

**STEEL BOX GIRDER BRIDGE
(7-SPAN)**

SUPERSTRUCTURE

Design & Calculation Report of 7-Span Continuous Steel Box Girder with Steel Deck

Contents

- 1- 1Summary of Design and Calculation
- 2-1 Input data for Analysis of Main Girder
- 2-2 Analysis Result of Main Girder
- 2-3 Member Force
- 2-4 Section Composition Figure of Main Girder
- 3-1 Calculation of Section G1
- 3-2 Calculation of Section G2
- 3-3 Splice Calculation of Main Girder
- 3-4 Summary of Splice calculation of Main Girder
- 4-1 Calculation of Cross Girder
- 4-2 Calculation of Diaphragm at support
- 4-3 Calculation of Longitudinal Ribs and Transverse Ribs
- 4-4 Calculation of Horizontal Stiffener at Web
- 5-1 to 5-8 Analysis and Calculation of Steel Deck
- 5-1 Analysis of Steel Deck
- 5-2 Calculation of Longitudinal Rib
- 5-3 Calculation of Cross Rib
- 5-4 Calculation of Bracket Section
- 5-5 Calculation of Longitudinal Side Beam
- 5-6 Combination Stress Check of Longitudinal Rib
- 5-7 Biaxial Stress Check of Cross Beam
- 5-8 Splice Calculation of Cross Beam
- 6-1 Check of Temperature Stress

4.1.1 Detailed Design for Superstructure of the Steel Box Girder Bridge (7-Span Bridge)

4.1.1.1 Design Condition

(1) Profile

Span Length:

$$1.2 + 110.8 + 5@112.0 + 103.1 + 0.9 = 776.0 \text{ m (Bridge Length)}$$

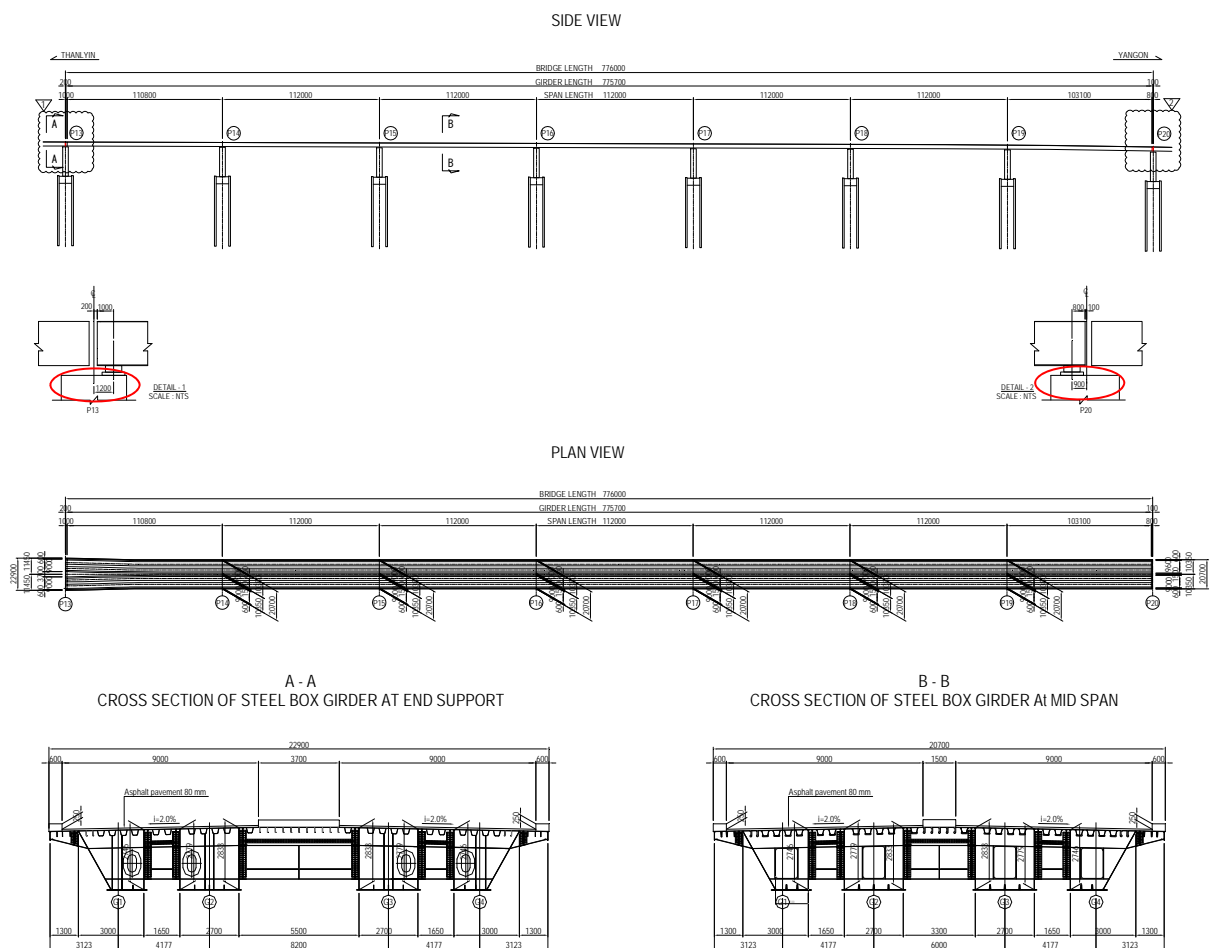
Italicized figures of 1.2 and 0.9 above show the combined length of the clearance and marginal length from the end girder to the bearing position. There has been a slight change for it is longer than the value on the B/D because of the displacement in consideration of the seismic behavior and temperature elongation.

The width composition is same as the B/D.

$$\text{Normal Width} \quad 0.6 + 9.0 + 1.5 + 9.0 + 0.6 = 20.7 \text{ m}$$

$$\text{Widened Width} \quad 0.6 + 9.0 + 3.7 + 9.0 + 0.6 = 22.9 \text{ m}$$

Italicized figures of 0.6, 1.5, and 3.7 above show the side barrier (coping) and median barrier (coping) width.



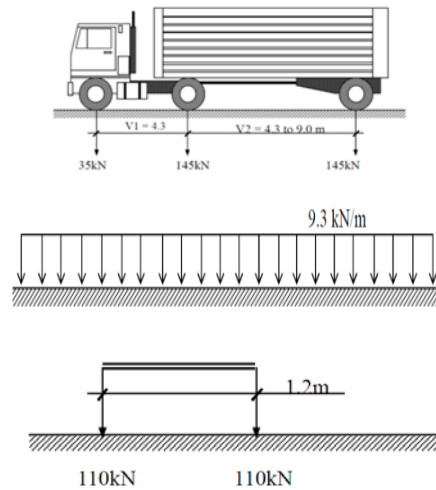
Source: JICA Study Team

Figure 0.1 General View

(2) Live Load

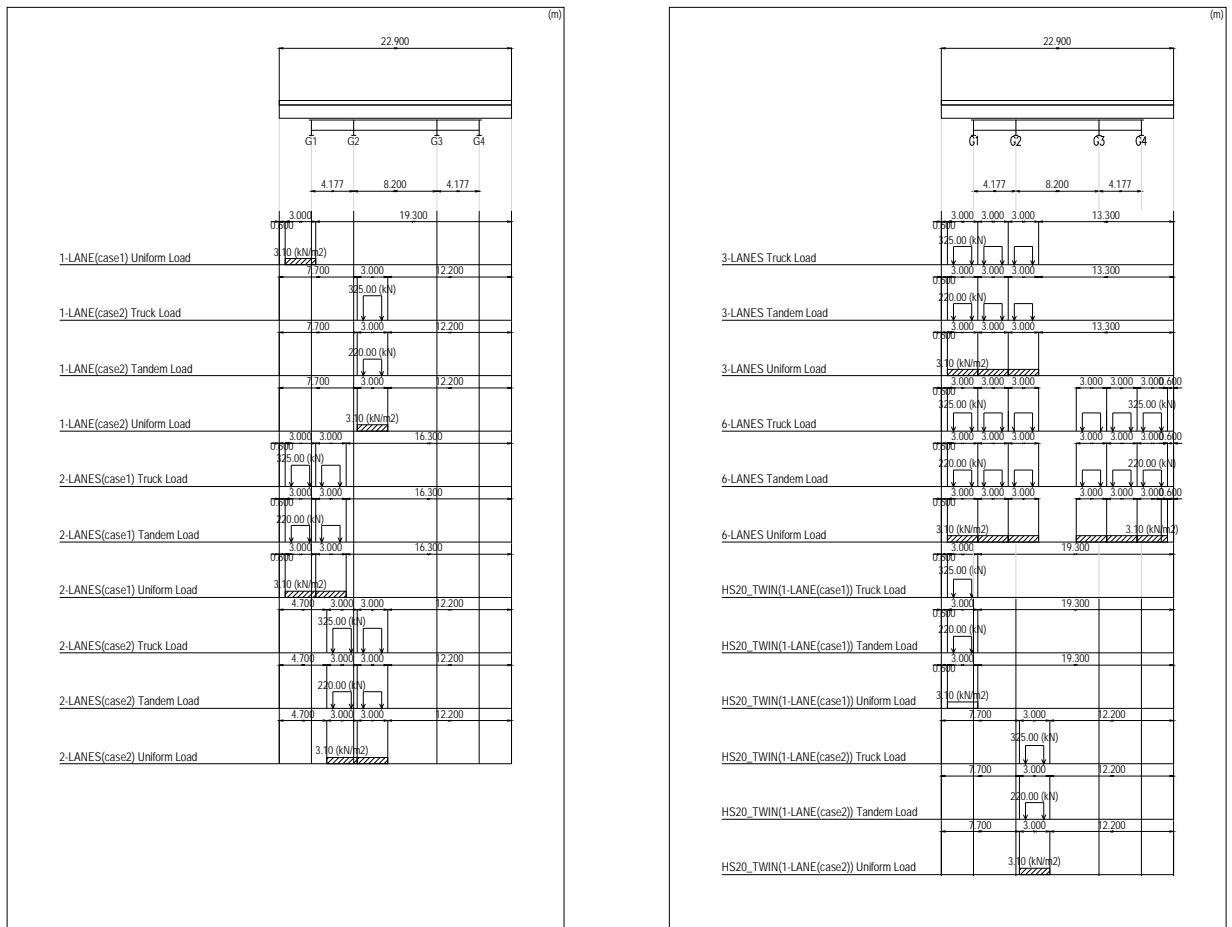
AASHTO load was adopted on the design of the 6-lane carriageways that is different from the actual 4-lane carriageways, and loading lanes were taken in the severest condition.

There are three kinds of loading, 1-Truck load, Tandem load, and Uniform Lane load, which are shown in the figure below.



Source: AASHTO specification

Figure 0.2 AASHTO Loading



Source: JICA Study Team

Figure 0.3 Variations of Loading Position

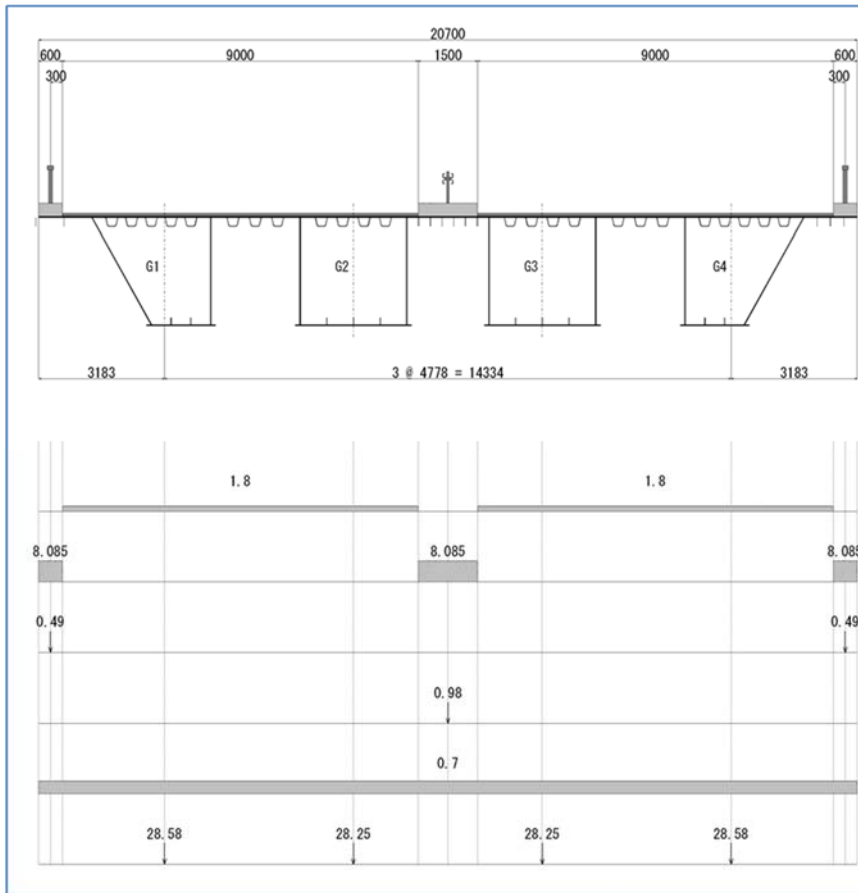
(3) Dead Load

The following items were considered:

- Pavement of asphalt 80 mm thick asphalt laid at whole carriageway
- Coping as wheel guard 330 mm deep concrete casted from steel deck plate
- Railing at side barrier Steel railing weight is assumed.
- Railing at median strip Dual steel railing weight is assumed
- Miscellaneous weight Provisional weight as future overlay load
- Steel weight Assumed in accordance with the girder weight based on B/D

(These weights will be reviewed during the step by step design)

Unit weight of each item is calculated in accordance with its unit volume weight as shown on JSIB.

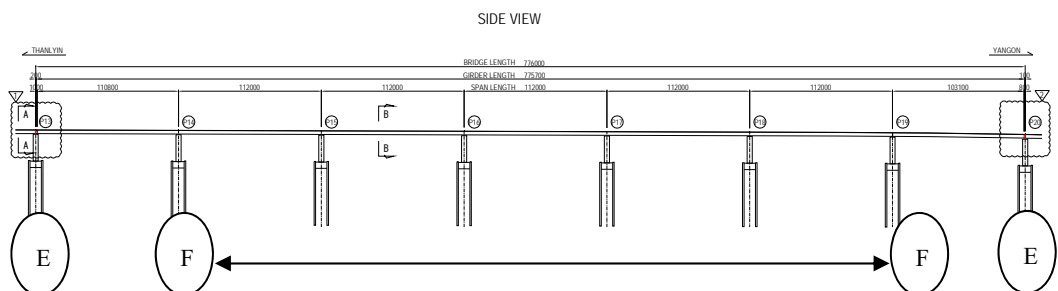


Source: JICA Study Team

Figure 0.4 Dead Load Variations

(4) Supporting Condition

- This bridge is supported by eight piers at the longitudinal road direction.
- Every girder has been assumed to be supported on elastic bearing that was rotatable and only longitudinally movable during the B/D.
- However, the end bearing capacity against rotation distortion due to live load was reviewed, and then it was decided that multi-fixed bearing system will be suitable in case that the substructure is built on soft foundation.
- Elasticity coefficient including flexibility of substructure on soft soil has been reviewed eventually at the design stage of substructure and bearing.



Source: JICA Study Team

Figure 0.5 Bearing Support Condition

4.1.1.2 Analysis of the Main Girder

(1) Software for Analysis

- Superstructure was analyzed using the common software named ‘APPOLO’, which is for Grid Frame Analysis.
- This software consists of 5-steps bridge designing.

1st: Calculating the alignment and coordinates of each line and grid point

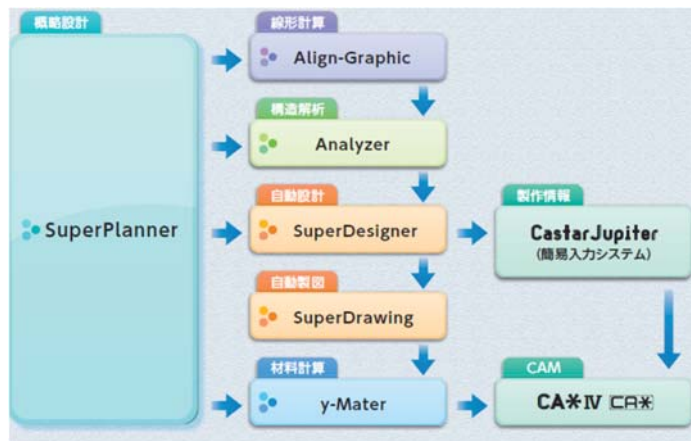
2nd: Analysis of grid frame that is for the purpose of determining design forces of each member.

3rd: Calculating section properties of each member in accordance with JSHB.

4th: Automatically drawing in accordance with determined member section composition.

5th: Quantities calculation

This software system is shown in the following figure.



Source: Catalogue prepared by the software company

Figure 0.6 Analysis Flow of the Software

4.1.1.3 Results of the Analysis and the Determined Section Composition

(1) Reaction

Analyzed reaction was reflected into the design of the substructure and the bearing support.

Table 0.1 Reaction Components at Each Pier

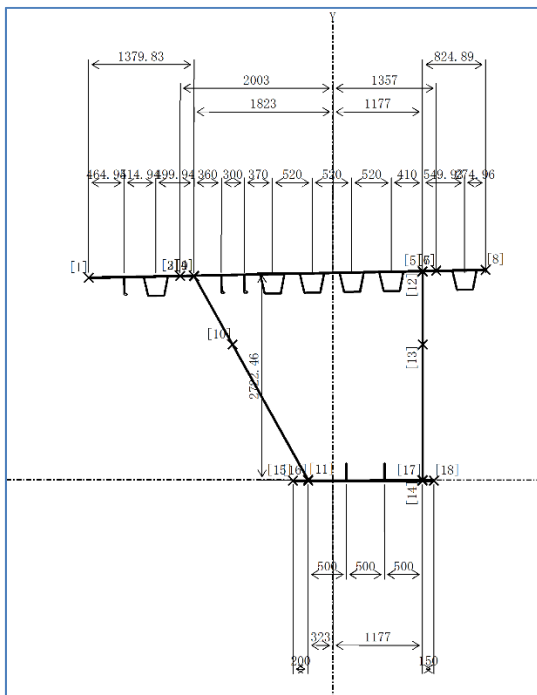
Reaction Table (unit:Kn)		P13	P14	P15	P16	P17	P18	P19	P20
G1 & G4	Pavement	362.1	1,053.7	890.2	953.0	941.5	914.6	1,009.7	337.0
	Side Railing	19.4	52.5	46.3	48.4	47.9	47.0	50.8	18.8
	Side Coping	192.3	519.3	458.4	479.0	474.8	465.4	502.6	185.9
	Steel Girder	1,228.9	3,625.2	3,039.0	3,267.4	3,226.5	3,128.9	3,467.6	1,135.8
	Median coping	116.1	275.9	192.3	223.0	217.0	208.4	237.6	66.7
	Overlay	167.5	478.6	402.5	431.4	426.0	414.0	456.7	152.9
	Median Railing	6.2	20.3	16.1	17.9	17.6	16.8	19.2	5.4
	Total Dead Weight	2,092.5	6,025.6	5,044.7	5,420.0	5,351.3	5,195.2	5,744.3	1,902.5
	Live load with impact (Max)	1,030.3	2,043.6	1,963.6	2,021.3	2,008.9	1,980.2	1,992.3	1,009.9
	Live load with impact (Min)	-338.0	-370.9	-481.5	-466.2	-466.3	-469.4	-367.7	-320.9
	Total Rection(Max)	3,122.8	8,069.2	7,008.3	7,441.3	7,360.2	7,175.3	7,736.6	2,912.4
	Total Rection(Min)	1,754.6	5,654.7	4,563.3	4,953.8	4,884.9	4,725.8	5,376.6	1,581.6
	G2&G3	Pavement	334.6	1,007.9	851.4	882.8	876.7	855.9	966.7
Side Railing		1.7	9.9	6.4	7.1	7.1	6.5	9.0	0.5
Side Coping		16.3	98.0	63.2	70.8	69.8	64.8	89.2	4.8
Steel Girder		1,329.3	3,946.6	3,357.4	3,475.0	3,451.7	3,373.9	3,791.3	1,202.6
Median coping		330.7	548.0	446.0	468.0	462.5	454.7	502.0	171.6
Overlay		160.2	447.9	375.2	389.9	387.0	377.8	427.1	131.8
Median Railing		14.9	42.0	36.6	37.7	37.4	36.7	40.6	13.9
Total Dead Weight		2,187.6	6,100.3	5,136.1	5,331.3	5,292.2	5,170.3	5,825.9	1,824.8
Live load with impact (Max)		989.8	1,872.8	1,804.5	1,802.3	1,799.4	1,779.1	1,826.3	909.5
Live load with impact (Min)		-196.2	-201.6	-319.4	-290.5	-295.9	-299.9	-199.8	-184.3
Total Rection(Max)		3,177.4	7,973.1	6,940.6	7,133.6	7,091.6	6,949.5	7,652.3	2,734.3
Total Rection(Min)		1,991.4	5,898.7	4,816.7	5,040.7	4,996.4	4,870.5	5,626.2	1,640.5
Whole Dead Load		8,560.2	24,251.7	20,361.7	21,502.5	21,287.0	20,731.0	23,140.3	7,454.6
Whole Live Load with Impact	4,040.1	7,832.8	7,536.1	7,647.2	7,616.6	7,518.6	7,637.3	3,838.8	
Σ Total	12,600.3	32,084.5	27,897.8	29,149.7	28,903.6	28,249.5	30,777.6	11,293.4	
Whole Dead Load	8,560.2	24,251.7	20,361.7	21,502.5	21,287.0	20,731.0	23,140.3	7,454.6	
Whole Live Load without Impact	3,593.2	6,971.8	6,707.7	6,806.6	6,779.3	6,692.1	6,797.7	3,395.6	
Σ Total	12,153.3	31,223.5	27,069.4	28,309.1	28,066.4	27,423.1	29,938.1	10,850.2	
Whole Dead Load	8,560.2							7,454.6	
Whole Live Load without Impact and Truck	3,332.8							3,115.3	
Σ Total	12,153.3							10,850.2	

Source: JICA Study Team

(2) Member Force and Section Composition Diagram

The section dimensions and grade of material are determined so that the following criteria are satisfied:

- Each section is designed so that the stress based on bending moment and shearing force shall be within the allowable stress of the adopted material grade.
- The JSHB requires that the deflection due to live load shall be less than 1/500 of span length.
- All block joints are fastened by high strength bolts. Therefore, axial tensile stress at tensile part shall take account of the decreased section area because of the bolt holes. In case that tensile stress would be more than the allowable stress, the thickness of the section should be increased.
- Steel deck plate is stiffened by u-shaped trough ribs, so that torsional stiffness is increased for wheel load.
- Compression stress part of lower flange is stiffened by plate ribs in accordance with thickness of flange. These ribs shall be fastened by high strength bolts at block joint as stress member.
- Web plate is stiffened by horizontal stiffeners at 2-level position, so as decreasing web thickness. These stiffeners only act as stiffeners but not as stress member.
- Required section properties are calculated as follows:



Effective width(mm)		Full width	In-plane
DECK 張出部		1380	1380
Intermediate		3000	3000
張出部		825	825
LFLG Intermediate		1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL 1200 * 16 (SM490Y)		192.0	192.0
1-BULB PL 230 * 11 (SM490Y)		32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL 3361 * 16 (SM490Y)		537.7	537.7
2-BULB PL 230 * 11 (SM490Y)		64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL 645 * 16 (SM490Y)		103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL 3058 * 12 (SM490Y)		367.0	367.0
1-RWEB PL 2730 * 12 (SM490Y)		327.6	327.6
1-LFLG PL 1850 * 20 (SM490Y)		370.0	370.0
2-RIB PL 220 * 19 (SM490Y)		83.6	83.6

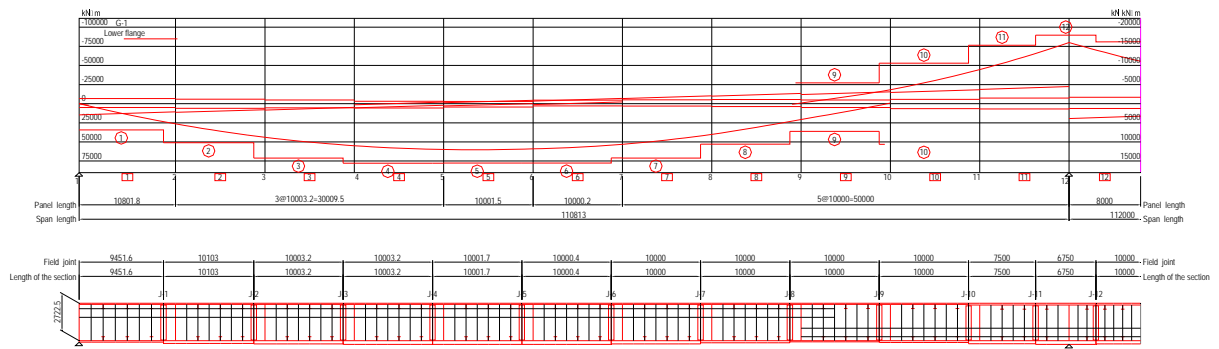
Section property		Total	In-plane
Section area	A (cm2)	2400.5	2400.5
Gravity center	ex (cm)	-22.0	-22.0
	ey (cm)	177.5	177.5
Moment of inertia	Ix (cm4)	29294019	29294019
	Iy (cm4)	40717501	40717501
Torsion Constant	J (cm4)	20180893	

Source: JICA Study Team

Figure 0.7 Typical Calculation Sample of the Section

- The thickness and the material grade of all sections have been determined and calculated in accordance with the bending moment.
- The following diagrams show part of the section composition of G1 and G2 girders as example.

STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (1)

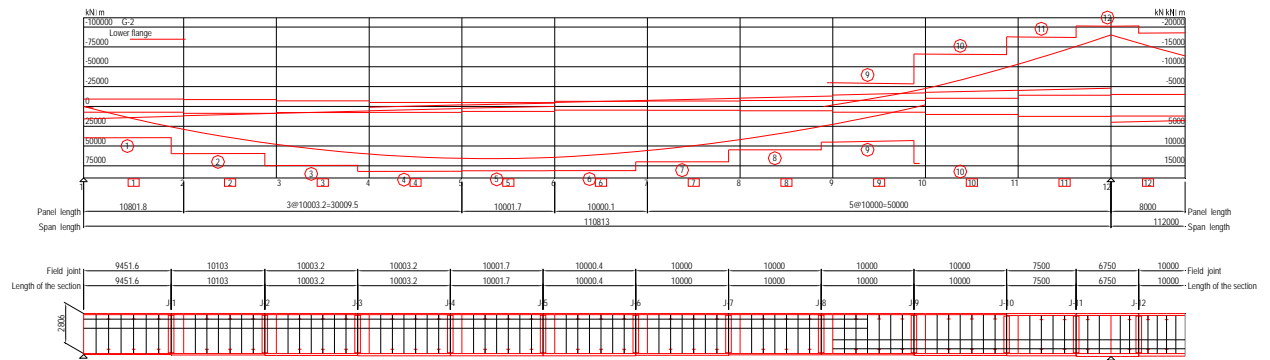


													Unit: mm N/mm ²						
Section	1	2	3	4	5	6	7	8	9	10	11	12	13	Section	Grade:				
Deck Plate	Thickness	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	22, 22, 22	27, 27, 27	27, 27, 27	27, 27, 27	Thickness	Deck Plate				
Quality	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	(3), (3), (3)	Quality	(3), (3), (3)				
Longitudinal Rib	Number	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	3-Butt	Number	Longitudinal Rib				
Section	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	Section	Grade:				
Height	3044.3	3044.2	3044.2	3044.2	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3037.5	3037.5	3031.9	Height	(1):SM440				
Left Web	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	Number	(2):SM490Y				
Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	Section	(4):SM570				
Height	3044.3	3044.2	3044.2	3044.2	3044.3	3044.3	3044.3	3044.3	3044.3	3037.5	3037.5	3031.9	3031.9	Height	(5):SM405-H				
Right Web	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	Number	(6):SM490-H				
Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	Section	(7):SM520-H				
Height	3044.3	3044.2	3044.2	3044.2	3044.3	3044.3	3044.3	3044.3	3044.3	3037.5	3037.5	3031.9	3031.9	Height	(8):SM570-H				
Lower Flange	Number	2	2	2	2	2	2	2	2	5	5	5	5	Number	Lower Flange				
Width	220	220	220	220	220	220	220	220	220	220	220	220	220	Width	Vertical Rib				
Vertical Rib	Thickness	19(3)	19(3)	19(4)	19(4)	19(4)	19(4)	19(4)	19(3)	19(3)	19(4)	19(4)	19(4)	Thickness	Vertical Rib				
Lflg W-1850 T	20(3)	38(3)	46(8)	52(8)	52(8)	52(8)	46(8)	30(4)	16(3)	24(4)	43(8)	52(8)	47(8)	Lflg W-1850 T	Deck Plate				
Deck Plate	σ	0	-80	-132	-165	-180	-181	-178	-165	-136	-70	53	4	σ	Deck Plate				
σ _{ca}	210	210	210	210	210	210	210	210	210	210	210	210	210	σ _{ca}	σ _{ca}				
σ _σ	210	130	78	45	30	29	32	45	74	131	203	157	204	σ _σ	σ _σ				
Lower Flange	σ	0	145	174	195	197	199	197	196	204	136	12	-91	σ	Lower Flange				
σ _{ca}	210	210	210	255	255	255	255	255	210	210	158	255	255	σ _{ca}	σ _{ca}				
σ _σ	210	65	36	60	58	56	58	59	51	74	198	67	245	σ _σ	σ _σ				
Web	t	60	48	36	25	16	14	19	28	41	53	59	59	t	Web				
σ _{ca}	120	120	120	145	145	145	145	145	120	120	145	145	145	σ _{ca}	σ _{ca}				
σ _σ	0.25	0.56	0.72	0.57	0.56	0.57	0.56	0.58	0.67	0.52	0.25	0.32	0.16	σ _σ	σ _σ				
Calculated points	Left	J-1	J-2	J-3	J-4	J-5	J-6	J-7	J-8	J-9	J-9	Left	J-10	J-11	Max Left	Max Right	J-12	Calculated points	
Stress of Net Area σ _{Lflg} (σ _{ca})																			Stress of Net Area σ _{Lflg} (σ _{ca})

Source: JICA Study Team

Figure 0.8 Typical Section Composition, G1 (P13-P14)

STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (1)



													Unit: mm N/mm ²		
Section	1	2	3	4	5	6	7	8	9	10	11	12	13	Section	
Deck Plate	Thickness	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	22, 22, 22	27, 27, 27	27, 27, 27	27, 27, 27	Thickness	Deck Plate
	Quality	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	Quality	Deck Plate
Longitu-dinal Rib1	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	Number	Longitu-dinal Rib1
	Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	Section	Longitu-dinal Rib1
Longitu-dinal Rib2	Number	5-Bub	5-Bub	5-Bub	4-Bub	4-Bub	4-Bub	4-Bub	2-Bub	2-Bub	2-Bub	2-Bub	2-Bub	Number	Longitu-dinal Rib2
	Section	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	Section	Longitu-dinal Rib2
Left Web	Height	2747	2746.9	2746.9	2746.9	2746.9	2747	2747	2747	2747	2747	2741	2741	Height	Left Web
	Thickness	11(3)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(3)	11(3)	11(3)	13(4)	13(4)	Thickness	Left Web
Right Web	Height	2801	2801.1	2801.1	2801.1	2801.1	2801	2801	2801	2801	2795	2795	2795	Height	Right Web
	Thickness	11(3)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(3)	11(3)	11(3)	13(4)	13(4)	Thickness	Right Web
Lower flange Vertical rib	Number	3	3	3	3	3	3	3	3	3	3	7	7	Number	Lower flange Vertical rib
	Width	220	220	220	220	220	220	220	220	220	220	240	240	Width	Lower flange Vertical rib
	Thickness	19(3)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(3)	19(3)	19(3)	19(4)	19(4)	Thickness	Lower flange Vertical rib
Left W-2940 T	Thickness	14(3)	20(4)	28(4)	32(4)	32(4)	26(4)	18(4)	18(3)	27(4)	32(4)	40(4)	35(4)	Thickness	Left W-1850 T
Deck Plate	σ	0	-73	-128	-165	-185	-185	-167	-140	-81	-5	63	-4	σ	Deck Plate
	σ _a	210	210	210	210	210	210	210	210	210	210	210	210	σ _a	Deck Plate
	σ _{a-σ}	210	137	82	45	25	24	43	70	129	205	147	206	σ _{a-σ}	Deck Plate
Lower flange	σ	0	138	198	203	205	208	205	210	206	118	8	-96	σ	Lower flange
	σ _a	210	210	255	255	255	255	255	255	210	139	255	255	σ _a	Lower flange
	σ _{a-σ}	210	72	57	52	50	47	50	45	49	92	202	43	σ _{a-σ}	Lower flange
Web	τ	70	58	44	31	20	17	22	34	44	56	70	70	τ	Web
	τ _a	120	120	145	145	145	145	145	145	120	120	145	145	τ _a	Web
	Combined	0.34	0.57	0.66	0.65	0.63	0.64	0.63	0.68	0.70	0.45	0.34	0.43	Combined	Web
Calculated points	Left	J-1	J-2	J-3	J-3	J-4	J-5	J-6	J-7	J-8	J-9	J-10	J-11	Calculated points	Web
Stress of Net Area σ														Stress of Net Area σ	Web
Left														Left	Web

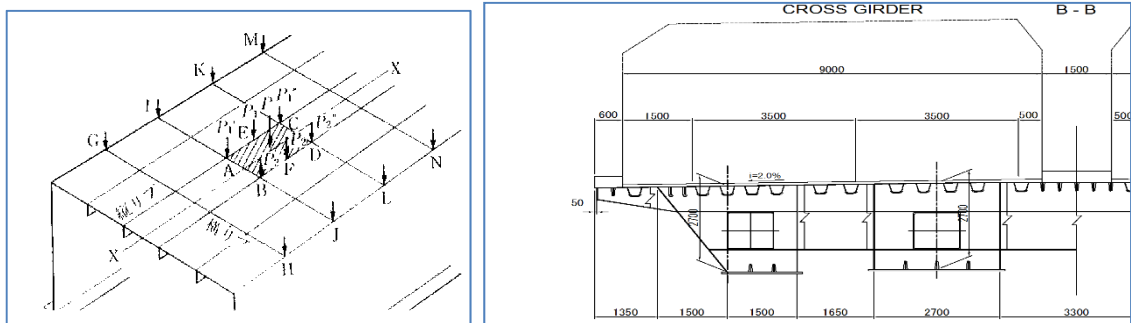
Source: JICA Study Team

Figure 0.9 Typical Section Composition, G2 (P13-P14)

4.1.1.4 Analysis of Steel Deck

(1) Design Method of Steel Deck

- The steel deck will be analyzed as equivalent multi-grid frame.
- The model of the grid frame consists of webs, cross girder, crossbeams, and longitudinal stiffeners.



Source: JICA Study Team

Figure 0.10 Concept of Wheel Loading on Steel Deck

(2) Stress Evaluation of Steel Deck

- Longitudinal ribs or cross ribs have combined stresses of primary stress as a deck member of the whole main girder and secondary stress as a member of the deck frame.
- The stress of longitudinal rib is of the same direction as the main girder stress. Therefore, this stress shall be combined with the stress of the main girder and shall be within the allowable stress as shown below.

σ₁ : Primary stress as a member of the main girder

σ₂ : Secondary stress as a member of the deck frame

α : Safety factor (1.4 as specified by the JSDB)

σ_a : Allowable stress of the material deck plate

$$\sigma_1 + \sigma_2 < \sigma_a \cdot \alpha$$

- If σ_2 is smaller than $0.4 \cdot \sigma_a$, then the formula above will always be satisfied.
- The stress of the cross rib is in the right angle direction of the stress of the main girder, so the biaxial stress shall be checked.

Biaxial calculation formula:

$$K = (\sigma_x / \sigma_a)^2 - (\sigma_x / \sigma_a) * (\sigma_y / \sigma_a) + (\sigma_y / \sigma_a)^2 + (\tau / \tau_a)^2 \leq 1.2$$

σ_x : Normal stress of the main girder (N/mm²) τ_x : Shear stress of the main girder (N/mm²)

σ_y : Normal stress of the crossbeam (N/mm²) τ_y : Shear stress of the crossbeam (N/mm²)

σ_a : Allowable tensile stress of the main girder (N/mm²)

τ_a : Allowable shear stress of the main girder or crossbeam (N/mm²)

Where, by checking location:

Flange point $(\tau / \tau_a) = (\tau_x / \tau_{xa})$

Web point $(\tau / \tau_a) = \text{Max}((\tau_x / \tau_{xa}), (\tau_y / \text{Max}(\tau_{xa}, \tau_{ya})))$

(3) Analysis Model of Deck Frame

- Wheel load shall act on the longitudinal stiffener or crossbeam so that the maximum bending moment will occur.
- Vertical ribs are considered as one bar members without any cross sectional deformation. Therefore, the torsional rigidity (using only the simple torsional resistance) is not reduced; it is 100% valid and is calculated by the following formula:

$$\text{Torsional rigidity} = 4 \cdot A^2 / \{(u/tR) + (a/tP)\}$$

A : Cross sectional area surrounded by the U-shaped steel

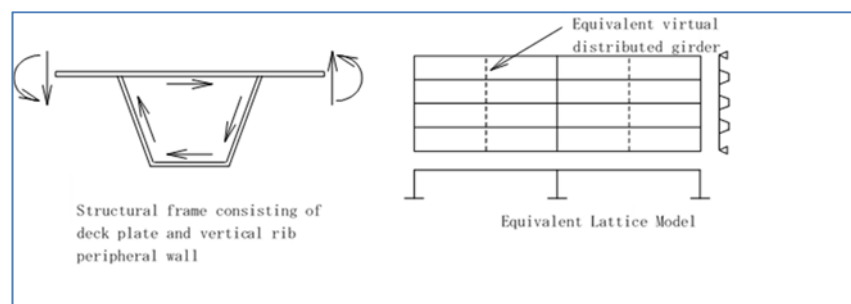
u : Expanded width of the U-shaped steel

a : Upper width of the U-shaped steel

tR : Thickness of the U-shaped steel

tP : Thickness of the deck plate

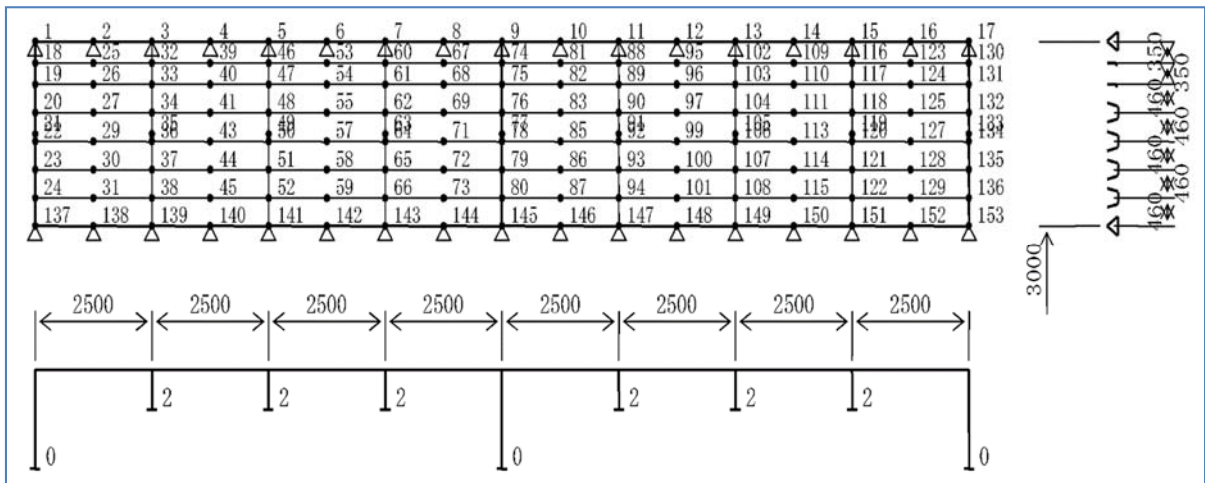
- The virtual distribution girder that performs the load distribution between the longitudinal ribs gives the bending rigidity equivalent to the rigid structure consisting of the deck plate and the longitudinal rib peripheral wall in consideration of the sectional deformation of the longitudinal rib. Since this rigid structure continues in the direction of the bridge axis, the equivalent cross sectional secondary moment per unit length is obtained first, and in the Lattice Model, one distribution girder is provided at the lateral rib intervals to provide bending rigidity.



Source: Analysis manual prepared by the software company

Figure 0.11 Concept of Equivalent Virtual Beam of Steel Deck

- There are five deck models, i.e.: side deck, top deck of G1, top deck of G2, median deck, and center deck, that are to be considered.
- The top deck of G2 is shown in the following figure.



Source: JICA Study Team

Figure 0.12 Analysis Model of Steel Deck

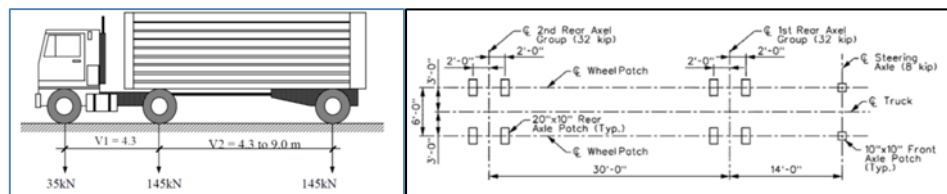
- Dead load to be considered

Pavement (road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

- Section profile of member

Cross sectional shape	Thickness of deck plate	16 mm
Longitudinal rib	Sec- 2	U.RIB 320 * 240 * 8
Lateral rib	Sec- 2	WEB PL 800 * 9 FLG PL 200 * 10
Diaphragm		WEB PL 2100 * 10 FLG PL 220 * 10

- Wheel load shall act on the longitudinal stiffener or crossbeam so the maximum bending moment will occur.
- Distance of the wheel is 1.8 m, and contact area of each wheel is 510 mm wide and 250 mm long.



Source: AASHTO specification

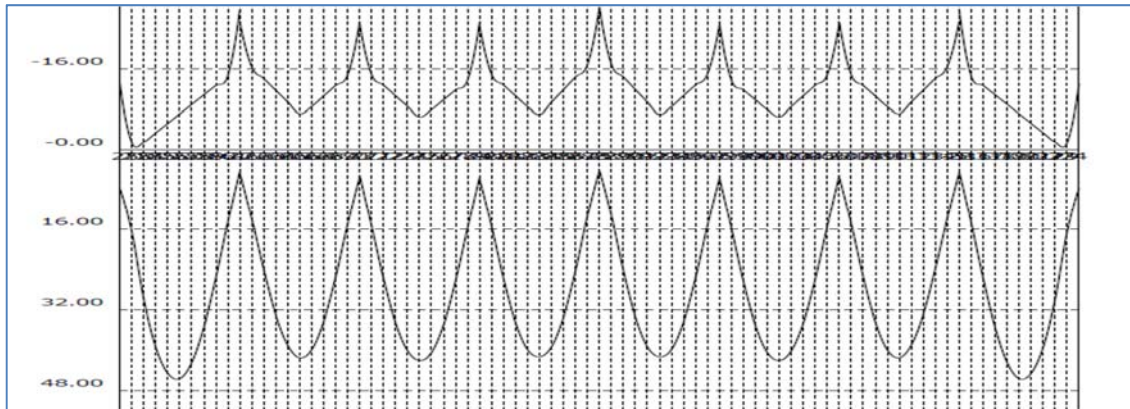
Figure 0.13 Wheel Load to be Considered on Steel Deck

- Impact coefficient is based on the following formula which is based on JSHB:

Longitudinal rib $i = 0.4$
Lateral rib & bracket $i = 20/(50+L)$ L: Span length of lateral rib and bracket (m)

(4) Diagram of Bending Moment

- The maximum/minimum bending moment of the longitudinal rib was calculated based on influence line and area.
- The critical moment occurred at the mid span.



Source: JICA Study Team

Figure 0.14 Bending Moment Diagram

(5) Analysis Results of Each Rib Force

Table 0.2 Table of the Member Force

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)	
Longitudinal rib	Sec-2	At Max. bending	45	Dead load	0.73	0.05	
				T - Load	43.43	-57.88	
				Total	44.16	-57.83	
		At Min. bending	40	Dead load	-0.93	2.61	
				T - Load	-23.97	13.43	
				Total	-24.90	16.05	
	At Max. shear	67	Dead load	-1.01	2.70		
			T - Load	0.18	107.48		
			Total	-0.83	110.18		
	Lateral rib	Sec-2	At Max. bending	39	Dead load	8.89	-5.52
					T - Load	110.82	0.88
					Total	119.71	-4.64
At Min. bending			77	Dead load	7.95	4.92	
				T - Load	-14.20	-9.31	
				Total	-6.25	-4.39	
At Max. shear	3	Dead load	0.00	11.05			
		T - Load	0.00	195.64			
		Total	0.00	206.68			
				Additional Total	0.00	206.68	

Source: JICA Study Team

Table 0.3 Table of the Deflection due to Live Load

(b) List of Deflection due to Live Load				
Member	Cross-section	Point of interest	Load type	Deflection (mm)
Longitudinal rib	Sec-2	44	T - Load	0.63
Lateral rib	Sec-2	38	T - Load	0.15

Source: JICA Study Team

2-1 Input data for Analysis of Main Girder

Bago

TITLE:

Bago

STRUCTURE:

NODE COUNT:	328
STRUCTURE-NODE (NODE)	328
ELEMENT COUNT:	602
BEAM-ELEMENT (BEAM)	570
SUPPORT-ELEMENT (SUPPORT)	32
GROUP COUNT:	16
APREACT (APREACT)	16
GIRDER COUNT:	4
CROSS COUNT:	82
SPAN COUNT:	7

STATIC LINER ANALYSIS CASE:

LOAD CASE COUNT:	10
INFL-CASE (INFL)	7
ROAD (INFLROAD)	3

COMBI CASE COUNT:	7
-------------------	---

Bago

NODAL BLOCK DATA

BLOCK	TITLE	COUNT	BLOCK TYPE
1	Structure node	328	STRUCTURE-NODE (NODE)

NODE DATA [STRUCTURE-NODE (NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
1001	1	1.20000	8.27700	0.00000	1	1	0	0	0	1
1002	1	12.00000	8.10240	0.00000	1	1	0	0	0	1
1003	1	22.00000	7.85107	0.00000	1	1	0	0	0	1
1004	1	32.00000	7.59975	0.00000	1	1	0	0	0	1
1005	1	42.00000	7.34842	0.00000	1	1	0	0	0	1
1006	1	52.00000	7.17744	0.00000	1	1	0	0	0	1
1007	1	62.00000	7.17700	0.00000	1	1	0	0	0	1
1008	1	72.00000	7.17700	0.00000	1	1	0	0	0	1
1009	1	82.00000	7.17700	0.00000	1	1	0	0	0	1
1010	1	92.00000	7.17700	0.00000	1	1	0	0	0	1
1011	1	102.00000	7.17700	0.00000	1	1	0	0	0	1
1012	1	112.00000	7.17700	0.00000	1	1	0	0	0	1
1013	1	120.00000	7.17700	0.00000	1	1	0	0	0	1
1014	1	128.00000	7.17700	0.00000	1	1	0	0	0	1
1015	1	138.00000	7.17700	0.00000	1	1	0	0	0	1
1016	1	148.00000	7.17700	0.00000	1	1	0	0	0	1
1017	1	158.00000	7.17700	0.00000	1	1	0	0	0	1
1018	1	168.00000	7.17700	0.00000	1	1	0	0	0	1
1019	1	178.00000	7.17700	0.00000	1	1	0	0	0	1
1020	1	188.00000	7.17700	0.00000	1	1	0	0	0	1
1021	1	198.00000	7.17700	0.00000	1	1	0	0	0	1
1022	1	208.00000	7.17700	0.00000	1	1	0	0	0	1
1023	1	216.00000	7.17700	0.00000	1	1	0	0	0	1
1024	1	224.00000	7.17700	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
1025	1	232.00000	7.17700	0.00000	1	1	0	0	0	1
1026	1	240.00000	7.17700	0.00000	1	1	0	0	0	1
1027	1	250.00000	7.17700	0.00000	1	1	0	0	0	1
1028	1	260.00000	7.17700	0.00000	1	1	0	0	0	1
1029	1	270.00000	7.17700	0.00000	1	1	0	0	0	1
1030	1	280.00000	7.17700	0.00000	1	1	0	0	0	1
1031	1	290.00000	7.17700	0.00000	1	1	0	0	0	1
1032	1	300.00000	7.17700	0.00000	1	1	0	0	0	1
1033	1	310.00000	7.17700	0.00000	1	1	0	0	0	1
1034	1	320.00000	7.17700	0.00000	1	1	0	0	0	1
1035	1	328.00000	7.17700	0.00000	1	1	0	0	0	1
1036	1	336.00000	7.17700	0.00000	1	1	0	0	0	1
1037	1	344.00000	7.17700	0.00000	1	1	0	0	0	1
1038	1	352.00000	7.17700	0.00000	1	1	0	0	0	1
1039	1	362.00000	7.17700	0.00000	1	1	0	0	0	1
1040	1	372.00000	7.17700	0.00000	1	1	0	0	0	1
1041	1	382.00000	7.17700	0.00000	1	1	0	0	0	1
1042	1	392.00000	7.17700	0.00000	1	1	0	0	0	1
1043	1	402.00000	7.17700	0.00000	1	1	0	0	0	1
1044	1	412.00000	7.17700	0.00000	1	1	0	0	0	1
1045	1	422.00000	7.17700	0.00000	1	1	0	0	0	1
1046	1	432.00000	7.17700	0.00000	1	1	0	0	0	1
1047	1	440.00000	7.17700	0.00000	1	1	0	0	0	1
1048	1	448.00000	7.17700	0.00000	1	1	0	0	0	1
1049	1	456.00000	7.17700	0.00000	1	1	0	0	0	1
1050	1	464.00000	7.17700	0.00000	1	1	0	0	0	1
1051	1	474.00000	7.17700	0.00000	1	1	0	0	0	1
1052	1	484.00000	7.17700	0.00000	1	1	0	0	0	1
1053	1	494.00000	7.17700	0.00000	1	1	0	0	0	1
1054	1	504.00000	7.17700	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
1055	1	514.00000	7.17700	0.00000	1	1	0	0	0	1
1056	1	524.00000	7.17700	0.00000	1	1	0	0	0	1
1057	1	534.00000	7.17700	0.00000	1	1	0	0	0	1
1058	1	544.00000	7.17700	0.00000	1	1	0	0	0	1
1059	1	552.00000	7.17700	0.00000	1	1	0	0	0	1
1060	1	560.00000	7.17700	0.00000	1	1	0	0	0	1
1061	1	568.00000	7.17700	0.00000	1	1	0	0	0	1
1062	1	576.00000	7.17700	0.00000	1	1	0	0	0	1
1063	1	586.00000	7.17700	0.00000	1	1	0	0	0	1
1064	1	596.00000	7.17700	0.00000	1	1	0	0	0	1
1065	1	606.00000	7.17700	0.00000	1	1	0	0	0	1
1066	1	616.00000	7.17700	0.00000	1	1	0	0	0	1
1067	1	626.00000	7.17700	0.00000	1	1	0	0	0	1
1068	1	636.00000	7.17700	0.00000	1	1	0	0	0	1
1069	1	646.00000	7.17700	0.00000	1	1	0	0	0	1
1070	1	656.00000	7.17700	0.00000	1	1	0	0	0	1
1071	1	664.00000	7.17700	0.00000	1	1	0	0	0	1
1072	1	672.00000	7.17700	0.00000	1	1	0	0	0	1
1073	1	682.00000	7.17700	0.00000	1	1	0	0	0	1
1074	1	692.00000	7.17700	0.00000	1	1	0	0	0	1
1075	1	702.00000	7.17700	0.00000	1	1	0	0	0	1
1076	1	712.00000	7.17700	0.00000	1	1	0	0	0	1
1077	1	722.00000	7.17700	0.00000	1	1	0	0	0	1
1078	1	732.00000	7.17700	0.00000	1	1	0	0	0	1
1079	1	742.00000	7.17700	0.00000	1	1	0	0	0	1
1080	1	752.00000	7.17700	0.00000	1	1	0	0	0	1
1081	1	762.00000	7.17700	0.00000	1	1	0	0	0	1
1082	1	775.10000	7.17700	0.00000	1	1	0	0	0	1
2001	1	1.20000	4.10000	0.00000	1	1	0	0	0	1
2002	1	12.00000	3.92408	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
2003	1	22.00000	3.67275	0.00000	1	1	0	0	0	1
2004	1	32.00000	3.42143	0.00000	1	1	0	0	0	1
2005	1	42.00000	3.17010	0.00000	1	1	0	0	0	1
2006	1	52.00000	3.00044	0.00000	1	1	0	0	0	1
2007	1	62.00000	3.00000	0.00000	1	1	0	0	0	1
2008	1	72.00000	3.00000	0.00000	1	1	0	0	0	1
2009	1	82.00000	3.00000	0.00000	1	1	0	0	0	1
2010	1	92.00000	3.00000	0.00000	1	1	0	0	0	1
2011	1	102.00000	3.00000	0.00000	1	1	0	0	0	1
2012	1	112.00000	3.00000	0.00000	1	1	0	0	0	1
2013	1	120.00000	3.00000	0.00000	1	1	0	0	0	1
2014	1	128.00000	3.00000	0.00000	1	1	0	0	0	1
2015	1	138.00000	3.00000	0.00000	1	1	0	0	0	1
2016	1	148.00000	3.00000	0.00000	1	1	0	0	0	1
2017	1	158.00000	3.00000	0.00000	1	1	0	0	0	1
2018	1	168.00000	3.00000	0.00000	1	1	0	0	0	1
2019	1	178.00000	3.00000	0.00000	1	1	0	0	0	1
2020	1	188.00000	3.00000	0.00000	1	1	0	0	0	1
2021	1	198.00000	3.00000	0.00000	1	1	0	0	0	1
2022	1	208.00000	3.00000	0.00000	1	1	0	0	0	1
2023	1	216.00000	3.00000	0.00000	1	1	0	0	0	1
2024	1	224.00000	3.00000	0.00000	1	1	0	0	0	1
2025	1	232.00000	3.00000	0.00000	1	1	0	0	0	1
2026	1	240.00000	3.00000	0.00000	1	1	0	0	0	1
2027	1	250.00000	3.00000	0.00000	1	1	0	0	0	1
2028	1	260.00000	3.00000	0.00000	1	1	0	0	0	1
2029	1	270.00000	3.00000	0.00000	1	1	0	0	0	1
2030	1	280.00000	3.00000	0.00000	1	1	0	0	0	1
2031	1	290.00000	3.00000	0.00000	1	1	0	0	0	1
2032	1	300.00000	3.00000	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
2033	1	310.00000	3.00000	0.00000	1	1	0	0	0	1
2034	1	320.00000	3.00000	0.00000	1	1	0	0	0	1
2035	1	328.00000	3.00000	0.00000	1	1	0	0	0	1
2036	1	336.00000	3.00000	0.00000	1	1	0	0	0	1
2037	1	344.00000	3.00000	0.00000	1	1	0	0	0	1
2038	1	352.00000	3.00000	0.00000	1	1	0	0	0	1
2039	1	362.00000	3.00000	0.00000	1	1	0	0	0	1
2040	1	372.00000	3.00000	0.00000	1	1	0	0	0	1
2041	1	382.00000	3.00000	0.00000	1	1	0	0	0	1
2042	1	392.00000	3.00000	0.00000	1	1	0	0	0	1
2043	1	402.00000	3.00000	0.00000	1	1	0	0	0	1
2044	1	412.00000	3.00000	0.00000	1	1	0	0	0	1
2045	1	422.00000	3.00000	0.00000	1	1	0	0	0	1
2046	1	432.00000	3.00000	0.00000	1	1	0	0	0	1
2047	1	440.00000	3.00000	0.00000	1	1	0	0	0	1
2048	1	448.00000	3.00000	0.00000	1	1	0	0	0	1
2049	1	456.00000	3.00000	0.00000	1	1	0	0	0	1
2050	1	464.00000	3.00000	0.00000	1	1	0	0	0	1
2051	1	474.00000	3.00000	0.00000	1	1	0	0	0	1
2052	1	484.00000	3.00000	0.00000	1	1	0	0	0	1
2053	1	494.00000	3.00000	0.00000	1	1	0	0	0	1
2054	1	504.00000	3.00000	0.00000	1	1	0	0	0	1
2055	1	514.00000	3.00000	0.00000	1	1	0	0	0	1
2056	1	524.00000	3.00000	0.00000	1	1	0	0	0	1
2057	1	534.00000	3.00000	0.00000	1	1	0	0	0	1
2058	1	544.00000	3.00000	0.00000	1	1	0	0	0	1
2059	1	552.00000	3.00000	0.00000	1	1	0	0	0	1
2060	1	560.00000	3.00000	0.00000	1	1	0	0	0	1
2061	1	568.00000	3.00000	0.00000	1	1	0	0	0	1
2062	1	576.00000	3.00000	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
2063	1	586.00000	3.00000	0.00000	1	1	0	0	0	1
2064	1	596.00000	3.00000	0.00000	1	1	0	0	0	1
2065	1	606.00000	3.00000	0.00000	1	1	0	0	0	1
2066	1	616.00000	3.00000	0.00000	1	1	0	0	0	1
2067	1	626.00000	3.00000	0.00000	1	1	0	0	0	1
2068	1	636.00000	3.00000	0.00000	1	1	0	0	0	1
2069	1	646.00000	3.00000	0.00000	1	1	0	0	0	1
2070	1	656.00000	3.00000	0.00000	1	1	0	0	0	1
2071	1	664.00000	3.00000	0.00000	1	1	0	0	0	1
2072	1	672.00000	3.00000	0.00000	1	1	0	0	0	1
2073	1	682.00000	3.00000	0.00000	1	1	0	0	0	1
2074	1	692.00000	3.00000	0.00000	1	1	0	0	0	1
2075	1	702.00000	3.00000	0.00000	1	1	0	0	0	1
2076	1	712.00000	3.00000	0.00000	1	1	0	0	0	1
2077	1	722.00000	3.00000	0.00000	1	1	0	0	0	1
2078	1	732.00000	3.00000	0.00000	1	1	0	0	0	1
2079	1	742.00000	3.00000	0.00000	1	1	0	0	0	1
2080	1	752.00000	3.00000	0.00000	1	1	0	0	0	1
2081	1	762.00000	3.00000	0.00000	1	1	0	0	0	1
2082	1	775.10000	3.00000	0.00000	1	1	0	0	0	1
3001	1	1.20000	-4.10000	0.00000	1	1	0	0	0	1
3002	1	12.00000	-3.92408	0.00000	1	1	0	0	0	1
3003	1	22.00000	-3.67275	0.00000	1	1	0	0	0	1
3004	1	32.00000	-3.42143	0.00000	1	1	0	0	0	1
3005	1	42.00000	-3.17010	0.00000	1	1	0	0	0	1
3006	1	52.00000	-3.00044	0.00000	1	1	0	0	0	1
3007	1	62.00000	-3.00000	0.00000	1	1	0	0	0	1
3008	1	72.00000	-3.00000	0.00000	1	1	0	0	0	1
3009	1	82.00000	-3.00000	0.00000	1	1	0	0	0	1
3010	1	92.00000	-3.00000	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
3011	1	102.00000	-3.00000	0.00000	1	1	0	0	0	1
3012	1	112.00000	-3.00000	0.00000	1	1	0	0	0	1
3013	1	120.00000	-3.00000	0.00000	1	1	0	0	0	1
3014	1	128.00000	-3.00000	0.00000	1	1	0	0	0	1
3015	1	138.00000	-3.00000	0.00000	1	1	0	0	0	1
3016	1	148.00000	-3.00000	0.00000	1	1	0	0	0	1
3017	1	158.00000	-3.00000	0.00000	1	1	0	0	0	1
3018	1	168.00000	-3.00000	0.00000	1	1	0	0	0	1
3019	1	178.00000	-3.00000	0.00000	1	1	0	0	0	1
3020	1	188.00000	-3.00000	0.00000	1	1	0	0	0	1
3021	1	198.00000	-3.00000	0.00000	1	1	0	0	0	1
3022	1	208.00000	-3.00000	0.00000	1	1	0	0	0	1
3023	1	216.00000	-3.00000	0.00000	1	1	0	0	0	1
3024	1	224.00000	-3.00000	0.00000	1	1	0	0	0	1
3025	1	232.00000	-3.00000	0.00000	1	1	0	0	0	1
3026	1	240.00000	-3.00000	0.00000	1	1	0	0	0	1
3027	1	250.00000	-3.00000	0.00000	1	1	0	0	0	1
3028	1	260.00000	-3.00000	0.00000	1	1	0	0	0	1
3029	1	270.00000	-3.00000	0.00000	1	1	0	0	0	1
3030	1	280.00000	-3.00000	0.00000	1	1	0	0	0	1
3031	1	290.00000	-3.00000	0.00000	1	1	0	0	0	1
3032	1	300.00000	-3.00000	0.00000	1	1	0	0	0	1
3033	1	310.00000	-3.00000	0.00000	1	1	0	0	0	1
3034	1	320.00000	-3.00000	0.00000	1	1	0	0	0	1
3035	1	328.00000	-3.00000	0.00000	1	1	0	0	0	1
3036	1	336.00000	-3.00000	0.00000	1	1	0	0	0	1
3037	1	344.00000	-3.00000	0.00000	1	1	0	0	0	1
3038	1	352.00000	-3.00000	0.00000	1	1	0	0	0	1
3039	1	362.00000	-3.00000	0.00000	1	1	0	0	0	1
3040	1	372.00000	-3.00000	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
3041	1	382.00000	-3.00000	0.00000	1	1	0	0	0	1
3042	1	392.00000	-3.00000	0.00000	1	1	0	0	0	1
3043	1	402.00000	-3.00000	0.00000	1	1	0	0	0	1
3044	1	412.00000	-3.00000	0.00000	1	1	0	0	0	1
3045	1	422.00000	-3.00000	0.00000	1	1	0	0	0	1
3046	1	432.00000	-3.00000	0.00000	1	1	0	0	0	1
3047	1	440.00000	-3.00000	0.00000	1	1	0	0	0	1
3048	1	448.00000	-3.00000	0.00000	1	1	0	0	0	1
3049	1	456.00000	-3.00000	0.00000	1	1	0	0	0	1
3050	1	464.00000	-3.00000	0.00000	1	1	0	0	0	1
3051	1	474.00000	-3.00000	0.00000	1	1	0	0	0	1
3052	1	484.00000	-3.00000	0.00000	1	1	0	0	0	1
3053	1	494.00000	-3.00000	0.00000	1	1	0	0	0	1
3054	1	504.00000	-3.00000	0.00000	1	1	0	0	0	1
3055	1	514.00000	-3.00000	0.00000	1	1	0	0	0	1
3056	1	524.00000	-3.00000	0.00000	1	1	0	0	0	1
3057	1	534.00000	-3.00000	0.00000	1	1	0	0	0	1
3058	1	544.00000	-3.00000	0.00000	1	1	0	0	0	1
3059	1	552.00000	-3.00000	0.00000	1	1	0	0	0	1
3060	1	560.00000	-3.00000	0.00000	1	1	0	0	0	1
3061	1	568.00000	-3.00000	0.00000	1	1	0	0	0	1
3062	1	576.00000	-3.00000	0.00000	1	1	0	0	0	1
3063	1	586.00000	-3.00000	0.00000	1	1	0	0	0	1
3064	1	596.00000	-3.00000	0.00000	1	1	0	0	0	1
3065	1	606.00000	-3.00000	0.00000	1	1	0	0	0	1
3066	1	616.00000	-3.00000	0.00000	1	1	0	0	0	1
3067	1	626.00000	-3.00000	0.00000	1	1	0	0	0	1
3068	1	636.00000	-3.00000	0.00000	1	1	0	0	0	1
3069	1	646.00000	-3.00000	0.00000	1	1	0	0	0	1
3070	1	656.00000	-3.00000	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
3071	1	664.00000	-3.00000	0.00000	1	1	0	0	0	1
3072	1	672.00000	-3.00000	0.00000	1	1	0	0	0	1
3073	1	682.00000	-3.00000	0.00000	1	1	0	0	0	1
3074	1	692.00000	-3.00000	0.00000	1	1	0	0	0	1
3075	1	702.00000	-3.00000	0.00000	1	1	0	0	0	1
3076	1	712.00000	-3.00000	0.00000	1	1	0	0	0	1
3077	1	722.00000	-3.00000	0.00000	1	1	0	0	0	1
3078	1	732.00000	-3.00000	0.00000	1	1	0	0	0	1
3079	1	742.00000	-3.00000	0.00000	1	1	0	0	0	1
3080	1	752.00000	-3.00000	0.00000	1	1	0	0	0	1
3081	1	762.00000	-3.00000	0.00000	1	1	0	0	0	1
3082	1	775.10000	-3.00000	0.00000	1	1	0	0	0	1
4001	1	1.20000	-8.27700	0.00000	1	1	0	0	0	1
4002	1	12.00000	-8.10240	0.00000	1	1	0	0	0	1
4003	1	22.00000	-7.85107	0.00000	1	1	0	0	0	1
4004	1	32.00000	-7.59975	0.00000	1	1	0	0	0	1
4005	1	42.00000	-7.34842	0.00000	1	1	0	0	0	1
4006	1	52.00000	-7.17744	0.00000	1	1	0	0	0	1
4007	1	62.00000	-7.17700	0.00000	1	1	0	0	0	1
4008	1	72.00000	-7.17700	0.00000	1	1	0	0	0	1
4009	1	82.00000	-7.17700	0.00000	1	1	0	0	0	1
4010	1	92.00000	-7.17700	0.00000	1	1	0	0	0	1
4011	1	102.00000	-7.17700	0.00000	1	1	0	0	0	1
4012	1	112.00000	-7.17700	0.00000	1	1	0	0	0	1
4013	1	120.00000	-7.17700	0.00000	1	1	0	0	0	1
4014	1	128.00000	-7.17700	0.00000	1	1	0	0	0	1
4015	1	138.00000	-7.17700	0.00000	1	1	0	0	0	1
4016	1	148.00000	-7.17700	0.00000	1	1	0	0	0	1
4017	1	158.00000	-7.17700	0.00000	1	1	0	0	0	1
4018	1	168.00000	-7.17700	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
4019	1	178.00000	-7.17700	0.00000	1	1	0	0	0	1
4020	1	188.00000	-7.17700	0.00000	1	1	0	0	0	1
4021	1	198.00000	-7.17700	0.00000	1	1	0	0	0	1
4022	1	208.00000	-7.17700	0.00000	1	1	0	0	0	1
4023	1	216.00000	-7.17700	0.00000	1	1	0	0	0	1
4024	1	224.00000	-7.17700	0.00000	1	1	0	0	0	1
4025	1	232.00000	-7.17700	0.00000	1	1	0	0	0	1
4026	1	240.00000	-7.17700	0.00000	1	1	0	0	0	1
4027	1	250.00000	-7.17700	0.00000	1	1	0	0	0	1
4028	1	260.00000	-7.17700	0.00000	1	1	0	0	0	1
4029	1	270.00000	-7.17700	0.00000	1	1	0	0	0	1
4030	1	280.00000	-7.17700	0.00000	1	1	0	0	0	1
4031	1	290.00000	-7.17700	0.00000	1	1	0	0	0	1
4032	1	300.00000	-7.17700	0.00000	1	1	0	0	0	1
4033	1	310.00000	-7.17700	0.00000	1	1	0	0	0	1
4034	1	320.00000	-7.17700	0.00000	1	1	0	0	0	1
4035	1	328.00000	-7.17700	0.00000	1	1	0	0	0	1
4036	1	336.00000	-7.17700	0.00000	1	1	0	0	0	1
4037	1	344.00000	-7.17700	0.00000	1	1	0	0	0	1
4038	1	352.00000	-7.17700	0.00000	1	1	0	0	0	1
4039	1	362.00000	-7.17700	0.00000	1	1	0	0	0	1
4040	1	372.00000	-7.17700	0.00000	1	1	0	0	0	1
4041	1	382.00000	-7.17700	0.00000	1	1	0	0	0	1
4042	1	392.00000	-7.17700	0.00000	1	1	0	0	0	1
4043	1	402.00000	-7.17700	0.00000	1	1	0	0	0	1
4044	1	412.00000	-7.17700	0.00000	1	1	0	0	0	1
4045	1	422.00000	-7.17700	0.00000	1	1	0	0	0	1
4046	1	432.00000	-7.17700	0.00000	1	1	0	0	0	1
4047	1	440.00000	-7.17700	0.00000	1	1	0	0	0	1
4048	1	448.00000	-7.17700	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE (m)	Y-COORDINATE (m)	Z-COORDINATE (m)	BOUNDARY CONDITION					
					DX	DY	DZ	RX	RY	RZ
4049	1	456.00000	-7.17700	0.00000	1	1	0	0	0	1
4050	1	464.00000	-7.17700	0.00000	1	1	0	0	0	1
4051	1	474.00000	-7.17700	0.00000	1	1	0	0	0	1
4052	1	484.00000	-7.17700	0.00000	1	1	0	0	0	1
4053	1	494.00000	-7.17700	0.00000	1	1	0	0	0	1
4054	1	504.00000	-7.17700	0.00000	1	1	0	0	0	1
4055	1	514.00000	-7.17700	0.00000	1	1	0	0	0	1
4056	1	524.00000	-7.17700	0.00000	1	1	0	0	0	1
4057	1	534.00000	-7.17700	0.00000	1	1	0	0	0	1
4058	1	544.00000	-7.17700	0.00000	1	1	0	0	0	1
4059	1	552.00000	-7.17700	0.00000	1	1	0	0	0	1
4060	1	560.00000	-7.17700	0.00000	1	1	0	0	0	1
4061	1	568.00000	-7.17700	0.00000	1	1	0	0	0	1
4062	1	576.00000	-7.17700	0.00000	1	1	0	0	0	1
4063	1	586.00000	-7.17700	0.00000	1	1	0	0	0	1
4064	1	596.00000	-7.17700	0.00000	1	1	0	0	0	1
4065	1	606.00000	-7.17700	0.00000	1	1	0	0	0	1
4066	1	616.00000	-7.17700	0.00000	1	1	0	0	0	1
4067	1	626.00000	-7.17700	0.00000	1	1	0	0	0	1
4068	1	636.00000	-7.17700	0.00000	1	1	0	0	0	1
4069	1	646.00000	-7.17700	0.00000	1	1	0	0	0	1
4070	1	656.00000	-7.17700	0.00000	1	1	0	0	0	1
4071	1	664.00000	-7.17700	0.00000	1	1	0	0	0	1
4072	1	672.00000	-7.17700	0.00000	1	1	0	0	0	1
4073	1	682.00000	-7.17700	0.00000	1	1	0	0	0	1
4074	1	692.00000	-7.17700	0.00000	1	1	0	0	0	1
4075	1	702.00000	-7.17700	0.00000	1	1	0	0	0	1
4076	1	712.00000	-7.17700	0.00000	1	1	0	0	0	1
4077	1	722.00000	-7.17700	0.00000	1	1	0	0	0	1
4078	1	732.00000	-7.17700	0.00000	1	1	0	0	0	1

Bago

NODE DATA [STRUCTURE-NODE(NODE)]

NODE	BLOCK	X-COORDINATE	Y-COORDINATE	Z-COORDINATE	BOUNDARY CONDITION					
		(m)	(m)	(m)	DX	DY	DZ	RX	RY	RZ
4079	1	742.00000	-7.17700	0.00000	1	1	0	0	0	1
4080	1	752.00000	-7.17700	0.00000	1	1	0	0	0	1
4081	1	762.00000	-7.17700	0.00000	1	1	0	0	0	1
4082	1	775.10000	-7.17700	0.00000	1	1	0	0	0	1

Bago

MATERIAL DATA [MATE1]

MATERIAL	YOUNG MODULUS (kN/m ²)	SHEARS (kN/m ²)	POISSONS	THERMAL EXP
1001	2.000000e+008	7.700000e+007	0.000000e+000	1.200000e-005

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1001	0.000000	0.000000	0.000000	0.203191	0.000000	0.304843
1002	0.000000	0.000000	0.000000	0.213172	0.000000	0.392633
1003	0.000000	0.000000	0.000000	0.215549	0.000000	0.427086
1004	0.000000	0.000000	0.000000	0.216846	0.000000	0.448767
1005	0.000000	0.000000	0.000000	0.216540	0.000000	0.448653
1006	0.000000	0.000000	0.000000	0.216353	0.000000	0.445557
1007	0.000000	0.000000	0.000000	0.214607	0.000000	0.414581
1008	0.000000	0.000000	0.000000	0.207747	0.000000	0.343015
1009	0.000000	0.000000	0.000000	0.197760	0.000000	0.309099
1010	0.000000	0.000000	0.000000	0.209583	0.000000	0.365396
1011	0.000000	0.000000	0.000000	0.261510	0.000000	0.516357
1012	0.000000	0.000000	0.000000	0.262364	0.000000	0.528515
1013	0.000000	0.000000	0.000000	0.227744	0.000000	0.460011
1014	0.000000	0.000000	0.000000	0.203482	0.000000	0.340058
1015	0.000000	0.000000	0.000000	0.195354	0.000000	0.299378
1016	0.000000	0.000000	0.000000	0.196414	0.000000	0.292423
1017	0.000000	0.000000	0.000000	0.202546	0.000000	0.297354
1018	0.000000	0.000000	0.000000	0.201850	0.000000	0.314631
1019	0.000000	0.000000	0.000000	0.199098	0.000000	0.313616
1020	0.000000	0.000000	0.000000	0.198140	0.000000	0.309433
1021	0.000000	0.000000	0.000000	0.198140	0.000000	0.309195
1022	0.000000	0.000000	0.000000	0.210653	0.000000	0.361375
1023	0.000000	0.000000	0.000000	0.219593	0.000000	0.402954
1024	0.000000	0.000000	0.000000	0.219593	0.000000	0.402956
1025	0.000000	0.000000	0.000000	0.211155	0.000000	0.350705
1026	0.000000	0.000000	0.000000	0.196337	0.000000	0.268694
1027	0.000000	0.000000	0.000000	0.193741	0.000000	0.258614
1028	0.000000	0.000000	0.000000	0.201166	0.000000	0.292313
1029	0.000000	0.000000	0.000000	0.204559	0.000000	0.323355
1030	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1031	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
1032	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
1033	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
1034	0.000000	0.000000	0.000000	0.216085	0.000000	0.389593
1035	0.000000	0.000000	0.000000	0.237686	0.000000	0.450148
1036	0.000000	0.000000	0.000000	0.238716	0.000000	0.445098
1037	0.000000	0.000000	0.000000	0.218372	0.000000	0.378412
1038	0.000000	0.000000	0.000000	0.198433	0.000000	0.279939
1039	0.000000	0.000000	0.000000	0.195854	0.000000	0.269881
1040	0.000000	0.000000	0.000000	0.204951	0.000000	0.324447
1041	0.000000	0.000000	0.000000	0.206914	0.000000	0.357354
1042	0.000000	0.000000	0.000000	0.206914	0.000000	0.357354
1043	0.000000	0.000000	0.000000	0.203723	0.000000	0.337790
1044	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
1045	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
1046	0.000000	0.000000	0.000000	0.214851	0.000000	0.376877
1047	0.000000	0.000000	0.000000	0.236451	0.000000	0.428380
1048	0.000000	0.000000	0.000000	0.238716	0.000000	0.435873
1049	0.000000	0.000000	0.000000	0.218372	0.000000	0.378412
1050	0.000000	0.000000	0.000000	0.199211	0.000000	0.296110
1051	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
1052	0.000000	0.000000	0.000000	0.204204	0.000000	0.341504
1053	0.000000	0.000000	0.000000	0.208195	0.000000	0.367259
1054	0.000000	0.000000	0.000000	0.208195	0.000000	0.367259
1055	0.000000	0.000000	0.000000	0.204843	0.000000	0.344874
1056	0.000000	0.000000	0.000000	0.196797	0.000000	0.306860
1057	0.000000	0.000000	0.000000	0.199210	0.000000	0.296109
1058	0.000000	0.000000	0.000000	0.216142	0.000000	0.365212
1059	0.000000	0.000000	0.000000	0.225322	0.000000	0.417478
1060	0.000000	0.000000	0.000000	0.224169	0.000000	0.422681

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1061	0.000000	0.000000	0.000000	0.213732	0.000000	0.376550
1062	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
1063	0.000000	0.000000	0.000000	0.193176	0.000000	0.292110
1064	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
1065	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
1066	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
1067	0.000000	0.000000	0.000000	0.197564	0.000000	0.308498
1068	0.000000	0.000000	0.000000	0.195016	0.000000	0.275497
1069	0.000000	0.000000	0.000000	0.200489	0.000000	0.288442
1070	0.000000	0.000000	0.000000	0.224633	0.000000	0.407272
1071	0.000000	0.000000	0.000000	0.238266	0.000000	0.483407
1072	0.000000	0.000000	0.000000	0.237815	0.000000	0.479922
1073	0.000000	0.000000	0.000000	0.215430	0.000000	0.360398
1074	0.000000	0.000000	0.000000	0.199899	0.000000	0.283722
1075	0.000000	0.000000	0.000000	0.203624	0.000000	0.307535
1076	0.000000	0.000000	0.000000	0.210628	0.000000	0.365326
1077	0.000000	0.000000	0.000000	0.213697	0.000000	0.399631
1078	0.000000	0.000000	0.000000	0.214201	0.000000	0.406510
1079	0.000000	0.000000	0.000000	0.213361	0.000000	0.395045
1080	0.000000	0.000000	0.000000	0.208230	0.000000	0.343149
1081	0.000000	0.000000	0.000000	0.197781	0.000000	0.278271
2001	0.000000	0.000000	0.000000	0.266676	0.000000	0.364508
2002	0.000000	0.000000	0.000000	0.285577	0.000000	0.420893
2003	0.000000	0.000000	0.000000	0.299361	0.000000	0.473661
2004	0.000000	0.000000	0.000000	0.303882	0.000000	0.491915
2005	0.000000	0.000000	0.000000	0.304117	0.000000	0.485521
2006	0.000000	0.000000	0.000000	0.303077	0.000000	0.477617
2007	0.000000	0.000000	0.000000	0.293498	0.000000	0.423967
2008	0.000000	0.000000	0.000000	0.278349	0.000000	0.368411
2009	0.000000	0.000000	0.000000	0.284924	0.000000	0.372660

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
2010	0.000000	0.000000	0.000000	0.350269	0.000000	0.455974
2011	0.000000	0.000000	0.000000	0.492707	0.000000	0.595606
2012	0.000000	0.000000	0.000000	0.497709	0.000000	0.609757
2013	0.000000	0.000000	0.000000	0.418014	0.000000	0.526736
2014	0.000000	0.000000	0.000000	0.288057	0.000000	0.393367
2015	0.000000	0.000000	0.000000	0.278950	0.000000	0.370476
2016	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664
2017	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664
2018	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664
2019	0.000000	0.000000	0.000000	0.270933	0.000000	0.348349
2020	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559
2021	0.000000	0.000000	0.000000	0.305822	0.000000	0.367172
2022	0.000000	0.000000	0.000000	0.348549	0.000000	0.430762
2023	0.000000	0.000000	0.000000	0.364309	0.000000	0.470548
2024	0.000000	0.000000	0.000000	0.364310	0.000000	0.470550
2025	0.000000	0.000000	0.000000	0.332701	0.000000	0.429331
2026	0.000000	0.000000	0.000000	0.286067	0.000000	0.384606
2027	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
2028	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
2029	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
2030	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
2031	0.000000	0.000000	0.000000	0.277261	0.000000	0.366764
2032	0.000000	0.000000	0.000000	0.271977	0.000000	0.350717
2033	0.000000	0.000000	0.000000	0.282155	0.000000	0.373440
2034	0.000000	0.000000	0.000000	0.308419	0.000000	0.452765
2035	0.000000	0.000000	0.000000	0.338320	0.000000	0.506041
2036	0.000000	0.000000	0.000000	0.338321	0.000000	0.506042
2037	0.000000	0.000000	0.000000	0.309185	0.000000	0.455762
2038	0.000000	0.000000	0.000000	0.282056	0.000000	0.374974
2039	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
2040	0.000000	0.000000	0.000000	0.273117	0.000000	0.354835
2041	0.000000	0.000000	0.000000	0.281135	0.000000	0.376962
2042	0.000000	0.000000	0.000000	0.281135	0.000000	0.376962
2043	0.000000	0.000000	0.000000	0.273118	0.000000	0.354836
2044	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559
2045	0.000000	0.000000	0.000000	0.277927	0.000000	0.359568
2046	0.000000	0.000000	0.000000	0.304195	0.000000	0.437365
2047	0.000000	0.000000	0.000000	0.332864	0.000000	0.485961
2048	0.000000	0.000000	0.000000	0.331895	0.000000	0.480988
2049	0.000000	0.000000	0.000000	0.303226	0.000000	0.432358
2050	0.000000	0.000000	0.000000	0.277927	0.000000	0.359569
2051	0.000000	0.000000	0.000000	0.272073	0.000000	0.351628
2052	0.000000	0.000000	0.000000	0.281243	0.000000	0.377822
2053	0.000000	0.000000	0.000000	0.297764	0.000000	0.396461
2054	0.000000	0.000000	0.000000	0.317261	0.000000	0.401383
2055	0.000000	0.000000	0.000000	0.309064	0.000000	0.380530
2056	0.000000	0.000000	0.000000	0.286123	0.000000	0.362797
2057	0.000000	0.000000	0.000000	0.282033	0.000000	0.371716
2058	0.000000	0.000000	0.000000	0.302419	0.000000	0.431278
2059	0.000000	0.000000	0.000000	0.314807	0.000000	0.473832
2060	0.000000	0.000000	0.000000	0.314808	0.000000	0.473833
2061	0.000000	0.000000	0.000000	0.301531	0.000000	0.428151
2062	0.000000	0.000000	0.000000	0.277927	0.000000	0.359569
2063	0.000000	0.000000	0.000000	0.291629	0.000000	0.349598
2064	0.000000	0.000000	0.000000	0.334470	0.000000	0.369515
2065	0.000000	0.000000	0.000000	0.341090	0.000000	0.380378
2066	0.000000	0.000000	0.000000	0.303618	0.000000	0.378243
2067	0.000000	0.000000	0.000000	0.273118	0.000000	0.354836
2068	0.000000	0.000000	0.000000	0.272683	0.000000	0.352875
2069	0.000000	0.000000	0.000000	0.285872	0.000000	0.386699

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
2070	0.000000	0.000000	0.000000	0.355414	0.000000	0.495697
2071	0.000000	0.000000	0.000000	0.396891	0.000000	0.562938
2072	0.000000	0.000000	0.000000	0.395739	0.000000	0.559007
2073	0.000000	0.000000	0.000000	0.326975	0.000000	0.447878
2074	0.000000	0.000000	0.000000	0.282066	0.000000	0.378949
2075	0.000000	0.000000	0.000000	0.278349	0.000000	0.368411
2076	0.000000	0.000000	0.000000	0.285821	0.000000	0.393999
2077	0.000000	0.000000	0.000000	0.290305	0.000000	0.409352
2078	0.000000	0.000000	0.000000	0.290305	0.000000	0.409352
2079	0.000000	0.000000	0.000000	0.286176	0.000000	0.394336
2080	0.000000	0.000000	0.000000	0.283699	0.000000	0.385326
2081	0.000000	0.000000	0.000000	0.268709	0.000000	0.346114
3001	0.000000	0.000000	0.000000	0.266676	0.000000	0.364506
3002	0.000000	0.000000	0.000000	0.285577	0.000000	0.420890
3003	0.000000	0.000000	0.000000	0.299361	0.000000	0.473657
3004	0.000000	0.000000	0.000000	0.303882	0.000000	0.491912
3005	0.000000	0.000000	0.000000	0.304117	0.000000	0.485520
3006	0.000000	0.000000	0.000000	0.303077	0.000000	0.477617
3007	0.000000	0.000000	0.000000	0.293498	0.000000	0.423967
3008	0.000000	0.000000	0.000000	0.278349	0.000000	0.368411
3009	0.000000	0.000000	0.000000	0.284924	0.000000	0.372660
3010	0.000000	0.000000	0.000000	0.350269	0.000000	0.455974
3011	0.000000	0.000000	0.000000	0.492707	0.000000	0.595606
3012	0.000000	0.000000	0.000000	0.497709	0.000000	0.609757
3013	0.000000	0.000000	0.000000	0.418014	0.000000	0.526736
3014	0.000000	0.000000	0.000000	0.288057	0.000000	0.393367
3015	0.000000	0.000000	0.000000	0.278950	0.000000	0.370476
3016	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664
3017	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664
3018	0.000000	0.000000	0.000000	0.275309	0.000000	0.359664

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
3019	0.000000	0.000000	0.000000	0.270933	0.000000	0.348349
3020	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559
3021	0.000000	0.000000	0.000000	0.305822	0.000000	0.367172
3022	0.000000	0.000000	0.000000	0.348549	0.000000	0.430762
3023	0.000000	0.000000	0.000000	0.364309	0.000000	0.470548
3024	0.000000	0.000000	0.000000	0.364310	0.000000	0.470550
3025	0.000000	0.000000	0.000000	0.332701	0.000000	0.429331
3026	0.000000	0.000000	0.000000	0.286067	0.000000	0.384606
3027	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
3028	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
3029	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
3030	0.000000	0.000000	0.000000	0.286067	0.000000	0.393508
3031	0.000000	0.000000	0.000000	0.277261	0.000000	0.366764
3032	0.000000	0.000000	0.000000	0.271977	0.000000	0.350717
3033	0.000000	0.000000	0.000000	0.282155	0.000000	0.373440
3034	0.000000	0.000000	0.000000	0.308419	0.000000	0.452765
3035	0.000000	0.000000	0.000000	0.338320	0.000000	0.506041
3036	0.000000	0.000000	0.000000	0.338321	0.000000	0.506042
3037	0.000000	0.000000	0.000000	0.309185	0.000000	0.455762
3038	0.000000	0.000000	0.000000	0.282056	0.000000	0.374974
3039	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559
3040	0.000000	0.000000	0.000000	0.273117	0.000000	0.354835
3041	0.000000	0.000000	0.000000	0.281135	0.000000	0.376962
3042	0.000000	0.000000	0.000000	0.281135	0.000000	0.376962
3043	0.000000	0.000000	0.000000	0.273118	0.000000	0.354836
3044	0.000000	0.000000	0.000000	0.268307	0.000000	0.341559
3045	0.000000	0.000000	0.000000	0.277927	0.000000	0.359568
3046	0.000000	0.000000	0.000000	0.304195	0.000000	0.437365
3047	0.000000	0.000000	0.000000	0.332864	0.000000	0.485961
3048	0.000000	0.000000	0.000000	0.331895	0.000000	0.480988

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
3049	0.000000	0.000000	0.000000	0.303226	0.000000	0.432358
3050	0.000000	0.000000	0.000000	0.277927	0.000000	0.359569
3051	0.000000	0.000000	0.000000	0.272073	0.000000	0.351628
3052	0.000000	0.000000	0.000000	0.281243	0.000000	0.377822
3053	0.000000	0.000000	0.000000	0.297764	0.000000	0.396461
3054	0.000000	0.000000	0.000000	0.317261	0.000000	0.401383
3055	0.000000	0.000000	0.000000	0.309064	0.000000	0.380530
3056	0.000000	0.000000	0.000000	0.286123	0.000000	0.362797
3057	0.000000	0.000000	0.000000	0.282033	0.000000	0.371716
3058	0.000000	0.000000	0.000000	0.302419	0.000000	0.431278
3059	0.000000	0.000000	0.000000	0.314807	0.000000	0.473832
3060	0.000000	0.000000	0.000000	0.314808	0.000000	0.473833
3061	0.000000	0.000000	0.000000	0.301531	0.000000	0.428151
3062	0.000000	0.000000	0.000000	0.277927	0.000000	0.359569
3063	0.000000	0.000000	0.000000	0.291629	0.000000	0.349598
3064	0.000000	0.000000	0.000000	0.334470	0.000000	0.369515
3065	0.000000	0.000000	0.000000	0.341090	0.000000	0.380378
3066	0.000000	0.000000	0.000000	0.303618	0.000000	0.378243
3067	0.000000	0.000000	0.000000	0.273118	0.000000	0.354836
3068	0.000000	0.000000	0.000000	0.272683	0.000000	0.352875
3069	0.000000	0.000000	0.000000	0.285872	0.000000	0.386699
3070	0.000000	0.000000	0.000000	0.355414	0.000000	0.495697
3071	0.000000	0.000000	0.000000	0.396891	0.000000	0.562938
3072	0.000000	0.000000	0.000000	0.395739	0.000000	0.559007
3073	0.000000	0.000000	0.000000	0.326975	0.000000	0.447878
3074	0.000000	0.000000	0.000000	0.282066	0.000000	0.378949
3075	0.000000	0.000000	0.000000	0.278349	0.000000	0.368411
3076	0.000000	0.000000	0.000000	0.285821	0.000000	0.393999
3077	0.000000	0.000000	0.000000	0.290305	0.000000	0.409352
3078	0.000000	0.000000	0.000000	0.290305	0.000000	0.409352

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
3079	0.000000	0.000000	0.000000	0.286176	0.000000	0.394336
3080	0.000000	0.000000	0.000000	0.283699	0.000000	0.385326
3081	0.000000	0.000000	0.000000	0.268709	0.000000	0.346114
4001	0.000000	0.000000	0.000000	0.203191	0.000000	0.304844
4002	0.000000	0.000000	0.000000	0.213172	0.000000	0.392635
4003	0.000000	0.000000	0.000000	0.215549	0.000000	0.427088
4004	0.000000	0.000000	0.000000	0.216846	0.000000	0.448769
4005	0.000000	0.000000	0.000000	0.216540	0.000000	0.448654
4006	0.000000	0.000000	0.000000	0.216353	0.000000	0.445557
4007	0.000000	0.000000	0.000000	0.214607	0.000000	0.414581
4008	0.000000	0.000000	0.000000	0.207747	0.000000	0.343015
4009	0.000000	0.000000	0.000000	0.197760	0.000000	0.309099
4010	0.000000	0.000000	0.000000	0.209583	0.000000	0.365396
4011	0.000000	0.000000	0.000000	0.261510	0.000000	0.516357
4012	0.000000	0.000000	0.000000	0.262364	0.000000	0.528515
4013	0.000000	0.000000	0.000000	0.227744	0.000000	0.460011
4014	0.000000	0.000000	0.000000	0.203482	0.000000	0.340058
4015	0.000000	0.000000	0.000000	0.195354	0.000000	0.299378
4016	0.000000	0.000000	0.000000	0.196414	0.000000	0.292423
4017	0.000000	0.000000	0.000000	0.202546	0.000000	0.297354
4018	0.000000	0.000000	0.000000	0.201850	0.000000	0.314631
4019	0.000000	0.000000	0.000000	0.199098	0.000000	0.313616
4020	0.000000	0.000000	0.000000	0.198140	0.000000	0.309433
4021	0.000000	0.000000	0.000000	0.198140	0.000000	0.309195
4022	0.000000	0.000000	0.000000	0.210653	0.000000	0.361375
4023	0.000000	0.000000	0.000000	0.219593	0.000000	0.402954
4024	0.000000	0.000000	0.000000	0.219593	0.000000	0.402956
4025	0.000000	0.000000	0.000000	0.211155	0.000000	0.350705
4026	0.000000	0.000000	0.000000	0.196337	0.000000	0.268694
4027	0.000000	0.000000	0.000000	0.193741	0.000000	0.258614

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
4028	0.000000	0.000000	0.000000	0.201166	0.000000	0.292313
4029	0.000000	0.000000	0.000000	0.204559	0.000000	0.323355
4030	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
4031	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
4032	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
4033	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
4034	0.000000	0.000000	0.000000	0.216085	0.000000	0.389593
4035	0.000000	0.000000	0.000000	0.237686	0.000000	0.450148
4036	0.000000	0.000000	0.000000	0.238716	0.000000	0.445098
4037	0.000000	0.000000	0.000000	0.218372	0.000000	0.378412
4038	0.000000	0.000000	0.000000	0.198433	0.000000	0.279939
4039	0.000000	0.000000	0.000000	0.195854	0.000000	0.269881
4040	0.000000	0.000000	0.000000	0.204951	0.000000	0.324447
4041	0.000000	0.000000	0.000000	0.206914	0.000000	0.357354
4042	0.000000	0.000000	0.000000	0.206914	0.000000	0.357354
4043	0.000000	0.000000	0.000000	0.203723	0.000000	0.337790
4044	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
4045	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
4046	0.000000	0.000000	0.000000	0.214851	0.000000	0.376877
4047	0.000000	0.000000	0.000000	0.236451	0.000000	0.428380
4048	0.000000	0.000000	0.000000	0.238716	0.000000	0.435873
4049	0.000000	0.000000	0.000000	0.218372	0.000000	0.378412
4050	0.000000	0.000000	0.000000	0.199211	0.000000	0.296110
4051	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
4052	0.000000	0.000000	0.000000	0.204204	0.000000	0.341504
4053	0.000000	0.000000	0.000000	0.208195	0.000000	0.367259
4054	0.000000	0.000000	0.000000	0.208195	0.000000	0.367259
4055	0.000000	0.000000	0.000000	0.204843	0.000000	0.344874
4056	0.000000	0.000000	0.000000	0.196797	0.000000	0.306860
4057	0.000000	0.000000	0.000000	0.199210	0.000000	0.296109

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
4058	0.000000	0.000000	0.000000	0.216142	0.000000	0.365212
4059	0.000000	0.000000	0.000000	0.225322	0.000000	0.417478
4060	0.000000	0.000000	0.000000	0.224169	0.000000	0.422681
4061	0.000000	0.000000	0.000000	0.213732	0.000000	0.376550
4062	0.000000	0.000000	0.000000	0.197115	0.000000	0.306203
4063	0.000000	0.000000	0.000000	0.193176	0.000000	0.292110
4064	0.000000	0.000000	0.000000	0.196414	0.000000	0.304838
4065	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
4066	0.000000	0.000000	0.000000	0.201809	0.000000	0.326051
4067	0.000000	0.000000	0.000000	0.197564	0.000000	0.308498
4068	0.000000	0.000000	0.000000	0.195016	0.000000	0.275497
4069	0.000000	0.000000	0.000000	0.200489	0.000000	0.288442
4070	0.000000	0.000000	0.000000	0.224633	0.000000	0.407272
4071	0.000000	0.000000	0.000000	0.238266	0.000000	0.483407
4072	0.000000	0.000000	0.000000	0.237815	0.000000	0.479922
4073	0.000000	0.000000	0.000000	0.215430	0.000000	0.360398
4074	0.000000	0.000000	0.000000	0.199899	0.000000	0.283722
4075	0.000000	0.000000	0.000000	0.203624	0.000000	0.307535
4076	0.000000	0.000000	0.000000	0.210628	0.000000	0.365326
4077	0.000000	0.000000	0.000000	0.213697	0.000000	0.399631
4078	0.000000	0.000000	0.000000	0.214201	0.000000	0.406510
4079	0.000000	0.000000	0.000000	0.213361	0.000000	0.395045
4080	0.000000	0.000000	0.000000	0.208230	0.000000	0.343149
4081	0.000000	0.000000	0.000000	0.197781	0.000000	0.278271
1001001	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001002	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1001003	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1001004	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1001005	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1001006	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1001007	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001008	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001009	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001010	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001011	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001012	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001013	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001014	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001015	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001016	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001017	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001018	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001019	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001020	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001021	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001022	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001023	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001024	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001025	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001026	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001027	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001028	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001029	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001030	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001031	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001032	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001033	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001034	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001035	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001036	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1001037	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001038	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001039	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001040	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001041	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001042	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001043	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001044	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001045	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001046	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001047	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001048	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001049	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001050	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001051	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001052	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001053	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001054	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001055	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001056	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001057	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001058	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001059	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001060	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001061	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001062	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001063	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001064	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001065	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001066	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1001067	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001068	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001069	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001070	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001071	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001072	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001073	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001074	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001075	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001076	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001077	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001078	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001079	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001080	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001081	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1001082	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1002001	0.000000	0.000000	0.000000	0.000000	0.000000	0.035354
1002002	0.000000	0.000000	0.000000	0.000000	0.000000	0.036050
1002003	0.000000	0.000000	0.000000	0.000000	0.000000	0.034898
1002004	0.000000	0.000000	0.000000	0.000000	0.000000	0.033623
1002005	0.000000	0.000000	0.000000	0.000000	0.000000	0.032208
1002006	0.000000	0.000000	0.000000	0.000000	0.000000	0.031163
1002007	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002008	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002009	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002010	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002011	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002012	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002013	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002014	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1002015	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002016	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002017	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002018	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002019	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002020	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002021	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002022	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002023	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002024	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002025	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002026	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002027	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002028	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002029	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002030	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002031	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002032	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002033	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002034	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002035	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002036	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002037	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002038	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002039	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002040	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002041	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002042	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002043	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002044	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1002045	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002046	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002047	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002048	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002049	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002050	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002051	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002052	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002053	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002054	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002055	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002056	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002057	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002058	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002059	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002060	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002061	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002062	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002063	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002064	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002065	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002066	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002067	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002068	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002069	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002070	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002071	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002072	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002073	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002074	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1002075	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002076	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002077	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002078	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002079	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002080	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002081	0.000000	0.000000	0.000000	0.000000	0.000000	0.031159
1002082	0.000000	0.000000	0.000000	0.000000	0.000000	0.030206
1003001	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003002	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1003003	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1003004	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1003005	0.000000	0.000000	0.000000	0.000000	0.000000	0.022474
1003006	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003007	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003008	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003009	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003010	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003011	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003012	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003013	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003014	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003015	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003016	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003017	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003018	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003019	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003020	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003021	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003022	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1003023	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003024	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003025	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003026	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003027	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003028	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003029	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003030	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003031	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003032	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003033	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003034	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003035	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003036	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003037	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003038	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003039	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003040	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003041	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003042	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003043	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003044	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003045	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003046	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003047	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003048	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003049	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003050	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003051	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003052	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [BEAM-ELEMENT (BEAM)]

PROPERTY	AREA (m2)	AREA2 (m2)	AREA3 (m2)	INERTIA1 (m4)	INERTIA2 (m4)	INERTIA3 (m4)
1003053	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003054	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003055	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003056	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003057	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003058	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003059	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003060	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003061	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003062	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003063	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003064	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003065	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003066	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003067	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003068	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003069	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003070	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003071	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003072	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003073	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003074	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003075	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003076	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003077	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003078	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003079	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003080	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003081	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467
1003082	0.000000	0.000000	0.000000	0.000000	0.000000	0.022467

Bago

PROPERTY DATA [SUPPORT-ELEMENT(SUPPORT)]

PROPERTY	SPRING-D1 (kN/m)	SPRING-D2 (kN/m)	SPRING-D3 (kN/m)	SPRING-R1 (kN·m/rad)	SPRING-R2 (kN·m/rad)	SPRING-R3 (kN·m/rad)
7104072	0.000000e+000	0.000000e+000	1.000000e+012	0.000000e+000	0.000000e+000	0.000000e+000
7104082	0.000000e+000	0.000000e+000	1.000000e+012	0.000000e+000	0.000000e+000	0.000000e+000

Bago

ELEMENT BLOCK DATA

BLOCK	TITLE	COUNT	BLOCK TYPE
1	Main girder	324	BEAM-ELEMENT (BEAM)
2	Cross beam	246	BEAM-ELEMENT (BEAM)
3	Support No. 1	4	SUPPORT-ELEMENT (SUPPORT)
4	Support No. 2	4	SUPPORT-ELEMENT (SUPPORT)
5	Support No. 3	4	SUPPORT-ELEMENT (SUPPORT)
6	Support No. 4	4	SUPPORT-ELEMENT (SUPPORT)
7	Support No. 5	4	SUPPORT-ELEMENT (SUPPORT)
8	Support No. 6	4	SUPPORT-ELEMENT (SUPPORT)
9	Support No. 7	4	SUPPORT-ELEMENT (SUPPORT)
10	Support No. 8	4	SUPPORT-ELEMENT (SUPPORT)

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1001	1	1001	1002	1001	1001	000000	000000	0.00000	0.00000	1.00000	10.80141
1002	1	1002	1003	1001	1002	000000	000000	0.00000	0.00000	1.00000	10.00316
1003	1	1003	1004	1001	1003	000000	000000	0.00000	0.00000	1.00000	10.00316
1004	1	1004	1005	1001	1004	000000	000000	0.00000	0.00000	1.00000	10.00316
1005	1	1005	1006	1001	1005	000000	000000	0.00000	0.00000	1.00000	10.00146
1006	1	1006	1007	1001	1006	000000	000000	0.00000	0.00000	1.00000	10.00000
1007	1	1007	1008	1001	1007	000000	000000	0.00000	0.00000	1.00000	10.00000
1008	1	1008	1009	1001	1008	000000	000000	0.00000	0.00000	1.00000	10.00000
1009	1	1009	1010	1001	1009	000000	000000	0.00000	0.00000	1.00000	10.00000
1010	1	1010	1011	1001	1010	000000	000000	0.00000	0.00000	1.00000	10.00000
1011	1	1011	1012	1001	1011	000000	000000	0.00000	0.00000	1.00000	10.00000
1012	1	1012	1013	1001	1012	000000	000000	0.00000	0.00000	1.00000	8.00000
1013	1	1013	1014	1001	1013	000000	000000	0.00000	0.00000	1.00000	8.00000
1014	1	1014	1015	1001	1014	000000	000000	0.00000	0.00000	1.00000	10.00000
1015	1	1015	1016	1001	1015	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1016	1	1016	1017	1001	1016	000000	000000	0.00000	0.00000	1.00000	10.00000
1017	1	1017	1018	1001	1017	000000	000000	0.00000	0.00000	1.00000	10.00000
1018	1	1018	1019	1001	1018	000000	000000	0.00000	0.00000	1.00000	10.00000
1019	1	1019	1020	1001	1019	000000	000000	0.00000	0.00000	1.00000	10.00000
1020	1	1020	1021	1001	1020	000000	000000	0.00000	0.00000	1.00000	10.00000
1021	1	1021	1022	1001	1021	000000	000000	0.00000	0.00000	1.00000	10.00000
1022	1	1022	1023	1001	1022	000000	000000	0.00000	0.00000	1.00000	8.00000
1023	1	1023	1024	1001	1023	000000	000000	0.00000	0.00000	1.00000	8.00000
1024	1	1024	1025	1001	1024	000000	000000	0.00000	0.00000	1.00000	8.00000
1025	1	1025	1026	1001	1025	000000	000000	0.00000	0.00000	1.00000	8.00000
1026	1	1026	1027	1001	1026	000000	000000	0.00000	0.00000	1.00000	10.00000
1027	1	1027	1028	1001	1027	000000	000000	0.00000	0.00000	1.00000	10.00000
1028	1	1028	1029	1001	1028	000000	000000	0.00000	0.00000	1.00000	10.00000
1029	1	1029	1030	1001	1029	000000	000000	0.00000	0.00000	1.00000	10.00000
1030	1	1030	1031	1001	1030	000000	000000	0.00000	0.00000	1.00000	10.00000
1031	1	1031	1032	1001	1031	000000	000000	0.00000	0.00000	1.00000	10.00000
1032	1	1032	1033	1001	1032	000000	000000	0.00000	0.00000	1.00000	10.00000
1033	1	1033	1034	1001	1033	000000	000000	0.00000	0.00000	1.00000	10.00000
1034	1	1034	1035	1001	1034	000000	000000	0.00000	0.00000	1.00000	8.00000
1035	1	1035	1036	1001	1035	000000	000000	0.00000	0.00000	1.00000	8.00000
1036	1	1036	1037	1001	1036	000000	000000	0.00000	0.00000	1.00000	8.00000
1037	1	1037	1038	1001	1037	000000	000000	0.00000	0.00000	1.00000	8.00000
1038	1	1038	1039	1001	1038	000000	000000	0.00000	0.00000	1.00000	10.00000
1039	1	1039	1040	1001	1039	000000	000000	0.00000	0.00000	1.00000	10.00000
1040	1	1040	1041	1001	1040	000000	000000	0.00000	0.00000	1.00000	10.00000
1041	1	1041	1042	1001	1041	000000	000000	0.00000	0.00000	1.00000	10.00000
1042	1	1042	1043	1001	1042	000000	000000	0.00000	0.00000	1.00000	10.00000
1043	1	1043	1044	1001	1043	000000	000000	0.00000	0.00000	1.00000	10.00000
1044	1	1044	1045	1001	1044	000000	000000	0.00000	0.00000	1.00000	10.00000
1045	1	1045	1046	1001	1045	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1046	1	1046	1047	1001	1046	000000	000000	0.00000	0.00000	1.00000	8.00000
1047	1	1047	1048	1001	1047	000000	000000	0.00000	0.00000	1.00000	8.00000
1048	1	1048	1049	1001	1048	000000	000000	0.00000	0.00000	1.00000	8.00000
1049	1	1049	1050	1001	1049	000000	000000	0.00000	0.00000	1.00000	8.00000
1050	1	1050	1051	1001	1050	000000	000000	0.00000	0.00000	1.00000	10.00000
1051	1	1051	1052	1001	1051	000000	000000	0.00000	0.00000	1.00000	10.00000
1052	1	1052	1053	1001	1052	000000	000000	0.00000	0.00000	1.00000	10.00000
1053	1	1053	1054	1001	1053	000000	000000	0.00000	0.00000	1.00000	10.00000
1054	1	1054	1055	1001	1054	000000	000000	0.00000	0.00000	1.00000	10.00000
1055	1	1055	1056	1001	1055	000000	000000	0.00000	0.00000	1.00000	10.00000
1056	1	1056	1057	1001	1056	000000	000000	0.00000	0.00000	1.00000	10.00000
1057	1	1057	1058	1001	1057	000000	000000	0.00000	0.00000	1.00000	10.00000
1058	1	1058	1059	1001	1058	000000	000000	0.00000	0.00000	1.00000	8.00000
1059	1	1059	1060	1001	1059	000000	000000	0.00000	0.00000	1.00000	8.00000
1060	1	1060	1061	1001	1060	000000	000000	0.00000	0.00000	1.00000	8.00000
1061	1	1061	1062	1001	1061	000000	000000	0.00000	0.00000	1.00000	8.00000
1062	1	1062	1063	1001	1062	000000	000000	0.00000	0.00000	1.00000	10.00000
1063	1	1063	1064	1001	1063	000000	000000	0.00000	0.00000	1.00000	10.00000
1064	1	1064	1065	1001	1064	000000	000000	0.00000	0.00000	1.00000	10.00000
1065	1	1065	1066	1001	1065	000000	000000	0.00000	0.00000	1.00000	10.00000
1066	1	1066	1067	1001	1066	000000	000000	0.00000	0.00000	1.00000	10.00000
1067	1	1067	1068	1001	1067	000000	000000	0.00000	0.00000	1.00000	10.00000
1068	1	1068	1069	1001	1068	000000	000000	0.00000	0.00000	1.00000	10.00000
1069	1	1069	1070	1001	1069	000000	000000	0.00000	0.00000	1.00000	10.00000
1070	1	1070	1071	1001	1070	000000	000000	0.00000	0.00000	1.00000	8.00000
1071	1	1071	1072	1001	1071	000000	000000	0.00000	0.00000	1.00000	8.00000
1072	1	1072	1073	1001	1072	000000	000000	0.00000	0.00000	1.00000	10.00000
1073	1	1073	1074	1001	1073	000000	000000	0.00000	0.00000	1.00000	10.00000
1074	1	1074	1075	1001	1074	000000	000000	0.00000	0.00000	1.00000	10.00000
1075	1	1075	1076	1001	1075	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1076	1	1076	1077	1001	1076	000000	000000	0.00000	0.00000	1.00000	10.00000
1077	1	1077	1078	1001	1077	000000	000000	0.00000	0.00000	1.00000	10.00000
1078	1	1078	1079	1001	1078	000000	000000	0.00000	0.00000	1.00000	10.00000
1079	1	1079	1080	1001	1079	000000	000000	0.00000	0.00000	1.00000	10.00000
1080	1	1080	1081	1001	1080	000000	000000	0.00000	0.00000	1.00000	10.00000
1081	1	1081	1082	1001	1081	000000	000000	0.00000	0.00000	1.00000	13.10000
2001	1	2001	2002	1001	2001	000000	000000	0.00000	0.00000	1.00000	10.80143
2002	1	2002	2003	1001	2002	000000	000000	0.00000	0.00000	1.00000	10.00316
2003	1	2003	2004	1001	2003	000000	000000	0.00000	0.00000	1.00000	10.00316
2004	1	2004	2005	1001	2004	000000	000000	0.00000	0.00000	1.00000	10.00316
2005	1	2005	2006	1001	2005	000000	000000	0.00000	0.00000	1.00000	10.00144
2006	1	2006	2007	1001	2006	000000	000000	0.00000	0.00000	1.00000	10.00000
2007	1	2007	2008	1001	2007	000000	000000	0.00000	0.00000	1.00000	10.00000
2008	1	2008	2009	1001	2008	000000	000000	0.00000	0.00000	1.00000	10.00000
2009	1	2009	2010	1001	2009	000000	000000	0.00000	0.00000	1.00000	10.00000
2010	1	2010	2011	1001	2010	000000	000000	0.00000	0.00000	1.00000	10.00000
2011	1	2011	2012	1001	2011	000000	000000	0.00000	0.00000	1.00000	10.00000
2012	1	2012	2013	1001	2012	000000	000000	0.00000	0.00000	1.00000	8.00000
2013	1	2013	2014	1001	2013	000000	000000	0.00000	0.00000	1.00000	8.00000
2014	1	2014	2015	1001	2014	000000	000000	0.00000	0.00000	1.00000	10.00000
2015	1	2015	2016	1001	2015	000000	000000	0.00000	0.00000	1.00000	10.00000
2016	1	2016	2017	1001	2016	000000	000000	0.00000	0.00000	1.00000	10.00000
2017	1	2017	2018	1001	2017	000000	000000	0.00000	0.00000	1.00000	10.00000
2018	1	2018	2019	1001	2018	000000	000000	0.00000	0.00000	1.00000	10.00000
2019	1	2019	2020	1001	2019	000000	000000	0.00000	0.00000	1.00000	10.00000
2020	1	2020	2021	1001	2020	000000	000000	0.00000	0.00000	1.00000	10.00000
2021	1	2021	2022	1001	2021	000000	000000	0.00000	0.00000	1.00000	10.00000
2022	1	2022	2023	1001	2022	000000	000000	0.00000	0.00000	1.00000	8.00000
2023	1	2023	2024	1001	2023	000000	000000	0.00000	0.00000	1.00000	8.00000
2024	1	2024	2025	1001	2024	000000	000000	0.00000	0.00000	1.00000	8.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
2025	1	2025	2026	1001	2025	000000	000000	0.00000	0.00000	1.00000	8.00000
2026	1	2026	2027	1001	2026	000000	000000	0.00000	0.00000	1.00000	10.00000
2027	1	2027	2028	1001	2027	000000	000000	0.00000	0.00000	1.00000	10.00000
2028	1	2028	2029	1001	2028	000000	000000	0.00000	0.00000	1.00000	10.00000
2029	1	2029	2030	1001	2029	000000	000000	0.00000	0.00000	1.00000	10.00000
2030	1	2030	2031	1001	2030	000000	000000	0.00000	0.00000	1.00000	10.00000
2031	1	2031	2032	1001	2031	000000	000000	0.00000	0.00000	1.00000	10.00000
2032	1	2032	2033	1001	2032	000000	000000	0.00000	0.00000	1.00000	10.00000
2033	1	2033	2034	1001	2033	000000	000000	0.00000	0.00000	1.00000	10.00000
2034	1	2034	2035	1001	2034	000000	000000	0.00000	0.00000	1.00000	8.00000
2035	1	2035	2036	1001	2035	000000	000000	0.00000	0.00000	1.00000	8.00000
2036	1	2036	2037	1001	2036	000000	000000	0.00000	0.00000	1.00000	8.00000
2037	1	2037	2038	1001	2037	000000	000000	0.00000	0.00000	1.00000	8.00000
2038	1	2038	2039	1001	2038	000000	000000	0.00000	0.00000	1.00000	10.00000
2039	1	2039	2040	1001	2039	000000	000000	0.00000	0.00000	1.00000	10.00000
2040	1	2040	2041	1001	2040	000000	000000	0.00000	0.00000	1.00000	10.00000
2041	1	2041	2042	1001	2041	000000	000000	0.00000	0.00000	1.00000	10.00000
2042	1	2042	2043	1001	2042	000000	000000	0.00000	0.00000	1.00000	10.00000
2043	1	2043	2044	1001	2043	000000	000000	0.00000	0.00000	1.00000	10.00000
2044	1	2044	2045	1001	2044	000000	000000	0.00000	0.00000	1.00000	10.00000
2045	1	2045	2046	1001	2045	000000	000000	0.00000	0.00000	1.00000	10.00000
2046	1	2046	2047	1001	2046	000000	000000	0.00000	0.00000	1.00000	8.00000
2047	1	2047	2048	1001	2047	000000	000000	0.00000	0.00000	1.00000	8.00000
2048	1	2048	2049	1001	2048	000000	000000	0.00000	0.00000	1.00000	8.00000
2049	1	2049	2050	1001	2049	000000	000000	0.00000	0.00000	1.00000	8.00000
2050	1	2050	2051	1001	2050	000000	000000	0.00000	0.00000	1.00000	10.00000
2051	1	2051	2052	1001	2051	000000	000000	0.00000	0.00000	1.00000	10.00000
2052	1	2052	2053	1001	2052	000000	000000	0.00000	0.00000	1.00000	10.00000
2053	1	2053	2054	1001	2053	000000	000000	0.00000	0.00000	1.00000	10.00000
2054	1	2054	2055	1001	2054	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
2055	1	2055	2056	1001	2055	000000	000000	0.00000	0.00000	1.00000	10.00000
2056	1	2056	2057	1001	2056	000000	000000	0.00000	0.00000	1.00000	10.00000
2057	1	2057	2058	1001	2057	000000	000000	0.00000	0.00000	1.00000	10.00000
2058	1	2058	2059	1001	2058	000000	000000	0.00000	0.00000	1.00000	8.00000
2059	1	2059	2060	1001	2059	000000	000000	0.00000	0.00000	1.00000	8.00000
2060	1	2060	2061	1001	2060	000000	000000	0.00000	0.00000	1.00000	8.00000
2061	1	2061	2062	1001	2061	000000	000000	0.00000	0.00000	1.00000	8.00000
2062	1	2062	2063	1001	2062	000000	000000	0.00000	0.00000	1.00000	10.00000
2063	1	2063	2064	1001	2063	000000	000000	0.00000	0.00000	1.00000	10.00000
2064	1	2064	2065	1001	2064	000000	000000	0.00000	0.00000	1.00000	10.00000
2065	1	2065	2066	1001	2065	000000	000000	0.00000	0.00000	1.00000	10.00000
2066	1	2066	2067	1001	2066	000000	000000	0.00000	0.00000	1.00000	10.00000
2067	1	2067	2068	1001	2067	000000	000000	0.00000	0.00000	1.00000	10.00000
2068	1	2068	2069	1001	2068	000000	000000	0.00000	0.00000	1.00000	10.00000
2069	1	2069	2070	1001	2069	000000	000000	0.00000	0.00000	1.00000	10.00000
2070	1	2070	2071	1001	2070	000000	000000	0.00000	0.00000	1.00000	8.00000
2071	1	2071	2072	1001	2071	000000	000000	0.00000	0.00000	1.00000	8.00000
2072	1	2072	2073	1001	2072	000000	000000	0.00000	0.00000	1.00000	10.00000
2073	1	2073	2074	1001	2073	000000	000000	0.00000	0.00000	1.00000	10.00000
2074	1	2074	2075	1001	2074	000000	000000	0.00000	0.00000	1.00000	10.00000
2075	1	2075	2076	1001	2075	000000	000000	0.00000	0.00000	1.00000	10.00000
2076	1	2076	2077	1001	2076	000000	000000	0.00000	0.00000	1.00000	10.00000
2077	1	2077	2078	1001	2077	000000	000000	0.00000	0.00000	1.00000	10.00000
2078	1	2078	2079	1001	2078	000000	000000	0.00000	0.00000	1.00000	10.00000
2079	1	2079	2080	1001	2079	000000	000000	0.00000	0.00000	1.00000	10.00000
2080	1	2080	2081	1001	2080	000000	000000	0.00000	0.00000	1.00000	10.00000
2081	1	2081	2082	1001	2081	000000	000000	0.00000	0.00000	1.00000	13.10000
3001	1	3001	3002	1001	3001	000000	000000	0.00000	0.00000	1.00000	10.80143
3002	1	3002	3003	1001	3002	000000	000000	0.00000	0.00000	1.00000	10.00316
3003	1	3003	3004	1001	3003	000000	000000	0.00000	0.00000	1.00000	10.00316

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
3004	1	3004	3005	1001	3004	000000	000000	0.00000	0.00000	1.00000	10.00316
3005	1	3005	3006	1001	3005	000000	000000	0.00000	0.00000	1.00000	10.00144
3006	1	3006	3007	1001	3006	000000	000000	0.00000	0.00000	1.00000	10.00000
3007	1	3007	3008	1001	3007	000000	000000	0.00000	0.00000	1.00000	10.00000
3008	1	3008	3009	1001	3008	000000	000000	0.00000	0.00000	1.00000	10.00000
3009	1	3009	3010	1001	3009	000000	000000	0.00000	0.00000	1.00000	10.00000
3010	1	3010	3011	1001	3010	000000	000000	0.00000	0.00000	1.00000	10.00000
3011	1	3011	3012	1001	3011	000000	000000	0.00000	0.00000	1.00000	10.00000
3012	1	3012	3013	1001	3012	000000	000000	0.00000	0.00000	1.00000	8.00000
3013	1	3013	3014	1001	3013	000000	000000	0.00000	0.00000	1.00000	8.00000
3014	1	3014	3015	1001	3014	000000	000000	0.00000	0.00000	1.00000	10.00000
3015	1	3015	3016	1001	3015	000000	000000	0.00000	0.00000	1.00000	10.00000
3016	1	3016	3017	1001	3016	000000	000000	0.00000	0.00000	1.00000	10.00000
3017	1	3017	3018	1001	3017	000000	000000	0.00000	0.00000	1.00000	10.00000
3018	1	3018	3019	1001	3018	000000	000000	0.00000	0.00000	1.00000	10.00000
3019	1	3019	3020	1001	3019	000000	000000	0.00000	0.00000	1.00000	10.00000
3020	1	3020	3021	1001	3020	000000	000000	0.00000	0.00000	1.00000	10.00000
3021	1	3021	3022	1001	3021	000000	000000	0.00000	0.00000	1.00000	10.00000
3022	1	3022	3023	1001	3022	000000	000000	0.00000	0.00000	1.00000	8.00000
3023	1	3023	3024	1001	3023	000000	000000	0.00000	0.00000	1.00000	8.00000
3024	1	3024	3025	1001	3024	000000	000000	0.00000	0.00000	1.00000	8.00000
3025	1	3025	3026	1001	3025	000000	000000	0.00000	0.00000	1.00000	8.00000
3026	1	3026	3027	1001	3026	000000	000000	0.00000	0.00000	1.00000	10.00000
3027	1	3027	3028	1001	3027	000000	000000	0.00000	0.00000	1.00000	10.00000
3028	1	3028	3029	1001	3028	000000	000000	0.00000	0.00000	1.00000	10.00000
3029	1	3029	3030	1001	3029	000000	000000	0.00000	0.00000	1.00000	10.00000
3030	1	3030	3031	1001	3030	000000	000000	0.00000	0.00000	1.00000	10.00000
3031	1	3031	3032	1001	3031	000000	000000	0.00000	0.00000	1.00000	10.00000
3032	1	3032	3033	1001	3032	000000	000000	0.00000	0.00000	1.00000	10.00000
3033	1	3033	3034	1001	3033	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
3034	1	3034	3035	1001	3034	000000	000000	0.00000	0.00000	1.00000	8.00000
3035	1	3035	3036	1001	3035	000000	000000	0.00000	0.00000	1.00000	8.00000
3036	1	3036	3037	1001	3036	000000	000000	0.00000	0.00000	1.00000	8.00000
3037	1	3037	3038	1001	3037	000000	000000	0.00000	0.00000	1.00000	8.00000
3038	1	3038	3039	1001	3038	000000	000000	0.00000	0.00000	1.00000	10.00000
3039	1	3039	3040	1001	3039	000000	000000	0.00000	0.00000	1.00000	10.00000
3040	1	3040	3041	1001	3040	000000	000000	0.00000	0.00000	1.00000	10.00000
3041	1	3041	3042	1001	3041	000000	000000	0.00000	0.00000	1.00000	10.00000
3042	1	3042	3043	1001	3042	000000	000000	0.00000	0.00000	1.00000	10.00000
3043	1	3043	3044	1001	3043	000000	000000	0.00000	0.00000	1.00000	10.00000
3044	1	3044	3045	1001	3044	000000	000000	0.00000	0.00000	1.00000	10.00000
3045	1	3045	3046	1001	3045	000000	000000	0.00000	0.00000	1.00000	10.00000
3046	1	3046	3047	1001	3046	000000	000000	0.00000	0.00000	1.00000	8.00000
3047	1	3047	3048	1001	3047	000000	000000	0.00000	0.00000	1.00000	8.00000
3048	1	3048	3049	1001	3048	000000	000000	0.00000	0.00000	1.00000	8.00000
3049	1	3049	3050	1001	3049	000000	000000	0.00000	0.00000	1.00000	8.00000
3050	1	3050	3051	1001	3050	000000	000000	0.00000	0.00000	1.00000	10.00000
3051	1	3051	3052	1001	3051	000000	000000	0.00000	0.00000	1.00000	10.00000
3052	1	3052	3053	1001	3052	000000	000000	0.00000	0.00000	1.00000	10.00000
3053	1	3053	3054	1001	3053	000000	000000	0.00000	0.00000	1.00000	10.00000
3054	1	3054	3055	1001	3054	000000	000000	0.00000	0.00000	1.00000	10.00000
3055	1	3055	3056	1001	3055	000000	000000	0.00000	0.00000	1.00000	10.00000
3056	1	3056	3057	1001	3056	000000	000000	0.00000	0.00000	1.00000	10.00000
3057	1	3057	3058	1001	3057	000000	000000	0.00000	0.00000	1.00000	10.00000
3058	1	3058	3059	1001	3058	000000	000000	0.00000	0.00000	1.00000	8.00000
3059	1	3059	3060	1001	3059	000000	000000	0.00000	0.00000	1.00000	8.00000
3060	1	3060	3061	1001	3060	000000	000000	0.00000	0.00000	1.00000	8.00000
3061	1	3061	3062	1001	3061	000000	000000	0.00000	0.00000	1.00000	8.00000
3062	1	3062	3063	1001	3062	000000	000000	0.00000	0.00000	1.00000	10.00000
3063	1	3063	3064	1001	3063	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
3064	1	3064	3065	1001	3064	000000	000000	0.00000	0.00000	1.00000	10.00000
3065	1	3065	3066	1001	3065	000000	000000	0.00000	0.00000	1.00000	10.00000
3066	1	3066	3067	1001	3066	000000	000000	0.00000	0.00000	1.00000	10.00000
3067	1	3067	3068	1001	3067	000000	000000	0.00000	0.00000	1.00000	10.00000
3068	1	3068	3069	1001	3068	000000	000000	0.00000	0.00000	1.00000	10.00000
3069	1	3069	3070	1001	3069	000000	000000	0.00000	0.00000	1.00000	10.00000
3070	1	3070	3071	1001	3070	000000	000000	0.00000	0.00000	1.00000	8.00000
3071	1	3071	3072	1001	3071	000000	000000	0.00000	0.00000	1.00000	8.00000
3072	1	3072	3073	1001	3072	000000	000000	0.00000	0.00000	1.00000	10.00000
3073	1	3073	3074	1001	3073	000000	000000	0.00000	0.00000	1.00000	10.00000
3074	1	3074	3075	1001	3074	000000	000000	0.00000	0.00000	1.00000	10.00000
3075	1	3075	3076	1001	3075	000000	000000	0.00000	0.00000	1.00000	10.00000
3076	1	3076	3077	1001	3076	000000	000000	0.00000	0.00000	1.00000	10.00000
3077	1	3077	3078	1001	3077	000000	000000	0.00000	0.00000	1.00000	10.00000
3078	1	3078	3079	1001	3078	000000	000000	0.00000	0.00000	1.00000	10.00000
3079	1	3079	3080	1001	3079	000000	000000	0.00000	0.00000	1.00000	10.00000
3080	1	3080	3081	1001	3080	000000	000000	0.00000	0.00000	1.00000	10.00000
3081	1	3081	3082	1001	3081	000000	000000	0.00000	0.00000	1.00000	13.10000
4001	1	4001	4002	1001	4001	000000	000000	0.00000	0.00000	1.00000	10.80141
4002	1	4002	4003	1001	4002	000000	000000	0.00000	0.00000	1.00000	10.00316
4003	1	4003	4004	1001	4003	000000	000000	0.00000	0.00000	1.00000	10.00316
4004	1	4004	4005	1001	4004	000000	000000	0.00000	0.00000	1.00000	10.00316
4005	1	4005	4006	1001	4005	000000	000000	0.00000	0.00000	1.00000	10.00146
4006	1	4006	4007	1001	4006	000000	000000	0.00000	0.00000	1.00000	10.00000
4007	1	4007	4008	1001	4007	000000	000000	0.00000	0.00000	1.00000	10.00000
4008	1	4008	4009	1001	4008	000000	000000	0.00000	0.00000	1.00000	10.00000
4009	1	4009	4010	1001	4009	000000	000000	0.00000	0.00000	1.00000	10.00000
4010	1	4010	4011	1001	4010	000000	000000	0.00000	0.00000	1.00000	10.00000
4011	1	4011	4012	1001	4011	000000	000000	0.00000	0.00000	1.00000	10.00000
4012	1	4012	4013	1001	4012	000000	000000	0.00000	0.00000	1.00000	8.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
4013	1	4013	4014	1001	4013	000000	000000	0.00000	0.00000	1.00000	8.00000
4014	1	4014	4015	1001	4014	000000	000000	0.00000	0.00000	1.00000	10.00000
4015	1	4015	4016	1001	4015	000000	000000	0.00000	0.00000	1.00000	10.00000
4016	1	4016	4017	1001	4016	000000	000000	0.00000	0.00000	1.00000	10.00000
4017	1	4017	4018	1001	4017	000000	000000	0.00000	0.00000	1.00000	10.00000
4018	1	4018	4019	1001	4018	000000	000000	0.00000	0.00000	1.00000	10.00000
4019	1	4019	4020	1001	4019	000000	000000	0.00000	0.00000	1.00000	10.00000
4020	1	4020	4021	1001	4020	000000	000000	0.00000	0.00000	1.00000	10.00000
4021	1	4021	4022	1001	4021	000000	000000	0.00000	0.00000	1.00000	10.00000
4022	1	4022	4023	1001	4022	000000	000000	0.00000	0.00000	1.00000	8.00000
4023	1	4023	4024	1001	4023	000000	000000	0.00000	0.00000	1.00000	8.00000
4024	1	4024	4025	1001	4024	000000	000000	0.00000	0.00000	1.00000	8.00000
4025	1	4025	4026	1001	4025	000000	000000	0.00000	0.00000	1.00000	8.00000
4026	1	4026	4027	1001	4026	000000	000000	0.00000	0.00000	1.00000	10.00000
4027	1	4027	4028	1001	4027	000000	000000	0.00000	0.00000	1.00000	10.00000
4028	1	4028	4029	1001	4028	000000	000000	0.00000	0.00000	1.00000	10.00000
4029	1	4029	4030	1001	4029	000000	000000	0.00000	0.00000	1.00000	10.00000
4030	1	4030	4031	1001	4030	000000	000000	0.00000	0.00000	1.00000	10.00000
4031	1	4031	4032	1001	4031	000000	000000	0.00000	0.00000	1.00000	10.00000
4032	1	4032	4033	1001	4032	000000	000000	0.00000	0.00000	1.00000	10.00000
4033	1	4033	4034	1001	4033	000000	000000	0.00000	0.00000	1.00000	10.00000
4034	1	4034	4035	1001	4034	000000	000000	0.00000	0.00000	1.00000	8.00000
4035	1	4035	4036	1001	4035	000000	000000	0.00000	0.00000	1.00000	8.00000
4036	1	4036	4037	1001	4036	000000	000000	0.00000	0.00000	1.00000	8.00000
4037	1	4037	4038	1001	4037	000000	000000	0.00000	0.00000	1.00000	8.00000
4038	1	4038	4039	1001	4038	000000	000000	0.00000	0.00000	1.00000	10.00000
4039	1	4039	4040	1001	4039	000000	000000	0.00000	0.00000	1.00000	10.00000
4040	1	4040	4041	1001	4040	000000	000000	0.00000	0.00000	1.00000	10.00000
4041	1	4041	4042	1001	4041	000000	000000	0.00000	0.00000	1.00000	10.00000
4042	1	4042	4043	1001	4042	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
4043	1	4043	4044	1001	4043	000000	000000	0.00000	0.00000	1.00000	10.00000
4044	1	4044	4045	1001	4044	000000	000000	0.00000	0.00000	1.00000	10.00000
4045	1	4045	4046	1001	4045	000000	000000	0.00000	0.00000	1.00000	10.00000
4046	1	4046	4047	1001	4046	000000	000000	0.00000	0.00000	1.00000	8.00000
4047	1	4047	4048	1001	4047	000000	000000	0.00000	0.00000	1.00000	8.00000
4048	1	4048	4049	1001	4048	000000	000000	0.00000	0.00000	1.00000	8.00000
4049	1	4049	4050	1001	4049	000000	000000	0.00000	0.00000	1.00000	8.00000
4050	1	4050	4051	1001	4050	000000	000000	0.00000	0.00000	1.00000	10.00000
4051	1	4051	4052	1001	4051	000000	000000	0.00000	0.00000	1.00000	10.00000
4052	1	4052	4053	1001	4052	000000	000000	0.00000	0.00000	1.00000	10.00000
4053	1	4053	4054	1001	4053	000000	000000	0.00000	0.00000	1.00000	10.00000
4054	1	4054	4055	1001	4054	000000	000000	0.00000	0.00000	1.00000	10.00000
4055	1	4055	4056	1001	4055	000000	000000	0.00000	0.00000	1.00000	10.00000
4056	1	4056	4057	1001	4056	000000	000000	0.00000	0.00000	1.00000	10.00000
4057	1	4057	4058	1001	4057	000000	000000	0.00000	0.00000	1.00000	10.00000
4058	1	4058	4059	1001	4058	000000	000000	0.00000	0.00000	1.00000	8.00000
4059	1	4059	4060	1001	4059	000000	000000	0.00000	0.00000	1.00000	8.00000
4060	1	4060	4061	1001	4060	000000	000000	0.00000	0.00000	1.00000	8.00000
4061	1	4061	4062	1001	4061	000000	000000	0.00000	0.00000	1.00000	8.00000
4062	1	4062	4063	1001	4062	000000	000000	0.00000	0.00000	1.00000	10.00000
4063	1	4063	4064	1001	4063	000000	000000	0.00000	0.00000	1.00000	10.00000
4064	1	4064	4065	1001	4064	000000	000000	0.00000	0.00000	1.00000	10.00000
4065	1	4065	4066	1001	4065	000000	000000	0.00000	0.00000	1.00000	10.00000
4066	1	4066	4067	1001	4066	000000	000000	0.00000	0.00000	1.00000	10.00000
4067	1	4067	4068	1001	4067	000000	000000	0.00000	0.00000	1.00000	10.00000
4068	1	4068	4069	1001	4068	000000	000000	0.00000	0.00000	1.00000	10.00000
4069	1	4069	4070	1001	4069	000000	000000	0.00000	0.00000	1.00000	10.00000
4070	1	4070	4071	1001	4070	000000	000000	0.00000	0.00000	1.00000	8.00000
4071	1	4071	4072	1001	4071	000000	000000	0.00000	0.00000	1.00000	8.00000
4072	1	4072	4073	1001	4072	000000	000000	0.00000	0.00000	1.00000	10.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
4073	1	4073	4074	1001	4073	000000	000000	0.00000	0.00000	1.00000	10.00000
4074	1	4074	4075	1001	4074	000000	000000	0.00000	0.00000	1.00000	10.00000
4075	1	4075	4076	1001	4075	000000	000000	0.00000	0.00000	1.00000	10.00000
4076	1	4076	4077	1001	4076	000000	000000	0.00000	0.00000	1.00000	10.00000
4077	1	4077	4078	1001	4077	000000	000000	0.00000	0.00000	1.00000	10.00000
4078	1	4078	4079	1001	4078	000000	000000	0.00000	0.00000	1.00000	10.00000
4079	1	4079	4080	1001	4079	000000	000000	0.00000	0.00000	1.00000	10.00000
4080	1	4080	4081	1001	4080	000000	000000	0.00000	0.00000	1.00000	10.00000
4081	1	4081	4082	1001	4081	000000	000000	0.00000	0.00000	1.00000	13.10000
1001001	2	1001	2001	1001	1001001	000000	000000	0.00000	0.00000	1.00000	4.17700
1001002	2	1002	2002	1001	1001002	000000	000000	0.00000	0.00000	1.00000	4.17832
1001003	2	1003	2003	1001	1001003	000000	000000	0.00000	0.00000	1.00000	4.17832
1001004	2	1004	2004	1001	1001004	000000	000000	0.00000	0.00000	1.00000	4.17832
1001005	2	1005	2005	1001	1001005	000000	000000	0.00000	0.00000	1.00000	4.17832
1001006	2	1006	2006	1001	1001006	000000	000000	0.00000	0.00000	1.00000	4.17701
1001007	2	1007	2007	1001	1001007	000000	000000	0.00000	0.00000	1.00000	4.17700
1001008	2	1008	2008	1001	1001008	000000	000000	0.00000	0.00000	1.00000	4.17700
1001009	2	1009	2009	1001	1001009	000000	000000	0.00000	0.00000	1.00000	4.17700
1001010	2	1010	2010	1001	1001010	000000	000000	0.00000	0.00000	1.00000	4.17700
1001011	2	1011	2011	1001	1001011	000000	000000	0.00000	0.00000	1.00000	4.17700
1001012	2	1012	2012	1001	1001012	000000	000000	0.00000	0.00000	1.00000	4.17700
1001013	2	1013	2013	1001	1001013	000000	000000	0.00000	0.00000	1.00000	4.17700
1001014	2	1014	2014	1001	1001014	000000	000000	0.00000	0.00000	1.00000	4.17700
1001015	2	1015	2015	1001	1001015	000000	000000	0.00000	0.00000	1.00000	4.17700
1001016	2	1016	2016	1001	1001016	000000	000000	0.00000	0.00000	1.00000	4.17700
1001017	2	1017	2017	1001	1001017	000000	000000	0.00000	0.00000	1.00000	4.17700
1001018	2	1018	2018	1001	1001018	000000	000000	0.00000	0.00000	1.00000	4.17700
1001019	2	1019	2019	1001	1001019	000000	000000	0.00000	0.00000	1.00000	4.17700
1001020	2	1020	2020	1001	1001020	000000	000000	0.00000	0.00000	1.00000	4.17700
1001021	2	1021	2021	1001	1001021	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1001022	2	1022	2022	1001	1001022	000000	000000	0.00000	0.00000	1.00000	4.17700
1001023	2	1023	2023	1001	1001023	000000	000000	0.00000	0.00000	1.00000	4.17700
1001024	2	1024	2024	1001	1001024	000000	000000	0.00000	0.00000	1.00000	4.17700
1001025	2	1025	2025	1001	1001025	000000	000000	0.00000	0.00000	1.00000	4.17700
1001026	2	1026	2026	1001	1001026	000000	000000	0.00000	0.00000	1.00000	4.17700
1001027	2	1027	2027	1001	1001027	000000	000000	0.00000	0.00000	1.00000	4.17700
1001028	2	1028	2028	1001	1001028	000000	000000	0.00000	0.00000	1.00000	4.17700
1001029	2	1029	2029	1001	1001029	000000	000000	0.00000	0.00000	1.00000	4.17700
1001030	2	1030	2030	1001	1001030	000000	000000	0.00000	0.00000	1.00000	4.17700
1001031	2	1031	2031	1001	1001031	000000	000000	0.00000	0.00000	1.00000	4.17700
1001032	2	1032	2032	1001	1001032	000000	000000	0.00000	0.00000	1.00000	4.17700
1001033	2	1033	2033	1001	1001033	000000	000000	0.00000	0.00000	1.00000	4.17700
1001034	2	1034	2034	1001	1001034	000000	000000	0.00000	0.00000	1.00000	4.17700
1001035	2	1035	2035	1001	1001035	000000	000000	0.00000	0.00000	1.00000	4.17700
1001036	2	1036	2036	1001	1001036	000000	000000	0.00000	0.00000	1.00000	4.17700
1001037	2	1037	2037	1001	1001037	000000	000000	0.00000	0.00000	1.00000	4.17700
1001038	2	1038	2038	1001	1001038	000000	000000	0.00000	0.00000	1.00000	4.17700
1001039	2	1039	2039	1001	1001039	000000	000000	0.00000	0.00000	1.00000	4.17700
1001040	2	1040	2040	1001	1001040	000000	000000	0.00000	0.00000	1.00000	4.17700
1001041	2	1041	2041	1001	1001041	000000	000000	0.00000	0.00000	1.00000	4.17700
1001042	2	1042	2042	1001	1001042	000000	000000	0.00000	0.00000	1.00000	4.17700
1001043	2	1043	2043	1001	1001043	000000	000000	0.00000	0.00000	1.00000	4.17700
1001044	2	1044	2044	1001	1001044	000000	000000	0.00000	0.00000	1.00000	4.17700
1001045	2	1045	2045	1001	1001045	000000	000000	0.00000	0.00000	1.00000	4.17700
1001046	2	1046	2046	1001	1001046	000000	000000	0.00000	0.00000	1.00000	4.17700
1001047	2	1047	2047	1001	1001047	000000	000000	0.00000	0.00000	1.00000	4.17700
1001048	2	1048	2048	1001	1001048	000000	000000	0.00000	0.00000	1.00000	4.17700
1001049	2	1049	2049	1001	1001049	000000	000000	0.00000	0.00000	1.00000	4.17700
1001050	2	1050	2050	1001	1001050	000000	000000	0.00000	0.00000	1.00000	4.17700
1001051	2	1051	2051	1001	1001051	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1001052	2	1052	2052	1001	1001052	000000	000000	0.00000	0.00000	1.00000	4.17700
1001053	2	1053	2053	1001	1001053	000000	000000	0.00000	0.00000	1.00000	4.17700
1001054	2	1054	2054	1001	1001054	000000	000000	0.00000	0.00000	1.00000	4.17700
1001055	2	1055	2055	1001	1001055	000000	000000	0.00000	0.00000	1.00000	4.17700
1001056	2	1056	2056	1001	1001056	000000	000000	0.00000	0.00000	1.00000	4.17700
1001057	2	1057	2057	1001	1001057	000000	000000	0.00000	0.00000	1.00000	4.17700
1001058	2	1058	2058	1001	1001058	000000	000000	0.00000	0.00000	1.00000	4.17700
1001059	2	1059	2059	1001	1001059	000000	000000	0.00000	0.00000	1.00000	4.17700
1001060	2	1060	2060	1001	1001060	000000	000000	0.00000	0.00000	1.00000	4.17700
1001061	2	1061	2061	1001	1001061	000000	000000	0.00000	0.00000	1.00000	4.17700
1001062	2	1062	2062	1001	1001062	000000	000000	0.00000	0.00000	1.00000	4.17700
1001063	2	1063	2063	1001	1001063	000000	000000	0.00000	0.00000	1.00000	4.17700
1001064	2	1064	2064	1001	1001064	000000	000000	0.00000	0.00000	1.00000	4.17700
1001065	2	1065	2065	1001	1001065	000000	000000	0.00000	0.00000	1.00000	4.17700
1001066	2	1066	2066	1001	1001066	000000	000000	0.00000	0.00000	1.00000	4.17700
1001067	2	1067	2067	1001	1001067	000000	000000	0.00000	0.00000	1.00000	4.17700
1001068	2	1068	2068	1001	1001068	000000	000000	0.00000	0.00000	1.00000	4.17700
1001069	2	1069	2069	1001	1001069	000000	000000	0.00000	0.00000	1.00000	4.17700
1001070	2	1070	2070	1001	1001070	000000	000000	0.00000	0.00000	1.00000	4.17700
1001071	2	1071	2071	1001	1001071	000000	000000	0.00000	0.00000	1.00000	4.17700
1001072	2	1072	2072	1001	1001072	000000	000000	0.00000	0.00000	1.00000	4.17700
1001073	2	1073	2073	1001	1001073	000000	000000	0.00000	0.00000	1.00000	4.17700
1001074	2	1074	2074	1001	1001074	000000	000000	0.00000	0.00000	1.00000	4.17700
1001075	2	1075	2075	1001	1001075	000000	000000	0.00000	0.00000	1.00000	4.17700
1001076	2	1076	2076	1001	1001076	000000	000000	0.00000	0.00000	1.00000	4.17700
1001077	2	1077	2077	1001	1001077	000000	000000	0.00000	0.00000	1.00000	4.17700
1001078	2	1078	2078	1001	1001078	000000	000000	0.00000	0.00000	1.00000	4.17700
1001079	2	1079	2079	1001	1001079	000000	000000	0.00000	0.00000	1.00000	4.17700
1001080	2	1080	2080	1001	1001080	000000	000000	0.00000	0.00000	1.00000	4.17700
1001081	2	1081	2081	1001	1001081	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1001082	2	1082	2082	1001	1001082	000000	000000	0.00000	0.00000	1.00000	4.17700
1002001	2	2001	3001	1001	1002001	000000	000000	0.00000	0.00000	1.00000	8.20000
1002002	2	2002	3002	1001	1002002	000000	000000	0.00000	0.00000	1.00000	7.84816
1002003	2	2003	3003	1001	1002003	000000	000000	0.00000	0.00000	1.00000	7.34551
1002004	2	2004	3004	1001	1002004	000000	000000	0.00000	0.00000	1.00000	6.84286
1002005	2	2005	3005	1001	1002005	000000	000000	0.00000	0.00000	1.00000	6.34021
1002006	2	2006	3006	1001	1002006	000000	000000	0.00000	0.00000	1.00000	6.00087
1002007	2	2007	3007	1001	1002007	000000	000000	0.00000	0.00000	1.00000	6.00000
1002008	2	2008	3008	1001	1002008	000000	000000	0.00000	0.00000	1.00000	6.00000
1002009	2	2009	3009	1001	1002009	000000	000000	0.00000	0.00000	1.00000	6.00000
1002010	2	2010	3010	1001	1002010	000000	000000	0.00000	0.00000	1.00000	6.00000
1002011	2	2011	3011	1001	1002011	000000	000000	0.00000	0.00000	1.00000	6.00000
1002012	2	2012	3012	1001	1002012	000000	000000	0.00000	0.00000	1.00000	6.00000
1002013	2	2013	3013	1001	1002013	000000	000000	0.00000	0.00000	1.00000	6.00000
1002014	2	2014	3014	1001	1002014	000000	000000	0.00000	0.00000	1.00000	6.00000
1002015	2	2015	3015	1001	1002015	000000	000000	0.00000	0.00000	1.00000	6.00000
1002016	2	2016	3016	1001	1002016	000000	000000	0.00000	0.00000	1.00000	6.00000
1002017	2	2017	3017	1001	1002017	000000	000000	0.00000	0.00000	1.00000	6.00000
1002018	2	2018	3018	1001	1002018	000000	000000	0.00000	0.00000	1.00000	6.00000
1002019	2	2019	3019	1001	1002019	000000	000000	0.00000	0.00000	1.00000	6.00000
1002020	2	2020	3020	1001	1002020	000000	000000	0.00000	0.00000	1.00000	6.00000
1002021	2	2021	3021	1001	1002021	000000	000000	0.00000	0.00000	1.00000	6.00000
1002022	2	2022	3022	1001	1002022	000000	000000	0.00000	0.00000	1.00000	6.00000
1002023	2	2023	3023	1001	1002023	000000	000000	0.00000	0.00000	1.00000	6.00000
1002024	2	2024	3024	1001	1002024	000000	000000	0.00000	0.00000	1.00000	6.00000
1002025	2	2025	3025	1001	1002025	000000	000000	0.00000	0.00000	1.00000	6.00000
1002026	2	2026	3026	1001	1002026	000000	000000	0.00000	0.00000	1.00000	6.00000
1002027	2	2027	3027	1001	1002027	000000	000000	0.00000	0.00000	1.00000	6.00000
1002028	2	2028	3028	1001	1002028	000000	000000	0.00000	0.00000	1.00000	6.00000
1002029	2	2029	3029	1001	1002029	000000	000000	0.00000	0.00000	1.00000	6.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1002030	2	2030	3030	1001	1002030	000000	000000	0.00000	0.00000	1.00000	6.00000
1002031	2	2031	3031	1001	1002031	000000	000000	0.00000	0.00000	1.00000	6.00000
1002032	2	2032	3032	1001	1002032	000000	000000	0.00000	0.00000	1.00000	6.00000
1002033	2	2033	3033	1001	1002033	000000	000000	0.00000	0.00000	1.00000	6.00000
1002034	2	2034	3034	1001	1002034	000000	000000	0.00000	0.00000	1.00000	6.00000
1002035	2	2035	3035	1001	1002035	000000	000000	0.00000	0.00000	1.00000	6.00000
1002036	2	2036	3036	1001	1002036	000000	000000	0.00000	0.00000	1.00000	6.00000
1002037	2	2037	3037	1001	1002037	000000	000000	0.00000	0.00000	1.00000	6.00000
1002038	2	2038	3038	1001	1002038	000000	000000	0.00000	0.00000	1.00000	6.00000
1002039	2	2039	3039	1001	1002039	000000	000000	0.00000	0.00000	1.00000	6.00000
1002040	2	2040	3040	1001	1002040	000000	000000	0.00000	0.00000	1.00000	6.00000
1002041	2	2041	3041	1001	1002041	000000	000000	0.00000	0.00000	1.00000	6.00000
1002042	2	2042	3042	1001	1002042	000000	000000	0.00000	0.00000	1.00000	6.00000
1002043	2	2043	3043	1001	1002043	000000	000000	0.00000	0.00000	1.00000	6.00000
1002044	2	2044	3044	1001	1002044	000000	000000	0.00000	0.00000	1.00000	6.00000
1002045	2	2045	3045	1001	1002045	000000	000000	0.00000	0.00000	1.00000	6.00000
1002046	2	2046	3046	1001	1002046	000000	000000	0.00000	0.00000	1.00000	6.00000
1002047	2	2047	3047	1001	1002047	000000	000000	0.00000	0.00000	1.00000	6.00000
1002048	2	2048	3048	1001	1002048	000000	000000	0.00000	0.00000	1.00000	6.00000
1002049	2	2049	3049	1001	1002049	000000	000000	0.00000	0.00000	1.00000	6.00000
1002050	2	2050	3050	1001	1002050	000000	000000	0.00000	0.00000	1.00000	6.00000
1002051	2	2051	3051	1001	1002051	000000	000000	0.00000	0.00000	1.00000	6.00000
1002052	2	2052	3052	1001	1002052	000000	000000	0.00000	0.00000	1.00000	6.00000
1002053	2	2053	3053	1001	1002053	000000	000000	0.00000	0.00000	1.00000	6.00000
1002054	2	2054	3054	1001	1002054	000000	000000	0.00000	0.00000	1.00000	6.00000
1002055	2	2055	3055	1001	1002055	000000	000000	0.00000	0.00000	1.00000	6.00000
1002056	2	2056	3056	1001	1002056	000000	000000	0.00000	0.00000	1.00000	6.00000
1002057	2	2057	3057	1001	1002057	000000	000000	0.00000	0.00000	1.00000	6.00000
1002058	2	2058	3058	1001	1002058	000000	000000	0.00000	0.00000	1.00000	6.00000
1002059	2	2059	3059	1001	1002059	000000	000000	0.00000	0.00000	1.00000	6.00000

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1002060	2	2060	3060	1001	1002060	000000	000000	0.00000	0.00000	1.00000	6.00000
1002061	2	2061	3061	1001	1002061	000000	000000	0.00000	0.00000	1.00000	6.00000
1002062	2	2062	3062	1001	1002062	000000	000000	0.00000	0.00000	1.00000	6.00000
1002063	2	2063	3063	1001	1002063	000000	000000	0.00000	0.00000	1.00000	6.00000
1002064	2	2064	3064	1001	1002064	000000	000000	0.00000	0.00000	1.00000	6.00000
1002065	2	2065	3065	1001	1002065	000000	000000	0.00000	0.00000	1.00000	6.00000
1002066	2	2066	3066	1001	1002066	000000	000000	0.00000	0.00000	1.00000	6.00000
1002067	2	2067	3067	1001	1002067	000000	000000	0.00000	0.00000	1.00000	6.00000
1002068	2	2068	3068	1001	1002068	000000	000000	0.00000	0.00000	1.00000	6.00000
1002069	2	2069	3069	1001	1002069	000000	000000	0.00000	0.00000	1.00000	6.00000
1002070	2	2070	3070	1001	1002070	000000	000000	0.00000	0.00000	1.00000	6.00000
1002071	2	2071	3071	1001	1002071	000000	000000	0.00000	0.00000	1.00000	6.00000
1002072	2	2072	3072	1001	1002072	000000	000000	0.00000	0.00000	1.00000	6.00000
1002073	2	2073	3073	1001	1002073	000000	000000	0.00000	0.00000	1.00000	6.00000
1002074	2	2074	3074	1001	1002074	000000	000000	0.00000	0.00000	1.00000	6.00000
1002075	2	2075	3075	1001	1002075	000000	000000	0.00000	0.00000	1.00000	6.00000
1002076	2	2076	3076	1001	1002076	000000	000000	0.00000	0.00000	1.00000	6.00000
1002077	2	2077	3077	1001	1002077	000000	000000	0.00000	0.00000	1.00000	6.00000
1002078	2	2078	3078	1001	1002078	000000	000000	0.00000	0.00000	1.00000	6.00000
1002079	2	2079	3079	1001	1002079	000000	000000	0.00000	0.00000	1.00000	6.00000
1002080	2	2080	3080	1001	1002080	000000	000000	0.00000	0.00000	1.00000	6.00000
1002081	2	2081	3081	1001	1002081	000000	000000	0.00000	0.00000	1.00000	6.00000
1002082	2	2082	3082	1001	1002082	000000	000000	0.00000	0.00000	1.00000	6.00000
1003001	2	3001	4001	1001	1003001	000000	000000	0.00000	0.00000	1.00000	4.17700
1003002	2	3002	4002	1001	1003002	000000	000000	0.00000	0.00000	1.00000	4.17832
1003003	2	3003	4003	1001	1003003	000000	000000	0.00000	0.00000	1.00000	4.17832
1003004	2	3004	4004	1001	1003004	000000	000000	0.00000	0.00000	1.00000	4.17832
1003005	2	3005	4005	1001	1003005	000000	000000	0.00000	0.00000	1.00000	4.17832
1003006	2	3006	4006	1001	1003006	000000	000000	0.00000	0.00000	1.00000	4.17701
1003007	2	3007	4007	1001	1003007	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1003008	2	3008	4008	1001	1003008	000000	000000	0.00000	0.00000	1.00000	4.17700
1003009	2	3009	4009	1001	1003009	000000	000000	0.00000	0.00000	1.00000	4.17700
1003010	2	3010	4010	1001	1003010	000000	000000	0.00000	0.00000	1.00000	4.17700
1003011	2	3011	4011	1001	1003011	000000	000000	0.00000	0.00000	1.00000	4.17700
1003012	2	3012	4012	1001	1003012	000000	000000	0.00000	0.00000	1.00000	4.17700
1003013	2	3013	4013	1001	1003013	000000	000000	0.00000	0.00000	1.00000	4.17700
1003014	2	3014	4014	1001	1003014	000000	000000	0.00000	0.00000	1.00000	4.17700
1003015	2	3015	4015	1001	1003015	000000	000000	0.00000	0.00000	1.00000	4.17700
1003016	2	3016	4016	1001	1003016	000000	000000	0.00000	0.00000	1.00000	4.17700
1003017	2	3017	4017	1001	1003017	000000	000000	0.00000	0.00000	1.00000	4.17700
1003018	2	3018	4018	1001	1003018	000000	000000	0.00000	0.00000	1.00000	4.17700
1003019	2	3019	4019	1001	1003019	000000	000000	0.00000	0.00000	1.00000	4.17700
1003020	2	3020	4020	1001	1003020	000000	000000	0.00000	0.00000	1.00000	4.17700
1003021	2	3021	4021	1001	1003021	000000	000000	0.00000	0.00000	1.00000	4.17700
1003022	2	3022	4022	1001	1003022	000000	000000	0.00000	0.00000	1.00000	4.17700
1003023	2	3023	4023	1001	1003023	000000	000000	0.00000	0.00000	1.00000	4.17700
1003024	2	3024	4024	1001	1003024	000000	000000	0.00000	0.00000	1.00000	4.17700
1003025	2	3025	4025	1001	1003025	000000	000000	0.00000	0.00000	1.00000	4.17700
1003026	2	3026	4026	1001	1003026	000000	000000	0.00000	0.00000	1.00000	4.17700
1003027	2	3027	4027	1001	1003027	000000	000000	0.00000	0.00000	1.00000	4.17700
1003028	2	3028	4028	1001	1003028	000000	000000	0.00000	0.00000	1.00000	4.17700
1003029	2	3029	4029	1001	1003029	000000	000000	0.00000	0.00000	1.00000	4.17700
1003030	2	3030	4030	1001	1003030	000000	000000	0.00000	0.00000	1.00000	4.17700
1003031	2	3031	4031	1001	1003031	000000	000000	0.00000	0.00000	1.00000	4.17700
1003032	2	3032	4032	1001	1003032	000000	000000	0.00000	0.00000	1.00000	4.17700
1003033	2	3033	4033	1001	1003033	000000	000000	0.00000	0.00000	1.00000	4.17700
1003034	2	3034	4034	1001	1003034	000000	000000	0.00000	0.00000	1.00000	4.17700
1003035	2	3035	4035	1001	1003035	000000	000000	0.00000	0.00000	1.00000	4.17700
1003036	2	3036	4036	1001	1003036	000000	000000	0.00000	0.00000	1.00000	4.17700
1003037	2	3037	4037	1001	1003037	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1003038	2	3038	4038	1001	1003038	000000	000000	0.00000	0.00000	1.00000	4.17700
1003039	2	3039	4039	1001	1003039	000000	000000	0.00000	0.00000	1.00000	4.17700
1003040	2	3040	4040	1001	1003040	000000	000000	0.00000	0.00000	1.00000	4.17700
1003041	2	3041	4041	1001	1003041	000000	000000	0.00000	0.00000	1.00000	4.17700
1003042	2	3042	4042	1001	1003042	000000	000000	0.00000	0.00000	1.00000	4.17700
1003043	2	3043	4043	1001	1003043	000000	000000	0.00000	0.00000	1.00000	4.17700
1003044	2	3044	4044	1001	1003044	000000	000000	0.00000	0.00000	1.00000	4.17700
1003045	2	3045	4045	1001	1003045	000000	000000	0.00000	0.00000	1.00000	4.17700
1003046	2	3046	4046	1001	1003046	000000	000000	0.00000	0.00000	1.00000	4.17700
1003047	2	3047	4047	1001	1003047	000000	000000	0.00000	0.00000	1.00000	4.17700
1003048	2	3048	4048	1001	1003048	000000	000000	0.00000	0.00000	1.00000	4.17700
1003049	2	3049	4049	1001	1003049	000000	000000	0.00000	0.00000	1.00000	4.17700
1003050	2	3050	4050	1001	1003050	000000	000000	0.00000	0.00000	1.00000	4.17700
1003051	2	3051	4051	1001	1003051	000000	000000	0.00000	0.00000	1.00000	4.17700
1003052	2	3052	4052	1001	1003052	000000	000000	0.00000	0.00000	1.00000	4.17700
1003053	2	3053	4053	1001	1003053	000000	000000	0.00000	0.00000	1.00000	4.17700
1003054	2	3054	4054	1001	1003054	000000	000000	0.00000	0.00000	1.00000	4.17700
1003055	2	3055	4055	1001	1003055	000000	000000	0.00000	0.00000	1.00000	4.17700
1003056	2	3056	4056	1001	1003056	000000	000000	0.00000	0.00000	1.00000	4.17700
1003057	2	3057	4057	1001	1003057	000000	000000	0.00000	0.00000	1.00000	4.17700
1003058	2	3058	4058	1001	1003058	000000	000000	0.00000	0.00000	1.00000	4.17700
1003059	2	3059	4059	1001	1003059	000000	000000	0.00000	0.00000	1.00000	4.17700
1003060	2	3060	4060	1001	1003060	000000	000000	0.00000	0.00000	1.00000	4.17700
1003061	2	3061	4061	1001	1003061	000000	000000	0.00000	0.00000	1.00000	4.17700
1003062	2	3062	4062	1001	1003062	000000	000000	0.00000	0.00000	1.00000	4.17700
1003063	2	3063	4063	1001	1003063	000000	000000	0.00000	0.00000	1.00000	4.17700
1003064	2	3064	4064	1001	1003064	000000	000000	0.00000	0.00000	1.00000	4.17700
1003065	2	3065	4065	1001	1003065	000000	000000	0.00000	0.00000	1.00000	4.17700
1003066	2	3066	4066	1001	1003066	000000	000000	0.00000	0.00000	1.00000	4.17700
1003067	2	3067	4067	1001	1003067	000000	000000	0.00000	0.00000	1.00000	4.17700

Bago

ELEMENT DATA [BEAM-ELEMENT (BEAM)]

ELEMENT	BLOCK	NODE (I)	NODE (J)	MATERIAL	PROPERTY	RELEASE (I)	RELEASE (J)	VECTOR AXIS2			E. LENGTH (m)
								X	Y	Z	
1003068	2	3068	4068	1001	1003068	000000	000000	0.00000	0.00000	1.00000	4.17700
1003069	2	3069	4069	1001	1003069	000000	000000	0.00000	0.00000	1.00000	4.17700
1003070	2	3070	4070	1001	1003070	000000	000000	0.00000	0.00000	1.00000	4.17700
1003071	2	3071	4071	1001	1003071	000000	000000	0.00000	0.00000	1.00000	4.17700
1003072	2	3072	4072	1001	1003072	000000	000000	0.00000	0.00000	1.00000	4.17700
1003073	2	3073	4073	1001	1003073	000000	000000	0.00000	0.00000	1.00000	4.17700
1003074	2	3074	4074	1001	1003074	000000	000000	0.00000	0.00000	1.00000	4.17700
1003075	2	3075	4075	1001	1003075	000000	000000	0.00000	0.00000	1.00000	4.17700
1003076	2	3076	4076	1001	1003076	000000	000000	0.00000	0.00000	1.00000	4.17700
1003077	2	3077	4077	1001	1003077	000000	000000	0.00000	0.00000	1.00000	4.17700
1003078	2	3078	4078	1001	1003078	000000	000000	0.00000	0.00000	1.00000	4.17700
1003079	2	3079	4079	1001	1003079	000000	000000	0.00000	0.00000	1.00000	4.17700
1003080	2	3080	4080	1001	1003080	000000	000000	0.00000	0.00000	1.00000	4.17700
1003081	2	3081	4081	1001	1003081	000000	000000	0.00000	0.00000	1.00000	4.17700
1003082	2	3082	4082	1001	1003082	000000	000000	0.00000	0.00000	1.00000	4.17700

ELEMENT DATA [SUPPORT-ELEMENT (SUPPORT)]

ELEMENT	BLOCK	NODE	PROPERTY	VECTOR AXIS1			VECTOR AXIS2			VECTOR AXIS3		
				X	Y	Z	X	Y	Z	X	Y	Z
7101001	3	1001	7101001	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102001	3	2001	7102001	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103001	3	3001	7103001	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104001	3	4001	7104001	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101012	4	1012	7101012	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102012	4	2012	7102012	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103012	4	3012	7103012	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104012	4	4012	7104012	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101024	5	1024	7101024	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102024	5	2024	7102024	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000

Bago

ELEMENT DATA [SUPPORT-ELEMENT(SUPPORT)]

ELEMENT	BLOCK	NODE	PROPERTY	VECTOR AXIS1			VECTOR AXIS2			VECTOR AXIS3		
				X	Y	Z	X	Y	Z	X	Y	Z
7103024	5	3024	7103024	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104024	5	4024	7104024	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101036	6	1036	7101036	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102036	6	2036	7102036	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103036	6	3036	7103036	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104036	6	4036	7104036	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101048	7	1048	7101048	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102048	7	2048	7102048	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103048	7	3048	7103048	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104048	7	4048	7104048	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101060	8	1060	7101060	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102060	8	2060	7102060	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103060	8	3060	7103060	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104060	8	4060	7104060	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101072	9	1072	7101072	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102072	9	2072	7102072	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103072	9	3072	7103072	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104072	9	4072	7104072	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7101082	10	1082	7101082	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7102082	10	2082	7102082	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7103082	10	3082	7103082	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000
7104082	10	4082	7104082	1.00000	0.00000	0.00000	0.00000	1.00000	0.00000	0.00000	0.00000	1.00000

Bago

ELEMENT GROUP DATA [APREACT(APREACT)]

GROUP	TITLE	IMPACT-COEF					
1	1st span Without imp	NO(NOIMPACT)	ELEMENT	7101001	7102001	7103001	7104001
			VIEW	D3	D3	D3	D3
2	2nd span Without imp	NO(NOIMPACT)	ELEMENT	7101012	7102012	7103012	7104012
			VIEW	D3	D3	D3	D3
3	3rd span Without imp	NO(NOIMPACT)	ELEMENT	7101024	7102024	7103024	7104024
			VIEW	D3	D3	D3	D3
4	4th span Without imp	NO(NOIMPACT)	ELEMENT	7101036	7102036	7103036	7104036
			VIEW	D3	D3	D3	D3
5	5th span Without imp	NO(NOIMPACT)	ELEMENT	7101048	7102048	7103048	7104048
			VIEW	D3	D3	D3	D3
6	6th span Without imp	NO(NOIMPACT)	ELEMENT	7101060	7102060	7103060	7104060
			VIEW	D3	D3	D3	D3
7	7th span Without imp	NO(NOIMPACT)	ELEMENT	7101072	7102072	7103072	7104072
			VIEW	D3	D3	D3	D3
8	8th span Without imp	NO(NOIMPACT)	ELEMENT	7101082	7102082	7103082	7104082
			VIEW	D3	D3	D3	D3
101	1st span With impact	YES(IMPACT)	ELEMENT	7101001	7102001	7103001	7104001
			VIEW	D3	D3	D3	D3
102	2nd span With impact	YES(IMPACT)	ELEMENT	7101012	7102012	7103012	7104012
			VIEW	D3	D3	D3	D3
103	3rd span With impact	YES(IMPACT)	ELEMENT	7101024	7102024	7103024	7104024
			VIEW	D3	D3	D3	D3
104	4th span With impact	YES(IMPACT)	ELEMENT	7101036	7102036	7103036	7104036
			VIEW	D3	D3	D3	D3
105	5th span With impact	YES(IMPACT)	ELEMENT	7101048	7102048	7103048	7104048
			VIEW	D3	D3	D3	D3
106	6th span With impact	YES(IMPACT)	ELEMENT	7101060	7102060	7103060	7104060
			VIEW	D3	D3	D3	D3
107	7th span With impact	YES(IMPACT)	ELEMENT	7101072	7102072	7103072	7104072
			VIEW	D3	D3	D3	D3
108	8th span With impact	YES(IMPACT)	ELEMENT	7101082	7102082	7103082	7104082
			VIEW	D3	D3	D3	D3

Bago

CROSS DATA

CROSS	GIRDER1	GIRDER2	ANGLE1 (deg)	ANGLE2 (deg)	NODE G1	NODE G2	NODE G3	NODE G4
C1	G1	G4	90.00000	90.00000	1001	2001	3001	4001
C2	G1	G4	90.00000	90.00000	1002	2002	3002	4002
C3	G1	G4	90.00000	90.00000	1003	2003	3003	4003
C4	G1	G4	90.00000	90.00000	1004	2004	3004	4004
C5	G1	G4	90.00000	90.00000	1005	2005	3005	4005
C6	G1	G4	90.00000	90.00000	1006	2006	3006	4006
C7	G1	G4	90.00000	90.00000	1007	2007	3007	4007
C8	G1	G4	90.00000	90.00000	1008	2008	3008	4008
C9	G1	G4	90.00000	90.00000	1009	2009	3009	4009
C10	G1	G4	90.00000	90.00000	1010	2010	3010	4010
C11	G1	G4	90.00000	90.00000	1011	2011	3011	4011
C12	G1	G4	90.00000	90.00000	1012	2012	3012	4012
C13	G1	G4	90.00000	90.00000	1013	2013	3013	4013
C14	G1	G4	90.00000	90.00000	1014	2014	3014	4014
C15	G1	G4	90.00000	90.00000	1015	2015	3015	4015
C16	G1	G4	90.00000	90.00000	1016	2016	3016	4016
C17	G1	G4	90.00000	90.00000	1017	2017	3017	4017
C18	G1	G4	90.00000	90.00000	1018	2018	3018	4018
C19	G1	G4	90.00000	90.00000	1019	2019	3019	4019
C20	G1	G4	90.00000	90.00000	1020	2020	3020	4020
C21	G1	G4	90.00000	90.00000	1021	2021	3021	4021
C22	G1	G4	90.00000	90.00000	1022	2022	3022	4022
C23	G1	G4	90.00000	90.00000	1023	2023	3023	4023
C24	G1	G4	90.00000	90.00000	1024	2024	3024	4024
C25	G1	G4	90.00000	90.00000	1025	2025	3025	4025
C26	G1	G4	90.00000	90.00000	1026	2026	3026	4026
C27	G1	G4	90.00000	90.00000	1027	2027	3027	4027
C28	G1	G4	90.00000	90.00000	1028	2028	3028	4028
C29	G1	G4	90.00000	90.00000	1029	2029	3029	4029
C30	G1	G4	90.00000	90.00000	1030	2030	3030	4030

Bago

CROSS DATA

CROSS	GIRDER1	GIRDER2	ANGLE1 (deg)	ANGLE2 (deg)	NODE G1	NODE G2	NODE G3	NODE G4
C31	G1	G4	90.00000	90.00000	1031	2031	3031	4031
C32	G1	G4	90.00000	90.00000	1032	2032	3032	4032
C33	G1	G4	90.00000	90.00000	1033	2033	3033	4033
C34	G1	G4	90.00000	90.00000	1034	2034	3034	4034
C35	G1	G4	90.00000	90.00000	1035	2035	3035	4035
C36	G1	G4	90.00000	90.00000	1036	2036	3036	4036
C37	G1	G4	90.00000	90.00000	1037	2037	3037	4037
C38	G1	G4	90.00000	90.00000	1038	2038	3038	4038
C39	G1	G4	90.00000	90.00000	1039	2039	3039	4039
C40	G1	G4	90.00000	90.00000	1040	2040	3040	4040
C41	G1	G4	90.00000	90.00000	1041	2041	3041	4041
C42	G1	G4	90.00000	90.00000	1042	2042	3042	4042
C43	G1	G4	90.00000	90.00000	1043	2043	3043	4043
C44	G1	G4	90.00000	90.00000	1044	2044	3044	4044
C45	G1	G4	90.00000	90.00000	1045	2045	3045	4045
C46	G1	G4	90.00000	90.00000	1046	2046	3046	4046
C47	G1	G4	90.00000	90.00000	1047	2047	3047	4047
C48	G1	G4	90.00000	90.00000	1048	2048	3048	4048
C49	G1	G4	90.00000	90.00000	1049	2049	3049	4049
C50	G1	G4	90.00000	90.00000	1050	2050	3050	4050
C51	G1	G4	90.00000	90.00000	1051	2051	3051	4051
C52	G1	G4	90.00000	90.00000	1052	2052	3052	4052
C53	G1	G4	90.00000	90.00000	1053	2053	3053	4053
C54	G1	G4	90.00000	90.00000	1054	2054	3054	4054
C55	G1	G4	90.00000	90.00000	1055	2055	3055	4055
C56	G1	G4	90.00000	90.00000	1056	2056	3056	4056
C57	G1	G4	90.00000	90.00000	1057	2057	3057	4057
C58	G1	G4	90.00000	90.00000	1058	2058	3058	4058
C59	G1	G4	90.00000	90.00000	1059	2059	3059	4059
C60	G1	G4	90.00000	90.00000	1060	2060	3060	4060

Bago

CROSS DATA

CROSS	GIRDER1	GIRDER2	ANGLE1 (deg)	ANGLE2 (deg)	NODE G1	NODE G2	NODE G3	NODE G4
C61	G1	G4	90.00000	90.00000	1061	2061	3061	4061
C62	G1	G4	90.00000	90.00000	1062	2062	3062	4062
C63	G1	G4	90.00000	90.00000	1063	2063	3063	4063
C64	G1	G4	90.00000	90.00000	1064	2064	3064	4064
C65	G1	G4	90.00000	90.00000	1065	2065	3065	4065
C66	G1	G4	90.00000	90.00000	1066	2066	3066	4066
C67	G1	G4	90.00000	90.00000	1067	2067	3067	4067
C68	G1	G4	90.00000	90.00000	1068	2068	3068	4068
C69	G1	G4	90.00000	90.00000	1069	2069	3069	4069
C70	G1	G4	90.00000	90.00000	1070	2070	3070	4070
C71	G1	G4	90.00000	90.00000	1071	2071	3071	4071
C72	G1	G4	90.00000	90.00000	1072	2072	3072	4072
C73	G1	G4	90.00000	90.00000	1073	2073	3073	4073
C74	G1	G4	90.00000	90.00000	1074	2074	3074	4074
C75	G1	G4	90.00000	90.00000	1075	2075	3075	4075
C76	G1	G4	90.00000	90.00000	1076	2076	3076	4076
C77	G1	G4	90.00000	90.00000	1077	2077	3077	4077
C78	G1	G4	90.00000	90.00000	1078	2078	3078	4078
C79	G1	G4	90.00000	90.00000	1079	2079	3079	4079
C80	G1	G4	90.00000	90.00000	1080	2080	3080	4080
C81	G1	G4	90.00000	90.00000	1081	2081	3081	4081
C82	G1	G4	90.00000	90.00000	1082	2082	3082	4082

Bago

SPAN DATA

CROSS	CROSS	SPAN LENGTH (m)
C1	C12	110.81303
C12	C24	112.00000
C24	C36	112.00000
C36	C48	112.00000
C48	C60	112.00000
C60	C72	112.00000
C72	C82	103.10000

Bago

LOAD CASE DATA

CASE	CASE TITLE	CASE CLASS	CASE TYPE	NOTE
1	Pavement	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
3	Railing	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
5	Wheel guard	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
8	Steel weight	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
10	Medial strip	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
19	Snow	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
31	Miscellaneous	INFL-CASE (INFL)	DEAD-LOAD (DEAD)	GIRDER-DIRDCT (DIRECT)
100	AASHTO-LRFD LOAD	ROAD (INFLROAD) TRUCK-LOAD TANDEM-LOAD DISPERSION-LOAD	AASHTOLOADLRFD (ROADAASHTOLRFD)	GIRDER-DIRDCT (DIRECT)
198	AASHTO Fatig LOAD	ROAD (INFLROAD) TRUCK-LOAD TANDEM-LOAD DISPERSION-LOAD	AASHTOLOADLRFD (ROADAASHTOLRFD)	GIRDER-DIRDCT (DIRECT)
199	AASHTO-LRFD Twin LOAD	ROAD (INFLROAD) TRUCK-LOAD TANDEM-LOAD DISPERSION-LOAD	AASHTOLOADLRFD (ROADAASHTOLRFD)	GIRDER-DIRDCT (DIRECT)

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C1	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C2	1.80000	G1	-2.57381	90.00000	1.80000	G2	2.25071	0.00000
C2	1.80000	G3	-2.25071	0.00000	1.80000	G4	2.57381	90.00000
C3	1.80000	G1	-2.57381	90.00000	1.80000	G2	2.25071	0.00000
C3	1.80000	G3	-2.25071	0.00000	1.80000	G4	2.57381	90.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C4	1.80000	G1	-2.57381	90.00000	1.80000	G2	2.25071	0.00000
C4	1.80000	G3	-2.25071	0.00000	1.80000	G4	2.57381	90.00000
C5	1.80000	G1	-2.57381	90.00000	1.80000	G2	2.25071	0.00000
C5	1.80000	G3	-2.25071	0.00000	1.80000	G4	2.57381	90.00000
C6	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C6	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C7	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C7	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C8	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C8	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C9	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C9	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C10	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C10	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C11	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C11	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C12	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C12	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C13	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C13	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C14	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C14	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C15	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C15	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C16	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C16	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C17	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C17	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C18	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C18	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C19	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C19	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C20	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C20	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C21	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C21	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C22	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C22	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C23	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C23	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C24	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C24	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C25	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C25	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C26	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C26	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C27	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C27	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C28	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C28	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C29	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C29	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C30	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C30	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C31	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C31	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C32	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C32	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C33	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C33	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C34	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C34	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C35	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C35	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C36	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C36	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C37	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C37	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C38	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C38	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C39	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C39	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C40	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C40	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C41	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C41	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C42	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C42	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C43	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C43	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C44	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C44	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C45	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C45	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C46	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C46	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C47	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C47	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C48	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C48	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C49	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C49	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C50	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C50	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C51	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C51	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C52	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C52	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C53	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C53	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C54	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C54	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C55	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C55	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C56	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C56	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C57	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C57	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C58	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C58	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C59	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C59	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C60	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C60	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C61	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C61	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C62	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C62	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C63	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C63	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C64	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C64	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C65	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C65	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C66	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C66	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C67	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C67	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C68	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C68	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C69	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C69	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C70	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C70	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C71	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C71	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C72	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C72	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C73	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C73	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C74	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C74	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C75	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C75	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C76	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000

Bago

LOAD DATA [No.1 : Pavement] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C76	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C77	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C77	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C78	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C78	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C79	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C79	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C80	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C80	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C81	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C81	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000
C82	1.80000	G1	-2.57300	90.00000	1.80000	G2	2.25000	0.00000
C82	1.80000	G3	-2.25000	0.00000	1.80000	G4	2.57300	90.00000

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C1	0.49000	G1	-2.87300	90.00000
C1	0.49000	G4	2.87300	90.00000
C2	0.49000	G1	-2.87391	90.00000
C2	0.49000	G4	2.87391	90.00000
C3	0.49000	G1	-2.87391	90.00000
C3	0.49000	G4	2.87391	90.00000
C4	0.49000	G1	-2.87391	90.00000
C4	0.49000	G4	2.87391	90.00000
C5	0.49000	G1	-2.87391	90.00000
C5	0.49000	G4	2.87391	90.00000
C6	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C6	0.49000	G4	2.87300	90.00000
C7	0.49000	G1	-2.87300	90.00000
C7	0.49000	G4	2.87300	90.00000
C8	0.49000	G1	-2.87300	90.00000
C8	0.49000	G4	2.87300	90.00000
C9	0.49000	G1	-2.87300	90.00000
C9	0.49000	G4	2.87300	90.00000
C10	0.49000	G1	-2.87300	90.00000
C10	0.49000	G4	2.87300	90.00000
C11	0.49000	G1	-2.87300	90.00000
C11	0.49000	G4	2.87300	90.00000
C12	0.49000	G1	-2.87300	90.00000
C12	0.49000	G4	2.87300	90.00000
C13	0.49000	G1	-2.87300	90.00000
C13	0.49000	G4	2.87300	90.00000
C14	0.49000	G1	-2.87300	90.00000
C14	0.49000	G4	2.87300	90.00000
C15	0.49000	G1	-2.87300	90.00000
C15	0.49000	G4	2.87300	90.00000
C16	0.49000	G1	-2.87300	90.00000
C16	0.49000	G4	2.87300	90.00000
C17	0.49000	G1	-2.87300	90.00000
C17	0.49000	G4	2.87300	90.00000
C18	0.49000	G1	-2.87300	90.00000
C18	0.49000	G4	2.87300	90.00000
C19	0.49000	G1	-2.87300	90.00000
C19	0.49000	G4	2.87300	90.00000
C20	0.49000	G1	-2.87300	90.00000
C20	0.49000	G4	2.87300	90.00000
C21	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C21	0.49000	G4	2.87300	90.00000
C22	0.49000	G1	-2.87300	90.00000
C22	0.49000	G4	2.87300	90.00000
C23	0.49000	G1	-2.87300	90.00000
C23	0.49000	G4	2.87300	90.00000
C24	0.49000	G1	-2.87300	90.00000
C24	0.49000	G4	2.87300	90.00000
C25	0.49000	G1	-2.87300	90.00000
C25	0.49000	G4	2.87300	90.00000
C26	0.49000	G1	-2.87300	90.00000
C26	0.49000	G4	2.87300	90.00000
C27	0.49000	G1	-2.87300	90.00000
C27	0.49000	G4	2.87300	90.00000
C28	0.49000	G1	-2.87300	90.00000
C28	0.49000	G4	2.87300	90.00000
C29	0.49000	G1	-2.87300	90.00000
C29	0.49000	G4	2.87300	90.00000
C30	0.49000	G1	-2.87300	90.00000
C30	0.49000	G4	2.87300	90.00000
C31	0.49000	G1	-2.87300	90.00000
C31	0.49000	G4	2.87300	90.00000
C32	0.49000	G1	-2.87300	90.00000
C32	0.49000	G4	2.87300	90.00000
C33	0.49000	G1	-2.87300	90.00000
C33	0.49000	G4	2.87300	90.00000
C34	0.49000	G1	-2.87300	90.00000
C34	0.49000	G4	2.87300	90.00000
C35	0.49000	G1	-2.87300	90.00000
C35	0.49000	G4	2.87300	90.00000
C36	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C36	0.49000	G4	2.87300	90.00000
C37	0.49000	G1	-2.87300	90.00000
C37	0.49000	G4	2.87300	90.00000
C38	0.49000	G1	-2.87300	90.00000
C38	0.49000	G4	2.87300	90.00000
C39	0.49000	G1	-2.87300	90.00000
C39	0.49000	G4	2.87300	90.00000
C40	0.49000	G1	-2.87300	90.00000
C40	0.49000	G4	2.87300	90.00000
C41	0.49000	G1	-2.87300	90.00000
C41	0.49000	G4	2.87300	90.00000
C42	0.49000	G1	-2.87300	90.00000
C42	0.49000	G4	2.87300	90.00000
C43	0.49000	G1	-2.87300	90.00000
C43	0.49000	G4	2.87300	90.00000
C44	0.49000	G1	-2.87300	90.00000
C44	0.49000	G4	2.87300	90.00000
C45	0.49000	G1	-2.87300	90.00000
C45	0.49000	G4	2.87300	90.00000
C46	0.49000	G1	-2.87300	90.00000
C46	0.49000	G4	2.87300	90.00000
C47	0.49000	G1	-2.87300	90.00000
C47	0.49000	G4	2.87300	90.00000
C48	0.49000	G1	-2.87300	90.00000
C48	0.49000	G4	2.87300	90.00000
C49	0.49000	G1	-2.87300	90.00000
C49	0.49000	G4	2.87300	90.00000
C50	0.49000	G1	-2.87300	90.00000
C50	0.49000	G4	2.87300	90.00000
C51	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C51	0.49000	G4	2.87300	90.00000
C52	0.49000	G1	-2.87300	90.00000
C52	0.49000	G4	2.87300	90.00000
C53	0.49000	G1	-2.87300	90.00000
C53	0.49000	G4	2.87300	90.00000
C54	0.49000	G1	-2.87300	90.00000
C54	0.49000	G4	2.87300	90.00000
C55	0.49000	G1	-2.87300	90.00000
C55	0.49000	G4	2.87300	90.00000
C56	0.49000	G1	-2.87300	90.00000
C56	0.49000	G4	2.87300	90.00000
C57	0.49000	G1	-2.87300	90.00000
C57	0.49000	G4	2.87300	90.00000
C58	0.49000	G1	-2.87300	90.00000
C58	0.49000	G4	2.87300	90.00000
C59	0.49000	G1	-2.87300	90.00000
C59	0.49000	G4	2.87300	90.00000
C60	0.49000	G1	-2.87300	90.00000
C60	0.49000	G4	2.87300	90.00000
C61	0.49000	G1	-2.87300	90.00000
C61	0.49000	G4	2.87300	90.00000
C62	0.49000	G1	-2.87300	90.00000
C62	0.49000	G4	2.87300	90.00000
C63	0.49000	G1	-2.87300	90.00000
C63	0.49000	G4	2.87300	90.00000
C64	0.49000	G1	-2.87300	90.00000
C64	0.49000	G4	2.87300	90.00000
C65	0.49000	G1	-2.87300	90.00000
C65	0.49000	G4	2.87300	90.00000
C66	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C66	0.49000	G4	2.87300	90.00000
C67	0.49000	G1	-2.87300	90.00000
C67	0.49000	G4	2.87300	90.00000
C68	0.49000	G1	-2.87300	90.00000
C68	0.49000	G4	2.87300	90.00000
C69	0.49000	G1	-2.87300	90.00000
C69	0.49000	G4	2.87300	90.00000
C70	0.49000	G1	-2.87300	90.00000
C70	0.49000	G4	2.87300	90.00000
C71	0.49000	G1	-2.87300	90.00000
C71	0.49000	G4	2.87300	90.00000
C72	0.49000	G1	-2.87300	90.00000
C72	0.49000	G4	2.87300	90.00000
C73	0.49000	G1	-2.87300	90.00000
C73	0.49000	G4	2.87300	90.00000
C74	0.49000	G1	-2.87300	90.00000
C74	0.49000	G4	2.87300	90.00000
C75	0.49000	G1	-2.87300	90.00000
C75	0.49000	G4	2.87300	90.00000
C76	0.49000	G1	-2.87300	90.00000
C76	0.49000	G4	2.87300	90.00000
C77	0.49000	G1	-2.87300	90.00000
C77	0.49000	G4	2.87300	90.00000
C78	0.49000	G1	-2.87300	90.00000
C78	0.49000	G4	2.87300	90.00000
C79	0.49000	G1	-2.87300	90.00000
C79	0.49000	G4	2.87300	90.00000
C80	0.49000	G1	-2.87300	90.00000
C80	0.49000	G4	2.87300	90.00000
C81	0.49000	G1	-2.87300	90.00000

Bago

LOAD DATA [No.3 : Railing] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C81	0.49000	G4	2.87300	90.00000
C82	0.49000	G1	-2.87300	90.00000
C82	0.49000	G4	2.87300	90.00000

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C1	4.85100	G1	-2.87300	90.00000
C1	4.85100	G4	2.87300	90.00000
C2	4.85100	G1	-2.87391	90.00000
C2	4.85100	G4	2.87391	90.00000
C3	4.85100	G1	-2.87391	90.00000
C3	4.85100	G4	2.87391	90.00000
C4	4.85100	G1	-2.87391	90.00000
C4	4.85100	G4	2.87391	90.00000
C5	4.85100	G1	-2.87391	90.00000
C5	4.85100	G4	2.87391	90.00000
C6	4.85100	G1	-2.87300	90.00000
C6	4.85100	G4	2.87300	90.00000
C7	4.85100	G1	-2.87300	90.00000
C7	4.85100	G4	2.87300	90.00000
C8	4.85100	G1	-2.87300	90.00000
C8	4.85100	G4	2.87300	90.00000
C9	4.85100	G1	-2.87300	90.00000
C9	4.85100	G4	2.87300	90.00000
C10	4.85100	G1	-2.87300	90.00000
C10	4.85100	G4	2.87300	90.00000
C11	4.85100	G1	-2.87300	90.00000
C11	4.85100	G4	2.87300	90.00000

Bago

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C12	4.85100	G1	-2.87300	90.00000
C12	4.85100	G4	2.87300	90.00000
C13	4.85100	G1	-2.87300	90.00000
C13	4.85100	G4	2.87300	90.00000
C14	4.85100	G1	-2.87300	90.00000
C14	4.85100	G4	2.87300	90.00000
C15	4.85100	G1	-2.87300	90.00000
C15	4.85100	G4	2.87300	90.00000
C16	4.85100	G1	-2.87300	90.00000
C16	4.85100	G4	2.87300	90.00000
C17	4.85100	G1	-2.87300	90.00000
C17	4.85100	G4	2.87300	90.00000
C18	4.85100	G1	-2.87300	90.00000
C18	4.85100	G4	2.87300	90.00000
C19	4.85100	G1	-2.87300	90.00000
C19	4.85100	G4	2.87300	90.00000
C20	4.85100	G1	-2.87300	90.00000
C20	4.85100	G4	2.87300	90.00000
C21	4.85100	G1	-2.87300	90.00000
C21	4.85100	G4	2.87300	90.00000
C22	4.85100	G1	-2.87300	90.00000
C22	4.85100	G4	2.87300	90.00000
C23	4.85100	G1	-2.87300	90.00000
C23	4.85100	G4	2.87300	90.00000
C24	4.85100	G1	-2.87300	90.00000
C24	4.85100	G4	2.87300	90.00000
C25	4.85100	G1	-2.87300	90.00000
C25	4.85100	G4	2.87300	90.00000
C26	4.85100	G1	-2.87300	90.00000
C26	4.85100	G4	2.87300	90.00000

Bago

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C27	4.85100	G1	-2.87300	90.00000
C27	4.85100	G4	2.87300	90.00000
C28	4.85100	G1	-2.87300	90.00000
C28	4.85100	G4	2.87300	90.00000
C29	4.85100	G1	-2.87300	90.00000
C29	4.85100	G4	2.87300	90.00000
C30	4.85100	G1	-2.87300	90.00000
C30	4.85100	G4	2.87300	90.00000
C31	4.85100	G1	-2.87300	90.00000
C31	4.85100	G4	2.87300	90.00000
C32	4.85100	G1	-2.87300	90.00000
C32	4.85100	G4	2.87300	90.00000
C33	4.85100	G1	-2.87300	90.00000
C33	4.85100	G4	2.87300	90.00000
C34	4.85100	G1	-2.87300	90.00000
C34	4.85100	G4	2.87300	90.00000
C35	4.85100	G1	-2.87300	90.00000
C35	4.85100	G4	2.87300	90.00000
C36	4.85100	G1	-2.87300	90.00000
C36	4.85100	G4	2.87300	90.00000
C37	4.85100	G1	-2.87300	90.00000
C37	4.85100	G4	2.87300	90.00000
C38	4.85100	G1	-2.87300	90.00000
C38	4.85100	G4	2.87300	90.00000
C39	4.85100	G1	-2.87300	90.00000
C39	4.85100	G4	2.87300	90.00000
C40	4.85100	G1	-2.87300	90.00000
C40	4.85100	G4	2.87300	90.00000
C41	4.85100	G1	-2.87300	90.00000
C41	4.85100	G4	2.87300	90.00000

Bago

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C42	4.85100	G1	-2.87300	90.00000
C42	4.85100	G4	2.87300	90.00000
C43	4.85100	G1	-2.87300	90.00000
C43	4.85100	G4	2.87300	90.00000
C44	4.85100	G1	-2.87300	90.00000
C44	4.85100	G4	2.87300	90.00000
C45	4.85100	G1	-2.87300	90.00000
C45	4.85100	G4	2.87300	90.00000
C46	4.85100	G1	-2.87300	90.00000
C46	4.85100	G4	2.87300	90.00000
C47	4.85100	G1	-2.87300	90.00000
C47	4.85100	G4	2.87300	90.00000
C48	4.85100	G1	-2.87300	90.00000
C48	4.85100	G4	2.87300	90.00000
C49	4.85100	G1	-2.87300	90.00000
C49	4.85100	G4	2.87300	90.00000
C50	4.85100	G1	-2.87300	90.00000
C50	4.85100	G4	2.87300	90.00000
C51	4.85100	G1	-2.87300	90.00000
C51	4.85100	G4	2.87300	90.00000
C52	4.85100	G1	-2.87300	90.00000
C52	4.85100	G4	2.87300	90.00000
C53	4.85100	G1	-2.87300	90.00000
C53	4.85100	G4	2.87300	90.00000
C54	4.85100	G1	-2.87300	90.00000
C54	4.85100	G4	2.87300	90.00000
C55	4.85100	G1	-2.87300	90.00000
C55	4.85100	G4	2.87300	90.00000
C56	4.85100	G1	-2.87300	90.00000
C56	4.85100	G4	2.87300	90.00000

Bago

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C57	4.85100	G1	-2.87300	90.00000
C57	4.85100	G4	2.87300	90.00000
C58	4.85100	G1	-2.87300	90.00000
C58	4.85100	G4	2.87300	90.00000
C59	4.85100	G1	-2.87300	90.00000
C59	4.85100	G4	2.87300	90.00000
C60	4.85100	G1	-2.87300	90.00000
C60	4.85100	G4	2.87300	90.00000
C61	4.85100	G1	-2.87300	90.00000
C61	4.85100	G4	2.87300	90.00000
C62	4.85100	G1	-2.87300	90.00000
C62	4.85100	G4	2.87300	90.00000
C63	4.85100	G1	-2.87300	90.00000
C63	4.85100	G4	2.87300	90.00000
C64	4.85100	G1	-2.87300	90.00000
C64	4.85100	G4	2.87300	90.00000
C65	4.85100	G1	-2.87300	90.00000
C65	4.85100	G4	2.87300	90.00000
C66	4.85100	G1	-2.87300	90.00000
C66	4.85100	G4	2.87300	90.00000
C67	4.85100	G1	-2.87300	90.00000
C67	4.85100	G4	2.87300	90.00000
C68	4.85100	G1	-2.87300	90.00000
C68	4.85100	G4	2.87300	90.00000
C69	4.85100	G1	-2.87300	90.00000
C69	4.85100	G4	2.87300	90.00000
C70	4.85100	G1	-2.87300	90.00000
C70	4.85100	G4	2.87300	90.00000
C71	4.85100	G1	-2.87300	90.00000
C71	4.85100	G4	2.87300	90.00000

Bago

LOAD DATA [No.5 : Wheel guard] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C72	4.85100	G1	-2.87300	90.00000
C72	4.85100	G4	2.87300	90.00000
C73	4.85100	G1	-2.87300	90.00000
C73	4.85100	G4	2.87300	90.00000
C74	4.85100	G1	-2.87300	90.00000
C74	4.85100	G4	2.87300	90.00000
C75	4.85100	G1	-2.87300	90.00000
C75	4.85100	G4	2.87300	90.00000
C76	4.85100	G1	-2.87300	90.00000
C76	4.85100	G4	2.87300	90.00000
C77	4.85100	G1	-2.87300	90.00000
C77	4.85100	G4	2.87300	90.00000
C78	4.85100	G1	-2.87300	90.00000
C78	4.85100	G4	2.87300	90.00000
C79	4.85100	G1	-2.87300	90.00000
C79	4.85100	G4	2.87300	90.00000
C80	4.85100	G1	-2.87300	90.00000
C80	4.85100	G4	2.87300	90.00000
C81	4.85100	G1	-2.87300	90.00000
C81	4.85100	G4	2.87300	90.00000
C82	4.85100	G1	-2.87300	90.00000
C82	4.85100	G4	2.87300	90.00000

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C1	29.86000	G1	0.00000	0.00000
C1	29.86000	G2	0.00000	0.00000
C1	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C1	29.86000	G4	0.00000	0.00000
C2	29.86000	G1	0.00000	0.00000
C2	29.86000	G2	0.00000	0.00000
C2	29.86000	G3	0.00000	0.00000
C2	29.86000	G4	0.00000	0.00000
C3	29.86000	G1	0.00000	0.00000
C3	29.86000	G2	0.00000	0.00000
C3	29.86000	G3	0.00000	0.00000
C3	29.86000	G4	0.00000	0.00000
C4	29.86000	G1	0.00000	0.00000
C4	29.86000	G2	0.00000	0.00000
C4	29.86000	G3	0.00000	0.00000
C4	29.86000	G4	0.00000	0.00000
C5	29.86000	G1	0.00000	0.00000
C5	29.86000	G2	0.00000	0.00000
C5	29.86000	G3	0.00000	0.00000
C5	29.86000	G4	0.00000	0.00000
C6	29.86000	G1	0.00000	0.00000
C6	29.86000	G2	0.00000	0.00000
C6	29.86000	G3	0.00000	0.00000
C6	29.86000	G4	0.00000	0.00000
C7	29.86000	G1	0.00000	0.00000
C7	29.86000	G2	0.00000	0.00000
C7	29.86000	G3	0.00000	0.00000
C7	29.86000	G4	0.00000	0.00000
C8	29.86000	G1	0.00000	0.00000
C8	29.86000	G2	0.00000	0.00000
C8	29.86000	G3	0.00000	0.00000
C8	29.86000	G4	0.00000	0.00000
C9	29.86000	G1	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C9	29.86000	G2	0.00000	0.00000
C9	29.86000	G3	0.00000	0.00000
C9	29.86000	G4	0.00000	0.00000
C10	29.86000	G1	0.00000	0.00000
C10	29.86000	G2	0.00000	0.00000
C10	29.86000	G3	0.00000	0.00000
C10	29.86000	G4	0.00000	0.00000
C11	29.86000	G1	0.00000	0.00000
C11	29.86000	G2	0.00000	0.00000
C11	29.86000	G3	0.00000	0.00000
C11	29.86000	G4	0.00000	0.00000
C12	29.86000	G1	0.00000	0.00000
C12	29.86000	G2	0.00000	0.00000
C12	29.86000	G3	0.00000	0.00000
C12	29.86000	G4	0.00000	0.00000
C13	29.86000	G1	0.00000	0.00000
C13	29.86000	G2	0.00000	0.00000
C13	29.86000	G3	0.00000	0.00000
C13	29.86000	G4	0.00000	0.00000
C14	29.86000	G1	0.00000	0.00000
C14	29.86000	G2	0.00000	0.00000
C14	29.86000	G3	0.00000	0.00000
C14	29.86000	G4	0.00000	0.00000
C15	29.86000	G1	0.00000	0.00000
C15	29.86000	G2	0.00000	0.00000
C15	29.86000	G3	0.00000	0.00000
C15	29.86000	G4	0.00000	0.00000
C16	29.86000	G1	0.00000	0.00000
C16	29.86000	G2	0.00000	0.00000
C16	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C16	29.86000	G4	0.00000	0.00000
C17	29.86000	G1	0.00000	0.00000
C17	29.86000	G2	0.00000	0.00000
C17	29.86000	G3	0.00000	0.00000
C17	29.86000	G4	0.00000	0.00000
C18	29.86000	G1	0.00000	0.00000
C18	29.86000	G2	0.00000	0.00000
C18	29.86000	G3	0.00000	0.00000
C18	29.86000	G4	0.00000	0.00000
C19	29.86000	G1	0.00000	0.00000
C19	29.86000	G2	0.00000	0.00000
C19	29.86000	G3	0.00000	0.00000
C19	29.86000	G4	0.00000	0.00000
C20	29.86000	G1	0.00000	0.00000
C20	29.86000	G2	0.00000	0.00000
C20	29.86000	G3	0.00000	0.00000
C20	29.86000	G4	0.00000	0.00000
C21	29.86000	G1	0.00000	0.00000
C21	29.86000	G2	0.00000	0.00000
C21	29.86000	G3	0.00000	0.00000
C21	29.86000	G4	0.00000	0.00000
C22	29.86000	G1	0.00000	0.00000
C22	29.86000	G2	0.00000	0.00000
C22	29.86000	G3	0.00000	0.00000
C22	29.86000	G4	0.00000	0.00000
C23	29.86000	G1	0.00000	0.00000
C23	29.86000	G2	0.00000	0.00000
C23	29.86000	G3	0.00000	0.00000
C23	29.86000	G4	0.00000	0.00000
C24	29.86000	G1	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C24	29.86000	G2	0.00000	0.00000
C24	29.86000	G3	0.00000	0.00000
C24	29.86000	G4	0.00000	0.00000
C25	29.86000	G1	0.00000	0.00000
C25	29.86000	G2	0.00000	0.00000
C25	29.86000	G3	0.00000	0.00000
C25	29.86000	G4	0.00000	0.00000
C26	29.86000	G1	0.00000	0.00000
C26	29.86000	G2	0.00000	0.00000
C26	29.86000	G3	0.00000	0.00000
C26	29.86000	G4	0.00000	0.00000
C27	29.86000	G1	0.00000	0.00000
C27	29.86000	G2	0.00000	0.00000
C27	29.86000	G3	0.00000	0.00000
C27	29.86000	G4	0.00000	0.00000
C28	29.86000	G1	0.00000	0.00000
C28	29.86000	G2	0.00000	0.00000
C28	29.86000	G3	0.00000	0.00000
C28	29.86000	G4	0.00000	0.00000
C29	29.86000	G1	0.00000	0.00000
C29	29.86000	G2	0.00000	0.00000
C29	29.86000	G3	0.00000	0.00000
C29	29.86000	G4	0.00000	0.00000
C30	29.86000	G1	0.00000	0.00000
C30	29.86000	G2	0.00000	0.00000
C30	29.86000	G3	0.00000	0.00000
C30	29.86000	G4	0.00000	0.00000
C31	29.86000	G1	0.00000	0.00000
C31	29.86000	G2	0.00000	0.00000
C31	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C31	29.86000	G4	0.00000	0.00000
C32	29.86000	G1	0.00000	0.00000
C32	29.86000	G2	0.00000	0.00000
C32	29.86000	G3	0.00000	0.00000
C32	29.86000	G4	0.00000	0.00000
C33	29.86000	G1	0.00000	0.00000
C33	29.86000	G2	0.00000	0.00000
C33	29.86000	G3	0.00000	0.00000
C33	29.86000	G4	0.00000	0.00000
C34	29.86000	G1	0.00000	0.00000
C34	29.86000	G2	0.00000	0.00000
C34	29.86000	G3	0.00000	0.00000
C34	29.86000	G4	0.00000	0.00000
C35	29.86000	G1	0.00000	0.00000
C35	29.86000	G2	0.00000	0.00000
C35	29.86000	G3	0.00000	0.00000
C35	29.86000	G4	0.00000	0.00000
C36	29.86000	G1	0.00000	0.00000
C36	29.86000	G2	0.00000	0.00000
C36	29.86000	G3	0.00000	0.00000
C36	29.86000	G4	0.00000	0.00000
C37	29.86000	G1	0.00000	0.00000
C37	29.86000	G2	0.00000	0.00000
C37	29.86000	G3	0.00000	0.00000
C37	29.86000	G4	0.00000	0.00000
C38	29.86000	G1	0.00000	0.00000
C38	29.86000	G2	0.00000	0.00000
C38	29.86000	G3	0.00000	0.00000
C38	29.86000	G4	0.00000	0.00000
C39	29.86000	G1	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C39	29.86000	G2	0.00000	0.00000
C39	29.86000	G3	0.00000	0.00000
C39	29.86000	G4	0.00000	0.00000
C40	29.86000	G1	0.00000	0.00000
C40	29.86000	G2	0.00000	0.00000
C40	29.86000	G3	0.00000	0.00000
C40	29.86000	G4	0.00000	0.00000
C41	29.86000	G1	0.00000	0.00000
C41	29.86000	G2	0.00000	0.00000
C41	29.86000	G3	0.00000	0.00000
C41	29.86000	G4	0.00000	0.00000
C42	29.86000	G1	0.00000	0.00000
C42	29.86000	G2	0.00000	0.00000
C42	29.86000	G3	0.00000	0.00000
C42	29.86000	G4	0.00000	0.00000
C43	29.86000	G1	0.00000	0.00000
C43	29.86000	G2	0.00000	0.00000
C43	29.86000	G3	0.00000	0.00000
C43	29.86000	G4	0.00000	0.00000
C44	29.86000	G1	0.00000	0.00000
C44	29.86000	G2	0.00000	0.00000
C44	29.86000	G3	0.00000	0.00000
C44	29.86000	G4	0.00000	0.00000
C45	29.86000	G1	0.00000	0.00000
C45	29.86000	G2	0.00000	0.00000
C45	29.86000	G3	0.00000	0.00000
C45	29.86000	G4	0.00000	0.00000
C46	29.86000	G1	0.00000	0.00000
C46	29.86000	G2	0.00000	0.00000
C46	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C46	29.86000	G4	0.00000	0.00000
C47	29.86000	G1	0.00000	0.00000
C47	29.86000	G2	0.00000	0.00000
C47	29.86000	G3	0.00000	0.00000
C47	29.86000	G4	0.00000	0.00000
C48	29.86000	G1	0.00000	0.00000
C48	29.86000	G2	0.00000	0.00000
C48	29.86000	G3	0.00000	0.00000
C48	29.86000	G4	0.00000	0.00000
C49	29.86000	G1	0.00000	0.00000
C49	29.86000	G2	0.00000	0.00000
C49	29.86000	G3	0.00000	0.00000
C49	29.86000	G4	0.00000	0.00000
C50	29.86000	G1	0.00000	0.00000
C50	29.86000	G2	0.00000	0.00000
C50	29.86000	G3	0.00000	0.00000
C50	29.86000	G4	0.00000	0.00000
C51	29.86000	G1	0.00000	0.00000
C51	29.86000	G2	0.00000	0.00000
C51	29.86000	G3	0.00000	0.00000
C51	29.86000	G4	0.00000	0.00000
C52	29.86000	G1	0.00000	0.00000
C52	29.86000	G2	0.00000	0.00000
C52	29.86000	G3	0.00000	0.00000
C52	29.86000	G4	0.00000	0.00000
C53	29.86000	G1	0.00000	0.00000
C53	29.86000	G2	0.00000	0.00000
C53	29.86000	G3	0.00000	0.00000
C53	29.86000	G4	0.00000	0.00000
C54	29.86000	G1	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C54	29.86000	G2	0.00000	0.00000
C54	29.86000	G3	0.00000	0.00000
C54	29.86000	G4	0.00000	0.00000
C55	29.86000	G1	0.00000	0.00000
C55	29.86000	G2	0.00000	0.00000
C55	29.86000	G3	0.00000	0.00000
C55	29.86000	G4	0.00000	0.00000
C56	29.86000	G1	0.00000	0.00000
C56	29.86000	G2	0.00000	0.00000
C56	29.86000	G3	0.00000	0.00000
C56	29.86000	G4	0.00000	0.00000
C57	29.86000	G1	0.00000	0.00000
C57	29.86000	G2	0.00000	0.00000
C57	29.86000	G3	0.00000	0.00000
C57	29.86000	G4	0.00000	0.00000
C58	29.86000	G1	0.00000	0.00000
C58	29.86000	G2	0.00000	0.00000
C58	29.86000	G3	0.00000	0.00000
C58	29.86000	G4	0.00000	0.00000
C59	29.86000	G1	0.00000	0.00000
C59	29.86000	G2	0.00000	0.00000
C59	29.86000	G3	0.00000	0.00000
C59	29.86000	G4	0.00000	0.00000
C60	29.86000	G1	0.00000	0.00000
C60	29.86000	G2	0.00000	0.00000
C60	29.86000	G3	0.00000	0.00000
C60	29.86000	G4	0.00000	0.00000
C61	29.86000	G1	0.00000	0.00000
C61	29.86000	G2	0.00000	0.00000
C61	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C61	29.86000	G4	0.00000	0.00000
C62	29.86000	G1	0.00000	0.00000
C62	29.86000	G2	0.00000	0.00000
C62	29.86000	G3	0.00000	0.00000
C62	29.86000	G4	0.00000	0.00000
C63	29.86000	G1	0.00000	0.00000
C63	29.86000	G2	0.00000	0.00000
C63	29.86000	G3	0.00000	0.00000
C63	29.86000	G4	0.00000	0.00000
C64	29.86000	G1	0.00000	0.00000
C64	29.86000	G2	0.00000	0.00000
C64	29.86000	G3	0.00000	0.00000
C64	29.86000	G4	0.00000	0.00000
C65	29.86000	G1	0.00000	0.00000
C65	29.86000	G2	0.00000	0.00000
C65	29.86000	G3	0.00000	0.00000
C65	29.86000	G4	0.00000	0.00000
C66	29.86000	G1	0.00000	0.00000
C66	29.86000	G2	0.00000	0.00000
C66	29.86000	G3	0.00000	0.00000
C66	29.86000	G4	0.00000	0.00000
C67	29.86000	G1	0.00000	0.00000
C67	29.86000	G2	0.00000	0.00000
C67	29.86000	G3	0.00000	0.00000
C67	29.86000	G4	0.00000	0.00000
C68	29.86000	G1	0.00000	0.00000
C68	29.86000	G2	0.00000	0.00000
C68	29.86000	G3	0.00000	0.00000
C68	29.86000	G4	0.00000	0.00000
C69	29.86000	G1	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C69	29.86000	G2	0.00000	0.00000
C69	29.86000	G3	0.00000	0.00000
C69	29.86000	G4	0.00000	0.00000
C70	29.86000	G1	0.00000	0.00000
C70	29.86000	G2	0.00000	0.00000
C70	29.86000	G3	0.00000	0.00000
C70	29.86000	G4	0.00000	0.00000
C71	29.86000	G1	0.00000	0.00000
C71	29.86000	G2	0.00000	0.00000
C71	29.86000	G3	0.00000	0.00000
C71	29.86000	G4	0.00000	0.00000
C72	29.86000	G1	0.00000	0.00000
C72	29.86000	G2	0.00000	0.00000
C72	29.86000	G3	0.00000	0.00000
C72	29.86000	G4	0.00000	0.00000
C73	29.86000	G1	0.00000	0.00000
C73	29.86000	G2	0.00000	0.00000
C73	29.86000	G3	0.00000	0.00000
C73	29.86000	G4	0.00000	0.00000
C74	29.86000	G1	0.00000	0.00000
C74	29.86000	G2	0.00000	0.00000
C74	29.86000	G3	0.00000	0.00000
C74	29.86000	G4	0.00000	0.00000
C75	29.86000	G1	0.00000	0.00000
C75	29.86000	G2	0.00000	0.00000
C75	29.86000	G3	0.00000	0.00000
C75	29.86000	G4	0.00000	0.00000
C76	29.86000	G1	0.00000	0.00000
C76	29.86000	G2	0.00000	0.00000
C76	29.86000	G3	0.00000	0.00000

Bago

LOAD DATA [No.8 : Steel weight] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C76	29.86000	G4	0.00000	0.00000
C77	29.86000	G1	0.00000	0.00000
C77	29.86000	G2	0.00000	0.00000
C77	29.86000	G3	0.00000	0.00000
C77	29.86000	G4	0.00000	0.00000
C78	29.86000	G1	0.00000	0.00000
C78	29.86000	G2	0.00000	0.00000
C78	29.86000	G3	0.00000	0.00000
C78	29.86000	G4	0.00000	0.00000
C79	29.86000	G1	0.00000	0.00000
C79	29.86000	G2	0.00000	0.00000
C79	29.86000	G3	0.00000	0.00000
C79	29.86000	G4	0.00000	0.00000
C80	29.86000	G1	0.00000	0.00000
C80	29.86000	G2	0.00000	0.00000
C80	29.86000	G3	0.00000	0.00000
C80	29.86000	G4	0.00000	0.00000
C81	29.86000	G1	0.00000	0.00000
C81	29.86000	G2	0.00000	0.00000
C81	29.86000	G3	0.00000	0.00000
C81	29.86000	G4	0.00000	0.00000
C82	29.86000	G1	0.00000	0.00000
C82	29.86000	G2	0.00000	0.00000
C82	29.86000	G3	0.00000	0.00000
C82	29.86000	G4	0.00000	0.00000

Bago

LOAD DATA [No.10 : Medial strip] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C2	8.08500	G2	2.25071	0.00000	8.08500	G3	-2.25071	0.00000
C3	8.08500	G2	2.25071	0.00000	8.08500	G3	-2.25071	0.00000
C4	8.08500	G2	2.25071	0.00000	8.08500	G3	-2.25071	0.00000
C5	8.08500	G2	2.25071	0.00000	8.08500	G3	-2.25071	0.00000
C6	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C7	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C8	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C9	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C10	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C11	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C12	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C13	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C14	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C15	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C16	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C17	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C18	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C19	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C20	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C21	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C22	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C23	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C24	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C25	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C26	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C27	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C28	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C29	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000

Bago

LOAD DATA [No.10 : Medial strip] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C30	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C31	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C32	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C33	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C34	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C35	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C36	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C37	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C38	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C39	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C40	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C41	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C42	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C43	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C44	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C45	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C46	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C47	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C48	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C49	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C50	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C51	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C52	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C53	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C54	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C55	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C56	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C57	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C58	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000

Bago

LOAD DATA [No.10 : Medial strip] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C59	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C60	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C61	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C62	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C63	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C64	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C65	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C66	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C67	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C68	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C69	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C70	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C71	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C72	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C73	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C74	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C75	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C76	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C77	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C78	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C79	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C80	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C81	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000
C82	8.08500	G2	2.25000	0.00000	8.08500	G3	-2.25000	0.00000

Bago

LOAD DATA [No. 19 : Snow] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C2	0.70000	G1	-3.17400	90.00000	0.70000	G4	3.17400	90.00000
C3	0.70000	G1	-3.17400	90.00000	0.70000	G4	3.17400	90.00000
C4	0.70000	G1	-3.17400	90.00000	0.70000	G4	3.17400	90.00000
C5	0.70000	G1	-3.17400	90.00000	0.70000	G4	3.17400	90.00000
C6	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C7	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C8	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C9	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C10	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C11	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C12	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C13	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C14	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C15	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C16	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C17	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C18	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C19	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C20	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C21	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C22	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C23	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C24	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C25	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C26	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C27	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C28	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C29	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000

Bago

LOAD DATA [No. 19 : Snow] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C30	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C31	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C32	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C33	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C34	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C35	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C36	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C37	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C38	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C39	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C40	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C41	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C42	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C43	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C44	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C45	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C46	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C47	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C48	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C49	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C50	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C51	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C52	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C53	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C54	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C55	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C56	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C57	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C58	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000

Bago

LOAD DATA [No. 19 : Snow] [UNIFORM-LOAD(CRSSLINE)]

CROSS	LEFT LOAD (kN/m2)	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT LOAD (kN/m2)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C59	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C60	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C61	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C62	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C63	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C64	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C65	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C66	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C67	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C68	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C69	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C70	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C71	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C72	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C73	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C74	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C75	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C76	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C77	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C78	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C79	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C80	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C81	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000
C82	0.70000	G1	-3.17300	90.00000	0.70000	G4	3.17300	90.00000

Bago

LOAD DATA [No. 31 : Miscellaneous] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C1	0.98000	G2	4.10000	0.00000
C2	0.98000	G2	3.92408	0.00000
C3	0.98000	G2	3.67275	0.00000
C4	0.98000	G2	3.42143	0.00000
C5	0.98000	G2	3.17010	0.00000
C6	0.98000	G2	3.00044	0.00000
C7	0.98000	G2	3.00000	0.00000
C8	0.98000	G2	3.00000	0.00000
C9	0.98000	G2	3.00000	0.00000
C10	0.98000	G2	3.00000	0.00000
C11	0.98000	G2	3.00000	0.00000
C12	0.98000	G2	3.00000	0.00000
C13	0.98000	G2	3.00000	0.00000
C14	0.98000	G2	3.00000	0.00000
C15	0.98000	G2	3.00000	0.00000
C16	0.98000	G2	3.00000	0.00000
C17	0.98000	G2	3.00000	0.00000
C18	0.98000	G2	3.00000	0.00000
C19	0.98000	G2	3.00000	0.00000
C20	0.98000	G2	3.00000	0.00000
C21	0.98000	G2	3.00000	0.00000
C22	0.98000	G2	3.00000	0.00000
C23	0.98000	G2	3.00000	0.00000
C24	0.98000	G2	3.00000	0.00000
C25	0.98000	G2	3.00000	0.00000
C26	0.98000	G2	3.00000	0.00000
C27	0.98000	G2	3.00000	0.00000
C28	0.98000	G2	3.00000	0.00000
C29	0.98000	G2	3.00000	0.00000
C30	0.98000	G2	3.00000	0.00000

Bago

LOAD DATA [No. 31 : Miscellaneous] [LINE-LOAD (CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C31	0.98000	G2	3.00000	0.00000
C32	0.98000	G2	3.00000	0.00000
C33	0.98000	G2	3.00000	0.00000
C34	0.98000	G2	3.00000	0.00000
C35	0.98000	G2	3.00000	0.00000
C36	0.98000	G2	3.00000	0.00000
C37	0.98000	G2	3.00000	0.00000
C38	0.98000	G2	3.00000	0.00000
C39	0.98000	G2	3.00000	0.00000
C40	0.98000	G2	3.00000	0.00000
C41	0.98000	G2	3.00000	0.00000
C42	0.98000	G2	3.00000	0.00000
C43	0.98000	G2	3.00000	0.00000
C44	0.98000	G2	3.00000	0.00000
C45	0.98000	G2	3.00000	0.00000
C46	0.98000	G2	3.00000	0.00000
C47	0.98000	G2	3.00000	0.00000
C48	0.98000	G2	3.00000	0.00000
C49	0.98000	G2	3.00000	0.00000
C50	0.98000	G2	3.00000	0.00000
C51	0.98000	G2	3.00000	0.00000
C52	0.98000	G2	3.00000	0.00000
C53	0.98000	G2	3.00000	0.00000
C54	0.98000	G2	3.00000	0.00000
C55	0.98000	G2	3.00000	0.00000
C56	0.98000	G2	3.00000	0.00000
C57	0.98000	G2	3.00000	0.00000
C58	0.98000	G2	3.00000	0.00000
C59	0.98000	G2	3.00000	0.00000
C60	0.98000	G2	3.00000	0.00000

Bago

LOAD DATA [No. 31 : Miscellaneous] [LINE-LOAD(CRSSPOINT)]

CROSS	LOAD (kN/m)	GIRDER	POSITION (m)	ANGLE (deg)
C61	0.98000	G2	3.00000	0.00000
C62	0.98000	G2	3.00000	0.00000
C63	0.98000	G2	3.00000	0.00000
C64	0.98000	G2	3.00000	0.00000
C65	0.98000	G2	3.00000	0.00000
C66	0.98000	G2	3.00000	0.00000
C67	0.98000	G2	3.00000	0.00000
C68	0.98000	G2	3.00000	0.00000
C69	0.98000	G2	3.00000	0.00000
C70	0.98000	G2	3.00000	0.00000
C71	0.98000	G2	3.00000	0.00000
C72	0.98000	G2	3.00000	0.00000
C73	0.98000	G2	3.00000	0.00000
C74	0.98000	G2	3.00000	0.00000
C75	0.98000	G2	3.00000	0.00000
C76	0.98000	G2	3.00000	0.00000
C77	0.98000	G2	3.00000	0.00000
C78	0.98000	G2	3.00000	0.00000
C79	0.98000	G2	3.00000	0.00000
C80	0.98000	G2	3.00000	0.00000
C81	0.98000	G2	3.00000	0.00000
C82	0.98000	G2	3.00000	0.00000

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD]

LOAD TYPE

AASHTO HS-20 LOAD(AASHTOHS20)

LOADING LANE PARAMETER

LANE COUNT

6

LANE TYPE

EQUAL-DIVID-LOADING-DOMAIN(EDIVID)

TRUCK-LOAD

TRANSVERSAL DIRECTION

BRIDGE AXIS DIRECTION

FRONT WHEEL FRONT-MIDDLE WHEEL MIDDLE-REAR WHEEL

WHEEL	LOAD	INTE	WHEEL	LOAD	INTE	WHEEL	LOAD	INTE
	(m)		(kN/1wheel)	(m)	(kN/1wheel)	(m)	(kN/1wheel)	(m)
2	1.8	3	17.5	4.3	72.5	4.3	72.5	

TANDEM-LOAD

TRANSVERSAL DIRECTION

BRIDGE AXIS DIRECTION

FRONT WHEEL FRONT-REAR WHEEL

WHEEL	LOAD	INTE	WHEEL	LOAD	INTE
	(m)		(kN/1wheel)	(m)	(kN/1wheel)
2	1.8	2	55.0	1.2	55.0

DISPERSION-LOAD

LOAD W/LOAD

(m) (kN/m2)

3.0 3.1

Bago

LOAD DATA [No.100 : AASHTO-LRFD LOAD]

SPAN'S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE		C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
1	Main girder	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
2	Cross beam	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
3	Support No. 1	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
4	Support No. 2	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
5	Support No. 3	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
6	Support No. 4	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
7	Support No. 5	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
8	Support No. 6	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
9	Support No. 7	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					

Bago

LOAD DATA [No.100 : AASHTO-LRFD LOAD]

SPAN'S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE	C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
10	Support No. 8	COEF(USER)	IMPACT.C	1.12437	1.12391	1.12346	1.12346	1.12346
			IMPACT.C	1.12346	1.12346	1.12346	1.12346	1.12346
			IMPACT.C	1.13063				1.12694

LOAD DATA [No.100 : AASHTO-LRFD LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	G1	-2.57300	90.00000	G4	2.57300	90.00000
C2	G1	-2.57381	90.00000	G4	2.57381	90.00000
C3	G1	-2.57381	90.00000	G4	2.57381	90.00000
C4	G1	-2.57381	90.00000	G4	2.57381	90.00000
C5	G1	-2.57381	90.00000	G4	2.57381	90.00000
C6	G1	-2.57300	90.00000	G4	2.57300	90.00000
C7	G1	-2.57300	90.00000	G4	2.57300	90.00000
C8	G1	-2.57300	90.00000	G4	2.57300	90.00000
C9	G1	-2.57300	90.00000	G4	2.57300	90.00000
C10	G1	-2.57300	90.00000	G4	2.57300	90.00000
C11	G1	-2.57300	90.00000	G4	2.57300	90.00000
C12	G1	-2.57300	90.00000	G4	2.57300	90.00000
C13	G1	-2.57300	90.00000	G4	2.57300	90.00000
C14	G1	-2.57300	90.00000	G4	2.57300	90.00000
C15	G1	-2.57300	90.00000	G4	2.57300	90.00000
C16	G1	-2.57300	90.00000	G4	2.57300	90.00000
C17	G1	-2.57300	90.00000	G4	2.57300	90.00000
C18	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C19	G1	-2.57300	90.00000	G4	2.57300	90.00000
C20	G1	-2.57300	90.00000	G4	2.57300	90.00000
C21	G1	-2.57300	90.00000	G4	2.57300	90.00000
C22	G1	-2.57300	90.00000	G4	2.57300	90.00000
C23	G1	-2.57300	90.00000	G4	2.57300	90.00000
C24	G1	-2.57300	90.00000	G4	2.57300	90.00000
C25	G1	-2.57300	90.00000	G4	2.57300	90.00000
C26	G1	-2.57300	90.00000	G4	2.57300	90.00000
C27	G1	-2.57300	90.00000	G4	2.57300	90.00000
C28	G1	-2.57300	90.00000	G4	2.57300	90.00000
C29	G1	-2.57300	90.00000	G4	2.57300	90.00000
C30	G1	-2.57300	90.00000	G4	2.57300	90.00000
C31	G1	-2.57300	90.00000	G4	2.57300	90.00000
C32	G1	-2.57300	90.00000	G4	2.57300	90.00000
C33	G1	-2.57300	90.00000	G4	2.57300	90.00000
C34	G1	-2.57300	90.00000	G4	2.57300	90.00000
C35	G1	-2.57300	90.00000	G4	2.57300	90.00000
C36	G1	-2.57300	90.00000	G4	2.57300	90.00000
C37	G1	-2.57300	90.00000	G4	2.57300	90.00000
C38	G1	-2.57300	90.00000	G4	2.57300	90.00000
C39	G1	-2.57300	90.00000	G4	2.57300	90.00000
C40	G1	-2.57300	90.00000	G4	2.57300	90.00000
C41	G1	-2.57300	90.00000	G4	2.57300	90.00000
C42	G1	-2.57300	90.00000	G4	2.57300	90.00000
C43	G1	-2.57300	90.00000	G4	2.57300	90.00000
C44	G1	-2.57300	90.00000	G4	2.57300	90.00000
C45	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C46	G1	-2.57300	90.00000	G4	2.57300	90.00000
C47	G1	-2.57300	90.00000	G4	2.57300	90.00000
C48	G1	-2.57300	90.00000	G4	2.57300	90.00000
C49	G1	-2.57300	90.00000	G4	2.57300	90.00000
C50	G1	-2.57300	90.00000	G4	2.57300	90.00000
C51	G1	-2.57300	90.00000	G4	2.57300	90.00000
C52	G1	-2.57300	90.00000	G4	2.57300	90.00000
C53	G1	-2.57300	90.00000	G4	2.57300	90.00000
C54	G1	-2.57300	90.00000	G4	2.57300	90.00000
C55	G1	-2.57300	90.00000	G4	2.57300	90.00000
C56	G1	-2.57300	90.00000	G4	2.57300	90.00000
C57	G1	-2.57300	90.00000	G4	2.57300	90.00000
C58	G1	-2.57300	90.00000	G4	2.57300	90.00000
C59	G1	-2.57300	90.00000	G4	2.57300	90.00000
C60	G1	-2.57300	90.00000	G4	2.57300	90.00000
C61	G1	-2.57300	90.00000	G4	2.57300	90.00000
C62	G1	-2.57300	90.00000	G4	2.57300	90.00000
C63	G1	-2.57300	90.00000	G4	2.57300	90.00000
C64	G1	-2.57300	90.00000	G4	2.57300	90.00000
C65	G1	-2.57300	90.00000	G4	2.57300	90.00000
C66	G1	-2.57300	90.00000	G4	2.57300	90.00000
C67	G1	-2.57300	90.00000	G4	2.57300	90.00000
C68	G1	-2.57300	90.00000	G4	2.57300	90.00000
C69	G1	-2.57300	90.00000	G4	2.57300	90.00000
C70	G1	-2.57300	90.00000	G4	2.57300	90.00000
C71	G1	-2.57300	90.00000	G4	2.57300	90.00000
C72	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C73	G1	-2.57300	90.00000	G4	2.57300	90.00000
C74	G1	-2.57300	90.00000	G4	2.57300	90.00000
C75	G1	-2.57300	90.00000	G4	2.57300	90.00000
C76	G1	-2.57300	90.00000	G4	2.57300	90.00000
C77	G1	-2.57300	90.00000	G4	2.57300	90.00000
C78	G1	-2.57300	90.00000	G4	2.57300	90.00000
C79	G1	-2.57300	90.00000	G4	2.57300	90.00000
C80	G1	-2.57300	90.00000	G4	2.57300	90.00000
C81	G1	-2.57300	90.00000	G4	2.57300	90.00000
C82	G1	-2.57300	90.00000	G4	2.57300	90.00000

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C1	G2	2.25000	G3	-2.25000
C2	G2	2.25071	G3	-2.25071
C3	G2	2.25071	G3	-2.25071
C4	G2	2.25071	G3	-2.25071
C5	G2	2.25071	G3	-2.25071
C6	G2	2.25000	G3	-2.25000
C7	G2	2.25000	G3	-2.25000
C8	G2	2.25000	G3	-2.25000
C9	G2	2.25000	G3	-2.25000
C10	G2	2.25000	G3	-2.25000
C11	G2	2.25000	G3	-2.25000
C12	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C13	G2	2.25000	G3	-2.25000
C14	G2	2.25000	G3	-2.25000
C15	G2	2.25000	G3	-2.25000
C16	G2	2.25000	G3	-2.25000
C17	G2	2.25000	G3	-2.25000
C18	G2	2.25000	G3	-2.25000
C19	G2	2.25000	G3	-2.25000
C20	G2	2.25000	G3	-2.25000
C21	G2	2.25000	G3	-2.25000
C22	G2	2.25000	G3	-2.25000
C23	G2	2.25000	G3	-2.25000
C24	G2	2.25000	G3	-2.25000
C25	G2	2.25000	G3	-2.25000
C26	G2	2.25000	G3	-2.25000
C27	G2	2.25000	G3	-2.25000
C28	G2	2.25000	G3	-2.25000
C29	G2	2.25000	G3	-2.25000
C30	G2	2.25000	G3	-2.25000
C31	G2	2.25000	G3	-2.25000
C32	G2	2.25000	G3	-2.25000
C33	G2	2.25000	G3	-2.25000
C34	G2	2.25000	G3	-2.25000
C35	G2	2.25000	G3	-2.25000
C36	G2	2.25000	G3	-2.25000
C37	G2	2.25000	G3	-2.25000
C38	G2	2.25000	G3	-2.25000
C39	G2	2.25000	G3	-2.25000
C40	G2	2.25000	G3	-2.25000
C41	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C42	G2	2.25000	G3	-2.25000
C43	G2	2.25000	G3	-2.25000
C44	G2	2.25000	G3	-2.25000
C45	G2	2.25000	G3	-2.25000
C46	G2	2.25000	G3	-2.25000
C47	G2	2.25000	G3	-2.25000
C48	G2	2.25000	G3	-2.25000
C49	G2	2.25000	G3	-2.25000
C50	G2	2.25000	G3	-2.25000
C51	G2	2.25000	G3	-2.25000
C52	G2	2.25000	G3	-2.25000
C53	G2	2.25000	G3	-2.25000
C54	G2	2.25000	G3	-2.25000
C55	G2	2.25000	G3	-2.25000
C56	G2	2.25000	G3	-2.25000
C57	G2	2.25000	G3	-2.25000
C58	G2	2.25000	G3	-2.25000
C59	G2	2.25000	G3	-2.25000
C60	G2	2.25000	G3	-2.25000
C61	G2	2.25000	G3	-2.25000
C62	G2	2.25000	G3	-2.25000
C63	G2	2.25000	G3	-2.25000
C64	G2	2.25000	G3	-2.25000
C65	G2	2.25000	G3	-2.25000
C66	G2	2.25000	G3	-2.25000
C67	G2	2.25000	G3	-2.25000
C68	G2	2.25000	G3	-2.25000
C69	G2	2.25000	G3	-2.25000
C70	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No. 100 : AASHTO-LRFD LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C71	G2	2.25000	G3	-2.25000
C72	G2	2.25000	G3	-2.25000
C73	G2	2.25000	G3	-2.25000
C74	G2	2.25000	G3	-2.25000
C75	G2	2.25000	G3	-2.25000
C76	G2	2.25000	G3	-2.25000
C77	G2	2.25000	G3	-2.25000
C78	G2	2.25000	G3	-2.25000
C79	G2	2.25000	G3	-2.25000
C80	G2	2.25000	G3	-2.25000
C81	G2	2.25000	G3	-2.25000
C82	G2	2.25000	G3	-2.25000

LOAD DATA [No. 198 : AASHTO Fatig LOAD]

LOAD TYPE

AASHTO HS-20 LOAD(AASHTOHS20)

LOADING LANE PARAMETER

LANE COUNT

1

LANE TYPE

EQUAL-DIVID-LOADING-DOMAIN(EDIVID)

TRUCK-LOAD

TRANSVERSAL DIRECTION

BRIDGE AXIS DIRECTION

WHEEL	LOAD	LOAD	INTEWHEEL	LOAD	LOAD	INTELOAD	LOAD	INTELOAD
(m)			(m)	(kN/1wheel)	(m)	(kN/1wheel)	(m)	(kN/1wheel)
2	1.8	3	17.5	4.3	72.5	4.3	72.5	

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD]

TANDEM-LOAD

TRANSVERSAL DIRECTION			BRIDGE AXIS DIRECTION		
WHEEL	LOAD	INTEWHEEL	LOAD	LOAD	INTELOAD
	(m)		(kN/1wheel)	(m)	(kN/1wheel)
2	1.8	2	55.0	1.2	55.0

DISPERSION-LOAD

LOAD	WILOAD
(m)	(kN/m2)
3.0	3.1

SPAN' S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE		C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
1	Main girder	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
2	Cross beam	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
3	Support No. 1	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
4	Support No. 2	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
5	Support No. 3	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD]

SPAN'S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE		C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
6	Support No. 4	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
7	Support No. 5	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
8	Support No. 6	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
9	Support No. 7	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
10	Support No. 8	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					

LOAD DATA [No.198 : AASHTO Fatig LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	G1	-2. 57300	90. 00000	G4	2. 57300	90. 00000
C2	G1	-2. 57381	90. 00000	G4	2. 57381	90. 00000
C3	G1	-2. 57381	90. 00000	G4	2. 57381	90. 00000
C4	G1	-2. 57381	90. 00000	G4	2. 57381	90. 00000
C5	G1	-2. 57381	90. 00000	G4	2. 57381	90. 00000
C6	G1	-2. 57300	90. 00000	G4	2. 57300	90. 00000
:						

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT	LEFT	LEFT	RIGHT	RIGHT	RIGHT
	GIRDER	POSITION	ANGLE	GIRDER	POSITION	ANGLE
		(m)	(deg)		(m)	(deg)
:						
C7	G1	-2.57300	90.00000	G4	2.57300	90.00000
C8	G1	-2.57300	90.00000	G4	2.57300	90.00000
C9	G1	-2.57300	90.00000	G4	2.57300	90.00000
C10	G1	-2.57300	90.00000	G4	2.57300	90.00000
C11	G1	-2.57300	90.00000	G4	2.57300	90.00000
C12	G1	-2.57300	90.00000	G4	2.57300	90.00000
C13	G1	-2.57300	90.00000	G4	2.57300	90.00000
C14	G1	-2.57300	90.00000	G4	2.57300	90.00000
C15	G1	-2.57300	90.00000	G4	2.57300	90.00000
C16	G1	-2.57300	90.00000	G4	2.57300	90.00000
C17	G1	-2.57300	90.00000	G4	2.57300	90.00000
C18	G1	-2.57300	90.00000	G4	2.57300	90.00000
C19	G1	-2.57300	90.00000	G4	2.57300	90.00000
C20	G1	-2.57300	90.00000	G4	2.57300	90.00000
C21	G1	-2.57300	90.00000	G4	2.57300	90.00000
C22	G1	-2.57300	90.00000	G4	2.57300	90.00000
C23	G1	-2.57300	90.00000	G4	2.57300	90.00000
C24	G1	-2.57300	90.00000	G4	2.57300	90.00000
C25	G1	-2.57300	90.00000	G4	2.57300	90.00000
C26	G1	-2.57300	90.00000	G4	2.57300	90.00000
C27	G1	-2.57300	90.00000	G4	2.57300	90.00000
C28	G1	-2.57300	90.00000	G4	2.57300	90.00000
C29	G1	-2.57300	90.00000	G4	2.57300	90.00000
C30	G1	-2.57300	90.00000	G4	2.57300	90.00000
C31	G1	-2.57300	90.00000	G4	2.57300	90.00000
C32	G1	-2.57300	90.00000	G4	2.57300	90.00000
C33	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT	LEFT	LEFT	RIGHT	RIGHT	RIGHT
	GIRDER	POSITION	ANGLE	GIRDER	POSITION	ANGLE
		(m)	(deg)		(m)	(deg)
:						
C34	G1	-2.57300	90.00000	G4	2.57300	90.00000
C35	G1	-2.57300	90.00000	G4	2.57300	90.00000
C36	G1	-2.57300	90.00000	G4	2.57300	90.00000
C37	G1	-2.57300	90.00000	G4	2.57300	90.00000
C38	G1	-2.57300	90.00000	G4	2.57300	90.00000
C39	G1	-2.57300	90.00000	G4	2.57300	90.00000
C40	G1	-2.57300	90.00000	G4	2.57300	90.00000
C41	G1	-2.57300	90.00000	G4	2.57300	90.00000
C42	G1	-2.57300	90.00000	G4	2.57300	90.00000
C43	G1	-2.57300	90.00000	G4	2.57300	90.00000
C44	G1	-2.57300	90.00000	G4	2.57300	90.00000
C45	G1	-2.57300	90.00000	G4	2.57300	90.00000
C46	G1	-2.57300	90.00000	G4	2.57300	90.00000
C47	G1	-2.57300	90.00000	G4	2.57300	90.00000
C48	G1	-2.57300	90.00000	G4	2.57300	90.00000
C49	G1	-2.57300	90.00000	G4	2.57300	90.00000
C50	G1	-2.57300	90.00000	G4	2.57300	90.00000
C51	G1	-2.57300	90.00000	G4	2.57300	90.00000
C52	G1	-2.57300	90.00000	G4	2.57300	90.00000
C53	G1	-2.57300	90.00000	G4	2.57300	90.00000
C54	G1	-2.57300	90.00000	G4	2.57300	90.00000
C55	G1	-2.57300	90.00000	G4	2.57300	90.00000
C56	G1	-2.57300	90.00000	G4	2.57300	90.00000
C57	G1	-2.57300	90.00000	G4	2.57300	90.00000
C58	G1	-2.57300	90.00000	G4	2.57300	90.00000
C59	G1	-2.57300	90.00000	G4	2.57300	90.00000
C60	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C61	G1	-2.57300	90.00000	G4	2.57300	90.00000
C62	G1	-2.57300	90.00000	G4	2.57300	90.00000
C63	G1	-2.57300	90.00000	G4	2.57300	90.00000
C64	G1	-2.57300	90.00000	G4	2.57300	90.00000
C65	G1	-2.57300	90.00000	G4	2.57300	90.00000
C66	G1	-2.57300	90.00000	G4	2.57300	90.00000
C67	G1	-2.57300	90.00000	G4	2.57300	90.00000
C68	G1	-2.57300	90.00000	G4	2.57300	90.00000
C69	G1	-2.57300	90.00000	G4	2.57300	90.00000
C70	G1	-2.57300	90.00000	G4	2.57300	90.00000
C71	G1	-2.57300	90.00000	G4	2.57300	90.00000
C72	G1	-2.57300	90.00000	G4	2.57300	90.00000
C73	G1	-2.57300	90.00000	G4	2.57300	90.00000
C74	G1	-2.57300	90.00000	G4	2.57300	90.00000
C75	G1	-2.57300	90.00000	G4	2.57300	90.00000
C76	G1	-2.57300	90.00000	G4	2.57300	90.00000
C77	G1	-2.57300	90.00000	G4	2.57300	90.00000
C78	G1	-2.57300	90.00000	G4	2.57300	90.00000
C79	G1	-2.57300	90.00000	G4	2.57300	90.00000
C80	G1	-2.57300	90.00000	G4	2.57300	90.00000
C81	G1	-2.57300	90.00000	G4	2.57300	90.00000
C82	G1	-2.57300	90.00000	G4	2.57300	90.00000

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C1	G2	2.25000	G3	-2.25000
C2	G2	2.25071	G3	-2.25071
C3	G2	2.25071	G3	-2.25071
C4	G2	2.25071	G3	-2.25071
C5	G2	2.25071	G3	-2.25071
C6	G2	2.25000	G3	-2.25000
C7	G2	2.25000	G3	-2.25000
C8	G2	2.25000	G3	-2.25000
C9	G2	2.25000	G3	-2.25000
C10	G2	2.25000	G3	-2.25000
C11	G2	2.25000	G3	-2.25000
C12	G2	2.25000	G3	-2.25000
C13	G2	2.25000	G3	-2.25000
C14	G2	2.25000	G3	-2.25000
C15	G2	2.25000	G3	-2.25000
C16	G2	2.25000	G3	-2.25000
C17	G2	2.25000	G3	-2.25000
C18	G2	2.25000	G3	-2.25000
C19	G2	2.25000	G3	-2.25000
C20	G2	2.25000	G3	-2.25000
C21	G2	2.25000	G3	-2.25000
C22	G2	2.25000	G3	-2.25000
C23	G2	2.25000	G3	-2.25000
C24	G2	2.25000	G3	-2.25000
C25	G2	2.25000	G3	-2.25000
C26	G2	2.25000	G3	-2.25000
C27	G2	2.25000	G3	-2.25000
C28	G2	2.25000	G3	-2.25000
C29	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C30	G2	2.25000	G3	-2.25000
C31	G2	2.25000	G3	-2.25000
C32	G2	2.25000	G3	-2.25000
C33	G2	2.25000	G3	-2.25000
C34	G2	2.25000	G3	-2.25000
C35	G2	2.25000	G3	-2.25000
C36	G2	2.25000	G3	-2.25000
C37	G2	2.25000	G3	-2.25000
C38	G2	2.25000	G3	-2.25000
C39	G2	2.25000	G3	-2.25000
C40	G2	2.25000	G3	-2.25000
C41	G2	2.25000	G3	-2.25000
C42	G2	2.25000	G3	-2.25000
C43	G2	2.25000	G3	-2.25000
C44	G2	2.25000	G3	-2.25000
C45	G2	2.25000	G3	-2.25000
C46	G2	2.25000	G3	-2.25000
C47	G2	2.25000	G3	-2.25000
C48	G2	2.25000	G3	-2.25000
C49	G2	2.25000	G3	-2.25000
C50	G2	2.25000	G3	-2.25000
C51	G2	2.25000	G3	-2.25000
C52	G2	2.25000	G3	-2.25000
C53	G2	2.25000	G3	-2.25000
C54	G2	2.25000	G3	-2.25000
C55	G2	2.25000	G3	-2.25000
C56	G2	2.25000	G3	-2.25000
C57	G2	2.25000	G3	-2.25000
C58	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No.198 : AASHTO Fatig LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C59	G2	2.25000	G3	-2.25000
C60	G2	2.25000	G3	-2.25000
C61	G2	2.25000	G3	-2.25000
C62	G2	2.25000	G3	-2.25000
C63	G2	2.25000	G3	-2.25000
C64	G2	2.25000	G3	-2.25000
C65	G2	2.25000	G3	-2.25000
C66	G2	2.25000	G3	-2.25000
C67	G2	2.25000	G3	-2.25000
C68	G2	2.25000	G3	-2.25000
C69	G2	2.25000	G3	-2.25000
C70	G2	2.25000	G3	-2.25000
C71	G2	2.25000	G3	-2.25000
C72	G2	2.25000	G3	-2.25000
C73	G2	2.25000	G3	-2.25000
C74	G2	2.25000	G3	-2.25000
C75	G2	2.25000	G3	-2.25000
C76	G2	2.25000	G3	-2.25000
C77	G2	2.25000	G3	-2.25000
C78	G2	2.25000	G3	-2.25000
C79	G2	2.25000	G3	-2.25000
C80	G2	2.25000	G3	-2.25000
C81	G2	2.25000	G3	-2.25000
C82	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD]

LOAD TYPE

AASHTO HS-20LOAD×2(AASHTOHS20)

LOADING LANE PARAMETER

LANE COUNT

6

LANE TYPE

EQUAL-DIVID-LOADING-DOMAIN(EDIVID)

TRUCK-LOAD

TRANSVERSAL DIRECTION

BRIDGE AXIS DIRECTION

FRONT WHEEL FRONT-MIDDLE WHEEL MIDDLE-REAR WHEEL

WHEEL	LOAD	INTE	WHEEL	LOAD	INTE	WHEEL	LOAD	INTE	LOADING	NINTER-AXLE
	(m)		(kN/1wheel)	(m)	(kN/1wheel)	(m)	(kN/1wheel)	(m)	mber)	(m)
2	1.8	3	17.5	4.3	72.5	4.3	72.5	2.0	15.0	

TANDEM-LOAD

TRANSVERSAL DIRECTION

BRIDGE AXIS DIRECTION

FRONT WHEEL FRONT-REAR WHEEL

WHEEL	LOAD	INTE	WHEEL	LOAD	INTE
	(m)		(kN/1wheel)	(m)	(kN/1wheel)
2	1.8	2	55.0	1.2	55.0

DISPERSION-LOAD

LOAD WILOAD

(m) (kN/m2)

3.0 3.1

Bago

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD]

SPAN'S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE		C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
1	Main girder	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694
			IMPACT. C	1. 13063					
2	Cross beam	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
3	Support No. 1	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
4	Support No. 2	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
5	Support No. 3	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
6	Support No. 4	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
7	Support No. 5	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
8	Support No. 6	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					
9	Support No. 7	COEF (USER)	IMPACT. C	1. 12437	1. 12391	1. 12346	1. 12346	1. 12346	1. 12346
			IMPACT. C	1. 12346	1. 12346	1. 12346	1. 12346	1. 12694	
			IMPACT. C	1. 13063					

Bago

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD]

SPAN'S IMPACT (EVERY ELEMENT BLOCK)

BLOCK	TITLE	IMPACT TYPE		C1-C12 C36-C48 C72-C82	C12 C48	C12-C24 C48-C60	C24 C60	C24-C36 C60-C72	C36 C72
10	Support No. 8	COEF(USER)	IMPACT.C	1.12437	1.12391	1.12346	1.12346	1.12346	1.12346
			IMPACT.C	1.12346	1.12346	1.12346	1.12346	1.12346	1.12694
			IMPACT.C	1.13063					

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
C1	G1	-2.57300	90.00000	G4	2.57300	90.00000
C2	G1	-2.57381	90.00000	G4	2.57381	90.00000
C3	G1	-2.57381	90.00000	G4	2.57381	90.00000
C4	G1	-2.57381	90.00000	G4	2.57381	90.00000
C5	G1	-2.57381	90.00000	G4	2.57381	90.00000
C6	G1	-2.57300	90.00000	G4	2.57300	90.00000
C7	G1	-2.57300	90.00000	G4	2.57300	90.00000
C8	G1	-2.57300	90.00000	G4	2.57300	90.00000
C9	G1	-2.57300	90.00000	G4	2.57300	90.00000
C10	G1	-2.57300	90.00000	G4	2.57300	90.00000
C11	G1	-2.57300	90.00000	G4	2.57300	90.00000
C12	G1	-2.57300	90.00000	G4	2.57300	90.00000
C13	G1	-2.57300	90.00000	G4	2.57300	90.00000
C14	G1	-2.57300	90.00000	G4	2.57300	90.00000
C15	G1	-2.57300	90.00000	G4	2.57300	90.00000
C16	G1	-2.57300	90.00000	G4	2.57300	90.00000
C17	G1	-2.57300	90.00000	G4	2.57300	90.00000
C18	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No. 199 : AASHTO-LRFD Twin LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT	LEFT	LEFT	RIGHT	RIGHT	RIGHT
	GIRDER	POSITION	ANGLE	GIRDER	POSITION	ANGLE
		(m)	(deg)		(m)	(deg)
:						
C19	G1	-2.57300	90.00000	G4	2.57300	90.00000
C20	G1	-2.57300	90.00000	G4	2.57300	90.00000
C21	G1	-2.57300	90.00000	G4	2.57300	90.00000
C22	G1	-2.57300	90.00000	G4	2.57300	90.00000
C23	G1	-2.57300	90.00000	G4	2.57300	90.00000
C24	G1	-2.57300	90.00000	G4	2.57300	90.00000
C25	G1	-2.57300	90.00000	G4	2.57300	90.00000
C26	G1	-2.57300	90.00000	G4	2.57300	90.00000
C27	G1	-2.57300	90.00000	G4	2.57300	90.00000
C28	G1	-2.57300	90.00000	G4	2.57300	90.00000
C29	G1	-2.57300	90.00000	G4	2.57300	90.00000
C30	G1	-2.57300	90.00000	G4	2.57300	90.00000
C31	G1	-2.57300	90.00000	G4	2.57300	90.00000
C32	G1	-2.57300	90.00000	G4	2.57300	90.00000
C33	G1	-2.57300	90.00000	G4	2.57300	90.00000
C34	G1	-2.57300	90.00000	G4	2.57300	90.00000
C35	G1	-2.57300	90.00000	G4	2.57300	90.00000
C36	G1	-2.57300	90.00000	G4	2.57300	90.00000
C37	G1	-2.57300	90.00000	G4	2.57300	90.00000
C38	G1	-2.57300	90.00000	G4	2.57300	90.00000
C39	G1	-2.57300	90.00000	G4	2.57300	90.00000
C40	G1	-2.57300	90.00000	G4	2.57300	90.00000
C41	G1	-2.57300	90.00000	G4	2.57300	90.00000
C42	G1	-2.57300	90.00000	G4	2.57300	90.00000
C43	G1	-2.57300	90.00000	G4	2.57300	90.00000
C44	G1	-2.57300	90.00000	G4	2.57300	90.00000
C45	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No. 199 : AASHTO-LRFD Twin LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C46	G1	-2.57300	90.00000	G4	2.57300	90.00000
C47	G1	-2.57300	90.00000	G4	2.57300	90.00000
C48	G1	-2.57300	90.00000	G4	2.57300	90.00000
C49	G1	-2.57300	90.00000	G4	2.57300	90.00000
C50	G1	-2.57300	90.00000	G4	2.57300	90.00000
C51	G1	-2.57300	90.00000	G4	2.57300	90.00000
C52	G1	-2.57300	90.00000	G4	2.57300	90.00000
C53	G1	-2.57300	90.00000	G4	2.57300	90.00000
C54	G1	-2.57300	90.00000	G4	2.57300	90.00000
C55	G1	-2.57300	90.00000	G4	2.57300	90.00000
C56	G1	-2.57300	90.00000	G4	2.57300	90.00000
C57	G1	-2.57300	90.00000	G4	2.57300	90.00000
C58	G1	-2.57300	90.00000	G4	2.57300	90.00000
C59	G1	-2.57300	90.00000	G4	2.57300	90.00000
C60	G1	-2.57300	90.00000	G4	2.57300	90.00000
C61	G1	-2.57300	90.00000	G4	2.57300	90.00000
C62	G1	-2.57300	90.00000	G4	2.57300	90.00000
C63	G1	-2.57300	90.00000	G4	2.57300	90.00000
C64	G1	-2.57300	90.00000	G4	2.57300	90.00000
C65	G1	-2.57300	90.00000	G4	2.57300	90.00000
C66	G1	-2.57300	90.00000	G4	2.57300	90.00000
C67	G1	-2.57300	90.00000	G4	2.57300	90.00000
C68	G1	-2.57300	90.00000	G4	2.57300	90.00000
C69	G1	-2.57300	90.00000	G4	2.57300	90.00000
C70	G1	-2.57300	90.00000	G4	2.57300	90.00000
C71	G1	-2.57300	90.00000	G4	2.57300	90.00000
C72	G1	-2.57300	90.00000	G4	2.57300	90.00000
:						

Bago

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD] [LOADING-DOMAIN(LOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	LEFT ANGLE (deg)	RIGHT GIRDER	RIGHT POSITION (m)	RIGHT ANGLE (deg)
:						
C73	G1	-2.57300	90.00000	G4	2.57300	90.00000
C74	G1	-2.57300	90.00000	G4	2.57300	90.00000
C75	G1	-2.57300	90.00000	G4	2.57300	90.00000
C76	G1	-2.57300	90.00000	G4	2.57300	90.00000
C77	G1	-2.57300	90.00000	G4	2.57300	90.00000
C78	G1	-2.57300	90.00000	G4	2.57300	90.00000
C79	G1	-2.57300	90.00000	G4	2.57300	90.00000
C80	G1	-2.57300	90.00000	G4	2.57300	90.00000
C81	G1	-2.57300	90.00000	G4	2.57300	90.00000
C82	G1	-2.57300	90.00000	G4	2.57300	90.00000

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C1	G2	2.25000	G3	-2.25000
C2	G2	2.25071	G3	-2.25071
C3	G2	2.25071	G3	-2.25071
C4	G2	2.25071	G3	-2.25071
C5	G2	2.25071	G3	-2.25071
C6	G2	2.25000	G3	-2.25000
C7	G2	2.25000	G3	-2.25000
C8	G2	2.25000	G3	-2.25000
C9	G2	2.25000	G3	-2.25000
C10	G2	2.25000	G3	-2.25000
C11	G2	2.25000	G3	-2.25000
C12	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No. 199 : AASHTO-LRFD Twin LOAD] [UNLOADING-DONAIN (UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C13	G2	2.25000	G3	-2.25000
C14	G2	2.25000	G3	-2.25000
C15	G2	2.25000	G3	-2.25000
C16	G2	2.25000	G3	-2.25000
C17	G2	2.25000	G3	-2.25000
C18	G2	2.25000	G3	-2.25000
C19	G2	2.25000	G3	-2.25000
C20	G2	2.25000	G3	-2.25000
C21	G2	2.25000	G3	-2.25000
C22	G2	2.25000	G3	-2.25000
C23	G2	2.25000	G3	-2.25000
C24	G2	2.25000	G3	-2.25000
C25	G2	2.25000	G3	-2.25000
C26	G2	2.25000	G3	-2.25000
C27	G2	2.25000	G3	-2.25000
C28	G2	2.25000	G3	-2.25000
C29	G2	2.25000	G3	-2.25000
C30	G2	2.25000	G3	-2.25000
C31	G2	2.25000	G3	-2.25000
C32	G2	2.25000	G3	-2.25000
C33	G2	2.25000	G3	-2.25000
C34	G2	2.25000	G3	-2.25000
C35	G2	2.25000	G3	-2.25000
C36	G2	2.25000	G3	-2.25000
C37	G2	2.25000	G3	-2.25000
C38	G2	2.25000	G3	-2.25000
C39	G2	2.25000	G3	-2.25000
C40	G2	2.25000	G3	-2.25000
C41	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No. 199 : AASHTO-LRFD Twin LOAD] [UNLOADING-DONAIN (UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C42	G2	2.25000	G3	-2.25000
C43	G2	2.25000	G3	-2.25000
C44	G2	2.25000	G3	-2.25000
C45	G2	2.25000	G3	-2.25000
C46	G2	2.25000	G3	-2.25000
C47	G2	2.25000	G3	-2.25000
C48	G2	2.25000	G3	-2.25000
C49	G2	2.25000	G3	-2.25000
C50	G2	2.25000	G3	-2.25000
C51	G2	2.25000	G3	-2.25000
C52	G2	2.25000	G3	-2.25000
C53	G2	2.25000	G3	-2.25000
C54	G2	2.25000	G3	-2.25000
C55	G2	2.25000	G3	-2.25000
C56	G2	2.25000	G3	-2.25000
C57	G2	2.25000	G3	-2.25000
C58	G2	2.25000	G3	-2.25000
C59	G2	2.25000	G3	-2.25000
C60	G2	2.25000	G3	-2.25000
C61	G2	2.25000	G3	-2.25000
C62	G2	2.25000	G3	-2.25000
C63	G2	2.25000	G3	-2.25000
C64	G2	2.25000	G3	-2.25000
C65	G2	2.25000	G3	-2.25000
C66	G2	2.25000	G3	-2.25000
C67	G2	2.25000	G3	-2.25000
C68	G2	2.25000	G3	-2.25000
C69	G2	2.25000	G3	-2.25000
C70	G2	2.25000	G3	-2.25000

Bago

LOAD DATA [No.199 : AASHTO-LRFD Twin LOAD] [UNLOADING-DONAIN(UNLOAD)]

CROSS	LEFT GIRDER	LEFT POSITION (m)	RIGHT GIRDER	RIGHT POSITION (m)
C71	G2	2.25000	G3	-2.25000
C72	G2	2.25000	G3	-2.25000
C73	G2	2.25000	G3	-2.25000
C74	G2	2.25000	G3	-2.25000
C75	G2	2.25000	G3	-2.25000
C76	G2	2.25000	G3	-2.25000
C77	G2	2.25000	G3	-2.25000
C78	G2	2.25000	G3	-2.25000
C79	G2	2.25000	G3	-2.25000
C80	G2	2.25000	G3	-2.25000
C81	G2	2.25000	G3	-2.25000
C82	G2	2.25000	G3	-2.25000

Bago

CASECOMBI CASE DATA

CASE	CASE TITLE	CASE TYPE	DATA COUNT	PICKUP EXTRA. COEF	PICKUP OUTPUT	NOTE
300	Total Dead load	COMBI-CASE (COMBI)	1			
301	Particular	COMBI-CASE (COMBI)	1			
111	AASHTO Twin PICKUP	PICKUPUSER-CASE (PICKUPUSE	1	1.00000	YES	
110	Live load	PICKUP-CASE (PICKUP)	3	1.00000	YES	
302	Live load	COMBI-CASE (COMBI)	1			
303	Sum total	COMBI-CASE (COMBI)	1			
352	Road bridge live load	COMBI-CASE (COMBI)	1			

CASECOMBI DATA [No.300 : Total Dead load]

[No.1 : Without snow] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE	COMBI COEF	COMBI FLAG
1	Pavement	1.00000	
3	Railing	1.00000	
5	Wheel guard	1.00000	
8	Steel weight	1.00000	
10	Medial strip	1.00000	
31	Miscellaneous	1.00000	

CASECOMBI DATA [No.301 : Particular]

[No.1 : Snow] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE	COMBI COEF	COMBI FLAG
19	Snow	1.00000	

Bago

CASECOMBI DATA [No.111 : AASHTO Twin PICKUP]

[No.1 : TWIN-PICKUP] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
199	AASHTO-LRFD Twin LOAD	TRUCK-LOAD	0.90000	
199	AASHTO-LRFD Twin LOAD	DISPERSION-LOAD	0.90000	

CASECOMBI DATA [No.110 : Live load]

[No.1 : L-PICKUP 1] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
100	AASHTO-LRFD LOAD	TRUCK-LOAD	1.00000	
100	AASHTO-LRFD LOAD	DISPERSION-LOAD	1.00000	

[No.2 : L-PICKUP 2] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
100	AASHTO-LRFD LOAD	TANDEM-LOAD	1.00000	
100	AASHTO-LRFD LOAD	DISPERSION-LOAD	1.00000	

[No.3 : L-PICKUP 3] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
111	AASHTO Twin PICKUP	AASHTO Twin PICKUP	1.00000	

CASECOMBI DATA [No.302 : Live load]

[No.1 : Total] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
110	Live load	Live load	0.65000	

Bago

CASECOMBI DATA [No.303 : Sum total]

[No.1 : D+L+PP] [EXTRA COEF = 1.00000] [COMBI TYPE = REV]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
300	Total Dead load	Without snow	1.00000	DEAD-CASE (D)
302	Live load	Total	1.00000	LIVE-CASE (L)
301	Particular	Snow	1.00000	

CASECOMBI DATA [No.352 : Road bridge live load]

[No.1 : Total] [EXTRA COEF = 1.00000] [COMBI TYPE = PLUS]

CASE	CASE TITLE		COMBI COEF	COMBI FLAG
110	Live load	Live load	1.00000	

2-2 Analysis Result of Main Girder

Bago Bridge

OUTPUT CASE

NAME TITLE

1 Pavement

3 Railing

5 Wheel guard

8 Steel weight

10 Medial strip

19 Snow

31 Miscellaneous 0

100 AASHTO-LRFD LOAD TRUCK-LOAD MAX/MIN

TANDEM-LOAD MAX/MIN

DISPERSION-LOAD MAX/MIN

110 Live load L-PICKUP 1 MAX/MIN

L-PICKUP 2 MAX/MIN

L-PICKUP 3

Live load MAX/MIN

111 AASHTO Twin PICKUP TWIN-PICKUP MAX/MIN

MID-PICKUP

198 AASHTO Fatig LOAD TRUCK-LOAD MAX/MIN

TANDEM-LOAD MAX/MIN

DISPERSION-LOAD MAX/MIN

199 AASHTO-LRFD Twin LOATRUCK-LOAD MAX/MIN

TANDEM-LOAD MAX/MIN

DISPERSION-LOAD MAX/MIN

300 Total Dead load Without snow

301 Particular Snow

302 Live load Total MAX/MIN

303 Sum total D+L+PP MAX/MIN

OUTPUT NODAL BLOCK

NAME TITLE

NODAL SIZE

1 Structure node

328

Bago Bridge

OUTPUT ELEMENT BLOCK

NAME	TITLE	ELEMENT	SIZE
1	Main girder	324	
2	Cross beam	246	
3	Support No. 1	4	
4	Support No. 2	4	
5	Support No. 3	4	
6	Support No. 4	4	
7	Support No. 5	4	
8	Support No. 6	4	
9	Support No. 7	4	
10	Support No. 8	4	

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	0.00	-30.30	-54.03	-71.51	-81.63	-83.93	-78.60	-66.40	-48.79	-28.86	-11.27	0.00	
3	Railing	0.00	-0.94	-1.66	-2.19	-2.50	-2.57	-2.41	-2.04	-1.50	-0.90	-0.35	0.00	
5	Wheel guard	0.00	-9.27	-16.45	-21.71	-24.73	-25.42	-23.83	-20.18	-14.89	-8.87	-3.48	0.00	
8	Steel weight	0.00	-111.43	-198.80	-263.21	-300.51	-309.00	-289.33	-244.37	-179.47	-106.07	-41.39	0.00	
10	Medial strip	0.00	-15.74	-27.91	-36.62	-41.41	-42.24	-39.34	-33.21	-24.58	-14.87	-6.13	0.00	
19	Snow	0.00	-13.95	-24.85	-32.86	-37.47	-38.50	-36.04	-30.45	-22.39	-13.28	-5.21	0.00	
31	Miscellaneous	0.00	-0.90	-1.62	-2.15	-2.45	-2.52	-2.36	-1.99	-1.46	-0.86	-0.33	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	0.00	11.81	22.09	31.27	38.94	44.64	47.85	47.94	43.88	34.56	19.69	0.00
		MIN	0.00	-35.49	-64.54	-87.64	-103.00	-109.64	-106.95	-95.50	-76.01	-50.95	-24.35	0.00
	TANDEM-LOAD	MAX	0.00	8.04	15.03	21.27	26.49	30.37	32.56	32.61	29.85	23.51	13.39	0.00
		MIN	0.00	-24.13	-43.91	-59.59	-70.10	-74.79	-72.52	-65.02	-51.68	-34.62	-16.55	0.00
	DISPERSION-LMAX	MAX	0.00	24.00	44.87	63.53	79.11	90.69	97.23	97.41	89.16	70.24	40.04	0.00
		MIN	0.00	-72.35	-131.15	-177.80	-209.63	-224.97	-223.03	-203.68	-167.19	-116.29	-57.92	0.00
110	Live load L-PICKUP 1	MAX	0.00	35.81	66.96	94.80	118.05	135.33	145.09	145.35	133.04	104.80	59.73	0.00
		MIN	0.00	-107.84	-195.69	-265.44	-312.64	-334.61	-329.98	-299.18	-243.20	-167.24	-82.27	0.00
	L-PICKUP 2	MAX	0.00	32.03	59.90	84.81	105.60	121.06	129.79	130.02	119.01	93.75	53.43	0.00
		MIN	0.00	-96.49	-175.06	-237.40	-279.73	-299.76	-295.54	-268.71	-218.87	-150.91	-74.47	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	0.00	35.81	66.96	94.80	118.05	135.33	145.09	145.35	133.04	104.80	59.73	0.00
		MIN	0.00	-107.84	-195.69	-265.44	-312.64	-334.61	-329.98	-299.18	-243.20	-167.24	-82.27	0.00
111	AASHTO Twin TWIN-PICKUP	MAX	0.00	41.56	77.72	110.03	137.01	157.06	168.39	168.69	154.41	121.63	69.32	0.00
		MIN	0.00	-125.30	-227.24	-307.85	-362.00	-386.53	-380.46	-344.50	-279.42	-191.35	-93.64	0.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	0.00	2.04	3.82	5.40	6.73	7.73	8.33	8.40	7.76	6.22	3.64	0.00
		MIN	0.00	-7.75	-13.98	-18.88	-22.03	-23.34	-22.73	-20.14	-15.86	-10.48	-4.88	0.00
	TANDEM-LOAD	MAX	0.00	1.39	2.59	3.67	4.57	5.25	5.66	5.70	5.27	4.22	2.47	0.00
		MIN	0.00	-5.26	-9.52	-12.87	-14.93	-15.95	-15.44	-13.74	-10.74	-7.12	-3.32	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	0.00	4.39	8.20	11.61	14.47	16.63	17.90	18.05	16.69	13.37	7.84	0.00
	MIN	0.00	-16.72	-29.84	-39.88	-46.43	-49.35	-48.71	-44.28	-36.14	-24.89	-12.18	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	0.00	22.18	41.48	58.72	73.12	83.82	89.87	90.03	82.40	64.91	36.99	0.00
	MIN	0.00	-66.86	-121.34	-164.26	-192.59	-204.51	-199.71	-179.10	-143.27	-96.33	-46.12	0.00
	TANDEM-LOAD MAX	0.00	8.04	15.03	21.27	26.49	30.37	32.56	32.61	29.85	23.51	13.39	0.00
	MIN	0.00	-24.13	-43.91	-59.59	-70.10	-74.79	-72.52	-65.02	-51.68	-34.62	-16.55	0.00
	DISPERSION-LMAX	0.00	24.00	44.87	63.53	79.11	90.69	97.23	97.41	89.16	70.24	40.04	0.00
	MIN	0.00	-72.35	-131.15	-177.80	-209.63	-224.97	-223.03	-203.68	-167.19	-116.29	-57.92	0.00
300	Total Dead lWithout snow	0.00	-168.58	-300.47	-397.39	-453.23	-465.68	-435.86	-368.19	-270.70	-160.43	-62.96	0.00
301	Particular Snow	0.00	-13.95	-24.85	-32.86	-37.47	-38.50	-36.04	-30.45	-22.39	-13.28	-5.21	0.00
302	Live load Total MAX	0.00	23.28	43.52	61.62	76.73	87.96	94.31	94.48	86.48	68.12	38.83	0.00
	MIN	0.00	-70.10	-127.20	-172.54	-203.21	-217.50	-214.49	-194.47	-158.08	-108.70	-53.48	0.00
303	Sum total D+L+PP MAX	0.00	-159.25	-281.79	-368.63	-413.98	-416.21	-377.59	-304.16	-206.61	-105.59	-29.35	0.00
	MIN	0.00	-252.63	-452.52	-602.79	-693.92	-721.67	-686.38	-593.10	-451.17	-282.41	-121.65	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	2.77	0.98	-5.79	-14.61	-22.16	-26.14	-25.61	-20.80	-13.06	-4.99	-0.60	0.00	
3	Railing	0.07	0.01	-0.21	-0.48	-0.71	-0.83	-0.81	-0.66	-0.43	-0.17	-0.03	0.00	
5	Wheel guard	0.74	0.09	-2.03	-4.72	-7.00	-8.20	-8.03	-6.57	-4.21	-1.70	-0.27	0.00	
8	Steel weight	10.32	3.84	-21.00	-53.46	-81.26	-95.94	-94.00	-76.30	-47.80	-18.15	-2.09	0.00	
10	Medial strip	2.43	2.92	1.40	-1.37	-4.10	-5.83	-6.12	-4.99	-2.87	-0.66	0.34	0.00	
19	Snow	1.35	0.64	-2.31	-6.21	-9.58	-11.38	-11.19	-9.09	-5.69	-2.15	-0.23	0.00	
31	Miscellaneous	0.09	0.04	-0.16	-0.42	-0.65	-0.77	-0.75	-0.61	-0.38	-0.14	-0.01	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	16.31	29.53	41.18	47.22	48.29	45.31	42.28	41.69	36.85	26.95	15.16	0.00
		MIN	-18.70	-38.94	-64.16	-85.75	-100.15	-105.08	-100.08	-85.90	-64.51	-39.15	-18.64	0.00
	TANDEM-LOAD	MAX	11.06	20.02	27.91	32.00	32.72	30.70	28.68	28.28	25.00	18.29	10.30	0.00
		MIN	-12.72	-26.49	-43.69	-58.36	-67.99	-71.88	-67.95	-58.48	-43.90	-26.62	-12.67	0.00
	DISPERSION-LMAX	MAX	42.11	79.52	118.01	145.73	162.13	167.25	161.45	144.91	117.62	79.76	42.53	0.00
		MIN	-37.97	-78.64	-128.50	-170.78	-199.55	-211.12	-204.31	-179.73	-139.55	-88.26	-43.66	0.00
110	Live load L-PICKUP 1	MAX	58.42	109.05	159.19	192.95	210.41	212.56	203.73	186.60	154.46	106.71	57.70	0.00
		MIN	-56.67	-117.58	-192.66	-256.53	-299.70	-316.20	-304.39	-265.63	-204.06	-127.41	-62.30	0.00
	L-PICKUP 2	MAX	53.17	99.54	145.93	177.73	194.84	197.95	190.13	173.19	142.62	98.05	52.83	0.00
		MIN	-50.69	-105.13	-172.19	-229.15	-267.54	-283.00	-272.26	-238.20	-183.45	-114.88	-56.34	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	58.42	109.05	159.19	192.95	210.41	212.56	203.73	186.60	154.46	106.71	57.70	0.00
		MIN	-56.67	-117.58	-192.66	-256.53	-299.70	-316.20	-304.39	-265.63	-204.06	-127.41	-62.30	0.00
111	AASHTO Twin TWIN-PICKUP	MAX	65.71	121.92	176.44	211.70	228.27	227.81	216.89	201.00	168.24	117.41	63.94	0.00
		MIN	-65.76	-136.46	-223.46	-297.03	-346.16	-364.68	-350.38	-305.44	-234.09	-145.52	-70.82	0.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	3.02	5.35	7.31	8.29	8.41	7.85	7.44	7.41	6.65	4.99	2.89	0.00
		MIN	-3.76	-7.99	-13.45	-18.21	-21.44	-22.59	-21.48	-18.35	-13.68	-8.20	-3.84	0.00
	TANDEM-LOAD	MAX	2.05	3.63	4.96	5.62	5.70	5.32	5.04	5.02	4.51	3.38	1.96	0.00
		MIN	-2.55	-5.41	-9.13	-12.44	-14.54	-15.48	-14.57	-12.54	-9.28	-5.56	-2.61	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	8.24	15.23	22.25	27.23	30.15	31.06	30.02	27.07	22.19	15.31	8.36	0.00
	MIN	-8.06	-16.92	-27.86	-37.10	-43.32	-45.80	-44.29	-38.93	-30.16	-18.96	-9.26	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	30.90	55.95	78.03	89.49	91.51	85.87	79.54	78.42	69.31	50.69	28.52	0.00
	MIN	-35.10	-72.98	-119.79	-159.25	-185.07	-194.08	-185.00	-159.65	-120.55	-73.43	-35.02	0.00
	TANDEM-LOAD MAX	11.06	20.02	27.91	32.00	32.72	30.70	28.68	28.28	25.00	18.29	10.30	0.00
	MIN	-12.72	-26.49	-43.69	-58.36	-67.99	-71.88	-67.95	-58.48	-43.90	-26.62	-12.67	0.00
	DISPERSION-LMAX	42.11	79.52	118.01	145.73	162.13	167.25	161.45	144.91	117.62	79.76	42.53	0.00
	MIN	-37.97	-78.64	-128.50	-170.78	-199.55	-211.12	-204.31	-179.73	-139.55	-88.26	-43.66	0.00
300	Total Dead lWithout snow	16.43	7.87	-27.79	-75.06	-115.87	-137.70	-135.33	-109.94	-68.74	-25.82	-2.66	0.00
301	Particular Snow	1.35	0.64	-2.31	-6.21	-9.58	-11.38	-11.19	-9.09	-5.69	-2.15	-0.23	0.00
302	Live load Total MAX	37.97	70.88	103.47	125.42	136.77	138.17	132.42	121.29	100.40	69.36	37.50	0.00
	MIN	-36.84	-76.43	-125.23	-166.75	-194.80	-205.53	-197.85	-172.66	-132.64	-82.81	-40.50	0.00
303	Sum total D+L+PP MAX	55.76	79.39	73.38	44.16	11.32	-10.92	-14.09	2.26	25.97	41.40	34.62	0.00
	MIN	-19.05	-67.92	-155.32	-248.01	-320.25	-354.61	-344.37	-291.69	-207.08	-110.78	-43.38	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-4.56	-12.81	-25.42	-36.97	-44.53	-46.76	-43.32	-34.82	-22.97	-10.81	-3.42	0.00	
3	Railing	-0.15	-0.41	-0.80	-1.15	-1.38	-1.45	-1.35	-1.09	-0.72	-0.35	-0.11	0.00	
5	Wheel guard	-1.46	-4.05	-7.91	-11.41	-13.69	-14.36	-13.32	-10.76	-7.17	-3.44	-1.11	0.00	
8	Steel weight	-16.69	-46.97	-93.36	-135.88	-163.73	-171.93	-159.27	-127.98	-84.34	-39.62	-12.49	0.00	
10	Medial strip	-2.05	-5.37	-10.29	-14.71	-17.54	-18.29	-16.87	-13.52	-8.90	-4.20	-1.36	0.00	
19	Snow	-2.08	-5.80	-11.46	-16.64	-20.02	-21.01	-19.46	-15.65	-10.33	-4.87	-1.54	0.00	
31	Miscellaneous	-0.13	-0.38	-0.75	-1.10	-1.33	-1.39	-1.29	-1.03	-0.68	-0.32	-0.10	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	15.37	27.33	37.25	41.88	42.21	39.78	42.58	42.05	37.21	27.14	15.18	0.00
		MIN	-18.36	-38.52	-63.40	-84.07	-97.38	-101.82	-97.04	-83.51	-62.90	-38.24	-18.26	0.00
	TANDEM-LOAD	MAX	10.44	18.56	25.30	28.44	28.66	26.98	28.88	28.52	25.24	18.42	10.31	0.00
		MIN	-12.48	-26.20	-43.13	-57.24	-66.10	-69.62	-65.87	-56.85	-42.80	-26.00	-12.41	0.00
	DISPERSION-LMAX	MAX	39.55	74.16	109.13	133.93	148.70	153.92	149.62	135.48	110.96	75.72	40.47	0.00
		MIN	-46.90	-94.93	-150.47	-194.12	-221.25	-230.12	-220.24	-192.27	-148.43	-93.34	-46.03	0.00
110	Live load L-PICKUP 1	MAX	54.93	101.49	146.38	175.81	190.91	193.71	192.20	177.53	148.17	102.86	55.65	0.00
		MIN	-65.26	-133.45	-213.87	-278.19	-318.63	-331.94	-317.28	-275.78	-211.33	-131.58	-64.29	0.00
	L-PICKUP 2	MAX	49.99	92.72	134.43	162.37	177.36	180.90	178.49	164.00	136.21	94.14	50.78	0.00
		MIN	-59.38	-121.13	-193.60	-251.36	-287.35	-299.74	-286.11	-249.12	-191.23	-119.34	-58.45	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	54.93	101.49	146.38	175.81	190.91	193.71	192.20	177.53	148.17	102.86	55.65	0.00
		MIN	-65.26	-133.45	-213.87	-278.19	-318.63	-331.94	-317.28	-275.78	-211.33	-131.58	-64.29	0.00
111	AASHTO Twin TWIN-PICKUP	MAX	61.61	113.01	161.27	191.42	205.27	205.85	206.71	193.08	162.82	114.05	62.10	0.00
		MIN	-73.26	-150.51	-242.14	-315.48	-361.34	-376.70	-359.95	-312.92	-239.47	-148.60	-72.32	0.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	2.91	5.04	6.71	7.43	7.43	7.00	7.54	7.52	6.76	5.05	2.91	0.00
		MIN	-3.81	-8.16	-13.60	-18.18	-21.17	-22.17	-21.08	-18.04	-13.48	-8.09	-3.79	0.00
	TANDEM-LOAD	MAX	1.98	3.41	4.54	5.04	5.03	4.74	5.11	5.10	4.58	3.43	1.98	0.00
		MIN	-2.59	-5.54	-9.21	-12.42	-14.37	-15.19	-14.29	-12.33	-9.14	-5.49	-2.58	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	7.80	14.28	20.64	25.07	27.71	28.65	27.90	25.41	21.04	14.62	8.00	0.00
	MIN	-9.90	-20.30	-32.39	-41.84	-47.68	-49.59	-47.47	-41.45	-31.96	-19.98	-9.73	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	28.91	51.41	70.06	78.76	79.38	74.80	80.06	79.05	69.95	51.01	28.53	0.00
	MIN	-34.50	-72.30	-118.57	-156.41	-180.24	-188.44	-179.71	-155.42	-117.64	-71.77	-34.32	0.00
	TANDEM-LOAD MAX	10.44	18.56	25.30	28.44	28.66	26.98	28.88	28.52	25.24	18.42	10.31	0.00
	MIN	-12.48	-26.20	-43.13	-57.24	-66.10	-69.62	-65.87	-56.85	-42.80	-26.00	-12.41	0.00
	DISPERSION-LMAX	39.55	74.16	109.13	133.93	148.70	153.92	149.62	135.48	110.96	75.72	40.47	0.00
	MIN	-46.90	-94.93	-150.47	-194.12	-221.25	-230.12	-220.24	-192.27	-148.43	-93.34	-46.03	0.00
300	Total Dead lWithout snow	-25.03	-69.98	-138.54	-201.23	-242.21	-254.18	-235.41	-189.20	-124.79	-58.74	-18.59	0.00
301	Particular Snow	-2.08	-5.80	-11.46	-16.64	-20.02	-21.01	-19.46	-15.65	-10.33	-4.87	-1.54	0.00
302	Live load Total MAX	35.70	65.97	95.15	114.28	124.09	125.91	124.93	115.39	96.31	66.86	36.17	0.00
	MIN	-42.42	-86.74	-139.02	-180.82	-207.11	-215.76	-206.23	-179.25	-137.36	-85.53	-41.79	0.00
303	Sum total D+L+PP MAX	8.59	-9.81	-54.85	-103.59	-138.14	-149.28	-129.94	-89.45	-38.80	3.25	16.04	0.00
	MIN	-69.53	-162.52	-289.02	-398.69	-469.34	-490.95	-461.10	-384.10	-272.47	-149.13	-61.92	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-1.89	-7.84	-18.42	-28.89	-36.15	-38.78	-36.34	-29.24	-18.92	-8.32	-2.14	0.00	
3	Railing	-0.07	-0.26	-0.59	-0.91	-1.13	-1.21	-1.13	-0.92	-0.60	-0.27	-0.07	0.00	
5	Wheel guard	-0.66	-2.55	-5.81	-8.98	-11.17	-11.96	-11.23	-9.08	-5.95	-2.69	-0.73	0.00	
8	Steel weight	-6.88	-28.66	-67.54	-106.10	-132.85	-142.53	-133.55	-107.38	-69.40	-30.42	-7.80	0.00	
10	Medial strip	-0.53	-2.58	-6.40	-10.26	-12.96	-13.97	-13.10	-10.51	-6.73	-2.89	-0.70	0.00	
19	Snow	-0.84	-3.49	-8.22	-12.90	-16.15	-17.33	-16.24	-13.07	-8.46	-3.72	-0.96	0.00	
31	Miscellaneous	-0.05	-0.23	-0.54	-0.86	-1.07	-1.15	-1.08	-0.87	-0.56	-0.24	-0.06	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	15.27	27.35	37.52	42.23	42.48	39.50	41.10	40.75	36.20	26.51	14.88	0.00
		MIN	-18.21	-38.20	-62.89	-83.23	-96.13	-100.42	-95.85	-82.71	-62.41	-37.95	-18.09	0.00
	TANDEM-LOAD	MAX	10.37	18.57	25.47	28.66	28.84	26.81	27.87	27.64	24.56	17.99	10.11	0.00
		MIN	-12.38	-25.98	-42.78	-56.68	-65.24	-68.65	-65.06	-56.31	-42.46	-25.80	-12.30	0.00
	DISPERSION-LMAX	MAX	41.73	78.30	115.03	140.34	154.62	158.95	153.68	138.59	113.07	76.90	41.03	0.00
		MIN	-44.88	-91.22	-145.29	-187.74	-213.90	-222.52	-213.25	-186.53	-144.12	-90.57	-44.57	0.00
110	Live load L-PICKUP 1	MAX	57.00	105.65	152.54	182.57	197.11	198.45	194.79	179.34	149.27	103.40	55.92	0.00
		MIN	-63.10	-129.42	-208.17	-270.98	-310.03	-322.93	-309.10	-269.23	-206.53	-128.51	-62.66	0.00
	L-PICKUP 2	MAX	52.11	96.87	140.49	169.00	183.46	185.77	181.56	166.23	137.63	94.88	51.14	0.00
		MIN	-57.27	-117.20	-188.07	-244.42	-279.14	-291.17	-278.31	-242.84	-186.58	-116.37	-56.87	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	57.00	105.65	152.54	182.57	197.11	198.45	194.79	179.34	149.27	103.40	55.92	0.00
		MIN	-63.10	-129.42	-208.17	-270.98	-310.03	-322.93	-309.10	-269.23	-206.53	-128.51	-62.66	0.00
111	AASHTO Twin TWIN-PICKUP	MAX	63.41	116.79	167.06	197.81	211.10	209.95	207.95	193.76	163.07	114.09	62.13	0.00
		MIN	-71.18	-146.59	-236.60	-308.41	-352.79	-367.71	-351.79	-306.46	-234.77	-145.61	-70.71	0.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	2.92	5.08	6.80	7.54	7.52	6.95	7.29	7.30	6.59	4.94	2.86	0.00
		MIN	-3.79	-8.11	-13.51	-18.04	-20.95	-21.91	-20.89	-17.93	-13.44	-8.07	-3.77	0.00
	TANDEM-LOAD	MAX	1.98	3.44	4.61	5.11	5.09	4.71	4.93	4.94	4.46	3.35	1.94	0.00
		MIN	-2.58	-5.51	-9.15	-12.32	-14.21	-15.01	-14.17	-12.26	-9.11	-5.48	-2.57	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	8.24	15.11	21.80	26.32	28.86	29.62	28.69	26.01	21.44	14.85	8.11	0.00
	MIN	-9.52	-19.61	-31.43	-40.68	-46.36	-48.23	-46.24	-40.47	-31.24	-19.52	-9.48	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	28.72	51.46	70.59	79.45	79.93	74.32	77.37	76.70	68.12	49.87	28.00	0.00
	MIN	-34.21	-71.65	-117.60	-154.94	-178.09	-186.05	-177.62	-153.98	-116.74	-71.22	-34.00	0.00
	TANDEM-LOAD MAX	10.37	18.57	25.47	28.66	28.84	26.81	27.87	27.64	24.56	17.99	10.11	0.00
	MIN	-12.38	-25.98	-42.78	-56.68	-65.24	-68.65	-65.06	-56.31	-42.46	-25.80	-12.30	0.00
	DISPERSION-LMAX	41.73	78.30	115.03	140.34	154.62	158.95	153.68	138.59	113.07	76.90	41.03	0.00
	MIN	-44.88	-91.22	-145.29	-187.74	-213.90	-222.52	-213.25	-186.53	-144.12	-90.57	-44.57	0.00
300	Total Dead lWithout snow	-10.08	-42.12	-99.30	-155.99	-195.34	-209.60	-196.44	-157.99	-102.17	-44.83	-11.51	0.00
301	Particular Snow	-0.84	-3.49	-8.22	-12.90	-16.15	-17.33	-16.24	-13.07	-8.46	-3.72	-0.96	0.00
302	Live load Total MAX	37.05	68.68	99.15	118.67	128.12	128.99	126.61	116.57	97.02	67.21	36.35	0.00
	MIN	-41.01	-84.13	-135.31	-176.13	-201.52	-209.91	-200.92	-175.00	-134.24	-83.53	-40.73	0.00
303	Sum total D+L+PP MAX	26.14	23.06	-8.37	-50.22	-83.37	-97.93	-86.06	-54.48	-13.60	18.66	23.88	0.00
	MIN	-51.93	-129.74	-242.83	-345.02	-413.01	-436.83	-413.59	-346.05	-244.87	-132.08	-53.20	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-3.22	-10.40	-22.17	-33.44	-41.24	-44.14	-41.73	-34.35	-23.32	-11.41	-3.81	0.00	
3	Railing	-0.11	-0.34	-0.70	-1.04	-1.28	-1.37	-1.30	-1.07	-0.74	-0.37	-0.12	0.00	
5	Wheel guard	-1.05	-3.32	-6.93	-10.34	-12.70	-13.57	-12.85	-10.62	-7.28	-3.62	-1.23	0.00	
8	Steel weight	-11.76	-38.10	-81.39	-122.86	-151.59	-162.30	-153.41	-126.22	-85.61	-41.82	-13.95	0.00	
10	Medial strip	-1.18	-3.81	-8.18	-12.37	-15.28	-16.36	-15.45	-12.68	-8.56	-4.15	-1.38	0.00	
19	Snow	-1.44	-4.66	-9.93	-14.97	-18.46	-19.76	-18.68	-15.37	-10.44	-5.11	-1.71	0.00	
31	Miscellaneous	-0.09	-0.30	-0.65	-0.99	-1.23	-1.32	-1.24	-1.02	-0.69	-0.33	-0.11	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	14.99	26.69	36.37	40.81	41.08	38.29	41.10	40.80	36.37	26.76	15.08	0.00
		MIN	-17.94	-37.58	-61.66	-81.47	-94.17	-98.45	-94.08	-81.34	-61.56	-37.53	-17.91	0.00
	TANDEM-LOAD	MAX	10.18	18.12	24.67	27.68	27.86	25.98	27.89	27.69	24.69	18.17	10.24	0.00
		MIN	-12.20	-25.55	-41.94	-55.47	-63.91	-67.31	-63.86	-55.38	-41.88	-25.52	-12.18	0.00
	DISPERSION-LMAX	MAX	40.03	74.67	108.91	132.29	145.47	149.29	144.16	129.95	106.13	72.32	38.64	0.00
		MIN	-45.29	-91.69	-145.19	-186.99	-212.91	-221.48	-212.40	-186.14	-144.28	-90.99	-44.88	0.00
110	Live load L-PICKUP 1	MAX	55.01	101.36	145.28	173.10	186.54	187.58	185.26	170.75	142.50	99.08	53.72	0.00
		MIN	-63.23	-129.27	-206.85	-268.45	-307.07	-319.93	-306.49	-267.47	-205.84	-128.53	-62.79	0.00
	L-PICKUP 2	MAX	50.20	92.79	133.59	159.98	173.33	175.27	172.04	157.64	130.81	90.48	48.88	0.00
		MIN	-57.49	-117.24	-187.14	-242.45	-276.81	-288.79	-276.26	-241.51	-186.16	-116.51	-57.06	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	55.01	101.36	145.28	173.10	186.54	187.58	185.26	170.75	142.50	99.08	53.72	0.00	
	MIN	-63.23	-129.27	-206.85	-268.45	-307.07	-319.93	-306.49	-267.47	-205.84	-128.53	-62.79	0.00	
111	AASHTO Twin TWIN-PICKUP	MAX	61.39	112.39	159.59	188.16	200.47	199.18	199.31	186.02	157.08	110.37	60.29	0.00
		MIN	-71.12	-146.03	-234.53	-304.87	-348.74	-363.60	-348.16	-303.91	-233.57	-145.34	-70.71	0.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	2.88	4.97	6.61	7.30	7.28	6.75	7.29	7.31	6.62	5.00	2.90	0.00
		MIN	-3.75	-8.00	-13.29	-17.69	-20.56	-21.53	-20.56	-17.69	-13.31	-8.02	-3.76	0.00
	TANDEM-LOAD	MAX	1.95	3.37	4.48	4.94	4.93	4.57	4.94	4.95	4.49	3.39	1.97	0.00
		MIN	-2.55	-5.44	-9.00	-12.09	-13.95	-14.75	-13.95	-12.09	-9.02	-5.45	-2.56	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	7.93	14.45	20.70	24.89	27.23	27.91	27.00	24.49	20.23	14.06	7.71	0.00
	MIN	-9.61	-19.72	-31.42	-40.53	-46.15	-48.02	-46.08	-40.42	-31.33	-19.66	-9.57	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	28.19	50.21	68.41	76.77	77.28	72.02	77.30	76.74	68.40	50.32	28.35	0.00
	MIN	-33.73	-70.56	-115.39	-151.76	-174.58	-182.52	-174.45	-151.54	-115.23	-70.50	-33.69	0.00
	TANDEM-LOAD MAX	10.18	18.12	24.67	27.68	27.86	25.98	27.89	27.69	24.69	18.17	10.24	0.00
	MIN	-12.20	-25.55	-41.94	-55.47	-63.91	-67.31	-63.86	-55.38	-41.88	-25.52	-12.18	0.00
	DISPERSION-LMAX	40.03	74.67	108.91	132.29	145.47	149.29	144.16	129.95	106.13	72.32	38.64	0.00
	MIN	-45.29	-91.69	-145.19	-186.99	-212.91	-221.48	-212.40	-186.14	-144.28	-90.99	-44.88	0.00
300	Total Dead lWithout snow	-17.40	-56.27	-120.03	-181.04	-223.31	-239.06	-225.97	-185.96	-126.19	-61.71	-20.61	0.00
301	Particular Snow	-1.44	-4.66	-9.93	-14.97	-18.46	-19.76	-18.68	-15.37	-10.44	-5.11	-1.71	0.00
302	Live load Total MAX	35.76	65.89	94.43	112.52	121.25	121.92	120.42	110.99	92.63	64.40	34.92	0.00
	MIN	-41.10	-84.03	-134.45	-174.49	-199.60	-207.96	-199.22	-173.86	-133.80	-83.54	-40.81	0.00
303	Sum total D+L+PP MAX	16.91	4.96	-35.53	-83.50	-120.52	-136.89	-124.23	-90.35	-44.01	-2.43	12.60	0.00
	MIN	-59.95	-144.95	-264.41	-370.51	-441.37	-466.77	-443.86	-375.19	-270.43	-150.37	-63.13	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072		
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)		
1	Pavement	-1.38	-6.58	-15.75	-24.57	-30.26	-31.45	-27.94	-20.43	-10.80	-2.39	1.02	0.00		
3	Railing	-0.05	-0.22	-0.51	-0.78	-0.95	-0.99	-0.88	-0.65	-0.36	-0.09	0.02	0.00		
5	Wheel guard	-0.50	-2.17	-5.01	-7.69	-9.41	-9.77	-8.72	-6.45	-3.53	-0.92	0.22	0.00		
8	Steel weight	-4.97	-24.01	-57.70	-90.17	-111.13	-115.53	-102.58	-74.91	-39.46	-8.58	3.88	0.00		
10	Medial strip	-0.44	-2.30	-5.67	-8.94	-11.05	-11.50	-10.19	-7.40	-3.83	-0.75	0.45	0.00		
19	Snow	-0.62	-2.95	-7.05	-10.99	-13.54	-14.07	-12.50	-9.14	-4.84	-1.08	0.46	0.00		
31	Miscellaneous	-0.04	-0.19	-0.46	-0.72	-0.90	-0.93	-0.83	-0.60	-0.31	-0.06	0.04	0.00		
100	AASHTO-LRFD TRUCK-LOAD	MAX	14.83	26.40	36.10	40.74	41.16	42.22	45.25	44.71	39.46	28.55	15.82	0.00	
		MIN	-18.28	-38.37	-63.24	-84.06	-97.64	-102.33	-97.76	-84.31	-63.51	-38.58	-18.47	0.00	
	TANDEM-LOAD	MAX	10.07	17.92	24.49	27.63	27.91	28.70	30.77	30.40	26.83	19.41	10.76	0.00	
		MIN	-12.43	-26.09	-43.03	-57.23	-66.29	-69.97	-66.34	-57.41	-43.22	-26.24	-12.56	0.00	
	DISPERSION-LMAX	MAX	40.44	75.59	110.89	135.64	149.97	154.43	149.31	134.42	109.21	73.72	39.02	0.00	
		MIN	-42.72	-86.42	-136.75	-175.95	-199.58	-206.00	-195.15	-167.98	-127.01	-77.72	-37.39	0.00	
110	Live load L-PICKUP 1	MAX	55.26	102.00	147.00	176.38	191.13	196.64	194.56	179.13	148.67	102.27	54.85	0.00	
		MIN	-61.00	-124.79	-199.98	-260.00	-297.23	-308.33	-292.91	-252.29	-190.52	-116.30	-55.86	0.00	
	L-PICKUP 2	MAX	50.50	93.51	135.38	163.28	177.88	183.13	180.08	164.82	136.04	93.13	49.78	0.00	
		MIN	-55.15	-112.51	-179.77	-233.18	-265.87	-275.98	-261.49	-225.39	-170.23	-103.96	-49.95	0.00	
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
111	AASHTO Twin TWIN-PICKUP	MAX	61.50	112.76	160.97	191.11	204.71	210.29	210.82	196.51	164.95	114.58	61.86	0.00	
		MIN	-69.35	-142.58	-229.48	-299.10	-342.29	-355.82	-338.49	-292.33	-221.13	-135.06	-64.86	0.00	
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	198	AASHTO FatigTRUCK-LOAD	MAX	2.86	4.94	6.58	7.31	7.31	7.37	7.94	7.92	7.08	5.24	2.98	0.00
			MIN	-3.82	-8.16	-13.59	-18.17	-21.18	-22.18	-21.12	-18.07	-13.47	-8.06	-3.78	0.00
TANDEM-LOAD		MAX	1.94	3.35	4.46	4.95	4.95	5.02	5.41	5.39	4.83	3.57	2.03	0.00	
		MIN	-2.60	-5.54	-9.22	-12.42	-14.37	-15.20	-14.32	-12.35	-9.13	-5.47	-2.57	0.00	

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	8.02	14.63	21.05	25.47	27.99	28.76	27.83	25.17	20.65	14.18	7.68	0.00
	MIN	-9.18	-18.82	-29.95	-38.57	-43.73	-45.15	-42.82	-36.92	-27.92	-17.00	-8.08	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	27.90	49.69	67.96	76.70	77.49	79.23	84.94	83.92	74.06	53.59	29.71	0.00
	MIN	-34.34	-72.00	-118.23	-156.38	-180.74	-189.35	-180.96	-156.84	-118.69	-72.35	-34.67	0.00
	TANDEM-LOAD MAX	10.07	17.92	24.49	27.63	27.91	28.70	30.77	30.40	26.83	19.41	10.76	0.00
	MIN	-12.43	-26.09	-43.03	-57.23	-66.29	-69.97	-66.34	-57.41	-43.22	-26.24	-12.56	0.00
	DISPERSION-LMAX	40.44	75.59	110.89	135.64	149.97	154.43	149.31	134.42	109.21	73.72	39.02	0.00
	MIN	-42.72	-86.42	-136.75	-175.95	-199.58	-206.00	-195.15	-167.98	-127.01	-77.72	-37.39	0.00
300	Total Dead lWithout snow	-7.38	-35.47	-85.09	-132.87	-163.70	-170.17	-151.13	-110.44	-58.29	-12.79	5.63	0.00
301	Particular Snow	-0.62	-2.95	-7.05	-10.99	-13.54	-14.07	-12.50	-9.14	-4.84	-1.08	0.46	0.00
302	Live load Total MAX	35.92	66.30	95.55	114.65	124.23	127.82	126.47	116.44	96.64	66.47	35.65	0.00
	MIN	-39.65	-81.12	-129.99	-169.00	-193.20	-200.42	-190.39	-163.99	-123.84	-75.60	-36.31	0.00
303	Sum total D+L+PP MAX	27.92	27.88	3.41	-29.22	-53.00	-56.43	-37.17	-3.15	33.51	52.61	41.73	0.00
	MIN	-47.65	-119.53	-222.13	-312.87	-370.43	-384.66	-354.03	-283.57	-186.96	-89.46	-30.23	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	2001	2002	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-8.97	-23.92	-40.98	-55.74	-65.15	-67.75	-62.90	-50.66	-31.77	0.00	0.00	-30.15	
3	Railing	-0.28	-0.75	-1.27	-1.72	-2.01	-2.08	-1.94	-1.56	-0.98	0.00	0.00	-0.89	
5	Wheel guard	-2.80	-7.41	-12.59	-17.03	-19.86	-20.64	-19.17	-15.48	-9.75	0.00	0.00	-8.83	
8	Steel weight	-32.92	-87.89	-150.69	-205.05	-239.74	-249.34	-231.48	-186.40	-116.82	0.00	0.00	-111.34	
10	Medial strip	-3.28	-8.79	-15.13	-20.63	-24.15	-25.12	-23.32	-18.75	-11.73	0.00	0.00	-16.14	
19	Snow	-4.01	-10.71	-18.34	-24.94	-29.14	-30.31	-28.14	-22.67	-14.21	0.00	0.00	-13.89	
31	Miscellaneous	-0.26	-0.71	-1.22	-1.67	-1.95	-2.03	-1.88	-1.52	-0.95	0.00	0.00	-0.92	
100	AASHTO-LRFD TRUCK-LOAD	MAX	19.13	33.34	42.01	45.36	44.46	40.29	33.56	24.84	14.66	0.00	0.00	11.82
		MIN	-23.73	-49.47	-73.31	-90.93	-99.94	-99.06	-88.41	-68.90	-42.12	0.00	0.00	-35.32
	TANDEM-LOAD	MAX	12.99	22.63	28.51	30.79	30.18	27.35	22.78	16.86	9.95	0.00	0.00	8.04
		MIN	-16.13	-33.64	-49.85	-62.03	-68.07	-67.30	-60.31	-46.87	-28.65	0.00	0.00	-24.03
	DISPERSION-LMAX	MAX	38.81	67.63	85.20	91.98	90.15	81.69	68.04	50.37	29.73	0.00	0.00	24.01
		MIN	-53.45	-106.70	-152.12	-183.00	-196.52	-192.31	-170.75	-133.10	-81.59	0.00	0.00	-72.00
110	Live load L-PICKUP 1	MAX	57.95	100.97	127.20	137.34	134.60	121.98	101.60	75.22	44.39	0.00	0.00	35.82
		MIN	-77.18	-156.17	-225.44	-273.93	-296.46	-291.37	-259.16	-201.99	-123.71	0.00	0.00	-107.32
	L-PICKUP 2	MAX	51.81	90.26	113.71	122.77	120.32	109.04	90.82	67.24	39.68	0.00	0.00	32.05
		MIN	-69.59	-140.34	-201.97	-245.03	-264.59	-259.61	-231.05	-179.97	-110.24	0.00	0.00	-96.02
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	57.95	100.97	127.20	137.34	134.60	121.98	101.60	75.22	44.39	0.00	0.00	35.82	
	MIN	-77.18	-156.17	-225.44	-273.93	-296.46	-291.37	-259.16	-201.99	-123.71	0.00	0.00	-107.32	
111	AASHTO Twin TWIN-PICKUP	MAX	67.29	117.25	147.73	159.50	156.32	141.67	118.00	87.35	51.55	0.00	0.00	41.58
		MIN	-88.17	-179.35	-259.83	-316.50	-342.60	-337.41	-301.01	-235.12	-144.16	0.00	0.00	-124.73
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	3.59	6.06	7.49	8.00	7.78	7.02	5.83	4.31	2.54	0.00	0.00	2.00
		MIN	-4.85	-10.35	-15.59	-19.49	-21.53	-21.41	-19.07	-14.85	-9.11	0.00	0.00	-6.71
	TANDEM-LOAD	MAX	2.43	4.11	5.07	5.42	5.27	4.76	3.95	2.92	1.72	0.00	0.00	1.36
		MIN	-3.31	-7.06	-10.60	-13.27	-14.70	-14.59	-13.02	-10.06	-6.19	0.00	0.00	-4.57

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	2001	2002
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	7.71	13.03	16.10	17.18	16.72	15.08	12.53	9.26	5.46	0.00	0.00	4.31
	MIN	-11.33	-22.96	-32.95	-39.78	-42.86	-42.11	-37.61	-29.57	-18.32	0.00	0.00	-14.52
199	AASHTO-LRFD TRUCK-LOAD MAX	35.95	62.65	78.94	85.24	83.55	75.72	63.07	46.69	27.55	0.00	0.00	22.19
	MIN	-44.51	-92.58	-136.58	-168.67	-184.14	-182.59	-163.71	-128.15	-78.58	0.00	0.00	-66.59
	TANDEM-LOAD MAX	12.99	22.63	28.51	30.79	30.18	27.35	22.78	16.86	9.95	0.00	0.00	8.04
	MIN	-16.13	-33.64	-49.85	-62.03	-68.07	-67.30	-60.31	-46.87	-28.65	0.00	0.00	-24.03
	DISPERSION-LMAX	38.81	67.63	85.20	91.98	90.15	81.69	68.04	50.37	29.73	0.00	0.00	24.01
	MIN	-53.45	-106.70	-152.12	-183.00	-196.52	-192.31	-170.75	-133.10	-81.59	0.00	0.00	-72.00
300	Total Dead lWithout snow	-48.52	-129.47	-221.87	-301.84	-352.84	-366.97	-340.70	-274.38	-172.00	0.00	0.00	-168.27
301	Particular Snow	-4.01	-10.71	-18.34	-24.94	-29.14	-30.31	-28.14	-22.67	-14.21	0.00	0.00	-13.89
302	Live load Total MAX	37.67	65.63	82.68	89.27	87.49	79.29	66.04	48.89	28.85	0.00	0.00	23.29
	MIN	-50.17	-101.51	-146.53	-178.05	-192.70	-189.39	-168.45	-131.30	-80.41	0.00	0.00	-69.75
303	Sum total D+L+PP MAX	-14.87	-74.55	-157.53	-237.51	-294.50	-317.99	-302.79	-248.15	-157.36	0.00	0.00	-158.87
	MIN	-102.70	-241.69	-386.74	-504.83	-574.69	-586.67	-537.29	-428.34	-266.62	0.00	0.00	-251.91

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-53.87	-71.35	-81.53	-83.85	-78.49	-66.22	-48.52	-28.66	-11.21	0.00	2.85	1.14	
3	Railing	-1.60	-2.12	-2.43	-2.50	-2.34	-1.97	-1.44	-0.84	-0.33	0.00	0.09	0.05	
5	Wheel guard	-15.83	-21.02	-24.03	-24.71	-23.13	-19.48	-14.22	-8.35	-3.25	0.00	0.92	0.50	
8	Steel weight	-198.89	-263.40	-300.94	-309.52	-289.75	-244.47	-179.20	-105.92	-41.45	0.00	10.40	3.98	
10	Medial strip	-28.47	-37.20	-41.98	-42.77	-39.82	-33.62	-24.90	-15.13	-6.26	0.00	2.35	2.72	
19	Snow	-24.78	-32.79	-37.42	-38.45	-35.97	-30.35	-22.26	-13.18	-5.18	0.00	1.39	0.72	
31	Miscellaneous	-1.65	-2.18	-2.49	-2.56	-2.39	-2.02	-1.48	-0.88	-0.34	0.00	0.08	0.03	
100	AASHTO-LRFD TRUCK-LOAD	MAX	22.11	31.30	38.99	44.70	47.93	48.01	43.89	34.50	19.65	0.00	16.29	29.52
		MIN	-64.35	-87.43	-102.96	-109.63	-106.86	-95.38	-75.75	-50.71	-24.28	0.00	-18.66	-38.84
	TANDEM-LOAD	MAX	15.04	21.30	26.53	30.41	32.61	32.67	29.86	23.47	13.37	0.00	11.04	20.00
		MIN	-43.74	-59.33	-70.12	-74.79	-72.40	-64.97	-51.57	-34.41	-16.46	0.00	-12.70	-26.46
	DISPERSION-LMAX	MAX	44.91	63.59	79.20	90.80	97.36	97.53	89.15	70.08	39.91	0.00	42.08	79.50
		MIN	-130.71	-177.33	-209.25	-224.63	-222.69	-203.26	-166.56	-115.71	-57.67	0.00	-37.81	-78.31
110	Live load L-PICKUP 1	MAX	67.02	94.89	118.19	135.50	145.29	145.55	133.04	104.57	59.56	0.00	58.37	109.01
		MIN	-195.07	-264.76	-312.20	-334.26	-329.54	-298.64	-242.32	-166.42	-81.95	0.00	-56.47	-117.15
	L-PICKUP 2	MAX	59.95	84.88	105.73	121.21	129.97	130.20	119.01	93.55	53.28	0.00	53.12	99.49
		MIN	-174.45	-236.66	-279.36	-299.41	-295.08	-268.23	-218.14	-150.12	-74.13	0.00	-50.50	-104.77
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	67.02	94.89	118.19	135.50	145.29	145.55	133.04	104.57	59.56	0.00	58.37	109.01
		MIN	-195.07	-264.76	-312.20	-334.26	-329.54	-298.64	-242.32	-166.42	-81.95	0.00	-56.47	-117.15
111	AASHTO Twin TWIN-PICKUP	MAX	77.78	110.13	137.18	157.27	168.63	168.93	154.41	121.37	69.13	0.00	65.66	121.89
		MIN	-226.59	-307.16	-361.65	-386.31	-380.19	-344.01	-278.49	-190.48	-93.29	0.00	-65.55	-136.01
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	3.75	5.30	6.60	7.58	8.14	8.18	7.51	5.96	3.44	0.00	2.85	5.11
		MIN	-12.14	-16.34	-19.05	-20.13	-19.59	-17.49	-13.85	-9.20	-4.36	0.00	-3.35	-7.05
	TANDEM-LOAD	MAX	2.55	3.61	4.49	5.15	5.53	5.56	5.11	4.05	2.34	0.00	1.93	3.46
		MIN	-8.27	-11.08	-12.97	-13.73	-13.27	-11.92	-9.42	-6.23	-2.96	0.00	-2.28	-4.80

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	8.06	11.40	14.20	16.28	17.49	17.58	16.15	12.80	7.38	0.00	7.81	14.62
	MIN	-26.15	-35.12	-41.02	-43.71	-43.21	-39.32	-32.08	-22.13	-10.94	0.00	-7.16	-14.91
199	AASHTO-LRFD TRUCK-LOAD MAX	41.52	58.79	73.22	83.94	90.01	90.17	82.41	64.78	36.90	0.00	30.88	55.94
	MIN	-121.06	-163.96	-192.59	-204.61	-199.75	-178.97	-142.87	-95.94	-45.99	0.00	-35.03	-72.81
	TANDEM-LOAD MAX	15.04	21.30	26.53	30.41	32.61	32.67	29.86	23.47	13.37	0.00	11.04	20.00
	MIN	-43.74	-59.33	-70.12	-74.79	-72.40	-64.97	-51.57	-34.41	-16.46	0.00	-12.70	-26.46
	DISPERSION-LMAX	44.91	63.59	79.20	90.80	97.36	97.53	89.15	70.08	39.91	0.00	42.08	79.50
	MIN	-130.71	-177.33	-209.25	-224.63	-222.69	-203.26	-166.56	-115.71	-57.67	0.00	-37.81	-78.31
300	Total Dead lWithout snow	-300.31	-397.27	-453.39	-465.91	-435.92	-367.78	-269.77	-159.79	-62.85	0.00	16.69	8.42
301	Particular Snow	-24.78	-32.79	-37.42	-38.45	-35.97	-30.35	-22.26	-13.18	-5.18	0.00	1.39	0.72
302	Live load Total MAX	43.56	61.68	76.82	88.07	94.44	94.61	86.47	67.97	38.71	0.00	37.94	70.86
	MIN	-126.79	-172.10	-202.93	-217.27	-214.20	-194.11	-157.51	-108.17	-53.27	0.00	-36.70	-76.15
303	Sum total D+L+PP MAX	-281.53	-368.38	-413.99	-416.28	-377.45	-303.53	-205.55	-105.00	-29.32	0.00	56.02	80.00
	MIN	-451.89	-602.16	-693.75	-721.63	-686.10	-592.25	-449.53	-281.15	-121.30	0.00	-18.63	-67.01

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-5.57	-14.33	-21.84	-25.83	-25.34	-20.54	-12.81	-4.82	-0.52	0.00	-4.51	-12.70	
3	Railing	-0.14	-0.41	-0.63	-0.75	-0.74	-0.59	-0.36	-0.13	-0.01	0.00	-0.13	-0.37	
5	Wheel guard	-1.43	-4.01	-6.24	-7.43	-7.29	-5.86	-3.58	-1.26	-0.08	0.00	-1.27	-3.63	
8	Steel weight	-20.84	-53.18	-80.88	-95.62	-93.79	-76.09	-47.55	-17.99	-2.03	0.00	-16.72	-47.04	
10	Medial strip	1.11	-1.71	-4.44	-6.18	-6.48	-5.33	-3.16	-0.87	0.24	0.00	-2.15	-5.60	
19	Snow	-2.19	-6.07	-9.42	-11.23	-11.05	-8.96	-5.57	-2.06	-0.19	0.00	-2.05	-5.74	
31	Miscellaneous	-0.18	-0.45	-0.68	-0.80	-0.78	-0.64	-0.40	-0.16	-0.02	0.00	-0.14	-0.39	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.13	47.16	48.25	45.29	42.29	41.71	36.84	26.91	15.14	0.00	15.36	27.26
		MIN	-63.91	-85.45	-99.74	-104.72	-99.77	-85.66	-64.22	-38.97	-18.57	0.00	-18.32	-38.40
	TANDEM-LOAD	MAX	27.86	31.94	32.67	30.67	28.68	28.29	24.99	18.25	10.27	0.00	10.43	18.51
		MIN	-43.60	-58.15	-67.69	-71.62	-67.71	-58.31	-43.80	-26.51	-12.62	0.00	-12.43	-26.11
	DISPERSION-LMAX	MAX	117.94	145.60	162.01	167.20	161.45	144.94	117.59	79.67	42.47	0.00	39.52	74.02
		MIN	-127.96	-170.05	-198.73	-210.36	-203.68	-179.17	-139.00	-87.84	-43.47	0.00	-46.77	-94.56
110	Live load L-PICKUP 1	MAX	159.07	192.76	210.26	212.49	203.74	186.65	154.43	106.58	57.61	0.00	54.88	101.29
		MIN	-191.87	-255.49	-298.47	-315.07	-303.45	-264.83	-203.23	-126.80	-62.04	0.00	-65.09	-132.96
	L-PICKUP 2	MAX	145.80	177.54	194.69	197.87	190.13	173.23	142.57	97.92	52.74	0.00	49.95	92.54
		MIN	-171.56	-228.19	-266.41	-281.98	-271.39	-237.47	-182.80	-114.35	-56.09	0.00	-59.20	-120.67
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	159.07	192.76	210.26	212.49	203.74	186.65	154.43	106.58	57.61	0.00	54.88	101.29	
	MIN	-191.87	-255.49	-298.47	-315.07	-303.45	-264.83	-203.23	-126.80	-62.04	0.00	-65.09	-132.96	
111	AASHTO Twin TWIN-PICKUP	MAX	176.30	211.49	228.12	227.75	216.91	201.08	168.21	117.27	63.85	0.00	61.56	112.76
		MIN	-222.62	-295.87	-344.91	-363.58	-349.49	-304.58	-233.19	-144.87	-70.54	0.00	-73.09	-150.00
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.05	8.03	8.19	7.67	7.21	7.15	6.36	4.70	2.68	0.00	2.71	4.76
		MIN	-11.70	-15.73	-18.39	-19.31	-18.41	-15.81	-11.82	-7.13	-3.37	0.00	-3.34	-7.06
	TANDEM-LOAD	MAX	4.78	5.44	5.55	5.20	4.89	4.84	4.31	3.18	1.82	0.00	1.84	3.23
		MIN	-7.99	-10.72	-12.48	-13.21	-12.49	-10.78	-8.07	-4.84	-2.28	0.00	-2.26	-4.79

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	21.51	26.43	29.34	30.25	29.22	26.28	21.41	14.63	7.87	0.00	7.32	13.58
	MIN	-24.52	-32.68	-38.22	-40.45	-39.14	-34.39	-26.61	-16.72	-8.23	0.00	-8.85	-18.00
199	AASHTO-LRFD TRUCK-LOAD MAX	77.96	89.39	91.45	85.86	79.56	78.48	69.32	50.63	28.47	0.00	28.89	51.27
	MIN	-119.39	-158.70	-184.51	-193.62	-184.64	-159.25	-120.10	-73.13	-34.90	0.00	-34.44	-72.11
	TANDEM-LOAD MAX	27.86	31.94	32.67	30.67	28.68	28.29	24.99	18.25	10.27	0.00	10.43	18.51
	MIN	-43.60	-58.15	-67.69	-71.62	-67.71	-58.31	-43.80	-26.51	-12.62	0.00	-12.43	-26.11
	DISPERSION-LMAX	117.94	145.60	162.01	167.20	161.45	144.94	117.59	79.67	42.47	0.00	39.52	74.02
	MIN	-127.96	-170.05	-198.73	-210.36	-203.68	-179.17	-139.00	-87.84	-43.47	0.00	-46.77	-94.56
300	Total Dead lWithout snow	-27.06	-74.09	-114.72	-136.62	-134.42	-109.05	-67.86	-25.23	-2.42	0.00	-24.92	-69.73
301	Particular Snow	-2.19	-6.07	-9.42	-11.23	-11.05	-8.96	-5.57	-2.06	-0.19	0.00	-2.05	-5.74
302	Live load Total MAX	103.39	125.29	136.67	138.12	132.43	121.32	100.38	69.28	37.44	0.00	35.67	65.84
	MIN	-124.72	-166.07	-194.00	-204.80	-197.24	-172.14	-132.10	-82.42	-40.33	0.00	-42.31	-86.42
303	Sum total D+L+PP MAX	74.14	45.14	12.53	-9.73	-13.03	3.31	26.95	41.99	34.84	0.00	8.70	-9.64
	MIN	-153.97	-246.23	-318.14	-352.65	-342.71	-290.15	-205.53	-109.71	-42.93	0.00	-69.28	-161.90

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-25.16	-36.60	-44.20	-46.46	-43.05	-34.58	-22.75	-10.68	-3.36	0.00	-1.86	-7.73	
3	Railing	-0.74	-1.08	-1.31	-1.37	-1.27	-1.02	-0.66	-0.30	-0.09	0.00	-0.05	-0.22	
5	Wheel guard	-7.28	-10.67	-12.93	-13.59	-12.58	-10.06	-6.55	-3.02	-0.93	0.00	-0.48	-2.14	
8	Steel weight	-93.06	-135.26	-163.30	-171.63	-159.07	-127.82	-84.18	-39.59	-12.47	0.00	-6.93	-28.72	
10	Medial strip	-10.58	-15.01	-17.88	-18.65	-17.24	-13.87	-9.21	-4.42	-1.45	0.00	-0.63	-2.81	
19	Snow	-11.33	-16.46	-19.86	-20.86	-19.32	-15.52	-10.21	-4.80	-1.51	0.00	-0.82	-3.44	
31	Miscellaneous	-0.78	-1.12	-1.35	-1.42	-1.32	-1.06	-0.70	-0.33	-0.11	0.00	-0.06	-0.24	
100	AASHTO-LRFD TRUCK-LOAD	MAX	37.13	41.81	42.23	39.77	42.58	42.06	37.17	27.08	15.15	0.00	15.23	27.26
		MIN	-63.03	-83.61	-96.93	-101.47	-96.73	-83.28	-62.62	-38.08	-18.20	0.00	-18.16	-38.02
	TANDEM-LOAD	MAX	25.21	28.39	28.67	26.96	28.87	28.51	25.20	18.36	10.28	0.00	10.34	18.50
		MIN	-42.98	-56.94	-65.74	-69.37	-65.63	-56.69	-42.70	-25.90	-12.36	0.00	-12.32	-25.84
	DISPERSION-LMAX	MAX	108.86	133.71	148.65	153.91	149.62	135.50	110.88	75.60	40.42	0.00	41.66	78.10
		MIN	-149.65	-193.12	-220.45	-229.40	-219.60	-191.72	-147.87	-92.96	-45.87	0.00	-44.72	-90.79
110	Live load L-PICKUP 1	MAX	145.99	175.53	190.88	193.67	192.20	177.56	148.05	102.68	55.57	0.00	56.89	105.36
		MIN	-212.68	-276.73	-317.38	-330.87	-316.33	-275.00	-210.49	-131.04	-64.06	0.00	-62.88	-128.81
	L-PICKUP 2	MAX	134.07	162.11	177.33	180.87	178.49	164.01	136.08	93.96	50.70	0.00	52.00	96.60
		MIN	-192.63	-250.06	-286.19	-298.77	-285.24	-248.41	-190.57	-118.86	-58.23	0.00	-57.05	-116.62
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	145.99	175.53	190.88	193.67	192.20	177.56	148.05	102.68	55.57	0.00	56.89	105.36
		MIN	-212.68	-276.73	-317.38	-330.87	-316.33	-275.00	-210.49	-131.04	-64.06	0.00	-62.88	-128.81
111	AASHTO Twin TWIN-PICKUP	MAX	160.82	191.11	205.26	205.82	206.73	193.13	162.69	113.86	62.02	0.00	63.29	116.45
		MIN	-240.84	-313.85	-360.12	-375.66	-359.04	-312.08	-238.57	-148.03	-72.08	0.00	-70.96	-145.95
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	6.40	7.16	7.20	6.78	7.28	7.22	6.43	4.75	2.69	0.00	2.71	4.78
		MIN	-11.67	-15.52	-17.99	-18.82	-17.95	-15.46	-11.59	-7.01	-3.32	0.00	-3.31	-7.00
	TANDEM-LOAD	MAX	4.34	4.86	4.89	4.59	4.93	4.89	4.35	3.21	1.82	0.00	1.83	3.24
		MIN	-7.96	-10.59	-12.19	-12.87	-12.18	-10.54	-7.91	-4.76	-2.25	0.00	-2.24	-4.74

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	19.80	24.21	26.85	27.78	27.03	24.55	20.20	13.90	7.51	0.00	7.73	14.36
	MIN	-28.65	-37.04	-42.30	-44.02	-42.13	-36.76	-28.29	-17.70	-8.68	0.00	-8.48	-17.31
199	AASHTO-LRFD TRUCK-LOAD MAX	69.83	78.63	79.41	74.78	80.07	79.09	69.89	50.91	28.49	0.00	28.66	51.29
	MIN	-117.95	-155.61	-179.68	-188.00	-179.34	-155.04	-117.21	-71.52	-34.22	0.00	-34.12	-71.38
	TANDEM-LOAD MAX	25.21	28.39	28.67	26.96	28.87	28.51	25.20	18.36	10.28	0.00	10.34	18.50
	MIN	-42.98	-56.94	-65.74	-69.37	-65.63	-56.69	-42.70	-25.90	-12.36	0.00	-12.32	-25.84
	DISPERSION-LMAX	108.86	133.71	148.65	153.91	149.62	135.50	110.88	75.60	40.42	0.00	41.66	78.10
	MIN	-149.65	-193.12	-220.45	-229.40	-219.60	-191.72	-147.87	-92.96	-45.87	0.00	-44.72	-90.79
300	Total Dead lWithout snow	-137.60	-199.75	-240.97	-253.14	-234.52	-188.40	-124.05	-58.35	-18.41	0.00	-10.01	-41.87
301	Particular Snow	-11.33	-16.46	-19.86	-20.86	-19.32	-15.52	-10.21	-4.80	-1.51	0.00	-0.82	-3.44
302	Live load Total MAX	94.89	114.09	124.07	125.89	124.93	115.41	96.23	66.74	36.12	0.00	36.98	68.48
	MIN	-138.24	-179.87	-206.29	-215.07	-205.61	-178.75	-136.82	-85.18	-41.64	0.00	-40.87	-83.73
303	Sum total D+L+PP MAX	-54.04	-102.11	-136.75	-148.11	-128.91	-88.51	-38.03	3.60	16.20	0.00	26.15	23.18
	MIN	-287.17	-396.08	-467.12	-489.06	-459.46	-382.67	-271.08	-148.32	-61.56	0.00	-51.70	-129.03

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-18.16	-28.58	-35.89	-38.53	-36.09	-28.97	-18.67	-8.17	-2.10	0.00	-3.15	-10.26	
3	Railing	-0.52	-0.83	-1.05	-1.13	-1.06	-0.85	-0.54	-0.23	-0.06	0.00	-0.09	-0.29	
5	Wheel guard	-5.18	-8.26	-10.43	-11.22	-10.49	-8.37	-5.33	-2.26	-0.55	0.00	-0.87	-2.89	
8	Steel weight	-67.27	-105.71	-132.67	-142.42	-133.43	-107.15	-69.15	-30.34	-7.83	0.00	-11.70	-38.05	
10	Medial strip	-6.69	-10.58	-13.33	-14.34	-13.47	-10.85	-7.03	-3.10	-0.80	0.00	-1.27	-4.03	
19	Snow	-8.09	-12.75	-16.01	-17.20	-16.11	-12.93	-8.33	-3.64	-0.93	0.00	-1.41	-4.59	
31	Miscellaneous	-0.56	-0.88	-1.10	-1.18	-1.11	-0.89	-0.58	-0.26	-0.07	0.00	-0.10	-0.32	
100	AASHTO-LRFD TRUCK-LOAD	MAX	37.43	42.22	42.53	39.53	41.12	40.76	36.16	26.44	14.84	0.00	14.97	26.63
		MIN	-62.51	-82.90	-95.82	-100.18	-95.57	-82.45	-62.10	-37.77	-18.02	0.00	-17.86	-37.41
	TANDEM-LOAD	MAX	25.41	28.66	28.87	26.83	27.88	27.63	24.51	17.93	10.06	0.00	10.15	18.06
		MIN	-42.61	-56.48	-64.96	-68.48	-64.83	-56.15	-42.34	-25.68	-12.23	0.00	-12.12	-25.42
	DISPERSION-LMAX	MAX	114.78	140.26	154.67	158.98	153.71	138.57	112.96	76.78	40.95	0.00	39.97	74.54
		MIN	-144.51	-186.98	-213.31	-221.93	-212.67	-185.90	-143.49	-90.15	-44.39	0.00	-45.11	-91.28
110	Live load L-PICKUP 1	MAX	152.20	182.48	197.20	198.51	194.83	179.33	149.12	103.22	55.79	0.00	54.94	101.17
		MIN	-207.02	-269.88	-309.13	-322.11	-308.24	-268.35	-205.59	-127.92	-62.42	0.00	-62.97	-128.68
	L-PICKUP 2	MAX	140.18	168.92	183.54	185.82	181.59	166.20	137.48	94.71	51.02	0.00	50.12	92.60
		MIN	-187.12	-243.47	-278.27	-290.41	-277.50	-242.06	-185.83	-115.82	-56.62	0.00	-57.23	-116.69
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	152.20	182.48	197.20	198.51	194.83	179.33	149.12	103.22	55.79	0.00	54.94	101.17	
	MIN	-207.02	-269.88	-309.13	-322.11	-308.24	-268.35	-205.59	-127.92	-62.42	0.00	-62.97	-128.68	
111	AASHTO Twin TWIN-PICKUP	MAX	166.68	197.73	211.22	210.02	208.01	193.77	162.93	113.90	62.00	0.00	61.31	112.18
		MIN	-235.35	-307.22	-351.96	-366.92	-350.99	-305.51	-233.76	-144.97	-70.45	0.00	-70.84	-145.41
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	6.48	7.25	7.27	6.74	7.03	7.00	6.26	4.64	2.64	0.00	2.66	4.67
		MIN	-11.59	-15.39	-17.79	-18.60	-17.75	-15.32	-11.52	-6.96	-3.29	0.00	-3.26	-6.90
	TANDEM-LOAD	MAX	4.39	4.92	4.93	4.57	4.76	4.74	4.24	3.14	1.79	0.00	1.80	3.16
		MIN	-7.89	-10.50	-12.06	-12.71	-12.04	-10.45	-7.85	-4.72	-2.23	0.00	-2.21	-4.68

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	20.91	25.42	27.96	28.72	27.79	25.12	20.58	14.12	7.60	0.00	7.43	13.72
	MIN	-27.70	-35.92	-41.00	-42.67	-40.89	-35.73	-27.52	-17.20	-8.42	0.00	-8.55	-17.41
199	AASHTO-LRFD TRUCK-LOAD MAX	70.42	79.45	80.02	74.37	77.41	76.73	68.07	49.78	27.93	0.00	28.15	50.11
	MIN	-116.99	-154.37	-177.76	-185.76	-177.32	-153.55	-116.25	-70.94	-33.89	0.00	-33.60	-70.29
	TANDEM-LOAD MAX	25.41	28.66	28.87	26.83	27.88	27.63	24.51	17.93	10.06	0.00	10.15	18.06
	MIN	-42.61	-56.48	-64.96	-68.48	-64.83	-56.15	-42.34	-25.68	-12.23	0.00	-12.12	-25.42
	DISPERSION-LMAX	114.78	140.26	154.67	158.98	153.71	138.57	112.96	76.78	40.95	0.00	39.97	74.54
	MIN	-144.51	-186.98	-213.31	-221.93	-212.67	-185.90	-143.49	-90.15	-44.39	0.00	-45.11	-91.28
300	Total Dead lWithout snow	-98.40	-154.85	-194.48	-208.82	-195.65	-157.08	-101.30	-44.36	-11.40	0.00	-17.17	-55.85
301	Particular Snow	-8.09	-12.75	-16.01	-17.20	-16.11	-12.93	-8.33	-3.64	-0.93	0.00	-1.41	-4.59
302	Live load Total MAX	98.93	118.61	128.18	129.03	126.64	116.56	96.93	67.09	36.26	0.00	35.71	65.76
	MIN	-134.56	-175.42	-200.93	-209.37	-200.36	-174.43	-133.63	-83.15	-40.57	0.00	-40.93	-83.64
303	Sum total D+L+PP MAX	-7.56	-48.98	-82.31	-96.98	-85.12	-53.44	-12.70	19.09	23.94	0.00	17.13	5.33
	MIN	-241.05	-343.02	-411.43	-435.39	-412.11	-344.44	-243.26	-131.15	-52.90	0.00	-59.51	-144.08

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-21.94	-33.16	-40.97	-43.88	-41.46	-34.06	-23.07	-11.28	-3.76	0.00	-1.31	-6.43	
3	Railing	-0.64	-0.97	-1.21	-1.30	-1.22	-1.00	-0.67	-0.32	-0.11	0.00	-0.03	-0.18	
5	Wheel guard	-6.31	-9.63	-11.96	-12.82	-12.10	-9.90	-6.65	-3.20	-1.05	0.00	-0.31	-1.74	
8	Steel weight	-81.18	-122.59	-151.42	-162.15	-153.22	-125.93	-85.35	-41.79	-13.97	0.00	-4.92	-23.93	
10	Medial strip	-8.47	-12.71	-15.65	-16.73	-15.81	-13.02	-8.86	-4.37	-1.48	0.00	-0.54	-2.52	
19	Snow	-9.81	-14.83	-18.32	-19.62	-18.54	-15.23	-10.31	-5.04	-1.68	0.00	-0.58	-2.87	
31	Miscellaneous	-0.68	-1.02	-1.26	-1.35	-1.27	-1.05	-0.71	-0.35	-0.12	0.00	-0.04	-0.20	
100	AASHTO-LRFD TRUCK-LOAD	MAX	36.32	40.80	41.09	38.30	41.13	40.81	36.32	26.69	15.04	0.00	14.81	26.37
		MIN	-61.35	-81.19	-93.86	-98.19	-93.77	-81.05	-61.23	-37.36	-17.85	0.00	-18.21	-38.23
	TANDEM-LOAD	MAX	24.63	27.68	27.87	25.99	27.90	27.69	24.64	18.11	10.21	0.00	10.04	17.88
		MIN	-41.82	-55.30	-63.65	-67.12	-63.60	-55.19	-41.74	-25.39	-12.11	0.00	-12.37	-26.00
	DISPERSION-LMAX	MAX	108.78	132.24	145.46	149.29	144.15	129.90	105.98	72.17	38.57	0.00	40.40	75.54
		MIN	-144.56	-186.31	-212.27	-220.84	-211.76	-185.45	-143.60	-90.56	-44.71	0.00	-42.55	-86.06
110	Live load L-PICKUP 1	MAX	145.10	173.05	186.56	187.59	185.28	170.71	142.29	98.85	53.61	0.00	55.21	101.90
		MIN	-205.91	-267.51	-306.13	-319.04	-305.53	-266.50	-204.84	-127.92	-62.55	0.00	-60.76	-124.30
	L-PICKUP 2	MAX	133.41	159.92	173.33	175.28	172.06	157.59	130.62	90.28	48.77	0.00	50.44	93.41
		MIN	-186.38	-241.61	-275.92	-287.97	-275.36	-240.65	-185.35	-115.95	-56.82	0.00	-54.91	-112.06
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	145.10	173.05	186.56	187.59	185.28	170.71	142.29	98.85	53.61	0.00	55.21	101.90	
	MIN	-205.91	-267.51	-306.13	-319.04	-305.53	-266.50	-204.84	-127.92	-62.55	0.00	-60.76	-124.30	
111	AASHTO Twin TWIN-PICKUP	MAX	159.40	188.11	200.50	199.20	199.35	185.99	156.85	110.12	60.17	0.00	61.45	112.66
		MIN	-233.53	-303.84	-347.85	-362.73	-347.26	-302.85	-232.49	-144.70	-70.46	0.00	-69.11	-142.06
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	6.29	7.01	7.03	6.54	7.04	7.02	6.30	4.69	2.68	0.00	2.64	4.63
		MIN	-11.39	-15.10	-17.45	-18.24	-17.44	-15.09	-11.38	-6.90	-3.27	0.00	-3.33	-7.05
	TANDEM-LOAD	MAX	4.26	4.75	4.76	4.43	4.77	4.76	4.27	3.17	1.81	0.00	1.79	3.13
		MIN	-7.76	-10.30	-11.83	-12.47	-11.83	-10.29	-7.76	-4.68	-2.21	0.00	-2.25	-4.78

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	19.84	23.99	26.33	27.00	26.10	23.58	19.35	13.31	7.19	0.00	7.51	13.90
	MIN	-27.71	-35.79	-40.81	-42.46	-40.72	-35.66	-27.57	-17.30	-8.49	0.00	-8.11	-16.50
199	AASHTO-LRFD TRUCK-LOAD MAX	68.33	76.77	77.32	72.04	77.35	76.76	68.31	50.19	28.29	0.00	27.88	49.65
	MIN	-114.92	-151.29	-174.23	-182.19	-174.08	-151.05	-114.71	-70.22	-33.58	0.00	-34.24	-71.78
	TANDEM-LOAD MAX	24.63	27.68	27.87	25.99	27.90	27.69	24.64	18.11	10.21	0.00	10.04	17.88
	MIN	-41.82	-55.30	-63.65	-67.12	-63.60	-55.19	-41.74	-25.39	-12.11	0.00	-12.37	-26.00
	DISPERSION-LMAX	108.78	132.24	145.46	149.29	144.15	129.90	105.98	72.17	38.57	0.00	40.40	75.54
	MIN	-144.56	-186.31	-212.27	-220.84	-211.76	-185.45	-143.60	-90.56	-44.71	0.00	-42.55	-86.06
300	Total Dead lWithout snow	-119.22	-180.09	-222.45	-238.23	-225.09	-184.96	-125.31	-61.31	-20.48	0.00	-7.15	-35.01
301	Particular Snow	-9.81	-14.83	-18.32	-19.62	-18.54	-15.23	-10.31	-5.04	-1.68	0.00	-0.58	-2.87
302	Live load Total MAX	94.31	112.48	121.26	121.94	120.43	110.96	92.49	64.26	34.85	0.00	35.88	66.24
	MIN	-133.84	-173.88	-198.98	-207.37	-198.60	-173.23	-133.14	-83.15	-40.66	0.00	-39.50	-80.79
303	Sum total D+L+PP MAX	-34.72	-82.44	-119.51	-135.92	-123.20	-89.23	-43.13	-2.09	12.68	0.00	28.15	28.35
	MIN	-262.87	-368.79	-439.76	-465.23	-442.22	-373.42	-268.76	-149.50	-62.83	0.00	-47.23	-118.68

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-15.52	-24.28	-29.96	-31.16	-27.65	-20.13	-10.57	-2.29	1.07	0.00	-8.90	-23.73	
3	Railing	-0.44	-0.70	-0.87	-0.91	-0.80	-0.58	-0.29	-0.05	0.04	0.00	-0.26	-0.70	
5	Wheel guard	-4.39	-6.97	-8.66	-9.01	-7.97	-5.73	-2.91	-0.51	0.40	0.00	-2.56	-6.89	
8	Steel weight	-57.54	-89.88	-110.81	-115.26	-102.30	-74.55	-39.27	-8.64	3.87	0.00	-32.92	-87.72	
10	Medial strip	-5.97	-9.27	-11.41	-11.86	-10.55	-7.72	-4.12	-0.97	0.35	0.00	-3.40	-9.04	
19	Snow	-6.93	-10.85	-13.39	-13.93	-12.36	-8.99	-4.72	-1.02	0.48	0.00	-3.98	-10.61	
31	Miscellaneous	-0.48	-0.75	-0.92	-0.96	-0.85	-0.63	-0.33	-0.08	0.03	0.00	-0.27	-0.73	
100	AASHTO-LRFD TRUCK-LOAD	MAX	36.07	40.71	41.14	42.23	45.29	44.72	39.38	28.48	15.81	0.00	19.10	33.25
		MIN	-62.96	-83.74	-97.25	-102.00	-97.44	-84.02	-63.17	-38.44	-18.42	0.00	-23.67	-49.23
	TANDEM-LOAD	MAX	24.45	27.60	27.90	28.71	30.79	30.40	26.78	19.36	10.75	0.00	12.96	22.57
		MIN	-42.93	-57.03	-65.97	-69.74	-66.08	-57.23	-43.08	-26.14	-12.51	0.00	-16.08	-33.41
	DISPERSION-LMAX	MAX	110.81	135.55	149.90	154.41	149.33	134.37	109.03	73.57	38.96	0.00	38.72	67.42
		MIN	-136.18	-175.21	-198.82	-205.30	-194.49	-167.27	-126.33	-77.34	-37.24	0.00	-53.22	-106.09
110	Live load L-PICKUP 1	MAX	146.87	176.25	191.04	196.64	194.62	179.09	148.41	102.04	54.77	0.00	57.82	100.67
		MIN	-199.14	-258.96	-296.07	-307.30	-291.93	-251.29	-189.51	-115.78	-55.66	0.00	-76.89	-155.31
	L-PICKUP 2	MAX	135.26	163.15	177.80	183.12	180.12	164.77	135.81	92.93	49.71	0.00	51.69	89.99
		MIN	-179.11	-232.24	-264.80	-275.03	-260.57	-224.50	-169.41	-103.48	-49.75	0.00	-69.30	-139.50
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	146.87	176.25	191.04	196.64	194.62	179.09	148.41	102.04	54.77	0.00	57.82	100.67
		MIN	-199.14	-258.96	-296.07	-307.30	-291.93	-251.29	-189.51	-115.78	-55.66	0.00	-76.89	-155.31
111	AASHTO Twin TWIN-PICKUP	MAX	160.85	190.98	204.63	210.30	210.89	196.47	164.65	114.32	61.77	0.00	67.16	116.92
		MIN	-228.58	-297.95	-341.17	-354.82	-337.56	-291.22	-220.04	-134.51	-64.65	0.00	-87.85	-178.39
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	6.25	7.00	7.04	7.18	7.71	7.65	6.78	4.96	2.79	0.00	3.36	5.77
		MIN	-11.68	-15.55	-18.03	-18.88	-18.03	-15.53	-11.64	-7.03	-3.33	0.00	-4.29	-9.02
	TANDEM-LOAD	MAX	4.23	4.74	4.77	4.88	5.25	5.21	4.62	3.38	1.90	0.00	2.28	3.91
		MIN	-7.96	-10.60	-12.22	-12.91	-12.22	-10.59	-7.93	-4.77	-2.26	0.00	-2.92	-6.13

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	20.20	24.57	27.10	27.88	26.98	24.33	19.84	13.50	7.22	0.00	7.21	12.38
	MIN	-26.24	-33.83	-38.40	-39.66	-37.58	-32.32	-24.37	-14.84	-7.10	0.00	-10.08	-20.24
199	AASHTO-LRFD TRUCK-LOAD MAX	67.91	76.65	77.47	79.26	85.00	83.93	73.92	53.45	29.67	0.00	35.89	62.49
	MIN	-117.80	-155.84	-180.26	-188.95	-180.58	-156.31	-118.15	-72.11	-34.60	0.00	-44.39	-92.12
	TANDEM-LOAD MAX	24.45	27.60	27.90	28.71	30.79	30.40	26.78	19.36	10.75	0.00	12.96	22.57
	MIN	-42.93	-57.03	-65.97	-69.74	-66.08	-57.23	-43.08	-26.14	-12.51	0.00	-16.08	-33.41
	DISPERSION-LMAX	110.81	135.55	149.90	154.41	149.33	134.37	109.03	73.57	38.96	0.00	38.72	67.42
	MIN	-136.18	-175.21	-198.82	-205.30	-194.49	-167.27	-126.33	-77.34	-37.24	0.00	-53.22	-106.09
300	Total Dead lWithout snow	-84.35	-131.86	-162.63	-169.16	-150.12	-109.34	-57.50	-12.54	5.76	0.00	-48.32	-128.80
301	Particular Snow	-6.93	-10.85	-13.39	-13.93	-12.36	-8.99	-4.72	-1.02	0.48	0.00	-3.98	-10.61
302	Live load Total MAX	95.47	114.56	124.18	127.82	126.50	116.41	96.47	66.33	35.60	0.00	37.58	65.43
	MIN	-129.44	-168.32	-192.45	-199.74	-189.76	-163.34	-123.18	-75.26	-36.18	0.00	-49.98	-100.95
303	Sum total D+L+PP MAX	4.19	-28.15	-51.83	-55.27	-35.98	-1.93	34.25	52.77	41.84	0.00	-14.71	-73.97
	MIN	-220.72	-311.04	-368.46	-382.83	-352.23	-281.67	-185.39	-88.82	-29.94	0.00	-102.27	-240.36

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2075	2076	2077	2078	2079	2080	2081	2082	3001	3002	3003	3004	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-40.65	-55.40	-64.89	-67.55	-62.73	-50.44	-31.49	0.00	0.00	-30.15	-53.87	-71.35	
3	Railing	-1.20	-1.65	-1.93	-2.01	-1.87	-1.50	-0.93	0.00	0.00	-0.89	-1.60	-2.12	
5	Wheel guard	-11.90	-16.29	-19.12	-19.91	-18.48	-14.83	-9.22	0.00	0.00	-8.83	-15.83	-21.02	
8	Steel weight	-150.18	-204.61	-239.60	-249.39	-231.62	-186.27	-116.35	0.00	0.00	-111.34	-198.89	-263.40	
10	Medial strip	-15.41	-20.96	-24.52	-25.51	-23.70	-19.08	-11.93	0.00	0.00	-16.14	-28.47	-37.20	
19	Snow	-18.17	-24.77	-29.01	-30.20	-28.05	-22.55	-14.08	0.00	0.00	-13.89	-24.78	-32.79	
31	Miscellaneous	-1.24	-1.69	-1.98	-2.06	-1.91	-1.54	-0.96	0.00	0.00	-0.92	-1.65	-2.18	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.94	45.37	44.50	40.33	33.58	24.85	14.64	0.00	0.00	11.82	22.11	31.30
		MIN	-72.87	-90.56	-99.71	-98.87	-88.19	-68.62	-41.78	0.00	0.00	-35.32	-64.35	-87.43
	TANDEM-LOAD	MAX	28.47	30.80	30.21	27.37	22.80	16.86	9.94	0.00	0.00	8.04	15.04	21.30
		MIN	-49.47	-61.83	-67.91	-67.15	-60.21	-46.76	-28.38	0.00	0.00	-24.03	-43.74	-59.33
	DISPERSION-LMAX	MAX	85.03	91.98	90.21	81.75	68.08	50.36	29.68	0.00	0.00	24.01	44.91	63.59
		MIN	-151.28	-182.28	-195.96	-191.82	-170.30	-132.56	-81.00	0.00	0.00	-72.00	-130.71	-177.33
110	Live load L-PICKUP 1	MAX	126.97	137.36	134.71	122.07	101.67	75.21	44.32	0.00	0.00	35.82	67.02	94.89
		MIN	-224.15	-272.84	-295.67	-290.69	-258.49	-201.18	-122.78	0.00	0.00	-107.31	-195.07	-264.76
	L-PICKUP 2	MAX	113.50	122.78	120.42	109.12	90.88	67.23	39.62	0.00	0.00	32.05	59.95	84.88
		MIN	-200.75	-244.10	-263.86	-258.97	-230.51	-179.32	-109.38	0.00	0.00	-96.02	-174.45	-236.66
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	126.97	137.36	134.71	122.07	101.67	75.21	44.32	0.00	0.00	35.82	67.02	94.89	
	MIN	-224.15	-272.84	-295.67	-290.69	-258.49	-201.18	-122.78	0.00	0.00	-107.31	-195.07	-264.76	
111	AASHTO Twin TWIN-PICKUP	MAX	147.47	159.53	156.46	141.78	118.08	87.35	51.47	0.00	0.00	41.58	77.78	110.13
		MIN	-258.49	-315.38	-341.83	-336.78	-300.37	-234.27	-143.12	0.00	0.00	-124.73	-226.59	-307.16
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.20	7.75	7.57	6.85	5.70	4.21	2.48	0.00	0.00	2.00	3.75	5.30
		MIN	-13.41	-16.71	-18.40	-18.27	-16.33	-12.74	-7.76	0.00	0.00	-6.71	-12.14	-16.34
	TANDEM-LOAD	MAX	4.88	5.25	5.14	4.64	3.86	2.86	1.68	0.00	0.00	1.36	2.55	3.61
		MIN	-9.09	-11.41	-12.53	-12.41	-11.16	-8.67	-5.26	0.00	0.00	-4.57	-8.27	-11.08

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		2075	2076	2077	2078	2079	2080	2081	2082	3001	3002	3003	3004
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	15.47	16.64	16.26	14.71	12.23	9.04	5.33	0.00	0.00	4.31	8.06	11.40
	MIN	-29.01	-35.06	-37.76	-37.03	-32.95	-25.71	-15.74	0.00	0.00	-14.52	-26.15	-35.12
199	AASHTO-LRFD TRUCK-LOAD MAX	78.82	85.27	83.63	75.79	63.12	46.69	27.52	0.00	0.00	22.19	41.52	58.79
	MIN	-135.93	-168.15	-183.85	-182.38	-163.44	-127.74	-78.02	0.00	0.00	-66.59	-121.06	-163.96
	TANDEM-LOAD MAX	28.47	30.80	30.21	27.37	22.80	16.86	9.94	0.00	0.00	8.04	15.04	21.30
	MIN	-49.47	-61.83	-67.91	-67.15	-60.21	-46.76	-28.38	0.00	0.00	-24.03	-43.74	-59.33
	DISPERSION-LMAX	85.03	91.98	90.21	81.75	68.08	50.36	29.68	0.00	0.00	24.01	44.91	63.59
	MIN	-151.28	-182.28	-195.96	-191.82	-170.30	-132.56	-81.00	0.00	0.00	-72.00	-130.71	-177.33
300	Total Dead lWithout snow	-220.58	-300.60	-352.03	-366.44	-340.31	-273.66	-170.90	0.00	0.00	-168.27	-300.31	-397.27
301	Particular Snow	-18.17	-24.77	-29.01	-30.20	-28.05	-22.55	-14.08	0.00	0.00	-13.89	-24.78	-32.79
302	Live load Total MAX	82.53	89.28	87.56	79.35	66.08	48.89	28.81	0.00	0.00	23.29	43.56	61.68
	MIN	-145.69	-177.34	-192.19	-188.95	-168.02	-130.77	-79.81	0.00	0.00	-69.75	-126.79	-172.10
303	Sum total D+L+PP MAX	-156.22	-236.08	-293.48	-317.29	-302.28	-247.32	-156.17	0.00	0.00	-158.87	-281.53	-368.38
	MIN	-384.45	-502.71	-573.23	-585.59	-536.38	-426.98	-264.78	0.00	0.00	-251.91	-451.89	-602.16

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-81.53	-83.85	-78.49	-66.22	-48.52	-28.66	-11.21	0.00	2.85	1.14	-5.57	-14.33	
3	Railing	-2.43	-2.50	-2.34	-1.97	-1.44	-0.84	-0.33	0.00	0.09	0.05	-0.14	-0.41	
5	Wheel guard	-24.03	-24.71	-23.13	-19.48	-14.22	-8.35	-3.25	0.00	0.92	0.50	-1.43	-4.01	
8	Steel weight	-300.94	-309.52	-289.75	-244.47	-179.20	-105.92	-41.45	0.00	10.40	3.98	-20.84	-53.18	
10	Medial strip	-41.98	-42.77	-39.82	-33.62	-24.90	-15.13	-6.26	0.00	2.35	2.72	1.11	-1.71	
19	Snow	-37.42	-38.45	-35.97	-30.35	-22.26	-13.18	-5.18	0.00	1.39	0.72	-2.19	-6.07	
31	Miscellaneous	-2.49	-2.56	-2.39	-2.02	-1.48	-0.88	-0.35	0.00	0.08	0.03	-0.18	-0.45	
100	AASHTO-LRFD TRUCK-LOAD	MAX	38.99	44.70	47.93	48.01	43.89	34.50	19.65	0.00	16.29	29.52	41.13	47.16
		MIN	-102.96	-109.63	-106.86	-95.38	-75.75	-50.71	-24.28	0.00	-18.66	-38.84	-63.91	-85.45
	TANDEM-LOAD	MAX	26.53	30.41	32.61	32.67	29.86	23.47	13.37	0.00	11.04	20.00	27.86	31.94
		MIN	-70.12	-74.79	-72.40	-64.97	-51.57	-34.41	-16.46	0.00	-12.70	-26.46	-43.60	-58.15
	DISPERSION-LMAX	MAX	79.20	90.80	97.36	97.53	89.15	70.08	39.91	0.00	42.08	79.50	117.94	145.60
		MIN	-209.25	-224.63	-222.69	-203.26	-166.56	-115.71	-57.67	0.00	-37.81	-78.31	-127.96	-170.05
110	Live load L-PICKUP 1	MAX	118.19	135.50	145.29	145.55	133.04	104.57	59.56	0.00	58.37	109.01	159.07	192.76
		MIN	-312.20	-334.26	-329.55	-298.64	-242.32	-166.42	-81.95	0.00	-56.47	-117.15	-191.87	-255.49
	L-PICKUP 2	MAX	105.73	121.21	129.97	130.20	119.01	93.55	53.28	0.00	53.12	99.49	145.80	177.54
		MIN	-279.36	-299.41	-295.09	-268.23	-218.14	-150.12	-74.13	0.00	-50.50	-104.77	-171.56	-228.19
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	118.19	135.50	145.29	145.55	133.04	104.57	59.56	0.00	58.37	109.01	159.07	192.76	
	MIN	-312.20	-334.26	-329.55	-298.64	-242.32	-166.42	-81.95	0.00	-56.47	-117.15	-191.87	-255.49	
111	AASHTO Twin TWIN-PICKUP	MAX	137.18	157.27	168.63	168.93	154.41	121.37	69.13	0.00	65.66	121.89	176.30	211.49
		MIN	-361.65	-386.31	-380.19	-344.01	-278.49	-190.48	-93.29	0.00	-65.55	-136.01	-222.62	-295.87
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	6.60	7.58	8.14	8.18	7.51	5.96	3.44	0.00	2.85	5.11	7.05	8.03
		MIN	-19.05	-20.13	-19.59	-17.49	-13.85	-9.20	-4.36	0.00	-3.35	-7.05	-11.70	-15.73
	TANDEM-LOAD	MAX	4.49	5.15	5.53	5.56	5.11	4.05	2.34	0.00	1.93	3.46	4.78	5.44
		MIN	-12.97	-13.73	-13.27	-11.92	-9.42	-6.23	-2.96	0.00	-2.28	-4.80	-7.99	-10.72

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	14.20	16.28	17.49	17.58	16.15	12.80	7.38	0.00	7.81	14.62	21.51	26.43
	MIN	-41.02	-43.71	-43.21	-39.32	-32.08	-22.13	-10.94	0.00	-7.16	-14.91	-24.52	-32.68
199	AASHTO-LRFD TRUCK-LOAD MAX	73.22	83.94	90.01	90.17	82.41	64.78	36.90	0.00	30.88	55.94	77.96	89.39
	MIN	-192.59	-204.61	-199.75	-178.97	-142.87	-95.94	-45.99	0.00	-35.03	-72.81	-119.39	-158.70
	TANDEM-LOAD MAX	26.53	30.41	32.61	32.67	29.86	23.47	13.37	0.00	11.04	20.00	27.86	31.94
	MIN	-70.12	-74.79	-72.40	-64.97	-51.57	-34.41	-16.46	0.00	-12.70	-26.46	-43.60	-58.15
	DISPERSION-LMAX	79.20	90.80	97.36	97.53	89.15	70.08	39.91	0.00	42.08	79.50	117.94	145.60
	MIN	-209.25	-224.63	-222.69	-203.26	-166.56	-115.71	-57.67	0.00	-37.81	-78.31	-127.96	-170.05
300	Total Dead lWithout snow	-453.39	-465.91	-435.92	-367.78	-269.77	-159.79	-62.85	0.00	16.69	8.42	-27.06	-74.09
301	Particular Snow	-37.42	-38.45	-35.97	-30.35	-22.26	-13.18	-5.18	0.00	1.39	0.72	-2.19	-6.07
302	Live load Total MAX	76.82	88.07	94.44	94.61	86.47	67.97	38.71	0.00	37.94	70.86	103.39	125.29
	MIN	-202.93	-217.27	-214.20	-194.11	-157.51	-108.17	-53.27	0.00	-36.70	-76.15	-124.72	-166.07
303	Sum total D+L+PP MAX	-413.99	-416.28	-377.45	-303.53	-205.55	-105.00	-29.32	0.00	56.02	80.00	74.14	45.14
	MIN	-693.75	-721.63	-686.10	-592.25	-449.53	-281.15	-121.30	0.00	-18.63	-67.01	-153.97	-246.23

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-21.84	-25.83	-25.34	-20.54	-12.81	-4.82	-0.52	0.00	-4.51	-12.70	-25.16	-36.60	
3	Railing	-0.63	-0.75	-0.74	-0.59	-0.36	-0.13	-0.01	0.00	-0.13	-0.37	-0.74	-1.08	
5	Wheel guard	-6.24	-7.43	-7.29	-5.86	-3.58	-1.26	-0.08	0.00	-1.27	-3.63	-7.28	-10.67	
8	Steel weight	-80.88	-95.62	-93.79	-76.09	-47.55	-17.99	-2.03	0.00	-16.72	-47.04	-93.06	-135.26	
10	Medial strip	-4.44	-6.18	-6.48	-5.33	-3.16	-0.87	0.24	0.00	-2.15	-5.60	-10.58	-15.01	
19	Snow	-9.42	-11.23	-11.05	-8.96	-5.57	-2.06	-0.19	0.00	-2.05	-5.74	-11.33	-16.46	
31	Miscellaneous	-0.68	-0.80	-0.78	-0.64	-0.40	-0.16	-0.02	0.00	-0.14	-0.39	-0.78	-1.12	
100	AASHTO-LRFD TRUCK-LOAD	MAX	48.25	45.29	42.29	41.71	36.84	26.91	15.14	0.00	15.36	27.26	37.13	41.81
		MIN	-99.74	-104.72	-99.77	-85.66	-64.22	-38.97	-18.57	0.00	-18.32	-38.40	-63.03	-83.61
	TANDEM-LOAD	MAX	32.67	30.67	28.68	28.29	24.99	18.25	10.27	0.00	10.43	18.51	25.21	28.39
		MIN	-67.69	-71.62	-67.71	-58.31	-43.80	-26.51	-12.62	0.00	-12.43	-26.11	-42.98	-56.94
	DISPERSION-LMAX	MAX	162.01	167.20	161.45	144.94	117.59	79.67	42.47	0.00	39.52	74.02	108.86	133.71
		MIN	-198.73	-210.36	-203.68	-179.17	-139.00	-87.84	-43.47	0.00	-46.77	-94.56	-149.65	-193.12
110	Live load L-PICKUP 1	MAX	210.26	212.49	203.74	186.65	154.43	106.58	57.61	0.00	54.88	101.29	145.99	175.53
		MIN	-298.47	-315.07	-303.45	-264.83	-203.23	-126.80	-62.04	0.00	-65.09	-132.96	-212.68	-276.73
	L-PICKUP 2	MAX	194.69	197.87	190.13	173.23	142.57	97.92	52.74	0.00	49.95	92.54	134.07	162.11
		MIN	-266.41	-281.98	-271.39	-237.47	-182.80	-114.35	-56.09	0.00	-59.20	-120.67	-192.63	-250.06
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	210.26	212.49	203.74	186.65	154.43	106.58	57.61	0.00	54.88	101.29	145.99	175.53
		MIN	-298.47	-315.07	-303.45	-264.83	-203.23	-126.80	-62.04	0.00	-65.09	-132.96	-212.68	-276.73
111	AASHTO Twin TWIN-PICKUP	MAX	228.12	227.75	216.91	201.08	168.21	117.27	63.85	0.00	61.56	112.76	160.82	191.11
		MIN	-344.91	-363.58	-349.49	-304.58	-233.19	-144.87	-70.54	0.00	-73.09	-150.00	-240.84	-313.85
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	8.19	7.67	7.21	7.15	6.36	4.70	2.68	0.00	2.71	4.76	6.40	7.16
		MIN	-18.39	-19.31	-18.41	-15.81	-11.82	-7.13	-3.37	0.00	-3.34	-7.06	-11.67	-15.52
	TANDEM-LOAD	MAX	5.55	5.20	4.89	4.84	4.31	3.18	1.82	0.00	1.84	3.23	4.34	4.86
		MIN	-12.48	-13.21	-12.49	-10.78	-8.07	-4.84	-2.28	0.00	-2.26	-4.79	-7.96	-10.59

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	29.34	30.25	29.22	26.28	21.41	14.63	7.87	0.00	7.32	13.58	19.80	24.21
	MIN	-38.22	-40.45	-39.14	-34.39	-26.61	-16.72	-8.23	0.00	-8.85	-18.00	-28.65	-37.04
199	AASHTO-LRFD TRUCK-LOAD MAX	91.45	85.86	79.56	78.48	69.32	50.63	28.47	0.00	28.89	51.27	69.83	78.63
	MIN	-184.51	-193.62	-184.64	-159.25	-120.10	-73.13	-34.90	0.00	-34.44	-72.11	-117.95	-155.61
	TANDEM-LOAD MAX	32.67	30.67	28.68	28.29	24.99	18.25	10.27	0.00	10.43	18.51	25.21	28.39
	MIN	-67.69	-71.62	-67.71	-58.31	-43.80	-26.51	-12.62	0.00	-12.43	-26.11	-42.98	-56.94
	DISPERSION-LMAX	162.01	167.20	161.45	144.94	117.59	79.67	42.47	0.00	39.52	74.02	108.86	133.71
	MIN	-198.73	-210.36	-203.68	-179.17	-139.00	-87.84	-43.47	0.00	-46.77	-94.56	-149.65	-193.12
300	Total Dead lWithout snow	-114.72	-136.62	-134.42	-109.05	-67.86	-25.23	-2.42	0.00	-24.92	-69.73	-137.60	-199.75
301	Particular Snow	-9.42	-11.23	-11.05	-8.96	-5.57	-2.06	-0.19	0.00	-2.05	-5.74	-11.33	-16.46
302	Live load Total MAX	136.67	138.12	132.43	121.32	100.38	69.28	37.44	0.00	35.67	65.84	94.89	114.09
	MIN	-194.00	-204.80	-197.24	-172.14	-132.10	-82.42	-40.33	0.00	-42.31	-86.42	-138.24	-179.87
303	Sum total D+L+PP MAX	12.53	-9.73	-13.03	3.31	26.95	41.99	34.84	0.00	8.70	-9.64	-54.04	-102.11
	MIN	-318.14	-352.65	-342.71	-290.15	-205.53	-109.71	-42.93	0.00	-69.28	-161.90	-287.17	-396.08

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040
NAME	TITLE	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
1	Pavement	-44.20	-46.46	-43.05	-34.58	-22.75	-10.68	-3.36	0.00	-1.86	-7.73	-18.16	-28.58
3	Railing	-1.31	-1.37	-1.27	-1.02	-0.66	-0.30	-0.09	0.00	-0.05	-0.22	-0.52	-0.83
5	Wheel guard	-12.93	-13.59	-12.58	-10.06	-6.55	-3.02	-0.93	0.00	-0.48	-2.14	-5.18	-8.26
8	Steel weight	-163.30	-171.63	-159.07	-127.82	-84.18	-39.59	-12.47	0.00	-6.93	-28.72	-67.27	-105.71
10	Medial strip	-17.88	-18.65	-17.24	-13.87	-9.21	-4.42	-1.45	0.00	-0.63	-2.81	-6.69	-10.58
19	Snow	-19.86	-20.86	-19.32	-15.52	-10.21	-4.80	-1.51	0.00	-0.82	-3.44	-8.09	-12.75
31	Miscellaneous	-1.35	-1.42	-1.32	-1.06	-0.70	-0.33	-0.11	0.00	-0.06	-0.24	-0.56	-0.88
100	AASHTO-LRFD TRUCK-LOAD	42.23	39.77	42.58	42.06	37.17	27.08	15.15	0.00	15.23	27.26	37.43	42.22
	MIN	-96.93	-101.47	-96.73	-83.28	-62.62	-38.08	-18.20	0.00	-18.16	-38.02	-62.51	-82.90
	TANDEM-LOAD MAX	28.67	26.96	28.87	28.51	25.20	18.36	10.28	0.00	10.34	18.50	25.41	28.66
	MIN	-65.74	-69.37	-65.63	-56.69	-42.70	-25.90	-12.36	0.00	-12.32	-25.84	-42.61	-56.48
	DISPERSION-LMAX	148.65	153.91	149.62	135.50	110.88	75.60	40.42	0.00	41.66	78.10	114.78	140.26
	MIN	-220.45	-229.40	-219.60	-191.72	-147.87	-92.96	-45.87	0.00	-44.72	-90.79	-144.51	-186.98
110	Live load L-PICKUP 1	190.88	193.67	192.20	177.56	148.05	102.68	55.57	0.00	56.89	105.36	152.20	182.48
	MIN	-317.38	-330.87	-316.33	-275.00	-210.49	-131.04	-64.06	0.00	-62.88	-128.81	-207.02	-269.88
	L-PICKUP 2 MAX	177.33	180.87	178.49	164.01	136.08	93.96	50.70	0.00	52.00	96.60	140.18	168.92
	MIN	-286.19	-298.77	-285.24	-248.41	-190.57	-118.86	-58.23	0.00	-57.05	-116.62	-187.12	-243.47
	L-PICKUP 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load MAX	190.88	193.67	192.20	177.56	148.05	102.68	55.57	0.00	56.89	105.36	152.20	182.48
	MIN	-317.38	-330.87	-316.33	-275.00	-210.49	-131.04	-64.06	0.00	-62.88	-128.81	-207.02	-269.88
111	AASHTO Twin TWIN-PICKUP	205.26	205.82	206.73	193.13	162.69	113.86	62.02	0.00	63.29	116.45	166.68	197.73
	MIN	-360.12	-375.66	-359.04	-312.08	-238.57	-148.03	-72.08	0.00	-70.96	-145.95	-235.35	-307.22
	MID-PICKUP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	7.20	6.78	7.28	7.22	6.43	4.75	2.69	0.00	2.71	4.78	6.48	7.25
	MIN	-17.99	-18.82	-17.95	-15.46	-11.59	-7.01	-3.32	0.00	-3.31	-7.00	-11.59	-15.39
	TANDEM-LOAD MAX	4.89	4.59	4.93	4.89	4.35	3.21	1.82	0.00	1.83	3.24	4.39	4.92
	MIN	-12.19	-12.87	-12.18	-10.54	-7.91	-4.76	-2.25	0.00	-2.24	-4.74	-7.89	-10.50

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	26.85	27.78	27.03	24.55	20.20	13.90	7.51	0.00	7.73	14.36	20.91	25.42
	MIN	-42.30	-44.02	-42.13	-36.76	-28.29	-17.70	-8.68	0.00	-8.48	-17.31	-27.70	-35.92
199	AASHTO-LRFD TRUCK-LOAD MAX	79.41	74.78	80.07	79.09	69.89	50.91	28.49	0.00	28.66	51.29	70.42	79.45
	MIN	-179.68	-188.00	-179.34	-155.04	-117.21	-71.52	-34.22	0.00	-34.12	-71.38	-116.99	-154.37
	TANDEM-LOAD MAX	28.67	26.96	28.87	28.51	25.20	18.36	10.28	0.00	10.34	18.50	25.41	28.66
	MIN	-65.74	-69.37	-65.63	-56.69	-42.70	-25.90	-12.36	0.00	-12.32	-25.84	-42.61	-56.48
	DISPERSION-LMAX	148.65	153.91	149.62	135.50	110.88	75.60	40.42	0.00	41.66	78.10	114.78	140.26
	MIN	-220.45	-229.40	-219.60	-191.72	-147.87	-92.96	-45.87	0.00	-44.72	-90.79	-144.51	-186.98
300	Total Dead lWithout snow	-240.97	-253.14	-234.52	-188.40	-124.05	-58.35	-18.41	0.00	-10.01	-41.87	-98.40	-154.85
301	Particular Snow	-19.86	-20.86	-19.32	-15.52	-10.21	-4.80	-1.51	0.00	-0.82	-3.44	-8.09	-12.75
302	Live load Total MAX	124.07	125.89	124.93	115.41	96.23	66.74	36.12	0.00	36.98	68.48	98.93	118.61
	MIN	-206.29	-215.07	-205.61	-178.75	-136.82	-85.18	-41.64	0.00	-40.87	-83.73	-134.56	-175.42
303	Sum total D+L+PP MAX	-136.75	-148.11	-128.91	-88.51	-38.03	3.60	16.20	0.00	26.15	23.18	-7.56	-48.98
	MIN	-467.12	-489.06	-459.46	-382.67	-271.08	-148.32	-61.56	0.00	-51.70	-129.03	-241.05	-343.02

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-35.89	-38.53	-36.09	-28.97	-18.67	-8.17	-2.10	0.00	-3.15	-10.26	-21.94	-33.16	
3	Railing	-1.05	-1.13	-1.06	-0.85	-0.54	-0.23	-0.06	0.00	-0.09	-0.29	-0.64	-0.97	
5	Wheel guard	-10.43	-11.22	-10.49	-8.37	-5.33	-2.26	-0.55	0.00	-0.87	-2.89	-6.31	-9.63	
8	Steel weight	-132.67	-142.42	-133.43	-107.15	-69.15	-30.34	-7.83	0.00	-11.70	-38.05	-81.18	-122.59	
10	Medial strip	-13.33	-14.34	-13.47	-10.85	-7.03	-3.10	-0.80	0.00	-1.27	-4.03	-8.47	-12.71	
19	Snow	-16.01	-17.20	-16.11	-12.93	-8.33	-3.64	-0.93	0.00	-1.41	-4.59	-9.81	-14.83	
31	Miscellaneous	-1.10	-1.18	-1.11	-0.89	-0.58	-0.26	-0.07	0.00	-0.10	-0.32	-0.68	-1.02	
100	AASHTO-LRFD TRUCK-LOAD	MAX	42.53	39.53	41.12	40.76	36.16	26.44	14.84	0.00	14.97	26.63	36.32	40.80
		MIN	-95.82	-100.18	-95.57	-82.45	-62.10	-37.77	-18.02	0.00	-17.86	-37.41	-61.35	-81.19
	TANDEM-LOAD	MAX	28.87	26.83	27.88	27.63	24.51	17.93	10.06	0.00	10.15	18.06	24.63	27.68
		MIN	-64.96	-68.48	-64.83	-56.15	-42.34	-25.68	-12.23	0.00	-12.12	-25.42	-41.82	-55.30
	DISPERSION-LMAX	MAX	154.67	158.98	153.71	138.57	112.96	76.78	40.95	0.00	39.97	74.54	108.78	132.24
		MIN	-213.31	-221.93	-212.67	-185.90	-143.49	-90.15	-44.39	0.00	-45.11	-91.28	-144.56	-186.31
110	Live load L-PICKUP 1	MAX	197.20	198.51	194.83	179.33	149.12	103.22	55.79	0.00	54.94	101.17	145.10	173.05
		MIN	-309.13	-322.11	-308.24	-268.35	-205.59	-127.92	-62.42	0.00	-62.97	-128.68	-205.91	-267.51
	L-PICKUP 2	MAX	183.54	185.82	181.59	166.20	137.48	94.71	51.02	0.00	50.12	92.60	133.41	159.92
		MIN	-278.27	-290.41	-277.50	-242.06	-185.83	-115.82	-56.62	0.00	-57.23	-116.69	-186.38	-241.61
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	197.20	198.51	194.83	179.33	149.12	103.22	55.79	0.00	54.94	101.17	145.10	173.05	
	MIN	-309.13	-322.11	-308.24	-268.35	-205.59	-127.92	-62.42	0.00	-62.97	-128.68	-205.91	-267.51	
111	AASHTO Twin TWIN-PICKUP	MAX	211.22	210.02	208.01	193.77	162.93	113.90	62.00	0.00	61.31	112.18	159.40	188.11
		MIN	-351.96	-366.92	-350.99	-305.51	-233.76	-144.97	-70.45	0.00	-70.84	-145.41	-233.53	-303.84
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.27	6.74	7.03	7.00	6.26	4.64	2.64	0.00	2.66	4.67	6.29	7.01
		MIN	-17.79	-18.60	-17.75	-15.32	-11.52	-6.96	-3.29	0.00	-3.26	-6.90	-11.39	-15.10
	TANDEM-LOAD	MAX	4.93	4.57	4.76	4.74	4.24	3.14	1.79	0.00	1.80	3.16	4.26	4.75
		MIN	-12.06	-12.71	-12.04	-10.45	-7.85	-4.72	-2.23	0.00	-2.21	-4.68	-7.76	-10.30

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	27.96	28.72	27.79	25.12	20.58	14.12	7.60	0.00	7.43	13.72	19.84	23.99
	MIN	-41.00	-42.67	-40.89	-35.73	-27.52	-17.20	-8.42	0.00	-8.55	-17.41	-27.71	-35.79
199	AASHTO-LRFD TRUCK-LOAD MAX	80.02	74.37	77.41	76.73	68.07	49.78	27.93	0.00	28.15	50.11	68.33	76.77
	MIN	-177.76	-185.76	-177.32	-153.55	-116.25	-70.94	-33.89	0.00	-33.60	-70.29	-114.92	-151.29
	TANDEM-LOAD MAX	28.87	26.83	27.88	27.63	24.51	17.93	10.06	0.00	10.15	18.06	24.63	27.68
	MIN	-64.96	-68.48	-64.83	-56.15	-42.34	-25.68	-12.23	0.00	-12.12	-25.42	-41.82	-55.30
	DISPERSION-LMAX	154.67	158.98	153.71	138.57	112.96	76.78	40.95	0.00	39.97	74.54	108.78	132.24
	MIN	-213.31	-221.93	-212.67	-185.90	-143.49	-90.15	-44.39	0.00	-45.11	-91.28	-144.56	-186.31
300	Total Dead lWithout snow	-194.48	-208.82	-195.65	-157.08	-101.30	-44.36	-11.40	0.00	-17.17	-55.85	-119.22	-180.09
301	Particular Snow	-16.01	-17.20	-16.11	-12.93	-8.33	-3.64	-0.93	0.00	-1.41	-4.59	-9.81	-14.83
302	Live load Total MAX	128.18	129.03	126.64	116.56	96.93	67.09	36.26	0.00	35.71	65.76	94.31	112.48
	MIN	-200.93	-209.37	-200.36	-174.43	-133.63	-83.15	-40.57	0.00	-40.93	-83.64	-133.84	-173.88
303	Sum total D+L+PP MAX	-82.31	-96.98	-85.12	-53.44	-12.70	19.09	23.94	0.00	17.13	5.33	-34.72	-82.44
	MIN	-411.43	-435.39	-412.11	-344.44	-243.26	-131.15	-52.90	0.00	-59.51	-144.08	-262.87	-368.79

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-40.97	-43.88	-41.46	-34.06	-23.07	-11.28	-3.76	0.00	-1.31	-6.43	-15.52	-24.28	
3	Railing	-1.21	-1.30	-1.22	-1.00	-0.67	-0.32	-0.11	0.00	-0.03	-0.18	-0.44	-0.70	
5	Wheel guard	-11.96	-12.82	-12.10	-9.90	-6.65	-3.20	-1.05	0.00	-0.31	-1.74	-4.39	-6.97	
8	Steel weight	-151.42	-162.15	-153.22	-125.93	-85.35	-41.79	-13.97	0.00	-4.92	-23.93	-57.54	-89.88	
10	Medial strip	-15.65	-16.73	-15.81	-13.02	-8.86	-4.37	-1.48	0.00	-0.54	-2.52	-5.97	-9.27	
19	Snow	-18.32	-19.62	-18.54	-15.23	-10.31	-5.04	-1.68	0.00	-0.58	-2.87	-6.93	-10.85	
31	Miscellaneous	-1.26	-1.35	-1.27	-1.05	-0.71	-0.35	-0.12	0.00	-0.04	-0.20	-0.48	-0.75	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.09	38.30	41.13	40.81	36.32	26.69	15.04	0.00	14.81	26.37	36.07	40.71
		MIN	-93.86	-98.19	-93.77	-81.05	-61.23	-37.36	-17.85	0.00	-18.21	-38.23	-62.96	-83.74
	TANDEM-LOAD	MAX	27.87	25.99	27.90	27.69	24.64	18.11	10.21	0.00	10.04	17.88	24.45	27.60
		MIN	-63.65	-67.12	-63.60	-55.19	-41.74	-25.39	-12.11	0.00	-12.37	-26.00	-42.93	-57.03
	DISPERSION-LMAX	MAX	145.46	149.29	144.15	129.90	105.98	72.17	38.57	0.00	40.40	75.54	110.81	135.55
		MIN	-212.27	-220.84	-211.76	-185.45	-143.60	-90.56	-44.71	0.00	-42.55	-86.06	-136.18	-175.21
110	Live load L-PICKUP 1	MAX	186.56	187.59	185.28	170.71	142.29	98.85	53.61	0.00	55.21	101.90	146.87	176.25
		MIN	-306.13	-319.04	-305.53	-266.50	-204.84	-127.92	-62.55	0.00	-60.76	-124.30	-199.14	-258.96
	L-PICKUP 2	MAX	173.33	175.28	172.06	157.59	130.62	90.28	48.77	0.00	50.44	93.41	135.26	163.15
		MIN	-275.92	-287.97	-275.36	-240.65	-185.35	-115.95	-56.82	0.00	-54.91	-112.06	-179.11	-232.24
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	186.56	187.59	185.28	170.71	142.29	98.85	53.61	0.00	55.21	101.90	146.87	176.25	
	MIN	-306.13	-319.04	-305.53	-266.50	-204.84	-127.92	-62.55	0.00	-60.76	-124.30	-199.14	-258.96	
111	AASHTO Twin TWIN-PICKUP	MAX	200.50	199.20	199.35	185.99	156.85	110.12	60.17	0.00	61.45	112.66	160.85	190.98
		MIN	-347.85	-362.73	-347.26	-302.85	-232.49	-144.70	-70.46	0.00	-69.11	-142.06	-228.58	-297.95
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.03	6.54	7.04	7.02	6.30	4.69	2.68	0.00	2.64	4.63	6.25	7.00
		MIN	-17.45	-18.24	-17.44	-15.09	-11.38	-6.90	-3.27	0.00	-3.33	-7.05	-11.68	-15.55
	TANDEM-LOAD	MAX	4.76	4.43	4.77	4.76	4.27	3.17	1.81	0.00	1.79	3.13	4.23	4.74
		MIN	-11.83	-12.47	-11.83	-10.29	-7.76	-4.68	-2.21	0.00	-2.25	-4.78	-7.96	-10.60

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	26.33	27.00	26.10	23.58	19.35	13.31	7.19	0.00	7.51	13.90	20.20	24.57
	MIN	-40.81	-42.46	-40.72	-35.66	-27.57	-17.30	-8.49	0.00	-8.11	-16.50	-26.24	-33.83
199	AASHTO-LRFD TRUCK-LOAD MAX	77.32	72.04	77.35	76.76	68.31	50.19	28.29	0.00	27.88	49.65	67.91	76.65
	MIN	-174.23	-182.19	-174.08	-151.05	-114.71	-70.22	-33.58	0.00	-34.24	-71.78	-117.80	-155.84
	TANDEM-LOAD MAX	27.87	25.99	27.90	27.69	24.64	18.11	10.21	0.00	10.04	17.88	24.45	27.60
	MIN	-63.65	-67.12	-63.60	-55.19	-41.74	-25.39	-12.11	0.00	-12.37	-26.00	-42.93	-57.03
	DISPERSION-LMAX	145.46	149.29	144.15	129.90	105.98	72.17	38.57	0.00	40.40	75.54	110.81	135.55
	MIN	-212.27	-220.84	-211.76	-185.45	-143.60	-90.56	-44.71	0.00	-42.55	-86.06	-136.18	-175.21
300	Total Dead lWithout snow	-222.45	-238.23	-225.09	-184.96	-125.31	-61.31	-20.48	0.00	-7.15	-35.01	-84.35	-131.86
301	Particular Snow	-18.32	-19.62	-18.54	-15.23	-10.31	-5.04	-1.68	0.00	-0.58	-2.87	-6.93	-10.85
302	Live load Total MAX	121.26	121.94	120.43	110.96	92.49	64.26	34.85	0.00	35.88	66.24	95.47	114.56
	MIN	-198.98	-207.37	-198.60	-173.23	-133.14	-83.15	-40.66	0.00	-39.50	-80.79	-129.44	-168.32
303	Sum total D+L+PP MAX	-119.51	-135.92	-123.20	-89.23	-43.13	-2.09	12.68	0.00	28.15	28.35	4.19	-28.15
	MIN	-439.76	-465.23	-442.22	-373.42	-268.76	-149.50	-62.83	0.00	-47.23	-118.68	-220.72	-311.04

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-29.96	-31.16	-27.65	-20.13	-10.57	-2.29	1.07	0.00	-8.90	-23.73	-40.65	-55.40	
3	Railing	-0.87	-0.91	-0.80	-0.58	-0.29	-0.05	0.04	0.00	-0.26	-0.70	-1.20	-1.65	
5	Wheel guard	-8.66	-9.01	-7.97	-5.73	-2.91	-0.51	0.40	0.00	-2.56	-6.89	-11.90	-16.29	
8	Steel weight	-110.81	-115.26	-102.30	-74.55	-39.27	-8.64	3.87	0.00	-32.92	-87.72	-150.18	-204.61	
10	Medial strip	-11.41	-11.86	-10.55	-7.72	-4.12	-0.97	0.35	0.00	-3.40	-9.04	-15.41	-20.96	
19	Snow	-13.39	-13.93	-12.36	-8.99	-4.72	-1.02	0.48	0.00	-3.98	-10.61	-18.17	-24.77	
31	Miscellaneous	-0.92	-0.96	-0.85	-0.63	-0.33	-0.08	0.03	0.00	-0.27	-0.73	-1.24	-1.69	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.14	42.23	45.29	44.72	39.38	28.48	15.81	0.00	19.10	33.25	41.94	45.37
		MIN	-97.25	-102.00	-97.44	-84.02	-63.17	-38.44	-18.42	0.00	-23.67	-49.23	-72.87	-90.56
	TANDEM-LOAD	MAX	27.90	28.71	30.79	30.40	26.78	19.36	10.75	0.00	12.96	22.57	28.47	30.80
		MIN	-65.97	-69.74	-66.08	-57.23	-43.08	-26.14	-12.51	0.00	-16.08	-33.41	-49.47	-61.83
	DISPERSION-LMAX	MAX	149.90	154.41	149.33	134.37	109.03	73.57	38.96	0.00	38.72	67.42	85.03	91.98
		MIN	-198.82	-205.30	-194.49	-167.27	-126.33	-77.34	-37.24	0.00	-53.22	-106.09	-151.28	-182.28
110	Live load L-PICKUP 1	MAX	191.04	196.64	194.62	179.09	148.41	102.04	54.77	0.00	57.82	100.67	126.97	137.36
		MIN	-296.07	-307.30	-291.93	-251.29	-189.51	-115.78	-55.66	0.00	-76.89	-155.31	-224.15	-272.84
	L-PICKUP 2	MAX	177.80	183.12	180.12	164.77	135.81	92.93	49.71	0.00	51.69	89.99	113.50	122.78
		MIN	-264.80	-275.03	-260.57	-224.50	-169.41	-103.48	-49.75	0.00	-69.30	-139.50	-200.75	-244.10
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	191.04	196.64	194.62	179.09	148.41	102.04	54.77	0.00	57.82	100.67	126.97	137.36
		MIN	-296.07	-307.30	-291.93	-251.29	-189.51	-115.78	-55.66	0.00	-76.89	-155.31	-224.15	-272.84
111	AASHTO Twin TWIN-PICKUP	MAX	204.63	210.30	210.89	196.47	164.65	114.32	61.77	0.00	67.16	116.92	147.47	159.53
		MIN	-341.17	-354.82	-337.56	-291.22	-220.04	-134.51	-64.65	0.00	-87.85	-178.39	-258.49	-315.38
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	7.04	7.18	7.71	7.65	6.78	4.96	2.79	0.00	3.36	5.77	7.20	7.75
		MIN	-18.03	-18.88	-18.03	-15.53	-11.64	-7.03	-3.33	0.00	-4.29	-9.02	-13.41	-16.71
	TANDEM-LOAD	MAX	4.77	4.88	5.25	5.21	4.62	3.38	1.90	0.00	2.28	3.91	4.88	5.25
		MIN	-12.22	-12.91	-12.22	-10.59	-7.93	-4.77	-2.26	0.00	-2.92	-6.13	-9.09	-11.41

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	27.10	27.88	26.98	24.33	19.84	13.50	7.22	0.00	7.21	12.38	15.47	16.64
	MIN	-38.40	-39.66	-37.58	-32.32	-24.37	-14.84	-7.10	0.00	-10.08	-20.24	-29.01	-35.06
199	AASHTO-LRFD TRUCK-LOAD MAX	77.47	79.26	85.00	83.93	73.92	53.45	29.67	0.00	35.89	62.49	78.82	85.27
	MIN	-180.26	-188.95	-180.58	-156.31	-118.15	-72.11	-34.60	0.00	-44.39	-92.12	-135.93	-168.15
	TANDEM-LOAD MAX	27.90	28.71	30.79	30.40	26.78	19.36	10.75	0.00	12.96	22.57	28.47	30.80
	MIN	-65.97	-69.74	-66.08	-57.23	-43.08	-26.14	-12.51	0.00	-16.08	-33.41	-49.47	-61.83
	DISPERSION-LMAX	149.90	154.41	149.33	134.37	109.03	73.57	38.96	0.00	38.72	67.42	85.03	91.98
	MIN	-198.82	-205.30	-194.49	-167.27	-126.33	-77.34	-37.24	0.00	-53.22	-106.09	-151.28	-182.28
300	Total Dead lWithout snow	-162.63	-169.16	-150.12	-109.34	-57.50	-12.54	5.76	0.00	-48.32	-128.80	-220.58	-300.60
301	Particular Snow	-13.39	-13.93	-12.36	-8.99	-4.72	-1.02	0.48	0.00	-3.98	-10.61	-18.17	-24.77
302	Live load Total MAX	124.18	127.82	126.50	116.41	96.47	66.33	35.60	0.00	37.58	65.43	82.53	89.28
	MIN	-192.45	-199.74	-189.76	-163.34	-123.18	-75.26	-36.18	0.00	-49.98	-100.95	-145.69	-177.34
303	Sum total D+L+PP MAX	-51.83	-55.27	-35.98	-1.93	34.25	52.77	41.84	0.00	-14.71	-73.97	-156.22	-236.08
	MIN	-368.46	-382.83	-352.23	-281.67	-185.39	-88.82	-29.94	0.00	-102.27	-240.36	-384.45	-502.71

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3077	3078	3079	3080	3081	3082	4001	4002	4003	4004	4005	4006	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-64.89	-67.55	-62.73	-50.44	-31.49	0.00	0.00	-30.30	-54.03	-71.51	-81.63	-83.93	
3	Railing	-1.93	-2.01	-1.87	-1.50	-0.93	0.00	0.00	-0.94	-1.66	-2.19	-2.50	-2.57	
5	Wheel guard	-19.12	-19.91	-18.48	-14.83	-9.22	0.00	0.00	-9.27	-16.45	-21.71	-24.73	-25.42	
8	Steel weight	-239.60	-249.39	-231.62	-186.27	-116.35	0.00	0.00	-111.43	-198.80	-263.21	-300.51	-309.00	
10	Medial strip	-24.52	-25.51	-23.70	-19.08	-11.93	0.00	0.00	-15.74	-27.91	-36.62	-41.41	-42.24	
19	Snow	-29.01	-30.20	-28.05	-22.55	-14.08	0.00	0.00	-13.95	-24.85	-32.86	-37.47	-38.50	
31	Miscellaneous	-1.98	-2.06	-1.91	-1.54	-0.96	0.00	0.00	-0.91	-1.62	-2.15	-2.45	-2.52	
100	AASHTO-LRFD TRUCK-LOAD	MAX	44.50	40.33	33.58	24.85	14.64	0.00	0.00	11.81	22.09	31.27	38.94	44.64
		MIN	-99.71	-98.87	-88.19	-68.62	-41.78	0.00	0.00	-35.49	-64.54	-87.64	-103.00	-109.64
	TANDEM-LOAD	MAX	30.21	27.37	22.80	16.86	9.94	0.00	0.00	8.04	15.03	21.27	26.49	30.37
		MIN	-67.91	-67.15	-60.21	-46.76	-28.38	0.00	0.00	-24.13	-43.91	-59.59	-70.10	-74.79
	DISPERSION-LMAX	MAX	90.21	81.75	68.08	50.36	29.68	0.00	0.00	24.00	44.87	63.53	79.11	90.69
		MIN	-195.96	-191.82	-170.30	-132.56	-81.00	0.00	0.00	-72.35	-131.15	-177.80	-209.63	-224.97
110	Live load L-PICKUP 1	MAX	134.71	122.07	101.67	75.21	44.32	0.00	0.00	35.81	66.96	94.80	118.05	135.33
		MIN	-295.67	-290.69	-258.49	-201.18	-122.78	0.00	0.00	-107.84	-195.69	-265.44	-312.64	-334.61
	L-PICKUP 2	MAX	120.42	109.12	90.88	67.23	39.62	0.00	0.00	32.03	59.90	84.81	105.60	121.06
		MIN	-263.86	-258.97	-230.51	-179.32	-109.38	0.00	0.00	-96.49	-175.06	-237.40	-279.73	-299.76
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	134.71	122.07	101.67	75.21	44.32	0.00	0.00	35.81	66.96	94.80	118.05	135.33	
	MIN	-295.67	-290.69	-258.49	-201.18	-122.78	0.00	0.00	-107.84	-195.69	-265.44	-312.64	-334.61	
111	AASHTO Twin TWIN-PICKUP	MAX	156.46	141.78	118.08	87.35	51.47	0.00	0.00	41.56	77.72	110.03	137.01	157.06
		MIN	-341.83	-336.78	-300.37	-234.27	-143.12	0.00	0.00	-125.30	-227.24	-307.85	-362.00	-386.53
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.57	6.85	5.70	4.21	2.48	0.00	0.00	2.04	3.82	5.40	6.73	7.73
		MIN	-18.40	-18.27	-16.33	-12.74	-7.76	0.00	0.00	-7.75	-13.98	-18.88	-22.03	-23.34
	TANDEM-LOAD	MAX	5.14	4.64	3.86	2.86	1.68	0.00	0.00	1.39	2.59	3.67	4.57	5.25
		MIN	-12.53	-12.41	-11.16	-8.67	-5.26	0.00	0.00	-5.26	-9.52	-12.87	-14.93	-15.95

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		3077	3078	3079	3080	3081	3082	4001	4002	4003	4004	4005	4006
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	16.26	14.71	12.23	9.04	5.33	0.00	0.00	4.39	8.20	11.61	14.47	16.63
	MIN	-37.76	-37.03	-32.95	-25.71	-15.74	0.00	0.00	-16.72	-29.84	-39.88	-46.43	-49.35
199	AASHTO-LRFD TRUCK-LOAD MAX	83.63	75.79	63.12	46.69	27.52	0.00	0.00	22.18	41.48	58.72	73.12	83.82
	MIN	-183.85	-182.38	-163.44	-127.74	-78.02	0.00	0.00	-66.86	-121.34	-164.26	-192.59	-204.51
	TANDEM-LOAD MAX	30.21	27.37	22.80	16.86	9.94	0.00	0.00	8.04	15.03	21.27	26.49	30.37
	MIN	-67.91	-67.15	-60.21	-46.76	-28.38	0.00	0.00	-24.13	-43.91	-59.59	-70.10	-74.79
	DISPERSION-LMAX	90.21	81.75	68.08	50.36	29.68	0.00	0.00	24.00	44.87	63.53	79.11	90.69
	MIN	-195.96	-191.82	-170.30	-132.56	-81.00	0.00	0.00	-72.35	-131.15	-177.80	-209.63	-224.97
300	Total Dead lWithout snow	-352.03	-366.44	-340.31	-273.66	-170.90	0.00	0.00	-168.58	-300.47	-397.39	-453.23	-465.68
301	Particular Snow	-29.01	-30.20	-28.05	-22.55	-14.08	0.00	0.00	-13.95	-24.85	-32.86	-37.47	-38.50
302	Live load Total MAX	87.56	79.35	66.08	48.89	28.81	0.00	0.00	23.28	43.52	61.62	76.73	87.96
	MIN	-192.19	-188.95	-168.02	-130.77	-79.81	0.00	0.00	-70.10	-127.20	-172.54	-203.21	-217.50
303	Sum total D+L+PP MAX	-293.48	-317.29	-302.28	-247.32	-156.17	0.00	0.00	-159.25	-281.79	-368.63	-413.98	-416.21
	MIN	-573.23	-585.59	-536.38	-426.98	-264.78	0.00	0.00	-252.63	-452.52	-602.79	-693.92	-721.67

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4007	4008	4009	4010	4011	4012	4013	4014	4015	4016	4017	4018	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-78.60	-66.40	-48.79	-28.86	-11.27	0.00	2.77	0.98	-5.79	-14.61	-22.16	-26.14	
3	Railing	-2.41	-2.04	-1.50	-0.90	-0.35	0.00	0.07	0.01	-0.21	-0.48	-0.71	-0.83	
5	Wheel guard	-23.83	-20.18	-14.89	-8.87	-3.48	0.00	0.74	0.09	-2.03	-4.72	-7.00	-8.20	
8	Steel weight	-289.33	-244.37	-179.47	-106.07	-41.39	0.00	10.32	3.84	-21.00	-53.46	-81.26	-95.94	
10	Medial strip	-39.34	-33.21	-24.58	-14.87	-6.13	0.00	2.43	2.92	1.40	-1.37	-4.10	-5.83	
19	Snow	-36.04	-30.45	-22.39	-13.28	-5.21	0.00	1.35	0.64	-2.31	-6.21	-9.58	-11.38	
31	Miscellaneous	-2.36	-1.99	-1.46	-0.86	-0.33	0.00	0.09	0.04	-0.16	-0.42	-0.65	-0.77	
100	AASHTO-LRFD TRUCK-LOAD	MAX	47.85	47.94	43.88	34.56	19.69	0.00	16.31	29.53	41.18	47.22	48.29	45.31
		MIN	-106.95	-95.50	-76.01	-50.95	-24.35	0.00	-18.70	-38.94	-64.16	-85.75	-100.15	-105.08
	TANDEM-LOAD	MAX	32.56	32.61	29.85	23.51	13.39	0.00	11.06	20.02	27.91	32.00	32.72	30.70
		MIN	-72.52	-65.02	-51.68	-34.62	-16.55	0.00	-12.72	-26.49	-43.69	-58.36	-67.99	-71.88
	DISPERSION-LMAX	MAX	97.23	97.41	89.16	70.24	40.04	0.00	42.11	79.52	118.01	145.73	162.13	167.26
		MIN	-223.03	-203.68	-167.19	-116.29	-57.92	0.00	-37.97	-78.64	-128.50	-170.78	-199.55	-211.12
110	Live load L-PICKUP 1	MAX	145.09	145.35	133.04	104.80	59.73	0.00	58.42	109.05	159.19	192.95	210.41	212.56
		MIN	-329.98	-299.18	-243.20	-167.24	-82.27	0.00	-56.67	-117.58	-192.66	-256.53	-299.70	-316.20
	L-PICKUP 2	MAX	129.79	130.02	119.01	93.75	53.43	0.00	53.18	99.54	145.93	177.73	194.84	197.95
		MIN	-295.55	-268.71	-218.87	-150.91	-74.47	0.00	-50.69	-105.13	-172.19	-229.15	-267.54	-283.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	145.09	145.35	133.04	104.80	59.73	0.00	58.42	109.05	159.19	192.95	210.41	212.56	
	MIN	-329.98	-299.18	-243.20	-167.24	-82.27	0.00	-56.67	-117.58	-192.66	-256.53	-299.70	-316.20	
111	AASHTO Twin TWIN-PICKUP	MAX	168.39	168.69	154.41	121.63	69.32	0.00	65.71	121.92	176.44	211.70	228.27	227.81
		MIN	-380.47	-344.50	-279.42	-191.35	-93.64	0.00	-65.76	-136.46	-223.46	-297.03	-346.16	-364.68
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	8.33	8.40	7.76	6.22	3.64	0.00	3.02	5.35	7.31	8.29	8.41	7.85
		MIN	-22.73	-20.14	-15.86	-10.48	-4.88	0.00	-3.76	-7.99	-13.45	-18.21	-21.44	-22.59
	TANDEM-LOAD	MAX	5.66	5.70	5.27	4.22	2.47	0.00	2.05	3.63	4.96	5.62	5.70	5.32
		MIN	-15.44	-13.74	-10.74	-7.12	-3.32	0.00	-2.55	-5.41	-9.13	-12.44	-14.54	-15.48

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4007	4008	4009	4010	4011	4012	4013	4014	4015	4016	4017	4018
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	17.90	18.05	16.69	13.37	7.84	0.00	8.24	15.23	22.25	27.23	30.15	31.06
	MIN	-48.71	-44.28	-36.14	-24.89	-12.18	0.00	-8.06	-16.92	-27.86	-37.10	-43.32	-45.80
199	AASHTO-LRFD TRUCK-LOAD MAX	89.87	90.03	82.40	64.91	36.99	0.00	30.90	55.95	78.03	89.49	91.51	85.87
	MIN	-199.71	-179.10	-143.27	-96.33	-46.12	0.00	-35.10	-72.98	-119.79	-159.25	-185.07	-194.08
	TANDEM-LOAD MAX	32.56	32.61	29.85	23.51	13.39	0.00	11.06	20.02	27.91	32.00	32.72	30.70
	MIN	-72.52	-65.02	-51.68	-34.62	-16.55	0.00	-12.72	-26.49	-43.69	-58.36	-67.99	-71.88
	DISPERSION-LMAX	97.23	97.41	89.16	70.24	40.04	0.00	42.11	79.52	118.01	145.73	162.13	167.26
	MIN	-223.03	-203.68	-167.19	-116.29	-57.92	0.00	-37.97	-78.64	-128.50	-170.78	-199.55	-211.12
300	Total Dead lWithout snow	-435.86	-368.19	-270.70	-160.43	-62.96	0.00	16.43	7.87	-27.79	-75.06	-115.87	-137.70
301	Particular Snow	-36.04	-30.45	-22.39	-13.28	-5.21	0.00	1.35	0.64	-2.31	-6.21	-9.58	-11.38
302	Live load Total MAX	94.31	94.48	86.48	68.12	38.83	0.00	37.97	70.88	103.48	125.42	136.77	138.17
	MIN	-214.49	-194.47	-158.08	-108.70	-53.48	0.00	-36.84	-76.43	-125.23	-166.75	-194.80	-205.53
303	Sum total D+L+PP MAX	-377.59	-304.16	-206.61	-105.59	-29.35	0.00	55.76	79.39	73.38	44.16	11.32	-10.92
	MIN	-686.39	-593.10	-451.17	-282.41	-121.65	0.00	-19.05	-67.91	-155.32	-248.01	-320.25	-354.61

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4019	4020	4021	4022	4023	4024	4025	4026	4027	4028	4029	4030
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
1	Pavement	-25.61	-20.80	-13.06	-4.99	-0.60	0.00	-4.56	-12.81	-25.42	-36.97	-44.53	-46.76
3	Railing	-0.81	-0.66	-0.43	-0.17	-0.03	0.00	-0.15	-0.41	-0.80	-1.15	-1.38	-1.45
5	Wheel guard	-8.03	-6.57	-4.21	-1.70	-0.27	0.00	-1.46	-4.05	-7.91	-11.41	-13.69	-14.36
8	Steel weight	-94.00	-76.30	-47.80	-18.15	-2.09	0.00	-16.69	-46.97	-93.36	-135.88	-163.73	-171.93
10	Medial strip	-6.12	-4.99	-2.87	-0.66	0.34	0.00	-2.05	-5.37	-10.29	-14.71	-17.54	-18.29
19	Snow	-11.19	-9.09	-5.69	-2.15	-0.23	0.00	-2.08	-5.80	-11.46	-16.64	-20.02	-21.01
31	Miscellaneous	-0.75	-0.61	-0.38	-0.14	-0.01	0.00	-0.13	-0.38	-0.75	-1.10	-1.33	-1.39
100	AASHTO-LRFD TRUCK-LOAD	42.28	41.69	36.85	26.95	15.16	0.00	15.37	27.33	37.25	41.88	42.21	39.78
	MIN	-100.08	-85.90	-64.51	-39.15	-18.64	0.00	-18.36	-38.52	-63.40	-84.07	-97.38	-101.82
	TANDEM-LOAD	28.68	28.28	25.00	18.29	10.30	0.00	10.44	18.56	25.30	28.44	28.66	26.98
	MIN	-67.95	-58.48	-43.90	-26.62	-12.67	0.00	-12.48	-26.20	-43.13	-57.24	-66.10	-69.62
	DISPERSION-LMAX	161.45	144.91	117.62	79.76	42.53	0.00	39.55	74.16	109.13	133.93	148.70	153.92
	MIN	-204.31	-179.73	-139.55	-88.26	-43.66	0.00	-46.90	-94.93	-150.47	-194.12	-221.25	-230.12
110	Live load L-PICKUP 1	203.73	186.60	154.46	106.71	57.70	0.00	54.93	101.49	146.38	175.81	190.91	193.71
	MIN	-304.39	-265.63	-204.06	-127.41	-62.30	0.00	-65.26	-133.45	-213.87	-278.19	-318.63	-331.94
	L-PICKUP 2	190.13	173.19	142.62	98.05	52.83	0.00	49.99	92.72	134.43	162.37	177.36	180.90
	MIN	-272.26	-238.20	-183.45	-114.88	-56.34	0.00	-59.38	-121.13	-193.60	-251.36	-287.35	-299.74
	L-PICKUP 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	203.73	186.60	154.46	106.71	57.70	0.00	54.93	101.49	146.38	175.81	190.91	193.71
	MIN	-304.39	-265.63	-204.06	-127.41	-62.30	0.00	-65.26	-133.45	-213.87	-278.19	-318.63	-331.94
111	AASHTO Twin TWIN-PICKUP	216.89	201.00	168.24	117.41	63.94	0.00	61.61	113.01	161.27	191.42	205.27	205.85
	MIN	-350.38	-305.44	-234.09	-145.52	-70.82	0.00	-73.26	-150.51	-242.14	-315.48	-361.34	-376.70
	MID-PICKUP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	7.44	7.41	6.65	4.99	2.89	0.00	2.91	5.04	6.71	7.43	7.43	7.00
	MIN	-21.48	-18.35	-13.68	-8.20	-3.84	0.00	-3.81	-8.16	-13.60	-18.18	-21.17	-22.17
	TANDEM-LOAD	5.04	5.02	4.51	3.38	1.96	0.00	1.98	3.41	4.54	5.04	5.03	4.74
	MIN	-14.57	-12.54	-9.28	-5.56	-2.61	0.00	-2.59	-5.54	-9.21	-12.42	-14.37	-15.19

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4019	4020	4021	4022	4023	4024	4025	4026	4027	4028	4029	4030
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	30.02	27.07	22.19	15.31	8.36	0.00	7.80	14.28	20.64	25.07	27.71	28.65
	MIN	-44.29	-38.93	-30.16	-18.96	-9.26	0.00	-9.90	-20.30	-32.39	-41.84	-47.68	-49.59
199	AASHTO-LRFD TRUCK-LOAD MAX	79.54	78.42	69.31	50.69	28.52	0.00	28.91	51.41	70.06	78.76	79.38	74.80
	MIN	-185.00	-159.65	-120.55	-73.43	-35.02	0.00	-34.50	-72.30	-118.57	-156.41	-180.24	-188.44
	TANDEM-LOAD MAX	28.68	28.28	25.00	18.29	10.30	0.00	10.44	18.56	25.30	28.44	28.66	26.98
	MIN	-67.95	-58.48	-43.90	-26.62	-12.67	0.00	-12.48	-26.20	-43.13	-57.24	-66.10	-69.62
	DISPERSION-LMAX	161.45	144.91	117.62	79.76	42.53	0.00	39.55	74.16	109.13	133.93	148.70	153.92
	MIN	-204.31	-179.73	-139.55	-88.26	-43.66	0.00	-46.90	-94.93	-150.47	-194.12	-221.25	-230.12
300	Total Dead lWithout snow	-135.33	-109.94	-68.74	-25.82	-2.66	0.00	-25.03	-69.98	-138.54	-201.23	-242.21	-254.18
301	Particular Snow	-11.19	-9.09	-5.69	-2.15	-0.23	0.00	-2.08	-5.80	-11.46	-16.64	-20.02	-21.01
302	Live load Total MAX	132.42	121.29	100.40	69.36	37.50	0.00	35.70	65.97	95.15	114.28	124.09	125.91
	MIN	-197.85	-172.66	-132.64	-82.81	-40.50	0.00	-42.42	-86.74	-139.02	-180.82	-207.11	-215.76
303	Sum total D+L+PP MAX	-14.09	2.26	25.97	41.40	34.62	0.00	8.59	-9.81	-54.85	-103.59	-138.14	-149.28
	MIN	-344.37	-291.69	-207.08	-110.78	-43.38	0.00	-69.53	-162.52	-289.02	-398.69	-469.34	-490.95

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4031	4032	4033	4034	4035	4036	4037	4038	4039	4040	4041	4042	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-43.32	-34.82	-22.97	-10.81	-3.42	0.00	-1.89	-7.84	-18.42	-28.89	-36.15	-38.78	
3	Railing	-1.35	-1.09	-0.72	-0.35	-0.11	0.00	-0.07	-0.26	-0.59	-0.91	-1.13	-1.21	
5	Wheel guard	-13.32	-10.76	-7.17	-3.44	-1.11	0.00	-0.66	-2.55	-5.81	-8.98	-11.17	-11.96	
8	Steel weight	-159.27	-127.98	-84.34	-39.62	-12.49	0.00	-6.88	-28.66	-67.54	-106.10	-132.85	-142.53	
10	Medial strip	-16.87	-13.52	-8.90	-4.20	-1.36	0.00	-0.53	-2.58	-6.40	-10.26	-12.96	-13.97	
19	Snow	-19.46	-15.65	-10.33	-4.87	-1.54	0.00	-0.84	-3.49	-8.22	-12.90	-16.15	-17.33	
31	Miscellaneous	-1.29	-1.03	-0.68	-0.32	-0.10	0.00	-0.05	-0.23	-0.54	-0.86	-1.07	-1.15	
100	AASHTO-LRFD TRUCK-LOAD	MAX	42.58	42.05	37.21	27.14	15.18	0.00	15.27	27.35	37.52	42.23	42.48	39.50
		MIN	-97.04	-83.51	-62.90	-38.24	-18.26	0.00	-18.21	-38.20	-62.89	-83.23	-96.13	-100.42
	TANDEM-LOAD	MAX	28.88	28.52	25.24	18.42	10.31	0.00	10.37	18.57	25.47	28.66	28.84	26.81
		MIN	-65.87	-56.85	-42.80	-26.00	-12.41	0.00	-12.38	-25.98	-42.78	-56.68	-65.24	-68.65
	DISPERSION-LMAX	MAX	149.62	135.48	110.96	75.72	40.47	0.00	41.73	78.30	115.03	140.34	154.62	158.95
		MIN	-220.24	-192.27	-148.43	-93.34	-46.03	0.00	-44.88	-91.22	-145.29	-187.74	-213.90	-222.52
110	Live load L-PICKUP 1	MAX	192.20	177.53	148.17	102.86	55.65	0.00	57.00	105.65	152.54	182.57	197.11	198.45
		MIN	-317.28	-275.78	-211.33	-131.58	-64.29	0.00	-63.10	-129.42	-208.17	-270.98	-310.03	-322.93
	L-PICKUP 2	MAX	178.49	164.00	136.21	94.14	50.78	0.00	52.11	96.87	140.49	169.00	183.46	185.77
		MIN	-286.11	-249.12	-191.23	-119.34	-58.45	0.00	-57.27	-117.20	-188.07	-244.42	-279.14	-291.17
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Live load	MAX	192.20	177.53	148.17	102.86	55.65	0.00	57.00	105.65	152.54	182.57	197.11	198.45
		MIN	-317.28	-275.78	-211.33	-131.58	-64.29	0.00	-63.10	-129.42	-208.17	-270.98	-310.03	-322.93
111	AASHTO Twin TWIN-PICKUP	MAX	206.71	193.08	162.82	114.05	62.10	0.00	63.41	116.79	167.06	197.81	211.10	209.95
		MIN	-359.95	-312.92	-239.47	-148.60	-72.32	0.00	-71.18	-146.59	-236.60	-308.41	-352.79	-367.71
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.54	7.52	6.76	5.05	2.91	0.00	2.92	5.08	6.80	7.54	7.52	6.95
		MIN	-21.08	-18.04	-13.48	-8.09	-3.79	0.00	-3.79	-8.11	-13.51	-18.04	-20.95	-21.91
	TANDEM-LOAD	MAX	5.11	5.10	4.58	3.43	1.98	0.00	1.98	3.44	4.61	5.11	5.09	4.71
		MIN	-14.29	-12.33	-9.14	-5.49	-2.58	0.00	-2.58	-5.51	-9.15	-12.32	-14.21	-15.01

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4031	4032	4033	4034	4035	4036	4037	4038	4039	4040	4041	4042
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	27.90	25.41	21.04	14.62	8.00	0.00	8.24	15.11	21.80	26.32	28.86	29.62
	MIN	-47.47	-41.45	-31.96	-19.98	-9.73	0.00	-9.52	-19.61	-31.43	-40.68	-46.36	-48.23
199	AASHTO-LRFD TRUCK-LOAD MAX	80.06	79.05	69.95	51.01	28.53	0.00	28.72	51.46	70.59	79.45	79.93	74.32
	MIN	-179.71	-155.42	-117.64	-71.77	-34.32	0.00	-34.21	-71.65	-117.60	-154.94	-178.09	-186.05
	TANDEM-LOAD MAX	28.88	28.52	25.24	18.42	10.31	0.00	10.37	18.57	25.47	28.66	28.84	26.81
	MIN	-65.87	-56.85	-42.80	-26.00	-12.41	0.00	-12.38	-25.98	-42.78	-56.68	-65.24	-68.65
	DISPERSION-LMAX	149.62	135.48	110.96	75.72	40.47	0.00	41.73	78.30	115.03	140.34	154.62	158.95
	MIN	-220.24	-192.27	-148.43	-93.34	-46.03	0.00	-44.88	-91.22	-145.29	-187.74	-213.90	-222.52
300	Total Dead lWithout snow	-235.41	-189.20	-124.79	-58.74	-18.59	0.00	-10.08	-42.12	-99.30	-155.99	-195.34	-209.60
301	Particular Snow	-19.46	-15.65	-10.33	-4.87	-1.54	0.00	-0.84	-3.49	-8.22	-12.90	-16.15	-17.33
302	Live load Total MAX	124.93	115.39	96.31	66.86	36.17	0.00	37.05	68.68	99.15	118.67	128.12	128.99
	MIN	-206.23	-179.25	-137.36	-85.53	-41.79	0.00	-41.01	-84.13	-135.31	-176.13	-201.52	-209.91
303	Sum total D+L+PP MAX	-129.94	-89.45	-38.80	3.25	16.04	0.00	26.14	23.06	-8.37	-50.22	-83.37	-97.93
	MIN	-461.10	-384.10	-272.47	-149.13	-61.92	0.00	-51.93	-129.74	-242.83	-345.02	-413.01	-436.83

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4043	4044	4045	4046	4047	4048	4049	4050	4051	4052	4053	4054	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-36.34	-29.24	-18.92	-8.32	-2.14	0.00	-3.22	-10.40	-22.17	-33.44	-41.24	-44.14	
3	Railing	-1.13	-0.92	-0.60	-0.27	-0.07	0.00	-0.11	-0.34	-0.70	-1.04	-1.28	-1.37	
5	Wheel guard	-11.23	-9.08	-5.95	-2.69	-0.73	0.00	-1.05	-3.32	-6.93	-10.34	-12.70	-13.57	
8	Steel weight	-133.55	-107.38	-69.40	-30.42	-7.80	0.00	-11.76	-38.10	-81.39	-122.86	-151.59	-162.30	
10	Medial strip	-13.10	-10.51	-6.73	-2.89	-0.70	0.00	-1.18	-3.81	-8.18	-12.37	-15.28	-16.36	
19	Snow	-16.24	-13.07	-8.46	-3.72	-0.96	0.00	-1.44	-4.66	-9.93	-14.97	-18.46	-19.76	
31	Miscellaneous	-1.08	-0.87	-0.56	-0.24	-0.06	0.00	-0.09	-0.30	-0.65	-0.99	-1.23	-1.32	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.10	40.75	36.20	26.51	14.88	0.00	14.99	26.69	36.37	40.81	41.08	38.29
		MIN	-95.85	-82.71	-62.41	-37.95	-18.09	0.00	-17.94	-37.58	-61.66	-81.47	-94.17	-98.45
	TANDEM-LOAD	MAX	27.87	27.64	24.56	17.99	10.11	0.00	10.18	18.12	24.67	27.68	27.86	25.98
		MIN	-65.06	-56.31	-42.46	-25.80	-12.30	0.00	-12.20	-25.55	-41.94	-55.47	-63.91	-67.31
	DISPERSION-LMAX	MAX	153.68	138.59	113.07	76.90	41.03	0.00	40.03	74.67	108.91	132.29	145.47	149.29
		MIN	-213.25	-186.53	-144.12	-90.57	-44.57	0.00	-45.29	-91.69	-145.19	-186.99	-212.91	-221.48
110	Live load L-PICKUP 1	MAX	194.79	179.34	149.27	103.40	55.92	0.00	55.01	101.36	145.28	173.10	186.54	187.58
		MIN	-309.10	-269.23	-206.53	-128.51	-62.66	0.00	-63.23	-129.27	-206.85	-268.45	-307.07	-319.93
	L-PICKUP 2	MAX	181.56	166.23	137.63	94.88	51.14	0.00	50.20	92.79	133.59	159.98	173.33	175.27
		MIN	-278.31	-242.84	-186.58	-116.37	-56.87	0.00	-57.49	-117.24	-187.14	-242.45	-276.81	-288.79
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	194.79	179.34	149.27	103.40	55.92	0.00	55.01	101.36	145.28	173.10	186.54	187.58	
	MIN	-309.10	-269.23	-206.53	-128.51	-62.66	0.00	-63.23	-129.27	-206.85	-268.45	-307.07	-319.93	
111	AASHTO Twin TWIN-PICKUP	MAX	207.95	193.76	163.07	114.09	62.13	0.00	61.39	112.39	159.59	188.16	200.47	199.18
		MIN	-351.79	-306.46	-234.77	-145.61	-70.71	0.00	-71.12	-146.03	-234.53	-304.87	-348.74	-363.60
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.29	7.30	6.59	4.94	2.86	0.00	2.88	4.97	6.61	7.30	7.28	6.75
		MIN	-20.89	-17.93	-13.44	-8.07	-3.77	0.00	-3.75	-8.00	-13.29	-17.69	-20.56	-21.53
	TANDEM-LOAD	MAX	4.93	4.94	4.46	3.35	1.94	0.00	1.95	3.37	4.48	4.94	4.93	4.57
		MIN	-14.17	-12.26	-9.11	-5.48	-2.57	0.00	-2.55	-5.44	-9.00	-12.09	-13.95	-14.75

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4043	4044	4045	4046	4047	4048	4049	4050	4051	4052	4053	4054
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	28.69	26.01	21.44	14.85	8.11	0.00	7.93	14.45	20.70	24.89	27.23	27.91
	MIN	-46.24	-40.47	-31.24	-19.52	-9.48	0.00	-9.61	-19.72	-31.42	-40.53	-46.15	-48.02
199	AASHTO-LRFD TRUCK-LOAD MAX	77.37	76.70	68.12	49.87	28.00	0.00	28.19	50.21	68.41	76.77	77.28	72.02
	MIN	-177.62	-153.98	-116.74	-71.22	-34.00	0.00	-33.73	-70.56	-115.39	-151.76	-174.58	-182.52
	TANDEM-LOAD MAX	27.87	27.64	24.56	17.99	10.11	0.00	10.18	18.12	24.67	27.68	27.86	25.98
	MIN	-65.06	-56.31	-42.46	-25.80	-12.30	0.00	-12.20	-25.55	-41.94	-55.47	-63.91	-67.31
	DISPERSION-LMAX	153.68	138.59	113.07	76.90	41.03	0.00	40.03	74.67	108.91	132.29	145.47	149.29
	MIN	-213.25	-186.53	-144.12	-90.57	-44.57	0.00	-45.29	-91.69	-145.19	-186.99	-212.91	-221.48
300	Total Dead lWithout snow	-196.44	-157.99	-102.17	-44.83	-11.51	0.00	-17.40	-56.27	-120.03	-181.04	-223.31	-239.06
301	Particular Snow	-16.24	-13.07	-8.46	-3.72	-0.96	0.00	-1.44	-4.66	-9.93	-14.97	-18.46	-19.76
302	Live load Total MAX	126.61	116.57	97.02	67.21	36.35	0.00	35.76	65.89	94.43	112.52	121.25	121.92
	MIN	-200.92	-175.00	-134.24	-83.53	-40.73	0.00	-41.10	-84.03	-134.45	-174.49	-199.60	-207.96
303	Sum total D+L+PP MAX	-86.06	-54.48	-13.60	18.66	23.88	0.00	16.91	4.96	-35.53	-83.50	-120.52	-136.89
	MIN	-413.59	-346.05	-244.87	-132.08	-53.20	0.00	-59.95	-144.95	-264.41	-370.51	-441.37	-466.77

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4055	4056	4057	4058	4059	4060	4061	4062	4063	4064	4065	4066	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-41.73	-34.35	-23.32	-11.41	-3.81	0.00	-1.38	-6.58	-15.75	-24.57	-30.26	-31.45	
3	Railing	-1.30	-1.07	-0.74	-0.37	-0.12	0.00	-0.05	-0.22	-0.51	-0.78	-0.95	-0.99	
5	Wheel guard	-12.85	-10.62	-7.28	-3.62	-1.23	0.00	-0.50	-2.17	-5.01	-7.69	-9.41	-9.77	
8	Steel weight	-153.41	-126.22	-85.61	-41.82	-13.95	0.00	-4.97	-24.01	-57.70	-90.17	-111.13	-115.53	
10	Medial strip	-15.45	-12.68	-8.56	-4.15	-1.38	0.00	-0.44	-2.30	-5.67	-8.94	-11.05	-11.50	
19	Snow	-18.68	-15.37	-10.44	-5.11	-1.71	0.00	-0.62	-2.95	-7.05	-10.99	-13.54	-14.07	
31	Miscellaneous	-1.24	-1.02	-0.69	-0.33	-0.11	0.00	-0.04	-0.19	-0.46	-0.72	-0.90	-0.93	
100	AASHTO-LRFD TRUCK-LOAD	MAX	41.10	40.80	36.37	26.76	15.08	0.00	14.83	26.40	36.10	40.74	41.16	42.22
		MIN	-94.08	-81.34	-61.56	-37.53	-17.91	0.00	-18.28	-38.37	-63.24	-84.06	-97.64	-102.33
	TANDEM-LOAD	MAX	27.89	27.69	24.69	18.17	10.24	0.00	10.07	17.92	24.49	27.63	27.91	28.70
		MIN	-63.86	-55.38	-41.88	-25.52	-12.18	0.00	-12.43	-26.09	-43.03	-57.23	-66.29	-69.97
	DISPERSION-LMAX	MAX	144.16	129.95	106.13	72.32	38.64	0.00	40.44	75.59	110.89	135.64	149.97	154.43
		MIN	-212.40	-186.14	-144.28	-90.99	-44.88	0.00	-42.72	-86.42	-136.75	-175.95	-199.58	-206.00
110	Live load L-PICKUP 1	MAX	185.26	170.75	142.50	99.08	53.72	0.00	55.26	102.00	147.00	176.38	191.13	196.64
		MIN	-306.49	-267.47	-205.84	-128.53	-62.79	0.00	-61.00	-124.79	-199.98	-260.00	-297.23	-308.33
	L-PICKUP 2	MAX	172.04	157.64	130.81	90.48	48.88	0.00	50.50	93.51	135.38	163.28	177.88	183.13
		MIN	-276.26	-241.51	-186.16	-116.51	-57.06	0.00	-55.15	-112.51	-179.77	-233.18	-265.87	-275.98
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	185.26	170.75	142.50	99.08	53.72	0.00	55.26	102.00	147.00	176.38	191.13	196.64	
	MIN	-306.49	-267.47	-205.84	-128.53	-62.79	0.00	-61.00	-124.79	-199.98	-260.00	-297.23	-308.33	
111	AASHTO Twin TWIN-PICKUP	MAX	199.31	186.02	157.08	110.37	60.29	0.00	61.50	112.76	160.97	191.11	204.71	210.29
		MIN	-348.16	-303.91	-233.57	-145.34	-70.71	0.00	-69.35	-142.58	-229.48	-299.10	-342.29	-355.82
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.29	7.31	6.62	5.00	2.90	0.00	2.86	4.94	6.58	7.31	7.31	7.37
		MIN	-20.56	-17.69	-13.31	-8.02	-3.76	0.00	-3.82	-8.16	-13.59	-18.17	-21.18	-22.18
	TANDEM-LOAD	MAX	4.94	4.95	4.49	3.39	1.97	0.00	1.94	3.35	4.46	4.95	4.95	5.02
		MIN	-13.95	-12.09	-9.02	-5.45	-2.56	0.00	-2.60	-5.54	-9.22	-12.42	-14.37	-15.20

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4055	4056	4057	4058	4059	4060	4061	4062	4063	4064	4065	4066
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	27.00	24.49	20.23	14.06	7.71	0.00	8.02	14.63	21.05	25.47	27.99	28.76
	MIN	-46.08	-40.42	-31.33	-19.66	-9.57	0.00	-9.18	-18.82	-29.95	-38.57	-43.73	-45.15
199	AASHTO-LRFD TRUCK-LOAD MAX	77.30	76.74	68.40	50.32	28.35	0.00	27.90	49.69	67.96	76.70	77.49	79.23
	MIN	-174.45	-151.54	-115.23	-70.50	-33.69	0.00	-34.34	-72.00	-118.23	-156.38	-180.74	-189.35
	TANDEM-LOAD MAX	27.89	27.69	24.69	18.17	10.24	0.00	10.07	17.92	24.49	27.63	27.91	28.70
	MIN	-63.86	-55.38	-41.88	-25.52	-12.18	0.00	-12.43	-26.09	-43.03	-57.23	-66.29	-69.97
	DISPERSION-LMAX	144.16	129.95	106.13	72.32	38.64	0.00	40.44	75.59	110.89	135.64	149.97	154.43
	MIN	-212.40	-186.14	-144.28	-90.99	-44.88	0.00	-42.72	-86.42	-136.75	-175.95	-199.58	-206.00
300	Total Dead lWithout snow	-225.97	-185.96	-126.19	-61.71	-20.61	0.00	-7.38	-35.47	-85.09	-132.87	-163.70	-170.17
301	Particular Snow	-18.68	-15.37	-10.44	-5.11	-1.71	0.00	-0.62	-2.95	-7.05	-10.99	-13.54	-14.07
302	Live load Total MAX	120.42	110.99	92.63	64.40	34.92	0.00	35.92	66.30	95.55	114.65	124.23	127.82
	MIN	-199.22	-173.86	-133.80	-83.54	-40.81	0.00	-39.65	-81.12	-129.99	-169.00	-193.20	-200.42
303	Sum total D+L+PP MAX	-124.23	-90.35	-44.01	-2.43	12.60	0.00	27.92	27.88	3.41	-29.22	-53.00	-56.43
	MIN	-443.86	-375.19	-270.43	-150.37	-63.13	0.00	-47.65	-119.53	-222.13	-312.87	-370.43	-384.66

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4067	4068	4069	4070	4071	4072	4073	4074	4075	4076	4077	4078	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-27.94	-20.43	-10.80	-2.39	1.02	0.00	-8.97	-23.92	-40.98	-55.74	-65.15	-67.75	
3	Railing	-0.88	-0.65	-0.36	-0.09	0.02	0.00	-0.28	-0.75	-1.27	-1.72	-2.01	-2.08	
5	Wheel guard	-8.72	-6.45	-3.53	-0.92	0.22	0.00	-2.80	-7.41	-12.59	-17.03	-19.86	-20.64	
8	Steel weight	-102.58	-74.91	-39.46	-8.58	3.88	0.00	-32.92	-87.89	-150.69	-205.05	-239.74	-249.34	
10	Medial strip	-10.19	-7.40	-3.83	-0.75	0.45	0.00	-3.28	-8.79	-15.13	-20.63	-24.15	-25.12	
19	Snow	-12.50	-9.14	-4.84	-1.08	0.46	0.00	-4.01	-10.71	-18.34	-24.94	-29.14	-30.31	
31	Miscellaneous	-0.83	-0.60	-0.31	-0.06	0.04	0.00	-0.26	-0.71	-1.22	-1.67	-1.95	-2.03	
100	AASHTO-LRFD TRUCK-LOAD	MAX	45.25	44.71	39.46	28.55	15.82	0.00	19.13	33.34	42.01	45.36	44.46	40.29
		MIN	-97.76	-84.31	-63.51	-38.58	-18.47	0.00	-23.73	-49.47	-73.31	-90.93	-99.94	-99.06
	TANDEM-LOAD	MAX	30.77	30.40	26.83	19.41	10.76	0.00	12.99	22.63	28.51	30.79	30.18	27.35
		MIN	-66.34	-57.41	-43.22	-26.24	-12.56	0.00	-16.13	-33.64	-49.85	-62.03	-68.07	-67.30
	DISPERSION-LMAX	MAX	149.31	134.42	109.21	73.72	39.02	0.00	38.81	67.63	85.20	91.98	90.15	81.69
		MIN	-195.15	-167.98	-127.01	-77.72	-37.39	0.00	-53.45	-106.70	-152.12	-183.00	-196.52	-192.31
110	Live load L-PICKUP 1	MAX	194.56	179.13	148.67	102.27	54.85	0.00	57.95	100.97	127.20	137.34	134.60	121.98
		MIN	-292.91	-252.29	-190.52	-116.30	-55.86	0.00	-77.18	-156.17	-225.44	-273.93	-296.46	-291.37
	L-PICKUP 2	MAX	180.08	164.82	136.04	93.13	49.78	0.00	51.81	90.26	113.71	122.77	120.32	109.04
		MIN	-261.49	-225.39	-170.23	-103.96	-49.95	0.00	-69.59	-140.34	-201.97	-245.03	-264.59	-259.61
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Live load	MAX	194.56	179.13	148.67	102.27	54.85	0.00	57.95	100.97	127.20	137.34	134.60	121.98	
	MIN	-292.91	-252.29	-190.52	-116.30	-55.86	0.00	-77.18	-156.17	-225.44	-273.93	-296.46	-291.37	
111	AASHTO Twin TWIN-PICKUP	MAX	210.82	196.51	164.95	114.58	61.86	0.00	67.29	117.25	147.73	159.50	156.32	141.67
		MIN	-338.49	-292.33	-221.13	-135.06	-64.86	0.00	-88.17	-179.35	-259.83	-316.50	-342.60	-337.41
	MID-PICKUP	MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	7.94	7.92	7.08	5.24	2.98	0.00	3.59	6.06	7.49	8.00	7.78	7.02
		MIN	-21.12	-18.07	-13.47	-8.06	-3.78	0.00	-4.85	-10.35	-15.59	-19.49	-21.53	-21.41
	TANDEM-LOAD	MAX	5.41	5.39	4.83	3.57	2.03	0.00	2.43	4.11	5.07	5.42	5.27	4.76
		MIN	-14.32	-12.35	-9.13	-5.47	-2.57	0.00	-3.31	-7.06	-10.60	-13.27	-14.70	-14.59

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4067	4068	4069	4070	4071	4072	4073	4074	4075	4076	4077	4078
		TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ	TRANSZ
NAME	TITLE	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)	DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	27.83	25.17	20.65	14.18	7.68	0.00	7.71	13.03	16.10	17.18	16.72	15.08
	MIN	-42.82	-36.92	-27.92	-17.00	-8.08	0.00	-11.33	-22.96	-32.95	-39.78	-42.86	-42.11
199	AASHTO-LRFD TRUCK-LOAD MAX	84.94	83.92	74.06	53.59	29.71	0.00	35.95	62.65	78.94	85.24	83.55	75.72
	MIN	-180.96	-156.84	-118.69	-72.35	-34.67	0.00	-44.51	-92.58	-136.58	-168.67	-184.14	-182.59
	TANDEM-LOAD MAX	30.77	30.40	26.83	19.41	10.76	0.00	12.99	22.63	28.51	30.79	30.18	27.35
	MIN	-66.34	-57.41	-43.22	-26.24	-12.56	0.00	-16.13	-33.64	-49.85	-62.03	-68.07	-67.30
	DISPERSION-LMAX	149.31	134.42	109.21	73.72	39.02	0.00	38.81	67.63	85.20	91.98	90.15	81.69
	MIN	-195.15	-167.98	-127.01	-77.72	-37.39	0.00	-53.45	-106.70	-152.12	-183.00	-196.52	-192.31
300	Total Dead lWithout snow	-151.13	-110.44	-58.29	-12.79	5.63	0.00	-48.52	-129.47	-221.87	-301.84	-352.84	-366.97
301	Particular Snow	-12.50	-9.14	-4.84	-1.08	0.46	0.00	-4.01	-10.71	-18.34	-24.94	-29.14	-30.31
302	Live load Total MAX	126.47	116.44	96.64	66.47	35.65	0.00	37.67	65.63	82.68	89.27	87.49	79.29
	MIN	-190.39	-163.99	-123.84	-75.60	-36.31	0.00	-50.17	-101.51	-146.53	-178.05	-192.70	-189.39
303	Sum total D+L+PP MAX	-37.17	-3.15	33.51	52.61	41.73	0.00	-14.87	-74.55	-157.53	-237.51	-294.50	-317.99
	MIN	-354.03	-283.57	-186.96	-89.46	-30.23	0.00	-102.70	-241.69	-386.74	-504.83	-574.69	-586.67

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4079	4080	4081	4082	
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	
1	Pavement	-62.90	-50.66	-31.77	0.00	
3	Railing	-1.94	-1.56	-0.98	0.00	
5	Wheel guard	-19.17	-15.48	-9.75	0.00	
8	Steel weight	-231.48	-186.40	-116.82	0.00	
10	Medial strip	-23.32	-18.75	-11.73	0.00	
19	Snow	-28.14	-22.67	-14.21	0.00	
31	Miscellaneous	-1.88	-1.52	-0.95	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	33.56	24.84	14.66	0.00
		MIN	-88.41	-68.90	-42.12	0.00
	TANDEM-LOAD	MAX	22.78	16.86	9.95	0.00
		MIN	-60.31	-46.87	-28.65	0.00
	DISPERSION-LMAX	MAX	68.04	50.37	29.73	0.00
		MIN	-170.75	-133.10	-81.59	0.00
110	Live load L-PICKUP 1	MAX	101.60	75.22	44.39	0.00
		MIN	-259.16	-201.99	-123.71	0.00
	L-PICKUP 2	MAX	90.82	67.24	39.68	0.00
		MIN	-231.05	-179.97	-110.24	0.00
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00
	Live load	MAX	101.60	75.22	44.39	0.00
		MIN	-259.16	-201.99	-123.71	0.00
	111	AASHTO Twin TWIN-PICKUP	MAX	118.00	87.35	51.55
MIN			-301.01	-235.12	-144.16	0.00
MID-PICKUP		MAX	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	5.83	4.31	2.54	0.00
		MIN	-19.07	-14.85	-9.11	0.00
	TANDEM-LOAD	MAX	3.95	2.92	1.72	0.00
		MIN	-13.02	-10.06	-6.19	0.00

Bago Bridge

BLOCK [No.1 : Structure node][NODAL DISPLACEMENT]

NODE		4079	4080	4081	4082
NAME TITLE		TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)	TRANSZ DZ (mm)
198	AASHTO FatigDISPERSION-LMAX	12.53	9.26	5.46	0.00
	MIN	-37.61	-29.57	-18.32	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	63.07	46.69	27.55	0.00
	MIN	-163.71	-128.15	-78.58	0.00
	TANDEM-LOAD MAX	22.78	16.86	9.95	0.00
	MIN	-60.31	-46.87	-28.65	0.00
	DISPERSION-LMAX	68.04	50.37	29.73	0.00
	MIN	-170.75	-133.10	-81.59	0.00
300	Total Dead lWithout snow	-340.70	-274.38	-172.00	0.00
301	Particular Snow	-28.14	-22.67	-14.21	0.00
302	Live load Total MAX	66.04	48.89	28.85	0.00
	MIN	-168.45	-131.30	-80.41	0.00
303	Sum total D+L+PP MAX	-302.79	-248.15	-157.36	0.00
	MIN	-537.29	-428.34	-266.62	0.00

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	1001			1002			1002			1003			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		344.98	-38.04	0.61	238.94	-38.04	3154.24	260.14	15.60	3153.81	161.94	15.60	5264.89	
3	Railing		14.11	-12.96	0.21	5.17	-12.96	104.34	10.03	-7.66	104.34	1.76	-7.66	163.34	
5	Wheel guard		139.65	-128.26	2.07	51.23	-128.26	1032.97	99.32	-75.82	1032.99	17.45	-75.82	1617.04	
8	Steel weight		1227.61	0.80	-0.01	905.12	0.80	11518.21	932.90	154.61	11516.46	634.30	154.61	19354.97	
10	Medial strip		163.91	119.72	-1.94	163.91	119.72	1768.53	116.67	87.54	1768.59	116.67	87.54	2935.68	
19	Snow		160.44	-15.53	0.25	111.55	-15.53	1469.22	119.87	7.08	1469.07	74.59	7.08	2441.66	
31	Miscellaneous		8.37	5.49	-0.09	8.37	5.49	90.37	6.65	5.05	90.35	6.65	5.05	156.89	
100	AASHTO-LRFD TRUCK-LOAD	MAX	696.80	628.73	10.45	480.11	628.73	5184.02	580.22	614.00	5178.49	417.35	614.00	8302.93	
		MIN	-48.22	-646.37	-10.16	-227.07	-646.37	-520.83	-125.53	-617.85	-520.70	-300.20	-617.85	-1010.72	
		TANDEM-LOAD MAX	509.70	433.56	7.18	342.90	433.56	3702.28	423.29	420.82	3697.48	300.29	420.82	5867.50	
		MIN	-32.81	-443.94	-7.01	-189.63	-443.94	-354.31	-102.80	-431.34	-354.22	-233.36	-431.34	-687.62	
		DISPERSION-LMAX	632.38	944.83	16.39	510.29	944.83	5936.12	521.13	963.79	5935.49	429.07	963.79	10187.85	
		MIN	-87.22	-1013.53	-15.28	-129.03	-1013.53	-942.01	-107.03	-945.02	-941.78	-169.27	-945.02	-1827.65	
110	Live load	L-PICKUP 1	MAX	1329.18	1573.57	26.84	990.40	1573.57	11120.14	1101.35	1577.79	11113.98	846.42	1577.79	18490.79
		MIN	-135.44	-1659.90	-25.44	-356.11	-1659.90	-1462.83	-232.55	-1562.87	-1462.48	-469.47	-1562.87	-2838.36	
		L-PICKUP 2	MAX	1142.08	1378.40	23.56	853.19	1378.40	9638.41	944.42	1384.61	9632.97	729.36	1384.61	16055.36
		MIN	-120.03	-1457.47	-22.28	-318.67	-1457.47	-1296.31	-209.83	-1376.37	-1296.00	-402.63	-1376.37	-2515.27	
		L-PICKUP 3	MAX	1329.18	1573.57	26.84	990.40	1573.57	11120.14	1101.35	1577.79	11113.98	846.42	1577.79	18490.79
		MIN	-160.00	-1952.66	-29.98	-356.11	-1952.66	-1728.09	-235.18	-1829.90	-1727.68	-469.47	-1829.90	-3353.11	
111	AASHTO Twin	TWIN-PICKUP	MAX	1488.99	1854.12	31.57	1147.39	1854.12	12792.57	1231.31	1858.69	12788.49	972.28	1858.69	21255.60
		MIN	-160.00	-1952.66	-29.98	-351.87	-1952.66	-1728.09	-235.18	-1829.90	-1727.68	-448.40	-1829.90	-3353.11	
		MID-PICKUP	MAX	1488.99	1854.12	31.57	1147.39	1854.12	12792.57	1231.31	1858.69	12788.49	972.28	1858.69	21255.60
198	AASHTO Fatig	TRUCK-LOAD	MAX	377.17	275.89	6.44	166.30	275.89	1802.16	293.55	276.73	1799.99	137.40	276.73	2483.90
		MIN	-8.50	-398.45	-4.46	-187.35	-398.45	-92.01	-72.11	-380.35	-92.15	-230.49	-380.35	-173.29	
		TANDEM-LOAD	MAX	291.09	187.16	4.44	125.12	187.16	1355.38	226.86	189.23	1353.08	105.58	189.23	1833.82
		MIN	-5.77	-274.61	-3.03	-162.60	-274.61	-62.46	-62.58	-263.28	-62.55	-184.17	-263.28	-117.76	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001			1002			1002			1003		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	222.48	477.15	10.25	143.64	477.15	1731.08	160.06	490.93	1735.22	102.19	490.93	2578.86
	MIN	-16.26	-633.78	-7.71	-52.84	-633.78	-176.05	-29.64	-577.49	-176.30	-80.07	-577.49	-331.58
199	AASHTO-LRFD TRUCK-LOAD MAX	1022.06	1115.30	18.69	764.59	1115.30	8277.84	846.99	1101.43	8273.95	651.24	1101.43	13429.48
	MIN	-90.56	-1156.09	-18.03	-261.93	-1156.09	-978.10	-154.28	-1088.20	-977.86	-328.96	-1088.20	-1898.03
	TANDEM-LOAD MAX	509.70	433.56	7.18	342.90	433.56	3702.28	423.29	420.82	3697.48	300.29	420.82	5867.50
	MIN	-32.81	-443.94	-7.01	-189.63	-443.94	-354.31	-102.80	-431.34	-354.22	-233.36	-431.34	-687.62
	DISPERSION-LMAX	632.38	944.83	16.39	510.29	944.83	5936.12	521.13	963.79	5935.49	429.07	963.79	10187.85
	MIN	-87.22	-1013.53	-15.28	-129.03	-1013.53	-942.01	-107.03	-945.02	-941.78	-169.27	-945.02	-1827.65
300	Total Dead lWithout snow	1898.63	-53.24	0.86	1372.75	-53.24	17668.65	1425.73	179.31	17666.55	938.78	179.31	29492.80
301	Particular Snow	160.44	-15.53	0.25	111.55	-15.53	1469.22	119.87	7.08	1469.07	74.59	7.08	2441.66
302	Live load Total MAX	863.97	1022.82	17.44	643.76	1022.82	7228.09	715.88	1025.57	7224.09	550.17	1025.57	12019.01
	MIN	-104.00	-1269.23	-19.48	-231.47	-1269.23	-1123.26	-152.87	-1189.44	-1122.99	-305.16	-1189.44	-2179.52
303	Sum total D+L+PP MAX	2923.04	1007.28	18.55	2128.05	1007.28	26365.96	2261.47	1211.96	26359.70	1563.54	1211.96	43953.48
	MIN	1923.88	-1338.01	-19.23	1183.39	-1338.01	17677.63	1346.87	-1182.36	17675.73	616.66	-1182.36	29101.09

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003			1004			1004			1005		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	180.44	32.92	5264.46	82.24	32.92	6578.30	105.03	60.17	6577.62	6.83	60.17	7137.07
3	Railing	7.90	-3.14	163.22	-0.37	-3.14	200.86	5.78	0.00	200.78	-2.49	0.00	217.28
5	Wheel guard	78.19	-31.09	1615.91	-3.69	-31.09	1988.52	57.26	0.02	1987.73	-24.61	0.02	2151.04
8	Steel weight	635.91	170.71	19354.56	337.31	170.71	24222.24	356.00	243.44	24220.41	57.40	243.44	26288.02
10	Medial strip	56.74	35.26	2936.99	56.74	35.26	3504.62	10.48	19.89	3505.01	10.48	19.89	3609.89
19	Snow	81.86	13.16	2441.51	36.58	13.16	3033.86	46.71	25.12	3033.56	1.43	25.12	3274.34
31	Miscellaneous	4.09	3.33	156.93	4.09	3.33	197.82	1.71	2.85	197.83	1.71	2.85	214.96
100	AASHTO-LRFD TRUCK-LOAD	514.99	546.17	8300.55	356.47	546.17	10252.03	468.02	530.70	10249.64	306.78	530.70	11252.16
	MIN	-175.16	-551.89	-1010.66	-342.91	-551.89	-1494.20	-214.40	-458.21	-1494.04	-384.80	-458.21	-1980.16
	TANDEM-LOAD	378.26	379.46	5865.64	258.94	379.46	7218.43	346.97	368.99	7216.80	225.60	368.99	7919.73
	MIN	-136.16	-383.07	-687.59	-262.67	-383.07	-1016.56	-162.93	-317.07	-1016.44	-292.42	-317.07	-1347.17
	DISPERSION-LMAX	421.51	798.86	10186.86	335.32	798.86	13187.19	333.75	634.06	13185.55	251.28	634.06	14997.83
	MIN	-129.93	-752.50	-1827.55	-200.73	-752.50	-2701.60	-160.29	-543.01	-2701.30	-236.97	-543.01	-3579.97
110	Live load L-PICKUP 1	936.50	1345.03	18487.41	691.79	1345.03	23439.22	801.76	1164.76	23435.20	558.06	1164.76	26249.99
	MIN	-305.09	-1304.39	-2838.21	-543.63	-1304.39	-4195.80	-374.70	-1001.22	-4195.33	-621.76	-1001.22	-5560.13
	L-PICKUP 2	799.78	1178.32	16052.50	594.26	1178.32	20405.62	680.72	1003.05	20402.35	476.88	1003.05	22917.56
	MIN	-266.09	-1135.57	-2515.13	-463.39	-1135.57	-3718.15	-323.22	-860.08	-3717.74	-529.38	-860.08	-4927.14
	L-PICKUP 3	-293.80	-1507.55	-3352.92	-530.68	-1507.55	-4956.81	-368.64	-1153.69	-4956.26	-626.20	-1153.69	-6568.68
	Live load	936.50	1345.03	18487.41	691.79	1345.03	23439.22	801.76	1164.76	23435.20	558.06	1164.76	26249.99
	MIN	-305.09	-1507.55	-3352.92	-543.63	-1507.55	-4956.81	-374.70	-1153.69	-4956.26	-626.20	-1153.69	-6568.68
111	AASHTO Twin TWIN-PICKUP	1032.63	1553.33	21253.31	784.36	1553.33	26913.40	867.51	1308.83	26909.99	621.01	1308.83	29960.36
	MIN	-293.80	-1507.55	-3352.92	-530.68	-1507.55	-4956.81	-368.64	-1153.69	-4956.26	-626.20	-1153.69	-6568.68
	MID-PICKUP	-293.80	-1507.55	-3352.92	-530.68	-1507.55	-4956.81	-368.64	-1153.69	-4956.26	-626.20	-1153.69	-6568.68
198	AASHTO FatigTRUCK-LOAD	275.87	227.87	2477.42	125.83	227.87	2843.78	265.32	176.26	2837.05	117.00	176.26	2992.81
	MIN	-93.31	-320.34	-173.29	-244.67	-320.34	-253.07	-105.37	-257.06	-253.04	-229.67	-257.06	-332.93
	TANDEM-LOAD	213.66	155.78	1828.89	97.59	155.78	2084.48	206.15	121.02	2079.40	91.61	121.02	2190.24
	MIN	-76.28	-222.22	-117.76	-192.54	-222.22	-172.06	-84.01	-178.24	-172.04	-198.61	-178.24	-226.42

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003			1004			1004			1005		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	141.04	404.69	2575.25	84.91	404.69	3106.16	123.77	315.97	3102.03	68.03	315.97	3377.74
	MIN	-39.41	-468.99	-331.57	-93.90	-468.99	-484.25	-50.04	-348.19	-484.20	-106.38	-348.19	-637.09
199	AASHTO-LRFD TRUCK-LOAD MAX	725.86	927.06	13427.93	536.19	927.06	16716.58	630.16	820.20	16714.43	438.74	820.20	18291.46
	MIN	-196.51	-922.56	-1897.92	-388.92	-922.56	-2805.97	-249.31	-738.87	-2805.66	-458.81	-738.87	-3718.55
	TANDEM-LOAD MAX	378.26	379.46	5865.64	258.94	379.46	7218.43	346.97	368.99	7216.80	225.60	368.99	7919.73
	MIN	-136.16	-383.07	-687.59	-262.67	-383.07	-1016.56	-162.93	-317.07	-1016.44	-292.42	-317.07	-1347.17
	DISPERSION-LMAX	421.51	798.86	10186.86	335.32	798.86	13187.19	333.75	634.06	13185.55	251.28	634.06	14997.83
	MIN	-129.93	-752.50	-1827.55	-200.73	-752.50	-2701.60	-160.29	-543.01	-2701.30	-236.97	-543.01	-3579.97
300	Total Dead lWithout snow	963.27	207.98	29492.08	476.33	207.98	36692.36	536.27	326.37	36689.38	49.32	326.37	39618.25
301	Particular Snow	81.86	13.16	2441.51	36.58	13.16	3033.86	46.71	25.12	3033.56	1.43	25.12	3274.34
302	Live load Total MAX	608.72	874.27	12016.82	449.67	874.27	15235.49	521.15	757.10	15232.88	362.74	757.10	17062.49
	MIN	-198.31	-979.91	-2179.40	-353.36	-979.91	-3221.93	-243.55	-749.90	-3221.57	-407.03	-749.90	-4269.64
303	Sum total D+L+PP MAX	1653.85	1095.41	43950.41	962.57	1095.41	54961.71	1104.13	1108.59	54955.82	413.49	1108.59	59955.09
	MIN	787.33	-966.75	29100.37	53.53	-966.75	35537.71	266.36	-623.38	35534.90	-405.60	-623.38	37342.07

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1005	1006			1007			1006			1007		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	29.76	37.40	7136.73	-68.43	37.40	6943.32	-38.66	-28.38	6942.95	-136.83	-28.38	6065.52
3	Railing	3.55	0.61	217.23	-4.72	0.61	211.38	1.44	-0.56	211.36	-6.83	-0.56	184.41
5	Wheel guard	35.15	6.02	2150.58	-46.73	6.02	2092.68	14.26	-5.57	2092.48	-67.62	-5.57	1825.66
8	Steel weight	78.11	144.05	26287.22	-220.49	144.05	25575.24	-173.55	-108.15	25573.97	-472.15	-108.15	22345.42
10	Medial strip	-25.43	-0.31	3609.78	-25.43	-0.31	3355.41	-51.68	-31.08	3354.92	-51.68	-31.08	2838.07
19	Snow	12.41	15.04	3274.16	-32.86	15.04	3171.90	-18.27	-14.21	3171.70	-63.54	-14.21	2762.62
31	Miscellaneous	-0.58	1.43	214.97	-0.58	1.43	209.12	-2.63	-1.03	209.11	-2.63	-1.03	182.85
100	AASHTO-LRFD TRUCK-LOAD	429.37	513.87	11250.84	262.49	513.87	11378.02	404.54	463.94	11377.08	231.42	463.94	10879.78
	MIN	-256.29	-440.44	-1980.05	-427.77	-440.44	-2478.55	-297.58	-521.38	-2478.47	-470.57	-521.38	-3031.18
	TANDEM-LOAD	321.81	358.94	7918.71	195.75	358.94	8029.43	306.17	323.94	8028.70	175.13	323.94	7667.68
	MIN	-191.59	-308.11	-1347.10	-323.91	-308.11	-1686.24	-220.15	-364.35	-1686.19	-351.08	-364.35	-2062.22
	DISPERSION-LMAX	260.78	498.69	14996.78	181.50	498.69	15623.58	218.03	444.48	15622.76	140.84	444.48	15237.46
	MIN	-207.88	-440.23	-3579.76	-289.51	-440.23	-4480.82	-275.72	-488.29	-4480.65	-360.14	-488.29	-5479.81
110	Live load L-PICKUP 1	690.16	1012.56	26247.62	443.99	1012.56	27001.60	622.56	908.42	26999.84	372.26	908.42	26117.25
	MIN	-464.17	-880.67	-5559.81	-717.28	-880.67	-6959.37	-573.30	-1009.68	-6959.12	-830.72	-1009.68	-8510.99
	L-PICKUP 2	582.59	857.63	22915.49	377.25	857.63	23653.01	524.19	768.42	23651.45	315.97	768.42	22905.14
	MIN	-399.47	-748.33	-4926.86	-613.42	-748.33	-6167.06	-495.87	-852.64	-6166.84	-711.22	-852.64	-7542.02
	L-PICKUP 3	-480.51	-964.05	-6568.30	-742.81	-964.05	-8221.77	-618.23	-1135.06	-8221.49	-879.22	-1135.06	-10054.88
	Live load	690.16	1012.56	26247.62	443.99	1012.56	27001.60	622.56	908.42	26999.84	372.26	908.42	26117.25
	MIN	-480.51	-964.05	-6568.30	-742.81	-964.05	-8221.77	-618.23	-1135.06	-8221.49	-879.22	-1135.06	-10054.88
111	AASHTO Twin TWIN-PICKUP	727.70	1131.06	29957.08	479.82	1131.06	30620.60	637.02	1013.93	30621.11	386.39	1013.93	29596.64
	MIN	-480.51	-964.05	-6568.30	-742.81	-964.05	-8221.77	-618.23	-1135.06	-8221.49	-879.22	-1135.06	-10054.88
	MID-PICKUP	-480.51	-964.05	-6568.30	-742.81	-964.05	-8221.77	-618.23	-1135.06	-8221.49	-879.22	-1135.06	-10054.88
198	AASHTO FatigTRUCK-LOAD	257.03	156.48	2986.41	109.16	156.48	2977.49	252.20	202.32	2975.37	103.44	202.32	2860.80
	MIN	-102.57	-209.64	-332.79	-262.27	-209.64	-414.82	-119.14	-168.41	-414.57	-267.39	-168.41	-506.66
	TANDEM-LOAD	200.47	111.27	2185.53	86.25	111.27	2181.71	197.31	141.06	2179.93	82.59	141.06	2098.25
	MIN	-89.75	-146.61	-226.33	-204.02	-146.61	-282.16	-92.95	-119.58	-281.99	-207.60	-119.58	-344.64

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1005			1006			1006			1007		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	107.69	267.92	3372.70	51.75	267.92	3426.64	99.16	265.46	3424.71	43.60	265.46	3304.78
	MIN	-61.39	-269.57	-636.83	-118.80	-269.57	-793.81	-73.21	-269.04	-793.32	-130.79	-269.04	-969.59
199	AASHTO-LRFD TRUCK-LOAD MAX	547.77	758.04	18288.86	351.63	758.04	18399.31	489.78	682.11	18400.70	288.49	682.11	17647.69
	MIN	-326.02	-630.94	-3718.35	-535.83	-630.94	-4654.48	-411.20	-772.89	-4654.34	-616.77	-772.89	-5692.28
	TANDEM-LOAD MAX	321.81	358.94	7918.71	195.75	358.94	8029.43	306.17	323.94	8028.70	175.13	323.94	7667.68
	MIN	-191.59	-308.11	-1347.10	-323.91	-308.11	-1686.24	-220.15	-364.35	-1686.19	-351.08	-364.35	-2062.22
	DISPERSION-LMAX	260.78	498.69	14996.78	181.50	498.69	15623.58	218.03	444.48	15622.76	140.84	444.48	15237.46
	MIN	-207.88	-440.23	-3579.76	-289.51	-440.23	-4480.82	-275.72	-488.29	-4480.65	-360.14	-488.29	-5479.81
300	Total Dead lWithout snow	120.55	189.20	39616.50	-366.38	189.20	38387.15	-250.83	-174.76	38384.78	-737.74	-174.76	33441.94
301	Particular Snow	12.41	15.04	3274.16	-32.86	15.04	3171.90	-18.27	-14.21	3171.70	-63.54	-14.21	2762.62
302	Live load Total MAX	448.60	658.17	17060.95	288.59	658.17	17551.04	404.67	590.47	17549.90	241.97	590.47	16976.21
	MIN	-312.33	-626.63	-4269.40	-482.83	-626.63	-5344.15	-401.85	-737.79	-5343.97	-571.50	-737.79	-6535.67
303	Sum total D+L+PP MAX	581.57	862.40	59951.62	-24.07	862.40	59110.09	256.97	576.27	59106.38	-486.73	576.27	53180.77
	MIN	-273.07	-610.38	37340.45	-882.07	-610.38	34611.65	-670.95	-926.76	34609.32	-1372.78	-926.76	27708.19

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	1007			1008			1008			1009				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-130.26	-32.10	6065.52	-228.43	-32.10	4272.04	-212.47	-25.06	4272.04	-310.65	-25.06	1656.44		
3	Railing	-1.26	0.47	184.41	-9.53	0.47	130.42	-3.67	2.33	130.42	-11.94	2.33	52.36		
5	Wheel guard	-12.51	4.65	1825.66	-94.39	4.65	1291.19	-36.34	23.02	1291.19	-118.22	23.02	518.41		
8	Steel weight	-512.05	-135.54	22345.42	-810.65	-135.54	15731.94	-816.06	-129.17	15731.94	-1114.66	-129.17	6078.34		
10	Medial strip	-87.83	-34.41	2838.07	-87.83	-34.41	1959.74	-119.53	-38.95	1959.74	-119.53	-38.95	764.48		
19	Snow	-59.35	-15.06	2762.62	-104.61	-15.06	1942.83	-96.12	-11.12	1942.83	-141.39	-11.12	755.25		
31	Miscellaneous	-5.43	-1.79	182.85	-5.43	-1.79	128.50	-7.97	-2.51	128.50	-7.97	-2.51	48.83		
100	AASHTO-LRFD TRUCK-LOAD	MAX	343.98	474.71	10879.78	170.27	474.71	9365.53	295.80	496.16	9365.53	121.52	496.16	7032.78	
		MIN	-371.53	-538.63	-3031.18	-545.93	-538.63	-3509.30	-438.17	-550.99	-3509.30	-614.79	-550.99	-3837.15	
		TANDEM-LOAD	MAX	265.16	330.77	7667.68	132.86	330.77	6621.20	232.51	345.25	6621.20	98.14	345.25	5029.11
		MIN	-270.00	-376.03	-2062.22	-402.41	-376.03	-2387.49	-314.89	-384.45	-2387.49	-449.59	-384.45	-2610.55	
		DISPERSION-L	MAX	157.88	528.17	15237.46	87.83	528.17	13229.77	114.30	672.64	13229.77	51.31	672.64	9612.46
		MIN	-364.66	-575.84	-5479.81	-456.09	-575.84	-6344.48	-455.47	-708.92	-6344.48	-553.80	-708.92	-6938.01	
110	Live load	L-PICKUP 1	MAX	501.86	1002.88	26117.24	258.10	1002.88	22595.30	410.10	1168.80	22595.30	172.82	1168.80	16645.24
		MIN	-736.19	-1114.47	-8510.99	-1002.02	-1114.47	-9853.78	-893.64	-1259.91	-9853.78	-1168.59	-1259.91	-10775.16	
		L-PICKUP 2	MAX	423.04	858.94	22905.14	220.69	858.94	19850.97	346.80	1017.89	19850.97	149.44	1017.89	14641.57
		MIN	-634.66	-951.87	-7542.02	-858.49	-951.87	-8731.97	-770.36	-1093.37	-8731.97	-1003.39	-1093.37	-9548.56	
		L-PICKUP 3	MAX	-825.33	-1258.88	-10054.88	-1095.30	-1258.88	-11641.16	-1026.14	-1431.79	-11641.16	-1305.00	-1431.79	-12729.42
		MIN	501.86	1002.88	26117.24	258.10	1002.88	22595.30	410.10	1168.80	22595.30	172.82	1168.80	16645.24	
111	AASHTO Twin	TWIN-PICKUP	MAX	491.81	1134.44	29596.64	252.37	1134.44	25447.76	389.04	1344.60	25447.76	160.76	1344.60	18348.96
		MIN	-825.33	-1258.88	-10054.88	-1095.30	-1258.88	-11641.16	-1026.14	-1431.79	-11641.16	-1305.00	-1431.79	-12729.42	
		MID-PICKUP	MAX	-825.33	-1258.88	-10054.88	-1095.30	-1258.88	-11641.16	-1026.14	-1431.79	-11641.16	-1305.00	-1431.79	-12729.42
198	AASHTO Fatig	TRUCK-LOAD	MAX	238.52	253.33	2860.80	88.49	253.33	2526.68	224.55	298.29	2526.68	73.33	298.29	2015.20
		MIN	-131.89	-165.19	-506.66	-282.23	-165.19	-590.39	-145.29	-210.52	-590.39	-297.71	-210.52	-660.99	
		TANDEM-LOAD	MAX	188.45	175.57	2098.25	72.13	175.57	1863.46	179.53	207.05	1863.46	61.16	207.05	1510.88
		MIN	-101.67	-113.45	-344.64	-218.05	-113.45	-401.50	-110.52	-143.98	-401.50	-229.06	-143.98	-449.13	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1007			1008			1008			1009		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	84.25	333.09	3304.78	31.39	333.09	2870.87	70.95	415.75	2870.87	21.86	415.75	2122.48
	MIN	-93.13	-303.06	-969.58	-151.51	-303.06	-1129.80	-118.31	-352.82	-1129.80	-177.83	-352.82	-1264.08
199	AASHTO-LRFD TRUCK-LOAD MAX	388.57	732.32	17647.70	192.58	732.32	15045.51	317.97	821.36	15045.51	127.32	821.36	10775.27
	MIN	-552.38	-822.92	-5692.28	-760.91	-822.92	-6590.14	-684.68	-881.97	-6590.14	-896.20	-881.97	-7205.80
	TANDEM-LOAD MAX	265.16	330.77	7667.68	132.86	330.77	6621.20	232.51	345.25	6621.20	98.14	345.25	5029.11
	MIN	-270.00	-376.03	-2062.22	-402.41	-376.03	-2387.49	-314.89	-384.45	-2387.49	-449.59	-384.45	-2610.55
	DISPERSION-LMAX	157.88	528.17	15237.46	87.83	528.17	13229.77	114.30	672.64	13229.77	51.31	672.64	9612.46
	MIN	-364.66	-575.84	-5479.81	-456.09	-575.84	-6344.48	-455.47	-708.92	-6344.48	-553.80	-708.92	-6938.01
300	Total Dead lWithout snow	-749.35	-198.73	33441.93	-1236.27	-198.73	23513.83	-1196.04	-170.34	23513.83	-1682.96	-170.34	9118.86
301	Particular Snow	-59.35	-15.06	2762.62	-104.61	-15.06	1942.83	-96.12	-11.12	1942.83	-141.39	-11.12	755.25
302	Live load Total MAX	326.21	651.87	16976.21	167.77	651.87	14686.95	266.56	759.72	14686.95	112.33	759.72	10819.41
	MIN	-536.47	-818.27	-6535.67	-711.94	-818.27	-7566.75	-666.99	-930.67	-7566.75	-848.25	-930.67	-8274.13
303	Sum total D+L+PP MAX	-384.63	633.65	53180.76	-1122.79	633.65	40143.61	-945.63	748.60	40143.61	-1678.31	748.60	20693.51
	MIN	-1345.16	-1032.06	27708.18	-2052.83	-1032.06	15619.88	-1959.15	-1112.13	15619.88	-2672.60	-1112.13	-882.26

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	1009			1010			1010			1011			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-270.99	24.68	1656.44	-369.16	24.68	-1544.28	-345.66	47.51	-1544.28	-443.83	47.51	-5491.71	
3	Railing		-5.28	6.64	52.36	-13.55	6.64	-41.74	-7.81	11.13	-41.74	-16.08	11.13	-161.23	
5	Wheel guard		-52.23	65.77	518.41	-134.10	65.77	-413.24	-77.36	110.16	-413.24	-159.23	110.16	-1596.19	
8	Steel weight		-1033.74	20.57	6078.34	-1332.34	20.57	-5752.05	-1305.67	59.43	-5752.05	-1604.27	59.43	-20301.73	
10	Medial strip		-141.28	-34.83	764.48	-141.28	-34.83	-648.32	-166.84	-50.60	-648.32	-166.84	-50.60	-2316.77	
19	Snow		-122.14	12.28	755.25	-167.40	12.28	-692.47	-155.57	23.63	-692.47	-200.83	23.63	-2474.46	
31	Miscellaneous		-9.83	-2.58	48.83	-9.83	-2.58	-49.48	-11.93	-4.01	-49.48	-11.93	-4.01	-168.80	
100	AASHTO-LRFD TRUCK-LOAD	MAX	273.74	564.85	7032.78	99.56	564.85	4507.75	261.05	650.12	4507.75	86.68	650.12	2348.32	
		MIN	-467.88	-523.34	-3837.15	-645.54	-523.34	-4158.29	-497.98	-583.16	-4158.29	-676.15	-583.16	-4670.74	
		TANDEM-LOAD MAX	217.77	391.65	5029.11	82.36	391.65	3323.88	208.16	447.62	3323.88	73.14	447.62	1855.92	
		MIN	-334.67	-364.61	-2610.55	-470.58	-364.61	-2828.19	-355.54	-401.34	-2828.19	-491.10	-401.34	-3174.84	
		DISPERSION-LMAX	99.86	840.13	9612.46	41.03	840.13	5313.74	107.57	1040.08	5313.74	54.09	1040.08	3138.47	
		MIN	-537.43	-796.02	-6938.01	-639.78	-796.02	-7810.29	-667.77	-959.27	-7810.29	-775.32	-959.27	-12059.75	
110	Live load	L-PICKUP 1	MAX	373.61	1404.98	16645.24	140.59	1404.98	9821.48	368.62	1690.20	9821.48	140.77	1690.20	5486.79
		MIN	-1005.31	-1319.37	-10775.16	-1285.32	-1319.37	-11968.58	-1165.75	-1542.43	-11968.58	-1451.46	-1542.43	-16730.49	
		L-PICKUP 2	MAX	317.64	1231.78	14641.57	123.40	1231.78	8637.62	315.73	1487.70	8637.62	127.23	1487.70	4994.39
		MIN	-872.10	-1160.63	-9548.56	-1110.35	-1160.63	-10638.48	-1023.31	-1360.61	-10638.48	-1266.42	-1360.61	-15234.59	
		L-PICKUP 3	MAX	-1160.79	-1533.52	-12729.42	-1442.36	-1533.52	-14057.20	-1337.35	-1810.05	-14057.20	-1622.19	-1810.05	-18740.50
		MIN	373.61	1404.98	16645.24	140.59	1404.98	9821.48	368.62	1690.20	9821.48	140.77	1690.20	5486.79	
111	AASHTO Twin	TWIN-PICKUP	MAX	345.32	1640.09	18348.96	121.26	1640.09	10022.37	324.82	1983.70	10022.37	109.93	1983.70	5071.82
		MIN	-1160.79	-1533.52	-12729.42	-1442.36	-1533.52	-14057.20	-1337.35	-1810.05	-14057.20	-1622.19	-1810.05	-18740.50	
		MID-PICKUP	MAX	-1160.79	-1533.52	-12729.42	-1442.36	-1533.52	-14057.20	-1337.35	-1810.05	-14057.20	-1622.19	-1810.05	-18740.50
		MIN	345.32	1640.09	18348.96	121.26	1640.09	10022.37	324.82	1983.70	10022.37	109.93	1983.70	5071.82	
		MID-PICKUP	MAX	215.49	336.96	2015.20	64.65	336.96	1471.42	202.07	363.39	1471.42	52.54	363.39	931.47
		MIN	-154.25	-233.50	-660.99	-307.18	-233.50	-760.19	-167.35	-242.21	-760.19	-319.59	-242.21	-992.08	
198	AASHTO Fatig	TRUCK-LOAD	MAX	173.55	233.30	1510.88	54.72	233.30	1145.98	164.10	251.35	1145.98	46.72	251.35	783.49
		MIN	-116.48	-159.58	-449.13	-235.62	-159.58	-515.51	-125.89	-164.46	-515.51	-243.65	-164.46	-673.61	
		TANDEM-LOAD	MAX	173.55	233.30	1510.88	54.72	233.30	1145.98	164.10	251.35	1145.98	46.72	251.35	783.49
		MIN	-116.48	-159.58	-449.13	-235.62	-159.58	-515.51	-125.89	-164.46	-515.51	-243.65	-164.46	-673.61	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1009			1010			1010			1011		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	66.13	507.76	2122.48	19.42	507.76	1331.63	70.63	629.29	1331.63	27.27	629.29	778.36
	MIN	-145.46	-403.63	-1264.08	-206.43	-403.63	-1592.57	-196.94	-491.37	-1592.57	-260.42	-491.37	-3037.26
199	AASHTO-LRFD TRUCK-LOAD MAX	283.82	982.19	10775.27	93.70	982.19	5822.23	253.35	1164.03	5822.23	68.05	1164.03	2496.88
	MIN	-752.33	-907.89	-7205.80	-962.84	-907.89	-7808.82	-818.18	-1051.90	-7808.82	-1027.11	-1051.90	-8763.03
	TANDEM-LOAD MAX	217.77	391.65	5029.11	82.36	391.65	3323.88	208.16	447.62	3323.88	73.14	447.62	1855.92
	MIN	-334.67	-364.61	-2610.55	-470.58	-364.61	-2828.19	-355.54	-401.34	-2828.19	-491.10	-401.34	-3174.84
	DISPERSION-LMAX	99.86	840.13	9612.46	41.03	840.13	5313.74	107.57	1040.08	5313.74	54.09	1040.08	3138.47
	MIN	-537.43	-796.02	-6938.01	-639.78	-796.02	-7810.29	-667.77	-959.27	-7810.29	-775.32	-959.27	-12059.75
300	Total Dead lWithout snow	-1513.34	80.26	9118.86	-2000.26	80.26	-8449.12	-1915.27	173.62	-8449.12	-2402.19	173.62	-30036.43
301	Particular Snow	-122.14	12.28	755.25	-167.40	12.28	-692.47	-155.57	23.63	-692.47	-200.83	23.63	-2474.46
302	Live load Total MAX	242.85	913.24	10819.41	91.39	913.24	6383.96	239.60	1098.63	6383.96	91.50	1098.63	3566.41
	MIN	-754.51	-996.79	-8274.13	-937.53	-996.79	-9137.18	-869.28	-1176.54	-9137.18	-1054.42	-1176.54	-12181.33
303	Sum total D+L+PP MAX	-1319.78	1005.78	20693.51	-2048.86	1005.78	-842.43	-1759.36	1295.88	-842.43	-2484.08	1295.88	-27874.55
	MIN	-2389.99	-984.51	-882.26	-3105.19	-984.51	-18278.76	-2940.12	-1152.90	-18278.76	-3657.44	-1152.90	-44692.22

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1011			MEMBER 1012			MEMBER 1012			MEMBER 1013			
		NODE 1011			NODE 1012			NODE 1012			NODE 1013			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-450.68	21.42	-5491.71	-548.85	21.42	-10489.34	476.47	-32.54	-10489.34	397.93	-32.54	-6991.74	
3	Railing	-15.46	8.42	-161.23	-23.73	8.42	-357.17	21.71	-7.55	-357.17	15.09	-7.55	-209.99	
5	Wheel guard	-153.04	83.39	-1596.19	-234.91	83.39	-3535.95	214.88	-74.72	-3535.95	149.38	-74.72	-2078.88	
8	Steel weight	-1639.46	-13.87	-20301.73	-1938.06	-13.87	-38189.29	1669.34	-41.56	-38189.29	1430.46	-41.56	-25790.12	
10	Medial strip	-175.57	-47.36	-2316.77	-175.57	-47.36	-4072.42	132.42	32.60	-4072.42	132.42	32.60	-3013.08	
19	Snow	-203.71	11.45	-2474.46	-248.98	11.45	-4737.94	215.36	-16.30	-4737.94	179.15	-16.30	-3159.89	
31	Miscellaneous	-12.60	-3.72	-168.80	-12.60	-3.72	-294.84	10.32	2.68	-294.84	10.32	2.68	-212.27	
100	AASHTO-LRFD TRUCK-LOAD	MAX	237.55	756.14	2348.32	90.02	756.14	1491.97	729.10	741.96	1491.97	565.58	741.96	1926.23
		MIN	-562.40	-737.70	-4670.74	-754.38	-737.70	-6047.02	-113.29	-758.93	-6047.02	-211.39	-758.93	-5351.55
		TANDEM-LOAD MAX	195.92	518.21	1855.92	62.85	518.21	1012.87	529.77	508.60	1012.87	407.52	508.60	1593.57
		MIN	-401.34	-507.14	-3174.84	-545.48	-507.14	-4111.01	-77.28	-516.98	-4111.01	-178.22	-516.98	-3640.09
		DISPERSION-LMAX	168.45	1244.88	3138.47	137.94	1244.88	2727.45	1005.41	1204.87	2727.45	897.28	1204.87	2422.71
		MIN	-901.91	-1207.28	-12059.75	-1032.45	-1207.28	-19820.70	-225.18	-1259.84	-19820.70	-245.94	-1259.84	-13752.91
110	Live load	L-PICKUP 1 MAX	406.01	2001.03	5486.79	227.97	2001.03	4219.42	1734.51	1946.82	4219.42	1462.87	1946.82	4348.94
		MIN	-1464.30	-1944.97	-16730.49	-1786.83	-1944.97	-25867.72	-338.46	-2018.77	-25867.72	-457.33	-2018.77	-19104.46
		L-PICKUP 2 MAX	364.38	1763.09	4994.39	200.79	1763.09	3740.31	1535.18	1713.47	3740.31	1304.80	1713.47	4016.28
		MIN	-1303.25	-1714.42	-15234.59	-1577.93	-1714.42	-23931.71	-302.46	-1776.81	-23931.71	-424.16	-1776.81	-17392.99
		L-PICKUP 3	-1651.84	-2263.98	-18740.50	-1974.62	-2263.98	-28118.35	-381.33	-2369.49	-28118.35	-404.17	-2369.49	-21499.42
		Live load MAX	406.01	2001.03	5486.79	227.97	2001.03	4219.42	1734.51	1946.82	4219.42	1462.87	1946.82	4348.94
MIN	-1651.84	-2263.98	-18740.50	-1974.62	-2263.98	-28118.35	-381.33	-2369.49	-28118.35	-457.33	-2369.49	-21499.42		
111	AASHTO Twin	TWIN-PICKUP MAX	341.58	2342.21	5071.82	261.81	2342.21	4980.13	1900.27	2258.59	4980.13	1625.72	2258.59	3924.63
		MIN	-1651.84	-2263.98	-18740.50	-1974.62	-2263.98	-28118.35	-381.33	-2369.49	-28118.35	-404.17	-2369.49	-21499.42
		MID-PICKUP	-1651.84	-2263.98	-18740.50	-1974.62	-2263.98	-28118.35	-381.33	-2369.49	-28118.35	-404.17	-2369.49	-21499.42
198	AASHTO Fatig	TRUCK-LOAD MAX	138.07	338.92	931.47	38.34	338.92	278.95	385.80	213.12	278.95	242.68	213.12	817.64
		MIN	-222.55	-221.41	-992.08	-389.14	-221.41	-1754.72	-40.93	-320.63	-1754.72	-107.05	-320.63	-1172.22
		TANDEM-LOAD MAX	122.78	233.60	783.49	26.05	233.60	189.21	292.16	145.78	189.21	183.58	145.78	731.38
		MIN	-165.95	-151.30	-673.61	-292.71	-151.30	-1190.51	-27.92	-217.79	-1190.51	-103.21	-217.79	-798.45

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1011			1012			1012			1013		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	95.11	740.73	778.36	69.39	740.73	554.80	432.48	646.37	554.80	362.32	646.37	637.19
	MIN	-343.12	-639.68	-3037.26	-426.21	-639.68	-6409.73	-89.35	-740.00	-6409.73	-106.95	-740.00	-3562.94
199	AASHTO-LRFD TRUCK-LOAD MAX	211.08	1357.57	2496.88	152.96	1357.57	2806.03	1106.00	1304.68	2806.03	909.07	1304.68	1937.99
	MIN	-933.47	-1308.26	-8763.03	-1161.57	-1308.26	-11421.91	-198.52	-1372.92	-11421.91	-203.14	-1372.92	-10135.33
	TANDEM-LOAD MAX	195.92	518.21	1855.92	62.85	518.21	1012.87	529.77	508.60	1012.87	407.52	508.60	1593.57
	MIN	-401.34	-507.14	-3174.84	-545.48	-507.14	-4111.01	-77.28	-516.98	-4111.01	-178.22	-516.98	-3640.09
	DISPERSION-LMAX	168.45	1244.88	3138.47	137.94	1244.88	2727.45	1005.41	1204.87	2727.45	897.28	1204.87	2422.71
	MIN	-901.91	-1207.28	-12059.75	-1032.45	-1207.28	-19820.70	-225.18	-1259.84	-19820.70	-245.94	-1259.84	-13752.91
300	Total Dead lWithout snow	-2446.80	48.28	-30036.43	-2933.72	48.28	-56939.01	2525.13	-121.08	-56939.01	2135.60	-121.08	-38296.07
301	Particular Snow	-203.71	11.45	-2474.46	-248.98	11.45	-4737.94	215.36	-16.30	-4737.94	179.15	-16.30	-3159.89
302	Live load Total MAX	263.90	1300.67	3566.41	148.18	1300.67	2742.62	1127.43	1265.43	2742.62	950.86	1265.43	2826.81
	MIN	-1073.70	-1471.59	-12181.33	-1283.50	-1471.59	-18276.93	-247.86	-1540.17	-18276.93	-297.26	-1540.17	-13974.62
303	Sum total D+L+PP MAX	-2307.44	1360.40	-27874.55	-2990.07	1360.40	-58111.54	3867.93	1249.13	-58111.54	3265.61	1249.13	-37781.10
	MIN	-3724.21	-1460.14	-44692.22	-4466.20	-1460.14	-79953.87	2418.28	-1677.54	-79953.87	1928.31	-1677.54	-55430.58

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1013			1014			1014			1015			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	398.62	-43.91	-6991.74	320.09	-43.91	-4116.91	338.26	-29.49	-4116.91	240.09	-29.49	-1225.13	
3	Railing	14.65	-11.82	-209.99	8.03	-11.82	-119.28	12.67	-8.37	-119.28	4.40	-8.37	-33.98	
5	Wheel guard	145.00	-117.01	-2078.88	79.50	-117.01	-1180.89	125.39	-82.82	-1180.89	43.51	-82.82	-336.38	
8	Steel weight	1438.54	-36.59	-25790.12	1199.66	-36.59	-15237.30	1217.88	-19.45	-15237.30	919.28	-19.45	-4551.45	
10	Medial strip	136.22	56.20	-3013.08	136.22	56.20	-1923.35	115.16	41.57	-1923.35	115.16	41.57	-771.79	
19	Snow	179.37	-22.34	-3159.89	143.15	-22.34	-1869.80	152.37	-15.04	-1869.80	107.11	-15.04	-572.39	
31	Miscellaneous	10.60	4.54	-212.27	10.60	4.54	-127.43	8.87	3.29	-127.43	8.87	3.29	-38.76	
100	AASHTO-LRFD TRUCK-LOAD	MAX	657.91	639.19	1926.23	507.23	639.19	3716.78	611.67	522.60	3716.78	431.24	522.60	5726.86
		MIN	-107.78	-691.66	-5351.55	-257.82	-691.66	-4774.20	-127.85	-593.88	-4774.20	-307.35	-593.88	-4021.38
	TANDEM-LOAD	MAX	480.89	438.24	1593.57	364.93	438.24	2807.13	447.88	360.30	2807.13	310.60	360.30	4154.93
		MIN	-91.97	-474.92	-3640.09	-207.92	-474.92	-3241.04	-102.64	-411.86	-3241.04	-239.85	-411.86	-2725.31
	DISPERSION-LMAX	MAX	791.81	1041.90	2422.71	704.21	1041.90	3046.73	679.01	852.00	3046.73	577.94	852.00	4982.93
		MIN	-140.67	-1117.21	-13752.91	-181.87	-1117.21	-9665.89	-126.44	-903.86	-9665.89	-186.62	-903.86	-6884.97
110	Live load L-PICKUP 1	MAX	1449.72	1681.09	4348.94	1211.43	1681.09	6763.52	1290.68	1374.59	6763.52	1009.18	1374.59	10709.79
		MIN	-248.44	-1808.88	-19104.46	-439.69	-1808.88	-14440.09	-254.29	-1497.74	-14440.09	-493.97	-1497.74	-10906.36
	L-PICKUP 2	MAX	1272.70	1480.13	4016.28	1069.13	1480.13	5853.86	1126.90	1212.30	5853.86	888.54	1212.30	9137.86
		MIN	-232.64	-1592.13	-17392.99	-389.79	-1592.13	-12906.93	-229.08	-1315.72	-12906.93	-426.47	-1315.72	-9610.28
	L-PICKUP 3	MAX	-229.94	-2112.68	-21499.42	-390.09	-2112.68	-16840.21	-242.40	-1742.66	-16840.21	-475.51	-1742.66	-13055.00
		MIN	1449.72	1681.09	4348.94	1211.43	1681.09	6763.52	1290.68	1374.59	6763.52	1009.18	1374.59	10709.79
	Live load	MAX	1449.72	1681.09	4348.94	1211.43	1681.09	6763.52	1290.68	1374.59	6763.52	1009.18	1374.59	10709.79
		MIN	-248.44	-1808.88	-19104.46	-439.69	-1808.88	-14440.09	-254.29	-1497.74	-14440.09	-493.97	-1497.74	-10906.36
111	AASHTO Twin TWIN-PICKUP	MAX	1597.82	1961.39	3924.63	1359.11	1961.39	6331.29	1411.93	1605.93	6331.29	1129.60	1605.93	11751.79
		MIN	-229.94	-2112.68	-21499.42	-390.09	-2112.68	-16840.21	-242.40	-1742.66	-16840.21	-475.51	-1742.66	-13055.00
	MID-PICKUP	MAX	-229.94	-2112.68	-21499.42	-390.09	-2112.68	-16840.21	-242.40	-1742.66	-16840.21	-475.51	-1742.66	-13055.00
		MIN	-229.94	-2112.68	-21499.42	-390.09	-2112.68	-16840.21	-242.40	-1742.66	-16840.21	-475.51	-1742.66	-13055.00
198	AASHTO FatigTRUCK-LOAD	MAX	308.75	246.48	817.64	180.73	246.48	1302.88	304.39	234.23	1302.88	150.78	234.23	1734.30
		MIN	-52.52	-371.90	-1172.22	-180.84	-371.90	-908.13	-64.30	-354.84	-908.13	-217.74	-354.84	-708.37
	TANDEM-LOAD	MAX	237.90	166.99	731.38	137.27	166.99	1044.29	233.66	160.37	1044.29	114.66	160.37	1324.55
		MIN	-50.58	-256.68	-798.45	-151.32	-256.68	-617.34	-55.97	-246.03	-617.34	-175.01	-246.03	-480.51

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1013			1014			1014			1015		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	268.46	532.94	637.19	216.61	532.94	888.13	220.73	436.73	888.13	159.10	436.73	1288.38
	MIN	-46.31	-677.95	-3562.94	-79.90	-677.95	-2177.82	-33.96	-550.31	-2177.82	-81.29	-550.31	-1317.77
199	AASHTO-LRFD TRUCK-LOAD MAX	983.55	1137.43	1937.99	805.91	1137.43	3988.03	889.80	932.37	3988.03	677.17	932.37	8074.61
	MIN	-114.82	-1230.21	-10135.33	-251.56	-1230.21	-9045.45	-142.89	-1032.42	-9045.45	-341.72	-1032.42	-7620.58
	TANDEM-LOAD MAX	480.89	438.24	1593.57	364.93	438.24	2807.13	447.88	360.30	2807.13	310.60	360.30	4154.93
	MIN	-91.97	-474.92	-3640.09	-207.92	-474.92	-3241.04	-102.64	-411.86	-3241.04	-239.85	-411.86	-2725.31
	DISPERSION-LMAX	791.81	1041.90	2422.71	704.21	1041.90	3046.73	679.01	852.00	3046.73	577.94	852.00	4982.93
	MIN	-140.67	-1117.21	-13752.91	-181.87	-1117.21	-9665.89	-126.44	-903.86	-9665.89	-186.62	-903.86	-6884.97
300	Total Dead lWithout snow	2143.63	-148.58	-38296.07	1754.10	-148.58	-22705.15	1818.23	-95.26	-22705.15	1331.31	-95.26	-6957.48
301	Particular Snow	179.37	-22.34	-3159.89	143.15	-22.34	-1869.80	152.37	-15.04	-1869.80	107.11	-15.04	-572.39
302	Live load Total MAX	942.32	1092.71	2826.81	787.43	1092.71	4396.29	838.94	893.49	4396.29	655.97	893.49	6961.36
	MIN	-161.49	-1373.24	-13974.62	-285.80	-1373.24	-10946.13	-165.29	-1132.73	-10946.13	-321.08	-1132.73	-8485.75
303	Sum total D+L+PP MAX	3265.32	1070.37	-37781.10	2684.68	1070.37	-18859.78	2809.54	878.45	-18859.78	2094.38	878.45	1519.90
	MIN	2113.06	-1544.16	-55430.58	1525.71	-1544.16	-35521.08	1755.73	-1243.02	-35521.08	1021.01	-1243.02	-16015.62

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	1015			1016			1016			1017			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	258.48	-23.65	-1225.13	160.31	-23.65	868.83	184.02	-14.62	868.83	85.85	-14.62	2218.20	
3	Railing	10.31	-4.76	-33.98	2.04	-4.76	27.73	8.16	-2.35	27.73	-0.11	-2.35	67.95	
5	Wheel guard	102.03	-47.09	-336.38	20.15	-47.09	274.51	80.75	-23.27	274.51	-1.12	-23.27	672.66	
8	Steel weight	923.14	-38.94	-4551.45	624.54	-38.94	3186.93	647.42	-31.12	3186.93	348.82	-31.12	8168.12	
10	Medial strip	84.69	19.63	-771.79	84.69	19.63	75.09	55.51	7.31	75.09	55.51	7.31	630.20	
19	Snow	116.69	-11.57	-572.39	71.42	-11.57	368.14	83.36	-7.07	368.14	38.10	-7.07	975.43	
31	Miscellaneous	6.42	1.55	-38.76	6.42	1.55	25.48	4.11	0.63	25.48	4.11	0.63	66.63	
100	AASHTO-LRFD TRUCK-LOAD	MAX	560.86	492.43	5726.86	373.59	492.43	7271.60	517.61	482.31	7271.60	327.12	482.31	8345.10
		MIN	-156.58	-575.02	-4021.38	-341.90	-575.02	-3305.84	-181.45	-512.37	-3305.84	-370.93	-512.37	-2673.50
		TANDEM-LOAD MAX	415.03	344.00	4154.93	271.45	344.00	5200.15	386.37	337.93	5200.15	239.99	337.93	5939.92
		MIN	-122.54	-399.55	-2725.31	-265.84	-399.55	-2238.89	-140.27	-357.32	-2238.89	-286.51	-357.32	-1810.46
		DISPERSION-LMAX	562.77	694.73	4982.93	468.84	694.73	8169.59	463.89	586.84	8169.59	374.93	586.84	10311.63
		MIN	-141.25	-736.67	-6884.97	-208.78	-736.67	-6673.32	-164.13	-613.89	-6673.32	-236.71	-613.89	-6628.49
110	Live load	L-PICKUP 1 MAX	1123.63	1187.16	10709.79	842.43	1187.16	15441.18	981.50	1069.15	15441.18	702.05	1069.15	18656.74
		MIN	-297.84	-1311.70	-10906.36	-550.67	-1311.70	-9979.16	-345.58	-1126.26	-9979.16	-607.63	-1126.26	-9301.99
		L-PICKUP 2 MAX	977.80	1038.73	9137.86	740.29	1038.73	13369.74	850.26	924.77	13369.74	614.92	924.77	16251.55
		MIN	-263.79	-1136.22	-9610.28	-474.62	-1136.22	-8912.21	-304.40	-971.21	-8912.21	-523.21	-971.21	-8438.95
		L-PICKUP 3	-294.30	-1509.71	-13055.00	-541.63	-1509.71	-11645.53	-347.25	-1274.29	-11645.53	-603.95	-1274.29	-10526.78
		Live load MAX	1123.63	1187.16	10709.79	842.43	1187.16	15441.18	981.50	1069.15	15441.18	702.05	1069.15	18656.74
		MIN	-297.84	-1509.71	-13055.00	-550.67	-1509.71	-11645.53	-347.25	-1274.29	-11645.53	-607.63	-1274.29	-10526.78
		111	AASHTO Twin TWIN-PICKUP	1211.01	1365.67	11751.79	930.55	1365.67	17292.01	1041.23	1192.25	17292.01	762.73	1192.25
MIN	-294.30	-1509.71	-13055.00	-541.63	-1509.71	-11645.53	-347.25	-1274.29	-11645.53	-603.95	-1274.29	-10526.78		
	MID-PICKUP	-294.30	-1509.71	-13055.00	-541.63	-1509.71	-11645.53	-347.25	-1274.29	-11645.53	-603.95	-1274.29	-10526.78	
198	AASHTO FatigTRUCK-LOAD	MAX	289.93	206.39	1734.30	131.15	206.39	2046.29	279.93	163.22	2046.29	119.05	163.22	2256.76
		MIN	-78.04	-326.22	-708.37	-235.55	-326.22	-561.74	-86.51	-279.27	-561.74	-246.85	-279.27	-447.69
		TANDEM-LOAD MAX	225.06	141.61	1324.55	101.16	141.61	1533.97	218.74	112.15	1533.97	92.94	112.15	1677.99
		MIN	-64.53	-226.83	-480.51	-188.25	-226.83	-380.64	-70.63	-195.14	-380.64	-196.35	-195.14	-303.23

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1015			1016			1016			1017		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	177.51	357.66	1288.38	118.24	357.66	1846.63	149.38	312.57	1846.63	91.40	312.57	2253.64
	MIN	-38.73	-451.10	-1317.77	-90.22	-451.10	-1213.79	-44.34	-377.62	-1213.79	-98.51	-377.62	-1184.02
199	AASHTO-LRFD TRUCK-LOAD MAX	782.81	822.68	8074.61	565.10	822.68	11043.76	693.03	737.88	11043.76	472.55	737.88	12967.35
	MIN	-185.75	-940.78	-7620.58	-393.04	-940.78	-6266.16	-221.70	-801.99	-6266.16	-434.34	-801.99	-5067.93
	TANDEM-LOAD MAX	415.03	344.00	4154.93	271.45	344.00	5200.15	386.37	337.93	5200.15	239.99	337.93	5939.92
	MIN	-122.54	-399.55	-2725.31	-265.84	-399.55	-2238.89	-140.27	-357.32	-2238.89	-286.51	-357.32	-1810.46
	DISPERSION-LMAX	562.77	694.73	4982.93	468.84	694.73	8169.59	463.89	586.84	8169.59	374.93	586.84	10311.63
	MIN	-141.25	-736.67	-6884.97	-208.78	-736.67	-6673.32	-164.13	-613.89	-6673.32	-236.71	-613.89	-6628.49
300	Total Dead lWithout snow	1385.07	-93.25	-6957.48	898.15	-93.25	4458.58	979.98	-63.44	4458.58	493.06	-63.44	11823.76
301	Particular Snow	116.69	-11.57	-572.39	71.42	-11.57	368.14	83.36	-7.07	368.14	38.10	-7.07	975.43
302	Live load Total	730.36	771.66	6961.36	547.58	771.66	10036.77	637.98	694.95	10036.77	456.33	694.95	12126.88
	MIN	-193.59	-981.31	-8485.75	-357.94	-981.31	-7569.60	-225.71	-828.29	-7569.60	-394.96	-828.29	-6842.41
303	Sum total D+L+PP	2232.11	760.08	1519.90	1517.15	760.08	14863.49	1701.31	687.88	14863.49	987.49	687.88	24926.06
	MIN	1250.08	-1086.14	-16015.62	504.25	-1086.14	-5013.75	769.91	-898.80	-5013.75	17.70	-898.80	3904.06

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1017			MEMBER 1018			MEMBER 1018			MEMBER 1019			
		NODE 1017			NODE 1018			NODE 1018			NODE 1019			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	115.64	2.34	2218.20	17.47	2.34	2883.76	42.92	10.69	2883.76	-55.25	10.69	2822.09	
3	Railing	6.13	-0.52	67.95	-2.14	-0.52	87.91	3.96	0.81	87.91	-4.31	0.81	86.15	
5	Wheel guard	60.70	-5.15	672.66	-21.18	-5.15	870.27	39.20	8.02	870.27	-42.68	8.02	852.87	
8	Steel weight	394.84	15.70	8168.12	96.24	15.70	10623.48	126.41	33.60	10623.48	-172.19	33.60	10394.59	
10	Medial strip	29.45	4.34	630.20	29.45	4.34	924.67	2.17	0.27	924.67	2.17	0.27	946.39	
19	Snow	52.78	0.84	975.43	7.51	0.84	1276.86	20.27	4.88	1276.86	-24.99	4.88	1253.26	
31	Miscellaneous	2.02	0.40	66.63	2.02	0.40	86.85	-0.19	0.05	86.85	-0.19	0.05	84.92	
100	AASHTO-LRFD TRUCK-LOAD	MAX	476.36	499.14	8345.10	286.24	499.14	8854.64	428.26	505.85	8854.64	239.86	505.85	8698.61
		MIN	-212.64	-473.56	-2673.50	-401.95	-473.56	-2065.52	-260.53	-467.66	-2065.52	-448.37	-467.66	-2376.20
		TANDEM-LOAD MAX	358.34	349.21	5939.92	212.45	349.21	6303.14	325.15	353.91	6303.14	180.80	353.91	6186.80
		MIN	-161.91	-332.01	-1810.46	-307.68	-332.01	-1398.74	-194.72	-327.87	-1398.74	-338.98	-327.87	-1611.65
		DISPERSION-LMAX	392.44	519.47	10311.63	307.48	519.47	11440.35	334.51	521.51	11440.35	254.26	521.51	11401.96
		MIN	-204.28	-516.98	-6628.49	-280.92	-516.98	-6684.44	-264.92	-502.41	-6684.44	-346.31	-502.41	-6758.14
110	Live load	L-PICKUP 1 MAX	868.80	1018.61	18656.74	593.72	1018.61	20294.99	762.78	1027.36	20294.99	494.12	1027.36	20100.57
		MIN	-416.92	-990.54	-9301.99	-682.88	-990.54	-8749.96	-525.45	-970.07	-8749.96	-794.69	-970.07	-9134.34
		L-PICKUP 2 MAX	750.78	868.68	16251.55	519.93	868.68	17743.49	659.66	875.42	17743.49	435.07	875.42	17588.76
		MIN	-366.19	-848.98	-8438.95	-588.61	-848.98	-8083.18	-459.64	-830.27	-8083.18	-685.30	-830.27	-8369.79
		L-PICKUP 3	-427.03	-1081.45	-10526.78	-688.33	-1081.45	-9539.88	-552.31	-1052.86	-9539.88	-818.65	-1052.86	-10105.97
		Live load MAX	868.80	1018.61	18656.74	593.72	1018.61	20294.99	762.78	1027.36	20294.99	494.12	1027.36	20100.57
MIN	-427.03	-1081.45	-10526.78	-688.33	-1081.45	-9539.88	-552.31	-1052.86	-9539.88	-818.65	-1052.86	-10105.97		
111	AASHTO Twin	TWIN-PICKUP MAX	901.75	1117.56	20951.09	627.21	1117.56	22711.26	771.35	1125.76	22711.26	503.84	1125.76	22448.46
		MIN	-427.03	-1081.45	-10526.78	-688.33	-1081.45	-9539.88	-552.31	-1052.86	-9539.88	-818.65	-1052.86	-10105.97
		MID-PICKUP	-427.03	-1081.45	-10526.78	-688.33	-1081.45	-9539.88	-552.31	-1052.86	-9539.88	-818.65	-1052.86	-10105.97
198	AASHTO Fatig	TRUCK-LOAD MAX	271.75	158.30	2256.76	110.98	158.30	2364.61	262.00	217.68	2364.61	102.22	217.68	2347.18
		MIN	-94.53	-221.55	-447.69	-254.88	-221.55	-344.68	-104.54	-160.76	-344.68	-264.01	-160.76	-398.42
		TANDEM-LOAD MAX	213.15	113.44	1677.99	87.56	113.44	1754.83	206.33	153.71	1754.83	81.65	153.71	1742.71
		MIN	-76.20	-156.05	-303.23	-201.73	-156.05	-233.42	-83.05	-114.84	-233.42	-207.69	-114.84	-270.09

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1017			1018			1018			1019		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	132.14	287.78	2253.64	74.67	287.78	2471.03	120.12	303.52	2471.03	63.44	303.52	2468.49
	MIN	-52.90	-306.86	-1184.02	-108.42	-306.86	-1187.88	-65.39	-281.64	-1187.88	-122.10	-281.64	-1202.45
199	AASHTO-LRFD TRUCK-LOAD MAX	609.50	722.26	12967.35	389.42	722.26	13794.38	522.55	729.34	13794.38	305.56	729.34	13540.77
	MIN	-270.20	-684.64	-5067.93	-483.88	-684.64	-3915.43	-348.76	-667.44	-3915.43	-563.29	-667.44	-4470.72
	TANDEM-LOAD MAX	358.34	349.21	5939.92	212.45	349.21	6303.14	325.15	353.91	6303.14	180.80	353.91	6186.80
	MIN	-161.91	-332.01	-1810.46	-307.68	-332.01	-1398.74	-194.72	-327.87	-1398.74	-338.98	-327.87	-1611.65
	DISPERSION-LMAX	392.44	519.47	10311.63	307.48	519.47	11440.35	334.51	521.51	11440.35	254.26	521.51	11401.96
	MIN	-204.28	-516.98	-6628.49	-280.92	-516.98	-6684.44	-264.92	-502.41	-6684.44	-346.31	-502.41	-6758.14
300	Total Dead lWithout snow	608.78	17.11	11823.76	121.86	17.11	15476.94	214.47	53.44	15476.94	-272.45	53.44	15187.02
301	Particular Snow	52.78	0.84	975.43	7.51	0.84	1276.86	20.27	4.88	1276.86	-24.99	4.88	1253.26
302	Live load Total MAX	564.72	662.10	12126.88	385.92	662.10	13191.74	495.80	667.78	13191.74	321.18	667.78	13065.37
	MIN	-277.57	-702.94	-6842.41	-447.41	-702.94	-6200.92	-359.00	-684.36	-6200.92	-532.12	-684.36	-6568.88
303	Sum total D+L+PP MAX	1226.27	680.05	24926.06	515.29	680.05	29945.55	730.54	726.10	29945.55	120.09	726.10	29505.64
	MIN	300.71	-702.10	3904.06	-439.90	-702.10	8692.60	-231.96	-679.49	8692.60	-829.57	-679.49	7900.72

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1019			MEMBER 1020			MEMBER 1020			MEMBER 1021			
		NODE 1019			NODE 1020			NODE 1020			NODE 1021			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-37.05	7.04	2822.09	-135.22	7.04	1960.70	-114.76	10.76	1960.70	-212.93	10.76	322.23	
3	Railing	1.58	1.97	86.15	-6.69	1.97	60.55	-0.68	4.09	60.55	-8.95	4.09	12.36	
5	Wheel guard	15.60	19.50	852.87	-66.28	19.50	599.48	-6.77	40.51	599.48	-88.64	40.51	122.41	
8	Steel weight	-168.82	4.98	10394.59	-467.42	4.98	7213.37	-456.37	-5.30	7213.37	-754.97	-5.30	1156.66	
10	Medial strip	-27.72	-9.41	946.39	-27.72	-9.41	669.23	-57.34	-21.86	669.23	-57.34	-21.86	95.80	
19	Snow	-15.46	3.61	1253.26	-60.73	3.61	872.34	-50.18	5.80	872.34	-95.45	5.80	144.21	
31	Miscellaneous	-2.63	-0.77	84.92	-2.63	-0.77	58.61	-5.03	-1.78	58.61	-5.03	-1.78	8.28	
100	AASHTO-LRFD TRUCK-LOAD	MAX	380.90	508.05	8698.61	195.59	508.05	7691.56	341.36	551.19	7691.56	158.47	551.19	5898.03
		MIN	-326.53	-483.77	-2376.20	-512.31	-483.77	-2986.96	-391.97	-513.79	-2986.96	-577.10	-513.79	-3517.35
		TANDEM-LOAD MAX	292.39	354.13	6186.80	150.19	354.13	5491.25	264.97	383.28	5491.25	123.75	383.28	4268.93
		MIN	-239.61	-339.08	-1611.65	-381.87	-339.08	-2025.89	-284.06	-359.10	-2025.89	-425.60	-359.10	-2385.98
		DISPERSION-LMAX	285.85	589.99	11401.96	212.21	589.99	9958.24	246.24	708.34	9958.24	179.87	708.34	7080.65
		MIN	-347.01	-574.95	-6758.14	-434.92	-574.95	-6731.29	-434.72	-687.67	-6731.29	-529.76	-687.67	-6537.92
110	Live load	L-PICKUP 1 MAX	666.75	1098.04	20100.57	407.79	1098.04	17649.80	587.60	1259.53	17649.80	338.34	1259.53	12978.68
		MIN	-673.54	-1058.71	-9134.34	-947.23	-1058.71	-9718.24	-826.69	-1201.45	-9718.24	-1106.86	-1201.45	-10055.27
		L-PICKUP 2 MAX	578.24	944.11	17588.76	362.40	944.11	15449.48	511.21	1091.62	15449.48	303.62	1091.62	11349.58
		MIN	-586.62	-914.03	-8369.79	-816.79	-914.03	-8757.18	-718.77	-1046.76	-8757.18	-955.36	-1046.76	-8923.90
		L-PICKUP 3	-735.82	-1163.00	-10105.97	-1009.15	-1163.00	-11116.02	-926.20	-1366.34	-11116.02	-1207.66	-1366.34	-11839.38
		Live load MAX	666.75	1098.04	20100.57	407.79	1098.04	17649.80	587.60	1259.53	17649.80	338.34	1259.53	12978.68
MIN	-735.82	-1163.00	-10105.97	-1009.15	-1163.00	-11116.02	-926.20	-1366.34	-11116.02	-1207.66	-1366.34	-11839.38		
111	AASHTO Twin	TWIN-PICKUP MAX	665.27	1229.28	22448.46	409.19	1229.28	19527.54	582.95	1442.31	19527.54	340.36	1442.31	13944.87
		MIN	-735.82	-1163.00	-10105.97	-1009.15	-1163.00	-11116.02	-926.20	-1366.34	-11116.02	-1207.66	-1366.34	-11839.38
		MID-PICKUP	-735.82	-1163.00	-10105.97	-1009.15	-1163.00	-11116.02	-926.20	-1366.34	-11116.02	-1207.66	-1366.34	-11839.38
198	AASHTO Fatig	TRUCK-LOAD MAX	248.24	269.14	2347.18	90.20	269.14	2153.45	233.04	313.90	2153.45	76.45	313.90	1788.01
		MIN	-118.69	-156.17	-398.42	-277.00	-156.17	-508.86	-133.98	-205.43	-508.86	-291.91	-205.43	-624.17
		TANDEM-LOAD MAX	196.75	188.26	1742.71	73.27	188.26	1608.85	186.35	218.33	1608.85	63.44	218.33	1359.16
		MIN	-92.69	-107.48	-270.09	-216.21	-107.48	-344.77	-103.10	-140.96	-344.77	-226.20	-140.96	-422.68

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1019			1020			1020			1021		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	108.39	363.34	2468.49	53.83	363.34	2188.76	96.43	436.01	2188.76	45.52	436.01	1652.50
	MIN	-85.53	-306.73	-1202.45	-143.16	-306.73	-1213.92	-111.22	-351.12	-1213.92	-170.29	-351.12	-1232.40
199	AASHTO-LRFD TRUCK-LOAD MAX	453.34	775.88	13540.77	242.45	775.88	11739.03	401.48	894.23	11739.03	198.31	894.23	8413.64
	MIN	-470.57	-717.28	-4470.72	-686.36	-717.28	-5619.84	-594.39	-830.49	-5619.84	-812.09	-830.49	-6616.94
	TANDEM-LOAD MAX	292.39	354.13	6186.80	150.19	354.13	5491.25	264.97	383.28	5491.25	123.75	383.28	4268.93
	MIN	-239.61	-339.08	-1611.65	-381.87	-339.08	-2025.89	-284.06	-359.10	-2025.89	-425.60	-359.10	-2385.98
	DISPERSION-LMAX	285.85	589.99	11401.96	212.21	589.99	9958.24	246.24	708.34	9958.24	179.87	708.34	7080.65
	MIN	-347.01	-574.95	-6758.14	-434.92	-574.95	-6731.29	-434.72	-687.67	-6731.29	-529.76	-687.67	-6537.92
300	Total Dead lWithout snow	-219.05	23.30	15187.02	-705.97	23.30	10561.95	-640.96	26.43	10561.95	-1127.88	26.43	1717.75
301	Particular Snow	-15.46	3.61	1253.26	-60.73	3.61	872.34	-50.18	5.80	872.34	-95.45	5.80	144.21
302	Live load Total MAX	433.39	713.73	13065.37	265.07	713.73	11472.37	381.94	818.69	11472.37	219.92	818.69	8436.14
	MIN	-478.28	-755.95	-6568.88	-655.94	-755.95	-7225.41	-602.03	-888.12	-7225.41	-784.98	-888.12	-7695.59
303	Sum total D+L+PP MAX	328.90	740.64	29505.64	-422.11	740.64	22906.66	-194.62	850.92	22906.66	-937.43	850.92	10298.09
	MIN	-712.79	-752.34	7900.72	-1422.64	-752.34	2041.25	-1293.17	-882.32	2041.25	-2008.31	-882.32	-7551.39

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	1021			1022			1022			1023			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-185.90	32.13	322.23	-284.07	32.13	-2027.65	-265.69	46.01	-2027.65	-344.23	46.01	-4467.31	
3	Railing		-2.72	8.05	12.36	-10.99	8.05	-56.16	-6.26	11.53	-56.16	-12.88	11.53	-132.73	
5	Wheel guard		-26.90	79.72	122.41	-108.77	79.72	-555.94	-62.00	114.15	-555.94	-127.51	114.15	-1313.98	
8	Steel weight		-720.05	33.89	1156.66	-1018.65	33.89	-7536.80	-1000.64	48.54	-7536.80	-1239.52	48.54	-16497.44	
10	Medial strip		-84.89	-37.07	95.80	-84.89	-37.07	-753.10	-106.90	-53.09	-753.10	-106.90	-53.09	-1608.27	
19	Snow		-81.97	16.19	144.21	-127.24	16.19	-901.87	-117.95	23.18	-901.87	-154.16	23.18	-1990.29	
31	Miscellaneous		-7.25	-2.99	8.28	-7.25	-2.99	-64.23	-9.03	-4.29	-64.23	-9.03	-4.29	-136.47	
100	AASHTO-LRFD TRUCK-LOAD	MAX	316.43	592.50	5898.03	132.48	592.50	3625.34	266.18	689.37	3625.34	111.82	689.37	2091.25	
		MIN	-443.80	-529.03	-3517.35	-628.39	-529.03	-4034.81	-500.62	-625.57	-4034.81	-654.73	-625.57	-4529.43	
		TANDEM-LOAD	MAX	246.79	410.85	4268.93	105.95	410.85	2732.97	214.69	474.59	2732.97	94.57	474.59	1674.50
		MIN	-319.34	-366.32	-2385.98	-460.21	-366.32	-2740.87	-360.00	-430.17	-2740.87	-480.00	-430.17	-3081.02	
		DISPERSION-L	MAX	223.07	893.84	7080.65	162.47	893.84	5014.51	221.04	1096.89	5014.51	179.18	1096.89	4717.08
		MIN	-528.09	-837.99	-6537.92	-628.73	-837.99	-8328.48	-656.99	-1018.27	-8328.48	-743.93	-1018.27	-12047.79	
110	Live load	L-PICKUP 1	MAX	539.50	1486.34	12978.68	294.95	1486.34	8639.85	487.22	1786.26	8639.85	291.00	1786.26	6808.33
		MIN	-971.90	-1367.02	-10055.27	-1257.12	-1367.02	-12363.29	-1157.61	-1643.85	-12363.29	-1398.67	-1643.85	-16577.21	
		L-PICKUP 2	MAX	469.85	1304.70	11349.58	268.41	1304.70	7747.49	435.73	1571.48	7747.49	273.75	1571.48	6391.58
		MIN	-847.43	-1204.31	-8923.90	-1088.94	-1204.31	-11069.35	-1016.99	-1448.45	-11069.35	-1223.94	-1448.45	-15128.81	
		L-PICKUP 3	MAX	-1101.05	-1592.39	-11839.38	-1387.62	-1592.39	-14323.53	-1308.88	-1921.75	-14323.53	-1549.72	-1921.75	-18503.17
		MIN	539.50	1486.34	12978.68	294.95	1486.34	8639.85	487.22	1786.26	8639.85	291.00	1786.26	6808.33	
111	AASHTO Twin	TWIN-PICKUP	MAX	522.12	1728.25	13944.87	288.76	1728.25	8153.70	439.74	2088.01	8153.70	277.34	2088.01	6445.46
		MIN	-1101.05	-1592.39	-11839.38	-1387.62	-1592.39	-14323.53	-1308.88	-1921.75	-14323.53	-1549.72	-1921.75	-18503.17	
		MID-PICKUP	MAX	-1101.05	-1592.39	-11839.38	-1387.62	-1592.39	-14323.53	-1308.88	-1921.75	-14323.53	-1549.72	-1921.75	-18503.17
		MIN	522.12	1728.25	13944.87	288.76	1728.25	8153.70	439.74	2088.01	8153.70	277.34	2088.01	6445.46	
		TWIN-PICKUP	MAX	522.12	1728.25	13944.87	288.76	1728.25	8153.70	439.74	2088.01	8153.70	277.34	2088.01	6445.46
		MIN	-1101.05	-1592.39	-11839.38	-1387.62	-1592.39	-14323.53	-1308.88	-1921.75	-14323.53	-1549.72	-1921.75	-18503.17	
198	AASHTO Fatig	TRUCK-LOAD	MAX	220.38	351.85	1788.01	63.06	351.85	1319.79	184.00	372.17	1319.79	52.12	372.17	802.56
		MIN	-146.84	-237.61	-624.17	-303.87	-237.61	-785.37	-176.42	-244.95	-785.37	-307.37	-244.95	-1027.73	
		TANDEM-LOAD	MAX	177.53	243.86	1359.16	55.33	243.86	1048.70	154.53	257.39	1048.70	50.20	257.39	715.74
		MIN	-111.95	-162.79	-422.68	-234.05	-162.79	-533.30	-133.89	-166.21	-533.30	-238.02	-166.21	-700.41	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1021			1022			1022			1023		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	88.99	542.29	1652.50	41.23	542.29	1213.60	88.48	663.77	1213.60	54.40	663.77	1041.92
	MIN	-140.95	-429.83	-1232.40	-201.50	-429.83	-1813.53	-201.81	-521.58	-1813.53	-253.16	-521.58	-3045.03
199	AASHTO-LRFD TRUCK-LOAD MAX	357.06	1026.44	8413.64	158.38	1026.44	4045.16	267.56	1223.13	4045.16	128.98	1223.13	2444.54
	MIN	-695.30	-931.33	-6616.94	-913.07	-931.33	-7586.55	-797.32	-1117.01	-7586.55	-977.98	-1117.01	-8511.29
	TANDEM-LOAD MAX	246.79	410.85	4268.93	105.95	410.85	2732.97	214.69	474.59	2732.97	94.57	474.59	1674.50
	MIN	-319.34	-366.32	-2385.98	-460.21	-366.32	-2740.87	-360.00	-430.17	-2740.87	-480.00	-430.17	-3081.02
	DISPERSION-LMAX	223.07	893.84	7080.65	162.47	893.84	5014.51	221.04	1096.89	5014.51	179.18	1096.89	4717.08
	MIN	-528.09	-837.99	-6537.92	-628.73	-837.99	-8328.48	-656.99	-1018.27	-8328.48	-743.93	-1018.27	-12047.79
300	Total Dead lWithout snow	-1027.70	113.73	1717.75	-1514.62	113.73	-10993.88	-1450.52	162.86	-10993.88	-1840.06	162.86	-24156.19
301	Particular Snow	-81.97	16.19	144.21	-127.24	16.19	-901.87	-117.95	23.18	-901.87	-154.16	23.18	-1990.29
302	Live load Total MAX	350.68	966.12	8436.14	191.72	966.12	5615.90	316.69	1161.07	5615.90	189.15	1161.07	4425.42
	MIN	-715.68	-1035.05	-7695.59	-901.95	-1035.05	-9310.29	-850.77	-1249.14	-9310.29	-1007.32	-1249.14	-12027.06
303	Sum total D+L+PP MAX	-653.80	1096.04	10298.09	-1392.63	1096.04	-4595.07	-1156.77	1347.11	-4595.07	-1748.32	1347.11	-20393.44
	MIN	-1825.36	-1018.86	-7551.39	-2543.81	-1018.86	-21206.04	-2419.24	-1225.96	-21206.04	-3001.54	-1225.96	-38173.54

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1023	1024			1024			1025							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-345.46	30.30	-4467.31	-424.00	30.30	-7545.16	446.42	-17.05	-7545.16	367.88	-17.05	-4287.97		
3	Railing	-13.14	7.45	-132.73	-19.76	7.45	-264.33	20.42	-7.06	-264.33	13.80	-7.06	-127.47		
5	Wheel guard	-130.11	73.73	-1313.98	-195.61	73.73	-2616.83	202.11	-69.92	-2616.83	136.61	-69.92	-1261.94		
8	Steel weight	-1241.39	33.70	-16497.44	-1480.27	33.70	-27384.10	1563.14	15.32	-27384.10	1324.26	15.32	-15834.48		
10	Medial strip	-105.74	-33.87	-1608.27	-105.74	-33.87	-2454.18	117.48	38.90	-2454.18	117.48	38.90	-1514.31		
19	Snow	-154.77	15.23	-1990.29	-190.98	15.23	-3373.27	201.28	-9.32	-3373.27	165.06	-9.32	-1907.91		
31	Miscellaneous	-8.94	-2.74	-136.47	-8.94	-2.74	-208.00	9.63	3.15	-208.00	9.63	3.15	-130.95		
100	AASHTO-LRFD TRUCK-LOAD	MAX	211.01	740.50	2091.25	112.39	740.50	1650.48	714.93	729.33	1650.48	547.38	729.33	2178.45	
		MIN	-556.46	-715.73	-4529.43	-721.43	-715.73	-5269.35	-102.46	-738.42	-5269.35	-203.74	-738.42	-4530.50	
		TANDEM-LOAD	MAX	178.13	504.64	1674.50	76.56	504.64	1119.22	521.44	499.87	1119.22	394.90	499.87	1731.06
		MIN	-400.58	-490.98	-3081.02	-525.37	-490.98	-3579.71	-69.72	-503.61	-3579.71	-174.15	-503.61	-3081.00	
		DISPERSION-L	MAX	274.37	1208.62	4717.08	253.05	1208.62	5414.36	972.43	1186.15	5414.36	865.10	1186.15	4698.28
		MIN	-842.83	-1157.15	-12047.79	-950.38	-1157.15	-17830.80	-239.41	-1216.08	-17830.80	-260.96	-1216.08	-11743.62	
110	Live load	L-PICKUP 1	MAX	485.38	1949.12	6808.33	365.44	1949.12	7064.84	1687.36	1915.48	7064.84	1412.48	1915.48	6876.73
		MIN	-1399.29	-1872.88	-16577.21	-1671.81	-1872.88	-23100.16	-341.87	-1954.50	-23100.16	-464.70	-1954.50	-16274.12	
		L-PICKUP 2	MAX	452.50	1713.25	6391.58	329.61	1713.25	6533.58	1493.87	1686.01	6533.58	1260.00	1686.01	6429.34
		MIN	-1243.42	-1648.13	-15128.81	-1475.75	-1648.13	-21410.51	-309.13	-1719.69	-21410.51	-435.12	-1719.69	-14824.62	
		L-PICKUP 3	MAX	-1570.30	-2174.74	-18503.17	-1844.58	-2174.74	-24948.28	-378.76	-2286.43	-24948.28	-410.13	-2286.43	-18228.87
		Live load	MAX	485.38	1949.12	6808.33	365.44	1949.12	7064.84	1687.36	1915.48	7064.84	1412.48	1915.48	6876.73
MIN	-1570.30	-2174.74	-18503.17	-1844.58	-2174.74	-24948.28	-378.76	-2286.43	-24948.28	-464.70	-2286.43	-18228.87			
111	AASHTO Twin	TWIN-PICKUP	MAX	439.27	2283.58	6445.46	409.31	2283.58	7687.59	1851.47	2227.34	7687.59	1576.68	2227.34	6722.49
		MIN	-1570.30	-2174.74	-18503.17	-1844.58	-2174.74	-24948.28	-378.76	-2286.43	-24948.28	-410.13	-2286.43	-18228.87	
		MID-PICKUP	MAX	-1570.30	-2174.74	-18503.17	-1844.58	-2174.74	-24948.28	-378.76	-2286.43	-24948.28	-410.13	-2286.43	-18228.87
198	AASHTO Fatig	TRUCK-LOAD	MAX	110.04	316.62	802.56	37.78	316.62	299.44	383.58	214.81	299.44	237.34	214.81	789.99
		MIN	-239.28	-207.12	-1027.73	-384.09	-207.12	-1557.95	-34.54	-320.46	-1557.95	-110.97	-320.46	-1014.33	
		TANDEM-LOAD	MAX	106.12	216.13	715.74	25.60	216.13	203.30	291.74	147.10	203.30	179.57	147.10	706.11
		MIN	-180.61	-141.84	-700.41	-291.81	-141.84	-1055.43	-23.40	-218.88	-1055.43	-107.01	-218.88	-691.03	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1023			1024			1024			1025		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	110.88	710.72	1041.92	92.78	710.72	1084.04	419.30	632.47	1084.04	349.94	632.47	1039.80
	MIN	-344.66	-618.75	-3045.03	-414.08	-618.75	-5742.43	-86.26	-717.02	-5742.43	-104.51	-717.02	-2994.05
199	AASHTO-LRFD TRUCK-LOAD MAX	213.71	1328.69	2444.54	201.74	1328.69	3127.41	1084.77	1288.68	3127.41	886.77	1288.68	2771.16
	MIN	-901.95	-1259.23	-8511.29	-1099.16	-1259.23	-9889.51	-181.43	-1324.40	-9889.51	-194.73	-1324.40	-8510.68
	TANDEM-LOAD MAX	178.13	504.64	1674.50	76.56	504.64	1119.22	521.44	499.87	1119.22	394.90	499.87	1731.06
	MIN	-400.58	-490.98	-3081.02	-525.37	-490.98	-3579.71	-69.72	-503.61	-3579.71	-174.15	-503.61	-3081.00
	DISPERSION-LMAX	274.37	1208.62	4717.08	253.05	1208.62	5414.36	972.43	1186.15	5414.36	865.10	1186.15	4698.28
	MIN	-842.83	-1157.15	-12047.79	-950.38	-1157.15	-17830.80	-239.41	-1216.08	-17830.80	-260.96	-1216.08	-11743.62
300	Total Dead lWithout snow	-1844.78	108.56	-24156.19	-2234.32	108.56	-40472.60	2359.20	-36.67	-40472.60	1969.67	-36.67	-23157.13
301	Particular Snow	-154.77	15.23	-1990.29	-190.98	15.23	-3373.27	201.28	-9.32	-3373.27	165.06	-9.32	-1907.91
302	Live load Total MAX	315.50	1266.93	4425.42	237.54	1266.93	4592.15	1096.78	1245.06	4592.15	918.11	1245.06	4469.88
	MIN	-1020.70	-1413.58	-12027.06	-1198.98	-1413.58	-16216.38	-246.19	-1486.18	-16216.38	-302.06	-1486.18	-11848.76
303	Sum total D+L+PP MAX	-1589.40	1390.72	-20393.44	-2116.50	1390.72	-37876.08	3657.26	1235.74	-37876.08	3052.84	1235.74	-19254.20
	MIN	-3020.25	-1398.35	-38173.54	-3624.28	-1398.35	-60062.26	2240.43	-1532.16	-60062.26	1742.06	-1532.16	-36913.80

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	1025			1026			1026			1027			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	364.05	-35.33	-4287.97	285.51	-35.33	-1689.73	285.09	-55.57	-1689.73	186.92	-55.57	670.30	
3	Railing	13.47	-11.24	-127.47	6.85	-11.24	-46.17	11.03	-8.74	-46.17	2.76	-8.74	22.80	
5	Wheel guard	133.35	-111.28	-1261.94	67.85	-111.28	-457.12	109.22	-86.48	-457.12	27.34	-86.48	225.68	
8	Steel weight	1312.69	-8.79	-15834.48	1073.81	-8.79	-6288.50	1022.20	-120.62	-6288.50	723.60	-120.62	2440.49	
10	Medial strip	117.28	56.60	-1514.31	117.28	56.60	-576.09	88.27	27.63	-576.09	88.27	27.63	306.66	
19	Snow	163.27	-18.48	-1907.91	127.06	-18.48	-746.57	127.97	-26.71	-746.57	82.70	-26.71	306.76	
31	Miscellaneous	9.63	4.63	-130.95	9.63	4.63	-53.88	7.27	2.27	-53.88	7.27	2.27	18.86	
100	AASHTO-LRFD TRUCK-LOAD	MAX	634.24	636.51	2178.45	475.51	636.51	3416.15	586.96	514.73	3416.15	392.45	514.73	5216.40
		MIN	-107.59	-695.26	-4530.50	-267.85	-695.26	-3839.46	-129.62	-625.77	-3839.46	-325.46	-625.77	-3100.08
		TANDEM-LOAD MAX	467.12	436.72	1731.06	342.72	436.72	2581.92	434.04	352.81	2581.92	283.87	352.81	3788.36
		MIN	-92.50	-479.12	-3081.00	-217.19	-479.12	-2608.30	-104.76	-434.68	-2608.30	-255.18	-434.68	-2105.10
		DISPERSION-LMAX	774.30	1065.66	4698.28	688.68	1065.66	4794.67	629.21	859.07	4794.67	531.86	859.07	6382.14
		MIN	-177.53	-1126.87	-11743.62	-220.77	-1126.87	-7571.11	-161.92	-953.05	-7571.11	-225.95	-953.05	-5295.35
110	Live load	L-PICKUP 1 MAX	1408.54	1702.18	6876.73	1164.19	1702.18	8210.82	1216.17	1373.80	8210.82	924.31	1373.80	11598.54
		MIN	-285.11	-1822.13	-16274.12	-488.61	-1822.13	-11410.57	-291.55	-1578.82	-11410.57	-551.40	-1578.82	-8395.43
		L-PICKUP 2 MAX	1241.41	1502.38	6429.34	1031.40	1502.38	7376.59	1063.25	1211.89	7376.59	815.73	1211.89	10170.50
		MIN	-270.02	-1605.99	-14824.62	-437.96	-1605.99	-10179.42	-266.68	-1387.74	-10179.42	-481.13	-1387.74	-7400.45
		L-PICKUP 3	-261.15	-2121.72	-18228.87	-430.09	-2121.72	-13310.88	-271.74	-1839.37	-13310.88	-525.72	-1839.37	-10012.78
		Live load MAX	1408.54	1702.18	6876.73	1164.19	1702.18	8210.82	1216.17	1373.80	8210.82	924.31	1373.80	11598.54
111	AASHTO Twin	MIN	-285.11	-2121.72	-18228.87	-488.61	-2121.72	-13310.88	-291.55	-1839.37	-13310.88	-551.40	-1839.37	-10012.78
111	TWIN-PICKUP	MAX	1545.60	1998.16	6722.49	1304.98	1998.16	7779.22	1319.09	1606.03	7779.22	1031.92	1606.03	12431.79
		MIN	-261.15	-2121.72	-18228.87	-430.09	-2121.72	-13310.88	-271.74	-1839.37	-13310.88	-525.72	-1839.37	-10012.78
		MID-PICKUP	-261.15	-2121.72	-18228.87	-430.09	-2121.72	-13310.88	-271.74	-1839.37	-13310.88	-525.72	-1839.37	-10012.78
198	AASHTO Fatig	TRUCK-LOAD MAX	304.09	250.96	789.99	170.54	250.96	1246.36	298.46	235.06	1246.36	135.99	235.06	1620.36
		MIN	-53.34	-382.83	-1014.33	-163.43	-382.83	-742.20	-52.67	-370.68	-742.20	-203.33	-370.68	-547.85
		TANDEM-LOAD MAX	236.54	170.23	706.11	129.91	170.23	996.45	231.64	160.88	996.45	104.37	160.88	1237.97
		MIN	-51.38	-265.48	-691.03	-158.31	-265.48	-503.33	-57.33	-257.13	-503.33	-184.84	-257.13	-371.25

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1025			1026			1026			1027		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	260.74	544.99	1039.80	209.58	544.99	1162.86	201.88	444.98	1162.86	141.63	444.98	1487.04
	MIN	-48.88	-681.36	-2994.05	-83.75	-681.36	-1662.79	-40.37	-569.73	-1662.79	-89.96	-569.73	-998.03
199	AASHTO-LRFD TRUCK-LOAD MAX	943.04	1154.51	2771.16	761.30	1154.51	3848.91	836.45	925.40	3848.91	614.71	925.40	7430.96
	MIN	-112.64	-1230.59	-8510.68	-257.11	-1230.59	-7218.76	-140.01	-1090.69	-7218.76	-358.18	-1090.69	-5829.96
	TANDEM-LOAD MAX	467.12	436.72	1731.06	342.72	436.72	2581.92	434.04	352.81	2581.92	283.87	352.81	3788.36
	MIN	-92.50	-479.12	-3081.00	-217.19	-479.12	-2608.30	-104.76	-434.68	-2608.30	-255.18	-434.68	-2105.10
	DISPERSION-LMAX	774.30	1065.66	4698.28	688.68	1065.66	4794.67	629.21	859.07	4794.67	531.86	859.07	6382.14
	MIN	-177.53	-1126.87	-11743.62	-220.77	-1126.87	-7571.11	-161.92	-953.05	-7571.11	-225.95	-953.05	-5295.35
300	Total Dead lWithout snow	1950.47	-105.42	-23157.13	1560.94	-105.42	-9111.50	1523.09	-241.51	-9111.50	1036.17	-241.51	3684.77
301	Particular Snow	163.27	-18.48	-1907.91	127.06	-18.48	-746.57	127.97	-26.71	-746.57	82.70	-26.71	306.76
302	Live load Total MAX	915.55	1106.41	4469.88	756.72	1106.41	5337.03	790.51	892.97	5337.03	600.80	892.97	7539.05
	MIN	-185.32	-1379.12	-11848.76	-317.60	-1379.12	-8652.07	-189.51	-1195.59	-8652.07	-358.41	-1195.59	-6508.30
303	Sum total D+L+PP MAX	3029.30	1087.94	-19254.20	2444.72	1087.94	-2919.93	2441.56	866.26	-2919.93	1719.67	866.26	11530.59
	MIN	1872.82	-1503.01	-36913.80	1275.12	-1503.01	-18510.15	1404.69	-1463.80	-18510.15	652.93	-1463.80	-4469.26

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	TITLE	1027			1028			1028			1029				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	212.45	-39.23	670.30	114.28	-39.23	2303.97	159.64	5.67	2303.97	61.47	5.67	3409.55		
3	Railing	8.94	-4.90	22.80	0.67	-4.90	70.84	7.43	-1.58	70.84	-0.84	-1.58	103.82		
5	Wheel guard	88.50	-48.53	225.68	6.63	-48.53	701.33	73.59	-15.59	701.33	-8.29	-15.59	1027.81		
8	Steel weight	753.18	-100.23	2440.49	454.58	-100.23	8479.29	557.42	41.75	8479.29	258.82	41.75	12560.49		
10	Medial strip	60.97	11.53	306.66	60.97	11.53	916.36	40.81	14.96	916.36	40.81	14.96	1324.46		
19	Snow	95.56	-18.46	306.76	50.30	-18.46	1036.05	71.99	2.15	1036.05	26.72	2.15	1529.60		
31	Miscellaneous	5.02	0.89	18.86	5.02	0.89	69.04	3.37	1.15	69.04	3.37	1.15	102.74		
100	AASHTO-LRFD TRUCK-LOAD	MAX	558.02	498.37	5216.40	359.44	498.37	6858.26	536.59	526.19	6858.26	339.76	526.19	8257.18	
		MIN	-146.90	-574.64	-3100.08	-343.71	-574.64	-2623.12	-163.42	-485.82	-2623.12	-358.19	-485.82	-2245.15	
		TANDEM-LOAD	MAX	415.32	347.63	3788.36	261.80	347.63	4904.07	400.21	368.23	4904.07	248.92	368.23	5875.54
		MIN	-116.09	-399.17	-2105.10	-269.36	-399.17	-1781.20	-127.60	-339.09	-1781.20	-278.60	-339.09	-1524.55	
		DISPERSION-L	MAX	505.26	704.10	6382.14	411.75	704.10	9217.48	435.95	622.35	9217.48	344.52	622.35	11455.28
		MIN	-157.28	-771.30	-5295.35	-225.23	-771.30	-5464.16	-174.41	-616.07	-5464.16	-244.47	-616.07	-5897.13	
110	Live load	L-PICKUP 1	MAX	1063.28	1202.47	11598.54	771.19	1202.47	16075.74	972.55	1148.54	16075.74	684.28	1148.54	19712.46
		MIN	-304.18	-1345.94	-8395.43	-568.94	-1345.94	-8087.27	-337.83	-1101.89	-8087.27	-602.66	-1101.89	-8142.28	
		L-PICKUP 2	MAX	920.58	1051.72	10170.50	673.55	1051.72	14121.55	836.16	990.58	14121.55	593.43	990.58	17330.82
		MIN	-273.37	-1170.47	-7400.45	-494.59	-1170.47	-7245.36	-302.02	-955.16	-7245.36	-523.07	-955.16	-7421.68	
		L-PICKUP 3	MAX	300.25	1549.09	10012.78	554.66	1549.09	9357.50	339.32	1244.29	9357.50	593.74	1244.29	9107.45
		MIN	-300.25	-1549.09	-10012.78	-554.66	-1549.09	-9357.50	-339.32	-1244.29	-9357.50	-593.74	-1244.29	-9107.45	
111	AASHTO Twin	TWIN-PICKUP	MAX	1146.48	1377.42	12431.79	857.44	1377.42	17711.91	1039.91	1262.67	17711.91	752.27	1262.67	21872.44
		MIN	-300.25	-1549.09	-10012.78	-554.66	-1549.09	-9357.50	-339.32	-1244.29	-9357.50	-593.74	-1244.29	-9107.45	
		MID-PICKUP	MAX	300.25	1549.09	10012.78	554.66	1549.09	9357.50	339.32	1244.29	9357.50	593.74	1244.29	9107.45
198	AASHTO Fatig	TRUCK-LOAD	MAX	290.79	204.05	1620.36	125.42	204.05	1961.31	285.83	163.43	1961.31	121.64	163.43	2257.18
		MIN	-63.46	-327.36	-547.85	-238.68	-327.36	-445.33	-79.47	-270.65	-445.33	-242.60	-270.65	-375.81	
		TANDEM-LOAD	MAX	227.04	139.93	1237.97	97.27	139.93	1470.62	223.32	112.32	1470.62	95.01	112.32	1678.25
		MIN	-62.14	-227.58	-371.25	-191.77	-227.58	-302.21	-65.89	-189.08	-302.21	-194.05	-189.08	-255.16	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1027			1028			1028			1029		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	162.68	361.67	1487.04	103.80	361.67	2023.41	143.90	326.24	2023.41	85.54	326.24	2465.04
	MIN	-40.61	-463.17	-998.03	-92.39	-463.17	-980.99	-44.57	-376.22	-980.99	-97.49	-376.22	-1044.23
199	AASHTO-LRFD TRUCK-LOAD MAX	768.60	826.37	7430.96	540.96	826.37	10462.42	719.50	780.62	10462.42	491.34	780.62	12847.43
	MIN	-176.33	-949.92	-5829.96	-391.05	-949.92	-4933.07	-202.61	-766.48	-4933.07	-415.24	-766.48	-4222.26
	TANDEM-LOAD MAX	415.32	347.63	3788.36	261.80	347.63	4904.07	400.21	368.23	4904.07	248.92	368.23	5875.54
	MIN	-116.09	-399.17	-2105.10	-269.36	-399.17	-1781.20	-127.60	-339.09	-1781.20	-278.60	-339.09	-1524.55
	DISPERSION-LMAX	505.26	704.10	6382.14	411.75	704.10	9217.48	435.95	622.35	9217.48	344.52	622.35	11455.28
	MIN	-157.28	-771.30	-5295.35	-225.23	-771.30	-5464.16	-174.41	-616.07	-5464.16	-244.47	-616.07	-5897.13
300	Total Dead lWithout snow	1129.07	-180.47	3684.77	642.15	-180.47	12540.84	842.26	46.36	12540.84	355.34	46.36	18528.87
301	Particular Snow	95.56	-18.46	306.76	50.30	-18.46	1036.05	71.99	2.15	1036.05	26.72	2.15	1529.60
302	Live load Total MAX	691.13	781.60	7539.05	501.27	781.60	10449.23	632.16	746.55	10449.23	444.78	746.55	12813.10
	MIN	-197.72	-1006.91	-6508.30	-369.81	-1006.91	-6082.37	-220.56	-808.79	-6082.37	-391.73	-808.79	-5919.84
303	Sum total D+L+PP MAX	1915.76	763.14	11530.59	1193.72	763.14	24026.12	1546.41	795.06	24026.12	826.85	795.06	32871.56
	MIN	967.60	-1205.84	-4469.26	211.69	-1205.84	5669.81	627.52	-806.64	5669.81	-127.18	-806.64	12362.67

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1029			1030			1030			1031			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	88.48	13.14	3409.55	-9.69	13.14	3803.47	11.70	12.72	3803.47	-86.47	12.72	3429.61	
3	Railing	5.32	-0.11	103.82	-2.95	-0.11	115.63	3.02	0.91	115.63	-5.25	0.91	104.45	
5	Wheel guard	52.63	-1.10	1027.81	-29.25	-1.10	1144.70	29.87	9.05	1144.70	-52.00	9.05	1034.06	
8	Steel weight	294.65	54.52	12560.49	-3.95	54.52	14013.98	11.33	40.55	14013.98	-287.27	40.55	12634.26	
10	Medial strip	13.68	8.66	1324.46	13.68	8.66	1461.30	-15.37	1.07	1461.30	-15.37	1.07	1307.55	
19	Snow	40.15	5.77	1529.60	-5.12	5.77	1704.76	5.81	5.82	1704.76	-39.46	5.82	1536.47	
31	Miscellaneous	1.20	0.68	102.74	1.20	0.68	114.71	-1.14	0.09	114.71	-1.14	0.09	103.33	
100	AASHTO-LRFD TRUCK-LOAD	MAX	478.38	514.14	8257.18	286.38	514.14	8841.65	423.51	506.46	8841.65	235.87	506.46	8653.86
		MIN	-204.63	-472.31	-2245.15	-395.80	-472.31	-1813.16	-261.65	-475.97	-1813.16	-448.84	-475.97	-2445.59
		TANDEM-LOAD MAX	359.94	359.60	5875.54	212.81	359.60	6294.23	321.77	354.37	6294.23	178.21	354.37	6154.46
		MIN	-156.43	-331.25	-1524.55	-303.44	-331.25	-1229.18	-195.60	-333.65	-1229.18	-339.10	-333.65	-1657.92
		DISPERSION-LMAX	369.45	541.91	11455.28	283.85	541.91	12399.92	315.05	539.64	12399.92	235.06	539.64	12022.38
		MIN	-224.02	-521.53	-5897.13	-300.03	-521.53	-6196.42	-294.75	-517.22	-6196.42	-376.41	-517.22	-6423.84
110	Live load	L-PICKUP 1 MAX	847.82	1056.05	19712.46	570.23	1056.05	21241.57	738.55	1046.10	21241.57	470.94	1046.10	20676.23
		MIN	-428.65	-993.84	-8142.28	-695.83	-993.84	-8009.59	-556.39	-993.18	-8009.59	-825.25	-993.18	-8869.42
		L-PICKUP 2 MAX	729.39	901.51	17330.82	496.66	901.51	18694.16	636.82	894.01	18694.16	413.27	894.01	18176.83
		MIN	-380.45	-852.78	-7421.68	-603.48	-852.78	-7425.61	-490.35	-850.87	-7425.61	-715.51	-850.87	-8081.75
		L-PICKUP 3	-434.41	-1082.95	-9107.45	-695.38	-1082.95	-8645.50	-579.83	-1083.04	-8645.50	-846.24	-1083.04	-9920.53
		Live load MAX	847.82	1056.05	19712.46	570.23	1056.05	21241.57	738.55	1046.10	21241.57	470.94	1046.10	20676.23
MIN	-434.41	-1082.95	-9107.45	-695.83	-1082.95	-8645.50	-579.83	-1083.04	-8645.50	-846.24	-1083.04	-9920.53		
111	AASHTO Twin TWIN-PICKUP	MAX	882.34	1158.55	21872.44	605.46	1158.55	23564.02	746.01	1147.54	23564.02	479.67	1147.54	22958.20
		MIN	-434.41	-1082.95	-9107.45	-695.38	-1082.95	-8645.50	-579.83	-1083.04	-8645.50	-846.24	-1083.04	-9920.53
		MID-PICKUP	-434.41	-1082.95	-9107.45	-695.38	-1082.95	-8645.50	-579.83	-1083.04	-8645.50	-846.24	-1083.04	-9920.53
198	AASHTO FatigTRUCK-LOAD	MAX	273.06	170.92	2257.18	111.86	170.92	2383.49	261.05	222.53	2383.49	102.34	222.53	2355.09
		MIN	-92.80	-216.26	-375.81	-253.58	-216.26	-302.42	-105.74	-157.17	-302.42	-264.21	-157.17	-410.22
		TANDEM-LOAD MAX	214.04	122.19	1678.25	88.37	122.19	1769.44	205.43	156.75	1769.44	81.82	156.75	1748.39
		MIN	-75.24	-152.35	-255.16	-200.85	-152.35	-205.04	-83.99	-112.33	-205.04	-207.57	-112.33	-277.99

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1029			1030			1030			1031		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	127.92	300.01	2465.04	70.29	300.01	2654.75	116.56	314.82	2654.75	59.93	314.82	2591.66
	MIN	-55.82	-308.04	-1044.23	-111.21	-308.04	-1094.72	-70.96	-289.51	-1094.72	-127.76	-289.51	-1139.26
199	AASHTO-LRFD TRUCK-LOAD MAX	610.93	745.37	12847.43	388.89	745.37	13782.32	513.85	735.40	13782.32	297.90	735.40	13486.74
	MIN	-258.66	-681.75	-4222.26	-472.61	-681.75	-3409.68	-349.51	-686.16	-3409.68	-563.86	-686.16	-4598.98
	TANDEM-LOAD MAX	359.94	359.60	5875.54	212.81	359.60	6294.23	321.77	354.37	6294.23	178.21	354.37	6154.46
	MIN	-156.43	-331.25	-1524.55	-303.44	-331.25	-1229.18	-195.60	-333.65	-1229.18	-339.10	-333.65	-1657.92
	DISPERSION-LMAX	369.45	541.91	11455.28	283.85	541.91	12399.92	315.05	539.64	12399.92	235.06	539.64	12022.38
	MIN	-224.02	-521.53	-5897.13	-300.03	-521.53	-6196.42	-294.75	-517.22	-6196.42	-376.41	-517.22	-6423.84
300	Total Dead lWithout snow	455.95	75.80	18528.87	-30.97	75.80	20653.79	39.41	64.39	20653.79	-447.51	64.39	18613.26
301	Particular Snow	40.15	5.77	1529.60	-5.12	5.77	1704.76	5.81	5.82	1704.76	-39.46	5.82	1536.47
302	Live load Total MAX	551.09	686.44	12813.10	370.65	686.44	13807.02	480.06	679.97	13807.02	306.11	679.97	13439.55
	MIN	-282.36	-703.92	-5919.84	-452.29	-703.92	-5619.57	-376.89	-703.97	-5619.57	-550.06	-703.97	-6448.35
303	Sum total D+L+PP MAX	1047.18	768.00	32871.56	365.53	768.00	36165.56	525.27	750.18	36165.56	-89.03	750.18	33589.29
	MIN	129.03	-698.15	12362.67	-488.37	-698.15	15053.09	-371.09	-698.15	15053.09	-1037.03	-698.15	11766.88

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1031			MEMBER 1032			MEMBER 1032			MEMBER 1033			
		NODE 1031			NODE 1032			NODE 1032			NODE 1033			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-67.39	11.70	3429.61	-165.56	11.70	2264.82	-146.39	15.06	2264.82	-244.56	15.06	310.06	
3	Railing	0.66	2.15	104.45	-7.61	2.15	69.74	-1.63	4.29	69.74	-9.90	4.29	12.13	
5	Wheel guard	6.58	21.30	1034.06	-75.30	21.30	690.46	-16.10	42.48	690.46	-97.98	42.48	120.05	
8	Steel weight	-280.71	21.68	12634.26	-579.31	21.68	8334.19	-573.10	9.72	8334.19	-871.70	9.72	1110.18	
10	Medial strip	-45.31	-8.15	1307.55	-45.31	-8.15	854.43	-75.60	-21.03	854.43	-75.60	-21.03	98.43	
19	Snow	-29.56	5.69	1536.47	-74.83	5.69	1014.52	-64.87	7.71	1014.52	-110.14	7.71	139.49	
31	Miscellaneous	-3.55	-0.65	103.33	-3.55	-0.65	67.81	-6.00	-1.69	67.81	-6.00	-1.69	7.84	
100	AASHTO-LRFD TRUCK-LOAD	MAX	378.09	520.00	8653.86	191.52	520.00	7643.46	336.78	561.76	7643.46	153.38	561.76	5823.79
		MIN	-322.89	-486.92	-2445.59	-509.68	-486.92	-3057.56	-390.73	-518.31	-3057.56	-576.28	-518.31	-3584.22
		TANDEM-LOAD MAX	290.69	362.42	6154.46	147.60	362.42	5455.28	262.06	390.50	5455.28	120.37	390.50	4215.09
		MIN	-237.12	-341.38	-1657.92	-380.24	-341.38	-2072.78	-283.11	-361.94	-2072.78	-425.12	-361.94	-2430.74
		DISPERSION-LMAX	265.92	618.94	12022.38	192.05	618.94	10275.81	227.33	743.03	10275.81	160.89	743.03	7059.83
		MIN	-374.84	-596.27	-6423.84	-462.52	-596.27	-6571.83	-465.68	-715.15	-6571.83	-560.66	-715.15	-6539.73
110	Live load	L-PICKUP 1 MAX	644.00	1138.94	20676.23	383.57	1138.94	17919.27	564.11	1304.79	17919.27	314.27	1304.79	12883.63
		MIN	-697.72	-1083.18	-8869.42	-972.20	-1083.18	-9629.39	-856.41	-1233.46	-9629.39	-1136.95	-1233.46	-10123.95
		L-PICKUP 2 MAX	556.61	981.36	18176.83	339.65	981.36	15731.09	489.39	1133.53	15731.09	281.26	1133.53	11274.92
		MIN	-611.95	-937.65	-8081.75	-842.76	-937.65	-8644.62	-748.80	-1077.09	-8644.62	-985.78	-1077.09	-8970.47
		L-PICKUP 3	-755.88	-1201.42	-9920.53	-1029.64	-1201.42	-11089.47	-953.30	-1411.24	-11089.47	-1234.91	-1411.24	-11950.03
		Live load MAX	644.00	1138.94	20676.23	383.57	1138.94	17919.27	564.11	1304.79	17919.27	314.27	1304.79	12883.63
MIN	-755.88	-1201.42	-9920.53	-1029.64	-1201.42	-11089.47	-953.30	-1411.24	-11089.47	-1234.91	-1411.24	-11950.03		
111	AASHTO Twin TWIN-PICKUP	MAX	639.00	1282.34	22958.20	381.93	1282.34	19773.51	555.33	1497.44	19773.51	312.11	1497.44	13856.42
		MIN	-755.88	-1201.42	-9920.53	-1029.64	-1201.42	-11089.47	-953.30	-1411.24	-11089.47	-1234.91	-1411.24	-11950.03
		MID-PICKUP	-755.88	-1201.42	-9920.53	-1029.64	-1201.42	-11089.47	-953.30	-1411.24	-11089.47	-1234.91	-1411.24	-11950.03
198	AASHTO FatigTRUCK-LOAD	MAX	248.77	276.28	2355.09	90.36	276.28	2157.48	233.27	319.45	2157.48	76.61	319.45	1783.61
		MIN	-118.03	-162.32	-410.22	-276.55	-162.32	-522.27	-133.80	-211.25	-522.27	-291.71	-211.25	-641.79
		TANDEM-LOAD MAX	197.14	192.98	1748.39	73.50	192.98	1610.84	186.52	221.96	1610.84	63.56	221.96	1355.03
		MIN	-92.28	-111.73	-277.99	-215.94	-111.73	-353.70	-102.94	-144.91	-353.70	-226.08	-144.91	-434.87

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1031			1032			1032			1033		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	104.76	379.83	2591.66	50.07	379.83	2257.83	93.07	452.58	2257.83	42.09	452.58	1649.37
	MIN	-90.49	-318.70	-1139.26	-148.03	-318.70	-1185.63	-117.76	-364.49	-1185.63	-176.73	-364.49	-1242.42
199	AASHTO-LRFD TRUCK-LOAD MAX	444.09	805.88	13486.74	232.32	805.88	11694.76	389.71	920.79	11694.76	185.90	920.79	8336.19
	MIN	-465.03	-738.64	-4598.98	-681.52	-738.64	-5749.80	-593.53	-852.90	-5749.80	-811.46	-852.90	-6738.09
	TANDEM-LOAD MAX	290.69	362.42	6154.46	147.60	362.42	5455.28	262.06	390.50	5455.28	120.37	390.50	4215.09
	MIN	-237.12	-341.38	-1657.92	-380.24	-341.38	-2072.78	-283.11	-361.94	-2072.78	-425.12	-361.94	-2430.74
	DISPERSION-LMAX	265.92	618.94	12022.38	192.05	618.94	10275.81	227.33	743.03	10275.81	160.89	743.03	7059.83
	MIN	-374.84	-596.27	-6423.84	-462.52	-596.27	-6571.83	-465.68	-715.15	-6571.83	-560.66	-715.15	-6539.73
300	Total Dead lWithout snow	-389.72	48.04	18613.26	-876.64	48.04	12281.45	-818.82	48.84	12281.45	-1305.74	48.84	1658.68
301	Particular Snow	-29.56	5.69	1536.47	-74.83	5.69	1014.52	-64.87	7.71	1014.52	-110.14	7.71	139.49
302	Live load Total MAX	418.60	740.31	13439.55	249.32	740.31	11647.53	366.67	848.12	11647.53	204.28	848.12	8374.36
	MIN	-491.32	-780.92	-6448.35	-669.27	-780.92	-7208.16	-619.64	-917.31	-7208.16	-802.69	-917.31	-7767.52
303	Sum total D+L+PP MAX	124.90	794.04	33589.29	-627.35	794.04	24943.50	-407.02	904.67	24943.50	-1150.31	904.67	10172.53
	MIN	-910.61	-775.23	11766.88	-1620.74	-775.23	3925.37	-1503.33	-909.59	3925.37	-2218.56	-909.59	-7628.03

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1033 1033	1034			1034			1035			1035				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-220.56	34.13	310.06	-318.73	34.13	-2386.41	-307.67	37.35	-2386.41	-386.21	37.35	-5161.92		
3	Railing	-3.77	8.25	12.13	-12.05	8.25	-66.97	-7.63	11.40	-66.97	-14.25	11.40	-154.47		
5	Wheel guard	-37.37	81.69	120.05	-119.25	81.69	-663.04	-75.53	112.88	-663.04	-141.03	112.88	-1529.25		
8	Steel weight	-847.66	39.60	1110.18	-1146.26	39.60	-8859.44	-1154.22	15.02	-8859.44	-1393.10	15.02	-19048.72		
10	Medial strip	-104.02	-37.29	98.43	-104.02	-37.29	-941.73	-128.20	-57.28	-941.73	-128.20	-57.28	-1967.34		
19	Snow	-98.02	17.12	139.49	-143.28	17.12	-1066.99	-137.29	19.34	-1066.99	-173.50	19.34	-2310.15		
31	Miscellaneous	-8.29	-3.01	7.84	-8.29	-3.01	-75.10	-10.25	-4.62	-75.10	-10.25	-4.62	-157.06		
100	AASHTO-LRFD TRUCK-LOAD	MAX	310.24	611.66	5823.79	128.08	611.66	3615.55	258.51	718.25	3615.55	107.43	718.25	2105.89	
		MIN	-439.48	-541.04	-3584.22	-621.94	-541.04	-4171.22	-501.74	-661.34	-4171.22	-652.38	-661.34	-4747.08	
		TANDEM-LOAD	MAX	242.35	423.80	4215.09	102.95	423.80	2728.79	208.70	494.33	2728.79	91.57	494.33	1687.98
		MIN	-316.06	-372.78	-2430.74	-455.44	-372.78	-2833.74	-360.45	-454.40	-2833.74	-477.44	-454.40	-3229.78	
		DISPERSION-L	MAX	210.36	945.23	7059.83	149.77	945.23	4922.13	208.59	1165.40	4922.13	167.34	1165.40	4562.02
		MIN	-570.45	-886.07	-6539.73	-671.10	-886.07	-8807.84	-711.70	-1100.82	-8807.84	-799.24	-1100.82	-13001.20	
110	Live load	L-PICKUP 1	MAX	520.61	1556.89	12883.63	277.85	1556.89	8537.68	467.10	1883.65	8537.68	274.77	1883.65	6667.92
		MIN	-1009.93	-1427.10	-10123.95	-1293.05	-1427.10	-12979.06	-1213.44	-1762.16	-12979.06	-1451.62	-1762.16	-17748.28	
		L-PICKUP 2	MAX	452.71	1369.04	11274.92	252.72	1369.04	7650.92	417.29	1659.73	7650.92	258.91	1659.73	6250.00
		MIN	-886.51	-1258.84	-8970.47	-1126.54	-1258.84	-11641.59	-1072.15	-1555.22	-11641.59	-1276.69	-1555.22	-16230.98	
		L-PICKUP 3	MAX	-1135.79	-1666.94	-11950.03	-1419.95	-1666.94	-14980.15	-1363.61	-2060.90	-14980.15	-1601.69	-2060.90	-19720.90
		MIN	520.61	1556.89	12883.63	277.85	1556.89	8537.68	467.10	1883.65	8537.68	274.77	1883.65	6667.92	
111	AASHTO Twin	TWIN-PICKUP	MAX	499.90	1811.22	13856.42	264.49	1811.22	8043.03	415.49	2198.45	8043.03	255.74	2198.45	6337.52
		MIN	-1135.79	-1666.94	-11950.03	-1419.95	-1666.94	-14980.15	-1363.61	-2060.90	-14980.15	-1601.69	-2060.90	-19720.90	
		MID-PICKUP	MAX	-1135.79	-1666.94	-11950.03	-1419.95	-1666.94	-14980.15	-1363.61	-2060.90	-14980.15	-1601.69	-2060.90	-19720.90
		MIN	499.90	1811.22	13856.42	264.49	1811.22	8043.03	415.49	2198.45	8043.03	255.74	2198.45	6337.52	
		MID-PICKUP	MAX	219.82	359.67	1783.61	63.94	359.67	1320.71	181.38	382.70	1320.71	51.87	382.70	808.14
		MIN	-148.20	-243.53	-641.79	-303.64	-243.53	-824.24	-180.40	-255.05	-824.24	-308.94	-255.05	-1090.42	
198	AASHTO Fatig	TRUCK-LOAD	MAX	176.88	249.17	1355.03	55.85	249.17	1050.99	152.11	264.57	1050.99	49.97	264.57	722.06
		MIN	-112.71	-166.69	-434.87	-233.63	-166.69	-560.08	-136.50	-172.89	-560.08	-238.44	-172.89	-743.35	
		TANDEM-LOAD	MAX	176.88	249.17	1355.03	55.85	249.17	1050.99	152.11	264.57	1050.99	49.97	264.57	722.06
		MIN	-112.71	-166.69	-434.87	-233.63	-166.69	-560.08	-136.50	-172.89	-560.08	-238.44	-172.89	-743.35	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1033			1034			1034			1035		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	87.12	570.91	1649.37	39.41	570.91	1205.02	85.51	703.72	1205.02	51.87	703.72	1021.63
	MIN	-153.98	-456.96	-1242.42	-214.73	-456.96	-1943.24	-220.72	-564.99	-1943.24	-272.52	-564.99	-3332.11
199	AASHTO-LRFD TRUCK-LOAD MAX	345.08	1067.23	8336.19	144.10	1067.23	4014.57	253.06	1277.32	4014.57	116.82	1277.32	2479.67
	MIN	-691.54	-966.09	-6738.09	-906.62	-966.09	-7836.77	-803.43	-1189.06	-7836.77	-980.41	-1189.06	-8910.91
	TANDEM-LOAD MAX	242.35	423.80	4215.09	102.95	423.80	2728.79	208.70	494.33	2728.79	91.57	494.33	1687.98
	MIN	-316.06	-372.78	-2430.74	-455.44	-372.78	-2833.74	-360.45	-454.40	-2833.74	-477.44	-454.40	-3229.78
	DISPERSION-LMAX	210.36	945.23	7059.83	149.77	945.23	4922.13	208.59	1165.40	4922.13	167.34	1165.40	4562.02
	MIN	-570.45	-886.07	-6539.73	-671.10	-886.07	-8807.84	-711.70	-1100.82	-8807.84	-799.24	-1100.82	-13001.20
300	Total Dead lWithout snow	-1221.68	123.36	1658.68	-1708.60	123.36	-12992.70	-1683.49	114.75	-12992.70	-2073.02	114.75	-28018.76
301	Particular Snow	-98.02	17.12	139.49	-143.28	17.12	-1066.99	-137.29	19.34	-1066.99	-173.50	19.34	-2310.15
302	Live load Total MAX	338.39	1011.98	8374.36	180.60	1011.98	5549.49	303.61	1224.37	5549.49	178.60	1224.37	4334.15
	MIN	-738.26	-1083.51	-7767.52	-922.97	-1083.51	-9737.10	-886.35	-1339.58	-9737.10	-1041.10	-1339.58	-12818.59
303	Sum total D+L+PP MAX	-879.78	1152.46	10172.53	-1617.10	1152.46	-6845.36	-1426.08	1358.46	-6845.36	-2014.35	1358.46	-24694.52
	MIN	-2057.96	-1066.39	-7628.03	-2774.85	-1066.39	-23796.79	-2707.13	-1320.24	-23796.79	-3287.63	-1320.24	-43147.49

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1035			1036			1036			1037			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-386.43	25.60	-5161.92	-464.97	25.60	-8567.52	466.33	-16.25	-8567.52	387.79	-16.25	-5151.01	
3	Railing	-14.50	7.36	-154.47	-21.12	7.36	-296.95	21.16	-7.11	-296.95	14.54	-7.11	-154.13	
5	Wheel guard	-143.57	72.87	-1529.25	-209.07	72.87	-2939.78	209.49	-70.42	-2939.78	143.99	-70.42	-1525.84	
8	Steel weight	-1390.95	15.73	-19048.72	-1629.83	15.73	-31131.81	1634.84	19.18	-31131.81	1395.96	19.18	-19008.63	
10	Medial strip	-126.55	-36.10	-1967.34	-126.55	-36.10	-2979.74	126.14	39.91	-2979.74	126.14	39.91	-1970.66	
19	Snow	-173.67	13.14	-2310.15	-209.88	13.14	-3844.33	210.41	-8.96	-3844.33	174.20	-8.96	-2305.90	
31	Miscellaneous	-10.11	-2.91	-157.06	-10.11	-2.91	-237.96	10.15	3.22	-237.96	10.15	3.22	-156.74	
100	AASHTO-LRFD TRUCK-LOAD	MAX	205.70	790.13	2105.89	108.55	790.13	1480.69	721.53	777.32	1480.69	558.54	777.32	2073.01
		MIN	-561.89	-770.22	-4747.08	-723.63	-770.22	-5418.17	-106.07	-789.49	-5418.17	-203.45	-789.49	-4609.75
	TANDEM-LOAD	MAX	173.89	537.66	1687.98	73.97	537.66	1005.90	524.67	531.90	1005.90	402.14	531.90	1665.31
		MIN	-404.30	-527.27	-3229.78	-525.84	-527.27	-3680.79	-72.23	-537.45	-3680.79	-172.67	-537.45	-3134.80
	DISPERSION-LMAX	MAX	259.45	1310.32	4562.02	238.66	1310.32	5144.39	1008.77	1283.05	5144.39	900.82	1283.05	4439.06
		MIN	-893.13	-1266.44	-13001.20	-1001.21	-1266.44	-19191.57	-243.75	-1311.73	-19191.57	-264.68	-1311.73	-12858.46
110	Live load L-PICKUP 1	MAX	465.15	2100.45	6667.92	347.21	2100.45	6625.08	1730.31	2060.37	6625.08	1459.36	2060.37	6512.07
		MIN	-1455.02	-2036.67	-17748.28	-1724.84	-2036.67	-24609.74	-349.83	-2101.23	-24609.74	-468.12	-2101.23	-17468.21
	L-PICKUP 2	MAX	433.34	1847.98	6250.00	312.63	1847.98	6150.28	1533.44	1814.95	6150.28	1302.96	1814.95	6104.36
		MIN	-1297.43	-1793.72	-16230.98	-1527.06	-1793.72	-22872.36	-315.98	-1849.19	-22872.36	-437.35	-1849.19	-15993.26
	L-PICKUP 3	MAX	-1623.44	-2368.16	-19720.90	-1895.45	-2368.16	-26415.72	-388.36	-2459.06	-26415.72	-414.64	-2459.06	-19368.05
		MIN	465.15	2100.45	6667.92	347.21	2100.45	6625.08	1730.31	2060.37	6625.08	1459.36	2060.37	6512.07
	Live load	MAX	465.15	2100.45	6667.92	347.21	2100.45	6625.08	1730.31	2060.37	6625.08	1459.36	2060.37	6512.07
		MIN	-1623.44	-2368.16	-19720.90	-1895.45	-2368.16	-26415.72	-388.36	-2459.06	-26415.72	-468.12	-2459.06	-19368.05
111	AASHTO Twin TWIN-PICKUP	MAX	414.01	2460.51	6337.52	386.91	2460.51	7135.77	1899.43	2399.68	7135.77	1627.55	2399.68	6215.56
		MIN	-1623.44	-2368.16	-19720.90	-1895.45	-2368.16	-26415.72	-388.36	-2459.06	-26415.72	-414.64	-2459.06	-19368.05
	MID-PICKUP	MAX	-1623.44	-2368.16	-19720.90	-1895.45	-2368.16	-26415.72	-388.36	-2459.06	-26415.72	-414.64	-2459.06	-19368.05
198	AASHTO FatigTRUCK-LOAD	MAX	107.49	331.45	808.14	37.88	331.45	275.98	385.14	225.63	275.98	241.87	225.63	792.90
		MIN	-242.90	-223.19	-1090.42	-385.44	-223.19	-1644.41	-36.49	-334.42	-1644.41	-108.04	-334.42	-1060.00
	TANDEM-LOAD	MAX	103.68	225.51	722.06	25.70	225.51	187.26	291.97	154.50	187.26	182.61	154.50	710.02
		MIN	-183.21	-152.78	-743.35	-292.01	-152.78	-1113.69	-24.75	-227.66	-1113.69	-104.21	-227.66	-722.26

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1035			1036			1036			1037		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	108.25	768.30	1021.63	90.56	768.30	1043.34	433.12	685.82	1043.34	363.30	685.82	994.60
	MIN	-360.16	-678.40	-3332.11	-430.02	-678.40	-6158.04	-90.17	-770.76	-6158.04	-107.95	-770.76	-3298.81
199	AASHTO-LRFD TRUCK-LOAD MAX	200.56	1423.57	2479.67	191.24	1423.57	2784.25	1101.71	1383.27	2784.25	907.56	1383.27	2467.12
	MIN	-910.69	-1364.84	-8910.91	-1104.84	-1364.84	-10159.23	-187.76	-1420.56	-10159.23	-196.03	-1420.56	-8661.60
	TANDEM-LOAD MAX	173.89	537.66	1687.98	73.97	537.66	1005.90	524.67	531.90	1005.90	402.14	531.90	1665.31
	MIN	-404.30	-527.27	-3229.78	-525.84	-527.27	-3680.79	-72.23	-537.45	-3680.79	-172.67	-537.45	-3134.80
	DISPERSION-LMAX	259.45	1310.32	4562.02	238.66	1310.32	5144.39	1008.77	1283.05	5144.39	900.82	1283.05	4439.06
	MIN	-893.13	-1266.44	-13001.20	-1001.21	-1266.44	-19191.57	-243.75	-1311.73	-19191.57	-264.68	-1311.73	-12858.46
300	Total Dead lWithout snow	-2072.11	82.55	-28018.76	-2461.64	82.55	-46153.75	2468.11	-31.47	-46153.75	2078.58	-31.47	-27967.01
301	Particular Snow	-173.67	13.14	-2310.15	-209.88	13.14	-3844.33	210.41	-8.96	-3844.33	174.20	-8.96	-2305.90
302	Live load Total MAX	302.35	1365.29	4334.15	225.69	1365.29	4306.30	1124.70	1339.24	4306.30	948.58	1339.24	4232.84
	MIN	-1055.24	-1539.30	-12818.59	-1232.04	-1539.30	-17170.22	-252.43	-1598.39	-17170.22	-304.28	-1598.39	-12589.23
303	Sum total D+L+PP MAX	-1852.72	1460.98	-24694.52	-2378.13	1460.98	-44399.89	3803.22	1330.28	-44399.89	3201.36	1330.28	-24770.22
	MIN	-3301.01	-1526.16	-43147.49	-3903.56	-1526.16	-67168.30	2350.36	-1638.82	-67168.30	1857.21	-1638.82	-42862.15

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1037	1038			1038			1039							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	382.07	-37.77	-5151.01	303.53	-37.77	-2408.62	305.77	-51.36	-2408.62	207.60	-51.36	158.20		
3	Railing	14.10	-11.50	-154.13	7.49	-11.50	-67.78	11.65	-8.82	-67.78	3.38	-8.82	7.36		
5	Wheel guard	139.60	-113.84	-1525.84	74.10	-113.84	-671.02	115.32	-87.31	-671.02	33.45	-87.31	72.84		
8	Steel weight	1378.06	-15.55	-19008.63	1139.18	-15.55	-8939.64	1098.53	-102.58	-8939.64	799.93	-102.58	552.62		
10	Medial strip	125.89	57.84	-1970.66	125.89	57.84	-963.51	98.22	31.15	-963.51	98.22	31.15	18.70		
19	Snow	171.57	-19.54	-2305.90	135.35	-19.54	-1078.21	137.40	-24.84	-1078.21	92.13	-24.84	69.45		
31	Miscellaneous	10.13	4.66	-156.74	10.13	4.66	-75.69	7.90	2.52	-75.69	7.90	2.52	3.35		
100	AASHTO-LRFD TRUCK-LOAD	MAX	643.83	664.93	2073.01	489.95	664.93	3421.24	611.71	535.71	3421.24	423.54	535.71	5487.11	
		MIN	-107.10	-729.99	-4609.75	-261.97	-729.99	-3955.96	-126.54	-630.34	-3955.96	-314.76	-630.34	-3345.11	
		TANDEM-LOAD	MAX	472.42	456.59	1665.31	352.40	456.59	2594.45	449.68	367.24	2594.45	305.13	367.24	3978.69
		MIN	-91.61	-502.85	-3134.80	-211.86	-502.85	-2687.66	-101.98	-436.75	-2687.66	-246.60	-436.75	-2270.77	
		DISPERSION-L	MAX	799.01	1122.11	4439.06	712.24	1122.11	4597.80	653.16	891.35	4597.80	553.58	891.35	6483.27
		MIN	-173.49	-1187.47	-12858.46	-215.56	-1187.47	-8516.04	-152.72	-978.58	-8516.04	-214.42	-978.58	-6204.91	
110	Live load	L-PICKUP 1	MAX	1442.84	1787.05	6512.07	1202.19	1787.05	8019.05	1264.87	1427.06	8019.05	977.12	1427.06	11970.37
		MIN	-280.60	-1917.46	-17468.21	-477.53	-1917.46	-12471.99	-279.26	-1608.93	-12471.99	-529.18	-1608.93	-9550.02	
		L-PICKUP 2	MAX	1271.43	1578.70	6104.36	1064.64	1578.70	7192.25	1102.83	1258.59	7192.25	858.71	1258.59	10461.95
		MIN	-265.11	-1690.32	-15993.26	-427.41	-1690.32	-11203.70	-254.70	-1415.33	-11203.70	-461.02	-1415.33	-8475.69	
		L-PICKUP 3	MAX	1442.84	1787.05	6512.07	1202.19	1787.05	8019.05	1264.87	1427.06	8019.05	977.12	1427.06	11970.37
		MIN	-280.60	-2235.35	-19368.05	-477.53	-2235.35	-14359.48	-279.26	-1876.30	-14359.48	-529.18	-1876.30	-11248.82	
111	AASHTO Twin	TWIN-PICKUP	MAX	1586.93	2094.46	6215.56	1348.21	2094.46	7494.97	1383.97	1666.23	7494.97	1097.45	1666.23	12871.29
		MIN	-258.48	-2235.35	-19368.05	-420.94	-2235.35	-14359.48	-263.42	-1876.30	-14359.48	-506.26	-1876.30	-11248.82	
		MID-PICKUP	MAX	1586.93	2094.46	6215.56	1348.21	2094.46	7494.97	1383.97	1666.23	7494.97	1097.45	1666.23	12871.29
198	AASHTO Fatig	TRUCK-LOAD	MAX	306.98	257.10	792.90	176.48	257.10	1262.15	302.28	242.95	1262.15	143.28	242.95	1683.57
		MIN	-52.47	-392.02	-1060.00	-184.23	-392.02	-780.76	-63.79	-371.37	-780.76	-223.42	-371.37	-596.85	
		TANDEM-LOAD	MAX	237.66	174.46	710.02	133.86	174.46	1009.66	233.49	166.30	1009.66	109.30	166.30	1283.00
		MIN	-50.55	-271.35	-722.26	-154.60	-271.35	-529.82	-55.77	-257.35	-529.82	-180.10	-257.35	-404.25	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1037			1038			1038			1039		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	272.12	575.46	994.60	220.54	575.46	1132.04	209.77	462.64	1132.04	149.27	462.64	1520.04
	MIN	-51.11	-715.97	-3298.81	-85.24	-715.97	-1881.70	-39.56	-587.31	-1881.70	-87.91	-587.31	-1176.50
199	AASHTO-LRFD TRUCK-LOAD MAX	964.25	1205.07	2467.12	785.78	1205.07	3729.95	884.59	960.01	3729.95	665.81	960.01	7818.17
	MIN	-113.71	-1296.25	-8661.60	-252.15	-1296.25	-7438.94	-139.97	-1106.20	-7438.94	-348.09	-1106.20	-6293.78
	TANDEM-LOAD MAX	472.42	456.59	1665.31	352.40	456.59	2594.45	449.68	367.24	2594.45	305.13	367.24	3978.69
	MIN	-91.61	-502.85	-3134.80	-211.86	-502.85	-2687.66	-101.98	-436.75	-2687.66	-246.60	-436.75	-2270.77
	DISPERSION-LMAX	799.01	1122.11	4439.06	712.24	1122.11	4597.80	653.16	891.35	4597.80	553.58	891.35	6483.27
	MIN	-173.49	-1187.47	-12858.46	-215.56	-1187.47	-8516.04	-152.72	-978.58	-8516.04	-214.42	-978.58	-6204.91
300	Total Dead lWithout snow	2049.86	-116.16	-27967.01	1660.33	-116.16	-13126.27	1637.39	-216.40	-13126.27	1150.47	-216.40	813.06
301	Particular Snow	171.57	-19.54	-2305.90	135.35	-19.54	-1078.21	137.40	-24.84	-1078.21	92.13	-24.84	69.45
302	Live load Total MAX	937.84	1161.58	4232.84	781.43	1161.58	5212.38	822.16	927.59	5212.38	635.13	927.59	7780.74
	MIN	-182.39	-1452.98	-12589.23	-310.39	-1452.98	-9333.66	-181.52	-1219.60	-9333.66	-343.97	-1219.60	-7311.73
303	Sum total D+L+PP MAX	3159.27	1142.04	-24770.22	2577.11	1142.04	-7428.39	2596.95	902.75	-7428.39	1877.73	902.75	8663.25
	MIN	1984.32	-1588.67	-42862.15	1392.17	-1588.67	-23538.14	1538.82	-1460.84	-23538.14	795.45	-1460.84	-7242.29

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1039			1040			1040			1041			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	237.56	-23.07	158.20	139.39	-23.07	2042.98	175.00	9.39	2042.98	76.83	9.39	3302.15	
3	Railing	9.70	-4.53	7.36	1.43	-4.53	63.00	7.90	-1.53	63.00	-0.37	-1.53	100.63	
5	Wheel guard	96.02	-44.89	72.84	14.14	-44.89	623.65	78.20	-15.11	623.65	-3.68	-15.11	996.24	
8	Steel weight	845.74	-39.22	552.62	547.14	-39.22	7517.06	614.02	56.25	7517.06	315.42	56.25	12164.26	
10	Medial strip	71.77	17.75	18.70	71.77	17.75	736.43	47.75	15.93	736.43	47.75	15.93	1213.92	
19	Snow	106.91	-11.32	69.45	61.65	-11.32	912.25	78.96	3.72	912.25	33.69	3.72	1475.53	
31	Miscellaneous	5.78	1.45	3.35	5.78	1.45	61.12	3.83	1.30	61.12	3.83	1.30	99.46	
100	AASHTO-LRFD TRUCK-LOAD	MAX	587.45	528.35	5487.11	398.31	528.35	7460.68	545.60	534.22	7460.68	358.93	534.22	8931.58
		MIN	-143.21	-560.95	-3345.11	-329.49	-560.95	-2940.55	-171.61	-493.44	-2940.55	-356.35	-493.44	-2490.80
		TANDEM-LOAD MAX	433.39	369.16	3978.69	288.13	369.16	5323.61	404.42	373.58	5323.61	261.82	373.58	6346.86
		MIN	-112.91	-389.83	-2270.77	-257.76	-389.83	-1996.13	-133.07	-344.54	-1996.13	-275.40	-344.54	-1690.83
		DISPERSION-LMAX	545.06	739.15	6483.27	448.59	739.15	9862.24	472.47	633.02	9862.24	380.48	633.02	12218.23
		MIN	-156.36	-779.96	-6204.91	-221.27	-779.96	-6510.60	-186.16	-620.72	-6510.60	-255.65	-620.72	-6814.13
110	Live load	L-PICKUP 1 MAX	1132.51	1267.51	11970.37	846.90	1267.51	17322.92	1018.07	1167.23	17322.92	739.41	1167.23	21149.81
		MIN	-299.57	-1340.92	-9550.02	-550.76	-1340.92	-9451.15	-357.77	-1114.16	-9451.15	-612.00	-1114.16	-9304.93
		L-PICKUP 2 MAX	978.45	1108.31	10461.95	736.71	1108.31	15185.85	876.89	1006.60	15185.85	642.30	1006.60	18565.09
		MIN	-269.27	-1169.79	-8475.69	-479.03	-1169.79	-8506.73	-319.23	-965.26	-8506.73	-531.05	-965.26	-8504.96
		L-PICKUP 3	-299.97	-1536.34	-11248.82	-541.58	-1536.34	-10838.95	-359.15	-1257.78	-10838.95	-606.10	-1257.78	-10350.54
		Live load MAX	1132.51	1267.51	11970.37	846.90	1267.51	17322.92	1018.07	1167.23	17322.92	739.41	1167.23	21149.81
MIN	-299.97	-1536.34	-11248.82	-550.76	-1536.34	-10838.95	-359.15	-1257.78	-10838.95	-612.00	-1257.78	-10350.54		
111	AASHTO Twin TWIN-PICKUP	MAX	1236.35	1444.60	12871.29	949.08	1444.60	19153.94	1094.32	1285.82	19153.94	812.85	1285.82	23536.14
		MIN	-299.97	-1536.34	-11248.82	-541.58	-1536.34	-10838.95	-359.15	-1257.78	-10838.95	-606.10	-1257.78	-10350.54
		MID-PICKUP	-299.97	-1536.34	-11248.82	-541.58	-1536.34	-10838.95	-359.15	-1257.78	-10838.95	-606.10	-1257.78	-10350.54
198	AASHTO FatigTRUCK-LOAD	MAX	295.73	212.38	1683.57	135.44	212.38	2103.91	285.56	168.40	2103.91	126.81	168.40	2425.53
		MIN	-72.09	-320.90	-596.85	-230.78	-320.90	-501.01	-82.01	-269.14	-501.01	-239.76	-269.14	-417.30
		TANDEM-LOAD MAX	229.34	145.58	1283.00	103.97	145.58	1570.56	222.03	115.79	1570.56	98.36	115.79	1797.10
		MIN	-60.23	-222.80	-404.25	-185.37	-222.80	-339.85	-67.50	-187.77	-339.85	-191.03	-187.77	-283.24

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1039			1040			1040			1041		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	174.48	373.09	1520.04	115.18	373.09	2170.36	152.32	332.64	2170.36	93.88	332.64	2643.33
	MIN	-40.44	-463.53	-1176.50	-90.58	-463.53	-1171.76	-47.35	-380.89	-1171.76	-99.94	-380.89	-1208.05
199	AASHTO-LRFD TRUCK-LOAD MAX	828.66	865.96	7818.17	605.95	865.96	11419.91	743.44	795.68	11419.91	522.68	795.68	13933.04
	MIN	-176.94	-927.08	-6293.78	-380.49	-927.08	-5532.67	-212.90	-776.82	-5532.67	-417.80	-776.82	-4686.47
	TANDEM-LOAD MAX	433.39	369.16	3978.69	288.13	369.16	5323.61	404.42	373.58	5323.61	261.82	373.58	6346.86
	MIN	-112.91	-389.83	-2270.77	-257.76	-389.83	-1996.13	-133.07	-344.54	-1996.13	-275.40	-344.54	-1690.83
	DISPERSION-LMAX	545.06	739.15	6483.27	448.59	739.15	9862.24	472.47	633.02	9862.24	380.48	633.02	12218.23
	MIN	-156.36	-779.96	-6204.91	-221.27	-779.96	-6510.60	-186.16	-620.72	-6510.60	-255.65	-620.72	-6814.13
300	Total Dead lWithout snow	1266.58	-92.50	813.06	779.66	-92.50	11044.24	926.70	66.24	11044.24	439.78	66.24	17876.67
301	Particular Snow	106.91	-11.32	69.45	61.65	-11.32	912.25	78.96	3.72	912.25	33.69	3.72	1475.53
302	Live load Total MAX	736.13	823.88	7780.74	550.48	823.88	11259.90	661.75	758.70	11259.90	480.62	758.70	13747.38
	MIN	-194.98	-998.62	-7311.73	-357.99	-998.62	-7045.32	-233.45	-817.56	-7045.32	-397.80	-817.56	-6727.85
303	Sum total D+L+PP MAX	2109.62	812.56	8663.25	1391.79	812.56	23216.38	1667.41	828.67	23216.38	954.10	828.67	33099.57
	MIN	1120.01	-1102.44	-7242.29	375.91	-1102.44	2797.57	702.18	-813.83	2797.57	-43.66	-813.83	10605.99

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1041	1042			1043			1042			1043		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	94.40	5.91	3302.15	-3.77	5.91	3755.29	12.14	0.58	3755.29	-86.03	0.58	3385.83	
3 Railing	5.49	-0.36	100.63	-2.78	-0.36	114.23	3.03	0.53	114.23	-5.24	0.53	103.18	
5 Wheel guard	54.40	-3.58	996.24	-27.48	-3.58	1130.85	30.00	5.25	1130.85	-51.88	5.25	1021.47	
8 Steel weight	316.47	28.24	12164.26	17.87	28.24	13835.98	12.95	-4.00	13835.98	-285.65	-4.00	12472.47	
10 Medial strip	17.43	5.98	1213.92	17.43	5.98	1388.22	-13.50	-3.29	1388.22	-13.50	-3.29	1253.24	
19 Snow	42.93	2.51	1475.53	-2.34	2.51	1678.49	6.15	0.39	1678.49	-39.12	0.39	1513.66	
31 Miscellaneous	1.38	0.48	99.46	1.38	0.48	113.23	-1.12	-0.27	113.23	-1.12	-0.27	101.98	
100 AASHTO-LRFD TRUCK-LOAD	474.42	507.92	8931.58	292.53	507.92	9418.71	414.56	497.28	9418.71	234.13	497.28	9058.17	
MIN	-224.27	-492.91	-2490.80	-405.93	-492.91	-1911.07	-285.27	-500.00	-1911.07	-465.80	-500.00	-2476.71	
TANDEM-LOAD	355.41	355.59	6346.86	216.80	355.59	6697.77	314.39	348.37	6697.77	176.87	348.37	6436.00	
MIN	-170.18	-345.50	-1690.83	-308.76	-345.50	-1297.29	-211.80	-350.26	-1297.29	-349.34	-350.26	-1679.13	
DISPERSION-LMAX	396.31	546.73	12218.23	311.78	546.73	13017.76	329.31	542.08	13017.76	251.05	542.08	12381.72	
MIN	-241.69	-538.53	-6814.13	-318.77	-538.53	-6876.11	-308.84	-539.61	-6876.11	-392.20	-539.61	-6842.92	
110 Live load L-PICKUP 1	870.74	1054.65	21149.81	604.31	1054.65	22436.46	743.87	1039.35	22436.46	485.18	1039.35	21439.89	
MIN	-465.96	-1031.44	-9304.93	-724.70	-1031.44	-8787.18	-594.11	-1039.62	-8787.18	-858.00	-1039.62	-9319.63	
L-PICKUP 2	751.72	902.32	18565.09	528.59	902.32	19715.53	643.70	890.45	19715.53	427.92	890.45	18817.72	
MIN	-411.87	-884.02	-8504.96	-627.53	-884.02	-8173.40	-520.64	-889.87	-8173.40	-741.54	-889.87	-8522.05	
L-PICKUP 3	-473.18	-1126.20	-10350.54	-729.83	-1126.20	-9424.63	-624.77	-1136.13	-9424.63	-889.94	-1136.13	-10354.91	
Live load	870.74	1054.65	21149.81	604.31	1054.65	22436.46	743.87	1039.35	22436.46	485.18	1039.35	21439.89	
MIN	-473.18	-1126.20	-10350.54	-729.83	-1126.20	-9424.63	-624.77	-1136.13	-9424.63	-889.94	-1136.13	-10354.91	
111 AASHTO Twin TWIN-PICKUP	906.50	1153.22	23536.14	638.35	1153.22	24948.46	751.66	1135.26	24948.46	493.34	1135.26	23859.77	
MIN	-473.18	-1126.20	-10350.54	-729.83	-1126.20	-9424.63	-624.77	-1136.13	-9424.63	-889.94	-1136.13	-10354.91	
MID-PICKUP	-473.18	-1126.20	-10350.54	-729.83	-1126.20	-9424.63	-624.77	-1136.13	-9424.63	-889.94	-1136.13	-10354.91	
198 AASHTO FatigTRUCK-LOAD	269.30	163.08	2425.53	113.71	163.08	2530.94	256.37	216.58	2530.94	101.63	216.58	2458.75	
MIN	-98.65	-216.64	-417.30	-254.14	-216.64	-318.76	-111.85	-160.45	-318.76	-266.64	-160.45	-415.48	
TANDEM-LOAD	210.37	116.53	1797.10	89.46	116.53	1873.96	201.47	152.38	1873.96	81.21	152.38	1820.92	
MIN	-79.22	-152.41	-283.24	-200.11	-152.41	-216.39	-88.16	-114.56	-216.39	-208.42	-114.56	-281.60	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1041	1042			1043			1042			1043		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	133.10	301.77	2643.33	75.76	301.77	2803.92	118.68	316.52	2803.92	62.71	316.52	2684.75	
MIN	-60.19	-316.07	-1208.05	-115.79	-316.07	-1215.79	-74.69	-298.69	-1215.79	-131.76	-298.69	-1213.75	
199 AASHTO-LRFD TRUCK-LOAD MAX	610.90	734.63	13933.04	397.49	734.63	14702.76	505.86	719.33	14702.76	297.11	719.33	14129.13	
MIN	-284.07	-712.80	-4686.47	-492.16	-712.80	-3595.70	-385.35	-722.75	-3595.70	-596.62	-722.75	-4662.53	
TANDEM-LOAD MAX	355.41	355.59	6346.86	216.80	355.59	6697.77	314.39	348.37	6697.77	176.87	348.37	6436.00	
MIN	-170.18	-345.50	-1690.83	-308.76	-345.50	-1297.29	-211.80	-350.26	-1297.29	-349.34	-350.26	-1679.13	
DISPERSION-LMAX	396.31	546.73	12218.23	311.78	546.73	13017.76	329.31	542.08	13017.76	251.05	542.08	12381.72	
MIN	-241.69	-538.53	-6814.13	-318.77	-538.53	-6876.11	-308.84	-539.61	-6876.11	-392.20	-539.61	-6842.92	
300 Total Dead lWithout snow	489.57	36.67	17876.67	2.65	36.67	20337.80	43.50	-1.21	20337.80	-443.42	-1.21	18338.17	
301 Particular Snow	42.93	2.51	1475.53	-2.34	2.51	1678.49	6.15	0.39	1678.49	-39.12	0.39	1513.66	
302 Live load Total MAX	565.98	685.52	13747.38	392.80	685.52	14583.70	483.52	675.58	14583.70	315.37	675.58	13935.93	
MIN	-307.57	-732.03	-6727.85	-474.39	-732.03	-6126.01	-406.10	-738.48	-6126.01	-578.46	-738.48	-6730.69	
303 Sum total D+L+PP MAX	1098.48	724.69	33099.57	393.12	724.69	36599.99	533.16	675.97	36599.99	-72.56	675.97	33787.76	
MIN	132.66	-729.52	10605.99	-476.73	-729.52	14052.47	-399.95	-739.30	14052.47	-1061.00	-739.30	11101.93	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1043			MEMBER 1044			MEMBER 1044			MEMBER 1045			
		NODE 1043			NODE 1044			NODE 1044			NODE 1045			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-69.04	-2.10	3385.83	-167.21	-2.10	2204.62	-142.26	11.90	2204.62	-240.43	11.90	291.17	
3	Railing	0.61	1.72	103.18	-7.66	1.72	67.95	-1.51	4.16	67.95	-9.78	4.16	11.54	
5	Wheel guard	6.06	17.00	1021.47	-75.81	17.00	672.73	-14.91	41.19	672.73	-96.79	41.19	114.20	
8	Steel weight	-286.75	-29.00	12472.47	-585.35	-29.00	8112.02	-557.82	-1.50	8112.02	-856.42	-1.50	1040.77	
10	Medial strip	-44.14	-13.09	1253.24	-44.14	-13.09	811.87	-72.22	-21.88	811.87	-72.22	-21.88	89.66	
19	Snow	-30.14	-0.48	1513.66	-75.41	-0.48	985.89	-62.87	6.30	985.89	-108.13	6.30	130.88	
31	Miscellaneous	-3.60	-1.06	101.98	-3.60	-1.06	65.97	-5.87	-1.77	65.97	-5.87	-1.77	7.28	
100	AASHTO-LRFD TRUCK-LOAD	MAX	367.27	506.48	9058.17	186.16	506.48	7809.27	333.78	562.09	7809.27	153.17	562.09	5890.34
		MIN	-347.33	-510.34	-2476.71	-529.39	-510.34	-3026.19	-401.50	-524.79	-3026.19	-584.31	-524.79	-3523.48
		TANDEM-LOAD MAX	282.34	353.41	6436.00	143.57	353.41	5569.19	259.51	390.83	5569.19	120.08	390.83	4261.28
		MIN	-253.78	-357.37	-1679.13	-392.69	-357.37	-2051.66	-290.33	-366.40	-2051.66	-430.08	-366.40	-2389.49
		DISPERSION-LMAX	273.44	616.31	12381.72	201.75	616.31	10310.28	236.42	748.35	10310.28	170.75	748.35	6977.75
		MIN	-385.65	-616.27	-6842.92	-475.46	-616.27	-6698.18	-468.57	-725.63	-6698.18	-564.30	-725.63	-6487.70
110	Live load	L-PICKUP 1 MAX	640.72	1122.79	21439.89	387.90	1122.79	18119.55	570.19	1310.44	18119.55	323.92	1310.44	12868.09
		MIN	-732.98	-1126.61	-9319.63	-1004.85	-1126.61	-9724.37	-870.08	-1250.42	-9724.37	-1148.61	-1250.42	-10011.18
		L-PICKUP 2 MAX	555.79	969.73	18817.72	345.31	969.73	15879.47	495.92	1139.18	15879.47	290.83	1139.18	11239.03
		MIN	-639.43	-973.63	-8522.05	-868.15	-973.63	-8749.84	-758.91	-1092.03	-8749.84	-994.38	-1092.03	-8877.19
		L-PICKUP 3	-800.62	-1242.49	-10354.91	-1075.13	-1242.49	-11155.63	-971.81	-1428.72	-11155.63	-1253.05	-1428.72	-11807.52
		Live load MAX	640.72	1122.79	21439.89	387.90	1122.79	18119.55	570.19	1310.44	18119.55	323.92	1310.44	12868.09
MIN	-800.62	-1242.49	-10354.91	-1075.13	-1242.49	-11155.63	-971.81	-1428.72	-11155.63	-1253.05	-1428.72	-11807.52		
111	AASHTO Twin	TWIN-PICKUP MAX	638.00	1266.57	23859.77	388.70	1266.57	20045.23	562.20	1504.77	20045.23	322.42	1504.77	13877.12
		MIN	-800.62	-1242.49	-10354.91	-1075.13	-1242.49	-11155.63	-971.81	-1428.72	-11155.63	-1253.05	-1428.72	-11807.52
		MID-PICKUP	-800.62	-1242.49	-10354.91	-1075.13	-1242.49	-11155.63	-971.81	-1428.72	-11155.63	-1253.05	-1428.72	-11807.52
198	AASHTO Fatig	TRUCK-LOAD MAX	243.57	269.64	2458.75	88.10	269.64	2199.90	231.28	317.59	2199.90	76.02	317.59	1800.22
		MIN	-124.27	-165.26	-415.48	-280.20	-165.26	-516.74	-136.45	-212.00	-516.74	-292.96	-212.00	-630.29
		TANDEM-LOAD MAX	193.07	188.14	1820.92	71.77	188.14	1639.87	184.91	220.50	1639.87	63.07	220.50	1366.41
		MIN	-96.50	-113.71	-281.60	-217.87	-113.71	-350.03	-104.64	-145.38	-350.03	-226.66	-145.38	-426.99

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1043			1044			1044			1045		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	105.21	379.56	2684.75	51.47	379.56	2278.28	94.39	455.87	2278.28	43.84	455.87	1637.05
	MIN	-94.21	-326.66	-1213.75	-152.10	-326.66	-1207.34	-119.08	-369.76	-1207.34	-178.13	-369.76	-1231.61
199	AASHTO-LRFD TRUCK-LOAD MAX	435.45	790.99	14129.13	230.15	790.99	11962.20	388.25	923.61	11962.20	187.50	923.61	8441.27
	MIN	-503.93	-764.28	-4662.53	-719.12	-764.28	-5696.96	-611.21	-861.83	-5696.96	-827.97	-861.83	-6631.77
	TANDEM-LOAD MAX	282.34	353.41	6436.00	143.57	353.41	5569.19	259.51	390.83	5569.19	120.08	390.83	4261.28
	MIN	-253.78	-357.37	-1679.13	-392.69	-357.37	-2051.66	-290.33	-366.40	-2051.66	-430.08	-366.40	-2389.49
	DISPERSION-LMAX	273.44	616.31	12381.72	201.75	616.31	10310.28	236.42	748.35	10310.28	170.75	748.35	6977.75
	MIN	-385.65	-616.27	-6842.92	-475.46	-616.27	-6698.18	-468.57	-725.63	-6698.18	-564.30	-725.63	-6487.70
300	Total Dead lWithout snow	-396.84	-26.53	18338.17	-883.76	-26.53	11935.16	-794.60	32.10	11935.16	-1281.51	32.10	1554.62
301	Particular Snow	-30.14	-0.48	1513.66	-75.41	-0.48	985.89	-62.87	6.30	985.89	-108.13	6.30	130.88
302	Live load Total MAX	416.47	729.81	13935.93	252.14	729.81	11777.71	370.63	851.79	11777.71	210.55	851.79	8364.26
	MIN	-520.40	-807.62	-6730.69	-698.83	-807.62	-7251.16	-631.68	-928.66	-7251.16	-814.48	-928.66	-7674.89
303	Sum total D+L+PP MAX	114.42	729.34	33787.76	-631.39	729.34	24698.76	-375.65	890.19	24698.76	-1115.93	890.19	10049.76
	MIN	-947.39	-834.63	11101.93	-1658.00	-834.63	3494.54	-1489.14	-922.36	3494.54	-2204.13	-922.36	-7544.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1045	1046			1046			1047			1046	1047		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-211.75	38.15	291.17	-309.92	38.15	-2317.20	-296.11	45.55	-2317.20	-374.65	45.55	-5000.21	
3	Railing	-3.51	8.33	11.54	-11.78	8.33	-64.89	-7.24	11.64	-64.89	-13.86	11.64	-149.29	
5	Wheel guard	-34.72	82.47	114.20	-116.60	82.47	-642.38	-71.70	115.21	-642.38	-137.20	115.21	-1478.01	
8	Steel weight	-815.21	54.94	1040.77	-1113.81	54.94	-8604.30	-1112.04	45.41	-8604.30	-1350.92	45.41	-18456.18	
10	Medial strip	-98.95	-35.48	89.66	-98.95	-35.48	-899.80	-122.31	-54.07	-899.80	-122.31	-54.07	-1878.28	
19	Snow	-93.92	18.90	130.88	-139.19	18.90	-1034.66	-131.95	23.01	-1034.66	-168.16	23.01	-2235.12	
31	Miscellaneous	-8.03	-2.87	7.28	-8.03	-2.87	-73.00	-9.92	-4.37	-73.00	-9.92	-4.37	-152.33	
100	AASHTO-LRFD TRUCK-LOAD	MAX	309.35	615.40	5890.34	127.68	615.40	3637.67	257.45	724.26	3637.67	106.64	724.26	2089.53
		MIN	-442.91	-541.41	-3523.48	-624.85	-541.41	-4075.41	-504.58	-659.64	-4075.41	-655.37	-659.64	-4605.48
	TANDEM-LOAD	MAX	241.64	426.48	4261.28	102.66	426.48	2743.75	208.01	498.23	2743.75	90.80	498.23	1675.57
		MIN	-318.39	-373.10	-2389.49	-457.34	-373.10	-2768.44	-362.45	-453.65	-2768.44	-479.58	-453.65	-3133.15
	DISPERSION-LMAX	MAX	216.85	958.41	6977.75	156.50	958.41	4858.94	213.97	1180.36	4858.94	172.91	1180.36	4512.77
		MIN	-563.04	-892.70	-6487.70	-663.92	-892.70	-8635.42	-698.65	-1102.46	-8635.42	-786.38	-1102.46	-12695.45
110	Live load L-PICKUP 1	MAX	526.20	1573.80	12868.09	284.18	1573.80	8496.61	471.42	1904.62	8496.61	279.55	1904.62	6602.30
		MIN	-1005.95	-1434.11	-10011.18	-1288.78	-1434.11	-12710.83	-1203.23	-1762.10	-12710.83	-1441.75	-1762.10	-17300.93
	L-PICKUP 2	MAX	458.48	1384.88	11239.03	259.16	1384.88	7602.69	421.98	1678.60	7602.69	263.71	1678.60	6188.34
		MIN	-881.43	-1265.80	-8877.19	-1121.27	-1265.80	-11403.85	-1061.11	-1556.10	-11403.85	-1265.96	-1556.10	-15828.60
	L-PICKUP 3	MAX	-1133.67	-1673.83	-11807.52	-1418.11	-1673.83	-14671.36	-1354.66	-2057.55	-14671.36	-1593.48	-2057.55	-19215.95
		MIN	526.20	1573.80	12868.09	284.18	1573.80	8496.61	471.42	1904.62	8496.61	279.55	1904.62	6602.30
	Live load	MAX	526.20	1573.80	12868.09	284.18	1573.80	8496.61	471.42	1904.62	8496.61	279.55	1904.62	6602.30
		MIN	-1133.67	-1673.83	-11807.52	-1418.11	-1673.83	-14671.36	-1354.66	-2057.55	-14671.36	-1593.48	-2057.55	-19215.95
111	AASHTO Twin TWIN-PICKUP	MAX	505.20	1832.17	13877.12	271.17	1832.17	8022.75	421.13	2223.48	8022.75	261.00	2223.48	6270.00
		MIN	-1133.67	-1673.83	-11807.52	-1418.11	-1673.83	-14671.36	-1354.66	-2057.55	-14671.36	-1593.48	-2057.55	-19215.95
	MID-PICKUP	MAX	-1133.67	-1673.83	-11807.52	-1418.11	-1673.83	-14671.36	-1354.66	-2057.55	-14671.36	-1593.48	-2057.55	-19215.95
		MIN	-1133.67	-1673.83	-11807.52	-1418.11	-1673.83	-14671.36	-1354.66	-2057.55	-14671.36	-1593.48	-2057.55	-19215.95
198	AASHTO FatigTRUCK-LOAD	MAX	219.31	361.56	1800.22	63.46	361.56	1325.76	180.99	384.76	1325.76	51.39	384.76	802.44
		MIN	-148.78	-244.24	-630.29	-304.15	-244.24	-803.74	-180.63	-256.38	-803.74	-309.50	-256.38	-1056.22
	TANDEM-LOAD	MAX	176.54	250.39	1366.41	55.52	250.39	1053.95	151.95	265.81	1053.95	49.50	265.81	716.85
		MIN	-113.07	-167.18	-426.99	-233.97	-167.18	-546.02	-136.64	-173.92	-546.02	-238.92	-173.92	-719.90

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1045			1046			1046			1047		
	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	88.22	577.36	1637.05	40.64	577.36	1194.54	86.93	710.66	1194.54	53.39	710.66	1013.44
MIN	-152.19	-461.32	-1231.61	-212.93	-461.32	-1899.24	-216.56	-567.35	-1899.24	-268.33	-567.35	-3248.80
199 AASHTO-LRFD TRUCK-LOAD MAX	344.49	1077.34	8441.27	144.80	1077.34	4055.23	253.94	1290.17	4055.23	117.09	1290.17	2453.90
MIN	-696.59	-967.12	-6631.77	-911.76	-967.12	-7666.09	-806.52	-1183.71	-7666.09	-984.16	-1183.71	-8655.60
TANDEM-LOAD MAX	241.64	426.48	4261.28	102.66	426.48	2743.75	208.01	498.23	2743.75	90.80	498.23	1675.57
MIN	-318.39	-373.10	-2389.49	-457.34	-373.10	-2768.44	-362.45	-453.65	-2768.44	-479.58	-453.65	-3133.15
DISPERSION-LMAX	216.85	958.41	6977.75	156.50	958.41	4858.94	213.97	1180.36	4858.94	172.91	1180.36	4512.77
MIN	-563.04	-892.70	-6487.70	-663.92	-892.70	-8635.42	-698.65	-1102.46	-8635.42	-786.38	-1102.46	-12695.45
300 Total Dead lWithout snow	-1172.16	145.54	1554.62	-1659.08	145.54	-12601.58	-1619.32	159.37	-12601.58	-2008.86	159.37	-27114.31
301 Particular Snow	-93.92	18.90	130.88	-139.19	18.90	-1034.66	-131.95	23.01	-1034.66	-168.16	23.01	-2235.12
302 Live load Total MAX	342.03	1022.97	8364.26	184.72	1022.97	5522.79	306.42	1238.00	5522.79	181.71	1238.00	4291.49
MIN	-736.88	-1087.99	-7674.89	-921.77	-1087.99	-9536.38	-880.53	-1337.41	-9536.38	-1035.76	-1337.41	-12490.37
303 Sum total D+L+PP MAX	-821.44	1187.42	10049.76	-1558.13	1187.42	-6456.60	-1352.93	1420.39	-6456.60	-1940.80	1420.39	-23770.48
MIN	-2002.96	-1069.09	-7544.01	-2720.04	-1069.09	-23172.61	-2631.80	-1314.40	-23172.61	-3212.79	-1314.40	-41839.79

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1047			MEMBER 1048			MEMBER 1048			MEMBER 1049				
		NODE 1047			NODE 1048			NODE 1048			NODE 1049				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-381.33	20.36	-5000.21	-459.87	20.36	-8365.04	461.38	-27.89	-8365.04	382.84	-27.89	-4988.16		
3	Railing	-14.27	7.23	-149.29	-20.89	7.23	-289.94	20.93	-7.54	-289.94	14.32	-7.54	-148.93		
5	Wheel guard	-141.30	71.60	-1478.01	-206.80	71.60	-2870.39	207.25	-74.65	-2870.39	141.75	-74.65	-1474.37		
8	Steel weight	-1373.06	-3.95	-18456.18	-1611.94	-3.95	-30396.19	1617.49	-22.86	-30396.19	1378.61	-22.86	-18411.80		
10	Medial strip	-123.34	-38.23	-1878.28	-123.34	-38.23	-2865.01	124.19	35.98	-2865.01	124.19	35.98	-1871.48		
19	Snow	-171.21	10.81	-2235.12	-207.42	10.81	-3749.64	208.12	-14.20	-3749.64	171.91	-14.20	-2229.52		
31	Miscellaneous	-10.00	-3.09	-152.33	-10.00	-3.09	-232.33	10.05	2.91	-232.33	10.05	2.91	-151.97		
100	AASHTO-LRFD TRUCK-LOAD	MAX	205.47	787.81	2089.53	108.29	787.81	1494.50	724.43	773.20	1494.50	562.23	773.20	2125.39	
		MIN	-564.82	-774.21	-4605.48	-726.28	-774.21	-5357.65	-108.24	-794.54	-5357.65	-205.81	-794.54	-4693.78	
		TANDEM-LOAD	MAX	173.21	536.28	1675.57	73.67	536.28	1014.80	526.62	529.67	1014.80	404.58	529.67	1701.22
		MIN	-406.10	-530.16	-3133.15	-527.71	-530.16	-3639.61	-73.68	-540.75	-3639.61	-173.80	-540.75	-3192.71	
		DISPERSION-L	MAX	268.23	1315.09	4512.77	247.39	1315.09	5181.51	995.18	1280.21	5181.51	887.22	1280.21	4598.10
		MIN	-894.10	-1279.75	-12695.45	-1002.11	-1279.75	-18909.40	-238.09	-1327.84	-18909.40	-258.99	-1327.84	-12761.84	
110	Live load	L-PICKUP 1	MAX	473.70	2102.91	6602.30	355.68	2102.91	6676.01	1719.61	2053.41	6676.01	1449.44	2053.41	6723.49
		MIN	-1458.91	-2053.95	-17300.93	-1728.39	-2053.95	-24267.05	-346.33	-2122.38	-24267.05	-464.80	-2122.38	-17455.63	
		L-PICKUP 2	MAX	441.44	1851.37	6188.34	321.06	1851.37	6196.31	1521.80	1809.88	6196.31	1291.79	1809.88	6299.32
		MIN	-1300.20	-1809.90	-15828.60	-1529.82	-1809.90	-22549.01	-311.77	-1868.59	-22549.01	-432.79	-1868.59	-15954.55	
		L-PICKUP 3	MAX	-1630.12	-2387.54	-19215.95	-1901.85	-2387.54	-26066.87	-386.13	-2484.05	-26066.87	-414.28	-2484.05	-19421.47
		MIN	473.70	2102.91	6602.30	355.68	2102.91	6676.01	1719.61	2053.41	6676.01	1449.44	2053.41	6723.49	
111	AASHTO Twin	TWIN-PICKUP	MAX	422.56	2461.17	6270.00	394.98	2461.17	7193.69	1890.75	2384.41	7193.69	1618.47	2384.41	6420.15
		MIN	-1630.12	-2387.54	-19215.95	-1901.85	-2387.54	-26066.87	-386.13	-2484.05	-26066.87	-414.28	-2484.05	-19421.47	
		MID-PICKUP	MAX	-1630.12	-2387.54	-19215.95	-1901.85	-2387.54	-26066.87	-386.13	-2484.05	-26066.87	-414.28	-2484.05	-19421.47
198	AASHTO Fatig	TRUCK-LOAD	MAX	107.91	332.42	802.44	37.13	332.42	280.56	385.08	224.25	280.56	241.96	224.25	805.84
		MIN	-242.55	-224.60	-1056.22	-385.23	-224.60	-1621.03	-37.46	-334.59	-1621.03	-108.17	-334.59	-1074.12	
		TANDEM-LOAD	MAX	104.08	226.25	716.85	25.17	226.25	190.13	291.96	153.52	190.13	182.52	153.52	719.82
		MIN	-182.82	-153.76	-719.90	-291.98	-153.76	-1098.17	-25.42	-227.73	-1098.17	-104.33	-227.73	-732.04	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1047			1048			1048			1049		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	110.01	771.70	1013.44	92.25	771.70	1055.73	427.70	685.62	1055.73	358.05	685.62	1029.99
	MIN	-359.79	-684.47	-3248.80	-429.47	-684.47	-6071.62	-90.59	-778.11	-6071.62	-108.39	-778.11	-3263.81
199	AASHTO-LRFD TRUCK-LOAD MAX	201.27	1419.54	2453.90	191.47	1419.54	2811.48	1105.66	1369.14	2811.48	911.09	1369.14	2535.40
	MIN	-917.15	-1373.07	-8655.60	-1111.05	-1373.07	-10053.79	-190.95	-1432.21	-10053.79	-201.33	-1432.21	-8817.57
	TANDEM-LOAD MAX	173.21	536.28	1675.57	73.67	536.28	1014.80	526.62	529.67	1014.80	404.58	529.67	1701.22
	MIN	-406.10	-530.16	-3133.15	-527.71	-530.16	-3639.61	-73.68	-540.75	-3639.61	-173.80	-540.75	-3192.71
	DISPERSION-LMAX	268.23	1315.09	4512.77	247.39	1315.09	5181.51	995.18	1280.21	5181.51	887.22	1280.21	4598.10
	MIN	-894.10	-1279.75	-12695.45	-1002.11	-1279.75	-18909.40	-238.09	-1327.84	-18909.40	-258.99	-1327.84	-12761.84
300	Total Dead lWithout snow	-2043.31	53.92	-27114.31	-2432.84	53.92	-45018.89	2441.29	-94.06	-45018.89	2051.76	-94.06	-27046.70
301	Particular Snow	-171.21	10.81	-2235.12	-207.42	10.81	-3749.64	208.12	-14.20	-3749.64	171.91	-14.20	-2229.52
302	Live load Total MAX	307.90	1366.89	4291.49	231.19	1366.89	4339.41	1117.75	1334.72	4339.41	942.14	1334.72	4370.27
	MIN	-1059.58	-1551.90	-12490.37	-1236.20	-1551.90	-16943.47	-250.99	-1614.63	-16943.47	-302.12	-1614.63	-12623.96
303	Sum total D+L+PP MAX	-1814.24	1431.61	-23770.48	-2339.71	1431.61	-43127.30	3767.16	1320.52	-43127.30	3165.80	1320.52	-23594.87
	MIN	-3274.10	-1541.09	-41839.79	-3876.46	-1541.09	-65712.00	2323.13	-1722.89	-65712.00	1830.91	-1722.89	-41900.18

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1049	1050			1050			1051				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1 Pavement	384.26	-37.44	-4988.16	305.73	-37.44	-2228.21	315.99	-37.03	-2228.21	217.82	-37.03	440.85
3 Railing	14.14	-11.50	-148.93	7.53	-11.50	-62.26	11.96	-8.35	-62.26	3.69	-8.35	16.04
5 Wheel guard	140.00	-113.85	-1474.37	74.50	-113.85	-616.34	118.45	-82.71	-616.34	36.57	-82.71	158.75
8 Steel weight	1386.47	-14.22	-18411.80	1147.59	-14.22	-8275.54	1136.14	-50.11	-8275.54	837.54	-50.11	1592.85
10 Medial strip	126.23	57.82	-1871.48	126.23	57.82	-861.60	101.48	36.29	-861.60	101.48	36.29	153.19
19 Snow	172.49	-19.41	-2229.52	136.27	-19.41	-994.49	141.93	-18.42	-994.49	96.66	-18.42	198.45
31 Miscellaneous	10.21	4.68	-151.97	10.21	4.68	-70.28	8.21	2.93	-70.28	8.21	2.93	11.82
100 AASHTO-LRFD TRUCK-LOAD	653.03	665.30	2125.39	501.76	665.30	3630.88	621.22	538.78	3630.88	438.34	538.78	5853.41
MIN	-107.30	-722.76	-4693.78	-259.20	-722.76	-4111.57	-128.20	-614.83	-4111.57	-311.02	-614.83	-3516.58
TANDEM-LOAD	478.11	457.38	1701.22	360.41	457.38	2737.61	455.07	371.16	2737.61	315.18	371.16	4232.66
MIN	-91.48	-497.50	-3192.71	-209.34	-497.50	-2793.19	-103.04	-426.05	-2793.19	-242.98	-426.05	-2385.43
DISPERSION-LMAX	797.82	1121.86	4598.10	710.43	1121.86	4967.44	668.99	899.37	4967.44	568.47	899.37	7232.28
MIN	-168.68	-1186.60	-12761.84	-210.09	-1186.60	-8600.02	-151.73	-963.28	-8600.02	-212.46	-963.28	-6500.82
110 Live load L-PICKUP 1	1450.84	1787.15	6723.49	1212.20	1787.15	8598.32	1290.21	1438.15	8598.32	1006.81	1438.15	13085.68
MIN	-275.97	-1909.36	-17455.63	-469.30	-1909.36	-12711.59	-279.93	-1578.11	-12711.59	-523.48	-1578.11	-10017.40
L-PICKUP 2	1275.93	1579.24	6299.32	1070.84	1579.24	7705.04	1124.06	1270.53	7705.04	883.65	1270.53	11464.94
MIN	-260.15	-1684.10	-15954.55	-419.44	-1684.10	-11393.21	-254.77	-1389.34	-11393.21	-455.44	-1389.34	-8886.25
L-PICKUP 3	-257.07	-2225.97	-19421.47	-417.62	-2225.97	-14697.54	-266.36	-1835.12	-14697.54	-502.51	-1835.12	-11804.67
Live load	1450.84	1787.15	6723.49	1212.20	1787.15	8598.32	1290.21	1438.15	8598.32	1006.81	1438.15	13085.68
MIN	-275.97	-2225.97	-19421.47	-469.30	-2225.97	-14697.54	-279.93	-1835.12	-14697.54	-523.48	-1835.12	-11804.67
111 AASHTO Twin TWIN-PICKUP	1601.52	2088.23	6420.15	1363.25	2088.23	8149.71	1417.30	1680.00	8149.71	1133.08	1680.00	14101.54
MIN	-257.07	-2225.97	-19421.47	-417.62	-2225.97	-14697.54	-266.36	-1835.12	-14697.54	-502.51	-1835.12	-11804.67
MID-PICKUP	-257.07	-2225.97	-19421.47	-417.62	-2225.97	-14697.54	-266.36	-1835.12	-14697.54	-502.51	-1835.12	-11804.67
198 AASHTO FatigTRUCK-LOAD	308.53	256.79	805.84	179.33	256.79	1317.25	303.54	242.95	1317.25	147.62	242.95	1786.62
MIN	-51.87	-386.64	-1074.12	-182.17	-386.64	-809.65	-63.80	-362.16	-809.65	-220.31	-362.16	-627.63
TANDEM-LOAD	238.39	174.19	719.82	135.70	174.19	1047.31	233.69	166.24	1047.31	112.24	166.24	1355.73
MIN	-49.96	-267.45	-732.04	-152.87	-267.45	-549.80	-55.75	-250.85	-549.80	-177.35	-250.85	-424.99

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1049			1050			1050			1051		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	271.21	575.76	1029.99	219.56	575.76	1213.07	214.09	464.77	1213.07	153.39	464.77	1675.01
	MIN	-51.83	-715.69	-3263.81	-85.59	-715.69	-1887.65	-39.66	-580.99	-1887.65	-87.45	-580.99	-1230.82
199	AASHTO-LRFD TRUCK-LOAD MAX	981.65	1198.40	2535.40	804.28	1198.40	4087.80	905.78	967.30	4087.80	690.51	967.30	8436.10
	MIN	-116.96	-1286.70	-8817.57	-253.92	-1286.70	-7730.58	-144.23	-1075.74	-7730.58	-345.89	-1075.74	-6615.48
	TANDEM-LOAD MAX	478.11	457.38	1701.22	360.41	457.38	2737.61	455.07	371.16	2737.61	315.18	371.16	4232.66
	MIN	-91.48	-497.50	-3192.71	-209.34	-497.50	-2793.19	-103.04	-426.05	-2793.19	-242.98	-426.05	-2385.43
	DISPERSION-LMAX	797.82	1121.86	4598.10	710.43	1121.86	4967.44	668.99	899.37	4967.44	568.47	899.37	7232.28
	MIN	-168.68	-1186.60	-12761.84	-210.09	-1186.60	-8600.02	-151.73	-963.28	-8600.02	-212.46	-963.28	-6500.82
300	Total Dead lWithout snow	2061.33	-114.51	-27046.70	1671.79	-114.51	-12114.22	1692.23	-138.98	-12114.22	1205.31	-138.98	2373.49
301	Particular Snow	172.49	-19.41	-2229.52	136.27	-19.41	-994.49	141.93	-18.42	-994.49	96.66	-18.42	198.45
302	Live load Total MAX	943.05	1161.65	4370.27	787.93	1161.65	5588.91	838.64	934.80	5588.91	654.43	934.80	8505.69
	MIN	-179.38	-1446.88	-12623.96	-305.04	-1446.88	-9553.40	-181.95	-1192.83	-9553.40	-340.26	-1192.83	-7673.03
303	Sum total D+L+PP MAX	3176.86	1142.24	-23594.87	2596.00	1142.24	-5843.13	2672.80	916.38	-5843.13	1956.40	916.38	11077.63
	MIN	2000.62	-1580.80	-41900.18	1411.51	-1580.80	-22662.11	1597.62	-1350.22	-22662.11	859.63	-1350.22	-7403.00

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1051			MEMBER 1052			MEMBER 1052			MEMBER 1053			
		NODE 1051			NODE 1052			NODE 1052			NODE 1053			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	242.76	-17.73	440.85	144.59	-17.73	2377.62	171.85	0.24	2377.62	73.67	0.24	3605.23	
3	Railing	9.85	-4.35	16.04	1.58	-4.35	73.23	7.80	-1.79	73.23	-0.47	-1.79	109.86	
5	Wheel guard	97.56	-43.09	158.75	15.68	-43.09	724.97	77.20	-17.72	724.97	-4.67	-17.72	1087.62	
8	Steel weight	864.94	-19.79	1592.85	566.34	-19.79	8749.20	602.44	22.36	8749.20	303.84	22.36	13280.65	
10	Medial strip	73.36	19.85	153.19	73.36	19.85	886.77	46.19	12.56	886.77	46.19	12.56	1348.68	
19	Snow	109.21	-8.91	198.45	63.94	-8.91	1064.18	77.51	-0.35	1064.18	32.25	-0.35	1612.97	
31	Miscellaneous	5.94	1.60	11.82	5.94	1.60	71.18	3.74	1.01	71.18	3.74	1.01	108.59	
100	AASHTO-LRFD TRUCK-LOAD	MAX	579.21	515.73	5853.41	394.56	515.73	7744.17	527.60	504.36	7744.17	344.55	504.36	9012.09
		MIN	-152.44	-562.26	-3516.58	-335.10	-562.26	-3014.60	-184.73	-502.99	-3014.60	-367.10	-502.99	-2478.02
		TANDEM-LOAD MAX	426.97	360.25	4232.66	285.58	360.25	5521.35	391.66	353.12	5521.35	251.86	353.12	6401.01
		MIN	-119.67	-390.86	-2385.43	-260.78	-390.86	-2044.68	-142.55	-350.92	-2044.68	-282.26	-350.92	-1680.74
		DISPERSION-LMAX	558.70	722.78	7232.28	463.35	722.78	10473.46	472.06	614.10	10473.46	382.41	614.10	12525.57
		MIN	-161.45	-755.00	-6500.82	-227.50	-755.00	-6582.57	-190.88	-617.11	-6582.57	-262.74	-617.11	-6633.45
110	Live load	L-PICKUP 1 MAX	1137.92	1238.52	13085.68	857.91	1238.52	18217.63	999.66	1118.46	18217.63	726.96	1118.46	21537.66
		MIN	-313.89	-1317.26	-10017.40	-562.60	-1317.26	-9597.17	-375.61	-1120.10	-9597.17	-629.84	-1120.10	-9111.46
		L-PICKUP 2 MAX	985.67	1083.03	11464.94	748.92	1083.03	15994.81	863.72	967.23	15994.81	634.27	967.23	18926.59
		MIN	-281.12	-1145.85	-8886.25	-488.28	-1145.85	-8627.25	-333.43	-968.03	-8627.25	-545.00	-968.03	-8314.18
		L-PICKUP 3	-312.36	-1512.87	-11804.67	-554.20	-1512.87	-11028.89	-376.72	-1265.19	-11028.89	-626.95	-1265.19	-10166.10
		Live load MAX	1137.92	1238.52	13085.68	857.91	1238.52	18217.63	999.66	1118.46	18217.63	726.96	1118.46	21537.66
MIN	-313.89	-1512.87	-11804.67	-562.60	-1512.87	-11028.89	-376.72	-1265.19	-11028.89	-629.84	-1265.19	-10166.10		
111	AASHTO Twin TWIN-PICKUP	MAX	1239.25	1416.96	14101.54	957.60	1416.96	20140.43	1069.46	1235.50	20140.43	794.87	1235.50	23963.28
		MIN	-312.36	-1512.87	-11804.67	-554.20	-1512.87	-11028.89	-376.72	-1265.19	-11028.89	-626.95	-1265.19	-10166.10
		MID-PICKUP	-312.36	-1512.87	-11804.67	-554.20	-1512.87	-11028.89	-376.72	-1265.19	-11028.89	-626.95	-1265.19	-10166.10
198	AASHTO FatigTRUCK-LOAD	MAX	292.46	208.72	1786.62	135.06	208.72	2186.58	279.86	163.04	2186.58	123.68	163.04	2449.36
		MIN	-76.05	-317.40	-627.63	-232.31	-317.40	-513.91	-88.16	-268.70	-513.91	-244.05	-268.70	-414.64
		TANDEM-LOAD MAX	226.51	143.13	1355.73	103.71	143.13	1630.07	217.68	112.15	1630.07	96.11	112.15	1813.91
		MIN	-63.15	-220.37	-424.99	-185.80	-220.37	-348.28	-71.92	-187.46	-348.28	-193.44	-187.46	-281.18

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1051			1052			1052			1053		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	177.08	368.95	1675.01	118.02	368.95	2305.97	151.60	325.85	2305.97	93.82	325.85	2710.34
	MIN	-42.20	-458.66	-1230.82	-92.95	-458.66	-1183.82	-49.62	-379.95	-1183.82	-103.48	-379.95	-1176.23
199	AASHTO-LRFD TRUCK-LOAD MAX	818.25	851.62	8436.10	600.65	851.62	11904.80	716.23	758.67	11904.80	500.78	758.67	14100.29
	MIN	-185.62	-925.97	-6615.48	-388.28	-925.97	-5671.76	-227.70	-788.66	-5671.76	-433.87	-788.66	-4662.22
	TANDEM-LOAD MAX	426.97	360.25	4232.66	285.58	360.25	5521.35	391.66	353.12	5521.35	251.86	353.12	6401.01
	MIN	-119.67	-390.86	-2385.43	-260.78	-390.86	-2044.68	-142.55	-350.92	-2044.68	-282.26	-350.92	-1680.74
	DISPERSION-LMAX	558.70	722.78	7232.28	463.35	722.78	10473.46	472.06	614.10	10473.46	382.41	614.10	12525.57
	MIN	-161.45	-755.00	-6500.82	-227.50	-755.00	-6582.57	-190.88	-617.11	-6582.57	-262.74	-617.11	-6633.45
300	Total Dead lWithout snow	1294.41	-63.51	2373.49	807.49	-63.51	12882.98	909.22	16.67	12882.98	422.31	16.67	19540.64
301	Particular Snow	109.21	-8.91	198.45	63.94	-8.91	1064.18	77.51	-0.35	1064.18	32.25	-0.35	1612.97
302	Live load Total MAX	739.65	805.03	8505.69	557.64	805.03	11841.46	649.78	727.00	11841.46	472.53	727.00	13999.48
	MIN	-204.03	-983.37	-7673.03	-365.69	-983.37	-7168.78	-244.87	-822.37	-7168.78	-409.40	-822.37	-6607.96
303	Sum total D+L+PP MAX	2143.26	796.13	11077.63	1429.07	796.13	25788.61	1636.52	743.31	25788.61	927.08	743.31	35153.09
	MIN	1138.38	-1055.79	-7403.00	396.03	-1055.79	4627.74	668.41	-822.73	4627.74	-77.66	-822.73	12563.26

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	1053			1054			1054			1055			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		92.87	0.77	3605.23	-5.30	0.77	4043.11	12.00	-2.63	4043.11	-86.17	-2.63	3672.25	
3	Railing		5.45	-0.51	109.86	-2.83	-0.51	122.96	3.03	0.44	122.96	-5.24	0.44	111.86	
5	Wheel guard		53.91	-5.03	1087.62	-27.97	-5.03	1217.32	29.95	4.34	1217.32	-51.93	4.34	1107.45	
8	Steel weight		310.89	9.20	13280.65	12.29	9.20	14896.56	12.45	-15.87	14896.56	-286.15	-15.87	13528.03	
10	Medial strip		16.37	3.97	1348.68	16.37	3.97	1512.43	-14.08	-4.58	1512.43	-14.08	-4.58	1371.60	
19	Snow		42.20	0.21	1612.97	-3.06	0.21	1808.66	6.04	-1.04	1808.66	-39.23	-1.04	1642.73	
31	Miscellaneous		1.33	0.32	108.59	1.33	0.32	121.92	-1.13	-0.37	121.92	-1.13	-0.37	110.63	
100	AASHTO-LRFD TRUCK-LOAD	MAX	466.45	493.07	9012.09	284.78	493.07	9424.46	410.40	484.88	9424.46	228.00	484.88	9011.00	
		MIN	-229.58	-488.60	-2478.02	-411.37	-488.60	-1905.51	-286.65	-494.15	-1905.51	-469.38	-494.15	-2492.60	
		TANDEM-LOAD	MAX	349.96	345.26	6401.01	211.43	345.26	6699.68	311.93	339.75	6699.68	172.77	339.75	6400.53
		MIN	-173.91	-342.31	-1680.74	-312.46	-342.31	-1292.90	-212.92	-346.03	-1292.90	-352.13	-346.03	-1691.24	
		DISPERSION-L	MAX	389.82	534.97	12525.57	306.36	534.97	13195.95	320.94	530.93	13195.95	243.20	530.93	12475.42
		MIN	-237.62	-535.27	-6633.45	-315.78	-535.27	-6590.64	-300.56	-533.80	-6590.64	-384.44	-533.80	-6473.97	
110	Live load	L-PICKUP 1	MAX	856.27	1028.05	21537.66	591.14	1028.05	22620.41	731.34	1015.81	22620.41	471.20	1015.81	21486.42
		MIN	-467.19	-1023.87	-9111.46	-727.15	-1023.87	-8496.15	-587.21	-1027.94	-8496.15	-853.82	-1027.94	-8966.56	
		L-PICKUP 2	MAX	739.78	880.24	18926.59	517.79	880.24	19895.63	632.86	870.68	19895.63	415.96	870.68	18875.95
		MIN	-411.53	-877.58	-8314.18	-628.24	-877.58	-7883.54	-513.48	-879.83	-7883.54	-736.57	-879.83	-8165.21	
		L-PICKUP 3	MAX	475.46	1119.04	10166.10	734.37	1119.04	9157.01	619.02	1124.33	9157.01	886.61	1124.33	10045.76
		MIN	-475.46	-1119.04	-10166.10	-734.37	-1119.04	-9157.01	-619.02	-1124.33	-9157.01	-886.61	-1124.33	-10045.76	
111	AASHTO Twin	TWIN-PICKUP	MAX	889.19	1124.98	23963.28	623.24	1124.98	25146.94	736.67	1110.30	25146.94	478.14	1110.30	23908.75
		MIN	-475.46	-1119.04	-10166.10	-734.37	-1119.04	-9157.01	-619.02	-1124.33	-9157.01	-886.61	-1124.33	-10045.76	
		MID-PICKUP	MAX	475.46	1119.04	10166.10	734.37	1119.04	9157.01	619.02	1124.33	9157.01	886.61	1124.33	10045.76
198	AASHTO Fatig	TRUCK-LOAD	MAX	266.77	159.31	2449.36	111.74	159.31	2529.53	255.48	213.19	2529.53	99.92	213.19	2445.38
		MIN	-101.20	-216.12	-414.64	-256.37	-216.12	-319.08	-112.20	-161.19	-319.08	-267.94	-161.19	-418.22	
		TANDEM-LOAD	MAX	208.55	113.78	1813.91	88.10	113.78	1872.73	201.00	150.01	1872.73	80.13	150.01	1811.28
		MIN	-81.04	-152.04	-281.18	-201.51	-152.04	-216.46	-88.54	-115.07	-216.46	-209.44	-115.07	-283.69	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1053			1054			1054			1055		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	131.26	296.43	2710.34	74.32	296.43	2834.19	116.49	311.29	2834.19	60.65	311.29	2696.06
	MIN	-60.31	-314.43	-1176.23	-116.40	-314.43	-1166.55	-72.74	-295.83	-1166.55	-129.99	-295.83	-1148.06
199	AASHTO-LRFD TRUCK-LOAD MAX	598.17	715.00	14100.29	386.13	715.00	14745.10	497.59	702.73	14745.10	288.07	702.73	14089.85
	MIN	-290.67	-708.11	-4662.22	-500.18	-708.11	-3583.81	-387.25	-715.46	-3583.81	-600.68	-715.46	-4687.99
	TANDEM-LOAD MAX	349.96	345.26	6401.01	211.43	345.26	6699.68	311.93	339.75	6699.68	172.77	339.75	6400.53
	MIN	-173.91	-342.31	-1680.74	-312.46	-342.31	-1292.90	-212.92	-346.03	-1292.90	-352.13	-346.03	-1691.24
	DISPERSION-LMAX	389.82	534.97	12525.57	306.36	534.97	13195.95	320.94	530.93	13195.95	243.20	530.93	12475.42
	MIN	-237.62	-535.27	-6633.45	-315.78	-535.27	-6590.64	-300.56	-533.80	-6590.64	-384.44	-533.80	-6473.97
300	Total Dead lWithout snow	480.82	8.73	19540.64	-6.09	8.73	21914.30	42.21	-18.67	21914.30	-444.71	-18.67	19901.83
301	Particular Snow	42.20	0.21	1612.97	-3.06	0.21	1808.66	6.04	-1.04	1808.66	-39.23	-1.04	1642.73
302	Live load Total MAX	556.58	668.23	13999.48	384.24	668.23	14703.26	475.37	660.28	14703.26	306.28	660.28	13966.17
	MIN	-309.05	-727.37	-6607.96	-477.34	-727.37	-5952.06	-402.37	-730.81	-5952.06	-576.30	-730.81	-6529.74
303	Sum total D+L+PP MAX	1079.60	677.17	35153.09	381.18	677.17	38426.22	523.62	659.24	38426.22	-85.77	659.24	35510.73
	MIN	121.27	-727.17	12563.26	-486.50	-727.17	15985.28	-396.32	-750.52	15985.28	-1060.23	-750.52	13055.89

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1055			1056			1056			1057			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-66.56	-1.84	3672.25	-164.74	-1.84	2515.75	-136.71	16.57	2515.75	-234.88	16.57	657.82	
3	Railing	0.69	1.72	111.86	-7.58	1.72	77.40	-1.34	4.28	77.40	-9.61	4.28	22.63	
5	Wheel guard	6.82	17.03	1107.45	-75.05	17.03	766.28	-13.29	42.39	766.28	-95.17	42.39	223.99	
8	Steel weight	-277.65	-28.01	13528.03	-576.25	-28.01	9258.49	-537.31	15.95	9258.49	-835.91	15.95	2392.42	
10	Medial strip	-43.77	-13.01	1371.60	-43.77	-13.01	933.93	-70.64	-20.00	933.93	-70.64	-20.00	227.50	
19	Snow	-29.08	-0.37	1642.73	-74.35	-0.37	1125.55	-60.43	8.38	1125.55	-105.70	8.38	294.91	
31	Miscellaneous	-3.53	-1.05	110.63	-3.53	-1.05	75.36	-5.70	-1.62	75.36	-5.70	-1.62	18.37	
100	AASHTO-LRFD TRUCK-LOAD	MAX	367.10	497.15	9011.00	183.03	497.15	7737.12	334.97	556.69	7737.12	151.16	556.69	5821.08
		MIN	-344.63	-503.17	-2492.60	-529.50	-503.17	-3018.27	-394.08	-515.75	-3018.27	-579.84	-515.75	-3490.84
		TANDEM-LOAD MAX	282.51	346.88	6400.53	141.41	346.88	5515.57	260.88	386.91	5515.57	118.84	386.91	4208.49
		MIN	-252.07	-352.26	-1691.24	-393.28	-352.26	-2047.91	-285.29	-360.20	-2047.91	-427.59	-360.20	-2368.57
		DISPERSION-LMAX	266.27	608.83	12475.42	194.39	608.83	10374.22	230.23	750.48	10374.22	164.09	750.48	7076.18
		MIN	-374.25	-608.49	-6473.97	-463.88	-608.49	-6257.22	-453.14	-720.14	-6257.22	-548.41	-720.14	-5990.20
110	Live load	L-PICKUP 1 MAX	633.37	1105.98	21486.42	377.42	1105.98	18111.34	565.20	1307.16	18111.34	315.25	1307.16	12897.26
		MIN	-718.87	-1111.66	-8966.56	-993.39	-1111.66	-9275.49	-847.23	-1235.89	-9275.49	-1128.25	-1235.89	-9481.03
		L-PICKUP 2 MAX	548.78	955.70	18875.95	335.81	955.70	15889.79	491.10	1137.39	15889.79	282.93	1137.39	11284.67
		MIN	-626.31	-960.75	-8165.21	-857.16	-960.75	-8305.14	-738.43	-1080.34	-8305.14	-976.01	-1080.34	-8358.77
		L-PICKUP 3	-786.51	-1225.32	-10045.76	-1062.69	-1225.32	-10740.48	-947.54	-1411.87	-10740.48	-1230.03	-1411.87	-11299.99
		Live load MAX	633.37	1105.98	21486.42	377.42	1105.98	18111.34	565.20	1307.16	18111.34	315.25	1307.16	12897.26
MIN	-786.51	-1225.32	-10045.76	-1062.69	-1225.32	-10740.48	-947.54	-1411.87	-10740.48	-1230.03	-1411.87	-11299.99		
111	AASHTO Twin TWIN-PICKUP	MAX	628.89	1248.24	23908.75	377.69	1248.24	20045.41	555.88	1500.48	20045.41	313.44	1500.48	13933.68
		MIN	-786.51	-1225.32	-10045.76	-1062.69	-1225.32	-10740.48	-947.54	-1411.87	-10740.48	-1230.03	-1411.87	-11299.99
		MID-PICKUP	-786.51	-1225.32	-10045.76	-1062.69	-1225.32	-10740.48	-947.54	-1411.87	-10740.48	-1230.03	-1411.87	-11299.99
198	AASHTO FatigTRUCK-LOAD	MAX	244.40	266.75	2445.38	87.53	266.75	2186.14	232.76	315.89	2186.14	75.93	315.89	1785.61
		MIN	-122.80	-161.29	-418.22	-280.03	-161.29	-514.63	-134.37	-207.80	-514.63	-292.28	-207.80	-623.06
		TANDEM-LOAD MAX	193.86	186.14	1811.28	71.55	186.14	1629.40	186.20	219.34	1629.40	63.14	219.34	1354.48
		MIN	-95.62	-110.95	-283.69	-217.98	-110.95	-348.89	-103.27	-142.44	-348.89	-226.48	-142.44	-421.80

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1055	1056						1057					
		1055			1056			1056			1057		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	103.64	375.57	2696.06	49.74	375.57	2293.08	93.35	454.94	2293.08	42.51	454.94	1642.70	
MIN	-90.80	-322.74	-1148.06	-148.51	-322.74	-1126.70	-115.54	-366.03	-1126.70	-174.41	-366.03	-1138.21	
199 AASHTO-LRFD TRUCK-LOAD MAX	432.49	778.11	14089.85	225.26	778.11	11898.46	387.42	916.72	11898.46	184.18	916.72	8405.69	
MIN	-499.65	-752.97	-4687.99	-716.89	-752.97	-5676.65	-599.67	-848.60	-5676.65	-818.29	-848.60	-6565.34	
TANDEM-LOAD MAX	282.51	346.88	6400.53	141.41	346.88	5515.57	260.88	386.91	5515.57	118.84	386.91	4208.49	
MIN	-252.07	-352.26	-1691.24	-393.28	-352.26	-2047.91	-285.29	-360.20	-2047.91	-427.59	-360.20	-2368.57	
DISPERSION-LMAX	266.27	608.83	12475.42	194.39	608.83	10374.22	230.23	750.48	10374.22	164.09	750.48	7076.18	
MIN	-374.25	-608.49	-6473.97	-463.88	-608.49	-6257.22	-453.14	-720.14	-6257.22	-548.41	-720.14	-5990.20	
300 Total Dead lWithout snow	-384.00	-25.16	19901.83	-870.92	-25.16	13627.21	-764.99	57.57	13627.21	-1251.91	57.57	3542.72	
301 Particular Snow	-29.08	-0.37	1642.73	-74.35	-0.37	1125.55	-60.43	8.38	1125.55	-105.70	8.38	294.91	
302 Live load Total MAX	411.69	718.88	13966.17	245.32	718.88	11772.37	367.38	849.66	11772.37	204.91	849.66	8383.22	
MIN	-511.23	-796.46	-6529.74	-690.75	-796.46	-6981.31	-615.90	-917.71	-6981.31	-799.52	-917.71	-7344.99	
303 Sum total D+L+PP MAX	122.11	718.52	35510.73	-626.35	718.52	26525.14	-347.83	915.61	26525.14	-1091.22	915.61	12220.85	
MIN	-924.32	-821.99	13055.89	-1636.02	-821.99	5677.06	-1441.32	-909.33	5677.06	-2157.13	-909.33	-5710.86	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1057	1058			1058			1059			1059			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-206.20	42.34	657.82	-304.37	42.34	-1895.02	-294.38	42.41	-1895.02	-372.91	42.41	-4564.17	
3	Railing	-3.34	8.46	22.63	-11.61	8.46	-52.10	-7.16	11.58	-52.10	-13.78	11.58	-135.89	
5	Wheel guard	-33.04	83.75	223.99	-114.92	83.75	-515.83	-70.93	114.65	-515.83	-136.43	114.65	-1345.28	
8	Steel weight	-794.75	70.37	2392.42	-1093.35	70.37	-7048.09	-1105.96	33.39	-7048.09	-1344.84	33.39	-16851.30	
10	Medial strip	-97.39	-33.91	227.50	-97.39	-33.91	-746.40	-122.36	-55.51	-746.40	-122.36	-55.51	-1725.27	
19	Snow	-91.48	20.78	294.91	-136.75	20.78	-846.23	-131.21	21.61	-846.23	-167.43	21.61	-2040.80	
31	Miscellaneous	-7.86	-2.74	18.37	-7.86	-2.74	-60.24	-9.88	-4.49	-60.24	-9.88	-4.49	-139.27	
100	AASHTO-LRFD TRUCK-LOAD	MAX	312.71	617.76	5821.08	127.84	617.76	3623.51	261.01	722.84	3623.51	107.12	722.84	2182.41
		MIN	-432.13	-535.04	-3490.84	-616.68	-535.04	-4073.51	-494.90	-658.19	-4073.51	-647.86	-658.19	-4665.31
	TANDEM-LOAD	MAX	244.48	428.05	4208.49	102.98	428.05	2726.10	211.02	497.48	2726.10	91.51	497.48	1738.26
		MIN	-310.95	-367.65	-2368.57	-452.34	-367.65	-2767.41	-355.72	-452.38	-2767.41	-475.03	-452.38	-3172.99
	DISPERSION-LMAX	MAX	215.74	963.12	7076.18	154.47	963.12	4821.56	214.29	1183.00	4821.56	172.45	1183.00	4485.62
		MIN	-552.72	-890.59	-5990.20	-652.72	-890.59	-7909.22	-696.10	-1110.18	-7909.22	-783.07	-1110.18	-11955.60
110	Live load L-PICKUP 1	MAX	528.45	1580.89	12897.26	282.31	1580.89	8445.07	475.30	1905.83	8445.07	279.57	1905.83	6668.03
		MIN	-984.84	-1425.63	-9481.03	-1269.40	-1425.63	-11982.73	-1190.99	-1768.37	-11982.73	-1430.93	-1768.37	-16620.91
	L-PICKUP 2	MAX	460.21	1391.17	11284.67	257.45	1391.17	7547.65	425.32	1680.48	7547.65	263.96	1680.48	6223.87
		MIN	-863.67	-1258.23	-8358.77	-1105.06	-1258.23	-10676.63	-1051.82	-1562.56	-10676.63	-1258.09	-1562.56	-15128.59
	L-PICKUP 3	MAX	-1109.42	-1666.08	-11299.99	-1394.06	-1666.08	-14009.99	-1339.88	-2070.94	-14009.99	-1578.69	-2070.94	-18648.08
		MIN	528.45	1580.89	12897.26	282.31	1580.89	8445.07	475.30	1905.83	8445.07	279.57	1905.83	6668.03
	Live load	MAX	528.45	1580.89	12897.26	282.31	1580.89	8445.07	475.30	1905.83	8445.07	279.57	1905.83	6668.03
		MIN	-1109.42	-1666.08	-11299.99	-1394.06	-1666.08	-14009.99	-1339.88	-2070.94	-14009.99	-1578.69	-2070.94	-18648.08
111	AASHTO Twin TWIN-PICKUP	MAX	506.26	1840.77	13933.68	267.24	1840.77	8072.83	421.08	2224.01	8072.83	258.44	2224.01	6446.10
		MIN	-1109.42	-1666.08	-11299.99	-1394.06	-1666.08	-14009.99	-1339.88	-2070.94	-14009.99	-1578.69	-2070.94	-18648.08
	MID-PICKUP	MAX	-1109.42	-1666.08	-11299.99	-1394.06	-1666.08	-14009.99	-1339.88	-2070.94	-14009.99	-1578.69	-2070.94	-18648.08
198	AASHTO FatigTRUCK-LOAD	MAX	221.82	363.31	1785.61	64.21	363.31	1321.06	183.70	386.92	1321.06	52.24	386.92	807.14
		MIN	-145.78	-242.24	-623.06	-302.54	-242.24	-802.99	-177.29	-256.09	-802.99	-307.44	-256.09	-1068.67
	TANDEM-LOAD	MAX	178.55	251.63	1354.48	56.17	251.63	1048.77	154.19	267.62	1048.77	50.32	267.62	720.07
		MIN	-110.98	-165.75	-421.80	-233.19	-165.75	-545.06	-134.31	-173.67	-545.06	-237.92	-173.67	-728.20

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1057			1058			1058			1059		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	88.28	579.91	1642.70	40.17	579.91	1182.30	86.07	712.86	1182.30	52.03	712.86	1005.47
	MIN	-149.86	-460.98	-1138.21	-210.35	-460.98	-1745.95	-216.37	-570.92	-1745.95	-267.87	-570.92	-3090.13
199	AASHTO-LRFD TRUCK-LOAD MAX	346.77	1082.17	8405.69	142.46	1082.17	4148.26	253.57	1288.12	4148.26	114.70	1288.12	2676.71
	MIN	-679.97	-960.62	-6565.34	-896.24	-960.62	-7657.43	-792.65	-1190.87	-7657.43	-971.03	-1190.87	-8764.49
	TANDEM-LOAD MAX	244.48	428.05	4208.49	102.98	428.05	2726.10	211.02	497.48	2726.10	91.51	497.48	1738.26
	MIN	-310.95	-367.65	-2368.57	-452.34	-367.65	-2767.41	-355.72	-452.38	-2767.41	-475.03	-452.38	-3172.99
	DISPERSION-LMAX	215.74	963.12	7076.18	154.47	963.12	4821.56	214.29	1183.00	4821.56	172.45	1183.00	4485.62
	MIN	-552.72	-890.59	-5990.20	-652.72	-890.59	-7909.22	-696.10	-1110.18	-7909.22	-783.07	-1110.18	-11955.60
300	Total Dead lWithout snow	-1142.58	168.27	3542.72	-1629.50	168.27	-10317.68	-1610.67	142.03	-10317.68	-2000.20	142.03	-24761.17
301	Particular Snow	-91.48	20.78	294.91	-136.75	20.78	-846.23	-131.21	21.61	-846.23	-167.43	21.61	-2040.80
302	Live load Total MAX	343.49	1027.58	8383.22	183.50	1027.58	5489.30	308.95	1238.79	5489.30	181.72	1238.79	4334.22
	MIN	-721.12	-1082.95	-7344.99	-906.14	-1082.95	-9106.49	-870.92	-1346.11	-9106.49	-1026.15	-1346.11	-12121.25
303	Sum total D+L+PP MAX	-787.52	1216.63	12220.85	-1527.69	1216.63	-4027.82	-1340.25	1402.44	-4027.82	-1931.40	1402.44	-21167.49
	MIN	-1955.18	-1062.17	-5710.86	-2672.39	-1062.17	-20270.40	-2612.80	-1324.50	-20270.40	-3193.78	-1324.50	-38923.23

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1059 1059	1060			1060			1061							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-378.25	20.02	-4564.17	-456.78	20.02	-7904.28	438.48	-27.35	-7904.28	359.95	-27.35	-4710.56		
3	Railing	-14.17	7.18	-135.89	-20.79	7.18	-275.74	20.23	-7.34	-275.74	13.62	-7.34	-140.35		
5	Wheel guard	-140.32	71.06	-1345.28	-205.82	71.06	-2729.83	200.29	-72.71	-2729.83	134.79	-72.71	-1389.50		
8	Steel weight	-1361.73	-4.68	-16851.30	-1600.61	-4.68	-28700.70	1533.22	-23.01	-28700.70	1294.34	-23.01	-17390.50		
10	Medial strip	-122.75	-38.07	-1725.27	-122.75	-38.07	-2707.29	115.85	34.94	-2707.29	115.85	34.94	-1780.47		
19	Snow	-169.87	10.64	-2040.80	-206.09	10.64	-3544.63	197.89	-13.91	-3544.63	161.68	-13.91	-2106.34		
31	Miscellaneous	-9.91	-3.08	-139.27	-9.91	-3.08	-218.54	9.36	2.82	-218.54	9.36	2.82	-143.67		
100	AASHTO-LRFD TRUCK-LOAD	MAX	202.61	772.26	2182.41	105.14	772.26	1595.56	722.84	754.33	1595.56	561.80	754.33	2096.96	
		MIN	-558.39	-758.01	-4665.31	-720.24	-758.01	-5357.21	-109.38	-773.12	-5357.21	-205.96	-773.12	-4566.23	
		TANDEM-LOAD	MAX	171.58	525.87	1738.26	71.58	525.87	1084.73	525.35	516.87	1084.73	404.08	516.87	1683.50
		MIN	-401.67	-519.07	-3172.99	-523.72	-519.07	-3639.63	-74.59	-526.18	-3639.63	-173.11	-526.18	-3106.09	
		DISPERSION-L	MAX	261.73	1288.90	4485.62	240.82	1288.90	5145.45	957.81	1238.43	5145.45	849.75	1238.43	4553.29
		MIN	-882.51	-1254.10	-11955.60	-990.46	-1254.10	-18119.84	-237.93	-1285.12	-18119.84	-258.73	-1285.12	-12262.26	
110	Live load	L-PICKUP 1	MAX	464.34	2061.17	6668.03	345.96	2061.17	6741.02	1680.65	1992.76	6741.02	1411.55	1992.76	6650.25
		MIN	-1440.90	-2012.11	-16620.91	-1710.70	-2012.11	-23477.06	-347.31	-2058.24	-23477.06	-464.69	-2058.24	-16828.49	
		L-PICKUP 2	MAX	433.31	1814.77	6223.87	312.40	1814.77	6230.18	1483.17	1755.30	6230.18	1253.84	1755.30	6236.78
		MIN	-1284.18	-1773.17	-15128.59	-1514.18	-1773.17	-21759.48	-312.52	-1811.30	-21759.48	-431.84	-1811.30	-15368.35	
		L-PICKUP 3	MAX	-1611.33	-2342.04	-18648.08	-1882.66	-2342.04	-25362.48	-389.49	-2412.29	-25362.48	-417.91	-2412.29	-18763.12
		MIN	464.34	2061.17	6668.03	345.96	2061.17	6741.02	1680.65	1992.76	6741.02	1411.55	1992.76	6650.25	
111	AASHTO Twin	TWIN-PICKUP	MAX	413.01	2412.66	6446.10	384.34	2412.66	7326.54	1855.35	2315.07	7326.54	1583.75	2315.07	6287.18
		MIN	-1611.33	-2342.04	-18648.08	-1882.66	-2342.04	-25362.48	-389.49	-2412.29	-25362.48	-417.91	-2412.29	-18763.12	
		MID-PICKUP	MAX	-1611.33	-2342.04	-18648.08	-1882.66	-2342.04	-25362.48	-389.49	-2412.29	-25362.48	-417.91	-2412.29	-18763.12
198	AASHTO Fatig	TRUCK-LOAD	MAX	108.22	327.06	807.14	35.76	327.06	295.57	385.32	220.15	295.57	242.93	220.15	811.30
		MIN	-242.24	-220.50	-1068.67	-385.07	-220.50	-1610.76	-36.90	-325.28	-1610.76	-107.74	-325.28	-1056.39	
		TANDEM-LOAD	MAX	104.37	222.83	720.07	24.24	222.83	201.46	291.99	150.73	201.46	183.02	150.73	723.85
		MIN	-182.53	-150.90	-728.20	-291.95	-150.90	-1091.74	-25.05	-221.47	-1091.74	-103.91	-221.47	-719.93	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1059			1060			1060			1061		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	106.91	756.90	1005.47	89.10	756.90	1043.32	421.11	663.01	1043.32	351.42	663.01	1016.80
	MIN	-359.61	-670.35	-3090.13	-429.27	-670.35	-5910.03	-89.99	-753.13	-5910.03	-107.72	-753.13	-3158.62
199	AASHTO-LRFD TRUCK-LOAD MAX	197.17	1391.84	2676.71	186.23	1391.84	2995.15	1103.69	1333.86	2995.15	909.96	1333.86	2432.47
	MIN	-907.86	-1348.17	-8764.49	-1101.38	-1348.17	-10060.69	-194.83	-1395.21	-10060.69	-205.62	-1395.21	-8585.65
	TANDEM-LOAD MAX	171.58	525.87	1738.26	71.58	525.87	1084.73	525.35	516.87	1084.73	404.08	516.87	1683.50
	MIN	-401.67	-519.07	-3172.99	-523.72	-519.07	-3639.63	-74.59	-526.18	-3639.63	-173.11	-526.18	-3106.09
	DISPERSION-LMAX	261.73	1288.90	4485.62	240.82	1288.90	5145.45	957.81	1238.43	5145.45	849.75	1238.43	4553.29
	MIN	-882.51	-1254.10	-11955.60	-990.46	-1254.10	-18119.84	-237.93	-1285.12	-18119.84	-258.73	-1285.12	-12262.26
300	Total Dead lWithout snow	-2027.13	52.44	-24761.17	-2416.67	52.44	-42536.39	2317.43	-92.65	-42536.39	1927.90	-92.65	-25555.06
301	Particular Snow	-169.87	10.64	-2040.80	-206.09	10.64	-3544.63	197.89	-13.91	-3544.63	161.68	-13.91	-2106.34
302	Live load Total MAX	301.82	1339.76	4334.22	224.87	1339.76	4381.66	1092.42	1295.30	4381.66	917.51	1295.30	4322.66
	MIN	-1047.37	-1522.33	-12121.25	-1223.73	-1522.33	-16485.61	-253.17	-1567.99	-16485.61	-302.05	-1567.99	-12196.03
303	Sum total D+L+PP MAX	-1804.64	1402.84	-21167.49	-2330.42	1402.84	-40384.86	3607.75	1281.39	-40384.86	3007.09	1281.39	-22041.94
	MIN	-3244.37	-1511.68	-38923.23	-3846.48	-1511.68	-62566.63	2186.21	-1674.55	-62566.63	1696.91	-1674.55	-39857.43

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1061			MEMBER 1062			MEMBER 1062			MEMBER 1063				
		NODE 1061			NODE 1062			NODE 1062			NODE 1063				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	360.81	-38.22	-4710.56	282.27	-38.22	-2138.25	295.12	-32.92	-2138.25	196.94	-32.92	322.05		
3	Railing	13.42	-11.37	-140.35	6.80	-11.37	-59.46	11.33	-8.11	-59.46	3.05	-8.11	12.44		
5	Wheel guard	132.86	-112.55	-1389.50	67.36	-112.55	-588.63	112.12	-80.34	-588.63	30.24	-80.34	123.18		
8	Steel weight	1300.15	-18.96	-17390.50	1061.27	-18.96	-7944.79	1059.28	-36.33	-7944.79	760.68	-36.33	1154.97		
10	Medial strip	117.71	56.49	-1780.47	117.71	56.49	-838.79	93.87	37.03	-838.79	93.87	37.03	99.91		
19	Snow	162.01	-19.72	-2106.34	125.80	-19.72	-955.13	132.60	-16.55	-955.13	87.34	-16.55	144.56		
31	Miscellaneous	9.51	4.56	-143.67	9.51	4.56	-67.60	7.58	2.99	-67.60	7.58	2.99	8.23		
100	AASHTO-LRFD TRUCK-LOAD	MAX	654.40	660.73	2096.96	503.17	660.73	3620.50	614.52	536.12	3620.50	430.83	536.12	5742.03	
		MIN	-110.09	-714.95	-4566.23	-261.75	-714.95	-4031.85	-133.70	-611.28	-4031.85	-317.98	-611.28	-3405.40	
		TANDEM-LOAD	MAX	478.99	454.23	1683.50	361.49	454.23	2732.98	450.71	368.30	2732.98	310.12	368.30	4159.09
		MIN	-93.41	-492.10	-3106.09	-211.05	-492.10	-2738.96	-107.15	-423.72	-2738.96	-247.88	-423.72	-2309.59	
		DISPERSION-L	MAX	760.45	1092.91	4553.29	673.05	1092.91	4904.93	638.68	876.13	4904.93	539.11	876.13	6837.83
		MIN	-169.63	-1158.88	-12262.26	-211.03	-1158.88	-8388.87	-155.42	-933.33	-8388.87	-217.12	-933.33	-6297.81	
110	Live load	L-PICKUP 1	MAX	1414.85	1753.64	6650.25	1176.22	1753.64	8525.43	1253.20	1412.25	8525.43	969.93	1412.25	12579.86
		MIN	-279.72	-1873.83	-16828.49	-472.78	-1873.83	-12420.72	-289.13	-1544.60	-12420.72	-535.10	-1544.60	-9703.20	
		L-PICKUP 2	MAX	1239.44	1547.14	6236.78	1034.54	1547.14	7637.91	1089.39	1244.44	7637.91	849.23	1244.44	10996.92
		MIN	-263.05	-1650.98	-15368.35	-422.07	-1650.98	-11127.82	-262.57	-1357.04	-11127.82	-465.01	-1357.04	-8607.40	
		L-PICKUP 3	MAX	1414.85	1753.64	6650.25	1176.22	1753.64	8525.43	1253.20	1412.25	8525.43	969.93	1412.25	12579.86
		MIN	-279.72	-1873.83	-16828.49	-472.78	-1873.83	-12420.72	-289.13	-1544.60	-12420.72	-535.10	-1544.60	-9703.20	
		Live load	MAX	1414.85	1753.64	6650.25	1176.22	1753.64	8525.43	1253.20	1412.25	8525.43	969.93	1412.25	12579.86
		MIN	-279.72	-1873.83	-16828.49	-472.78	-1873.83	-12420.72	-289.13	-1544.60	-12420.72	-535.10	-1544.60	-9703.20	
111	AASHTO Twin	TWIN-PICKUP	MAX	1568.24	2050.94	6287.18	1330.01	2050.94	8039.42	1378.82	1652.97	8039.42	1096.16	1652.97	13524.50
		MIN	-264.78	-2188.80	-18763.12	-424.56	-2188.80	-14378.01	-276.40	-1793.95	-14378.01	-515.09	-1793.95	-11438.09	
		MID-PICKUP	MAX	1568.24	2050.94	6287.18	1330.01	2050.94	8039.42	1378.82	1652.97	8039.42	1096.16	1652.97	13524.50
198	AASHTO Fatig	TRUCK-LOAD	MAX	308.47	256.55	811.30	179.30	256.55	1331.98	301.42	240.80	1331.98	145.07	240.80	1767.65
		MIN	-51.95	-381.33	-1056.39	-182.15	-381.33	-799.80	-65.35	-360.56	-799.80	-222.68	-360.56	-609.93	
		TANDEM-LOAD	MAX	238.31	174.11	723.85	135.75	174.11	1058.51	232.34	164.89	1058.51	110.51	164.89	1343.68
		MIN	-50.05	-263.72	-719.93	-152.82	-263.72	-543.29	-57.02	-249.96	-543.29	-179.04	-249.96	-413.13	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1061			1062			1062			1063		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	263.57	560.91	1016.80	212.01	560.91	1195.82	208.49	451.75	1195.82	148.18	451.75	1593.98
	MIN	-53.20	-699.45	-3158.62	-86.97	-699.45	-1847.64	-40.48	-564.42	-1847.64	-88.84	-564.42	-1193.73
199	AASHTO-LRFD TRUCK-LOAD MAX	982.04	1185.91	2432.47	804.73	1185.91	4027.76	893.34	960.51	4027.76	678.85	960.51	8189.39
	MIN	-124.56	-1273.12	-8585.65	-260.71	-1273.12	-7586.70	-151.69	-1059.95	-7586.70	-355.20	-1059.95	-6411.18
	TANDEM-LOAD MAX	478.99	454.23	1683.50	361.49	454.23	2732.98	450.71	368.30	2732.98	310.12	368.30	4159.09
	MIN	-93.41	-492.10	-3106.09	-211.05	-492.10	-2738.96	-107.15	-423.72	-2738.96	-247.88	-423.72	-2309.59
	DISPERSION-LMAX	760.45	1092.91	4553.29	673.05	1092.91	4904.93	638.68	876.13	4904.93	539.11	876.13	6837.83
	MIN	-169.63	-1158.88	-12262.26	-211.03	-1158.88	-8388.87	-155.42	-933.33	-8388.87	-217.12	-933.33	-6297.81
300	Total Dead lWithout snow	1934.46	-120.04	-25555.06	1544.93	-120.04	-11637.52	1579.29	-117.68	-11637.52	1092.37	-117.68	1720.79
301	Particular Snow	162.01	-19.72	-2106.34	125.80	-19.72	-955.13	132.60	-16.55	-955.13	87.34	-16.55	144.56
302	Live load Total MAX	919.65	1139.87	4322.66	764.54	1139.87	5541.53	814.58	917.96	5541.53	630.46	917.96	8176.91
	MIN	-181.82	-1422.72	-12196.03	-307.30	-1422.72	-9345.71	-187.93	-1166.07	-9345.71	-347.82	-1166.07	-7434.76
303	Sum total D+L+PP MAX	3016.12	1120.15	-22041.94	2435.26	1120.15	-5388.66	2526.47	901.41	-5388.66	1810.16	901.41	10042.25
	MIN	1860.10	-1562.48	-39857.43	1271.23	-1562.48	-21938.35	1467.58	-1300.30	-21938.35	727.55	-1300.30	-7290.20

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1063			1064			1064			1065			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	216.62	-24.17	322.05	118.45	-24.17	1997.37	145.23	-9.03	1997.37	47.06	-9.03	2958.78	
3	Railing	9.05	-4.45	12.44	0.78	-4.45	61.63	6.99	-1.98	61.63	-1.28	-1.98	90.20	
5	Wheel guard	89.64	-44.05	123.18	7.76	-44.05	610.16	69.21	-19.59	610.16	-12.66	-19.59	892.93	
8	Steel weight	768.66	-44.69	1154.97	470.06	-44.69	7348.62	504.33	-12.91	7348.62	205.73	-12.91	10898.96	
10	Medial strip	63.77	16.73	99.91	63.77	16.73	737.60	36.38	8.44	737.60	36.38	8.44	1101.35	
19	Snow	97.52	-11.76	144.56	52.26	-11.76	893.45	65.62	-4.48	893.45	20.35	-4.48	1323.30	
31	Miscellaneous	5.15	1.35	8.23	5.15	1.35	59.73	2.94	0.68	59.73	2.94	0.68	89.10	
100	AASHTO-LRFD TRUCK-LOAD	MAX	561.49	488.18	5742.03	373.21	488.18	7378.57	519.79	478.01	7378.57	328.73	478.01	8494.64
		MIN	-162.25	-565.28	-3405.40	-349.73	-565.28	-2818.95	-187.11	-494.17	-2818.95	-377.72	-494.17	-2274.15
		TANDEM-LOAD MAX	415.74	340.93	4159.09	270.91	340.93	5270.55	387.97	334.90	5270.55	241.18	334.90	6043.48
		MIN	-126.76	-392.82	-2309.59	-271.47	-392.82	-1911.41	-144.57	-344.58	-1911.41	-291.28	-344.58	-1542.00
		DISPERSION-LMAX	522.17	678.02	6837.83	429.39	678.02	9480.70	427.22	569.55	9480.70	339.15	569.55	11050.57
		MIN	-167.63	-720.66	-6297.81	-236.31	-720.66	-6207.65	-189.60	-587.61	-6207.65	-263.07	-587.61	-6211.56
110	Live load	L-PICKUP 1 MAX	1083.66	1166.20	12579.86	802.60	1166.20	16859.27	947.00	1047.56	16859.27	667.88	1047.56	19545.22
		MIN	-329.88	-1285.94	-9703.20	-586.04	-1285.94	-9026.60	-376.71	-1081.78	-9026.60	-640.80	-1081.78	-8485.70
		L-PICKUP 2 MAX	937.90	1018.95	10996.92	700.30	1018.95	14751.25	815.18	904.45	14751.25	580.33	904.45	17094.05
		MIN	-294.39	-1113.48	-8607.40	-507.78	-1113.48	-8119.06	-334.16	-932.19	-8119.06	-554.36	-932.19	-7753.56
		L-PICKUP 3	-326.50	-1477.33	-11438.09	-577.19	-1477.33	-10364.03	-378.20	-1215.24	-10364.03	-637.06	-1215.24	-9444.29
		Live load MAX	1083.66	1166.20	12579.86	802.60	1166.20	16859.27	947.00	1047.56	16859.27	667.88	1047.56	19545.22
MIN	-329.88	-1477.33	-11438.09	-586.04	-1477.33	-10364.03	-378.20	-1215.24	-10364.03	-640.80	-1215.24	-9444.29		
111	AASHTO Twin TWIN-PICKUP	MAX	1176.22	1339.97	13524.50	896.49	1339.97	18670.51	1009.98	1154.78	18670.51	732.11	1154.78	21834.96
		MIN	-326.50	-1477.33	-11438.09	-577.19	-1477.33	-10364.03	-378.20	-1215.24	-10364.03	-637.06	-1215.24	-9444.29
		MID-PICKUP	-326.50	-1477.33	-11438.09	-577.19	-1477.33	-10364.03	-378.20	-1215.24	-10364.03	-637.06	-1215.24	-9444.29
198	AASHTO FatigTRUCK-LOAD	MAX	287.40	201.49	1767.65	127.75	201.49	2085.62	277.90	153.46	2085.62	116.63	153.46	2296.36
		MIN	-79.65	-318.54	-609.93	-238.84	-318.54	-480.35	-87.95	-264.48	-480.35	-249.05	-264.48	-381.35
		TANDEM-LOAD MAX	223.61	138.10	1343.68	98.66	138.10	1558.94	217.43	105.53	1558.94	91.36	105.53	1705.75
		MIN	-65.85	-221.52	-413.13	-190.73	-221.52	-325.44	-71.85	-184.88	-325.44	-197.90	-184.88	-258.51

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1063			1064			1064			1065		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	167.75	350.02	1593.98	109.53	350.02	2108.23	139.24	304.62	2108.23	82.00	304.62	2394.71
	MIN	-43.82	-441.57	-1193.73	-96.06	-441.57	-1117.57	-48.92	-361.69	-1117.57	-103.60	-361.69	-1101.31
199	AASHTO-LRFD TRUCK-LOAD MAX	784.74	810.84	8189.39	566.71	810.84	11264.31	694.99	713.54	11264.31	474.30	713.54	13210.49
	MIN	-195.15	-920.82	-6411.18	-405.01	-920.82	-5307.94	-230.62	-762.66	-5307.94	-444.77	-762.66	-4282.10
	TANDEM-LOAD MAX	415.74	340.93	4159.09	270.91	340.93	5270.55	387.97	334.90	5270.55	241.18	334.90	6043.48
	MIN	-126.76	-392.82	-2309.59	-271.47	-392.82	-1911.41	-144.57	-344.58	-1911.41	-291.28	-344.58	-1542.00
	DISPERSION-LMAX	522.17	678.02	6837.83	429.39	678.02	9480.70	427.22	569.55	9480.70	339.15	569.55	11050.57
	MIN	-167.63	-720.66	-6297.81	-236.31	-720.66	-6207.65	-189.60	-587.61	-6207.65	-263.07	-587.61	-6211.56
300	Total Dead lWithout snow	1152.89	-99.27	1720.79	665.97	-99.27	10815.12	765.08	-34.38	10815.12	278.16	-34.38	16031.33
301	Particular Snow	97.52	-11.76	144.56	52.26	-11.76	893.45	65.62	-4.48	893.45	20.35	-4.48	1323.30
302	Live load Total MAX	704.38	758.03	8176.91	521.69	758.03	10958.53	615.55	680.91	10958.53	434.12	680.91	12704.39
	MIN	-214.42	-960.27	-7434.76	-380.93	-960.27	-6736.62	-245.83	-789.91	-6736.62	-416.52	-789.91	-6138.79
303	Sum total D+L+PP MAX	1954.79	746.26	10042.25	1239.92	746.26	22667.09	1446.25	676.44	22667.09	732.63	676.44	30059.02
	MIN	971.67	-1071.31	-7290.20	223.03	-1071.31	2950.96	511.12	-828.76	2950.96	-242.96	-828.76	9374.20

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1065	1066			1066			1067			1067		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	73.16	1.19	2958.78	-25.01	1.19	3199.56	-3.86	1.24	3199.56	-102.03	1.24	2670.12	
3 Railing	4.85	-0.44	90.20	-3.42	-0.44	97.37	2.55	0.60	97.37	-5.72	0.60	81.52	
5 Wheel guard	48.05	-4.32	892.93	-33.83	-4.32	964.00	25.24	5.93	964.00	-56.64	5.93	807.03	
8 Steel weight	238.18	10.01	10898.96	-60.42	10.01	11787.81	-46.06	-2.12	11787.81	-344.66	-2.12	9834.17	
10 Medial strip	9.11	3.71	1101.35	9.11	3.71	1192.50	-19.90	-3.43	1192.50	-19.90	-3.43	993.55	
19 Snow	33.40	0.41	1323.30	-11.87	0.41	1430.98	-1.04	0.70	1430.98	-46.30	0.70	1194.27	
31 Miscellaneous	0.73	0.30	89.10	0.73	0.30	96.44	-1.61	-0.28	96.44	-1.61	-0.28	80.34	
100 AASHTO-LRFD TRUCK-LOAD	MAX	472.77	490.68	8494.64	281.52	490.68	8930.28	415.53	492.15	8930.28	226.79	492.15	8583.86
	MIN	-219.21	-470.58	-2274.15	-409.78	-470.58	-1945.21	-273.21	-481.00	-1945.21	-461.45	-481.00	-2575.59
	TANDEM-LOAD MAX	356.08	343.57	6043.48	209.59	343.57	6356.47	316.57	344.75	6356.47	172.11	344.75	6107.10
	MIN	-166.75	-329.83	-1542.00	-313.14	-329.83	-1322.58	-203.49	-336.88	-1322.58	-347.88	-336.88	-1751.19
	DISPERSION-LMAX	349.14	511.43	11050.57	264.97	511.43	11484.90	285.81	525.83	11484.90	206.92	525.83	10599.66
	MIN	-229.05	-510.53	-6211.56	-306.51	-510.53	-6253.62	-291.21	-522.06	-6253.62	-373.94	-522.06	-6229.80
110 Live load L-PICKUP 1	MAX	821.91	1002.10	19545.22	546.49	1002.10	20415.18	701.34	1017.98	20415.18	433.70	1017.98	19183.53
	MIN	-448.26	-981.12	-8485.70	-716.29	-981.12	-8198.83	-564.42	-1003.06	-8198.83	-835.39	-1003.06	-8805.39
	L-PICKUP 2 MAX	705.22	855.00	17094.05	474.57	855.00	17841.37	602.38	870.58	17841.37	379.03	870.58	16706.76
	MIN	-395.80	-840.37	-7753.56	-619.65	-840.37	-7576.20	-494.70	-858.94	-7576.20	-721.83	-858.94	-7980.99
	L-PICKUP 3	-456.22	-1069.01	-9444.29	-719.71	-1069.01	-8914.08	-594.21	-1095.54	-8914.08	-863.26	-1095.54	-9957.48
	Live load MAX	821.91	1002.10	19545.22	546.49	1002.10	20415.18	701.34	1017.98	20415.18	433.70	1017.98	19183.53
MIN	-456.22	-1069.01	-9444.29	-719.71	-1069.01	-8914.08	-594.21	-1095.54	-8914.08	-863.26	-1095.54	-9957.48	
111 AASHTO Twin TWIN-PICKUP	MAX	853.94	1097.00	21834.96	580.08	1097.00	22861.71	707.51	1115.63	22861.71	442.78	1115.63	21572.66
	MIN	-456.22	-1069.01	-9444.29	-719.71	-1069.01	-8914.08	-594.21	-1095.54	-8914.08	-863.26	-1095.54	-9957.48
	MID-PICKUP	-456.22	-1069.01	-9444.29	-719.71	-1069.01	-8914.08	-594.21	-1095.54	-8914.08	-863.26	-1095.54	-9957.48
198 AASHTO FatigTRUCK-LOAD	MAX	270.15	166.16	2296.36	108.90	166.16	2384.14	259.30	222.50	2384.14	99.55	222.50	2321.94
	MIN	-95.66	-207.98	-381.35	-256.52	-207.98	-325.38	-107.16	-153.83	-325.38	-266.54	-153.83	-429.76
	TANDEM-LOAD MAX	212.08	118.68	1705.75	86.37	118.68	1769.59	204.45	156.68	1769.59	79.97	156.68	1724.06
	MIN	-77.20	-146.70	-258.51	-202.85	-146.70	-221.27	-84.93	-110.17	-221.27	-209.35	-110.17	-292.25

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1065			1066			1066			1067		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	122.24	285.55	2394.71	64.87	285.55	2481.73	110.58	310.82	2481.73	54.18	310.82	2324.32
	MIN	-56.88	-298.67	-1101.31	-112.65	-298.67	-1109.99	-70.18	-289.59	-1109.99	-126.90	-289.59	-1103.93
199	AASHTO-LRFD TRUCK-LOAD MAX	599.68	707.47	13210.49	379.56	707.47	13917.00	500.31	713.76	13917.00	285.06	713.76	13369.96
	MIN	-277.86	-677.26	-4282.10	-493.17	-677.26	-3650.91	-369.02	-695.21	-3650.91	-585.23	-695.21	-4834.06
	TANDEM-LOAD MAX	356.08	343.57	6043.48	209.59	343.57	6356.47	316.57	344.75	6356.47	172.11	344.75	6107.10
	MIN	-166.75	-329.83	-1542.00	-313.14	-329.83	-1322.58	-203.49	-336.88	-1322.58	-347.88	-336.88	-1751.19
	DISPERSION-LMAX	349.14	511.43	11050.57	264.97	511.43	11484.90	285.81	525.83	11484.90	206.92	525.83	10599.66
	MIN	-229.05	-510.53	-6211.56	-306.51	-510.53	-6253.62	-291.21	-522.06	-6253.62	-373.94	-522.06	-6229.80
300	Total Dead lWithout snow	374.10	10.46	16031.33	-112.82	10.46	17337.69	-43.64	1.95	17337.69	-530.56	1.95	14466.72
301	Particular Snow	33.40	0.41	1323.30	-11.87	0.41	1430.98	-1.04	0.70	1430.98	-46.30	0.70	1194.27
302	Live load Total MAX	534.24	651.37	12704.39	355.22	651.37	13269.87	455.87	661.69	13269.87	281.91	661.69	12469.29
	MIN	-296.54	-694.86	-6138.79	-467.81	-694.86	-5794.15	-386.23	-712.10	-5794.15	-561.12	-712.10	-6472.36
303	Sum total D+L+PP MAX	941.74	662.23	30059.02	337.10	662.23	32038.54	454.83	664.34	32038.54	-210.38	664.34	28130.29
	MIN	21.99	-694.45	9374.20	-592.50	-694.45	11236.28	-430.91	-711.40	11236.28	-1137.98	-711.40	7246.93

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1067			1068			1068			1069				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-80.53	2.62	2670.12	-178.70	2.62	1373.94	-146.61	27.81	1373.94	-244.78	27.81	-583.04		
3	Railing	0.26	1.91	81.52	-8.01	1.91	42.77	-1.64	4.73	42.77	-9.91	4.73	-15.00		
5	Wheel guard	2.58	18.87	807.03	-79.30	18.87	423.46	-16.26	46.86	423.46	-98.13	46.86	-148.51		
8	Steel weight	-329.08	-12.16	9834.17	-627.68	-12.16	5050.38	-573.82	56.03	5050.38	-872.42	56.03	-2180.77		
10	Medial strip	-48.80	-11.68	993.55	-48.80	-11.68	505.51	-74.20	-16.57	505.51	-74.20	-16.57	-236.52		
19	Snow	-35.32	1.64	1194.27	-80.59	1.64	614.74	-64.85	13.44	614.74	-110.11	13.44	-260.07		
31	Miscellaneous	-3.95	-0.94	80.34	-3.95	-0.94	40.88	-6.00	-1.34	40.88	-6.00	-1.34	-19.11		
100	AASHTO-LRFD TRUCK-LOAD	MAX	363.96	499.01	8583.86	175.59	499.01	7328.46	332.02	559.55	7328.46	144.11	559.55	5478.05	
		MIN	-338.03	-505.67	-2575.59	-527.52	-505.67	-3105.69	-388.75	-519.43	-3105.69	-579.57	-519.43	-3578.06	
		TANDEM-LOAD	MAX	281.16	348.18	6107.10	135.98	348.18	5234.55	259.80	388.80	5234.55	113.68	388.80	3974.46
		MIN	-247.44	-353.90	-1751.19	-392.78	-353.90	-2111.61	-281.84	-363.03	-2111.61	-428.38	-363.03	-2432.78	
		DISPERSION-L	MAX	233.00	613.36	10599.66	161.52	613.36	8275.99	200.72	766.19	8275.99	135.13	766.19	4822.09
		MIN	-363.83	-605.90	-6229.80	-453.87	-605.90	-6018.99	-439.83	-717.60	-6018.99	-535.65	-717.60	-5755.11	
110	Live load	L-PICKUP 1	MAX	596.96	1112.36	19183.53	337.11	1112.36	15604.45	532.74	1325.74	15604.45	279.25	1325.74	10300.14
		MIN	-701.85	-1111.56	-8805.39	-981.39	-1111.56	-9124.68	-828.58	-1237.03	-9124.68	-1115.22	-1237.03	-9333.16	
		L-PICKUP 2	MAX	514.16	961.54	16706.76	297.51	961.54	13510.54	460.52	1154.99	13510.54	248.81	1154.99	8796.55
		MIN	-611.27	-959.79	-7980.99	-846.65	-959.79	-8130.61	-721.67	-1080.63	-8130.61	-964.02	-1080.63	-8187.88	
		L-PICKUP 3	MAX	-769.01	-1231.60	-9957.48	-1048.47	-1231.60	-10663.19	-926.57	-1415.13	-10663.19	-1213.34	-1415.13	-11223.52
		MIN	596.96	1112.36	19183.53	337.11	1112.36	15604.45	532.74	1325.74	15604.45	279.25	1325.74	10300.14	
111	AASHTO Twin	TWIN-PICKUP	MAX	592.76	1260.24	21572.66	339.44	1260.24	17508.12	524.10	1521.50	17508.12	279.91	1521.50	11332.52
		MIN	-769.01	-1231.60	-9957.48	-1048.47	-1231.60	-10663.19	-926.57	-1415.13	-10663.19	-1213.34	-1415.13	-11223.52	
		MID-PICKUP	MAX	-769.01	-1231.60	-9957.48	-1048.47	-1231.60	-10663.19	-926.57	-1415.13	-10663.19	-1213.34	-1415.13	-11223.52
198	AASHTO Fatig	TRUCK-LOAD	MAX	244.43	271.87	2321.94	84.74	271.87	2060.32	232.33	319.62	2060.32	72.89	319.62	1672.39
		MIN	-121.66	-164.97	-429.76	-281.90	-164.97	-527.67	-133.42	-209.58	-527.67	-294.56	-209.58	-634.10	
		TANDEM-LOAD	MAX	194.55	189.85	1724.06	69.48	189.85	1541.48	186.55	222.08	1541.48	60.83	222.08	1276.62
		MIN	-94.77	-113.38	-292.25	-219.92	-113.38	-359.02	-102.72	-143.70	-359.02	-228.68	-143.70	-431.93	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1067	1068			1068			1069				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	97.45	377.83	2324.32	43.79	377.83	1865.97	87.21	460.31	1865.97	36.72	460.31	1227.00
MIN	-90.52	-321.90	-1103.93	-148.50	-321.90	-1082.26	-112.97	-367.35	-1082.26	-172.30	-367.35	-1094.43
199 AASHTO-LRFD TRUCK-LOAD MAX	425.62	786.91	13369.96	215.63	786.91	11177.47	381.61	924.37	11177.47	175.88	924.37	7769.60
MIN	-490.62	-762.54	-4834.06	-711.10	-762.54	-5829.00	-589.69	-854.76	-5829.00	-812.50	-854.76	-6715.47
TANDEM-LOAD MAX	281.16	348.18	6107.10	135.98	348.18	5234.55	259.80	388.80	5234.55	113.68	388.80	3974.46
MIN	-247.44	-353.90	-1751.19	-392.78	-353.90	-2111.61	-281.84	-363.03	-2111.61	-428.38	-363.03	-2432.78
DISPERSION-LMAX	233.00	613.36	10599.66	161.52	613.36	8275.99	200.72	766.19	8275.99	135.13	766.19	4822.09
MIN	-363.83	-605.90	-6229.80	-453.87	-605.90	-6018.99	-439.83	-717.60	-6018.99	-535.65	-717.60	-5755.11
300 Total Dead lWithout snow	-459.52	-1.39	14466.72	-946.44	-1.39	7436.93	-818.53	117.51	7436.93	-1305.45	117.51	-3182.94
301 Particular Snow	-35.32	1.64	1194.27	-80.59	1.64	614.74	-64.85	13.44	614.74	-110.11	13.44	-260.07
302 Live load Total MAX	388.02	723.04	12469.29	219.12	723.04	10142.89	346.28	861.73	10142.89	181.51	861.73	6695.09
MIN	-499.85	-800.54	-6472.36	-681.51	-800.54	-6931.07	-602.27	-919.83	-6931.07	-788.67	-919.83	-7295.28
303 Sum total D+L+PP MAX	9.59	724.68	28130.29	-742.16	724.68	18194.56	-433.21	992.68	18194.56	-1179.60	992.68	5260.60
MIN	-994.70	-800.29	7246.93	-1708.53	-800.29	-958.73	-1485.65	-906.40	-958.73	-2204.23	-906.40	-10738.30

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	1069			1070			1070			1071		
		MEMBER			MEMBER			MEMBER			MEMBER		
		NODE			NODE			NODE			NODE		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-220.35	46.24	-583.04	-318.52	46.24	-3277.40	-315.73	33.76	-3277.40	-394.26	33.76	-6117.37
3	Railing	-3.78	8.72	-15.00	-12.05	8.72	-94.13	-7.85	11.43	-94.13	-14.47	11.43	-183.39
5	Wheel guard	-37.40	86.38	-148.51	-119.27	86.38	-931.87	-77.71	113.17	-931.87	-143.21	113.17	-1815.55
8	Steel weight	-846.78	82.97	-2180.77	-1145.38	82.97	-12141.62	-1184.21	0.11	-12141.62	-1423.09	0.11	-22570.81
10	Medial strip	-102.46	-33.48	-236.52	-102.46	-33.48	-1261.14	-129.93	-59.53	-1261.14	-129.93	-59.53	-2300.60
19	Snow	-97.80	22.56	-260.07	-143.07	22.56	-1464.42	-140.76	17.77	-1464.42	-176.97	17.77	-2735.35
31	Miscellaneous	-8.28	-2.71	-19.11	-8.28	-2.71	-101.93	-10.50	-4.81	-101.93	-10.50	-4.81	-185.95
100	AASHTO-LRFD TRUCK-LOAD	312.07	611.40	5478.05	125.31	611.40	3454.22	263.57	709.29	3454.22	107.89	709.29	1859.39
	MIN	-422.51	-523.38	-3578.06	-609.81	-523.38	-4225.04	-488.96	-645.92	-4225.04	-643.70	-645.92	-4888.87
	TANDEM-LOAD MAX	244.54	423.82	3974.46	101.00	423.82	2619.22	213.21	488.29	2619.22	92.63	488.29	1545.93
	MIN	-304.58	-359.15	-2432.78	-448.14	-359.15	-2873.01	-352.06	-442.90	-2873.01	-472.43	-442.90	-3327.02
	DISPERSION-LMAX	183.53	948.05	4822.09	122.23	948.05	2760.82	177.19	1139.45	2760.82	134.76	1139.45	2275.06
	MIN	-543.68	-869.15	-5755.11	-643.66	-869.15	-8100.21	-693.73	-1080.68	-8100.21	-780.13	-1080.68	-12275.11
110	Live load L-PICKUP 1	495.60	1559.45	10300.14	247.55	1559.45	6215.04	440.75	1848.74	6215.04	242.64	1848.74	4134.45
	MIN	-966.18	-1392.54	-9333.16	-1253.47	-1392.54	-12325.25	-1182.69	-1726.59	-12325.25	-1423.84	-1726.59	-17163.98
	L-PICKUP 2 MAX	428.07	1371.86	8796.55	223.23	1371.86	5380.05	390.40	1627.74	5380.05	227.38	1627.74	3820.99
	MIN	-848.26	-1228.30	-8187.88	-1091.80	-1228.30	-10973.22	-1045.79	-1523.57	-10973.22	-1252.56	-1523.57	-15602.13
	L-PICKUP 3	-1085.74	-1626.84	-11223.52	-1372.00	-1626.84	-14428.32	-1327.23	-2022.28	-14428.32	-1566.38	-2022.28	-19305.45
	Live load MAX	495.60	1559.45	10300.14	247.55	1559.45	6215.04	440.75	1848.74	6215.04	242.64	1848.74	4134.45
	MIN	-1085.74	-1626.84	-11223.52	-1372.00	-1626.84	-14428.32	-1327.23	-2022.28	-14428.32	-1566.38	-2022.28	-19305.45
111	AASHTO Twin TWIN-PICKUP	475.56	1816.16	11332.52	234.53	1816.16	5806.58	385.95	2156.22	5806.58	221.65	2156.22	3701.75
	MIN	-1085.74	-1626.84	-11223.52	-1372.00	-1626.84	-14428.32	-1327.23	-2022.28	-14428.32	-1566.38	-2022.28	-19305.45
	MID-PICKUP	-1085.74	-1626.84	-11223.52	-1372.00	-1626.84	-14428.32	-1327.23	-2022.28	-14428.32	-1566.38	-2022.28	-19305.45
198	AASHTO FatigTRUCK-LOAD	221.98	362.51	1672.39	63.69	362.51	1253.48	185.35	383.80	1253.48	53.39	383.80	803.68
	MIN	-144.90	-236.55	-634.10	-303.04	-236.55	-820.08	-175.05	-248.88	-820.08	-305.72	-248.88	-1104.47
	TANDEM-LOAD MAX	178.90	251.38	1276.62	55.59	251.38	1005.43	155.29	265.79	1005.43	51.42	265.79	719.48
	MIN	-110.54	-161.87	-431.93	-233.77	-161.87	-559.15	-133.13	-168.66	-559.15	-236.74	-168.66	-751.02

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1069			1070			1070			1071		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	81.54	571.70	1227.00	33.48	571.70	807.71	77.19	691.57	807.71	42.81	691.57	599.29
	MIN	-148.47	-449.24	-1094.43	-209.37	-449.24	-1826.22	-213.82	-553.30	-1826.22	-265.22	-553.30	-3200.96
199	AASHTO-LRFD TRUCK-LOAD MAX	344.87	1069.90	7769.60	138.36	1069.90	3690.93	251.64	1256.35	3690.93	111.52	1256.35	1837.99
	MIN	-662.70	-938.45	-6715.47	-880.78	-938.45	-7931.26	-780.97	-1166.30	-7931.26	-960.29	-1166.30	-9175.40
	TANDEM-LOAD MAX	244.54	423.82	3974.46	101.00	423.82	2619.22	213.21	488.29	2619.22	92.63	488.29	1545.93
	MIN	-304.58	-359.15	-2432.78	-448.14	-359.15	-2873.01	-352.06	-442.90	-2873.01	-472.43	-442.90	-3327.02
	DISPERSION-LMAX	183.53	948.05	4822.09	122.23	948.05	2760.82	177.19	1139.45	2760.82	134.76	1139.45	2275.06
	MIN	-543.68	-869.15	-5755.11	-643.66	-869.15	-8100.21	-693.73	-1080.68	-8100.21	-780.13	-1080.68	-12275.11
300	Total Dead lWithout snow	-1219.06	188.12	-3182.94	-1705.97	188.12	-17808.09	-1725.93	94.13	-17808.09	-2115.46	94.13	-33173.67
301	Particular Snow	-97.80	22.56	-260.07	-143.07	22.56	-1464.42	-140.76	17.77	-1464.42	-176.97	17.77	-2735.35
302	Live load Total MAX	322.14	1013.64	6695.09	160.91	1013.64	4039.78	286.49	1201.68	4039.78	157.72	1201.68	2687.39
	MIN	-705.73	-1057.45	-7295.28	-891.80	-1057.45	-9378.41	-862.70	-1314.48	-9378.41	-1018.15	-1314.48	-12548.54
303	Sum total D+L+PP MAX	-898.08	1224.32	5260.60	-1639.86	1224.32	-14020.80	-1494.25	1313.59	-14020.80	-2087.41	1313.59	-32415.41
	MIN	-2022.59	-1034.89	-10738.30	-2740.84	-1034.89	-28650.92	-2729.39	-1296.71	-28650.92	-3310.59	-1296.71	-48457.57

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 1071			MEMBER 1072			MEMBER 1072			MEMBER 1073				
		NODE 1071			NODE 1072			NODE 1072			NODE 1073				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-396.67	18.46	-6117.37	-475.21	18.46	-9604.90	514.05	-28.86	-9604.90	415.87	-28.86	-4955.30		
3	Railing	-14.94	6.98	-183.39	-21.56	6.98	-329.41	22.63	-8.44	-329.41	14.36	-8.44	-144.49		
5	Wheel guard	-147.95	69.09	-1815.55	-213.45	69.09	-3261.17	224.01	-83.53	-3261.17	142.13	-83.53	-1430.47		
8	Steel weight	-1427.12	-8.61	-22570.81	-1666.00	-8.61	-34943.26	1810.46	-16.04	-34943.26	1511.86	-16.04	-18331.69		
10	Medial strip	-128.02	-37.59	-2300.60	-128.02	-37.59	-3324.75	143.33	41.64	-3324.75	143.33	41.64	-1891.45		
19	Snow	-178.16	9.91	-2735.35	-214.37	9.91	-4305.45	231.71	-14.85	-4305.45	186.44	-14.85	-2214.67		
31	Miscellaneous	-10.35	-3.04	-185.95	-10.35	-3.04	-268.73	11.58	3.36	-268.73	11.58	3.36	-152.90		
100	AASHTO-LRFD TRUCK-LOAD	MAX	205.24	756.21	1859.39	107.02	756.21	1442.29	743.62	732.30	1442.29	552.43	732.30	2402.57	
		MIN	-555.51	-741.11	-4888.87	-720.81	-741.11	-5641.40	-84.31	-757.58	-5641.40	-231.86	-757.58	-4597.42	
		TANDEM-LOAD	MAX	174.58	515.57	1545.93	73.30	515.57	979.17	538.13	503.79	979.17	394.71	503.79	1894.99
		MIN	-400.42	-508.24	-3327.02	-524.64	-508.24	-3839.74	-58.71	-519.29	-3839.74	-191.90	-519.29	-3126.65	
		DISPERSION-L	MAX	226.47	1228.90	2275.06	205.54	1228.90	2650.51	972.79	1146.60	2650.51	842.19	1146.60	3074.75
		MIN	-877.31	-1196.70	-12275.11	-985.26	-1196.70	-18396.82	-130.34	-1196.16	-18396.82	-160.79	-1196.16	-11173.12	
110	Live load	L-PICKUP 1	MAX	431.71	1985.11	4134.45	312.56	1985.11	4092.80	1716.41	1878.90	4092.80	1394.61	1878.90	5477.33
		MIN	-1432.82	-1937.82	-17163.98	-1706.07	-1937.82	-24038.22	-214.65	-1953.75	-24038.22	-392.65	-1953.75	-15770.54	
		L-PICKUP 2	MAX	401.06	1744.47	3820.99	278.84	1744.47	3629.68	1510.92	1650.39	3629.68	1236.90	1650.39	4969.74
		MIN	-1277.73	-1704.94	-15602.13	-1509.90	-1704.94	-22236.56	-189.06	-1715.45	-22236.56	-352.69	-1715.45	-14299.77	
		L-PICKUP 3	MAX	-1597.95	-2259.82	-19305.45	-1872.28	-2259.82	-26069.43	-245.96	-2295.55	-26069.43	-327.43	-2295.55	-17822.31
		MIN	431.71	1985.11	4134.45	312.56	1985.11	4092.80	1716.41	1878.90	4092.80	1394.61	1878.90	5477.33	
111	AASHTO Twin	TWIN-PICKUP	MAX	377.63	2329.10	3701.75	353.20	2329.10	4828.31	1900.04	2193.68	4828.31	1576.28	2193.68	4983.02
		MIN	-1597.95	-2259.82	-19305.45	-1872.28	-2259.82	-26069.43	-245.96	-2295.55	-26069.43	-327.43	-2295.55	-17822.31	
		MID-PICKUP	MAX	-1597.95	-2259.82	-19305.45	-1872.28	-2259.82	-26069.43	-245.96	-2295.55	-26069.43	-327.43	-2295.55	-17822.31
		MIN	-1597.95	-2259.82	-19305.45	-1872.28	-2259.82	-26069.43	-245.96	-2295.55	-26069.43	-327.43	-2295.55	-17822.31	
		TRUCK-LOAD	MAX	107.91	321.78	803.68	37.28	321.78	274.45	390.47	219.57	274.45	224.34	219.57	969.06
		MIN	-241.70	-212.49	-1104.47	-386.13	-212.49	-1682.63	-35.47	-337.74	-1682.63	-138.64	-337.74	-996.56	
198	AASHTO Fatig	TANDEM-LOAD	MAX	104.03	219.08	719.48	25.54	219.08	186.23	293.54	149.76	186.23	167.11	149.76	812.15
		MIN	-182.74	-145.47	-751.02	-292.84	-145.47	-1144.73	-24.01	-232.82	-1144.73	-123.29	-232.82	-678.35	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		1071			1072			1072			1073		
NODE		1071			1072			1072			1073		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	97.01	723.98	599.29	79.27	723.98	549.85	412.89	607.76	549.85	329.77	607.76	777.49
	MIN	-357.06	-640.06	-3200.96	-427.06	-640.06	-6009.40	-65.87	-710.68	-6009.40	-91.55	-710.68	-2789.87
199	AASHTO-LRFD TRUCK-LOAD MAX	193.12	1358.99	1837.99	186.90	1358.99	2714.29	1138.36	1290.82	2714.29	909.24	1290.82	2461.93
	MIN	-898.19	-1314.21	-9175.40	-1095.05	-1314.21	-10569.22	-142.94	-1354.45	-10569.22	-203.02	-1354.45	-8629.44
	TANDEM-LOAD MAX	174.58	515.57	1545.93	73.30	515.57	979.17	538.13	503.79	979.17	394.71	503.79	1894.99
	MIN	-400.42	-508.24	-3327.02	-524.64	-508.24	-3839.74	-58.71	-519.29	-3839.74	-191.90	-519.29	-3126.65
	DISPERSION-LMAX	226.47	1228.90	2275.06	205.54	1228.90	2650.51	972.79	1146.60	2650.51	842.19	1146.60	3074.75
	MIN	-877.31	-1196.70	-12275.11	-985.26	-1196.70	-18396.82	-130.34	-1196.16	-18396.82	-160.79	-1196.16	-11173.12
300	Total Dead lWithout snow	-2125.05	45.29	-33173.67	-2514.59	45.29	-51732.23	2726.05	-91.87	-51732.23	2239.13	-91.87	-26906.31
301	Particular Snow	-178.16	9.91	-2735.35	-214.37	9.91	-4305.45	231.71	-14.85	-4305.45	186.44	-14.85	-2214.67
302	Live load Total MAX	280.61	1290.32	2687.39	203.16	1290.32	2660.32	1115.67	1221.29	2660.32	906.50	1221.29	3560.26
	MIN	-1038.67	-1468.88	-12548.54	-1216.98	-1468.88	-16945.13	-159.87	-1492.11	-16945.13	-255.22	-1492.11	-11584.50
303	Sum total D+L+PP MAX	-1938.41	1345.52	-32415.41	-2464.84	1345.52	-52579.27	4073.43	1206.44	-52579.27	3332.08	1206.44	-24492.64
	MIN	-3341.88	-1458.98	-48457.57	-3945.93	-1458.98	-72982.81	2749.93	-1598.83	-72982.81	2093.79	-1598.83	-40705.48

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1073			1074			1074			1075		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	412.09	-51.27	-4955.30	313.92	-51.27	-1325.29	330.21	-46.89	-1325.29	232.04	-46.89	1485.96
3	Railing	15.05	-11.26	-144.49	6.78	-11.26	-35.35	12.36	-7.17	-35.35	4.09	-7.17	46.88
5	Wheel guard	148.99	-111.47	-1430.47	67.11	-111.47	-349.95	122.34	-71.00	-349.95	40.47	-71.00	464.12
8	Steel weight	1488.26	-73.05	-18331.69	1189.66	-73.05	-4942.14	1188.99	-104.14	-4942.14	890.39	-104.14	5454.77
10	Medial strip	136.32	48.11	-1891.45	136.32	48.11	-528.29	107.16	22.33	-528.29	107.16	22.33	543.34
19	Snow	184.96	-25.42	-2214.67	139.69	-25.42	-591.43	148.29	-22.45	-591.43	103.02	-22.45	665.10
31	Miscellaneous	11.02	3.89	-152.90	11.02	3.89	-42.74	8.66	1.80	-42.74	8.66	1.80	43.86
100	AASHTO-LRFD TRUCK-LOAD	660.56	597.60	2402.57	475.70	597.60	4454.84	621.11	497.32	4454.84	435.28	497.32	6699.38
	MIN	-91.07	-677.79	-4597.42	-273.46	-677.79	-3945.99	-108.58	-583.95	-3945.99	-291.65	-583.95	-3500.19
	TANDEM-LOAD	481.82	410.11	1894.99	340.70	410.11	3287.05	455.69	347.24	3287.05	312.97	347.24	4800.75
	MIN	-77.11	-466.77	-3126.65	-217.89	-466.77	-2679.17	-89.26	-406.10	-2679.17	-231.58	-406.10	-2375.87
	DISPERSION-LMAX	731.75	931.70	3074.75	626.47	931.70	5117.50	588.71	705.35	5117.50	489.34	705.35	8751.85
	MIN	-57.66	-1018.71	-11173.12	-113.48	-1018.71	-7266.12	-48.72	-785.18	-7266.12	-110.63	-785.18	-6316.01
110	Live load L-PICKUP 1	1392.31	1529.30	5477.33	1102.18	1529.30	9572.33	1209.82	1202.67	9572.33	924.62	1202.67	15451.23
	MIN	-148.73	-1696.50	-15770.54	-386.94	-1696.50	-11212.11	-157.31	-1369.13	-11212.11	-402.29	-1369.13	-9816.20
	L-PICKUP 2	1213.57	1341.81	4969.74	967.17	1341.81	8404.55	1044.40	1052.60	8404.55	802.30	1052.60	13552.59
	MIN	-134.78	-1485.48	-14299.77	-331.37	-1485.48	-9945.29	-137.98	-1191.29	-9945.29	-342.21	-1191.29	-8691.88
	L-PICKUP 3	-112.93	-1996.79	-17822.31	-337.99	-1996.79	-13212.27	-136.36	-1602.16	-13212.27	-374.08	-1602.16	-11604.62
	Live load	1392.31	1529.30	5477.33	1102.18	1529.30	9572.33	1209.82	1202.67	9572.33	924.62	1202.67	15451.23
	MIN	-148.73	-1996.79	-17822.31	-386.94	-1996.79	-13212.27	-157.31	-1602.16	-13212.27	-402.29	-1602.16	-11604.62
111	AASHTO Twin TWIN-PICKUP	1546.83	1809.54	4983.02	1258.63	1809.54	9805.95	1343.58	1415.08	9805.95	1058.23	1415.08	17033.90
	MIN	-112.93	-1996.79	-17822.31	-337.99	-1996.79	-13212.27	-136.36	-1602.16	-13212.27	-374.08	-1602.16	-11604.62
	MID-PICKUP	-112.93	-1996.79	-17822.31	-337.99	-1996.79	-13212.27	-136.36	-1602.16	-13212.27	-374.08	-1602.16	-11604.62
198	AASHTO FatigTRUCK-LOAD	316.64	245.52	969.06	160.14	245.52	1473.10	303.21	224.78	1473.10	145.16	224.78	1933.85
	MIN	-55.27	-379.80	-996.56	-209.92	-379.80	-732.05	-68.49	-347.86	-732.05	-224.83	-347.86	-606.00
	TANDEM-LOAD	242.52	167.40	812.15	121.13	167.40	1146.74	233.95	154.00	1146.74	110.50	154.00	1453.95
	MIN	-49.15	-263.06	-678.35	-170.27	-263.06	-495.97	-57.69	-241.22	-495.97	-180.89	-241.22	-410.76

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1073			1074			1074			1075		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	247.19	475.00	777.49	184.56	475.00	1286.06	191.47	362.93	1286.06	131.33	362.93	1937.73
	MIN	-26.85	-615.49	-2789.87	-71.69	-615.49	-1471.24	-20.98	-477.94	-1471.24	-69.45	-477.94	-1158.01
199	AASHTO-LRFD TRUCK-LOAD MAX	986.95	1078.90	2461.93	772.01	1078.90	5778.00	904.16	866.96	5778.00	686.47	866.96	10174.71
	MIN	-67.82	-1199.95	-8629.44	-262.06	-1199.95	-7414.18	-102.79	-994.99	-7414.18	-305.01	-994.99	-6578.02
	TANDEM-LOAD MAX	481.82	410.11	1894.99	340.70	410.11	3287.05	455.69	347.24	3287.05	312.97	347.24	4800.75
	MIN	-77.11	-466.77	-3126.65	-217.89	-466.77	-2679.17	-89.26	-406.10	-2679.17	-231.58	-406.10	-2375.87
	DISPERSION-LMAX	731.75	931.70	3074.75	626.47	931.70	5117.50	588.71	705.35	5117.50	489.34	705.35	8751.85
	MIN	-57.66	-1018.71	-11173.12	-113.48	-1018.71	-7266.12	-48.72	-785.18	-7266.12	-110.63	-785.18	-6316.01
300	Total Dead lWithout snow	2211.71	-195.05	-26906.31	1724.80	-195.05	-7223.75	1769.73	-205.06	-7223.75	1282.81	-205.06	8038.93
301	Particular Snow	184.96	-25.42	-2214.67	139.69	-25.42	-591.43	148.29	-22.45	-591.43	103.02	-22.45	665.10
302	Live load Total	905.00	994.04	3560.26	716.41	994.04	6222.02	786.38	781.73	6222.02	601.00	781.73	10043.30
	MIN	-96.67	-1297.91	-11584.50	-251.51	-1297.91	-8587.98	-102.25	-1041.40	-8587.98	-261.49	-1041.40	-7543.01
303	Sum total D+L+PP	3301.67	968.62	-24492.64	2580.90	968.62	273.45	2704.40	759.29	273.45	1986.83	759.29	18747.32
	MIN	2271.00	-1518.39	-40705.48	1537.53	-1518.39	-16403.15	1785.09	-1268.91	-16403.15	1045.89	-1268.91	-1101.88

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	1075	1076			1076			1077							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	273.48	-4.10	1485.96	175.31	-4.10	3729.94	210.95	24.92	3729.94	112.78	24.92	5348.62		
3	Railing	10.83	-2.96	46.88	2.56	-2.96	113.86	9.01	-0.38	113.86	0.74	-0.38	162.58		
5	Wheel guard	107.24	-29.27	464.12	25.37	-29.27	1127.17	89.18	-3.80	1127.17	7.30	-3.80	1609.56		
8	Steel weight	977.60	18.72	5454.77	679.00	18.72	13737.75	746.29	105.46	13737.75	447.69	105.46	19707.68		
10	Medial strip	84.61	18.11	543.34	84.61	18.11	1389.45	60.74	17.22	1389.45	60.74	17.22	1996.89		
19	Snow	122.97	-2.56	665.10	77.70	-2.56	1668.42	95.02	10.85	1668.42	49.75	10.85	2392.27		
31	Miscellaneous	6.84	1.46	43.86	6.84	1.46	112.24	4.91	1.39	112.24	4.91	1.39	161.33		
100	AASHTO-LRFD TRUCK-LOAD	MAX	602.06	520.07	6699.38	415.86	520.07	8871.04	554.27	524.70	8871.04	372.28	524.70	10433.59	
		MIN	-121.47	-496.50	-3500.19	-304.84	-496.50	-3193.29	-157.44	-459.59	-3193.29	-337.61	-459.59	-2810.59	
		TANDEM-LOAD	MAX	442.75	363.98	4800.75	300.21	363.98	6284.77	409.51	366.60	6284.77	271.08	366.60	7376.79
		MIN	-98.29	-346.17	-2375.87	-240.43	-346.17	-2167.54	-123.82	-322.08	-2167.54	-261.98	-322.08	-1907.78	
		DISPERSION-L	MAX	496.74	604.53	8751.85	399.72	604.53	11855.18	419.90	503.72	11855.18	327.52	503.72	13801.65
		MIN	-49.70	-614.49	-6316.01	-114.04	-614.49	-5761.31	-75.09	-465.65	-5761.31	-144.17	-465.65	-5070.50	
110	Live load	L-PICKUP 1	MAX	1098.80	1124.59	15451.23	815.57	1124.59	20726.22	974.18	1028.42	20726.22	699.80	1028.42	24235.24
		MIN	-171.18	-1110.99	-9816.20	-418.88	-1110.99	-8954.60	-232.53	-925.25	-8954.60	-481.78	-925.25	-7881.10	
		L-PICKUP 2	MAX	939.50	968.50	13552.59	699.93	968.50	18139.96	829.41	870.31	18139.96	598.60	870.31	21178.44
		MIN	-147.99	-960.66	-8691.88	-354.47	-960.66	-7928.86	-198.90	-787.73	-7928.86	-406.15	-787.73	-6978.28	
		L-PICKUP 3	MAX	1098.80	1124.59	15451.23	815.57	1124.59	20726.22	974.18	1028.42	20726.22	699.80	1028.42	24235.24
		MIN	-171.18	-1272.05	-11604.62	-418.88	-1272.05	-10586.35	-232.53	-1027.84	-10586.35	-481.78	-1027.84	-9317.32	
111	AASHTO Twin	TWIN-PICKUP	MAX	1217.29	1265.91	17033.90	930.43	1265.91	23310.74	1060.22	1146.57	23310.74	779.60	1146.57	27397.27
		MIN	-159.03	-1272.05	-11604.62	-396.48	-1272.05	-10586.35	-226.60	-1027.84	-10586.35	-468.79	-1027.84	-9317.32	
		MID-PICKUP	MAX	1217.29	1265.91	17033.90	930.43	1265.91	23310.74	1060.22	1146.57	23310.74	779.60	1146.57	27397.27
198	AASHTO Fatig	TRUCK-LOAD	MAX	297.86	192.28	1933.85	139.34	192.28	2396.99	286.87	142.05	2396.99	131.22	142.05	2732.00
		MIN	-73.25	-297.02	-606.00	-230.28	-297.02	-537.64	-84.55	-241.61	-537.64	-239.30	-241.61	-469.10	
		TANDEM-LOAD	MAX	230.36	131.89	1453.95	106.73	131.89	1773.78	222.22	97.86	1773.78	101.45	97.86	2009.81
		MIN	-61.19	-206.56	-410.76	-184.61	-206.56	-364.77	-69.38	-169.05	-364.77	-190.02	-169.05	-318.36	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1075			1076			1076			1077		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	163.59	302.07	1937.73	104.43	302.07	2565.55	143.27	266.50	2565.55	84.98	266.50	2966.92
	MIN	-21.43	-378.06	-1158.01	-71.29	-378.06	-1027.64	-28.36	-291.28	-1027.64	-80.76	-291.28	-896.54
199	AASHTO-LRFD TRUCK-LOAD MAX	855.80	802.04	10174.71	634.09	802.04	14045.64	758.12	770.25	14045.64	538.70	770.25	16639.76
	MIN	-127.00	-798.90	-6578.02	-326.49	-798.90	-6001.30	-176.69	-676.39	-6001.30	-376.70	-676.39	-5282.08
	TANDEM-LOAD MAX	442.75	363.98	4800.75	300.21	363.98	6284.77	409.51	366.60	6284.77	271.08	366.60	7376.79
	MIN	-98.29	-346.17	-2375.87	-240.43	-346.17	-2167.54	-123.82	-322.08	-2167.54	-261.98	-322.08	-1907.78
	DISPERSION-LMAX	496.74	604.53	8751.85	399.72	604.53	11855.18	419.90	503.72	11855.18	327.52	503.72	13801.65
	MIN	-49.70	-614.49	-6316.01	-114.04	-614.49	-5761.31	-75.09	-465.65	-5761.31	-144.17	-465.65	-5070.50
300	Total Dead lWithout snow	1460.61	1.96	8038.93	973.69	1.96	20210.40	1121.09	144.80	20210.40	634.17	144.80	28986.67
301	Particular Snow	122.97	-2.56	665.10	77.70	-2.56	1668.42	95.02	10.85	1668.42	49.75	10.85	2392.27
302	Live load Total MAX	714.22	730.99	10043.30	530.12	730.99	13472.05	633.21	668.47	13472.05	454.87	668.47	15752.90
	MIN	-111.26	-826.83	-7543.01	-272.27	-826.83	-6881.13	-151.14	-668.10	-6881.13	-313.16	-668.10	-6056.26
303	Sum total D+L+PP MAX	2297.79	730.38	18747.32	1581.51	730.38	35350.87	1849.32	824.13	35350.87	1138.79	824.13	47131.84
	MIN	1438.93	-829.40	-1101.88	697.44	-829.40	12933.36	1019.62	-657.24	12933.36	276.82	-657.24	23505.80

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	1077			1078			1078			1079			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	129.81	21.69	5348.62	31.64	21.69	6155.91	41.94	10.61	6155.91	-56.23	10.61	6084.48	
3	Railing	6.58	0.74	162.58	-1.69	0.74	187.03	3.95	1.67	187.03	-4.32	1.67	185.19	
5	Wheel guard	65.14	7.33	1609.56	-16.74	7.33	1851.58	39.12	16.53	1851.58	-42.76	16.53	1833.39	
8	Steel weight	446.87	78.96	19707.68	148.27	78.96	22683.35	122.58	23.02	22683.35	-176.02	23.02	22416.18	
10	Medial strip	30.19	7.53	1996.89	30.19	7.53	2298.79	-2.91	-5.37	2298.79	-2.91	-5.37	2269.74	
19	Snow	58.74	9.72	2392.27	13.47	9.72	2753.31	19.45	5.09	2753.31	-25.82	5.09	2721.44	
31	Miscellaneous	2.44	0.61	161.33	2.44	0.61	185.73	-0.23	-0.43	185.73	-0.23	-0.43	183.39	
100	AASHTO-LRFD TRUCK-LOAD	MAX	483.39	501.10	10433.59	305.31	501.10	11010.83	414.97	483.67	11010.83	237.66	483.67	10527.55
		MIN	-217.35	-464.65	-2810.59	-394.48	-464.65	-2328.85	-283.08	-474.36	-2328.85	-459.45	-474.36	-1796.26
		TANDEM-LOAD MAX	360.72	350.36	7376.79	225.83	350.36	7783.06	313.92	337.85	7783.06	179.91	337.85	7426.62
		MIN	-165.36	-325.82	-1907.78	-300.11	-325.82	-1580.78	-210.24	-332.46	-1580.78	-344.11	-332.46	-1219.27
		DISPERSION-LMAX	338.57	449.74	13801.65	252.67	449.74	14247.48	268.29	492.54	14247.48	188.81	492.54	13170.59
		MIN	-126.17	-414.35	-5070.50	-201.87	-414.35	-4201.39	-199.18	-471.73	-4201.39	-281.33	-471.73	-3240.64
110	Live load	L-PICKUP 1 MAX	821.96	950.84	24235.24	557.98	950.84	25258.31	683.26	976.21	25258.31	426.47	976.21	23698.14
		MIN	-343.52	-879.01	-7881.10	-596.35	-879.01	-6530.25	-482.25	-946.09	-6530.25	-740.79	-946.09	-5036.90
		L-PICKUP 2 MAX	699.29	800.10	21178.44	478.50	800.10	22030.53	582.20	830.39	22030.53	368.72	830.39	20597.21
		MIN	-291.53	-740.18	-6978.28	-501.98	-740.18	-5782.18	-409.41	-804.19	-5782.18	-625.44	-804.19	-4459.91
		L-PICKUP 3	-355.22	-959.62	-9317.32	-606.08	-959.62	-7720.30	-524.59	-1024.85	-7720.30	-784.75	-1024.85	-5954.79
		Live load MAX	821.96	950.84	24235.24	557.98	950.84	25258.31	683.26	976.21	25258.31	426.47	976.21	23698.14
MIN	-355.22	-959.62	-9317.32	-606.08	-959.62	-7720.30	-524.59	-1024.85	-7720.30	-784.75	-1024.85	-5954.79		
111	AASHTO Twin TWIN-PICKUP	MAX	861.94	1045.07	27397.27	590.30	1045.07	28638.95	688.05	1087.55	28638.95	422.93	1087.55	27068.69
		MIN	-355.22	-959.62	-9317.32	-606.08	-959.62	-7720.30	-524.59	-1024.85	-7720.30	-784.75	-1024.85	-5954.79
		MID-PICKUP	-355.22	-959.62	-9317.32	-606.08	-959.62	-7720.30	-524.59	-1024.85	-7720.30	-784.75	-1024.85	-5954.79
198	AASHTO FatigTRUCK-LOAD	MAX	272.65	186.39	2732.00	119.77	186.39	2858.78	259.50	242.53	2858.78	107.18	242.53	2780.67
		MIN	-99.33	-183.62	-469.10	-251.77	-183.62	-388.34	-112.66	-132.21	-388.34	-264.48	-132.21	-300.16
		TANDEM-LOAD MAX	211.98	132.22	2009.81	93.76	132.22	2101.00	202.92	169.92	2101.00	85.34	169.92	2042.97
		MIN	-79.70	-129.93	-318.36	-197.85	-129.93	-263.61	-88.78	-91.32	-263.61	-206.29	-91.32	-203.70

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1077			1078			1078			1079		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	124.68	250.79	2966.92	67.13	250.79	3075.58	109.98	304.37	3075.58	53.47	304.37	2896.00
	MIN	-40.16	-239.10	-896.54	-95.35	-239.10	-742.04	-55.28	-254.30	-742.04	-111.78	-254.30	-573.67
199	AASHTO-LRFD TRUCK-LOAD MAX	619.14	711.45	16639.76	403.22	711.45	17573.58	496.21	715.85	17573.58	281.12	715.85	16905.73
	MIN	-268.52	-651.89	-5282.08	-471.56	-651.89	-4376.71	-383.69	-666.99	-4376.71	-590.60	-666.99	-3375.80
	TANDEM-LOAD MAX	360.72	350.36	7376.79	225.83	350.36	7783.06	313.92	337.85	7783.06	179.91	337.85	7426.62
	MIN	-165.36	-325.82	-1907.78	-300.11	-325.82	-1580.78	-210.24	-332.46	-1580.78	-344.11	-332.46	-1219.27
	DISPERSION-LMAX	338.57	449.74	13801.65	252.67	449.74	14247.48	268.29	492.54	14247.48	188.81	492.54	13170.59
	MIN	-126.17	-414.35	-5070.50	-201.87	-414.35	-4201.39	-199.18	-471.73	-4201.39	-281.33	-471.73	-3240.64
300	Total Dead lWithout snow	681.03	116.86	28986.67	194.12	116.86	33362.40	204.46	46.02	33362.40	-282.46	46.02	32972.37
301	Particular Snow	58.74	9.72	2392.27	13.47	9.72	2753.31	19.45	5.09	2753.31	-25.82	5.09	2721.44
302	Live load Total MAX	534.27	618.05	15752.90	362.69	618.05	16417.90	444.12	634.53	16417.90	277.20	634.53	15403.79
	MIN	-230.89	-623.75	-6056.26	-393.95	-623.75	-5018.19	-340.98	-666.15	-5018.19	-510.08	-666.15	-3870.61
303	Sum total D+L+PP MAX	1274.04	744.63	47131.84	570.27	744.63	52533.61	668.02	685.65	52533.61	52.08	685.65	51097.61
	MIN	439.61	-614.03	23505.80	-304.55	-614.03	29592.06	-219.37	-661.06	29592.06	-818.37	-661.06	30662.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1079			1080			1080			1081			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-53.79	-13.78	6084.48	-151.96	-13.78	5055.73	-131.96	-4.25	5055.73	-230.13	-4.25	3245.29	
3	Railing	1.17	2.84	185.19	-7.10	2.84	155.50	-0.82	6.68	155.50	-9.09	6.68	105.95	
5	Wheel guard	11.55	28.10	1833.39	-70.33	28.10	1539.47	-8.12	66.15	1539.47	-89.99	66.15	1048.90	
8	Steel weight	-231.65	-89.66	22416.18	-530.25	-89.66	18606.70	-524.32	-96.98	18606.70	-822.92	-96.98	11870.49	
10	Medial strip	-39.51	-27.72	2269.74	-39.51	-27.72	1874.68	-71.38	-48.80	1874.68	-71.38	-48.80	1160.83	
19	Snow	-23.34	-5.33	2721.44	-68.61	-5.33	2261.71	-58.20	-0.15	2261.71	-103.47	-0.15	1453.38	
31	Miscellaneous	-3.19	-2.24	183.39	-3.19	-2.24	151.47	-5.77	-3.94	151.47	-5.77	-3.94	93.80	
100	AASHTO-LRFD TRUCK-LOAD	MAX	363.09	537.73	10527.55	182.43	537.73	8738.10	333.57	615.90	8738.10	146.08	615.90	5806.02
		MIN	-359.53	-522.91	-1796.26	-539.60	-522.91	-1223.33	-420.82	-581.34	-1223.33	-609.90	-581.34	-657.80
		TANDEM-LOAD MAX	278.67	374.30	7426.62	141.84	374.30	6178.53	259.32	429.92	6178.53	114.96	429.92	4143.43
		MIN	-262.31	-366.08	-1219.27	-399.06	-366.08	-830.38	-303.90	-398.85	-830.38	-448.49	-398.85	-446.51
		DISPERSION-LMAX	220.98	639.44	13170.59	149.22	639.44	10461.18	191.67	849.52	10461.18	125.95	849.52	6490.89
		MIN	-308.26	-658.61	-3240.64	-398.00	-658.61	-2207.17	-406.24	-853.12	-2207.17	-501.90	-853.12	-1187.12
110	Live load	L-PICKUP 1 MAX	584.07	1177.16	23698.14	331.65	1177.16	19199.28	525.24	1465.42	19199.28	272.03	1465.42	12296.92
		MIN	-667.79	-1181.51	-5036.90	-937.60	-1181.51	-3430.51	-827.06	-1434.45	-3430.51	-1111.79	-1434.45	-1844.92
		L-PICKUP 2 MAX	499.65	1013.74	20597.21	291.05	1013.74	16639.71	450.98	1279.44	16639.71	240.91	1279.44	10634.33
		MIN	-570.56	-1024.69	-4459.91	-797.06	-1024.69	-3037.55	-710.15	-1251.97	-3037.55	-950.38	-1251.97	-1633.62
		L-PICKUP 3	-750.41	-1342.76	-5954.79	-1023.69	-1342.76	-4055.62	-943.97	-1691.35	-4055.62	-1231.20	-1691.35	-2181.02
		Live load MAX	584.07	1177.16	23698.14	331.65	1177.16	19199.28	525.24	1465.42	19199.28	272.03	1465.42	12296.92
MIN	-750.41	-1342.76	-5954.79	-1023.69	-1342.76	-4055.62	-943.97	-1691.35	-4055.62	-1231.20	-1691.35	-2181.02		
111	AASHTO Twin	TWIN-PICKUP MAX	574.87	1353.12	27068.69	322.01	1353.12	21998.54	502.80	1712.88	21998.54	274.91	1712.88	14080.52
		MIN	-750.41	-1342.76	-5954.79	-1023.69	-1342.76	-4055.62	-943.97	-1691.35	-4055.62	-1231.20	-1691.35	-2181.02
		MID-PICKUP	-750.41	-1342.76	-5954.79	-1023.69	-1342.76	-4055.62	-943.97	-1691.35	-4055.62	-1231.20	-1691.35	-2181.02
198	AASHTO Fatig	TRUCK-LOAD MAX	244.89	299.76	2780.67	90.24	299.76	2434.83	234.56	362.66	2434.83	76.59	362.66	1830.49
		MIN	-126.23	-197.78	-300.16	-280.35	-197.78	-205.83	-134.10	-257.50	-205.83	-294.44	-257.50	-113.42
		TANDEM-LOAD MAX	193.48	208.52	2042.97	73.99	208.52	1800.03	187.81	251.15	1800.03	63.20	251.15	1372.24
		MIN	-98.08	-135.58	-203.70	-217.49	-135.58	-139.65	-103.39	-176.14	-139.65	-228.34	-176.14	-76.88

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1079			1080			1080			1081		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	95.97	401.21	2896.00	42.01	401.21	2406.51	85.97	516.56	2406.51	35.10	516.56	1689.85
	MIN	-79.20	-331.07	-573.67	-136.05	-331.07	-393.43	-95.10	-434.73	-393.43	-152.54	-434.73	-216.86
199	AASHTO-LRFD TRUCK-LOAD MAX	417.77	864.03	16905.73	208.57	864.03	13981.64	366.99	1053.67	13981.64	179.50	1053.67	9154.13
	MIN	-525.54	-833.34	-3375.80	-739.44	-833.34	-2299.07	-642.61	-1026.16	-2299.07	-866.10	-1026.16	-1236.24
	TANDEM-LOAD MAX	278.67	374.30	7426.62	141.84	374.30	6178.53	259.32	429.92	6178.53	114.96	429.92	4143.43
	MIN	-262.31	-366.08	-1219.27	-399.06	-366.08	-830.38	-303.90	-398.85	-830.38	-448.49	-398.85	-446.51
	DISPERSION-LMAX	220.98	639.44	13170.59	149.22	639.44	10461.18	191.67	849.52	10461.18	125.95	849.52	6490.89
	MIN	-308.26	-658.61	-3240.64	-398.00	-658.61	-2207.17	-406.24	-853.12	-2207.17	-501.90	-853.12	-1187.12
300	Total Dead lWithout snow	-315.42	-102.47	32972.37	-802.34	-102.47	27383.56	-742.37	-81.15	27383.56	-1229.29	-81.15	17525.26
301	Particular Snow	-23.34	-5.33	2721.44	-68.61	-5.33	2261.71	-58.20	-0.15	2261.71	-103.47	-0.15	1453.38
302	Live load Total MAX	379.64	765.16	15403.79	215.57	765.16	12479.53	341.41	952.52	12479.53	176.82	952.52	7993.00
	MIN	-487.77	-872.79	-3870.61	-665.40	-872.79	-2636.15	-613.58	-1099.38	-2636.15	-800.28	-1099.38	-1417.66
303	Sum total D+L+PP MAX	154.77	759.83	51097.61	-590.71	759.83	42124.81	-356.74	952.37	42124.81	-1102.89	952.37	26971.64
	MIN	-826.53	-980.58	30662.01	-1536.35	-980.58	26218.28	-1414.15	-1180.67	26218.28	-2133.04	-1180.67	17135.68

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	1081			1082			2001			2002			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-183.43	61.26	3245.29	-312.03	61.26	0.00	352.00	-28.53	0.46	283.05	-28.53	3430.25	
3	Railing		-2.67	12.98	105.95	-13.50	12.98	0.00	6.97	-10.34	0.17	10.61	-10.34	95.15	
5	Wheel guard		-26.44	128.47	1048.90	-133.70	128.47	0.00	69.04	-102.37	1.67	105.07	-102.37	942.01	
8	Steel weight		-710.56	92.99	11870.49	-1101.73	92.99	0.00	1341.18	8.04	-0.13	1018.69	8.04	12744.89	
10	Medial strip		-88.61	-54.18	1160.83	-88.61	-54.18	0.00	283.09	98.51	-1.60	129.26	98.51	2204.53	
19	Snow		-81.30	30.25	1453.38	-140.59	30.25	0.00	167.38	-11.43	0.19	130.37	-11.43	1606.43	
31	Miscellaneous		-7.16	-4.38	93.80	-7.16	-4.38	0.00	12.73	4.48	-0.07	7.44	4.48	108.55	
100	AASHTO-LRFD TRUCK-LOAD	MAX	303.11	682.94	5806.02	50.21	682.94	0.00	748.62	895.70	14.88	542.36	895.70	5519.16	
		MIN	-442.20	-619.32	-657.80	-741.36	-619.32	0.00	-83.86	-913.54	-14.59	-230.55	-913.54	-577.76	
		TANDEM-LOAD MAX	245.27	468.64	4143.43	34.08	468.64	0.00	549.78	612.49	10.17	402.79	612.49	3928.78	
		MIN	-316.29	-426.55	-446.51	-543.30	-426.55	0.00	-76.96	-624.13	-9.98	-195.11	-624.13	-393.07	
		DISPERSION-LMAX	151.66	1003.99	6490.89	90.62	1003.99	0.00	665.12	1388.88	23.48	577.70	1388.88	6476.73	
		MIN	-451.41	-900.22	-1187.12	-601.37	-900.22	0.00	-104.24	-1441.32	-22.62	-130.19	-1441.32	-1044.77	
110	Live load	L-PICKUP 1	MAX	454.76	1686.93	12296.92	140.83	1686.93	0.00	1413.74	2284.58	38.36	1120.06	2284.58	11995.88
		MIN	-893.61	-1519.54	-1844.92	-1342.73	-1519.54	0.00	-188.10	-2354.86	-37.21	-360.74	-2354.86	-1622.53	
		L-PICKUP 2	MAX	396.93	1472.63	10634.33	124.70	1472.63	0.00	1214.90	2001.37	33.64	980.49	2001.37	10405.51
		MIN	-767.70	-1326.77	-1633.62	-1144.67	-1326.77	0.00	-181.20	-2065.44	-32.60	-325.30	-2065.44	-1437.84	
		L-PICKUP 3	MAX	-1031.72	-1798.93	-2181.02	-1478.29	-1798.93	0.00	-204.31	-2773.90	-44.01	-347.95	-2773.90	-1916.78
		MIN	454.76	1686.93	12296.92	140.83	1686.93	0.00	1413.74	2284.58	38.36	1120.06	2284.58	11995.88	
111	AASHTO Twin	TWIN-PICKUP	MAX	435.38	2004.63	14080.52	166.49	2004.63	0.00	1594.11	2701.78	45.18	1307.80	2701.78	13913.17
		MIN	-1031.72	-1798.93	-2181.02	-1478.29	-1798.93	0.00	-204.31	-2773.90	-44.01	-347.95	-2773.90	-1916.78	
		MID-PICKUP	MAX	-1031.72	-1798.93	-2181.02	-1478.29	-1798.93	0.00	-204.31	-2773.90	-44.01	-347.95	-2773.90	-1916.78
		MIN	-1031.72	-1798.93	-2181.02	-1478.29	-1798.93	0.00	-204.31	-2773.90	-44.01	-347.95	-2773.90	-1916.78	
		LIVE-LOAD	MAX	454.76	1686.93	12296.92	140.83	1686.93	0.00	1413.74	2284.58	38.36	1120.06	2284.58	11995.88
		MIN	-1031.72	-1798.93	-2181.02	-1478.29	-1798.93	0.00	-204.31	-2773.90	-44.01	-360.74	-2773.90	-1916.78	
198	AASHTO Fatig	TRUCK-LOAD	MAX	225.16	406.70	1830.49	8.66	406.70	0.00	274.81	426.92	8.54	134.37	426.92	1303.63
		MIN	-138.75	-274.44	-113.42	-384.18	-274.44	0.00	-39.52	-524.23	-6.95	-139.93	-524.23	-99.16	
		TANDEM-LOAD	MAX	185.77	279.96	1372.24	5.87	279.96	0.00	213.00	292.61	5.84	110.60	292.61	964.88
		MIN	-104.75	-187.78	-76.88	-293.42	-187.78	0.00	-46.79	-358.49	-4.77	-121.45	-358.49	-67.39	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1081			1082			2001			2002		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	66.33	617.24	1689.85	16.55	617.24	0.00	185.11	717.19	13.71	148.10	717.19	1536.16
	MIN	-113.98	-455.05	-216.86	-205.56	-455.05	0.00	-25.02	-841.81	-11.68	-43.03	-841.81	-189.75
199	AASHTO-LRFD TRUCK-LOAD MAX	332.10	1223.37	9154.13	94.37	1223.37	0.00	1106.12	1613.10	26.73	875.41	1613.10	8982.35
	MIN	-694.95	-1098.60	-1236.24	-1041.18	-1098.60	0.00	-122.78	-1640.80	-26.28	-256.42	-1640.80	-1084.98
	TANDEM-LOAD MAX	245.27	468.64	4143.43	34.08	468.64	0.00	549.78	612.49	10.17	402.79	612.49	3928.78
	MIN	-316.29	-426.55	-446.51	-543.30	-426.55	0.00	-76.96	-624.13	-9.98	-195.11	-624.13	-393.07
	DISPERSION-LMAX	151.66	1003.99	6490.89	90.62	1003.99	0.00	665.12	1388.88	23.48	577.70	1388.88	6476.73
	MIN	-451.41	-900.22	-1187.12	-601.37	-900.22	0.00	-104.24	-1441.32	-22.62	-130.19	-1441.32	-1044.77
300	Total Dead lWithout snow	-1018.88	237.14	17525.26	-1656.74	237.14	0.00	2065.01	-30.22	0.49	1554.13	-30.22	19525.39
301	Particular Snow	-81.30	30.25	1453.38	-140.59	30.25	0.00	167.38	-11.43	0.19	130.37	-11.43	1606.43
302	Live load Total MAX	295.60	1096.50	7993.00	91.54	1096.50	0.00	918.93	1484.97	24.93	728.04	1484.97	7797.32
	MIN	-670.62	-1169.31	-1417.66	-960.89	-1169.31	0.00	-132.80	-1803.04	-28.61	-234.48	-1803.04	-1245.90
303	Sum total D+L+PP MAX	-715.90	1363.90	26971.64	-1678.33	1363.90	0.00	3151.32	1473.54	25.61	2412.54	1473.54	28929.15
	MIN	-1770.79	-1139.05	17135.68	-2758.22	-1139.05	0.00	2059.74	-1844.69	-28.42	1379.68	-1844.69	19512.15

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2002	2003			2003			2004						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
											S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)
1	Pavement	261.85	26.29	3429.76	198.00	26.29	5729.76	179.50	42.98	5729.34	115.65	42.98	7205.55	
3	Railing	5.76	-5.20	95.13	9.13	-5.20	169.56	2.99	-1.37	169.46	6.36	-1.37	216.23	
5	Wheel guard	56.98	-51.50	941.81	90.34	-51.50	1678.65	29.61	-13.58	1677.69	62.97	-13.58	2140.72	
8	Steel weight	990.91	168.52	12743.12	692.31	168.52	21161.86	690.70	190.32	21161.32	392.10	190.32	26576.99	
10	Medial strip	176.50	73.34	2204.70	51.37	73.34	3318.97	111.29	31.21	3320.03	6.48	31.21	3883.68	
19	Snow	122.05	12.11	1606.24	89.27	12.11	2660.97	82.00	18.24	2660.81	50.99	18.24	3323.79	
31	Miscellaneous	9.17	4.20	108.54	4.27	4.20	175.34	6.84	2.84	175.37	1.94	2.84	218.82	
100	AASHTO-LRFD TRUCK-LOAD	MAX	608.16	917.82	5516.64	461.04	917.82	8787.20	543.81	794.67	8785.19	399.95	794.67	11009.95
		MIN	-136.16	-893.26	-577.64	-279.77	-893.26	-1105.02	-188.88	-773.68	-1104.95	-304.94	-773.68	-1638.83
		TANDEM-LOAD MAX	446.23	627.92	3928.26	343.33	627.92	6164.58	401.32	544.22	6162.76	301.79	544.22	7716.31
		MIN	-124.99	-610.85	-392.99	-218.85	-610.85	-751.78	-159.59	-531.67	-751.74	-249.15	-531.67	-1114.95
		DISPERSION-LMAX	536.33	1425.30	6476.39	471.36	1425.30	11086.05	434.85	1163.04	11085.29	372.61	1163.04	14430.81
		MIN	-115.51	-1387.68	-1044.57	-156.12	-1387.68	-1998.17	-141.79	-1097.43	-1998.06	-186.06	-1097.43	-2963.16
110	Live load	L-PICKUP 1 MAX	1144.48	2343.12	11993.03	932.40	2343.12	19873.26	978.66	1957.71	19870.48	772.56	1957.71	25440.75
		MIN	-251.67	-2280.94	-1622.22	-435.89	-2280.94	-3103.19	-330.66	-1871.11	-3103.01	-491.01	-1871.11	-4601.99
		L-PICKUP 2 MAX	982.55	2053.22	10404.65	814.69	2053.22	17250.63	836.17	1707.26	17248.05	674.40	1707.26	22147.12
		MIN	-240.50	-1998.53	-1437.56	-374.97	-1998.53	-2749.96	-301.37	-1629.11	-2749.79	-435.21	-1629.11	-4078.12
		L-PICKUP 3	-246.22	-2682.33	-1916.40	-413.03	-2682.33	-3665.97	-313.54	-2201.87	-3665.75	-487.18	-2201.87	-5436.66
		Live load MAX	1144.48	2343.12	11993.03	932.40	2343.12	19873.26	978.66	1957.71	19870.48	772.56	1957.71	25440.75
MIN	-251.67	-2682.33	-1916.40	-435.89	-2682.33	-3665.97	-330.66	-2201.87	-3665.75	-491.01	-2201.87	-5436.66		
111	AASHTO Twin	TWIN-PICKUP MAX	1288.61	2764.51	13909.66	1082.05	2764.51	23053.97	1089.20	2310.37	23052.11	888.43	2310.37	29384.11
		MIN	-246.22	-2682.33	-1916.40	-413.03	-2682.33	-3665.97	-313.54	-2201.87	-3665.75	-487.18	-2201.87	-5436.66
		MID-PICKUP	-246.22	-2682.33	-1916.40	-413.03	-2682.33	-3665.97	-313.54	-2201.87	-3665.75	-487.18	-2201.87	-5436.66
198	AASHTO Fatig	TRUCK-LOAD MAX	219.04	434.14	1304.06	106.73	434.14	1907.22	206.82	366.77	1904.82	92.90	366.77	2279.23
		MIN	-47.96	-507.78	-99.36	-162.12	-507.78	-189.27	-57.67	-430.41	-189.28	-170.50	-430.41	-277.83
		TANDEM-LOAD MAX	169.30	295.98	965.07	88.33	295.98	1388.05	160.79	250.07	1386.36	74.45	250.07	1645.65
		MIN	-41.62	-348.93	-67.52	-130.33	-348.93	-128.63	-53.50	-295.98	-128.64	-135.70	-295.98	-188.89

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2002 2002	2003			2003			2004					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
198	AASHTO FatigDISPERSION-LMAX	146.49	745.76	1543.14	120.41	745.76	2495.40	121.00	614.25	2492.23	93.65	614.25	3068.95
	MIN	-32.65	-799.03	-190.13	-59.54	-799.03	-362.19	-43.17	-630.29	-362.20	-69.36	-630.29	-531.68
199	AASHTO-LRFD TRUCK-LOAD MAX	895.47	1646.37	8978.79	730.92	1646.37	14529.47	775.37	1404.03	14528.17	614.54	1404.03	18218.21
	MIN	-158.06	-1592.68	-1084.76	-302.81	-1592.68	-2075.12	-206.59	-1349.09	-2075.00	-355.24	-1349.09	-3077.57
	TANDEM-LOAD MAX	446.23	627.92	3928.26	343.33	627.92	6164.58	401.32	544.22	6162.76	301.79	544.22	7716.31
	MIN	-124.99	-610.85	-392.99	-218.85	-610.85	-751.78	-159.59	-531.67	-751.74	-249.15	-531.67	-1114.95
	DISPERSION-LMAX	536.33	1425.30	6476.39	471.36	1425.30	11086.05	434.85	1163.04	11085.29	372.61	1163.04	14430.81
	MIN	-115.51	-1387.68	-1044.57	-156.12	-1387.68	-1998.17	-141.79	-1097.43	-1998.06	-186.06	-1097.43	-2963.16
300	Total Dead lWithout snow	1501.16	215.64	19523.05	1045.42	215.64	32234.14	1020.92	252.40	32233.22	585.50	252.40	40241.99
301	Particular Snow	122.05	12.11	1606.24	89.27	12.11	2660.97	82.00	18.24	2660.81	50.99	18.24	3323.79
302	Live load Total MAX	743.92	1523.03	7795.47	606.06	1523.03	12917.62	636.13	1272.51	12915.81	502.17	1272.51	16536.49
	MIN	-163.58	-1743.51	-1245.66	-283.33	-1743.51	-2382.88	-214.93	-1431.21	-2382.74	-319.15	-1431.21	-3533.83
303	Sum total D+L+PP MAX	2367.12	1750.79	28924.76	1740.75	1750.79	47812.72	1739.05	1543.16	47809.84	1138.65	1543.16	60102.27
	MIN	1410.55	-1731.40	19509.93	766.36	-1731.40	31797.36	823.51	-1412.97	31796.47	221.59	-1412.97	38971.80

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2004 2004	2005			2005			2006						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	92.86	69.07	7204.89	29.01	69.07	7814.46	6.08	44.28	7814.11	-57.76	44.28	7555.66	
3	Railing	0.20	1.16	216.17	3.57	1.16	235.07	-2.46	1.22	235.03	0.91	1.22	227.26	
5	Wheel guard	2.02	11.47	2140.09	35.38	11.47	2327.16	-24.38	12.04	2326.84	8.99	12.04	2249.89	
8	Steel weight	373.41	265.66	26575.10	74.81	265.66	28816.94	54.10	164.63	28815.87	-244.50	164.63	27863.69	
10	Medial strip	52.74	22.44	3883.90	-31.75	22.44	3963.46	4.17	5.19	3963.26	-63.34	5.19	3650.28	
19	Snow	40.85	29.80	3323.50	11.60	29.80	3583.64	0.61	18.71	3583.45	-27.17	18.71	3449.18	
31	Miscellaneous	4.31	2.64	218.83	-0.59	2.64	236.98	1.70	1.42	236.98	-3.20	1.42	229.12	
100	AASHTO-LRFD TRUCK-LOAD	MAX	475.34	763.16	11008.34	338.51	763.16	12106.09	410.95	765.06	12104.81	282.18	765.06	12164.00
		MIN	-226.66	-657.13	-1638.66	-363.15	-657.13	-2169.94	-292.59	-680.64	-2169.80	-416.05	-680.64	-2688.54
	TANDEM-LOAD	MAX	353.77	527.48	7714.92	260.04	527.48	8487.36	309.20	528.95	8486.35	222.14	528.95	8546.45
		MIN	-190.98	-450.59	-1114.83	-276.25	-450.59	-1476.29	-230.05	-470.03	-1476.19	-311.95	-470.03	-1829.10
	DISPERSION-LMAX	MAX	334.90	905.31	14429.28	276.80	905.31	16403.15	249.44	757.07	16402.02	195.93	757.07	16965.09
		MIN	-179.04	-798.27	-2962.85	-228.42	-798.27	-3923.20	-232.80	-686.79	-3922.92	-287.48	-686.79	-4860.52
110	Live load L-PICKUP 1	MAX	810.24	1668.47	25437.62	615.31	1668.47	28509.23	660.39	1522.13	28506.82	478.11	1522.13	29129.09
		MIN	-405.70	-1455.41	-4601.50	-591.57	-1455.41	-6093.14	-525.40	-1367.42	-6092.73	-703.53	-1367.42	-7549.06
	L-PICKUP 2	MAX	688.67	1432.79	22144.20	536.83	1432.79	24890.51	558.65	1286.02	24888.37	418.08	1286.02	25511.54
		MIN	-370.02	-1248.86	-4077.68	-504.66	-1248.86	-5399.49	-462.85	-1156.82	-5399.12	-599.43	-1156.82	-6689.63
	L-PICKUP 3	MAX	810.24	1668.47	25437.62	615.31	1668.47	28509.23	660.39	1522.13	28506.82	478.11	1522.13	29129.09
		MIN	-414.01	-1680.45	-5436.08	-589.53	-1680.45	-7198.34	-551.66	-1522.13	-7197.85	-728.12	-1522.13	-8918.41
	Live load	MAX	810.24	1668.47	25437.62	615.31	1668.47	28509.23	660.39	1522.13	28506.82	478.11	1522.13	29129.09
		MIN	-414.01	-1680.45	-5436.08	-591.57	-1680.45	-7198.34	-551.66	-1522.13	-7197.85	-728.12	-1522.13	-8918.41
111	AASHTO Twin TWIN-PICKUP	MAX	886.85	1896.01	29381.32	699.33	1896.01	32737.82	703.58	1714.36	32736.70	528.84	1714.36	33157.14
		MIN	-414.01	-1680.45	-5436.08	-589.53	-1680.45	-7198.34	-551.66	-1522.13	-7197.85	-728.12	-1522.13	-8918.41
	MID-PICKUP	MAX	886.85	1896.01	29381.32	699.33	1896.01	32737.82	703.58	1714.36	32736.70	528.84	1714.36	33157.14
198	AASHTO FatigTRUCK-LOAD	MAX	194.17	291.79	2276.43	81.57	291.79	2436.66	182.84	207.85	2433.76	70.97	207.85	2418.71
		MIN	-67.72	-343.91	-277.81	-160.39	-343.91	-365.13	-75.32	-270.85	-364.94	-186.62	-270.85	-449.58
	TANDEM-LOAD	MAX	152.00	199.87	1643.67	66.05	199.87	1755.78	144.21	143.41	1753.76	60.27	143.41	1745.93
		MIN	-61.50	-235.90	-188.88	-141.05	-235.90	-248.31	-66.99	-186.54	-248.19	-146.32	-186.54	-305.81

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2004			2005			2005			2006		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.50	466.54	3064.61	71.24	466.54	3339.52	81.13	395.83	3333.62	54.07	395.83	3367.58
	MIN	-55.77	-467.80	-531.64	-82.15	-467.80	-698.77	-66.58	-384.01	-698.41	-93.31	-384.01	-860.43
199	AASHTO-LRFD TRUCK-LOAD MAX	650.48	1201.36	18216.62	500.24	1201.36	19972.21	532.31	1147.77	19972.10	391.67	1147.77	19876.17
	MIN	-280.97	-1068.90	-3077.24	-426.62	-1068.90	-4074.95	-380.16	-1004.47	-4074.69	-521.54	-1004.47	-5048.82
	TANDEM-LOAD MAX	353.77	527.48	7714.92	260.04	527.48	8487.36	309.20	528.95	8486.35	222.14	528.95	8546.45
	MIN	-190.98	-450.59	-1114.83	-276.25	-450.59	-1476.29	-230.05	-470.03	-1476.19	-311.95	-470.03	-1829.10
	DISPERSION-LMAX	334.90	905.31	14429.28	276.80	905.31	16403.15	249.44	757.07	16402.02	195.93	757.07	16965.09
	MIN	-179.04	-798.27	-2962.85	-228.42	-798.27	-3923.20	-232.80	-686.79	-3922.92	-287.48	-686.79	-4860.52
300	Total Dead lWithout snow	525.55	372.44	40238.98	110.45	372.44	43394.07	39.20	228.77	43392.09	-358.90	228.77	41775.89
301	Particular Snow	40.85	29.80	3323.50	11.60	29.80	3583.64	0.61	18.71	3583.45	-27.17	18.71	3449.18
302	Live load Total MAX	526.66	1084.50	16534.45	399.95	1084.50	18531.00	429.25	989.38	18529.44	310.77	989.38	18933.91
	MIN	-269.11	-1092.29	-3533.45	-384.52	-1092.29	-4678.92	-358.58	-989.38	-4678.60	-473.28	-989.38	-5796.97
303	Sum total D+L+PP MAX	1093.06	1486.75	60096.93	521.99	1486.75	65508.71	469.07	1236.86	65504.98	17.94	1236.86	64158.98
	MIN	216.56	-1017.74	38968.99	-372.92	-1017.74	40895.11	-357.97	-970.67	40893.36	-859.35	-970.67	37689.02

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2006 2006	2007			2007			2008							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-87.53	-23.23	7555.32	-151.36	-23.23	6360.89	-157.92	-24.75	6360.89	-221.75	-24.75	4462.51		
3	Railing	-5.25	-0.45	227.25	-1.88	-0.45	191.58	-7.45	0.23	191.58	-4.08	0.23	133.95		
5	Wheel guard	-51.99	-4.47	2249.77	-18.63	-4.47	1896.65	-73.74	2.26	1896.65	-40.37	2.26	1326.10		
8	Steel weight	-291.44	-88.63	27862.48	-590.04	-88.63	23455.12	-550.14	-102.91	23455.11	-848.74	-102.91	16460.70		
10	Medial strip	-37.09	-24.04	3649.85	-97.74	-24.04	2975.67	-61.59	-24.73	2975.67	-122.23	-24.73	2056.56		
19	Snow	-41.75	-11.50	3449.00	-68.94	-11.50	2895.55	-73.13	-11.57	2895.55	-100.32	-11.57	2028.31		
31	Miscellaneous	-1.18	-0.86	229.11	-6.08	-0.86	192.81	-3.28	-1.33	192.81	-8.18	-1.33	135.53		
100	AASHTO-LRFD TRUCK-LOAD	MAX	342.01	719.09	12163.15	213.87	719.09	11192.30	313.72	716.47	11192.30	187.87	716.47	9633.72	
		MIN	-364.52	-765.26	-2688.44	-488.42	-765.26	-3152.83	-399.57	-766.21	-3152.83	-525.01	-766.21	-3691.84	
		TANDEM-LOAD	MAX	261.83	496.21	8545.79	176.81	496.21	7855.24	242.93	494.20	7855.24	157.62	494.20	6781.48
		MIN	-278.72	-529.91	-1829.04	-361.42	-529.91	-2144.98	-301.78	-530.59	-2144.98	-386.33	-530.59	-2511.69	
		DISPERSION-L	MAX	172.95	710.60	16964.32	125.45	710.60	15916.50	145.94	811.59	15916.50	100.91	811.59	13855.89
		MIN	-307.97	-746.41	-4860.31	-368.93	-746.41	-5699.81	-395.86	-849.08	-5699.81	-459.32	-849.08	-6674.33	
110	Live load	L-PICKUP 1	MAX	514.96	1429.69	29127.47	339.32	1429.69	27108.80	459.66	1528.06	27108.79	288.78	1528.06	23489.61
		MIN	-672.49	-1511.67	-7548.75	-857.35	-1511.67	-8852.64	-795.43	-1615.29	-8852.64	-984.34	-1615.29	-10366.17	
		L-PICKUP 2	MAX	434.78	1206.81	25510.11	302.26	1206.81	23771.74	388.87	1305.79	23771.73	258.53	1305.79	20637.37
		MIN	-586.69	-1276.32	-6689.35	-730.35	-1276.32	-7844.79	-697.64	-1379.67	-7844.79	-845.65	-1379.67	-9186.02	
		L-PICKUP 3	MAX	514.96	1429.69	29127.47	339.32	1429.69	27108.80	459.66	1528.06	27108.79	288.78	1528.06	23489.61
		MIN	-747.89	-1716.58	-8918.05	-931.16	-1716.58	-10458.48	-904.68	-1845.80	-10458.48	-1088.68	-1845.80	-12246.53	
111	AASHTO Twin	TWIN-PICKUP	MAX	524.92	1618.72	33154.31	361.61	1618.72	30884.87	452.00	1747.40	30884.87	291.11	1747.40	26571.49
		MIN	-747.89	-1716.58	-8918.05	-931.16	-1716.58	-10458.48	-904.68	-1845.80	-10458.48	-1088.68	-1845.80	-12246.53	
		MID-PICKUP	MAX	524.92	1618.72	33154.31	361.61	1618.72	30884.87	452.00	1747.40	30884.87	291.11	1747.40	26571.49
198	AASHTO Fatig	TRUCK-LOAD	MAX	170.24	266.05	2417.72	58.68	266.05	2235.49	165.90	337.71	2235.49	53.25	337.71	1949.29
		MIN	-86.08	-204.43	-449.21	-198.35	-204.43	-526.06	-90.65	-273.04	-526.06	-203.56	-273.04	-615.56	
		TANDEM-LOAD	MAX	135.68	182.40	1745.17	53.53	182.40	1615.10	133.05	231.09	1615.10	51.67	231.09	1415.88
		MIN	-73.90	-142.63	-305.57	-154.71	-142.63	-357.87	-77.67	-187.99	-357.87	-158.54	-187.99	-418.77	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2006 2006	2007			2007			2008					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
198	AASHTO FatigDISPERSION-LMAX	66.20	392.25	3365.50	39.96	392.25	3141.46	60.63	461.90	3141.47	34.94	461.90	2738.72
	MIN	-80.15	-394.88	-859.72	-107.07	-394.88	-1006.78	-96.77	-446.17	-1006.78	-123.71	-446.17	-1178.34
199	AASHTO-LRFD TRUCK-LOAD MAX	410.29	1087.98	19873.80	276.34	1087.98	18400.03	356.28	1129.96	18400.03	222.54	1129.96	15667.99
	MIN	-523.02	-1160.91	-5048.64	-665.69	-1160.91	-5920.72	-609.34	-1201.81	-5920.72	-750.32	-1201.81	-6932.93
	TANDEM-LOAD MAX	261.83	496.21	8545.79	176.81	496.21	7855.24	242.93	494.20	7855.24	157.62	494.20	6781.48
	MIN	-278.72	-529.91	-1829.04	-361.42	-529.91	-2144.98	-301.78	-530.59	-2144.98	-386.33	-530.59	-2511.69
	DISPERSION-LMAX	172.95	710.60	16964.32	125.45	710.60	15916.50	145.94	811.59	15916.50	100.91	811.59	13855.89
	MIN	-307.97	-746.41	-4860.31	-368.93	-746.41	-5699.81	-395.86	-849.08	-5699.81	-459.32	-849.08	-6674.33
300	Total Dead lWithout snow	-474.48	-141.69	41773.77	-865.72	-141.69	35072.73	-854.12	-151.23	35072.72	-1245.35	-151.23	24575.35
301	Particular Snow	-41.75	-11.50	3449.00	-68.94	-11.50	2895.55	-73.13	-11.57	2895.55	-100.32	-11.57	2028.31
302	Live load Total MAX	334.73	929.30	18932.86	220.56	929.30	17620.72	298.78	993.24	17620.72	187.71	993.24	15268.24
	MIN	-486.13	-1115.78	-5796.73	-605.25	-1115.78	-6798.01	-588.04	-1199.77	-6798.01	-707.64	-1199.77	-7960.25
303	Sum total D+L+PP MAX	-81.09	917.80	64155.63	-647.94	917.80	55588.99	-538.84	981.67	55588.98	-1101.65	981.67	41871.90
	MIN	-1002.36	-1268.97	37687.02	-1539.92	-1268.97	29130.86	-1515.29	-1362.58	29130.86	-2053.31	-1362.58	16255.34

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2008 2008	2009			2009			2010						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)				
1	Pavement	-237.71	-20.02	4462.51	-301.54	-20.02	1766.26	-341.20	21.62	1766.26	-405.03	21.62	-1964.87	
3	Railing	-9.94	1.55	133.95	-6.57	1.55	51.39	-13.24	5.26	51.39	-9.87	5.26	-64.13	
5	Wheel guard	-98.42	15.33	1326.10	-65.05	15.33	508.75	-131.04	52.06	508.75	-97.68	52.06	-634.84	
8	Steel weight	-843.33	-99.50	16460.70	-1141.93	-99.50	6534.40	-1222.85	24.71	6534.40	-1521.45	24.71	-7187.10	
10	Medial strip	-90.54	-28.09	2056.56	-151.17	-28.09	848.02	-129.42	-25.83	848.02	-190.06	-25.83	-749.37	
19	Snow	-108.80	-8.89	2028.31	-135.99	-8.89	804.35	-155.24	10.68	804.35	-182.42	10.68	-883.96	
31	Miscellaneous	-5.65	-1.85	135.53	-10.55	-1.85	54.55	-8.68	-1.96	54.55	-13.58	-1.96	-56.79	
100	AASHTO-LRFD TRUCK-LOAD	MAX	285.85	720.64	9633.72	161.75	720.64	7658.89	237.52	836.15	7658.89	119.30	836.15	5121.41
		MIN	-435.22	-773.50	-3691.84	-559.49	-773.50	-4381.23	-503.75	-798.00	-4381.23	-622.84	-798.00	-5079.01
	TANDEM-LOAD	MAX	223.86	495.21	6781.48	139.92	495.21	5444.12	189.61	573.98	5444.12	109.69	573.98	3738.09
		MIN	-325.59	-534.45	-2511.69	-409.50	-534.45	-2980.69	-371.92	-547.83	-2980.69	-451.72	-547.83	-3455.33
	DISPERSION-LMAX	MAX	129.57	991.65	13855.89	86.79	991.65	10769.57	101.15	1258.14	10769.57	62.97	1258.14	6285.66
		MIN	-509.75	-1021.29	-6674.33	-575.53	-1021.29	-7921.97	-650.48	-1220.78	-7921.97	-720.92	-1220.78	-9458.15
110	Live load L-PICKUP 1	MAX	415.42	1712.29	23489.61	248.54	1712.29	18428.46	338.67	2094.29	18428.46	182.28	2094.29	11407.07
		MIN	-944.96	-1794.78	-10366.17	-1135.02	-1794.78	-12303.19	-1154.22	-2018.78	-12303.19	-1343.75	-2018.78	-14537.16
	L-PICKUP 2	MAX	353.43	1486.86	20637.37	226.71	1486.86	16213.69	290.76	1832.12	16213.69	172.66	1832.12	10023.75
		MIN	-835.34	-1555.74	-9186.02	-985.03	-1555.74	-10902.66	-1022.39	-1768.61	-10902.66	-1172.64	-1768.61	-12913.48
	L-PICKUP 3	MAX	-1083.87	-2075.99	-12246.53	-1266.36	-2075.99	-14534.62	-1336.73	-2376.95	-14534.62	-1517.66	-2376.95	-17096.99
		MIN	415.42	1712.29	23489.61	248.54	1712.29	18428.46	338.67	2094.29	18428.46	182.28	2094.29	11407.07
	Live load	MAX	415.42	1712.29	23489.61	248.54	1712.29	18428.46	338.67	2094.29	18428.46	182.28	2094.29	11407.07
		MIN	-1083.87	-2075.99	-12246.53	-1266.36	-2075.99	-14534.62	-1336.73	-2376.95	-14534.62	-1517.66	-2376.95	-17096.99
111	AASHTO Twin TWIN-PICKUP	MAX	396.39	1992.24	26571.49	238.57	1992.24	20414.16	311.48	2463.70	20414.16	158.62	2463.70	11776.53
		MIN	-1083.87	-2075.99	-12246.53	-1266.36	-2075.99	-14534.62	-1336.73	-2376.95	-14534.62	-1517.66	-2376.95	-17096.99
	MID-PICKUP	MAX	-1083.87	-2075.99	-12246.53	-1266.36	-2075.99	-14534.62	-1336.73	-2376.95	-14534.62	-1517.66	-2376.95	-17096.99
198	AASHTO FatigTRUCK-LOAD	MAX	161.24	401.21	1949.29	48.41	401.21	1597.32	150.09	475.88	1597.32	40.43	475.88	1157.29
		MIN	-98.25	-336.27	-615.56	-208.59	-336.27	-736.39	-113.48	-392.67	-736.39	-218.37	-392.67	-886.81
	TANDEM-LOAD	MAX	130.02	275.30	1415.88	49.15	275.30	1176.49	121.99	326.65	1176.49	40.48	326.65	882.29
		MIN	-83.28	-230.27	-418.77	-162.08	-230.27	-500.78	-93.87	-268.61	-500.78	-168.21	-268.61	-602.21

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2008 2008	2009			2009			2010					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
198	AASHTO FatigDISPERSION-LMAX	56.24	570.51	2738.72	30.92	570.51	2151.80	47.38	709.61	2151.80	22.93	709.61	1330.13
	MIN	-121.54	-533.66	-1178.34	-148.26	-533.66	-1410.56	-159.92	-643.18	-1410.56	-186.06	-643.18	-1795.26
199	AASHTO-LRFD TRUCK-LOAD MAX	310.86	1221.94	15667.99	178.29	1221.94	11912.83	244.94	1479.30	11912.83	113.27	1479.30	6799.37
	MIN	-694.55	-1285.36	-6932.93	-831.54	-1285.36	-8227.61	-834.78	-1420.27	-8227.61	-965.37	-1420.27	-9538.50
	TANDEM-LOAD MAX	223.86	495.21	6781.48	139.92	495.21	5444.12	189.61	573.98	5444.12	109.69	573.98	3738.09
	MIN	-325.59	-534.45	-2511.69	-409.50	-534.45	-2980.69	-371.92	-547.83	-2980.69	-451.72	-547.83	-3455.33
	DISPERSION-LMAX	129.57	991.65	13855.89	86.79	991.65	10769.57	101.15	1258.14	10769.57	62.97	1258.14	6285.66
	MIN	-509.75	-1021.29	-6674.33	-575.53	-1021.29	-7921.97	-650.48	-1220.78	-7921.97	-720.92	-1220.78	-9458.15
300	Total Dead lWithout snow	-1285.58	-132.58	24575.35	-1676.81	-132.58	9763.36	-1846.43	75.85	9763.36	-2237.66	75.85	-10657.10
301	Particular Snow	-108.80	-8.89	2028.31	-135.99	-8.89	804.35	-155.24	10.68	804.35	-182.42	10.68	-883.96
302	Live load Total MAX	270.02	1112.99	15268.24	161.55	1112.99	11978.50	220.13	1361.29	11978.50	118.48	1361.29	7414.60
	MIN	-704.52	-1349.39	-7960.25	-823.13	-1349.39	-9447.50	-868.87	-1545.02	-9447.50	-986.48	-1545.02	-11113.04
303	Sum total D+L+PP MAX	-1043.36	1104.10	41871.90	-1602.78	1104.10	22546.22	-1715.50	1447.82	22546.22	-2266.06	1447.82	-1902.09
	MIN	-2098.90	-1490.86	16255.34	-2635.93	-1490.86	-1714.04	-2870.55	-1534.34	-1714.04	-3406.56	-1534.34	-22654.11

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	2010 2010	2011						2012						
		SHEAR		TORQUE		MOMENT		SHEAR		TORQUE		MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-428.53	43.14	-1964.87	-492.36	43.14	-6569.30	-485.51	20.04	-6569.30	-549.34	20.04	-11743.52	
3	Railing	-15.60	9.88	-64.13	-12.23	9.88	-203.25	-12.85	7.97	-203.25	-9.48	7.97	-314.94	
5	Wheel guard	-154.42	97.82	-634.84	-121.05	97.82	-2012.22	-127.25	78.95	-2012.22	-93.88	78.95	-3117.89	
8	Steel weight	-1548.12	56.62	-7187.10	-1846.72	56.62	-24161.33	-1811.53	-14.10	-24161.33	-2110.13	-14.10	-43769.66	
10	Medial strip	-164.49	-44.05	-749.37	-225.13	-44.05	-2697.49	-216.41	-44.86	-2697.49	-277.05	-44.86	-5164.77	
19	Snow	-194.26	21.43	-883.96	-221.45	21.43	-2962.50	-218.56	10.75	-2962.50	-245.75	10.75	-5284.06	
31	Miscellaneous	-11.48	-3.53	-56.79	-16.38	-3.53	-196.12	-15.71	-3.55	-196.12	-20.61	-3.55	-377.71	
100	AASHTO-LRFD TRUCK-LOAD	MAX	197.14	1088.91	5121.41	78.56	1088.91	2358.66	178.17	1411.12	2358.66	85.35	1411.12	1726.37
		MIN	-571.56	-1040.85	-5079.01	-685.29	-1040.85	-5608.59	-617.43	-1394.38	-5608.59	-764.72	-1394.38	-6750.22
	TANDEM-LOAD	MAX	158.77	743.74	3738.09	81.06	743.74	1853.58	152.25	962.70	1853.58	77.71	962.70	1170.91
		MIN	-417.53	-712.82	-3455.33	-492.86	-712.82	-3813.12	-449.90	-954.11	-3813.12	-548.57	-954.11	-4589.55
	DISPERSION-LMAX	MAX	81.21	1763.91	6285.66	47.70	1763.91	3637.68	76.92	2338.31	3637.68	61.72	2338.31	3133.63
		MIN	-773.57	-1690.70	-9458.15	-848.67	-1690.70	-14274.98	-864.88	-2302.90	-14274.98	-958.29	-2302.90	-22212.24
110	Live load L-PICKUP 1	MAX	278.34	2852.81	11407.07	126.26	2852.81	5996.34	255.08	3749.43	5996.34	147.07	3749.43	4860.01
		MIN	-1345.13	-2731.55	-14537.16	-1533.95	-2731.55	-19883.57	-1482.31	-3697.28	-19883.57	-1723.01	-3697.28	-28962.46
	L-PICKUP 2	MAX	239.98	2507.64	10023.75	128.76	2507.64	5491.26	229.17	3301.01	5491.26	139.43	3301.01	4304.54
		MIN	-1191.09	-2403.52	-12913.48	-1341.53	-2403.52	-18088.10	-1314.78	-3257.01	-18088.10	-1506.86	-3257.01	-26801.79
	L-PICKUP 3	MAX	-1568.51	-3211.70	-17096.99	-1748.13	-3211.70	-22326.62	-1727.90	-4346.04	-22326.62	-1955.73	-4346.04	-31500.26
		MIN	278.34	2852.81	11407.07	128.76	2852.81	5996.34	255.08	3749.43	5996.34	147.07	3749.43	4860.01
	Live load	MAX	278.34	2852.81	11407.07	128.76	2852.81	5996.34	255.08	3749.43	5996.34	147.07	3749.43	4860.01
		MIN	-1568.51	-3211.70	-17096.99	-1748.13	-3211.70	-22326.62	-1727.90	-4346.04	-22326.62	-1955.73	-4346.04	-31500.26
111	AASHTO Twin TWIN-PICKUP	MAX	249.49	3347.82	11776.53	90.74	3347.82	5982.26	195.91	4401.63	5982.26	140.43	4401.63	5743.56
		MIN	-1568.51	-3211.70	-17096.99	-1748.13	-3211.70	-22326.62	-1727.90	-4346.04	-22326.62	-1955.73	-4346.04	-31500.26
	MID-PICKUP	MAX	-1568.51	-3211.70	-17096.99	-1748.13	-3211.70	-22326.62	-1727.90	-4346.04	-22326.62	-1955.73	-4346.04	-31500.26
198	AASHTO FatigTRUCK-LOAD	MAX	137.71	557.31	1157.29	32.98	557.31	668.66	101.55	548.23	668.66	43.16	548.23	298.31
		MIN	-128.92	-448.10	-886.81	-228.09	-448.10	-1081.08	-149.06	-442.78	-1081.08	-270.15	-442.78	-1363.35
	TANDEM-LOAD	MAX	112.67	382.06	882.29	29.33	382.06	559.55	90.30	372.08	559.55	47.31	372.08	202.02
		MIN	-103.97	-307.05	-602.21	-173.85	-307.05	-731.82	-111.39	-301.25	-731.82	-204.41	-301.25	-927.53

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2010 2010	2011						2012					
		SHEAR			TORQUE			SHEAR			TORQUE		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	45.68	1008.64	1330.13	22.41	1008.64	764.87	43.34	1316.56	764.87	33.78	1316.56	574.46
	MIN	-202.59	-885.95	-1795.26	-227.77	-885.95	-3066.61	-213.77	-1220.96	-3066.61	-255.02	-1220.96	-4931.66
199	AASHTO-LRFD TRUCK-LOAD MAX	196.01	1955.89	6799.37	53.12	1955.89	3009.28	140.77	2552.39	3009.28	94.31	2552.39	3248.10
	MIN	-969.22	-1877.86	-9538.50	-1093.70	-1877.86	-10532.37	-1055.01	-2526.04	-10532.37	-1214.74	-2526.04	-12788.05
	TANDEM-LOAD MAX	158.77	743.74	3738.09	81.06	743.74	1853.58	152.25	962.70	1853.58	77.71	962.70	1170.91
	MIN	-417.53	-712.82	-3455.33	-492.86	-712.82	-3813.12	-449.90	-954.11	-3813.12	-548.57	-954.11	-4589.55
	DISPERSION-LMAX	81.21	1763.91	6285.66	47.70	1763.91	3637.68	76.92	2338.31	3637.68	61.72	2338.31	3133.63
	MIN	-773.57	-1690.70	-9458.15	-848.67	-1690.70	-14274.98	-864.88	-2302.90	-14274.98	-958.29	-2302.90	-22212.24
300	Total Dead lWithout snow	-2322.64	159.88	-10657.10	-2713.87	159.88	-35839.70	-2669.26	44.45	-35839.70	-3060.49	44.45	-64488.49
301	Particular Snow	-194.26	21.43	-883.96	-221.45	21.43	-2962.50	-218.56	10.75	-2962.50	-245.75	10.75	-5284.06
302	Live load Total MAX	180.92	1854.33	7414.60	83.69	1854.33	3897.62	165.80	2437.13	3897.62	95.60	2437.13	3159.00
	MIN	-1019.53	-2087.61	-11113.04	-1136.29	-2087.61	-14512.30	-1123.13	-2824.93	-14512.30	-1271.22	-2824.93	-20475.17
303	Sum total D+L+PP MAX	-2281.71	2035.64	-1902.09	-2826.52	2035.64	-33735.30	-2672.28	2492.32	-33735.30	-3181.97	2492.32	-65665.84
	MIN	-3536.44	-2066.17	-22654.11	-4071.61	-2066.17	-53314.50	-4010.96	-2814.18	-53314.50	-4577.47	-2814.18	-90247.72

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2012 2012	2013			2013			2014							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	486.00	-31.48	-11743.52	434.94	-31.48	-8059.79	434.24	-40.48	-8059.79	383.18	-40.48	-4790.08		
3	Railing	7.40	-7.31	-314.94	10.10	-7.31	-244.95	10.54	-10.92	-244.95	13.24	-10.92	-149.85		
5	Wheel guard	73.27	-72.37	-3117.89	99.96	-72.37	-2424.99	104.34	-108.08	-2424.99	131.04	-108.08	-1483.47		
8	Steel weight	1878.73	-40.11	-43769.66	1639.85	-40.11	-29695.36	1631.76	-33.46	-29695.36	1392.88	-33.46	-17596.78		
10	Medial strip	238.34	31.64	-5164.77	189.83	31.64	-3452.12	186.03	51.93	-3452.12	137.52	51.93	-2157.95		
19	Snow	215.98	-15.77	-5284.06	194.23	-15.77	-3643.22	194.01	-20.60	-3643.22	172.27	-20.60	-2178.10		
31	Miscellaneous	18.79	2.59	-377.71	14.87	2.59	-243.09	14.59	4.20	-243.09	10.67	4.20	-142.08		
100	AASHTO-LRFD TRUCK-LOAD	MAX	745.97	1412.15	1726.37	606.59	1412.15	1868.58	662.32	1186.01	1868.58	558.28	1186.01	3981.80	
		MIN	-111.20	-1429.93	-6750.22	-165.79	-1429.93	-6120.84	-92.48	-1222.18	-6120.84	-211.35	-1222.18	-5506.36	
		TANDEM-LOAD	MAX	538.48	963.68	1170.91	442.24	963.68	1518.44	479.79	811.57	1518.44	411.55	811.57	2972.14
		MIN	-95.49	-979.35	-4589.55	-145.38	-979.35	-4156.68	-91.80	-832.41	-4156.68	-170.00	-832.41	-3732.45	
		DISPERSION-L	MAX	954.47	2319.48	3133.63	876.55	2319.48	2642.23	851.70	1929.61	2642.23	791.73	1929.61	3338.80
		MIN	-156.28	-2372.97	-22212.24	-165.23	-2372.97	-15667.06	-140.82	-1999.04	-15667.06	-167.79	-1999.04	-11024.99	
110	Live load	L-PICKUP 1	MAX	1700.43	3731.62	4860.01	1483.13	3731.62	4510.82	1514.03	3115.61	4510.82	1350.01	3115.61	7320.59
		MIN	-267.48	-3802.91	-28962.46	-331.02	-3802.91	-21787.90	-233.29	-3221.22	-21787.90	-379.14	-3221.22	-16531.34	
		L-PICKUP 2	MAX	1492.94	3283.16	4304.54	1318.79	3283.16	4160.67	1331.50	2741.17	4160.67	1203.28	2741.17	6310.93
		MIN	-251.78	-3352.32	-26801.79	-310.62	-3352.32	-19823.74	-232.61	-2831.45	-19823.74	-337.79	-2831.45	-14757.44	
		L-PICKUP 3	MAX	1700.43	3731.62	4860.01	1483.13	3731.62	4510.82	1514.03	3115.61	4510.82	1350.01	3115.61	7320.59
		MIN	-273.24	-4464.31	-31500.26	-331.02	-4464.31	-24537.25	-240.21	-3768.71	-24537.25	-379.14	-3768.71	-19313.47	
111	AASHTO Twin	TWIN-PICKUP	MAX	1907.29	4372.39	5743.56	1698.58	4372.39	4385.78	1701.48	3646.75	4385.78	1548.93	3646.75	6994.51
		MIN	-273.24	-4464.31	-31500.26	-289.95	-4464.31	-24537.25	-240.21	-3768.71	-24537.25	-354.61	-3768.71	-19313.47	
		MID-PICKUP	MAX	1907.29	4372.39	5743.56	1698.58	4372.39	4385.78	1701.48	3646.75	4385.78	1548.93	3646.75	6994.51
198	AASHTO Fatig	TRUCK-LOAD	MAX	265.95	428.49	298.31	157.63	428.49	568.26	217.71	479.22	568.26	128.94	479.22	957.68
		MIN	-40.88	-527.49	-1363.35	-82.13	-527.49	-1190.97	-34.78	-591.41	-1190.97	-125.85	-591.41	-985.17	
		TANDEM-LOAD	MAX	203.75	291.85	202.02	120.77	291.85	506.71	168.24	328.62	506.71	96.64	328.62	752.05
		MIN	-46.79	-362.03	-927.53	-79.06	-362.03	-810.04	-33.46	-403.62	-810.04	-106.08	-403.62	-668.63	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER		2012			2013			2013			2014		
NODE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	250.97	1237.11	574.46	214.33	1237.11	576.75	227.54	1008.54	576.75	207.21	1008.54	770.30
	MIN	-47.06	-1327.78	-4931.66	-51.91	-1327.78	-3393.29	-37.97	-1142.46	-3393.29	-56.82	-1142.46	-2213.19
199	AASHTO-LRFD TRUCK-LOAD MAX	1164.75	2538.73	3248.10	1010.77	2538.73	2230.85	1038.82	2122.34	2230.85	929.30	2122.34	4432.88
	MIN	-147.32	-2587.37	-12788.05	-156.94	-2587.37	-11596.55	-126.08	-2188.42	-11596.55	-226.22	-2188.42	-10434.42
	TANDEM-LOAD MAX	538.48	963.68	1170.91	442.24	963.68	1518.44	479.79	811.57	1518.44	411.55	811.57	2972.14
	MIN	-95.49	-979.35	-4589.55	-145.38	-979.35	-4156.68	-91.80	-832.41	-4156.68	-170.00	-832.41	-3732.45
	DISPERSION-LMAX	954.47	2319.48	3133.63	876.55	2319.48	2642.23	851.70	1929.61	2642.23	791.73	1929.61	3338.80
	MIN	-156.28	-2372.97	-22212.24	-165.23	-2372.97	-15667.06	-140.82	-1999.04	-15667.06	-167.79	-1999.04	-11024.99
300	Total Dead lWithout snow	2702.52	-117.03	-64488.49	2389.53	-117.03	-44120.30	2381.50	-136.80	-44120.30	2068.52	-136.80	-26320.20
301	Particular Snow	215.98	-15.77	-5284.06	194.23	-15.77	-3643.22	194.01	-20.60	-3643.22	172.27	-20.60	-2178.10
302	Live load Total MAX	1105.28	2425.56	3159.00	964.04	2425.56	2932.03	984.12	2025.15	2932.03	877.51	2025.15	4758.39
	MIN	-177.61	-2901.80	-20475.17	-215.16	-2901.80	-15949.21	-156.14	-2449.66	-15949.21	-246.44	-2449.66	-12553.76
303	Sum total D+L+PP MAX	4023.78	2409.79	-65665.84	3547.80	2409.79	-43951.87	3559.63	2004.55	-43951.87	3118.29	2004.55	-22312.40
	MIN	2687.61	-3034.60	-90247.72	2304.05	-3034.60	-63712.73	2372.54	-2607.07	-63712.73	1920.41	-2607.07	-41052.06

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2014 2014	2015			2015			2016							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	365.00	-23.12	-4790.08	301.17	-23.12	-1459.20	282.79	-17.96	-1459.20	218.96	-17.96	1049.51		
3	Railing	8.60	-6.67	-149.85	11.97	-6.67	-46.99	6.06	-3.51	-46.99	9.43	-3.51	30.47		
5	Wheel guard	85.15	-66.06	-1483.47	118.51	-66.06	-465.18	60.00	-34.73	-465.18	93.36	-34.73	301.62		
8	Steel weight	1374.66	-13.91	-17596.78	1076.06	-13.91	-5343.18	1072.21	-30.79	-5343.18	773.61	-30.79	3885.88		
10	Medial strip	158.58	33.42	-2157.95	97.94	33.42	-875.36	128.41	14.23	-875.36	67.77	14.23	105.53		
19	Snow	163.05	-11.82	-2178.10	135.86	-11.82	-683.54	126.28	-8.76	-683.54	99.10	-8.76	443.39		
31	Miscellaneous	12.41	2.65	-142.08	7.51	2.65	-42.51	9.95	1.12	-42.51	5.05	1.12	32.48		
100	AASHTO-LRFD TRUCK-LOAD	MAX	632.55	853.83	3981.80	515.23	853.83	6577.50	579.59	766.45	6577.50	458.86	766.45	8640.72	
		MIN	-119.86	-897.11	-5506.36	-243.99	-897.11	-4805.33	-157.97	-829.54	-4805.33	-279.86	-829.54	-4077.65	
		TANDEM-LOAD	MAX	458.38	585.26	2972.14	380.58	585.26	4725.00	423.19	527.62	4725.00	342.86	527.62	6128.57
		MIN	-109.49	-616.72	-3732.45	-191.05	-616.72	-3254.39	-136.55	-573.27	-3254.39	-218.77	-573.27	-2761.33	
		DISPERSION-L	MAX	739.63	1338.88	3338.80	667.70	1338.88	5962.25	627.02	1083.84	5962.25	559.26	1083.84	10036.95
		MIN	-141.87	-1378.90	-11024.99	-178.60	-1378.90	-8228.54	-164.57	-1115.33	-8228.54	-205.40	-1115.33	-8234.71	
110	Live load	L-PICKUP 1	MAX	1372.18	2192.71	7320.59	1182.93	2192.71	12539.75	1206.61	1850.29	12539.75	1018.12	1850.29	18677.67
		MIN	-261.73	-2276.01	-16531.34	-422.59	-2276.01	-13033.87	-322.54	-1944.86	-13033.87	-485.26	-1944.86	-12312.36	
		L-PICKUP 2	MAX	1198.01	1924.14	6310.93	1048.28	1924.14	10687.25	1050.20	1611.46	10687.25	902.12	1611.46	16165.52
		MIN	-251.36	-1995.62	-14757.44	-369.65	-1995.62	-11482.93	-301.12	-1688.60	-11482.93	-424.17	-1688.60	-10996.04	
		L-PICKUP 3	MAX	1372.18	2192.71	7320.59	1182.93	2192.71	12539.75	1206.61	1850.29	12539.75	1018.12	1850.29	18677.67
		MIN	-261.73	-2660.17	-19313.47	-422.59	-2660.17	-15603.43	-322.54	-2268.04	-15603.43	-485.26	-2268.04	-14367.95	
111	AASHTO Twin	TWIN-PICKUP	MAX	1535.58	2563.29	6994.51	1349.61	2563.29	13940.72	1334.32	2162.04	13940.72	1147.77	2162.04	21103.66
		MIN	-249.56	-2660.17	-19313.47	-416.19	-2660.17	-15603.43	-318.70	-2268.04	-15603.43	-473.35	-2268.04	-14367.95	
		MID-PICKUP	MAX	1535.58	2563.29	6994.51	1349.61	2563.29	13940.72	1334.32	2162.04	13940.72	1147.77	2162.04	21103.66
198	AASHTO Fatig	TRUCK-LOAD	MAX	221.51	401.13	957.68	118.82	401.13	1411.79	212.78	352.15	1411.79	105.75	352.15	1772.37
		MIN	-36.25	-497.93	-985.17	-145.88	-497.93	-816.41	-44.59	-445.58	-816.41	-156.67	-445.58	-682.32	
		TANDEM-LOAD	MAX	170.05	274.67	752.05	97.25	274.67	1054.00	164.87	240.07	1054.00	88.85	240.07	1299.39
		MIN	-35.29	-342.63	-668.63	-118.85	-342.63	-553.24	-46.16	-307.85	-553.24	-126.88	-307.85	-462.13	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2014 2014	2015			2015			2016					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	194.32	704.96	770.30	168.60	704.96	1289.87	158.58	573.21	1289.87	132.15	573.21	2021.03
	MIN	-35.03	-786.54	-2213.19	-59.26	-786.54	-1506.22	-43.19	-633.76	-1506.22	-68.19	-633.76	-1475.05
199	AASHTO-LRFD TRUCK-LOAD MAX	966.57	1509.22	4432.88	831.87	1509.22	9527.44	855.56	1318.43	9527.44	716.04	1318.43	13411.56
	MIN	-135.42	-1576.84	-10434.42	-283.84	-1576.84	-9108.60	-189.54	-1404.71	-9108.60	-320.54	-1404.71	-7729.68
	TANDEM-LOAD MAX	458.38	585.26	2972.14	380.58	585.26	4725.00	423.19	527.62	4725.00	342.86	527.62	6128.57
	MIN	-109.49	-616.72	-3732.45	-191.05	-616.72	-3254.39	-136.55	-573.27	-3254.39	-218.77	-573.27	-2761.33
	DISPERSION-LMAX	739.63	1338.88	3338.80	667.70	1338.88	5962.25	627.02	1083.84	5962.25	559.26	1083.84	10036.95
	MIN	-141.87	-1378.90	-11024.99	-178.60	-1378.90	-8228.54	-164.57	-1115.33	-8228.54	-205.40	-1115.33	-8234.71
300	Total Dead lWithout snow	2004.39	-73.70	-26320.20	1613.16	-73.70	-8232.42	1559.41	-71.63	-8232.42	1168.18	-71.63	5405.50
301	Particular Snow	163.05	-11.82	-2178.10	135.86	-11.82	-683.54	126.28	-8.76	-683.54	99.10	-8.76	443.39
302	Live load Total MAX	891.92	1425.26	4758.39	768.90	1425.26	8150.84	784.30	1202.69	8150.84	661.78	1202.69	12140.48
	MIN	-170.13	-1729.11	-12553.76	-274.69	-1729.11	-10142.23	-209.65	-1474.22	-10142.23	-315.42	-1474.22	-9339.17
303	Sum total D+L+PP MAX	3059.36	1413.44	-22312.40	2517.93	1413.44	1680.12	2469.99	1193.93	1680.12	1929.06	1193.93	17989.37
	MIN	1946.28	-1814.63	-41052.06	1391.94	-1814.63	-19058.20	1413.14	-1554.61	-19058.20	857.23	-1554.61	-6292.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2016 2016	2017			2017			2018						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	195.24	-11.12	1049.51	131.42	-11.12	2682.82	101.62	2.28	2682.82	37.80	2.28	3379.92	
3	Railing	3.31	-1.65	30.47	6.68	-1.65	80.41	0.43	-0.33	80.41	3.81	-0.33	101.61	
5	Wheel guard	32.76	-16.36	301.62	66.13	-16.36	796.07	4.31	-3.22	796.07	37.67	-3.22	1005.96	
8	Steel weight	750.73	-25.27	3885.88	452.13	-25.27	9900.13	406.11	13.13	9900.13	107.51	13.13	12468.23	
10	Medial strip	96.95	4.60	105.53	36.31	4.60	771.82	62.37	3.09	771.82	1.74	3.09	1092.37	
19	Snow	87.16	-5.34	443.39	59.98	-5.34	1179.06	45.29	0.88	1179.06	18.11	0.88	1496.08	
31	Miscellaneous	7.36	0.40	32.48	2.46	0.40	81.57	4.55	0.29	81.57	-0.35	0.29	102.59	
100	AASHTO-LRFD TRUCK-LOAD	MAX	509.83	736.58	8640.72	387.48	736.58	9875.54	437.02	732.19	9875.54	311.83	732.19	10148.06
		MIN	-207.70	-740.62	-4077.65	-330.99	-740.62	-3269.69	-271.88	-712.22	-3269.69	-396.70	-712.22	-2437.72
	TANDEM-LOAD	MAX	376.05	510.98	6128.57	294.52	510.98	6981.11	327.11	510.70	6981.11	243.14	510.70	7178.62
		MIN	-171.91	-516.79	-2761.33	-254.41	-516.79	-2214.19	-216.22	-497.19	-2214.19	-299.83	-497.19	-1650.79
	DISPERSION-LMAX	MAX	521.98	897.00	10036.95	459.97	897.00	12541.82	420.35	783.43	12541.82	364.48	783.43	13423.66
		MIN	-202.92	-917.13	-8234.71	-249.41	-917.13	-8097.49	-254.17	-780.58	-8097.49	-306.75	-780.58	-7860.86
110	Live load L-PICKUP 1	MAX	1031.81	1633.58	18677.67	847.45	1633.58	22417.36	857.37	1515.62	22417.36	676.32	1515.62	23571.72
		MIN	-410.63	-1657.75	-12312.36	-580.40	-1657.75	-11367.18	-526.05	-1492.80	-11367.18	-703.45	-1492.80	-10298.57
	L-PICKUP 2	MAX	898.03	1407.98	16165.52	754.49	1407.98	19522.93	747.46	1294.13	19522.93	607.62	1294.13	20602.27
		MIN	-374.84	-1433.92	-10996.04	-503.82	-1433.92	-10311.68	-470.39	-1277.77	-10311.68	-606.57	-1277.77	-9511.65
	L-PICKUP 3	MAX	416.27	1881.11	14367.95	580.24	1881.11	12866.01	548.74	1644.43	12866.01	722.87	1644.43	11233.65
		MIN	-416.27	-1881.11	-14367.95	-580.24	-1881.11	-12866.01	-548.74	-1644.43	-12866.01	-722.87	-1644.43	-11233.65
	Live load	MAX	1031.81	1633.58	18677.67	847.45	1633.58	22417.36	857.37	1515.62	22417.36	676.32	1515.62	23571.72
		MIN	-416.27	-1881.11	-14367.95	-580.40	-1881.11	-12866.01	-548.74	-1644.43	-12866.01	-722.87	-1644.43	-11233.65
111	AASHTO Twin TWIN-PICKUP	MAX	1116.85	1828.89	21103.66	934.70	1828.89	25357.71	898.63	1675.16	25357.71	721.71	1675.16	26520.92
		MIN	-416.27	-1881.11	-14367.95	-580.24	-1881.11	-12866.01	-548.74	-1644.43	-12866.01	-722.87	-1644.43	-11233.65
	MID-PICKUP	MAX	416.27	1881.11	14367.95	580.24	1881.11	12866.01	548.74	1644.43	12866.01	722.87	1644.43	11233.65
198	AASHTO FatigTRUCK-LOAD	MAX	200.80	280.86	1772.37	91.54	280.86	1984.09	188.60	199.39	1984.09	77.34	199.39	2029.81
		MIN	-57.50	-369.92	-682.32	-169.28	-369.92	-545.57	-70.86	-281.68	-545.57	-182.07	-281.68	-406.71
	TANDEM-LOAD	MAX	156.98	191.24	1299.39	79.33	191.24	1444.63	148.93	136.18	1444.63	69.58	136.18	1477.59
		MIN	-56.24	-256.80	-462.13	-135.64	-256.80	-369.46	-65.21	-196.75	-369.46	-144.51	-196.75	-275.42

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2016 2016	2017			2017			2018					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	133.40	475.69	2021.03	106.74	475.69	2475.02	112.84	417.28	2475.02	86.01	417.28	2633.05
	MIN	-53.41	-518.75	-1475.05	-79.40	-518.75	-1442.06	-65.00	-430.59	-1442.06	-91.63	-430.59	-1396.81
199	AASHTO-LRFD TRUCK-LOAD MAX	718.97	1135.11	13411.56	578.58	1135.11	15633.42	578.13	1077.86	15633.42	437.42	1077.86	16044.04
	MIN	-259.60	-1172.99	-7729.68	-395.30	-1172.99	-6198.08	-355.54	-1046.57	-6198.08	-496.44	-1046.57	-4620.98
	TANDEM-LOAD MAX	376.05	510.98	6128.57	294.52	510.98	6981.11	327.11	510.70	6981.11	243.14	510.70	7178.62
	MIN	-171.91	-516.79	-2761.33	-254.41	-516.79	-2214.19	-216.22	-497.19	-2214.19	-299.83	-497.19	-1650.79
	DISPERSION-LMAX	521.98	897.00	10036.95	459.97	897.00	12541.82	420.35	783.43	12541.82	364.48	783.43	13423.66
	MIN	-202.92	-917.13	-8234.71	-249.41	-917.13	-8097.49	-254.17	-780.58	-8097.49	-306.75	-780.58	-7860.86
300	Total Dead lWithout snow	1086.35	-49.40	5405.50	695.12	-49.40	14312.83	579.40	15.25	14312.83	188.17	15.25	18150.68
301	Particular Snow	87.16	-5.34	443.39	59.98	-5.34	1179.06	45.29	0.88	1179.06	18.11	0.88	1496.08
302	Live load Total MAX	670.67	1061.82	12140.48	550.84	1061.82	14571.28	557.29	985.15	14571.28	439.61	985.15	15321.61
	MIN	-270.57	-1222.72	-9339.17	-377.26	-1222.72	-8362.91	-356.68	-1068.88	-8362.91	-469.86	-1068.88	-7301.87
303	Sum total D+L+PP MAX	1844.18	1056.48	17989.37	1305.94	1056.48	30063.17	1181.98	1001.29	30063.17	645.89	1001.29	34968.38
	MIN	821.76	-1277.46	-6292.04	264.66	-1277.46	4620.11	161.01	-1068.01	4620.11	-404.54	-1068.01	10154.33

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2018 2018	2019			2019			2020						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	12.35	8.39	3379.92	-51.48	8.39	3184.27	-69.68	4.45	3184.27	-133.51	4.45	2168.33	
3	Railing	-2.29	0.57	101.61	1.08	0.57	95.53	-4.81	1.31	95.53	-1.44	1.31	64.29	
5	Wheel guard	-22.70	5.65	1005.96	10.66	5.65	945.76	-47.61	13.01	945.76	-14.25	13.01	636.44	
8	Steel weight	77.33	27.16	12468.23	-221.27	27.16	11748.56	-224.63	2.33	11748.56	-523.23	2.33	8009.22	
10	Medial strip	29.01	0.68	1092.37	-31.63	0.68	1079.30	-1.74	-6.39	1079.30	-62.38	-6.39	758.73	
19	Snow	5.35	3.81	1496.08	-21.83	3.81	1413.65	-31.37	2.30	1413.65	-58.55	2.30	964.03	
31	Miscellaneous	1.87	0.08	102.59	-3.03	0.08	96.76	-0.59	-0.52	96.76	-5.49	-0.52	66.32	
100	AASHTO-LRFD TRUCK-LOAD	MAX	373.61	734.67	10148.06	246.46	734.67	9584.72	330.10	726.96	9584.72	202.29	726.96	8302.56
		MIN	-333.90	-707.23	-2437.72	-459.76	-707.23	-2668.88	-383.63	-721.36	-2668.88	-510.39	-721.36	-3309.98
	TANDEM-LOAD	MAX	284.46	513.37	7178.62	198.56	513.37	6776.62	254.31	507.58	6776.62	167.55	507.58	5890.85
		MIN	-258.28	-492.87	-1650.79	-342.89	-492.87	-1810.17	-291.77	-500.99	-1810.17	-377.33	-500.99	-2245.00
	DISPERSION-LMAX	MAX	339.77	779.40	13423.66	289.33	779.40	12836.05	285.15	870.47	12836.05	238.92	870.47	11016.18
		MIN	-319.19	-764.79	-7860.86	-377.18	-764.79	-7606.88	-398.25	-861.23	-7606.88	-460.50	-861.23	-7454.54
110	Live load L-PICKUP 1	MAX	713.38	1514.07	23571.72	535.80	1514.07	22420.76	615.25	1597.43	22420.76	441.21	1597.43	19318.74
		MIN	-653.08	-1472.02	-10298.57	-836.95	-1472.02	-10275.76	-781.88	-1582.59	-10275.76	-970.90	-1582.59	-10764.52
	L-PICKUP 2	MAX	624.23	1292.77	20602.27	487.90	1292.77	19612.67	539.46	1378.05	19612.67	406.47	1378.05	16907.02
		MIN	-577.46	-1257.66	-9511.65	-720.08	-1257.66	-9417.05	-690.01	-1362.22	-9417.05	-837.83	-1362.22	-9699.54
	L-PICKUP 3	MAX	713.38	1514.07	23571.72	535.80	1514.07	22420.76	615.25	1597.43	22420.76	441.21	1597.43	19318.74
		MIN	-710.28	-1616.34	-11233.65	-892.12	-1616.34	-11365.45	-871.20	-1758.47	-11365.45	-1057.54	-1758.47	-12313.93
	Live load	MAX	713.38	1514.07	23571.72	535.80	1514.07	22420.76	615.25	1597.43	22420.76	441.21	1597.43	19318.74
		MIN	-710.28	-1616.34	-11233.65	-892.12	-1616.34	-11365.45	-871.20	-1758.47	-11365.45	-1057.54	-1758.47	-12313.93
111	AASHTO Twin TWIN-PICKUP	MAX	723.17	1668.33	26520.92	551.87	1668.33	25204.34	612.21	1781.78	25204.34	445.47	1781.78	21520.00
		MIN	-710.28	-1616.34	-11233.65	-892.12	-1616.34	-11365.45	-871.20	-1758.47	-11365.45	-1057.54	-1758.47	-12313.93
	MID-PICKUP	MAX	723.17	1668.33	26520.92	551.87	1668.33	25204.34	612.21	1781.78	25204.34	445.47	1781.78	21520.00
198	AASHTO FatigTRUCK-LOAD	MAX	177.76	270.42	2029.81	65.08	270.42	1930.58	169.35	348.16	1930.58	56.03	348.16	1706.79
		MIN	-82.09	-194.09	-406.71	-193.28	-194.09	-444.96	-90.57	-264.00	-444.96	-201.95	-264.00	-554.20
	TANDEM-LOAD	MAX	141.72	189.54	1477.59	61.11	189.54	1406.84	136.12	241.78	1406.84	54.89	241.78	1252.19
		MIN	-72.69	-137.15	-275.42	-152.23	-137.15	-301.76	-78.33	-180.05	-301.76	-158.18	-180.05	-375.71

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2018 2018	2019						2020					
		2018			2019			2019			2020		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	96.81	425.75	2633.05	70.28	425.75	2521.33	85.47	491.23	2521.33	59.51	491.23	2185.23	
MIN	-78.37	-409.58	-1396.81	-105.12	-409.58	-1349.22	-94.88	-455.85	-1349.22	-121.62	-455.85	-1324.68	
199 AASHTO-LRFD TRUCK-LOAD MAX	463.75	1074.31	16044.04	323.85	1074.31	15168.77	395.09	1109.29	15168.77	256.05	1109.29	12894.94	
MIN	-470.01	-1031.14	-4620.98	-614.06	-1031.14	-5021.40	-569.75	-1092.63	-5021.40	-714.54	-1092.63	-6227.60	
TANDEM-LOAD MAX	284.46	513.37	7178.62	198.56	513.37	6776.62	254.31	507.58	6776.62	167.55	507.58	5890.85	
MIN	-258.28	-492.87	-1650.79	-342.89	-492.87	-1810.17	-291.77	-500.99	-1810.17	-377.33	-500.99	-2245.00	
DISPERSION-LMAX	339.77	779.40	13423.66	289.33	779.40	12836.05	285.15	870.47	12836.05	238.92	870.47	11016.18	
MIN	-319.19	-764.79	-7860.86	-377.18	-764.79	-7606.88	-398.25	-861.23	-7606.88	-460.50	-861.23	-7454.54	
300 Total Dead lWithout snow	95.56	42.53	18150.68	-295.67	42.53	17150.17	-349.07	14.19	17150.17	-740.30	14.19	11703.32	
301 Particular Snow	5.35	3.81	1496.08	-21.83	3.81	1413.65	-31.37	2.30	1413.65	-58.55	2.30	964.03	
302 Live load Total MAX	463.70	984.14	15321.61	348.27	984.14	14573.50	399.91	1038.33	14573.50	286.79	1038.33	12557.18	
MIN	-461.68	-1050.62	-7301.87	-579.88	-1050.62	-7387.54	-566.28	-1143.01	-7387.54	-687.40	-1143.01	-8004.05	
303 Sum total D+L+PP MAX	564.61	1030.48	34968.38	135.25	1030.48	33137.32	139.45	1054.83	33137.32	-426.03	1054.83	25224.53	
MIN	-456.33	-1046.81	10154.33	-897.38	-1046.81	8960.01	-946.72	-1140.70	8960.01	-1486.25	-1140.70	2262.08	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2020 2020	2021			2021			2022						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-153.97	7.03	2168.33	-217.80	7.03	309.46	-244.83	26.46	309.46	-308.66	26.46	-2457.98	
3	Railing	-7.45	2.92	64.29	-4.08	2.92	6.64	-10.32	6.57	6.64	-6.95	6.57	-79.68	
5	Wheel guard	-73.76	28.91	636.44	-40.39	28.91	65.70	-102.14	65.04	65.70	-68.77	65.04	-788.84	
8	Steel weight	-534.28	-6.42	8009.22	-832.88	-6.42	1173.38	-867.81	28.64	1173.38	-1166.41	28.64	-8997.72	
10	Medial strip	-32.75	-15.95	758.73	-93.39	-15.95	128.06	-65.84	-30.10	128.06	-126.48	-30.10	-833.52	
19	Snow	-69.10	3.86	964.03	-96.28	3.86	137.12	-109.76	13.31	137.12	-136.94	13.31	-1096.34	
31	Miscellaneous	-3.09	-1.30	66.32	-7.99	-1.30	10.89	-5.77	-2.43	10.89	-10.67	-2.43	-71.36	
100	AASHTO-LRFD TRUCK-LOAD	MAX	296.81	779.49	8302.56	171.92	779.49	6445.08	260.60	925.25	6445.08	134.29	925.25	3982.16
		MIN	-432.98	-755.09	-3309.98	-558.24	-755.09	-4032.11	-496.72	-891.63	-4032.11	-617.91	-891.63	-4776.04
	TANDEM-LOAD	MAX	231.08	538.66	5890.85	146.40	538.66	4630.90	203.34	636.67	4630.90	120.01	636.67	2967.82
		MIN	-324.97	-521.11	-2245.00	-409.29	-521.11	-2734.78	-367.90	-611.03	-2734.78	-449.21	-611.03	-3240.58
	DISPERSION-LMAX	MAX	253.98	1052.71	11016.18	211.45	1052.71	7994.90	230.42	1396.11	7994.90	192.14	1396.11	5820.06
		MIN	-504.69	-1039.18	-7454.54	-570.73	-1039.18	-7472.55	-630.06	-1350.84	-7472.55	-700.40	-1350.84	-9824.82
110	Live load L-PICKUP 1	MAX	550.79	1832.21	19318.74	383.37	1832.21	14439.98	491.02	2321.36	14439.98	326.43	2321.36	9802.22
		MIN	-937.67	-1794.26	-10764.52	-1128.97	-1794.26	-11504.66	-1126.78	-2242.47	-11504.66	-1318.32	-2242.47	-14600.86
	L-PICKUP 2	MAX	485.06	1591.37	16907.02	357.85	1591.37	12625.80	433.76	2032.77	12625.80	312.16	2032.77	8787.88
		MIN	-829.66	-1560.29	-9699.54	-980.02	-1560.29	-10207.33	-997.96	-1961.87	-10207.33	-1149.61	-1961.87	-13065.39
	L-PICKUP 3	MAX	-1060.29	-2075.94	-12313.93	-1247.76	-2075.94	-13553.02	-1288.20	-2629.89	-13553.02	-1475.03	-2629.89	-16928.42
		MIN	550.79	1832.21	19318.74	383.37	1832.21	14439.98	491.02	2321.36	14439.98	326.43	2321.36	9802.22
	Live load	MAX	550.79	1832.21	19318.74	383.37	1832.21	14439.98	491.02	2321.36	14439.98	326.43	2321.36	9802.22
		MIN	-1060.29	-2075.94	-12313.93	-1247.76	-2075.94	-13553.02	-1288.20	-2629.89	-13553.02	-1475.03	-2629.89	-16928.42
111	AASHTO Twin TWIN-PICKUP	MAX	537.00	2127.93	21520.00	376.39	2127.93	15627.32	483.64	2714.43	15627.32	311.49	2714.43	9295.40
		MIN	-1060.29	-2075.94	-12313.93	-1247.76	-2075.94	-13553.02	-1288.20	-2629.89	-13553.02	-1475.03	-2629.89	-16928.42
	MID-PICKUP	MAX	-1060.29	-2075.94	-12313.93	-1247.76	-2075.94	-13553.02	-1288.20	-2629.89	-13553.02	-1475.03	-2629.89	-16928.42
198	AASHTO FatigTRUCK-LOAD	MAX	161.20	421.02	1706.79	47.49	421.02	1385.23	150.65	514.73	1385.23	37.24	514.73	965.69
		MIN	-99.89	-339.28	-554.20	-209.60	-339.28	-687.23	-113.21	-420.27	-687.23	-218.67	-420.27	-864.55
	TANDEM-LOAD	MAX	130.43	290.84	1252.19	49.22	290.84	1034.04	122.77	354.36	1034.04	39.28	354.36	754.91
		MIN	-84.72	-231.22	-375.71	-163.19	-231.22	-465.59	-93.56	-287.08	-465.59	-168.81	-287.08	-585.88

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2020 2020	2021			2021			2022					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	77.86	600.97	2185.23	52.57	600.97	1640.38	69.65	794.45	1640.38	45.04	794.45	1201.88
	MIN	-120.09	-547.19	-1324.68	-146.72	-547.19	-1353.53	-155.77	-712.82	-1353.53	-181.74	-712.82	-1934.16
199	AASHTO-LRFD TRUCK-LOAD MAX	342.69	1311.66	12894.94	206.76	1311.66	9368.79	306.96	1619.93	9368.79	153.96	1619.93	4508.16
	MIN	-673.41	-1267.42	-6227.60	-815.67	-1267.42	-7586.37	-801.27	-1571.26	-7586.37	-938.51	-1571.26	-8984.54
	TANDEM-LOAD MAX	231.08	538.66	5890.85	146.40	538.66	4630.90	203.34	636.67	4630.90	120.01	636.67	2967.82
	MIN	-324.97	-521.11	-2245.00	-409.29	-521.11	-2734.78	-367.90	-611.03	-2734.78	-449.21	-611.03	-3240.58
	DISPERSION-LMAX	253.98	1052.71	11016.18	211.45	1052.71	7994.90	230.42	1396.11	7994.90	192.14	1396.11	5820.06
	MIN	-504.69	-1039.18	-7454.54	-570.73	-1039.18	-7472.55	-630.06	-1350.84	-7472.55	-700.40	-1350.84	-9824.82
300	Total Dead lWithout snow	-805.30	15.19	11703.32	-1196.53	15.19	1694.13	-1296.71	94.17	1694.13	-1687.94	94.17	-13229.11
301	Particular Snow	-69.10	3.86	964.03	-96.28	3.86	137.12	-109.76	13.31	137.12	-136.94	13.31	-1096.34
302	Live load Total MAX	358.02	1190.93	12557.18	249.19	1190.93	9385.99	319.17	1508.88	9385.99	212.18	1508.88	6371.44
	MIN	-689.19	-1349.36	-8004.05	-811.04	-1349.36	-8809.46	-837.33	-1709.43	-8809.46	-958.77	-1709.43	-11003.47
303	Sum total D+L+PP MAX	-408.98	1209.98	25224.53	-968.87	1209.98	11217.24	-991.55	1616.37	11217.24	-1549.05	1616.37	-6042.57
	MIN	-1563.59	-1345.50	2262.08	-2103.86	-1345.50	-8672.34	-2243.79	-1696.12	-8672.34	-2783.64	-1696.12	-25328.93

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2022 2022	2023						2024						
		SHEAR			TORQUE			SHEAR			TORQUE			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-327.04	40.61	-2457.98	-378.11	40.61	-5278.59	-376.87	27.53	-5278.59	-427.93	27.53	-8497.80	
3	Railing	-11.67	10.18	-79.68	-8.97	10.18	-162.26	-8.71	6.82	-162.26	-6.02	6.82	-221.17	
5	Wheel guard	-115.54	100.76	-788.84	-88.85	100.76	-1606.40	-86.25	67.50	-1606.40	-59.55	67.50	-2189.61	
8	Steel weight	-1184.42	42.83	-8997.72	-1423.30	42.83	-19428.56	-1421.42	30.00	-19428.56	-1660.30	30.00	-31755.46	
10	Medial strip	-104.47	-46.86	-833.52	-152.98	-46.86	-1863.32	-154.14	-31.12	-1863.32	-202.65	-31.12	-3290.46	
19	Snow	-146.23	20.46	-1096.34	-167.98	20.46	-2353.19	-167.37	13.85	-2353.19	-189.12	13.85	-3779.16	
31	Miscellaneous	-8.90	-3.78	-71.36	-12.82	-3.78	-158.21	-12.90	-2.52	-158.21	-16.82	-2.52	-277.13	
100	AASHTO-LRFD TRUCK-LOAD	MAX	218.87	1134.68	3982.16	98.26	1134.68	2023.85	169.41	1251.07	2023.85	116.37	1251.07	1912.76
		MIN	-557.86	-1090.89	-4776.04	-661.64	-1090.89	-5322.29	-605.80	-1227.47	-5322.29	-743.69	-1227.47	-5903.09
	TANDEM-LOAD	MAX	175.68	773.67	2967.82	94.96	773.67	1616.62	149.70	857.29	1616.62	98.58	857.29	1295.58
		MIN	-411.35	-746.94	-3240.58	-480.08	-746.94	-3616.18	-441.41	-837.91	-3616.18	-537.81	-837.91	-4012.91
	DISPERSION-LMAX	MAX	212.17	1825.30	5820.06	185.15	1825.30	5449.53	204.47	2047.40	5449.53	194.67	2047.40	6289.85
		MIN	-747.21	-1755.91	-9824.82	-807.11	-1755.91	-14080.24	-823.78	-2000.42	-14080.24	-900.85	-2000.42	-20234.69
110	Live load L-PICKUP 1	MAX	431.04	2959.97	9802.22	283.40	2959.97	7473.39	373.88	3298.47	7473.39	311.04	3298.47	8202.61
		MIN	-1305.07	-2846.80	-14600.86	-1468.75	-2846.80	-19402.53	-1429.58	-3227.89	-19402.53	-1644.54	-3227.89	-26137.78
	L-PICKUP 2	MAX	387.85	2598.97	8787.88	280.11	2598.97	7066.15	354.17	2904.69	7066.15	293.25	2904.69	7585.44
		MIN	-1158.56	-2502.85	-13065.39	-1287.19	-2502.85	-17696.42	-1265.19	-2838.33	-17696.42	-1438.67	-2838.33	-24247.60
	L-PICKUP 3	MAX	-1506.59	-3335.62	-16928.42	-1660.01	-3335.62	-21678.91	-1648.97	-3786.50	-21678.91	-1855.17	-3786.50	-28192.87
		MIN	431.04	2959.97	9802.22	283.40	2959.97	7473.39	373.88	3298.47	7473.39	311.04	3298.47	8202.61
111	AASHTO Twin TWIN-PICKUP	MAX	408.59	3463.71	9295.40	298.52	3463.71	7502.58	338.06	3869.65	7502.58	314.33	3869.65	8923.62
		MIN	-1506.59	-3335.62	-16928.42	-1660.01	-3335.62	-21678.91	-1648.97	-3786.50	-21678.91	-1855.17	-3786.50	-28192.87
	MID-PICKUP	-1506.59	-3335.62	-16928.42	-1660.01	-3335.62	-21678.91	-1648.97	-3786.50	-21678.91	-1855.17	-3786.50	-28192.87	
	AASHTO FatigTRUCK-LOAD	MAX	126.75	559.84	965.69	33.92	559.84	552.79	84.51	469.70	552.79	42.43	469.70	327.41
		MIN	-127.97	-449.05	-864.55	-217.87	-449.05	-1055.54	-154.78	-377.68	-1055.54	-264.60	-377.68	-1201.61
	TANDEM-LOAD	MAX	107.30	382.94	754.91	32.64	382.94	491.46	81.37	321.18	491.46	46.43	321.18	221.91
MIN		-99.18	-308.07	-585.88	-168.96	-308.07	-717.07	-118.39	-255.95	-717.07	-203.49	-255.95	-816.52	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2022 2022	2023						2024					
		2023			2023			2024			2024		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	65.83	1043.59	1201.88	46.92	1043.59	1079.02	58.76	1148.46	1079.02	53.12	1148.46	1155.24	
MIN	-197.70	-918.09	-1934.16	-217.69	-918.09	-3013.94	-203.25	-1064.31	-3013.94	-238.80	-1064.31	-4454.14	
199 AASHTO-LRFD TRUCK-LOAD MAX	241.82	2023.27	4508.16	146.54	2023.27	2886.67	171.15	2252.20	2886.67	154.59	2252.20	3625.28	
MIN	-926.78	-1950.34	-8984.54	-1037.35	-1950.34	-10007.43	-1008.41	-2206.80	-10007.43	-1160.45	-2206.80	-11090.73	
TANDEM-LOAD MAX	175.68	773.67	2967.82	94.96	773.67	1616.62	149.70	857.29	1616.62	98.58	857.29	1295.58	
MIN	-411.35	-746.94	-3240.58	-480.08	-746.94	-3616.18	-441.41	-837.91	-3616.18	-537.81	-837.91	-4012.91	
DISPERSION-LMAX	212.17	1825.30	5820.06	185.15	1825.30	5449.53	204.47	2047.40	5449.53	194.67	2047.40	6289.85	
MIN	-747.21	-1755.91	-9824.82	-807.11	-1755.91	-14080.24	-823.78	-2000.42	-14080.24	-900.85	-2000.42	-20234.69	
300 Total Dead lWithout snow	-1752.04	143.73	-13229.11	-2065.02	143.73	-28497.35	-2060.29	98.20	-28497.35	-2373.28	98.20	-46231.64	
301 Particular Snow	-146.23	20.46	-1096.34	-167.98	20.46	-2353.19	-167.37	13.85	-2353.19	-189.12	13.85	-3779.16	
302 Live load Total MAX	280.18	1923.98	6371.44	184.21	1923.98	4857.70	243.03	2144.01	4857.70	202.18	2144.01	5331.70	
MIN	-979.28	-2168.15	-11003.47	-1079.00	-2168.15	-14091.29	-1071.83	-2461.22	-14091.29	-1205.86	-2461.22	-18325.37	
303 Sum total D+L+PP MAX	-1534.04	2088.17	-6042.57	-1993.52	2088.17	-24535.53	-1911.73	2256.06	-24535.53	-2299.57	2256.06	-43079.60	
MIN	-2877.55	-2147.70	-25328.93	-3312.00	-2147.70	-44941.83	-3299.50	-2447.37	-44941.83	-3768.26	-2447.37	-68336.17	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2024 2024	2025			2025			2026							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	443.75	-14.83	-8497.80	392.68	-14.83	-5152.08	396.51	-28.66	-5152.08	345.45	-28.66	-2184.21		
3	Railing	6.51	-6.33	-221.17	9.21	-6.33	-158.31	9.54	-9.58	-158.31	12.23	-9.58	-71.24		
5	Wheel guard	64.45	-62.63	-2189.61	91.14	-62.63	-1567.23	94.40	-94.82	-1567.23	121.09	-94.82	-705.24		
8	Steel weight	1718.38	15.51	-31755.46	1479.50	15.51	-18963.94	1491.08	-1.62	-18963.94	1252.20	-1.62	-7990.85		
10	Medial strip	212.73	35.12	-3290.46	164.22	35.12	-1782.67	164.43	49.06	-1782.67	115.92	49.06	-661.31		
19	Snow	196.57	-8.15	-3779.16	174.82	-8.15	-2293.62	176.61	-15.11	-2293.62	154.86	-15.11	-967.73		
31	Miscellaneous	17.29	2.84	-277.13	13.37	2.84	-154.46	13.37	4.01	-154.46	9.45	4.01	-63.18		
100	AASHTO-LRFD TRUCK-LOAD	MAX	752.49	1239.51	1912.76	616.37	1239.51	2153.61	682.77	1084.79	2153.61	584.43	1084.79	4231.48	
		MIN	-111.68	-1246.76	-5903.09	-167.18	-1246.76	-5454.37	-88.74	-1117.19	-5454.37	-203.91	-1117.19	-5098.60	
		TANDEM-LOAD MAX	543.43	845.78	1295.58	447.86	845.78	1703.16	493.76	742.93	1703.16	429.05	742.93	3141.76	
		MIN	-95.14	-854.10	-4012.91	-147.81	-854.10	-3705.67	-86.83	-762.54	-3705.67	-164.55	-762.54	-3462.04	
		DISPERSION-LMAX	915.12	2029.20	6289.85	837.92	2029.20	5573.70	819.72	1772.91	5573.70	758.65	1772.91	6298.11	
		MIN	-184.62	-2055.49	-20234.69	-194.30	-2055.49	-14007.81	-169.31	-1822.65	-14007.81	-195.11	-1822.65	-9876.05	
110	Live load	L-PICKUP 1	MAX	1667.62	3268.71	8202.61	1454.29	3268.71	7727.30	1502.49	2857.70	7727.30	1343.07	2857.70	10529.59
		MIN	-296.30	-3302.25	-26137.78	-361.47	-3302.25	-19462.17	-258.05	-2939.84	-19462.17	-399.02	-2939.84	-14974.65	
		L-PICKUP 2	MAX	1458.55	2874.98	7585.44	1285.79	2874.98	7276.85	1313.48	2515.84	7276.85	1187.70	2515.84	9439.87
		MIN	-279.76	-2909.59	-24247.60	-342.11	-2909.59	-17713.48	-256.14	-2585.19	-17713.48	-359.65	-2585.19	-13338.09	
		L-PICKUP 3	MAX	1667.62	3268.71	8202.61	1454.29	3268.71	7727.30	1502.49	2857.70	7727.30	1343.07	2857.70	10529.59
		MIN	-299.26	-3870.79	-28192.87	-361.47	-3870.79	-21835.16	-266.63	-3429.61	-21835.16	-399.02	-3429.61	-17518.73	
111	AASHTO Twin	TWIN-PICKUP	MAX	1881.66	3833.29	8923.62	1675.83	3833.29	8038.35	1704.25	3349.37	8038.35	1551.89	3349.37	10076.57
		MIN	-299.26	-3870.79	-28192.87	-321.94	-3870.79	-21835.16	-266.63	-3429.61	-21835.16	-377.61	-3429.61	-17518.73	
		MID-PICKUP	MAX	1881.66	3833.29	8923.62	1675.83	3833.29	8038.35	1704.25	3349.37	8038.35	1551.89	3349.37	10076.57
198	AASHTO Fatig	TRUCK-LOAD	MAX	264.95	385.79	327.41	156.03	385.79	555.56	220.92	446.56	555.56	133.53	446.56	1010.89
		MIN	-42.81	-472.66	-1201.61	-83.88	-472.66	-1070.20	-32.53	-557.06	-1070.20	-104.82	-557.06	-917.79	
		TANDEM-LOAD	MAX	203.54	261.32	221.91	119.10	261.32	493.16	170.55	306.32	493.16	103.87	306.32	786.76
		MIN	-46.36	-322.97	-816.52	-80.76	-322.97	-726.01	-31.29	-381.73	-726.01	-104.23	-381.73	-621.48	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2024 2024	2025			2025			2026					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	239.27	1078.66	1155.24	203.75	1078.66	1104.75	219.35	926.37	1104.75	199.63	926.37	1299.58
	MIN	-52.54	-1154.30	-4454.14	-58.17	-1154.30	-3010.02	-46.68	-1042.32	-3010.02	-65.11	-1042.32	-1948.85
199	AASHTO-LRFD TRUCK-LOAD MAX	1175.61	2230.02	3625.28	1024.11	2230.02	3357.80	1073.89	1948.61	3357.80	965.68	1948.61	4898.08
	MIN	-147.89	-2245.39	-11090.73	-163.42	-2245.39	-10253.48	-126.94	-1988.03	-10253.48	-224.46	-1988.03	-9589.21
	TANDEM-LOAD MAX	543.43	845.78	1295.58	447.86	845.78	1703.16	493.76	742.93	1703.16	429.05	742.93	3141.76
	MIN	-95.14	-854.10	-4012.91	-147.81	-854.10	-3705.67	-86.83	-762.54	-3705.67	-164.55	-762.54	-3462.04
	DISPERSION-LMAX	915.12	2029.20	6289.85	837.92	2029.20	5573.70	819.72	1772.91	5573.70	758.65	1772.91	6298.11
	MIN	-184.62	-2055.49	-20234.69	-194.30	-2055.49	-14007.81	-169.31	-1822.65	-14007.81	-195.11	-1822.65	-9876.05
300	Total Dead lWithout snow	2463.11	-30.32	-46231.64	2150.13	-30.32	-27778.68	2169.32	-81.61	-27778.68	1856.34	-81.61	-11676.02
301	Particular Snow	196.57	-8.15	-3779.16	174.82	-8.15	-2293.62	176.61	-15.11	-2293.62	154.86	-15.11	-967.73
302	Live load Total MAX	1083.95	2124.66	5331.70	945.29	2124.66	5022.75	976.62	1857.51	5022.75	873.00	1857.51	6844.23
	MIN	-194.52	-2516.01	-18325.37	-234.96	-2516.01	-14192.85	-173.31	-2229.25	-14192.85	-259.36	-2229.25	-11387.18
303	Sum total D+L+PP MAX	3743.63	2116.51	-43079.60	3270.24	2116.51	-23542.72	3322.55	1842.40	-23542.72	2884.20	1842.40	-3746.24
	MIN	2406.80	-2554.48	-68336.17	2019.50	-2554.48	-44265.15	2120.63	-2325.96	-44265.15	1674.04	-2325.96	-24030.92

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2026 2026	2027			2027			2028			2028				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	345.87	-44.88	-2184.21	282.05	-44.88	955.40	256.51	-31.58	955.40	192.68	-31.58	3201.36		
3	Railing	8.05	-6.90	-71.24	11.42	-6.90	26.15	5.25	-3.70	26.15	8.62	-3.70	95.46		
5	Wheel guard	79.73	-68.29	-705.24	113.09	-68.29	258.88	51.93	-36.61	258.88	85.30	-36.61	945.05		
8	Steel weight	1303.80	-99.29	-7990.85	1005.20	-99.29	3554.20	975.62	-83.68	3554.20	677.02	-83.68	11817.42		
10	Medial strip	144.92	21.20	-661.31	84.28	21.20	484.69	111.58	7.57	484.69	50.95	7.57	1297.35		
19	Snow	153.96	-21.53	-967.73	126.77	-21.53	435.92	113.91	-14.80	435.92	86.73	-14.80	1439.12		
31	Miscellaneous	11.81	1.75	-63.18	6.91	1.75	30.43	9.17	0.58	30.43	4.27	0.58	97.59		
100	AASHTO-LRFD TRUCK-LOAD	MAX	658.11	862.36	4231.48	547.25	862.36	7197.67	578.37	790.84	7197.67	463.93	790.84	9288.77	
		MIN	-119.17	-944.80	-5098.60	-239.32	-944.80	-4573.26	-173.78	-851.30	-4573.26	-288.13	-851.30	-3790.91	
		TANDEM-LOAD	MAX	474.96	590.70	3141.76	402.98	590.70	5153.30	421.24	546.17	5153.30	346.63	546.17	6576.09
		MIN	-109.72	-651.29	-3462.04	-186.86	-651.29	-3105.40	-148.31	-587.83	-3105.40	-223.50	-587.83	-2574.18	
		DISPERSION-L	MAX	746.02	1349.07	6298.11	672.41	1349.07	9374.89	643.19	1116.26	9374.89	575.84	1116.26	13051.51
		MIN	-178.00	-1424.20	-9876.05	-213.03	-1424.20	-7830.71	-221.81	-1169.88	-7830.71	-263.05	-1169.88	-7847.02	
110	Live load	L-PICKUP 1	MAX	1404.13	2211.43	10529.59	1219.66	2211.43	16572.56	1221.56	1907.11	16572.56	1039.77	1907.11	22340.28
		MIN	-297.17	-2369.00	-14974.65	-452.34	-2369.00	-12403.97	-395.59	-2021.18	-12403.97	-551.19	-2021.18	-11637.92	
		L-PICKUP 2	MAX	1220.97	1939.78	9439.87	1075.39	1939.78	14528.19	1064.43	1662.44	14528.19	922.47	1662.44	19627.60
		MIN	-287.72	-2075.49	-13338.09	-399.89	-2075.49	-10936.11	-370.12	-1757.72	-10936.11	-486.55	-1757.72	-10421.19	
		L-PICKUP 3	MAX	1220.97	1939.78	9439.87	1075.39	1939.78	14528.19	1064.43	1662.44	14528.19	922.47	1662.44	19627.60
		MIN	-287.72	-2075.49	-13338.09	-399.89	-2075.49	-10936.11	-370.12	-1757.72	-10936.11	-486.55	-1757.72	-10421.19	
111	AASHTO Twin	TWIN-PICKUP	MAX	1404.13	2211.43	10529.59	1219.66	2211.43	16572.56	1221.56	1907.11	16572.56	1039.77	1907.11	22340.28
		MIN	-297.17	-2369.00	-14974.65	-452.34	-2369.00	-12403.97	-395.59	-2021.18	-12403.97	-551.19	-2021.18	-11637.92	
		MID-PICKUP	MAX	1585.18	2590.83	10076.57	1401.24	2590.83	17970.69	1353.72	2214.59	17970.69	1173.46	2214.59	24813.53
		MIN	-286.41	-2772.63	-17518.73	-445.52	-2772.63	-14788.22	-386.69	-2354.51	-14788.22	-534.79	-2354.51	-13478.64	
		MID-PICKUP	MAX	1585.18	2590.83	10076.57	1401.24	2590.83	17970.69	1353.72	2214.59	17970.69	1173.46	2214.59	24813.53
		MIN	-286.41	-2772.63	-17518.73	-445.52	-2772.63	-14788.22	-386.69	-2354.51	-14788.22	-534.79	-2354.51	-13478.64	
198	AASHTO Fatig	TRUCK-LOAD	MAX	224.36	407.35	1010.89	125.44	407.35	1538.11	210.53	355.63	1538.11	105.34	355.63	1902.77
		MIN	-27.81	-516.76	-917.79	-124.00	-516.76	-779.31	-48.11	-453.61	-779.31	-157.23	-453.61	-634.23	
		TANDEM-LOAD	MAX	171.71	278.37	786.76	102.74	278.37	1141.57	162.75	242.61	1141.57	89.29	242.61	1390.64
		MIN	-35.92	-356.20	-621.48	-116.15	-356.20	-528.74	-50.51	-313.07	-528.74	-126.67	-313.07	-430.62	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2026 2026	2027			2027			2028					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
198	AASHTO FatigDISPERSION-LMAX	193.67	714.79	1299.58	168.09	714.79	1908.06	160.56	591.09	1908.06	134.00	591.09	2579.33
	MIN	-41.78	-803.83	-1948.85	-65.29	-803.83	-1419.32	-54.55	-661.62	-1419.32	-79.39	-661.62	-1391.20
199	AASHTO-LRFD TRUCK-LOAD MAX	1015.29	1529.63	4898.08	884.52	1529.63	10592.54	860.94	1344.39	10592.54	728.01	1344.39	14519.08
	MIN	-140.24	-1656.50	-9589.21	-282.00	-1656.50	-8600.65	-207.84	-1446.24	-8600.65	-331.16	-1446.24	-7129.25
	TANDEM-LOAD MAX	474.96	590.70	3141.76	402.98	590.70	5153.30	421.24	546.17	5153.30	346.63	546.17	6576.09
	MIN	-109.72	-651.29	-3462.04	-186.86	-651.29	-3105.40	-148.31	-587.83	-3105.40	-223.50	-587.83	-2574.18
	DISPERSION-LMAX	746.02	1349.07	6298.11	672.41	1349.07	9374.89	643.19	1116.26	9374.89	575.84	1116.26	13051.51
	MIN	-178.00	-1424.20	-9876.05	-213.03	-1424.20	-7830.71	-221.81	-1169.88	-7830.71	-263.05	-1169.88	-7847.02
300	Total Dead lWithout snow	1894.19	-196.41	-11676.02	1502.96	-196.41	5309.74	1410.06	-147.43	5309.74	1018.83	-147.43	17454.22
301	Particular Snow	153.96	-21.53	-967.73	126.77	-21.53	435.92	113.91	-14.80	435.92	86.73	-14.80	1439.12
302	Live load Total MAX	912.69	1437.43	6844.23	792.78	1437.43	10772.17	794.01	1239.62	10772.17	675.85	1239.62	14521.18
	MIN	-193.16	-1802.21	-11387.18	-294.02	-1802.21	-9612.35	-257.13	-1530.43	-9612.35	-358.27	-1530.43	-8761.11
303	Sum total D+L+PP MAX	2960.83	1415.90	-3746.24	2422.51	1415.90	16517.83	2317.99	1224.82	16517.83	1781.41	1224.82	33414.53
	MIN	1797.04	-2020.15	-24030.92	1247.51	-2020.15	-6750.39	1189.70	-1692.66	-6750.39	639.81	-1692.66	7503.90

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2028 2028	2029			2029			2030							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	147.32	6.19	3201.36	83.49	6.19	4355.42	56.49	10.55	4355.42	-7.34	10.55	4601.14		
3	Railing	1.85	-1.03	95.46	5.22	-1.03	130.84	-0.93	-0.03	130.84	2.44	-0.03	138.39		
5	Wheel guard	18.34	-10.24	945.05	51.71	-10.24	1295.29	-9.21	-0.31	1295.29	24.16	-0.31	1370.02		
8	Steel weight	574.18	37.40	11817.42	275.58	37.40	16066.26	239.75	43.08	16066.26	-58.85	43.08	16970.80		
10	Medial strip	71.11	11.38	1297.35	10.47	11.38	1705.24	37.60	6.53	1705.24	-23.04	6.53	1778.02		
19	Snow	65.04	2.51	1439.12	37.85	2.51	1953.56	24.42	4.64	1953.56	-2.76	4.64	2061.89		
31	Miscellaneous	5.91	0.87	97.59	1.01	0.87	132.24	3.19	0.52	132.24	-1.71	0.52	139.61		
100	AASHTO-LRFD TRUCK-LOAD	MAX	485.29	790.32	9288.77	366.36	790.32	10248.11	427.88	767.56	10248.11	305.81	767.56	10415.60	
		MIN	-238.43	-743.29	-3790.91	-355.81	-743.29	-2909.72	-287.33	-737.33	-2909.72	-408.05	-737.33	-2194.20	
		TANDEM-LOAD	MAX	358.45	550.62	6576.09	279.98	550.62	7238.05	320.08	535.01	7238.05	238.92	535.01	7363.73
		MIN	-193.81	-517.00	-2574.18	-270.69	-517.00	-1975.82	-226.83	-513.19	-1975.82	-306.80	-513.19	-1487.51	
		DISPERSION-L	MAX	511.01	949.20	13051.51	451.47	949.20	14690.18	402.87	831.29	14690.18	347.91	831.29	14985.02
		MIN	-268.09	-940.96	-7847.02	-317.00	-940.96	-7602.84	-308.15	-814.94	-7602.84	-361.64	-814.94	-7493.25	
110	Live load	L-PICKUP 1	MAX	996.30	1739.52	22340.28	817.83	1739.52	24938.28	830.75	1598.85	24938.28	653.72	1598.85	25400.63
		MIN	-506.52	-1684.25	-11637.92	-672.81	-1684.25	-10512.57	-595.48	-1552.27	-10512.57	-769.69	-1552.27	-9687.45	
		L-PICKUP 2	MAX	869.46	1499.83	19627.60	731.45	1499.83	21928.23	722.94	1366.30	21928.23	586.83	1366.30	22348.75
		MIN	-461.90	-1457.96	-10421.19	-587.69	-1457.96	-9578.66	-534.98	-1328.13	-9578.66	-668.44	-1328.13	-8980.75	
		L-PICKUP 3	MAX	996.30	1739.52	22340.28	817.83	1739.52	24938.28	830.75	1598.85	24938.28	653.72	1598.85	25400.63
		MIN	-506.52	-1896.44	-13478.64	-672.81	-1896.44	-11767.43	-616.58	-1708.58	-11767.43	-789.82	-1708.58	-10457.54	
111	AASHTO Twin	TWIN-PICKUP	MAX	1073.71	1938.65	24813.53	899.42	1938.65	27874.96	871.54	1766.48	27874.96	699.05	1766.48	28332.01
		MIN	-506.07	-1896.44	-13478.64	-671.80	-1896.44	-11767.43	-616.58	-1708.58	-11767.43	-789.82	-1708.58	-10457.54	
		MID-PICKUP	MAX	1073.71	1938.65	24813.53	899.42	1938.65	27874.96	871.54	1766.48	27874.96	699.05	1766.48	28332.01
198	AASHTO Fatig	TRUCK-LOAD	MAX	194.60	283.42	1902.77	85.47	283.42	2062.03	185.87	205.72	2062.03	74.99	205.72	2088.36
		MIN	-65.79	-365.72	-634.23	-173.87	-365.72	-485.18	-73.58	-280.34	-485.18	-183.27	-280.34	-365.93	
		TANDEM-LOAD	MAX	152.22	193.52	1390.64	75.45	193.52	1499.62	146.54	145.47	1499.62	67.96	145.47	1519.49
		MIN	-62.21	-253.01	-430.62	-138.18	-253.01	-329.47	-67.06	-195.25	-329.47	-144.78	-195.25	-248.11	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2028 2028	2029			2029			2030					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	130.41	499.85	2579.33	103.58	499.85	2871.26	109.40	442.65	2871.26	82.51	442.65	2922.58
	MIN	-66.92	-530.59	-1391.20	-92.98	-530.59	-1343.13	-75.25	-448.70	-1343.13	-101.87	-448.70	-1324.05
199	AASHTO-LRFD TRUCK-LOAD MAX	682.00	1204.85	14519.08	547.89	1204.85	16282.01	565.52	1131.46	16282.01	428.81	1131.46	16494.99
	MIN	-294.21	-1166.20	-7129.25	-429.45	-1166.20	-5472.08	-376.93	-1083.48	-5472.08	-515.94	-1083.48	-4126.25
	TANDEM-LOAD MAX	358.45	550.62	6576.09	279.98	550.62	7238.05	320.08	535.01	7238.05	238.92	535.01	7363.73
	MIN	-193.81	-517.00	-2574.18	-270.69	-517.00	-1975.82	-226.83	-513.19	-1975.82	-306.80	-513.19	-1487.51
	DISPERSION-LMAX	511.01	949.20	13051.51	451.47	949.20	14690.18	402.87	831.29	14690.18	347.91	831.29	14985.02
	MIN	-268.09	-940.96	-7847.02	-317.00	-940.96	-7602.84	-308.15	-814.94	-7602.84	-361.64	-814.94	-7493.25
300	Total Dead lWithout snow	818.72	44.57	17454.22	427.49	44.57	23685.28	326.88	60.34	23685.28	-64.35	60.34	24997.97
301	Particular Snow	65.04	2.51	1439.12	37.85	2.51	1953.56	24.42	4.64	1953.56	-2.76	4.64	2061.89
302	Live load Total MAX	647.59	1130.69	14521.18	531.59	1130.69	16209.88	539.99	1039.26	16209.88	424.92	1039.26	16510.41
	MIN	-329.24	-1232.69	-8761.11	-437.32	-1232.69	-7648.83	-400.77	-1110.58	-7648.83	-513.38	-1110.58	-6797.40
303	Sum total D+L+PP MAX	1531.35	1177.76	33414.53	996.93	1177.76	41848.72	891.30	1104.24	41848.72	422.16	1104.24	43570.26
	MIN	455.75	-1230.18	7503.90	-103.18	-1230.18	15695.36	-169.70	-1105.93	15695.36	-580.49	-1105.93	18223.23

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2030 2030	2031			2032			2031			2032				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-28.74	9.32	4601.14	-92.56	9.32	3994.63	-111.64	7.80	3994.63	-175.47	7.80	2559.06		
3	Railing	-3.53	0.62	138.39	-0.16	0.62	119.92	-6.08	1.43	119.92	-2.71	1.43	75.98		
5	Wheel guard	-34.97	6.18	1370.02	-1.60	6.18	1187.18	-60.18	14.12	1187.18	-26.81	14.12	752.20		
8	Steel weight	-74.12	30.28	16970.80	-372.72	30.28	14736.56	-379.29	14.55	14736.56	-677.89	14.55	9450.66		
10	Medial strip	6.02	1.08	1778.02	-54.62	1.08	1535.01	-24.68	-5.39	1535.01	-85.32	-5.39	984.99		
19	Snow	-13.68	4.25	2061.89	-40.87	4.25	1789.16	-50.76	3.79	1789.16	-77.95	3.79	1145.60		
31	Miscellaneous	0.62	0.09	139.61	-4.28	0.09	121.33	-1.86	-0.43	121.33	-6.76	-0.43	78.20		
100	AASHTO-LRFD TRUCK-LOAD	MAX	371.01	756.69	10415.60	246.08	756.69	9821.12	324.35	746.50	9821.12	198.99	746.50	8457.54	
		MIN	-338.59	-736.75	-2194.20	-462.34	-736.75	-2835.34	-391.84	-738.43	-2835.34	-516.14	-738.43	-3496.98	
	TANDEM-LOAD	MAX	282.13	527.21	7363.73	198.27	527.21	6938.54	250.11	519.85	6938.54	165.60	519.85	5996.67	
		MIN	-261.45	-512.51	-1487.51	-344.13	-512.51	-1922.15	-297.36	-512.62	-1922.15	-380.61	-512.62	-2370.69	
	DISPERSION-LMAX		319.71	826.48	14985.02	269.50	826.48	13965.17	267.43	919.68	13965.17	221.67	919.68	11676.56	
		MIN	-364.01	-810.34	-7493.25	-422.25	-810.34	-7455.89	-446.97	-904.90	-7455.89	-509.71	-904.90	-7499.21	
110	Live load	L-PICKUP 1	MAX	690.71	1583.17	25400.63	515.58	1583.17	23786.29	591.78	1666.19	23786.29	420.67	1666.19	20134.10
			MIN	-702.60	-1547.09	-9687.45	-884.59	-1547.09	-10291.23	-838.82	-1643.33	-10291.23	-1025.86	-1643.33	-10996.19
		L-PICKUP 2	MAX	601.84	1353.69	22348.75	467.77	1353.69	20903.71	517.54	1439.53	20903.71	387.28	1439.53	17673.23
			MIN	-625.46	-1322.85	-8980.75	-766.38	-1322.85	-9378.04	-744.33	-1417.52	-9378.04	-890.32	-1417.52	-9869.90
		L-PICKUP 3		-756.48	-1705.83	-10457.54	-937.09	-1705.83	-11509.01	-927.90	-1833.57	-11509.01	-1112.96	-1833.57	-12667.82
	Live load	MAX	690.71	1583.17	25400.63	515.58	1583.17	23786.29	591.78	1666.19	23786.29	420.67	1666.19	20134.10	
		MIN	-756.48	-1705.83	-10457.54	-937.09	-1705.83	-11509.01	-927.90	-1833.57	-11509.01	-1112.96	-1833.57	-12667.82	
111	AASHTO Twin	TWIN-PICKUP	MAX	699.65	1747.75	28332.01	530.64	1747.75	26588.80	588.07	1871.38	26588.80	424.22	1871.38	22369.71
			MIN	-756.48	-1705.83	-10457.54	-937.09	-1705.83	-11509.01	-927.90	-1833.57	-11509.01	-1112.96	-1833.57	-12667.82
		MID-PICKUP		-756.48	-1705.83	-10457.54	-937.09	-1705.83	-11509.01	-927.90	-1833.57	-11509.01	-1112.96	-1833.57	-12667.82
198	AASHTO Fatig	TRUCK-LOAD	MAX	176.76	284.44	2088.36	64.51	284.44	1982.67	167.88	359.23	1982.67	55.38	359.23	1740.86
			MIN	-82.06	-197.02	-365.93	-193.20	-197.02	-472.78	-91.79	-273.96	-472.78	-202.41	-273.96	-585.74
		TANDEM-LOAD	MAX	140.66	198.25	1519.49	60.59	198.25	1443.42	134.77	248.63	1443.42	54.49	248.63	1275.92
			MIN	-72.53	-137.34	-248.11	-151.79	-137.34	-320.55	-79.19	-187.50	-320.55	-158.14	-187.50	-396.94

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2030 2030	2031			2031			2032			2032		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	93.20	452.15	2922.58	66.72	452.15	2735.62	82.27	518.33	2735.62	56.42	518.33	2311.50
	MIN	-86.38	-433.91	-1324.05	-113.17	-433.91	-1316.71	-104.46	-480.18	-1316.71	-131.22	-480.18	-1330.89
199	AASHTO-LRFD TRUCK-LOAD MAX	457.69	1115.46	16494.99	320.10	1115.46	15577.94	385.97	1159.63	15577.94	249.68	1159.63	13178.67
	MIN	-476.52	-1085.02	-4126.25	-618.96	-1085.02	-5331.90	-584.03	-1132.40	-5331.90	-726.91	-1132.40	-6576.15
	TANDEM-LOAD MAX	282.13	527.21	7363.73	198.27	527.21	6938.54	250.11	519.85	6938.54	165.60	519.85	5996.67
	MIN	-261.45	-512.51	-1487.51	-344.13	-512.51	-1922.15	-297.36	-512.62	-1922.15	-380.61	-512.62	-2370.69
	DISPERSION-LMAX	319.71	826.48	14985.02	269.50	826.48	13965.17	267.43	919.68	13965.17	221.67	919.68	11676.56
	MIN	-364.01	-810.34	-7493.25	-422.25	-810.34	-7455.89	-446.97	-904.90	-7455.89	-509.71	-904.90	-7499.21
300	Total Dead lWithout snow	-134.72	47.58	24997.97	-525.95	47.58	21694.62	-583.74	32.08	21694.62	-974.97	32.08	13901.08
301	Particular Snow	-13.68	4.25	2061.89	-40.87	4.25	1789.16	-50.76	3.79	1789.16	-77.95	3.79	1145.60
302	Live load Total MAX	448.96	1029.06	16510.41	335.13	1029.06	15461.09	384.66	1083.02	15461.09	273.43	1083.02	13087.17
	MIN	-491.71	-1108.79	-6797.40	-609.11	-1108.79	-7480.86	-603.13	-1191.82	-7480.86	-723.42	-1191.82	-8234.08
303	Sum total D+L+PP MAX	435.25	1080.90	43570.26	-131.15	1080.90	38944.87	-134.45	1118.89	38944.87	-697.45	1118.89	28133.84
	MIN	-640.11	-1104.53	18223.23	-1175.93	-1104.53	13758.66	-1237.64	-1188.03	13758.66	-1776.34	-1188.03	4342.37

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2032	2033			2033			2034						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)				
1	Pavement	-194.65	9.90	2559.06	-258.47	9.90	293.45	-282.47	26.28	293.45	-346.30	26.28	-2850.44	
3	Railing	-8.69	2.98	75.98	-5.32	2.98	5.95	-11.44	6.25	5.95	-8.07	6.25	-91.59	
5	Wheel guard	-86.01	29.46	752.20	-52.64	29.46	58.93	-113.25	61.89	58.93	-79.89	61.89	-906.76	
8	Steel weight	-684.10	4.54	9450.66	-982.70	4.54	1116.70	-1006.73	31.69	1116.70	-1305.33	31.69	-10443.64	
10	Medial strip	-55.03	-14.91	984.99	-115.67	-14.91	131.49	-87.25	-28.01	131.49	-147.89	-28.01	-1044.24	
19	Snow	-87.91	5.11	1145.60	-115.09	5.11	130.61	-127.21	13.15	130.61	-154.39	13.15	-1277.42	
31	Miscellaneous	-4.32	-1.20	78.20	-9.22	-1.20	10.51	-6.92	-2.26	10.51	-11.82	-2.26	-83.21	
100	AASHTO-LRFD TRUCK-LOAD	MAX	292.79	792.24	8457.54	169.60	792.24	6551.51	250.56	884.11	6551.51	126.52	884.11	4008.49
		MIN	-437.87	-765.10	-3496.98	-561.42	-765.10	-4245.42	-503.76	-847.54	-4245.42	-623.18	-847.54	-4945.05
	TANDEM-LOAD	MAX	228.09	546.47	5996.67	144.91	546.47	4703.76	196.18	607.97	4703.76	114.67	607.97	2986.70
		MIN	-328.22	-527.96	-2370.69	-411.12	-527.96	-2878.07	-372.72	-580.83	-2878.07	-452.44	-580.83	-3354.67
	DISPERSION-LMAX	MAX	236.90	1093.30	11676.56	194.53	1093.30	8221.42	206.58	1360.46	8221.42	168.84	1360.46	5736.27
		MIN	-551.98	-1075.07	-7499.21	-618.18	-1075.07	-7727.05	-665.80	-1315.60	-7727.05	-736.70	-1315.60	-10363.85
110	Live load L-PICKUP 1	MAX	529.69	1885.54	20134.10	364.14	1885.54	14772.93	457.14	2244.57	14772.93	295.35	2244.57	9744.76
		MIN	-989.85	-1840.17	-10996.19	-1179.60	-1840.17	-11972.47	-1169.55	-2163.14	-11972.47	-1359.87	-2163.14	-15308.90
	L-PICKUP 2	MAX	464.99	1639.77	17673.23	339.45	1639.77	12925.17	402.76	1968.43	12925.17	283.50	1968.43	8722.97
		MIN	-880.20	-1603.03	-9869.90	-1029.30	-1603.03	-10605.11	-1038.52	-1896.44	-10605.11	-1189.14	-1896.44	-13718.51
	L-PICKUP 3	MAX	-1111.75	-2137.35	-12667.82	-1297.78	-2137.35	-14139.68	-1331.43	-2534.81	-14139.68	-1517.62	-2534.81	-17693.21
		MIN	529.69	1885.54	20134.10	364.14	1885.54	14772.93	457.14	2244.57	14772.93	295.35	2244.57	9744.76
	Live load	MAX	529.69	1885.54	20134.10	364.14	1885.54	14772.93	457.14	2244.57	14772.93	295.35	2244.57	9744.76
		MIN	-1111.75	-2137.35	-12667.82	-1297.78	-2137.35	-14139.68	-1331.43	-2534.81	-14139.68	-1517.62	-2534.81	-17693.21
111	AASHTO Twin TWIN-PICKUP	MAX	512.49	2194.79	22369.71	354.01	2194.79	16006.51	447.21	2624.73	16006.51	277.02	2624.73	9266.87
		MIN	-1111.75	-2137.35	-12667.82	-1297.78	-2137.35	-14139.68	-1331.43	-2534.81	-14139.68	-1517.62	-2534.81	-17693.21
	MID-PICKUP	MAX	-1111.75	-2137.35	-12667.82	-1297.78	-2137.35	-14139.68	-1331.43	-2534.81	-14139.68	-1517.62	-2534.81	-17693.21
198	AASHTO FatigTRUCK-LOAD	MAX	160.61	426.01	1740.86	47.54	426.01	1411.44	149.02	489.40	1411.44	36.97	489.40	974.26
		MIN	-100.20	-345.07	-585.74	-209.56	-345.07	-726.19	-115.28	-399.12	-726.19	-219.58	-399.12	-902.83
	TANDEM-LOAD	MAX	129.80	293.62	1275.92	49.29	293.62	1052.26	121.41	336.63	1052.26	38.13	336.63	761.35
		MIN	-84.96	-235.63	-396.94	-162.94	-235.63	-491.75	-94.98	-272.97	-491.75	-169.17	-272.97	-612.16

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2032 2032	2033			2033			2034					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
198	AASHTO FatigDISPERSION-LMAX	74.75	622.25	2311.50	49.52	622.25	1685.20	65.16	773.46	1685.20	40.68	773.46	1191.05
	MIN	-129.24	-566.94	-1330.89	-155.86	-566.94	-1404.70	-165.37	-695.47	-1404.70	-191.23	-695.47	-2052.41
199	AASHTO-LRFD TRUCK-LOAD MAX	332.54	1345.35	13178.67	198.81	1345.35	9563.60	290.32	1555.90	9563.60	138.96	1555.90	4560.25
	MIN	-683.29	-1299.77	-6576.15	-823.79	-1299.77	-7983.71	-813.56	-1500.85	-7983.71	-949.54	-1500.85	-9295.28
	TANDEM-LOAD MAX	228.09	546.47	5996.67	144.91	546.47	4703.76	196.18	607.97	4703.76	114.67	607.97	2986.70
	MIN	-328.22	-527.96	-2370.69	-411.12	-527.96	-2878.07	-372.72	-580.83	-2878.07	-452.44	-580.83	-3354.67
	DISPERSION-LMAX	236.90	1093.30	11676.56	194.53	1093.30	8221.42	206.58	1360.46	8221.42	168.84	1360.46	5736.27
	MIN	-551.98	-1075.07	-7499.21	-618.18	-1075.07	-7727.05	-665.80	-1315.60	-7727.05	-736.70	-1315.60	-10363.85
300	Total Dead lWithout snow	-1032.79	30.77	13901.08	-1424.02	30.77	1617.04	-1508.08	95.85	1617.04	-1899.31	95.85	-15419.87
301	Particular Snow	-87.91	5.11	1145.60	-115.09	5.11	130.61	-127.21	13.15	130.61	-154.39	13.15	-1277.42
302	Live load Total MAX	344.30	1225.60	13087.17	236.69	1225.60	9602.40	297.14	1458.97	9602.40	191.98	1458.97	6334.09
	MIN	-722.63	-1389.28	-8234.08	-843.55	-1389.28	-9190.79	-865.43	-1647.63	-9190.79	-986.45	-1647.63	-11500.59
303	Sum total D+L+PP MAX	-673.11	1261.48	28133.84	-1231.42	1261.48	11350.05	-1249.01	1567.97	11350.05	-1804.13	1567.97	-8462.97
	MIN	-1843.33	-1384.17	4342.37	-2382.66	-1384.17	-9060.18	-2500.71	-1634.47	-9060.18	-3040.15	-1634.47	-28197.88

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	2034			2035			2035			2036			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-357.37	29.57	-2850.44	-408.43	29.57	-5913.62	-408.21	21.39	-5913.62	-459.27	21.39	-9383.52	
3	Railing		-12.49	9.19	-91.59	-9.79	9.19	-180.69	-9.53	6.23	-180.69	-6.84	6.23	-246.17	
5	Wheel guard		-123.61	90.99	-906.76	-96.92	90.99	-1788.85	-94.38	61.72	-1788.85	-67.68	61.72	-2437.08	
8	Steel weight		-1297.38	9.95	-10443.64	-1536.26	9.95	-21778.18	-1538.41	12.13	-21778.18	-1777.29	12.13	-35040.99	
10	Medial strip		-123.71	-46.49	-1044.24	-172.22	-46.49	-2227.93	-173.87	-30.75	-2227.93	-222.38	-30.75	-3812.90	
19	Snow		-160.39	15.35	-1277.42	-182.14	15.35	-2647.52	-181.97	11.00	-2647.52	-203.72	11.00	-4190.27	
31	Miscellaneous		-9.87	-3.75	-83.21	-13.79	-3.75	-177.85	-13.92	-2.48	-177.85	-17.84	-2.48	-304.91	
100	AASHTO-LRFD TRUCK-LOAD	MAX	209.15	1051.40	4008.49	90.21	1051.40	2016.79	166.31	1186.46	2016.79	109.89	1186.46	1675.93	
		MIN	-559.49	-1020.41	-4945.05	-662.81	-1020.41	-5431.29	-605.23	-1170.37	-5431.29	-743.84	-1170.37	-5947.97	
	TANDEM-LOAD	MAX	168.79	716.96	2986.70	89.83	716.96	1613.43	147.40	813.38	1613.43	94.09	813.38	1138.02	
		MIN	-412.38	-698.87	-3354.67	-480.54	-698.87	-3690.03	-441.05	-799.58	-3690.03	-537.60	-799.58	-4043.56	
	DISPERSION-LMAX		188.36	1720.04	5736.27	161.64	1720.04	5133.43	182.57	1966.17	5133.43	173.11	1966.17	5792.70	
		MIN	-770.94	-1668.85	-10363.85	-831.14	-1668.85	-14768.80	-851.04	-1929.29	-14768.80	-928.46	-1929.29	-21136.07	
110	Live load	L-PICKUP 1	MAX	397.51	2771.44	9744.76	251.86	2771.44	7150.22	348.88	3152.63	7150.22	282.99	3152.63	7468.63
			MIN	-1330.43	-2689.26	-15308.90	-1493.95	-2689.26	-20200.09	-1456.28	-3099.66	-20200.09	-1672.30	-3099.66	-27084.04
		L-PICKUP 2	MAX	357.15	2437.01	8722.97	251.48	2437.01	6746.86	329.96	2779.54	6746.86	267.19	2779.54	6930.73
			MIN	-1183.32	-2367.72	-13718.51	-1311.68	-2367.72	-18458.83	-1292.09	-2728.87	-18458.83	-1466.06	-2728.87	-25179.63
		L-PICKUP 3		-1529.62	-3149.96	-17693.21	-1683.14	-3149.96	-22475.40	-1672.65	-3632.03	-22475.40	-1879.85	-3632.03	-29073.47
	Live load	MAX	397.51	2771.44	9744.76	251.86	2771.44	7150.22	348.88	3152.63	7150.22	282.99	3152.63	7468.63	
		MIN	-1529.62	-3149.96	-17693.21	-1683.14	-3149.96	-22475.40	-1672.65	-3632.03	-22475.40	-1879.85	-3632.03	-29073.47	
111	AASHTO Twin	TWIN-PICKUP	MAX	372.52	3239.36	9266.87	257.43	3239.36	7188.50	305.23	3694.42	7188.50	285.23	3694.42	8050.03
			MIN	-1529.62	-3149.96	-17693.21	-1683.14	-3149.96	-22475.40	-1672.65	-3632.03	-22475.40	-1879.85	-3632.03	-29073.47
		MID-PICKUP		-1529.62	-3149.96	-17693.21	-1683.14	-3149.96	-22475.40	-1672.65	-3632.03	-22475.40	-1879.85	-3632.03	-29073.47
198	AASHTO Fatig	TRUCK-LOAD	MAX	125.56	515.11	974.26	33.78	515.11	555.96	83.52	441.73	555.96	42.94	441.73	289.17
			MIN	-129.61	-415.64	-902.83	-218.61	-415.64	-1085.81	-155.94	-359.88	-1085.81	-265.12	-359.88	-1216.49
		TANDEM-LOAD	MAX	106.22	352.26	761.35	32.50	352.26	494.89	80.42	302.46	494.89	46.56	302.46	196.12
			MIN	-99.43	-285.00	-612.16	-169.19	-285.00	-737.96	-119.37	-244.11	-737.96	-203.57	-244.11	-826.73

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2034	2035						2036					
		2034			2035			2035			2036		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	62.99	983.65	1191.05	44.21	983.65	1023.77	54.51	1102.60	1023.77	49.19	1102.60	1063.01	
MIN	-204.41	-871.99	-2052.41	-224.46	-871.99	-3178.64	-206.84	-1026.51	-3178.64	-242.83	-1026.51	-4646.71	
199 AASHTO-LRFD TRUCK-LOAD MAX	225.55	1879.24	4560.25	124.39	1879.24	2853.79	156.57	2138.74	2853.79	143.82	2138.74	3151.78	
MIN	-928.64	-1831.10	-9295.28	-1039.02	-1831.10	-10203.87	-1007.46	-2106.30	-10203.87	-1160.26	-2106.30	-11167.79	
TANDEM-LOAD MAX	168.79	716.96	2986.70	89.83	716.96	1613.43	147.40	813.38	1613.43	94.09	813.38	1138.02	
MIN	-412.38	-698.87	-3354.67	-480.54	-698.87	-3690.03	-441.05	-799.58	-3690.03	-537.60	-799.58	-4043.56	
DISPERSION-LMAX	188.36	1720.04	5736.27	161.64	1720.04	5133.43	182.57	1966.17	5133.43	173.11	1966.17	5792.70	
MIN	-770.94	-1668.85	-10363.85	-831.14	-1668.85	-14768.80	-851.04	-1929.29	-14768.80	-928.46	-1929.29	-21136.07	
300 Total Dead lWithout snow	-1924.41	89.47	-15419.87	-2237.40	89.47	-32067.12	-2238.31	68.24	-32067.12	-2551.30	68.24	-51225.57	
301 Particular Snow	-160.39	15.35	-1277.42	-182.14	15.35	-2647.52	-181.97	11.00	-2647.52	-203.72	11.00	-4190.27	
302 Live load Total MAX	258.38	1801.44	6334.09	163.71	1801.44	4647.64	226.77	2049.21	4647.64	183.95	2049.21	4854.61	
MIN	-994.25	-2047.47	-11500.59	-1094.04	-2047.47	-14609.01	-1087.22	-2360.82	-14609.01	-1221.90	-2360.82	-18897.76	
303 Sum total D+L+PP MAX	-1748.90	1906.26	-8462.97	-2206.71	1906.26	-28672.70	-2125.49	2128.45	-28672.70	-2515.89	2128.45	-49104.84	
MIN	-3079.06	-2032.12	-28197.88	-3513.57	-2032.12	-49323.64	-3507.51	-2349.82	-49323.64	-3976.92	-2349.82	-74313.60	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2036	2037			2038			2037			2038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
1	Pavement	445.62	-13.19	-9383.52	394.55	-13.19	-6022.84	400.28	-29.36	-6022.84	349.22	-29.36	-3024.84
3	Railing	6.42	-5.98	-246.17	9.12	-5.98	-184.00	9.56	-9.21	-184.00	12.26	-9.21	-96.71
5	Wheel guard	63.59	-59.19	-2437.08	90.29	-59.19	-1821.55	94.67	-91.16	-1821.55	121.37	-91.16	-957.38
8	Steel weight	1726.97	18.00	-35040.99	1488.09	18.00	-22180.73	1505.98	-8.89	-22180.73	1267.10	-8.89	-11088.38
10	Medial strip	216.06	33.81	-3812.90	167.55	33.81	-2278.44	167.79	46.84	-2278.44	119.28	46.84	-1130.12
19	Snow	197.51	-7.33	-4190.27	175.76	-7.33	-2697.19	178.39	-15.26	-2697.19	156.64	-15.26	-1357.06
31	Miscellaneous	17.43	2.73	-304.91	13.51	2.73	-181.15	13.53	3.77	-181.15	9.61	3.77	-88.57
100	AASHTO-LRFD TRUCK-LOAD	747.58	1178.58	1675.93	610.24	1178.58	2025.65	673.15	1029.94	2025.65	572.69	1029.94	4057.13
	MIN	-109.15	-1186.22	-5947.97	-166.11	-1186.22	-5421.72	-88.72	-1065.04	-5421.72	-205.15	-1065.04	-5021.14
	TANDEM-LOAD	539.98	805.01	1138.02	444.16	805.01	1621.86	487.28	705.46	1621.86	421.27	705.46	3024.72
	MIN	-93.33	-813.14	-4043.56	-146.93	-813.14	-3683.57	-87.94	-726.57	-3683.57	-165.74	-726.57	-3408.70
	DISPERSION-LMAX	907.72	1944.06	5792.70	830.23	1944.06	5129.72	821.82	1691.57	5129.72	761.09	1691.57	5746.94
	MIN	-174.45	-1967.61	-21136.07	-183.83	-1967.61	-14940.84	-165.48	-1742.44	-14940.84	-191.64	-1742.44	-10653.86
110	Live load L-PICKUP 1	1655.29	3122.64	7468.63	1440.47	3122.64	7155.37	1494.97	2721.51	7155.37	1333.78	2721.51	9804.07
	MIN	-283.60	-3153.83	-27084.04	-349.95	-3153.83	-20362.55	-254.19	-2807.48	-20362.55	-396.79	-2807.48	-15675.00
	L-PICKUP 2	1447.69	2749.08	6930.73	1274.39	2749.08	6751.57	1309.09	2397.03	6751.57	1182.36	2397.03	8771.66
	MIN	-267.78	-2780.75	-25179.63	-330.77	-2780.75	-18624.41	-253.41	-2469.02	-18624.41	-357.38	-2469.02	-14062.56
	L-PICKUP 3	-287.12	-3693.97	-29073.47	-306.33	-3693.97	-22621.36	-259.14	-3276.99	-22621.36	-372.50	-3276.99	-18091.34
	Live load	1655.29	3122.64	7468.63	1440.47	3122.64	7155.37	1494.97	2721.51	7155.37	1333.78	2721.51	9804.07
	MIN	-287.12	-3693.97	-29073.47	-349.95	-3693.97	-22621.36	-259.14	-3276.99	-22621.36	-396.79	-3276.99	-18091.34
111	AASHTO Twin TWIN-PICKUP	1865.03	3659.27	8050.03	1658.41	3659.27	7245.56	1690.83	3185.94	7245.56	1538.09	3185.94	9287.45
	MIN	-287.12	-3693.97	-29073.47	-306.33	-3693.97	-22621.36	-259.14	-3276.99	-22621.36	-372.50	-3276.99	-18091.34
	MID-PICKUP	-287.12	-3693.97	-29073.47	-306.33	-3693.97	-22621.36	-259.14	-3276.99	-22621.36	-372.50	-3276.99	-18091.34
198	AASHTO FatigTRUCK-LOAD	265.33	362.44	289.17	156.62	362.44	552.97	219.95	418.60	552.97	132.08	418.60	983.15
	MIN	-43.21	-444.32	-1216.49	-83.13	-444.32	-1082.83	-33.15	-524.39	-1082.83	-123.89	-524.39	-915.39
	TANDEM-LOAD	203.60	245.61	196.12	119.79	245.61	493.17	169.90	287.16	493.17	101.85	287.16	768.53
	MIN	-46.51	-304.15	-826.73	-80.05	-304.15	-734.94	-31.89	-359.11	-734.94	-104.88	-359.11	-619.79

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2036			2037			2037			2038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	237.73	1033.27	1063.01	201.77	1033.27	1023.10	222.24	883.39	1023.10	202.36	883.39	1194.48
	MIN	-50.23	-1104.56	-4646.71	-55.54	-1104.56	-3217.91	-46.57	-995.63	-3217.91	-65.14	-995.63	-2111.17
199	AASHTO-LRFD TRUCK-LOAD MAX	1164.54	2121.80	3151.78	1012.45	2121.80	2920.90	1056.88	1848.37	2920.90	947.90	1848.37	4572.44
	MIN	-144.57	-2136.81	-11167.79	-156.53	-2136.81	-10194.01	-122.46	-1898.66	-10194.01	-222.25	-1898.66	-9447.64
	TANDEM-LOAD MAX	539.98	805.01	1138.02	444.16	805.01	1621.86	487.28	705.46	1621.86	421.27	705.46	3024.72
	MIN	-93.33	-813.14	-4043.56	-146.93	-813.14	-3683.57	-87.94	-726.57	-3683.57	-165.74	-726.57	-3408.70
	DISPERSION-LMAX	907.72	1944.06	5792.70	830.23	1944.06	5129.72	821.82	1691.57	5129.72	761.09	1691.57	5746.94
	MIN	-174.45	-1967.61	-21136.07	-183.83	-1967.61	-14940.84	-165.48	-1742.44	-14940.84	-191.64	-1742.44	-10653.86
300	Total Dead lWithout snow	2476.10	-23.82	-51225.57	2163.12	-23.82	-32668.70	2191.83	-88.00	-32668.70	1878.85	-88.00	-16385.99
301	Particular Snow	197.51	-7.33	-4190.27	175.76	-7.33	-2697.19	178.39	-15.26	-2697.19	156.64	-15.26	-1357.06
302	Live load Total MAX	1075.94	2029.72	4854.61	936.30	2029.72	4650.99	971.73	1768.98	4650.99	866.95	1768.98	6372.64
	MIN	-186.62	-2401.08	-18897.76	-227.47	-2401.08	-14703.89	-168.44	-2130.04	-14703.89	-257.91	-2130.04	-11759.37
303	Sum total D+L+PP MAX	3749.55	2022.39	-49104.84	3275.18	2022.39	-29319.61	3341.95	1753.72	-29319.61	2902.44	1753.72	-9458.61
	MIN	2431.00	-2432.23	-74313.60	2043.17	-2432.23	-50069.78	2151.25	-2233.30	-50069.78	1700.20	-2233.30	-29502.42

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2038 2038	2039			2039			2040			2040		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	346.98	-40.67	-3024.84	283.15	-40.67	125.82	253.18	-16.96	125.82	189.36	-16.96	2338.52
3	Railing	8.10	-6.69	-96.71	11.47	-6.69	1.10	5.15	-3.16	1.10	8.52	-3.16	69.41
5	Wheel guard	80.15	-66.19	-957.38	113.51	-66.19	10.92	50.94	-31.24	10.92	84.31	-31.24	687.16
8	Steel weight	1307.76	-84.78	-11088.38	1009.16	-84.78	496.25	963.34	-30.95	496.25	664.74	-30.95	8636.70
10	Medial strip	146.96	22.60	-1130.12	86.32	22.60	36.26	112.77	11.81	36.26	52.13	11.81	860.75
19	Snow	154.60	-19.59	-1357.06	127.42	-19.59	53.01	112.63	-8.28	53.01	85.45	-8.28	1043.44
31	Miscellaneous	11.84	1.83	-88.57	6.94	1.83	5.32	9.07	0.97	5.32	4.17	0.97	71.48
100	AASHTO-LRFD TRUCK-LOAD	635.02	849.12	4057.13	518.95	849.12	6710.43	550.64	766.82	6710.43	428.07	766.82	8478.15
	MIN	-124.67	-910.02	-5021.14	-246.50	-910.02	-4359.70	-179.67	-790.31	-4359.70	-300.84	-790.31	-3500.23
	TANDEM-LOAD	460.07	581.88	3024.72	383.36	581.88	4816.49	403.56	529.77	4816.49	321.68	529.77	6013.17
	MIN	-113.56	-626.82	-3408.70	-192.79	-626.82	-2959.48	-152.33	-544.85	-2959.48	-233.45	-544.85	-2376.06
	DISPERSION-LMAX	745.31	1324.46	5746.94	673.53	1324.46	8303.43	625.93	1079.94	8303.43	560.68	1079.94	11531.68
	MIN	-175.97	-1392.72	-10653.86	-212.84	-1392.72	-8074.12	-210.73	-1109.49	-8074.12	-254.04	-1109.49	-7702.78
110	Live load L-PICKUP 1	1380.33	2173.57	9804.07	1192.47	2173.57	15013.86	1176.57	1846.76	15013.86	988.75	1846.76	20009.83
	MIN	-300.64	-2302.74	-15675.00	-459.34	-2302.74	-12433.82	-390.40	-1899.80	-12433.82	-554.87	-1899.80	-11203.01
	L-PICKUP 2	1205.39	1906.34	8771.66	1056.88	1906.34	13119.92	1029.49	1609.72	13119.92	882.37	1609.72	17544.85
	MIN	-289.54	-2019.55	-14062.56	-405.63	-2019.55	-11033.60	-363.06	-1654.34	-11033.60	-487.49	-1654.34	-10078.85
	L-PICKUP 3	-283.28	-2693.09	-18091.34	-449.74	-2693.09	-14649.35	-375.99	-2210.75	-14649.35	-535.54	-2210.75	-12859.67
	Live load	1380.33	2173.57	9804.07	1192.47	2173.57	15013.86	1176.57	1846.76	15013.86	988.75	1846.76	20009.83
	MIN	-300.64	-2693.09	-18091.34	-459.34	-2693.09	-14649.35	-390.40	-2210.75	-14649.35	-554.87	-2210.75	-12859.67
111	AASHTO Twin TWIN-PICKUP	1546.80	2545.96	9287.45	1361.82	2545.96	16284.63	1290.43	2144.54	16284.63	1107.18	2144.54	22261.58
	MIN	-283.28	-2693.09	-18091.34	-449.74	-2693.09	-14649.35	-375.99	-2210.75	-14649.35	-535.54	-2210.75	-12859.67
	MID-PICKUP	-283.28	-2693.09	-18091.34	-449.74	-2693.09	-14649.35	-375.99	-2210.75	-14649.35	-535.54	-2210.75	-12859.67
198	AASHTO FatigTRUCK-LOAD	221.07	399.42	983.15	119.06	399.42	1439.45	207.35	342.63	1439.45	98.50	342.63	1742.80
	MIN	-36.13	-499.97	-915.39	-146.95	-499.97	-745.90	-51.19	-423.87	-745.90	-162.77	-423.87	-585.91
	TANDEM-LOAD	169.98	272.70	768.53	97.99	272.70	1072.23	161.43	233.70	1072.23	84.11	233.70	1277.20
	MIN	-37.94	-344.47	-619.79	-119.80	-344.47	-505.86	-52.12	-292.10	-505.86	-131.25	-292.10	-397.68

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2038 2038	2039			2039			2040			2040		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	193.72	702.45	1194.48	167.98	702.45	1702.18	157.12	568.30	1702.18	130.46	568.30	2284.63
	MIN	-41.83	-788.75	-2111.17	-66.00	-788.75	-1468.32	-53.02	-628.06	-1468.32	-78.36	-628.06	-1366.93
199	AASHTO-LRFD TRUCK-LOAD MAX	973.35	1504.39	4572.44	839.61	1504.39	9790.61	807.88	1302.88	9790.61	669.51	1302.88	13203.40
	MIN	-138.79	-1599.59	-9447.64	-286.87	-1599.59	-8202.93	-207.04	-1346.90	-8202.93	-341.01	-1346.90	-6585.74
	TANDEM-LOAD MAX	460.07	581.88	3024.72	383.36	581.88	4816.49	403.56	529.77	4816.49	321.68	529.77	6013.17
	MIN	-113.56	-626.82	-3408.70	-192.79	-626.82	-2959.48	-152.33	-544.85	-2959.48	-233.45	-544.85	-2376.06
	DISPERSION-LMAX	745.31	1324.46	5746.94	673.53	1324.46	8303.43	625.93	1079.94	8303.43	560.68	1079.94	11531.68
	MIN	-175.97	-1392.72	-10653.86	-212.84	-1392.72	-8074.12	-210.73	-1109.49	-8074.12	-254.04	-1109.49	-7702.78
300	Total Dead lWithout snow	1901.78	-173.90	-16385.99	1510.55	-173.90	675.67	1394.45	-69.52	675.67	1003.22	-69.52	12664.02
301	Particular Snow	154.60	-19.59	-1357.06	127.42	-19.59	53.01	112.63	-8.28	53.01	85.45	-8.28	1043.44
302	Live load Total MAX	897.22	1412.82	6372.64	775.11	1412.82	9759.01	764.77	1200.39	9759.01	642.69	1200.39	13006.39
	MIN	-195.42	-1750.51	-11759.37	-298.57	-1750.51	-9522.08	-253.76	-1436.99	-9522.08	-360.67	-1436.99	-8358.78
303	Sum total D+L+PP MAX	2953.60	1393.23	-9458.61	2413.07	1393.23	10487.69	2271.86	1192.12	10487.69	1731.36	1192.12	26713.85
	MIN	1802.34	-1943.99	-29502.42	1249.82	-1943.99	-9469.07	1177.20	-1514.79	-9469.07	619.80	-1514.79	2841.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2040 2040	2041			2041			2042			2042		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	153.75	9.12	2338.52	89.92	9.12	3556.83	72.35	4.79	3556.83	8.52	4.79	3961.18	
3 Railing	2.05	-0.90	69.41	5.42	-0.90	106.72	-0.45	-0.20	106.72	2.92	-0.20	119.07	
5 Wheel guard	20.25	-8.87	687.16	53.62	-8.87	1056.53	-4.46	-1.97	1056.53	28.91	-1.97	1178.77	
8 Steel weight	597.87	47.62	8636.70	299.27	47.62	13122.37	298.22	21.77	13122.37	-0.38	21.77	14611.54	
10 Medial strip	76.15	11.44	860.75	15.52	11.44	1319.11	45.84	4.20	1319.11	-14.80	4.20	1474.28	
19 Snow	68.14	3.77	1043.44	40.95	3.77	1588.89	31.72	2.06	1588.89	4.53	2.06	1770.16	
31 Miscellaneous	6.11	0.93	71.48	1.21	0.93	108.07	3.67	0.34	108.07	-1.23	0.34	120.23	
100 AASHTO-LRFD TRUCK-LOAD	480.48	759.27	8478.15	352.78	759.27	9425.11	436.12	740.16	9425.11	306.15	740.16	9743.74	
MIN	-226.04	-713.08	-3500.23	-352.26	-713.08	-2686.15	-262.76	-730.06	-2686.15	-392.23	-730.06	-2002.10	
TANDEM-LOAD	356.85	528.80	6013.17	270.46	528.80	6665.13	327.40	515.46	6665.13	239.00	515.46	6896.79	
MIN	-184.97	-495.37	-2376.06	-270.02	-495.37	-1823.44	-209.69	-507.73	-1823.44	-297.73	-507.73	-1359.08	
DISPERSION-LMAX	493.45	920.09	11531.68	433.90	920.09	13148.37	393.64	817.30	13148.37	337.56	817.30	13683.42	
MIN	-240.72	-907.02	-7702.78	-289.62	-907.02	-7338.30	-273.62	-810.40	-7338.30	-325.97	-810.40	-7216.47	
110 Live load L-PICKUP 1	973.93	1679.36	20009.83	786.68	1679.36	22573.48	829.77	1557.46	22573.48	643.71	1557.46	23427.16	
MIN	-466.75	-1620.09	-11203.01	-641.88	-1620.09	-10024.45	-536.38	-1540.46	-10024.45	-718.20	-1540.46	-9218.56	
L-PICKUP 2	850.30	1448.89	17544.85	704.36	1448.89	19813.50	721.05	1332.75	19813.50	576.55	1332.75	20580.21	
MIN	-425.68	-1402.38	-10078.85	-559.63	-1402.38	-9161.74	-483.31	-1318.13	-9161.74	-623.70	-1318.13	-8575.55	
L-PICKUP 3	-465.15	-1819.73	-12859.67	-637.08	-1819.73	-11153.09	-551.81	-1695.58	-11153.09	-728.72	-1695.58	-9885.10	
Live load	973.93	1679.36	20009.83	786.68	1679.36	22573.48	829.77	1557.46	22573.48	643.71	1557.46	23427.16	
MIN	-466.75	-1819.73	-12859.67	-641.88	-1819.73	-11153.09	-551.81	-1695.58	-11153.09	-728.72	-1695.58	-9885.10	
111 AASHTO Twin TWIN-PICKUP	1043.20	1873.85	22261.58	861.82	1873.85	25268.14	868.18	1717.27	25268.14	687.59	1717.27	26164.07	
MIN	-465.15	-1819.73	-12859.67	-637.08	-1819.73	-11153.09	-551.81	-1695.58	-11153.09	-728.72	-1695.58	-9885.10	
MID-PICKUP	-465.15	-1819.73	-12859.67	-637.08	-1819.73	-11153.09	-551.81	-1695.58	-11153.09	-728.72	-1695.58	-9885.10	
198 AASHTO FatigTRUCK-LOAD	196.08	273.79	1742.80	83.61	273.79	1908.09	189.38	195.52	1908.09	75.51	195.52	1965.37	
MIN	-63.26	-347.18	-585.91	-174.98	-347.18	-448.15	-68.39	-272.87	-448.15	-181.93	-272.87	-334.04	
TANDEM-LOAD	154.13	187.24	1277.20	73.59	187.24	1391.05	149.69	137.97	1391.05	67.68	137.97	1433.15	
MIN	-59.88	-239.71	-397.68	-139.85	-239.71	-304.22	-62.88	-189.69	-304.22	-144.64	-189.69	-226.76	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2040 2040	2041			2041			2042				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	127.22	485.47	2284.63	100.31	485.47	2581.97	107.46	435.41	2581.97	80.55	435.41	2681.35
MIN	-61.15	-512.34	-1366.93	-87.31	-512.34	-1297.34	-67.82	-445.32	-1297.34	-94.47	-445.32	-1275.74
199 AASHTO-LRFD TRUCK-LOAD MAX	665.66	1161.96	13203.40	523.68	1161.96	14927.34	571.00	1090.78	14927.34	426.43	1090.78	15387.76
MIN	-276.12	-1114.91	-6585.74	-418.25	-1114.91	-5054.02	-339.50	-1073.58	-5054.02	-483.72	-1073.58	-3766.98
TANDEM-LOAD MAX	356.85	528.80	6013.17	270.46	528.80	6665.13	327.40	515.46	6665.13	239.00	515.46	6896.79
MIN	-184.97	-495.37	-2376.06	-270.02	-495.37	-1823.44	-209.69	-507.73	-1823.44	-297.73	-507.73	-1359.08
DISPERSION-LMAX	493.45	920.09	11531.68	433.90	920.09	13148.37	393.64	817.30	13148.37	337.56	817.30	13683.42
MIN	-240.72	-907.02	-7702.78	-289.62	-907.02	-7338.30	-273.62	-810.40	-7338.30	-325.97	-810.40	-7216.47
300 Total Dead lWithout snow	856.18	59.35	12664.02	464.95	59.35	19269.63	415.16	28.92	19269.63	23.93	28.92	21465.07
301 Particular Snow	68.14	3.77	1043.44	40.95	3.77	1588.89	31.72	2.06	1588.89	4.53	2.06	1770.16
302 Live load Total MAX	633.06	1091.59	13006.39	511.34	1091.59	14672.76	539.35	1012.35	14672.76	418.41	1012.35	15227.65
MIN	-303.39	-1182.83	-8358.78	-417.22	-1182.83	-7249.51	-358.68	-1102.13	-7249.51	-473.67	-1102.13	-6425.31
303 Sum total D+L+PP MAX	1557.37	1154.70	26713.85	1017.24	1154.70	35531.28	986.23	1043.33	35531.28	446.88	1043.33	38462.88
MIN	529.91	-1179.06	2841.04	-36.48	-1179.06	11434.16	-19.40	-1100.07	11434.16	-469.13	-1100.07	14882.32

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 2042			MEMBER 2043			MEMBER 2043			MEMBER 2044			
		NODE 2042			NODE 2043			NODE 2043			NODE 2044			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement		-7.39	-0.01	3961.18	-71.22	-0.01	3568.12	-88.22	-2.95	3568.12	-152.05	-2.95	2366.81
3	Railing		-2.89	0.33	119.07	0.48	0.33	107.06	-5.37	1.06	107.06	-2.00	1.06	70.23
5	Wheel guard		-28.57	3.22	1178.77	4.80	3.22	1059.91	-53.14	10.53	1059.91	-19.78	10.53	695.30
8	Steel weight		4.54	-3.93	14611.54	-294.06	-3.93	13163.94	-292.97	-24.66	13163.94	-591.57	-24.66	8741.27
10	Medial strip		16.13	-2.23	1474.28	-44.51	-2.23	1332.35	-13.87	-9.07	1332.35	-74.51	-9.07	890.45
19	Snow		-3.95	0.08	1770.16	-31.14	0.08	1594.72	-40.11	-1.02	1594.72	-67.29	-1.02	1057.72
31	Miscellaneous		1.27	-0.18	120.23	-3.63	-0.18	108.41	-1.16	-0.74	108.41	-6.06	-0.74	72.35
100	AASHTO-LRFD TRUCK-LOAD	MAX	384.89	729.09	9743.74	254.30	729.09	9360.07	339.51	718.58	9360.07	210.16	718.58	8252.12
		MIN	-311.77	-732.52	-2002.10	-442.15	-732.52	-2604.37	-363.46	-738.59	-2604.37	-492.82	-738.59	-3297.26
		TANDEM-LOAD MAX	292.87	507.26	6896.79	203.83	507.26	6619.78	261.60	499.64	6619.78	173.57	499.64	5854.03
		MIN	-242.90	-509.69	-1359.08	-331.67	-509.69	-1765.69	-277.78	-513.10	-1765.69	-365.71	-513.10	-2235.45
		DISPERSION-LMAX	322.59	810.46	13683.42	270.84	810.46	13016.45	277.03	902.44	13016.45	229.40	902.44	11146.89
		MIN	-332.61	-809.57	-7216.47	-389.30	-809.57	-7190.20	-418.90	-905.27	-7190.20	-479.73	-905.27	-7276.71
110	Live load	L-PICKUP 1 MAX	707.48	1539.55	23427.16	525.14	1539.55	22376.52	616.54	1621.02	22376.52	439.56	1621.02	19399.01
		MIN	-644.38	-1542.09	-9218.56	-831.45	-1542.09	-9794.57	-782.36	-1643.86	-9794.57	-972.55	-1643.86	-10573.98
		L-PICKUP 2 MAX	615.46	1317.72	20580.21	474.67	1317.72	19636.22	538.63	1402.08	19636.22	402.97	1402.08	17000.92
		MIN	-575.51	-1319.26	-8575.55	-720.97	-1319.26	-8955.89	-696.68	-1418.38	-8955.89	-845.44	-1418.38	-9512.16
		L-PICKUP 3	-689.54	-1700.46	-9885.10	-871.82	-1700.46	-10883.76	-860.91	-1833.67	-10883.76	-1046.23	-1833.67	-12135.60
		Live load MAX	707.48	1539.55	23427.16	525.14	1539.55	22376.52	616.54	1621.02	22376.52	439.56	1621.02	19399.01
MIN	-689.54	-1700.46	-9885.10	-871.82	-1700.46	-10883.76	-860.91	-1833.67	-10883.76	-1046.23	-1833.67	-12135.60		
111	AASHTO Twin TWIN-PICKUP	MAX	714.91	1694.59	26164.07	538.76	1694.59	25046.19	610.29	1821.88	25046.19	439.65	1821.88	21594.04
		MIN	-689.54	-1700.46	-9885.10	-871.82	-1700.46	-10883.76	-860.91	-1833.67	-10883.76	-1046.23	-1833.67	-12135.60
		MID-PICKUP	-689.54	-1700.46	-9885.10	-871.82	-1700.46	-10883.76	-860.91	-1833.67	-10883.76	-1046.23	-1833.67	-12135.60
198	AASHTO FatigTRUCK-LOAD	MAX	180.73	272.54	1965.37	66.62	272.54	1896.97	172.43	347.09	1896.97	58.81	347.09	1702.23
		MIN	-76.78	-194.13	-334.04	-190.73	-194.13	-434.17	-86.14	-270.54	-434.17	-199.05	-270.54	-552.26
		TANDEM-LOAD MAX	143.88	189.50	1433.15	61.59	189.50	1383.34	138.27	239.79	1383.34	56.54	239.79	1248.60
		MIN	-68.49	-135.75	-226.76	-150.64	-135.75	-294.36	-75.05	-185.15	-294.36	-156.29	-185.15	-374.32

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2042			2043			2043			2044		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	93.90	444.44	2681.35	67.26	444.44	2560.18	84.49	510.09	2560.18	58.35	510.09	2215.09
	MIN	-79.81	-431.93	-1275.74	-106.68	-431.93	-1270.04	-98.09	-478.88	-1270.04	-124.92	-478.88	-1291.13
199	AASHTO-LRFD TRUCK-LOAD MAX	471.75	1072.41	15387.76	327.78	1072.41	14812.66	401.07	1121.86	14812.66	259.09	1121.86	12846.49
	MIN	-433.54	-1079.83	-3766.98	-579.39	-1079.83	-4902.87	-537.67	-1132.13	-4902.87	-682.75	-1132.13	-6207.28
	TANDEM-LOAD MAX	292.87	507.26	6896.79	203.83	507.26	6619.78	261.60	499.64	6619.78	173.57	499.64	5854.03
	MIN	-242.90	-509.69	-1359.08	-331.67	-509.69	-1765.69	-277.78	-513.10	-1765.69	-365.71	-513.10	-2235.45
	DISPERSION-LMAX	322.59	810.46	13683.42	270.84	810.46	13016.45	277.03	902.44	13016.45	229.40	902.44	11146.89
	MIN	-332.61	-809.57	-7216.47	-389.30	-809.57	-7190.20	-418.90	-905.27	-7190.20	-479.73	-905.27	-7276.71
300	Total Dead lWithout snow	-16.91	-2.80	21465.07	-408.14	-2.80	19339.79	-454.72	-25.82	19339.79	-845.95	-25.82	12836.42
301	Particular Snow	-3.95	0.08	1770.16	-31.14	0.08	1594.72	-40.11	-1.02	1594.72	-67.29	-1.02	1057.72
302	Live load Total MAX	459.86	1000.71	15227.65	341.34	1000.71	14544.74	400.75	1053.66	14544.74	285.71	1053.66	12609.36
	MIN	-448.20	-1105.30	-6425.31	-566.68	-1105.30	-7074.45	-559.59	-1191.88	-7074.45	-680.05	-1191.88	-7888.14
303	Sum total D+L+PP MAX	455.91	1000.79	38462.88	4.46	1000.79	35479.25	26.15	1052.64	35479.25	-541.82	1052.64	26503.49
	MIN	-469.07	-1108.02	14882.32	-1005.96	-1108.02	11737.73	-1054.42	-1218.73	11737.73	-1593.29	-1218.73	3639.56

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2044	2045			2045			2046							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
														S2 (kN)	TQ (kN·m)
1	Pavement	-176.99	7.72	2366.81	-240.82	7.72	277.75	-269.50	29.50	277.75	-333.33	29.50	-2736.41		
3	Railing	-8.15	2.84	70.23	-4.78	2.84	5.59	-11.05	6.25	5.59	-7.68	6.25	-88.04		
5	Wheel guard	-80.67	28.15	695.30	-47.31	28.15	55.39	-109.38	61.89	55.39	-76.01	61.89	-871.57		
8	Steel weight	-619.09	-2.71	8741.27	-917.69	-2.71	1057.41	-958.90	44.77	1057.41	-1257.50	44.77	-10024.64		
10	Medial strip	-46.43	-15.19	890.45	-107.06	-15.19	123.00	-80.34	-26.12	123.00	-140.98	-26.12	-983.57		
19	Snow	-79.83	4.12	1057.72	-107.02	4.12	123.46	-121.23	14.57	123.46	-148.41	14.57	-1224.78		
31	Miscellaneous	-3.79	-1.23	72.35	-8.69	-1.23	9.97	-6.53	-2.11	9.97	-11.43	-2.11	-79.82		
100	AASHTO-LRFD TRUCK-LOAD	MAX	297.93	783.96	8252.12	172.13	783.96	6450.69	252.46	884.04	6450.69	127.30	884.04	3949.56	
		MIN	-424.07	-760.24	-3297.26	-550.61	-760.24	-4043.49	-497.70	-845.15	-4043.49	-618.74	-845.15	-4745.91	
		TANDEM-LOAD	MAX	232.17	540.45	5854.03	146.74	540.45	4632.34	197.83	607.93	4632.34	115.22	607.93	2944.93
		MIN	-318.79	-524.78	-2235.45	-404.28	-524.78	-2741.35	-368.59	-579.31	-2741.35	-449.69	-579.31	-3219.47	
		DISPERSION-L	MAX	244.05	1087.75	11146.89	200.94	1087.75	7902.39	215.91	1359.47	7902.39	177.87	1359.47	5546.43
		MIN	-530.87	-1073.10	-7276.71	-596.31	-1073.10	-7433.24	-654.51	-1309.39	-7433.24	-725.11	-1309.39	-9992.98	
110	Live load	L-PICKUP 1	MAX	541.99	1871.71	19399.01	373.07	1871.71	14353.08	468.37	2243.50	14353.08	305.16	2243.50	9496.00
		MIN	-954.94	-1833.34	-10573.98	-1146.92	-1833.34	-11476.73	-1152.22	-2154.54	-11476.73	-1343.85	-2154.54	-14738.90	
		L-PICKUP 2	MAX	476.22	1628.20	17000.92	347.68	1628.20	12534.73	413.74	1967.39	12534.73	293.09	1967.39	8491.36
		MIN	-849.66	-1597.88	-9512.16	-1000.59	-1597.88	-10174.59	-1023.10	-1888.70	-10174.59	-1174.79	-1888.70	-13212.45	
		L-PICKUP 3	MAX	-1071.17	-2131.83	-12135.60	-1258.39	-2131.83	-13540.88	-1311.96	-2526.54	-13540.88	-1499.06	-2526.54	-17032.16
		MIN	541.99	1871.71	19399.01	373.07	1871.71	14353.08	468.37	2243.50	14353.08	305.16	2243.50	9496.00	
111	AASHTO Twin	TWIN-PICKUP	MAX	523.06	2179.36	21594.04	360.39	2179.36	15593.20	457.31	2624.89	15593.20	285.72	2624.89	9034.99
		MIN	-1071.17	-2131.83	-12135.60	-1258.39	-2131.83	-13540.88	-1311.96	-2526.54	-13540.88	-1499.06	-2526.54	-17032.16	
		MID-PICKUP	MAX	-1071.17	-2131.83	-12135.60	-1258.39	-2131.83	-13540.88	-1311.96	-2526.54	-13540.88	-1499.06	-2526.54	-17032.16
		MIN	523.06	2179.36	21594.04	360.39	2179.36	15593.20	457.31	2624.89	15593.20	285.72	2624.89	9034.99	
		TWIN-PICKUP	MAX	523.06	2179.36	21594.04	360.39	2179.36	15593.20	457.31	2624.89	15593.20	285.72	2624.89	9034.99
		MIN	-1071.17	-2131.83	-12135.60	-1258.39	-2131.83	-13540.88	-1311.96	-2526.54	-13540.88	-1499.06	-2526.54	-17032.16	
198	AASHTO Fatig	TRUCK-LOAD	MAX	162.65	419.47	1702.23	48.80	419.47	1390.66	150.00	486.87	1390.66	36.92	486.87	960.28
		MIN	-97.74	-340.88	-552.26	-208.40	-340.88	-690.99	-114.32	-396.19	-690.99	-219.20	-396.19	-865.76	
		TANDEM-LOAD	MAX	131.50	288.95	1248.60	50.01	288.95	1037.05	122.28	334.87	1037.05	38.60	334.87	750.98
		MIN	-83.14	-232.68	-374.32	-162.46	-232.68	-468.01	-94.31	-270.78	-468.01	-169.13	-270.78	-586.91	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2044	2044			2045			2045			2046		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	76.20	619.18	2215.09	50.79	619.18	1624.29	66.96	771.74	1624.29	42.39	771.74	1155.30
	MIN	-124.49	-566.01	-1291.13	-151.15	-566.01	-1349.56	-162.78	-693.03	-1349.56	-188.67	-693.03	-1976.48
199	AASHTO-LRFD TRUCK-LOAD MAX	337.13	1333.76	12846.49	199.50	1333.76	9423.39	292.22	1557.07	9423.39	139.60	1557.07	4492.45
	MIN	-659.32	-1295.60	-6207.28	-801.90	-1295.60	-7612.18	-803.21	-1497.88	-7612.18	-940.52	-1497.88	-8931.64
	TANDEM-LOAD MAX	232.17	540.45	5854.03	146.74	540.45	4632.34	197.83	607.93	4632.34	115.22	607.93	2944.93
	MIN	-318.79	-524.78	-2235.45	-404.28	-524.78	-2741.35	-368.59	-579.31	-2741.35	-449.69	-579.31	-3219.47
	DISPERSION-LMAX	244.05	1087.75	11146.89	200.94	1087.75	7902.39	215.91	1359.47	7902.39	177.87	1359.47	5546.43
	MIN	-530.87	-1073.10	-7276.71	-596.31	-1073.10	-7433.24	-654.51	-1309.39	-7433.24	-725.11	-1309.39	-9992.98
300	Total Dead lWithout snow	-935.12	19.58	12836.42	-1326.35	19.58	1529.10	-1435.70	114.19	1529.10	-1826.93	114.19	-14784.04
301	Particular Snow	-79.83	4.12	1057.72	-107.02	4.12	123.46	-121.23	14.57	123.46	-148.41	14.57	-1224.78
302	Live load Total MAX	352.29	1216.61	12609.36	242.49	1216.61	9329.50	304.44	1458.28	9329.50	198.36	1458.28	6172.40
	MIN	-696.26	-1385.69	-7888.14	-817.96	-1385.69	-8801.57	-852.77	-1642.25	-8801.57	-974.39	-1642.25	-11070.90
303	Sum total D+L+PP MAX	-556.97	1240.32	26503.49	-1118.12	1240.32	10982.06	-1161.16	1587.04	10982.06	-1717.48	1587.04	-7984.69
	MIN	-1711.21	-1381.57	3639.56	-2251.32	-1381.57	-8678.12	-2409.70	-1627.68	-8678.12	-2949.74	-1627.68	-27079.72

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	TITLE	2046			2047			2047			2048			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-347.14	36.67	-2736.41	-398.21	36.67	-5717.80	-391.52	16.82	-5717.80	-442.58	16.82	-9054.20	
3	Railing	-12.21	9.34	-88.04	-9.52	9.34	-174.95	-9.10	6.11	-174.95	-6.41	6.11	-236.99	
5	Wheel guard	-120.91	92.49	-871.57	-94.21	92.49	-1732.05	-90.12	60.45	-1732.05	-63.43	60.45	-2346.24	
8	Steel weight	-1259.27	36.88	-10024.64	-1498.15	36.88	-21054.29	-1476.01	-4.82	-21054.29	-1714.89	-4.82	-33817.90	
10	Medial strip	-117.61	-43.35	-983.57	-166.12	-43.35	-2118.51	-165.09	-32.49	-2118.51	-213.60	-32.49	-3633.27	
19	Snow	-155.65	18.52	-1224.78	-177.40	18.52	-2556.97	-174.35	8.96	-2556.97	-196.10	8.96	-4038.78	
31	Miscellaneous	-9.54	-3.50	-79.82	-13.46	-3.50	-171.82	-13.38	-2.63	-171.82	-17.30	-2.63	-294.51	
100	AASHTO-LRFD TRUCK-LOAD	MAX	211.42	1047.51	3949.56	90.98	1047.51	1994.84	166.82	1171.51	1994.84	108.76	1171.51	1670.46
		MIN	-554.47	-1009.34	-4745.91	-658.89	-1009.34	-5251.70	-601.46	-1161.10	-5251.70	-740.62	-1161.10	-5785.65
		TANDEM-LOAD MAX	170.68	714.22	2944.93	91.00	714.22	1598.29	148.01	803.07	1598.29	93.30	803.07	1133.95
		MIN	-409.01	-691.13	-3219.47	-478.19	-691.13	-3567.95	-438.84	-793.10	-3567.95	-535.91	-793.10	-3931.85
		DISPERSION-LMAX	198.82	1721.45	5546.43	171.83	1721.45	5061.27	187.93	1952.98	5061.27	178.21	1952.98	5772.57
		MIN	-765.28	-1658.73	-9992.98	-825.23	-1658.73	-14386.43	-829.66	-1923.54	-14386.43	-906.81	-1923.54	-20591.38
110	Live load	L-PICKUP 1 MAX	410.24	2768.96	9496.00	262.81	2768.96	7056.11	354.75	3124.50	7056.11	286.96	3124.50	7443.03
		MIN	-1319.75	-2668.08	-14738.90	-1484.12	-2668.08	-19638.13	-1431.12	-3084.64	-19638.13	-1647.43	-3084.64	-26377.04
		L-PICKUP 2 MAX	369.50	2435.67	8491.36	262.83	2435.67	6659.55	335.94	2756.05	6659.55	271.51	2756.05	6906.53
		MIN	-1174.30	-2349.87	-13212.45	-1303.42	-2349.87	-17954.38	-1268.50	-2716.64	-17954.38	-1442.73	-2716.64	-24523.23
		L-PICKUP 3	-1517.55	-3121.84	-17032.16	-1671.63	-3121.84	-21838.44	-1644.85	-3612.90	-21838.44	-1852.62	-3612.90	-28316.48
		Live load MAX	410.24	2768.96	9496.00	262.83	2768.96	7056.11	354.75	3124.50	7056.11	286.96	3124.50	7443.03
MIN	-1517.55	-3121.84	-17032.16	-1671.63	-3121.84	-21838.44	-1644.85	-3612.90	-21838.44	-1852.62	-3612.90	-28316.48		
111	AASHTO Twin	TWIN-PICKUP MAX	384.03	3236.38	9034.99	267.65	3236.38	7089.10	310.23	3659.10	7089.10	289.11	3659.10	8024.00
		MIN	-1517.55	-3121.84	-17032.16	-1671.63	-3121.84	-21838.44	-1644.85	-3612.90	-21838.44	-1852.62	-3612.90	-28316.48
		MID-PICKUP	-1517.55	-3121.84	-17032.16	-1671.63	-3121.84	-21838.44	-1644.85	-3612.90	-21838.44	-1852.62	-3612.90	-28316.48
198	AASHTO Fatig	TRUCK-LOAD MAX	126.55	514.22	960.28	33.89	514.22	550.16	84.45	439.21	550.16	42.85	439.21	289.07
		MIN	-128.24	-414.41	-865.76	-218.00	-414.41	-1051.59	-154.52	-358.24	-1051.59	-264.63	-358.24	-1183.58
		TANDEM-LOAD MAX	107.12	351.60	750.98	32.61	351.60	490.37	81.32	300.61	490.37	46.54	300.61	195.98
		MIN	-98.94	-284.20	-586.91	-169.01	-284.20	-714.59	-118.40	-242.89	-714.59	-203.49	-242.89	-803.74

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2046			2047			2047			2048		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	64.54	983.04	1155.30	45.65	983.04	1011.69	55.44	1096.04	1011.69	49.93	1096.04	1061.85
	MIN	-203.32	-867.97	-1976.48	-223.36	-867.97	-3101.32	-201.90	-1022.47	-3101.32	-237.68	-1022.47	-4529.26
199	AASHTO-LRFD TRUCK-LOAD MAX	227.88	1874.53	4492.45	125.56	1874.53	2815.51	156.77	2112.68	2815.51	143.03	2112.68	3142.99
	MIN	-920.88	-1809.97	-8931.64	-1032.14	-1809.97	-9878.51	-997.94	-2090.80	-9878.51	-1151.66	-2090.80	-10871.37
	TANDEM-LOAD MAX	170.68	714.22	2944.93	91.00	714.22	1598.29	148.01	803.07	1598.29	93.30	803.07	1133.95
	MIN	-409.01	-691.13	-3219.47	-478.19	-691.13	-3567.95	-438.84	-793.10	-3567.95	-535.91	-793.10	-3931.85
	DISPERSION-LMAX	198.82	1721.45	5546.43	171.83	1721.45	5061.27	187.93	1952.98	5061.27	178.21	1952.98	5772.57
	MIN	-765.28	-1658.73	-9992.98	-825.23	-1658.73	-14386.43	-829.66	-1923.54	-14386.43	-906.81	-1923.54	-20591.38
300	Total Dead lWithout snow	-1866.68	128.54	-14784.04	-2179.67	128.54	-30969.43	-2145.22	43.43	-30969.43	-2458.20	43.43	-49383.12
301	Particular Snow	-155.65	18.52	-1224.78	-177.40	18.52	-2556.97	-174.35	8.96	-2556.97	-196.10	8.96	-4038.78
302	Live load Total MAX	266.65	1799.82	6172.40	170.84	1799.82	4586.47	230.59	2030.92	4586.47	186.53	2030.92	4837.97
	MIN	-986.40	-2029.19	-11070.90	-1086.56	-2029.19	-14194.99	-1069.15	-2348.39	-14194.99	-1204.21	-2348.39	-18405.71
303	Sum total D+L+PP MAX	-1675.68	1946.88	-7984.69	-2134.97	1946.88	-27563.99	-2019.81	2083.32	-27563.99	-2411.82	2083.32	-47132.54
	MIN	-3008.74	-2010.68	-27079.72	-3443.62	-2010.68	-47721.39	-3388.72	-2339.42	-47721.39	-3858.51	-2339.42	-71827.61

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2048	2048			2049			2049			2050				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	453.89	-23.14	-9054.20	402.83	-23.14	-5627.34	401.40	-28.90	-5627.34	350.34	-28.90	-2620.36		
3	Railing	6.75	-6.28	-236.99	9.45	-6.28	-172.22	9.62	-9.09	-172.22	12.32	-9.09	-84.46		
5	Wheel guard	66.81	-62.14	-2346.24	93.51	-62.14	-1704.96	95.26	-90.02	-1704.96	121.95	-90.02	-836.14		
8	Steel weight	1756.58	-18.70	-33817.90	1517.70	-18.70	-20720.81	1509.83	-8.39	-20720.81	1270.95	-8.39	-9597.68		
10	Medial strip	218.16	29.99	-3633.27	169.65	29.99	-2082.06	167.60	46.13	-2082.06	119.09	46.13	-935.28		
19	Snow	201.19	-11.78	-4038.78	179.44	-11.78	-2516.29	178.86	-15.04	-2516.29	157.11	-15.04	-1172.40		
31	Miscellaneous	17.64	2.42	-294.51	13.72	2.42	-169.09	13.55	3.73	-169.09	9.63	3.73	-76.34		
100	AASHTO-LRFD TRUCK-LOAD	MAX	743.11	1154.14	1670.46	604.05	1154.14	2011.32	662.27	1006.08	2011.32	558.42	1006.08	4010.69	
		MIN	-109.70	-1171.50	-5785.65	-167.26	-1171.50	-5286.38	-89.65	-1036.43	-5286.38	-209.55	-1036.43	-4829.41	
		TANDEM-LOAD	MAX	537.50	788.32	1133.95	440.31	788.32	1608.29	480.51	688.84	1608.29	411.75	688.84	2985.28
		MIN	-93.91	-802.76	-3931.85	-148.31	-802.76	-3591.60	-89.48	-706.80	-3591.60	-169.36	-706.80	-3276.71	
		DISPERSION-L	MAX	921.12	1916.30	5772.57	843.96	1916.30	5101.27	819.42	1663.96	5101.27	759.29	1663.96	5746.97
		MIN	-174.19	-1956.01	-20591.38	-183.91	-1956.01	-14279.48	-161.03	-1714.00	-14279.48	-187.82	-1714.00	-10005.89	
110	Live load	L-PICKUP 1	MAX	1664.22	3070.44	7443.03	1448.01	3070.44	7112.59	1481.69	2670.04	7112.59	1317.71	2670.04	9757.66
		MIN	-283.89	-3127.52	-26377.04	-351.18	-3127.52	-19565.86	-250.68	-2750.43	-19565.86	-397.37	-2750.43	-14835.30	
		L-PICKUP 2	MAX	1458.62	2704.62	6906.53	1284.27	2704.62	6709.56	1299.94	2352.80	6709.56	1171.05	2352.80	8732.25
		MIN	-268.11	-2758.78	-24523.23	-332.23	-2758.78	-17871.07	-250.51	-2420.80	-17871.07	-357.17	-2420.80	-13282.60	
		L-PICKUP 3	MAX	1458.62	2704.62	6906.53	1284.27	2704.62	6709.56	1299.94	2352.80	6709.56	1171.05	2352.80	8732.25
		MIN	-268.11	-2758.78	-24523.23	-332.23	-2758.78	-17871.07	-250.51	-2420.80	-17871.07	-357.17	-2420.80	-13282.60	
111	AASHTO Twin	TWIN-PICKUP	MAX	1664.22	3070.44	7443.03	1448.01	3070.44	7112.59	1481.69	2670.04	7112.59	1317.71	2670.04	9757.66
		MIN	-283.89	-3127.52	-26377.04	-351.18	-3127.52	-19565.86	-250.68	-2750.43	-19565.86	-397.37	-2750.43	-14835.30	
		MID-PICKUP	MAX	1458.62	2704.62	6906.53	1284.27	2704.62	6709.56	1299.94	2352.80	6709.56	1171.05	2352.80	8732.25
		MIN	-268.11	-2758.78	-24523.23	-332.23	-2758.78	-17871.07	-250.51	-2420.80	-17871.07	-357.17	-2420.80	-13282.60	
		Live load	MAX	1664.22	3070.44	7443.03	1448.01	3070.44	7112.59	1481.69	2670.04	7112.59	1317.71	2670.04	9757.66
		MIN	-283.89	-3127.52	-26377.04	-351.18	-3127.52	-19565.86	-250.68	-2750.43	-19565.86	-397.37	-2750.43	-14835.30	
198	AASHTO Fatig	TRUCK-LOAD	MAX	1871.89	3594.96	8024.00	1664.59	3594.96	7178.03	1671.17	3124.01	7178.03	1517.03	3124.01	9342.03
		MIN	-286.60	-3662.38	-28316.48	-308.04	-3662.38	-21796.54	-256.43	-3210.57	-21796.54	-373.10	-3210.57	-17181.53	
		MID-PICKUP	MAX	1871.89	3594.96	8024.00	1664.59	3594.96	7178.03	1671.17	3124.01	7178.03	1517.03	3124.01	9342.03
198	AASHTO Fatig	TRUCK-LOAD	MAX	264.65	355.21	289.07	154.71	355.21	549.91	218.56	410.63	549.91	128.92	410.63	970.11
		MIN	-42.86	-437.80	-1183.58	-84.41	-437.80	-1055.28	-33.53	-510.56	-1055.28	-125.99	-510.56	-879.43	
		TANDEM-LOAD	MAX	203.50	240.62	195.98	118.46	240.62	489.60	169.39	281.59	489.60	99.77	281.59	757.26
MIN	-46.53	-299.49	-803.74	-81.28	-299.49	-716.75	-32.25	-349.48	-716.75	-106.74	-349.48	-595.91			

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2048			2049			2049			2050		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	240.73	1019.67	1061.85	204.97	1019.67	1018.81	221.64	869.39	1018.81	201.67	869.39	1193.49
	MIN	-49.44	-1096.63	-4529.26	-54.96	-1096.63	-3075.32	-44.38	-979.80	-3075.32	-63.20	-979.80	-1975.88
199	AASHTO-LRFD TRUCK-LOAD MAX	1158.76	2078.10	3142.99	1005.59	2078.10	2874.32	1037.44	1807.17	2874.32	926.29	1807.17	4633.07
	MIN	-144.25	-2113.30	-10871.37	-158.35	-2113.30	-9938.90	-123.90	-1853.30	-9938.90	-226.74	-1853.30	-9084.70
	TANDEM-LOAD MAX	537.50	788.32	1133.95	440.31	788.32	1608.29	480.51	688.84	1608.29	411.75	688.84	2985.28
	MIN	-93.91	-802.76	-3931.85	-148.31	-802.76	-3591.60	-89.48	-706.80	-3591.60	-169.36	-706.80	-3276.71
	DISPERSION-LMAX	921.12	1916.30	5772.57	843.96	1916.30	5101.27	819.42	1663.96	5101.27	759.29	1663.96	5746.97
	MIN	-174.19	-1956.01	-20591.38	-183.91	-1956.01	-14279.48	-161.03	-1714.00	-14279.48	-187.82	-1714.00	-10005.89
300	Total Dead lWithout snow	2519.82	-77.84	-49383.12	2206.84	-77.84	-30476.48	2197.27	-86.54	-30476.48	1884.28	-86.54	-14150.27
301	Particular Snow	201.19	-11.78	-4038.78	179.44	-11.78	-2516.29	178.86	-15.04	-2516.29	157.11	-15.04	-1172.40
302	Live load Total MAX	1081.75	1995.79	4837.97	941.20	1995.79	4623.18	963.10	1735.53	4623.18	856.51	1735.53	6342.48
	MIN	-186.29	-2380.55	-18405.71	-228.26	-2380.55	-14167.75	-166.68	-2086.87	-14167.75	-258.29	-2086.87	-11168.00
303	Sum total D+L+PP MAX	3802.75	1984.01	-47132.54	3327.48	1984.01	-26982.63	3339.23	1720.49	-26982.63	2897.91	1720.49	-7077.44
	MIN	2478.83	-2470.17	-71827.61	2089.53	-2470.17	-47160.52	2159.44	-2188.45	-47160.52	1705.62	-2188.45	-26490.66

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2050			2051			2051			2052		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	340.08	-28.25	-2620.36	276.25	-28.25	461.25	251.30	-12.58	461.25	187.47	-12.58	2655.14
3	Railing	7.88	-6.21	-84.46	11.25	-6.21	11.18	5.09	-3.01	11.18	8.46	-3.01	78.93
5	Wheel guard	78.00	-61.44	-836.14	111.37	-61.44	110.72	50.38	-29.80	110.72	83.75	-29.80	781.37
8	Steel weight	1282.41	-40.21	-9597.68	983.81	-40.21	1733.37	956.41	-14.99	1733.37	657.81	-14.99	9804.45
10	Medial strip	143.85	26.53	-935.28	83.21	26.53	200.02	111.33	13.54	200.02	50.69	13.54	1010.15
19	Snow	151.46	-14.01	-1172.40	124.28	-14.01	206.28	111.73	-6.30	206.28	84.55	-6.30	1187.67
31	Miscellaneous	11.63	2.14	-76.34	6.73	2.14	15.50	9.01	1.09	15.50	4.11	1.09	81.08
100	AASHTO-LRFD TRUCK-LOAD	623.55	837.17	4010.69	503.45	837.17	6595.33	556.72	757.60	6595.33	432.40	757.60	8490.71
	MIN	-125.64	-878.88	-4829.41	-250.38	-878.88	-4167.22	-171.31	-787.50	-4167.22	-294.85	-787.50	-3421.87
	TANDEM-LOAD	452.82	573.80	2985.28	372.56	573.80	4730.57	407.95	523.31	4730.57	324.49	523.31	6017.05
	MIN	-114.09	-604.51	-3276.71	-196.23	-604.51	-2826.43	-146.17	-542.54	-2826.43	-229.58	-542.54	-2320.91
	DISPERSION-LMAX	726.16	1308.91	5746.97	655.16	1308.91	8458.13	608.09	1080.44	8458.13	542.16	1080.44	11790.38
	MIN	-167.99	-1356.94	-10005.89	-205.64	-1356.94	-7692.66	-195.68	-1103.07	-7692.66	-238.31	-1103.07	-7453.62
110	Live load L-PICKUP 1	1349.70	2146.08	9757.66	1158.61	2146.08	15053.47	1164.81	1838.04	15053.47	974.56	1838.04	20281.09
	MIN	-293.63	-2235.83	-14835.30	-456.02	-2235.83	-11859.88	-366.99	-1890.57	-11859.88	-533.17	-1890.57	-10875.49
	L-PICKUP 2	1178.97	1882.71	8732.25	1027.72	1882.71	13188.71	1016.03	1603.74	13188.71	866.65	1603.74	17807.43
	MIN	-282.08	-1961.45	-13282.60	-401.86	-1961.45	-10519.09	-341.85	-1645.61	-10519.09	-467.89	-1645.61	-9774.53
	L-PICKUP 3	-276.13	-2616.64	-17181.53	-446.10	-2616.64	-13979.79	-355.94	-2202.89	-13979.79	-515.42	-2202.89	-12502.47
	Live load	1349.70	2146.08	9757.66	1158.61	2146.08	15053.47	1164.81	1838.04	15053.47	974.56	1838.04	20281.09
	MIN	-293.63	-2616.64	-17181.53	-456.02	-2616.64	-13979.79	-366.99	-2202.89	-13979.79	-533.17	-2202.89	-12502.47
111	AASHTO Twin TWIN-PICKUP	1508.43	2516.52	9342.03	1321.43	2516.52	16342.80	1281.12	2137.21	16342.80	1095.06	2137.21	22565.48
	MIN	-276.13	-2616.64	-17181.53	-446.10	-2616.64	-13979.79	-355.94	-2202.89	-13979.79	-515.42	-2202.89	-12502.47
	MID-PICKUP	-276.13	-2616.64	-17181.53	-446.10	-2616.64	-13979.79	-355.94	-2202.89	-13979.79	-515.42	-2202.89	-12502.47
198	AASHTO FatigTRUCK-LOAD	219.95	391.64	970.11	115.53	391.64	1418.19	209.02	338.56	1418.19	99.03	338.56	1749.60
	MIN	-36.41	-482.91	-879.43	-149.04	-482.91	-712.03	-48.37	-419.76	-712.03	-161.31	-419.76	-572.61
	TANDEM-LOAD	169.55	267.73	757.26	95.22	267.73	1055.89	162.63	231.34	1055.89	84.12	231.34	1281.58
	MIN	-38.28	-332.20	-595.91	-121.56	-332.20	-482.47	-49.82	-288.93	-482.47	-130.34	-288.93	-388.30

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2050			2051			2051			2052		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	189.18	692.70	1193.49	163.30	692.70	1725.12	153.88	570.21	1725.12	127.19	570.21	2336.43
	MIN	-40.56	-770.69	-1975.88	-64.99	-770.69	-1395.77	-49.87	-627.23	-1395.77	-75.13	-627.23	-1320.88
199	AASHTO-LRFD TRUCK-LOAD MAX	949.88	1487.22	4633.07	813.10	1487.22	9700.53	815.38	1294.24	9700.53	674.57	1294.24	13282.38
	MIN	-138.82	-1550.44	-9084.70	-290.03	-1550.44	-7840.43	-199.81	-1344.59	-7840.43	-334.37	-1344.59	-6438.02
	TANDEM-LOAD MAX	452.82	573.80	2985.28	372.56	573.80	4730.57	407.95	523.31	4730.57	324.49	523.31	6017.05
	MIN	-114.09	-604.51	-3276.71	-196.23	-604.51	-2826.43	-146.17	-542.54	-2826.43	-229.58	-542.54	-2320.91
	DISPERSION-LMAX	726.16	1308.91	5746.97	655.16	1308.91	8458.13	608.09	1080.44	8458.13	542.16	1080.44	11790.38
	MIN	-167.99	-1356.94	-10005.89	-205.64	-1356.94	-7692.66	-195.68	-1103.07	-7692.66	-238.31	-1103.07	-7453.62
300	Total Dead lWithout snow	1863.85	-107.43	-14150.27	1472.62	-107.43	2532.05	1383.52	-45.75	2532.05	992.29	-45.75	14411.12
301	Particular Snow	151.46	-14.01	-1172.40	124.28	-14.01	206.28	111.73	-6.30	206.28	84.55	-6.30	1187.67
302	Live load Total MAX	877.31	1394.95	6342.48	753.09	1394.95	9784.75	757.13	1194.73	9784.75	633.46	1194.73	13182.71
	MIN	-190.86	-1700.82	-11168.00	-296.41	-1700.82	-9086.86	-238.54	-1431.88	-9086.86	-346.56	-1431.88	-8126.61
303	Sum total D+L+PP MAX	2892.61	1380.95	-7077.44	2349.99	1380.95	12523.09	2252.38	1188.42	12523.09	1710.30	1188.42	28781.50
	MIN	1767.19	-1822.26	-26490.66	1211.56	-1822.26	-8880.58	1185.14	-1483.94	-8880.58	626.31	-1483.94	5034.20

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2052	2053			2053			2054						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)				
1	Pavement	160.22	1.58	2655.14	96.39	1.58	3938.20	77.19	1.04	3938.20	13.36	1.04	4390.99	
3	Railing	2.25	-1.13	78.93	5.62	-1.13	118.23	-0.30	-0.31	118.23	3.07	-0.31	132.06	
5	Wheel guard	22.23	-11.23	781.37	55.59	-11.23	1170.47	-2.99	-3.04	1170.47	30.38	-3.04	1307.44	
8	Steel weight	621.70	19.93	9804.45	323.10	19.93	14528.45	316.05	7.86	14528.45	17.45	7.86	16195.97	
10	Medial strip	77.86	8.79	1010.15	17.22	8.79	1485.58	47.04	2.73	1485.58	-13.60	2.73	1652.79	
19	Snow	70.97	0.40	1187.67	43.79	0.40	1761.48	33.83	0.38	1761.48	6.65	0.38	1963.91	
31	Miscellaneous	6.30	0.71	81.08	1.40	0.71	119.62	3.81	0.22	119.62	-1.09	0.22	133.23	
100	AASHTO-LRFD TRUCK-LOAD	MAX	494.81	748.62	8490.71	367.58	748.62	9640.37	441.32	756.29	9640.37	313.34	756.29	10026.12
		MIN	-211.75	-728.96	-3421.87	-338.83	-728.96	-2711.70	-258.88	-751.01	-2711.70	-386.88	-751.01	-2064.62
	TANDEM-LOAD	MAX	366.49	520.21	6017.05	280.54	520.21	6811.95	330.44	526.07	6811.95	243.82	526.07	7090.79
		MIN	-174.68	-506.14	-2320.91	-260.58	-506.14	-1839.23	-207.04	-521.66	-1839.23	-293.66	-521.66	-1400.86
	DISPERSION-LMAX	MAX	489.47	924.58	11790.38	428.52	924.58	13674.94	397.25	842.35	13674.94	340.72	842.35	14302.96
		MIN	-225.91	-924.01	-7453.62	-273.42	-924.01	-7249.91	-269.17	-841.61	-7249.91	-321.08	-841.61	-7140.94
110	Live load L-PICKUP 1	MAX	984.28	1673.20	20281.09	796.11	1673.20	23315.31	838.57	1598.65	23315.31	654.06	1598.65	24329.09
		MIN	-437.65	-1652.97	-10875.49	-612.25	-1652.97	-9961.61	-528.05	-1592.62	-9961.61	-707.96	-1592.62	-9205.56
	L-PICKUP 2	MAX	855.96	1444.79	17807.43	709.06	1444.79	20486.88	727.68	1368.42	20486.88	584.54	1368.42	21393.75
		MIN	-400.58	-1430.15	-9774.53	-534.00	-1430.15	-9089.15	-476.21	-1363.27	-9089.15	-614.74	-1363.27	-8541.80
	L-PICKUP 3	MAX	984.28	1673.20	20281.09	796.11	1673.20	23315.31	838.57	1598.65	23315.31	654.06	1598.65	24329.09
		MIN	-438.71	-1859.94	-12502.47	-607.42	-1859.94	-11116.61	-543.26	-1755.98	-11116.61	-717.74	-1755.98	-9921.61
111	AASHTO Twin TWIN-PICKUP	MAX	1060.81	1867.22	22565.48	877.29	1867.22	26095.47	880.88	1765.42	26095.47	701.07	1765.42	27168.74
		MIN	-438.71	-1859.94	-12502.47	-607.42	-1859.94	-11116.61	-543.26	-1755.98	-11116.61	-717.74	-1755.98	-9921.61
	MID-PICKUP	MAX	1060.81	1867.22	22565.48	877.29	1867.22	26095.47	880.88	1765.42	26095.47	701.07	1765.42	27168.74
		MIN	-438.71	-1859.94	-12502.47	-607.42	-1859.94	-11116.61	-543.26	-1755.98	-11116.61	-717.74	-1755.98	-9921.61
198	AASHTO FatigTRUCK-LOAD	MAX	198.81	272.30	1749.60	86.35	272.30	1951.80	189.81	201.03	1951.80	76.34	201.03	2018.72
		MIN	-58.96	-350.78	-572.61	-171.83	-350.78	-452.44	-67.41	-281.32	-452.44	-180.66	-281.32	-344.41
	TANDEM-LOAD	MAX	155.83	186.60	1281.58	75.21	186.60	1421.71	149.67	141.56	1421.71	68.20	141.56	1470.44
		MIN	-56.67	-241.91	-388.30	-137.56	-241.91	-306.85	-62.15	-195.10	-306.85	-143.48	-195.10	-233.66

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2052			2053			2053			2054		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	127.00	489.47	2336.43	100.16	489.47	2686.00	108.28	449.66	2686.00	81.41	449.66	2797.81
	MIN	-57.98	-521.88	-1320.88	-84.08	-521.88	-1281.74	-67.41	-462.08	-1281.74	-94.03	-462.08	-1262.51
199	AASHTO-LRFD TRUCK-LOAD MAX	689.20	1150.11	13282.38	546.25	1150.11	15320.04	581.50	1119.23	15320.04	438.25	1119.23	15884.53
	MIN	-261.55	-1142.59	-6438.02	-401.48	-1142.59	-5101.87	-334.46	-1109.48	-5101.87	-476.41	-1109.48	-3883.08
	TANDEM-LOAD MAX	366.49	520.21	6017.05	280.54	520.21	6811.95	330.44	526.07	6811.95	243.82	526.07	7090.79
	MIN	-174.68	-506.14	-2320.91	-260.58	-506.14	-1839.23	-207.04	-521.66	-1839.23	-293.66	-521.66	-1400.86
	DISPERSION-LMAX	489.47	924.58	11790.38	428.52	924.58	13674.94	397.25	842.35	13674.94	340.72	842.35	14302.96
	MIN	-225.91	-924.01	-7453.62	-273.42	-924.01	-7249.91	-269.17	-841.61	-7249.91	-321.08	-841.61	-7140.94
300	Total Dead lWithout snow	890.56	18.64	14411.12	499.33	18.64	21360.55	440.81	8.51	21360.55	49.58	8.51	23812.50
301	Particular Snow	70.97	0.40	1187.67	43.79	0.40	1761.48	33.83	0.38	1761.48	6.65	0.38	1963.91
302	Live load Total MAX	639.78	1087.58	13182.71	517.47	1087.58	15154.95	545.07	1039.12	15154.95	425.14	1039.12	15813.91
	MIN	-285.16	-1208.96	-8126.61	-397.96	-1208.96	-7225.80	-353.12	-1141.39	-7225.80	-466.53	-1141.39	-6449.05
303	Sum total D+L+PP MAX	1601.31	1106.62	28781.50	1060.59	1106.62	38276.98	1019.71	1048.00	38276.98	481.37	1048.00	41590.31
	MIN	590.82	-1208.56	5034.20	25.77	-1208.56	13728.50	15.59	-1141.01	13728.50	-459.88	-1141.01	17392.64

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2054	2055			2056			2055			2056				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-3.93	-2.56	4390.99	-67.76	-2.56	4032.51	-87.37	-2.88	4032.51	-151.20	-2.88	2839.68		
3	Railing	-2.78	0.30	132.06	0.59	0.30	121.10	-5.35	1.17	121.10	-1.98	1.17	84.50		
5	Wheel guard	-27.54	2.97	1307.44	5.83	2.97	1198.88	-52.92	11.63	1198.88	-19.55	11.63	836.50		
8	Steel weight	17.30	-13.95	16195.97	-281.30	-13.95	14875.94	-289.80	-25.70	14875.94	-588.40	-25.70	10484.92		
10	Medial strip	16.86	-3.58	1652.79	-43.78	-3.58	1518.21	-14.09	-9.83	1518.21	-74.73	-9.83	1074.10		
19	Snow	-2.45	-1.05	1963.91	-29.64	-1.05	1803.45	-39.78	-0.97	1803.45	-66.96	-0.97	1269.74		
31	Miscellaneous	1.37	-0.29	133.23	-3.53	-0.29	122.46	-1.13	-0.79	122.46	-6.03	-0.79	86.67		
100	AASHTO-LRFD TRUCK-LOAD	MAX	389.69	778.92	10026.12	261.52	778.92	9683.34	341.83	773.22	9683.34	215.29	773.22	8572.26	
		MIN	-311.04	-786.85	-2064.62	-439.35	-786.85	-2737.51	-365.70	-796.30	-2737.51	-492.47	-796.30	-3471.86	
		TANDEM-LOAD	MAX	295.60	541.43	7090.79	208.76	541.43	6842.06	262.56	536.84	6842.06	177.14	536.84	6073.10
		MIN	-242.33	-546.93	-1400.86	-329.23	-546.93	-1857.42	-279.25	-553.14	-1857.42	-364.83	-553.14	-2355.68	
		DISPERSION-L	MAX	328.34	871.46	14302.96	276.24	871.46	13685.08	282.27	976.53	13685.08	234.46	976.53	11810.81
		MIN	-332.56	-874.67	-7140.94	-388.89	-874.67	-7106.04	-422.57	-979.12	-7106.04	-483.22	-979.12	-7172.36	
110	Live load	L-PICKUP 1	MAX	718.03	1650.38	24329.09	537.75	1650.38	23368.41	624.10	1749.74	23368.41	449.75	1749.74	20383.08
		MIN	-643.59	-1661.52	-9205.56	-828.24	-1661.52	-9843.54	-788.27	-1775.42	-9843.54	-975.69	-1775.42	-10644.23	
		L-PICKUP 2	MAX	623.94	1412.89	21393.75	484.99	1412.89	20527.14	544.83	1513.37	20527.14	411.60	1513.37	17883.92
		MIN	-574.89	-1421.60	-8541.80	-718.12	-1421.60	-8963.46	-701.82	-1532.26	-8963.46	-848.05	-1532.26	-9528.05	
		L-PICKUP 3	MAX	689.58	1834.06	24329.09	537.75	1650.38	23368.41	624.10	1749.74	23368.41	449.75	1749.74	20383.08
		MIN	-689.58	-1834.06	-9921.61	-869.30	-1834.06	-11029.19	-868.78	-1979.87	-11029.19	-1051.50	-1979.87	-12331.93	
111	AASHTO Twin	TWIN-PICKUP	MAX	728.22	1818.73	27168.74	553.12	1818.73	26163.36	618.75	1966.92	26163.36	449.74	1966.92	22706.86
		MIN	-689.58	-1834.06	-9921.61	-869.30	-1834.06	-11029.19	-868.78	-1979.87	-11029.19	-1051.50	-1979.87	-12331.93	
		MID-PICKUP	MAX	689.58	1834.06	24329.09	537.75	1650.38	23368.41	624.10	1749.74	23368.41	449.75	1749.74	20383.08
198	AASHTO Fatig	TRUCK-LOAD	MAX	181.03	292.57	2018.72	67.53	292.57	1958.37	172.41	373.34	1958.37	59.81	373.34	1765.57
		MIN	-75.98	-208.30	-344.41	-189.54	-208.30	-456.59	-85.48	-289.27	-456.59	-198.08	-289.27	-581.12	
		TANDEM-LOAD	MAX	143.77	203.20	1470.44	62.21	203.20	1426.39	137.90	257.52	1426.39	57.25	257.52	1292.85
		MIN	-67.93	-146.37	-233.66	-149.53	-146.37	-309.78	-74.62	-198.16	-309.78	-155.28	-198.16	-394.21	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2054			2055			2055			2056		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	95.07	478.57	2797.81	68.42	478.57	2684.89	85.68	551.97	2684.89	59.57	551.97	2344.96
	MIN	-79.83	-466.43	-1262.51	-106.74	-466.43	-1254.92	-98.15	-518.13	-1254.92	-125.01	-518.13	-1271.06
199	AASHTO-LRFD TRUCK-LOAD MAX	480.79	1149.35	15884.53	338.34	1149.35	15385.32	405.24	1208.94	15385.32	265.24	1208.94	13419.03
	MIN	-433.65	-1163.17	-3883.08	-577.00	-1163.17	-5148.62	-542.74	-1220.74	-5148.62	-685.12	-1220.74	-6529.78
	TANDEM-LOAD MAX	295.60	541.43	7090.79	208.76	541.43	6842.06	262.56	536.84	6842.06	177.14	536.84	6073.10
	MIN	-242.33	-546.93	-1400.86	-329.23	-546.93	-1857.42	-279.25	-553.14	-1857.42	-364.83	-553.14	-2355.68
	DISPERSION-LMAX	328.34	871.46	14302.96	276.24	871.46	13685.08	282.27	976.53	13685.08	234.46	976.53	11810.81
	MIN	-332.56	-874.67	-7140.94	-388.89	-874.67	-7106.04	-422.57	-979.12	-7106.04	-483.22	-979.12	-7172.36
300	Total Dead lWithout snow	1.28	-17.11	23812.50	-389.95	-17.11	21869.10	-450.66	-26.40	21869.10	-841.89	-26.40	15406.37
301	Particular Snow	-2.45	-1.05	1963.91	-29.64	-1.05	1803.45	-39.78	-0.97	1803.45	-66.96	-0.97	1269.74
302	Live load Total MAX	466.72	1072.75	15813.91	349.54	1072.75	15189.47	405.66	1137.33	15189.47	292.34	1137.33	13249.00
	MIN	-448.23	-1192.14	-6449.05	-565.05	-1192.14	-7168.97	-564.71	-1286.92	-7168.97	-683.48	-1286.92	-8015.75
303	Sum total D+L+PP MAX	465.54	1071.70	41590.31	34.81	1071.70	38862.01	36.93	1136.37	38862.01	-528.81	1136.37	29925.11
	MIN	-450.68	-1210.30	17392.64	-984.64	-1210.30	14352.88	-1055.14	-1314.28	14352.88	-1592.33	-1314.28	6255.63

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2056	2057			2057			2058						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
														S2 (kN)
1	Pavement	-179.23	11.82	2839.68	-243.05	11.82	728.28	-271.74	33.04	728.28	-335.56	33.04	-2308.22	
3	Railing	-8.21	3.07	84.50	-4.84	3.07	19.21	-11.12	6.39	19.21	-7.75	6.39	-75.13	
5	Wheel guard	-81.32	30.38	836.50	-47.95	30.38	190.15	-110.07	63.26	190.15	-76.71	63.26	-743.77	
8	Steel weight	-627.35	11.21	10484.92	-925.95	11.21	2718.43	-967.11	57.45	2718.43	-1265.71	57.45	-8445.62	
10	Medial strip	-47.85	-14.37	1074.10	-108.49	-14.37	292.37	-81.75	-24.99	292.37	-142.38	-24.99	-828.27	
19	Snow	-80.88	5.98	1269.74	-108.07	5.98	325.00	-122.28	16.16	325.00	-149.47	16.16	-1033.75	
31	Miscellaneous	-3.86	-1.16	86.67	-8.76	-1.16	23.61	-6.59	-2.02	23.61	-11.49	-2.02	-66.84	
100	AASHTO-LRFD TRUCK-LOAD	MAX	298.22	814.98	8572.26	175.69	814.98	6720.68	249.88	895.74	6720.68	126.64	895.74	4102.62
		MIN	-429.25	-788.09	-3471.86	-552.90	-788.09	-4259.53	-506.12	-849.08	-4259.53	-624.94	-849.08	-4946.00
	TANDEM-LOAD	MAX	231.73	561.03	6073.10	149.32	561.03	4817.18	195.56	615.59	4817.18	114.89	615.59	3048.34
		MIN	-322.27	-544.28	-2355.68	-405.15	-544.28	-2890.10	-374.38	-581.83	-2890.10	-453.49	-581.83	-3356.62
	DISPERSION-LMAX	MAX	248.33	1139.69	11810.81	205.29	1139.69	8495.34	214.27	1381.29	8495.34	176.69	1381.29	5763.26
		MIN	-538.64	-1118.28	-7172.36	-604.15	-1118.28	-7293.25	-656.43	-1325.44	-7293.25	-727.48	-1325.44	-9511.48
110	Live load L-PICKUP 1	MAX	546.55	1954.66	20383.08	380.98	1954.66	15216.02	464.15	2277.03	15216.02	303.33	2277.03	9865.87
		MIN	-967.89	-1906.37	-10644.23	-1157.05	-1906.37	-11552.78	-1162.55	-2174.52	-11552.78	-1352.43	-2174.52	-14457.48
	L-PICKUP 2	MAX	480.07	1700.72	17883.92	354.61	1700.72	13312.52	409.83	1996.88	13312.52	291.58	1996.88	8811.60
		MIN	-860.90	-1662.56	-9528.05	-1009.30	-1662.56	-10183.35	-1030.81	-1907.27	-10183.35	-1180.97	-1907.27	-12868.11
	L-PICKUP 3	MAX	546.55	1954.66	20383.08	380.98	1954.66	15216.02	464.15	2277.03	15216.02	303.33	2277.03	9865.87
		MIN	-1087.83	-2214.67	-12331.93	-1272.55	-2214.67	-13774.09	-1327.21	-2552.28	-13774.09	-1513.13	-2552.28	-16931.74
111	AASHTO Twin TWIN-PICKUP	MAX	527.36	2277.16	22706.86	368.05	2277.16	16563.34	453.54	2666.64	16563.34	284.25	2666.64	9499.45
		MIN	-1087.83	-2214.67	-12331.93	-1272.55	-2214.67	-13774.09	-1327.21	-2552.28	-13774.09	-1513.13	-2552.28	-16931.74
	MID-PICKUP	MAX	527.36	2277.16	22706.86	368.05	2277.16	16563.34	453.54	2666.64	16563.34	284.25	2666.64	9499.45
	MIN	-1087.83	-2214.67	-12331.93	-1272.55	-2214.67	-13774.09	-1327.21	-2552.28	-13774.09	-1513.13	-2552.28	-16931.74	
	AASHTO FatigTRUCK-LOAD	MAX	162.14	435.76	1765.57	49.77	435.76	1446.07	148.73	492.14	1446.07	36.77	492.14	991.49
		MIN	-97.72	-351.85	-581.12	-207.87	-351.85	-728.47	-115.93	-398.46	-728.47	-219.80	-398.46	-901.34
198	TANDEM-LOAD	MAX	130.78	299.69	1292.85	50.79	299.69	1075.62	121.18	338.18	1075.62	38.47	338.18	772.15
		MIN	-83.23	-240.41	-394.21	-161.74	-240.41	-493.78	-95.56	-272.50	-493.78	-169.29	-272.50	-610.54

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2056			2057			2057			2058		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	77.22	648.43	2344.96	51.91	648.43	1734.20	66.57	783.56	1734.20	42.17	783.56	1198.13
	MIN	-126.10	-589.64	-1271.06	-152.79	-589.64	-1325.53	-164.23	-702.34	-1325.53	-190.09	-702.34	-1886.17
199	AASHTO-LRFD TRUCK-LOAD MAX	337.63	1390.49	13419.03	203.65	1390.49	9908.37	289.66	1581.64	9908.37	139.15	1581.64	4791.68
	MIN	-670.06	-1342.46	-6529.78	-809.80	-1342.46	-8011.30	-818.25	-1510.42	-8011.30	-953.77	-1510.42	-9301.57
	TANDEM-LOAD MAX	231.73	561.03	6073.10	149.32	561.03	4817.18	195.56	615.59	4817.18	114.89	615.59	3048.34
	MIN	-322.27	-544.28	-2355.68	-405.15	-544.28	-2890.10	-374.38	-581.83	-2890.10	-453.49	-581.83	-3356.62
	DISPERSION-LMAX	248.33	1139.69	11810.81	205.29	1139.69	8495.34	214.27	1381.29	8495.34	176.69	1381.29	5763.26
	MIN	-538.64	-1118.28	-7172.36	-604.15	-1118.28	-7293.25	-656.43	-1325.44	-7293.25	-727.48	-1325.44	-9511.48
300	Total Dead lWithout snow	-947.82	40.95	15406.37	-1339.05	40.95	3972.04	-1448.37	133.13	3972.04	-1839.60	133.13	-12467.85
301	Particular Snow	-80.88	5.98	1269.74	-108.07	5.98	325.00	-122.28	16.16	325.00	-149.47	16.16	-1033.75
302	Live load Total MAX	355.26	1270.53	13249.00	247.64	1270.53	9890.41	301.70	1480.07	9890.41	197.16	1480.07	6412.82
	MIN	-707.09	-1439.53	-8015.75	-827.16	-1439.53	-8953.16	-862.69	-1658.98	-8953.16	-983.53	-1658.98	-11005.63
303	Sum total D+L+PP MAX	-566.86	1317.46	29925.11	-1125.18	1317.46	14187.46	-1178.45	1629.36	14187.46	-1732.76	1629.36	-5164.93
	MIN	-1735.79	-1433.55	6255.63	-2274.27	-1433.55	-7342.07	-2433.34	-1642.82	-7342.07	-2972.61	-1642.82	-24507.23

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2058	2059			2059			2060					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
1	Pavement	-345.56	33.52	-2308.22	-396.62	33.52	-5276.93	-391.29	16.36	-5276.93	-442.35	16.36	-8611.48
3	Railing	-12.19	9.23	-75.13	-9.50	9.23	-161.88	-9.10	5.98	-161.88	-6.41	5.98	-223.91
5	Wheel guard	-120.70	91.37	-743.77	-94.01	91.37	-1602.58	-90.12	59.20	-1602.58	-63.42	59.20	-2216.75
8	Steel weight	-1253.09	25.45	-8445.62	-1491.97	25.45	-19425.90	-1475.08	-5.19	-19425.90	-1713.96	-5.19	-32182.07
10	Medial strip	-117.41	-44.41	-828.27	-165.92	-44.41	-1961.62	-165.53	-31.90	-1961.62	-214.04	-31.90	-3479.90
19	Snow	-155.00	17.10	-1033.75	-176.75	17.10	-2360.73	-174.30	8.73	-2360.73	-196.05	8.73	-3842.13
31	Miscellaneous	-9.48	-3.59	-66.84	-13.40	-3.59	-158.34	-13.37	-2.58	-158.34	-17.29	-2.58	-280.95
100	AASHTO-LRFD TRUCK-LOAD	208.13	1043.11	4102.62	89.35	1043.11	2103.20	166.13	1137.02	2103.20	108.23	1137.02	1802.70
	MIN	-562.56	-1008.16	-4946.00	-665.07	-1008.16	-5401.40	-604.87	-1127.03	-5401.40	-742.92	-1127.03	-5871.80
	TANDEM-LOAD	168.08	711.16	3048.34	88.92	711.16	1670.61	147.36	778.92	1670.61	92.80	778.92	1225.69
	MIN	-414.40	-690.20	-3356.62	-482.16	-690.20	-3669.74	-440.80	-769.72	-3669.74	-537.31	-769.72	-3989.76
	DISPERSION-LMAX	194.11	1725.00	5763.26	167.47	1725.00	5108.99	185.29	1900.63	5108.99	175.56	1900.63	5774.85
	MIN	-757.80	-1667.42	-9511.48	-818.06	-1667.42	-13713.71	-826.52	-1871.98	-13713.71	-903.67	-1871.98	-19869.63
110	Live load L-PICKUP 1	402.24	2768.10	9865.87	256.81	2768.10	7212.19	351.42	3037.65	7212.19	283.79	3037.65	7577.56
	MIN	-1320.36	-2675.58	-14457.48	-1483.13	-2675.58	-19115.11	-1431.40	-2999.01	-19115.11	-1646.60	-2999.01	-25741.43
	L-PICKUP 2	362.19	2436.15	8811.60	256.38	2436.15	6779.60	332.65	2679.55	6779.60	268.36	2679.55	7000.54
	MIN	-1172.21	-2357.62	-12868.11	-1300.22	-2357.62	-17383.45	-1267.32	-2641.70	-17383.45	-1440.99	-2641.70	-23859.38
	L-PICKUP 3	-1521.62	-3134.13	-16931.74	-1675.08	-3134.13	-21480.12	-1647.59	-3516.04	-21480.12	-1854.48	-3516.04	-27811.61
	Live load	402.24	2768.10	9865.87	256.81	2768.10	7212.19	351.42	3037.65	7212.19	283.79	3037.65	7577.56
	MIN	-1521.62	-3134.13	-16931.74	-1675.08	-3134.13	-21480.12	-1647.59	-3516.04	-21480.12	-1854.48	-3516.04	-27811.61
111	AASHTO Twin TWIN-PICKUP	377.40	3235.45	9499.45	261.91	3235.45	7404.14	307.48	3559.92	7404.14	285.94	3559.92	8242.47
	MIN	-1521.62	-3134.13	-16931.74	-1675.08	-3134.13	-21480.12	-1647.59	-3516.04	-21480.12	-1854.48	-3516.04	-27811.61
	MID-PICKUP	-1521.62	-3134.13	-16931.74	-1675.08	-3134.13	-21480.12	-1647.59	-3516.04	-21480.12	-1854.48	-3516.04	-27811.61
198	AASHTO FatigTRUCK-LOAD	125.51	514.25	991.49	33.50	514.25	558.71	84.32	426.84	558.71	42.91	426.84	310.75
	MIN	-129.96	-413.62	-901.34	-218.84	-413.62	-1076.56	-154.99	-347.91	-1076.56	-264.70	-347.91	-1197.60
	TANDEM-LOAD	106.29	351.76	772.15	32.23	351.76	495.14	81.19	291.80	495.14	46.47	291.80	211.52
	MIN	-100.86	-283.52	-610.54	-169.45	-283.52	-730.89	-118.58	-235.80	-730.89	-203.50	-235.80	-812.83

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2058			2059			2059			2060		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	64.23	985.57	1198.13	45.45	985.57	1019.52	55.06	1067.06	1019.52	49.51	1067.06	1060.37
	MIN	-202.60	-872.51	-1886.17	-222.44	-872.51	-2976.25	-202.10	-995.03	-2976.25	-237.77	-995.03	-4402.83
199	AASHTO-LRFD TRUCK-LOAD MAX	225.22	1869.95	4791.68	123.55	1869.95	3117.83	156.36	2054.83	3117.83	142.15	2054.83	3383.44
	MIN	-932.89	-1814.95	-9301.57	-1043.13	-1814.95	-10153.09	-1004.13	-2034.73	-10153.09	-1156.86	-2034.73	-11032.16
	TANDEM-LOAD MAX	168.08	711.16	3048.34	88.92	711.16	1670.61	147.36	778.92	1670.61	92.80	778.92	1225.69
	MIN	-414.40	-690.20	-3356.62	-482.16	-690.20	-3669.74	-440.80	-769.72	-3669.74	-537.31	-769.72	-3989.76
	DISPERSION-LMAX	194.11	1725.00	5763.26	167.47	1725.00	5108.99	185.29	1900.63	5108.99	175.56	1900.63	5774.85
	MIN	-757.80	-1667.42	-9511.48	-818.06	-1667.42	-13713.71	-826.52	-1871.98	-13713.71	-903.67	-1871.98	-19869.63
300	Total Dead lWithout snow	-1858.43	111.57	-12467.85	-2171.42	111.57	-28587.25	-2144.49	41.87	-28587.25	-2457.47	41.87	-46995.07
301	Particular Snow	-155.00	17.10	-1033.75	-176.75	17.10	-2360.73	-174.30	8.73	-2360.73	-196.05	8.73	-3842.13
302	Live load Total MAX	261.45	1799.27	6412.82	166.93	1799.27	4687.93	228.42	1974.47	4687.93	184.46	1974.47	4925.41
	MIN	-989.06	-2037.19	-11005.63	-1088.80	-2037.19	-13962.08	-1070.93	-2285.43	-13962.08	-1205.41	-2285.43	-18077.54
303	Sum total D+L+PP MAX	-1673.54	1927.94	-5164.93	-2131.16	1927.94	-24853.67	-2021.84	2025.07	-24853.67	-2413.72	2025.07	-44434.17
	MIN	-3002.49	-2020.09	-24507.23	-3436.96	-2020.09	-44910.06	-3389.72	-2276.70	-44910.06	-3858.93	-2276.70	-68914.74

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2060 2060	2061			2062			2061			2062			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	433.61	-22.81	-8611.48	382.55	-22.81	-5346.82	381.69	-30.04	-5346.82	330.63	-30.04	-2497.55	
3	Railing	6.15	-6.17	-223.91	8.84	-6.17	-163.96	9.04	-9.10	-163.96	11.73	-9.10	-80.87	
5	Wheel guard	60.85	-61.05	-2216.75	87.54	-61.05	-1623.19	89.47	-90.07	-1623.19	116.17	-90.07	-800.64	
8	Steel weight	1681.71	-18.69	-32182.07	1442.83	-18.69	-19683.93	1437.01	-12.95	-19683.93	1198.13	-12.95	-9143.36	
10	Medial strip	210.65	29.43	-3479.90	162.14	29.43	-1988.74	160.28	45.53	-1988.74	111.77	45.53	-900.51	
19	Snow	192.13	-11.61	-3842.13	170.39	-11.61	-2392.04	170.06	-15.54	-2392.04	148.31	-15.54	-1118.55	
31	Miscellaneous	17.02	2.38	-280.95	13.10	2.38	-160.47	12.95	3.68	-160.47	9.03	3.68	-72.56	
100	AASHTO-LRFD TRUCK-LOAD	MAX	741.73	1123.00	1802.70	602.63	1123.00	1966.90	659.76	1008.62	1966.90	555.30	1008.62	3919.32
		MIN	-112.65	-1138.73	-5871.80	-168.29	-1138.73	-5141.25	-93.90	-1037.24	-5141.25	-214.57	-1037.24	-4651.59
	TANDEM-LOAD	MAX	536.63	766.93	1225.69	439.45	766.93	1578.61	478.91	690.61	1578.61	409.58	690.61	2924.15
		MIN	-96.07	-780.24	-3989.76	-149.08	-780.24	-3492.84	-92.13	-707.14	-3492.84	-172.95	-707.14	-3155.60
	DISPERSION-LMAX	MAX	890.81	1858.76	5774.85	813.70	1858.76	5056.10	791.47	1650.34	5056.10	731.56	1650.34	5573.26
		MIN	-176.80	-1897.90	-19869.63	-186.57	-1897.90	-13774.62	-165.10	-1702.25	-13774.62	-192.11	-1702.25	-9629.39
110	Live load L-PICKUP 1	MAX	1632.54	2981.77	7577.56	1416.33	2981.77	7023.00	1451.23	2658.96	7023.00	1286.86	2658.96	9492.58
		MIN	-289.45	-3036.64	-25741.43	-354.86	-3036.64	-18915.87	-259.00	-2739.49	-18915.87	-406.69	-2739.49	-14280.97
	L-PICKUP 2	MAX	1427.44	2625.69	7000.54	1253.15	2625.69	6634.71	1270.38	2340.95	6634.71	1141.14	2340.95	8497.41
		MIN	-272.86	-2678.14	-23859.38	-335.65	-2678.14	-17267.46	-257.23	-2409.39	-17267.46	-365.06	-2409.39	-12784.99
	L-PICKUP 3	MAX	1632.54	2981.77	7577.56	1416.33	2981.77	7023.00	1451.23	2658.96	7023.00	1286.86	2658.96	9492.58
		MIN	-293.35	-3561.28	-27811.61	-315.48	-3561.28	-21103.72	-269.25	-3205.71	-21103.72	-406.69	-3205.71	-16547.55
111	AASHTO Twin TWIN-PICKUP	MAX	1842.29	3495.49	8242.47	1634.95	3495.49	7031.17	1642.11	3116.63	7031.17	1487.84	3116.63	8995.84
		MIN	-293.35	-3561.28	-27811.61	-315.48	-3561.28	-21103.72	-269.25	-3205.71	-21103.72	-383.52	-3205.71	-16547.55
	MID-PICKUP	MAX	1842.29	3495.49	8242.47	1634.95	3495.49	7031.17	1642.11	3116.63	7031.17	1487.84	3116.63	8995.84
		MIN	-293.35	-3561.28	-27811.61	-315.48	-3561.28	-21103.72	-269.25	-3205.71	-21103.72	-383.52	-3205.71	-16547.55
198	AASHTO FatigTRUCK-LOAD	MAX	264.56	348.45	310.75	154.49	348.45	546.33	217.99	415.18	546.33	128.13	415.18	956.41
		MIN	-42.69	-426.27	-1197.60	-84.59	-426.27	-1031.81	-33.82	-510.19	-1031.81	-126.66	-510.19	-850.42
	TANDEM-LOAD	MAX	203.48	236.26	211.52	118.29	236.26	487.21	169.07	284.68	487.21	99.24	284.68	748.17
		MIN	-46.52	-291.63	-812.83	-81.45	-291.63	-701.01	-32.54	-348.81	-701.01	-107.26	-348.81	-576.44

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2060			2061			2061			2062		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	236.22	988.86	1060.37	200.50	988.86	1007.22	217.25	862.75	1007.22	197.30	862.75	1155.37
	MIN	-49.45	-1064.49	-4402.83	-55.00	-1064.49	-2983.46	-44.50	-973.51	-2983.46	-63.42	-973.51	-1905.99
199	AASHTO-LRFD TRUCK-LOAD MAX	1156.18	2025.11	3383.44	1002.91	2025.11	2756.31	1033.09	1812.59	2756.31	921.60	1812.59	4422.12
	MIN	-149.15	-2059.08	-11032.16	-163.96	-2059.08	-9673.96	-134.07	-1859.65	-9673.96	-234.02	-1859.65	-8756.78
	TANDEM-LOAD MAX	536.63	766.93	1225.69	439.45	766.93	1578.61	478.91	690.61	1578.61	409.58	690.61	2924.15
	MIN	-96.07	-780.24	-3989.76	-149.08	-780.24	-3492.84	-92.13	-707.14	-3492.84	-172.95	-707.14	-3155.60
	DISPERSION-LMAX	890.81	1858.76	5774.85	813.70	1858.76	5056.10	791.47	1650.34	5056.10	731.56	1650.34	5573.26
	MIN	-176.80	-1897.90	-19869.63	-186.57	-1897.90	-13774.62	-165.10	-1702.25	-13774.62	-192.11	-1702.25	-9629.39
300	Total Dead lWithout snow	2409.99	-76.92	-46995.07	2097.00	-76.92	-28967.10	2090.44	-92.96	-28967.10	1777.46	-92.96	-13495.49
301	Particular Snow	192.13	-11.61	-3842.13	170.39	-11.61	-2392.04	170.06	-15.54	-2392.04	148.31	-15.54	-1118.55
302	Live load Total	1061.15	1938.15	4925.41	920.62	1938.15	4564.95	943.30	1728.32	4564.95	836.46	1728.32	6170.18
	MIN	-190.68	-2314.83	-18077.54	-230.66	-2314.83	-13717.42	-175.01	-2083.71	-13717.42	-264.35	-2083.71	-10755.91
303	Sum total D+L+PP	3663.27	1926.54	-44434.17	3188.01	1926.54	-25424.71	3203.80	1712.78	-25424.71	2762.23	1712.78	-6592.81
	MIN	2354.24	-2403.36	-68914.74	1967.54	-2403.36	-45076.56	2032.98	-2192.22	-45076.56	1582.12	-2192.22	-25369.95

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	2062			2063			2063			2064		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	317.78	-24.90	-2497.55	253.95	-24.90	361.13	234.28	-18.85	361.13	170.45	-18.85	2384.78
3	Railing	7.21	-6.12	-80.87	10.58	-6.12	8.11	4.58	-3.32	8.11	7.95	-3.32	70.79
5	Wheel guard	71.41	-60.58	-800.64	104.77	-60.58	80.25	45.38	-32.85	80.25	78.74	-32.85	700.86
8	Steel weight	1200.13	-27.70	-9143.36	901.53	-27.70	1364.92	893.54	-36.65	1364.92	594.94	-36.65	8807.31
10	Medial strip	135.61	27.88	-900.51	74.98	27.88	152.44	105.08	12.00	152.44	44.44	12.00	900.01
19	Snow	141.51	-12.51	-1118.55	114.32	-12.51	160.58	104.14	-9.13	160.58	76.95	-9.13	1066.02
31	Miscellaneous	10.96	2.25	-72.56	6.06	2.25	12.50	8.49	0.97	12.50	3.59	0.97	72.88
100	AASHTO-LRFD TRUCK-LOAD	628.00	846.13	3919.32	508.37	846.13	6525.35	573.32	792.45	6525.35	450.87	792.45	8585.39
	MIN	-126.60	-888.73	-4651.59	-252.57	-888.73	-4038.41	-165.12	-844.68	-4038.41	-287.94	-844.68	-3395.73
	TANDEM-LOAD MAX	455.83	579.55	2924.15	375.84	579.55	4684.34	419.09	546.86	4684.34	337.20	546.86	6086.76
	MIN	-114.65	-611.11	-3155.60	-197.72	-611.11	-2738.26	-141.76	-582.53	-2738.26	-224.75	-582.53	-2302.50
	DISPERSION-LMAX	689.40	1306.08	5573.26	618.12	1306.08	8079.28	576.96	1112.27	8079.28	509.77	1112.27	11374.94
	MIN	-167.52	-1348.68	-9629.39	-204.88	-1348.68	-7474.15	-192.18	-1145.38	-7474.15	-233.57	-1145.38	-7476.07
110	Live load L-PICKUP 1	1317.41	2152.22	9492.58	1126.49	2152.22	14604.62	1150.28	1904.71	14604.62	960.64	1904.71	19960.33
	MIN	-294.11	-2237.41	-14280.97	-457.46	-2237.41	-11512.57	-357.30	-1990.06	-11512.57	-521.51	-1990.06	-10871.80
	L-PICKUP 2 MAX	1145.23	1885.63	8497.41	993.96	1885.63	12763.62	996.05	1659.13	12763.62	846.96	1659.13	17461.69
	MIN	-282.16	-1959.79	-12784.99	-402.61	-1959.79	-10212.41	-333.94	-1727.91	-10212.41	-458.33	-1727.91	-9778.57
	L-PICKUP 3	-280.91	-2620.60	-16547.55	-450.07	-2620.60	-13570.55	-352.84	-2317.21	-13570.55	-508.82	-2317.21	-12483.06
	Live load MAX	1317.41	2152.22	9492.58	1126.49	2152.22	14604.62	1150.28	1904.71	14604.62	960.64	1904.71	19960.33
	MIN	-294.11	-2620.60	-16547.55	-457.46	-2620.60	-13570.55	-357.30	-2317.21	-13570.55	-521.51	-2317.21	-12483.06
111	AASHTO Twin TWIN-PICKUP	1481.86	2525.33	8995.84	1294.38	2525.33	15834.03	1279.04	2210.37	15834.03	1091.67	2210.37	22264.08
	MIN	-280.91	-2620.60	-16547.55	-450.07	-2620.60	-13570.55	-352.84	-2317.21	-13570.55	-508.82	-2317.21	-12483.06
	MID-PICKUP	-280.91	-2620.60	-16547.55	-450.07	-2620.60	-13570.55	-352.84	-2317.21	-13570.55	-508.82	-2317.21	-12483.06
198	AASHTO FatigTRUCK-LOAD	220.52	398.22	956.41	116.44	398.22	1406.75	211.56	356.40	1406.75	102.62	356.40	1763.40
	MIN	-35.96	-489.89	-850.42	-148.40	-489.89	-690.68	-45.99	-450.76	-690.68	-158.60	-450.76	-568.10
	TANDEM-LOAD MAX	169.92	272.24	748.17	95.86	272.24	1048.40	164.30	243.27	1048.40	86.76	243.27	1291.58
	MIN	-37.75	-336.83	-576.44	-121.09	-336.83	-467.86	-48.37	-310.63	-467.86	-128.45	-310.63	-385.12

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2062			2063			2063			2064		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	183.00	690.43	1155.37	157.19	690.43	1651.10	148.39	588.16	1651.10	121.81	588.16	2266.78
	MIN	-40.42	-766.72	-1905.99	-64.78	-766.72	-1356.05	-48.75	-651.78	-1356.05	-73.74	-651.78	-1325.60
199	AASHTO-LRFD TRUCK-LOAD MAX	957.11	1499.84	4422.12	820.07	1499.84	9514.09	844.20	1343.70	9514.09	703.20	1343.70	13362.92
	MIN	-144.60	-1563.10	-8756.78	-295.20	-1563.10	-7604.24	-199.86	-1429.30	-7604.24	-331.79	-1429.30	-6394.00
	TANDEM-LOAD MAX	455.83	579.55	2924.15	375.84	579.55	4684.34	419.09	546.86	4684.34	337.20	546.86	6086.76
	MIN	-114.65	-611.11	-3155.60	-197.72	-611.11	-2738.26	-141.76	-582.53	-2738.26	-224.75	-582.53	-2302.50
	DISPERSION-LMAX	689.40	1306.08	5573.26	618.12	1306.08	8079.28	576.96	1112.27	8079.28	509.77	1112.27	11374.94
	MIN	-167.52	-1348.68	-9629.39	-204.88	-1348.68	-7474.15	-192.18	-1145.38	-7474.15	-233.57	-1145.38	-7476.07
300	Total Dead lWithout snow	1743.10	-89.16	-13495.49	1351.87	-89.16	1979.33	1291.35	-78.70	1979.33	900.12	-78.70	12936.64
301	Particular Snow	141.51	-12.51	-1118.55	114.32	-12.51	160.58	104.14	-9.13	160.58	76.95	-9.13	1066.02
302	Live load Total MAX	856.31	1398.94	6170.18	732.22	1398.94	9493.01	747.68	1238.06	9493.01	624.42	1238.06	12974.22
	MIN	-191.17	-1703.39	-10755.91	-297.35	-1703.39	-8820.86	-232.25	-1506.19	-8820.86	-338.98	-1506.19	-8113.99
303	Sum total D+L+PP MAX	2740.92	1386.43	-6592.81	2198.41	1386.43	11632.92	2143.16	1228.93	11632.92	1601.48	1228.93	26976.88
	MIN	1636.08	-1805.07	-25369.95	1079.64	-1805.07	-8660.27	1093.56	-1594.03	-8660.27	536.39	-1594.03	3454.48

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2064			2065			2065			2066				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	143.67	-6.93	2384.78	79.84	-6.93	3502.35	53.73	1.51	3502.35	-10.09	1.51	3720.55		
3	Railing	1.75	-1.52	70.79	5.12	-1.52	105.11	-1.02	-0.34	105.11	2.36	-0.34	111.81		
5	Wheel guard	17.29	-15.08	700.86	50.66	-15.08	1040.59	-10.05	-3.40	1040.59	23.32	-3.40	1106.91		
8	Steel weight	560.67	-9.87	8807.31	262.07	-9.87	12921.01	229.62	10.22	12921.01	-68.98	10.22	13724.20		
10	Medial strip	71.83	6.51	900.01	11.20	6.51	1315.15	38.46	3.26	1315.15	-22.18	3.26	1396.52		
19	Snow	63.59	-3.44	1066.02	36.40	-3.44	1565.99	23.36	0.58	1565.99	-3.83	0.58	1663.63		
31	Miscellaneous	5.80	0.53	72.88	0.90	0.53	106.40	3.10	0.26	106.40	-1.80	0.26	112.94		
100	AASHTO-LRFD TRUCK-LOAD	MAX	506.01	836.78	8585.39	381.48	836.78	9817.07	440.54	844.50	9817.07	314.86	844.50	10130.89	
		MIN	-210.21	-832.63	-3395.73	-335.24	-832.63	-2712.38	-268.76	-826.14	-2712.38	-394.27	-826.14	-2251.62	
		TANDEM-LOAD	MAX	373.79	581.70	6086.76	290.26	581.70	6939.84	329.68	588.14	6939.84	245.17	588.14	7166.67
		MIN	-173.73	-579.60	-2302.50	-257.80	-579.60	-1839.15	-213.93	-575.38	-1839.15	-298.30	-575.38	-1530.91	
		DISPERSION-L	MAX	466.59	1007.21	11374.94	404.92	1007.21	13105.00	371.71	911.02	13105.00	315.55	911.02	13335.22
		MIN	-230.03	-1020.73	-7476.07	-276.84	-1020.73	-7388.15	-281.89	-909.41	-7388.15	-334.16	-909.41	-7263.45	
110	Live load	L-PICKUP 1	MAX	972.60	1843.99	19960.33	786.40	1843.99	22922.08	812.26	1755.52	22922.08	630.41	1755.52	23466.11
		MIN	-440.24	-1853.36	-10871.80	-612.07	-1853.36	-10100.53	-550.65	-1735.55	-10100.53	-728.44	-1735.55	-9515.08	
		L-PICKUP 2	MAX	840.38	1588.91	17461.69	695.18	1588.91	20044.85	701.39	1499.16	20044.85	560.72	1499.16	20501.89
		MIN	-403.76	-1600.33	-9778.57	-534.64	-1600.33	-9227.30	-495.82	-1484.79	-9227.30	-632.46	-1484.79	-8794.37	
		L-PICKUP 3	MAX	972.60	1843.99	19960.33	786.40	1843.99	22922.08	812.26	1755.52	22922.08	630.41	1755.52	23466.11
		MIN	-444.04	-2073.55	-12483.06	-610.06	-2073.55	-11245.88	-568.05	-1908.04	-11245.88	-742.16	-1908.04	-10340.52	
111	AASHTO Twin	TWIN-PICKUP	MAX	1058.35	2051.79	22264.08	874.79	2051.79	25779.85	857.66	1936.32	25779.85	679.63	1936.32	26406.98
		MIN	-444.04	-2073.55	-12483.06	-610.06	-2073.55	-11245.88	-568.05	-1908.04	-11245.88	-742.16	-1908.04	-10340.52	
		MID-PICKUP	MAX	1058.35	2051.79	22264.08	874.79	2051.79	25779.85	857.66	1936.32	25779.85	679.63	1936.32	26406.98
198	AASHTO Fatig	TRUCK-LOAD	MAX	200.14	302.23	1763.40	88.56	302.23	1973.63	189.17	230.11	1973.63	77.05	230.11	2027.65
		MIN	-58.81	-398.72	-568.10	-170.49	-398.72	-452.18	-69.46	-308.24	-452.18	-181.41	-308.24	-376.46	
		TANDEM-LOAD	MAX	156.72	206.63	1291.58	77.08	206.63	1437.35	149.28	162.25	1437.35	69.14	162.25	1476.53
		MIN	-56.91	-275.84	-385.12	-136.65	-275.84	-306.62	-64.00	-214.95	-306.62	-144.03	-214.95	-256.01	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2064			2065			2065			2066		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	121.53	534.37	2266.78	94.71	534.37	2572.19	103.38	486.80	2572.19	76.48	486.80	2615.29
	MIN	-58.46	-575.10	-1325.60	-84.37	-575.10	-1304.92	-69.38	-498.40	-1304.92	-95.99	-498.40	-1285.99
199	AASHTO-LRFD TRUCK-LOAD MAX	709.36	1272.55	13362.92	567.07	1272.55	15539.27	581.24	1240.44	15539.27	439.59	1240.44	16005.87
	MIN	-263.35	-1283.21	-6394.00	-401.01	-1283.21	-5107.27	-349.28	-1210.64	-5107.27	-490.46	-1210.64	-4226.01
	TANDEM-LOAD MAX	373.79	581.70	6086.76	290.26	581.70	6939.84	329.68	588.14	6939.84	245.17	588.14	7166.67
	MIN	-173.73	-579.60	-2302.50	-257.80	-579.60	-1839.15	-213.93	-575.38	-1839.15	-298.30	-575.38	-1530.91
	DISPERSION-LMAX	466.59	1007.21	11374.94	404.92	1007.21	13105.00	371.71	911.02	13105.00	315.55	911.02	13335.22
	MIN	-230.03	-1020.73	-7476.07	-276.84	-1020.73	-7388.15	-281.89	-909.41	-7388.15	-334.16	-909.41	-7263.45
300	Total Dead lWithout snow	801.01	-26.37	12936.64	409.78	-26.37	18990.60	313.85	11.51	18990.60	-77.38	11.51	20172.93
301	Particular Snow	63.59	-3.44	1066.02	36.40	-3.44	1565.99	23.36	0.58	1565.99	-3.83	0.58	1663.63
302	Live load Total MAX	632.19	1198.60	12974.22	511.16	1198.60	14899.35	527.97	1141.09	14899.35	409.76	1141.09	15252.97
	MIN	-288.63	-1347.81	-8113.99	-397.85	-1347.81	-7309.82	-369.23	-1240.23	-7309.82	-482.40	-1240.23	-6721.34
303	Sum total D+L+PP MAX	1496.79	1195.16	26976.88	957.35	1195.16	35455.94	865.17	1153.17	35455.94	405.94	1153.17	37089.53
	MIN	489.38	-1377.62	3454.48	-71.01	-1377.62	11053.82	-142.80	-1239.65	11053.82	-563.61	-1239.65	13098.83

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	2066	2067			2067			2068						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
											S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)
1	Pavement	-31.24	0.59	3720.55	-95.07	0.59	3088.98	-116.57	0.33	3088.98	-180.40	0.33	1604.14	
3	Railing	-3.61	0.38	111.81	-0.24	0.38	92.54	-6.22	1.24	92.54	-2.85	1.24	47.17	
5	Wheel guard	-35.76	3.77	1106.91	-2.39	3.77	916.18	-61.61	12.23	916.18	-28.24	12.23	466.95	
8	Steel weight	-83.33	-2.16	13724.20	-381.93	-2.16	11397.87	-397.52	-13.42	11397.87	-696.12	-13.42	5929.70	
10	Medial strip	6.83	-2.30	1396.52	-53.81	-2.30	1161.62	-24.90	-8.37	1161.62	-85.54	-8.37	609.43	
19	Snow	-14.65	0.36	1663.63	-41.84	0.36	1381.16	-52.82	0.46	1381.16	-80.01	0.46	717.02	
31	Miscellaneous	0.55	-0.19	112.94	-4.35	-0.19	93.93	-2.02	-0.68	93.93	-6.92	-0.68	49.28	
100	AASHTO-LRFD TRUCK-LOAD	MAX	384.66	786.62	10130.89	258.52	786.62	9685.39	341.36	730.38	9685.39	217.83	730.38	8572.26
		MIN	-322.99	-779.20	-2251.62	-448.83	-779.20	-2977.42	-372.22	-755.85	-2977.42	-496.32	-755.85	-3803.57
	TANDEM-LOAD	MAX	291.89	547.18	7166.67	206.92	547.18	6847.41	261.78	507.65	6847.41	179.05	507.65	6079.69
		MIN	-250.56	-542.76	-1530.91	-335.24	-542.76	-2024.39	-283.80	-525.60	-2024.39	-366.95	-525.60	-2586.10
	DISPERSION-LMAX	MAX	298.75	862.16	13335.22	247.28	862.16	12248.63	250.93	923.42	12248.63	203.32	923.42	9961.82
		MIN	-347.46	-860.15	-7263.45	-404.43	-860.15	-7204.40	-438.81	-920.94	-7204.40	-499.67	-920.94	-7333.45
110	Live load L-PICKUP 1	MAX	683.41	1648.78	23466.11	505.80	1648.78	21934.02	592.29	1653.79	21934.02	421.15	1653.79	18534.07
		MIN	-670.45	-1639.35	-9515.08	-853.26	-1639.35	-10181.82	-811.03	-1676.80	-10181.82	-995.99	-1676.80	-11137.02
	L-PICKUP 2	MAX	590.63	1409.34	20501.89	454.20	1409.34	19096.04	512.71	1431.07	19096.04	382.37	1431.07	16041.51
		MIN	-598.02	-1402.91	-8794.37	-739.68	-1402.91	-9228.80	-722.61	-1446.54	-9228.80	-866.62	-1446.54	-9919.55
	L-PICKUP 3	MAX	683.41	1648.78	23466.11	505.80	1648.78	21934.02	592.29	1653.79	21934.02	421.15	1653.79	18534.07
		MIN	-721.08	-1808.76	-10340.52	-900.74	-1808.76	-11513.38	-894.55	-1876.11	-11513.38	-1075.89	-1876.11	-13025.04
	Live load	MAX	683.41	1648.78	23466.11	505.80	1648.78	21934.02	592.29	1653.79	21934.02	421.15	1653.79	18534.07
		MIN	-721.08	-1808.76	-10340.52	-900.74	-1808.76	-11513.38	-894.55	-1876.11	-11513.38	-1075.89	-1876.11	-13025.04
111	AASHTO Twin TWIN-PICKUP	MAX	696.35	1820.98	26406.98	523.62	1820.98	24826.56	592.39	1869.89	24826.56	425.32	1869.89	20959.31
		MIN	-721.08	-1808.76	-10340.52	-900.74	-1808.76	-11513.38	-894.55	-1876.11	-11513.38	-1075.89	-1876.11	-13025.04
	MID-PICKUP	MAX	696.35	1820.98	26406.98	523.62	1820.98	24826.56	592.39	1869.89	24826.56	425.32	1869.89	20959.31
198	AASHTO FatigTRUCK-LOAD	MAX	179.87	299.79	2027.65	67.78	299.79	1950.77	171.94	357.50	1950.77	60.88	357.50	1758.40
		MIN	-78.67	-209.61	-376.46	-190.78	-209.61	-497.19	-87.50	-277.75	-497.19	-198.37	-277.75	-636.16
	TANDEM-LOAD	MAX	143.01	208.35	1476.53	62.84	208.35	1420.93	137.53	246.90	1420.93	58.45	246.90	1288.77
		MIN	-70.22	-143.95	-256.01	-150.40	-143.95	-338.10	-76.46	-189.93	-338.10	-155.42	-189.93	-432.63

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2066			2067			2067			2068		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	89.75	473.91	2615.29	63.19	473.91	2421.84	80.34	521.96	2421.84	54.31	521.96	2003.46
	MIN	-82.49	-459.18	-1285.99	-109.30	-459.18	-1275.29	-102.17	-487.84	-1275.29	-128.97	-487.84	-1300.06
199	AASHTO-LRFD TRUCK-LOAD MAX	474.98	1161.15	16005.87	334.53	1161.15	15336.43	407.28	1154.24	15336.43	269.25	1154.24	13326.31
	MIN	-453.74	-1149.59	-4226.01	-596.39	-1149.59	-5588.24	-555.13	-1163.62	-5588.24	-695.76	-1163.62	-7138.82
	TANDEM-LOAD MAX	291.89	547.18	7166.67	206.92	547.18	6847.41	261.78	507.65	6847.41	179.05	507.65	6079.69
	MIN	-250.56	-542.76	-1530.91	-335.24	-542.76	-2024.39	-283.80	-525.60	-2024.39	-366.95	-525.60	-2586.10
	DISPERSION-LMAX	298.75	862.16	13335.22	247.28	862.16	12248.63	250.93	923.42	12248.63	203.32	923.42	9961.82
	MIN	-347.46	-860.15	-7263.45	-404.43	-860.15	-7204.40	-438.81	-920.94	-7204.40	-499.67	-920.94	-7333.45
300	Total Dead lWithout snow	-146.57	0.09	20172.93	-537.80	0.09	16751.12	-608.83	-8.67	16751.12	-1000.06	-8.67	8706.66
301	Particular Snow	-14.65	0.36	1663.63	-41.84	0.36	1381.16	-52.82	0.46	1381.16	-80.01	0.46	717.02
302	Live load Total MAX	444.21	1071.70	15252.97	328.77	1071.70	14257.11	384.99	1074.96	14257.11	273.75	1074.96	12047.15
	MIN	-468.70	-1175.70	-6721.34	-585.48	-1175.70	-7483.69	-581.46	-1219.47	-7483.69	-699.33	-1219.47	-8466.28
303	Sum total D+L+PP MAX	416.26	1072.16	37089.53	-152.23	1072.16	32389.40	-161.17	1075.43	32389.40	-724.19	1075.43	21470.83
	MIN	-629.92	-1175.34	13098.83	-1165.11	-1175.34	8403.48	-1243.11	-1227.68	8403.48	-1779.39	-1227.68	-1582.48

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	2068	2069			2069			2070							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
														S2 (kN)	TQ (kN·m)
1	Pavement	-212.49	20.84	1604.14	-276.32	20.84	-839.91	-300.75	36.72	-839.91	-364.58	36.72	-4166.57		
3	Railing	-9.22	3.40	47.17	-5.85	3.40	-28.18	-11.98	6.79	-28.18	-8.61	6.79	-131.18		
5	Wheel guard	-91.28	33.66	466.95	-57.91	33.66	-278.99	-118.65	67.25	-278.99	-85.28	67.25	-1298.64		
8	Steel weight	-749.98	43.75	5929.70	-1048.58	43.75	-3063.11	-1074.21	67.51	-3063.11	-1372.81	67.51	-15298.22		
10	Medial strip	-60.14	-11.40	609.43	-120.78	-11.40	-295.16	-92.52	-25.65	-295.16	-153.15	-25.65	-1523.51		
19	Snow	-95.74	10.03	717.02	-122.93	10.03	-376.34	-135.24	17.88	-376.34	-162.42	17.88	-1864.67		
31	Miscellaneous	-4.86	-0.92	49.28	-9.76	-0.92	-23.85	-7.48	-2.07	-23.85	-12.38	-2.07	-123.14		
100	AASHTO-LRFD TRUCK-LOAD	MAX	295.71	801.96	8572.26	175.70	801.96	6739.52	244.56	905.75	6739.52	123.57	905.75	4101.66	
		MIN	-438.07	-771.27	-3803.57	-559.23	-771.27	-4687.66	-520.94	-849.83	-4687.66	-636.01	-849.83	-5401.44	
		TANDEM-LOAD	MAX	229.69	553.02	6079.69	149.43	553.02	4838.57	191.14	623.73	4838.57	112.65	623.73	3057.44
		MIN	-328.54	-532.54	-2586.10	-409.20	-532.54	-3187.22	-384.70	-582.56	-3187.22	-460.50	-582.56	-3672.47	
		DISPERSION-L	MAX	212.48	1121.72	9961.82	169.84	1121.72	6174.11	180.83	1399.18	6174.11	144.13	1399.18	3405.45
		MIN	-556.99	-1085.74	-7333.45	-622.91	-1085.74	-7522.97	-670.37	-1337.27	-7522.97	-742.33	-1337.27	-10178.93	
110	Live load	L-PICKUP 1	MAX	508.19	1923.68	18534.07	345.53	1923.68	12913.63	425.39	2304.93	12913.63	267.70	2304.93	7507.10
		MIN	-995.05	-1857.00	-11137.02	-1182.14	-1857.00	-12210.63	-1191.31	-2187.11	-12210.63	-1378.34	-2187.11	-15580.37	
		L-PICKUP 2	MAX	442.17	1674.74	16041.51	319.27	1674.74	11012.67	371.97	2022.91	11012.67	256.78	2022.91	6462.89
		MIN	-885.52	-1618.28	-9919.55	-1032.11	-1618.28	-10710.19	-1055.07	-1919.83	-10710.19	-1202.83	-1919.83	-13851.40	
		L-PICKUP 3	MAX	-1118.40	-2165.93	-13025.04	-1301.65	-2165.93	-14689.09	-1361.74	-2560.19	-14689.09	-1546.03	-2560.19	-18286.10
		MIN	508.19	1923.68	18534.07	345.53	1923.68	12913.63	425.39	2304.93	12913.63	267.70	2304.93	7507.10	
111	AASHTO Twin	TWIN-PICKUP	MAX	493.59	2242.90	20959.31	336.44	2242.90	14374.55	418.94	2695.53	14374.55	253.41	2695.53	7202.67
		MIN	-1118.40	-2165.93	-13025.04	-1301.65	-2165.93	-14689.09	-1361.74	-2560.19	-14689.09	-1546.03	-2560.19	-18286.10	
		MID-PICKUP	MAX	-1118.40	-2165.93	-13025.04	-1301.65	-2165.93	-14689.09	-1361.74	-2560.19	-14689.09	-1546.03	-2560.19	-18286.10
		MIN	493.59	2242.90	20959.31	336.44	2242.90	14374.55	418.94	2695.53	14374.55	253.41	2695.53	7202.67	
		MID-PICKUP	MAX	161.04	429.08	1758.40	49.60	429.08	1443.92	146.15	497.71	1443.92	36.48	497.71	988.24
		MIN	-100.55	-346.11	-636.16	-208.57	-346.11	-799.89	-119.65	-397.74	-799.89	-221.23	-397.74	-977.08	
198	AASHTO Fatig	TRUCK-LOAD	MAX	129.90	295.76	1288.77	51.08	295.76	1076.22	119.04	342.95	1076.22	37.23	342.95	773.21
		MIN	-85.56	-236.20	-432.63	-162.07	-236.20	-544.31	-98.31	-271.85	-544.31	-169.86	-271.85	-665.86	
		TANDEM-LOAD	MAX	129.90	295.76	1288.77	51.08	295.76	1076.22	119.04	342.95	1076.22	37.23	342.95	773.21
		MIN	-85.56	-236.20	-432.63	-162.07	-236.20	-544.31	-98.31	-271.85	-544.31	-169.86	-271.85	-665.86	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2068			2069			2069			2070		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	70.76	637.01	2003.46	45.54	637.01	1328.22	59.89	794.13	1328.22	35.75	794.13	781.58
	MIN	-130.63	-574.24	-1300.06	-157.26	-574.24	-1368.96	-168.18	-707.68	-1368.96	-193.91	-707.68	-2036.79
199	AASHTO-LRFD TRUCK-LOAD MAX	335.95	1370.39	13326.31	203.98	1370.39	9797.62	284.65	1595.86	9797.62	137.43	1595.86	4597.52
	MIN	-685.68	-1320.85	-7138.82	-823.37	-1320.85	-8798.24	-842.68	-1507.38	-8798.24	-975.49	-1507.38	-10138.96
	TANDEM-LOAD MAX	229.69	553.02	6079.69	149.43	553.02	4838.57	191.14	623.73	4838.57	112.65	623.73	3057.44
	MIN	-328.54	-532.54	-2586.10	-409.20	-532.54	-3187.22	-384.70	-582.56	-3187.22	-460.50	-582.56	-3672.47
	DISPERSION-LMAX	212.48	1121.72	9961.82	169.84	1121.72	6174.11	180.83	1399.18	6174.11	144.13	1399.18	3405.45
	MIN	-556.99	-1085.74	-7333.45	-622.91	-1085.74	-7522.97	-670.37	-1337.27	-7522.97	-742.33	-1337.27	-10178.93
300	Total Dead lWithout snow	-1127.97	89.32	8706.66	-1519.20	89.32	-4529.20	-1605.59	150.55	-4529.20	-1996.82	150.55	-22541.25
301	Particular Snow	-95.74	10.03	717.02	-122.93	10.03	-376.34	-135.24	17.88	-376.34	-162.42	17.88	-1864.67
302	Live load Total MAX	330.32	1250.39	12047.15	224.60	1250.39	8393.86	276.50	1498.20	8393.86	174.01	1498.20	4879.62
	MIN	-726.96	-1407.85	-8466.28	-846.07	-1407.85	-9547.91	-885.13	-1664.13	-9547.91	-1004.92	-1664.13	-11885.97
303	Sum total D+L+PP MAX	-794.30	1349.74	21470.83	-1350.15	1349.74	6006.47	-1381.38	1666.64	6006.47	-1933.04	1666.64	-18062.43
	MIN	-1950.68	-1397.82	-1582.48	-2488.20	-1397.82	-14453.45	-2625.96	-1646.24	-14453.45	-3164.17	-1646.24	-36291.89

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2070	2071			2071			2072							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
														S2 (kN)	TQ (kN·m)
1	Pavement	-367.37	27.79	-4166.57	-418.44	27.79	-7309.81	-416.03	16.81	-7309.81	-467.09	16.81	-10842.30		
3	Railing	-12.81	9.79	-131.18	-10.12	9.79	-222.89	-9.64	6.36	-222.89	-6.94	6.36	-289.21		
5	Wheel guard	-126.85	96.95	-1298.64	-100.15	96.95	-2206.63	-95.41	62.99	-2206.63	-68.72	62.99	-2863.15		
8	Steel weight	-1333.99	-4.46	-15298.22	-1572.87	-4.46	-26925.65	-1568.84	-7.93	-26925.65	-1807.72	-7.93	-40431.88		
10	Medial strip	-125.68	-51.66	-1523.51	-174.19	-51.66	-2723.03	-176.11	-34.29	-2723.03	-224.62	-34.29	-4325.93		
19	Snow	-164.73	14.73	-1864.67	-186.48	14.73	-3269.52	-185.30	9.02	-3269.52	-207.04	9.02	-4838.88		
31	Miscellaneous	-10.16	-4.17	-123.14	-14.08	-4.17	-220.10	-14.23	-2.77	-220.10	-18.15	-2.77	-349.65		
100	AASHTO-LRFD TRUCK-LOAD	MAX	204.68	1137.05	4101.66	89.19	1137.05	1854.20	164.50	1282.77	1854.20	108.76	1282.77	1678.81	
		MIN	-575.01	-1099.62	-5401.44	-674.75	-1099.62	-5857.84	-614.42	-1272.41	-5857.84	-752.15	-1272.41	-6358.30	
		TANDEM-LOAD	MAX	164.82	775.40	3057.44	87.55	775.40	1507.84	144.44	878.89	1507.84	94.16	878.89	1138.33
		MIN	-422.79	-751.88	-3672.47	-487.98	-751.88	-3983.71	-446.87	-868.38	-3983.71	-542.85	-868.38	-4330.72	
		DISPERSION-L	MAX	167.37	1846.80	3405.45	141.14	1846.80	2601.90	161.28	2082.91	2601.90	152.21	2082.91	3061.37
		MIN	-766.55	-1798.27	-10178.93	-827.22	-1798.27	-14516.90	-842.87	-2053.39	-14516.90	-920.66	-2053.39	-20791.57	
110	Live load	L-PICKUP 1	MAX	372.05	2983.86	7507.10	230.33	2983.86	4456.10	325.78	3365.69	4456.10	260.96	3365.69	4740.19
		MIN	-1341.55	-2897.90	-15580.37	-1501.97	-2897.90	-20374.74	-1457.29	-3325.80	-20374.74	-1672.81	-3325.80	-27149.86	
		L-PICKUP 2	MAX	332.18	2622.20	6462.89	228.69	2622.20	4109.74	305.73	2961.81	4109.74	246.37	2961.81	4199.70
		MIN	-1189.34	-2550.15	-13851.40	-1315.21	-2550.15	-18500.62	-1289.73	-2921.77	-18500.62	-1463.52	-2921.77	-25122.29	
		L-PICKUP 3	MAX	-1547.50	-3392.55	-18286.10	-1699.06	-3392.55	-22961.99	-1678.13	-3900.54	-22961.99	-1885.12	-3900.54	-29461.97
		Live load	MAX	372.05	2983.86	7507.10	230.33	2983.86	4456.10	325.78	3365.69	4456.10	260.96	3365.69	4740.19
MIN	-1547.50	-3392.55	-18286.10	-1699.06	-3392.55	-22961.99	-1678.13	-3900.54	-22961.99	-1885.12	-3900.54	-29461.97			
111	AASHTO Twin	TWIN-PICKUP	MAX	349.50	3483.49	7202.67	237.37	3483.49	4308.90	285.48	3952.54	4308.90	268.17	3952.54	5600.25
		MIN	-1547.50	-3392.55	-18286.10	-1699.06	-3392.55	-22961.99	-1678.13	-3900.54	-22961.99	-1885.12	-3900.54	-29461.97	
		MID-PICKUP	MAX	-1547.50	-3392.55	-18286.10	-1699.06	-3392.55	-22961.99	-1678.13	-3900.54	-22961.99	-1885.12	-3900.54	-29461.97
198	AASHTO Fatig	TRUCK-LOAD	MAX	123.72	556.53	988.24	33.70	556.53	565.62	82.12	476.85	565.62	41.27	476.85	291.70
		MIN	-132.57	-442.86	-977.08	-219.64	-442.86	-1153.66	-158.13	-385.18	-1153.66	-266.52	-385.18	-1292.68	
		TANDEM-LOAD	MAX	104.49	381.16	773.21	32.42	381.16	504.00	79.04	326.72	504.00	46.72	326.72	197.51
		MIN	-101.55	-303.77	-665.86	-169.41	-303.77	-786.66	-120.86	-261.34	-786.66	-204.28	-261.34	-881.73	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2070			2071			2071			2072		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	58.88	1057.00	781.58	40.25	1057.00	569.32	51.41	1168.17	569.32	46.33	1168.17	564.32
	MIN	-202.89	-938.82	-2036.79	-222.70	-938.82	-3151.81	-205.45	-1091.66	-3151.81	-241.69	-1091.66	-4612.67
199	AASHTO-LRFD TRUCK-LOAD MAX	220.97	2023.74	4597.52	122.60	2023.74	2185.76	155.92	2308.80	2185.76	145.76	2308.80	3161.12
	MIN	-952.90	-1971.22	-10138.96	-1060.62	-1971.22	-10996.42	-1021.73	-2280.54	-10996.42	-1173.92	-2280.54	-11943.96
	TANDEM-LOAD MAX	164.82	775.40	3057.44	87.55	775.40	1507.84	144.44	878.89	1507.84	94.16	878.89	1138.33
	MIN	-422.79	-751.88	-3672.47	-487.98	-751.88	-3983.71	-446.87	-868.38	-3983.71	-542.85	-868.38	-4330.72
	DISPERSION-LMAX	167.37	1846.80	3405.45	141.14	1846.80	2601.90	161.28	2082.91	2601.90	152.21	2082.91	3061.37
	MIN	-766.55	-1798.27	-10178.93	-827.22	-1798.27	-14516.90	-842.87	-2053.39	-14516.90	-920.66	-2053.39	-20791.57
300	Total Dead lWithout snow	-1976.86	74.24	-22541.25	-2289.85	74.24	-39608.10	-2280.26	41.18	-39608.10	-2593.24	41.18	-59102.12
301	Particular Snow	-164.73	14.73	-1864.67	-186.48	14.73	-3269.52	-185.30	9.02	-3269.52	-207.04	9.02	-4838.88
302	Live load Total MAX	241.83	1939.51	4879.62	149.71	1939.51	2896.47	211.76	2187.70	2896.47	169.63	2187.70	3081.12
	MIN	-1005.88	-2205.16	-11885.97	-1104.39	-2205.16	-14925.30	-1090.79	-2535.35	-14925.30	-1225.33	-2535.35	-19150.28
303	Sum total D+L+PP MAX	-1827.22	2028.48	-18062.43	-2281.70	2028.48	-39112.21	-2190.27	2237.90	-39112.21	-2579.77	2237.90	-59935.54
	MIN	-3147.47	-2190.43	-36291.89	-3580.71	-2190.43	-57802.92	-3556.34	-2526.33	-57802.92	-4025.62	-2526.33	-83091.28

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2072	2073			2073			2074					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
											S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	519.39	-24.90	-10842.30	455.56	-24.90	-5967.56	459.35	-42.35	-5967.56	395.52	-42.35	-1693.24
3	Railing	8.63	-7.53	-289.21	12.00	-7.53	-186.03	11.31	-9.38	-186.03	14.68	-9.38	-56.08
5	Wheel guard	85.46	-74.58	-2863.15	118.83	-74.58	-1841.69	111.97	-92.83	-1841.69	145.34	-92.83	-555.16
8	Steel weight	1999.20	-10.82	-40431.88	1700.60	-10.82	-21932.91	1724.20	-59.44	-21932.91	1425.60	-59.44	-6183.93
10	Medial strip	243.46	37.68	-4325.93	182.82	37.68	-2194.50	189.84	40.27	-2194.50	129.20	40.27	-599.29
19	Snow	230.46	-12.88	-4838.88	203.28	-12.88	-2670.17	204.77	-21.02	-2670.17	177.58	-21.02	-758.43
31	Miscellaneous	19.67	3.05	-349.65	14.77	3.05	-177.40	15.34	3.25	-177.40	10.44	3.25	-48.49
100	AASHTO-LRFD TRUCK-LOAD	764.61	1255.07	1678.81	618.38	1255.07	2414.73	691.86	1000.56	2414.73	579.71	1000.56	5381.63
	MIN	-83.59	-1275.56	-6358.30	-176.99	-1275.56	-5551.16	-77.59	-1052.47	-5551.16	-196.59	-1052.47	-5083.76
	TANDEM-LOAD	548.84	859.33	1138.33	450.93	859.33	1895.98	497.60	685.74	1895.98	423.80	685.74	3917.78
	MIN	-76.85	-871.00	-4330.72	-151.89	-871.00	-3771.17	-80.64	-720.58	-3771.17	-158.36	-720.58	-3450.69
	DISPERSION-LMAX	912.96	1980.50	3061.37	819.75	1980.50	3596.46	798.37	1523.61	3596.46	723.05	1523.61	6533.18
	MIN	-59.41	-2023.52	-20791.57	-74.81	-2023.52	-13318.53	-45.74	-1595.50	-13318.53	-79.00	-1595.50	-9273.49
110	Live load L-PICKUP 1	1677.57	3235.57	4740.19	1438.13	3235.57	6011.19	1490.23	2524.17	6011.19	1302.77	2524.17	11914.81
	MIN	-143.00	-3299.08	-27149.86	-251.79	-3299.08	-18869.69	-123.33	-2647.97	-18869.69	-275.59	-2647.97	-14357.25
	L-PICKUP 2	1461.80	2839.83	4199.70	1270.68	2839.83	5492.44	1295.97	2209.35	5492.44	1146.86	2209.35	10450.97
	MIN	-136.26	-2894.52	-25122.29	-226.70	-2894.52	-17089.70	-126.38	-2316.08	-17089.70	-237.35	-2316.08	-12724.18
	L-PICKUP 3	-133.78	-3882.68	-29461.97	-191.37	-3882.68	-21371.51	-88.52	-3118.97	-21371.51	-246.64	-3118.97	-16945.26
	Live load	1677.57	3235.57	4740.19	1438.13	3235.57	6011.19	1490.23	2524.17	6011.19	1302.77	2524.17	11914.81
	MIN	-143.00	-3882.68	-29461.97	-251.79	-3882.68	-21371.51	-126.38	-3118.97	-21371.51	-275.59	-3118.97	-16945.26
111	AASHTO Twin TWIN-PICKUP	1908.67	3812.59	5600.25	1680.56	3812.59	5852.24	1705.00	2981.44	5852.24	1523.40	2981.44	12402.49
	MIN	-133.78	-3882.68	-29461.97	-191.37	-3882.68	-21371.51	-88.52	-3118.97	-21371.51	-246.64	-3118.97	-16945.26
	MID-PICKUP	-133.78	-3882.68	-29461.97	-191.37	-3882.68	-21371.51	-88.52	-3118.97	-21371.51	-246.64	-3118.97	-16945.26
198	AASHTO FatigTRUCK-LOAD	270.79	400.31	291.70	149.30	400.31	686.83	229.84	428.95	686.83	132.80	428.95	1212.91
	MIN	-42.94	-498.26	-1292.68	-102.68	-498.26	-1080.96	-32.87	-541.65	-1080.96	-137.91	-541.65	-893.24
	TANDEM-LOAD	204.95	273.28	197.51	111.50	273.28	572.66	175.11	293.90	572.66	107.01	293.90	920.91
	MIN	-47.37	-338.82	-881.73	-91.31	-338.82	-733.43	-29.23	-372.36	-733.43	-112.88	-372.36	-605.07

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2072			2073			2073			2074		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	245.03	1047.65	564.32	204.06	1047.65	763.33	217.26	795.08	763.33	192.51	795.08	1381.83
	MIN	-31.33	-1139.37	-4612.67	-41.09	-1139.37	-2858.55	-23.39	-911.93	-2858.55	-46.64	-911.93	-1749.90
199	AASHTO-LRFD TRUCK-LOAD MAX	1207.78	2255.71	3161.12	1047.54	2255.71	2906.02	1096.08	1789.10	2906.02	969.62	1789.10	7247.36
	MIN	-89.24	-2290.56	-11943.96	-137.82	-2290.56	-10427.59	-52.61	-1870.03	-10427.59	-195.04	-1870.03	-9554.58
	TANDEM-LOAD MAX	548.84	859.33	1138.33	450.93	859.33	1895.98	497.60	685.74	1895.98	423.80	685.74	3917.78
	MIN	-76.85	-871.00	-4330.72	-151.89	-871.00	-3771.17	-80.64	-720.58	-3771.17	-158.36	-720.58	-3450.69
	DISPERSION-LMAX	912.96	1980.50	3061.37	819.75	1980.50	3596.46	798.37	1523.61	3596.46	723.05	1523.61	6533.18
	MIN	-59.41	-2023.52	-20791.57	-74.81	-2023.52	-13318.53	-45.74	-1595.50	-13318.53	-79.00	-1595.50	-9273.49
300	Total Dead lWithout snow	2875.82	-77.11	-59102.12	2484.59	-77.11	-32300.10	2512.01	-160.48	-32300.10	2120.78	-160.48	-9136.18
301	Particular Snow	230.46	-12.88	-4838.88	203.28	-12.88	-2670.17	204.77	-21.02	-2670.17	177.58	-21.02	-758.43
302	Live load Total MAX	1090.42	2103.12	3081.12	934.78	2103.12	3907.28	968.65	1640.71	3907.28	846.80	1640.71	7744.63
	MIN	-92.95	-2523.74	-19150.28	-163.67	-2523.74	-13891.48	-82.15	-2027.33	-13891.48	-179.13	-2027.33	-11014.42
303	Sum total D+L+PP MAX	4196.70	2090.24	-59935.54	3622.65	2090.24	-29890.81	3685.42	1619.69	-29890.81	3145.16	1619.69	173.40
	MIN	2985.45	-2613.72	-83091.28	2475.10	-2613.72	-48861.75	2609.98	-2208.83	-48861.75	2065.49	-2208.83	-20909.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	2074			2075			2075			2076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	379.22	-37.65	-1693.24	315.40	-37.65	1779.86	273.95	-2.32	1779.86	210.12	-2.32	4200.22
3	Railing	9.10	-5.46	-56.08	12.47	-5.46	51.79	5.73	-2.02	51.79	9.10	-2.02	125.91
5	Wheel guard	90.11	-54.04	-555.16	123.47	-54.04	512.73	56.70	-19.96	512.73	90.06	-19.96	1246.54
8	Steel weight	1426.26	-87.22	-6183.93	1127.66	-87.22	6585.70	1040.46	14.67	6585.70	741.86	14.67	15497.26
10	Medial strip	158.36	15.85	-599.29	97.72	15.85	681.07	120.27	12.62	681.07	59.63	12.62	1580.57
19	Snow	168.99	-17.95	-758.43	141.80	-17.95	795.53	121.86	-1.54	795.53	94.67	-1.54	1878.19
31	Miscellaneous	12.80	1.28	-48.49	7.90	1.28	54.98	9.72	1.02	54.98	4.82	1.02	127.68
100	AASHTO-LRFD TRUCK-LOAD	631.08	768.68	5381.63	514.00	768.68	8039.42	546.92	754.43	8039.42	423.74	754.43	9819.79
	MIN	-118.55	-835.42	-5083.76	-235.29	-835.42	-4441.08	-178.07	-724.50	-4441.08	-300.37	-724.50	-3661.51
	TANDEM-LOAD MAX	457.38	528.25	3917.78	379.80	528.25	5712.79	400.99	523.55	5712.79	318.61	523.55	6920.56
	MIN	-109.54	-576.04	-3450.69	-187.93	-576.04	-3014.53	-152.12	-501.24	-3014.53	-233.98	-501.24	-2485.38
	DISPERSION-LMAX	680.82	1066.90	6533.18	609.87	1066.90	10927.86	546.82	892.82	10927.86	482.23	892.82	13458.16
	MIN	-59.35	-1130.10	-9273.49	-97.02	-1130.10	-8013.92	-97.90	-898.76	-8013.92	-141.85	-898.76	-6605.95
110	Live load L-PICKUP 1	1311.90	1835.58	11914.81	1123.87	1835.58	18967.28	1093.74	1647.24	18967.28	905.98	1647.24	23277.95
	MIN	-177.90	-1965.53	-14357.25	-332.31	-1965.53	-12455.00	-275.97	-1623.25	-12455.00	-442.22	-1623.25	-10267.45
	L-PICKUP 2 MAX	1138.20	1595.15	10450.97	989.67	1595.15	16640.65	947.81	1416.36	16640.65	800.84	1416.36	20378.73
	MIN	-168.89	-1706.14	-12724.18	-284.95	-1706.14	-11028.45	-250.02	-1400.00	-11028.45	-375.83	-1400.00	-9091.32
	L-PICKUP 3	-154.34	-2321.55	-16945.26	-303.82	-2321.55	-14724.28	-265.12	-1871.06	-14724.28	-424.92	-1871.06	-12138.46
	Live load MAX	1311.90	1835.58	11914.81	1123.87	1835.58	18967.28	1093.74	1647.24	18967.28	905.98	1647.24	23277.95
	MIN	-177.90	-2321.55	-16945.26	-332.31	-2321.55	-14724.28	-275.97	-1871.06	-14724.28	-442.22	-1871.06	-12138.46
111	AASHTO Twin TWIN-PICKUP	1485.76	2168.58	12402.49	1302.60	2168.58	21055.04	1211.65	1884.18	21055.04	1029.07	1884.18	26331.46
	MIN	-154.34	-2321.55	-16945.26	-303.82	-2321.55	-14724.28	-265.12	-1871.06	-14724.28	-424.92	-1871.06	-12138.46
	MID-PICKUP	-154.34	-2321.55	-16945.26	-303.82	-2321.55	-14724.28	-265.12	-1871.06	-14724.28	-424.92	-1871.06	-12138.46
198	AASHTO FatigTRUCK-LOAD	220.31	377.75	1212.91	115.73	377.75	1671.39	206.88	316.21	1671.39	96.31	316.21	1981.20
	MIN	-40.26	-474.07	-893.24	-149.83	-474.07	-748.32	-53.09	-394.63	-748.32	-164.89	-394.63	-610.51
	TANDEM-LOAD MAX	169.51	257.76	920.91	95.85	257.76	1229.35	160.99	215.86	1229.35	82.48	215.86	1440.07
	MIN	-41.32	-326.56	-605.07	-121.80	-326.56	-507.66	-53.24	-271.96	-507.66	-132.57	-271.96	-414.43

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2074			2075			2075			2076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	177.09	565.61	1381.83	150.95	565.61	2177.20	140.82	466.16	2177.20	114.04	466.16	2643.43
	MIN	-22.42	-638.62	-1749.90	-46.65	-638.62	-1431.74	-33.94	-514.21	-1431.74	-59.35	-514.21	-1166.79
199	AASHTO-LRFD TRUCK-LOAD MAX	970.02	1342.63	7247.36	837.46	1342.63	12466.63	799.46	1200.72	12466.63	661.18	1200.72	15799.01
	MIN	-112.14	-1449.39	-9554.58	-240.56	-1449.39	-8346.39	-196.68	-1180.20	-8346.39	-330.29	-1180.20	-6881.23
	TANDEM-LOAD MAX	457.38	528.25	3917.78	379.80	528.25	5712.79	400.99	523.55	5712.79	318.61	523.55	6920.56
	MIN	-109.54	-576.04	-3450.69	-187.93	-576.04	-3014.53	-152.12	-501.24	-3014.53	-233.98	-501.24	-2485.38
	DISPERSION-LMAX	680.82	1066.90	6533.18	609.87	1066.90	10927.86	546.82	892.82	10927.86	482.23	892.82	13458.16
	MIN	-59.35	-1130.10	-9273.49	-97.02	-1130.10	-8013.92	-97.90	-898.76	-8013.92	-141.85	-898.76	-6605.95
300	Total Dead lWithout snow	2075.85	-167.24	-9136.18	1684.62	-167.24	9666.14	1506.82	4.02	9666.14	1115.59	4.02	22778.18
301	Particular Snow	168.99	-17.95	-758.43	141.80	-17.95	795.53	121.86	-1.54	795.53	94.67	-1.54	1878.19
302	Live load Total MAX	852.74	1193.13	7744.63	730.52	1193.13	12328.73	710.93	1070.71	12328.73	588.89	1070.71	15130.67
	MIN	-115.63	-1509.01	-11014.42	-216.00	-1509.01	-9570.78	-179.38	-1216.19	-9570.78	-287.44	-1216.19	-7890.00
303	Sum total D+L+PP MAX	3097.57	1175.18	173.40	2556.94	1175.18	22790.40	2339.61	1073.19	22790.40	1799.15	1073.19	39787.04
	MIN	2094.51	-1694.20	-20909.04	1545.62	-1694.20	-1980.35	1395.48	-1217.73	-1980.35	836.59	-1217.73	14399.38

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	TITLE	2076			2077			2077			2078		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	174.48	20.28	4200.22	110.65	20.28	5625.88	93.62	16.56	5625.88	29.79	16.56	6242.92
3	Railing	2.65	-0.14	125.91	6.02	-0.14	169.28	0.18	0.54	169.28	3.55	0.54	187.93
5	Wheel guard	26.25	-1.35	1246.54	59.62	-1.35	1675.90	1.78	5.37	1675.90	35.15	5.37	1860.54
8	Steel weight	674.56	83.73	15497.26	375.96	83.73	20749.87	376.79	60.53	20749.87	78.19	60.53	23024.73
10	Medial strip	83.50	12.79	1580.57	22.86	12.79	2112.37	53.42	5.90	2112.37	-7.22	5.90	2343.34
19	Snow	77.36	8.88	1878.19	50.17	8.88	2515.83	41.19	7.41	2515.83	14.00	7.41	2791.78
31	Miscellaneous	6.75	1.03	127.68	1.85	1.03	170.66	4.32	0.48	170.66	-0.58	0.48	189.33
100	AASHTO-LRFD TRUCK-LOAD	481.48	748.07	9819.79	353.33	748.07	10791.24	430.84	722.08	10791.24	299.97	722.08	11010.45
	MIN	-228.38	-696.61	-3661.51	-355.44	-696.61	-2957.84	-266.51	-695.70	-2957.84	-397.08	-695.70	-2353.25
	TANDEM-LOAD MAX	357.47	521.08	6920.56	270.87	521.08	7598.71	323.83	502.73	7598.71	234.90	502.73	7753.57
	MIN	-186.45	-484.17	-2485.38	-272.25	-484.17	-2007.74	-212.22	-484.04	-2007.74	-301.09	-484.04	-1597.35
	DISPERSION-LMAX	417.80	743.38	13458.16	358.21	743.38	14508.29	320.73	668.90	14508.29	264.95	668.90	14421.56
	MIN	-131.21	-711.88	-6605.95	-180.07	-711.88	-5336.37	-166.00	-642.19	-5336.37	-218.66	-642.19	-4245.57
110	Live load L-PICKUP 1	899.28	1491.45	23277.95	711.54	1491.45	25299.53	751.57	1390.98	25299.53	564.92	1390.98	25432.01
	MIN	-359.59	-1408.49	-10267.45	-535.51	-1408.49	-8294.21	-432.51	-1337.89	-8294.21	-615.74	-1337.89	-6598.81
	L-PICKUP 2 MAX	775.26	1264.46	20378.73	629.08	1264.46	22107.01	644.56	1171.63	22107.01	499.84	1171.63	22175.13
	MIN	-317.66	-1196.04	-9091.32	-452.33	-1196.04	-7344.11	-378.22	-1126.23	-7344.11	-519.75	-1126.23	-5842.91
	L-PICKUP 3	-367.98	-1577.84	-12138.46	-538.25	-1577.84	-9805.66	-464.86	-1473.19	-9805.66	-641.83	-1473.19	-7801.32
	Live load MAX	899.28	1491.45	23277.95	711.54	1491.45	25299.53	751.57	1390.98	25299.53	564.92	1390.98	25432.01
	MIN	-367.98	-1577.84	-12138.46	-538.25	-1577.84	-9805.66	-464.86	-1473.19	-9805.66	-641.83	-1473.19	-7801.32
111	AASHTO Twin TWIN-PICKUP	970.23	1674.89	26331.46	787.31	1674.89	28745.27	782.97	1537.10	28745.27	599.78	1537.10	28980.24
	MIN	-367.98	-1577.84	-12138.46	-538.25	-1577.84	-9805.66	-464.86	-1473.19	-9805.66	-641.83	-1473.19	-7801.32
	MID-PICKUP	-367.98	-1577.84	-12138.46	-538.25	-1577.84	-9805.66	-464.86	-1473.19	-9805.66	-641.83	-1473.19	-7801.32
198	AASHTO FatigTRUCK-LOAD	196.96	240.66	1981.20	82.87	240.66	2151.36	189.54	224.27	2151.36	74.10	224.27	2189.95
	MIN	-62.60	-314.05	-610.51	-175.62	-314.05	-493.50	-68.42	-230.29	-493.50	-183.35	-230.29	-392.42
	TANDEM-LOAD MAX	154.56	164.77	1440.07	72.80	164.77	1558.83	149.65	157.12	1558.83	66.45	157.12	1586.64
	MIN	-59.12	-217.15	-414.43	-140.11	-217.15	-334.93	-62.61	-160.70	-334.93	-145.46	-160.70	-266.38

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2076			2077			2077			2078		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	113.42	390.47	2643.43	86.47	390.47	2838.90	95.05	356.30	2838.90	68.12	356.30	2827.90
	MIN	-42.06	-401.55	-1166.79	-68.24	-401.55	-943.29	-49.32	-348.30	-943.29	-76.02	-348.30	-749.99
199	AASHTO-LRFD TRUCK-LOAD MAX	660.23	1117.61	15799.01	516.58	1117.61	17430.89	549.24	1038.99	17430.89	401.47	1038.99	17778.71
	MIN	-277.66	-1041.27	-6881.23	-417.99	-1041.27	-5558.80	-350.51	-994.69	-5558.80	-494.49	-994.69	-4422.56
	TANDEM-LOAD MAX	357.47	521.08	6920.56	270.87	521.08	7598.71	323.83	502.73	7598.71	234.90	502.73	7753.57
	MIN	-186.45	-484.17	-2485.38	-272.25	-484.17	-2007.74	-212.22	-484.04	-2007.74	-301.09	-484.04	-1597.35
	DISPERSION-LMAX	417.80	743.38	13458.16	358.21	743.38	14508.29	320.73	668.90	14508.29	264.95	668.90	14421.56
	MIN	-131.21	-711.88	-6605.95	-180.07	-711.88	-5336.37	-166.00	-642.19	-5336.37	-218.66	-642.19	-4245.57
300	Total Dead lWithout snow	968.19	116.36	22778.18	576.96	116.36	30503.96	530.10	89.38	30503.96	138.87	89.38	33848.79
301	Particular Snow	77.36	8.88	1878.19	50.17	8.88	2515.83	41.19	7.41	2515.83	14.00	7.41	2791.78
302	Live load Total MAX	584.53	969.44	15130.67	462.50	969.44	16444.69	488.52	904.14	16444.69	367.20	904.14	16530.81
	MIN	-239.19	-1025.59	-7890.00	-349.86	-1025.59	-6373.68	-302.16	-957.58	-6373.68	-417.19	-957.58	-5070.86
303	Sum total D+L+PP MAX	1630.08	1094.67	39787.04	1089.64	1094.67	49464.49	1059.80	1000.94	49464.49	520.07	1000.94	53171.38
	MIN	734.61	-1016.71	14399.38	172.31	-1016.71	24734.01	178.48	-950.16	24734.01	-389.47	-950.16	30048.46

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2078	2079			2079			2080						
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)				
											NAME	TITLE	NAME	TITLE
1	Pavement	19.49	7.94	6242.92	-44.34	7.94	6118.69	-46.78	-12.83	6118.69	-110.60	-12.83	5331.79	
3	Railing	-2.09	1.09	187.93	1.28	1.09	183.87	-4.21	1.74	183.87	-0.84	1.74	158.65	
5	Wheel guard	-20.71	10.74	1860.54	12.66	10.74	1820.30	-41.65	17.25	1820.30	-8.28	17.25	1570.67	
8	Steel weight	103.87	19.17	23024.73	-194.73	19.17	22570.43	-139.10	-72.72	22570.43	-437.70	-72.72	19686.45	
10	Medial strip	25.87	-2.89	2343.34	-34.76	-2.89	2298.88	1.84	-19.57	2298.88	-58.80	-19.57	2014.06	
19	Snow	8.03	3.77	2791.78	-19.16	3.77	2736.13	-21.64	-5.19	2736.13	-48.82	-5.19	2383.84	
31	Miscellaneous	2.09	-0.23	189.33	-2.81	-0.23	185.75	0.15	-1.58	185.75	-4.75	-1.58	162.74	
100	AASHTO-LRFD TRUCK-LOAD	MAX	379.87	700.33	11010.45	247.45	700.33	10414.73	342.19	733.98	10414.73	209.87	733.98	8960.40
		MIN	-308.91	-696.97	-2353.25	-441.69	-696.97	-1799.51	-347.02	-730.35	-1799.51	-480.68	-730.35	-1286.11
	TANDEM-LOAD	MAX	289.85	487.63	7753.57	199.54	487.63	7318.45	264.73	507.06	7318.45	175.05	507.06	6298.72
		MIN	-240.91	-485.09	-1597.35	-331.66	-485.09	-1221.48	-266.61	-510.56	-1221.48	-358.07	-510.56	-872.99
	DISPERSION-LMAX	MAX	250.38	710.82	14421.56	198.56	710.82	13220.62	202.01	901.66	13220.62	153.39	901.66	11015.47
		MIN	-216.54	-696.16	-4245.57	-273.16	-696.16	-3246.54	-276.30	-920.33	-3246.54	-336.11	-920.33	-2320.38
110	Live load L-PICKUP 1	MAX	630.25	1411.16	25432.01	446.00	1411.16	23635.35	544.21	1635.65	23635.35	363.26	1635.65	19975.87
		MIN	-525.44	-1393.13	-6598.81	-714.85	-1393.13	-5046.04	-623.32	-1650.67	-5046.04	-816.80	-1650.67	-3606.49
	L-PICKUP 2	MAX	540.23	1198.45	22175.13	398.10	1198.45	20539.07	466.74	1408.72	20539.07	328.44	1408.72	17314.19
		MIN	-457.45	-1181.25	-5842.91	-604.81	-1181.25	-4468.01	-542.91	-1430.89	-4468.01	-694.18	-1430.89	-3193.37
	L-PICKUP 3	MAX	540.23	1198.45	22175.13	398.10	1198.45	20539.07	466.74	1408.72	20539.07	328.44	1408.72	17314.19
		MIN	-457.45	-1181.25	-5842.91	-604.81	-1181.25	-4468.01	-542.91	-1430.89	-4468.01	-694.18	-1430.89	-3193.37
	Live load	MAX	630.25	1411.16	25432.01	446.00	1411.16	23635.35	544.21	1635.65	23635.35	363.26	1635.65	19975.87
		MIN	-583.20	-1524.89	-7801.32	-766.23	-1524.89	-5965.59	-706.62	-1915.69	-5965.59	-893.25	-1915.69	-4263.69
111	AASHTO Twin TWIN-PICKUP	MAX	626.94	1547.86	28980.24	444.33	1547.86	27136.42	528.30	1914.30	27136.42	343.86	1914.30	23050.04
		MIN	-583.20	-1524.89	-7801.32	-766.23	-1524.89	-5965.59	-706.62	-1915.69	-5965.59	-893.25	-1915.69	-4263.69
	MID-PICKUP	MAX	626.94	1547.86	28980.24	444.33	1547.86	27136.42	528.30	1914.30	27136.42	343.86	1914.30	23050.04
		MIN	-583.20	-1524.89	-7801.32	-766.23	-1524.89	-5965.59	-706.62	-1915.69	-5965.59	-893.25	-1915.69	-4263.69
198	AASHTO FatigTRUCK-LOAD	MAX	181.88	304.73	2189.95	66.19	304.73	2086.25	175.95	389.67	2086.25	61.37	389.67	1834.40
		MIN	-75.17	-223.83	-392.42	-191.42	-223.83	-300.22	-80.78	-315.32	-300.22	-197.65	-315.32	-215.43
	TANDEM-LOAD	MAX	144.61	211.12	1586.64	60.96	211.12	1511.41	140.70	268.58	1511.41	57.89	268.58	1336.31
		MIN	-67.01	-153.73	-266.38	-151.07	-153.73	-203.76	-70.94	-215.24	-203.76	-155.39	-215.24	-146.18

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2078			2079			2079			2080		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	81.78	397.22	2827.90	55.15	397.22	2620.22	71.39	520.13	2620.22	45.24	520.13	2234.58
	MIN	-59.37	-368.41	-749.99	-86.30	-368.41	-573.85	-71.36	-479.15	-573.85	-98.29	-479.15	-411.78
199	AASHTO-LRFD TRUCK-LOAD MAX	446.22	1009.02	17778.71	295.14	1009.02	16930.96	384.99	1225.33	16930.96	228.67	1225.33	14595.68
	MIN	-431.46	-998.16	-4422.56	-578.21	-998.16	-3381.90	-508.83	-1208.21	-3381.90	-656.39	-1208.21	-2417.05
	TANDEM-LOAD MAX	289.85	487.63	7753.57	199.54	487.63	7318.45	264.73	507.06	7318.45	175.05	507.06	6298.72
	MIN	-240.91	-485.09	-1597.35	-331.66	-485.09	-1221.48	-266.61	-510.56	-1221.48	-358.07	-510.56	-872.99
	DISPERSION-LMAX	250.38	710.82	14421.56	198.56	710.82	13220.62	202.01	901.66	13220.62	153.39	901.66	11015.47
	MIN	-216.54	-696.16	-4245.57	-273.16	-696.16	-3246.54	-276.30	-920.33	-3246.54	-336.11	-920.33	-2320.38
300	Total Dead lWithout snow	128.53	35.81	33848.79	-262.70	35.81	33177.92	-229.74	-87.71	33177.92	-620.97	-87.71	28924.36
301	Particular Snow	8.03	3.77	2791.78	-19.16	3.77	2736.13	-21.64	-5.19	2736.13	-48.82	-5.19	2383.84
302	Live load Total	409.66	917.25	16530.81	289.90	917.25	15362.98	353.73	1063.17	15362.98	236.12	1063.17	12984.32
	MIN	-379.08	-991.18	-5070.86	-498.05	-991.18	-3877.63	-459.30	-1245.20	-3877.63	-580.62	-1245.20	-2771.40
303	Sum total D+L+PP	546.22	956.83	53171.38	95.01	956.83	51277.03	208.48	1057.98	51277.03	-362.84	1057.98	44292.51
	MIN	-356.25	-987.41	30048.46	-779.91	-987.41	30873.13	-710.68	-1338.09	30873.13	-1250.41	-1338.09	27705.38

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	2080 2080	2081			2081			2082			2082				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-130.61	-6.24	5331.79	-194.44	-6.24	3706.56	-241.14	49.96	3706.56	-324.75	49.96	0.00		
3	Railing	-7.12	4.70	158.65	-3.75	4.70	104.30	-10.17	10.25	104.30	-5.75	10.25	0.00		
5	Wheel guard	-70.49	46.55	1570.67	-37.12	46.55	1032.60	-100.68	101.48	1032.60	-56.97	101.48	0.00		
8	Steel weight	-443.62	-81.40	19686.45	-742.22	-81.40	13757.21	-854.59	79.80	13757.21	-1245.75	79.80	0.00		
10	Medial strip	-26.92	-36.24	2014.06	-87.56	-36.24	1441.64	-70.33	-41.88	1441.64	-149.77	-41.88	0.00		
19	Snow	-59.23	-1.53	2383.84	-86.41	-1.53	1655.66	-108.58	24.59	1655.66	-144.19	24.59	0.00		
31	Miscellaneous	-2.17	-2.93	162.74	-7.07	-2.93	116.49	-5.68	-3.38	116.49	-12.10	-3.38	0.00		
100	AASHTO-LRFD TRUCK-LOAD	MAX	287.46	884.44	8960.40	164.53	884.44	6340.11	247.88	1001.28	6340.11	97.38	1001.28	0.00	
		MIN	-410.80	-881.22	-1286.11	-544.58	-881.22	-765.32	-532.41	-951.67	-765.32	-719.46	-951.67	0.00	
		TANDEM-LOAD	MAX	224.13	606.41	6298.72	143.66	606.41	4465.59	198.83	686.67	4465.59	84.02	686.67	0.00
		MIN	-310.15	-603.30	-872.99	-401.57	-603.30	-519.49	-391.59	-650.10	-519.49	-519.42	-650.10	0.00	
		DISPERSION-L	MAX	166.03	1253.52	11015.47	122.35	1253.52	7432.89	150.50	1478.15	7432.89	114.52	1478.15	0.00
		MIN	-377.08	-1261.84	-2320.38	-441.93	-1261.84	-1380.80	-542.33	-1393.65	-1380.80	-648.57	-1393.65	0.00	
110	Live load	L-PICKUP 1	MAX	453.49	2137.96	19975.87	286.88	2137.96	13773.00	398.38	2479.44	13773.00	211.90	2479.44	0.00
		MIN	-787.87	-2143.06	-3606.49	-986.51	-2143.06	-2146.12	-1074.74	-2345.32	-2146.12	-1368.03	-2345.32	0.00	
		L-PICKUP 2	MAX	390.15	1859.93	17314.19	266.01	1859.93	11898.48	349.33	2164.83	11898.48	198.54	2164.83	0.00
		MIN	-687.22	-1865.14	-3193.37	-843.49	-1865.14	-1900.29	-933.92	-2043.75	-1900.29	-1167.99	-2043.75	0.00	
		L-PICKUP 3	MAX	-906.24	-2534.68	-4263.69	-1098.95	-2534.68	-2537.19	-1246.89	-2786.40	-2537.19	-1546.47	-2786.40	0.00
		MIN	453.49	2137.96	19975.87	286.88	2137.96	13773.00	398.38	2479.44	13773.00	211.90	2479.44	0.00	
111	AASHTO Twin	TWIN-PICKUP	MAX	428.75	2524.83	23050.04	273.62	2524.83	15995.24	389.32	2938.07	15995.24	229.17	2938.07	0.00
		MIN	-906.24	-2534.68	-4263.69	-1098.95	-2534.68	-2537.19	-1246.89	-2786.40	-2537.19	-1546.47	-2786.40	0.00	
		MID-PICKUP	MAX	-906.24	-2534.68	-4263.69	-1098.95	-2534.68	-2537.19	-1246.89	-2786.40	-2537.19	-1546.47	-2786.40	0.00
198	AASHTO Fatig	TRUCK-LOAD	MAX	165.75	488.23	1834.40	48.93	488.23	1361.83	156.19	555.35	1361.83	45.57	555.35	0.00
		MIN	-94.70	-409.58	-215.43	-208.79	-409.58	-128.47	-137.61	-448.29	-128.47	-269.01	-448.29	0.00	
		TANDEM-LOAD	MAX	134.12	335.80	1336.31	50.43	335.80	1003.95	128.87	382.16	1003.95	48.29	382.16	0.00
		MIN	-80.79	-278.94	-146.18	-163.26	-278.94	-87.17	-110.59	-306.03	-87.17	-205.24	-306.03	0.00	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	2080			2081			2081			2082		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	61.37	716.40	2234.58	35.82	716.40	1551.53	51.68	850.33	1551.53	27.86	850.33	0.00
	MIN	-93.41	-664.15	-411.78	-119.87	-664.15	-245.57	-130.03	-721.87	-245.57	-170.26	-721.87	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	310.36	1551.85	14595.68	181.67	1551.85	10339.60	282.08	1786.37	10339.60	140.12	1786.37	0.00
	MIN	-629.85	-1554.47	-2417.05	-779.12	-1554.47	-1438.30	-843.10	-1702.35	-1438.30	-1069.72	-1702.35	0.00
	TANDEM-LOAD MAX	224.13	606.41	6298.72	143.66	606.41	4465.59	198.83	686.67	4465.59	84.02	686.67	0.00
	MIN	-310.15	-603.30	-872.99	-401.57	-603.30	-519.49	-391.59	-650.10	-519.49	-519.42	-650.10	0.00
	DISPERSION-LMAX	166.03	1253.52	11015.47	122.35	1253.52	7432.89	150.50	1478.15	7432.89	114.52	1478.15	0.00
	MIN	-377.08	-1261.84	-2320.38	-441.93	-1261.84	-1380.80	-542.33	-1393.65	-1380.80	-648.57	-1393.65	0.00
300	Total Dead lWithout snow	-680.94	-75.55	28924.36	-1072.17	-75.55	20158.80	-1282.58	196.22	20158.80	-1795.10	196.22	0.00
301	Particular Snow	-59.23	-1.53	2383.84	-86.41	-1.53	1655.66	-108.58	24.59	1655.66	-144.19	24.59	0.00
302	Live load Total MAX	294.77	1389.67	12984.32	186.47	1389.67	8952.45	258.94	1611.64	8952.45	137.73	1611.64	0.00
	MIN	-589.05	-1647.54	-2771.40	-714.31	-1647.54	-1649.17	-810.48	-1811.16	-1649.17	-1005.20	-1811.16	0.00
303	Sum total D+L+PP MAX	-356.97	1388.14	44292.51	-916.16	1388.14	30766.91	-1054.54	1832.44	30766.91	-1760.23	1832.44	0.00
	MIN	-1329.22	-1724.62	27705.38	-1872.89	-1724.62	19670.53	-2201.64	-1786.57	19670.53	-2944.49	-1786.57	0.00

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3001			3002			3002			3003		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	352.00	28.53	0.46	283.05	28.53	3430.23	261.85	-26.29	3429.73	198.00	-26.29	5729.71
3	Railing	6.97	10.34	0.17	10.61	10.34	95.15	5.76	5.20	95.13	9.13	5.20	169.56
5	Wheel guard	69.04	102.37	1.67	105.07	102.37	942.00	56.98	51.50	941.80	90.34	51.50	1678.63
8	Steel weight	1341.17	-8.04	-0.13	1018.69	-8.04	12744.80	990.90	-168.52	12743.03	692.30	-168.52	21161.70
10	Medial strip	283.09	-98.51	-1.60	129.26	-98.51	2204.52	176.50	-73.34	2204.69	51.36	-73.34	3318.95
19	Snow	167.38	11.43	0.19	130.37	11.43	1606.42	122.05	-12.11	1606.23	89.27	-12.11	2660.94
31	Miscellaneous	12.67	-4.41	-0.07	7.38	-4.41	108.52	9.09	-4.11	108.51	4.19	-4.11	175.36
100	AASHTO-LRFD TRUCK-LOAD	748.62	913.54	14.88	542.36	913.54	5519.12	608.16	893.26	5516.61	461.03	893.26	8787.14
	MIN	-83.86	-895.70	-14.59	-230.55	-895.70	-577.76	-136.16	-917.82	-577.64	-279.77	-917.82	-1105.01
	TANDEM-LOAD MAX	549.78	624.13	10.17	402.79	624.13	3928.76	446.23	610.85	3928.24	343.32	610.85	6164.53
	MIN	-76.96	-612.49	-9.98	-195.11	-612.49	-393.07	-124.99	-627.92	-392.99	-218.85	-627.92	-751.78
	DISPERSION-LMAX	664.90	1441.31	23.48	577.59	1441.31	6476.31	536.06	1387.73	6475.98	471.26	1387.73	11085.67
	MIN	-104.24	-1388.89	-22.62	-130.28	-1388.89	-1044.76	-115.55	-1425.25	-1044.57	-156.28	-1425.25	-1998.16
110	Live load L-PICKUP 1	1413.52	2354.85	38.36	1119.95	2354.85	11995.43	1144.22	2280.99	11992.58	932.30	2280.99	19872.81
	MIN	-188.10	-2284.58	-37.21	-360.84	-2284.58	-1622.52	-251.70	-2343.07	-1622.20	-436.06	-2343.07	-3103.17
	L-PICKUP 2 MAX	1214.68	2065.43	33.64	980.38	2065.43	10405.07	982.29	1998.58	10404.22	814.59	1998.58	17250.21
	MIN	-181.20	-2001.38	-32.60	-325.40	-2001.38	-1437.83	-240.54	-2053.17	-1437.55	-375.13	-2053.17	-2749.93
	L-PICKUP 3	-204.31	-2701.79	-44.01	-348.04	-2701.79	-1916.76	-246.25	-2764.46	-1916.39	-413.18	-2764.46	-3665.94
	Live load MAX	1413.52	2354.85	38.36	1119.95	2354.85	11995.43	1144.22	2280.99	11992.58	932.30	2280.99	19872.81
	MIN	-204.31	-2701.79	-44.01	-360.84	-2701.79	-1916.76	-251.70	-2764.46	-1916.39	-436.06	-2764.46	-3665.94
111	AASHTO Twin TWIN-PICKUP	1593.91	2773.89	45.18	1307.70	2773.89	13912.74	1288.37	2682.37	13909.24	1081.96	2682.37	23053.53
	MIN	-204.31	-2701.79	-44.01	-348.04	-2701.79	-1916.76	-246.25	-2764.46	-1916.39	-413.18	-2764.46	-3665.94
	MID-PICKUP	-204.31	-2701.79	-44.01	-348.04	-2701.79	-1916.76	-246.25	-2764.46	-1916.39	-413.18	-2764.46	-3665.94
198	AASHTO FatigTRUCK-LOAD	274.81	524.23	8.54	134.37	524.23	1303.63	219.04	507.78	1304.05	106.73	507.78	1907.21
	MIN	-39.52	-426.92	-6.95	-139.93	-426.92	-99.16	-47.96	-434.14	-99.36	-162.12	-434.14	-189.27
	TANDEM-LOAD MAX	213.00	358.49	5.84	110.60	358.49	964.88	169.30	348.93	965.06	88.33	348.93	1388.04
	MIN	-46.79	-292.61	-4.77	-121.45	-292.61	-67.39	-41.62	-295.98	-67.52	-130.33	-295.98	-128.63

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3001			3002			3002			3003		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	185.11	841.81	13.71	148.10	841.81	1536.14	146.49	799.03	1543.13	120.41	799.03	2495.38
	MIN	-25.02	-717.19	-11.68	-43.03	-717.19	-189.75	-32.65	-745.76	-190.12	-59.54	-745.76	-362.18
199	AASHTO-LRFD TRUCK-LOAD MAX	1106.12	1640.80	26.73	875.41	1640.80	8982.29	895.46	1592.68	8978.73	730.91	1592.68	14529.36
	MIN	-122.78	-1613.10	-26.28	-256.42	-1613.10	-1084.98	-158.06	-1646.37	-1084.75	-302.81	-1646.37	-2075.11
	TANDEM-LOAD MAX	549.78	624.13	10.17	402.79	624.13	3928.76	446.23	610.85	3928.24	343.32	610.85	6164.53
	MIN	-76.96	-612.49	-9.98	-195.11	-612.49	-393.07	-124.99	-627.92	-392.99	-218.85	-627.92	-751.78
	DISPERSION-LMAX	664.90	1441.31	23.48	577.59	1441.31	6476.31	536.06	1387.73	6475.98	471.26	1387.73	11085.67
	MIN	-104.24	-1388.89	-22.62	-130.28	-1388.89	-1044.76	-115.55	-1425.25	-1044.57	-156.28	-1425.25	-1998.16
300	Total Dead lWithout snow	2064.94	30.28	0.49	1554.06	30.28	19525.23	1501.07	-215.56	19522.89	1045.33	-215.56	32233.90
301	Particular Snow	167.38	11.43	0.19	130.37	11.43	1606.42	122.05	-12.11	1606.23	89.27	-12.11	2660.94
302	Live load Total MAX	918.79	1530.65	24.93	727.97	1530.65	7797.03	743.74	1482.65	7795.18	605.99	1482.65	12917.33
	MIN	-132.80	-1756.17	-28.61	-234.54	-1756.17	-1245.90	-163.61	-1796.90	-1245.65	-283.44	-1796.90	-2382.86
303	Sum total D+L+PP MAX	3151.10	1572.36	25.61	2412.40	1572.36	28928.68	2366.86	1470.53	28924.30	1740.59	1470.53	47812.18
	MIN	2059.67	-1744.73	-28.42	1379.52	-1744.73	19511.98	1410.43	-2024.57	19509.77	766.13	-2024.57	31797.13

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3003			3004			3004			3005			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	179.50	-42.98	5729.29	115.65	-42.98	7205.49	92.86	-69.07	7204.84	29.02	-69.07	7814.43	
3	Railing	2.99	1.37	169.46	6.36	1.37	216.23	0.20	-1.16	216.17	3.57	-1.16	235.07	
5	Wheel guard	29.61	13.58	1677.68	62.97	13.58	2140.71	2.02	-11.47	2140.08	35.38	-11.47	2327.15	
8	Steel weight	690.69	-190.32	21161.15	392.09	-190.32	26576.80	373.42	-265.66	26574.90	74.82	-265.66	28816.81	
10	Medial strip	111.29	-31.21	3320.01	6.48	-31.21	3883.65	52.74	-22.44	3883.87	-31.75	-22.44	3963.45	
19	Snow	82.00	-18.24	2660.79	50.99	-18.24	3323.76	40.85	-29.80	3323.47	11.60	-29.80	3583.62	
31	Miscellaneous	6.75	-2.75	175.39	1.85	-2.75	218.84	4.23	-2.57	218.85	-0.68	-2.57	237.06	
100	AASHTO-LRFD TRUCK-LOAD	MAX	543.80	773.68	8785.12	399.95	773.68	11009.87	475.34	657.13	11008.26	338.51	657.13	12106.04
		MIN	-188.87	-794.67	-1104.94	-304.94	-794.67	-1638.82	-226.66	-763.16	-1638.64	-363.15	-763.16	-2169.94
		TANDEM-LOAD	401.32	531.67	6162.72	301.79	531.67	7716.26	353.77	450.59	7714.87	260.04	450.59	8487.32
		MIN	-159.59	-544.22	-751.73	-249.15	-544.22	-1114.94	-190.98	-527.48	-1114.83	-276.24	-527.48	-1476.28
		DISPERSION-LMAX	434.53	1097.61	11084.91	372.51	1097.61	14430.50	334.58	798.49	14428.98	276.73	798.49	16403.36
		MIN	-141.85	-1162.95	-1998.04	-186.31	-1162.95	-2963.14	-179.12	-905.20	-2962.83	-228.75	-905.20	-3923.18
110	Live load	L-PICKUP 1	978.34	1871.28	19870.04	772.47	1871.28	25440.37	809.92	1455.62	25437.24	615.25	1455.62	28509.40
		MIN	-330.72	-1957.62	-3102.99	-491.25	-1957.62	-4601.96	-405.78	-1668.35	-4601.47	-591.89	-1668.35	-6093.12
		L-PICKUP 2	835.86	1629.28	17247.63	674.30	1629.28	22146.76	688.35	1249.08	22143.85	536.77	1249.08	24890.68
		MIN	-301.43	-1707.17	-2749.77	-435.46	-1707.17	-4078.09	-370.10	-1432.68	-4077.65	-504.99	-1432.68	-5399.46
		L-PICKUP 3	-313.59	-2310.29	-3665.72	-487.40	-2310.29	-5436.62	-414.08	-1895.90	-5436.04	-589.82	-1895.90	-7198.31
		Live load	978.34	1871.28	19870.04	772.47	1871.28	25440.37	809.92	1455.62	25437.24	615.25	1455.62	28509.40
MIN	-330.72	-2310.29	-3665.72	-491.25	-2310.29	-5436.62	-414.08	-1895.90	-5436.04	-591.89	-1895.90	-7198.31		
111	AASHTO Twin	TWIN-PICKUP	1088.91	2202.02	23051.67	888.34	2202.02	29383.72	886.56	1680.65	29380.93	699.27	1680.65	32737.94
		MIN	-313.59	-2310.29	-3665.72	-487.40	-2310.29	-5436.62	-414.08	-1895.90	-5436.04	-589.82	-1895.90	-7198.31
		MID-PICKUP	-313.59	-2310.29	-3665.72	-487.40	-2310.29	-5436.62	-414.08	-1895.90	-5436.04	-589.82	-1895.90	-7198.31
198	AASHTO Fatig	TRUCK-LOAD	206.82	430.41	1904.81	92.90	430.41	2279.22	194.17	343.91	2276.41	81.57	343.91	2436.65
		MIN	-57.67	-366.77	-189.28	-170.50	-366.77	-277.83	-67.72	-291.79	-277.81	-160.39	-291.79	-365.13
		TANDEM-LOAD	160.79	295.98	1386.35	74.45	295.98	1645.64	152.00	235.90	1643.66	66.05	235.90	1755.77
		MIN	-53.50	-250.07	-128.64	-135.70	-250.07	-188.89	-61.50	-199.87	-188.87	-141.05	-199.87	-248.31

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3003			3004			3004			3005		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	121.00	630.29	2492.21	93.65	630.29	3068.92	98.50	467.80	3064.59	71.24	467.80	3339.51
	MIN	-43.17	-614.25	-362.20	-69.36	-614.25	-531.67	-55.77	-466.54	-531.63	-82.15	-466.54	-698.77
199	AASHTO-LRFD TRUCK-LOAD MAX	775.37	1349.09	14528.05	614.53	1349.09	18218.08	650.48	1068.90	18216.49	500.24	1068.90	19972.13
	MIN	-206.59	-1404.03	-2074.98	-355.24	-1404.03	-3077.55	-280.97	-1201.36	-3077.22	-426.61	-1201.36	-4074.94
	TANDEM-LOAD MAX	401.32	531.67	6162.72	301.79	531.67	7716.26	353.77	450.59	7714.87	260.04	450.59	8487.32
	MIN	-159.59	-544.22	-751.73	-249.15	-544.22	-1114.94	-190.98	-527.48	-1114.83	-276.24	-527.48	-1476.28
	DISPERSION-LMAX	434.53	1097.61	11084.91	372.51	1097.61	14430.50	334.58	798.49	14428.98	276.73	798.49	16403.36
	MIN	-141.85	-1162.95	-1998.04	-186.31	-1162.95	-2963.14	-179.12	-905.20	-2962.83	-228.75	-905.20	-3923.18
300	Total Dead lWithout snow	1020.83	-252.32	32232.98	585.40	-252.32	40241.72	525.47	-372.38	40238.71	110.37	-372.38	43393.97
301	Particular Snow	82.00	-18.24	2660.79	50.99	-18.24	3323.76	40.85	-29.80	3323.47	11.60	-29.80	3583.62
302	Live load Total MAX	635.92	1216.33	12915.52	502.10	1216.33	16536.24	526.45	946.15	16534.21	399.91	946.15	18531.11
	MIN	-214.97	-1501.69	-2382.72	-319.31	-1501.69	-3533.80	-269.15	-1232.34	-3533.43	-384.73	-1232.34	-4678.90
303	Sum total D+L+PP MAX	1738.76	1198.09	47809.29	1138.50	1198.09	60101.73	1092.78	827.83	60096.39	521.87	827.83	65508.70
	MIN	823.38	-1772.25	31796.24	221.29	-1772.25	38971.54	216.43	-1634.51	38968.72	-373.13	-1634.51	40895.02

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3005			3006			3006			3007			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	6.08	-44.27	7814.07	-57.75	-44.27	7555.65	-87.53	23.23	7555.31	-151.36	23.23	6360.89	
3	Railing	-2.46	-1.22	235.03	0.91	-1.22	227.26	-5.25	0.45	227.25	-1.88	0.45	191.58	
5	Wheel guard	-24.38	-12.04	2326.83	8.99	-12.04	2249.88	-51.99	4.47	2249.77	-18.63	4.47	1896.65	
8	Steel weight	54.11	-164.63	28815.75	-244.49	-164.63	27863.66	-291.43	88.64	27862.45	-590.03	88.64	23455.13	
10	Medial strip	4.17	-5.19	3963.24	-63.34	-5.19	3650.28	-37.08	24.04	3649.84	-97.74	24.04	2975.67	
19	Snow	0.62	-18.71	3583.44	-27.17	-18.71	3449.18	-41.75	11.50	3449.00	-68.94	11.50	2895.55	
31	Miscellaneous	1.64	-1.40	237.06	-3.26	-1.40	229.27	-1.19	0.83	229.26	-6.09	0.83	192.81	
100	AASHTO-LRFD TRUCK-LOAD	MAX	410.95	680.64	12104.76	282.18	680.64	12163.98	342.01	765.26	12163.14	213.87	765.26	11192.30
		MIN	-292.59	-765.05	-2169.79	-416.05	-765.05	-2688.53	-364.52	-719.09	-2688.44	-488.42	-719.09	-3152.83
		TANDEM-LOAD MAX	309.21	470.03	8486.32	222.14	470.03	8546.44	261.83	529.91	8545.78	176.81	529.91	7855.24
		MIN	-230.04	-528.95	-1476.19	-311.94	-528.95	-1829.10	-278.72	-496.21	-1829.04	-361.42	-496.21	-2144.98
		DISPERSION-LMAX	249.24	686.99	16402.23	195.94	686.99	16965.84	172.95	746.46	16965.06	125.45	746.46	15916.51
		MIN	-232.90	-757.05	-3922.91	-287.78	-757.05	-4860.52	-308.05	-710.66	-4860.30	-369.01	-710.66	-5699.81
110	Live load	L-PICKUP 1 MAX	660.19	1367.63	28506.98	478.12	1367.63	29129.82	514.96	1511.72	29128.20	339.32	1511.72	27108.82
		MIN	-525.49	-1522.11	-6092.70	-703.83	-1522.11	-7549.05	-672.56	-1429.75	-7548.74	-857.43	-1429.75	-8852.64
		L-PICKUP 2 MAX	558.45	1157.02	24888.54	418.08	1157.02	25512.28	434.78	1276.37	25510.85	302.26	1276.37	23771.76
		MIN	-462.95	-1286.00	-5399.09	-599.73	-1286.00	-6689.62	-586.77	-1206.87	-6689.34	-730.43	-1206.87	-7844.79
		L-PICKUP 3	-551.75	-1714.34	-7197.82	-728.39	-1714.34	-8918.40	-747.96	-1618.78	-8918.04	-931.23	-1618.78	-10458.48
		Live load MAX	660.19	1367.63	28506.98	478.12	1367.63	29129.82	514.96	1511.72	29128.20	339.32	1511.72	27108.82
MIN	-551.75	-1714.34	-7197.82	-728.39	-1714.34	-8918.40	-747.96	-1618.78	-8918.04	-931.23	-1618.78	-10458.48		
111	AASHTO Twin	TWIN-PICKUP MAX	703.40	1522.31	32736.81	528.85	1522.31	33157.79	524.92	1716.63	33154.96	361.61	1716.63	30884.89
		MIN	-551.75	-1714.34	-7197.82	-728.39	-1714.34	-8918.40	-747.96	-1618.78	-8918.04	-931.23	-1618.78	-10458.48
		MID-PICKUP	-551.75	-1714.34	-7197.82	-728.39	-1714.34	-8918.40	-747.96	-1618.78	-8918.04	-931.23	-1618.78	-10458.48
198	AASHTO Fatig	TRUCK-LOAD MAX	182.84	270.85	2433.75	70.97	270.85	2418.70	170.24	204.43	2417.72	58.68	204.43	2235.49
		MIN	-75.32	-207.85	-364.94	-186.62	-207.85	-449.58	-86.08	-266.05	-449.21	-198.35	-266.05	-526.06
		TANDEM-LOAD MAX	144.21	186.54	1753.76	60.27	186.54	1745.93	135.68	142.63	1745.17	53.53	142.63	1615.10
		MIN	-66.99	-143.41	-248.19	-146.32	-143.41	-305.81	-73.90	-182.40	-305.57	-154.71	-182.40	-357.87

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3005			3006			3006			3007		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	81.13	384.01	3333.61	54.07	384.01	3367.58	66.20	394.88	3365.49	39.96	394.88	3141.46
	MIN	-66.58	-395.83	-698.41	-93.31	-395.83	-860.43	-80.15	-392.25	-859.72	-107.07	-392.25	-1006.78
199	AASHTO-LRFD TRUCK-LOAD MAX	532.31	1004.47	19972.01	391.68	1004.47	19876.15	410.29	1160.91	19873.78	276.34	1160.91	18400.03
	MIN	-380.15	-1147.77	-4074.67	-521.54	-1147.77	-5048.82	-523.02	-1087.98	-5048.63	-665.69	-1087.98	-5920.72
	TANDEM-LOAD MAX	309.21	470.03	8486.32	222.14	470.03	8546.44	261.83	529.91	8545.78	176.81	529.91	7855.24
	MIN	-230.04	-528.95	-1476.19	-311.94	-528.95	-1829.10	-278.72	-496.21	-1829.04	-361.42	-496.21	-2144.98
	DISPERSION-LMAX	249.24	686.99	16402.23	195.94	686.99	16965.84	172.95	746.46	16965.06	125.45	746.46	15916.51
	MIN	-232.90	-757.05	-3922.91	-287.78	-757.05	-4860.52	-308.05	-710.66	-4860.30	-369.01	-710.66	-5699.81
300	Total Dead lWithout snow	39.16	-228.74	43391.99	-358.95	-228.74	41776.00	-474.49	141.66	41773.88	-865.73	141.66	35072.74
301	Particular Snow	0.62	-18.71	3583.44	-27.17	-18.71	3449.18	-41.75	11.50	3449.00	-68.94	11.50	2895.55
302	Live load Total MAX	429.12	888.96	18529.54	310.78	888.96	18934.39	334.73	982.62	18933.33	220.56	982.62	17620.73
	MIN	-358.64	-1114.32	-4678.58	-473.45	-1114.32	-5796.96	-486.17	-1052.20	-5796.73	-605.30	-1052.20	-6798.01
303	Sum total D+L+PP MAX	468.90	870.25	65504.96	17.90	870.25	64159.56	-81.09	1135.78	64156.21	-647.94	1135.78	55589.02
	MIN	-358.02	-1361.77	40893.27	-859.57	-1361.77	37689.13	-1002.41	-1040.70	37687.13	-1539.97	-1040.70	29130.87

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3007			MEMBER 3008			MEMBER 3008			MEMBER 3009			
		NODE 3007			NODE 3008			NODE 3008			NODE 3009			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-157.92	24.75	6360.89	-221.75	24.75	4462.52	-237.71	20.02	4462.52	-301.54	20.02	1766.26	
3	Railing	-7.45	-0.23	191.58	-4.08	-0.23	133.95	-9.94	-1.55	133.95	-6.57	-1.55	51.39	
5	Wheel guard	-73.74	-2.26	1896.65	-40.37	-2.26	1326.10	-98.42	-15.33	1326.10	-65.05	-15.33	508.75	
8	Steel weight	-550.14	102.91	23455.12	-848.74	102.91	16460.70	-843.33	99.50	16460.70	-1141.93	99.50	6534.40	
10	Medial strip	-61.59	24.73	2975.67	-122.23	24.73	2056.57	-90.54	28.09	2056.57	-151.17	28.09	848.02	
19	Snow	-73.13	11.57	2895.55	-100.32	11.57	2028.31	-108.80	8.89	2028.31	-135.99	8.89	804.35	
31	Miscellaneous	-3.28	1.26	192.81	-8.18	1.26	135.53	-5.65	1.78	135.53	-10.55	1.78	54.55	
100	AASHTO-LRFD TRUCK-LOAD	MAX	313.72	766.21	11192.30	187.87	766.21	9633.72	285.85	773.50	9633.72	161.75	773.50	7658.89
		MIN	-399.57	-716.47	-3152.83	-525.01	-716.47	-3691.84	-435.22	-720.64	-3691.84	-559.49	-720.64	-4381.23
		TANDEM-LOAD MAX	242.93	530.59	7855.24	157.62	530.59	6781.48	223.86	534.45	6781.48	139.92	534.45	5444.12
		MIN	-301.78	-494.20	-2144.98	-386.33	-494.20	-2511.69	-325.59	-495.21	-2511.69	-409.50	-495.21	-2980.69
		DISPERSION-LMAX	145.94	849.01	15916.51	100.91	849.01	13855.89	129.57	1021.19	13855.89	86.79	1021.19	10769.57
		MIN	-395.86	-811.68	-5699.81	-459.33	-811.68	-6674.33	-509.75	-991.75	-6674.33	-575.53	-991.75	-7921.97
110	Live load	L-PICKUP 1 MAX	459.66	1615.23	27108.81	288.78	1615.23	23489.61	415.42	1794.69	23489.61	248.54	1794.69	18428.46
		MIN	-795.43	-1528.15	-8852.64	-984.34	-1528.15	-10366.17	-944.96	-1712.39	-10366.17	-1135.02	-1712.39	-12303.19
		L-PICKUP 2 MAX	388.87	1379.61	23771.75	258.53	1379.61	20637.37	353.43	1555.64	20637.37	226.71	1555.64	16213.68
		MIN	-697.64	-1305.88	-7844.79	-845.65	-1305.88	-9186.02	-835.34	-1486.96	-9186.02	-985.03	-1486.96	-10902.66
		L-PICKUP 3	-904.68	-1747.48	-10458.48	-1088.68	-1747.48	-12246.53	-1083.87	-1992.32	-12246.53	-1266.36	-1992.32	-14534.62
		Live load MAX	459.66	1615.23	27108.81	288.78	1615.23	23489.61	415.42	1794.69	23489.61	248.54	1794.69	18428.46
MIN	-904.68	-1747.48	-10458.48	-1088.68	-1747.48	-12246.53	-1083.87	-1992.32	-12246.53	-1266.36	-1992.32	-14534.62		
111	AASHTO Twin	TWIN-PICKUP MAX	452.00	1845.74	30884.89	291.11	1845.74	26571.50	396.39	2075.90	26571.50	238.57	2075.90	20414.15
		MIN	-904.68	-1747.48	-10458.48	-1088.68	-1747.48	-12246.53	-1083.87	-1992.32	-12246.53	-1266.36	-1992.32	-14534.62
		MID-PICKUP	-904.68	-1747.48	-10458.48	-1088.68	-1747.48	-12246.53	-1083.87	-1992.32	-12246.53	-1266.36	-1992.32	-14534.62
198	AASHTO Fatig	TRUCK-LOAD MAX	165.90	273.04	2235.49	53.25	273.04	1949.29	161.24	336.27	1949.29	48.41	336.27	1597.32
		MIN	-90.65	-337.71	-526.06	-203.56	-337.71	-615.56	-98.25	-401.21	-615.56	-208.59	-401.21	-736.39
		TANDEM-LOAD MAX	133.05	187.99	1615.10	51.67	187.99	1415.88	130.02	230.27	1415.88	49.15	230.27	1176.49
		MIN	-77.67	-231.09	-357.87	-158.54	-231.09	-418.77	-83.28	-275.30	-418.77	-162.08	-275.30	-500.78

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3007			3008			3008			3009		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.63	446.17	3141.47	34.94	446.17	2738.72	56.24	533.66	2738.72	30.92	533.66	2151.80
	MIN	-96.77	-461.90	-1006.78	-123.71	-461.90	-1178.34	-121.54	-570.51	-1178.34	-148.26	-570.51	-1410.56
199	AASHTO-LRFD TRUCK-LOAD MAX	356.28	1201.81	18400.03	222.54	1201.81	15667.99	310.86	1285.36	15667.99	178.29	1285.36	11912.83
	MIN	-609.34	-1129.96	-5920.72	-750.32	-1129.96	-6932.93	-694.55	-1221.94	-6932.93	-831.54	-1221.94	-8227.61
	TANDEM-LOAD MAX	242.93	530.59	7855.24	157.62	530.59	6781.48	223.86	534.45	6781.48	139.92	534.45	5444.12
	MIN	-301.78	-494.20	-2144.98	-386.33	-494.20	-2511.69	-325.59	-495.21	-2511.69	-409.50	-495.21	-2980.69
	DISPERSION-LMAX	145.94	849.01	15916.51	100.91	849.01	13855.89	129.57	1021.19	13855.89	86.79	1021.19	10769.57
	MIN	-395.86	-811.68	-5699.81	-459.33	-811.68	-6674.33	-509.75	-991.75	-6674.33	-575.53	-991.75	-7921.97
300	Total Dead lWithout snow	-854.12	151.17	35072.73	-1245.35	151.17	24575.36	-1285.58	132.51	24575.36	-1676.81	132.51	9763.36
301	Particular Snow	-73.13	11.57	2895.55	-100.32	11.57	2028.31	-108.80	8.89	2028.31	-135.99	8.89	804.35
302	Live load Total MAX	298.78	1049.90	17620.73	187.71	1049.90	15268.25	270.02	1166.55	15268.25	161.55	1166.55	11978.50
	MIN	-588.04	-1135.86	-6798.01	-707.64	-1135.86	-7960.25	-704.52	-1295.01	-7960.25	-823.13	-1295.01	-9447.50
303	Sum total D+L+PP MAX	-538.84	1212.64	55589.01	-1101.65	1212.64	41871.91	-1043.36	1307.94	41871.91	-1602.78	1307.94	22546.21
	MIN	-1515.30	-1124.29	29130.87	-2053.31	-1124.29	16255.34	-2098.91	-1286.12	16255.34	-2635.94	-1286.12	-1714.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3009			3010			3010			3011			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-341.20	-21.62	1766.26	-405.03	-21.62	-1964.87	-428.53	-43.14	-1964.87	-492.36	-43.14	-6569.30	
3	Railing	-13.24	-5.26	51.39	-9.87	-5.26	-64.13	-15.60	-9.88	-64.13	-12.23	-9.88	-203.25	
5	Wheel guard	-131.04	-52.06	508.75	-97.68	-52.06	-634.84	-154.42	-97.82	-634.84	-121.05	-97.82	-2012.22	
8	Steel weight	-1222.85	-24.71	6534.40	-1521.45	-24.71	-7187.10	-1548.12	-56.62	-7187.10	-1846.72	-56.62	-24161.33	
10	Medial strip	-129.42	25.83	848.02	-190.06	25.83	-749.37	-164.49	44.05	-749.37	-225.13	44.05	-2697.49	
19	Snow	-155.24	-10.68	804.35	-182.42	-10.68	-883.96	-194.26	-21.43	-883.96	-221.45	-21.43	-2962.50	
31	Miscellaneous	-8.69	1.89	54.55	-13.59	1.89	-56.81	-11.48	3.46	-56.81	-16.38	3.46	-196.15	
100	AASHTO-LRFD TRUCK-LOAD	MAX	237.52	798.00	7658.89	119.30	798.00	5121.41	197.14	1040.85	5121.41	78.56	1040.85	2358.66
		MIN	-503.75	-836.15	-4381.23	-622.84	-836.15	-5079.01	-571.56	-1088.91	-5079.01	-685.29	-1088.91	-5608.59
		TANDEM-LOAD MAX	189.61	547.83	5444.12	109.69	547.83	3738.09	158.77	712.82	3738.09	81.06	712.82	1853.58
		MIN	-371.92	-573.98	-2980.69	-451.72	-573.98	-3455.33	-417.53	-743.74	-3455.33	-492.86	-743.74	-3813.12
		DISPERSION-LMAX	101.15	1220.68	10769.57	62.97	1220.68	6285.69	81.21	1690.60	6285.69	47.70	1690.60	3637.68
		MIN	-650.48	-1258.24	-7921.97	-720.92	-1258.24	-9458.23	-773.57	-1764.01	-9458.23	-848.67	-1764.01	-14275.07
110	Live load	L-PICKUP 1 MAX	338.67	2018.68	18428.46	182.28	2018.68	11407.10	278.34	2731.45	11407.10	126.26	2731.45	5996.34
		MIN	-1154.23	-2094.39	-12303.19	-1343.76	-2094.39	-14537.23	-1345.13	-2852.91	-14537.23	-1533.96	-2852.91	-19883.65
		L-PICKUP 2 MAX	290.76	1768.51	16213.68	172.66	1768.51	10023.78	239.98	2403.42	10023.78	128.76	2403.42	5491.26
		MIN	-1022.40	-1832.22	-10902.66	-1172.64	-1832.22	-12913.56	-1191.10	-2507.75	-12913.56	-1341.53	-2507.75	-18088.18
		L-PICKUP 3	-1336.73	-2463.79	-14534.62	-1517.66	-2463.79	-17097.05	-1568.51	-3347.91	-17097.05	-1748.14	-3347.91	-22326.69
		Live load MAX	338.67	2018.68	18428.46	182.28	2018.68	11407.10	278.34	2731.45	11407.10	128.76	2731.45	5996.34
MIN	-1336.73	-2463.79	-14534.62	-1517.66	-2463.79	-17097.05	-1568.51	-3347.91	-17097.05	-1748.14	-3347.91	-22326.69		
111	AASHTO Twin	TWIN-PICKUP MAX	311.48	2376.86	20414.15	158.62	2376.86	11776.56	249.49	3211.61	11776.56	90.74	3211.61	5982.26
		MIN	-1336.73	-2463.79	-14534.62	-1517.66	-2463.79	-17097.05	-1568.51	-3347.91	-17097.05	-1748.14	-3347.91	-22326.69
		MID-PICKUP	-1336.73	-2463.79	-14534.62	-1517.66	-2463.79	-17097.05	-1568.51	-3347.91	-17097.05	-1748.14	-3347.91	-22326.69
198	AASHTO Fatig	TRUCK-LOAD MAX	150.09	392.67	1597.32	40.43	392.67	1157.29	137.71	448.10	1157.29	32.98	448.10	668.66
		MIN	-113.48	-475.88	-736.39	-218.37	-475.88	-886.81	-128.92	-557.31	-886.81	-228.09	-557.31	-1081.08
		TANDEM-LOAD MAX	121.99	268.61	1176.49	40.48	268.61	882.29	112.67	307.05	882.29	29.33	307.05	559.55
		MIN	-93.87	-326.65	-500.78	-168.21	-326.65	-602.21	-103.97	-382.06	-602.21	-173.85	-382.06	-731.82

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3009			3010			3010			3011		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	47.38	643.18	2151.80	22.93	643.18	1330.13	45.68	885.95	1330.13	22.41	885.95	764.87
	MIN	-159.92	-709.61	-1410.56	-186.06	-709.61	-1795.26	-202.59	-1008.64	-1795.26	-227.77	-1008.64	-3066.61
199	AASHTO-LRFD TRUCK-LOAD MAX	244.94	1420.27	11912.83	113.27	1420.27	6799.37	196.01	1877.86	6799.37	53.12	1877.86	3009.28
	MIN	-834.78	-1479.30	-8227.61	-965.37	-1479.30	-9538.50	-969.22	-1955.89	-9538.50	-1093.70	-1955.89	-10532.37
	TANDEM-LOAD MAX	189.61	547.83	5444.12	109.69	547.83	3738.09	158.77	712.82	3738.09	81.06	712.82	1853.58
	MIN	-371.92	-573.98	-2980.69	-451.72	-573.98	-3455.33	-417.53	-743.74	-3455.33	-492.86	-743.74	-3813.12
	DISPERSION-LMAX	101.15	1220.68	10769.57	62.97	1220.68	6285.69	81.21	1690.60	6285.69	47.70	1690.60	3637.68
	MIN	-650.48	-1258.24	-7921.97	-720.92	-1258.24	-9458.23	-773.57	-1764.01	-9458.23	-848.67	-1764.01	-14275.07
300	Total Dead lWithout snow	-1846.43	-75.93	9763.36	-2237.66	-75.93	-10657.11	-2322.65	-159.95	-10657.11	-2713.88	-159.95	-35839.73
301	Particular Snow	-155.24	-10.68	804.35	-182.42	-10.68	-883.96	-194.26	-21.43	-883.96	-221.45	-21.43	-2962.50
302	Live load Total MAX	220.13	1312.14	11978.50	118.48	1312.14	7414.62	180.92	1775.44	7414.62	83.69	1775.44	3897.62
	MIN	-868.88	-1601.46	-9447.50	-986.48	-1601.46	-11113.09	-1019.53	-2176.14	-11113.09	-1136.29	-2176.14	-14512.35
303	Sum total D+L+PP MAX	-1715.50	1301.47	22546.21	-2266.06	1301.47	-1902.08	-2281.71	1754.01	-1902.08	-2826.52	1754.01	-33735.33
	MIN	-2870.55	-1688.07	-1714.04	-3406.56	-1688.07	-22654.16	-3536.44	-2357.52	-22654.16	-4071.61	-2357.52	-53314.58

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3011			MEMBER 3012			MEMBER 3012			MEMBER 3013				
		NODE 3011			NODE 3012			NODE 3012			NODE 3013				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-485.51	-20.04	-6569.30	-549.34	-20.04	-11743.52	486.00	31.48	-11743.52	434.94	31.48	-8059.79		
3	Railing	-12.85	-7.97	-203.25	-9.48	-7.97	-314.94	7.40	7.31	-314.94	10.10	7.31	-244.95		
5	Wheel guard	-127.25	-78.95	-2012.22	-93.88	-78.95	-3117.89	73.27	72.37	-3117.89	99.96	72.37	-2424.99		
8	Steel weight	-1811.53	14.10	-24161.33	-2110.13	14.10	-43769.66	1878.73	40.11	-43769.66	1639.85	40.11	-29695.36		
10	Medial strip	-216.41	44.86	-2697.49	-277.05	44.86	-5164.77	238.34	-31.64	-5164.77	189.83	-31.64	-3452.12		
19	Snow	-218.56	-10.75	-2962.50	-245.75	-10.75	-5284.06	215.98	15.77	-5284.06	194.23	15.77	-3643.22		
31	Miscellaneous	-15.71	3.49	-196.15	-20.61	3.49	-377.75	18.79	-2.63	-377.75	14.87	-2.63	-243.11		
100	AASHTO-LRFD TRUCK-LOAD	MAX	178.17	1394.38	2358.66	85.35	1394.38	1726.37	745.97	1429.93	1726.37	606.59	1429.93	1868.58	
		MIN	-617.43	-1411.12	-5608.59	-764.72	-1411.12	-6750.22	-111.20	-1412.15	-6750.22	-165.79	-1412.15	-6120.84	
		TANDEM-LOAD	MAX	152.25	954.11	1853.58	77.71	954.11	1170.91	538.48	979.35	1170.91	442.24	979.35	1518.44
		MIN	-449.90	-962.70	-3813.12	-548.57	-962.70	-4589.55	-95.49	-963.68	-4589.55	-145.38	-963.68	-4156.68	
		DISPERSION-L	MAX	76.92	2302.81	3637.68	61.72	2302.81	3133.63	954.47	2372.92	3133.63	876.55	2372.92	2642.23
		MIN	-864.88	-2338.40	-14275.07	-958.29	-2338.40	-22212.35	-156.28	-2319.53	-22212.35	-165.23	-2319.53	-15667.13	
110	Live load	L-PICKUP 1	MAX	255.08	3697.19	5996.34	147.07	3697.19	4860.01	1700.44	3802.86	4860.01	1483.14	3802.86	4510.82
		MIN	-1482.31	-3749.52	-19883.65	-1723.01	-3749.52	-28962.57	-267.48	-3731.67	-28962.57	-331.02	-3731.67	-21787.97	
		L-PICKUP 2	MAX	229.17	3256.92	5491.26	139.43	3256.92	4304.54	1492.95	3352.27	4304.54	1318.79	3352.27	4160.67
		MIN	-1314.78	-3301.10	-18088.18	-1506.86	-3301.10	-26801.90	-251.78	-3283.21	-26801.90	-310.62	-3283.21	-19823.81	
		L-PICKUP 3	MAX	-1727.90	-4401.71	-22326.69	-1955.73	-4401.71	-31500.36	-273.24	-4372.43	-31500.36	-289.95	-4372.43	-24537.31
		MIN	255.08	3697.19	5996.34	147.07	3697.19	4860.01	1700.44	3802.86	4860.01	1483.14	3802.86	4510.82	
111	AASHTO Twin	TWIN-PICKUP	MAX	195.91	4345.96	5982.26	140.43	4345.96	5743.56	1907.30	4464.26	5743.56	1698.59	4464.26	4385.78
		MIN	-1727.90	-4401.71	-22326.69	-1955.73	-4401.71	-31500.36	-273.24	-4372.43	-31500.36	-289.95	-4372.43	-24537.31	
		MID-PICKUP	MAX	-1727.90	-4401.71	-22326.69	-1955.73	-4401.71	-31500.36	-273.24	-4372.43	-31500.36	-289.95	-4372.43	-24537.31
		MIN	-1727.90	-4401.71	-22326.69	-1955.73	-4401.71	-31500.36	-273.24	-4372.43	-31500.36	-289.95	-4372.43	-24537.31	
		TWIN-PICKUP	MAX	101.55	442.78	668.66	43.16	442.78	298.31	265.95	527.49	298.31	157.63	527.49	568.26
		MIN	-149.06	-548.23	-1081.08	-270.15	-548.23	-1363.35	-40.88	-428.49	-1363.35	-82.13	-428.49	-1190.97	
198	AASHTO Fatig	TRUCK-LOAD	MAX	101.55	442.78	668.66	43.16	442.78	298.31	265.95	527.49	298.31	157.63	527.49	568.26
		MIN	-149.06	-548.23	-1081.08	-270.15	-548.23	-1363.35	-40.88	-428.49	-1363.35	-82.13	-428.49	-1190.97	
		TANDEM-LOAD	MAX	90.30	301.25	559.55	47.31	301.25	202.02	203.75	362.03	202.02	120.77	362.03	506.71
		MIN	-111.39	-372.08	-731.82	-204.41	-372.08	-927.53	-46.79	-291.85	-927.53	-79.06	-291.85	-810.04	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3011			3012			3012			3013		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	43.34	1220.96	764.87	33.78	1220.96	574.46	250.97	1327.78	574.46	214.33	1327.78	576.75
	MIN	-213.77	-1316.56	-3066.61	-255.02	-1316.56	-4931.66	-47.06	-1237.11	-4931.66	-51.91	-1237.11	-3393.29
199	AASHTO-LRFD TRUCK-LOAD MAX	140.77	2526.04	3009.28	94.31	2526.04	3248.10	1164.75	2587.37	3248.10	1010.77	2587.37	2230.85
	MIN	-1055.01	-2552.39	-10532.37	-1214.74	-2552.39	-12788.05	-147.32	-2538.73	-12788.05	-156.94	-2538.73	-11596.55
	TANDEM-LOAD MAX	152.25	954.11	1853.58	77.71	954.11	1170.91	538.48	979.35	1170.91	442.24	979.35	1518.44
	MIN	-449.90	-962.70	-3813.12	-548.57	-962.70	-4589.55	-95.49	-963.68	-4589.55	-145.38	-963.68	-4156.68
	DISPERSION-LMAX	76.92	2302.81	3637.68	61.72	2302.81	3133.63	954.47	2372.92	3133.63	876.55	2372.92	2642.23
	MIN	-864.88	-2338.40	-14275.07	-958.29	-2338.40	-22212.35	-156.28	-2319.53	-22212.35	-165.23	-2319.53	-15667.13
300	Total Dead lWithout snow	-2669.27	-44.51	-35839.73	-3060.50	-44.51	-64488.53	2702.52	117.00	-64488.53	2389.53	117.00	-44120.32
301	Particular Snow	-218.56	-10.75	-2962.50	-245.75	-10.75	-5284.06	215.98	15.77	-5284.06	194.23	15.77	-3643.22
302	Live load Total MAX	165.80	2403.17	3897.62	95.60	2403.17	3159.00	1105.28	2471.86	3159.00	964.04	2471.86	2932.03
	MIN	-1123.14	-2861.11	-14512.35	-1271.23	-2861.11	-20475.23	-177.61	-2842.08	-20475.23	-215.16	-2842.08	-15949.25
303	Sum total D+L+PP MAX	-2672.28	2392.43	-33735.33	-3181.97	2392.43	-65665.88	4023.78	2604.62	-65665.88	3547.80	2604.62	-43951.90
	MIN	-4010.96	-2916.37	-53314.58	-4577.47	-2916.37	-90247.82	2687.61	-2826.32	-90247.82	2304.05	-2826.32	-63712.79

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3013	3014			3014			3015							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	434.24	40.48	-8059.79	383.18	40.48	-4790.08	365.00	23.12	-4790.08	301.17	23.12	-1459.20		
3	Railing	10.54	10.92	-244.95	13.24	10.92	-149.85	8.60	6.67	-149.85	11.97	6.67	-46.99		
5	Wheel guard	104.34	108.08	-2424.99	131.04	108.08	-1483.47	85.15	66.06	-1483.47	118.51	66.06	-465.18		
8	Steel weight	1631.76	33.46	-29695.36	1392.88	33.46	-17596.78	1374.66	13.91	-17596.78	1076.06	13.91	-5343.18		
10	Medial strip	186.03	-51.93	-3452.12	137.52	-51.93	-2157.95	158.58	-33.42	-2157.95	97.94	-33.42	-875.36		
19	Snow	194.01	20.60	-3643.22	172.27	20.60	-2178.10	163.05	11.82	-2178.10	135.86	11.82	-683.54		
31	Miscellaneous	14.59	-4.21	-243.11	10.67	-4.21	-142.09	12.41	-2.65	-142.09	7.51	-2.65	-42.52		
100	AASHTO-LRFD TRUCK-LOAD	MAX	662.32	1222.18	1868.58	558.28	1222.18	3981.80	632.55	897.11	3981.80	515.23	897.11	6577.50	
		MIN	-92.48	-1186.01	-6120.84	-211.35	-1186.01	-5506.36	-119.86	-853.83	-5506.36	-243.99	-853.83	-4805.33	
		TANDEM-LOAD	MAX	479.79	832.41	1518.44	411.55	832.41	2972.14	458.38	616.72	2972.14	380.58	616.72	4725.00
		MIN	-91.80	-811.57	-4156.68	-170.00	-811.57	-3732.45	-109.49	-585.26	-3732.45	-191.05	-585.26	-3254.39	
		DISPERSION-L	MAX	851.71	1999.02	2642.23	791.74	1999.02	3338.80	739.63	1378.90	3338.80	667.70	1378.90	5962.25
		MIN	-140.82	-1929.63	-15667.13	-167.79	-1929.63	-11025.02	-141.87	-1338.89	-11025.02	-178.60	-1338.89	-8228.55	
110	Live load	L-PICKUP 1	MAX	1514.03	3221.20	4510.82	1350.02	3221.20	7320.59	1372.18	2276.01	7320.59	1182.93	2276.01	12539.75
		MIN	-233.29	-3115.63	-21787.97	-379.14	-3115.63	-16531.37	-261.73	-2192.72	-16531.37	-422.59	-2192.72	-13033.88	
		L-PICKUP 2	MAX	1331.50	2831.43	4160.67	1203.29	2831.43	6310.93	1198.02	1995.61	6310.93	1048.28	1995.61	10687.25
		MIN	-232.61	-2741.19	-19823.81	-337.79	-2741.19	-14757.46	-251.36	-1924.14	-14757.46	-369.65	-1924.14	-11482.93	
		L-PICKUP 3	MAX	1514.03	3221.20	4510.82	1350.02	3221.20	7320.59	1372.18	2276.01	7320.59	1182.93	2276.01	12539.75
		MIN	-240.21	-3646.77	-24537.31	-379.14	-3646.77	-19313.49	-261.73	-2563.30	-19313.49	-422.59	-2563.30	-15603.44	
111	AASHTO Twin	TWIN-PICKUP	MAX	1701.48	3768.69	4385.78	1548.94	3768.69	6994.51	1535.58	2660.16	6994.51	1349.61	2660.16	13940.72
		MIN	-240.21	-3646.77	-24537.31	-354.61	-3646.77	-19313.49	-249.56	-2563.30	-19313.49	-416.19	-2563.30	-15603.44	
		MID-PICKUP	MAX	1701.48	3768.69	4385.78	1548.94	3768.69	6994.51	1535.58	2660.16	6994.51	1349.61	2660.16	13940.72
198	AASHTO Fatig	TRUCK-LOAD	MAX	217.71	591.41	568.26	128.94	591.41	957.68	221.51	497.93	957.68	118.82	497.93	1411.79
		MIN	-34.78	-479.22	-1190.97	-125.85	-479.22	-985.17	-36.25	-401.13	-985.17	-145.88	-401.13	-816.41	
		TANDEM-LOAD	MAX	168.24	403.62	506.71	96.64	403.62	752.05	170.05	342.63	752.05	97.25	342.63	1054.00
		MIN	-33.46	-328.62	-810.04	-106.08	-328.62	-668.63	-35.29	-274.67	-668.63	-118.85	-274.67	-553.24	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3013			3014			3014			3015		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	227.54	1142.46	576.75	207.21	1142.46	770.30	194.32	786.54	770.30	168.60	786.54	1289.87
	MIN	-37.97	-1008.54	-3393.29	-56.82	-1008.54	-2213.19	-35.03	-704.96	-2213.19	-59.26	-704.96	-1506.22
199	AASHTO-LRFD TRUCK-LOAD MAX	1038.82	2188.42	2230.85	929.30	2188.42	4432.88	966.57	1576.84	4432.88	831.87	1576.84	9527.44
	MIN	-126.08	-2122.34	-11596.55	-226.22	-2122.34	-10434.42	-135.42	-1509.22	-10434.42	-283.84	-1509.22	-9108.60
	TANDEM-LOAD MAX	479.79	832.41	1518.44	411.55	832.41	2972.14	458.38	616.72	2972.14	380.58	616.72	4725.00
	MIN	-91.80	-811.57	-4156.68	-170.00	-811.57	-3732.45	-109.49	-585.26	-3732.45	-191.05	-585.26	-3254.39
	DISPERSION-LMAX	851.71	1999.02	2642.23	791.74	1999.02	3338.80	739.63	1378.90	3338.80	667.70	1378.90	5962.25
	MIN	-140.82	-1929.63	-15667.13	-167.79	-1929.63	-11025.02	-141.87	-1338.89	-11025.02	-178.60	-1338.89	-8228.55
300	Total Dead lWithout snow	2381.51	136.79	-44120.32	2068.52	136.79	-26320.21	2004.39	73.70	-26320.21	1613.16	73.70	-8232.43
301	Particular Snow	194.01	20.60	-3643.22	172.27	20.60	-2178.10	163.05	11.82	-2178.10	135.86	11.82	-683.54
302	Live load Total MAX	984.12	2093.78	2932.03	877.51	2093.78	4758.39	891.92	1479.40	4758.39	768.91	1479.40	8150.84
	MIN	-156.14	-2370.40	-15949.25	-246.44	-2370.40	-12553.77	-170.13	-1666.14	-12553.77	-274.69	-1666.14	-10142.23
303	Sum total D+L+PP MAX	3559.64	2251.17	-43951.90	3118.30	2251.17	-22312.41	3059.36	1564.92	-22312.41	2517.93	1564.92	1680.12
	MIN	2372.54	-2349.80	-63712.79	1920.41	-2349.80	-41052.08	1946.28	-1654.32	-41052.08	1391.94	-1654.32	-19058.20

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3015			3016			3016			3017		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	282.79	17.96	-1459.20	218.96	17.96	1049.51	195.24	11.12	1049.51	131.42	11.12	2682.82
3	Railing	6.06	3.51	-46.99	9.43	3.51	30.47	3.31	1.65	30.47	6.68	1.65	80.41
5	Wheel guard	60.00	34.73	-465.18	93.36	34.73	301.62	32.76	16.36	301.62	66.13	16.36	796.07
8	Steel weight	1072.21	30.79	-5343.18	773.61	30.79	3885.88	750.73	25.27	3885.88	452.13	25.27	9900.13
10	Medial strip	128.41	-14.23	-875.36	67.77	-14.23	105.53	96.95	-4.60	105.53	36.31	-4.60	771.82
19	Snow	126.28	8.76	-683.54	99.10	8.76	443.39	87.16	5.34	443.39	59.98	5.34	1179.06
31	Miscellaneous	9.95	-1.12	-42.52	5.05	-1.12	32.48	7.36	-0.40	32.48	2.46	-0.40	81.57
100	AASHTO-LRFD TRUCK-LOAD	579.59	829.54	6577.50	458.86	829.54	8640.72	509.83	740.62	8640.72	387.48	740.62	9875.54
	MIN	-157.97	-766.45	-4805.33	-279.86	-766.45	-4077.65	-207.70	-736.58	-4077.65	-330.99	-736.58	-3269.69
	TANDEM-LOAD	423.19	573.27	4725.00	342.86	573.27	6128.57	376.05	516.79	6128.57	294.52	516.79	6981.11
	MIN	-136.55	-527.62	-3254.39	-218.77	-527.62	-2761.33	-171.91	-510.98	-2761.33	-254.41	-510.98	-2214.19
	DISPERSION-LMAX	627.02	1115.33	5962.25	559.26	1115.33	10036.95	521.98	917.13	10036.95	459.97	917.13	12541.82
	MIN	-164.57	-1083.84	-8228.55	-205.40	-1083.84	-8234.71	-202.92	-896.99	-8234.71	-249.41	-896.99	-8097.49
110	Live load L-PICKUP 1	1206.61	1944.87	12539.75	1018.12	1944.87	18677.67	1031.81	1657.76	18677.67	847.45	1657.76	22417.36
	MIN	-322.54	-1850.29	-13033.88	-485.26	-1850.29	-12312.36	-410.63	-1633.57	-12312.36	-580.40	-1633.57	-11367.18
	L-PICKUP 2	1050.21	1688.60	10687.25	902.12	1688.60	16165.52	898.03	1433.92	16165.52	754.49	1433.92	19522.93
	MIN	-301.12	-1611.46	-11482.93	-424.17	-1611.46	-10996.04	-374.84	-1407.97	-10996.04	-503.82	-1407.97	-10311.68
	L-PICKUP 3	-318.70	-2162.04	-15603.44	-473.35	-2162.04	-14367.95	-416.27	-1828.89	-14367.95	-580.24	-1828.89	-12866.01
	Live load	1206.61	1944.87	12539.75	1018.12	1944.87	18677.67	1031.81	1657.76	18677.67	847.45	1657.76	22417.36
	MIN	-322.54	-2162.04	-15603.44	-485.26	-2162.04	-14367.95	-416.27	-1828.89	-14367.95	-580.40	-1828.89	-12866.01
111	AASHTO Twin TWIN-PICKUP	1334.32	2268.04	13940.72	1147.77	2268.04	21103.66	1116.85	1881.11	21103.66	934.70	1881.11	25357.71
	MIN	-318.70	-2162.04	-15603.44	-473.35	-2162.04	-14367.95	-416.27	-1828.89	-14367.95	-580.24	-1828.89	-12866.01
	MID-PICKUP	-318.70	-2162.04	-15603.44	-473.35	-2162.04	-14367.95	-416.27	-1828.89	-14367.95	-580.24	-1828.89	-12866.01
198	AASHTO FatigTRUCK-LOAD	212.78	445.58	1411.79	105.75	445.58	1772.37	200.80	369.92	1772.37	91.54	369.92	1984.09
	MIN	-44.59	-352.15	-816.41	-156.67	-352.15	-682.32	-57.50	-280.86	-682.32	-169.28	-280.86	-545.57
	TANDEM-LOAD	164.87	307.85	1054.00	88.85	307.85	1299.39	156.98	256.80	1299.39	79.33	256.80	1444.63
	MIN	-46.16	-240.07	-553.24	-126.88	-240.07	-462.13	-56.24	-191.24	-462.13	-135.64	-191.24	-369.46

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3015			3016			3016			3017		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	158.58	633.76	1289.87	132.15	633.76	2021.03	133.40	518.75	2021.03	106.74	518.75	2475.02
	MIN	-43.19	-573.21	-1506.22	-68.19	-573.21	-1475.05	-53.41	-475.69	-1475.05	-79.40	-475.69	-1442.06
199	AASHTO-LRFD TRUCK-LOAD MAX	855.56	1404.71	9527.44	716.04	1404.71	13411.56	718.97	1172.99	13411.56	578.58	1172.99	15633.42
	MIN	-189.54	-1318.43	-9108.60	-320.54	-1318.43	-7729.68	-259.60	-1135.11	-7729.68	-395.30	-1135.11	-6198.08
	TANDEM-LOAD MAX	423.19	573.27	4725.00	342.86	573.27	6128.57	376.05	516.79	6128.57	294.52	516.79	6981.11
	MIN	-136.55	-527.62	-3254.39	-218.77	-527.62	-2761.33	-171.91	-510.98	-2761.33	-254.41	-510.98	-2214.19
	DISPERSION-LMAX	627.02	1115.33	5962.25	559.26	1115.33	10036.95	521.98	917.13	10036.95	459.97	917.13	12541.82
	MIN	-164.57	-1083.84	-8228.55	-205.40	-1083.84	-8234.71	-202.92	-896.99	-8234.71	-249.41	-896.99	-8097.49
300	Total Dead lWithout snow	1559.41	71.63	-8232.43	1168.18	71.63	5405.50	1086.35	49.40	5405.50	695.12	49.40	14312.83
301	Particular Snow	126.28	8.76	-683.54	99.10	8.76	443.39	87.16	5.34	443.39	59.98	5.34	1179.06
302	Live load Total MAX	784.30	1264.16	8150.84	661.78	1264.16	12140.48	670.67	1077.54	12140.48	550.84	1077.54	14571.28
	MIN	-209.65	-1405.33	-10142.23	-315.42	-1405.33	-9339.17	-270.57	-1188.78	-9339.17	-377.26	-1188.78	-8362.91
303	Sum total D+L+PP MAX	2469.99	1344.56	1680.12	1929.06	1344.56	17989.37	1844.18	1132.29	17989.37	1305.94	1132.29	30063.17
	MIN	1413.14	-1396.57	-19058.20	857.23	-1396.57	-6292.04	821.76	-1183.44	-6292.04	264.66	-1183.44	4620.11

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3017	3018			3018			3019			3019		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	101.62	-2.28	2682.82	37.80	-2.28	3379.92	12.35	-8.39	3379.92	-51.48	-8.39	3184.27	
3 Railing	0.43	0.33	80.41	3.81	0.33	101.61	-2.29	-0.57	101.61	1.08	-0.57	95.53	
5 Wheel guard	4.31	3.22	796.07	37.67	3.22	1005.96	-22.70	-5.65	1005.96	10.66	-5.65	945.76	
8 Steel weight	406.11	-13.13	9900.13	107.51	-13.13	12468.23	77.33	-27.16	12468.23	-221.27	-27.16	11748.56	
10 Medial strip	62.37	-3.09	771.82	1.74	-3.09	1092.37	29.01	-0.68	1092.37	-31.63	-0.68	1079.30	
19 Snow	45.29	-0.88	1179.06	18.11	-0.88	1496.08	5.35	-3.81	1496.08	-21.83	-3.81	1413.65	
31 Miscellaneous	4.55	-0.29	81.57	-0.35	-0.29	102.59	1.87	-0.07	102.59	-3.03	-0.07	96.76	
100 AASHTO-LRFD TRUCK-LOAD	437.02	712.22	9875.54	311.83	712.22	10148.06	373.61	707.23	10148.06	246.46	707.23	9584.72	
MIN	-271.88	-732.19	-3269.69	-396.70	-732.19	-2437.72	-333.90	-734.67	-2437.72	-459.76	-734.67	-2668.88	
TANDEM-LOAD	327.11	497.19	6981.11	243.14	497.19	7178.62	284.46	492.87	7178.62	198.56	492.87	6776.62	
MIN	-216.22	-510.70	-2214.19	-299.83	-510.70	-1650.79	-258.28	-513.37	-1650.79	-342.89	-513.37	-1810.17	
DISPERSION-LMAX	420.35	780.59	12541.82	364.48	780.59	13423.66	339.77	764.80	13423.66	289.33	764.80	12836.05	
MIN	-254.17	-783.43	-8097.49	-306.75	-783.43	-7860.86	-319.19	-779.39	-7860.86	-377.18	-779.39	-7606.88	
110 Live load L-PICKUP 1	857.37	1492.81	22417.36	676.32	1492.81	23571.72	713.38	1472.02	23571.72	535.80	1472.02	22420.76	
MIN	-526.05	-1515.62	-11367.18	-703.45	-1515.62	-10298.57	-653.08	-1514.06	-10298.57	-836.95	-1514.06	-10275.76	
L-PICKUP 2	747.46	1277.77	19522.93	607.62	1277.77	20602.27	624.23	1257.66	20602.27	487.90	1257.66	19612.67	
MIN	-470.39	-1294.12	-10311.68	-606.57	-1294.12	-9511.65	-577.46	-1292.76	-9511.65	-720.08	-1292.76	-9417.05	
L-PICKUP 3	-548.74	-1675.15	-12866.01	-722.87	-1675.15	-11233.65	-710.28	-1668.33	-11233.65	-892.12	-1668.33	-11365.45	
Live load	857.37	1492.81	22417.36	676.32	1492.81	23571.72	713.38	1472.02	23571.72	535.80	1472.02	22420.76	
MIN	-548.74	-1675.15	-12866.01	-722.87	-1675.15	-11233.65	-710.28	-1668.33	-11233.65	-892.12	-1668.33	-11365.45	
111 AASHTO Twin TWIN-PICKUP	898.63	1644.44	25357.71	721.71	1644.44	26520.92	723.17	1616.34	26520.92	551.87	1616.34	25204.34	
MIN	-548.74	-1675.15	-12866.01	-722.87	-1675.15	-11233.65	-710.28	-1668.33	-11233.65	-892.12	-1668.33	-11365.45	
MID-PICKUP	-548.74	-1675.15	-12866.01	-722.87	-1675.15	-11233.65	-710.28	-1668.33	-11233.65	-892.12	-1668.33	-11365.45	
198 AASHTO FatigTRUCK-LOAD	188.60	281.68	1984.09	77.34	281.68	2029.81	177.76	194.09	2029.81	65.08	194.09	1930.58	
MIN	-70.86	-199.39	-545.57	-182.07	-199.39	-406.71	-82.09	-270.42	-406.71	-193.28	-270.42	-444.96	
TANDEM-LOAD	148.93	196.75	1444.63	69.58	196.75	1477.59	141.72	137.15	1477.59	61.11	137.15	1406.84	
MIN	-65.21	-136.18	-369.46	-144.51	-136.18	-275.42	-72.69	-189.54	-275.42	-152.23	-189.54	-301.76	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3017			3018			3018			3019		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	112.84	430.59	2475.02	86.01	430.59	2633.05	96.81	409.58	2633.05	70.28	409.58	2521.33
	MIN	-65.00	-417.28	-1442.06	-91.63	-417.28	-1396.81	-78.37	-425.75	-1396.81	-105.12	-425.75	-1349.22
199	AASHTO-LRFD TRUCK-LOAD MAX	578.13	1046.57	15633.42	437.42	1046.57	16044.04	463.75	1031.14	16044.04	323.85	1031.14	15168.77
	MIN	-355.54	-1077.86	-6198.08	-496.44	-1077.86	-4620.98	-470.01	-1074.31	-4620.98	-614.06	-1074.31	-5021.40
	TANDEM-LOAD MAX	327.11	497.19	6981.11	243.14	497.19	7178.62	284.46	492.87	7178.62	198.56	492.87	6776.62
	MIN	-216.22	-510.70	-2214.19	-299.83	-510.70	-1650.79	-258.28	-513.37	-1650.79	-342.89	-513.37	-1810.17
	DISPERSION-LMAX	420.35	780.59	12541.82	364.48	780.59	13423.66	339.77	764.80	13423.66	289.33	764.80	12836.05
	MIN	-254.17	-783.43	-8097.49	-306.75	-783.43	-7860.86	-319.19	-779.39	-7860.86	-377.18	-779.39	-7606.88
300	Total Dead lWithout snow	579.40	-15.25	14312.83	188.17	-15.25	18150.68	95.56	-42.53	18150.68	-295.67	-42.53	17150.17
301	Particular Snow	45.29	-0.88	1179.06	18.11	-0.88	1496.08	5.35	-3.81	1496.08	-21.83	-3.81	1413.65
302	Live load Total MAX	557.29	970.32	14571.28	439.61	970.32	15321.61	463.70	956.82	15321.61	348.27	956.82	14573.50
	MIN	-356.68	-1088.85	-8362.91	-469.86	-1088.85	-7301.87	-461.68	-1084.41	-7301.87	-579.88	-1084.41	-7387.54
303	Sum total D+L+PP MAX	1181.98	969.45	30063.17	645.89	969.45	34968.38	564.61	953.00	34968.38	135.25	953.00	33137.32
	MIN	161.01	-1104.98	4620.11	-404.54	-1104.98	10154.33	-456.33	-1130.75	10154.33	-897.38	-1130.75	8960.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3019			3020			3020			3021			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-69.68	-4.45	3184.27	-133.51	-4.45	2168.33	-153.97	-7.03	2168.33	-217.80	-7.03	309.46	
3	Railing	-4.81	-1.31	95.53	-1.44	-1.31	64.29	-7.45	-2.92	64.29	-4.08	-2.92	6.64	
5	Wheel guard	-47.61	-13.01	945.76	-14.25	-13.01	636.44	-73.76	-28.91	636.44	-40.39	-28.91	65.70	
8	Steel weight	-224.63	-2.33	11748.56	-523.23	-2.33	8009.22	-534.28	6.42	8009.22	-832.88	6.42	1173.38	
10	Medial strip	-1.74	6.39	1079.30	-62.38	6.39	758.73	-32.75	15.95	758.73	-93.39	15.95	128.06	
19	Snow	-31.37	-2.30	1413.65	-58.55	-2.30	964.03	-69.10	-3.86	964.03	-96.28	-3.86	137.12	
31	Miscellaneous	-0.59	0.53	96.76	-5.49	0.53	66.32	-3.09	1.31	66.32	-7.99	1.31	10.89	
100	AASHTO-LRFD TRUCK-LOAD	MAX	330.10	721.36	9584.72	202.29	721.36	8302.56	296.81	755.09	8302.56	171.92	755.09	6445.08
		MIN	-383.63	-726.96	-2668.88	-510.39	-726.96	-3309.98	-432.98	-779.49	-3309.98	-558.24	-779.49	-4032.11
		TANDEM-LOAD MAX	254.31	500.99	6776.62	167.55	500.99	5890.85	231.08	521.11	5890.85	146.40	521.11	4630.90
		MIN	-291.77	-507.58	-1810.17	-377.33	-507.58	-2245.00	-324.97	-538.66	-2245.00	-409.29	-538.66	-2734.78
		DISPERSION-LMAX	285.15	861.24	12836.05	238.92	861.24	11016.18	253.98	1039.18	11016.18	211.45	1039.18	7994.90
		MIN	-398.25	-870.47	-7606.88	-460.50	-870.47	-7454.54	-504.69	-1052.71	-7454.54	-570.73	-1052.71	-7472.55
110	Live load	L-PICKUP 1 MAX	615.25	1582.59	22420.76	441.21	1582.59	19318.74	550.79	1794.27	19318.74	383.37	1794.27	14439.98
		MIN	-781.88	-1597.43	-10275.76	-970.90	-1597.43	-10764.52	-937.67	-1832.20	-10764.52	-1128.97	-1832.20	-11504.66
		L-PICKUP 2 MAX	539.46	1362.23	19612.67	406.47	1362.23	16907.02	485.06	1560.29	16907.02	357.85	1560.29	12625.80
		MIN	-690.01	-1378.05	-9417.05	-837.83	-1378.05	-9699.54	-829.66	-1591.37	-9699.54	-980.02	-1591.37	-10207.33
		L-PICKUP 3	-871.20	-1781.78	-11365.45	-1057.54	-1781.78	-12313.92	-1060.29	-2127.93	-12313.92	-1247.76	-2127.93	-13553.02
		Live load MAX	615.25	1582.59	22420.76	441.21	1582.59	19318.74	550.79	1794.27	19318.74	383.37	1794.27	14439.98
MIN	-871.20	-1781.78	-11365.45	-1057.54	-1781.78	-12313.92	-1060.29	-2127.93	-12313.92	-1247.76	-2127.93	-13553.02		
111	AASHTO Twin	TWIN-PICKUP MAX	612.21	1758.48	25204.34	445.47	1758.48	21520.00	537.00	2075.94	21520.00	376.39	2075.94	15627.32
		MIN	-871.20	-1781.78	-11365.45	-1057.54	-1781.78	-12313.92	-1060.29	-2127.93	-12313.92	-1247.76	-2127.93	-13553.02
		MID-PICKUP	-871.20	-1781.78	-11365.45	-1057.54	-1781.78	-12313.92	-1060.29	-2127.93	-12313.92	-1247.76	-2127.93	-13553.02
198	AASHTO Fatig	TRUCK-LOAD MAX	169.35	264.00	1930.58	56.03	264.00	1706.79	161.20	339.28	1706.79	47.49	339.28	1385.23
		MIN	-90.57	-348.16	-444.96	-201.95	-348.16	-554.20	-99.89	-421.02	-554.20	-209.60	-421.02	-687.23
		TANDEM-LOAD MAX	136.12	180.05	1406.84	54.89	180.05	1252.19	130.43	231.22	1252.19	49.22	231.22	1034.04
		MIN	-78.33	-241.78	-301.76	-158.18	-241.78	-375.71	-84.72	-290.84	-375.71	-163.19	-290.84	-465.59

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3019			3020			3020			3021		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	85.47	455.85	2521.33	59.51	455.85	2185.23	77.86	547.19	2185.23	52.57	547.19	1640.38
	MIN	-94.88	-491.23	-1349.22	-121.62	-491.23	-1324.68	-120.09	-600.97	-1324.68	-146.72	-600.97	-1353.53
199	AASHTO-LRFD TRUCK-LOAD MAX	395.09	1092.63	15168.77	256.05	1092.63	12894.94	342.69	1267.42	12894.94	206.76	1267.42	9368.79
	MIN	-569.75	-1109.29	-5021.40	-714.54	-1109.29	-6227.60	-673.41	-1311.66	-6227.60	-815.67	-1311.66	-7586.37
	TANDEM-LOAD MAX	254.31	500.99	6776.62	167.55	500.99	5890.85	231.08	521.11	5890.85	146.40	521.11	4630.90
	MIN	-291.77	-507.58	-1810.17	-377.33	-507.58	-2245.00	-324.97	-538.66	-2245.00	-409.29	-538.66	-2734.78
	DISPERSION-LMAX	285.15	861.24	12836.05	238.92	861.24	11016.18	253.98	1039.18	11016.18	211.45	1039.18	7994.90
	MIN	-398.25	-870.47	-7606.88	-460.50	-870.47	-7454.54	-504.69	-1052.71	-7454.54	-570.73	-1052.71	-7472.55
300	Total Dead lWithout snow	-349.07	-14.19	17150.17	-740.30	-14.19	11703.32	-805.30	-15.18	11703.32	-1196.53	-15.18	1694.13
301	Particular Snow	-31.37	-2.30	1413.65	-58.55	-2.30	964.03	-69.10	-3.86	964.03	-96.28	-3.86	137.12
302	Live load Total MAX	399.91	1028.68	14573.50	286.79	1028.68	12557.18	358.02	1166.27	12557.18	249.19	1166.27	9385.99
	MIN	-566.28	-1158.16	-7387.54	-687.40	-1158.16	-8004.05	-689.19	-1383.15	-8004.05	-811.04	-1383.15	-8809.46
303	Sum total D+L+PP MAX	139.45	1026.38	33137.32	-426.03	1026.38	25224.53	-408.98	1162.42	25224.53	-968.87	1162.42	11217.24
	MIN	-946.72	-1174.65	8960.01	-1486.25	-1174.65	2262.08	-1563.59	-1402.19	2262.08	-2103.86	-1402.19	-8672.34

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3021			3022			3022			3023			
NODE		3021			3022			3022			3023			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-244.83	-26.46	309.46	-308.66	-26.46	-2457.98	-327.04	-40.61	-2457.98	-378.11	-40.61	-5278.59	
3	Railing	-10.32	-6.57	6.64	-6.95	-6.57	-79.68	-11.67	-10.18	-79.68	-8.97	-10.18	-162.26	
5	Wheel guard	-102.14	-65.04	65.70	-68.77	-65.04	-788.84	-115.54	-100.76	-788.84	-88.85	-100.76	-1606.40	
8	Steel weight	-867.81	-28.64	1173.38	-1166.41	-28.64	-8997.72	-1184.42	-42.83	-8997.72	-1423.30	-42.83	-19428.56	
10	Medial strip	-65.84	30.10	128.06	-126.48	30.10	-833.52	-104.47	46.86	-833.52	-152.98	46.86	-1863.32	
19	Snow	-109.76	-13.31	137.12	-136.94	-13.31	-1096.34	-146.23	-20.46	-1096.34	-167.98	-20.46	-2353.19	
31	Miscellaneous	-5.77	2.43	10.89	-10.67	2.43	-71.36	-8.90	3.79	-71.36	-12.82	3.79	-158.21	
100	AASHTO-LRFD TRUCK-LOAD	MAX	260.60	891.63	6445.08	134.29	891.63	3982.16	218.87	1090.89	3982.16	98.26	1090.89	2023.85
		MIN	-496.72	-925.25	-4032.11	-617.91	-925.25	-4776.04	-557.86	-1134.68	-4776.04	-661.64	-1134.68	-5322.29
		TANDEM-LOAD	203.34	611.03	4630.90	120.01	611.03	2967.82	175.68	746.94	2967.82	94.96	746.94	1616.62
		MIN	-367.90	-636.67	-2734.78	-449.21	-636.67	-3240.58	-411.35	-773.67	-3240.58	-480.08	-773.67	-3616.18
		DISPERSION-LMAX	230.42	1350.85	7994.90	192.14	1350.85	5820.07	212.17	1755.91	5820.07	185.15	1755.91	5449.54
		MIN	-630.06	-1396.10	-7472.55	-700.40	-1396.10	-9824.82	-747.21	-1825.29	-9824.82	-807.11	-1825.29	-14080.24
110	Live load	L-PICKUP 1	491.02	2242.48	14439.98	326.43	2242.48	9802.22	431.04	2846.80	9802.22	283.40	2846.80	7473.39
		MIN	-1126.78	-2321.36	-11504.66	-1318.32	-2321.36	-14600.86	-1305.07	-2959.97	-14600.86	-1468.75	-2959.97	-19402.53
		L-PICKUP 2	433.76	1961.88	12625.80	312.16	1961.88	8787.88	387.85	2502.85	8787.88	280.11	2502.85	7066.16
		MIN	-997.96	-2032.77	-10207.33	-1149.61	-2032.77	-13065.39	-1158.56	-2598.97	-13065.39	-1287.19	-2598.97	-17696.42
		L-PICKUP 3	-1288.20	-2714.43	-13553.02	-1475.03	-2714.43	-16928.42	-1506.59	-3463.71	-16928.42	-1660.01	-3463.71	-21678.91
		Live load	491.02	2242.48	14439.98	326.43	2242.48	9802.22	431.04	2846.80	9802.22	283.40	2846.80	7473.39
111	AASHTO Twin	TWIN-PICKUP	483.64	2629.90	15627.32	311.49	2629.90	9295.40	408.59	3335.63	9295.40	298.52	3335.63	7502.58
		MIN	-1288.20	-2714.43	-13553.02	-1475.03	-2714.43	-16928.42	-1506.59	-3463.71	-16928.42	-1660.01	-3463.71	-21678.91
		MID-PICKUP	-1288.20	-2714.43	-13553.02	-1475.03	-2714.43	-16928.42	-1506.59	-3463.71	-16928.42	-1660.01	-3463.71	-21678.91
198	AASHTO Fatig	TRUCK-LOAD	150.65	420.27	1385.23	37.24	420.27	965.69	126.75	449.05	965.69	33.92	449.05	552.79
		MIN	-113.21	-514.73	-687.23	-218.67	-514.73	-864.55	-127.97	-559.84	-864.55	-217.87	-559.84	-1055.54
		TANDEM-LOAD	122.77	287.08	1034.04	39.28	287.08	754.91	107.30	308.07	754.91	32.64	308.07	491.46
		MIN	-93.56	-354.36	-465.59	-168.81	-354.36	-585.88	-99.18	-382.94	-585.88	-168.96	-382.94	-717.07

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3021			3022			3022			3023		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	69.65	712.82	1640.38	45.04	712.82	1201.88	65.83	918.09	1201.88	46.92	918.09	1079.02
	MIN	-155.77	-794.45	-1353.53	-181.74	-794.45	-1934.16	-197.70	-1043.59	-1934.16	-217.69	-1043.59	-3013.94
199	AASHTO-LRFD TRUCK-LOAD MAX	306.96	1571.26	9368.79	153.96	1571.26	4508.16	241.82	1950.34	4508.16	146.54	1950.34	2886.67
	MIN	-801.27	-1619.93	-7586.37	-938.51	-1619.93	-8984.54	-926.78	-2023.27	-8984.54	-1037.35	-2023.27	-10007.43
	TANDEM-LOAD MAX	203.34	611.03	4630.90	120.01	611.03	2967.82	175.68	746.94	2967.82	94.96	746.94	1616.62
	MIN	-367.90	-636.67	-2734.78	-449.21	-636.67	-3240.58	-411.35	-773.67	-3240.58	-480.08	-773.67	-3616.18
	DISPERSION-LMAX	230.42	1350.85	7994.90	192.14	1350.85	5820.07	212.17	1755.91	5820.07	185.15	1755.91	5449.54
	MIN	-630.06	-1396.10	-7472.55	-700.40	-1396.10	-9824.82	-747.21	-1825.29	-9824.82	-807.11	-1825.29	-14080.24
300	Total Dead lWithout snow	-1296.71	-94.17	1694.13	-1687.94	-94.17	-13229.11	-1752.04	-143.72	-13229.11	-2065.02	-143.72	-28497.35
301	Particular Snow	-109.76	-13.31	137.12	-136.94	-13.31	-1096.34	-146.23	-20.46	-1096.34	-167.98	-20.46	-2353.19
302	Live load Total MAX	319.17	1457.61	9385.99	212.18	1457.61	6371.45	280.18	1850.42	6371.45	184.21	1850.42	4857.70
	MIN	-837.33	-1764.38	-8809.46	-958.77	-1764.38	-11003.47	-979.28	-2251.41	-11003.47	-1079.00	-2251.41	-14091.29
303	Sum total D+L+PP MAX	-991.55	1444.30	11217.24	-1549.05	1444.30	-6042.57	-1534.04	1829.96	-6042.57	-1993.52	1829.96	-24535.53
	MIN	-2243.79	-1871.86	-8672.34	-2783.64	-1871.86	-25328.93	-2877.55	-2415.59	-25328.93	-3312.00	-2415.59	-44941.83

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3023			3024			3024			3025			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-376.87	-27.53	-5278.59	-427.93	-27.53	-8497.80	443.75	14.83	-8497.80	392.68	14.83	-5152.08	
3	Railing	-8.71	-6.82	-162.26	-6.02	-6.82	-221.17	6.51	6.33	-221.17	9.21	6.33	-158.31	
5	Wheel guard	-86.25	-67.50	-1606.40	-59.55	-67.50	-2189.61	64.45	62.63	-2189.61	91.14	62.63	-1567.23	
8	Steel weight	-1421.42	-30.00	-19428.56	-1660.30	-30.00	-31755.46	1718.38	-15.51	-31755.46	1479.50	-15.51	-18963.94	
10	Medial strip	-154.14	31.12	-1863.32	-202.65	31.12	-3290.46	212.73	-35.12	-3290.46	164.22	-35.12	-1782.67	
19	Snow	-167.37	-13.85	-2353.19	-189.12	-13.85	-3779.16	196.57	8.15	-3779.16	174.82	8.15	-2293.62	
31	Miscellaneous	-12.90	2.52	-158.21	-16.82	2.52	-277.13	17.29	-2.84	-277.13	13.37	-2.84	-154.46	
100	AASHTO-LRFD TRUCK-LOAD	MAX	169.41	1227.47	2023.85	116.37	1227.47	1912.76	752.49	1246.76	1912.76	616.37	1246.76	2153.61
		MIN	-605.80	-1251.07	-5322.29	-743.69	-1251.07	-5903.09	-111.68	-1239.51	-5903.09	-167.18	-1239.51	-5454.37
	TANDEM-LOAD	MAX	149.70	837.91	1616.62	98.58	837.91	1295.58	543.43	854.10	1295.58	447.86	854.10	1703.16
		MIN	-441.41	-857.29	-3616.18	-537.81	-857.29	-4012.91	-95.14	-845.78	-4012.91	-147.81	-845.78	-3705.67
	DISPERSION-LMAX	MAX	204.47	2000.42	5449.54	194.67	2000.42	6289.86	915.12	2055.49	6289.86	837.92	2055.49	5573.70
		MIN	-823.78	-2047.40	-14080.24	-900.85	-2047.40	-20234.69	-184.62	-2029.19	-20234.69	-194.30	-2029.19	-14007.81
110	Live load L-PICKUP 1	MAX	373.88	3227.89	7473.39	311.04	3227.89	8202.61	1667.62	3302.25	8202.61	1454.29	3302.25	7727.31
		MIN	-1429.58	-3298.47	-19402.53	-1644.54	-3298.47	-26137.78	-296.30	-3268.71	-26137.78	-361.47	-3268.71	-19462.17
	L-PICKUP 2	MAX	354.17	2838.34	7066.16	293.25	2838.34	7585.44	1458.55	2909.60	7585.44	1285.79	2909.60	7276.86
		MIN	-1265.19	-2904.69	-17696.42	-1438.67	-2904.69	-24247.60	-279.76	-2874.98	-24247.60	-342.11	-2874.98	-17713.48
	L-PICKUP 3	MAX	-1648.97	-3869.64	-21678.91	-1855.17	-3869.64	-28192.87	-299.26	-3833.29	-28192.87	-321.94	-3833.29	-21835.16
		MIN	373.88	3227.89	7473.39	311.04	3227.89	8202.61	1667.62	3302.25	8202.61	1454.29	3302.25	7727.31
111	AASHTO Twin TWIN-PICKUP	MAX	338.06	3786.50	7502.58	314.33	3786.50	8923.62	1881.66	3870.79	8923.62	1675.83	3870.79	8038.35
		MIN	-1648.97	-3869.64	-21678.91	-1855.17	-3869.64	-28192.87	-299.26	-3833.29	-28192.87	-321.94	-3833.29	-21835.16
	MID-PICKUP	MAX	-1648.97	-3869.64	-21678.91	-1855.17	-3869.64	-28192.87	-299.26	-3833.29	-28192.87	-321.94	-3833.29	-21835.16
		MIN	-1648.97	-3869.64	-21678.91	-1855.17	-3869.64	-28192.87	-299.26	-3833.29	-28192.87	-321.94	-3833.29	-21835.16
	AASHTO FatigTRUCK-LOAD	MAX	84.51	377.68	552.79	42.43	377.68	327.41	264.95	472.66	327.41	156.03	472.66	555.56
		MIN	-154.78	-469.70	-1055.54	-264.60	-469.70	-1201.61	-42.81	-385.79	-1201.61	-83.88	-385.79	-1070.20
198	TANDEM-LOAD	MAX	81.37	255.95	491.46	46.43	255.95	221.91	203.54	322.97	221.91	119.10	322.97	493.16
		MIN	-118.39	-321.18	-717.07	-203.49	-321.18	-816.52	-46.36	-261.32	-816.52	-80.76	-261.32	-726.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3023			3024			3024			3025		
NODE		3023			3024			3024			3025		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	58.76	1064.31	1079.02	53.12	1064.31	1155.23	239.27	1154.30	1155.23	203.75	1154.30	1104.75
	MIN	-203.25	-1148.46	-3013.94	-238.80	-1148.46	-4454.14	-52.54	-1078.66	-4454.14	-58.17	-1078.66	-3010.02
199	AASHTO-LRFD TRUCK-LOAD MAX	171.15	2206.80	2886.67	154.59	2206.80	3625.28	1175.61	2245.39	3625.28	1024.11	2245.39	3357.80
	MIN	-1008.41	-2252.20	-10007.43	-1160.45	-2252.20	-11090.73	-147.89	-2230.02	-11090.73	-163.42	-2230.02	-10253.48
	TANDEM-LOAD MAX	149.70	837.91	1616.62	98.58	837.91	1295.58	543.43	854.10	1295.58	447.86	854.10	1703.16
	MIN	-441.41	-857.29	-3616.18	-537.81	-857.29	-4012.91	-95.14	-845.78	-4012.91	-147.81	-845.78	-3705.67
	DISPERSION-LMAX	204.47	2000.42	5449.54	194.67	2000.42	6289.86	915.12	2055.49	6289.86	837.92	2055.49	5573.70
	MIN	-823.78	-2047.40	-14080.24	-900.85	-2047.40	-20234.69	-184.62	-2029.19	-20234.69	-194.30	-2029.19	-14007.81
300	Total Dead lWithout snow	-2060.29	-98.20	-28497.35	-2373.28	-98.20	-46231.64	2463.11	30.32	-46231.64	2150.13	30.32	-27778.68
301	Particular Snow	-167.37	-13.85	-2353.19	-189.12	-13.85	-3779.16	196.57	8.15	-3779.16	174.82	8.15	-2293.62
302	Live load Total MAX	243.03	2098.13	4857.70	202.18	2098.13	5331.70	1083.95	2146.46	5331.70	945.29	2146.46	5022.75
	MIN	-1071.83	-2515.27	-14091.29	-1205.86	-2515.27	-18325.37	-194.52	-2491.64	-18325.37	-234.96	-2491.64	-14192.85
303	Sum total D+L+PP MAX	-1911.73	2084.28	-24535.53	-2299.57	2084.28	-43079.59	3743.63	2184.93	-43079.59	3270.24	2184.93	-23542.72
	MIN	-3299.50	-2627.32	-44941.83	-3768.26	-2627.32	-68336.17	2406.80	-2483.49	-68336.17	2019.50	-2483.49	-44265.15

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3025			3026			3026			3027		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	396.51	28.66	-5152.08	345.45	28.66	-2184.21	345.87	44.88	-2184.21	282.05	44.88	955.40
3	Railing	9.54	9.58	-158.31	12.23	9.58	-71.24	8.05	6.90	-71.24	11.42	6.90	26.15
5	Wheel guard	94.40	94.82	-1567.23	121.09	94.82	-705.24	79.73	68.29	-705.24	113.09	68.29	258.88
8	Steel weight	1491.08	1.62	-18963.94	1252.20	1.62	-7990.85	1303.80	99.29	-7990.85	1005.20	99.29	3554.20
10	Medial strip	164.43	-49.06	-1782.67	115.92	-49.06	-661.31	144.92	-21.20	-661.31	84.28	-21.20	484.69
19	Snow	176.61	15.11	-2293.62	154.86	15.11	-967.73	153.96	21.53	-967.73	126.77	21.53	435.92
31	Miscellaneous	13.37	-4.01	-154.46	9.45	-4.01	-63.18	11.81	-1.75	-63.18	6.91	-1.75	30.43
100	AASHTO-LRFD TRUCK-LOAD	682.77	1117.19	2153.61	584.43	1117.19	4231.48	658.11	944.80	4231.48	547.25	944.80	7197.67
	MIN	-88.74	-1084.79	-5454.37	-203.91	-1084.79	-5098.60	-119.17	-862.36	-5098.60	-239.32	-862.36	-4573.26
	TANDEM-LOAD	493.76	762.54	1703.16	429.05	762.54	3141.76	474.96	651.29	3141.76	402.98	651.29	5153.30
	MIN	-86.83	-742.93	-3705.67	-164.55	-742.93	-3462.04	-109.72	-590.70	-3462.04	-186.86	-590.70	-3105.40
	DISPERSION-LMAX	819.72	1822.65	5573.70	758.65	1822.65	6298.11	746.02	1424.20	6298.11	672.41	1424.20	9374.89
	MIN	-169.31	-1772.91	-14007.81	-195.11	-1772.91	-9876.05	-178.00	-1349.07	-9876.05	-213.03	-1349.07	-7830.71
110	Live load L-PICKUP 1	1502.49	2939.84	7727.31	1343.07	2939.84	10529.59	1404.13	2369.00	10529.59	1219.66	2369.00	16572.56
	MIN	-258.06	-2857.70	-19462.17	-399.02	-2857.70	-14974.65	-297.17	-2211.43	-14974.65	-452.34	-2211.43	-12403.97
	L-PICKUP 2	1313.48	2585.19	7276.86	1187.70	2585.19	9439.87	1220.97	2075.49	9439.87	1075.39	2075.49	14528.19
	MIN	-256.14	-2515.84	-17713.48	-359.65	-2515.84	-13338.09	-287.72	-1939.78	-13338.09	-399.89	-1939.78	-10936.11
	L-PICKUP 3	-266.63	-3349.37	-21835.16	-377.61	-3349.37	-17518.73	-286.41	-2590.83	-17518.73	-445.52	-2590.83	-14788.22
	Live load	1502.49	2939.84	7727.31	1343.07	2939.84	10529.59	1404.13	2369.00	10529.59	1219.66	2369.00	16572.56
	MIN	-266.63	-3349.37	-21835.16	-399.02	-3349.37	-17518.73	-297.17	-2590.83	-17518.73	-452.34	-2590.83	-14788.22
111	AASHTO Twin TWIN-PICKUP	1704.25	3429.61	8038.35	1551.89	3429.61	10076.57	1585.18	2772.63	10076.57	1401.24	2772.63	17970.69
	MIN	-266.63	-3349.37	-21835.16	-377.61	-3349.37	-17518.73	-286.41	-2590.83	-17518.73	-445.52	-2590.83	-14788.22
	MID-PICKUP	-266.63	-3349.37	-21835.16	-377.61	-3349.37	-17518.73	-286.41	-2590.83	-17518.73	-445.52	-2590.83	-14788.22
198	AASHTO FatigTRUCK-LOAD	220.92	557.06	555.56	133.53	557.06	1010.89	224.36	516.76	1010.89	125.44	516.76	1538.11
	MIN	-32.53	-446.56	-1070.20	-104.82	-446.56	-917.79	-27.81	-407.35	-917.79	-124.00	-407.35	-779.31
	TANDEM-LOAD	170.55	381.73	493.16	103.87	381.73	786.76	171.71	356.20	786.76	102.74	356.20	1141.57
	MIN	-31.29	-306.32	-726.01	-104.23	-306.32	-621.48	-35.92	-278.37	-621.48	-116.15	-278.37	-528.74

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3025			3026			3026			3027		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	219.35	1042.32	1104.75	199.63	1042.32	1299.58	193.67	803.83	1299.58	168.09	803.83	1908.06
	MIN	-46.68	-926.37	-3010.02	-65.11	-926.37	-1948.85	-41.78	-714.79	-1948.85	-65.29	-714.79	-1419.32
199	AASHTO-LRFD TRUCK-LOAD MAX	1073.89	1988.03	3357.80	965.68	1988.03	4898.08	1015.29	1656.50	4898.08	884.52	1656.50	10592.54
	MIN	-126.94	-1948.61	-10253.48	-224.46	-1948.61	-9589.21	-140.24	-1529.63	-9589.21	-282.00	-1529.63	-8600.65
	TANDEM-LOAD MAX	493.76	762.54	1703.16	429.05	762.54	3141.76	474.96	651.29	3141.76	402.98	651.29	5153.30
	MIN	-86.83	-742.93	-3705.67	-164.55	-742.93	-3462.04	-109.72	-590.70	-3462.04	-186.86	-590.70	-3105.40
	DISPERSION-LMAX	819.72	1822.65	5573.70	758.65	1822.65	6298.11	746.02	1424.20	6298.11	672.41	1424.20	9374.89
	MIN	-169.31	-1772.91	-14007.81	-195.11	-1772.91	-9876.05	-178.00	-1349.07	-9876.05	-213.03	-1349.07	-7830.71
300	Total Dead lWithout snow	2169.32	81.61	-27778.68	1856.34	81.61	-11676.02	1894.19	196.41	-11676.02	1502.96	196.41	5309.74
301	Particular Snow	176.61	15.11	-2293.62	154.86	15.11	-967.73	153.96	21.53	-967.73	126.77	21.53	435.92
302	Live load Total MAX	976.62	1910.90	5022.75	873.00	1910.90	6844.24	912.69	1539.85	6844.24	792.78	1539.85	10772.17
	MIN	-173.31	-2177.09	-14192.85	-259.36	-2177.09	-11387.18	-193.16	-1684.04	-11387.18	-294.02	-1684.04	-9612.35
303	Sum total D+L+PP MAX	3322.55	2007.61	-23542.72	2884.20	2007.61	-3746.24	2960.83	1757.78	-3746.24	2422.51	1757.78	16517.83
	MIN	2120.63	-2161.98	-44265.15	1674.04	-2161.98	-24030.92	1797.04	-1662.51	-24030.92	1247.51	-1662.51	-6750.39

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3027			MEMBER 3028			MEMBER 3028			MEMBER 3029				
		NODE			NODE			NODE			NODE				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	256.51	31.58	955.40	192.68	31.58	3201.36	147.32	-6.19	3201.36	83.49	-6.19	4355.42		
3	Railing	5.25	3.70	26.15	8.62	3.70	95.46	1.85	1.03	95.46	5.22	1.03	130.84		
5	Wheel guard	51.93	36.61	258.88	85.30	36.61	945.05	18.34	10.24	945.05	51.71	10.24	1295.29		
8	Steel weight	975.62	83.68	3554.20	677.02	83.68	11817.42	574.18	-37.40	11817.42	275.58	-37.40	16066.26		
10	Medial strip	111.58	-7.57	484.69	50.95	-7.57	1297.35	71.11	-11.38	1297.35	10.47	-11.38	1705.24		
19	Snow	113.91	14.80	435.92	86.73	14.80	1439.12	65.04	-2.51	1439.12	37.85	-2.51	1953.56		
31	Miscellaneous	9.17	-0.58	30.43	4.27	-0.58	97.59	5.91	-0.87	97.59	1.01	-0.87	132.24		
100	AASHTO-LRFD TRUCK-LOAD	MAX	578.37	851.30	7197.67	463.93	851.30	9288.77	485.29	743.29	9288.77	366.36	743.29	10248.11	
		MIN	-173.78	-790.84	-4573.26	-288.13	-790.84	-3790.91	-238.43	-790.32	-3790.91	-355.81	-790.32	-2909.72	
		TANDEM-LOAD	MAX	421.24	587.83	5153.30	346.63	587.83	6576.09	358.45	517.00	6576.09	279.98	517.00	7238.05
		MIN	-148.31	-546.17	-3105.40	-223.50	-546.17	-2574.18	-193.81	-550.62	-2574.18	-270.69	-550.62	-1975.82	
		DISPERSION-L	MAX	643.19	1169.88	9374.89	575.84	1169.88	13051.51	511.01	940.96	13051.51	451.47	940.96	14690.18
		MIN	-221.81	-1116.26	-7830.71	-263.05	-1116.26	-7847.02	-268.09	-949.20	-7847.02	-317.00	-949.20	-7602.84	
110	Live load	L-PICKUP 1	MAX	1221.56	2021.18	16572.56	1039.77	2021.18	22340.28	996.30	1684.25	22340.28	817.83	1684.25	24938.28
		MIN	-395.59	-1907.11	-12403.97	-551.19	-1907.11	-11637.92	-506.52	-1739.52	-11637.92	-672.81	-1739.52	-10512.57	
		L-PICKUP 2	MAX	1064.43	1757.72	14528.19	922.47	1757.72	19627.60	869.46	1457.96	19627.60	731.45	1457.96	21928.23
		MIN	-370.12	-1662.44	-10936.11	-486.55	-1662.44	-10421.19	-461.90	-1499.83	-10421.19	-587.69	-1499.83	-9578.66	
		L-PICKUP 3	MAX	1064.43	1757.72	14528.19	922.47	1757.72	19627.60	869.46	1457.96	19627.60	731.45	1457.96	21928.23
		MIN	-370.12	-1662.44	-10936.11	-486.55	-1662.44	-10421.19	-461.90	-1499.83	-10421.19	-587.69	-1499.83	-9578.66	
111	AASHTO Twin	TWIN-PICKUP	MAX	1221.56	2021.18	16572.56	1039.77	2021.18	22340.28	996.30	1684.25	22340.28	817.83	1684.25	24938.28
		MIN	-395.59	-1907.11	-12403.97	-551.19	-1907.11	-11637.92	-506.52	-1739.52	-11637.92	-672.81	-1739.52	-10512.57	
		MID-PICKUP	MAX	1064.43	1757.72	14528.19	922.47	1757.72	19627.60	869.46	1457.96	19627.60	731.45	1457.96	21928.23
		MIN	-370.12	-1662.44	-10936.11	-486.55	-1662.44	-10421.19	-461.90	-1499.83	-10421.19	-587.69	-1499.83	-9578.66	
		Live load	MAX	1221.56	2021.18	16572.56	1039.77	2021.18	22340.28	996.30	1684.25	22340.28	817.83	1684.25	24938.28
		MIN	-395.59	-2214.59	-14788.22	-551.19	-2214.59	-13478.64	-506.52	-1938.65	-13478.64	-672.81	-1938.65	-11767.43	
198	AASHTO Fatig	TRUCK-LOAD	MAX	1353.72	2354.51	17970.69	1173.46	2354.51	24813.53	1073.71	1896.44	24813.53	899.42	1896.44	27874.96
		MIN	-386.69	-2214.59	-14788.22	-534.79	-2214.59	-13478.64	-506.07	-1938.65	-13478.64	-671.80	-1938.65	-11767.43	
		MID-PICKUP	MAX	1353.72	2354.51	17970.69	1173.46	2354.51	24813.53	1073.71	1896.44	24813.53	899.42	1896.44	27874.96
		MIN	-386.69	-2214.59	-14788.22	-534.79	-2214.59	-13478.64	-506.07	-1938.65	-13478.64	-671.80	-1938.65	-11767.43	
		TRUCK-LOAD	MAX	210.53	453.61	1538.11	105.34	453.61	1902.77	194.60	365.72	1902.77	85.47	365.72	2062.03
		MIN	-48.11	-355.63	-779.31	-157.23	-355.63	-634.23	-65.79	-283.42	-634.23	-173.87	-283.42	-485.18	
	TANDEM-LOAD	MAX	162.75	313.07	1141.57	89.29	313.07	1390.64	152.22	253.01	1390.64	75.45	253.01	1499.62	
		MIN	-50.51	-242.61	-528.74	-126.67	-242.61	-430.62	-62.21	-193.52	-430.62	-138.18	-193.52	-329.47	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3027			3028			3028			3029		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	160.56	661.62	1908.06	134.00	661.62	2579.33	130.41	530.59	2579.33	103.58	530.59	2871.26
	MIN	-54.55	-591.09	-1419.32	-79.39	-591.09	-1391.20	-66.92	-499.85	-1391.20	-92.98	-499.85	-1343.13
199	AASHTO-LRFD TRUCK-LOAD MAX	860.94	1446.24	10592.54	728.01	1446.24	14519.08	682.00	1166.20	14519.08	547.89	1166.20	16282.01
	MIN	-207.84	-1344.39	-8600.65	-331.16	-1344.39	-7129.25	-294.21	-1204.85	-7129.25	-429.45	-1204.85	-5472.08
	TANDEM-LOAD MAX	421.24	587.83	5153.30	346.63	587.83	6576.09	358.45	517.00	6576.09	279.98	517.00	7238.05
	MIN	-148.31	-546.17	-3105.40	-223.50	-546.17	-2574.18	-193.81	-550.62	-2574.18	-270.69	-550.62	-1975.82
	DISPERSION-LMAX	643.19	1169.88	9374.89	575.84	1169.88	13051.51	511.01	940.96	13051.51	451.47	940.96	14690.18
	MIN	-221.81	-1116.26	-7830.71	-263.05	-1116.26	-7847.02	-268.09	-949.20	-7847.02	-317.00	-949.20	-7602.84
300	Total Dead lWithout snow	1410.06	147.43	5309.74	1018.83	147.43	17454.22	818.72	-44.57	17454.22	427.49	-44.57	23685.28
301	Particular Snow	113.91	14.80	435.92	86.73	14.80	1439.12	65.04	-2.51	1439.12	37.85	-2.51	1953.56
302	Live load Total MAX	794.01	1313.77	10772.17	675.85	1313.77	14521.18	647.59	1094.76	14521.18	531.59	1094.76	16209.88
	MIN	-257.13	-1439.48	-9612.35	-358.27	-1439.48	-8761.11	-329.24	-1260.12	-8761.11	-437.32	-1260.12	-7648.83
303	Sum total D+L+PP MAX	2317.99	1476.00	16517.83	1781.41	1476.00	33414.53	1531.35	1092.26	33414.53	996.93	1092.26	41848.72
	MIN	1189.70	-1424.68	-6750.39	639.81	-1424.68	7503.90	455.75	-1307.19	7503.90	-103.18	-1307.19	15695.36

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3029			MEMBER 3030			MEMBER 3030			MEMBER 3031				
		NODE 3029			NODE 3030			NODE 3030			NODE 3031				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	56.49	-10.55	4355.42	-7.34	-10.55	4601.14	-28.74	-9.32	4601.14	-92.56	-9.32	3994.63		
3	Railing	-0.93	0.03	130.84	2.44	0.03	138.39	-3.53	-0.62	138.39	-0.16	-0.62	119.92		
5	Wheel guard	-9.21	0.31	1295.29	24.16	0.31	1370.02	-34.97	-6.18	1370.02	-1.60	-6.18	1187.18		
8	Steel weight	239.75	-43.08	16066.26	-58.85	-43.08	16970.80	-74.12	-30.28	16970.80	-372.72	-30.28	14736.56		
10	Medial strip	37.60	-6.53	1705.24	-23.04	-6.53	1778.02	6.02	-1.08	1778.02	-54.62	-1.08	1535.01		
19	Snow	24.42	-4.64	1953.56	-2.76	-4.64	2061.89	-13.68	-4.25	2061.89	-40.87	-4.25	1789.16		
31	Miscellaneous	3.19	-0.52	132.24	-1.71	-0.52	139.61	0.62	-0.09	139.61	-4.28	-0.09	121.33		
100	AASHTO-LRFD TRUCK-LOAD	MAX	427.88	737.33	10248.11	305.81	737.33	10415.60	371.01	736.75	10415.60	246.08	736.75	9821.12	
		MIN	-287.33	-767.56	-2909.72	-408.05	-767.56	-2194.20	-338.59	-756.69	-2194.20	-462.34	-756.69	-2835.34	
		TANDEM-LOAD	MAX	320.08	513.19	7238.05	238.92	513.19	7363.73	282.13	512.51	7363.73	198.27	512.51	6938.54
		MIN	-226.83	-535.01	-1975.82	-306.80	-535.01	-1487.51	-261.45	-527.21	-1487.51	-344.13	-527.21	-1922.15	
		DISPERSION-L	MAX	402.87	814.94	14690.18	347.91	814.94	14985.02	319.71	810.34	14985.02	269.50	810.34	13965.17
		MIN	-308.15	-831.29	-7602.84	-361.64	-831.29	-7493.25	-364.01	-826.48	-7493.25	-422.25	-826.48	-7455.89	
110	Live load	L-PICKUP 1	MAX	830.75	1552.27	24938.28	653.72	1552.27	25400.62	690.71	1547.09	25400.62	515.58	1547.09	23786.29
		MIN	-595.48	-1598.85	-10512.57	-769.69	-1598.85	-9687.45	-702.60	-1583.17	-9687.45	-884.59	-1583.17	-10291.23	
		L-PICKUP 2	MAX	722.94	1328.13	21928.23	586.83	1328.13	22348.75	601.84	1322.85	22348.75	467.77	1322.85	20903.71
		MIN	-534.98	-1366.30	-9578.66	-668.44	-1366.30	-8980.75	-625.46	-1353.69	-8980.75	-766.38	-1353.69	-9378.04	
		L-PICKUP 3	MAX	-616.58	-1766.48	-11767.43	-789.82	-1766.48	-10457.54	-756.48	-1747.75	-10457.54	-937.09	-1747.75	-11509.01
		MIN	830.75	1552.27	24938.28	653.72	1552.27	25400.62	690.71	1547.09	25400.62	515.58	1547.09	23786.29	
111	AASHTO Twin	TWIN-PICKUP	MAX	871.54	1708.58	27874.96	699.05	1708.58	28332.01	699.65	1705.83	28332.01	530.64	1705.83	26588.80
		MIN	-616.58	-1766.48	-11767.43	-789.82	-1766.48	-10457.54	-756.48	-1747.75	-10457.54	-937.09	-1747.75	-11509.01	
		MID-PICKUP	MAX	-616.58	-1766.48	-11767.43	-789.82	-1766.48	-10457.54	-756.48	-1747.75	-10457.54	-937.09	-1747.75	-11509.01
		MIN	871.54	1708.58	27874.96	699.05	1708.58	28332.01	699.65	1705.83	28332.01	530.64	1705.83	26588.80	
		TWIN-PICKUP	MAX	871.54	1708.58	27874.96	699.05	1708.58	28332.01	699.65	1705.83	28332.01	530.64	1705.83	26588.80
		MIN	-616.58	-1766.48	-11767.43	-789.82	-1766.48	-10457.54	-756.48	-1747.75	-10457.54	-937.09	-1747.75	-11509.01	
198	AASHTO Fatig	TRUCK-LOAD	MAX	185.87	280.34	2062.03	74.99	280.34	2088.36	176.76	197.02	2088.36	64.51	197.02	1982.67
		MIN	-73.58	-205.72	-485.18	-183.27	-205.72	-365.93	-82.06	-284.44	-365.93	-193.20	-284.44	-472.78	
		TANDEM-LOAD	MAX	146.54	195.25	1499.62	67.96	195.25	1519.49	140.66	137.34	1519.49	60.59	137.34	1443.42
		MIN	-67.06	-145.47	-329.47	-144.78	-145.47	-248.11	-72.53	-198.25	-248.11	-151.79	-198.25	-320.55	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3029			3030			3030			3031		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	109.40	448.70	2871.26	82.51	448.70	2922.58	93.20	433.91	2922.58	66.72	433.91	2735.62
	MIN	-75.25	-442.65	-1343.13	-101.87	-442.65	-1324.05	-86.38	-452.15	-1324.05	-113.17	-452.15	-1316.71
199	AASHTO-LRFD TRUCK-LOAD MAX	565.52	1083.48	16282.01	428.81	1083.48	16494.99	457.69	1085.02	16494.99	320.10	1085.02	15577.94
	MIN	-376.93	-1131.46	-5472.08	-515.94	-1131.46	-4126.25	-476.52	-1115.46	-4126.25	-618.96	-1115.46	-5331.90
	TANDEM-LOAD MAX	320.08	513.19	7238.05	238.92	513.19	7363.73	282.13	512.51	7363.73	198.27	512.51	6938.54
	MIN	-226.83	-535.01	-1975.82	-306.80	-535.01	-1487.51	-261.45	-527.21	-1487.51	-344.13	-527.21	-1922.15
	DISPERSION-LMAX	402.87	814.94	14690.18	347.91	814.94	14985.02	319.71	810.34	14985.02	269.50	810.34	13965.17
	MIN	-308.15	-831.29	-7602.84	-361.64	-831.29	-7493.25	-364.01	-826.48	-7493.25	-422.25	-826.48	-7455.89
300	Total Dead lWithout snow	326.88	-60.34	23685.28	-64.35	-60.34	24997.97	-134.72	-47.58	24997.97	-525.95	-47.58	21694.62
301	Particular Snow	24.42	-4.64	1953.56	-2.76	-4.64	2061.89	-13.68	-4.25	2061.89	-40.87	-4.25	1789.16
302	Live load Total MAX	539.99	1008.97	16209.88	424.92	1008.97	16510.41	448.96	1005.61	16510.41	335.13	1005.61	15461.09
	MIN	-400.77	-1148.21	-7648.83	-513.38	-1148.21	-6797.40	-491.71	-1136.04	-6797.40	-609.11	-1136.04	-7480.86
303	Sum total D+L+PP MAX	891.30	1004.33	41848.72	422.16	1004.33	43570.26	435.25	1001.36	43570.26	-131.15	1001.36	38944.87
	MIN	-169.70	-1213.19	15695.36	-580.49	-1213.19	18223.23	-640.11	-1187.87	18223.23	-1175.93	-1187.87	13758.66

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	3031			3032			3032			3033			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-111.64	-7.80	3994.63	-175.47	-7.80	2559.06	-194.65	-9.90	2559.06	-258.47	-9.90	293.45	
3	Railing		-6.08	-1.43	119.92	-2.71	-1.43	75.98	-8.69	-2.98	75.98	-5.32	-2.98	5.95	
5	Wheel guard		-60.18	-14.12	1187.18	-26.81	-14.12	752.20	-86.01	-29.46	752.20	-52.64	-29.46	58.93	
8	Steel weight		-379.29	-14.55	14736.56	-677.89	-14.55	9450.66	-684.10	-4.54	9450.66	-982.70	-4.54	1116.70	
10	Medial strip		-24.68	5.39	1535.01	-85.32	5.39	984.99	-55.03	14.91	984.99	-115.67	14.91	131.49	
19	Snow		-50.76	-3.79	1789.16	-77.95	-3.79	1145.60	-87.91	-5.11	1145.60	-115.09	-5.11	130.61	
31	Miscellaneous		-1.86	0.43	121.33	-6.76	0.43	78.20	-4.32	1.20	78.20	-9.22	1.20	10.51	
100	AASHTO-LRFD TRUCK-LOAD	MAX	324.35	738.43	9821.12	198.99	738.43	8457.54	292.79	765.10	8457.54	169.60	765.10	6551.51	
		MIN	-391.84	-746.50	-2835.34	-516.14	-746.50	-3496.98	-437.87	-792.24	-3496.98	-561.42	-792.24	-4245.42	
		TANDEM-LOAD MAX	250.11	512.62	6938.54	165.60	512.62	5996.67	228.09	527.96	5996.67	144.91	527.96	4703.76	
		MIN	-297.36	-519.85	-1922.15	-380.61	-519.85	-2370.69	-328.22	-546.47	-2370.69	-411.12	-546.47	-2878.07	
		DISPERSION-LMAX	267.43	904.90	13965.17	221.67	904.90	11676.56	236.90	1075.07	11676.56	194.53	1075.07	8221.42	
		MIN	-446.97	-919.68	-7455.89	-509.71	-919.68	-7499.21	-551.98	-1093.30	-7499.21	-618.18	-1093.30	-7727.05	
110	Live load	L-PICKUP 1	MAX	591.78	1643.33	23786.29	420.67	1643.33	20134.10	529.69	1840.17	20134.10	364.14	1840.17	14772.93
		MIN	-838.82	-1666.19	-10291.23	-1025.86	-1666.19	-10996.19	-989.85	-1885.54	-10996.19	-1179.60	-1885.54	-11972.47	
		L-PICKUP 2	MAX	517.54	1417.52	20903.71	387.28	1417.52	17673.23	464.99	1603.03	17673.23	339.45	1603.03	12925.17
		MIN	-744.33	-1439.53	-9378.04	-890.32	-1439.53	-9869.90	-880.20	-1639.77	-9869.90	-1029.30	-1639.77	-10605.11	
		L-PICKUP 3	MAX	591.78	1643.33	23786.29	420.67	1643.33	20134.10	529.69	1840.17	20134.10	364.14	1840.17	14772.93
		MIN	-927.90	-1871.38	-11509.01	-1112.96	-1871.38	-12667.82	-1111.75	-2194.79	-12667.82	-1297.78	-2194.79	-14139.68	
111	AASHTO Twin	TWIN-PICKUP	MAX	588.07	1833.57	26588.80	424.22	1833.57	22369.71	512.49	2137.35	22369.71	354.01	2137.35	16006.51
		MIN	-927.90	-1871.38	-11509.01	-1112.96	-1871.38	-12667.82	-1111.75	-2194.79	-12667.82	-1297.78	-2194.79	-14139.68	
		MID-PICKUP	MAX	588.07	1833.57	26588.80	424.22	1833.57	22369.71	512.49	2137.35	22369.71	354.01	2137.35	16006.51
198	AASHTO Fatig	TRUCK-LOAD	MAX	167.88	273.96	1982.67	55.38	273.96	1740.86	160.61	345.07	1740.86	47.54	345.07	1411.44
		MIN	-91.79	-359.23	-472.78	-202.41	-359.23	-585.74	-100.20	-426.01	-585.74	-209.56	-426.01	-726.19	
		TANDEM-LOAD	MAX	134.77	187.50	1443.42	54.49	187.50	1275.92	129.80	235.63	1275.92	49.29	235.63	1052.26
		MIN	-79.19	-248.63	-320.55	-158.14	-248.63	-396.94	-84.96	-293.62	-396.94	-162.94	-293.62	-491.75	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3031			3032			3032			3033		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	82.27	480.18	2735.62	56.42	480.18	2311.50	74.75	566.94	2311.50	49.52	566.94	1685.20
	MIN	-104.46	-518.33	-1316.71	-131.22	-518.33	-1330.89	-129.24	-622.25	-1330.89	-155.86	-622.25	-1404.70
199	AASHTO-LRFD TRUCK-LOAD MAX	385.97	1132.40	15577.94	249.68	1132.40	13178.67	332.54	1299.77	13178.67	198.81	1299.77	9563.60
	MIN	-584.03	-1159.63	-5331.90	-726.91	-1159.63	-6576.15	-683.29	-1345.35	-6576.15	-823.79	-1345.35	-7983.71
	TANDEM-LOAD MAX	250.11	512.62	6938.54	165.60	512.62	5996.67	228.09	527.96	5996.67	144.91	527.96	4703.76
	MIN	-297.36	-519.85	-1922.15	-380.61	-519.85	-2370.69	-328.22	-546.47	-2370.69	-411.12	-546.47	-2878.07
	DISPERSION-LMAX	267.43	904.90	13965.17	221.67	904.90	11676.56	236.90	1075.07	11676.56	194.53	1075.07	8221.42
	MIN	-446.97	-919.68	-7455.89	-509.71	-919.68	-7499.21	-551.98	-1093.30	-7499.21	-618.18	-1093.30	-7727.05
300	Total Dead lWithout snow	-583.74	-32.08	21694.62	-974.97	-32.08	13901.08	-1032.79	-30.77	13901.08	-1424.02	-30.77	1617.04
301	Particular Snow	-50.76	-3.79	1789.16	-77.95	-3.79	1145.60	-87.91	-5.11	1145.60	-115.09	-5.11	130.61
302	Live load Total MAX	384.66	1068.17	15461.09	273.43	1068.17	13087.17	344.30	1196.11	13087.17	236.69	1196.11	9602.40
	MIN	-603.13	-1216.40	-7480.86	-723.42	-1216.40	-8234.08	-722.63	-1426.61	-8234.08	-843.55	-1426.61	-9190.79
303	Sum total D+L+PP MAX	-134.45	1064.38	38944.87	-697.45	1064.38	28133.84	-673.11	1191.00	28133.84	-1231.42	1191.00	11350.05
	MIN	-1237.64	-1252.27	13758.66	-1776.34	-1252.27	4342.37	-1843.33	-1462.49	4342.37	-2382.66	-1462.49	-9060.18

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3033			MEMBER 3034			MEMBER 3034			MEMBER 3035			
		NODE 3033			NODE 3034			NODE 3034			NODE 3035			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-282.47	-26.28	293.45	-346.30	-26.28	-2850.44	-357.37	-29.57	-2850.44	-408.43	-29.57	-5913.62	
3	Railing	-11.44	-6.25	5.95	-8.07	-6.25	-91.59	-12.49	-9.19	-91.59	-9.79	-9.19	-180.69	
5	Wheel guard	-113.25	-61.89	58.93	-79.89	-61.89	-906.76	-123.61	-90.99	-906.76	-96.92	-90.99	-1788.85	
8	Steel weight	-1006.73	-31.69	1116.70	-1305.33	-31.69	-10443.64	-1297.38	-9.95	-10443.64	-1536.26	-9.95	-21778.18	
10	Medial strip	-87.25	28.01	131.49	-147.89	28.01	-1044.24	-123.71	46.49	-1044.24	-172.22	46.49	-2227.93	
19	Snow	-127.21	-13.15	130.61	-154.39	-13.15	-1277.42	-160.39	-15.35	-1277.42	-182.14	-15.35	-2647.52	
31	Miscellaneous	-6.92	2.26	10.51	-11.82	2.26	-83.21	-9.87	3.75	-83.21	-13.79	3.75	-177.85	
100	AASHTO-LRFD TRUCK-LOAD	MAX	250.56	847.54	6551.51	126.52	847.54	4008.49	209.15	1020.41	4008.49	90.21	1020.41	2016.79
		MIN	-503.76	-884.11	-4245.42	-623.18	-884.11	-4945.05	-559.49	-1051.40	-4945.05	-662.81	-1051.40	-5431.29
		TANDEM-LOAD MAX	196.18	580.83	4703.76	114.67	580.83	2986.70	168.79	698.87	2986.70	89.83	698.87	1613.43
		MIN	-372.72	-607.97	-2878.07	-452.44	-607.97	-3354.67	-412.38	-716.96	-3354.67	-480.54	-716.96	-3690.03
		DISPERSION-LMAX	206.58	1315.60	8221.42	168.84	1315.60	5736.27	188.36	1668.85	5736.27	161.64	1668.85	5133.43
		MIN	-665.80	-1360.46	-7727.05	-736.70	-1360.46	-10363.85	-770.94	-1720.04	-10363.85	-831.14	-1720.04	-14768.80
110	Live load	L-PICKUP 1 MAX	457.14	2163.14	14772.93	295.35	2163.14	9744.76	397.51	2689.26	9744.76	251.86	2689.26	7150.22
		MIN	-1169.55	-2244.57	-11972.47	-1359.87	-2244.57	-15308.90	-1330.43	-2771.44	-15308.90	-1493.95	-2771.44	-20200.09
		L-PICKUP 2 MAX	402.76	1896.44	12925.17	283.50	1896.44	8722.97	357.15	2367.72	8722.97	251.48	2367.72	6746.86
		MIN	-1038.52	-1968.43	-10605.11	-1189.14	-1968.43	-13718.51	-1183.32	-2437.01	-13718.51	-1311.68	-2437.01	-18458.83
		L-PICKUP 3	-1331.43	-2624.73	-14139.68	-1517.62	-2624.73	-17693.21	-1529.62	-3239.36	-17693.21	-1683.14	-3239.36	-22475.40
		Live load MAX	457.14	2163.14	14772.93	295.35	2163.14	9744.76	397.51	2689.26	9744.76	251.86	2689.26	7150.22
MIN	-1331.43	-2624.73	-14139.68	-1517.62	-2624.73	-17693.21	-1529.62	-3239.36	-17693.21	-1683.14	-3239.36	-22475.40		
111	AASHTO Twin	TWIN-PICKUP MAX	447.21	2534.81	16006.51	277.02	2534.81	9266.87	372.52	3149.96	9266.87	257.43	3149.96	7188.50
		MIN	-1331.43	-2624.73	-14139.68	-1517.62	-2624.73	-17693.21	-1529.62	-3239.36	-17693.21	-1683.14	-3239.36	-22475.40
		MID-PICKUP	-1331.43	-2624.73	-14139.68	-1517.62	-2624.73	-17693.21	-1529.62	-3239.36	-17693.21	-1683.14	-3239.36	-22475.40
198	AASHTO Fatig	TRUCK-LOAD MAX	149.02	399.12	1411.44	36.97	399.12	974.26	125.56	415.64	974.26	33.78	415.64	555.96
		MIN	-115.28	-489.40	-726.19	-219.58	-489.40	-902.83	-129.61	-515.11	-902.83	-218.61	-515.11	-1085.81
		TANDEM-LOAD MAX	121.41	272.97	1052.26	38.13	272.97	761.35	106.22	285.00	761.35	32.50	285.00	494.89
		MIN	-94.98	-336.63	-491.75	-169.17	-336.63	-612.16	-99.43	-352.26	-612.16	-169.19	-352.26	-737.96

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER		3033			3034			3034			3035		
NODE		3033			3034			3034			3035		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	65.16	695.47	1685.20	40.68	695.47	1191.05	62.99	871.99	1191.05	44.21	871.99	1023.77
	MIN	-165.37	-773.46	-1404.70	-191.23	-773.46	-2052.41	-204.41	-983.65	-2052.41	-224.46	-983.65	-3178.64
199	AASHTO-LRFD TRUCK-LOAD MAX	290.32	1500.85	9563.60	138.96	1500.85	4560.25	225.55	1831.10	4560.25	124.39	1831.10	2853.79
	MIN	-813.56	-1555.90	-7983.71	-949.54	-1555.90	-9295.28	-928.64	-1879.24	-9295.28	-1039.02	-1879.24	-10203.87
	TANDEM-LOAD MAX	196.18	580.83	4703.76	114.67	580.83	2986.70	168.79	698.87	2986.70	89.83	698.87	1613.43
	MIN	-372.72	-607.97	-2878.07	-452.44	-607.97	-3354.67	-412.38	-716.96	-3354.67	-480.54	-716.96	-3690.03
	DISPERSION-LMAX	206.58	1315.60	8221.42	168.84	1315.60	5736.27	188.36	1668.85	5736.27	161.64	1668.85	5133.43
	MIN	-665.80	-1360.46	-7727.05	-736.70	-1360.46	-10363.85	-770.94	-1720.04	-10363.85	-831.14	-1720.04	-14768.80
300	Total Dead lWithout snow	-1508.08	-95.85	1617.04	-1899.31	-95.85	-15419.87	-1924.41	-89.47	-15419.87	-2237.40	-89.47	-32067.12
301	Particular Snow	-127.21	-13.15	130.61	-154.39	-13.15	-1277.42	-160.39	-15.35	-1277.42	-182.14	-15.35	-2647.52
302	Live load Total	297.14	1406.04	9602.40	191.98	1406.04	6334.09	258.38	1748.02	6334.09	163.71	1748.02	4647.64
	MIN	-865.43	-1706.07	-9190.79	-986.45	-1706.07	-11500.59	-994.25	-2105.58	-11500.59	-1094.04	-2105.58	-14609.01
303	Sum total D+L+PP	-1249.01	1392.89	11350.05	-1804.13	1392.89	-8462.97	-1748.90	1732.67	-8462.97	-2206.71	1732.67	-28672.70
	MIN	-2500.71	-1815.07	-9060.18	-3040.15	-1815.07	-28197.88	-3079.06	-2210.40	-28197.88	-3513.57	-2210.40	-49323.64

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3035			3036			3036			3037		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-408.21	-21.39	-5913.62	-459.27	-21.39	-9383.52	445.62	13.19	-9383.52	394.55	13.19	-6022.84
3	Railing	-9.53	-6.23	-180.69	-6.84	-6.23	-246.17	6.42	5.98	-246.17	9.12	5.98	-184.00
5	Wheel guard	-94.38	-61.72	-1788.85	-67.68	-61.72	-2437.08	63.59	59.19	-2437.08	90.29	59.19	-1821.55
8	Steel weight	-1538.41	-12.13	-21778.18	-1777.29	-12.13	-35040.99	1726.97	-18.00	-35040.99	1488.09	-18.00	-22180.73
10	Medial strip	-173.87	30.75	-2227.93	-222.38	30.75	-3812.90	216.06	-33.81	-3812.90	167.55	-33.81	-2278.44
19	Snow	-181.97	-11.00	-2647.52	-203.72	-11.00	-4190.27	197.51	7.33	-4190.27	175.76	7.33	-2697.19
31	Miscellaneous	-13.92	2.48	-177.85	-17.84	2.48	-304.91	17.43	-2.73	-304.91	13.51	-2.73	-181.15
100	AASHTO-LRFD TRUCK-LOAD	166.31	1170.37	2016.79	109.89	1170.37	1675.93	747.58	1186.22	1675.93	610.24	1186.22	2025.65
	MIN	-605.23	-1186.46	-5431.29	-743.84	-1186.46	-5947.97	-109.15	-1178.58	-5947.97	-166.11	-1178.58	-5421.72
	TANDEM-LOAD MAX	147.40	799.58	1613.43	94.09	799.58	1138.02	539.98	813.14	1138.02	444.16	813.14	1621.86
	MIN	-441.05	-813.38	-3690.03	-537.60	-813.38	-4043.56	-93.33	-805.01	-4043.56	-146.93	-805.01	-3683.57
	DISPERSION-LMAX	182.57	1929.29	5133.43	173.11	1929.29	5792.70	907.72	1967.61	5792.70	830.23	1967.61	5129.72
	MIN	-851.04	-1966.17	-14768.80	-928.46	-1966.17	-21136.07	-174.45	-1944.06	-21136.07	-183.83	-1944.06	-14940.84
110	Live load L-PICKUP 1	348.88	3099.66	7150.22	282.99	3099.66	7468.63	1655.29	3153.83	7468.63	1440.47	3153.83	7155.37
	MIN	-1456.28	-3152.63	-20200.09	-1672.30	-3152.63	-27084.04	-283.60	-3122.64	-27084.04	-349.95	-3122.64	-20362.55
	L-PICKUP 2 MAX	329.96	2728.87	6746.86	267.19	2728.87	6930.73	1447.69	2780.75	6930.73	1274.39	2780.75	6751.57
	MIN	-1292.09	-2779.54	-18458.83	-1466.06	-2779.54	-25179.63	-267.78	-2749.08	-25179.63	-330.77	-2749.08	-18624.41
	L-PICKUP 3	-1672.65	-3694.42	-22475.40	-1879.85	-3694.42	-29073.47	-287.12	-3659.27	-29073.47	-306.33	-3659.27	-22621.36
	Live load MAX	348.88	3099.66	7150.22	282.99	3099.66	7468.63	1655.29	3153.83	7468.63	1440.47	3153.83	7155.37
	MIN	-1672.65	-3694.42	-22475.40	-1879.85	-3694.42	-29073.47	-287.12	-3659.27	-29073.47	-349.95	-3659.27	-22621.36
111	AASHTO Twin TWIN-PICKUP	305.23	3632.03	7188.50	285.23	3632.03	8050.03	1865.03	3693.97	8050.03	1658.41	3693.97	7245.56
	MIN	-1672.65	-3694.42	-22475.40	-1879.85	-3694.42	-29073.47	-287.12	-3659.27	-29073.47	-306.33	-3659.27	-22621.36
	MID-PICKUP	-1672.65	-3694.42	-22475.40	-1879.85	-3694.42	-29073.47	-287.12	-3659.27	-29073.47	-306.33	-3659.27	-22621.36
198	AASHTO FatigTRUCK-LOAD	83.52	359.88	555.96	42.94	359.88	289.17	265.33	444.32	289.17	156.62	444.32	552.97
	MIN	-155.94	-441.73	-1085.81	-265.12	-441.73	-1216.49	-43.21	-362.44	-1216.49	-83.13	-362.44	-1082.83
	TANDEM-LOAD MAX	80.42	244.11	494.89	46.56	244.11	196.12	203.60	304.15	196.12	119.79	304.15	493.17
	MIN	-119.37	-302.46	-737.96	-203.57	-302.46	-826.73	-46.51	-245.61	-826.73	-80.05	-245.61	-734.94

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3035			3036			3036			3037		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.51	1026.51	1023.77	49.19	1026.51	1063.01	237.73	1104.56	1063.01	201.77	1104.56	1023.10
	MIN	-206.84	-1102.60	-3178.64	-242.83	-1102.60	-4646.71	-50.23	-1033.27	-4646.71	-55.54	-1033.27	-3217.91
199	AASHTO-LRFD TRUCK-LOAD MAX	156.57	2106.30	2853.79	143.82	2106.30	3151.78	1164.54	2136.81	3151.78	1012.45	2136.81	2920.90
	MIN	-1007.46	-2138.74	-10203.87	-1160.26	-2138.74	-11167.79	-144.57	-2121.80	-11167.79	-156.53	-2121.80	-10194.01
	TANDEM-LOAD MAX	147.40	799.58	1613.43	94.09	799.58	1138.02	539.98	813.14	1138.02	444.16	813.14	1621.86
	MIN	-441.05	-813.38	-3690.03	-537.60	-813.38	-4043.56	-93.33	-805.01	-4043.56	-146.93	-805.01	-3683.57
	DISPERSION-LMAX	182.57	1929.29	5133.43	173.11	1929.29	5792.70	907.72	1967.61	5792.70	830.23	1967.61	5129.72
	MIN	-851.04	-1966.17	-14768.80	-928.46	-1966.17	-21136.07	-174.45	-1944.06	-21136.07	-183.83	-1944.06	-14940.84
300	Total Dead lWithout snow	-2238.31	-68.24	-32067.12	-2551.30	-68.24	-51225.57	2476.10	23.82	-51225.57	2163.12	23.82	-32668.70
301	Particular Snow	-181.97	-11.00	-2647.52	-203.72	-11.00	-4190.27	197.51	7.33	-4190.27	175.76	7.33	-2697.19
302	Live load Total MAX	226.77	2014.78	4647.64	183.95	2014.78	4854.61	1075.94	2049.99	4854.61	936.30	2049.99	4650.99
	MIN	-1087.22	-2401.37	-14609.01	-1221.90	-2401.37	-18897.76	-186.62	-2378.53	-18897.76	-227.47	-2378.53	-14703.89
303	Sum total D+L+PP MAX	-2125.49	2003.78	-28672.70	-2515.89	2003.78	-49104.84	3749.55	2081.14	-49104.84	3275.18	2081.14	-29319.61
	MIN	-3507.51	-2480.61	-49323.64	-3976.92	-2480.61	-74313.60	2431.00	-2371.20	-74313.60	2043.17	-2371.20	-50069.78

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3037			MEMBER 3038			MEMBER 3038			MEMBER 3039				
		NODE 3037			NODE 3038			NODE 3038			NODE 3039				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	400.28	29.36	-6022.84	349.22	29.36	-3024.84	346.98	40.67	-3024.84	283.15	40.67	125.82		
3	Railing	9.56	9.21	-184.00	12.26	9.21	-96.71	8.10	6.69	-96.71	11.47	6.69	1.10		
5	Wheel guard	94.67	91.16	-1821.55	121.37	91.16	-957.38	80.15	66.19	-957.38	113.51	66.19	10.92		
8	Steel weight	1505.98	8.89	-22180.73	1267.10	8.89	-11088.38	1307.76	84.78	-11088.38	1009.16	84.78	496.25		
10	Medial strip	167.79	-46.84	-2278.44	119.28	-46.84	-1130.12	146.96	-22.60	-1130.12	86.32	-22.60	36.26		
19	Snow	178.39	15.26	-2697.19	156.64	15.26	-1357.06	154.60	19.59	-1357.06	127.42	19.59	53.01		
31	Miscellaneous	13.53	-3.77	-181.15	9.61	-3.77	-88.57	11.84	-1.83	-88.57	6.94	-1.83	5.32		
100	AASHTO-LRFD TRUCK-LOAD	MAX	673.15	1065.04	2025.65	572.69	1065.04	4057.13	635.02	910.02	4057.13	518.95	910.02	6710.43	
		MIN	-88.72	-1029.94	-5421.72	-205.15	-1029.94	-5021.14	-124.67	-849.12	-5021.14	-246.50	-849.12	-4359.70	
		TANDEM-LOAD	MAX	487.28	726.57	1621.86	421.27	726.57	3024.72	460.07	626.82	3024.72	383.36	626.82	4816.49
		MIN	-87.94	-705.46	-3683.57	-165.74	-705.46	-3408.70	-113.56	-581.88	-3408.70	-192.79	-581.88	-2959.48	
		DISPERSION-L	MAX	821.82	1742.44	5129.72	761.09	1742.44	5746.94	745.31	1392.72	5746.94	673.53	1392.72	8303.43
		MIN	-165.48	-1691.57	-14940.84	-191.64	-1691.57	-10653.86	-175.97	-1324.46	-10653.86	-212.84	-1324.46	-8074.12	
110	Live load	L-PICKUP 1	MAX	1494.97	2807.48	7155.37	1333.78	2807.48	9804.07	1380.33	2302.74	9804.07	1192.47	2302.74	15013.86
		MIN	-254.19	-2721.51	-20362.55	-396.79	-2721.51	-15675.00	-300.64	-2173.57	-15675.00	-459.34	-2173.57	-12433.82	
		L-PICKUP 2	MAX	1309.09	2469.02	6751.57	1182.36	2469.02	8771.66	1205.39	2019.55	8771.66	1056.88	2019.55	13119.92
		MIN	-253.41	-2397.03	-18624.41	-357.38	-2397.03	-14062.56	-289.54	-1906.34	-14062.56	-405.63	-1906.34	-11033.60	
		L-PICKUP 3	MAX	1494.97	2807.48	7155.37	1333.78	2807.48	9804.07	1380.33	2302.74	9804.07	1192.47	2302.74	15013.86
		MIN	-259.14	-3185.94	-22621.36	-396.79	-3185.94	-18091.34	-300.64	-2545.96	-18091.34	-459.34	-2545.96	-14649.35	
111	AASHTO Twin	TWIN-PICKUP	MAX	1690.83	3276.99	7245.56	1538.09	3276.99	9287.45	1546.80	2693.09	9287.45	1361.82	2693.09	16284.63
		MIN	-259.14	-3185.94	-22621.36	-372.50	-3185.94	-18091.34	-283.28	-2545.96	-18091.34	-449.74	-2545.96	-14649.35	
		MID-PICKUP	MAX	1690.83	3276.99	7245.56	1538.09	3276.99	9287.45	1546.80	2693.09	9287.45	1361.82	2693.09	16284.63
198	AASHTO Fatig	TRUCK-LOAD	MAX	219.95	524.39	552.97	132.08	524.39	983.15	221.07	499.97	983.15	119.06	499.97	1439.45
		MIN	-33.15	-418.60	-1082.83	-123.89	-418.60	-915.39	-36.13	-399.42	-915.39	-146.95	-399.42	-745.90	
		TANDEM-LOAD	MAX	169.90	359.11	493.17	101.85	359.11	768.53	169.98	344.47	768.53	97.99	344.47	1072.23
		MIN	-31.89	-287.16	-734.94	-104.88	-287.16	-619.79	-37.94	-272.70	-619.79	-119.80	-272.70	-505.86	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3037			3038			3038			3039		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	222.24	995.63	1023.10	202.36	995.63	1194.48	193.72	788.75	1194.48	167.98	788.75	1702.18
	MIN	-46.57	-883.39	-3217.91	-65.14	-883.39	-2111.17	-41.83	-702.45	-2111.17	-66.00	-702.45	-1468.33
199	AASHTO-LRFD TRUCK-LOAD MAX	1056.88	1898.66	2920.90	947.90	1898.66	4572.44	973.35	1599.59	4572.44	839.61	1599.59	9790.61
	MIN	-122.46	-1848.37	-10194.01	-222.25	-1848.37	-9447.64	-138.79	-1504.39	-9447.64	-286.87	-1504.39	-8202.93
	TANDEM-LOAD MAX	487.28	726.57	1621.86	421.27	726.57	3024.72	460.07	626.82	3024.72	383.36	626.82	4816.49
	MIN	-87.94	-705.46	-3683.57	-165.74	-705.46	-3408.70	-113.56	-581.88	-3408.70	-192.79	-581.88	-2959.48
	DISPERSION-LMAX	821.82	1742.44	5129.72	761.09	1742.44	5746.94	745.31	1392.72	5746.94	673.53	1392.72	8303.43
	MIN	-165.48	-1691.57	-14940.84	-191.64	-1691.57	-10653.86	-175.97	-1324.46	-10653.86	-212.84	-1324.46	-8074.12
300	Total Dead lWithout snow	2191.83	88.00	-32668.70	1878.85	88.00	-16385.99	1901.78	173.90	-16385.99	1510.55	173.90	675.67
301	Particular Snow	178.39	15.26	-2697.19	156.64	15.26	-1357.06	154.60	19.59	-1357.06	127.42	19.59	53.01
302	Live load Total MAX	971.73	1824.86	4650.99	866.95	1824.86	6372.64	897.22	1496.78	6372.64	775.11	1496.78	9759.01
	MIN	-168.44	-2070.86	-14703.89	-257.91	-2070.86	-11759.37	-195.42	-1654.88	-11759.37	-298.57	-1654.88	-9522.08
303	Sum total D+L+PP MAX	3341.95	1928.12	-29319.61	2902.44	1928.12	-9458.61	2953.60	1690.27	-9458.61	2413.07	1690.27	10487.69
	MIN	2151.25	-2055.61	-50069.78	1700.20	-2055.61	-29502.42	1802.34	-1635.29	-29502.42	1249.82	-1635.29	-9469.07

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3039			MEMBER 3040			MEMBER 3040			MEMBER 3041			
		NODE 3039			NODE 3040			NODE 3040			NODE 3041			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	253.18	16.96	125.82	189.36	16.96	2338.52	153.75	-9.12	2338.52	89.92	-9.12	3556.83	
3	Railing	5.15	3.16	1.10	8.52	3.16	69.41	2.05	0.90	69.41	5.42	0.90	106.72	
5	Wheel guard	50.94	31.24	10.92	84.31	31.24	687.16	20.25	8.87	687.16	53.62	8.87	1056.53	
8	Steel weight	963.34	30.95	496.25	664.74	30.95	8636.70	597.87	-47.62	8636.70	299.27	-47.62	13122.37	
10	Medial strip	112.77	-11.81	36.26	52.13	-11.81	860.75	76.15	-11.44	860.75	15.52	-11.44	1319.11	
19	Snow	112.63	8.28	53.01	85.45	8.28	1043.44	68.14	-3.77	1043.44	40.95	-3.77	1588.89	
31	Miscellaneous	9.07	-0.97	5.32	4.17	-0.97	71.48	6.11	-0.93	71.48	1.21	-0.93	108.07	
100	AASHTO-LRFD TRUCK-LOAD	MAX	550.64	790.31	6710.43	428.07	790.31	8478.15	480.48	713.08	8478.15	352.78	713.08	9425.11
		MIN	-179.67	-766.82	-4359.70	-300.84	-766.82	-3500.23	-226.04	-759.27	-3500.23	-352.26	-759.27	-2686.15
		TANDEM-LOAD MAX	403.56	544.85	4816.49	321.68	544.85	6013.17	356.85	495.37	6013.17	270.46	495.37	6665.13
		MIN	-152.33	-529.77	-2959.48	-233.45	-529.77	-2376.06	-184.97	-528.80	-2376.06	-270.02	-528.80	-1823.44
		DISPERSION-LMAX	625.93	1109.49	8303.43	560.68	1109.49	11531.68	493.45	907.02	11531.68	433.90	907.02	13148.37
		MIN	-210.73	-1079.94	-8074.12	-254.04	-1079.94	-7702.78	-240.72	-920.09	-7702.78	-289.62	-920.09	-7338.30
110	Live load	L-PICKUP 1 MAX	1176.57	1899.80	15013.86	988.75	1899.80	20009.83	973.93	1620.09	20009.83	786.68	1620.09	22573.48
		MIN	-390.40	-1846.76	-12433.82	-554.87	-1846.76	-11203.01	-466.75	-1679.36	-11203.01	-641.88	-1679.36	-10024.45
		L-PICKUP 2 MAX	1029.49	1654.34	13119.92	882.37	1654.34	17544.85	850.30	1402.38	17544.85	704.36	1402.38	19813.50
		MIN	-363.06	-1609.72	-11033.60	-487.49	-1609.72	-10078.85	-425.68	-1448.89	-10078.85	-559.63	-1448.89	-9161.74
		L-PICKUP 3	-375.99	-2144.54	-14649.35	-535.54	-2144.54	-12859.67	-465.15	-1873.85	-12859.67	-637.08	-1873.85	-11153.09
		Live load MAX	1176.57	1899.80	15013.86	988.75	1899.80	20009.83	973.93	1620.09	20009.83	786.68	1620.09	22573.48
		MIN	-390.40	-2144.54	-14649.35	-554.87	-2144.54	-12859.67	-466.75	-1873.85	-12859.67	-641.88	-1873.85	-11153.09
		111	AASHTO Twin TWIN-PICKUP	MAX	1290.43	2210.75	16284.63	1107.18	2210.75	22261.58	1043.20	1819.73	22261.58	861.82
MIN	-375.99	-2144.54	-14649.35	-535.54	-2144.54	-12859.67	-465.15	-1873.85	-12859.67	-637.08	-1873.85	-11153.09		
	MID-PICKUP	-375.99	-2144.54	-14649.35	-535.54	-2144.54	-12859.67	-465.15	-1873.85	-12859.67	-637.08	-1873.85	-11153.09	
198	AASHTO FatigTRUCK-LOAD	MAX	207.35	423.87	1439.45	98.50	423.87	1742.80	196.08	347.18	1742.80	83.61	347.18	1908.09
		MIN	-51.19	-342.63	-745.90	-162.77	-342.63	-585.91	-63.26	-273.79	-585.91	-174.98	-273.79	-448.15
		TANDEM-LOAD MAX	161.43	292.10	1072.23	84.11	292.10	1277.20	154.13	239.71	1277.20	73.59	239.71	1391.05
		MIN	-52.12	-233.70	-505.86	-131.25	-233.70	-397.68	-59.88	-187.24	-397.68	-139.85	-187.24	-304.22

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3039	3040			3040			3040			3041		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	157.12	628.06	1702.18	130.46	628.06	2284.63	127.22	512.34	2284.63	100.31	512.34	2581.97	
MIN	-53.02	-568.30	-1468.33	-78.36	-568.30	-1366.93	-61.15	-485.47	-1366.93	-87.31	-485.47	-1297.34	
199 AASHTO-LRFD TRUCK-LOAD MAX	807.88	1346.90	9790.61	669.51	1346.90	13203.40	665.66	1114.91	13203.40	523.68	1114.91	14927.34	
MIN	-207.04	-1302.88	-8202.93	-341.01	-1302.88	-6585.74	-276.12	-1161.96	-6585.74	-418.25	-1161.96	-5054.02	
TANDEM-LOAD MAX	403.56	544.85	4816.49	321.68	544.85	6013.17	356.85	495.37	6013.17	270.46	495.37	6665.13	
MIN	-152.33	-529.77	-2959.48	-233.45	-529.77	-2376.06	-184.97	-528.80	-2376.06	-270.02	-528.80	-1823.44	
DISPERSION-LMAX	625.93	1109.49	8303.43	560.68	1109.49	11531.68	493.45	907.02	11531.68	433.90	907.02	13148.37	
MIN	-210.73	-1079.94	-8074.12	-254.04	-1079.94	-7702.78	-240.72	-920.09	-7702.78	-289.62	-920.09	-7338.30	
300 Total Dead lWithout snow	1394.45	69.52	675.67	1003.22	69.52	12664.02	856.18	-59.35	12664.02	464.95	-59.35	19269.63	
301 Particular Snow	112.63	8.28	53.01	85.45	8.28	1043.44	68.14	-3.77	1043.44	40.95	-3.77	1588.89	
302 Live load Total MAX	764.77	1234.87	9759.01	642.69	1234.87	13006.39	633.06	1053.06	13006.39	511.34	1053.06	14672.76	
MIN	-253.76	-1393.95	-9522.08	-360.67	-1393.95	-8358.78	-303.39	-1218.00	-8358.78	-417.22	-1218.00	-7249.51	
303 Sum total D+L+PP MAX	2271.86	1312.67	10487.69	1731.36	1312.67	26713.85	1557.37	1049.29	26713.85	1017.24	1049.29	35531.28	
MIN	1177.20	-1385.67	-9469.07	619.80	-1385.67	2841.04	529.91	-1281.12	2841.04	-36.48	-1281.12	11434.16	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3041			MEMBER 3042			MEMBER 3042			MEMBER 3043				
		NODE 3041			NODE 3042			NODE 3042			NODE 3043				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		72.35	-4.79	3556.83	8.52	-4.79	3961.18	-7.39	0.01	3961.18	-71.22	0.01	3568.12	
3	Railing		-0.45	0.20	106.72	2.92	0.20	119.07	-2.89	-0.33	119.07	0.48	-0.33	107.06	
5	Wheel guard		-4.46	1.97	1056.53	28.91	1.97	1178.77	-28.57	-3.22	1178.77	4.80	-3.22	1059.91	
8	Steel weight		298.22	-21.77	13122.37	-0.38	-21.77	14611.54	4.54	3.93	14611.54	-294.06	3.93	13163.94	
10	Medial strip		45.84	-4.20	1319.11	-14.80	-4.20	1474.28	16.13	2.23	1474.28	-44.51	2.23	1332.35	
19	Snow		31.72	-2.06	1588.89	4.53	-2.06	1770.16	-3.95	-0.08	1770.16	-31.14	-0.08	1594.72	
31	Miscellaneous		3.67	-0.34	108.07	-1.23	-0.34	120.23	1.27	0.18	120.23	-3.63	0.18	108.41	
100	AASHTO-LRFD TRUCK-LOAD	MAX	436.12	730.06	9425.11	306.15	730.06	9743.74	384.89	732.52	9743.74	254.30	732.52	9360.07	
		MIN	-262.76	-740.16	-2686.15	-392.23	-740.16	-2002.10	-311.77	-729.09	-2002.10	-442.15	-729.09	-2604.37	
		TANDEM-LOAD	MAX	327.40	507.73	6665.13	239.00	507.73	6896.79	292.87	509.69	6896.79	203.83	509.69	6619.78
		MIN	-209.69	-515.46	-1823.44	-297.73	-515.46	-1359.08	-242.90	-507.26	-1359.08	-331.67	-507.26	-1765.69	
		DISPERSION-L	MAX	393.64	810.40	13148.37	337.56	810.40	13683.42	322.59	809.57	13683.42	270.84	809.57	13016.45
		MIN	-273.62	-817.30	-7338.30	-325.97	-817.30	-7216.47	-332.61	-810.46	-7216.47	-389.30	-810.46	-7190.20	
110	Live load	L-PICKUP 1	MAX	829.77	1540.46	22573.48	643.71	1540.46	23427.16	707.48	1542.09	23427.16	525.14	1542.09	22376.52
		MIN	-536.38	-1557.46	-10024.45	-718.20	-1557.46	-9218.56	-644.38	-1539.55	-9218.56	-831.45	-1539.55	-9794.57	
		L-PICKUP 2	MAX	721.05	1318.13	19813.50	576.55	1318.13	20580.21	615.46	1319.26	20580.21	474.67	1319.26	19636.22
		MIN	-483.31	-1332.75	-9161.74	-623.70	-1332.75	-8575.55	-575.51	-1317.72	-8575.55	-720.97	-1317.72	-8955.89	
		L-PICKUP 3	MAX	551.81	1717.27	11153.09	728.72	1717.27	9885.10	689.54	1694.59	9885.10	871.82	1694.59	10883.76
		MIN	-551.81	-1717.27	-11153.09	-728.72	-1717.27	-9885.10	-689.54	-1694.59	-9885.10	-871.82	-1694.59	-10883.76	
111	AASHTO Twin	TWIN-PICKUP	MAX	868.18	1695.58	25268.14	687.59	1695.58	26164.07	714.91	1700.46	26164.07	538.76	1700.46	25046.19
		MIN	-551.81	-1717.27	-11153.09	-728.72	-1717.27	-9885.10	-689.54	-1694.59	-9885.10	-871.82	-1694.59	-10883.76	
		MID-PICKUP	MAX	551.81	1717.27	11153.09	728.72	1717.27	9885.10	689.54	1694.59	9885.10	871.82	1694.59	10883.76
198	AASHTO Fatig	TRUCK-LOAD	MAX	189.38	272.87	1908.09	75.51	272.87	1965.37	180.73	194.13	1965.37	66.62	194.13	1896.97
		MIN	-68.39	-195.52	-448.15	-181.93	-195.52	-334.04	-76.78	-272.54	-334.04	-190.73	-272.54	-434.17	
		TANDEM-LOAD	MAX	149.69	189.69	1391.05	67.68	189.69	1433.15	143.88	135.75	1433.15	61.59	135.75	1383.34
		MIN	-62.88	-137.97	-304.22	-144.64	-137.97	-226.76	-68.49	-189.50	-226.76	-150.64	-189.50	-294.36	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3041			3042			3042			3043		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	107.46	445.32	2581.97	80.55	445.32	2681.35	93.90	431.93	2681.35	67.26	431.93	2560.18
	MIN	-67.82	-435.41	-1297.34	-94.47	-435.41	-1275.74	-79.81	-444.44	-1275.74	-106.68	-444.44	-1270.04
199	AASHTO-LRFD TRUCK-LOAD MAX	571.00	1073.58	14927.34	426.43	1073.58	15387.76	471.75	1079.83	15387.76	327.78	1079.83	14812.66
	MIN	-339.50	-1090.78	-5054.02	-483.72	-1090.78	-3766.98	-433.54	-1072.41	-3766.98	-579.39	-1072.41	-4902.87
	TANDEM-LOAD MAX	327.40	507.73	6665.13	239.00	507.73	6896.79	292.87	509.69	6896.79	203.83	509.69	6619.78
	MIN	-209.69	-515.46	-1823.44	-297.73	-515.46	-1359.08	-242.90	-507.26	-1359.08	-331.67	-507.26	-1765.69
	DISPERSION-LMAX	393.64	810.40	13148.37	337.56	810.40	13683.42	322.59	809.57	13683.42	270.84	809.57	13016.45
	MIN	-273.62	-817.30	-7338.30	-325.97	-817.30	-7216.47	-332.61	-810.46	-7216.47	-389.30	-810.46	-7190.20
300	Total Dead lWithout snow	415.16	-28.92	19269.63	23.93	-28.92	21465.07	-16.91	2.80	21465.07	-408.14	2.80	19339.79
301	Particular Snow	31.72	-2.06	1588.89	4.53	-2.06	1770.16	-3.95	-0.08	1770.16	-31.14	-0.08	1594.72
302	Live load Total MAX	539.35	1001.30	14672.76	418.41	1001.30	15227.65	459.86	1002.36	15227.65	341.34	1002.36	14544.74
	MIN	-358.68	-1116.22	-7249.51	-473.67	-1116.22	-6425.31	-448.20	-1101.48	-6425.31	-566.68	-1101.48	-7074.45
303	Sum total D+L+PP MAX	986.23	999.24	35531.28	446.88	999.24	38462.88	455.91	1005.08	38462.88	4.46	1005.08	35479.25
	MIN	-19.40	-1147.20	11434.16	-469.13	-1147.20	14882.32	-469.07	-1101.56	14882.32	-1005.96	-1101.56	11737.73

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER		3043			3044			3044			3045				
NODE		3043			3044			3044			3045				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-88.22	2.95	3568.12	-152.05	2.95	2366.81	-176.99	-7.72	2366.81	-240.82	-7.72	277.75		
3	Railing	-5.37	-1.06	107.06	-2.00	-1.06	70.23	-8.15	-2.84	70.23	-4.78	-2.84	5.59		
5	Wheel guard	-53.14	-10.53	1059.91	-19.78	-10.53	695.30	-80.67	-28.15	695.30	-47.31	-28.15	55.39		
8	Steel weight	-292.97	24.66	13163.94	-591.57	24.66	8741.27	-619.09	2.71	8741.27	-917.69	2.71	1057.41		
10	Medial strip	-13.87	9.07	1332.35	-74.51	9.07	890.45	-46.43	15.19	890.45	-107.06	15.19	123.00		
19	Snow	-40.11	1.02	1594.72	-67.29	1.02	1057.72	-79.83	-4.12	1057.72	-107.02	-4.12	123.46		
31	Miscellaneous	-1.16	0.74	108.41	-6.06	0.74	72.35	-3.79	1.23	72.35	-8.69	1.23	9.97		
100	AASHTO-LRFD TRUCK-LOAD	MAX	339.51	738.59	9360.07	210.16	738.59	8252.12	297.93	760.24	8252.12	172.13	760.24	6450.69	
		MIN	-363.46	-718.58	-2604.37	-492.82	-718.58	-3297.26	-424.07	-783.96	-3297.26	-550.61	-783.96	-4043.49	
		TANDEM-LOAD	MAX	261.60	513.10	6619.78	173.57	513.10	5854.03	232.17	524.78	5854.03	146.74	524.78	4632.34
		MIN	-277.78	-499.64	-1765.69	-365.71	-499.64	-2235.45	-318.79	-540.45	-2235.45	-404.28	-540.45	-2741.35	
		DISPERSION-L	MAX	277.03	905.27	13016.45	229.40	905.27	11146.89	244.05	1073.10	11146.89	200.94	1073.10	7902.39
		MIN	-418.90	-902.44	-7190.20	-479.73	-902.44	-7276.71	-530.87	-1087.75	-7276.71	-596.31	-1087.75	-7433.24	
110	Live load	L-PICKUP 1	MAX	616.54	1643.86	22376.52	439.56	1643.86	19399.01	541.99	1833.34	19399.01	373.07	1833.34	14353.08
		MIN	-782.36	-1621.02	-9794.57	-972.55	-1621.02	-10573.98	-954.94	-1871.71	-10573.98	-1146.92	-1871.71	-11476.73	
		L-PICKUP 2	MAX	538.63	1418.38	19636.22	402.97	1418.38	17000.92	476.22	1597.88	17000.92	347.68	1597.88	12534.73
		MIN	-696.68	-1402.08	-8955.89	-845.44	-1402.08	-9512.16	-849.66	-1628.20	-9512.16	-1000.59	-1628.20	-10174.59	
		L-PICKUP 3	MAX	-860.91	-1821.88	-10883.76	-1046.23	-1821.88	-12135.60	-1071.17	-2179.36	-12135.60	-1258.39	-2179.36	-13540.88
		Live load	MAX	616.54	1643.86	22376.52	439.56	1643.86	19399.01	541.99	1833.34	19399.01	373.07	1833.34	14353.08
MIN	-860.91	-1821.88	-10883.76	-1046.23	-1821.88	-12135.60	-1071.17	-2179.36	-12135.60	-1258.39	-2179.36	-13540.88			
111	AASHTO Twin	TWIN-PICKUP	MAX	610.29	1833.67	25046.19	439.65	1833.67	21594.04	523.06	2131.83	21594.04	360.39	2131.83	15593.20
		MIN	-860.91	-1821.88	-10883.76	-1046.23	-1821.88	-12135.60	-1071.17	-2179.36	-12135.60	-1258.39	-2179.36	-13540.88	
		MID-PICKUP	MAX	-860.91	-1821.88	-10883.76	-1046.23	-1821.88	-12135.60	-1071.17	-2179.36	-12135.60	-1258.39	-2179.36	-13540.88
198	AASHTO Fatig	TRUCK-LOAD	MAX	172.43	270.54	1896.97	58.81	270.54	1702.23	162.65	340.88	1702.23	48.80	340.88	1390.66
		MIN	-86.14	-347.09	-434.17	-199.05	-347.09	-552.26	-97.74	-419.47	-552.26	-208.40	-419.47	-690.99	
		TANDEM-LOAD	MAX	138.27	185.15	1383.34	56.54	185.15	1248.60	131.50	232.68	1248.60	50.01	232.68	1037.05
		MIN	-75.05	-239.79	-294.36	-156.29	-239.79	-374.32	-83.14	-288.95	-374.32	-162.46	-288.95	-468.01	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3043	3044			3044			3044			3045		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	84.49	478.88	2560.18	58.35	478.88	2215.09	76.20	566.01	2215.09	50.79	566.01	1624.29	
MIN	-98.09	-510.09	-1270.04	-124.92	-510.09	-1291.13	-124.49	-619.18	-1291.13	-151.15	-619.18	-1349.56	
199 AASHTO-LRFD TRUCK-LOAD MAX	401.07	1132.13	14812.66	259.09	1132.13	12846.49	337.13	1295.60	12846.49	199.50	1295.60	9423.39	
MIN	-537.67	-1121.86	-4902.87	-682.75	-1121.86	-6207.28	-659.32	-1333.76	-6207.28	-801.90	-1333.76	-7612.18	
TANDEM-LOAD MAX	261.60	513.10	6619.78	173.57	513.10	5854.03	232.17	524.78	5854.03	146.74	524.78	4632.34	
MIN	-277.78	-499.64	-1765.69	-365.71	-499.64	-2235.45	-318.79	-540.45	-2235.45	-404.28	-540.45	-2741.35	
DISPERSION-LMAX	277.03	905.27	13016.45	229.40	905.27	11146.89	244.05	1073.10	11146.89	200.94	1073.10	7902.39	
MIN	-418.90	-902.44	-7190.20	-479.73	-902.44	-7276.71	-530.87	-1087.75	-7276.71	-596.31	-1087.75	-7433.24	
300 Total Dead lWithout snow	-454.72	25.82	19339.79	-845.95	25.82	12836.42	-935.12	-19.58	12836.42	-1326.35	-19.58	1529.10	
301 Particular Snow	-40.11	1.02	1594.72	-67.29	1.02	1057.72	-79.83	-4.12	1057.72	-107.02	-4.12	123.46	
302 Live load Total MAX	400.75	1068.51	14544.74	285.71	1068.51	12609.36	352.29	1191.67	12609.36	242.49	1191.67	9329.50	
MIN	-559.59	-1184.22	-7074.45	-680.05	-1184.22	-7888.14	-696.26	-1416.58	-7888.14	-817.96	-1416.58	-8801.57	
303 Sum total D+L+PP MAX	26.15	1095.36	35479.25	-541.82	1095.36	26503.49	-556.97	1187.55	26503.49	-1118.12	1187.55	10982.06	
MIN	-1054.42	-1183.20	11737.73	-1593.29	-1183.20	3639.56	-1711.21	-1440.29	3639.56	-2251.32	-1440.29	-8678.12	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3045			3046			3046			3047				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-269.50	-29.50	277.75	-333.33	-29.50	-2736.41	-347.14	-36.67	-2736.41	-398.21	-36.67	-5717.80		
3	Railing	-11.05	-6.25	5.59	-7.68	-6.25	-88.04	-12.21	-9.34	-88.04	-9.52	-9.34	-174.95		
5	Wheel guard	-109.38	-61.89	55.39	-76.01	-61.89	-871.57	-120.91	-92.49	-871.57	-94.21	-92.49	-1732.05		
8	Steel weight	-958.90	-44.77	1057.41	-1257.50	-44.77	-10024.64	-1259.27	-36.88	-10024.64	-1498.15	-36.88	-21054.29		
10	Medial strip	-80.34	26.12	123.00	-140.98	26.12	-983.57	-117.61	43.35	-983.57	-166.12	43.35	-2118.51		
19	Snow	-121.23	-14.57	123.46	-148.41	-14.57	-1224.78	-155.65	-18.52	-1224.78	-177.40	-18.52	-2556.97		
31	Miscellaneous	-6.53	2.11	9.97	-11.43	2.11	-79.82	-9.54	3.50	-79.82	-13.46	3.50	-171.82		
100	AASHTO-LRFD TRUCK-LOAD	MAX	252.46	845.15	6450.69	127.30	845.15	3949.56	211.42	1009.34	3949.56	90.98	1009.34	1994.84	
		MIN	-497.70	-884.04	-4043.49	-618.74	-884.04	-4745.91	-554.47	-1047.51	-4745.91	-658.89	-1047.51	-5251.70	
		TANDEM-LOAD	MAX	197.83	579.31	4632.34	115.22	579.31	2944.93	170.68	691.13	2944.93	91.00	691.13	1598.29
		MIN	-368.59	-607.93	-2741.35	-449.69	-607.93	-3219.47	-409.01	-714.22	-3219.47	-478.19	-714.22	-3567.95	
		DISPERSION-L	MAX	215.91	1309.39	7902.39	177.87	1309.39	5546.43	198.82	1658.73	5546.43	171.83	1658.73	5061.27
		MIN	-654.51	-1359.47	-7433.24	-725.11	-1359.47	-9992.98	-765.28	-1721.45	-9992.98	-825.23	-1721.45	-14386.43	
110	Live load	L-PICKUP 1	MAX	468.37	2154.54	14353.08	305.16	2154.54	9496.00	410.24	2668.08	9496.00	262.81	2668.08	7056.11
		MIN	-1152.22	-2243.50	-11476.73	-1343.85	-2243.50	-14738.90	-1319.75	-2768.96	-14738.90	-1484.12	-2768.96	-19638.13	
		L-PICKUP 2	MAX	413.74	1888.70	12534.73	293.09	1888.70	8491.36	369.50	2349.87	8491.36	262.83	2349.87	6659.55
		MIN	-1023.10	-1967.39	-10174.59	-1174.79	-1967.39	-13212.45	-1174.30	-2435.67	-13212.45	-1303.42	-2435.67	-17954.38	
		L-PICKUP 3	MAX	-1311.96	-2624.89	-13540.88	-1499.06	-2624.89	-17032.16	-1517.55	-3236.38	-17032.16	-1671.63	-3236.38	-21838.44
		MIN	468.37	2154.54	14353.08	305.16	2154.54	9496.00	410.24	2668.08	9496.00	262.83	2668.08	7056.11	
111	AASHTO Twin	TWIN-PICKUP	MAX	457.31	2526.54	15593.20	285.72	2526.54	9034.99	384.03	3121.84	9034.99	267.65	3121.84	7089.10
		MIN	-1311.96	-2624.89	-13540.88	-1499.06	-2624.89	-17032.16	-1517.55	-3236.38	-17032.16	-1671.63	-3236.38	-21838.44	
		MID-PICKUP	MAX	-1311.96	-2624.89	-13540.88	-1499.06	-2624.89	-17032.16	-1517.55	-3236.38	-17032.16	-1671.63	-3236.38	-21838.44
198	AASHTO Fatig	TRUCK-LOAD	MAX	150.00	396.19	1390.66	36.92	396.19	960.28	126.55	414.41	960.28	33.89	414.41	550.16
		MIN	-114.32	-486.87	-690.99	-219.20	-486.87	-865.76	-128.24	-514.22	-865.76	-218.00	-514.22	-1051.59	
		TANDEM-LOAD	MAX	122.28	270.78	1037.05	38.60	270.78	750.98	107.12	284.20	750.98	32.61	284.20	490.37
		MIN	-94.31	-334.87	-468.01	-169.13	-334.87	-586.91	-98.94	-351.60	-586.91	-169.01	-351.60	-714.59	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3045 3045	3046			3046			3046			3047		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	66.96	693.03	1624.29	42.39	693.03	1155.30	64.54	867.97	1155.30	45.65	867.97	1011.69	
MIN	-162.78	-771.74	-1349.56	-188.67	-771.74	-1976.48	-203.32	-983.04	-1976.48	-223.36	-983.04	-3101.32	
199 AASHTO-LRFD TRUCK-LOAD MAX	292.22	1497.88	9423.39	139.60	1497.88	4492.45	227.88	1809.97	4492.45	125.56	1809.97	2815.51	
MIN	-803.21	-1557.07	-7612.18	-940.52	-1557.07	-8931.64	-920.88	-1874.53	-8931.64	-1032.14	-1874.53	-9878.51	
TANDEM-LOAD MAX	197.83	579.31	4632.34	115.22	579.31	2944.93	170.68	691.13	2944.93	91.00	691.13	1598.29	
MIN	-368.59	-607.93	-2741.35	-449.69	-607.93	-3219.47	-409.01	-714.22	-3219.47	-478.19	-714.22	-3567.95	
DISPERSION-LMAX	215.91	1309.39	7902.39	177.87	1309.39	5546.43	198.82	1658.73	5546.43	171.83	1658.73	5061.27	
MIN	-654.51	-1359.47	-7433.24	-725.11	-1359.47	-9992.98	-765.28	-1721.45	-9992.98	-825.23	-1721.45	-14386.43	
300 Total Dead lWithout snow	-1435.70	-114.19	1529.10	-1826.93	-114.19	-14784.04	-1866.68	-128.54	-14784.04	-2179.67	-128.54	-30969.43	
301 Particular Snow	-121.23	-14.57	123.46	-148.41	-14.57	-1224.78	-155.65	-18.52	-1224.78	-177.40	-18.52	-2556.97	
302 Live load Total MAX	304.44	1400.45	9329.50	198.36	1400.45	6172.40	266.65	1734.25	6172.40	170.84	1734.25	4586.47	
MIN	-852.77	-1706.18	-8801.57	-974.39	-1706.18	-11070.90	-986.40	-2103.65	-11070.90	-1086.56	-2103.65	-14194.99	
303 Sum total D+L+PP MAX	-1161.16	1385.88	10982.06	-1717.48	1385.88	-7984.69	-1675.68	1715.73	-7984.69	-2134.97	1715.73	-27563.99	
MIN	-2409.70	-1834.94	-8678.12	-2949.74	-1834.94	-27079.72	-3008.74	-2250.70	-27079.72	-3443.62	-2250.70	-47721.39	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3047			3048			3048			3049				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-391.52	-16.82	-5717.80	-442.58	-16.82	-9054.20	453.89	23.14	-9054.20	402.83	23.14	-5627.34		
3	Railing	-9.10	-6.11	-174.95	-6.41	-6.11	-236.99	6.75	6.28	-236.99	9.45	6.28	-172.22		
5	Wheel guard	-90.12	-60.45	-1732.05	-63.43	-60.45	-2346.24	66.81	62.14	-2346.24	93.51	62.14	-1704.96		
8	Steel weight	-1476.01	4.82	-21054.29	-1714.89	4.82	-33817.90	1756.58	18.70	-33817.90	1517.70	18.70	-20720.81		
10	Medial strip	-165.09	32.49	-2118.51	-213.60	32.49	-3633.27	218.16	-29.99	-3633.27	169.65	-29.99	-2082.06		
19	Snow	-174.35	-8.96	-2556.97	-196.10	-8.96	-4038.78	201.19	11.78	-4038.78	179.44	11.78	-2516.29		
31	Miscellaneous	-13.38	2.63	-171.82	-17.30	2.63	-294.51	17.64	-2.42	-294.51	13.72	-2.42	-169.09		
100	AASHTO-LRFD TRUCK-LOAD	MAX	166.82	1161.10	1994.84	108.76	1161.10	1670.46	743.11	1171.50	1670.46	604.05	1171.50	2011.32	
		MIN	-601.46	-1171.51	-5251.70	-740.62	-1171.51	-5785.65	-109.70	-1154.14	-5785.65	-167.26	-1154.14	-5286.38	
		TANDEM-LOAD MAX	148.01	793.10	1598.29	93.30	793.10	1133.95	537.50	802.76	1133.95	440.31	802.76	1608.29	
		MIN	-438.84	-803.07	-3567.95	-535.91	-803.07	-3931.85	-93.91	-788.32	-3931.85	-148.31	-788.32	-3591.60	
		DISPERSION-LMAX	187.93	1923.54	5061.27	178.21	1923.54	5772.57	921.12	1956.01	5772.57	843.96	1956.01	5101.27	
		MIN	-829.66	-1952.98	-14386.43	-906.81	-1952.98	-20591.38	-174.19	-1916.30	-20591.38	-183.91	-1916.30	-14279.48	
110	Live load	L-PICKUP 1	MAX	354.75	3084.64	7056.11	286.96	3084.64	7443.03	1664.22	3127.52	7443.03	1448.01	3127.52	7112.59
		MIN	-1431.12	-3124.50	-19638.13	-1647.43	-3124.50	-26377.04	-283.89	-3070.44	-26377.04	-351.18	-3070.44	-19565.86	
		L-PICKUP 2	MAX	335.94	2716.64	6659.55	271.51	2716.64	6906.53	1458.62	2758.78	6906.53	1284.27	2758.78	6709.56
		MIN	-1268.50	-2756.05	-17954.38	-1442.73	-2756.05	-24523.23	-268.11	-2704.62	-24523.23	-332.23	-2704.62	-17871.07	
		L-PICKUP 3	MAX	-1644.85	-3659.10	-21838.44	-1852.62	-3659.10	-28316.48	-286.60	-3594.96	-28316.48	-308.04	-3594.96	-21796.54
		MIN	354.75	3084.64	7056.11	286.96	3084.64	7443.03	1664.22	3127.52	7443.03	1448.01	3127.52	7112.59	
111	AASHTO Twin	TWIN-PICKUP	MAX	310.23	3612.90	7089.10	289.11	3612.90	8024.00	1871.89	3662.38	8024.00	1664.59	3662.38	7178.03
		MIN	-1644.85	-3659.10	-21838.44	-1852.62	-3659.10	-28316.48	-286.60	-3594.96	-28316.48	-308.04	-3594.96	-21796.54	
		MID-PICKUP	MAX	-1644.85	-3659.10	-21838.44	-1852.62	-3659.10	-28316.48	-286.60	-3594.96	-28316.48	-308.04	-3594.96	-21796.54
198	AASHTO Fatig	TRUCK-LOAD	MAX	84.45	358.24	550.16	42.85	358.24	289.07	264.65	437.80	289.07	154.71	437.80	549.91
		MIN	-154.52	-439.21	-1051.59	-264.63	-439.21	-1183.58	-42.86	-355.21	-1183.58	-84.41	-355.21	-1055.28	
		TANDEM-LOAD	MAX	81.32	242.89	490.37	46.54	242.89	195.98	203.50	299.49	195.98	118.46	299.49	489.60
		MIN	-118.40	-300.61	-714.59	-203.49	-300.61	-803.74	-46.53	-240.62	-803.74	-81.28	-240.62	-716.75	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3047	3048			3048			3048			3049		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	55.44	1022.47	1011.69	49.93	1022.47	1061.85	240.73	1096.63	1061.85	204.97	1096.63	1018.81	
MIN	-201.90	-1096.04	-3101.32	-237.68	-1096.04	-4529.26	-49.44	-1019.67	-4529.26	-54.96	-1019.67	-3075.32	
199 AASHTO-LRFD TRUCK-LOAD MAX	156.77	2090.80	2815.51	143.03	2090.80	3142.99	1158.76	2113.30	3142.99	1005.59	2113.30	2874.32	
MIN	-997.94	-2112.68	-9878.51	-1151.66	-2112.68	-10871.37	-144.25	-2078.10	-10871.37	-158.35	-2078.10	-9938.90	
TANDEM-LOAD MAX	148.01	793.10	1598.29	93.30	793.10	1133.95	537.50	802.76	1133.95	440.31	802.76	1608.29	
MIN	-438.84	-803.07	-3567.95	-535.91	-803.07	-3931.85	-93.91	-788.32	-3931.85	-148.31	-788.32	-3591.60	
DISPERSION-LMAX	187.93	1923.54	5061.27	178.21	1923.54	5772.57	921.12	1956.01	5772.57	843.96	1956.01	5101.27	
MIN	-829.66	-1952.98	-14386.43	-906.81	-1952.98	-20591.38	-174.19	-1916.30	-20591.38	-183.91	-1916.30	-14279.48	
300 Total Dead lWithout snow	-2145.22	-43.43	-30969.43	-2458.20	-43.43	-49383.12	2519.82	77.84	-49383.12	2206.84	77.84	-30476.48	
301 Particular Snow	-174.35	-8.96	-2556.97	-196.10	-8.96	-4038.78	201.19	11.78	-4038.78	179.44	11.78	-2516.29	
302 Live load Total MAX	230.59	2005.02	4586.47	186.53	2005.02	4837.97	1081.75	2032.89	4837.97	941.20	2032.89	4623.18	
MIN	-1069.15	-2378.41	-14194.99	-1204.21	-2378.41	-18405.71	-186.29	-2336.72	-18405.71	-228.26	-2336.72	-14167.75	
303 Sum total D+L+PP MAX	-2019.81	1996.06	-27563.99	-2411.82	1996.06	-47132.54	3802.75	2122.50	-47132.54	3327.48	2122.50	-26982.63	
MIN	-3388.72	-2430.81	-47721.39	-3858.51	-2430.81	-71827.61	2478.83	-2324.94	-71827.61	2089.53	-2324.94	-47160.52	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3049			MEMBER 3050			MEMBER 3050			MEMBER 3051			
		NODE 3049			NODE 3050			NODE 3050			NODE 3051			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	401.40	28.90	-5627.34	350.34	28.90	-2620.36	340.08	28.25	-2620.36	276.25	28.25	461.25	
3	Railing	9.62	9.09	-172.22	12.32	9.09	-84.46	7.88	6.21	-84.46	11.25	6.21	11.18	
5	Wheel guard	95.26	90.02	-1704.96	121.95	90.02	-836.14	78.00	61.44	-836.14	111.37	61.44	110.72	
8	Steel weight	1509.83	8.39	-20720.81	1270.95	8.39	-9597.68	1282.41	40.21	-9597.68	983.81	40.21	1733.37	
10	Medial strip	167.60	-46.13	-2082.06	119.09	-46.13	-935.28	143.85	-26.53	-935.28	83.21	-26.53	200.02	
19	Snow	178.86	15.04	-2516.29	157.11	15.04	-1172.40	151.46	14.01	-1172.40	124.28	14.01	206.28	
31	Miscellaneous	13.55	-3.73	-169.09	9.63	-3.73	-76.34	11.63	-2.14	-76.34	6.73	-2.14	15.50	
100	AASHTO-LRFD TRUCK-LOAD	MAX	662.27	1036.43	2011.32	558.42	1036.43	4010.69	623.55	878.88	4010.69	503.45	878.88	6595.33
		MIN	-89.65	-1006.08	-5286.38	-209.55	-1006.08	-4829.41	-125.64	-837.17	-4829.41	-250.38	-837.17	-4167.22
		TANDEM-LOAD MAX	480.51	706.80	1608.29	411.75	706.80	2985.28	452.82	604.51	2985.28	372.56	604.51	4730.57
		MIN	-89.48	-688.84	-3591.60	-169.36	-688.84	-3276.71	-114.09	-573.80	-3276.71	-196.23	-573.80	-2826.43
		DISPERSION-LMAX	819.42	1714.00	5101.27	759.29	1714.00	5746.97	726.16	1356.94	5746.97	655.16	1356.94	8458.13
		MIN	-161.03	-1663.96	-14279.48	-187.82	-1663.96	-10005.89	-167.99	-1308.91	-10005.89	-205.64	-1308.91	-7692.66
110	Live load	L-PICKUP 1 MAX	1481.69	2750.43	7112.59	1317.71	2750.43	9757.66	1349.70	2235.83	9757.66	1158.61	2235.83	15053.47
		MIN	-250.68	-2670.04	-19565.86	-397.37	-2670.04	-14835.30	-293.63	-2146.08	-14835.30	-456.02	-2146.08	-11859.88
		L-PICKUP 2 MAX	1299.94	2420.80	6709.56	1171.05	2420.80	8732.25	1178.97	1961.45	8732.25	1027.72	1961.45	13188.71
		MIN	-250.51	-2352.80	-17871.07	-357.17	-2352.80	-13282.60	-282.08	-1882.71	-13282.60	-401.86	-1882.71	-10519.09
		L-PICKUP 3	-256.43	-3124.01	-21796.54	-373.10	-3124.01	-17181.53	-276.13	-2516.52	-17181.53	-446.10	-2516.52	-13979.79
		Live load MAX	1481.69	2750.43	7112.59	1317.71	2750.43	9757.66	1349.70	2235.83	9757.66	1158.61	2235.83	15053.47
MIN	-256.43	-3124.01	-21796.54	-397.37	-3124.01	-17181.53	-293.63	-2516.52	-17181.53	-456.02	-2516.52	-13979.79		
111	AASHTO Twin TWIN-PICKUP	MAX	1671.17	3210.57	7178.03	1517.03	3210.57	9342.03	1508.43	2616.64	9342.03	1321.43	2616.64	16342.80
		MIN	-256.43	-3124.01	-21796.54	-373.10	-3124.01	-17181.53	-276.13	-2516.52	-17181.53	-446.10	-2516.52	-13979.79
		MID-PICKUP	-256.43	-3124.01	-21796.54	-373.10	-3124.01	-17181.53	-276.13	-2516.52	-17181.53	-446.10	-2516.52	-13979.79
198	AASHTO FatigTRUCK-LOAD	MAX	218.56	510.56	549.91	128.92	510.56	970.11	219.95	482.91	970.11	115.53	482.91	1418.19
		MIN	-33.53	-410.63	-1055.28	-125.99	-410.63	-879.43	-36.41	-391.64	-879.43	-149.04	-391.64	-712.03
		TANDEM-LOAD MAX	169.39	349.48	489.60	99.77	349.48	757.26	169.55	332.20	757.26	95.22	332.20	1055.89
		MIN	-32.25	-281.59	-716.75	-106.74	-281.59	-595.91	-38.28	-267.73	-595.91	-121.56	-267.73	-482.47

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3049			3050			3050			3051		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	221.64	979.80	1018.81	201.67	979.80	1193.49	189.18	770.69	1193.49	163.30	770.69	1725.12
	MIN	-44.38	-869.39	-3075.32	-63.20	-869.39	-1975.88	-40.56	-692.70	-1975.88	-64.99	-692.70	-1395.77
199	AASHTO-LRFD TRUCK-LOAD MAX	1037.44	1853.30	2874.32	926.29	1853.30	4633.07	949.88	1550.44	4633.07	813.10	1550.44	9700.53
	MIN	-123.90	-1807.17	-9938.90	-226.74	-1807.17	-9084.70	-138.82	-1487.22	-9084.70	-290.03	-1487.22	-7840.43
	TANDEM-LOAD MAX	480.51	706.80	1608.29	411.75	706.80	2985.28	452.82	604.51	2985.28	372.56	604.51	4730.57
	MIN	-89.48	-688.84	-3591.60	-169.36	-688.84	-3276.71	-114.09	-573.80	-3276.71	-196.23	-573.80	-2826.43
	DISPERSION-LMAX	819.42	1714.00	5101.27	759.29	1714.00	5746.97	726.16	1356.94	5746.97	655.16	1356.94	8458.13
	MIN	-161.03	-1663.96	-14279.48	-187.82	-1663.96	-10005.89	-167.99	-1308.91	-10005.89	-205.64	-1308.91	-7692.66
300	Total Dead lWithout snow	2197.27	86.54	-30476.48	1884.28	86.54	-14150.27	1863.85	107.43	-14150.27	1472.62	107.43	2532.05
301	Particular Snow	178.86	15.04	-2516.29	157.11	15.04	-1172.40	151.46	14.01	-1172.40	124.28	14.01	206.28
302	Live load Total MAX	963.10	1787.78	4623.18	856.51	1787.78	6342.48	877.31	1453.29	6342.48	753.09	1453.29	9784.75
	MIN	-166.68	-2030.61	-14167.75	-258.29	-2030.61	-11168.00	-190.86	-1635.74	-11168.00	-296.41	-1635.74	-9086.86
303	Sum total D+L+PP MAX	3339.23	1889.36	-26982.63	2897.91	1889.36	-7077.44	2892.61	1574.73	-7077.44	2349.99	1574.73	12523.09
	MIN	2159.44	-2015.57	-47160.52	1705.62	-2015.57	-26490.66	1767.19	-1621.73	-26490.66	1211.56	-1621.73	-8880.58

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3051			MEMBER 3052			MEMBER 3052			MEMBER 3053			
		NODE 3051			NODE 3052			NODE 3052			NODE 3053			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	251.30	12.58	461.25	187.47	12.58	2655.14	160.22	-1.58	2655.14	96.39	-1.58	3938.20	
3	Railing	5.09	3.01	11.18	8.46	3.01	78.93	2.25	1.13	78.93	5.62	1.13	118.23	
5	Wheel guard	50.38	29.80	110.72	83.75	29.80	781.37	22.23	11.23	781.37	55.59	11.23	1170.47	
8	Steel weight	956.41	14.99	1733.37	657.81	14.99	9804.45	621.70	-19.93	9804.45	323.10	-19.93	14528.45	
10	Medial strip	111.33	-13.54	200.02	50.69	-13.54	1010.15	77.86	-8.79	1010.15	17.22	-8.79	1485.58	
19	Snow	111.73	6.30	206.28	84.55	6.30	1187.67	70.97	-0.40	1187.67	43.79	-0.40	1761.48	
31	Miscellaneous	9.01	-1.09	15.50	4.11	-1.09	81.08	6.30	-0.71	81.08	1.40	-0.71	119.62	
100	AASHTO-LRFD TRUCK-LOAD	MAX	556.72	787.50	6595.33	432.40	787.50	8490.71	494.81	728.96	8490.71	367.58	728.96	9640.37
		MIN	-171.31	-757.60	-4167.22	-294.85	-757.60	-3421.87	-211.75	-748.62	-3421.87	-338.83	-748.62	-2711.70
		TANDEM-LOAD MAX	407.95	542.54	4730.57	324.49	542.54	6017.05	366.49	506.14	6017.05	280.54	506.14	6811.95
		MIN	-146.17	-523.31	-2826.43	-229.58	-523.31	-2320.91	-174.68	-520.21	-2320.91	-260.58	-520.21	-1839.23
		DISPERSION-LMAX	608.09	1103.07	8458.13	542.16	1103.07	11790.38	489.47	924.01	11790.38	428.52	924.01	13674.94
		MIN	-195.68	-1080.44	-7692.66	-238.31	-1080.44	-7453.62	-225.91	-924.58	-7453.62	-273.42	-924.58	-7249.91
110	Live load	L-PICKUP 1 MAX	1164.81	1890.57	15053.47	974.56	1890.57	20281.09	984.28	1652.97	20281.09	796.11	1652.97	23315.31
		MIN	-366.99	-1838.04	-11859.88	-533.17	-1838.04	-10875.49	-437.65	-1673.20	-10875.49	-612.25	-1673.20	-9961.61
		L-PICKUP 2 MAX	1016.03	1645.61	13188.71	866.65	1645.61	17807.43	855.96	1430.15	17807.43	709.06	1430.15	20486.88
		MIN	-341.85	-1603.74	-10519.09	-467.89	-1603.74	-9774.53	-400.58	-1444.79	-9774.53	-534.00	-1444.79	-9089.15
		L-PICKUP 3	-355.94	-2137.21	-13979.79	-515.42	-2137.21	-12502.47	-438.71	-1867.22	-12502.47	-607.42	-1867.22	-11116.61
		Live load MAX	1164.81	1890.57	15053.47	974.56	1890.57	20281.09	984.28	1652.97	20281.09	796.11	1652.97	23315.31
MIN	-366.99	-2137.21	-13979.79	-533.17	-2137.21	-12502.47	-438.71	-1867.22	-12502.47	-612.25	-1867.22	-11116.61		
111	AASHTO Twin TWIN-PICKUP	MAX	1281.12	2202.89	16342.80	1095.06	2202.89	22565.48	1060.81	1859.94	22565.48	877.29	1859.94	26095.47
		MIN	-355.94	-2137.21	-13979.79	-515.42	-2137.21	-12502.47	-438.71	-1867.22	-12502.47	-607.42	-1867.22	-11116.61
		MID-PICKUP	-355.94	-2137.21	-13979.79	-515.42	-2137.21	-12502.47	-438.71	-1867.22	-12502.47	-607.42	-1867.22	-11116.61
198	AASHTO FatigTRUCK-LOAD	MAX	209.02	419.76	1418.19	99.03	419.76	1749.60	198.81	350.78	1749.60	86.35	350.78	1951.80
		MIN	-48.37	-338.56	-712.03	-161.31	-338.56	-572.61	-58.96	-272.30	-572.61	-171.83	-272.30	-452.44
		TANDEM-LOAD MAX	162.63	288.93	1055.89	84.12	288.93	1281.58	155.83	241.91	1281.58	75.21	241.91	1421.71
		MIN	-49.82	-231.34	-482.47	-130.34	-231.34	-388.30	-56.67	-186.60	-388.30	-137.56	-186.60	-306.85

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3051			3052			3052			3053		
NODE		3051			3052			3052			3053		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	153.88	627.23	1725.12	127.19	627.23	2336.43	127.00	521.88	2336.43	100.16	521.88	2686.00
	MIN	-49.87	-570.21	-1395.77	-75.13	-570.21	-1320.88	-57.98	-489.47	-1320.88	-84.08	-489.47	-1281.74
199	AASHTO-LRFD TRUCK-LOAD MAX	815.38	1344.59	9700.53	674.57	1344.59	13282.38	689.20	1142.59	13282.38	546.25	1142.59	15320.04
	MIN	-199.81	-1294.24	-7840.43	-334.37	-1294.24	-6438.02	-261.55	-1150.11	-6438.02	-401.48	-1150.11	-5101.87
	TANDEM-LOAD MAX	407.95	542.54	4730.57	324.49	542.54	6017.05	366.49	506.14	6017.05	280.54	506.14	6811.95
	MIN	-146.17	-523.31	-2826.43	-229.58	-523.31	-2320.91	-174.68	-520.21	-2320.91	-260.58	-520.21	-1839.23
	DISPERSION-LMAX	608.09	1103.07	8458.13	542.16	1103.07	11790.38	489.47	924.01	11790.38	428.52	924.01	13674.94
	MIN	-195.68	-1080.44	-7692.66	-238.31	-1080.44	-7453.62	-225.91	-924.58	-7453.62	-273.42	-924.58	-7249.91
300	Total Dead lWithout snow	1383.52	45.75	2532.05	992.29	45.75	14411.12	890.56	-18.64	14411.12	499.33	-18.64	21360.55
301	Particular Snow	111.73	6.30	206.28	84.55	6.30	1187.67	70.97	-0.40	1187.67	43.79	-0.40	1761.48
302	Live load Total MAX	757.13	1228.87	9784.75	633.46	1228.87	13182.71	639.78	1074.43	13182.71	517.47	1074.43	15154.95
	MIN	-238.54	-1389.19	-9086.86	-346.56	-1389.19	-8126.61	-285.16	-1213.69	-8126.61	-397.96	-1213.69	-7225.80
303	Sum total D+L+PP MAX	2252.38	1280.92	12523.09	1710.30	1280.92	28781.50	1601.31	1074.03	28781.50	1060.59	1074.03	38276.98
	MIN	1185.14	-1382.89	-8880.58	626.31	-1382.89	5034.20	590.82	-1232.73	5034.20	25.77	-1232.73	13728.50

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	3053	3054			3054			3055			3053	3054			3055
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT	
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1 Pavement	77.19	-1.04	3938.20	13.36	-1.04	4390.99	-3.93	2.56	4390.99	-67.76	2.56	4032.51			
3 Railing	-0.30	0.31	118.23	3.07	0.31	132.06	-2.78	-0.30	132.06	0.59	-0.30	121.10			
5 Wheel guard	-2.99	3.04	1170.47	30.38	3.04	1307.44	-27.54	-2.97	1307.44	5.83	-2.97	1198.88			
8 Steel weight	316.05	-7.86	14528.45	17.45	-7.86	16195.97	17.30	13.95	16195.97	-281.30	13.95	14875.94			
10 Medial strip	47.04	-2.73	1485.58	-13.60	-2.73	1652.79	16.86	3.58	1652.79	-43.78	3.58	1518.21			
19 Snow	33.83	-0.38	1761.48	6.65	-0.38	1963.91	-2.45	1.05	1963.91	-29.64	1.05	1803.45			
31 Miscellaneous	3.81	-0.22	119.62	-1.09	-0.22	133.23	1.37	0.29	133.23	-3.53	0.29	122.46			
100 AASHTO-LRFD TRUCK-LOAD	441.32	751.01	9640.37	313.34	751.01	10026.12	389.69	786.85	10026.12	261.52	786.85	9683.34			
MIN	-258.88	-756.29	-2711.70	-386.88	-756.29	-2064.62	-311.04	-778.92	-2064.62	-439.35	-778.92	-2737.51			
TANDEM-LOAD	330.44	521.66	6811.95	243.82	521.66	7090.79	295.60	546.93	7090.79	208.76	546.93	6842.06			
MIN	-207.04	-526.07	-1839.23	-293.66	-526.07	-1400.86	-242.33	-541.43	-1400.86	-329.23	-541.43	-1857.42			
DISPERSION-LMAX	397.25	841.61	13674.94	340.72	841.61	14302.96	328.34	874.67	14302.96	276.24	874.67	13685.08			
MIN	-269.17	-842.35	-7249.91	-321.08	-842.35	-7140.94	-332.56	-871.46	-7140.94	-388.89	-871.46	-7106.04			
110 Live load L-PICKUP 1	838.57	1592.62	23315.31	654.06	1592.62	24329.09	718.03	1661.52	24329.09	537.75	1661.52	23368.41			
MIN	-528.05	-1598.65	-9961.61	-707.96	-1598.65	-9205.56	-643.59	-1650.38	-9205.56	-828.24	-1650.38	-9843.54			
L-PICKUP 2	727.68	1363.27	20486.88	584.54	1363.27	21393.75	623.94	1421.60	21393.75	484.99	1421.60	20527.14			
MIN	-476.21	-1368.42	-9089.15	-614.74	-1368.42	-8541.80	-574.89	-1412.89	-8541.80	-718.12	-1412.89	-8963.46			
L-PICKUP 3	-543.26	-1765.42	-11116.61	-717.74	-1765.42	-9921.61	-689.58	-1818.73	-9921.61	-869.30	-1818.73	-11029.19			
Live load	838.57	1592.62	23315.31	654.06	1592.62	24329.09	718.03	1661.52	24329.09	537.75	1661.52	23368.41			
MIN	-543.26	-1765.42	-11116.61	-717.74	-1765.42	-9921.61	-689.58	-1818.73	-9921.61	-869.30	-1818.73	-11029.19			
111 AASHTO Twin TWIN-PICKUP	880.88	1755.98	26095.47	701.07	1755.98	27168.74	728.22	1834.06	27168.74	553.12	1834.06	26163.36			
MIN	-543.26	-1765.42	-11116.61	-717.74	-1765.42	-9921.61	-689.58	-1818.73	-9921.61	-869.30	-1818.73	-11029.19			
MID-PICKUP	-543.26	-1765.42	-11116.61	-717.74	-1765.42	-9921.61	-689.58	-1818.73	-9921.61	-869.30	-1818.73	-11029.19			
198 AASHTO FatigTRUCK-LOAD	189.81	281.32	1951.80	76.34	281.32	2018.72	181.03	208.30	2018.72	67.53	208.30	1958.37			
MIN	-67.41	-201.03	-452.44	-180.66	-201.03	-344.41	-75.98	-292.57	-344.41	-189.54	-292.57	-456.59			
TANDEM-LOAD	149.67	195.10	1421.71	68.20	195.10	1470.44	143.77	146.37	1470.44	62.21	146.37	1426.39			
MIN	-62.15	-141.56	-306.85	-143.48	-141.56	-233.66	-67.93	-203.20	-233.66	-149.53	-203.20	-309.78			

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3053			3054			3054			3055		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	108.28	462.08	2686.00	81.41	462.08	2797.81	95.07	466.43	2797.81	68.42	466.43	2684.89
	MIN	-67.41	-449.66	-1281.74	-94.03	-449.66	-1262.51	-79.83	-478.57	-1262.51	-106.74	-478.57	-1254.92
199	AASHTO-LRFD TRUCK-LOAD MAX	581.50	1109.48	15320.04	438.25	1109.48	15884.53	480.79	1163.17	15884.53	338.34	1163.17	15385.32
	MIN	-334.46	-1119.23	-5101.87	-476.41	-1119.23	-3883.08	-433.65	-1149.35	-3883.08	-577.00	-1149.35	-5148.62
	TANDEM-LOAD MAX	330.44	521.66	6811.95	243.82	521.66	7090.79	295.60	546.93	7090.79	208.76	546.93	6842.06
	MIN	-207.04	-526.07	-1839.23	-293.66	-526.07	-1400.86	-242.33	-541.43	-1400.86	-329.23	-541.43	-1857.42
	DISPERSION-LMAX	397.25	841.61	13674.94	340.72	841.61	14302.96	328.34	874.67	14302.96	276.24	874.67	13685.08
	MIN	-269.17	-842.35	-7249.91	-321.08	-842.35	-7140.94	-332.56	-871.46	-7140.94	-388.89	-871.46	-7106.04
300	Total Dead lWithout snow	440.81	-8.51	21360.55	49.58	-8.51	23812.50	1.28	17.11	23812.50	-389.95	17.11	21869.10
301	Particular Snow	33.83	-0.38	1761.48	6.65	-0.38	1963.91	-2.45	1.05	1963.91	-29.64	1.05	1803.45
302	Live load Total MAX	545.07	1035.20	15154.95	425.14	1035.20	15813.91	466.72	1079.98	15813.91	349.54	1079.98	15189.47
	MIN	-353.12	-1147.53	-7225.80	-466.53	-1147.53	-6449.05	-448.23	-1182.18	-6449.05	-565.05	-1182.18	-7168.97
303	Sum total D+L+PP MAX	1019.71	1034.83	38276.98	481.37	1034.83	41590.31	465.54	1098.15	41590.31	34.81	1098.15	38862.01
	MIN	15.59	-1156.41	13728.50	-459.88	-1156.41	17392.64	-450.68	-1181.13	17392.64	-984.64	-1181.13	14352.88

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3055			3056			3056			3057			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-87.37	2.88	4032.51	-151.20	2.88	2839.68	-179.23	-11.82	2839.68	-243.05	-11.82	728.28	
3	Railing	-5.35	-1.17	121.10	-1.98	-1.17	84.50	-8.21	-3.07	84.50	-4.84	-3.07	19.21	
5	Wheel guard	-52.92	-11.63	1198.88	-19.55	-11.63	836.50	-81.32	-30.38	836.50	-47.95	-30.38	190.15	
8	Steel weight	-289.80	25.70	14875.94	-588.40	25.70	10484.92	-627.35	-11.21	10484.92	-925.95	-11.21	2718.43	
10	Medial strip	-14.09	9.83	1518.21	-74.73	9.83	1074.10	-47.85	14.37	1074.10	-108.49	14.37	292.37	
19	Snow	-39.78	0.97	1803.45	-66.96	0.97	1269.74	-80.88	-5.98	1269.74	-108.07	-5.98	325.00	
31	Miscellaneous	-1.13	0.79	122.46	-6.03	0.79	86.67	-3.86	1.16	86.67	-8.76	1.16	23.61	
100	AASHTO-LRFD TRUCK-LOAD	MAX	341.83	796.30	9683.34	215.29	796.30	8572.26	298.22	788.09	8572.26	175.69	788.09	6720.68
		MIN	-365.70	-773.22	-2737.51	-492.47	-773.22	-3471.86	-429.25	-814.98	-3471.86	-552.90	-814.98	-4259.53
		TANDEM-LOAD MAX	262.56	553.14	6842.06	177.14	553.14	6073.10	231.73	544.28	6073.10	149.32	544.28	4817.18
		MIN	-279.25	-536.84	-1857.42	-364.83	-536.84	-2355.68	-322.27	-561.03	-2355.68	-405.15	-561.03	-2890.10
		DISPERSION-LMAX	282.27	979.12	13685.08	234.46	979.12	11810.81	248.33	1118.28	11810.81	205.29	1118.28	8495.34
		MIN	-422.57	-976.53	-7106.04	-483.22	-976.53	-7172.36	-538.64	-1139.69	-7172.36	-604.15	-1139.69	-7293.25
110	Live load	L-PICKUP 1 MAX	624.10	1775.42	23368.41	449.75	1775.42	20383.08	546.55	1906.37	20383.08	380.98	1906.37	15216.02
		MIN	-788.27	-1749.74	-9843.54	-975.69	-1749.74	-10644.23	-967.89	-1954.66	-10644.23	-1157.05	-1954.66	-11552.78
		L-PICKUP 2 MAX	544.83	1532.26	20527.14	411.60	1532.26	17883.92	480.07	1662.56	17883.92	354.61	1662.56	13312.52
		MIN	-701.82	-1513.37	-8963.46	-848.05	-1513.37	-9528.05	-860.90	-1700.72	-9528.05	-1009.30	-1700.72	-10183.35
		L-PICKUP 3	-868.78	-1966.92	-11029.19	-1051.50	-1966.92	-12331.93	-1087.83	-2277.16	-12331.93	-1272.55	-2277.16	-13774.09
		Live load MAX	624.10	1775.42	23368.41	449.75	1775.42	20383.08	546.55	1906.37	20383.08	380.98	1906.37	15216.02
MIN	-868.78	-1966.92	-11029.19	-1051.50	-1966.92	-12331.93	-1087.83	-2277.16	-12331.93	-1272.55	-2277.16	-13774.09		
111	AASHTO Twin	TWIN-PICKUP MAX	618.75	1979.87	26163.36	449.74	1979.87	22706.86	527.36	2214.67	22706.86	368.05	2214.67	16563.34
		MIN	-868.78	-1966.92	-11029.19	-1051.50	-1966.92	-12331.93	-1087.83	-2277.16	-12331.93	-1272.55	-2277.16	-13774.09
		MID-PICKUP	-868.78	-1966.92	-11029.19	-1051.50	-1966.92	-12331.93	-1087.83	-2277.16	-12331.93	-1272.55	-2277.16	-13774.09
198	AASHTO Fatig	TRUCK-LOAD MAX	172.41	289.27	1958.37	59.81	289.27	1765.57	162.14	351.85	1765.57	49.77	351.85	1446.07
		MIN	-85.48	-373.34	-456.59	-198.08	-373.34	-581.12	-97.72	-435.76	-581.12	-207.87	-435.76	-728.47
		TANDEM-LOAD MAX	137.90	198.16	1426.39	57.25	198.16	1292.85	130.78	240.41	1292.85	50.79	240.41	1075.62
		MIN	-74.62	-257.52	-309.78	-155.28	-257.52	-394.21	-83.23	-299.69	-394.21	-161.74	-299.69	-493.78

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3055			3056			3056			3057		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	85.68	518.13	2684.89	59.57	518.13	2344.96	77.22	589.64	2344.96	51.91	589.64	1734.20
	MIN	-98.15	-551.97	-1254.92	-125.01	-551.97	-1271.06	-126.10	-648.43	-1271.06	-152.79	-648.43	-1325.53
199	AASHTO-LRFD TRUCK-LOAD MAX	405.24	1220.74	15385.32	265.24	1220.74	13419.03	337.63	1342.46	13419.03	203.65	1342.46	9908.37
	MIN	-542.74	-1208.94	-5148.62	-685.12	-1208.94	-6529.78	-670.06	-1390.49	-6529.78	-809.80	-1390.49	-8011.30
	TANDEM-LOAD MAX	262.56	553.14	6842.06	177.14	553.14	6073.10	231.73	544.28	6073.10	149.32	544.28	4817.18
	MIN	-279.25	-536.84	-1857.42	-364.83	-536.84	-2355.68	-322.27	-561.03	-2355.68	-405.15	-561.03	-2890.10
	DISPERSION-LMAX	282.27	979.12	13685.08	234.46	979.12	11810.81	248.33	1118.28	11810.81	205.29	1118.28	8495.34
	MIN	-422.57	-976.53	-7106.04	-483.22	-976.53	-7172.36	-538.64	-1139.69	-7172.36	-604.15	-1139.69	-7293.25
300	Total Dead lWithout snow	-450.66	26.40	21869.10	-841.89	26.40	15406.37	-947.82	-40.95	15406.37	-1339.05	-40.95	3972.04
301	Particular Snow	-39.78	0.97	1803.45	-66.96	0.97	1269.74	-80.88	-5.98	1269.74	-108.07	-5.98	325.00
302	Live load Total MAX	405.66	1154.02	15189.47	292.34	1154.02	13249.00	355.26	1239.14	13249.00	247.64	1239.14	9890.41
	MIN	-564.71	-1278.50	-7168.97	-683.48	-1278.50	-8015.75	-707.09	-1480.15	-8015.75	-827.16	-1480.15	-8953.16
303	Sum total D+L+PP MAX	36.93	1181.39	38862.01	-528.81	1181.39	29925.11	-566.86	1233.16	29925.11	-1125.18	1233.16	14187.46
	MIN	-1055.14	-1277.53	14352.88	-1592.33	-1277.53	6255.63	-1735.79	-1527.08	6255.63	-2274.27	-1527.08	-7342.07

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3057			3058			3058			3059				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-271.74	-33.04	728.28	-335.56	-33.04	-2308.22	-345.56	-33.52	-2308.22	-396.62	-33.52	-5276.93		
3	Railing	-11.12	-6.39	19.21	-7.75	-6.39	-75.13	-12.19	-9.23	-75.13	-9.50	-9.23	-161.88		
5	Wheel guard	-110.07	-63.26	190.15	-76.71	-63.26	-743.77	-120.70	-91.37	-743.77	-94.01	-91.37	-1602.58		
8	Steel weight	-967.11	-57.45	2718.43	-1265.71	-57.45	-8445.62	-1253.09	-25.45	-8445.62	-1491.97	-25.45	-19425.90		
10	Medial strip	-81.75	24.99	292.37	-142.38	24.99	-828.27	-117.41	44.41	-828.27	-165.92	44.41	-1961.62		
19	Snow	-122.28	-16.16	325.00	-149.47	-16.16	-1033.75	-155.00	-17.10	-1033.75	-176.75	-17.10	-2360.73		
31	Miscellaneous	-6.59	2.02	23.61	-11.49	2.02	-66.84	-9.48	3.59	-66.84	-13.40	3.59	-158.34		
100	AASHTO-LRFD TRUCK-LOAD	MAX	249.88	849.08	6720.68	126.64	849.08	4102.62	208.13	1008.16	4102.62	89.35	1008.16	2103.20	
		MIN	-506.12	-895.74	-4259.53	-624.94	-895.74	-4946.00	-562.56	-1043.11	-4946.00	-665.07	-1043.11	-5401.40	
		TANDEM-LOAD	MAX	195.56	581.83	4817.18	114.89	581.83	3048.34	168.08	690.20	3048.34	88.92	690.20	1670.61
		MIN	-374.38	-615.59	-2890.10	-453.49	-615.59	-3356.62	-414.40	-711.16	-3356.62	-482.16	-711.16	-3669.74	
		DISPERSION-L	MAX	214.27	1325.44	8495.34	176.69	1325.44	5763.26	194.11	1667.42	5763.26	167.47	1667.42	5108.99
		MIN	-656.43	-1381.29	-7293.25	-727.48	-1381.29	-9511.48	-757.80	-1725.00	-9511.48	-818.06	-1725.00	-13713.71	
110	Live load	L-PICKUP 1	MAX	464.15	2174.52	15216.02	303.33	2174.52	9865.87	402.24	2675.58	9865.87	256.81	2675.58	7212.19
		MIN	-1162.55	-2277.03	-11552.78	-1352.43	-2277.03	-14457.48	-1320.36	-2768.10	-14457.48	-1483.13	-2768.10	-19115.11	
		L-PICKUP 2	MAX	409.83	1907.27	13312.52	291.58	1907.27	8811.60	362.19	2357.62	8811.60	256.38	2357.62	6779.60
		MIN	-1030.81	-1996.88	-10183.35	-1180.97	-1996.88	-12868.11	-1172.21	-2436.15	-12868.11	-1300.22	-2436.15	-17383.45	
		L-PICKUP 3	MAX	-1327.21	-2666.64	-13774.09	-1513.13	-2666.64	-16931.74	-1521.62	-3235.45	-16931.74	-1675.08	-3235.45	-21480.12
		MIN	464.15	2174.52	15216.02	303.33	2174.52	9865.87	402.24	2675.58	9865.87	256.81	2675.58	7212.19	
111	AASHTO Twin	TWIN-PICKUP	MAX	453.54	2552.28	16563.34	284.25	2552.28	9499.45	377.40	3134.13	9499.45	261.91	3134.13	7404.14
		MIN	-1327.21	-2666.64	-13774.09	-1513.13	-2666.64	-16931.74	-1521.62	-3235.45	-16931.74	-1675.08	-3235.45	-21480.12	
		MID-PICKUP	MAX	-1327.21	-2666.64	-13774.09	-1513.13	-2666.64	-16931.74	-1521.62	-3235.45	-16931.74	-1675.08	-3235.45	-21480.12
198	AASHTO Fatig	TRUCK-LOAD	MAX	148.73	398.46	1446.07	36.77	398.46	991.49	125.51	413.62	991.49	33.50	413.62	558.71
		MIN	-115.93	-492.14	-728.47	-219.80	-492.14	-901.34	-129.96	-514.25	-901.34	-218.84	-514.25	-1076.56	
		TANDEM-LOAD	MAX	121.18	272.50	1075.62	38.47	272.50	772.15	106.29	283.52	772.15	32.23	283.52	495.14
		MIN	-95.56	-338.18	-493.78	-169.29	-338.18	-610.54	-100.86	-351.76	-610.54	-169.45	-351.76	-730.89	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3057	3058			3058			3058			3059		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	66.57	702.34	1734.20	42.17	702.34	1198.13	64.23	872.51	1198.13	45.45	872.51	1019.52	
MIN	-164.23	-783.56	-1325.53	-190.09	-783.56	-1886.17	-202.60	-985.57	-1886.17	-222.44	-985.57	-2976.25	
199 AASHTO-LRFD TRUCK-LOAD MAX	289.66	1510.42	9908.37	139.15	1510.42	4791.68	225.22	1814.95	4791.68	123.55	1814.95	3117.83	
MIN	-818.25	-1581.64	-8011.30	-953.77	-1581.64	-9301.57	-932.89	-1869.95	-9301.57	-1043.13	-1869.95	-10153.09	
TANDEM-LOAD MAX	195.56	581.83	4817.18	114.89	581.83	3048.34	168.08	690.20	3048.34	88.92	690.20	1670.61	
MIN	-374.38	-615.59	-2890.10	-453.49	-615.59	-3356.62	-414.40	-711.16	-3356.62	-482.16	-711.16	-3669.74	
DISPERSION-LMAX	214.27	1325.44	8495.34	176.69	1325.44	5763.26	194.11	1667.42	5763.26	167.47	1667.42	5108.99	
MIN	-656.43	-1381.29	-7293.25	-727.48	-1381.29	-9511.48	-757.80	-1725.00	-9511.48	-818.06	-1725.00	-13713.71	
300 Total Dead lWithout snow	-1448.37	-133.13	3972.04	-1839.60	-133.13	-12467.85	-1858.43	-111.57	-12467.85	-2171.42	-111.57	-28587.25	
301 Particular Snow	-122.28	-16.16	325.00	-149.47	-16.16	-1033.75	-155.00	-17.10	-1033.75	-176.75	-17.10	-2360.73	
302 Live load Total MAX	301.70	1413.44	9890.41	197.16	1413.44	6412.82	261.45	1739.13	6412.82	166.93	1739.13	4687.93	
MIN	-862.69	-1733.32	-8953.16	-983.53	-1733.32	-11005.63	-989.06	-2103.05	-11005.63	-1088.80	-2103.05	-13962.08	
303 Sum total D+L+PP MAX	-1178.45	1397.27	14187.46	-1732.76	1397.27	-5164.93	-1673.54	1722.03	-5164.93	-2131.16	1722.03	-24853.67	
MIN	-2433.34	-1882.61	-7342.07	-2972.61	-1882.61	-24507.23	-3002.49	-2231.72	-24507.23	-3436.96	-2231.72	-44910.06	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3059			MEMBER 3060			MEMBER 3060			MEMBER 3061			
		NODE 3059			NODE 3060			NODE 3060			NODE 3061			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-391.29	-16.36	-5276.93	-442.35	-16.36	-8611.48	433.61	22.81	-8611.48	382.55	22.81	-5346.82	
3	Railing	-9.10	-5.98	-161.88	-6.41	-5.98	-223.91	6.15	6.17	-223.91	8.84	6.17	-163.96	
5	Wheel guard	-90.12	-59.20	-1602.58	-63.42	-59.20	-2216.75	60.85	61.05	-2216.75	87.54	61.05	-1623.19	
8	Steel weight	-1475.08	5.19	-19425.90	-1713.96	5.19	-32182.07	1681.71	18.69	-32182.07	1442.83	18.69	-19683.93	
10	Medial strip	-165.53	31.90	-1961.62	-214.04	31.90	-3479.90	210.65	-29.43	-3479.90	162.14	-29.43	-1988.74	
19	Snow	-174.30	-8.73	-2360.73	-196.05	-8.73	-3842.13	192.13	11.61	-3842.13	170.39	11.61	-2392.04	
31	Miscellaneous	-13.37	2.58	-158.34	-17.29	2.58	-280.95	17.02	-2.38	-280.95	13.10	-2.38	-160.47	
100	AASHTO-LRFD TRUCK-LOAD	MAX	166.13	1127.03	2103.20	108.23	1127.03	1802.70	741.73	1138.73	1802.70	602.63	1138.73	1966.90
		MIN	-604.87	-1137.02	-5401.40	-742.92	-1137.02	-5871.80	-112.65	-1123.00	-5871.80	-168.29	-1123.00	-5141.25
		TANDEM-LOAD MAX	147.36	769.72	1670.61	92.80	769.72	1225.69	536.63	780.24	1225.69	439.45	780.24	1578.61
		MIN	-440.80	-778.92	-3669.74	-537.31	-778.92	-3989.76	-96.07	-766.93	-3989.76	-149.08	-766.93	-3492.84
		DISPERSION-LMAX	185.29	1871.98	5108.99	175.56	1871.98	5774.85	890.81	1897.90	5774.85	813.70	1897.90	5056.10
		MIN	-826.52	-1900.63	-13713.71	-903.67	-1900.63	-19869.63	-176.80	-1858.76	-19869.63	-186.57	-1858.76	-13774.62
110	Live load	L-PICKUP 1 MAX	351.42	2999.01	7212.19	283.79	2999.01	7577.56	1632.54	3036.64	7577.56	1416.33	3036.64	7023.00
		MIN	-1431.40	-3037.65	-19115.11	-1646.60	-3037.65	-25741.43	-289.45	-2981.77	-25741.43	-354.86	-2981.77	-18915.87
		L-PICKUP 2 MAX	332.65	2641.70	6779.60	268.36	2641.70	7000.54	1427.44	2678.14	7000.54	1253.15	2678.14	6634.71
		MIN	-1267.32	-2679.55	-17383.45	-1440.99	-2679.55	-23859.38	-272.86	-2625.69	-23859.38	-335.65	-2625.69	-17267.46
		L-PICKUP 3	-1647.59	-3559.92	-21480.12	-1854.48	-3559.92	-27811.61	-293.35	-3495.49	-27811.61	-315.48	-3495.49	-21103.72
		Live load MAX	351.42	2999.01	7212.19	283.79	2999.01	7577.56	1632.54	3036.64	7577.56	1416.33	3036.64	7023.00
MIN	-1647.59	-3559.92	-21480.12	-1854.48	-3559.92	-27811.61	-293.35	-3495.49	-27811.61	-354.86	-3495.49	-21103.72		
111	AASHTO Twin	TWIN-PICKUP MAX	307.48	3516.04	7404.14	285.94	3516.04	8242.47	1842.29	3561.28	8242.47	1634.95	3561.28	7031.17
		MIN	-1647.59	-3559.92	-21480.12	-1854.48	-3559.92	-27811.61	-293.35	-3495.49	-27811.61	-315.48	-3495.49	-21103.72
		MID-PICKUP	-1647.59	-3559.92	-21480.12	-1854.48	-3559.92	-27811.61	-293.35	-3495.49	-27811.61	-315.48	-3495.49	-21103.72
198	AASHTO Fatig	TRUCK-LOAD MAX	84.32	347.91	558.71	42.91	347.91	310.75	264.56	426.27	310.75	154.49	426.27	546.33
		MIN	-154.99	-426.84	-1076.56	-264.70	-426.84	-1197.60	-42.69	-348.45	-1197.60	-84.59	-348.45	-1031.81
		TANDEM-LOAD MAX	81.19	235.80	495.14	46.47	235.80	211.52	203.48	291.63	211.52	118.29	291.63	487.21
		MIN	-118.58	-291.80	-730.89	-203.50	-291.80	-812.83	-46.52	-236.26	-812.83	-81.45	-236.26	-701.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3059			3060			3060			3061		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	55.06	995.03	1019.52	49.51	995.03	1060.37	236.22	1064.49	1060.37	200.50	1064.49	1007.22
	MIN	-202.10	-1067.06	-2976.25	-237.77	-1067.06	-4402.83	-49.45	-988.86	-4402.83	-55.00	-988.86	-2983.46
199	AASHTO-LRFD TRUCK-LOAD MAX	156.36	2034.73	3117.83	142.15	2034.73	3383.44	1156.18	2059.08	3383.44	1002.91	2059.08	2756.31
	MIN	-1004.13	-2054.83	-10153.09	-1156.86	-2054.83	-11032.16	-149.15	-2025.11	-11032.16	-163.96	-2025.11	-9673.96
	TANDEM-LOAD MAX	147.36	769.72	1670.61	92.80	769.72	1225.69	536.63	780.24	1225.69	439.45	780.24	1578.61
	MIN	-440.80	-778.92	-3669.74	-537.31	-778.92	-3989.76	-96.07	-766.93	-3989.76	-149.08	-766.93	-3492.84
	DISPERSION-LMAX	185.29	1871.98	5108.99	175.56	1871.98	5774.85	890.81	1897.90	5774.85	813.70	1897.90	5056.10
	MIN	-826.52	-1900.63	-13713.71	-903.67	-1900.63	-19869.63	-176.80	-1858.76	-19869.63	-186.57	-1858.76	-13774.62
300	Total Dead lWithout snow	-2144.49	-41.87	-28587.25	-2457.47	-41.87	-46995.07	2409.99	76.92	-46995.07	2097.00	76.92	-28967.10
301	Particular Snow	-174.30	-8.73	-2360.73	-196.05	-8.73	-3842.13	192.13	11.61	-3842.13	170.39	11.61	-2392.04
302	Live load Total MAX	228.42	1949.36	4687.93	184.46	1949.36	4925.41	1061.15	1973.81	4925.41	920.62	1973.81	4564.95
	MIN	-1070.93	-2313.95	-13962.08	-1205.41	-2313.95	-18077.54	-190.68	-2272.07	-18077.54	-230.66	-2272.07	-13717.42
303	Sum total D+L+PP MAX	-2021.84	1940.63	-24853.67	-2413.72	1940.63	-44434.17	3663.27	2062.34	-44434.17	3188.01	2062.34	-25424.71
	MIN	-3389.72	-2364.54	-44910.06	-3858.93	-2364.54	-68914.74	2354.24	-2260.46	-68914.74	1967.54	-2260.46	-45076.56

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3061			MEMBER 3062			MEMBER 3062			MEMBER 3063			
		NODE 3061			NODE 3062			NODE 3062			NODE 3063			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	381.69	30.04	-5346.82	330.63	30.04	-2497.55	317.78	24.90	-2497.55	253.95	24.90	361.13	
3	Railing	9.04	9.10	-163.96	11.73	9.10	-80.87	7.21	6.12	-80.87	10.58	6.12	8.11	
5	Wheel guard	89.47	90.07	-1623.19	116.17	90.07	-800.64	71.41	60.58	-800.64	104.77	60.58	80.25	
8	Steel weight	1437.01	12.95	-19683.93	1198.13	12.95	-9143.36	1200.13	27.70	-9143.36	901.53	27.70	1364.92	
10	Medial strip	160.28	-45.53	-1988.74	111.77	-45.53	-900.51	135.61	-27.88	-900.51	74.98	-27.88	152.44	
19	Snow	170.06	15.54	-2392.04	148.31	15.54	-1118.55	141.51	12.51	-1118.55	114.32	12.51	160.58	
31	Miscellaneous	12.95	-3.68	-160.47	9.03	-3.68	-72.56	10.96	-2.25	-72.56	6.06	-2.25	12.50	
100	AASHTO-LRFD TRUCK-LOAD	MAX	659.76	1037.24	1966.90	555.30	1037.24	3919.32	628.00	888.73	3919.32	508.37	888.73	6525.35
		MIN	-93.90	-1008.62	-5141.25	-214.57	-1008.62	-4651.59	-126.60	-846.13	-4651.59	-252.57	-846.13	-4038.41
		TANDEM-LOAD MAX	478.91	707.14	1578.61	409.58	707.14	2924.15	455.83	611.11	2924.15	375.84	611.11	4684.34
		MIN	-92.13	-690.61	-3492.84	-172.95	-690.61	-3155.60	-114.65	-579.55	-3155.60	-197.72	-579.55	-2738.26
		DISPERSION-LMAX	791.47	1702.25	5056.10	731.56	1702.25	5573.26	689.40	1348.68	5573.26	618.12	1348.68	8079.28
		MIN	-165.10	-1650.34	-13774.62	-192.11	-1650.34	-9629.39	-167.52	-1306.08	-9629.39	-204.88	-1306.08	-7474.15
110	Live load	L-PICKUP 1 MAX	1451.23	2739.49	7023.00	1286.86	2739.49	9492.58	1317.41	2237.41	9492.58	1126.49	2237.41	14604.62
		MIN	-259.00	-2658.96	-18915.87	-406.69	-2658.96	-14280.97	-294.11	-2152.22	-14280.97	-457.46	-2152.22	-11512.57
		L-PICKUP 2 MAX	1270.38	2409.39	6634.71	1141.14	2409.39	8497.41	1145.23	1959.79	8497.41	993.96	1959.79	12763.62
		MIN	-257.23	-2340.95	-17267.46	-365.06	-2340.95	-12784.99	-282.16	-1885.63	-12784.99	-402.61	-1885.63	-10212.41
		L-PICKUP 3	-269.25	-3116.63	-21103.72	-383.52	-3116.63	-16547.55	-280.91	-2525.33	-16547.55	-450.07	-2525.33	-13570.55
		Live load MAX	1451.23	2739.49	7023.00	1286.86	2739.49	9492.58	1317.41	2237.41	9492.58	1126.49	2237.41	14604.62
MIN	-269.25	-3116.63	-21103.72	-406.69	-3116.63	-16547.55	-294.11	-2525.33	-16547.55	-457.46	-2525.33	-13570.55		
111	AASHTO Twin	TWIN-PICKUP MAX	1642.11	3205.71	7031.17	1487.84	3205.71	8995.84	1481.86	2620.60	8995.84	1294.38	2620.60	15834.03
		MIN	-269.25	-3116.63	-21103.72	-383.52	-3116.63	-16547.55	-280.91	-2525.33	-16547.55	-450.07	-2525.33	-13570.55
		MID-PICKUP	-269.25	-3116.63	-21103.72	-383.52	-3116.63	-16547.55	-280.91	-2525.33	-16547.55	-450.07	-2525.33	-13570.55
198	AASHTO Fatig	TRUCK-LOAD MAX	217.99	510.19	546.33	128.13	510.19	956.41	220.52	489.89	956.41	116.44	489.89	1406.75
		MIN	-33.82	-415.18	-1031.81	-126.66	-415.18	-850.42	-35.96	-398.22	-850.42	-148.40	-398.22	-690.68
		TANDEM-LOAD MAX	169.07	348.81	487.21	99.24	348.81	748.17	169.92	336.83	748.17	95.86	336.83	1048.40
		MIN	-32.54	-284.68	-701.01	-107.26	-284.68	-576.44	-37.75	-272.24	-576.44	-121.09	-272.24	-467.86

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3061			3062			3062			3063		
NODE		3061			3062			3062			3063		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	217.25	973.51	1007.22	197.30	973.51	1155.37	183.00	766.72	1155.37	157.19	766.72	1651.10
	MIN	-44.50	-862.75	-2983.46	-63.42	-862.75	-1905.99	-40.42	-690.43	-1905.99	-64.78	-690.43	-1356.05
199	AASHTO-LRFD TRUCK-LOAD MAX	1033.09	1859.65	2756.31	921.60	1859.65	4422.12	957.11	1563.10	4422.12	820.07	1563.10	9514.09
	MIN	-134.07	-1812.59	-9673.96	-234.02	-1812.59	-8756.78	-144.60	-1499.84	-8756.78	-295.20	-1499.84	-7604.24
	TANDEM-LOAD MAX	478.91	707.14	1578.61	409.58	707.14	2924.15	455.83	611.11	2924.15	375.84	611.11	4684.34
	MIN	-92.13	-690.61	-3492.84	-172.95	-690.61	-3155.60	-114.65	-579.55	-3155.60	-197.72	-579.55	-2738.26
	DISPERSION-LMAX	791.47	1702.25	5056.10	731.56	1702.25	5573.26	689.40	1348.68	5573.26	618.12	1348.68	8079.28
	MIN	-165.10	-1650.34	-13774.62	-192.11	-1650.34	-9629.39	-167.52	-1306.08	-9629.39	-204.88	-1306.08	-7474.15
300	Total Dead lWithout snow	2090.44	92.96	-28967.10	1777.46	92.96	-13495.49	1743.10	89.16	-13495.49	1351.87	89.16	1979.33
301	Particular Snow	170.06	15.54	-2392.04	148.31	15.54	-1118.55	141.51	12.51	-1118.55	114.32	12.51	160.58
302	Live load Total MAX	943.30	1780.67	4564.95	836.46	1780.67	6170.18	856.31	1454.32	6170.18	732.22	1454.32	9493.01
	MIN	-175.01	-2025.81	-13717.42	-264.35	-2025.81	-10755.91	-191.17	-1641.47	-10755.91	-297.35	-1641.47	-8820.86
303	Sum total D+L+PP MAX	3203.80	1889.17	-25424.71	2762.23	1889.17	-6592.81	2740.92	1556.00	-6592.81	2198.41	1556.00	11632.92
	MIN	2032.98	-2010.27	-45076.56	1582.12	-2010.27	-25369.95	1636.08	-1628.95	-25369.95	1079.64	-1628.95	-8660.27

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3063			3064			3064			3065		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	234.28	18.85	361.13	170.45	18.85	2384.78	143.67	6.93	2384.78	79.84	6.93	3502.35
3	Railing	4.58	3.32	8.11	7.95	3.32	70.79	1.75	1.52	70.79	5.12	1.52	105.11
5	Wheel guard	45.38	32.85	80.25	78.74	32.85	700.86	17.29	15.08	700.86	50.66	15.08	1040.59
8	Steel weight	893.54	36.65	1364.92	594.94	36.65	8807.31	560.67	9.87	8807.31	262.07	9.87	12921.01
10	Medial strip	105.08	-12.00	152.44	44.44	-12.00	900.01	71.83	-6.51	900.01	11.20	-6.51	1315.15
19	Snow	104.14	9.13	160.58	76.95	9.13	1066.02	63.59	3.44	1066.02	36.40	3.44	1565.99
31	Miscellaneous	8.49	-0.97	12.50	3.59	-0.97	72.88	5.80	-0.53	72.88	0.90	-0.53	106.40
100	AASHTO-LRFD TRUCK-LOAD	573.32	844.68	6525.35	450.87	844.68	8585.39	506.01	832.63	8585.39	381.48	832.63	9817.07
	MIN	-165.12	-792.45	-4038.41	-287.94	-792.45	-3395.73	-210.21	-836.78	-3395.73	-335.24	-836.78	-2712.38
	TANDEM-LOAD	419.09	582.53	4684.34	337.20	582.53	6086.76	373.79	579.60	6086.76	290.26	579.60	6939.84
	MIN	-141.76	-546.86	-2738.26	-224.75	-546.86	-2302.50	-173.73	-581.70	-2302.50	-257.80	-581.70	-1839.15
	DISPERSION-LMAX	576.96	1145.38	8079.28	509.77	1145.38	11374.94	466.59	1020.73	11374.94	404.92	1020.73	13105.00
	MIN	-192.18	-1112.27	-7474.15	-233.57	-1112.27	-7476.07	-230.03	-1007.21	-7476.07	-276.84	-1007.21	-7388.15
110	Live load L-PICKUP 1	1150.28	1990.06	14604.62	960.64	1990.06	19960.33	972.60	1853.36	19960.33	786.40	1853.36	22922.08
	MIN	-357.30	-1904.71	-11512.57	-521.51	-1904.71	-10871.80	-440.24	-1843.99	-10871.80	-612.07	-1843.99	-10100.53
	L-PICKUP 2	996.05	1727.91	12763.62	846.96	1727.91	17461.69	840.38	1600.33	17461.69	695.18	1600.33	20044.85
	MIN	-333.94	-1659.13	-10212.41	-458.33	-1659.13	-9778.57	-403.76	-1588.91	-9778.57	-534.64	-1588.91	-9227.30
	L-PICKUP 3	-352.84	-2210.37	-13570.55	-508.82	-2210.37	-12483.06	-444.04	-2051.79	-12483.06	-610.06	-2051.79	-11245.88
	Live load	1150.28	1990.06	14604.62	960.64	1990.06	19960.33	972.60	1853.36	19960.33	786.40	1853.36	22922.08
	MIN	-357.30	-2210.37	-13570.55	-521.51	-2210.37	-12483.06	-444.04	-2051.79	-12483.06	-612.07	-2051.79	-11245.88
111	AASHTO Twin TWIN-PICKUP	1279.04	2317.21	15834.03	1091.67	2317.21	22264.08	1058.35	2073.55	22264.08	874.79	2073.55	25779.85
	MIN	-352.84	-2210.37	-13570.55	-508.82	-2210.37	-12483.06	-444.04	-2051.79	-12483.06	-610.06	-2051.79	-11245.88
	MID-PICKUP	-352.84	-2210.37	-13570.55	-508.82	-2210.37	-12483.06	-444.04	-2051.79	-12483.06	-610.06	-2051.79	-11245.88
198	AASHTO FatigTRUCK-LOAD	211.56	450.76	1406.75	102.62	450.76	1763.40	200.14	398.72	1763.40	88.56	398.72	1973.63
	MIN	-45.99	-356.40	-690.68	-158.60	-356.40	-568.10	-58.81	-302.23	-568.10	-170.49	-302.23	-452.18
	TANDEM-LOAD	164.30	310.63	1048.40	86.76	310.63	1291.58	156.72	275.84	1291.58	77.08	275.84	1437.35
	MIN	-48.37	-243.27	-467.86	-128.45	-243.27	-385.12	-56.91	-206.63	-385.12	-136.65	-206.63	-306.62

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3063 3063	3064			3064			3065				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	148.39	651.78	1651.10	121.81	651.78	2266.78	121.53	575.10	2266.78	94.71	575.10	2572.19
MIN	-48.75	-588.16	-1356.05	-73.74	-588.16	-1325.60	-58.46	-534.37	-1325.60	-84.37	-534.37	-1304.92
199 AASHTO-LRFD TRUCK-LOAD MAX	844.20	1429.30	9514.09	703.20	1429.30	13362.92	709.36	1283.21	13362.92	567.07	1283.21	15539.27
MIN	-199.86	-1343.70	-7604.24	-331.79	-1343.70	-6394.00	-263.35	-1272.55	-6394.00	-401.01	-1272.55	-5107.27
TANDEM-LOAD MAX	419.09	582.53	4684.34	337.20	582.53	6086.76	373.79	579.60	6086.76	290.26	579.60	6939.84
MIN	-141.76	-546.86	-2738.26	-224.75	-546.86	-2302.50	-173.73	-581.70	-2302.50	-257.80	-581.70	-1839.15
DISPERSION-LMAX	576.96	1145.38	8079.28	509.77	1145.38	11374.94	466.59	1020.73	11374.94	404.92	1020.73	13105.00
MIN	-192.18	-1112.27	-7474.15	-233.57	-1112.27	-7476.07	-230.03	-1007.21	-7476.07	-276.84	-1007.21	-7388.15
300 Total Dead lWithout snow	1291.35	78.70	1979.33	900.12	78.70	12936.64	801.01	26.37	12936.64	409.78	26.37	18990.60
301 Particular Snow	104.14	9.13	160.58	76.95	9.13	1066.02	63.59	3.44	1066.02	36.40	3.44	1565.99
302 Live load Total MAX	747.68	1293.54	9493.01	624.42	1293.54	12974.22	632.19	1204.69	12974.22	511.16	1204.69	14899.35
MIN	-232.25	-1436.74	-8820.86	-338.98	-1436.74	-8113.99	-288.63	-1333.66	-8113.99	-397.85	-1333.66	-7309.82
303 Sum total D+L+PP MAX	2143.16	1381.37	11632.92	1601.48	1381.37	26976.88	1496.79	1234.49	26976.88	957.35	1234.49	35455.94
MIN	1093.56	-1427.61	-8660.27	536.39	-1427.61	3454.48	489.38	-1330.23	3454.48	-71.01	-1330.23	11053.82

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3065			MEMBER 3066			MEMBER 3066			MEMBER 3067				
		NODE			NODE			NODE			NODE				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	53.73	-1.51	3502.35	-10.09	-1.51	3720.55	-31.24	-0.59	3720.55	-95.07	-0.59	3088.98		
3	Railing	-1.02	0.34	105.11	2.36	0.34	111.81	-3.61	-0.38	111.81	-0.24	-0.38	92.54		
5	Wheel guard	-10.05	3.40	1040.59	23.32	3.40	1106.91	-35.76	-3.77	1106.91	-2.39	-3.77	916.18		
8	Steel weight	229.62	-10.22	12921.01	-68.98	-10.22	13724.20	-83.33	2.16	13724.20	-381.93	2.16	11397.87		
10	Medial strip	38.46	-3.26	1315.15	-22.18	-3.26	1396.52	6.83	2.30	1396.52	-53.81	2.30	1161.62		
19	Snow	23.36	-0.58	1565.99	-3.83	-0.58	1663.63	-14.65	-0.36	1663.63	-41.84	-0.36	1381.16		
31	Miscellaneous	3.10	-0.26	106.40	-1.80	-0.26	112.94	0.55	0.19	112.94	-4.35	0.19	93.93		
100	AASHTO-LRFD TRUCK-LOAD	MAX	440.54	826.14	9817.07	314.86	826.14	10130.89	384.66	779.20	10130.89	258.52	779.20	9685.39	
		MIN	-268.76	-844.50	-2712.38	-394.27	-844.50	-2251.62	-322.99	-786.62	-2251.62	-448.83	-786.62	-2977.42	
		TANDEM-LOAD	MAX	329.68	575.38	6939.84	245.17	575.38	7166.67	291.89	542.76	7166.67	206.92	542.76	6847.41
		MIN	-213.93	-588.14	-1839.15	-298.30	-588.14	-1530.91	-250.56	-547.18	-1530.91	-335.24	-547.18	-2024.39	
		DISPERSION-L	MAX	371.71	909.41	13105.00	315.55	909.41	13335.22	298.75	860.15	13335.22	247.28	860.15	12248.63
		MIN	-281.89	-911.02	-7388.15	-334.16	-911.02	-7263.45	-347.46	-862.16	-7263.45	-404.43	-862.16	-7204.40	
110	Live load	L-PICKUP 1	MAX	812.26	1735.55	22922.08	630.41	1735.55	23466.11	683.41	1639.35	23466.11	505.80	1639.35	21934.02
		MIN	-550.65	-1755.52	-10100.53	-728.44	-1755.52	-9515.08	-670.45	-1648.78	-9515.08	-853.26	-1648.78	-10181.82	
		L-PICKUP 2	MAX	701.39	1484.79	20044.85	560.72	1484.79	20501.89	590.63	1402.91	20501.89	454.20	1402.91	19096.04
		MIN	-495.82	-1499.16	-9227.30	-632.46	-1499.16	-8794.37	-598.02	-1409.34	-8794.37	-739.68	-1409.34	-9228.80	
		L-PICKUP 3	MAX	812.26	1735.55	22922.08	630.41	1735.55	23466.11	683.41	1639.35	23466.11	505.80	1639.35	21934.02
		MIN	-568.05	-1936.32	-11245.88	-742.16	-1936.32	-10340.52	-721.08	-1820.98	-10340.52	-900.74	-1820.98	-11513.38	
111	AASHTO Twin	TWIN-PICKUP	MAX	857.66	1908.04	25779.85	679.63	1908.04	26406.98	696.35	1808.76	26406.98	523.62	1808.76	24826.56
		MIN	-568.05	-1936.32	-11245.88	-742.16	-1936.32	-10340.52	-721.08	-1820.98	-10340.52	-900.74	-1820.98	-11513.38	
		MID-PICKUP	MAX	857.66	1908.04	25779.85	679.63	1908.04	26406.98	696.35	1808.76	26406.98	523.62	1808.76	24826.56
198	AASHTO Fatig	TRUCK-LOAD	MAX	189.17	308.24	1973.63	77.05	308.24	2027.65	179.87	209.61	2027.65	67.78	209.61	1950.77
		MIN	-69.46	-230.11	-452.18	-181.41	-230.11	-376.46	-78.67	-299.79	-376.46	-190.78	-299.79	-497.19	
		TANDEM-LOAD	MAX	149.28	214.95	1437.35	69.14	214.95	1476.53	143.01	143.95	1476.53	62.84	143.95	1420.93
		MIN	-64.00	-162.25	-306.62	-144.03	-162.25	-256.01	-70.22	-208.35	-256.01	-150.40	-208.35	-338.10	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3065			3066			3066			3067		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	103.38	498.40	2572.19	76.48	498.40	2615.29	89.75	459.18	2615.29	63.19	459.18	2421.84
	MIN	-69.38	-486.80	-1304.92	-95.99	-486.80	-1285.99	-82.49	-473.91	-1285.99	-109.30	-473.91	-1275.29
199	AASHTO-LRFD TRUCK-LOAD MAX	581.24	1210.64	15539.27	439.59	1210.64	16005.87	474.98	1149.59	16005.87	334.53	1149.59	15336.43
	MIN	-349.28	-1240.44	-5107.27	-490.46	-1240.44	-4226.01	-453.74	-1161.15	-4226.01	-596.39	-1161.15	-5588.24
	TANDEM-LOAD MAX	329.68	575.38	6939.84	245.17	575.38	7166.67	291.89	542.76	7166.67	206.92	542.76	6847.41
	MIN	-213.93	-588.14	-1839.15	-298.30	-588.14	-1530.91	-250.56	-547.18	-1530.91	-335.24	-547.18	-2024.39
	DISPERSION-LMAX	371.71	909.41	13105.00	315.55	909.41	13335.22	298.75	860.15	13335.22	247.28	860.15	12248.63
	MIN	-281.89	-911.02	-7388.15	-334.16	-911.02	-7263.45	-347.46	-862.16	-7263.45	-404.43	-862.16	-7204.40
300	Total Dead lWithout snow	313.85	-11.51	18990.60	-77.38	-11.51	20172.93	-146.57	-0.09	20172.93	-537.80	-0.09	16751.12
301	Particular Snow	23.36	-0.58	1565.99	-3.83	-0.58	1663.63	-14.65	-0.36	1663.63	-41.84	-0.36	1381.16
302	Live load Total MAX	527.97	1128.10	14899.35	409.76	1128.10	15252.97	444.21	1065.58	15252.97	328.77	1065.58	14257.11
	MIN	-369.23	-1258.60	-7309.82	-482.40	-1258.60	-6721.34	-468.70	-1183.63	-6721.34	-585.48	-1183.63	-7483.69
303	Sum total D+L+PP MAX	865.17	1127.53	35455.94	405.94	1127.53	37089.53	416.26	1065.22	37089.53	-152.23	1065.22	32389.40
	MIN	-142.80	-1270.69	11053.82	-563.61	-1270.69	13098.83	-629.92	-1184.09	13098.83	-1165.11	-1184.09	8403.48

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3067			3068			3068			3069			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-116.57	-0.33	3088.98	-180.40	-0.33	1604.14	-212.49	-20.84	1604.14	-276.32	-20.84	-839.91	
3	Railing	-6.22	-1.24	92.54	-2.85	-1.24	47.17	-9.22	-3.40	47.17	-5.85	-3.40	-28.18	
5	Wheel guard	-61.61	-12.23	916.18	-28.24	-12.23	466.95	-91.28	-33.66	466.95	-57.91	-33.66	-278.99	
8	Steel weight	-397.52	13.42	11397.87	-696.12	13.42	5929.70	-749.98	-43.75	5929.70	-1048.58	-43.75	-3063.11	
10	Medial strip	-24.90	8.37	1161.62	-85.54	8.37	609.43	-60.14	11.40	609.43	-120.78	11.40	-295.16	
19	Snow	-52.82	-0.46	1381.16	-80.01	-0.46	717.02	-95.74	-10.03	717.02	-122.93	-10.03	-376.34	
31	Miscellaneous	-2.02	0.68	93.93	-6.92	0.68	49.28	-4.86	0.92	49.28	-9.76	0.92	-23.85	
100	AASHTO-LRFD TRUCK-LOAD	MAX	341.36	755.85	9685.39	217.83	755.85	8572.26	295.71	771.27	8572.26	175.70	771.27	6739.52
		MIN	-372.22	-730.38	-2977.42	-496.32	-730.38	-3803.57	-438.07	-801.96	-3803.57	-559.23	-801.96	-4687.66
		TANDEM-LOAD MAX	261.78	525.60	6847.41	179.05	525.60	6079.69	229.69	532.54	6079.69	149.43	532.54	4838.57
		MIN	-283.80	-507.65	-2024.39	-366.95	-507.65	-2586.10	-328.54	-553.02	-2586.10	-409.20	-553.02	-3187.22
		DISPERSION-LMAX	250.93	920.94	12248.63	203.32	920.94	9961.82	212.48	1085.74	9961.82	169.84	1085.74	6174.11
		MIN	-438.81	-923.42	-7204.40	-499.67	-923.42	-7333.45	-556.99	-1121.72	-7333.45	-622.91	-1121.72	-7522.97
110	Live load	L-PICKUP 1 MAX	592.29	1676.80	21934.02	421.15	1676.80	18534.07	508.19	1857.00	18534.07	345.53	1857.00	12913.63
		MIN	-811.03	-1653.79	-10181.82	-995.99	-1653.79	-11137.02	-995.05	-1923.68	-11137.02	-1182.14	-1923.68	-12210.63
		L-PICKUP 2 MAX	512.71	1446.54	19096.04	382.37	1446.54	16041.51	442.17	1618.28	16041.51	319.27	1618.28	11012.67
		MIN	-722.61	-1431.07	-9228.80	-866.62	-1431.07	-9919.55	-885.52	-1674.74	-9919.55	-1032.11	-1674.74	-10710.19
		L-PICKUP 3	-894.55	-1869.89	-11513.38	-1075.89	-1869.89	-13025.04	-1118.40	-2242.90	-13025.04	-1301.65	-2242.90	-14689.09
		Live load MAX	592.29	1676.80	21934.02	421.15	1676.80	18534.07	508.19	1857.00	18534.07	345.53	1857.00	12913.63
MIN	-894.55	-1869.89	-11513.38	-1075.89	-1869.89	-13025.04	-1118.40	-2242.90	-13025.04	-1301.65	-2242.90	-14689.09		
111	AASHTO Twin TWIN-PICKUP	MAX	592.39	1876.11	24826.56	425.32	1876.11	20959.31	493.59	2165.93	20959.31	336.44	2165.93	14374.55
		MIN	-894.55	-1869.89	-11513.38	-1075.89	-1869.89	-13025.04	-1118.40	-2242.90	-13025.04	-1301.65	-2242.90	-14689.09
		MID-PICKUP	-894.55	-1869.89	-11513.38	-1075.89	-1869.89	-13025.04	-1118.40	-2242.90	-13025.04	-1301.65	-2242.90	-14689.09
198	AASHTO FatigTRUCK-LOAD	MAX	171.94	277.75	1950.77	60.88	277.75	1758.40	161.04	346.11	1758.40	49.60	346.11	1443.92
		MIN	-87.50	-357.50	-497.19	-198.37	-357.50	-636.16	-100.55	-429.08	-636.16	-208.57	-429.08	-799.89
		TANDEM-LOAD MAX	137.53	189.93	1420.93	58.45	189.93	1288.77	129.90	236.20	1288.77	51.08	236.20	1076.22
		MIN	-76.46	-246.90	-338.10	-155.42	-246.90	-432.63	-85.56	-295.76	-432.63	-162.07	-295.76	-544.31

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3067			3068			3068			3069		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	80.34	487.84	2421.84	54.31	487.84	2003.46	70.76	574.24	2003.46	45.54	574.24	1328.22
	MIN	-102.17	-521.96	-1275.29	-128.97	-521.96	-1300.06	-130.63	-637.01	-1300.06	-157.26	-637.01	-1368.96
199	AASHTO-LRFD TRUCK-LOAD MAX	407.28	1163.62	15336.43	269.25	1163.62	13326.31	335.95	1320.85	13326.31	203.98	1320.85	9797.62
	MIN	-555.13	-1154.24	-5588.24	-695.76	-1154.24	-7138.82	-685.68	-1370.39	-7138.82	-823.37	-1370.39	-8798.24
	TANDEM-LOAD MAX	261.78	525.60	6847.41	179.05	525.60	6079.69	229.69	532.54	6079.69	149.43	532.54	4838.57
	MIN	-283.80	-507.65	-2024.39	-366.95	-507.65	-2586.10	-328.54	-553.02	-2586.10	-409.20	-553.02	-3187.22
	DISPERSION-LMAX	250.93	920.94	12248.63	203.32	920.94	9961.82	212.48	1085.74	9961.82	169.84	1085.74	6174.11
	MIN	-438.81	-923.42	-7204.40	-499.67	-923.42	-7333.45	-556.99	-1121.72	-7333.45	-622.91	-1121.72	-7522.97
300	Total Dead lWithout snow	-608.83	8.67	16751.12	-1000.06	8.67	8706.66	-1127.97	-89.32	8706.66	-1519.20	-89.32	-4529.20
301	Particular Snow	-52.82	-0.46	1381.16	-80.01	-0.46	717.02	-95.74	-10.03	717.02	-122.93	-10.03	-376.34
302	Live load Total MAX	384.99	1089.92	14257.11	273.75	1089.92	12047.15	330.32	1207.05	12047.15	224.60	1207.05	8393.86
	MIN	-581.46	-1215.43	-7483.69	-699.33	-1215.43	-8466.28	-726.96	-1457.89	-8466.28	-846.07	-1457.89	-9547.91
303	Sum total D+L+PP MAX	-161.17	1098.13	32389.40	-724.19	1098.13	21470.83	-794.30	1197.02	21470.83	-1350.15	1197.02	6006.47
	MIN	-1243.11	-1215.89	8403.48	-1779.39	-1215.89	-1582.48	-1950.68	-1557.24	-1582.48	-2488.20	-1557.24	-14453.45

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 3069			MEMBER 3070			MEMBER 3070			MEMBER 3071			
		NODE 3069			NODE 3070			NODE 3070			NODE 3071			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-300.75	-36.72	-839.91	-364.58	-36.72	-4166.57	-367.37	-27.79	-4166.57	-418.44	-27.79	-7309.81	
3	Railing	-11.98	-6.79	-28.18	-8.61	-6.79	-131.18	-12.81	-9.79	-131.18	-10.12	-9.79	-222.89	
5	Wheel guard	-118.65	-67.25	-278.99	-85.28	-67.25	-1298.64	-126.85	-96.95	-1298.64	-100.15	-96.95	-2206.63	
8	Steel weight	-1074.21	-67.51	-3063.11	-1372.81	-67.51	-15298.22	-1333.99	4.46	-15298.22	-1572.87	4.46	-26925.65	
10	Medial strip	-92.52	25.65	-295.16	-153.15	25.65	-1523.51	-125.68	51.66	-1523.51	-174.19	51.66	-2723.03	
19	Snow	-135.24	-17.88	-376.34	-162.42	-17.88	-1864.67	-164.73	-14.73	-1864.67	-186.48	-14.73	-3269.52	
31	Miscellaneous	-7.48	2.07	-23.85	-12.38	2.07	-123.14	-10.16	4.17	-123.14	-14.08	4.17	-220.10	
100	AASHTO-LRFD TRUCK-LOAD	MAX	244.56	849.83	6739.52	123.57	849.83	4101.66	204.68	1099.62	4101.66	89.19	1099.62	1854.20
		MIN	-520.94	-905.75	-4687.66	-636.01	-905.75	-5401.44	-575.01	-1137.05	-5401.44	-674.75	-1137.05	-5857.84
		TANDEM-LOAD MAX	191.14	582.56	4838.57	112.65	582.56	3057.44	164.82	751.88	3057.44	87.55	751.88	1507.84
		MIN	-384.70	-623.73	-3187.22	-460.50	-623.73	-3672.47	-422.79	-775.40	-3672.47	-487.98	-775.40	-3983.71
		DISPERSION-LMAX	180.83	1337.27	6174.11	144.13	1337.27	3405.45	167.37	1798.27	3405.45	141.14	1798.27	2601.90
		MIN	-670.37	-1399.18	-7522.97	-742.33	-1399.18	-10178.93	-766.55	-1846.80	-10178.93	-827.22	-1846.80	-14516.90
110	Live load	L-PICKUP 1 MAX	425.39	2187.11	12913.63	267.70	2187.11	7507.10	372.05	2897.90	7507.10	230.33	2897.90	4456.10
		MIN	-1191.31	-2304.93	-12210.63	-1378.34	-2304.93	-15580.37	-1341.55	-2983.86	-15580.37	-1501.97	-2983.86	-20374.74
		L-PICKUP 2 MAX	371.97	1919.83	11012.67	256.78	1919.83	6462.89	332.18	2550.15	6462.89	228.69	2550.15	4109.74
		MIN	-1055.07	-2022.91	-10710.19	-1202.83	-2022.91	-13851.40	-1189.34	-2622.20	-13851.40	-1315.21	-2622.20	-18500.62
		L-PICKUP 3	-1361.74	-2695.53	-14689.09	-1546.03	-2695.53	-18286.10	-1547.50	-3483.49	-18286.10	-1699.06	-3483.49	-22961.99
		Live load MAX	425.39	2187.11	12913.63	267.70	2187.11	7507.10	372.05	2897.90	7507.10	230.33	2897.90	4456.10
MIN	-1361.74	-2695.53	-14689.09	-1546.03	-2695.53	-18286.10	-1547.50	-3483.49	-18286.10	-1699.06	-3483.49	-22961.99		
111	AASHTO Twin TWIN-PICKUP	MAX	418.94	2560.19	14374.55	253.41	2560.19	7202.67	349.50	3392.55	7202.67	237.37	3392.55	4308.90
		MIN	-1361.74	-2695.53	-14689.09	-1546.03	-2695.53	-18286.10	-1547.50	-3483.49	-18286.10	-1699.06	-3483.49	-22961.99
		MID-PICKUP	-1361.74	-2695.53	-14689.09	-1546.03	-2695.53	-18286.10	-1547.50	-3483.49	-18286.10	-1699.06	-3483.49	-22961.99
198	AASHTO FatigTRUCK-LOAD	MAX	146.15	397.74	1443.92	36.48	397.74	988.24	123.72	442.86	988.24	33.70	442.86	565.62
		MIN	-119.65	-497.71	-799.89	-221.23	-497.71	-977.08	-132.57	-556.53	-977.08	-219.64	-556.53	-1153.66
		TANDEM-LOAD MAX	119.04	271.85	1076.22	37.23	271.85	773.21	104.49	303.77	773.21	32.42	303.77	504.00
		MIN	-98.31	-342.95	-544.31	-169.86	-342.95	-665.86	-101.55	-381.16	-665.86	-169.41	-381.16	-786.66

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3069			3070			3070			3071		
NODE		3069			3070			3070			3071		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	59.89	707.68	1328.22	35.75	707.68	781.58	58.88	938.82	781.58	40.25	938.82	569.32
	MIN	-168.18	-794.13	-1368.96	-193.91	-794.13	-2036.79	-202.89	-1057.00	-2036.79	-222.70	-1057.00	-3151.81
199	AASHTO-LRFD TRUCK-LOAD MAX	284.65	1507.38	9797.62	137.43	1507.38	4597.52	220.97	1971.22	4597.52	122.60	1971.22	2185.76
	MIN	-842.68	-1595.86	-8798.24	-975.49	-1595.86	-10138.96	-952.90	-2023.74	-10138.96	-1060.62	-2023.74	-10996.42
	TANDEM-LOAD MAX	191.14	582.56	4838.57	112.65	582.56	3057.44	164.82	751.88	3057.44	87.55	751.88	1507.84
	MIN	-384.70	-623.73	-3187.22	-460.50	-623.73	-3672.47	-422.79	-775.40	-3672.47	-487.98	-775.40	-3983.71
	DISPERSION-LMAX	180.83	1337.27	6174.11	144.13	1337.27	3405.45	167.37	1798.27	3405.45	141.14	1798.27	2601.90
	MIN	-670.37	-1399.18	-7522.97	-742.33	-1399.18	-10178.93	-766.55	-1846.80	-10178.93	-827.22	-1846.80	-14516.90
300	Total Dead lWithout snow	-1605.59	-150.55	-4529.20	-1996.82	-150.55	-22541.25	-1976.86	-74.24	-22541.25	-2289.85	-74.24	-39608.10
301	Particular Snow	-135.24	-17.88	-376.34	-162.42	-17.88	-1864.67	-164.73	-14.73	-1864.67	-186.48	-14.73	-3269.52
302	Live load Total MAX	276.50	1421.62	8393.86	174.01	1421.62	4879.62	241.83	1883.63	4879.62	149.71	1883.63	2896.47
	MIN	-885.13	-1752.09	-9547.91	-1004.92	-1752.09	-11885.97	-1005.88	-2264.27	-11885.97	-1104.39	-2264.27	-14925.30
303	Sum total D+L+PP MAX	-1381.38	1403.74	6006.47	-1933.04	1403.74	-18062.43	-1827.22	1868.90	-18062.43	-2281.70	1868.90	-39112.21
	MIN	-2625.96	-1920.53	-14453.45	-3164.17	-1920.53	-36291.89	-3147.47	-2353.24	-36291.89	-3580.71	-2353.24	-57802.92

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3071			3072			3072			3073				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-416.03	-16.81	-7309.81	-467.09	-16.81	-10842.30	519.39	24.90	-10842.30	455.56	24.90	-5967.56		
3	Railing	-9.64	-6.36	-222.89	-6.94	-6.36	-289.21	8.63	7.53	-289.21	12.00	7.53	-186.03		
5	Wheel guard	-95.41	-62.99	-2206.63	-68.72	-62.99	-2863.15	85.46	74.58	-2863.15	118.83	74.58	-1841.69		
8	Steel weight	-1568.84	7.93	-26925.65	-1807.72	7.93	-40431.88	1999.20	10.82	-40431.88	1700.60	10.82	-21932.91		
10	Medial strip	-176.11	34.29	-2723.03	-224.62	34.29	-4325.93	243.46	-37.68	-4325.93	182.82	-37.68	-2194.50		
19	Snow	-185.30	-9.02	-3269.52	-207.04	-9.02	-4838.88	230.46	12.88	-4838.88	203.28	12.88	-2670.17		
31	Miscellaneous	-14.23	2.77	-220.10	-18.15	2.77	-349.65	19.67	-3.05	-349.65	14.77	-3.05	-177.40		
100	AASHTO-LRFD TRUCK-LOAD	MAX	164.50	1272.41	1854.20	108.76	1272.41	1678.81	764.61	1275.56	1678.81	618.38	1275.56	2414.73	
		MIN	-614.42	-1282.77	-5857.84	-752.15	-1282.77	-6358.30	-83.59	-1255.07	-6358.30	-176.99	-1255.07	-5551.16	
		TANDEM-LOAD MAX	144.44	868.38	1507.84	94.16	868.38	1138.33	548.84	871.00	1138.33	450.93	871.00	1895.98	
		MIN	-446.87	-878.89	-3983.71	-542.85	-878.89	-4330.72	-76.85	-859.33	-4330.72	-151.89	-859.33	-3771.17	
		DISPERSION-LMAX	161.28	2053.39	2601.90	152.21	2053.39	3061.37	912.96	2023.52	3061.37	819.75	2023.52	3596.46	
		MIN	-842.87	-2082.91	-14516.90	-920.66	-2082.91	-20791.57	-59.41	-1980.50	-20791.57	-74.81	-1980.50	-13318.53	
110	Live load	L-PICKUP 1	MAX	325.78	3325.80	4456.10	260.96	3325.80	4740.19	1677.57	3299.08	4740.19	1438.13	3299.08	6011.19
		MIN	-1457.29	-3365.69	-20374.74	-1672.81	-3365.69	-27149.86	-143.00	-3235.57	-27149.86	-251.79	-3235.57	-18869.69	
		L-PICKUP 2	MAX	305.73	2921.77	4109.74	246.37	2921.77	4199.70	1461.80	2894.52	4199.70	1270.68	2894.52	5492.44
		MIN	-1289.73	-2961.81	-18500.62	-1463.52	-2961.81	-25122.29	-136.26	-2839.83	-25122.29	-226.70	-2839.83	-17089.70	
		L-PICKUP 3	MAX	325.78	3325.80	4456.10	260.96	3325.80	4740.19	1677.57	3299.08	4740.19	1438.13	3299.08	6011.19
		MIN	-1678.13	-3952.54	-22961.99	-1885.12	-3952.54	-29461.97	-143.00	-3812.59	-29461.97	-251.79	-3812.59	-21371.51	
111	AASHTO Twin	TWIN-PICKUP	MAX	285.48	3900.54	4308.90	268.17	3900.54	5600.25	1908.67	3882.68	5600.25	1680.56	3882.68	5852.24
		MIN	-1678.13	-3952.54	-22961.99	-1885.12	-3952.54	-29461.97	-133.78	-3812.59	-29461.97	-191.37	-3812.59	-21371.51	
		MID-PICKUP	MAX	285.48	3900.54	4308.90	268.17	3900.54	5600.25	1908.67	3882.68	5600.25	1680.56	3882.68	5852.24
198	AASHTO Fatig	TRUCK-LOAD	MAX	82.12	385.18	565.62	41.27	385.18	291.70	270.79	498.26	291.70	149.30	498.26	686.83
		MIN	-158.13	-476.85	-1153.66	-266.52	-476.85	-1292.68	-42.94	-400.31	-1292.68	-102.68	-400.31	-1080.96	
		TANDEM-LOAD	MAX	79.04	261.34	504.00	46.72	261.34	197.51	204.95	338.82	197.51	111.50	338.82	572.66
		MIN	-120.86	-326.72	-786.66	-204.28	-326.72	-881.73	-47.37	-273.28	-881.73	-91.31	-273.28	-733.43	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3071			3072			3072			3073		
NODE		3071			3072			3072			3073		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	51.41	1091.66	569.32	46.33	1091.66	564.32	245.03	1139.37	564.32	204.06	1139.37	763.33
	MIN	-205.45	-1168.17	-3151.81	-241.69	-1168.17	-4612.67	-31.33	-1047.65	-4612.67	-41.09	-1047.65	-2858.55
199	AASHTO-LRFD TRUCK-LOAD MAX	155.92	2280.54	2185.76	145.76	2280.54	3161.12	1207.78	2290.56	3161.12	1047.54	2290.56	2906.02
	MIN	-1021.73	-2308.80	-10996.42	-1173.92	-2308.80	-11943.96	-89.24	-2255.71	-11943.96	-137.82	-2255.71	-10427.59
	TANDEM-LOAD MAX	144.44	868.38	1507.84	94.16	868.38	1138.33	548.84	871.00	1138.33	450.93	871.00	1895.98
	MIN	-446.87	-878.89	-3983.71	-542.85	-878.89	-4330.72	-76.85	-859.33	-4330.72	-151.89	-859.33	-3771.17
	DISPERSION-LMAX	161.28	2053.39	2601.90	152.21	2053.39	3061.37	912.96	2023.52	3061.37	819.75	2023.52	3596.46
	MIN	-842.87	-2082.91	-14516.90	-920.66	-2082.91	-20791.57	-59.41	-1980.50	-20791.57	-74.81	-1980.50	-13318.53
300	Total Dead lWithout snow	-2280.26	-41.18	-39608.10	-2593.24	-41.18	-59102.12	2875.82	77.11	-59102.12	2484.59	77.11	-32300.10
301	Particular Snow	-185.30	-9.02	-3269.52	-207.04	-9.02	-4838.88	230.46	12.88	-4838.88	203.28	12.88	-2670.17
302	Live load Total	211.76	2161.77	2896.47	169.63	2161.77	3081.12	1090.42	2144.40	3081.12	934.78	2144.40	3907.28
	MIN	-1090.79	-2569.15	-14925.30	-1225.33	-2569.15	-19150.28	-92.95	-2478.18	-19150.28	-163.67	-2478.18	-13891.48
303	Sum total D+L+PP	-2190.27	2152.75	-39112.21	-2579.77	2152.75	-59935.54	4196.70	2234.38	-59935.54	3622.65	2234.38	-29890.81
	MIN	-3556.34	-2619.35	-57802.92	-4025.62	-2619.35	-83091.28	2985.45	-2465.30	-83091.28	2475.10	-2465.30	-48861.75

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3073			3074			3074			3075		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	459.35	42.35	-5967.56	395.52	42.35	-1693.24	379.22	37.65	-1693.24	315.40	37.65	1779.86
3	Railing	11.31	9.38	-186.03	14.68	9.38	-56.08	9.10	5.46	-56.08	12.47	5.46	51.79
5	Wheel guard	111.97	92.83	-1841.69	145.34	92.83	-555.16	90.11	54.04	-555.16	123.47	54.04	512.73
8	Steel weight	1724.20	59.44	-21932.91	1425.60	59.44	-6183.93	1426.26	87.22	-6183.93	1127.66	87.22	6585.70
10	Medial strip	189.84	-40.27	-2194.50	129.20	-40.27	-599.29	158.36	-15.85	-599.29	97.72	-15.85	681.07
19	Snow	204.77	21.02	-2670.17	177.58	21.02	-758.43	168.99	17.95	-758.43	141.80	17.95	795.53
31	Miscellaneous	15.34	-3.25	-177.40	10.44	-3.25	-48.49	12.80	-1.28	-48.49	7.90	-1.28	54.98
100	AASHTO-LRFD TRUCK-LOAD	691.86	1052.47	2414.73	579.71	1052.47	5381.63	631.08	835.42	5381.63	514.00	835.42	8039.42
	MIN	-77.59	-1000.56	-5551.16	-196.59	-1000.56	-5083.76	-118.55	-768.68	-5083.76	-235.29	-768.68	-4441.08
	TANDEM-LOAD MAX	497.60	720.58	1895.98	423.80	720.58	3917.78	457.38	576.04	3917.78	379.80	576.04	5712.79
	MIN	-80.64	-685.74	-3771.17	-158.36	-685.74	-3450.69	-109.54	-528.25	-3450.69	-187.93	-528.25	-3014.53
	DISPERSION-LMAX	798.37	1595.50	3596.46	723.05	1595.50	6533.18	680.82	1130.10	6533.18	609.87	1130.10	10927.86
	MIN	-45.74	-1523.61	-13318.53	-79.00	-1523.61	-9273.49	-59.35	-1066.90	-9273.49	-97.02	-1066.90	-8013.92
110	Live load L-PICKUP 1	1490.23	2647.97	6011.19	1302.77	2647.97	11914.81	1311.90	1965.53	11914.81	1123.87	1965.53	18967.28
	MIN	-123.33	-2524.17	-18869.69	-275.59	-2524.17	-14357.25	-177.90	-1835.58	-14357.25	-332.31	-1835.58	-12455.00
	L-PICKUP 2 MAX	1295.97	2316.08	5492.44	1146.86	2316.08	10450.97	1138.20	1706.14	10450.97	989.67	1706.14	16640.65
	MIN	-126.38	-2209.35	-17089.70	-237.35	-2209.35	-12724.18	-168.89	-1595.15	-12724.18	-284.95	-1595.15	-11028.45
	L-PICKUP 3	-88.52	-2981.44	-21371.51	-246.64	-2981.44	-16945.26	-154.34	-2168.58	-16945.26	-303.82	-2168.58	-14724.28
	Live load MAX	1490.23	2647.97	6011.19	1302.77	2647.97	11914.81	1311.90	1965.53	11914.81	1123.87	1965.53	18967.28
	MIN	-126.38	-2981.44	-21371.51	-275.59	-2981.44	-16945.26	-177.90	-2168.58	-16945.26	-332.31	-2168.58	-14724.28
111	AASHTO Twin TWIN-PICKUP	1705.00	3118.97	5852.24	1523.40	3118.97	12402.49	1485.76	2321.55	12402.49	1302.60	2321.55	21055.04
	MIN	-88.52	-2981.44	-21371.51	-246.64	-2981.44	-16945.26	-154.34	-2168.58	-16945.26	-303.82	-2168.58	-14724.28
	MID-PICKUP	-88.52	-2981.44	-21371.51	-246.64	-2981.44	-16945.26	-154.34	-2168.58	-16945.26	-303.82	-2168.58	-14724.28
198	AASHTO FatigTRUCK-LOAD	229.84	541.65	686.83	132.80	541.65	1212.91	220.31	474.07	1212.91	115.73	474.07	1671.39
	MIN	-32.87	-428.95	-1080.96	-137.91	-428.95	-893.24	-40.26	-377.75	-893.24	-149.83	-377.75	-748.32
	TANDEM-LOAD MAX	175.11	372.36	572.66	107.01	372.36	920.91	169.51	326.56	920.91	95.85	326.56	1229.35
	MIN	-29.23	-293.90	-733.43	-112.88	-293.90	-605.07	-41.32	-257.76	-605.07	-121.80	-257.76	-507.66

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3073			3074			3074			3075		
NODE		3073			3074			3074			3075		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	217.26	911.93	763.33	192.51	911.93	1381.83	177.09	638.62	1381.83	150.95	638.62	2177.20
	MIN	-23.39	-795.08	-2858.55	-46.64	-795.08	-1749.90	-22.42	-565.61	-1749.90	-46.65	-565.61	-1431.74
199	AASHTO-LRFD TRUCK-LOAD MAX	1096.08	1870.03	2906.02	969.62	1870.03	7247.36	970.02	1449.39	7247.36	837.46	1449.39	12466.63
	MIN	-52.61	-1789.10	-10427.59	-195.04	-1789.10	-9554.58	-112.14	-1342.63	-9554.58	-240.56	-1342.63	-8346.39
	TANDEM-LOAD MAX	497.60	720.58	1895.98	423.80	720.58	3917.78	457.38	576.04	3917.78	379.80	576.04	5712.79
	MIN	-80.64	-685.74	-3771.17	-158.36	-685.74	-3450.69	-109.54	-528.25	-3450.69	-187.93	-528.25	-3014.53
	DISPERSION-LMAX	798.37	1595.50	3596.46	723.05	1595.50	6533.18	680.82	1130.10	6533.18	609.87	1130.10	10927.86
	MIN	-45.74	-1523.61	-13318.53	-79.00	-1523.61	-9273.49	-59.35	-1066.90	-9273.49	-97.02	-1066.90	-8013.92
300	Total Dead lWithout snow	2512.01	160.48	-32300.10	2120.78	160.48	-9136.18	2075.85	167.24	-9136.18	1684.62	167.24	9666.14
301	Particular Snow	204.77	21.02	-2670.17	177.58	21.02	-758.43	168.99	17.95	-758.43	141.80	17.95	795.53
302	Live load Total MAX	968.65	1721.18	3907.28	846.80	1721.18	7744.63	852.74	1277.59	7744.63	730.52	1277.59	12328.73
	MIN	-82.15	-1937.94	-13891.48	-179.13	-1937.94	-11014.42	-115.63	-1409.57	-11014.42	-216.00	-1409.57	-9570.78
303	Sum total D+L+PP MAX	3685.42	1902.68	-29890.81	3145.16	1902.68	173.40	3097.57	1462.78	173.40	2556.94	1462.78	22790.40
	MIN	2609.98	-1916.92	-48861.75	2065.49	-1916.92	-20909.04	2094.51	-1391.63	-20909.04	1545.62	-1391.63	-1980.35

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3075			3076			3076			3077		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	273.95	2.32	1779.86	210.12	2.32	4200.22	174.48	-20.28	4200.22	110.65	-20.28	5625.88
3	Railing	5.73	2.02	51.79	9.10	2.02	125.91	2.65	0.14	125.91	6.02	0.14	169.28
5	Wheel guard	56.70	19.96	512.73	90.06	19.96	1246.54	26.25	1.35	1246.54	59.62	1.35	1675.90
8	Steel weight	1040.46	-14.67	6585.70	741.86	-14.67	15497.26	674.56	-83.73	15497.26	375.96	-83.73	20749.87
10	Medial strip	120.27	-12.62	681.07	59.63	-12.62	1580.57	83.50	-12.79	1580.57	22.86	-12.79	2112.37
19	Snow	121.86	1.54	795.53	94.67	1.54	1878.19	77.36	-8.88	1878.19	50.17	-8.88	2515.83
31	Miscellaneous	9.72	-1.02	54.98	4.82	-1.02	127.68	6.75	-1.03	127.68	1.85	-1.03	170.66
100	AASHTO-LRFD TRUCK-LOAD	546.92	724.50	8039.42	423.74	724.50	9819.79	481.48	696.61	9819.79	353.33	696.61	10791.24
	MIN	-178.07	-754.43	-4441.08	-300.37	-754.43	-3661.51	-228.38	-748.07	-3661.51	-355.44	-748.07	-2957.84
	TANDEM-LOAD	400.99	501.24	5712.79	318.61	501.24	6920.56	357.47	484.17	6920.56	270.87	484.17	7598.71
	MIN	-152.12	-523.55	-3014.53	-233.98	-523.55	-2485.38	-186.45	-521.08	-2485.38	-272.25	-521.08	-2007.74
	DISPERSION-LMAX	546.82	898.76	10927.86	482.23	898.76	13458.16	417.80	711.88	13458.16	358.21	711.88	14508.29
	MIN	-97.90	-892.82	-8013.92	-141.85	-892.82	-6605.95	-131.21	-743.38	-6605.95	-180.07	-743.38	-5336.37
110	Live load L-PICKUP 1	1093.74	1623.25	18967.28	905.98	1623.25	23277.95	899.28	1408.49	23277.95	711.54	1408.49	25299.53
	MIN	-275.97	-1647.24	-12455.00	-442.22	-1647.24	-10267.45	-359.59	-1491.45	-10267.45	-535.51	-1491.45	-8294.21
	L-PICKUP 2	947.81	1400.00	16640.65	800.84	1400.00	20378.73	775.26	1196.04	20378.73	629.08	1196.04	22107.01
	MIN	-250.02	-1416.36	-11028.45	-375.83	-1416.36	-9091.32	-317.66	-1264.46	-9091.32	-452.33	-1264.46	-7344.11
	L-PICKUP 3	-265.12	-1884.18	-14724.28	-424.92	-1884.18	-12138.46	-367.98	-1674.89	-12138.46	-538.25	-1674.89	-9805.66
	Live load	1093.74	1623.25	18967.28	905.98	1623.25	23277.95	899.28	1408.49	23277.95	711.54	1408.49	25299.53
	MIN	-275.97	-1884.18	-14724.28	-442.22	-1884.18	-12138.46	-367.98	-1674.89	-12138.46	-538.25	-1674.89	-9805.66
111	AASHTO Twin TWIN-PICKUP	1211.65	1871.06	21055.04	1029.07	1871.06	26331.46	970.23	1577.84	26331.46	787.31	1577.84	28745.27
	MIN	-265.12	-1884.18	-14724.28	-424.92	-1884.18	-12138.46	-367.98	-1674.89	-12138.46	-538.25	-1674.89	-9805.66
	MID-PICKUP	-265.12	-1884.18	-14724.28	-424.92	-1884.18	-12138.46	-367.98	-1674.89	-12138.46	-538.25	-1674.89	-9805.66
198	AASHTO FatigTRUCK-LOAD	206.88	394.63	1671.39	96.31	394.63	1981.20	196.96	314.05	1981.20	82.87	314.05	2151.36
	MIN	-53.09	-316.21	-748.32	-164.89	-316.21	-610.51	-62.60	-240.66	-610.51	-175.62	-240.66	-493.50
	TANDEM-LOAD	160.99	271.96	1229.35	82.48	271.96	1440.07	154.56	217.15	1440.07	72.80	217.15	1558.83
	MIN	-53.24	-215.86	-507.66	-132.57	-215.86	-414.43	-59.12	-164.77	-414.43	-140.11	-164.77	-334.93

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3075			3076			3076			3077		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	140.82	514.21	2177.20	114.04	514.21	2643.43	113.42	401.55	2643.43	86.47	401.55	2838.90
	MIN	-33.94	-466.16	-1431.74	-59.35	-466.16	-1166.79	-42.06	-390.47	-1166.79	-68.24	-390.47	-943.29
199	AASHTO-LRFD TRUCK-LOAD MAX	799.46	1180.20	12466.63	661.18	1180.20	15799.01	660.23	1041.27	15799.01	516.58	1041.27	17430.89
	MIN	-196.68	-1200.72	-8346.39	-330.29	-1200.72	-6881.23	-277.66	-1117.61	-6881.23	-417.99	-1117.61	-5558.80
	TANDEM-LOAD MAX	400.99	501.24	5712.79	318.61	501.24	6920.56	357.47	484.17	6920.56	270.87	484.17	7598.71
	MIN	-152.12	-523.55	-3014.53	-233.98	-523.55	-2485.38	-186.45	-521.08	-2485.38	-272.25	-521.08	-2007.74
	DISPERSION-LMAX	546.82	898.76	10927.86	482.23	898.76	13458.16	417.80	711.88	13458.16	358.21	711.88	14508.29
	MIN	-97.90	-892.82	-8013.92	-141.85	-892.82	-6605.95	-131.21	-743.38	-6605.95	-180.07	-743.38	-5336.37
300	Total Dead lWithout snow	1506.82	-4.02	9666.14	1115.59	-4.02	22778.18	968.19	-116.36	22778.18	576.96	-116.36	30503.96
301	Particular Snow	121.86	1.54	795.53	94.67	1.54	1878.19	77.36	-8.88	1878.19	50.17	-8.88	2515.83
302	Live load Total MAX	710.93	1055.11	12328.73	588.89	1055.11	15130.67	584.53	915.52	15130.67	462.50	915.52	16444.69
	MIN	-179.38	-1224.72	-9570.78	-287.44	-1224.72	-7890.00	-239.19	-1088.68	-7890.00	-349.86	-1088.68	-6373.68
303	Sum total D+L+PP MAX	2339.61	1056.65	22790.40	1799.15	1056.65	39787.04	1630.08	906.64	39787.04	1089.64	906.64	49464.49
	MIN	1395.48	-1227.20	-1980.35	836.59	-1227.20	14399.38	734.61	-1213.91	14399.38	172.31	-1213.91	24734.01

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3077			3078			3078			3079			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	93.62	-16.56	5625.88	29.79	-16.56	6242.92	19.49	-7.94	6242.92	-44.34	-7.94	6118.69	
3	Railing	0.18	-0.54	169.28	3.55	-0.54	187.93	-2.09	-1.09	187.93	1.28	-1.09	183.87	
5	Wheel guard	1.78	-5.37	1675.90	35.15	-5.37	1860.54	-20.71	-10.74	1860.54	12.66	-10.74	1820.30	
8	Steel weight	376.79	-60.53	20749.87	78.19	-60.53	23024.73	103.87	-19.17	23024.73	-194.73	-19.17	22570.43	
10	Medial strip	53.42	-5.90	2112.37	-7.22	-5.90	2343.34	25.87	2.89	2343.34	-34.76	2.89	2298.88	
19	Snow	41.19	-7.41	2515.83	14.00	-7.41	2791.78	8.03	-3.77	2791.78	-19.16	-3.77	2736.13	
31	Miscellaneous	4.32	-0.48	170.66	-0.58	-0.48	189.33	2.09	0.23	189.33	-2.81	0.23	185.75	
100	AASHTO-LRFD TRUCK-LOAD	MAX	430.84	695.70	10791.24	299.97	695.70	11010.45	379.87	696.97	11010.45	247.45	696.97	10414.73
		MIN	-266.51	-722.08	-2957.84	-397.08	-722.08	-2353.25	-308.91	-700.33	-2353.25	-441.69	-700.33	-1799.51
	TANDEM-LOAD	MAX	323.83	484.04	7598.71	234.90	484.04	7753.57	289.85	485.09	7753.57	199.54	485.09	7318.45
		MIN	-212.22	-502.73	-2007.74	-301.09	-502.73	-1597.35	-240.91	-487.63	-1597.35	-331.66	-487.63	-1221.48
	DISPERSION-LMAX	MAX	320.73	642.19	14508.29	264.95	642.19	14421.56	250.38	696.16	14421.56	198.56	696.16	13220.62
		MIN	-166.00	-668.90	-5336.37	-218.66	-668.90	-4245.57	-216.54	-710.82	-4245.57	-273.16	-710.82	-3246.54
110	Live load L-PICKUP 1	MAX	751.57	1337.89	25299.53	564.92	1337.89	25432.01	630.25	1393.13	25432.01	446.00	1393.13	23635.35
		MIN	-432.51	-1390.98	-8294.21	-615.74	-1390.98	-6598.81	-525.44	-1411.16	-6598.81	-714.85	-1411.16	-5046.04
	L-PICKUP 2	MAX	644.56	1126.23	22107.01	499.84	1126.23	22175.13	540.23	1181.25	22175.13	398.10	1181.25	20539.07
		MIN	-378.22	-1171.63	-7344.11	-519.75	-1171.63	-5842.91	-457.45	-1198.45	-5842.91	-604.81	-1198.45	-4468.01
	L-PICKUP 3	MAX	464.86	1537.10	9805.66	641.83	1537.10	7801.32	583.20	1547.86	7801.32	766.23	1547.86	5965.59
		MIN	-464.86	-1537.10	-9805.66	-641.83	-1537.10	-7801.32	-583.20	-1547.86	-7801.32	-766.23	-1547.86	-5965.59
	Live load	MAX	751.57	1337.89	25299.53	564.92	1337.89	25432.01	630.25	1393.13	25432.01	446.00	1393.13	23635.35
		MIN	-464.86	-1537.10	-9805.66	-641.83	-1537.10	-7801.32	-583.20	-1547.86	-7801.32	-766.23	-1547.86	-5965.59
111	AASHTO Twin TWIN-PICKUP	MAX	782.97	1473.19	28745.27	599.78	1473.19	28980.24	626.94	1524.89	28980.24	444.33	1524.89	27136.42
		MIN	-464.86	-1537.10	-9805.66	-641.83	-1537.10	-7801.32	-583.20	-1547.86	-7801.32	-766.23	-1547.86	-5965.59
	MID-PICKUP	MAX	464.86	1537.10	9805.66	641.83	1537.10	7801.32	583.20	1547.86	7801.32	766.23	1547.86	5965.59
198	AASHTO FatigTRUCK-LOAD	MAX	189.54	230.29	2151.36	74.10	230.29	2189.95	181.88	223.83	2189.95	66.19	223.83	2086.25
		MIN	-68.42	-224.27	-493.50	-183.35	-224.27	-392.42	-75.17	-304.73	-392.42	-191.42	-304.73	-300.22
	TANDEM-LOAD	MAX	149.65	160.70	1558.83	66.45	160.70	1586.64	144.61	153.73	1586.64	60.96	153.73	1511.41
		MIN	-62.61	-157.12	-334.93	-145.46	-157.12	-266.38	-67.01	-211.12	-266.38	-151.07	-211.12	-203.76

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3077			3078			3078			3079		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	95.05	348.30	2838.90	68.12	348.30	2827.90	81.78	368.41	2827.90	55.15	368.41	2620.22
	MIN	-49.32	-356.30	-943.29	-76.02	-356.30	-749.99	-59.37	-397.22	-749.99	-86.30	-397.22	-573.85
199	AASHTO-LRFD TRUCK-LOAD MAX	549.24	994.69	17430.89	401.47	994.69	17778.71	446.22	998.16	17778.71	295.14	998.16	16930.96
	MIN	-350.51	-1038.99	-5558.80	-494.49	-1038.99	-4422.56	-431.46	-1009.02	-4422.56	-578.21	-1009.02	-3381.90
	TANDEM-LOAD MAX	323.83	484.04	7598.71	234.90	484.04	7753.57	289.85	485.09	7753.57	199.54	485.09	7318.45
	MIN	-212.22	-502.73	-2007.74	-301.09	-502.73	-1597.35	-240.91	-487.63	-1597.35	-331.66	-487.63	-1221.48
	DISPERSION-LMAX	320.73	642.19	14508.29	264.95	642.19	14421.56	250.38	696.16	14421.56	198.56	696.16	13220.62
	MIN	-166.00	-668.90	-5336.37	-218.66	-668.90	-4245.57	-216.54	-710.82	-4245.57	-273.16	-710.82	-3246.54
300	Total Dead lWithout snow	530.10	-89.38	30503.96	138.87	-89.38	33848.79	128.53	-35.81	33848.79	-262.70	-35.81	33177.92
301	Particular Snow	41.19	-7.41	2515.83	14.00	-7.41	2791.78	8.03	-3.77	2791.78	-19.16	-3.77	2736.13
302	Live load Total MAX	488.52	869.63	16444.69	367.20	869.63	16530.81	409.66	905.53	16530.81	289.90	905.53	15362.98
	MIN	-302.16	-999.12	-6373.68	-417.19	-999.12	-5070.86	-379.08	-1006.11	-5070.86	-498.05	-1006.11	-3877.63
303	Sum total D+L+PP MAX	1059.80	862.21	49464.49	520.07	862.21	53171.38	546.22	901.77	53171.38	95.01	901.77	51277.03
	MIN	178.48	-1095.91	24734.01	-389.47	-1095.91	30048.46	-356.25	-1045.69	30048.46	-779.91	-1045.69	30873.13

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		3079			3080			3080			3081		
NODE		3079			3080			3080			3081		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-46.78	12.83	6118.69	-110.60	12.83	5331.79	-130.61	6.24	5331.79	-194.44	6.24	3706.56
3	Railing	-4.21	-1.74	183.87	-0.84	-1.74	158.65	-7.12	-4.70	158.65	-3.75	-4.70	104.30
5	Wheel guard	-41.65	-17.25	1820.30	-8.28	-17.25	1570.67	-70.49	-46.55	1570.67	-37.12	-46.55	1032.60
8	Steel weight	-139.10	72.72	22570.43	-437.70	72.72	19686.45	-443.62	81.40	19686.45	-742.22	81.40	13757.21
10	Medial strip	1.84	19.57	2298.88	-58.80	19.57	2014.06	-26.92	36.24	2014.06	-87.56	36.24	1441.64
19	Snow	-21.64	5.19	2736.13	-48.82	5.19	2383.84	-59.23	1.53	2383.84	-86.41	1.53	1655.66
31	Miscellaneous	0.15	1.58	185.75	-4.75	1.58	162.74	-2.17	2.93	162.74	-7.07	2.93	116.49
100	AASHTO-LRFD TRUCK-LOAD	342.19	730.35	10414.73	209.87	730.35	8960.40	287.46	881.22	8960.40	164.53	881.22	6340.11
	MIN	-347.02	-733.98	-1799.51	-480.68	-733.98	-1286.11	-410.80	-884.44	-1286.11	-544.58	-884.44	-765.32
	TANDEM-LOAD	264.73	510.56	7318.45	175.05	510.56	6298.72	224.13	603.30	6298.72	143.66	603.30	4465.59
	MIN	-266.61	-507.06	-1221.48	-358.07	-507.06	-872.99	-310.15	-606.41	-872.99	-401.57	-606.41	-519.49
	DISPERSION-LMAX	202.01	920.33	13220.62	153.39	920.33	11015.47	166.03	1261.84	11015.47	122.35	1261.84	7432.89
	MIN	-276.30	-901.66	-3246.54	-336.11	-901.66	-2320.38	-377.08	-1253.52	-2320.38	-441.93	-1253.52	-1380.80
110	Live load L-PICKUP 1	544.21	1650.67	23635.35	363.26	1650.67	19975.87	453.49	2143.06	19975.87	286.88	2143.06	13773.00
	MIN	-623.32	-1635.65	-5046.04	-816.80	-1635.65	-3606.49	-787.87	-2137.96	-3606.49	-986.51	-2137.96	-2146.12
	L-PICKUP 2	466.74	1430.89	20539.07	328.44	1430.89	17314.19	390.15	1865.14	17314.19	266.01	1865.14	11898.48
	MIN	-542.91	-1408.72	-4468.01	-694.18	-1408.72	-3193.37	-687.22	-1859.93	-3193.37	-843.49	-1859.93	-1900.29
	L-PICKUP 3	-706.62	-1914.30	-5965.59	-893.25	-1914.30	-4263.69	-906.24	-2524.83	-4263.69	-1098.95	-2524.83	-2537.19
	Live load	544.21	1650.67	23635.35	363.26	1650.67	19975.87	453.49	2143.06	19975.87	286.88	2143.06	13773.00
	MIN	-706.62	-1914.30	-5965.59	-893.25	-1914.30	-4263.69	-906.24	-2524.83	-4263.69	-1098.95	-2524.83	-2537.19
111	AASHTO Twin TWIN-PICKUP	528.30	1915.69	27136.42	343.86	1915.69	23050.04	428.75	2534.68	23050.04	273.62	2534.68	15995.24
	MIN	-706.62	-1914.30	-5965.59	-893.25	-1914.30	-4263.69	-906.24	-2524.83	-4263.69	-1098.95	-2524.83	-2537.19
	MID-PICKUP	-706.62	-1914.30	-5965.59	-893.25	-1914.30	-4263.69	-906.24	-2524.83	-4263.69	-1098.95	-2524.83	-2537.19
198	AASHTO FatigTRUCK-LOAD	175.95	315.32	2086.25	61.37	315.32	1834.40	165.75	409.58	1834.40	48.93	409.58	1361.83
	MIN	-80.78	-389.67	-300.22	-197.65	-389.67	-215.43	-94.70	-488.23	-215.43	-208.79	-488.23	-128.47
	TANDEM-LOAD	140.70	215.24	1511.41	57.89	215.24	1336.31	134.12	278.94	1336.31	50.43	278.94	1003.95
	MIN	-70.94	-268.58	-203.76	-155.39	-268.58	-146.18	-80.79	-335.80	-146.18	-163.26	-335.80	-87.17

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3079			3080			3080			3081		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	71.39	479.15	2620.22	45.24	479.15	2234.58	61.37	664.15	2234.58	35.82	664.15	1551.53
	MIN	-71.36	-520.13	-573.85	-98.29	-520.13	-411.78	-93.41	-716.40	-411.78	-119.87	-716.40	-245.57
199	AASHTO-LRFD TRUCK-LOAD MAX	384.99	1208.21	16930.96	228.67	1208.21	14595.68	310.36	1554.47	14595.68	181.67	1554.47	10339.60
	MIN	-508.83	-1225.33	-3381.90	-656.39	-1225.33	-2417.05	-629.85	-1551.85	-2417.05	-779.12	-1551.85	-1438.30
	TANDEM-LOAD MAX	264.73	510.56	7318.45	175.05	510.56	6298.72	224.13	603.30	6298.72	143.66	603.30	4465.59
	MIN	-266.61	-507.06	-1221.48	-358.07	-507.06	-872.99	-310.15	-606.41	-872.99	-401.57	-606.41	-519.49
	DISPERSION-LMAX	202.01	920.33	13220.62	153.39	920.33	11015.47	166.03	1261.84	11015.47	122.35	1261.84	7432.89
	MIN	-276.30	-901.66	-3246.54	-336.11	-901.66	-2320.38	-377.08	-1253.52	-2320.38	-441.93	-1253.52	-1380.80
300	Total Dead lWithout snow	-229.74	87.71	33177.92	-620.97	87.71	28924.36	-680.94	75.55	28924.36	-1072.17	75.55	20158.80
301	Particular Snow	-21.64	5.19	2736.13	-48.82	5.19	2383.84	-59.23	1.53	2383.84	-86.41	1.53	1655.66
302	Live load Total MAX	353.73	1072.94	15362.98	236.12	1072.94	12984.32	294.77	1392.99	12984.32	186.47	1392.99	8952.45
	MIN	-459.30	-1244.29	-3877.63	-580.62	-1244.29	-2771.40	-589.05	-1641.14	-2771.40	-714.31	-1641.14	-1649.17
303	Sum total D+L+PP MAX	208.48	1165.83	51277.03	-362.84	1165.83	44292.51	-356.97	1470.07	44292.51	-916.16	1470.07	30766.91
	MIN	-710.68	-1239.10	30873.13	-1250.41	-1239.10	27705.38	-1329.22	-1639.61	27705.38	-1872.89	-1639.61	19670.53

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	3081			3082			4001			4002			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-241.14	-49.96	3706.56	-324.75	-49.96	0.00	344.98	38.04	0.61	238.94	38.04	3154.25	
3	Railing	-10.17	-10.25	104.30	-5.75	-10.25	0.00	14.11	12.96	0.21	5.17	12.96	104.34	
5	Wheel guard	-100.68	-101.48	1032.60	-56.97	-101.48	0.00	139.66	128.26	2.07	51.23	128.26	1032.97	
8	Steel weight	-854.59	-79.80	13757.21	-1245.75	-79.80	0.00	1227.61	-0.80	-0.01	905.12	-0.80	11518.25	
10	Medial strip	-70.33	41.88	1441.64	-149.77	41.88	0.00	163.91	-119.72	-1.94	163.91	-119.72	1768.54	
19	Snow	-108.58	-24.59	1655.66	-144.19	-24.59	0.00	160.44	15.53	0.25	111.55	15.53	1469.23	
31	Miscellaneous	-5.68	3.38	116.49	-12.10	3.38	0.00	8.37	-5.44	-0.09	8.37	-5.44	90.36	
100	AASHTO-LRFD TRUCK-LOAD	MAX	247.88	951.67	6340.11	97.38	951.67	0.00	696.80	646.37	10.45	480.11	646.37	5184.03
		MIN	-532.41	-1001.28	-765.32	-719.46	-1001.28	0.00	-48.22	-628.73	-10.16	-227.07	-628.73	-520.83
		TANDEM-LOAD MAX	198.83	650.10	4465.59	84.02	650.10	0.00	509.70	443.94	7.18	342.90	443.94	3702.29
		MIN	-391.59	-686.67	-519.49	-519.42	-686.67	0.00	-32.81	-433.57	-7.01	-189.63	-433.57	-354.31
		DISPERSION-LMAX	150.50	1393.65	7432.89	114.52	1393.65	0.00	632.34	1013.46	16.38	510.25	1013.46	5935.77
		MIN	-542.33	-1478.15	-1380.80	-648.57	-1478.15	0.00	-87.22	-944.70	-15.27	-129.03	-944.70	-942.01
110	Live load	L-PICKUP 1 MAX	398.38	2345.32	13773.00	211.90	2345.32	0.00	1329.15	1659.83	26.83	990.37	1659.83	11119.80
		MIN	-1074.74	-2479.44	-2146.12	-1368.03	-2479.44	0.00	-135.44	-1573.44	-25.44	-356.11	-1573.44	-1462.84
		L-PICKUP 2 MAX	349.33	2043.75	11898.48	198.54	2043.75	0.00	1142.05	1457.40	23.56	853.15	1457.40	9638.06
		MIN	-933.92	-2164.83	-1900.29	-1167.99	-2164.83	0.00	-120.03	-1378.27	-22.28	-318.67	-1378.27	-1296.32
		L-PICKUP 3	-1246.89	-2938.07	-2537.19	-1546.47	-2938.07	0.00	-160.00	-1854.00	-29.97	-351.87	-1854.00	-1728.10
		Live load MAX	398.38	2345.32	13773.00	211.90	2345.32	0.00	1329.15	1659.83	26.83	990.37	1659.83	11119.80
MIN	-1246.89	-2938.07	-2537.19	-1546.47	-2938.07	0.00	-160.00	-1854.00	-29.97	-356.11	-1854.00	-1728.10		
111	AASHTO Twin	TWIN-PICKUP MAX	389.32	2786.40	15995.24	229.17	2786.40	0.00	1488.97	1952.60	31.57	1147.36	1952.60	12792.27
		MIN	-1246.89	-2938.07	-2537.19	-1546.47	-2938.07	0.00	-160.00	-1854.00	-29.97	-351.87	-1854.00	-1728.10
		MID-PICKUP	-1246.89	-2938.07	-2537.19	-1546.47	-2938.07	0.00	-160.00	-1854.00	-29.97	-351.87	-1854.00	-1728.10
198	AASHTO Fatig	TRUCK-LOAD MAX	156.19	448.29	1361.83	45.57	448.29	0.00	377.17	398.45	6.44	166.30	398.45	1802.16
		MIN	-137.61	-555.35	-128.47	-269.01	-555.35	0.00	-8.50	-275.89	-4.46	-187.35	-275.89	-92.01
		TANDEM-LOAD MAX	128.87	306.03	1003.95	48.29	306.03	0.00	291.09	274.61	4.44	125.12	274.61	1355.38
		MIN	-110.59	-382.16	-87.17	-205.24	-382.16	0.00	-5.77	-187.16	-3.03	-162.60	-187.16	-62.46

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	3081	3082			4001			4002				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	51.68	721.87	1551.53	27.86	721.87	0.00	222.48	633.78	10.25	143.64	633.78	1731.09
MIN	-130.03	-850.33	-245.57	-170.26	-850.33	0.00	-16.26	-477.15	-7.71	-52.84	-477.15	-176.05
199 AASHTO-LRFD TRUCK-LOAD MAX	282.08	1702.35	10339.60	140.12	1702.35	0.00	1022.06	1156.09	18.69	764.60	1156.09	8277.87
MIN	-843.10	-1786.37	-1438.30	-1069.72	-1786.37	0.00	-90.56	-1115.30	-18.03	-261.93	-1115.30	-978.10
TANDEM-LOAD MAX	198.83	650.10	4465.59	84.02	650.10	0.00	509.70	443.94	7.18	342.90	443.94	3702.29
MIN	-391.59	-686.67	-519.49	-519.42	-686.67	0.00	-32.81	-433.57	-7.01	-189.63	-433.57	-354.31
DISPERSION-LMAX	150.50	1393.65	7432.89	114.52	1393.65	0.00	632.34	1013.46	16.38	510.25	1013.46	5935.77
MIN	-542.33	-1478.15	-1380.80	-648.57	-1478.15	0.00	-87.22	-944.70	-15.27	-129.03	-944.70	-942.01
300 Total Dead lWithout snow	-1282.58	-196.22	20158.80	-1795.10	-196.22	0.00	1898.64	53.29	0.86	1372.75	53.29	17668.71
301 Particular Snow	-108.58	-24.59	1655.66	-144.19	-24.59	0.00	160.44	15.53	0.25	111.55	15.53	1469.23
302 Live load Total MAX	258.94	1524.46	8952.45	137.73	1524.46	0.00	863.94	1078.89	17.44	643.74	1078.89	7227.87
MIN	-810.48	-1909.75	-1649.17	-1005.20	-1909.75	0.00	-104.00	-1205.10	-19.48	-231.47	-1205.10	-1123.26
303 Sum total D+L+PP MAX	-1054.54	1499.87	30766.91	-1760.23	1499.87	0.00	2923.03	1147.71	18.55	2128.04	1147.71	26365.81
MIN	-2201.64	-2130.55	19670.53	-2944.49	-2130.55	0.00	1923.88	-1189.57	-19.23	1183.39	-1189.57	17677.70

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4002			4003			4003			4004			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	260.14	-15.60	3153.83	161.94	-15.60	5264.92	180.44	-32.92	5264.48	82.24	-32.92	6578.33	
3	Railing	10.03	7.66	104.34	1.76	7.66	163.34	7.90	3.14	163.22	-0.37	3.14	200.86	
5	Wheel guard	99.32	75.82	1032.99	17.45	75.82	1617.04	78.19	31.09	1615.92	-3.69	31.09	1988.52	
8	Steel weight	932.91	-154.61	11516.51	634.31	-154.61	19355.06	635.92	-170.71	19354.66	337.32	-170.71	24222.35	
10	Medial strip	116.67	-87.54	1768.60	116.67	-87.54	2935.69	56.75	-35.26	2937.01	56.75	-35.26	3504.64	
19	Snow	119.87	-7.08	1469.07	74.59	-7.08	2441.68	81.86	-13.16	2441.52	36.58	-13.16	3033.88	
31	Miscellaneous	6.65	-5.00	90.34	6.65	-5.00	156.91	4.09	-3.29	156.95	4.09	-3.29	197.89	
100	AASHTO-LRFD TRUCK-LOAD	MAX	580.22	617.85	5178.51	417.35	617.85	8302.97	514.99	551.89	8300.59	356.48	551.89	10252.07
		MIN	-125.53	-614.00	-520.70	-300.20	-614.00	-1010.72	-175.16	-546.17	-1010.66	-342.91	-546.17	-1494.21
		TANDEM-LOAD MAX	423.29	431.34	3697.49	300.29	431.34	5867.53	378.26	383.07	5865.67	258.94	383.07	7218.46
		MIN	-102.80	-420.82	-354.22	-233.36	-420.82	-687.63	-136.16	-379.46	-687.59	-262.67	-379.46	-1016.56
		DISPERSION-LMAX	521.12	945.03	5935.13	429.07	945.03	10187.47	421.56	752.58	10186.47	335.37	752.58	13187.11
		MIN	-107.03	-963.72	-941.79	-169.27	-963.72	-1827.66	-129.95	-798.83	-1827.56	-200.74	-798.83	-2701.61
110	Live load	L-PICKUP 1 MAX	1101.35	1562.88	11113.64	846.42	1562.88	18490.44	936.55	1304.47	18487.06	691.84	1304.47	23439.18
		MIN	-232.55	-1577.72	-1462.49	-469.47	-1577.72	-2838.38	-305.11	-1345.00	-2838.22	-543.65	-1345.00	-4195.82
		L-PICKUP 2 MAX	944.42	1376.38	9632.62	729.36	1376.38	16055.00	799.82	1135.64	16052.14	594.31	1135.64	20405.57
		MIN	-209.83	-1384.54	-1296.01	-402.63	-1384.54	-2515.28	-266.11	-1178.29	-2515.15	-463.41	-1178.29	-3718.17
		L-PICKUP 3	-235.18	-1858.63	-1727.69	-448.40	-1858.63	-3353.13	-293.82	-1553.30	-3352.94	-530.70	-1553.30	-4956.83
		Live load MAX	1101.35	1562.88	11113.64	846.42	1562.88	18490.44	936.55	1304.47	18487.06	691.84	1304.47	23439.18
MIN	-235.18	-1858.63	-1727.69	-469.47	-1858.63	-3353.13	-305.11	-1553.30	-3352.94	-543.65	-1553.30	-4956.83		
111	AASHTO Twin	TWIN-PICKUP MAX	1231.31	1829.91	12788.20	972.28	1829.91	21255.31	1032.68	1507.62	21253.02	784.41	1507.62	26913.39
		MIN	-235.18	-1858.63	-1727.69	-448.40	-1858.63	-3353.13	-293.82	-1553.30	-3352.94	-530.70	-1553.30	-4956.83
		MID-PICKUP	-235.18	-1858.63	-1727.69	-448.40	-1858.63	-3353.13	-293.82	-1553.30	-3352.94	-530.70	-1553.30	-4956.83
198	AASHTO Fatig	TRUCK-LOAD MAX	293.55	380.34	1799.99	137.40	380.34	2483.91	275.87	320.34	2477.43	125.83	320.34	2843.79
		MIN	-72.11	-276.73	-92.15	-230.49	-276.73	-173.29	-93.31	-227.87	-173.29	-244.67	-227.87	-253.07
		TANDEM-LOAD MAX	226.86	263.28	1353.08	105.58	263.28	1833.83	213.66	222.22	1828.90	97.59	222.22	2084.49
		MIN	-62.58	-189.23	-62.55	-184.17	-189.23	-117.76	-76.28	-155.78	-117.76	-192.54	-155.78	-172.06

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4002			4003			4003			4004		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	160.06	577.49	1735.23	102.19	577.49	2578.88	141.04	468.99	2575.27	84.91	468.99	3106.17
	MIN	-29.64	-490.93	-176.30	-80.07	-490.93	-331.58	-39.41	-404.69	-331.57	-93.90	-404.69	-484.25
199	AASHTO-LRFD TRUCK-LOAD MAX	847.00	1088.20	8273.98	651.24	1088.20	13429.54	725.86	922.56	13428.00	536.20	922.56	16716.66
	MIN	-154.28	-1101.43	-977.86	-328.96	-1101.43	-1898.04	-196.51	-927.06	-1897.93	-388.92	-927.06	-2805.98
	TANDEM-LOAD MAX	423.29	431.34	3697.49	300.29	431.34	5867.53	378.26	383.07	5865.67	258.94	383.07	7218.46
	MIN	-102.80	-420.82	-354.22	-233.36	-420.82	-687.63	-136.16	-379.46	-687.59	-262.67	-379.46	-1016.56
	DISPERSION-LMAX	521.12	945.03	5935.13	429.07	945.03	10187.47	421.56	752.58	10186.47	335.37	752.58	13187.11
	MIN	-107.03	-963.72	-941.79	-169.27	-963.72	-1827.66	-129.95	-798.83	-1827.56	-200.74	-798.83	-2701.61
300	Total Dead lWithout snow	1425.74	-179.27	17666.61	938.79	-179.27	29492.96	963.28	-207.94	29492.24	476.33	-207.94	36692.59
301	Particular Snow	119.87	-7.08	1469.07	74.59	-7.08	2441.68	81.86	-13.16	2441.52	36.58	-13.16	3033.88
302	Live load Total MAX	715.87	1015.87	7223.87	550.17	1015.87	12018.79	608.76	847.90	12016.59	449.70	847.90	15235.46
	MIN	-152.87	-1208.11	-1123.00	-305.16	-1208.11	-2179.53	-198.32	-1009.65	-2179.41	-353.37	-1009.65	-3221.94
303	Sum total D+L+PP MAX	2261.48	1008.79	26359.55	1563.55	1008.79	43953.42	1653.89	834.74	43950.35	962.61	834.74	54961.94
	MIN	1346.88	-1394.46	17675.79	616.67	-1394.46	29101.25	787.32	-1230.75	29100.53	53.52	-1230.75	35537.95

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4004			MEMBER 4005			MEMBER 4005			MEMBER 4006			
		NODE 4004			NODE 4005			NODE 4005			NODE 4006			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	105.03	-60.17	6577.65	6.83	-60.17	7137.09	29.76	-37.40	7136.75	-68.43	-37.40	6943.33	
3	Railing	5.78	-0.00	200.78	-2.49	-0.00	217.28	3.55	-0.61	217.23	-4.72	-0.61	211.38	
5	Wheel guard	57.26	-0.02	1987.74	-24.61	-0.02	2151.05	35.15	-6.02	2150.58	-46.73	-6.02	2092.69	
8	Steel weight	355.99	-243.44	24220.52	57.39	-243.44	26288.10	78.11	-144.05	26287.29	-220.49	-144.05	25575.26	
10	Medial strip	10.48	-19.89	3505.02	10.48	-19.89	3609.90	-25.43	0.31	3609.79	-25.43	0.31	3355.41	
19	Snow	46.71	-25.12	3033.58	1.43	-25.12	3274.35	12.41	-15.04	3274.17	-32.86	-15.04	3171.91	
31	Miscellaneous	1.72	-2.82	197.90	1.72	-2.82	215.09	-0.58	-1.42	215.11	-0.58	-1.42	209.28	
100	AASHTO-LRFD TRUCK-LOAD	MAX	468.02	458.21	10249.69	306.78	458.21	11252.19	429.37	440.45	11250.87	262.48	440.45	11378.03
		MIN	-214.41	-530.70	-1494.04	-384.80	-530.70	-1980.17	-256.29	-513.87	-1980.06	-427.78	-513.87	-2478.55
		TANDEM-LOAD MAX	346.97	317.07	7216.83	225.60	317.07	7919.75	321.81	308.11	7918.73	195.75	308.11	8029.43
		MIN	-162.93	-368.99	-1016.45	-292.42	-368.99	-1347.17	-191.59	-358.94	-1347.10	-323.91	-358.94	-1686.24
		DISPERSION-LMAX	333.80	543.13	13185.46	251.33	543.13	14998.26	260.81	440.34	14997.20	181.53	440.34	15624.27
		MIN	-160.29	-634.09	-2701.31	-236.97	-634.09	-3579.98	-207.88	-498.73	-3579.77	-289.51	-498.73	-4480.82
110	Live load	L-PICKUP 1 MAX	801.82	1001.34	23435.15	558.11	1001.34	26250.45	690.18	880.78	26248.08	444.02	880.78	27002.30
		MIN	-374.70	-1164.80	-4195.35	-621.77	-1164.80	-5560.15	-464.17	-1012.61	-5559.83	-717.29	-1012.61	-6959.37
		L-PICKUP 2 MAX	680.77	860.20	20402.29	476.93	860.20	22918.01	582.62	748.45	22915.94	377.28	748.45	23653.71
		MIN	-323.22	-1003.08	-3717.76	-529.38	-1003.08	-4927.16	-399.47	-857.67	-4926.87	-613.42	-857.67	-6167.07
		L-PICKUP 3	-368.64	-1308.86	-4956.29	-626.20	-1308.86	-6568.69	-480.51	-1131.10	-6568.32	-742.81	-1131.10	-8221.78
		Live load MAX	801.82	1001.34	23435.15	558.11	1001.34	26250.45	690.18	880.78	26248.08	444.02	880.78	27002.30
MIN	-374.70	-1308.86	-4956.29	-626.20	-1308.86	-6568.69	-480.51	-1131.10	-6568.32	-742.81	-1131.10	-8221.78		
111	AASHTO Twin	TWIN-PICKUP MAX	867.56	1153.80	26909.97	621.06	1153.80	29960.79	727.72	964.15	29957.51	479.84	964.15	30621.24
		MIN	-368.64	-1308.86	-4956.29	-626.20	-1308.86	-6568.69	-480.51	-1131.10	-6568.32	-742.81	-1131.10	-8221.78
		MID-PICKUP	-368.64	-1308.86	-4956.29	-626.20	-1308.86	-6568.69	-480.51	-1131.10	-6568.32	-742.81	-1131.10	-8221.78
198	AASHTO Fatig	TRUCK-LOAD MAX	265.32	257.06	2837.06	117.00	257.06	2992.81	257.03	209.64	2986.42	109.16	209.64	2977.49
		MIN	-105.37	-176.26	-253.04	-229.67	-176.26	-332.93	-102.57	-156.48	-332.80	-262.27	-156.48	-414.82
		TANDEM-LOAD MAX	206.15	178.24	2079.40	91.61	178.24	2190.24	200.47	146.61	2185.53	86.25	146.61	2181.71
		MIN	-84.01	-121.02	-172.04	-198.61	-121.02	-226.42	-89.75	-111.27	-226.33	-204.02	-111.27	-282.16

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4004			4005			4005			4006		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	123.77	348.19	3102.04	68.03	348.19	3377.75	107.69	269.57	3372.71	51.75	269.57	3426.65
	MIN	-50.04	-315.97	-484.20	-106.38	-315.97	-637.09	-61.39	-267.92	-636.83	-118.81	-267.92	-793.81
199	AASHTO-LRFD TRUCK-LOAD MAX	630.16	738.87	16714.51	438.73	738.87	18291.52	547.77	630.94	18288.92	351.62	630.94	18399.33
	MIN	-249.31	-820.20	-2805.67	-458.81	-820.20	-3718.56	-326.02	-758.04	-3718.36	-535.83	-758.04	-4654.49
	TANDEM-LOAD MAX	346.97	317.07	7216.83	225.60	317.07	7919.75	321.81	308.11	7918.73	195.75	308.11	8029.43
	MIN	-162.93	-368.99	-1016.45	-292.42	-368.99	-1347.17	-191.59	-358.94	-1347.10	-323.91	-358.94	-1686.24
	DISPERSION-LMAX	333.80	543.13	13185.46	251.33	543.13	14998.26	260.81	440.34	14997.20	181.53	440.34	15624.27
	MIN	-160.29	-634.09	-2701.31	-236.97	-634.09	-3579.98	-207.88	-498.73	-3579.77	-289.51	-498.73	-4480.82
300	Total Dead lWithout snow	536.27	-326.34	36689.62	49.32	-326.34	39618.51	120.55	-189.18	39616.76	-366.39	-189.18	38387.35
301	Particular Snow	46.71	-25.12	3033.58	1.43	-25.12	3274.35	12.41	-15.04	3274.17	-32.86	-15.04	3171.91
302	Live load Total MAX	521.18	650.87	15232.85	362.77	650.87	17062.79	448.62	572.51	17061.25	288.61	572.51	17551.50
	MIN	-243.55	-850.76	-3221.59	-407.03	-850.76	-4269.65	-312.33	-735.21	-4269.41	-482.83	-735.21	-5344.16
303	Sum total D+L+PP MAX	1104.16	494.67	54956.04	413.52	494.67	59955.66	581.58	540.04	59952.18	-24.06	540.04	59110.75
	MIN	266.36	-1202.22	35535.13	-405.60	-1202.22	37342.32	-273.08	-939.43	37340.70	-882.08	-939.43	34611.85

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4006			MEMBER 4007			MEMBER 4007			MEMBER 4008			
		NODE 4006			NODE 4007			NODE 4007			NODE 4008			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-38.66	28.38	6942.95	-136.83	28.38	6065.52	-130.26	32.10	6065.52	-228.43	32.10	4272.04	
3	Railing	1.44	0.56	211.36	-6.83	0.56	184.41	-1.26	-0.47	184.41	-9.53	-0.47	130.42	
5	Wheel guard	14.26	5.57	2092.48	-67.62	5.57	1825.66	-12.51	-4.65	1825.66	-94.39	-4.65	1291.19	
8	Steel weight	-173.56	108.15	25573.99	-472.16	108.15	22345.42	-512.05	135.54	22345.42	-810.65	135.54	15731.94	
10	Medial strip	-51.68	31.08	3354.92	-51.68	31.08	2838.07	-87.83	34.41	2838.07	-87.83	34.41	1959.74	
19	Snow	-18.27	14.21	3171.70	-63.54	14.21	2762.62	-59.35	15.06	2762.62	-104.61	15.06	1942.83	
31	Miscellaneous	-2.63	1.02	209.27	-2.63	1.02	182.94	-5.44	1.76	182.94	-5.44	1.76	128.53	
100	AASHTO-LRFD TRUCK-LOAD	MAX	404.54	521.38	11377.10	231.42	521.38	10879.78	343.98	538.63	10879.78	170.27	538.63	9365.53
		MIN	-297.58	-463.94	-2478.47	-470.57	-463.94	-3031.18	-371.53	-474.71	-3031.18	-545.93	-474.71	-3509.30
		TANDEM-LOAD MAX	306.16	364.35	8028.70	175.13	364.35	7667.68	265.16	376.03	7667.68	132.86	376.03	6621.20
		MIN	-220.15	-323.94	-1686.19	-351.08	-323.94	-2062.22	-270.00	-330.77	-2062.22	-402.41	-330.77	-2387.49
		DISPERSION-LMAX	218.03	488.40	15623.45	140.84	488.40	15237.85	157.88	575.89	15237.85	87.83	575.89	13229.89
		MIN	-275.75	-444.52	-4480.65	-360.17	-444.52	-5479.81	-364.68	-528.25	-5479.81	-456.12	-528.25	-6344.48
110	Live load	L-PICKUP 1 MAX	622.56	1009.79	27000.54	372.26	1009.79	26117.64	501.86	1114.52	26117.63	258.10	1114.52	22595.42
		MIN	-573.33	-908.47	-6959.13	-830.75	-908.47	-8510.99	-736.22	-1002.96	-8510.99	-1002.05	-1002.96	-9853.78
		L-PICKUP 2 MAX	524.19	852.75	23652.15	315.97	852.75	22905.53	423.04	951.92	22905.53	220.69	951.92	19851.09
		MIN	-495.90	-768.46	-6166.85	-711.25	-768.46	-7542.03	-634.69	-859.02	-7542.02	-858.52	-859.02	-8731.97
		L-PICKUP 3	-618.26	-1013.97	-8221.50	-879.25	-1013.97	-10054.88	-825.36	-1134.52	-10054.88	-1095.32	-1134.52	-11641.16
		Live load MAX	622.56	1009.79	27000.54	372.26	1009.79	26117.64	501.86	1114.52	26117.63	258.10	1114.52	22595.42
MIN	-618.26	-1013.97	-8221.50	-879.25	-1013.97	-10054.88	-825.36	-1134.52	-10054.88	-1095.32	-1134.52	-11641.16		
111	AASHTO Twin TWIN-PICKUP	MAX	637.02	1135.16	30621.74	386.39	1135.16	29596.99	491.81	1258.92	29596.99	252.37	1258.92	25447.86
		MIN	-618.26	-1013.97	-8221.50	-879.25	-1013.97	-10054.88	-825.36	-1134.52	-10054.88	-1095.32	-1134.52	-11641.16
		MID-PICKUP	-618.26	-1013.97	-8221.50	-879.25	-1013.97	-10054.88	-825.36	-1134.52	-10054.88	-1095.32	-1134.52	-11641.16
198	AASHTO FatigTRUCK-LOAD	MAX	252.20	168.41	2975.37	103.44	168.41	2860.80	238.52	165.19	2860.80	88.49	165.19	2526.68
		MIN	-119.14	-202.32	-414.57	-267.39	-202.32	-506.66	-131.89	-253.33	-506.66	-282.23	-253.33	-590.39
		TANDEM-LOAD MAX	197.31	119.58	2179.94	82.59	119.58	2098.25	188.45	113.45	2098.25	72.13	113.45	1863.46
		MIN	-92.95	-141.06	-281.99	-207.60	-141.06	-344.64	-101.67	-175.57	-344.64	-218.05	-175.57	-401.50

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4006			4007			4007			4008		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	99.16	269.04	3424.71	43.60	269.04	3304.78	84.25	303.06	3304.78	31.39	303.06	2870.88
	MIN	-73.21	-265.46	-793.32	-130.79	-265.46	-969.58	-93.13	-333.09	-969.58	-151.51	-333.09	-1129.80
199	AASHTO-LRFD TRUCK-LOAD MAX	489.78	772.89	18400.71	288.49	772.89	17647.70	388.57	822.92	17647.70	192.58	822.92	15045.51
	MIN	-411.21	-682.11	-4654.34	-616.77	-682.11	-5692.28	-552.38	-732.32	-5692.28	-760.91	-732.32	-6590.14
	TANDEM-LOAD MAX	306.16	364.35	8028.70	175.13	364.35	7667.68	265.16	376.03	7667.68	132.86	376.03	6621.20
	MIN	-220.15	-323.94	-1686.19	-351.08	-323.94	-2062.22	-270.00	-330.77	-2062.22	-402.41	-330.77	-2387.49
	DISPERSION-LMAX	218.03	488.40	15623.45	140.84	488.40	15237.85	157.88	575.89	15237.85	87.83	575.89	13229.89
	MIN	-275.75	-444.52	-4480.65	-360.17	-444.52	-5479.81	-364.68	-528.25	-5479.81	-456.12	-528.25	-6344.48
300	Total Dead lWithout snow	-250.84	174.76	38384.98	-737.75	174.76	33442.03	-749.36	198.70	33442.02	-1236.28	198.70	23513.86
301	Particular Snow	-18.27	14.21	3171.70	-63.54	14.21	2762.62	-59.35	15.06	2762.62	-104.61	15.06	1942.83
302	Live load Total MAX	404.67	656.36	17550.35	241.97	656.36	16976.46	326.21	724.44	16976.46	167.77	724.44	14687.02
	MIN	-401.87	-659.08	-5343.97	-571.51	-659.08	-6535.67	-536.48	-737.44	-6535.67	-711.96	-737.44	-7566.75
303	Sum total D+L+PP MAX	256.95	845.32	59107.03	-486.74	845.32	53181.11	-384.63	938.20	53181.10	-1122.79	938.20	40143.71
	MIN	-670.98	-644.87	34609.52	-1372.81	-644.87	27708.28	-1345.19	-722.37	27708.27	-2052.85	-722.37	15619.91

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4008			4009			4009			4010			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-212.47	25.06	4272.04	-310.65	25.06	1656.44	-270.99	-24.68	1656.44	-369.16	-24.68	-1544.28	
3	Railing	-3.67	-2.33	130.42	-11.94	-2.33	52.36	-5.28	-6.64	52.36	-13.55	-6.64	-41.74	
5	Wheel guard	-36.34	-23.02	1291.19	-118.22	-23.02	518.41	-52.23	-65.77	518.41	-134.10	-65.77	-413.24	
8	Steel weight	-816.06	129.17	15731.94	-1114.66	129.17	6078.35	-1033.74	-20.57	6078.35	-1332.34	-20.57	-5752.05	
10	Medial strip	-119.53	38.95	1959.74	-119.53	38.95	764.48	-141.28	34.83	764.48	-141.28	34.83	-648.32	
19	Snow	-96.12	11.12	1942.83	-141.39	11.12	755.25	-122.14	-12.28	755.25	-167.40	-12.28	-692.47	
31	Miscellaneous	-7.97	2.46	128.53	-7.97	2.46	48.82	-9.83	2.53	48.82	-9.83	2.53	-49.50	
100	AASHTO-LRFD TRUCK-LOAD	MAX	295.80	550.99	9365.53	121.52	550.99	7032.78	273.74	523.34	7032.78	99.56	523.34	4507.75
		MIN	-438.17	-496.16	-3509.30	-614.79	-496.16	-3837.15	-467.88	-564.85	-3837.15	-645.54	-564.85	-4158.29
		TANDEM-LOAD MAX	232.51	384.45	6621.20	98.14	384.45	5029.11	217.77	364.61	5029.11	82.36	364.61	3323.88
		MIN	-314.89	-345.25	-2387.49	-449.59	-345.25	-2610.55	-334.67	-391.65	-2610.55	-470.58	-391.65	-2828.19
		DISPERSION-LMAX	114.30	708.89	13229.89	51.31	708.89	9612.46	99.86	795.96	9612.46	41.03	795.96	5313.77
		MIN	-455.48	-672.72	-6344.48	-553.81	-672.72	-6938.01	-537.44	-840.19	-6938.01	-639.78	-840.19	-7810.39
110	Live load	L-PICKUP 1 MAX	410.10	1259.88	22595.42	172.82	1259.88	16645.24	373.61	1319.31	16645.24	140.59	1319.31	9821.51
		MIN	-893.65	-1168.88	-9853.78	-1168.60	-1168.88	-10775.16	-1005.32	-1405.04	-10775.16	-1285.32	-1405.04	-11968.68
		L-PICKUP 2 MAX	346.80	1093.34	19851.09	149.44	1093.34	14641.57	317.64	1160.57	14641.57	123.40	1160.57	8637.65
		MIN	-770.37	-1017.96	-8731.97	-1003.40	-1017.96	-9548.56	-872.11	-1231.84	-9548.56	-1110.36	-1231.84	-10638.58
		L-PICKUP 3	-1026.15	-1344.67	-11641.16	-1305.01	-1344.67	-12729.42	-1160.79	-1640.14	-12729.42	-1442.36	-1640.14	-14057.29
		Live load MAX	410.10	1259.88	22595.42	172.82	1259.88	16645.24	373.61	1319.31	16645.24	140.59	1319.31	9821.51
MIN	-1026.15	-1344.67	-11641.16	-1305.01	-1344.67	-12729.42	-1160.79	-1640.14	-12729.42	-1442.36	-1640.14	-14057.29		
111	AASHTO Twin	TWIN-PICKUP MAX	389.04	1431.77	25447.86	160.76	1431.77	18348.96	345.32	1533.47	18348.96	121.26	1533.47	10022.40
		MIN	-1026.15	-1344.67	-11641.16	-1305.01	-1344.67	-12729.42	-1160.79	-1640.14	-12729.42	-1442.36	-1640.14	-14057.29
		MID-PICKUP	-1026.15	-1344.67	-11641.16	-1305.01	-1344.67	-12729.42	-1160.79	-1640.14	-12729.42	-1442.36	-1640.14	-14057.29
198	AASHTO Fatig	TRUCK-LOAD MAX	224.55	210.52	2526.68	73.33	210.52	2015.20	215.49	233.50	2015.20	64.65	233.50	1471.42
		MIN	-145.29	-298.29	-590.39	-297.71	-298.29	-660.99	-154.25	-336.96	-660.99	-307.18	-336.96	-760.19
		TANDEM-LOAD MAX	179.53	143.98	1863.46	61.16	143.98	1510.88	173.55	159.58	1510.88	54.72	159.58	1145.98
		MIN	-110.52	-207.05	-401.50	-229.06	-207.05	-449.13	-116.48	-233.30	-449.13	-235.62	-233.30	-515.51

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4008			4009			4009			4010		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	70.95	352.82	2870.88	21.86	352.82	2122.48	66.13	403.63	2122.48	19.42	403.63	1331.63
	MIN	-118.31	-415.75	-1129.80	-177.83	-415.75	-1264.08	-145.46	-507.76	-1264.08	-206.43	-507.76	-1592.57
199	AASHTO-LRFD TRUCK-LOAD MAX	317.97	881.97	15045.51	127.32	881.97	10775.27	283.82	907.89	10775.27	93.70	907.89	5822.23
	MIN	-684.68	-821.36	-6590.14	-896.20	-821.36	-7205.80	-752.33	-982.19	-7205.80	-962.84	-982.19	-7808.82
	TANDEM-LOAD MAX	232.51	384.45	6621.20	98.14	384.45	5029.11	217.77	364.61	5029.11	82.36	364.61	3323.88
	MIN	-314.89	-345.25	-2387.49	-449.59	-345.25	-2610.55	-334.67	-391.65	-2610.55	-470.58	-391.65	-2828.19
	DISPERSION-LMAX	114.30	708.89	13229.89	51.31	708.89	9612.46	99.86	795.96	9612.46	41.03	795.96	5313.77
	MIN	-455.48	-672.72	-6344.48	-553.81	-672.72	-6938.01	-537.44	-840.19	-6938.01	-639.78	-840.19	-7810.39
300	Total Dead lWithout snow	-1196.04	170.30	23513.86	-1682.96	170.30	9118.86	-1513.34	-80.31	9118.86	-2000.26	-80.31	-8449.14
301	Particular Snow	-96.12	11.12	1942.83	-141.39	11.12	755.25	-122.14	-12.28	755.25	-167.40	-12.28	-692.47
302	Live load Total	266.56	818.92	14687.02	112.33	818.92	10819.41	242.85	857.55	10819.41	91.39	857.55	6383.98
	MIN	-667.00	-874.04	-7566.75	-848.26	-874.04	-8274.13	-754.52	-1066.09	-8274.13	-937.54	-1066.09	-9137.24
303	Sum total D+L+PP	-945.63	1000.34	40143.71	-1678.32	1000.34	20693.51	-1319.78	845.27	20693.51	-2048.86	845.27	-842.43
	MIN	-1959.16	-862.91	15619.91	-2672.61	-862.91	-882.26	-2390.00	-1158.68	-882.26	-3105.20	-1158.68	-18278.84

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4010			MEMBER 4011			MEMBER 4012						
		NODE 4010			NODE 4011			NODE 4012						
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)				
1	Pavement	-345.66	-47.51	-1544.28	-443.83	-47.51	-5491.71	-450.68	-21.42	-5491.71	-548.85	-21.42	-10489.34	
3	Railing	-7.81	-11.13	-41.74	-16.08	-11.13	-161.23	-15.46	-8.42	-161.23	-23.73	-8.42	-357.17	
5	Wheel guard	-77.36	-110.16	-413.24	-159.23	-110.16	-1596.19	-153.04	-83.39	-1596.19	-234.91	-83.39	-3535.95	
8	Steel weight	-1305.67	-59.43	-5752.05	-1604.27	-59.43	-20301.73	-1639.46	13.87	-20301.73	-1938.06	13.87	-38189.29	
10	Medial strip	-166.84	50.60	-648.32	-166.84	50.60	-2316.77	-175.57	47.36	-2316.77	-175.57	47.36	-4072.42	
19	Snow	-155.57	-23.63	-692.47	-200.83	-23.63	-2474.46	-203.71	-11.45	-2474.46	-248.98	-11.45	-4737.94	
31	Miscellaneous	-11.93	3.97	-49.50	-11.93	3.97	-168.85	-12.61	3.69	-168.85	-12.61	3.69	-294.94	
100	AASHTO-LRFD TRUCK-LOAD	MAX	261.05	583.16	4507.75	86.68	583.16	2348.32	237.55	737.70	2348.32	90.02	737.70	1491.97
		MIN	-497.98	-650.12	-4158.29	-676.15	-650.12	-4670.74	-562.40	-756.14	-4670.74	-754.38	-756.14	-6047.02
		TANDEM-LOAD MAX	208.16	401.34	3323.88	73.14	401.34	1855.92	195.92	507.14	1855.92	62.85	507.14	1012.87
		MIN	-355.54	-447.62	-2828.19	-491.10	-447.62	-3174.84	-401.34	-518.21	-3174.84	-545.48	-518.21	-4111.01
		DISPERSION-LMAX	107.57	959.22	5313.77	54.09	959.22	3138.47	168.45	1207.23	3138.47	137.94	1207.23	2727.45
		MIN	-667.77	-1040.14	-7810.39	-775.33	-1040.14	-12059.90	-901.92	-1244.93	-12059.90	-1032.46	-1244.93	-19820.98
110	Live load L-PICKUP 1	MAX	368.62	1542.37	9821.51	140.77	1542.37	5486.79	406.01	1944.92	5486.79	227.97	1944.92	4219.42
		MIN	-1165.76	-1690.26	-11968.68	-1451.47	-1690.26	-16730.64	-1464.32	-2001.08	-16730.64	-1786.84	-2001.08	-25868.00
		L-PICKUP 2 MAX	315.73	1360.55	8637.65	127.23	1360.55	4994.39	364.38	1714.37	4994.39	200.79	1714.37	3740.31
		MIN	-1023.32	-1487.76	-10638.58	-1266.43	-1487.76	-15234.74	-1303.26	-1763.14	-15234.74	-1577.94	-1763.14	-23931.99
		L-PICKUP 3	-1337.36	-1983.75	-14057.29	-1622.19	-1983.75	-18740.63	-1651.85	-2342.25	-18740.63	-1974.63	-2342.25	-28118.60
		Live load MAX	368.62	1542.37	9821.51	140.77	1542.37	5486.79	406.01	1944.92	5486.79	227.97	1944.92	4219.42
111	AASHTO Twin TWIN-PICKUP	MAX	324.82	1810.00	10022.40	109.93	1810.00	5071.82	341.58	2263.94	5071.82	261.81	2263.94	4980.13
		MIN	-1337.36	-1983.75	-14057.29	-1622.19	-1983.75	-18740.63	-1651.85	-2342.25	-18740.63	-1974.63	-2342.25	-28118.60
		MID-PICKUP	-1337.36	-1983.75	-14057.29	-1622.19	-1983.75	-18740.63	-1651.85	-2342.25	-18740.63	-1974.63	-2342.25	-28118.60
		MAX	202.07	242.21	1471.42	52.54	242.21	931.47	138.07	221.41	931.47	38.34	221.41	278.95
		MIN	-167.35	-363.39	-760.19	-319.59	-363.39	-992.08	-222.55	-338.92	-992.08	-389.14	-338.92	-1754.72
		TANDEM-LOAD MAX	164.10	164.46	1145.98	46.72	164.46	783.49	122.78	151.30	783.49	26.05	151.30	189.21
198	AASHTO FatigTRUCK-LOAD	MIN	-125.89	-251.35	-515.51	-243.65	-251.35	-673.61	-165.95	-233.60	-673.61	-292.71	-233.60	-1190.51

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4010			4011			4011			4012		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	70.63	491.37	1331.63	27.27	491.37	778.36	95.11	639.68	778.36	69.39	639.68	554.80
	MIN	-196.94	-629.29	-1592.57	-260.42	-629.29	-3037.26	-343.12	-740.73	-3037.26	-426.21	-740.73	-6409.73
199	AASHTO-LRFD TRUCK-LOAD MAX	253.35	1051.90	5822.23	68.05	1051.90	2496.88	211.08	1308.26	2496.88	152.96	1308.26	2806.03
	MIN	-818.18	-1164.03	-7808.82	-1027.11	-1164.03	-8763.03	-933.47	-1357.57	-8763.03	-1161.57	-1357.57	-11421.91
	TANDEM-LOAD MAX	208.16	401.34	3323.88	73.14	401.34	1855.92	195.92	507.14	1855.92	62.85	507.14	1012.87
	MIN	-355.54	-447.62	-2828.19	-491.10	-447.62	-3174.84	-401.34	-518.21	-3174.84	-545.48	-518.21	-4111.01
	DISPERSION-LMAX	107.57	959.22	5313.77	54.09	959.22	3138.47	168.45	1207.23	3138.47	137.94	1207.23	2727.45
	MIN	-667.77	-1040.14	-7810.39	-775.33	-1040.14	-12059.90	-901.92	-1244.93	-12059.90	-1032.46	-1244.93	-19820.98
300	Total Dead lWithout snow	-1915.27	-173.66	-8449.14	-2402.19	-173.66	-30036.48	-2446.80	-48.32	-30036.48	-2933.72	-48.32	-56939.11
301	Particular Snow	-155.57	-23.63	-692.47	-200.83	-23.63	-2474.46	-203.71	-11.45	-2474.46	-248.98	-11.45	-4737.94
302	Live load Total MAX	239.60	1002.54	6383.98	91.50	1002.54	3566.41	263.90	1264.20	3566.41	148.18	1264.20	2742.62
	MIN	-869.28	-1289.44	-9137.24	-1054.42	-1289.44	-12181.41	-1073.70	-1522.46	-12181.41	-1283.51	-1522.46	-18277.09
303	Sum total D+L+PP MAX	-1759.36	978.91	-842.43	-2484.08	978.91	-27874.60	-2307.44	1252.75	-27874.60	-2990.07	1252.75	-58111.64
	MIN	-2940.12	-1486.74	-18278.84	-3657.45	-1486.74	-44692.35	-3724.22	-1582.23	-44692.35	-4466.21	-1582.23	-79954.14

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4012			MEMBER 4013			MEMBER 4013			MEMBER 4014				
		NODE 4012			NODE 4013			NODE 4013			NODE 4014				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	476.47	32.54	-10489.34	397.93	32.54	-6991.74	398.62	43.91	-6991.74	320.09	43.91	-4116.91		
3	Railing	21.71	7.55	-357.17	15.09	7.55	-209.99	14.65	11.82	-209.99	8.03	11.82	-119.28		
5	Wheel guard	214.88	74.72	-3535.95	149.38	74.72	-2078.88	145.00	117.01	-2078.88	79.50	117.01	-1180.89		
8	Steel weight	1669.34	41.56	-38189.29	1430.46	41.56	-25790.12	1438.54	36.59	-25790.12	1199.66	36.59	-15237.30		
10	Medial strip	132.42	-32.60	-4072.42	132.42	-32.60	-3013.08	136.22	-56.20	-3013.08	136.22	-56.20	-1923.35		
19	Snow	215.36	16.30	-4737.94	179.15	16.30	-3159.89	179.37	22.34	-3159.89	143.15	22.34	-1869.80		
31	Miscellaneous	10.33	-2.70	-294.94	10.33	-2.70	-212.31	10.61	-4.55	-212.31	10.61	-4.55	-127.45		
100	AASHTO-LRFD TRUCK-LOAD	MAX	729.10	758.93	1491.97	565.58	758.93	1926.23	657.91	691.66	1926.23	507.23	691.66	3716.78	
		MIN	-113.29	-741.96	-6047.02	-211.39	-741.96	-5351.55	-107.78	-639.19	-5351.55	-257.82	-639.19	-4774.20	
		TANDEM-LOAD	MAX	529.77	516.98	1012.87	407.52	516.98	1593.57	480.89	474.92	1593.57	364.93	474.92	2807.13
		MIN	-77.28	-508.60	-4111.01	-178.22	-508.60	-3640.09	-91.97	-438.24	-3640.09	-207.92	-438.24	-3241.04	
		DISPERSION-L	MAX	1005.42	1259.81	2727.45	897.30	1259.81	2422.71	791.81	1117.20	2422.71	704.22	1117.20	3046.73
		MIN	-225.17	-1204.89	-19820.98	-245.94	-1204.89	-13753.02	-140.67	-1041.91	-13753.02	-181.87	-1041.91	-9665.94	
110	Live load	L-PICKUP 1	MAX	1734.53	2018.74	4219.42	1462.89	2018.74	4348.94	1449.73	1808.87	4348.94	1211.44	1808.87	6763.52
		MIN	-338.46	-1946.85	-25868.00	-457.32	-1946.85	-19104.57	-248.44	-1681.10	-19104.57	-439.69	-1681.10	-14440.13	
		L-PICKUP 2	MAX	1535.20	1776.79	3740.31	1304.82	1776.79	4016.28	1272.71	1592.12	4016.28	1069.14	1592.12	5853.86
		MIN	-302.45	-1713.49	-23931.99	-424.16	-1713.49	-17393.11	-232.64	-1480.15	-17393.11	-389.79	-1480.15	-12906.98	
		L-PICKUP 3	MAX	-381.32	-2258.61	-28118.60	-404.17	-2258.61	-21499.52	-229.94	-1961.40	-21499.52	-390.09	-1961.40	-16840.25
		Live load	MAX	1734.53	2018.74	4219.42	1462.89	2018.74	4348.94	1449.73	1808.87	4348.94	1211.44	1808.87	6763.52
MIN	-381.32	-2258.61	-28118.60	-457.32	-2258.61	-21499.52	-248.44	-1961.40	-21499.52	-439.69	-1961.40	-16840.25			
111	AASHTO Twin	TWIN-PICKUP	MAX	1900.29	2369.46	4980.13	1625.74	2369.46	3924.63	1597.83	2112.67	3924.63	1359.12	2112.67	6331.29
		MIN	-381.32	-2258.61	-28118.60	-404.17	-2258.61	-21499.52	-229.94	-1961.40	-21499.52	-390.09	-1961.40	-16840.25	
		MID-PICKUP	MAX	-381.32	-2258.61	-28118.60	-404.17	-2258.61	-21499.52	-229.94	-1961.40	-21499.52	-390.09	-1961.40	-16840.25
198	AASHTO Fatig	TRUCK-LOAD	MAX	385.80	320.63	278.95	242.68	320.63	817.64	308.75	371.90	817.64	180.73	371.90	1302.88
		MIN	-40.93	-213.12	-1754.72	-107.05	-213.12	-1172.22	-52.52	-246.48	-1172.22	-180.84	-246.48	-908.13	
		TANDEM-LOAD	MAX	292.16	217.79	189.21	183.58	217.79	731.38	237.90	256.68	731.38	137.27	256.68	1044.29
		MIN	-27.92	-145.78	-1190.51	-103.21	-145.78	-798.45	-50.58	-166.99	-798.45	-151.32	-166.99	-617.34	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4012			4013			4013			4014		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	432.48	740.00	554.80	362.32	740.00	637.19	268.46	677.95	637.19	216.61	677.95	888.13
	MIN	-89.35	-646.37	-6409.73	-106.95	-646.37	-3562.94	-46.31	-532.94	-3562.94	-79.90	-532.94	-2177.82
199	AASHTO-LRFD TRUCK-LOAD MAX	1106.00	1372.92	2806.03	909.07	1372.92	1937.99	983.55	1230.21	1937.99	805.91	1230.21	3988.03
	MIN	-198.52	-1304.68	-11421.91	-203.14	-1304.68	-10135.33	-114.82	-1137.43	-10135.33	-251.56	-1137.43	-9045.45
	TANDEM-LOAD MAX	529.77	516.98	1012.87	407.52	516.98	1593.57	480.89	474.92	1593.57	364.93	474.92	2807.13
	MIN	-77.28	-508.60	-4111.01	-178.22	-508.60	-3640.09	-91.97	-438.24	-3640.09	-207.92	-438.24	-3241.04
	DISPERSION-LMAX	1005.42	1259.81	2727.45	897.30	1259.81	2422.71	791.81	1117.20	2422.71	704.22	1117.20	3046.73
	MIN	-225.17	-1204.89	-19820.98	-245.94	-1204.89	-13753.02	-140.67	-1041.91	-13753.02	-181.87	-1041.91	-9665.94
300	Total Dead lWithout snow	2525.14	121.06	-56939.11	2135.61	121.06	-38296.11	2143.63	148.57	-38296.11	1754.10	148.57	-22705.17
301	Particular Snow	215.36	16.30	-4737.94	179.15	16.30	-3159.89	179.37	22.34	-3159.89	143.15	22.34	-1869.80
302	Live load Total MAX	1127.44	1312.18	2742.62	950.88	1312.18	2826.81	942.32	1175.76	2826.81	787.44	1175.76	4396.29
	MIN	-247.86	-1468.10	-18277.09	-297.26	-1468.10	-13974.69	-161.49	-1274.91	-13974.69	-285.80	-1274.91	-10946.16
303	Sum total D+L+PP MAX	3867.95	1449.54	-58111.64	3265.63	1449.54	-37781.14	3265.32	1346.67	-37781.14	2684.69	1346.67	-18859.79
	MIN	2418.29	-1451.80	-79954.14	1928.32	-1451.80	-55430.68	2113.07	-1252.57	-55430.68	1525.72	-1252.57	-35521.13

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4014			MEMBER 4015			MEMBER 4015			MEMBER 4016				
		NODE 4014			NODE 4015			NODE 4015			NODE 4016				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	338.26	29.49	-4116.91	240.09	29.49	-1225.13	258.48	23.65	-1225.13	160.31	23.65	868.83		
3	Railing	12.67	8.37	-119.28	4.40	8.37	-33.98	10.31	4.76	-33.98	2.04	4.76	27.73		
5	Wheel guard	125.39	82.82	-1180.89	43.51	82.82	-336.38	102.03	47.09	-336.38	20.15	47.09	274.51		
8	Steel weight	1217.88	19.45	-15237.30	919.28	19.45	-4551.45	923.14	38.94	-4551.45	624.54	38.94	3186.93		
10	Medial strip	115.16	-41.57	-1923.35	115.16	-41.57	-771.79	84.69	-19.63	-771.79	84.69	-19.63	75.09		
19	Snow	152.37	15.04	-1869.80	107.11	15.04	-572.39	116.69	11.57	-572.39	71.42	11.57	368.14		
31	Miscellaneous	8.87	-3.30	-127.45	8.87	-3.30	-38.76	6.42	-1.55	-38.76	6.42	-1.55	25.48		
100	AASHTO-LRFD TRUCK-LOAD	MAX	611.67	593.88	3716.78	431.24	593.88	5726.86	560.86	575.02	5726.86	373.59	575.02	7271.60	
		MIN	-127.85	-522.60	-4774.20	-307.35	-522.60	-4021.38	-156.58	-492.43	-4021.38	-341.90	-492.43	-3305.84	
		TANDEM-LOAD	MAX	447.88	411.86	2807.13	310.60	411.86	4154.93	415.03	399.55	4154.93	271.45	399.55	5200.15
		MIN	-102.64	-360.30	-3241.04	-239.85	-360.30	-2725.31	-122.54	-344.00	-2725.31	-265.84	-344.00	-2238.89	
		DISPERSION-L	MAX	679.02	903.86	3046.73	577.94	903.86	4982.93	562.77	736.67	4982.93	468.84	736.67	8169.59
		MIN	-126.44	-852.00	-9665.94	-186.62	-852.00	-6884.99	-141.25	-694.73	-6884.99	-208.78	-694.73	-6673.33	
110	Live load	L-PICKUP 1	MAX	1290.69	1497.74	6763.52	1009.18	1497.74	10709.79	1123.63	1311.70	10709.79	842.44	1311.70	15441.18
		MIN	-254.29	-1374.60	-14440.13	-493.97	-1374.60	-10906.37	-297.84	-1187.16	-10906.37	-550.67	-1187.16	-9979.17	
		L-PICKUP 2	MAX	1126.90	1315.72	5853.86	888.54	1315.72	9137.86	977.80	1136.22	9137.86	740.29	1136.22	13369.74
		MIN	-229.08	-1212.30	-12906.98	-426.47	-1212.30	-9610.30	-263.79	-1038.73	-9610.30	-474.62	-1038.73	-8912.22	
		L-PICKUP 3	MAX	-242.40	-1605.93	-16840.25	-475.51	-1605.93	-13055.01	-294.30	-1365.67	-13055.01	-541.63	-1365.67	-11645.54
		MIN	1290.69	1497.74	6763.52	1009.18	1497.74	10709.79	1123.63	1311.70	10709.79	842.44	1311.70	15441.18	
		Live load	MAX	1290.69	1497.74	6763.52	1009.18	1497.74	10709.79	1123.63	1311.70	10709.79	842.44	1311.70	15441.18
		MIN	-254.29	-1605.93	-16840.25	-493.97	-1605.93	-13055.01	-297.84	-1365.67	-13055.01	-550.67	-1365.67	-11645.54	
111	AASHTO Twin	TWIN-PICKUP	MAX	1411.93	1742.65	6331.29	1129.60	1742.65	11751.79	1211.02	1509.71	11751.79	930.55	1509.71	17292.01
		MIN	-242.40	-1605.93	-16840.25	-475.51	-1605.93	-13055.01	-294.30	-1365.67	-13055.01	-541.63	-1365.67	-11645.54	
		MID-PICKUP	MAX	-242.40	-1605.93	-16840.25	-475.51	-1605.93	-13055.01	-294.30	-1365.67	-13055.01	-541.63	-1365.67	-11645.54
198	AASHTO Fatig	TRUCK-LOAD	MAX	304.39	354.84	1302.88	150.78	354.84	1734.30	289.93	326.22	1734.30	131.15	326.22	2046.29
		MIN	-64.30	-234.23	-908.13	-217.74	-234.23	-708.37	-78.04	-206.39	-708.37	-235.55	-206.39	-561.74	
		TANDEM-LOAD	MAX	233.66	246.03	1044.29	114.66	246.03	1324.55	225.06	226.83	1324.55	101.16	226.83	1533.97
		MIN	-55.97	-160.37	-617.34	-175.01	-160.37	-480.51	-64.53	-141.61	-480.51	-188.25	-141.61	-380.64	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4014			4015			4015			4016		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	220.73	550.31	888.13	159.10	550.31	1288.38	177.51	451.10	1288.38	118.24	451.10	1846.63
	MIN	-33.96	-436.73	-2177.82	-81.29	-436.73	-1317.77	-38.73	-357.66	-1317.77	-90.22	-357.66	-1213.79
199	AASHTO-LRFD TRUCK-LOAD MAX	889.80	1032.42	3988.03	677.17	1032.42	8074.61	782.81	940.78	8074.61	565.10	940.78	11043.76
	MIN	-142.89	-932.37	-9045.45	-341.72	-932.37	-7620.58	-185.75	-822.68	-7620.58	-393.04	-822.68	-6266.16
	TANDEM-LOAD MAX	447.88	411.86	2807.13	310.60	411.86	4154.93	415.03	399.55	4154.93	271.45	399.55	5200.15
	MIN	-102.64	-360.30	-3241.04	-239.85	-360.30	-2725.31	-122.54	-344.00	-2725.31	-265.84	-344.00	-2238.89
	DISPERSION-LMAX	679.02	903.86	3046.73	577.94	903.86	4982.93	562.77	736.67	4982.93	468.84	736.67	8169.59
	MIN	-126.44	-852.00	-9665.94	-186.62	-852.00	-6884.99	-141.25	-694.73	-6884.99	-208.78	-694.73	-6673.33
300	Total Dead lWithout snow	1818.23	95.25	-22705.17	1331.31	95.25	-6957.48	1385.07	93.25	-6957.48	898.15	93.25	4458.58
301	Particular Snow	152.37	15.04	-1869.80	107.11	15.04	-572.39	116.69	11.57	-572.39	71.42	11.57	368.14
302	Live load Total MAX	838.95	973.53	4396.29	655.97	973.53	6961.36	730.36	852.60	6961.36	547.58	852.60	10036.77
	MIN	-165.29	-1043.86	-10946.16	-321.08	-1043.86	-8485.76	-193.59	-887.68	-8485.76	-357.94	-887.68	-7569.60
303	Sum total D+L+PP MAX	2809.55	1083.82	-18859.79	2094.39	1083.82	1519.89	2232.11	957.43	1519.89	1517.15	957.43	14863.49
	MIN	1755.73	-1028.82	-35521.13	1021.01	-1028.82	-16015.64	1250.08	-876.11	-16015.64	504.25	-876.11	-5013.76

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4016			4017			4017			4018			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	184.02	14.62	868.83	85.85	14.62	2218.20	115.64	-2.34	2218.20	17.47	-2.34	2883.76	
3	Railing	8.16	2.35	27.73	-0.11	2.35	67.95	6.13	0.52	67.95	-2.14	0.52	87.91	
5	Wheel guard	80.75	23.27	274.51	-1.12	23.27	672.66	60.70	5.15	672.66	-21.18	5.15	870.27	
8	Steel weight	647.42	31.12	3186.93	348.82	31.12	8168.12	394.84	-15.70	8168.12	96.24	-15.70	10623.48	
10	Medial strip	55.51	-7.31	75.09	55.51	-7.31	630.20	29.45	-4.34	630.20	29.45	-4.34	924.67	
19	Snow	83.36	7.07	368.14	38.10	7.07	975.43	52.78	-0.84	975.43	7.51	-0.84	1276.86	
31	Miscellaneous	4.11	-0.63	25.48	4.11	-0.63	66.63	2.02	-0.40	66.63	2.02	-0.40	86.85	
100	AASHTO-LRFD TRUCK-LOAD	MAX	517.61	512.37	7271.60	327.12	512.37	8345.10	476.36	473.56	8345.10	286.24	473.56	8854.64
		MIN	-181.45	-482.31	-3305.84	-370.93	-482.31	-2673.50	-212.64	-499.14	-2673.50	-401.95	-499.14	-2065.52
		TANDEM-LOAD MAX	386.37	357.32	5200.15	239.99	357.32	5939.92	358.34	332.01	5939.92	212.45	332.01	6303.14
		MIN	-140.27	-337.93	-2238.89	-286.51	-337.93	-1810.46	-161.91	-349.21	-1810.46	-307.68	-349.21	-1398.74
		DISPERSION-LMAX	463.89	613.90	8169.59	374.93	613.90	10311.63	392.44	516.98	10311.63	307.48	516.98	11440.35
		MIN	-164.13	-586.84	-6673.33	-236.71	-586.84	-6628.49	-204.28	-519.47	-6628.49	-280.92	-519.47	-6684.44
110	Live load	L-PICKUP 1 MAX	981.50	1126.27	15441.18	702.05	1126.27	18656.74	868.80	990.54	18656.74	593.72	990.54	20294.99
		MIN	-345.58	-1069.15	-9979.17	-607.63	-1069.15	-9301.99	-416.92	-1018.61	-9301.99	-682.88	-1018.61	-8749.96
		L-PICKUP 2 MAX	850.26	971.21	13369.74	614.92	971.21	16251.55	750.78	848.98	16251.55	519.93	848.98	17743.49
		MIN	-304.40	-924.77	-8912.22	-523.21	-924.77	-8438.95	-366.19	-868.68	-8438.95	-588.61	-868.68	-8083.18
		L-PICKUP 3	-347.25	-1192.24	-11645.54	-603.95	-1192.24	-10526.78	-427.03	-1117.55	-10526.78	-688.33	-1117.55	-9539.88
		Live load MAX	981.50	1126.27	15441.18	702.05	1126.27	18656.74	868.80	990.54	18656.74	593.72	990.54	20294.99
MIN	-347.25	-1192.24	-11645.54	-607.63	-1192.24	-10526.78	-427.03	-1117.55	-10526.78	-688.33	-1117.55	-9539.88		
111	AASHTO Twin TWIN-PICKUP	MAX	1041.23	1274.30	17292.01	762.73	1274.30	20951.09	901.75	1081.46	20951.09	627.21	1081.46	22711.26
		MIN	-347.25	-1192.24	-11645.54	-603.95	-1192.24	-10526.78	-427.03	-1117.55	-10526.78	-688.33	-1117.55	-9539.88
		MID-PICKUP	-347.25	-1192.24	-11645.54	-603.95	-1192.24	-10526.78	-427.03	-1117.55	-10526.78	-688.33	-1117.55	-9539.88
198	AASHTO FatigTRUCK-LOAD	MAX	279.93	279.27	2046.29	119.05	279.27	2256.76	271.75	221.55	2256.76	110.98	221.55	2364.61
		MIN	-86.51	-163.22	-561.74	-246.85	-163.22	-447.69	-94.53	-158.30	-447.69	-254.88	-158.30	-344.68
		TANDEM-LOAD MAX	218.74	195.14	1533.97	92.94	195.14	1677.99	213.15	156.05	1677.99	87.56	156.05	1754.83
		MIN	-70.63	-112.15	-380.64	-196.35	-112.15	-303.23	-76.20	-113.44	-303.23	-201.73	-113.44	-233.42

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4016			4017			4017			4018		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	149.38	377.62	1846.63	91.40	377.62	2253.64	132.14	306.86	2253.64	74.67	306.86	2471.03
	MIN	-44.34	-312.57	-1213.79	-98.51	-312.57	-1184.03	-52.90	-287.78	-1184.03	-108.42	-287.78	-1187.88
199	AASHTO-LRFD TRUCK-LOAD MAX	693.03	801.99	11043.76	472.55	801.99	12967.35	609.50	684.64	12967.35	389.42	684.64	13794.38
	MIN	-221.70	-737.88	-6266.16	-434.34	-737.88	-5067.93	-270.20	-722.26	-5067.93	-483.88	-722.26	-3915.43
	TANDEM-LOAD MAX	386.37	357.32	5200.15	239.99	357.32	5939.92	358.34	332.01	5939.92	212.45	332.01	6303.14
	MIN	-140.27	-337.93	-2238.89	-286.51	-337.93	-1810.46	-161.91	-349.21	-1810.46	-307.68	-349.21	-1398.74
	DISPERSION-LMAX	463.89	613.90	8169.59	374.93	613.90	10311.63	392.44	516.98	10311.63	307.48	516.98	11440.35
	MIN	-164.13	-586.84	-6673.33	-236.71	-586.84	-6628.49	-204.28	-519.47	-6628.49	-280.92	-519.47	-6684.44
300	Total Dead lWithout snow	979.98	63.44	4458.58	493.06	63.44	11823.76	608.78	-17.10	11823.76	121.86	-17.10	15476.94
301	Particular Snow	83.36	7.07	368.14	38.10	7.07	975.43	52.78	-0.84	975.43	7.51	-0.84	1276.86
302	Live load Total MAX	637.98	732.07	10036.77	456.33	732.07	12126.88	564.72	643.85	12126.88	385.92	643.85	13191.74
	MIN	-225.71	-774.96	-7569.60	-394.96	-774.96	-6842.41	-277.57	-726.41	-6842.41	-447.41	-726.41	-6200.92
303	Sum total D+L+PP MAX	1701.31	802.58	14863.49	987.49	802.58	24926.06	1226.27	643.01	24926.06	515.29	643.01	29945.55
	MIN	769.91	-767.89	-5013.76	17.70	-767.89	3904.05	300.71	-744.35	3904.05	-439.90	-744.35	8692.60

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	4018 4018	4019			4019			4020					
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	42.92	-10.69	2883.76	-55.25	-10.69	2822.09	-37.05	-7.04	2822.09	-135.22	-7.04	1960.70	
3 Railing	3.96	-0.81	87.91	-4.31	-0.81	86.15	1.58	-1.97	86.15	-6.69	-1.97	60.55	
5 Wheel guard	39.20	-8.02	870.27	-42.68	-8.02	852.87	15.60	-19.50	852.87	-66.28	-19.50	599.48	
8 Steel weight	126.41	-33.60	10623.48	-172.19	-33.60	10394.59	-168.82	-4.98	10394.59	-467.42	-4.98	7213.37	
10 Medial strip	2.17	-0.27	924.67	2.17	-0.27	946.39	-27.72	9.41	946.39	-27.72	9.41	669.23	
19 Snow	20.27	-4.88	1276.86	-24.99	-4.88	1253.26	-15.46	-3.61	1253.26	-60.73	-3.61	872.34	
31 Miscellaneous	-0.19	-0.05	86.85	-0.19	-0.05	84.92	-2.63	0.77	84.92	-2.63	0.77	58.61	
100 AASHTO-LRFD TRUCK-LOAD	MAX	428.26	467.66	8854.64	239.86	467.66	8698.61	380.90	483.77	8698.61	195.59	483.77	7691.56
	MIN	-260.53	-505.85	-2065.52	-448.37	-505.85	-2376.20	-326.53	-508.05	-2376.20	-512.31	-508.05	-2986.96
	TANDEM-LOAD MAX	325.15	327.87	6303.14	180.80	327.87	6186.80	292.39	339.08	6186.80	150.19	339.08	5491.25
	MIN	-194.72	-353.91	-1398.74	-338.98	-353.91	-1611.65	-239.61	-354.13	-1611.65	-381.87	-354.13	-2025.89
	DISPERSION-LMAX	334.51	502.41	11440.35	254.26	502.41	11401.96	285.85	574.95	11401.96	212.21	574.95	9958.24
	MIN	-264.92	-521.51	-6684.44	-346.31	-521.51	-6758.14	-347.01	-589.98	-6758.14	-434.92	-589.98	-6731.29
110 Live load L-PICKUP 1	MAX	762.78	970.07	20294.99	494.12	970.07	20100.57	666.75	1058.72	20100.57	407.79	1058.72	17649.80
	MIN	-525.45	-1027.35	-8749.96	-794.69	-1027.35	-9134.34	-673.54	-1098.04	-9134.34	-947.23	-1098.04	-9718.24
	L-PICKUP 2 MAX	659.66	830.28	17743.49	435.07	830.28	17588.76	578.24	914.03	17588.76	362.40	914.03	15449.48
	MIN	-459.64	-875.41	-8083.18	-685.30	-875.41	-8369.79	-586.62	-944.11	-8369.79	-816.79	-944.11	-8757.18
	L-PICKUP 3	-552.31	-1125.76	-9539.88	-818.65	-1125.76	-10105.97	-735.82	-1229.28	-10105.97	-1009.15	-1229.28	-11116.02
	Live load MAX	762.78	970.07	20294.99	494.12	970.07	20100.57	666.75	1058.72	20100.57	407.79	1058.72	17649.80
MIN	-552.31	-1125.76	-9539.88	-818.65	-1125.76	-10105.97	-735.82	-1229.28	-10105.97	-1009.15	-1229.28	-11116.02	
111 AASHTO Twin TWIN-PICKUP	MAX	771.35	1052.86	22711.26	503.84	1052.86	22448.46	665.27	1163.01	22448.46	409.19	1163.01	19527.54
	MIN	-552.31	-1125.76	-9539.88	-818.65	-1125.76	-10105.97	-735.82	-1229.28	-10105.97	-1009.15	-1229.28	-11116.02
	MID-PICKUP	-552.31	-1125.76	-9539.88	-818.65	-1125.76	-10105.97	-735.82	-1229.28	-10105.97	-1009.15	-1229.28	-11116.02
198 AASHTO FatigTRUCK-LOAD	MAX	262.00	160.76	2364.61	102.22	160.76	2347.18	248.24	156.17	2347.18	90.20	156.17	2153.45
	MIN	-104.54	-217.68	-344.68	-264.01	-217.68	-398.42	-118.69	-269.14	-398.42	-277.00	-269.14	-508.86
	TANDEM-LOAD MAX	206.33	114.84	1754.83	81.65	114.84	1742.71	196.75	107.48	1742.71	73.27	107.48	1608.85
	MIN	-83.05	-153.71	-233.42	-207.69	-153.71	-270.09	-92.69	-188.26	-270.09	-216.21	-188.26	-344.77

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	4018 4018	4019			4019			4020			4020		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
198 AASHTO FatigDISPERSION-LMAX	120.12	281.64	2471.03	63.44	281.64	2468.49	108.39	306.73	2468.49	53.83	306.73	2188.76	
MIN	-65.39	-303.52	-1187.88	-122.10	-303.52	-1202.45	-85.53	-363.34	-1202.45	-143.16	-363.34	-1213.92	
199 AASHTO-LRFD TRUCK-LOAD MAX	522.55	667.44	13794.38	305.56	667.44	13540.77	453.34	717.28	13540.77	242.45	717.28	11739.03	
MIN	-348.76	-729.34	-3915.43	-563.29	-729.34	-4470.72	-470.57	-775.88	-4470.72	-686.36	-775.88	-5619.84	
TANDEM-LOAD MAX	325.15	327.87	6303.14	180.80	327.87	6186.80	292.39	339.08	6186.80	150.19	339.08	5491.25	
MIN	-194.72	-353.91	-1398.74	-338.98	-353.91	-1611.65	-239.61	-354.13	-1611.65	-381.87	-354.13	-2025.89	
DISPERSION-LMAX	334.51	502.41	11440.35	254.26	502.41	11401.96	285.85	574.95	11401.96	212.21	574.95	9958.24	
MIN	-264.92	-521.51	-6684.44	-346.31	-521.51	-6758.14	-347.01	-589.98	-6758.14	-434.92	-589.98	-6731.29	
300 Total Dead lWithout snow	214.47	-53.44	15476.94	-272.45	-53.44	15187.02	-219.05	-23.30	15187.02	-705.97	-23.30	10561.95	
301 Particular Snow	20.27	-4.88	1276.86	-24.99	-4.88	1253.26	-15.46	-3.61	1253.26	-60.73	-3.61	872.34	
302 Live load Total MAX	495.80	630.55	13191.74	321.18	630.55	13065.37	433.39	688.17	13065.37	265.07	688.17	11472.37	
MIN	-359.00	-731.74	-6200.92	-532.12	-731.74	-6568.88	-478.28	-799.03	-6568.88	-655.94	-799.03	-7225.41	
303 Sum total D+L+PP MAX	730.54	625.67	29945.55	120.09	625.67	29505.64	328.90	684.56	29505.64	-422.11	684.56	22906.66	
MIN	-231.96	-790.06	8692.60	-829.57	-790.06	7900.72	-712.79	-825.94	7900.72	-1422.64	-825.94	2041.25	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4020			MEMBER 4021			MEMBER 4021			MEMBER 4022				
		NODE 4020			NODE 4021			NODE 4021			NODE 4022				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-114.76	-10.76	1960.70	-212.93	-10.76	322.23	-185.90	-32.13	322.23	-284.07	-32.13	-2027.65		
3	Railing	-0.68	-4.09	60.55	-8.95	-4.09	12.36	-2.72	-8.05	12.36	-10.99	-8.05	-56.16		
5	Wheel guard	-6.77	-40.51	599.48	-88.64	-40.51	122.41	-26.90	-79.72	122.41	-108.77	-79.72	-555.94		
8	Steel weight	-456.37	5.30	7213.37	-754.97	5.30	1156.66	-720.05	-33.89	1156.66	-1018.65	-33.89	-7536.80		
10	Medial strip	-57.34	21.86	669.23	-57.34	21.86	95.80	-84.89	37.07	95.80	-84.89	37.07	-753.10		
19	Snow	-50.18	-5.80	872.34	-95.45	-5.80	144.21	-81.97	-16.19	144.21	-127.24	-16.19	-901.87		
31	Miscellaneous	-5.03	1.79	58.61	-5.03	1.79	8.28	-7.25	3.00	8.28	-7.25	3.00	-64.23		
100	AASHTO-LRFD TRUCK-LOAD	MAX	341.36	513.79	7691.56	158.47	513.79	5898.03	316.43	529.03	5898.03	132.48	529.03	3625.34	
		MIN	-391.97	-551.19	-2986.96	-577.10	-551.19	-3517.35	-443.80	-592.50	-3517.35	-628.39	-592.50	-4034.81	
		TANDEM-LOAD	MAX	264.97	359.10	5491.25	123.75	359.10	4268.93	246.79	366.32	4268.93	105.95	366.32	2732.97
		MIN	-284.06	-383.28	-2025.89	-425.60	-383.28	-2385.98	-319.34	-410.85	-2385.98	-460.21	-410.85	-2740.87	
		DISPERSION-L	MAX	246.24	687.67	9958.24	179.87	687.67	7080.65	223.07	837.99	7080.65	162.47	837.99	5014.51
		MIN	-434.72	-708.34	-6731.29	-529.76	-708.34	-6537.92	-528.09	-893.84	-6537.92	-628.73	-893.84	-8328.48	
110	Live load	L-PICKUP 1	MAX	587.60	1201.46	17649.80	338.34	1201.46	12978.68	539.50	1367.02	12978.68	294.95	1367.02	8639.85
		MIN	-826.69	-1259.53	-9718.24	-1106.86	-1259.53	-10055.27	-971.90	-1486.34	-10055.27	-1257.12	-1486.34	-12363.29	
		L-PICKUP 2	MAX	511.21	1046.77	15449.48	303.62	1046.77	11349.58	469.85	1204.31	11349.58	268.41	1204.31	7747.49
		MIN	-718.77	-1091.62	-8757.18	-955.36	-1091.62	-8923.90	-847.43	-1304.69	-8923.90	-1088.94	-1304.69	-11069.35	
		L-PICKUP 3	MAX	-926.20	-1442.31	-11116.02	-1207.66	-1442.31	-11839.37	-1101.05	-1728.25	-11839.37	-1387.62	-1728.25	-14323.53
		MIN	587.60	1201.46	17649.80	338.34	1201.46	12978.68	539.50	1367.02	12978.68	294.95	1367.02	8639.85	
		Live load	MAX	587.60	1201.46	17649.80	338.34	1201.46	12978.68	539.50	1367.02	12978.68	294.95	1367.02	8639.85
		MIN	-926.20	-1442.31	-11116.02	-1207.66	-1442.31	-11839.37	-1101.05	-1728.25	-11839.37	-1387.62	-1728.25	-14323.53	
111	AASHTO Twin	TWIN-PICKUP	MAX	582.95	1366.34	19527.54	340.36	1366.34	13944.87	522.12	1592.39	13944.87	288.76	1592.39	8153.71
		MIN	-926.20	-1442.31	-11116.02	-1207.66	-1442.31	-11839.37	-1101.05	-1728.25	-11839.37	-1387.62	-1728.25	-14323.53	
		MID-PICKUP	MAX	582.95	1366.34	19527.54	340.36	1366.34	13944.87	522.12	1592.39	13944.87	288.76	1592.39	8153.71
198	AASHTO Fatig	TRUCK-LOAD	MAX	233.04	205.43	2153.45	76.45	205.43	1788.01	220.38	237.61	1788.01	63.06	237.61	1319.79
		MIN	-133.98	-313.90	-508.86	-291.91	-313.90	-624.17	-146.84	-351.85	-624.17	-303.87	-351.85	-785.37	
		TANDEM-LOAD	MAX	186.35	140.96	1608.85	63.44	140.96	1359.16	177.53	162.79	1359.16	55.33	162.79	1048.70
		MIN	-103.10	-218.33	-344.77	-226.20	-218.33	-422.68	-111.95	-243.86	-422.68	-234.05	-243.86	-533.30	
		MIN	-103.10	-218.33	-344.77	-226.20	-218.33	-422.68	-111.95	-243.86	-422.68	-234.05	-243.86	-533.30	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4020			4021			4021			4022		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.43	351.12	2188.76	45.52	351.12	1652.50	88.99	429.83	1652.50	41.23	429.83	1213.60
	MIN	-111.22	-436.01	-1213.92	-170.29	-436.01	-1232.40	-140.95	-542.29	-1232.40	-201.50	-542.29	-1813.53
199	AASHTO-LRFD TRUCK-LOAD MAX	401.48	830.49	11739.03	198.31	830.49	8413.64	357.06	931.33	8413.64	158.38	931.33	4045.16
	MIN	-594.39	-894.23	-5619.84	-812.09	-894.23	-6616.94	-695.30	-1026.44	-6616.94	-913.07	-1026.44	-7586.55
	TANDEM-LOAD MAX	264.97	359.10	5491.25	123.75	359.10	4268.93	246.79	366.32	4268.93	105.95	366.32	2732.97
	MIN	-284.06	-383.28	-2025.89	-425.60	-383.28	-2385.98	-319.34	-410.85	-2385.98	-460.21	-410.85	-2740.87
	DISPERSION-LMAX	246.24	687.67	9958.24	179.87	687.67	7080.65	223.07	837.99	7080.65	162.47	837.99	5014.51
	MIN	-434.72	-708.34	-6731.29	-529.76	-708.34	-6537.92	-528.09	-893.84	-6537.92	-628.73	-893.84	-8328.48
300	Total Dead lWithout snow	-640.96	-26.42	10561.95	-1127.88	-26.42	1717.75	-1027.70	-113.73	1717.75	-1514.62	-113.73	-10993.88
301	Particular Snow	-50.18	-5.80	872.34	-95.45	-5.80	144.21	-81.97	-16.19	144.21	-127.24	-16.19	-901.87
302	Live load Total MAX	381.94	780.95	11472.37	219.92	780.95	8436.14	350.68	888.57	8436.14	191.72	888.57	5615.90
	MIN	-602.03	-937.50	-7225.41	-784.98	-937.50	-7695.59	-715.68	-1123.36	-7695.59	-901.95	-1123.36	-9310.29
303	Sum total D+L+PP MAX	-194.62	775.15	22906.66	-937.43	775.15	10298.10	-653.80	872.38	10298.10	-1392.63	872.38	-4595.07
	MIN	-1293.17	-969.73	2041.25	-2008.31	-969.73	-7551.39	-1825.36	-1253.28	-7551.39	-2543.81	-1253.28	-21206.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4022			MEMBER 4023			MEMBER 4024						
		NODE 4022			NODE 4023			NODE 4024						
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)				
1	Pavement	-265.69	-46.01	-2027.65	-344.23	-46.01	-4467.31	-345.46	-30.30	-4467.31	-424.00	-30.30	-7545.16	
3	Railing	-6.26	-11.53	-56.16	-12.88	-11.53	-132.73	-13.14	-7.45	-132.73	-19.76	-7.45	-264.33	
5	Wheel guard	-62.00	-114.15	-555.94	-127.51	-114.15	-1313.98	-130.11	-73.73	-1313.98	-195.61	-73.73	-2616.83	
8	Steel weight	-1000.64	-48.54	-7536.80	-1239.52	-48.54	-16497.44	-1241.39	-33.70	-16497.44	-1480.27	-33.70	-27384.10	
10	Medial strip	-106.90	53.09	-753.10	-106.90	53.09	-1608.27	-105.74	33.87	-1608.27	-105.74	33.87	-2454.18	
19	Snow	-117.95	-23.18	-901.87	-154.16	-23.18	-1990.29	-154.77	-15.23	-1990.29	-190.98	-15.23	-3373.27	
31	Miscellaneous	-9.03	4.29	-64.23	-9.03	4.29	-136.47	-8.94	2.74	-136.47	-8.94	2.74	-208.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	266.18	625.57	3625.34	111.82	625.57	2091.25	211.01	715.73	2091.25	112.39	715.73	1650.48
		MIN	-500.62	-689.37	-4034.81	-654.73	-689.37	-4529.43	-556.46	-740.50	-4529.43	-721.43	-740.50	-5269.35
		TANDEM-LOAD MAX	214.69	430.17	2732.97	94.57	430.17	1674.50	178.13	490.98	1674.50	76.56	490.98	1119.22
		MIN	-360.00	-474.59	-2740.87	-480.00	-474.59	-3081.02	-400.58	-504.64	-3081.02	-525.37	-504.64	-3579.71
		DISPERSION-LMAX	221.04	1018.27	5014.51	179.18	1018.27	4717.09	274.37	1157.15	4717.09	253.05	1157.15	5414.37
		MIN	-656.99	-1096.89	-8328.48	-743.93	-1096.89	-12047.79	-842.83	-1208.61	-12047.79	-950.38	-1208.61	-17830.80
110	Live load	L-PICKUP 1 MAX	487.22	1643.85	8639.85	291.00	1643.85	6808.34	485.38	1872.88	6808.34	365.44	1872.88	7064.85
		MIN	-1157.61	-1786.26	-12363.29	-1398.67	-1786.26	-16577.21	-1399.29	-1949.12	-16577.21	-1671.81	-1949.12	-23100.16
		L-PICKUP 2 MAX	435.73	1448.45	7747.49	273.75	1448.45	6391.58	452.50	1648.13	6391.58	329.61	1648.13	6533.59
		MIN	-1016.99	-1571.47	-11069.35	-1223.94	-1571.47	-15128.81	-1243.42	-1713.25	-15128.81	-1475.75	-1713.25	-21410.51
		L-PICKUP 3	-1308.88	-2088.01	-14323.53	-1549.72	-2088.01	-18503.17	-1570.30	-2283.58	-18503.17	-1844.58	-2283.58	-24948.28
		Live load MAX	487.22	1643.85	8639.85	291.00	1643.85	6808.34	485.38	1872.88	6808.34	365.44	1872.88	7064.85
MIN	-1308.88	-2088.01	-14323.53	-1549.72	-2088.01	-18503.17	-1570.30	-2283.58	-18503.17	-1844.58	-2283.58	-24948.28		
111	AASHTO Twin	TWIN-PICKUP MAX	439.74	1921.75	8153.71	277.34	1921.75	6445.46	439.27	2174.74	6445.46	409.31	2174.74	7687.60
		MIN	-1308.88	-2088.01	-14323.53	-1549.72	-2088.01	-18503.17	-1570.30	-2283.58	-18503.17	-1844.58	-2283.58	-24948.28
		MID-PICKUP	-1308.88	-2088.01	-14323.53	-1549.72	-2088.01	-18503.17	-1570.30	-2283.58	-18503.17	-1844.58	-2283.58	-24948.28
198	AASHTO Fatig	TRUCK-LOAD MAX	184.00	244.95	1319.79	52.12	244.95	802.56	110.04	207.12	802.56	37.78	207.12	299.44
		MIN	-176.42	-372.17	-785.37	-307.37	-372.17	-1027.73	-239.28	-316.62	-1027.73	-384.09	-316.62	-1557.95
		TANDEM-LOAD MAX	154.53	166.21	1048.70	50.20	166.21	715.74	106.12	141.84	715.74	25.60	141.84	203.30
		MIN	-133.89	-257.39	-533.30	-238.02	-257.39	-700.41	-180.61	-216.13	-700.41	-291.81	-216.13	-1055.43

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4022			4023			4023			4024		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	88.48	521.58	1213.60	54.40	521.58	1041.92	110.88	618.75	1041.92	92.78	618.75	1084.04
	MIN	-201.81	-663.77	-1813.53	-253.16	-663.77	-3045.03	-344.66	-710.72	-3045.03	-414.08	-710.72	-5742.43
199	AASHTO-LRFD TRUCK-LOAD MAX	267.56	1117.01	4045.16	128.98	1117.01	2444.54	213.71	1259.23	2444.54	201.74	1259.23	3127.41
	MIN	-797.32	-1223.13	-7586.55	-977.98	-1223.13	-8511.29	-901.95	-1328.69	-8511.29	-1099.16	-1328.69	-9889.51
	TANDEM-LOAD MAX	214.69	430.17	2732.97	94.57	430.17	1674.50	178.13	490.98	1674.50	76.56	490.98	1119.22
	MIN	-360.00	-474.59	-2740.87	-480.00	-474.59	-3081.02	-400.58	-504.64	-3081.02	-525.37	-504.64	-3579.71
	DISPERSION-LMAX	221.04	1018.27	5014.51	179.18	1018.27	4717.09	274.37	1157.15	4717.09	253.05	1157.15	5414.37
	MIN	-656.99	-1096.89	-8328.48	-743.93	-1096.89	-12047.79	-842.83	-1208.61	-12047.79	-950.38	-1208.61	-17830.80
300	Total Dead lWithout snow	-1450.52	-162.86	-10993.88	-1840.06	-162.86	-24156.19	-1844.78	-108.56	-24156.19	-2234.32	-108.56	-40472.60
301	Particular Snow	-117.95	-23.18	-901.87	-154.16	-23.18	-1990.29	-154.77	-15.23	-1990.29	-190.98	-15.23	-3373.27
302	Live load Total MAX	316.69	1068.50	5615.90	189.15	1068.50	4425.42	315.50	1217.37	4425.42	237.54	1217.37	4592.15
	MIN	-850.77	-1357.21	-9310.29	-1007.32	-1357.21	-12027.06	-1020.70	-1484.32	-12027.06	-1198.98	-1484.32	-16216.38
303	Sum total D+L+PP MAX	-1156.77	1045.32	-4595.07	-1748.32	1045.32	-20393.43	-1589.40	1202.14	-20393.43	-2116.50	1202.14	-37876.07
	MIN	-2419.24	-1543.24	-21206.04	-3001.54	-1543.24	-38173.54	-3020.25	-1608.12	-38173.54	-3624.28	-1608.12	-60062.25

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4024			4025			4025			4026				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	446.42	17.05	-7545.16	367.88	17.05	-4287.97	364.05	35.33	-4287.97	285.51	35.33	-1689.73		
3	Railing	20.42	7.06	-264.33	13.80	7.06	-127.47	13.47	11.24	-127.47	6.85	11.24	-46.17		
5	Wheel guard	202.11	69.92	-2616.83	136.61	69.92	-1261.94	133.35	111.28	-1261.94	67.85	111.28	-457.12		
8	Steel weight	1563.14	-15.32	-27384.10	1324.26	-15.32	-15834.48	1312.69	8.79	-15834.48	1073.81	8.79	-6288.50		
10	Medial strip	117.48	-38.90	-2454.18	117.48	-38.90	-1514.31	117.28	-56.60	-1514.31	117.28	-56.60	-576.09		
19	Snow	201.28	9.32	-3373.27	165.06	9.32	-1907.91	163.27	18.48	-1907.91	127.06	18.48	-746.57		
31	Miscellaneous	9.63	-3.15	-208.00	9.63	-3.15	-130.95	9.63	-4.63	-130.95	9.63	-4.63	-53.88		
100	AASHTO-LRFD TRUCK-LOAD	MAX	714.93	738.42	1650.48	547.38	738.42	2178.45	634.24	695.26	2178.45	475.51	695.26	3416.15	
		MIN	-102.46	-729.33	-5269.35	-203.74	-729.33	-4530.50	-107.59	-636.51	-4530.50	-267.85	-636.51	-3839.46	
		TANDEM-LOAD MAX	521.44	503.61	1119.22	394.90	503.61	1731.06	467.12	479.12	1731.06	342.72	479.12	2581.92	
		MIN	-69.72	-499.87	-3579.71	-174.15	-499.87	-3081.00	-92.50	-436.72	-3081.00	-217.19	-436.72	-2608.30	
		DISPERSION-LMAX	972.43	1216.08	5414.37	865.10	1216.08	4698.28	774.30	1126.87	4698.28	688.68	1126.87	4794.67	
		MIN	-239.41	-1186.14	-17830.80	-260.96	-1186.14	-11743.62	-177.53	-1065.66	-11743.62	-220.77	-1065.66	-7571.11	
110	Live load	L-PICKUP 1	MAX	1687.36	1954.50	7064.85	1412.48	1954.50	6876.73	1408.54	1822.13	6876.73	1164.19	1822.13	8210.82
		MIN	-341.88	-1915.48	-23100.16	-464.70	-1915.48	-16274.12	-285.12	-1702.18	-16274.12	-488.61	-1702.18	-11410.57	
		L-PICKUP 2	MAX	1493.87	1719.69	6533.59	1260.00	1719.69	6429.35	1241.41	1605.99	6429.35	1031.40	1605.99	7376.59
		MIN	-309.14	-1686.01	-21410.51	-435.12	-1686.01	-14824.62	-270.02	-1502.38	-14824.62	-437.96	-1502.38	-10179.42	
		L-PICKUP 3	MAX	1687.36	1954.50	7064.85	1412.48	1954.50	6876.73	1408.54	1822.13	6876.73	1164.19	1822.13	8210.82
		MIN	-378.76	-2227.34	-24948.28	-464.70	-2227.34	-18228.87	-285.12	-1998.16	-18228.87	-488.61	-1998.16	-13310.88	
111	AASHTO Twin	TWIN-PICKUP	MAX	1851.47	2286.43	7687.60	1576.68	2286.43	6722.50	1545.60	2121.72	6722.50	1304.98	2121.72	7779.23
		MIN	-378.76	-2227.34	-24948.28	-410.13	-2227.34	-18228.87	-261.15	-1998.16	-18228.87	-430.09	-1998.16	-13310.88	
		MID-PICKUP	MAX	1851.47	2286.43	7687.60	1576.68	2286.43	6722.50	1545.60	2121.72	6722.50	1304.98	2121.72	7779.23
198	AASHTO Fatig	TRUCK-LOAD	MAX	383.58	320.46	299.44	237.34	320.46	789.99	304.09	382.83	789.99	170.54	382.83	1246.36
		MIN	-34.54	-214.81	-1557.95	-110.97	-214.81	-1014.33	-53.34	-250.96	-1014.33	-163.43	-250.96	-742.20	
		TANDEM-LOAD	MAX	291.74	218.88	203.30	179.57	218.88	706.11	236.54	265.48	706.11	129.91	265.48	996.45
		MIN	-23.40	-147.10	-1055.43	-107.01	-147.10	-691.03	-51.38	-170.23	-691.03	-158.31	-170.23	-503.33	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4024			4025			4025			4026		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	419.30	717.02	1084.04	349.94	717.02	1039.80	260.74	681.36	1039.80	209.58	681.36	1162.86
	MIN	-86.26	-632.47	-5742.43	-104.51	-632.47	-2994.05	-48.88	-544.99	-2994.05	-83.75	-544.99	-1662.79
199	AASHTO-LRFD TRUCK-LOAD MAX	1084.77	1324.40	3127.41	886.77	1324.40	2771.16	943.04	1230.59	2771.16	761.30	1230.59	3848.91
	MIN	-181.43	-1288.68	-9889.51	-194.73	-1288.68	-8510.68	-112.64	-1154.51	-8510.68	-257.11	-1154.51	-7218.76
	TANDEM-LOAD MAX	521.44	503.61	1119.22	394.90	503.61	1731.06	467.12	479.12	1731.06	342.72	479.12	2581.92
	MIN	-69.72	-499.87	-3579.71	-174.15	-499.87	-3081.00	-92.50	-436.72	-3081.00	-217.19	-436.72	-2608.30
	DISPERSION-LMAX	972.43	1216.08	5414.37	865.10	1216.08	4698.28	774.30	1126.87	4698.28	688.68	1126.87	4794.67
	MIN	-239.41	-1186.14	-17830.80	-260.96	-1186.14	-11743.62	-177.53	-1065.66	-11743.62	-220.77	-1065.66	-7571.11
300	Total Dead lWithout snow	2359.20	36.67	-40472.60	1969.67	36.67	-23157.13	1950.47	105.42	-23157.13	1560.94	105.42	-9111.50
301	Particular Snow	201.28	9.32	-3373.27	165.06	9.32	-1907.91	163.27	18.48	-1907.91	127.06	18.48	-746.57
302	Live load Total MAX	1096.78	1270.43	4592.15	918.11	1270.43	4469.88	915.55	1184.38	4469.88	756.72	1184.38	5337.04
	MIN	-246.19	-1447.77	-16216.38	-302.06	-1447.77	-11848.76	-185.32	-1298.80	-11848.76	-317.60	-1298.80	-8652.07
303	Sum total D+L+PP MAX	3657.26	1316.41	-37876.07	3052.84	1316.41	-19254.20	3029.30	1308.28	-19254.20	2444.72	1308.28	-2919.93
	MIN	2240.43	-1438.45	-60062.25	1742.06	-1438.45	-36913.80	1872.82	-1280.33	-36913.80	1275.12	-1280.33	-18510.15

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4026			4027			4027			4028		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	285.09	55.57	-1689.73	186.92	55.57	670.30	212.45	39.23	670.30	114.28	39.23	2303.97
3	Railing	11.03	8.74	-46.17	2.76	8.74	22.80	8.94	4.90	22.80	0.67	4.90	70.84
5	Wheel guard	109.22	86.48	-457.12	27.34	86.48	225.68	88.50	48.53	225.68	6.63	48.53	701.33
8	Steel weight	1022.20	120.62	-6288.50	723.60	120.62	2440.49	753.18	100.23	2440.49	454.58	100.23	8479.29
10	Medial strip	88.27	-27.63	-576.09	88.27	-27.63	306.66	60.97	-11.53	306.66	60.97	-11.53	916.36
19	Snow	127.97	26.71	-746.57	82.70	26.71	306.76	95.56	18.46	306.76	50.30	18.46	1036.05
31	Miscellaneous	7.27	-2.27	-53.88	7.27	-2.27	18.86	5.02	-0.90	18.86	5.02	-0.90	69.04
100	AASHTO-LRFD TRUCK-LOAD	586.96	625.77	3416.15	392.45	625.77	5216.40	558.02	574.64	5216.40	359.44	574.64	6858.26
	MIN	-129.62	-514.73	-3839.46	-325.46	-514.73	-3100.08	-146.90	-498.37	-3100.08	-343.71	-498.37	-2623.12
	TANDEM-LOAD	434.04	434.68	2581.92	283.87	434.68	3788.36	415.32	399.17	3788.36	261.80	399.17	4904.07
	MIN	-104.76	-352.81	-2608.30	-255.18	-352.81	-2105.10	-116.09	-347.63	-2105.10	-269.36	-347.63	-1781.20
	DISPERSION-LMAX	629.21	953.05	4794.67	531.86	953.05	6382.14	505.26	771.30	6382.14	411.75	771.30	9217.48
	MIN	-161.92	-859.07	-7571.11	-225.95	-859.07	-5295.35	-157.28	-704.10	-5295.35	-225.23	-704.10	-5464.16
110	Live load L-PICKUP 1	1216.17	1578.82	8210.82	924.31	1578.82	11598.54	1063.28	1345.94	11598.54	771.19	1345.94	16075.74
	MIN	-291.55	-1373.80	-11410.57	-551.41	-1373.80	-8395.43	-304.18	-1202.47	-8395.43	-568.94	-1202.47	-8087.27
	L-PICKUP 2	1063.25	1387.74	7376.59	815.73	1387.74	10170.50	920.58	1170.47	10170.50	673.55	1170.47	14121.55
	MIN	-266.68	-1211.89	-10179.42	-481.13	-1211.89	-7400.45	-273.37	-1051.72	-7400.45	-494.59	-1051.72	-7245.36
	L-PICKUP 3	-271.74	-1606.03	-13310.88	-525.72	-1606.03	-10012.78	-300.25	-1377.42	-10012.78	-554.66	-1377.42	-9357.50
	Live load	1216.17	1578.82	8210.82	924.31	1578.82	11598.54	1063.28	1345.94	11598.54	771.19	1345.94	16075.74
	MIN	-291.55	-1606.03	-13310.88	-551.41	-1606.03	-10012.78	-304.18	-1377.42	-10012.78	-568.94	-1377.42	-9357.50
111	AASHTO Twin TWIN-PICKUP	1319.09	1839.37	7779.23	1031.92	1839.37	12431.79	1146.48	1549.09	12431.79	857.44	1549.09	17711.91
	MIN	-271.74	-1606.03	-13310.88	-525.72	-1606.03	-10012.78	-300.25	-1377.42	-10012.78	-554.66	-1377.42	-9357.50
	MID-PICKUP	-271.74	-1606.03	-13310.88	-525.72	-1606.03	-10012.78	-300.25	-1377.42	-10012.78	-554.66	-1377.42	-9357.50
198	AASHTO FatigTRUCK-LOAD	298.46	370.68	1246.36	135.99	370.68	1620.36	290.79	327.36	1620.36	125.42	327.36	1961.31
	MIN	-52.67	-235.06	-742.20	-203.33	-235.06	-547.85	-63.46	-204.05	-547.85	-238.68	-204.05	-445.33
	TANDEM-LOAD	231.64	257.13	996.45	104.37	257.13	1237.97	227.04	227.58	1237.97	97.27	227.58	1470.62
	MIN	-57.33	-160.88	-503.33	-184.84	-160.88	-371.25	-62.14	-139.93	-371.25	-191.77	-139.93	-302.21

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4026			4027			4027			4028		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	201.88	569.73	1162.86	141.63	569.73	1487.04	162.68	463.17	1487.04	103.80	463.17	2023.41
	MIN	-40.37	-444.98	-1662.79	-89.96	-444.98	-998.03	-40.61	-361.67	-998.03	-92.39	-361.67	-980.99
199	AASHTO-LRFD TRUCK-LOAD MAX	836.45	1090.69	3848.91	614.71	1090.69	7430.96	768.60	949.92	7430.96	540.96	949.92	10462.42
	MIN	-140.01	-925.40	-7218.76	-358.18	-925.40	-5829.96	-176.33	-826.37	-5829.96	-391.05	-826.37	-4933.07
	TANDEM-LOAD MAX	434.04	434.68	2581.92	283.87	434.68	3788.36	415.32	399.17	3788.36	261.80	399.17	4904.07
	MIN	-104.76	-352.81	-2608.30	-255.18	-352.81	-2105.10	-116.09	-347.63	-2105.10	-269.36	-347.63	-1781.20
	DISPERSION-LMAX	629.21	953.05	4794.67	531.86	953.05	6382.14	505.26	771.30	6382.14	411.75	771.30	9217.48
	MIN	-161.92	-859.07	-7571.11	-225.95	-859.07	-5295.35	-157.28	-704.10	-5295.35	-225.23	-704.10	-5464.16
300	Total Dead lWithout snow	1523.09	241.51	-9111.50	1036.17	241.51	3684.77	1129.07	180.47	3684.77	642.15	180.47	12540.84
301	Particular Snow	127.97	26.71	-746.57	82.70	26.71	306.76	95.56	18.46	306.76	50.30	18.46	1036.05
302	Live load Total MAX	790.51	1026.23	5337.04	600.80	1026.23	7539.05	691.13	874.86	7539.05	501.27	874.86	10449.23
	MIN	-189.51	-1043.92	-8652.07	-358.41	-1043.92	-6508.30	-197.72	-895.32	-6508.30	-369.81	-895.32	-6082.37
303	Sum total D+L+PP MAX	2441.56	1294.45	-2919.93	1719.67	1294.45	11530.59	1915.76	1073.79	11530.59	1193.72	1073.79	24026.12
	MIN	1404.69	-1017.21	-18510.15	652.93	-1017.21	-4469.26	967.60	-876.87	-4469.26	211.69	-876.87	5669.81

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4028			MEMBER 4029			MEMBER 4029			MEMBER 4030			
		NODE 4028			NODE 4029			NODE 4029			NODE 4030			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	159.64	-5.67	2303.97	61.47	-5.67	3409.55	88.48	-13.14	3409.55	-9.69	-13.14	3803.47	
3	Railing	7.43	1.58	70.84	-0.84	1.58	103.82	5.32	0.11	103.82	-2.95	0.11	115.63	
5	Wheel guard	73.59	15.59	701.33	-8.29	15.59	1027.81	52.63	1.10	1027.81	-29.25	1.10	1144.70	
8	Steel weight	557.42	-41.75	8479.29	258.82	-41.75	12560.49	294.65	-54.52	12560.49	-3.95	-54.52	14013.98	
10	Medial strip	40.81	-14.96	916.36	40.81	-14.96	1324.46	13.68	-8.66	1324.46	13.68	-8.66	1461.30	
19	Snow	71.99	-2.15	1036.05	26.72	-2.15	1529.60	40.15	-5.77	1529.60	-5.12	-5.77	1704.76	
31	Miscellaneous	3.37	-1.15	69.04	3.37	-1.15	102.74	1.20	-0.68	102.74	1.20	-0.68	114.71	
100	AASHTO-LRFD TRUCK-LOAD	MAX	536.59	485.82	6858.26	339.76	485.82	8257.18	478.38	472.31	8257.18	286.38	472.31	8841.65
		MIN	-163.42	-526.19	-2623.12	-358.19	-526.19	-2245.15	-204.63	-514.14	-2245.15	-395.80	-514.14	-1813.16
		TANDEM-LOAD MAX	400.21	339.09	4904.07	248.92	339.09	5875.54	359.94	331.25	5875.54	212.81	331.25	6294.23
		MIN	-127.60	-368.23	-1781.20	-278.60	-368.23	-1524.55	-156.43	-359.60	-1524.55	-303.44	-359.60	-1229.18
		DISPERSION-LMAX	435.95	616.07	9217.48	344.52	616.07	11455.28	369.45	521.53	11455.28	283.85	521.53	12399.92
		MIN	-174.41	-622.35	-5464.16	-244.47	-622.35	-5897.13	-224.02	-541.91	-5897.13	-300.03	-541.91	-6196.42
110	Live load	L-PICKUP 1 MAX	972.55	1101.89	16075.74	684.28	1101.89	19712.46	847.82	993.84	19712.46	570.23	993.84	21241.57
		MIN	-337.83	-1148.54	-8087.27	-602.66	-1148.54	-8142.28	-428.65	-1056.06	-8142.28	-695.83	-1056.06	-8009.59
		L-PICKUP 2 MAX	836.16	955.16	14121.55	593.43	955.16	17330.82	729.39	852.78	17330.82	496.66	852.78	18694.16
		MIN	-302.02	-990.58	-7245.36	-523.07	-990.58	-7421.68	-380.45	-901.51	-7421.68	-603.48	-901.51	-7425.61
		L-PICKUP 3	-339.32	-1262.67	-9357.50	-593.74	-1262.67	-9107.45	-434.41	-1158.55	-9107.45	-695.38	-1158.55	-8645.50
		Live load MAX	972.55	1101.89	16075.74	684.28	1101.89	19712.46	847.82	993.84	19712.46	570.23	993.84	21241.57
MIN	-339.32	-1262.67	-9357.50	-602.66	-1262.67	-9107.45	-434.41	-1158.55	-9107.45	-695.83	-1158.55	-8645.50		
111	AASHTO Twin	TWIN-PICKUP MAX	1039.91	1244.29	17711.91	752.27	1244.29	21872.44	882.34	1082.95	21872.44	605.46	1082.95	23564.02
		MIN	-339.32	-1262.67	-9357.50	-593.74	-1262.67	-9107.45	-434.41	-1158.55	-9107.45	-695.38	-1158.55	-8645.50
		MID-PICKUP	-339.32	-1262.67	-9357.50	-593.74	-1262.67	-9107.45	-434.41	-1158.55	-9107.45	-695.38	-1158.55	-8645.50
198	AASHTO Fatig	TRUCK-LOAD MAX	285.83	270.65	1961.31	121.64	270.65	2257.18	273.06	216.26	2257.18	111.86	216.26	2383.49
		MIN	-79.47	-163.43	-445.33	-242.60	-163.43	-375.81	-92.80	-170.92	-375.81	-253.58	-170.92	-302.42
		TANDEM-LOAD MAX	223.32	189.08	1470.62	95.01	189.08	1678.25	214.04	152.35	1678.25	88.37	152.35	1769.44
		MIN	-65.89	-112.32	-302.21	-194.05	-112.32	-255.16	-75.24	-122.19	-255.16	-200.85	-122.19	-205.04

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4028			4029			4029			4030		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	143.90	376.22	2023.41	85.54	376.22	2465.04	127.92	308.04	2465.04	70.29	308.04	2654.75
	MIN	-44.57	-326.24	-980.99	-97.49	-326.24	-1044.23	-55.82	-300.01	-1044.23	-111.21	-300.01	-1094.72
199	AASHTO-LRFD TRUCK-LOAD MAX	719.50	766.48	10462.42	491.34	766.48	12847.43	610.93	681.75	12847.43	388.89	681.75	13782.32
	MIN	-202.61	-780.62	-4933.07	-415.24	-780.62	-4222.26	-258.66	-745.37	-4222.26	-472.61	-745.37	-3409.68
	TANDEM-LOAD MAX	400.21	339.09	4904.07	248.92	339.09	5875.54	359.94	331.25	5875.54	212.81	331.25	6294.23
	MIN	-127.60	-368.23	-1781.20	-278.60	-368.23	-1524.55	-156.43	-359.60	-1524.55	-303.44	-359.60	-1229.18
	DISPERSION-LMAX	435.95	616.07	9217.48	344.52	616.07	11455.28	369.45	521.53	11455.28	283.85	521.53	12399.92
	MIN	-174.41	-622.35	-5464.16	-244.47	-622.35	-5897.13	-224.02	-541.91	-5897.13	-300.03	-541.91	-6196.42
300	Total Dead lWithout snow	842.26	-46.36	12540.84	355.34	-46.36	18528.87	455.95	-75.80	18528.87	-30.97	-75.80	20653.79
301	Particular Snow	71.99	-2.15	1036.05	26.72	-2.15	1529.60	40.15	-5.77	1529.60	-5.12	-5.77	1704.76
302	Live load Total MAX	632.16	716.23	10449.23	444.78	716.23	12813.10	551.09	646.00	12813.10	370.65	646.00	13807.02
	MIN	-220.56	-820.74	-6082.37	-391.73	-820.74	-5919.84	-282.36	-753.06	-5919.84	-452.29	-753.06	-5619.57
303	Sum total D+L+PP MAX	1546.41	714.08	24026.12	826.85	714.08	32871.56	1047.18	640.23	32871.56	365.53	640.23	36165.56
	MIN	627.52	-869.25	5669.81	-127.18	-869.25	12362.67	129.03	-834.62	12362.67	-488.37	-834.62	15053.09

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	4030			4031			4031			4032			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		11.70	-12.72	3803.47	-86.47	-12.72	3429.61	-67.39	-11.70	3429.61	-165.56	-11.70	2264.82	
3	Railing		3.02	-0.91	115.63	-5.25	-0.91	104.45	0.66	-2.15	104.45	-7.61	-2.15	69.74	
5	Wheel guard		29.87	-9.05	1144.70	-52.00	-9.05	1034.06	6.58	-21.30	1034.06	-75.30	-21.30	690.46	
8	Steel weight		11.33	-40.55	14013.98	-287.27	-40.55	12634.26	-280.71	-21.68	12634.26	-579.31	-21.68	8334.19	
10	Medial strip		-15.37	-1.07	1461.30	-15.37	-1.07	1307.55	-45.31	8.15	1307.55	-45.31	8.15	854.43	
19	Snow		5.81	-5.82	1704.76	-39.46	-5.82	1536.47	-29.56	-5.69	1536.47	-74.83	-5.69	1014.52	
31	Miscellaneous		-1.14	-0.09	114.71	-1.14	-0.09	103.33	-3.55	0.65	103.33	-3.55	0.65	67.81	
100	AASHTO-LRFD TRUCK-LOAD	MAX	423.51	475.97	8841.65	235.87	475.97	8653.86	378.09	486.92	8653.86	191.52	486.92	7643.46	
		MIN	-261.65	-506.46	-1813.16	-448.84	-506.46	-2445.59	-322.89	-520.00	-2445.59	-509.68	-520.00	-3057.56	
		TANDEM-LOAD	MAX	321.77	333.65	6294.23	178.21	333.65	6154.46	290.69	341.38	6154.46	147.60	341.38	5455.28
		MIN	-195.60	-354.37	-1229.18	-339.10	-354.37	-1657.92	-237.12	-362.42	-1657.92	-380.24	-362.42	-2072.78	
		DISPERSION-L	MAX	315.05	517.22	12399.92	235.06	517.22	12022.38	265.92	596.27	12022.38	192.05	596.27	10275.81
		MIN	-294.75	-539.64	-6196.42	-376.41	-539.64	-6423.84	-374.84	-618.94	-6423.84	-462.52	-618.94	-6571.83	
110	Live load	L-PICKUP 1	MAX	738.55	993.18	21241.57	470.94	993.18	20676.23	644.00	1083.18	20676.23	383.57	1083.18	17919.27
		MIN	-556.39	-1046.10	-8009.59	-825.25	-1046.10	-8869.42	-697.72	-1138.94	-8869.42	-972.20	-1138.94	-9629.39	
		L-PICKUP 2	MAX	636.82	850.87	18694.16	413.27	850.87	18176.83	556.61	937.65	18176.83	339.65	937.65	15731.09
		MIN	-490.35	-894.01	-7425.61	-715.51	-894.01	-8081.75	-611.95	-981.36	-8081.75	-842.76	-981.36	-8644.62	
		L-PICKUP 3	MAX	-579.83	-1147.54	-8645.50	-846.24	-1147.54	-9920.53	-755.88	-1282.34	-9920.53	-1029.64	-1282.34	-11089.47
		MIN	738.55	993.18	21241.57	470.94	993.18	20676.23	644.00	1083.18	20676.23	383.57	1083.18	17919.27	
111	AASHTO Twin	TWIN-PICKUP	MAX	746.01	1083.04	23564.02	479.67	1083.04	22958.20	639.00	1201.42	22958.20	381.93	1201.42	19773.51
		MIN	-579.83	-1147.54	-8645.50	-846.24	-1147.54	-9920.53	-755.88	-1282.34	-9920.53	-1029.64	-1282.34	-11089.47	
		MID-PICKUP	MAX	-579.83	-1147.54	-8645.50	-846.24	-1147.54	-9920.53	-755.88	-1282.34	-9920.53	-1029.64	-1282.34	-11089.47
198	AASHTO Fatig	TRUCK-LOAD	MAX	261.05	157.17	2383.49	102.34	157.17	2355.09	248.77	162.32	2355.09	90.36	162.32	2157.48
		MIN	-105.74	-222.53	-302.42	-264.21	-222.53	-410.22	-118.03	-276.28	-410.22	-276.55	-276.28	-522.27	
		TANDEM-LOAD	MAX	205.43	112.33	1769.44	81.82	112.33	1748.39	197.14	111.73	1748.39	73.50	111.73	1610.84
		MIN	-83.99	-156.75	-205.04	-207.57	-156.75	-277.99	-92.28	-192.98	-277.99	-215.94	-192.98	-353.70	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4030			4031			4031			4032		
NODE		4030			4031			4031			4032		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	116.56	289.51	2654.75	59.93	289.51	2591.66	104.76	318.70	2591.66	50.07	318.70	2257.83
	MIN	-70.96	-314.82	-1094.72	-127.76	-314.82	-1139.26	-90.49	-379.83	-1139.26	-148.03	-379.83	-1185.63
199	AASHTO-LRFD TRUCK-LOAD MAX	513.85	686.16	13782.32	297.90	686.16	13486.74	444.09	738.64	13486.74	232.32	738.64	11694.76
	MIN	-349.51	-735.40	-3409.68	-563.86	-735.40	-4598.98	-465.03	-805.88	-4598.98	-681.52	-805.88	-5749.80
	TANDEM-LOAD MAX	321.77	333.65	6294.23	178.21	333.65	6154.46	290.69	341.38	6154.46	147.60	341.38	5455.28
	MIN	-195.60	-354.37	-1229.18	-339.10	-354.37	-1657.92	-237.12	-362.42	-1657.92	-380.24	-362.42	-2072.78
	DISPERSION-LMAX	315.05	517.22	12399.92	235.06	517.22	12022.38	265.92	596.27	12022.38	192.05	596.27	10275.81
	MIN	-294.75	-539.64	-6196.42	-376.41	-539.64	-6423.84	-374.84	-618.94	-6423.84	-462.52	-618.94	-6571.83
300	Total Dead lWithout snow	39.41	-64.39	20653.79	-447.51	-64.39	18613.26	-389.72	-48.04	18613.26	-876.64	-48.04	12281.45
301	Particular Snow	5.81	-5.82	1704.76	-39.46	-5.82	1536.47	-29.56	-5.69	1536.47	-74.83	-5.69	1014.52
302	Live load Total MAX	480.06	645.57	13807.02	306.11	645.57	13439.55	418.60	704.07	13439.55	249.32	704.07	11647.53
	MIN	-376.89	-745.90	-5619.57	-550.06	-745.90	-6448.35	-491.32	-833.52	-6448.35	-669.27	-833.52	-7208.16
303	Sum total D+L+PP MAX	525.27	639.75	36165.56	-89.03	639.75	33589.29	124.90	698.38	33589.29	-627.35	698.38	24943.50
	MIN	-371.09	-816.11	15053.09	-1037.03	-816.11	11766.88	-910.61	-887.25	11766.88	-1620.74	-887.25	3925.37

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4032			MEMBER 4033			MEMBER 4034						
		NODE 4032			NODE 4033			NODE 4034						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-146.39	-15.06	2264.82	-244.56	-15.06	310.06	-220.56	-34.13	310.06	-318.73	-34.13	-2386.41	
3	Railing	-1.63	-4.29	69.74	-9.90	-4.29	12.13	-3.77	-8.25	12.13	-12.05	-8.25	-66.97	
5	Wheel guard	-16.10	-42.48	690.46	-97.98	-42.48	120.05	-37.37	-81.69	120.05	-119.25	-81.69	-663.04	
8	Steel weight	-573.10	-9.72	8334.19	-871.70	-9.72	1110.18	-847.66	-39.60	1110.18	-1146.26	-39.60	-8859.44	
10	Medial strip	-75.60	21.03	854.43	-75.60	21.03	98.43	-104.02	37.29	98.43	-104.02	37.29	-941.73	
19	Snow	-64.87	-7.71	1014.52	-110.14	-7.71	139.49	-98.02	-17.12	139.49	-143.28	-17.12	-1066.99	
31	Miscellaneous	-6.00	1.69	67.81	-6.00	1.69	7.84	-8.29	3.01	7.84	-8.29	3.01	-75.10	
100	AASHTO-LRFD TRUCK-LOAD	MAX	336.78	518.31	7643.46	153.38	518.31	5823.79	310.24	541.04	5823.79	128.08	541.04	3615.55
		MIN	-390.73	-561.76	-3057.56	-576.28	-561.76	-3584.22	-439.48	-611.66	-3584.22	-621.94	-611.66	-4171.22
		TANDEM-LOAD MAX	262.06	361.94	5455.28	120.37	361.94	4215.09	242.35	372.78	4215.09	102.95	372.78	2728.79
		MIN	-283.11	-390.50	-2072.78	-425.12	-390.50	-2430.74	-316.06	-423.80	-2430.74	-455.44	-423.80	-2833.74
		DISPERSION-LMAX	227.33	715.15	10275.81	160.89	715.15	7059.83	210.36	886.07	7059.83	149.77	886.07	4922.13
		MIN	-465.68	-743.03	-6571.83	-560.66	-743.03	-6539.73	-570.45	-945.23	-6539.73	-671.10	-945.23	-8807.84
110	Live load	L-PICKUP 1 MAX	564.11	1233.46	17919.27	314.27	1233.46	12883.63	520.61	1427.10	12883.63	277.85	1427.10	8537.68
		MIN	-856.41	-1304.79	-9629.39	-1136.95	-1304.79	-10123.95	-1009.93	-1556.89	-10123.95	-1293.05	-1556.89	-12979.06
		L-PICKUP 2 MAX	489.39	1077.09	15731.09	281.26	1077.09	11274.92	452.71	1258.84	11274.92	252.72	1258.84	7650.92
		MIN	-748.80	-1133.53	-8644.62	-985.78	-1133.53	-8970.47	-886.51	-1369.04	-8970.47	-1126.54	-1369.04	-11641.59
		L-PICKUP 3	-953.30	-1497.44	-11089.47	-1234.91	-1497.44	-11950.03	-1135.79	-1811.22	-11950.03	-1419.95	-1811.22	-14980.15
		Live load MAX	564.11	1233.46	17919.27	314.27	1233.46	12883.63	520.61	1427.10	12883.63	277.85	1427.10	8537.68
MIN	-953.30	-1497.44	-11089.47	-1234.91	-1497.44	-11950.03	-1135.79	-1811.22	-11950.03	-1419.95	-1811.22	-14980.15		
111	AASHTO Twin TWIN-PICKUP	MAX	555.33	1411.24	19773.51	312.11	1411.24	13856.42	499.90	1666.94	13856.42	264.49	1666.94	8043.03
		MIN	-953.30	-1497.44	-11089.47	-1234.91	-1497.44	-11950.03	-1135.79	-1811.22	-11950.03	-1419.95	-1811.22	-14980.15
		MID-PICKUP	-953.30	-1497.44	-11089.47	-1234.91	-1497.44	-11950.03	-1135.79	-1811.22	-11950.03	-1419.95	-1811.22	-14980.15
198	AASHTO FatigTRUCK-LOAD	MAX	233.27	211.25	2157.48	76.61	211.25	1783.61	219.82	243.53	1783.61	63.94	243.53	1320.71
		MIN	-133.80	-319.45	-522.27	-291.71	-319.45	-641.79	-148.20	-359.67	-641.79	-303.64	-359.67	-824.24
		TANDEM-LOAD MAX	186.52	144.91	1610.84	63.56	144.91	1355.03	176.88	166.69	1355.03	55.85	166.69	1050.99
		MIN	-102.94	-221.96	-353.70	-226.08	-221.96	-434.87	-112.71	-249.17	-434.87	-233.63	-249.17	-560.08

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4032			4033			4033			4034		
NODE		4032			4033			4033			4034		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	93.07	364.49	2257.83	42.09	364.49	1649.37	87.12	456.96	1649.37	39.41	456.96	1205.02
	MIN	-117.76	-452.58	-1185.63	-176.73	-452.58	-1242.42	-153.98	-570.91	-1242.42	-214.73	-570.91	-1943.24
199	AASHTO-LRFD TRUCK-LOAD MAX	389.71	852.90	11694.76	185.90	852.90	8336.19	345.08	966.09	8336.19	144.10	966.09	4014.57
	MIN	-593.53	-920.79	-5749.80	-811.46	-920.79	-6738.09	-691.54	-1067.23	-6738.09	-906.62	-1067.23	-7836.77
	TANDEM-LOAD MAX	262.06	361.94	5455.28	120.37	361.94	4215.09	242.35	372.78	4215.09	102.95	372.78	2728.79
	MIN	-283.11	-390.50	-2072.78	-425.12	-390.50	-2430.74	-316.06	-423.80	-2430.74	-455.44	-423.80	-2833.74
	DISPERSION-LMAX	227.33	715.15	10275.81	160.89	715.15	7059.83	210.36	886.07	7059.83	149.77	886.07	4922.13
	MIN	-465.68	-743.03	-6571.83	-560.66	-743.03	-6539.73	-570.45	-945.23	-6539.73	-671.10	-945.23	-8807.84
300	Total Dead lWithout snow	-818.82	-48.84	12281.45	-1305.74	-48.84	1658.68	-1221.68	-123.36	1658.68	-1708.60	-123.36	-12992.70
301	Particular Snow	-64.87	-7.71	1014.52	-110.14	-7.71	139.49	-98.02	-17.12	139.49	-143.28	-17.12	-1066.99
302	Live load Total MAX	366.67	801.75	11647.53	204.28	801.75	8374.36	338.39	927.62	8374.36	180.60	927.62	5549.49
	MIN	-619.64	-973.33	-7208.16	-802.69	-973.33	-7767.52	-738.26	-1177.29	-7767.52	-922.97	-1177.29	-9737.10
303	Sum total D+L+PP MAX	-407.02	794.04	24943.50	-1150.31	794.04	10172.53	-879.78	910.50	10172.53	-1617.10	910.50	-6845.36
	MIN	-1503.33	-1029.89	3925.37	-2218.56	-1029.89	-7628.03	-2057.96	-1317.77	-7628.03	-2774.85	-1317.77	-23796.79

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4034			4035			4035			4036		
NODE		4034			4035			4035			4036		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-307.67	-37.35	-2386.41	-386.21	-37.35	-5161.92	-386.43	-25.60	-5161.92	-464.97	-25.60	-8567.52
3	Railing	-7.63	-11.40	-66.97	-14.25	-11.40	-154.47	-14.50	-7.36	-154.47	-21.12	-7.36	-296.95
5	Wheel guard	-75.53	-112.88	-663.04	-141.03	-112.88	-1529.25	-143.57	-72.87	-1529.25	-209.07	-72.87	-2939.78
8	Steel weight	-1154.22	-15.02	-8859.44	-1393.10	-15.02	-19048.72	-1390.95	-15.73	-19048.72	-1629.83	-15.73	-31131.81
10	Medial strip	-128.20	57.28	-941.73	-128.20	57.28	-1967.34	-126.55	36.10	-1967.34	-126.55	36.10	-2979.74
19	Snow	-137.29	-19.34	-1066.99	-173.50	-19.34	-2310.15	-173.67	-13.14	-2310.15	-209.88	-13.14	-3844.33
31	Miscellaneous	-10.25	4.62	-75.10	-10.25	4.62	-157.06	-10.11	2.91	-157.06	-10.11	2.91	-237.96
100	AASHTO-LRFD TRUCK-LOAD	258.51	661.34	3615.55	107.43	661.34	2105.89	205.70	770.22	2105.89	108.55	770.22	1480.69
	MIN	-501.74	-718.25	-4171.22	-652.38	-718.25	-4747.08	-561.89	-790.13	-4747.08	-723.63	-790.13	-5418.17
	TANDEM-LOAD	208.70	454.40	2728.79	91.57	454.40	1687.98	173.89	527.27	1687.98	73.97	527.27	1005.90
	MIN	-360.45	-494.33	-2833.74	-477.44	-494.33	-3229.78	-404.30	-537.66	-3229.78	-525.84	-537.66	-3680.79
	DISPERSION-LMAX	208.59	1100.82	4922.13	167.34	1100.82	4562.02	259.45	1266.44	4562.02	238.66	1266.44	5144.39
	MIN	-711.70	-1165.40	-8807.84	-799.24	-1165.40	-13001.20	-893.13	-1310.32	-13001.20	-1001.21	-1310.32	-19191.57
110	Live load	467.10	1762.16	8537.68	274.77	1762.16	6667.92	465.15	2036.67	6667.92	347.21	2036.67	6625.08
	MIN	-1213.44	-1883.65	-12979.06	-1451.62	-1883.65	-17748.28	-1455.02	-2100.45	-17748.28	-1724.84	-2100.45	-24609.74
	L-PICKUP 2	417.29	1555.22	7650.92	258.91	1555.22	6250.00	433.34	1793.72	6250.00	312.63	1793.72	6150.28
	MIN	-1072.15	-1659.73	-11641.59	-1276.69	-1659.73	-16230.98	-1297.43	-1847.98	-16230.98	-1527.06	-1847.98	-22872.37
	L-PICKUP 3	-1363.61	-2198.45	-14980.15	-1601.69	-2198.45	-19720.90	-1623.44	-2460.51	-19720.90	-1895.45	-2460.51	-26415.72
	Live load	467.10	1762.16	8537.68	274.77	1762.16	6667.92	465.15	2036.67	6667.92	347.21	2036.67	6625.08
	MIN	-1363.61	-2198.45	-14980.15	-1601.69	-2198.45	-19720.90	-1623.44	-2460.51	-19720.90	-1895.45	-2460.51	-26415.72
111	AASHTO Twin	415.49	2060.90	8043.03	255.74	2060.90	6337.52	414.01	2368.16	6337.52	386.91	2368.16	7135.77
	MIN	-1363.61	-2198.45	-14980.15	-1601.69	-2198.45	-19720.90	-1623.44	-2460.51	-19720.90	-1895.45	-2460.51	-26415.72
	MID-PICKUP	-1363.61	-2198.45	-14980.15	-1601.69	-2198.45	-19720.90	-1623.44	-2460.51	-19720.90	-1895.45	-2460.51	-26415.72
198	AASHTO Fatig	181.38	255.05	1320.71	51.87	255.05	808.14	107.49	223.19	808.14	37.88	223.19	275.98
	MIN	-180.40	-382.70	-824.24	-308.94	-382.70	-1090.42	-242.90	-331.45	-1090.42	-385.44	-331.45	-1644.41
	TANDEM-LOAD	152.11	172.89	1050.99	49.97	172.89	722.06	103.68	152.78	722.06	25.70	152.78	187.26
	MIN	-136.50	-264.57	-560.08	-238.44	-264.57	-743.35	-183.21	-225.51	-743.35	-292.01	-225.51	-1113.69

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4034			4035			4035			4036		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	85.51	564.99	1205.02	51.87	564.99	1021.63	108.25	678.40	1021.63	90.56	678.40	1043.34
	MIN	-220.72	-703.72	-1943.24	-272.52	-703.72	-3332.11	-360.16	-768.30	-3332.11	-430.02	-768.30	-6158.05
199	AASHTO-LRFD TRUCK-LOAD MAX	253.06	1189.06	4014.57	116.82	1189.06	2479.67	200.56	1364.84	2479.67	191.24	1364.84	2784.25
	MIN	-803.43	-1277.32	-7836.77	-980.41	-1277.32	-8910.91	-910.69	-1423.57	-8910.91	-1104.84	-1423.57	-10159.23
	TANDEM-LOAD MAX	208.70	454.40	2728.79	91.57	454.40	1687.98	173.89	527.27	1687.98	73.97	527.27	1005.90
	MIN	-360.45	-494.33	-2833.74	-477.44	-494.33	-3229.78	-404.30	-537.66	-3229.78	-525.84	-537.66	-3680.79
	DISPERSION-LMAX	208.59	1100.82	4922.13	167.34	1100.82	4562.02	259.45	1266.44	4562.02	238.66	1266.44	5144.39
	MIN	-711.70	-1165.40	-8807.84	-799.24	-1165.40	-13001.20	-893.13	-1310.32	-13001.20	-1001.21	-1310.32	-19191.57
300	Total Dead lWithout snow	-1683.49	-114.75	-12992.70	-2073.02	-114.75	-28018.76	-2072.11	-82.55	-28018.76	-2461.64	-82.55	-46153.75
301	Particular Snow	-137.29	-19.34	-1066.99	-173.50	-19.34	-2310.15	-173.67	-13.14	-2310.15	-209.88	-13.14	-3844.33
302	Live load Total MAX	303.61	1145.40	5549.49	178.60	1145.40	4334.15	302.35	1323.83	4334.15	225.69	1323.83	4306.30
	MIN	-886.35	-1428.99	-9737.10	-1041.10	-1428.99	-12818.59	-1055.24	-1599.33	-12818.59	-1232.04	-1599.33	-17170.22
303	Sum total D+L+PP MAX	-1426.08	1126.06	-6845.36	-2014.35	1126.06	-24694.52	-1852.72	1310.69	-24694.52	-2378.13	1310.69	-44399.89
	MIN	-2707.13	-1563.08	-23796.79	-3287.63	-1563.08	-43147.49	-3301.01	-1695.02	-43147.49	-3903.56	-1695.02	-67168.30

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4036			4037			4037			4038			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	466.33	16.25	-8567.52	387.79	16.25	-5151.01	382.07	37.77	-5151.01	303.53	37.77	-2408.62	
3	Railing	21.16	7.11	-296.95	14.54	7.11	-154.13	14.10	11.50	-154.13	7.49	11.50	-67.78	
5	Wheel guard	209.49	70.42	-2939.78	143.99	70.42	-1525.84	139.60	113.84	-1525.84	74.10	113.84	-671.02	
8	Steel weight	1634.84	-19.18	-31131.81	1395.96	-19.18	-19008.63	1378.06	15.55	-19008.63	1139.18	15.55	-8939.64	
10	Medial strip	126.14	-39.91	-2979.74	126.14	-39.91	-1970.66	125.89	-57.84	-1970.66	125.89	-57.84	-963.51	
19	Snow	210.41	8.96	-3844.33	174.20	8.96	-2305.90	171.57	19.54	-2305.90	135.35	19.54	-1078.21	
31	Miscellaneous	10.15	-3.22	-237.96	10.15	-3.22	-156.74	10.13	-4.66	-156.74	10.13	-4.66	-75.69	
100	AASHTO-LRFD TRUCK-LOAD	MAX	721.53	789.49	1480.69	558.54	789.49	2073.01	643.83	729.99	2073.01	489.95	729.99	3421.24
		MIN	-106.07	-777.32	-5418.17	-203.45	-777.32	-4609.75	-107.10	-664.93	-4609.75	-261.97	-664.93	-3955.96
		TANDEM-LOAD MAX	524.67	537.45	1005.90	402.14	537.45	1665.31	472.42	502.85	1665.31	352.40	502.85	2594.45
		MIN	-72.23	-531.90	-3680.79	-172.67	-531.90	-3134.80	-91.61	-456.59	-3134.80	-211.86	-456.59	-2687.66
		DISPERSION-LMAX	1008.77	1311.73	5144.39	900.82	1311.73	4439.06	799.01	1187.47	4439.06	712.24	1187.47	4597.80
		MIN	-243.75	-1283.05	-19191.57	-264.68	-1283.05	-12858.46	-173.49	-1122.11	-12858.46	-215.56	-1122.11	-8516.04
110	Live load	L-PICKUP 1 MAX	1730.31	2101.23	6625.08	1459.36	2101.23	6512.07	1442.84	1917.46	6512.07	1202.19	1917.46	8019.05
		MIN	-349.83	-2060.37	-24609.74	-468.12	-2060.37	-17468.21	-280.60	-1787.05	-17468.21	-477.53	-1787.05	-12471.99
		L-PICKUP 2 MAX	1533.44	1849.19	6150.28	1302.96	1849.19	6104.36	1271.43	1690.32	6104.36	1064.64	1690.32	7192.25
		MIN	-315.98	-1814.95	-22872.37	-437.35	-1814.95	-15993.26	-265.11	-1578.70	-15993.26	-427.41	-1578.70	-11203.70
		L-PICKUP 3	-388.36	-2399.68	-26415.72	-414.64	-2399.68	-19368.05	-258.48	-2094.46	-19368.05	-420.94	-2094.46	-14359.48
		Live load MAX	1730.31	2101.23	6625.08	1459.36	2101.23	6512.07	1442.84	1917.46	6512.07	1202.19	1917.46	8019.05
MIN	-388.36	-2399.68	-26415.72	-468.12	-2399.68	-19368.05	-280.60	-2094.46	-19368.05	-477.53	-2094.46	-14359.48		
111	AASHTO Twin	TWIN-PICKUP MAX	1899.43	2459.06	7135.77	1627.55	2459.06	6215.56	1586.93	2235.35	6215.56	1348.21	2235.35	7494.97
		MIN	-388.36	-2399.68	-26415.72	-414.64	-2399.68	-19368.05	-258.48	-2094.46	-19368.05	-420.94	-2094.46	-14359.48
		MID-PICKUP	-388.36	-2399.68	-26415.72	-414.64	-2399.68	-19368.05	-258.48	-2094.46	-19368.05	-420.94	-2094.46	-14359.48
198	AASHTO Fatig	TRUCK-LOAD MAX	385.14	334.42	275.98	241.87	334.42	792.90	306.98	392.02	792.90	176.48	392.02	1262.15
		MIN	-36.49	-225.63	-1644.41	-108.04	-225.63	-1060.00	-52.47	-257.10	-1060.00	-184.23	-257.10	-780.76
		TANDEM-LOAD MAX	291.97	227.66	187.26	182.61	227.66	710.02	237.66	271.35	710.02	133.86	271.35	1009.66
		MIN	-24.75	-154.50	-1113.69	-104.21	-154.50	-722.26	-50.55	-174.46	-722.26	-154.60	-174.46	-529.82

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4036			4037			4037			4038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	433.12	770.76	1043.34	363.30	770.76	994.60	272.12	715.97	994.60	220.54	715.97	1132.04
	MIN	-90.17	-685.82	-6158.05	-107.95	-685.82	-3298.81	-51.11	-575.46	-3298.81	-85.24	-575.46	-1881.70
199	AASHTO-LRFD TRUCK-LOAD MAX	1101.71	1420.56	2784.25	907.56	1420.56	2467.12	964.25	1296.25	2467.12	785.78	1296.25	3729.95
	MIN	-187.76	-1383.27	-10159.23	-196.03	-1383.27	-8661.60	-113.71	-1205.07	-8661.60	-252.15	-1205.07	-7438.94
	TANDEM-LOAD MAX	524.67	537.45	1005.90	402.14	537.45	1665.31	472.42	502.85	1665.31	352.40	502.85	2594.45
	MIN	-72.23	-531.90	-3680.79	-172.67	-531.90	-3134.80	-91.61	-456.59	-3134.80	-211.86	-456.59	-2687.66
	DISPERSION-LMAX	1008.77	1311.73	5144.39	900.82	1311.73	4439.06	799.01	1187.47	4439.06	712.24	1187.47	4597.80
	MIN	-243.75	-1283.05	-19191.57	-264.68	-1283.05	-12858.46	-173.49	-1122.11	-12858.46	-215.56	-1122.11	-8516.04
300	Total Dead lWithout snow	2468.11	31.47	-46153.75	2078.58	31.47	-27967.01	2049.86	116.16	-27967.01	1660.33	116.16	-13126.27
301	Particular Snow	210.41	8.96	-3844.33	174.20	8.96	-2305.90	171.57	19.54	-2305.90	135.35	19.54	-1078.21
302	Live load Total MAX	1124.70	1365.80	4306.30	948.58	1365.80	4232.84	937.84	1246.35	4232.84	781.43	1246.35	5212.38
	MIN	-252.43	-1559.79	-17170.22	-304.28	-1559.79	-12589.23	-182.39	-1361.40	-12589.23	-310.39	-1361.40	-9333.66
303	Sum total D+L+PP MAX	3803.22	1406.23	-44399.89	3201.36	1406.23	-24770.22	3159.27	1382.04	-24770.22	2577.11	1382.04	-7428.39
	MIN	2350.36	-1550.83	-67168.30	1857.21	-1550.83	-42862.15	1984.32	-1341.86	-42862.15	1392.17	-1341.86	-23538.14

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4038			MEMBER 4039			MEMBER 4039			MEMBER 4040			
		NODE 4038			NODE 4039			NODE 4039			NODE 4040			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	305.77	51.36	-2408.62	207.60	51.36	158.20	237.56	23.07	158.20	139.39	23.07	2042.98	
3	Railing	11.65	8.82	-67.78	3.38	8.82	7.36	9.70	4.53	7.36	1.43	4.53	63.00	
5	Wheel guard	115.32	87.31	-671.02	33.45	87.31	72.84	96.02	44.89	72.84	14.14	44.89	623.65	
8	Steel weight	1098.53	102.58	-8939.64	799.93	102.58	552.62	845.74	39.22	552.62	547.14	39.22	7517.06	
10	Medial strip	98.22	-31.15	-963.51	98.22	-31.15	18.70	71.77	-17.75	18.70	71.77	-17.75	736.43	
19	Snow	137.40	24.84	-1078.21	92.13	24.84	69.45	106.91	11.32	69.45	61.65	11.32	912.25	
31	Miscellaneous	7.90	-2.52	-75.69	7.90	-2.52	3.35	5.78	-1.45	3.35	5.78	-1.45	61.12	
100	AASHTO-LRFD TRUCK-LOAD	MAX	611.71	630.34	3421.24	423.54	630.34	5487.11	587.45	560.95	5487.11	398.31	560.95	7460.68
		MIN	-126.54	-535.71	-3955.96	-314.76	-535.71	-3345.11	-143.21	-528.35	-3345.11	-329.49	-528.35	-2940.55
		TANDEM-LOAD MAX	449.68	436.75	2594.45	305.13	436.75	3978.69	433.39	389.83	3978.69	288.13	389.83	5323.61
		MIN	-101.98	-367.24	-2687.66	-246.60	-367.24	-2270.77	-112.91	-369.16	-2270.77	-257.76	-369.16	-1996.13
		DISPERSION-LMAX	653.16	978.58	4597.80	553.58	978.58	6483.27	545.06	779.96	6483.27	448.59	779.96	9862.24
		MIN	-152.72	-891.35	-8516.04	-214.42	-891.35	-6204.91	-156.36	-739.15	-6204.91	-221.27	-739.15	-6510.60
110	Live load	L-PICKUP 1 MAX	1264.87	1608.93	8019.05	977.12	1608.93	11970.37	1132.51	1340.92	11970.37	846.90	1340.92	17322.92
		MIN	-279.26	-1427.06	-12471.99	-529.18	-1427.06	-9550.02	-299.57	-1267.51	-9550.02	-550.76	-1267.51	-9451.15
		L-PICKUP 2 MAX	1102.83	1415.33	7192.25	858.71	1415.33	10461.95	978.45	1169.79	10461.95	736.71	1169.79	15185.85
		MIN	-254.70	-1258.59	-11203.70	-461.02	-1258.59	-8475.69	-269.27	-1108.31	-8475.69	-479.03	-1108.31	-8506.73
		L-PICKUP 3	-263.42	-1666.23	-14359.48	-506.26	-1666.23	-11248.82	-299.97	-1444.60	-11248.82	-541.58	-1444.60	-10838.95
		Live load MAX	1264.87	1608.93	8019.05	977.12	1608.93	11970.37	1132.51	1340.92	11970.37	846.90	1340.92	17322.92
MIN	-279.26	-1666.23	-14359.48	-529.18	-1666.23	-11248.82	-299.97	-1444.60	-11248.82	-550.76	-1444.60	-10838.95		
111	AASHTO Twin	TWIN-PICKUP MAX	1383.97	1876.30	7494.97	1097.45	1876.30	12871.29	1236.35	1536.34	12871.29	949.08	1536.34	19153.94
		MIN	-263.42	-1666.23	-14359.48	-506.26	-1666.23	-11248.82	-299.97	-1444.60	-11248.82	-541.58	-1444.60	-10838.95
		MID-PICKUP	-263.42	-1666.23	-14359.48	-506.26	-1666.23	-11248.82	-299.97	-1444.60	-11248.82	-541.58	-1444.60	-10838.95
198	AASHTO Fatig	TRUCK-LOAD MAX	302.28	371.37	1262.15	143.28	371.37	1683.57	295.73	320.90	1683.57	135.44	320.90	2103.91
		MIN	-63.79	-242.95	-780.76	-223.42	-242.95	-596.85	-72.09	-212.38	-596.85	-230.78	-212.38	-501.01
		TANDEM-LOAD MAX	233.49	257.35	1009.66	109.30	257.35	1283.00	229.34	222.80	1283.00	103.97	222.80	1570.56
		MIN	-55.77	-166.30	-529.82	-180.10	-166.30	-404.25	-60.23	-145.58	-404.25	-185.37	-145.58	-339.85

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4038			4039			4039			4040		
NODE		4038			4039			4039			4040		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	209.77	587.31	1132.04	149.27	587.31	1520.04	174.48	463.53	1520.04	115.18	463.53	2170.36
	MIN	-39.56	-462.64	-1881.70	-87.91	-462.64	-1176.50	-40.44	-373.09	-1176.50	-90.58	-373.09	-1171.76
199	AASHTO-LRFD TRUCK-LOAD MAX	884.59	1106.20	3729.95	665.81	1106.20	7818.17	828.66	927.08	7818.17	605.95	927.08	11419.91
	MIN	-139.97	-960.01	-7438.94	-348.09	-960.01	-6293.78	-176.94	-865.96	-6293.78	-380.49	-865.96	-5532.67
	TANDEM-LOAD MAX	449.68	436.75	2594.45	305.13	436.75	3978.69	433.39	389.83	3978.69	288.13	389.83	5323.61
	MIN	-101.98	-367.24	-2687.66	-246.60	-367.24	-2270.77	-112.91	-369.16	-2270.77	-257.76	-369.16	-1996.13
	DISPERSION-LMAX	653.16	978.58	4597.80	553.58	978.58	6483.27	545.06	779.96	6483.27	448.59	779.96	9862.24
	MIN	-152.72	-891.35	-8516.04	-214.42	-891.35	-6204.91	-156.36	-739.15	-6204.91	-221.27	-739.15	-6510.60
300	Total Dead lWithout snow	1637.39	216.40	-13126.27	1150.47	216.40	813.06	1266.58	92.50	813.06	779.66	92.50	11044.24
301	Particular Snow	137.40	24.84	-1078.21	92.13	24.84	69.45	106.91	11.32	69.45	61.65	11.32	912.25
302	Live load Total MAX	822.16	1045.80	5212.38	635.13	1045.80	7780.74	736.13	871.60	7780.74	550.48	871.60	11259.90
	MIN	-181.52	-1083.05	-9333.66	-343.97	-1083.05	-7311.73	-194.98	-938.99	-7311.73	-357.99	-938.99	-7045.32
303	Sum total D+L+PP MAX	2596.95	1287.04	-7428.39	1877.73	1287.04	8663.25	2109.62	975.42	8663.25	1391.79	975.42	23216.38
	MIN	1538.82	-1058.21	-23538.14	795.45	-1058.21	-7242.29	1120.01	-927.67	-7242.29	375.91	-927.67	2797.57

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	4040	4041			4041			4042			4042		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1 Pavement	175.00	-9.39	2042.98	76.83	-9.39	3302.15	94.40	-5.91	3302.15	-3.77	-5.91	3755.29	
3 Railing	7.90	1.53	63.00	-0.37	1.53	100.63	5.49	0.36	100.63	-2.78	0.36	114.23	
5 Wheel guard	78.20	15.11	623.65	-3.68	15.11	996.24	54.40	3.58	996.24	-27.48	3.58	1130.85	
8 Steel weight	614.02	-56.25	7517.06	315.42	-56.25	12164.26	316.47	-28.24	12164.26	17.87	-28.24	13835.98	
10 Medial strip	47.75	-15.93	736.43	47.75	-15.93	1213.92	17.43	-5.98	1213.92	17.43	-5.98	1388.22	
19 Snow	78.96	-3.72	912.25	33.69	-3.72	1475.53	42.93	-2.51	1475.53	-2.34	-2.51	1678.49	
31 Miscellaneous	3.83	-1.30	61.12	3.83	-1.30	99.46	1.38	-0.48	99.46	1.38	-0.48	113.23	
100 AASHTO-LRFD TRUCK-LOAD	545.60	493.44	7460.68	358.93	493.44	8931.58	474.42	492.91	8931.58	292.53	492.91	9418.71	
MIN	-171.61	-534.22	-2940.55	-356.35	-534.22	-2490.80	-224.27	-507.92	-2490.80	-405.93	-507.92	-1911.07	
TANDEM-LOAD	404.42	344.54	5323.61	261.82	344.54	6346.86	355.41	345.50	6346.86	216.80	345.50	6697.77	
MIN	-133.07	-373.58	-1996.13	-275.40	-373.58	-1690.83	-170.18	-355.59	-1690.83	-308.76	-355.59	-1297.29	
DISPERSION-LMAX	472.47	620.72	9862.24	380.48	620.72	12218.23	396.31	538.53	12218.23	311.78	538.53	13017.76	
MIN	-186.16	-633.02	-6510.60	-255.65	-633.02	-6814.13	-241.69	-546.73	-6814.13	-318.77	-546.73	-6876.11	
110 Live load L-PICKUP 1	1018.07	1114.16	17322.92	739.41	1114.16	21149.81	870.74	1031.44	21149.81	604.31	1031.44	22436.46	
MIN	-357.77	-1167.23	-9451.15	-612.00	-1167.23	-9304.93	-465.96	-1054.65	-9304.93	-724.70	-1054.65	-8787.18	
L-PICKUP 2	876.89	965.26	15185.85	642.30	965.26	18565.09	751.72	884.02	18565.09	528.59	884.02	19715.53	
MIN	-319.23	-1006.60	-8506.73	-531.05	-1006.60	-8504.96	-411.87	-902.32	-8504.96	-627.53	-902.32	-8173.40	
L-PICKUP 3	-359.15	-1285.82	-10838.95	-606.10	-1285.82	-10350.54	-473.18	-1153.22	-10350.54	-729.83	-1153.22	-9424.63	
Live load	1018.07	1114.16	17322.92	739.41	1114.16	21149.81	870.74	1031.44	21149.81	604.31	1031.44	22436.46	
MIN	-359.15	-1285.82	-10838.95	-612.00	-1285.82	-10350.54	-473.18	-1153.22	-10350.54	-729.83	-1153.22	-9424.63	
111 AASHTO Twin TWIN-PICKUP	1094.32	1257.78	19153.94	812.85	1257.78	23536.14	906.50	1126.20	23536.14	638.35	1126.20	24948.46	
MIN	-359.15	-1285.82	-10838.95	-606.10	-1285.82	-10350.54	-473.18	-1153.22	-10350.54	-729.83	-1153.22	-9424.63	
MID-PICKUP	-359.15	-1285.82	-10838.95	-606.10	-1285.82	-10350.54	-473.18	-1153.22	-10350.54	-729.83	-1153.22	-9424.63	
198 AASHTO FatigTRUCK-LOAD	285.56	269.14	2103.91	126.81	269.14	2425.53	269.30	216.64	2425.53	113.71	216.64	2530.94	
MIN	-82.01	-168.40	-501.01	-239.76	-168.40	-417.30	-98.65	-163.08	-417.30	-254.14	-163.08	-318.76	
TANDEM-LOAD	222.03	187.77	1570.56	98.36	187.77	1797.10	210.37	152.41	1797.10	89.46	152.41	1873.96	
MIN	-67.50	-115.79	-339.85	-191.03	-115.79	-283.24	-79.22	-116.53	-283.24	-200.11	-116.53	-216.39	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	4040	4041			4041			4042				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	152.32	380.89	2170.36	93.88	380.89	2643.33	133.10	316.07	2643.33	75.76	316.07	2803.92
MIN	-47.35	-332.64	-1171.76	-99.94	-332.64	-1208.05	-60.19	-301.77	-1208.05	-115.79	-301.77	-1215.79
199 AASHTO-LRFD TRUCK-LOAD MAX	743.44	776.82	11419.91	522.68	776.82	13933.04	610.90	712.80	13933.04	397.49	712.80	14702.76
MIN	-212.90	-795.68	-5532.67	-417.80	-795.68	-4686.47	-284.07	-734.63	-4686.47	-492.16	-734.63	-3595.70
TANDEM-LOAD MAX	404.42	344.54	5323.61	261.82	344.54	6346.86	355.41	345.50	6346.86	216.80	345.50	6697.77
MIN	-133.07	-373.58	-1996.13	-275.40	-373.58	-1690.83	-170.18	-355.59	-1690.83	-308.76	-355.59	-1297.29
DISPERSION-LMAX	472.47	620.72	9862.24	380.48	620.72	12218.23	396.31	538.53	12218.23	311.78	538.53	13017.76
MIN	-186.16	-633.02	-6510.60	-255.65	-633.02	-6814.13	-241.69	-546.73	-6814.13	-318.77	-546.73	-6876.11
300 Total Dead lWithout snow	926.70	-66.24	11044.24	439.78	-66.24	17876.67	489.57	-36.67	17876.67	2.65	-36.67	20337.80
301 Particular Snow	78.96	-3.72	912.25	33.69	-3.72	1475.53	42.93	-2.51	1475.53	-2.34	-2.51	1678.49
302 Live load Total MAX	661.75	724.20	11259.90	480.62	724.20	13747.38	565.98	670.43	13747.38	392.80	670.43	14583.70
MIN	-233.45	-835.78	-7045.32	-397.80	-835.78	-6727.85	-307.57	-749.60	-6727.85	-474.39	-749.60	-6126.01
303 Sum total D+L+PP MAX	1667.41	720.48	23216.38	954.10	720.48	33099.57	1098.48	667.93	33099.57	393.12	667.93	36599.99
MIN	702.18	-905.75	2797.57	-43.66	-905.75	10605.99	132.66	-788.77	10605.99	-476.73	-788.77	14052.47

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4042			MEMBER 4043			MEMBER 4043			MEMBER 4044			
		4042			4043			4043			4044			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	12.14	-0.58	3755.29	-86.03	-0.58	3385.83	-69.04	2.10	3385.83	-167.21	2.10	2204.62	
3	Railing	3.03	-0.53	114.23	-5.24	-0.53	103.18	0.61	-1.72	103.18	-7.66	-1.72	67.95	
5	Wheel guard	30.00	-5.25	1130.85	-51.88	-5.25	1021.47	6.06	-17.00	1021.47	-75.81	-17.00	672.73	
8	Steel weight	12.95	4.00	13835.98	-285.65	4.00	12472.47	-286.75	29.00	12472.47	-585.35	29.00	8112.02	
10	Medial strip	-13.50	3.29	1388.22	-13.50	3.29	1253.24	-44.14	13.09	1253.24	-44.14	13.09	811.87	
19	Snow	6.15	-0.39	1678.49	-39.12	-0.39	1513.66	-30.14	0.48	1513.66	-75.41	0.48	985.89	
31	Miscellaneous	-1.12	0.27	113.23	-1.12	0.27	101.98	-3.60	1.06	101.98	-3.60	1.06	65.97	
100	AASHTO-LRFD TRUCK-LOAD	MAX	414.56	500.00	9418.71	234.13	500.00	9058.17	367.27	510.34	9058.17	186.16	510.34	7809.27
		MIN	-285.27	-497.28	-1911.07	-465.80	-497.28	-2476.71	-347.33	-506.48	-2476.71	-529.39	-506.48	-3026.19
		TANDEM-LOAD MAX	314.39	350.26	6697.77	176.87	350.26	6436.00	282.34	357.37	6436.00	143.57	357.37	5569.19
		MIN	-211.80	-348.37	-1297.29	-349.34	-348.37	-1679.13	-253.78	-353.41	-1679.13	-392.69	-353.41	-2051.66
		DISPERSION-LMAX	329.31	539.61	13017.76	251.05	539.61	12381.72	273.44	616.27	12381.72	201.75	616.27	10310.28
		MIN	-308.84	-542.08	-6876.11	-392.20	-542.08	-6842.92	-385.65	-616.31	-6842.92	-475.46	-616.31	-6698.18
110	Live load	L-PICKUP 1 MAX	743.87	1039.62	22436.46	485.18	1039.62	21439.89	640.72	1126.61	21439.89	387.90	1126.61	18119.55
		MIN	-594.11	-1039.35	-8787.18	-858.00	-1039.35	-9319.63	-732.98	-1122.79	-9319.63	-1004.85	-1122.79	-9724.37
		L-PICKUP 2 MAX	643.70	889.87	19715.53	427.92	889.87	18817.72	555.79	973.63	18817.72	345.31	973.63	15879.47
		MIN	-520.64	-890.45	-8173.40	-741.54	-890.45	-8522.05	-639.43	-969.73	-8522.05	-868.15	-969.73	-8749.84
		L-PICKUP 3	-624.77	-1135.26	-9424.63	-889.94	-1135.26	-10354.91	-800.62	-1266.57	-10354.91	-1075.13	-1266.57	-11155.63
		Live load MAX	743.87	1039.62	22436.46	485.18	1039.62	21439.89	640.72	1126.61	21439.89	387.90	1126.61	18119.55
MIN	-624.77	-1135.26	-9424.63	-889.94	-1135.26	-10354.91	-800.62	-1266.57	-10354.91	-1075.13	-1266.57	-11155.63		
111	AASHTO Twin TWIN-PICKUP	MAX	751.66	1136.13	24948.46	493.34	1136.13	23859.77	638.00	1242.49	23859.77	388.70	1242.49	20045.23
		MIN	-624.77	-1135.26	-9424.63	-889.94	-1135.26	-10354.91	-800.62	-1266.57	-10354.91	-1075.13	-1266.57	-11155.63
		MID-PICKUP	-624.77	-1135.26	-9424.63	-889.94	-1135.26	-10354.91	-800.62	-1266.57	-10354.91	-1075.13	-1266.57	-11155.63
198	AASHTO FatigTRUCK-LOAD	MAX	256.37	160.45	2530.94	101.63	160.45	2458.75	243.57	165.26	2458.75	88.10	165.26	2199.90
		MIN	-111.85	-216.58	-318.76	-266.64	-216.58	-415.48	-124.27	-269.64	-415.48	-280.20	-269.64	-516.74
		TANDEM-LOAD MAX	201.47	114.56	1873.96	81.21	114.56	1820.92	193.07	113.71	1820.92	71.77	113.71	1639.87
		MIN	-88.16	-152.38	-216.39	-208.42	-152.38	-281.60	-96.50	-188.14	-281.60	-217.87	-188.14	-350.03

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4042			4043			4043			4044		
NODE		4042			4043			4043			4044		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	118.68	298.69	2803.92	62.71	298.69	2684.75	105.21	326.66	2684.75	51.47	326.66	2278.28
	MIN	-74.69	-316.52	-1215.79	-131.76	-316.52	-1213.75	-94.21	-379.56	-1213.75	-152.10	-379.56	-1207.34
199	AASHTO-LRFD TRUCK-LOAD MAX	505.86	722.75	14702.76	297.11	722.75	14129.13	435.45	764.28	14129.13	230.15	764.28	11962.20
	MIN	-385.35	-719.33	-3595.70	-596.62	-719.33	-4662.53	-503.93	-790.99	-4662.53	-719.12	-790.99	-5696.96
	TANDEM-LOAD MAX	314.39	350.26	6697.77	176.87	350.26	6436.00	282.34	357.37	6436.00	143.57	357.37	5569.19
	MIN	-211.80	-348.37	-1297.29	-349.34	-348.37	-1679.13	-253.78	-353.41	-1679.13	-392.69	-353.41	-2051.66
	DISPERSION-LMAX	329.31	539.61	13017.76	251.05	539.61	12381.72	273.44	616.27	12381.72	201.75	616.27	10310.28
	MIN	-308.84	-542.08	-6876.11	-392.20	-542.08	-6842.92	-385.65	-616.31	-6842.92	-475.46	-616.31	-6698.18
300	Total Dead lWithout snow	43.50	1.21	20337.80	-443.42	1.21	18338.17	-396.84	26.53	18338.17	-883.76	26.53	11935.16
301	Particular Snow	6.15	-0.39	1678.49	-39.12	-0.39	1513.66	-30.14	0.48	1513.66	-75.41	0.48	985.89
302	Live load Total MAX	483.52	675.75	14583.70	315.37	675.75	13935.93	416.47	732.29	13935.93	252.14	732.29	11777.71
	MIN	-406.10	-737.92	-6126.01	-578.46	-737.92	-6730.69	-520.40	-823.27	-6730.69	-698.83	-823.27	-7251.16
303	Sum total D+L+PP MAX	533.16	676.57	36599.99	-72.56	676.57	33787.76	114.42	759.30	33787.76	-631.39	759.30	24698.76
	MIN	-399.95	-738.31	14052.47	-1061.00	-738.31	11101.93	-947.39	-822.80	11101.93	-1658.00	-822.80	3494.54

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4044			MEMBER 4045			MEMBER 4045			MEMBER 4046			
		NODE 4044			NODE 4045			NODE 4045			NODE 4046			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-142.26	-11.90	2204.62	-240.43	-11.90	291.17	-211.75	-38.15	291.17	-309.92	-38.15	-2317.20	
3	Railing	-1.51	-4.16	67.95	-9.78	-4.16	11.54	-3.51	-8.33	11.54	-11.78	-8.33	-64.89	
5	Wheel guard	-14.91	-41.19	672.73	-96.79	-41.19	114.20	-34.72	-82.47	114.20	-116.60	-82.47	-642.38	
8	Steel weight	-557.82	1.50	8112.02	-856.42	1.50	1040.77	-815.21	-54.94	1040.77	-1113.81	-54.94	-8604.30	
10	Medial strip	-72.22	21.88	811.87	-72.22	21.88	89.66	-98.95	35.48	89.66	-98.95	35.48	-899.80	
19	Snow	-62.87	-6.30	985.89	-108.13	-6.30	130.88	-93.92	-18.90	130.88	-139.19	-18.90	-1034.66	
31	Miscellaneous	-5.87	1.77	65.97	-5.87	1.77	7.28	-8.03	2.87	7.28	-8.03	2.87	-73.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	333.78	524.79	7809.27	153.17	524.79	5890.34	309.35	541.41	5890.34	127.68	541.41	3637.67
		MIN	-401.50	-562.09	-3026.19	-584.31	-562.09	-3523.48	-442.91	-615.40	-3523.48	-624.85	-615.40	-4075.41
		TANDEM-LOAD MAX	259.51	366.40	5569.19	120.08	366.40	4261.28	241.64	373.10	4261.28	102.66	373.10	2743.75
		MIN	-290.33	-390.83	-2051.66	-430.08	-390.83	-2389.49	-318.39	-426.48	-2389.49	-457.34	-426.48	-2768.44
		DISPERSION-LMAX	236.42	725.63	10310.28	170.75	725.63	6977.75	216.85	892.70	6977.75	156.50	892.70	4858.94
		MIN	-468.57	-748.35	-6698.18	-564.30	-748.35	-6487.70	-563.04	-958.41	-6487.70	-663.92	-958.41	-8635.42
110	Live load	L-PICKUP 1 MAX	570.19	1250.42	18119.55	323.92	1250.42	12868.09	526.20	1434.11	12868.09	284.18	1434.11	8496.61
		MIN	-870.08	-1310.44	-9724.37	-1148.61	-1310.44	-10011.18	-1005.95	-1573.80	-10011.18	-1288.78	-1573.80	-12710.83
		L-PICKUP 2 MAX	495.92	1092.03	15879.47	290.83	1092.03	11239.03	458.48	1265.80	11239.03	259.16	1265.80	7602.69
		MIN	-758.91	-1139.18	-8749.84	-994.38	-1139.18	-8877.19	-881.43	-1384.88	-8877.19	-1121.27	-1384.88	-11403.85
		L-PICKUP 3	-971.81	-1504.77	-11155.63	-1253.05	-1504.77	-11807.52	-1133.67	-1832.17	-11807.52	-1418.11	-1832.17	-14671.36
		Live load MAX	570.19	1250.42	18119.55	323.92	1250.42	12868.09	526.20	1434.11	12868.09	284.18	1434.11	8496.61
MIN	-971.81	-1504.77	-11155.63	-1253.05	-1504.77	-11807.52	-1133.67	-1832.17	-11807.52	-1418.11	-1832.17	-14671.36		
111	AASHTO Twin	TWIN-PICKUP MAX	562.20	1428.72	20045.23	322.42	1428.72	13877.12	505.20	1673.83	13877.12	271.17	1673.83	8022.75
		MIN	-971.81	-1504.77	-11155.63	-1253.05	-1504.77	-11807.52	-1133.67	-1832.17	-11807.52	-1418.11	-1832.17	-14671.36
		MID-PICKUP	-971.81	-1504.77	-11155.63	-1253.05	-1504.77	-11807.52	-1133.67	-1832.17	-11807.52	-1418.11	-1832.17	-14671.36
198	AASHTO Fatig	TRUCK-LOAD MAX	231.28	212.00	2199.90	76.02	212.00	1800.22	219.31	244.24	1800.22	63.46	244.24	1325.76
		MIN	-136.45	-317.59	-516.74	-292.96	-317.59	-630.29	-148.78	-361.56	-630.29	-304.15	-361.56	-803.74
		TANDEM-LOAD MAX	184.91	145.38	1639.87	63.07	145.38	1366.41	176.54	167.18	1366.41	55.52	167.18	1053.95
		MIN	-104.64	-220.50	-350.03	-226.66	-220.50	-426.99	-113.07	-250.39	-426.99	-233.97	-250.39	-546.02

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4044			4045			4045			4046		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	94.39	369.76	2278.28	43.84	369.76	1637.05	88.22	461.32	1637.05	40.64	461.32	1194.54
	MIN	-119.08	-455.87	-1207.34	-178.13	-455.87	-1231.61	-152.19	-577.36	-1231.61	-212.93	-577.36	-1899.24
199	AASHTO-LRFD TRUCK-LOAD MAX	388.25	861.83	11962.20	187.50	861.83	8441.27	344.49	967.12	8441.27	144.80	967.12	4055.23
	MIN	-611.21	-923.61	-5696.96	-827.97	-923.61	-6631.77	-696.59	-1077.34	-6631.77	-911.76	-1077.34	-7666.09
	TANDEM-LOAD MAX	259.51	366.40	5569.19	120.08	366.40	4261.28	241.64	373.10	4261.28	102.66	373.10	2743.75
	MIN	-290.33	-390.83	-2051.66	-430.08	-390.83	-2389.49	-318.39	-426.48	-2389.49	-457.34	-426.48	-2768.44
	DISPERSION-LMAX	236.42	725.63	10310.28	170.75	725.63	6977.75	216.85	892.70	6977.75	156.50	892.70	4858.94
	MIN	-468.57	-748.35	-6698.18	-564.30	-748.35	-6487.70	-563.04	-958.41	-6487.70	-663.92	-958.41	-8635.42
300	Total Dead lWithout snow	-794.60	-32.10	11935.16	-1281.51	-32.10	1554.62	-1172.16	-145.54	1554.62	-1659.08	-145.54	-12601.58
301	Particular Snow	-62.87	-6.30	985.89	-108.13	-6.30	130.88	-93.92	-18.90	130.88	-139.19	-18.90	-1034.66
302	Live load Total MAX	370.63	812.78	11777.71	210.55	812.78	8364.26	342.03	932.17	8364.26	184.72	932.17	5522.79
	MIN	-631.68	-978.10	-7251.16	-814.48	-978.10	-7674.89	-736.88	-1190.91	-7674.89	-921.77	-1190.91	-9536.38
303	Sum total D+L+PP MAX	-375.65	806.47	24698.76	-1115.93	806.47	10049.76	-821.44	913.27	10049.76	-1558.13	913.27	-6456.60
	MIN	-1489.14	-1016.50	3494.54	-2204.13	-1016.50	-7544.01	-2002.96	-1355.36	-7544.01	-2720.04	-1355.36	-23172.61

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4046			MEMBER 4047			MEMBER 4047			MEMBER 4048			
		NODE 4046			NODE 4047			NODE 4047			NODE 4048			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-296.11	-45.55	-2317.20	-374.65	-45.55	-5000.21	-381.33	-20.36	-5000.21	-459.87	-20.36	-8365.04	
3	Railing	-7.24	-11.64	-64.89	-13.86	-11.64	-149.29	-14.27	-7.23	-149.29	-20.89	-7.23	-289.94	
5	Wheel guard	-71.70	-115.21	-642.38	-137.20	-115.21	-1478.01	-141.30	-71.60	-1478.01	-206.80	-71.60	-2870.39	
8	Steel weight	-1112.04	-45.41	-8604.30	-1350.92	-45.41	-18456.18	-1373.06	3.95	-18456.18	-1611.94	3.95	-30396.19	
10	Medial strip	-122.31	54.07	-899.80	-122.31	54.07	-1878.28	-123.34	38.23	-1878.28	-123.34	38.23	-2865.01	
19	Snow	-131.95	-23.01	-1034.66	-168.16	-23.01	-2235.12	-171.21	-10.81	-2235.12	-207.42	-10.81	-3749.64	
31	Miscellaneous	-9.92	4.37	-73.00	-9.92	4.37	-152.33	-10.00	3.09	-152.33	-10.00	3.09	-232.33	
100	AASHTO-LRFD TRUCK-LOAD	MAX	257.45	659.64	3637.67	106.64	659.64	2089.53	205.47	774.21	2089.53	108.29	774.21	1494.50
		MIN	-504.58	-724.26	-4075.41	-655.37	-724.26	-4605.48	-564.82	-787.81	-4605.48	-726.28	-787.81	-5357.65
		TANDEM-LOAD MAX	208.01	453.65	2743.75	90.80	453.65	1675.57	173.21	530.16	1675.57	73.67	530.16	1014.80
		MIN	-362.45	-498.23	-2768.44	-479.58	-498.23	-3133.15	-406.10	-536.28	-3133.15	-527.71	-536.28	-3639.61
		DISPERSION-LMAX	213.97	1102.46	4858.94	172.91	1102.46	4512.77	268.23	1279.75	4512.77	247.39	1279.75	5181.51
		MIN	-698.65	-1180.36	-8635.42	-786.38	-1180.36	-12695.45	-894.10	-1315.09	-12695.45	-1002.11	-1315.09	-18909.40
110	Live load	L-PICKUP 1 MAX	471.42	1762.10	8496.61	279.55	1762.10	6602.30	473.70	2053.95	6602.30	355.68	2053.95	6676.01
		MIN	-1203.23	-1904.62	-12710.83	-1441.75	-1904.62	-17300.93	-1458.91	-2102.91	-17300.93	-1728.39	-2102.91	-24267.05
		L-PICKUP 2 MAX	421.98	1556.10	7602.69	263.71	1556.10	6188.34	441.44	1809.90	6188.34	321.06	1809.90	6196.31
		MIN	-1061.11	-1678.60	-11403.85	-1265.96	-1678.60	-15828.60	-1300.20	-1851.37	-15828.60	-1529.82	-1851.37	-22549.01
		L-PICKUP 3	-1354.66	-2223.48	-14671.36	-1593.48	-2223.48	-19215.95	-1630.12	-2461.17	-19215.95	-1901.85	-2461.17	-26066.87
		Live load MAX	471.42	1762.10	8496.61	279.55	1762.10	6602.30	473.70	2053.95	6602.30	355.68	2053.95	6676.01
MIN	-1354.66	-2223.48	-14671.36	-1593.48	-2223.48	-19215.95	-1630.12	-2461.17	-19215.95	-1901.85	-2461.17	-26066.87		
111	AASHTO Twin	TWIN-PICKUP MAX	421.13	2057.55	8022.75	261.00	2057.55	6270.00	422.56	2387.54	6270.00	394.98	2387.54	7193.69
		MIN	-1354.66	-2223.48	-14671.36	-1593.48	-2223.48	-19215.95	-1630.12	-2461.17	-19215.95	-1901.85	-2461.17	-26066.87
		MID-PICKUP	-1354.66	-2223.48	-14671.36	-1593.48	-2223.48	-19215.95	-1630.12	-2461.17	-19215.95	-1901.85	-2461.17	-26066.87
198	AASHTO Fatig	TRUCK-LOAD MAX	180.99	256.38	1325.76	51.39	256.38	802.44	107.91	224.60	802.44	37.13	224.60	280.56
		MIN	-180.63	-384.76	-803.74	-309.50	-384.76	-1056.22	-242.55	-332.42	-1056.22	-385.23	-332.42	-1621.03
		TANDEM-LOAD MAX	151.95	173.92	1053.95	49.50	173.92	716.85	104.08	153.76	716.85	25.17	153.76	190.13
		MIN	-136.64	-265.81	-546.02	-238.92	-265.81	-719.90	-182.82	-226.25	-719.90	-291.98	-226.25	-1098.17

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4046			4047			4047			4048		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	86.93	567.35	1194.54	53.39	567.35	1013.44	110.01	684.47	1013.44	92.25	684.47	1055.73
	MIN	-216.56	-710.66	-1899.24	-268.33	-710.66	-3248.80	-359.79	-771.70	-3248.80	-429.47	-771.70	-6071.62
199	AASHTO-LRFD TRUCK-LOAD MAX	253.94	1183.71	4055.23	117.09	1183.71	2453.90	201.27	1373.07	2453.90	191.47	1373.07	2811.48
	MIN	-806.52	-1290.17	-7666.09	-984.16	-1290.17	-8655.60	-917.15	-1419.54	-8655.60	-1111.05	-1419.54	-10053.79
	TANDEM-LOAD MAX	208.01	453.65	2743.75	90.80	453.65	1675.57	173.21	530.16	1675.57	73.67	530.16	1014.80
	MIN	-362.45	-498.23	-2768.44	-479.58	-498.23	-3133.15	-406.10	-536.28	-3133.15	-527.71	-536.28	-3639.61
	DISPERSION-LMAX	213.97	1102.46	4858.94	172.91	1102.46	4512.77	268.23	1279.75	4512.77	247.39	1279.75	5181.51
	MIN	-698.65	-1180.36	-8635.42	-786.38	-1180.36	-12695.45	-894.10	-1315.09	-12695.45	-1002.11	-1315.09	-18909.40
300	Total Dead lWithout snow	-1619.32	-159.37	-12601.58	-2008.86	-159.37	-27114.31	-2043.31	-53.92	-27114.31	-2432.84	-53.92	-45018.89
301	Particular Snow	-131.95	-23.01	-1034.66	-168.16	-23.01	-2235.12	-171.21	-10.81	-2235.12	-207.42	-10.81	-3749.64
302	Live load Total MAX	306.42	1145.37	5522.79	181.71	1145.37	4291.49	307.90	1335.07	4291.49	231.19	1335.07	4339.41
	MIN	-880.53	-1445.26	-9536.38	-1035.76	-1445.26	-12490.37	-1059.58	-1599.76	-12490.37	-1236.20	-1599.76	-16943.47
303	Sum total D+L+PP MAX	-1352.93	1122.36	-6456.60	-1940.80	1122.36	-23770.48	-1814.24	1324.26	-23770.48	-2339.71	1324.26	-43127.30
	MIN	-2631.80	-1627.65	-23172.61	-3212.79	-1627.65	-41839.79	-3274.10	-1664.49	-41839.79	-3876.46	-1664.49	-65712.00

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4048			4049			4049			4050			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	461.38	27.89	-8365.04	382.84	27.89	-4988.16	384.26	37.44	-4988.16	305.73	37.44	-2228.21	
3	Railing	20.93	7.54	-289.94	14.32	7.54	-148.93	14.14	11.50	-148.93	7.53	11.50	-62.26	
5	Wheel guard	207.25	74.65	-2870.39	141.75	74.65	-1474.37	140.00	113.85	-1474.37	74.50	113.85	-616.34	
8	Steel weight	1617.49	22.86	-30396.19	1378.61	22.86	-18411.80	1386.47	14.22	-18411.80	1147.59	14.22	-8275.54	
10	Medial strip	124.19	-35.98	-2865.01	124.19	-35.98	-1871.48	126.23	-57.82	-1871.48	126.23	-57.82	-861.60	
19	Snow	208.12	14.20	-3749.64	171.91	14.20	-2229.52	172.49	19.41	-2229.52	136.27	19.41	-994.49	
31	Miscellaneous	10.05	-2.91	-232.33	10.05	-2.91	-151.97	10.21	-4.68	-151.97	10.21	-4.68	-70.28	
100	AASHTO-LRFD TRUCK-LOAD	MAX	724.43	794.54	1494.50	562.23	794.54	2125.39	653.03	722.76	2125.39	501.76	722.76	3630.88
		MIN	-108.24	-773.20	-5357.65	-205.81	-773.20	-4693.78	-107.30	-665.30	-4693.78	-259.20	-665.30	-4111.57
		TANDEM-LOAD MAX	526.62	540.75	1014.80	404.58	540.75	1701.22	478.11	497.50	1701.22	360.41	497.50	2737.61
		MIN	-73.68	-529.67	-3639.61	-173.80	-529.67	-3192.71	-91.48	-457.38	-3192.71	-209.34	-457.38	-2793.19
		DISPERSION-LMAX	995.18	1327.84	5181.51	887.22	1327.84	4598.10	797.82	1186.60	4598.10	710.43	1186.60	4967.44
		MIN	-238.09	-1280.21	-18909.40	-258.99	-1280.21	-12761.84	-168.68	-1121.86	-12761.84	-210.09	-1121.86	-8600.02
110	Live load	L-PICKUP 1 MAX	1719.61	2122.38	6676.01	1449.44	2122.38	6723.49	1450.84	1909.36	6723.49	1212.20	1909.36	8598.32
		MIN	-346.33	-2053.41	-24267.05	-464.80	-2053.41	-17455.63	-275.97	-1787.15	-17455.63	-469.30	-1787.15	-12711.59
		L-PICKUP 2 MAX	1521.80	1868.59	6196.31	1291.79	1868.59	6299.32	1275.93	1684.10	6299.32	1070.84	1684.10	7705.04
		MIN	-311.77	-1809.88	-22549.01	-432.79	-1809.88	-15954.55	-260.15	-1579.24	-15954.55	-419.44	-1579.24	-11393.21
		L-PICKUP 3	-386.13	-2384.41	-26066.87	-414.28	-2384.41	-19421.47	-257.07	-2088.23	-19421.47	-417.62	-2088.23	-14697.54
		Live load MAX	1719.61	2122.38	6676.01	1449.44	2122.38	6723.49	1450.84	1909.36	6723.49	1212.20	1909.36	8598.32
MIN	-386.13	-2384.41	-26066.87	-464.80	-2384.41	-19421.47	-275.97	-2088.23	-19421.47	-469.30	-2088.23	-14697.54		
111	AASHTO Twin	TWIN-PICKUP MAX	1890.75	2484.05	7193.69	1618.47	2484.05	6420.15	1601.52	2225.97	6420.15	1363.25	2225.97	8149.71
		MIN	-386.13	-2384.41	-26066.87	-414.28	-2384.41	-19421.47	-257.07	-2088.23	-19421.47	-417.62	-2088.23	-14697.54
		MID-PICKUP	-386.13	-2384.41	-26066.87	-414.28	-2384.41	-19421.47	-257.07	-2088.23	-19421.47	-417.62	-2088.23	-14697.54
198	AASHTO Fatig	TRUCK-LOAD MAX	385.08	334.59	280.56	241.96	334.59	805.84	308.53	386.64	805.84	179.33	386.64	1317.25
		MIN	-37.46	-224.25	-1621.03	-108.17	-224.25	-1074.12	-51.87	-256.79	-1074.12	-182.17	-256.79	-809.65
		TANDEM-LOAD MAX	291.96	227.73	190.13	182.52	227.73	719.82	238.39	267.45	719.82	135.70	267.45	1047.31
		MIN	-25.42	-153.52	-1098.17	-104.33	-153.52	-732.04	-49.96	-174.19	-732.04	-152.87	-174.19	-549.80

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER		4048			4049			4049			4050		
NODE		4048			4049			4049			4050		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	427.70	778.11	1055.73	358.05	778.11	1029.99	271.21	715.69	1029.99	219.56	715.69	1213.07
	MIN	-90.59	-685.62	-6071.62	-108.39	-685.62	-3263.81	-51.83	-575.76	-3263.81	-85.59	-575.76	-1887.65
199	AASHTO-LRFD TRUCK-LOAD MAX	1105.66	1432.21	2811.48	911.09	1432.21	2535.40	981.65	1286.70	2535.40	804.28	1286.70	4087.80
	MIN	-190.95	-1369.14	-10053.79	-201.33	-1369.14	-8817.57	-116.96	-1198.40	-8817.57	-253.92	-1198.40	-7730.58
	TANDEM-LOAD MAX	526.62	540.75	1014.80	404.58	540.75	1701.22	478.11	497.50	1701.22	360.41	497.50	2737.61
	MIN	-73.68	-529.67	-3639.61	-173.80	-529.67	-3192.71	-91.48	-457.38	-3192.71	-209.34	-457.38	-2793.19
	DISPERSION-LMAX	995.18	1327.84	5181.51	887.22	1327.84	4598.10	797.82	1186.60	4598.10	710.43	1186.60	4967.44
	MIN	-238.09	-1280.21	-18909.40	-258.99	-1280.21	-12761.84	-168.68	-1121.86	-12761.84	-210.09	-1121.86	-8600.02
300	Total Dead lWithout snow	2441.29	94.06	-45018.89	2051.76	94.06	-27046.70	2061.33	114.51	-27046.70	1671.79	114.51	-12114.22
301	Particular Snow	208.12	14.20	-3749.64	171.91	14.20	-2229.52	172.49	19.41	-2229.52	136.27	19.41	-994.49
302	Live load Total MAX	1117.75	1379.55	4339.41	942.14	1379.55	4370.27	943.05	1241.08	4370.27	787.93	1241.08	5588.91
	MIN	-250.99	-1549.87	-16943.47	-302.12	-1549.87	-12623.96	-179.38	-1357.35	-12623.96	-305.04	-1357.35	-9553.40
303	Sum total D+L+PP MAX	3767.16	1487.80	-43127.30	3165.80	1487.80	-23594.87	3176.86	1375.00	-23594.87	2596.00	1375.00	-5843.13
	MIN	2323.13	-1535.67	-65712.00	1830.91	-1535.67	-41900.18	2000.62	-1337.94	-41900.18	1411.51	-1337.94	-22662.11

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4050			MEMBER 4051			MEMBER 4051			MEMBER 4052				
		NODE 4050			NODE 4051			NODE 4051			NODE 4052				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	315.99	37.03	-2228.21	217.82	37.03	440.85	242.76	17.73	440.85	144.59	17.73	2377.62		
3	Railing	11.96	8.35	-62.26	3.69	8.35	16.04	9.85	4.35	16.04	1.58	4.35	73.23		
5	Wheel guard	118.45	82.71	-616.34	36.57	82.71	158.75	97.56	43.09	158.75	15.68	43.09	724.97		
8	Steel weight	1136.14	50.11	-8275.54	837.54	50.11	1592.85	864.94	19.79	1592.85	566.34	19.79	8749.20		
10	Medial strip	101.48	-36.29	-861.60	101.48	-36.29	153.19	73.36	-19.85	153.19	73.36	-19.85	886.77		
19	Snow	141.93	18.42	-994.49	96.66	18.42	198.45	109.21	8.91	198.45	63.94	8.91	1064.18		
31	Miscellaneous	8.21	-2.93	-70.28	8.21	-2.93	11.82	5.94	-1.60	11.82	5.94	-1.60	71.18		
100	AASHTO-LRFD TRUCK-LOAD	MAX	621.22	614.83	3630.88	438.34	614.83	5853.41	579.21	562.26	5853.41	394.56	562.26	7744.17	
		MIN	-128.20	-538.78	-4111.57	-311.02	-538.78	-3516.58	-152.44	-515.73	-3516.58	-335.10	-515.73	-3014.60	
		TANDEM-LOAD	MAX	455.07	426.05	2737.61	315.18	426.05	4232.66	426.97	390.86	4232.66	285.58	390.86	5521.35
		MIN	-103.04	-371.16	-2793.19	-242.98	-371.16	-2385.43	-119.67	-360.25	-2385.43	-260.78	-360.25	-2044.68	
		DISPERSION-L	MAX	668.99	963.28	4967.44	568.47	963.28	7232.28	558.70	755.00	7232.28	463.35	755.00	10473.46
		MIN	-151.73	-899.37	-8600.02	-212.46	-899.37	-6500.82	-161.45	-722.78	-6500.82	-227.50	-722.78	-6582.57	
110	Live load	L-PICKUP 1	MAX	1290.21	1578.11	8598.32	1006.81	1578.11	13085.68	1137.92	1317.26	13085.68	857.91	1317.26	18217.63
		MIN	-279.93	-1438.15	-12711.59	-523.48	-1438.15	-10017.40	-313.89	-1238.52	-10017.40	-562.60	-1238.52	-9597.17	
		L-PICKUP 2	MAX	1124.06	1389.34	7705.04	883.65	1389.34	11464.94	985.67	1145.85	11464.94	748.92	1145.85	15994.81
		MIN	-254.77	-1270.53	-11393.21	-455.44	-1270.53	-8886.25	-281.12	-1083.03	-8886.25	-488.28	-1083.03	-8627.25	
		L-PICKUP 3	MAX	-266.36	-1680.00	-14697.54	-502.51	-1680.00	-11804.67	-312.36	-1416.96	-11804.67	-554.20	-1416.96	-11028.89
		MIN	1290.21	1578.11	8598.32	1006.81	1578.11	13085.68	1137.92	1317.26	13085.68	857.91	1317.26	18217.63	
111	AASHTO Twin	TWIN-PICKUP	MAX	1417.30	1835.12	8149.71	1133.08	1835.12	14101.54	1239.25	1512.87	14101.54	957.60	1512.87	20140.43
		MIN	-266.36	-1680.00	-14697.54	-502.51	-1680.00	-11804.67	-312.36	-1416.96	-11804.67	-554.20	-1416.96	-11028.89	
		MID-PICKUP	MAX	-266.36	-1680.00	-14697.54	-502.51	-1680.00	-11804.67	-312.36	-1416.96	-11804.67	-554.20	-1416.96	-11028.89
		MIN	-266.36	-1680.00	-14697.54	-502.51	-1680.00	-11804.67	-312.36	-1416.96	-11804.67	-554.20	-1416.96	-11028.89	
		Live load	MAX	1290.21	1578.11	8598.32	1006.81	1578.11	13085.68	1137.92	1317.26	13085.68	857.91	1317.26	18217.63
		MIN	-279.93	-1680.00	-14697.54	-523.48	-1680.00	-11804.67	-313.89	-1416.96	-11804.67	-562.60	-1416.96	-11028.89	
198	AASHTO Fatig	TRUCK-LOAD	MAX	303.54	362.16	1317.25	147.62	362.16	1786.62	292.46	317.40	1786.62	135.06	317.40	2186.58
		MIN	-63.80	-242.95	-809.65	-220.31	-242.95	-627.63	-76.05	-208.72	-627.63	-232.31	-208.72	-513.91	
		TANDEM-LOAD	MAX	233.69	250.85	1047.31	112.24	250.85	1355.73	226.51	220.37	1355.73	103.71	220.37	1630.07
		MIN	-55.75	-166.24	-549.80	-177.35	-166.24	-424.99	-63.15	-143.13	-424.99	-185.80	-143.13	-348.28	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4050			4051			4051			4052		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	214.09	580.99	1213.07	153.39	580.99	1675.01	177.08	458.66	1675.01	118.02	458.66	2305.97
	MIN	-39.66	-464.77	-1887.65	-87.45	-464.77	-1230.82	-42.20	-368.95	-1230.82	-92.95	-368.95	-1183.82
199	AASHTO-LRFD TRUCK-LOAD MAX	905.78	1075.74	4087.80	690.51	1075.74	8436.10	818.25	925.97	8436.10	600.65	925.97	11904.80
	MIN	-144.23	-967.30	-7730.58	-345.89	-967.30	-6615.48	-185.62	-851.62	-6615.48	-388.28	-851.62	-5671.76
	TANDEM-LOAD MAX	455.07	426.05	2737.61	315.18	426.05	4232.66	426.97	390.86	4232.66	285.58	390.86	5521.35
	MIN	-103.04	-371.16	-2793.19	-242.98	-371.16	-2385.43	-119.67	-360.25	-2385.43	-260.78	-360.25	-2044.68
	DISPERSION-LMAX	668.99	963.28	4967.44	568.47	963.28	7232.28	558.70	755.00	7232.28	463.35	755.00	10473.46
	MIN	-151.73	-899.37	-8600.02	-212.46	-899.37	-6500.82	-161.45	-722.78	-6500.82	-227.50	-722.78	-6582.57
300	Total Dead lWithout snow	1692.23	138.98	-12114.22	1205.31	138.98	2373.49	1294.41	63.51	2373.49	807.49	63.51	12882.98
301	Particular Snow	141.93	18.42	-994.49	96.66	18.42	198.45	109.21	8.91	198.45	63.94	8.91	1064.18
302	Live load Total MAX	838.64	1025.77	5588.91	654.43	1025.77	8505.69	739.65	856.22	8505.69	557.64	856.22	11841.46
	MIN	-181.95	-1092.00	-9553.40	-340.26	-1092.00	-7673.03	-204.03	-921.03	-7673.03	-365.69	-921.03	-7168.78
303	Sum total D+L+PP MAX	2672.80	1183.17	-5843.13	1956.40	1183.17	11077.63	2143.26	928.64	11077.63	1429.07	928.64	25788.61
	MIN	1597.62	-1073.58	-22662.11	859.63	-1073.58	-7403.00	1138.38	-912.12	-7403.00	396.03	-912.12	4627.74

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4052			4053			4053			4054		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	171.85	-0.24	2377.62	73.67	-0.24	3605.23	92.87	-0.77	3605.23	-5.30	-0.77	4043.11
3	Railing	7.80	1.79	73.23	-0.47	1.79	109.86	5.45	0.51	109.86	-2.83	0.51	122.96
5	Wheel guard	77.20	17.72	724.97	-4.67	17.72	1087.62	53.91	5.03	1087.62	-27.97	5.03	1217.32
8	Steel weight	602.44	-22.36	8749.20	303.84	-22.36	13280.65	310.89	-9.20	13280.65	12.29	-9.20	14896.56
10	Medial strip	46.19	-12.56	886.77	46.19	-12.56	1348.68	16.37	-3.97	1348.68	16.37	-3.97	1512.43
19	Snow	77.51	0.35	1064.18	32.25	0.35	1612.97	42.20	-0.21	1612.97	-3.06	-0.21	1808.66
31	Miscellaneous	3.74	-1.01	71.18	3.74	-1.01	108.59	1.33	-0.32	108.59	1.33	-0.32	121.92
100	AASHTO-LRFD TRUCK-LOAD	527.60	502.99	7744.17	344.55	502.99	9012.09	466.45	488.60	9012.09	284.78	488.60	9424.46
	MIN	-184.73	-504.36	-3014.60	-367.10	-504.36	-2478.02	-229.58	-493.07	-2478.02	-411.37	-493.07	-1905.51
	TANDEM-LOAD MAX	391.66	350.92	5521.35	251.86	350.92	6401.01	349.96	342.31	6401.01	211.43	342.31	6699.68
	MIN	-142.55	-353.12	-2044.68	-282.26	-353.12	-1680.74	-173.91	-345.26	-1680.74	-312.46	-345.26	-1292.90
	DISPERSION-LMAX	472.06	617.11	10473.46	382.41	617.11	12525.57	389.82	535.27	12525.57	306.36	535.27	13195.95
	MIN	-190.88	-614.10	-6582.57	-262.74	-614.10	-6633.45	-237.62	-534.97	-6633.45	-315.78	-534.97	-6590.64
110	Live load L-PICKUP 1	999.66	1120.10	18217.63	726.96	1120.10	21537.66	856.27	1023.87	21537.66	591.14	1023.87	22620.41
	MIN	-375.61	-1118.46	-9597.17	-629.84	-1118.46	-9111.46	-467.19	-1028.05	-9111.46	-727.15	-1028.05	-8496.15
	L-PICKUP 2 MAX	863.72	968.03	15994.81	634.27	968.03	18926.59	739.78	877.58	18926.59	517.79	877.58	19895.63
	MIN	-333.43	-967.23	-8627.25	-545.00	-967.23	-8314.18	-411.53	-880.24	-8314.18	-628.24	-880.24	-7883.54
	L-PICKUP 3	-376.72	-1235.50	-11028.89	-626.95	-1235.50	-10166.10	-475.46	-1124.98	-10166.10	-734.37	-1124.98	-9157.01
	Live load MAX	999.66	1120.10	18217.63	726.96	1120.10	21537.66	856.27	1023.87	21537.66	591.14	1023.87	22620.41
	MIN	-376.72	-1235.50	-11028.89	-629.84	-1235.50	-10166.10	-475.46	-1124.98	-10166.10	-734.37	-1124.98	-9157.01
111	AASHTO Twin TWIN-PICKUP	1069.46	1265.19	20140.43	794.87	1265.19	23963.28	889.19	1119.04	23963.28	623.24	1119.04	25146.94
	MIN	-376.72	-1235.50	-11028.89	-626.95	-1235.50	-10166.10	-475.46	-1124.98	-10166.10	-734.37	-1124.98	-9157.01
	MID-PICKUP	-376.72	-1235.50	-11028.89	-626.95	-1235.50	-10166.10	-475.46	-1124.98	-10166.10	-734.37	-1124.98	-9157.01
198	AASHTO FatigTRUCK-LOAD	279.86	268.70	2186.58	123.68	268.70	2449.36	266.77	216.12	2449.36	111.74	216.12	2529.53
	MIN	-88.16	-163.04	-513.91	-244.05	-163.04	-414.64	-101.20	-159.31	-414.64	-256.37	-159.31	-319.08
	TANDEM-LOAD MAX	217.68	187.46	1630.07	96.11	187.46	1813.91	208.55	152.04	1813.91	88.10	152.04	1872.73
	MIN	-71.92	-112.15	-348.28	-193.44	-112.15	-281.18	-81.04	-113.78	-281.18	-201.51	-113.78	-216.46

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4052			4053			4053			4054		
NODE		4052			4053			4053			4054		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	151.60	379.95	2305.97	93.82	379.95	2710.34	131.26	314.43	2710.34	74.32	314.43	2834.19
	MIN	-49.62	-325.85	-1183.82	-103.48	-325.85	-1176.23	-60.31	-296.43	-1176.23	-116.40	-296.43	-1166.55
199	AASHTO-LRFD TRUCK-LOAD MAX	716.23	788.66	11904.80	500.78	788.66	14100.29	598.17	708.11	14100.29	386.13	708.11	14745.10
	MIN	-227.70	-758.67	-5671.76	-433.87	-758.67	-4662.22	-290.67	-715.00	-4662.22	-500.18	-715.00	-3583.81
	TANDEM-LOAD MAX	391.66	350.92	5521.35	251.86	350.92	6401.01	349.96	342.31	6401.01	211.43	342.31	6699.68
	MIN	-142.55	-353.12	-2044.68	-282.26	-353.12	-1680.74	-173.91	-345.26	-1680.74	-312.46	-345.26	-1292.90
	DISPERSION-LMAX	472.06	617.11	10473.46	382.41	617.11	12525.57	389.82	535.27	12525.57	306.36	535.27	13195.95
	MIN	-190.88	-614.10	-6582.57	-262.74	-614.10	-6633.45	-237.62	-534.97	-6633.45	-315.78	-534.97	-6590.64
300	Total Dead lWithout snow	909.22	-16.67	12882.98	422.31	-16.67	19540.64	480.82	-8.73	19540.64	-6.09	-8.73	21914.30
301	Particular Snow	77.51	0.35	1064.18	32.25	0.35	1612.97	42.20	-0.21	1612.97	-3.06	-0.21	1808.66
302	Live load Total MAX	649.78	728.06	11841.46	472.53	728.06	13999.48	556.58	665.51	13999.48	384.24	665.51	14703.26
	MIN	-244.87	-803.08	-7168.78	-409.40	-803.08	-6607.96	-309.05	-731.24	-6607.96	-477.34	-731.24	-5952.06
303	Sum total D+L+PP MAX	1636.52	728.42	25788.61	927.08	728.42	35153.09	1079.60	665.30	35153.09	381.18	665.30	38426.22
	MIN	668.41	-819.39	4627.74	-77.66	-819.39	12563.26	121.27	-740.18	12563.26	-486.50	-740.18	15985.28

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4054			4055			4055			4056				
NODE		4054			4055			4055			4056				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	12.00	2.63	4043.11	-86.17	2.63	3672.25	-66.56	1.84	3672.25	-164.74	1.84	2515.75		
3	Railing	3.03	-0.44	122.96	-5.24	-0.44	111.86	0.69	-1.72	111.86	-7.58	-1.72	77.40		
5	Wheel guard	29.95	-4.34	1217.32	-51.93	-4.34	1107.45	6.82	-17.03	1107.45	-75.05	-17.03	766.28		
8	Steel weight	12.45	15.87	14896.56	-286.15	15.87	13528.03	-277.65	28.01	13528.03	-576.25	28.01	9258.49		
10	Medial strip	-14.08	4.58	1512.43	-14.08	4.58	1371.60	-43.77	13.01	1371.60	-43.77	13.01	933.93		
19	Snow	6.04	1.04	1808.66	-39.23	1.04	1642.73	-29.08	0.37	1642.73	-74.35	0.37	1125.55		
31	Miscellaneous	-1.13	0.37	121.92	-1.13	0.37	110.63	-3.53	1.05	110.63	-3.53	1.05	75.36		
100	AASHTO-LRFD TRUCK-LOAD	MAX	410.40	494.15	9424.46	228.00	494.15	9011.00	367.10	503.17	9011.00	183.03	503.17	7737.12	
		MIN	-286.65	-484.88	-1905.51	-469.38	-484.88	-2492.60	-344.63	-497.15	-2492.60	-529.50	-497.15	-3018.27	
		TANDEM-LOAD	MAX	311.93	346.03	6699.68	172.77	346.03	6400.53	282.51	352.26	6400.53	141.41	352.26	5515.57
		MIN	-212.92	-339.75	-1292.90	-352.13	-339.75	-1691.24	-252.07	-346.88	-1691.24	-393.28	-346.88	-2047.91	
		DISPERSION-L	MAX	320.94	533.80	13195.95	243.20	533.80	12475.42	266.27	608.49	12475.42	194.39	608.49	10374.22
		MIN	-300.56	-530.93	-6590.64	-384.44	-530.93	-6473.97	-374.25	-608.83	-6473.97	-463.88	-608.83	-6257.22	
110	Live load	L-PICKUP 1	MAX	731.34	1027.94	22620.41	471.20	1027.94	21486.42	633.37	1111.66	21486.42	377.42	1111.66	18111.34
		MIN	-587.21	-1015.81	-8496.15	-853.82	-1015.81	-8966.56	-718.87	-1105.98	-8966.56	-993.39	-1105.98	-9275.49	
		L-PICKUP 2	MAX	632.86	879.83	19895.63	415.96	879.83	18875.95	548.78	960.75	18875.95	335.81	960.75	15889.79
		MIN	-513.48	-870.68	-7883.54	-736.57	-870.68	-8165.21	-626.31	-955.70	-8165.21	-857.16	-955.70	-8305.14	
		L-PICKUP 3	MAX	-619.02	-1110.30	-9157.01	-886.61	-1110.30	-10045.76	-786.51	-1248.24	-10045.76	-1062.69	-1248.24	-10740.48
		MIN	731.34	1027.94	22620.41	471.20	1027.94	21486.42	633.37	1111.66	21486.42	377.42	1111.66	18111.34	
		Live load	MAX	731.34	1027.94	22620.41	471.20	1027.94	21486.42	633.37	1111.66	21486.42	377.42	1111.66	18111.34
		MIN	-619.02	-1110.30	-9157.01	-886.61	-1110.30	-10045.76	-786.51	-1248.24	-10045.76	-1062.69	-1248.24	-10740.48	
111	AASHTO Twin	TWIN-PICKUP	MAX	736.67	1124.33	25146.94	478.14	1124.33	23908.75	628.89	1225.32	23908.75	377.69	1225.32	20045.41
		MIN	-619.02	-1110.30	-9157.01	-886.61	-1110.30	-10045.76	-786.51	-1248.24	-10045.76	-1062.69	-1248.24	-10740.48	
		MID-PICKUP	MAX	-619.02	-1110.30	-9157.01	-886.61	-1110.30	-10045.76	-786.51	-1248.24	-10045.76	-1062.69	-1248.24	-10740.48
198	AASHTO Fatig	TRUCK-LOAD	MAX	255.48	161.19	2529.53	99.92	161.19	2445.38	244.40	161.29	2445.38	87.53	161.29	2186.14
		MIN	-112.20	-213.19	-319.08	-267.94	-213.19	-418.22	-122.80	-266.75	-418.22	-280.03	-266.75	-514.63	
		TANDEM-LOAD	MAX	201.00	115.07	1872.73	80.13	115.07	1811.28	193.86	110.95	1811.28	71.55	110.95	1629.40
		MIN	-88.54	-150.01	-216.46	-209.44	-150.01	-283.69	-95.62	-186.14	-283.69	-217.98	-186.14	-348.89	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4054			4055			4055			4056		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	116.49	295.83	2834.19	60.65	295.83	2696.06	103.64	322.74	2696.06	49.74	322.74	2293.08
	MIN	-72.74	-311.29	-1166.55	-129.99	-311.29	-1148.06	-90.80	-375.57	-1148.06	-148.51	-375.57	-1126.70
199	AASHTO-LRFD TRUCK-LOAD MAX	497.59	715.46	14745.10	288.07	715.46	14089.85	432.49	752.97	14089.85	225.26	752.97	11898.46
	MIN	-387.25	-702.73	-3583.81	-600.68	-702.73	-4687.99	-499.65	-778.11	-4687.99	-716.89	-778.11	-5676.65
	TANDEM-LOAD MAX	311.93	346.03	6699.68	172.77	346.03	6400.53	282.51	352.26	6400.53	141.41	352.26	5515.57
	MIN	-212.92	-339.75	-1292.90	-352.13	-339.75	-1691.24	-252.07	-346.88	-1691.24	-393.28	-346.88	-2047.91
	DISPERSION-LMAX	320.94	533.80	13195.95	243.20	533.80	12475.42	266.27	608.49	12475.42	194.39	608.49	10374.22
	MIN	-300.56	-530.93	-6590.64	-384.44	-530.93	-6473.97	-374.25	-608.83	-6473.97	-463.88	-608.83	-6257.22
300	Total Dead lWithout snow	42.21	18.67	21914.30	-444.71	18.67	19901.83	-384.00	25.16	19901.83	-870.92	25.16	13627.21
301	Particular Snow	6.04	1.04	1808.66	-39.23	1.04	1642.73	-29.08	0.37	1642.73	-74.35	0.37	1125.55
302	Live load Total MAX	475.37	668.16	14703.26	306.28	668.16	13966.17	411.69	722.58	13966.17	245.32	722.58	11772.37
	MIN	-402.37	-721.69	-5952.06	-576.30	-721.69	-6529.74	-511.23	-811.36	-6529.74	-690.75	-811.36	-6981.31
303	Sum total D+L+PP MAX	523.62	687.88	38426.22	-85.77	687.88	35510.73	122.11	748.11	35510.73	-626.35	748.11	26525.14
	MIN	-396.32	-720.65	15985.28	-1060.23	-720.65	13055.89	-924.32	-810.99	13055.89	-1636.02	-810.99	5677.06

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4056			MEMBER 4057			MEMBER 4058						
		NODE 4056			NODE 4057			NODE 4058						
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)				
1	Pavement	-136.71	-16.57	2515.75	-234.88	-16.57	657.82	-206.20	-42.34	657.82	-304.37	-42.34	-1895.02	
3	Railing	-1.34	-4.28	77.40	-9.61	-4.28	22.63	-3.34	-8.46	22.63	-11.61	-8.46	-52.10	
5	Wheel guard	-13.29	-42.39	766.28	-95.17	-42.39	223.99	-33.04	-83.75	223.99	-114.92	-83.75	-515.83	
8	Steel weight	-537.31	-15.95	9258.49	-835.91	-15.95	2392.42	-794.75	-70.37	2392.42	-1093.35	-70.37	-7048.09	
10	Medial strip	-70.64	20.00	933.93	-70.64	20.00	227.50	-97.39	33.91	227.50	-97.39	33.91	-746.40	
19	Snow	-60.43	-8.38	1125.55	-105.70	-8.38	294.91	-91.48	-20.78	294.91	-136.75	-20.78	-846.23	
31	Miscellaneous	-5.70	1.62	75.36	-5.70	1.62	18.37	-7.86	2.74	18.37	-7.86	2.74	-60.24	
100	AASHTO-LRFD TRUCK-LOAD	MAX	334.97	515.75	7737.12	151.16	515.75	5821.08	312.71	535.04	5821.08	127.84	535.04	3623.51
		MIN	-394.08	-556.69	-3018.27	-579.84	-556.69	-3490.84	-432.13	-617.76	-3490.84	-616.68	-617.76	-4073.51
		TANDEM-LOAD MAX	260.88	360.20	5515.57	118.84	360.20	4208.49	244.48	367.65	4208.49	102.98	367.65	2726.10
		MIN	-285.29	-386.91	-2047.91	-427.59	-386.91	-2368.57	-310.95	-428.05	-2368.57	-452.34	-428.05	-2767.41
		DISPERSION-LMAX	230.23	720.14	10374.22	164.09	720.14	7076.18	215.74	890.59	7076.18	154.47	890.59	4821.56
		MIN	-453.14	-750.48	-6257.22	-548.41	-750.48	-5990.20	-552.72	-963.12	-5990.20	-652.72	-963.12	-7909.22
110	Live load	L-PICKUP 1 MAX	565.20	1235.89	18111.34	315.25	1235.89	12897.26	528.45	1425.63	12897.26	282.31	1425.63	8445.07
		MIN	-847.23	-1307.16	-9275.49	-1128.25	-1307.16	-9481.03	-984.84	-1580.89	-9481.03	-1269.40	-1580.89	-11982.73
		L-PICKUP 2 MAX	491.10	1080.34	15889.79	282.93	1080.34	11284.67	460.21	1258.23	11284.67	257.45	1258.23	7547.65
		MIN	-738.43	-1137.39	-8305.14	-976.01	-1137.39	-8358.77	-863.67	-1391.17	-8358.77	-1105.06	-1391.17	-10676.63
		L-PICKUP 3	-947.54	-1500.48	-10740.48	-1230.03	-1500.48	-11299.99	-1109.42	-1840.77	-11299.99	-1394.06	-1840.77	-14009.99
		Live load MAX	565.20	1235.89	18111.34	315.25	1235.89	12897.26	528.45	1425.63	12897.26	282.31	1425.63	8445.07
MIN	-947.54	-1500.48	-10740.48	-1230.03	-1500.48	-11299.99	-1109.42	-1840.77	-11299.99	-1394.06	-1840.77	-14009.99		
111	AASHTO Twin TWIN-PICKUP	MAX	555.88	1411.87	20045.41	313.44	1411.87	13933.68	506.26	1666.08	13933.68	267.24	1666.08	8072.83
		MIN	-947.54	-1500.48	-10740.48	-1230.03	-1500.48	-11299.99	-1109.42	-1840.77	-11299.99	-1394.06	-1840.77	-14009.99
		MID-PICKUP	-947.54	-1500.48	-10740.48	-1230.03	-1500.48	-11299.99	-1109.42	-1840.77	-11299.99	-1394.06	-1840.77	-14009.99
198	AASHTO FatigTRUCK-LOAD	MAX	232.76	207.80	2186.14	75.93	207.80	1785.61	221.82	242.24	1785.61	64.21	242.24	1321.06
		MIN	-134.37	-315.89	-514.63	-292.28	-315.89	-623.06	-145.78	-363.31	-623.06	-302.54	-363.31	-802.99
		TANDEM-LOAD MAX	186.20	142.44	1629.40	63.14	142.44	1354.48	178.55	165.75	1354.48	56.17	165.75	1048.77
		MIN	-103.27	-219.34	-348.89	-226.48	-219.34	-421.80	-110.98	-251.63	-421.80	-233.19	-251.63	-545.06

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4056			4057			4057			4058		
NODE		4056			4057			4057			4058		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	93.35	366.03	2293.08	42.51	366.03	1642.70	88.28	460.98	1642.70	40.17	460.98	1182.30
	MIN	-115.54	-454.94	-1126.70	-174.41	-454.94	-1138.21	-149.86	-579.91	-1138.21	-210.35	-579.91	-1745.95
199	AASHTO-LRFD TRUCK-LOAD MAX	387.42	848.60	11898.46	184.18	848.60	8405.69	346.77	960.62	8405.69	142.46	960.62	4148.26
	MIN	-599.67	-916.72	-5676.65	-818.29	-916.72	-6565.34	-679.97	-1082.17	-6565.34	-896.24	-1082.17	-7657.43
	TANDEM-LOAD MAX	260.88	360.20	5515.57	118.84	360.20	4208.49	244.48	367.65	4208.49	102.98	367.65	2726.10
	MIN	-285.29	-386.91	-2047.91	-427.59	-386.91	-2368.57	-310.95	-428.05	-2368.57	-452.34	-428.05	-2767.41
	DISPERSION-LMAX	230.23	720.14	10374.22	164.09	720.14	7076.18	215.74	890.59	7076.18	154.47	890.59	4821.56
	MIN	-453.14	-750.48	-6257.22	-548.41	-750.48	-5990.20	-552.72	-963.12	-5990.20	-652.72	-963.12	-7909.22
300	Total Dead lWithout snow	-764.99	-57.57	13627.21	-1251.91	-57.57	3542.72	-1142.58	-168.27	3542.72	-1629.50	-168.27	-10317.68
301	Particular Snow	-60.43	-8.38	1125.55	-105.70	-8.38	294.91	-91.48	-20.78	294.91	-136.75	-20.78	-846.23
302	Live load Total MAX	367.38	803.33	11772.37	204.91	803.33	8383.22	343.49	926.66	8383.22	183.50	926.66	5489.30
	MIN	-615.90	-975.31	-6981.31	-799.52	-975.31	-7344.99	-721.12	-1196.50	-7344.99	-906.14	-1196.50	-9106.49
303	Sum total D+L+PP MAX	-347.83	794.94	26525.14	-1091.22	794.94	12220.85	-787.52	905.88	12220.85	-1527.69	905.88	-4027.82
	MIN	-1441.32	-1041.27	5677.06	-2157.13	-1041.27	-5710.86	-1955.18	-1385.55	-5710.86	-2672.39	-1385.55	-20270.40

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4058			4059			4059			4060			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-294.38	-42.41	-1895.02	-372.91	-42.41	-4564.17	-378.25	-20.02	-4564.17	-456.78	-20.02	-7904.28	
3	Railing	-7.16	-11.58	-52.10	-13.78	-11.58	-135.89	-14.17	-7.18	-135.89	-20.79	-7.18	-275.74	
5	Wheel guard	-70.93	-114.65	-515.83	-136.43	-114.65	-1345.28	-140.32	-71.06	-1345.28	-205.82	-71.06	-2729.83	
8	Steel weight	-1105.96	-33.39	-7048.09	-1344.84	-33.39	-16851.30	-1361.73	4.68	-16851.30	-1600.61	4.68	-28700.70	
10	Medial strip	-122.36	55.51	-746.40	-122.36	55.51	-1725.27	-122.75	38.07	-1725.27	-122.75	38.07	-2707.29	
19	Snow	-131.21	-21.61	-846.23	-167.43	-21.61	-2040.80	-169.87	-10.64	-2040.80	-206.09	-10.64	-3544.63	
31	Miscellaneous	-9.88	4.49	-60.24	-9.88	4.49	-139.27	-9.91	3.08	-139.27	-9.91	3.08	-218.54	
100	AASHTO-LRFD TRUCK-LOAD	MAX	261.01	658.19	3623.51	107.12	658.19	2182.41	202.61	758.01	2182.41	105.14	758.01	1595.56
		MIN	-494.90	-722.84	-4073.51	-647.86	-722.84	-4665.31	-558.39	-772.26	-4665.31	-720.24	-772.26	-5357.21
		TANDEM-LOAD MAX	211.02	452.38	2726.10	91.51	452.38	1738.26	171.58	519.07	1738.26	71.58	519.07	1084.73
		MIN	-355.72	-497.48	-2767.41	-475.03	-497.48	-3172.99	-401.67	-525.87	-3172.99	-523.72	-525.87	-3639.63
		DISPERSION-LMAX	214.29	1110.18	4821.56	172.45	1110.18	4485.62	261.73	1254.10	4485.62	240.82	1254.10	5145.45
		MIN	-696.10	-1183.00	-7909.22	-783.07	-1183.00	-11955.60	-882.51	-1288.90	-11955.60	-990.46	-1288.90	-18119.84
110	Live load	L-PICKUP 1 MAX	475.30	1768.37	8445.07	279.57	1768.37	6668.03	464.34	2012.11	6668.03	345.96	2012.11	6741.02
		MIN	-1190.99	-1905.83	-11982.73	-1430.93	-1905.83	-16620.91	-1440.90	-2061.17	-16620.91	-1710.70	-2061.17	-23477.06
		L-PICKUP 2 MAX	425.32	1562.56	7547.65	263.96	1562.56	6223.87	433.31	1773.17	6223.87	312.40	1773.17	6230.18
		MIN	-1051.82	-1680.48	-10676.63	-1258.09	-1680.48	-15128.59	-1284.18	-1814.77	-15128.59	-1514.18	-1814.77	-21759.48
		L-PICKUP 3	-1339.88	-2224.01	-14009.99	-1578.69	-2224.01	-18648.08	-1611.33	-2412.66	-18648.08	-1882.66	-2412.66	-25362.48
		Live load MAX	475.30	1768.37	8445.07	279.57	1768.37	6668.03	464.34	2012.11	6668.03	345.96	2012.11	6741.02
MIN	-1339.88	-2224.01	-14009.99	-1578.69	-2224.01	-18648.08	-1611.33	-2412.66	-18648.08	-1882.66	-2412.66	-25362.48		
111	AASHTO Twin	TWIN-PICKUP MAX	421.08	2070.94	8072.83	258.44	2070.94	6446.10	413.01	2342.04	6446.10	384.34	2342.04	7326.54
		MIN	-1339.88	-2224.01	-14009.99	-1578.69	-2224.01	-18648.08	-1611.33	-2412.66	-18648.08	-1882.66	-2412.66	-25362.48
		MID-PICKUP	-1339.88	-2224.01	-14009.99	-1578.69	-2224.01	-18648.08	-1611.33	-2412.66	-18648.08	-1882.66	-2412.66	-25362.48
198	AASHTO Fatig	TRUCK-LOAD MAX	183.70	256.09	1321.06	52.24	256.09	807.14	108.22	220.50	807.14	35.76	220.50	295.57
		MIN	-177.29	-386.92	-802.99	-307.44	-386.92	-1068.67	-242.24	-327.06	-1068.67	-385.07	-327.06	-1610.76
		TANDEM-LOAD MAX	154.19	173.67	1048.77	50.32	173.67	720.07	104.37	150.90	720.07	24.24	150.90	201.46
		MIN	-134.31	-267.62	-545.06	-237.92	-267.62	-728.20	-182.53	-222.83	-728.20	-291.95	-222.83	-1091.74

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4058			4059			4059			4060		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	86.07	570.92	1182.30	52.03	570.92	1005.47	106.91	670.35	1005.47	89.10	670.35	1043.32
	MIN	-216.37	-712.86	-1745.95	-267.87	-712.86	-3090.13	-359.61	-756.90	-3090.13	-429.27	-756.90	-5910.03
199	AASHTO-LRFD TRUCK-LOAD MAX	253.57	1190.87	4148.26	114.70	1190.87	2676.71	197.17	1348.17	2676.71	186.23	1348.17	2995.15
	MIN	-792.65	-1288.12	-7657.43	-971.03	-1288.12	-8764.49	-907.86	-1391.84	-8764.49	-1101.38	-1391.84	-10060.69
	TANDEM-LOAD MAX	211.02	452.38	2726.10	91.51	452.38	1738.26	171.58	519.07	1738.26	71.58	519.07	1084.73
	MIN	-355.72	-497.48	-2767.41	-475.03	-497.48	-3172.99	-401.67	-525.87	-3172.99	-523.72	-525.87	-3639.63
	DISPERSION-LMAX	214.29	1110.18	4821.56	172.45	1110.18	4485.62	261.73	1254.10	4485.62	240.82	1254.10	5145.45
	MIN	-696.10	-1183.00	-7909.22	-783.07	-1183.00	-11955.60	-882.51	-1288.90	-11955.60	-990.46	-1288.90	-18119.84
300	Total Dead lWithout snow	-1610.67	-142.03	-10317.68	-2000.20	-142.03	-24761.17	-2027.13	-52.44	-24761.17	-2416.67	-52.44	-42536.39
301	Particular Snow	-131.21	-21.61	-846.23	-167.43	-21.61	-2040.80	-169.87	-10.64	-2040.80	-206.09	-10.64	-3544.63
302	Live load Total MAX	308.95	1149.44	5489.30	181.72	1149.44	4334.22	301.82	1307.87	4334.22	224.87	1307.87	4381.66
	MIN	-870.92	-1445.60	-9106.49	-1026.15	-1445.60	-12121.25	-1047.37	-1568.23	-12121.25	-1223.73	-1568.23	-16485.61
303	Sum total D+L+PP MAX	-1340.25	1127.83	-4027.82	-1931.40	1127.83	-21167.49	-1804.64	1297.23	-21167.49	-2330.42	1297.23	-40384.86
	MIN	-2612.80	-1609.25	-20270.40	-3193.78	-1609.25	-38923.23	-3244.37	-1631.31	-38923.23	-3846.48	-1631.31	-62566.63

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4060			MEMBER 4061			MEMBER 4061			MEMBER 4062			
		NODE 4060			NODE 4061			NODE 4061			NODE 4062			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	438.48	27.35	-7904.28	359.95	27.35	-4710.56	360.81	38.22	-4710.56	282.27	38.22	-2138.25	
3	Railing	20.23	7.34	-275.74	13.62	7.34	-140.35	13.42	11.37	-140.35	6.80	11.37	-59.46	
5	Wheel guard	200.29	72.71	-2729.83	134.79	72.71	-1389.50	132.86	112.55	-1389.50	67.36	112.55	-588.63	
8	Steel weight	1533.22	23.01	-28700.70	1294.34	23.01	-17390.50	1300.15	18.96	-17390.50	1061.27	18.96	-7944.79	
10	Medial strip	115.85	-34.94	-2707.29	115.85	-34.94	-1780.47	117.71	-56.49	-1780.47	117.71	-56.49	-838.79	
19	Snow	197.89	13.91	-3544.63	161.68	13.91	-2106.34	162.01	19.72	-2106.34	125.80	19.72	-955.13	
31	Miscellaneous	9.36	-2.82	-218.54	9.36	-2.82	-143.67	9.51	-4.56	-143.67	9.51	-4.56	-67.60	
100	AASHTO-LRFD TRUCK-LOAD	MAX	722.84	773.12	1595.56	561.80	773.12	2096.96	654.40	714.95	2096.96	503.17	714.95	3620.50
		MIN	-109.38	-754.33	-5357.21	-205.96	-754.33	-4566.23	-110.09	-660.73	-4566.23	-261.75	-660.73	-4031.85
		TANDEM-LOAD MAX	525.35	526.18	1084.73	404.08	526.18	1683.50	478.99	492.10	1683.50	361.49	492.10	2732.98
		MIN	-74.59	-516.87	-3639.63	-173.11	-516.87	-3106.09	-93.41	-454.23	-3106.09	-211.05	-454.23	-2738.96
		DISPERSION-LMAX	957.81	1285.12	5145.45	849.75	1285.12	4553.29	760.45	1158.88	4553.29	673.05	1158.88	4904.93
		MIN	-237.93	-1238.43	-18119.84	-258.73	-1238.43	-12262.26	-169.63	-1092.91	-12262.26	-211.03	-1092.91	-8388.87
110	Live load	L-PICKUP 1 MAX	1680.65	2058.24	6741.02	1411.55	2058.24	6650.25	1414.85	1873.83	6650.25	1176.22	1873.83	8525.43
		MIN	-347.31	-1992.76	-23477.06	-464.69	-1992.76	-16828.49	-279.72	-1753.64	-16828.49	-472.78	-1753.64	-12420.72
		L-PICKUP 2 MAX	1483.17	1811.30	6230.18	1253.84	1811.30	6236.78	1239.44	1650.98	6236.78	1034.54	1650.98	7637.91
		MIN	-312.52	-1755.30	-21759.48	-431.84	-1755.30	-15368.35	-263.05	-1547.14	-15368.35	-422.07	-1547.14	-11127.82
		L-PICKUP 3	-389.49	-2315.07	-25362.48	-417.91	-2315.07	-18763.12	-264.78	-2050.94	-18763.12	-424.56	-2050.94	-14378.01
		Live load MAX	1680.65	2058.24	6741.02	1411.55	2058.24	6650.25	1414.85	1873.83	6650.25	1176.22	1873.83	8525.43
MIN	-389.49	-2315.07	-25362.48	-464.69	-2315.07	-18763.12	-279.72	-2050.94	-18763.12	-472.78	-2050.94	-14378.01		
111	AASHTO Twin TWIN-PICKUP	MAX	1855.35	2412.29	7326.54	1583.75	2412.29	6287.18	1568.24	2188.80	6287.18	1330.01	2188.80	8039.42
		MIN	-389.49	-2315.07	-25362.48	-417.91	-2315.07	-18763.12	-264.78	-2050.94	-18763.12	-424.56	-2050.94	-14378.01
		MID-PICKUP	-389.49	-2315.07	-25362.48	-417.91	-2315.07	-18763.12	-264.78	-2050.94	-18763.12	-424.56	-2050.94	-14378.01
198	AASHTO FatigTRUCK-LOAD	MAX	385.32	325.28	295.57	242.93	325.28	811.30	308.47	381.33	811.30	179.30	381.33	1331.98
		MIN	-36.90	-220.15	-1610.76	-107.74	-220.15	-1056.39	-51.95	-256.55	-1056.39	-182.15	-256.55	-799.80
		TANDEM-LOAD MAX	291.99	221.47	201.46	183.02	221.47	723.85	238.31	263.72	723.85	135.75	263.72	1058.51
		MIN	-25.05	-150.73	-1091.74	-103.91	-150.73	-719.93	-50.05	-174.11	-719.93	-152.82	-174.11	-543.29

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4060			4061			4061			4062		
NODE		4060			4061			4061			4062		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	421.11	753.13	1043.32	351.42	753.13	1016.80	263.57	699.45	1016.80	212.01	699.45	1195.82
	MIN	-89.99	-663.01	-5910.03	-107.72	-663.01	-3158.62	-53.20	-560.91	-3158.62	-86.97	-560.91	-1847.64
199	AASHTO-LRFD TRUCK-LOAD MAX	1103.69	1395.21	2995.15	909.96	1395.21	2432.47	982.04	1273.12	2432.47	804.73	1273.12	4027.76
	MIN	-194.83	-1333.86	-10060.69	-205.62	-1333.86	-8585.65	-124.56	-1185.91	-8585.65	-260.71	-1185.91	-7586.70
	TANDEM-LOAD MAX	525.35	526.18	1084.73	404.08	526.18	1683.50	478.99	492.10	1683.50	361.49	492.10	2732.98
	MIN	-74.59	-516.87	-3639.63	-173.11	-516.87	-3106.09	-93.41	-454.23	-3106.09	-211.05	-454.23	-2738.96
	DISPERSION-LMAX	957.81	1285.12	5145.45	849.75	1285.12	4553.29	760.45	1158.88	4553.29	673.05	1158.88	4904.93
	MIN	-237.93	-1238.43	-18119.84	-258.73	-1238.43	-12262.26	-169.63	-1092.91	-12262.26	-211.03	-1092.91	-8388.87
300	Total Dead lWithout snow	2317.43	92.65	-42536.39	1927.90	92.65	-25555.06	1934.46	120.04	-25555.06	1544.93	120.04	-11637.52
301	Particular Snow	197.89	13.91	-3544.63	161.68	13.91	-2106.34	162.01	19.72	-2106.34	125.80	19.72	-955.13
302	Live load Total MAX	1092.42	1337.85	4381.66	917.51	1337.85	4322.66	919.65	1217.99	4322.66	764.54	1217.99	5541.53
	MIN	-253.17	-1504.79	-16485.61	-302.05	-1504.79	-12196.03	-181.82	-1333.11	-12196.03	-307.30	-1333.11	-9345.71
303	Sum total D+L+PP MAX	3607.75	1444.41	-40384.86	3007.09	1444.41	-22041.94	3016.12	1357.75	-22041.94	2435.26	1357.75	-5388.66
	MIN	2186.21	-1490.89	-62566.63	1696.91	-1490.89	-39857.43	1860.10	-1313.39	-39857.43	1271.23	-1313.39	-21938.35

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4062			4063			4063			4064			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	295.12	32.92	-2138.25	196.94	32.92	322.05	216.62	24.17	322.05	118.45	24.17	1997.37	
3	Railing	11.33	8.11	-59.46	3.05	8.11	12.44	9.05	4.45	12.44	0.78	4.45	61.63	
5	Wheel guard	112.12	80.34	-588.63	30.24	80.34	123.18	89.64	44.05	123.18	7.76	44.05	610.16	
8	Steel weight	1059.28	36.33	-7944.79	760.68	36.33	1154.97	768.66	44.69	1154.97	470.06	44.69	7348.62	
10	Medial strip	93.87	-37.03	-838.79	93.87	-37.03	99.91	63.77	-16.73	99.91	63.77	-16.73	737.60	
19	Snow	132.60	16.55	-955.13	87.34	16.55	144.56	97.52	11.76	144.56	52.26	11.76	893.45	
31	Miscellaneous	7.58	-2.99	-67.60	7.58	-2.99	8.23	5.15	-1.35	8.23	5.15	-1.35	59.73	
100	AASHTO-LRFD TRUCK-LOAD	MAX	614.52	611.28	3620.50	430.83	611.28	5742.03	561.49	565.28	5742.03	373.21	565.28	7378.57
		MIN	-133.70	-536.12	-4031.85	-317.98	-536.12	-3405.40	-162.25	-488.18	-3405.40	-349.73	-488.18	-2818.95
		TANDEM-LOAD MAX	450.71	423.72	2732.98	310.12	423.72	4159.09	415.74	392.82	4159.09	270.91	392.82	5270.55
		MIN	-107.15	-368.30	-2738.96	-247.88	-368.30	-2309.59	-126.76	-340.93	-2309.59	-271.47	-340.93	-1911.41
		DISPERSION-LMAX	638.68	933.33	4904.93	539.11	933.33	6837.83	522.17	720.66	6837.83	429.39	720.66	9480.70
		MIN	-155.42	-876.13	-8388.87	-217.12	-876.13	-6297.81	-167.63	-678.02	-6297.81	-236.31	-678.02	-6207.65
110	Live load	L-PICKUP 1 MAX	1253.20	1544.60	8525.43	969.93	1544.60	12579.86	1083.66	1285.94	12579.86	802.60	1285.94	16859.27
		MIN	-289.13	-1412.25	-12420.72	-535.10	-1412.25	-9703.20	-329.88	-1166.20	-9703.20	-586.04	-1166.20	-9026.60
		L-PICKUP 2 MAX	1089.39	1357.04	7637.91	849.23	1357.04	10996.92	937.90	1113.48	10996.92	700.30	1113.48	14751.25
		MIN	-262.57	-1244.44	-11127.82	-465.01	-1244.44	-8607.40	-294.39	-1018.95	-8607.40	-507.78	-1018.95	-8119.06
		L-PICKUP 3	-276.40	-1652.97	-14378.01	-515.09	-1652.97	-11438.09	-326.50	-1339.97	-11438.09	-577.19	-1339.97	-10364.03
		Live load MAX	1253.20	1544.60	8525.43	969.93	1544.60	12579.86	1083.66	1285.94	12579.86	802.60	1285.94	16859.27
MIN	-289.13	-1652.97	-14378.01	-535.10	-1652.97	-11438.09	-329.88	-1339.97	-11438.09	-586.04	-1339.97	-10364.03		
111	AASHTO Twin TWIN-PICKUP	MAX	1378.82	1793.95	8039.42	1096.16	1793.95	13524.50	1176.22	1477.33	13524.50	896.49	1477.33	18670.51
		MIN	-276.40	-1652.97	-14378.01	-515.09	-1652.97	-11438.09	-326.50	-1339.97	-11438.09	-577.19	-1339.97	-10364.03
		MID-PICKUP	-276.40	-1652.97	-14378.01	-515.09	-1652.97	-11438.09	-326.50	-1339.97	-11438.09	-577.19	-1339.97	-10364.03
198	AASHTO FatigTRUCK-LOAD	MAX	301.42	360.56	1331.98	145.07	360.56	1767.65	287.40	318.54	1767.65	127.75	318.54	2085.62
		MIN	-65.35	-240.80	-799.80	-222.68	-240.80	-609.93	-79.65	-201.49	-609.93	-238.84	-201.49	-480.35
		TANDEM-LOAD MAX	232.34	249.96	1058.51	110.51	249.96	1343.68	223.61	221.52	1343.68	98.66	221.52	1558.94
		MIN	-57.02	-164.89	-543.29	-179.04	-164.89	-413.13	-65.85	-138.10	-413.13	-190.73	-138.10	-325.44

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4062			4063			4063			4064		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	208.49	564.42	1195.82	148.18	564.42	1593.98	167.75	441.57	1593.98	109.53	441.57	2108.23
	MIN	-40.48	-451.75	-1847.64	-88.84	-451.75	-1193.73	-43.82	-350.02	-1193.73	-96.06	-350.02	-1117.57
199	AASHTO-LRFD TRUCK-LOAD MAX	893.34	1059.95	4027.76	678.85	1059.95	8189.39	784.74	920.82	8189.39	566.71	920.82	11264.31
	MIN	-151.69	-960.51	-7586.70	-355.20	-960.51	-6411.18	-195.15	-810.84	-6411.18	-405.01	-810.84	-5307.94
	TANDEM-LOAD MAX	450.71	423.72	2732.98	310.12	423.72	4159.09	415.74	392.82	4159.09	270.91	392.82	5270.55
	MIN	-107.15	-368.30	-2738.96	-247.88	-368.30	-2309.59	-126.76	-340.93	-2309.59	-271.47	-340.93	-1911.41
	DISPERSION-LMAX	638.68	933.33	4904.93	539.11	933.33	6837.83	522.17	720.66	6837.83	429.39	720.66	9480.70
	MIN	-155.42	-876.13	-8388.87	-217.12	-876.13	-6297.81	-167.63	-678.02	-6297.81	-236.31	-678.02	-6207.65
300	Total Dead lWithout snow	1579.29	117.68	-11637.52	1092.37	117.68	1720.79	1152.89	99.27	1720.79	665.97	99.27	10815.12
301	Particular Snow	132.60	16.55	-955.13	87.34	16.55	144.56	97.52	11.76	144.56	52.26	11.76	893.45
302	Live load Total MAX	814.58	1003.99	5541.53	630.46	1003.99	8176.91	704.38	835.86	8176.91	521.69	835.86	10958.53
	MIN	-187.93	-1074.43	-9345.71	-347.82	-1074.43	-7434.76	-214.42	-870.98	-7434.76	-380.93	-870.98	-6736.62
303	Sum total D+L+PP MAX	2526.47	1138.22	-5388.66	1810.16	1138.22	10042.25	1954.79	946.90	10042.25	1239.92	946.90	22667.09
	MIN	1467.58	-1057.88	-21938.35	727.55	-1057.88	-7290.20	971.67	-859.22	-7290.20	223.03	-859.22	2950.96

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4064			MEMBER 4065			MEMBER 4065			MEMBER 4066				
		NODE 4064			NODE 4065			NODE 4065			NODE 4066				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	145.23	9.03	1997.37	47.06	9.03	2958.78	73.16	-1.19	2958.78	-25.01	-1.19	3199.56		
3	Railing	6.99	1.98	61.63	-1.28	1.98	90.20	4.85	0.44	90.20	-3.42	0.44	97.37		
5	Wheel guard	69.21	19.59	610.16	-12.66	19.59	892.93	48.05	4.32	892.93	-33.83	4.32	964.00		
8	Steel weight	504.33	12.91	7348.62	205.73	12.91	10898.96	238.18	-10.01	10898.96	-60.42	-10.01	11787.81		
10	Medial strip	36.38	-8.44	737.60	36.38	-8.44	1101.35	9.11	-3.71	1101.35	9.11	-3.71	1192.50		
19	Snow	65.62	4.48	893.45	20.35	4.48	1323.30	33.40	-0.41	1323.30	-11.87	-0.41	1430.98		
31	Miscellaneous	2.94	-0.68	59.73	2.94	-0.68	89.10	0.73	-0.30	89.10	0.73	-0.30	96.44		
100	AASHTO-LRFD TRUCK-LOAD	MAX	519.79	494.17	7378.57	328.73	494.17	8494.64	472.77	470.58	8494.64	281.52	470.58	8930.28	
		MIN	-187.11	-478.01	-2818.95	-377.72	-478.01	-2274.15	-219.21	-490.68	-2274.15	-409.78	-490.68	-1945.21	
		TANDEM-LOAD	MAX	387.97	344.58	5270.55	241.18	344.58	6043.48	356.08	329.83	6043.48	209.59	329.83	6356.47
		MIN	-144.57	-334.90	-1911.41	-291.28	-334.90	-1542.00	-166.75	-343.57	-1542.00	-313.14	-343.57	-1322.58	
		DISPERSION-L	MAX	427.22	587.61	9480.70	339.15	587.61	11050.57	349.14	510.53	11050.57	264.97	510.53	11484.90
		MIN	-189.60	-569.55	-6207.65	-263.07	-569.55	-6211.56	-229.05	-511.43	-6211.56	-306.51	-511.43	-6253.62	
110	Live load	L-PICKUP 1	MAX	947.00	1081.78	16859.27	667.88	1081.78	19545.22	821.91	981.12	19545.22	546.49	981.12	20415.18
		MIN	-376.71	-1047.56	-9026.60	-640.80	-1047.56	-8485.70	-448.26	-1002.10	-8485.70	-716.29	-1002.10	-8198.83	
		L-PICKUP 2	MAX	815.18	932.19	14751.25	580.33	932.19	17094.05	705.22	840.37	17094.05	474.57	840.37	17841.37
		MIN	-334.16	-904.45	-8119.06	-554.36	-904.45	-7753.56	-395.80	-855.00	-7753.56	-619.65	-855.00	-7576.20	
		L-PICKUP 3	MAX	-378.20	-1154.78	-10364.03	-637.06	-1154.78	-9444.29	-456.22	-1097.00	-9444.29	-719.71	-1097.00	-8914.08
		Live load	MAX	947.00	1081.78	16859.27	667.88	1081.78	19545.22	821.91	981.12	19545.22	546.49	981.12	20415.18
MIN	-378.20	-1154.78	-10364.03	-640.80	-1154.78	-9444.29	-456.22	-1097.00	-9444.29	-719.71	-1097.00	-8914.08			
111	AASHTO Twin	TWIN-PICKUP	MAX	1009.98	1215.24	18670.51	732.11	1215.24	21834.96	853.94	1069.01	21834.96	580.08	1069.01	22861.71
		MIN	-378.20	-1154.78	-10364.03	-637.06	-1154.78	-9444.29	-456.22	-1097.00	-9444.29	-719.71	-1097.00	-8914.08	
		MID-PICKUP	MAX	-378.20	-1154.78	-10364.03	-637.06	-1154.78	-9444.29	-456.22	-1097.00	-9444.29	-719.71	-1097.00	-8914.08
198	AASHTO Fatig	TRUCK-LOAD	MAX	277.90	264.48	2085.62	116.63	264.48	2296.36	270.15	207.98	2296.36	108.90	207.98	2384.14
		MIN	-87.95	-153.46	-480.35	-249.05	-153.46	-381.35	-95.66	-166.16	-381.35	-256.52	-166.16	-325.38	
		TANDEM-LOAD	MAX	217.43	184.88	1558.94	91.36	184.88	1705.75	212.08	146.70	1705.75	86.37	146.70	1769.59
		MIN	-71.85	-105.53	-325.44	-197.90	-105.53	-258.51	-77.20	-118.68	-258.51	-202.85	-118.68	-221.27	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4064			4065			4065			4066		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	139.24	361.69	2108.23	82.00	361.69	2394.71	122.24	298.67	2394.71	64.87	298.67	2481.73
	MIN	-48.92	-304.62	-1117.57	-103.60	-304.62	-1101.31	-56.88	-285.55	-1101.31	-112.65	-285.55	-1109.99
199	AASHTO-LRFD TRUCK-LOAD MAX	694.99	762.66	11264.31	474.30	762.66	13210.49	599.68	677.26	13210.49	379.56	677.26	13917.00
	MIN	-230.62	-713.54	-5307.94	-444.77	-713.54	-4282.10	-277.86	-707.47	-4282.10	-493.17	-707.47	-3650.91
	TANDEM-LOAD MAX	387.97	344.58	5270.55	241.18	344.58	6043.48	356.08	329.83	6043.48	209.59	329.83	6356.47
	MIN	-144.57	-334.90	-1911.41	-291.28	-334.90	-1542.00	-166.75	-343.57	-1542.00	-313.14	-343.57	-1322.58
	DISPERSION-LMAX	427.22	587.61	9480.70	339.15	587.61	11050.57	349.14	510.53	11050.57	264.97	510.53	11484.90
	MIN	-189.60	-569.55	-6207.65	-263.07	-569.55	-6211.56	-229.05	-511.43	-6211.56	-306.51	-511.43	-6253.62
300	Total Dead lWithout snow	765.08	34.38	10815.12	278.16	34.38	16031.33	374.10	-10.46	16031.33	-112.82	-10.46	17337.69
301	Particular Snow	65.62	4.48	893.45	20.35	4.48	1323.30	33.40	-0.41	1323.30	-11.87	-0.41	1430.98
302	Live load Total MAX	615.55	703.16	10958.53	434.12	703.16	12704.39	534.24	637.73	12704.39	355.22	637.73	13269.87
	MIN	-245.83	-750.61	-6736.62	-416.52	-750.61	-6138.79	-296.54	-713.05	-6138.79	-467.81	-713.05	-5794.15
303	Sum total D+L+PP MAX	1446.25	742.01	22667.09	732.63	742.01	30059.02	941.74	637.32	30059.02	337.10	637.32	32038.54
	MIN	511.12	-746.13	2950.96	-242.96	-746.13	9374.20	21.99	-723.91	9374.20	-592.50	-723.91	11236.28

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4066			4067			4067			4068		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-3.86	-1.24	3199.56	-102.03	-1.24	2670.12	-80.53	-2.62	2670.12	-178.70	-2.62	1373.94
3	Railing	2.55	-0.60	97.37	-5.72	-0.60	81.52	0.26	-1.91	81.52	-8.01	-1.91	42.77
5	Wheel guard	25.24	-5.93	964.00	-56.64	-5.93	807.03	2.58	-18.87	807.03	-79.30	-18.87	423.46
8	Steel weight	-46.06	2.12	11787.81	-344.66	2.12	9834.17	-329.08	12.16	9834.17	-627.68	12.16	5050.38
10	Medial strip	-19.90	3.43	1192.50	-19.90	3.43	993.55	-48.80	11.68	993.55	-48.80	11.68	505.51
19	Snow	-1.04	-0.70	1430.98	-46.30	-0.70	1194.27	-35.32	-1.64	1194.27	-80.59	-1.64	614.74
31	Miscellaneous	-1.61	0.28	96.44	-1.61	0.28	80.34	-3.95	0.94	80.34	-3.95	0.94	40.88
100	AASHTO-LRFD TRUCK-LOAD	415.53	481.00	8930.28	226.79	481.00	8583.86	363.96	505.67	8583.86	175.59	505.67	7328.46
	MIN	-273.21	-492.15	-1945.21	-461.45	-492.15	-2575.59	-338.03	-499.01	-2575.59	-527.52	-499.01	-3105.69
	TANDEM-LOAD	316.57	336.88	6356.47	172.11	336.88	6107.10	281.16	353.90	6107.10	135.98	353.90	5234.55
	MIN	-203.49	-344.75	-1322.58	-347.88	-344.75	-1751.19	-247.44	-348.18	-1751.19	-392.78	-348.18	-2111.61
	DISPERSION-LMAX	285.81	522.06	11484.90	206.92	522.06	10599.66	233.00	605.90	10599.66	161.52	605.90	8275.99
	MIN	-291.21	-525.83	-6253.62	-373.94	-525.83	-6229.80	-363.83	-613.36	-6229.80	-453.87	-613.36	-6018.99
110	Live load L-PICKUP 1	701.34	1003.06	20415.18	433.70	1003.06	19183.53	596.96	1111.56	19183.53	337.11	1111.56	15604.45
	MIN	-564.42	-1017.98	-8198.83	-835.39	-1017.98	-8805.39	-701.85	-1112.36	-8805.39	-981.39	-1112.36	-9124.68
	L-PICKUP 2	602.38	858.94	17841.37	379.03	858.94	16706.76	514.16	959.79	16706.76	297.51	959.79	13510.54
	MIN	-494.70	-870.58	-7576.20	-721.83	-870.58	-7980.99	-611.27	-961.54	-7980.99	-846.65	-961.54	-8130.61
	L-PICKUP 3	-594.21	-1115.63	-8914.08	-863.26	-1115.63	-9957.48	-769.01	-1260.24	-9957.48	-1048.47	-1260.24	-10663.19
	Live load	701.34	1003.06	20415.18	433.70	1003.06	19183.53	596.96	1111.56	19183.53	337.11	1111.56	15604.45
	MIN	-594.21	-1115.63	-8914.08	-863.26	-1115.63	-9957.48	-769.01	-1260.24	-9957.48	-1048.47	-1260.24	-10663.19
111	AASHTO Twin TWIN-PICKUP	707.51	1095.54	22861.71	442.78	1095.54	21572.66	592.76	1231.60	21572.66	339.44	1231.60	17508.12
	MIN	-594.21	-1115.63	-8914.08	-863.26	-1115.63	-9957.48	-769.01	-1260.24	-9957.48	-1048.47	-1260.24	-10663.19
	MID-PICKUP	-594.21	-1115.63	-8914.08	-863.26	-1115.63	-9957.48	-769.01	-1260.24	-9957.48	-1048.47	-1260.24	-10663.19
198	AASHTO FatigTRUCK-LOAD	259.30	153.83	2384.14	99.55	153.83	2321.94	244.43	164.97	2321.94	84.74	164.97	2060.32
	MIN	-107.16	-222.50	-325.38	-266.54	-222.50	-429.76	-121.66	-271.87	-429.76	-281.90	-271.87	-527.67
	TANDEM-LOAD	204.45	110.17	1769.59	79.97	110.17	1724.06	194.55	113.38	1724.06	69.48	113.38	1541.48
	MIN	-84.93	-156.68	-221.27	-209.35	-156.68	-292.25	-94.77	-189.85	-292.25	-219.92	-189.85	-359.02

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4066			4067			4067			4068		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	110.58	289.59	2481.73	54.18	289.59	2324.32	97.45	321.90	2324.32	43.79	321.90	1865.97
	MIN	-70.18	-310.82	-1109.99	-126.90	-310.82	-1103.93	-90.52	-377.83	-1103.93	-148.50	-377.83	-1082.26
199	AASHTO-LRFD TRUCK-LOAD MAX	500.31	695.21	13917.00	285.06	695.21	13369.96	425.62	762.54	13369.96	215.63	762.54	11177.47
	MIN	-369.02	-713.76	-3650.91	-585.23	-713.76	-4834.06	-490.62	-786.91	-4834.06	-711.10	-786.91	-5829.00
	TANDEM-LOAD MAX	316.57	336.88	6356.47	172.11	336.88	6107.10	281.16	353.90	6107.10	135.98	353.90	5234.55
	MIN	-203.49	-344.75	-1322.58	-347.88	-344.75	-1751.19	-247.44	-348.18	-1751.19	-392.78	-348.18	-2111.61
	DISPERSION-LMAX	285.81	522.06	11484.90	206.92	522.06	10599.66	233.00	605.90	10599.66	161.52	605.90	8275.99
	MIN	-291.21	-525.83	-6253.62	-373.94	-525.83	-6229.80	-363.83	-613.36	-6229.80	-453.87	-613.36	-6018.99
300	Total Dead lWithout snow	-43.64	-1.95	17337.69	-530.56	-1.95	14466.72	-459.52	1.39	14466.72	-946.44	1.39	7436.93
301	Particular Snow	-1.04	-0.70	1430.98	-46.30	-0.70	1194.27	-35.32	-1.64	1194.27	-80.59	-1.64	614.74
302	Live load Total MAX	455.87	651.99	13269.87	281.91	651.99	12469.29	388.02	722.52	12469.29	219.12	722.52	10142.89
	MIN	-386.23	-725.16	-5794.15	-561.12	-725.16	-6472.36	-499.85	-819.16	-6472.36	-681.51	-819.16	-6931.07
303	Sum total D+L+PP MAX	454.83	651.29	32038.54	-210.38	651.29	28130.29	9.59	722.26	28130.29	-742.16	722.26	18194.56
	MIN	-430.91	-727.81	11236.28	-1137.98	-727.81	7246.93	-994.70	-820.80	7246.93	-1708.53	-820.80	-958.73

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4068			4069			4069			4070			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-146.61	-27.81	1373.94	-244.78	-27.81	-583.04	-220.35	-46.24	-583.04	-318.52	-46.24	-3277.40	
3	Railing	-1.64	-4.73	42.77	-9.91	-4.73	-15.00	-3.78	-8.72	-15.00	-12.05	-8.72	-94.13	
5	Wheel guard	-16.26	-46.86	423.46	-98.13	-46.86	-148.51	-37.40	-86.38	-148.51	-119.27	-86.38	-931.87	
8	Steel weight	-573.82	-56.03	5050.38	-872.42	-56.03	-2180.77	-846.78	-82.97	-2180.77	-1145.38	-82.97	-12141.62	
10	Medial strip	-74.20	16.57	505.51	-74.20	16.57	-236.52	-102.46	33.48	-236.52	-102.46	33.48	-1261.14	
19	Snow	-64.85	-13.44	614.74	-110.11	-13.44	-260.07	-97.80	-22.56	-260.07	-143.07	-22.56	-1464.42	
31	Miscellaneous	-6.00	1.34	40.88	-6.00	1.34	-19.11	-8.28	2.71	-19.11	-8.28	2.71	-101.93	
100	AASHTO-LRFD TRUCK-LOAD	MAX	332.02	519.43	7328.46	144.11	519.43	5478.05	312.07	523.38	5478.05	125.31	523.38	3454.22
		MIN	-388.75	-559.55	-3105.69	-579.57	-559.55	-3578.06	-422.51	-611.40	-3578.06	-609.81	-611.40	-4225.04
		TANDEM-LOAD MAX	259.80	363.03	5234.55	113.68	363.03	3974.46	244.54	359.15	3974.46	101.00	359.15	2619.22
		MIN	-281.84	-388.80	-2111.61	-428.38	-388.80	-2432.78	-304.58	-423.82	-2432.78	-448.14	-423.82	-2873.01
		DISPERSION-LMAX	200.72	717.60	8275.99	135.13	717.60	4822.09	183.53	869.15	4822.09	122.23	869.15	2760.82
		MIN	-439.83	-766.19	-6018.99	-535.65	-766.19	-5755.11	-543.68	-948.05	-5755.11	-643.66	-948.05	-8100.21
110	Live load	L-PICKUP 1 MAX	532.74	1237.03	15604.45	279.25	1237.03	10300.14	495.60	1392.54	10300.14	247.55	1392.54	6215.04
		MIN	-828.58	-1325.74	-9124.68	-1115.22	-1325.74	-9333.16	-966.18	-1559.45	-9333.16	-1253.47	-1559.45	-12325.25
		L-PICKUP 2 MAX	460.52	1080.63	13510.54	248.81	1080.63	8796.55	428.07	1228.30	8796.55	223.23	1228.30	5380.05
		MIN	-721.67	-1154.99	-8130.61	-964.02	-1154.99	-8187.88	-848.26	-1371.86	-8187.88	-1091.80	-1371.86	-10973.22
		L-PICKUP 3	-926.57	-1521.50	-10663.19	-1213.34	-1521.50	-11223.52	-1085.74	-1816.16	-11223.52	-1372.00	-1816.16	-14428.32
		Live load MAX	532.74	1237.03	15604.45	279.25	1237.03	10300.14	495.60	1392.54	10300.14	247.55	1392.54	6215.04
MIN	-926.57	-1521.50	-10663.19	-1213.34	-1521.50	-11223.52	-1085.74	-1816.16	-11223.52	-1372.00	-1816.16	-14428.32		
111	AASHTO Twin TWIN-PICKUP	MAX	524.10	1415.13	17508.12	279.91	1415.13	11332.52	475.56	1626.84	11332.52	234.53	1626.84	5806.58
		MIN	-926.57	-1521.50	-10663.19	-1213.34	-1521.50	-11223.52	-1085.74	-1816.16	-11223.52	-1372.00	-1816.16	-14428.32
		MID-PICKUP	-926.57	-1521.50	-10663.19	-1213.34	-1521.50	-11223.52	-1085.74	-1816.16	-11223.52	-1372.00	-1816.16	-14428.32
198	AASHTO FatigTRUCK-LOAD	MAX	232.33	209.58	2060.32	72.89	209.58	1672.39	221.98	236.55	1672.39	63.69	236.55	1253.48
		MIN	-133.42	-319.62	-527.67	-294.56	-319.62	-634.10	-144.90	-362.51	-634.10	-303.04	-362.51	-820.08
		TANDEM-LOAD MAX	186.55	143.70	1541.48	60.83	143.70	1276.62	178.90	161.87	1276.62	55.59	161.87	1005.43
		MIN	-102.72	-222.08	-359.02	-228.68	-222.08	-431.93	-110.54	-251.38	-431.93	-233.77	-251.38	-559.15

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4068			4069			4069			4070		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	87.21	367.35	1865.97	36.72	367.35	1227.00	81.54	449.24	1227.00	33.48	449.24	807.71
	MIN	-112.97	-460.31	-1082.26	-172.30	-460.31	-1094.43	-148.47	-571.70	-1094.43	-209.37	-571.70	-1826.22
199	AASHTO-LRFD TRUCK-LOAD MAX	381.61	854.76	11177.47	175.88	854.76	7769.60	344.87	938.45	7769.60	138.36	938.45	3690.93
	MIN	-589.69	-924.37	-5829.00	-812.50	-924.37	-6715.47	-662.70	-1069.90	-6715.47	-880.78	-1069.90	-7931.26
	TANDEM-LOAD MAX	259.80	363.03	5234.55	113.68	363.03	3974.46	244.54	359.15	3974.46	101.00	359.15	2619.22
	MIN	-281.84	-388.80	-2111.61	-428.38	-388.80	-2432.78	-304.58	-423.82	-2432.78	-448.14	-423.82	-2873.01
	DISPERSION-LMAX	200.72	717.60	8275.99	135.13	717.60	4822.09	183.53	869.15	4822.09	122.23	869.15	2760.82
	MIN	-439.83	-766.19	-6018.99	-535.65	-766.19	-5755.11	-543.68	-948.05	-5755.11	-643.66	-948.05	-8100.21
300	Total Dead lWithout snow	-818.53	-117.51	7436.93	-1305.45	-117.51	-3182.94	-1219.06	-188.12	-3182.94	-1705.97	-188.12	-17808.09
301	Particular Snow	-64.85	-13.44	614.74	-110.11	-13.44	-260.07	-97.80	-22.56	-260.07	-143.07	-22.56	-1464.42
302	Live load Total MAX	346.28	804.07	10142.89	181.51	804.07	6695.09	322.14	905.15	6695.09	160.91	905.15	4039.78
	MIN	-602.27	-988.98	-6931.07	-788.67	-988.98	-7295.28	-705.73	-1180.50	-7295.28	-891.80	-1180.50	-9378.41
303	Sum total D+L+PP MAX	-433.21	790.63	18194.56	-1179.60	790.63	5260.60	-898.08	882.59	5260.60	-1639.86	882.59	-14020.80
	MIN	-1485.65	-1119.92	-958.73	-2204.23	-1119.92	-10738.30	-2022.59	-1391.18	-10738.30	-2740.84	-1391.18	-28650.92

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4070			4071			4071			4072				
NODE		4070			4071			4071			4072				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-315.73	-33.76	-3277.40	-394.26	-33.76	-6117.37	-396.67	-18.46	-6117.37	-475.21	-18.46	-9604.90		
3	Railing	-7.85	-11.43	-94.13	-14.47	-11.43	-183.39	-14.94	-6.98	-183.39	-21.56	-6.98	-329.41		
5	Wheel guard	-77.71	-113.17	-931.87	-143.21	-113.17	-1815.55	-147.95	-69.09	-1815.55	-213.45	-69.09	-3261.17		
8	Steel weight	-1184.21	-0.11	-12141.62	-1423.09	-0.11	-22570.81	-1427.12	8.61	-22570.81	-1666.00	8.61	-34943.26		
10	Medial strip	-129.93	59.53	-1261.14	-129.93	59.53	-2300.60	-128.02	37.59	-2300.60	-128.02	37.59	-3324.75		
19	Snow	-140.76	-17.77	-1464.42	-176.97	-17.77	-2735.35	-178.16	-9.91	-2735.35	-214.37	-9.91	-4305.45		
31	Miscellaneous	-10.50	4.81	-101.93	-10.50	4.81	-185.95	-10.35	3.04	-185.95	-10.35	3.04	-268.73		
100	AASHTO-LRFD TRUCK-LOAD	MAX	263.57	645.92	3454.22	107.89	645.92	1859.39	205.24	741.11	1859.39	107.02	741.11	1442.29	
		MIN	-488.96	-709.29	-4225.04	-643.70	-709.29	-4888.87	-555.51	-756.21	-4888.87	-720.81	-756.21	-5641.40	
		TANDEM-LOAD	MAX	213.21	442.90	2619.22	92.63	442.90	1545.93	174.58	508.24	1545.93	73.30	508.24	979.17
		MIN	-352.06	-488.29	-2873.01	-472.43	-488.29	-3327.02	-400.42	-515.57	-3327.02	-524.64	-515.57	-3839.74	
		DISPERSION-L	MAX	177.19	1080.68	2760.82	134.76	1080.68	2275.06	226.47	1196.70	2275.06	205.54	1196.70	2650.51
		MIN	-693.73	-1139.45	-8100.21	-780.13	-1139.45	-12275.11	-877.31	-1228.90	-12275.11	-985.26	-1228.90	-18396.82	
110	Live load	L-PICKUP 1	MAX	440.75	1726.59	6215.04	242.64	1726.59	4134.45	431.71	1937.82	4134.45	312.56	1937.82	4092.80
		MIN	-1182.69	-1848.74	-12325.25	-1423.84	-1848.74	-17163.98	-1432.82	-1985.11	-17163.98	-1706.07	-1985.11	-24038.22	
		L-PICKUP 2	MAX	390.40	1523.57	5380.05	227.38	1523.57	3820.99	401.06	1704.94	3820.99	278.84	1704.94	3629.68
		MIN	-1045.79	-1627.74	-10973.22	-1252.56	-1627.74	-15602.13	-1277.73	-1744.47	-15602.13	-1509.90	-1744.47	-22236.56	
		L-PICKUP 3	MAX	-1327.23	-2156.22	-14428.32	-1566.38	-2156.22	-19305.45	-1597.95	-2329.10	-19305.45	-1872.28	-2329.10	-26069.43
		MIN	440.75	1726.59	6215.04	242.64	1726.59	4134.45	431.71	1937.82	4134.45	312.56	1937.82	4092.80	
111	AASHTO Twin	TWIN-PICKUP	MAX	385.95	2022.28	5806.58	221.65	2022.28	3701.75	377.63	2259.82	3701.75	353.20	2259.82	4828.31
		MIN	-1327.23	-2156.22	-14428.32	-1566.38	-2156.22	-19305.45	-1597.95	-2329.10	-19305.45	-1872.28	-2329.10	-26069.43	
		MID-PICKUP	MAX	-1327.23	-2156.22	-14428.32	-1566.38	-2156.22	-19305.45	-1597.95	-2329.10	-19305.45	-1872.28	-2329.10	-26069.43
		MIN	-1327.23	-2156.22	-14428.32	-1566.38	-2156.22	-19305.45	-1597.95	-2329.10	-19305.45	-1872.28	-2329.10	-26069.43	
		Fatig	MAX	185.35	248.88	1253.48	53.39	248.88	803.68	107.91	212.49	803.68	37.28	212.49	274.45
		MIN	-175.05	-383.80	-820.08	-305.72	-383.80	-1104.47	-241.70	-321.78	-1104.47	-386.13	-321.78	-1682.63	
198	AASHTO Fatig	TRUCK-LOAD	MAX	155.29	168.66	1005.43	51.42	168.66	719.48	104.03	145.47	719.48	25.54	145.47	186.23
		MIN	-133.13	-265.79	-559.15	-236.74	-265.79	-751.02	-182.74	-219.08	-751.02	-292.84	-219.08	-1144.73	
		TANDEM-LOAD	MAX	155.29	168.66	1005.43	51.42	168.66	719.48	104.03	145.47	719.48	25.54	145.47	186.23
		MIN	-133.13	-265.79	-559.15	-236.74	-265.79	-751.02	-182.74	-219.08	-751.02	-292.84	-219.08	-1144.73	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4070			4071			4071			4072		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	77.19	553.30	807.71	42.81	553.30	599.29	97.01	640.06	599.29	79.27	640.06	549.85
	MIN	-213.82	-691.57	-1826.22	-265.22	-691.57	-3200.96	-357.06	-723.98	-3200.96	-427.06	-723.98	-6009.40
199	AASHTO-LRFD TRUCK-LOAD MAX	251.64	1166.30	3690.93	111.52	1166.30	1837.99	193.12	1314.21	1837.99	186.90	1314.21	2714.29
	MIN	-780.97	-1256.35	-7931.26	-960.29	-1256.35	-9175.40	-898.19	-1358.99	-9175.40	-1095.05	-1358.99	-10569.22
	TANDEM-LOAD MAX	213.21	442.90	2619.22	92.63	442.90	1545.93	174.58	508.24	1545.93	73.30	508.24	979.17
	MIN	-352.06	-488.29	-2873.01	-472.43	-488.29	-3327.02	-400.42	-515.57	-3327.02	-524.64	-515.57	-3839.74
	DISPERSION-LMAX	177.19	1080.68	2760.82	134.76	1080.68	2275.06	226.47	1196.70	2275.06	205.54	1196.70	2650.51
	MIN	-693.73	-1139.45	-8100.21	-780.13	-1139.45	-12275.11	-877.31	-1228.90	-12275.11	-985.26	-1228.90	-18396.82
300	Total Dead lWithout snow	-1725.93	-94.13	-17808.09	-2115.46	-94.13	-33173.67	-2125.05	-45.29	-33173.67	-2514.59	-45.29	-51732.23
301	Particular Snow	-140.76	-17.77	-1464.42	-176.97	-17.77	-2735.35	-178.16	-9.91	-2735.35	-214.37	-9.91	-4305.45
302	Live load Total MAX	286.49	1122.29	4039.78	157.72	1122.29	2687.39	280.61	1259.58	2687.39	203.16	1259.58	2660.32
	MIN	-862.70	-1401.54	-9378.41	-1018.15	-1401.54	-12548.54	-1038.67	-1513.91	-12548.54	-1216.98	-1513.91	-16945.13
303	Sum total D+L+PP MAX	-1494.25	1104.52	-14020.80	-2087.41	1104.52	-32415.41	-1938.41	1249.67	-32415.41	-2464.84	1249.67	-52579.27
	MIN	-2729.39	-1513.45	-28650.92	-3310.59	-1513.45	-48457.57	-3341.88	-1569.11	-48457.57	-3945.93	-1569.11	-72982.81

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4072			4073			4073			4074			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	514.05	28.86	-9604.90	415.87	28.86	-4955.30	412.09	51.27	-4955.30	313.92	51.27	-1325.29	
3	Railing	22.63	8.44	-329.41	14.36	8.44	-144.49	15.05	11.26	-144.49	6.78	11.26	-35.35	
5	Wheel guard	224.01	83.53	-3261.17	142.13	83.53	-1430.47	148.99	111.47	-1430.47	67.11	111.47	-349.95	
8	Steel weight	1810.46	16.04	-34943.26	1511.86	16.04	-18331.69	1488.26	73.05	-18331.69	1189.66	73.05	-4942.14	
10	Medial strip	143.33	-41.64	-3324.75	143.33	-41.64	-1891.45	136.32	-48.11	-1891.45	136.32	-48.11	-528.29	
19	Snow	231.71	14.85	-4305.45	186.44	14.85	-2214.67	184.96	25.42	-2214.67	139.69	25.42	-591.43	
31	Miscellaneous	11.58	-3.36	-268.73	11.58	-3.36	-152.90	11.02	-3.89	-152.90	11.02	-3.89	-42.74	
100	AASHTO-LRFD TRUCK-LOAD	MAX	743.62	757.58	1442.29	552.43	757.58	2402.57	660.56	677.79	2402.57	475.70	677.79	4454.84
		MIN	-84.31	-732.30	-5641.40	-231.86	-732.30	-4597.42	-91.07	-597.60	-4597.42	-273.46	-597.60	-3945.99
		TANDEM-LOAD MAX	538.13	519.29	979.17	394.71	519.29	1894.99	481.82	466.77	1894.99	340.70	466.77	3287.05
		MIN	-58.71	-503.79	-3839.74	-191.90	-503.79	-3126.65	-77.11	-410.11	-3126.65	-217.89	-410.11	-2679.17
		DISPERSION-LMAX	972.79	1196.16	2650.51	842.19	1196.16	3074.75	731.75	1018.71	3074.75	626.47	1018.71	5117.50
		MIN	-130.34	-1146.60	-18396.82	-160.79	-1146.60	-11173.12	-57.66	-931.70	-11173.12	-113.48	-931.70	-7266.12
110	Live load	L-PICKUP 1 MAX	1716.41	1953.75	4092.80	1394.61	1953.75	5477.33	1392.31	1696.50	5477.33	1102.18	1696.50	9572.33
		MIN	-214.65	-1878.90	-24038.22	-392.65	-1878.90	-15770.54	-148.73	-1529.30	-15770.54	-386.94	-1529.30	-11212.11
		L-PICKUP 2 MAX	1510.92	1715.45	3629.68	1236.90	1715.45	4969.74	1213.57	1485.48	4969.74	967.17	1485.48	8404.55
		MIN	-189.06	-1650.39	-22236.56	-352.69	-1650.39	-14299.77	-134.78	-1341.81	-14299.77	-331.37	-1341.81	-9945.29
		L-PICKUP 3	-245.96	-2193.68	-26069.43	-327.43	-2193.68	-17822.31	-112.93	-1809.54	-17822.31	-337.99	-1809.54	-13212.27
		Live load MAX	1716.41	1953.75	4092.80	1394.61	1953.75	5477.33	1392.31	1696.50	5477.33	1102.18	1696.50	9572.33
MIN	-245.96	-2193.68	-26069.43	-392.65	-2193.68	-17822.31	-148.73	-1809.54	-17822.31	-386.94	-1809.54	-13212.27		
111	AASHTO Twin TWIN-PICKUP	MAX	1900.04	2295.55	4828.31	1576.28	2295.55	4983.02	1546.83	1996.79	4983.02	1258.63	1996.79	9805.95
		MIN	-245.96	-2193.68	-26069.43	-327.43	-2193.68	-17822.31	-112.93	-1809.54	-17822.31	-337.99	-1809.54	-13212.27
		MID-PICKUP	-245.96	-2193.68	-26069.43	-327.43	-2193.68	-17822.31	-112.93	-1809.54	-17822.31	-337.99	-1809.54	-13212.27
198	AASHTO FatigTRUCK-LOAD	MAX	390.47	337.74	274.45	224.34	337.74	969.06	316.64	379.80	969.06	160.14	379.80	1473.10
		MIN	-35.47	-219.57	-1682.63	-138.64	-219.57	-996.56	-55.27	-245.52	-996.56	-209.92	-245.52	-732.05
		TANDEM-LOAD MAX	293.54	232.82	186.23	167.11	232.82	812.15	242.52	263.06	812.15	121.13	263.06	1146.74
		MIN	-24.01	-149.76	-1144.73	-123.29	-149.76	-678.35	-49.15	-167.40	-678.35	-170.27	-167.40	-495.97

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4072			4073			4073			4074		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	412.89	710.68	549.85	329.77	710.68	777.49	247.19	615.49	777.49	184.56	615.49	1286.06
	MIN	-65.87	-607.76	-6009.40	-91.55	-607.76	-2789.87	-26.85	-475.00	-2789.87	-71.69	-475.00	-1471.24
199	AASHTO-LRFD TRUCK-LOAD MAX	1138.36	1354.45	2714.29	909.24	1354.45	2461.93	986.95	1199.95	2461.93	772.01	1199.95	5778.00
	MIN	-142.94	-1290.82	-10569.22	-203.02	-1290.82	-8629.44	-67.82	-1078.90	-8629.44	-262.06	-1078.90	-7414.18
	TANDEM-LOAD MAX	538.13	519.29	979.17	394.71	519.29	1894.99	481.82	466.77	1894.99	340.70	466.77	3287.05
	MIN	-58.71	-503.79	-3839.74	-191.90	-503.79	-3126.65	-77.11	-410.11	-3126.65	-217.89	-410.11	-2679.17
	DISPERSION-LMAX	972.79	1196.16	2650.51	842.19	1196.16	3074.75	731.75	1018.71	3074.75	626.47	1018.71	5117.50
	MIN	-130.34	-1146.60	-18396.82	-160.79	-1146.60	-11173.12	-57.66	-931.70	-11173.12	-113.48	-931.70	-7266.12
300	Total Dead lWithout snow	2726.05	91.87	-51732.23	2239.13	91.87	-26906.31	2211.71	195.05	-26906.31	1724.80	195.05	-7223.75
301	Particular Snow	231.71	14.85	-4305.45	186.44	14.85	-2214.67	184.96	25.42	-2214.67	139.69	25.42	-591.43
302	Live load Total MAX	1115.67	1269.93	2660.32	906.50	1269.93	3560.26	905.00	1102.73	3560.26	716.41	1102.73	6222.02
	MIN	-159.87	-1425.89	-16945.13	-255.22	-1425.89	-11584.50	-96.67	-1176.20	-11584.50	-251.51	-1176.20	-8587.98
303	Sum total D+L+PP MAX	4073.43	1376.65	-52579.27	3332.08	1376.65	-24492.64	3301.67	1323.20	-24492.64	2580.90	1323.20	273.45
	MIN	2749.93	-1411.04	-72982.81	2093.79	-1411.04	-40705.48	2271.00	-1150.78	-40705.48	1537.53	-1150.78	-16403.15

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

NAME	TITLE	MEMBER 4074			MEMBER 4075			MEMBER 4075			MEMBER 4076				
		NODE 4074			NODE 4075			NODE 4075			NODE 4076				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	330.21	46.89	-1325.29	232.04	46.89	1485.96	273.48	4.10	1485.96	175.31	4.10	3729.94		
3	Railing	12.36	7.17	-35.35	4.09	7.17	46.88	10.83	2.96	46.88	2.56	2.96	113.86		
5	Wheel guard	122.34	71.00	-349.95	40.47	71.00	464.12	107.24	29.27	464.12	25.37	29.27	1127.17		
8	Steel weight	1188.99	104.14	-4942.14	890.39	104.14	5454.77	977.60	-18.72	5454.77	679.00	-18.72	13737.75		
10	Medial strip	107.16	-22.33	-528.29	107.16	-22.33	543.34	84.61	-18.11	543.34	84.61	-18.11	1389.45		
19	Snow	148.29	22.45	-591.43	103.02	22.45	665.10	122.97	2.56	665.10	77.70	2.56	1668.42		
31	Miscellaneous	8.66	-1.80	-42.74	8.66	-1.80	43.86	6.84	-1.46	43.86	6.84	-1.46	112.24		
100	AASHTO-LRFD TRUCK-LOAD	MAX	621.11	583.95	4454.84	435.28	583.95	6699.38	602.06	496.50	6699.38	415.86	496.50	8871.04	
		MIN	-108.58	-497.32	-3945.99	-291.65	-497.32	-3500.19	-121.47	-520.07	-3500.19	-304.84	-520.07	-3193.29	
		TANDEM-LOAD	MAX	455.69	406.10	3287.05	312.97	406.10	4800.75	442.75	346.17	4800.75	300.21	346.17	6284.77
		MIN	-89.26	-347.24	-2679.17	-231.58	-347.24	-2375.87	-98.29	-363.98	-2375.87	-240.43	-363.98	-2167.54	
		DISPERSION-L	MAX	588.71	785.18	5117.50	489.34	785.18	8751.85	496.74	614.49	8751.85	399.72	614.49	11855.18
		MIN	-48.72	-705.35	-7266.12	-110.63	-705.35	-6316.01	-49.70	-604.53	-6316.01	-114.04	-604.53	-5761.31	
110	Live load	L-PICKUP 1	MAX	1209.82	1369.13	9572.33	924.62	1369.13	15451.23	1098.80	1110.99	15451.23	815.57	1110.99	20726.22
		MIN	-157.31	-1202.67	-11212.11	-402.29	-1202.67	-9816.20	-171.18	-1124.59	-9816.20	-418.88	-1124.59	-8954.60	
		L-PICKUP 2	MAX	1044.40	1191.29	8404.55	802.30	1191.29	13552.59	939.50	960.66	13552.59	699.93	960.66	18139.96
		MIN	-137.98	-1052.60	-9945.29	-342.21	-1052.60	-8691.88	-147.99	-968.50	-8691.88	-354.47	-968.50	-7928.86	
		L-PICKUP 3	MAX	-136.36	-1415.08	-13212.27	-374.08	-1415.08	-11604.62	-159.03	-1265.91	-11604.62	-396.48	-1265.91	-10586.35
		MIN	1209.82	1369.13	9572.33	924.62	1369.13	15451.23	1098.80	1110.99	15451.23	815.57	1110.99	20726.22	
111	AASHTO Twin	TWIN-PICKUP	MAX	1343.58	1602.16	9805.95	1058.23	1602.16	17033.90	1217.29	1272.05	17033.90	930.43	1272.05	23310.74
		MIN	-136.36	-1415.08	-13212.27	-374.08	-1415.08	-11604.62	-159.03	-1265.91	-11604.62	-396.48	-1265.91	-10586.35	
		MID-PICKUP	MAX	-136.36	-1415.08	-13212.27	-374.08	-1415.08	-11604.62	-159.03	-1265.91	-11604.62	-396.48	-1265.91	-10586.35
		MIN	-136.36	-1415.08	-13212.27	-374.08	-1415.08	-11604.62	-159.03	-1265.91	-11604.62	-396.48	-1265.91	-10586.35	
		TRUCK-LOAD	MAX	303.21	347.86	1473.10	145.16	347.86	1933.85	297.86	297.02	1933.85	139.34	297.02	2396.99
		MIN	-68.49	-224.78	-732.05	-224.83	-224.78	-606.00	-73.25	-192.28	-606.00	-230.28	-192.28	-537.64	
198	AASHTO Fatig	TANDEM-LOAD	MAX	233.95	241.22	1146.74	110.50	241.22	1453.95	230.36	206.56	1453.95	106.73	206.56	1773.78
		MIN	-57.69	-154.00	-495.97	-180.89	-154.00	-410.76	-61.19	-131.89	-410.76	-184.61	-131.89	-364.77	

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4074			4075			4075			4076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	191.47	477.94	1286.06	131.33	477.94	1937.73	163.59	378.06	1937.73	104.43	378.06	2565.55
	MIN	-20.98	-362.93	-1471.24	-69.45	-362.93	-1158.01	-21.43	-302.07	-1158.01	-71.29	-302.07	-1027.64
199	AASHTO-LRFD TRUCK-LOAD MAX	904.16	994.99	5778.00	686.47	994.99	10174.71	855.80	798.90	10174.71	634.09	798.90	14045.64
	MIN	-102.79	-866.96	-7414.18	-305.01	-866.96	-6578.02	-127.00	-802.04	-6578.02	-326.49	-802.04	-6001.30
	TANDEM-LOAD MAX	455.69	406.10	3287.05	312.97	406.10	4800.75	442.75	346.17	4800.75	300.21	346.17	6284.77
	MIN	-89.26	-347.24	-2679.17	-231.58	-347.24	-2375.87	-98.29	-363.98	-2375.87	-240.43	-363.98	-2167.54
	DISPERSION-LMAX	588.71	785.18	5117.50	489.34	785.18	8751.85	496.74	614.49	8751.85	399.72	614.49	11855.18
	MIN	-48.72	-705.35	-7266.12	-110.63	-705.35	-6316.01	-49.70	-604.53	-6316.01	-114.04	-604.53	-5761.31
300	Total Dead lWithout snow	1769.73	205.06	-7223.75	1282.81	205.06	8038.93	1460.61	-1.96	8038.93	973.69	-1.96	20210.40
301	Particular Snow	148.29	22.45	-591.43	103.02	22.45	665.10	122.97	2.56	665.10	77.70	2.56	1668.42
302	Live load Total MAX	786.38	889.94	6222.02	601.00	889.94	10043.30	714.22	722.14	10043.30	530.12	722.14	13472.05
	MIN	-102.25	-919.80	-8587.98	-261.49	-919.80	-7543.01	-111.26	-822.84	-7543.01	-272.27	-822.84	-6881.13
303	Sum total D+L+PP MAX	2704.40	1117.44	273.45	1986.83	1117.44	18747.32	2297.79	724.70	18747.32	1581.51	724.70	35350.87
	MIN	1785.09	-897.35	-16403.15	1045.89	-897.35	-1101.88	1438.93	-822.24	-1101.88	697.44	-822.24	12933.36

Bago Bridge

BLOCK [No.1 : Main girder][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4076			4077			4077			4078			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	210.95	-24.92	3729.94	112.78	-24.92	5348.62	129.81	-21.69	5348.62	31.64	-21.69	6155.91	
3	Railing	9.01	0.38	113.86	0.74	0.38	162.58	6.58	-0.74	162.58	-1.69	-0.74	187.03	
5	Wheel guard	89.18	3.80	1127.17	7.30	3.80	1609.56	65.14	-7.33	1609.56	-16.74	-7.33	1851.58	
8	Steel weight	746.29	-105.46	13737.75	447.69	-105.46	19707.68	446.87	-78.96	19707.68	148.27	-78.96	22683.35	
10	Medial strip	60.74	-17.22	1389.45	60.74	-17.22	1996.89	30.19	-7.53	1996.89	30.19	-7.53	2298.79	
19	Snow	95.02	-10.85	1668.42	49.75	-10.85	2392.27	58.74	-9.72	2392.27	13.47	-9.72	2753.31	
31	Miscellaneous	4.91	-1.39	112.24	4.91	-1.39	161.33	2.44	-0.61	161.33	2.44	-0.61	185.73	
100	AASHTO-LRFD TRUCK-LOAD	MAX	554.27	459.59	8871.04	372.28	459.59	10433.59	483.39	464.65	10433.59	305.31	464.65	11010.83
		MIN	-157.44	-524.70	-3193.29	-337.61	-524.70	-2810.59	-217.35	-501.10	-2810.59	-394.48	-501.10	-2328.85
		TANDEM-LOAD MAX	409.51	322.08	6284.77	271.08	322.08	7376.79	360.72	325.82	7376.79	225.83	325.82	7783.06
		MIN	-123.82	-366.60	-2167.54	-261.98	-366.60	-1907.78	-165.36	-350.36	-1907.78	-300.11	-350.36	-1580.78
		DISPERSION-LMAX	419.90	465.65	11855.18	327.52	465.65	13801.65	338.57	414.35	13801.65	252.67	414.35	14247.48
		MIN	-75.09	-503.72	-5761.31	-144.17	-503.72	-5070.50	-126.17	-449.74	-5070.50	-201.87	-449.74	-4201.39
110	Live load	L-PICKUP 1 MAX	974.18	925.25	20726.22	699.80	925.25	24235.24	821.96	879.01	24235.24	557.98	879.01	25258.31
		MIN	-232.53	-1028.42	-8954.60	-481.78	-1028.42	-7881.10	-343.52	-950.84	-7881.10	-596.35	-950.84	-6530.25
		L-PICKUP 2 MAX	829.41	787.73	18139.96	598.60	787.73	21178.44	699.29	740.18	21178.44	478.50	740.18	22030.53
		MIN	-198.90	-870.31	-7928.86	-406.15	-870.31	-6978.28	-291.53	-800.10	-6978.28	-501.98	-800.10	-5782.18
		L-PICKUP 3	-226.60	-1146.57	-10586.35	-468.79	-1146.57	-9317.32	-355.22	-1045.07	-9317.32	-606.08	-1045.07	-7720.30
		Live load MAX	974.18	925.25	20726.22	699.80	925.25	24235.24	821.96	879.01	24235.24	557.98	879.01	25258.31
MIN	-232.53	-1146.57	-10586.35	-481.78	-1146.57	-9317.32	-355.22	-1045.07	-9317.32	-606.08	-1045.07	-7720.30		
111	AASHTO Twin	TWIN-PICKUP MAX	1060.22	1027.84	23310.74	779.60	1027.84	27397.27	861.94	959.62	27397.27	590.30	959.62	28638.95
		MIN	-226.60	-1146.57	-10586.35	-468.79	-1146.57	-9317.32	-355.22	-1045.07	-9317.32	-606.08	-1045.07	-7720.30
		MID-PICKUP	-226.60	-1146.57	-10586.35	-468.79	-1146.57	-9317.32	-355.22	-1045.07	-9317.32	-606.08	-1045.07	-7720.30
198	AASHTO Fatig	TRUCK-LOAD MAX	286.87	241.61	2396.99	131.22	241.61	2732.00	272.65	183.62	2732.00	119.77	183.62	2858.78
		MIN	-84.55	-142.05	-537.64	-239.30	-142.05	-469.10	-99.33	-186.39	-469.10	-251.77	-186.39	-388.34
		TANDEM-LOAD MAX	222.22	169.05	1773.78	101.45	169.05	2009.81	211.98	129.93	2009.81	93.76	129.93	2101.00
		MIN	-69.38	-97.86	-364.77	-190.02	-97.86	-318.36	-79.70	-132.22	-318.36	-197.85	-132.22	-263.61

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4076			4077			4077			4078		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	143.27	291.28	2565.55	84.98	291.28	2966.92	124.68	239.10	2966.92	67.13	239.10	3075.58
	MIN	-28.36	-266.50	-1027.64	-80.76	-266.50	-896.54	-40.16	-250.79	-896.54	-95.35	-250.79	-742.04
199	AASHTO-LRFD TRUCK-LOAD MAX	758.12	676.39	14045.64	538.70	676.39	16639.76	619.14	651.89	16639.76	403.22	651.89	17573.58
	MIN	-176.69	-770.25	-6001.30	-376.70	-770.25	-5282.08	-268.52	-711.45	-5282.08	-471.56	-711.45	-4376.71
	TANDEM-LOAD MAX	409.51	322.08	6284.77	271.08	322.08	7376.79	360.72	325.82	7376.79	225.83	325.82	7783.06
	MIN	-123.82	-366.60	-2167.54	-261.98	-366.60	-1907.78	-165.36	-350.36	-1907.78	-300.11	-350.36	-1580.78
	DISPERSION-LMAX	419.90	465.65	11855.18	327.52	465.65	13801.65	338.57	414.35	13801.65	252.67	414.35	14247.48
	MIN	-75.09	-503.72	-5761.31	-144.17	-503.72	-5070.50	-126.17	-449.74	-5070.50	-201.87	-449.74	-4201.39
300	Total Dead lWithout snow	1121.09	-144.80	20210.40	634.17	-144.80	28986.67	681.03	-116.86	28986.67	194.12	-116.86	33362.40
301	Particular Snow	95.02	-10.85	1668.42	49.75	-10.85	2392.27	58.74	-9.72	2392.27	13.47	-9.72	2753.31
302	Live load Total MAX	633.21	601.41	13472.05	454.87	601.41	15752.90	534.27	571.36	15752.90	362.69	571.36	16417.90
	MIN	-151.14	-745.27	-6881.13	-313.16	-745.27	-6056.26	-230.89	-679.30	-6056.26	-393.95	-679.30	-5018.19
303	Sum total D+L+PP MAX	1849.32	590.56	35350.87	1138.79	590.56	47131.84	1274.04	561.63	47131.84	570.27	561.63	52533.61
	MIN	1019.62	-900.93	12933.36	276.82	-900.93	23505.80	439.61	-805.88	23505.80	-304.55	-805.88	29592.06

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	4078			4079			4079			4080			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	41.94	-10.61	6155.91	-56.23	-10.61	6084.48	-53.79	13.78	6084.48	-151.96	13.78	5055.73	
3	Railing	3.95	-1.67	187.03	-4.32	-1.67	185.19	1.17	-2.84	185.19	-7.10	-2.84	155.50	
5	Wheel guard	39.12	-16.53	1851.58	-42.76	-16.53	1833.39	11.55	-28.10	1833.39	-70.33	-28.10	1539.47	
8	Steel weight	122.58	-23.02	22683.35	-176.02	-23.02	22416.18	-231.65	89.66	22416.18	-530.25	89.66	18606.70	
10	Medial strip	-2.91	5.37	2298.79	-2.91	5.37	2269.74	-39.51	27.72	2269.74	-39.51	27.72	1874.68	
19	Snow	19.45	-5.09	2753.31	-25.82	-5.09	2721.44	-23.34	5.33	2721.44	-68.61	5.33	2261.71	
31	Miscellaneous	-0.23	0.43	185.73	-0.23	0.43	183.39	-3.19	2.24	183.39	-3.19	2.24	151.47	
100	AASHTO-LRFD TRUCK-LOAD	MAX	414.97	474.36	11010.83	237.66	474.36	10527.55	363.09	522.91	10527.55	182.43	522.91	8738.10
		MIN	-283.08	-483.67	-2328.85	-459.45	-483.67	-1796.26	-359.53	-537.73	-1796.26	-539.60	-537.73	-1223.33
	TANDEM-LOAD	MAX	313.92	332.46	7783.06	179.91	332.46	7426.62	278.67	366.08	7426.62	141.84	366.08	6178.53
		MIN	-210.24	-337.85	-1580.78	-344.11	-337.85	-1219.27	-262.31	-374.30	-1219.27	-399.06	-374.30	-830.38
	DISPERSION-LMAX	MAX	268.29	471.73	14247.48	188.81	471.73	13170.59	220.98	658.61	13170.59	149.22	658.61	10461.18
		MIN	-199.18	-492.54	-4201.39	-281.33	-492.54	-3240.64	-308.26	-639.44	-3240.64	-398.00	-639.44	-2207.17
110	Live load L-PICKUP 1	MAX	683.26	946.09	25258.31	426.47	946.09	23698.14	584.07	1181.51	23698.14	331.65	1181.51	19199.28
		MIN	-482.25	-976.21	-6530.25	-740.79	-976.21	-5036.90	-667.79	-1177.16	-5036.90	-937.60	-1177.16	-3430.51
	L-PICKUP 2	MAX	582.20	804.19	22030.53	368.72	804.19	20597.21	499.65	1024.69	20597.21	291.05	1024.69	16639.71
		MIN	-409.41	-830.39	-5782.18	-625.44	-830.39	-4459.91	-570.56	-1013.74	-4459.91	-797.06	-1013.74	-3037.55
	L-PICKUP 3	MAX	524.59	1087.55	7720.30	784.75	1087.55	5954.79	750.41	1353.12	5954.79	1023.69	1353.12	4055.62
		MIN	-524.59	-1087.55	-7720.30	-784.75	-1087.55	-5954.79	-750.41	-1353.12	-5954.79	-1023.69	-1353.12	-4055.62
111	AASHTO Twin TWIN-PICKUP	MAX	688.05	1024.85	28638.95	422.93	1024.85	27068.69	574.87	1342.76	27068.69	322.01	1342.76	21998.54
		MIN	-524.59	-1087.55	-7720.30	-784.75	-1087.55	-5954.79	-750.41	-1353.12	-5954.79	-1023.69	-1353.12	-4055.62
	MID-PICKUP	MAX	524.59	1087.55	7720.30	784.75	1087.55	5954.79	750.41	1353.12	5954.79	1023.69	1353.12	4055.62
	MIN	-524.59	-1087.55	-7720.30	-784.75	-1087.55	-5954.79	-750.41	-1353.12	-5954.79	-1023.69	-1353.12	-4055.62	
198	AASHTO FatigTRUCK-LOAD	MAX	259.50	132.21	2858.78	107.18	132.21	2780.67	244.89	197.78	2780.67	90.24	197.78	2434.83
		MIN	-112.66	-242.53	-388.34	-264.48	-242.53	-300.16	-126.23	-299.76	-300.16	-280.35	-299.76	-205.83
	TANDEM-LOAD	MAX	202.92	91.32	2101.00	85.34	91.32	2042.97	193.48	135.58	2042.97	73.99	135.58	1800.03
		MIN	-88.78	-169.92	-263.61	-206.29	-169.92	-203.70	-98.08	-208.52	-203.70	-217.49	-208.52	-139.65

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4078			4079			4079			4080		
NODE		4078			4079			4079			4080		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	109.98	254.30	3075.58	53.47	254.30	2896.00	95.97	331.07	2896.00	42.01	331.07	2406.51
	MIN	-55.28	-304.37	-742.04	-111.78	-304.37	-573.67	-79.20	-401.21	-573.67	-136.05	-401.21	-393.43
199	AASHTO-LRFD TRUCK-LOAD MAX	496.21	666.99	17573.58	281.12	666.99	16905.73	417.77	833.34	16905.73	208.57	833.34	13981.64
	MIN	-383.69	-715.85	-4376.71	-590.60	-715.85	-3375.80	-525.54	-864.03	-3375.80	-739.44	-864.03	-2299.07
	TANDEM-LOAD MAX	313.92	332.46	7783.06	179.91	332.46	7426.62	278.67	366.08	7426.62	141.84	366.08	6178.53
	MIN	-210.24	-337.85	-1580.78	-344.11	-337.85	-1219.27	-262.31	-374.30	-1219.27	-399.06	-374.30	-830.38
	DISPERSION-LMAX	268.29	471.73	14247.48	188.81	471.73	13170.59	220.98	658.61	13170.59	149.22	658.61	10461.18
	MIN	-199.18	-492.54	-4201.39	-281.33	-492.54	-3240.64	-308.26	-639.44	-3240.64	-398.00	-639.44	-2207.17
300	Total Dead lWithout snow	204.46	-46.02	33362.40	-282.46	-46.02	32972.37	-315.42	102.47	32972.37	-802.34	102.47	27383.56
301	Particular Snow	19.45	-5.09	2753.31	-25.82	-5.09	2721.44	-23.34	5.33	2721.44	-68.61	5.33	2261.71
302	Live load Total MAX	444.12	614.96	16417.90	277.20	614.96	15403.79	379.64	767.98	15403.79	215.57	767.98	12479.53
	MIN	-340.98	-706.91	-5018.19	-510.08	-706.91	-3870.61	-487.77	-879.53	-3870.61	-665.40	-879.53	-2636.15
303	Sum total D+L+PP MAX	668.02	609.87	52533.61	52.08	609.87	51097.61	154.77	875.77	51097.61	-590.71	875.77	42124.81
	MIN	-219.37	-758.03	29592.06	-818.37	-758.03	30662.01	-826.53	-874.20	30662.01	-1536.35	-874.20	26218.28

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

NAME	TITLE	MEMBER NODE	4080			4081			4081			4082			
			SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
			S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement		-131.96	4.25	5055.73	-230.13	4.25	3245.29	-183.43	-61.26	3245.29	-312.03	-61.26	0.00	
3	Railing		-0.82	-6.68	155.50	-9.09	-6.68	105.95	-2.67	-12.98	105.95	-13.50	-12.98	0.00	
5	Wheel guard		-8.12	-66.15	1539.47	-89.99	-66.15	1048.90	-26.44	-128.47	1048.90	-133.70	-128.47	0.00	
8	Steel weight		-524.32	96.98	18606.70	-822.92	96.98	11870.49	-710.56	-92.99	11870.49	-1101.73	-92.99	0.00	
10	Medial strip		-71.38	48.80	1874.68	-71.38	48.80	1160.83	-88.61	54.18	1160.83	-88.61	54.18	0.00	
19	Snow		-58.20	0.15	2261.71	-103.47	0.15	1453.38	-81.30	-30.25	1453.38	-140.59	-30.25	0.00	
31	Miscellaneous		-5.77	3.94	151.47	-5.77	3.94	93.80	-7.16	4.38	93.80	-7.16	4.38	0.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	333.57	581.34	8738.10	146.08	581.34	5806.02	303.11	619.32	5806.02	50.21	619.32	0.00	
		MIN	-420.82	-615.90	-1223.33	-609.90	-615.90	-657.80	-442.20	-682.94	-657.80	-741.36	-682.94	0.00	
		TANDEM-LOAD MAX	259.32	398.85	6178.53	114.96	398.85	4143.43	245.27	426.55	4143.43	34.08	426.55	0.00	
		MIN	-303.90	-429.92	-830.38	-448.49	-429.92	-446.51	-316.29	-468.64	-446.51	-543.30	-468.64	0.00	
		DISPERSION-LMAX	191.67	853.12	10461.18	125.95	853.12	6490.89	151.66	900.22	6490.89	90.62	900.22	0.00	
		MIN	-406.24	-849.52	-2207.17	-501.90	-849.52	-1187.12	-451.41	-1003.99	-1187.12	-601.37	-1003.99	0.00	
110	Live load	L-PICKUP 1	MAX	525.24	1434.45	19199.28	272.03	1434.45	12296.92	454.76	1519.54	12296.92	140.83	1519.54	0.00
		MIN	-827.06	-1465.42	-3430.51	-1111.79	-1465.42	-1844.92	-893.61	-1686.93	-1844.92	-1342.73	-1686.93	0.00	
		L-PICKUP 2	MAX	450.98	1251.97	16639.71	240.91	1251.97	10634.33	396.93	1326.77	10634.33	124.70	1326.77	0.00
		MIN	-710.15	-1279.44	-3037.55	-950.38	-1279.44	-1633.62	-767.70	-1472.63	-1633.62	-1144.67	-1472.63	0.00	
		L-PICKUP 3	MAX	525.24	1434.45	19199.28	272.03	1434.45	12296.92	454.76	1519.54	12296.92	140.83	1519.54	0.00
		MIN	-943.97	-1712.88	-4055.62	-1231.20	-1712.88	-2181.02	-1031.72	-2004.63	-2181.02	-1478.29	-2004.63	0.00	
111	AASHTO Twin	TWIN-PICKUP	MAX	502.80	1691.35	21998.54	274.91	1691.35	14080.52	435.38	1798.93	14080.52	166.49	1798.93	0.00
		MIN	-943.97	-1712.88	-4055.62	-1231.20	-1712.88	-2181.02	-1031.72	-2004.63	-2181.02	-1478.29	-2004.63	0.00	
		MID-PICKUP	MAX	502.80	1691.35	21998.54	274.91	1691.35	14080.52	435.38	1798.93	14080.52	166.49	1798.93	0.00
198	AASHTO Fatig	TRUCK-LOAD	MAX	234.56	257.50	2434.83	76.59	257.50	1830.49	225.16	274.44	1830.49	8.66	274.44	0.00
		MIN	-134.10	-362.66	-205.83	-294.44	-362.66	-113.42	-138.75	-406.70	-113.42	-384.18	-406.70	0.00	
		TANDEM-LOAD	MAX	187.81	176.14	1800.03	63.20	176.14	1372.24	185.77	187.78	1372.24	5.87	187.78	0.00
		MIN	-103.39	-251.15	-139.65	-228.34	-251.15	-76.88	-104.75	-279.96	-76.88	-293.42	-279.96	0.00	

Bago Bridge

BLOCK [No.1 : Main girder] [BEAM MEMBER FORCE]

MEMBER		4080			4081			4081			4082		
NODE		4080			4081			4081			4082		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	85.97	434.73	2406.51	35.10	434.73	1689.85	66.33	455.05	1689.85	16.55	455.05	0.00
	MIN	-95.10	-516.56	-393.43	-152.54	-516.56	-216.86	-113.98	-617.24	-216.86	-205.56	-617.24	0.00
199	AASHTO-LRFD TRUCK-LOAD MAX	366.99	1026.16	13981.64	179.50	1026.16	9154.13	332.10	1098.60	9154.13	94.37	1098.60	0.00
	MIN	-642.61	-1053.67	-2299.07	-866.10	-1053.67	-1236.24	-694.95	-1223.37	-1236.24	-1041.18	-1223.37	0.00
	TANDEM-LOAD MAX	259.32	398.85	6178.53	114.96	398.85	4143.43	245.27	426.55	4143.43	34.08	426.55	0.00
	MIN	-303.90	-429.92	-830.38	-448.49	-429.92	-446.51	-316.29	-468.64	-446.51	-543.30	-468.64	0.00
	DISPERSION-LMAX	191.67	853.12	10461.18	125.95	853.12	6490.89	151.66	900.22	6490.89	90.62	900.22	0.00
	MIN	-406.24	-849.52	-2207.17	-501.90	-849.52	-1187.12	-451.41	-1003.99	-1187.12	-601.37	-1003.99	0.00
300	Total Dead lWithout snow	-742.37	81.15	27383.56	-1229.29	81.15	17525.26	-1018.88	-237.14	17525.26	-1656.74	-237.14	0.00
301	Particular Snow	-58.20	0.15	2261.71	-103.47	0.15	1453.38	-81.30	-30.25	1453.38	-140.59	-30.25	0.00
302	Live load Total MAX	341.41	932.39	12479.53	176.82	932.39	7993.00	295.60	987.70	7993.00	91.54	987.70	0.00
	MIN	-613.58	-1113.37	-2636.15	-800.28	-1113.37	-1417.66	-670.62	-1303.01	-1417.66	-960.89	-1303.01	0.00
303	Sum total D+L+PP MAX	-356.74	1013.69	42124.81	-1102.89	1013.69	26971.64	-715.90	957.44	26971.64	-1678.33	957.44	0.00
	MIN	-1414.15	-1113.22	26218.28	-2133.04	-1113.22	17135.68	-1770.79	-1570.40	17135.68	-2758.22	-1570.40	0.00

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001001 1001	2001						1001002 1002						2002		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT			
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)			
1	Pavement	15.15	0.00	-38.04	15.15	0.00	25.22	-21.20	0.00	25.38	-21.20	0.00	-63.21			
3	Railing	5.26	0.00	-12.96	5.26	0.00	9.00	-4.86	0.00	4.36	-4.86	0.00	-15.94			
5	Wheel guard	52.03	0.00	-128.28	52.03	0.00	89.07	-48.10	0.00	43.19	-48.10	0.00	-157.77			
8	Steel weight	-1.48	0.00	0.80	-1.48	0.00	-5.38	-27.78	0.00	50.60	-27.78	0.00	-65.49			
10	Medial strip	-49.03	0.00	119.74	-49.03	0.00	-85.06	47.24	0.00	-48.05	47.24	0.00	149.33			
19	Snow	6.15	0.00	-15.54	6.15	0.00	10.16	-8.32	0.00	9.45	-8.32	0.00	-25.32			
31	Miscellaneous	-2.24	0.00	5.49	-2.24	0.00	-3.87	1.72	0.00	-1.25	1.72	0.00	5.95			
100	AASHTO-LRFD TRUCK-LOAD	MAX	286.74	0.00	628.81	286.74	0.00	552.23	116.24	0.00	322.02	116.24	0.00	308.34		
		MIN	-279.23	0.00	-646.45	-279.23	0.00	-538.62	-148.84	0.00	-234.43	-148.84	0.00	-389.82		
		TANDEM-LOAD	MAX	197.12	0.00	433.62	197.12	0.00	379.50	90.31	0.00	247.83	90.31	0.00	236.74	
		MIN	-192.38	0.00	-444.00	-192.38	0.00	-370.14	-114.92	0.00	-177.41	-114.92	0.00	-298.52		
		DISPERSION-L	MAX	450.03	0.00	944.96	450.03	0.00	867.29	57.97	0.00	182.63	57.97	0.00	143.78	
		MIN	-422.42	0.00	-1013.66	-422.42	0.00	-821.08	-89.20	0.00	-144.01	-89.20	0.00	-236.51		
110	Live load	L-PICKUP 1	MAX	736.77	0.00	1573.77	736.77	0.00	1419.52	174.21	0.00	504.65	174.21	0.00	452.13	
		MIN	-701.65	0.00	-1660.12	-701.65	0.00	-1359.70	-238.04	0.00	-378.44	-238.04	0.00	-626.33		
		L-PICKUP 2	MAX	647.15	0.00	1378.58	647.15	0.00	1246.79	148.29	0.00	430.46	148.29	0.00	380.53	
		MIN	-614.80	0.00	-1457.66	-614.80	0.00	-1191.22	-204.12	0.00	-321.42	-204.12	0.00	-535.03		
		L-PICKUP 3	MAX	-827.36	0.00	-1952.92	-827.36	0.00	-1604.69	-224.74	0.00	-374.05	-224.74	0.00	-599.39	
		Live load	MAX	736.77	0.00	1573.77	736.77	0.00	1419.52	174.21	0.00	504.65	174.21	0.00	452.13	
MIN	-827.36	0.00	-1952.92	-827.36	0.00	-1604.69	-238.04	0.00	-378.44	-238.04	0.00	-626.33				
111	AASHTO Twin	TWIN-PICKUP	MAX	867.18	0.00	1854.36	867.18	0.00	1671.52	164.59	0.00	486.27	164.59	0.00	439.71	
		MIN	-827.36	0.00	-1952.92	-827.36	0.00	-1604.69	-224.74	0.00	-374.05	-224.74	0.00	-599.39		
		MID-PICKUP	MAX	-827.36	0.00	-1952.92	-827.36	0.00	-1604.69	-224.74	0.00	-374.05	-224.74	0.00	-599.39	
198	AASHTO Fatig	TRUCK-LOAD	MAX	174.31	0.00	275.92	174.31	0.00	330.01	68.17	0.00	220.75	68.17	0.00	207.06	
		MIN	-124.96	0.00	-398.50	-124.96	0.00	-246.03	-130.05	0.00	-79.74	-130.05	0.00	-322.64		
		TANDEM-LOAD	MAX	120.09	0.00	187.19	120.09	0.00	226.98	53.88	0.00	174.71	53.88	0.00	159.76	
		MIN	-85.00	0.00	-274.65	-85.00	0.00	-167.87	-101.73	0.00	-65.91	-101.73	0.00	-250.36		

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001001			1001002			1001002			2002		
NODE		1001			2001			1002			2002		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	277.39	0.00	477.21	277.39	0.00	524.80	38.74	0.00	126.28	38.74	0.00	103.09
	MIN	-213.91	0.00	-633.86	-213.91	0.00	-416.30	-69.18	0.00	-78.65	-69.18	0.00	-175.38
199	AASHTO-LRFD TRUCK-LOAD MAX	513.51	0.00	1115.45	513.51	0.00	989.95	124.91	0.00	357.68	124.91	0.00	344.78
	MIN	-496.87	0.00	-1156.24	-496.87	0.00	-961.91	-160.51	0.00	-271.60	-160.51	0.00	-429.47
	TANDEM-LOAD MAX	197.12	0.00	433.62	197.12	0.00	379.50	90.31	0.00	247.83	90.31	0.00	236.74
	MIN	-192.38	0.00	-444.00	-192.38	0.00	-370.14	-114.92	0.00	-177.41	-114.92	0.00	-298.52
	DISPERSION-LMAX	450.03	0.00	944.96	450.03	0.00	867.29	57.97	0.00	182.63	57.97	0.00	143.78
	MIN	-422.42	0.00	-1013.66	-422.42	0.00	-821.08	-89.20	0.00	-144.01	-89.20	0.00	-236.51
300	Total Dead lWithout snow	19.68	0.00	-53.25	19.68	0.00	28.97	-52.98	0.00	74.23	-52.98	0.00	-147.13
301	Particular Snow	6.15	0.00	-15.54	6.15	0.00	10.16	-8.32	0.00	9.45	-8.32	0.00	-25.32
302	Live load Total MAX	478.90	0.00	1022.95	478.90	0.00	922.69	113.24	0.00	328.02	113.24	0.00	293.88
	MIN	-537.79	0.00	-1269.40	-537.79	0.00	-1043.05	-154.73	0.00	-245.99	-154.73	0.00	-407.12
303	Sum total D+L+PP MAX	504.74	0.00	1007.42	504.74	0.00	961.82	85.91	0.00	411.71	85.91	0.00	209.60
	MIN	-531.63	0.00	-1338.18	-531.63	0.00	-1032.89	-216.03	0.00	-236.10	-216.03	0.00	-579.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001003 1003	2003			1001004 1004			2004							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-18.50	0.00	17.32	-18.50	0.00	-60.00	-22.79	0.00	27.26	-22.79	0.00	-67.95		
3	Railing	-6.14	0.00	4.52	-6.14	0.00	-21.11	-6.16	0.00	3.14	-6.16	0.00	-22.58		
5	Wheel guard	-60.74	0.00	44.75	-60.74	0.00	-209.04	-60.95	0.00	31.12	-60.95	0.00	-223.56		
8	Steel weight	-1.61	0.00	16.11	-1.61	0.00	9.38	-18.68	0.00	72.75	-18.68	0.00	-5.30		
10	Medial strip	59.93	0.00	-52.30	59.93	0.00	198.10	46.26	0.00	-15.37	46.26	0.00	177.92		
19	Snow	-7.27	0.00	6.08	-7.27	0.00	-24.28	-10.14	0.00	11.97	-10.14	0.00	-30.38		
31	Miscellaneous	2.57	0.00	-1.72	2.57	0.00	9.00	2.37	0.00	-0.48	2.37	0.00	9.44		
100	AASHTO-LRFD TRUCK-LOAD	MAX	122.04	0.00	354.94	122.04	0.00	327.76	113.83	0.00	384.85	113.83	0.00	309.40	
		MIN	-153.61	0.00	-282.34	-153.61	0.00	-387.86	-158.73	0.00	-278.38	-158.73	0.00	-389.16	
		TANDEM-LOAD	MAX	91.49	0.00	266.27	91.49	0.00	244.49	84.47	0.00	284.72	84.47	0.00	230.04
		MIN	-115.59	0.00	-206.28	-115.59	0.00	-290.88	-119.25	0.00	-204.15	-119.25	0.00	-290.93	
		DISPERSION-L	MAX	74.98	0.00	236.32	74.98	0.00	196.68	77.72	0.00	298.19	77.72	0.00	204.58
		MIN	-102.41	0.00	-204.81	-102.41	0.00	-282.28	-113.42	0.00	-250.89	-113.42	0.00	-304.90	
110	Live load	L-PICKUP 1	MAX	197.02	0.00	591.26	197.02	0.00	524.44	191.54	0.00	683.04	191.54	0.00	513.97
		MIN	-256.02	0.00	-487.15	-256.02	0.00	-670.14	-272.15	0.00	-529.27	-272.15	0.00	-694.06	
		L-PICKUP 2	MAX	166.47	0.00	502.59	166.47	0.00	441.18	162.19	0.00	582.91	162.19	0.00	434.61
		MIN	-218.00	0.00	-411.09	-218.00	0.00	-573.16	-232.66	0.00	-455.04	-232.66	0.00	-595.82	
		L-PICKUP 3	MAX	-242.66	0.00	-520.18	-242.66	0.00	-652.67	-264.83	0.00	-569.60	-264.83	0.00	-679.40
		MIN	197.02	0.00	591.26	197.02	0.00	524.44	191.54	0.00	683.04	191.54	0.00	513.97	
111	AASHTO Twin	TWIN-PICKUP	MAX	199.05	0.00	587.83	199.05	0.00	520.51	195.87	0.00	701.68	195.87	0.00	512.21
		MIN	-242.66	0.00	-520.18	-242.66	0.00	-652.67	-264.83	0.00	-569.60	-264.83	0.00	-679.40	
		MID-PICKUP	MAX	-242.66	0.00	-520.18	-242.66	0.00	-652.67	-264.83	0.00	-569.60	-264.83	0.00	-679.40
		MIN	199.05	0.00	587.83	199.05	0.00	520.51	195.87	0.00	701.68	195.87	0.00	512.21	
		TWIN-PICKUP	MAX	199.05	0.00	587.83	199.05	0.00	520.51	195.87	0.00	701.68	195.87	0.00	512.21
		MIN	-242.66	0.00	-520.18	-242.66	0.00	-652.67	-264.83	0.00	-569.60	-264.83	0.00	-679.40	
198	AASHTO Fatig	TRUCK-LOAD	MAX	62.71	0.00	258.10	62.71	0.00	214.08	57.98	0.00	267.88	57.98	0.00	209.04
		MIN	-142.63	0.00	-82.68	-142.63	0.00	-337.86	-143.76	0.00	-96.78	-143.76	0.00	-333.08	
		TANDEM-LOAD	MAX	48.69	0.00	196.44	48.69	0.00	161.50	45.30	0.00	202.52	45.30	0.00	157.20
		MIN	-108.07	0.00	-56.10	-108.07	0.00	-255.12	-108.55	0.00	-66.65	-108.55	0.00	-251.12	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001003			2003			1001004			2004		
NODE		1003			2003			1004			2004		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	34.35	0.00	161.41	34.35	0.00	129.38	33.38	0.00	183.11	33.38	0.00	132.18
	MIN	-86.15	0.00	-90.64	-86.15	0.00	-216.90	-91.47	0.00	-121.42	-91.47	0.00	-222.54
199	AASHTO-LRFD TRUCK-LOAD MAX	146.19	0.00	416.82	146.19	0.00	381.66	139.92	0.00	481.45	139.92	0.00	364.55
	MIN	-167.21	0.00	-373.16	-167.21	0.00	-442.91	-180.84	0.00	-381.99	-180.84	0.00	-449.99
	TANDEM-LOAD MAX	91.49	0.00	266.27	91.49	0.00	244.49	84.47	0.00	284.72	84.47	0.00	230.04
	MIN	-115.59	0.00	-206.28	-115.59	0.00	-290.88	-119.25	0.00	-204.15	-119.25	0.00	-290.93
	DISPERSION-LMAX	74.98	0.00	236.32	74.98	0.00	196.68	77.72	0.00	298.19	77.72	0.00	204.58
	MIN	-102.41	0.00	-204.81	-102.41	0.00	-282.28	-113.42	0.00	-250.89	-113.42	0.00	-304.90
300	Total Dead lWithout snow	-24.50	0.00	28.68	-24.50	0.00	-73.67	-59.94	0.00	118.42	-59.94	0.00	-132.04
301	Particular Snow	-7.27	0.00	6.08	-7.27	0.00	-24.28	-10.14	0.00	11.97	-10.14	0.00	-30.38
302	Live load Total MAX	128.06	0.00	384.32	128.06	0.00	340.89	124.50	0.00	443.98	124.50	0.00	334.08
	MIN	-166.41	0.00	-338.12	-166.41	0.00	-435.59	-176.89	0.00	-370.24	-176.89	0.00	-451.14
303	Sum total D+L+PP MAX	120.79	0.00	419.09	120.79	0.00	316.60	91.77	0.00	574.36	91.77	0.00	271.88
	MIN	-198.18	0.00	-332.03	-198.18	0.00	-533.55	-246.97	0.00	-350.92	-246.97	0.00	-613.56

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001005 1005	2005			1001006 1006			2006						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)				
1	Pavement	-22.93	0.00	34.55	-22.93	0.00	-61.27	-29.77	0.00	52.62	-29.77	0.00	-71.73	
3	Railing	-6.04	0.00	2.35	-6.04	0.00	-22.87	-6.16	0.00	2.43	-6.16	0.00	-23.30	
5	Wheel guard	-59.76	0.00	23.28	-59.76	0.00	-226.42	-60.98	0.00	24.10	-60.98	0.00	-230.63	
8	Steel weight	-20.72	0.00	111.75	-20.72	0.00	25.19	-46.93	0.00	183.91	-46.93	0.00	-12.13	
10	Medial strip	35.92	0.00	8.80	35.92	0.00	158.87	26.25	0.00	26.45	26.25	0.00	136.10	
19	Snow	-10.98	0.00	16.22	-10.98	0.00	-29.68	-14.59	0.00	24.84	-14.59	0.00	-36.08	
31	Miscellaneous	2.30	0.00	0.30	2.30	0.00	9.90	2.04	0.00	1.11	2.04	0.00	9.64	
100	AASHTO-LRFD TRUCK-LOAD	MAX	115.77	0.00	410.28	115.77	0.00	304.27	111.72	0.00	440.12	111.72	0.00	284.46
		MIN	-163.44	0.00	-274.59	-163.44	0.00	-380.16	-174.75	0.00	-259.16	-174.75	0.00	-384.83
	TANDEM-LOAD	MAX	85.62	0.00	302.50	85.62	0.00	225.00	82.86	0.00	324.64	82.86	0.00	210.89
		MIN	-122.57	0.00	-200.91	-122.57	0.00	-284.37	-130.25	0.00	-190.48	-130.25	0.00	-287.43
	DISPERSION-LMAX	MAX	85.64	0.00	341.14	85.64	0.00	217.18	87.16	0.00	379.95	87.16	0.00	202.76
		MIN	-122.42	0.00	-281.99	-122.42	0.00	-308.71	-135.43	0.00	-292.17	-135.43	0.00	-313.69
110	Live load L-PICKUP 1	MAX	201.41	0.00	751.43	201.41	0.00	521.46	198.88	0.00	820.06	198.88	0.00	487.22
		MIN	-285.86	0.00	-556.58	-285.86	0.00	-688.86	-310.18	0.00	-551.34	-310.18	0.00	-698.52
	L-PICKUP 2	MAX	171.25	0.00	643.64	171.25	0.00	442.18	170.01	0.00	704.58	170.01	0.00	413.66
		MIN	-244.98	0.00	-482.90	-244.98	0.00	-593.08	-265.68	0.00	-482.66	-265.68	0.00	-601.12
	L-PICKUP 3	MAX	-281.60	0.00	-590.92	-281.60	0.00	-677.55	-308.98	0.00	-589.90	-308.98	0.00	-686.26
		MIN	201.41	0.00	751.43	201.41	0.00	521.46	198.88	0.00	820.06	198.88	0.00	487.22
	Live load	MAX	201.41	0.00	751.43	201.41	0.00	521.46	198.88	0.00	820.06	198.88	0.00	487.22
		MIN	-285.86	0.00	-590.92	-285.86	0.00	-688.86	-310.18	0.00	-589.90	-310.18	0.00	-698.52
111	AASHTO Twin TWIN-PICKUP	MAX	206.29	0.00	773.03	206.29	0.00	521.25	201.22	0.00	847.36	201.22	0.00	484.60
		MIN	-281.60	0.00	-590.92	-281.60	0.00	-677.55	-308.98	0.00	-589.90	-308.98	0.00	-686.26
	MID-PICKUP	-281.60	0.00	-590.92	-281.60	0.00	-677.55	-308.98	0.00	-589.90	-308.98	0.00	-686.26	
198	AASHTO FatigTRUCK-LOAD	MAX	55.98	0.00	275.74	55.98	0.00	206.92	52.89	0.00	284.99	52.89	0.00	200.31
		MIN	-144.34	0.00	-101.20	-144.34	0.00	-327.69	-147.44	0.00	-97.79	-147.44	0.00	-331.37
	TANDEM-LOAD	MAX	43.76	0.00	208.01	43.76	0.00	155.21	41.57	0.00	214.91	41.57	0.00	150.40
		MIN	-108.86	0.00	-69.26	-108.86	0.00	-246.92	-111.07	0.00	-66.95	-111.07	0.00	-249.18

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001005						1001006					
	1005			2005			1006			2006		
NAME TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	35.43	0.00	200.01	35.43	0.00	134.36	35.16	0.00	212.53	35.16	0.00	127.57
MIN	-94.87	0.00	-141.28	-94.87	0.00	-223.97	-99.56	0.00	-146.32	-99.56	0.00	-229.64
199 AASHTO-LRFD TRUCK-LOAD MAX	143.57	0.00	517.78	143.57	0.00	361.98	136.42	0.00	561.56	136.42	0.00	335.68
MIN	-190.47	0.00	-374.58	-190.47	0.00	-444.12	-207.88	0.00	-363.27	-207.88	0.00	-448.82
TANDEM-LOAD MAX	85.62	0.00	302.50	85.62	0.00	225.00	82.86	0.00	324.64	82.86	0.00	210.89
MIN	-122.57	0.00	-200.91	-122.57	0.00	-284.37	-130.25	0.00	-190.48	-130.25	0.00	-287.43
DISPERSION-LMAX	85.64	0.00	341.14	85.64	0.00	217.18	87.16	0.00	379.95	87.16	0.00	202.76
MIN	-122.42	0.00	-281.99	-122.42	0.00	-308.71	-135.43	0.00	-292.17	-135.43	0.00	-313.69
300 Total Dead lWithout snow	-71.23	0.00	181.03	-71.23	0.00	-116.59	-115.56	0.00	290.63	-115.56	0.00	-192.05
301 Particular Snow	-10.98	0.00	16.22	-10.98	0.00	-29.68	-14.59	0.00	24.84	-14.59	0.00	-36.08
302 Live load Total MAX	130.91	0.00	488.43	130.91	0.00	338.95	129.27	0.00	533.04	129.27	0.00	316.69
MIN	-185.81	0.00	-384.10	-185.81	0.00	-447.76	-201.62	0.00	-383.43	-201.62	0.00	-454.04
303 Sum total D+L+PP MAX	87.98	0.00	685.67	87.98	0.00	294.36	37.91	0.00	848.51	37.91	0.00	183.56
MIN	-268.02	0.00	-302.08	-268.02	0.00	-594.03	-331.76	0.00	-183.00	-331.76	0.00	-682.18

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001007						1001008						
		1007			2007			1008			2008			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-6.57	0.00	-3.46	-6.57	0.00	-30.88	-15.96	0.00	7.05	-15.96	0.00	-59.62	
3	Railing	-5.57	0.00	1.04	-5.57	0.00	-22.21	-5.86	0.00	1.86	-5.86	0.00	-22.63	
5	Wheel guard	-55.11	0.00	10.29	-55.11	0.00	-219.90	-58.05	0.00	18.37	-58.05	0.00	-224.08	
8	Steel weight	39.89	0.00	-26.40	39.89	0.00	140.23	5.41	0.00	6.37	5.41	0.00	28.97	
10	Medial strip	36.15	0.00	-3.21	36.15	0.00	147.78	31.69	0.00	-4.54	31.69	0.00	127.84	
19	Snow	-4.19	0.00	-0.73	-4.19	0.00	-18.25	-8.49	0.00	3.94	-8.49	0.00	-31.52	
31	Miscellaneous	2.81	0.00	-0.76	2.81	0.00	10.98	2.53	0.00	-0.71	2.53	0.00	9.86	
100	AASHTO-LRFD TRUCK-LOAD	MAX	132.28	0.00	375.33	132.28	0.00	334.51	131.07	0.00	378.36	131.07	0.00	321.73
		MIN	-157.60	0.00	-301.75	-157.60	0.00	-386.68	-165.59	0.00	-304.50	-165.59	0.00	-408.14
	TANDEM-LOAD	MAX	97.32	0.00	278.59	97.32	0.00	246.49	97.06	0.00	282.06	97.06	0.00	239.12
		MIN	-118.60	0.00	-220.92	-118.60	0.00	-288.94	-124.61	0.00	-223.63	-124.61	0.00	-304.84
	DISPERSION-LMAX	MAX	108.21	0.00	290.81	108.21	0.00	274.23	102.97	0.00	291.85	102.97	0.00	259.24
		MIN	-118.70	0.00	-293.47	-118.70	0.00	-317.25	-128.52	0.00	-277.62	-128.52	0.00	-349.76
110	Live load L-PICKUP 1	MAX	240.50	0.00	666.14	240.50	0.00	608.73	234.03	0.00	670.21	234.03	0.00	580.97
		MIN	-276.30	0.00	-595.23	-276.30	0.00	-703.93	-294.11	0.00	-582.12	-294.11	0.00	-757.90
	L-PICKUP 2	MAX	205.54	0.00	569.41	205.54	0.00	520.71	200.03	0.00	573.91	200.03	0.00	498.37
		MIN	-237.30	0.00	-514.39	-237.30	0.00	-606.19	-253.13	0.00	-501.26	-253.13	0.00	-654.59
	L-PICKUP 3	MAX	240.50	0.00	666.14	240.50	0.00	608.73	234.03	0.00	670.21	234.03	0.00	580.97
		MIN	-276.30	0.00	-632.94	-276.30	0.00	-703.93	-294.11	0.00	-615.64	-294.11	0.00	-757.90
	Live load	MAX	240.50	0.00	666.14	240.50	0.00	608.73	234.03	0.00	670.21	234.03	0.00	580.97
		MIN	-276.30	0.00	-632.94	-276.30	0.00	-703.93	-294.11	0.00	-615.64	-294.11	0.00	-757.90
111	AASHTO Twin TWIN-PICKUP	MAX	250.64	0.00	674.23	250.64	0.00	626.88	240.12	0.00	671.35	240.12	0.00	591.10
		MIN	-271.78	0.00	-632.94	-271.78	0.00	-689.85	-289.72	0.00	-615.64	-289.72	0.00	-746.48
	MID-PICKUP	-271.78	0.00	-632.94	-271.78	0.00	-689.85	-289.72	0.00	-615.64	-289.72	0.00	-746.48	
198	AASHTO FatigTRUCK-LOAD	MAX	61.78	0.00	259.88	61.78	0.00	216.11	62.61	0.00	254.80	62.61	0.00	213.78
		MIN	-139.76	0.00	-102.87	-139.76	0.00	-324.45	-141.32	0.00	-96.24	-141.32	0.00	-335.49
	TANDEM-LOAD	MAX	47.95	0.00	197.07	47.95	0.00	162.09	48.78	0.00	194.93	48.78	0.00	161.25
		MIN	-105.92	0.00	-70.63	-105.92	0.00	-245.51	-107.53	0.00	-66.28	-107.53	0.00	-254.23

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001007			2007			1001008			2008		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	42.25	0.00	182.24	42.25	0.00	149.15	39.55	0.00	180.14	39.55	0.00	142.00
	MIN	-89.37	0.00	-147.96	-89.37	0.00	-219.85	-90.86	0.00	-129.75	-90.86	0.00	-228.73
199	AASHTO-LRFD TRUCK-LOAD MAX	170.27	0.00	458.33	170.27	0.00	422.31	163.83	0.00	454.09	163.83	0.00	397.54
	MIN	-183.27	0.00	-409.80	-183.27	0.00	-449.25	-193.39	0.00	-406.42	-193.39	0.00	-479.66
	TANDEM-LOAD MAX	97.32	0.00	278.59	97.32	0.00	246.49	97.06	0.00	282.06	97.06	0.00	239.12
	MIN	-118.60	0.00	-220.92	-118.60	0.00	-288.94	-124.61	0.00	-223.63	-124.61	0.00	-304.84
	DISPERSION-LMAX	108.21	0.00	290.81	108.21	0.00	274.23	102.97	0.00	291.85	102.97	0.00	259.24
	MIN	-118.70	0.00	-293.47	-118.70	0.00	-317.25	-128.52	0.00	-277.62	-128.52	0.00	-349.76
300	Total Dead lWithout snow	11.61	0.00	-22.50	11.61	0.00	25.99	-40.23	0.00	28.39	-40.23	0.00	-139.65
301	Particular Snow	-4.19	0.00	-0.73	-4.19	0.00	-18.25	-8.49	0.00	3.94	-8.49	0.00	-31.52
302	Live load Total MAX	156.32	0.00	432.99	156.32	0.00	395.68	152.12	0.00	435.64	152.12	0.00	377.63
	MIN	-179.59	0.00	-411.41	-179.59	0.00	-457.55	-191.17	0.00	-400.17	-191.17	0.00	-492.63
303	Sum total D+L+PP MAX	163.74	0.00	432.26	163.74	0.00	403.41	143.63	0.00	467.97	143.63	0.00	319.75
	MIN	-183.79	0.00	-434.64	-183.79	0.00	-475.81	-239.89	0.00	-396.23	-239.89	0.00	-663.80

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001009 1009	2009						1001010 1010					
		SHEAR			TORQUE			SHEAR			TORQUE		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
NAME TITLE													
1 Pavement		-39.66	0.00	49.74	-39.66	0.00	-115.92	-23.50	0.00	22.83	-23.50	0.00	-75.33
3 Railing		-6.67	0.00	4.32	-6.67	0.00	-23.52	-5.73	0.00	4.48	-5.73	0.00	-19.46
5 Wheel guard		-65.99	0.00	42.75	-65.99	0.00	-232.89	-56.74	0.00	44.39	-56.74	0.00	-192.64
8 Steel weight		-80.92	0.00	149.74	-80.92	0.00	-188.26	-26.67	0.00	38.86	-26.67	0.00	-72.55
10 Medial strip		21.75	0.00	4.12	21.75	0.00	94.99	25.56	0.00	-15.77	25.56	0.00	91.01
19 Snow		-19.25	0.00	23.40	-19.25	0.00	-57.02	-11.84	0.00	11.36	-11.84	0.00	-38.10
31 Miscellaneous		1.86	0.00	-0.07	1.86	0.00	7.71	2.10	0.00	-1.43	2.10	0.00	7.35
100 AASHTO-LRFD TRUCK-LOAD	MAX	109.02	0.00	406.40	109.02	0.00	255.06	116.09	0.00	388.46	116.09	0.00	261.41
	MIN	-182.50	0.00	-263.89	-182.50	0.00	-430.62	-182.09	0.00	-266.67	-182.09	0.00	-427.15
	TANDEM-LOAD												
	MAX	81.78	0.00	302.88	81.78	0.00	193.14	86.18	0.00	290.17	86.18	0.00	194.77
	MIN	-136.78	0.00	-195.46	-136.78	0.00	-322.89	-136.39	0.00	-195.14	-136.39	0.00	-320.11
	DISPERSION-LMAX												
	MIN	69.91	0.00	309.89	69.91	0.00	159.99	101.16	0.00	319.53	101.16	0.00	225.52
	MIN	-133.87	0.00	-226.67	-133.87	0.00	-345.72	-138.85	0.00	-280.99	-138.85	0.00	-345.89
110 Live load	L-PICKUP 1												
	MAX	178.93	0.00	716.29	178.93	0.00	415.05	217.25	0.00	707.99	217.25	0.00	486.93
	MIN	-316.36	0.00	-490.57	-316.36	0.00	-776.33	-320.94	0.00	-547.65	-320.94	0.00	-773.04
	L-PICKUP 2												
	MAX	151.69	0.00	612.77	151.69	0.00	353.13	187.34	0.00	609.70	187.34	0.00	420.30
	MIN	-270.65	0.00	-422.14	-270.65	0.00	-668.61	-275.23	0.00	-476.13	-275.23	0.00	-666.00
	L-PICKUP 3												
	MAX	-312.62	0.00	-515.20	-312.62	0.00	-766.40	-314.06	0.00	-571.87	-314.06	0.00	-759.32
	MIN	-312.62	0.00	-515.20	-312.62	0.00	-766.40	-314.06	0.00	-571.87	-314.06	0.00	-759.32
	Live load												
	MAX	178.93	0.00	716.29	178.93	0.00	415.05	217.25	0.00	707.99	217.25	0.00	486.93
	MIN	-316.36	0.00	-515.20	-316.36	0.00	-776.33	-320.94	0.00	-571.87	-320.94	0.00	-773.04
111 AASHTO Twin	TWIN-PICKUP												
	MAX	178.76	0.00	717.51	178.76	0.00	393.99	220.29	0.00	693.88	220.29	0.00	485.15
	MIN	-312.62	0.00	-515.20	-312.62	0.00	-766.40	-314.06	0.00	-571.87	-314.06	0.00	-759.32
	MID-PICKUP												
	MAX	-312.62	0.00	-515.20	-312.62	0.00	-766.40	-314.06	0.00	-571.87	-314.06	0.00	-759.32
198 AASHTO Fatig	TRUCK-LOAD												
	MAX	57.12	0.00	255.63	57.12	0.00	194.76	55.16	0.00	239.13	55.16	0.00	178.86
	MIN	-147.97	0.00	-71.51	-147.97	0.00	-362.42	-144.04	0.00	-52.76	-144.04	0.00	-362.61
	TANDEM-LOAD												
	MAX	44.90	0.00	196.54	44.90	0.00	148.32	43.20	0.00	184.73	43.20	0.00	136.86
	MIN	-112.58	0.00	-49.54	-112.58	0.00	-273.69	-109.73	0.00	-43.77	-109.73	0.00	-273.65

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001009						1001010					
		1009			2009			1010			2010		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	33.01	0.00	189.58	33.01	0.00	106.55	51.22	0.00	200.94	51.22	0.00	132.56
	MIN	-98.25	0.00	-107.66	-98.25	0.00	-245.84	-99.98	0.00	-134.39	-99.98	0.00	-252.65
199	AASHTO-LRFD TRUCK-LOAD MAX	128.71	0.00	487.35	128.71	0.00	277.78	143.60	0.00	451.45	143.60	0.00	313.53
	MIN	-213.49	0.00	-345.77	-213.49	0.00	-505.83	-210.11	0.00	-354.43	-210.11	0.00	-497.80
	TANDEM-LOAD MAX	81.78	0.00	302.88	81.78	0.00	193.14	86.18	0.00	290.17	86.18	0.00	194.77
	MIN	-136.78	0.00	-195.46	-136.78	0.00	-322.89	-136.39	0.00	-195.14	-136.39	0.00	-320.11
	DISPERSION-LMAX	69.91	0.00	309.89	69.91	0.00	159.99	101.16	0.00	319.53	101.16	0.00	225.52
	MIN	-133.87	0.00	-226.67	-133.87	0.00	-345.72	-138.85	0.00	-280.99	-138.85	0.00	-345.89
300	Total Dead lWithout snow	-169.62	0.00	250.60	-169.62	0.00	-457.89	-84.98	0.00	93.36	-84.98	0.00	-261.62
301	Particular Snow	-19.25	0.00	23.40	-19.25	0.00	-57.02	-11.84	0.00	11.36	-11.84	0.00	-38.10
302	Live load Total MAX	116.31	0.00	465.59	116.31	0.00	269.78	141.21	0.00	460.20	141.21	0.00	316.51
	MIN	-205.64	0.00	-334.88	-205.64	0.00	-504.62	-208.61	0.00	-371.72	-208.61	0.00	-502.48
303	Sum total D+L+PP MAX	-37.67	0.00	739.59	-37.67	0.00	-164.19	86.75	0.00	564.91	86.75	0.00	111.74
	MIN	-394.51	0.00	-161.33	-394.51	0.00	-1019.52	-305.43	0.00	-360.36	-305.43	0.00	-802.19

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001011						1001012							
NODE		1011			2011			1012			2012				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	6.85	0.00	-26.09	6.85	0.00	2.51	22.95	0.00	-53.96	22.95	0.00	41.91		
3	Railing	-0.63	0.00	-2.70	-0.63	0.00	-5.32	6.80	0.00	-15.97	6.80	0.00	12.43		
5	Wheel guard	-6.20	0.00	-26.77	-6.20	0.00	-52.65	67.30	0.00	-158.11	67.30	0.00	123.02		
8	Steel weight	35.19	0.00	-73.30	35.19	0.00	73.68	11.71	0.00	-27.69	11.71	0.00	21.24		
10	Medial strip	8.72	0.00	3.24	8.72	0.00	39.67	-34.03	0.00	79.96	-34.03	0.00	-62.20		
19	Snow	2.88	0.00	-12.18	2.88	0.00	-0.15	11.81	0.00	-27.75	11.81	0.00	21.56		
31	Miscellaneous	0.67	0.00	0.29	0.67	0.00	3.10	-2.73	0.00	6.41	-2.73	0.00	-4.99		
100	AASHTO-LRFD TRUCK-LOAD	MAX	138.76	0.00	355.51	138.76	0.00	304.71	121.48	0.00	269.45	121.48	0.00	238.21	
		MIN	-177.71	0.00	-296.02	-177.71	0.00	-398.90	-121.82	0.00	-270.08	-121.82	0.00	-240.66	
		TANDEM-LOAD	MAX	101.00	0.00	265.90	101.00	0.00	220.70	83.13	0.00	184.18	83.13	0.00	162.70
		MIN	-133.34	0.00	-214.59	-133.34	0.00	-299.39	-82.98	0.00	-185.30	-82.98	0.00	-163.91	
		DISPERSION-L	MAX	196.66	0.00	422.06	196.66	0.00	376.76	368.36	0.00	723.11	368.36	0.00	725.26
		MIN	-184.51	0.00	-466.29	-184.51	0.00	-370.71	-329.55	0.00	-814.38	-329.55	0.00	-654.58	
110	Live load	L-PICKUP 1	MAX	335.42	0.00	777.57	335.42	0.00	681.47	489.84	0.00	992.56	489.84	0.00	963.47
		MIN	-362.22	0.00	-762.32	-362.22	0.00	-769.61	-451.37	0.00	-1084.45	-451.37	0.00	-895.24	
		L-PICKUP 2	MAX	297.65	0.00	687.96	297.65	0.00	597.46	451.49	0.00	907.28	451.49	0.00	887.96
		MIN	-317.85	0.00	-680.88	-317.85	0.00	-670.10	-412.54	0.00	-999.68	-412.54	0.00	-818.49	
		L-PICKUP 3	MAX	-352.30	0.00	-774.62	-352.30	0.00	-757.64	-493.22	0.00	-1164.46	-493.22	0.00	-974.47
		Live load	MAX	335.42	0.00	777.57	335.42	0.00	681.47	489.84	0.00	992.56	489.84	0.00	963.47
MIN	-362.22	0.00	-774.62	-362.22	0.00	-769.61	-493.22	0.00	-1164.46	-493.22	0.00	-974.47			
111	AASHTO Twin	TWIN-PICKUP	MAX	351.81	0.00	743.23	351.81	0.00	730.01	526.81	0.00	1087.20	526.81	0.00	1037.44
		MIN	-352.30	0.00	-774.62	-352.30	0.00	-757.64	-493.22	0.00	-1164.46	-493.22	0.00	-974.47	
		MID-PICKUP	MAX	-352.30	0.00	-774.62	-352.30	0.00	-757.64	-493.22	0.00	-1164.46	-493.22	0.00	-974.47
198	AASHTO Fatig	TRUCK-LOAD	MAX	50.61	0.00	163.30	50.61	0.00	135.37	74.96	0.00	102.50	74.96	0.00	144.33
		MIN	-98.83	0.00	-113.13	-98.83	0.00	-249.50	-47.52	0.00	-169.03	-47.52	0.00	-96.16	
		TANDEM-LOAD	MAX	36.46	0.00	131.39	36.46	0.00	104.11	51.47	0.00	69.44	51.47	0.00	98.54
		MIN	-77.70	0.00	-77.69	-77.70	0.00	-193.17	-32.26	0.00	-116.44	-32.26	0.00	-65.54	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001011			1001012								
NODE		1011			2011			1012			2012		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	121.05	0.00	233.98	121.05	0.00	235.52	235.36	0.00	342.03	235.36	0.00	455.15
	MIN	-109.53	0.00	-280.57	-109.53	0.00	-231.06	-157.16	0.00	-527.96	-157.16	0.00	-316.73
199	AASHTO-LRFD TRUCK-LOAD MAX	194.24	0.00	403.75	194.24	0.00	434.37	216.98	0.00	484.89	216.98	0.00	427.46
	MIN	-206.93	0.00	-394.40	-206.93	0.00	-471.11	-218.47	0.00	-479.46	-218.47	0.00	-428.16
	TANDEM-LOAD MAX	101.00	0.00	265.90	101.00	0.00	220.70	83.13	0.00	184.18	83.13	0.00	162.70
	MIN	-133.34	0.00	-214.59	-133.34	0.00	-299.39	-82.98	0.00	-185.30	-82.98	0.00	-163.91
	DISPERSION-LMAX	196.66	0.00	422.06	196.66	0.00	376.76	368.36	0.00	723.11	368.36	0.00	725.26
	MIN	-184.51	0.00	-466.29	-184.51	0.00	-370.71	-329.55	0.00	-814.38	-329.55	0.00	-654.58
300	Total Dead lWithout snow	44.61	0.00	-125.33	44.61	0.00	61.00	72.01	0.00	-169.36	72.01	0.00	131.41
301	Particular Snow	2.88	0.00	-12.18	2.88	0.00	-0.15	11.81	0.00	-27.75	11.81	0.00	21.56
302	Live load Total MAX	218.02	0.00	505.42	218.02	0.00	442.95	318.40	0.00	645.16	318.40	0.00	626.25
	MIN	-235.44	0.00	-503.50	-235.44	0.00	-500.25	-320.59	0.00	-756.90	-320.59	0.00	-633.40
303	Sum total D+L+PP MAX	265.51	0.00	493.24	265.51	0.00	503.81	402.21	0.00	617.41	402.21	0.00	779.23
	MIN	-232.56	0.00	-641.02	-232.56	0.00	-500.39	-308.78	0.00	-954.01	-308.78	0.00	-611.84

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001013 1013						1001014 1014					
		2013		2013		2014		2014		2014		2014	
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-0.69	0.00	-11.37	-0.69	0.00	-14.26	-18.18	0.00	14.42	-18.18	0.00	-61.51
3	Railing	0.44	0.00	-4.27	0.44	0.00	-2.42	-4.64	0.00	3.45	-4.64	0.00	-15.91
5	Wheel guard	4.38	0.00	-42.29	4.38	0.00	-23.97	-45.89	0.00	34.19	-45.89	0.00	-157.49
8	Steel weight	-8.09	0.00	4.97	-8.09	0.00	-28.80	-18.22	0.00	17.13	-18.22	0.00	-58.98
10	Medial strip	-3.80	0.00	23.60	-3.80	0.00	7.73	21.06	0.00	-14.63	21.06	0.00	73.34
19	Snow	-0.22	0.00	-6.04	-0.22	0.00	-6.95	-9.22	0.00	7.30	-9.22	0.00	-31.21
31	Miscellaneous	-0.28	0.00	1.86	-0.28	0.00	0.68	1.74	0.00	-1.25	1.74	0.00	6.01
100	AASHTO-LRFD TRUCK-LOAD	114.83	0.00	285.02	114.83	0.00	257.51	126.42	0.00	346.65	126.42	0.00	291.34
	MIN	-144.38	0.00	-236.91	-144.38	0.00	-326.01	-169.86	0.00	-269.13	-169.86	0.00	-392.02
	TANDEM-LOAD	83.35	0.00	214.69	83.35	0.00	186.34	92.76	0.00	258.44	92.76	0.00	214.04
	MIN	-108.70	0.00	-173.45	-108.70	0.00	-244.60	-126.82	0.00	-196.74	-126.82	0.00	-292.19
	DISPERSION-LMAX	187.62	0.00	419.90	187.62	0.00	357.03	104.05	0.00	300.77	104.05	0.00	239.06
	MIN	-187.73	0.00	-440.74	-187.73	0.00	-378.07	-132.69	0.00	-277.24	-132.69	0.00	-336.23
110	Live load L-PICKUP 1	302.44	0.00	704.92	302.44	0.00	614.54	230.47	0.00	647.43	230.47	0.00	530.40
	MIN	-332.11	0.00	-677.64	-332.11	0.00	-704.08	-302.55	0.00	-546.36	-302.55	0.00	-728.25
	L-PICKUP 2	270.97	0.00	634.59	270.97	0.00	543.37	196.80	0.00	559.22	196.80	0.00	453.10
	MIN	-296.43	0.00	-614.19	-296.43	0.00	-622.67	-259.52	0.00	-473.98	-259.52	0.00	-628.42
	L-PICKUP 3	-322.30	0.00	-693.91	-322.30	0.00	-689.36	-301.59	0.00	-567.52	-301.59	0.00	-731.93
	Live load	302.44	0.00	704.92	302.44	0.00	614.54	230.47	0.00	647.43	230.47	0.00	530.40
	MIN	-332.11	0.00	-693.91	-332.11	0.00	-704.08	-302.55	0.00	-567.52	-302.55	0.00	-731.93
111	AASHTO Twin TWIN-PICKUP	318.52	0.00	670.38	318.52	0.00	649.81	237.26	0.00	633.42	237.26	0.00	549.10
	MIN	-322.30	0.00	-693.91	-322.30	0.00	-689.36	-301.59	0.00	-567.52	-301.59	0.00	-731.93
	MID-PICKUP	-322.30	0.00	-693.91	-322.30	0.00	-689.36	-301.59	0.00	-567.52	-301.59	0.00	-731.93
198	AASHTO FatigTRUCK-LOAD	49.22	0.00	106.68	49.22	0.00	106.88	54.18	0.00	205.23	54.18	0.00	169.55
	MIN	-67.01	0.00	-108.91	-67.01	0.00	-173.59	-126.33	0.00	-57.73	-126.33	0.00	-322.45
	TANDEM-LOAD	33.49	0.00	90.02	33.49	0.00	81.13	42.30	0.00	159.43	42.30	0.00	129.08
	MIN	-54.32	0.00	-74.58	-54.32	0.00	-136.87	-96.40	0.00	-47.89	-96.40	0.00	-243.23

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001013 1013						1001014 1014					
		2013			2014			2013			2014		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	119.41	0.00	216.72	119.41	0.00	227.71	55.28	0.00	188.34	55.28	0.00	143.24
	MIN	-101.82	0.00	-278.49	-101.82	0.00	-211.10	-92.99	0.00	-140.27	-92.99	0.00	-248.67
199	AASHTO-LRFD TRUCK-LOAD MAX	166.30	0.00	324.97	166.30	0.00	364.98	159.58	0.00	403.02	159.58	0.00	371.06
	MIN	-170.38	0.00	-330.27	-170.38	0.00	-387.88	-202.41	0.00	-353.33	-202.41	0.00	-477.02
	TANDEM-LOAD MAX	83.35	0.00	214.69	83.35	0.00	186.34	92.76	0.00	258.44	92.76	0.00	214.04
	MIN	-108.70	0.00	-173.45	-108.70	0.00	-244.60	-126.82	0.00	-196.74	-126.82	0.00	-292.19
	DISPERSION-LMAX	187.62	0.00	419.90	187.62	0.00	357.03	104.05	0.00	300.77	104.05	0.00	239.06
	MIN	-187.73	0.00	-440.74	-187.73	0.00	-378.07	-132.69	0.00	-277.24	-132.69	0.00	-336.23
300	Total Dead lWithout snow	-8.03	0.00	-27.50	-8.03	0.00	-61.05	-64.13	0.00	53.32	-64.13	0.00	-214.54
301	Particular Snow	-0.22	0.00	-6.04	-0.22	0.00	-6.95	-9.22	0.00	7.30	-9.22	0.00	-31.21
302	Live load Total MAX	196.59	0.00	458.20	196.59	0.00	399.45	149.80	0.00	420.83	149.80	0.00	344.76
	MIN	-215.87	0.00	-451.04	-215.87	0.00	-457.65	-196.66	0.00	-368.89	-196.66	0.00	-475.75
303	Sum total D+L+PP MAX	196.37	0.00	452.16	196.37	0.00	392.50	121.40	0.00	481.45	121.40	0.00	202.44
	MIN	-224.12	0.00	-484.58	-224.12	0.00	-525.65	-270.01	0.00	-361.58	-270.01	0.00	-721.50

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001015 1015	2015			1001016 1016			2016							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-18.39	0.00	5.83	-18.39	0.00	-70.98	-23.71	0.00	9.03	-23.71	0.00	-90.02		
3	Railing	-5.91	0.00	3.61	-5.91	0.00	-21.08	-6.12	0.00	2.41	-6.12	0.00	-23.16		
5	Wheel guard	-58.51	0.00	35.73	-58.51	0.00	-208.68	-60.60	0.00	23.82	-60.60	0.00	-229.32		
8	Steel weight	-3.85	0.00	-19.49	-3.85	0.00	-35.59	-22.88	0.00	7.82	-22.88	0.00	-87.75		
10	Medial strip	30.47	0.00	-21.94	30.47	0.00	105.33	29.18	0.00	-12.33	29.18	0.00	109.54		
19	Snow	-9.58	0.00	3.46	-9.58	0.00	-36.55	-11.94	0.00	4.51	-11.94	0.00	-45.38		
31	Miscellaneous	2.44	0.00	-1.75	2.44	0.00	8.46	2.31	0.00	-0.92	2.31	0.00	8.73		
100	AASHTO-LRFD TRUCK-LOAD	MAX	114.75	0.00	375.72	114.75	0.00	259.32	111.11	0.00	405.31	111.11	0.00	255.03	
		MIN	-170.00	0.00	-279.11	-170.00	0.00	-412.71	-180.97	0.00	-281.65	-180.97	0.00	-445.00	
		TANDEM-LOAD	MAX	85.59	0.00	282.54	85.59	0.00	195.15	83.30	0.00	304.39	83.30	0.00	192.26
		MIN	-128.47	0.00	-204.97	-128.47	0.00	-311.68	-136.64	0.00	-207.94	-136.64	0.00	-334.69	
		DISPERSION-L	MAX	88.62	0.00	275.73	88.62	0.00	190.39	81.10	0.00	281.56	81.10	0.00	199.15
		MIN	-117.93	0.00	-264.26	-117.93	0.00	-302.43	-119.60	0.00	-264.04	-119.60	0.00	-343.54	
110	Live load	L-PICKUP 1	MAX	203.37	0.00	651.45	203.37	0.00	449.71	192.22	0.00	686.87	192.22	0.00	454.19
		MIN	-287.93	0.00	-543.37	-287.93	0.00	-715.14	-300.57	0.00	-545.69	-300.57	0.00	-788.54	
		L-PICKUP 2	MAX	174.21	0.00	558.27	174.21	0.00	385.54	164.40	0.00	585.95	164.40	0.00	391.41
		MIN	-246.40	0.00	-469.23	-246.40	0.00	-614.10	-256.24	0.00	-471.98	-256.24	0.00	-678.22	
		L-PICKUP 3	MAX	-276.86	0.00	-570.34	-276.86	0.00	-685.06	-290.84	0.00	-573.45	-290.84	0.00	-769.73
		Live load	MAX	203.37	0.00	651.45	203.37	0.00	449.71	192.22	0.00	686.87	192.22	0.00	454.19
MIN	-287.93	0.00	-570.34	-287.93	0.00	-715.14	-300.57	0.00	-573.45	-300.57	0.00	-788.54			
111	AASHTO Twin	TWIN-PICKUP	MAX	204.70	0.00	640.82	204.70	0.00	441.59	192.41	0.00	676.52	192.41	0.00	443.40
		MIN	-276.86	0.00	-570.34	-276.86	0.00	-685.06	-290.84	0.00	-573.45	-290.84	0.00	-769.73	
		MID-PICKUP	MAX	-276.86	0.00	-570.34	-276.86	0.00	-685.06	-290.84	0.00	-573.45	-290.84	0.00	-769.73
198	AASHTO Fatig	TRUCK-LOAD	MAX	58.08	0.00	247.59	58.08	0.00	193.66	55.42	0.00	271.96	55.42	0.00	193.96
		MIN	-144.46	0.00	-67.92	-144.46	0.00	-355.93	-154.10	0.00	-87.85	-154.10	0.00	-371.70	
		TANDEM-LOAD	MAX	45.47	0.00	191.12	45.47	0.00	147.18	43.84	0.00	209.10	43.84	0.00	147.83
		MIN	-110.47	0.00	-46.42	-110.47	0.00	-270.37	-117.62	0.00	-60.58	-117.62	0.00	-282.19	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001015 1015						1001016 1016					
		2015			2016			2015			2016		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	42.07	0.00	180.02	42.07	0.00	119.12	35.22	0.00	180.95	35.22	0.00	116.47
	MIN	-92.49	0.00	-119.81	-92.49	0.00	-224.46	-93.49	0.00	-126.69	-93.49	0.00	-241.83
199	AASHTO-LRFD TRUCK-LOAD MAX	138.82	0.00	436.29	138.82	0.00	300.27	132.69	0.00	470.13	132.69	0.00	293.52
	MIN	-189.70	0.00	-369.45	-189.70	0.00	-458.75	-203.56	0.00	-373.13	-203.56	0.00	-511.72
	TANDEM-LOAD MAX	85.59	0.00	282.54	85.59	0.00	195.15	83.30	0.00	304.39	83.30	0.00	192.26
	MIN	-128.47	0.00	-204.97	-128.47	0.00	-311.68	-136.64	0.00	-207.94	-136.64	0.00	-334.69
	DISPERSION-LMAX	88.62	0.00	275.73	88.62	0.00	190.39	81.10	0.00	281.56	81.10	0.00	199.15
	MIN	-117.93	0.00	-264.26	-117.93	0.00	-302.43	-119.60	0.00	-264.04	-119.60	0.00	-343.54
300	Total Dead lWithout snow	-53.76	0.00	2.00	-53.76	0.00	-222.54	-81.83	0.00	29.82	-81.83	0.00	-311.98
301	Particular Snow	-9.58	0.00	3.46	-9.58	0.00	-36.55	-11.94	0.00	4.51	-11.94	0.00	-45.38
302	Live load Total MAX	132.19	0.00	423.44	132.19	0.00	292.31	124.94	0.00	446.46	124.94	0.00	295.22
	MIN	-187.15	0.00	-370.72	-187.15	0.00	-464.84	-195.37	0.00	-372.75	-195.37	0.00	-512.55
303	Sum total D+L+PP MAX	108.51	0.00	428.91	108.51	0.00	120.91	68.65	0.00	480.79	68.65	0.00	26.43
	MIN	-250.49	0.00	-367.26	-250.49	0.00	-723.93	-289.14	0.00	-368.24	-289.14	0.00	-869.91

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001017 1017						1001018 1018						
		2017		2017		2018		2018		2018		2018		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-29.79	0.00	16.97	-29.79	0.00	-107.48	-25.45	0.00	8.35	-25.45	0.00	-97.95	
3	Railing	-6.24	0.00	1.83	-6.24	0.00	-24.25	-6.10	0.00	1.33	-6.10	0.00	-24.14	
5	Wheel guard	-61.82	0.00	18.12	-61.82	0.00	-240.11	-60.37	0.00	13.17	-60.37	0.00	-239.01	
8	Steel weight	-46.02	0.00	46.82	-46.02	0.00	-145.39	-30.18	0.00	17.90	-30.18	0.00	-108.14	
10	Medial strip	26.06	0.00	-2.97	26.06	0.00	105.91	27.27	0.00	-4.07	27.27	0.00	109.86	
19	Snow	-14.68	0.00	7.91	-14.68	0.00	-53.42	-12.76	0.00	4.04	-12.76	0.00	-49.27	
31	Miscellaneous	2.09	0.00	-0.22	2.09	0.00	8.51	2.22	0.00	-0.35	2.22	0.00	8.90	
100	AASHTO-LRFD TRUCK-LOAD	MAX	112.12	0.00	423.69	112.12	0.00	252.61	119.60	0.00	416.24	119.60	0.00	268.63
		MIN	-187.50	0.00	-289.91	-187.50	0.00	-452.46	-182.01	0.00	-304.44	-182.01	0.00	-436.68
	TANDEM-LOAD	MAX	84.04	0.00	317.27	84.04	0.00	190.82	89.25	0.00	311.61	89.25	0.00	202.15
		MIN	-141.16	0.00	-213.99	-141.16	0.00	-339.72	-137.00	0.00	-224.16	-137.00	0.00	-328.60
	DISPERSION-LMAX	MAX	80.60	0.00	305.10	80.60	0.00	188.94	85.52	0.00	303.27	85.52	0.00	192.49
		MIN	-129.14	0.00	-274.59	-129.14	0.00	-361.58	-126.83	0.00	-287.12	-126.83	0.00	-348.35
110	Live load L-PICKUP 1	MAX	192.72	0.00	728.79	192.72	0.00	441.55	205.12	0.00	719.52	205.12	0.00	461.12
		MIN	-316.64	0.00	-564.49	-316.64	0.00	-814.04	-308.83	0.00	-591.56	-308.83	0.00	-785.04
	L-PICKUP 2	MAX	164.64	0.00	622.37	164.64	0.00	379.76	174.78	0.00	614.89	174.78	0.00	394.64
		MIN	-270.30	0.00	-488.58	-270.30	0.00	-701.30	-263.83	0.00	-511.28	-263.83	0.00	-676.95
	L-PICKUP 3	MAX	-308.61	0.00	-591.58	-308.61	0.00	-801.00	-301.27	0.00	-623.38	-301.27	0.00	-767.93
		MIN	192.72	0.00	728.79	192.72	0.00	441.55	205.12	0.00	719.52	205.12	0.00	461.12
	Live load	MAX	192.72	0.00	728.79	192.72	0.00	441.55	205.12	0.00	719.52	205.12	0.00	461.12
		MIN	-316.64	0.00	-591.58	-316.64	0.00	-814.04	-308.83	0.00	-623.38	-308.83	0.00	-785.04
111	AASHTO Twin TWIN-PICKUP	MAX	192.60	0.00	720.69	192.60	0.00	425.12	208.11	0.00	711.27	208.11	0.00	451.58
		MIN	-308.61	0.00	-591.58	-308.61	0.00	-801.00	-301.27	0.00	-623.38	-301.27	0.00	-767.93
	MID-PICKUP	-308.61	0.00	-591.58	-308.61	0.00	-801.00	-301.27	0.00	-623.38	-301.27	0.00	-767.93	
198	AASHTO FatigTRUCK-LOAD	MAX	55.12	0.00	284.27	55.12	0.00	195.88	57.11	0.00	284.27	57.11	0.00	201.87
		MIN	-157.77	0.00	-100.80	-157.77	0.00	-374.73	-155.95	0.00	-107.61	-155.95	0.00	-367.15
	TANDEM-LOAD	MAX	43.68	0.00	217.92	43.68	0.00	149.27	45.11	0.00	217.56	45.11	0.00	153.48
		MIN	-120.21	0.00	-69.55	-120.21	0.00	-284.19	-118.78	0.00	-74.14	-118.78	0.00	-278.58

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001017						1001018					
		1017			2017			1018			2018		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	33.33	0.00	188.73	33.33	0.00	116.52	34.99	0.00	187.56	34.99	0.00	121.36
	MIN	-96.97	0.00	-136.66	-96.97	0.00	-248.17	-95.67	0.00	-145.08	-95.67	0.00	-242.89
199	AASHTO-LRFD TRUCK-LOAD MAX	133.40	0.00	495.68	133.40	0.00	283.42	145.71	0.00	487.02	145.71	0.00	309.27
	MIN	-213.76	0.00	-382.72	-213.76	0.00	-528.42	-207.91	0.00	-405.53	-207.91	0.00	-504.90
	TANDEM-LOAD MAX	84.04	0.00	317.27	84.04	0.00	190.82	89.25	0.00	311.61	89.25	0.00	202.15
	MIN	-141.16	0.00	-213.99	-141.16	0.00	-339.72	-137.00	0.00	-224.16	-137.00	0.00	-328.60
	DISPERSION-LMAX	80.60	0.00	305.10	80.60	0.00	188.94	85.52	0.00	303.27	85.52	0.00	192.49
	MIN	-129.14	0.00	-274.59	-129.14	0.00	-361.58	-126.83	0.00	-287.12	-126.83	0.00	-348.35
300	Total Dead lWithout snow	-115.72	0.00	80.54	-115.72	0.00	-402.81	-92.61	0.00	36.33	-92.61	0.00	-350.49
301	Particular Snow	-14.68	0.00	7.91	-14.68	0.00	-53.42	-12.76	0.00	4.04	-12.76	0.00	-49.27
302	Live load Total MAX	125.27	0.00	473.71	125.27	0.00	287.01	133.33	0.00	467.69	133.33	0.00	299.73
	MIN	-205.82	0.00	-384.53	-205.82	0.00	-529.13	-200.74	0.00	-405.20	-200.74	0.00	-510.27
303	Sum total D+L+PP MAX	32.45	0.00	562.17	32.45	0.00	-83.12	67.96	0.00	508.06	67.96	0.00	-10.11
	MIN	-336.22	0.00	-376.62	-336.22	0.00	-985.35	-306.11	0.00	-401.16	-306.11	0.00	-910.03

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001019 1019	2019			1001020 1020			2020							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-18.20	0.00	-3.65	-18.20	0.00	-79.67	-20.46	0.00	3.72	-20.46	0.00	-81.75		
3	Railing	-5.89	0.00	1.16	-5.89	0.00	-23.43	-6.01	0.00	2.12	-6.01	0.00	-22.98		
5	Wheel guard	-58.28	0.00	11.48	-58.28	0.00	-231.95	-59.51	0.00	21.02	-59.51	0.00	-227.54		
8	Steel weight	-3.37	0.00	-28.62	-3.37	0.00	-42.68	-11.05	0.00	-10.28	-11.05	0.00	-56.44		
10	Medial strip	29.89	0.00	-9.68	29.89	0.00	115.16	29.63	0.00	-12.45	29.63	0.00	111.31		
19	Snow	-9.54	0.00	-1.26	-9.54	0.00	-41.09	-10.55	0.00	2.19	-10.55	0.00	-41.86		
31	Miscellaneous	2.44	0.00	-0.82	2.44	0.00	9.36	2.40	0.00	-1.01	2.40	0.00	9.02		
100	AASHTO-LRFD TRUCK-LOAD	MAX	127.14	0.00	394.27	127.14	0.00	292.30	126.04	0.00	390.68	126.04	0.00	295.71	
		MIN	-172.72	0.00	-318.91	-172.72	0.00	-417.89	-171.95	0.00	-312.47	-171.95	0.00	-418.21	
		TANDEM-LOAD	MAX	94.54	0.00	296.01	94.54	0.00	218.95	93.94	0.00	293.30	93.94	0.00	221.90
		MIN	-130.53	0.00	-234.29	-130.53	0.00	-315.03	-129.93	0.00	-229.99	-129.93	0.00	-314.19	
		DISPERSION-L	MAX	92.32	0.00	289.76	92.32	0.00	209.87	90.57	0.00	286.81	90.57	0.00	213.10
		MIN	-121.55	0.00	-293.54	-121.55	0.00	-334.43	-123.44	0.00	-278.62	-123.44	0.00	-341.19	
110	Live load	L-PICKUP 1	MAX	219.47	0.00	684.03	219.47	0.00	502.17	216.61	0.00	677.49	216.61	0.00	508.82
		MIN	-294.27	0.00	-612.44	-294.27	0.00	-752.32	-295.39	0.00	-591.09	-295.39	0.00	-759.41	
		L-PICKUP 2	MAX	186.87	0.00	585.77	186.87	0.00	428.82	184.52	0.00	580.11	184.52	0.00	435.01
		MIN	-252.08	0.00	-527.83	-252.08	0.00	-649.46	-253.37	0.00	-508.61	-253.37	0.00	-655.38	
		L-PICKUP 3	MAX	-284.75	0.00	-646.32	-284.75	0.00	-731.53	-287.40	0.00	-623.82	-287.40	0.00	-740.64
		Live load	MAX	219.47	0.00	684.03	219.47	0.00	502.17	216.61	0.00	677.49	216.61	0.00	508.82
MIN	-294.27	0.00	-646.32	-294.27	0.00	-752.32	-295.39	0.00	-623.82	-295.39	0.00	-759.41			
111	AASHTO Twin	TWIN-PICKUP	MAX	224.63	0.00	671.50	224.63	0.00	499.68	219.61	0.00	670.45	219.61	0.00	504.21
		MIN	-284.75	0.00	-646.32	-284.75	0.00	-731.53	-287.40	0.00	-623.82	-287.40	0.00	-740.64	
		MID-PICKUP	MAX	-284.75	0.00	-646.32	-284.75	0.00	-731.53	-287.40	0.00	-623.82	-287.40	0.00	-740.64
198	AASHTO Fatig	TRUCK-LOAD	MAX	60.30	0.00	274.08	60.30	0.00	209.32	61.26	0.00	263.88	61.26	0.00	209.43
		MIN	-150.86	0.00	-107.07	-150.86	0.00	-356.07	-147.95	0.00	-97.24	-147.95	0.00	-354.12	
		TANDEM-LOAD	MAX	47.39	0.00	210.20	47.39	0.00	158.78	48.10	0.00	203.18	48.10	0.00	159.07
		MIN	-115.10	0.00	-73.73	-115.10	0.00	-270.57	-113.11	0.00	-67.03	-113.11	0.00	-269.28	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001019						1001020					
NODE		1019			2019			1020			2020		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	37.33	0.00	180.79	37.33	0.00	128.79	36.63	0.00	181.60	36.63	0.00	127.26
	MIN	-91.91	0.00	-144.29	-91.91	0.00	-233.55	-92.63	0.00	-131.20	-92.63	0.00	-232.79
199	AASHTO-LRFD TRUCK-LOAD MAX	157.27	0.00	456.35	157.27	0.00	345.33	153.43	0.00	458.13	153.43	0.00	347.13
	MIN	-194.85	0.00	-424.60	-194.85	0.00	-478.38	-195.90	0.00	-414.51	-195.90	0.00	-481.75
	TANDEM-LOAD MAX	94.54	0.00	296.01	94.54	0.00	218.95	93.94	0.00	293.30	93.94	0.00	221.90
	MIN	-130.53	0.00	-234.29	-130.53	0.00	-315.03	-129.93	0.00	-229.99	-129.93	0.00	-314.19
	DISPERSION-LMAX	92.32	0.00	289.76	92.32	0.00	209.87	90.57	0.00	286.81	90.57	0.00	213.10
	MIN	-121.55	0.00	-293.54	-121.55	0.00	-334.43	-123.44	0.00	-278.62	-123.44	0.00	-341.19
300	Total Dead lWithout snow	-53.40	0.00	-30.14	-53.40	0.00	-253.20	-65.00	0.00	3.12	-65.00	0.00	-268.40
301	Particular Snow	-9.54	0.00	-1.26	-9.54	0.00	-41.09	-10.55	0.00	2.19	-10.55	0.00	-41.86
302	Live load Total MAX	142.65	0.00	444.62	142.65	0.00	326.41	140.80	0.00	440.37	140.80	0.00	330.73
	MIN	-191.27	0.00	-420.11	-191.27	0.00	-489.01	-192.00	0.00	-405.48	-192.00	0.00	-493.61
303	Sum total D+L+PP MAX	122.51	0.00	443.36	122.51	0.00	130.03	107.49	0.00	445.68	107.49	0.00	119.69
	MIN	-254.21	0.00	-451.51	-254.21	0.00	-783.31	-267.55	0.00	-403.29	-267.55	0.00	-803.87

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001021						1001022					
NODE		1021			2021			1022			2022		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-27.03	0.00	21.37	-27.03	0.00	-91.54	-18.39	0.00	13.88	-18.39	0.00	-62.92
3	Railing	-6.24	0.00	3.96	-6.24	0.00	-22.09	-4.72	0.00	3.48	-4.72	0.00	-16.26
5	Wheel guard	-61.75	0.00	39.21	-61.75	0.00	-218.71	-46.77	0.00	34.43	-46.77	0.00	-160.93
8	Steel weight	-34.93	0.00	39.19	-34.93	0.00	-106.70	-18.01	0.00	14.65	-18.01	0.00	-60.55
10	Medial strip	27.55	0.00	-15.21	27.55	0.00	99.85	22.01	0.00	-16.02	22.01	0.00	75.90
19	Snow	-13.47	0.00	10.39	-13.47	0.00	-45.89	-9.29	0.00	6.99	-9.29	0.00	-31.83
31	Miscellaneous	2.22	0.00	-1.21	2.22	0.00	8.06	1.78	0.00	-1.29	1.78	0.00	6.14
100	AASHTO-LRFD TRUCK-LOAD	121.49	0.00	401.85	121.49	0.00	269.78	113.53	0.00	363.99	113.53	0.00	251.76
	MIN	-182.26	0.00	-291.10	-182.26	0.00	-424.88	-169.59	0.00	-264.89	-169.59	0.00	-390.58
	TANDEM-LOAD	90.68	0.00	300.78	90.68	0.00	203.61	84.46	0.00	272.38	84.46	0.00	188.66
	MIN	-137.02	0.00	-214.09	-137.02	0.00	-319.21	-127.46	0.00	-194.56	-127.46	0.00	-293.74
	DISPERSION-LMAX	85.45	0.00	299.97	85.45	0.00	179.77	99.88	0.00	310.42	99.88	0.00	191.70
	MIN	-129.02	0.00	-262.90	-129.02	0.00	-325.64	-129.07	0.00	-287.04	-129.07	0.00	-291.92
110	Live load L-PICKUP 1	206.93	0.00	701.82	206.93	0.00	449.55	213.41	0.00	674.40	213.41	0.00	443.45
	MIN	-311.28	0.00	-553.99	-311.28	0.00	-750.52	-298.67	0.00	-551.93	-298.67	0.00	-682.50
	L-PICKUP 2	176.12	0.00	600.75	176.12	0.00	383.38	184.34	0.00	582.79	184.34	0.00	380.35
	MIN	-266.04	0.00	-476.98	-266.04	0.00	-644.85	-256.53	0.00	-481.60	-256.53	0.00	-585.66
	L-PICKUP 3	-306.30	0.00	-584.83	-306.30	0.00	-735.71	-288.07	0.00	-568.38	-288.07	0.00	-653.65
	Live load	206.93	0.00	701.82	206.93	0.00	449.55	213.41	0.00	674.40	213.41	0.00	443.45
	MIN	-311.28	0.00	-584.83	-311.28	0.00	-750.52	-298.67	0.00	-568.38	-298.67	0.00	-682.50
111	AASHTO Twin TWIN-PICKUP	208.91	0.00	699.13	208.91	0.00	435.05	214.04	0.00	650.21	214.04	0.00	439.35
	MIN	-306.30	0.00	-584.83	-306.30	0.00	-735.71	-288.07	0.00	-568.38	-288.07	0.00	-653.65
	MID-PICKUP	-306.30	0.00	-584.83	-306.30	0.00	-735.71	-288.07	0.00	-568.38	-288.07	0.00	-653.65
198	AASHTO FatigTRUCK-LOAD	58.72	0.00	257.28	58.72	0.00	196.71	53.75	0.00	217.45	53.75	0.00	172.37
	MIN	-149.77	0.00	-75.61	-149.77	0.00	-368.46	-130.58	0.00	-53.57	-130.58	0.00	-327.97
	TANDEM-LOAD	46.15	0.00	198.44	46.15	0.00	150.15	42.34	0.00	169.16	42.34	0.00	131.93
	MIN	-114.25	0.00	-51.88	-114.25	0.00	-278.84	-100.16	0.00	-45.32	-100.16	0.00	-249.21

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001021						1001022					
	1021			2021			1022			2022		
	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	38.87	0.00	190.67	38.87	0.00	113.09	55.44	0.00	194.09	55.44	0.00	123.78
MIN	-97.49	0.00	-121.63	-97.49	0.00	-247.69	-92.34	0.00	-145.14	-92.34	0.00	-211.55
199 AASHTO-LRFD TRUCK-LOAD MAX	146.68	0.00	476.84	146.68	0.00	303.62	137.95	0.00	412.04	137.95	0.00	296.47
MIN	-211.31	0.00	-386.92	-211.31	0.00	-491.82	-191.01	0.00	-344.50	-191.01	0.00	-434.36
TANDEM-LOAD MAX	90.68	0.00	300.78	90.68	0.00	203.61	84.46	0.00	272.38	84.46	0.00	188.66
MIN	-137.02	0.00	-214.09	-137.02	0.00	-319.21	-127.46	0.00	-194.56	-127.46	0.00	-293.74
DISPERSION-LMAX	85.45	0.00	299.97	85.45	0.00	179.77	99.88	0.00	310.42	99.88	0.00	191.70
MIN	-129.02	0.00	-262.90	-129.02	0.00	-325.64	-129.07	0.00	-287.04	-129.07	0.00	-291.92
300 Total Dead lWithout snow	-100.18	0.00	87.30	-100.18	0.00	-331.13	-64.10	0.00	49.13	-64.10	0.00	-218.62
301 Particular Snow	-13.47	0.00	10.39	-13.47	0.00	-45.89	-9.29	0.00	6.99	-9.29	0.00	-31.83
302 Live load Total MAX	134.51	0.00	456.18	134.51	0.00	292.21	138.72	0.00	438.36	138.72	0.00	288.24
MIN	-202.33	0.00	-380.14	-202.33	0.00	-487.84	-194.13	0.00	-369.45	-194.13	0.00	-443.62
303 Sum total D+L+PP MAX	61.21	0.00	553.87	61.21	0.00	2.85	106.94	0.00	494.48	106.94	0.00	124.27
MIN	-315.98	0.00	-369.76	-315.98	0.00	-864.86	-267.53	0.00	-362.46	-267.53	0.00	-694.07

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001023 1023	2023						1001024 1024						
		SHEAR		TORQUE		MOMENT		SHEAR		TORQUE		MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	1.24	0.00	-15.71	1.24	0.00	-10.54	19.73	0.00	-47.35	19.73	0.00	35.04	
3	Railing	0.26	0.00	-4.08	0.26	0.00	-2.99	6.07	0.00	-14.51	6.07	0.00	10.84	
5	Wheel guard	2.60	0.00	-40.43	2.60	0.00	-29.56	60.08	0.00	-143.65	60.08	0.00	107.30	
8	Steel weight	1.87	0.00	-14.84	1.87	0.00	-7.02	7.37	0.00	-18.38	7.37	0.00	12.41	
10	Medial strip	-1.16	0.00	19.22	-1.16	0.00	14.38	-30.48	0.00	72.77	-30.48	0.00	-54.55	
19	Snow	0.61	0.00	-7.95	0.61	0.00	-5.41	10.23	0.00	-24.55	10.23	0.00	18.19	
31	Miscellaneous	-0.09	0.00	1.55	-0.09	0.00	1.18	-2.47	0.00	5.89	-2.47	0.00	-4.42	
100	AASHTO-LRFD TRUCK-LOAD	MAX	110.98	0.00	281.98	110.98	0.00	247.12	110.70	0.00	249.54	110.70	0.00	211.56
		MIN	-140.92	0.00	-230.17	-140.92	0.00	-314.87	-110.14	0.00	-251.28	-110.14	0.00	-211.40
	TANDEM-LOAD	MAX	81.34	0.00	215.54	81.34	0.00	180.29	75.34	0.00	170.16	75.34	0.00	143.67
		MIN	-107.68	0.00	-170.73	-107.68	0.00	-240.25	-75.01	0.00	-171.64	-75.01	0.00	-144.51
	DISPERSION-LMAX	MAX	188.85	0.00	418.25	188.85	0.00	355.34	333.48	0.00	673.04	333.48	0.00	640.51
		MIN	-185.91	0.00	-446.07	-185.91	0.00	-370.42	-300.09	0.00	-753.22	-300.09	0.00	-581.38
110	Live load L-PICKUP 1	MAX	299.82	0.00	700.23	299.82	0.00	602.45	444.18	0.00	922.58	444.18	0.00	852.07
		MIN	-326.83	0.00	-676.23	-326.83	0.00	-685.30	-410.23	0.00	-1004.50	-410.23	0.00	-792.77
	L-PICKUP 2	MAX	270.18	0.00	633.79	270.18	0.00	535.63	408.82	0.00	843.20	408.82	0.00	784.18
		MIN	-293.59	0.00	-616.80	-293.59	0.00	-610.67	-375.10	0.00	-924.86	-375.10	0.00	-725.89
	L-PICKUP 3	MAX	-307.98	0.00	-688.14	-307.98	0.00	-648.63	-449.33	0.00	-1078.38	-449.33	0.00	-863.67
		MIN	299.82	0.00	700.23	299.82	0.00	602.45	444.18	0.00	922.58	444.18	0.00	852.07
	Live load	MAX	299.82	0.00	700.23	299.82	0.00	602.45	444.18	0.00	922.58	444.18	0.00	852.07
		MIN	-326.83	0.00	-688.14	-326.83	0.00	-685.30	-449.33	0.00	-1078.38	-449.33	0.00	-863.67
111	AASHTO Twin TWIN-PICKUP	MAX	311.91	0.00	656.24	311.91	0.00	626.96	477.12	0.00	1014.52	477.12	0.00	915.86
		MIN	-307.98	0.00	-688.14	-307.98	0.00	-648.63	-449.33	0.00	-1078.38	-449.33	0.00	-863.67
	MID-PICKUP	-307.98	0.00	-688.14	-307.98	0.00	-648.63	-449.33	0.00	-1078.38	-449.33	0.00	-863.67	
198	AASHTO FatigTRUCK-LOAD	MAX	44.71	0.00	110.90	44.71	0.00	115.08	68.95	0.00	96.26	68.95	0.00	128.98
		MIN	-69.74	0.00	-103.09	-69.74	0.00	-180.41	-43.38	0.00	-159.01	-43.38	0.00	-84.94
	TANDEM-LOAD	MAX	30.59	0.00	95.19	30.59	0.00	88.11	46.91	0.00	65.33	46.91	0.00	87.36
		MIN	-57.41	0.00	-71.16	-57.41	0.00	-144.62	-29.54	0.00	-108.60	-29.54	0.00	-58.06

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001023			1001024			1001024			1001024		
NODE		1023			2023			1024			2024		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	118.99	0.00	217.99	118.99	0.00	223.86	212.92	0.00	318.93	212.92	0.00	401.88
	MIN	-101.55	0.00	-279.41	-101.55	0.00	-209.15	-143.24	0.00	-487.48	-143.24	0.00	-281.57
199	AASHTO-LRFD TRUCK-LOAD MAX	157.72	0.00	310.90	157.72	0.00	341.29	196.66	0.00	454.21	196.66	0.00	377.11
	MIN	-156.29	0.00	-318.53	-156.29	0.00	-350.28	-199.16	0.00	-444.98	-199.16	0.00	-378.25
	TANDEM-LOAD MAX	81.34	0.00	215.54	81.34	0.00	180.29	75.34	0.00	170.16	75.34	0.00	143.67
	MIN	-107.68	0.00	-170.73	-107.68	0.00	-240.25	-75.01	0.00	-171.64	-75.01	0.00	-144.51
	DISPERSION-LMAX	188.85	0.00	418.25	188.85	0.00	355.34	333.48	0.00	673.04	333.48	0.00	640.51
	MIN	-185.91	0.00	-446.07	-185.91	0.00	-370.42	-300.09	0.00	-753.22	-300.09	0.00	-581.38
300	Total Dead lWithout snow	4.73	0.00	-54.30	4.73	0.00	-34.55	60.30	0.00	-145.22	60.30	0.00	106.63
301	Particular Snow	0.61	0.00	-7.95	0.61	0.00	-5.41	10.23	0.00	-24.55	10.23	0.00	18.19
302	Live load Total MAX	194.89	0.00	455.15	194.89	0.00	391.60	288.72	0.00	599.68	288.72	0.00	553.84
	MIN	-212.44	0.00	-447.29	-212.44	0.00	-445.44	-292.06	0.00	-700.94	-292.06	0.00	-561.38
303	Sum total D+L+PP MAX	200.22	0.00	447.20	200.22	0.00	386.18	359.24	0.00	575.13	359.24	0.00	678.66
	MIN	-211.83	0.00	-509.53	-211.83	0.00	-485.41	-281.83	0.00	-870.72	-281.83	0.00	-543.19

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001025						1001026					
NODE		1025			2025			1026			2026		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	3.83	0.00	-18.28	3.83	0.00	-2.28	0.42	0.00	-20.24	0.42	0.00	-18.47
3	Railing	0.33	0.00	-4.18	0.33	0.00	-2.80	-4.18	0.00	2.50	-4.18	0.00	-14.95
5	Wheel guard	3.26	0.00	-41.35	3.26	0.00	-27.75	-41.37	0.00	24.80	-41.37	0.00	-147.99
8	Steel weight	11.58	0.00	-24.11	11.58	0.00	24.24	51.61	0.00	-111.83	51.61	0.00	103.73
10	Medial strip	0.21	0.00	17.70	0.21	0.00	18.56	29.00	0.00	-28.96	29.00	0.00	92.18
19	Snow	1.79	0.00	-9.16	1.79	0.00	-1.68	-0.91	0.00	-8.23	-0.91	0.00	-12.02
31	Miscellaneous	-0.00	0.00	1.48	-0.00	0.00	1.46	2.36	0.00	-2.36	2.36	0.00	7.50
100	AASHTO-LRFD TRUCK-LOAD	111.37	0.00	282.64	111.37	0.00	254.15	121.15	0.00	353.47	121.15	0.00	268.26
	MIN	-143.18	0.00	-230.50	-143.18	0.00	-319.60	-166.85	0.00	-279.30	-166.85	0.00	-384.78
	TANDEM-LOAD	81.35	0.00	216.84	81.35	0.00	184.27	89.08	0.00	267.94	89.08	0.00	197.79
	MIN	-109.41	0.00	-170.48	-109.41	0.00	-243.99	-126.45	0.00	-203.46	-126.45	0.00	-291.87
	DISPERSION-LMAX	188.64	0.00	413.91	188.64	0.00	354.33	125.17	0.00	286.79	125.17	0.00	256.32
	MIN	-181.48	0.00	-446.05	-181.48	0.00	-355.97	-123.42	0.00	-319.40	-123.42	0.00	-282.17
110	Live load L-PICKUP 1	300.01	0.00	696.55	300.01	0.00	608.48	246.31	0.00	640.26	246.31	0.00	524.58
	MIN	-324.66	0.00	-676.55	-324.66	0.00	-675.56	-290.27	0.00	-598.71	-290.27	0.00	-666.95
	L-PICKUP 2	269.99	0.00	630.75	269.99	0.00	538.60	214.25	0.00	554.73	214.25	0.00	454.11
	MIN	-290.88	0.00	-616.53	-290.88	0.00	-599.96	-249.87	0.00	-522.86	-249.87	0.00	-574.04
	L-PICKUP 3	-308.06	0.00	-687.93	-308.06	0.00	-643.67	-271.48	0.00	-628.85	-271.48	0.00	-620.45
	Live load	300.01	0.00	696.55	300.01	0.00	608.48	246.31	0.00	640.26	246.31	0.00	524.58
	MIN	-324.66	0.00	-687.93	-324.66	0.00	-675.56	-290.27	0.00	-628.85	-290.27	0.00	-666.95
111	AASHTO Twin TWIN-PICKUP	313.77	0.00	654.04	313.77	0.00	640.59	254.51	0.00	602.54	254.51	0.00	544.63
	MIN	-308.06	0.00	-687.93	-308.06	0.00	-643.67	-271.48	0.00	-628.85	-271.48	0.00	-620.45
	MID-PICKUP	-308.06	0.00	-687.93	-308.06	0.00	-643.67	-271.48	0.00	-628.85	-271.48	0.00	-620.45
198	AASHTO FatigTRUCK-LOAD	43.64	0.00	107.77	43.64	0.00	117.95	54.24	0.00	219.30	54.24	0.00	172.44
	MIN	-68.70	0.00	-99.46	-68.70	0.00	-179.19	-131.68	0.00	-54.12	-131.68	0.00	-330.71
	TANDEM-LOAD	31.32	0.00	93.69	31.32	0.00	89.50	42.25	0.00	172.02	42.25	0.00	130.99
	MIN	-56.97	0.00	-68.71	-56.97	0.00	-144.26	-101.73	0.00	-45.47	-101.73	0.00	-252.90

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001025			2025			1001026			2026		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	118.12	0.00	214.94	118.12	0.00	221.35	61.35	0.00	183.62	61.35	0.00	141.71
	MIN	-99.10	0.00	-278.38	-99.10	0.00	-202.30	-87.69	0.00	-152.90	-87.69	0.00	-199.12
199	AASHTO-LRFD TRUCK-LOAD MAX	159.99	0.00	312.80	159.99	0.00	357.43	157.62	0.00	382.70	157.62	0.00	348.82
	MIN	-160.81	0.00	-318.31	-160.81	0.00	-359.22	-178.23	0.00	-379.32	-178.23	0.00	-407.21
	TANDEM-LOAD MAX	81.35	0.00	216.84	81.35	0.00	184.27	89.08	0.00	267.94	89.08	0.00	197.79
	MIN	-109.41	0.00	-170.48	-109.41	0.00	-243.99	-126.45	0.00	-203.46	-126.45	0.00	-291.87
	DISPERSION-LMAX	188.64	0.00	413.91	188.64	0.00	354.33	125.17	0.00	286.79	125.17	0.00	256.32
	MIN	-181.48	0.00	-446.05	-181.48	0.00	-355.97	-123.42	0.00	-319.40	-123.42	0.00	-282.17
300	Total Dead lWithout snow	19.20	0.00	-68.75	19.20	0.00	11.43	37.85	0.00	-136.09	37.85	0.00	22.01
301	Particular Snow	1.79	0.00	-9.16	1.79	0.00	-1.68	-0.91	0.00	-8.23	-0.91	0.00	-12.02
302	Live load Total MAX	195.00	0.00	452.76	195.00	0.00	395.51	160.10	0.00	416.17	160.10	0.00	340.98
	MIN	-211.03	0.00	-447.15	-211.03	0.00	-439.12	-188.68	0.00	-408.76	-188.68	0.00	-433.52
303	Sum total D+L+PP MAX	215.99	0.00	443.60	215.99	0.00	405.26	197.05	0.00	396.69	197.05	0.00	350.97
	MIN	-209.24	0.00	-525.06	-209.24	0.00	-440.80	-189.58	0.00	-553.08	-189.58	0.00	-445.53

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001027						1001028					
NODE		1027			2027			1028			2028		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-25.54	0.00	16.35	-25.54	0.00	-90.31	-45.36	0.00	44.89	-45.36	0.00	-144.58
3	Railing	-6.18	0.00	3.83	-6.18	0.00	-21.97	-6.76	0.00	3.33	-6.76	0.00	-24.92
5	Wheel guard	-61.16	0.00	37.95	-61.16	0.00	-217.52	-66.96	0.00	32.94	-66.96	0.00	-246.74
8	Steel weight	-29.58	0.00	20.39	-29.58	0.00	-103.17	-102.84	0.00	141.98	-102.84	0.00	-287.58
10	Medial strip	27.30	0.00	-16.11	27.30	0.00	97.94	20.16	0.00	3.43	20.16	0.00	87.64
19	Snow	-12.86	0.00	8.25	-12.86	0.00	-45.48	-21.69	0.00	20.61	-21.69	0.00	-70.00
31	Miscellaneous	2.26	0.00	-1.38	2.26	0.00	8.05	1.65	0.00	0.25	1.65	0.00	7.14
100	AASHTO-LRFD TRUCK-LOAD	104.84	0.00	429.02	104.84	0.00	257.54	95.82	0.00	454.61	95.82	0.00	230.90
	MIN	-195.93	0.00	-271.72	-195.93	0.00	-490.18	-210.60	0.00	-259.36	-210.60	0.00	-508.01
	TANDEM-LOAD MAX	78.38	0.00	322.83	78.38	0.00	191.53	72.22	0.00	340.04	72.22	0.00	173.45
	MIN	-148.45	0.00	-199.16	-148.45	0.00	-367.44	-158.21	0.00	-191.61	-158.21	0.00	-378.92
	DISPERSION-LMAX	97.13	0.00	309.88	97.13	0.00	247.70	76.53	0.00	331.80	76.53	0.00	197.71
	MIN	-138.25	0.00	-281.02	-138.25	0.00	-393.11	-150.60	0.00	-255.56	-150.60	0.00	-432.72
110	Live load L-PICKUP 1	201.97	0.00	738.90	201.97	0.00	505.25	172.34	0.00	786.41	172.34	0.00	428.61
	MIN	-334.18	0.00	-552.74	-334.18	0.00	-883.28	-361.19	0.00	-514.92	-361.19	0.00	-940.72
	L-PICKUP 2 MAX	175.51	0.00	632.71	175.51	0.00	439.23	148.74	0.00	671.84	148.74	0.00	371.17
	MIN	-286.70	0.00	-480.18	-286.70	0.00	-760.54	-308.81	0.00	-447.17	-308.81	0.00	-811.64
	L-PICKUP 3	-316.61	0.00	-589.15	-316.61	0.00	-867.07	-352.70	0.00	-541.84	-352.70	0.00	-941.34
	Live load MAX	201.97	0.00	738.90	201.97	0.00	505.25	172.34	0.00	786.41	172.34	0.00	428.61
	MIN	-334.18	0.00	-589.15	-334.18	0.00	-883.28	-361.19	0.00	-541.84	-361.19	0.00	-941.34
111	AASHTO Twin TWIN-PICKUP	204.61	0.00	717.05	204.61	0.00	509.27	169.90	0.00	775.88	169.90	0.00	416.31
	MIN	-316.61	0.00	-589.15	-316.61	0.00	-867.07	-352.70	0.00	-541.84	-352.70	0.00	-941.34
	MID-PICKUP	-316.61	0.00	-589.15	-316.61	0.00	-867.07	-352.70	0.00	-541.84	-352.70	0.00	-941.34
198	AASHTO FatigTRUCK-LOAD	50.39	0.00	278.45	50.39	0.00	176.45	48.51	0.00	292.16	48.51	0.00	176.76
	MIN	-160.37	0.00	-72.44	-160.37	0.00	-391.73	-165.53	0.00	-88.00	-165.53	0.00	-399.28
	TANDEM-LOAD MAX	39.91	0.00	214.77	39.91	0.00	134.81	38.66	0.00	224.18	38.66	0.00	135.11
	MIN	-122.70	0.00	-49.72	-122.70	0.00	-297.83	-126.05	0.00	-60.83	-126.05	0.00	-302.33

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001027						1001028					
NODE		1027			2027			1028			2028		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	41.69	0.00	193.02	41.69	0.00	119.90	30.84	0.00	198.74	30.84	0.00	106.33
	MIN	-98.91	0.00	-129.09	-98.91	0.00	-252.80	-103.90	0.00	-125.22	-103.90	0.00	-269.53
199	AASHTO-LRFD TRUCK-LOAD MAX	130.22	0.00	486.84	130.22	0.00	318.15	112.25	0.00	530.29	112.25	0.00	264.85
	MIN	-213.54	0.00	-373.60	-213.54	0.00	-570.31	-241.29	0.00	-346.49	-241.29	0.00	-613.21
	TANDEM-LOAD MAX	78.38	0.00	322.83	78.38	0.00	191.53	72.22	0.00	340.04	72.22	0.00	173.45
	MIN	-148.45	0.00	-199.16	-148.45	0.00	-367.44	-158.21	0.00	-191.61	-158.21	0.00	-378.92
	DISPERSION-LMAX	97.13	0.00	309.88	97.13	0.00	247.70	76.53	0.00	331.80	76.53	0.00	197.71
	MIN	-138.25	0.00	-281.02	-138.25	0.00	-393.11	-150.60	0.00	-255.56	-150.60	0.00	-432.72
300	Total Dead lWithout snow	-92.90	0.00	61.04	-92.90	0.00	-326.99	-200.11	0.00	226.83	-200.11	0.00	-609.05
301	Particular Snow	-12.86	0.00	8.25	-12.86	0.00	-45.48	-21.69	0.00	20.61	-21.69	0.00	-70.00
302	Live load Total MAX	131.28	0.00	480.29	131.28	0.00	328.41	112.02	0.00	511.17	112.02	0.00	278.60
	MIN	-217.22	0.00	-382.95	-217.22	0.00	-574.13	-234.78	0.00	-352.20	-234.78	0.00	-611.87
303	Sum total D+L+PP MAX	64.90	0.00	549.58	64.90	0.00	54.47	-76.18	0.00	758.60	-76.18	0.00	-316.87
	MIN	-322.98	0.00	-374.70	-322.98	0.00	-946.60	-456.58	0.00	-210.42	-456.58	0.00	-1290.92

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001029						1001030					
		1029			2029			1030			2030		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-27.01	0.00	7.47	-27.01	0.00	-105.33	-21.39	0.00	-0.43	-21.39	0.00	-89.79
3	Railing	-6.15	0.00	1.46	-6.15	0.00	-24.24	-5.97	0.00	1.03	-5.97	0.00	-23.92
5	Wheel guard	-60.92	0.00	14.49	-60.92	0.00	-239.96	-59.12	0.00	10.15	-59.12	0.00	-236.81
8	Steel weight	-35.83	0.00	12.76	-35.83	0.00	-136.90	-15.28	0.00	-13.97	-15.28	0.00	-77.78
10	Medial strip	27.13	0.00	-6.29	27.13	0.00	107.02	29.06	0.00	-7.59	29.06	0.00	113.78
19	Snow	-13.43	0.00	3.62	-13.43	0.00	-52.47	-10.92	0.00	0.06	-10.92	0.00	-45.57
31	Miscellaneous	2.17	0.00	-0.47	2.17	0.00	8.61	2.34	0.00	-0.59	2.34	0.00	9.16
100	AASHTO-LRFD TRUCK-LOAD	118.75	0.00	417.21	118.75	0.00	261.19	121.26	0.00	407.95	121.26	0.00	272.95
	MIN	-187.63	0.00	-304.65	-187.63	0.00	-446.46	-181.05	0.00	-308.68	-181.05	0.00	-433.69
	TANDEM-LOAD	88.02	0.00	312.65	88.02	0.00	194.75	89.89	0.00	305.27	89.89	0.00	203.72
	MIN	-141.08	0.00	-223.44	-141.08	0.00	-335.10	-135.97	0.00	-226.21	-135.97	0.00	-325.48
	DISPERSION-LMAX	91.95	0.00	308.87	91.95	0.00	205.90	93.99	0.00	300.58	93.99	0.00	213.76
	MIN	-135.92	0.00	-293.87	-135.92	0.00	-373.99	-128.70	0.00	-298.66	-128.70	0.00	-355.78
110	Live load L-PICKUP 1	210.69	0.00	726.08	210.69	0.00	467.09	215.24	0.00	708.53	215.24	0.00	486.71
	MIN	-323.55	0.00	-598.52	-323.55	0.00	-820.44	-309.75	0.00	-607.35	-309.75	0.00	-789.47
	L-PICKUP 2	179.97	0.00	621.52	179.97	0.00	400.65	183.88	0.00	605.85	183.88	0.00	417.48
	MIN	-277.00	0.00	-517.31	-277.00	0.00	-709.08	-264.67	0.00	-524.87	-264.67	0.00	-681.26
	L-PICKUP 3	-314.79	0.00	-637.82	-314.79	0.00	-807.40	-301.83	0.00	-645.04	-301.83	0.00	-775.13
	Live load	210.69	0.00	726.08	210.69	0.00	467.09	215.24	0.00	708.53	215.24	0.00	486.71
	MIN	-323.55	0.00	-637.82	-323.55	0.00	-820.44	-309.75	0.00	-645.04	-309.75	0.00	-789.47
111	AASHTO Twin TWIN-PICKUP	216.89	0.00	714.91	216.89	0.00	463.98	221.88	0.00	698.38	221.88	0.00	487.44
	MIN	-314.79	0.00	-637.82	-314.79	0.00	-807.40	-301.83	0.00	-645.04	-301.83	0.00	-775.13
	MID-PICKUP	-314.79	0.00	-637.82	-314.79	0.00	-807.40	-301.83	0.00	-645.04	-301.83	0.00	-775.13
198	AASHTO FatigTRUCK-LOAD	56.17	0.00	279.83	56.17	0.00	197.05	57.05	0.00	278.65	57.05	0.00	200.87
	MIN	-156.19	0.00	-106.02	-156.19	0.00	-372.59	-153.87	0.00	-107.94	-153.87	0.00	-364.07
	TANDEM-LOAD	44.04	0.00	214.61	44.04	0.00	149.16	44.76	0.00	213.03	44.76	0.00	152.00
	MIN	-119.04	0.00	-73.03	-119.04	0.00	-282.61	-117.06	0.00	-74.28	-117.06	0.00	-275.93

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001029						1001030					
NODE		1029			2029			1030			2030		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	35.47	0.00	186.75	35.47	0.00	122.58	37.05	0.00	184.80	37.05	0.00	127.59
	MIN	-96.61	0.00	-141.25	-96.61	0.00	-248.94	-94.56	0.00	-148.20	-94.56	0.00	-242.35
199	AASHTO-LRFD TRUCK-LOAD MAX	149.04	0.00	485.48	149.04	0.00	309.64	152.55	0.00	475.40	152.55	0.00	327.83
	MIN	-213.85	0.00	-414.82	-213.85	0.00	-523.12	-206.67	0.00	-418.05	-206.67	0.00	-505.47
	TANDEM-LOAD MAX	88.02	0.00	312.65	88.02	0.00	194.75	89.89	0.00	305.27	89.89	0.00	203.72
	MIN	-141.08	0.00	-223.44	-141.08	0.00	-335.10	-135.97	0.00	-226.21	-135.97	0.00	-325.48
	DISPERSION-LMAX	91.95	0.00	308.87	91.95	0.00	205.90	93.99	0.00	300.58	93.99	0.00	213.76
	MIN	-135.92	0.00	-293.87	-135.92	0.00	-373.99	-128.70	0.00	-298.66	-128.70	0.00	-355.78
300	Total Dead lWithout snow	-100.61	0.00	29.44	-100.61	0.00	-390.80	-70.37	0.00	-11.41	-70.37	0.00	-305.36
301	Particular Snow	-13.43	0.00	3.62	-13.43	0.00	-52.47	-10.92	0.00	0.06	-10.92	0.00	-45.57
302	Live load Total MAX	136.95	0.00	471.95	136.95	0.00	303.61	139.91	0.00	460.54	139.91	0.00	316.36
	MIN	-210.31	0.00	-414.58	-210.31	0.00	-533.29	-201.34	0.00	-419.28	-201.34	0.00	-513.16
303	Sum total D+L+PP MAX	64.00	0.00	505.00	64.00	0.00	-48.58	100.59	0.00	460.60	100.59	0.00	60.35
	MIN	-324.34	0.00	-410.96	-324.34	0.00	-976.56	-282.63	0.00	-430.63	-282.63	0.00	-864.08

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001031						1001032							
		1031			2031			1032			2032				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-19.08	0.00	-1.01	-19.08	0.00	-80.70	-19.17	0.00	3.36	-19.17	0.00	-76.73		
3	Railing	-5.92	0.00	1.24	-5.92	0.00	-23.48	-5.98	0.00	2.14	-5.98	0.00	-22.84		
5	Wheel guard	-58.58	0.00	12.26	-58.58	0.00	-232.43	-59.20	0.00	21.18	-59.20	0.00	-226.08		
8	Steel weight	-6.57	0.00	-18.88	-6.57	0.00	-46.30	-6.21	0.00	-11.95	-6.21	0.00	-37.87		
10	Medial strip	29.94	0.00	-9.22	29.94	0.00	115.83	30.29	0.00	-12.88	30.29	0.00	113.64		
19	Snow	-9.90	0.00	-0.13	-9.90	0.00	-41.48	-9.96	0.00	2.02	-9.96	0.00	-39.58		
31	Miscellaneous	2.41	0.00	-0.74	2.41	0.00	9.34	2.44	0.00	-1.04	2.44	0.00	9.17		
100	AASHTO-LRFD TRUCK-LOAD	MAX	123.04	0.00	398.49	123.04	0.00	280.79	126.24	0.00	395.17	126.24	0.00	292.82	
		MIN	-174.10	0.00	-308.76	-174.10	0.00	-420.77	-172.08	0.00	-313.71	-172.08	0.00	-417.46	
		TANDEM-LOAD	MAX	91.46	0.00	298.55	91.46	0.00	210.24	93.85	0.00	296.27	93.85	0.00	218.95
		MIN	-131.21	0.00	-226.62	-131.21	0.00	-316.75	-129.75	0.00	-230.39	-129.75	0.00	-314.03	
		DISPERSION-L	MAX	91.15	0.00	292.20	91.15	0.00	209.86	93.78	0.00	295.40	93.78	0.00	220.27
		MIN	-121.98	0.00	-291.40	-121.98	0.00	-336.64	-124.57	0.00	-287.78	-124.57	0.00	-340.15	
110	Live load	L-PICKUP 1	MAX	214.19	0.00	690.69	214.19	0.00	490.65	220.02	0.00	690.57	220.02	0.00	513.10
		MIN	-296.09	0.00	-600.16	-296.09	0.00	-757.41	-296.65	0.00	-601.49	-296.65	0.00	-757.62	
		L-PICKUP 2	MAX	182.61	0.00	590.75	182.61	0.00	420.10	187.63	0.00	591.66	187.63	0.00	439.22
		MIN	-253.19	0.00	-518.02	-253.19	0.00	-653.39	-254.32	0.00	-518.17	-254.32	0.00	-654.19	
		L-PICKUP 3	MAX	-287.23	0.00	-635.37	-287.23	0.00	-735.61	-289.45	0.00	-637.16	-289.45	0.00	-736.79
		MIN	214.19	0.00	690.69	214.19	0.00	490.65	220.02	0.00	690.57	220.02	0.00	513.10	
111	AASHTO Twin	TWIN-PICKUP	MAX	219.34	0.00	681.86	219.34	0.00	488.56	224.05	0.00	687.20	224.05	0.00	512.61
		MIN	-287.23	0.00	-635.37	-287.23	0.00	-735.61	-289.45	0.00	-637.16	-289.45	0.00	-736.79	
		MID-PICKUP	MAX	-287.23	0.00	-635.37	-287.23	0.00	-735.61	-289.45	0.00	-637.16	-289.45	0.00	-736.79
198	AASHTO Fatig	TRUCK-LOAD	MAX	58.49	0.00	274.17	58.49	0.00	204.72	60.71	0.00	264.82	60.71	0.00	208.33
		MIN	-151.33	0.00	-105.98	-151.33	0.00	-357.95	-147.84	0.00	-98.32	-147.84	0.00	-352.75	
		TANDEM-LOAD	MAX	45.93	0.00	210.03	45.93	0.00	155.09	47.58	0.00	203.69	47.58	0.00	157.89
		MIN	-115.32	0.00	-72.95	-115.32	0.00	-271.67	-113.02	0.00	-67.76	-113.02	0.00	-268.40	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001031						1001032					
		1031			2031			1032			2032		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	36.85	0.00	183.83	36.85	0.00	127.96	37.59	0.00	185.83	37.59	0.00	129.91
	MIN	-93.05	0.00	-145.06	-93.05	0.00	-236.11	-93.26	0.00	-135.84	-93.26	0.00	-231.45
199	AASHTO-LRFD TRUCK-LOAD MAX	152.56	0.00	465.42	152.56	0.00	332.99	155.16	0.00	468.15	155.16	0.00	349.29
	MIN	-197.15	0.00	-414.57	-197.15	0.00	-480.70	-197.04	0.00	-420.17	-197.04	0.00	-478.50
	TANDEM-LOAD MAX	91.46	0.00	298.55	91.46	0.00	210.24	93.85	0.00	296.27	93.85	0.00	218.95
	MIN	-131.21	0.00	-226.62	-131.21	0.00	-316.75	-129.75	0.00	-230.39	-129.75	0.00	-314.03
	DISPERSION-LMAX	91.15	0.00	292.20	91.15	0.00	209.86	93.78	0.00	295.40	93.78	0.00	220.27
	MIN	-121.98	0.00	-291.40	-121.98	0.00	-336.64	-124.57	0.00	-287.78	-124.57	0.00	-340.15
300	Total Dead lWithout snow	-57.79	0.00	-16.35	-57.79	0.00	-257.74	-57.82	0.00	0.80	-57.82	0.00	-240.72
301	Particular Snow	-9.90	0.00	-0.13	-9.90	0.00	-41.48	-9.96	0.00	2.02	-9.96	0.00	-39.58
302	Live load Total MAX	139.23	0.00	448.95	139.23	0.00	318.93	143.01	0.00	448.87	143.01	0.00	333.51
	MIN	-192.46	0.00	-412.99	-192.46	0.00	-492.31	-192.82	0.00	-414.15	-192.82	0.00	-492.45
303	Sum total D+L+PP MAX	113.31	0.00	448.82	113.31	0.00	115.38	118.14	0.00	451.69	118.14	0.00	153.28
	MIN	-260.15	0.00	-429.47	-260.15	0.00	-791.53	-260.60	0.00	-412.13	-260.60	0.00	-772.74

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001033						1001034						
NODE		1033			2033			1034			2034			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-24.00	0.00	19.07	-24.00	0.00	-81.19	-11.06	0.00	3.22	-11.06	0.00	-42.99	
3	Railing	-6.12	0.00	3.96	-6.12	0.00	-21.61	-4.42	0.00	3.15	-4.42	0.00	-15.30	
5	Wheel guard	-60.61	0.00	39.21	-60.61	0.00	-213.95	-43.72	0.00	31.19	-43.72	0.00	-151.43	
8	Steel weight	-24.04	0.00	29.88	-24.04	0.00	-70.53	7.96	0.00	-24.57	7.96	0.00	8.66	
10	Medial strip	28.42	0.00	-16.26	28.42	0.00	102.43	24.19	0.00	-19.99	24.19	0.00	81.03	
19	Snow	-12.12	0.00	9.40	-12.12	0.00	-41.23	-5.99	0.00	2.22	-5.99	0.00	-22.81	
31	Miscellaneous	2.30	0.00	-1.32	2.30	0.00	8.27	1.95	0.00	-1.61	1.95	0.00	6.54	
100	AASHTO-LRFD TRUCK-LOAD	MAX	116.73	0.00	410.58	116.73	0.00	259.94	112.74	0.00	365.94	112.74	0.00	250.31
		MIN	-178.11	0.00	-294.56	-178.11	0.00	-422.78	-160.92	0.00	-279.13	-160.92	0.00	-378.42
	TANDEM-LOAD	MAX	87.22	0.00	306.76	87.22	0.00	196.46	83.54	0.00	273.24	83.54	0.00	188.64
		MIN	-134.05	0.00	-216.09	-134.05	0.00	-318.85	-121.21	0.00	-204.08	-121.21	0.00	-285.95
	DISPERSION-LMAX	MAX	87.09	0.00	311.23	87.09	0.00	187.98	106.97	0.00	313.00	106.97	0.00	205.89
		MIN	-125.67	0.00	-277.91	-125.67	0.00	-316.98	-124.19	0.00	-307.04	-124.19	0.00	-273.19
110	Live load L-PICKUP 1	MAX	203.82	0.00	721.81	203.82	0.00	447.92	219.72	0.00	678.94	219.72	0.00	456.20
		MIN	-303.78	0.00	-572.46	-303.78	0.00	-739.76	-285.10	0.00	-586.16	-285.10	0.00	-651.62
	L-PICKUP 2	MAX	174.31	0.00	617.99	174.31	0.00	384.44	190.52	0.00	586.24	190.52	0.00	394.53
		MIN	-259.72	0.00	-494.00	-259.72	0.00	-635.83	-245.39	0.00	-511.11	-245.39	0.00	-559.14
	L-PICKUP 3	MAX	-294.99	0.00	-608.42	-294.99	0.00	-716.94	-272.15	0.00	-612.78	-272.15	0.00	-615.68
		MIN	203.82	0.00	721.81	203.82	0.00	447.92	219.72	0.00	678.94	219.72	0.00	456.20
	Live load	MAX	203.82	0.00	721.81	203.82	0.00	447.92	219.72	0.00	678.94	219.72	0.00	456.20
		MIN	-303.78	0.00	-608.42	-303.78	0.00	-739.76	-285.10	0.00	-612.78	-285.10	0.00	-651.62
111	AASHTO Twin TWIN-PICKUP	MAX	205.69	0.00	720.09	205.69	0.00	434.29	221.10	0.00	660.74	221.10	0.00	449.76
		MIN	-294.99	0.00	-608.42	-294.99	0.00	-716.94	-272.15	0.00	-612.78	-272.15	0.00	-615.68
	MID-PICKUP	MAX	-294.99	0.00	-608.42	-294.99	0.00	-716.94	-272.15	0.00	-612.78	-272.15	0.00	-615.68
		MIN	-294.99	0.00	-608.42	-294.99	0.00	-716.94	-272.15	0.00	-612.78	-272.15	0.00	-615.68
198	AASHTO FatigTRUCK-LOAD	MAX	57.64	0.00	261.16	57.64	0.00	195.35	54.15	0.00	217.25	54.15	0.00	173.38
		MIN	-148.41	0.00	-75.51	-148.41	0.00	-359.16	-126.43	0.00	-54.05	-126.43	0.00	-310.87
	TANDEM-LOAD	MAX	45.29	0.00	200.98	45.29	0.00	148.84	42.47	0.00	168.70	42.47	0.00	132.20
		MIN	-113.37	0.00	-51.80	-113.37	0.00	-272.68	-97.12	0.00	-45.53	-97.12	0.00	-236.98

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001033						1001034					
NODE		1033			2033			1034			2034		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	41.08	0.00	197.40	41.08	0.00	115.44	59.07	0.00	197.04	59.07	0.00	128.03
	MIN	-96.44	0.00	-129.40	-96.44	0.00	-226.90	-89.44	0.00	-153.26	-89.44	0.00	-192.59
199	AASHTO-LRFD TRUCK-LOAD MAX	141.45	0.00	488.87	141.45	0.00	294.56	138.70	0.00	421.16	138.70	0.00	293.84
	MIN	-202.10	0.00	-398.11	-202.10	0.00	-479.62	-178.20	0.00	-373.83	-178.20	0.00	-410.90
	TANDEM-LOAD MAX	87.22	0.00	306.76	87.22	0.00	196.46	83.54	0.00	273.24	83.54	0.00	188.64
	MIN	-134.05	0.00	-216.09	-134.05	0.00	-318.85	-121.21	0.00	-204.08	-121.21	0.00	-285.95
	DISPERSION-LMAX	87.09	0.00	311.23	87.09	0.00	187.98	106.97	0.00	313.00	106.97	0.00	205.89
	MIN	-125.67	0.00	-277.91	-125.67	0.00	-316.98	-124.19	0.00	-307.04	-124.19	0.00	-273.19
300	Total Dead lWithout snow	-84.06	0.00	74.53	-84.06	0.00	-276.58	-25.11	0.00	-8.61	-25.11	0.00	-113.49
301	Particular Snow	-12.12	0.00	9.40	-12.12	0.00	-41.23	-5.99	0.00	2.22	-5.99	0.00	-22.81
302	Live load Total MAX	132.49	0.00	469.18	132.49	0.00	291.15	142.82	0.00	441.31	142.82	0.00	296.53
	MIN	-197.46	0.00	-395.47	-197.46	0.00	-480.85	-185.32	0.00	-398.31	-185.32	0.00	-423.55
303	Sum total D+L+PP MAX	76.05	0.00	553.10	76.05	0.00	60.68	136.82	0.00	443.54	136.82	0.00	249.19
	MIN	-293.63	0.00	-386.07	-293.63	0.00	-798.65	-216.42	0.00	-404.69	-216.42	0.00	-559.85

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001035						1001036					
NODE		1035			2035			1036			2036		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.22	0.00	-11.75	0.22	0.00	-10.81	17.02	0.00	-41.85	17.02	0.00	29.23
3	Railing	0.26	0.00	-4.04	0.26	0.00	-2.97	5.92	0.00	-14.47	5.92	0.00	10.26
5	Wheel guard	2.54	0.00	-40.01	2.54	0.00	-29.40	58.63	0.00	-143.29	58.63	0.00	101.62
8	Steel weight	-2.15	0.00	0.71	-2.15	0.00	-8.29	-1.84	0.00	3.45	-1.84	0.00	-4.25
10	Medial strip	-1.65	0.00	21.18	-1.65	0.00	14.29	-31.16	0.00	76.00	-31.16	0.00	-54.16
19	Snow	0.16	0.00	-6.20	0.16	0.00	-5.51	9.00	0.00	-22.10	9.00	0.00	15.48
31	Miscellaneous	-0.13	0.00	1.71	-0.13	0.00	1.15	-2.51	0.00	6.13	-2.51	0.00	-4.37
100	AASHTO-LRFD TRUCK-LOAD	110.65	0.00	293.87	110.65	0.00	237.99	108.34	0.00	250.02	108.34	0.00	200.98
	MIN	-140.52	0.00	-242.23	-140.52	0.00	-300.40	-107.65	0.00	-252.06	-107.65	0.00	-200.63
	TANDEM-LOAD	80.92	0.00	222.24	80.92	0.00	173.02	73.66	0.00	170.70	73.66	0.00	136.36
	MIN	-106.74	0.00	-178.15	-106.74	0.00	-228.81	-73.35	0.00	-171.90	-73.35	0.00	-136.97
	DISPERSION-LMAX	182.56	0.00	424.18	182.56	0.00	332.38	328.40	0.00	690.03	328.40	0.00	611.21
	MIN	-181.29	0.00	-445.56	-181.29	0.00	-348.02	-299.45	0.00	-761.25	-299.45	0.00	-561.64
110	Live load L-PICKUP 1	293.20	0.00	718.06	293.20	0.00	570.37	436.73	0.00	940.05	436.73	0.00	812.19
	MIN	-321.81	0.00	-687.79	-321.81	0.00	-648.41	-407.10	0.00	-1013.32	-407.10	0.00	-762.26
	L-PICKUP 2	263.47	0.00	646.42	263.47	0.00	505.39	402.06	0.00	860.73	402.06	0.00	747.57
	MIN	-288.03	0.00	-623.71	-288.03	0.00	-576.82	-372.79	0.00	-933.16	-372.79	0.00	-698.60
	L-PICKUP 3	-307.60	0.00	-701.75	-307.60	0.00	-616.50	-444.62	0.00	-1088.91	-444.62	0.00	-828.39
	Live load	293.20	0.00	718.06	293.20	0.00	570.37	436.73	0.00	940.05	436.73	0.00	812.19
	MIN	-321.81	0.00	-701.75	-321.81	0.00	-648.41	-444.62	0.00	-1088.91	-444.62	0.00	-828.39
111	AASHTO Twin TWIN-PICKUP	306.47	0.00	685.53	306.47	0.00	593.84	469.54	0.00	1030.03	469.54	0.00	873.45
	MIN	-307.60	0.00	-701.75	-307.60	0.00	-616.50	-444.62	0.00	-1088.91	-444.62	0.00	-828.39
	MID-PICKUP	-307.60	0.00	-701.75	-307.60	0.00	-616.50	-444.62	0.00	-1088.91	-444.62	0.00	-828.39
198	AASHTO FatigTRUCK-LOAD	44.43	0.00	110.63	44.43	0.00	114.05	67.32	0.00	95.56	67.32	0.00	122.78
	MIN	-67.42	0.00	-107.34	-67.42	0.00	-170.99	-42.00	0.00	-158.77	-42.00	0.00	-79.88
	TANDEM-LOAD	30.48	0.00	94.07	30.48	0.00	86.74	45.69	0.00	64.79	45.69	0.00	83.24
	MIN	-55.22	0.00	-74.08	-55.22	0.00	-136.60	-28.57	0.00	-108.08	-28.57	0.00	-54.56

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001035 1035			2035			1001036 1036			2036		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	115.60	0.00	219.98	115.60	0.00	210.53	210.01	0.00	326.55	210.01	0.00	384.24
	MIN	-98.96	0.00	-279.28	-98.96	0.00	-196.92	-142.63	0.00	-492.96	-142.63	0.00	-271.53
199	AASHTO-LRFD TRUCK-LOAD MAX	157.97	0.00	337.52	157.97	0.00	327.45	193.31	0.00	454.45	193.31	0.00	359.29
	MIN	-160.48	0.00	-334.16	-160.48	0.00	-336.99	-194.58	0.00	-448.65	-194.58	0.00	-358.79
	TANDEM-LOAD MAX	80.92	0.00	222.24	80.92	0.00	173.02	73.66	0.00	170.70	73.66	0.00	136.36
	MIN	-106.74	0.00	-178.15	-106.74	0.00	-228.81	-73.35	0.00	-171.90	-73.35	0.00	-136.97
	DISPERSION-LMAX	182.56	0.00	424.18	182.56	0.00	332.38	328.40	0.00	690.03	328.40	0.00	611.21
	MIN	-181.29	0.00	-445.56	-181.29	0.00	-348.02	-299.45	0.00	-761.25	-299.45	0.00	-561.64
300	Total Dead lWithout snow	-0.92	0.00	-32.20	-0.92	0.00	-36.03	46.05	0.00	-114.02	46.05	0.00	78.34
301	Particular Snow	0.16	0.00	-6.20	0.16	0.00	-5.51	9.00	0.00	-22.10	9.00	0.00	15.48
302	Live load Total MAX	190.58	0.00	466.74	190.58	0.00	370.74	283.88	0.00	611.03	283.88	0.00	527.92
	MIN	-209.18	0.00	-456.14	-209.18	0.00	-421.47	-289.01	0.00	-707.79	-289.01	0.00	-538.45
303	Sum total D+L+PP MAX	190.75	0.00	460.54	190.75	0.00	365.23	338.93	0.00	588.93	338.93	0.00	621.73
	MIN	-209.93	0.00	-494.54	-209.93	0.00	-463.01	-280.01	0.00	-843.92	-280.01	0.00	-522.97

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001037						1001038					
NODE		1037			2037			1038			2038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	5.73	0.00	-21.52	5.73	0.00	2.41	-2.24	0.00	-13.60	-2.24	0.00	-22.95
3	Railing	0.44	0.00	-4.39	0.44	0.00	-2.53	-4.16	0.00	2.68	-4.16	0.00	-14.71
5	Wheel guard	4.39	0.00	-43.42	4.39	0.00	-25.09	-41.22	0.00	26.53	-41.22	0.00	-145.65
8	Steel weight	17.89	0.00	-34.74	17.89	0.00	40.00	40.66	0.00	-87.03	40.66	0.00	82.80
10	Medial strip	0.24	0.00	17.93	0.24	0.00	18.94	27.67	0.00	-26.69	27.67	0.00	88.90
19	Snow	2.63	0.00	-10.58	2.63	0.00	0.40	-2.04	0.00	-5.30	-2.04	0.00	-13.84
31	Miscellaneous	0.02	0.00	1.44	0.02	0.00	1.53	2.23	0.00	-2.14	2.23	0.00	7.16
100	AASHTO-LRFD TRUCK-LOAD	111.29	0.00	292.56	111.29	0.00	242.56	114.57	0.00	368.57	114.57	0.00	252.54
	MIN	-140.36	0.00	-243.91	-140.36	0.00	-298.97	-161.90	0.00	-284.61	-161.90	0.00	-385.24
	TANDEM-LOAD	81.23	0.00	222.36	81.23	0.00	175.67	84.57	0.00	276.88	84.57	0.00	188.19
	MIN	-106.90	0.00	-178.93	-106.90	0.00	-228.53	-122.29	0.00	-207.64	-122.29	0.00	-291.92
	DISPERSION-LMAX	189.96	0.00	421.50	189.96	0.00	348.29	120.81	0.00	308.80	120.81	0.00	245.00
	MIN	-179.69	0.00	-458.95	-179.69	0.00	-342.30	-123.72	0.00	-330.12	-123.72	0.00	-279.25
110	Live load L-PICKUP 1	301.25	0.00	714.06	301.25	0.00	590.85	235.38	0.00	677.37	235.38	0.00	497.55
	MIN	-320.05	0.00	-702.86	-320.05	0.00	-641.27	-285.62	0.00	-614.73	-285.62	0.00	-664.50
	L-PICKUP 2	271.20	0.00	643.86	271.20	0.00	523.96	205.37	0.00	585.68	205.37	0.00	433.19
	MIN	-286.60	0.00	-637.88	-286.60	0.00	-570.83	-246.02	0.00	-537.76	-246.02	0.00	-571.17
	L-PICKUP 3	-303.92	0.00	-718.36	-303.92	0.00	-604.07	-268.60	0.00	-646.21	-268.60	0.00	-625.99
	Live load	301.25	0.00	714.06	301.25	0.00	590.85	235.38	0.00	677.37	235.38	0.00	497.55
	MIN	-320.05	0.00	-718.36	-320.05	0.00	-641.27	-285.62	0.00	-646.21	-285.62	0.00	-664.50
111	AASHTO Twin TWIN-PICKUP	316.06	0.00	678.30	316.06	0.00	620.86	238.92	0.00	648.08	238.92	0.00	499.66
	MIN	-303.92	0.00	-718.36	-303.92	0.00	-604.07	-268.60	0.00	-646.21	-268.60	0.00	-625.99
	MID-PICKUP	-303.92	0.00	-718.36	-303.92	0.00	-604.07	-268.60	0.00	-646.21	-268.60	0.00	-625.99
198	AASHTO FatigTRUCK-LOAD	44.29	0.00	108.98	44.29	0.00	115.22	53.40	0.00	222.75	53.40	0.00	170.95
	MIN	-66.76	0.00	-106.42	-66.76	0.00	-169.89	-129.30	0.00	-53.78	-129.30	0.00	-317.35
	TANDEM-LOAD	30.64	0.00	93.53	30.64	0.00	87.21	41.84	0.00	173.55	41.84	0.00	130.28
	MIN	-55.05	0.00	-73.45	-55.05	0.00	-136.42	-99.63	0.00	-44.75	-99.63	0.00	-242.60

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001037						1001038					
NODE		1037			2037			1038			2038		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	118.85	0.00	219.35	118.85	0.00	217.09	63.16	0.00	196.06	63.16	0.00	137.94
	MIN	-98.48	0.00	-285.71	-98.48	0.00	-195.26	-88.63	0.00	-160.69	-88.63	0.00	-190.15
199	AASHTO-LRFD TRUCK-LOAD MAX	161.21	0.00	332.17	161.21	0.00	341.56	144.66	0.00	411.29	144.66	0.00	310.17
	MIN	-158.00	0.00	-339.23	-158.00	0.00	-328.89	-174.72	0.00	-387.89	-174.72	0.00	-416.29
	TANDEM-LOAD MAX	81.23	0.00	222.36	81.23	0.00	175.67	84.57	0.00	276.88	84.57	0.00	188.19
	MIN	-106.90	0.00	-178.93	-106.90	0.00	-228.53	-122.29	0.00	-207.64	-122.29	0.00	-291.92
	DISPERSION-LMAX	189.96	0.00	421.50	189.96	0.00	348.29	120.81	0.00	308.80	120.81	0.00	245.00
	MIN	-179.69	0.00	-458.95	-179.69	0.00	-342.30	-123.72	0.00	-330.12	-123.72	0.00	-279.25
300	Total Dead lWithout snow	28.72	0.00	-84.68	28.72	0.00	35.26	22.93	0.00	-100.25	22.93	0.00	-4.45
301	Particular Snow	2.63	0.00	-10.58	2.63	0.00	0.40	-2.04	0.00	-5.30	-2.04	0.00	-13.84
302	Live load Total MAX	195.81	0.00	464.14	195.81	0.00	384.05	153.00	0.00	440.29	153.00	0.00	323.41
	MIN	-208.03	0.00	-466.94	-208.03	0.00	-416.83	-185.65	0.00	-420.04	-185.65	0.00	-431.92
303	Sum total D+L+PP MAX	227.15	0.00	453.56	227.15	0.00	419.72	173.89	0.00	434.99	173.89	0.00	309.57
	MIN	-205.40	0.00	-562.20	-205.40	0.00	-416.42	-187.70	0.00	-525.59	-187.70	0.00	-450.22

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001039						1001040						
NODE		1039			2039			1040			2040			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-29.97	0.00	28.30	-29.97	0.00	-96.87	-35.61	0.00	32.46	-35.61	0.00	-116.29	
3	Railing	-6.32	0.00	4.29	-6.32	0.00	-22.11	-6.47	0.00	3.01	-6.47	0.00	-24.02	
5	Wheel guard	-62.57	0.00	42.43	-62.57	0.00	-218.93	-64.05	0.00	29.77	-64.05	0.00	-237.78	
8	Steel weight	-45.82	0.00	63.36	-45.82	0.00	-128.03	-66.88	0.00	95.47	-66.88	0.00	-183.87	
10	Medial strip	26.45	0.00	-13.40	26.45	0.00	97.08	24.02	0.00	-1.82	24.02	0.00	98.53	
19	Snow	-14.78	0.00	13.52	-14.78	0.00	-48.22	-17.31	0.00	15.04	-17.31	0.00	-57.28	
31	Miscellaneous	2.13	0.00	-1.07	2.13	0.00	7.82	1.94	0.00	-0.15	1.94	0.00	7.97	
100	AASHTO-LRFD TRUCK-LOAD	MAX	108.51	0.00	444.29	108.51	0.00	254.94	113.58	0.00	433.89	113.58	0.00	262.04
		MIN	-197.29	0.00	-284.54	-197.29	0.00	-472.47	-189.26	0.00	-294.53	-189.26	0.00	-447.85
		TANDEM-LOAD	81.27	0.00	331.53	81.27	0.00	191.01	85.08	0.00	323.76	85.08	0.00	197.47
		MAX	-148.18	0.00	-208.97	-148.18	0.00	-353.28	-142.07	0.00	-217.20	-142.07	0.00	-336.11
		MIN	94.01	0.00	335.59	94.01	0.00	231.34	80.65	0.00	329.23	80.65	0.00	183.52
		DISPERSION-L	-142.64	0.00	-286.57	-142.64	0.00	-388.20	-138.51	0.00	-273.55	-138.51	0.00	-370.39
110	Live load	L-PICKUP 1	202.52	0.00	779.88	202.52	0.00	486.29	194.24	0.00	763.11	194.24	0.00	445.56
		MAX	-339.93	0.00	-571.11	-339.93	0.00	-860.67	-327.76	0.00	-568.08	-327.76	0.00	-818.24
		L-PICKUP 2	175.28	0.00	667.12	175.28	0.00	422.35	165.73	0.00	652.99	165.73	0.00	380.99
		MAX	-290.82	0.00	-495.54	-290.82	0.00	-741.48	-280.58	0.00	-490.76	-280.58	0.00	-706.50
		MIN	-331.91	0.00	-607.77	-331.91	0.00	-853.72	-322.53	0.00	-599.51	-322.53	0.00	-809.18
		L-PICKUP 3	202.52	0.00	779.88	202.52	0.00	486.29	194.24	0.00	763.11	194.24	0.00	445.56
		MAX	-339.93	0.00	-607.77	-339.93	0.00	-860.67	-327.76	0.00	-599.51	-327.76	0.00	-818.24
		MIN	204.41	0.00	774.02	204.41	0.00	476.03	194.05	0.00	762.50	194.05	0.00	431.53
111	AASHTO Twin	TWIN-PICKUP	-331.91	0.00	-607.77	-331.91	0.00	-853.72	-322.53	0.00	-599.51	-322.53	0.00	-809.18
		MAX	-331.91	0.00	-607.77	-331.91	0.00	-853.72	-322.53	0.00	-599.51	-322.53	0.00	-809.18
		MIN	-331.91	0.00	-607.77	-331.91	0.00	-853.72	-322.53	0.00	-599.51	-322.53	0.00	-809.18
198	AASHTO Fatig	TRUCK-LOAD	52.95	0.00	278.35	52.95	0.00	183.31	56.85	0.00	279.29	56.85	0.00	198.70
		MAX	-157.40	0.00	-74.11	-157.40	0.00	-379.12	-154.91	0.00	-94.96	-154.91	0.00	-367.76
		MIN	41.95	0.00	213.96	41.95	0.00	140.49	44.88	0.00	214.22	44.88	0.00	151.35
		TANDEM-LOAD	-120.04	0.00	-50.99	-120.04	0.00	-287.45	-118.07	0.00	-65.65	-118.07	0.00	-278.94
		MAX	-120.04	0.00	-50.99	-120.04	0.00	-287.45	-118.07	0.00	-65.65	-118.07	0.00	-278.94

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001039						1001040					
NODE		1039			2039			1040			2040		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	41.06	0.00	206.42	41.06	0.00	113.46	33.55	0.00	198.92	33.55	0.00	113.90
	MIN	-100.95	0.00	-133.00	-100.95	0.00	-248.96	-99.61	0.00	-132.26	-99.61	0.00	-246.19
199	AASHTO-LRFD TRUCK-LOAD MAX	133.11	0.00	524.43	133.11	0.00	297.58	134.95	0.00	517.99	134.95	0.00	295.96
	MIN	-226.15	0.00	-388.73	-226.15	0.00	-560.39	-219.86	0.00	-392.57	-219.86	0.00	-528.70
	TANDEM-LOAD MAX	81.27	0.00	331.53	81.27	0.00	191.01	85.08	0.00	323.76	85.08	0.00	197.47
	MIN	-148.18	0.00	-208.97	-148.18	0.00	-353.28	-142.07	0.00	-217.20	-142.07	0.00	-336.11
	DISPERSION-LMAX	94.01	0.00	335.59	94.01	0.00	231.34	80.65	0.00	329.23	80.65	0.00	183.52
	MIN	-142.64	0.00	-286.57	-142.64	0.00	-388.20	-138.51	0.00	-273.55	-138.51	0.00	-370.39
300	Total Dead lWithout snow	-116.10	0.00	123.90	-116.10	0.00	-361.05	-147.04	0.00	158.74	-147.04	0.00	-455.46
301	Particular Snow	-14.78	0.00	13.52	-14.78	0.00	-48.22	-17.31	0.00	15.04	-17.31	0.00	-57.28
302	Live load Total MAX	131.64	0.00	506.92	131.64	0.00	316.09	126.26	0.00	496.02	126.26	0.00	289.61
	MIN	-220.95	0.00	-395.05	-220.95	0.00	-559.43	-213.05	0.00	-389.68	-213.05	0.00	-531.86
303	Sum total D+L+PP MAX	40.25	0.00	644.34	40.25	0.00	1.64	-0.23	0.00	669.81	-0.23	0.00	-136.24
	MIN	-351.84	0.00	-376.15	-351.84	0.00	-968.71	-377.41	0.00	-332.80	-377.41	0.00	-1044.59

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001041 1041	2041			1001042 1042			2042			SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)					
1	Pavement	-17.57	0.00	-3.49	-17.57	0.00	-76.87	-15.91	0.00	-5.33	-15.91	0.00	-71.80		
3	Railing	-5.87	0.00	1.16	-5.87	0.00	-23.34	-5.81	0.00	0.89	-5.81	0.00	-23.36		
5	Wheel guard	-58.08	0.00	11.53	-58.08	0.00	-231.06	-57.48	0.00	8.83	-57.48	0.00	-231.24		
8	Steel weight	-1.05	0.00	-28.02	-1.05	0.00	-32.41	4.92	0.00	-32.24	4.92	0.00	-11.68		
10	Medial strip	30.32	0.00	-9.95	30.32	0.00	116.69	30.93	0.00	-9.27	30.93	0.00	119.91		
19	Snow	-9.24	0.00	-1.22	-9.24	0.00	-39.79	-8.49	0.00	-2.11	-8.49	0.00	-37.56		
31	Miscellaneous	2.46	0.00	-0.82	2.46	0.00	9.45	2.50	0.00	-0.75	2.50	0.00	9.70		
100	AASHTO-LRFD TRUCK-LOAD	MAX	133.86	0.00	395.82	133.86	0.00	314.53	129.29	0.00	390.02	129.29	0.00	304.37	
		MIN	-172.50	0.00	-328.18	-172.50	0.00	-417.78	-167.95	0.00	-318.44	-167.95	0.00	-405.15	
		TANDEM-LOAD	MAX	99.06	0.00	295.56	99.06	0.00	234.25	96.04	0.00	291.40	96.04	0.00	227.75
		MIN	-130.12	0.00	-240.89	-130.12	0.00	-312.65	-126.84	0.00	-233.95	-126.84	0.00	-304.12	
		DISPERSION-L	MAX	102.75	0.00	304.77	102.75	0.00	235.40	95.99	0.00	293.15	95.99	0.00	222.58
		MIN	-130.89	0.00	-307.97	-130.89	0.00	-354.85	-121.55	0.00	-299.40	-121.55	0.00	-334.12	
110	Live load	L-PICKUP 1	MAX	236.61	0.00	700.59	236.61	0.00	549.93	225.28	0.00	683.17	225.28	0.00	526.96
		MIN	-303.39	0.00	-636.16	-303.39	0.00	-772.63	-289.50	0.00	-617.84	-289.50	0.00	-739.27	
		L-PICKUP 2	MAX	201.80	0.00	600.33	201.80	0.00	469.65	192.03	0.00	584.55	192.03	0.00	450.34
		MIN	-261.02	0.00	-548.87	-261.02	0.00	-667.50	-248.39	0.00	-533.35	-248.39	0.00	-638.24	
		L-PICKUP 3	MAX	-297.06	0.00	-677.70	-297.06	0.00	-761.59	-282.28	0.00	-652.86	-282.28	0.00	-723.07
		MIN	236.61	0.00	700.59	236.61	0.00	549.93	225.28	0.00	683.17	225.28	0.00	526.96	
111	AASHTO Twin	TWIN-PICKUP	MAX	244.71	0.00	699.49	244.71	0.00	551.06	230.85	0.00	679.20	230.85	0.00	523.32
		MIN	-297.06	0.00	-677.70	-297.06	0.00	-761.59	-282.28	0.00	-652.86	-282.28	0.00	-723.07	
		MID-PICKUP	MAX	-297.06	0.00	-677.70	-297.06	0.00	-761.59	-282.28	0.00	-652.86	-282.28	0.00	-723.07
		MIN	244.71	0.00	699.49	244.71	0.00	551.06	230.85	0.00	679.20	230.85	0.00	523.32	
		TWIN-PICKUP	MAX	244.71	0.00	699.49	244.71	0.00	551.06	230.85	0.00	679.20	230.85	0.00	523.32
		MIN	-297.06	0.00	-677.70	-297.06	0.00	-761.59	-282.28	0.00	-652.86	-282.28	0.00	-723.07	
198	AASHTO Fatig	TRUCK-LOAD	MAX	62.42	0.00	269.08	62.42	0.00	214.20	60.94	0.00	271.13	60.94	0.00	211.89
		MIN	-147.01	0.00	-109.95	-147.01	0.00	-344.98	-147.31	0.00	-109.79	-147.31	0.00	-344.17	
		TANDEM-LOAD	MAX	48.82	0.00	205.94	48.82	0.00	162.04	47.83	0.00	206.96	47.83	0.00	160.47
		MIN	-112.01	0.00	-75.72	-112.01	0.00	-261.93	-112.01	0.00	-75.57	-112.01	0.00	-260.89	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001041			1001042								
NODE		1041	2041		1042	2042							
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	39.64	0.00	184.84	39.64	0.00	136.25	38.44	0.00	183.93	38.44	0.00	133.17
	MIN	-92.26	0.00	-147.07	-92.26	0.00	-233.18	-91.83	0.00	-150.13	-91.83	0.00	-231.77
199	AASHTO-LRFD TRUCK-LOAD MAX	169.15	0.00	472.44	169.15	0.00	376.89	160.50	0.00	461.52	160.50	0.00	358.88
	MIN	-199.17	0.00	-445.03	-199.17	0.00	-491.36	-192.09	0.00	-426.01	-192.09	0.00	-469.30
	TANDEM-LOAD MAX	99.06	0.00	295.56	99.06	0.00	234.25	96.04	0.00	291.40	96.04	0.00	227.75
	MIN	-130.12	0.00	-240.89	-130.12	0.00	-312.65	-126.84	0.00	-233.95	-126.84	0.00	-304.12
	DISPERSION-LMAX	102.75	0.00	304.77	102.75	0.00	235.40	95.99	0.00	293.15	95.99	0.00	222.58
	MIN	-130.89	0.00	-307.97	-130.89	0.00	-354.85	-121.55	0.00	-299.40	-121.55	0.00	-334.12
300	Total Dead lWithout snow	-49.79	0.00	-29.58	-49.79	0.00	-237.54	-40.84	0.00	-37.88	-40.84	0.00	-208.48
301	Particular Snow	-9.24	0.00	-1.22	-9.24	0.00	-39.79	-8.49	0.00	-2.11	-8.49	0.00	-37.56
302	Live load Total MAX	153.80	0.00	455.38	153.80	0.00	357.46	146.43	0.00	444.06	146.43	0.00	342.52
	MIN	-197.20	0.00	-440.51	-197.20	0.00	-502.21	-188.17	0.00	-424.36	-188.17	0.00	-480.52
303	Sum total D+L+PP MAX	140.91	0.00	454.16	140.91	0.00	187.36	137.95	0.00	441.95	137.95	0.00	199.24
	MIN	-256.23	0.00	-471.31	-256.23	0.00	-779.54	-237.50	0.00	-464.35	-237.50	0.00	-726.56

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001043 1043						1001044 1044					
		2043			2044			2043			2044		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-17.00	0.00	-2.67	-17.00	0.00	-73.67	-24.95	0.00	14.00	-24.95	0.00	-90.20
3	Railing	-5.85	0.00	1.19	-5.85	0.00	-23.26	-6.15	0.00	2.44	-6.15	0.00	-23.25
5	Wheel guard	-57.94	0.00	11.75	-57.94	0.00	-230.27	-60.90	0.00	24.19	-60.90	0.00	-230.18
8	Steel weight	1.09	0.00	-24.99	1.09	0.00	-20.42	-27.52	0.00	27.49	-27.52	0.00	-87.46
10	Medial strip	30.64	0.00	-9.79	30.64	0.00	118.19	28.08	0.00	-8.79	28.08	0.00	108.51
19	Snow	-8.97	0.00	-0.87	-8.97	0.00	-38.35	-12.54	0.00	6.78	-12.54	0.00	-45.61
31	Miscellaneous	2.48	0.00	-0.79	2.48	0.00	9.55	2.27	0.00	-0.71	2.27	0.00	8.77
100	AASHTO-LRFD TRUCK-LOAD	129.46	0.00	394.26	129.46	0.00	306.06	122.48	0.00	406.75	122.48	0.00	287.40
	MIN	-169.07	0.00	-319.75	-169.07	0.00	-407.25	-175.45	0.00	-308.07	-175.45	0.00	-419.03
	TANDEM-LOAD	96.24	0.00	294.36	96.24	0.00	229.23	91.47	0.00	303.75	91.47	0.00	216.29
	MIN	-127.67	0.00	-235.10	-127.67	0.00	-305.50	-132.30	0.00	-226.92	-132.30	0.00	-315.01
	DISPERSION-LMAX	94.47	0.00	295.15	94.47	0.00	220.34	86.04	0.00	306.94	86.04	0.00	197.13
	MIN	-121.79	0.00	-297.09	-121.79	0.00	-335.04	-126.26	0.00	-281.65	-126.26	0.00	-340.01
110	Live load L-PICKUP 1	223.93	0.00	689.41	223.93	0.00	526.40	208.52	0.00	713.69	208.52	0.00	484.53
	MIN	-290.86	0.00	-616.83	-290.86	0.00	-742.29	-301.71	0.00	-589.72	-301.71	0.00	-759.04
	L-PICKUP 2	190.71	0.00	589.51	190.71	0.00	449.57	177.51	0.00	610.69	177.51	0.00	413.42
	MIN	-249.46	0.00	-532.18	-249.46	0.00	-640.54	-258.56	0.00	-508.57	-258.56	0.00	-655.01
	L-PICKUP 3	-284.19	0.00	-652.92	-284.19	0.00	-726.34	-296.08	0.00	-623.83	-296.08	0.00	-744.11
	Live load	223.93	0.00	689.41	223.93	0.00	526.40	208.52	0.00	713.69	208.52	0.00	484.53
	MIN	-290.86	0.00	-652.92	-290.86	0.00	-742.29	-301.71	0.00	-623.83	-301.71	0.00	-759.04
111	AASHTO Twin TWIN-PICKUP	228.89	0.00	687.98	228.89	0.00	519.25	210.28	0.00	714.38	210.28	0.00	468.43
	MIN	-284.19	0.00	-652.92	-284.19	0.00	-726.34	-296.08	0.00	-623.83	-296.08	0.00	-744.11
	MID-PICKUP	-284.19	0.00	-652.92	-284.19	0.00	-726.34	-296.08	0.00	-623.83	-296.08	0.00	-744.11
198	AASHTO FatigTRUCK-LOAD	61.45	0.00	269.48	61.45	0.00	212.56	60.23	0.00	267.91	60.23	0.00	207.46
	MIN	-147.04	0.00	-107.83	-147.04	0.00	-344.69	-148.51	0.00	-96.90	-148.51	0.00	-352.41
	TANDEM-LOAD	48.23	0.00	205.99	48.23	0.00	161.12	47.38	0.00	205.50	47.38	0.00	157.77
	MIN	-111.91	0.00	-74.26	-111.91	0.00	-261.48	-113.22	0.00	-66.86	-113.22	0.00	-267.43

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001043			1001044								
NODE		1043			1044								
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	37.80	0.00	184.44	37.80	0.00	132.11	36.32	0.00	190.58	36.32	0.00	122.57
	MIN	-92.03	0.00	-146.28	-92.03	0.00	-231.49	-94.96	0.00	-135.63	-94.96	0.00	-234.20
199	AASHTO-LRFD TRUCK-LOAD MAX	159.85	0.00	469.27	159.85	0.00	356.60	147.61	0.00	486.81	147.61	0.00	323.34
	MIN	-193.98	0.00	-428.38	-193.98	0.00	-472.01	-202.72	0.00	-411.50	-202.72	0.00	-486.78
	TANDEM-LOAD MAX	96.24	0.00	294.36	96.24	0.00	229.23	91.47	0.00	303.75	91.47	0.00	216.29
	MIN	-127.67	0.00	-235.10	-127.67	0.00	-305.50	-132.30	0.00	-226.92	-132.30	0.00	-315.01
	DISPERSION-LMAX	94.47	0.00	295.15	94.47	0.00	220.34	86.04	0.00	306.94	86.04	0.00	197.13
	MIN	-121.79	0.00	-297.09	-121.79	0.00	-335.04	-126.26	0.00	-281.65	-126.26	0.00	-340.01
300	Total Dead lWithout snow	-46.58	0.00	-25.32	-46.58	0.00	-219.88	-89.16	0.00	58.63	-89.16	0.00	-313.81
301	Particular Snow	-8.97	0.00	-0.87	-8.97	0.00	-38.35	-12.54	0.00	6.78	-12.54	0.00	-45.61
302	Live load Total MAX	145.56	0.00	448.12	145.56	0.00	342.16	135.54	0.00	463.90	135.54	0.00	314.94
	MIN	-189.06	0.00	-424.40	-189.06	0.00	-482.49	-196.11	0.00	-405.49	-196.11	0.00	-493.37
303	Sum total D+L+PP MAX	133.67	0.00	447.24	133.67	0.00	186.58	74.49	0.00	529.31	74.49	0.00	50.01
	MIN	-244.61	0.00	-450.59	-244.61	0.00	-740.72	-297.82	0.00	-398.71	-297.82	0.00	-852.79

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001045 1045	2045			1001046 1046	2046							
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)					
NAME TITLE													
1 Pavement	-28.68	0.00	26.25	-28.68	0.00	-93.55	-13.81	0.00	7.40	-13.81	0.00	-50.30	
3 Railing	-6.27	0.00	4.17	-6.27	0.00	-22.02	-4.53	0.00	3.31	-4.53	0.00	-15.63	
5 Wheel guard	-62.07	0.00	41.28	-62.07	0.00	-217.99	-44.89	0.00	32.74	-44.89	0.00	-154.78	
8 Steel weight	-41.22	0.00	56.44	-41.22	0.00	-115.72	-1.76	0.00	-9.53	-1.76	0.00	-16.89	
10 Medial strip	26.73	0.00	-13.60	26.73	0.00	98.03	23.36	0.00	-18.60	23.36	0.00	78.99	
19 Snow	-14.21	0.00	12.60	-14.21	0.00	-46.77	-7.24	0.00	4.10	-7.24	0.00	-26.12	
31 Miscellaneous	2.16	0.00	-1.10	2.16	0.00	7.92	1.89	0.00	-1.50	1.89	0.00	6.38	
100 AASHTO-LRFD TRUCK-LOAD	115.68	0.00	417.41	115.68	0.00	260.24	112.74	0.00	367.95	112.74	0.00	252.80	
MIN	-182.16	0.00	-294.35	-182.16	0.00	-429.90	-161.77	0.00	-279.83	-161.77	0.00	-378.53	
TANDEM-LOAD	86.62	0.00	311.30	86.62	0.00	197.48	83.75	0.00	274.54	83.75	0.00	191.07	
MIN	-136.95	0.00	-216.35	-136.95	0.00	-323.28	-121.96	0.00	-204.90	-121.96	0.00	-285.99	
DISPERSION-LMAX	84.82	0.00	320.46	84.82	0.00	181.84	102.86	0.00	316.01	102.86	0.00	191.18	
MIN	-131.08	0.00	-275.27	-131.08	0.00	-331.68	-124.51	0.00	-303.25	-124.51	0.00	-270.54	
110 Live load L-PICKUP 1	200.50	0.00	737.87	200.50	0.00	442.08	215.60	0.00	683.96	215.60	0.00	443.98	
MIN	-313.23	0.00	-569.62	-313.23	0.00	-761.57	-286.29	0.00	-583.08	-286.29	0.00	-649.07	
L-PICKUP 2	171.45	0.00	631.76	171.45	0.00	379.32	186.61	0.00	590.55	186.61	0.00	382.25	
MIN	-268.03	0.00	-491.62	-268.03	0.00	-654.96	-246.47	0.00	-508.15	-246.47	0.00	-556.53	
L-PICKUP 3	-307.21	0.00	-604.28	-307.21	0.00	-746.90	-274.08	0.00	-607.28	-274.08	0.00	-616.19	
Live load	200.50	0.00	737.87	200.50	0.00	442.08	215.60	0.00	683.96	215.60	0.00	443.98	
MIN	-313.23	0.00	-604.28	-313.23	0.00	-761.57	-286.29	0.00	-607.28	-286.29	0.00	-649.07	
111 AASHTO Twin TWIN-PICKUP	201.44	0.00	739.20	201.44	0.00	422.42	215.95	0.00	667.63	215.95	0.00	432.47	
MIN	-307.21	0.00	-604.28	-307.21	0.00	-746.90	-274.08	0.00	-607.28	-274.08	0.00	-616.19	
MID-PICKUP	-307.21	0.00	-604.28	-307.21	0.00	-746.90	-274.08	0.00	-607.28	-274.08	0.00	-616.19	
198 AASHTO FatigTRUCK-LOAD	57.87	0.00	263.03	57.87	0.00	195.87	54.86	0.00	218.18	54.86	0.00	175.45	
MIN	-148.90	0.00	-75.94	-148.90	0.00	-358.95	-126.68	0.00	-55.01	-126.68	0.00	-310.97	
TANDEM-LOAD	45.56	0.00	202.25	45.56	0.00	149.64	43.09	0.00	169.44	43.09	0.00	133.96	
MIN	-113.59	0.00	-52.17	-113.59	0.00	-272.22	-97.32	0.00	-46.39	-97.32	0.00	-237.07	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001045 1045	2045			1001046 1046	2046						
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)				
198 AASHTO FatigDISPERSION-LMAX	39.66	0.00	200.67	39.66	0.00	110.95	57.43	0.00	198.45	57.43	0.00	122.89
MIN	-97.90	0.00	-128.63	-97.90	0.00	-230.99	-89.68	0.00	-151.86	-89.68	0.00	-192.24
199 AASHTO-LRFD TRUCK-LOAD MAX	139.00	0.00	500.87	139.00	0.00	287.51	137.08	0.00	425.81	137.08	0.00	289.34
MIN	-210.27	0.00	-396.15	-210.27	0.00	-498.21	-180.02	0.00	-371.50	-180.02	0.00	-414.12
TANDEM-LOAD MAX	86.62	0.00	311.30	86.62	0.00	197.48	83.75	0.00	274.54	83.75	0.00	191.07
MIN	-136.95	0.00	-216.35	-136.95	0.00	-323.28	-121.96	0.00	-204.90	-121.96	0.00	-285.99
DISPERSION-LMAX	84.82	0.00	320.46	84.82	0.00	181.84	102.86	0.00	316.01	102.86	0.00	191.18
MIN	-131.08	0.00	-275.27	-131.08	0.00	-331.68	-124.51	0.00	-303.25	-124.51	0.00	-270.54
300 Total Dead lWithout snow	-109.35	0.00	113.44	-109.35	0.00	-343.33	-39.75	0.00	13.83	-39.75	0.00	-152.22
301 Particular Snow	-14.21	0.00	12.60	-14.21	0.00	-46.77	-7.24	0.00	4.10	-7.24	0.00	-26.12
302 Live load Total MAX	130.32	0.00	479.62	130.32	0.00	287.35	140.14	0.00	444.57	140.14	0.00	288.59
MIN	-203.60	0.00	-392.78	-203.60	0.00	-495.02	-186.09	0.00	-394.73	-186.09	0.00	-421.89
303 Sum total D+L+PP MAX	45.86	0.00	605.66	45.86	0.00	-16.54	132.90	0.00	462.51	132.90	0.00	196.82
MIN	-327.17	0.00	-380.18	-327.17	0.00	-885.12	-233.08	0.00	-390.63	-233.08	0.00	-600.23

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001047 1047	2047			1001048 1048	2048						
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)				
NAME TITLE												
1 Pavement	6.69	0.00	-25.19	6.69	0.00	2.75	19.64	0.00	-48.26	19.64	0.00	33.76
3 Railing	0.41	0.00	-4.41	0.41	0.00	-2.68	6.03	0.00	-14.77	6.03	0.00	10.43
5 Wheel guard	4.09	0.00	-43.61	4.09	0.00	-26.52	59.72	0.00	-146.25	59.72	0.00	103.21
8 Steel weight	22.14	0.00	-49.36	22.14	0.00	43.10	7.44	0.00	-18.91	7.44	0.00	12.15
10 Medial strip	1.03	0.00	15.84	1.03	0.00	20.15	-30.35	0.00	74.21	-30.35	0.00	-52.55
19 Snow	3.04	0.00	-12.20	3.04	0.00	0.52	10.18	0.00	-25.00	10.18	0.00	17.52
31 Miscellaneous	0.08	0.00	1.28	0.08	0.00	1.63	-2.45	0.00	6.00	-2.45	0.00	-4.25
100 AASHTO-LRFD TRUCK-LOAD												
MAX	112.54	0.00	291.75	112.54	0.00	241.49	108.75	0.00	252.25	108.75	0.00	201.31
MIN	-139.08	0.00	-247.31	-139.08	0.00	-299.21	-108.22	0.00	-253.78	-108.22	0.00	-200.81
TANDEM-LOAD												
MAX	82.32	0.00	221.49	82.32	0.00	175.60	73.98	0.00	171.95	73.98	0.00	136.61
MIN	-106.09	0.00	-181.83	-106.09	0.00	-228.71	-73.69	0.00	-173.08	-73.69	0.00	-137.29
DISPERSION-LMAX	190.71	0.00	420.68	190.71	0.00	347.97	335.17	0.00	697.44	335.17	0.00	621.65
MIN	-178.90	0.00	-463.98	-178.90	0.00	-341.47	-301.96	0.00	-779.10	-301.96	0.00	-564.72
110 Live load L-PICKUP 1												
MAX	303.25	0.00	712.44	303.25	0.00	589.46	443.92	0.00	949.69	443.92	0.00	822.96
MIN	-317.98	0.00	-711.29	-317.98	0.00	-640.69	-410.19	0.00	-1032.88	-410.19	0.00	-765.53
L-PICKUP 2												
MAX	273.03	0.00	642.17	273.03	0.00	523.56	409.16	0.00	869.39	409.16	0.00	758.26
MIN	-284.99	0.00	-645.81	-284.99	0.00	-570.19	-375.65	0.00	-952.17	-375.65	0.00	-702.01
L-PICKUP 3												
MAX	-300.68	0.00	-726.72	-300.68	0.00	-603.02	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
MIN	-300.68	0.00	-726.72	-300.68	0.00	-603.02	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
Live load												
MAX	303.25	0.00	712.44	303.25	0.00	589.46	443.92	0.00	949.69	443.92	0.00	822.96
MIN	-317.98	0.00	-726.72	-317.98	0.00	-640.69	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
111 AASHTO Twin TWIN-PICKUP												
MAX	317.47	0.00	676.50	317.47	0.00	614.85	476.52	0.00	1041.29	476.52	0.00	884.28
MIN	-300.68	0.00	-726.72	-300.68	0.00	-603.02	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
MID-PICKUP												
MAX	-300.68	0.00	-726.72	-300.68	0.00	-603.02	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
MIN	-300.68	0.00	-726.72	-300.68	0.00	-603.02	-448.06	0.00	-1108.43	-448.06	0.00	-831.55
198 AASHTO FatigTRUCK-LOAD												
MAX	44.96	0.00	112.66	44.96	0.00	115.60	67.29	0.00	96.15	67.29	0.00	122.31
MIN	-68.40	0.00	-108.99	-68.40	0.00	-173.06	-42.05	0.00	-159.27	-42.05	0.00	-79.53
TANDEM-LOAD												
MAX	30.85	0.00	95.86	30.85	0.00	88.13	45.67	0.00	65.18	45.67	0.00	82.95
MIN	-56.10	0.00	-75.12	-56.10	0.00	-138.48	-28.60	0.00	-108.39	-28.60	0.00	-54.29

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001047						1001048					
NODE		1047			2047			1048			2048		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	119.02	0.00	220.62	119.02	0.00	216.47	213.62	0.00	331.55	213.62	0.00	389.60
	MIN	-98.80	0.00	-287.61	-98.80	0.00	-195.57	-144.43	0.00	-502.68	-144.43	0.00	-274.07
199	AASHTO-LRFD TRUCK-LOAD MAX	162.04	0.00	330.98	162.04	0.00	335.21	194.30	0.00	459.55	194.30	0.00	360.88
	MIN	-155.19	0.00	-343.49	-155.19	0.00	-328.55	-195.88	0.00	-452.49	-195.88	0.00	-359.22
	TANDEM-LOAD MAX	82.32	0.00	221.49	82.32	0.00	175.60	73.98	0.00	171.95	73.98	0.00	136.61
	MIN	-106.09	0.00	-181.83	-106.09	0.00	-228.71	-73.69	0.00	-173.08	-73.69	0.00	-137.29
	DISPERSION-LMAX	190.71	0.00	420.68	190.71	0.00	347.97	335.17	0.00	697.44	335.17	0.00	621.65
	MIN	-178.90	0.00	-463.98	-178.90	0.00	-341.47	-301.96	0.00	-779.10	-301.96	0.00	-564.72
300	Total Dead lWithout snow	34.45	0.00	-105.46	34.45	0.00	38.43	60.03	0.00	-147.98	60.03	0.00	102.75
301	Particular Snow	3.04	0.00	-12.20	3.04	0.00	0.52	10.18	0.00	-25.00	10.18	0.00	17.52
302	Live load Total MAX	197.11	0.00	463.08	197.11	0.00	383.15	288.55	0.00	617.30	288.55	0.00	534.93
	MIN	-206.69	0.00	-472.37	-206.69	0.00	-416.45	-291.24	0.00	-720.48	-291.24	0.00	-540.51
303	Sum total D+L+PP MAX	234.60	0.00	450.88	234.60	0.00	422.09	358.76	0.00	592.30	358.76	0.00	655.20
	MIN	-203.64	0.00	-590.03	-203.64	0.00	-415.93	-281.06	0.00	-893.46	-281.06	0.00	-522.99

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001049						1001050					
NODE		1049			2049			1050			2050		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-1.42	0.00	-9.55	-1.42	0.00	-15.49	-10.27	0.00	0.41	-10.27	0.00	-42.47
3	Railing	0.18	0.00	-3.96	0.18	0.00	-3.22	-4.44	0.00	3.15	-4.44	0.00	-15.40
5	Wheel guard	1.75	0.00	-39.20	1.75	0.00	-31.90	-43.94	0.00	31.14	-43.94	0.00	-152.41
8	Steel weight	-7.86	0.00	8.64	-7.86	0.00	-24.21	11.45	0.00	-35.89	11.45	0.00	11.95
10	Medial strip	-2.04	0.00	21.85	-2.04	0.00	13.31	24.76	0.00	-21.53	24.76	0.00	81.87
19	Snow	-0.58	0.00	-5.21	-0.58	0.00	-7.63	-5.65	0.00	0.99	-5.65	0.00	-22.62
31	Miscellaneous	-0.17	0.00	1.77	-0.17	0.00	1.07	2.00	0.00	-1.74	2.00	0.00	6.62
100	AASHTO-LRFD TRUCK-LOAD	111.19	0.00	296.45	111.19	0.00	238.91	114.82	0.00	369.93	114.82	0.00	253.28
	MIN	-141.39	0.00	-243.49	-141.39	0.00	-301.95	-161.53	0.00	-285.81	-161.53	0.00	-378.72
	TANDEM-LOAD	81.45	0.00	224.46	81.45	0.00	174.32	85.09	0.00	276.38	85.09	0.00	191.06
	MIN	-107.56	0.00	-179.49	-107.56	0.00	-230.35	-121.82	0.00	-209.01	-121.82	0.00	-286.43
	DISPERSION-LMAX	182.41	0.00	431.53	182.41	0.00	327.91	107.98	0.00	314.06	107.98	0.00	204.64
	MIN	-183.83	0.00	-449.35	-183.83	0.00	-351.16	-123.85	0.00	-312.69	-123.85	0.00	-271.01
110	Live load L-PICKUP 1	293.61	0.00	727.98	293.61	0.00	566.82	222.79	0.00	683.99	222.79	0.00	457.92
	MIN	-325.22	0.00	-692.84	-325.22	0.00	-653.11	-285.38	0.00	-598.50	-285.38	0.00	-649.73
	L-PICKUP 2	263.87	0.00	656.00	263.87	0.00	502.23	193.07	0.00	590.44	193.07	0.00	395.70
	MIN	-291.39	0.00	-628.84	-291.39	0.00	-581.51	-245.67	0.00	-521.70	-245.67	0.00	-557.44
	L-PICKUP 3	-311.01	0.00	-705.66	-311.01	0.00	-622.23	-272.46	0.00	-627.17	-272.46	0.00	-614.11
	Live load	293.61	0.00	727.98	293.61	0.00	566.82	222.79	0.00	683.99	222.79	0.00	457.92
	MIN	-325.22	0.00	-705.66	-325.22	0.00	-653.11	-285.38	0.00	-627.17	-285.38	0.00	-649.73
111	AASHTO Twin TWIN-PICKUP	306.10	0.00	694.85	306.10	0.00	589.10	224.33	0.00	665.92	224.33	0.00	449.52
	MIN	-311.01	0.00	-705.66	-311.01	0.00	-622.23	-272.46	0.00	-627.17	-272.46	0.00	-614.11
	MID-PICKUP	-311.01	0.00	-705.66	-311.01	0.00	-622.23	-272.46	0.00	-627.17	-272.46	0.00	-614.11
198	AASHTO FatigTRUCK-LOAD	43.97	0.00	112.01	43.97	0.00	116.14	54.92	0.00	220.65	54.92	0.00	175.34
	MIN	-68.05	0.00	-106.64	-68.05	0.00	-172.24	-127.46	0.00	-55.15	-127.46	0.00	-311.76
	TANDEM-LOAD	31.08	0.00	95.47	31.08	0.00	88.63	43.10	0.00	171.42	43.10	0.00	133.80
	MIN	-55.86	0.00	-73.59	-55.86	0.00	-137.87	-97.99	0.00	-46.53	-97.99	0.00	-237.89

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001049			1001050			1001050			2050		
NODE		1049			2049			1050			2050		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	115.62	0.00	223.21	115.62	0.00	208.25	59.10	0.00	198.42	59.10	0.00	127.24
	MIN	-99.97	0.00	-281.59	-99.97	0.00	-197.82	-89.53	0.00	-154.80	-89.53	0.00	-191.82
199	AASHTO-LRFD TRUCK-LOAD MAX	157.69	0.00	340.52	157.69	0.00	326.65	141.28	0.00	425.85	141.28	0.00	294.83
	MIN	-161.74	0.00	-334.72	-161.74	0.00	-340.21	-178.88	0.00	-384.16	-178.88	0.00	-411.34
	TANDEM-LOAD MAX	81.45	0.00	224.46	81.45	0.00	174.32	85.09	0.00	276.38	85.09	0.00	191.06
	MIN	-107.56	0.00	-179.49	-107.56	0.00	-230.35	-121.82	0.00	-209.01	-121.82	0.00	-286.43
	DISPERSION-LMAX	182.41	0.00	431.53	182.41	0.00	327.91	107.98	0.00	314.06	107.98	0.00	204.64
	MIN	-183.83	0.00	-449.35	-183.83	0.00	-351.16	-123.85	0.00	-312.69	-123.85	0.00	-271.01
300	Total Dead lWithout snow	-9.57	0.00	-20.45	-9.57	0.00	-60.43	-20.44	0.00	-24.47	-20.44	0.00	-109.83
301	Particular Snow	-0.58	0.00	-5.21	-0.58	0.00	-7.63	-5.65	0.00	0.99	-5.65	0.00	-22.62
302	Live load Total MAX	190.84	0.00	473.19	190.84	0.00	368.43	144.82	0.00	444.59	144.82	0.00	297.65
	MIN	-211.39	0.00	-458.68	-211.39	0.00	-424.52	-185.50	0.00	-407.66	-185.50	0.00	-422.32
303	Sum total D+L+PP MAX	190.27	0.00	467.98	190.27	0.00	360.80	139.16	0.00	445.59	139.16	0.00	254.48
	MIN	-221.54	0.00	-484.34	-221.54	0.00	-492.58	-211.59	0.00	-431.13	-211.59	0.00	-554.78

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001051 1051	2051			1001052 1052	2052						
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)				
NAME TITLE												
1 Pavement	-24.94	0.00	19.30	-24.94	0.00	-84.89	-27.25	0.00	17.97	-27.25	0.00	-95.87
3 Railing	-6.16	0.00	4.00	-6.16	0.00	-21.73	-6.21	0.00	2.56	-6.21	0.00	-23.39
5 Wheel guard	-60.99	0.00	39.62	-60.99	0.00	-215.13	-61.52	0.00	25.37	-61.52	0.00	-231.59
8 Steel weight	-27.40	0.00	30.32	-27.40	0.00	-84.12	-36.11	0.00	42.14	-36.11	0.00	-108.68
10 Medial strip	28.12	0.00	-16.44	28.12	0.00	101.02	27.17	0.00	-7.29	27.17	0.00	106.19
19 Snow	-12.55	0.00	9.51	-12.55	0.00	-42.89	-13.57	0.00	8.56	-13.57	0.00	-48.14
31 Miscellaneous	2.27	0.00	-1.33	2.27	0.00	8.17	2.19	0.00	-0.59	2.19	0.00	8.58
100 AASHTO-LRFD TRUCK-LOAD												
MAX	116.11	0.00	416.44	116.11	0.00	259.75	117.75	0.00	407.83	117.75	0.00	273.73
MIN	-180.55	0.00	-297.10	-180.55	0.00	-430.44	-176.87	0.00	-297.95	-176.87	0.00	-423.90
TANDEM-LOAD												
MAX	86.83	0.00	310.98	86.83	0.00	196.19	87.97	0.00	304.64	87.97	0.00	206.22
MIN	-135.73	0.00	-217.98	-135.73	0.00	-323.80	-133.15	0.00	-219.46	-133.15	0.00	-318.44
DISPERSION-LMAX												
MAX	88.07	0.00	314.50	88.07	0.00	196.64	82.04	0.00	305.40	82.04	0.00	187.65
MIN	-128.27	0.00	-280.64	-128.27	0.00	-332.22	-126.08	0.00	-273.58	-126.08	0.00	-340.23
110 Live load L-PICKUP 1												
MAX	204.18	0.00	730.93	204.18	0.00	456.39	199.80	0.00	713.23	199.80	0.00	461.38
MIN	-308.82	0.00	-577.74	-308.82	0.00	-762.66	-302.95	0.00	-571.53	-302.95	0.00	-764.14
L-PICKUP 2												
MAX	174.90	0.00	625.48	174.90	0.00	392.83	170.01	0.00	610.05	170.01	0.00	393.87
MIN	-264.00	0.00	-498.62	-264.00	0.00	-656.02	-259.23	0.00	-493.04	-259.23	0.00	-658.67
L-PICKUP 3												
MAX	-301.06	0.00	-615.57	-301.06	0.00	-744.57	-296.80	0.00	-604.91	-296.80	0.00	-749.83
MIN	-301.06	0.00	-615.57	-301.06	0.00	-744.57	-296.80	0.00	-604.91	-296.80	0.00	-749.83
Live load												
MAX	204.18	0.00	730.93	204.18	0.00	456.39	199.80	0.00	713.23	199.80	0.00	461.38
MIN	-308.82	0.00	-615.57	-308.82	0.00	-762.66	-302.95	0.00	-604.91	-302.95	0.00	-764.14
111 AASHTO Twin TWIN-PICKUP												
MAX	206.01	0.00	729.42	206.01	0.00	441.27	201.06	0.00	712.20	201.06	0.00	445.00
MIN	-301.06	0.00	-615.57	-301.06	0.00	-744.57	-296.80	0.00	-604.91	-296.80	0.00	-749.83
MID-PICKUP												
MAX	-301.06	0.00	-615.57	-301.06	0.00	-744.57	-296.80	0.00	-604.91	-296.80	0.00	-749.83
MIN	-301.06	0.00	-615.57	-301.06	0.00	-744.57	-296.80	0.00	-604.91	-296.80	0.00	-749.83
198 AASHTO FatigTRUCK-LOAD												
MAX	57.21	0.00	265.19	57.21	0.00	194.34	58.51	0.00	268.20	58.51	0.00	202.56
MIN	-149.69	0.00	-76.86	-149.69	0.00	-360.07	-149.56	0.00	-94.12	-149.56	0.00	-356.50
TANDEM-LOAD												
MAX	45.05	0.00	203.97	45.05	0.00	148.29	46.05	0.00	205.69	46.05	0.00	154.02
MIN	-114.28	0.00	-52.73	-114.28	0.00	-273.35	-113.97	0.00	-64.94	-113.97	0.00	-270.38

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001051			1001052								
NODE		1051			2051			1052			2052		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	41.00	0.00	199.40	41.00	0.00	115.21	35.21	0.00	189.74	35.21	0.00	119.72
	MIN	-97.06	0.00	-130.59	-97.06	0.00	-230.40	-95.19	0.00	-132.26	-95.19	0.00	-236.67
199	AASHTO-LRFD TRUCK-LOAD MAX	140.83	0.00	495.97	140.83	0.00	293.66	141.36	0.00	485.92	141.36	0.00	306.80
	MIN	-206.25	0.00	-403.33	-206.25	0.00	-495.08	-203.70	0.00	-398.54	-203.70	0.00	-492.91
	TANDEM-LOAD MAX	86.83	0.00	310.98	86.83	0.00	196.19	87.97	0.00	304.64	87.97	0.00	206.22
	MIN	-135.73	0.00	-217.98	-135.73	0.00	-323.80	-133.15	0.00	-219.46	-133.15	0.00	-318.44
	DISPERSION-LMAX	88.07	0.00	314.50	88.07	0.00	196.64	82.04	0.00	305.40	82.04	0.00	187.65
	MIN	-128.27	0.00	-280.64	-128.27	0.00	-332.22	-126.08	0.00	-273.58	-126.08	0.00	-340.23
300	Total Dead lWithout snow	-89.10	0.00	75.46	-89.10	0.00	-296.69	-101.74	0.00	80.18	-101.74	0.00	-344.77
301	Particular Snow	-12.55	0.00	9.51	-12.55	0.00	-42.89	-13.57	0.00	8.56	-13.57	0.00	-48.14
302	Live load Total MAX	132.72	0.00	475.11	132.72	0.00	296.66	129.87	0.00	463.60	129.87	0.00	299.90
	MIN	-200.73	0.00	-400.12	-200.73	0.00	-495.73	-196.91	0.00	-393.19	-196.91	0.00	-496.69
303	Sum total D+L+PP MAX	70.89	0.00	560.08	70.89	0.00	46.07	53.52	0.00	552.34	53.52	0.00	-3.04
	MIN	-302.37	0.00	-390.61	-302.37	0.00	-835.31	-312.22	0.00	-384.63	-312.22	0.00	-889.59

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001053						1001054					
		1053			2053			1054			2054		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-19.20	0.00	0.53	-19.20	0.00	-79.66	-17.30	0.00	-3.40	-17.30	0.00	-75.66
3	Railing	-5.92	0.00	1.28	-5.92	0.00	-23.43	-5.85	0.00	0.95	-5.85	0.00	-23.49
5	Wheel guard	-58.58	0.00	12.69	-58.58	0.00	-232.00	-57.92	0.00	9.36	-57.92	0.00	-232.56
8	Steel weight	-7.05	0.00	-13.16	-7.05	0.00	-42.59	-0.16	0.00	-25.07	-0.16	0.00	-25.71
10	Medial strip	29.82	0.00	-8.59	29.82	0.00	115.95	30.46	0.00	-8.55	30.46	0.00	118.67
19	Snow	-9.96	0.00	0.56	-9.96	0.00	-41.03	-9.10	0.00	-1.25	-9.10	0.00	-39.28
31	Miscellaneous	2.41	0.00	-0.69	2.41	0.00	9.37	2.46	0.00	-0.69	2.46	0.00	9.59
100	AASHTO-LRFD TRUCK-LOAD	125.13	0.00	390.93	125.13	0.00	292.39	127.51	0.00	385.52	127.51	0.00	294.05
	MIN	-170.29	0.00	-307.77	-170.29	0.00	-410.43	-169.71	0.00	-308.91	-169.71	0.00	-406.80
	TANDEM-LOAD MAX	92.99	0.00	292.06	92.99	0.00	218.95	94.60	0.00	288.21	94.60	0.00	220.06
	MIN	-128.27	0.00	-226.18	-128.27	0.00	-308.11	-127.77	0.00	-226.95	-127.77	0.00	-304.62
	DISPERSION-LMAX	90.74	0.00	291.90	90.74	0.00	211.48	94.70	0.00	290.89	94.70	0.00	214.68
	MIN	-121.72	0.00	-288.59	-121.72	0.00	-336.38	-122.64	0.00	-293.98	-122.64	0.00	-332.90
110	Live load L-PICKUP 1	215.87	0.00	682.83	215.87	0.00	503.87	222.21	0.00	676.41	222.21	0.00	508.73
	MIN	-292.01	0.00	-596.36	-292.01	0.00	-746.81	-292.35	0.00	-602.89	-292.35	0.00	-739.70
	L-PICKUP 2 MAX	183.73	0.00	583.97	183.73	0.00	430.43	189.30	0.00	579.10	189.30	0.00	434.74
	MIN	-249.99	0.00	-514.77	-249.99	0.00	-644.49	-250.41	0.00	-520.94	-250.41	0.00	-637.52
	L-PICKUP 3	-285.40	0.00	-631.42	-285.40	0.00	-729.78	-285.43	0.00	-636.80	-285.43	0.00	-723.07
	Live load MAX	215.87	0.00	682.83	215.87	0.00	503.87	222.21	0.00	676.41	222.21	0.00	508.73
	MIN	-292.01	0.00	-631.42	-292.01	0.00	-746.81	-292.35	0.00	-636.80	-292.35	0.00	-739.70
111	AASHTO Twin TWIN-PICKUP	220.09	0.00	680.25	220.09	0.00	495.99	227.35	0.00	670.48	227.35	0.00	503.99
	MIN	-285.40	0.00	-631.42	-285.40	0.00	-729.78	-285.43	0.00	-636.80	-285.43	0.00	-723.07
	MID-PICKUP	-285.40	0.00	-631.42	-285.40	0.00	-729.78	-285.43	0.00	-636.80	-285.43	0.00	-723.07
198	AASHTO FatigTRUCK-LOAD	59.70	0.00	267.23	59.70	0.00	207.12	59.25	0.00	268.45	59.25	0.00	206.48
	MIN	-147.80	0.00	-104.23	-147.80	0.00	-350.15	-148.78	0.00	-107.19	-148.78	0.00	-353.01
	TANDEM-LOAD MAX	46.85	0.00	204.31	46.85	0.00	156.93	46.50	0.00	204.91	46.50	0.00	156.34
	MIN	-112.44	0.00	-71.77	-112.44	0.00	-265.35	-112.97	0.00	-73.77	-112.97	0.00	-266.94

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001053						1001054					
NODE		1053			2053			1054			2054		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	36.63	0.00	182.85	36.63	0.00	129.05	37.91	0.00	182.72	37.91	0.00	129.12
	MIN	-92.65	0.00	-143.07	-92.65	0.00	-236.16	-93.38	0.00	-147.89	-93.38	0.00	-238.97
199	AASHTO-LRFD TRUCK-LOAD MAX	153.80	0.00	463.93	153.80	0.00	339.62	157.91	0.00	454.08	157.91	0.00	345.30
	MIN	-195.39	0.00	-412.99	-195.39	0.00	-474.48	-194.50	0.00	-413.58	-194.50	0.00	-470.52
	TANDEM-LOAD MAX	92.99	0.00	292.06	92.99	0.00	218.95	94.60	0.00	288.21	94.60	0.00	220.06
	MIN	-128.27	0.00	-226.18	-128.27	0.00	-308.11	-127.77	0.00	-226.95	-127.77	0.00	-304.62
	DISPERSION-LMAX	90.74	0.00	291.90	90.74	0.00	211.48	94.70	0.00	290.89	94.70	0.00	214.68
	MIN	-121.72	0.00	-288.59	-121.72	0.00	-336.38	-122.64	0.00	-293.98	-122.64	0.00	-332.90
300	Total Dead lWithout snow	-58.52	0.00	-7.94	-58.52	0.00	-252.36	-48.30	0.00	-27.40	-48.30	0.00	-229.17
301	Particular Snow	-9.96	0.00	0.56	-9.96	0.00	-41.03	-9.10	0.00	-1.25	-9.10	0.00	-39.28
302	Live load Total MAX	140.32	0.00	443.84	140.32	0.00	327.51	144.44	0.00	439.66	144.44	0.00	330.68
	MIN	-189.81	0.00	-410.42	-189.81	0.00	-485.43	-190.03	0.00	-413.92	-190.03	0.00	-480.80
303	Sum total D+L+PP MAX	113.94	0.00	444.40	113.94	0.00	132.38	130.36	0.00	438.41	130.36	0.00	161.43
	MIN	-258.28	0.00	-417.80	-258.28	0.00	-778.82	-247.44	0.00	-442.57	-247.44	0.00	-749.25

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001055						1001056							
		1055			2055			1056			2056				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-19.61	0.00	0.78	-19.61	0.00	-81.11	-28.03	0.00	18.42	-28.03	0.00	-98.66		
3	Railing	-5.93	0.00	1.28	-5.93	0.00	-23.50	-6.24	0.00	2.56	-6.24	0.00	-23.50		
5	Wheel guard	-58.75	0.00	12.69	-58.75	0.00	-232.69	-61.76	0.00	25.36	-61.76	0.00	-232.63		
8	Steel weight	-8.50	0.00	-12.14	-8.50	0.00	-47.65	-38.95	0.00	43.96	-38.95	0.00	-118.72		
10	Medial strip	29.68	0.00	-8.43	29.68	0.00	115.56	26.88	0.00	-6.99	26.88	0.00	105.27		
19	Snow	-10.14	0.00	0.67	-10.14	0.00	-41.69	-13.92	0.00	8.75	-13.92	0.00	-49.39		
31	Miscellaneous	2.40	0.00	-0.68	2.40	0.00	9.34	2.17	0.00	-0.57	2.17	0.00	8.51		
100	AASHTO-LRFD TRUCK-LOAD	MAX	127.66	0.00	395.81	127.66	0.00	292.00	118.75	0.00	409.37	118.75	0.00	273.38	
		MIN	-174.58	0.00	-310.29	-174.58	0.00	-415.25	-179.05	0.00	-298.14	-179.05	0.00	-427.73	
		TANDEM-LOAD	MAX	94.76	0.00	295.41	94.76	0.00	218.65	88.57	0.00	305.72	88.57	0.00	205.52
		MIN	-131.26	0.00	-227.82	-131.26	0.00	-310.96	-134.60	0.00	-219.39	-134.60	0.00	-320.41	
		DISPERSION-L	MAX	93.52	0.00	295.72	93.52	0.00	211.20	83.56	0.00	307.58	83.56	0.00	191.94
		MIN	-125.25	0.00	-291.98	-125.25	0.00	-338.49	-128.90	0.00	-275.07	-128.90	0.00	-348.99	
110	Live load	L-PICKUP 1	MAX	221.18	0.00	691.53	221.18	0.00	503.20	202.31	0.00	716.95	202.31	0.00	465.32
		MIN	-299.83	0.00	-602.27	-299.83	0.00	-753.74	-307.95	0.00	-573.20	-307.95	0.00	-776.71	
		L-PICKUP 2	MAX	188.28	0.00	591.13	188.28	0.00	429.85	172.13	0.00	613.30	172.13	0.00	397.46
		MIN	-256.51	0.00	-519.80	-256.51	0.00	-649.45	-263.50	0.00	-494.46	-263.50	0.00	-669.40	
		L-PICKUP 3	MAX	-294.00	0.00	-638.91	-294.00	0.00	-738.77	-301.67	0.00	-607.46	-301.67	0.00	-762.09
		Live load	MAX	221.18	0.00	691.53	221.18	0.00	503.20	202.31	0.00	716.95	202.31	0.00	465.32
MIN	-299.83	0.00	-638.91	-299.83	0.00	-753.74	-307.95	0.00	-607.46	-307.95	0.00	-776.71			
111	AASHTO Twin	TWIN-PICKUP	MAX	226.57	0.00	689.65	226.57	0.00	497.79	203.42	0.00	715.60	203.42	0.00	449.49
		MIN	-294.00	0.00	-638.91	-294.00	0.00	-738.77	-301.67	0.00	-607.46	-301.67	0.00	-762.09	
		MID-PICKUP	MAX	-294.00	0.00	-638.91	-294.00	0.00	-738.77	-301.67	0.00	-607.46	-301.67	0.00	-762.09
198	AASHTO Fatig	TRUCK-LOAD	MAX	59.33	0.00	269.00	59.33	0.00	206.07	58.12	0.00	268.30	58.12	0.00	201.39
		MIN	-149.78	0.00	-105.83	-149.78	0.00	-356.63	-150.50	0.00	-95.08	-150.50	0.00	-360.33	
		TANDEM-LOAD	MAX	46.55	0.00	205.49	46.55	0.00	156.11	45.70	0.00	205.73	45.70	0.00	153.04
		MIN	-113.82	0.00	-72.89	-113.82	0.00	-269.95	-114.71	0.00	-65.61	-114.71	0.00	-273.40	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001055						1001056					
NODE		1055			2055			1056			2056		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	37.21	0.00	184.55	37.21	0.00	127.37	35.34	0.00	190.62	35.34	0.00	120.84
	MIN	-94.35	0.00	-144.44	-94.35	0.00	-239.74	-96.55	0.00	-132.95	-96.55	0.00	-241.29
199	AASHTO-LRFD TRUCK-LOAD MAX	158.23	0.00	470.56	158.23	0.00	341.90	142.46	0.00	487.54	142.46	0.00	307.49
	MIN	-201.42	0.00	-417.92	-201.42	0.00	-482.36	-206.29	0.00	-399.89	-206.29	0.00	-497.77
	TANDEM-LOAD MAX	94.76	0.00	295.41	94.76	0.00	218.65	88.57	0.00	305.72	88.57	0.00	205.52
	MIN	-131.26	0.00	-227.82	-131.26	0.00	-310.96	-134.60	0.00	-219.39	-134.60	0.00	-320.41
	DISPERSION-LMAX	93.52	0.00	295.72	93.52	0.00	211.20	83.56	0.00	307.58	83.56	0.00	191.94
	MIN	-125.25	0.00	-291.98	-125.25	0.00	-338.49	-128.90	0.00	-275.07	-128.90	0.00	-348.99
300	Total Dead lWithout snow	-60.70	0.00	-6.49	-60.70	0.00	-260.05	-105.93	0.00	82.73	-105.93	0.00	-359.74
301	Particular Snow	-10.14	0.00	0.67	-10.14	0.00	-41.69	-13.92	0.00	8.75	-13.92	0.00	-49.39
302	Live load Total MAX	143.77	0.00	449.49	143.77	0.00	327.08	131.50	0.00	466.02	131.50	0.00	302.46
	MIN	-194.89	0.00	-415.29	-194.89	0.00	-489.93	-200.17	0.00	-394.85	-200.17	0.00	-504.86
303	Sum total D+L+PP MAX	116.05	0.00	450.17	116.05	0.00	123.46	51.11	0.00	557.50	51.11	0.00	-15.93
	MIN	-265.73	0.00	-421.11	-265.73	0.00	-791.67	-320.02	0.00	-386.10	-320.02	0.00	-913.99

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001057 1057						1001058 1058						
		2057			2058			2057			2058			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-28.68	0.00	25.77	-28.68	0.00	-94.03	-9.99	0.00	0.07	-9.99	0.00	-41.67	
3	Railing	-6.28	0.00	4.18	-6.28	0.00	-22.03	-4.44	0.00	3.12	-4.44	0.00	-15.44	
5	Wheel guard	-62.12	0.00	41.36	-62.12	0.00	-218.12	-43.99	0.00	30.89	-43.99	0.00	-152.85	
8	Steel weight	-41.16	0.00	54.42	-41.16	0.00	-117.49	12.61	0.00	-36.98	12.61	0.00	15.70	
10	Medial strip	26.75	0.00	-13.91	26.75	0.00	97.81	24.97	0.00	-21.60	24.97	0.00	82.70	
19	Snow	-14.22	0.00	12.40	-14.22	0.00	-46.98	-5.53	0.00	0.83	-5.53	0.00	-22.28	
31	Miscellaneous	2.16	0.00	-1.12	2.16	0.00	7.90	2.02	0.00	-1.74	2.02	0.00	6.68	
100	AASHTO-LRFD TRUCK-LOAD	MAX	112.56	0.00	421.97	112.56	0.00	251.79	113.41	0.00	369.17	113.41	0.00	250.49
		MIN	-184.74	0.00	-289.89	-184.74	0.00	-440.79	-161.92	0.00	-281.60	-161.92	0.00	-384.41
		TANDEM-LOAD MAX	84.20	0.00	314.83	84.20	0.00	190.29	83.99	0.00	276.27	83.99	0.00	188.35
		MIN	-138.80	0.00	-212.71	-138.80	0.00	-330.62	-122.08	0.00	-205.90	-122.08	0.00	-290.73
		DISPERSION-LMAX	85.83	0.00	318.17	85.83	0.00	197.97	108.43	0.00	309.19	108.43	0.00	212.97
		MIN	-132.19	0.00	-273.60	-132.19	0.00	-348.80	-123.92	0.00	-308.29	-123.92	0.00	-278.09
110	Live load	L-PICKUP 1 MAX	198.39	0.00	740.15	198.39	0.00	449.76	221.83	0.00	678.36	221.83	0.00	463.46
		MIN	-316.93	0.00	-563.49	-316.93	0.00	-789.59	-285.84	0.00	-589.88	-285.84	0.00	-662.50
		L-PICKUP 2 MAX	170.03	0.00	633.00	170.03	0.00	388.26	192.42	0.00	585.46	192.42	0.00	401.32
		MIN	-270.99	0.00	-486.31	-270.99	0.00	-679.43	-246.01	0.00	-514.19	-246.01	0.00	-568.82
		L-PICKUP 3	-308.98	0.00	-601.98	-308.98	0.00	-776.16	-271.85	0.00	-619.86	-271.85	0.00	-627.11
		Live load MAX	198.39	0.00	740.15	198.39	0.00	449.76	221.83	0.00	678.36	221.83	0.00	463.46
MIN	-316.93	0.00	-601.98	-316.93	0.00	-789.59	-285.84	0.00	-619.86	-285.84	0.00	-662.50		
111	AASHTO Twin	TWIN-PICKUP MAX	200.07	0.00	738.39	200.07	0.00	438.01	223.88	0.00	658.27	223.88	0.00	460.13
		MIN	-308.98	0.00	-601.98	-308.98	0.00	-776.16	-271.85	0.00	-619.86	-271.85	0.00	-627.11
		MID-PICKUP	-308.98	0.00	-601.98	-308.98	0.00	-776.16	-271.85	0.00	-619.86	-271.85	0.00	-627.11
198	AASHTO Fatig	TRUCK-LOAD MAX	55.74	0.00	267.17	55.74	0.00	190.57	54.21	0.00	221.26	54.21	0.00	173.82
		MIN	-151.38	0.00	-75.84	-151.38	0.00	-365.14	-128.57	0.00	-53.68	-128.57	0.00	-315.78
		TANDEM-LOAD MAX	43.92	0.00	205.32	43.92	0.00	145.49	42.53	0.00	172.03	42.53	0.00	132.58
		MIN	-115.50	0.00	-52.05	-115.50	0.00	-277.12	-98.88	0.00	-45.36	-98.88	0.00	-240.99

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001057			1001058			1001058			2058		
NODE		1057			2057			1058			2058		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	40.20	0.00	200.15	40.20	0.00	115.09	59.38	0.00	195.95	59.38	0.00	130.23
	MIN	-98.43	0.00	-128.11	-98.43	0.00	-237.64	-89.46	0.00	-152.47	-89.46	0.00	-194.43
199	AASHTO-LRFD TRUCK-LOAD MAX	136.47	0.00	502.26	136.47	0.00	288.71	140.33	0.00	422.22	140.33	0.00	298.29
	MIN	-211.11	0.00	-395.27	-211.11	0.00	-513.60	-178.13	0.00	-380.45	-178.13	0.00	-418.70
	TANDEM-LOAD MAX	84.20	0.00	314.83	84.20	0.00	190.29	83.99	0.00	276.27	83.99	0.00	188.35
	MIN	-138.80	0.00	-212.71	-138.80	0.00	-330.62	-122.08	0.00	-205.90	-122.08	0.00	-290.73
	DISPERSION-LMAX	85.83	0.00	318.17	85.83	0.00	197.97	108.43	0.00	309.19	108.43	0.00	212.97
	MIN	-132.19	0.00	-273.60	-132.19	0.00	-348.80	-123.92	0.00	-308.29	-123.92	0.00	-278.09
300	Total Dead lWithout snow	-109.33	0.00	110.70	-109.33	0.00	-345.96	-18.83	0.00	-26.24	-18.83	0.00	-104.88
301	Particular Snow	-14.22	0.00	12.40	-14.22	0.00	-46.98	-5.53	0.00	0.83	-5.53	0.00	-22.28
302	Live load Total MAX	128.95	0.00	481.09	128.95	0.00	292.35	144.19	0.00	440.94	144.19	0.00	301.25
	MIN	-206.01	0.00	-391.29	-206.01	0.00	-513.23	-185.80	0.00	-402.91	-185.80	0.00	-430.63
303	Sum total D+L+PP MAX	44.10	0.00	604.20	44.10	0.00	-12.89	138.66	0.00	441.77	138.66	0.00	264.46
	MIN	-329.55	0.00	-378.89	-329.55	0.00	-906.17	-210.16	0.00	-428.32	-210.16	0.00	-557.79

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001059						1001060						
		1059			2059			1060			2060			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	5.33	0.00	-22.39	5.33	0.00	-0.12	19.27	0.00	-47.37	19.27	0.00	33.11	
3	Railing	0.39	0.00	-4.40	0.39	0.00	-2.76	5.93	0.00	-14.52	5.93	0.00	10.23	
5	Wheel guard	3.89	0.00	-43.58	3.89	0.00	-27.34	58.67	0.00	-143.77	58.67	0.00	101.31	
8	Steel weight	16.89	0.00	-38.06	16.89	0.00	32.50	7.21	0.00	-18.33	7.21	0.00	11.80	
10	Medial strip	0.39	0.00	17.44	0.39	0.00	19.08	-29.83	0.00	73.01	-29.83	0.00	-51.60	
19	Snow	2.44	0.00	-10.97	2.44	0.00	-0.76	9.99	0.00	-24.55	9.99	0.00	17.18	
31	Miscellaneous	0.03	0.00	1.41	0.03	0.00	1.54	-2.41	0.00	5.90	-2.41	0.00	-4.17	
100	AASHTO-LRFD TRUCK-LOAD	MAX	109.59	0.00	283.99	109.59	0.00	241.06	107.79	0.00	248.45	107.79	0.00	198.84
		MIN	-137.23	0.00	-236.32	-137.23	0.00	-301.11	-106.81	0.00	-251.66	-106.81	0.00	-198.59
		TANDEM-LOAD	80.23	0.00	216.97	80.23	0.00	175.55	73.32	0.00	169.42	73.32	0.00	134.77
		MIN	-105.01	0.00	-174.65	-105.01	0.00	-230.47	-72.75	0.00	-171.65	-72.75	0.00	-135.74
		DISPERSION-L	190.42	0.00	421.12	190.42	0.00	348.50	328.04	0.00	682.05	328.04	0.00	608.66
		MIN	-180.82	0.00	-459.97	-180.82	0.00	-346.62	-295.43	0.00	-762.26	-295.43	0.00	-552.80
110	Live load	L-PICKUP 1	300.02	0.00	705.11	300.02	0.00	589.56	435.83	0.00	930.50	435.83	0.00	807.50
		MIN	-318.05	0.00	-696.28	-318.05	0.00	-647.73	-402.24	0.00	-1013.92	-402.24	0.00	-751.39
		L-PICKUP 2	270.65	0.00	638.09	270.65	0.00	524.05	401.35	0.00	851.47	401.35	0.00	743.43
		MIN	-285.83	0.00	-634.62	-285.83	0.00	-577.08	-368.18	0.00	-933.92	-368.18	0.00	-688.54
		L-PICKUP 3	-298.56	0.00	-710.23	-298.56	0.00	-609.20	-439.57	0.00	-1090.23	-439.57	0.00	-817.09
		Live load	300.02	0.00	705.11	300.02	0.00	589.56	435.83	0.00	930.50	435.83	0.00	807.50
111	AASHTO Twin	TWIN-PICKUP	312.49	0.00	663.07	312.49	0.00	615.85	468.84	0.00	1020.24	468.84	0.00	869.12
		MIN	-298.56	0.00	-710.23	-298.56	0.00	-609.20	-439.57	0.00	-1090.23	-439.57	0.00	-817.09
		MID-PICKUP	-298.56	0.00	-710.23	-298.56	0.00	-609.20	-439.57	0.00	-1090.23	-439.57	0.00	-817.09
198	AASHTO Fatig	TRUCK-LOAD	43.15	0.00	108.43	43.15	0.00	117.29	66.69	0.00	94.37	66.69	0.00	120.91
		MIN	-66.98	0.00	-103.95	-66.98	0.00	-171.36	-41.42	0.00	-157.78	-41.42	0.00	-78.63
		TANDEM-LOAD	31.18	0.00	93.50	31.18	0.00	89.21	45.29	0.00	64.00	45.29	0.00	81.89
		MIN	-55.39	0.00	-71.72	-55.39	0.00	-137.87	-28.17	0.00	-107.46	-28.17	0.00	-53.68

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001059						1001060					
NODE		1059			2059			1060			2060		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	119.17	0.00	219.76	119.17	0.00	217.22	209.26	0.00	323.93	209.26	0.00	381.71
	MIN	-99.04	0.00	-286.64	-99.04	0.00	-197.43	-141.20	0.00	-492.38	-141.20	0.00	-268.16
199	AASHTO-LRFD TRUCK-LOAD MAX	156.79	0.00	315.63	156.79	0.00	335.78	192.89	0.00	451.54	192.89	0.00	357.03
	MIN	-150.91	0.00	-329.18	-150.91	0.00	-330.28	-192.98	0.00	-449.11	-192.98	0.00	-355.08
	TANDEM-LOAD MAX	80.23	0.00	216.97	80.23	0.00	175.55	73.32	0.00	169.42	73.32	0.00	134.77
	MIN	-105.01	0.00	-174.65	-105.01	0.00	-230.47	-72.75	0.00	-171.65	-72.75	0.00	-135.74
	DISPERSION-LMAX	190.42	0.00	421.12	190.42	0.00	348.50	328.04	0.00	682.05	328.04	0.00	608.66
	MIN	-180.82	0.00	-459.97	-180.82	0.00	-346.62	-295.43	0.00	-762.26	-295.43	0.00	-552.80
300	Total Dead lWithout snow	26.93	0.00	-89.60	26.93	0.00	22.89	58.84	0.00	-145.09	58.84	0.00	100.68
301	Particular Snow	2.44	0.00	-10.97	2.44	0.00	-0.76	9.99	0.00	-24.55	9.99	0.00	17.18
302	Live load Total MAX	195.01	0.00	458.32	195.01	0.00	383.22	283.29	0.00	604.83	283.29	0.00	524.87
	MIN	-206.73	0.00	-461.65	-206.73	0.00	-421.02	-285.72	0.00	-708.65	-285.72	0.00	-531.11
303	Sum total D+L+PP MAX	224.39	0.00	447.35	224.39	0.00	405.35	352.12	0.00	580.28	352.12	0.00	642.73
	MIN	-204.29	0.00	-562.22	-204.29	0.00	-421.79	-275.73	0.00	-878.29	-275.73	0.00	-513.93

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001061						1001062							
NODE		1061			2061			1062			2062				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-0.86	0.00	-10.87	-0.86	0.00	-14.47	-12.85	0.00	5.31	-12.85	0.00	-48.35		
3	Railing	0.20	0.00	-4.02	0.20	0.00	-3.21	-4.52	0.00	3.25	-4.52	0.00	-15.63		
5	Wheel guard	1.93	0.00	-39.84	1.93	0.00	-31.77	-44.76	0.00	32.21	-44.76	0.00	-154.75		
8	Steel weight	-5.82	0.00	4.05	-5.82	0.00	-20.25	2.00	0.00	-17.38	2.00	0.00	-9.04		
10	Medial strip	-1.86	0.00	21.55	-1.86	0.00	13.79	23.84	0.00	-19.46	23.84	0.00	80.13		
19	Snow	-0.33	0.00	-5.81	-0.33	0.00	-7.18	-6.81	0.00	3.17	-6.81	0.00	-25.26		
31	Miscellaneous	-0.15	0.00	1.74	-0.15	0.00	1.11	1.93	0.00	-1.57	1.93	0.00	6.47		
100	AASHTO-LRFD TRUCK-LOAD	MAX	108.61	0.00	284.35	108.61	0.00	237.14	115.49	0.00	362.73	115.49	0.00	260.82	
		MIN	-137.39	0.00	-233.51	-137.39	0.00	-302.51	-160.01	0.00	-282.74	-160.01	0.00	-374.77	
		TANDEM-LOAD	MAX	79.64	0.00	216.35	79.64	0.00	173.34	85.65	0.00	271.25	85.65	0.00	196.44
		MIN	-104.86	0.00	-172.93	-104.86	0.00	-230.85	-120.75	0.00	-206.88	-120.75	0.00	-283.42	
		DISPERSION-L	MAX	182.59	0.00	424.40	182.59	0.00	332.01	102.91	0.00	305.33	102.91	0.00	193.58
		MIN	-183.09	0.00	-444.35	-183.09	0.00	-353.58	-122.78	0.00	-296.15	-122.78	0.00	-269.09	
110	Live load	L-PICKUP 1	MAX	291.20	0.00	708.76	291.20	0.00	569.16	218.40	0.00	668.06	218.40	0.00	454.40
		MIN	-320.49	0.00	-677.86	-320.49	0.00	-656.09	-282.80	0.00	-578.89	-282.80	0.00	-643.86	
		L-PICKUP 2	MAX	262.23	0.00	640.76	262.23	0.00	505.35	188.56	0.00	576.58	188.56	0.00	390.02
		MIN	-287.95	0.00	-617.28	-287.95	0.00	-584.44	-243.53	0.00	-503.03	-243.53	0.00	-552.52	
		L-PICKUP 3	MAX	-303.03	0.00	-690.24	-303.03	0.00	-622.88	-271.66	0.00	-605.93	-271.66	0.00	-609.64
		MIN	291.20	0.00	708.76	291.20	0.00	569.16	218.40	0.00	668.06	218.40	0.00	454.40	
111	AASHTO Twin	TWIN-PICKUP	MAX	302.18	0.00	670.72	302.18	0.00	591.78	219.66	0.00	652.42	219.66	0.00	449.78
		MIN	-303.03	0.00	-690.24	-303.03	0.00	-622.88	-271.66	0.00	-605.93	-271.66	0.00	-609.64	
		MID-PICKUP	MAX	-303.03	0.00	-690.24	-303.03	0.00	-622.88	-271.66	0.00	-605.93	-271.66	0.00	-609.64
		MIN	302.18	0.00	670.72	302.18	0.00	591.78	219.66	0.00	652.42	219.66	0.00	449.78	
		TWIN-PICKUP	MAX	42.83	0.00	108.99	42.83	0.00	116.87	56.24	0.00	214.85	56.24	0.00	179.08
		MIN	-67.14	0.00	-103.70	-67.14	0.00	-171.46	-125.46	0.00	-56.71	-125.46	0.00	-309.19	
198	AASHTO Fatig	TRUCK-LOAD	MAX	31.05	0.00	93.43	31.05	0.00	89.17	44.01	0.00	167.33	44.01	0.00	136.39
		MIN	-55.29	0.00	-71.56	-55.29	0.00	-137.51	-96.59	0.00	-47.66	-96.59	0.00	-236.14	
		TANDEM-LOAD	MAX	42.83	0.00	108.99	42.83	0.00	116.87	56.24	0.00	214.85	56.24	0.00	179.08
		MIN	-67.14	0.00	-103.70	-67.14	0.00	-171.46	-125.46	0.00	-56.71	-125.46	0.00	-309.19	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001061						1001062					
NODE		1061			2061			1062			2062		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	115.67	0.00	219.58	115.67	0.00	210.28	57.46	0.00	193.08	57.46	0.00	125.43
	MIN	-99.39	0.00	-279.30	-99.39	0.00	-199.07	-88.63	0.00	-147.30	-88.63	0.00	-194.27
199	AASHTO-LRFD TRUCK-LOAD MAX	153.16	0.00	320.85	153.16	0.00	325.52	141.16	0.00	419.57	141.16	0.00	306.17
	MIN	-153.61	0.00	-322.58	-153.61	0.00	-338.50	-179.06	0.00	-377.11	-179.06	0.00	-408.29
	TANDEM-LOAD MAX	79.64	0.00	216.35	79.64	0.00	173.34	85.65	0.00	271.25	85.65	0.00	196.44
	MIN	-104.86	0.00	-172.93	-104.86	0.00	-230.85	-120.75	0.00	-206.88	-120.75	0.00	-283.42
	DISPERSION-LMAX	182.59	0.00	424.40	182.59	0.00	332.01	102.91	0.00	305.33	102.91	0.00	193.58
	MIN	-183.09	0.00	-444.35	-183.09	0.00	-353.58	-122.78	0.00	-296.15	-122.78	0.00	-269.09
300	Total Dead lWithout snow	-6.56	0.00	-27.39	-6.56	0.00	-54.79	-34.36	0.00	2.36	-34.36	0.00	-141.18
301	Particular Snow	-0.33	0.00	-5.81	-0.33	0.00	-7.18	-6.81	0.00	3.17	-6.81	0.00	-25.26
302	Live load Total MAX	189.28	0.00	460.69	189.28	0.00	369.95	141.96	0.00	434.24	141.96	0.00	295.36
	MIN	-208.32	0.00	-448.65	-208.32	0.00	-426.46	-183.82	0.00	-393.86	-183.82	0.00	-418.51
303	Sum total D+L+PP MAX	188.95	0.00	454.88	188.95	0.00	362.77	135.15	0.00	439.77	135.15	0.00	217.53
	MIN	-215.20	0.00	-481.86	-215.20	0.00	-488.44	-224.99	0.00	-390.69	-224.99	0.00	-584.95

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001063						1001064							
NODE		1063			2063			1064			2064				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	-19.67	0.00	8.75	-19.67	0.00	-73.43	-26.78	0.00	15.14	-26.78	0.00	-96.72		
3	Railing	-6.00	0.00	3.66	-6.00	0.00	-21.39	-6.21	0.00	2.47	-6.21	0.00	-23.46		
5	Wheel guard	-59.39	0.00	36.28	-59.39	0.00	-211.80	-61.45	0.00	24.47	-61.45	0.00	-232.23		
8	Steel weight	-7.99	0.00	-8.35	-7.99	0.00	-41.72	-34.27	0.00	31.78	-34.27	0.00	-111.37		
10	Medial strip	30.10	0.00	-20.30	30.10	0.00	105.43	27.39	0.00	-8.29	27.39	0.00	106.13		
19	Snow	-10.19	0.00	4.79	-10.19	0.00	-37.76	-13.36	0.00	7.29	-13.36	0.00	-48.53		
31	Miscellaneous	2.43	0.00	-1.64	2.43	0.00	8.52	2.21	0.00	-0.67	2.21	0.00	8.58		
100	AASHTO-LRFD TRUCK-LOAD	MAX	119.76	0.00	400.73	119.76	0.00	269.38	117.24	0.00	416.21	117.24	0.00	259.86	
		MIN	-175.00	0.00	-302.56	-175.00	0.00	-422.47	-185.44	0.00	-294.33	-185.44	0.00	-448.20	
		TANDEM-LOAD	MAX	89.38	0.00	300.24	89.38	0.00	202.84	87.67	0.00	311.50	87.67	0.00	195.47
		MIN	-132.17	0.00	-221.56	-132.17	0.00	-318.82	-139.70	0.00	-216.97	-139.70	0.00	-335.57	
		DISPERSION-L	MAX	91.27	0.00	297.44	91.27	0.00	200.81	83.79	0.00	303.28	83.79	0.00	198.31
		MIN	-122.67	0.00	-281.11	-122.67	0.00	-316.80	-127.29	0.00	-275.98	-127.29	0.00	-352.77	
110	Live load	L-PICKUP 1	MAX	211.03	0.00	698.17	211.03	0.00	470.18	201.03	0.00	719.50	201.03	0.00	458.17
		MIN	-297.67	0.00	-583.67	-297.67	0.00	-739.27	-312.73	0.00	-570.31	-312.73	0.00	-800.97	
		L-PICKUP 2	MAX	180.65	0.00	597.67	180.65	0.00	403.64	171.47	0.00	614.78	171.47	0.00	393.78
		MIN	-254.85	0.00	-502.67	-254.85	0.00	-635.62	-266.99	0.00	-492.95	-266.99	0.00	-688.34	
		L-PICKUP 3	MAX	-286.45	0.00	-622.85	-286.45	0.00	-711.63	-303.55	0.00	-603.46	-303.55	0.00	-785.25
		Live load	MAX	211.03	0.00	698.17	211.03	0.00	470.18	201.03	0.00	719.50	201.03	0.00	458.17
MIN	-297.67	0.00	-622.85	-297.67	0.00	-739.27	-312.73	0.00	-603.46	-312.73	0.00	-800.97			
111	AASHTO Twin	TWIN-PICKUP	MAX	213.11	0.00	694.01	213.11	0.00	463.48	201.28	0.00	715.25	201.28	0.00	446.97
		MIN	-286.45	0.00	-622.85	-286.45	0.00	-711.63	-303.55	0.00	-603.46	-303.55	0.00	-785.25	
		MID-PICKUP	MAX	-286.45	0.00	-622.85	-286.45	0.00	-711.63	-303.55	0.00	-603.46	-303.55	0.00	-785.25
198	AASHTO Fatig	TRUCK-LOAD	MAX	58.81	0.00	260.15	58.81	0.00	199.18	55.91	0.00	275.53	55.91	0.00	197.09
		MIN	-147.91	0.00	-79.18	-147.91	0.00	-357.66	-155.87	0.00	-94.91	-155.87	0.00	-375.53	
		TANDEM-LOAD	MAX	46.18	0.00	200.47	46.18	0.00	151.46	44.25	0.00	211.49	44.25	0.00	150.16
		MIN	-113.19	0.00	-54.14	-113.19	0.00	-272.33	-118.88	0.00	-65.49	-118.88	0.00	-285.06	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001063			1001064			1001064			1001064		
NODE		1063			2063			1064			2064		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	42.67	0.00	192.23	42.67	0.00	123.52	36.39	0.00	190.23	36.39	0.00	121.61
	MIN	-95.15	0.00	-129.40	-95.15	0.00	-229.75	-97.51	0.00	-135.00	-97.51	0.00	-250.43
199	AASHTO-LRFD TRUCK-LOAD MAX	145.52	0.00	473.68	145.52	0.00	314.17	139.85	0.00	491.43	139.85	0.00	298.32
	MIN	-195.60	0.00	-410.94	-195.60	0.00	-473.90	-209.99	0.00	-394.53	-209.99	0.00	-519.73
	TANDEM-LOAD MAX	89.38	0.00	300.24	89.38	0.00	202.84	87.67	0.00	311.50	87.67	0.00	195.47
	MIN	-132.17	0.00	-221.56	-132.17	0.00	-318.82	-139.70	0.00	-216.97	-139.70	0.00	-335.57
	DISPERSION-LMAX	91.27	0.00	297.44	91.27	0.00	200.81	83.79	0.00	303.28	83.79	0.00	198.31
	MIN	-122.67	0.00	-281.11	-122.67	0.00	-316.80	-127.29	0.00	-275.98	-127.29	0.00	-352.77
300	Total Dead lWithout snow	-60.52	0.00	18.40	-60.52	0.00	-234.39	-99.11	0.00	64.90	-99.11	0.00	-349.07
301	Particular Snow	-10.19	0.00	4.79	-10.19	0.00	-37.76	-13.36	0.00	7.29	-13.36	0.00	-48.53
302	Live load Total MAX	137.17	0.00	453.81	137.17	0.00	305.62	130.67	0.00	467.67	130.67	0.00	297.81
	MIN	-193.48	0.00	-404.85	-193.48	0.00	-480.52	-203.27	0.00	-392.25	-203.27	0.00	-520.63
303	Sum total D+L+PP MAX	107.61	0.00	477.00	107.61	0.00	125.15	57.40	0.00	539.86	57.40	0.00	-10.44
	MIN	-264.19	0.00	-400.06	-264.19	0.00	-752.68	-315.74	0.00	-384.96	-315.74	0.00	-918.23

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001065						1001066							
		1065			2065			1066			2066				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-26.11	0.00	10.21	-26.11	0.00	-98.84	-21.15	0.00	0.06	-21.15	0.00	-88.28		
3	Railing	-6.13	0.00	1.54	-6.13	0.00	-24.07	-5.97	0.00	1.04	-5.97	0.00	-23.89		
5	Wheel guard	-60.71	0.00	15.27	-60.71	0.00	-238.30	-59.07	0.00	10.25	-59.07	0.00	-236.48		
8	Steel weight	-32.45	0.00	22.92	-32.45	0.00	-112.63	-14.35	0.00	-12.13	-14.35	0.00	-72.08		
10	Medial strip	27.26	0.00	-4.73	27.26	0.00	109.14	29.01	0.00	-7.14	29.01	0.00	114.03		
19	Snow	-13.05	0.00	4.88	-13.05	0.00	-49.62	-10.83	0.00	0.29	-10.83	0.00	-44.93		
31	Miscellaneous	2.20	0.00	-0.38	2.20	0.00	8.82	2.34	0.00	-0.58	2.34	0.00	9.21		
100	AASHTO-LRFD TRUCK-LOAD	MAX	121.59	0.00	415.07	121.59	0.00	259.49	126.20	0.00	397.70	126.20	0.00	281.23	
		MIN	-186.99	0.00	-298.22	-186.99	0.00	-438.17	-179.40	0.00	-305.20	-179.40	0.00	-428.26	
		TANDEM-LOAD	MAX	90.77	0.00	310.56	90.77	0.00	196.27	93.77	0.00	298.22	93.77	0.00	210.72
		MIN	-140.74	0.00	-219.67	-140.74	0.00	-329.16	-134.98	0.00	-224.41	-134.98	0.00	-321.27	
		DISPERSION-L	MAX	86.14	0.00	302.74	86.14	0.00	184.87	91.10	0.00	289.90	91.10	0.00	202.58
		MIN	-128.72	0.00	-283.40	-128.72	0.00	-342.46	-125.45	0.00	-287.30	-125.45	0.00	-341.92	
110	Live load	L-PICKUP 1	MAX	207.74	0.00	717.81	207.74	0.00	444.36	217.30	0.00	687.59	217.30	0.00	483.80
		MIN	-315.71	0.00	-581.62	-315.71	0.00	-780.63	-304.85	0.00	-592.50	-304.85	0.00	-770.18	
		L-PICKUP 2	MAX	176.91	0.00	613.30	176.91	0.00	381.14	184.87	0.00	588.12	184.87	0.00	413.29
		MIN	-269.46	0.00	-503.07	-269.46	0.00	-671.62	-260.43	0.00	-511.71	-260.43	0.00	-663.19	
		L-PICKUP 3	MAX	-307.84	0.00	-612.72	-307.84	0.00	-761.01	-296.36	0.00	-625.24	-296.36	0.00	-749.78
		Live load	MAX	207.74	0.00	717.81	207.74	0.00	444.36	217.30	0.00	687.59	217.30	0.00	483.80
MIN	-315.71	0.00	-612.72	-315.71	0.00	-780.63	-304.85	0.00	-625.24	-304.85	0.00	-770.18			
111	AASHTO Twin	TWIN-PICKUP	MAX	209.93	0.00	712.58	209.93	0.00	429.60	221.88	0.00	675.32	221.88	0.00	479.97
		MIN	-307.84	0.00	-612.72	-307.84	0.00	-761.01	-296.36	0.00	-625.24	-296.36	0.00	-749.78	
		MID-PICKUP	MAX	-307.84	0.00	-612.72	-307.84	0.00	-761.01	-296.36	0.00	-625.24	-296.36	0.00	-749.78
198	AASHTO Fatig	TRUCK-LOAD	MAX	55.58	0.00	279.90	55.58	0.00	196.95	57.74	0.00	274.93	57.74	0.00	202.44
		MIN	-158.62	0.00	-104.22	-158.62	0.00	-382.67	-155.19	0.00	-106.87	-155.19	0.00	-373.29	
		TANDEM-LOAD	MAX	43.99	0.00	214.31	43.99	0.00	149.99	45.46	0.00	210.59	45.46	0.00	153.65
		MIN	-120.72	0.00	-71.88	-120.72	0.00	-289.94	-118.07	0.00	-73.63	-118.07	0.00	-282.61	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001065						1001066					
NODE		1065			2065			1066			2066		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	35.25	0.00	188.37	35.25	0.00	116.88	36.63	0.00	182.16	36.63	0.00	124.53
	MIN	-98.32	0.00	-142.28	-98.32	0.00	-251.32	-95.27	0.00	-144.56	-95.27	0.00	-251.02
199	AASHTO-LRFD TRUCK-LOAD MAX	147.11	0.00	489.01	147.11	0.00	292.46	155.44	0.00	460.46	155.44	0.00	330.73
	MIN	-213.32	0.00	-397.40	-213.32	0.00	-503.10	-203.84	0.00	-407.41	-203.84	0.00	-491.17
	TANDEM-LOAD MAX	90.77	0.00	310.56	90.77	0.00	196.27	93.77	0.00	298.22	93.77	0.00	210.72
	MIN	-140.74	0.00	-219.67	-140.74	0.00	-329.16	-134.98	0.00	-224.41	-134.98	0.00	-321.27
	DISPERSION-LMAX	86.14	0.00	302.74	86.14	0.00	184.87	91.10	0.00	289.90	91.10	0.00	202.58
	MIN	-128.72	0.00	-283.40	-128.72	0.00	-342.46	-125.45	0.00	-287.30	-125.45	0.00	-341.92
300	Total Dead lWithout snow	-95.93	0.00	44.83	-95.93	0.00	-355.88	-69.18	0.00	-8.51	-69.18	0.00	-297.49
301	Particular Snow	-13.05	0.00	4.88	-13.05	0.00	-49.62	-10.83	0.00	0.29	-10.83	0.00	-44.93
302	Live load Total MAX	135.03	0.00	466.58	135.03	0.00	288.84	141.24	0.00	446.94	141.24	0.00	314.47
	MIN	-205.21	0.00	-398.27	-205.21	0.00	-507.41	-198.15	0.00	-406.41	-198.15	0.00	-500.62
303	Sum total D+L+PP MAX	66.56	0.00	516.30	66.56	0.00	-30.01	103.60	0.00	447.23	103.60	0.00	66.39
	MIN	-314.19	0.00	-393.39	-314.19	0.00	-912.91	-278.17	0.00	-414.62	-278.17	0.00	-843.04

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001067 1067						1001068 1068						
		SHEAR		TORQUE		MOMENT		SHEAR		TORQUE		MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	-21.50	0.00	1.38	-21.50	0.00	-88.42	-32.09	0.00	25.19	-32.09	0.00	-108.86	
3	Railing	-5.98	0.00	1.31	-5.98	0.00	-23.68	-6.37	0.00	2.83	-6.37	0.00	-23.77	
5	Wheel guard	-59.22	0.00	12.93	-59.22	0.00	-234.42	-63.04	0.00	27.99	-63.04	0.00	-235.31	
8	Steel weight	-15.59	0.00	-10.03	-15.59	0.00	-75.13	-53.86	0.00	68.18	-53.86	0.00	-156.81	
10	Medial strip	28.91	0.00	-8.25	28.91	0.00	112.50	25.40	0.00	-4.90	25.40	0.00	101.19	
19	Snow	-10.98	0.00	0.94	-10.98	0.00	-44.94	-15.74	0.00	11.79	-15.74	0.00	-53.95	
31	Miscellaneous	2.34	0.00	-0.67	2.34	0.00	9.09	2.05	0.00	-0.40	2.05	0.00	8.18	
100	AASHTO-LRFD TRUCK-LOAD	MAX	128.08	0.00	388.76	128.08	0.00	294.23	113.70	0.00	411.89	113.70	0.00	259.95
		MIN	-173.80	0.00	-310.45	-173.80	0.00	-426.67	-183.10	0.00	-288.17	-183.10	0.00	-438.94
	TANDEM-LOAD	MAX	95.00	0.00	292.05	95.00	0.00	219.70	85.10	0.00	308.89	85.10	0.00	195.98
		MIN	-131.26	0.00	-228.11	-131.26	0.00	-320.08	-137.94	0.00	-212.56	-137.94	0.00	-330.47
	DISPERSION-LMAX	MAX	91.03	0.00	286.74	91.03	0.00	214.08	75.89	0.00	298.55	75.89	0.00	178.10
		MIN	-125.73	0.00	-282.08	-125.73	0.00	-352.91	-127.91	0.00	-254.96	-127.91	0.00	-352.25
110	Live load L-PICKUP 1	MAX	219.11	0.00	675.50	219.11	0.00	508.31	189.59	0.00	710.43	189.59	0.00	438.05
		MIN	-299.53	0.00	-592.53	-299.53	0.00	-779.58	-311.01	0.00	-543.14	-311.01	0.00	-791.19
	L-PICKUP 2	MAX	186.03	0.00	578.79	186.03	0.00	433.78	160.99	0.00	607.44	160.99	0.00	374.08
		MIN	-256.99	0.00	-510.19	-256.99	0.00	-673.00	-265.86	0.00	-467.52	-265.86	0.00	-682.72
	L-PICKUP 3	MAX	-290.86	0.00	-628.48	-290.86	0.00	-762.06	-303.21	0.00	-573.75	-303.21	0.00	-774.53
		MIN	219.11	0.00	675.50	219.11	0.00	508.31	189.59	0.00	710.43	189.59	0.00	438.05
	Live load	MAX	219.11	0.00	675.50	219.11	0.00	508.31	189.59	0.00	710.43	189.59	0.00	438.05
		MIN	-299.53	0.00	-628.48	-299.53	0.00	-779.58	-311.01	0.00	-573.75	-311.01	0.00	-791.19
111	AASHTO Twin TWIN-PICKUP	MAX	224.56	0.00	664.51	224.56	0.00	505.18	190.67	0.00	701.14	190.67	0.00	422.78
		MIN	-290.86	0.00	-628.48	-290.86	0.00	-762.06	-303.21	0.00	-573.75	-303.21	0.00	-774.53
	MID-PICKUP	-290.86	0.00	-628.48	-290.86	0.00	-762.06	-303.21	0.00	-573.75	-303.21	0.00	-774.53	
198	AASHTO FatigTRUCK-LOAD	MAX	60.17	0.00	267.25	60.17	0.00	207.58	57.21	0.00	271.42	57.21	0.00	198.37
		MIN	-149.92	0.00	-103.89	-149.92	0.00	-359.34	-153.42	0.00	-91.80	-153.42	0.00	-369.42
	TANDEM-LOAD	MAX	47.16	0.00	205.50	47.16	0.00	157.34	45.06	0.00	208.94	45.06	0.00	150.99
		MIN	-114.58	0.00	-71.60	-114.58	0.00	-273.22	-117.20	0.00	-63.37	-117.20	0.00	-280.60

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001067						1001068					
NODE		1067			2067			1068			2068		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	36.27	0.00	177.86	36.27	0.00	130.67	32.54	0.00	186.14	32.54	0.00	115.24
	MIN	-92.11	0.00	-136.86	-92.11	0.00	-241.31	-95.75	0.00	-122.79	-95.75	0.00	-242.46
199	AASHTO-LRFD TRUCK-LOAD MAX	158.48	0.00	451.60	158.48	0.00	347.23	135.97	0.00	480.50	135.97	0.00	291.65
	MIN	-197.44	0.00	-416.23	-197.44	0.00	-493.82	-208.98	0.00	-382.54	-208.98	0.00	-508.34
	TANDEM-LOAD MAX	95.00	0.00	292.05	95.00	0.00	219.70	85.10	0.00	308.89	85.10	0.00	195.98
	MIN	-131.26	0.00	-228.11	-131.26	0.00	-320.08	-137.94	0.00	-212.56	-137.94	0.00	-330.47
	DISPERSION-LMAX	91.03	0.00	286.74	91.03	0.00	214.08	75.89	0.00	298.55	75.89	0.00	178.10
	MIN	-125.73	0.00	-282.08	-125.73	0.00	-352.91	-127.91	0.00	-254.96	-127.91	0.00	-352.25
300	Total Dead lWithout snow	-71.04	0.00	-3.34	-71.04	0.00	-300.05	-127.91	0.00	118.90	-127.91	0.00	-415.38
301	Particular Snow	-10.98	0.00	0.94	-10.98	0.00	-44.94	-15.74	0.00	11.79	-15.74	0.00	-53.95
302	Live load Total MAX	142.42	0.00	439.07	142.42	0.00	330.40	123.23	0.00	461.78	123.23	0.00	284.73
	MIN	-194.70	0.00	-408.51	-194.70	0.00	-506.73	-202.16	0.00	-372.94	-202.16	0.00	-514.27
303	Sum total D+L+PP MAX	103.13	0.00	440.01	103.13	0.00	84.53	16.55	0.00	592.48	16.55	0.00	-99.17
	MIN	-276.72	0.00	-410.91	-276.72	0.00	-851.72	-345.81	0.00	-354.12	-345.81	0.00	-983.60

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001069						1001070					
NODE		1069			2069			1070			2070		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-24.43	0.00	18.43	-24.43	0.00	-83.62	-2.79	0.00	-12.48	-2.79	0.00	-24.16
3	Railing	-6.13	0.00	3.99	-6.13	0.00	-21.63	-4.20	0.00	2.71	-4.20	0.00	-14.83
5	Wheel guard	-60.74	0.00	39.52	-60.74	0.00	-214.18	-41.56	0.00	26.80	-41.56	0.00	-146.81
8	Steel weight	-25.63	0.00	26.94	-25.63	0.00	-80.12	38.82	0.00	-82.85	38.82	0.00	79.32
10	Medial strip	28.26	0.00	-16.91	28.26	0.00	101.14	27.47	0.00	-26.05	27.47	0.00	88.69
19	Snow	-12.31	0.00	9.13	-12.31	0.00	-42.31	-2.31	0.00	-4.79	-2.31	0.00	-14.43
31	Miscellaneous	2.28	0.00	-1.37	2.28	0.00	8.17	2.22	0.00	-2.11	2.22	0.00	7.17
100	AASHTO-LRFD TRUCK-LOAD	108.06	0.00	422.75	108.06	0.00	252.05	119.39	0.00	362.67	119.39	0.00	264.29
	MIN	-190.38	0.00	-274.66	-190.38	0.00	-456.22	-167.92	0.00	-276.71	-167.92	0.00	-382.20
	TANDEM-LOAD MAX	80.94	0.00	316.94	80.94	0.00	188.79	87.91	0.00	271.88	87.91	0.00	195.63
	MIN	-143.51	0.00	-201.93	-143.51	0.00	-342.33	-126.40	0.00	-201.78	-126.40	0.00	-288.63
	DISPERSION-LMAX	86.40	0.00	297.96	86.40	0.00	209.04	113.72	0.00	286.73	113.72	0.00	236.66
	MIN	-125.88	0.00	-265.37	-125.88	0.00	-343.66	-117.54	0.00	-306.41	-117.54	0.00	-273.17
110	Live load L-PICKUP 1	194.46	0.00	720.72	194.46	0.00	461.09	233.12	0.00	649.40	233.12	0.00	500.95
	MIN	-316.26	0.00	-540.03	-316.26	0.00	-799.88	-285.46	0.00	-583.11	-285.46	0.00	-655.37
	L-PICKUP 2 MAX	167.34	0.00	614.91	167.34	0.00	397.83	201.64	0.00	558.62	201.64	0.00	432.28
	MIN	-269.39	0.00	-467.29	-269.39	0.00	-685.99	-243.95	0.00	-508.18	-243.95	0.00	-561.80
	L-PICKUP 3	-305.88	0.00	-573.62	-305.88	0.00	-786.94	-273.41	0.00	-612.65	-273.41	0.00	-618.72
	Live load MAX	194.46	0.00	720.72	194.46	0.00	461.09	233.12	0.00	649.40	233.12	0.00	500.95
	MIN	-316.26	0.00	-573.62	-316.26	0.00	-799.88	-285.46	0.00	-612.65	-285.46	0.00	-655.37
111	AASHTO Twin TWIN-PICKUP	196.66	0.00	712.59	196.66	0.00	454.50	239.85	0.00	622.45	239.85	0.00	515.10
	MIN	-305.88	0.00	-573.62	-305.88	0.00	-786.94	-273.41	0.00	-612.65	-273.41	0.00	-618.72
	MID-PICKUP	-305.88	0.00	-573.62	-305.88	0.00	-786.94	-273.41	0.00	-612.65	-273.41	0.00	-618.72
198	AASHTO FatigTRUCK-LOAD	53.55	0.00	268.89	53.55	0.00	183.37	52.32	0.00	219.53	52.32	0.00	166.77
	MIN	-154.69	0.00	-69.48	-154.69	0.00	-377.48	-131.19	0.00	-52.80	-131.19	0.00	-328.44
	TANDEM-LOAD MAX	42.28	0.00	207.24	42.28	0.00	140.29	40.99	0.00	170.85	40.99	0.00	127.14
	MIN	-118.14	0.00	-47.80	-118.14	0.00	-286.30	-100.63	0.00	-44.38	-100.63	0.00	-249.50

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001069						1001070					
NODE		1069			2069			1070			2070		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	39.94	0.00	191.12	39.94	0.00	113.32	59.12	0.00	185.47	59.12	0.00	137.84
	MIN	-96.51	0.00	-122.97	-96.51	0.00	-240.44	-87.26	0.00	-150.65	-87.26	0.00	-207.00
199	AASHTO-LRFD TRUCK-LOAD MAX	132.10	0.00	493.81	132.10	0.00	295.96	152.78	0.00	404.88	152.78	0.00	335.68
	MIN	-213.99	0.00	-371.99	-213.99	0.00	-530.72	-186.24	0.00	-374.31	-186.24	0.00	-414.29
	TANDEM-LOAD MAX	80.94	0.00	316.94	80.94	0.00	188.79	87.91	0.00	271.88	87.91	0.00	195.63
	MIN	-143.51	0.00	-201.93	-143.51	0.00	-342.33	-126.40	0.00	-201.78	-126.40	0.00	-288.63
	DISPERSION-LMAX	86.40	0.00	297.96	86.40	0.00	209.04	113.72	0.00	286.73	113.72	0.00	236.66
	MIN	-125.88	0.00	-265.37	-125.88	0.00	-343.66	-117.54	0.00	-306.41	-117.54	0.00	-273.17
300	Total Dead lWithout snow	-86.39	0.00	70.61	-86.39	0.00	-290.24	19.96	0.00	-93.99	19.96	0.00	-10.63
301	Particular Snow	-12.31	0.00	9.13	-12.31	0.00	-42.31	-2.31	0.00	-4.79	-2.31	0.00	-14.43
302	Live load Total MAX	126.40	0.00	468.47	126.40	0.00	299.71	151.53	0.00	422.11	151.53	0.00	325.62
	MIN	-205.57	0.00	-372.85	-205.57	0.00	-519.92	-185.55	0.00	-398.22	-185.55	0.00	-425.99
303	Sum total D+L+PP MAX	65.62	0.00	548.20	65.62	0.00	57.07	169.18	0.00	417.32	169.18	0.00	311.19
	MIN	-304.27	0.00	-363.73	-304.27	0.00	-852.47	-187.86	0.00	-497.00	-187.86	0.00	-451.05

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001071						1001072					
NODE		1071			2071			1072			2072		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	2.41	0.00	-15.29	2.41	0.00	-5.23	19.62	0.00	-47.32	19.62	0.00	34.64
3	Railing	0.48	0.00	-4.45	0.48	0.00	-2.45	6.44	0.00	-15.42	6.44	0.00	11.47
5	Wheel guard	4.74	0.00	-44.09	4.74	0.00	-24.29	63.73	0.00	-152.62	63.73	0.00	113.58
8	Steel weight	4.03	0.00	-8.72	4.03	0.00	8.11	2.55	0.00	-7.44	2.55	0.00	3.21
10	Medial strip	-1.91	0.00	21.94	-1.91	0.00	13.95	-33.16	0.00	79.23	-33.16	0.00	-59.30
19	Snow	1.18	0.00	-7.86	1.18	0.00	-2.93	10.28	0.00	-24.76	10.28	0.00	18.17
31	Miscellaneous	-0.15	0.00	1.77	-0.15	0.00	1.13	-2.68	0.00	6.40	-2.68	0.00	-4.79
100	AASHTO-LRFD TRUCK-LOAD	111.20	0.00	279.14	111.20	0.00	246.82	117.38	0.00	263.32	117.38	0.00	224.93
	MIN	-140.22	0.00	-229.78	-140.22	0.00	-310.66	-116.32	0.00	-266.18	-116.32	0.00	-223.84
	TANDEM-LOAD	81.09	0.00	212.68	81.09	0.00	179.41	79.91	0.00	179.63	79.91	0.00	152.76
	MIN	-106.49	0.00	-168.63	-106.49	0.00	-235.68	-79.22	0.00	-181.65	-79.22	0.00	-152.95
	DISPERSION-LMAX	184.12	0.00	409.94	184.12	0.00	343.71	344.29	0.00	698.02	344.29	0.00	660.52
	MIN	-179.25	0.00	-437.29	-179.25	0.00	-350.17	-310.94	0.00	-778.46	-310.94	0.00	-601.81
110	Live load L-PICKUP 1	295.33	0.00	689.08	295.33	0.00	590.53	461.67	0.00	961.34	461.67	0.00	885.46
	MIN	-319.46	0.00	-667.07	-319.46	0.00	-660.83	-427.26	0.00	-1044.65	-427.26	0.00	-825.65
	L-PICKUP 2	265.21	0.00	622.62	265.21	0.00	523.12	424.20	0.00	877.64	424.20	0.00	813.28
	MIN	-285.74	0.00	-605.92	-285.74	0.00	-585.85	-390.17	0.00	-960.11	-390.17	0.00	-754.76
	L-PICKUP 3	-304.19	0.00	-684.97	-304.19	0.00	-632.24	-468.88	0.00	-1125.52	-468.88	0.00	-901.77
	Live load	295.33	0.00	689.08	295.33	0.00	590.53	461.67	0.00	961.34	461.67	0.00	885.46
	MIN	-319.46	0.00	-684.97	-319.46	0.00	-660.83	-468.88	0.00	-1125.52	-468.88	0.00	-901.77
111	AASHTO Twin TWIN-PICKUP	309.70	0.00	649.16	309.70	0.00	619.86	497.90	0.00	1058.17	497.90	0.00	955.73
	MIN	-304.19	0.00	-684.97	-304.19	0.00	-632.24	-468.88	0.00	-1125.52	-468.88	0.00	-901.77
	MID-PICKUP	-304.19	0.00	-684.97	-304.19	0.00	-632.24	-468.88	0.00	-1125.52	-468.88	0.00	-901.77
198	AASHTO FatigTRUCK-LOAD	46.55	0.00	102.83	46.55	0.00	111.48	72.95	0.00	100.90	72.95	0.00	137.26
	MIN	-65.60	0.00	-104.69	-65.60	0.00	-171.16	-45.59	0.00	-167.94	-45.59	0.00	-89.54
	TANDEM-LOAD	31.88	0.00	88.79	31.88	0.00	84.24	49.63	0.00	68.38	49.63	0.00	93.09
	MIN	-54.01	0.00	-71.49	-54.01	0.00	-136.79	-31.01	0.00	-114.41	-31.01	0.00	-61.14

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001071 1071						1001072 1072					
	2071			2072			2071			2072		
	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	116.78	0.00	211.13	116.78	0.00	217.42	221.09	0.00	327.99	221.09	0.00	416.55
MIN	-96.98	0.00	-276.72	-96.98	0.00	-197.13	-147.31	0.00	-506.94	-147.31	0.00	-289.43
199 AASHTO-LRFD TRUCK-LOAD MAX	159.99	0.00	311.35	159.99	0.00	345.02	208.93	0.00	477.72	208.93	0.00	401.40
MIN	-158.75	0.00	-323.78	-158.75	0.00	-352.32	-210.03	0.00	-472.12	-210.03	0.00	-400.15
TANDEM-LOAD MAX	81.09	0.00	212.68	81.09	0.00	179.41	79.91	0.00	179.63	79.91	0.00	152.76
MIN	-106.49	0.00	-168.63	-106.49	0.00	-235.68	-79.22	0.00	-181.65	-79.22	0.00	-152.95
DISPERSION-LMAX	184.12	0.00	409.94	184.12	0.00	343.71	344.29	0.00	698.02	344.29	0.00	660.52
MIN	-179.25	0.00	-437.29	-179.25	0.00	-350.17	-310.94	0.00	-778.46	-310.94	0.00	-601.81
300 Total Dead lWithout snow	9.59	0.00	-48.84	9.59	0.00	-8.79	56.49	0.00	-137.16	56.49	0.00	98.82
301 Particular Snow	1.18	0.00	-7.86	1.18	0.00	-2.93	10.28	0.00	-24.76	10.28	0.00	18.17
302 Live load Total MAX	191.96	0.00	447.90	191.96	0.00	383.85	300.09	0.00	624.87	300.09	0.00	575.55
MIN	-207.65	0.00	-445.23	-207.65	0.00	-429.54	-304.77	0.00	-731.59	-304.77	0.00	-586.15
303 Sum total D+L+PP MAX	202.73	0.00	440.04	202.73	0.00	380.92	366.86	0.00	600.11	366.86	0.00	692.54
MIN	-206.47	0.00	-501.94	-206.47	0.00	-441.27	-294.49	0.00	-893.50	-294.49	0.00	-567.98

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001073 1073						1001074 1074					
		2073			2074			2073			2074		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	3.79	0.00	-22.41	3.79	0.00	-6.59	-16.29	0.00	4.38	-16.29	0.00	-63.68
3	Railing	-0.69	0.00	-2.82	-0.69	0.00	-5.72	-5.58	0.00	4.09	-5.58	0.00	-19.21
5	Wheel guard	-6.86	0.00	-27.93	-6.86	0.00	-56.58	-55.23	0.00	40.47	-55.23	0.00	-190.23
8	Steel weight	23.60	0.00	-57.01	23.60	0.00	41.57	0.66	0.00	-31.08	0.66	0.00	-28.31
10	Medial strip	7.01	0.00	6.47	7.01	0.00	35.77	29.15	0.00	-25.77	29.15	0.00	96.00
19	Snow	1.49	0.00	-10.57	1.49	0.00	-4.37	-8.59	0.00	2.98	-8.59	0.00	-32.92
31	Miscellaneous	0.57	0.00	0.52	0.57	0.00	2.89	2.36	0.00	-2.08	2.36	0.00	7.76
100	AASHTO-LRFD TRUCK-LOAD	130.98	0.00	346.57	130.98	0.00	289.32	119.16	0.00	402.92	119.16	0.00	260.23
	MIN	-170.59	0.00	-282.84	-170.59	0.00	-380.14	-183.92	0.00	-289.47	-183.92	0.00	-432.79
	TANDEM-LOAD	95.75	0.00	261.42	95.75	0.00	210.32	88.18	0.00	301.95	88.18	0.00	194.16
	MIN	-128.75	0.00	-206.51	-128.75	0.00	-287.24	-138.35	0.00	-211.12	-138.35	0.00	-325.12
	DISPERSION-LMAX	191.85	0.00	422.42	191.85	0.00	358.92	107.34	0.00	312.76	107.34	0.00	230.24
	MIN	-184.56	0.00	-461.30	-184.56	0.00	-367.29	-133.35	0.00	-303.97	-133.35	0.00	-331.44
110	Live load L-PICKUP 1	322.83	0.00	768.99	322.83	0.00	648.24	226.51	0.00	715.68	226.51	0.00	490.47
	MIN	-355.15	0.00	-744.14	-355.15	0.00	-747.43	-317.27	0.00	-593.43	-317.27	0.00	-764.23
	L-PICKUP 2	287.60	0.00	683.84	287.60	0.00	569.25	195.53	0.00	614.71	195.53	0.00	424.40
	MIN	-313.32	0.00	-667.81	-313.32	0.00	-654.53	-271.69	0.00	-515.09	-271.69	0.00	-656.56
	L-PICKUP 3	-341.15	0.00	-748.30	-341.15	0.00	-720.69	-304.94	0.00	-626.54	-304.94	0.00	-742.95
	Live load	322.83	0.00	768.99	322.83	0.00	648.24	226.51	0.00	715.68	226.51	0.00	490.47
	MIN	-355.15	0.00	-748.30	-355.15	0.00	-747.43	-317.27	0.00	-626.54	-317.27	0.00	-764.23
111	AASHTO Twin TWIN-PICKUP	338.07	0.00	721.41	338.07	0.00	684.98	231.11	0.00	696.86	231.11	0.00	489.66
	MIN	-341.15	0.00	-748.30	-341.15	0.00	-720.69	-304.94	0.00	-626.54	-304.94	0.00	-742.95
	MID-PICKUP	-341.15	0.00	-748.30	-341.15	0.00	-720.69	-304.94	0.00	-626.54	-304.94	0.00	-742.95
198	AASHTO FatigTRUCK-LOAD	48.30	0.00	155.71	48.30	0.00	141.93	55.48	0.00	251.20	55.48	0.00	181.22
	MIN	-94.79	0.00	-107.21	-94.79	0.00	-240.22	-147.67	0.00	-57.11	-147.67	0.00	-365.88
	TANDEM-LOAD	37.92	0.00	127.23	37.92	0.00	108.72	43.43	0.00	194.10	43.43	0.00	138.33
	MIN	-75.41	0.00	-73.94	-75.41	0.00	-187.76	-112.82	0.00	-43.38	-112.82	0.00	-277.22

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001073						1001074					
NODE		1073			2073			1074			2074		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	119.62	0.00	230.61	119.62	0.00	226.79	53.61	0.00	202.92	53.61	0.00	132.06
	MIN	-107.63	0.00	-281.48	-107.63	0.00	-223.37	-99.04	0.00	-142.71	-99.04	0.00	-236.31
199	AASHTO-LRFD TRUCK-LOAD MAX	183.79	0.00	379.14	183.79	0.00	402.16	149.45	0.00	461.52	149.45	0.00	313.82
	MIN	-194.49	0.00	-370.14	-194.49	0.00	-433.47	-205.47	0.00	-392.18	-205.47	0.00	-494.06
	TANDEM-LOAD MAX	95.75	0.00	261.42	95.75	0.00	210.32	88.18	0.00	301.95	88.18	0.00	194.16
	MIN	-128.75	0.00	-206.51	-128.75	0.00	-287.24	-138.35	0.00	-211.12	-138.35	0.00	-325.12
	DISPERSION-LMAX	191.85	0.00	422.42	191.85	0.00	358.92	107.34	0.00	312.76	107.34	0.00	230.24
	MIN	-184.56	0.00	-461.30	-184.56	0.00	-367.29	-133.35	0.00	-303.97	-133.35	0.00	-331.44
300	Total Dead lWithout snow	27.42	0.00	-103.18	27.42	0.00	11.35	-44.93	0.00	-10.01	-44.93	0.00	-197.67
301	Particular Snow	1.49	0.00	-10.57	1.49	0.00	-4.37	-8.59	0.00	2.98	-8.59	0.00	-32.92
302	Live load Total MAX	209.84	0.00	499.85	209.84	0.00	421.36	147.23	0.00	465.19	147.23	0.00	318.81
	MIN	-230.85	0.00	-486.39	-230.85	0.00	-485.83	-206.22	0.00	-407.25	-206.22	0.00	-496.75
303	Sum total D+L+PP MAX	238.75	0.00	489.27	238.75	0.00	428.34	137.87	0.00	468.17	137.87	0.00	183.85
	MIN	-229.36	0.00	-600.15	-229.36	0.00	-490.20	-259.75	0.00	-414.28	-259.75	0.00	-727.35

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1001075 1075	2075			1001076 1076	2076							
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT					
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)					
NAME TITLE													
1 Pavement	-41.44	0.00	42.79	-41.44	0.00	-130.33	-35.64	0.00	29.02	-35.64	0.00	-119.86	
3 Railing	-6.74	0.00	4.21	-6.74	0.00	-23.96	-6.45	0.00	2.57	-6.45	0.00	-24.35	
5 Wheel guard	-66.77	0.00	41.72	-66.77	0.00	-237.19	-63.81	0.00	25.47	-63.81	0.00	-241.07	
8 Steel weight	-87.21	0.00	122.86	-87.21	0.00	-241.41	-67.29	0.00	86.74	-67.29	0.00	-194.35	
10 Medial strip	22.55	0.00	-4.23	22.55	0.00	89.97	23.87	0.00	-0.89	23.87	0.00	98.81	
19 Snow	-19.95	0.00	19.89	-19.95	0.00	-63.43	-17.32	0.00	13.41	-17.32	0.00	-58.93	
31 Miscellaneous	1.82	0.00	-0.34	1.82	0.00	7.27	1.93	0.00	-0.07	1.93	0.00	7.98	
100 AASHTO-LRFD TRUCK-LOAD													
MAX	104.08	0.00	437.91	104.08	0.00	247.18	116.03	0.00	418.58	116.03	0.00	270.26	
MIN	-199.63	0.00	-271.49	-199.63	0.00	-480.93	-184.22	0.00	-295.51	-184.22	0.00	-439.54	
TANDEM-LOAD													
MAX	78.13	0.00	326.65	78.13	0.00	185.42	86.59	0.00	311.73	86.59	0.00	203.04	
MIN	-149.28	0.00	-200.48	-149.28	0.00	-358.44	-138.16	0.00	-217.52	-138.16	0.00	-328.99	
DISPERSION-LMAX	77.55	0.00	325.40	77.55	0.00	195.59	77.81	0.00	315.26	77.81	0.00	179.68	
MIN	-144.97	0.00	-252.53	-144.97	0.00	-406.86	-135.72	0.00	-265.22	-135.72	0.00	-371.82	
110 Live load L-PICKUP 1													
MAX	181.62	0.00	763.31	181.62	0.00	442.77	193.85	0.00	733.84	193.85	0.00	449.95	
MIN	-344.59	0.00	-524.03	-344.59	0.00	-887.79	-319.95	0.00	-560.74	-319.95	0.00	-811.35	
L-PICKUP 2													
MAX	155.68	0.00	652.05	155.68	0.00	381.01	164.40	0.00	626.99	164.40	0.00	382.72	
MIN	-294.25	0.00	-453.01	-294.25	0.00	-765.29	-273.89	0.00	-482.75	-273.89	0.00	-700.81	
L-PICKUP 3													
MAX	-340.05	0.00	-555.81	-340.05	0.00	-890.18	-315.91	0.00	-593.82	-315.91	0.00	-806.08	
MIN	181.62	0.00	763.31	181.62	0.00	442.77	193.85	0.00	733.84	193.85	0.00	449.95	
Live load													
MAX	181.62	0.00	763.31	181.62	0.00	442.77	193.85	0.00	733.84	193.85	0.00	449.95	
MIN	-344.59	0.00	-555.81	-344.59	0.00	-890.18	-319.95	0.00	-593.82	-319.95	0.00	-811.35	
111 AASHTO Twin TWIN-PICKUP													
MAX	181.73	0.00	761.72	181.73	0.00	432.13	195.68	0.00	736.81	195.68	0.00	439.73	
MIN	-340.05	0.00	-555.81	-340.05	0.00	-890.18	-315.91	0.00	-593.82	-315.91	0.00	-806.08	
MID-PICKUP													
MAX	-340.05	0.00	-555.81	-340.05	0.00	-890.18	-315.91	0.00	-593.82	-315.91	0.00	-806.08	
MIN	-340.05	0.00	-555.81	-340.05	0.00	-890.18	-315.91	0.00	-593.82	-315.91	0.00	-806.08	
198 AASHTO FatigTRUCK-LOAD													
MAX	52.87	0.00	276.75	52.87	0.00	185.12	57.92	0.00	273.91	57.92	0.00	201.31	
MIN	-157.55	0.00	-77.16	-157.55	0.00	-381.33	-152.00	0.00	-97.68	-152.00	0.00	-360.99	
TANDEM-LOAD													
MAX	41.90	0.00	212.37	41.90	0.00	141.49	45.52	0.00	209.38	45.52	0.00	152.76	
MIN	-119.86	0.00	-53.40	-119.86	0.00	-288.28	-115.49	0.00	-67.37	-115.49	0.00	-273.03	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001075						1001076					
NODE		1075			2075			1076			2076		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	34.27	0.00	198.57	34.27	0.00	107.07	32.33	0.00	192.14	32.33	0.00	115.43
	MIN	-101.62	0.00	-119.45	-101.62	0.00	-258.07	-97.51	0.00	-130.45	-97.51	0.00	-245.49
199	AASHTO-LRFD TRUCK-LOAD MAX	124.38	0.00	520.96	124.38	0.00	284.55	139.61	0.00	503.42	139.61	0.00	308.90
	MIN	-232.87	0.00	-365.04	-232.87	0.00	-582.23	-215.29	0.00	-394.58	-215.29	0.00	-523.83
	TANDEM-LOAD MAX	78.13	0.00	326.65	78.13	0.00	185.42	86.59	0.00	311.73	86.59	0.00	203.04
	MIN	-149.28	0.00	-200.48	-149.28	0.00	-358.44	-138.16	0.00	-217.52	-138.16	0.00	-328.99
	DISPERSION-LMAX	77.55	0.00	325.40	77.55	0.00	195.59	77.81	0.00	315.26	77.81	0.00	179.68
	MIN	-144.97	0.00	-252.53	-144.97	0.00	-406.86	-135.72	0.00	-265.22	-135.72	0.00	-371.82
300	Total Dead lWithout snow	-177.80	0.00	207.01	-177.80	0.00	-535.65	-147.40	0.00	142.85	-147.40	0.00	-472.83
301	Particular Snow	-19.95	0.00	19.89	-19.95	0.00	-63.43	-17.32	0.00	13.41	-17.32	0.00	-58.93
302	Live load Total MAX	118.06	0.00	496.15	118.06	0.00	287.80	126.00	0.00	476.99	126.00	0.00	292.46
	MIN	-223.99	0.00	-361.28	-223.99	0.00	-578.61	-207.97	0.00	-385.99	-207.97	0.00	-527.38
303	Sum total D+L+PP MAX	-44.27	0.00	723.05	-44.27	0.00	-224.94	-0.92	0.00	633.25	-0.92	0.00	-151.55
	MIN	-421.73	0.00	-242.76	-421.73	0.00	-1177.69	-372.68	0.00	-345.52	-372.68	0.00	-1059.14

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001077						1001078					
NODE		1077			2077			1078			2078		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-17.03	0.00	-3.23	-17.03	0.00	-74.37	-10.30	0.00	-11.08	-10.30	0.00	-54.10
3	Railing	-5.84	0.00	1.12	-5.84	0.00	-23.28	-5.64	0.00	0.93	-5.64	0.00	-22.64
5	Wheel guard	-57.84	0.00	11.13	-57.84	0.00	-230.46	-55.85	0.00	9.20	-55.85	0.00	-224.11
8	Steel weight	0.83	0.00	-26.50	0.83	0.00	-23.06	25.68	0.00	-55.93	25.68	0.00	51.35
10	Medial strip	30.55	0.00	-9.68	30.55	0.00	117.94	33.10	0.00	-12.91	33.10	0.00	125.33
19	Snow	-8.99	0.00	-1.13	-8.99	0.00	-38.67	-5.98	0.00	-4.63	-5.98	0.00	-29.59
31	Miscellaneous	2.47	0.00	-0.78	2.47	0.00	9.53	2.67	0.00	-1.04	2.67	0.00	10.13
100	AASHTO-LRFD TRUCK-LOAD	131.31	0.00	391.56	131.31	0.00	310.27	133.86	0.00	382.17	133.86	0.00	317.70
	MIN	-170.48	0.00	-321.50	-170.48	0.00	-409.86	-164.13	0.00	-324.41	-164.13	0.00	-394.39
	TANDEM-LOAD MAX	97.10	0.00	291.34	97.10	0.00	230.91	98.95	0.00	284.56	98.95	0.00	236.57
	MIN	-128.18	0.00	-235.59	-128.18	0.00	-305.88	-123.60	0.00	-237.56	-123.60	0.00	-294.74
	DISPERSION-LMAX	101.06	0.00	300.20	101.06	0.00	229.47	103.13	0.00	288.44	103.13	0.00	234.42
	MIN	-128.39	0.00	-302.98	-128.39	0.00	-345.07	-119.50	0.00	-304.12	-119.50	0.00	-316.43
110	Live load L-PICKUP 1	232.37	0.00	691.76	232.37	0.00	539.75	236.99	0.00	670.61	236.99	0.00	552.12
	MIN	-298.87	0.00	-624.48	-298.87	0.00	-754.93	-283.63	0.00	-628.53	-283.63	0.00	-710.82
	L-PICKUP 2 MAX	198.16	0.00	591.54	198.16	0.00	460.38	202.08	0.00	572.99	202.08	0.00	471.00
	MIN	-256.57	0.00	-538.57	-256.57	0.00	-650.95	-243.10	0.00	-541.67	-243.10	0.00	-611.17
	L-PICKUP 3	-293.93	0.00	-665.90	-293.93	0.00	-747.63	-278.05	0.00	-669.91	-278.05	0.00	-698.78
	Live load MAX	232.37	0.00	691.76	232.37	0.00	539.75	236.99	0.00	670.61	236.99	0.00	552.12
	MIN	-298.87	0.00	-665.90	-298.87	0.00	-754.93	-283.63	0.00	-669.91	-283.63	0.00	-710.82
111	AASHTO Twin TWIN-PICKUP	240.50	0.00	695.11	240.50	0.00	541.90	245.64	0.00	671.78	245.64	0.00	555.60
	MIN	-293.93	0.00	-665.90	-293.93	0.00	-747.63	-278.05	0.00	-669.91	-278.05	0.00	-698.78
	MID-PICKUP	-293.93	0.00	-665.90	-293.93	0.00	-747.63	-278.05	0.00	-669.91	-278.05	0.00	-698.78
198	AASHTO FatigTRUCK-LOAD	61.56	0.00	267.26	61.56	0.00	212.16	61.91	0.00	267.14	61.91	0.00	214.28
	MIN	-145.70	0.00	-108.82	-145.70	0.00	-341.33	-144.07	0.00	-111.84	-144.07	0.00	-334.65
	TANDEM-LOAD MAX	48.08	0.00	203.57	48.08	0.00	160.19	48.35	0.00	203.00	48.35	0.00	161.68
	MIN	-110.53	0.00	-74.86	-110.53	0.00	-258.12	-109.16	0.00	-76.90	-109.16	0.00	-252.95

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001077			1001078			1001078			1001078		
NODE		1077			2077			1078			2078		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	39.64	0.00	183.48	39.64	0.00	134.09	40.40	0.00	180.18	40.40	0.00	136.50
	MIN	-92.49	0.00	-147.96	-92.49	0.00	-231.83	-90.55	0.00	-150.48	-90.55	0.00	-223.88
199	AASHTO-LRFD TRUCK-LOAD MAX	166.16	0.00	472.15	166.16	0.00	372.64	169.80	0.00	457.99	169.80	0.00	382.90
	MIN	-198.19	0.00	-436.91	-198.19	0.00	-485.63	-189.44	0.00	-440.23	-189.44	0.00	-459.99
	TANDEM-LOAD MAX	97.10	0.00	291.34	97.10	0.00	230.91	98.95	0.00	284.56	98.95	0.00	236.57
	MIN	-128.18	0.00	-235.59	-128.18	0.00	-305.88	-123.60	0.00	-237.56	-123.60	0.00	-294.74
	DISPERSION-LMAX	101.06	0.00	300.20	101.06	0.00	229.47	103.13	0.00	288.44	103.13	0.00	234.42
	MIN	-128.39	0.00	-302.98	-128.39	0.00	-345.07	-119.50	0.00	-304.12	-119.50	0.00	-316.43
300	Total Dead lWithout snow	-46.87	0.00	-27.94	-46.87	0.00	-223.70	-10.34	0.00	-70.84	-10.34	0.00	-114.03
301	Particular Snow	-8.99	0.00	-1.13	-8.99	0.00	-38.67	-5.98	0.00	-4.63	-5.98	0.00	-29.59
302	Live load Total MAX	151.04	0.00	449.65	151.04	0.00	350.84	154.05	0.00	435.90	154.05	0.00	358.88
	MIN	-194.26	0.00	-432.83	-194.26	0.00	-490.70	-184.36	0.00	-435.44	-184.36	0.00	-462.04
303	Sum total D+L+PP MAX	140.50	0.00	448.52	140.50	0.00	193.72	148.07	0.00	431.27	148.07	0.00	322.92
	MIN	-250.12	0.00	-461.91	-250.12	0.00	-753.07	-200.68	0.00	-510.91	-200.68	0.00	-605.66

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001079						1001080					
NODE		1079			2079			1080			2080		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-2.44	0.00	-24.39	-2.44	0.00	-34.58	-20.00	0.00	9.53	-20.00	0.00	-74.02
3	Railing	-5.49	0.00	1.17	-5.49	0.00	-21.74	-6.28	0.00	3.84	-6.28	0.00	-22.40
5	Wheel guard	-54.30	0.00	11.57	-54.30	0.00	-215.26	-62.21	0.00	38.05	-62.21	0.00	-221.80
8	Steel weight	55.63	0.00	-112.68	55.63	0.00	119.69	-5.93	0.00	-7.33	-5.93	0.00	-32.08
10	Medial strip	36.60	0.00	-22.35	36.60	0.00	130.54	31.88	0.00	-21.08	31.88	0.00	112.08
19	Snow	-2.48	0.00	-10.42	-2.48	0.00	-20.78	-10.41	0.00	5.18	-10.41	0.00	-38.29
31	Miscellaneous	2.96	0.00	-1.81	2.96	0.00	10.55	2.58	0.00	-1.70	2.58	0.00	9.06
100	AASHTO-LRFD TRUCK-LOAD	141.56	0.00	371.41	141.56	0.00	331.67	129.37	0.00	394.26	129.37	0.00	292.82
	MIN	-158.53	0.00	-340.44	-158.53	0.00	-384.13	-172.84	0.00	-314.81	-172.84	0.00	-405.08
	TANDEM-LOAD MAX	104.37	0.00	276.99	104.37	0.00	246.70	96.01	0.00	293.69	96.01	0.00	219.89
	MIN	-119.78	0.00	-248.63	-119.78	0.00	-287.84	-130.09	0.00	-230.54	-130.09	0.00	-303.82
	DISPERSION-LMAX	109.10	0.00	269.19	109.10	0.00	243.48	86.64	0.00	266.32	86.64	0.00	189.59
	MIN	-112.55	0.00	-306.78	-112.55	0.00	-293.05	-118.74	0.00	-248.42	-118.74	0.00	-305.84
110	Live load L-PICKUP 1	250.67	0.00	640.59	250.67	0.00	575.15	216.01	0.00	660.58	216.01	0.00	482.41
	MIN	-271.08	0.00	-647.22	-271.08	0.00	-677.18	-291.59	0.00	-563.24	-291.59	0.00	-710.92
	L-PICKUP 2 MAX	213.47	0.00	546.18	213.47	0.00	490.18	182.65	0.00	560.01	182.65	0.00	409.48
	MIN	-232.32	0.00	-555.41	-232.32	0.00	-580.89	-248.83	0.00	-478.96	-248.83	0.00	-609.66
	L-PICKUP 3	-264.15	0.00	-698.35	-264.15	0.00	-660.50	-286.11	0.00	-608.84	-286.11	0.00	-696.93
	Live load MAX	250.67	0.00	640.59	250.67	0.00	575.15	216.01	0.00	660.58	216.01	0.00	482.41
	MIN	-271.08	0.00	-698.35	-271.08	0.00	-677.18	-291.59	0.00	-608.84	-291.59	0.00	-710.92
111	AASHTO Twin TWIN-PICKUP	260.84	0.00	640.71	260.84	0.00	581.98	222.46	0.00	660.34	222.46	0.00	472.02
	MIN	-264.15	0.00	-698.35	-264.15	0.00	-660.50	-286.11	0.00	-608.84	-286.11	0.00	-696.93
	MID-PICKUP	-264.15	0.00	-698.35	-264.15	0.00	-660.50	-286.11	0.00	-608.84	-286.11	0.00	-696.93
198	AASHTO FatigTRUCK-LOAD	63.92	0.00	264.42	63.92	0.00	218.32	60.65	0.00	274.64	60.65	0.00	207.32
	MIN	-142.62	0.00	-114.74	-142.62	0.00	-331.29	-150.54	0.00	-102.75	-150.54	0.00	-354.18
	TANDEM-LOAD MAX	49.79	0.00	201.26	49.79	0.00	164.64	47.53	0.00	209.14	47.53	0.00	157.37
	MIN	-108.21	0.00	-78.89	-108.21	0.00	-250.75	-114.10	0.00	-70.44	-114.10	0.00	-267.45

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001079			1001080			1001080			2080		
NODE		1079			2079			1080			2080		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	41.33	0.00	170.98	41.33	0.00	138.77	35.12	0.00	173.24	35.12	0.00	120.06
	MIN	-87.70	0.00	-145.69	-87.70	0.00	-215.73	-94.18	0.00	-112.87	-94.18	0.00	-234.65
199	AASHTO-LRFD TRUCK-LOAD MAX	180.72	0.00	442.71	180.72	0.00	403.16	160.53	0.00	467.40	160.53	0.00	334.87
	MIN	-180.96	0.00	-469.17	-180.96	0.00	-440.83	-199.16	0.00	-428.06	-199.16	0.00	-468.53
	TANDEM-LOAD MAX	104.37	0.00	276.99	104.37	0.00	246.70	96.01	0.00	293.69	96.01	0.00	219.89
	MIN	-119.78	0.00	-248.63	-119.78	0.00	-287.84	-130.09	0.00	-230.54	-130.09	0.00	-303.82
	DISPERSION-LMAX	109.10	0.00	269.19	109.10	0.00	243.48	86.64	0.00	266.32	86.64	0.00	189.59
	MIN	-112.55	0.00	-306.78	-112.55	0.00	-293.05	-118.74	0.00	-248.42	-118.74	0.00	-305.84
300	Total Dead lWithout snow	32.96	0.00	-148.49	32.96	0.00	-10.81	-59.97	0.00	21.32	-59.97	0.00	-229.17
301	Particular Snow	-2.48	0.00	-10.42	-2.48	0.00	-20.78	-10.41	0.00	5.18	-10.41	0.00	-38.29
302	Live load Total MAX	162.93	0.00	416.39	162.93	0.00	373.85	140.41	0.00	429.38	140.41	0.00	313.57
	MIN	-176.20	0.00	-453.93	-176.20	0.00	-440.17	-189.53	0.00	-395.75	-189.53	0.00	-462.10
303	Sum total D+L+PP MAX	193.41	0.00	382.39	193.41	0.00	353.07	112.16	0.00	455.87	112.16	0.00	140.18
	MIN	-178.68	0.00	-612.84	-178.68	0.00	-471.76	-259.91	0.00	-390.57	-259.91	0.00	-729.56

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1001081 1081						1001082 1082							
		2081		2081		2082		2082		2082		2082			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-46.70	0.00	65.51	-46.70	0.00	-129.56	24.85	0.00	-61.26	24.85	0.00	42.53		
3	Railing	-6.42	0.00	6.29	-6.42	0.00	-20.52	5.21	0.00	-12.98	5.21	0.00	8.80		
5	Wheel guard	-63.55	0.00	62.32	-63.55	0.00	-203.15	51.62	0.00	-128.47	51.62	0.00	87.17		
8	Steel weight	-112.36	0.00	189.98	-112.36	0.00	-279.35	38.30	0.00	-92.99	38.30	0.00	67.00		
10	Medial strip	17.23	0.00	-5.38	17.23	0.00	66.59	-21.64	0.00	54.18	-21.64	0.00	-36.20		
19	Snow	-22.17	0.00	30.40	-22.17	0.00	-62.21	12.26	0.00	-30.25	12.26	0.00	20.95		
31	Miscellaneous	1.39	0.00	-0.43	1.39	0.00	5.38	-1.75	0.00	4.38	-1.75	0.00	-2.93		
100	AASHTO-LRFD TRUCK-LOAD	MAX	98.50	0.00	445.26	98.50	0.00	249.31	300.54	0.00	619.32	300.54	0.00	574.33	
		MIN	-209.71	0.00	-250.00	-209.71	0.00	-485.95	-273.07	0.00	-682.94	-273.07	0.00	-526.22	
		TANDEM-LOAD MAX	76.40	0.00	334.40	76.40	0.00	192.38	206.12	0.00	426.55	206.12	0.00	393.50	
		MIN	-158.75	0.00	-188.01	-158.75	0.00	-366.17	-187.27	0.00	-468.64	-187.27	0.00	-359.58	
		DISPERSION-LMAX	52.61	0.00	259.54	52.61	0.00	140.18	442.56	0.00	900.22	442.56	0.00	845.61	
		MIN	-128.39	0.00	-151.19	-128.39	0.00	-349.96	-400.49	0.00	-1003.99	-400.49	0.00	-773.64	
110	Live load	L-PICKUP 1	MAX	151.11	0.00	704.80	151.11	0.00	389.49	743.11	0.00	1519.54	743.11	0.00	1419.94
		MIN	-338.10	0.00	-401.19	-338.10	0.00	-835.92	-673.56	0.00	-1686.93	-673.56	0.00	-1299.85	
		L-PICKUP 2	MAX	129.01	0.00	593.95	129.01	0.00	332.56	648.68	0.00	1326.77	648.68	0.00	1239.11
		MIN	-287.14	0.00	-339.20	-287.14	0.00	-716.13	-587.76	0.00	-1472.63	-587.76	0.00	-1133.21	
		L-PICKUP 3	MAX	-328.67	0.00	-387.28	-328.67	0.00	-834.05	-799.12	0.00	-2004.63	-799.12	0.00	-1545.57
		Live load	MAX	151.11	0.00	704.80	151.11	0.00	389.49	743.11	0.00	1519.54	743.11	0.00	1419.94
		MIN	-338.10	0.00	-401.19	-338.10	0.00	-835.92	-799.12	0.00	-2004.63	-799.12	0.00	-1545.57	
		111	AASHTO Twin	TWIN-PICKUP	MAX	138.87	0.00	688.27	138.87	0.00	356.94	883.32	0.00	1798.93	883.32
MIN	-328.67	0.00	-387.28	-328.67	0.00	-834.05	-799.12	0.00	-2004.63	-799.12	0.00	-1545.57			
	MID-PICKUP	MAX	-328.67	0.00	-387.28	-328.67	0.00	-834.05	-799.12	0.00	-2004.63	-799.12	0.00	-1545.57	
198	AASHTO Fatig	TRUCK-LOAD	MAX	62.85	0.00	283.82	62.85	0.00	199.21	176.60	0.00	274.44	176.60	0.00	331.70
		MIN	-160.07	0.00	-66.72	-160.07	0.00	-384.80	-123.41	0.00	-406.70	-123.41	0.00	-241.03	
		TANDEM-LOAD	MAX	49.85	0.00	220.86	49.85	0.00	154.67	121.69	0.00	187.78	121.69	0.00	228.53
		MIN	-123.59	0.00	-54.49	-123.59	0.00	-295.39	-84.52	0.00	-279.96	-84.52	0.00	-165.26	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1001081			1001082								
NODE		1081	2081		1082	2082							
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	28.75	0.00	162.70	28.75	0.00	91.46	268.33	0.00	455.05	268.33	0.00	503.59
	MIN	-88.34	0.00	-66.18	-88.34	0.00	-222.79	-203.10	0.00	-617.24	-203.10	0.00	-393.32
199	AASHTO-LRFD TRUCK-LOAD MAX	101.69	0.00	505.20	101.69	0.00	256.42	538.90	0.00	1098.60	538.90	0.00	1027.94
	MIN	-236.79	0.00	-279.12	-236.79	0.00	-576.76	-487.42	0.00	-1223.37	-487.42	0.00	-943.66
	TANDEM-LOAD MAX	76.40	0.00	334.40	76.40	0.00	192.38	206.12	0.00	426.55	206.12	0.00	393.50
	MIN	-158.75	0.00	-188.01	-158.75	0.00	-366.17	-187.27	0.00	-468.64	-187.27	0.00	-359.58
	DISPERSION-LMAX	52.61	0.00	259.54	52.61	0.00	140.18	442.56	0.00	900.22	442.56	0.00	845.61
	MIN	-128.39	0.00	-151.19	-128.39	0.00	-349.96	-400.49	0.00	-1003.99	-400.49	0.00	-773.64
300	Total Dead lWithout snow	-210.41	0.00	318.28	-210.41	0.00	-560.61	96.61	0.00	-237.14	96.61	0.00	166.38
301	Particular Snow	-22.17	0.00	30.40	-22.17	0.00	-62.21	12.26	0.00	-30.25	12.26	0.00	20.95
302	Live load Total MAX	98.22	0.00	458.12	98.22	0.00	253.17	483.02	0.00	987.70	483.02	0.00	922.96
	MIN	-219.76	0.00	-260.77	-219.76	0.00	-543.35	-519.43	0.00	-1303.01	-519.43	0.00	-1004.62
303	Sum total D+L+PP MAX	-104.90	0.00	806.81	-104.90	0.00	-293.70	591.88	0.00	957.44	591.88	0.00	1110.30
	MIN	-452.35	0.00	9.68	-452.35	0.00	-1166.17	-507.17	0.00	-1570.40	-507.17	0.00	-983.67

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002001 2001	3001						1002002 2002							
		SHEAR			TORQUE			SHEAR			TORQUE				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-3.31	0.00	0.00	-3.31	-0.00	0.00	-38.71	-0.00	0.00	-38.71		
3	Railing	0.00	0.00	-1.35	0.00	0.00	-1.35	-0.00	0.00	-11.64	-0.00	0.00	-11.64		
5	Wheel guard	0.00	0.00	-13.32	0.00	0.00	-13.32	-0.00	0.00	-115.21	-0.00	0.00	-115.21		
8	Steel weight	0.00	0.00	2.66	0.00	0.00	2.66	0.00	0.00	-17.65	0.00	0.00	-17.65		
10	Medial strip	0.00	0.00	13.46	0.00	0.00	13.46	0.00	0.00	104.66	0.00	0.00	104.66		
19	Snow	0.00	0.00	-1.28	0.00	0.00	-1.28	0.00	0.00	-15.97	0.00	0.00	-15.97		
31	Miscellaneous	-0.00	0.00	0.61	-0.00	0.00	0.59	-0.00	0.00	4.71	-0.00	0.00	4.68		
100	AASHTO-LRFD TRUCK-LOAD	MAX	89.62	0.00	368.69	89.62	0.00	368.69	74.90	0.00	357.04	74.90	0.00	357.04	
		MIN	-89.62	0.00	-366.72	-89.62	0.00	-366.72	-74.90	0.00	-360.51	-74.90	0.00	-360.51	
		TANDEM-LOAD	MAX	61.05	0.00	252.32	61.05	0.00	252.32	56.09	0.00	263.47	56.09	0.00	263.47
		MIN	-61.05	0.00	-248.74	-61.05	0.00	-248.74	-56.09	0.00	-270.38	-56.09	0.00	-270.38	
		DISPERSION-L	MAX	139.41	0.00	568.47	139.41	0.00	568.49	50.34	0.00	222.40	50.34	0.00	222.12
		MIN	-139.41	0.00	-574.71	-139.41	0.00	-574.69	-50.38	0.00	-276.17	-50.38	0.00	-276.16	
110	Live load	L-PICKUP 1	MAX	229.03	0.00	937.16	229.03	0.00	937.17	125.24	0.00	579.44	125.24	0.00	579.17
		MIN	-229.02	0.00	-941.43	-229.02	0.00	-941.41	-125.27	0.00	-636.68	-125.27	0.00	-636.67	
		L-PICKUP 2	MAX	200.46	0.00	820.79	200.46	0.00	820.81	106.43	0.00	485.86	106.43	0.00	485.59
		MIN	-200.46	0.00	-823.45	-200.46	0.00	-823.43	-106.46	0.00	-546.56	-106.46	0.00	-546.54	
		L-PICKUP 3	MAX	-270.25	0.00	-1111.19	-270.25	0.00	-1111.17	-122.55	0.00	-629.75	-122.55	0.00	-629.74
		MIN	229.03	0.00	937.16	229.03	0.00	937.17	125.24	0.00	579.44	125.24	0.00	579.17	
111	AASHTO Twin	TWIN-PICKUP	MAX	270.26	0.00	1106.02	270.26	0.00	1106.04	122.52	0.00	587.04	122.52	0.00	586.79
		MIN	-270.25	0.00	-1111.19	-270.25	0.00	-1111.17	-122.55	0.00	-629.75	-122.55	0.00	-629.74	
		MID-PICKUP	MAX	-270.25	0.00	-1111.19	-270.25	0.00	-1111.17	-122.55	0.00	-629.75	-122.55	0.00	-629.74
		MIN	270.26	0.00	1106.02	270.26	0.00	1106.04	122.52	0.00	587.04	122.52	0.00	586.79	
		LIVE-LOAD	MAX	229.03	0.00	937.16	229.03	0.00	937.17	125.24	0.00	579.44	125.24	0.00	579.17
		MIN	-229.02	0.00	-941.43	-229.02	0.00	-941.41	-125.27	0.00	-636.68	-125.27	0.00	-636.67	
198	AASHTO Fatig	TRUCK-LOAD	MAX	45.95	0.00	182.73	45.95	0.00	182.73	37.64	0.00	194.55	37.64	0.00	194.55
		MIN	-45.95	0.00	-194.29	-45.95	0.00	-194.29	-37.64	0.00	-118.54	-37.64	0.00	-118.54	
		TANDEM-LOAD	MAX	31.28	0.00	125.08	31.28	0.00	125.08	28.75	0.00	146.86	28.75	0.00	146.86
		MIN	-31.28	0.00	-131.56	-31.28	0.00	-131.56	-28.75	0.00	-91.83	-28.75	0.00	-91.83	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002001			1002002			1002002			1002002		
NODE		2001			3001			2002			3002		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	75.38	0.00	300.99	75.38	0.00	300.99	28.50	0.00	136.88	28.50	0.00	136.88
	MIN	-75.38	0.00	-317.12	-75.38	0.00	-317.12	-28.50	0.00	-136.10	-28.50	0.00	-136.11
199	AASHTO-LRFD TRUCK-LOAD MAX	160.87	0.00	660.44	160.87	0.00	660.44	85.79	0.00	429.86	85.79	0.00	429.86
	MIN	-160.87	0.00	-659.94	-160.87	0.00	-659.94	-85.79	0.00	-423.55	-85.79	0.00	-423.55
	TANDEM-LOAD MAX	61.05	0.00	252.32	61.05	0.00	252.32	56.09	0.00	263.47	56.09	0.00	263.47
	MIN	-61.05	0.00	-248.74	-61.05	0.00	-248.74	-56.09	0.00	-270.38	-56.09	0.00	-270.38
	DISPERSION-LMAX	139.41	0.00	568.47	139.41	0.00	568.49	50.34	0.00	222.40	50.34	0.00	222.12
	MIN	-139.41	0.00	-574.71	-139.41	0.00	-574.69	-50.38	0.00	-276.17	-50.38	0.00	-276.16
300	Total Dead lWithout snow	-0.00	0.00	-1.25	-0.00	0.00	-1.27	-0.00	0.00	-73.85	-0.00	0.00	-73.88
301	Particular Snow	0.00	0.00	-1.28	0.00	0.00	-1.28	0.00	0.00	-15.97	0.00	0.00	-15.97
302	Live load Total MAX	148.87	0.00	609.15	148.87	0.00	609.16	81.41	0.00	376.64	81.41	0.00	376.46
	MIN	-175.66	0.00	-722.27	-175.66	0.00	-722.26	-81.43	0.00	-413.84	-81.43	0.00	-413.83
303	Sum total D+L+PP MAX	148.87	0.00	607.88	148.87	0.00	607.89	81.41	0.00	360.67	81.41	0.00	360.49
	MIN	-175.67	0.00	-724.79	-175.67	0.00	-724.81	-81.43	0.00	-503.66	-81.43	0.00	-503.68

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002003						1002004					
		2003			3003			2004			3004		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	0.00	0.00	-43.30	0.00	0.00	-43.30	0.00	0.00	-41.86	0.00	0.00	-41.85
3	Railing	0.00	0.00	-17.28	0.00	0.00	-17.28	0.00	0.00	-20.05	0.00	0.00	-20.05
5	Wheel guard	0.00	0.00	-171.11	0.00	0.00	-171.11	0.00	0.00	-198.50	0.00	0.00	-198.50
8	Steel weight	0.00	0.00	31.19	0.00	0.00	31.20	0.00	0.00	70.07	0.00	0.00	70.08
10	Medial strip	0.00	0.00	155.96	0.00	0.00	155.96	0.00	0.00	169.13	0.00	0.00	169.14
19	Snow	0.00	0.00	-18.15	0.00	0.00	-18.15	0.00	0.00	-18.82	0.00	0.00	-18.82
31	Miscellaneous	-0.00	0.00	7.64	-0.00	0.00	7.63	0.00	0.00	9.24	0.00	0.00	9.27
100	AASHTO-LRFD TRUCK-LOAD	102.59	0.00	419.88	102.59	0.00	419.88	119.15	0.00	459.77	119.15	0.00	459.77
	MIN	-102.59	0.00	-417.49	-102.59	0.00	-417.49	-119.15	0.00	-430.65	-119.15	0.00	-430.65
	TANDEM-LOAD MAX	74.70	0.00	306.99	74.70	0.00	306.99	86.19	0.00	332.54	86.19	0.00	332.54
	MIN	-74.70	0.00	-304.40	-74.70	0.00	-304.40	-86.19	0.00	-312.18	-86.19	0.00	-312.17
	DISPERSION-LMAX	76.10	0.00	307.41	76.10	0.00	307.02	102.56	0.00	381.77	102.56	0.00	381.55
	MIN	-76.14	0.00	-359.71	-76.14	0.00	-359.63	-102.59	0.00	-432.69	-102.59	0.00	-432.61
110	Live load L-PICKUP 1	178.68	0.00	727.28	178.68	0.00	726.90	221.71	0.00	841.54	221.71	0.00	841.32
	MIN	-178.73	0.00	-777.21	-178.73	0.00	-777.13	-221.73	0.00	-863.34	-221.73	0.00	-863.25
	L-PICKUP 2 MAX	150.80	0.00	614.40	150.80	0.00	614.01	188.75	0.00	714.31	188.75	0.00	714.09
	MIN	-150.84	0.00	-664.11	-150.84	0.00	-664.03	-188.77	0.00	-744.86	-188.77	0.00	-744.78
	L-PICKUP 3	-188.77	0.00	-817.77	-188.77	0.00	-817.69	-239.77	0.00	-929.30	-239.77	0.00	-929.22
	Live load MAX	178.68	0.00	727.28	178.68	0.00	726.90	221.71	0.00	841.54	221.71	0.00	841.32
	MIN	-188.77	0.00	-817.77	-188.77	0.00	-817.69	-239.77	0.00	-929.30	-239.77	0.00	-929.22
111	AASHTO Twin TWIN-PICKUP	188.73	0.00	746.87	188.73	0.00	746.52	239.76	0.00	879.13	239.76	0.00	878.93
	MIN	-188.77	0.00	-817.77	-188.77	0.00	-817.69	-239.77	0.00	-929.30	-239.77	0.00	-929.22
	MID-PICKUP	-188.77	0.00	-817.77	-188.77	0.00	-817.69	-239.77	0.00	-929.30	-239.77	0.00	-929.22
198	AASHTO FatigTRUCK-LOAD	52.41	0.00	241.34	52.41	0.00	241.34	58.81	0.00	250.34	58.81	0.00	250.35
	MIN	-52.41	0.00	-190.46	-52.41	0.00	-190.46	-58.81	0.00	-221.16	-58.81	0.00	-221.16
	TANDEM-LOAD MAX	38.73	0.00	177.74	38.73	0.00	177.75	43.11	0.00	182.48	43.11	0.00	182.49
	MIN	-38.73	0.00	-131.89	-38.73	0.00	-131.89	-43.11	0.00	-151.98	-43.11	0.00	-151.98

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002003			3003			1002004			3004		
		2003			2004			2004			2004		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	37.38	0.00	181.92	37.38	0.00	181.93	47.89	0.00	209.12	47.89	0.00	209.12
	MIN	-37.38	0.00	-189.25	-37.38	0.00	-189.25	-47.89	0.00	-249.32	-47.89	0.00	-249.32
199	AASHTO-LRFD TRUCK-LOAD MAX	133.60	0.00	522.45	133.60	0.00	522.45	163.83	0.00	595.04	163.83	0.00	595.05
	MIN	-133.60	0.00	-548.92	-133.60	0.00	-548.91	-163.83	0.00	-599.87	-163.83	0.00	-599.86
	TANDEM-LOAD MAX	74.70	0.00	306.99	74.70	0.00	306.99	86.19	0.00	332.54	86.19	0.00	332.54
	MIN	-74.70	0.00	-304.40	-74.70	0.00	-304.40	-86.19	0.00	-312.18	-86.19	0.00	-312.17
	DISPERSION-LMAX	76.10	0.00	307.41	76.10	0.00	307.02	102.56	0.00	381.77	102.56	0.00	381.55
	MIN	-76.14	0.00	-359.71	-76.14	0.00	-359.63	-102.59	0.00	-432.69	-102.59	0.00	-432.61
300	Total Dead lWithout snow	0.00	0.00	-36.90	0.00	0.00	-36.89	0.01	0.00	-11.96	0.01	0.00	-11.91
301	Particular Snow	0.00	0.00	-18.15	0.00	0.00	-18.15	0.00	0.00	-18.82	0.00	0.00	-18.82
302	Live load Total MAX	116.15	0.00	472.73	116.15	0.00	472.48	144.11	0.00	547.00	144.11	0.00	546.86
	MIN	-122.70	0.00	-531.55	-122.70	0.00	-531.50	-155.85	0.00	-604.04	-155.85	0.00	-604.00
303	Sum total D+L+PP MAX	116.15	0.00	454.58	116.15	0.00	454.33	144.12	0.00	528.18	144.12	0.00	528.04
	MIN	-122.70	0.00	-586.60	-122.70	0.00	-586.55	-155.85	0.00	-634.83	-155.85	0.00	-634.73

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002005						1002006							
		2005			3005			2006			3006				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	0.00	0.00	-22.27	0.00	0.00	-22.27	-0.00	0.00	-11.38	-0.00	0.00	-11.39		
3	Railing	0.00	0.00	-20.89	0.00	0.00	-20.89	-0.00	0.00	-21.12	-0.00	0.00	-21.12		
5	Wheel guard	0.00	0.00	-206.85	0.00	0.00	-206.85	-0.00	0.00	-209.08	-0.00	0.00	-209.08		
8	Steel weight	0.00	0.00	159.38	0.00	0.00	159.39	-0.00	0.00	206.11	-0.00	0.00	206.10		
10	Medial strip	0.00	0.00	173.98	0.00	0.00	173.98	-0.00	0.00	168.64	-0.00	0.00	168.64		
19	Snow	0.00	0.00	-11.51	0.00	0.00	-11.51	-0.00	0.00	-7.93	-0.00	0.00	-7.93		
31	Miscellaneous	0.01	0.00	10.61	0.01	0.00	10.70	0.02	0.00	11.24	0.02	0.00	11.35		
100	AASHTO-LRFD TRUCK-LOAD	MAX	131.73	0.00	493.26	131.73	0.00	493.27	137.87	0.00	497.85	137.87	0.00	497.85	
		MIN	-131.73	0.00	-412.52	-131.73	0.00	-412.52	-137.87	0.00	-400.71	-137.87	0.00	-400.71	
		TANDEM-LOAD	MAX	95.23	0.00	356.19	95.23	0.00	356.19	99.90	0.00	360.15	99.90	0.00	360.15
		MIN	-95.23	0.00	-299.40	-95.23	0.00	-299.40	-99.90	0.00	-291.76	-99.90	0.00	-291.76	
		DISPERSION-L	MAX	120.46	0.00	438.53	120.46	0.00	438.70	127.36	0.00	456.25	127.36	0.00	456.73
		MIN	-120.42	0.00	-461.37	-120.42	0.00	-461.31	-127.28	0.00	-463.43	-127.28	0.00	-463.41	
110	Live load	L-PICKUP 1	MAX	252.19	0.00	931.80	252.19	0.00	931.97	265.23	0.00	954.10	265.23	0.00	954.57
		MIN	-252.15	0.00	-873.89	-252.15	0.00	-873.83	-265.15	0.00	-864.14	-265.15	0.00	-864.12	
		L-PICKUP 2	MAX	215.69	0.00	794.72	215.69	0.00	794.89	227.26	0.00	816.39	227.26	0.00	816.87
		MIN	-215.66	0.00	-760.77	-215.66	0.00	-760.71	-227.18	0.00	-755.20	-227.18	0.00	-755.18	
		L-PICKUP 3	MAX	-275.35	0.00	-956.62	-275.35	0.00	-956.57	-288.38	0.00	-949.54	-288.38	0.00	-949.53
		MIN	252.19	0.00	931.80	252.19	0.00	931.97	265.23	0.00	954.10	265.23	0.00	954.57	
111	AASHTO Twin	TWIN-PICKUP	MAX	275.38	0.00	982.36	275.38	0.00	982.51	288.45	0.00	1005.15	288.45	0.00	1005.57
		MIN	-275.35	0.00	-956.62	-275.35	0.00	-956.57	-288.38	0.00	-949.54	-288.38	0.00	-949.53	
		MID-PICKUP	MAX	-275.35	0.00	-956.62	-275.35	0.00	-956.57	-288.38	0.00	-949.54	-288.38	0.00	-949.53
198	AASHTO Fatig	TRUCK-LOAD	MAX	63.53	0.00	260.58	63.53	0.00	260.58	66.17	0.00	263.96	66.17	0.00	263.96
		MIN	-63.53	0.00	-223.67	-63.53	0.00	-223.67	-66.17	0.00	-218.23	-66.17	0.00	-218.23	
		TANDEM-LOAD	MAX	46.63	0.00	189.86	46.63	0.00	189.86	48.82	0.00	192.83	48.82	0.00	192.83
		MIN	-46.63	0.00	-153.17	-46.63	0.00	-153.17	-48.82	0.00	-150.12	-48.82	0.00	-150.12	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002005			3005			1002006			3006		
		2005			2006			2006			2006		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	56.54	0.00	226.06	56.54	0.00	226.06	60.02	0.00	229.84	60.02	0.00	229.84
	MIN	-56.54	0.00	-273.03	-56.54	0.00	-273.03	-60.02	0.00	-275.31	-60.02	0.00	-275.31
199	AASHTO-LRFD TRUCK-LOAD MAX	185.52	0.00	652.98	185.52	0.00	652.98	193.14	0.00	660.58	193.14	0.00	660.58
	MIN	-185.52	0.00	-601.54	-185.52	0.00	-601.54	-193.14	0.00	-591.62	-193.14	0.00	-591.62
	TANDEM-LOAD MAX	95.23	0.00	356.19	95.23	0.00	356.19	99.90	0.00	360.15	99.90	0.00	360.15
	MIN	-95.23	0.00	-299.40	-95.23	0.00	-299.40	-99.90	0.00	-291.76	-99.90	0.00	-291.76
	DISPERSION-LMAX	120.46	0.00	438.53	120.46	0.00	438.70	127.36	0.00	456.25	127.36	0.00	456.73
	MIN	-120.42	0.00	-461.37	-120.42	0.00	-461.31	-127.28	0.00	-463.43	-127.28	0.00	-463.41
300	Total Dead lWithout snow	0.01	0.00	93.96	0.01	0.00	94.05	0.02	0.00	144.40	0.02	0.00	144.50
301	Particular Snow	0.00	0.00	-11.51	0.00	0.00	-11.51	-0.00	0.00	-7.93	-0.00	0.00	-7.93
302	Live load Total MAX	163.92	0.00	605.67	163.92	0.00	605.78	172.40	0.00	620.16	172.40	0.00	620.47
	MIN	-178.98	0.00	-621.80	-178.98	0.00	-621.77	-187.45	0.00	-617.20	-187.45	0.00	-617.19
303	Sum total D+L+PP MAX	163.94	0.00	688.11	163.94	0.00	688.32	172.42	0.00	756.64	172.42	0.00	757.05
	MIN	-178.98	0.00	-633.31	-178.98	0.00	-633.28	-187.45	0.00	-625.13	-187.45	0.00	-625.12

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002007						1002008						
		2007			3007			2008			3008			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-0.00	0.00	-32.13	-0.00	0.00	-32.13	0.00	0.00	-54.88	0.00	0.00	-54.88	
3	Railing	-0.00	0.00	-21.52	-0.00	0.00	-21.52	0.00	0.00	-21.31	0.00	0.00	-21.31	
5	Wheel guard	-0.00	0.00	-213.09	-0.00	0.00	-213.09	0.00	0.00	-211.01	0.00	0.00	-211.01	
8	Steel weight	-0.00	0.00	126.98	-0.00	0.00	126.97	0.00	0.00	32.38	0.00	0.00	32.38	
10	Medial strip	-0.00	0.00	147.22	-0.00	0.00	147.21	0.00	0.00	124.48	0.00	0.00	124.48	
19	Snow	-0.00	0.00	-18.20	-0.00	0.00	-18.20	0.00	0.00	-28.84	0.00	0.00	-28.84	
31	Miscellaneous	0.01	0.00	10.52	0.01	0.00	10.56	0.00	0.00	9.35	0.00	0.00	9.35	
100	AASHTO-LRFD TRUCK-LOAD	MAX	131.71	0.00	461.02	131.71	0.00	461.02	128.84	0.00	434.10	128.84	0.00	434.10
		MIN	-131.71	0.00	-420.29	-131.71	0.00	-420.30	-128.84	0.00	-441.53	-128.84	0.00	-441.53
	TANDEM-LOAD	MAX	95.79	0.00	335.04	95.79	0.00	335.04	94.14	0.00	318.25	94.14	0.00	318.25
		MIN	-95.79	0.00	-308.00	-95.79	0.00	-308.00	-94.14	0.00	-323.80	-94.14	0.00	-323.80
	DISPERSION-LMAX	MAX	117.62	0.00	409.04	117.62	0.00	409.27	109.36	0.00	359.28	109.36	0.00	359.32
		MIN	-117.58	0.00	-450.38	-117.58	0.00	-450.38	-109.35	0.00	-438.61	-109.35	0.00	-438.61
110	Live load L-PICKUP 1	MAX	249.33	0.00	870.06	249.33	0.00	870.29	238.20	0.00	793.38	238.20	0.00	793.43
		MIN	-249.30	0.00	-870.68	-249.30	0.00	-870.68	-238.19	0.00	-880.15	-238.19	0.00	-880.14
	L-PICKUP 2	MAX	213.41	0.00	744.08	213.41	0.00	744.31	203.50	0.00	677.52	203.50	0.00	677.57
		MIN	-213.38	0.00	-758.39	-213.38	0.00	-758.39	-203.50	0.00	-762.41	-203.50	0.00	-762.41
	L-PICKUP 3	MAX	-269.50	0.00	-926.78	-269.50	0.00	-926.78	-254.78	0.00	-927.63	-254.78	0.00	-927.63
		MIN	249.33	0.00	870.06	249.33	0.00	870.29	238.20	0.00	793.38	238.20	0.00	793.43
	Live load	MAX	249.33	0.00	870.06	249.33	0.00	870.29	238.20	0.00	793.38	238.20	0.00	793.43
		MIN	-269.50	0.00	-926.78	-269.50	0.00	-926.78	-254.78	0.00	-927.63	-254.78	0.00	-927.63
111	AASHTO Twin TWIN-PICKUP	MAX	269.53	0.00	906.36	269.53	0.00	906.56	254.78	0.00	811.00	254.78	0.00	811.04
		MIN	-269.50	0.00	-926.78	-269.50	0.00	-926.78	-254.78	0.00	-927.63	-254.78	0.00	-927.63
	MID-PICKUP	-269.50	0.00	-926.78	-269.50	0.00	-926.78	-254.78	0.00	-927.63	-254.78	0.00	-927.63	
198	AASHTO FatigTRUCK-LOAD	MAX	64.20	0.00	251.17	64.20	0.00	251.17	63.17	0.00	241.86	63.17	0.00	241.86
		MIN	-64.20	0.00	-214.99	-64.20	0.00	-214.99	-63.17	0.00	-210.85	-63.17	0.00	-210.85
	TANDEM-LOAD	MAX	47.67	0.00	184.19	47.67	0.00	184.19	47.18	0.00	178.68	47.18	0.00	178.68
		MIN	-47.67	0.00	-148.51	-47.67	0.00	-148.51	-47.18	0.00	-146.12	-47.18	0.00	-146.12

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002007						1002008					
NODE		2007			3007			2008			3008		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	55.59	0.00	213.38	55.59	0.00	213.38	51.87	0.00	198.69	51.87	0.00	198.69
	MIN	-55.59	0.00	-264.44	-55.59	0.00	-264.44	-51.87	0.00	-251.18	-51.87	0.00	-251.18
199	AASHTO-LRFD TRUCK-LOAD MAX	181.86	0.00	598.02	181.86	0.00	598.02	173.73	0.00	541.83	173.73	0.00	541.83
	MIN	-181.86	0.00	-579.37	-181.86	0.00	-579.37	-173.73	0.00	-592.09	-173.73	0.00	-592.09
	TANDEM-LOAD MAX	95.79	0.00	335.04	95.79	0.00	335.04	94.14	0.00	318.25	94.14	0.00	318.25
	MIN	-95.79	0.00	-308.00	-95.79	0.00	-308.00	-94.14	0.00	-323.80	-94.14	0.00	-323.80
	DISPERSION-LMAX	117.62	0.00	409.04	117.62	0.00	409.27	109.36	0.00	359.28	109.36	0.00	359.32
	MIN	-117.58	0.00	-450.38	-117.58	0.00	-450.38	-109.35	0.00	-438.61	-109.35	0.00	-438.61
300	Total Dead lWithout snow	0.01	0.00	17.97	0.01	0.00	18.01	0.00	0.00	-121.00	0.00	0.00	-120.99
301	Particular Snow	-0.00	0.00	-18.20	-0.00	0.00	-18.20	0.00	0.00	-28.84	0.00	0.00	-28.84
302	Live load Total MAX	162.07	0.00	565.54	162.07	0.00	565.69	154.83	0.00	515.70	154.83	0.00	515.73
	MIN	-175.17	0.00	-602.41	-175.17	0.00	-602.41	-165.60	0.00	-602.96	-165.60	0.00	-602.96
303	Sum total D+L+PP MAX	162.07	0.00	565.31	162.07	0.00	565.50	154.83	0.00	486.86	154.83	0.00	486.89
	MIN	-175.17	0.00	-620.60	-175.17	0.00	-620.61	-165.60	0.00	-752.80	-165.60	0.00	-752.79

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002009						1002010							
		2009			3009			2010			3010				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	0.00	0.00	-74.28	0.00	0.00	-74.28	0.00	0.00	-53.81	0.00	0.00	-53.81		
3	Railing	0.00	0.00	-19.81	0.00	0.00	-19.81	0.00	0.00	-14.84	0.00	0.00	-14.84		
5	Wheel guard	0.00	0.00	-196.16	0.00	0.00	-196.16	0.00	0.00	-146.87	0.00	0.00	-146.87		
8	Steel weight	0.00	0.00	-64.05	0.00	0.00	-64.05	0.00	0.00	-40.65	0.00	0.00	-40.65		
10	Medial strip	0.00	0.00	97.25	0.00	0.00	97.25	0.00	0.00	72.79	0.00	0.00	72.79		
19	Snow	0.00	0.00	-37.45	0.00	0.00	-37.45	0.00	0.00	-27.34	0.00	0.00	-27.34		
31	Miscellaneous	-0.00	0.00	7.59	-0.00	0.00	7.59	-0.00	0.00	5.77	-0.00	0.00	5.77		
100	AASHTO-LRFD TRUCK-LOAD	MAX	129.40	0.00	411.75	129.40	0.00	411.75	143.95	0.00	436.18	143.95	0.00	436.18	
		MIN	-129.40	0.00	-462.97	-129.40	0.00	-462.97	-143.95	0.00	-463.83	-143.95	0.00	-463.83	
		TANDEM-LOAD	MAX	94.72	0.00	303.03	94.72	0.00	303.03	104.81	0.00	317.33	104.81	0.00	317.33
		MIN	-94.72	0.00	-339.13	-94.72	0.00	-339.13	-104.81	0.00	-335.99	-104.81	0.00	-335.99	
		DISPERSION-L	MAX	112.70	0.00	338.59	112.70	0.00	338.60	137.94	0.00	422.86	137.94	0.00	422.87
		MIN	-112.70	0.00	-451.29	-112.70	0.00	-451.29	-137.94	0.00	-503.34	-137.94	0.00	-503.35	
110	Live load	L-PICKUP 1	MAX	242.10	0.00	750.34	242.10	0.00	750.35	281.89	0.00	859.05	281.89	0.00	859.05
		MIN	-242.10	0.00	-914.26	-242.10	0.00	-914.26	-281.89	0.00	-967.18	-281.89	0.00	-967.18	
		L-PICKUP 2	MAX	207.42	0.00	641.63	207.42	0.00	641.63	242.75	0.00	740.19	242.75	0.00	740.19
		MIN	-207.42	0.00	-790.41	-207.42	0.00	-790.42	-242.75	0.00	-839.33	-242.75	0.00	-839.34	
		L-PICKUP 3	MAX	257.40	0.00	796.60	257.40	0.00	796.60	299.58	0.00	1026.52	299.58	0.00	1026.52
		MIN	-257.40	0.00	-966.60	-257.40	0.00	-966.60	-299.58	0.00	-1026.52	-299.58	0.00	-1026.52	
111	AASHTO Twin	TWIN-PICKUP	MAX	257.40	0.00	763.04	257.40	0.00	763.05	299.58	0.00	902.39	299.58	0.00	902.39
		MIN	-257.40	0.00	-966.60	-257.40	0.00	-966.60	-299.58	0.00	-1026.52	-299.58	0.00	-1026.52	
		MID-PICKUP	MAX	257.40	0.00	763.04	257.40	0.00	763.05	299.58	0.00	902.39	299.58	0.00	902.39
198	AASHTO Fatig	TRUCK-LOAD	MAX	61.16	0.00	226.13	61.16	0.00	226.13	57.52	0.00	205.69	57.52	0.00	205.69
		MIN	-61.16	0.00	-200.56	-61.16	0.00	-200.56	-57.52	0.00	-168.65	-57.52	0.00	-168.65	
		TANDEM-LOAD	MAX	45.88	0.00	168.18	45.88	0.00	168.18	43.18	0.00	153.38	43.18	0.00	153.38
		MIN	-45.88	0.00	-139.22	-45.88	0.00	-139.22	-43.18	0.00	-114.83	-43.18	0.00	-114.83	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002009			3009			1002010			3010		
NODE		2009			2010			2010			3010		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	55.03	0.00	202.27	55.03	0.00	202.27	71.61	0.00	247.63	71.61	0.00	247.63
	MIN	-55.03	0.00	-247.15	-55.03	0.00	-247.15	-71.61	0.00	-257.10	-71.61	0.00	-257.10
199	AASHTO-LRFD TRUCK-LOAD MAX	173.30	0.00	509.23	173.30	0.00	509.23	194.92	0.00	579.79	194.92	0.00	579.79
	MIN	-173.30	0.00	-622.71	-173.30	0.00	-622.71	-194.92	0.00	-637.23	-194.92	0.00	-637.23
	TANDEM-LOAD MAX	94.72	0.00	303.03	94.72	0.00	303.03	104.81	0.00	317.33	104.81	0.00	317.33
	MIN	-94.72	0.00	-339.13	-94.72	0.00	-339.13	-104.81	0.00	-335.99	-104.81	0.00	-335.99
	DISPERSION-LMAX	112.70	0.00	338.59	112.70	0.00	338.60	137.94	0.00	422.86	137.94	0.00	422.87
	MIN	-112.70	0.00	-451.29	-112.70	0.00	-451.29	-137.94	0.00	-503.34	-137.94	0.00	-503.35
300	Total Dead lWithout snow	0.00	0.00	-249.46	0.00	0.00	-249.45	-0.00	0.00	-177.60	-0.00	0.00	-177.60
301	Particular Snow	0.00	0.00	-37.45	0.00	0.00	-37.45	0.00	0.00	-27.34	0.00	0.00	-27.34
302	Live load Total MAX	157.37	0.00	487.72	157.37	0.00	487.73	183.23	0.00	558.38	183.23	0.00	558.38
	MIN	-167.31	0.00	-628.29	-167.31	0.00	-628.29	-194.72	0.00	-667.24	-194.72	0.00	-667.24
303	Sum total D+L+PP MAX	157.37	0.00	347.13	157.37	0.00	347.14	183.23	0.00	520.95	183.23	0.00	520.95
	MIN	-167.31	0.00	-915.20	-167.31	0.00	-915.20	-194.72	0.00	-872.18	-194.72	0.00	-872.18

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002011						1002012						
NODE		2011			3011			2012			3012			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	0.00	0.00	-20.58	0.00	0.00	-20.58	-0.00	0.00	-9.61	-0.00	0.00	-9.61	
3	Railing	0.00	0.00	-7.22	0.00	0.00	-7.22	-0.00	0.00	-2.86	-0.00	0.00	-2.86	
5	Wheel guard	0.00	0.00	-71.52	0.00	0.00	-71.52	-0.00	0.00	-28.30	-0.00	0.00	-28.30	
8	Steel weight	0.00	0.00	2.96	0.00	0.00	2.96	-0.00	0.00	-4.76	-0.00	0.00	-4.76	
10	Medial strip	0.00	0.00	38.86	0.00	0.00	38.86	-0.00	0.00	14.30	-0.00	0.00	14.30	
19	Snow	0.00	0.00	-10.83	0.00	0.00	-10.83	-0.00	0.00	-4.95	-0.00	0.00	-4.95	
31	Miscellaneous	-0.00	0.00	3.08	-0.00	0.00	3.07	-0.00	0.00	1.15	-0.00	0.00	1.14	
100	AASHTO-LRFD TRUCK-LOAD	MAX	142.20	0.00	441.53	142.20	0.00	441.53	65.26	0.00	197.74	65.26	0.00	197.74
		MIN	-142.20	0.00	-449.93	-142.20	0.00	-449.93	-65.26	0.00	-196.80	-65.26	0.00	-196.80
		TANDEM-LOAD	102.49	0.00	314.81	102.49	0.00	314.81	44.51	0.00	135.14	44.51	0.00	135.14
		MIN	-102.49	0.00	-323.96	-102.49	0.00	-323.96	-44.51	0.00	-134.72	-44.51	0.00	-134.72
		DISPERSION-LMAX	175.34	0.00	542.76	175.34	0.00	542.75	197.74	0.00	585.10	197.74	0.00	585.08
		MIN	-175.34	0.00	-573.61	-175.34	0.00	-573.62	-197.75	0.00	-601.57	-197.75	0.00	-601.59
110	Live load	L-PICKUP 1	317.54	0.00	984.28	317.54	0.00	984.28	263.01	0.00	782.84	263.01	0.00	782.82
		MIN	-317.54	0.00	-1023.54	-317.54	0.00	-1023.54	-263.01	0.00	-798.37	-263.01	0.00	-798.39
		L-PICKUP 2	277.83	0.00	857.57	277.83	0.00	857.56	242.26	0.00	720.24	242.26	0.00	720.22
		MIN	-277.83	0.00	-897.57	-277.83	0.00	-897.57	-242.26	0.00	-736.29	-242.26	0.00	-736.31
		L-PICKUP 3	-336.08	0.00	-1062.60	-336.08	0.00	-1062.61	-283.13	0.00	-857.66	-283.13	0.00	-857.67
		Live load	317.54	0.00	984.28	317.54	0.00	984.28	263.01	0.00	782.84	263.01	0.00	782.82
111	AASHTO Twin	TWIN-PICKUP	336.08	0.00	1063.28	336.08	0.00	1063.27	283.13	0.00	843.19	283.13	0.00	843.17
		MIN	-336.08	0.00	-1062.60	-336.08	0.00	-1062.61	-283.13	0.00	-857.66	-283.13	0.00	-857.67
		MID-PICKUP	-336.08	0.00	-1062.60	-336.08	0.00	-1062.61	-283.13	0.00	-857.66	-283.13	0.00	-857.67
198	AASHTO Fatig	TRUCK-LOAD	40.41	0.00	139.77	40.41	0.00	139.77	33.01	0.00	94.13	33.01	0.00	94.13
		MIN	-40.41	0.00	-116.21	-40.41	0.00	-116.21	-33.01	0.00	-105.28	-33.01	0.00	-105.28
		TANDEM-LOAD	30.79	0.00	104.89	30.79	0.00	104.89	22.40	0.00	64.20	22.40	0.00	64.20
		MIN	-30.79	0.00	-79.95	-30.79	0.00	-79.95	-22.40	0.00	-72.08	-22.40	0.00	-72.08

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002011			1002012			1002012			1002012		
NODE		2011			3011			2012			3012		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	94.14	0.00	301.27	94.14	0.00	301.27	105.63	0.00	300.26	105.63	0.00	300.26
	MIN	-94.14	0.00	-294.93	-94.14	0.00	-294.93	-105.63	0.00	-334.32	-105.63	0.00	-334.32
199	AASHTO-LRFD TRUCK-LOAD MAX	198.08	0.00	638.66	198.08	0.00	638.66	116.84	0.00	351.77	116.84	0.00	351.77
	MIN	-198.08	0.00	-607.06	-198.08	0.00	-607.06	-116.84	0.00	-351.38	-116.84	0.00	-351.38
	TANDEM-LOAD MAX	102.49	0.00	314.81	102.49	0.00	314.81	44.51	0.00	135.14	44.51	0.00	135.14
	MIN	-102.49	0.00	-323.96	-102.49	0.00	-323.96	-44.51	0.00	-134.72	-44.51	0.00	-134.72
	DISPERSION-LMAX	175.34	0.00	542.76	175.34	0.00	542.75	197.74	0.00	585.10	197.74	0.00	585.08
	MIN	-175.34	0.00	-573.61	-175.34	0.00	-573.62	-197.75	0.00	-601.57	-197.75	0.00	-601.59
300	Total Dead lWithout snow	-0.00	0.00	-54.43	-0.00	0.00	-54.44	-0.00	0.00	-30.07	-0.00	0.00	-30.09
301	Particular Snow	0.00	0.00	-10.83	0.00	0.00	-10.83	-0.00	0.00	-4.95	-0.00	0.00	-4.95
302	Live load Total MAX	206.40	0.00	639.79	206.40	0.00	639.78	170.95	0.00	508.84	170.95	0.00	508.83
	MIN	-218.45	0.00	-690.69	-218.45	0.00	-690.69	-184.04	0.00	-557.48	-184.04	0.00	-557.49
303	Sum total D+L+PP MAX	206.40	0.00	628.95	206.40	0.00	628.95	170.95	0.00	503.89	170.95	0.00	503.88
	MIN	-218.45	0.00	-755.95	-218.45	0.00	-755.96	-184.04	0.00	-592.50	-184.04	0.00	-592.52

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE		1002013 2013						1002014 2014						
		3013		3014		3013		3014						
NAME	TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-0.00	0.00	-23.26	-0.00	0.00	-23.26	-0.00	0.00	-44.16	-0.00	0.00	-44.16	
3	Railing	-0.00	0.00	-6.03	-0.00	0.00	-6.03	-0.00	0.00	-11.66	-0.00	0.00	-11.66	
5	Wheel guard	-0.00	0.00	-59.68	-0.00	0.00	-59.68	-0.00	0.00	-115.48	-0.00	0.00	-115.48	
8	Steel weight	-0.00	0.00	-22.16	-0.00	0.00	-22.16	-0.00	0.00	-39.43	-0.00	0.00	-39.43	
10	Medial strip	-0.00	0.00	28.02	-0.00	0.00	28.02	-0.00	0.00	54.83	-0.00	0.00	54.83	
19	Snow	-0.00	0.00	-11.79	-0.00	0.00	-11.79	-0.00	0.00	-22.42	-0.00	0.00	-22.42	
31	Miscellaneous	-0.00	0.00	2.29	-0.00	0.00	2.27	-0.00	0.00	4.45	-0.00	0.00	4.45	
100	AASHTO-LRFD TRUCK-LOAD	MAX	108.89	0.00	352.69	108.89	0.00	352.69	148.26	0.00	440.50	148.26	0.00	440.50
		MIN	-108.89	0.00	-345.63	-108.89	0.00	-345.63	-148.26	0.00	-468.97	-148.26	0.00	-468.97
		TANDEM-LOAD	77.71	0.00	248.82	77.71	0.00	248.82	106.83	0.00	317.68	106.83	0.00	317.68
		MIN	-77.71	0.00	-250.73	-77.71	0.00	-250.73	-106.83	0.00	-334.57	-106.83	0.00	-334.57
		DISPERSION-LMAX	163.98	0.00	497.78	163.98	0.00	497.76	143.81	0.00	431.80	143.81	0.00	431.79
		MIN	-163.99	0.00	-534.23	-163.99	0.00	-534.25	-143.81	0.00	-496.67	-143.81	0.00	-496.69
110	Live load	L-PICKUP 1	272.87	0.00	850.47	272.87	0.00	850.45	292.07	0.00	872.30	292.07	0.00	872.29
		MIN	-272.88	0.00	-879.86	-272.88	0.00	-879.87	-292.07	0.00	-965.65	-292.07	0.00	-965.66
		L-PICKUP 2	241.69	0.00	746.60	241.69	0.00	746.58	250.64	0.00	749.48	250.64	0.00	749.46
		MIN	-241.70	0.00	-784.96	-241.70	0.00	-784.97	-250.64	0.00	-831.24	-250.64	0.00	-831.25
		L-PICKUP 3	-286.90	0.00	-885.80	-286.90	0.00	-885.82	-313.08	0.00	-1037.97	-313.08	0.00	-1037.99
		Live load	272.87	0.00	850.47	272.87	0.00	850.45	292.07	0.00	872.30	292.07	0.00	872.29
111	AASHTO Twin	TWIN-PICKUP	286.89	0.00	900.71	286.89	0.00	900.70	313.08	0.00	928.40	313.08	0.00	928.39
		MIN	-286.90	0.00	-885.80	-286.90	0.00	-885.82	-313.08	0.00	-1037.97	-313.08	0.00	-1037.99
		MID-PICKUP	-286.90	0.00	-885.80	-286.90	0.00	-885.82	-313.08	0.00	-1037.97	-313.08	0.00	-1037.99
198	AASHTO Fatig	TRUCK-LOAD	35.14	0.00	105.76	35.14	0.00	105.76	52.77	0.00	188.27	52.77	0.00	188.27
		MIN	-35.14	0.00	-105.09	-35.14	0.00	-105.09	-52.77	0.00	-152.37	-52.77	0.00	-152.37
		TANDEM-LOAD	23.98	0.00	75.54	23.98	0.00	75.54	39.41	0.00	139.67	39.41	0.00	139.67
		MIN	-23.98	0.00	-71.96	-23.98	0.00	-71.96	-39.41	0.00	-105.94	-39.41	0.00	-105.94

Bago Bridge

BLOCK [No.2 : Cross beam] [BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002013 2013						1002014 2014					
		3013			3014			3013			3014		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	88.39	0.00	273.22	88.39	0.00	273.22	75.22	0.00	249.41	75.22	0.00	249.41
	MIN	-88.39	0.00	-282.61	-88.39	0.00	-282.61	-75.22	0.00	-254.58	-75.22	0.00	-254.58
199	AASHTO-LRFD TRUCK-LOAD MAX	154.79	0.00	503.01	154.79	0.00	503.01	204.06	0.00	599.76	204.06	0.00	599.76
	MIN	-154.79	0.00	-450.00	-154.79	0.00	-450.00	-204.06	0.00	-656.63	-204.06	0.00	-656.63
	TANDEM-LOAD MAX	77.71	0.00	248.82	77.71	0.00	248.82	106.83	0.00	317.68	106.83	0.00	317.68
	MIN	-77.71	0.00	-250.73	-77.71	0.00	-250.73	-106.83	0.00	-334.57	-106.83	0.00	-334.57
	DISPERSION-LMAX	163.98	0.00	497.78	163.98	0.00	497.76	143.81	0.00	431.80	143.81	0.00	431.79
	MIN	-163.99	0.00	-534.23	-163.99	0.00	-534.25	-143.81	0.00	-496.67	-143.81	0.00	-496.69
300	Total Dead lWithout snow	-0.00	0.00	-80.81	-0.00	0.00	-80.83	-0.00	0.00	-151.44	-0.00	0.00	-151.45
301	Particular Snow	-0.00	0.00	-11.79	-0.00	0.00	-11.79	-0.00	0.00	-22.42	-0.00	0.00	-22.42
302	Live load Total MAX	177.37	0.00	552.80	177.37	0.00	552.79	189.84	0.00	567.00	189.84	0.00	566.99
	MIN	-186.48	0.00	-575.77	-186.48	0.00	-575.78	-203.50	0.00	-674.68	-203.50	0.00	-674.69
303	Sum total D+L+PP MAX	177.37	0.00	541.02	177.37	0.00	541.01	189.84	0.00	544.57	189.84	0.00	544.56
	MIN	-186.49	0.00	-668.37	-186.49	0.00	-668.40	-203.51	0.00	-848.55	-203.51	0.00	-848.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002015 2015	3015						1002016 2016					
		SHEAR			TORQUE			SHEAR			TORQUE		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
NAME TITLE													
1 Pavement	-0.00	0.00	-65.81	-0.00	0.00	-65.81	-0.00	0.00	-83.18	-0.00	0.00	-83.18	
3 Railing	-0.00	0.00	-17.91	-0.00	0.00	-17.91	0.00	0.00	-21.31	0.00	0.00	-21.31	
5 Wheel guard	-0.00	0.00	-177.35	-0.00	0.00	-177.35	-0.00	0.00	-210.94	-0.00	0.00	-210.94	
8 Steel weight	-0.00	0.00	-52.46	-0.00	0.00	-52.46	-0.00	0.00	-82.23	-0.00	0.00	-82.23	
10 Medial strip	-0.00	0.00	86.14	-0.00	0.00	86.14	-0.00	0.00	99.90	-0.00	0.00	99.90	
19 Snow	-0.00	0.00	-33.49	-0.00	0.00	-33.49	-0.00	0.00	-41.96	-0.00	0.00	-41.96	
31 Miscellaneous	-0.00	0.00	6.93	-0.00	0.00	6.93	-0.00	0.00	8.01	-0.00	0.00	8.01	
100 AASHTO-LRFD TRUCK-LOAD	129.12	0.00	412.99	129.12	0.00	412.99	131.67	0.00	404.39	131.67	0.00	404.39	
MIN	-129.12	0.00	-460.59	-129.12	0.00	-460.59	-131.67	0.00	-487.77	-131.67	0.00	-487.77	
TANDEM-LOAD	94.50	0.00	303.70	94.50	0.00	303.70	96.30	0.00	298.48	96.30	0.00	298.48	
MIN	-94.50	0.00	-337.03	-94.50	0.00	-337.03	-96.30	0.00	-357.47	-96.30	0.00	-357.47	
DISPERSION-LMAX	116.60	0.00	357.58	116.60	0.00	357.57	110.53	0.00	324.56	110.53	0.00	324.56	
MIN	-116.60	0.00	-457.41	-116.60	0.00	-457.41	-110.53	0.00	-452.21	-110.53	0.00	-452.21	
110 Live load L-PICKUP 1	245.71	0.00	770.57	245.71	0.00	770.56	242.20	0.00	728.95	242.20	0.00	728.95	
MIN	-245.71	0.00	-918.00	-245.71	0.00	-918.00	-242.20	0.00	-939.98	-242.20	0.00	-939.98	
L-PICKUP 2	211.09	0.00	661.28	211.09	0.00	661.27	206.84	0.00	623.04	206.84	0.00	623.04	
MIN	-211.10	0.00	-794.44	-211.10	0.00	-794.44	-206.84	0.00	-809.68	-206.84	0.00	-809.68	
L-PICKUP 3	-258.20	0.00	-963.27	-258.20	0.00	-963.27	-257.27	0.00	-994.50	-257.27	0.00	-994.50	
Live load	245.71	0.00	770.57	245.71	0.00	770.56	242.20	0.00	728.95	242.20	0.00	728.95	
MIN	-258.20	0.00	-963.27	-258.20	0.00	-963.27	-257.27	0.00	-994.50	-257.27	0.00	-994.50	
111 AASHTO Twin TWIN-PICKUP	258.20	0.00	785.45	258.20	0.00	785.45	257.27	0.00	732.34	257.27	0.00	732.33	
MIN	-258.20	0.00	-963.27	-258.20	0.00	-963.27	-257.27	0.00	-994.50	-257.27	0.00	-994.50	
MID-PICKUP	-258.20	0.00	-963.27	-258.20	0.00	-963.27	-257.27	0.00	-994.50	-257.27	0.00	-994.50	
198 AASHTO FatigTRUCK-LOAD	59.12	0.00	216.60	59.12	0.00	216.60	63.66	0.00	231.54	63.66	0.00	231.54	
MIN	-59.12	0.00	-186.62	-59.12	0.00	-186.62	-63.66	0.00	-223.47	-63.66	0.00	-223.47	
TANDEM-LOAD	44.46	0.00	161.47	44.46	0.00	161.47	47.68	0.00	172.16	47.68	0.00	172.16	
MIN	-44.46	0.00	-129.45	-44.46	0.00	-129.45	-47.68	0.00	-155.18	-47.68	0.00	-155.18	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002015 2015						1002016 2016					
		3015			3016			3015			3016		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	58.53	0.00	212.93	58.53	0.00	212.93	52.64	0.00	192.57	52.64	0.00	192.57
	MIN	-58.53	0.00	-241.92	-58.53	0.00	-241.92	-52.64	0.00	-254.26	-52.64	0.00	-254.26
199	AASHTO-LRFD TRUCK-LOAD MAX	170.29	0.00	515.15	170.29	0.00	515.15	175.33	0.00	489.14	175.33	0.00	489.14
	MIN	-170.29	0.00	-612.89	-170.29	0.00	-612.89	-175.33	0.00	-652.79	-175.33	0.00	-652.79
	TANDEM-LOAD MAX	94.50	0.00	303.70	94.50	0.00	303.70	96.30	0.00	298.48	96.30	0.00	298.48
	MIN	-94.50	0.00	-337.03	-94.50	0.00	-337.03	-96.30	0.00	-357.47	-96.30	0.00	-357.47
	DISPERSION-LMAX	116.60	0.00	357.58	116.60	0.00	357.57	110.53	0.00	324.56	110.53	0.00	324.56
	MIN	-116.60	0.00	-457.41	-116.60	0.00	-457.41	-110.53	0.00	-452.21	-110.53	0.00	-452.21
300	Total Dead lWithout snow	-0.00	0.00	-220.47	-0.00	0.00	-220.47	-0.00	0.00	-289.75	-0.00	0.00	-289.75
301	Particular Snow	-0.00	0.00	-33.49	-0.00	0.00	-33.49	-0.00	0.00	-41.96	-0.00	0.00	-41.96
302	Live load Total MAX	159.71	0.00	500.87	159.71	0.00	500.87	157.43	0.00	473.82	157.43	0.00	473.82
	MIN	-167.83	0.00	-626.12	-167.83	0.00	-626.13	-167.23	0.00	-646.42	-167.23	0.00	-646.42
303	Sum total D+L+PP MAX	159.71	0.00	397.17	159.71	0.00	397.16	157.43	0.00	284.26	157.43	0.00	284.25
	MIN	-167.83	0.00	-880.08	-167.83	0.00	-880.09	-167.23	0.00	-978.13	-167.23	0.00	-978.14

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002017 2017						1002018 2018						
		3017			3018			3017			3018			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-0.00	0.00	-94.07	-0.00	0.00	-94.07	-0.00	0.00	-91.84	-0.00	0.00	-91.84	
3	Railing	0.00	0.00	-22.93	0.00	0.00	-22.93	0.00	0.00	-23.25	0.00	0.00	-23.25	
5	Wheel guard	-0.00	0.00	-226.98	-0.00	0.00	-226.98	0.00	0.00	-230.14	0.00	0.00	-230.14	
8	Steel weight	-0.00	0.00	-106.99	-0.00	0.00	-106.99	-0.00	0.00	-94.12	-0.00	0.00	-94.12	
10	Medial strip	-0.00	0.00	104.41	-0.00	0.00	104.41	-0.00	0.00	107.44	-0.00	0.00	107.44	
19	Snow	-0.00	0.00	-47.20	-0.00	0.00	-47.20	-0.00	0.00	-46.34	-0.00	0.00	-46.34	
31	Miscellaneous	-0.00	0.00	8.40	-0.00	0.00	8.40	-0.00	0.00	8.69	-0.00	0.00	8.69	
100	AASHTO-LRFD TRUCK-LOAD	MAX	135.45	0.00	407.24	135.45	0.00	407.24	136.49	0.00	415.23	136.49	0.00	415.23
		MIN	-135.45	0.00	-499.36	-135.45	0.00	-499.36	-136.49	0.00	-492.94	-136.49	0.00	-492.94
	TANDEM-LOAD	MAX	98.83	0.00	300.56	98.83	0.00	300.56	99.55	0.00	305.86	99.55	0.00	305.86
		MIN	-98.83	0.00	-365.63	-98.83	0.00	-365.63	-99.55	0.00	-361.07	-99.55	0.00	-361.07
	DISPERSION-LMAX	MAX	114.32	0.00	325.12	114.32	0.00	325.12	116.17	0.00	327.03	116.17	0.00	327.03
		MIN	-114.32	0.00	-469.96	-114.32	0.00	-469.96	-116.17	0.00	-467.59	-116.17	0.00	-467.59
110	Live load L-PICKUP 1	MAX	249.77	0.00	732.35	249.77	0.00	732.35	252.65	0.00	742.26	252.65	0.00	742.26
		MIN	-249.78	0.00	-969.32	-249.78	0.00	-969.32	-252.65	0.00	-960.54	-252.65	0.00	-960.54
	L-PICKUP 2	MAX	213.15	0.00	625.68	213.15	0.00	625.68	215.72	0.00	632.89	215.72	0.00	632.89
		MIN	-213.15	0.00	-835.59	-213.15	0.00	-835.59	-215.72	0.00	-828.67	-215.72	0.00	-828.67
	L-PICKUP 3	MAX	-267.08	0.00	-1027.82	-267.08	0.00	-1027.82	-270.15	0.00	-1016.99	-270.15	0.00	-1016.99
		MIN	249.77	0.00	732.35	249.77	0.00	732.35	252.65	0.00	742.26	252.65	0.00	742.26
	Live load	MAX	249.77	0.00	732.35	249.77	0.00	732.35	252.65	0.00	742.26	252.65	0.00	742.26
		MIN	-267.08	0.00	-1027.82	-267.08	0.00	-1027.82	-270.15	0.00	-1016.99	-270.15	0.00	-1016.99
111	AASHTO Twin TWIN-PICKUP	MAX	267.08	0.00	733.91	267.08	0.00	733.91	270.15	0.00	746.73	270.15	0.00	746.73
		MIN	-267.08	0.00	-1027.82	-267.08	0.00	-1027.82	-270.15	0.00	-1016.99	-270.15	0.00	-1016.99
	MID-PICKUP	-267.08	0.00	-1027.82	-267.08	0.00	-1027.82	-270.15	0.00	-1016.99	-270.15	0.00	-1016.99	
198	AASHTO FatigTRUCK-LOAD	MAX	66.07	0.00	239.81	66.07	0.00	239.81	66.76	0.00	244.61	66.76	0.00	244.61
		MIN	-66.07	0.00	-240.58	-66.07	0.00	-240.58	-66.76	0.00	-242.60	-66.76	0.00	-242.60
	TANDEM-LOAD	MAX	49.38	0.00	178.01	49.38	0.00	178.01	49.86	0.00	181.32	49.86	0.00	181.32
		MIN	-49.38	0.00	-167.02	-49.38	0.00	-167.02	-49.86	0.00	-168.37	-49.86	0.00	-168.37

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002017 2017			3017			1002018 2018			3018		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	53.82	0.00	188.59	53.82	0.00	188.59	54.59	0.00	189.20	54.59	0.00	189.20
	MIN	-53.82	0.00	-272.54	-53.82	0.00	-272.54	-54.59	0.00	-276.57	-54.59	0.00	-276.57
199	AASHTO-LRFD TRUCK-LOAD MAX	182.43	0.00	490.33	182.43	0.00	490.33	184.00	0.00	502.67	184.00	0.00	502.67
	MIN	-182.43	0.00	-672.07	-182.43	0.00	-672.07	-184.00	0.00	-662.40	-184.00	0.00	-662.40
	TANDEM-LOAD MAX	98.83	0.00	300.56	98.83	0.00	300.56	99.55	0.00	305.86	99.55	0.00	305.86
	MIN	-98.83	0.00	-365.63	-98.83	0.00	-365.63	-99.55	0.00	-361.07	-99.55	0.00	-361.07
	DISPERSION-LMAX	114.32	0.00	325.12	114.32	0.00	325.12	116.17	0.00	327.03	116.17	0.00	327.03
	MIN	-114.32	0.00	-469.96	-114.32	0.00	-469.96	-116.17	0.00	-467.59	-116.17	0.00	-467.59
300	Total Dead lWithout snow	-0.00	0.00	-338.16	-0.00	0.00	-338.16	-0.00	0.00	-323.21	-0.00	0.00	-323.21
301	Particular Snow	-0.00	0.00	-47.20	-0.00	0.00	-47.20	-0.00	0.00	-46.34	-0.00	0.00	-46.34
302	Live load Total MAX	162.35	0.00	476.03	162.35	0.00	476.03	164.23	0.00	482.47	164.23	0.00	482.47
	MIN	-173.60	0.00	-668.08	-173.60	0.00	-668.08	-175.60	0.00	-661.04	-175.60	0.00	-661.04
303	Sum total D+L+PP MAX	162.35	0.00	233.48	162.35	0.00	233.48	164.23	0.00	257.66	164.23	0.00	257.66
	MIN	-173.60	0.00	-1053.44	-173.60	0.00	-1053.44	-175.60	0.00	-1030.59	-175.60	0.00	-1030.59

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002019						1002020					
NODE		2019			3019			2020			3020		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-83.61	0.00	0.00	-83.61	0.00	0.00	-79.18	0.00	0.00	-79.18
3	Railing	0.00	0.00	-22.69	0.00	0.00	-22.69	0.00	0.00	-21.38	0.00	0.00	-21.38
5	Wheel guard	0.00	0.00	-224.60	0.00	0.00	-224.60	0.00	0.00	-211.64	0.00	0.00	-211.64
8	Steel weight	0.00	0.00	-67.51	0.00	0.00	-67.51	0.00	0.00	-65.19	0.00	0.00	-65.19
10	Medial strip	0.00	0.00	108.10	0.00	0.00	108.10	0.00	0.00	101.74	0.00	0.00	101.74
19	Snow	0.00	0.00	-42.60	0.00	0.00	-42.60	0.00	0.00	-40.31	0.00	0.00	-40.31
31	Miscellaneous	0.00	0.00	8.76	0.00	0.00	8.76	0.00	0.00	8.24	0.00	0.00	8.24
100	AASHTO-LRFD TRUCK-LOAD	135.76	0.00	424.02	135.76	0.00	424.02	134.54	0.00	425.58	134.54	0.00	425.58
	MIN	-135.76	0.00	-480.38	-135.76	0.00	-480.38	-134.54	0.00	-475.06	-134.54	0.00	-475.06
	TANDEM-LOAD	99.09	0.00	312.22	99.09	0.00	312.22	98.34	0.00	313.77	98.34	0.00	313.77
	MIN	-99.09	0.00	-352.41	-99.09	0.00	-352.41	-98.34	0.00	-348.63	-98.34	0.00	-348.63
	DISPERSION-LMAX	114.15	0.00	334.60	114.15	0.00	334.60	112.91	0.00	335.31	112.91	0.00	335.31
	MIN	-114.15	0.00	-461.38	-114.15	0.00	-461.38	-112.91	0.00	-455.16	-112.91	0.00	-455.16
110	Live load L-PICKUP 1	249.91	0.00	758.62	249.91	0.00	758.62	247.45	0.00	760.88	247.45	0.00	760.88
	MIN	-249.91	0.00	-941.76	-249.91	0.00	-941.76	-247.45	0.00	-930.22	-247.45	0.00	-930.22
	L-PICKUP 2	213.24	0.00	646.82	213.24	0.00	646.82	211.24	0.00	649.07	211.24	0.00	649.07
	MIN	-213.24	0.00	-813.78	-213.24	0.00	-813.78	-211.24	0.00	-803.79	-211.24	0.00	-803.79
	L-PICKUP 3	-267.12	0.00	-994.58	-267.12	0.00	-994.58	-263.71	0.00	-983.76	-263.71	0.00	-983.76
	Live load	249.91	0.00	758.62	249.91	0.00	758.62	247.45	0.00	760.88	247.45	0.00	760.88
	MIN	-267.12	0.00	-994.58	-267.12	0.00	-994.58	-263.71	0.00	-983.76	-263.71	0.00	-983.76
111	AASHTO Twin TWIN-PICKUP	267.12	0.00	767.05	267.12	0.00	767.05	263.71	0.00	765.80	263.71	0.00	765.80
	MIN	-267.12	0.00	-994.58	-267.12	0.00	-994.58	-263.71	0.00	-983.76	-263.71	0.00	-983.76
	MID-PICKUP	-267.12	0.00	-994.58	-267.12	0.00	-994.58	-263.71	0.00	-983.76	-263.71	0.00	-983.76
198	AASHTO FatigTRUCK-LOAD	66.26	0.00	246.04	66.26	0.00	246.04	64.79	0.00	241.42	64.79	0.00	241.42
	MIN	-66.26	0.00	-235.50	-66.26	0.00	-235.50	-64.79	0.00	-223.17	-64.79	0.00	-223.17
	TANDEM-LOAD	49.55	0.00	182.43	49.55	0.00	182.43	48.57	0.00	179.36	48.57	0.00	179.36
	MIN	-49.55	0.00	-163.47	-49.55	0.00	-163.47	-48.57	0.00	-155.01	-48.57	0.00	-155.01

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002019 2019			3019			1002020 2020			3020		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	53.75	0.00	192.32	53.75	0.00	192.32	53.67	0.00	196.02	53.67	0.00	196.02
	MIN	-53.75	0.00	-269.25	-53.75	0.00	-269.25	-53.67	0.00	-258.36	-53.67	0.00	-258.36
199	AASHTO-LRFD TRUCK-LOAD MAX	182.65	0.00	517.68	182.65	0.00	517.68	180.10	0.00	515.58	180.10	0.00	515.58
	MIN	-182.65	0.00	-643.71	-182.65	0.00	-643.71	-180.10	0.00	-637.91	-180.10	0.00	-637.91
	TANDEM-LOAD MAX	99.09	0.00	312.22	99.09	0.00	312.22	98.34	0.00	313.77	98.34	0.00	313.77
	MIN	-99.09	0.00	-352.41	-99.09	0.00	-352.41	-98.34	0.00	-348.63	-98.34	0.00	-348.63
	DISPERSION-LMAX	114.15	0.00	334.60	114.15	0.00	334.60	112.91	0.00	335.31	112.91	0.00	335.31
	MIN	-114.15	0.00	-461.38	-114.15	0.00	-461.38	-112.91	0.00	-455.16	-112.91	0.00	-455.16
300	Total Dead lWithout snow	0.00	0.00	-281.54	0.00	0.00	-281.54	0.00	0.00	-267.41	0.00	0.00	-267.41
301	Particular Snow	0.00	0.00	-42.60	0.00	0.00	-42.60	0.00	0.00	-40.31	0.00	0.00	-40.31
302	Live load Total MAX	162.44	0.00	493.10	162.44	0.00	493.10	160.84	0.00	494.58	160.84	0.00	494.58
	MIN	-173.63	0.00	-646.48	-173.63	0.00	-646.48	-171.41	0.00	-639.44	-171.41	0.00	-639.44
303	Sum total D+L+PP MAX	162.44	0.00	316.89	162.44	0.00	316.89	160.84	0.00	335.23	160.84	0.00	335.23
	MIN	-173.63	0.00	-970.62	-173.63	0.00	-970.62	-171.41	0.00	-947.16	-171.41	0.00	-947.16

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002021						1002022					
NODE		2021			3021			2022			3022		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-72.11	0.00	0.00	-72.11	0.00	0.00	-48.77	0.00	0.00	-48.77
3	Railing	0.00	0.00	-18.44	0.00	0.00	-18.44	0.00	0.00	-12.65	0.00	0.00	-12.65
5	Wheel guard	0.00	0.00	-182.58	0.00	0.00	-182.58	0.00	0.00	-125.21	0.00	0.00	-125.21
8	Steel weight	0.00	0.00	-71.64	0.00	0.00	-71.64	0.00	0.00	-46.37	0.00	0.00	-46.37
10	Medial strip	0.00	0.00	85.70	0.00	0.00	85.70	0.00	0.00	59.14	0.00	0.00	59.14
19	Snow	0.00	0.00	-36.43	0.00	0.00	-36.43	0.00	0.00	-24.69	0.00	0.00	-24.69
31	Miscellaneous	0.00	0.00	6.93	0.00	0.00	6.93	0.00	0.00	4.78	0.00	0.00	4.78
100	AASHTO-LRFD TRUCK-LOAD	142.72	0.00	433.24	142.72	0.00	433.24	132.83	0.00	420.79	132.83	0.00	420.79
	MIN	-142.72	0.00	-481.30	-142.72	0.00	-481.30	-132.83	0.00	-429.74	-132.83	0.00	-429.74
	TANDEM-LOAD	104.16	0.00	318.33	104.16	0.00	318.33	97.01	0.00	305.80	97.01	0.00	305.80
	MIN	-104.16	0.00	-351.59	-104.16	0.00	-351.59	-97.01	0.00	-311.87	-97.01	0.00	-311.87
	DISPERSION-LMAX	123.33	0.00	361.87	123.33	0.00	361.87	136.50	0.00	424.08	136.50	0.00	424.08
	MIN	-123.33	0.00	-470.97	-123.33	0.00	-470.97	-136.50	0.00	-497.55	-136.50	0.00	-497.55
110	Live load L-PICKUP 1	266.06	0.00	795.11	266.06	0.00	795.11	269.32	0.00	844.87	269.32	0.00	844.87
	MIN	-266.06	0.00	-952.27	-266.06	0.00	-952.27	-269.32	0.00	-927.29	-269.32	0.00	-927.29
	L-PICKUP 2	227.49	0.00	680.20	227.49	0.00	680.20	233.50	0.00	729.88	233.50	0.00	729.88
	MIN	-227.49	0.00	-822.56	-227.49	0.00	-822.56	-233.50	0.00	-809.42	-233.50	0.00	-809.42
	L-PICKUP 3	-284.07	0.00	-1007.99	-284.07	0.00	-1007.99	-280.03	0.00	-962.90	-280.03	0.00	-962.90
	Live load	266.06	0.00	795.11	266.06	0.00	795.11	269.32	0.00	844.87	269.32	0.00	844.87
	MIN	-284.07	0.00	-1007.99	-284.07	0.00	-1007.99	-280.03	0.00	-962.90	-280.03	0.00	-962.90
111	AASHTO Twin TWIN-PICKUP	284.07	0.00	813.85	284.07	0.00	813.85	280.03	0.00	878.51	280.03	0.00	878.51
	MIN	-284.07	0.00	-1007.99	-284.07	0.00	-1007.99	-280.03	0.00	-962.90	-280.03	0.00	-962.90
	MID-PICKUP	-284.07	0.00	-1007.99	-284.07	0.00	-1007.99	-280.03	0.00	-962.90	-280.03	0.00	-962.90
198	AASHTO FatigTRUCK-LOAD	63.18	0.00	231.17	63.18	0.00	231.17	51.51	0.00	185.80	51.51	0.00	185.80
	MIN	-63.18	0.00	-208.80	-63.18	0.00	-208.80	-51.51	0.00	-138.85	-51.51	0.00	-138.85
	TANDEM-LOAD	47.36	0.00	171.96	47.36	0.00	171.96	38.96	0.00	139.32	38.96	0.00	139.32
	MIN	-47.36	0.00	-144.48	-47.36	0.00	-144.48	-38.96	0.00	-94.43	-38.96	0.00	-94.43

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002021 2021			3021			1002022 2022			3022		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.46	0.00	214.55	60.46	0.00	214.55	72.75	0.00	248.54	72.75	0.00	248.54
	MIN	-60.46	0.00	-257.72	-60.46	0.00	-257.72	-72.75	0.00	-247.94	-72.75	0.00	-247.94
199	AASHTO-LRFD TRUCK-LOAD MAX	192.30	0.00	542.41	192.30	0.00	542.41	174.64	0.00	552.05	174.64	0.00	552.05
	MIN	-192.30	0.00	-649.02	-192.30	0.00	-649.02	-174.64	0.00	-572.34	-174.64	0.00	-572.34
	TANDEM-LOAD MAX	104.16	0.00	318.33	104.16	0.00	318.33	97.01	0.00	305.80	97.01	0.00	305.80
	MIN	-104.16	0.00	-351.59	-104.16	0.00	-351.59	-97.01	0.00	-311.87	-97.01	0.00	-311.87
	DISPERSION-LMAX	123.33	0.00	361.87	123.33	0.00	361.87	136.50	0.00	424.08	136.50	0.00	424.08
	MIN	-123.33	0.00	-470.97	-123.33	0.00	-470.97	-136.50	0.00	-497.55	-136.50	0.00	-497.55
300	Total Dead lWithout snow	0.00	0.00	-252.14	0.00	0.00	-252.14	0.00	0.00	-169.07	0.00	0.00	-169.07
301	Particular Snow	0.00	0.00	-36.43	0.00	0.00	-36.43	0.00	0.00	-24.69	0.00	0.00	-24.69
302	Live load Total MAX	172.94	0.00	516.82	172.94	0.00	516.82	175.06	0.00	549.16	175.06	0.00	549.16
	MIN	-184.65	0.00	-655.20	-184.65	0.00	-655.20	-182.02	0.00	-625.89	-182.02	0.00	-625.89
303	Sum total D+L+PP MAX	172.94	0.00	383.30	172.94	0.00	383.30	175.06	0.00	520.16	175.06	0.00	520.16
	MIN	-184.65	0.00	-943.77	-184.65	0.00	-943.77	-182.02	0.00	-819.64	-182.02	0.00	-819.64

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002023						1002024					
NODE		2023			3023			2024			3024		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-23.62	0.00	0.00	-23.62	0.00	0.00	-7.32	0.00	0.00	-7.32
3	Railing	0.00	0.00	-6.35	0.00	0.00	-6.35	0.00	0.00	-2.31	0.00	0.00	-2.31
5	Wheel guard	0.00	0.00	-62.82	0.00	0.00	-62.82	0.00	0.00	-22.83	0.00	0.00	-22.83
8	Steel weight	0.00	0.00	-19.85	0.00	0.00	-19.85	0.00	0.00	-2.08	0.00	0.00	-2.08
10	Medial strip	0.00	0.00	30.13	0.00	0.00	30.13	0.00	0.00	11.69	0.00	0.00	11.69
19	Snow	0.00	0.00	-12.02	0.00	0.00	-12.02	0.00	0.00	-3.81	0.00	0.00	-3.81
31	Miscellaneous	0.00	0.00	2.44	0.00	0.00	2.44	0.00	0.00	0.95	0.00	0.00	0.95
100	AASHTO-LRFD TRUCK-LOAD	100.42	0.00	336.87	100.42	0.00	336.87	54.16	0.00	163.48	54.16	0.00	163.48
	MIN	-100.42	0.00	-311.06	-100.42	0.00	-311.06	-54.16	0.00	-163.16	-54.16	0.00	-163.16
	TANDEM-LOAD	72.90	0.00	241.80	72.90	0.00	241.80	37.05	0.00	111.69	37.05	0.00	111.69
	MIN	-72.90	0.00	-229.05	-72.90	0.00	-229.05	-37.05	0.00	-112.14	-37.05	0.00	-112.14
	DISPERSION-LMAX	160.59	0.00	485.50	160.59	0.00	485.50	164.85	0.00	488.39	164.85	0.00	488.39
	MIN	-160.59	0.00	-522.85	-160.59	0.00	-522.84	-164.85	0.00	-500.93	-164.85	0.00	-500.93
110	Live load L-PICKUP 1	261.01	0.00	822.37	261.01	0.00	822.37	219.01	0.00	651.87	219.01	0.00	651.87
	MIN	-261.01	0.00	-833.91	-261.01	0.00	-833.91	-219.01	0.00	-664.08	-219.01	0.00	-664.08
	L-PICKUP 2	233.49	0.00	727.30	233.49	0.00	727.30	201.90	0.00	600.07	201.90	0.00	600.07
	MIN	-233.49	0.00	-751.90	-233.49	0.00	-751.90	-201.90	0.00	-613.07	-201.90	0.00	-613.07
	L-PICKUP 3	-265.63	0.00	-804.36	-265.63	0.00	-804.36	-235.09	0.00	-711.93	-235.09	0.00	-711.93
	Live load	261.01	0.00	822.37	261.01	0.00	822.37	219.01	0.00	651.87	219.01	0.00	651.87
	MIN	-265.63	0.00	-833.91	-265.63	0.00	-833.91	-235.09	0.00	-711.93	-235.09	0.00	-711.93
111	AASHTO Twin TWIN-PICKUP	265.63	0.00	843.37	265.63	0.00	843.37	235.09	0.00	700.23	235.09	0.00	700.23
	MIN	-265.63	0.00	-804.36	-265.63	0.00	-804.36	-235.09	0.00	-711.93	-235.09	0.00	-711.93
	MID-PICKUP	-265.63	0.00	-804.36	-265.63	0.00	-804.36	-235.09	0.00	-711.93	-235.09	0.00	-711.93
198	AASHTO FatigTRUCK-LOAD	30.45	0.00	109.01	30.45	0.00	109.01	27.26	0.00	77.29	27.26	0.00	77.29
	MIN	-30.45	0.00	-89.04	-30.45	0.00	-89.04	-27.26	0.00	-86.50	-27.26	0.00	-86.50
	TANDEM-LOAD	22.60	0.00	81.30	22.60	0.00	81.30	18.59	0.00	52.40	18.59	0.00	52.40
	MIN	-22.60	0.00	-61.42	-22.60	0.00	-61.42	-18.59	0.00	-59.46	-18.59	0.00	-59.46

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002023 2023						1002024 2024					
		3023			3024			3023			3024		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	86.71	0.00	267.26	86.71	0.00	267.26	87.78	0.00	250.37	87.78	0.00	250.37
	MIN	-86.71	0.00	-283.11	-86.71	0.00	-283.11	-87.78	0.00	-277.35	-87.78	0.00	-277.35
199	AASHTO-LRFD TRUCK-LOAD MAX	134.56	0.00	451.58	134.56	0.00	451.58	96.36	0.00	289.64	96.36	0.00	289.64
	MIN	-134.56	0.00	-370.89	-134.56	0.00	-370.89	-96.36	0.00	-290.11	-96.36	0.00	-290.11
	TANDEM-LOAD MAX	72.90	0.00	241.80	72.90	0.00	241.80	37.05	0.00	111.69	37.05	0.00	111.69
	MIN	-72.90	0.00	-229.05	-72.90	0.00	-229.05	-37.05	0.00	-112.14	-37.05	0.00	-112.14
	DISPERSION-LMAX	160.59	0.00	485.50	160.59	0.00	485.50	164.85	0.00	488.39	164.85	0.00	488.39
	MIN	-160.59	0.00	-522.85	-160.59	0.00	-522.84	-164.85	0.00	-500.93	-164.85	0.00	-500.93
300	Total Dead lWithout snow	0.00	0.00	-80.07	0.00	0.00	-80.07	0.00	0.00	-21.89	0.00	0.00	-21.89
301	Particular Snow	0.00	0.00	-12.02	0.00	0.00	-12.02	0.00	0.00	-3.81	0.00	0.00	-3.81
302	Live load Total MAX	169.66	0.00	534.54	169.66	0.00	534.54	142.36	0.00	423.71	142.36	0.00	423.71
	MIN	-172.66	0.00	-542.04	-172.66	0.00	-542.04	-152.81	0.00	-462.75	-152.81	0.00	-462.75
303	Sum total D+L+PP MAX	169.66	0.00	522.52	169.66	0.00	522.52	142.36	0.00	419.90	142.36	0.00	419.90
	MIN	-172.66	0.00	-634.13	-172.66	0.00	-634.13	-152.81	0.00	-488.46	-152.81	0.00	-488.46

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002025						1002026					
NODE		2025			3025			2026			3026		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-16.11	0.00	0.00	-16.11	0.00	0.00	-34.70	0.00	0.00	-34.70
3	Railing	0.00	0.00	-6.05	0.00	0.00	-6.05	0.00	0.00	-12.27	0.00	0.00	-12.27
5	Wheel guard	0.00	0.00	-59.94	0.00	0.00	-59.94	0.00	0.00	-121.45	0.00	0.00	-121.45
8	Steel weight	0.00	0.00	7.11	0.00	0.00	7.11	0.00	0.00	6.06	0.00	0.00	6.06
10	Medial strip	0.00	0.00	32.50	0.00	0.00	32.50	0.00	0.00	64.32	0.00	0.00	64.32
19	Snow	0.00	0.00	-8.64	0.00	0.00	-8.64	0.00	0.00	-18.44	0.00	0.00	-18.44
31	Miscellaneous	0.00	0.00	2.63	0.00	0.00	2.63	0.00	0.00	5.23	0.00	0.00	5.23
100	AASHTO-LRFD TRUCK-LOAD	101.27	0.00	339.18	101.27	0.00	339.18	132.80	0.00	417.18	132.80	0.00	417.18
	MIN	-101.27	0.00	-318.51	-101.27	0.00	-318.51	-132.80	0.00	-433.29	-132.80	0.00	-433.29
	TANDEM-LOAD MAX	73.25	0.00	242.46	73.25	0.00	242.46	96.91	0.00	302.20	96.91	0.00	302.20
	MIN	-73.25	0.00	-234.03	-73.25	0.00	-234.03	-96.91	0.00	-315.70	-96.91	0.00	-315.70
	DISPERSION-LMAX	154.88	0.00	477.37	154.88	0.00	477.37	132.55	0.00	425.99	132.55	0.00	425.99
	MIN	-154.88	0.00	-502.26	-154.88	0.00	-502.26	-132.55	0.00	-476.30	-132.55	0.00	-476.29
110	Live load L-PICKUP 1	256.15	0.00	816.55	256.15	0.00	816.55	265.35	0.00	843.17	265.35	0.00	843.17
	MIN	-256.15	0.00	-820.77	-256.15	0.00	-820.77	-265.35	0.00	-909.58	-265.35	0.00	-909.58
	L-PICKUP 2 MAX	228.13	0.00	719.83	228.13	0.00	719.83	229.46	0.00	728.19	229.46	0.00	728.19
	MIN	-228.13	0.00	-736.28	-228.13	0.00	-736.28	-229.46	0.00	-792.00	-229.46	0.00	-791.99
	L-PICKUP 3	-262.78	0.00	-795.01	-262.78	0.00	-795.01	-276.98	0.00	-933.96	-276.98	0.00	-933.96
	Live load MAX	256.15	0.00	816.55	256.15	0.00	816.55	265.35	0.00	843.17	265.35	0.00	843.17
	MIN	-262.78	0.00	-820.77	-262.78	0.00	-820.77	-276.98	0.00	-933.96	-276.98	0.00	-933.96
111	AASHTO Twin TWIN-PICKUP	262.78	0.00	846.12	262.78	0.00	846.12	276.98	0.00	885.78	276.98	0.00	885.78
	MIN	-262.78	0.00	-795.01	-262.78	0.00	-795.01	-276.98	0.00	-933.96	-276.98	0.00	-933.96
	MID-PICKUP	-262.78	0.00	-795.01	-262.78	0.00	-795.01	-276.98	0.00	-933.96	-276.98	0.00	-933.96
198	AASHTO FatigTRUCK-LOAD	30.46	0.00	110.09	30.46	0.00	110.09	51.35	0.00	183.80	51.35	0.00	183.80
	MIN	-30.46	0.00	-88.89	-30.46	0.00	-88.89	-51.35	0.00	-143.81	-51.35	0.00	-143.81
	TANDEM-LOAD MAX	22.88	0.00	81.81	22.88	0.00	81.81	38.69	0.00	137.35	38.69	0.00	137.35
	MIN	-22.88	0.00	-61.29	-22.88	0.00	-61.29	-38.69	0.00	-97.92	-38.69	0.00	-97.92

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002025 2025						1002026 2026					
		3025			3025			3026			3026		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	83.60	0.00	262.12	83.60	0.00	262.12	70.38	0.00	245.70	70.38	0.00	245.70
	MIN	-83.60	0.00	-269.38	-83.60	0.00	-269.38	-70.38	0.00	-238.15	-70.38	0.00	-238.15
199	AASHTO-LRFD TRUCK-LOAD MAX	137.10	0.00	462.76	137.10	0.00	462.76	175.21	0.00	558.21	175.21	0.00	558.21
	MIN	-137.10	0.00	-381.08	-137.10	0.00	-381.08	-175.21	0.00	-561.43	-175.21	0.00	-561.43
	TANDEM-LOAD MAX	73.25	0.00	242.46	73.25	0.00	242.46	96.91	0.00	302.20	96.91	0.00	302.20
	MIN	-73.25	0.00	-234.03	-73.25	0.00	-234.03	-96.91	0.00	-315.70	-96.91	0.00	-315.70
	DISPERSION-LMAX	154.88	0.00	477.37	154.88	0.00	477.37	132.55	0.00	425.99	132.55	0.00	425.99
	MIN	-154.88	0.00	-502.26	-154.88	0.00	-502.26	-132.55	0.00	-476.30	-132.55	0.00	-476.29
300	Total Dead lWithout snow	0.00	0.00	-39.86	0.00	0.00	-39.86	0.00	0.00	-92.79	0.00	0.00	-92.79
301	Particular Snow	0.00	0.00	-8.64	0.00	0.00	-8.64	0.00	0.00	-18.44	0.00	0.00	-18.44
302	Live load Total MAX	166.50	0.00	530.76	166.50	0.00	530.76	172.48	0.00	548.06	172.48	0.00	548.06
	MIN	-170.81	0.00	-533.50	-170.81	0.00	-533.50	-180.04	0.00	-607.07	-180.04	0.00	-607.07
303	Sum total D+L+PP MAX	166.50	0.00	522.12	166.50	0.00	522.12	172.48	0.00	529.62	172.48	0.00	529.62
	MIN	-170.81	0.00	-581.99	-170.81	0.00	-581.99	-180.04	0.00	-718.30	-180.04	0.00	-718.30

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002027						1002028					
NODE		2027			3027			2028			3028		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-77.02	0.00	0.00	-77.02	0.00	0.00	-106.81	0.00	0.00	-106.81
3	Railing	0.00	0.00	-18.77	0.00	0.00	-18.77	0.00	0.00	-22.26	0.00	0.00	-22.26
5	Wheel guard	0.00	0.00	-185.85	0.00	0.00	-185.85	0.00	0.00	-220.37	0.00	0.00	-220.37
8	Steel weight	0.00	0.00	-87.57	0.00	0.00	-87.57	0.00	0.00	-166.49	0.00	0.00	-166.49
10	Medial strip	0.00	0.00	84.31	0.00	0.00	84.31	0.00	0.00	91.45	0.00	0.00	91.45
19	Snow	0.00	0.00	-38.74	0.00	0.00	-38.74	0.00	0.00	-52.70	0.00	0.00	-52.70
31	Miscellaneous	0.00	0.00	6.88	0.00	0.00	6.88	0.00	0.00	7.43	0.00	0.00	7.43
100	AASHTO-LRFD TRUCK-LOAD	134.13	0.00	409.93	134.13	0.00	409.93	135.21	0.00	393.49	135.21	0.00	393.49
	MIN	-134.13	0.00	-499.50	-134.13	0.00	-499.50	-135.21	0.00	-519.24	-135.21	0.00	-519.24
	TANDEM-LOAD	97.96	0.00	300.97	97.96	0.00	300.97	98.49	0.00	289.98	98.49	0.00	289.98
	MIN	-97.96	0.00	-365.59	-97.96	0.00	-365.59	-98.49	0.00	-379.31	-98.49	0.00	-379.31
	DISPERSION-LMAX	119.70	0.00	365.46	119.70	0.00	365.46	115.60	0.00	328.12	115.60	0.00	328.12
	MIN	-119.70	0.00	-483.79	-119.70	0.00	-483.79	-115.60	0.00	-494.37	-115.60	0.00	-494.37
110	Live load L-PICKUP 1	253.83	0.00	775.39	253.83	0.00	775.39	250.81	0.00	721.61	250.81	0.00	721.61
	MIN	-253.83	0.00	-983.29	-253.83	0.00	-983.29	-250.81	0.00	-1013.61	-250.81	0.00	-1013.61
	L-PICKUP 2	217.66	0.00	666.43	217.66	0.00	666.43	214.08	0.00	618.10	214.08	0.00	618.10
	MIN	-217.66	0.00	-849.38	-217.66	0.00	-849.38	-214.08	0.00	-873.68	-214.08	0.00	-873.68
	L-PICKUP 3	-268.42	0.00	-1028.82	-268.42	0.00	-1028.82	-268.95	0.00	-1077.70	-268.95	0.00	-1077.70
	Live load	253.83	0.00	775.39	253.83	0.00	775.39	250.81	0.00	721.61	250.81	0.00	721.61
	MIN	-268.42	0.00	-1028.82	-268.42	0.00	-1028.82	-268.95	0.00	-1077.70	-268.95	0.00	-1077.70
111	AASHTO Twin TWIN-PICKUP	268.42	0.00	794.19	268.42	0.00	794.19	268.95	0.00	725.86	268.95	0.00	725.86
	MIN	-268.42	0.00	-1028.82	-268.42	0.00	-1028.82	-268.95	0.00	-1077.70	-268.95	0.00	-1077.70
	MID-PICKUP	-268.42	0.00	-1028.82	-268.42	0.00	-1028.82	-268.95	0.00	-1077.70	-268.95	0.00	-1077.70
198	AASHTO FatigTRUCK-LOAD	60.74	0.00	214.51	60.74	0.00	214.51	64.45	0.00	226.94	64.45	0.00	226.94
	MIN	-60.74	0.00	-208.02	-60.74	0.00	-208.02	-64.45	0.00	-238.64	-64.45	0.00	-238.64
	TANDEM-LOAD	45.57	0.00	159.90	45.57	0.00	159.90	48.11	0.00	168.51	48.11	0.00	168.51
	MIN	-45.57	0.00	-144.78	-45.57	0.00	-144.78	-48.11	0.00	-165.75	-48.11	0.00	-165.75

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002027						1002028					
NODE		2027			3027			2028			3028		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	59.25	0.00	214.24	59.25	0.00	214.24	54.72	0.00	191.50	54.72	0.00	191.50
	MIN	-59.25	0.00	-253.50	-59.25	0.00	-253.50	-54.72	0.00	-271.58	-54.72	0.00	-271.58
199	AASHTO-LRFD TRUCK-LOAD MAX	178.55	0.00	516.97	178.55	0.00	516.97	183.24	0.00	478.39	183.24	0.00	478.39
	MIN	-178.55	0.00	-659.34	-178.55	0.00	-659.34	-183.24	0.00	-703.08	-183.24	0.00	-703.08
	TANDEM-LOAD MAX	97.96	0.00	300.97	97.96	0.00	300.97	98.49	0.00	289.98	98.49	0.00	289.98
	MIN	-97.96	0.00	-365.59	-97.96	0.00	-365.59	-98.49	0.00	-379.31	-98.49	0.00	-379.31
	DISPERSION-LMAX	119.70	0.00	365.46	119.70	0.00	365.46	115.60	0.00	328.12	115.60	0.00	328.12
	MIN	-119.70	0.00	-483.79	-119.70	0.00	-483.79	-115.60	0.00	-494.37	-115.60	0.00	-494.37
300	Total Dead lWithout snow	0.00	0.00	-278.02	0.00	0.00	-278.01	0.00	0.00	-417.05	0.00	0.00	-417.05
301	Particular Snow	0.00	0.00	-38.74	0.00	0.00	-38.74	0.00	0.00	-52.70	0.00	0.00	-52.70
302	Live load Total MAX	164.99	0.00	504.00	164.99	0.00	504.00	163.03	0.00	469.05	163.03	0.00	469.05
	MIN	-174.48	0.00	-668.73	-174.48	0.00	-668.73	-174.82	0.00	-700.51	-174.82	0.00	-700.51
303	Sum total D+L+PP MAX	164.99	0.00	338.44	164.99	0.00	338.44	163.03	0.00	140.01	163.03	0.00	140.01
	MIN	-174.48	0.00	-985.49	-174.48	0.00	-985.49	-174.82	0.00	-1170.26	-174.82	0.00	-1170.26

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002029						1002030							
NODE		2029			3029			2030			3030				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-100.97	0.00	0.00	-100.97	0.00	0.00	-91.02	0.00	0.00	-91.02		
3	Railing	0.00	0.00	-23.24	0.00	0.00	-23.24	0.00	0.00	-23.26	0.00	0.00	-23.26		
5	Wheel guard	0.00	0.00	-230.03	0.00	0.00	-230.03	0.00	0.00	-230.32	0.00	0.00	-230.32		
8	Steel weight	0.00	0.00	-131.22	0.00	0.00	-131.22	0.00	0.00	-90.59	0.00	0.00	-90.59		
10	Medial strip	0.00	0.00	102.18	0.00	0.00	102.18	0.00	0.00	108.33	0.00	0.00	108.33		
19	Snow	0.00	0.00	-50.33	0.00	0.00	-50.33	0.00	0.00	-45.96	0.00	0.00	-45.96		
31	Miscellaneous	0.00	0.00	8.25	0.00	0.00	8.25	0.00	0.00	8.74	0.00	0.00	8.74		
100	AASHTO-LRFD TRUCK-LOAD	MAX	136.31	0.00	405.32	136.31	0.00	405.32	135.72	0.00	416.35	135.72	0.00	416.35	
		MIN	-136.31	0.00	-502.11	-136.31	0.00	-502.11	-135.72	0.00	-490.20	-135.72	0.00	-490.20	
		TANDEM-LOAD	MAX	99.21	0.00	298.13	99.21	0.00	298.13	98.82	0.00	305.50	98.82	0.00	305.50
		MIN	-99.21	0.00	-366.73	-99.21	0.00	-366.73	-98.82	0.00	-358.30	-98.82	0.00	-358.30	
		DISPERSION-L	MAX	117.01	0.00	327.12	117.01	0.00	327.12	116.90	0.00	338.67	116.90	0.00	338.67
		MIN	-117.01	0.00	-482.91	-117.01	0.00	-482.91	-116.90	0.00	-477.79	-116.90	0.00	-477.79	
110	Live load	L-PICKUP 1	MAX	253.32	0.00	732.44	253.32	0.00	732.44	252.62	0.00	755.02	252.62	0.00	755.02
		MIN	-253.32	0.00	-985.02	-253.32	0.00	-985.02	-252.62	0.00	-967.99	-252.62	0.00	-967.99	
		L-PICKUP 2	MAX	216.22	0.00	625.25	216.22	0.00	625.25	215.72	0.00	644.17	215.72	0.00	644.17
		MIN	-216.22	0.00	-849.64	-216.22	0.00	-849.64	-215.72	0.00	-836.09	-215.72	0.00	-836.09	
		L-PICKUP 3	MAX	-272.27	0.00	-1047.90	-272.27	0.00	-1047.90	-270.84	0.00	-1027.58	-270.84	0.00	-1027.58
		MIN	253.32	0.00	732.44	253.32	0.00	732.44	252.62	0.00	755.02	252.62	0.00	755.02	
111	AASHTO Twin	TWIN-PICKUP	MAX	272.27	0.00	735.21	272.27	0.00	735.21	270.84	0.00	764.70	270.84	0.00	764.70
		MIN	-272.27	0.00	-1047.90	-272.27	0.00	-1047.90	-270.84	0.00	-1027.58	-270.84	0.00	-1027.58	
		MID-PICKUP	MAX	-272.27	0.00	-1047.90	-272.27	0.00	-1047.90	-270.84	0.00	-1027.58	-270.84	0.00	-1027.58
198	AASHTO Fatig	TRUCK-LOAD	MAX	65.92	0.00	238.33	65.92	0.00	238.33	66.12	0.00	242.32	66.12	0.00	242.32
		MIN	-65.92	0.00	-242.96	-65.92	0.00	-242.96	-66.12	0.00	-240.83	-66.12	0.00	-240.83	
		TANDEM-LOAD	MAX	49.11	0.00	176.31	49.11	0.00	176.31	49.26	0.00	179.09	49.26	0.00	179.09
		MIN	-49.11	0.00	-168.48	-49.11	0.00	-168.48	-49.26	0.00	-166.94	-49.26	0.00	-166.94	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002029			1002030								
NODE		2029	3029		2030	3030							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.94	0.00	188.27	54.94	0.00	188.27	54.85	0.00	191.92	54.85	0.00	191.92
	MIN	-54.94	0.00	-280.42	-54.94	0.00	-280.42	-54.85	0.00	-278.71	-54.85	0.00	-278.71
199	AASHTO-LRFD TRUCK-LOAD MAX	185.51	0.00	489.78	185.51	0.00	489.78	184.03	0.00	510.99	184.03	0.00	510.99
	MIN	-185.51	0.00	-681.43	-185.51	0.00	-681.43	-184.03	0.00	-663.97	-184.03	0.00	-663.97
	TANDEM-LOAD MAX	99.21	0.00	298.13	99.21	0.00	298.13	98.82	0.00	305.50	98.82	0.00	305.50
	MIN	-99.21	0.00	-366.73	-99.21	0.00	-366.73	-98.82	0.00	-358.30	-98.82	0.00	-358.30
	DISPERSION-LMAX	117.01	0.00	327.12	117.01	0.00	327.12	116.90	0.00	338.67	116.90	0.00	338.67
	MIN	-117.01	0.00	-482.91	-117.01	0.00	-482.91	-116.90	0.00	-477.79	-116.90	0.00	-477.79
300	Total Dead lWithout snow	0.00	0.00	-375.02	0.00	0.00	-375.02	0.00	0.00	-318.12	0.00	0.00	-318.12
301	Particular Snow	0.00	0.00	-50.33	0.00	0.00	-50.33	0.00	0.00	-45.96	0.00	0.00	-45.96
302	Live load Total MAX	164.66	0.00	476.08	164.66	0.00	476.08	164.20	0.00	490.77	164.20	0.00	490.77
	MIN	-176.97	0.00	-681.14	-176.97	0.00	-681.14	-176.04	0.00	-667.92	-176.04	0.00	-667.92
303	Sum total D+L+PP MAX	164.66	0.00	193.55	164.66	0.00	193.55	164.20	0.00	273.92	164.20	0.00	273.92
	MIN	-176.97	0.00	-1106.49	-176.97	0.00	-1106.49	-176.04	0.00	-1032.00	-176.04	0.00	-1032.00

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002031						1002032						
		2031			3031			2032			3032			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	0.00	0.00	-82.22	0.00	0.00	-82.22	0.00	0.00	-74.63	0.00	0.00	-74.63	
3	Railing	0.00	0.00	-22.68	0.00	0.00	-22.68	0.00	0.00	-21.29	0.00	0.00	-21.29	
5	Wheel guard	0.00	0.00	-224.49	0.00	0.00	-224.49	0.00	0.00	-210.74	0.00	0.00	-210.74	
8	Steel weight	0.00	0.00	-62.03	0.00	0.00	-62.03	0.00	0.00	-47.88	0.00	0.00	-47.88	
10	Medial strip	0.00	0.00	109.36	0.00	0.00	109.36	0.00	0.00	104.12	0.00	0.00	104.12	
19	Snow	0.00	0.00	-41.94	0.00	0.00	-41.94	0.00	0.00	-38.26	0.00	0.00	-38.26	
31	Miscellaneous	-0.00	0.00	8.82	-0.00	0.00	8.82	-0.00	0.00	8.40	-0.00	0.00	8.40	
100	AASHTO-LRFD TRUCK-LOAD	MAX	135.32	0.00	421.93	135.32	0.00	421.93	135.21	0.00	428.58	135.21	0.00	428.58
		MIN	-135.32	0.00	-479.99	-135.32	0.00	-479.99	-135.21	0.00	-475.59	-135.21	0.00	-475.59
	TANDEM-LOAD	MAX	98.64	0.00	310.01	98.64	0.00	310.01	98.68	0.00	315.24	98.68	0.00	315.24
		MIN	-98.64	0.00	-351.54	-98.64	0.00	-351.54	-98.68	0.00	-348.75	-98.68	0.00	-348.75
	DISPERSION-LMAX	MAX	115.36	0.00	343.55	115.36	0.00	343.55	115.75	0.00	349.05	115.75	0.00	349.05
		MIN	-115.36	0.00	-468.13	-115.36	0.00	-468.13	-115.75	0.00	-461.53	-115.75	0.00	-461.53
110	Live load L-PICKUP 1	MAX	250.68	0.00	765.48	250.68	0.00	765.48	250.95	0.00	777.64	250.95	0.00	777.64
		MIN	-250.68	0.00	-948.12	-250.68	0.00	-948.12	-250.95	0.00	-937.12	-250.95	0.00	-937.12
	L-PICKUP 2	MAX	214.00	0.00	653.56	214.00	0.00	653.56	214.43	0.00	664.29	214.43	0.00	664.29
		MIN	-214.00	0.00	-819.67	-214.00	0.00	-819.67	-214.43	0.00	-810.28	-214.43	0.00	-810.28
	L-PICKUP 3	MAX	-268.75	0.00	-1003.53	-268.75	0.00	-1003.53	-268.37	0.00	-991.73	-268.37	0.00	-991.73
		MIN	250.68	0.00	765.48	250.68	0.00	765.48	250.95	0.00	777.64	250.95	0.00	777.64
	Live load	MAX	250.68	0.00	765.48	250.68	0.00	765.48	250.95	0.00	777.64	250.95	0.00	777.64
		MIN	-268.75	0.00	-1003.53	-268.75	0.00	-1003.53	-268.37	0.00	-991.73	-268.37	0.00	-991.73
111	AASHTO Twin TWIN-PICKUP	MAX	268.75	0.00	776.58	268.75	0.00	776.58	268.37	0.00	787.09	268.37	0.00	787.09
		MIN	-268.75	0.00	-1003.53	-268.75	0.00	-1003.53	-268.37	0.00	-991.73	-268.37	0.00	-991.73
	MID-PICKUP	-268.75	0.00	-1003.53	-268.75	0.00	-1003.53	-268.37	0.00	-991.73	-268.37	0.00	-991.73	
198	AASHTO FatigTRUCK-LOAD	MAX	65.69	0.00	243.05	65.69	0.00	243.05	64.52	0.00	240.05	64.52	0.00	240.05
		MIN	-65.69	0.00	-234.61	-65.69	0.00	-234.61	-64.52	0.00	-223.28	-64.52	0.00	-223.28
	TANDEM-LOAD	MAX	49.03	0.00	179.90	49.03	0.00	179.90	48.30	0.00	178.09	48.30	0.00	178.09
		MIN	-49.03	0.00	-162.73	-49.03	0.00	-162.73	-48.30	0.00	-155.06	-48.30	0.00	-155.06

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002031						1002032					
		2031			3031			2032			3032		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.30	0.00	195.36	54.30	0.00	195.36	55.12	0.00	201.63	55.12	0.00	201.63
	MIN	-54.30	0.00	-271.61	-54.30	0.00	-271.61	-55.12	0.00	-262.25	-55.12	0.00	-262.25
199	AASHTO-LRFD TRUCK-LOAD MAX	183.25	0.00	519.32	183.25	0.00	519.32	182.44	0.00	525.49	182.44	0.00	525.49
	MIN	-183.25	0.00	-646.90	-183.25	0.00	-646.90	-182.44	0.00	-640.39	-182.44	0.00	-640.39
	TANDEM-LOAD MAX	98.64	0.00	310.01	98.64	0.00	310.01	98.68	0.00	315.24	98.68	0.00	315.24
	MIN	-98.64	0.00	-351.54	-98.64	0.00	-351.54	-98.68	0.00	-348.75	-98.68	0.00	-348.75
	DISPERSION-LMAX	115.36	0.00	343.55	115.36	0.00	343.55	115.75	0.00	349.05	115.75	0.00	349.05
	MIN	-115.36	0.00	-468.13	-115.36	0.00	-468.13	-115.75	0.00	-461.53	-115.75	0.00	-461.53
300	Total Dead lWithout snow	-0.00	0.00	-273.24	-0.00	0.00	-273.24	-0.00	0.00	-242.03	-0.00	0.00	-242.03
301	Particular Snow	0.00	0.00	-41.94	0.00	0.00	-41.94	0.00	0.00	-38.26	0.00	0.00	-38.26
302	Live load Total MAX	162.94	0.00	497.56	162.94	0.00	497.56	163.12	0.00	505.47	163.12	0.00	505.47
	MIN	-174.69	0.00	-652.30	-174.69	0.00	-652.30	-174.44	0.00	-644.62	-174.44	0.00	-644.62
303	Sum total D+L+PP MAX	162.94	0.00	331.65	162.94	0.00	331.65	163.12	0.00	376.82	163.12	0.00	376.82
	MIN	-174.69	0.00	-967.48	-174.69	0.00	-967.48	-174.44	0.00	-924.90	-174.44	0.00	-924.90

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002033						1002034							
NODE		2033			3033			2034			3034				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-64.81	0.00	0.00	-64.81	0.00	0.00	-39.69	0.00	0.00	-39.69		
3	Railing	0.00	0.00	-18.34	0.00	0.00	-18.34	0.00	0.00	-12.36	0.00	0.00	-12.36		
5	Wheel guard	0.00	0.00	-181.52	0.00	0.00	-181.52	0.00	0.00	-122.34	0.00	0.00	-122.34		
8	Steel weight	0.00	0.00	-43.38	0.00	0.00	-43.38	-0.00	0.00	-13.08	-0.00	0.00	-13.08		
10	Medial strip	0.00	0.00	89.33	0.00	0.00	89.33	0.00	0.00	62.55	0.00	0.00	62.55		
19	Snow	0.00	0.00	-33.19	0.00	0.00	-33.19	0.00	0.00	-20.61	0.00	0.00	-20.61		
31	Miscellaneous	-0.00	0.00	7.21	-0.00	0.00	7.21	-0.00	0.00	5.05	-0.00	0.00	5.05		
100	AASHTO-LRFD TRUCK-LOAD	MAX	136.76	0.00	431.77	136.76	0.00	431.77	126.65	0.00	414.90	126.65	0.00	414.90	
		MIN	-136.76	0.00	-474.31	-136.76	0.00	-474.31	-126.65	0.00	-418.76	-126.65	0.00	-418.76	
	TANDEM-LOAD	MAX	99.94	0.00	317.43	99.94	0.00	317.43	92.68	0.00	301.41	92.68	0.00	301.41	
		MIN	-99.94	0.00	-347.46	-99.94	0.00	-347.46	-92.68	0.00	-304.83	-92.68	0.00	-304.83	
	DISPERSION-LMAX	MAX	122.42	0.00	375.06	122.42	0.00	375.06	134.35	0.00	430.71	134.35	0.00	430.71	
		MIN	-122.42	0.00	-472.68	-122.42	0.00	-472.68	-134.35	0.00	-489.60	-134.35	0.00	-489.60	
110	Live load	L-PICKUP 1	MAX	259.18	0.00	806.83	259.18	0.00	806.83	261.00	0.00	845.61	261.00	0.00	845.61
			MIN	-259.18	0.00	-947.00	-259.18	0.00	-947.00	-261.00	0.00	-908.36	-261.00	0.00	-908.36
		L-PICKUP 2	MAX	222.36	0.00	692.49	222.36	0.00	692.49	227.03	0.00	732.13	227.03	0.00	732.13
			MIN	-222.36	0.00	-820.14	-222.36	0.00	-820.14	-227.03	0.00	-794.43	-227.03	0.00	-794.43
		L-PICKUP 3	MAX	275.19	0.00	899.41	275.19	0.00	899.41	270.71	0.00	926.69	270.71	0.00	926.69
			MIN	-275.19	0.00	-994.41	-275.19	0.00	-994.41	-270.71	0.00	-926.69	-270.71	0.00	-926.69
	Live load	MAX	259.18	0.00	806.83	259.18	0.00	806.83	261.00	0.00	845.61	261.00	0.00	845.61	
		MIN	-275.19	0.00	-994.41	-275.19	0.00	-994.41	-270.71	0.00	-926.69	-270.71	0.00	-926.69	
111	AASHTO Twin	TWIN-PICKUP	MAX	275.19	0.00	826.49	275.19	0.00	826.49	270.71	0.00	880.35	270.71	0.00	880.35
			MIN	-275.19	0.00	-994.41	-275.19	0.00	-994.41	-270.71	0.00	-926.69	-270.71	0.00	-926.69
		MID-PICKUP	MAX	275.19	0.00	826.49	275.19	0.00	826.49	270.71	0.00	880.35	270.71	0.00	880.35
			MIN	-275.19	0.00	-994.41	-275.19	0.00	-994.41	-270.71	0.00	-926.69	-270.71	0.00	-926.69
198	AASHTO Fatig	TRUCK-LOAD	MAX	61.13	0.00	224.63	61.13	0.00	224.63	49.57	0.00	182.40	49.57	0.00	182.40
			MIN	-61.13	0.00	-199.09	-61.13	0.00	-199.09	-49.57	0.00	-130.67	-49.57	0.00	-130.67
		TANDEM-LOAD	MAX	45.93	0.00	167.35	45.93	0.00	167.35	37.51	0.00	136.38	37.51	0.00	136.38
			MIN	-45.93	0.00	-138.38	-45.93	0.00	-138.38	-37.51	0.00	-89.66	-37.51	0.00	-89.66

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002033			1002034		
NODE		2033			2034		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.79	0.00	221.09	60.79	0.00	221.09
	MIN	-60.79	0.00	-254.49	-60.79	0.00	-254.49
199	AASHTO-LRFD TRUCK-LOAD MAX	183.35	0.00	543.27	183.35	0.00	543.27
	MIN	-183.35	0.00	-632.21	-183.35	0.00	-632.21
	TANDEM-LOAD MAX	99.94	0.00	317.43	99.94	0.00	317.43
	MIN	-99.94	0.00	-347.46	-99.94	0.00	-347.46
	DISPERSION-LMAX	122.42	0.00	375.06	122.42	0.00	375.06
	MIN	-122.42	0.00	-472.68	-122.42	0.00	-472.68
300	Total Dead lWithout snow	-0.00	0.00	-211.50	-0.00	0.00	-211.50
301	Particular Snow	0.00	0.00	-33.19	0.00	0.00	-33.19
302	Live load Total MAX	168.46	0.00	524.44	168.46	0.00	524.44
	MIN	-178.87	0.00	-646.36	-178.87	0.00	-646.36
303	Sum total D+L+PP MAX	168.46	0.00	437.08	168.46	0.00	437.08
	MIN	-178.87	0.00	-891.06	-178.87	0.00	-891.06

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002035						1002036						
NODE		2035			3035			2036			3036			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	0.00	0.00	-18.99	0.00	0.00	-18.99	0.00	0.00	-5.35	0.00	0.00	-5.35	
3	Railing	0.00	0.00	-5.93	0.00	0.00	-5.93	0.00	0.00	-1.95	0.00	0.00	-1.95	
5	Wheel guard	0.00	0.00	-58.67	0.00	0.00	-58.67	0.00	0.00	-19.29	0.00	0.00	-19.29	
8	Steel weight	-0.00	0.00	-6.11	-0.00	0.00	-6.11	-0.00	0.00	1.63	-0.00	0.00	1.63	
10	Medial strip	0.00	0.00	30.02	0.00	0.00	30.02	0.00	0.00	10.40	0.00	0.00	10.40	
19	Snow	0.00	0.00	-9.87	0.00	0.00	-9.87	0.00	0.00	-2.85	0.00	0.00	-2.85	
31	Miscellaneous	-0.00	0.00	2.42	-0.00	0.00	2.42	-0.00	0.00	0.84	-0.00	0.00	0.84	
100	AASHTO-LRFD TRUCK-LOAD	MAX	97.94	0.00	328.27	97.94	0.00	328.27	47.60	0.00	143.71	47.60	0.00	143.71
		MIN	-97.94	0.00	-306.86	-97.94	0.00	-306.86	-47.60	0.00	-143.36	-47.60	0.00	-143.36
		TANDEM-LOAD	70.68	0.00	234.35	70.68	0.00	234.35	32.55	0.00	98.28	32.55	0.00	98.28
		MIN	-70.68	0.00	-225.02	-70.68	0.00	-225.02	-32.55	0.00	-98.63	-32.55	0.00	-98.63
		DISPERSION-L	146.24	0.00	449.53	146.24	0.00	449.53	145.14	0.00	430.95	145.14	0.00	430.94
		MIN	-146.24	0.00	-479.15	-146.24	0.00	-479.15	-145.14	0.00	-440.12	-145.14	0.00	-440.12
110	Live load	L-PICKUP 1	244.18	0.00	777.80	244.18	0.00	777.80	192.74	0.00	574.66	192.74	0.00	574.66
		MIN	-244.18	0.00	-786.00	-244.18	0.00	-786.00	-192.74	0.00	-583.48	-192.74	0.00	-583.48
		L-PICKUP 2	216.91	0.00	683.88	216.91	0.00	683.88	177.69	0.00	529.22	177.69	0.00	529.22
		MIN	-216.91	0.00	-704.17	-216.91	0.00	-704.17	-177.69	0.00	-538.75	-177.69	0.00	-538.75
		L-PICKUP 3	-251.93	0.00	-770.22	-251.93	0.00	-770.22	-206.66	0.00	-625.08	-206.66	0.00	-625.08
		Live load	244.18	0.00	777.80	244.18	0.00	777.80	192.74	0.00	574.66	192.74	0.00	574.66
		MIN	-251.93	0.00	-786.00	-251.93	0.00	-786.00	-206.66	0.00	-625.08	-206.66	0.00	-625.08
		111	AASHTO Twin	251.93	0.00	808.49	251.93	0.00	808.49	206.66	0.00	616.07	206.66	0.00
MIN	-251.93	0.00	-770.22	-251.93	0.00	-770.22	-206.66	0.00	-625.08	-206.66	0.00	-625.08		
	MID-PICKUP	-251.93	0.00	-770.22	-251.93	0.00	-770.22	-206.66	0.00	-625.08	-206.66	0.00	-625.08	
198	AASHTO Fatig	TRUCK-LOAD	29.26	0.00	107.99	29.26	0.00	107.99	23.83	0.00	67.56	23.83	0.00	67.56
		MIN	-29.26	0.00	-84.83	-29.26	0.00	-84.83	-23.83	0.00	-75.61	-23.83	0.00	-75.61
		TANDEM-LOAD	22.09	0.00	79.90	22.09	0.00	79.90	16.25	0.00	45.80	16.25	0.00	45.80
		MIN	-22.09	0.00	-58.50	-22.09	0.00	-58.50	-16.25	0.00	-51.98	-16.25	0.00	-51.98

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002035 2035						1002036 2036					
		3035			3036			3035			3036		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	78.81	0.00	248.80	78.81	0.00	248.80	76.93	0.00	220.54	76.93	0.00	220.54
	MIN	-78.81	0.00	-255.47	-78.81	0.00	-255.47	-76.93	0.00	-242.52	-76.93	0.00	-242.52
199	AASHTO-LRFD TRUCK-LOAD MAX	133.69	0.00	448.80	133.69	0.00	448.80	84.48	0.00	253.58	84.48	0.00	253.58
	MIN	-133.69	0.00	-376.65	-133.69	0.00	-376.65	-84.48	0.00	-254.40	-84.48	0.00	-254.40
	TANDEM-LOAD MAX	70.68	0.00	234.35	70.68	0.00	234.35	32.55	0.00	98.28	32.55	0.00	98.28
	MIN	-70.68	0.00	-225.02	-70.68	0.00	-225.02	-32.55	0.00	-98.63	-32.55	0.00	-98.63
	DISPERSION-LMAX	146.24	0.00	449.53	146.24	0.00	449.53	145.14	0.00	430.95	145.14	0.00	430.94
	MIN	-146.24	0.00	-479.15	-146.24	0.00	-479.15	-145.14	0.00	-440.12	-145.14	0.00	-440.12
300	Total Dead lWithout snow	-0.00	0.00	-57.26	-0.00	0.00	-57.26	-0.00	0.00	-13.73	-0.00	0.00	-13.73
301	Particular Snow	0.00	0.00	-9.87	0.00	0.00	-9.87	0.00	0.00	-2.85	0.00	0.00	-2.85
302	Live load Total MAX	158.72	0.00	505.57	158.72	0.00	505.57	125.28	0.00	373.53	125.28	0.00	373.53
	MIN	-163.76	0.00	-510.90	-163.76	0.00	-510.90	-134.33	0.00	-406.30	-134.33	0.00	-406.30
303	Sum total D+L+PP MAX	158.72	0.00	495.70	158.72	0.00	495.70	125.28	0.00	370.68	125.28	0.00	370.68
	MIN	-163.76	0.00	-578.03	-163.76	0.00	-578.03	-134.33	0.00	-422.88	-134.33	0.00	-422.88

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002037						1002038					
NODE		2037			3037			2038			3038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-13.76	0.00	0.00	-13.76	0.00	0.00	-34.26	0.00	0.00	-34.26
3	Railing	0.00	0.00	-5.76	0.00	0.00	-5.76	0.00	0.00	-12.19	0.00	0.00	-12.19
5	Wheel guard	0.00	0.00	-57.05	0.00	0.00	-57.05	0.00	0.00	-120.68	0.00	0.00	-120.68
8	Steel weight	-0.00	0.00	13.11	-0.00	0.00	13.11	-0.00	0.00	6.91	-0.00	0.00	6.91
10	Medial strip	0.00	0.00	31.97	0.00	0.00	31.97	0.00	0.00	64.66	0.00	0.00	64.66
19	Snow	0.00	0.00	-7.52	0.00	0.00	-7.52	0.00	0.00	-18.17	0.00	0.00	-18.17
31	Miscellaneous	-0.00	0.00	2.58	-0.00	0.00	2.58	-0.00	0.00	5.21	-0.00	0.00	5.21
100	AASHTO-LRFD TRUCK-LOAD	97.34	0.00	327.72	97.34	0.00	327.72	127.18	0.00	413.85	127.18	0.00	413.85
	MIN	-97.34	0.00	-304.24	-97.34	0.00	-304.24	-127.18	0.00	-424.08	-127.18	0.00	-424.08
	TANDEM-LOAD	70.24	0.00	233.88	70.24	0.00	233.88	93.06	0.00	300.68	93.06	0.00	300.68
	MIN	-70.24	0.00	-223.34	-70.24	0.00	-223.34	-93.06	0.00	-308.80	-93.06	0.00	-308.80
	DISPERSION-LMAX	146.62	0.00	455.13	146.62	0.00	455.13	134.63	0.00	437.82	134.63	0.00	437.82
	MIN	-146.62	0.00	-476.26	-146.62	0.00	-476.26	-134.63	0.00	-488.05	-134.63	0.00	-488.05
110	Live load L-PICKUP 1	243.96	0.00	782.85	243.96	0.00	782.85	261.81	0.00	851.67	261.81	0.00	851.67
	MIN	-243.96	0.00	-780.50	-243.96	0.00	-780.50	-261.81	0.00	-912.13	-261.81	0.00	-912.13
	L-PICKUP 2	216.86	0.00	689.01	216.86	0.00	689.01	227.69	0.00	738.50	227.69	0.00	738.50
	MIN	-216.86	0.00	-699.60	-216.86	0.00	-699.60	-227.69	0.00	-796.85	-227.69	0.00	-796.85
	L-PICKUP 3	-251.18	0.00	-759.79	-251.18	0.00	-759.79	-271.51	0.00	-921.40	-271.51	0.00	-921.40
	Live load	243.96	0.00	782.85	243.96	0.00	782.85	261.81	0.00	851.67	261.81	0.00	851.67
	MIN	-251.18	0.00	-780.50	-251.18	0.00	-780.50	-271.51	0.00	-921.40	-271.51	0.00	-921.40
111	AASHTO Twin TWIN-PICKUP	251.18	0.00	814.06	251.18	0.00	814.06	271.51	0.00	886.94	271.51	0.00	886.94
	MIN	-251.18	0.00	-759.79	-251.18	0.00	-759.79	-271.51	0.00	-921.40	-271.51	0.00	-921.40
	MID-PICKUP	-251.18	0.00	-759.79	-251.18	0.00	-759.79	-271.51	0.00	-921.40	-271.51	0.00	-921.40
198	AASHTO FatigTRUCK-LOAD	29.03	0.00	107.64	29.03	0.00	107.64	49.68	0.00	180.87	49.68	0.00	180.87
	MIN	-29.03	0.00	-83.27	-29.03	0.00	-83.27	-49.68	0.00	-133.69	-49.68	0.00	-133.69
	TANDEM-LOAD	22.05	0.00	79.64	22.05	0.00	79.64	37.58	0.00	135.30	37.58	0.00	135.30
	MIN	-22.05	0.00	-57.37	-22.05	0.00	-57.37	-37.58	0.00	-91.15	-37.58	0.00	-91.15

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002037						1002038					
NODE		2037			3037			2038			3038		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	79.03	0.00	250.62	79.03	0.00	250.62	72.38	0.00	252.53	72.38	0.00	252.53
	MIN	-79.03	0.00	-254.73	-79.03	0.00	-254.73	-72.38	0.00	-241.92	-72.38	0.00	-241.92
199	AASHTO-LRFD TRUCK-LOAD MAX	132.47	0.00	449.38	132.47	0.00	449.38	167.05	0.00	547.67	167.05	0.00	547.67
	MIN	-132.47	0.00	-367.95	-132.47	0.00	-367.95	-167.05	0.00	-535.73	-167.05	0.00	-535.73
	TANDEM-LOAD MAX	70.24	0.00	233.88	70.24	0.00	233.88	93.06	0.00	300.68	93.06	0.00	300.68
	MIN	-70.24	0.00	-223.34	-70.24	0.00	-223.34	-93.06	0.00	-308.80	-93.06	0.00	-308.80
	DISPERSION-LMAX	146.62	0.00	455.13	146.62	0.00	455.13	134.63	0.00	437.82	134.63	0.00	437.82
	MIN	-146.62	0.00	-476.26	-146.62	0.00	-476.26	-134.63	0.00	-488.05	-134.63	0.00	-488.05
300	Total Dead lWithout snow	-0.00	0.00	-28.92	-0.00	0.00	-28.92	-0.00	0.00	-90.35	-0.00	0.00	-90.35
301	Particular Snow	0.00	0.00	-7.52	0.00	0.00	-7.52	0.00	0.00	-18.17	0.00	0.00	-18.17
302	Live load Total MAX	158.57	0.00	508.85	158.57	0.00	508.85	170.18	0.00	553.58	170.18	0.00	553.58
	MIN	-163.27	0.00	-507.32	-163.27	0.00	-507.32	-176.48	0.00	-598.91	-176.48	0.00	-598.91
303	Sum total D+L+PP MAX	158.57	0.00	501.33	158.57	0.00	501.33	170.18	0.00	535.41	170.18	0.00	535.41
	MIN	-163.27	0.00	-543.77	-163.27	0.00	-543.77	-176.48	0.00	-707.44	-176.48	0.00	-707.44

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002039						1002040					
NODE		2039			3039			2040			3040		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-73.16	0.00	0.00	-73.16	0.00	0.00	-90.21	0.00	0.00	-90.21
3	Railing	0.00	0.00	-18.58	0.00	0.00	-18.58	0.00	0.00	-21.76	0.00	0.00	-21.76
5	Wheel guard	0.00	0.00	-183.99	0.00	0.00	-183.99	0.00	0.00	-215.40	0.00	0.00	-215.40
8	Steel weight	0.00	0.00	-74.19	0.00	0.00	-74.19	0.00	0.00	-105.30	0.00	0.00	-105.30
10	Medial strip	0.00	0.00	86.28	0.00	0.00	86.28	0.00	0.00	98.16	0.00	0.00	98.16
19	Snow	0.00	0.00	-36.91	0.00	0.00	-36.91	0.00	0.00	-45.23	0.00	0.00	-45.23
31	Miscellaneous	-0.00	0.00	6.96	-0.00	0.00	6.96	-0.00	0.00	7.93	-0.00	0.00	7.93
100	AASHTO-LRFD TRUCK-LOAD	138.82	0.00	424.08	138.82	0.00	424.08	136.79	0.00	419.41	136.79	0.00	419.41
	MIN	-138.82	0.00	-494.86	-138.82	0.00	-494.86	-136.79	0.00	-493.32	-136.79	0.00	-493.32
	TANDEM-LOAD	101.38	0.00	312.17	101.38	0.00	312.17	99.87	0.00	309.22	99.87	0.00	309.22
	MIN	-101.38	0.00	-362.04	-101.38	0.00	-362.04	-99.87	0.00	-361.28	-99.87	0.00	-361.28
	DISPERSION-LMAX	123.89	0.00	375.07	123.89	0.00	375.07	116.82	0.00	335.85	116.82	0.00	335.85
	MIN	-123.89	0.00	-487.09	-123.89	0.00	-487.09	-116.82	0.00	-474.48	-116.82	0.00	-474.48
110	Live load L-PICKUP 1	262.71	0.00	799.15	262.71	0.00	799.15	253.60	0.00	755.26	253.60	0.00	755.26
	MIN	-262.71	0.00	-981.95	-262.71	0.00	-981.95	-253.60	0.00	-967.80	-253.60	0.00	-967.80
	L-PICKUP 2	225.28	0.00	687.24	225.28	0.00	687.24	216.68	0.00	645.07	216.68	0.00	645.07
	MIN	-225.28	0.00	-849.13	-225.28	0.00	-849.13	-216.68	0.00	-835.76	-216.68	0.00	-835.76
	L-PICKUP 3	-279.46	0.00	-1030.86	-279.46	0.00	-1030.86	-270.83	0.00	-1028.65	-270.83	0.00	-1028.65
	Live load	262.71	0.00	799.15	262.71	0.00	799.15	253.60	0.00	755.26	253.60	0.00	755.26
	MIN	-279.46	0.00	-1030.86	-279.46	0.00	-1030.86	-270.83	0.00	-1028.65	-270.83	0.00	-1028.65
111	AASHTO Twin TWIN-PICKUP	279.46	0.00	816.68	279.46	0.00	816.68	270.83	0.00	758.69	270.83	0.00	758.69
	MIN	-279.46	0.00	-1030.86	-279.46	0.00	-1030.86	-270.83	0.00	-1028.65	-270.83	0.00	-1028.65
	MID-PICKUP	-279.46	0.00	-1030.86	-279.46	0.00	-1030.86	-270.83	0.00	-1028.65	-270.83	0.00	-1028.65
198	AASHTO FatigTRUCK-LOAD	61.69	0.00	221.16	61.69	0.00	221.16	65.00	0.00	237.49	65.00	0.00	237.49
	MIN	-61.69	0.00	-208.07	-61.69	0.00	-208.07	-65.00	0.00	-229.66	-65.00	0.00	-229.66
	TANDEM-LOAD	46.33	0.00	165.03	46.33	0.00	165.03	48.67	0.00	176.57	48.67	0.00	176.57
	MIN	-46.33	0.00	-144.67	-46.33	0.00	-144.67	-48.67	0.00	-159.62	-48.67	0.00	-159.62

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002039			1002040								
NODE		2039	3039		2040	3040							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	61.33	0.00	219.90	61.33	0.00	219.90	55.61	0.00	197.62	55.61	0.00	197.62
	MIN	-61.33	0.00	-259.83	-61.33	0.00	-259.83	-55.61	0.00	-268.12	-55.61	0.00	-268.12
199	AASHTO-LRFD TRUCK-LOAD MAX	186.63	0.00	532.35	186.63	0.00	532.35	184.10	0.00	507.14	184.10	0.00	507.14
	MIN	-186.63	0.00	-658.31	-186.63	0.00	-658.31	-184.10	0.00	-668.46	-184.10	0.00	-668.46
	TANDEM-LOAD MAX	101.38	0.00	312.17	101.38	0.00	312.17	99.87	0.00	309.22	99.87	0.00	309.22
	MIN	-101.38	0.00	-362.04	-101.38	0.00	-362.04	-99.87	0.00	-361.28	-99.87	0.00	-361.28
	DISPERSION-LMAX	123.89	0.00	375.07	123.89	0.00	375.07	116.82	0.00	335.85	116.82	0.00	335.85
	MIN	-123.89	0.00	-487.09	-123.89	0.00	-487.09	-116.82	0.00	-474.48	-116.82	0.00	-474.48
300	Total Dead lWithout snow	-0.00	0.00	-256.68	-0.00	0.00	-256.68	-0.00	0.00	-326.58	-0.00	0.00	-326.58
301	Particular Snow	0.00	0.00	-36.91	0.00	0.00	-36.91	0.00	0.00	-45.23	0.00	0.00	-45.23
302	Live load Total MAX	170.76	0.00	519.45	170.76	0.00	519.45	164.84	0.00	490.92	164.84	0.00	490.92
	MIN	-181.65	0.00	-670.06	-181.65	0.00	-670.06	-176.04	0.00	-668.62	-176.04	0.00	-668.62
303	Sum total D+L+PP MAX	170.76	0.00	381.69	170.76	0.00	381.69	164.84	0.00	266.38	164.84	0.00	266.38
	MIN	-181.65	0.00	-963.65	-181.65	0.00	-963.65	-176.04	0.00	-1040.44	-176.04	0.00	-1040.44

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002041						1002042							
		2041			3041			2042			3042				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	0.00	0.00	-81.20	0.00	0.00	-81.20	0.00	0.00	-76.60	0.00	0.00	-76.60		
3	Railing	0.00	0.00	-22.64	0.00	0.00	-22.64	0.00	0.00	-22.83	0.00	0.00	-22.83		
5	Wheel guard	0.00	0.00	-224.16	0.00	0.00	-224.16	0.00	0.00	-226.05	0.00	0.00	-226.05		
8	Steel weight	0.00	0.00	-58.26	0.00	0.00	-58.26	0.00	0.00	-37.38	0.00	0.00	-37.38		
10	Medial strip	0.00	0.00	109.45	0.00	0.00	109.45	0.00	0.00	113.48	0.00	0.00	113.48		
19	Snow	0.00	0.00	-41.51	0.00	0.00	-41.51	0.00	0.00	-39.54	0.00	0.00	-39.54		
31	Miscellaneous	-0.00	0.00	8.85	-0.00	0.00	8.85	-0.00	0.00	9.18	-0.00	0.00	9.18		
100	AASHTO-LRFD TRUCK-LOAD	MAX	135.88	0.00	428.39	135.88	0.00	428.39	134.87	0.00	429.07	134.87	0.00	429.07	
		MIN	-135.88	0.00	-472.85	-135.88	0.00	-472.85	-134.87	0.00	-466.48	-134.87	0.00	-466.48	
		TANDEM-LOAD	MAX	99.15	0.00	314.92	99.15	0.00	314.92	98.34	0.00	315.20	98.34	0.00	315.20
		MIN	-99.15	0.00	-346.44	-99.15	0.00	-346.44	-98.34	0.00	-341.76	-98.34	0.00	-341.76	
		DISPERSION-L	MAX	115.37	0.00	342.93	115.37	0.00	342.93	115.68	0.00	351.13	115.68	0.00	351.13
		MIN	-115.37	0.00	-465.80	-115.37	0.00	-465.80	-115.68	0.00	-466.22	-115.68	0.00	-466.22	
110	Live load	L-PICKUP 1	MAX	251.26	0.00	771.32	251.26	0.00	771.32	250.55	0.00	780.20	250.55	0.00	780.20
		MIN	-251.26	0.00	-938.65	-251.26	0.00	-938.65	-250.55	0.00	-932.70	-250.55	0.00	-932.70	
		L-PICKUP 2	MAX	214.53	0.00	657.85	214.53	0.00	657.85	214.02	0.00	666.32	214.02	0.00	666.32
		MIN	-214.53	0.00	-812.24	-214.53	0.00	-812.24	-214.02	0.00	-807.98	-214.02	0.00	-807.98	
		L-PICKUP 3	MAX	-268.80	0.00	-994.67	-268.80	0.00	-994.67	-268.37	0.00	-984.41	-268.37	0.00	-984.41
		MIN	251.26	0.00	771.32	251.26	0.00	771.32	250.55	0.00	780.20	250.55	0.00	780.20	
111	AASHTO Twin	TWIN-PICKUP	MAX	268.80	0.00	778.33	268.80	0.00	778.33	268.37	0.00	792.16	268.37	0.00	792.16
		MIN	-268.80	0.00	-994.67	-268.80	0.00	-994.67	-268.37	0.00	-984.41	-268.37	0.00	-984.41	
		MID-PICKUP	MAX	268.80	0.00	778.33	268.80	0.00	778.33	268.37	0.00	792.16	268.37	0.00	792.16
		MIN	-268.80	0.00	-994.67	-268.80	0.00	-994.67	-268.37	0.00	-984.41	-268.37	0.00	-984.41	
		MID-PICKUP	MAX	268.80	0.00	778.33	268.80	0.00	778.33	268.37	0.00	792.16	268.37	0.00	792.16
		MIN	-268.80	0.00	-994.67	-268.80	0.00	-994.67	-268.37	0.00	-984.41	-268.37	0.00	-984.41	
198	AASHTO Fatig	TRUCK-LOAD	MAX	65.98	0.00	246.96	65.98	0.00	246.96	66.15	0.00	248.41	66.15	0.00	248.41
		MIN	-65.98	0.00	-232.06	-65.98	0.00	-232.06	-66.15	0.00	-233.25	-66.15	0.00	-233.25	
		TANDEM-LOAD	MAX	49.29	0.00	182.88	49.29	0.00	182.88	49.37	0.00	183.77	49.37	0.00	183.77
		MIN	-49.29	0.00	-160.91	-49.29	0.00	-160.91	-49.37	0.00	-161.57	-49.37	0.00	-161.57	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002041			1002042								
NODE		2041	3041		2042	3042							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.38	0.00	194.17	54.38	0.00	194.17	54.40	0.00	195.88	54.40	0.00	195.88
	MIN	-54.38	0.00	-271.42	-54.38	0.00	-271.42	-54.40	0.00	-272.69	-54.40	0.00	-272.69
199	AASHTO-LRFD TRUCK-LOAD MAX	183.29	0.00	521.88	183.29	0.00	521.88	182.51	0.00	529.05	182.51	0.00	529.05
	MIN	-183.29	0.00	-639.39	-183.29	0.00	-639.39	-182.51	0.00	-627.57	-182.51	0.00	-627.57
	TANDEM-LOAD MAX	99.15	0.00	314.92	99.15	0.00	314.92	98.34	0.00	315.20	98.34	0.00	315.20
	MIN	-99.15	0.00	-346.44	-99.15	0.00	-346.44	-98.34	0.00	-341.76	-98.34	0.00	-341.76
	DISPERSION-LMAX	115.37	0.00	342.93	115.37	0.00	342.93	115.68	0.00	351.13	115.68	0.00	351.13
	MIN	-115.37	0.00	-465.80	-115.37	0.00	-465.80	-115.68	0.00	-466.22	-115.68	0.00	-466.22
300	Total Dead lWithout snow	-0.00	0.00	-267.96	-0.00	0.00	-267.96	-0.00	0.00	-240.21	-0.00	0.00	-240.21
301	Particular Snow	0.00	0.00	-41.51	0.00	0.00	-41.51	0.00	0.00	-39.54	0.00	0.00	-39.54
302	Live load Total MAX	163.32	0.00	501.36	163.32	0.00	501.36	162.86	0.00	507.13	162.86	0.00	507.13
	MIN	-174.72	0.00	-646.54	-174.72	0.00	-646.54	-174.44	0.00	-639.87	-174.44	0.00	-639.87
303	Sum total D+L+PP MAX	163.32	0.00	342.29	163.32	0.00	342.29	162.86	0.00	379.52	162.86	0.00	379.52
	MIN	-174.72	0.00	-956.01	-174.72	0.00	-956.01	-174.44	0.00	-919.61	-174.44	0.00	-919.61

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002043						1002044							
		2043			3043			2044			3044				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	0.00	0.00	-76.61	0.00	0.00	-76.61	0.00	0.00	-79.53	0.00	0.00	-79.53		
3	Railing	0.00	0.00	-22.52	0.00	0.00	-22.52	0.00	0.00	-21.47	0.00	0.00	-21.47		
5	Wheel guard	0.00	0.00	-222.96	0.00	0.00	-222.96	0.00	0.00	-212.56	0.00	0.00	-212.56		
8	Steel weight	0.00	0.00	-41.15	0.00	0.00	-41.15	0.00	0.00	-65.51	0.00	0.00	-65.51		
10	Medial strip	0.00	0.00	111.35	0.00	0.00	111.35	0.00	0.00	102.39	0.00	0.00	102.39		
19	Snow	0.00	0.00	-39.46	0.00	0.00	-39.46	0.00	0.00	-40.47	0.00	0.00	-40.47		
31	Miscellaneous	0.00	0.00	9.00	0.00	0.00	9.00	0.00	0.00	8.27	0.00	0.00	8.27		
100	AASHTO-LRFD TRUCK-LOAD	MAX	135.49	0.00	430.68	135.49	0.00	430.68	135.42	0.00	427.23	135.42	0.00	427.23	
		MIN	-135.49	0.00	-467.93	-135.49	0.00	-467.93	-135.42	0.00	-475.90	-135.42	0.00	-475.90	
		TANDEM-LOAD	MAX	98.87	0.00	316.64	98.87	0.00	316.64	98.91	0.00	314.90	98.91	0.00	314.90
		MIN	-98.87	0.00	-342.93	-98.87	0.00	-342.93	-98.91	0.00	-348.92	-98.91	0.00	-348.92	
		DISPERSION-L	MAX	115.11	0.00	346.44	115.11	0.00	346.44	115.63	0.00	339.88	115.63	0.00	339.88
		MIN	-115.11	0.00	-461.68	-115.11	0.00	-461.68	-115.63	0.00	-460.58	-115.63	0.00	-460.58	
110	Live load	L-PICKUP 1	MAX	250.60	0.00	777.12	250.60	0.00	777.12	251.05	0.00	767.11	251.05	0.00	767.11
		MIN	-250.60	0.00	-929.61	-250.60	0.00	-929.61	-251.05	0.00	-936.49	-251.05	0.00	-936.49	
		L-PICKUP 2	MAX	213.98	0.00	663.08	213.98	0.00	663.08	214.55	0.00	654.78	214.55	0.00	654.78
		MIN	-213.98	0.00	-804.61	-213.98	0.00	-804.61	-214.55	0.00	-809.50	-214.55	0.00	-809.50	
		L-PICKUP 3	MAX	-268.23	0.00	-984.31	-268.23	0.00	-984.31	-268.30	0.00	-993.82	-268.30	0.00	-993.82
		MIN	250.60	0.00	777.12	250.60	0.00	777.12	251.05	0.00	767.11	251.05	0.00	767.11	
111	AASHTO Twin	TWIN-PICKUP	MAX	268.23	0.00	786.52	268.23	0.00	786.52	268.30	0.00	772.40	268.30	0.00	772.40
		MIN	-268.23	0.00	-984.31	-268.23	0.00	-984.31	-268.30	0.00	-993.82	-268.30	0.00	-993.82	
		MID-PICKUP	MAX	268.23	0.00	786.52	268.23	0.00	786.52	268.30	0.00	772.40	268.30	0.00	772.40
198	AASHTO Fatig	TRUCK-LOAD	MAX	65.89	0.00	247.27	65.89	0.00	247.27	64.78	0.00	241.11	64.78	0.00	241.11
		MIN	-65.89	0.00	-230.79	-65.89	0.00	-230.79	-64.78	0.00	-223.80	-64.78	0.00	-223.80	
		TANDEM-LOAD	MAX	49.23	0.00	183.15	49.23	0.00	183.15	48.54	0.00	179.14	48.54	0.00	179.14
		MIN	-49.23	0.00	-159.99	-49.23	0.00	-159.99	-48.54	0.00	-155.38	-48.54	0.00	-155.38	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002043			1002044								
NODE		2043	3043		2044	3044							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.27	0.00	196.04	54.27	0.00	196.04	55.10	0.00	199.37	55.10	0.00	199.37
	MIN	-54.27	0.00	-269.64	-54.27	0.00	-269.64	-55.10	0.00	-263.18	-55.10	0.00	-263.18
199	AASHTO-LRFD TRUCK-LOAD MAX	182.92	0.00	527.46	182.92	0.00	527.46	182.47	0.00	518.34	182.47	0.00	518.34
	MIN	-182.92	0.00	-632.00	-182.92	0.00	-632.00	-182.47	0.00	-643.67	-182.47	0.00	-643.67
	TANDEM-LOAD MAX	98.87	0.00	316.64	98.87	0.00	316.64	98.91	0.00	314.90	98.91	0.00	314.90
	MIN	-98.87	0.00	-342.93	-98.87	0.00	-342.93	-98.91	0.00	-348.92	-98.91	0.00	-348.92
	DISPERSION-LMAX	115.11	0.00	346.44	115.11	0.00	346.44	115.63	0.00	339.88	115.63	0.00	339.88
	MIN	-115.11	0.00	-461.68	-115.11	0.00	-461.68	-115.63	0.00	-460.58	-115.63	0.00	-460.58
300	Total Dead lWithout snow	0.00	0.00	-242.90	0.00	0.00	-242.90	0.00	0.00	-268.40	0.00	0.00	-268.40
301	Particular Snow	0.00	0.00	-39.46	0.00	0.00	-39.46	0.00	0.00	-40.47	0.00	0.00	-40.47
302	Live load Total MAX	162.89	0.00	505.13	162.89	0.00	505.13	163.18	0.00	498.62	163.18	0.00	498.62
	MIN	-174.35	0.00	-639.80	-174.35	0.00	-639.80	-174.39	0.00	-645.99	-174.39	0.00	-645.99
303	Sum total D+L+PP MAX	162.89	0.00	374.31	162.89	0.00	374.31	163.18	0.00	339.34	163.18	0.00	339.34
	MIN	-174.35	0.00	-922.16	-174.35	0.00	-922.16	-174.39	0.00	-954.86	-174.39	0.00	-954.86

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002045 2045	3045			1002046 2046	3046						
		SHEAR	TORQUE	MOMENT		SHEAR	TORQUE	MOMENT				
		S2 (kN)	TQ (kN·m)	M3 (kN·m)		S2 (kN)	TQ (kN·m)	M3 (kN·m)				
NAME TITLE												
1 Pavement	0.00	0.00	-71.77	0.00	0.00	-71.77	0.00	0.00	-43.13	0.00	0.00	-43.13
3 Railing	0.00	0.00	-18.61	0.00	0.00	-18.61	0.00	0.00	-12.54	0.00	0.00	-12.54
5 Wheel guard	0.00	0.00	-184.25	0.00	0.00	-184.25	0.00	0.00	-124.18	0.00	0.00	-124.18
8 Steel weight	0.00	0.00	-68.24	0.00	0.00	-68.24	0.00	0.00	-24.78	0.00	0.00	-24.78
10 Medial strip	0.00	0.00	87.11	0.00	0.00	87.11	0.00	0.00	61.76	0.00	0.00	61.76
19 Snow	0.00	0.00	-36.32	0.00	0.00	-36.32	0.00	0.00	-22.18	0.00	0.00	-22.18
31 Miscellaneous	0.00	0.00	7.04	0.00	0.00	7.04	0.00	0.00	4.99	0.00	0.00	4.99
100 AASHTO-LRFD TRUCK-LOAD	136.96	0.00	429.97	136.96	0.00	429.97	127.00	0.00	415.88	127.00	0.00	415.88
MIN	-136.96	0.00	-476.29	-136.96	0.00	-476.29	-127.00	0.00	-419.51	-127.00	0.00	-419.51
TANDEM-LOAD	100.14	0.00	316.80	100.14	0.00	316.80	93.00	0.00	302.57	93.00	0.00	302.57
MIN	-100.14	0.00	-348.81	-100.14	0.00	-348.81	-93.00	0.00	-305.44	-93.00	0.00	-305.44
DISPERSION-LMAX	122.15	0.00	366.65	122.15	0.00	366.65	134.27	0.00	426.68	134.27	0.00	426.68
MIN	-122.15	0.00	-475.83	-122.15	0.00	-475.83	-134.27	0.00	-491.15	-134.27	0.00	-491.15
110 Live load L-PICKUP 1	259.11	0.00	796.62	259.11	0.00	796.62	261.27	0.00	842.56	261.27	0.00	842.56
MIN	-259.11	0.00	-952.12	-259.11	0.00	-952.12	-261.27	0.00	-910.66	-261.27	0.00	-910.66
L-PICKUP 2	222.29	0.00	683.44	222.29	0.00	683.44	227.27	0.00	729.25	227.27	0.00	729.25
MIN	-222.29	0.00	-824.64	-222.29	0.00	-824.64	-227.27	0.00	-796.60	-227.27	0.00	-796.60
L-PICKUP 3	-275.06	0.00	-1002.48	-275.06	0.00	-1002.48	-270.82	0.00	-929.23	-270.82	0.00	-929.23
Live load	259.11	0.00	796.62	259.11	0.00	796.62	261.27	0.00	842.56	261.27	0.00	842.56
MIN	-275.06	0.00	-1002.48	-275.06	0.00	-1002.48	-270.82	0.00	-929.23	-270.82	0.00	-929.23
111 AASHTO Twin TWIN-PICKUP	275.06	0.00	811.98	275.06	0.00	811.98	270.82	0.00	874.49	270.82	0.00	874.49
MIN	-275.06	0.00	-1002.48	-275.06	0.00	-1002.48	-270.82	0.00	-929.23	-270.82	0.00	-929.23
MID-PICKUP	-275.06	0.00	-1002.48	-275.06	0.00	-1002.48	-270.82	0.00	-929.23	-270.82	0.00	-929.23
198 AASHTO FatigTRUCK-LOAD	61.50	0.00	225.87	61.50	0.00	225.87	50.02	0.00	184.30	50.02	0.00	184.30
MIN	-61.50	0.00	-200.64	-61.50	0.00	-200.64	-50.02	0.00	-131.93	-50.02	0.00	-131.93
TANDEM-LOAD	46.24	0.00	168.49	46.24	0.00	168.49	37.89	0.00	137.95	37.89	0.00	137.95
MIN	-46.24	0.00	-139.43	-46.24	0.00	-139.43	-37.89	0.00	-90.29	-37.89	0.00	-90.29

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002045			1002046		
NODE		2045			2046		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.62	0.00	218.32	60.62	0.00	218.32
	MIN	-60.62	0.00	-256.29	-60.62	0.00	-256.29
199	AASHTO-LRFD TRUCK-LOAD MAX	183.47	0.00	535.55	183.47	0.00	535.55
	MIN	-183.47	0.00	-638.04	-183.47	0.00	-638.04
	TANDEM-LOAD MAX	100.14	0.00	316.80	100.14	0.00	316.80
	MIN	-100.14	0.00	-348.81	-100.14	0.00	-348.81
	DISPERSION-LMAX	122.15	0.00	366.65	122.15	0.00	366.65
	MIN	-122.15	0.00	-475.83	-122.15	0.00	-475.83
300	Total Dead lWithout snow	0.00	0.00	-248.72	0.00	0.00	-248.72
301	Particular Snow	0.00	0.00	-36.32	0.00	0.00	-36.32
302	Live load Total MAX	168.42	0.00	517.80	168.42	0.00	517.80
	MIN	-178.79	0.00	-651.61	-178.79	0.00	-651.61
303	Sum total D+L+PP MAX	168.42	0.00	388.11	168.42	0.00	388.11
	MIN	-178.79	0.00	-936.65	-178.79	0.00	-936.65

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002047						1002048						
NODE		2047		3047		2048		3048		2048		3048		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	0.00	0.00	-17.11	0.00	0.00	-17.11	0.00	0.00	-6.20	0.00	0.00	-6.20	
3	Railing	0.00	0.00	-5.92	0.00	0.00	-5.92	0.00	0.00	-1.96	0.00	0.00	-1.96	
5	Wheel guard	0.00	0.00	-58.56	0.00	0.00	-58.56	0.00	0.00	-19.37	0.00	0.00	-19.37	
8	Steel weight	0.00	0.00	1.39	0.00	0.00	1.39	0.00	0.00	-1.73	0.00	0.00	-1.73	
10	Medial strip	0.00	0.00	31.01	0.00	0.00	31.01	0.00	0.00	9.94	0.00	0.00	9.94	
19	Snow	0.00	0.00	-9.04	0.00	0.00	-9.04	0.00	0.00	-3.23	0.00	0.00	-3.23	
31	Miscellaneous	0.00	0.00	2.51	0.00	0.00	2.51	0.00	0.00	0.80	0.00	0.00	0.80	
100	AASHTO-LRFD TRUCK-LOAD	MAX	97.74	0.00	329.60	97.74	0.00	329.60	47.71	0.00	144.10	47.71	0.00	144.10
		MIN	-97.74	0.00	-304.62	-97.74	0.00	-304.62	-47.71	0.00	-143.81	-47.71	0.00	-143.81
		TANDEM-LOAD	70.71	0.00	235.75	70.71	0.00	235.75	32.60	0.00	98.59	32.60	0.00	98.59
		MIN	-70.71	0.00	-224.04	-70.71	0.00	-224.04	-32.60	0.00	-98.85	-32.60	0.00	-98.85
		DISPERSION-LMAX	146.65	0.00	452.40	146.65	0.00	452.40	145.51	0.00	431.37	145.51	0.00	431.37
		MIN	-146.65	0.00	-478.93	-146.65	0.00	-478.93	-145.51	0.00	-441.92	-145.51	0.00	-441.92
110	Live load	L-PICKUP 1	244.38	0.00	782.00	244.38	0.00	782.00	193.23	0.00	575.47	193.23	0.00	575.47
		MIN	-244.38	0.00	-783.54	-244.38	0.00	-783.54	-193.23	0.00	-585.73	-193.23	0.00	-585.73
		L-PICKUP 2	217.35	0.00	688.15	217.35	0.00	688.15	178.12	0.00	529.96	178.12	0.00	529.96
		MIN	-217.35	0.00	-702.96	-217.35	0.00	-702.96	-178.12	0.00	-540.77	-178.12	0.00	-540.77
		L-PICKUP 3	-251.61	0.00	-764.30	-251.61	0.00	-764.30	-207.42	0.00	-628.19	-207.42	0.00	-628.19
		Live load	244.38	0.00	782.00	244.38	0.00	782.00	193.23	0.00	575.47	193.23	0.00	575.47
111	AASHTO Twin	TWIN-PICKUP	251.61	0.00	811.52	251.61	0.00	811.52	207.42	0.00	617.49	207.42	0.00	617.49
		MIN	-251.61	0.00	-764.30	-251.61	0.00	-764.30	-207.42	0.00	-628.19	-207.42	0.00	-628.19
		MID-PICKUP	-251.61	0.00	-764.30	-251.61	0.00	-764.30	-207.42	0.00	-628.19	-207.42	0.00	-628.19
198	AASHTO Fatig	TRUCK-LOAD	28.85	0.00	109.48	28.85	0.00	109.48	23.86	0.00	67.66	23.86	0.00	67.66
		MIN	-28.85	0.00	-82.95	-28.85	0.00	-82.95	-23.86	0.00	-75.75	-23.86	0.00	-75.75
		TANDEM-LOAD	22.42	0.00	81.22	22.42	0.00	81.22	16.26	0.00	45.90	16.26	0.00	45.90
		MIN	-22.42	0.00	-57.21	-22.42	0.00	-57.21	-16.26	0.00	-52.03	-16.26	0.00	-52.03

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002047						1002048					
NODE		2047			3047			2048			3048		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	79.06	0.00	250.17	79.06	0.00	250.17	77.11	0.00	220.98	77.11	0.00	220.98
	MIN	-79.06	0.00	-255.81	-79.06	0.00	-255.81	-77.11	0.00	-243.22	-77.11	0.00	-243.22
199	AASHTO-LRFD TRUCK-LOAD MAX	132.92	0.00	449.29	132.92	0.00	449.29	84.95	0.00	254.73	84.95	0.00	254.73
	MIN	-132.92	0.00	-370.29	-132.92	0.00	-370.29	-84.95	0.00	-256.07	-84.95	0.00	-256.07
	TANDEM-LOAD MAX	70.71	0.00	235.75	70.71	0.00	235.75	32.60	0.00	98.59	32.60	0.00	98.59
	MIN	-70.71	0.00	-224.04	-70.71	0.00	-224.04	-32.60	0.00	-98.85	-32.60	0.00	-98.85
	DISPERSION-LMAX	146.65	0.00	452.40	146.65	0.00	452.40	145.51	0.00	431.37	145.51	0.00	431.37
	MIN	-146.65	0.00	-478.93	-146.65	0.00	-478.93	-145.51	0.00	-441.92	-145.51	0.00	-441.92
300	Total Dead lWithout snow	0.00	0.00	-46.68	0.00	0.00	-46.68	0.00	0.00	-18.52	0.00	0.00	-18.52
301	Particular Snow	0.00	0.00	-9.04	0.00	0.00	-9.04	0.00	0.00	-3.23	0.00	0.00	-3.23
302	Live load Total MAX	158.85	0.00	508.30	158.85	0.00	508.30	125.60	0.00	374.05	125.60	0.00	374.05
	MIN	-163.55	0.00	-509.30	-163.55	0.00	-509.30	-134.82	0.00	-408.33	-134.82	0.00	-408.33
303	Sum total D+L+PP MAX	158.85	0.00	499.26	158.85	0.00	499.26	125.60	0.00	370.83	125.60	0.00	370.83
	MIN	-163.55	0.00	-565.02	-163.55	0.00	-565.02	-134.82	0.00	-430.07	-134.82	0.00	-430.07

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002049						1002050					
NODE		2049			3049			2050			3050		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-21.25	0.00	0.00	-21.25	0.00	0.00	-41.81	0.00	0.00	-41.81
3	Railing	0.00	0.00	-6.04	0.00	0.00	-6.04	0.00	0.00	-12.51	0.00	0.00	-12.51
5	Wheel guard	0.00	0.00	-59.77	0.00	0.00	-59.77	0.00	0.00	-123.84	0.00	0.00	-123.84
8	Steel weight	0.00	0.00	-13.90	0.00	0.00	-13.90	0.00	0.00	-19.87	0.00	0.00	-19.87
10	Medial strip	0.00	0.00	29.44	0.00	0.00	29.44	0.00	0.00	62.27	0.00	0.00	62.27
19	Snow	0.00	0.00	-10.89	0.00	0.00	-10.89	0.00	0.00	-21.59	0.00	0.00	-21.59
31	Miscellaneous	0.00	0.00	2.38	0.00	0.00	2.38	0.00	0.00	5.03	0.00	0.00	5.03
100	AASHTO-LRFD TRUCK-LOAD	98.43	0.00	330.45	98.43	0.00	330.45	127.55	0.00	416.22	127.55	0.00	416.22
	MIN	-98.43	0.00	-308.57	-98.43	0.00	-308.57	-127.55	0.00	-420.85	-127.55	0.00	-420.85
	TANDEM-LOAD MAX	71.17	0.00	236.45	71.17	0.00	236.45	93.38	0.00	302.75	93.38	0.00	302.75
	MIN	-71.17	0.00	-226.58	-71.17	0.00	-226.58	-93.38	0.00	-306.46	-93.38	0.00	-306.46
	DISPERSION-LMAX	147.31	0.00	450.95	147.31	0.00	450.95	134.19	0.00	427.56	134.19	0.00	427.56
	MIN	-147.31	0.00	-484.21	-147.31	0.00	-484.21	-134.19	0.00	-489.87	-134.19	0.00	-489.87
110	Live load L-PICKUP 1	245.74	0.00	781.40	245.74	0.00	781.40	261.74	0.00	843.78	261.74	0.00	843.78
	MIN	-245.74	0.00	-792.78	-245.74	0.00	-792.78	-261.74	0.00	-910.72	-261.74	0.00	-910.72
	L-PICKUP 2 MAX	218.48	0.00	687.40	218.48	0.00	687.40	227.57	0.00	730.31	227.57	0.00	730.31
	MIN	-218.48	0.00	-710.79	-218.48	0.00	-710.79	-227.57	0.00	-796.34	-227.57	0.00	-796.34
	L-PICKUP 3	-253.48	0.00	-776.57	-253.48	0.00	-776.57	-271.61	0.00	-929.72	-271.61	0.00	-929.72
	Live load MAX	245.74	0.00	781.40	245.74	0.00	781.40	261.74	0.00	843.78	261.74	0.00	843.78
	MIN	-253.48	0.00	-792.78	-253.48	0.00	-792.78	-271.61	0.00	-929.72	-271.61	0.00	-929.72
111	AASHTO Twin TWIN-PICKUP	253.48	0.00	811.36	253.48	0.00	811.36	271.61	0.00	877.30	271.61	0.00	877.30
	MIN	-253.48	0.00	-776.57	-253.48	0.00	-776.57	-271.61	0.00	-929.72	-271.61	0.00	-929.72
	MID-PICKUP	-253.48	0.00	-776.57	-253.48	0.00	-776.57	-271.61	0.00	-929.72	-271.61	0.00	-929.72
198	AASHTO FatigTRUCK-LOAD	29.20	0.00	109.71	29.20	0.00	109.71	50.13	0.00	184.16	50.13	0.00	184.16
	MIN	-29.20	0.00	-84.70	-29.20	0.00	-84.70	-50.13	0.00	-132.93	-50.13	0.00	-132.93
	TANDEM-LOAD MAX	22.50	0.00	81.44	22.50	0.00	81.44	37.96	0.00	137.84	37.96	0.00	137.84
	MIN	-22.50	0.00	-58.35	-22.50	0.00	-58.35	-37.96	0.00	-90.73	-37.96	0.00	-90.73

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002049			1002050								
NODE		2049	3049		2050	3050							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	79.43	0.00	250.15	79.43	0.00	250.15	72.08	0.00	249.78	72.08	0.00	249.78
	MIN	-79.43	0.00	-257.88	-79.43	0.00	-257.88	-72.08	0.00	-243.27	-72.08	0.00	-243.27
199	AASHTO-LRFD TRUCK-LOAD MAX	134.33	0.00	450.57	134.33	0.00	450.57	167.60	0.00	547.22	167.60	0.00	547.22
	MIN	-134.33	0.00	-378.65	-134.33	0.00	-378.65	-167.60	0.00	-543.15	-167.60	0.00	-543.15
	TANDEM-LOAD MAX	71.17	0.00	236.45	71.17	0.00	236.45	93.38	0.00	302.75	93.38	0.00	302.75
	MIN	-71.17	0.00	-226.58	-71.17	0.00	-226.58	-93.38	0.00	-306.46	-93.38	0.00	-306.46
	DISPERSION-LMAX	147.31	0.00	450.95	147.31	0.00	450.95	134.19	0.00	427.56	134.19	0.00	427.56
	MIN	-147.31	0.00	-484.21	-147.31	0.00	-484.21	-134.19	0.00	-489.87	-134.19	0.00	-489.87
300	Total Dead lWithout snow	0.00	0.00	-69.13	0.00	0.00	-69.13	0.00	0.00	-130.73	0.00	0.00	-130.73
301	Particular Snow	0.00	0.00	-10.89	0.00	0.00	-10.89	0.00	0.00	-21.59	0.00	0.00	-21.59
302	Live load Total MAX	159.73	0.00	507.91	159.73	0.00	507.91	170.13	0.00	548.46	170.13	0.00	548.46
	MIN	-164.76	0.00	-515.31	-164.76	0.00	-515.31	-176.55	0.00	-604.32	-176.55	0.00	-604.32
303	Sum total D+L+PP MAX	159.73	0.00	497.02	159.73	0.00	497.02	170.13	0.00	526.87	170.13	0.00	526.87
	MIN	-164.76	0.00	-595.33	-164.76	0.00	-595.33	-176.55	0.00	-756.64	-176.55	0.00	-756.64

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002051						1002052					
NODE		2051			3051			2052			3052		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-69.23	0.00	0.00	-69.23	0.00	0.00	-81.71	0.00	0.00	-81.71
3	Railing	0.00	0.00	-18.53	0.00	0.00	-18.53	0.00	0.00	-21.52	0.00	0.00	-21.52
5	Wheel guard	0.00	0.00	-183.48	0.00	0.00	-183.48	0.00	0.00	-213.03	0.00	0.00	-213.03
8	Steel weight	0.00	0.00	-58.90	0.00	0.00	-58.90	0.00	0.00	-73.77	0.00	0.00	-73.77
10	Medial strip	0.00	0.00	88.03	0.00	0.00	88.03	0.00	0.00	101.45	0.00	0.00	101.45
19	Snow	0.00	0.00	-35.19	0.00	0.00	-35.19	0.00	0.00	-41.44	0.00	0.00	-41.44
31	Miscellaneous	0.00	0.00	7.11	0.00	0.00	7.11	0.00	0.00	8.20	0.00	0.00	8.20
100	AASHTO-LRFD TRUCK-LOAD	136.57	0.00	428.83	136.57	0.00	428.83	134.16	0.00	420.23	134.16	0.00	420.23
	MIN	-136.57	0.00	-477.05	-136.57	0.00	-477.05	-134.16	0.00	-477.57	-134.16	0.00	-477.57
	TANDEM-LOAD MAX	99.82	0.00	315.68	99.82	0.00	315.68	97.99	0.00	309.58	97.99	0.00	309.58
	MIN	-99.82	0.00	-349.36	-99.82	0.00	-349.36	-97.99	0.00	-349.78	-97.99	0.00	-349.78
	DISPERSION-LMAX	121.93	0.00	369.22	121.93	0.00	369.22	114.56	0.00	336.00	114.56	0.00	336.00
	MIN	-121.93	0.00	-474.29	-121.93	0.00	-474.29	-114.56	0.00	-460.48	-114.56	0.00	-460.48
110	Live load L-PICKUP 1	258.50	0.00	798.04	258.50	0.00	798.04	248.72	0.00	756.23	248.72	0.00	756.23
	MIN	-258.50	0.00	-951.34	-258.50	0.00	-951.34	-248.72	0.00	-938.05	-248.72	0.00	-938.05
	L-PICKUP 2 MAX	221.75	0.00	684.90	221.75	0.00	684.90	212.55	0.00	645.57	212.55	0.00	645.57
	MIN	-221.75	0.00	-823.65	-221.75	0.00	-823.65	-212.55	0.00	-810.26	-212.55	0.00	-810.26
	L-PICKUP 3	-274.59	0.00	-1000.41	-274.59	0.00	-1000.41	-265.64	0.00	-996.65	-265.64	0.00	-996.65
	Live load MAX	258.50	0.00	798.04	258.50	0.00	798.04	248.72	0.00	756.23	248.72	0.00	756.23
	MIN	-274.59	0.00	-1000.41	-274.59	0.00	-1000.41	-265.64	0.00	-996.65	-265.64	0.00	-996.65
111	AASHTO Twin TWIN-PICKUP	274.59	0.00	815.47	274.59	0.00	815.47	265.64	0.00	762.34	265.64	0.00	762.34
	MIN	-274.59	0.00	-1000.41	-274.59	0.00	-1000.41	-265.64	0.00	-996.65	-265.64	0.00	-996.65
	MID-PICKUP	-274.59	0.00	-1000.41	-274.59	0.00	-1000.41	-265.64	0.00	-996.65	-265.64	0.00	-996.65
198	AASHTO FatigTRUCK-LOAD	61.32	0.00	224.33	61.32	0.00	224.33	64.19	0.00	237.12	64.19	0.00	237.12
	MIN	-61.32	0.00	-200.71	-61.32	0.00	-200.71	-64.19	0.00	-222.52	-64.19	0.00	-222.52
	TANDEM-LOAD MAX	46.08	0.00	167.28	46.08	0.00	167.28	48.05	0.00	176.12	48.05	0.00	176.12
	MIN	-46.08	0.00	-139.54	-46.08	0.00	-139.54	-48.05	0.00	-154.49	-48.05	0.00	-154.49

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002051			1002052								
NODE		2051			3051			2052			3052		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.51	0.00	218.90	60.51	0.00	218.90	54.59	0.00	197.98	54.59	0.00	197.98
	MIN	-60.51	0.00	-255.30	-60.51	0.00	-255.30	-54.59	0.00	-261.98	-54.59	0.00	-261.98
199	AASHTO-LRFD TRUCK-LOAD MAX	183.17	0.00	536.86	183.17	0.00	536.86	180.60	0.00	511.05	180.60	0.00	511.05
	MIN	-183.17	0.00	-637.27	-183.17	0.00	-637.27	-180.60	0.00	-646.91	-180.60	0.00	-646.91
	TANDEM-LOAD MAX	99.82	0.00	315.68	99.82	0.00	315.68	97.99	0.00	309.58	97.99	0.00	309.58
	MIN	-99.82	0.00	-349.36	-99.82	0.00	-349.36	-97.99	0.00	-349.78	-97.99	0.00	-349.78
	DISPERSION-LMAX	121.93	0.00	369.22	121.93	0.00	369.22	114.56	0.00	336.00	114.56	0.00	336.00
	MIN	-121.93	0.00	-474.29	-121.93	0.00	-474.29	-114.56	0.00	-460.48	-114.56	0.00	-460.48
300	Total Dead lWithout snow	0.00	0.00	-235.01	0.00	0.00	-235.01	0.00	0.00	-280.37	0.00	0.00	-280.37
301	Particular Snow	0.00	0.00	-35.19	0.00	0.00	-35.19	0.00	0.00	-41.44	0.00	0.00	-41.44
302	Live load Total MAX	168.03	0.00	518.73	168.03	0.00	518.73	161.67	0.00	491.55	161.67	0.00	491.55
	MIN	-178.48	0.00	-650.26	-178.48	0.00	-650.26	-172.67	0.00	-647.82	-172.67	0.00	-647.82
303	Sum total D+L+PP MAX	168.03	0.00	404.15	168.03	0.00	404.15	161.67	0.00	317.20	161.67	0.00	317.20
	MIN	-178.48	0.00	-920.46	-178.48	0.00	-920.46	-172.67	0.00	-969.63	-172.67	0.00	-969.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002053 2053						1002054 2054						
		3053			3054			2054			3054			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	0.00	0.00	-80.20	0.00	0.00	-80.20	0.00	0.00	-79.26	0.00	0.00	-79.26	
3	Railing	0.00	0.00	-22.61	0.00	0.00	-22.61	0.00	0.00	-22.88	0.00	0.00	-22.88	
5	Wheel guard	0.00	0.00	-223.80	0.00	0.00	-223.80	0.00	0.00	-226.56	0.00	0.00	-226.56	
8	Steel weight	0.00	0.00	-54.65	0.00	0.00	-54.65	0.00	0.00	-47.53	0.00	0.00	-47.53	
10	Medial strip	0.00	0.00	109.89	0.00	0.00	109.89	0.00	0.00	112.36	0.00	0.00	112.36	
19	Snow	0.00	0.00	-41.05	0.00	0.00	-41.05	0.00	0.00	-40.71	0.00	0.00	-40.71	
31	Miscellaneous	0.00	0.00	8.88	0.00	0.00	8.88	0.00	0.00	9.08	0.00	0.00	9.08	
100	AASHTO-LRFD TRUCK-LOAD	MAX	134.68	0.00	423.46	134.68	0.00	423.46	137.69	0.00	431.29	137.69	0.00	431.29
		MIN	-134.68	0.00	-470.24	-134.68	0.00	-470.24	-137.69	0.00	-471.05	-137.69	0.00	-471.05
	TANDEM-LOAD	MAX	98.22	0.00	311.07	98.22	0.00	311.07	100.17	0.00	315.92	100.17	0.00	315.92
		MIN	-98.22	0.00	-343.92	-98.22	0.00	-343.92	-100.17	0.00	-343.95	-100.17	0.00	-343.95
	DISPERSION-LMAX	MAX	114.76	0.00	339.07	114.76	0.00	339.07	118.61	0.00	349.97	118.61	0.00	349.97
		MIN	-114.76	0.00	-460.36	-114.76	0.00	-460.36	-118.61	0.00	-469.46	-118.61	0.00	-469.46
110	Live load L-PICKUP 1	MAX	249.44	0.00	762.52	249.44	0.00	762.52	256.30	0.00	781.26	256.30	0.00	781.26
		MIN	-249.44	0.00	-930.60	-249.44	0.00	-930.60	-256.30	0.00	-940.51	-256.30	0.00	-940.51
	L-PICKUP 2	MAX	212.97	0.00	650.13	212.97	0.00	650.13	218.78	0.00	665.89	218.78	0.00	665.89
		MIN	-212.97	0.00	-804.28	-212.97	0.00	-804.28	-218.78	0.00	-813.41	-218.78	0.00	-813.41
	L-PICKUP 3	MAX	-266.89	0.00	-989.30	-266.89	0.00	-989.30	-274.97	0.00	-1000.89	-274.97	0.00	-1000.89
		MIN	249.44	0.00	762.52	249.44	0.00	762.52	256.30	0.00	781.26	256.30	0.00	781.26
	Live load	MAX	249.44	0.00	762.52	249.44	0.00	762.52	256.30	0.00	781.26	256.30	0.00	781.26
		MIN	-266.89	0.00	-989.30	-266.89	0.00	-989.30	-274.97	0.00	-1000.89	-274.97	0.00	-1000.89
111	AASHTO Twin TWIN-PICKUP	MAX	266.89	0.00	770.10	266.89	0.00	770.10	274.97	0.00	793.80	274.97	0.00	793.80
		MIN	-266.89	0.00	-989.30	-266.89	0.00	-989.30	-274.97	0.00	-1000.89	-274.97	0.00	-1000.89
	MID-PICKUP	-266.89	0.00	-989.30	-266.89	0.00	-989.30	-274.97	0.00	-1000.89	-274.97	0.00	-1000.89	
198	AASHTO FatigTRUCK-LOAD	MAX	65.36	0.00	243.17	65.36	0.00	243.17	66.53	0.00	246.97	66.53	0.00	246.97
		MIN	-65.36	0.00	-229.91	-65.36	0.00	-229.91	-66.53	0.00	-236.70	-66.53	0.00	-236.70
	TANDEM-LOAD	MAX	48.77	0.00	179.94	48.77	0.00	179.94	49.53	0.00	182.37	49.53	0.00	182.37
		MIN	-48.77	0.00	-159.24	-48.77	0.00	-159.24	-49.53	0.00	-163.75	-49.53	0.00	-163.75

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002053						1002054					
NODE		2053			3053			2054			3054		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.08	0.00	194.26	54.08	0.00	194.26	55.65	0.00	195.90	55.65	0.00	195.90
	MIN	-54.08	0.00	-269.61	-54.08	0.00	-269.61	-55.65	0.00	-277.97	-55.65	0.00	-277.97
199	AASHTO-LRFD TRUCK-LOAD MAX	181.79	0.00	516.60	181.79	0.00	516.60	186.91	0.00	532.03	186.91	0.00	532.03
	MIN	-181.79	0.00	-638.86	-181.79	0.00	-638.86	-186.91	0.00	-642.64	-186.91	0.00	-642.64
	TANDEM-LOAD MAX	98.22	0.00	311.07	98.22	0.00	311.07	100.17	0.00	315.92	100.17	0.00	315.92
	MIN	-98.22	0.00	-343.92	-98.22	0.00	-343.92	-100.17	0.00	-343.95	-100.17	0.00	-343.95
	DISPERSION-LMAX	114.76	0.00	339.07	114.76	0.00	339.07	118.61	0.00	349.97	118.61	0.00	349.97
	MIN	-114.76	0.00	-460.36	-114.76	0.00	-460.36	-118.61	0.00	-469.46	-118.61	0.00	-469.46
300	Total Dead lWithout snow	0.00	0.00	-262.50	0.00	0.00	-262.50	0.00	0.00	-254.79	0.00	0.00	-254.79
301	Particular Snow	0.00	0.00	-41.05	0.00	0.00	-41.05	0.00	0.00	-40.71	0.00	0.00	-40.71
302	Live load Total MAX	162.13	0.00	495.64	162.13	0.00	495.64	166.60	0.00	507.82	166.60	0.00	507.82
	MIN	-173.48	0.00	-643.04	-173.48	0.00	-643.04	-178.73	0.00	-650.58	-178.73	0.00	-650.58
303	Sum total D+L+PP MAX	162.13	0.00	340.79	162.13	0.00	340.79	166.60	0.00	364.66	166.60	0.00	364.66
	MIN	-173.48	0.00	-946.59	-173.48	0.00	-946.59	-178.73	0.00	-946.08	-178.73	0.00	-946.08

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002055						1002056					
NODE		2055			3055			2056			3056		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-81.44	0.00	0.00	-81.44	0.00	0.00	-83.95	0.00	0.00	-83.95
3	Railing	0.00	0.00	-22.63	0.00	0.00	-22.63	0.00	0.00	-21.60	0.00	0.00	-21.60
5	Wheel guard	0.00	0.00	-224.03	0.00	0.00	-224.03	0.00	0.00	-213.88	0.00	0.00	-213.88
8	Steel weight	0.00	0.00	-59.39	0.00	0.00	-59.39	0.00	0.00	-81.82	0.00	0.00	-81.82
10	Medial strip	0.00	0.00	109.31	0.00	0.00	109.31	0.00	0.00	100.73	0.00	0.00	100.73
19	Snow	0.00	0.00	-41.60	0.00	0.00	-41.60	0.00	0.00	-42.44	0.00	0.00	-42.44
31	Miscellaneous	0.00	0.00	8.83	0.00	0.00	8.83	0.00	0.00	8.14	0.00	0.00	8.14
100	AASHTO-LRFD TRUCK-LOAD	138.79	0.00	429.29	138.79	0.00	429.29	137.42	0.00	426.91	137.42	0.00	426.91
	MIN	-138.79	0.00	-476.40	-138.79	0.00	-476.40	-137.42	0.00	-482.36	-137.42	0.00	-482.36
	TANDEM-LOAD	100.90	0.00	314.55	100.90	0.00	314.55	100.20	0.00	313.76	100.20	0.00	313.76
	MIN	-100.90	0.00	-348.31	-100.90	0.00	-348.31	-100.20	0.00	-352.73	-100.20	0.00	-352.73
	DISPERSION-LMAX	119.47	0.00	346.48	119.47	0.00	346.48	117.93	0.00	343.34	117.93	0.00	343.34
	MIN	-119.47	0.00	-469.58	-119.47	0.00	-469.58	-117.93	0.00	-471.44	-117.93	0.00	-471.44
110	Live load L-PICKUP 1	258.26	0.00	775.77	258.26	0.00	775.77	255.36	0.00	770.26	255.36	0.00	770.26
	MIN	-258.26	0.00	-945.98	-258.26	0.00	-945.98	-255.36	0.00	-953.80	-255.36	0.00	-953.80
	L-PICKUP 2	220.37	0.00	661.03	220.37	0.00	661.03	218.13	0.00	657.11	218.13	0.00	657.11
	MIN	-220.37	0.00	-817.90	-220.37	0.00	-817.90	-218.13	0.00	-824.17	-218.13	0.00	-824.17
	L-PICKUP 3	-277.01	0.00	-1005.95	-277.01	0.00	-1005.95	-272.11	0.00	-1017.38	-272.11	0.00	-1017.38
	Live load	258.26	0.00	775.77	258.26	0.00	775.77	255.36	0.00	770.26	255.36	0.00	770.26
	MIN	-277.01	0.00	-1005.95	-277.01	0.00	-1005.95	-272.11	0.00	-1017.38	-272.11	0.00	-1017.38
111	AASHTO Twin TWIN-PICKUP	277.01	0.00	790.50	277.01	0.00	790.50	272.11	0.00	777.37	272.11	0.00	777.37
	MIN	-277.01	0.00	-1005.95	-277.01	0.00	-1005.95	-272.11	0.00	-1017.38	-272.11	0.00	-1017.38
	MID-PICKUP	-277.01	0.00	-1005.95	-277.01	0.00	-1005.95	-272.11	0.00	-1017.38	-272.11	0.00	-1017.38
198	AASHTO FatigTRUCK-LOAD	66.66	0.00	246.49	66.66	0.00	246.49	64.89	0.00	238.20	64.89	0.00	238.20
	MIN	-66.66	0.00	-236.98	-66.66	0.00	-236.98	-64.89	0.00	-225.80	-64.89	0.00	-225.80
	TANDEM-LOAD	49.70	0.00	182.26	49.70	0.00	182.26	48.52	0.00	176.77	48.52	0.00	176.77
	MIN	-49.70	0.00	-164.23	-49.70	0.00	-164.23	-48.52	0.00	-156.85	-48.52	0.00	-156.85

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002055						1002056					
NODE		2055			3055			2056			3056		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	56.10	0.00	196.36	56.10	0.00	196.36	56.08	0.00	201.27	56.08	0.00	201.27
	MIN	-56.10	0.00	-277.78	-56.10	0.00	-277.78	-56.08	0.00	-268.27	-56.08	0.00	-268.27
199	AASHTO-LRFD TRUCK-LOAD MAX	188.32	0.00	531.85	188.32	0.00	531.85	184.41	0.00	520.40	184.41	0.00	520.40
	MIN	-188.32	0.00	-648.14	-188.32	0.00	-648.14	-184.41	0.00	-658.99	-184.41	0.00	-658.99
	TANDEM-LOAD MAX	100.90	0.00	314.55	100.90	0.00	314.55	100.20	0.00	313.76	100.20	0.00	313.76
	MIN	-100.90	0.00	-348.31	-100.90	0.00	-348.31	-100.20	0.00	-352.73	-100.20	0.00	-352.73
	DISPERSION-LMAX	119.47	0.00	346.48	119.47	0.00	346.48	117.93	0.00	343.34	117.93	0.00	343.34
	MIN	-119.47	0.00	-469.58	-119.47	0.00	-469.58	-117.93	0.00	-471.44	-117.93	0.00	-471.44
300	Total Dead lWithout snow	0.00	0.00	-269.34	0.00	0.00	-269.34	0.00	0.00	-292.39	0.00	0.00	-292.39
301	Particular Snow	0.00	0.00	-41.60	0.00	0.00	-41.60	0.00	0.00	-42.44	0.00	0.00	-42.44
302	Live load Total MAX	167.87	0.00	504.25	167.87	0.00	504.25	165.98	0.00	500.67	165.98	0.00	500.67
	MIN	-180.06	0.00	-653.87	-180.06	0.00	-653.87	-176.87	0.00	-661.30	-176.87	0.00	-661.30
303	Sum total D+L+PP MAX	167.87	0.00	344.58	167.87	0.00	344.58	165.98	0.00	316.04	165.98	0.00	316.04
	MIN	-180.06	0.00	-964.81	-180.06	0.00	-964.81	-176.87	0.00	-996.13	-176.87	0.00	-996.13

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002057						1002058							
NODE		2057			3057			2058			3058				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-72.81	0.00	0.00	-72.81	0.00	0.00	-41.20	0.00	0.00	-41.20		
3	Railing	0.00	0.00	-18.71	0.00	0.00	-18.71	0.00	0.00	-12.60	0.00	0.00	-12.60		
5	Wheel guard	0.00	0.00	-185.24	0.00	0.00	-185.24	0.00	0.00	-124.73	0.00	0.00	-124.73		
8	Steel weight	0.00	0.00	-71.25	0.00	0.00	-71.25	0.00	0.00	-16.30	0.00	0.00	-16.30		
10	Medial strip	0.00	0.00	87.19	0.00	0.00	87.19	0.00	0.00	63.28	0.00	0.00	63.28		
19	Snow	0.00	0.00	-36.80	0.00	0.00	-36.80	0.00	0.00	-21.34	0.00	0.00	-21.34		
31	Miscellaneous	0.00	0.00	7.05	0.00	0.00	7.05	0.00	0.00	5.11	0.00	0.00	5.11		
100	AASHTO-LRFD TRUCK-LOAD	MAX	135.63	0.00	426.49	135.63	0.00	426.49	125.34	0.00	413.17	125.34	0.00	413.17	
		MIN	-135.63	0.00	-479.79	-135.63	0.00	-479.79	-125.34	0.00	-420.49	-125.34	0.00	-420.49	
		TANDEM-LOAD	MAX	99.06	0.00	313.89	99.06	0.00	313.89	91.82	0.00	300.48	91.82	0.00	300.48
		MIN	-99.06	0.00	-351.15	-99.06	0.00	-351.15	-91.82	0.00	-306.01	-91.82	0.00	-306.01	
		DISPERSION-L	MAX	122.45	0.00	369.59	122.45	0.00	369.59	133.04	0.00	426.79	133.04	0.00	426.79
		MIN	-122.45	0.00	-480.68	-122.45	0.00	-480.68	-133.04	0.00	-488.21	-133.04	0.00	-488.21	
110	Live load	L-PICKUP 1	MAX	258.08	0.00	796.09	258.08	0.00	796.09	258.38	0.00	839.96	258.38	0.00	839.96
		MIN	-258.08	0.00	-960.48	-258.08	0.00	-960.48	-258.38	0.00	-908.71	-258.38	0.00	-908.71	
		L-PICKUP 2	MAX	221.50	0.00	683.48	221.50	0.00	683.48	224.86	0.00	727.27	224.86	0.00	727.27
		MIN	-221.50	0.00	-831.83	-221.50	0.00	-831.83	-224.86	0.00	-794.22	-224.86	0.00	-794.22	
		L-PICKUP 3	MAX	-273.81	0.00	-1011.91	-273.81	0.00	-1011.91	-267.49	0.00	-919.20	-267.49	0.00	-919.20
		MIN	258.08	0.00	796.09	258.08	0.00	796.09	258.38	0.00	839.96	258.38	0.00	839.96	
		Live load	MAX	258.08	0.00	796.09	258.08	0.00	796.09	258.38	0.00	839.96	258.38	0.00	839.96
		MIN	-273.81	0.00	-1011.91	-273.81	0.00	-1011.91	-267.49	0.00	-919.20	-267.49	0.00	-919.20	
111	AASHTO Twin	TWIN-PICKUP	MAX	273.81	0.00	813.43	273.81	0.00	813.43	267.49	0.00	873.02	267.49	0.00	873.02
		MIN	-273.81	0.00	-1011.91	-273.81	0.00	-1011.91	-267.49	0.00	-919.20	-267.49	0.00	-919.20	
		MID-PICKUP	MAX	-273.81	0.00	-1011.91	-273.81	0.00	-1011.91	-267.49	0.00	-919.20	-267.49	0.00	-919.20
198	AASHTO Fatig	TRUCK-LOAD	MAX	61.02	0.00	221.96	61.02	0.00	221.96	49.71	0.00	183.01	49.71	0.00	183.01
		MIN	-61.02	0.00	-200.51	-61.02	0.00	-200.51	-49.71	0.00	-131.42	-49.71	0.00	-131.42	
		TANDEM-LOAD	MAX	45.87	0.00	165.56	45.87	0.00	165.56	37.65	0.00	136.97	37.65	0.00	136.97
		MIN	-45.87	0.00	-139.50	-45.87	0.00	-139.50	-37.65	0.00	-90.24	-37.65	0.00	-90.24	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002057						1002058					
NODE		2057			3057			2058			3058		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.87	0.00	219.50	60.87	0.00	219.50	71.69	0.00	249.23	71.69	0.00	249.23
	MIN	-60.87	0.00	-257.35	-60.87	0.00	-257.35	-71.69	0.00	-241.94	-71.69	0.00	-241.94
199	AASHTO-LRFD TRUCK-LOAD MAX	181.78	0.00	534.22	181.78	0.00	534.22	164.18	0.00	543.24	164.18	0.00	543.24
	MIN	-181.78	0.00	-643.67	-181.78	0.00	-643.67	-164.18	0.00	-533.11	-164.18	0.00	-533.11
	TANDEM-LOAD MAX	99.06	0.00	313.89	99.06	0.00	313.89	91.82	0.00	300.48	91.82	0.00	300.48
	MIN	-99.06	0.00	-351.15	-99.06	0.00	-351.15	-91.82	0.00	-306.01	-91.82	0.00	-306.01
	DISPERSION-LMAX	122.45	0.00	369.59	122.45	0.00	369.59	133.04	0.00	426.79	133.04	0.00	426.79
	MIN	-122.45	0.00	-480.68	-122.45	0.00	-480.68	-133.04	0.00	-488.21	-133.04	0.00	-488.21
300	Total Dead lWithout snow	0.00	0.00	-253.78	0.00	0.00	-253.78	0.00	0.00	-126.44	0.00	0.00	-126.44
301	Particular Snow	0.00	0.00	-36.80	0.00	0.00	-36.80	0.00	0.00	-21.34	0.00	0.00	-21.34
302	Live load Total	167.75	0.00	517.46	167.75	0.00	517.46	167.95	0.00	545.97	167.95	0.00	545.97
	MIN	-177.97	0.00	-657.74	-177.97	0.00	-657.74	-173.87	0.00	-597.48	-173.87	0.00	-597.48
303	Sum total D+L+PP	167.75	0.00	382.11	167.75	0.00	382.11	167.95	0.00	524.63	167.95	0.00	524.63
	MIN	-177.97	0.00	-948.33	-177.97	0.00	-948.33	-173.87	0.00	-745.26	-173.87	0.00	-745.26

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002059						1002060					
NODE		2059			3059			2060			3060		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.00	0.00	-17.28	0.00	0.00	-17.28	0.00	0.00	-6.06	0.00	0.00	-6.06
3	Railing	0.00	0.00	-6.01	0.00	0.00	-6.01	0.00	0.00	-1.91	0.00	0.00	-1.91
5	Wheel guard	0.00	0.00	-59.52	0.00	0.00	-59.52	0.00	0.00	-18.94	0.00	0.00	-18.94
8	Steel weight	0.00	0.00	1.86	0.00	0.00	1.86	0.00	0.00	-1.70	0.00	0.00	-1.70
10	Medial strip	0.00	0.00	31.59	0.00	0.00	31.59	0.00	0.00	9.72	0.00	0.00	9.72
19	Snow	0.00	0.00	-9.14	0.00	0.00	-9.14	0.00	0.00	-3.16	0.00	0.00	-3.16
31	Miscellaneous	0.00	0.00	2.55	0.00	0.00	2.55	0.00	0.00	0.79	0.00	0.00	0.79
100	AASHTO-LRFD TRUCK-LOAD	94.59	0.00	323.14	94.59	0.00	323.14	46.26	0.00	140.27	46.26	0.00	140.27
	MIN	-94.59	0.00	-291.79	-94.59	0.00	-291.79	-46.26	0.00	-139.41	-46.26	0.00	-139.41
	TANDEM-LOAD MAX	68.72	0.00	231.81	68.72	0.00	231.81	31.62	0.00	95.99	31.62	0.00	95.99
	MIN	-68.72	0.00	-215.48	-68.72	0.00	-215.48	-31.62	0.00	-95.84	-31.62	0.00	-95.84
	DISPERSION-LMAX	147.96	0.00	454.23	147.96	0.00	454.23	142.71	0.00	423.06	142.71	0.00	423.06
	MIN	-147.96	0.00	-481.19	-147.96	0.00	-481.19	-142.71	0.00	-433.38	-142.71	0.00	-433.38
110	Live load L-PICKUP 1	242.55	0.00	777.36	242.55	0.00	777.36	188.97	0.00	563.33	188.97	0.00	563.33
	MIN	-242.55	0.00	-772.97	-242.55	0.00	-772.97	-188.97	0.00	-572.79	-188.97	0.00	-572.79
	L-PICKUP 2 MAX	216.68	0.00	686.04	216.68	0.00	686.04	174.32	0.00	519.05	174.32	0.00	519.05
	MIN	-216.68	0.00	-696.66	-216.68	0.00	-696.66	-174.32	0.00	-529.22	-174.32	0.00	-529.22
	L-PICKUP 3	-246.97	0.00	-745.16	-246.97	0.00	-745.16	-202.71	0.00	-613.98	-202.71	0.00	-613.98
	Live load MAX	242.55	0.00	777.36	242.55	0.00	777.36	188.97	0.00	563.33	188.97	0.00	563.33
	MIN	-246.97	0.00	-772.97	-246.97	0.00	-772.97	-202.71	0.00	-613.98	-202.71	0.00	-613.98
111	AASHTO Twin TWIN-PICKUP	246.97	0.00	799.97	246.97	0.00	799.97	202.71	0.00	604.50	202.71	0.00	604.50
	MIN	-246.97	0.00	-745.16	-246.97	0.00	-745.16	-202.71	0.00	-613.98	-202.71	0.00	-613.98
	MID-PICKUP	-246.97	0.00	-745.16	-246.97	0.00	-745.16	-202.71	0.00	-613.98	-202.71	0.00	-613.98
198	AASHTO FatigTRUCK-LOAD	28.33	0.00	109.31	28.33	0.00	109.31	23.10	0.00	65.77	23.10	0.00	65.77
	MIN	-28.33	0.00	-79.26	-28.33	0.00	-79.26	-23.10	0.00	-73.31	-23.10	0.00	-73.31
	TANDEM-LOAD MAX	22.17	0.00	81.35	22.17	0.00	81.35	15.74	0.00	44.63	15.74	0.00	44.63
	MIN	-22.17	0.00	-54.60	-22.17	0.00	-54.60	-15.74	0.00	-50.36	-15.74	0.00	-50.36

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002059 2059						1002060 2060					
	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	79.74	0.00	250.76	79.74	0.00	250.76	75.61	0.00	216.73	75.61	0.00	216.73
MIN	-79.74	0.00	-260.34	-79.74	0.00	-260.34	-75.61	0.00	-238.45	-75.61	0.00	-238.45
199 AASHTO-LRFD TRUCK-LOAD MAX	126.45	0.00	434.63	126.45	0.00	434.63	82.53	0.00	248.61	82.53	0.00	248.61
MIN	-126.45	0.00	-346.77	-126.45	0.00	-346.77	-82.53	0.00	-248.82	-82.53	0.00	-248.82
TANDEM-LOAD MAX	68.72	0.00	231.81	68.72	0.00	231.81	31.62	0.00	95.99	31.62	0.00	95.99
MIN	-68.72	0.00	-215.48	-68.72	0.00	-215.48	-31.62	0.00	-95.84	-31.62	0.00	-95.84
DISPERSION-LMAX	147.96	0.00	454.23	147.96	0.00	454.23	142.71	0.00	423.06	142.71	0.00	423.06
MIN	-147.96	0.00	-481.19	-147.96	0.00	-481.19	-142.71	0.00	-433.38	-142.71	0.00	-433.38
300 Total Dead lWithout snow	0.00	0.00	-46.81	0.00	0.00	-46.81	0.00	0.00	-18.11	0.00	0.00	-18.11
301 Particular Snow	0.00	0.00	-9.14	0.00	0.00	-9.14	0.00	0.00	-3.16	0.00	0.00	-3.16
302 Live load Total MAX	157.66	0.00	505.29	157.66	0.00	505.29	122.83	0.00	366.16	122.83	0.00	366.16
MIN	-160.53	0.00	-502.43	-160.53	0.00	-502.43	-131.76	0.00	-399.09	-131.76	0.00	-399.09
303 Sum total D+L+PP MAX	157.66	0.00	496.15	157.66	0.00	496.15	122.83	0.00	363.01	122.83	0.00	363.01
MIN	-160.53	0.00	-558.38	-160.53	0.00	-558.38	-131.76	0.00	-420.35	-131.76	0.00	-420.35

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002061						1002062							
NODE		2061			3061			2062			3062				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-21.70	0.00	0.00	-21.70	0.00	0.00	-43.21	0.00	0.00	-43.21		
3	Railing	0.00	0.00	-6.14	0.00	0.00	-6.14	0.00	0.00	-12.65	0.00	0.00	-12.65		
5	Wheel guard	0.00	0.00	-60.79	0.00	0.00	-60.79	0.00	0.00	-125.26	0.00	0.00	-125.26		
8	Steel weight	0.00	0.00	-14.51	0.00	0.00	-14.51	0.00	0.00	-23.78	0.00	0.00	-23.78		
10	Medial strip	0.00	0.00	29.89	0.00	0.00	29.89	0.00	0.00	62.48	0.00	0.00	62.48		
19	Snow	0.00	0.00	-11.12	0.00	0.00	-11.12	0.00	0.00	-22.24	0.00	0.00	-22.24		
31	Miscellaneous	0.00	0.00	2.42	0.00	0.00	2.42	0.00	0.00	5.05	0.00	0.00	5.05		
100	AASHTO-LRFD TRUCK-LOAD	MAX	94.86	0.00	323.56	94.86	0.00	323.56	126.14	0.00	416.88	126.14	0.00	416.88	
		MIN	-94.86	0.00	-293.48	-94.86	0.00	-293.48	-126.14	0.00	-417.38	-126.14	0.00	-417.38	
		TANDEM-LOAD	MAX	68.96	0.00	232.26	68.96	0.00	232.26	92.42	0.00	303.15	92.42	0.00	303.15
		MIN	-68.96	0.00	-216.57	-68.96	0.00	-216.57	-92.42	0.00	-303.91	-92.42	0.00	-303.91	
		DISPERSION-L	MAX	147.62	0.00	449.23	147.62	0.00	449.23	132.27	0.00	421.58	132.27	0.00	421.58
		MIN	-147.62	0.00	-483.36	-147.62	0.00	-483.36	-132.27	0.00	-486.02	-132.27	0.00	-486.02	
110	Live load	L-PICKUP 1	MAX	242.48	0.00	772.79	242.48	0.00	772.79	258.41	0.00	838.47	258.41	0.00	838.47
		MIN	-242.48	0.00	-776.84	-242.48	0.00	-776.84	-258.41	0.00	-903.41	-258.41	0.00	-903.41	
		L-PICKUP 2	MAX	216.58	0.00	681.49	216.58	0.00	681.49	224.69	0.00	724.73	224.69	0.00	724.73
		MIN	-216.58	0.00	-699.94	-216.58	0.00	-699.94	-224.69	0.00	-789.93	-224.69	0.00	-789.93	
		L-PICKUP 3	MAX	-247.03	0.00	-752.27	-247.03	0.00	-752.27	-267.64	0.00	-922.22	-267.64	0.00	-922.22
		MIN	242.48	0.00	772.79	242.48	0.00	772.79	258.41	0.00	838.47	258.41	0.00	838.47	
111	AASHTO Twin	TWIN-PICKUP	MAX	247.03	0.00	794.67	247.03	0.00	794.67	267.64	0.00	871.91	267.64	0.00	871.91
		MIN	-247.03	0.00	-752.27	-247.03	0.00	-752.27	-267.64	0.00	-922.22	-267.64	0.00	-922.22	
		MID-PICKUP	MAX	-247.03	0.00	-752.27	-247.03	0.00	-752.27	-267.64	0.00	-922.22	-267.64	0.00	-922.22
		MIN	247.03	0.00	794.67	247.03	0.00	794.67	267.64	0.00	871.91	267.64	0.00	871.91	
		TWIN-PICKUP	MAX	28.35	0.00	109.84	28.35	0.00	109.84	49.99	0.00	185.59	49.99	0.00	185.59
		MIN	-28.35	0.00	-80.59	-28.35	0.00	-80.59	-49.99	0.00	-130.27	-49.99	0.00	-130.27	
198	AASHTO Fatig	TRUCK-LOAD	MAX	22.21	0.00	81.73	22.21	0.00	81.73	37.88	0.00	138.87	37.88	0.00	138.87
		MIN	-22.21	0.00	-55.51	-22.21	0.00	-55.51	-37.88	0.00	-89.54	-37.88	0.00	-89.54	
		TANDEM-LOAD	MAX	22.21	0.00	81.73	22.21	0.00	81.73	37.88	0.00	138.87	37.88	0.00	138.87
		MIN	-22.21	0.00	-55.51	-22.21	0.00	-55.51	-37.88	0.00	-89.54	-37.88	0.00	-89.54	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002061 2061						1002062 2062					
	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	79.55	0.00	248.87	79.55	0.00	248.87	71.21	0.00	247.35	71.21	0.00	247.35
MIN	-79.55	0.00	-261.05	-79.55	0.00	-261.05	-71.21	0.00	-241.13	-71.21	0.00	-241.13
199 AASHTO-LRFD TRUCK-LOAD MAX	126.86	0.00	433.74	126.86	0.00	433.74	165.11	0.00	547.20	165.11	0.00	547.20
MIN	-126.86	0.00	-352.49	-126.86	0.00	-352.49	-165.11	0.00	-538.66	-165.11	0.00	-538.66
TANDEM-LOAD MAX	68.96	0.00	232.26	68.96	0.00	232.26	92.42	0.00	303.15	92.42	0.00	303.15
MIN	-68.96	0.00	-216.57	-68.96	0.00	-216.57	-92.42	0.00	-303.91	-92.42	0.00	-303.91
DISPERSION-LMAX	147.62	0.00	449.23	147.62	0.00	449.23	132.27	0.00	421.58	132.27	0.00	421.58
MIN	-147.62	0.00	-483.36	-147.62	0.00	-483.36	-132.27	0.00	-486.02	-132.27	0.00	-486.02
300 Total Dead lWithout snow	0.00	0.00	-70.84	0.00	0.00	-70.84	0.00	0.00	-137.38	0.00	0.00	-137.38
301 Particular Snow	0.00	0.00	-11.12	0.00	0.00	-11.12	0.00	0.00	-22.24	0.00	0.00	-22.24
302 Live load Total MAX	157.61	0.00	502.32	157.61	0.00	502.32	167.96	0.00	545.00	167.96	0.00	545.00
MIN	-160.57	0.00	-504.94	-160.57	0.00	-504.94	-173.96	0.00	-599.44	-173.96	0.00	-599.44
303 Sum total D+L+PP MAX	157.61	0.00	491.20	157.61	0.00	491.20	167.96	0.00	522.76	167.96	0.00	522.76
MIN	-160.57	0.00	-586.90	-160.57	0.00	-586.90	-173.96	0.00	-759.06	-173.96	0.00	-759.06

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002063						1002064							
NODE		2063			3063			2064			3064				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-67.37	0.00	0.00	-67.37	0.00	0.00	-84.81	0.00	0.00	-84.81		
3	Railing	0.00	0.00	-18.59	0.00	0.00	-18.59	0.00	0.00	-21.66	0.00	0.00	-21.66		
5	Wheel guard	0.00	0.00	-184.07	0.00	0.00	-184.07	0.00	0.00	-214.46	0.00	0.00	-214.46		
8	Steel weight	0.00	0.00	-50.67	0.00	0.00	-50.67	0.00	0.00	-84.58	0.00	0.00	-84.58		
10	Medial strip	0.00	0.00	89.55	0.00	0.00	89.55	0.00	0.00	100.64	0.00	0.00	100.64		
19	Snow	0.00	0.00	-34.38	0.00	0.00	-34.38	0.00	0.00	-42.83	0.00	0.00	-42.83		
31	Miscellaneous	0.00	0.00	7.24	0.00	0.00	7.24	0.00	0.00	8.13	0.00	0.00	8.13		
100	AASHTO-LRFD TRUCK-LOAD	MAX	134.92	0.00	433.32	134.92	0.00	433.32	140.74	0.00	434.03	140.74	0.00	434.03	
		MIN	-134.92	0.00	-473.48	-134.92	0.00	-473.48	-140.74	0.00	-494.93	-140.74	0.00	-494.93	
		TANDEM-LOAD	MAX	98.62	0.00	319.02	98.62	0.00	319.02	102.59	0.00	318.70	102.59	0.00	318.70
		MIN	-98.62	0.00	-347.20	-98.62	0.00	-347.20	-102.59	0.00	-361.68	-102.59	0.00	-361.68	
		DISPERSION-L	MAX	122.26	0.00	374.94	122.26	0.00	374.94	120.17	0.00	350.65	120.17	0.00	350.65
		MIN	-122.26	0.00	-476.87	-122.26	0.00	-476.87	-120.17	0.00	-480.25	-120.17	0.00	-480.25	
110	Live load	L-PICKUP 1	MAX	257.18	0.00	808.26	257.18	0.00	808.26	260.92	0.00	784.68	260.92	0.00	784.68
		MIN	-257.18	0.00	-950.35	-257.18	0.00	-950.35	-260.92	0.00	-975.18	-260.92	0.00	-975.18	
		L-PICKUP 2	MAX	220.88	0.00	693.96	220.88	0.00	693.96	222.76	0.00	669.35	222.76	0.00	669.35
		MIN	-220.88	0.00	-824.07	-220.88	0.00	-824.07	-222.76	0.00	-841.93	-222.76	0.00	-841.93	
		L-PICKUP 3	MAX	-271.33	0.00	-999.27	-271.33	0.00	-999.27	-276.74	0.00	-1042.67	-276.74	0.00	-1042.67
		MIN	257.18	0.00	808.26	257.18	0.00	808.26	260.92	0.00	784.68	260.92	0.00	784.68	
		Live load	MAX	257.18	0.00	808.26	257.18	0.00	808.26	260.92	0.00	784.68	260.92	0.00	784.68
		MIN	-271.33	0.00	-999.27	-271.33	0.00	-999.27	-276.74	0.00	-1042.67	-276.74	0.00	-1042.67	
111	AASHTO Twin	TWIN-PICKUP	MAX	271.33	0.00	823.45	271.33	0.00	823.45	276.74	0.00	792.74	276.74	0.00	792.74
		MIN	-271.33	0.00	-999.27	-271.33	0.00	-999.27	-276.74	0.00	-1042.67	-276.74	0.00	-1042.67	
		MID-PICKUP	MAX	271.33	0.00	823.45	271.33	0.00	823.45	276.74	0.00	792.74	276.74	0.00	792.74
198	AASHTO Fatig	TRUCK-LOAD	MAX	61.09	0.00	224.42	61.09	0.00	224.42	65.90	0.00	239.10	65.90	0.00	239.10
		MIN	-61.09	0.00	-197.29	-61.09	0.00	-197.29	-65.90	0.00	-231.56	-65.90	0.00	-231.56	
		TANDEM-LOAD	MAX	46.01	0.00	167.51	46.01	0.00	167.51	49.31	0.00	177.64	49.31	0.00	177.64
		MIN	-46.01	0.00	-137.46	-46.01	0.00	-137.46	-49.31	0.00	-161.04	-49.31	0.00	-161.04	
		TANDEM-LOAD	MAX	46.01	0.00	167.51	46.01	0.00	167.51	49.31	0.00	177.64	49.31	0.00	177.64

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002063						1002064					
NODE		2063			3063			2064			3064		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	60.92	0.00	221.70	60.92	0.00	221.70	57.05	0.00	204.14	57.05	0.00	204.14
	MIN	-60.92	0.00	-255.57	-60.92	0.00	-255.57	-57.05	0.00	-272.25	-57.05	0.00	-272.25
199	AASHTO-LRFD TRUCK-LOAD MAX	179.22	0.00	540.01	179.22	0.00	540.01	187.31	0.00	530.18	187.31	0.00	530.18
	MIN	-179.22	0.00	-633.43	-179.22	0.00	-633.43	-187.31	0.00	-678.27	-187.31	0.00	-678.27
	TANDEM-LOAD MAX	98.62	0.00	319.02	98.62	0.00	319.02	102.59	0.00	318.70	102.59	0.00	318.70
	MIN	-98.62	0.00	-347.20	-98.62	0.00	-347.20	-102.59	0.00	-361.68	-102.59	0.00	-361.68
	DISPERSION-LMAX	122.26	0.00	374.94	122.26	0.00	374.94	120.17	0.00	350.65	120.17	0.00	350.65
	MIN	-122.26	0.00	-476.87	-122.26	0.00	-476.87	-120.17	0.00	-480.25	-120.17	0.00	-480.25
300	Total Dead lWithout snow	0.00	0.00	-223.93	0.00	0.00	-223.93	0.00	0.00	-296.73	0.00	0.00	-296.73
301	Particular Snow	0.00	0.00	-34.38	0.00	0.00	-34.38	0.00	0.00	-42.83	0.00	0.00	-42.83
302	Live load Total MAX	167.17	0.00	525.37	167.17	0.00	525.37	169.60	0.00	510.04	169.60	0.00	510.04
	MIN	-176.37	0.00	-649.53	-176.37	0.00	-649.53	-179.88	0.00	-677.73	-179.88	0.00	-677.73
303	Sum total D+L+PP MAX	167.17	0.00	424.67	167.17	0.00	424.67	169.60	0.00	323.49	169.60	0.00	323.49
	MIN	-176.37	0.00	-907.84	-176.37	0.00	-907.84	-179.88	0.00	-1017.30	-179.88	0.00	-1017.30

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002065						1002066							
NODE		2065			3065			2066			3066				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-90.40	0.00	0.00	-90.40	0.00	0.00	-89.20	0.00	0.00	-89.20		
3	Railing	0.00	0.00	-22.89	0.00	0.00	-22.89	0.00	0.00	-23.16	0.00	0.00	-23.16		
5	Wheel guard	0.00	0.00	-226.62	0.00	0.00	-226.62	0.00	0.00	-229.31	0.00	0.00	-229.31		
8	Steel weight	0.00	0.00	-92.54	0.00	0.00	-92.54	0.00	0.00	-84.46	0.00	0.00	-84.46		
10	Medial strip	0.00	0.00	105.89	0.00	0.00	105.89	0.00	0.00	108.47	0.00	0.00	108.47		
19	Snow	0.00	0.00	-45.61	0.00	0.00	-45.61	0.00	0.00	-45.15	0.00	0.00	-45.15		
31	Miscellaneous	0.00	0.00	8.56	0.00	0.00	8.56	0.00	0.00	8.77	0.00	0.00	8.77		
100	AASHTO-LRFD TRUCK-LOAD	MAX	145.30	0.00	435.19	145.30	0.00	435.19	142.97	0.00	437.24	142.97	0.00	437.24	
		MIN	-145.30	0.00	-500.73	-145.30	0.00	-500.73	-142.97	0.00	-492.69	-142.97	0.00	-492.69	
		TANDEM-LOAD	MAX	105.36	0.00	319.31	105.36	0.00	319.31	103.93	0.00	320.17	103.93	0.00	320.17
		MIN	-105.36	0.00	-366.11	-105.36	0.00	-366.11	-103.93	0.00	-359.49	-103.93	0.00	-359.49	
		DISPERSION-L	MAX	124.28	0.00	347.55	124.28	0.00	347.55	120.95	0.00	342.89	120.95	0.00	342.89
		MIN	-124.28	0.00	-485.43	-124.28	0.00	-485.43	-120.95	0.00	-478.76	-120.95	0.00	-478.76	
110	Live load	L-PICKUP 1	MAX	269.57	0.00	782.73	269.57	0.00	782.73	263.91	0.00	780.13	263.91	0.00	780.13
		MIN	-269.57	0.00	-986.16	-269.57	0.00	-986.16	-263.91	0.00	-971.45	-263.91	0.00	-971.45	
		L-PICKUP 2	MAX	229.64	0.00	666.86	229.64	0.00	666.86	224.87	0.00	663.07	224.87	0.00	663.07
		MIN	-229.64	0.00	-851.54	-229.64	0.00	-851.54	-224.87	0.00	-838.25	-224.87	0.00	-838.25	
		L-PICKUP 3	MAX	-288.92	0.00	-1048.43	-288.92	0.00	-1048.43	-282.38	0.00	-1037.72	-282.38	0.00	-1037.72
		MIN	-288.92	0.00	-1048.43	-288.92	0.00	-1048.43	-282.38	0.00	-1037.72	-282.38	0.00	-1037.72	
111	AASHTO Twin	TWIN-PICKUP	MAX	288.92	0.00	800.82	288.92	0.00	800.82	282.38	0.00	791.06	282.38	0.00	791.06
		MIN	-288.92	0.00	-1048.43	-288.92	0.00	-1048.43	-282.38	0.00	-1037.72	-282.38	0.00	-1037.72	
		MID-PICKUP	MAX	-288.92	0.00	-1048.43	-288.92	0.00	-1048.43	-282.38	0.00	-1037.72	-282.38	0.00	-1037.72
198	AASHTO Fatig	TRUCK-LOAD	MAX	68.86	0.00	249.07	68.86	0.00	249.07	68.20	0.00	249.06	68.20	0.00	249.06
		MIN	-68.86	0.00	-251.57	-68.86	0.00	-251.57	-68.20	0.00	-247.18	-68.20	0.00	-247.18	
		TANDEM-LOAD	MAX	51.37	0.00	184.43	51.37	0.00	184.43	50.81	0.00	184.14	50.81	0.00	184.14
		MIN	-51.37	0.00	-174.70	-51.37	0.00	-174.70	-50.81	0.00	-171.27	-50.81	0.00	-171.27	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002065						1002066					
NODE		2065			3065			2066			3066		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	58.06	0.00	196.99	58.06	0.00	196.99	56.53	0.00	193.75	56.53	0.00	193.75
	MIN	-58.06	0.00	-288.04	-58.06	0.00	-288.04	-56.53	0.00	-284.14	-56.53	0.00	-284.14
199	AASHTO-LRFD TRUCK-LOAD MAX	196.74	0.00	542.26	196.74	0.00	542.26	192.81	0.00	536.06	192.81	0.00	536.06
	MIN	-196.74	0.00	-679.49	-196.74	0.00	-679.49	-192.81	0.00	-674.26	-192.81	0.00	-674.26
	TANDEM-LOAD MAX	105.36	0.00	319.31	105.36	0.00	319.31	103.93	0.00	320.17	103.93	0.00	320.17
	MIN	-105.36	0.00	-366.11	-105.36	0.00	-366.11	-103.93	0.00	-359.49	-103.93	0.00	-359.49
	DISPERSION-LMAX	124.28	0.00	347.55	124.28	0.00	347.55	120.95	0.00	342.89	120.95	0.00	342.89
	MIN	-124.28	0.00	-485.43	-124.28	0.00	-485.43	-120.95	0.00	-478.76	-120.95	0.00	-478.76
300	Total Dead lWithout snow	0.00	0.00	-318.00	0.00	0.00	-318.00	0.00	0.00	-308.90	0.00	0.00	-308.90
301	Particular Snow	0.00	0.00	-45.61	0.00	0.00	-45.61	0.00	0.00	-45.15	0.00	0.00	-45.15
302	Live load Total MAX	175.22	0.00	508.78	175.22	0.00	508.78	171.54	0.00	507.09	171.54	0.00	507.09
	MIN	-187.80	0.00	-681.48	-187.80	0.00	-681.48	-183.55	0.00	-674.52	-183.55	0.00	-674.52
303	Sum total D+L+PP MAX	175.22	0.00	297.80	175.22	0.00	297.80	171.54	0.00	305.16	171.54	0.00	305.16
	MIN	-187.80	0.00	-1045.09	-187.80	0.00	-1045.09	-183.55	0.00	-1028.57	-183.55	0.00	-1028.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002067						1002068							
NODE		2067			3067			2068			3068				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-88.68	0.00	0.00	-88.68	0.00	0.00	-88.36	0.00	0.00	-88.36		
3	Railing	0.00	0.00	-22.82	0.00	0.00	-22.82	0.00	0.00	-21.60	0.00	0.00	-21.60		
5	Wheel guard	0.00	0.00	-225.96	0.00	0.00	-225.96	0.00	0.00	-213.88	0.00	0.00	-213.88		
8	Steel weight	0.00	0.00	-86.39	0.00	0.00	-86.39	0.00	0.00	-99.64	0.00	0.00	-99.64		
10	Medial strip	0.00	0.00	106.43	0.00	0.00	106.43	0.00	0.00	98.16	0.00	0.00	98.16		
19	Snow	0.00	0.00	-44.84	0.00	0.00	-44.84	0.00	0.00	-44.38	0.00	0.00	-44.38		
31	Miscellaneous	0.00	0.00	8.60	0.00	0.00	8.60	0.00	0.00	7.93	0.00	0.00	7.93		
100	AASHTO-LRFD TRUCK-LOAD	MAX	136.12	0.00	426.23	136.12	0.00	426.23	133.52	0.00	411.94	133.52	0.00	411.94	
		MIN	-136.12	0.00	-482.20	-136.12	0.00	-482.20	-133.52	0.00	-488.67	-133.52	0.00	-488.67	
		TANDEM-LOAD	MAX	99.41	0.00	313.20	99.41	0.00	313.20	97.56	0.00	303.97	97.56	0.00	303.97
		MIN	-99.41	0.00	-352.65	-99.41	0.00	-352.65	-97.56	0.00	-358.25	-97.56	0.00	-358.25	
		DISPERSION-L	MAX	113.18	0.00	329.84	113.18	0.00	329.84	111.90	0.00	324.13	111.90	0.00	324.13
		MIN	-113.18	0.00	-465.11	-113.18	0.00	-465.11	-111.90	0.00	-459.66	-111.90	0.00	-459.66	
110	Live load	L-PICKUP 1	MAX	249.30	0.00	756.07	249.30	0.00	756.07	245.42	0.00	736.06	245.42	0.00	736.06
		MIN	-249.30	0.00	-947.31	-249.30	0.00	-947.31	-245.42	0.00	-948.33	-245.42	0.00	-948.33	
		L-PICKUP 2	MAX	212.59	0.00	643.04	212.59	0.00	643.04	209.46	0.00	628.10	209.46	0.00	628.10
		MIN	-212.59	0.00	-817.76	-212.59	0.00	-817.76	-209.46	0.00	-817.91	-209.46	0.00	-817.91	
		L-PICKUP 3	MAX	-265.42	0.00	-1008.41	-265.42	0.00	-1008.41	-261.88	0.00	-1004.57	-261.88	0.00	-1004.57
		MIN	249.30	0.00	756.07	249.30	0.00	756.07	245.42	0.00	736.06	245.42	0.00	736.06	
111	AASHTO Twin	TWIN-PICKUP	MAX	265.42	0.00	760.65	265.42	0.00	760.65	261.88	0.00	740.74	261.88	0.00	740.74
		MIN	-265.42	0.00	-1008.41	-265.42	0.00	-1008.41	-261.88	0.00	-1004.57	-261.88	0.00	-1004.57	
		MID-PICKUP	MAX	265.42	0.00	760.65	265.42	0.00	760.65	261.88	0.00	740.74	261.88	0.00	740.74
		MIN	-265.42	0.00	-1008.41	-265.42	0.00	-1008.41	-261.88	0.00	-1004.57	-261.88	0.00	-1004.57	
		MID-PICKUP	MAX	265.42	0.00	760.65	265.42	0.00	760.65	261.88	0.00	740.74	261.88	0.00	740.74
		MIN	-265.42	0.00	-1008.41	-265.42	0.00	-1008.41	-261.88	0.00	-1004.57	-261.88	0.00	-1004.57	
198	AASHTO Fatig	TRUCK-LOAD	MAX	65.86	0.00	243.18	65.86	0.00	243.18	64.19	0.00	234.56	64.19	0.00	234.56
		MIN	-65.86	0.00	-232.62	-65.86	0.00	-232.62	-64.19	0.00	-224.88	-64.19	0.00	-224.88	
		TANDEM-LOAD	MAX	49.19	0.00	180.16	49.19	0.00	180.16	48.10	0.00	174.41	48.10	0.00	174.41
		MIN	-49.19	0.00	-161.31	-49.19	0.00	-161.31	-48.10	0.00	-156.32	-48.10	0.00	-156.32	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002067						1002068					
NODE		2067			3067			2068			3068		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	53.25	0.00	191.36	53.25	0.00	191.36	53.22	0.00	192.58	53.22	0.00	192.58
	MIN	-53.25	0.00	-268.64	-53.25	0.00	-268.64	-53.22	0.00	-258.92	-53.22	0.00	-258.92
199	AASHTO-LRFD TRUCK-LOAD MAX	181.73	0.00	515.33	181.73	0.00	515.33	179.08	0.00	498.92	179.08	0.00	498.92
	MIN	-181.73	0.00	-655.35	-181.73	0.00	-655.35	-179.08	0.00	-656.53	-179.08	0.00	-656.53
	TANDEM-LOAD MAX	99.41	0.00	313.20	99.41	0.00	313.20	97.56	0.00	303.97	97.56	0.00	303.97
	MIN	-99.41	0.00	-352.65	-99.41	0.00	-352.65	-97.56	0.00	-358.25	-97.56	0.00	-358.25
	DISPERSION-LMAX	113.18	0.00	329.84	113.18	0.00	329.84	111.90	0.00	324.13	111.90	0.00	324.13
	MIN	-113.18	0.00	-465.11	-113.18	0.00	-465.11	-111.90	0.00	-459.66	-111.90	0.00	-459.66
300	Total Dead lWithout snow	0.00	0.00	-308.82	0.00	0.00	-308.82	0.00	0.00	-317.38	0.00	0.00	-317.38
301	Particular Snow	0.00	0.00	-44.84	0.00	0.00	-44.84	0.00	0.00	-44.38	0.00	0.00	-44.38
302	Live load Total MAX	162.05	0.00	491.44	162.05	0.00	491.44	159.52	0.00	478.44	159.52	0.00	478.44
	MIN	-172.52	0.00	-655.47	-172.52	0.00	-655.47	-170.22	0.00	-652.97	-170.22	0.00	-652.97
303	Sum total D+L+PP MAX	162.05	0.00	285.22	162.05	0.00	285.22	159.52	0.00	260.21	159.52	0.00	260.21
	MIN	-172.52	0.00	-1009.12	-172.52	0.00	-1009.12	-170.22	0.00	-1014.74	-170.22	0.00	-1014.74

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002069						1002070						
		2069			3069			2070			3070			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	0.00	0.00	-67.74	0.00	0.00	-67.74	0.00	0.00	-33.09	0.00	0.00	-33.09	
3	Railing	0.00	0.00	-18.24	0.00	0.00	-18.24	0.00	0.00	-11.83	0.00	0.00	-11.83	
5	Wheel guard	0.00	0.00	-180.58	0.00	0.00	-180.58	0.00	0.00	-117.12	0.00	0.00	-117.12	
8	Steel weight	0.00	0.00	-56.36	0.00	0.00	-56.36	0.00	0.00	7.35	0.00	0.00	7.35	
10	Medial strip	0.00	0.00	86.89	0.00	0.00	86.89	0.00	0.00	62.68	0.00	0.00	62.68	
19	Snow	0.00	0.00	-34.46	0.00	0.00	-34.46	0.00	0.00	-17.58	0.00	0.00	-17.58	
31	Miscellaneous	0.00	0.00	7.02	0.00	0.00	7.02	0.00	0.00	5.07	0.00	0.00	5.07	
100	AASHTO-LRFD TRUCK-LOAD	MAX	134.90	0.00	417.53	134.90	0.00	417.53	136.24	0.00	418.07	136.24	0.00	418.07
		MIN	-134.90	0.00	-486.04	-134.90	0.00	-486.04	-136.24	0.00	-437.74	-136.24	0.00	-437.74
	TANDEM-LOAD	MAX	98.51	0.00	306.94	98.51	0.00	306.94	98.89	0.00	302.21	98.89	0.00	302.21
		MIN	-98.51	0.00	-355.92	-98.51	0.00	-355.92	-98.89	0.00	-316.84	-98.89	0.00	-316.84
	DISPERSION-LMAX	MAX	118.30	0.00	360.02	118.30	0.00	360.02	131.61	0.00	418.75	131.61	0.00	418.75
		MIN	-118.30	0.00	-463.06	-118.30	0.00	-463.06	-131.61	0.00	-466.56	-131.61	0.00	-466.56
110	Live load L-PICKUP 1	MAX	253.20	0.00	777.55	253.20	0.00	777.55	267.85	0.00	836.83	267.85	0.00	836.83
		MIN	-253.20	0.00	-949.10	-253.20	0.00	-949.10	-267.85	0.00	-904.30	-267.85	0.00	-904.30
	L-PICKUP 2	MAX	216.81	0.00	666.96	216.81	0.00	666.96	230.50	0.00	720.96	230.50	0.00	720.96
		MIN	-216.81	0.00	-818.98	-216.81	0.00	-818.98	-230.50	0.00	-783.40	-230.50	0.00	-783.40
	L-PICKUP 3	MAX	-268.40	0.00	-996.48	-268.40	0.00	-996.48	-282.71	0.00	-947.21	-282.71	0.00	-947.21
		MIN	268.40	0.00	996.48	268.40	0.00	996.48	282.71	0.00	947.21	282.71	0.00	947.21
	Live load	MAX	253.20	0.00	777.55	253.20	0.00	777.55	267.85	0.00	836.83	267.85	0.00	836.83
		MIN	-268.40	0.00	-996.48	-268.40	0.00	-996.48	-282.71	0.00	-947.21	-282.71	0.00	-947.21
111	AASHTO Twin TWIN-PICKUP	MAX	268.40	0.00	795.60	268.40	0.00	795.60	282.71	0.00	887.44	282.71	0.00	887.44
		MIN	-268.40	0.00	-996.48	-268.40	0.00	-996.48	-282.71	0.00	-947.21	-282.71	0.00	-947.21
	MID-PICKUP	MAX	268.40	0.00	795.60	268.40	0.00	795.60	282.71	0.00	887.44	282.71	0.00	887.44
198	AASHTO FatigTRUCK-LOAD	MAX	60.56	0.00	217.70	60.56	0.00	217.70	50.90	0.00	181.50	50.90	0.00	181.50
		MIN	-60.56	0.00	-200.53	-60.56	0.00	-200.53	-50.90	0.00	-143.36	-50.90	0.00	-143.36
	TANDEM-LOAD	MAX	45.50	0.00	162.42	45.50	0.00	162.42	38.27	0.00	135.44	38.27	0.00	135.44
		MIN	-45.50	0.00	-139.47	-45.50	0.00	-139.47	-38.27	0.00	-98.40	-38.27	0.00	-98.40

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002069						1002070					
NODE		2069			3069			2070			3070		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	58.75	0.00	213.88	58.75	0.00	213.88	69.73	0.00	242.62	69.73	0.00	242.62
	MIN	-58.75	0.00	-247.15	-58.75	0.00	-247.15	-69.73	0.00	-233.56	-69.73	0.00	-233.56
199	AASHTO-LRFD TRUCK-LOAD MAX	179.92	0.00	523.98	179.92	0.00	523.98	182.51	0.00	567.29	182.51	0.00	567.29
	MIN	-179.92	0.00	-644.14	-179.92	0.00	-644.14	-182.51	0.00	-585.89	-182.51	0.00	-585.89
	TANDEM-LOAD MAX	98.51	0.00	306.94	98.51	0.00	306.94	98.89	0.00	302.21	98.89	0.00	302.21
	MIN	-98.51	0.00	-355.92	-98.51	0.00	-355.92	-98.89	0.00	-316.84	-98.89	0.00	-316.84
	DISPERSION-LMAX	118.30	0.00	360.02	118.30	0.00	360.02	131.61	0.00	418.75	131.61	0.00	418.75
	MIN	-118.30	0.00	-463.06	-118.30	0.00	-463.06	-131.61	0.00	-466.56	-131.61	0.00	-466.56
300	Total Dead lWithout snow	0.00	0.00	-229.01	0.00	0.00	-229.01	0.00	0.00	-86.94	0.00	0.00	-86.94
301	Particular Snow	0.00	0.00	-34.46	0.00	0.00	-34.46	0.00	0.00	-17.58	0.00	0.00	-17.58
302	Live load Total	164.58	0.00	505.41	164.58	0.00	505.41	174.10	0.00	543.94	174.10	0.00	543.94
	MIN	-174.46	0.00	-647.71	-174.46	0.00	-647.71	-183.76	0.00	-615.69	-183.76	0.00	-615.69
303	Sum total D+L+PP	164.58	0.00	393.56	164.58	0.00	393.56	174.10	0.00	526.36	174.10	0.00	526.36
	MIN	-174.46	0.00	-911.18	-174.46	0.00	-911.18	-183.76	0.00	-720.21	-183.76	0.00	-720.21

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002071						1002072						
		2071			3071			2072			3072			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	0.00	0.00	-16.21	0.00	0.00	-16.21	0.00	0.00	-7.07	0.00	0.00	-7.07	
3	Railing	0.00	0.00	-5.88	0.00	0.00	-5.88	0.00	0.00	-2.42	0.00	0.00	-2.42	
5	Wheel guard	0.00	0.00	-58.24	0.00	0.00	-58.24	0.00	0.00	-23.99	0.00	0.00	-23.99	
8	Steel weight	0.00	0.00	4.64	0.00	0.00	4.64	0.00	0.00	0.33	0.00	0.00	0.33	
10	Medial strip	0.00	0.00	31.32	0.00	0.00	31.32	0.00	0.00	12.67	0.00	0.00	12.67	
19	Snow	0.00	0.00	-8.64	0.00	0.00	-8.64	0.00	0.00	-3.73	0.00	0.00	-3.73	
31	Miscellaneous	0.00	0.00	2.53	0.00	0.00	2.53	0.00	0.00	1.02	0.00	0.00	1.02	
100	AASHTO-LRFD TRUCK-LOAD	MAX	101.58	0.00	334.42	101.58	0.00	334.42	57.94	0.00	174.65	57.94	0.00	174.65
		MIN	-101.58	0.00	-317.71	-101.58	0.00	-317.71	-57.94	0.00	-174.75	-57.94	0.00	-174.75
	TANDEM-LOAD	MAX	72.96	0.00	237.32	72.96	0.00	237.32	39.63	0.00	119.36	39.63	0.00	119.36
		MIN	-72.96	0.00	-232.43	-72.96	0.00	-232.43	-39.63	0.00	-120.16	-39.63	0.00	-120.16
	DISPERSION-LMAX	MAX	150.51	0.00	463.01	150.51	0.00	463.01	169.88	0.00	503.66	169.88	0.00	503.66
		MIN	-150.51	0.00	-488.14	-150.51	0.00	-488.14	-169.88	0.00	-515.85	-169.88	0.00	-515.85
110	Live load L-PICKUP 1	MAX	252.09	0.00	797.43	252.09	0.00	797.43	227.82	0.00	678.31	227.82	0.00	678.31
		MIN	-252.09	0.00	-805.85	-252.09	0.00	-805.85	-227.82	0.00	-690.60	-227.82	0.00	-690.60
	L-PICKUP 2	MAX	223.47	0.00	700.32	223.47	0.00	700.32	209.51	0.00	623.01	209.51	0.00	623.01
		MIN	-223.47	0.00	-720.57	-223.47	0.00	-720.57	-209.51	0.00	-636.01	-209.51	0.00	-636.01
	L-PICKUP 3	MAX	-261.20	0.00	-791.00	-261.20	0.00	-791.00	-245.63	0.00	-743.67	-245.63	0.00	-743.67
		MIN	252.09	0.00	797.43	252.09	0.00	797.43	227.82	0.00	678.31	227.82	0.00	678.31
	Live load	MAX	252.09	0.00	797.43	252.09	0.00	797.43	227.82	0.00	678.31	227.82	0.00	678.31
		MIN	-261.20	0.00	-805.85	-261.20	0.00	-805.85	-245.63	0.00	-743.67	-245.63	0.00	-743.67
111	AASHTO Twin TWIN-PICKUP	MAX	261.20	0.00	835.65	261.20	0.00	835.65	245.63	0.00	731.68	245.63	0.00	731.68
		MIN	-261.20	0.00	-791.00	-261.20	0.00	-791.00	-245.63	0.00	-743.67	-245.63	0.00	-743.67
	MID-PICKUP	MAX	261.20	0.00	835.65	261.20	0.00	835.65	245.63	0.00	731.68	245.63	0.00	731.68
198	AASHTO FatigTRUCK-LOAD	MAX	31.44	0.00	104.65	31.44	0.00	104.65	29.06	0.00	82.30	29.06	0.00	82.30
		MIN	-31.44	0.00	-91.53	-31.44	0.00	-91.53	-29.06	0.00	-92.43	-29.06	0.00	-92.43
	TANDEM-LOAD	MAX	21.63	0.00	77.10	21.63	0.00	77.10	19.81	0.00	55.84	19.81	0.00	55.84
		MIN	-21.63	0.00	-62.63	-21.63	0.00	-62.63	-19.81	0.00	-63.54	-19.81	0.00	-63.54

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1002071 2071			3071			1002072 2072			3072		
	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	80.83	0.00	253.72	80.83	0.00	253.72	90.32	0.00	257.27	90.32	0.00	257.27
MIN	-80.83	0.00	-260.75	-80.83	0.00	-260.75	-90.32	0.00	-285.61	-90.32	0.00	-285.61
199 AASHTO-LRFD TRUCK-LOAD MAX	139.72	0.00	465.50	139.72	0.00	465.50	103.04	0.00	309.33	103.04	0.00	309.33
MIN	-139.72	0.00	-390.75	-139.72	0.00	-390.75	-103.04	0.00	-310.44	-103.04	0.00	-310.44
TANDEM-LOAD MAX	72.96	0.00	237.32	72.96	0.00	237.32	39.63	0.00	119.36	39.63	0.00	119.36
MIN	-72.96	0.00	-232.43	-72.96	0.00	-232.43	-39.63	0.00	-120.16	-39.63	0.00	-120.16
DISPERSION-LMAX	150.51	0.00	463.01	150.51	0.00	463.01	169.88	0.00	503.66	169.88	0.00	503.66
MIN	-150.51	0.00	-488.14	-150.51	0.00	-488.14	-169.88	0.00	-515.85	-169.88	0.00	-515.85
300 Total Dead lWithout snow	0.00	0.00	-41.86	0.00	0.00	-41.86	0.00	0.00	-19.46	0.00	0.00	-19.46
301 Particular Snow	0.00	0.00	-8.64	0.00	0.00	-8.64	0.00	0.00	-3.73	0.00	0.00	-3.73
302 Live load Total MAX	163.86	0.00	518.33	163.86	0.00	518.33	148.08	0.00	440.90	148.08	0.00	440.90
MIN	-169.78	0.00	-523.80	-169.78	0.00	-523.80	-159.66	0.00	-483.38	-159.66	0.00	-483.38
303 Sum total D+L+PP MAX	163.86	0.00	509.69	163.86	0.00	509.69	148.08	0.00	437.17	148.08	0.00	437.17
MIN	-169.78	0.00	-574.29	-169.78	0.00	-574.29	-159.66	0.00	-506.58	-159.66	0.00	-506.58

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002073						1002074						
NODE		2073			3073			2074			3074			
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	0.00	0.00	-24.04	0.00	0.00	-24.04	0.00	0.00	-58.99	0.00	0.00	-58.99	
3	Railing	0.00	0.00	-7.56	0.00	0.00	-7.56	0.00	0.00	-15.30	0.00	0.00	-15.30	
5	Wheel guard	0.00	0.00	-74.84	0.00	0.00	-74.84	0.00	0.00	-151.43	0.00	0.00	-151.43	
8	Steel weight	0.00	0.00	-7.05	0.00	0.00	-7.05	0.00	0.00	-56.09	0.00	0.00	-56.09	
10	Medial strip	0.00	0.00	38.36	0.00	0.00	38.36	0.00	0.00	71.58	0.00	0.00	71.58	
19	Snow	0.00	0.00	-12.51	0.00	0.00	-12.51	0.00	0.00	-29.85	0.00	0.00	-29.85	
31	Miscellaneous	0.00	0.00	3.10	0.00	0.00	3.10	0.00	0.00	5.78	0.00	0.00	5.78	
100	AASHTO-LRFD TRUCK-LOAD	MAX	126.25	0.00	411.86	126.25	0.00	411.86	142.68	0.00	438.16	142.68	0.00	438.16
		MIN	-126.25	0.00	-405.01	-126.25	0.00	-405.01	-142.68	0.00	-476.29	-142.68	0.00	-476.29
	TANDEM-LOAD	MAX	91.87	0.00	295.54	91.87	0.00	295.54	104.01	0.00	318.90	104.01	0.00	318.90
		MIN	-91.87	0.00	-293.75	-91.87	0.00	-293.75	-104.01	0.00	-345.53	-104.01	0.00	-345.53
	DISPERSION-LMAX	MAX	166.62	0.00	517.95	166.62	0.00	517.95	136.79	0.00	422.49	136.79	0.00	422.49
		MIN	-166.62	0.00	-554.74	-166.62	0.00	-554.74	-136.79	0.00	-511.74	-136.79	0.00	-511.74
110	Live load L-PICKUP 1	MAX	292.87	0.00	929.80	292.87	0.00	929.80	279.47	0.00	860.65	279.47	0.00	860.65
		MIN	-292.87	0.00	-959.75	-292.87	0.00	-959.75	-279.47	0.00	-988.03	-279.47	0.00	-988.03
	L-PICKUP 2	MAX	258.49	0.00	813.48	258.49	0.00	813.48	240.80	0.00	741.39	240.80	0.00	741.39
		MIN	-258.49	0.00	-848.49	-258.49	0.00	-848.49	-240.80	0.00	-857.27	-240.80	0.00	-857.27
	L-PICKUP 3	MAX	-305.17	0.00	-963.95	-305.17	0.00	-963.95	-295.77	0.00	-1029.35	-295.77	0.00	-1029.35
		MIN	292.87	0.00	929.80	292.87	0.00	929.80	279.47	0.00	860.65	279.47	0.00	860.65
	Live load	MAX	292.87	0.00	929.80	292.87	0.00	929.80	279.47	0.00	860.65	279.47	0.00	860.65
		MIN	-305.17	0.00	-963.95	-305.17	0.00	-963.95	-295.77	0.00	-1029.35	-295.77	0.00	-1029.35
111	AASHTO Twin TWIN-PICKUP	MAX	305.17	0.00	984.72	305.17	0.00	984.72	295.77	0.00	901.83	295.77	0.00	901.83
		MIN	-305.17	0.00	-963.95	-305.17	0.00	-963.95	-295.77	0.00	-1029.35	-295.77	0.00	-1029.35
	MID-PICKUP	MAX	-305.17	0.00	-963.95	-305.17	0.00	-963.95	-295.77	0.00	-1029.35	-295.77	0.00	-1029.35
198	AASHTO FatigTRUCK-LOAD	MAX	38.89	0.00	138.12	38.89	0.00	138.12	57.45	0.00	205.05	57.45	0.00	205.05
		MIN	-38.89	0.00	-102.45	-38.89	0.00	-102.45	-57.45	0.00	-172.56	-57.45	0.00	-172.56
	TANDEM-LOAD	MAX	29.90	0.00	103.61	29.90	0.00	103.61	43.17	0.00	153.06	43.17	0.00	153.06
		MIN	-29.90	0.00	-75.82	-29.90	0.00	-75.82	-43.17	0.00	-117.96	-43.17	0.00	-117.96

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002073			3073			1002074			3074		
NODE		2073			2074			2074			3074		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	90.28	0.00	289.36	90.28	0.00	289.36	71.23	0.00	248.53	71.23	0.00	248.53
	MIN	-90.28	0.00	-285.84	-90.28	0.00	-285.84	-71.23	0.00	-258.34	-71.23	0.00	-258.34
199	AASHTO-LRFD TRUCK-LOAD MAX	172.46	0.00	576.19	172.46	0.00	576.19	191.84	0.00	579.55	191.84	0.00	579.55
	MIN	-172.46	0.00	-516.32	-172.46	0.00	-516.32	-191.84	0.00	-631.98	-191.84	0.00	-631.98
	TANDEM-LOAD MAX	91.87	0.00	295.54	91.87	0.00	295.54	104.01	0.00	318.90	104.01	0.00	318.90
	MIN	-91.87	0.00	-293.75	-91.87	0.00	-293.75	-104.01	0.00	-345.53	-104.01	0.00	-345.53
	DISPERSION-LMAX	166.62	0.00	517.95	166.62	0.00	517.95	136.79	0.00	422.49	136.79	0.00	422.49
	MIN	-166.62	0.00	-554.74	-166.62	0.00	-554.74	-136.79	0.00	-511.74	-136.79	0.00	-511.74
300	Total Dead lWithout snow	0.00	0.00	-72.03	0.00	0.00	-72.03	0.00	0.00	-204.44	0.00	0.00	-204.44
301	Particular Snow	0.00	0.00	-12.51	0.00	0.00	-12.51	0.00	0.00	-29.85	0.00	0.00	-29.85
302	Live load Total MAX	190.37	0.00	604.37	190.37	0.00	604.37	181.66	0.00	559.42	181.66	0.00	559.42
	MIN	-198.36	0.00	-626.57	-198.36	0.00	-626.57	-192.25	0.00	-669.07	-192.25	0.00	-669.07
303	Sum total D+L+PP MAX	190.37	0.00	591.86	190.37	0.00	591.86	181.66	0.00	492.96	181.66	0.00	492.96
	MIN	-198.36	0.00	-711.11	-198.36	0.00	-711.11	-192.25	0.00	-903.36	-192.25	0.00	-903.36

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002075						1002076							
NODE		2075			3075			2076			3076				
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	0.00	0.00	-95.00	0.00	0.00	-95.00	0.00	0.00	-97.25	0.00	0.00	-97.25		
3	Railing	0.00	0.00	-20.52	0.00	0.00	-20.52	0.00	0.00	-22.47	0.00	0.00	-22.47		
5	Wheel guard	0.00	0.00	-203.11	0.00	0.00	-203.11	0.00	0.00	-222.46	0.00	0.00	-222.46		
8	Steel weight	0.00	0.00	-139.51	0.00	0.00	-139.51	0.00	0.00	-125.29	0.00	0.00	-125.29		
10	Medial strip	0.00	0.00	86.74	0.00	0.00	86.74	0.00	0.00	98.98	0.00	0.00	98.98		
19	Snow	0.00	0.00	-47.02	0.00	0.00	-47.02	0.00	0.00	-48.51	0.00	0.00	-48.51		
31	Miscellaneous	0.00	0.00	7.01	0.00	0.00	7.01	0.00	0.00	8.00	0.00	0.00	8.00		
100	AASHTO-LRFD TRUCK-LOAD	MAX	134.66	0.00	409.10	134.66	0.00	409.10	134.01	0.00	410.41	134.01	0.00	410.41	
		MIN	-134.66	0.00	-496.97	-134.66	0.00	-496.97	-134.01	0.00	-485.06	-134.01	0.00	-485.06	
		TANDEM-LOAD	MAX	98.33	0.00	301.51	98.33	0.00	301.51	97.81	0.00	302.49	97.81	0.00	302.49
		MIN	-98.33	0.00	-363.12	-98.33	0.00	-363.12	-97.81	0.00	-354.58	-97.81	0.00	-354.58	
		DISPERSION-L	MAX	116.50	0.00	336.32	116.50	0.00	336.32	113.31	0.00	318.12	113.31	0.00	318.12
		MIN	-116.50	0.00	-483.79	-116.50	0.00	-483.79	-113.31	0.00	-468.09	-113.31	0.00	-468.09	
110	Live load	L-PICKUP 1	MAX	251.16	0.00	745.41	251.16	0.00	745.41	247.32	0.00	728.53	247.32	0.00	728.53
		MIN	-251.16	0.00	-980.76	-251.16	0.00	-980.76	-247.32	0.00	-953.14	-247.32	0.00	-953.14	
		L-PICKUP 2	MAX	214.83	0.00	637.82	214.83	0.00	637.82	211.12	0.00	620.61	211.12	0.00	620.61
		MIN	-214.83	0.00	-846.91	-214.83	0.00	-846.91	-211.12	0.00	-822.67	-211.12	0.00	-822.67	
		L-PICKUP 3	MAX	-268.31	0.00	-1041.32	-268.31	0.00	-1041.32	-265.09	0.00	-1016.98	-265.09	0.00	-1016.98
		MIN	251.16	0.00	745.41	251.16	0.00	745.41	247.32	0.00	728.53	247.32	0.00	728.53	
		Live load	MAX	251.16	0.00	745.41	251.16	0.00	745.41	247.32	0.00	728.53	247.32	0.00	728.53
		MIN	-268.31	0.00	-1041.32	-268.31	0.00	-1041.32	-265.09	0.00	-1016.98	-265.09	0.00	-1016.98	
111	AASHTO Twin	TWIN-PICKUP	MAX	268.31	0.00	753.37	268.31	0.00	753.37	265.09	0.00	734.10	265.09	0.00	734.10
		MIN	-268.31	0.00	-1041.32	-268.31	0.00	-1041.32	-265.09	0.00	-1016.98	-265.09	0.00	-1016.98	
		MID-PICKUP	MAX	268.31	0.00	753.37	268.31	0.00	753.37	265.09	0.00	734.10	265.09	0.00	734.10
198	AASHTO Fatig	TRUCK-LOAD	MAX	62.46	0.00	224.15	62.46	0.00	224.15	64.81	0.00	237.92	64.81	0.00	237.92
		MIN	-62.46	0.00	-216.10	-62.46	0.00	-216.10	-64.81	0.00	-229.01	-64.81	0.00	-229.01	
		TANDEM-LOAD	MAX	46.81	0.00	166.96	46.81	0.00	166.96	48.41	0.00	176.40	48.41	0.00	176.40
		MIN	-46.81	0.00	-150.08	-46.81	0.00	-150.08	-48.41	0.00	-158.78	-48.41	0.00	-158.78	
		TANDEM-LOAD	MAX	46.81	0.00	166.96	46.81	0.00	166.96	48.41	0.00	176.40	48.41	0.00	176.40

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002075						1002076					
NODE		2075			3075			2076			3076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	56.54	0.00	201.66	56.54	0.00	201.66	53.67	0.00	188.50	53.67	0.00	188.50
	MIN	-56.54	0.00	-260.46	-56.54	0.00	-260.46	-53.67	0.00	-267.71	-53.67	0.00	-267.71
199	AASHTO-LRFD TRUCK-LOAD MAX	181.63	0.00	500.76	181.63	0.00	500.76	181.23	0.00	497.54	181.23	0.00	497.54
	MIN	-181.63	0.00	-673.23	-181.63	0.00	-673.23	-181.23	0.00	-661.89	-181.23	0.00	-661.89
	TANDEM-LOAD MAX	98.33	0.00	301.51	98.33	0.00	301.51	97.81	0.00	302.49	97.81	0.00	302.49
	MIN	-98.33	0.00	-363.12	-98.33	0.00	-363.12	-97.81	0.00	-354.58	-97.81	0.00	-354.58
	DISPERSION-LMAX	116.50	0.00	336.32	116.50	0.00	336.32	113.31	0.00	318.12	113.31	0.00	318.12
	MIN	-116.50	0.00	-483.79	-116.50	0.00	-483.79	-113.31	0.00	-468.09	-113.31	0.00	-468.09
300	Total Dead lWithout snow	0.00	0.00	-364.39	0.00	0.00	-364.39	0.00	0.00	-360.49	0.00	0.00	-360.49
301	Particular Snow	0.00	0.00	-47.02	0.00	0.00	-47.02	0.00	0.00	-48.51	0.00	0.00	-48.51
302	Live load Total	163.25	0.00	484.52	163.25	0.00	484.52	160.76	0.00	473.55	160.76	0.00	473.55
	MIN	-174.40	0.00	-676.86	-174.40	0.00	-676.86	-172.31	0.00	-661.03	-172.31	0.00	-661.03
303	Sum total D+L+PP	163.25	0.00	218.47	163.25	0.00	218.47	160.76	0.00	206.61	160.76	0.00	206.61
	MIN	-174.40	0.00	-1088.26	-174.40	0.00	-1088.26	-172.31	0.00	-1070.04	-172.31	0.00	-1070.04

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002077 2077						1002078 2078						
		SHEAR		TORQUE		MOMENT		SHEAR		TORQUE		MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	
1	Pavement	0.00	0.00	-78.10	0.00	0.00	-78.10	0.00	0.00	-62.72	0.00	0.00	-62.72	
3	Railing	0.00	0.00	-22.60	0.00	0.00	-22.60	0.00	0.00	-22.09	0.00	0.00	-22.09	
5	Wheel guard	0.00	0.00	-223.73	0.00	0.00	-223.73	0.00	0.00	-218.74	0.00	0.00	-218.74	
8	Steel weight	0.00	0.00	-46.26	0.00	0.00	-46.26	0.00	0.00	9.99	0.00	0.00	9.99	
10	Medial strip	0.00	0.00	111.05	0.00	0.00	111.05	0.00	0.00	116.54	0.00	0.00	116.54	
19	Snow	0.00	0.00	-40.13	0.00	0.00	-40.13	0.00	0.00	-33.24	0.00	0.00	-33.24	
31	Miscellaneous	0.00	0.00	8.97	0.00	0.00	8.97	0.00	0.00	9.42	0.00	0.00	9.42	
100	AASHTO-LRFD TRUCK-LOAD	MAX	134.17	0.00	425.77	134.17	0.00	425.77	135.10	0.00	438.79	135.10	0.00	438.79
		MIN	-134.17	0.00	-465.19	-134.17	0.00	-465.19	-135.10	0.00	-454.17	-135.10	0.00	-454.17
	TANDEM-LOAD	MAX	97.74	0.00	312.65	97.74	0.00	312.65	98.31	0.00	321.27	98.31	0.00	321.27
		MIN	-97.74	0.00	-340.04	-97.74	0.00	-340.04	-98.31	0.00	-332.15	-98.31	0.00	-332.15
	DISPERSION-LMAX	MAX	116.25	0.00	346.66	116.25	0.00	346.66	117.59	0.00	364.21	117.59	0.00	364.21
		MIN	-116.25	0.00	-464.43	-116.25	0.00	-464.43	-117.59	0.00	-456.38	-117.59	0.00	-456.38
110	Live load L-PICKUP 1	MAX	250.42	0.00	772.43	250.42	0.00	772.43	252.69	0.00	803.00	252.69	0.00	803.00
		MIN	-250.42	0.00	-929.62	-250.42	0.00	-929.62	-252.69	0.00	-910.55	-252.69	0.00	-910.55
	L-PICKUP 2	MAX	213.99	0.00	659.31	213.99	0.00	659.31	215.90	0.00	685.48	215.90	0.00	685.48
		MIN	-213.99	0.00	-804.47	-213.99	0.00	-804.47	-215.90	0.00	-788.53	-215.90	0.00	-788.53
	L-PICKUP 3	MAX	-269.69	0.00	-987.57	-269.69	0.00	-987.57	-272.60	0.00	-967.28	-272.60	0.00	-967.28
		MIN	250.42	0.00	772.43	250.42	0.00	772.43	252.69	0.00	803.00	252.69	0.00	803.00
	Live load	MAX	250.42	0.00	772.43	250.42	0.00	772.43	252.69	0.00	803.00	252.69	0.00	803.00
		MIN	-269.69	0.00	-987.57	-269.69	0.00	-987.57	-272.60	0.00	-967.28	-272.60	0.00	-967.28
111	AASHTO Twin TWIN-PICKUP	MAX	269.69	0.00	782.68	269.69	0.00	782.68	272.60	0.00	825.06	272.60	0.00	825.06
		MIN	-269.69	0.00	-987.57	-269.69	0.00	-987.57	-272.60	0.00	-967.28	-272.60	0.00	-967.28
	MID-PICKUP	-269.69	0.00	-987.57	-269.69	0.00	-987.57	-272.60	0.00	-967.28	-272.60	0.00	-967.28	
198	AASHTO FatigTRUCK-LOAD	MAX	65.57	0.00	245.99	65.57	0.00	245.99	65.98	0.00	249.79	65.98	0.00	249.79
		MIN	-65.57	0.00	-230.00	-65.57	0.00	-230.00	-65.98	0.00	-230.21	-65.98	0.00	-230.21
	TANDEM-LOAD	MAX	48.86	0.00	181.71	48.86	0.00	181.71	49.10	0.00	184.21	49.10	0.00	184.21
		MIN	-48.86	0.00	-159.09	-48.86	0.00	-159.09	-49.10	0.00	-159.12	-49.10	0.00	-159.12

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002077			1002078		
NODE		2077			2078		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.78	0.00	193.88	54.78	0.00	193.88
	MIN	-54.78	0.00	-272.21	-54.78	0.00	-272.21
199	AASHTO-LRFD TRUCK-LOAD MAX	183.41	0.00	522.98	183.41	0.00	522.98
	MIN	-183.41	0.00	-632.87	-183.41	0.00	-632.87
	TANDEM-LOAD MAX	97.74	0.00	312.65	97.74	0.00	312.65
	MIN	-97.74	0.00	-340.04	-97.74	0.00	-340.04
	DISPERSION-LMAX	116.25	0.00	346.66	116.25	0.00	346.66
	MIN	-116.25	0.00	-464.43	-116.25	0.00	-464.43
300	Total Dead lWithout snow	0.00	0.00	-250.67	0.00	0.00	-250.67
301	Particular Snow	0.00	0.00	-40.13	0.00	0.00	-40.13
302	Live load Total MAX	162.77	0.00	502.08	162.77	0.00	502.08
	MIN	-175.30	0.00	-641.92	-175.30	0.00	-641.92
303	Sum total D+L+PP MAX	162.77	0.00	361.91	162.77	0.00	361.91
	MIN	-175.30	0.00	-932.72	-175.30	0.00	-932.72

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002079						1002080									
NODE		2079			3079			2080			3080						
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT				
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)				
1	Pavement	0.00	0.00	-55.34	0.00	0.00	-55.34	0.00	0.00	-67.43	0.00	0.00	-67.43				
3	Railing	0.00	0.00	-21.09	0.00	0.00	-21.09	0.00	0.00	-19.44	0.00	0.00	-19.44				
5	Wheel guard	0.00	0.00	-208.75	0.00	0.00	-208.75	0.00	0.00	-192.49	0.00	0.00	-192.49				
8	Steel weight	0.00	0.00	27.80	0.00	0.00	27.80	0.00	0.00	-40.75	0.00	0.00	-40.75				
10	Medial strip	0.00	0.00	113.85	0.00	0.00	113.85	0.00	0.00	95.41	0.00	0.00	95.41				
19	Snow	0.00	0.00	-29.74	0.00	0.00	-29.74	0.00	0.00	-34.63	0.00	0.00	-34.63				
31	Miscellaneous	0.00	0.00	9.20	0.00	0.00	9.20	0.00	0.00	7.71	0.00	0.00	7.71				
100	AASHTO-LRFD TRUCK-LOAD	MAX	136.79	0.00	445.58	136.79	0.00	445.58	135.09	0.00	420.88	135.09	0.00	420.88			
		MIN	-136.79	0.00	-452.48	-136.79	0.00	-452.48	-135.09	0.00	-465.99	-135.09	0.00	-465.99			
		TANDEM-LOAD	MAX	99.49	0.00	325.77	99.49	0.00	325.77	98.51	0.00	309.37	98.51	0.00	309.37		
		MIN	-99.49	0.00	-331.06	-99.49	0.00	-331.06	-98.51	0.00	-341.02	-98.51	0.00	-341.02			
		DISPERSION-L	MAX	116.86	0.00	360.42	116.86	0.00	360.42	105.43	0.00	304.69	105.43	0.00	304.69		
		MIN	-116.86	0.00	-440.73	-116.86	0.00	-440.73	-105.43	0.00	-405.34	-105.43	0.00	-405.34			
110	Live load	L-PICKUP 1	MAX	253.65	0.00	806.00	253.65	0.00	806.00	240.52	0.00	725.58	240.52	0.00	725.58		
		MIN	-253.65	0.00	-893.20	-253.65	0.00	-893.20	-240.52	0.00	-871.32	-240.52	0.00	-871.32			
		L-PICKUP 2	MAX	216.34	0.00	686.19	216.34	0.00	686.19	203.94	0.00	614.06	203.94	0.00	614.06		
		MIN	-216.34	0.00	-771.79	-216.34	0.00	-771.79	-203.94	0.00	-746.36	-203.94	0.00	-746.36			
		L-PICKUP 3	MAX	-274.13	0.00	-952.64	-274.13	0.00	-952.64	-257.42	0.00	-938.93	-257.42	0.00	-938.93		
		MIN	-274.13	0.00	-952.64	-274.13	0.00	-952.64	-257.42	0.00	-938.93	-257.42	0.00	-938.93			
111	AASHTO Twin	TWIN-PICKUP	MAX	274.13	0.00	833.82	274.13	0.00	833.82	257.42	0.00	741.83	257.42	0.00	741.83		
		MIN	-274.13	0.00	-952.64	-274.13	0.00	-952.64	-257.42	0.00	-938.93	-257.42	0.00	-938.93			
		MID-PICKUP	MAX	-274.13	0.00	-952.64	-274.13	0.00	-952.64	-257.42	0.00	-938.93	-257.42	0.00	-938.93		
		MIN	-274.13	0.00	-952.64	-274.13	0.00	-952.64	-257.42	0.00	-938.93	-257.42	0.00	-938.93			
		198	AASHTO Fatig	TRUCK-LOAD	MAX	66.60	0.00	252.01	66.60	0.00	252.01	66.45	0.00	245.61	66.45	0.00	245.61
		MIN		-66.60	0.00	-231.82	-66.60	0.00	-231.82	-66.45	0.00	-230.09	-66.45	0.00	-230.09		
TANDEM-LOAD	MAX	49.55		0.00	185.85	49.55	0.00	185.85	49.54	0.00	181.73	49.54	0.00	181.73			
MIN	-49.55	0.00		-160.30	-49.55	0.00	-160.30	-49.54	0.00	-159.39	-49.54	0.00	-159.39				

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002079			3079			1002080			3080		
NODE		2079			2080			2080			3080		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	54.47	0.00	196.21	54.47	0.00	196.21	48.11	0.00	176.75	48.11	0.00	176.75
	MIN	-54.47	0.00	-261.25	-54.47	0.00	-261.25	-48.11	0.00	-231.01	-48.11	0.00	-231.01
199	AASHTO-LRFD TRUCK-LOAD MAX	187.73	0.00	566.04	187.73	0.00	566.04	180.60	0.00	519.57	180.60	0.00	519.57
	MIN	-187.73	0.00	-617.76	-187.73	0.00	-617.76	-180.60	0.00	-637.92	-180.60	0.00	-637.92
	TANDEM-LOAD MAX	99.49	0.00	325.77	99.49	0.00	325.77	98.51	0.00	309.37	98.51	0.00	309.37
	MIN	-99.49	0.00	-331.06	-99.49	0.00	-331.06	-98.51	0.00	-341.02	-98.51	0.00	-341.02
	DISPERSION-LMAX	116.86	0.00	360.42	116.86	0.00	360.42	105.43	0.00	304.69	105.43	0.00	304.69
	MIN	-116.86	0.00	-440.73	-116.86	0.00	-440.73	-105.43	0.00	-405.34	-105.43	0.00	-405.34
300	Total Dead lWithout snow	0.00	0.00	-134.33	0.00	0.00	-134.33	0.00	0.00	-217.01	0.00	0.00	-217.01
301	Particular Snow	0.00	0.00	-29.74	0.00	0.00	-29.74	0.00	0.00	-34.63	0.00	0.00	-34.63
302	Live load Total MAX	164.87	0.00	523.90	164.87	0.00	523.90	156.34	0.00	471.63	156.34	0.00	471.63
	MIN	-178.19	0.00	-619.21	-178.19	0.00	-619.21	-167.32	0.00	-610.31	-167.32	0.00	-610.31
303	Sum total D+L+PP MAX	164.87	0.00	494.16	164.87	0.00	494.16	156.34	0.00	361.47	156.34	0.00	361.47
	MIN	-178.19	0.00	-783.28	-178.19	0.00	-783.28	-167.32	0.00	-861.95	-167.32	0.00	-861.95

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1002081 2081						1002082 2082						
		3081		3082		3081		3082		3082		3082		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	0.00	0.00	-73.36	0.00	0.00	-73.36	0.00	0.00	-7.43	0.00	0.00	-7.43	
3	Railing	0.00	0.00	-14.97	0.00	0.00	-14.97	0.00	0.00	-1.45	0.00	0.00	-1.45	
5	Wheel guard	0.00	0.00	-148.22	0.00	0.00	-148.22	0.00	0.00	-14.31	0.00	0.00	-14.31	
8	Steel weight	0.00	0.00	-118.16	0.00	0.00	-118.16	0.00	0.00	-12.80	0.00	0.00	-12.80	
10	Medial strip	0.00	0.00	60.94	0.00	0.00	60.94	0.00	0.00	5.68	0.00	0.00	5.68	
19	Snow	0.00	0.00	-36.09	0.00	0.00	-36.09	0.00	0.00	-3.63	0.00	0.00	-3.63	
31	Miscellaneous	0.00	0.00	4.92	0.00	0.00	4.92	0.00	0.00	0.46	0.00	0.00	0.46	
100	AASHTO-LRFD TRUCK-LOAD	MAX	124.31	0.00	374.02	124.31	0.00	374.02	143.15	0.00	426.79	143.15	0.00	426.79
		MIN	-124.31	0.00	-467.60	-124.31	0.00	-467.60	-143.15	0.00	-433.00	-143.15	0.00	-433.00
	TANDEM-LOAD	MAX	93.23	0.00	280.95	93.23	0.00	280.95	97.92	0.00	291.01	97.92	0.00	291.01
		MIN	-93.23	0.00	-343.02	-93.23	0.00	-343.02	-97.92	0.00	-296.70	-97.92	0.00	-296.70
	DISPERSION-LMAX	MAX	72.15	0.00	213.94	72.15	0.00	213.94	209.05	0.00	620.91	209.05	0.00	620.91
		MIN	-72.15	0.00	-327.27	-72.15	0.00	-327.27	-209.05	0.00	-633.44	-209.05	0.00	-633.44
110	Live load L-PICKUP 1	MAX	196.46	0.00	587.96	196.46	0.00	587.96	352.20	0.00	1047.70	352.20	0.00	1047.70
		MIN	-196.46	0.00	-794.87	-196.46	0.00	-794.87	-352.20	0.00	-1066.44	-352.20	0.00	-1066.44
	L-PICKUP 2	MAX	165.37	0.00	494.90	165.37	0.00	494.90	306.97	0.00	911.91	306.97	0.00	911.91
		MIN	-165.37	0.00	-670.29	-165.37	0.00	-670.29	-306.97	0.00	-930.13	-306.97	0.00	-930.13
	L-PICKUP 3	MAX	-187.81	0.00	-802.81	-187.81	0.00	-802.81	-417.82	0.00	-1264.17	-417.82	0.00	-1264.17
		MIN	196.46	0.00	587.96	196.46	0.00	587.96	352.20	0.00	1047.70	352.20	0.00	1047.70
	Live load	MAX	196.46	0.00	587.96	196.46	0.00	587.96	352.20	0.00	1047.70	352.20	0.00	1047.70
		MIN	-196.46	0.00	-802.81	-196.46	0.00	-802.81	-417.82	0.00	-1264.17	-417.82	0.00	-1264.17
111	AASHTO Twin TWIN-PICKUP	MAX	187.81	0.00	568.64	187.81	0.00	568.64	417.82	0.00	1243.65	417.82	0.00	1243.65
		MIN	-187.81	0.00	-802.81	-187.81	0.00	-802.81	-417.82	0.00	-1264.17	-417.82	0.00	-1264.17
	MID-PICKUP	-187.81	0.00	-802.81	-187.81	0.00	-802.81	-417.82	0.00	-1264.17	-417.82	0.00	-1264.17	
198	AASHTO FatigTRUCK-LOAD	MAX	62.61	0.00	222.33	62.61	0.00	222.33	72.21	0.00	208.57	72.21	0.00	208.57
		MIN	-62.61	0.00	-173.36	-62.61	0.00	-173.36	-72.21	0.00	-224.66	-72.21	0.00	-224.66
	TANDEM-LOAD	MAX	47.79	0.00	168.67	47.79	0.00	168.67	49.16	0.00	141.32	49.16	0.00	141.32
		MIN	-47.79	0.00	-118.08	-47.79	0.00	-118.08	-49.16	0.00	-153.63	-49.16	0.00	-153.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1002081			1002082								
NODE		2081	3081		2082	3082							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	37.53	0.00	134.19	37.53	0.00	134.19	112.55	0.00	328.55	112.55	0.00	328.55
	MIN	-37.53	0.00	-154.33	-37.53	0.00	-154.33	-112.55	0.00	-346.75	-112.55	0.00	-346.75
199	AASHTO-LRFD TRUCK-LOAD MAX	136.53	0.00	417.89	136.53	0.00	417.89	255.19	0.00	760.93	255.19	0.00	760.93
	MIN	-136.53	0.00	-564.75	-136.53	0.00	-564.75	-255.19	0.00	-771.20	-255.19	0.00	-771.20
	TANDEM-LOAD MAX	93.23	0.00	280.95	93.23	0.00	280.95	97.92	0.00	291.01	97.92	0.00	291.01
	MIN	-93.23	0.00	-343.02	-93.23	0.00	-343.02	-97.92	0.00	-296.70	-97.92	0.00	-296.70
	DISPERSION-LMAX	72.15	0.00	213.94	72.15	0.00	213.94	209.05	0.00	620.91	209.05	0.00	620.91
	MIN	-72.15	0.00	-327.27	-72.15	0.00	-327.27	-209.05	0.00	-633.44	-209.05	0.00	-633.44
300	Total Dead lWithout snow	0.00	0.00	-288.85	0.00	0.00	-288.85	0.00	0.00	-29.84	0.00	0.00	-29.84
301	Particular Snow	0.00	0.00	-36.09	0.00	0.00	-36.09	0.00	0.00	-3.63	0.00	0.00	-3.63
302	Live load Total MAX	127.70	0.00	382.17	127.70	0.00	382.17	228.93	0.00	681.00	228.93	0.00	681.00
	MIN	-127.70	0.00	-521.83	-127.70	0.00	-521.83	-271.58	0.00	-821.71	-271.58	0.00	-821.71
303	Sum total D+L+PP MAX	127.70	0.00	171.89	127.70	0.00	171.89	228.93	0.00	677.37	228.93	0.00	677.37
	MIN	-127.70	0.00	-846.77	-127.70	0.00	-846.77	-271.58	0.00	-855.18	-271.58	0.00	-855.18

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003001						1003002					
NODE		3001			4001			3002			4002		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-15.15	0.00	25.22	-15.15	0.00	-38.04	21.20	0.00	-63.21	21.20	0.00	25.38
3	Railing	-5.26	0.00	9.00	-5.26	0.00	-12.96	4.86	0.00	-15.94	4.86	0.00	4.36
5	Wheel guard	-52.03	0.00	89.07	-52.03	0.00	-128.28	48.10	0.00	-157.77	48.10	0.00	43.19
8	Steel weight	1.48	0.00	-5.38	1.48	0.00	0.80	27.79	0.00	-65.49	27.79	0.00	50.60
10	Medial strip	49.03	0.00	-85.06	49.03	0.00	119.74	-47.24	0.00	149.33	-47.24	0.00	-48.05
19	Snow	-6.15	0.00	10.16	-6.15	0.00	-15.54	8.32	0.00	-25.32	8.32	0.00	9.45
31	Miscellaneous	2.22	0.00	-3.83	2.22	0.00	5.44	-1.72	0.00	5.94	-1.72	0.00	-1.25
100	AASHTO-LRFD TRUCK-LOAD	279.23	0.00	552.22	279.23	0.00	628.81	148.84	0.00	308.35	148.84	0.00	322.02
	MIN	-286.74	0.00	-538.62	-286.74	0.00	-646.45	-116.24	0.00	-389.82	-116.24	0.00	-234.43
	TANDEM-LOAD	192.38	0.00	379.50	192.38	0.00	433.62	114.92	0.00	236.75	114.92	0.00	247.83
	MIN	-197.12	0.00	-370.14	-197.12	0.00	-444.00	-90.31	0.00	-298.52	-90.31	0.00	-177.41
	DISPERSION-LMAX	422.38	0.00	867.24	422.38	0.00	944.83	89.19	0.00	143.64	89.19	0.00	182.55
	MIN	-450.00	0.00	-821.02	-450.00	0.00	-1013.59	-57.93	0.00	-236.51	-57.93	0.00	-143.95
110	Live load L-PICKUP 1	701.61	0.00	1419.47	701.61	0.00	1573.64	238.03	0.00	451.98	238.03	0.00	504.57
	MIN	-736.74	0.00	-1359.64	-736.74	0.00	-1660.05	-174.17	0.00	-626.33	-174.17	0.00	-378.38
	L-PICKUP 2	614.75	0.00	1246.74	614.75	0.00	1378.45	204.11	0.00	380.38	204.11	0.00	430.38
	MIN	-647.12	0.00	-1191.16	-647.12	0.00	-1457.59	-148.24	0.00	-535.03	-148.24	0.00	-321.36
	L-PICKUP 3	-867.15	0.00	-1604.64	-867.15	0.00	-1952.85	-164.56	0.00	-599.39	-164.56	0.00	-373.99
	Live load	701.61	0.00	1419.47	701.61	0.00	1573.64	238.03	0.00	451.98	238.03	0.00	504.57
	MIN	-867.15	0.00	-1604.64	-867.15	0.00	-1952.85	-174.17	0.00	-626.33	-174.17	0.00	-378.38
111	AASHTO Twin TWIN-PICKUP	827.32	0.00	1671.48	827.32	0.00	1854.25	224.73	0.00	439.58	224.73	0.00	486.20
	MIN	-867.15	0.00	-1604.64	-867.15	0.00	-1952.85	-164.56	0.00	-599.39	-164.56	0.00	-373.99
	MID-PICKUP	-867.15	0.00	-1604.64	-867.15	0.00	-1952.85	-164.56	0.00	-599.39	-164.56	0.00	-373.99
198	AASHTO FatigTRUCK-LOAD	124.96	0.00	330.01	124.96	0.00	275.92	130.05	0.00	207.06	130.05	0.00	220.75
	MIN	-174.31	0.00	-246.03	-174.31	0.00	-398.50	-68.17	0.00	-322.64	-68.17	0.00	-79.74
	TANDEM-LOAD	85.00	0.00	226.98	85.00	0.00	187.19	101.73	0.00	159.76	101.73	0.00	174.71
	MIN	-120.09	0.00	-167.87	-120.09	0.00	-274.65	-53.88	0.00	-250.36	-53.88	0.00	-65.91

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003001			1003002								
NODE		3001			4001			3002			4002		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	213.91	0.00	524.80	213.91	0.00	477.21	69.18	0.00	103.09	69.18	0.00	126.28
	MIN	-277.39	0.00	-416.30	-277.39	0.00	-633.86	-38.74	0.00	-175.38	-38.74	0.00	-78.65
199	AASHTO-LRFD TRUCK-LOAD MAX	496.87	0.00	989.95	496.87	0.00	1115.45	160.51	0.00	344.78	160.51	0.00	357.68
	MIN	-513.51	0.00	-961.91	-513.51	0.00	-1156.24	-124.91	0.00	-429.47	-124.91	0.00	-271.60
	TANDEM-LOAD MAX	192.38	0.00	379.50	192.38	0.00	433.62	114.92	0.00	236.75	114.92	0.00	247.83
	MIN	-197.12	0.00	-370.14	-197.12	0.00	-444.00	-90.31	0.00	-298.52	-90.31	0.00	-177.41
	DISPERSION-LMAX	422.38	0.00	867.24	422.38	0.00	944.83	89.19	0.00	143.64	89.19	0.00	182.55
	MIN	-450.00	0.00	-821.02	-450.00	0.00	-1013.59	-57.93	0.00	-236.51	-57.93	0.00	-143.95
300	Total Dead lWithout snow	-19.71	0.00	29.01	-19.71	0.00	-53.30	52.98	0.00	-147.14	52.98	0.00	74.24
301	Particular Snow	-6.15	0.00	10.16	-6.15	0.00	-15.54	8.32	0.00	-25.32	8.32	0.00	9.45
302	Live load Total MAX	456.05	0.00	922.65	456.05	0.00	1022.87	154.72	0.00	293.79	154.72	0.00	327.97
	MIN	-563.65	0.00	-1043.01	-563.65	0.00	-1269.35	-113.21	0.00	-407.12	-113.21	0.00	-245.95
303	Sum total D+L+PP MAX	449.89	0.00	961.82	449.89	0.00	1007.33	216.02	0.00	209.46	216.02	0.00	411.66
	MIN	-589.51	0.00	-1032.86	-589.51	0.00	-1338.19	-85.87	0.00	-579.58	-85.87	0.00	-236.04

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003003						1003004					
		3003			4003			3004			4004		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	18.50	0.00	-59.99	18.50	0.00	17.32	22.79	0.00	-67.95	22.79	0.00	27.26
3	Railing	6.14	0.00	-21.11	6.14	0.00	4.52	6.16	0.00	-22.58	6.16	0.00	3.14
5	Wheel guard	60.74	0.00	-209.04	60.74	0.00	44.75	60.95	0.00	-223.56	60.95	0.00	31.12
8	Steel weight	1.61	0.00	9.39	1.61	0.00	16.11	18.68	0.00	-5.29	18.68	0.00	72.75
10	Medial strip	-59.93	0.00	198.10	-59.93	0.00	-52.30	-46.26	0.00	177.92	-46.26	0.00	-15.37
19	Snow	7.27	0.00	-24.28	7.27	0.00	6.08	10.13	0.00	-30.38	10.13	0.00	11.96
31	Miscellaneous	-2.56	0.00	9.00	-2.56	0.00	-1.71	-2.37	0.00	9.45	-2.37	0.00	-0.47
100	AASHTO-LRFD TRUCK-LOAD	153.61	0.00	327.76	153.61	0.00	354.94	158.73	0.00	309.40	158.73	0.00	384.85
	MIN	-122.04	0.00	-387.86	-122.04	0.00	-282.34	-113.83	0.00	-389.16	-113.83	0.00	-278.38
	TANDEM-LOAD MAX	115.59	0.00	244.49	115.59	0.00	266.27	119.25	0.00	230.04	119.25	0.00	284.72
	MIN	-91.49	0.00	-290.88	-91.49	0.00	-206.28	-84.47	0.00	-290.92	-84.47	0.00	-204.15
	DISPERSION-LMAX	102.41	0.00	196.53	102.41	0.00	236.28	113.42	0.00	204.50	113.42	0.00	298.19
	MIN	-74.94	0.00	-282.27	-74.94	0.00	-204.78	-77.70	0.00	-304.90	-77.70	0.00	-250.87
110	Live load L-PICKUP 1	256.01	0.00	524.29	256.01	0.00	591.21	272.15	0.00	513.90	272.15	0.00	683.04
	MIN	-196.98	0.00	-670.13	-196.98	0.00	-487.12	-191.52	0.00	-694.06	-191.52	0.00	-529.26
	L-PICKUP 2 MAX	218.00	0.00	441.02	218.00	0.00	502.54	232.67	0.00	434.54	232.67	0.00	582.91
	MIN	-166.43	0.00	-573.15	-166.43	0.00	-411.06	-162.17	0.00	-595.82	-162.17	0.00	-455.03
	L-PICKUP 3	-199.02	0.00	-652.67	-199.02	0.00	-520.15	-195.86	0.00	-679.40	-195.86	0.00	-569.58
	Live load MAX	256.01	0.00	524.29	256.01	0.00	591.21	272.15	0.00	513.90	272.15	0.00	683.04
	MIN	-199.02	0.00	-670.13	-199.02	0.00	-520.15	-195.86	0.00	-694.06	-195.86	0.00	-569.58
111	AASHTO Twin TWIN-PICKUP	242.65	0.00	520.38	242.65	0.00	587.78	264.83	0.00	512.15	264.83	0.00	701.67
	MIN	-199.02	0.00	-652.67	-199.02	0.00	-520.15	-195.86	0.00	-679.40	-195.86	0.00	-569.58
	MID-PICKUP	-199.02	0.00	-652.67	-199.02	0.00	-520.15	-195.86	0.00	-679.40	-195.86	0.00	-569.58
198	AASHTO FatigTRUCK-LOAD	142.63	0.00	214.08	142.63	0.00	258.10	143.76	0.00	209.04	143.76	0.00	267.88
	MIN	-62.71	0.00	-337.85	-62.71	0.00	-82.68	-57.98	0.00	-333.07	-57.98	0.00	-96.78
	TANDEM-LOAD MAX	108.07	0.00	161.50	108.07	0.00	196.44	108.55	0.00	157.21	108.55	0.00	202.52
	MIN	-48.69	0.00	-255.12	-48.69	0.00	-56.10	-45.30	0.00	-251.12	-45.30	0.00	-66.65

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003003						1003004					
		3003			4003			3004			4004		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	86.15	0.00	129.38	86.15	0.00	161.41	91.47	0.00	132.18	91.47	0.00	183.11
	MIN	-34.35	0.00	-216.90	-34.35	0.00	-90.64	-33.38	0.00	-222.54	-33.38	0.00	-121.42
199	AASHTO-LRFD TRUCK-LOAD MAX	167.21	0.00	381.66	167.21	0.00	416.82	180.84	0.00	364.56	180.84	0.00	481.45
	MIN	-146.19	0.00	-442.91	-146.19	0.00	-373.17	-139.92	0.00	-449.99	-139.92	0.00	-381.99
	TANDEM-LOAD MAX	115.59	0.00	244.49	115.59	0.00	266.27	119.25	0.00	230.04	119.25	0.00	284.72
	MIN	-91.49	0.00	-290.88	-91.49	0.00	-206.28	-84.47	0.00	-290.92	-84.47	0.00	-204.15
	DISPERSION-LMAX	102.41	0.00	196.53	102.41	0.00	236.28	113.42	0.00	204.50	113.42	0.00	298.19
	MIN	-74.94	0.00	-282.27	-74.94	0.00	-204.78	-77.70	0.00	-304.90	-77.70	0.00	-250.87
300	Total Dead lWithout snow	24.50	0.00	-73.66	24.50	0.00	28.69	59.94	0.00	-132.01	59.94	0.00	118.43
301	Particular Snow	7.27	0.00	-24.28	7.27	0.00	6.08	10.13	0.00	-30.38	10.13	0.00	11.96
302	Live load Total MAX	166.41	0.00	340.79	166.41	0.00	384.29	176.90	0.00	334.03	176.90	0.00	443.97
	MIN	-129.36	0.00	-435.59	-129.36	0.00	-338.10	-127.31	0.00	-451.14	-127.31	0.00	-370.23
303	Sum total D+L+PP MAX	198.17	0.00	316.51	198.17	0.00	419.06	246.97	0.00	271.86	246.97	0.00	574.37
	MIN	-122.09	0.00	-533.53	-122.09	0.00	-332.02	-95.43	0.00	-613.52	-95.43	0.00	-350.90

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003005						1003006					
		3005			4005			3006			4006		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	22.93	0.00	-61.26	22.93	0.00	34.55	29.77	0.00	-71.74	29.77	0.00	52.63
3	Railing	6.04	0.00	-22.87	6.04	0.00	2.35	6.16	0.00	-23.30	6.16	0.00	2.43
5	Wheel guard	59.76	0.00	-226.42	59.76	0.00	23.28	60.98	0.00	-230.63	60.98	0.00	24.10
8	Steel weight	20.72	0.00	25.19	20.72	0.00	111.75	46.94	0.00	-12.13	46.94	0.00	183.92
10	Medial strip	-35.92	0.00	158.88	-35.92	0.00	8.80	-26.25	0.00	136.10	-26.25	0.00	26.45
19	Snow	10.98	0.00	-29.68	10.98	0.00	16.21	14.59	0.00	-36.08	14.59	0.00	24.84
31	Miscellaneous	-2.30	0.00	9.94	-2.30	0.00	0.32	-2.05	0.00	9.69	-2.05	0.00	1.13
100	AASHTO-LRFD TRUCK-LOAD	163.44	0.00	304.27	163.44	0.00	410.28	174.75	0.00	284.45	174.75	0.00	440.12
	MIN	-115.77	0.00	-380.15	-115.77	0.00	-274.59	-111.72	0.00	-384.83	-111.72	0.00	-259.16
	TANDEM-LOAD	122.57	0.00	225.00	122.57	0.00	302.50	130.25	0.00	210.89	130.25	0.00	324.64
	MIN	-85.62	0.00	-284.37	-85.62	0.00	-200.91	-82.85	0.00	-287.43	-82.85	0.00	-190.48
	DISPERSION-LMAX	122.42	0.00	217.31	122.42	0.00	341.19	135.44	0.00	203.02	135.44	0.00	380.05
	MIN	-85.67	0.00	-308.71	-85.67	0.00	-282.02	-87.22	0.00	-313.69	-87.22	0.00	-292.26
110	Live load L-PICKUP 1	285.86	0.00	521.58	285.86	0.00	751.47	310.19	0.00	487.47	310.19	0.00	820.17
	MIN	-201.44	0.00	-688.86	-201.44	0.00	-556.61	-198.95	0.00	-698.52	-198.95	0.00	-551.42
	L-PICKUP 2	244.99	0.00	442.31	244.99	0.00	643.69	265.69	0.00	413.91	265.69	0.00	704.69
	MIN	-171.28	0.00	-593.08	-171.28	0.00	-482.93	-170.08	0.00	-601.12	-170.08	0.00	-482.74
	L-PICKUP 3	-206.32	0.00	-677.55	-206.32	0.00	-590.94	-201.28	0.00	-686.26	-201.28	0.00	-589.97
	Live load	285.86	0.00	521.58	285.86	0.00	751.47	310.19	0.00	487.47	310.19	0.00	820.17
	MIN	-206.32	0.00	-688.86	-206.32	0.00	-590.94	-201.28	0.00	-698.52	-201.28	0.00	-589.97
111	AASHTO Twin TWIN-PICKUP	281.60	0.00	521.36	281.60	0.00	773.07	308.99	0.00	484.83	308.99	0.00	847.45
	MIN	-206.32	0.00	-677.55	-206.32	0.00	-590.94	-201.28	0.00	-686.26	-201.28	0.00	-589.97
	MID-PICKUP	-206.32	0.00	-677.55	-206.32	0.00	-590.94	-201.28	0.00	-686.26	-201.28	0.00	-589.97
198	AASHTO FatigTRUCK-LOAD	144.34	0.00	206.92	144.34	0.00	275.74	147.44	0.00	200.31	147.44	0.00	284.99
	MIN	-55.98	0.00	-327.69	-55.98	0.00	-101.20	-52.89	0.00	-331.37	-52.89	0.00	-97.79
	TANDEM-LOAD	108.86	0.00	155.21	108.86	0.00	208.01	111.07	0.00	150.40	111.07	0.00	214.91
	MIN	-43.76	0.00	-246.92	-43.76	0.00	-69.26	-41.57	0.00	-249.18	-41.57	0.00	-66.95

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003005						1003006					
		3005			4005			3006			4006		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	94.87	0.00	134.36	94.87	0.00	200.00	99.56	0.00	127.57	99.56	0.00	212.53
	MIN	-35.43	0.00	-223.97	-35.43	0.00	-141.28	-35.16	0.00	-229.64	-35.16	0.00	-146.32
199	AASHTO-LRFD TRUCK-LOAD MAX	190.47	0.00	361.98	190.47	0.00	517.78	207.88	0.00	335.68	207.88	0.00	561.56
	MIN	-143.57	0.00	-444.12	-143.57	0.00	-374.58	-136.42	0.00	-448.82	-136.42	0.00	-363.27
	TANDEM-LOAD MAX	122.57	0.00	225.00	122.57	0.00	302.50	130.25	0.00	210.89	130.25	0.00	324.64
	MIN	-85.62	0.00	-284.37	-85.62	0.00	-200.91	-82.85	0.00	-287.43	-82.85	0.00	-190.48
	DISPERSION-LMAX	122.42	0.00	217.31	122.42	0.00	341.19	135.44	0.00	203.02	135.44	0.00	380.05
	MIN	-85.67	0.00	-308.71	-85.67	0.00	-282.02	-87.22	0.00	-313.69	-87.22	0.00	-292.26
300	Total Dead lWithout snow	71.22	0.00	-116.55	71.22	0.00	181.05	115.55	0.00	-192.01	115.55	0.00	290.65
301	Particular Snow	10.98	0.00	-29.68	10.98	0.00	16.21	14.59	0.00	-36.08	14.59	0.00	24.84
302	Live load Total MAX	185.81	0.00	339.03	185.81	0.00	488.46	201.62	0.00	316.86	201.62	0.00	533.11
	MIN	-134.11	0.00	-447.76	-134.11	0.00	-384.11	-130.83	0.00	-454.04	-130.83	0.00	-383.48
303	Sum total D+L+PP MAX	268.02	0.00	294.51	268.02	0.00	685.72	331.76	0.00	183.82	331.76	0.00	848.60
	MIN	-92.13	0.00	-593.98	-92.13	0.00	-302.08	-39.95	0.00	-682.14	-39.95	0.00	-183.04

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003007						1003008					
NODE		3007			4007			3008			4008		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	6.57	0.00	-30.88	6.57	0.00	-3.46	15.96	0.00	-59.62	15.96	0.00	7.05
3	Railing	5.57	0.00	-22.21	5.57	0.00	1.04	5.86	0.00	-22.63	5.86	0.00	1.86
5	Wheel guard	55.11	0.00	-219.90	55.11	0.00	10.29	58.05	0.00	-224.08	58.05	0.00	18.37
8	Steel weight	-39.89	0.00	140.23	-39.89	0.00	-26.40	-5.41	0.00	28.97	-5.41	0.00	6.37
10	Medial strip	-36.15	0.00	147.78	-36.15	0.00	-3.21	-31.69	0.00	127.84	-31.69	0.00	-4.54
19	Snow	4.20	0.00	-18.26	4.20	0.00	-0.73	8.49	0.00	-31.52	8.49	0.00	3.94
31	Miscellaneous	-2.81	0.00	10.99	-2.81	0.00	-0.73	-2.53	0.00	9.87	-2.53	0.00	-0.70
100	AASHTO-LRFD TRUCK-LOAD	157.60	0.00	334.50	157.60	0.00	375.33	165.59	0.00	321.73	165.59	0.00	378.36
	MIN	-132.28	0.00	-386.68	-132.28	0.00	-301.75	-131.07	0.00	-408.14	-131.07	0.00	-304.50
	TANDEM-LOAD MAX	118.60	0.00	246.48	118.60	0.00	278.59	124.61	0.00	239.12	124.61	0.00	282.06
	MIN	-97.32	0.00	-288.94	-97.32	0.00	-220.92	-97.06	0.00	-304.84	-97.06	0.00	-223.63
	DISPERSION-LMAX	118.71	0.00	274.31	118.71	0.00	290.89	128.52	0.00	259.25	128.52	0.00	291.92
	MIN	-108.22	0.00	-317.25	-108.22	0.00	-293.46	-102.96	0.00	-349.76	-102.96	0.00	-277.62
110	Live load L-PICKUP 1	276.30	0.00	608.82	276.30	0.00	666.22	294.12	0.00	580.98	294.12	0.00	670.29
	MIN	-240.50	0.00	-703.93	-240.50	0.00	-595.21	-234.02	0.00	-757.90	-234.02	0.00	-582.12
	L-PICKUP 2 MAX	237.31	0.00	520.80	237.31	0.00	569.49	253.13	0.00	498.37	253.13	0.00	573.98
	MIN	-205.54	0.00	-606.19	-205.54	0.00	-514.37	-200.02	0.00	-654.59	-200.02	0.00	-501.26
	L-PICKUP 3	-250.64	0.00	-689.85	-250.64	0.00	-632.93	-240.11	0.00	-746.48	-240.11	0.00	-615.64
	Live load MAX	276.30	0.00	608.82	276.30	0.00	666.22	294.12	0.00	580.98	294.12	0.00	670.29
	MIN	-250.64	0.00	-703.93	-250.64	0.00	-632.93	-240.11	0.00	-757.90	-240.11	0.00	-615.64
111	AASHTO Twin TWIN-PICKUP	271.78	0.00	626.96	271.78	0.00	674.30	289.73	0.00	591.11	289.73	0.00	671.42
	MIN	-250.64	0.00	-689.85	-250.64	0.00	-632.93	-240.11	0.00	-746.48	-240.11	0.00	-615.64
	MID-PICKUP	-250.64	0.00	-689.85	-250.64	0.00	-632.93	-240.11	0.00	-746.48	-240.11	0.00	-615.64
198	AASHTO FatigTRUCK-LOAD	139.76	0.00	216.11	139.76	0.00	259.88	141.32	0.00	213.78	141.32	0.00	254.80
	MIN	-61.78	0.00	-324.45	-61.78	0.00	-102.87	-62.61	0.00	-335.49	-62.61	0.00	-96.24
	TANDEM-LOAD MAX	105.92	0.00	162.09	105.92	0.00	197.07	107.53	0.00	161.25	107.53	0.00	194.93
	MIN	-47.95	0.00	-245.51	-47.95	0.00	-70.63	-48.78	0.00	-254.23	-48.78	0.00	-66.28

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003007						1003008					
NODE		3007			4007			3008			4008		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	89.37	0.00	149.15	89.37	0.00	182.24	90.86	0.00	142.00	90.86	0.00	180.14
	MIN	-42.25	0.00	-219.85	-42.25	0.00	-147.96	-39.55	0.00	-228.73	-39.55	0.00	-129.75
199	AASHTO-LRFD TRUCK-LOAD MAX	183.27	0.00	422.30	183.27	0.00	458.33	193.39	0.00	397.54	193.39	0.00	454.09
	MIN	-170.27	0.00	-449.25	-170.27	0.00	-409.80	-163.83	0.00	-479.66	-163.83	0.00	-406.42
	TANDEM-LOAD MAX	118.60	0.00	246.48	118.60	0.00	278.59	124.61	0.00	239.12	124.61	0.00	282.06
	MIN	-97.32	0.00	-288.94	-97.32	0.00	-220.92	-97.06	0.00	-304.84	-97.06	0.00	-223.63
	DISPERSION-LMAX	118.71	0.00	274.31	118.71	0.00	290.89	128.52	0.00	259.25	128.52	0.00	291.92
	MIN	-108.22	0.00	-317.25	-108.22	0.00	-293.46	-102.96	0.00	-349.76	-102.96	0.00	-277.62
300	Total Dead lWithout snow	-11.60	0.00	26.00	-11.60	0.00	-22.47	40.23	0.00	-139.65	40.23	0.00	28.40
301	Particular Snow	4.20	0.00	-18.26	4.20	0.00	-0.73	8.49	0.00	-31.52	8.49	0.00	3.94
302	Live load Total MAX	179.60	0.00	395.73	179.60	0.00	433.04	191.17	0.00	377.63	191.17	0.00	435.69
	MIN	-162.92	0.00	-457.56	-162.92	0.00	-411.40	-156.07	0.00	-492.63	-156.07	0.00	-400.17
303	Sum total D+L+PP MAX	183.79	0.00	403.48	183.79	0.00	432.31	239.90	0.00	319.75	239.90	0.00	468.03
	MIN	-170.32	0.00	-475.81	-170.32	0.00	-434.60	-147.58	0.00	-663.80	-147.58	0.00	-396.23

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003009						1003010					
		3009			4009			3010			4010		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	39.66	0.00	-115.92	39.66	0.00	49.74	23.50	0.00	-75.33	23.50	0.00	22.83
3	Railing	6.67	0.00	-23.52	6.67	0.00	4.32	5.73	0.00	-19.46	5.73	0.00	4.48
5	Wheel guard	65.99	0.00	-232.89	65.99	0.00	42.75	56.74	0.00	-192.64	56.74	0.00	44.39
8	Steel weight	80.92	0.00	-188.26	80.92	0.00	149.74	26.67	0.00	-72.55	26.67	0.00	38.86
10	Medial strip	-21.75	0.00	94.99	-21.75	0.00	4.12	-25.56	0.00	91.01	-25.56	0.00	-15.77
19	Snow	19.25	0.00	-57.02	19.25	0.00	23.40	11.84	0.00	-38.10	11.84	0.00	11.36
31	Miscellaneous	-1.86	0.00	7.71	-1.86	0.00	-0.07	-2.10	0.00	7.34	-2.10	0.00	-1.44
100	AASHTO-LRFD TRUCK-LOAD	182.50	0.00	255.06	182.50	0.00	406.40	182.09	0.00	261.41	182.09	0.00	388.46
	MIN	-109.02	0.00	-430.62	-109.02	0.00	-263.89	-116.09	0.00	-427.15	-116.09	0.00	-266.67
	TANDEM-LOAD MAX	136.78	0.00	193.14	136.78	0.00	302.88	136.39	0.00	194.77	136.39	0.00	290.17
	MIN	-81.78	0.00	-322.89	-81.78	0.00	-195.46	-86.18	0.00	-320.11	-86.18	0.00	-195.14
	DISPERSION-LMAX	133.87	0.00	159.99	133.87	0.00	309.91	138.85	0.00	225.52	138.85	0.00	319.54
	MIN	-69.91	0.00	-345.72	-69.91	0.00	-226.67	-101.16	0.00	-345.89	-101.16	0.00	-281.00
110	Live load L-PICKUP 1	316.37	0.00	415.05	316.37	0.00	716.30	320.94	0.00	486.93	320.94	0.00	708.00
	MIN	-178.93	0.00	-776.33	-178.93	0.00	-490.57	-217.25	0.00	-773.04	-217.25	0.00	-547.66
	L-PICKUP 2 MAX	270.65	0.00	353.13	270.65	0.00	612.79	275.23	0.00	420.30	275.23	0.00	609.70
	MIN	-151.69	0.00	-668.61	-151.69	0.00	-422.14	-187.34	0.00	-666.00	-187.34	0.00	-476.14
	L-PICKUP 3	-178.76	0.00	-766.40	-178.76	0.00	-515.20	-220.29	0.00	-759.32	-220.29	0.00	-571.88
	Live load MAX	316.37	0.00	415.05	316.37	0.00	716.30	320.94	0.00	486.93	320.94	0.00	708.00
	MIN	-178.93	0.00	-776.33	-178.93	0.00	-515.20	-220.29	0.00	-773.04	-220.29	0.00	-571.88
111	AASHTO Twin TWIN-PICKUP	312.62	0.00	393.99	312.62	0.00	717.53	314.06	0.00	485.15	314.06	0.00	693.88
	MIN	-178.76	0.00	-766.40	-178.76	0.00	-515.20	-220.29	0.00	-759.32	-220.29	0.00	-571.88
	MID-PICKUP	-178.76	0.00	-766.40	-178.76	0.00	-515.20	-220.29	0.00	-759.32	-220.29	0.00	-571.88
198	AASHTO FatigTRUCK-LOAD	147.97	0.00	194.76	147.97	0.00	255.63	144.04	0.00	178.86	144.04	0.00	239.13
	MIN	-57.12	0.00	-362.42	-57.12	0.00	-71.51	-55.16	0.00	-362.61	-55.16	0.00	-52.76
	TANDEM-LOAD MAX	112.58	0.00	148.32	112.58	0.00	196.54	109.73	0.00	136.86	109.73	0.00	184.73
	MIN	-44.90	0.00	-273.69	-44.90	0.00	-49.54	-43.20	0.00	-273.65	-43.20	0.00	-43.77

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003009						1003010					
NODE		3009			4009			3010			4010		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.25	0.00	106.55	98.25	0.00	189.58	99.98	0.00	132.56	99.98	0.00	200.94
	MIN	-33.01	0.00	-245.84	-33.01	0.00	-107.66	-51.22	0.00	-252.65	-51.22	0.00	-134.39
199	AASHTO-LRFD TRUCK-LOAD MAX	213.49	0.00	277.78	213.49	0.00	487.35	210.11	0.00	313.53	210.11	0.00	451.45
	MIN	-128.71	0.00	-505.83	-128.71	0.00	-345.77	-143.60	0.00	-497.80	-143.60	0.00	-354.43
	TANDEM-LOAD MAX	136.78	0.00	193.14	136.78	0.00	302.88	136.39	0.00	194.77	136.39	0.00	290.17
	MIN	-81.78	0.00	-322.89	-81.78	0.00	-195.46	-86.18	0.00	-320.11	-86.18	0.00	-195.14
	DISPERSION-LMAX	133.87	0.00	159.99	133.87	0.00	309.91	138.85	0.00	225.52	138.85	0.00	319.54
	MIN	-69.91	0.00	-345.72	-69.91	0.00	-226.67	-101.16	0.00	-345.89	-101.16	0.00	-281.00
300	Total Dead lWithout snow	169.62	0.00	-457.89	169.62	0.00	250.61	84.98	0.00	-261.62	84.98	0.00	93.35
301	Particular Snow	19.25	0.00	-57.02	19.25	0.00	23.40	11.84	0.00	-38.10	11.84	0.00	11.36
302	Live load Total MAX	205.64	0.00	269.78	205.64	0.00	465.60	208.61	0.00	316.51	208.61	0.00	460.20
	MIN	-116.31	0.00	-504.62	-116.31	0.00	-334.88	-143.19	0.00	-502.48	-143.19	0.00	-371.72
303	Sum total D+L+PP MAX	394.51	0.00	-164.19	394.51	0.00	739.61	305.43	0.00	111.74	305.43	0.00	564.91
	MIN	37.67	0.00	-1019.52	37.67	0.00	-161.33	-89.32	0.00	-802.20	-89.32	0.00	-360.37

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003011						1003012					
NODE		3011			4011			3012			4012		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-6.85	0.00	2.51	-6.85	0.00	-26.09	-22.95	0.00	41.91	-22.95	0.00	-53.96
3	Railing	0.63	0.00	-5.32	0.63	0.00	-2.70	-6.80	0.00	12.43	-6.80	0.00	-15.97
5	Wheel guard	6.20	0.00	-52.65	6.20	0.00	-26.77	-67.30	0.00	123.02	-67.30	0.00	-158.11
8	Steel weight	-35.19	0.00	73.68	-35.19	0.00	-73.30	-11.71	0.00	21.24	-11.71	0.00	-27.69
10	Medial strip	-8.72	0.00	39.67	-8.72	0.00	3.24	34.03	0.00	-62.20	34.03	0.00	79.96
19	Snow	-2.88	0.00	-0.15	-2.88	0.00	-12.18	-11.81	0.00	21.56	-11.81	0.00	-27.75
31	Miscellaneous	-0.67	0.00	3.10	-0.67	0.00	0.28	2.72	0.00	-4.98	2.72	0.00	6.39
100	AASHTO-LRFD TRUCK-LOAD	177.71	0.00	304.71	177.71	0.00	355.51	121.82	0.00	238.21	121.82	0.00	269.45
	MIN	-138.76	0.00	-398.90	-138.76	0.00	-296.02	-121.48	0.00	-240.66	-121.48	0.00	-270.08
	TANDEM-LOAD	133.34	0.00	220.70	133.34	0.00	265.90	82.98	0.00	162.70	82.98	0.00	184.18
	MIN	-101.00	0.00	-299.39	-101.00	0.00	-214.59	-83.13	0.00	-163.91	-83.13	0.00	-185.30
	DISPERSION-LMAX	184.50	0.00	376.76	184.50	0.00	422.05	329.54	0.00	725.28	329.54	0.00	723.08
	MIN	-196.66	0.00	-370.70	-196.66	0.00	-466.30	-368.37	0.00	-654.56	-368.37	0.00	-814.40
110	Live load L-PICKUP 1	362.22	0.00	681.47	362.22	0.00	777.56	451.36	0.00	963.49	451.36	0.00	992.53
	MIN	-335.42	0.00	-769.61	-335.42	0.00	-762.33	-489.85	0.00	-895.22	-489.85	0.00	-1084.48
	L-PICKUP 2	317.84	0.00	597.47	317.84	0.00	687.95	412.53	0.00	887.98	412.53	0.00	907.26
	MIN	-297.66	0.00	-670.09	-297.66	0.00	-680.89	-451.50	0.00	-818.47	-451.50	0.00	-999.70
	L-PICKUP 3	-351.82	0.00	-757.63	-351.82	0.00	-774.63	-526.82	0.00	-974.45	-526.82	0.00	-1164.48
	Live load	362.22	0.00	681.47	362.22	0.00	777.56	451.36	0.00	963.49	451.36	0.00	992.53
	MIN	-351.82	0.00	-769.61	-351.82	0.00	-774.63	-526.82	0.00	-974.45	-526.82	0.00	-1164.48
111	AASHTO Twin TWIN-PICKUP	352.29	0.00	730.02	352.29	0.00	743.22	493.21	0.00	1037.46	493.21	0.00	1087.18
	MIN	-351.82	0.00	-757.63	-351.82	0.00	-774.63	-526.82	0.00	-974.45	-526.82	0.00	-1164.48
	MID-PICKUP	-351.82	0.00	-757.63	-351.82	0.00	-774.63	-526.82	0.00	-974.45	-526.82	0.00	-1164.48
198	AASHTO FatigTRUCK-LOAD	98.83	0.00	135.37	98.83	0.00	163.30	47.52	0.00	144.33	47.52	0.00	102.50
	MIN	-50.61	0.00	-249.50	-50.61	0.00	-113.13	-74.96	0.00	-96.16	-74.96	0.00	-169.03
	TANDEM-LOAD	77.70	0.00	104.11	77.70	0.00	131.39	32.26	0.00	98.54	32.26	0.00	69.44
	MIN	-36.46	0.00	-193.17	-36.46	0.00	-77.69	-51.47	0.00	-65.54	-51.47	0.00	-116.44

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003011						1003012					
NODE		3011			4011			3012			4012		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	109.53	0.00	235.52	109.53	0.00	233.98	157.16	0.00	455.15	157.16	0.00	342.03
	MIN	-121.05	0.00	-231.06	-121.05	0.00	-280.57	-235.36	0.00	-316.73	-235.36	0.00	-527.96
199	AASHTO-LRFD TRUCK-LOAD MAX	206.93	0.00	434.37	206.93	0.00	403.75	218.47	0.00	427.46	218.47	0.00	484.89
	MIN	-194.24	0.00	-471.11	-194.24	0.00	-394.40	-216.98	0.00	-428.16	-216.98	0.00	-479.46
	TANDEM-LOAD MAX	133.34	0.00	220.70	133.34	0.00	265.90	82.98	0.00	162.70	82.98	0.00	184.18
	MIN	-101.00	0.00	-299.39	-101.00	0.00	-214.59	-83.13	0.00	-163.91	-83.13	0.00	-185.30
	DISPERSION-LMAX	184.50	0.00	376.76	184.50	0.00	422.05	329.54	0.00	725.28	329.54	0.00	723.08
	MIN	-196.66	0.00	-370.70	-196.66	0.00	-466.30	-368.37	0.00	-654.56	-368.37	0.00	-814.40
300	Total Dead lWithout snow	-44.61	0.00	61.00	-44.61	0.00	-125.34	-72.01	0.00	131.42	-72.01	0.00	-169.38
301	Particular Snow	-2.88	0.00	-0.15	-2.88	0.00	-12.18	-11.81	0.00	21.56	-11.81	0.00	-27.75
302	Live load Total MAX	235.44	0.00	442.96	235.44	0.00	505.41	293.38	0.00	626.27	293.38	0.00	645.15
	MIN	-228.68	0.00	-500.24	-228.68	0.00	-503.51	-342.43	0.00	-633.39	-342.43	0.00	-756.91
303	Sum total D+L+PP MAX	232.56	0.00	503.81	232.56	0.00	493.23	281.58	0.00	779.26	281.58	0.00	617.40
	MIN	-276.17	0.00	-500.39	-276.17	0.00	-641.03	-426.26	0.00	-611.83	-426.26	0.00	-954.04

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003013						1003014					
NODE		3013			4013			3014			4014		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.69	0.00	-14.26	0.69	0.00	-11.37	18.18	0.00	-61.51	18.18	0.00	14.42
3	Railing	-0.44	0.00	-2.42	-0.44	0.00	-4.27	4.64	0.00	-15.91	4.64	0.00	3.45
5	Wheel guard	-4.38	0.00	-23.97	-4.38	0.00	-42.29	45.89	0.00	-157.49	45.89	0.00	34.19
8	Steel weight	8.09	0.00	-28.80	8.09	0.00	4.97	18.22	0.00	-58.98	18.22	0.00	17.13
10	Medial strip	3.80	0.00	7.73	3.80	0.00	23.60	-21.06	0.00	73.34	-21.06	0.00	-14.63
19	Snow	0.22	0.00	-6.95	0.22	0.00	-6.04	9.22	0.00	-31.21	9.22	0.00	7.30
31	Miscellaneous	0.28	0.00	0.69	0.28	0.00	1.85	-1.74	0.00	6.01	-1.74	0.00	-1.26
100	AASHTO-LRFD TRUCK-LOAD	144.38	0.00	257.51	144.38	0.00	285.02	169.86	0.00	291.34	169.86	0.00	346.65
	MIN	-114.83	0.00	-326.01	-114.83	0.00	-236.91	-126.42	0.00	-392.02	-126.42	0.00	-269.13
	TANDEM-LOAD MAX	108.70	0.00	186.34	108.70	0.00	214.69	126.82	0.00	214.04	126.82	0.00	258.44
	MIN	-83.35	0.00	-244.60	-83.35	0.00	-173.45	-92.76	0.00	-292.19	-92.76	0.00	-196.74
	DISPERSION-LMAX	187.73	0.00	357.04	187.73	0.00	419.88	132.69	0.00	239.07	132.69	0.00	300.77
	MIN	-187.63	0.00	-378.06	-187.63	0.00	-440.75	-104.05	0.00	-336.23	-104.05	0.00	-277.25
110	Live load L-PICKUP 1	332.10	0.00	614.55	332.10	0.00	704.90	302.55	0.00	530.40	302.55	0.00	647.42
	MIN	-302.45	0.00	-704.07	-302.45	0.00	-677.66	-230.47	0.00	-728.25	-230.47	0.00	-546.37
	L-PICKUP 2 MAX	296.42	0.00	543.38	296.42	0.00	634.57	259.51	0.00	453.10	259.51	0.00	559.21
	MIN	-270.97	0.00	-622.66	-270.97	0.00	-614.21	-196.81	0.00	-628.41	-196.81	0.00	-473.98
	L-PICKUP 3	-318.53	0.00	-689.35	-318.53	0.00	-693.92	-237.27	0.00	-731.93	-237.27	0.00	-567.52
	Live load MAX	332.10	0.00	614.55	332.10	0.00	704.90	302.55	0.00	530.40	302.55	0.00	647.42
	MIN	-318.53	0.00	-704.07	-318.53	0.00	-693.92	-237.27	0.00	-731.93	-237.27	0.00	-567.52
111	AASHTO Twin TWIN-PICKUP	322.29	0.00	649.82	322.29	0.00	670.37	301.59	0.00	549.11	301.59	0.00	633.41
	MIN	-318.53	0.00	-689.35	-318.53	0.00	-693.92	-237.27	0.00	-731.93	-237.27	0.00	-567.52
	MID-PICKUP	-318.53	0.00	-689.35	-318.53	0.00	-693.92	-237.27	0.00	-731.93	-237.27	0.00	-567.52
198	AASHTO FatigTRUCK-LOAD	67.01	0.00	106.88	67.01	0.00	106.68	126.33	0.00	169.55	126.33	0.00	205.23
	MIN	-49.22	0.00	-173.59	-49.22	0.00	-108.91	-54.18	0.00	-322.45	-54.18	0.00	-57.73
	TANDEM-LOAD MAX	54.32	0.00	81.13	54.32	0.00	90.02	96.40	0.00	129.08	96.40	0.00	159.43
	MIN	-33.49	0.00	-136.87	-33.49	0.00	-74.58	-42.30	0.00	-243.23	-42.30	0.00	-47.89

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003013						1003014					
		3013			4013			3014			4014		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	101.82	0.00	227.71	101.82	0.00	216.72	92.99	0.00	143.24	92.99	0.00	188.34
	MIN	-119.41	0.00	-211.10	-119.41	0.00	-278.49	-55.28	0.00	-248.67	-55.28	0.00	-140.27
199	AASHTO-LRFD TRUCK-LOAD MAX	170.38	0.00	364.98	170.38	0.00	324.97	202.41	0.00	371.06	202.41	0.00	403.02
	MIN	-166.30	0.00	-387.88	-166.30	0.00	-330.27	-159.58	0.00	-477.02	-159.58	0.00	-353.33
	TANDEM-LOAD MAX	108.70	0.00	186.34	108.70	0.00	214.69	126.82	0.00	214.04	126.82	0.00	258.44
	MIN	-83.35	0.00	-244.60	-83.35	0.00	-173.45	-92.76	0.00	-292.19	-92.76	0.00	-196.74
	DISPERSION-LMAX	187.73	0.00	357.04	187.73	0.00	419.88	132.69	0.00	239.07	132.69	0.00	300.77
	MIN	-187.63	0.00	-378.06	-187.63	0.00	-440.75	-104.05	0.00	-336.23	-104.05	0.00	-277.25
300	Total Dead lWithout snow	8.03	0.00	-61.04	8.03	0.00	-27.51	64.13	0.00	-214.54	64.13	0.00	53.32
301	Particular Snow	0.22	0.00	-6.95	0.22	0.00	-6.04	9.22	0.00	-31.21	9.22	0.00	7.30
302	Live load Total MAX	215.87	0.00	399.46	215.87	0.00	458.19	196.66	0.00	344.76	196.66	0.00	420.82
	MIN	-207.04	0.00	-457.65	-207.04	0.00	-451.05	-154.22	0.00	-475.75	-154.22	0.00	-368.89
303	Sum total D+L+PP MAX	224.11	0.00	392.51	224.11	0.00	452.15	270.00	0.00	202.44	270.00	0.00	481.44
	MIN	-206.83	0.00	-525.64	-206.83	0.00	-484.60	-127.14	0.00	-721.50	-127.14	0.00	-361.59

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1003015 3015	4015			1003016 3016			4016							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT		
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)		
1	Pavement	18.39	0.00	-70.98	18.39	0.00	5.83	23.71	0.00	-90.02	23.71	0.00	9.03		
3	Railing	5.91	0.00	-21.08	5.91	0.00	3.61	6.12	0.00	-23.16	6.12	0.00	2.41		
5	Wheel guard	58.51	0.00	-208.68	58.51	0.00	35.73	60.60	0.00	-229.32	60.60	0.00	23.82		
8	Steel weight	3.85	0.00	-35.59	3.85	0.00	-19.49	22.88	0.00	-87.75	22.88	0.00	7.82		
10	Medial strip	-30.47	0.00	105.33	-30.47	0.00	-21.94	-29.18	0.00	109.54	-29.18	0.00	-12.33		
19	Snow	9.58	0.00	-36.55	9.58	0.00	3.46	11.94	0.00	-45.38	11.94	0.00	4.51		
31	Miscellaneous	-2.44	0.00	8.46	-2.44	0.00	-1.75	-2.31	0.00	8.73	-2.31	0.00	-0.92		
100	AASHTO-LRFD TRUCK-LOAD	MAX	170.00	0.00	259.32	170.00	0.00	375.72	180.97	0.00	255.03	180.97	0.00	405.31	
		MIN	-114.75	0.00	-412.71	-114.75	0.00	-279.11	-111.11	0.00	-445.00	-111.11	0.00	-281.65	
		TANDEM-LOAD	MAX	128.47	0.00	195.15	128.47	0.00	282.54	136.64	0.00	192.26	136.64	0.00	304.39
		MIN	-85.59	0.00	-311.68	-85.59	0.00	-204.97	-83.30	0.00	-334.69	-83.30	0.00	-207.94	
		DISPERSION-L	MAX	117.92	0.00	190.39	117.92	0.00	275.73	119.60	0.00	199.15	119.60	0.00	281.56
		MIN	-88.63	0.00	-302.43	-88.63	0.00	-264.26	-81.10	0.00	-343.54	-81.10	0.00	-264.04	
110	Live load	L-PICKUP 1	MAX	287.92	0.00	449.71	287.92	0.00	651.44	300.57	0.00	454.19	300.57	0.00	686.87
		MIN	-203.37	0.00	-715.14	-203.37	0.00	-543.37	-192.22	0.00	-788.54	-192.22	0.00	-545.70	
		L-PICKUP 2	MAX	246.40	0.00	385.54	246.40	0.00	558.27	256.24	0.00	391.41	256.24	0.00	585.95
		MIN	-174.21	0.00	-614.10	-174.21	0.00	-469.23	-164.40	0.00	-678.22	-164.40	0.00	-471.98	
		L-PICKUP 3	MAX	-204.70	0.00	-685.06	-204.70	0.00	-570.34	-192.41	0.00	-769.73	-192.41	0.00	-573.46
		MIN	287.92	0.00	449.71	287.92	0.00	651.44	300.57	0.00	454.19	300.57	0.00	686.87	
111	AASHTO Twin	TWIN-PICKUP	MAX	276.86	0.00	441.59	276.86	0.00	640.81	290.84	0.00	443.40	290.84	0.00	676.52
		MIN	-204.70	0.00	-685.06	-204.70	0.00	-570.34	-192.41	0.00	-769.73	-192.41	0.00	-573.46	
		MID-PICKUP	MAX	-204.70	0.00	-685.06	-204.70	0.00	-570.34	-192.41	0.00	-769.73	-192.41	0.00	-573.46
		MIN	276.86	0.00	441.59	276.86	0.00	640.81	290.84	0.00	443.40	290.84	0.00	676.52	
		TWIN-PICKUP	MAX	276.86	0.00	441.59	276.86	0.00	640.81	290.84	0.00	443.40	290.84	0.00	676.52
		MIN	-204.70	0.00	-685.06	-204.70	0.00	-570.34	-192.41	0.00	-769.73	-192.41	0.00	-573.46	
198	AASHTO Fatig	TRUCK-LOAD	MAX	144.46	0.00	193.66	144.46	0.00	247.59	154.10	0.00	193.96	154.10	0.00	271.96
		MIN	-58.08	0.00	-355.93	-58.08	0.00	-67.92	-55.42	0.00	-371.70	-55.42	0.00	-87.85	
		TANDEM-LOAD	MAX	110.47	0.00	147.18	110.47	0.00	191.12	117.62	0.00	147.83	117.62	0.00	209.10
		MIN	-45.47	0.00	-270.37	-45.47	0.00	-46.42	-43.84	0.00	-282.19	-43.84	0.00	-60.58	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1003015						1003016					
	3015			4015			3016			4016		
NAME TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	92.49	0.00	119.12	92.49	0.00	180.02	93.49	0.00	116.47	93.49	0.00	180.95
MIN	-42.07	0.00	-224.46	-42.07	0.00	-119.81	-35.22	0.00	-241.83	-35.22	0.00	-126.69
199 AASHTO-LRFD TRUCK-LOAD MAX	189.70	0.00	300.27	189.70	0.00	436.29	203.56	0.00	293.52	203.56	0.00	470.13
MIN	-138.82	0.00	-458.75	-138.82	0.00	-369.45	-132.69	0.00	-511.72	-132.69	0.00	-373.13
TANDEM-LOAD MAX	128.47	0.00	195.15	128.47	0.00	282.54	136.64	0.00	192.26	136.64	0.00	304.39
MIN	-85.59	0.00	-311.68	-85.59	0.00	-204.97	-83.30	0.00	-334.69	-83.30	0.00	-207.94
DISPERSION-LMAX	117.92	0.00	190.39	117.92	0.00	275.73	119.60	0.00	199.15	119.60	0.00	281.56
MIN	-88.63	0.00	-302.43	-88.63	0.00	-264.26	-81.10	0.00	-343.54	-81.10	0.00	-264.04
300 Total Dead lWithout snow	53.76	0.00	-222.54	53.76	0.00	2.00	81.83	0.00	-311.98	81.83	0.00	29.82
301 Particular Snow	9.58	0.00	-36.55	9.58	0.00	3.46	11.94	0.00	-45.38	11.94	0.00	4.51
302 Live load Total MAX	187.15	0.00	292.31	187.15	0.00	423.44	195.37	0.00	295.22	195.37	0.00	446.46
MIN	-133.06	0.00	-464.84	-133.06	0.00	-370.72	-125.07	0.00	-512.55	-125.07	0.00	-372.75
303 Sum total D+L+PP MAX	250.49	0.00	120.92	250.49	0.00	428.90	289.14	0.00	26.43	289.14	0.00	480.79
MIN	-109.64	0.00	-723.93	-109.64	0.00	-367.26	-68.82	0.00	-869.91	-68.82	0.00	-368.24

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003017						1003018					
		3017			4017			3018			4018		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	29.79	0.00	-107.48	29.79	0.00	16.97	25.45	0.00	-97.95	25.45	0.00	8.35
3	Railing	6.24	0.00	-24.25	6.24	0.00	1.83	6.10	0.00	-24.14	6.10	0.00	1.33
5	Wheel guard	61.82	0.00	-240.11	61.82	0.00	18.12	60.37	0.00	-239.01	60.37	0.00	13.17
8	Steel weight	46.02	0.00	-145.39	46.02	0.00	46.82	30.18	0.00	-108.14	30.18	0.00	17.90
10	Medial strip	-26.06	0.00	105.91	-26.06	0.00	-2.97	-27.27	0.00	109.86	-27.27	0.00	-4.07
19	Snow	14.68	0.00	-53.42	14.68	0.00	7.91	12.76	0.00	-49.27	12.76	0.00	4.04
31	Miscellaneous	-2.09	0.00	8.51	-2.09	0.00	-0.22	-2.22	0.00	8.90	-2.22	0.00	-0.35
100	AASHTO-LRFD TRUCK-LOAD	187.50	0.00	252.61	187.50	0.00	423.69	182.01	0.00	268.63	182.01	0.00	416.24
	MIN	-112.12	0.00	-452.46	-112.12	0.00	-289.91	-119.60	0.00	-436.68	-119.60	0.00	-304.44
	TANDEM-LOAD	141.16	0.00	190.82	141.16	0.00	317.27	137.00	0.00	202.15	137.00	0.00	311.61
	MIN	-84.04	0.00	-339.72	-84.04	0.00	-213.99	-89.25	0.00	-328.60	-89.25	0.00	-224.16
	DISPERSION-LMAX	129.14	0.00	188.94	129.14	0.00	305.09	126.83	0.00	192.49	126.83	0.00	303.27
	MIN	-80.60	0.00	-361.58	-80.60	0.00	-274.59	-85.52	0.00	-348.35	-85.52	0.00	-287.12
110	Live load L-PICKUP 1	316.64	0.00	441.55	316.64	0.00	728.79	308.83	0.00	461.12	308.83	0.00	719.52
	MIN	-192.72	0.00	-814.04	-192.72	0.00	-564.49	-205.12	0.00	-785.04	-205.12	0.00	-591.56
	L-PICKUP 2	270.30	0.00	379.76	270.30	0.00	622.37	263.83	0.00	394.64	263.83	0.00	614.89
	MIN	-164.64	0.00	-701.30	-164.64	0.00	-488.58	-174.78	0.00	-676.95	-174.78	0.00	-511.28
	L-PICKUP 3	-192.60	0.00	-801.00	-192.60	0.00	-591.58	-208.11	0.00	-767.93	-208.11	0.00	-623.38
	Live load	316.64	0.00	441.55	316.64	0.00	728.79	308.83	0.00	461.12	308.83	0.00	719.52
	MIN	-192.72	0.00	-814.04	-192.72	0.00	-591.58	-208.11	0.00	-785.04	-208.11	0.00	-623.38
111	AASHTO Twin TWIN-PICKUP	308.61	0.00	425.12	308.61	0.00	720.69	301.27	0.00	451.58	301.27	0.00	711.27
	MIN	-192.60	0.00	-801.00	-192.60	0.00	-591.58	-208.11	0.00	-767.93	-208.11	0.00	-623.38
	MID-PICKUP	-192.60	0.00	-801.00	-192.60	0.00	-591.58	-208.11	0.00	-767.93	-208.11	0.00	-623.38
198	AASHTO FatigTRUCK-LOAD	157.77	0.00	195.88	157.77	0.00	284.27	155.95	0.00	201.87	155.95	0.00	284.27
	MIN	-55.12	0.00	-374.73	-55.12	0.00	-100.80	-57.11	0.00	-367.15	-57.11	0.00	-107.61
	TANDEM-LOAD	120.21	0.00	149.27	120.21	0.00	217.92	118.78	0.00	153.48	118.78	0.00	217.56
	MIN	-43.68	0.00	-284.19	-43.68	0.00	-69.55	-45.11	0.00	-278.58	-45.11	0.00	-74.14

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003017						1003018					
NODE		3017			4017			3018			4018		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.97	0.00	116.52	96.97	0.00	188.73	95.67	0.00	121.36	95.67	0.00	187.56
	MIN	-33.33	0.00	-248.17	-33.33	0.00	-136.66	-34.99	0.00	-242.89	-34.99	0.00	-145.08
199	AASHTO-LRFD TRUCK-LOAD MAX	213.76	0.00	283.42	213.76	0.00	495.68	207.91	0.00	309.27	207.91	0.00	487.02
	MIN	-133.40	0.00	-528.42	-133.40	0.00	-382.72	-145.71	0.00	-504.90	-145.71	0.00	-405.53
	TANDEM-LOAD MAX	141.16	0.00	190.82	141.16	0.00	317.27	137.00	0.00	202.15	137.00	0.00	311.61
	MIN	-84.04	0.00	-339.72	-84.04	0.00	-213.99	-89.25	0.00	-328.60	-89.25	0.00	-224.16
	DISPERSION-LMAX	129.14	0.00	188.94	129.14	0.00	305.09	126.83	0.00	192.49	126.83	0.00	303.27
	MIN	-80.60	0.00	-361.58	-80.60	0.00	-274.59	-85.52	0.00	-348.35	-85.52	0.00	-287.12
300	Total Dead lWithout snow	115.72	0.00	-402.81	115.72	0.00	80.54	92.61	0.00	-350.49	92.61	0.00	36.33
301	Particular Snow	14.68	0.00	-53.42	14.68	0.00	7.91	12.76	0.00	-49.27	12.76	0.00	4.04
302	Live load Total MAX	205.82	0.00	287.01	205.82	0.00	473.71	200.74	0.00	299.73	200.74	0.00	467.69
	MIN	-125.27	0.00	-529.13	-125.27	0.00	-384.53	-135.27	0.00	-510.27	-135.27	0.00	-405.20
303	Sum total D+L+PP MAX	336.22	0.00	-83.12	336.22	0.00	562.16	306.11	0.00	-10.11	306.11	0.00	508.05
	MIN	-32.45	0.00	-985.36	-32.45	0.00	-376.62	-70.48	0.00	-910.03	-70.48	0.00	-401.16

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003019						1003020					
		3019			4019			3020			4020		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	18.20	0.00	-79.67	18.20	0.00	-3.65	20.46	0.00	-81.75	20.46	0.00	3.72
3	Railing	5.89	0.00	-23.43	5.89	0.00	1.16	6.01	0.00	-22.98	6.01	0.00	2.12
5	Wheel guard	58.28	0.00	-231.95	58.28	0.00	11.48	59.51	0.00	-227.54	59.51	0.00	21.02
8	Steel weight	3.37	0.00	-42.68	3.37	0.00	-28.62	11.05	0.00	-56.44	11.05	0.00	-10.28
10	Medial strip	-29.89	0.00	115.16	-29.89	0.00	-9.68	-29.63	0.00	111.31	-29.63	0.00	-12.45
19	Snow	9.54	0.00	-41.09	9.54	0.00	-1.26	10.55	0.00	-41.86	10.55	0.00	2.19
31	Miscellaneous	-2.44	0.00	9.36	-2.44	0.00	-0.82	-2.40	0.00	9.02	-2.40	0.00	-1.01
100	AASHTO-LRFD TRUCK-LOAD	172.72	0.00	292.30	172.72	0.00	394.27	171.95	0.00	295.71	171.95	0.00	390.68
	MIN	-127.14	0.00	-417.89	-127.14	0.00	-318.91	-126.04	0.00	-418.21	-126.04	0.00	-312.47
	TANDEM-LOAD	130.53	0.00	218.95	130.53	0.00	296.01	129.93	0.00	221.90	129.93	0.00	293.30
	MIN	-94.54	0.00	-315.03	-94.54	0.00	-234.29	-93.94	0.00	-314.19	-93.94	0.00	-229.99
	DISPERSION-LMAX	121.55	0.00	209.87	121.55	0.00	289.76	123.44	0.00	213.10	123.44	0.00	286.81
	MIN	-92.32	0.00	-334.43	-92.32	0.00	-293.54	-90.57	0.00	-341.19	-90.57	0.00	-278.62
110	Live load L-PICKUP 1	294.27	0.00	502.17	294.27	0.00	684.03	295.39	0.00	508.82	295.39	0.00	677.49
	MIN	-219.47	0.00	-752.32	-219.47	0.00	-612.44	-216.61	0.00	-759.41	-216.61	0.00	-591.09
	L-PICKUP 2	252.08	0.00	428.82	252.08	0.00	585.77	253.37	0.00	435.01	253.37	0.00	580.11
	MIN	-186.87	0.00	-649.46	-186.87	0.00	-527.83	-184.52	0.00	-655.38	-184.52	0.00	-508.61
	L-PICKUP 3	-224.63	0.00	-731.53	-224.63	0.00	-646.32	-219.61	0.00	-740.64	-219.61	0.00	-623.82
	Live load	294.27	0.00	502.17	294.27	0.00	684.03	295.39	0.00	508.82	295.39	0.00	677.49
	MIN	-224.63	0.00	-752.32	-224.63	0.00	-646.32	-219.61	0.00	-759.41	-219.61	0.00	-623.82
111	AASHTO Twin TWIN-PICKUP	284.75	0.00	499.68	284.75	0.00	671.50	287.40	0.00	504.21	287.40	0.00	670.45
	MIN	-224.63	0.00	-731.53	-224.63	0.00	-646.32	-219.61	0.00	-740.64	-219.61	0.00	-623.82
	MID-PICKUP	-224.63	0.00	-731.53	-224.63	0.00	-646.32	-219.61	0.00	-740.64	-219.61	0.00	-623.82
198	AASHTO FatigTRUCK-LOAD	150.86	0.00	209.32	150.86	0.00	274.08	147.95	0.00	209.43	147.95	0.00	263.88
	MIN	-60.30	0.00	-356.07	-60.30	0.00	-107.07	-61.26	0.00	-354.12	-61.26	0.00	-97.24
	TANDEM-LOAD	115.10	0.00	158.78	115.10	0.00	210.20	113.11	0.00	159.07	113.11	0.00	203.18
	MIN	-47.39	0.00	-270.57	-47.39	0.00	-73.73	-48.10	0.00	-269.28	-48.10	0.00	-67.03

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003019 3019			4019			1003020 3020			4020		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	91.91	0.00	128.79	91.91	0.00	180.79	92.63	0.00	127.26	92.63	0.00	181.60
	MIN	-37.33	0.00	-233.55	-37.33	0.00	-144.29	-36.63	0.00	-232.79	-36.63	0.00	-131.20
199	AASHTO-LRFD TRUCK-LOAD MAX	194.85	0.00	345.33	194.85	0.00	456.35	195.90	0.00	347.13	195.90	0.00	458.13
	MIN	-157.27	0.00	-478.38	-157.27	0.00	-424.60	-153.43	0.00	-481.75	-153.43	0.00	-414.51
	TANDEM-LOAD MAX	130.53	0.00	218.95	130.53	0.00	296.01	129.93	0.00	221.90	129.93	0.00	293.30
	MIN	-94.54	0.00	-315.03	-94.54	0.00	-234.29	-93.94	0.00	-314.19	-93.94	0.00	-229.99
	DISPERSION-LMAX	121.55	0.00	209.87	121.55	0.00	289.76	123.44	0.00	213.10	123.44	0.00	286.81
	MIN	-92.32	0.00	-334.43	-92.32	0.00	-293.54	-90.57	0.00	-341.19	-90.57	0.00	-278.62
300	Total Dead lWithout snow	53.40	0.00	-253.20	53.40	0.00	-30.14	65.00	0.00	-268.40	65.00	0.00	3.12
301	Particular Snow	9.54	0.00	-41.09	9.54	0.00	-1.26	10.55	0.00	-41.86	10.55	0.00	2.19
302	Live load Total MAX	191.27	0.00	326.41	191.27	0.00	444.62	192.00	0.00	330.73	192.00	0.00	440.37
	MIN	-146.01	0.00	-489.01	-146.01	0.00	-420.11	-142.74	0.00	-493.61	-142.74	0.00	-405.48
303	Sum total D+L+PP MAX	254.21	0.00	130.03	254.21	0.00	443.36	267.55	0.00	119.69	267.55	0.00	445.68
	MIN	-126.87	0.00	-783.31	-126.87	0.00	-451.51	-110.02	0.00	-803.87	-110.02	0.00	-403.29

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003021						1003022					
NODE		3021			4021			3022			4022		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	27.03	0.00	-91.54	27.03	0.00	21.37	18.39	0.00	-62.92	18.39	0.00	13.88
3	Railing	6.24	0.00	-22.09	6.24	0.00	3.96	4.72	0.00	-16.26	4.72	0.00	3.48
5	Wheel guard	61.75	0.00	-218.71	61.75	0.00	39.21	46.77	0.00	-160.93	46.77	0.00	34.43
8	Steel weight	34.93	0.00	-106.70	34.93	0.00	39.19	18.01	0.00	-60.55	18.01	0.00	14.65
10	Medial strip	-27.55	0.00	99.85	-27.55	0.00	-15.21	-22.01	0.00	75.90	-22.01	0.00	-16.02
19	Snow	13.47	0.00	-45.89	13.47	0.00	10.39	9.29	0.00	-31.83	9.29	0.00	6.99
31	Miscellaneous	-2.22	0.00	8.06	-2.22	0.00	-1.21	-1.78	0.00	6.14	-1.78	0.00	-1.29
100	AASHTO-LRFD TRUCK-LOAD	182.26	0.00	269.78	182.26	0.00	401.85	169.59	0.00	251.76	169.59	0.00	363.99
	MIN	-121.49	0.00	-424.88	-121.49	0.00	-291.10	-113.53	0.00	-390.58	-113.53	0.00	-264.89
	TANDEM-LOAD MAX	137.02	0.00	203.61	137.02	0.00	300.78	127.46	0.00	188.66	127.46	0.00	272.38
	MIN	-90.68	0.00	-319.21	-90.68	0.00	-214.09	-84.46	0.00	-293.74	-84.46	0.00	-194.56
	DISPERSION-LMAX	129.02	0.00	179.77	129.02	0.00	299.97	129.07	0.00	191.70	129.07	0.00	310.42
	MIN	-85.45	0.00	-325.64	-85.45	0.00	-262.90	-99.88	0.00	-291.92	-99.88	0.00	-287.04
110	Live load L-PICKUP 1	311.28	0.00	449.55	311.28	0.00	701.82	298.67	0.00	443.45	298.67	0.00	674.41
	MIN	-206.93	0.00	-750.52	-206.93	0.00	-553.99	-213.41	0.00	-682.50	-213.41	0.00	-551.93
	L-PICKUP 2 MAX	266.04	0.00	383.38	266.04	0.00	600.75	256.53	0.00	380.35	256.53	0.00	582.80
	MIN	-176.12	0.00	-644.85	-176.12	0.00	-476.98	-184.34	0.00	-585.66	-184.34	0.00	-481.60
	L-PICKUP 3	-208.91	0.00	-735.71	-208.91	0.00	-584.83	-214.04	0.00	-653.65	-214.04	0.00	-568.38
	Live load MAX	311.28	0.00	449.55	311.28	0.00	701.82	298.67	0.00	443.45	298.67	0.00	674.41
	MIN	-208.91	0.00	-750.52	-208.91	0.00	-584.83	-214.04	0.00	-682.50	-214.04	0.00	-568.38
111	AASHTO Twin TWIN-PICKUP	306.30	0.00	435.05	306.30	0.00	699.13	288.07	0.00	439.35	288.07	0.00	650.21
	MIN	-208.91	0.00	-735.71	-208.91	0.00	-584.83	-214.04	0.00	-653.65	-214.04	0.00	-568.38
	MID-PICKUP	-208.91	0.00	-735.71	-208.91	0.00	-584.83	-214.04	0.00	-653.65	-214.04	0.00	-568.38
198	AASHTO FatigTRUCK-LOAD	149.77	0.00	196.71	149.77	0.00	257.28	130.58	0.00	172.37	130.58	0.00	217.45
	MIN	-58.72	0.00	-368.46	-58.72	0.00	-75.61	-53.75	0.00	-327.97	-53.75	0.00	-53.57
	TANDEM-LOAD MAX	114.25	0.00	150.15	114.25	0.00	198.44	100.16	0.00	131.93	100.16	0.00	169.16
	MIN	-46.15	0.00	-278.84	-46.15	0.00	-51.88	-42.34	0.00	-249.21	-42.34	0.00	-45.32

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003021						1003022					
NODE		3021			4021			3022			4022		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	97.49	0.00	113.09	97.49	0.00	190.67	92.34	0.00	123.78	92.34	0.00	194.09
	MIN	-38.87	0.00	-247.69	-38.87	0.00	-121.63	-55.44	0.00	-211.55	-55.44	0.00	-145.14
199	AASHTO-LRFD TRUCK-LOAD MAX	211.31	0.00	303.62	211.31	0.00	476.84	191.01	0.00	296.47	191.01	0.00	412.04
	MIN	-146.68	0.00	-491.82	-146.68	0.00	-386.92	-137.95	0.00	-434.36	-137.95	0.00	-344.50
	TANDEM-LOAD MAX	137.02	0.00	203.61	137.02	0.00	300.78	127.46	0.00	188.66	127.46	0.00	272.38
	MIN	-90.68	0.00	-319.21	-90.68	0.00	-214.09	-84.46	0.00	-293.74	-84.46	0.00	-194.56
	DISPERSION-LMAX	129.02	0.00	179.77	129.02	0.00	299.97	129.07	0.00	191.70	129.07	0.00	310.42
	MIN	-85.45	0.00	-325.64	-85.45	0.00	-262.90	-99.88	0.00	-291.92	-99.88	0.00	-287.04
300	Total Dead lWithout snow	100.18	0.00	-331.13	100.18	0.00	87.30	64.10	0.00	-218.62	64.10	0.00	49.13
301	Particular Snow	13.47	0.00	-45.89	13.47	0.00	10.39	9.29	0.00	-31.83	9.29	0.00	6.99
302	Live load Total MAX	202.33	0.00	292.21	202.33	0.00	456.18	194.13	0.00	288.24	194.13	0.00	438.36
	MIN	-135.79	0.00	-487.84	-135.79	0.00	-380.14	-139.13	0.00	-443.62	-139.13	0.00	-369.45
303	Sum total D+L+PP MAX	315.98	0.00	2.85	315.98	0.00	553.87	267.53	0.00	124.27	267.53	0.00	494.48
	MIN	-62.88	0.00	-864.86	-62.88	0.00	-369.76	-107.47	0.00	-694.07	-107.47	0.00	-362.46

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003023						1003024					
NODE		3023			4023			3024			4024		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-1.24	0.00	-10.54	-1.24	0.00	-15.71	-19.73	0.00	35.04	-19.73	0.00	-47.35
3	Railing	-0.26	0.00	-2.99	-0.26	0.00	-4.08	-6.07	0.00	10.84	-6.07	0.00	-14.51
5	Wheel guard	-2.60	0.00	-29.56	-2.60	0.00	-40.43	-60.08	0.00	107.30	-60.08	0.00	-143.65
8	Steel weight	-1.87	0.00	-7.02	-1.87	0.00	-14.84	-7.37	0.00	12.41	-7.37	0.00	-18.38
10	Medial strip	1.16	0.00	14.38	1.16	0.00	19.22	30.48	0.00	-54.55	30.48	0.00	72.77
19	Snow	-0.61	0.00	-5.41	-0.61	0.00	-7.95	-10.23	0.00	18.19	-10.23	0.00	-24.55
31	Miscellaneous	0.09	0.00	1.17	0.09	0.00	1.55	2.47	0.00	-4.42	2.47	0.00	5.89
100	AASHTO-LRFD TRUCK-LOAD	140.92	0.00	247.12	140.92	0.00	281.98	110.14	0.00	211.56	110.14	0.00	249.54
	MIN	-110.98	0.00	-314.87	-110.98	0.00	-230.17	-110.70	0.00	-211.40	-110.70	0.00	-251.28
	TANDEM-LOAD	107.68	0.00	180.29	107.68	0.00	215.54	75.01	0.00	143.67	75.01	0.00	170.16
	MIN	-81.34	0.00	-240.25	-81.34	0.00	-170.73	-75.34	0.00	-144.51	-75.34	0.00	-171.64
	DISPERSION-LMAX	185.91	0.00	355.34	185.91	0.00	418.25	300.09	0.00	640.51	300.09	0.00	673.04
	MIN	-188.85	0.00	-370.42	-188.85	0.00	-446.07	-333.48	0.00	-581.38	-333.48	0.00	-753.22
110	Live load L-PICKUP 1	326.83	0.00	602.45	326.83	0.00	700.23	410.23	0.00	852.06	410.23	0.00	922.58
	MIN	-299.82	0.00	-685.30	-299.82	0.00	-676.23	-444.18	0.00	-792.78	-444.18	0.00	-1004.50
	L-PICKUP 2	293.59	0.00	535.63	293.59	0.00	633.79	375.10	0.00	784.17	375.10	0.00	843.20
	MIN	-270.18	0.00	-610.67	-270.18	0.00	-616.80	-408.82	0.00	-725.89	-408.82	0.00	-924.86
	L-PICKUP 3	-311.91	0.00	-648.63	-311.91	0.00	-688.14	-477.12	0.00	-863.67	-477.12	0.00	-1078.38
	Live load	326.83	0.00	602.45	326.83	0.00	700.23	410.23	0.00	852.06	410.23	0.00	922.58
	MIN	-311.91	0.00	-685.30	-311.91	0.00	-688.14	-477.12	0.00	-863.67	-477.12	0.00	-1078.38
111	AASHTO Twin TWIN-PICKUP	307.98	0.00	626.96	307.98	0.00	656.24	449.33	0.00	915.86	449.33	0.00	1014.52
	MIN	-311.91	0.00	-648.63	-311.91	0.00	-688.14	-477.12	0.00	-863.67	-477.12	0.00	-1078.38
	MID-PICKUP	-311.91	0.00	-648.63	-311.91	0.00	-688.14	-477.12	0.00	-863.67	-477.12	0.00	-1078.38
198	AASHTO FatigTRUCK-LOAD	69.74	0.00	115.08	69.74	0.00	110.90	43.38	0.00	128.98	43.38	0.00	96.26
	MIN	-44.71	0.00	-180.41	-44.71	0.00	-103.09	-68.95	0.00	-84.94	-68.95	0.00	-159.01
	TANDEM-LOAD	57.41	0.00	88.11	57.41	0.00	95.19	29.54	0.00	87.36	29.54	0.00	65.33
	MIN	-30.59	0.00	-144.62	-30.59	0.00	-71.16	-46.91	0.00	-58.06	-46.91	0.00	-108.60

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003023			1003024			1003024			1003024		
NODE		3023			4023			3024			4024		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	101.55	0.00	223.86	101.55	0.00	217.99	143.24	0.00	401.88	143.24	0.00	318.93
	MIN	-118.99	0.00	-209.15	-118.99	0.00	-279.41	-212.92	0.00	-281.57	-212.92	0.00	-487.48
199	AASHTO-LRFD TRUCK-LOAD MAX	156.29	0.00	341.29	156.29	0.00	310.90	199.16	0.00	377.11	199.16	0.00	454.21
	MIN	-157.72	0.00	-350.28	-157.72	0.00	-318.53	-196.66	0.00	-378.25	-196.66	0.00	-444.98
	TANDEM-LOAD MAX	107.68	0.00	180.29	107.68	0.00	215.54	75.01	0.00	143.67	75.01	0.00	170.16
	MIN	-81.34	0.00	-240.25	-81.34	0.00	-170.73	-75.34	0.00	-144.51	-75.34	0.00	-171.64
	DISPERSION-LMAX	185.91	0.00	355.34	185.91	0.00	418.25	300.09	0.00	640.51	300.09	0.00	673.04
	MIN	-188.85	0.00	-370.42	-188.85	0.00	-446.07	-333.48	0.00	-581.38	-333.48	0.00	-753.22
300	Total Dead lWithout snow	-4.73	0.00	-34.55	-4.73	0.00	-54.30	-60.29	0.00	106.63	-60.29	0.00	-145.22
301	Particular Snow	-0.61	0.00	-5.41	-0.61	0.00	-7.95	-10.23	0.00	18.19	-10.23	0.00	-24.55
302	Live load Total MAX	212.44	0.00	391.60	212.44	0.00	455.15	266.65	0.00	553.84	266.65	0.00	599.68
	MIN	-202.74	0.00	-445.44	-202.74	0.00	-447.29	-310.13	0.00	-561.38	-310.13	0.00	-700.94
303	Sum total D+L+PP MAX	211.83	0.00	386.18	211.83	0.00	447.20	256.42	0.00	678.66	256.42	0.00	575.13
	MIN	-208.08	0.00	-485.41	-208.08	0.00	-509.53	-380.66	0.00	-543.19	-380.66	0.00	-870.72

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003025						1003026					
		3025			4025			3026			4026		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-3.83	0.00	-2.28	-3.83	0.00	-18.28	-0.42	0.00	-18.47	-0.42	0.00	-20.24
3	Railing	-0.33	0.00	-2.80	-0.33	0.00	-4.18	4.18	0.00	-14.95	4.18	0.00	2.50
5	Wheel guard	-3.26	0.00	-27.75	-3.26	0.00	-41.35	41.37	0.00	-147.99	41.37	0.00	24.80
8	Steel weight	-11.58	0.00	24.24	-11.58	0.00	-24.11	-51.61	0.00	103.73	-51.61	0.00	-111.83
10	Medial strip	-0.21	0.00	18.56	-0.21	0.00	17.70	-29.00	0.00	92.18	-29.00	0.00	-28.96
19	Snow	-1.79	0.00	-1.68	-1.79	0.00	-9.16	0.91	0.00	-12.02	0.91	0.00	-8.23
31	Miscellaneous	0.00	0.00	1.46	0.00	0.00	1.48	-2.36	0.00	7.50	-2.36	0.00	-2.36
100	AASHTO-LRFD TRUCK-LOAD	143.18	0.00	254.15	143.18	0.00	282.64	166.85	0.00	268.26	166.85	0.00	353.47
	MIN	-111.37	0.00	-319.60	-111.37	0.00	-230.50	-121.15	0.00	-384.78	-121.15	0.00	-279.30
	TANDEM-LOAD	109.41	0.00	184.27	109.41	0.00	216.84	126.45	0.00	197.79	126.45	0.00	267.94
	MIN	-81.35	0.00	-243.99	-81.35	0.00	-170.48	-89.08	0.00	-291.87	-89.08	0.00	-203.46
	DISPERSION-LMAX	181.48	0.00	354.33	181.48	0.00	413.91	123.42	0.00	256.32	123.42	0.00	286.79
	MIN	-188.64	0.00	-355.97	-188.64	0.00	-446.05	-125.17	0.00	-282.17	-125.17	0.00	-319.40
110	Live load L-PICKUP 1	324.66	0.00	608.48	324.66	0.00	696.55	290.27	0.00	524.58	290.27	0.00	640.26
	MIN	-300.01	0.00	-675.56	-300.01	0.00	-676.55	-246.31	0.00	-666.95	-246.31	0.00	-598.71
	L-PICKUP 2	290.88	0.00	538.60	290.88	0.00	630.75	249.87	0.00	454.11	249.87	0.00	554.73
	MIN	-269.99	0.00	-599.96	-269.99	0.00	-616.53	-214.25	0.00	-574.04	-214.25	0.00	-522.86
	L-PICKUP 3	-313.77	0.00	-643.67	-313.77	0.00	-687.93	-254.51	0.00	-620.45	-254.51	0.00	-628.85
	Live load	324.66	0.00	608.48	324.66	0.00	696.55	290.27	0.00	524.58	290.27	0.00	640.26
	MIN	-313.77	0.00	-675.56	-313.77	0.00	-687.93	-254.51	0.00	-666.95	-254.51	0.00	-628.85
111	AASHTO Twin TWIN-PICKUP	308.06	0.00	640.59	308.06	0.00	654.04	271.48	0.00	544.63	271.48	0.00	602.54
	MIN	-313.77	0.00	-643.67	-313.77	0.00	-687.93	-254.51	0.00	-620.45	-254.51	0.00	-628.85
	MID-PICKUP	-313.77	0.00	-643.67	-313.77	0.00	-687.93	-254.51	0.00	-620.45	-254.51	0.00	-628.85
198	AASHTO FatigTRUCK-LOAD	68.70	0.00	117.95	68.70	0.00	107.77	131.68	0.00	172.44	131.68	0.00	219.30
	MIN	-43.64	0.00	-179.19	-43.64	0.00	-99.46	-54.24	0.00	-330.71	-54.24	0.00	-54.12
	TANDEM-LOAD	56.97	0.00	89.50	56.97	0.00	93.69	101.73	0.00	130.99	101.73	0.00	172.02
	MIN	-31.32	0.00	-144.26	-31.32	0.00	-68.71	-42.25	0.00	-252.90	-42.25	0.00	-45.47

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003025						1003026					
NODE		3025			4025			3026			4026		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	99.10	0.00	221.35	99.10	0.00	214.94	87.69	0.00	141.71	87.69	0.00	183.62
	MIN	-118.12	0.00	-202.30	-118.12	0.00	-278.38	-61.35	0.00	-199.12	-61.35	0.00	-152.90
199	AASHTO-LRFD TRUCK-LOAD MAX	160.81	0.00	357.43	160.81	0.00	312.80	178.23	0.00	348.82	178.23	0.00	382.70
	MIN	-159.99	0.00	-359.22	-159.99	0.00	-318.31	-157.62	0.00	-407.21	-157.62	0.00	-379.32
	TANDEM-LOAD MAX	109.41	0.00	184.27	109.41	0.00	216.84	126.45	0.00	197.79	126.45	0.00	267.94
	MIN	-81.35	0.00	-243.99	-81.35	0.00	-170.48	-89.08	0.00	-291.87	-89.08	0.00	-203.46
	DISPERSION-LMAX	181.48	0.00	354.33	181.48	0.00	413.91	123.42	0.00	256.32	123.42	0.00	286.79
	MIN	-188.64	0.00	-355.97	-188.64	0.00	-446.05	-125.17	0.00	-282.17	-125.17	0.00	-319.40
300	Total Dead lWithout snow	-19.20	0.00	11.43	-19.20	0.00	-68.75	-37.85	0.00	22.01	-37.85	0.00	-136.09
301	Particular Snow	-1.79	0.00	-1.68	-1.79	0.00	-9.16	0.91	0.00	-12.02	0.91	0.00	-8.23
302	Live load Total MAX	211.03	0.00	395.51	211.03	0.00	452.76	188.68	0.00	340.98	188.68	0.00	416.17
	MIN	-203.95	0.00	-439.12	-203.95	0.00	-447.15	-165.43	0.00	-433.52	-165.43	0.00	-408.76
303	Sum total D+L+PP MAX	209.24	0.00	405.26	209.24	0.00	443.60	189.58	0.00	350.97	189.58	0.00	396.69
	MIN	-224.93	0.00	-440.80	-224.93	0.00	-525.06	-202.37	0.00	-445.53	-202.37	0.00	-553.08

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003027						1003028					
		3027			4027			3028			4028		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	25.54	0.00	-90.31	25.54	0.00	16.35	45.36	0.00	-144.58	45.36	0.00	44.89
3	Railing	6.18	0.00	-21.97	6.18	0.00	3.83	6.76	0.00	-24.92	6.76	0.00	3.33
5	Wheel guard	61.16	0.00	-217.52	61.16	0.00	37.95	66.96	0.00	-246.74	66.96	0.00	32.94
8	Steel weight	29.58	0.00	-103.17	29.58	0.00	20.39	102.84	0.00	-287.58	102.84	0.00	141.98
10	Medial strip	-27.30	0.00	97.94	-27.30	0.00	-16.11	-20.16	0.00	87.64	-20.16	0.00	3.43
19	Snow	12.86	0.00	-45.48	12.86	0.00	8.25	21.69	0.00	-70.00	21.69	0.00	20.61
31	Miscellaneous	-2.26	0.00	8.05	-2.26	0.00	-1.38	-1.65	0.00	7.14	-1.65	0.00	0.25
100	AASHTO-LRFD TRUCK-LOAD	195.93	0.00	257.54	195.93	0.00	429.02	210.60	0.00	230.90	210.60	0.00	454.61
	MIN	-104.84	0.00	-490.18	-104.84	0.00	-271.72	-95.82	0.00	-508.01	-95.82	0.00	-259.36
	TANDEM-LOAD MAX	148.45	0.00	191.53	148.45	0.00	322.83	158.21	0.00	173.45	158.21	0.00	340.04
	MIN	-78.38	0.00	-367.44	-78.38	0.00	-199.16	-72.22	0.00	-378.92	-72.22	0.00	-191.61
	DISPERSION-LMAX	138.25	0.00	247.70	138.25	0.00	309.88	150.60	0.00	197.71	150.60	0.00	331.80
	MIN	-97.13	0.00	-393.11	-97.13	0.00	-281.02	-76.53	0.00	-432.72	-76.53	0.00	-255.56
110	Live load L-PICKUP 1	334.18	0.00	505.25	334.18	0.00	738.90	361.19	0.00	428.61	361.19	0.00	786.41
	MIN	-201.97	0.00	-883.28	-201.97	0.00	-552.74	-172.34	0.00	-940.72	-172.34	0.00	-514.92
	L-PICKUP 2 MAX	286.70	0.00	439.23	286.70	0.00	632.71	308.81	0.00	371.17	308.81	0.00	671.84
	MIN	-175.51	0.00	-760.54	-175.51	0.00	-480.18	-148.74	0.00	-811.64	-148.74	0.00	-447.17
	L-PICKUP 3	-204.61	0.00	-867.07	-204.61	0.00	-589.15	-169.90	0.00	-941.34	-169.90	0.00	-541.84
	Live load MAX	334.18	0.00	505.25	334.18	0.00	738.90	361.19	0.00	428.61	361.19	0.00	786.41
	MIN	-204.61	0.00	-883.28	-204.61	0.00	-589.15	-172.34	0.00	-941.34	-172.34	0.00	-541.84
111	AASHTO Twin TWIN-PICKUP	316.61	0.00	509.27	316.61	0.00	717.05	352.70	0.00	416.31	352.70	0.00	775.88
	MIN	-204.61	0.00	-867.07	-204.61	0.00	-589.15	-169.90	0.00	-941.34	-169.90	0.00	-541.84
	MID-PICKUP	-204.61	0.00	-867.07	-204.61	0.00	-589.15	-169.90	0.00	-941.34	-169.90	0.00	-541.84
198	AASHTO FatigTRUCK-LOAD	160.37	0.00	176.45	160.37	0.00	278.45	165.53	0.00	176.76	165.53	0.00	292.16
	MIN	-50.39	0.00	-391.73	-50.39	0.00	-72.44	-48.51	0.00	-399.28	-48.51	0.00	-88.00
	TANDEM-LOAD MAX	122.70	0.00	134.81	122.70	0.00	214.77	126.05	0.00	135.11	126.05	0.00	224.18
	MIN	-39.91	0.00	-297.83	-39.91	0.00	-49.72	-38.66	0.00	-302.33	-38.66	0.00	-60.83

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003027						1003028					
NODE		3027			4027			3028			4028		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.91	0.00	119.90	98.91	0.00	193.02	103.90	0.00	106.33	103.90	0.00	198.74
	MIN	-41.69	0.00	-252.80	-41.69	0.00	-129.09	-30.84	0.00	-269.53	-30.84	0.00	-125.22
199	AASHTO-LRFD TRUCK-LOAD MAX	213.54	0.00	318.15	213.54	0.00	486.84	241.29	0.00	264.85	241.29	0.00	530.29
	MIN	-130.22	0.00	-570.31	-130.22	0.00	-373.60	-112.25	0.00	-613.21	-112.25	0.00	-346.49
	TANDEM-LOAD MAX	148.45	0.00	191.53	148.45	0.00	322.83	158.21	0.00	173.45	158.21	0.00	340.04
	MIN	-78.38	0.00	-367.44	-78.38	0.00	-199.16	-72.22	0.00	-378.92	-72.22	0.00	-191.61
	DISPERSION-LMAX	138.25	0.00	247.70	138.25	0.00	309.88	150.60	0.00	197.71	150.60	0.00	331.80
	MIN	-97.13	0.00	-393.11	-97.13	0.00	-281.02	-76.53	0.00	-432.72	-76.53	0.00	-255.56
300	Total Dead lWithout snow	92.90	0.00	-326.99	92.90	0.00	61.04	200.11	0.00	-609.05	200.11	0.00	226.83
301	Particular Snow	12.86	0.00	-45.48	12.86	0.00	8.25	21.69	0.00	-70.00	21.69	0.00	20.61
302	Live load Total MAX	217.22	0.00	328.41	217.22	0.00	480.29	234.78	0.00	278.60	234.78	0.00	511.17
	MIN	-133.00	0.00	-574.13	-133.00	0.00	-382.95	-112.02	0.00	-611.87	-112.02	0.00	-352.20
303	Sum total D+L+PP MAX	322.98	0.00	54.47	322.98	0.00	549.58	456.58	0.00	-316.87	456.58	0.00	758.60
	MIN	-67.14	0.00	-946.60	-67.14	0.00	-374.70	76.18	0.00	-1290.92	76.18	0.00	-210.42

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE		1003029						1003030							
		3029			4029			3030			4030				
NAME TITLE		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	27.01	0.00	-105.33	27.01	0.00	7.47	21.39	0.00	-89.79	21.39	0.00	-0.43		
3	Railing	6.15	0.00	-24.24	6.15	0.00	1.46	5.97	0.00	-23.92	5.97	0.00	1.03		
5	Wheel guard	60.92	0.00	-239.96	60.92	0.00	14.49	59.12	0.00	-236.81	59.12	0.00	10.15		
8	Steel weight	35.83	0.00	-136.90	35.83	0.00	12.76	15.28	0.00	-77.78	15.28	0.00	-13.97		
10	Medial strip	-27.13	0.00	107.02	-27.13	0.00	-6.29	-29.06	0.00	113.78	-29.06	0.00	-7.59		
19	Snow	13.43	0.00	-52.47	13.43	0.00	3.62	10.92	0.00	-45.57	10.92	0.00	0.06		
31	Miscellaneous	-2.17	0.00	8.61	-2.17	0.00	-0.47	-2.34	0.00	9.16	-2.34	0.00	-0.59		
100	AASHTO-LRFD TRUCK-LOAD	MAX	187.63	0.00	261.19	187.63	0.00	417.21	181.05	0.00	272.95	181.05	0.00	407.95	
		MIN	-118.75	0.00	-446.46	-118.75	0.00	-304.65	-121.26	0.00	-433.69	-121.26	0.00	-308.68	
		TANDEM-LOAD	MAX	141.08	0.00	194.75	141.08	0.00	312.65	135.97	0.00	203.72	135.97	0.00	305.27
		MIN	-88.02	0.00	-335.10	-88.02	0.00	-223.44	-89.89	0.00	-325.48	-89.89	0.00	-226.21	
		DISPERSION-L	MAX	135.92	0.00	205.90	135.92	0.00	308.87	128.70	0.00	213.76	128.70	0.00	300.58
		MIN	-91.95	0.00	-373.99	-91.95	0.00	-293.87	-93.99	0.00	-355.78	-93.99	0.00	-298.66	
110	Live load	L-PICKUP 1	MAX	323.55	0.00	467.09	323.55	0.00	726.08	309.75	0.00	486.71	309.75	0.00	708.53
		MIN	-210.69	0.00	-820.44	-210.69	0.00	-598.52	-215.24	0.00	-789.47	-215.24	0.00	-607.35	
		L-PICKUP 2	MAX	277.00	0.00	400.65	277.00	0.00	621.52	264.67	0.00	417.48	264.67	0.00	605.85
		MIN	-179.97	0.00	-709.08	-179.97	0.00	-517.31	-183.88	0.00	-681.26	-183.88	0.00	-524.87	
		L-PICKUP 3	MAX	-216.89	0.00	-807.40	-216.89	0.00	-637.82	-221.88	0.00	-775.13	-221.88	0.00	-645.04
		MIN	-216.89	0.00	-820.44	-216.89	0.00	-637.82	-221.88	0.00	-789.47	-221.88	0.00	-645.04	
111	AASHTO Twin	TWIN-PICKUP	MAX	314.79	0.00	463.98	314.79	0.00	714.91	301.83	0.00	487.44	301.83	0.00	698.38
		MIN	-216.89	0.00	-807.40	-216.89	0.00	-637.82	-221.88	0.00	-775.13	-221.88	0.00	-645.04	
		MID-PICKUP	MAX	-216.89	0.00	-807.40	-216.89	0.00	-637.82	-221.88	0.00	-775.13	-221.88	0.00	-645.04
198	AASHTO Fatig	TRUCK-LOAD	MAX	156.19	0.00	197.05	156.19	0.00	279.83	153.87	0.00	200.87	153.87	0.00	278.65
		MIN	-56.17	0.00	-372.59	-56.17	0.00	-106.02	-57.05	0.00	-364.07	-57.05	0.00	-107.94	
		TANDEM-LOAD	MAX	119.04	0.00	149.16	119.04	0.00	214.61	117.06	0.00	152.00	117.06	0.00	213.03
		MIN	-44.04	0.00	-282.61	-44.04	0.00	-73.03	-44.76	0.00	-275.93	-44.76	0.00	-74.28	

Bago Bridge

BLOCK [No.2 : Cross beam] [BEAM MEMBER FORCE]

MEMBER		1003029						1003030					
NODE		3029			4029			3030			4030		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.61	0.00	122.58	96.61	0.00	186.75	94.56	0.00	127.59	94.56	0.00	184.80
	MIN	-35.47	0.00	-248.94	-35.47	0.00	-141.25	-37.05	0.00	-242.35	-37.05	0.00	-148.20
199	AASHTO-LRFD TRUCK-LOAD MAX	213.85	0.00	309.64	213.85	0.00	485.48	206.67	0.00	327.83	206.67	0.00	475.40
	MIN	-149.04	0.00	-523.12	-149.04	0.00	-414.82	-152.55	0.00	-505.47	-152.55	0.00	-418.05
	TANDEM-LOAD MAX	141.08	0.00	194.75	141.08	0.00	312.65	135.97	0.00	203.72	135.97	0.00	305.27
	MIN	-88.02	0.00	-335.10	-88.02	0.00	-223.44	-89.89	0.00	-325.48	-89.89	0.00	-226.21
	DISPERSION-LMAX	135.92	0.00	205.90	135.92	0.00	308.87	128.70	0.00	213.76	128.70	0.00	300.58
	MIN	-91.95	0.00	-373.99	-91.95	0.00	-293.87	-93.99	0.00	-355.78	-93.99	0.00	-298.66
300	Total Dead lWithout snow	100.61	0.00	-390.80	100.61	0.00	29.44	70.37	0.00	-305.36	70.37	0.00	-11.41
301	Particular Snow	13.43	0.00	-52.47	13.43	0.00	3.62	10.92	0.00	-45.57	10.92	0.00	0.06
302	Live load Total MAX	210.31	0.00	303.61	210.31	0.00	471.95	201.34	0.00	316.36	201.34	0.00	460.54
	MIN	-140.98	0.00	-533.29	-140.98	0.00	-414.58	-144.22	0.00	-513.16	-144.22	0.00	-419.28
303	Sum total D+L+PP MAX	324.34	0.00	-48.58	324.34	0.00	505.00	282.63	0.00	60.35	282.63	0.00	460.60
	MIN	-69.24	0.00	-976.56	-69.24	0.00	-410.96	-106.19	0.00	-864.08	-106.19	0.00	-430.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003031						1003032						
		3031			4031			3032			4032			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	19.08	0.00	-80.70	19.08	0.00	-1.01	19.17	0.00	-76.73	19.17	0.00	3.36	
3	Railing	5.92	0.00	-23.48	5.92	0.00	1.24	5.98	0.00	-22.84	5.98	0.00	2.14	
5	Wheel guard	58.58	0.00	-232.43	58.58	0.00	12.26	59.20	0.00	-226.08	59.20	0.00	21.18	
8	Steel weight	6.57	0.00	-46.30	6.57	0.00	-18.88	6.21	0.00	-37.87	6.21	0.00	-11.95	
10	Medial strip	-29.94	0.00	115.83	-29.94	0.00	-9.22	-30.29	0.00	113.64	-30.29	0.00	-12.88	
19	Snow	9.90	0.00	-41.48	9.90	0.00	-0.13	9.96	0.00	-39.58	9.96	0.00	2.02	
31	Miscellaneous	-2.41	0.00	9.34	-2.41	0.00	-0.74	-2.44	0.00	9.17	-2.44	0.00	-1.04	
100	AASHTO-LRFD TRUCK-LOAD	MAX	174.10	0.00	280.79	174.10	0.00	398.49	172.08	0.00	292.82	172.08	0.00	395.17
		MIN	-123.04	0.00	-420.77	-123.04	0.00	-308.76	-126.24	0.00	-417.46	-126.24	0.00	-313.71
		TANDEM-LOAD MAX	131.21	0.00	210.24	131.21	0.00	298.55	129.75	0.00	218.95	129.75	0.00	296.27
		MIN	-91.46	0.00	-316.75	-91.46	0.00	-226.62	-93.85	0.00	-314.03	-93.85	0.00	-230.39
		DISPERSION-LMAX	121.98	0.00	209.86	121.98	0.00	292.20	124.57	0.00	220.27	124.57	0.00	295.40
		MIN	-91.15	0.00	-336.64	-91.15	0.00	-291.40	-93.78	0.00	-340.15	-93.78	0.00	-287.78
110	Live load	L-PICKUP 1 MAX	296.09	0.00	490.65	296.09	0.00	690.69	296.65	0.00	513.10	296.65	0.00	690.57
		MIN	-214.19	0.00	-757.41	-214.19	0.00	-600.16	-220.02	0.00	-757.62	-220.02	0.00	-601.49
		L-PICKUP 2 MAX	253.19	0.00	420.10	253.19	0.00	590.75	254.32	0.00	439.22	254.32	0.00	591.66
		MIN	-182.61	0.00	-653.39	-182.61	0.00	-518.02	-187.63	0.00	-654.19	-187.63	0.00	-518.17
		L-PICKUP 3	-219.34	0.00	-735.61	-219.34	0.00	-635.37	-224.05	0.00	-736.79	-224.05	0.00	-637.16
		Live load MAX	296.09	0.00	490.65	296.09	0.00	690.69	296.65	0.00	513.10	296.65	0.00	690.57
MIN	-219.34	0.00	-757.41	-219.34	0.00	-635.37	-224.05	0.00	-757.62	-224.05	0.00	-637.16		
111	AASHTO Twin	TWIN-PICKUP MAX	287.23	0.00	488.56	287.23	0.00	681.86	289.45	0.00	512.61	289.45	0.00	687.20
		MIN	-219.34	0.00	-735.61	-219.34	0.00	-635.37	-224.05	0.00	-736.79	-224.05	0.00	-637.16
		MID-PICKUP	-219.34	0.00	-735.61	-219.34	0.00	-635.37	-224.05	0.00	-736.79	-224.05	0.00	-637.16
198	AASHTO Fatig	TRUCK-LOAD MAX	151.33	0.00	204.72	151.33	0.00	274.17	147.84	0.00	208.33	147.84	0.00	264.82
		MIN	-58.49	0.00	-357.95	-58.49	0.00	-105.98	-60.71	0.00	-352.75	-60.71	0.00	-98.32
		TANDEM-LOAD MAX	115.32	0.00	155.09	115.32	0.00	210.03	113.02	0.00	157.89	113.02	0.00	203.69
		MIN	-45.93	0.00	-271.67	-45.93	0.00	-72.95	-47.58	0.00	-268.40	-47.58	0.00	-67.76

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003031			1003032			1003032			1003032		
NODE		3031			4031			3032			4032		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	93.05	0.00	127.96	93.05	0.00	183.83	93.26	0.00	129.91	93.26	0.00	185.83
	MIN	-36.85	0.00	-236.11	-36.85	0.00	-145.06	-37.59	0.00	-231.45	-37.59	0.00	-135.84
199	AASHTO-LRFD TRUCK-LOAD MAX	197.15	0.00	332.99	197.15	0.00	465.42	197.04	0.00	349.29	197.04	0.00	468.15
	MIN	-152.56	0.00	-480.70	-152.56	0.00	-414.57	-155.16	0.00	-478.50	-155.16	0.00	-420.17
	TANDEM-LOAD MAX	131.21	0.00	210.24	131.21	0.00	298.55	129.75	0.00	218.95	129.75	0.00	296.27
	MIN	-91.46	0.00	-316.75	-91.46	0.00	-226.62	-93.85	0.00	-314.03	-93.85	0.00	-230.39
	DISPERSION-LMAX	121.98	0.00	209.86	121.98	0.00	292.20	124.57	0.00	220.27	124.57	0.00	295.40
	MIN	-91.15	0.00	-336.64	-91.15	0.00	-291.40	-93.78	0.00	-340.15	-93.78	0.00	-287.78
300	Total Dead lWithout snow	57.79	0.00	-257.74	57.79	0.00	-16.35	57.82	0.00	-240.72	57.82	0.00	0.80
301	Particular Snow	9.90	0.00	-41.48	9.90	0.00	-0.13	9.96	0.00	-39.58	9.96	0.00	2.02
302	Live load Total MAX	192.46	0.00	318.93	192.46	0.00	448.95	192.82	0.00	333.51	192.82	0.00	448.87
	MIN	-142.57	0.00	-492.31	-142.57	0.00	-412.99	-145.63	0.00	-492.45	-145.63	0.00	-414.15
303	Sum total D+L+PP MAX	260.15	0.00	115.38	260.15	0.00	448.82	260.60	0.00	153.28	260.60	0.00	451.69
	MIN	-117.65	0.00	-791.53	-117.65	0.00	-429.47	-121.54	0.00	-772.74	-121.54	0.00	-412.13

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003033						1003034					
		3033			4033			3034			4034		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	24.00	0.00	-81.19	24.00	0.00	19.07	11.06	0.00	-42.99	11.06	0.00	3.22
3	Railing	6.12	0.00	-21.61	6.12	0.00	3.96	4.42	0.00	-15.30	4.42	0.00	3.15
5	Wheel guard	60.61	0.00	-213.95	60.61	0.00	39.21	43.72	0.00	-151.43	43.72	0.00	31.19
8	Steel weight	24.04	0.00	-70.53	24.04	0.00	29.88	-7.96	0.00	8.66	-7.96	0.00	-24.57
10	Medial strip	-28.42	0.00	102.43	-28.42	0.00	-16.26	-24.19	0.00	81.03	-24.19	0.00	-19.99
19	Snow	12.12	0.00	-41.23	12.12	0.00	9.40	5.99	0.00	-22.81	5.99	0.00	2.22
31	Miscellaneous	-2.30	0.00	8.27	-2.30	0.00	-1.32	-1.95	0.00	6.54	-1.95	0.00	-1.61
100	AASHTO-LRFD TRUCK-LOAD	178.11	0.00	259.94	178.11	0.00	410.58	160.92	0.00	250.31	160.92	0.00	365.94
	MIN	-116.73	0.00	-422.78	-116.73	0.00	-294.56	-112.74	0.00	-378.42	-112.74	0.00	-279.13
	TANDEM-LOAD MAX	134.05	0.00	196.46	134.05	0.00	306.76	121.21	0.00	188.64	121.21	0.00	273.24
	MIN	-87.22	0.00	-318.85	-87.22	0.00	-216.09	-83.54	0.00	-285.95	-83.54	0.00	-204.08
	DISPERSION-LMAX	125.67	0.00	187.98	125.67	0.00	311.23	124.19	0.00	205.89	124.19	0.00	313.00
	MIN	-87.09	0.00	-316.98	-87.09	0.00	-277.91	-106.97	0.00	-273.19	-106.97	0.00	-307.04
110	Live load L-PICKUP 1	303.78	0.00	447.92	303.78	0.00	721.81	285.10	0.00	456.20	285.10	0.00	678.94
	MIN	-203.82	0.00	-739.76	-203.82	0.00	-572.46	-219.72	0.00	-651.62	-219.72	0.00	-586.16
	L-PICKUP 2 MAX	259.72	0.00	384.44	259.72	0.00	617.99	245.39	0.00	394.53	245.39	0.00	586.24
	MIN	-174.31	0.00	-635.83	-174.31	0.00	-494.00	-190.52	0.00	-559.14	-190.52	0.00	-511.11
	L-PICKUP 3	-205.69	0.00	-716.94	-205.69	0.00	-608.42	-221.10	0.00	-615.68	-221.10	0.00	-612.78
	Live load MAX	303.78	0.00	447.92	303.78	0.00	721.81	285.10	0.00	456.20	285.10	0.00	678.94
	MIN	-205.69	0.00	-739.76	-205.69	0.00	-608.42	-221.10	0.00	-651.62	-221.10	0.00	-612.78
111	AASHTO Twin TWIN-PICKUP	294.99	0.00	434.29	294.99	0.00	720.09	272.15	0.00	449.76	272.15	0.00	660.74
	MIN	-205.69	0.00	-716.94	-205.69	0.00	-608.42	-221.10	0.00	-615.68	-221.10	0.00	-612.78
	MID-PICKUP	-205.69	0.00	-716.94	-205.69	0.00	-608.42	-221.10	0.00	-615.68	-221.10	0.00	-612.78
198	AASHTO FatigTRUCK-LOAD	148.41	0.00	195.35	148.41	0.00	261.16	126.43	0.00	173.38	126.43	0.00	217.25
	MIN	-57.64	0.00	-359.16	-57.64	0.00	-75.51	-54.15	0.00	-310.87	-54.15	0.00	-54.05
	TANDEM-LOAD MAX	113.37	0.00	148.84	113.37	0.00	200.98	97.12	0.00	132.20	97.12	0.00	168.70
	MIN	-45.29	0.00	-272.68	-45.29	0.00	-51.80	-42.47	0.00	-236.98	-42.47	0.00	-45.53

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003033						1003034					
NODE		3033			4033			3034			4034		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.44	0.00	115.44	96.44	0.00	197.40	89.44	0.00	128.03	89.44	0.00	197.04
	MIN	-41.08	0.00	-226.90	-41.08	0.00	-129.40	-59.07	0.00	-192.59	-59.07	0.00	-153.26
199	AASHTO-LRFD TRUCK-LOAD MAX	202.10	0.00	294.56	202.10	0.00	488.87	178.20	0.00	293.84	178.20	0.00	421.16
	MIN	-141.45	0.00	-479.62	-141.45	0.00	-398.11	-138.70	0.00	-410.90	-138.70	0.00	-373.83
	TANDEM-LOAD MAX	134.05	0.00	196.46	134.05	0.00	306.76	121.21	0.00	188.64	121.21	0.00	273.24
	MIN	-87.22	0.00	-318.85	-87.22	0.00	-216.09	-83.54	0.00	-285.95	-83.54	0.00	-204.08
	DISPERSION-LMAX	125.67	0.00	187.98	125.67	0.00	311.23	124.19	0.00	205.89	124.19	0.00	313.00
	MIN	-87.09	0.00	-316.98	-87.09	0.00	-277.91	-106.97	0.00	-273.19	-106.97	0.00	-307.04
300	Total Dead lWithout snow	84.06	0.00	-276.58	84.06	0.00	74.53	25.11	0.00	-113.49	25.11	0.00	-8.61
301	Particular Snow	12.12	0.00	-41.23	12.12	0.00	9.40	5.99	0.00	-22.81	5.99	0.00	2.22
302	Live load Total MAX	197.46	0.00	291.15	197.46	0.00	469.18	185.32	0.00	296.53	185.32	0.00	441.31
	MIN	-133.70	0.00	-480.85	-133.70	0.00	-395.47	-143.72	0.00	-423.55	-143.72	0.00	-398.31
303	Sum total D+L+PP MAX	293.63	0.00	60.68	293.63	0.00	553.10	216.42	0.00	249.19	216.42	0.00	443.54
	MIN	-77.63	0.00	-798.65	-77.63	0.00	-386.07	-137.72	0.00	-559.85	-137.72	0.00	-404.69

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003035						1003036					
		3035			4035			3036			4036		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	-0.22	0.00	-10.81	-0.22	0.00	-11.75	-17.02	0.00	29.23	-17.02	0.00	-41.85
3	Railing	-0.26	0.00	-2.97	-0.26	0.00	-4.04	-5.92	0.00	10.26	-5.92	0.00	-14.47
5	Wheel guard	-2.54	0.00	-29.40	-2.54	0.00	-40.01	-58.63	0.00	101.62	-58.63	0.00	-143.29
8	Steel weight	2.15	0.00	-8.29	2.15	0.00	0.71	1.84	0.00	-4.25	1.84	0.00	3.45
10	Medial strip	1.65	0.00	14.29	1.65	0.00	21.18	31.16	0.00	-54.16	31.16	0.00	76.00
19	Snow	-0.16	0.00	-5.51	-0.16	0.00	-6.20	-9.00	0.00	15.48	-9.00	0.00	-22.10
31	Miscellaneous	0.13	0.00	1.15	0.13	0.00	1.71	2.51	0.00	-4.37	2.51	0.00	6.13
100	AASHTO-LRFD TRUCK-LOAD	140.52	0.00	237.99	140.52	0.00	293.87	107.65	0.00	200.98	107.65	0.00	250.02
	MIN	-110.65	0.00	-300.40	-110.65	0.00	-242.23	-108.34	0.00	-200.63	-108.34	0.00	-252.06
	TANDEM-LOAD MAX	106.74	0.00	173.02	106.74	0.00	222.24	73.35	0.00	136.36	73.35	0.00	170.70
	MIN	-80.92	0.00	-228.81	-80.92	0.00	-178.15	-73.66	0.00	-136.97	-73.66	0.00	-171.90
	DISPERSION-LMAX	181.29	0.00	332.38	181.29	0.00	424.18	299.45	0.00	611.21	299.45	0.00	690.03
	MIN	-182.56	0.00	-348.02	-182.56	0.00	-445.56	-328.40	0.00	-561.64	-328.40	0.00	-761.25
110	Live load L-PICKUP 1	321.81	0.00	570.37	321.81	0.00	718.06	407.10	0.00	812.19	407.10	0.00	940.05
	MIN	-293.20	0.00	-648.41	-293.20	0.00	-687.79	-436.73	0.00	-762.26	-436.73	0.00	-1013.32
	L-PICKUP 2 MAX	288.03	0.00	505.39	288.03	0.00	646.42	372.79	0.00	747.57	372.79	0.00	860.73
	MIN	-263.47	0.00	-576.82	-263.47	0.00	-623.71	-402.06	0.00	-698.60	-402.06	0.00	-933.16
	L-PICKUP 3	-306.47	0.00	-616.50	-306.47	0.00	-701.75	-469.54	0.00	-828.39	-469.54	0.00	-1088.91
	Live load MAX	321.81	0.00	570.37	321.81	0.00	718.06	407.10	0.00	812.19	407.10	0.00	940.05
	MIN	-306.47	0.00	-648.41	-306.47	0.00	-701.75	-469.54	0.00	-828.39	-469.54	0.00	-1088.91
111	AASHTO Twin TWIN-PICKUP	307.60	0.00	593.84	307.60	0.00	685.53	444.62	0.00	873.45	444.62	0.00	1030.03
	MIN	-306.47	0.00	-616.50	-306.47	0.00	-701.75	-469.54	0.00	-828.39	-469.54	0.00	-1088.91
	MID-PICKUP	-306.47	0.00	-616.50	-306.47	0.00	-701.75	-469.54	0.00	-828.39	-469.54	0.00	-1088.91
198	AASHTO FatigTRUCK-LOAD	67.42	0.00	114.05	67.42	0.00	110.63	42.00	0.00	122.78	42.00	0.00	95.56
	MIN	-44.43	0.00	-170.99	-44.43	0.00	-107.34	-67.32	0.00	-79.88	-67.32	0.00	-158.77
	TANDEM-LOAD MAX	55.22	0.00	86.74	55.22	0.00	94.07	28.57	0.00	83.24	28.57	0.00	64.79
	MIN	-30.48	0.00	-136.60	-30.48	0.00	-74.08	-45.69	0.00	-54.56	-45.69	0.00	-108.08

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1003035						1003036					
	3035			4035			3036			4036		
NAME TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	98.96	0.00	210.53	98.96	0.00	219.98	142.63	0.00	384.24	142.63	0.00	326.55
MIN	-115.60	0.00	-196.92	-115.60	0.00	-279.28	-210.01	0.00	-271.53	-210.01	0.00	-492.96
199 AASHTO-LRFD TRUCK-LOAD MAX	160.48	0.00	327.45	160.48	0.00	337.52	194.58	0.00	359.29	194.58	0.00	454.45
MIN	-157.97	0.00	-336.99	-157.97	0.00	-334.16	-193.31	0.00	-358.79	-193.31	0.00	-448.65
TANDEM-LOAD MAX	106.74	0.00	173.02	106.74	0.00	222.24	73.35	0.00	136.36	73.35	0.00	170.70
MIN	-80.92	0.00	-228.81	-80.92	0.00	-178.15	-73.66	0.00	-136.97	-73.66	0.00	-171.90
DISPERSION-LMAX	181.29	0.00	332.38	181.29	0.00	424.18	299.45	0.00	611.21	299.45	0.00	690.03
MIN	-182.56	0.00	-348.02	-182.56	0.00	-445.56	-328.40	0.00	-561.64	-328.40	0.00	-761.25
300 Total Dead lWithout snow	0.92	0.00	-36.03	0.92	0.00	-32.20	-46.05	0.00	78.34	-46.05	0.00	-114.02
301 Particular Snow	-0.16	0.00	-5.51	-0.16	0.00	-6.20	-9.00	0.00	15.48	-9.00	0.00	-22.10
302 Live load Total MAX	209.17	0.00	370.74	209.17	0.00	466.74	264.61	0.00	527.92	264.61	0.00	611.03
MIN	-199.21	0.00	-421.47	-199.21	0.00	-456.14	-305.20	0.00	-538.45	-305.20	0.00	-707.79
303 Sum total D+L+PP MAX	209.93	0.00	365.23	209.93	0.00	460.54	255.62	0.00	621.73	255.62	0.00	588.93
MIN	-199.37	0.00	-463.01	-199.37	0.00	-494.54	-360.25	0.00	-522.97	-360.25	0.00	-843.92

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003037						1003038							
		3037			4037			3038			4038				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-5.73	0.00	2.41	-5.73	0.00	-21.52	2.24	0.00	-22.95	2.24	0.00	-13.60		
3	Railing	-0.44	0.00	-2.53	-0.44	0.00	-4.39	4.16	0.00	-14.71	4.16	0.00	2.68		
5	Wheel guard	-4.39	0.00	-25.09	-4.39	0.00	-43.42	41.22	0.00	-145.65	41.22	0.00	26.53		
8	Steel weight	-17.89	0.00	40.00	-17.89	0.00	-34.74	-40.66	0.00	82.80	-40.66	0.00	-87.03		
10	Medial strip	-0.24	0.00	18.94	-0.24	0.00	17.93	-27.67	0.00	88.90	-27.67	0.00	-26.69		
19	Snow	-2.63	0.00	0.40	-2.63	0.00	-10.58	2.04	0.00	-13.84	2.04	0.00	-5.30		
31	Miscellaneous	-0.02	0.00	1.53	-0.02	0.00	1.44	-2.23	0.00	7.16	-2.23	0.00	-2.14		
100	AASHTO-LRFD TRUCK-LOAD	MAX	140.36	0.00	242.56	140.36	0.00	292.56	161.90	0.00	252.54	161.90	0.00	368.57	
		MIN	-111.29	0.00	-298.97	-111.29	0.00	-243.91	-114.57	0.00	-385.24	-114.57	0.00	-284.61	
		TANDEM-LOAD	MAX	106.90	0.00	175.67	106.90	0.00	222.36	122.29	0.00	188.19	122.29	0.00	276.88
		MIN	-81.23	0.00	-228.53	-81.23	0.00	-178.93	-84.57	0.00	-291.92	-84.57	0.00	-207.64	
		DISPERSION-L	MAX	179.69	0.00	348.29	179.69	0.00	421.50	123.72	0.00	245.00	123.72	0.00	308.80
		MIN	-189.96	0.00	-342.30	-189.96	0.00	-458.95	-120.81	0.00	-279.25	-120.81	0.00	-330.12	
110	Live load	L-PICKUP 1	MAX	320.05	0.00	590.85	320.05	0.00	714.06	285.62	0.00	497.55	285.62	0.00	677.37
		MIN	-301.25	0.00	-641.27	-301.25	0.00	-702.86	-235.38	0.00	-664.50	-235.38	0.00	-614.73	
		L-PICKUP 2	MAX	286.60	0.00	523.96	286.60	0.00	643.86	246.02	0.00	433.19	246.02	0.00	585.68
		MIN	-271.20	0.00	-570.83	-271.20	0.00	-637.88	-205.37	0.00	-571.17	-205.37	0.00	-537.76	
		L-PICKUP 3	MAX	-316.06	0.00	-604.07	-316.06	0.00	-718.36	-238.92	0.00	-625.99	-238.92	0.00	-646.21
		Live load	MAX	320.05	0.00	590.85	320.05	0.00	714.06	285.62	0.00	497.55	285.62	0.00	677.37
MIN	-316.06	0.00	-641.27	-316.06	0.00	-718.36	-238.92	0.00	-664.50	-238.92	0.00	-646.21			
111	AASHTO Twin	TWIN-PICKUP	MAX	303.92	0.00	620.86	303.92	0.00	678.30	268.60	0.00	499.66	268.60	0.00	648.08
		MIN	-316.06	0.00	-604.07	-316.06	0.00	-718.36	-238.92	0.00	-625.99	-238.92	0.00	-646.21	
		MID-PICKUP	MAX	-316.06	0.00	-604.07	-316.06	0.00	-718.36	-238.92	0.00	-625.99	-238.92	0.00	-646.21
198	AASHTO Fatig	TRUCK-LOAD	MAX	66.76	0.00	115.22	66.76	0.00	108.98	129.30	0.00	170.95	129.30	0.00	222.75
		MIN	-44.29	0.00	-169.89	-44.29	0.00	-106.42	-53.40	0.00	-317.35	-53.40	0.00	-53.78	
		TANDEM-LOAD	MAX	55.05	0.00	87.21	55.05	0.00	93.53	99.63	0.00	130.28	99.63	0.00	173.55
		MIN	-30.64	0.00	-136.42	-30.64	0.00	-73.45	-41.84	0.00	-242.60	-41.84	0.00	-44.75	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003037						1003038					
NODE		3037			4037			3038			4038		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.48	0.00	217.09	98.48	0.00	219.35	88.63	0.00	137.94	88.63	0.00	196.06
	MIN	-118.85	0.00	-195.26	-118.85	0.00	-285.71	-63.16	0.00	-190.15	-63.16	0.00	-160.69
199	AASHTO-LRFD TRUCK-LOAD MAX	158.00	0.00	341.56	158.00	0.00	332.17	174.72	0.00	310.17	174.72	0.00	411.29
	MIN	-161.21	0.00	-328.89	-161.21	0.00	-339.23	-144.66	0.00	-416.29	-144.66	0.00	-387.89
	TANDEM-LOAD MAX	106.90	0.00	175.67	106.90	0.00	222.36	122.29	0.00	188.19	122.29	0.00	276.88
	MIN	-81.23	0.00	-228.53	-81.23	0.00	-178.93	-84.57	0.00	-291.92	-84.57	0.00	-207.64
	DISPERSION-LMAX	179.69	0.00	348.29	179.69	0.00	421.50	123.72	0.00	245.00	123.72	0.00	308.80
	MIN	-189.96	0.00	-342.30	-189.96	0.00	-458.95	-120.81	0.00	-279.25	-120.81	0.00	-330.12
300	Total Dead lWithout snow	-28.72	0.00	35.26	-28.72	0.00	-84.68	-22.93	0.00	-4.45	-22.93	0.00	-100.25
301	Particular Snow	-2.63	0.00	0.40	-2.63	0.00	-10.58	2.04	0.00	-13.84	2.04	0.00	-5.30
302	Live load Total MAX	208.03	0.00	384.05	208.03	0.00	464.14	185.65	0.00	323.41	185.65	0.00	440.29
	MIN	-205.44	0.00	-416.83	-205.44	0.00	-466.94	-155.30	0.00	-431.92	-155.30	0.00	-420.04
303	Sum total D+L+PP MAX	205.40	0.00	419.72	205.40	0.00	453.56	187.70	0.00	309.57	187.70	0.00	434.99
	MIN	-236.78	0.00	-416.42	-236.78	0.00	-562.20	-176.19	0.00	-450.22	-176.19	0.00	-525.59

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003039						1003040					
NODE		3039			4039			3040			4040		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	29.97	0.00	-96.87	29.97	0.00	28.30	35.61	0.00	-116.29	35.61	0.00	32.46
3	Railing	6.32	0.00	-22.11	6.32	0.00	4.29	6.47	0.00	-24.02	6.47	0.00	3.01
5	Wheel guard	62.57	0.00	-218.93	62.57	0.00	42.43	64.05	0.00	-237.78	64.05	0.00	29.77
8	Steel weight	45.82	0.00	-128.03	45.82	0.00	63.36	66.88	0.00	-183.87	66.88	0.00	95.47
10	Medial strip	-26.45	0.00	97.08	-26.45	0.00	-13.40	-24.02	0.00	98.53	-24.02	0.00	-1.82
19	Snow	14.78	0.00	-48.22	14.78	0.00	13.52	17.31	0.00	-57.28	17.31	0.00	15.04
31	Miscellaneous	-2.13	0.00	7.82	-2.13	0.00	-1.07	-1.94	0.00	7.97	-1.94	0.00	-0.15
100	AASHTO-LRFD TRUCK-LOAD	197.29	0.00	254.94	197.29	0.00	444.29	189.26	0.00	262.04	189.26	0.00	433.89
	MIN	-108.51	0.00	-472.47	-108.51	0.00	-284.54	-113.58	0.00	-447.85	-113.58	0.00	-294.53
	TANDEM-LOAD MAX	148.18	0.00	191.01	148.18	0.00	331.53	142.07	0.00	197.47	142.07	0.00	323.76
	MIN	-81.27	0.00	-353.28	-81.27	0.00	-208.97	-85.08	0.00	-336.11	-85.08	0.00	-217.20
	DISPERSION-LMAX	142.64	0.00	231.34	142.64	0.00	335.59	138.51	0.00	183.52	138.51	0.00	329.23
	MIN	-94.01	0.00	-388.20	-94.01	0.00	-286.57	-80.65	0.00	-370.39	-80.65	0.00	-273.55
110	Live load L-PICKUP 1	339.93	0.00	486.29	339.93	0.00	779.88	327.76	0.00	445.56	327.76	0.00	763.11
	MIN	-202.52	0.00	-860.67	-202.52	0.00	-571.11	-194.24	0.00	-818.24	-194.24	0.00	-568.08
	L-PICKUP 2 MAX	290.82	0.00	422.35	290.82	0.00	667.12	280.58	0.00	380.99	280.58	0.00	652.99
	MIN	-175.28	0.00	-741.48	-175.28	0.00	-495.54	-165.73	0.00	-706.50	-165.73	0.00	-490.76
	L-PICKUP 3	-204.41	0.00	-853.72	-204.41	0.00	-607.77	-194.05	0.00	-809.18	-194.05	0.00	-599.51
	Live load MAX	339.93	0.00	486.29	339.93	0.00	779.88	327.76	0.00	445.56	327.76	0.00	763.11
	MIN	-204.41	0.00	-860.67	-204.41	0.00	-607.77	-194.24	0.00	-818.24	-194.24	0.00	-599.51
111	AASHTO Twin TWIN-PICKUP	331.91	0.00	476.03	331.91	0.00	774.02	322.53	0.00	431.53	322.53	0.00	762.50
	MIN	-204.41	0.00	-853.72	-204.41	0.00	-607.77	-194.05	0.00	-809.18	-194.05	0.00	-599.51
	MID-PICKUP	-204.41	0.00	-853.72	-204.41	0.00	-607.77	-194.05	0.00	-809.18	-194.05	0.00	-599.51
198	AASHTO FatigTRUCK-LOAD	157.40	0.00	183.31	157.40	0.00	278.35	154.91	0.00	198.70	154.91	0.00	279.29
	MIN	-52.95	0.00	-379.12	-52.95	0.00	-74.11	-56.85	0.00	-367.76	-56.85	0.00	-94.96
	TANDEM-LOAD MAX	120.04	0.00	140.49	120.04	0.00	213.96	118.07	0.00	151.35	118.07	0.00	214.22
	MIN	-41.95	0.00	-287.45	-41.95	0.00	-50.99	-44.88	0.00	-278.94	-44.88	0.00	-65.65

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003039						1003040					
NODE		3039			4039			3040			4040		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	100.95	0.00	113.46	100.95	0.00	206.42	99.61	0.00	113.90	99.61	0.00	198.92
	MIN	-41.06	0.00	-248.96	-41.06	0.00	-133.00	-33.55	0.00	-246.19	-33.55	0.00	-132.26
199	AASHTO-LRFD TRUCK-LOAD MAX	226.15	0.00	297.58	226.15	0.00	524.43	219.86	0.00	295.96	219.86	0.00	517.99
	MIN	-133.11	0.00	-560.39	-133.11	0.00	-388.73	-134.95	0.00	-528.70	-134.95	0.00	-392.57
	TANDEM-LOAD MAX	148.18	0.00	191.01	148.18	0.00	331.53	142.07	0.00	197.47	142.07	0.00	323.76
	MIN	-81.27	0.00	-353.28	-81.27	0.00	-208.97	-85.08	0.00	-336.11	-85.08	0.00	-217.20
	DISPERSION-LMAX	142.64	0.00	231.34	142.64	0.00	335.59	138.51	0.00	183.52	138.51	0.00	329.23
	MIN	-94.01	0.00	-388.20	-94.01	0.00	-286.57	-80.65	0.00	-370.39	-80.65	0.00	-273.55
300	Total Dead lWithout snow	116.10	0.00	-361.05	116.10	0.00	123.90	147.04	0.00	-455.46	147.04	0.00	158.74
301	Particular Snow	14.78	0.00	-48.22	14.78	0.00	13.52	17.31	0.00	-57.28	17.31	0.00	15.04
302	Live load Total MAX	220.95	0.00	316.09	220.95	0.00	506.92	213.05	0.00	289.61	213.05	0.00	496.02
	MIN	-132.86	0.00	-559.43	-132.86	0.00	-395.05	-126.26	0.00	-531.86	-126.26	0.00	-389.68
303	Sum total D+L+PP MAX	351.84	0.00	1.64	351.84	0.00	644.34	377.41	0.00	-136.24	377.41	0.00	669.81
	MIN	-41.84	0.00	-968.71	-41.84	0.00	-376.15	0.23	0.00	-1044.59	0.23	0.00	-332.80

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003041						1003042						
		3041			4041			3042			4042			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	17.57	0.00	-76.87	17.57	0.00	-3.49	15.91	0.00	-71.80	15.91	0.00	-5.33	
3	Railing	5.87	0.00	-23.34	5.87	0.00	1.16	5.81	0.00	-23.36	5.81	0.00	0.89	
5	Wheel guard	58.08	0.00	-231.06	58.08	0.00	11.53	57.48	0.00	-231.24	57.48	0.00	8.83	
8	Steel weight	1.05	0.00	-32.41	1.05	0.00	-28.02	-4.92	0.00	-11.68	-4.92	0.00	-32.24	
10	Medial strip	-30.32	0.00	116.69	-30.32	0.00	-9.95	-30.93	0.00	119.91	-30.93	0.00	-9.27	
19	Snow	9.24	0.00	-39.79	9.24	0.00	-1.22	8.49	0.00	-37.56	8.49	0.00	-2.11	
31	Miscellaneous	-2.46	0.00	9.45	-2.46	0.00	-0.82	-2.50	0.00	9.70	-2.50	0.00	-0.75	
100	AASHTO-LRFD TRUCK-LOAD	MAX	172.50	0.00	314.53	172.50	0.00	395.82	167.95	0.00	304.37	167.95	0.00	390.02
		MIN	-133.86	0.00	-417.78	-133.86	0.00	-328.18	-129.29	0.00	-405.15	-129.29	0.00	-318.44
	TANDEM-LOAD	MAX	130.12	0.00	234.25	130.12	0.00	295.56	126.84	0.00	227.75	126.84	0.00	291.40
		MIN	-99.06	0.00	-312.65	-99.06	0.00	-240.89	-96.04	0.00	-304.12	-96.04	0.00	-233.95
	DISPERSION-LMAX	MAX	130.89	0.00	235.40	130.89	0.00	304.77	121.55	0.00	222.58	121.55	0.00	293.15
		MIN	-102.75	0.00	-354.85	-102.75	0.00	-307.97	-95.99	0.00	-334.12	-95.99	0.00	-299.40
110	Live load L-PICKUP 1	MAX	303.39	0.00	549.93	303.39	0.00	700.59	289.50	0.00	526.96	289.50	0.00	683.17
		MIN	-236.61	0.00	-772.63	-236.61	0.00	-636.16	-225.28	0.00	-739.27	-225.28	0.00	-617.84
	L-PICKUP 2	MAX	261.02	0.00	469.65	261.02	0.00	600.33	248.39	0.00	450.34	248.39	0.00	584.55
		MIN	-201.80	0.00	-667.50	-201.80	0.00	-548.87	-192.03	0.00	-638.24	-192.03	0.00	-533.35
	L-PICKUP 3	MAX	261.02	0.00	469.65	261.02	0.00	600.33	248.39	0.00	450.34	248.39	0.00	584.55
		MIN	-201.80	0.00	-667.50	-201.80	0.00	-548.87	-192.03	0.00	-638.24	-192.03	0.00	-533.35
	Live load	MAX	303.39	0.00	549.93	303.39	0.00	700.59	289.50	0.00	526.96	289.50	0.00	683.17
		MIN	-244.71	0.00	-772.63	-244.71	0.00	-677.70	-230.85	0.00	-739.27	-230.85	0.00	-652.86
111	AASHTO Twin TWIN-PICKUP	MAX	297.06	0.00	551.06	297.06	0.00	699.49	282.28	0.00	523.32	282.28	0.00	679.20
		MIN	-244.71	0.00	-761.59	-244.71	0.00	-677.70	-230.85	0.00	-723.07	-230.85	0.00	-652.86
	MID-PICKUP	MAX	297.06	0.00	551.06	297.06	0.00	699.49	282.28	0.00	523.32	282.28	0.00	679.20
		MIN	-244.71	0.00	-761.59	-244.71	0.00	-677.70	-230.85	0.00	-723.07	-230.85	0.00	-652.86
198	AASHTO FatigTRUCK-LOAD	MAX	147.01	0.00	214.20	147.01	0.00	269.08	147.31	0.00	211.89	147.31	0.00	271.13
		MIN	-62.42	0.00	-344.98	-62.42	0.00	-109.95	-60.94	0.00	-344.17	-60.94	0.00	-109.79
	TANDEM-LOAD	MAX	112.01	0.00	162.04	112.01	0.00	205.94	112.01	0.00	160.47	112.01	0.00	206.96
		MIN	-48.82	0.00	-261.93	-48.82	0.00	-75.72	-47.83	0.00	-260.89	-47.83	0.00	-75.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003041			1003042								
NODE		3041	4041		3042	4042							
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	92.26	0.00	136.25	92.26	0.00	184.84	91.83	0.00	133.17	91.83	0.00	183.93
	MIN	-39.64	0.00	-233.18	-39.64	0.00	-147.07	-38.44	0.00	-231.77	-38.44	0.00	-150.13
199	AASHTO-LRFD TRUCK-LOAD MAX	199.17	0.00	376.89	199.17	0.00	472.44	192.09	0.00	358.88	192.09	0.00	461.52
	MIN	-169.15	0.00	-491.36	-169.15	0.00	-445.03	-160.50	0.00	-469.30	-160.50	0.00	-426.01
	TANDEM-LOAD MAX	130.12	0.00	234.25	130.12	0.00	295.56	126.84	0.00	227.75	126.84	0.00	291.40
	MIN	-99.06	0.00	-312.65	-99.06	0.00	-240.89	-96.04	0.00	-304.12	-96.04	0.00	-233.95
	DISPERSION-LMAX	130.89	0.00	235.40	130.89	0.00	304.77	121.55	0.00	222.58	121.55	0.00	293.15
	MIN	-102.75	0.00	-354.85	-102.75	0.00	-307.97	-95.99	0.00	-334.12	-95.99	0.00	-299.40
300	Total Dead lWithout snow	49.79	0.00	-237.54	49.79	0.00	-29.58	40.84	0.00	-208.48	40.84	0.00	-37.88
301	Particular Snow	9.24	0.00	-39.79	9.24	0.00	-1.22	8.49	0.00	-37.56	8.49	0.00	-2.11
302	Live load Total MAX	197.20	0.00	357.46	197.20	0.00	455.38	188.17	0.00	342.52	188.17	0.00	444.06
	MIN	-159.06	0.00	-502.21	-159.06	0.00	-440.51	-150.05	0.00	-480.52	-150.05	0.00	-424.36
303	Sum total D+L+PP MAX	256.23	0.00	187.36	256.23	0.00	454.16	237.50	0.00	199.24	237.50	0.00	441.95
	MIN	-147.76	0.00	-779.54	-147.76	0.00	-471.31	-141.56	0.00	-726.56	-141.56	0.00	-464.35

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003043						1003044							
		3043			4043			3044			4044				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	17.00	0.00	-73.67	17.00	0.00	-2.67	24.95	0.00	-90.20	24.95	0.00	14.00		
3	Railing	5.85	0.00	-23.26	5.85	0.00	1.19	6.15	0.00	-23.25	6.15	0.00	2.44		
5	Wheel guard	57.94	0.00	-230.27	57.94	0.00	11.75	60.90	0.00	-230.18	60.90	0.00	24.19		
8	Steel weight	-1.09	0.00	-20.42	-1.09	0.00	-24.99	27.52	0.00	-87.46	27.52	0.00	27.49		
10	Medial strip	-30.64	0.00	118.19	-30.64	0.00	-9.79	-28.08	0.00	108.51	-28.08	0.00	-8.79		
19	Snow	8.97	0.00	-38.35	8.97	0.00	-0.87	12.54	0.00	-45.61	12.54	0.00	6.78		
31	Miscellaneous	-2.48	0.00	9.55	-2.48	0.00	-0.79	-2.27	0.00	8.77	-2.27	0.00	-0.71		
100	AASHTO-LRFD TRUCK-LOAD	MAX	169.07	0.00	306.06	169.07	0.00	394.26	175.45	0.00	287.40	175.45	0.00	406.75	
		MIN	-129.46	0.00	-407.25	-129.46	0.00	-319.75	-122.48	0.00	-419.03	-122.48	0.00	-308.07	
		TANDEM-LOAD	MAX	127.67	0.00	229.23	127.67	0.00	294.36	132.30	0.00	216.29	132.30	0.00	303.75
		MIN	-96.24	0.00	-305.50	-96.24	0.00	-235.10	-91.47	0.00	-315.01	-91.47	0.00	-226.92	
		DISPERSION-L	MAX	121.79	0.00	220.34	121.79	0.00	295.15	126.26	0.00	197.13	126.26	0.00	306.94
		MIN	-94.47	0.00	-335.04	-94.47	0.00	-297.09	-86.04	0.00	-340.01	-86.04	0.00	-281.65	
110	Live load	L-PICKUP 1	MAX	290.86	0.00	526.40	290.86	0.00	689.41	301.71	0.00	484.53	301.71	0.00	713.69
		MIN	-223.93	0.00	-742.29	-223.93	0.00	-616.83	-208.52	0.00	-759.04	-208.52	0.00	-589.72	
		L-PICKUP 2	MAX	249.46	0.00	449.57	249.46	0.00	589.51	258.56	0.00	413.42	258.56	0.00	610.69
		MIN	-190.71	0.00	-640.54	-190.71	0.00	-532.18	-177.51	0.00	-655.01	-177.51	0.00	-508.57	
		L-PICKUP 3	MAX	-228.89	0.00	-726.34	-228.89	0.00	-652.92	-210.28	0.00	-744.11	-210.28	0.00	-623.83
		Live load	MAX	290.86	0.00	526.40	290.86	0.00	689.41	301.71	0.00	484.53	301.71	0.00	713.69
MIN	-228.89	0.00	-742.29	-228.89	0.00	-652.92	-210.28	0.00	-759.04	-210.28	0.00	-623.83			
111	AASHTO Twin	TWIN-PICKUP	MAX	284.19	0.00	519.25	284.19	0.00	687.98	296.08	0.00	468.43	296.08	0.00	714.38
		MIN	-228.89	0.00	-726.34	-228.89	0.00	-652.92	-210.28	0.00	-744.11	-210.28	0.00	-623.83	
		MID-PICKUP	MAX	-228.89	0.00	-726.34	-228.89	0.00	-652.92	-210.28	0.00	-744.11	-210.28	0.00	-623.83
198	AASHTO Fatig	TRUCK-LOAD	MAX	147.04	0.00	212.56	147.04	0.00	269.48	148.51	0.00	207.46	148.51	0.00	267.91
		MIN	-61.45	0.00	-344.69	-61.45	0.00	-107.83	-60.23	0.00	-352.41	-60.23	0.00	-96.90	
		TANDEM-LOAD	MAX	111.91	0.00	161.12	111.91	0.00	205.99	113.22	0.00	157.77	113.22	0.00	205.50
		MIN	-48.23	0.00	-261.48	-48.23	0.00	-74.26	-47.38	0.00	-267.43	-47.38	0.00	-66.86	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003043			1003044			1003044			1003044		
NODE		3043			4043			3044			4044		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	92.03	0.00	132.11	92.03	0.00	184.44	94.96	0.00	122.57	94.96	0.00	190.58
	MIN	-37.80	0.00	-231.49	-37.80	0.00	-146.28	-36.32	0.00	-234.20	-36.32	0.00	-135.63
199	AASHTO-LRFD TRUCK-LOAD MAX	193.98	0.00	356.60	193.98	0.00	469.27	202.72	0.00	323.34	202.72	0.00	486.81
	MIN	-159.85	0.00	-472.01	-159.85	0.00	-428.38	-147.61	0.00	-486.78	-147.61	0.00	-411.50
	TANDEM-LOAD MAX	127.67	0.00	229.23	127.67	0.00	294.36	132.30	0.00	216.29	132.30	0.00	303.75
	MIN	-96.24	0.00	-305.50	-96.24	0.00	-235.10	-91.47	0.00	-315.01	-91.47	0.00	-226.92
	DISPERSION-LMAX	121.79	0.00	220.34	121.79	0.00	295.15	126.26	0.00	197.13	126.26	0.00	306.94
	MIN	-94.47	0.00	-335.04	-94.47	0.00	-297.09	-86.04	0.00	-340.01	-86.04	0.00	-281.65
300	Total Dead lWithout snow	46.58	0.00	-219.88	46.58	0.00	-25.32	89.16	0.00	-313.81	89.16	0.00	58.63
301	Particular Snow	8.97	0.00	-38.35	8.97	0.00	-0.87	12.54	0.00	-45.61	12.54	0.00	6.78
302	Live load Total MAX	189.06	0.00	342.16	189.06	0.00	448.12	196.11	0.00	314.94	196.11	0.00	463.90
	MIN	-148.78	0.00	-482.49	-148.78	0.00	-424.40	-136.68	0.00	-493.37	-136.68	0.00	-405.49
303	Sum total D+L+PP MAX	244.61	0.00	186.58	244.61	0.00	447.24	297.82	0.00	50.01	297.82	0.00	529.31
	MIN	-137.86	0.00	-740.72	-137.86	0.00	-450.59	-75.98	0.00	-852.79	-75.98	0.00	-398.71

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003045						1003046							
		3045			4045			3046			4046				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	28.68	0.00	-93.55	28.68	0.00	26.25	13.81	0.00	-50.30	13.81	0.00	7.40		
3	Railing	6.27	0.00	-22.02	6.27	0.00	4.17	4.53	0.00	-15.63	4.53	0.00	3.31		
5	Wheel guard	62.07	0.00	-217.99	62.07	0.00	41.28	44.89	0.00	-154.78	44.89	0.00	32.74		
8	Steel weight	41.22	0.00	-115.72	41.22	0.00	56.44	1.76	0.00	-16.89	1.76	0.00	-9.53		
10	Medial strip	-26.73	0.00	98.03	-26.73	0.00	-13.60	-23.36	0.00	78.99	-23.36	0.00	-18.60		
19	Snow	14.21	0.00	-46.77	14.21	0.00	12.60	7.24	0.00	-26.12	7.24	0.00	4.10		
31	Miscellaneous	-2.16	0.00	7.92	-2.16	0.00	-1.10	-1.89	0.00	6.38	-1.89	0.00	-1.50		
100	AASHTO-LRFD TRUCK-LOAD	MAX	182.16	0.00	260.24	182.16	0.00	417.41	161.77	0.00	252.80	161.77	0.00	367.95	
		MIN	-115.68	0.00	-429.90	-115.68	0.00	-294.35	-112.74	0.00	-378.53	-112.74	0.00	-279.83	
		TANDEM-LOAD	MAX	136.95	0.00	197.48	136.95	0.00	311.30	121.96	0.00	191.07	121.96	0.00	274.54
		MIN	-86.62	0.00	-323.28	-86.62	0.00	-216.35	-83.75	0.00	-285.99	-83.75	0.00	-204.90	
		DISPERSION-L	MAX	131.08	0.00	181.84	131.08	0.00	320.46	124.51	0.00	191.18	124.51	0.00	316.01
		MIN	-84.82	0.00	-331.68	-84.82	0.00	-275.27	-102.86	0.00	-270.54	-102.86	0.00	-303.25	
110	Live load	L-PICKUP 1	MAX	313.23	0.00	442.08	313.23	0.00	737.87	286.29	0.00	443.98	286.29	0.00	683.96
		MIN	-200.50	0.00	-761.57	-200.50	0.00	-569.62	-215.60	0.00	-649.07	-215.60	0.00	-583.08	
		L-PICKUP 2	MAX	268.03	0.00	379.32	268.03	0.00	631.76	246.47	0.00	382.25	246.47	0.00	590.55
		MIN	-171.45	0.00	-654.96	-171.45	0.00	-491.62	-186.61	0.00	-556.53	-186.61	0.00	-508.15	
		L-PICKUP 3	MAX	-201.44	0.00	-746.90	-201.44	0.00	-604.28	-215.95	0.00	-616.19	-215.95	0.00	-607.28
		MIN	313.23	0.00	442.08	313.23	0.00	737.87	286.29	0.00	443.98	286.29	0.00	683.96	
111	AASHTO Twin	TWIN-PICKUP	MAX	307.21	0.00	422.42	307.21	0.00	739.20	274.08	0.00	432.47	274.08	0.00	667.63
		MIN	-201.44	0.00	-746.90	-201.44	0.00	-604.28	-215.95	0.00	-616.19	-215.95	0.00	-607.28	
		MID-PICKUP	MAX	-201.44	0.00	-746.90	-201.44	0.00	-604.28	-215.95	0.00	-616.19	-215.95	0.00	-607.28
198	AASHTO Fatig	TRUCK-LOAD	MAX	148.90	0.00	195.87	148.90	0.00	263.03	126.68	0.00	175.45	126.68	0.00	218.18
		MIN	-57.87	0.00	-358.95	-57.87	0.00	-75.94	-54.86	0.00	-310.97	-54.86	0.00	-55.01	
		TANDEM-LOAD	MAX	113.59	0.00	149.64	113.59	0.00	202.25	97.32	0.00	133.96	97.32	0.00	169.44
		MIN	-45.56	0.00	-272.22	-45.56	0.00	-52.17	-43.09	0.00	-237.07	-43.09	0.00	-46.39	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003045						1003046					
NODE		3045			4045			3046			4046		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	97.90	0.00	110.95	97.90	0.00	200.67	89.68	0.00	122.89	89.68	0.00	198.45
	MIN	-39.66	0.00	-230.99	-39.66	0.00	-128.63	-57.43	0.00	-192.24	-57.43	0.00	-151.86
199	AASHTO-LRFD TRUCK-LOAD MAX	210.27	0.00	287.51	210.27	0.00	500.87	180.02	0.00	289.34	180.02	0.00	425.81
	MIN	-139.00	0.00	-498.21	-139.00	0.00	-396.15	-137.08	0.00	-414.12	-137.08	0.00	-371.50
	TANDEM-LOAD MAX	136.95	0.00	197.48	136.95	0.00	311.30	121.96	0.00	191.07	121.96	0.00	274.54
	MIN	-86.62	0.00	-323.28	-86.62	0.00	-216.35	-83.75	0.00	-285.99	-83.75	0.00	-204.90
	DISPERSION-LMAX	131.08	0.00	181.84	131.08	0.00	320.46	124.51	0.00	191.18	124.51	0.00	316.01
	MIN	-84.82	0.00	-331.68	-84.82	0.00	-275.27	-102.86	0.00	-270.54	-102.86	0.00	-303.25
300	Total Dead lWithout snow	109.35	0.00	-343.33	109.35	0.00	113.44	39.75	0.00	-152.22	39.75	0.00	13.83
301	Particular Snow	14.21	0.00	-46.77	14.21	0.00	12.60	7.24	0.00	-26.12	7.24	0.00	4.10
302	Live load Total MAX	203.60	0.00	287.35	203.60	0.00	479.62	186.09	0.00	288.59	186.09	0.00	444.57
	MIN	-130.93	0.00	-495.02	-130.93	0.00	-392.78	-140.36	0.00	-421.89	-140.36	0.00	-394.73
303	Sum total D+L+PP MAX	327.17	0.00	-16.54	327.17	0.00	605.66	233.08	0.00	196.82	233.08	0.00	462.51
	MIN	-46.65	0.00	-885.12	-46.65	0.00	-380.18	-133.13	0.00	-600.23	-133.13	0.00	-390.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003047						1003048						
		3047			4047			3048			4048			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	-6.69	0.00	2.75	-6.69	0.00	-25.19	-19.64	0.00	33.76	-19.64	0.00	-48.26	
3	Railing	-0.41	0.00	-2.68	-0.41	0.00	-4.41	-6.03	0.00	10.43	-6.03	0.00	-14.77	
5	Wheel guard	-4.09	0.00	-26.52	-4.09	0.00	-43.61	-59.72	0.00	103.21	-59.72	0.00	-146.25	
8	Steel weight	-22.14	0.00	43.10	-22.14	0.00	-49.36	-7.44	0.00	12.15	-7.44	0.00	-18.91	
10	Medial strip	-1.03	0.00	20.15	-1.03	0.00	15.84	30.35	0.00	-52.55	30.35	0.00	74.21	
19	Snow	-3.04	0.00	0.52	-3.04	0.00	-12.20	-10.18	0.00	17.52	-10.18	0.00	-25.00	
31	Miscellaneous	-0.08	0.00	1.63	-0.08	0.00	1.28	2.45	0.00	-4.25	2.45	0.00	6.00	
100	AASHTO-LRFD TRUCK-LOAD	MAX	139.08	0.00	241.49	139.08	0.00	291.75	108.22	0.00	201.31	108.22	0.00	252.25
		MIN	-112.54	0.00	-299.21	-112.54	0.00	-247.31	-108.75	0.00	-200.81	-108.75	0.00	-253.78
	TANDEM-LOAD	MAX	106.09	0.00	175.60	106.09	0.00	221.49	73.69	0.00	136.61	73.69	0.00	171.95
		MIN	-82.32	0.00	-228.71	-82.32	0.00	-181.83	-73.98	0.00	-137.29	-73.98	0.00	-173.08
	DISPERSION-LMAX	MAX	178.90	0.00	347.97	178.90	0.00	420.68	301.96	0.00	621.65	301.96	0.00	697.44
		MIN	-190.71	0.00	-341.47	-190.71	0.00	-463.98	-335.17	0.00	-564.72	-335.17	0.00	-779.10
110	Live load L-PICKUP 1	MAX	317.98	0.00	589.46	317.98	0.00	712.44	410.19	0.00	822.96	410.19	0.00	949.69
		MIN	-303.25	0.00	-640.69	-303.25	0.00	-711.29	-443.92	0.00	-765.53	-443.92	0.00	-1032.88
	L-PICKUP 2	MAX	284.99	0.00	523.56	284.99	0.00	642.17	375.65	0.00	758.26	375.65	0.00	869.39
		MIN	-273.03	0.00	-570.19	-273.03	0.00	-645.81	-409.16	0.00	-702.01	-409.16	0.00	-952.17
	L-PICKUP 3	MAX	-317.47	0.00	-603.02	-317.47	0.00	-726.72	-476.52	0.00	-831.55	-476.52	0.00	-1108.43
		MIN	317.98	0.00	589.46	317.98	0.00	712.44	410.19	0.00	822.96	410.19	0.00	949.69
	Live load	MAX	317.98	0.00	589.46	317.98	0.00	712.44	410.19	0.00	822.96	410.19	0.00	949.69
		MIN	-317.47	0.00	-640.69	-317.47	0.00	-726.72	-476.52	0.00	-831.55	-476.52	0.00	-1108.43
111	AASHTO Twin TWIN-PICKUP	MAX	300.68	0.00	614.85	300.68	0.00	676.50	448.06	0.00	884.28	448.06	0.00	1041.29
		MIN	-317.47	0.00	-603.02	-317.47	0.00	-726.72	-476.52	0.00	-831.55	-476.52	0.00	-1108.43
	MID-PICKUP	-317.47	0.00	-603.02	-317.47	0.00	-726.72	-476.52	0.00	-831.55	-476.52	0.00	-1108.43	
198	AASHTO FatigTRUCK-LOAD	MAX	68.40	0.00	115.60	68.40	0.00	112.66	42.05	0.00	122.31	42.05	0.00	96.15
		MIN	-44.96	0.00	-173.06	-44.96	0.00	-108.99	-67.29	0.00	-79.53	-67.29	0.00	-159.27
	TANDEM-LOAD	MAX	56.10	0.00	88.13	56.10	0.00	95.86	28.60	0.00	82.95	28.60	0.00	65.18
		MIN	-30.85	0.00	-138.48	-30.85	0.00	-75.12	-45.67	0.00	-54.29	-45.67	0.00	-108.39

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003047						1003048					
NODE		3047			4047			3048			4048		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.80	0.00	216.47	98.80	0.00	220.62	144.43	0.00	389.60	144.43	0.00	331.55
	MIN	-119.02	0.00	-195.57	-119.02	0.00	-287.61	-213.62	0.00	-274.07	-213.62	0.00	-502.68
199	AASHTO-LRFD TRUCK-LOAD MAX	155.19	0.00	335.21	155.19	0.00	330.98	195.88	0.00	360.88	195.88	0.00	459.55
	MIN	-162.04	0.00	-328.55	-162.04	0.00	-343.49	-194.30	0.00	-359.22	-194.30	0.00	-452.49
	TANDEM-LOAD MAX	106.09	0.00	175.60	106.09	0.00	221.49	73.69	0.00	136.61	73.69	0.00	171.95
	MIN	-82.32	0.00	-228.71	-82.32	0.00	-181.83	-73.98	0.00	-137.29	-73.98	0.00	-173.08
	DISPERSION-LMAX	178.90	0.00	347.97	178.90	0.00	420.68	301.96	0.00	621.65	301.96	0.00	697.44
	MIN	-190.71	0.00	-341.47	-190.71	0.00	-463.98	-335.17	0.00	-564.72	-335.17	0.00	-779.10
300	Total Dead lWithout snow	-34.45	0.00	38.43	-34.45	0.00	-105.46	-60.03	0.00	102.75	-60.03	0.00	-147.98
301	Particular Snow	-3.04	0.00	0.52	-3.04	0.00	-12.20	-10.18	0.00	17.52	-10.18	0.00	-25.00
302	Live load Total MAX	206.69	0.00	383.15	206.69	0.00	463.08	266.62	0.00	534.93	266.62	0.00	617.30
	MIN	-206.35	0.00	-416.45	-206.35	0.00	-472.37	-309.74	0.00	-540.51	-309.74	0.00	-720.48
303	Sum total D+L+PP MAX	203.64	0.00	422.09	203.64	0.00	450.88	256.44	0.00	655.20	256.44	0.00	592.30
	MIN	-243.85	0.00	-415.93	-243.85	0.00	-590.03	-379.95	0.00	-522.99	-379.95	0.00	-893.46

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003049						1003050					
NODE		3049			4049			3050			4050		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	1.42	0.00	-15.49	1.42	0.00	-9.55	10.27	0.00	-42.47	10.27	0.00	0.41
3	Railing	-0.18	0.00	-3.22	-0.18	0.00	-3.96	4.44	0.00	-15.40	4.44	0.00	3.15
5	Wheel guard	-1.75	0.00	-31.90	-1.75	0.00	-39.20	43.94	0.00	-152.41	43.94	0.00	31.14
8	Steel weight	7.86	0.00	-24.21	7.86	0.00	8.64	-11.45	0.00	11.95	-11.45	0.00	-35.89
10	Medial strip	2.04	0.00	13.31	2.04	0.00	21.85	-24.76	0.00	81.87	-24.76	0.00	-21.53
19	Snow	0.58	0.00	-7.63	0.58	0.00	-5.21	5.65	0.00	-22.62	5.65	0.00	0.99
31	Miscellaneous	0.17	0.00	1.07	0.17	0.00	1.77	-2.00	0.00	6.62	-2.00	0.00	-1.74
100	AASHTO-LRFD TRUCK-LOAD	141.39	0.00	238.91	141.39	0.00	296.45	161.53	0.00	253.28	161.53	0.00	369.93
	MIN	-111.19	0.00	-301.95	-111.19	0.00	-243.49	-114.82	0.00	-378.72	-114.82	0.00	-285.81
	TANDEM-LOAD	107.56	0.00	174.32	107.56	0.00	224.46	121.82	0.00	191.06	121.82	0.00	276.38
	MIN	-81.45	0.00	-230.35	-81.45	0.00	-179.49	-85.09	0.00	-286.43	-85.09	0.00	-209.01
	DISPERSION-LMAX	183.83	0.00	327.91	183.83	0.00	431.53	123.85	0.00	204.64	123.85	0.00	314.06
	MIN	-182.41	0.00	-351.16	-182.41	0.00	-449.35	-107.98	0.00	-271.01	-107.98	0.00	-312.69
110	Live load L-PICKUP 1	325.22	0.00	566.82	325.22	0.00	727.98	285.38	0.00	457.92	285.38	0.00	683.99
	MIN	-293.61	0.00	-653.11	-293.61	0.00	-692.84	-222.79	0.00	-649.73	-222.79	0.00	-598.50
	L-PICKUP 2	291.39	0.00	502.23	291.39	0.00	656.00	245.67	0.00	395.70	245.67	0.00	590.44
	MIN	-263.87	0.00	-581.51	-263.87	0.00	-628.84	-193.07	0.00	-557.44	-193.07	0.00	-521.70
	L-PICKUP 3	-306.10	0.00	-622.23	-306.10	0.00	-705.66	-224.33	0.00	-614.11	-224.33	0.00	-627.17
	Live load	325.22	0.00	566.82	325.22	0.00	727.98	285.38	0.00	457.92	285.38	0.00	683.99
	MIN	-306.10	0.00	-653.11	-306.10	0.00	-705.66	-224.33	0.00	-649.73	-224.33	0.00	-627.17
111	AASHTO Twin TWIN-PICKUP	311.01	0.00	589.10	311.01	0.00	694.85	272.46	0.00	449.52	272.46	0.00	665.92
	MIN	-306.10	0.00	-622.23	-306.10	0.00	-705.66	-224.33	0.00	-614.11	-224.33	0.00	-627.17
	MID-PICKUP	-306.10	0.00	-622.23	-306.10	0.00	-705.66	-224.33	0.00	-614.11	-224.33	0.00	-627.17
198	AASHTO FatigTRUCK-LOAD	68.05	0.00	116.14	68.05	0.00	112.01	127.46	0.00	175.34	127.46	0.00	220.65
	MIN	-43.97	0.00	-172.24	-43.97	0.00	-106.64	-54.92	0.00	-311.76	-54.92	0.00	-55.15
	TANDEM-LOAD	55.86	0.00	88.63	55.86	0.00	95.47	97.99	0.00	133.80	97.99	0.00	171.42
	MIN	-31.08	0.00	-137.87	-31.08	0.00	-73.59	-43.10	0.00	-237.89	-43.10	0.00	-46.53

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003049						1003050					
NODE		3049			4049			3050			4050		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	99.97	0.00	208.25	99.97	0.00	223.21	89.53	0.00	127.24	89.53	0.00	198.42
	MIN	-115.62	0.00	-197.82	-115.62	0.00	-281.59	-59.10	0.00	-191.82	-59.10	0.00	-154.80
199	AASHTO-LRFD TRUCK-LOAD MAX	161.74	0.00	326.65	161.74	0.00	340.52	178.88	0.00	294.83	178.88	0.00	425.85
	MIN	-157.69	0.00	-340.21	-157.69	0.00	-334.72	-141.28	0.00	-411.34	-141.28	0.00	-384.16
	TANDEM-LOAD MAX	107.56	0.00	174.32	107.56	0.00	224.46	121.82	0.00	191.06	121.82	0.00	276.38
	MIN	-81.45	0.00	-230.35	-81.45	0.00	-179.49	-85.09	0.00	-286.43	-85.09	0.00	-209.01
	DISPERSION-LMAX	183.83	0.00	327.91	183.83	0.00	431.53	123.85	0.00	204.64	123.85	0.00	314.06
	MIN	-182.41	0.00	-351.16	-182.41	0.00	-449.35	-107.98	0.00	-271.01	-107.98	0.00	-312.69
300	Total Dead lWithout snow	9.57	0.00	-60.43	9.57	0.00	-20.45	20.44	0.00	-109.83	20.44	0.00	-24.47
301	Particular Snow	0.58	0.00	-7.63	0.58	0.00	-5.21	5.65	0.00	-22.62	5.65	0.00	0.99
302	Live load Total MAX	211.39	0.00	368.43	211.39	0.00	473.19	185.50	0.00	297.65	185.50	0.00	444.59
	MIN	-198.96	0.00	-424.52	-198.96	0.00	-458.68	-145.82	0.00	-422.32	-145.82	0.00	-407.66
303	Sum total D+L+PP MAX	221.54	0.00	360.80	221.54	0.00	467.98	211.59	0.00	254.48	211.59	0.00	445.59
	MIN	-198.38	0.00	-492.58	-198.38	0.00	-484.34	-140.16	0.00	-554.78	-140.16	0.00	-431.13

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003051						1003052						
		3051			4051			3052			4052			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	
1	Pavement	24.94	0.00	-84.89	24.94	0.00	19.30	27.25	0.00	-95.87	27.25	0.00	17.97	
3	Railing	6.16	0.00	-21.73	6.16	0.00	4.00	6.21	0.00	-23.39	6.21	0.00	2.56	
5	Wheel guard	60.99	0.00	-215.13	60.99	0.00	39.62	61.52	0.00	-231.59	61.52	0.00	25.37	
8	Steel weight	27.40	0.00	-84.12	27.40	0.00	30.32	36.11	0.00	-108.68	36.11	0.00	42.14	
10	Medial strip	-28.12	0.00	101.02	-28.12	0.00	-16.44	-27.17	0.00	106.19	-27.17	0.00	-7.29	
19	Snow	12.55	0.00	-42.89	12.55	0.00	9.51	13.57	0.00	-48.14	13.57	0.00	8.56	
31	Miscellaneous	-2.27	0.00	8.17	-2.27	0.00	-1.33	-2.19	0.00	8.58	-2.19	0.00	-0.59	
100	AASHTO-LRFD TRUCK-LOAD	MAX	180.55	0.00	259.75	180.55	0.00	416.44	176.87	0.00	273.73	176.87	0.00	407.83
		MIN	-116.11	0.00	-430.44	-116.11	0.00	-297.10	-117.75	0.00	-423.90	-117.75	0.00	-297.95
	TANDEM-LOAD	MAX	135.73	0.00	196.19	135.73	0.00	310.98	133.15	0.00	206.22	133.15	0.00	304.64
		MIN	-86.83	0.00	-323.80	-86.83	0.00	-217.98	-87.97	0.00	-318.44	-87.97	0.00	-219.46
	DISPERSION-LMAX	MAX	128.27	0.00	196.64	128.27	0.00	314.50	126.08	0.00	187.65	126.08	0.00	305.40
		MIN	-88.07	0.00	-332.22	-88.07	0.00	-280.64	-82.04	0.00	-340.23	-82.04	0.00	-273.58
110	Live load L-PICKUP 1	MAX	308.82	0.00	456.39	308.82	0.00	730.93	302.95	0.00	461.38	302.95	0.00	713.23
		MIN	-204.18	0.00	-762.66	-204.18	0.00	-577.74	-199.80	0.00	-764.14	-199.80	0.00	-571.53
	L-PICKUP 2	MAX	264.00	0.00	392.83	264.00	0.00	625.48	259.23	0.00	393.87	259.23	0.00	610.05
		MIN	-174.90	0.00	-656.02	-174.90	0.00	-498.62	-170.01	0.00	-658.67	-170.01	0.00	-493.04
	L-PICKUP 3	MAX	308.82	0.00	456.39	308.82	0.00	730.93	302.95	0.00	461.38	302.95	0.00	713.23
		MIN	-206.01	0.00	-744.57	-206.01	0.00	-615.57	-201.06	0.00	-749.83	-201.06	0.00	-604.91
	Live load	MAX	308.82	0.00	456.39	308.82	0.00	730.93	302.95	0.00	461.38	302.95	0.00	713.23
		MIN	-206.01	0.00	-762.66	-206.01	0.00	-615.57	-201.06	0.00	-764.14	-201.06	0.00	-604.91
111	AASHTO Twin TWIN-PICKUP	MAX	301.06	0.00	441.27	301.06	0.00	729.42	296.80	0.00	445.00	296.80	0.00	712.20
		MIN	-206.01	0.00	-744.57	-206.01	0.00	-615.57	-201.06	0.00	-749.83	-201.06	0.00	-604.91
	MID-PICKUP	MAX	301.06	0.00	441.27	301.06	0.00	729.42	296.80	0.00	445.00	296.80	0.00	712.20
198	AASHTO FatigTRUCK-LOAD	MAX	149.69	0.00	194.34	149.69	0.00	265.19	149.56	0.00	202.56	149.56	0.00	268.20
		MIN	-57.21	0.00	-360.07	-57.21	0.00	-76.86	-58.51	0.00	-356.50	-58.51	0.00	-94.12
	TANDEM-LOAD	MAX	114.28	0.00	148.29	114.28	0.00	203.97	113.97	0.00	154.02	113.97	0.00	205.69
		MIN	-45.05	0.00	-273.35	-45.05	0.00	-52.73	-46.05	0.00	-270.38	-46.05	0.00	-64.94

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003051						1003052					
NODE		3051			4051			3052			4052		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	97.06	0.00	115.21	97.06	0.00	199.40	95.19	0.00	119.72	95.19	0.00	189.74
	MIN	-41.00	0.00	-230.40	-41.00	0.00	-130.59	-35.21	0.00	-236.67	-35.21	0.00	-132.26
199	AASHTO-LRFD TRUCK-LOAD MAX	206.25	0.00	293.66	206.25	0.00	495.97	203.70	0.00	306.80	203.70	0.00	485.92
	MIN	-140.83	0.00	-495.08	-140.83	0.00	-403.33	-141.36	0.00	-492.91	-141.36	0.00	-398.54
	TANDEM-LOAD MAX	135.73	0.00	196.19	135.73	0.00	310.98	133.15	0.00	206.22	133.15	0.00	304.64
	MIN	-86.83	0.00	-323.80	-86.83	0.00	-217.98	-87.97	0.00	-318.44	-87.97	0.00	-219.46
	DISPERSION-LMAX	128.27	0.00	196.64	128.27	0.00	314.50	126.08	0.00	187.65	126.08	0.00	305.40
	MIN	-88.07	0.00	-332.22	-88.07	0.00	-280.64	-82.04	0.00	-340.23	-82.04	0.00	-273.58
300	Total Dead lWithout snow	89.10	0.00	-296.69	89.10	0.00	75.46	101.74	0.00	-344.77	101.74	0.00	80.18
301	Particular Snow	12.55	0.00	-42.89	12.55	0.00	9.51	13.57	0.00	-48.14	13.57	0.00	8.56
302	Live load Total MAX	200.73	0.00	296.66	200.73	0.00	475.11	196.91	0.00	299.90	196.91	0.00	463.60
	MIN	-133.91	0.00	-495.73	-133.91	0.00	-400.12	-130.69	0.00	-496.69	-130.69	0.00	-393.19
303	Sum total D+L+PP MAX	302.37	0.00	46.07	302.37	0.00	560.08	312.22	0.00	-3.04	312.22	0.00	552.34
	MIN	-72.44	0.00	-835.31	-72.44	0.00	-390.61	-54.59	0.00	-889.59	-54.59	0.00	-384.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003053						1003054					
NODE		3053			4053			3054			4054		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	19.20	0.00	-79.66	19.20	0.00	0.53	17.30	0.00	-75.66	17.30	0.00	-3.40
3	Railing	5.92	0.00	-23.43	5.92	0.00	1.28	5.85	0.00	-23.49	5.85	0.00	0.95
5	Wheel guard	58.58	0.00	-232.00	58.58	0.00	12.69	57.92	0.00	-232.56	57.92	0.00	9.36
8	Steel weight	7.05	0.00	-42.59	7.05	0.00	-13.16	0.16	0.00	-25.71	0.16	0.00	-25.07
10	Medial strip	-29.82	0.00	115.95	-29.82	0.00	-8.59	-30.46	0.00	118.67	-30.46	0.00	-8.55
19	Snow	9.96	0.00	-41.03	9.96	0.00	0.56	9.10	0.00	-39.28	9.10	0.00	-1.25
31	Miscellaneous	-2.41	0.00	9.37	-2.41	0.00	-0.69	-2.46	0.00	9.59	-2.46	0.00	-0.69
100	AASHTO-LRFD TRUCK-LOAD	170.29	0.00	292.39	170.29	0.00	390.93	169.71	0.00	294.05	169.71	0.00	385.52
	MIN	-125.13	0.00	-410.43	-125.13	0.00	-307.77	-127.51	0.00	-406.80	-127.51	0.00	-308.91
	TANDEM-LOAD	128.27	0.00	218.95	128.27	0.00	292.06	127.77	0.00	220.06	127.77	0.00	288.21
	MIN	-92.99	0.00	-308.11	-92.99	0.00	-226.18	-94.60	0.00	-304.62	-94.60	0.00	-226.95
	DISPERSION-LMAX	121.72	0.00	211.48	121.72	0.00	291.90	122.64	0.00	214.68	122.64	0.00	290.89
	MIN	-90.74	0.00	-336.38	-90.74	0.00	-288.59	-94.70	0.00	-332.90	-94.70	0.00	-293.98
110	Live load L-PICKUP 1	292.01	0.00	503.87	292.01	0.00	682.83	292.35	0.00	508.73	292.35	0.00	676.41
	MIN	-215.87	0.00	-746.81	-215.87	0.00	-596.36	-222.21	0.00	-739.70	-222.21	0.00	-602.89
	L-PICKUP 2	249.99	0.00	430.43	249.99	0.00	583.97	250.41	0.00	434.74	250.41	0.00	579.10
	MIN	-183.73	0.00	-644.49	-183.73	0.00	-514.77	-189.30	0.00	-637.52	-189.30	0.00	-520.94
	L-PICKUP 3	-220.09	0.00	-729.78	-220.09	0.00	-631.42	-227.35	0.00	-723.07	-227.35	0.00	-636.80
	Live load	292.01	0.00	503.87	292.01	0.00	682.83	292.35	0.00	508.73	292.35	0.00	676.41
	MIN	-220.09	0.00	-746.81	-220.09	0.00	-631.42	-227.35	0.00	-739.70	-227.35	0.00	-636.80
111	AASHTO Twin TWIN-PICKUP	285.40	0.00	495.99	285.40	0.00	680.25	285.43	0.00	503.99	285.43	0.00	670.48
	MIN	-220.09	0.00	-729.78	-220.09	0.00	-631.42	-227.35	0.00	-723.07	-227.35	0.00	-636.80
	MID-PICKUP	-220.09	0.00	-729.78	-220.09	0.00	-631.42	-227.35	0.00	-723.07	-227.35	0.00	-636.80
198	AASHTO FatigTRUCK-LOAD	147.80	0.00	207.12	147.80	0.00	267.23	148.78	0.00	206.48	148.78	0.00	268.45
	MIN	-59.70	0.00	-350.15	-59.70	0.00	-104.23	-59.25	0.00	-353.01	-59.25	0.00	-107.19
	TANDEM-LOAD	112.44	0.00	156.93	112.44	0.00	204.31	112.97	0.00	156.34	112.97	0.00	204.91
	MIN	-46.85	0.00	-265.35	-46.85	0.00	-71.77	-46.50	0.00	-266.94	-46.50	0.00	-73.77

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003053						1003054					
NODE		3053			4053			3054			4054		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	92.65	0.00	129.05	92.65	0.00	182.85	93.38	0.00	129.12	93.38	0.00	182.72
	MIN	-36.63	0.00	-236.16	-36.63	0.00	-143.07	-37.91	0.00	-238.97	-37.91	0.00	-147.89
199	AASHTO-LRFD TRUCK-LOAD MAX	195.39	0.00	339.62	195.39	0.00	463.93	194.50	0.00	345.30	194.50	0.00	454.08
	MIN	-153.80	0.00	-474.48	-153.80	0.00	-412.99	-157.91	0.00	-470.52	-157.91	0.00	-413.58
	TANDEM-LOAD MAX	128.27	0.00	218.95	128.27	0.00	292.06	127.77	0.00	220.06	127.77	0.00	288.21
	MIN	-92.99	0.00	-308.11	-92.99	0.00	-226.18	-94.60	0.00	-304.62	-94.60	0.00	-226.95
	DISPERSION-LMAX	121.72	0.00	211.48	121.72	0.00	291.90	122.64	0.00	214.68	122.64	0.00	290.89
	MIN	-90.74	0.00	-336.38	-90.74	0.00	-288.59	-94.70	0.00	-332.90	-94.70	0.00	-293.98
300	Total Dead lWithout snow	58.52	0.00	-252.36	58.52	0.00	-7.94	48.30	0.00	-229.17	48.30	0.00	-27.40
301	Particular Snow	9.96	0.00	-41.03	9.96	0.00	0.56	9.10	0.00	-39.28	9.10	0.00	-1.25
302	Live load Total MAX	189.81	0.00	327.51	189.81	0.00	443.84	190.03	0.00	330.68	190.03	0.00	439.66
	MIN	-143.06	0.00	-485.43	-143.06	0.00	-410.42	-147.78	0.00	-480.80	-147.78	0.00	-413.92
303	Sum total D+L+PP MAX	258.28	0.00	132.38	258.28	0.00	444.40	247.44	0.00	161.43	247.44	0.00	438.41
	MIN	-117.50	0.00	-778.82	-117.50	0.00	-417.80	-134.70	0.00	-749.25	-134.70	0.00	-442.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003055						1003056					
		3055			4055			3056			4056		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	19.61	0.00	-81.11	19.61	0.00	0.78	28.03	0.00	-98.66	28.03	0.00	18.42
3	Railing	5.93	0.00	-23.50	5.93	0.00	1.28	6.24	0.00	-23.50	6.24	0.00	2.56
5	Wheel guard	58.75	0.00	-232.69	58.75	0.00	12.69	61.76	0.00	-232.63	61.76	0.00	25.36
8	Steel weight	8.50	0.00	-47.65	8.50	0.00	-12.14	38.95	0.00	-118.72	38.95	0.00	43.96
10	Medial strip	-29.68	0.00	115.56	-29.68	0.00	-8.43	-26.88	0.00	105.27	-26.88	0.00	-6.99
19	Snow	10.14	0.00	-41.69	10.14	0.00	0.67	13.92	0.00	-49.39	13.92	0.00	8.75
31	Miscellaneous	-2.40	0.00	9.34	-2.40	0.00	-0.68	-2.17	0.00	8.51	-2.17	0.00	-0.57
100	AASHTO-LRFD TRUCK-LOAD	174.58	0.00	292.00	174.58	0.00	395.81	179.05	0.00	273.38	179.05	0.00	409.37
	MIN	-127.66	0.00	-415.25	-127.66	0.00	-310.29	-118.75	0.00	-427.73	-118.75	0.00	-298.14
	TANDEM-LOAD MAX	131.26	0.00	218.65	131.26	0.00	295.41	134.60	0.00	205.52	134.60	0.00	305.72
	MIN	-94.76	0.00	-310.96	-94.76	0.00	-227.82	-88.57	0.00	-320.41	-88.57	0.00	-219.39
	DISPERSION-LMAX	125.25	0.00	211.20	125.25	0.00	295.72	128.90	0.00	191.94	128.90	0.00	307.58
	MIN	-93.52	0.00	-338.49	-93.52	0.00	-291.98	-83.56	0.00	-348.99	-83.56	0.00	-275.07
110	Live load L-PICKUP 1	299.83	0.00	503.20	299.83	0.00	691.53	307.95	0.00	465.32	307.95	0.00	716.95
	MIN	-221.18	0.00	-753.74	-221.18	0.00	-602.27	-202.31	0.00	-776.71	-202.31	0.00	-573.20
	L-PICKUP 2 MAX	256.51	0.00	429.85	256.51	0.00	591.13	263.50	0.00	397.46	263.50	0.00	613.30
	MIN	-188.28	0.00	-649.45	-188.28	0.00	-519.80	-172.13	0.00	-669.40	-172.13	0.00	-494.46
	L-PICKUP 3	-226.57	0.00	-738.77	-226.57	0.00	-638.91	-203.42	0.00	-762.09	-203.42	0.00	-607.46
	Live load MAX	299.83	0.00	503.20	299.83	0.00	691.53	307.95	0.00	465.32	307.95	0.00	716.95
	MIN	-226.57	0.00	-753.74	-226.57	0.00	-638.91	-203.42	0.00	-776.71	-203.42	0.00	-607.46
111	AASHTO Twin TWIN-PICKUP	294.00	0.00	497.79	294.00	0.00	689.65	301.67	0.00	449.49	301.67	0.00	715.60
	MIN	-226.57	0.00	-738.77	-226.57	0.00	-638.91	-203.42	0.00	-762.09	-203.42	0.00	-607.46
	MID-PICKUP	-226.57	0.00	-738.77	-226.57	0.00	-638.91	-203.42	0.00	-762.09	-203.42	0.00	-607.46
198	AASHTO FatigTRUCK-LOAD	149.78	0.00	206.07	149.78	0.00	269.00	150.50	0.00	201.39	150.50	0.00	268.30
	MIN	-59.33	0.00	-356.63	-59.33	0.00	-105.83	-58.12	0.00	-360.33	-58.12	0.00	-95.08
	TANDEM-LOAD MAX	113.82	0.00	156.11	113.82	0.00	205.49	114.71	0.00	153.04	114.71	0.00	205.73
	MIN	-46.55	0.00	-269.95	-46.55	0.00	-72.89	-45.70	0.00	-273.40	-45.70	0.00	-65.61

Bago Bridge

BLOCK [No. 2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1003055						1003056					
	3055			4055			3056			4056		
NAME TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	94.35	0.00	127.37	94.35	0.00	184.55	96.55	0.00	120.84	96.55	0.00	190.62
MIN	-37.21	0.00	-239.74	-37.21	0.00	-144.44	-35.34	0.00	-241.29	-35.34	0.00	-132.95
199 AASHTO-LRFD TRUCK-LOAD MAX	201.42	0.00	341.90	201.42	0.00	470.56	206.29	0.00	307.49	206.29	0.00	487.54
MIN	-158.23	0.00	-482.36	-158.23	0.00	-417.92	-142.46	0.00	-497.77	-142.46	0.00	-399.89
TANDEM-LOAD MAX	131.26	0.00	218.65	131.26	0.00	295.41	134.60	0.00	205.52	134.60	0.00	305.72
MIN	-94.76	0.00	-310.96	-94.76	0.00	-227.82	-88.57	0.00	-320.41	-88.57	0.00	-219.39
DISPERSION-LMAX	125.25	0.00	211.20	125.25	0.00	295.72	128.90	0.00	191.94	128.90	0.00	307.58
MIN	-93.52	0.00	-338.49	-93.52	0.00	-291.98	-83.56	0.00	-348.99	-83.56	0.00	-275.07
300 Total Dead lWithout snow	60.70	0.00	-260.05	60.70	0.00	-6.49	105.93	0.00	-359.74	105.93	0.00	82.73
301 Particular Snow	10.14	0.00	-41.69	10.14	0.00	0.67	13.92	0.00	-49.39	13.92	0.00	8.75
302 Live load Total MAX	194.89	0.00	327.08	194.89	0.00	449.49	200.17	0.00	302.46	200.17	0.00	466.02
MIN	-147.27	0.00	-489.93	-147.27	0.00	-415.29	-132.22	0.00	-504.86	-132.22	0.00	-394.85
303 Sum total D+L+PP MAX	265.73	0.00	123.46	265.73	0.00	450.17	320.02	0.00	-15.93	320.02	0.00	557.50
MIN	-120.61	0.00	-791.67	-120.61	0.00	-421.11	-52.04	0.00	-913.99	-52.04	0.00	-386.10

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003057						1003058					
NODE		3057			4057			3058			4058		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	28.68	0.00	-94.03	28.68	0.00	25.77	9.99	0.00	-41.67	9.99	0.00	0.07
3	Railing	6.28	0.00	-22.03	6.28	0.00	4.18	4.44	0.00	-15.44	4.44	0.00	3.12
5	Wheel guard	62.12	0.00	-218.12	62.12	0.00	41.36	43.99	0.00	-152.85	43.99	0.00	30.89
8	Steel weight	41.16	0.00	-117.49	41.16	0.00	54.42	-12.61	0.00	15.70	-12.61	0.00	-36.98
10	Medial strip	-26.75	0.00	97.81	-26.75	0.00	-13.91	-24.97	0.00	82.70	-24.97	0.00	-21.60
19	Snow	14.22	0.00	-46.98	14.22	0.00	12.40	5.53	0.00	-22.28	5.53	0.00	0.83
31	Miscellaneous	-2.16	0.00	7.90	-2.16	0.00	-1.12	-2.02	0.00	6.68	-2.02	0.00	-1.74
100	AASHTO-LRFD TRUCK-LOAD	184.74	0.00	251.79	184.74	0.00	421.97	161.92	0.00	250.49	161.92	0.00	369.17
	MIN	-112.56	0.00	-440.79	-112.56	0.00	-289.89	-113.41	0.00	-384.41	-113.41	0.00	-281.60
	TANDEM-LOAD	138.80	0.00	190.29	138.80	0.00	314.83	122.08	0.00	188.35	122.08	0.00	276.27
	MIN	-84.20	0.00	-330.62	-84.20	0.00	-212.71	-83.99	0.00	-290.73	-83.99	0.00	-205.90
	DISPERSION-LMAX	132.19	0.00	197.97	132.19	0.00	318.17	123.92	0.00	212.97	123.92	0.00	309.19
	MIN	-85.83	0.00	-348.80	-85.83	0.00	-273.60	-108.43	0.00	-278.09	-108.43	0.00	-308.29
110	Live load L-PICKUP 1	316.93	0.00	449.76	316.93	0.00	740.15	285.84	0.00	463.46	285.84	0.00	678.36
	MIN	-198.39	0.00	-789.59	-198.39	0.00	-563.49	-221.83	0.00	-662.50	-221.83	0.00	-589.88
	L-PICKUP 2	270.99	0.00	388.26	270.99	0.00	633.00	246.01	0.00	401.32	246.01	0.00	585.46
	MIN	-170.03	0.00	-679.43	-170.03	0.00	-486.31	-192.42	0.00	-568.82	-192.42	0.00	-514.19
	L-PICKUP 3	-200.07	0.00	-776.16	-200.07	0.00	-601.98	-223.88	0.00	-627.11	-223.88	0.00	-619.86
	Live load	316.93	0.00	449.76	316.93	0.00	740.15	285.84	0.00	463.46	285.84	0.00	678.36
	MIN	-200.07	0.00	-789.59	-200.07	0.00	-601.98	-223.88	0.00	-662.50	-223.88	0.00	-619.86
111	AASHTO Twin TWIN-PICKUP	308.98	0.00	438.01	308.98	0.00	738.39	271.85	0.00	460.13	271.85	0.00	658.27
	MIN	-200.07	0.00	-776.16	-200.07	0.00	-601.98	-223.88	0.00	-627.11	-223.88	0.00	-619.86
	MID-PICKUP	-200.07	0.00	-776.16	-200.07	0.00	-601.98	-223.88	0.00	-627.11	-223.88	0.00	-619.86
198	AASHTO FatigTRUCK-LOAD	151.38	0.00	190.57	151.38	0.00	267.17	128.57	0.00	173.82	128.57	0.00	221.26
	MIN	-55.74	0.00	-365.14	-55.74	0.00	-75.84	-54.21	0.00	-315.78	-54.21	0.00	-53.68
	TANDEM-LOAD	115.50	0.00	145.49	115.50	0.00	205.32	98.88	0.00	132.58	98.88	0.00	172.03
	MIN	-43.92	0.00	-277.12	-43.92	0.00	-52.05	-42.53	0.00	-240.99	-42.53	0.00	-45.36

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003057						1003058					
NODE		3057			4057			3058			4058		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.43	0.00	115.09	98.43	0.00	200.15	89.46	0.00	130.23	89.46	0.00	195.95
	MIN	-40.20	0.00	-237.64	-40.20	0.00	-128.11	-59.38	0.00	-194.43	-59.38	0.00	-152.47
199	AASHTO-LRFD TRUCK-LOAD MAX	211.11	0.00	288.71	211.11	0.00	502.26	178.13	0.00	298.29	178.13	0.00	422.22
	MIN	-136.47	0.00	-513.60	-136.47	0.00	-395.27	-140.33	0.00	-418.70	-140.33	0.00	-380.45
	TANDEM-LOAD MAX	138.80	0.00	190.29	138.80	0.00	314.83	122.08	0.00	188.35	122.08	0.00	276.27
	MIN	-84.20	0.00	-330.62	-84.20	0.00	-212.71	-83.99	0.00	-290.73	-83.99	0.00	-205.90
	DISPERSION-LMAX	132.19	0.00	197.97	132.19	0.00	318.17	123.92	0.00	212.97	123.92	0.00	309.19
	MIN	-85.83	0.00	-348.80	-85.83	0.00	-273.60	-108.43	0.00	-278.09	-108.43	0.00	-308.29
300	Total Dead lWithout snow	109.33	0.00	-345.96	109.33	0.00	110.70	18.83	0.00	-104.88	18.83	0.00	-26.24
301	Particular Snow	14.22	0.00	-46.98	14.22	0.00	12.40	5.53	0.00	-22.28	5.53	0.00	0.83
302	Live load Total MAX	206.01	0.00	292.35	206.01	0.00	481.09	185.80	0.00	301.25	185.80	0.00	440.94
	MIN	-130.05	0.00	-513.23	-130.05	0.00	-391.29	-145.52	0.00	-430.63	-145.52	0.00	-402.91
303	Sum total D+L+PP MAX	329.55	0.00	-12.89	329.55	0.00	604.20	210.16	0.00	264.46	210.16	0.00	441.77
	MIN	-45.52	0.00	-906.17	-45.52	0.00	-378.89	-139.99	0.00	-557.79	-139.99	0.00	-428.32

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003059						1003060							
		3059			4059			3060			4060				
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-5.33	0.00	-0.12	-5.33	0.00	-22.39	-19.27	0.00	33.11	-19.27	0.00	-47.37		
3	Railing	-0.39	0.00	-2.76	-0.39	0.00	-4.40	-5.93	0.00	10.23	-5.93	0.00	-14.52		
5	Wheel guard	-3.89	0.00	-27.34	-3.89	0.00	-43.58	-58.67	0.00	101.31	-58.67	0.00	-143.77		
8	Steel weight	-16.89	0.00	32.50	-16.89	0.00	-38.06	-7.21	0.00	11.80	-7.21	0.00	-18.33		
10	Medial strip	-0.39	0.00	19.08	-0.39	0.00	17.44	29.83	0.00	-51.60	29.83	0.00	73.01		
19	Snow	-2.44	0.00	-0.76	-2.44	0.00	-10.97	-9.99	0.00	17.18	-9.99	0.00	-24.55		
31	Miscellaneous	-0.03	0.00	1.54	-0.03	0.00	1.41	2.41	0.00	-4.17	2.41	0.00	5.90		
100	AASHTO-LRFD TRUCK-LOAD	MAX	137.23	0.00	241.06	137.23	0.00	283.99	106.81	0.00	198.84	106.81	0.00	248.45	
		MIN	-109.59	0.00	-301.11	-109.59	0.00	-236.32	-107.79	0.00	-198.59	-107.79	0.00	-251.66	
		TANDEM-LOAD	MAX	105.01	0.00	175.55	105.01	0.00	216.97	72.75	0.00	134.77	72.75	0.00	169.42
		MIN	-80.23	0.00	-230.47	-80.23	0.00	-174.65	-73.32	0.00	-135.74	-73.32	0.00	-171.65	
		DISPERSION-L	MAX	180.82	0.00	348.50	180.82	0.00	421.12	295.43	0.00	608.66	295.43	0.00	682.05
		MIN	-190.42	0.00	-346.62	-190.42	0.00	-459.97	-328.04	0.00	-552.80	-328.04	0.00	-762.26	
110	Live load	L-PICKUP 1	MAX	318.05	0.00	589.56	318.05	0.00	705.11	402.24	0.00	807.50	402.24	0.00	930.50
		MIN	-300.02	0.00	-647.73	-300.02	0.00	-696.28	-435.83	0.00	-751.39	-435.83	0.00	-1013.92	
		L-PICKUP 2	MAX	285.83	0.00	524.05	285.83	0.00	638.09	368.18	0.00	743.43	368.18	0.00	851.47
		MIN	-270.65	0.00	-577.08	-270.65	0.00	-634.62	-401.35	0.00	-688.54	-401.35	0.00	-933.92	
		L-PICKUP 3	MAX	-312.49	0.00	-609.20	-312.49	0.00	-710.23	-468.84	0.00	-817.09	-468.84	0.00	-1090.23
		MIN	318.05	0.00	589.56	318.05	0.00	705.11	402.24	0.00	807.50	402.24	0.00	930.50	
111	AASHTO Twin	TWIN-PICKUP	MAX	298.56	0.00	615.85	298.56	0.00	663.07	439.57	0.00	869.12	439.57	0.00	1020.24
		MIN	-312.49	0.00	-609.20	-312.49	0.00	-710.23	-468.84	0.00	-817.09	-468.84	0.00	-1090.23	
		MID-PICKUP	MAX	-312.49	0.00	-609.20	-312.49	0.00	-710.23	-468.84	0.00	-817.09	-468.84	0.00	-1090.23
		MIN	298.56	0.00	615.85	298.56	0.00	663.07	439.57	0.00	869.12	439.57	0.00	1020.24	
		MID-PICKUP	MAX	-312.49	0.00	-609.20	-312.49	0.00	-710.23	-468.84	0.00	-817.09	-468.84	0.00	-1090.23
		MIN	312.49	0.00	609.20	312.49	0.00	710.23	468.84	0.00	817.09	468.84	0.00	1090.23	
198	AASHTO Fatig	TRUCK-LOAD	MAX	66.98	0.00	117.29	66.98	0.00	108.43	41.42	0.00	120.91	41.42	0.00	94.37
		MIN	-43.15	0.00	-171.36	-43.15	0.00	-103.95	-66.69	0.00	-78.63	-66.69	0.00	-157.78	
		TANDEM-LOAD	MAX	55.39	0.00	89.21	55.39	0.00	93.50	28.17	0.00	81.89	28.17	0.00	64.00
		MIN	-31.18	0.00	-137.87	-31.18	0.00	-71.72	-45.29	0.00	-53.68	-45.29	0.00	-107.46	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	1003059 3059						1003060 3060					
	4059			4060			4059			4060		
NAME TITLE	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
198 AASHTO FatigDISPERSION-LMAX	99.04	0.00	217.22	99.04	0.00	219.76	141.20	0.00	381.71	141.20	0.00	323.93
MIN	-119.17	0.00	-197.43	-119.17	0.00	-286.64	-209.26	0.00	-268.16	-209.26	0.00	-492.38
199 AASHTO-LRFD TRUCK-LOAD MAX	150.91	0.00	335.78	150.91	0.00	315.63	192.98	0.00	357.03	192.98	0.00	451.54
MIN	-156.79	0.00	-330.28	-156.79	0.00	-329.18	-192.89	0.00	-355.08	-192.89	0.00	-449.11
TANDEM-LOAD MAX	105.01	0.00	175.55	105.01	0.00	216.97	72.75	0.00	134.77	72.75	0.00	169.42
MIN	-80.23	0.00	-230.47	-80.23	0.00	-174.65	-73.32	0.00	-135.74	-73.32	0.00	-171.65
DISPERSION-LMAX	180.82	0.00	348.50	180.82	0.00	421.12	295.43	0.00	608.66	295.43	0.00	682.05
MIN	-190.42	0.00	-346.62	-190.42	0.00	-459.97	-328.04	0.00	-552.80	-328.04	0.00	-762.26
300 Total Dead lWithout snow	-26.93	0.00	22.89	-26.93	0.00	-89.60	-58.84	0.00	100.68	-58.84	0.00	-145.09
301 Particular Snow	-2.44	0.00	-0.76	-2.44	0.00	-10.97	-9.99	0.00	17.18	-9.99	0.00	-24.55
302 Live load Total MAX	206.73	0.00	383.22	206.73	0.00	458.32	261.45	0.00	524.87	261.45	0.00	604.83
MIN	-203.12	0.00	-421.02	-203.12	0.00	-461.65	-304.74	0.00	-531.11	-304.74	0.00	-708.65
303 Sum total D+L+PP MAX	204.29	0.00	405.35	204.29	0.00	447.35	251.46	0.00	642.73	251.46	0.00	580.28
MIN	-232.49	0.00	-421.79	-232.49	0.00	-562.22	-373.57	0.00	-513.93	-373.57	0.00	-878.29

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003061						1003062					
NODE		3061			4061			3062			4062		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	0.86	0.00	-14.47	0.86	0.00	-10.87	12.85	0.00	-48.35	12.85	0.00	5.31
3	Railing	-0.20	0.00	-3.21	-0.20	0.00	-4.02	4.52	0.00	-15.63	4.52	0.00	3.25
5	Wheel guard	-1.93	0.00	-31.77	-1.93	0.00	-39.84	44.76	0.00	-154.75	44.76	0.00	32.21
8	Steel weight	5.82	0.00	-20.25	5.82	0.00	4.05	-2.00	0.00	-9.04	-2.00	0.00	-17.38
10	Medial strip	1.86	0.00	13.79	1.86	0.00	21.55	-23.84	0.00	80.13	-23.84	0.00	-19.46
19	Snow	0.33	0.00	-7.18	0.33	0.00	-5.81	6.81	0.00	-25.26	6.81	0.00	3.17
31	Miscellaneous	0.15	0.00	1.11	0.15	0.00	1.74	-1.93	0.00	6.47	-1.93	0.00	-1.57
100	AASHTO-LRFD TRUCK-LOAD	137.39	0.00	237.14	137.39	0.00	284.35	160.01	0.00	260.82	160.01	0.00	362.73
	MIN	-108.61	0.00	-302.51	-108.61	0.00	-233.51	-115.49	0.00	-374.77	-115.49	0.00	-282.74
	TANDEM-LOAD MAX	104.86	0.00	173.34	104.86	0.00	216.35	120.75	0.00	196.44	120.75	0.00	271.25
	MIN	-79.64	0.00	-230.85	-79.64	0.00	-172.93	-85.65	0.00	-283.42	-85.65	0.00	-206.88
	DISPERSION-LMAX	183.09	0.00	332.01	183.09	0.00	424.40	122.78	0.00	193.58	122.78	0.00	305.33
	MIN	-182.59	0.00	-353.58	-182.59	0.00	-444.35	-102.91	0.00	-269.09	-102.91	0.00	-296.15
110	Live load L-PICKUP 1	320.49	0.00	569.16	320.49	0.00	708.76	282.80	0.00	454.40	282.80	0.00	668.06
	MIN	-291.20	0.00	-656.09	-291.20	0.00	-677.86	-218.40	0.00	-643.86	-218.40	0.00	-578.89
	L-PICKUP 2 MAX	287.95	0.00	505.35	287.95	0.00	640.76	243.53	0.00	390.02	243.53	0.00	576.58
	MIN	-262.23	0.00	-584.44	-262.23	0.00	-617.28	-188.56	0.00	-552.52	-188.56	0.00	-503.03
	L-PICKUP 3	-302.18	0.00	-622.88	-302.18	0.00	-690.24	-219.66	0.00	-609.64	-219.66	0.00	-605.93
	Live load MAX	320.49	0.00	569.16	320.49	0.00	708.76	282.80	0.00	454.40	282.80	0.00	668.06
	MIN	-302.18	0.00	-656.09	-302.18	0.00	-690.24	-219.66	0.00	-643.86	-219.66	0.00	-605.93
111	AASHTO Twin TWIN-PICKUP	303.03	0.00	591.78	303.03	0.00	670.72	271.66	0.00	449.78	271.66	0.00	652.42
	MIN	-302.18	0.00	-622.88	-302.18	0.00	-690.24	-219.66	0.00	-609.64	-219.66	0.00	-605.93
	MID-PICKUP	-302.18	0.00	-622.88	-302.18	0.00	-690.24	-219.66	0.00	-609.64	-219.66	0.00	-605.93
198	AASHTO FatigTRUCK-LOAD	67.14	0.00	116.87	67.14	0.00	108.99	125.46	0.00	179.08	125.46	0.00	214.85
	MIN	-42.83	0.00	-171.46	-42.83	0.00	-103.70	-56.24	0.00	-309.19	-56.24	0.00	-56.71
	TANDEM-LOAD MAX	55.29	0.00	89.17	55.29	0.00	93.43	96.59	0.00	136.39	96.59	0.00	167.33
	MIN	-31.05	0.00	-137.51	-31.05	0.00	-71.56	-44.01	0.00	-236.14	-44.01	0.00	-47.66

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003061						1003062					
NODE		3061			4061			3062			4062		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	99.39	0.00	210.28	99.39	0.00	219.58	88.63	0.00	125.43	88.63	0.00	193.08
	MIN	-115.67	0.00	-199.07	-115.67	0.00	-279.30	-57.46	0.00	-194.27	-57.46	0.00	-147.30
199	AASHTO-LRFD TRUCK-LOAD MAX	153.61	0.00	325.52	153.61	0.00	320.85	179.06	0.00	306.17	179.06	0.00	419.57
	MIN	-153.16	0.00	-338.50	-153.16	0.00	-322.58	-141.16	0.00	-408.29	-141.16	0.00	-377.11
	TANDEM-LOAD MAX	104.86	0.00	173.34	104.86	0.00	216.35	120.75	0.00	196.44	120.75	0.00	271.25
	MIN	-79.64	0.00	-230.85	-79.64	0.00	-172.93	-85.65	0.00	-283.42	-85.65	0.00	-206.88
	DISPERSION-LMAX	183.09	0.00	332.01	183.09	0.00	424.40	122.78	0.00	193.58	122.78	0.00	305.33
	MIN	-182.59	0.00	-353.58	-182.59	0.00	-444.35	-102.91	0.00	-269.09	-102.91	0.00	-296.15
300	Total Dead lWithout snow	6.56	0.00	-54.79	6.56	0.00	-27.39	34.36	0.00	-141.18	34.36	0.00	2.36
301	Particular Snow	0.33	0.00	-7.18	0.33	0.00	-5.81	6.81	0.00	-25.26	6.81	0.00	3.17
302	Live load Total MAX	208.32	0.00	369.95	208.32	0.00	460.69	183.82	0.00	295.36	183.82	0.00	434.24
	MIN	-196.41	0.00	-426.46	-196.41	0.00	-448.65	-142.78	0.00	-418.51	-142.78	0.00	-393.86
303	Sum total D+L+PP MAX	215.20	0.00	362.77	215.20	0.00	454.88	224.99	0.00	217.53	224.99	0.00	439.77
	MIN	-196.09	0.00	-488.44	-196.09	0.00	-481.86	-135.97	0.00	-584.95	-135.97	0.00	-390.69

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003063						1003064					
		3063			4063			3064			4064		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	19.67	0.00	-73.43	19.67	0.00	8.75	26.78	0.00	-96.72	26.78	0.00	15.14
3	Railing	6.00	0.00	-21.39	6.00	0.00	3.66	6.21	0.00	-23.46	6.21	0.00	2.47
5	Wheel guard	59.39	0.00	-211.80	59.39	0.00	36.28	61.45	0.00	-232.23	61.45	0.00	24.47
8	Steel weight	7.99	0.00	-41.72	7.99	0.00	-8.35	34.27	0.00	-111.37	34.27	0.00	31.78
10	Medial strip	-30.10	0.00	105.43	-30.10	0.00	-20.30	-27.39	0.00	106.13	-27.39	0.00	-8.29
19	Snow	10.19	0.00	-37.76	10.19	0.00	4.79	13.36	0.00	-48.53	13.36	0.00	7.29
31	Miscellaneous	-2.43	0.00	8.52	-2.43	0.00	-1.64	-2.21	0.00	8.58	-2.21	0.00	-0.67
100	AASHTO-LRFD TRUCK-LOAD	175.00	0.00	269.38	175.00	0.00	400.73	185.44	0.00	259.86	185.44	0.00	416.21
	MIN	-119.76	0.00	-422.47	-119.76	0.00	-302.56	-117.24	0.00	-448.20	-117.24	0.00	-294.33
	TANDEM-LOAD	132.17	0.00	202.84	132.17	0.00	300.24	139.70	0.00	195.47	139.70	0.00	311.50
	MIN	-89.38	0.00	-318.82	-89.38	0.00	-221.56	-87.67	0.00	-335.57	-87.67	0.00	-216.97
	DISPERSION-LMAX	122.67	0.00	200.81	122.67	0.00	297.44	127.29	0.00	198.31	127.29	0.00	303.28
	MIN	-91.27	0.00	-316.80	-91.27	0.00	-281.11	-83.79	0.00	-352.77	-83.79	0.00	-275.98
110	Live load L-PICKUP 1	297.67	0.00	470.18	297.67	0.00	698.17	312.73	0.00	458.17	312.73	0.00	719.50
	MIN	-211.03	0.00	-739.27	-211.03	0.00	-583.67	-201.03	0.00	-800.97	-201.03	0.00	-570.31
	L-PICKUP 2	254.85	0.00	403.64	254.85	0.00	597.67	266.99	0.00	393.78	266.99	0.00	614.78
	MIN	-180.65	0.00	-635.62	-180.65	0.00	-502.67	-171.47	0.00	-688.34	-171.47	0.00	-492.95
	L-PICKUP 3	-213.11	0.00	-711.63	-213.11	0.00	-622.85	-201.28	0.00	-785.25	-201.28	0.00	-603.46
	Live load	297.67	0.00	470.18	297.67	0.00	698.17	312.73	0.00	458.17	312.73	0.00	719.50
	MIN	-213.11	0.00	-739.27	-213.11	0.00	-622.85	-201.28	0.00	-800.97	-201.28	0.00	-603.46
111	AASHTO Twin TWIN-PICKUP	286.45	0.00	463.48	286.45	0.00	694.01	303.55	0.00	446.97	303.55	0.00	715.25
	MIN	-213.11	0.00	-711.63	-213.11	0.00	-622.85	-201.28	0.00	-785.25	-201.28	0.00	-603.46
	MID-PICKUP	-213.11	0.00	-711.63	-213.11	0.00	-622.85	-201.28	0.00	-785.25	-201.28	0.00	-603.46
198	AASHTO FatigTRUCK-LOAD	147.91	0.00	199.18	147.91	0.00	260.15	155.87	0.00	197.09	155.87	0.00	275.53
	MIN	-58.81	0.00	-357.66	-58.81	0.00	-79.18	-55.91	0.00	-375.53	-55.91	0.00	-94.91
	TANDEM-LOAD	113.19	0.00	151.46	113.19	0.00	200.47	118.88	0.00	150.16	118.88	0.00	211.49
	MIN	-46.18	0.00	-272.33	-46.18	0.00	-54.14	-44.25	0.00	-285.06	-44.25	0.00	-65.49

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003063						1003064					
NODE		3063			4063			3064			4064		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	95.15	0.00	123.52	95.15	0.00	192.23	97.51	0.00	121.61	97.51	0.00	190.23
	MIN	-42.67	0.00	-229.75	-42.67	0.00	-129.40	-36.39	0.00	-250.43	-36.39	0.00	-135.00
199	AASHTO-LRFD TRUCK-LOAD MAX	195.60	0.00	314.17	195.60	0.00	473.68	209.99	0.00	298.32	209.99	0.00	491.43
	MIN	-145.52	0.00	-473.90	-145.52	0.00	-410.94	-139.85	0.00	-519.73	-139.85	0.00	-394.53
	TANDEM-LOAD MAX	132.17	0.00	202.84	132.17	0.00	300.24	139.70	0.00	195.47	139.70	0.00	311.50
	MIN	-89.38	0.00	-318.82	-89.38	0.00	-221.56	-87.67	0.00	-335.57	-87.67	0.00	-216.97
	DISPERSION-LMAX	122.67	0.00	200.81	122.67	0.00	297.44	127.29	0.00	198.31	127.29	0.00	303.28
	MIN	-91.27	0.00	-316.80	-91.27	0.00	-281.11	-83.79	0.00	-352.77	-83.79	0.00	-275.98
300	Total Dead lWithout snow	60.52	0.00	-234.39	60.52	0.00	18.40	99.11	0.00	-349.07	99.11	0.00	64.90
301	Particular Snow	10.19	0.00	-37.76	10.19	0.00	4.79	13.36	0.00	-48.53	13.36	0.00	7.29
302	Live load Total MAX	193.48	0.00	305.62	193.48	0.00	453.81	203.27	0.00	297.81	203.27	0.00	467.67
	MIN	-138.52	0.00	-480.52	-138.52	0.00	-404.85	-130.83	0.00	-520.63	-130.83	0.00	-392.25
303	Sum total D+L+PP MAX	264.19	0.00	125.15	264.19	0.00	477.00	315.74	0.00	-10.44	315.74	0.00	539.86
	MIN	-109.37	0.00	-752.68	-109.37	0.00	-400.06	-57.61	0.00	-918.23	-57.61	0.00	-384.96

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003065						1003066					
		3065			4065			3066			4066		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	26.11	0.00	-98.84	26.11	0.00	10.21	21.15	0.00	-88.28	21.15	0.00	0.06
3	Railing	6.13	0.00	-24.07	6.13	0.00	1.54	5.97	0.00	-23.89	5.97	0.00	1.04
5	Wheel guard	60.71	0.00	-238.30	60.71	0.00	15.27	59.07	0.00	-236.48	59.07	0.00	10.25
8	Steel weight	32.45	0.00	-112.63	32.45	0.00	22.92	14.35	0.00	-72.08	14.35	0.00	-12.13
10	Medial strip	-27.26	0.00	109.14	-27.26	0.00	-4.73	-29.01	0.00	114.03	-29.01	0.00	-7.14
19	Snow	13.05	0.00	-49.62	13.05	0.00	4.88	10.83	0.00	-44.93	10.83	0.00	0.29
31	Miscellaneous	-2.20	0.00	8.82	-2.20	0.00	-0.38	-2.34	0.00	9.21	-2.34	0.00	-0.58
100	AASHTO-LRFD TRUCK-LOAD	186.99	0.00	259.49	186.99	0.00	415.07	179.40	0.00	281.23	179.40	0.00	397.70
	MIN	-121.59	0.00	-438.17	-121.59	0.00	-298.22	-126.20	0.00	-428.26	-126.20	0.00	-305.20
	TANDEM-LOAD	140.74	0.00	196.27	140.74	0.00	310.56	134.98	0.00	210.72	134.98	0.00	298.22
	MIN	-90.77	0.00	-329.16	-90.77	0.00	-219.67	-93.77	0.00	-321.27	-93.77	0.00	-224.41
	DISPERSION-LMAX	128.72	0.00	184.87	128.72	0.00	302.74	125.45	0.00	202.58	125.45	0.00	289.90
	MIN	-86.14	0.00	-342.46	-86.14	0.00	-283.40	-91.10	0.00	-341.92	-91.10	0.00	-287.30
110	Live load L-PICKUP 1	315.71	0.00	444.36	315.71	0.00	717.81	304.85	0.00	483.80	304.85	0.00	687.59
	MIN	-207.74	0.00	-780.63	-207.74	0.00	-581.62	-217.30	0.00	-770.18	-217.30	0.00	-592.50
	L-PICKUP 2	269.46	0.00	381.14	269.46	0.00	613.30	260.43	0.00	413.29	260.43	0.00	588.12
	MIN	-176.91	0.00	-671.62	-176.91	0.00	-503.07	-184.87	0.00	-663.19	-184.87	0.00	-511.71
	L-PICKUP 3	-209.93	0.00	-761.01	-209.93	0.00	-612.72	-221.88	0.00	-749.78	-221.88	0.00	-625.24
	Live load	315.71	0.00	444.36	315.71	0.00	717.81	304.85	0.00	483.80	304.85	0.00	687.59
	MIN	-209.93	0.00	-780.63	-209.93	0.00	-612.72	-221.88	0.00	-770.18	-221.88	0.00	-625.24
111	AASHTO Twin TWIN-PICKUP	307.84	0.00	429.60	307.84	0.00	712.58	296.36	0.00	479.97	296.36	0.00	675.32
	MIN	-209.93	0.00	-761.01	-209.93	0.00	-612.72	-221.88	0.00	-749.78	-221.88	0.00	-625.24
	MID-PICKUP	-209.93	0.00	-761.01	-209.93	0.00	-612.72	-221.88	0.00	-749.78	-221.88	0.00	-625.24
198	AASHTO FatigTRUCK-LOAD	158.62	0.00	196.95	158.62	0.00	279.90	155.19	0.00	202.44	155.19	0.00	274.93
	MIN	-55.58	0.00	-382.67	-55.58	0.00	-104.22	-57.74	0.00	-373.29	-57.74	0.00	-106.87
	TANDEM-LOAD	120.72	0.00	149.99	120.72	0.00	214.31	118.07	0.00	153.65	118.07	0.00	210.59
	MIN	-43.99	0.00	-289.94	-43.99	0.00	-71.88	-45.46	0.00	-282.61	-45.46	0.00	-73.63

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003065						1003066					
NODE		3065			4065			3066			4066		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	98.32	0.00	116.88	98.32	0.00	188.37	95.27	0.00	124.53	95.27	0.00	182.16
	MIN	-35.25	0.00	-251.32	-35.25	0.00	-142.28	-36.63	0.00	-251.02	-36.63	0.00	-144.56
199	AASHTO-LRFD TRUCK-LOAD MAX	213.32	0.00	292.46	213.32	0.00	489.01	203.84	0.00	330.73	203.84	0.00	460.46
	MIN	-147.11	0.00	-503.10	-147.11	0.00	-397.40	-155.44	0.00	-491.17	-155.44	0.00	-407.41
	TANDEM-LOAD MAX	140.74	0.00	196.27	140.74	0.00	310.56	134.98	0.00	210.72	134.98	0.00	298.22
	MIN	-90.77	0.00	-329.16	-90.77	0.00	-219.67	-93.77	0.00	-321.27	-93.77	0.00	-224.41
	DISPERSION-LMAX	128.72	0.00	184.87	128.72	0.00	302.74	125.45	0.00	202.58	125.45	0.00	289.90
	MIN	-86.14	0.00	-342.46	-86.14	0.00	-283.40	-91.10	0.00	-341.92	-91.10	0.00	-287.30
300	Total Dead lWithout snow	95.93	0.00	-355.88	95.93	0.00	44.83	69.18	0.00	-297.49	69.18	0.00	-8.51
301	Particular Snow	13.05	0.00	-49.62	13.05	0.00	4.88	10.83	0.00	-44.93	10.83	0.00	0.29
302	Live load Total MAX	205.21	0.00	288.84	205.21	0.00	466.58	198.15	0.00	314.47	198.15	0.00	446.94
	MIN	-136.45	0.00	-507.41	-136.45	0.00	-398.27	-144.23	0.00	-500.62	-144.23	0.00	-406.41
303	Sum total D+L+PP MAX	314.19	0.00	-30.01	314.19	0.00	516.30	278.17	0.00	66.39	278.17	0.00	447.23
	MIN	-68.41	0.00	-912.91	-68.41	0.00	-393.39	-107.48	0.00	-843.04	-107.48	0.00	-414.62

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003067						1003068					
		3067			4067			3068			4068		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	21.50	0.00	-88.42	21.50	0.00	1.38	32.09	0.00	-108.86	32.09	0.00	25.19
3	Railing	5.98	0.00	-23.68	5.98	0.00	1.31	6.37	0.00	-23.77	6.37	0.00	2.83
5	Wheel guard	59.22	0.00	-234.42	59.22	0.00	12.93	63.04	0.00	-235.31	63.04	0.00	27.99
8	Steel weight	15.59	0.00	-75.13	15.59	0.00	-10.03	53.86	0.00	-156.81	53.86	0.00	68.18
10	Medial strip	-28.91	0.00	112.50	-28.91	0.00	-8.25	-25.40	0.00	101.19	-25.40	0.00	-4.90
19	Snow	10.98	0.00	-44.94	10.98	0.00	0.94	15.74	0.00	-53.95	15.74	0.00	11.79
31	Miscellaneous	-2.34	0.00	9.09	-2.34	0.00	-0.67	-2.05	0.00	8.18	-2.05	0.00	-0.40
100	AASHTO-LRFD TRUCK-LOAD	173.80	0.00	294.23	173.80	0.00	388.76	183.10	0.00	259.95	183.10	0.00	411.89
	MIN	-128.08	0.00	-426.67	-128.08	0.00	-310.45	-113.70	0.00	-438.94	-113.70	0.00	-288.17
	TANDEM-LOAD	131.26	0.00	219.70	131.26	0.00	292.05	137.94	0.00	195.98	137.94	0.00	308.89
	MIN	-95.00	0.00	-320.08	-95.00	0.00	-228.11	-85.10	0.00	-330.47	-85.10	0.00	-212.56
	DISPERSION-LMAX	125.73	0.00	214.08	125.73	0.00	286.74	127.91	0.00	178.10	127.91	0.00	298.55
	MIN	-91.03	0.00	-352.91	-91.03	0.00	-282.08	-75.89	0.00	-352.25	-75.89	0.00	-254.96
110	Live load L-PICKUP 1	299.53	0.00	508.31	299.53	0.00	675.50	311.01	0.00	438.05	311.01	0.00	710.43
	MIN	-219.11	0.00	-779.58	-219.11	0.00	-592.53	-189.59	0.00	-791.19	-189.59	0.00	-543.14
	L-PICKUP 2	256.99	0.00	433.78	256.99	0.00	578.79	265.86	0.00	374.08	265.86	0.00	607.44
	MIN	-186.03	0.00	-673.00	-186.03	0.00	-510.19	-160.99	0.00	-682.72	-160.99	0.00	-467.52
	L-PICKUP 3	-224.56	0.00	-762.06	-224.56	0.00	-628.48	-190.67	0.00	-774.53	-190.67	0.00	-573.75
	Live load	299.53	0.00	508.31	299.53	0.00	675.50	311.01	0.00	438.05	311.01	0.00	710.43
	MIN	-224.56	0.00	-779.58	-224.56	0.00	-628.48	-190.67	0.00	-791.19	-190.67	0.00	-573.75
111	AASHTO Twin TWIN-PICKUP	290.86	0.00	505.18	290.86	0.00	664.51	303.21	0.00	422.78	303.21	0.00	701.14
	MIN	-224.56	0.00	-762.06	-224.56	0.00	-628.48	-190.67	0.00	-774.53	-190.67	0.00	-573.75
	MID-PICKUP	-224.56	0.00	-762.06	-224.56	0.00	-628.48	-190.67	0.00	-774.53	-190.67	0.00	-573.75
198	AASHTO FatigTRUCK-LOAD	149.92	0.00	207.58	149.92	0.00	267.25	153.42	0.00	198.37	153.42	0.00	271.42
	MIN	-60.17	0.00	-359.34	-60.17	0.00	-103.89	-57.21	0.00	-369.42	-57.21	0.00	-91.80
	TANDEM-LOAD	114.58	0.00	157.34	114.58	0.00	205.50	117.20	0.00	150.99	117.20	0.00	208.94
	MIN	-47.16	0.00	-273.22	-47.16	0.00	-71.60	-45.06	0.00	-280.60	-45.06	0.00	-63.37

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003067						1003068					
NODE		3067			4067			3068			4068		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	92.11	0.00	130.67	92.11	0.00	177.86	95.75	0.00	115.24	95.75	0.00	186.14
	MIN	-36.27	0.00	-241.31	-36.27	0.00	-136.86	-32.54	0.00	-242.46	-32.54	0.00	-122.79
199	AASHTO-LRFD TRUCK-LOAD MAX	197.44	0.00	347.23	197.44	0.00	451.60	208.98	0.00	291.65	208.98	0.00	480.50
	MIN	-158.48	0.00	-493.82	-158.48	0.00	-416.23	-135.97	0.00	-508.34	-135.97	0.00	-382.54
	TANDEM-LOAD MAX	131.26	0.00	219.70	131.26	0.00	292.05	137.94	0.00	195.98	137.94	0.00	308.89
	MIN	-95.00	0.00	-320.08	-95.00	0.00	-228.11	-85.10	0.00	-330.47	-85.10	0.00	-212.56
	DISPERSION-LMAX	125.73	0.00	214.08	125.73	0.00	286.74	127.91	0.00	178.10	127.91	0.00	298.55
	MIN	-91.03	0.00	-352.91	-91.03	0.00	-282.08	-75.89	0.00	-352.25	-75.89	0.00	-254.96
300	Total Dead lWithout snow	71.04	0.00	-300.05	71.04	0.00	-3.34	127.91	0.00	-415.38	127.91	0.00	118.90
301	Particular Snow	10.98	0.00	-44.94	10.98	0.00	0.94	15.74	0.00	-53.95	15.74	0.00	11.79
302	Live load Total MAX	194.70	0.00	330.40	194.70	0.00	439.07	202.16	0.00	284.73	202.16	0.00	461.78
	MIN	-145.96	0.00	-506.73	-145.96	0.00	-408.51	-123.94	0.00	-514.27	-123.94	0.00	-372.94
303	Sum total D+L+PP MAX	276.72	0.00	84.53	276.72	0.00	440.01	345.81	0.00	-99.17	345.81	0.00	592.48
	MIN	-107.73	0.00	-851.72	-107.73	0.00	-410.91	-17.47	0.00	-983.60	-17.47	0.00	-354.12

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003069						1003070					
NODE		3069			4069			3070			4070		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	24.43	0.00	-83.62	24.43	0.00	18.43	2.79	0.00	-24.16	2.79	0.00	-12.48
3	Railing	6.13	0.00	-21.63	6.13	0.00	3.99	4.20	0.00	-14.83	4.20	0.00	2.71
5	Wheel guard	60.74	0.00	-214.18	60.74	0.00	39.52	41.56	0.00	-146.81	41.56	0.00	26.80
8	Steel weight	25.63	0.00	-80.12	25.63	0.00	26.94	-38.82	0.00	79.32	-38.82	0.00	-82.85
10	Medial strip	-28.26	0.00	101.14	-28.26	0.00	-16.91	-27.47	0.00	88.69	-27.47	0.00	-26.05
19	Snow	12.31	0.00	-42.31	12.31	0.00	9.13	2.31	0.00	-14.43	2.31	0.00	-4.79
31	Miscellaneous	-2.28	0.00	8.17	-2.28	0.00	-1.37	-2.22	0.00	7.17	-2.22	0.00	-2.11
100	AASHTO-LRFD TRUCK-LOAD	190.38	0.00	252.05	190.38	0.00	422.75	167.92	0.00	264.29	167.92	0.00	362.67
	MIN	-108.06	0.00	-456.22	-108.06	0.00	-274.66	-119.39	0.00	-382.20	-119.39	0.00	-276.71
	TANDEM-LOAD MAX	143.51	0.00	188.79	143.51	0.00	316.94	126.40	0.00	195.63	126.40	0.00	271.88
	MIN	-80.94	0.00	-342.33	-80.94	0.00	-201.93	-87.91	0.00	-288.63	-87.91	0.00	-201.78
	DISPERSION-LMAX	125.88	0.00	209.04	125.88	0.00	297.96	117.54	0.00	236.66	117.54	0.00	286.73
	MIN	-86.40	0.00	-343.66	-86.40	0.00	-265.37	-113.72	0.00	-273.17	-113.72	0.00	-306.41
110	Live load L-PICKUP 1	316.26	0.00	461.09	316.26	0.00	720.72	285.46	0.00	500.95	285.46	0.00	649.40
	MIN	-194.46	0.00	-799.88	-194.46	0.00	-540.03	-233.12	0.00	-655.37	-233.12	0.00	-583.11
	L-PICKUP 2 MAX	269.39	0.00	397.83	269.39	0.00	614.91	243.95	0.00	432.28	243.95	0.00	558.62
	MIN	-167.34	0.00	-685.99	-167.34	0.00	-467.29	-201.64	0.00	-561.80	-201.64	0.00	-508.18
	L-PICKUP 3	-196.66	0.00	-786.94	-196.66	0.00	-573.62	-239.85	0.00	-618.72	-239.85	0.00	-612.65
	Live load MAX	316.26	0.00	461.09	316.26	0.00	720.72	285.46	0.00	500.95	285.46	0.00	649.40
	MIN	-196.66	0.00	-799.88	-196.66	0.00	-573.62	-239.85	0.00	-655.37	-239.85	0.00	-612.65
111	AASHTO Twin TWIN-PICKUP	305.88	0.00	454.50	305.88	0.00	712.59	273.41	0.00	515.10	273.41	0.00	622.45
	MIN	-196.66	0.00	-786.94	-196.66	0.00	-573.62	-239.85	0.00	-618.72	-239.85	0.00	-612.65
	MID-PICKUP	-196.66	0.00	-786.94	-196.66	0.00	-573.62	-239.85	0.00	-618.72	-239.85	0.00	-612.65
198	AASHTO FatigTRUCK-LOAD	154.69	0.00	183.37	154.69	0.00	268.89	131.19	0.00	166.77	131.19	0.00	219.53
	MIN	-53.55	0.00	-377.48	-53.55	0.00	-69.48	-52.32	0.00	-328.44	-52.32	0.00	-52.80
	TANDEM-LOAD MAX	118.14	0.00	140.29	118.14	0.00	207.24	100.63	0.00	127.14	100.63	0.00	170.85
	MIN	-42.28	0.00	-286.30	-42.28	0.00	-47.80	-40.99	0.00	-249.50	-40.99	0.00	-44.38

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003069						1003070					
NODE		3069			4069			3070			4070		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.51	0.00	113.32	96.51	0.00	191.12	87.26	0.00	137.84	87.26	0.00	185.47
	MIN	-39.94	0.00	-240.44	-39.94	0.00	-122.97	-59.12	0.00	-207.00	-59.12	0.00	-150.65
199	AASHTO-LRFD TRUCK-LOAD MAX	213.99	0.00	295.96	213.99	0.00	493.81	186.24	0.00	335.68	186.24	0.00	404.88
	MIN	-132.10	0.00	-530.72	-132.10	0.00	-371.99	-152.78	0.00	-414.29	-152.78	0.00	-374.31
	TANDEM-LOAD MAX	143.51	0.00	188.79	143.51	0.00	316.94	126.40	0.00	195.63	126.40	0.00	271.88
	MIN	-80.94	0.00	-342.33	-80.94	0.00	-201.93	-87.91	0.00	-288.63	-87.91	0.00	-201.78
	DISPERSION-LMAX	125.88	0.00	209.04	125.88	0.00	297.96	117.54	0.00	236.66	117.54	0.00	286.73
	MIN	-86.40	0.00	-343.66	-86.40	0.00	-265.37	-113.72	0.00	-273.17	-113.72	0.00	-306.41
300	Total Dead lWithout snow	86.39	0.00	-290.24	86.39	0.00	70.61	-19.96	0.00	-10.63	-19.96	0.00	-93.99
301	Particular Snow	12.31	0.00	-42.31	12.31	0.00	9.13	2.31	0.00	-14.43	2.31	0.00	-4.79
302	Live load Total MAX	205.57	0.00	299.71	205.57	0.00	468.47	185.55	0.00	325.62	185.55	0.00	422.11
	MIN	-127.83	0.00	-519.92	-127.83	0.00	-372.85	-155.90	0.00	-425.99	-155.90	0.00	-398.22
303	Sum total D+L+PP MAX	304.27	0.00	57.07	304.27	0.00	548.20	187.86	0.00	311.19	187.86	0.00	417.32
	MIN	-67.47	0.00	-852.47	-67.47	0.00	-363.73	-173.55	0.00	-451.05	-173.55	0.00	-497.00

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003071 3071						1003072 3072							
		4071		4071		4072		4072		4072		4072			
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)		
1	Pavement	-2.41	0.00	-5.23	-2.41	0.00	-15.29	-19.62	0.00	34.64	-19.62	0.00	-47.32		
3	Railing	-0.48	0.00	-2.45	-0.48	0.00	-4.45	-6.44	0.00	11.47	-6.44	0.00	-15.42		
5	Wheel guard	-4.74	0.00	-24.29	-4.74	0.00	-44.09	-63.73	0.00	113.58	-63.73	0.00	-152.62		
8	Steel weight	-4.03	0.00	8.11	-4.03	0.00	-8.72	-2.55	0.00	3.21	-2.55	0.00	-7.44		
10	Medial strip	1.91	0.00	13.95	1.91	0.00	21.94	33.16	0.00	-59.30	33.16	0.00	79.23		
19	Snow	-1.18	0.00	-2.93	-1.18	0.00	-7.86	-10.28	0.00	18.17	-10.28	0.00	-24.76		
31	Miscellaneous	0.15	0.00	1.13	0.15	0.00	1.77	2.68	0.00	-4.79	2.68	0.00	6.40		
100	AASHTO-LRFD TRUCK-LOAD	MAX	140.22	0.00	246.82	140.22	0.00	279.14	116.32	0.00	224.93	116.32	0.00	263.32	
		MIN	-111.20	0.00	-310.66	-111.20	0.00	-229.78	-117.38	0.00	-223.84	-117.38	0.00	-266.18	
		TANDEM-LOAD	MAX	106.49	0.00	179.41	106.49	0.00	212.68	79.22	0.00	152.76	79.22	0.00	179.63
		MIN	-81.09	0.00	-235.68	-81.09	0.00	-168.63	-79.91	0.00	-152.95	-79.91	0.00	-181.65	
		DISPERSION-L	MAX	179.25	0.00	343.71	179.25	0.00	409.94	310.94	0.00	660.52	310.94	0.00	698.02
		MIN	-184.12	0.00	-350.17	-184.12	0.00	-437.29	-344.29	0.00	-601.81	-344.29	0.00	-778.46	
110	Live load	L-PICKUP 1	MAX	319.46	0.00	590.53	319.46	0.00	689.08	427.26	0.00	885.46	427.26	0.00	961.34
		MIN	-295.33	0.00	-660.83	-295.33	0.00	-667.07	-461.67	0.00	-825.65	-461.67	0.00	-1044.65	
		L-PICKUP 2	MAX	285.74	0.00	523.12	285.74	0.00	622.62	390.17	0.00	813.28	390.17	0.00	877.64
		MIN	-265.21	0.00	-585.85	-265.21	0.00	-605.92	-424.20	0.00	-754.76	-424.20	0.00	-960.11	
		L-PICKUP 3	MAX	-309.70	0.00	-632.24	-309.70	0.00	-684.97	-497.90	0.00	-901.77	-497.90	0.00	-1125.52
		Live load	MAX	319.46	0.00	590.53	319.46	0.00	689.08	427.26	0.00	885.46	427.26	0.00	961.34
MIN	-309.70	0.00	-660.83	-309.70	0.00	-684.97	-497.90	0.00	-901.77	-497.90	0.00	-1125.52			
111	AASHTO Twin	TWIN-PICKUP	MAX	304.19	0.00	619.86	304.19	0.00	649.16	468.88	0.00	955.73	468.88	0.00	1058.17
		MIN	-309.70	0.00	-632.24	-309.70	0.00	-684.97	-497.90	0.00	-901.77	-497.90	0.00	-1125.52	
		MID-PICKUP	MAX	-309.70	0.00	-632.24	-309.70	0.00	-684.97	-497.90	0.00	-901.77	-497.90	0.00	-1125.52
198	AASHTO Fatig	TRUCK-LOAD	MAX	65.60	0.00	111.48	65.60	0.00	102.83	45.59	0.00	137.26	45.59	0.00	100.90
		MIN	-46.55	0.00	-171.16	-46.55	0.00	-104.69	-72.95	0.00	-89.54	-72.95	0.00	-167.94	
		TANDEM-LOAD	MAX	54.01	0.00	84.24	54.01	0.00	88.79	31.01	0.00	93.09	31.01	0.00	68.38
		MIN	-31.88	0.00	-136.79	-31.88	0.00	-71.49	-49.63	0.00	-61.14	-49.63	0.00	-114.41	

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003071						1003072					
NODE		3071			4071			3072			4072		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	96.98	0.00	217.42	96.98	0.00	211.13	147.31	0.00	416.55	147.31	0.00	327.99
	MIN	-116.78	0.00	-197.13	-116.78	0.00	-276.72	-221.09	0.00	-289.43	-221.09	0.00	-506.94
199	AASHTO-LRFD TRUCK-LOAD MAX	158.75	0.00	345.02	158.75	0.00	311.35	210.03	0.00	401.40	210.03	0.00	477.72
	MIN	-159.99	0.00	-352.32	-159.99	0.00	-323.78	-208.93	0.00	-400.15	-208.93	0.00	-472.12
	TANDEM-LOAD MAX	106.49	0.00	179.41	106.49	0.00	212.68	79.22	0.00	152.76	79.22	0.00	179.63
	MIN	-81.09	0.00	-235.68	-81.09	0.00	-168.63	-79.91	0.00	-152.95	-79.91	0.00	-181.65
	DISPERSION-LMAX	179.25	0.00	343.71	179.25	0.00	409.94	310.94	0.00	660.52	310.94	0.00	698.02
	MIN	-184.12	0.00	-350.17	-184.12	0.00	-437.29	-344.29	0.00	-601.81	-344.29	0.00	-778.46
300	Total Dead lWithout snow	-9.59	0.00	-8.79	-9.59	0.00	-48.84	-56.49	0.00	98.82	-56.49	0.00	-137.16
301	Particular Snow	-1.18	0.00	-2.93	-1.18	0.00	-7.86	-10.28	0.00	18.17	-10.28	0.00	-24.76
302	Live load Total MAX	207.65	0.00	383.85	207.65	0.00	447.90	277.72	0.00	575.55	277.72	0.00	624.87
	MIN	-201.31	0.00	-429.54	-201.31	0.00	-445.23	-323.64	0.00	-586.15	-323.64	0.00	-731.59
303	Sum total D+L+PP MAX	206.47	0.00	380.92	206.47	0.00	440.04	267.44	0.00	692.54	267.44	0.00	600.11
	MIN	-212.08	0.00	-441.27	-212.08	0.00	-501.94	-390.41	0.00	-567.98	-390.41	0.00	-893.50

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003073						1003074					
NODE		3073			4073			3074			4074		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	-3.79	0.00	-6.59	-3.79	0.00	-22.41	16.29	0.00	-63.68	16.29	0.00	4.38
3	Railing	0.69	0.00	-5.72	0.69	0.00	-2.82	5.58	0.00	-19.21	5.58	0.00	4.09
5	Wheel guard	6.86	0.00	-56.58	6.86	0.00	-27.93	55.23	0.00	-190.23	55.23	0.00	40.47
8	Steel weight	-23.60	0.00	41.57	-23.60	0.00	-57.01	-0.66	0.00	-28.31	-0.66	0.00	-31.08
10	Medial strip	-7.01	0.00	35.77	-7.01	0.00	6.47	-29.15	0.00	96.00	-29.15	0.00	-25.77
19	Snow	-1.49	0.00	-4.37	-1.49	0.00	-10.57	8.59	0.00	-32.92	8.59	0.00	2.98
31	Miscellaneous	-0.57	0.00	2.89	-0.57	0.00	0.52	-2.36	0.00	7.76	-2.36	0.00	-2.08
100	AASHTO-LRFD TRUCK-LOAD	170.59	0.00	289.32	170.59	0.00	346.57	183.92	0.00	260.23	183.92	0.00	402.92
	MIN	-130.98	0.00	-380.14	-130.98	0.00	-282.84	-119.16	0.00	-432.79	-119.16	0.00	-289.47
	TANDEM-LOAD	128.75	0.00	210.32	128.75	0.00	261.42	138.35	0.00	194.16	138.35	0.00	301.95
	MIN	-95.75	0.00	-287.24	-95.75	0.00	-206.51	-88.18	0.00	-325.12	-88.18	0.00	-211.12
	DISPERSION-LMAX	184.56	0.00	358.92	184.56	0.00	422.42	133.35	0.00	230.24	133.35	0.00	312.76
	MIN	-191.85	0.00	-367.29	-191.85	0.00	-461.30	-107.34	0.00	-331.44	-107.34	0.00	-303.97
110	Live load L-PICKUP 1	355.15	0.00	648.24	355.15	0.00	768.99	317.27	0.00	490.47	317.27	0.00	715.68
	MIN	-322.83	0.00	-747.43	-322.83	0.00	-744.14	-226.51	0.00	-764.23	-226.51	0.00	-593.43
	L-PICKUP 2	313.32	0.00	569.25	313.32	0.00	683.84	271.69	0.00	424.40	271.69	0.00	614.71
	MIN	-287.60	0.00	-654.53	-287.60	0.00	-667.81	-195.53	0.00	-656.56	-195.53	0.00	-515.09
	L-PICKUP 3	-338.07	0.00	-720.69	-338.07	0.00	-748.30	-231.11	0.00	-742.95	-231.11	0.00	-626.54
	Live load	355.15	0.00	648.24	355.15	0.00	768.99	317.27	0.00	490.47	317.27	0.00	715.68
	MIN	-338.07	0.00	-747.43	-338.07	0.00	-748.30	-231.11	0.00	-764.23	-231.11	0.00	-626.54
111	AASHTO Twin TWIN-PICKUP	341.15	0.00	684.98	341.15	0.00	721.41	304.94	0.00	489.66	304.94	0.00	696.86
	MIN	-338.07	0.00	-720.69	-338.07	0.00	-748.30	-231.11	0.00	-742.95	-231.11	0.00	-626.54
	MID-PICKUP	-338.07	0.00	-720.69	-338.07	0.00	-748.30	-231.11	0.00	-742.95	-231.11	0.00	-626.54
198	AASHTO FatigTRUCK-LOAD	94.79	0.00	141.93	94.79	0.00	155.71	147.67	0.00	181.22	147.67	0.00	251.20
	MIN	-48.30	0.00	-240.22	-48.30	0.00	-107.21	-55.48	0.00	-365.88	-55.48	0.00	-57.11
	TANDEM-LOAD	75.41	0.00	108.72	75.41	0.00	127.23	112.82	0.00	138.33	112.82	0.00	194.10
	MIN	-37.92	0.00	-187.76	-37.92	0.00	-73.94	-43.43	0.00	-277.22	-43.43	0.00	-43.38

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003073						1003074					
NODE		3073			4073			3074			4074		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	107.63	0.00	226.79	107.63	0.00	230.61	99.04	0.00	132.06	99.04	0.00	202.92
	MIN	-119.62	0.00	-223.37	-119.62	0.00	-281.48	-53.61	0.00	-236.31	-53.61	0.00	-142.71
199	AASHTO-LRFD TRUCK-LOAD MAX	194.49	0.00	402.16	194.49	0.00	379.14	205.47	0.00	313.82	205.47	0.00	461.52
	MIN	-183.79	0.00	-433.47	-183.79	0.00	-370.14	-149.45	0.00	-494.06	-149.45	0.00	-392.18
	TANDEM-LOAD MAX	128.75	0.00	210.32	128.75	0.00	261.42	138.35	0.00	194.16	138.35	0.00	301.95
	MIN	-95.75	0.00	-287.24	-95.75	0.00	-206.51	-88.18	0.00	-325.12	-88.18	0.00	-211.12
	DISPERSION-LMAX	184.56	0.00	358.92	184.56	0.00	422.42	133.35	0.00	230.24	133.35	0.00	312.76
	MIN	-191.85	0.00	-367.29	-191.85	0.00	-461.30	-107.34	0.00	-331.44	-107.34	0.00	-303.97
300	Total Dead lWithout snow	-27.42	0.00	11.35	-27.42	0.00	-103.18	44.93	0.00	-197.67	44.93	0.00	-10.01
301	Particular Snow	-1.49	0.00	-4.37	-1.49	0.00	-10.57	8.59	0.00	-32.92	8.59	0.00	2.98
302	Live load Total MAX	230.85	0.00	421.36	230.85	0.00	499.85	206.22	0.00	318.81	206.22	0.00	465.19
	MIN	-219.75	0.00	-485.83	-219.75	0.00	-486.39	-150.22	0.00	-496.75	-150.22	0.00	-407.25
303	Sum total D+L+PP MAX	229.36	0.00	428.34	229.36	0.00	489.27	259.75	0.00	183.85	259.75	0.00	468.17
	MIN	-248.65	0.00	-490.20	-248.65	0.00	-600.15	-141.63	0.00	-727.35	-141.63	0.00	-414.28

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003075						1003076					
NODE		3075			4075			3076			4076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	41.44	0.00	-130.33	41.44	0.00	42.79	35.64	0.00	-119.86	35.64	0.00	29.02
3	Railing	6.74	0.00	-23.96	6.74	0.00	4.21	6.45	0.00	-24.35	6.45	0.00	2.57
5	Wheel guard	66.77	0.00	-237.19	66.77	0.00	41.72	63.81	0.00	-241.07	63.81	0.00	25.47
8	Steel weight	87.21	0.00	-241.41	87.21	0.00	122.86	67.29	0.00	-194.35	67.29	0.00	86.74
10	Medial strip	-22.55	0.00	89.97	-22.55	0.00	-4.23	-23.87	0.00	98.81	-23.87	0.00	-0.89
19	Snow	19.95	0.00	-63.43	19.95	0.00	19.89	17.32	0.00	-58.93	17.32	0.00	13.41
31	Miscellaneous	-1.82	0.00	7.27	-1.82	0.00	-0.34	-1.93	0.00	7.98	-1.93	0.00	-0.07
100	AASHTO-LRFD TRUCK-LOAD	199.63	0.00	247.18	199.63	0.00	437.91	184.22	0.00	270.26	184.22	0.00	418.58
	MIN	-104.08	0.00	-480.93	-104.08	0.00	-271.49	-116.03	0.00	-439.54	-116.03	0.00	-295.51
	TANDEM-LOAD MAX	149.28	0.00	185.42	149.28	0.00	326.65	138.16	0.00	203.04	138.16	0.00	311.73
	MIN	-78.13	0.00	-358.44	-78.13	0.00	-200.48	-86.59	0.00	-328.99	-86.59	0.00	-217.52
	DISPERSION-LMAX	144.97	0.00	195.59	144.97	0.00	325.40	135.72	0.00	179.68	135.72	0.00	315.26
	MIN	-77.55	0.00	-406.86	-77.55	0.00	-252.53	-77.81	0.00	-371.82	-77.81	0.00	-265.22
110	Live load L-PICKUP 1	344.59	0.00	442.77	344.59	0.00	763.31	319.95	0.00	449.95	319.95	0.00	733.84
	MIN	-181.62	0.00	-887.79	-181.62	0.00	-524.03	-193.85	0.00	-811.35	-193.85	0.00	-560.74
	L-PICKUP 2 MAX	294.25	0.00	381.01	294.25	0.00	652.05	273.89	0.00	382.72	273.89	0.00	626.99
	MIN	-155.68	0.00	-765.29	-155.68	0.00	-453.01	-164.40	0.00	-700.81	-164.40	0.00	-482.75
	L-PICKUP 3	-181.73	0.00	-890.18	-181.73	0.00	-555.81	-195.68	0.00	-806.08	-195.68	0.00	-593.82
	Live load MAX	344.59	0.00	442.77	344.59	0.00	763.31	319.95	0.00	449.95	319.95	0.00	733.84
	MIN	-181.73	0.00	-890.18	-181.73	0.00	-555.81	-195.68	0.00	-811.35	-195.68	0.00	-593.82
111	AASHTO Twin TWIN-PICKUP	340.05	0.00	432.13	340.05	0.00	761.72	315.91	0.00	439.73	315.91	0.00	736.81
	MIN	-181.73	0.00	-890.18	-181.73	0.00	-555.81	-195.68	0.00	-806.08	-195.68	0.00	-593.82
	MID-PICKUP	-181.73	0.00	-890.18	-181.73	0.00	-555.81	-195.68	0.00	-806.08	-195.68	0.00	-593.82
198	AASHTO FatigTRUCK-LOAD	157.55	0.00	185.12	157.55	0.00	276.75	152.00	0.00	201.31	152.00	0.00	273.91
	MIN	-52.87	0.00	-381.33	-52.87	0.00	-77.16	-57.92	0.00	-360.99	-57.92	0.00	-97.68
	TANDEM-LOAD MAX	119.86	0.00	141.49	119.86	0.00	212.37	115.49	0.00	152.76	115.49	0.00	209.38
	MIN	-41.90	0.00	-288.28	-41.90	0.00	-53.40	-45.52	0.00	-273.03	-45.52	0.00	-67.37

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003075						1003076					
NODE		3075			4075			3076			4076		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	101.62	0.00	107.07	101.62	0.00	198.57	97.51	0.00	115.43	97.51	0.00	192.14
	MIN	-34.27	0.00	-258.07	-34.27	0.00	-119.45	-32.33	0.00	-245.49	-32.33	0.00	-130.45
199	AASHTO-LRFD TRUCK-LOAD MAX	232.87	0.00	284.55	232.87	0.00	520.96	215.29	0.00	308.90	215.29	0.00	503.42
	MIN	-124.38	0.00	-582.23	-124.38	0.00	-365.04	-139.61	0.00	-523.83	-139.61	0.00	-394.58
	TANDEM-LOAD MAX	149.28	0.00	185.42	149.28	0.00	326.65	138.16	0.00	203.04	138.16	0.00	311.73
	MIN	-78.13	0.00	-358.44	-78.13	0.00	-200.48	-86.59	0.00	-328.99	-86.59	0.00	-217.52
	DISPERSION-LMAX	144.97	0.00	195.59	144.97	0.00	325.40	135.72	0.00	179.68	135.72	0.00	315.26
	MIN	-77.55	0.00	-406.86	-77.55	0.00	-252.53	-77.81	0.00	-371.82	-77.81	0.00	-265.22
300	Total Dead lWithout snow	177.80	0.00	-535.65	177.80	0.00	207.01	147.40	0.00	-472.83	147.40	0.00	142.85
301	Particular Snow	19.95	0.00	-63.43	19.95	0.00	19.89	17.32	0.00	-58.93	17.32	0.00	13.41
302	Live load Total	223.99	0.00	287.80	223.99	0.00	496.15	207.97	0.00	292.46	207.97	0.00	476.99
	MIN	-118.13	0.00	-578.61	-118.13	0.00	-361.28	-127.19	0.00	-527.38	-127.19	0.00	-385.99
303	Sum total D+L+PP	421.73	0.00	-224.94	421.73	0.00	723.05	372.68	0.00	-151.55	372.68	0.00	633.25
	MIN	44.18	0.00	-1177.69	44.18	0.00	-242.76	-0.63	0.00	-1059.14	-0.63	0.00	-345.52

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003077						1003078					
		3077			4077			3078			4078		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	17.03	0.00	-74.37	17.03	0.00	-3.23	10.30	0.00	-54.10	10.30	0.00	-11.08
3	Railing	5.84	0.00	-23.28	5.84	0.00	1.12	5.64	0.00	-22.64	5.64	0.00	0.93
5	Wheel guard	57.84	0.00	-230.46	57.84	0.00	11.13	55.85	0.00	-224.11	55.85	0.00	9.20
8	Steel weight	-0.83	0.00	-23.06	-0.83	0.00	-26.50	-25.68	0.00	51.35	-25.68	0.00	-55.93
10	Medial strip	-30.55	0.00	117.94	-30.55	0.00	-9.68	-33.10	0.00	125.33	-33.10	0.00	-12.91
19	Snow	8.99	0.00	-38.67	8.99	0.00	-1.13	5.98	0.00	-29.59	5.98	0.00	-4.63
31	Miscellaneous	-2.47	0.00	9.53	-2.47	0.00	-0.78	-2.67	0.00	10.13	-2.67	0.00	-1.04
100	AASHTO-LRFD TRUCK-LOAD	170.48	0.00	310.27	170.48	0.00	391.56	164.13	0.00	317.70	164.13	0.00	382.17
	MIN	-131.31	0.00	-409.86	-131.31	0.00	-321.50	-133.86	0.00	-394.39	-133.86	0.00	-324.41
	TANDEM-LOAD MAX	128.18	0.00	230.91	128.18	0.00	291.34	123.60	0.00	236.57	123.60	0.00	284.56
	MIN	-97.10	0.00	-305.88	-97.10	0.00	-235.59	-98.95	0.00	-294.74	-98.95	0.00	-237.56
	DISPERSION-LMAX	128.39	0.00	229.47	128.39	0.00	300.20	119.50	0.00	234.42	119.50	0.00	288.44
	MIN	-101.06	0.00	-345.07	-101.06	0.00	-302.98	-103.13	0.00	-316.43	-103.13	0.00	-304.12
110	Live load L-PICKUP 1	298.87	0.00	539.75	298.87	0.00	691.76	283.63	0.00	552.12	283.63	0.00	670.61
	MIN	-232.37	0.00	-754.93	-232.37	0.00	-624.48	-236.99	0.00	-710.82	-236.99	0.00	-628.53
	L-PICKUP 2 MAX	256.57	0.00	460.38	256.57	0.00	591.54	243.10	0.00	471.00	243.10	0.00	572.99
	MIN	-198.16	0.00	-650.95	-198.16	0.00	-538.57	-202.08	0.00	-611.17	-202.08	0.00	-541.67
	L-PICKUP 3	-240.50	0.00	-747.63	-240.50	0.00	-665.90	-245.64	0.00	-698.78	-245.64	0.00	-669.91
	Live load MAX	298.87	0.00	539.75	298.87	0.00	691.76	283.63	0.00	552.12	283.63	0.00	670.61
	MIN	-240.50	0.00	-754.93	-240.50	0.00	-665.90	-245.64	0.00	-710.82	-245.64	0.00	-669.91
111	AASHTO Twin TWIN-PICKUP	293.93	0.00	541.90	293.93	0.00	695.11	278.05	0.00	555.60	278.05	0.00	671.78
	MIN	-240.50	0.00	-747.63	-240.50	0.00	-665.90	-245.64	0.00	-698.78	-245.64	0.00	-669.91
	MID-PICKUP	-240.50	0.00	-747.63	-240.50	0.00	-665.90	-245.64	0.00	-698.78	-245.64	0.00	-669.91
198	AASHTO FatigTRUCK-LOAD	145.70	0.00	212.16	145.70	0.00	267.26	144.07	0.00	214.28	144.07	0.00	267.14
	MIN	-61.56	0.00	-341.33	-61.56	0.00	-108.82	-61.91	0.00	-334.65	-61.91	0.00	-111.84
	TANDEM-LOAD MAX	110.53	0.00	160.19	110.53	0.00	203.57	109.16	0.00	161.68	109.16	0.00	203.00
	MIN	-48.08	0.00	-258.12	-48.08	0.00	-74.86	-48.35	0.00	-252.95	-48.35	0.00	-76.90

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003077						1003078					
NODE		3077			4077			3078			4078		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	92.49	0.00	134.09	92.49	0.00	183.48	90.55	0.00	136.50	90.55	0.00	180.18
	MIN	-39.64	0.00	-231.83	-39.64	0.00	-147.96	-40.40	0.00	-223.88	-40.40	0.00	-150.48
199	AASHTO-LRFD TRUCK-LOAD MAX	198.19	0.00	372.64	198.19	0.00	472.15	189.44	0.00	382.90	189.44	0.00	457.99
	MIN	-166.16	0.00	-485.63	-166.16	0.00	-436.91	-169.80	0.00	-459.99	-169.80	0.00	-440.23
	TANDEM-LOAD MAX	128.18	0.00	230.91	128.18	0.00	291.34	123.60	0.00	236.57	123.60	0.00	284.56
	MIN	-97.10	0.00	-305.88	-97.10	0.00	-235.59	-98.95	0.00	-294.74	-98.95	0.00	-237.56
	DISPERSION-LMAX	128.39	0.00	229.47	128.39	0.00	300.20	119.50	0.00	234.42	119.50	0.00	288.44
	MIN	-101.06	0.00	-345.07	-101.06	0.00	-302.98	-103.13	0.00	-316.43	-103.13	0.00	-304.12
300	Total Dead lWithout snow	46.87	0.00	-223.70	46.87	0.00	-27.94	10.34	0.00	-114.03	10.34	0.00	-70.84
301	Particular Snow	8.99	0.00	-38.67	8.99	0.00	-1.13	5.98	0.00	-29.59	5.98	0.00	-4.63
302	Live load Total MAX	194.26	0.00	350.84	194.26	0.00	449.65	184.36	0.00	358.88	184.36	0.00	435.90
	MIN	-156.33	0.00	-490.70	-156.33	0.00	-432.83	-159.67	0.00	-462.04	-159.67	0.00	-435.44
303	Sum total D+L+PP MAX	250.12	0.00	193.72	250.12	0.00	448.52	200.68	0.00	322.92	200.68	0.00	431.27
	MIN	-147.34	0.00	-753.07	-147.34	0.00	-461.91	-153.69	0.00	-605.66	-153.69	0.00	-510.91

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003079						1003080					
NODE		3079			4079			3080			4080		
		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
NAME	TITLE	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
1	Pavement	2.44	0.00	-34.58	2.44	0.00	-24.39	20.00	0.00	-74.02	20.00	0.00	9.53
3	Railing	5.49	0.00	-21.74	5.49	0.00	1.17	6.28	0.00	-22.40	6.28	0.00	3.84
5	Wheel guard	54.30	0.00	-215.26	54.30	0.00	11.57	62.21	0.00	-221.80	62.21	0.00	38.05
8	Steel weight	-55.63	0.00	119.69	-55.63	0.00	-112.68	5.93	0.00	-32.08	5.93	0.00	-7.33
10	Medial strip	-36.60	0.00	130.54	-36.60	0.00	-22.35	-31.88	0.00	112.08	-31.88	0.00	-21.08
19	Snow	2.48	0.00	-20.78	2.48	0.00	-10.42	10.41	0.00	-38.29	10.41	0.00	5.18
31	Miscellaneous	-2.96	0.00	10.55	-2.96	0.00	-1.81	-2.58	0.00	9.06	-2.58	0.00	-1.70
100	AASHTO-LRFD TRUCK-LOAD	158.53	0.00	331.67	158.53	0.00	371.41	172.84	0.00	292.82	172.84	0.00	394.26
	MIN	-141.56	0.00	-384.13	-141.56	0.00	-340.44	-129.37	0.00	-405.08	-129.37	0.00	-314.81
	TANDEM-LOAD	119.78	0.00	246.70	119.78	0.00	276.99	130.09	0.00	219.89	130.09	0.00	293.69
	MIN	-104.37	0.00	-287.84	-104.37	0.00	-248.63	-96.01	0.00	-303.82	-96.01	0.00	-230.54
	DISPERSION-LMAX	112.55	0.00	243.48	112.55	0.00	269.19	118.74	0.00	189.59	118.74	0.00	266.32
	MIN	-109.10	0.00	-293.05	-109.10	0.00	-306.78	-86.64	0.00	-305.84	-86.64	0.00	-248.42
110	Live load L-PICKUP 1	271.08	0.00	575.15	271.08	0.00	640.59	291.59	0.00	482.41	291.59	0.00	660.58
	MIN	-250.67	0.00	-677.18	-250.67	0.00	-647.22	-216.01	0.00	-710.92	-216.01	0.00	-563.24
	L-PICKUP 2	232.32	0.00	490.18	232.32	0.00	546.18	248.83	0.00	409.48	248.83	0.00	560.01
	MIN	-213.47	0.00	-580.89	-213.47	0.00	-555.41	-182.65	0.00	-609.66	-182.65	0.00	-478.96
	L-PICKUP 3	-260.84	0.00	-660.50	-260.84	0.00	-698.35	-222.46	0.00	-696.93	-222.46	0.00	-608.84
	Live load	271.08	0.00	575.15	271.08	0.00	640.59	291.59	0.00	482.41	291.59	0.00	660.58
	MIN	-260.84	0.00	-677.18	-260.84	0.00	-698.35	-222.46	0.00	-710.92	-222.46	0.00	-608.84
111	AASHTO Twin TWIN-PICKUP	264.15	0.00	581.98	264.15	0.00	640.71	286.11	0.00	472.02	286.11	0.00	660.34
	MIN	-260.84	0.00	-660.50	-260.84	0.00	-698.35	-222.46	0.00	-696.93	-222.46	0.00	-608.84
	MID-PICKUP	-260.84	0.00	-660.50	-260.84	0.00	-698.35	-222.46	0.00	-696.93	-222.46	0.00	-608.84
198	AASHTO FatigTRUCK-LOAD	142.62	0.00	218.32	142.62	0.00	264.42	150.54	0.00	207.32	150.54	0.00	274.64
	MIN	-63.92	0.00	-331.29	-63.92	0.00	-114.74	-60.65	0.00	-354.18	-60.65	0.00	-102.75
	TANDEM-LOAD	108.21	0.00	164.64	108.21	0.00	201.26	114.10	0.00	157.37	114.10	0.00	209.14
	MIN	-49.79	0.00	-250.75	-49.79	0.00	-78.89	-47.53	0.00	-267.45	-47.53	0.00	-70.44

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003079						1003080					
NODE		3079			4079			3080			4080		
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	87.70	0.00	138.77	87.70	0.00	170.98	94.18	0.00	120.06	94.18	0.00	173.24
	MIN	-41.33	0.00	-215.73	-41.33	0.00	-145.69	-35.12	0.00	-234.65	-35.12	0.00	-112.87
199	AASHTO-LRFD TRUCK-LOAD MAX	180.96	0.00	403.16	180.96	0.00	442.71	199.16	0.00	334.87	199.16	0.00	467.40
	MIN	-180.72	0.00	-440.83	-180.72	0.00	-469.17	-160.53	0.00	-468.53	-160.53	0.00	-428.06
	TANDEM-LOAD MAX	119.78	0.00	246.70	119.78	0.00	276.99	130.09	0.00	219.89	130.09	0.00	293.69
	MIN	-104.37	0.00	-287.84	-104.37	0.00	-248.63	-96.01	0.00	-303.82	-96.01	0.00	-230.54
	DISPERSION-LMAX	112.55	0.00	243.48	112.55	0.00	269.19	118.74	0.00	189.59	118.74	0.00	266.32
	MIN	-109.10	0.00	-293.05	-109.10	0.00	-306.78	-86.64	0.00	-305.84	-86.64	0.00	-248.42
300	Total Dead lWithout snow	-32.96	0.00	-10.81	-32.96	0.00	-148.49	59.97	0.00	-229.17	59.97	0.00	21.32
301	Particular Snow	2.48	0.00	-20.78	2.48	0.00	-10.42	10.41	0.00	-38.29	10.41	0.00	5.18
302	Live load Total MAX	176.20	0.00	373.85	176.20	0.00	416.39	189.53	0.00	313.57	189.53	0.00	429.38
	MIN	-169.55	0.00	-440.17	-169.55	0.00	-453.93	-144.60	0.00	-462.10	-144.60	0.00	-395.75
303	Sum total D+L+PP MAX	178.68	0.00	353.07	178.68	0.00	382.39	259.91	0.00	140.18	259.91	0.00	455.87
	MIN	-200.03	0.00	-471.76	-200.03	0.00	-612.84	-117.60	0.00	-729.56	-117.60	0.00	-390.57

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER NODE	NAME TITLE	1003081						1003082					
		3081			4081			3082			4082		
		SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)	SHEAR S2 (kN)	TORQUE TQ (kN·m)	MOMENT M3 (kN·m)
1	Pavement	46.70	0.00	-129.56	46.70	0.00	65.51	-24.85	0.00	42.53	-24.85	0.00	-61.26
3	Railing	6.42	0.00	-20.52	6.42	0.00	6.29	-5.21	0.00	8.80	-5.21	0.00	-12.98
5	Wheel guard	63.55	0.00	-203.15	63.55	0.00	62.32	-51.62	0.00	87.17	-51.62	0.00	-128.47
8	Steel weight	112.36	0.00	-279.35	112.36	0.00	189.98	-38.30	0.00	67.00	-38.30	0.00	-92.99
10	Medial strip	-17.23	0.00	66.59	-17.23	0.00	-5.38	21.64	0.00	-36.20	21.64	0.00	54.18
19	Snow	22.17	0.00	-62.21	22.17	0.00	30.40	-12.26	0.00	20.95	-12.26	0.00	-30.25
31	Miscellaneous	-1.39	0.00	5.38	-1.39	0.00	-0.43	1.75	0.00	-2.93	1.75	0.00	4.38
100	AASHTO-LRFD TRUCK-LOAD	209.71	0.00	249.31	209.71	0.00	445.26	273.07	0.00	574.33	273.07	0.00	619.32
	MIN	-98.50	0.00	-485.95	-98.50	0.00	-250.00	-300.54	0.00	-526.22	-300.54	0.00	-682.94
	TANDEM-LOAD MAX	158.75	0.00	192.38	158.75	0.00	334.40	187.27	0.00	393.50	187.27	0.00	426.55
	MIN	-76.40	0.00	-366.17	-76.40	0.00	-188.01	-206.12	0.00	-359.58	-206.12	0.00	-468.64
	DISPERSION-LMAX	128.39	0.00	140.18	128.39	0.00	259.54	400.49	0.00	845.61	400.49	0.00	900.22
	MIN	-52.61	0.00	-349.96	-52.61	0.00	-151.19	-442.56	0.00	-773.64	-442.56	0.00	-1003.99
110	Live load L-PICKUP 1	338.10	0.00	389.49	338.10	0.00	704.80	673.56	0.00	1419.94	673.56	0.00	1519.54
	MIN	-151.11	0.00	-835.92	-151.11	0.00	-401.19	-743.11	0.00	-1299.85	-743.11	0.00	-1686.93
	L-PICKUP 2 MAX	287.14	0.00	332.56	287.14	0.00	593.95	587.76	0.00	1239.11	587.76	0.00	1326.77
	MIN	-129.01	0.00	-716.13	-129.01	0.00	-339.20	-648.68	0.00	-1133.21	-648.68	0.00	-1472.63
	L-PICKUP 3	-138.87	0.00	-834.05	-138.87	0.00	-387.28	-883.32	0.00	-1545.57	-883.32	0.00	-2004.63
	Live load MAX	338.10	0.00	389.49	338.10	0.00	704.80	673.56	0.00	1419.94	673.56	0.00	1519.54
	MIN	-151.11	0.00	-835.92	-151.11	0.00	-401.19	-883.32	0.00	-1545.57	-883.32	0.00	-2004.63
111	AASHTO Twin TWIN-PICKUP	328.67	0.00	356.94	328.67	0.00	688.27	799.12	0.00	1686.19	799.12	0.00	1798.93
	MIN	-138.87	0.00	-834.05	-138.87	0.00	-387.28	-883.32	0.00	-1545.57	-883.32	0.00	-2004.63
	MID-PICKUP	-138.87	0.00	-834.05	-138.87	0.00	-387.28	-883.32	0.00	-1545.57	-883.32	0.00	-2004.63
198	AASHTO FatigTRUCK-LOAD	160.07	0.00	199.21	160.07	0.00	283.82	123.41	0.00	331.70	123.41	0.00	274.44
	MIN	-62.85	0.00	-384.80	-62.85	0.00	-66.72	-176.60	0.00	-241.03	-176.60	0.00	-406.70
	TANDEM-LOAD MAX	123.59	0.00	154.67	123.59	0.00	220.86	84.52	0.00	228.53	84.52	0.00	187.78
	MIN	-49.85	0.00	-295.39	-49.85	0.00	-54.49	-121.69	0.00	-165.26	-121.69	0.00	-279.96

Bago Bridge

BLOCK [No.2 : Cross beam][BEAM MEMBER FORCE]

MEMBER		1003081			1003082								
NODE		3081	4081		3082	4082							
NAME TITLE		SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT	SHEAR	TORQUE	MOMENT
		S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)	S2 (kN)	TQ (kN·m)	M3 (kN·m)
198	AASHTO FatigDISPERSION-LMAX	88.34	0.00	91.46	88.34	0.00	162.70	203.10	0.00	503.59	203.10	0.00	455.05
	MIN	-28.75	0.00	-222.79	-28.75	0.00	-66.18	-268.33	0.00	-393.32	-268.33	0.00	-617.24
199	AASHTO-LRFD TRUCK-LOAD MAX	236.79	0.00	256.42	236.79	0.00	505.20	487.42	0.00	1027.94	487.42	0.00	1098.60
	MIN	-101.69	0.00	-576.76	-101.69	0.00	-279.12	-538.90	0.00	-943.66	-538.90	0.00	-1223.37
	TANDEM-LOAD MAX	158.75	0.00	192.38	158.75	0.00	334.40	187.27	0.00	393.50	187.27	0.00	426.55
	MIN	-76.40	0.00	-366.17	-76.40	0.00	-188.01	-206.12	0.00	-359.58	-206.12	0.00	-468.64
	DISPERSION-LMAX	128.39	0.00	140.18	128.39	0.00	259.54	400.49	0.00	845.61	400.49	0.00	900.22
	MIN	-52.61	0.00	-349.96	-52.61	0.00	-151.19	-442.56	0.00	-773.64	-442.56	0.00	-1003.99
300	Total Dead lWithout snow	210.41	0.00	-560.61	210.41	0.00	318.28	-96.61	0.00	166.38	-96.61	0.00	-237.14
301	Particular Snow	22.17	0.00	-62.21	22.17	0.00	30.40	-12.26	0.00	20.95	-12.26	0.00	-30.25
302	Live load Total MAX	219.76	0.00	253.17	219.76	0.00	458.12	437.81	0.00	922.96	437.81	0.00	987.70
	MIN	-98.22	0.00	-543.35	-98.22	0.00	-260.77	-574.16	0.00	-1004.62	-574.16	0.00	-1303.01
303	Sum total D+L+PP MAX	452.35	0.00	-293.70	452.35	0.00	806.81	425.56	0.00	1110.30	425.56	0.00	957.44
	MIN	104.90	0.00	-1166.17	104.90	0.00	9.68	-683.02	0.00	-983.67	-683.02	0.00	-1570.40

Bago Bridge

BLOCK [No.3 : Support No.1][SUPPORT REACTION]

SUPPORT		7101001	7102001	7103001	7104001		
NODE		1001	2001	3001	4001		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	360.13	336.85	336.85	360.13		
3	Railing	19.36	1.72	1.72	19.36		
5	Wheel guard	191.69	17.01	17.00	191.69		
8	Steel weight	1226.13	1342.66	1342.65	1226.13		
10	Medial strip	114.88	332.12	332.12	114.88		
19	Snow	166.60	161.23	161.23	166.60		
31	Miscellaneous	6.13	14.97	14.89	6.16		
100	AASHTO-LRFD TRUCK-LOAD	MAX	677.64	798.71	798.71	677.64	
		MIN	-185.72	-114.31	-114.31	-185.72	
	TANDEM-LOAD	MAX	474.55	579.05	579.05	474.55	
		MIN	-126.61	-85.15	-85.15	-126.61	
	DISPERSION-LMAX	MAX	903.01	726.67	726.43	902.97	
		MIN	-334.44	-186.91	-186.91	-334.42	
110	Live load L-PICKUP 1	MAX	1580.65	1525.38	1525.14	1580.61	
		MIN	-520.16	-301.22	-301.22	-520.14	
	L-PICKUP 2	MAX	1377.56	1305.72	1305.48	1377.52	
		MIN	-461.05	-272.06	-272.06	-461.03	
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	
		MIN	0.00	0.00	0.00	0.00	
	Live load	MAX	1580.65	1525.38	1525.14	1580.61	
		MIN	-520.16	-301.22	-301.22	-520.14	
	111	AASHTO Twin TWIN-PICKUP	MAX	1853.53	1725.96	1725.74	1853.50
			MIN	-609.01	-339.52	-339.52	-608.99
MID-PICKUP		MAX	0.00	0.00	0.00	0.00	
198	AASHTO FatigTRUCK-LOAD	MAX	416.91	279.66	279.66	416.91	
		MIN	-96.32	-64.47	-64.47	-96.32	
	TANDEM-LOAD	MAX	296.77	213.69	213.69	296.77	
		MIN	-65.81	-51.26	-51.26	-65.81	

Bago Bridge

BLOCK [No.3 : Support No.1][SUPPORT REACTION]

SUPPORT		7101001	7102001	7103001	7104001
NODE		1001	2001	3001	4001
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	489.96	273.58	273.58	489.96
	MIN	-185.68	-105.28	-105.28	-185.68
199	AASHTO-LRFD TRUCK-LOAD MAX	1156.47	1191.07	1191.06	1156.47
	MIN	-342.24	-190.34	-190.34	-342.24
	TANDEM-LOAD MAX	474.55	579.05	579.05	474.55
	MIN	-126.61	-85.15	-85.15	-126.61
	DISPERSION-LMAX	903.01	726.67	726.43	902.97
	MIN	-334.44	-186.91	-186.91	-334.42
300	Total Dead lWithout snow	1918.32	2045.32	2045.24	1918.35
301	Particular Snow	166.60	161.23	161.23	166.60
302	Live load Total MAX	1027.43	991.50	991.34	1027.40
	MIN	-338.10	-195.79	-195.79	-338.09
303	Sum total D+L+PP MAX	3112.34	3198.05	3197.80	3112.34
	MIN	1746.81	2010.76	2010.67	1746.85

Bago Bridge

BLOCK [No. 4 : Support No. 2][SUPPORT REACTION]

SUPPORT		7101012	7102012	7103012	7104012		
NODE		1012	2012	3012	4012		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	1048.27	1012.38	1012.38	1048.27		
3	Railing	52.23	10.09	10.09	52.23		
5	Wheel guard	517.10	99.85	99.85	517.10		
8	Steel weight	3619.11	3977.15	3977.15	3619.11		
10	Medial strip	273.95	549.42	549.42	273.95		
19	Snow	476.15	449.92	449.92	476.15		
31	Miscellaneous	20.20	42.12	42.12	20.22		
100	AASHTO-LRFD TRUCK-LOAD	MAX	755.33	804.29	804.29	755.33	
		MIN	-153.96	-129.57	-129.57	-153.96	
	TANDEM-LOAD	MAX	520.63	559.59	559.59	520.63	
		MIN	-105.31	-98.98	-98.98	-105.31	
	DISPERSION-LMAX	MAX	2126.19	1850.87	1850.87	2126.25	
		MIN	-418.95	-183.44	-183.44	-418.95	
110	Live load L-PICKUP 1	MAX	2881.52	2655.16	2655.16	2881.58	
		MIN	-572.91	-313.01	-313.01	-572.91	
	L-PICKUP 2	MAX	2646.82	2410.46	2410.46	2646.87	
		MIN	-524.26	-282.42	-282.42	-524.26	
	L-PICKUP 3	MAX	3133.65	2892.05	2892.05	3133.70	
		MIN	-572.91	-313.01	-313.01	-572.91	
	Live load	MAX	3133.65	2892.05	2892.05	3133.70	
		MIN	-572.91	-313.01	-313.01	-572.91	
	111	AASHTO Twin TWIN-PICKUP	MAX	3133.65	2892.05	2892.05	3133.70
			MIN	-631.54	-303.72	-303.72	-631.54
MID-PICKUP		MAX	3133.65	2892.05	2892.05	3133.70	
198	AASHTO FatigTRUCK-LOAD	MAX	428.08	289.82	289.82	428.08	
		MIN	-68.40	-57.15	-57.15	-68.40	
	TANDEM-LOAD	MAX	297.89	206.75	206.75	297.89	
		MIN	-46.88	-49.63	-49.63	-46.88	

Bago Bridge

BLOCK [No. 4 : Support No. 2][SUPPORT REACTION]

SUPPORT		7101012	7102012	7103012	7104012
NODE		1012	2012	3012	4012
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1088.83	504.97	504.97	1088.83
	MIN	-247.02	-60.87	-60.87	-247.02
199	AASHTO-LRFD TRUCK-LOAD MAX	1355.65	1362.52	1362.52	1355.65
	MIN	-282.77	-154.03	-154.03	-282.77
	TANDEM-LOAD MAX	520.63	559.59	559.59	520.63
	MIN	-105.31	-98.98	-98.98	-105.31
	DISPERSION-LMAX	2126.19	1850.87	1850.87	2126.25
	MIN	-418.95	-183.44	-183.44	-418.95
300	Total Dead lWithout snow	5530.86	5691.00	5691.00	5530.88
301	Particular Snow	476.15	449.92	449.92	476.15
302	Live load Total MAX	2036.87	1879.83	1879.83	2036.91
	MIN	-372.39	-203.46	-203.46	-372.39
303	Sum total D+L+PP MAX	8043.88	8020.76	8020.75	8043.94
	MIN	5634.62	5937.46	5937.46	5634.64

Bago Bridge

BLOCK [No.5 : Support No.3][SUPPORT REACTION]

SUPPORT		7101024	7102024	7103024	7104024		
NODE		1024	2024	3024	4024		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	890.14	851.95	851.95	890.14		
3	Railing	46.24	6.46	6.46	46.24		
5	Wheel guard	457.80	63.93	63.93	457.80		
8	Steel weight	3050.79	3371.31	3371.31	3050.79		
10	Medial strip	192.74	445.86	445.86	192.74		
19	Snow	402.49	375.45	375.45	402.49		
31	Miscellaneous	16.10	36.59	36.59	16.10		
100	AASHTO-LRFD TRUCK-LOAD	MAX	743.41	792.56	792.56	743.41	
		MIN	-164.93	-138.18	-138.18	-164.93	
	TANDEM-LOAD	MAX	513.56	553.74	553.74	513.56	
		MIN	-112.79	-105.91	-105.91	-112.79	
	DISPERSION-LMAX	MAX	2031.42	1765.51	1765.51	2031.42	
		MIN	-575.15	-351.81	-351.81	-575.15	
110	Live load L-PICKUP 1	MAX	2774.84	2558.07	2558.07	2774.84	
		MIN	-740.08	-489.99	-489.99	-740.08	
	L-PICKUP 2	MAX	2544.98	2319.24	2319.24	2544.98	
		MIN	-687.94	-457.72	-457.72	-687.94	
	L-PICKUP 3	MAX	3021.00	2777.51	2777.51	3021.00	
		MIN	-740.08	-489.99	-489.99	-740.08	
	Live load	MAX	3021.00	2777.51	2777.51	3021.00	
		MIN	-740.08	-489.99	-489.99	-740.08	
	111	AASHTO Twin TWIN-PICKUP	MAX	3021.00	2777.51	2777.51	3021.00
			MIN	-791.90	-478.82	-478.82	-791.90
MID-PICKUP		MAX	3021.00	2777.51	2777.51	3021.00	
198	AASHTO FatigTRUCK-LOAD	MAX	425.88	287.15	287.15	425.88	
		MIN	-68.71	-54.85	-54.85	-68.71	
	TANDEM-LOAD	MAX	297.37	206.15	206.15	297.37	
		MIN	-47.11	-49.21	-49.21	-47.11	

Bago Bridge

BLOCK [No.5 : Support No.3][SUPPORT REACTION]

SUPPORT		7101024	7102024	7103024	7104024
NODE		1024	2024	3024	4024
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1037.04	477.71	477.71	1037.04
	MIN	-283.47	-89.54	-89.54	-283.47
199	AASHTO-LRFD TRUCK-LOAD MAX	1325.25	1320.61	1320.61	1325.25
	MIN	-304.74	-180.21	-180.21	-304.74
	TANDEM-LOAD MAX	513.56	553.74	553.74	513.56
	MIN	-112.79	-105.91	-105.91	-112.79
	DISPERSION-LMAX	2031.42	1765.51	1765.51	2031.42
	MIN	-575.15	-351.81	-351.81	-575.15
300	Total Dead lWithout snow	4653.81	4776.10	4776.10	4653.81
301	Particular Snow	402.49	375.45	375.45	402.49
302	Live load Total MAX	1963.65	1805.38	1805.38	1963.65
	MIN	-481.05	-318.49	-318.49	-481.05
303	Sum total D+L+PP MAX	7019.96	6956.93	6956.93	7019.96
	MIN	4575.25	4833.05	4833.05	4575.25

Bago Bridge

BLOCK [No.6 : Support No.4][SUPPORT REACTION]

SUPPORT		7101036	7102036	7103036	7104036		
NODE		1036	2036	3036	4036		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	948.32	887.87	887.87	948.32		
3	Railing	48.20	7.34	7.34	48.20		
5	Wheel guard	477.19	72.64	72.64	477.19		
8	Steel weight	3262.82	3506.11	3506.11	3262.82		
10	Medial strip	221.52	469.60	469.60	221.52		
19	Snow	429.29	392.23	392.23	429.29		
31	Miscellaneous	17.75	37.79	37.79	17.75		
100	AASHTO-LRFD TRUCK-LOAD	MAX	746.37	786.22	786.22	746.37	
		MIN	-155.44	-129.79	-129.79	-155.44	
	TANDEM-LOAD	MAX	515.06	549.34	549.34	515.06	
		MIN	-106.38	-99.81	-99.81	-106.38	
	DISPERSION-LMAX	MAX	2111.33	1792.04	1792.04	2111.33	
		MIN	-562.47	-321.79	-321.79	-562.47	
110	Live load L-PICKUP 1	MAX	2857.69	2578.26	2578.26	2857.69	
		MIN	-717.90	-451.58	-451.58	-717.90	
	L-PICKUP 2	MAX	2626.39	2341.38	2341.38	2626.39	
		MIN	-668.85	-421.59	-421.59	-668.85	
	L-PICKUP 3	MAX	3100.72	2788.02	2788.02	3100.72	
		MIN	-717.90	-451.58	-451.58	-717.90	
	Live load	MAX	3100.72	2788.02	2788.02	3100.72	
		MIN	-717.90	-451.58	-451.58	-717.90	
	111	AASHTO Twin TWIN-PICKUP	MAX	3100.72	2788.02	2788.02	3100.72
			MIN	-763.53	-431.02	-431.02	-763.53
MID-PICKUP		MAX	3100.72	2788.02	2788.02	3100.72	
198	AASHTO FatigTRUCK-LOAD	MAX	426.60	287.48	287.48	426.60	
		MIN	-67.06	-55.85	-55.85	-67.06	
	TANDEM-LOAD	MAX	297.49	206.19	206.19	297.49	
		MIN	-45.98	-49.37	-49.37	-45.98	

Bago Bridge

BLOCK [No.6 : Support No.4][SUPPORT REACTION]

SUPPORT		7101036	7102036	7103036	7104036
NODE		1036	2036	3036	4036
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1063.69	488.30	488.30	1063.69
	MIN	-285.38	-85.15	-85.15	-285.38
199	AASHTO-LRFD TRUCK-LOAD MAX	1333.92	1305.77	1305.77	1333.92
	MIN	-285.90	-157.13	-157.13	-285.90
	TANDEM-LOAD MAX	515.06	549.34	549.34	515.06
	MIN	-106.38	-99.81	-99.81	-106.38
	DISPERSION-LMAX	2111.33	1792.04	1792.04	2111.33
	MIN	-562.47	-321.79	-321.79	-562.47
300	Total Dead lWithout snow	4975.80	4981.35	4981.35	4975.80
301	Particular Snow	429.29	392.23	392.23	429.29
302	Live load Total MAX	2015.47	1812.21	1812.21	2015.47
	MIN	-466.64	-293.53	-293.53	-466.64
303	Sum total D+L+PP MAX	7420.55	7185.79	7185.79	7420.55
	MIN	4938.45	5080.05	5080.05	4938.45

Bago Bridge

BLOCK [No. 7 : Support No. 5][SUPPORT REACTION]

SUPPORT		7101048	7102048	7103048	7104048		
NODE		1048	2048	3048	4048		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	940.88	876.83	876.83	940.88		
3	Railing	47.86	7.12	7.12	47.86		
5	Wheel guard	473.77	70.52	70.52	473.77		
8	Steel weight	3236.86	3464.03	3464.03	3236.86		
10	Medial strip	217.19	462.10	462.10	217.19		
19	Snow	425.72	387.11	387.11	425.72		
31	Miscellaneous	17.59	37.39	37.39	17.59		
100	AASHTO-LRFD TRUCK-LOAD	MAX	745.63	783.03	783.03	745.63	
		MIN	-153.64	-130.46	-130.46	-153.64	
	TANDEM-LOAD	MAX	514.76	547.62	547.62	514.76	
		MIN	-105.08	-100.29	-100.29	-105.08	
	DISPERSION-LMAX	MAX	2102.98	1779.48	1779.48	2102.98	
		MIN	-565.82	-326.63	-326.63	-565.82	
110	Live load L-PICKUP 1	MAX	2848.61	2562.50	2562.50	2848.61	
		MIN	-719.45	-457.09	-457.09	-719.45	
	L-PICKUP 2	MAX	2617.74	2327.10	2327.10	2617.74	
		MIN	-670.89	-426.92	-426.92	-670.89	
	L-PICKUP 3	MAX	3091.52	2770.61	2770.61	3091.52	
		MIN	-719.45	-457.09	-457.09	-719.45	
	Live load	MAX	3091.52	2770.61	2770.61	3091.52	
		MIN	-719.45	-457.09	-457.09	-719.45	
	111	AASHTO Twin TWIN-PICKUP	MAX	3091.52	2770.61	2770.61	3091.52
			MIN	-764.28	-436.82	-436.82	-764.28
MID-PICKUP		MAX	3091.52	2770.61	2770.61	3091.52	
198	AASHTO FatigTRUCK-LOAD	MAX	426.45	287.03	287.03	426.45	
		MIN	-65.83	-55.71	-55.71	-65.83	
	TANDEM-LOAD	MAX	297.46	206.11	206.11	297.46	
		MIN	-45.11	-49.34	-49.34	-45.11	

Bago Bridge

BLOCK [No. 7 : Support No. 5][SUPPORT REACTION]

SUPPORT		7101048	7102048	7103048	7104048
NODE		1048	2048	3048	4048
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1061.00	485.44	485.44	1061.00
	MIN	-288.68	-86.09	-86.09	-288.68
199	AASHTO-LRFD TRUCK-LOAD MAX	1332.05	1298.97	1298.97	1332.05
	MIN	-283.38	-158.73	-158.73	-283.38
	TANDEM-LOAD MAX	514.76	547.62	547.62	514.76
	MIN	-105.08	-100.29	-100.29	-105.08
	DISPERSION-LMAX	2102.98	1779.48	1779.48	2102.98
	MIN	-565.82	-326.63	-326.63	-565.82
300	Total Dead lWithout snow	4934.16	4918.00	4918.00	4934.16
301	Particular Snow	425.72	387.11	387.11	425.72
302	Live load Total MAX	2009.49	1800.90	1800.90	2009.49
	MIN	-467.64	-297.11	-297.11	-467.64
303	Sum total D+L+PP MAX	7369.37	7106.00	7106.00	7369.37
	MIN	4892.24	5008.00	5008.00	4892.24

Bago Bridge

BLOCK [No.8 : Support No.6][SUPPORT REACTION]

SUPPORT		7101060	7102060	7103060	7104060		
NODE		1060	2060	3060	4060		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	914.53	856.70	856.70	914.53		
3	Railing	46.95	6.63	6.63	46.95		
5	Wheel guard	464.79	65.60	65.60	464.79		
8	Steel weight	3141.04	3388.46	3388.46	3141.04		
10	Medial strip	208.77	454.52	454.52	208.77		
19	Snow	413.97	378.19	378.19	413.97		
31	Miscellaneous	16.86	36.72	36.72	16.86		
100	AASHTO-LRFD TRUCK-LOAD	MAX	743.44	781.68	781.68	743.44	
		MIN	-157.80	-135.45	-135.45	-157.80	
	TANDEM-LOAD	MAX	513.56	546.71	546.71	513.56	
		MIN	-107.84	-103.97	-103.97	-107.84	
	DISPERSION-LMAX	MAX	2060.17	1746.66	1746.66	2060.17	
		MIN	-566.12	-326.94	-326.94	-566.12	
110	Live load L-PICKUP 1	MAX	2803.60	2528.35	2528.35	2803.60	
		MIN	-723.91	-462.39	-462.39	-723.91	
	L-PICKUP 2	MAX	2573.72	2293.37	2293.37	2573.72	
		MIN	-673.96	-430.91	-430.91	-673.96	
	L-PICKUP 3	MAX	3048.31	2739.73	2739.73	3048.31	
		MIN	-723.91	-462.39	-462.39	-723.91	
	Live load	MAX	3048.31	2739.73	2739.73	3048.31	
		MIN	-723.91	-462.39	-462.39	-723.91	
	111	AASHTO Twin TWIN-PICKUP	MAX	3048.31	2739.73	2739.73	3048.31
			MIN	-772.06	-447.81	-447.81	-772.06
		MID-PICKUP	MAX	3048.31	2739.73	2739.73	3048.31
	198	AASHTO FatigTRUCK-LOAD	MAX	426.14	286.88	286.88	426.14
MIN			-66.79	-55.42	-55.42	-66.79	
TANDEM-LOAD		MAX	297.41	206.09	206.09	297.41	
		MIN	-45.74	-49.30	-49.30	-45.74	

Bago Bridge

BLOCK [No.8 : Support No.6][SUPPORT REACTION]

SUPPORT		7101060	7102060	7103060	7104060
NODE		1060	2060	3060	4060
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1050.46	476.81	476.81	1050.46
	MIN	-288.05	-85.40	-85.40	-288.05
199	AASHTO-LRFD TRUCK-LOAD MAX	1326.85	1297.49	1297.49	1326.85
	MIN	-291.72	-170.62	-170.62	-291.72
	TANDEM-LOAD MAX	513.56	546.71	546.71	513.56
	MIN	-107.84	-103.97	-103.97	-107.84
	DISPERSION-LMAX	2060.17	1746.66	1746.66	2060.17
	MIN	-566.12	-326.94	-326.94	-566.12
300	Total Dead lWithout snow	4792.94	4808.62	4808.62	4792.94
301	Particular Snow	413.97	378.19	378.19	413.97
302	Live load Total MAX	1981.40	1780.83	1780.83	1981.40
	MIN	-470.54	-300.55	-300.55	-470.54
303	Sum total D+L+PP MAX	7188.31	6967.64	6967.64	7188.31
	MIN	4736.36	4886.26	4886.26	4736.36

Bago Bridge

BLOCK [No.9 : Support No.7][SUPPORT REACTION]

SUPPORT		7101072	7102072	7103072	7104072		
NODE		1072	2072	3072	4072		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	1008.88	966.86	966.86	1008.88		
3	Railing	50.63	9.14	9.14	50.63		
5	Wheel guard	501.19	90.45	90.45	501.19		
8	Steel weight	3479.00	3804.37	3804.37	3479.00		
10	Medial strip	238.19	501.24	501.24	238.19		
19	Snow	456.36	427.23	427.23	456.36		
31	Miscellaneous	19.25	40.51	40.51	19.25		
100	AASHTO-LRFD TRUCK-LOAD	MAX	751.42	799.35	799.35	751.42	
		MIN	-154.52	-128.04	-128.04	-154.52	
	TANDEM-LOAD	MAX	518.51	556.61	556.61	518.51	
		MIN	-105.77	-98.18	-98.18	-105.77	
	DISPERSION-LMAX	MAX	2061.10	1779.43	1779.43	2061.10	
		MIN	-412.29	-179.52	-179.52	-412.29	
110	Live load L-PICKUP 1	MAX	2812.52	2578.78	2578.78	2812.52	
		MIN	-566.82	-307.56	-307.56	-566.82	
	L-PICKUP 2	MAX	2579.62	2336.04	2336.04	2579.62	
		MIN	-518.07	-277.70	-277.70	-518.07	
	L-PICKUP 3	MAX	3065.02	2810.41	2810.41	3065.02	
		MIN	-566.82	-307.56	-307.56	-566.82	
	Live load	MAX	3065.02	2810.41	2810.41	3065.02	
		MIN	-566.82	-307.56	-307.56	-566.82	
	111	AASHTO Twin TWIN-PICKUP	MAX	3065.02	2810.41	2810.41	3065.02
			MIN	-626.98	-297.31	-297.31	-626.98
		MID-PICKUP	MAX	3065.02	2810.41	2810.41	3065.02
	198	AASHTO FatigTRUCK-LOAD	MAX	428.68	290.03	290.03	428.68
MIN			-67.51	-56.91	-56.91	-67.51	
TANDEM-LOAD		MAX	298.61	207.21	207.21	298.61	
		MIN	-46.29	-49.73	-49.73	-46.29	

Bago Bridge

BLOCK [No.9 : Support No.7][SUPPORT REACTION]

SUPPORT		7101072	7102072	7103072	7104072
NODE		1072	2072	3072	4072
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	1055.38	489.47	489.47	1055.38
	MIN	-242.03	-59.48	-59.48	-242.03
199	AASHTO-LRFD TRUCK-LOAD MAX	1344.48	1343.25	1343.25	1344.48
	MIN	-284.34	-150.82	-150.82	-284.34
	TANDEM-LOAD MAX	518.51	556.61	556.61	518.51
	MIN	-105.77	-98.18	-98.18	-105.77
	DISPERSION-LMAX	2061.10	1779.43	1779.43	2061.10
	MIN	-412.29	-179.52	-179.52	-412.29
300	Total Dead lWithout snow	5297.13	5412.57	5412.57	5297.13
301	Particular Snow	456.36	427.23	427.23	456.36
302	Live load Total MAX	1992.26	1826.77	1826.77	1992.26
	MIN	-368.43	-199.91	-199.91	-368.43
303	Sum total D+L+PP MAX	7745.75	7666.56	7666.56	7745.75
	MIN	5385.06	5639.88	5639.88	5385.06

Bago Bridge

BLOCK [No.10 : Support No.8][SUPPORT REACTION]

SUPPORT		7101082	7102082	7103082	7104082		
NODE		1082	2082	3082	4082		
		FORCE3	FORCE3	FORCE3	FORCE3		
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)		
1	Pavement	336.88	299.90	299.90	336.88		
3	Railing	18.72	0.54	0.54	18.72		
5	Wheel guard	185.32	5.34	5.34	185.32		
8	Steel weight	1140.03	1207.45	1207.45	1140.03		
10	Medial strip	66.98	171.40	171.40	66.98		
19	Snow	152.85	131.93	131.93	152.85		
31	Miscellaneous	5.41	13.85	13.85	5.41		
100	AASHTO-LRFD TRUCK-LOAD	MAX	690.56	740.56	740.56	690.56	
		MIN	-181.44	-119.93	-119.93	-181.44	
	TANDEM-LOAD	MAX	483.97	535.51	535.51	483.97	
		MIN	-123.68	-89.27	-89.27	-123.68	
	DISPERSION-LMAX	MAX	863.83	659.65	659.65	863.83	
		MIN	-313.28	-163.49	-163.49	-313.28	
110	Live load L-PICKUP 1	MAX	1554.39	1400.21	1400.21	1554.39	
		MIN	-494.72	-283.42	-283.42	-494.72	
	L-PICKUP 2	MAX	1347.80	1195.16	1195.16	1347.80	
		MIN	-436.96	-252.77	-252.77	-436.96	
	L-PICKUP 3	MAX	0.00	0.00	0.00	0.00	
		MIN	0.00	0.00	0.00	0.00	
	Live load	MAX	1554.39	1400.21	1400.21	1554.39	
		MIN	-494.72	-283.42	-283.42	-494.72	
	111	AASHTO Twin TWIN-PICKUP	MAX	1833.46	1573.72	1573.72	1833.46
			MIN	-584.21	-313.28	-313.28	-584.21
		MID-PICKUP	MAX	0.00	0.00	0.00	0.00
			MIN	0.00	0.00	0.00	0.00
198	AASHTO FatigTRUCK-LOAD	MAX	419.58	273.85	273.85	419.58	
		MIN	-90.05	-64.95	-64.95	-90.05	
	TANDEM-LOAD	MAX	298.47	205.93	205.93	298.47	
		MIN	-61.63	-51.56	-51.56	-61.63	

Bago Bridge

BLOCK [No.10 : Support No.8][SUPPORT REACTION]

SUPPORT		7101082	7102082	7103082	7104082
NODE		1082	2082	3082	4082
		FORCE3	FORCE3	FORCE3	FORCE3
NAME	TITLE	D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
198	AASHTO FatigDISPERSION-LMAX	462.72	235.28	235.28	462.72
	MIN	-171.63	-83.52	-83.52	-171.63
199	AASHTO-LRFD TRUCK-LOAD MAX	1173.34	1088.93	1088.93	1173.34
	MIN	-335.84	-184.59	-184.59	-335.84
	TANDEM-LOAD MAX	483.97	535.51	535.51	483.97
	MIN	-123.68	-89.27	-89.27	-123.68
	DISPERSION-LMAX	863.83	659.65	659.65	863.83
	MIN	-313.28	-163.49	-163.49	-313.28
300	Total Dead lWithout snow	1753.34	1698.49	1698.49	1753.34
301	Particular Snow	152.85	131.93	131.93	152.85
302	Live load Total MAX	1010.35	910.14	910.14	1010.35
	MIN	-321.57	-184.23	-184.23	-321.57
303	Sum total D+L+PP MAX	2916.55	2740.56	2740.56	2916.55
	MIN	1584.63	1646.20	1646.20	1584.63

Bago Bridge

BLOCK [No. 3 : Support No. 1][UPLIFT REACTION]

	SUPPORT	7101001	7102001	7103001	7104001
	NODE	1001	2001	3001	4001
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		1918. 32	2045. 32	2045. 24	1918. 35
TOTAL-LIVE (RL)		-1797. 87	-1069. 78	-1069. 78	-1797. 82
UPLIFT-REACTION (RD+2RL)		-1677. 42<-	-94. 24<-	-94. 33<-	-1677. 29<-

BLOCK [No. 4 : Support No. 2][UPLIFT REACTION]

	SUPPORT	7101012	7102012	7103012	7104012
	NODE	1012	2012	3012	4012
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		5530. 86	5691. 00	5691. 00	5530. 88
TOTAL-LIVE (RL)		-1847. 54	-1016. 08	-1016. 08	-1847. 54
UPLIFT-REACTION (RD+2RL)		1835. 77	3658. 84	3658. 84	1835. 79

BLOCK [No. 5 : Support No. 3][UPLIFT REACTION]

	SUPPORT	7101024	7102024	7103024	7104024
	NODE	1024	2024	3024	4024
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		4653. 81	4776. 10	4776. 10	4653. 81
TOTAL-LIVE (RL)		-2244. 83	-1427. 44	-1427. 44	-2244. 84
UPLIFT-REACTION (RD+2RL)		164. 15	1921. 22	1921. 22	164. 14

BLOCK [No. 6 : Support No. 4][UPLIFT REACTION]

	SUPPORT	7101036	7102036	7103036	7104036
	NODE	1036	2036	3036	4036
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		4975. 80	4981. 35	4981. 35	4975. 80
TOTAL-LIVE (RL)		-2177. 44	-1320. 48	-1320. 48	-2177. 44
UPLIFT-REACTION (RD+2RL)		620. 93	2340. 38	2340. 38	620. 93

Bago Bridge

BLOCK [No. 7 : Support No. 5][UPLIFT REACTION]

	SUPPORT	7101048	7102048	7103048	7104048
	NODE	1048	2048	3048	4048
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		4934. 16	4918. 00	4918. 00	4934. 16
TOTAL-LIVE (RL)		-2178. 43	-1334. 18	-1334. 18	-2178. 43
UPLIFT-REACTION (RD+2RL)		577. 31	2249. 63	2249. 63	577. 31

BLOCK [No. 8 : Support No. 6][UPLIFT REACTION]

	SUPPORT	7101060	7102060	7103060	7104060
	NODE	1060	2060	3060	4060
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		4792. 94	4808. 62	4808. 62	4792. 94
TOTAL-LIVE (RL)		-2198. 02	-1358. 00	-1358. 00	-2198. 02
UPLIFT-REACTION (RD+2RL)		396. 91	2092. 61	2092. 61	396. 91

BLOCK [No. 9 : Support No. 7][UPLIFT REACTION]

	SUPPORT	7101072	7102072	7103072	7104072
	NODE	1072	2072	3072	4072
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		5297. 13	5412. 57	5412. 57	5297. 13
TOTAL-LIVE (RL)		-1830. 83	-1000. 37	-1000. 37	-1830. 83
UPLIFT-REACTION (RD+2RL)		1635. 47	3411. 83	3411. 83	1635. 47

BLOCK [No. 10 : Support No. 8][UPLIFT REACTION]

	SUPPORT	7101082	7102082	7103082	7104082
	NODE	1082	2082	3082	4082
		D3 (kN)	D3 (kN)	D3 (kN)	D3 (kN)
TOTAL-DEAD (RD)		1753. 34	1698. 49	1698. 49	1753. 34
TOTAL-LIVE (RL)		-1714. 51	-1010. 09	-1010. 09	-1714. 51
UPLIFT-REACTION (RD+2RL)		-1675. 68<-	-321. 69<-	-321. 69<-	-1675. 68<-

Bago Bridge

[DEAD TOTAL GLOBAL REACTION FORCE Z (kN)]

NAME	TITLE	BLOCK	3	4	5	6	7	8	9	10	TOTAL
			DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)	DZ (kN)
1	Pavement		1393.96	4121.30	3484.19	3672.37	3635.44	3542.46	3951.47	1273.57	25074.77
3	Railing		42.16	124.64	105.40	111.08	109.96	107.15	119.52	38.52	758.42
5	Wheel guard		417.39	1233.90	1043.45	1099.67	1088.59	1060.77	1183.28	381.33	7508.38
8	Steel weight		5137.57	15192.51	12844.20	13537.85	13401.79	13059.00	14566.74	4694.96	92434.62
10	Medial strip		893.99	1646.73	1277.20	1382.25	1358.58	1326.59	1478.86	476.76	9840.96
19	Snow		655.64	1852.14	1555.88	1643.03	1625.66	1584.32	1767.17	569.57	11253.42
31	Miscellaneous		42.15	124.66	105.38	111.08	109.96	107.15	119.52	38.52	758.42
	TOTAL		8582.87	24295.88	20415.70	21557.33	21329.97	20787.44	23186.57	7473.24	147628.99

2-3 Member Force of Main Girder

Section force

(1) Bending moment in plane M_x (kN·m)

Girder No.	Member	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-1	1001	1	17	-19	0	19	-19
		17669	7228	-1123	1469	26366	17678
	1002	17667	7224	-1123	1469	26360	17676
		29493	12019	-2180	2442	43953	29101
	1003	29492	12017	-2179	2442	43950	29100
		36692	15235	-3222	3034	54962	35538
	1004	36689	15233	-3222	3034	54956	35535
		39618	17062	-4270	3274	59955	37342
	1005	39617	17061	-4269	3274	59952	37340
		38387	17551	-5344	3172	59110	34612
	1006	38385	17550	-5344	3172	59106	34609
		33442	16976	-6536	2763	53181	27708
	1007	33442	16976	-6536	2763	53181	27708
		23514	14687	-7567	1943	40144	15620
	1008	23514	14687	-7567	1943	40144	15620
		9119	10819	-8274	755	20694	-882
	1009	9119	10819	-8274	755	20694	-882
		-8449	6384	-9137	-692	-842	-18279
	1010	-8449	6384	-9137	-692	-842	-18279
		-30036	3566	-12181	-2474	-27875	-44692
	1011	-30036	3566	-12181	-2474	-27875	-44692
		-56939	2743	-18277	-4738	-58112	-79954
	1012	-56939	2743	-18277	-4738	-58112	-79954
		-38296	2827	-13975	-3160	-37781	-55431
	1013	-38296	2827	-13975	-3160	-37781	-55431
		-22705	4396	-10946	-1870	-18860	-35521
1014	-22705	4396	-10946	-1870	-18860	-35521	
	-6957	6961	-8486	-572	1520	-16016	
1015	-6957	6961	-8486	-572	1520	-16016	
	4459	10037	-7570	368	14863	-5014	
1016	4459	10037	-7570	368	14863	-5014	
	11824	12127	-6842	975	24926	3904	
1017	11824	12127	-6842	975	24926	3904	
	15477	13192	-6201	1277	29946	8693	
1018	15477	13192	-6201	1277	29946	8693	
	15187	13065	-6569	1253	29506	7901	
1019	15187	13065	-6569	1253	29506	7901	
	10562	11472	-7225	872	22907	2041	
1020	10562	11472	-7225	872	22907	2041	
	1718	8436	-7696	144	10298	-7551	
1021	1718	8436	-7696	144	10298	-7551	
	-10994	5616	-9310	-902	-4595	-21206	
1022	-10994	5616	-9310	-902	-4595	-21206	
	-24156	4425	-12027	-1990	-20393	-38174	
1023	-24156	4425	-12027	-1990	-20393	-38174	
	-40473	4592	-16216	-3373	-37876	-60062	
1024	-40473	4592	-16216	-3373	-37876	-60062	
	-23157	4470	-11849	-1908	-19254	-36914	
1025	-23157	4470	-11849	-1908	-19254	-36914	
	-9112	5337	-8652	-747	-2920	-18510	
1026	-9112	5337	-8652	-747	-2920	-18510	

	3685	7539	-6508	307	11531	-4469
1027	3685	7539	-6508	307	11531	-4469
	12541	10449	-6082	1036	24026	5670
1028	12541	10449	-6082	1036	24026	5670
	18529	12813	-5920	1530	32872	12363
1029	18529	12813	-5920	1530	32872	12363
	20654	13807	-5620	1705	36166	15053
1030	20654	13807	-5620	1705	36166	15053
	18613	13440	-6448	1536	33589	11767
1031	18613	13440	-6448	1536	33589	11767
	12281	11648	-7208	1015	24944	3925
1032	12281	11648	-7208	1015	24944	3925
	1659	8374	-7768	139	10173	-7628
1033	1659	8374	-7768	139	10173	-7628
	-12993	5549	-9737	-1067	-6845	-23797
1034	-12993	5549	-9737	-1067	-6845	-23797
	-28019	4334	-12819	-2310	-24695	-43147
1035	-28019	4334	-12819	-2310	-24695	-43147
	-46154	4306	-17170	-3844	-44400	-67168
1036	-46154	4306	-17170	-3844	-44400	-67168
	-27967	4233	-12589	-2306	-24770	-42862
1037	-27967	4233	-12589	-2306	-24770	-42862
	-13126	5212	-9334	-1078	-7428	-23538
1038	-13126	5212	-9334	-1078	-7428	-23538
	813	7781	-7312	69	8663	-7242
1039	813	7781	-7312	69	8663	-7242
	11044	11260	-7045	912	23216	2798
1040	11044	11260	-7045	912	23216	2798
	17877	13747	-6728	1476	33100	10606
1041	17877	13747	-6728	1476	33100	10606
	20338	14584	-6126	1678	36600	14052
1042	20338	14584	-6126	1678	36600	14052
	18338	13936	-6731	1514	33788	11102
1043	18338	13936	-6731	1514	33788	11102
	11935	11778	-7251	986	24699	3495
1044	11935	11778	-7251	986	24699	3495
	1555	8364	-7675	131	10050	-7544
1045	1555	8364	-7675	131	10050	-7544
	-12602	5523	-9536	-1035	-6457	-23173
1046	-12602	5523	-9536	-1035	-6457	-23173
	-27114	4291	-12490	-2235	-23770	-41840
1047	-27114	4291	-12490	-2235	-23770	-41840
	-45019	4339	-16943	-3750	-43127	-65712
1048	-45019	4339	-16943	-3750	-43127	-65712
	-27047	4370	-12624	-2230	-23595	-41900
1049	-27047	4370	-12624	-2230	-23595	-41900
	-12114	5589	-9553	-994	-5843	-22662
1050	-12114	5589	-9553	-994	-5843	-22662
	2373	8506	-7673	198	11078	-7403
1051	2373	8506	-7673	198	11078	-7403
	12883	11841	-7169	1064	25789	4628
1052	12883	11841	-7169	1064	25789	4628
	19541	13999	-6608	1613	35153	12563
1053	19541	13999	-6608	1613	35153	12563
	21914	14703	-5952	1809	38426	15985
1054	21914	14703	-5952	1809	38426	15985
	19902	13966	-6530	1643	35511	13056
1055	19902	13966	-6530	1643	35511	13056
	13627	11772	-6981	1126	26525	5677
1056	13627	11772	-6981	1126	26525	5677

	3543	8383	-7345	295	12221	-5711
1057	3543	8383	-7345	295	12221	-5711
	-10318	5489	-9106	-846	-4028	-20270
1058	-10318	5489	-9106	-846	-4028	-20270
	-24761	4334	-12121	-2041	-21167	-38923
1059	-24761	4334	-12121	-2041	-21167	-38923
	-42536	4382	-16486	-3545	-40385	-62567
1060	-42536	4382	-16486	-3545	-40385	-62567
	-25555	4323	-12196	-2106	-22042	-39857
1061	-25555	4323	-12196	-2106	-22042	-39857
	-11638	5542	-9346	-955	-5389	-21938
1062	-11638	5542	-9346	-955	-5389	-21938
	1721	8177	-7435	145	10042	-7290
1063	1721	8177	-7435	145	10042	-7290
	10815	10959	-6737	893	22667	2951
1064	10815	10959	-6737	893	22667	2951
	16031	12704	-6139	1323	30059	9374
1065	16031	12704	-6139	1323	30059	9374
	17338	13270	-5794	1431	32039	11236
1066	17338	13270	-5794	1431	32039	11236
	14467	12469	-6472	1194	28130	7247
1067	14467	12469	-6472	1194	28130	7247
	7437	10143	-6931	615	18195	-959
1068	7437	10143	-6931	615	18195	-959
	-3183	6695	-7295	-260	5261	-10738
1069	-3183	6695	-7295	-260	5261	-10738
	-17808	4040	-9378	-1464	-14021	-28651
1070	-17808	4040	-9378	-1464	-14021	-28651
	-33174	2687	-12549	-2735	-32415	-48458
1071	-33174	2687	-12549	-2735	-32415	-48458
	-51732	2660	-16945	-4305	-52579	-72983
1072	-51732	2660	-16945	-4305	-52579	-72983
	-26906	3560	-11584	-2215	-24493	-40705
1073	-26906	3560	-11584	-2215	-24493	-40705
	-7224	6222	-8588	-591	273	-16403
1074	-7224	6222	-8588	-591	273	-16403
	8039	10043	-7543	665	18747	-1102
1075	8039	10043	-7543	665	18747	-1102
	20210	13472	-6881	1668	35351	12933
1076	20210	13472	-6881	1668	35351	12933
	28987	15753	-6056	2392	47132	23506
1077	28987	15753	-6056	2392	47132	23506
	33362	16418	-5018	2753	52534	29592
1078	33362	16418	-5018	2753	52534	29592
	32972	15404	-3871	2721	51098	30662
1079	32972	15404	-3871	2721	51098	30662
	27384	12480	-2636	2262	42125	26218
1080	27384	12480	-2636	2262	42125	26218
	17525	7993	-1418	1453	26972	17136
1081	17525	7993	-1418	1453	26972	17136
	0	0	0	0	0	0

Girder No.	Member No.	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-2	2001	0	25	-29	0	26	-28
		19525	7797	-1246	1606	28929	19512
	2002	19523	7795	-1246	1606	28925	19510
		32234	12918	-2383	2661	47813	31797
	2003	32233	12916	-2383	2661	47810	31796

	40242	16536	-3534	3324	60102	38972
2004	40239	16534	-3533	3323	60097	38969
	43394	18531	-4679	3584	65509	40895
2005	43392	18529	-4679	3583	65505	40893
	41776	18934	-5797	3449	64159	37689
2006	41774	18933	-5797	3449	64156	37687
	35073	17621	-6798	2896	55589	29131
2007	35073	17621	-6798	2896	55589	29131
	24575	15268	-7960	2028	41872	16255
2008	24575	15268	-7960	2028	41872	16255
	9763	11978	-9448	804	22546	-1714
2009	9763	11978	-9448	804	22546	-1714
	-10657	7415	-11113	-884	-1902	-22654
2010	-10657	7415	-11113	-884	-1902	-22654
	-35840	3898	-14512	-2963	-33735	-53315
2011	-35840	3898	-14512	-2963	-33735	-53315
	-64488	3159	-20475	-5284	-65666	-90248
2012	-64488	3159	-20475	-5284	-65666	-90248
	-44120	2932	-15949	-3643	-43952	-63713
2013	-44120	2932	-15949	-3643	-43952	-63713
	-26320	4758	-12554	-2178	-22312	-41052
2014	-26320	4758	-12554	-2178	-22312	-41052
	-8232	8151	-10142	-684	1680	-19058
2015	-8232	8151	-10142	-684	1680	-19058
	5405	12140	-9339	443	17989	-6292
2016	5405	12140	-9339	443	17989	-6292
	14313	14571	-8363	1179	30063	4620
2017	14313	14571	-8363	1179	30063	4620
	18151	15322	-7302	1496	34968	10154
2018	18151	15322	-7302	1496	34968	10154
	17150	14573	-7388	1414	33137	8960
2019	17150	14573	-7388	1414	33137	8960
	11703	12557	-8004	964	25225	2262
2020	11703	12557	-8004	964	25225	2262
	1694	9386	-8809	137	11217	-8672
2021	1694	9386	-8809	137	11217	-8672
	-13229	6371	-11003	-1096	-6043	-25329
2022	-13229	6371	-11003	-1096	-6043	-25329
	-28497	4858	-14091	-2353	-24536	-44942
2023	-28497	4858	-14091	-2353	-24536	-44942
	-46232	5332	-18325	-3779	-43080	-68336
2024	-46232	5332	-18325	-3779	-43080	-68336
	-27779	5023	-14193	-2294	-23543	-44265
2025	-27779	5023	-14193	-2294	-23543	-44265
	-11676	6844	-11387	-968	-3746	-24031
2026	-11676	6844	-11387	-968	-3746	-24031
	5310	10772	-9612	436	16518	-6750
2027	5310	10772	-9612	436	16518	-6750
	17454	14521	-8761	1439	33415	7504
2028	17454	14521	-8761	1439	33415	7504
	23685	16210	-7649	1954	41849	15695
2029	23685	16210	-7649	1954	41849	15695
	24998	16510	-6797	2062	43570	18223
2030	24998	16510	-6797	2062	43570	18223
	21695	15461	-7481	1789	38945	13759
2031	21695	15461	-7481	1789	38945	13759
	13901	13087	-8234	1146	28134	4342
2032	13901	13087	-8234	1146	28134	4342
	1617	9602	-9191	131	11350	-9060
2033	1617	9602	-9191	131	11350	-9060

	-15420	6334	-11501	-1277	-8463	-28198
2034	-15420	6334	-11501	-1277	-8463	-28198
	-32067	4648	-14609	-2648	-28673	-49324
2035	-32067	4648	-14609	-2648	-28673	-49324
	-51226	4855	-18898	-4190	-49105	-74314
2036	-51226	4855	-18898	-4190	-49105	-74314
	-32669	4651	-14704	-2697	-29320	-50070
2037	-32669	4651	-14704	-2697	-29320	-50070
	-16386	6373	-11759	-1357	-9459	-29502
2038	-16386	6373	-11759	-1357	-9459	-29502
	676	9759	-9522	53	10488	-9469
2039	676	9759	-9522	53	10488	-9469
	12664	13006	-8359	1043	26714	2841
2040	12664	13006	-8359	1043	26714	2841
	19270	14673	-7250	1589	35531	11434
2041	19270	14673	-7250	1589	35531	11434
	21465	15228	-6425	1770	38463	14882
2042	21465	15228	-6425	1770	38463	14882
	19340	14545	-7074	1595	35479	11738
2043	19340	14545	-7074	1595	35479	11738
	12836	12609	-7888	1058	26503	3640
2044	12836	12609	-7888	1058	26503	3640
	1529	9330	-8802	123	10982	-8678
2045	1529	9330	-8802	123	10982	-8678
	-14784	6172	-11071	-1225	-7985	-27080
2046	-14784	6172	-11071	-1225	-7985	-27080
	-30969	4586	-14195	-2557	-27564	-47721
2047	-30969	4586	-14195	-2557	-27564	-47721
	-49383	4838	-18406	-4039	-47133	-71828
2048	-49383	4838	-18406	-4039	-47133	-71828
	-30476	4623	-14168	-2516	-26983	-47161
2049	-30476	4623	-14168	-2516	-26983	-47161
	-14150	6342	-11168	-1172	-7077	-26491
2050	-14150	6342	-11168	-1172	-7077	-26491
	2532	9785	-9087	206	12523	-8881
2051	2532	9785	-9087	206	12523	-8881
	14411	13183	-8127	1188	28781	5034
2052	14411	13183	-8127	1188	28781	5034
	21361	15155	-7226	1761	38277	13728
2053	21361	15155	-7226	1761	38277	13728
	23812	15814	-6449	1964	41590	17393
2054	23812	15814	-6449	1964	41590	17393
	21869	15189	-7169	1803	38862	14353
2055	21869	15189	-7169	1803	38862	14353
	15406	13249	-8016	1270	29925	6256
2056	15406	13249	-8016	1270	29925	6256
	3972	9890	-8953	325	14187	-7342
2057	3972	9890	-8953	325	14187	-7342
	-12468	6413	-11006	-1034	-5165	-24507
2058	-12468	6413	-11006	-1034	-5165	-24507
	-28587	4688	-13962	-2361	-24854	-44910
2059	-28587	4688	-13962	-2361	-24854	-44910
	-46995	4925	-18078	-3842	-44434	-68915
2060	-46995	4925	-18078	-3842	-44434	-68915
	-28967	4565	-13717	-2392	-25425	-45077
2061	-28967	4565	-13717	-2392	-25425	-45077
	-13495	6170	-10756	-1119	-6593	-25370
2062	-13495	6170	-10756	-1119	-6593	-25370
	1979	9493	-8821	161	11633	-8660
2063	1979	9493	-8821	161	11633	-8660

	12937	12974	-8114	1066	26977	3454
2064	12937	12974	-8114	1066	26977	3454
	18991	14899	-7310	1566	35456	11054
2065	18991	14899	-7310	1566	35456	11054
	20173	15253	-6721	1664	37090	13099
2066	20173	15253	-6721	1664	37090	13099
	16751	14257	-7484	1381	32389	8403
2067	16751	14257	-7484	1381	32389	8403
	8707	12047	-8466	717	21471	-1582
2068	8707	12047	-8466	717	21471	-1582
	-4529	8394	-9548	-376	6006	-14453
2069	-4529	8394	-9548	-376	6006	-14453
	-22541	4880	-11886	-1865	-18062	-36292
2070	-22541	4880	-11886	-1865	-18062	-36292
	-39608	2896	-14925	-3270	-39112	-57803
2071	-39608	2896	-14925	-3270	-39112	-57803
	-59102	3081	-19150	-4839	-59936	-83091
2072	-59102	3081	-19150	-4839	-59936	-83091
	-32300	3907	-13891	-2670	-29891	-48862
2073	-32300	3907	-13891	-2670	-29891	-48862
	-9136	7745	-11014	-758	173	-20909
2074	-9136	7745	-11014	-758	173	-20909
	9666	12329	-9571	796	22790	-1980
2075	9666	12329	-9571	796	22790	-1980
	22778	15131	-7890	1878	39787	14399
2076	22778	15131	-7890	1878	39787	14399
	30504	16445	-6374	2516	49464	24734
2077	30504	16445	-6374	2516	49464	24734
	33849	16531	-5071	2792	53171	30048
2078	33849	16531	-5071	2792	53171	30048
	33178	15363	-3878	2736	51277	30873
2079	33178	15363	-3878	2736	51277	30873
	28924	12984	-2771	2384	44293	27705
2080	28924	12984	-2771	2384	44293	27705
	20159	8952	-1649	1656	30767	19671
2081	20159	8952	-1649	1656	30767	19671
	0	0	0	0	0	0

Girder No.	Member	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-3	3001	0	25	-29	0	26	-28
		19525	7797	-1246	1606	28929	19512
	3002	19523	7795	-1246	1606	28924	19510
		32234	12917	-2383	2661	47812	31797
	3003	32233	12916	-2383	2661	47809	31796
		40242	16536	-3534	3324	60102	38972
	3004	40239	16534	-3533	3323	60096	38969
		43394	18531	-4679	3584	65509	40895
	3005	43392	18530	-4679	3583	65505	40893
		41776	18934	-5797	3449	64160	37689
	3006	41774	18933	-5797	3449	64156	37687
		35073	17621	-6798	2896	55589	29131
	3007	35073	17621	-6798	2896	55589	29131
		24575	15268	-7960	2028	41872	16255
	3008	24575	15268	-7960	2028	41872	16255
		9763	11978	-9448	804	22546	-1714
	3009	9763	11978	-9448	804	22546	-1714
		-10657	7415	-11113	-884	-1902	-22654
	3010	-10657	7415	-11113	-884	-1902	-22654

	-35840	3898	-14512	-2963	-33735	-53315
3011	-35840	3898	-14512	-2963	-33735	-53315
	-64489	3159	-20475	-5284	-65666	-90248
3012	-64489	3159	-20475	-5284	-65666	-90248
	-44120	2932	-15949	-3643	-43952	-63713
3013	-44120	2932	-15949	-3643	-43952	-63713
	-26320	4758	-12554	-2178	-22312	-41052
3014	-26320	4758	-12554	-2178	-22312	-41052
	-8232	8151	-10142	-684	1680	-19058
3015	-8232	8151	-10142	-684	1680	-19058
	5405	12140	-9339	443	17989	-6292
3016	5405	12140	-9339	443	17989	-6292
	14313	14571	-8363	1179	30063	4620
3017	14313	14571	-8363	1179	30063	4620
	18151	15322	-7302	1496	34968	10154
3018	18151	15322	-7302	1496	34968	10154
	17150	14573	-7388	1414	33137	8960
3019	17150	14573	-7388	1414	33137	8960
	11703	12557	-8004	964	25225	2262
3020	11703	12557	-8004	964	25225	2262
	1694	9386	-8809	137	11217	-8672
3021	1694	9386	-8809	137	11217	-8672
	-13229	6371	-11003	-1096	-6043	-25329
3022	-13229	6371	-11003	-1096	-6043	-25329
	-28497	4858	-14091	-2353	-24536	-44942
3023	-28497	4858	-14091	-2353	-24536	-44942
	-46232	5332	-18325	-3779	-43080	-68336
3024	-46232	5332	-18325	-3779	-43080	-68336
	-27779	5023	-14193	-2294	-23543	-44265
3025	-27779	5023	-14193	-2294	-23543	-44265
	-11676	6844	-11387	-968	-3746	-24031
3026	-11676	6844	-11387	-968	-3746	-24031
	5310	10772	-9612	436	16518	-6750
3027	5310	10772	-9612	436	16518	-6750
	17454	14521	-8761	1439	33415	7504
3028	17454	14521	-8761	1439	33415	7504
	23685	16210	-7649	1954	41849	15695
3029	23685	16210	-7649	1954	41849	15695
	24998	16510	-6797	2062	43570	18223
3030	24998	16510	-6797	2062	43570	18223
	21695	15461	-7481	1789	38945	13759
3031	21695	15461	-7481	1789	38945	13759
	13901	13087	-8234	1146	28134	4342
3032	13901	13087	-8234	1146	28134	4342
	1617	9602	-9191	131	11350	-9060
3033	1617	9602	-9191	131	11350	-9060
	-15420	6334	-11501	-1277	-8463	-28198
3034	-15420	6334	-11501	-1277	-8463	-28198
	-32067	4648	-14609	-2648	-28673	-49324
3035	-32067	4648	-14609	-2648	-28673	-49324
	-51226	4855	-18898	-4190	-49105	-74314
3036	-51226	4855	-18898	-4190	-49105	-74314
	-32669	4651	-14704	-2697	-29320	-50070
3037	-32669	4651	-14704	-2697	-29320	-50070
	-16386	6373	-11759	-1357	-9459	-29502
3038	-16386	6373	-11759	-1357	-9459	-29502
	676	9759	-9522	53	10488	-9469
3039	676	9759	-9522	53	10488	-9469
	12664	13006	-8359	1043	26714	2841
3040	12664	13006	-8359	1043	26714	2841

	19270	14673	-7250	1589	35531	11434
3041	19270	14673	-7250	1589	35531	11434
	21465	15228	-6425	1770	38463	14882
3042	21465	15228	-6425	1770	38463	14882
	19340	14545	-7074	1595	35479	11738
3043	19340	14545	-7074	1595	35479	11738
	12836	12609	-7888	1058	26503	3640
3044	12836	12609	-7888	1058	26503	3640
	1529	9330	-8802	123	10982	-8678
3045	1529	9330	-8802	123	10982	-8678
	-14784	6172	-11071	-1225	-7985	-27080
3046	-14784	6172	-11071	-1225	-7985	-27080
	-30969	4586	-14195	-2557	-27564	-47721
3047	-30969	4586	-14195	-2557	-27564	-47721
	-49383	4838	-18406	-4039	-47133	-71828
3048	-49383	4838	-18406	-4039	-47133	-71828
	-30476	4623	-14168	-2516	-26983	-47161
3049	-30476	4623	-14168	-2516	-26983	-47161
	-14150	6342	-11168	-1172	-7077	-26491
3050	-14150	6342	-11168	-1172	-7077	-26491
	2532	9785	-9087	206	12523	-8881
3051	2532	9785	-9087	206	12523	-8881
	14411	13183	-8127	1188	28781	5034
3052	14411	13183	-8127	1188	28781	5034
	21361	15155	-7226	1761	38277	13728
3053	21361	15155	-7226	1761	38277	13728
	23812	15814	-6449	1964	41590	17393
3054	23812	15814	-6449	1964	41590	17393
	21869	15189	-7169	1803	38862	14353
3055	21869	15189	-7169	1803	38862	14353
	15406	13249	-8016	1270	29925	6256
3056	15406	13249	-8016	1270	29925	6256
	3972	9890	-8953	325	14187	-7342
3057	3972	9890	-8953	325	14187	-7342
	-12468	6413	-11006	-1034	-5165	-24507
3058	-12468	6413	-11006	-1034	-5165	-24507
	-28587	4688	-13962	-2361	-24854	-44910
3059	-28587	4688	-13962	-2361	-24854	-44910
	-46995	4925	-18078	-3842	-44434	-68915
3060	-46995	4925	-18078	-3842	-44434	-68915
	-28967	4565	-13717	-2392	-25425	-45077
3061	-28967	4565	-13717	-2392	-25425	-45077
	-13495	6170	-10756	-1119	-6593	-25370
3062	-13495	6170	-10756	-1119	-6593	-25370
	1979	9493	-8821	161	11633	-8660
3063	1979	9493	-8821	161	11633	-8660
	12937	12974	-8114	1066	26977	3454
3064	12937	12974	-8114	1066	26977	3454
	18991	14899	-7310	1566	35456	11054
3065	18991	14899	-7310	1566	35456	11054
	20173	15253	-6721	1664	37090	13099
3066	20173	15253	-6721	1664	37090	13099
	16751	14257	-7484	1381	32389	8403
3067	16751	14257	-7484	1381	32389	8403
	8707	12047	-8466	717	21471	-1582
3068	8707	12047	-8466	717	21471	-1582
	-4529	8394	-9548	-376	6006	-14453
3069	-4529	8394	-9548	-376	6006	-14453
	-22541	4880	-11886	-1865	-18062	-36292
3070	-22541	4880	-11886	-1865	-18062	-36292

	-39608	2896	-14925	-3270	-39112	-57803
3071	-39608	2896	-14925	-3270	-39112	-57803
	-59102	3081	-19150	-4839	-59936	-83091
3072	-59102	3081	-19150	-4839	-59936	-83091
	-32300	3907	-13891	-2670	-29891	-48862
3073	-32300	3907	-13891	-2670	-29891	-48862
	-9136	7745	-11014	-758	173	-20909
3074	-9136	7745	-11014	-758	173	-20909
	9666	12329	-9571	796	22790	-1980
3075	9666	12329	-9571	796	22790	-1980
	22778	15131	-7890	1878	39787	14399
3076	22778	15131	-7890	1878	39787	14399
	30504	16445	-6374	2516	49464	24734
3077	30504	16445	-6374	2516	49464	24734
	33849	16531	-5071	2792	53171	30048
3078	33849	16531	-5071	2792	53171	30048
	33178	15363	-3878	2736	51277	30873
3079	33178	15363	-3878	2736	51277	30873
	28924	12984	-2771	2384	44293	27705
3080	28924	12984	-2771	2384	44293	27705
	20159	8952	-1649	1656	30767	19671
3081	20159	8952	-1649	1656	30767	19671
	0	0	0	0	0	0

Member Girder No.	Dead load	Live load		Snow load	Sum total		
		(Max.)	(Min.)		(Max.)	(Min.)	
G-4	4001	1	17	-19	0	19	-19
		17669	7228	-1123	1469	26366	17678
	4002	17667	7224	-1123	1469	26360	17676
		29493	12019	-2180	2442	43953	29101
	4003	29492	12017	-2179	2442	43950	29101
		36693	15235	-3222	3034	54962	35538
	4004	36690	15233	-3222	3034	54956	35535
		39619	17063	-4270	3274	59956	37342
	4005	39617	17061	-4269	3274	59952	37341
		38387	17551	-5344	3172	59111	34612
	4006	38385	17550	-5344	3172	59107	34610
		33442	16976	-6536	2763	53181	27708
	4007	33442	16976	-6536	2763	53181	27708
		23514	14687	-7567	1943	40144	15620
	4008	23514	14687	-7567	1943	40144	15620
		9119	10819	-8274	755	20694	-882
	4009	9119	10819	-8274	755	20694	-882
		-8449	6384	-9137	-692	-842	-18279
	4010	-8449	6384	-9137	-692	-842	-18279
		-30036	3566	-12181	-2474	-27875	-44692
	4011	-30036	3566	-12181	-2474	-27875	-44692
		-56939	2743	-18277	-4738	-58112	-79954
	4012	-56939	2743	-18277	-4738	-58112	-79954
		-38296	2827	-13975	-3160	-37781	-55431
	4013	-38296	2827	-13975	-3160	-37781	-55431
		-22705	4396	-10946	-1870	-18860	-35521
	4014	-22705	4396	-10946	-1870	-18860	-35521
		-6957	6961	-8486	-572	1520	-16016
	4015	-6957	6961	-8486	-572	1520	-16016
		4459	10037	-7570	368	14863	-5014
	4016	4459	10037	-7570	368	14863	-5014
		11824	12127	-6842	975	24926	3904
	4017	11824	12127	-6842	975	24926	3904

	15477	13192	-6201	1277	29946	8693
4018	15477	13192	-6201	1277	29946	8693
	15187	13065	-6569	1253	29506	7901
4019	15187	13065	-6569	1253	29506	7901
	10562	11472	-7225	872	22907	2041
4020	10562	11472	-7225	872	22907	2041
	1718	8436	-7696	144	10298	-7551
4021	1718	8436	-7696	144	10298	-7551
	-10994	5616	-9310	-902	-4595	-21206
4022	-10994	5616	-9310	-902	-4595	-21206
	-24156	4425	-12027	-1990	-20393	-38174
4023	-24156	4425	-12027	-1990	-20393	-38174
	-40473	4592	-16216	-3373	-37876	-60062
4024	-40473	4592	-16216	-3373	-37876	-60062
	-23157	4470	-11849	-1908	-19254	-36914
4025	-23157	4470	-11849	-1908	-19254	-36914
	-9112	5337	-8652	-747	-2920	-18510
4026	-9112	5337	-8652	-747	-2920	-18510
	3685	7539	-6508	307	11531	-4469
4027	3685	7539	-6508	307	11531	-4469
	12541	10449	-6082	1036	24026	5670
4028	12541	10449	-6082	1036	24026	5670
	18529	12813	-5920	1530	32872	12363
4029	18529	12813	-5920	1530	32872	12363
	20654	13807	-5620	1705	36166	15053
4030	20654	13807	-5620	1705	36166	15053
	18613	13440	-6448	1536	33589	11767
4031	18613	13440	-6448	1536	33589	11767
	12281	11648	-7208	1015	24944	3925
4032	12281	11648	-7208	1015	24944	3925
	1659	8374	-7768	139	10173	-7628
4033	1659	8374	-7768	139	10173	-7628
	-12993	5549	-9737	-1067	-6845	-23797
4034	-12993	5549	-9737	-1067	-6845	-23797
	-28019	4334	-12819	-2310	-24695	-43147
4035	-28019	4334	-12819	-2310	-24695	-43147
	-46154	4306	-17170	-3844	-44400	-67168
4036	-46154	4306	-17170	-3844	-44400	-67168
	-27967	4233	-12589	-2306	-24770	-42862
4037	-27967	4233	-12589	-2306	-24770	-42862
	-13126	5212	-9334	-1078	-7428	-23538
4038	-13126	5212	-9334	-1078	-7428	-23538
	813	7781	-7312	69	8663	-7242
4039	813	7781	-7312	69	8663	-7242
	11044	11260	-7045	912	23216	2798
4040	11044	11260	-7045	912	23216	2798
	17877	13747	-6728	1476	33100	10606
4041	17877	13747	-6728	1476	33100	10606
	20338	14584	-6126	1678	36600	14052
4042	20338	14584	-6126	1678	36600	14052
	18338	13936	-6731	1514	33788	11102
4043	18338	13936	-6731	1514	33788	11102
	11935	11778	-7251	986	24699	3495
4044	11935	11778	-7251	986	24699	3495
	1555	8364	-7675	131	10050	-7544
4045	1555	8364	-7675	131	10050	-7544
	-12602	5523	-9536	-1035	-6457	-23173
4046	-12602	5523	-9536	-1035	-6457	-23173
	-27114	4291	-12490	-2235	-23770	-41840
4047	-27114	4291	-12490	-2235	-23770	-41840

	-45019	4339	-16943	-3750	-43127	-65712
4048	-45019	4339	-16943	-3750	-43127	-65712
	-27047	4370	-12624	-2230	-23595	-41900
4049	-27047	4370	-12624	-2230	-23595	-41900
	-12114	5589	-9553	-994	-5843	-22662
4050	-12114	5589	-9553	-994	-5843	-22662
	2373	8506	-7673	198	11078	-7403
4051	2373	8506	-7673	198	11078	-7403
	12883	11841	-7169	1064	25789	4628
4052	12883	11841	-7169	1064	25789	4628
	19541	13999	-6608	1613	35153	12563
4053	19541	13999	-6608	1613	35153	12563
	21914	14703	-5952	1809	38426	15985
4054	21914	14703	-5952	1809	38426	15985
	19902	13966	-6530	1643	35511	13056
4055	19902	13966	-6530	1643	35511	13056
	13627	11772	-6981	1126	26525	5677
4056	13627	11772	-6981	1126	26525	5677
	3543	8383	-7345	295	12221	-5711
4057	3543	8383	-7345	295	12221	-5711
	-10318	5489	-9106	-846	-4028	-20270
4058	-10318	5489	-9106	-846	-4028	-20270
	-24761	4334	-12121	-2041	-21167	-38923
4059	-24761	4334	-12121	-2041	-21167	-38923
	-42536	4382	-16486	-3545	-40385	-62567
4060	-42536	4382	-16486	-3545	-40385	-62567
	-25555	4323	-12196	-2106	-22042	-39857
4061	-25555	4323	-12196	-2106	-22042	-39857
	-11638	5542	-9346	-955	-5389	-21938
4062	-11638	5542	-9346	-955	-5389	-21938
	1721	8177	-7435	145	10042	-7290
4063	1721	8177	-7435	145	10042	-7290
	10815	10959	-6737	893	22667	2951
4064	10815	10959	-6737	893	22667	2951
	16031	12704	-6139	1323	30059	9374
4065	16031	12704	-6139	1323	30059	9374
	17338	13270	-5794	1431	32039	11236
4066	17338	13270	-5794	1431	32039	11236
	14467	12469	-6472	1194	28130	7247
4067	14467	12469	-6472	1194	28130	7247
	7437	10143	-6931	615	18195	-959
4068	7437	10143	-6931	615	18195	-959
	-3183	6695	-7295	-260	5261	-10738
4069	-3183	6695	-7295	-260	5261	-10738
	-17808	4040	-9378	-1464	-14021	-28651
4070	-17808	4040	-9378	-1464	-14021	-28651
	-33174	2687	-12549	-2735	-32415	-48458
4071	-33174	2687	-12549	-2735	-32415	-48458
	-51732	2660	-16945	-4305	-52579	-72983
4072	-51732	2660	-16945	-4305	-52579	-72983
	-26906	3560	-11584	-2215	-24493	-40705
4073	-26906	3560	-11584	-2215	-24493	-40705
	-7224	6222	-8588	-591	273	-16403
4074	-7224	6222	-8588	-591	273	-16403
	8039	10043	-7543	665	18747	-1102
4075	8039	10043	-7543	665	18747	-1102
	20210	13472	-6881	1668	35351	12933
4076	20210	13472	-6881	1668	35351	12933
	28987	15753	-6056	2392	47132	23506
4077	28987	15753	-6056	2392	47132	23506

	33362	16418	-5018	2753	52534	29592
4078	33362	16418	-5018	2753	52534	29592
	32972	15404	-3871	2721	51098	30662
4079	32972	15404	-3871	2721	51098	30662
	27384	12480	-2636	2262	42125	26218
4080	27384	12480	-2636	2262	42125	26218
	17525	7993	-1418	1453	26972	17136
4081	17525	7993	-1418	1453	26972	17136
	0	0	0	0	0	0

Member Girder No.	Dead load	Live load (Max.)	(Min.)	Snow load	Sum total (Max.)	(Min.)
C- 1 1001001	-53	1023	-1269	-16	1007	-1338
	29	923	-1043	10	962	-1033
1002001	-1	609	-722	-1	608	-725
	-1	609	-722	-1	608	-725
1003001	29	923	-1043	10	962	-1033
	-53	1023	-1269	-16	1007	-1338
C- 2 1001002	74	328	-246	9	412	-236
	-147	294	-407	-25	210	-580
1002002	-74	377	-414	-16	361	-504
	-74	376	-414	-16	360	-504
1003002	-147	294	-407	-25	209	-580
	74	328	-246	9	412	-236
C- 3 1001003	29	384	-338	6	419	-332
	-74	341	-436	-24	317	-534
1002003	-37	473	-532	-18	455	-587
	-37	472	-532	-18	454	-587
1003003	-74	341	-436	-24	317	-534
	29	384	-338	6	419	-332
C- 4 1001004	118	444	-370	12	574	-351
	-132	334	-451	-30	272	-614
1002004	-12	547	-604	-19	528	-635
	-12	547	-604	-19	528	-635
1003004	-132	334	-451	-30	272	-614
	118	444	-370	12	574	-351
C- 5 1001005	181	488	-384	16	686	-302
	-117	339	-448	-30	294	-594
1002005	94	606	-622	-12	688	-633
	94	606	-622	-12	688	-633
1003005	-117	339	-448	-30	295	-594
	181	488	-384	16	686	-302
C- 6 1001006	291	533	-383	25	849	-183
	-192	317	-454	-36	184	-682
1002006	144	620	-617	-8	757	-625
	145	620	-617	-8	757	-625
1003006	-192	317	-454	-36	184	-682
	291	533	-383	25	849	-183
C- 7 1001007	-22	433	-411	-1	432	-435
	26	396	-458	-18	403	-476
1002007	18	566	-602	-18	565	-621
	18	566	-602	-18	565	-621
1003007	26	396	-458	-18	403	-476

		-22	433	-411	-1	432	-435
C- 8	1001008	28	436	-400	4	468	-396
		-140	378	-493	-32	320	-664
	1002008	-121	516	-603	-29	487	-753
		-121	516	-603	-29	487	-753
	1003008	-140	378	-493	-32	320	-664
		28	436	-400	4	468	-396
C- 9	1001009	251	466	-335	23	740	-161
		-458	270	-505	-57	-164	-1020
	1002009	-249	488	-628	-37	347	-915
		-249	488	-628	-37	347	-915
	1003009	-458	270	-505	-57	-164	-1020
		251	466	-335	23	740	-161
C-10	1001010	93	460	-372	11	565	-360
		-262	317	-502	-38	112	-802
	1002010	-178	558	-667	-27	521	-872
		-178	558	-667	-27	521	-872
	1003010	-262	317	-502	-38	112	-802
		93	460	-372	11	565	-360
C-11	1001011	-125	505	-504	-12	493	-641
		61	443	-500	0	504	-500
	1002011	-54	640	-691	-11	629	-756
		-54	640	-691	-11	629	-756
	1003011	61	443	-500	0	504	-500
		-125	505	-504	-12	493	-641
C-12	1001012	-169	645	-757	-28	617	-954
		131	626	-633	22	779	-612
	1002012	-30	509	-557	-5	504	-592
		-30	509	-557	-5	504	-593
	1003012	131	626	-633	22	779	-612
		-169	645	-757	-28	617	-954
C-13	1001013	-28	458	-451	-6	452	-485
		-61	399	-458	-7	392	-526
	1002013	-81	553	-576	-12	541	-668
		-81	553	-576	-12	541	-668
	1003013	-61	399	-458	-7	393	-526
		-28	458	-451	-6	452	-485
C-14	1001014	53	421	-369	7	481	-362
		-215	345	-476	-31	202	-722
	1002014	-151	567	-675	-22	545	-849
		-151	567	-675	-22	545	-849
	1003014	-215	345	-476	-31	202	-721
		53	421	-369	7	481	-362
C-15	1001015	2	423	-371	3	429	-367
		-223	292	-465	-37	121	-724
	1002015	-220	501	-626	-33	397	-880
		-220	501	-626	-33	397	-880
	1003015	-223	292	-465	-37	121	-724
		2	423	-371	3	429	-367
C-16	1001016	30	446	-373	5	481	-368
		-312	295	-513	-45	26	-870

	1002016	-290	474	-646	-42	284	-978
		-290	474	-646	-42	284	-978
	1003016	-312	295	-513	-45	26	-870
		30	446	-373	5	481	-368
C-17	1001017	81	474	-385	8	562	-377
		-403	287	-529	-53	-83	-985
	1002017	-338	476	-668	-47	233	-1053
		-338	476	-668	-47	233	-1053
	1003017	-403	287	-529	-53	-83	-985
		81	474	-385	8	562	-377
C-18	1001018	36	468	-405	4	508	-401
		-350	300	-510	-49	-10	-910
	1002018	-323	482	-661	-46	258	-1031
		-323	482	-661	-46	258	-1031
	1003018	-350	300	-510	-49	-10	-910
		36	468	-405	4	508	-401
C-19	1001019	-30	445	-420	-1	443	-452
		-253	326	-489	-41	130	-783
	1002019	-282	493	-646	-43	317	-971
		-282	493	-646	-43	317	-971
	1003019	-253	326	-489	-41	130	-783
		-30	445	-420	-1	443	-452
C-20	1001020	3	440	-405	2	446	-403
		-268	331	-494	-42	120	-804
	1002020	-267	495	-639	-40	335	-947
		-267	495	-639	-40	335	-947
	1003020	-268	331	-494	-42	120	-804
		3	440	-405	2	446	-403
C-21	1001021	87	456	-380	10	554	-370
		-331	292	-488	-46	3	-865
	1002021	-252	517	-655	-36	383	-944
		-252	517	-655	-36	383	-944
	1003021	-331	292	-488	-46	3	-865
		87	456	-380	10	554	-370
C-22	1001022	49	438	-369	7	494	-362
		-219	288	-444	-32	124	-694
	1002022	-169	549	-626	-25	520	-820
		-169	549	-626	-25	520	-820
	1003022	-219	288	-444	-32	124	-694
		49	438	-369	7	494	-362
C-23	1001023	-54	455	-447	-8	447	-510
		-35	392	-445	-5	386	-485
	1002023	-80	535	-542	-12	523	-634
		-80	535	-542	-12	523	-634
	1003023	-35	392	-445	-5	386	-485
		-54	455	-447	-8	447	-510
C-24	1001024	-145	600	-701	-25	575	-871
		107	554	-561	18	679	-543
	1002024	-22	424	-463	-4	420	-488
		-22	424	-463	-4	420	-488
	1003024	107	554	-561	18	679	-543
		-145	600	-701	-25	575	-871

C-25	1001025	-69	453	-447	-9	444	-525
		11	396	-439	-2	405	-441
	1002025	-40	531	-533	-9	522	-582
		-40	531	-533	-9	522	-582
	1003025	11	396	-439	-2	405	-441
-69		453	-447	-9	444	-525	
C-26	1001026	-136	416	-409	-8	397	-553
		22	341	-434	-12	351	-446
	1002026	-93	548	-607	-18	530	-718
		-93	548	-607	-18	530	-718
	1003026	22	341	-434	-12	351	-446
-136		416	-409	-8	397	-553	
C-27	1001027	61	480	-383	8	550	-375
		-327	328	-574	-45	54	-947
	1002027	-278	504	-669	-39	338	-985
		-278	504	-669	-39	338	-985
	1003027	-327	328	-574	-45	54	-947
61		480	-383	8	550	-375	
C-28	1001028	227	511	-352	21	759	-210
		-609	279	-612	-70	-317	-1291
	1002028	-417	469	-701	-53	140	-1170
		-417	469	-701	-53	140	-1170
	1003028	-609	279	-612	-70	-317	-1291
227		511	-352	21	759	-210	
C-29	1001029	29	472	-415	4	505	-411
		-391	304	-533	-52	-49	-977
	1002029	-375	476	-681	-50	194	-1106
		-375	476	-681	-50	194	-1106
	1003029	-391	304	-533	-52	-49	-977
29		472	-415	4	505	-411	
C-30	1001030	-11	461	-419	0	461	-431
		-305	316	-513	-46	60	-864
	1002030	-318	491	-668	-46	274	-1032
		-318	491	-668	-46	274	-1032
	1003030	-305	316	-513	-46	60	-864
-11		461	-419	0	461	-431	
C-31	1001031	-16	449	-413	0	449	-429
		-258	319	-492	-41	115	-792
	1002031	-273	498	-652	-42	332	-967
		-273	498	-652	-42	332	-967
	1003031	-258	319	-492	-41	115	-792
-16		449	-413	0	449	-429	
C-32	1001032	1	449	-414	2	452	-412
		-241	334	-492	-40	153	-773
	1002032	-242	505	-645	-38	377	-925
		-242	505	-645	-38	377	-925
	1003032	-241	334	-492	-40	153	-773
1		449	-414	2	452	-412	
C-33	1001033	75	469	-395	9	553	-386
		-277	291	-481	-41	61	-799
	1002033	-212	524	-646	-33	437	-891

		-212	524	-646	-33	437	-891
	1003033	-277	291	-481	-41	61	-799
		75	469	-395	9	553	-386
C-34	1001034	-9	441	-398	2	444	-405
		-113	297	-424	-23	249	-560
	1002034	-120	550	-602	-21	529	-743
		-120	550	-602	-21	529	-743
	1003034	-113	297	-424	-23	249	-560
		-9	441	-398	2	444	-405
C-35	1001035	-32	467	-456	-6	461	-495
		-36	371	-421	-6	365	-463
	1002035	-57	506	-511	-10	496	-578
		-57	506	-511	-10	496	-578
	1003035	-36	371	-421	-6	365	-463
		-32	467	-456	-6	461	-495
C-36	1001036	-114	611	-708	-22	589	-844
		78	528	-538	15	622	-523
	1002036	-14	374	-406	-3	371	-423
		-14	374	-406	-3	371	-423
	1003036	78	528	-538	15	622	-523
		-114	611	-708	-22	589	-844
C-37	1001037	-85	464	-467	-11	454	-562
		35	384	-417	0	420	-416
	1002037	-29	509	-507	-8	501	-544
		-29	509	-507	-8	501	-544
	1003037	35	384	-417	0	420	-416
		-85	464	-467	-11	454	-562
C-38	1001038	-100	440	-420	-5	435	-526
		-4	323	-432	-14	310	-450
	1002038	-90	554	-599	-18	535	-707
		-90	554	-599	-18	535	-707
	1003038	-4	323	-432	-14	310	-450
		-100	440	-420	-5	435	-526
C-39	1001039	124	507	-395	14	644	-376
		-361	316	-559	-48	2	-969
	1002039	-257	519	-670	-37	382	-964
		-257	519	-670	-37	382	-964
	1003039	-361	316	-559	-48	2	-969
		124	507	-395	14	644	-376
C-40	1001040	159	496	-390	15	670	-333
		-455	290	-532	-57	-136	-1045
	1002040	-327	491	-669	-45	266	-1040
		-327	491	-669	-45	266	-1040
	1003040	-455	290	-532	-57	-136	-1045
		159	496	-390	15	670	-333
C-41	1001041	-30	455	-441	-1	454	-471
		-238	357	-502	-40	187	-780
	1002041	-268	501	-647	-42	342	-956
		-268	501	-647	-42	342	-956
	1003041	-238	357	-502	-40	187	-780
		-30	455	-441	-1	454	-471

C-42	1001042	-38	444	-424	-2	442	-464
		-208	343	-481	-38	199	-727
	1002042	-240	507	-640	-40	380	-920
	1003042	-240	507	-640	-40	380	-920
		-208	343	-481	-38	199	-727
		-38	444	-424	-2	442	-464
C-43	1001043	-25	448	-424	-1	447	-451
		-220	342	-482	-38	187	-741
	1002043	-243	505	-640	-39	374	-922
	1003043	-243	505	-640	-39	374	-922
		-220	342	-482	-38	187	-741
		-25	448	-424	-1	447	-451
C-44	1001044	59	464	-405	7	529	-399
		-314	315	-493	-46	50	-853
	1002044	-268	499	-646	-40	339	-955
	1003044	-268	499	-646	-40	339	-955
		-314	315	-493	-46	50	-853
		59	464	-405	7	529	-399
C-45	1001045	113	480	-393	13	606	-380
		-343	287	-495	-47	-17	-885
	1002045	-249	518	-652	-36	388	-937
	1003045	-249	518	-652	-36	388	-937
		-343	287	-495	-47	-17	-885
		113	480	-393	13	606	-380
C-46	1001046	14	445	-395	4	463	-391
		-152	289	-422	-26	197	-600
	1002046	-138	548	-604	-22	525	-764
	1003046	-138	548	-604	-22	525	-764
		-152	289	-422	-26	197	-600
		14	445	-395	4	463	-391
C-47	1001047	-105	463	-472	-12	451	-590
		38	383	-416	1	422	-416
	1002047	-47	508	-509	-9	499	-565
	1003047	-47	508	-509	-9	499	-565
		38	383	-416	1	422	-416
		-105	463	-472	-12	451	-590
C-48	1001048	-148	617	-720	-25	592	-893
		103	535	-541	18	655	-523
	1002048	-19	374	-408	-3	371	-430
	1003048	-19	374	-408	-3	371	-430
		103	535	-541	18	655	-523
		-148	617	-720	-25	592	-893
C-49	1001049	-20	473	-459	-5	468	-484
		-60	368	-425	-8	361	-493
	1002049	-69	508	-515	-11	497	-595
	1003049	-69	508	-515	-11	497	-595
		-60	368	-425	-8	361	-493
		-20	473	-459	-5	468	-484
C-50	1001050	-24	445	-408	1	446	-431
		-110	298	-422	-23	254	-555
	1002050	-131	548	-604	-22	527	-757
		-131	548	-604	-22	527	-757

	1003050	-110	298	-422	-23	254	-555
		-24	445	-408	1	446	-431
C-51	1001051	75	475	-400	10	560	-391
		-297	297	-496	-43	46	-835
	1002051	-235	519	-650	-35	404	-920
		-235	519	-650	-35	404	-920
	1003051	-297	297	-496	-43	46	-835
		75	475	-400	10	560	-391
C-52	1001052	80	464	-393	9	552	-385
		-345	300	-497	-48	-3	-890
	1002052	-280	492	-648	-41	317	-970
		-280	492	-648	-41	317	-970
	1003052	-345	300	-497	-48	-3	-890
		80	464	-393	9	552	-385
C-53	1001053	-8	444	-410	1	444	-418
		-252	328	-485	-41	132	-779
	1002053	-262	496	-643	-41	341	-947
		-262	496	-643	-41	341	-947
	1003053	-252	328	-485	-41	132	-779
		-8	444	-410	1	444	-418
C-54	1001054	-27	440	-414	-1	438	-443
		-229	331	-481	-39	161	-749
	1002054	-255	508	-651	-41	365	-946
		-255	508	-651	-41	365	-946
	1003054	-229	331	-481	-39	161	-749
		-27	440	-414	-1	438	-443
C-55	1001055	-6	449	-415	1	450	-421
		-260	327	-490	-42	123	-792
	1002055	-269	504	-654	-42	345	-965
		-269	504	-654	-42	345	-965
	1003055	-260	327	-490	-42	123	-792
		-6	449	-415	1	450	-421
C-56	1001056	83	466	-395	9	558	-386
		-360	302	-505	-49	-16	-914
	1002056	-292	501	-661	-42	316	-996
		-292	501	-661	-42	316	-996
	1003056	-360	302	-505	-49	-16	-914
		83	466	-395	9	558	-386
C-57	1001057	111	481	-391	12	604	-379
		-346	292	-513	-47	-13	-906
	1002057	-254	517	-658	-37	382	-948
		-254	517	-658	-37	382	-948
	1003057	-346	292	-513	-47	-13	-906
		111	481	-391	12	604	-379
C-58	1001058	-26	441	-403	1	442	-428
		-105	301	-431	-22	264	-558
	1002058	-126	546	-597	-21	525	-745
		-126	546	-597	-21	525	-745
	1003058	-105	301	-431	-22	264	-558
		-26	441	-403	1	442	-428
C-59	1001059	-90	458	-462	-11	447	-562

		23	383	-421	-1	405	-422
	1002059	-47	505	-502	-9	496	-558
		-47	505	-502	-9	496	-558
	1003059	23	383	-421	-1	405	-422
		-90	458	-462	-11	447	-562
C-60	1001060	-145	605	-709	-25	580	-878
		101	525	-531	17	643	-514
	1002060	-18	366	-399	-3	363	-420
		-18	366	-399	-3	363	-420
	1003060	101	525	-531	17	643	-514
		-145	605	-709	-25	580	-878
C-61	1001061	-27	461	-449	-6	455	-482
		-55	370	-426	-7	363	-488
	1002061	-71	502	-505	-11	491	-587
		-71	502	-505	-11	491	-587
	1003061	-55	370	-426	-7	363	-488
		-27	461	-449	-6	455	-482
C-62	1001062	2	434	-394	3	440	-391
		-141	295	-419	-25	218	-585
	1002062	-137	545	-599	-22	523	-759
		-137	545	-599	-22	523	-759
	1003062	-141	295	-419	-25	218	-585
		2	434	-394	3	440	-391
C-63	1001063	18	454	-405	5	477	-400
		-234	306	-481	-38	125	-753
	1002063	-224	525	-650	-34	425	-908
		-224	525	-650	-34	425	-908
	1003063	-234	306	-481	-38	125	-753
		18	454	-405	5	477	-400
C-64	1001064	65	468	-392	7	540	-385
		-349	298	-521	-49	-10	-918
	1002064	-297	510	-678	-43	323	-1017
		-297	510	-678	-43	323	-1017
	1003064	-349	298	-521	-49	-10	-918
		65	468	-392	7	540	-385
C-65	1001065	45	467	-398	5	516	-393
		-356	289	-507	-50	-30	-913
	1002065	-318	509	-681	-46	298	-1045
		-318	509	-681	-46	298	-1045
	1003065	-356	289	-507	-50	-30	-913
		45	467	-398	5	516	-393
C-66	1001066	-9	447	-406	0	447	-415
		-297	314	-501	-45	66	-843
	1002066	-309	507	-675	-45	305	-1029
		-309	507	-675	-45	305	-1029
	1003066	-297	314	-501	-45	66	-843
		-9	447	-406	0	447	-415
C-67	1001067	-3	439	-409	1	440	-411
		-300	330	-507	-45	85	-852
	1002067	-309	491	-655	-45	285	-1009
		-309	491	-655	-45	285	-1009
	1003067	-300	330	-507	-45	85	-852

		-3	439	-409	1	440	-411
C-68	1001068	119	462	-373	12	592	-354
		-415	285	-514	-54	-99	-984
	1002068	-317	478	-653	-44	260	-1015
		-317	478	-653	-44	260	-1015
	1003068	-415	285	-514	-54	-99	-984
		119	462	-373	12	592	-354
C-69	1001069	71	468	-373	9	548	-364
		-290	300	-520	-42	57	-852
	1002069	-229	505	-648	-34	394	-911
		-229	505	-648	-34	394	-911
	1003069	-290	300	-520	-42	57	-852
		71	468	-373	9	548	-364
C-70	1001070	-94	422	-398	-5	417	-497
		-11	326	-426	-14	311	-451
	1002070	-87	544	-616	-18	526	-720
		-87	544	-616	-18	526	-720
	1003070	-11	326	-426	-14	311	-451
		-94	422	-398	-5	417	-497
C-71	1001071	-49	448	-445	-8	440	-502
		-9	384	-430	-3	381	-441
	1002071	-42	518	-524	-9	510	-574
		-42	518	-524	-9	510	-574
	1003071	-9	384	-430	-3	381	-441
		-49	448	-445	-8	440	-502
C-72	1001072	-137	625	-732	-25	600	-894
		99	576	-586	18	693	-568
	1002072	-19	441	-483	-4	437	-507
		-19	441	-483	-4	437	-507
	1003072	99	576	-586	18	693	-568
		-137	625	-732	-25	600	-894
C-73	1001073	-103	500	-486	-11	489	-600
		11	421	-486	-4	428	-490
	1002073	-72	604	-627	-13	592	-711
		-72	604	-627	-13	592	-711
	1003073	11	421	-486	-4	428	-490
		-103	500	-486	-11	489	-600
C-74	1001074	-10	465	-407	3	468	-414
		-198	319	-497	-33	184	-727
	1002074	-204	559	-669	-30	493	-903
		-204	559	-669	-30	493	-903
	1003074	-198	319	-497	-33	184	-727
		-10	465	-407	3	468	-414
C-75	1001075	207	496	-361	20	723	-243
		-536	288	-579	-63	-225	-1178
	1002075	-364	485	-677	-47	218	-1088
		-364	485	-677	-47	218	-1088
	1003075	-536	288	-579	-63	-225	-1178
		207	496	-361	20	723	-243
C-76	1001076	143	477	-386	13	633	-346
		-473	292	-527	-59	-152	-1059

	1002076	-360	474	-661	-49	207	-1070
		-360	474	-661	-49	207	-1070
	1003076	-473	292	-527	-59	-152	-1059
		143	477	-386	13	633	-346
C-77	1001077	-28	450	-433	-1	449	-462
		-224	351	-491	-39	194	-753
	1002077	-251	502	-642	-40	362	-933
		-251	502	-642	-40	362	-933
	1003077	-224	351	-491	-39	194	-753
		-28	450	-433	-1	449	-462
C-78	1001078	-71	436	-435	-5	431	-511
		-114	359	-462	-30	323	-606
	1002078	-168	522	-629	-33	478	-830
		-168	522	-629	-33	478	-830
	1003078	-114	359	-462	-30	323	-606
		-71	436	-435	-5	431	-511
C-79	1001079	-148	416	-454	-10	382	-613
		-11	374	-440	-21	353	-472
	1002079	-134	524	-619	-30	494	-783
		-134	524	-619	-30	494	-783
	1003079	-11	374	-440	-21	353	-472
		-148	416	-454	-10	382	-613
C-80	1001080	21	429	-396	5	456	-391
		-229	314	-462	-38	140	-730
	1002080	-217	472	-610	-35	361	-862
		-217	472	-610	-35	361	-862
	1003080	-229	314	-462	-38	140	-730
		21	429	-396	5	456	-391
C-81	1001081	318	458	-261	30	807	10
		-561	253	-543	-62	-294	-1166
	1002081	-289	382	-522	-36	172	-847
		-289	382	-522	-36	172	-847
	1003081	-561	253	-543	-62	-294	-1166
		318	458	-261	30	807	10
C-82	1001082	-237	988	-1303	-30	957	-1570
		166	923	-1005	21	1110	-984
	1002082	-30	681	-822	-4	677	-855
		-30	681	-822	-4	677	-855
	1003082	166	923	-1005	21	1110	-984
		-237	988	-1303	-30	957	-1570

(2) Shear forces in plane S_y (kN)

Girder No.	Member	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-1	1001	1899	864	-104	160	2923	1924
		1373	644	-231	112	2128	1183
	1002	1426	716	-153	120	2261	1347
		939	550	-305	75	1564	617
	1003	963	609	-198	82	1654	787
		476	450	-353	37	963	54
	1004	536	521	-244	47	1104	266
		49	363	-407	1	413	-406
	1005	121	449	-312	12	582	-273
		-366	289	-483	-33	-24	-882
	1006	-251	405	-402	-18	257	-671
		-738	242	-571	-64	-487	-1373
	1007	-749	326	-536	-59	-385	-1345
		-1236	168	-712	-105	-1123	-2053
	1008	-1196	267	-667	-96	-946	-1959
		-1683	112	-848	-141	-1678	-2673
	1009	-1513	243	-755	-122	-1320	-2390
		-2000	91	-938	-167	-2049	-3105
	1010	-1915	240	-869	-156	-1759	-2940
		-2402	91	-1054	-201	-2484	-3657
	1011	-2447	264	-1074	-204	-2307	-3724
		-2934	148	-1284	-249	-2990	-4466
	1012	2525	1127	-248	215	3868	2418
		2136	951	-297	179	3266	1928
	1013	2144	942	-161	179	3265	2113
		1754	787	-286	143	2685	1526
	1014	1818	839	-165	152	2810	1756
1331		656	-321	107	2094	1021	
1015	1385	730	-194	117	2232	1250	
	898	548	-358	71	1517	504	
1016	980	638	-226	83	1701	770	
	493	456	-395	38	987	18	
1017	609	565	-278	53	1226	301	
	122	386	-447	8	515	-440	
1018	214	496	-359	20	731	-232	
	-272	321	-532	-25	120	-830	
1019	-219	433	-478	-15	329	-713	
	-706	265	-656	-61	-422	-1423	
1020	-641	382	-602	-50	-195	-1293	
	-1128	220	-785	-95	-937	-2008	
1021	-1028	351	-716	-82	-654	-1825	
	-1515	192	-902	-127	-1393	-2544	
1022	-1451	317	-851	-118	-1157	-2419	
	-1840	189	-1007	-154	-1748	-3002	
1023	-1845	315	-1021	-155	-1589	-3020	
	-2234	238	-1199	-191	-2116	-3624	
1024	2359	1097	-246	201	3657	2240	
	1970	918	-302	165	3053	1742	
1025	1950	916	-185	163	3029	1873	
	1561	757	-318	127	2445	1275	
1026	1523	791	-190	128	2442	1405	
	1036	601	-358	83	1720	653	
1027	1129	691	-198	96	1916	968	
	642	501	-370	50	1194	212	

1028	842	632	-221	72	1546	628
	355	445	-392	27	827	-127
1029	456	551	-282	40	1047	129
	-31	371	-452	-5	366	-488
1030	39	480	-377	6	525	-371
	-448	306	-550	-39	-89	-1037
1031	-390	419	-491	-30	125	-911
	-877	249	-669	-75	-627	-1621
1032	-819	367	-620	-65	-407	-1503
	-1306	204	-803	-110	-1150	-2219
1033	-1222	338	-738	-98	-880	-2058
	-1709	181	-923	-143	-1617	-2775
1034	-1683	304	-886	-137	-1426	-2707
	-2073	179	-1041	-174	-2014	-3288
1035	-2072	302	-1055	-174	-1853	-3301
	-2462	226	-1232	-210	-2378	-3904
1036	2468	1125	-252	210	3803	2350
	2079	949	-304	174	3201	1857
1037	2050	938	-182	172	3159	1984
	1660	781	-310	135	2577	1392
1038	1637	822	-182	137	2597	1539
	1150	635	-344	92	1878	795
1039	1267	736	-195	107	2110	1120
	780	550	-358	62	1392	376
1040	927	662	-233	79	1667	702
	440	481	-398	34	954	-44
1041	490	566	-308	43	1098	133
	3	393	-474	-2	393	-477
1042	43	484	-406	6	533	-400
	-443	315	-578	-39	-73	-1061
1043	-397	416	-520	-30	114	-947
	-884	252	-699	-75	-631	-1658
1044	-795	371	-632	-63	-376	-1489
	-1282	211	-814	-108	-1116	-2204
1045	-1172	342	-737	-94	-821	-2003
	-1659	185	-922	-139	-1558	-2720
1046	-1619	306	-881	-132	-1353	-2632
	-2009	182	-1036	-168	-1941	-3213
1047	-2043	308	-1060	-171	-1814	-3274
	-2433	231	-1236	-207	-2340	-3876
1048	2441	1118	-251	208	3767	2323
	2052	942	-302	172	3166	1831
1049	2061	943	-179	172	3177	2001
	1672	788	-305	136	2596	1412
1050	1692	839	-182	142	2673	1598
	1205	654	-340	97	1956	860
1051	1294	740	-204	109	2143	1138
	807	558	-366	64	1429	396
1052	909	650	-245	78	1637	668
	422	473	-409	32	927	-78
1053	481	557	-309	42	1080	121
	-6	384	-477	-3	381	-486
1054	42	475	-402	6	524	-396
	-445	306	-576	-39	-86	-1060
1055	-384	412	-511	-29	122	-924
	-871	245	-691	-74	-626	-1636
1056	-765	367	-616	-60	-348	-1441
	-1252	205	-800	-106	-1091	-2157
1057	-1143	343	-721	-91	-788	-1955
	-1629	184	-906	-137	-1528	-2672

1058	-1611	309	-871	-131	-1340	-2613
	-2000	182	-1026	-167	-1931	-3194
1059	-2027	302	-1047	-170	-1805	-3244
	-2417	225	-1224	-206	-2330	-3846
1060	2317	1092	-253	198	3608	2186
	1928	918	-302	162	3007	1697
1061	1934	920	-182	162	3016	1860
	1545	765	-307	126	2435	1271
1062	1579	815	-188	133	2526	1468
	1092	630	-348	87	1810	728
1063	1153	704	-214	98	1955	972
	666	522	-381	52	1240	223
1064	765	616	-246	66	1446	511
	278	434	-417	20	733	-243
1065	374	534	-297	33	942	22
	-113	355	-468	-12	337	-593
1066	-44	456	-386	-1	455	-431
	-531	282	-561	-46	-210	-1138
1067	-460	388	-500	-35	10	-995
	-946	219	-682	-81	-742	-1709
1068	-819	346	-602	-65	-433	-1486
	-1305	182	-789	-110	-1180	-2204
1069	-1219	322	-706	-98	-898	-2023
	-1706	161	-892	-143	-1640	-2741
1070	-1726	286	-863	-141	-1494	-2729
	-2115	158	-1018	-177	-2087	-3311
1071	-2125	281	-1039	-178	-1938	-3342
	-2515	203	-1217	-214	-2465	-3946
1072	2726	1116	-160	232	4073	2750
	2239	906	-255	186	3332	2094
1073	2212	905	-97	185	3302	2271
	1725	716	-252	140	2581	1538
1074	1770	786	-102	148	2704	1785
	1283	601	-261	103	1987	1046
1075	1461	714	-111	123	2298	1439
	974	530	-272	78	1582	697
1076	1121	633	-151	95	1849	1020
	634	455	-313	50	1139	277
1077	681	534	-231	59	1274	440
	194	363	-394	13	570	-305
1078	204	444	-341	19	668	-219
	-282	277	-510	-26	52	-818
1079	-315	380	-488	-23	155	-827
	-802	216	-665	-69	-591	-1536
1080	-742	341	-614	-58	-357	-1414
	-1229	177	-800	-103	-1103	-2133
1081	-1019	296	-671	-81	-716	-1771
	-1657	92	-961	-141	-1678	-2758

Member Girder No.	Dead load	Live load		Snow load	Sum total	
		(Max.)	(Min.)		(Max.)	(Min.)
G-2 2001	2065	919	-133	167	3151	2060
	1554	728	-234	130	2413	1380
2002	1501	744	-164	122	2367	1411
	1045	606	-283	89	1741	766
2003	1021	636	-215	82	1739	824
	585	502	-319	51	1139	222
2004	526	527	-269	41	1093	217
	110	400	-385	12	522	-373

2005	39	429	-359	1	469	-358
	-359	311	-473	-27	18	-859
2006	-474	335	-486	-42	-81	-1002
	-866	221	-605	-69	-648	-1540
2007	-854	299	-588	-73	-539	-1515
	-1245	188	-708	-100	-1102	-2053
2008	-1286	270	-705	-109	-1043	-2099
	-1677	162	-823	-136	-1603	-2636
2009	-1846	220	-869	-155	-1715	-2871
	-2238	118	-986	-182	-2266	-3407
2010	-2323	181	-1020	-194	-2282	-3536
	-2714	84	-1136	-221	-2827	-4072
2011	-2669	166	-1123	-219	-2672	-4011
	-3060	96	-1271	-246	-3182	-4577
2012	2703	1105	-178	216	4024	2688
	2390	964	-215	194	3548	2304
2013	2382	984	-156	194	3560	2373
	2069	878	-246	172	3118	1920
2014	2004	892	-170	163	3059	1946
	1613	769	-275	136	2518	1392
2015	1559	784	-210	126	2470	1413
	1168	662	-315	99	1929	857
2016	1086	671	-271	87	1844	822
	695	551	-377	60	1306	265
2017	579	557	-357	45	1182	161
	188	440	-470	18	646	-405
2018	96	464	-462	5	565	-456
	-296	348	-580	-22	135	-897
2019	-349	400	-566	-31	139	-947
	-740	287	-687	-59	-426	-1486
2020	-805	358	-689	-69	-409	-1564
	-1197	249	-811	-96	-969	-2104
2021	-1297	319	-837	-110	-992	-2244
	-1688	212	-959	-137	-1549	-2784
2022	-1752	280	-979	-146	-1534	-2878
	-2065	184	-1079	-168	-1994	-3312
2023	-2060	243	-1072	-167	-1912	-3299
	-2373	202	-1206	-189	-2300	-3768
2024	2463	1084	-195	197	3744	2407
	2150	945	-235	175	3270	2020
2025	2169	977	-173	177	3323	2121
	1856	873	-259	155	2884	1674
2026	1894	913	-193	154	2961	1797
	1503	793	-294	127	2423	1248
2027	1410	794	-257	114	2318	1190
	1019	676	-358	87	1781	640
2028	819	648	-329	65	1531	456
	427	532	-437	38	997	-103
2029	327	540	-401	24	891	-170
	-64	425	-513	-3	422	-580
2030	-135	449	-492	-14	435	-640
	-526	335	-609	-41	-131	-1176
2031	-584	385	-603	-51	-134	-1238
	-975	273	-723	-78	-697	-1776
2032	-1033	344	-723	-88	-673	-1843
	-1424	237	-844	-115	-1231	-2383
2033	-1508	297	-865	-127	-1249	-2501
	-1899	192	-986	-154	-1804	-3040
2034	-1924	258	-994	-160	-1749	-3079
	-2237	164	-1094	-182	-2207	-3514

2035	-2238	227	-1087	-182	-2125	-3508
	-2551	184	-1222	-204	-2516	-3977
2036	2476	1076	-187	198	3750	2431
	2163	936	-227	176	3275	2043
2037	2192	972	-168	178	3342	2151
	1879	867	-258	157	2902	1700
2038	1902	897	-195	155	2954	1802
	1511	775	-299	127	2413	1250
2039	1394	765	-254	113	2272	1177
	1003	643	-361	85	1731	620
2040	856	633	-303	68	1557	530
	465	511	-417	41	1017	-36
2041	415	539	-359	32	986	-19
	24	418	-474	5	447	-469
2042	-17	460	-448	-4	456	-469
	-408	341	-567	-31	4	-1006
2043	-455	401	-560	-40	26	-1054
	-846	286	-680	-67	-542	-1593
2044	-935	352	-696	-80	-557	-1711
	-1326	242	-818	-107	-1118	-2251
2045	-1436	304	-853	-121	-1161	-2410
	-1827	198	-974	-148	-1717	-2950
2046	-1867	267	-986	-156	-1676	-3009
	-2180	171	-1087	-177	-2135	-3444
2047	-2145	231	-1069	-174	-2020	-3389
	-2458	187	-1204	-196	-2412	-3859
2048	2520	1082	-186	201	3803	2479
	2207	941	-228	179	3327	2090
2049	2197	963	-167	179	3339	2159
	1884	857	-258	157	2898	1706
2050	1864	877	-191	151	2893	1767
	1473	753	-296	124	2350	1212
2051	1384	757	-239	112	2252	1185
	992	633	-347	85	1710	626
2052	891	640	-285	71	1601	591
	499	517	-398	44	1061	26
2053	441	545	-353	34	1020	16
	50	425	-467	7	481	-460
2054	1	467	-448	-2	466	-451
	-390	350	-565	-30	35	-985
2055	-451	406	-565	-40	37	-1055
	-842	292	-683	-67	-529	-1592
2056	-948	355	-707	-81	-567	-1736
	-1339	248	-827	-108	-1125	-2274
2057	-1448	302	-863	-122	-1178	-2433
	-1840	197	-984	-149	-1733	-2973
2058	-1858	261	-989	-155	-1674	-3002
	-2171	167	-1089	-177	-2131	-3437
2059	-2144	228	-1071	-174	-2022	-3390
	-2457	184	-1205	-196	-2414	-3859
2060	2410	1061	-191	192	3663	2354
	2097	921	-231	170	3188	1968
2061	2090	943	-175	170	3204	2033
	1777	836	-264	148	2762	1582
2062	1743	856	-191	142	2741	1636
	1352	732	-297	114	2198	1080
2063	1291	748	-232	104	2143	1094
	900	624	-339	77	1601	536
2064	801	632	-289	64	1497	489
	410	511	-398	36	957	-71

2065	314	528	-369	23	865	-143
	-77	410	-482	-4	406	-564
2066	-147	444	-469	-15	416	-630
	-538	329	-585	-42	-152	-1165
2067	-609	385	-581	-53	-161	-1243
	-1000	274	-699	-80	-724	-1779
2068	-1128	330	-727	-96	-794	-1951
	-1519	225	-846	-123	-1350	-2488
2069	-1606	277	-885	-135	-1381	-2626
	-1997	174	-1005	-162	-1933	-3164
2070	-1977	242	-1006	-165	-1827	-3147
	-2290	150	-1104	-186	-2282	-3581
2071	-2280	212	-1091	-185	-2190	-3556
	-2593	170	-1225	-207	-2580	-4026
2072	2876	1090	-93	230	4197	2985
	2485	935	-164	203	3623	2475
2073	2512	969	-82	205	3685	2610
	2121	847	-179	178	3145	2065
2074	2076	853	-116	169	3098	2095
	1685	731	-216	142	2557	1546
2075	1507	711	-179	122	2340	1395
	1116	589	-287	95	1799	837
2076	968	585	-239	77	1630	735
	577	463	-350	50	1090	172
2077	530	489	-302	41	1060	178
	139	367	-417	14	520	-389
2078	129	410	-379	8	546	-356
	-263	290	-498	-19	95	-780
2079	-230	354	-459	-22	208	-711
	-621	236	-581	-49	-363	-1250
2080	-681	295	-589	-59	-357	-1329
	-1072	186	-714	-86	-916	-1873
2081	-1283	259	-810	-109	-1055	-2202
	-1795	138	-1005	-144	-1760	-2944

Member Girder No.	Dead load	Live load		Snow load	Sum total		
		(Max.)	(Min.)		(Max.)	(Min.)	
G-3	3001	2065	919	-133	167	3151	2060
		1554	728	-235	130	2412	1380
3002		1501	744	-164	122	2367	1410
		1045	606	-283	89	1741	766
3003		1021	636	-215	82	1739	823
		585	502	-319	51	1138	221
3004		525	526	-269	41	1093	216
		110	400	-385	12	522	-373
3005		39	429	-359	1	469	-358
		-359	311	-473	-27	18	-860
3006		-474	335	-486	-42	-81	-1002
		-866	221	-605	-69	-648	-1540
3007		-854	299	-588	-73	-539	-1515
		-1245	188	-708	-100	-1102	-2053
3008		-1286	270	-705	-109	-1043	-2099
		-1677	162	-823	-136	-1603	-2636
3009		-1846	220	-869	-155	-1715	-2871
		-2238	118	-986	-182	-2266	-3407
3010		-2323	181	-1020	-194	-2282	-3536
		-2714	84	-1136	-221	-2827	-4072
3011		-2669	166	-1123	-219	-2672	-4011
		-3060	96	-1271	-246	-3182	-4577

3012	2703	1105	-178	216	4024	2688
	2390	964	-215	194	3548	2304
3013	2382	984	-156	194	3560	2373
	2069	878	-246	172	3118	1920
3014	2004	892	-170	163	3059	1946
	1613	769	-275	136	2518	1392
3015	1559	784	-210	126	2470	1413
	1168	662	-315	99	1929	857
3016	1086	671	-271	87	1844	822
	695	551	-377	60	1306	265
3017	579	557	-357	45	1182	161
	188	440	-470	18	646	-405
3018	96	464	-462	5	565	-456
	-296	348	-580	-22	135	-897
3019	-349	400	-566	-31	139	-947
	-740	287	-687	-59	-426	-1486
3020	-805	358	-689	-69	-409	-1564
	-1197	249	-811	-96	-969	-2104
3021	-1297	319	-837	-110	-992	-2244
	-1688	212	-959	-137	-1549	-2784
3022	-1752	280	-979	-146	-1534	-2878
	-2065	184	-1079	-168	-1994	-3312
3023	-2060	243	-1072	-167	-1912	-3299
	-2373	202	-1206	-189	-2300	-3768
3024	2463	1084	-195	197	3744	2407
	2150	945	-235	175	3270	2020
3025	2169	977	-173	177	3323	2121
	1856	873	-259	155	2884	1674
3026	1894	913	-193	154	2961	1797
	1503	793	-294	127	2423	1248
3027	1410	794	-257	114	2318	1190
	1019	676	-358	87	1781	640
3028	819	648	-329	65	1531	456
	427	532	-437	38	997	-103
3029	327	540	-401	24	891	-170
	-64	425	-513	-3	422	-580
3030	-135	449	-492	-14	435	-640
	-526	335	-609	-41	-131	-1176
3031	-584	385	-603	-51	-134	-1238
	-975	273	-723	-78	-697	-1776
3032	-1033	344	-723	-88	-673	-1843
	-1424	237	-844	-115	-1231	-2383
3033	-1508	297	-865	-127	-1249	-2501
	-1899	192	-986	-154	-1804	-3040
3034	-1924	258	-994	-160	-1749	-3079
	-2237	164	-1094	-182	-2207	-3514
3035	-2238	227	-1087	-182	-2125	-3508
	-2551	184	-1222	-204	-2516	-3977
3036	2476	1076	-187	198	3750	2431
	2163	936	-227	176	3275	2043
3037	2192	972	-168	178	3342	2151
	1879	867	-258	157	2902	1700
3038	1902	897	-195	155	2954	1802
	1511	775	-299	127	2413	1250
3039	1394	765	-254	113	2272	1177
	1003	643	-361	85	1731	620
3040	856	633	-303	68	1557	530
	465	511	-417	41	1017	-36
3041	415	539	-359	32	986	-19
	24	418	-474	5	447	-469

3042	-17	460	-448	-4	456	-469
	-408	341	-567	-31	4	-1006
3043	-455	401	-560	-40	26	-1054
	-846	286	-680	-67	-542	-1593
3044	-935	352	-696	-80	-557	-1711
	-1326	242	-818	-107	-1118	-2251
3045	-1436	304	-853	-121	-1161	-2410
	-1827	198	-974	-148	-1717	-2950
3046	-1867	267	-986	-156	-1676	-3009
	-2180	171	-1087	-177	-2135	-3444
3047	-2145	231	-1069	-174	-2020	-3389
	-2458	187	-1204	-196	-2412	-3859
3048	2520	1082	-186	201	3803	2479
	2207	941	-228	179	3327	2090
3049	2197	963	-167	179	3339	2159
	1884	857	-258	157	2898	1706
3050	1864	877	-191	151	2893	1767
	1473	753	-296	124	2350	1212
3051	1384	757	-239	112	2252	1185
	992	633	-347	85	1710	626
3052	891	640	-285	71	1601	591
	499	517	-398	44	1061	26
3053	441	545	-353	34	1020	16
	50	425	-467	7	481	-460
3054	1	467	-448	-2	466	-451
	-390	350	-565	-30	35	-985
3055	-451	406	-565	-40	37	-1055
	-842	292	-683	-67	-529	-1592
3056	-948	355	-707	-81	-567	-1736
	-1339	248	-827	-108	-1125	-2274
3057	-1448	302	-863	-122	-1178	-2433
	-1840	197	-984	-149	-1733	-2973
3058	-1858	261	-989	-155	-1674	-3002
	-2171	167	-1089	-177	-2131	-3437
3059	-2144	228	-1071	-174	-2022	-3390
	-2457	184	-1205	-196	-2414	-3859
3060	2410	1061	-191	192	3663	2354
	2097	921	-231	170	3188	1968
3061	2090	943	-175	170	3204	2033
	1777	836	-264	148	2762	1582
3062	1743	856	-191	142	2741	1636
	1352	732	-297	114	2198	1080
3063	1291	748	-232	104	2143	1094
	900	624	-339	77	1601	536
3064	801	632	-289	64	1497	489
	410	511	-398	36	957	-71
3065	314	528	-369	23	865	-143
	-77	410	-482	-4	406	-564
3066	-147	444	-469	-15	416	-630
	-538	329	-585	-42	-152	-1165
3067	-609	385	-581	-53	-161	-1243
	-1000	274	-699	-80	-724	-1779
3068	-1128	330	-727	-96	-794	-1951
	-1519	225	-846	-123	-1350	-2488
3069	-1606	277	-885	-135	-1381	-2626
	-1997	174	-1005	-162	-1933	-3164
3070	-1977	242	-1006	-165	-1827	-3147
	-2290	150	-1104	-186	-2282	-3581
3071	-2280	212	-1091	-185	-2190	-3556
	-2593	170	-1225	-207	-2580	-4026

3072	2876	1090	-93	230	4197	2985
	2485	935	-164	203	3623	2475
3073	2512	969	-82	205	3685	2610
	2121	847	-179	178	3145	2065
3074	2076	853	-116	169	3098	2095
	1685	731	-216	142	2557	1546
3075	1507	711	-179	122	2340	1395
	1116	589	-287	95	1799	837
3076	968	585	-239	77	1630	735
	577	463	-350	50	1090	172
3077	530	489	-302	41	1060	178
	139	367	-417	14	520	-389
3078	129	410	-379	8	546	-356
	-263	290	-498	-19	95	-780
3079	-230	354	-459	-22	208	-711
	-621	236	-581	-49	-363	-1250
3080	-681	295	-589	-59	-357	-1329
	-1072	186	-714	-86	-916	-1873
3081	-1283	259	-810	-109	-1055	-2202
	-1795	138	-1005	-144	-1760	-2944

Girder No.	Member No.	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-4	4001	1899	864	-104	160	2923	1924
		1373	644	-231	112	2128	1183
4002		1426	716	-153	120	2261	1347
		939	550	-305	75	1564	617
4003		963	609	-198	82	1654	787
		476	450	-353	37	963	54
4004		536	521	-244	47	1104	266
		49	363	-407	1	414	-406
4005		121	449	-312	12	582	-273
		-366	289	-483	-33	-24	-882
4006		-251	405	-402	-18	257	-671
		-738	242	-572	-64	-487	-1373
4007		-749	326	-536	-59	-385	-1345
		-1236	168	-712	-105	-1123	-2053
4008		-1196	267	-667	-96	-946	-1959
		-1683	112	-848	-141	-1678	-2673
4009		-1513	243	-755	-122	-1320	-2390
		-2000	91	-938	-167	-2049	-3105
4010		-1915	240	-869	-156	-1759	-2940
		-2402	91	-1054	-201	-2484	-3657
4011		-2447	264	-1074	-204	-2307	-3724
		-2934	148	-1284	-249	-2990	-4466
4012		2525	1127	-248	215	3868	2418
		2136	951	-297	179	3266	1928
4013		2144	942	-161	179	3265	2113
		1754	787	-286	143	2685	1526
4014		1818	839	-165	152	2810	1756
		1331	656	-321	107	2094	1021
4015		1385	730	-194	117	2232	1250
		898	548	-358	71	1517	504
4016		980	638	-226	83	1701	770
		493	456	-395	38	987	18
4017		609	565	-278	53	1226	301
		122	386	-447	8	515	-440
4018		214	496	-359	20	731	-232
		-272	321	-532	-25	120	-830

4019	-219	433	-478	-15	329	-713
	-706	265	-656	-61	-422	-1423
4020	-641	382	-602	-50	-195	-1293
	-1128	220	-785	-95	-937	-2008
4021	-1028	351	-716	-82	-654	-1825
	-1515	192	-902	-127	-1393	-2544
4022	-1451	317	-851	-118	-1157	-2419
	-1840	189	-1007	-154	-1748	-3002
4023	-1845	315	-1021	-155	-1589	-3020
	-2234	238	-1199	-191	-2116	-3624
4024	2359	1097	-246	201	3657	2240
	1970	918	-302	165	3053	1742
4025	1950	916	-185	163	3029	1873
	1561	757	-318	127	2445	1275
4026	1523	791	-190	128	2442	1405
	1036	601	-358	83	1720	653
4027	1129	691	-198	96	1916	968
	642	501	-370	50	1194	212
4028	842	632	-221	72	1546	628
	355	445	-392	27	827	-127
4029	456	551	-282	40	1047	129
	-31	371	-452	-5	366	-488
4030	39	480	-377	6	525	-371
	-448	306	-550	-39	-89	-1037
4031	-390	419	-491	-30	125	-911
	-877	249	-669	-75	-627	-1621
4032	-819	367	-620	-65	-407	-1503
	-1306	204	-803	-110	-1150	-2219
4033	-1222	338	-738	-98	-880	-2058
	-1709	181	-923	-143	-1617	-2775
4034	-1683	304	-886	-137	-1426	-2707
	-2073	179	-1041	-174	-2014	-3288
4035	-2072	302	-1055	-174	-1853	-3301
	-2462	226	-1232	-210	-2378	-3904
4036	2468	1125	-252	210	3803	2350
	2079	949	-304	174	3201	1857
4037	2050	938	-182	172	3159	1984
	1660	781	-310	135	2577	1392
4038	1637	822	-182	137	2597	1539
	1150	635	-344	92	1878	795
4039	1267	736	-195	107	2110	1120
	780	550	-358	62	1392	376
4040	927	662	-233	79	1667	702
	440	481	-398	34	954	-44
4041	490	566	-308	43	1098	133
	3	393	-474	-2	393	-477
4042	43	484	-406	6	533	-400
	-443	315	-578	-39	-73	-1061
4043	-397	416	-520	-30	114	-947
	-884	252	-699	-75	-631	-1658
4044	-795	371	-632	-63	-376	-1489
	-1282	211	-814	-108	-1116	-2204
4045	-1172	342	-737	-94	-821	-2003
	-1659	185	-922	-139	-1558	-2720
4046	-1619	306	-881	-132	-1353	-2632
	-2009	182	-1036	-168	-1941	-3213
4047	-2043	308	-1060	-171	-1814	-3274
	-2433	231	-1236	-207	-2340	-3876
4048	2441	1118	-251	208	3767	2323
	2052	942	-302	172	3166	1831

4049	2061	943	-179	172	3177	2001
	1672	788	-305	136	2596	1412
4050	1692	839	-182	142	2673	1598
	1205	654	-340	97	1956	860
4051	1294	740	-204	109	2143	1138
	807	558	-366	64	1429	396
4052	909	650	-245	78	1637	668
	422	473	-409	32	927	-78
4053	481	557	-309	42	1080	121
	-6	384	-477	-3	381	-486
4054	42	475	-402	6	524	-396
	-445	306	-576	-39	-86	-1060
4055	-384	412	-511	-29	122	-924
	-871	245	-691	-74	-626	-1636
4056	-765	367	-616	-60	-348	-1441
	-1252	205	-800	-106	-1091	-2157
4057	-1143	343	-721	-91	-788	-1955
	-1629	184	-906	-137	-1528	-2672
4058	-1611	309	-871	-131	-1340	-2613
	-2000	182	-1026	-167	-1931	-3194
4059	-2027	302	-1047	-170	-1805	-3244
	-2417	225	-1224	-206	-2330	-3846
4060	2317	1092	-253	198	3608	2186
	1928	918	-302	162	3007	1697
4061	1934	920	-182	162	3016	1860
	1545	765	-307	126	2435	1271
4062	1579	815	-188	133	2526	1468
	1092	630	-348	87	1810	728
4063	1153	704	-214	98	1955	972
	666	522	-381	52	1240	223
4064	765	616	-246	66	1446	511
	278	434	-417	20	733	-243
4065	374	534	-297	33	942	22
	-113	355	-468	-12	337	-593
4066	-44	456	-386	-1	455	-431
	-531	282	-561	-46	-210	-1138
4067	-460	388	-500	-35	10	-995
	-946	219	-682	-81	-742	-1709
4068	-819	346	-602	-65	-433	-1486
	-1305	182	-789	-110	-1180	-2204
4069	-1219	322	-706	-98	-898	-2023
	-1706	161	-892	-143	-1640	-2741
4070	-1726	286	-863	-141	-1494	-2729
	-2115	158	-1018	-177	-2087	-3311
4071	-2125	281	-1039	-178	-1938	-3342
	-2515	203	-1217	-214	-2465	-3946
4072	2726	1116	-160	232	4073	2750
	2239	906	-255	186	3332	2094
4073	2212	905	-97	185	3302	2271
	1725	716	-252	140	2581	1538
4074	1770	786	-102	148	2704	1785
	1283	601	-261	103	1987	1046
4075	1461	714	-111	123	2298	1439
	974	530	-272	78	1582	697
4076	1121	633	-151	95	1849	1020
	634	455	-313	50	1139	277
4077	681	534	-231	59	1274	440
	194	363	-394	13	570	-305
4078	204	444	-341	19	668	-219
	-282	277	-510	-26	52	-818

4079	-315	380	-488	-23	155	-827
	-802	216	-665	-69	-591	-1536
4080	-742	341	-614	-58	-357	-1414
	-1229	177	-800	-103	-1103	-2133
4081	-1019	296	-671	-81	-716	-1771
	-1657	92	-961	-141	-1678	-2758

Member Girder No.	Dead load	Live load (Max.)	(Min.)	Snow load	Sum total (Max.)	(Min.)
C- 1 1001001	20	479	-538	6	505	-532
	20	479	-538	6	505	-532
1002001	0	149	-176	0	149	-176
	0	149	-176	0	149	-176
1003001	-20	456	-564	-6	450	-590
	-20	456	-564	-6	450	-590
C- 2 1001002	-53	113	-155	-8	86	-216
	-53	113	-155	-8	86	-216
1002002	0	81	-81	0	81	-81
	0	81	-81	0	81	-81
1003002	53	155	-113	8	216	-86
	53	155	-113	8	216	-86
C- 3 1001003	-24	128	-166	-7	121	-198
	-24	128	-166	-7	121	-198
1002003	0	116	-123	0	116	-123
	0	116	-123	0	116	-123
1003003	24	166	-129	7	198	-122
	24	166	-129	7	198	-122
C- 4 1001004	-60	125	-177	-10	92	-247
	-60	125	-177	-10	92	-247
1002004	0	144	-156	0	144	-156
	0	144	-156	0	144	-156
1003004	60	177	-127	10	247	-95
	60	177	-127	10	247	-95
C- 5 1001005	-71	131	-186	-11	88	-268
	-71	131	-186	-11	88	-268
1002005	0	164	-179	0	164	-179
	0	164	-179	0	164	-179
1003005	71	186	-134	11	268	-92
	71	186	-134	11	268	-92
C- 6 1001006	-116	129	-202	-15	38	-332
	-116	129	-202	-15	38	-332
1002006	0	172	-187	0	172	-187
	0	172	-187	0	172	-187
1003006	116	202	-131	15	332	-40
	116	202	-131	15	332	-40
C- 7 1001007	12	156	-180	-4	164	-184
	12	156	-180	-4	164	-184
1002007	0	162	-175	0	162	-175
	0	162	-175	0	162	-175
1003007	-12	180	-163	4	184	-170
	-12	180	-163	4	184	-170
C- 8 1001008	-40	152	-191	-8	144	-240

		-40	152	-191	-8	144	-240
	1002008	0	155	-166	0	155	-166
		0	155	-166	0	155	-166
	1003008	40	191	-156	8	240	-148
		40	191	-156	8	240	-148
C- 9	1001009	-170	116	-206	-19	-38	-395
		-170	116	-206	-19	-38	-395
	1002009	0	157	-167	0	157	-167
		0	157	-167	0	157	-167
	1003009	170	206	-116	19	395	38
		170	206	-116	19	395	38
C-10	1001010	-85	141	-209	-12	87	-305
		-85	141	-209	-12	87	-305
	1002010	0	183	-195	0	183	-195
		0	183	-195	0	183	-195
	1003010	85	209	-143	12	305	-89
		85	209	-143	12	305	-89
C-11	1001011	45	218	-235	3	266	-233
		45	218	-235	3	266	-233
	1002011	0	206	-218	0	206	-218
		0	206	-218	0	206	-218
	1003011	-45	235	-229	-3	233	-276
		-45	235	-229	-3	233	-276
C-12	1001012	72	318	-321	12	402	-309
		72	318	-321	12	402	-309
	1002012	0	171	-184	0	171	-184
		0	171	-184	0	171	-184
	1003012	-72	293	-342	-12	282	-426
		-72	293	-342	-12	282	-426
C-13	1001013	-8	197	-216	0	196	-224
		-8	197	-216	0	196	-224
	1002013	0	177	-186	0	177	-186
		0	177	-186	0	177	-186
	1003013	8	216	-207	0	224	-207
		8	216	-207	0	224	-207
C-14	1001014	-64	150	-197	-9	121	-270
		-64	150	-197	-9	121	-270
	1002014	0	190	-204	0	190	-204
		0	190	-204	0	190	-204
	1003014	64	197	-154	9	270	-127
		64	197	-154	9	270	-127
C-15	1001015	-54	132	-187	-10	109	-250
		-54	132	-187	-10	109	-250
	1002015	0	160	-168	0	160	-168
		0	160	-168	0	160	-168
	1003015	54	187	-133	10	250	-110
		54	187	-133	10	250	-110
C-16	1001016	-82	125	-195	-12	69	-289
		-82	125	-195	-12	69	-289
	1002016	0	157	-167	0	157	-167
		0	157	-167	0	157	-167
	1003016	82	195	-125	12	289	-69

		82	195	-125	12	289	-69
C-17	1001017	-116	125	-206	-15	32	-336
		-116	125	-206	-15	32	-336
	1002017	0	162	-174	0	162	-174
		0	162	-174	0	162	-174
	1003017	116	206	-125	15	336	-32
		116	206	-125	15	336	-32
C-18	1001018	-93	133	-201	-13	68	-306
		-93	133	-201	-13	68	-306
	1002018	0	164	-176	0	164	-176
		0	164	-176	0	164	-176
	1003018	93	201	-135	13	306	-70
		93	201	-135	13	306	-70
C-19	1001019	-53	143	-191	-10	123	-254
		-53	143	-191	-10	123	-254
	1002019	0	162	-174	0	162	-174
		0	162	-174	0	162	-174
	1003019	53	191	-146	10	254	-127
		53	191	-146	10	254	-127
C-20	1001020	-65	141	-192	-11	107	-268
		-65	141	-192	-11	107	-268
	1002020	0	161	-171	0	161	-171
		0	161	-171	0	161	-171
	1003020	65	192	-143	11	268	-110
		65	192	-143	11	268	-110
C-21	1001021	-100	135	-202	-13	61	-316
		-100	135	-202	-13	61	-316
	1002021	0	173	-185	0	173	-185
		0	173	-185	0	173	-185
	1003021	100	202	-136	13	316	-63
		100	202	-136	13	316	-63
C-22	1001022	-64	139	-194	-9	107	-268
		-64	139	-194	-9	107	-268
	1002022	0	175	-182	0	175	-182
		0	175	-182	0	175	-182
	1003022	64	194	-139	9	268	-107
		64	194	-139	9	268	-107
C-23	1001023	5	195	-212	1	200	-212
		5	195	-212	1	200	-212
	1002023	0	170	-173	0	170	-173
		0	170	-173	0	170	-173
	1003023	-5	212	-203	-1	212	-208
		-5	212	-203	-1	212	-208
C-24	1001024	60	289	-292	10	359	-282
		60	289	-292	10	359	-282
	1002024	0	142	-153	0	142	-153
		0	142	-153	0	142	-153
	1003024	-60	267	-310	-10	256	-381
		-60	267	-310	-10	256	-381
C-25	1001025	19	195	-211	2	216	-209
		19	195	-211	2	216	-209

	1002025	0	166	-171	0	166	-171
		0	166	-171	0	166	-171
	1003025	-19	211	-204	-2	209	-225
		-19	211	-204	-2	209	-225
C-26	1001026	38	160	-189	-1	197	-190
		38	160	-189	-1	197	-190
	1002026	0	172	-180	0	172	-180
		0	172	-180	0	172	-180
	1003026	-38	189	-165	1	190	-202
		-38	189	-165	1	190	-202
C-27	1001027	-93	131	-217	-13	65	-323
		-93	131	-217	-13	65	-323
	1002027	0	165	-174	0	165	-174
		0	165	-174	0	165	-174
	1003027	93	217	-133	13	323	-67
		93	217	-133	13	323	-67
C-28	1001028	-200	112	-235	-22	-76	-457
		-200	112	-235	-22	-76	-457
	1002028	0	163	-175	0	163	-175
		0	163	-175	0	163	-175
	1003028	200	235	-112	22	457	76
		200	235	-112	22	457	76
C-29	1001029	-101	137	-210	-13	64	-324
		-101	137	-210	-13	64	-324
	1002029	0	165	-177	0	165	-177
		0	165	-177	0	165	-177
	1003029	101	210	-141	13	324	-69
		101	210	-141	13	324	-69
C-30	1001030	-70	140	-201	-11	101	-283
		-70	140	-201	-11	101	-283
	1002030	0	164	-176	0	164	-176
		0	164	-176	0	164	-176
	1003030	70	201	-144	11	283	-106
		70	201	-144	11	283	-106
C-31	1001031	-58	139	-192	-10	113	-260
		-58	139	-192	-10	113	-260
	1002031	0	163	-175	0	163	-175
		0	163	-175	0	163	-175
	1003031	58	192	-143	10	260	-118
		58	192	-143	10	260	-118
C-32	1001032	-58	143	-193	-10	118	-261
		-58	143	-193	-10	118	-261
	1002032	0	163	-174	0	163	-174
		0	163	-174	0	163	-174
	1003032	58	193	-146	10	261	-122
		58	193	-146	10	261	-122
C-33	1001033	-84	132	-197	-12	76	-294
		-84	132	-197	-12	76	-294
	1002033	0	168	-179	0	168	-179
		0	168	-179	0	168	-179
	1003033	84	197	-134	12	294	-78
		84	197	-134	12	294	-78

C-34	1001034	-25	143	-185	-6	137	-216
		-25	143	-185	-6	137	-216
	1002034	0	170	-176	0	170	-176
		0	170	-176	0	170	-176
	1003034	25	185	-144	6	216	-138
		25	185	-144	6	216	-138
C-35	1001035	-1	191	-209	0	191	-210
		-1	191	-209	0	191	-210
	1002035	0	159	-164	0	159	-164
		0	159	-164	0	159	-164
	1003035	1	209	-199	0	210	-199
		1	209	-199	0	210	-199
C-36	1001036	46	284	-289	9	339	-280
		46	284	-289	9	339	-280
	1002036	0	125	-134	0	125	-134
		0	125	-134	0	125	-134
	1003036	-46	265	-305	-9	256	-360
		-46	265	-305	-9	256	-360
C-37	1001037	29	196	-208	3	227	-205
		29	196	-208	3	227	-205
	1002037	0	159	-163	0	159	-163
		0	159	-163	0	159	-163
	1003037	-29	208	-205	-3	205	-237
		-29	208	-205	-3	205	-237
C-38	1001038	23	153	-186	-2	174	-188
		23	153	-186	-2	174	-188
	1002038	0	170	-176	0	170	-176
		0	170	-176	0	170	-176
	1003038	-23	186	-155	2	188	-176
		-23	186	-155	2	188	-176
C-39	1001039	-116	132	-221	-15	40	-352
		-116	132	-221	-15	40	-352
	1002039	0	171	-182	0	171	-182
		0	171	-182	0	171	-182
	1003039	116	221	-133	15	352	-42
		116	221	-133	15	352	-42
C-40	1001040	-147	126	-213	-17	0	-377
		-147	126	-213	-17	0	-377
	1002040	0	165	-176	0	165	-176
		0	165	-176	0	165	-176
	1003040	147	213	-126	17	377	0
		147	213	-126	17	377	0
C-41	1001041	-50	154	-197	-9	141	-256
		-50	154	-197	-9	141	-256
	1002041	0	163	-175	0	163	-175
		0	163	-175	0	163	-175
	1003041	50	197	-159	9	256	-148
		50	197	-159	9	256	-148
C-42	1001042	-41	146	-188	-8	138	-238
		-41	146	-188	-8	138	-238
	1002042	0	163	-174	0	163	-174

		0	163	-174	0	163	-174
	1003042	41	188	-150	8	238	-142
		41	188	-150	8	238	-142
C-43	1001043	-47	146	-189	-9	134	-245
		-47	146	-189	-9	134	-245
	1002043	0	163	-174	0	163	-174
		0	163	-174	0	163	-174
	1003043	47	189	-149	9	245	-138
		47	189	-149	9	245	-138
C-44	1001044	-89	136	-196	-13	74	-298
		-89	136	-196	-13	74	-298
	1002044	0	163	-174	0	163	-174
		0	163	-174	0	163	-174
	1003044	89	196	-137	13	298	-76
		89	196	-137	13	298	-76
C-45	1001045	-109	130	-204	-14	46	-327
		-109	130	-204	-14	46	-327
	1002045	0	168	-179	0	168	-179
		0	168	-179	0	168	-179
	1003045	109	204	-131	14	327	-47
		109	204	-131	14	327	-47
C-46	1001046	-40	140	-186	-7	133	-233
		-40	140	-186	-7	133	-233
	1002046	0	170	-176	0	170	-176
		0	170	-176	0	170	-176
	1003046	40	186	-140	7	233	-133
		40	186	-140	7	233	-133
C-47	1001047	34	197	-207	3	235	-204
		34	197	-207	3	235	-204
	1002047	0	159	-164	0	159	-164
		0	159	-164	0	159	-164
	1003047	-34	207	-206	-3	204	-244
		-34	207	-206	-3	204	-244
C-48	1001048	60	289	-291	10	359	-281
		60	289	-291	10	359	-281
	1002048	0	126	-135	0	126	-135
		0	126	-135	0	126	-135
	1003048	-60	267	-310	-10	256	-380
		-60	267	-310	-10	256	-380
C-49	1001049	-10	191	-211	-1	190	-222
		-10	191	-211	-1	190	-222
	1002049	0	160	-165	0	160	-165
		0	160	-165	0	160	-165
	1003049	10	211	-199	1	222	-198
		10	211	-199	1	222	-198
C-50	1001050	-20	145	-185	-6	139	-212
		-20	145	-185	-6	139	-212
	1002050	0	170	-177	0	170	-177
		0	170	-177	0	170	-177
	1003050	20	185	-146	6	212	-140
		20	185	-146	6	212	-140

C-51	1001051	-89	133	-201	-13	71	-302
		-89	133	-201	-13	71	-302
	1002051	0	168	-178	0	168	-178
		0	168	-178	0	168	-178
	1003051	89	201	-134	13	302	-72
89		201	-134	13	302	-72	
C-52	1001052	-102	130	-197	-14	54	-312
		-102	130	-197	-14	54	-312
	1002052	0	162	-173	0	162	-173
		0	162	-173	0	162	-173
	1003052	102	197	-131	14	312	-55
102		197	-131	14	312	-55	
C-53	1001053	-59	140	-190	-10	114	-258
		-59	140	-190	-10	114	-258
	1002053	0	162	-173	0	162	-173
		0	162	-173	0	162	-173
	1003053	59	190	-143	10	258	-117
59		190	-143	10	258	-117	
C-54	1001054	-48	144	-190	-9	130	-247
		-48	144	-190	-9	130	-247
	1002054	0	167	-179	0	167	-179
		0	167	-179	0	167	-179
	1003054	48	190	-148	9	247	-135
48		190	-148	9	247	-135	
C-55	1001055	-61	144	-195	-10	116	-266
		-61	144	-195	-10	116	-266
	1002055	0	168	-180	0	168	-180
		0	168	-180	0	168	-180
	1003055	61	195	-147	10	266	-121
61		195	-147	10	266	-121	
C-56	1001056	-106	132	-200	-14	51	-320
		-106	132	-200	-14	51	-320
	1002056	0	166	-177	0	166	-177
		0	166	-177	0	166	-177
	1003056	106	200	-132	14	320	-52
106		200	-132	14	320	-52	
C-57	1001057	-109	129	-206	-14	44	-330
		-109	129	-206	-14	44	-330
	1002057	0	168	-178	0	168	-178
		0	168	-178	0	168	-178
	1003057	109	206	-130	14	330	-46
109		206	-130	14	330	-46	
C-58	1001058	-19	144	-186	-6	139	-210
		-19	144	-186	-6	139	-210
	1002058	0	168	-174	0	168	-174
		0	168	-174	0	168	-174
	1003058	19	186	-146	6	210	-140
19		186	-146	6	210	-140	
C-59	1001059	27	195	-207	2	224	-204
		27	195	-207	2	224	-204
	1002059	0	158	-161	0	158	-161
		0	158	-161	0	158	-161

	1003059	-27	207	-203	-2	204	-232
		-27	207	-203	-2	204	-232
C-60	1001060	59	283	-286	10	352	-276
		59	283	-286	10	352	-276
	1002060	0	123	-132	0	123	-132
		0	123	-132	0	123	-132
	1003060	-59	261	-305	-10	251	-374
		-59	261	-305	-10	251	-374
C-61	1001061	-7	189	-208	0	189	-215
		-7	189	-208	0	189	-215
	1002061	0	158	-161	0	158	-161
		0	158	-161	0	158	-161
	1003061	7	208	-196	0	215	-196
		7	208	-196	0	215	-196
C-62	1001062	-34	142	-184	-7	135	-225
		-34	142	-184	-7	135	-225
	1002062	0	168	-174	0	168	-174
		0	168	-174	0	168	-174
	1003062	34	184	-143	7	225	-136
		34	184	-143	7	225	-136
C-63	1001063	-61	137	-193	-10	108	-264
		-61	137	-193	-10	108	-264
	1002063	0	167	-176	0	167	-176
		0	167	-176	0	167	-176
	1003063	61	193	-139	10	264	-109
		61	193	-139	10	264	-109
C-64	1001064	-99	131	-203	-13	57	-316
		-99	131	-203	-13	57	-316
	1002064	0	170	-180	0	170	-180
		0	170	-180	0	170	-180
	1003064	99	203	-131	13	316	-58
		99	203	-131	13	316	-58
C-65	1001065	-96	135	-205	-13	67	-314
		-96	135	-205	-13	67	-314
	1002065	0	175	-188	0	175	-188
		0	175	-188	0	175	-188
	1003065	96	205	-136	13	314	-68
		96	205	-136	13	314	-68
C-66	1001066	-69	141	-198	-11	104	-278
		-69	141	-198	-11	104	-278
	1002066	0	172	-184	0	172	-184
		0	172	-184	0	172	-184
	1003066	69	198	-144	11	278	-107
		69	198	-144	11	278	-107
C-67	1001067	-71	142	-195	-11	103	-277
		-71	142	-195	-11	103	-277
	1002067	0	162	-173	0	162	-173
		0	162	-173	0	162	-173
	1003067	71	195	-146	11	277	-108
		71	195	-146	11	277	-108
C-68	1001068	-128	123	-202	-16	17	-346

		-128	123	-202	-16	17	-346
	1002068	0	160	-170	0	160	-170
		0	160	-170	0	160	-170
	1003068	128	202	-124	16	346	-17
		128	202	-124	16	346	-17
C-69	1001069	-86	126	-206	-12	66	-304
		-86	126	-206	-12	66	-304
	1002069	0	165	-174	0	165	-174
		0	165	-174	0	165	-174
	1003069	86	206	-128	12	304	-67
		86	206	-128	12	304	-67
C-70	1001070	20	152	-186	-2	169	-188
		20	152	-186	-2	169	-188
	1002070	0	174	-184	0	174	-184
		0	174	-184	0	174	-184
	1003070	-20	186	-156	2	188	-174
		-20	186	-156	2	188	-174
C-71	1001071	10	192	-208	1	203	-206
		10	192	-208	1	203	-206
	1002071	0	164	-170	0	164	-170
		0	164	-170	0	164	-170
	1003071	-10	208	-201	-1	206	-212
		-10	208	-201	-1	206	-212
C-72	1001072	56	300	-305	10	367	-294
		56	300	-305	10	367	-294
	1002072	0	148	-160	0	148	-160
		0	148	-160	0	148	-160
	1003072	-56	278	-324	-10	267	-390
		-56	278	-324	-10	267	-390
C-73	1001073	27	210	-231	1	239	-229
		27	210	-231	1	239	-229
	1002073	0	190	-198	0	190	-198
		0	190	-198	0	190	-198
	1003073	-27	231	-220	-1	229	-249
		-27	231	-220	-1	229	-249
C-74	1001074	-45	147	-206	-9	138	-260
		-45	147	-206	-9	138	-260
	1002074	0	182	-192	0	182	-192
		0	182	-192	0	182	-192
	1003074	45	206	-150	9	260	-142
		45	206	-150	9	260	-142
C-75	1001075	-178	118	-224	-20	-44	-422
		-178	118	-224	-20	-44	-422
	1002075	0	163	-174	0	163	-174
		0	163	-174	0	163	-174
	1003075	178	224	-118	20	422	44
		178	224	-118	20	422	44
C-76	1001076	-147	126	-208	-17	-1	-373
		-147	126	-208	-17	-1	-373
	1002076	0	161	-172	0	161	-172
		0	161	-172	0	161	-172
	1003076	147	208	-127	17	373	-1

		147	208	-127	17	373	-1
C-77	1001077	-47	151	-194	-9	141	-250
		-47	151	-194	-9	141	-250
	1002077	0	163	-175	0	163	-175
		0	163	-175	0	163	-175
	1003077	47	194	-156	9	250	-147
		47	194	-156	9	250	-147
C-78	1001078	-10	154	-184	-6	148	-201
		-10	154	-184	-6	148	-201
	1002078	0	164	-177	0	164	-177
		0	164	-177	0	164	-177
	1003078	10	184	-160	6	201	-154
		10	184	-160	6	201	-154
C-79	1001079	33	163	-176	-2	193	-179
		33	163	-176	-2	193	-179
	1002079	0	165	-178	0	165	-178
		0	165	-178	0	165	-178
	1003079	-33	176	-170	2	179	-200
		-33	176	-170	2	179	-200
C-80	1001080	-60	140	-190	-10	112	-260
		-60	140	-190	-10	112	-260
	1002080	0	156	-167	0	156	-167
		0	156	-167	0	156	-167
	1003080	60	190	-145	10	260	-118
		60	190	-145	10	260	-118
C-81	1001081	-210	98	-220	-22	-105	-452
		-210	98	-220	-22	-105	-452
	1002081	0	128	-128	0	128	-128
		0	128	-128	0	128	-128
	1003081	210	220	-98	22	452	105
		210	220	-98	22	452	105
C-82	1001082	97	483	-519	12	592	-507
		97	483	-519	12	592	-507
	1002082	0	229	-272	0	229	-272
		0	229	-272	0	229	-272
	1003082	-97	438	-574	-12	426	-683
		-97	438	-574	-12	426	-683

(3) Torsion moment T (kN·m)

Girder No.	Member	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-1	1001	-53	1023	-1269	-16	1007	-1338
		-53	1023	-1269	-16	1007	-1338
	1002	179	1026	-1189	7	1212	-1182
		179	1026	-1189	7	1212	-1182
	1003	208	874	-980	13	1095	-967
		208	874	-980	13	1095	-967
	1004	326	757	-750	25	1109	-623
		326	757	-750	25	1109	-623
	1005	189	658	-627	15	862	-610
		189	658	-627	15	862	-610
	1006	-175	590	-738	-14	576	-927
		-175	590	-738	-14	576	-927
	1007	-199	652	-818	-15	634	-1032
		-199	652	-818	-15	634	-1032
	1008	-170	760	-931	-11	749	-1112
		-170	760	-931	-11	749	-1112
	1009	80	913	-997	12	1006	-985
		80	913	-997	12	1006	-985
	1010	174	1099	-1177	24	1296	-1153
		174	1099	-1177	24	1296	-1153
	1011	48	1301	-1472	11	1360	-1460
		48	1301	-1472	11	1360	-1460
	1012	-121	1265	-1540	-16	1249	-1678
		-121	1265	-1540	-16	1249	-1678
	1013	-149	1093	-1373	-22	1070	-1544
		-149	1093	-1373	-22	1070	-1544
	1014	-95	893	-1133	-15	878	-1243
		-95	893	-1133	-15	878	-1243
1015	-93	772	-981	-12	760	-1086	
	-93	772	-981	-12	760	-1086	
1016	-63	695	-828	-7	688	-899	
	-63	695	-828	-7	688	-899	
1017	17	662	-703	1	680	-702	
	17	662	-703	1	680	-702	
1018	53	668	-684	5	726	-679	
	53	668	-684	5	726	-679	
1019	23	714	-756	4	741	-752	
	23	714	-756	4	741	-752	
1020	26	819	-888	6	851	-882	
	26	819	-888	6	851	-882	
1021	114	966	-1035	16	1096	-1019	
	114	966	-1035	16	1096	-1019	
1022	163	1161	-1249	23	1347	-1226	
	163	1161	-1249	23	1347	-1226	
1023	109	1267	-1414	15	1391	-1398	
	109	1267	-1414	15	1391	-1398	
1024	-37	1245	-1486	-9	1236	-1532	
	-37	1245	-1486	-9	1236	-1532	
1025	-105	1106	-1379	-18	1088	-1503	
	-105	1106	-1379	-18	1088	-1503	
1026	-242	893	-1196	-27	866	-1464	
	-242	893	-1196	-27	866	-1464	
1027	-180	782	-1007	-18	763	-1206	
	-180	782	-1007	-18	763	-1206	

1028	46	747	-809	2	795	-807
	46	747	-809	2	795	-807
1029	76	686	-704	6	768	-698
	76	686	-704	6	768	-698
1030	64	680	-704	6	750	-698
	64	680	-704	6	750	-698
1031	48	740	-781	6	794	-775
	48	740	-781	6	794	-775
1032	49	848	-917	8	905	-910
	49	848	-917	8	905	-910
1033	123	1012	-1084	17	1152	-1066
	123	1012	-1084	17	1152	-1066
1034	115	1224	-1340	19	1358	-1320
	115	1224	-1340	19	1358	-1320
1035	83	1365	-1539	13	1461	-1526
	83	1365	-1539	13	1461	-1526
1036	-31	1339	-1598	-9	1330	-1639
	-31	1339	-1598	-9	1330	-1639
1037	-116	1162	-1453	-20	1142	-1589
	-116	1162	-1453	-20	1142	-1589
1038	-216	928	-1220	-25	903	-1461
	-216	928	-1220	-25	903	-1461
1039	-93	824	-999	-11	813	-1102
	-93	824	-999	-11	813	-1102
1040	66	759	-818	4	829	-814
	66	759	-818	4	829	-814
1041	37	686	-732	3	725	-730
	37	686	-732	3	725	-730
1042	-1	676	-738	0	676	-739
	-1	676	-738	0	676	-739
1043	-27	730	-808	0	729	-835
	-27	730	-808	0	729	-835
1044	32	852	-929	6	890	-922
	32	852	-929	6	890	-922
1045	146	1023	-1088	19	1187	-1069
	146	1023	-1088	19	1187	-1069
1046	159	1238	-1337	23	1420	-1314
	159	1238	-1337	23	1420	-1314
1047	54	1367	-1552	11	1432	-1541
	54	1367	-1552	11	1432	-1541
1048	-94	1335	-1615	-14	1321	-1723
	-94	1335	-1615	-14	1321	-1723
1049	-115	1162	-1447	-19	1142	-1581
	-115	1162	-1447	-19	1142	-1581
1050	-139	935	-1193	-18	916	-1350
	-139	935	-1193	-18	916	-1350
1051	-64	805	-983	-9	796	-1056
	-64	805	-983	-9	796	-1056
1052	17	727	-822	0	743	-823
	17	727	-822	0	743	-823
1053	9	668	-727	0	677	-727
	9	668	-727	0	677	-727
1054	-19	660	-731	-1	659	-751
	-19	660	-731	-1	659	-751
1055	-25	719	-796	0	719	-822
	-25	719	-796	0	719	-822
1056	58	850	-918	8	916	-909
	58	850	-918	8	916	-909
1057	168	1028	-1083	21	1217	-1062
	168	1028	-1083	21	1217	-1062

1058	142	1239	-1346	22	1402	-1324
	142	1239	-1346	22	1402	-1324
1059	52	1340	-1522	11	1403	-1512
	52	1340	-1522	11	1403	-1512
1060	-93	1295	-1568	-14	1281	-1675
	-93	1295	-1568	-14	1281	-1675
1061	-120	1140	-1423	-20	1120	-1562
	-120	1140	-1423	-20	1120	-1562
1062	-118	918	-1166	-17	901	-1300
	-118	918	-1166	-17	901	-1300
1063	-99	758	-960	-12	746	-1071
	-99	758	-960	-12	746	-1071
1064	-34	681	-790	-4	676	-829
	-34	681	-790	-4	676	-829
1065	10	651	-695	0	662	-694
	10	651	-695	0	662	-694
1066	2	662	-712	1	664	-711
	2	662	-712	1	664	-711
1067	-1	723	-801	2	725	-800
	-1	723	-801	2	725	-800
1068	118	862	-920	13	993	-906
	118	862	-920	13	993	-906
1069	188	1014	-1057	23	1224	-1035
	188	1014	-1057	23	1224	-1035
1070	94	1202	-1314	18	1314	-1297
	94	1202	-1314	18	1314	-1297
1071	45	1290	-1469	10	1346	-1459
	45	1290	-1469	10	1346	-1459
1072	-92	1221	-1492	-15	1206	-1599
	-92	1221	-1492	-15	1206	-1599
1073	-195	994	-1298	-25	969	-1518
	-195	994	-1298	-25	969	-1518
1074	-205	782	-1041	-22	759	-1269
	-205	782	-1041	-22	759	-1269
1075	2	731	-827	-3	730	-829
	2	731	-827	-3	730	-829
1076	145	668	-668	11	824	-657
	145	668	-668	11	824	-657
1077	117	618	-624	10	745	-614
	117	618	-624	10	745	-614
1078	46	635	-666	5	686	-661
	46	635	-666	5	686	-661
1079	-102	765	-873	-5	760	-981
	-102	765	-873	-5	760	-981
1080	-81	953	-1099	0	952	-1181
	-81	953	-1099	0	952	-1181
1081	237	1097	-1169	30	1364	-1139
	237	1097	-1169	30	1364	-1139

Member Girder No.	Dead load	Live load		Snow load	Sum total		
		(Max.)	(Min.)		(Max.)	(Min.)	
G-2	2001	-30	1485	-1803	-11	1474	-1845
		-30	1485	-1803	-11	1474	-1845
2002	2002	216	1523	-1744	12	1751	-1731
		216	1523	-1744	12	1751	-1731
2003	2003	252	1273	-1431	18	1543	-1413
		252	1273	-1431	18	1543	-1413
2004	2004	372	1085	-1092	30	1487	-1018
		372	1085	-1092	30	1487	-1018

2005	229	989	-989	19	1237	-971
	229	989	-989	19	1237	-971
2006	-142	929	-1116	-12	918	-1269
	-142	929	-1116	-12	918	-1269
2007	-151	993	-1200	-12	982	-1363
	-151	993	-1200	-12	982	-1363
2008	-133	1113	-1349	-9	1104	-1491
	-133	1113	-1349	-9	1104	-1491
2009	76	1361	-1545	11	1448	-1534
	76	1361	-1545	11	1448	-1534
2010	160	1854	-2088	21	2036	-2066
	160	1854	-2088	21	2036	-2066
2011	44	2437	-2825	11	2492	-2814
	44	2437	-2825	11	2492	-2814
2012	-117	2426	-2902	-16	2410	-3035
	-117	2426	-2902	-16	2410	-3035
2013	-137	2025	-2450	-21	2005	-2607
	-137	2025	-2450	-21	2005	-2607
2014	-74	1425	-1729	-12	1413	-1815
	-74	1425	-1729	-12	1413	-1815
2015	-72	1203	-1474	-9	1194	-1555
	-72	1203	-1474	-9	1194	-1555
2016	-49	1062	-1223	-5	1056	-1277
	-49	1062	-1223	-5	1056	-1277
2017	15	985	-1069	1	1001	-1068
	15	985	-1069	1	1001	-1068
2018	43	984	-1051	4	1030	-1047
	43	984	-1051	4	1030	-1047
2019	14	1038	-1143	2	1055	-1141
	14	1038	-1143	2	1055	-1141
2020	15	1191	-1349	4	1210	-1346
	15	1191	-1349	4	1210	-1346
2021	94	1509	-1709	13	1616	-1696
	94	1509	-1709	13	1616	-1696
2022	144	1924	-2168	20	2088	-2148
	144	1924	-2168	20	2088	-2148
2023	98	2144	-2461	14	2256	-2447
	98	2144	-2461	14	2256	-2447
2024	-30	2125	-2516	-8	2117	-2554
	-30	2125	-2516	-8	2117	-2554
2025	-82	1858	-2229	-15	1842	-2326
	-82	1858	-2229	-15	1842	-2326
2026	-196	1437	-1802	-22	1416	-2020
	-196	1437	-1802	-22	1416	-2020
2027	-147	1240	-1530	-15	1225	-1693
	-147	1240	-1530	-15	1225	-1693
2028	45	1131	-1233	3	1178	-1230
	45	1131	-1233	3	1178	-1230
2029	60	1039	-1111	5	1104	-1106
	60	1039	-1111	5	1104	-1106
2030	48	1029	-1109	4	1081	-1105
	48	1029	-1109	4	1081	-1105
2031	32	1083	-1192	4	1119	-1188
	32	1083	-1192	4	1119	-1188
2032	31	1226	-1389	5	1261	-1384
	31	1226	-1389	5	1261	-1384
2033	96	1459	-1648	13	1568	-1634
	96	1459	-1648	13	1568	-1634
2034	89	1801	-2047	15	1906	-2032
	89	1801	-2047	15	1906	-2032

2035	68	2049	-2361	11	2128	-2350
	68	2049	-2361	11	2128	-2350
2036	-24	2030	-2401	-7	2022	-2432
	-24	2030	-2401	-7	2022	-2432
2037	-88	1769	-2130	-15	1754	-2233
	-88	1769	-2130	-15	1754	-2233
2038	-174	1413	-1751	-20	1393	-1944
	-174	1413	-1751	-20	1393	-1944
2039	-70	1200	-1437	-8	1192	-1515
	-70	1200	-1437	-8	1192	-1515
2040	59	1092	-1183	4	1155	-1179
	59	1092	-1183	4	1155	-1179
2041	29	1012	-1102	2	1043	-1100
	29	1012	-1102	2	1043	-1100
2042	-3	1001	-1105	0	1001	-1108
	-3	1001	-1105	0	1001	-1108
2043	-26	1054	-1192	-1	1053	-1219
	-26	1054	-1192	-1	1053	-1219
2044	20	1217	-1386	4	1240	-1382
	20	1217	-1386	4	1240	-1382
2045	114	1458	-1642	15	1587	-1628
	114	1458	-1642	15	1587	-1628
2046	129	1800	-2029	19	1947	-2011
	129	1800	-2029	19	1947	-2011
2047	43	2031	-2348	9	2083	-2339
	43	2031	-2348	9	2083	-2339
2048	-78	1996	-2381	-12	1984	-2470
	-78	1996	-2381	-12	1984	-2470
2049	-87	1736	-2087	-15	1720	-2188
	-87	1736	-2087	-15	1720	-2188
2050	-107	1395	-1701	-14	1381	-1822
	-107	1395	-1701	-14	1381	-1822
2051	-46	1195	-1432	-6	1188	-1484
	-46	1195	-1432	-6	1188	-1484
2052	19	1088	-1209	0	1107	-1209
	19	1088	-1209	0	1107	-1209
2053	9	1039	-1141	0	1048	-1141
	9	1039	-1141	0	1048	-1141
2054	-17	1073	-1192	-1	1072	-1210
	-17	1073	-1192	-1	1072	-1210
2055	-26	1137	-1287	-1	1136	-1314
	-26	1137	-1287	-1	1136	-1314
2056	41	1271	-1440	6	1317	-1434
	41	1271	-1440	6	1317	-1434
2057	133	1480	-1659	16	1629	-1643
	133	1480	-1659	16	1629	-1643
2058	112	1799	-2037	17	1928	-2020
	112	1799	-2037	17	1928	-2020
2059	42	1974	-2285	9	2025	-2277
	42	1974	-2285	9	2025	-2277
2060	-77	1938	-2315	-12	1927	-2403
	-77	1938	-2315	-12	1927	-2403
2061	-93	1728	-2084	-16	1713	-2192
	-93	1728	-2084	-16	1713	-2192
2062	-89	1399	-1703	-13	1386	-1805
	-89	1399	-1703	-13	1386	-1805
2063	-79	1238	-1506	-9	1229	-1594
	-79	1238	-1506	-9	1229	-1594
2064	-26	1199	-1348	-3	1195	-1378
	-26	1199	-1348	-3	1195	-1378

2065	12	1141	-1240	1	1153	-1240
	12	1141	-1240	1	1153	-1240
2066	0	1072	-1176	0	1072	-1175
	0	1072	-1176	0	1072	-1175
2067	-9	1075	-1219	0	1075	-1228
	-9	1075	-1219	0	1075	-1228
2068	89	1250	-1408	10	1350	-1398
	89	1250	-1408	10	1350	-1398
2069	151	1498	-1664	18	1667	-1646
	151	1498	-1664	18	1667	-1646
2070	74	1940	-2205	15	2028	-2190
	74	1940	-2205	15	2028	-2190
2071	41	2188	-2535	9	2238	-2526
	41	2188	-2535	9	2238	-2526
2072	-77	2103	-2524	-13	2090	-2614
	-77	2103	-2524	-13	2090	-2614
2073	-160	1641	-2027	-21	1620	-2209
	-160	1641	-2027	-21	1620	-2209
2074	-167	1193	-1509	-18	1175	-1694
	-167	1193	-1509	-18	1175	-1694
2075	4	1071	-1216	-2	1073	-1218
	4	1071	-1216	-2	1073	-1218
2076	116	969	-1026	9	1095	-1017
	116	969	-1026	9	1095	-1017
2077	89	904	-958	7	1001	-950
	89	904	-958	7	1001	-950
2078	36	917	-991	4	957	-987
	36	917	-991	4	957	-987
2079	-88	1063	-1245	-5	1058	-1338
	-88	1063	-1245	-5	1058	-1338
2080	-76	1390	-1648	-2	1388	-1725
	-76	1390	-1648	-2	1388	-1725
2081	196	1612	-1811	25	1832	-1787
	196	1612	-1811	25	1832	-1787

Member Girder No.	Dead load	Live load		Snow load	Sum total		
		(Max.)	(Min.)		(Max.)	(Min.)	
G-3	3001	30	1531	-1756	11	1572	-1745
		30	1531	-1756	11	1572	-1745
3002		-216	1483	-1797	-12	1471	-2025
		-216	1483	-1797	-12	1471	-2025
3003		-252	1216	-1502	-18	1198	-1772
		-252	1216	-1502	-18	1198	-1772
3004		-372	946	-1232	-30	828	-1635
		-372	946	-1232	-30	828	-1635
3005		-229	889	-1114	-19	870	-1362
		-229	889	-1114	-19	870	-1362
3006		142	983	-1052	12	1136	-1041
		142	983	-1052	12	1136	-1041
3007		151	1050	-1136	12	1213	-1124
		151	1050	-1136	12	1213	-1124
3008		133	1167	-1295	9	1308	-1286
		133	1167	-1295	9	1308	-1286
3009		-76	1312	-1601	-11	1301	-1688
		-76	1312	-1601	-11	1301	-1688
3010		-160	1775	-2176	-21	1754	-2358
		-160	1775	-2176	-21	1754	-2358
3011		-45	2403	-2861	-11	2392	-2916
		-45	2403	-2861	-11	2392	-2916

3012	117	2472	-2842	16	2605	-2826
	117	2472	-2842	16	2605	-2826
3013	137	2094	-2370	21	2251	-2350
	137	2094	-2370	21	2251	-2350
3014	74	1479	-1666	12	1565	-1654
	74	1479	-1666	12	1565	-1654
3015	72	1264	-1405	9	1345	-1397
	72	1264	-1405	9	1345	-1397
3016	49	1078	-1189	5	1132	-1183
	49	1078	-1189	5	1132	-1183
3017	-15	970	-1089	-1	969	-1105
	-15	970	-1089	-1	969	-1105
3018	-43	957	-1084	-4	953	-1131
	-43	957	-1084	-4	953	-1131
3019	-14	1029	-1158	-2	1026	-1175
	-14	1029	-1158	-2	1026	-1175
3020	-15	1166	-1383	-4	1162	-1402
	-15	1166	-1383	-4	1162	-1402
3021	-94	1458	-1764	-13	1444	-1872
	-94	1458	-1764	-13	1444	-1872
3022	-144	1850	-2251	-20	1830	-2416
	-144	1850	-2251	-20	1830	-2416
3023	-98	2098	-2515	-14	2084	-2627
	-98	2098	-2515	-14	2084	-2627
3024	30	2146	-2492	8	2185	-2483
	30	2146	-2492	8	2185	-2483
3025	82	1911	-2177	15	2008	-2162
	82	1911	-2177	15	2008	-2162
3026	196	1540	-1684	22	1758	-1663
	196	1540	-1684	22	1758	-1663
3027	147	1314	-1439	15	1476	-1425
	147	1314	-1439	15	1476	-1425
3028	-45	1095	-1260	-3	1092	-1307
	-45	1095	-1260	-3	1092	-1307
3029	-60	1009	-1148	-5	1004	-1213
	-60	1009	-1148	-5	1004	-1213
3030	-48	1006	-1136	-4	1001	-1188
	-48	1006	-1136	-4	1001	-1188
3031	-32	1068	-1216	-4	1064	-1252
	-32	1068	-1216	-4	1064	-1252
3032	-31	1196	-1427	-5	1191	-1462
	-31	1196	-1427	-5	1191	-1462
3033	-96	1406	-1706	-13	1393	-1815
	-96	1406	-1706	-13	1393	-1815
3034	-89	1748	-2106	-15	1733	-2210
	-89	1748	-2106	-15	1733	-2210
3035	-68	2015	-2401	-11	2004	-2481
	-68	2015	-2401	-11	2004	-2481
3036	24	2050	-2379	7	2081	-2371
	24	2050	-2379	7	2081	-2371
3037	88	1825	-2071	15	1928	-2056
	88	1825	-2071	15	1928	-2056
3038	174	1497	-1655	20	1690	-1635
	174	1497	-1655	20	1690	-1635
3039	70	1235	-1394	8	1313	-1386
	70	1235	-1394	8	1313	-1386
3040	-59	1053	-1218	-4	1049	-1281
	-59	1053	-1218	-4	1049	-1281
3041	-29	1001	-1116	-2	999	-1147
	-29	1001	-1116	-2	999	-1147

3042	3	1002	-1101	0	1005	-1102
	3	1002	-1101	0	1005	-1102
3043	26	1069	-1184	1	1095	-1183
	26	1069	-1184	1	1095	-1183
3044	-20	1192	-1417	-4	1188	-1440
	-20	1192	-1417	-4	1188	-1440
3045	-114	1400	-1706	-15	1386	-1835
	-114	1400	-1706	-15	1386	-1835
3046	-129	1734	-2104	-19	1716	-2251
	-129	1734	-2104	-19	1716	-2251
3047	-43	2005	-2378	-9	1996	-2431
	-43	2005	-2378	-9	1996	-2431
3048	78	2033	-2337	12	2123	-2325
	78	2033	-2337	12	2123	-2325
3049	87	1788	-2031	15	1889	-2016
	87	1788	-2031	15	1889	-2016
3050	107	1453	-1636	14	1575	-1622
	107	1453	-1636	14	1575	-1622
3051	46	1229	-1389	6	1281	-1383
	46	1229	-1389	6	1281	-1383
3052	-19	1074	-1214	0	1074	-1233
	-19	1074	-1214	0	1074	-1233
3053	-9	1035	-1148	0	1035	-1156
	-9	1035	-1148	0	1035	-1156
3054	17	1080	-1182	1	1098	-1181
	17	1080	-1182	1	1098	-1181
3055	26	1154	-1279	1	1181	-1278
	26	1154	-1279	1	1181	-1278
3056	-41	1239	-1480	-6	1233	-1527
	-41	1239	-1480	-6	1233	-1527
3057	-133	1413	-1733	-16	1397	-1883
	-133	1413	-1733	-16	1397	-1883
3058	-112	1739	-2103	-17	1722	-2232
	-112	1739	-2103	-17	1722	-2232
3059	-42	1949	-2314	-9	1941	-2365
	-42	1949	-2314	-9	1941	-2365
3060	77	1974	-2272	12	2062	-2260
	77	1974	-2272	12	2062	-2260
3061	93	1781	-2026	16	1889	-2010
	93	1781	-2026	16	1889	-2010
3062	89	1454	-1641	13	1556	-1629
	89	1454	-1641	13	1556	-1629
3063	79	1294	-1437	9	1381	-1428
	79	1294	-1437	9	1381	-1428
3064	26	1205	-1334	3	1234	-1330
	26	1205	-1334	3	1234	-1330
3065	-12	1128	-1259	-1	1128	-1271
	-12	1128	-1259	-1	1128	-1271
3066	0	1066	-1184	0	1065	-1184
	0	1066	-1184	0	1065	-1184
3067	9	1090	-1215	0	1098	-1216
	9	1090	-1215	0	1098	-1216
3068	-89	1207	-1458	-10	1197	-1557
	-89	1207	-1458	-10	1197	-1557
3069	-151	1422	-1752	-18	1404	-1921
	-151	1422	-1752	-18	1404	-1921
3070	-74	1884	-2264	-15	1869	-2353
	-74	1884	-2264	-15	1869	-2353
3071	-41	2162	-2569	-9	2153	-2619
	-41	2162	-2569	-9	2153	-2619

3072	77	2144	-2478	13	2234	-2465
	77	2144	-2478	13	2234	-2465
3073	160	1721	-1938	21	1903	-1917
	160	1721	-1938	21	1903	-1917
3074	167	1278	-1410	18	1463	-1392
	167	1278	-1410	18	1463	-1392
3075	-4	1055	-1225	2	1057	-1227
	-4	1055	-1225	2	1057	-1227
3076	-116	916	-1089	-9	907	-1214
	-116	916	-1089	-9	907	-1214
3077	-89	870	-999	-7	862	-1096
	-89	870	-999	-7	862	-1096
3078	-36	906	-1006	-4	902	-1046
	-36	906	-1006	-4	902	-1046
3079	88	1073	-1244	5	1166	-1239
	88	1073	-1244	5	1166	-1239
3080	76	1393	-1641	2	1470	-1640
	76	1393	-1641	2	1470	-1640
3081	-196	1524	-1910	-25	1500	-2131
	-196	1524	-1910	-25	1500	-2131

Girder No.	Member No.	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-4	4001	53	1079	-1205	16	1148	-1190
		53	1079	-1205	16	1148	-1190
	4002	-179	1016	-1208	-7	1009	-1394
		-179	1016	-1208	-7	1009	-1394
	4003	-208	848	-1010	-13	835	-1231
		-208	848	-1010	-13	835	-1231
	4004	-326	651	-851	-25	495	-1202
		-326	651	-851	-25	495	-1202
	4005	-189	573	-735	-15	540	-939
		-189	573	-735	-15	540	-939
	4006	175	656	-659	14	845	-645
		175	656	-659	14	845	-645
	4007	199	724	-737	15	938	-722
		199	724	-737	15	938	-722
	4008	170	819	-874	11	1000	-863
		170	819	-874	11	1000	-863
	4009	-80	858	-1066	-12	845	-1159
		-80	858	-1066	-12	845	-1159
	4010	-174	1003	-1289	-24	979	-1487
		-174	1003	-1289	-24	979	-1487
	4011	-48	1264	-1522	-11	1253	-1582
		-48	1264	-1522	-11	1253	-1582
	4012	121	1312	-1468	16	1450	-1452
		121	1312	-1468	16	1450	-1452
	4013	149	1176	-1275	22	1347	-1253
		149	1176	-1275	22	1347	-1253
	4014	95	974	-1044	15	1084	-1029
		95	974	-1044	15	1084	-1029
	4015	93	853	-888	12	957	-876
		93	853	-888	12	957	-876
	4016	63	732	-775	7	803	-768
		63	732	-775	7	803	-768
4017	-17	644	-726	-1	643	-744	
	-17	644	-726	-1	643	-744	
4018	-53	631	-732	-5	626	-790	
	-53	631	-732	-5	626	-790	

4019	-23	688	-799	-4	685	-826
	-23	688	-799	-4	685	-826
4020	-26	781	-938	-6	775	-970
	-26	781	-938	-6	775	-970
4021	-114	889	-1123	-16	872	-1253
	-114	889	-1123	-16	872	-1253
4022	-163	1069	-1357	-23	1045	-1543
	-163	1069	-1357	-23	1045	-1543
4023	-109	1217	-1484	-15	1202	-1608
	-109	1217	-1484	-15	1202	-1608
4024	37	1270	-1448	9	1316	-1438
	37	1270	-1448	9	1316	-1438
4025	105	1184	-1299	18	1308	-1280
	105	1184	-1299	18	1308	-1280
4026	242	1026	-1044	27	1294	-1017
	242	1026	-1044	27	1294	-1017
4027	180	875	-895	18	1074	-877
	180	875	-895	18	1074	-877
4028	-46	716	-821	-2	714	-869
	-46	716	-821	-2	714	-869
4029	-76	646	-753	-6	640	-835
	-76	646	-753	-6	640	-835
4030	-64	646	-746	-6	640	-816
	-64	646	-746	-6	640	-816
4031	-48	704	-834	-6	698	-887
	-48	704	-834	-6	698	-887
4032	-49	802	-973	-8	794	-1030
	-49	802	-973	-8	794	-1030
4033	-123	928	-1177	-17	911	-1318
	-123	928	-1177	-17	911	-1318
4034	-115	1145	-1429	-19	1126	-1563
	-115	1145	-1429	-19	1126	-1563
4035	-83	1324	-1599	-13	1311	-1695
	-83	1324	-1599	-13	1311	-1695
4036	31	1366	-1560	9	1406	-1551
	31	1366	-1560	9	1406	-1551
4037	116	1246	-1361	20	1382	-1342
	116	1246	-1361	20	1382	-1342
4038	216	1046	-1083	25	1287	-1058
	216	1046	-1083	25	1287	-1058
4039	93	872	-939	11	975	-928
	93	872	-939	11	975	-928
4040	-66	724	-836	-4	720	-906
	-66	724	-836	-4	720	-906
4041	-37	670	-750	-3	668	-789
	-37	670	-750	-3	668	-789
4042	1	676	-738	0	677	-738
	1	676	-738	0	677	-738
4043	27	732	-823	0	759	-823
	27	732	-823	0	759	-823
4044	-32	813	-978	-6	806	-1017
	-32	813	-978	-6	806	-1017
4045	-146	932	-1191	-19	913	-1355
	-146	932	-1191	-19	913	-1355
4046	-159	1145	-1445	-23	1122	-1628
	-159	1145	-1445	-23	1122	-1628
4047	-54	1335	-1600	-11	1324	-1664
	-54	1335	-1600	-11	1324	-1664
4048	94	1380	-1550	14	1488	-1536
	94	1380	-1550	14	1488	-1536

4049	115	1241	-1357	19	1375	-1338
	115	1241	-1357	19	1375	-1338
4050	139	1026	-1092	18	1183	-1074
	139	1026	-1092	18	1183	-1074
4051	64	856	-921	9	929	-912
	64	856	-921	9	929	-912
4052	-17	728	-803	0	728	-819
	-17	728	-803	0	728	-819
4053	-9	666	-731	0	665	-740
	-9	666	-731	0	665	-740
4054	19	668	-722	1	688	-721
	19	668	-722	1	688	-721
4055	25	723	-811	0	748	-811
	25	723	-811	0	748	-811
4056	-58	803	-975	-8	795	-1041
	-58	803	-975	-8	795	-1041
4057	-168	927	-1196	-21	906	-1386
	-168	927	-1196	-21	906	-1386
4058	-142	1149	-1446	-22	1128	-1609
	-142	1149	-1446	-22	1128	-1609
4059	-52	1308	-1568	-11	1297	-1631
	-52	1308	-1568	-11	1297	-1631
4060	93	1338	-1505	14	1444	-1491
	93	1338	-1505	14	1444	-1491
4061	120	1218	-1333	20	1358	-1313
	120	1218	-1333	20	1358	-1313
4062	118	1004	-1074	17	1138	-1058
	118	1004	-1074	17	1138	-1058
4063	99	836	-871	12	947	-859
	99	836	-871	12	947	-859
4064	34	703	-751	4	742	-746
	34	703	-751	4	742	-746
4065	-10	638	-713	0	637	-724
	-10	638	-713	0	637	-724
4066	-2	652	-725	-1	651	-728
	-2	652	-725	-1	651	-728
4067	1	723	-819	-2	722	-821
	1	723	-819	-2	722	-821
4068	-118	804	-989	-13	791	-1120
	-118	804	-989	-13	791	-1120
4069	-188	905	-1181	-23	883	-1391
	-188	905	-1181	-23	883	-1391
4070	-94	1122	-1402	-18	1105	-1513
	-94	1122	-1402	-18	1105	-1513
4071	-45	1260	-1514	-10	1250	-1569
	-45	1260	-1514	-10	1250	-1569
4072	92	1270	-1426	15	1377	-1411
	92	1270	-1426	15	1377	-1411
4073	195	1103	-1176	25	1323	-1151
	195	1103	-1176	25	1323	-1151
4074	205	890	-920	22	1117	-897
	205	890	-920	22	1117	-897
4075	-2	722	-823	3	725	-822
	-2	722	-823	3	725	-822
4076	-145	601	-745	-11	591	-901
	-145	601	-745	-11	591	-901
4077	-117	571	-679	-10	562	-806
	-117	571	-679	-10	562	-806
4078	-46	615	-707	-5	610	-758
	-46	615	-707	-5	610	-758

4079	102	768	-880	5	876	-874
	102	768	-880	5	876	-874
4080	81	932	-1113	0	1014	-1113
	81	932	-1113	0	1014	-1113
4081	-237	988	-1303	-30	957	-1570
	-237	988	-1303	-30	957	-1570

(4) Vertical reaction forces R_v (kN)

Girder No.	Support	Dead load	Live load		Snow load	Sum total	
			(Max.)	(Min.)		(Max.)	(Min.)
G-1	1001	1918	1027	-338	167	3112	1747
	1012	5531	2037	-372	476	8044	5635
	1024	4654	1964	-481	402	7020	4575
	1036	4976	2015	-467	429	7421	4938
	1048	4934	2009	-468	426	7369	4892
	1060	4793	1981	-471	414	7188	4736
	1072	5297	1992	-368	456	7746	5385
	1082	1753	1010	-322	153	2917	1585
G-2	2001	2045	991	-196	161	3198	2011
	2012	5691	1880	-203	450	8021	5937
	2024	4776	1805	-318	375	6957	4833
	2036	4981	1812	-294	392	7186	5080
	2048	4918	1801	-297	387	7106	5008
	2060	4809	1781	-301	378	6968	4886
	2072	5413	1827	-200	427	7667	5640
	2082	1698	910	-184	132	2741	1646
G-3	3001	2045	991	-196	161	3198	2011
	3012	5691	1880	-203	450	8021	5937
	3024	4776	1805	-318	375	6957	4833
	3036	4981	1812	-294	392	7186	5080
	3048	4918	1801	-297	387	7106	5008
	3060	4809	1781	-301	378	6968	4886
	3072	5413	1827	-200	427	7667	5640
	3082	1698	910	-184	132	2741	1646
G-4	4001	1918	1027	-338	167	3112	1747
	4012	5531	2037	-372	476	8044	5635
	4024	4654	1964	-481	402	7020	4575
	4036	4976	2015	-467	429	7421	4938
	4048	4934	2009	-468	426	7369	4892
	4060	4793	1981	-471	414	7188	4736
	4072	5297	1992	-368	456	7746	5385
	4082	1753	1010	-322	153	2917	1585

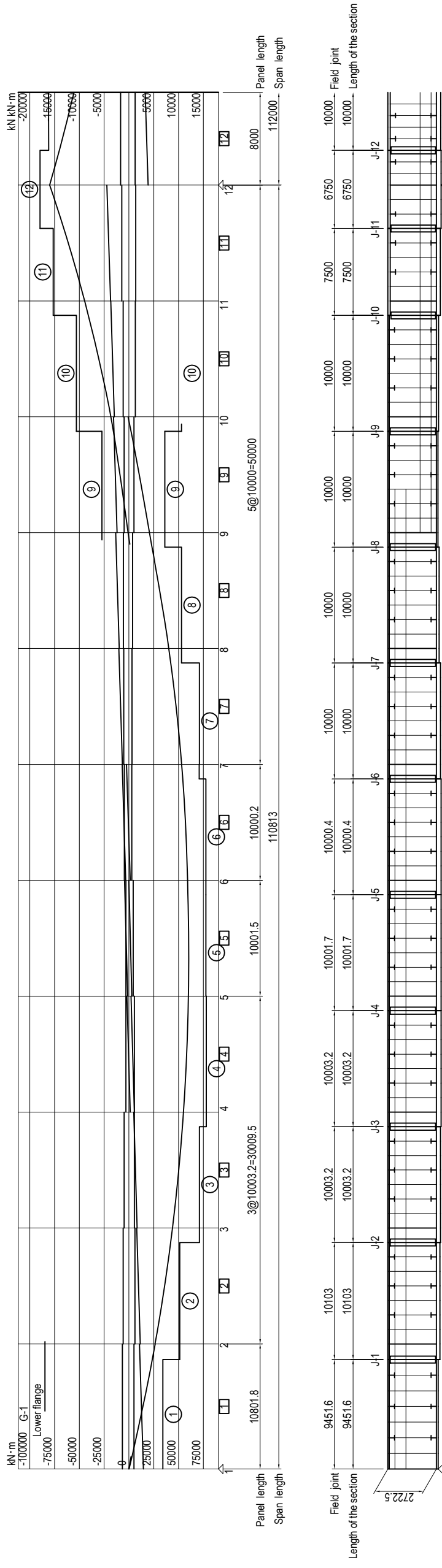
* Checking for negative reaction forces (N.R.F.) R_u (kN)

Node	Support	Reaction forces obtained from grid analysis		
		Dead load	2*Live load(min.)	Value for checking N.R.F. (Ru)
G-1	1001	1918	-676	1242
	1012	5531	-745	4786
	1024	4654	-962	3692
	1036	4976	-933	4043
	1048	4934	-935	3999
	1060	4793	-941	3852
	1072	5297	-737	4560
	1082	1753	-643	1110
G-2	2001	2045	-392	1654
	2012	5691	-407	5284
	2024	4776	-637	4139
	2036	4981	-587	4394

	2048	4918	-594	4324
	2060	4809	-601	4208
	2072	5413	-400	5013
	2082	1698	-368	1330
G-3	3001	2045	-392	1654
	3012	5691	-407	5284
	3024	4776	-637	4139
	3036	4981	-587	4394
	3048	4918	-594	4324
	3060	4809	-601	4208
	3072	5413	-400	5013
	3082	1698	-368	1330
G-4	4001	1918	-676	1242
	4012	5531	-745	4786
	4024	4654	-962	3692
	4036	4976	-933	4043
	4048	4934	-935	3999
	4060	4793	-941	3852
	4072	5297	-737	4560
	4082	1753	-643	1110

2-4 Section Composition Figure of Main Girde

STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (1) S=1:400

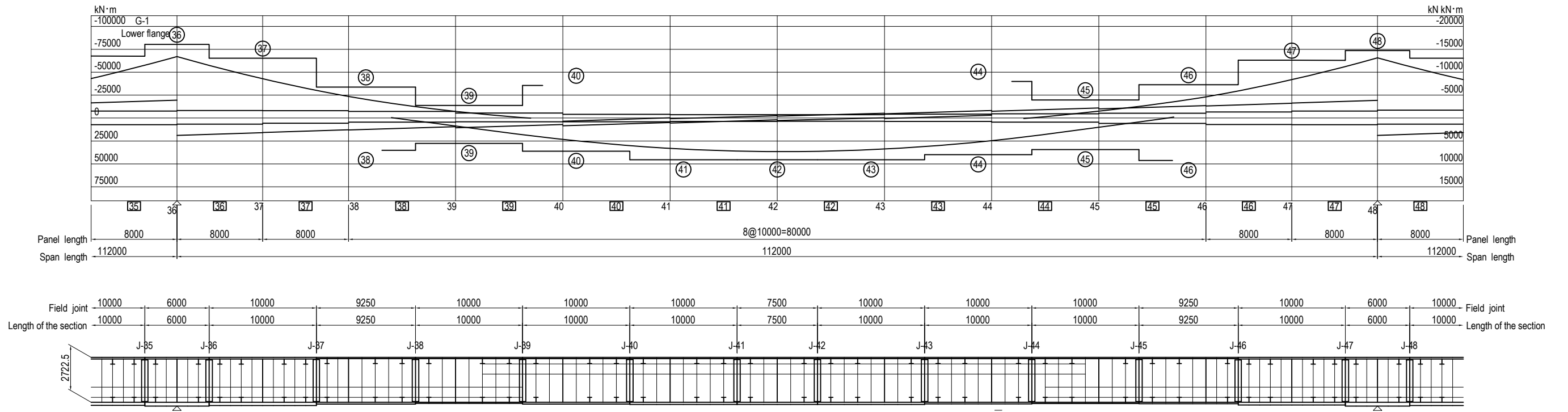


Section	1	2	3	4	5	6	7	8	9	10	11	12	13
Deck Plate Thickness	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	22, 22, 22	27, 27, 27	27, 27, 27	27, 27, 27
Quality	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)
Longitudinal Rib 1	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11	3-Bulb 230*11
Longitudinal Rib 2	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8	6-U-Rib 320*240*8
Left Web	3044.3	3044.2	3044.2	3044.2	3044.3	3044.3	3044.3	3044.3	3044.3	3037.5	3031.9	3031.9	3031.9
Right Web	2714	2714.1	2714.1	2714.1	2714.1	2714	2714	2714	2714	2708	2703	2703	2703
Lower flange Vertical Rib	2	2	2	2	2	2	2	2	5	5	5	5	5
Thickness	12(3)	12(3)	12(4)	12(4)	12(4)	12(4)	12(4)	12(4)	12(3)	12(4)	12(4)	12(4)	12(4)
Height	2714	2714.1	2714.1	2714.1	2714.1	2714	2714	2714	2714	2708	2703	2703	2703
Number	2	2	2	2	2	2	2	2	5	5	5	5	5
Width	220	220	220	220	220	220	220	220	220	220	220	220	220
Thickness	19(3)	19(3)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(3)	19(4)	19(4)	19(4)	19(4)
Lig W=1850 T	20(3)	38(3)	46(6)	52(6)	52(6)	52(6)	46(6)	30(4)	16(3)	24(4)	43(8)	52(8)	47(8)
Deck Plate σ	0	-80	-132	-165	-180	-178	-165	-136	-7	42	111	180	161
σ	210	210	210	210	210	210	210	210	210	210	210	210	210
σ-σ	210	130	78	45	30	32	45	74	131	203	157	99	30
σ	0	145	174	195	197	197	196	204	136	-74	-194	-232	-222
σ-σ	210	210	210	255	255	255	255	255	210	255	255	255	255
σ-σ	210	65	36	60	58	58	59	51	74	198	67	23	33
T	60	48	36	25	14	19	28	41	53	59	59	70	73
ta	120	120	120	145	145	145	145	145	120	145	145	145	145
Combined	0.25	0.56	0.72	0.57	0.56	0.56	0.58	0.67	0.52	0.19	0.71	0.94	0.91
Calculated points	Left	J-1	J-2	J-3	J-4	J-5	J-6	J-7	J-8	Left	J-10	Max Left	Max Right
Stress of Net Area σ													
Lig σspl													

BAGO RIBER BRIDGE G-1

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY jica	COUNTPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. IMADA	SIGNATURE	DATE 15 Jun.2017	DRAWING TITLE STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (1)	PACKAGE 2
				CHECKED BY T. HAYAKAWA	APPROVED BY Y. SANO	DATE 20 Jun.2017		

STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (4) S=1:400



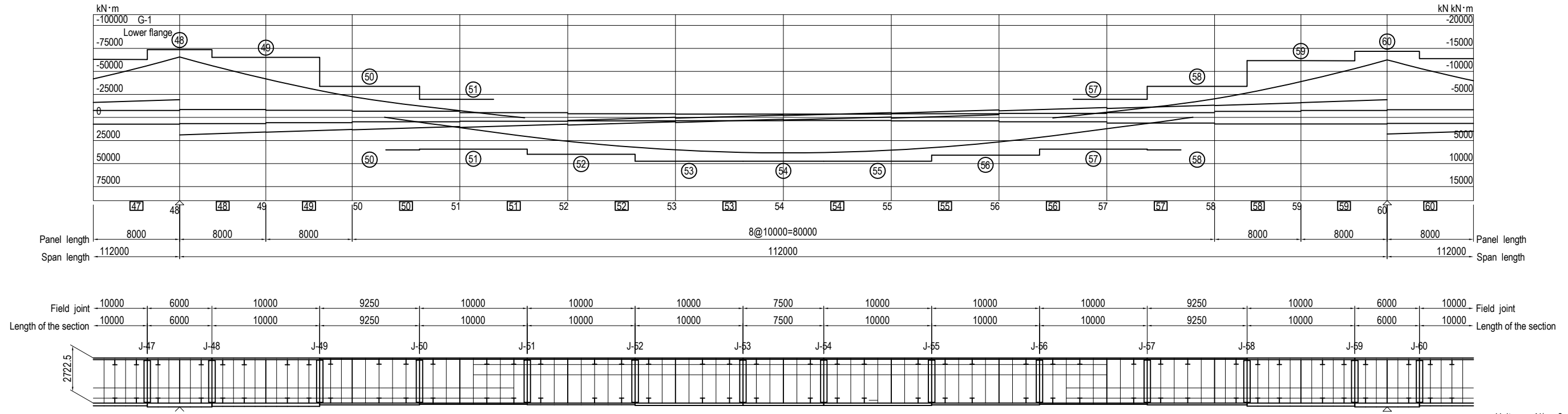
Unit: mm N/mm²

Section	Thickness	35			36			37			38			39			40			41			42			43			44			45			46			47			48			49		
		Sec-35			Sec-36			Sec-37			Sec-38			Sec-39			Sec-40			Sec-41			Sec-42			Sec-43			Sec-44			Sec-45			Sec-46			Sec-47			Sec-48			Sec-49		
Longitu-dinal Rib1	Number	3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb		
Longitu-dinal Rib2	Number	6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib		
Left Web	Height	3037.5			3037.5			3037.5			3044.3			3044.3			3044.3			3044.3			3044.3			3044.3			3044.3			3044.3			3044.3			3038.7			3038.7			3038.7		
Right Web	Thickness	12(4)			12(4)			12(4)			12(3)			12(3)			12(3)			12(3)			12(3)			12(3)			12(3)			12(3)			12(4)			12(4)			12(4)					
	Height	2708			2708			2708			2714			2714			2714			2714			2714			2714			2714			2714			2709			2709			2709					
Lower flange Vertical rib	Number	5			5			2			2			2			2			5			5			5			5			5			5			5			5					
	Width	220			220			220			220			220			220			220			220			220			220			220			220			220			220					
Deck Plate	σ	155	179	179	155	102	-10	42	-11	45	-65	2	-61	2	-101	-116	-118	-117	-103	-65	1	-67	1	-15	43	-14	42	99	158	180	180	154														
	σ _a	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210										
Web	τ	73	76	75	72	59	47	47	48	48	37	37	36	36	27	16	14	16	27	37	37	37	37	37	48	48	48	48	59	73	76	75	72													
	σ _a	255	255	255	255	202	210	202	210	210	104	104	210	207	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210							
Lower flange	σ	-219	-231	-231	-226	-181	18	-75	23	-96	139	-4	106	-3	176	167	170	168	164	104	-1	121	-1	26	-78	24	-70	-164	-229	-227	-227	-200														
	σ _a	255	255	255	255	202	210	202	210	210	104	104	210	207	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210					
Calculated points	σ _a	36	24	24	29	20	192	126	187	9	71	100	104	204	34	43	40	42	46	106	209	89	120	184	43	231	130	36	26	28	28	55														
	σ _a	73	76	75	72	59	47	47	48	48	37	37	36	36	27	16	14	16	27	37	37	37	37	48	48	48	48	59	73	76	75	72														
Stress of Net Area σ	τ	145	145	145	145	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	145	145	145	145	145	145	145	145	145	145	145	145	145	145						
	σ	0.88	0.99	0.98	0.92	0.87	0.16	0.22	0.16	0.28	0.48	0.10	0.30	0.09	0.71	0.63	0.64	0.64	0.63	0.30	0.09	0.38	0.10	0.16	0.23	0.11	0.14	0.51	0.95	0.96	0.95	0.77														
Lfig σspl	τ	0.88	0.99	0.98	0.92	0.87	0.16	0.22	0.16	0.28	0.48	0.10	0.30	0.09	0.71	0.63	0.64	0.64	0.63	0.30	0.09	0.38	0.10	0.16	0.23	0.11	0.14	0.51	0.95	0.96	0.95	0.77														
	σ	0.88	0.99	0.98	0.92	0.87	0.16	0.22	0.16	0.28	0.48	0.10	0.30	0.09	0.71	0.63	0.64	0.64	0.63	0.30	0.09	0.38	0.10	0.16	0.23	0.11	0.14	0.51	0.95	0.96	0.95	0.77														

BAGO RIBER BRIDGE G-1

- Grade (1):SM400 (5):SM400-H
- (2):SM490 (6):SM490-H
- (3):SM490Y (7):SM520-H
- (4):SM570 (8):SM570-H

STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (5) S=1:400



Unit: mm N/mm²

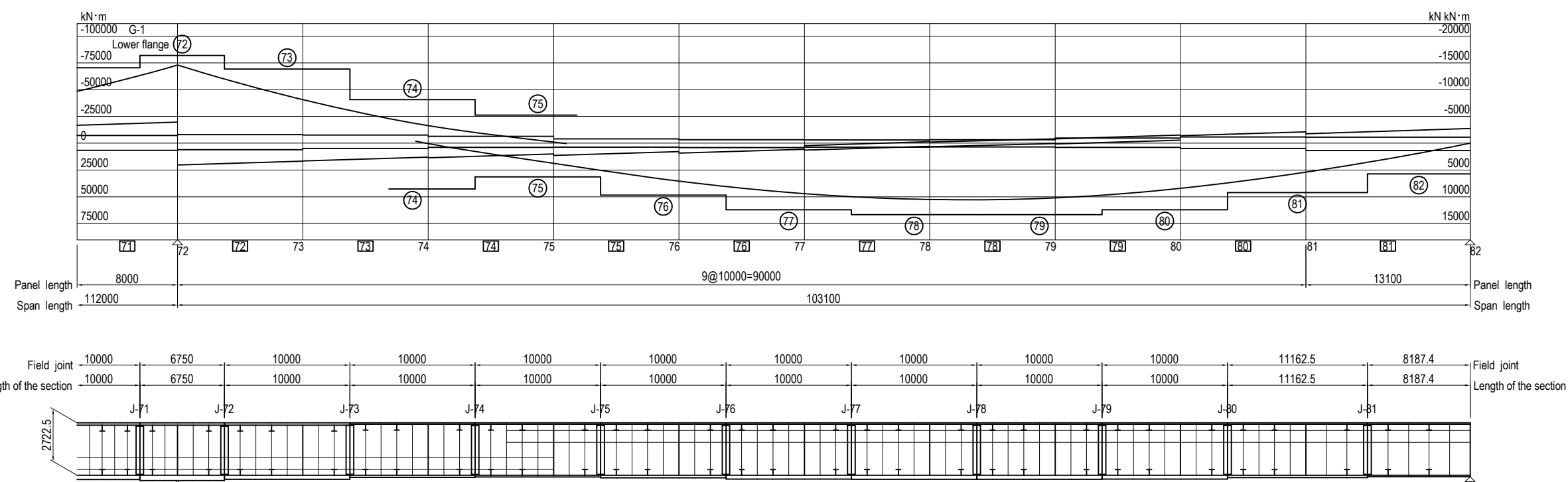
Section	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61										
Deck Plate Thickness	21, 21, 21			16, 16, 16			16, 16, 16			16, 16, 16			20, 20, 20												
Deck Plate Quality	(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)												
Longitudinal Rib Number	3-Bulb			3-Bulb			3-Bulb			3-Bulb			3-Bulb												
Longitudinal Rib Section	230*11			230*11			230*11			230*11			230*11												
Longitudinal Rib Number	6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib			6-U-Rib												
Longitudinal Rib Section	320*240*8			320*240*8			320*240*8			320*240*8			320*240*8												
Left Web Height	3038.7	3038.7	3038.7	3038.7	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3039.8	3039.8										
Right Web Height	2709	2709	2709	2709	2714	2714	2714	2714	2714	2714	2714	2714	2714	2710	2710										
Lower flange Vertical rib Number	5	5	5	2	5	5	5	5	5	5	5	5	2	5	5										
Lower flange Vertical rib Width	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220										
Lower flange Vertical rib Thickness	19(4)	19(4)	19(4)	19(3)	19(3)	19(3)	19(3)	19(3)	19(3)	19(3)	19(3)	19(3)	19(3)	19(4)	19(4)										
Lfig W=1850 T	32(4)	42(8)	40(4)	21(3)	14(3)	20(3)	28(3)	28(3)	28(3)	21(3)	14(3)	21(3)	37(4)	39(4)	33(4)										
Deck Plate σ	158	180	180	154	99	-17	42	-18	43	-71	-107	-121	-123	-108	-74	-22	36	-22	35	90	151	178	178	154	
Deck Plate σ_a	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	
Deck Plate $\sigma_a - \sigma$	52	30	30	56	111	193	168	192	167	139	103	89	87	88	102	136	188	174	188	175	120	59	32	32	56
Lower flange σ	-229	-227	-227	-200	-176	31	-75	32	-77	128	171	169	171	170	133	40	-65	39	-63	-160	-199	-227	-227	-215	
Lower flange σ_a	255	255	255	255	202	210	202	210	210	210	210	210	210	210	210	210	210	210	202	202	255	255	255	255	
Lower flange $\sigma_a - \sigma$	26	28	28	55	26	179	127	178	44	82	39	41	39	40	77	170	56	171	139	42	56	28	28	40	
Web τ	73	76	75	72	60	48	48	48	48	37	26	16	14	16	36	47	47	47	47	47	59	72	75	72	69
Web τ_a	145	145	145	145	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	145	145	145	145	
Web Combined	0.95	0.96	0.95	0.77	0.82	0.16	0.22	0.16	0.22	0.42	0.68	0.64	0.65	0.64	0.67	0.45	0.16	0.18	0.15	0.18	0.70	0.76	0.95	0.94	0.84
Calculated points	J-47	Max Left	Max Right	J-48	J-49	Right	Right	J-50	J-50	J-51	J-52	J-53		J-54	J-55	J-56	J-57	J-57	Left	Left	J-58	J-59	Max Left	Max Right	J-60
Stress of Net Area σ																									
Lfig σ_{spl}																									

BAGO RIBER BRIDGE G-1

- Grade (1):SM400 (5):SM400-H
 (2):SM490 (6):SM490-H
 (3):SM490Y (7):SM520-H
 (4):SM570 (8):SM570-H

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>NAME</td> <td>S. IMADA</td> <td>SIGNATURE</td> <td></td> <td>DATE</td> <td>15 Jun.2017</td> </tr> <tr> <td>PREPARED BY</td> <td>T. HAYAKAWA</td> <td>SIGNATURE</td> <td></td> <td>DATE</td> <td>20 Jun.2017</td> </tr> <tr> <td>CHECKED BY</td> <td>Y. SANO</td> <td>SIGNATURE</td> <td></td> <td>DATE</td> <td>21 Jun.2017</td> </tr> <tr> <td>APPROVED BY</td> <td></td> <td>SIGNATURE</td> <td></td> <td>DATE</td> <td></td> </tr> </table>	NAME	S. IMADA	SIGNATURE		DATE	15 Jun.2017	PREPARED BY	T. HAYAKAWA	SIGNATURE		DATE	20 Jun.2017	CHECKED BY	Y. SANO	SIGNATURE		DATE	21 Jun.2017	APPROVED BY		SIGNATURE		DATE		DRAWING TITLE STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (5)	PACKAGE 2 DWG No. P2-SB-1016
NAME	S. IMADA	SIGNATURE		DATE	15 Jun.2017																									
PREPARED BY	T. HAYAKAWA	SIGNATURE		DATE	20 Jun.2017																									
CHECKED BY	Y. SANO	SIGNATURE		DATE	21 Jun.2017																									
APPROVED BY		SIGNATURE		DATE																										

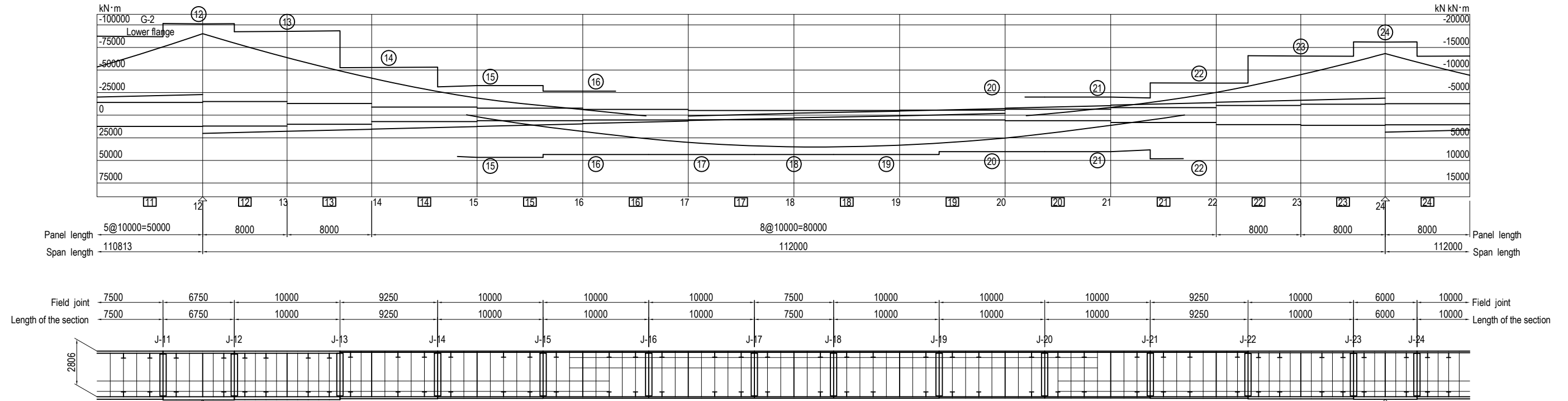
STRESS DIAGRAM OF MAIN GIRDER G1 (P13-P20) (7) S=1:400



		Unit: mm N/mm ²																		
		71	72		73	74			75		76	77	78	79	80	81	82			
Section		Sec-71	Sec-72		Sec-73	Sec-74			Sec-75		Sec-76	Sec-77	Sec-78	Sec-79	Sec-80	Sec-81	Sec-82		Section	Grade
Deck Plate	Thickness	25, 25, 25	25, 25, 25		25, 25, 25	16, 16, 16			16, 16, 16		16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16		Thickness	Deck Plate
	Quality	(3),(3),(3)	(3),(3),(3)		(3),(3),(3)	(3),(3),(3)			(3),(3),(3)		(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)		Quality	
Longitudinal Rib1	Number	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	3-Bulb	Number	Longitudinal Rib1
	Section	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	Section	
Longitudinal Rib2	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	Number	Longitudinal Rib2
	Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	Section	
Left Web	Height	3034.1	3034.1	3034.1	3034.1	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	3044.3	Height	Left Web
	Thickness	12(4)	12(4)		12(4)	12(4)			12(3)		12(4)	12(4)	12(4)	12(4)	12(4)	12(4)	12(4)	12(3)	Thickness	
Right Web	Height	2705	2705		2705	2714	2714	2714	2714	2714	2714	2714	2714	2714	2714	2714	2714	2714	Height	Right Web
	Thickness	12(4)	12(4)		12(4)	12(4)			12(3)		12(4)	12(4)	12(4)	12(4)	12(4)	12(4)	12(4)	12(3)	Thickness	
Lower flange Vertical rib	Number	5	5		5	2			2		2	2	2	2	2	2	2		Number	Lower flange Vertical rib
	Width	220	220		220	220			220		220	220	220	220	220	220	220		Width	
	Thickness	19(4)	19(4)		19(4)	19(4)			19(3)		19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(3)		Thickness	
Lflg W=1850 T		44(8)	50(8)		42(8)	21(4)			17(3)		26(4)	38(4)	42(8)	42(8)	38(4)	24(4)	14(3)		Lflg W=1850 T	
Deck Plate	σ	154	176	176	146	104	-26	34	-27	34	-88	-133	-156	-163	-163	-152	-123	-63	0	σ
	σ_a	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	σ_a
	$\sigma_a - \sigma$	56	34	34	64	106	184	176	183	176	122	77	54	47	47	58	87	147	210	$\sigma_a - \sigma$
Lower flange	σ	-210	-223	-223	-205	-184	47	-60	52	-67	170	214	206	204	204	201	206	132	0	σ
	σ_a	255	255	255	255	243	255	243	210	176	210	255	255	255	255	255	210	210	210	σ_a
	$\sigma_a - \sigma$	45	32	32	50	58	208	183	158	109	40	41	49	51	51	54	49	78	210	$\sigma_a - \sigma$
Web	τ	73	76	79	75	63	51	51	51	51	41	33	22	13	12	25	37	47	58	τ
	τ_a	145	145	145	145	145	145	145	145	120	120	145	145	145	145	145	145	120	120	τ_a
	Combined	0.83	0.93	0.95	0.81	0.62	0.12	0.12	0.18	0.19	0.71	0.72	0.64	0.61	0.61	0.61	0.68	0.46	0.24	Combined
Calculated points	J-71	Max Left	Max Right	J-72	J-73	Right	Right	J-74	J-74	J-75	J-76	J-77	J-78	J-79	J-80	J-81	Right	Right	Calculated points	
Stress of Net Area σ																				Stress of Net Area σ
Lflg σ_{spl}																				Lflg σ_{spl}

BAGO RIBER BRIDGE G-1

STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (2) S=1:400



Unit: mm N/mm²

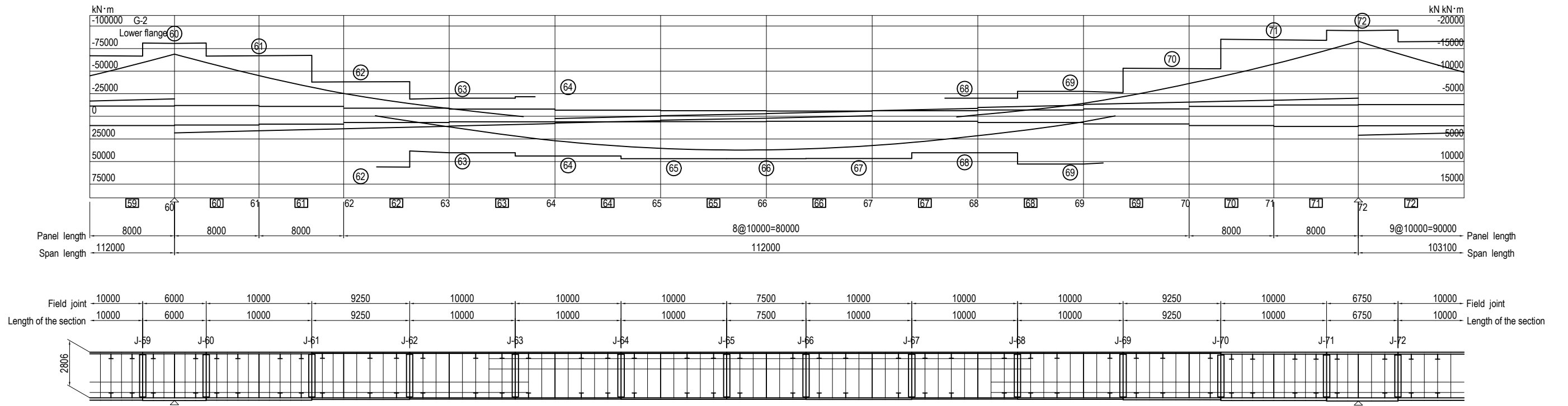
		11	12	13	14	15			16			17	18	19	20			21			22			23	24	25			
Section		Sec-11	Sec-12		Sec-13	Sec-14	Sec-15			Sec-16			Sec-17	Sec-18	Sec-19	Sec-20			Sec-21			Sec-22			Sec-23	Sec-24	Sec-25		
Deck Plate	Thickness	27, 27, 27	27, 27, 27		27, 27, 27	22, 22, 22			16, 16, 16			16, 16, 16			16, 16, 16			16, 16, 16			16, 16, 16			19, 19, 19	19, 19, 19		19, 19, 19		
	Quality	(3),(3),(3)	(3),(3),(3)		(3),(3),(3)	(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)			(3),(3),(3)	(3),(3),(3)		(3),(3),(3)		
Longitudinal Rib1	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib			
	Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8			
Longitudinal Rib2	Number	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb			
	Section	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11			
Left Web	Height	2736	2736	2736	2736	2741	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2744	2744	2744			
	Thickness	13(4)	13(4)		11(4)	11(4)	11(3)			11(3)			11(3)	11(3)	11(3)	11(3)			11(3)			11(3)	11(4)	11(4)		11(4)			
Right Web	Height	2790	2790	2790	2790	2795	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2798	2798	2798			
	Thickness	13(4)	13(4)		11(4)	11(4)	11(3)			11(3)			11(3)	11(3)	11(3)	11(3)			11(3)			11(3)	11(4)	11(4)		11(4)			
Lower flange Vertical Rib	Number	7	7		7	3	3			3			3	3	3	3			3			3	7	7		7			
	Thickness	19(4)	19(4)		19(4)	19(4)	19(3)			19(3)			19(3)	19(3)	19(3)	19(3)			19(3)			19(3)	19(4)	19(4)		19(4)			
Deck Plate	σ	164	193	193	174	127	84	-40	33	-40	34	-84	-109	-113	-113	-101	-67	4	-67	4	-17	46	-17	45	103	165	191	191	164
	σa	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
Lower flange	σ	-214	-218	-218	-216	-196	-125	57	-48	61	-51	127	165	171	170	162	108	-7	108	-7	29	-78	24	-65	-148	-194	-225	-225	-193
	σa	255	255	255	255	213	148	210	148	210	129	210	210	210	210	210	210	104	210	104	210	104	210	156	156	255	255	255	255
Web	τ	79	82	75	85	74	60	48	48	48	48	35	22	16	18	28	40	40	40	40	55	55	54	54	68	78	82	82	79
	τa	145	145	145	145	145	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	145	145	145	145
Calculated points		J-11	Max Left	Max Right	J-12	J-13	J-14	Right	Right	J-15	J-15	J-16	J-17	J-18	J-19	J-20	J-20	Left	Left	J-21	J-21	Left	Left	J-22	J-23	Max Left	Max Right	J-24	
Stress of Net Area σ																													
Lfig σspl																													

BAGO RIBER BRIDGE G-2
Grade (1):SM400
(2):SM490
(3):SM490Y
(4):SM570

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	NAME S. IMADA	SIGNATURE 	DATE 15 Jun.2017	DRAWING TITLE STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (2)	PACKAGE 2
				PREPARED BY	CHECKED BY T. HAYAKAWA	DATE 20 Jun.2017		DWG No. P2-SB-1020
				APPROVED BY Y. SANO		DATE 21 Jun.2017		

STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (6)

S=1:400



Section	59		60		61		62				63				64				65				66		67		68				69		70		71		72	
	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality	Thickness	Quality						
Deck Plate	20	(3),(3),(3)	20	(3),(3),(3)	20	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	16	(3),(3),(3)	25	(3),(3),(3)	25	(3),(3),(3)				
Longitudinal Rib	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8	6-U-Rib	320*240*8				
Longitudinal Rib	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11	2-Bulb	230*11				
Left Web	Height	2743	2743	2743	2743	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	2738	2738	2738	2738					
Right Web	Height	2797	2797	2797	2797	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	2792	2792	2792	2792				
Lower flange	Number	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	7	7	7	7					
Vertical rib	Width	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220					
Lflg W=2940 T	Thickness	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)					
Deck Plate	σ	160	186	186	160	103	-17	45	-17	47	-71	2	-71	2	-108	-118	-118	-115	-94	-53	19	-53	19	-53	19	70	138	168	190	190	190	190						
Lower flange	σ	-190	-221	-221	-190	-148	24	-65	29	-78	114	-3	114	-3	173	169	169	163	152	86	-30	86	-28	-111	-179	-204	-226	-226	-226	-226	-226	-226						
Web	τ	79	82	79	76	66	54	54	55	55	43	43	43	43	30	18	17	22	34	48	48	48	48	48	48	61	72	82	73	76	76	76						
Calculated points	Stress of Net Area σ	J-59	Max Left	Max Right	J-60	J-61	Right	J-62	Right	J-63	J-63	Left	J-64	Left	J-65		J-66	J-67	J-68	J-68	Left	Left	J-69	J-70	J-71	Max Left	Max Right											

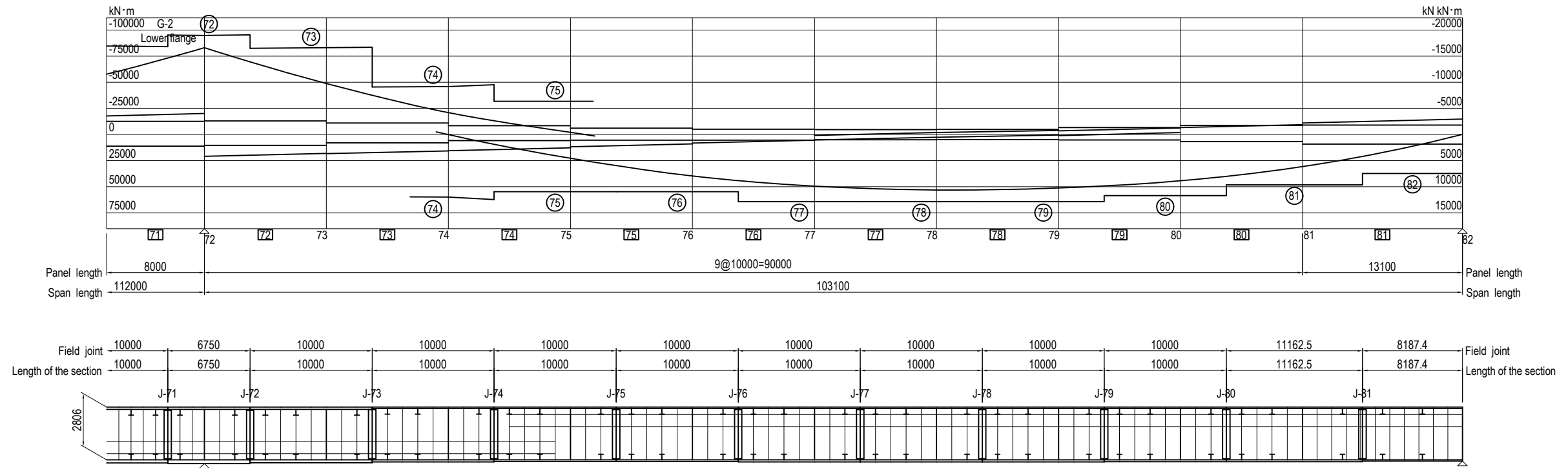
Unit: mm N/mm²

BAGO RIBER BRIDGE G-2

Grade (1):SM400
 (2):SM490
 (3):SM490Y
 (4):SM570

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	NAME	SIGNATURE	DATE	DRAWING TITLE STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (6)	PACKAGE
				PREPARED BY	S. IMADA	15 Jun.2017		
				CHECKED BY	T. HAYAKAWA	20 Jun.2017		
				APPROVED BY	Y. SANO	21 Jun.2017		

STRESS DIAGRAM OF MAIN GIRDER G2 (P13-P20) (7) S=1:400



Unit: mm N/mm²

		71	72	73	74		75		76	77	78	79	80	81	82							
Section		Sec-71	Sec-72	Sec-73	Sec-74		Sec-75		Sec-76	Sec-77	Sec-78	Sec-79	Sec-80	Sec-81	Sec-82	Section						
Deck Plate	Thickness	25, 25, 25	25, 25, 25	25, 25, 25	16, 16, 16		16, 16, 16		16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	16, 16, 16	Thickness	Deck Plate					
	Quality	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)		(3),(3),(3)		(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	(3),(3),(3)	Quality						
Longitudinal Rib1	Number	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	6-U-Rib	Number	Longitudinal Rib1					
	Section	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	320*240*8	Section	Longitudinal Rib1					
Longitudinal Rib2	Number	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	2-Bulb	Number	Longitudinal Rib2					
	Section	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	230*11	Section	Longitudinal Rib2					
Left Web	Height	2738	2738	2738	2738	2747	2747	2747	2747	2747	2747	2747	2747	2747	2747	Height	Left Web					
	Thickness	11(4)	13(4)	13(4)	13(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(3)	Thickness	Left Web					
Right Web	Height	2792	2792	2792	2792	2801	2801	2801	2801	2801	2801	2801	2801	2801	2801	Height	Right Web					
	Thickness	11(4)	13(4)	13(4)	13(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(4)	11(3)	Thickness	Right Web					
Lower flange Vertical rib	Number	7	7	7	3	3	3	3	3	3	3	3	3	3	3	Number	Lower flange Vertical rib					
	Width	220	240	220	220	220	220	220	220	220	220	220	220	220	220	Width	Lower flange Vertical rib					
Lflg W=2940 T	Thickness	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(4)	19(3)	Thickness	Lower flange Vertical rib					
	Lflg W=1850 T	34(4)	34(4)	32(4)	22(4)	18(4)	18(4)	18(4)	18(4)	18(4)	18(4)	18(4)	18(4)	18(4)	13(3)	Lflg W=1850 T						
Deck Plate	σ	168	190	190	159	119	-30	41	-30	42	-95	-141	-160	-166	-165	-156	-127	-69	0	σ	Deck Plate	
	σ _a	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	σ _a	Deck Plate
	σ _a -σ	42	20	20	51	91	180	169	180	168	115	69	50	44	45	54	83	141	210	210	σ _a -σ	Deck Plate
Lower flange	σ	-204	-226	-226	-198	-162	39	-54	44	-61	140	207	206	213	212	216	176	119	0	0	σ	Lower flange
	σ _a	255	255	255	255	195	255	195	255	148	255	255	255	255	255	255	210	210	210	210	σ _a	Lower flange
	σ _a -σ	51	29	29	57	33	216	141	211	87	115	48	49	42	43	39	34	91	210	210	σ _a -σ	Lower flange
Web	τ	82	73	76	73	76	62	62	63	63	46	32	21	15	15	25	38	57	65	65	τ	Web
	τ _a	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	120	120	120	120	τ _a	Web
	Combined	0.88	0.95	0.97	0.78	0.59	0.18	0.18	0.19	0.19	0.36	0.68	0.65	0.68	0.68	0.72	0.76	0.45	0.30	0.30	Combined	Web
Calculated points	J-71	Max Left	Max Right	J-72	J-73	Right	Right	J-74	J-74	J-75	J-76	J-77	J-78	J-79	J-80	J-81	Right	Right	Right	Right	Calculated points	
Stress of Net Area σ																					Stress of Net Area σ	
Lflg σspl																					Lflg σspl	

BAGO RIBER BRIDGE G-2
 Grade (1):SM400
 (2):SM490
 (3):SM490Y
 (4):SM570

3-1 Calculation of Section G1

Explanation of symbols

Section forces	
Bending moment (In plane)	M_x
Shear force (In plane)	S_y
Torsion moment	T
Stress	
Vertical stress due to M_x	σ_{mx}
Allowable vertical stress	σ_a
Shear stress due to S_y	τ_{sy}
Shear stress due to T	τ_t
Total shear stress	$\Sigma \tau$
Allowable shear stress	τ_a
Combined stress	κ

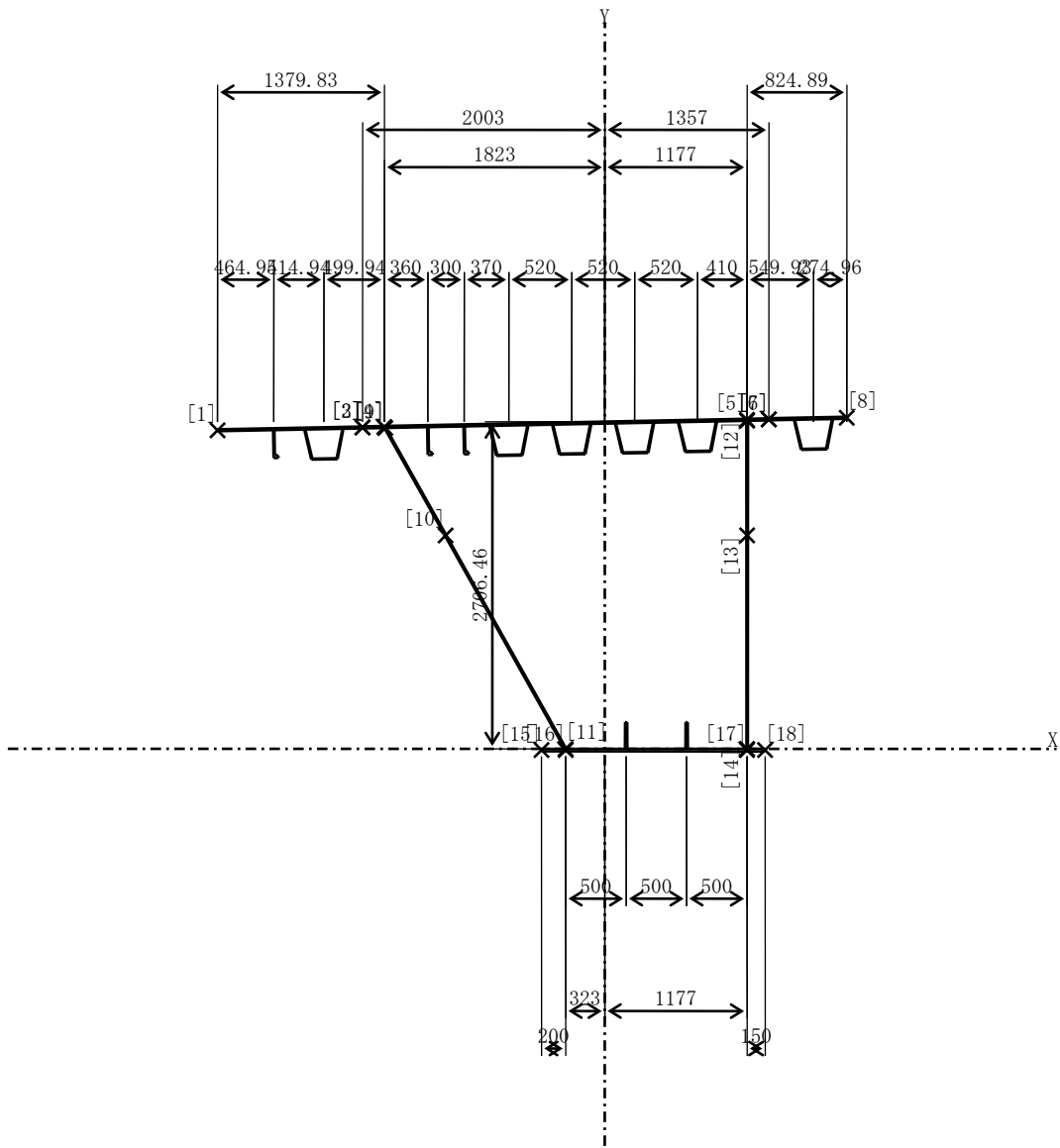
Others

*Girder numbers of each section and section numbers are serial.

*The inclines assumes an upward slant to right plus.

*Gravity center "ex" is distance from center of the box girder and "ey" is distance from bottom of web.

Girder Name : G-1



Girder Name : G-1 Section Name : Sec-1:Left (Girder number= 1 Section number= 1)

Section force Mx = 0 kN·m Sy = 2923 kN T = -1338 kN·m

Effective buckling length Lx = 10802 mmLy = 10802 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2396.9	2396.9
Gravity center	ex (cm)	-22.0	-22.0
	ey (cm)	176.5	176.5
Moment of inertia	Ix (cm4)	28913698	28913698
	Iy (cm4)	40664543	40664543
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61890.9 kN·m	61890.9 kN·m
Mxr(lower)=	34007.8 kN·m	31773.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	15	0	15	120	0.02
DECK-C	[3]	0	210	15	0	15	120	0.02
	[4]	0	210	18	7	25	120	0.04
	[5]	0	210	24	7	31	120	0.07
DECK-R	[6]	0	210	9	0	9	120	0.01
	[7]	0	210	9	0	9	120	0.01
LWEB	[8]	0	210	0	0	0	120	0.00
	[9]	0	210	45	9	54	120	0.21
RWEB	[10]	0	210	50	9	59	120	0.24
	[11]	0	210	32	9	41	120	0.12
RWEB	[12]	0	210	46	9	56	120	0.21
	[13]	0	210	51	9	60	120	0.25
	[14]	0	210	35	9	44	120	0.14

LFLG	[15]	0	210	0	0	0	120	0.00
	[16]	0	210	16	5	21	120	0.03
	[17]	0	210	18	5	24	120	0.04
	[18]	0	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-1:J-1 (Girder number= 1 Section number= 1)

Section force Mx = 23490 kN·m Sy = 2227 kN T = -1338 kN·m

Effective buckling length Lx = 10802 mmLy = 10802 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.1	192.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2397.0	2397.0
Gravity center	ex (cm)	-22.0	-22.0
	ey (cm)	176.5	176.5
Moment of inertia	Ix (cm4)	28913679	28913679
	Iy (cm4)	40672672	40672672
Torsion Constant	J (cm4)	20011741	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61882.5 kN·m	61882.5 kN·m
Mxr(lower)=	34007.6 kN·m	31772.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-71	210	0	0	0	120	0.12
	[2]	-73	210	11	0	11	120	0.13
DECK-C	[3]	-73	210	11	0	11	120	0.13
	[4]	-73	210	14	7	20	120	0.15
	[5]	-78	210	18	7	25	120	0.18
DECK-R	[6]	-79	210	7	0	7	120	0.14
	[7]	-79	210	7	0	7	120	0.14
LWEB	[8]	-80	210	0	0	0	120	0.14
	[9]	-72	210	35	9	44	120	0.25
RWEB	[10]	0	210	38	9	47	120	0.15
	[11]	144	210	24	9	33	120	0.55
	[12]	-77	210	35	9	44	120	0.27
	[13]	0	210	39	9	48	120	0.16
	[14]	143	210	27	9	36	120	0.56

LFLG	[15]	145	210	0	0	0	120	0.48
	[16]	145	210	12	5	17	120	0.50
	[17]	145	210	14	5	20	120	0.50
	[18]	145	210	0	0	0	120	0.48

Girder Name : G-1 Section Name : Sec-2:J-2 (Girder number= 1 Section number= 2)

Section force Mx = 42114 kN·m Sy = 1651 kN T = 1212 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 38 (SM490Y)	703.0	703.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2729.9	2729.9
Gravity center	ex (cm)	-14.4	-14.4
	ey (cm)	154.7	154.7
Moment of inertia	Ix (cm4)	38327747	38327747
	Iy (cm4)	42750158	42750158
Torsion Constant	J (cm4)	21111347	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67066.5 kN·m	67066.5 kN·m
	Mxr(lower)=	50796.1 kN·m	50796.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-120	210	0	0	0	120	0.33
	[2]	-123	210	8	0	8	120	0.35
DECK-C	[3]	-123	210	8	0	8	120	0.35
	[4]	-123	210	9	6	15	120	0.36
	[5]	-130	210	13	6	19	120	0.41
DECK-R	[6]	-130	210	5	0	5	120	0.39
	[7]	-130	210	5	0	5	120	0.39
	[8]	-132	210	0	0	0	120	0.39
LWEB	[9]	-122	210	24	8	32	120	0.41
	[10]	0	210	27	8	35	120	0.09
RWEB	[11]	170	210	21	8	29	120	0.72
	[12]	-128	210	25	8	33	120	0.45
	[13]	0	210	28	8	36	120	0.09
	[14]	170	210	23	8	31	120	0.72

LFLG	[15]	174	210	0	0	0	120	0.69
	[16]	174	210	5	3	8	120	0.69
	[17]	174	210	6	3	9	120	0.69
	[18]	174	210	0	0	0	120	0.69

Girder Name : G-1 Section Name : Sec-3:J-3 (Girder number= 1 Section number= 3)

Section force Mx = 53918 kN·m Sy = 1049 kN T = 1095 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 46 (SM570-H)	851.0	851.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2877.9	2877.9
Gravity center	ex (cm)	-11.6	-11.6
	ey (cm)	146.5	146.5
Moment of inertia	Ix (cm4)	41870401	41870401
	Iy (cm4)	43591206	43591206
Torsion Constant	J (cm4)	21360802	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	68596.1 kN·m	68596.1 kN·m
Mxr(lower)=	70668.8 kN·m	70668.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-152	210	0	0	0	120	0.52
	[2]	-155	210	5	0	5	120	0.54
DECK-C	[3]	-155	210	5	0	5	120	0.54
	[4]	-155	210	6	6	11	120	0.55
	[5]	-163	210	8	6	14	120	0.62
DECK-R	[6]	-163	210	3	0	3	120	0.61
	[7]	-163	210	3	0	3	120	0.61
LWEB	[8]	-165	210	0	0	0	120	0.62
	[9]	-153	255	15	7	22	145	0.39
RWEB	[10]	0	255	17	7	24	145	0.03
	[11]	189	255	14	7	21	145	0.57
	[12]	-161	255	16	7	23	145	0.42
	[13]	0	255	18	7	25	145	0.03
	[14]	189	255	15	7	22	145	0.57

LFLG	[15]	195	255	0	0	0	145	0.58
	[16]	195	255	3	2	5	145	0.58
	[17]	195	255	3	2	5	145	0.58
	[18]	195	255	0	0	0	145	0.58

Girder Name : G-1 Section Name : Sec-4:J-4 (Girder number= 1 Section number= 4)

Section force Mx = 59651 kN·m Sy = 500 kN T = 1109 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 52 (SM570-H)	962.0	962.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2988.9	2988.9
Gravity center	ex (cm)	-9.7	-9.7
	ey (cm)	140.9	140.9
Moment of inertia	Ix (cm4)	44319750	44319750
	Iy (cm4)	44194764	44194764
Torsion Constant	J (cm4)	21508378	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	69558.1 kN·m	69558.1 kN·m
Mxr(lower)=	77374.7 kN·m	77374.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-166	210	0	0	0	120	0.63
	[2]	-169	210	2	0	2	120	0.65
DECK-C	[3]	-169	210	2	0	2	120	0.65
	[4]	-170	210	3	6	8	120	0.66
	[5]	-178	210	4	6	10	120	0.72
DECK-R	[6]	-178	210	1	0	1	120	0.72
	[7]	-178	210	1	0	1	120	0.72
LWEB	[8]	-180	210	0	0	0	120	0.74
	[9]	-168	255	7	8	15	145	0.44
	[10]	0	255	8	8	16	145	0.01
RWEB	[11]	190	255	7	8	14	145	0.57
	[12]	-176	255	7	8	15	145	0.49
	[13]	0	255	8	8	16	145	0.01
	[14]	190	255	7	8	15	145	0.56

LFLG	[15]	197	255	0	0	0	145	0.59
	[16]	197	255	1	2	3	145	0.59
	[17]	197	255	1	2	3	145	0.59
	[18]	197	255	0	0	0	145	0.59

Girder Name : G-1 Section Name : Sec-5:Mx-Max (Girder number= 1 Section number= 5)

Section force Mx = 60292 kN·m Sy = -477 kN T = 862 kN·m

Effective buckling length Lx = 10002 mmLy = 10002 mm

Radius of curvature R = 293.6 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.1	192.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 52 (SM570-H)	962.0	962.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2988.9	2988.9
Gravity center	ex (cm)	-10.2	-10.2
	ey (cm)	141.0	141.0
Moment of inertia	Ix (cm4)	44308467	44308467
	Iy (cm4)	44304886	44304886
Torsion Constant	J (cm4)	21477884	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	70132.5 kN·m	70132.5 kN·m
	Mxr(lower)=	77152.4 kN·m	77152.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-169	210	0	0	0	120	0.65
	[2]	-172	210	2	0	2	120	0.67
DECK-C	[3]	-172	210	2	0	2	120	0.67
	[4]	-172	210	3	4	7	120	0.68
	[5]	-179	210	4	4	8	120	0.73
DECK-R	[6]	-179	210	1	0	1	120	0.73
	[7]	-179	210	1	0	1	120	0.73
LWEB	[8]	-181	210	0	0	0	120	0.74
	[9]	-171	255	7	6	13	145	0.46
	[10]	0	255	8	6	14	145	0.01
RWEB	[11]	193	255	6	6	12	145	0.58
	[12]	-177	255	7	6	13	145	0.49
	[13]	0	255	8	6	14	145	0.01
	[14]	191	255	7	6	13	145	0.57

LFLG	[15]	199	255	0	0	0	145	0.61
	[16]	199	255	1	1	3	145	0.61
	[17]	198	255	1	1	3	145	0.60
	[18]	198	255	0	0	0	145	0.60

Girder Name : G-1 Section Name : Sec-6:J-5 (Girder number= 1 Section number= 6)

Section force Mx = 59499 kN·m Sy = -806 kN T = 862 kN·m

Effective buckling length Lx = 10002 mmLy = 10002 mm

Radius of curvature R = 293.6 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 52 (SM570-H)	962.0	962.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2988.9	2988.9
Gravity center	ex (cm)	-10.2	-10.2
	ey (cm)	141.0	141.0
Moment of inertia	Ix (cm4)	44308259	44308259
	Iy (cm4)	44300034	44300034
Torsion Constant	J (cm4)	21477732	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	70135.9 kN·m	70135.9 kN·m
Mxr(lower)=	77152.7 kN·m	77152.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-167	210	0	0	0	120	0.63
	[2]	-170	210	4	0	4	120	0.65
DECK-C	[3]	-170	210	4	0	4	120	0.65
	[4]	-170	210	4	4	9	120	0.66
	[5]	-176	210	6	4	11	120	0.71
DECK-R	[6]	-177	210	2	0	2	120	0.71
	[7]	-177	210	2	0	2	120	0.71
	[8]	-178	210	0	0	0	120	0.72
LWEB	[9]	-168	255	11	6	17	145	0.45
	[10]	0	255	13	6	19	145	0.02
RWEB	[11]	190	255	11	6	17	145	0.57
	[12]	-174	255	12	6	18	145	0.48
	[13]	0	255	13	6	19	145	0.02
	[14]	189	255	12	6	17	145	0.56

LFLG	[15]	197	255	0	0	0	145	0.59
	[16]	197	255	2	1	3	145	0.59
	[17]	196	255	2	1	4	145	0.59
	[18]	195	255	0	0	0	145	0.59

Girder Name : G-1 Section Name : Sec-7:J-6 (Girder number= 1 Section number= 7)

Section force Mx = 54296 kN·m Sy = -1285 kN T = -927 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 293.6 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 46 (SM570-H)	851.0	851.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2877.9	2877.9
Gravity center	ex (cm)	-12.1	-12.1
	ey (cm)	146.7	146.7
Moment of inertia	Ix (cm4)	41855611	41855611
	Iy (cm4)	43693081	43693081
Torsion Constant	J (cm4)	21329543	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	69168.9 kN·m	69168.9 kN·m
	Mxr(lower)=	70467.5 kN·m	70467.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-154	210	0	0	0	120	0.54
	[2]	-157	210	6	0	6	120	0.56
DECK-C	[3]	-157	210	6	0	6	120	0.56
	[4]	-157	210	7	5	12	120	0.57
	[5]	-163	210	10	5	15	120	0.62
DECK-R	[6]	-164	210	4	0	4	120	0.61
	[7]	-164	210	4	0	4	120	0.61
	[8]	-165	210	0	0	0	120	0.62
LWEB	[9]	-155	255	18	6	25	145	0.40
	[10]	0	255	21	6	27	145	0.04
RWEB	[11]	191	255	17	6	23	145	0.59
	[12]	-161	255	19	6	25	145	0.43
	[13]	0	255	22	6	28	145	0.04
	[14]	189	255	18	6	24	145	0.58

LFLG	[15]	196	255	0	0	0	145	0.59
	[16]	196	255	4	2	5	145	0.59
	[17]	195	255	4	2	6	145	0.59
	[18]	195	255	0	0	0	145	0.59

Girder Name : G-1 Section Name : Sec-8:J-7 (Girder number= 1 Section number= 8)

Section force Mx = 42129 kN·m Sy = -1964 kN T = -1032 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 30 (SM570)	555.0	555.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2581.9	2581.9
Gravity center	ex (cm)	-17.6	-17.6
	ey (cm)	163.7	163.7
Moment of inertia	Ix (cm4)	34419730	34419730
	Iy (cm4)	41860777	41860777
Torsion Constant	J (cm4)	20760106	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65157.3 kN·m	65157.3 kN·m
Mxr(lower)=	52646.5 kN·m	52646.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-123	210	0	0	0	120	0.34
	[2]	-126	210	10	0	10	120	0.37
DECK-C	[3]	-126	210	10	0	10	120	0.37
	[4]	-126	210	11	5	17	120	0.38
	[5]	-134	210	16	5	21	120	0.44
DECK-R	[6]	-134	210	6	0	6	120	0.41
	[7]	-134	210	6	0	6	120	0.41
LWEB	[8]	-136	210	0	0	0	120	0.42
	[9]	-125	255	29	7	36	145	0.30
RWEB	[10]	0	255	33	7	40	145	0.07
	[11]	201	255	24	7	31	145	0.67
RWEB	[12]	-132	255	30	7	37	145	0.33
	[13]	0	255	33	7	41	145	0.08
	[14]	200	255	26	7	33	145	0.67

LFLG	[15]	204	255	0	0	0	145	0.64
	[16]	204	255	8	3	10	145	0.65
	[17]	204	255	9	3	12	145	0.65
	[18]	204	255	0	0	0	145	0.64

Girder Name : G-1 Section Name : Sec-9:J-8 (Girder number= 1 Section number= 9)

Section force Mx = 23268 kN·m Sy = -2583 kN T = -1112 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 16 (SM490Y)	296.0	296.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2448.3	2448.3
Gravity center	ex (cm)	-20.6	-20.6
	ey (cm)	173.5	173.5
Moment of inertia	Ix (cm4)	29978667	29978667
	Iy (cm4)	40900023	40900023
Torsion Constant	J (cm4)	19499284	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62212.8 kN·m	62212.8 kN·m
	Mxr(lower)=	35962.7 kN·m	27069.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-70	210	0	0	0	120	0.11
	[2]	-72	210	13	0	13	120	0.13
DECK-C	[3]	-72	210	13	0	13	120	0.13
	[4]	-73	210	16	6	21	120	0.15
	[5]	-77	210	21	6	27	120	0.19
DECK-R	[6]	-78	210	8	0	8	120	0.14
	[7]	-78	210	8	0	8	120	0.14
LWEB	[8]	-79	210	0	0	0	120	0.14
	[9]	-72	210	40	8	48	120	0.27
	[10]	0	210	44	8	52	120	0.19
RWEB	[11]	135	210	29	8	37	120	0.51
	[12]	-76	210	41	8	49	120	0.29
	[13]	0	210	45	8	53	120	0.19
	[14]	135	210	32	8	40	120	0.52

LFLG	[15]	136	210	0	0	0	120	0.42
	[16]	136	210	19	6	25	120	0.46
	[17]	136	210	22	6	28	120	0.47
	[18]	136	210	0	0	0	120	0.42

Girder Name : G-1 Section Name : Sec-9:J-9 (Girder number= 1 Section number= 9)

Section force Mx-Max Mx = 2127 kN·m Sy = -3016 kN T = 1006 kN·m
Mx-Min Mx = -15667 kN·m Sy = -3016 kN T = 1006 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1378
	Intermediate	3000	2995
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	191.7
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	536.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 16 (SM490Y)	296.0	296.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2448.3	2447.2
Gravity center	ex (cm)	-20.6	-20.5
	ey (cm)	173.5	173.4
Moment of inertia	Ix (cm4)	29978667	29968442
	Iy (cm4)	40900023	40871175
Torsion Constant	J (cm4)	19499284	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62164.4 kN·m	62164.4 kN·m
Mxr(lower)=	35959.6 kN·m	27067.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-6	210	0	0	0	120	0.00
	[2]	-7	210	15	0	15	120	0.02
DECK-C	[3]	-7	210	15	0	15	120	0.02
	[4]	-7	210	18	5	23	120	0.04
	[5]	-7	210	25	5	30	120	0.06
DECK-R	[6]	-7	210	9	0	9	120	0.01
	[7]	-7	210	9	0	9	120	0.01
LWEB	[8]	-7	210	0	0	0	120	0.00
	[9]	-7	210	47	7	54	120	0.20
	[10]	0	210	52	7	58	120	0.24
RWEB	[11]	12	210	34	7	41	120	0.12
	[12]	-7	210	48	7	55	120	0.21
	[13]	0	210	53	7	59	120	0.25
	[14]	12	210	37	7	44	120	0.14

LFLG	[15]	12	210	0	0	0	120	0.00
	[16]	12	210	22	5	27	120	0.06
	[17]	12	210	25	5	31	120	0.07
	[18]	12	210	0	0	0	120	0.00
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	47	210	0	0	0	120	0.05
	[2]	49	210	15	0	15	120	0.07
DECK-C	[3]	49	210	15	0	15	120	0.07
	[4]	49	210	18	5	23	120	0.09
	[5]	52	210	25	5	30	120	0.12
DECK-R	[6]	52	210	9	0	9	120	0.07
	[7]	52	210	9	0	9	120	0.07
	[8]	53	210	0	0	0	120	0.06
LWEB	[9]	48	210	47	7	54	120	0.25
	[10]	0	210	52	7	58	120	0.24
RWEB	[11]	-91	210	34	7	41	120	0.30
	[12]	51	210	48	7	55	120	0.27
	[13]	0	210	53	7	59	120	0.25
LFLG	[14]	-91	210	37	7	44	120	0.32
	[15]	-91	158	0	0	0	120	0.19
	[16]	-91	210	22	5	27	120	0.24
	[17]	-91	210	25	5	31	120	0.25
	[18]	-91	210	0	0	0	120	0.19

Girder Name : G-1 Section Name : Sec-10:Left (Girder number= 1 Section number= 10)

Section force Mx-Max Mx = 2127 kN·m Sy = -3016 kN T = 1006 kN·m
Mx-Min Mx = -15667 kN·m Sy = -3016 kN T = 1006 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1378
	Intermediate	3000	2995
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	263.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	738.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 24 (SM570)	444.0	444.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2907.1	2905.5
Gravity center	ex (cm)	-21.7	-21.7
	ey (cm)	174.5	174.4
Moment of inertia	Ix (cm4)	37246092	37232428
	Iy (cm4)	49367756	49328417
Torsion Constant	J (cm4)	21879981	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	78029.6 kN·m	78029.6 kN·m
Mxr(lower)=	53686.4 kN·m	53686.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-5	210	0	0	0	120	0.00
	[2]	-5	210	11	0	11	120	0.01
DECK-C	[3]	-5	210	11	0	11	120	0.01
	[4]	-5	210	13	4	17	120	0.02
	[5]	-6	210	18	4	22	120	0.03
DECK-R	[6]	-6	210	7	0	7	120	0.00
	[7]	-6	210	7	0	7	120	0.00
LWEB	[8]	-6	210	0	0	0	120	0.00
	[9]	-5	255	46	7	53	145	0.14
RWEB	[10]	0	255	50	7	57	145	0.15
	[11]	10	255	36	7	43	145	0.09
RWEB	[12]	-6	255	48	7	55	145	0.15
	[13]	0	255	52	7	59	145	0.16
	[14]	10	255	40	7	47	145	0.10

LFLG	[15]	10	255	0	0	0	145	0.00
	[16]	10	255	15	3	19	145	0.02
	[17]	10	255	18	3	21	145	0.02
	[18]	10	255	0	0	0	145	0.00
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	39	210	11	0	11	120	0.04
DECK-C	[3]	39	210	11	0	11	120	0.04
	[4]	39	210	13	4	17	120	0.05
	[5]	41	210	18	4	22	120	0.07
DECK-R	[6]	42	210	7	0	7	120	0.04
	[7]	42	210	7	0	7	120	0.04
	[8]	42	210	0	0	0	120	0.04
LWEB	[9]	38	255	46	7	53	145	0.16
	[10]	0	255	50	7	57	145	0.15
RWEB	[11]	-74	255	36	7	43	145	0.17
	[12]	41	255	48	7	55	145	0.17
	[13]	0	255	52	7	59	145	0.16
LFLG	[14]	-73	255	40	7	47	145	0.19
	[15]	-74	255	0	0	0	145	0.09
	[16]	-74	255	15	3	19	145	0.10
	[17]	-74	255	18	3	21	145	0.11
	[18]	-74	255	0	0	0	145	0.09

Girder Name : G-1 Section Name : Sec-10:J-10 (Girder number= 1 Section number= 10)

Section force Mx = -40906 kN·m Sy = -3568 kN T = 1296 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1356
	Intermediate	3000	2937
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	258.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	725.5
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 24 (SM570)	444.0	444.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2907.1	2888.1
Gravity center	ex (cm)	-21.7	-21.1
	ey (cm)	174.5	173.9
Moment of inertia	Ix (cm4)	37246092	37080630
	Iy (cm4)	49367756	48905909
Torsion Constant	J (cm4)	21879981	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	77278.0 kN·m	77278.0 kN·m
	Mxr(lower)=	53638.0 kN·m	53638.0 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	100	210	0	0	0	120	0.23
	[2]	102	210	13	0	13	120	0.25
DECK-C	[3]	102	210	13	0	13	120	0.25
	[4]	103	210	15	5	20	120	0.27
	[5]	109	210	21	5	26	120	0.32
DECK-R	[6]	110	210	8	0	8	120	0.28
	[7]	110	210	8	0	8	120	0.28
LWEB	[8]	111	210	0	0	0	120	0.28
	[9]	101	255	55	9	64	145	0.35
RWEB	[10]	1	255	59	9	68	145	0.22
	[11]	-192	255	43	9	51	145	0.69
	[12]	107	255	57	9	66	145	0.38
	[13]	1	255	62	9	70	145	0.24
	[14]	-192	255	47	9	56	145	0.71

LFLG	[15]	-194	255	0	0	0	145	0.58
	[16]	-194	255	18	4	22	145	0.61
	[17]	-194	255	21	4	25	145	0.61
	[18]	-194	255	0	0	0	145	0.58

Girder Name : G-1 Section Name : Sec-11:J-11 (Girder number= 1 Section number= 11)

Section force Mx = -65694 kN·m Sy = -4188 kN T = -1460 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1340
	Intermediate	3000	2894
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 27 (SM490Y)	324.1	313.3
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 27 (SM490Y)	907.4	878.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3032 * 12 (SM570)	363.8	363.8
1-RWEB PL	2703 * 12 (SM570)	324.4	324.4
1-LFLG PL	1850 * 43 (SM570-H)	795.5	795.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3517.7	3424.3
Gravity center	ex (cm)	-18.4	-17.2
	ey (cm)	163.5	160.9
Moment of inertia	Ix (cm4)	50122627	49248278
	Iy (cm4)	57907058	56915861
Torsion Constant	J (cm4)	23819713	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	90909.7 kN·m	90909.7 kN·m
	Mxr(lower)=	76024.7 kN·m	76024.7 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	138	210	0	0	0	120	0.43
	[2]	141	210	12	0	13	120	0.46
DECK-C	[3]	141	210	12	0	13	120	0.46
	[4]	142	210	14	4	18	120	0.48
	[5]	150	210	20	4	25	120	0.55
DECK-R	[6]	150	210	7	0	8	120	0.51
	[7]	150	210	7	0	8	120	0.51
	[8]	152	210	0	0	0	120	0.52
LWEB	[9]	138	255	62	10	72	145	0.54
	[10]	4	255	67	10	77	145	0.28
RWEB	[11]	-215	255	54	10	64	145	0.91
	[12]	146	255	66	10	76	145	0.60
	[13]	3	255	71	10	81	145	0.31
	[14]	-215	255	60	10	69	145	0.94

LFLG	[15]	-220	255	0	0	0	145	0.75
	[16]	-220	255	12	3	15	145	0.76
	[17]	-220	255	15	3	17	145	0.76
	[18]	-220	255	0	0	0	145	0.75

Girder Name : G-1 Section Name : Sec-12:Mx-Min_L (Girder number= 1 Section number= 12)

Section force Mx = -79954 kN·m Sy = -4466 kN T = -1460 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1332
	Intermediate	3000	2872
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 27 (SM490Y)	324.1	311.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 27 (SM490Y)	907.4	872.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3032 * 14 (SM570)	424.5	424.5
1-RWEB PL	2703 * 14 (SM570)	378.4	378.4
1-LFLG PL	1850 * 52 (SM570-H)	962.0	962.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3798.9	3697.5
Gravity center	ex (cm)	-15.3	-13.9
	ey (cm)	155.2	152.3
Moment of inertia Ix (cm4)		55360607	54225352
	Iy (cm4)	60519422	59300165
Torsion Constant	J (cm4)	27151896	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	93105.4 kN·m	93105.4 kN·m
Mxr(lower)=	87768.8 kN·m	87768.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	165	210	0	0	1	120	0.62
	[2]	169	210	13	0	13	120	0.66
DECK-C	[3]	169	210	13	0	13	120	0.66
	[4]	169	210	15	4	19	120	0.67
	[5]	178	210	21	4	26	120	0.76
DECK-R	[6]	178	210	8	0	8	120	0.73
	[7]	178	210	8	0	8	120	0.73
	[8]	180	210	0	0	0	120	0.74
LWEB	[9]	165	255	56	9	64	145	0.62
	[10]	5	255	61	9	70	145	0.23
RWEB	[11]	-225	255	50	9	59	145	0.95
	[12]	174	255	59	9	67	145	0.68
	[13]	4	255	64	9	73	145	0.25
	[14]	-225	255	55	9	63	145	0.97

LFLG	[15]	-232	255	0	0	0	145	0.83
	[16]	-232	255	11	2	13	145	0.84
	[17]	-232	255	13	2	15	145	0.84
	[18]	-232	255	0	0	0	145	0.83

Girder Name : G-1 Section Name : Sec-12:Mx-Min_R (Girder number= 1 Section number= 12)

Section force Mx = -79954 kN·m Sy = 3868 kN T = -1678 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1332
	Intermediate	3000	2872
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 27 (SM490Y)	324.1	311.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 27 (SM490Y)	907.4	872.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3032 * 14 (SM570)	424.5	424.5
1-RWEB PL	2703 * 14 (SM570)	378.4	378.4
1-LFLG PL	1850 * 52 (SM570-H)	962.0	962.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3798.9	3697.5
Gravity center	ex (cm)	-15.3	-13.9
	ey (cm)	155.2	152.3
Moment of inertia	Ix (cm4)	55360607	54225352
	Iy (cm4)	60519422	59300165
Torsion Constant	J (cm4)	27151896	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		93105.4 kN·m	93105.4 kN·m
Mxr(lower)=		87768.8 kN·m	87768.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	165	210	0	0	1	120	0.62
	[2]	169	210	11	0	11	120	0.65
DECK-C	[3]	169	210	11	0	11	120	0.65
	[4]	169	210	13	5	18	120	0.67
	[5]	178	210	18	5	23	120	0.76
DECK-R	[6]	178	210	7	0	7	120	0.73
	[7]	178	210	7	0	7	120	0.73
LWEB	[8]	180	210	0	0	0	120	0.74
	[9]	165	255	48	10	58	145	0.58
RWEB	[10]	5	255	53	10	63	145	0.19
	[11]	-225	255	44	10	53	145	0.92
	[12]	174	255	51	10	61	145	0.64
	[13]	4	255	56	10	65	145	0.20
	[14]	-225	255	47	10	57	145	0.93

LFLG	[15]	-232	255	0	0	0	145	0.83
	[16]	-232	255	10	3	12	145	0.84
	[17]	-232	255	11	3	14	145	0.84
	[18]	-232	255	0	0	0	145	0.83

Girder Name : G-1 Section Name : Sec-13:J-12 (Girder number= 1 Section number= 13)

Section force Mx = -70217 kN·m Sy = 3642 kN T = -1678 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1338
	Intermediate	3000	2889
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 27 (SM490Y)	324.1	312.8
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 27 (SM490Y)	907.4	877.5
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3032 * 12 (SM570)	363.8	363.8
1-RWEB PL	2703 * 12 (SM570)	324.4	324.4
1-LFLG PL	1850 * 47 (SM570-H)	869.5	869.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3591.7	3496.6
Gravity center	ex (cm)	-17.1	-15.9
	ey (cm)	160.0	157.3
Moment of inertia	Ix (cm4)	52167623	51209072
	Iy (cm4)	58366578	57323439
Torsion Constant	J (cm4)	23957447	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	91667.2 kN·m	91667.2 kN·m
	Mxr(lower)=	80589.3 kN·m	80589.3 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	147	210	0	0	0	120	0.49
	[2]	150	210	11	0	11	120	0.52
DECK-C	[3]	150	210	11	0	11	120	0.52
	[4]	150	210	12	5	17	120	0.53
	[5]	159	210	18	5	23	120	0.61
DECK-R	[6]	159	210	6	0	7	120	0.58
	[7]	159	210	6	0	7	120	0.58
LWEB	[8]	161	210	0	0	0	120	0.59
	[9]	147	255	54	11	65	145	0.54
RWEB	[10]	4	255	58	11	70	145	0.23
	[11]	-216	255	48	11	59	145	0.89
	[12]	155	255	57	11	68	145	0.59
	[13]	4	255	61	11	73	145	0.25
	[14]	-216	255	52	11	64	145	0.91

LFLG	[15]	-222	255	0	0	0	145	0.76
	[16]	-222	255	10	3	13	145	0.77
	[17]	-222	255	12	3	15	145	0.77
	[18]	-222	255	0	0	0	145	0.76

Girder Name : G-1 Section Name : Sec-14:J-13 (Girder number= 1 Section number= 14)

Section force Mx = -42504 kN·m Sy = 2902 kN T = -1544 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2946
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	259.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	727.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM490Y)	364.5	364.5
1-RWEB PL	2708 * 12 (SM490Y)	325.0	325.0
1-LFLG PL	1850 * 27 (SM490Y)	499.5	499.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2962.6	2946.4
Gravity center	ex (cm)	-20.6	-20.1
	ey (cm)	171.2	170.7
Moment of inertia	Ix (cm4)	38953193	38802317
	Iy (cm4)	49734805	49337761
Torsion Constant	J (cm4)	22122924	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	78352.0 kN·m	78352.0 kN·m
Mxr(lower)=	47005.6 kN·m	47005.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	103	210	0	0	0	120	0.24
	[2]	105	210	11	0	11	120	0.26
DECK-C	[3]	105	210	11	0	11	120	0.26
	[4]	106	210	12	6	18	120	0.28
	[5]	112	210	17	6	23	120	0.32
DECK-R	[6]	113	210	6	0	7	120	0.29
	[7]	113	210	6	0	7	120	0.29
	[8]	114	210	0	0	0	120	0.29
LWEB	[9]	103	210	44	11	55	120	0.45
	[10]	1	210	48	11	59	120	0.24
RWEB	[11]	-187	210	35	11	46	120	0.94
	[12]	110	210	46	11	57	120	0.50
	[13]	1	210	50	11	60	120	0.25
	[14]	-187	210	39	11	49	120	0.96

LFLG	[15]	-190	210	0	0	0	120	0.82
	[16]	-190	210	13	5	18	120	0.84
	[17]	-190	210	15	5	20	120	0.85
	[18]	-190	210	0	0	0	120	0.82

Girder Name : G-1 Section Name : Sec-15:J-14 (Girder number= 1 Section number= 15)

Section force Mx = -22444 kN·m Sy = 2363 kN T = -1243 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 16 (SM490Y)	296.0	296.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2448.3	2448.1
Gravity center	ex (cm)	-20.6	-20.6
	ey (cm)	173.5	173.4
Moment of inertia	Ix (cm4)	29978667	29977105
	Iy (cm4)	40900023	40895693
Torsion Constant	J (cm4)	19499284	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62205.4 kN·m	62205.4 kN·m
	Mxr(lower)=	35962.3 kN·m	27069.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	68	210	0	0	0	120	0.10
	[2]	70	210	12	0	12	120	0.12
DECK-C	[3]	70	210	12	0	12	120	0.12
	[4]	70	210	14	6	21	120	0.14
	[5]	75	210	19	6	26	120	0.17
DECK-R	[6]	75	210	7	0	7	120	0.13
	[7]	75	210	7	0	7	120	0.13
LWEB	[8]	76	210	0	0	0	120	0.13
	[9]	69	210	37	9	45	120	0.25
RWEB	[10]	0	210	40	9	49	120	0.17
	[11]	-130	210	27	9	35	120	0.47
	[12]	73	210	37	9	46	120	0.27
	[13]	0	210	41	9	50	120	0.17
	[14]	-130	210	29	9	38	120	0.48

LFLG	[15]	-131	158	0	0	0	120	0.39
	[16]	-131	210	17	6	24	120	0.43
	[17]	-131	210	20	6	26	120	0.44
	[18]	-131	210	0	0	0	120	0.39

Girder Name : G-1 Section Name : Sec-15:Right (Girder number= 1 Section number= 15)

Section force Mx-Max Mx = 10409 kN·m Sy = 1785 kN T = -1086 kN·m
 Mx-Min Mx = -8613 kN·m Sy = 1785 kN T = -1086 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 16 (SM490Y)	296.0	296.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2448.3	2448.3
Gravity center	ex (cm)	-20.6	-20.6
	ey (cm)	173.5	173.5
Moment of inertia	Ix (cm4)	29978667	29978667
	Iy (cm4)	40900023	40900023
Torsion Constant	J (cm4)	19499284	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62212.8 kN·m	62212.8 kN·m
Mxr(lower)=	35962.7 kN·m	27069.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-32	210	0	0	0	120	0.02
	[2]	-32	210	9	0	9	120	0.03
DECK-C	[3]	-32	210	9	0	9	120	0.03
	[4]	-32	210	11	6	16	120	0.04
	[5]	-35	210	15	6	20	120	0.06
DECK-R	[6]	-35	210	6	0	6	120	0.03
	[7]	-35	210	6	0	6	120	0.03
LWEB	[8]	-35	210	0	0	0	120	0.03
	[9]	-32	210	28	7	35	120	0.11
RWEB	[10]	0	210	31	7	38	120	0.10
	[11]	60	210	20	7	28	120	0.14
RWEB	[12]	-34	210	28	7	36	120	0.11
	[13]	0	210	31	7	39	120	0.10
	[14]	60	210	22	7	30	120	0.14

LFLG	[15]	61	210	0	0	0	120	0.08	
	[16]	61	210	13	6	19	120	0.11	
	[17]	61	210	15	6	21	120	0.11	
	[18]	61	210	0	0	0	120	0.08	
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ	
	DECK-L	[1]	26	210	0	0	0	120	0.02
		[2]	27	210	9	0	9	120	0.02
	DECK-C	[3]	27	210	9	0	9	120	0.02
		[4]	27	210	11	6	16	120	0.04
		[5]	29	210	15	6	20	120	0.05
	DECK-R	[6]	29	210	6	0	6	120	0.02
		[7]	29	210	6	0	6	120	0.02
		[8]	29	210	0	0	0	120	0.02
	LWEB	[9]	26	210	28	7	35	120	0.10
		[10]	0	210	31	7	38	120	0.10
	RWEB	[11]	-50	210	20	7	28	120	0.11
		[12]	28	210	28	7	36	120	0.11
		[13]	0	210	31	7	39	120	0.10
	LFLG	[14]	-50	210	22	7	30	120	0.12
		[15]	-50	158	0	0	0	120	0.06
		[16]	-50	210	13	6	19	120	0.08
		[17]	-50	210	15	6	21	120	0.09
[18]		-50	210	0	0	0	120	0.06	

Girder Name : G-1 Section Name : Sec-16:J-15 (Girder number= 1 Section number= 16)

Section force Mx-Max Mx = 10409 kN·m Sy = 1785 kN T = -1086 kN·m
Mx-Min Mx = -8613 kN·m Sy = 1785 kN T = -1086 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-32	210	0	0	0	120	0.02
	[2]	-33	210	9	0	9	120	0.03
DECK-C	[3]	-33	210	9	0	9	120	0.03
	[4]	-33	210	11	6	17	120	0.04
	[5]	-35	210	15	6	20	120	0.06
DECK-R	[6]	-35	210	6	0	6	120	0.03
	[7]	-35	210	6	0	6	120	0.03
LWEB	[8]	-36	210	0	0	0	120	0.03
	[9]	-32	210	28	7	35	120	0.11
RWEB	[10]	0	210	31	7	38	120	0.10
	[11]	64	210	20	7	27	120	0.14
RWEB	[12]	-34	210	28	7	36	120	0.12
	[13]	0	210	31	7	39	120	0.10
	[14]	64	210	22	7	29	120	0.15

	LFLG	[15]	64	210	0	0	0	120	0.09
		[16]	64	210	15	6	21	120	0.12
		[17]	64	210	17	6	23	120	0.13
		[18]	64	210	0	0	0	120	0.09
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	26	210	0	0	0	120	0.02
		[2]	27	210	9	0	9	120	0.02
	DECK-C	[3]	27	210	9	0	9	120	0.02
		[4]	27	210	11	6	17	120	0.04
		[5]	29	210	15	6	20	120	0.05
		[6]	29	210	6	0	6	120	0.02
	DECK-R	[7]	29	210	6	0	6	120	0.02
		[8]	29	210	0	0	0	120	0.02
	LWEB	[9]	27	210	28	7	35	120	0.10
		[10]	0	210	31	7	38	120	0.10
		[11]	-53	210	20	7	27	120	0.11
	RWEB	[12]	28	210	28	7	36	120	0.11
		[13]	0	210	31	7	39	120	0.10
		[14]	-53	210	22	7	29	120	0.12
	LFLG	[15]	-53	121	0	0	0	120	0.06
		[16]	-53	210	15	6	21	120	0.09
		[17]	-53	210	17	6	23	120	0.10
		[18]	-53	210	0	0	0	120	0.06

Girder Name : G-1 Section Name : Sec-16:J-16 (Girder number= 1 Section number= 16)

Section force Mx = 21666 kN·m Sy = 1255 kN T = -899 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-66	210	0	0	0	120	0.10
	[2]	-68	210	6	0	6	120	0.11
DECK-C	[3]	-68	210	6	0	6	120	0.11
	[4]	-68	210	8	5	12	120	0.12
	[5]	-73	210	10	5	15	120	0.14
DECK-R	[6]	-73	210	4	0	4	120	0.12
	[7]	-73	210	4	0	4	120	0.12
LWEB	[8]	-74	210	0	0	0	120	0.12
	[9]	-67	210	20	6	26	120	0.15
RWEB	[10]	0	210	22	6	28	120	0.05
	[11]	133	210	14	6	20	120	0.43
RWEB	[12]	-72	210	20	6	26	120	0.16
	[13]	0	210	22	6	28	120	0.06
	[14]	132	210	15	6	21	120	0.43

LFLG	[15]	133	210	0	0	0	120	0.40
	[16]	133	210	10	5	16	120	0.42
	[17]	133	210	12	5	17	120	0.42
	[18]	133	210	0	0	0	120	0.40

Girder Name : G-1 Section Name : Sec-17:J-17 (Girder number= 1 Section number= 17)

Section force Mx = 28685 kN·m Sy = 782 kN T = -702 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2396.9	2396.9
Gravity center	ex (cm)	-22.0	-22.0
	ey (cm)	176.5	176.5
Moment of inertia	Ix (cm4)	28914069	28914069
	Iy (cm4)	40668308	40668308
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61892.6 kN·m	61892.6 kN·m
Mxr(lower)=	34007.9 kN·m	31773.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-87	210	0	0	0	120	0.17
	[2]	-89	210	4	0	4	120	0.18
DECK-C	[3]	-89	210	4	0	4	120	0.18
	[4]	-90	210	5	4	8	120	0.19
	[5]	-96	210	6	4	10	120	0.21
DECK-R	[6]	-96	210	2	0	2	120	0.21
	[7]	-96	210	2	0	2	120	0.21
	[8]	-97	210	0	0	0	120	0.21
LWEB	[9]	-88	210	12	5	17	120	0.20
	[10]	0	210	13	5	18	120	0.02
RWEB	[11]	175	210	9	5	13	120	0.71
	[12]	-94	210	12	5	17	120	0.22
	[13]	0	210	14	5	18	120	0.02
	[14]	175	210	9	5	14	120	0.71

LFLG	[15]	177	210	0	0	0	120	0.71
	[16]	177	210	4	3	7	120	0.71
	[17]	177	210	5	3	8	120	0.72
	[18]	177	210	0	0	0	120	0.71

Girder Name : G-1 Section Name : Sec-18:Right (Girder number= 1 Section number= 18)

Section force Mx = 30451 kN·m Sy = 502 kN T = 726 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 22 (SM490Y)	407.0	407.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2433.9	2433.9
Gravity center	ex (cm)	-21.1	-21.1
	ey (cm)	173.8	173.8
Moment of inertia	Ix (cm4)	30076942	30076942
	Iy (cm4)	40914888	40914888
Torsion Constant	J (cm4)	20206967	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62647.6 kN·m	62647.6 kN·m
Mxr(lower)=	35881.2 kN·m	35309.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-92	210	0	0	0	120	0.19
	[2]	-94	210	2	0	3	120	0.20
DECK-C	[3]	-94	210	2	0	3	120	0.20
	[4]	-94	210	3	4	7	120	0.20
	[5]	-100	210	4	4	8	120	0.23
DECK-R	[6]	-101	210	2	0	2	120	0.23
	[7]	-101	210	2	0	2	120	0.23
LWEB	[8]	-102	210	0	0	0	120	0.24
	[9]	-93	210	8	5	13	120	0.21
RWEB	[10]	0	210	9	5	13	120	0.01
	[11]	176	210	6	5	11	120	0.71
RWEB	[12]	-99	210	8	5	13	120	0.23
	[13]	0	210	9	5	14	120	0.01
	[14]	176	210	6	5	11	120	0.71

LFLG	[15]	178	210	0	0	0	120	0.72
	[16]	178	210	2	3	5	120	0.72
	[17]	178	210	3	3	6	120	0.72
	[18]	178	210	0	0	0	120	0.72

Girder Name : G-1 Section Name : Sec-19:J-18 (Girder number= 1 Section number= 19)

Section force Mx = 30451 kN·m Sy = 502 kN T = 726 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 19 (SM490Y)	351.5	351.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2503.8	2503.8
Gravity center	ex (cm)	-19.2	-19.2
	ey (cm)	169.6	169.6
Moment of inertia	Ix (cm4)	31644608	31644608
	Iy (cm4)	41258821	41258821
Torsion Constant	J (cm4)	19900749	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63242.9 kN·m	63242.9 kN·m
Mxr(lower)=	38754.6 kN·m	38754.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-91	210	0	0	0	120	0.19
	[2]	-93	210	2	0	3	120	0.20
DECK-C	[3]	-93	210	2	0	3	120	0.20
	[4]	-94	210	3	4	7	120	0.20
	[5]	-100	210	4	4	8	120	0.23
DECK-R	[6]	-100	210	2	0	2	120	0.23
	[7]	-100	210	2	0	2	120	0.23
LWEB	[8]	-101	210	0	0	0	120	0.23
	[9]	-92	210	8	5	13	120	0.20
RWEB	[10]	0	210	9	5	13	120	0.01
	[11]	164	210	6	5	11	120	0.61
	[12]	-98	210	8	5	13	120	0.23
	[13]	0	210	9	5	14	120	0.01
	[14]	163	210	6	5	11	120	0.61

LFLG	[15]	165	210	0	0	0	120	0.62
	[16]	165	210	3	3	6	120	0.62
	[17]	165	210	4	3	7	120	0.62
	[18]	165	210	0	0	0	120	0.62

Girder Name : G-1 Section Name : Sec-19:Mx-Max (Girder number= 1 Section number= 19)

Section force Mx = 30463 kN·m Sy = -494 kN T = 726 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 19 (SM490Y)	351.5	351.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2503.8	2503.8
Gravity center	ex (cm)	-19.2	-19.2
	ey (cm)	169.6	169.6
Moment of inertia	Ix (cm4)	31644608	31644608
	Iy (cm4)	41258821	41258821
Torsion Constant	J (cm4)	19900749	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63242.9 kN·m	63242.9 kN·m
Mxr(lower)=	38754.6 kN·m	38754.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-91	210	0	0	0	120	0.19
	[2]	-93	210	2	0	3	120	0.20
DECK-C	[3]	-93	210	2	0	3	120	0.20
	[4]	-94	210	3	4	7	120	0.20
	[5]	-100	210	4	4	8	120	0.23
DECK-R	[6]	-100	210	2	0	2	120	0.23
	[7]	-100	210	2	0	2	120	0.23
LWEB	[8]	-101	210	0	0	0	120	0.23
	[9]	-92	210	8	5	13	120	0.20
RWEB	[10]	0	210	8	5	13	120	0.01
	[11]	164	210	6	5	11	120	0.61
	[12]	-98	210	8	5	13	120	0.23
	[13]	0	210	9	5	14	120	0.01
	[14]	163	210	6	5	11	120	0.61

LFLG	[15]	165	210	0	0	0	120	0.62
	[16]	165	210	3	3	6	120	0.62
	[17]	165	210	4	3	7	120	0.62
	[18]	165	210	0	0	0	120	0.62

Girder Name : G-1 Section Name : Sec-20:J-19 (Girder number= 1 Section number= 20)

Section force Mx = 27746 kN·m Sy = -979 kN T = -752 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2466.8
Gravity center	ex (cm)	-20.1	-20.1
	ey (cm)	172.1	172.1
Moment of inertia	Ix (cm4)	30541667	30541667
	Iy (cm4)	41020625	41020625
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62569.2 kN·m	62569.2 kN·m
Mxr(lower)=	36893.8 kN·m	31350.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-84	210	0	0	0	120	0.16
	[2]	-86	210	5	0	5	120	0.17
DECK-C	[3]	-86	210	5	0	5	120	0.17
	[4]	-86	210	6	4	10	120	0.17
	[5]	-92	210	8	4	12	120	0.20
DECK-R	[6]	-92	210	3	0	3	120	0.19
	[7]	-92	210	3	0	3	120	0.19
LWEB	[8]	-93	210	0	0	0	120	0.20
	[9]	-85	210	15	5	20	120	0.19
RWEB	[10]	0	210	17	5	22	120	0.03
	[11]	157	210	11	5	16	120	0.58
	[12]	-90	210	15	5	21	120	0.21
	[13]	0	210	17	5	22	120	0.03
	[14]	156	210	12	5	17	120	0.58

LFLG	[15]	158	210	0	0	0	120	0.57
	[16]	158	210	7	4	10	120	0.57
	[17]	158	210	8	4	11	120	0.57
	[18]	158	210	0	0	0	120	0.57

Girder Name : G-1 Section Name : Sec-20:J-20 (Girder number= 1 Section number= 20)

Section force Mx-Max Mx = 18719 kN·m Sy = -1561 kN T = -882 kN·m
Mx-Min Mx = -1104 kN·m Sy = -1561 kN T = -882 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2466.8
Gravity center	ex (cm)	-20.1	-20.1
	ey (cm)	172.1	172.1
Moment of inertia	Ix (cm4)	30541667	30541667
	Iy (cm4)	41020625	41020625
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62569.2 kN·m	62569.2 kN·m
Mxr(lower)=	36893.8 kN·m	31350.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-56	210	0	0	0	120	0.07
	[2]	-58	210	8	0	8	120	0.08
DECK-C	[3]	-58	210	8	0	8	120	0.08
	[4]	-58	210	9	5	14	120	0.09
	[5]	-62	210	13	5	17	120	0.11
DECK-R	[6]	-62	210	5	0	5	120	0.09
	[7]	-62	210	5	0	5	120	0.09
LWEB	[8]	-63	210	0	0	0	120	0.09
	[9]	-57	210	24	6	30	120	0.14
RWEB	[10]	0	210	27	6	33	120	0.07
	[11]	106	210	18	6	24	120	0.29
	[12]	-61	210	25	6	31	120	0.15
	[13]	0	210	27	6	33	120	0.08
	[14]	106	210	20	6	26	120	0.30

LFLG	[15]	107	210	0	0	0	120	0.26
	[16]	107	210	11	4	15	120	0.27
	[17]	107	210	13	4	17	120	0.28
	[18]	107	210	0	0	0	120	0.26
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	3	210	0	0	0	120	0.00
	[2]	3	210	8	0	8	120	0.00
DECK-C	[3]	3	210	8	0	8	120	0.00
	[4]	3	210	9	5	14	120	0.01
	[5]	4	210	13	5	17	120	0.02
DECK-R	[6]	4	210	5	0	5	120	0.00
	[7]	4	210	5	0	5	120	0.00
LWEB	[8]	4	210	0	0	0	120	0.00
	[9]	3	210	24	6	30	120	0.06
	[10]	0	210	27	6	33	120	0.07
RWEB	[11]	-6	210	18	6	24	120	0.04
	[12]	4	210	25	6	31	120	0.07
LFLG	[13]	0	210	27	6	33	120	0.08
	[14]	-6	210	20	6	26	120	0.05
	[15]	-6	178	0	0	0	120	0.00
LFLG	[16]	-6	210	11	4	15	120	0.02
	[17]	-6	210	13	4	17	120	0.02
	[18]	-6	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-21:Left (Girder number= 1 Section number= 21)

Section force Mx-Max Mx = 18719 kN·m Sy = -1561 kN T = -882 kN·m
Mx-Min Mx = -1104 kN·m Sy = -1561 kN T = -882 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2466.8
Gravity center	ex (cm)	-20.1	-20.1
	ey (cm)	172.1	172.1
Moment of inertia	Ix (cm4)	30541667	30541667
	Iy (cm4)	41020625	41020625
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62569.2 kN·m	62569.2 kN·m
Mxr(lower)=	36893.8 kN·m	31350.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-56	210	0	0	0	120	0.07
	[2]	-58	210	8	0	8	120	0.08
DECK-C	[3]	-58	210	8	0	8	120	0.08
	[4]	-58	210	9	5	14	120	0.09
	[5]	-62	210	13	5	17	120	0.11
DECK-R	[6]	-62	210	5	0	5	120	0.09
	[7]	-62	210	5	0	5	120	0.09
LWEB	[8]	-63	210	0	0	0	120	0.09
	[9]	-57	210	24	6	30	120	0.14
RWEB	[10]	0	210	27	6	33	120	0.07
	[11]	106	210	18	6	24	120	0.29
RWEB	[12]	-61	210	25	6	31	120	0.15
	[13]	0	210	27	6	33	120	0.08
	[14]	106	210	20	6	26	120	0.30

LFLG	[15]	107	210	0	0	0	120	0.26
	[16]	107	210	11	4	15	120	0.27
	[17]	107	210	13	4	17	120	0.28
	[18]	107	210	0	0	0	120	0.26
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	3	210	0	0	0	120	0.00
	[2]	3	210	8	0	8	120	0.00
DECK-C	[3]	3	210	8	0	8	120	0.00
	[4]	3	210	9	5	14	120	0.01
	[5]	4	210	13	5	17	120	0.02
DECK-R	[6]	4	210	5	0	5	120	0.00
	[7]	4	210	5	0	5	120	0.00
LWEB	[8]	4	210	0	0	0	120	0.00
	[9]	3	210	24	6	30	120	0.06
	[10]	0	210	27	6	33	120	0.07
RWEB	[11]	-6	210	18	6	24	120	0.04
	[12]	4	210	25	6	31	120	0.07
LFLG	[13]	0	210	27	6	33	120	0.08
	[14]	-6	210	20	6	26	120	0.05
	[15]	-6	178	0	0	0	120	0.00
	[16]	-6	210	11	4	15	120	0.02
	[17]	-6	210	13	4	17	120	0.02
	[18]	-6	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-21:J-21 (Girder number= 1 Section number= 21)

Section force Mx-Max Mx = 5117 kN·m Sy = -2095 kN T = 1096 kN·m
 Mx-Min Mx = -12006 kN·m Sy = -2095 kN T = 1096 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK	Cantilever	1380 1380
		Intermediate	3000 2999
		Cantilever	825 825
	LFLG	Intermediate	1500 1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2466.6
Gravity center	ex (cm)	-20.1	-20.1
	ey (cm)	172.1	172.1
Moment of inertia	Ix (cm4)	30541667	30540060
	Iy (cm4)	41020625	41016281
Torsion Constant	J (cm4)	19646438	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	62561.7 kN·m	62561.7 kN·m	
Mxr(lower)=	36893.3 kN·m	31350.1 kN·m	

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-15	210	0	0	0	120	0.01
	[2]	-16	210	10	0	11	120	0.01
	DECK-C [3]	-16	210	10	0	11	120	0.01
	[4]	-16	210	13	6	18	120	0.03
	[5]	-17	210	17	6	23	120	0.04
	[6]	-17	210	6	0	7	120	0.01
	DECK-R [7]	-17	210	6	0	7	120	0.01
	[8]	-17	210	0	0	0	120	0.01
	LWEB [9]	-16	210	32	7	40	120	0.12
	[10]	0	210	36	7	43	120	0.13
	[11]	29	210	24	7	32	120	0.09
	RWEB [12]	-17	210	33	7	41	120	0.12
	[13]	0	210	36	7	44	120	0.13
	[14]	29	210	26	7	34	120	0.10

LFLG	[15]	29	210	0	0	0	120	0.02
	[16]	29	210	15	5	20	120	0.05
	[17]	29	210	17	5	22	120	0.05
	[18]	29	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	36	210	0	0	0	120	0.03
	[2]	37	210	10	0	11	120	0.04
DECK-C	[3]	37	210	10	0	11	120	0.04
	[4]	37	210	13	6	18	120	0.05
	[5]	40	210	17	6	23	120	0.07
DECK-R	[6]	40	210	6	0	7	120	0.04
	[7]	40	210	6	0	7	120	0.04
	[8]	40	210	0	0	0	120	0.04
LWEB	[9]	37	210	32	7	40	120	0.14
	[10]	0	210	36	7	43	120	0.13
RWEB	[11]	-68	210	24	7	32	120	0.17
	[12]	39	210	33	7	41	120	0.15
	[13]	0	210	36	7	44	120	0.13
LFLG	[14]	-68	210	26	7	34	120	0.18
	[15]	-68	178	0	0	0	120	0.11
	[16]	-68	210	15	5	20	120	0.13
	[17]	-68	210	17	5	22	120	0.14
	[18]	-68	210	0	0	0	120	0.11

Girder Name : G-1 Section Name : Sec-22:Left (Girder number= 1 Section number= 22)

Section force Mx-Max Mx = 5117 kN·m Sy = -2095 kN T = 1096 kN·m
 Mx-Min Mx = -12006 kN·m Sy = -2095 kN T = 1096 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK	Cantilever	1380 1380
		Intermediate	3000 2999
		Cantilever	825 825
	LFLG	Intermediate	1500 1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2466.6
Gravity center	ex (cm)	-20.1	-20.1
	ey (cm)	172.1	172.1
Moment of inertia	Ix (cm4)	30541667	30540060
	Iy (cm4)	41020625	41016281
Torsion Constant	J (cm4)	19646438	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62561.7 kN·m	62561.7 kN·m
	Mxr(lower)=	36893.3 kN·m	31350.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-15	210	0	0	0	120	0.01
	[2]	-16	210	10	0	11	120	0.01
	DECK-C [3]	-16	210	10	0	11	120	0.01
	[4]	-16	210	13	6	18	120	0.03
	[5]	-17	210	17	6	23	120	0.04
	[6]	-17	210	6	0	7	120	0.01
	DECK-R [7]	-17	210	6	0	7	120	0.01
	[8]	-17	210	0	0	0	120	0.01
	LWEB [9]	-16	210	32	7	40	120	0.12
	[10]	0	210	36	7	43	120	0.13
	[11]	29	210	24	7	32	120	0.09
	RWEB [12]	-17	210	33	7	41	120	0.12
	[13]	0	210	36	7	44	120	0.13
	[14]	29	210	26	7	34	120	0.10

LFLG	[15]	29	210	0	0	0	120	0.02
	[16]	29	210	15	5	20	120	0.05
	[17]	29	210	17	5	22	120	0.05
	[18]	29	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	36	210	0	0	0	120	0.03
	[2]	37	210	10	0	11	120	0.04
DECK-C	[3]	37	210	10	0	11	120	0.04
	[4]	37	210	13	6	18	120	0.05
	[5]	40	210	17	6	23	120	0.07
DECK-R	[6]	40	210	6	0	7	120	0.04
	[7]	40	210	6	0	7	120	0.04
	[8]	40	210	0	0	0	120	0.04
LWEB	[9]	37	210	32	7	40	120	0.14
	[10]	0	210	36	7	43	120	0.13
RWEB	[11]	-68	210	24	7	32	120	0.17
	[12]	39	210	33	7	41	120	0.15
	[13]	0	210	36	7	44	120	0.13
LFLG	[14]	-68	210	26	7	34	120	0.18
	[15]	-68	178	0	0	0	120	0.11
	[16]	-68	210	15	5	20	120	0.13
	[17]	-68	210	17	5	22	120	0.14
	[18]	-68	210	0	0	0	120	0.11

Girder Name : G-1 Section Name : Sec-22:J-22 (Girder number= 1 Section number= 22)

Section force Mx = -26959 kN·m Sy = -2638 kN T = 1347 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2466.8	2455.1
Gravity center	ex (cm)	-20.1	-19.7
	ey (cm)	172.1	171.7
Moment of inertia	Ix (cm4)	30541667	30434705
	Iy (cm4)	41020625	40733880
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62075.3 kN·m	62075.3 kN·m
Mxr(lower)=	36860.8 kN·m	31322.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	82	210	0	0	0	120	0.15
	[2]	84	210	13	0	13	120	0.17
DECK-C	[3]	84	210	13	0	13	120	0.17
	[4]	84	210	16	7	23	120	0.20
	[5]	90	210	22	7	28	120	0.24
DECK-R	[6]	90	210	8	0	8	120	0.19
	[7]	90	210	8	0	8	120	0.19
LWEB	[8]	91	210	0	0	0	120	0.19
	[9]	83	210	41	9	50	120	0.33
RWEB	[10]	1	210	45	9	54	120	0.20
	[11]	-152	210	30	9	40	120	0.63
	[12]	88	210	42	9	51	120	0.36
	[13]	0	210	46	9	55	120	0.21
	[14]	-152	210	33	9	42	120	0.65

LFLG	[15]	-154	178	0	0	0	120	0.53
	[16]	-154	210	18	7	25	120	0.58
	[17]	-154	210	21	7	28	120	0.59
	[18]	-154	210	0	0	0	120	0.53

Girder Name : G-1 Section Name : Sec-23:J-23 (Girder number= 1 Section number= 23)

Section force Mx = -51277 kN·m Sy = -3398 kN T = -1398 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 19 (SM490Y)	228.0	220.3
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 19 (SM490Y)	638.5	617.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3041 * 12 (SM570)	364.9	364.9
1-RWEB PL	2711 * 12 (SM570)	325.3	325.3
1-LFLG PL	1850 * 30 (SM570)	555.0	555.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2862.7	2780.2
Gravity center	ex (cm)	-17.2	-16.1
	ey (cm)	162.6	159.8
Moment of inertia	Ix (cm4)	39005146	38224926
	Iy (cm4)	46314702	45587904
Torsion Constant	J (cm4)	21638990	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	69891.7 kN·m	69891.7 kN·m
	Mxr(lower)=	59874.1 kN·m	59874.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	140	210	0	0	0	120	0.45
	[2]	143	210	14	0	14	120	0.48
DECK-C	[3]	143	210	14	0	14	120	0.48
	[4]	144	210	16	6	22	120	0.50
	[5]	152	210	23	6	29	120	0.58
DECK-R	[6]	152	210	9	0	9	120	0.53
	[7]	152	210	9	0	9	120	0.53
LWEB	[8]	154	210	0	0	0	120	0.54
	[9]	142	255	51	10	60	145	0.48
RWEB	[10]	4	255	56	10	66	145	0.20
	[11]	-215	255	43	10	52	145	0.84
	[12]	149	255	53	10	62	145	0.53
	[13]	4	255	58	10	67	145	0.22
	[14]	-214	255	46	10	56	145	0.86

LFLG	[15]	-218	255	0	0	0	145	0.73
	[16]	-218	255	14	4	18	145	0.75
	[17]	-218	255	16	4	20	145	0.75
	[18]	-218	255	0	0	0	145	0.73

Girder Name : G-1 Section Name : Sec-24:Mx-Min_L (Girder number= 1 Section number= 24)

Section force Mx = -60062 kN·m Sy = -3624 kN T = -1398 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 19 (SM490Y)	228.0	219.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 19 (SM490Y)	638.5	614.5
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3041 * 12 (SM570)	364.9	364.9
1-RWEB PL	2711 * 12 (SM570)	325.3	325.3
1-LFLG PL	1850 * 38 (SM570)	703.0	703.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3010.7	2923.8
Gravity center	ex (cm)	-14.4	-13.1
	ey (cm)	154.5	151.4
Moment of inertia	Ix (cm4)	42884246	41908315
	Iy (cm4)	47200936	46344195
Torsion Constant	J (cm4)	22019187	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	71391.2 kN·m	71391.2 kN·m
Mxr(lower)=	68868.2 kN·m	68868.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	162	210	0	0	1	120	0.59
	[2]	165	210	15	0	15	120	0.63
DECK-C	[3]	165	210	15	0	15	120	0.63
	[4]	166	210	17	6	23	120	0.66
	[5]	174	210	24	6	30	120	0.75
	[6]	175	210	9	0	9	120	0.70
DECK-R	[7]	175	210	9	0	9	120	0.70
	[8]	177	210	0	0	0	120	0.71
LWEB	[9]	163	255	53	10	63	145	0.60
	[10]	5	255	59	10	69	145	0.22
	[11]	-217	255	47	10	57	145	0.88
RWEB	[12]	172	255	55	10	65	145	0.65
	[13]	4	255	61	10	71	145	0.24
	[14]	-217	255	51	10	61	145	0.90

LFLG	[15]	-222	255	0	0	0	145	0.76
	[16]	-222	255	12	3	15	145	0.77
	[17]	-222	255	14	3	17	145	0.77
	[18]	-222	255	0	0	0	145	0.76

Girder Name : G-1 Section Name : Sec-24:Mx-Min_R (Girder number= 1 Section number= 24)

Section force Mx = -60062 kN·m Sy = 3657 kN T = -1532 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 19 (SM490Y)	228.0	219.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 19 (SM490Y)	638.5	614.5
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3041 * 12 (SM570)	364.9	364.9
1-RWEB PL	2711 * 12 (SM570)	325.3	325.3
1-LFLG PL	1850 * 38 (SM570)	703.0	703.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3010.7	2923.8
Gravity center	ex (cm)	-14.4	-13.1
	ey (cm)	154.5	151.4
Moment of inertia	Ix (cm4)	42884246	41908315
	Iy (cm4)	47200936	46344195
Torsion Constant	J (cm4)	22019187	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	71391.2 kN·m	71391.2 kN·m
Mxr(lower)=	68868.2 kN·m	68868.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
	DECK-L [1]	162	210	0	0	1	120	0.59
	[2]	165	210	15	0	15	120	0.63
	DECK-C [3]	165	210	15	0	15	120	0.63
	[4]	166	210	17	7	24	120	0.66
	[5]	174	210	25	7	31	120	0.76
	[6]	175	210	9	0	9	120	0.70
	DECK-R [7]	175	210	9	0	9	120	0.70
	[8]	177	210	0	0	0	120	0.71
	LWEB [9]	163	255	54	10	64	145	0.61
	[10]	5	255	60	10	70	145	0.23
	[11]	-217	255	48	10	58	145	0.89
	RWEB [12]	172	255	56	10	66	145	0.66
	[13]	4	255	62	10	72	145	0.25
	[14]	-217	255	52	10	62	145	0.91

LFLG	[15]	-222	255	0	0	0	145	0.76
	[16]	-222	255	12	3	16	145	0.77
	[17]	-222	255	14	3	18	145	0.78
	[18]	-222	255	0	0	0	145	0.76

Girder Name : G-1 Section Name : Sec-25:J-24 (Girder number= 1 Section number= 25)

Section force Mx = -50825 kN·m Sy = 3431 kN T = -1532 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 19 (SM490Y)	228.0	220.3
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 19 (SM490Y)	638.5	617.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3041 * 12 (SM570)	364.9	364.9
1-RWEB PL	2711 * 12 (SM570)	325.3	325.3
1-LFLG PL	1850 * 30 (SM570)	555.0	555.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2862.7	2780.2
Gravity center	ex (cm)	-17.2	-16.1
	ey (cm)	162.6	159.8
Moment of inertia	Ix (cm4)	39005146	38224926
	Iy (cm4)	46314702	45587904
Torsion Constant	J (cm4)	21638990	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	69891.7 kN·m	69891.7 kN·m
Mxr(lower)=	59874.1 kN·m	59874.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	139	210	0	0	0	120	0.44
	[2]	142	210	14	0	14	120	0.47
DECK-C	[3]	142	210	14	0	14	120	0.47
	[4]	143	210	17	7	23	120	0.50
	[5]	151	210	23	7	30	120	0.58
DECK-R	[6]	151	210	9	0	9	120	0.52
	[7]	151	210	9	0	9	120	0.52
LWEB	[8]	153	210	0	0	0	120	0.53
	[9]	140	255	51	10	62	145	0.48
RWEB	[10]	4	255	57	10	67	145	0.21
	[11]	-213	255	43	10	54	145	0.83
	[12]	148	255	53	10	64	145	0.53
	[13]	4	255	58	10	69	145	0.23
	[14]	-212	255	47	10	57	145	0.85

LFLG	[15]	-216	255	0	0	0	145	0.72
	[16]	-216	255	14	4	19	145	0.74
	[17]	-216	255	17	4	21	145	0.74
	[18]	-216	255	0	0	0	145	0.72

Girder Name : G-1 Section Name : Sec-26:J-25 (Girder number= 1 Section number= 26)

Section force Mx = -24736 kN·m Sy = 2664 kN T = -1503 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2359.9	2348.2
Gravity center	ex (cm)	-23.0	-22.6
	ey (cm)	179.3	178.9
Moment of inertia	Ix (cm4)	27717416	27625944
	Iy (cm4)	40417306	40136525
Torsion Constant	J (cm4)	19779602	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	60592.4 kN·m	60592.4 kN·m
	Mxr(lower)=	38984.2 kN·m	30584.9 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	76	210	0	0	0	120	0.13
	[2]	79	210	13	0	14	120	0.15
DECK-C	[3]	79	210	13	0	14	120	0.15
	[4]	79	210	16	8	24	120	0.18
	[5]	84	210	22	8	30	120	0.22
DECK-R	[6]	85	210	8	0	8	120	0.17
	[7]	85	210	8	0	8	120	0.17
LWEB	[8]	86	210	0	0	0	120	0.17
	[9]	78	255	42	10	52	145	0.22
RWEB	[10]	1	255	46	10	56	145	0.15
	[11]	-160	255	28	10	38	145	0.47
	[12]	83	255	43	10	53	145	0.24
	[13]	0	255	47	10	57	145	0.15
	[14]	-160	255	31	10	41	145	0.48

LFLG	[15]	-162	200	0	0	0	145	0.40
	[16]	-162	215	15	7	22	145	0.43
	[17]	-162	215	18	7	25	145	0.43
	[18]	-162	255	0	0	0	145	0.40

Girder Name : G-1 Section Name : Sec-26:Right (Girder number= 1 Section number= 26)

Section force Mx-Max Mx = 6546 kN·m Sy = 1990 kN T = -1464 kN·m
Mx-Min Mx = -9011 kN·m Sy = 1990 kN T = -1464 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2359.9	2359.7
Gravity center	ex (cm)	-23.0	-23.0
	ey (cm)	179.3	179.3
Moment of inertia	Ix (cm4)	27717416	27716042
	Iy (cm4)	40417306	40413052
Torsion Constant	J (cm4)	19779602	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61065.5 kN·m	61065.5 kN·m
Mxr(lower)=	39018.0 kN·m	30611.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-20	210	0	0	0	120	0.01
	[2]	-21	210	10	0	10	120	0.02
DECK-C	[3]	-21	210	10	0	10	120	0.02
	[4]	-21	210	12	8	20	120	0.04
	[5]	-22	210	16	8	24	120	0.05
	[6]	-22	210	6	0	6	120	0.01
DECK-R	[7]	-22	210	6	0	6	120	0.01
	[8]	-23	210	0	0	0	120	0.01
LWEB	[9]	-20	255	31	10	41	145	0.09
	[10]	0	255	34	10	44	145	0.09
	[11]	42	255	21	10	31	145	0.07
RWEB	[12]	-22	255	32	10	42	145	0.09
	[13]	0	255	35	10	45	145	0.10
	[14]	42	255	23	10	33	145	0.08

LFLG	[15]	43	255	0	0	0	145	0.03
	[16]	43	255	11	7	18	145	0.04
	[17]	43	255	14	7	20	145	0.05
	[18]	43	255	0	0	0	145	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	28	210	0	0	0	120	0.02
	[2]	28	210	10	0	10	120	0.03
DECK-C	[3]	28	210	10	0	10	120	0.03
	[4]	29	210	12	8	20	120	0.05
	[5]	30	210	16	8	24	120	0.06
DECK-R	[6]	31	210	6	0	6	120	0.02
	[7]	31	210	6	0	6	120	0.02
	[8]	31	210	0	0	0	120	0.02
LWEB	[9]	28	255	31	10	41	145	0.09
	[10]	0	255	34	10	44	145	0.09
RWEB	[11]	-58	255	21	10	31	145	0.10
	[12]	30	255	32	10	42	145	0.10
	[13]	0	255	35	10	45	145	0.10
LFLG	[14]	-58	255	23	10	33	145	0.11
	[15]	-59	200	0	0	0	145	0.05
	[16]	-59	215	11	7	18	145	0.07
	[17]	-59	215	14	7	20	145	0.07
	[18]	-59	255	0	0	0	145	0.05

Girder Name : G-1 Section Name : Sec-27:J-26 (Girder number= 1 Section number= 27)

Section force Mx-Max Mx = 6546 kN·m Sy = 1990 kN T = -1464 kN·m
Mx-Min Mx = -9011 kN·m Sy = 1990 kN T = -1464 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 13 (SM490Y)	240.5	240.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2267.4	2267.2
Gravity center	ex (cm)	-25.6	-25.6
	ey (cm)	186.7	186.7
Moment of inertia	Ix (cm4)	24567120	24565966
	Iy (cm4)	39769029	39764854
Torsion Constant	J (cm4)	18946336	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	58667.6 kN·m	58667.6 kN·m
Mxr(lower)=	27438.3 kN·m	13634.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-21	210	0	0	0	120	0.01
	[2]	-21	210	10	0	10	120	0.02
DECK-C	[3]	-21	210	10	0	10	120	0.02
	[4]	-21	210	13	8	20	120	0.04
	[5]	-23	210	17	8	24	120	0.05
DECK-R	[6]	-23	210	6	0	7	120	0.02
	[7]	-23	210	6	0	7	120	0.02
LWEB	[8]	-23	210	0	0	0	120	0.01
	[9]	-21	210	32	10	42	120	0.13
	[10]	0	210	35	10	45	120	0.14
RWEB	[11]	50	210	19	10	29	120	0.11
	[12]	-23	210	33	10	43	120	0.14
	[13]	0	210	36	10	46	120	0.14
	[14]	50	210	21	10	31	120	0.12

LFLG	[15]	50	210	0	0	0	120	0.06
	[16]	50	210	14	9	24	120	0.10
	[17]	50	210	17	9	27	120	0.11
	[18]	50	210	0	0	0	120	0.06
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	28	210	0	0	0	120	0.02
	[2]	29	210	10	0	10	120	0.03
DECK-C	[3]	29	210	10	0	10	120	0.03
	[4]	29	210	13	8	20	120	0.05
	[5]	32	210	17	8	24	120	0.06
DECK-R	[6]	32	210	6	0	7	120	0.03
	[7]	32	210	6	0	7	120	0.03
LWEB	[8]	32	210	0	0	0	120	0.02
	[9]	29	210	32	10	42	120	0.14
RWEB	[10]	0	210	35	10	45	120	0.14
	[11]	-69	210	19	10	29	120	0.16
	[12]	31	210	33	10	43	120	0.15
LFLG	[13]	0	210	36	10	46	120	0.14
	[14]	-68	210	21	10	31	120	0.17
	[15]	-69	104	0	0	0	120	0.11
	[16]	-69	134	14	9	24	120	0.15
	[17]	-69	134	17	9	27	120	0.16
	[18]	-69	190	0	0	0	120	0.11

Girder Name : G-1 Section Name : Sec-27:J-27 (Girder number= 1 Section number= 27)

Section force Mx = 19694 kN·m Sy = 1464 kN T = -1206 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 13 (SM490Y)	240.5	240.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2267.4	2267.4
Gravity center	ex (cm)	-25.6	-25.6
	ey (cm)	186.7	186.7
Moment of inertia	Ix (cm4)	24567120	24567120
	Iy (cm4)	39769029	39769029
Torsion Constant	J (cm4)	18946336	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	58674.6 kN·m	58674.6 kN·m
Mxr(lower)=	27438.7 kN·m	13634.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-62	210	0	0	0	120	0.09
	[2]	-64	210	8	0	8	120	0.10
DECK-C	[3]	-64	210	8	0	8	120	0.10
	[4]	-64	210	9	6	16	120	0.11
	[5]	-69	210	12	6	19	120	0.13
DECK-R	[6]	-69	210	5	0	5	120	0.11
	[7]	-69	210	5	0	5	120	0.11
	[8]	-70	210	0	0	0	120	0.11
LWEB	[9]	-63	210	24	8	32	120	0.16
	[10]	0	210	26	8	34	120	0.08
RWEB	[11]	150	210	14	8	22	120	0.54
	[12]	-68	210	24	8	32	120	0.18
	[13]	0	210	26	8	34	120	0.08
	[14]	150	210	16	8	24	120	0.55

LFLG	[15]	151	210	0	0	0	120	0.52
	[16]	151	210	11	8	18	120	0.54
	[17]	151	210	13	8	20	120	0.54
	[18]	151	210	0	0	0	120	0.52

Girder Name : G-1 Section Name : Sec-28:J-28 (Girder number= 1 Section number= 28)

Section force Mx = 30122 kN·m Sy = 1097 kN T = -807 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 17 (SM570)	314.5	314.5
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2341.4	2341.4
Gravity center	ex (cm)	-23.5	-23.5
	ey (cm)	180.8	180.8
Moment of inertia	Ix (cm4)	27105920	27105920
	Iy (cm4)	40290081	40290081
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	60635.7 kN·m	60635.7 kN·m
Mxr(lower)=	37879.4 kN·m	26507.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-93	210	0	0	0	120	0.20
	[2]	-95	210	6	0	6	120	0.21
DECK-C	[3]	-95	210	6	0	6	120	0.21
	[4]	-96	210	7	4	11	120	0.22
	[5]	-102	210	9	4	13	120	0.25
DECK-R	[6]	-103	210	3	0	4	120	0.24
	[7]	-103	210	3	0	4	120	0.24
LWEB	[8]	-104	210	0	0	0	120	0.25
	[9]	-94	255	17	6	23	145	0.16
	[10]	0	255	19	6	24	145	0.03
RWEB	[11]	201	255	11	6	17	145	0.64
	[12]	-101	255	18	6	23	145	0.18
	[13]	0	255	19	6	25	145	0.03
	[14]	201	255	13	6	18	145	0.64

LFLG	[15]	203	255	0	0	0	145	0.63
	[16]	203	255	7	4	10	145	0.64
	[17]	203	255	8	4	12	145	0.64
	[18]	203	255	0	0	0	145	0.63

Girder Name : G-1 Section Name : Sec-29:Right (Girder number= 1 Section number= 29)

Section force Mx = 35604 kN·m Sy = 621 kN T = 768 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 25 (SM570)	462.5	462.5
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2489.4	2489.4
Gravity center	ex (cm)	-19.7	-19.7
	ey (cm)	169.9	169.9
Moment of inertia	Ix (cm4)	31761214	31761214
	Iy (cm4)	41276895	41276895
Torsion Constant	J (cm4)	20449406	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63675.1 kN·m	63675.1 kN·m
Mxr(lower)=	46978.1 kN·m	46978.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-106	210	0	0	0	120	0.25
	[2]	-108	210	3	0	3	120	0.27
DECK-C	[3]	-108	210	3	0	3	120	0.27
	[4]	-109	210	4	4	8	120	0.27
	[5]	-116	210	5	4	9	120	0.31
DECK-R	[6]	-116	210	2	0	2	120	0.31
	[7]	-116	210	2	0	2	120	0.31
	[8]	-117	210	0	0	0	120	0.31
LWEB	[9]	-107	255	9	5	15	145	0.19
	[10]	0	255	10	5	16	145	0.01
RWEB	[11]	191	255	7	5	12	145	0.57
	[12]	-114	255	10	5	15	145	0.21
	[13]	0	255	11	5	16	145	0.01
	[14]	190	255	8	5	13	145	0.57

LFLG	[15]	193	255	0	0	0	145	0.57
	[16]	193	255	3	3	5	145	0.58
	[17]	193	255	3	3	6	145	0.58
	[18]	193	255	0	0	0	145	0.57

Girder Name : G-1 Section Name : Sec-30:J-29 (Girder number= 1 Section number= 30)

Section force Mx = 35604 kN·m Sy = 621 kN T = 768 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 20 (SM570)	370.0	370.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	48188.0 kN·m	46673.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-106	210	0	0	0	120	0.26
	[2]	-109	210	3	0	3	120	0.27
DECK-C	[3]	-109	210	3	0	3	120	0.27
	[4]	-109	210	4	4	8	120	0.27
	[5]	-116	210	5	4	9	120	0.31
DECK-R	[6]	-116	210	2	0	2	120	0.31
	[7]	-116	210	2	0	2	120	0.31
	[8]	-118	210	0	0	0	120	0.31
LWEB	[9]	-108	255	9	5	15	145	0.19
	[10]	0	255	10	5	16	145	0.01
RWEB	[11]	187	255	7	5	13	145	0.54
	[12]	-114	255	10	5	15	145	0.21
	[13]	0	255	11	5	16	145	0.01
	[14]	186	255	8	5	13	145	0.54

LFLG	[15]	188	255	0	0	0	145	0.55
	[16]	188	255	4	3	7	145	0.55
	[17]	188	255	4	3	7	145	0.55
	[18]	188	255	0	0	0	145	0.55

Girder Name : G-1 Section Name : Sec-30:Mx-Max (Girder number= 1 Section number= 30)

Section force Mx = 36177 kN·m Sy = 487 kN T = 750 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 20 (SM570)	370.0	370.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	48188.0 kN·m	46673.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-108	210	0	0	0	120	0.26
	[2]	-111	210	2	0	2	120	0.28
DECK-C	[3]	-111	210	2	0	2	120	0.28
	[4]	-111	210	3	4	7	120	0.28
	[5]	-118	210	4	4	8	120	0.32
DECK-R	[6]	-118	210	1	0	2	120	0.32
	[7]	-118	210	1	0	2	120	0.32
LWEB	[8]	-120	210	0	0	0	120	0.32
	[9]	-109	255	7	5	13	145	0.19
	[10]	0	255	8	5	13	145	0.01
RWEB	[11]	190	255	6	5	11	145	0.56
	[12]	-116	255	8	5	13	145	0.21
	[13]	0	255	8	5	14	145	0.01
	[14]	189	255	6	5	11	145	0.56

LFLG	[15]	191	255	0	0	0	145	0.56
	[16]	191	255	3	3	6	145	0.57
	[17]	191	255	3	3	6	145	0.57
	[18]	191	255	0	0	0	145	0.56

Girder Name : G-1 Section Name : Sec-31:J-30 (Girder number= 1 Section number= 31)

Section force Mx = 35896 kN·m Sy = -621 kN T = 750 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 20 (SM570)	370.0	370.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	48188.0 kN·m	46673.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-107	210	0	0	0	120	0.26
	[2]	-110	210	3	0	3	120	0.27
DECK-C	[3]	-110	210	3	0	3	120	0.27
	[4]	-110	210	4	4	8	120	0.28
	[5]	-117	210	5	4	9	120	0.31
DECK-R	[6]	-117	210	2	0	2	120	0.31
	[7]	-117	210	2	0	2	120	0.31
LWEB	[8]	-119	210	0	0	0	120	0.32
	[9]	-109	255	9	5	15	145	0.19
	[10]	0	255	10	5	16	145	0.01
RWEB	[11]	188	255	7	5	12	145	0.55
	[12]	-115	255	10	5	15	145	0.21
	[13]	0	255	11	5	16	145	0.01
	[14]	188	255	8	5	13	145	0.55

LFLG	[15]	190	255	0	0	0	145	0.55
	[16]	190	255	4	3	7	145	0.56
	[17]	190	255	4	3	7	145	0.56
	[18]	190	255	0	0	0	145	0.55

Girder Name : G-1 Section Name : Sec-32:J-31 (Girder number= 1 Section number= 32)

Section force Mx = 31061 kN·m Sy = -1177 kN T = 794 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
	Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-93	210	0	0	0	120	0.19
	[2]	-95	210	6	0	6	120	0.21
DECK-C	[3]	-95	210	6	0	6	120	0.21
	[4]	-95	210	7	4	11	120	0.21
	[5]	-101	210	10	4	14	120	0.24
DECK-R	[6]	-101	210	4	0	4	120	0.23
	[7]	-101	210	4	0	4	120	0.23
LWEB	[8]	-103	210	0	0	0	120	0.24
	[9]	-94	210	18	5	23	120	0.24
RWEB	[10]	0	210	20	5	25	120	0.04
	[11]	163	210	14	5	19	120	0.63
	[12]	-99	210	18	5	24	120	0.26
	[13]	0	210	20	5	26	120	0.05
	[14]	162	210	15	5	21	120	0.63

LFLG	[15]	164	210	0	0	0	120	0.61
	[16]	164	210	7	3	10	120	0.62
	[17]	164	210	8	3	11	120	0.62
	[18]	164	210	0	0	0	120	0.61

Girder Name : G-1 Section Name : Sec-33:J-32 (Girder number= 1 Section number= 33)

Section force Mx = 19952 kN·m Sy = -1772 kN T = -910 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
	Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-61	210	0	0	0	120	0.08
	[2]	-63	210	9	0	9	120	0.09
DECK-C	[3]	-63	210	9	0	9	120	0.09
	[4]	-63	210	11	5	16	120	0.11
	[5]	-67	210	15	5	19	120	0.13
DECK-R	[6]	-67	210	6	0	6	120	0.10
	[7]	-67	210	6	0	6	120	0.10
	[8]	-68	210	0	0	0	120	0.11
LWEB	[9]	-62	210	28	6	34	120	0.17
	[10]	0	210	31	6	37	120	0.09
RWEB	[11]	122	210	20	6	26	120	0.38
	[12]	-66	210	28	6	34	120	0.18
	[13]	0	210	31	6	37	120	0.10
	[14]	122	210	22	6	28	120	0.39

LFLG	[15]	123	210	0	0	0	120	0.34
	[16]	123	210	15	5	20	120	0.37
	[17]	123	210	17	5	22	120	0.38
	[18]	123	210	0	0	0	120	0.34

Girder Name : G-1 Section Name : Sec-33:J-33 (Girder number= 1 Section number= 33)

Section force Mx-Max Mx = 4214 kN·m Sy = -2327 kN T = 1152 kN·m
Mx-Min Mx = -12962 kN·m Sy = -2327 kN T = 1152 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.1
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28827249
	Iy (cm4)	40655696	40651396
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61449.5 kN·m	61449.5 kN·m
Mxr(lower)=	34098.8 kN·m	19651.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	12	0	12	120	0.01
DECK-C	[3]	-13	210	12	0	12	120	0.01
	[4]	-13	210	14	6	20	120	0.03
	[5]	-14	210	19	6	25	120	0.05
DECK-R	[6]	-14	210	7	0	7	120	0.01
	[7]	-14	210	7	0	7	120	0.01
LWEB	[8]	-14	210	0	0	0	120	0.00
	[9]	-13	210	36	8	44	120	0.14
	[10]	0	210	40	8	48	120	0.16
RWEB	[11]	26	210	26	8	34	120	0.09
	[12]	-14	210	37	8	45	120	0.15
	[13]	0	210	41	8	49	120	0.16
	[14]	26	210	28	8	36	120	0.11

LFLG	[15]	26	210	0	0	0	120	0.02
	[16]	26	210	19	7	26	120	0.06
	[17]	26	210	22	7	29	120	0.07
	[18]	26	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	40	210	0	0	0	120	0.04
	[2]	41	210	12	0	12	120	0.05
DECK-C	[3]	41	210	12	0	12	120	0.05
	[4]	41	210	14	6	20	120	0.07
	[5]	44	210	19	6	25	120	0.09
DECK-R	[6]	44	210	7	0	7	120	0.05
	[7]	44	210	7	0	7	120	0.05
	[8]	44	210	0	0	0	120	0.04
LWEB	[9]	40	210	36	8	44	120	0.17
	[10]	0	210	40	8	48	120	0.16
RWEB	[11]	-79	210	26	8	34	120	0.22
	[12]	43	210	37	8	45	120	0.18
	[13]	0	210	41	8	49	120	0.16
LFLG	[14]	-79	210	28	8	36	120	0.23
	[15]	-80	121	0	0	0	120	0.14
	[16]	-80	210	19	7	26	120	0.19
	[17]	-80	210	22	7	29	120	0.20
	[18]	-80	210	0	0	0	120	0.14

Girder Name : G-1 Section Name : Sec-34:Left (Girder number= 1 Section number= 34)

Section force Mx-Max Mx = 4214 kN·m Sy = -2327 kN T = 1152 kN·m
Mx-Min Mx = -12962 kN·m Sy = -2327 kN T = 1152 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 18 (SM490Y)	333.0	333.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2485.1
Gravity center	ex (cm)	-19.7	-19.7
	ey (cm)	170.8	170.8
Moment of inertia Ix (cm4)		31096923	31095273
	Iy (cm4)	41140217	41135858
Torsion Constant	J (cm4)	19779602	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62904.8 kN·m	62904.8 kN·m
Mxr(lower)=	37823.9 kN·m	36033.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	12	0	12	120	0.01
DECK-C	[3]	-13	210	12	0	12	120	0.01
	[4]	-13	210	14	6	20	120	0.03
	[5]	-14	210	19	6	25	120	0.05
	[6]	-14	210	7	0	7	120	0.01
DECK-R	[7]	-14	210	7	0	7	120	0.01
	[8]	-14	210	0	0	0	120	0.00
LWEB	[9]	-13	210	36	8	44	120	0.14
	[10]	0	210	40	8	47	120	0.16
	[11]	23	210	27	8	35	120	0.10
RWEB	[12]	-14	210	37	8	44	120	0.14
	[13]	0	210	40	8	48	120	0.16
	[14]	23	210	29	8	37	120	0.11

	LFLG	[15]	23	210	0	0	0	120	0.01
		[16]	23	210	15	5	21	120	0.04
		[17]	23	210	18	5	23	120	0.05
		[18]	23	210	0	0	0	120	0.01
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	39	210	0	0	0	120	0.03
		[2]	40	210	12	0	12	120	0.05
	DECK-C	[3]	40	210	12	0	12	120	0.05
		[4]	40	210	14	6	20	120	0.06
		[5]	43	210	19	6	25	120	0.08
		[6]	43	210	7	0	7	120	0.05
	DECK-R	[7]	43	210	7	0	7	120	0.05
		[8]	43	210	0	0	0	120	0.04
	LWEB	[9]	40	210	36	8	44	120	0.17
		[10]	0	210	40	8	47	120	0.16
		[11]	-71	210	27	8	35	120	0.20
	RWEB	[12]	42	210	37	8	44	120	0.18
		[13]	0	210	40	8	48	120	0.16
		[14]	-71	210	29	8	37	120	0.21
	LFLG	[15]	-72	200	0	0	0	120	0.12
		[16]	-72	210	15	5	21	120	0.15
		[17]	-72	210	18	5	23	120	0.15
		[18]	-72	210	0	0	0	120	0.12

Girder Name : G-1 Section Name : Sec-34:J-34 (Girder number= 1 Section number= 34)

Section force Mx = -30431 kN·m Sy = -2925 kN T = 1358 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 18 (SM490Y)	333.0	333.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2473.6
Gravity center	ex (cm)	-19.7	-19.2
	ey (cm)	170.8	170.4
Moment of inertia	Ix (cm4)	31096923	30987048
	Iy (cm4)	41140217	40852520
Torsion Constant	J (cm4)	19779602	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62415.5 kN·m	62415.5 kN·m
	Mxr(lower)=	37790.7 kN·m	36001.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	92	210	0	0	0	120	0.19
	[2]	95	210	15	0	15	120	0.22
DECK-C	[3]	95	210	15	0	15	120	0.22
	[4]	95	210	18	7	24	120	0.25
	[5]	101	210	24	7	31	120	0.30
DECK-R	[6]	101	210	9	0	9	120	0.24
	[7]	101	210	9	0	9	120	0.24
	[8]	102	210	0	0	0	120	0.24
LWEB	[9]	94	210	45	9	54	120	0.40
	[10]	1	210	50	9	59	120	0.24
RWEB	[11]	-168	210	34	9	43	120	0.77
	[12]	99	210	46	9	55	120	0.44
	[13]	0	210	51	9	60	120	0.25
	[14]	-167	210	37	9	46	120	0.78

LFLG	[15]	-169	200	0	0	0	120	0.65
	[16]	-169	210	19	6	26	120	0.69
	[17]	-169	210	22	6	28	120	0.70
	[18]	-169	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-35:J-35 (Girder number= 1 Section number= 35)

Section force Mx = -57613 kN·m Sy = -3678 kN T = -1526 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	255.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	715.3
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 36 (SM570)	666.0	666.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3129.1	3042.1
Gravity center	ex (cm)	-17.3	-16.1
	ey (cm)	161.9	159.1
Moment of inertia	Ix (cm4)	43744092	42905263
	Iy (cm4)	50791520	49952561
Torsion Constant	J (cm4)	22641127	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	78008.9 kN·m	78008.9 kN·m
	Mxr(lower)=	67225.2 kN·m	67225.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	141	210	0	0	0	120	0.45
	[2]	144	210	13	0	13	120	0.48
DECK-C	[3]	144	210	13	0	13	120	0.48
	[4]	145	210	15	6	21	120	0.51
	[5]	153	210	22	6	27	120	0.58
DECK-R	[6]	153	210	8	0	8	120	0.54
	[7]	153	210	8	0	8	120	0.54
LWEB	[8]	155	210	0	0	0	120	0.55
	[9]	142	255	55	10	65	145	0.51
RWEB	[10]	4	255	60	10	70	145	0.23
	[11]	-214	255	47	10	58	145	0.86
	[12]	150	255	57	10	68	145	0.56
	[13]	4	255	62	10	73	145	0.25
	[14]	-214	255	51	10	62	145	0.88

LFLG	[15]	-219	255	0	0	0	145	0.73
	[16]	-219	255	13	3	16	145	0.75
	[17]	-219	255	15	3	19	145	0.75
	[18]	-219	255	0	0	0	145	0.73

Girder Name : G-1 Section Name : Sec-36:Mx-Min_L (Girder number= 1 Section number= 36)

Section force Mx = -67168 kN·m Sy = -3904 kN T = -1526 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	253.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	711.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3240.1	3148.1
Gravity center	ex (cm)	-15.4	-14.0
	ey (cm)	156.2	153.2
Moment of inertia	Ix (cm4)	46691079	45686184
	Iy (cm4)	51462776	50481458
Torsion Constant	J (cm4)	22882242	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	79012.7 kN·m	79012.7 kN·m
	Mxr(lower)=	74003.2 kN·m	74003.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	163	210	0	0	1	120	0.61
	[2]	167	210	14	0	14	120	0.64
DECK-C	[3]	167	210	14	0	14	120	0.64
	[4]	167	210	16	6	21	120	0.67
	[5]	176	210	23	6	28	120	0.76
	[6]	177	210	8	0	8	120	0.71
DECK-R	[7]	177	210	8	0	8	120	0.71
	[8]	179	210	0	0	0	120	0.72
LWEB	[9]	164	255	57	10	68	145	0.63
	[10]	5	255	63	10	73	145	0.26
	[11]	-226	255	51	10	62	145	0.97
RWEB	[12]	173	255	60	10	71	145	0.70
	[13]	4	255	66	10	76	145	0.28
	[14]	-225	255	56	10	66	145	0.99

LFLG	[15]	-231	255	0	0	0	145	0.82
	[16]	-231	255	12	3	15	145	0.83
	[17]	-231	255	14	3	17	145	0.84
	[18]	-231	255	0	0	0	145	0.82

Girder Name : G-1 Section Name : Sec-36:Mx-Min_R (Girder number= 1 Section number= 36)

Section force Mx = -67168 kN·m Sy = 3803 kN T = -1639 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	253.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	711.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3240.1	3148.1
Gravity center	ex (cm)	-15.4	-14.0
	ey (cm)	156.2	153.2
Moment of inertia	Ix (cm4)	46691079	45686184
	Iy (cm4)	51462776	50481458
Torsion Constant	J (cm4)	22882242	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	79012.7 kN·m	79012.7 kN·m
	Mxr(lower)=	74003.2 kN·m	74003.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	163	210	0	0	1	120	0.61
	[2]	167	210	14	0	14	120	0.64
DECK-C	[3]	167	210	14	0	14	120	0.64
	[4]	167	210	15	6	21	120	0.67
	[5]	176	210	22	6	28	120	0.76
	[6]	177	210	8	0	8	120	0.71
DECK-R	[7]	177	210	8	0	8	120	0.71
	[8]	179	210	0	0	0	120	0.72
LWEB	[9]	164	255	56	11	67	145	0.63
	[10]	5	255	61	11	73	145	0.25
	[11]	-226	255	50	11	61	145	0.96
RWEB	[12]	173	255	59	11	70	145	0.69
	[13]	4	255	64	11	75	145	0.27
	[14]	-225	255	54	11	65	145	0.98

LFLG	[15]	-231	255	0	0	0	145	0.82
	[16]	-231	255	12	3	15	145	0.83
	[17]	-231	255	14	3	17	145	0.84
	[18]	-231	255	0	0	0	145	0.82

Girder Name : G-1 Section Name : Sec-37:J-36 (Girder number= 1 Section number= 37)

Section force Mx = -57469 kN·m Sy = 3578 kN T = -1639 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 22 (SM490Y)	264.1	255.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 22 (SM490Y)	739.3	715.3
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3038 * 12 (SM570)	364.5	364.5
1-RWEB PL	2708 * 12 (SM570)	325.0	325.0
1-LFLG PL	1850 * 40 (SM570)	740.0	740.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	3077.7	2990.7
Gravity center	ex (cm)	-18.4	-17.2
	ey (cm)	164.1	161.3
Moment of inertia	Ix (cm4)	42900876	42098573
	Iy (cm4)	50583150	49751876
Torsion Constant	J (cm4)	22808300	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	78014.7 kN·m	78014.7 kN·m
	Mxr(lower)=	64932.0 kN·m	64932.0 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	141	210	0	0	0	120	0.45
	[2]	144	210	13	0	13	120	0.48
DECK-C	[3]	144	210	13	0	13	120	0.48
	[4]	144	210	15	6	21	120	0.50
	[5]	152	210	21	6	27	120	0.58
DECK-R	[6]	153	210	8	0	8	120	0.53
	[7]	153	210	8	0	8	120	0.53
LWEB	[8]	155	210	0	0	0	120	0.54
	[9]	142	255	53	11	64	145	0.51
RWEB	[10]	4	255	58	11	69	145	0.23
	[11]	-221	255	45	11	56	145	0.90
	[12]	149	255	56	11	67	145	0.56
	[13]	4	255	60	11	72	145	0.24
	[14]	-220	255	49	11	60	145	0.92

LFLG	[15]	-226	255	0	0	0	145	0.78
	[16]	-226	255	11	3	14	145	0.79
	[17]	-226	255	13	3	16	145	0.80
	[18]	-226	255	0	0	0	145	0.78

Girder Name : G-1 Section Name : Sec-38:J-37 (Girder number= 1 Section number= 38)

Section force Mx = -30156 kN·m Sy = 2795 kN T = -1589 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2403.7
Gravity center	ex (cm)	-21.5	-21.1
	ey (cm)	175.2	174.7
Moment of inertia	Ix (cm4)	29499631	29399343
	Iy (cm4)	40792138	40508359
Torsion Constant	J (cm4)	20113201	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61787.2 kN·m	61787.2 kN·m
	Mxr(lower)=	34914.4 kN·m	33530.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	92	210	0	0	0	120	0.19
	[2]	94	210	14	0	14	120	0.22
DECK-C	[3]	94	210	14	0	14	120	0.22
	[4]	95	210	17	8	25	120	0.25
	[5]	101	210	23	8	31	120	0.30
DECK-R	[6]	101	210	9	0	9	120	0.24
	[7]	101	210	9	0	9	120	0.24
LWEB	[8]	102	210	0	0	0	120	0.24
	[9]	93	210	43	11	54	120	0.40
RWEB	[10]	1	210	48	11	58	120	0.24
	[11]	-180	210	31	11	42	120	0.85
	[12]	99	210	44	11	55	120	0.43
	[13]	0	210	49	11	59	120	0.25
	[14]	-179	210	34	11	45	120	0.87

LFLG	[15]	-181	210	0	0	0	120	0.75
	[16]	-181	202	14	6	21	120	0.78
	[17]	-181	202	17	6	23	120	0.78
	[18]	-181	210	0	0	0	120	0.75

Girder Name : G-1 Section Name : Sec-38:Right (Girder number= 1 Section number= 38)

Section force Mx-Max Mx = 3014 kN·m Sy = 2147 kN T = -1461 kN·m
Mx-Min Mx = -12511 kN·m Sy = 2147 kN T = -1461 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2415.2
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	175.2	175.2
Moment of inertia	Ix (cm4)	29499631	29498125
	Iy (cm4)	40792138	40787839
Torsion Constant	J (cm4)	20113201	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62270.3 kN·m	62270.3 kN·m
Mxr(lower)=	34944.3 kN·m	33559.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-9	210	0	0	0	120	0.00
	[2]	-9	210	11	0	11	120	0.01
DECK-C	[3]	-9	210	11	0	11	120	0.01
	[4]	-9	210	13	7	20	120	0.03
	[5]	-10	210	18	7	25	120	0.05
DECK-R	[6]	-10	210	7	0	7	120	0.01
	[7]	-10	210	7	0	7	120	0.01
LWEB	[8]	-10	210	0	0	0	120	0.00
	[9]	-9	210	33	10	43	120	0.13
RWEB	[10]	0	210	37	10	47	120	0.15
	[11]	18	210	24	10	34	120	0.09
	[12]	-10	210	34	10	44	120	0.14
	[13]	0	210	37	10	47	120	0.16
	[14]	18	210	26	10	36	120	0.10

LFLG	[15]	18	210	0	0	0	120	0.01
	[16]	18	210	11	6	17	120	0.03
	[17]	18	210	13	6	19	120	0.03
	[18]	18	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	39	210	11	0	11	120	0.04
DECK-C	[3]	39	210	11	0	11	120	0.04
	[4]	39	210	13	7	20	120	0.06
	[5]	41	210	18	7	25	120	0.08
DECK-R	[6]	42	210	7	0	7	120	0.04
	[7]	42	210	7	0	7	120	0.04
	[8]	42	210	0	0	0	120	0.04
LWEB	[9]	38	210	33	10	43	120	0.16
	[10]	0	210	37	10	47	120	0.15
	[11]	-74	210	24	10	34	120	0.20
RWEB	[12]	41	210	34	10	44	120	0.17
	[13]	0	210	37	10	47	120	0.16
	[14]	-74	210	26	10	36	120	0.22
LFLG	[15]	-75	210	0	0	0	120	0.13
	[16]	-75	202	11	6	17	120	0.15
	[17]	-75	202	13	6	19	120	0.15
	[18]	-75	210	0	0	0	120	0.13

Girder Name : G-1 Section Name : Sec-39:J-38 (Girder number= 1 Section number= 39)

Section force Mx-Max Mx = 3014 kN·m Sy = 2147 kN T = -1461 kN·m
 Mx-Min Mx = -12511 kN·m Sy = 2147 kN T = -1461 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK	Cantilever	1380 1380
		Intermediate	3000 2999
		Cantilever	825 825
	LFLG	Intermediate	1500 1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 13 (SM490Y)	240.5	240.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2267.4	2267.2
Gravity center	ex (cm)	-25.6	-25.6
	ey (cm)	186.7	186.7
Moment of inertia	Ix (cm4)	24567120	24565966
	Iy (cm4)	39769029	39764854
Torsion Constant	J (cm4)	18946336	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	58667.6 kN·m	58667.6 kN·m
	Mxr(lower)=	27438.3 kN·m	13634.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-10	210	0	0	0	120	0.00
	[2]	-10	210	11	0	11	120	0.01
	DECK-C [3]	-10	210	11	0	11	120	0.01
	[4]	-10	210	14	7	21	120	0.03
	[5]	-11	210	18	7	26	120	0.05
	[6]	-11	210	7	0	7	120	0.01
	DECK-R [7]	-11	210	7	0	7	120	0.01
	[8]	-11	210	0	0	0	120	0.00
	LWEB [9]	-10	210	35	10	45	120	0.14
	[10]	0	210	38	10	48	120	0.16
	[11]	23	210	20	10	30	120	0.08
	RWEB [12]	-10	210	35	10	45	120	0.14
	[13]	0	210	38	10	48	120	0.16
	[14]	23	210	23	10	33	120	0.09

	LFLG	[15]	23	210	0	0	0	120	0.01
		[16]	23	210	16	9	25	120	0.05
		[17]	23	210	19	9	28	120	0.07
		[18]	23	210	0	0	0	120	0.01
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	39	210	0	0	0	120	0.04
		[2]	41	210	11	0	11	120	0.05
	DECK-C	[3]	41	210	11	0	11	120	0.05
		[4]	41	210	14	7	21	120	0.07
		[5]	44	210	18	7	26	120	0.09
		[6]	44	210	7	0	7	120	0.05
	DECK-R	[7]	44	210	7	0	7	120	0.05
		[8]	45	210	0	0	0	120	0.05
	LWEB	[9]	40	210	35	10	45	120	0.18
		[10]	0	210	38	10	48	120	0.16
		[11]	-95	210	20	10	30	120	0.27
	RWEB	[12]	43	210	35	10	45	120	0.18
		[13]	0	210	38	10	48	120	0.16
		[14]	-95	210	23	10	33	120	0.28
	LFLG	[15]	-96	104	0	0	0	120	0.21
		[16]	-96	134	16	9	25	120	0.25
		[17]	-96	134	19	9	28	120	0.26
		[18]	-96	190	0	0	0	120	0.21

Girder Name : G-1 Section Name : Sec-39:J-39 (Girder number= 1 Section number= 39)

Section force Mx-Max Mx = 18169 kN·m Sy = 1661 kN T = -1102 kN·m
Mx-Min Mx = -529 kN·m Sy = 1661 kN T = -1102 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 13 (SM490Y)	240.5	240.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2267.4	2267.4
Gravity center	ex (cm)	-25.6	-25.6
	ey (cm)	186.7	186.7
Moment of inertia	Ix (cm4)	24567120	24567120
	Iy (cm4)	39769029	39769029
Torsion Constant	J (cm4)	18946336	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	58674.6 kN·m	58674.6 kN·m
Mxr(lower)=	27438.7 kN·m	13634.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-57	210	0	0	0	120	0.07
	[2]	-59	210	9	0	9	120	0.08
DECK-C	[3]	-59	210	9	0	9	120	0.08
	[4]	-59	210	11	6	16	120	0.10
	[5]	-64	210	14	6	20	120	0.12
	[6]	-64	210	5	0	5	120	0.10
DECK-R	[7]	-64	210	5	0	5	120	0.10
	[8]	-65	210	0	0	0	120	0.10
LWEB	[9]	-58	210	27	8	34	120	0.16
	[10]	0	210	29	8	37	120	0.09
RWEB	[11]	138	210	16	8	23	120	0.47
	[12]	-63	210	27	8	35	120	0.17
	[13]	0	210	30	8	37	120	0.10
	[14]	138	210	18	8	25	120	0.48

	LFLG	[15]	139	210	0	0	0	120	0.44
		[16]	139	210	12	7	19	120	0.46
		[17]	139	210	15	7	22	120	0.47
		[18]	139	210	0	0	0	120	0.44
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	2	210	0	0	0	120	0.00
		[2]	2	210	9	0	9	120	0.01
	DECK-C	[3]	2	210	9	0	9	120	0.01
		[4]	2	210	11	6	16	120	0.02
		[5]	2	210	14	6	20	120	0.03
		[6]	2	210	5	0	5	120	0.00
	DECK-R	[7]	2	210	5	0	5	120	0.00
		[8]	2	210	0	0	0	120	0.00
	LWEB	[9]	2	210	27	8	34	120	0.08
		[10]	0	210	29	8	37	120	0.09
		[11]	-4	210	16	8	23	120	0.04
	RWEB	[12]	2	210	27	8	35	120	0.08
		[13]	0	210	30	8	37	120	0.10
		[14]	-4	210	18	8	25	120	0.05
	LFLG	[15]	-4	104	0	0	0	120	0.00
		[16]	-4	134	12	7	19	120	0.03
		[17]	-4	134	15	7	22	120	0.03
		[18]	-4	190	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-40:Left (Girder number= 1 Section number= 40)

Section force Mx-Max Mx = 18169 kN·m Sy = 1661 kN T = -1102 kN·m
Mx-Min Mx = -529 kN·m Sy = 1661 kN T = -1102 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 22 (SM490Y)	407.0	407.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2433.9	2433.9
Gravity center	ex (cm)	-21.1	-21.1
	ey (cm)	173.8	173.8
Moment of inertia	Ix (cm4)	30076942	30076942
	Iy (cm4)	40914888	40914888
Torsion Constant	J (cm4)	20206967	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62647.6 kN·m	62647.6 kN·m
	Mxr(lower)=	35881.2 kN·m	35309.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-55	210	0	0	0	120	0.07
	[2]	-56	210	8	0	8	120	0.08
DECK-C	[3]	-56	210	8	0	8	120	0.08
	[4]	-56	210	10	6	16	120	0.09
	[5]	-60	210	14	6	19	120	0.11
	[6]	-60	210	5	0	5	120	0.08
DECK-R	[7]	-60	210	5	0	5	120	0.08
	[8]	-61	210	0	0	0	120	0.08
LWEB	[9]	-55	210	26	8	33	120	0.15
	[10]	0	210	28	8	36	120	0.09
	[11]	105	210	19	8	26	120	0.30
RWEB	[12]	-59	210	26	8	34	120	0.16
	[13]	0	210	29	8	36	120	0.09
	[14]	105	210	20	8	28	120	0.30

	LFLG	[15]	106	210	0	0	0	120	0.26
		[16]	106	210	8	4	12	120	0.27
		[17]	106	210	10	4	14	120	0.27
		[18]	106	210	0	0	0	120	0.26
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	2	210	0	0	0	120	0.00
		[2]	2	210	8	0	8	120	0.00
	DECK-C	[3]	2	210	8	0	8	120	0.00
		[4]	2	210	10	6	16	120	0.02
		[5]	2	210	14	6	19	120	0.03
		[6]	2	210	5	0	5	120	0.00
	DECK-R	[7]	2	210	5	0	5	120	0.00
		[8]	2	210	0	0	0	120	0.00
	LWEB	[9]	2	210	26	8	33	120	0.08
		[10]	0	210	28	8	36	120	0.09
		[11]	-3	210	19	8	26	120	0.05
	RWEB	[12]	2	210	26	8	34	120	0.08
		[13]	0	210	29	8	36	120	0.09
		[14]	-3	210	20	8	28	120	0.05
	LFLG	[15]	-3	210	0	0	0	120	0.00
		[16]	-3	207	8	4	12	120	0.01
		[17]	-3	207	10	4	14	120	0.01
		[18]	-3	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-40:J-40 (Girder number= 1 Section number= 40)

Section force Mx = 30066 kN·m Sy = 1222 kN T = 829 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 22 (SM490Y)	407.0	407.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2433.9	2433.9
Gravity center	ex (cm)	-21.1	-21.1
	ey (cm)	173.8	173.8
Moment of inertia	Ix (cm4)	30076942	30076942
	Iy (cm4)	40914888	40914888
Torsion Constant	J (cm4)	20206967	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62647.6 kN·m	62647.6 kN·m
	Mxr(lower)=	35881.2 kN·m	35309.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-90	210	0	0	0	120	0.19
	[2]	-93	210	6	0	6	120	0.20
DECK-C	[3]	-93	210	6	0	6	120	0.20
	[4]	-93	210	7	4	12	120	0.21
	[5]	-99	210	10	4	14	120	0.24
DECK-R	[6]	-99	210	4	0	4	120	0.23
	[7]	-99	210	4	0	4	120	0.23
LWEB	[8]	-101	210	0	0	0	120	0.23
	[9]	-92	210	19	6	24	120	0.23
RWEB	[10]	0	210	21	6	26	120	0.05
	[11]	174	210	14	6	19	120	0.71
	[12]	-98	210	19	6	25	120	0.26
	[13]	0	210	21	6	27	120	0.05
	[14]	174	210	15	6	21	120	0.71

LFLG	[15]	176	210	0	0	0	120	0.70
	[16]	176	210	6	3	9	120	0.71
	[17]	176	210	7	3	10	120	0.71
	[18]	176	210	0	0	0	120	0.70

Girder Name : G-1 Section Name : Sec-41:J-41 (Girder number= 1 Section number= 41)

Section force Mx = 36030 kN·m Sy = 658 kN T = -730 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 26 (SM490Y)	481.0	481.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2633.3	2633.3
Gravity center	ex (cm)	-16.3	-16.3
	ey (cm)	161.1	161.1
Moment of inertia	Ix (cm4)	35279844	35279844
	Iy (cm4)	42063149	42063149
Torsion Constant	J (cm4)	20519560	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65260.1 kN·m	65260.1 kN·m
Mxr(lower)=	45251.8 kN·m	45251.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-105	210	0	0	0	120	0.25
	[2]	-108	210	3	0	3	120	0.26
DECK-C	[3]	-108	210	3	0	3	120	0.26
	[4]	-108	210	4	4	8	120	0.27
	[5]	-114	210	5	4	9	120	0.30
DECK-R	[6]	-115	210	2	0	2	120	0.30
	[7]	-115	210	2	0	2	120	0.30
LWEB	[8]	-116	210	0	0	0	120	0.30
	[9]	-107	210	10	5	15	120	0.27
RWEB	[10]	0	210	11	5	16	120	0.02
	[11]	165	210	8	5	13	120	0.63
RWEB	[12]	-113	210	10	5	15	120	0.30
	[13]	0	210	11	5	16	120	0.02
	[14]	165	210	9	5	14	120	0.63

LFLG	[15]	167	210	0	0	0	120	0.63
	[16]	167	210	3	2	5	120	0.64
	[17]	167	210	4	2	6	120	0.64
	[18]	167	210	0	0	0	120	0.63

Girder Name : G-1 Section Name : Sec-42: Mx-Max (Girder number= 1 Section number= 42)

Section force Mx = 36609 kN·m Sy = 500 kN T = -739 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 26 (SM490Y)	481.0	481.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2633.3	2633.3
Gravity center	ex (cm)	-16.3	-16.3
	ey (cm)	161.1	161.1
Moment of inertia	Ix (cm4)	35279844	35279844
	Iy (cm4)	42063149	42063149
Torsion Constant	J (cm4)	20519560	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65260.1 kN·m	65260.1 kN·m
Mxr(lower)=	45251.8 kN·m	45251.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-107	210	0	0	0	120	0.26
	[2]	-109	210	2	0	2	120	0.27
DECK-C	[3]	-109	210	2	0	2	120	0.27
	[4]	-110	210	3	4	7	120	0.28
	[5]	-116	210	4	4	8	120	0.31
	[6]	-116	210	1	0	2	120	0.31
DECK-R	[7]	-116	210	1	0	2	120	0.31
	[8]	-118	210	0	0	0	120	0.31
LWEB	[9]	-108	210	7	5	13	120	0.28
	[10]	0	210	8	5	13	120	0.01
	[11]	168	210	6	5	11	120	0.65
RWEB	[12]	-114	210	8	5	13	120	0.31
	[13]	0	210	9	5	14	120	0.01
	[14]	167	210	7	5	12	120	0.64

LFLG	[15]	170	210	0	0	0	120	0.65
	[16]	170	210	2	2	5	120	0.66
	[17]	170	210	3	2	5	120	0.66
	[18]	170	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-43:J-42 (Girder number= 1 Section number= 43)

Section force Mx = 36284 kN·m Sy = -648 kN T = -739 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 26 (SM490Y)	481.0	481.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2633.3	2633.3
Gravity center	ex (cm)	-16.3	-16.3
	ey (cm)	161.1	161.1
Moment of inertia	Ix (cm4)	35279844	35279844
	Iy (cm4)	42063149	42063149
Torsion Constant	J (cm4)	20519560	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65260.1 kN·m	65260.1 kN·m
	Mxr(lower)=	45251.8 kN·m	45251.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-106	210	0	0	0	120	0.26
	[2]	-109	210	3	0	3	120	0.27
DECK-C	[3]	-109	210	3	0	3	120	0.27
	[4]	-109	210	4	4	8	120	0.27
	[5]	-115	210	5	4	9	120	0.31
DECK-R	[6]	-115	210	2	0	2	120	0.30
	[7]	-115	210	2	0	2	120	0.30
LWEB	[8]	-117	210	0	0	0	120	0.31
	[9]	-108	210	10	5	15	120	0.28
	[10]	0	210	11	5	16	120	0.02
RWEB	[11]	166	210	8	5	13	120	0.64
	[12]	-113	210	10	5	15	120	0.31
	[13]	0	210	11	5	16	120	0.02
	[14]	166	210	9	5	14	120	0.64

LFLG	[15]	168	210	0	0	0	120	0.64
	[16]	168	210	3	2	5	120	0.64
	[17]	168	210	4	2	6	120	0.65
	[18]	168	210	0	0	0	120	0.64

Girder Name : G-1 Section Name : Sec-44:J-43 (Girder number= 1 Section number= 44)

Section force Mx = 31083 kN·m Sy = -1214 kN T = -835 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
	Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-93	210	0	0	0	120	0.19
	[2]	-95	210	6	0	6	120	0.21
DECK-C	[3]	-95	210	6	0	6	120	0.21
	[4]	-95	210	7	4	11	120	0.22
	[5]	-101	210	10	4	14	120	0.25
DECK-R	[6]	-101	210	4	0	4	120	0.23
	[7]	-101	210	4	0	4	120	0.23
LWEB	[8]	-103	210	0	0	0	120	0.24
	[9]	-94	210	18	6	24	120	0.24
RWEB	[10]	0	210	21	6	26	120	0.05
	[11]	163	210	14	6	20	120	0.63
	[12]	-100	210	19	6	25	120	0.27
	[13]	0	210	21	6	27	120	0.05
	[14]	163	210	16	6	21	120	0.63

LFLG	[15]	164	210	0	0	0	120	0.61
	[16]	164	210	7	3	11	120	0.62
	[17]	164	210	8	3	12	120	0.62
	[18]	164	210	0	0	0	120	0.61

Girder Name : G-1 Section Name : Sec-44:Right (Girder number= 1 Section number= 44)

Section force Mx-Max Mx = 19694 kN·m Sy = -1757 kN T = -922 kN·m
Mx-Min Mx = -192 kN·m Sy = -1757 kN T = -922 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia Ix (cm4)		32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-59	210	0	0	0	120	0.08
	[2]	-60	210	9	0	9	120	0.09
DECK-C	[3]	-60	210	9	0	9	120	0.09
	[4]	-60	210	10	5	15	120	0.10
	[5]	-64	210	14	5	19	120	0.12
DECK-R	[6]	-64	210	5	0	5	120	0.10
	[7]	-64	210	5	0	5	120	0.10
LWEB	[8]	-65	210	0	0	0	120	0.10
	[9]	-60	210	27	6	33	120	0.16
	[10]	0	210	30	6	36	120	0.09
RWEB	[11]	103	210	21	6	27	120	0.29
	[12]	-63	210	27	6	34	120	0.17
	[13]	0	210	30	6	37	120	0.09
	[14]	103	210	23	6	29	120	0.30

	LFLG	[15]	104	210	0	0	0	120	0.25
		[16]	104	210	11	4	14	120	0.26
		[17]	104	210	12	4	16	120	0.26
		[18]	104	210	0	0	0	120	0.25
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	1	210	0	0	0	120	0.00
		[2]	1	210	9	0	9	120	0.01
	DECK-C	[3]	1	210	9	0	9	120	0.01
		[4]	1	210	10	5	15	120	0.02
		[5]	1	210	14	5	19	120	0.03
		[6]	1	210	5	0	5	120	0.00
	DECK-R	[7]	1	210	5	0	5	120	0.00
		[8]	1	210	0	0	0	120	0.00
	LWEB	[9]	1	210	27	6	33	120	0.08
		[10]	0	210	30	6	36	120	0.09
		[11]	-1	210	21	6	27	120	0.05
	RWEB	[12]	1	210	27	6	34	120	0.08
		[13]	0	210	30	6	37	120	0.09
		[14]	-1	210	23	6	29	120	0.06
	LFLG	[15]	-1	210	0	0	0	120	0.00
		[16]	-1	210	11	4	14	120	0.01
		[17]	-1	210	12	4	16	120	0.02
		[18]	-1	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-45:J-44 (Girder number= 1 Section number= 45)

Section force Mx-Max Mx = 19694 kN·m Sy = -1757 kN T = -922 kN·m
Mx-Min Mx = -192 kN·m Sy = -1757 kN T = -922 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-60	210	0	0	0	120	0.08
	[2]	-62	210	9	0	9	120	0.09
DECK-C	[3]	-62	210	9	0	9	120	0.09
	[4]	-62	210	11	5	16	120	0.10
	[5]	-66	210	14	5	19	120	0.12
DECK-R	[6]	-66	210	5	0	6	120	0.10
	[7]	-66	210	5	0	6	120	0.10
LWEB	[8]	-67	210	0	0	0	120	0.10
	[9]	-61	210	28	6	34	120	0.16
RWEB	[10]	0	210	30	6	37	120	0.09
	[11]	121	210	19	6	26	120	0.38
RWEB	[12]	-65	210	28	6	34	120	0.18
	[13]	0	210	31	6	37	120	0.10
	[14]	120	210	21	6	28	120	0.38

LFLG	[15]	121	210	0	0	0	120	0.33
	[16]	121	210	15	5	20	120	0.36
	[17]	121	210	17	5	22	120	0.37
	[18]	121	210	0	0	0	120	0.33
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	1	210	0	0	0	120	0.00
	[2]	1	210	9	0	9	120	0.01
DECK-C	[3]	1	210	9	0	9	120	0.01
	[4]	1	210	11	5	16	120	0.02
	[5]	1	210	14	5	19	120	0.03
DECK-R	[6]	1	210	5	0	6	120	0.00
	[7]	1	210	5	0	6	120	0.00
	[8]	1	210	0	0	0	120	0.00
LWEB	[9]	1	210	28	6	34	120	0.08
	[10]	0	210	30	6	37	120	0.09
	[11]	-1	210	19	6	26	120	0.05
RWEB	[12]	1	210	28	6	34	120	0.08
	[13]	0	210	31	6	37	120	0.10
	[14]	-1	210	21	6	28	120	0.05
LFLG	[15]	-1	121	0	0	0	120	0.00
	[16]	-1	210	15	5	20	120	0.03
	[17]	-1	210	17	5	22	120	0.03
	[18]	-1	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-45:J-45 (Girder number= 1 Section number= 45)

Section force Mx-Max Mx = 4247 kN·m Sy = -2272 kN T = 1187 kN·m
Mx-Min Mx = -12692 kN·m Sy = -2272 kN T = 1187 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.1
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28827249
	Iy (cm4)	40655696	40651396
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61449.5 kN·m	61449.5 kN·m
Mxr(lower)=	34098.8 kN·m	19651.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	11	0	12	120	0.01
DECK-C	[3]	-13	210	11	0	12	120	0.01
	[4]	-13	210	14	6	20	120	0.03
	[5]	-14	210	19	6	25	120	0.05
	[6]	-14	210	7	0	7	120	0.01
DECK-R	[7]	-14	210	7	0	7	120	0.01
	[8]	-15	210	0	0	0	120	0.00
LWEB	[9]	-13	210	36	8	44	120	0.14
	[10]	0	210	39	8	47	120	0.16
	[11]	26	210	25	8	33	120	0.09
RWEB	[12]	-14	210	36	8	44	120	0.14
	[13]	0	210	40	8	48	120	0.16
	[14]	26	210	28	8	36	120	0.10

	LFLG	[15]	26	210	0	0	0	120	0.02
		[16]	26	210	19	7	26	120	0.06
		[17]	26	210	22	7	29	120	0.07
		[18]	26	210	0	0	0	120	0.02
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	39	210	0	0	0	120	0.03
		[2]	40	210	11	0	12	120	0.05
	DECK-C	[3]	40	210	11	0	12	120	0.05
		[4]	40	210	14	6	20	120	0.06
		[5]	43	210	19	6	25	120	0.08
		[6]	43	210	7	0	7	120	0.05
	DECK-R	[7]	43	210	7	0	7	120	0.05
		[8]	43	210	0	0	0	120	0.04
	LWEB	[9]	39	210	36	8	44	120	0.17
		[10]	0	210	39	8	47	120	0.16
		[11]	-78	210	25	8	33	120	0.21
	RWEB	[12]	42	210	36	8	44	120	0.18
		[13]	0	210	40	8	48	120	0.16
		[14]	-78	210	28	8	36	120	0.23
	LFLG	[15]	-78	121	0	0	0	120	0.14
		[16]	-78	210	19	7	26	120	0.18
		[17]	-78	210	22	7	29	120	0.20
		[18]	-78	210	0	0	0	120	0.14

Girder Name : G-1 Section Name : Sec-46:Left (Girder number= 1 Section number= 46)

Section force Mx-Max Mx = 4247 kN·m Sy = -2272 kN T = 1187 kN·m
Mx-Min Mx = -12692 kN·m Sy = -2272 kN T = 1187 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2485.1
Gravity center	ex (cm)	-19.7	-19.7
	ey (cm)	170.8	170.8
Moment of inertia Ix (cm4)		31096923	31095273
	Iy (cm4)	41140217	41135858
Torsion Constant	J (cm4)	19779602	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62904.8 kN·m	62904.8 kN·m
Mxr(lower)=	45929.1 kN·m	36033.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	11	0	11	120	0.01
DECK-C	[3]	-13	210	11	0	11	120	0.01
	[4]	-13	210	14	6	20	120	0.03
	[5]	-14	210	19	6	25	120	0.05
	[6]	-14	210	7	0	7	120	0.01
DECK-R	[7]	-14	210	7	0	7	120	0.01
	[8]	-14	210	0	0	0	120	0.00
LWEB	[9]	-13	255	35	8	43	145	0.09
	[10]	0	255	39	8	47	145	0.10
	[11]	23	255	26	8	35	145	0.07
RWEB	[12]	-14	255	36	8	44	145	0.09
	[13]	0	255	39	8	48	145	0.11
	[14]	23	255	29	8	37	145	0.07

LFLG	[15]	24	255	0	0	0	145	0.01
	[16]	24	255	15	5	20	145	0.03
	[17]	24	255	17	5	23	145	0.03
	[18]	24	255	0	0	0	145	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	39	210	11	0	11	120	0.04
DECK-C	[3]	39	210	11	0	11	120	0.04
	[4]	39	210	14	6	20	120	0.06
	[5]	42	210	19	6	25	120	0.08
DECK-R	[6]	42	210	7	0	7	120	0.04
	[7]	42	210	7	0	7	120	0.04
	[8]	42	210	0	0	0	120	0.04
LWEB	[9]	39	255	35	8	43	145	0.11
	[10]	0	255	39	8	47	145	0.10
RWEB	[11]	-70	255	26	8	35	145	0.13
	[12]	41	255	36	8	44	145	0.12
	[13]	0	255	39	8	48	145	0.11
LFLG	[14]	-70	255	29	8	37	145	0.14
	[15]	-70	200	0	0	0	145	0.08
	[16]	-70	255	15	5	20	145	0.10
	[17]	-70	255	17	5	23	145	0.10
	[18]	-70	255	0	0	0	145	0.08

Girder Name : G-1 Section Name : Sec-46:J-46 (Girder number= 1 Section number= 46)

Section force Mx = -29543 kN·m Sy = -2850 kN T = 1420 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2473.6
Gravity center	ex (cm)	-19.7	-19.2
	ey (cm)	170.8	170.4
Moment of inertia	Ix (cm4)	31096923	30987048
	Iy (cm4)	41140217	40852520
Torsion Constant	J (cm4)	19779602	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62415.5 kN·m	62415.5 kN·m
	Mxr(lower)=	45888.7 kN·m	36001.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	90	210	0	0	0	120	0.18
	[2]	92	210	14	0	14	120	0.21
DECK-C	[3]	92	210	14	0	14	120	0.21
	[4]	92	210	17	7	24	120	0.23
	[5]	98	210	23	7	31	120	0.28
DECK-R	[6]	98	210	9	0	9	120	0.22
	[7]	98	210	9	0	9	120	0.22
LWEB	[8]	99	210	0	0	0	120	0.22
	[9]	91	255	44	10	53	145	0.26
RWEB	[10]	1	255	48	10	58	145	0.16
	[11]	-163	255	33	10	43	145	0.49
	[12]	96	255	45	10	55	145	0.28
	[13]	0	255	49	10	59	145	0.17
	[14]	-162	255	36	10	46	145	0.51

LFLG	[15]	-164	200	0	0	0	145	0.41
	[16]	-164	255	19	6	25	145	0.45
	[17]	-164	255	22	6	28	145	0.45
	[18]	-164	255	0	0	0	145	0.41

Girder Name : G-1 Section Name : Sec-47:J-47 (Girder number= 1 Section number= 47)

Section force Mx = -56150 kN·m Sy = -3651 kN T = -1541 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 21 (SM490Y)	252.1	243.4
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 21 (SM490Y)	705.7	682.8
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3039 * 12 (SM570)	364.6	364.6
1-RWEB PL	2709 * 12 (SM570)	325.1	325.1
1-LFLG PL	1850 * 32 (SM570)	592.0	592.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3003.3	2917.8
Gravity center	ex (cm)	-18.0	-16.8
	ey (cm)	164.2	161.4
Moment of inertia	Ix (cm4)	41138291	40352760
	Iy (cm4)	49069929	48273297
Torsion Constant	J (cm4)	22227650	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	74839.0 kN·m	74839.0 kN·m
Mxr(lower)=	62507.6 kN·m	62507.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	143	210	0	0	1	120	0.46
	[2]	146	210	14	0	14	120	0.50
DECK-C	[3]	146	210	14	0	14	120	0.50
	[4]	147	210	16	6	22	120	0.52
	[5]	155	210	23	6	29	120	0.60
DECK-R	[6]	156	210	8	0	8	120	0.56
	[7]	156	210	8	0	8	120	0.56
LWEB	[8]	158	210	0	0	0	120	0.56
	[9]	144	255	55	11	65	145	0.52
RWEB	[10]	4	255	60	11	70	145	0.24
	[11]	-225	255	46	11	57	145	0.93
	[12]	152	255	57	11	68	145	0.57
	[13]	4	255	62	11	73	145	0.25
	[14]	-225	255	50	11	61	145	0.95

LFLG	[15]	-229	255	0	0	0	145	0.81
	[16]	-229	255	14	4	18	145	0.82
	[17]	-229	255	17	4	21	145	0.83
	[18]	-229	255	0	0	0	145	0.81

Girder Name : G-1 Section Name : Sec-48:Mx-Min_L (Girder number= 1 Section number= 48)

Section force Mx = -65712 kN·m Sy = -3876 kN T = -1541 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 21 (SM490Y)	252.1	242.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 21 (SM490Y)	705.7	679.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3039 * 12 (SM570)	364.6	364.6
1-RWEB PL	2709 * 12 (SM570)	325.1	325.1
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3188.3	3098.0
Gravity center	ex (cm)	-14.6	-13.3
	ey (cm)	154.4	151.4
Moment of inertia	Ix (cm4)	46049389	45030720
	Iy (cm4)	50187847	49244404
Torsion Constant	J (cm4)	22661065	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	76721.4 kN·m	76721.4 kN·m
	Mxr(lower)=	73800.5 kN·m	73800.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	165	210	0	0	1	120	0.62
	[2]	168	210	14	0	15	120	0.66
DECK-C	[3]	168	210	14	0	15	120	0.66
	[4]	169	210	16	6	22	120	0.68
	[5]	177	210	24	6	30	120	0.77
	[6]	178	210	9	0	9	120	0.72
DECK-R	[7]	178	210	9	0	9	120	0.72
	[8]	180	210	0	0	0	120	0.73
LWEB	[9]	166	255	57	11	67	145	0.64
	[10]	5	255	63	11	73	145	0.25
	[11]	-221	255	51	11	62	145	0.93
RWEB	[12]	174	255	60	11	70	145	0.70
	[13]	4	255	65	11	76	145	0.27
	[14]	-221	255	55	11	66	145	0.96

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	12	3	15	145	0.80
	[17]	-227	255	14	3	17	145	0.81
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-1 Section Name : Sec-48:Mx-Min_R (Girder number= 1 Section number= 48)

Section force Mx = -65712 kN·m Sy = 3767 kN T = -1723 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 21 (SM490Y)	252.1	242.1
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 21 (SM490Y)	705.7	679.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3039 * 12 (SM570)	364.6	364.6
1-RWEB PL	2709 * 12 (SM570)	325.1	325.1
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3188.3	3098.0
Gravity center	ex (cm)	-14.6	-13.3
	ey (cm)	154.4	151.4
Moment of inertia	Ix (cm4)	46049389	45030720
	Iy (cm4)	50187847	49244404
Torsion Constant	J (cm4)	22661065	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	76721.4 kN·m	76721.4 kN·m
	Mxr(lower)=	73800.5 kN·m	73800.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	165	210	0	0	1	120	0.62
	[2]	168	210	14	0	14	120	0.66
DECK-C	[3]	168	210	14	0	14	120	0.66
	[4]	169	210	16	7	23	120	0.68
	[5]	177	210	23	7	30	120	0.78
	[6]	178	210	8	0	9	120	0.72
DECK-R	[7]	178	210	8	0	9	120	0.72
	[8]	180	210	0	0	0	120	0.73
LWEB	[9]	166	255	55	12	67	145	0.64
	[10]	5	255	61	12	73	145	0.25
	[11]	-221	255	50	12	61	145	0.93
RWEB	[12]	174	255	58	12	70	145	0.70
	[13]	4	255	63	12	75	145	0.27
	[14]	-221	255	54	12	65	145	0.95

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	12	3	15	145	0.80
	[17]	-227	255	13	3	17	145	0.81
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-1 Section Name : Sec-49:J-48 (Girder number= 1 Section number= 49)

Section force Mx = -56246 kN·m Sy = 3542 kN T = -1723 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 21 (SM490Y)	252.1	243.4
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 21 (SM490Y)	705.7	682.8
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3039 * 12 (SM570)	364.6	364.6
1-RWEB PL	2709 * 12 (SM570)	325.1	325.1
1-LFLG PL	1850 * 40 (SM570)	740.0	740.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3151.3	3065.8
Gravity center	ex (cm)	-15.3	-14.1
	ey (cm)	156.3	153.5
Moment of inertia	Ix (cm4)	45108560	44188453
	Iy (cm4)	49969808	49153627
Torsion Constant	J (cm4)	22588467	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	76566.1 kN·m	76566.1 kN·m
	Mxr(lower)=	71564.5 kN·m	71564.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	141	210	0	0	1	120	0.45
	[2]	144	210	13	0	13	120	0.48
DECK-C	[3]	144	210	13	0	13	120	0.48
	[4]	145	210	15	7	22	120	0.51
	[5]	152	210	22	7	28	120	0.58
DECK-R	[6]	153	210	8	0	8	120	0.53
	[7]	153	210	8	0	8	120	0.53
LWEB	[8]	154	210	0	0	0	120	0.54
	[9]	142	255	52	12	64	145	0.50
RWEB	[10]	4	255	57	12	69	145	0.23
	[11]	-196	255	46	12	58	145	0.75
	[12]	149	255	55	12	66	145	0.55
	[13]	4	255	60	12	72	145	0.24
	[14]	-195	255	50	12	62	145	0.77

LFLG	[15]	-200	255	0	0	0	145	0.62
	[16]	-200	255	11	4	15	145	0.63
	[17]	-200	255	13	4	17	145	0.63
	[18]	-200	255	0	0	0	145	0.62

Girder Name : G-1 Section Name : Sec-50:J-49 (Girder number= 1 Section number= 50)

Section force Mx = -29217 kN·m Sy = 2814 kN T = -1581 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2403.7
Gravity center	ex (cm)	-21.5	-21.1
	ey (cm)	175.2	174.7
Moment of inertia	Ix (cm4)	29499631	29399343
	Iy (cm4)	40792138	40508359
Torsion Constant	J (cm4)	20113201	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61787.2 kN·m	61787.2 kN·m
	Mxr(lower)=	34914.4 kN·m	33530.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	89	210	0	0	0	120	0.18
	[2]	91	210	14	0	14	120	0.20
DECK-C	[3]	91	210	14	0	14	120	0.20
	[4]	92	210	17	8	25	120	0.23
	[5]	98	210	23	8	31	120	0.28
DECK-R	[6]	98	210	9	0	9	120	0.22
	[7]	98	210	9	0	9	120	0.22
	[8]	99	210	0	0	0	120	0.22
LWEB	[9]	90	210	43	11	54	120	0.39
	[10]	1	210	48	11	59	120	0.24
RWEB	[11]	-174	210	31	11	42	120	0.81
	[12]	96	210	44	11	55	120	0.42
	[13]	0	210	49	11	60	120	0.25
	[14]	-174	210	34	11	45	120	0.82

LFLG	[15]	-176	210	0	0	0	120	0.70
	[16]	-176	202	14	6	21	120	0.73
	[17]	-176	202	17	6	23	120	0.74
	[18]	-176	210	0	0	0	120	0.70

Girder Name : G-1 Section Name : Sec-50:Right (Girder number= 1 Section number= 50)

Section force Mx-Max Mx = 5152 kN·m Sy = 2225 kN T = -1350 kN·m
 Mx-Min Mx = -12459 kN·m Sy = 2225 kN T = -1350 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2415.2
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	175.2	175.2
Moment of inertia	Ix (cm4)	29499631	29498125
	Iy (cm4)	40792138	40787839
Torsion Constant	J (cm4)	20113201	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62270.3 kN·m	62270.3 kN·m
Mxr(lower)=	34944.3 kN·m	33559.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-16	210	0	0	0	120	0.01
	[2]	-16	210	11	0	11	120	0.01
DECK-C	[3]	-16	210	11	0	11	120	0.01
	[4]	-16	210	13	7	20	120	0.03
	[5]	-17	210	18	7	25	120	0.05
	[6]	-17	210	7	0	7	120	0.01
DECK-R	[7]	-17	210	7	0	7	120	0.01
	[8]	-17	210	0	0	0	120	0.01
LWEB	[9]	-16	210	34	9	44	120	0.14
	[10]	0	210	38	9	47	120	0.15
	[11]	31	210	25	9	34	120	0.10
RWEB	[12]	-17	210	35	9	44	120	0.14
	[13]	0	210	39	9	48	120	0.16
	[14]	31	210	27	9	36	120	0.11

LFLG	[15]	31	210	0	0	0	120	0.02
	[16]	31	210	11	5	17	120	0.04
	[17]	31	210	13	5	19	120	0.05
	[18]	31	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	39	210	11	0	11	120	0.04
DECK-C	[3]	39	210	11	0	11	120	0.04
	[4]	39	210	13	7	20	120	0.06
	[5]	41	210	18	7	25	120	0.08
DECK-R	[6]	41	210	7	0	7	120	0.04
	[7]	41	210	7	0	7	120	0.04
	[8]	42	210	0	0	0	120	0.04
LWEB	[9]	38	210	34	9	44	120	0.17
	[10]	0	210	38	9	47	120	0.15
RWEB	[11]	-74	210	25	9	34	120	0.20
	[12]	41	210	35	9	44	120	0.17
	[13]	0	210	39	9	48	120	0.16
LFLG	[14]	-74	210	27	9	36	120	0.22
	[15]	-75	210	0	0	0	120	0.13
	[16]	-75	202	11	5	17	120	0.15
	[17]	-75	202	13	5	19	120	0.15
	[18]	-75	210	0	0	0	120	0.13

Girder Name : G-1 Section Name : Sec-51:J-50 (Girder number= 1 Section number= 51)

Section force Mx-Max Mx = 5152 kN·m Sy = 2225 kN T = -1350 kN·m
Mx-Min Mx = -12459 kN·m Sy = 2225 kN T = -1350 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.1
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28827249
	Iy (cm4)	40655696	40651396
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61449.5 kN·m	61449.5 kN·m
Mxr(lower)=	34098.8 kN·m	19651.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-16	210	0	0	0	120	0.01
	[2]	-16	210	11	0	11	120	0.01
DECK-C	[3]	-16	210	11	0	11	120	0.01
	[4]	-16	210	14	7	21	120	0.04
	[5]	-17	210	18	7	25	120	0.05
DECK-R	[6]	-17	210	7	0	7	120	0.01
	[7]	-17	210	7	0	7	120	0.01
LWEB	[8]	-18	210	0	0	0	120	0.01
	[9]	-16	210	35	9	44	120	0.14
RWEB	[10]	0	210	38	9	48	120	0.16
	[11]	32	210	25	9	34	120	0.10
RWEB	[12]	-17	210	36	9	45	120	0.15
	[13]	0	210	39	9	48	120	0.16
	[14]	31	210	27	9	36	120	0.11

LFLG	[15]	32	210	0	0	0	120	0.02
	[16]	32	210	18	8	26	120	0.07
	[17]	32	210	21	8	29	120	0.08
	[18]	32	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	39	210	11	0	11	120	0.04
DECK-C	[3]	39	210	11	0	11	120	0.04
	[4]	39	210	14	7	21	120	0.06
	[5]	42	210	18	7	25	120	0.08
DECK-R	[6]	42	210	7	0	7	120	0.04
	[7]	42	210	7	0	7	120	0.04
	[8]	43	210	0	0	0	120	0.04
LWEB	[9]	39	210	35	9	44	120	0.17
	[10]	0	210	38	9	48	120	0.16
RWEB	[11]	-76	210	25	9	34	120	0.21
	[12]	41	210	36	9	45	120	0.18
	[13]	0	210	39	9	48	120	0.16
LFLG	[14]	-76	210	27	9	36	120	0.22
	[15]	-77	121	0	0	0	120	0.13
	[16]	-77	210	18	8	26	120	0.18
	[17]	-77	210	21	8	29	120	0.19
	[18]	-77	210	0	0	0	120	0.13

Girder Name : G-1 Section Name : Sec-51:J-51 (Girder number= 1 Section number= 51)

Section force Mx = 20761 kN·m Sy = 1697 kN T = -1056 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-63	210	0	0	0	120	0.09
	[2]	-65	210	9	0	9	120	0.10
DECK-C	[3]	-65	210	9	0	9	120	0.10
	[4]	-65	210	10	5	16	120	0.11
	[5]	-70	210	14	5	19	120	0.14
DECK-R	[6]	-70	210	5	0	5	120	0.11
	[7]	-70	210	5	0	5	120	0.11
LWEB	[8]	-71	210	0	0	0	120	0.11
	[9]	-64	210	27	7	34	120	0.17
RWEB	[10]	0	210	29	7	36	120	0.09
	[11]	127	210	19	7	26	120	0.41
RWEB	[12]	-69	210	27	7	34	120	0.19
	[13]	0	210	30	7	37	120	0.09
	[14]	127	210	21	7	28	120	0.42

LFLG	[15]	128	210	0	0	0	120	0.37
	[16]	128	210	14	6	20	120	0.40
	[17]	128	210	16	6	22	120	0.41
	[18]	128	210	0	0	0	120	0.37

Girder Name : G-1 Section Name : Sec-52:J-52 (Girder number= 1 Section number= 52)

Section force Mx = 32323 kN·m Sy = 1193 kN T = -823 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-96	210	0	0	0	120	0.21
	[2]	-99	210	6	0	6	120	0.22
DECK-C	[3]	-99	210	6	0	6	120	0.22
	[4]	-99	210	7	4	11	120	0.23
	[5]	-105	210	10	4	14	120	0.26
DECK-R	[6]	-105	210	4	0	4	120	0.25
	[7]	-105	210	4	0	4	120	0.25
	[8]	-107	210	0	0	0	120	0.26
LWEB	[9]	-98	210	18	6	24	120	0.26
	[10]	0	210	20	6	26	120	0.05
RWEB	[11]	169	210	14	6	20	120	0.68
	[12]	-104	210	19	6	24	120	0.28
	[13]	0	210	21	6	26	120	0.05
	[14]	169	210	15	6	21	120	0.68

LFLG	[15]	171	210	0	0	0	120	0.66
	[16]	171	210	7	3	11	120	0.67
	[17]	171	210	8	3	12	120	0.67
	[18]	171	210	0	0	0	120	0.66

Girder Name : G-1 Section Name : Sec-53:J-53 (Girder number= 1 Section number= 53)

Section force Mx = 37920 kN·m Sy = 643 kN T = -727 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 28 (SM490Y)	518.0	518.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2670.3	2670.3
Gravity center	ex (cm)	-15.5	-15.5
	ey (cm)	158.9	158.9
Moment of inertia	Ix (cm4)	36259092	36259092
	Iy (cm4)	42285208	42285208
Torsion Constant	J (cm4)	20647051	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65756.7 kN·m	65756.7 kN·m
Mxr(lower)=	47103.4 kN·m	47103.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-110	210	0	0	0	120	0.28
	[2]	-113	210	3	0	3	120	0.29
DECK-C	[3]	-113	210	3	0	3	120	0.29
	[4]	-113	210	4	4	7	120	0.29
	[5]	-119	210	5	4	9	120	0.33
DECK-R	[6]	-120	210	2	0	2	120	0.33
	[7]	-120	210	2	0	2	120	0.33
LWEB	[8]	-121	210	0	0	0	120	0.33
	[9]	-112	210	10	5	14	120	0.30
RWEB	[10]	0	210	11	5	16	120	0.02
	[11]	166	210	8	5	13	120	0.64
RWEB	[12]	-118	210	10	5	15	120	0.33
	[13]	0	210	11	5	16	120	0.02
	[14]	166	210	9	5	14	120	0.64

LFLG	[15]	169	210	0	0	0	120	0.65
	[16]	169	210	3	2	5	120	0.65
	[17]	169	210	3	2	5	120	0.65
	[18]	169	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-54:Mx-Max (Girder number= 1 Section number= 54)

Section force Mx = 38429 kN·m Sy = 506 kN T = -751 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 28 (SM490Y)	518.0	518.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2670.3	2670.3
Gravity center	ex (cm)	-15.5	-15.5
	ey (cm)	158.9	158.9
Moment of inertia	Ix (cm4)	36259092	36259092
	Iy (cm4)	42285208	42285208
Torsion Constant	J (cm4)	20647051	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65756.7 kN·m	65756.7 kN·m
Mxr(lower)=	47103.4 kN·m	47103.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-112	210	0	0	0	120	0.28
	[2]	-114	210	2	0	3	120	0.30
DECK-C	[3]	-114	210	2	0	3	120	0.30
	[4]	-115	210	3	4	7	120	0.30
	[5]	-121	210	4	4	8	120	0.34
DECK-R	[6]	-121	210	1	0	2	120	0.33
	[7]	-121	210	1	0	2	120	0.33
LWEB	[8]	-123	210	0	0	0	120	0.34
	[9]	-113	210	7	5	13	120	0.30
RWEB	[10]	0	210	8	5	14	120	0.01
	[11]	169	210	6	5	12	120	0.65
RWEB	[12]	-119	210	8	5	13	120	0.33
	[13]	0	210	9	5	14	120	0.01
	[14]	168	210	7	5	12	120	0.65

LFLG	[15]	171	210	0	0	0	120	0.67
	[16]	171	210	2	2	4	120	0.67
	[17]	171	210	3	2	5	120	0.67
	[18]	171	210	0	0	0	120	0.67

Girder Name : G-1 Section Name : Sec-55:J-54 (Girder number= 1 Section number= 55)

Section force Mx = 38053 kN·m Sy = -645 kN T = -751 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 28 (SM490Y)	518.0	518.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2670.3	2670.3
Gravity center	ex (cm)	-15.5	-15.5
	ey (cm)	158.9	158.9
Moment of inertia	Ix (cm4)	36259092	36259092
	Iy (cm4)	42285208	42285208
Torsion Constant	J (cm4)	20647051	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65756.7 kN·m	65756.7 kN·m
Mxr(lower)=	47103.4 kN·m	47103.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-111	210	0	0	0	120	0.28
	[2]	-113	210	3	0	3	120	0.29
DECK-C	[3]	-113	210	3	0	3	120	0.29
	[4]	-113	210	4	4	8	120	0.30
	[5]	-120	210	5	4	9	120	0.33
DECK-R	[6]	-120	210	2	0	2	120	0.33
	[7]	-120	210	2	0	2	120	0.33
	[8]	-122	210	0	0	0	120	0.33
LWEB	[9]	-112	210	10	5	15	120	0.30
	[10]	0	210	11	5	16	120	0.02
RWEB	[11]	167	210	8	5	13	120	0.65
	[12]	-118	210	10	5	15	120	0.33
	[13]	0	210	11	5	16	120	0.02
	[14]	167	210	9	5	14	120	0.64

LFLG	[15]	170	210	0	0	0	120	0.65
	[16]	170	210	3	2	5	120	0.65
	[17]	170	210	3	2	6	120	0.65
	[18]	170	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-56:J-55 (Girder number= 1 Section number= 56)

Section force Mx = 32819 kN·m Sy = -1191 kN T = -822 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2540.8	2540.8
Gravity center	ex (cm)	-18.4	-18.4
	ey (cm)	167.1	167.1
Moment of inertia	Ix (cm4)	32717928	32717928
	Iy (cm4)	41493154	41493154
Torsion Constant	J (cm4)	20113201	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63869.3 kN·m	63869.3 kN·m
	Mxr(lower)=	40613.5 kN·m	40613.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-97	210	0	0	0	120	0.22
	[2]	-100	210	6	0	6	120	0.23
DECK-C	[3]	-100	210	6	0	6	120	0.23
	[4]	-100	210	7	4	11	120	0.24
	[5]	-106	210	10	4	14	120	0.27
DECK-R	[6]	-107	210	4	0	4	120	0.26
	[7]	-107	210	4	0	4	120	0.26
	[8]	-108	210	0	0	0	120	0.26
LWEB	[9]	-99	210	18	6	24	120	0.26
	[10]	0	210	20	6	26	120	0.05
RWEB	[11]	168	210	14	6	20	120	0.67
	[12]	-105	210	19	6	24	120	0.29
	[13]	0	210	21	6	26	120	0.05
	[14]	168	210	15	6	21	120	0.67

LFLG	[15]	170	210	0	0	0	120	0.65
	[16]	170	210	7	3	10	120	0.66
	[17]	170	210	8	3	11	120	0.66
	[18]	170	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-57:J-56 (Girder number= 1 Section number= 57)

Section force Mx = 21636 kN·m Sy = -1710 kN T = 916 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
	Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-66	210	0	0	0	120	0.10
	[2]	-68	210	9	0	9	120	0.11
DECK-C	[3]	-68	210	9	0	9	120	0.11
	[4]	-68	210	10	5	15	120	0.12
	[5]	-73	210	14	5	19	120	0.14
DECK-R	[6]	-73	210	5	0	5	120	0.12
	[7]	-73	210	5	0	5	120	0.12
LWEB	[8]	-74	210	0	0	0	120	0.12
	[9]	-67	210	27	6	33	120	0.18
RWEB	[10]	0	210	29	6	36	120	0.09
	[11]	132	210	19	6	25	120	0.44
RWEB	[12]	-71	210	27	6	34	120	0.19
	[13]	0	210	30	6	36	120	0.09
	[14]	132	210	21	6	27	120	0.45

LFLG	[15]	133	210	0	0	0	120	0.40
	[16]	133	210	14	5	19	120	0.43
	[17]	133	210	16	5	22	120	0.44
	[18]	133	210	0	0	0	120	0.40

Girder Name : G-1 Section Name : Sec-57:J-57 (Girder number= 1 Section number= 57)

Section force Mx-Max Mx = 6523 kN·m Sy = -2224 kN T = 1217 kN·m
Mx-Min Mx = -10511 kN·m Sy = -2224 kN T = 1217 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.1
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28827249
	Iy (cm4)	40655696	40651396
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61449.5 kN·m	61449.5 kN·m
Mxr(lower)=	34098.8 kN·m	19651.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-20	210	0	0	0	120	0.01
	[2]	-20	210	11	0	11	120	0.02
DECK-C	[3]	-20	210	11	0	11	120	0.02
	[4]	-21	210	14	6	20	120	0.04
	[5]	-22	210	18	6	25	120	0.05
DECK-R	[6]	-22	210	7	0	7	120	0.01
	[7]	-22	210	7	0	7	120	0.01
LWEB	[8]	-22	210	0	0	0	120	0.01
	[9]	-20	210	35	8	43	120	0.14
	[10]	0	210	38	8	47	120	0.15
RWEB	[11]	40	210	25	8	33	120	0.11
	[12]	-22	210	35	8	44	120	0.14
	[13]	0	210	39	8	47	120	0.16
	[14]	40	210	27	8	35	120	0.12

LFLG	[15]	40	210	0	0	0	120	0.04
	[16]	40	210	18	7	25	120	0.08
	[17]	40	210	21	7	28	120	0.09
	[18]	40	210	0	0	0	120	0.04
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	32	210	0	0	0	120	0.02
	[2]	33	210	11	0	11	120	0.03
DECK-C	[3]	33	210	11	0	11	120	0.03
	[4]	33	210	14	6	20	120	0.05
	[5]	35	210	18	6	25	120	0.07
DECK-R	[6]	35	210	7	0	7	120	0.03
	[7]	35	210	7	0	7	120	0.03
	[8]	36	210	0	0	0	120	0.03
LWEB	[9]	33	210	35	8	43	120	0.15
	[10]	0	210	38	8	47	120	0.15
RWEB	[11]	-64	210	25	8	33	120	0.17
	[12]	35	210	35	8	44	120	0.16
	[13]	0	210	39	8	47	120	0.16
LFLG	[14]	-64	210	27	8	35	120	0.18
	[15]	-65	121	0	0	0	120	0.10
	[16]	-65	210	18	7	25	120	0.14
	[17]	-65	210	21	7	28	120	0.15
	[18]	-65	210	0	0	0	120	0.10

Girder Name : G-1 Section Name : Sec-58:Left (Girder number= 1 Section number= 58)

Section force Mx-Max Mx = 6523 kN·m Sy = -2224 kN T = 1217 kN·m
Mx-Min Mx = -10511 kN·m Sy = -2224 kN T = 1217 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2415.2
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	175.2	175.2
Moment of inertia	Ix (cm4)	29499631	29498125
	Iy (cm4)	40792138	40787839
Torsion Constant	J (cm4)	20113201	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62270.3 kN·m	62270.3 kN·m
Mxr(lower)=	34944.3 kN·m	33559.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-20	210	0	0	0	120	0.01
	[2]	-20	210	11	0	11	120	0.02
DECK-C	[3]	-20	210	11	0	11	120	0.02
	[4]	-20	210	13	6	20	120	0.04
	[5]	-22	210	18	6	24	120	0.05
	[6]	-22	210	7	0	7	120	0.01
DECK-R	[7]	-22	210	7	0	7	120	0.01
	[8]	-22	210	0	0	0	120	0.01
LWEB	[9]	-20	210	34	8	43	120	0.14
	[10]	0	210	38	8	46	120	0.15
	[11]	39	210	25	8	33	120	0.11
RWEB	[12]	-21	210	35	8	43	120	0.14
	[13]	0	210	39	8	47	120	0.15
	[14]	39	210	27	8	35	120	0.12

LFLG	[15]	39	210	0	0	0	120	0.03
	[16]	39	210	11	5	16	120	0.05
	[17]	39	210	13	5	18	120	0.06
	[18]	39	210	0	0	0	120	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	32	210	0	0	0	120	0.02
	[2]	33	210	11	0	11	120	0.03
DECK-C	[3]	33	210	11	0	11	120	0.03
	[4]	33	210	13	6	20	120	0.05
	[5]	35	210	18	6	24	120	0.07
DECK-R	[6]	35	210	7	0	7	120	0.03
	[7]	35	210	7	0	7	120	0.03
	[8]	35	210	0	0	0	120	0.03
LWEB	[9]	32	210	34	8	43	120	0.15
	[10]	0	210	38	8	46	120	0.15
RWEB	[11]	-63	210	25	8	33	120	0.16
	[12]	34	210	35	8	43	120	0.16
	[13]	0	210	39	8	47	120	0.15
LFLG	[14]	-62	210	27	8	35	120	0.18
	[15]	-63	210	0	0	0	120	0.09
	[16]	-63	202	11	5	16	120	0.11
	[17]	-63	202	13	5	18	120	0.11
	[18]	-63	210	0	0	0	120	0.09

Girder Name : G-1 Section Name : Sec-58:J-58 (Girder number= 1 Section number= 58)

Section force Mx = -26590 kN·m Sy = -2831 kN T = 1402 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 21 (SM490Y)	388.5	388.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2403.7
Gravity center	ex (cm)	-21.5	-21.1
	ey (cm)	175.2	174.7
Moment of inertia	Ix (cm4)	29499631	29399343
	Iy (cm4)	40792138	40508359
Torsion Constant	J (cm4)	20113201	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61787.2 kN·m	61787.2 kN·m
	Mxr(lower)=	34914.4 kN·m	33530.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	81	210	0	0	0	120	0.15
	[2]	83	210	14	0	14	120	0.17
DECK-C	[3]	83	210	14	0	14	120	0.17
	[4]	83	210	17	7	24	120	0.20
	[5]	89	210	23	7	30	120	0.24
DECK-R	[6]	89	210	9	0	9	120	0.19
	[7]	89	210	9	0	9	120	0.19
LWEB	[8]	90	210	0	0	0	120	0.19
	[9]	82	210	44	10	53	120	0.35
RWEB	[10]	1	210	48	10	58	120	0.23
	[11]	-158	210	31	10	41	120	0.68
	[12]	87	210	45	10	54	120	0.38
	[13]	0	210	49	10	59	120	0.24
	[14]	-158	210	34	10	44	120	0.70

LFLG	[15]	-160	210	0	0	0	120	0.58
	[16]	-160	202	14	5	20	120	0.61
	[17]	-160	202	17	5	23	120	0.62
	[18]	-160	210	0	0	0	120	0.58

Girder Name : G-1 Section Name : Sec-59:J-59 (Girder number= 1 Section number= 59)

Section force Mx = -53116 kN·m Sy = -3621 kN T = -1512 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 20 (SM490Y)	240.0	231.8
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 20 (SM490Y)	672.1	650.3
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3040 * 12 (SM570)	364.8	364.8
1-RWEB PL	2710 * 12 (SM570)	325.2	325.2
1-LFLG PL	1850 * 37 (SM570)	684.5	684.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3044.0	2960.0
Gravity center	ex (cm)	-15.5	-14.3
	ey (cm)	157.3	154.5
Moment of inertia	Ix (cm4)	43050082	42165474
	Iy (cm4)	48366943	47590688
Torsion Constant	J (cm4)	22233220	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		73684.1 kN·m	73684.1 kN·m
Mxr(lower)=		67975.2 kN·m	67975.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	138	210	0	0	1	120	0.43
	[2]	141	210	14	0	14	120	0.47
DECK-C	[3]	141	210	14	0	14	120	0.47
	[4]	142	210	16	6	22	120	0.49
	[5]	149	210	23	6	29	120	0.57
	[6]	150	210	9	0	9	120	0.51
DECK-R	[7]	150	210	9	0	9	120	0.51
	[8]	151	210	0	0	0	120	0.52
LWEB	[9]	140	255	53	10	64	145	0.49
	[10]	4	255	59	10	69	145	0.23
RWEB	[11]	-195	255	47	10	57	145	0.74
	[12]	147	255	56	10	66	145	0.54
	[13]	4	255	61	10	72	145	0.24
	[14]	-195	255	51	10	61	145	0.76

LFLG	[15]	-199	255	0	0	0	145	0.61
	[16]	-199	255	13	3	16	145	0.62
	[17]	-199	255	14	3	18	145	0.63
	[18]	-199	255	0	0	0	145	0.61

Girder Name : G-1 Section Name : Sec-60:Mx-Min_L (Girder number= 1 Section number= 60)

Section force Mx = -62567 kN·m Sy = -3846 kN T = -1512 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 20 (SM490Y)	240.0	230.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 20 (SM490Y)	672.1	646.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3040 * 12 (SM570)	364.8	364.8
1-RWEB PL	2710 * 12 (SM570)	325.2	325.2
1-LFLG PL	1850 * 39 (SM570)	721.5	721.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3081.0	2992.4
Gravity center	ex (cm)	-14.8	-13.5
	ey (cm)	155.4	152.3
Moment of inertia	Ix (cm4)	43999258	43019792
	Iy (cm4)	48585946	47688501
Torsion Constant	J (cm4)	22313525	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		73866.8 kN·m	73866.8 kN·m
Mxr(lower)=		70209.8 kN·m	70209.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	163	210	0	0	1	120	0.60
	[2]	166	210	15	0	15	120	0.64
DECK-C	[3]	166	210	15	0	15	120	0.64
	[4]	167	210	17	6	23	120	0.67
	[5]	175	210	25	6	31	120	0.76
	[6]	176	210	9	0	9	120	0.71
DECK-R	[7]	176	210	9	0	9	120	0.71
	[8]	178	210	0	0	0	120	0.72
LWEB	[9]	164	255	56	10	67	145	0.63
	[10]	5	255	62	10	73	145	0.25
	[11]	-222	255	50	10	61	145	0.93
RWEB	[12]	173	255	59	10	69	145	0.69
	[13]	4	255	65	10	75	145	0.27
	[14]	-222	255	54	10	65	145	0.95

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	13	3	16	145	0.81
	[17]	-227	255	15	3	18	145	0.81
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-1 Section Name : Sec-60:Mx-Min_R (Girder number= 1 Section number= 60)

Section force Mx = -62567 kN·m Sy = 3608 kN T = -1675 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	1380	1333
	Intermediate	3000	2874
	Cantilever	825	825
	LFLG Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 20 (SM490Y)	240.0	230.6
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 20 (SM490Y)	672.1	646.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3040 * 12 (SM570)	364.8	364.8
1-RWEB PL	2710 * 12 (SM570)	325.2	325.2
1-LFLG PL	1850 * 39 (SM570)	721.5	721.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3081.0	2992.4
Gravity center	ex (cm)	-14.8	-13.5
	ey (cm)	155.4	152.3
Moment of inertia	Ix (cm4)	43999258	43019792
	Iy (cm4)	48585946	47688501
Torsion Constant	J (cm4)	22313525	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	73866.8 kN·m	73866.8 kN·m	73866.8 kN·m
Mxr(lower)=	70209.8 kN·m	70209.8 kN·m	70209.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
	DECK-L [1]	163	210	0	0	1	120	0.60
	[2]	166	210	14	0	14	120	0.64
	DECK-C [3]	166	210	14	0	14	120	0.64
	[4]	167	210	16	7	23	120	0.67
	[5]	175	210	23	7	30	120	0.76
	[6]	176	210	8	0	9	120	0.71
	DECK-R [7]	176	210	8	0	9	120	0.71
	[8]	178	210	0	0	0	120	0.72
	LWEB [9]	164	255	53	11	64	145	0.61
	[10]	5	255	59	11	70	145	0.23
	[11]	-222	255	47	11	59	145	0.92
	RWEB [12]	173	255	55	11	67	145	0.67
	[13]	4	255	61	11	72	145	0.25
	[14]	-222	255	51	11	62	145	0.94

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	12	4	15	145	0.81
	[17]	-227	255	14	4	17	145	0.81
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-1 Section Name : Sec-61:J-60 (Girder number= 1 Section number= 61)

Section force Mx = -53489 kN·m Sy = 3382 kN T = -1675 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1339
	Intermediate	3000	2891
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 20 (SM490Y)	240.0	231.8
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 20 (SM490Y)	672.1	650.3
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3040 * 12 (SM570)	364.8	364.8
1-RWEB PL	2710 * 12 (SM570)	325.2	325.2
1-LFLG PL	1850 * 33 (SM570)	610.5	610.5
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2970.0	2886.0
Gravity center	ex (cm)	-16.9	-15.7
	ey (cm)	161.3	158.5
Moment of inertia	Ix (cm4)	41088107	40271294
	Iy (cm4)	47920454	47153833
Torsion Constant	J (cm4)	22049399	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	72828.8 kN·m	72828.8 kN·m
	Mxr(lower)=	63457.1 kN·m	63457.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	141	210	0	0	0	120	0.45
	[2]	144	210	13	0	13	120	0.48
DECK-C	[3]	144	210	13	0	13	120	0.48
	[4]	144	210	15	7	22	120	0.50
	[5]	152	210	22	7	29	120	0.58
DECK-R	[6]	153	210	8	0	8	120	0.53
	[7]	153	210	8	0	8	120	0.53
LWEB	[8]	154	210	0	0	0	120	0.54
	[9]	142	255	50	11	62	145	0.49
RWEB	[10]	4	255	55	11	67	145	0.21
	[11]	-211	255	43	11	55	145	0.83
	[12]	149	255	53	11	64	145	0.54
	[13]	4	255	57	11	69	145	0.23
	[14]	-211	255	47	11	58	145	0.84

LFLG	[15]	-215	255	0	0	0	145	0.71
	[16]	-215	255	13	4	17	145	0.72
	[17]	-215	255	15	4	19	145	0.73
	[18]	-215	255	0	0	0	145	0.71

Girder Name : G-1 Section Name : Sec-62:J-61 (Girder number= 1 Section number= 62)

Section force Mx = -28044 kN·m Sy = 2653 kN T = -1562 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1360
	Intermediate	3000	2947
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	529.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2473.6
Gravity center	ex (cm)	-19.7	-19.2
	ey (cm)	170.8	170.4
Moment of inertia	Ix (cm4)	31096923	30987048
	Iy (cm4)	41140217	40852520
Torsion Constant	J (cm4)	19779602	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62415.5 kN·m	62415.5 kN·m
Mxr(lower)=	45888.7 kN·m	36001.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	85	210	0	0	0	120	0.16
	[2]	87	210	13	0	13	120	0.18
DECK-C	[3]	87	210	13	0	13	120	0.18
	[4]	87	210	16	8	24	120	0.21
	[5]	93	210	22	8	30	120	0.26
DECK-R	[6]	93	210	8	0	8	120	0.20
	[7]	93	210	8	0	8	120	0.20
LWEB	[8]	94	210	0	0	0	120	0.20
	[9]	86	255	41	11	51	145	0.24
RWEB	[10]	1	255	45	11	56	145	0.15
	[11]	-155	255	31	11	41	145	0.45
	[12]	91	255	42	11	52	145	0.26
	[13]	0	255	46	11	57	145	0.15
	[14]	-154	255	34	11	44	145	0.46

LFLG	[15]	-156	200	0	0	0	145	0.37
	[16]	-156	255	18	7	25	145	0.40
	[17]	-156	255	20	7	27	145	0.41
	[18]	-156	255	0	0	0	145	0.37

Girder Name : G-1 Section Name : Sec-62:Right (Girder number= 1 Section number= 62)

Section force Mx-Max Mx = 4724 kN·m Sy = 2079 kN T = -1300 kN·m
 Mx-Min Mx = -12082 kN·m Sy = 2079 kN T = -1300 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 18 (SM570)	333.0	333.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2485.3	2485.1
Gravity center	ex (cm)	-19.7	-19.7
	ey (cm)	170.8	170.8
Moment of inertia Ix (cm4)		31096923	31095273
	Iy (cm4)	41140217	41135858
Torsion Constant	J (cm4)	19779602	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62904.8 kN·m	62904.8 kN·m
Mxr(lower)=	45929.1 kN·m	36033.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-14	210	0	0	0	120	0.00
	[2]	-15	210	10	0	10	120	0.01
DECK-C	[3]	-15	210	10	0	10	120	0.01
	[4]	-15	210	12	7	19	120	0.03
	[5]	-16	210	17	7	24	120	0.04
DECK-R	[6]	-16	210	6	0	6	120	0.01
	[7]	-16	210	6	0	6	120	0.01
LWEB	[8]	-16	210	0	0	0	120	0.01
	[9]	-14	255	32	9	41	145	0.08
RWEB	[10]	0	255	35	9	44	145	0.09
	[11]	26	255	24	9	33	145	0.06
	[12]	-15	255	33	9	42	145	0.09
	[13]	0	255	36	9	45	145	0.10
	[14]	26	255	26	9	35	145	0.07

LFLG	[15]	26	255	0	0	0	145	0.01
	[16]	26	255	14	6	20	145	0.03
	[17]	26	255	16	6	22	145	0.03
	[18]	26	255	0	0	0	145	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	36	210	0	0	0	120	0.03
	[2]	37	210	10	0	10	120	0.04
DECK-C	[3]	37	210	10	0	10	120	0.04
	[4]	37	210	12	7	19	120	0.06
	[5]	40	210	17	7	24	120	0.07
DECK-R	[6]	40	210	6	0	6	120	0.04
	[7]	40	210	6	0	6	120	0.04
	[8]	40	210	0	0	0	120	0.04
LWEB	[9]	37	255	32	9	41	145	0.10
	[10]	0	255	35	9	44	145	0.09
RWEB	[11]	-67	255	24	9	33	145	0.12
	[12]	39	255	33	9	42	145	0.11
	[13]	0	255	36	9	45	145	0.10
LFLG	[14]	-66	255	26	9	35	145	0.13
	[15]	-67	200	0	0	0	145	0.07
	[16]	-67	255	14	6	20	145	0.09
	[17]	-67	255	16	6	22	145	0.09
	[18]	-67	255	0	0	0	145	0.07

Girder Name : G-1 Section Name : Sec-63:J-62 (Girder number= 1 Section number= 63)

Section force Mx-Max Mx = 4724 kN·m Sy = 2079 kN T = -1300 kN·m
Mx-Min Mx = -12082 kN·m Sy = 2079 kN T = -1300 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.1
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28827249
	Iy (cm4)	40655696	40651396
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61449.5 kN·m	61449.5 kN·m
Mxr(lower)=	34098.8 kN·m	19651.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-14	210	0	0	0	120	0.00
	[2]	-15	210	10	0	11	120	0.01
DECK-C	[3]	-15	210	10	0	11	120	0.01
	[4]	-15	210	13	7	19	120	0.03
	[5]	-16	210	17	7	24	120	0.05
DECK-R	[6]	-16	210	6	0	7	120	0.01
	[7]	-16	210	6	0	7	120	0.01
LWEB	[8]	-16	210	0	0	0	120	0.01
	[9]	-15	210	33	9	41	120	0.12
RWEB	[10]	0	210	36	9	45	120	0.14
	[11]	29	210	23	9	32	120	0.09
	[12]	-16	210	33	9	42	120	0.13
	[13]	0	210	36	9	45	120	0.14
	[14]	29	210	25	9	34	120	0.10

LFLG	[15]	29	210	0	0	0	120	0.02
	[16]	29	210	17	8	25	120	0.06
	[17]	29	210	20	8	27	120	0.07
	[18]	29	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	37	210	0	0	0	120	0.03
	[2]	38	210	10	0	11	120	0.04
DECK-C	[3]	38	210	10	0	11	120	0.04
	[4]	38	210	13	7	19	120	0.06
	[5]	41	210	17	7	24	120	0.08
DECK-R	[6]	41	210	6	0	7	120	0.04
	[7]	41	210	6	0	7	120	0.04
	[8]	41	210	0	0	0	120	0.04
LWEB	[9]	38	210	33	9	41	120	0.15
	[10]	0	210	36	9	45	120	0.14
	[11]	-74	210	23	9	32	120	0.19
RWEB	[12]	40	210	33	9	42	120	0.16
	[13]	0	210	36	9	45	120	0.14
	[14]	-74	210	25	9	34	120	0.20
LFLG	[15]	-74	121	0	0	0	120	0.13
	[16]	-74	210	17	8	25	120	0.17
	[17]	-74	210	20	8	27	120	0.18
	[18]	-74	210	0	0	0	120	0.13

Girder Name : G-1 Section Name : Sec-63:J-63 (Girder number= 1 Section number= 63)

Section force Mx-Max Mx = 18439 kN·m Sy = 1508 kN T = -1071 kN·m
 Mx-Min Mx = -416 kN·m Sy = 1508 kN T = -1071 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-56	210	0	0	0	120	0.07
	[2]	-58	210	8	0	8	120	0.08
DECK-C	[3]	-58	210	8	0	8	120	0.08
	[4]	-58	210	9	5	15	120	0.09
	[5]	-62	210	12	5	18	120	0.11
DECK-R	[6]	-62	210	5	0	5	120	0.09
	[7]	-62	210	5	0	5	120	0.09
LWEB	[8]	-63	210	0	0	0	120	0.09
	[9]	-57	210	24	7	31	120	0.14
RWEB	[10]	0	210	26	7	33	120	0.08
	[11]	113	210	17	7	24	120	0.33
	[12]	-61	210	24	7	31	120	0.15
	[13]	0	210	26	7	34	120	0.08
	[14]	113	210	18	7	26	120	0.33

LFLG	[15]	114	210	0	0	0	120	0.29
	[16]	114	210	12	6	19	120	0.32
	[17]	114	210	14	6	21	120	0.32
	[18]	114	210	0	0	0	120	0.29
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	1	210	0	0	0	120	0.00
	[2]	1	210	8	0	8	120	0.00
DECK-C	[3]	1	210	8	0	8	120	0.00
	[4]	1	210	9	5	15	120	0.02
	[5]	1	210	12	5	18	120	0.02
DECK-R	[6]	1	210	5	0	5	120	0.00
	[7]	1	210	5	0	5	120	0.00
LWEB	[8]	1	210	0	0	0	120	0.00
	[9]	1	210	24	7	31	120	0.07
RWEB	[10]	0	210	26	7	33	120	0.08
	[11]	-3	210	17	7	24	120	0.04
LFLG	[12]	1	210	24	7	31	120	0.07
	[13]	0	210	26	7	34	120	0.08
LFLG	[14]	-3	210	18	7	26	120	0.05
	[15]	-3	121	0	0	0	120	0.00
	[16]	-3	210	12	6	19	120	0.02
	[17]	-3	210	14	6	21	120	0.03
	[18]	-3	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-64:Left (Girder number= 1 Section number= 64)

Section force Mx-Max Mx = 18439 kN·m Sy = 1508 kN T = -1071 kN·m
 Mx-Min Mx = -416 kN·m Sy = 1508 kN T = -1071 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-56	210	0	0	0	120	0.07
	[2]	-58	210	8	0	8	120	0.08
DECK-C	[3]	-58	210	8	0	8	120	0.08
	[4]	-58	210	9	5	15	120	0.09
	[5]	-62	210	12	5	18	120	0.11
	[6]	-62	210	5	0	5	120	0.09
DECK-R	[7]	-62	210	5	0	5	120	0.09
	[8]	-63	210	0	0	0	120	0.09
LWEB	[9]	-57	210	24	7	31	120	0.14
	[10]	0	210	26	7	33	120	0.08
RWEB	[11]	113	210	17	7	24	120	0.33
	[12]	-61	210	24	7	31	120	0.15
	[13]	0	210	26	7	34	120	0.08
	[14]	113	210	18	7	26	120	0.33

LFLG	[15]	114	210	0	0	0	120	0.29
	[16]	114	210	12	6	19	120	0.32
	[17]	114	210	14	6	21	120	0.32
	[18]	114	210	0	0	0	120	0.29
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	1	210	0	0	0	120	0.00
	[2]	1	210	8	0	8	120	0.00
DECK-C	[3]	1	210	8	0	8	120	0.00
	[4]	1	210	9	5	15	120	0.02
	[5]	1	210	12	5	18	120	0.02
DECK-R	[6]	1	210	5	0	5	120	0.00
	[7]	1	210	5	0	5	120	0.00
LWEB	[8]	1	210	0	0	0	120	0.00
	[9]	1	210	24	7	31	120	0.07
RWEB	[10]	0	210	26	7	33	120	0.08
	[11]	-3	210	17	7	24	120	0.04
LFLG	[12]	1	210	24	7	31	120	0.07
	[13]	0	210	26	7	34	120	0.08
LFLG	[14]	-3	210	18	7	26	120	0.05
	[15]	-3	121	0	0	0	120	0.00
	[16]	-3	210	12	6	19	120	0.02
	[17]	-3	210	14	6	21	120	0.03
	[18]	-3	210	0	0	0	120	0.00

Girder Name : G-1 Section Name : Sec-64:J-64 (Girder number= 1 Section number= 64)

Section force Mx = 27913 kN·m Sy = 1000 kN T = -829 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2411.3	2411.3
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	176.1	176.1
Moment of inertia	Ix (cm4)	28828724	28828724
	Iy (cm4)	40655696	40655696
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61456.8 kN·m	61456.8 kN·m
Mxr(lower)=	34099.3 kN·m	19651.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-85	210	0	0	0	120	0.16
	[2]	-88	210	5	0	5	120	0.18
DECK-C	[3]	-88	210	5	0	5	120	0.18
	[4]	-88	210	6	4	10	120	0.18
	[5]	-94	210	8	4	13	120	0.21
DECK-R	[6]	-94	210	3	0	3	120	0.20
	[7]	-94	210	3	0	3	120	0.20
LWEB	[8]	-95	210	0	0	0	120	0.21
	[9]	-87	210	16	6	21	120	0.20
RWEB	[10]	0	210	17	6	23	120	0.04
	[11]	171	210	11	6	17	120	0.68
	[12]	-92	210	16	6	22	120	0.23
	[13]	0	210	18	6	23	120	0.04
	[14]	171	210	12	6	18	120	0.68

LFLG	[15]	172	210	0	0	0	120	0.67
	[16]	172	210	8	5	13	120	0.68
	[17]	172	210	9	5	14	120	0.68
	[18]	172	210	0	0	0	120	0.67

Girder Name : G-1 Section Name : Sec-65:J-65 (Girder number= 1 Section number= 65)

Section force Mx = 31965 kN·m Sy = 564 kN T = -694 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-95	210	0	0	0	120	0.21
	[2]	-98	210	3	0	3	120	0.22
DECK-C	[3]	-98	210	3	0	3	120	0.22
	[4]	-98	210	3	4	7	120	0.22
	[5]	-104	210	5	4	8	120	0.25
DECK-R	[6]	-104	210	2	0	2	120	0.25
	[7]	-104	210	2	0	2	120	0.25
LWEB	[8]	-106	210	0	0	0	120	0.25
	[9]	-97	210	9	5	13	120	0.22
RWEB	[10]	0	210	10	5	14	120	0.01
	[11]	168	210	7	5	11	120	0.65
	[12]	-102	210	9	5	14	120	0.25
	[13]	0	210	10	5	14	120	0.01
	[14]	167	210	7	5	12	120	0.64

LFLG	[15]	169	210	0	0	0	120	0.65
	[16]	169	210	3	3	6	120	0.65
	[17]	169	210	4	3	7	120	0.65
	[18]	169	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-66:Mx-Max (Girder number= 1 Section number= 66)

Section force Mx = 32112 kN·m Sy = -498 kN T = -694 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-96	210	0	0	0	120	0.21
	[2]	-98	210	2	0	3	120	0.22
DECK-C	[3]	-98	210	2	0	3	120	0.22
	[4]	-98	210	3	4	7	120	0.22
	[5]	-104	210	4	4	8	120	0.25
DECK-R	[6]	-105	210	2	0	2	120	0.25
	[7]	-105	210	2	0	2	120	0.25
LWEB	[8]	-106	210	0	0	0	120	0.26
	[9]	-97	210	8	5	12	120	0.22
RWEB	[10]	0	210	8	5	13	120	0.01
	[11]	168	210	6	5	11	120	0.65
RWEB	[12]	-103	210	8	5	13	120	0.25
	[13]	0	210	9	5	13	120	0.01
	[14]	168	210	6	5	11	120	0.65

LFLG	[15]	170	210	0	0	0	120	0.65
	[16]	170	210	3	3	6	120	0.66
	[17]	170	210	3	3	6	120	0.66
	[18]	170	210	0	0	0	120	0.65

Girder Name : G-1 Section Name : Sec-67:J-66 (Girder number= 1 Section number= 67)

Section force Mx = 31269 kN·m Sy = -696 kN T = -711 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 20 (SM490Y)	370.0	370.0
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2522.3	2522.3
Gravity center	ex (cm)	-18.8	-18.8
	ey (cm)	168.3	168.3
Moment of inertia	Ix (cm4)	32184889	32184889
	Iy (cm4)	41376460	41376460
Torsion Constant	J (cm4)	20011502	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63561.6 kN·m	63561.6 kN·m
	Mxr(lower)=	39684.3 kN·m	39684.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-93	210	0	0	0	120	0.20
	[2]	-96	210	3	0	3	120	0.21
DECK-C	[3]	-96	210	3	0	3	120	0.21
	[4]	-96	210	4	4	8	120	0.21
	[5]	-102	210	6	4	9	120	0.24
DECK-R	[6]	-102	210	2	0	2	120	0.24
	[7]	-102	210	2	0	2	120	0.24
LWEB	[8]	-103	210	0	0	0	120	0.24
	[9]	-95	210	11	5	15	120	0.22
RWEB	[10]	0	210	12	5	17	120	0.02
	[11]	164	210	8	5	13	120	0.62
	[12]	-100	210	11	5	16	120	0.24
	[13]	0	210	12	5	17	120	0.02
	[14]	164	210	9	5	14	120	0.62

LFLG	[15]	165	210	0	0	0	120	0.62
	[16]	165	210	4	3	7	120	0.62
	[17]	165	210	5	3	8	120	0.63
	[18]	165	210	0	0	0	120	0.62

Girder Name : G-1 Section Name : Sec-68:J-67 (Girder number= 1 Section number= 68)

Section force Mx = 24978 kN·m Sy = -1262 kN T = -800 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 15 (SM490Y)	277.5	277.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2429.8	2429.8
Gravity center	ex (cm)	-21.0	-21.0
	ey (cm)	174.8	174.8
Moment of inertia	Ix (cm4)	29407747	29407747
	Iy (cm4)	40778388	40778388
Torsion Constant	J (cm4)	19335703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61842.3 kN·m	61842.3 kN·m
	Mxr(lower)=	35031.2 kN·m	23175.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-76	210	0	0	0	120	0.13
	[2]	-78	210	6	0	6	120	0.14
DECK-C	[3]	-78	210	6	0	6	120	0.14
	[4]	-78	210	8	4	12	120	0.15
	[5]	-83	210	10	4	14	120	0.17
DECK-R	[6]	-84	210	4	0	4	120	0.16
	[7]	-84	210	4	0	4	120	0.16
LWEB	[8]	-85	210	0	0	0	120	0.16
	[9]	-77	210	20	5	25	120	0.18
RWEB	[10]	0	210	22	5	27	120	0.05
	[11]	149	210	14	5	20	120	0.53
	[12]	-82	210	20	5	26	120	0.20
	[13]	0	210	22	5	28	120	0.05
	[14]	148	210	16	5	21	120	0.53

LFLG	[15]	150	210	0	0	0	120	0.51
	[16]	150	210	10	4	14	120	0.52
	[17]	150	210	11	4	16	120	0.53
	[18]	150	210	0	0	0	120	0.51

Girder Name : G-1 Section Name : Sec-68:J-68 (Girder number= 1 Section number= 68)

Section force Mx-Max Mx = 13843 kN·m Sy = -1755 kN T = 993 kN·m
Mx-Min Mx = -4153 kN·m Sy = -1755 kN T = 993 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 15 (SM490Y)	277.5	277.5
5-RIB PL	220 * 19 (SM490Y)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	2429.8	2429.8
Gravity center	ex (cm)	-21.0	-21.0
	ey (cm)	174.8	174.8
Moment of inertia	Ix (cm4)	29407747	29407747
	Iy (cm4)	40778388	40778388
Torsion Constant	J (cm4)	19335703	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	61842.3 kN·m	61842.3 kN·m
Mxr(lower)=	35031.2 kN·m	23175.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-42	210	0	0	0	120	0.04
	[2]	-43	210	9	0	9	120	0.05
DECK-C	[3]	-43	210	9	0	9	120	0.05
	[4]	-43	210	11	5	16	120	0.06
	[5]	-46	210	14	5	20	120	0.07
DECK-R	[6]	-46	210	5	0	6	120	0.05
	[7]	-46	210	5	0	6	120	0.05
LWEB	[8]	-47	210	0	0	0	120	0.05
	[9]	-43	210	27	7	34	120	0.12
RWEB	[10]	0	210	30	7	37	120	0.09
	[11]	82	210	20	7	26	120	0.20
RWEB	[12]	-45	210	28	7	35	120	0.13
	[13]	0	210	31	7	37	120	0.10
	[14]	82	210	22	7	28	120	0.21

	LFLG	[15]	83	210	0	0	0	120	0.16
		[16]	83	210	14	5	19	120	0.18
		[17]	83	210	16	5	21	120	0.19
		[18]	83	210	0	0	0	120	0.16
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	13	210	0	0	0	120	0.00
		[2]	13	210	9	0	9	120	0.01
	DECK-C	[3]	13	210	9	0	9	120	0.01
		[4]	13	210	11	5	16	120	0.02
		[5]	14	210	14	5	20	120	0.03
		[6]	14	210	5	0	6	120	0.01
	DECK-R	[7]	14	210	5	0	6	120	0.01
		[8]	14	210	0	0	0	120	0.00
	LWEB	[9]	13	210	27	7	34	120	0.08
		[10]	0	210	30	7	37	120	0.09
		[11]	-25	210	20	7	26	120	0.06
	RWEB	[12]	14	210	28	7	35	120	0.09
		[13]	0	210	31	7	37	120	0.10
		[14]	-25	210	22	7	28	120	0.07
	LFLG	[15]	-25	139	0	0	0	120	0.01
		[16]	-25	210	14	5	19	120	0.04
		[17]	-25	210	16	5	21	120	0.05
		[18]	-25	210	0	0	0	120	0.01

Girder Name : G-1 Section Name : Sec-69:Left (Girder number= 1 Section number= 69)

Section force Mx-Max Mx = 13843 kN·m Sy = -1755 kN T = 993 kN·m
 Mx-Min Mx = -4153 kN·m Sy = -1755 kN T = 993 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 15 (SM490Y)	277.5	277.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2304.4	2304.4
Gravity center	ex (cm)	-24.5	-24.5
	ey (cm)	183.7	183.7
Moment of inertia	Ix (cm4)	25855531	25855531
	Iy (cm4)	40032044	40032044
Torsion Constant	J (cm4)	19335703	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	59700.8 kN·m	59700.8 kN·m
Mxr(lower)=	29317.5 kN·m	19395.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-43	210	0	0	0	120	0.04
	[2]	-44	210	9	0	9	120	0.05
DECK-C	[3]	-44	210	9	0	9	120	0.05
	[4]	-45	210	11	5	16	120	0.06
	[5]	-48	210	15	5	20	120	0.08
	[6]	-48	210	6	0	6	120	0.05
DECK-R	[7]	-48	210	6	0	6	120	0.05
	[8]	-49	210	0	0	0	120	0.05
LWEB	[9]	-44	210	28	7	35	120	0.13
	[10]	0	210	31	7	37	120	0.10
RWEB	[11]	99	210	17	7	24	120	0.26
	[12]	-47	210	28	7	35	120	0.14
	[13]	0	210	31	7	38	120	0.10
	[14]	98	210	20	7	26	120	0.27

LFLG	[15]	99	210	0	0	0	120	0.22	
	[16]	99	210	11	5	17	120	0.24	
	[17]	99	210	14	5	19	120	0.25	
	[18]	99	210	0	0	0	120	0.22	
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ	
	DECK-L	[1]	13	210	0	0	0	120	0.00
		[2]	13	210	9	0	9	120	0.01
	DECK-C	[3]	13	210	9	0	9	120	0.01
		[4]	13	210	11	5	16	120	0.02
		[5]	14	210	15	5	20	120	0.03
	DECK-R	[6]	14	210	6	0	6	120	0.01
		[7]	14	210	6	0	6	120	0.01
		[8]	15	210	0	0	0	120	0.00
	LWEB	[9]	13	210	28	7	35	120	0.09
		[10]	0	210	31	7	37	120	0.10
		[11]	-30	210	17	7	24	120	0.06
	RWEB	[12]	14	210	28	7	35	120	0.09
		[13]	0	210	31	7	38	120	0.10
		[14]	-30	210	20	7	26	120	0.07
	LFLG	[15]	-30	139	0	0	0	120	0.02
		[16]	-30	158	11	5	17	120	0.04
		[17]	-30	158	14	5	19	120	0.05
[18]		-30	210	0	0	0	120	0.02	

Girder Name : G-1 Section Name : Sec-69:J-69 (Girder number= 1 Section number= 69)

Section force Mx = -16526 kN·m Sy = -2292 kN T = 1224 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	2999
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.5
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 15 (SM490Y)	277.5	277.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2304.4	2304.2
Gravity center	ex (cm)	-24.5	-24.5
	ey (cm)	183.7	183.7
Moment of inertia	Ix (cm4)	25855531	25853954
	Iy (cm4)	40032044	40026435
Torsion Constant	J (cm4)	19335703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	59691.8 kN·m	59691.8 kN·m
	Mxr(lower)=	29317.0 kN·m	19395.3 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	51	210	0	0	0	120	0.06
	[2]	53	210	12	0	12	120	0.07
DECK-C	[3]	53	210	12	0	12	120	0.07
	[4]	53	210	14	6	21	120	0.09
	[5]	57	210	19	6	25	120	0.12
DECK-R	[6]	57	210	7	0	7	120	0.08
	[7]	57	210	7	0	7	120	0.08
LWEB	[8]	58	210	0	0	0	120	0.08
	[9]	52	210	37	8	45	120	0.20
RWEB	[10]	0	210	40	8	48	120	0.16
	[11]	-118	210	23	8	31	120	0.38
	[12]	56	210	37	8	46	120	0.22
	[13]	0	210	41	8	49	120	0.17
	[14]	-117	210	26	8	34	120	0.39

LFLG	[15]	-118	139	0	0	0	120	0.32
	[16]	-118	158	15	7	22	120	0.35
	[17]	-118	158	18	7	25	120	0.36
	[18]	-118	210	0	0	0	120	0.32

Girder Name : G-1 Section Name : Sec-70:J-70 (Girder number= 1 Section number= 70)

Section force Mx = -35515 kN·m Sy = -2947 kN T = 1314 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1358
	Intermediate	3000	2942
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	188.5
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	528.4
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 22 (SM570)	407.0	407.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2433.9	2421.1
Gravity center	ex (cm)	-21.1	-20.6
	ey (cm)	173.8	173.3
Moment of inertia	Ix (cm4)	30076942	29963635
	Iy (cm4)	40914888	40600256
Torsion Constant	J (cm4)	20206967	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	62106.1 kN·m	62106.1 kN·m
	Mxr(lower)=	43528.6 kN·m	42672.0 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	108	210	0	0	0	120	0.26
	[2]	111	210	15	0	15	120	0.29
DECK-C	[3]	111	210	15	0	15	120	0.29
	[4]	111	210	18	7	24	120	0.32
	[5]	118	210	24	7	31	120	0.38
DECK-R	[6]	119	210	9	0	9	120	0.32
	[7]	119	210	9	0	9	120	0.32
LWEB	[8]	120	210	0	0	0	120	0.33
	[9]	109	255	45	9	54	145	0.32
RWEB	[10]	1	255	50	9	59	145	0.17
	[11]	-206	255	33	9	42	145	0.74
	[12]	116	255	46	9	55	145	0.35
	[13]	1	255	51	9	60	145	0.17
	[14]	-205	255	36	9	45	145	0.75

LFLG	[15]	-208	255	0	0	0	145	0.67
	[16]	-208	250	15	5	19	145	0.68
	[17]	-208	250	17	5	22	145	0.69
	[18]	-208	255	0	0	0	145	0.67

Girder Name : G-1 Section Name : Sec-71:J-71 (Girder number= 1 Section number= 71)

Section force Mx = -63233 kN·m Sy = -3719 kN T = -1459 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1335
	Intermediate	3000	2880
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 25 (SM490Y)	300.1	288.7
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 25 (SM490Y)	840.2	810.2
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3034 * 12 (SM570)	364.1	364.1
1-RWEB PL	2705 * 12 (SM570)	324.6	324.6
1-LFLG PL	1850 * 44 (SM570-H)	814.0	814.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3432.5	3337.3
Gravity center	ex (cm)	-16.8	-15.4
	ey (cm)	159.5	156.6
Moment of inertia	Ix (cm4)	49495706	48520790
	Iy (cm4)	55495186	54438870
Torsion Constant	J (cm4)	23529934	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	86345.9 kN·m	86345.9 kN·m
Mxr(lower)=	76828.9 kN·m	76828.9 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	140	210	0	0	1	120	0.45
	[2]	143	210	12	0	12	120	0.48
DECK-C	[3]	143	210	12	0	12	120	0.48
	[4]	144	210	13	5	18	120	0.49
	[5]	152	210	19	5	24	120	0.56
DECK-R	[6]	152	210	7	0	7	120	0.53
	[7]	152	210	7	0	7	120	0.53
LWEB	[8]	154	210	0	0	0	120	0.54
	[9]	141	255	55	10	65	145	0.51
RWEB	[10]	4	255	60	10	70	145	0.23
	[11]	-205	255	49	10	59	145	0.81
	[12]	148	255	58	10	68	145	0.56
	[13]	4	255	63	10	73	145	0.25
	[14]	-204	255	53	10	63	145	0.83

LFLG	[15]	-210	255	0	0	0	145	0.68
	[16]	-210	255	11	3	14	145	0.69
	[17]	-210	255	13	3	15	145	0.69
	[18]	-210	255	0	0	0	145	0.68

Girder Name : G-1 Section Name : Sec-72:Mx-Min_L (Girder number= 1 Section number= 72)

Section force Mx = -72983 kN·m Sy = -3946 kN T = -1459 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1328
	Intermediate	3000	2862
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 25 (SM490Y)	300.1	286.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 25 (SM490Y)	840.2	805.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3034 * 12 (SM570)	364.1	364.1
1-RWEB PL	2705 * 12 (SM570)	324.6	324.6
1-LFLG PL	1850 * 50 (SM570-H)	925.0	925.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3543.5	3441.9
Gravity center	ex (cm)	-15.0	-13.5
	ey (cm)	154.3	151.2
Moment of inertia	Ix (cm4)	52393904	51231021
	Iy (cm4)	56160821	54924584
Torsion Constant	J (cm4)	23718574	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	87172.7 kN·m	87172.7 kN·m
	Mxr(lower)=	83617.6 kN·m	83617.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	161	210	0	0	1	120	0.59
	[2]	164	210	12	0	13	120	0.62
DECK-C	[3]	164	210	12	0	13	120	0.62
	[4]	165	210	14	5	19	120	0.64
	[5]	173	210	20	5	25	120	0.73
	[6]	174	210	7	0	8	120	0.69
DECK-R	[7]	174	210	7	0	8	120	0.69
	[8]	176	210	0	0	0	120	0.70
LWEB	[9]	162	255	58	10	68	145	0.62
	[10]	5	255	63	10	73	145	0.25
	[11]	-216	255	53	10	63	145	0.90
RWEB	[12]	170	255	61	10	71	145	0.68
	[13]	4	255	66	10	76	145	0.28
	[14]	-215	255	57	10	67	145	0.93

LFLG	[15]	-223	255	0	0	0	145	0.76
	[16]	-223	255	10	2	13	145	0.77
	[17]	-223	255	12	2	14	145	0.77
	[18]	-223	255	0	0	0	145	0.76

Girder Name : G-1 Section Name : Sec-72:Mx-Min_R (Girder number= 1 Section number= 72)

Section force Mx = -72983 kN·m Sy = 4073 kN T = -1599 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1328
	Intermediate	3000	2862
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 25 (SM490Y)	300.1	286.9
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 25 (SM490Y)	840.2	805.6
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3034 * 12 (SM570)	364.1	364.1
1-RWEB PL	2705 * 12 (SM570)	324.6	324.6
1-LFLG PL	1850 * 50 (SM570-H)	925.0	925.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3543.5	3441.9
Gravity center	ex (cm)	-15.0	-13.5
	ey (cm)	154.3	151.2
Moment of inertia	Ix (cm4)	52393904	51231021
	Iy (cm4)	56160821	54924584
Torsion Constant	J (cm4)	23718574	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	87172.7 kN·m	87172.7 kN·m
	Mxr(lower)=	83617.6 kN·m	83617.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	161	210	0	0	1	120	0.59
	[2]	164	210	13	0	13	120	0.62
DECK-C	[3]	164	210	13	0	13	120	0.62
	[4]	165	210	14	5	20	120	0.64
	[5]	173	210	21	5	26	120	0.73
	[6]	174	210	8	0	8	120	0.69
DECK-R	[7]	174	210	8	0	8	120	0.69
	[8]	176	210	0	0	0	120	0.70
LWEB	[9]	162	255	60	11	71	145	0.64
	[10]	5	255	65	11	76	145	0.27
	[11]	-216	255	54	11	65	145	0.92
RWEB	[12]	170	255	63	11	74	145	0.70
	[13]	4	255	68	11	79	145	0.30
	[14]	-215	255	59	11	70	145	0.95

LFLG	[15]	-223	255	0	0	0	145	0.76
	[16]	-223	255	11	3	13	145	0.77
	[17]	-223	255	12	3	15	145	0.77
	[18]	-223	255	0	0	0	145	0.76

Girder Name : G-1 Section Name : Sec-73:J-72 (Girder number= 1 Section number= 73)

Section force Mx = -59944 kN·m Sy = 3795 kN T = -1599 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1337
	Intermediate	3000	2887
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 25 (SM490Y)	300.1	289.3
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 25 (SM490Y)	840.2	811.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	161.7
1-DECK-R PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3034 * 12 (SM570)	364.1	364.1
1-RWEB PL	2705 * 12 (SM570)	324.6	324.6
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
5-RIB PL	220 * 19 (SM570)	209.0	209.0

Section property		Total	In-plane
Section area	A (cm2)	3395.5	3302.6
Gravity center	ex (cm)	-17.4	-16.1
	ey (cm)	161.3	158.5
Moment of inertia	Ix (cm4)	48492440	47578545
	Iy (cm4)	55268236	54274135
Torsion Constant	J (cm4)	23458011	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	86039.2 kN·m	86039.2 kN·m
	Mxr(lower)=	74559.5 kN·m	74559.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	133	210	0	0	1	120	0.40
	[2]	136	210	12	0	12	120	0.43
DECK-C	[3]	136	210	12	0	12	120	0.43
	[4]	137	210	14	5	19	120	0.45
	[5]	144	210	20	5	25	120	0.51
DECK-R	[6]	145	210	7	0	7	120	0.48
	[7]	145	210	7	0	7	120	0.48
LWEB	[8]	146	210	0	0	0	120	0.49
	[9]	134	255	56	11	67	145	0.49
RWEB	[10]	4	255	61	11	72	145	0.25
	[11]	-200	255	49	11	60	145	0.79
	[12]	141	255	59	11	70	145	0.54
	[13]	3	255	64	11	75	145	0.27
	[14]	-200	255	54	11	65	145	0.81

LFLG	[15]	-205	255	0	0	0	145	0.65
	[16]	-205	255	12	3	15	145	0.66
	[17]	-205	255	13	3	17	145	0.66
	[18]	-205	255	0	0	0	145	0.65

Girder Name : G-1 Section Name : Sec-74:J-73 (Girder number= 1 Section number= 74)

Section force Mx = -30612 kN·m Sy = 3031 kN T = -1518 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1363
	Intermediate	3000	2954
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	189.2
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	530.3
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 21 (SM570)	388.5	388.5
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2405.2
Gravity center	ex (cm)	-21.5	-21.2
	ey (cm)	175.2	174.8
Moment of inertia	Ix (cm4)	29499631	29412358
	Iy (cm4)	40792138	40542448
Torsion Constant	J (cm4)	20113201	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	61850.6 kN·m	61850.6 kN·m
	Mxr(lower)=	42400.8 kN·m	40324.7 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	93	210	0	0	0	120	0.20
	[2]	96	210	15	0	15	120	0.22
DECK-C	[3]	96	210	15	0	15	120	0.22
	[4]	96	210	18	8	26	120	0.26
	[5]	102	210	25	8	33	120	0.31
DECK-R	[6]	103	210	9	0	9	120	0.24
	[7]	103	210	9	0	9	120	0.24
	[8]	104	210	0	0	0	120	0.24
LWEB	[9]	95	255	47	10	57	145	0.29
	[10]	1	255	52	10	62	145	0.18
RWEB	[11]	-182	255	33	10	44	145	0.60
	[12]	101	255	48	10	58	145	0.32
	[13]	0	255	53	10	63	145	0.19
	[14]	-182	255	37	10	47	145	0.62

LFLG	[15]	-184	255	0	0	0	145	0.52
	[16]	-184	243	16	6	21	145	0.54
	[17]	-184	243	18	6	24	145	0.55
	[18]	-184	255	0	0	0	145	0.52

Girder Name : G-1 Section Name : Sec-74:Right (Girder number= 1 Section number= 74)

Section force Mx-Max Mx = 7744 kN·m Sy = 2435 kN T = -1269 kN·m
 Mx-Min Mx = -9950 kN·m Sy = 2435 kN T = -1269 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 21 (SM570)	388.5	388.5
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2415.4	2415.4
Gravity center	ex (cm)	-21.5	-21.5
	ey (cm)	175.2	175.2
Moment of inertia	Ix (cm4)	29499631	29499631
	Iy (cm4)	40792138	40792138
Torsion Constant	J (cm4)	20113201	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	62277.7 kN·m	62277.7 kN·m
Mxr(lower)=	42433.0 kN·m	40355.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-23	210	0	0	0	120	0.01
	[2]	-24	210	12	0	12	120	0.02
DECK-C	[3]	-24	210	12	0	12	120	0.02
	[4]	-24	210	15	7	21	120	0.04
	[5]	-26	210	20	7	26	120	0.06
	[6]	-26	210	8	0	8	120	0.02
DECK-R	[7]	-26	210	8	0	8	120	0.02
	[8]	-26	210	0	0	0	120	0.02
LWEB	[9]	-24	255	38	9	46	145	0.11
	[10]	0	255	41	9	50	145	0.12
RWEB	[11]	46	255	27	9	36	145	0.09
	[12]	-25	255	38	9	47	145	0.12
	[13]	0	255	42	9	51	145	0.12
	[14]	46	255	30	9	38	145	0.10

LFLG	[15]	47	255	0	0	0	145	0.03
	[16]	47	255	12	5	17	145	0.05
	[17]	47	255	15	5	20	145	0.05
	[18]	47	255	0	0	0	145	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	30	210	0	0	0	120	0.02
	[2]	31	210	12	0	12	120	0.03
DECK-C	[3]	31	210	12	0	12	120	0.03
	[4]	31	210	15	7	21	120	0.05
	[5]	33	210	20	7	26	120	0.07
DECK-R	[6]	33	210	8	0	8	120	0.03
	[7]	33	210	8	0	8	120	0.03
	[8]	34	210	0	0	0	120	0.03
LWEB	[9]	31	255	38	9	46	145	0.12
	[10]	0	255	41	9	50	145	0.12
RWEB	[11]	-59	255	27	9	36	145	0.11
	[12]	32	255	38	9	47	145	0.12
	[13]	0	255	42	9	51	145	0.12
LFLG	[14]	-59	255	30	9	38	145	0.12
	[15]	-60	255	0	0	0	145	0.05
	[16]	-60	243	12	5	17	145	0.07
	[17]	-60	243	15	5	20	145	0.07
	[18]	-60	255	0	0	0	145	0.05

Girder Name : G-1 Section Name : Sec-75:J-74 (Girder number= 1 Section number= 75)

Section force Mx-Max Mx = 7744 kN·m Sy = 2435 kN T = -1269 kN·m
Mx-Min Mx = -9950 kN·m Sy = 2435 kN T = -1269 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2341.4	2341.4
Gravity center	ex (cm)	-23.5	-23.5
	ey (cm)	180.8	180.8
Moment of inertia	Ix (cm4)	27105920	27105920
	Iy (cm4)	40290081	40290081
Torsion Constant	J (cm4)	19646438	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	60635.7 kN·m	60635.7 kN·m
Mxr(lower)=	31194.8 kN·m	26130.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-24	210	0	0	0	120	0.01
	[2]	-25	210	12	0	12	120	0.02
DECK-C	[3]	-25	210	12	0	12	120	0.02
	[4]	-25	210	15	7	22	120	0.05
	[5]	-26	210	20	7	27	120	0.07
DECK-R	[6]	-26	210	8	0	8	120	0.02
	[7]	-26	210	8	0	8	120	0.02
LWEB	[8]	-27	210	0	0	0	120	0.02
	[9]	-24	210	38	9	47	120	0.17
RWEB	[10]	0	210	42	9	51	120	0.18
	[11]	52	210	25	9	34	120	0.14
	[12]	-26	210	39	9	48	120	0.17
	[13]	0	210	43	9	51	120	0.18
	[14]	52	210	28	9	37	120	0.15

	LFLG	[15]	52	210	0	0	0	120	0.06
		[16]	52	210	15	6	21	120	0.09
		[17]	52	210	17	6	24	120	0.10
		[18]	52	210	0	0	0	120	0.06
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	31	210	0	0	0	120	0.02
		[2]	32	210	12	0	12	120	0.03
	DECK-C	[3]	32	210	12	0	12	120	0.03
		[4]	32	210	15	7	22	120	0.06
		[5]	34	210	20	7	27	120	0.08
		[6]	34	210	8	0	8	120	0.03
	DECK-R	[7]	34	210	8	0	8	120	0.03
		[8]	34	210	0	0	0	120	0.03
	LWEB	[9]	31	210	38	9	47	120	0.18
		[10]	0	210	42	9	51	120	0.18
		[11]	-66	210	25	9	34	120	0.18
	RWEB	[12]	33	210	39	9	48	120	0.18
		[13]	0	210	43	9	51	120	0.18
		[14]	-66	210	28	9	37	120	0.19
	LFLG	[15]	-67	178	0	0	0	120	0.10
		[16]	-67	176	15	6	21	120	0.13
		[17]	-67	176	17	6	24	120	0.14
		[18]	-67	210	0	0	0	120	0.10

Girder Name : G-1 Section Name : Sec-75:J-75 (Girder number= 1 Section number= 75)

Section force Mx = 25323 kN·m Sy = 2029 kN T = -829 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 17 (SM490Y)	314.5	314.5
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2341.4	2341.4
Gravity center	ex (cm)	-23.5	-23.5
	ey (cm)	180.8	180.8
Moment of inertia	Ix (cm4)	27105920	27105920
	Iy (cm4)	40290081	40290081
Torsion Constant	J (cm4)	19646438	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	60635.7 kN·m	60635.7 kN·m
	Mxr(lower)=	31194.8 kN·m	26130.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-78	210	0	0	0	120	0.14
	[2]	-80	210	10	0	10	120	0.15
DECK-C	[3]	-80	210	10	0	10	120	0.15
	[4]	-81	210	13	4	17	120	0.17
	[5]	-86	210	17	4	21	120	0.20
DECK-R	[6]	-86	210	6	0	6	120	0.17
	[7]	-86	210	6	0	6	120	0.17
LWEB	[8]	-88	210	0	0	0	120	0.17
	[9]	-79	210	32	6	38	120	0.24
RWEB	[10]	0	210	35	6	41	120	0.12
	[11]	169	210	21	6	27	120	0.70
RWEB	[12]	-85	210	33	6	38	120	0.26
	[13]	0	210	36	6	41	120	0.12
	[14]	169	210	23	6	29	120	0.71

LFLG	[15]	170	210	0	0	0	120	0.66
	[16]	170	210	12	4	16	120	0.68
	[17]	170	210	15	4	19	120	0.68
	[18]	170	210	0	0	0	120	0.66

Girder Name : G-1 Section Name : Sec-76:J-76 (Girder number= 1 Section number= 76)

Section force Mx = 40402 kN·m Sy = 1583 kN T = 824 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 26 (SM570)	481.0	481.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2507.9	2507.9
Gravity center	ex (cm)	-19.3	-19.3
	ey (cm)	168.6	168.6
Moment of inertia	Ix (cm4)	32307338	32307338
	Iy (cm4)	41395560	41395560
Torsion Constant	J (cm4)	20519560	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63992.8 kN·m	63992.8 kN·m
Mxr(lower)=	48113.0 kN·m	48113.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-120	210	0	0	0	120	0.32
	[2]	-123	210	8	0	8	120	0.34
DECK-C	[3]	-123	210	8	0	8	120	0.34
	[4]	-123	210	9	4	14	120	0.36
	[5]	-131	210	13	4	17	120	0.41
DECK-R	[6]	-131	210	5	0	5	120	0.39
	[7]	-131	210	5	0	5	120	0.39
LWEB	[8]	-133	210	0	0	0	120	0.40
	[9]	-121	255	24	6	30	145	0.27
RWEB	[10]	0	255	27	6	32	145	0.05
	[11]	211	255	19	6	24	145	0.71
	[12]	-129	255	25	6	30	145	0.30
	[13]	0	255	27	6	33	145	0.05
	[14]	211	255	20	6	26	145	0.72

LFLG	[15]	214	255	0	0	0	145	0.71
	[16]	214	255	7	3	9	145	0.71
	[17]	214	255	8	3	11	145	0.71
	[18]	214	255	0	0	0	145	0.71

Girder Name : G-1 Section Name : Sec-77:J-77 (Girder number= 1 Section number= 77)

Section force Mx = 49925 kN·m Sy = 1010 kN T = 745 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 38 (SM570)	703.0	703.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2729.9	2729.9
Gravity center	ex (cm)	-14.4	-14.4
	ey (cm)	154.7	154.7
Moment of inertia	Ix (cm4)	38328974	38328974
	Iy (cm4)	42749874	42749874
Torsion Constant	J (cm4)	21111049	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	67079.2 kN·m	67079.2 kN·m
Mxr(lower)=	61682.0 kN·m	61682.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-143	210	0	0	0	120	0.46
	[2]	-146	210	5	0	5	120	0.48
DECK-C	[3]	-146	210	5	0	5	120	0.48
	[4]	-146	210	6	4	9	120	0.49
	[5]	-154	210	8	4	12	120	0.55
DECK-R	[6]	-155	210	3	0	3	120	0.54
	[7]	-155	210	3	0	3	120	0.54
LWEB	[8]	-156	210	0	0	0	120	0.55
	[9]	-145	255	15	5	20	145	0.34
RWEB	[10]	0	255	17	5	22	145	0.02
	[11]	202	255	13	5	18	145	0.64
	[12]	-152	255	15	5	20	145	0.38
	[13]	0	255	17	5	22	145	0.02
	[14]	201	255	14	5	19	145	0.64

LFLG	[15]	206	255	0	0	0	145	0.66
	[16]	206	255	3	2	5	145	0.66
	[17]	206	255	4	2	5	145	0.66
	[18]	206	255	0	0	0	145	0.66

Girder Name : G-1 Section Name : Sec-78: Mx-Max (Girder number= 1 Section number= 78)

Section force Mx = 52843 kN·m Sy = 479 kN T = 686 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2803.9	2803.9
Gravity center	ex (cm)	-13.0	-13.0
	ey (cm)	150.5	150.5
Moment of inertia	Ix (cm4)	40142527	40142527
	Iy (cm4)	43175936	43175936
Torsion Constant	J (cm4)	21245010	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67884.2 kN·m	67884.2 kN·m
	Mxr(lower)=	66182.3 kN·m	66182.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-150	210	0	0	0	120	0.51
	[2]	-153	210	2	0	2	120	0.53
DECK-C	[3]	-153	210	2	0	2	120	0.53
	[4]	-153	210	3	4	6	120	0.54
	[5]	-161	210	4	4	7	120	0.59
DECK-R	[6]	-162	210	1	0	1	120	0.59
	[7]	-162	210	1	0	1	120	0.59
LWEB	[8]	-163	210	0	0	0	120	0.61
	[9]	-152	255	7	5	12	145	0.36
	[10]	0	255	8	5	12	145	0.01
RWEB	[11]	199	255	6	5	11	145	0.61
	[12]	-159	255	7	5	12	145	0.40
	[13]	0	255	8	5	13	145	0.01
	[14]	198	255	7	5	11	145	0.61

LFLG	[15]	204	255	0	0	0	145	0.64
	[16]	204	255	1	1	3	145	0.64
	[17]	204	255	2	1	3	145	0.64
	[18]	204	255	0	0	0	145	0.64

Girder Name : G-1 Section Name : Sec-79:J-78 (Girder number= 1 Section number= 79)

Section force Mx = 52827 kN·m Sy = -444 kN T = 686 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 42 (SM570-H)	777.0	777.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2803.9	2803.9
Gravity center	ex (cm)	-13.0	-13.0
	ey (cm)	150.5	150.5
Moment of inertia	Ix (cm4)	40142527	40142527
	Iy (cm4)	43175936	43175936
Torsion Constant	J (cm4)	21245010	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67884.2 kN·m	67884.2 kN·m
	Mxr(lower)=	66182.3 kN·m	66182.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-150	210	0	0	0	120	0.51
	[2]	-153	210	2	0	2	120	0.53
DECK-C	[3]	-153	210	2	0	2	120	0.53
	[4]	-153	210	2	4	6	120	0.54
	[5]	-161	210	3	4	7	120	0.59
DECK-R	[6]	-162	210	1	0	1	120	0.59
	[7]	-162	210	1	0	1	120	0.59
LWEB	[8]	-163	210	0	0	0	120	0.61
	[9]	-152	255	6	5	11	145	0.36
	[10]	0	255	7	5	12	145	0.01
RWEB	[11]	198	255	6	5	10	145	0.61
	[12]	-159	255	7	5	11	145	0.40
	[13]	0	255	7	5	12	145	0.01
	[14]	198	255	6	5	11	145	0.61

LFLG	[15]	204	255	0	0	0	145	0.64
	[16]	204	255	1	1	3	145	0.64
	[17]	204	255	2	1	3	145	0.64
	[18]	204	255	0	0	0	145	0.64

Girder Name : G-1 Section Name : Sec-80:J-79 (Girder number= 1 Section number= 80)

Section force Mx = 48556 kN·m Sy = -1093 kN T = -981 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 38 (SM570)	703.0	703.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2729.9	2729.9
Gravity center	ex (cm)	-14.4	-14.4
	ey (cm)	154.7	154.7
Moment of inertia	Ix (cm4)	38328974	38328974
	Iy (cm4)	42749874	42749874
Torsion Constant	J (cm4)	21111049	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67079.2 kN·m	67079.2 kN·m
	Mxr(lower)=	61682.0 kN·m	61682.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-139	210	0	0	0	120	0.44
	[2]	-142	210	5	0	5	120	0.46
DECK-C	[3]	-142	210	5	0	5	120	0.46
	[4]	-142	210	6	5	11	120	0.47
	[5]	-150	210	9	5	14	120	0.52
DECK-R	[6]	-150	210	3	0	3	120	0.51
	[7]	-150	210	3	0	3	120	0.51
	[8]	-152	210	0	0	0	120	0.52
LWEB	[9]	-141	255	16	7	23	145	0.33
	[10]	0	255	18	7	25	145	0.03
RWEB	[11]	196	255	14	7	21	145	0.61
	[12]	-148	255	16	7	23	145	0.36
	[13]	0	255	18	7	25	145	0.03
	[14]	196	255	15	7	22	145	0.61

LFLG	[15]	201	255	0	0	0	145	0.62
	[16]	201	255	4	2	6	145	0.62
	[17]	201	255	4	2	6	145	0.62
	[18]	201	255	0	0	0	145	0.62

Girder Name : G-1 Section Name : Sec-81:J-80 (Girder number= 1 Section number= 81)

Section force Mx = 37102 kN·m Sy = -1684 kN T = -1181 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM570)	365.3	365.3
1-RWEB PL	2714 * 12 (SM570)	325.7	325.7
1-LFLG PL	1850 * 24 (SM570)	444.0	444.0
2-RIB PL	220 * 19 (SM570)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2470.9	2470.9
Gravity center	ex (cm)	-20.2	-20.2
	ey (cm)	171.2	171.2
Moment of inertia	Ix (cm4)	31207555	31207555
	Iy (cm4)	41157242	41157242
Torsion Constant	J (cm4)	20374329	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63345.5 kN·m	63345.5 kN·m
	Mxr(lower)=	45842.7 kN·m	45842.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-111	210	0	0	0	120	0.28
	[2]	-113	210	8	0	8	120	0.30
DECK-C	[3]	-113	210	8	0	8	120	0.30
	[4]	-114	210	10	6	16	120	0.31
	[5]	-121	210	14	6	20	120	0.36
DECK-R	[6]	-121	210	5	0	5	120	0.34
	[7]	-121	210	5	0	5	120	0.34
LWEB	[8]	-123	210	0	0	0	120	0.34
	[9]	-112	255	26	8	34	145	0.25
RWEB	[10]	0	255	28	8	36	145	0.06
	[11]	204	255	19	8	27	145	0.68
	[12]	-119	255	26	8	34	145	0.27
	[13]	0	255	29	8	37	145	0.07
	[14]	204	255	21	8	29	145	0.68

LFLG	[15]	206	255	0	0	0	145	0.66
	[16]	206	255	8	4	12	145	0.66
	[17]	206	255	9	4	13	145	0.66
	[18]	206	255	0	0	0	145	0.66

Girder Name : G-1 Section Name : Sec-82:J-81 (Girder number= 1 Section number= 82)

Section force Mx = 17804 kN·m Sy = -2141 kN T = 1364 kN·m

Effective buckling length Lx = 13100 mm Ly = 13100 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2285.9	2285.9
Gravity center	ex (cm)	-25.0	-25.0
	ey (cm)	185.2	185.2
Moment of inertia	Ix (cm4)	25216194	25216194
	Iy (cm4)	39901174	39901174
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	59200.0 kN·m	59200.0 kN·m
Mxr(lower)=	28378.3 kN·m	16354.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-56	210	0	0	0	120	0.07
	[2]	-57	210	11	0	11	120	0.08
DECK-C	[3]	-57	210	11	0	11	120	0.08
	[4]	-58	210	14	7	21	120	0.11
	[5]	-62	210	18	7	25	120	0.13
DECK-R	[6]	-62	210	7	0	7	120	0.09
	[7]	-62	210	7	0	7	120	0.09
LWEB	[8]	-63	210	0	0	0	120	0.09
	[9]	-57	210	34	9	44	120	0.21
RWEB	[10]	0	210	38	9	47	120	0.15
	[11]	131	210	21	9	30	120	0.45
	[12]	-61	210	35	9	44	120	0.22
	[13]	0	210	38	9	47	120	0.16
	[14]	131	210	23	9	33	120	0.46

LFLG	[15]	132	210	0	0	0	120	0.39
	[16]	132	210	15	8	23	120	0.43
	[17]	132	210	18	8	26	120	0.44
	[18]	132	210	0	0	0	120	0.39

Girder Name : G-1 Section Name : Sec-82:Right (Girder number= 1 Section number= 82)

Section force Mx = 0 kN·m Sy = -2758 kN T = 1364 kN·m

Effective buckling length Lx = 13100 mmLy = 13100 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	1380	1380
	Intermediate	3000	3000
	Cantilever	825	825
LFLG	Intermediate	1500	1500

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	1200 * 16 (SM490Y)	192.0	192.0
1-BULB PL	230 * 11 (SM490Y)	32.0	32.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3361 * 16 (SM490Y)	537.7	537.7
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-LWEB PL	3044 * 12 (SM490Y)	365.3	365.3
1-RWEB PL	2714 * 12 (SM490Y)	325.7	325.7
1-LFLG PL	1850 * 14 (SM490Y)	259.0	259.0
2-RIB PL	220 * 19 (SM490Y)	83.6	83.6

Section property		Total	In-plane
Section area	A (cm2)	2285.9	2285.9
Gravity center	ex (cm)	-25.0	-25.0
	ey (cm)	185.2	185.2
Moment of inertia	Ix (cm4)	25216194	25216194
	Iy (cm4)	39901174	39901174
Torsion Constant	J (cm4)	19152663	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	59200.0 kN·m	59200.0 kN·m
Mxr(lower)=	28378.3 kN·m	16354.4 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	14	0	14	120	0.01
DECK-C	[3]	0	210	14	0	14	120	0.01
	[4]	0	210	17	7	24	120	0.04
	[5]	0	210	23	7	30	120	0.06
	[6]	0	210	9	0	9	120	0.01
DECK-R	[7]	0	210	9	0	9	120	0.01
	[8]	0	210	0	0	0	120	0.00
LWEB	[9]	0	210	44	9	54	120	0.20
	[10]	0	210	48	9	58	120	0.23
RWEB	[11]	0	210	27	9	36	120	0.09
	[12]	0	210	45	9	54	120	0.20
	[13]	0	210	49	9	58	120	0.24
	[14]	0	210	30	9	40	120	0.11

LFLG	[15]	0	210	0	0	0	120	0.00
	[16]	0	210	19	8	27	120	0.05
	[17]	0	210	23	8	31	120	0.07
	[18]	0	210	0	0	0	120	0.00

3-2 Calculation of Section G2

Explanation of symbols

Section forces	
Bending moment (In plane)	M_x
Shear force (In plane)	S_y
Torsion moment	T
Stress	
Vertical stress due to M_x	σ_{mx}
Allowable vertical stress	σ_a
Shear stress due to S_y	τ_{sy}
Shear stress due to T	τ_t
Total shear stress	$\Sigma \tau$
Allowable shear stress	τ_a
Combined stress	κ

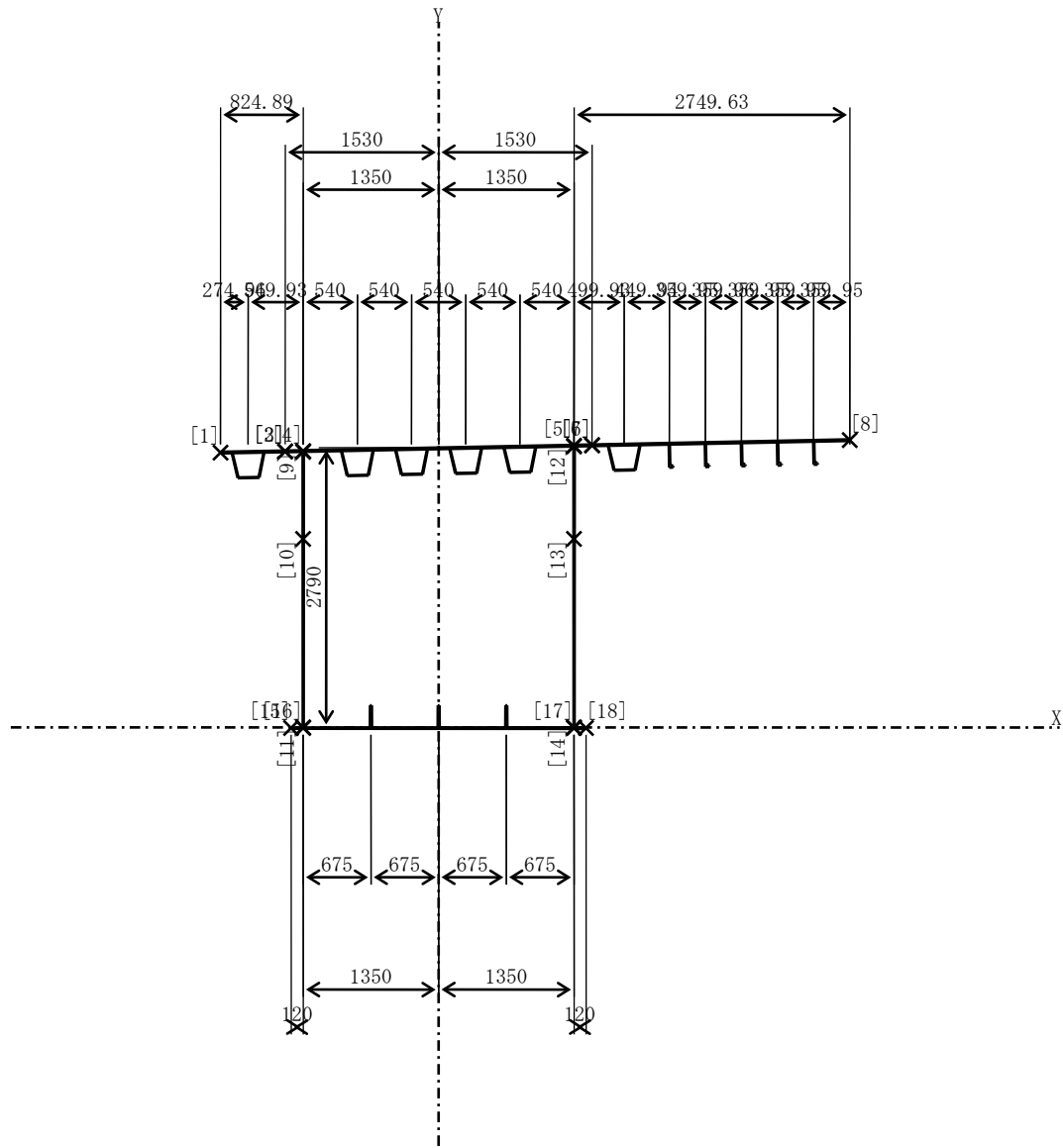
Others

*Girder numbers of each section and section numbers are serial.

*The inclines assumes an upward slant to right plus.

*Gravity center "ex" is distance from center of the box girder and "ey" is distance from bottom of web.

Girder Name : G-2



Girder Name : G-2 Section Name : Sec-1:Left (Girder number= 2 Section number= 1)

Section force Mx = 0 kN·m Sy = 3151 kN T = -1845 kN·m

Effective buckling length Lx = 10802 mmLy = 10802 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	2750	2750
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	2570 * 16 (SM490Y)	411.2	411.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
5-BULB PL	230 * 11 (SM490Y)	159.9	159.9
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 14 (SM490Y)	411.6	411.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2634.7	2634.7
Gravity center	ex (cm)	55.3	55.3
	ey (cm)	187.9	187.9
Moment of inertia	Ix (cm4)	35403105	35403105
	Iy (cm4)	68317764	68317764
Torsion Constant	J (cm4)	26211592	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	74840.8 kN·m	74840.8 kN·m
	Mxr(lower)=	39282.8 kN·m	16898.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	7	0	7	120	0.00
DECK-C	[3]	0	210	7	0	7	120	0.00
	[4]	0	210	26	8	33	120	0.08
	[5]	0	210	33	8	33	120	0.08
DECK-R	[6]	0	210	32	0	32	120	0.07
	[7]	0	210	32	0	32	120	0.07
	[8]	0	210	0	0	0	120	0.00
LWEB	[9]	0	210	49	11	61	120	0.25
	[10]	0	210	53	11	64	120	0.28
	[11]	0	210	37	11	48	120	0.16
RWEB	[12]	0	210	56	11	67	120	0.31
	[13]	0	210	59	11	70	120	0.34
	[14]	0	210	44	11	55	120	0.21
LFLG	[15]	0	210	0	0	0	120	0.00
	[16]	0	210	27	9	36	120	0.09
	[17]	0	210	32	9	41	120	0.12
	[18]	0	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-1:J-1 (Girder number= 2 Section number= 1)

Section force Mx = 25799 kN·m Sy = 2505 kN T = -1845 kN·m

Effective buckling length Lx = 10802 mmLy = 10802 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	2595	2595
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	2416 * 16 (SM490Y)	386.5	386.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
5-BULB PL	230 * 11 (SM490Y)	159.9	159.9
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 14 (SM490Y)	411.6	411.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2610.1	2610.1
Gravity center	ex (cm)	51.7	51.7
	ey (cm)	186.9	186.9
Moment of inertia	Ix (cm4)	35161374	35161374
	Iy (cm4)	64857094	64857094
Torsion Constant	J (cm4)	26211564	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	73846.1 kN·m	73846.1 kN·m
	Mxr(lower)=	39207.6 kN·m	16866.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-64	210	0	0	0	120	0.09
	[2]	-65	210	6	0	6	120	0.10
DECK-C	[3]	-65	210	6	0	6	120	0.10
	[4]	-66	210	20	8	28	120	0.15
	[5]	-70	210	26	8	26	120	0.16
DECK-R	[6]	-70	210	24	0	25	120	0.15
	[7]	-70	210	24	0	25	120	0.15
	[8]	-73	210	0	0	0	120	0.12
LWEB	[9]	-64	210	39	11	50	120	0.27
	[10]	0	210	42	11	53	120	0.20
	[11]	137	210	30	11	41	120	0.54
RWEB	[12]	-68	210	44	11	55	120	0.32
	[13]	0	210	47	11	58	120	0.24
	[14]	137	210	35	11	46	120	0.57
LFLG	[15]	138	210	0	0	0	120	0.43
	[16]	138	210	22	9	30	120	0.50
	[17]	138	210	26	9	34	120	0.51
	[18]	138	210	0	0	0	120	0.43

Girder Name : G-2 Section Name : Sec-2:J-2 (Girder number= 2 Section number= 2)

Section force Mx = 45819 kN·m Sy = 1819 kN T = 1751 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	2353	2353
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	2173 * 16 (SM490Y)	347.8	347.8
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
5-BULB PL	230 * 11 (SM490Y)	159.9	159.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	588.0
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2747.6	2747.6
Gravity center	ex (cm)	43.1	43.1
	ey (cm)	173.4	173.4
Moment of inertia	Ix (cm4)	40550189	40550189
	Iy (cm4)	61233401	61233401
Torsion Constant	J (cm4)	28148531	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		75340.3 kN·m	75340.3 kN·m
Mxr(lower)=		58949.8 kN·m	40207.2 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-114	210	0	0	0	120	0.30
	[2]	-116	210	4	0	4	120	0.31
DECK-C	[3]	-116	210	4	0	4	120	0.31
	[4]	-116	210	14	7	21	120	0.34
	[5]	-122	210	17	7	17	120	0.36
DECK-R	[6]	-123	210	16	0	17	120	0.36
	[7]	-123	210	16	0	17	120	0.36
	[8]	-128	210	0	0	0	120	0.37
LWEB	[9]	-114	255	28	11	38	145	0.27
	[10]	0	255	30	11	41	145	0.08
RWEB	[11]	196	255	23	11	34	145	0.65
	[12]	-121	255	31	11	42	145	0.31
	[13]	0	255	34	11	44	145	0.09
LFLG	[14]	196	255	27	11	37	145	0.66
	[15]	198	255	0	0	0	145	0.60
	[16]	198	255	12	6	18	145	0.62
	[17]	198	255	14	6	20	145	0.62
	[18]	198	255	0	0	0	145	0.60

Girder Name : G-2 Section Name : Sec-3:J-3 (Girder number= 2 Section number= 3)

Section force Mx = 58940 kN·m Sy = 1214 kN T = 1543 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	2102	2102
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1922 * 16 (SM490Y)	307.5	307.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
4-BULB PL	230 * 11 (SM490Y)	127.9	127.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 28 (SM570)	823.2	823.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2910.7	2910.7
Gravity center	ex (cm)	31.9	31.9
	ey (cm)	156.6	156.6
Moment of inertia	Ix (cm4)	46187958	46187958
	Iy (cm4)	56149198	56149198
Torsion Constant	J (cm4)	29644139	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	74989.1 kN·m	74989.1 kN·m
	Mxr(lower)=	73895.3 kN·m	69682.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-151	210	0	0	0	120	0.51
	[2]	-152	210	3	0	3	120	0.53
DECK-C	[3]	-152	210	3	0	3	120	0.53
	[4]	-153	210	9	6	15	120	0.55
	[5]	-160	210	10	6	10	120	0.59
DECK-R	[6]	-160	210	10	0	10	120	0.59
	[7]	-160	210	10	0	10	120	0.59
LWEB	[8]	-165	210	0	0	0	120	0.62
	[9]	-151	255	18	9	27	145	0.38
RWEB	[10]	0	255	20	9	29	145	0.04
	[11]	200	255	17	9	26	145	0.65
	[12]	-158	255	20	9	29	145	0.42
LFLG	[13]	0	255	22	9	31	145	0.05
	[14]	200	255	19	9	28	145	0.65
	[15]	203	255	0	0	0	145	0.64
	[16]	203	255	6	4	10	145	0.64
	[17]	203	255	7	4	11	145	0.64
	[18]	203	255	0	0	0	145	0.64

Girder Name : G-2 Section Name : Sec-4:J-4 (Girder number= 2 Section number= 4)

Section force Mx = 65203 kN·m Sy = 593 kN T = 1487 kN·m

Effective buckling length Lx = 10003 mmLy = 10003 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1851	1851
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1671 * 16 (SM490Y)	267.3	267.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
4-BULB PL	230 * 11 (SM490Y)	127.9	127.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 32 (SM570)	940.8	940.8
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2988.1	2988.1
Gravity center	ex (cm)	26.1	26.1
	ey (cm)	148.6	148.6
Moment of inertia	Ix (cm4)	48321972	48321972
	Iy (cm4)	52604382	52604382
Torsion Constant	J (cm4)	30158966	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	74146.9 kN·m	74146.9 kN·m
	Mxr(lower)=	81189.8 kN·m	81189.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-170	210	0	0	0	120	0.66
	[2]	-172	210	1	0	2	120	0.67
DECK-C	[3]	-172	210	1	0	2	120	0.67
	[4]	-172	210	4	6	10	120	0.68
	[5]	-180	210	5	6	8	120	0.74
DECK-R	[6]	-180	210	4	0	5	120	0.74
	[7]	-180	210	4	0	5	120	0.74
LWEB	[8]	-185	210	0	0	0	120	0.77
	[9]	-170	255	9	9	18	145	0.46
RWEB	[10]	0	255	10	9	19	145	0.02
	[11]	200	255	8	9	17	145	0.63
	[12]	-177	255	10	9	19	145	0.50
LFLG	[13]	0	255	11	9	20	145	0.02
	[14]	200	255	9	9	18	145	0.63
	[15]	205	255	0	0	0	145	0.64
	[16]	205	255	3	3	6	145	0.65
	[17]	205	255	3	3	6	145	0.65
	[18]	205	255	0	0	0	145	0.64

Girder Name : G-2 Section Name : Sec-5:Mx-Max (Girder number= 2 Section number= 5)

Section force Mx = 65826 kN·m Sy = -515 kN T = 1237 kN·m

Effective buckling length Lx = 10002 mmLy = 10002 mm

Radius of curvature R = 297.8 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1767	1767
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1587 * 16 (SM490Y)	253.9	253.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
4-BULB PL	230 * 11 (SM490Y)	127.9	127.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 32 (SM570)	940.8	940.8
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2974.6	2974.6
Gravity center	ex (cm)	24.1	24.1
	ey (cm)	147.8	147.8
Moment of inertia	Ix (cm4)	48065646	48065646
	Iy (cm4)	51186476	51186476
Torsion Constant	J (cm4)	30182894	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	74167.0 kN·m	74167.0 kN·m
	Mxr(lower)=	80681.9 kN·m	80681.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-175	210	0	0	0	120	0.69
	[2]	-176	210	1	0	1	120	0.71
DECK-C	[3]	-176	210	1	0	1	120	0.71
	[4]	-177	210	4	5	9	120	0.71
	[5]	-183	210	4	5	7	120	0.76
DECK-R	[6]	-183	210	4	0	4	120	0.76
	[7]	-183	210	4	0	4	120	0.76
LWEB	[8]	-186	210	0	0	0	120	0.79
	[9]	-175	255	8	8	15	145	0.48
	[10]	0	255	8	8	16	145	0.01
RWEB	[11]	204	255	7	8	15	145	0.65
	[12]	-180	255	8	7	16	145	0.51
	[13]	0	255	9	7	17	145	0.01
LFLG	[14]	202	255	8	7	15	145	0.64
	[15]	208	255	0	0	0	145	0.67
	[16]	208	255	2	3	5	145	0.67
	[17]	206	255	3	3	5	145	0.65
	[18]	206	255	0	0	0	145	0.65

Girder Name : G-2 Section Name : Sec-6:J-5 (Girder number= 2 Section number= 6)

Section force Mx = 64719 kN·m Sy = -797 kN T = 1237 kN·m

Effective buckling length Lx = 10002 mmLy = 10002 mm

Radius of curvature R = 297.8 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1671	1671
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1492 * 16 (SM490Y)	238.7	238.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
4-BULB PL	230 * 11 (SM490Y)	127.9	127.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 32 (SM570)	940.8	940.8
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2959.4	2959.4
Gravity center	ex (cm)	22.4	22.4
	ey (cm)	147.1	147.1
Moment of inertia	Ix (cm4)	47776676	47776676
	Iy (cm4)	49702665	49702665
Torsion Constant	J (cm4)	30181240	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	73436.0 kN·m	73436.0 kN·m
	Mxr(lower)=	80575.3 kN·m	80575.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-174	210	0	0	0	120	0.69
	[2]	-176	210	2	0	2	120	0.70
DECK-C	[3]	-176	210	2	0	2	120	0.70
	[4]	-176	210	6	5	11	120	0.71
	[5]	-182	210	6	5	8	120	0.75
DECK-R	[6]	-182	210	6	0	6	120	0.75
	[7]	-182	210	6	0	6	120	0.75
LWEB	[8]	-185	210	0	0	0	120	0.78
	[9]	-174	255	12	8	19	145	0.48
	[10]	0	255	13	8	21	145	0.02
RWEB	[11]	200	255	11	8	19	145	0.63
	[12]	-179	255	13	7	20	145	0.51
	[13]	0	255	14	7	22	145	0.02
LFLG	[14]	199	255	12	7	20	145	0.63
	[15]	205	255	0	0	0	145	0.65
	[16]	205	255	4	3	6	145	0.65
	[17]	203	255	4	3	7	145	0.64
	[18]	203	255	0	0	0	145	0.63

Girder Name : G-2 Section Name : Sec-7:J-6 (Girder number= 2 Section number= 7)

Section force Mx = 56956 kN·m Sy = -1473 kN T = -1269 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 297.8 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.3	235.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
4-BULB PL	230 * 11 (SM490Y)	127.9	127.9
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 26 (SM570)	764.4	764.4
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2779.6	2779.6
Gravity center	ex (cm)	23.7	23.7
	ey (cm)	156.5	156.5
Moment of inertia	Ix (cm4)	43499282	43499282
	Iy (cm4)	48282242	48282242
Torsion Constant	J (cm4)	29362992	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	71751.4 kN·m	71751.4 kN·m
	Mxr(lower)=	69316.5 kN·m	61914.8 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-156	210	0	0	0	120	0.55
	[2]	-157	210	4	0	4	120	0.56
DECK-C	[3]	-157	210	4	0	4	120	0.56
	[4]	-158	210	11	5	16	120	0.58
	[5]	-163	210	11	5	11	120	0.61
DECK-R	[6]	-164	210	10	0	11	120	0.62
	[7]	-164	210	10	0	11	120	0.62
	[8]	-167	210	0	0	0	120	0.63
LWEB	[9]	-156	255	22	8	30	145	0.41
	[10]	0	255	25	8	32	145	0.05
RWEB	[11]	206	255	20	8	28	145	0.69
	[12]	-161	255	24	8	32	145	0.45
	[13]	0	255	27	8	34	145	0.06
LFLG	[14]	204	255	22	8	30	145	0.68
	[15]	210	255	0	0	0	145	0.68
	[16]	209	255	8	3	11	145	0.68
	[17]	208	255	9	3	12	145	0.67
	[18]	207	255	0	0	0	145	0.66

Girder Name : G-2 Section Name : Sec-8:J-7 (Girder number= 2 Section number= 8)

Section force Mx = 43890 kN·m Sy = -1986 kN T = -1363 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 18 (SM570)	529.2	529.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	54401.5 kN·m	31584.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-128	210	0	0	0	120	0.37
	[2]	-129	210	5	0	5	120	0.38
DECK-C	[3]	-129	210	5	0	5	120	0.38
	[4]	-130	210	15	6	20	120	0.41
	[5]	-136	210	14	6	14	120	0.43
DECK-R	[6]	-137	210	13	0	13	120	0.44
	[7]	-137	210	13	0	13	120	0.44
	[8]	-140	210	0	0	0	120	0.45
LWEB	[9]	-128	255	31	8	39	145	0.32
	[10]	0	255	34	8	42	145	0.08
RWEB	[11]	204	255	26	8	34	145	0.69
	[12]	-134	255	33	8	41	145	0.36
	[13]	0	255	36	8	44	145	0.09
LFLG	[14]	204	255	28	8	36	145	0.70
	[15]	206	255	0	0	0	145	0.65
	[16]	206	255	15	5	20	145	0.67
	[17]	206	255	16	5	21	145	0.67
	[18]	206	255	0	0	0	145	0.65

Girder Name : G-2 Section Name : Sec-9:J-8 (Girder number= 2 Section number= 9)

Section force Mx = 25245 kN·m Sy = -2569 kN T = -1491 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	529.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	44801.2 kN·m	29590.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-73	210	0	0	0	120	0.12
	[2]	-74	210	7	0	7	120	0.13
DECK-C	[3]	-74	210	7	0	7	120	0.13
	[4]	-75	210	19	6	25	120	0.17
	[5]	-78	210	18	6	18	120	0.16
DECK-R	[6]	-79	210	17	0	17	120	0.16
	[7]	-79	210	17	0	17	120	0.16
LWEB	[8]	-81	210	0	0	0	120	0.15
	[9]	-73	210	40	9	49	120	0.29
	[10]	0	210	44	9	53	120	0.19
RWEB	[11]	117	210	34	9	43	120	0.44
	[12]	-77	210	42	9	51	120	0.32
	[13]	0	210	47	9	56	120	0.21
LFLG	[14]	117	210	36	9	45	120	0.45
	[15]	118	210	0	0	0	120	0.32
	[16]	118	210	19	5	25	120	0.36
	[17]	118	210	21	5	26	120	0.37
	[18]	118	210	0	0	0	120	0.32

Girder Name : G-2 Section Name : Sec-9:J-9 (Girder number= 2 Section number= 9)

Section force Mx-Max Mx = 1542 kN·m Sy = -3340 kN T = -1534 kN·m
 Mx-Min Mx = -19551 kN·m Sy = -3340 kN T = -1534 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2696
	Cantilever	1650	1646
LFLG	Intermediate	2700	2696

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	234.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	528.6
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2436.8
Gravity center	ex (cm)	20.4	20.7
	ey (cm)	168.8	171.5
Moment of inertia	Ix (cm4)	36388639	35295562
	Iy (cm4)	42747710	42684557
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65288.7 kN·m	65288.7 kN·m
	Mxr(lower)=	42778.7 kN·m	28254.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-5	210	0	0	0	120	0.00
	[2]	-5	210	9	0	9	120	0.01
DECK-C	[3]	-5	210	9	0	9	120	0.01
	[4]	-5	210	25	6	31	120	0.07
	[5]	-5	210	24	6	24	120	0.04
DECK-R	[6]	-5	210	22	0	22	120	0.03
	[7]	-5	210	22	0	22	120	0.03
LWEB	[8]	-5	210	0	0	0	120	0.00
	[9]	-5	210	52	9	61	120	0.26
RWEB	[10]	0	210	57	9	66	120	0.31
	[11]	7	210	44	9	53	120	0.20
	[12]	-5	210	55	9	64	120	0.29
	[13]	0	210	61	9	70	120	0.34
	[14]	7	210	47	9	57	120	0.22

LFLG	[15]	8	210	0	0	0	120	0.00
	[16]	8	210	25	6	31	120	0.07
	[17]	8	210	27	6	33	120	0.08
	[18]	8	210	0	0	0	120	0.00
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	57	210	0	0	0	120	0.07
	[2]	58	210	9	0	9	120	0.08
DECK-C	[3]	58	210	9	0	9	120	0.08
	[4]	58	210	25	6	31	120	0.14
	[5]	61	210	24	6	24	120	0.12
DECK-R	[6]	61	210	22	0	22	120	0.12
	[7]	61	210	22	0	22	120	0.12
	[8]	63	210	0	0	0	120	0.09
LWEB	[9]	57	210	52	9	61	120	0.33
	[10]	-1	210	57	9	66	120	0.31
	[11]	-95	210	44	9	53	120	0.40
RWEB	[12]	60	210	55	9	64	120	0.37
	[13]	-1	210	61	9	70	120	0.34
	[14]	-95	210	47	9	57	120	0.43
LFLG	[15]	-96	210	0	0	0	120	0.21
	[16]	-96	139	25	6	31	120	0.27
	[17]	-96	139	27	6	33	120	0.28
	[18]	-96	210	0	0	0	120	0.21

Girder Name : G-2 Section Name : Sec-10:Left (Girder number= 2 Section number= 10)

Section force Mx-Max Mx = 1542 kN·m Sy = -3340 kN T = -1534 kN·m
Mx-Min Mx = -19551 kN·m Sy = -3340 kN T = -1534 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2696
	Cantilever	1650	1646
LFLG	Intermediate	2700	2696

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	672.5
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	322.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 13 (SM570)	356.3	356.3
1-RWEB PL	2795 * 13 (SM570)	363.3	363.3
1-LFLG PL	2940 * 27 (SM570)	793.8	792.8
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3332.2	3287.8
Gravity center	ex (cm)	19.1	19.3
	ey (cm)	156.3	158.2
Moment of inertia	Ix (cm4)	52233162	51288883
	Iy (cm4)	54900865	54822414
Torsion Constant	J (cm4)	35137528	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	84918.3 kN·m	84918.3 kN·m
Mxr(lower)=	81306.1 kN·m	81306.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-4	210	0	0	0	120	0.00
	[2]	-4	210	6	0	7	120	0.00
DECK-C	[3]	-4	210	6	0	7	120	0.00
	[4]	-4	210	18	5	22	120	0.04
	[5]	-4	210	17	5	17	120	0.02
DECK-R	[6]	-4	210	16	0	16	120	0.02
	[7]	-4	210	16	0	16	120	0.02
LWEB	[8]	-4	210	0	0	0	120	0.00
	[9]	-3	255	43	8	51	145	0.12
RWEB	[10]	0	255	48	8	56	145	0.15
	[11]	5	255	40	8	48	145	0.11
RWEB	[12]	-4	255	45	8	53	145	0.14
	[13]	0	255	50	8	58	145	0.16
	[14]	5	255	43	8	50	145	0.12

LFLG	[15]	5	255	0	0	0	145	0.00
	[16]	5	255	18	4	22	145	0.02
	[17]	5	255	19	4	23	145	0.03
	[18]	5	255	0	0	0	145	0.00
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	44	210	0	0	0	120	0.04
	[2]	45	210	6	0	7	120	0.05
DECK-C	[3]	45	210	6	0	7	120	0.05
	[4]	45	210	18	5	22	120	0.08
	[5]	47	210	17	5	17	120	0.07
DECK-R	[6]	47	210	16	0	16	120	0.07
	[7]	47	210	16	0	16	120	0.07
	[8]	48	210	0	0	0	120	0.05
LWEB	[9]	44	255	43	8	51	145	0.15
	[10]	-1	255	48	8	56	145	0.15
RWEB	[11]	-60	255	40	8	48	145	0.16
	[12]	46	255	45	8	53	145	0.17
	[13]	-1	255	50	8	58	145	0.16
LFLG	[14]	-60	255	43	8	50	145	0.18
	[15]	-61	255	0	0	0	145	0.06
	[16]	-61	255	18	4	22	145	0.08
	[17]	-61	255	19	4	23	145	0.08
	[18]	-61	255	0	0	0	145	0.06

Girder Name : G-2 Section Name : Sec-10:J-10 (Girder number= 2 Section number= 10)

Section force Mx = -49116 kN·m Sy = -4005 kN T = -2066 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2656
	Cantilever	1650	1608
LFLG	Intermediate	2700	2656

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	663.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	314.1
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 13 (SM570)	356.3	356.3
1-RWEB PL	2795 * 13 (SM570)	363.3	363.3
1-LFLG PL	2940 * 27 (SM570)	793.8	782.0
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3332.2	3259.6
Gravity center	ex (cm)	19.1	18.7
	ey (cm)	156.3	158.0
Moment of inertia	Ix (cm4)	52233162	50752595
	Iy (cm4)	54900865	54150262
Torsion Constant	J (cm4)	35137528	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	83999.2 kN·m	83999.2 kN·m
	Mxr(lower)=	80518.4 kN·m	80518.4 kN·m

Stress (N/mm²)

Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	113	210	0	0	0	120	0.29
	[2]	114	210	8	0	8	120	0.30
DECK-C	[3]	114	210	8	0	8	120	0.30
	[4]	114	210	21	6	28	120	0.35
	[5]	120	210	20	6	21	120	0.35
DECK-R	[6]	120	210	19	0	19	120	0.35
	[7]	120	210	19	0	19	120	0.35
	[8]	123	210	0	0	1	120	0.34
LWEB	[9]	112	255	52	11	63	145	0.38
	[10]	-2	255	57	11	68	145	0.22
	[11]	-153	255	48	11	58	145	0.52
RWEB	[12]	118	255	55	11	65	145	0.41
	[13]	-2	255	60	11	71	145	0.24
	[14]	-153	255	51	11	61	145	0.54
LFLG	[15]	-156	255	0	0	0	145	0.37
	[16]	-156	255	22	5	27	145	0.41
	[17]	-156	255	23	5	28	145	0.41
	[18]	-156	255	0	0	0	145	0.37

Girder Name : G-2 Section Name : Sec-11:J-11 (Girder number= 2 Section number= 11)

Section force Mx = -75663 kN·m Sy = -4365 kN T = -2814 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2626
	Cantilever	1650	1578
LFLG	Intermediate	2700	2626

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 27 (SM490Y)	826.4	806.5
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 27 (SM490Y)	397.0	377.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2736 * 13 (SM570)	355.7	355.7
1-RWEB PL	2790 * 13 (SM570)	362.7	362.7
1-LFLG PL	2940 * 32 (SM570)	940.8	917.2
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3736.7	3632.1
Gravity center	ex (cm)	19.9	18.9
	ey (cm)	158.3	159.8
Moment of inertia	Ix (cm4)	59681759	57576151
	Iy (cm4)	61890190	60371642
Torsion Constant	J (cm4)	37393947	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	96653.4 kN·m	96653.4 kN·m
	Mxr(lower)=	90095.1 kN·m	90095.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	151	210	0	0	0	120	0.52
	[2]	153	210	7	0	7	120	0.53
DECK-C	[3]	153	210	7	0	7	120	0.53
	[4]	153	210	19	7	26	120	0.58
	[5]	160	210	18	7	19	120	0.61
DECK-R	[6]	161	210	17	0	17	120	0.61
	[7]	161	210	17	0	17	120	0.61
	[8]	164	210	1	0	1	120	0.61
LWEB	[9]	150	255	57	14	72	145	0.59
	[10]	-2	255	62	14	77	145	0.28
	[11]	-210	255	53	14	67	145	0.89
RWEB	[12]	157	255	60	14	74	145	0.64
	[13]	-2	255	65	14	79	145	0.30
	[14]	-210	255	56	14	70	145	0.91
LFLG	[15]	-214	255	0	0	0	145	0.71
	[16]	-214	255	20	6	26	145	0.74
	[17]	-214	255	21	6	27	145	0.74
	[18]	-214	255	0	0	0	145	0.71

Girder Name : G-2 Section Name : Sec-12:Mx-Min_L (Girder number= 2 Section number= 12)

Section force Mx = -90248 kN·m Sy = -4577 kN T = -2814 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2611
	Cantilever	1650	1564
LFLG	Intermediate	2700	2611

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 27 (SM490Y)	826.4	802.4
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 27 (SM490Y)	397.0	373.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2736 * 13 (SM570)	355.7	355.7
1-RWEB PL	2790 * 13 (SM570)	362.7	362.7
1-LFLG PL	2940 * 40 (SM570)	1176.0	1140.6
7-RIB PL	240 * 19 (SM570)	319.2	273.6

Section property		Total	In-plane
Section area	A (cm2)	3998.5	3870.2
Gravity center	ex (cm)	18.6	17.4
	ey (cm)	147.9	149.3
Moment of inertia	Ix (cm4)	65902982	63423126
	Iy (cm4)	63802355	61970512
Torsion Constant	J (cm4)	38569179	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	98257.3 kN·m	98257.3 kN·m
Mxr(lower)=	105514.5 kN·m	105514.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	178	210	0	0	0	120	0.72
	[2]	180	210	7	0	7	120	0.74
DECK-C	[3]	180	210	7	0	7	120	0.74
	[4]	181	210	20	7	27	120	0.79
	[5]	188	210	19	7	19	120	0.83
DECK-R	[6]	189	210	17	0	17	120	0.83
	[7]	189	210	17	0	17	120	0.83
LWEB	[8]	193	210	1	0	1	120	0.84
	[9]	177	255	59	14	74	145	0.74
RWEB	[10]	-2	255	65	14	79	145	0.30
	[11]	-212	255	57	14	72	145	0.94
	[12]	185	255	62	14	76	145	0.80
	[13]	-2	255	68	14	82	145	0.32
	[14]	-212	255	60	14	74	145	0.96

LFLG	[15]	-218	255	0	0	0	145	0.73
	[16]	-218	255	17	5	22	145	0.75
	[17]	-218	255	18	5	23	145	0.76
	[18]	-218	255	0	0	0	145	0.73

Girder Name : G-2 Section Name : Sec-12:Mx-Min_R (Girder number= 2 Section number= 12)

Section force Mx = -90248 kN·m Sy = 4024 kN T = -3035 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2611
	Cantilever	1650	1564
LFLG	Intermediate	2700	2611

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 27 (SM490Y)	826.4	802.4
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 27 (SM490Y)	397.0	373.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2736 * 13 (SM570)	355.7	355.7
1-RWEB PL	2790 * 13 (SM570)	362.7	362.7
1-LFLG PL	2940 * 40 (SM570)	1176.0	1140.6
7-RIB PL	240 * 19 (SM570)	319.2	273.6

Section property		Total	In-plane
Section area	A (cm2)	3998.5	3870.2
Gravity center	ex (cm)	18.6	17.4
	ey (cm)	147.9	149.3
Moment of inertia	Ix (cm4)	65902982	63423126
	Iy (cm4)	63802355	61970512
Torsion Constant	J (cm4)	38569179	

Resisting bending moment (+) (-)
 In-plane Mxr(upper)= 98257.3 kN·m 98257.3 kN·m
 Mxr(lower)= 105514.5 kN·m 105514.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	178	210	0	0	0	120	0.72
	[2]	180	210	6	0	7	120	0.74
DECK-C	[3]	180	210	6	0	7	120	0.74
	[4]	181	210	17	7	25	120	0.78
	[5]	188	210	17	7	17	120	0.82
DECK-R	[6]	189	210	15	0	15	120	0.83
	[7]	189	210	15	0	15	120	0.83
LWEB	[8]	193	210	1	0	1	120	0.84
	[9]	177	255	52	15	68	145	0.70
RWEB	[10]	-2	255	57	15	72	145	0.25
	[11]	-212	255	50	15	66	145	0.90
	[12]	185	255	54	15	70	145	0.76
	[13]	-2	255	60	15	75	145	0.27
	[14]	-212	255	53	15	68	145	0.92

LFLG	[15]	-218	255	0	0	0	145	0.73
	[16]	-218	255	15	5	20	145	0.75
	[17]	-218	255	16	5	21	145	0.75
	[18]	-218	255	0	0	0	145	0.73

Girder Name : G-2 Section Name : Sec-13:J-12 (Girder number= 2 Section number= 13)

Section force Mx = -79843 kN·m Sy = 3845 kN T = -3035 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2623
	Cantilever	1650	1575
LFLG	Intermediate	2700	2623

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 27 (SM490Y)	174.2	174.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 27 (SM490Y)	826.4	805.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 27 (SM490Y)	397.0	376.8
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2736 * 11 (SM570)	301.0	301.0
1-RWEB PL	2790 * 11 (SM570)	306.9	306.9
1-LFLG PL	2940 * 35 (SM570)	1029.0	1002.1
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3714.3	3604.7
Gravity center	ex (cm)	20.0	18.9
	ey (cm)	155.1	156.5
Moment of inertia	Ix (cm4)	61200347	59017118
	Iy (cm4)	60487304	58905052
Torsion Constant	J (cm4)	33525793	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	96579.0 kN·m	96579.0 kN·m
	Mxr(lower)=	94044.2 kN·m	94044.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	160	210	0	0	0	120	0.58
	[2]	162	210	6	0	6	120	0.59
DECK-C	[3]	162	210	6	0	6	120	0.59
	[4]	162	210	17	7	24	120	0.64
	[5]	169	210	16	7	17	120	0.67
DECK-R	[6]	170	210	15	0	15	120	0.67
	[7]	170	210	15	0	15	120	0.67
	[8]	174	210	1	0	1	120	0.68
LWEB	[9]	158	255	60	18	78	145	0.68
	[10]	-2	255	64	18	83	145	0.33
	[11]	-212	255	57	18	75	145	0.96
RWEB	[12]	166	255	62	18	80	145	0.73
	[13]	-2	255	67	18	85	145	0.35
	[14]	-212	255	59	18	78	145	0.98
LFLG	[15]	-216	255	0	0	0	145	0.72
	[16]	-216	255	17	6	22	145	0.74
	[17]	-216	255	17	6	23	145	0.75
	[18]	-216	255	0	0	0	145	0.72

Girder Name : G-2 Section Name : Sec-14:J-13 (Girder number= 2 Section number= 14)

Section force Mx = -49050 kN·m Sy = 3284 kN T = -2607 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	665.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	315.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 11 (SM570)	301.5	301.5
1-RWEB PL	2795 * 11 (SM570)	307.4	307.4
1-LFLG PL	2940 * 24 (SM570)	705.6	696.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2966.0	2899.2
Gravity center	ex (cm)	21.4	21.1
	ey (cm)	169.9	172.1
Moment of inertia	Ix (cm4)	45178898	43647347
	Iy (cm4)	51130657	50492986
Torsion Constant	J (cm4)	30780546	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	81244.3 kN·m	81244.3 kN·m
	Mxr(lower)=	63779.7 kN·m	53209.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	115	210	0	0	0	120	0.30
	[2]	117	210	6	0	7	120	0.31
DECK-C	[3]	117	210	6	0	7	120	0.31
	[4]	117	210	18	8	26	120	0.36
	[5]	123	210	17	8	18	120	0.37
DECK-R	[6]	124	210	16	0	16	120	0.36
	[7]	124	210	16	0	16	120	0.36
	[8]	127	210	0	0	0	120	0.36
LWEB	[9]	115	255	52	16	67	145	0.42
	[10]	-2	255	56	16	71	145	0.24
	[11]	-193	255	45	16	61	145	0.75
RWEB	[12]	121	255	54	16	70	145	0.45
	[13]	-2	255	58	16	74	145	0.26
	[14]	-193	255	48	16	63	145	0.77
LFLG	[15]	-196	255	0	0	0	145	0.59
	[16]	-196	213	19	7	26	145	0.62
	[17]	-196	213	20	7	28	145	0.63
	[18]	-196	255	0	0	0	145	0.59

Girder Name : G-2 Section Name : Sec-15:J-14 (Girder number= 2 Section number= 15)

Section force Mx = -26321 kN·m Sy = 2721 kN T = -1815 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.5
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2467.7
Gravity center	ex (cm)	20.2	20.5
	ey (cm)	166.8	169.4
Moment of inertia	Ix (cm4)	37234453	36195652
	Iy (cm4)	42971601	42946678
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65757.3 kN·m	65757.3 kN·m
	Mxr(lower)=	44371.4 kN·m	31224.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	77	210	0	0	0	120	0.13
	[2]	77	210	7	0	7	120	0.14
DECK-C	[3]	77	210	7	0	7	120	0.14
	[4]	78	210	20	8	28	120	0.19
	[5]	82	210	19	8	19	120	0.18
DECK-R	[6]	82	210	18	0	18	120	0.17
	[7]	82	210	18	0	18	120	0.17
	[8]	84	210	0	0	0	120	0.16
LWEB	[9]	77	210	42	11	53	120	0.33
	[10]	-2	210	46	11	57	120	0.23
	[11]	-123	210	36	11	47	120	0.50
RWEB	[12]	80	210	44	11	55	120	0.36
	[13]	-2	210	49	11	60	120	0.25
	[14]	-123	210	39	11	50	120	0.52
LFLG	[15]	-125	210	0	0	0	120	0.35
	[16]	-125	148	19	6	26	120	0.40
	[17]	-125	148	21	6	27	120	0.40
	[18]	-125	210	0	0	0	120	0.35

Girder Name : G-2 Section Name : Sec-15:Right (Girder number= 2 Section number= 15)

Section force Mx-Max Mx = 12521 kN·m Sy = 2132 kN T = -1555 kN·m
 Mx-Min Mx = -10538 kN·m Sy = 2132 kN T = -1555 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-36	210	0	0	0	120	0.03
	[2]	-37	210	6	0	6	120	0.03
DECK-C	[3]	-37	210	6	0	6	120	0.03
	[4]	-37	210	16	6	22	120	0.07
	[5]	-39	210	15	6	15	120	0.05
DECK-R	[6]	-39	210	14	0	14	120	0.05
	[7]	-39	210	14	0	14	120	0.05
LWEB	[8]	-40	210	0	0	0	120	0.04
	[9]	-36	210	33	9	42	120	0.15
RWEB	[10]	0	210	36	9	46	120	0.14
	[11]	56	210	28	9	38	120	0.17
	[12]	-38	210	35	9	44	120	0.17
	[13]	0	210	39	9	48	120	0.16
	[14]	56	210	31	9	40	120	0.18

	LFLG	[15]	57	210	0	0	0	120	0.07
		[16]	57	210	15	5	21	120	0.10
		[17]	57	210	17	5	22	120	0.11
		[18]	57	210	0	0	0	120	0.07
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	31	210	0	0	0	120	0.02
		[2]	31	210	6	0	6	120	0.02
	DECK-C	[3]	31	210	6	0	6	120	0.02
		[4]	31	210	16	6	22	120	0.06
		[5]	33	210	15	6	15	120	0.04
		[6]	33	210	14	0	14	120	0.04
	DECK-R	[7]	33	210	14	0	14	120	0.04
		[8]	33	210	0	0	0	120	0.03
	LWEB	[9]	31	210	33	9	42	120	0.15
		[10]	0	210	36	9	46	120	0.14
		[11]	-47	210	28	9	38	120	0.15
	RWEB	[12]	32	210	35	9	44	120	0.16
		[13]	0	210	39	9	48	120	0.16
		[14]	-47	210	31	9	40	120	0.16
	LFLG	[15]	-48	210	0	0	0	120	0.05
		[16]	-48	148	15	5	21	120	0.08
		[17]	-48	148	17	5	22	120	0.09
		[18]	-48	210	0	0	0	120	0.05

Girder Name : G-2 Section Name : Sec-16:J-15 (Girder number= 2 Section number= 16)

Section force Mx-Max Mx = 12521 kN·m Sy = 2132 kN T = -1555 kN·m
 Mx-Min Mx = -10538 kN·m Sy = 2132 kN T = -1555 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 17 (SM490Y)	499.8	499.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
	Moment of inertia Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65330.6 kN·m	65330.6 kN·m
Mxr(lower)=	43242.9 kN·m	26471.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-37	210	0	0	0	120	0.03
	[2]	-37	210	6	0	6	120	0.03
DECK-C	[3]	-37	210	6	0	6	120	0.03
	[4]	-37	210	16	6	22	120	0.07
	[5]	-39	210	15	6	15	120	0.05
DECK-R	[6]	-39	210	14	0	14	120	0.05
	[7]	-39	210	14	0	14	120	0.05
LWEB	[8]	-40	210	0	0	0	120	0.04
	[9]	-37	210	33	9	43	120	0.16
RWEB	[10]	0	210	37	9	46	120	0.15
	[11]	60	210	28	9	37	120	0.18
	[12]	-39	210	35	9	45	120	0.17
	[13]	0	210	39	9	48	120	0.16
	[14]	60	210	30	9	39	120	0.19

LFLG	[15]	61	210	0	0	0	120	0.08
	[16]	61	210	17	6	23	120	0.12
	[17]	61	210	18	6	24	120	0.12
	[18]	61	210	0	0	0	120	0.08
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	31	210	0	0	0	120	0.02
	[2]	31	210	6	0	6	120	0.02
DECK-C	[3]	31	210	6	0	6	120	0.02
	[4]	31	210	16	6	22	120	0.06
	[5]	33	210	15	6	15	120	0.04
DECK-R	[6]	33	210	14	0	14	120	0.04
	[7]	33	210	14	0	14	120	0.04
	[8]	34	210	0	0	0	120	0.03
LWEB	[9]	31	210	33	9	43	120	0.15
	[10]	0	210	37	9	46	120	0.15
	[11]	-51	210	28	9	37	120	0.15
RWEB	[12]	32	210	35	9	45	120	0.16
	[13]	0	210	39	9	48	120	0.16
	[14]	-51	210	30	9	39	120	0.17
LFLG	[15]	-51	210	0	0	0	120	0.06
	[16]	-51	129	17	6	23	120	0.10
	[17]	-51	129	18	6	24	120	0.10
	[18]	-51	210	0	0	0	120	0.06

Girder Name : G-2 Section Name : Sec-16:J-16 (Girder number= 2 Section number= 16)

Section force Mx = 26247 kN·m Sy = 1508 kN T = -1277 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 17 (SM490Y)	499.8	499.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
Moment of inertia	Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65330.6 kN·m	65330.6 kN·m
	Mxr(lower)=	43242.9 kN·m	26471.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-77	210	0	0	0	120	0.13
	[2]	-78	210	4	0	4	120	0.14
DECK-C	[3]	-78	210	4	0	4	120	0.14
	[4]	-78	210	11	5	17	120	0.16
	[5]	-82	210	11	5	12	120	0.16
DECK-R	[6]	-82	210	10	0	10	120	0.16
	[7]	-82	210	10	0	10	120	0.16
LWEB	[8]	-84	210	0	0	0	120	0.16
	[9]	-77	210	24	8	31	120	0.20
RWEB	[10]	0	210	26	8	34	120	0.08
	[11]	126	210	20	8	27	120	0.41
	[12]	-81	210	25	8	33	120	0.22
LFLG	[13]	0	210	27	8	35	120	0.09
	[14]	126	210	21	8	29	120	0.42
	[15]	127	210	0	0	0	120	0.37
	[16]	127	210	12	5	17	120	0.39
	[17]	127	210	13	5	18	120	0.39
	[18]	127	210	0	0	0	120	0.37

Girder Name : G-2 Section Name : Sec-17:J-17 (Girder number= 2 Section number= 17)

Section force Mx = 33937 kN·m Sy = 847 kN T = -1068 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 17 (SM490Y)	499.8	499.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
Moment of inertia	Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		65330.6 kN·m	65330.6 kN·m
Mxr(lower)=		43242.9 kN·m	26471.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-99	210	0	0	0	120	0.22
	[2]	-100	210	2	0	2	120	0.23
DECK-C	[3]	-100	210	2	0	2	120	0.23
	[4]	-101	210	6	4	11	120	0.24
	[5]	-106	210	6	4	8	120	0.26
DECK-R	[6]	-106	210	6	0	6	120	0.26
	[7]	-106	210	6	0	6	120	0.26
LWEB	[8]	-109	210	0	0	0	120	0.27
	[9]	-99	210	13	6	20	120	0.25
RWEB	[10]	0	210	15	6	21	120	0.03
	[11]	163	210	11	6	17	120	0.63
	[12]	-104	210	14	6	20	120	0.28
LFLG	[13]	0	210	15	6	22	120	0.03
	[14]	163	210	12	6	18	120	0.63
	[15]	165	210	0	0	0	120	0.62
	[16]	165	210	7	4	11	120	0.62
	[17]	165	210	7	4	11	120	0.62
	[18]	165	210	0	0	0	120	0.62

Girder Name : G-2 Section Name : Sec-18:Mx-Max (Girder number= 2 Section number= 18)

Section force Mx = 35131 kN·m Sy = -551 kN T = -1047 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 17 (SM490Y)	499.8	499.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
Moment of inertia	Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65330.6 kN·m	65330.6 kN·m
	Mxr(lower)=	43242.9 kN·m	26471.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-103	210	0	0	0	120	0.24
	[2]	-104	210	1	0	2	120	0.25
DECK-C	[3]	-104	210	1	0	2	120	0.25
	[4]	-104	210	4	4	8	120	0.25
	[5]	-110	210	4	4	7	120	0.28
DECK-R	[6]	-110	210	4	0	4	120	0.28
	[7]	-110	210	4	0	4	120	0.28
	[8]	-113	210	0	0	0	120	0.29
LWEB	[9]	-103	210	9	6	15	120	0.25
	[10]	0	210	9	6	16	120	0.02
	[11]	169	210	7	6	13	120	0.66
RWEB	[12]	-108	210	9	6	15	120	0.28
	[13]	0	210	10	6	16	120	0.02
LFLG	[14]	169	210	8	6	14	120	0.66
	[15]	171	210	0	0	0	120	0.66
	[16]	171	210	4	4	8	120	0.66
	[17]	171	210	5	4	9	120	0.67
	[18]	171	210	0	0	0	120	0.66

Girder Name : G-2 Section Name : Sec-19:J-18 (Girder number= 2 Section number= 19)

Section force Mx = 35042 kN·m Sy = -622 kN T = -1047 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 17 (SM490Y)	499.8	499.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
Moment of inertia	Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65330.6 kN·m	65330.6 kN·m
	Mxr(lower)=	43242.9 kN·m	26471.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-102	210	0	0	0	120	0.24
	[2]	-104	210	2	0	2	120	0.24
DECK-C	[3]	-104	210	2	0	2	120	0.24
	[4]	-104	210	5	4	9	120	0.25
	[5]	-109	210	4	4	7	120	0.27
DECK-R	[6]	-110	210	4	0	4	120	0.27
	[7]	-110	210	4	0	4	120	0.27
	[8]	-113	210	0	0	0	120	0.29
LWEB	[9]	-102	210	10	6	16	120	0.26
	[10]	0	210	11	6	17	120	0.02
	[11]	168	210	8	6	14	120	0.66
RWEB	[12]	-108	210	10	6	17	120	0.28
	[13]	0	210	11	6	18	120	0.02
	[14]	168	210	9	6	15	120	0.66
LFLG	[15]	170	210	0	0	0	120	0.66
	[16]	170	210	5	4	9	120	0.66
	[17]	170	210	5	4	9	120	0.66
	[18]	170	210	0	0	0	120	0.66

Girder Name : G-2 Section Name : Sec-20:J-19 (Girder number= 2 Section number= 20)

Section force Mx = 30883 kN·m Sy = -1149 kN T = -1141 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-91	210	0	0	0	120	0.19
	[2]	-92	210	3	0	3	120	0.19
DECK-C	[3]	-92	210	3	0	3	120	0.19
	[4]	-93	210	9	5	13	120	0.21
	[5]	-98	210	8	5	10	120	0.22
DECK-R	[6]	-98	210	8	0	8	120	0.22
	[7]	-98	210	8	0	8	120	0.22
LWEB	[8]	-101	210	0	0	0	120	0.23
	[9]	-91	210	18	7	25	120	0.23
RWEB	[10]	0	210	20	7	27	120	0.05
	[11]	160	210	15	7	21	120	0.61
	[12]	-96	210	19	7	26	120	0.26
LFLG	[13]	0	210	21	7	28	120	0.05
	[14]	160	210	16	7	23	120	0.62
	[15]	162	210	0	0	0	120	0.59
	[16]	162	210	10	5	15	120	0.61
	[17]	162	210	11	5	16	120	0.61
	[18]	162	210	0	0	0	120	0.59

Girder Name : G-2 Section Name : Sec-20:J-20 (Girder number= 2 Section number= 20)

Section force Mx-Max Mx = 20561 kN·m Sy = -1766 kN T = -1346 kN·m
Mx-Min Mx = -1277 kN·m Sy = -1766 kN T = -1346 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
	LFLG Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m	
Mxr(lower)=	40123.8 kN·m		19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-61	210	0	0	0	120	0.08
	[2]	-61	210	5	0	5	120	0.09
	DECK-C [3]	-61	210	5	0	5	120	0.09
	[4]	-62	210	13	6	19	120	0.11
	[5]	-65	210	13	6	13	120	0.11
	[6]	-65	210	12	0	12	120	0.11
	DECK-R [7]	-65	210	12	0	12	120	0.11
	[8]	-67	210	0	0	0	120	0.10
	LWEB [9]	-61	210	28	8	36	120	0.17
	[10]	0	210	30	8	39	120	0.10
	[11]	107	210	22	8	31	120	0.32
	RWEB [12]	-64	210	29	8	38	120	0.19
	[13]	0	210	32	8	40	120	0.11
	[14]	107	210	24	8	32	120	0.33

	LFLG	[15]	108	210	0	0	0	120	0.26
		[16]	108	210	15	6	21	120	0.29
		[17]	108	210	17	6	23	120	0.30
		[18]	108	210	0	0	0	120	0.26
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	4	210	0	0	0	120	0.00
		[2]	4	210	5	0	5	120	0.00
	DECK-C	[3]	4	210	5	0	5	120	0.00
		[4]	4	210	13	6	19	120	0.03
		[5]	4	210	13	6	13	120	0.01
		[6]	4	210	12	0	12	120	0.01
	DECK-R	[7]	4	210	12	0	12	120	0.01
		[8]	4	210	0	0	0	120	0.00
	LWEB	[9]	4	210	28	8	36	120	0.09
		[10]	0	210	30	8	39	120	0.10
		[11]	-7	210	22	8	31	120	0.07
	RWEB	[12]	4	210	29	8	38	120	0.10
		[13]	0	210	32	8	40	120	0.11
		[14]	-7	210	24	8	32	120	0.07
	LFLG	[15]	-7	210	0	0	0	120	0.00
		[16]	-7	104	15	6	21	120	0.03
		[17]	-7	104	17	6	23	120	0.04
		[18]	-7	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-21:Left (Girder number= 2 Section number= 21)

Section force Mx-Max Mx = 20561 kN·m Sy = -1766 kN T = -1346 kN·m
 Mx-Min Mx = -1277 kN·m Sy = -1766 kN T = -1346 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-61	210	0	0	0	120	0.08
	[2]	-61	210	5	0	5	120	0.09
DECK-C	[3]	-61	210	5	0	5	120	0.09
	[4]	-62	210	13	6	19	120	0.11
	[5]	-65	210	13	6	13	120	0.11
DECK-R	[6]	-65	210	12	0	12	120	0.11
	[7]	-65	210	12	0	12	120	0.11
LWEB	[8]	-67	210	0	0	0	120	0.10
	[9]	-61	210	28	8	36	120	0.17
RWEB	[10]	0	210	30	8	39	120	0.10
	[11]	107	210	22	8	31	120	0.32
	[12]	-64	210	29	8	38	120	0.19
	[13]	0	210	32	8	40	120	0.11
	[14]	107	210	24	8	32	120	0.33

	LFLG	[15]	108	210	0	0	0	120	0.26
		[16]	108	210	15	6	21	120	0.29
		[17]	108	210	17	6	23	120	0.30
		[18]	108	210	0	0	0	120	0.26
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	4	210	0	0	0	120	0.00
		[2]	4	210	5	0	5	120	0.00
	DECK-C	[3]	4	210	5	0	5	120	0.00
		[4]	4	210	13	6	19	120	0.03
		[5]	4	210	13	6	13	120	0.01
		[6]	4	210	12	0	12	120	0.01
	DECK-R	[7]	4	210	12	0	12	120	0.01
		[8]	4	210	0	0	0	120	0.00
	LWEB	[9]	4	210	28	8	36	120	0.09
		[10]	0	210	30	8	39	120	0.10
		[11]	-7	210	22	8	31	120	0.07
	RWEB	[12]	4	210	29	8	38	120	0.10
		[13]	0	210	32	8	40	120	0.11
		[14]	-7	210	24	8	32	120	0.07
	LFLG	[15]	-7	210	0	0	0	120	0.00
		[16]	-7	104	15	6	21	120	0.03
		[17]	-7	104	17	6	23	120	0.04
		[18]	-7	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-21:J-21 (Girder number= 2 Section number= 21)

Section force Mx-Max Mx = 5269 kN·m Sy = -2446 kN T = -1696 kN·m
Mx-Min Mx = -14116 kN·m Sy = -2446 kN T = -1696 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	440.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2350.1
Gravity center	ex (cm)	21.2	21.5
	ey (cm)	175.1	178.0
Moment of inertia	Ix (cm4)	33732695	32581137
	Iy (cm4)	42074248	42047621
Torsion Constant	J (cm4)	26615994	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63924.8 kN·m	63924.8 kN·m
Mxr(lower)=	38124.4 kN·m	18917.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-16	210	0	0	0	120	0.01
	[2]	-16	210	7	0	7	120	0.01
DECK-C	[3]	-16	210	7	0	7	120	0.01
	[4]	-16	210	19	7	26	120	0.05
	[5]	-17	210	18	7	18	120	0.03
DECK-R	[6]	-17	210	16	0	17	120	0.03
	[7]	-17	210	16	0	17	120	0.03
LWEB	[8]	-17	210	0	0	0	120	0.01
	[9]	-16	210	39	10	49	120	0.17
RWEB	[10]	0	210	42	10	52	120	0.19
	[11]	29	210	31	10	41	120	0.14
RWEB	[12]	-17	210	41	10	51	120	0.19
	[13]	0	210	45	10	55	120	0.21
	[14]	29	210	34	10	44	120	0.15

	LFLG	[15]	29	210	0	0	0	120	0.02
		[16]	29	210	21	8	29	120	0.08
		[17]	29	210	23	8	31	120	0.08
		[18]	29	210	0	0	0	120	0.02
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	42	210	0	0	0	120	0.04
		[2]	42	210	7	0	7	120	0.04
	DECK-C	[3]	42	210	7	0	7	120	0.04
		[4]	43	210	19	7	26	120	0.09
		[5]	45	210	18	7	18	120	0.07
		[6]	45	210	16	0	17	120	0.07
	DECK-R	[7]	45	210	16	0	17	120	0.07
		[8]	46	210	0	0	0	120	0.05
	LWEB	[9]	42	210	39	10	49	120	0.21
		[10]	-1	210	42	10	52	120	0.19
		[11]	-77	210	31	10	41	120	0.25
	RWEB	[12]	44	210	41	10	51	120	0.22
		[13]	-1	210	45	10	55	120	0.21
		[14]	-77	210	34	10	44	120	0.27
	LFLG	[15]	-78	210	0	0	0	120	0.14
		[16]	-78	104	21	8	29	120	0.19
		[17]	-78	104	23	8	31	120	0.20
		[18]	-78	210	0	0	0	120	0.14

Girder Name : G-2 Section Name : Sec-22:Left (Girder number= 2 Section number= 22)

Section force Mx-Max Mx = 5269 kN·m Sy = -2446 kN T = -1696 kN·m
Mx-Min Mx = -14116 kN·m Sy = -2446 kN T = -1696 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 20 (SM490Y)	588.0	587.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2497.1
Gravity center	ex (cm)	20.0	20.3
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	37048583
	Iy (cm4)	43195212	43170678
Torsion Constant	J (cm4)	28148444	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66152.5 kN·m	66152.5 kN·m
Mxr(lower)=	45931.0 kN·m	34109.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-15	210	0	0	0	120	0.01
	[2]	-15	210	7	0	7	120	0.01
DECK-C	[3]	-15	210	7	0	7	120	0.01
	[4]	-15	210	18	7	25	120	0.05
	[5]	-16	210	17	7	17	120	0.03
DECK-R	[6]	-16	210	16	0	16	120	0.02
	[7]	-16	210	16	0	16	120	0.02
LWEB	[8]	-17	210	0	0	0	120	0.01
	[9]	-15	210	38	10	48	120	0.16
RWEB	[10]	0	210	42	10	52	120	0.19
	[11]	24	210	33	10	43	120	0.14
	[12]	-16	210	40	10	50	120	0.18
	[13]	0	210	44	10	54	120	0.21
	[14]	24	210	35	10	46	120	0.16

LFLG	[15]	24	210	0	0	0	120	0.01
	[16]	24	210	17	6	22	120	0.05
	[17]	24	210	18	6	24	120	0.05
	[18]	24	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	41	210	0	0	0	120	0.04
	[2]	41	210	7	0	7	120	0.04
DECK-C	[3]	41	210	7	0	7	120	0.04
	[4]	41	210	18	7	25	120	0.08
	[5]	44	210	17	7	17	120	0.06
DECK-R	[6]	44	210	16	0	16	120	0.06
	[7]	44	210	16	0	16	120	0.06
	[8]	45	210	0	0	0	120	0.05
LWEB	[9]	41	210	38	10	48	120	0.20
	[10]	-1	210	42	10	52	120	0.19
RWEB	[11]	-64	210	33	10	43	120	0.22
	[12]	43	210	40	10	50	120	0.22
	[13]	-1	210	44	10	54	120	0.21
LFLG	[14]	-64	210	35	10	46	120	0.24
	[15]	-65	210	0	0	0	120	0.09
	[16]	-65	156	17	6	22	120	0.13
	[17]	-65	156	18	6	24	120	0.13
	[18]	-65	210	0	0	0	120	0.09

Girder Name : G-2 Section Name : Sec-22:J-22 (Girder number= 2 Section number= 22)

Section force Mx = -32108 kN·m Sy = -3040 kN T = -2148 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 20 (SM490Y)	588.0	580.7
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2478.5
Gravity center	ex (cm)	20.0	19.8
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	36696864
	Iy (cm4)	43195212	42729554
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65544.9 kN·m	65544.9 kN·m
	Mxr(lower)=	45504.1 kN·m	33792.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	94	210	0	0	0	120	0.20
	[2]	95	210	8	0	8	120	0.21
DECK-C	[3]	95	210	8	0	8	120	0.21
	[4]	95	210	22	9	31	120	0.27
	[5]	100	210	22	9	22	120	0.26
DECK-R	[6]	100	210	20	0	20	120	0.26
	[7]	100	210	20	0	20	120	0.26
	[8]	103	210	0	0	0	120	0.24
LWEB	[9]	94	210	47	13	60	120	0.45
	[10]	-2	210	52	13	65	120	0.29
	[11]	-146	210	41	13	54	120	0.69
RWEB	[12]	99	210	50	13	62	120	0.49
	[13]	-2	210	55	13	68	120	0.32
	[14]	-146	210	44	13	57	120	0.71
LFLG	[15]	-148	210	0	0	0	120	0.50
	[16]	-148	156	21	7	28	120	0.55
	[17]	-148	156	23	7	30	120	0.56
	[18]	-148	210	0	0	0	120	0.50

Girder Name : G-2 Section Name : Sec-23:J-23 (Girder number= 2 Section number= 23)

Section force Mx = -59120 kN·m Sy = -3592 kN T = -2447 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 19 (SM490Y)	581.5	567.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 19 (SM490Y)	279.4	265.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2744 * 11 (SM570)	301.8	301.8
1-RWEB PL	2798 * 11 (SM570)	307.8	307.8
1-LFLG PL	2940 * 27 (SM570)	793.8	773.4
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3066.8	2976.2
Gravity center	ex (cm)	18.6	17.8
	ey (cm)	150.9	152.7
Moment of inertia	Ix (cm4)	49142057	47358660
	Iy (cm4)	49296769	48183401
Torsion Constant	J (cm4)	30539360	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	75228.2 kN·m	75228.2 kN·m
	Mxr(lower)=	77737.1 kN·m	77737.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	152	210	0	0	0	120	0.53
	[2]	154	210	8	0	8	120	0.54
DECK-C	[3]	154	210	8	0	8	120	0.54
	[4]	154	210	22	9	31	120	0.61
	[5]	161	210	21	9	21	120	0.62
DECK-R	[6]	162	210	19	0	20	120	0.62
	[7]	162	210	19	0	20	120	0.62
	[8]	165	210	1	0	1	120	0.62
LWEB	[9]	152	255	55	15	70	145	0.59
	[10]	-2	255	60	15	75	145	0.27
	[11]	-191	255	52	15	67	145	0.77
RWEB	[12]	159	255	58	15	72	145	0.64
	[13]	-2	255	64	15	78	145	0.29
	[14]	-191	255	55	15	70	145	0.79
LFLG	[15]	-194	255	0	0	0	145	0.58
	[16]	-194	255	20	6	26	145	0.61
	[17]	-194	255	21	6	27	145	0.61
	[18]	-194	255	0	0	0	145	0.58

Girder Name : G-2 Section Name : Sec-24:Mx-Min_L (Girder number= 2 Section number= 24)

Section force Mx = -68336 kN·m Sy = -3768 kN T = -2447 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
	LFLG Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 19 (SM490Y)	581.5	564.9
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 19 (SM490Y)	279.4	263.1
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2744 * 11 (SM570)	301.8	301.8
1-RWEB PL	2798 * 11 (SM570)	307.8	307.8
1-LFLG PL	2940 * 27 (SM570)	793.8	770.2
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3066.8	2968.6
Gravity center	ex (cm)	18.6	17.6
	ey (cm)	150.9	152.6
Moment of inertia	Ix (cm4)	49142057	47210518
	Iy (cm4)	49296769	48018544
Torsion Constant	J (cm4)	30539360	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	74991.5 kN·m	74991.5 kN·m	
Mxr(lower)=	77506.5 kN·m	77506.5 kN·m	

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	177	210	0	0	0	120	0.71
	[2]	178	210	8	0	9	120	0.73
	DECK-C [3]	178	210	8	0	9	120	0.73
	[4]	179	210	23	9	32	120	0.80
	[5]	187	210	22	9	22	120	0.83
	[6]	187	210	20	0	21	120	0.83
	DECK-R [7]	187	210	20	0	21	120	0.83
	[8]	191	210	1	0	1	120	0.83
	LWEB [9]	176	255	58	15	72	145	0.73
	[10]	-3	255	63	15	78	145	0.29
	[11]	-221	255	55	15	69	145	0.98
	RWEB [12]	184	255	60	15	75	145	0.79
	[13]	-3	255	67	15	82	145	0.32
	[14]	-221	255	58	15	73	145	1.00

LFLG	[15]	-225	255	0	0	0	145	0.78
	[16]	-225	255	21	6	27	145	0.81
	[17]	-225	255	22	6	28	145	0.82
	[18]	-225	255	0	0	0	145	0.78

Girder Name : G-2 Section Name : Sec-24:Mx-Min_R (Girder number= 2 Section number= 24)

Section force Mx = -68336 kN·m Sy = 3744 kN T = -2554 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
LFLG	Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 19 (SM490Y)	581.5	564.9
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 19 (SM490Y)	279.4	263.1
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2744 * 11 (SM570)	301.8	301.8
1-RWEB PL	2798 * 11 (SM570)	307.8	307.8
1-LFLG PL	2940 * 27 (SM570)	793.8	770.2
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3066.8	2968.6
Gravity center	ex (cm)	18.6	17.6
	ey (cm)	150.9	152.6
Moment of inertia	Ix (cm4)	49142057	47210518
	Iy (cm4)	49296769	48018544
Torsion Constant	J (cm4)	30539360	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	74991.5 kN·m	74991.5 kN·m
	Mxr(lower)=	77506.5 kN·m	77506.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	177	210	0	0	0	120	0.71
	[2]	178	210	8	0	9	120	0.73
DECK-C	[3]	178	210	8	0	9	120	0.73
	[4]	179	210	23	9	32	120	0.80
	[5]	187	210	22	9	22	120	0.83
DECK-R	[6]	187	210	20	0	20	120	0.82
	[7]	187	210	20	0	20	120	0.82
	[8]	191	210	1	0	1	120	0.83
LWEB	[9]	176	255	57	15	73	145	0.73
	[10]	-3	255	63	15	78	145	0.29
RWEB	[11]	-221	255	54	15	70	145	0.98
	[12]	184	255	60	15	75	145	0.79
	[13]	-3	255	66	15	82	145	0.32
	[14]	-221	255	58	15	73	145	1.00

LFLG	[15]	-225	255	0	0	0	145	0.78
	[16]	-225	255	21	6	27	145	0.81
	[17]	-225	255	22	6	28	145	0.82
	[18]	-225	255	0	0	0	145	0.78

Girder Name : G-2 Section Name : Sec-25:J-24 (Girder number= 2 Section number= 25)

Section force Mx = -58860 kN·m Sy = 3566 kN T = -2554 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 19 (SM490Y)	122.6	122.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 19 (SM490Y)	581.5	567.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 19 (SM490Y)	279.4	265.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2744 * 11 (SM570)	301.8	301.8
1-RWEB PL	2798 * 11 (SM570)	307.8	307.8
1-LFLG PL	2940 * 27 (SM570)	793.8	773.4
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3066.8	2976.2
Gravity center	ex (cm)	18.6	17.8
	ey (cm)	150.9	152.7
Moment of inertia	Ix (cm4)	49142057	47358660
	Iy (cm4)	49296769	48183401
Torsion Constant	J (cm4)	30539360	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	75228.2 kN·m	75228.2 kN·m
	Mxr(lower)=	77737.1 kN·m	77737.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	152	210	0	0	0	120	0.52
	[2]	153	210	8	0	8	120	0.54
DECK-C	[3]	153	210	8	0	8	120	0.54
	[4]	154	210	22	9	31	120	0.60
	[5]	160	210	21	9	21	120	0.61
DECK-R	[6]	161	210	19	0	19	120	0.61
	[7]	161	210	19	0	19	120	0.61
	[8]	164	210	1	0	1	120	0.61
LWEB	[9]	151	255	54	15	70	145	0.58
	[10]	-2	255	60	15	75	145	0.27
	[11]	-190	255	52	15	67	145	0.77
RWEB	[12]	158	255	57	15	73	145	0.63
	[13]	-2	255	63	15	79	145	0.29
	[14]	-190	255	55	15	70	145	0.79
LFLG	[15]	-193	255	0	0	0	145	0.57
	[16]	-193	255	20	6	26	145	0.61
	[17]	-193	255	21	6	27	145	0.61
	[18]	-193	255	0	0	0	145	0.57

Girder Name : G-2 Section Name : Sec-26:J-25 (Girder number= 2 Section number= 26)

Section force Mx = -31033 kN·m Sy = 3049 kN T = -2326 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 21 (SM570)	617.4	609.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2507.5
Gravity center	ex (cm)	19.7	19.5
	ey (cm)	162.9	165.4
Moment of inertia	Ix (cm4)	38870903	37520435
	Iy (cm4)	43418552	42952519
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65916.2 kN·m	65916.2 kN·m
	Mxr(lower)=	57122.9 kN·m	41445.3 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	90	210	0	0	0	120	0.19
	[2]	91	210	8	0	8	120	0.19
DECK-C	[3]	91	210	8	0	8	120	0.19
	[4]	92	210	22	10	32	120	0.26
	[5]	96	210	22	10	22	120	0.24
DECK-R	[6]	96	210	20	0	20	120	0.24
	[7]	96	210	20	0	20	120	0.24
	[8]	99	210	0	0	0	120	0.22
LWEB	[9]	90	255	47	14	61	145	0.30
	[10]	-2	255	52	14	66	145	0.21
	[11]	-137	255	41	14	55	145	0.43
RWEB	[12]	95	255	49	14	64	145	0.33
	[13]	-2	255	55	14	69	145	0.23
	[14]	-137	255	44	14	58	145	0.45
LFLG	[15]	-139	255	0	0	0	145	0.30
	[16]	-139	185	20	7	27	145	0.33
	[17]	-139	185	22	7	29	145	0.34
	[18]	-139	255	0	0	0	145	0.30

Girder Name : G-2 Section Name : Sec-26:J-26 (Girder number= 2 Section number= 26)

Section force Mx-Max Mx = 9384 kN·m Sy = 2624 kN T = -2020 kN·m
Mx-Min Mx = -12618 kN·m Sy = 2624 kN T = -2020 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 21 (SM570)	617.4	617.3
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2526.5
Gravity center	ex (cm)	19.7	20.0
	ey (cm)	162.9	165.4
Moment of inertia	Ix (cm4)	38870903	37882652
	Iy (cm4)	43418552	43394393
Torsion Constant	J (cm4)	28384321	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66526.7 kN·m	66526.7 kN·m
Mxr(lower)=	57666.1 kN·m	41839.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	-27	210	0	0	0	120	0.02
	[2]	-27	210	7	0	7	120	0.02
DECK-C	[3]	-27	210	7	0	7	120	0.02
	[4]	-27	210	19	8	28	120	0.07
	[5]	-29	210	19	8	19	120	0.04
DECK-R	[6]	-29	210	17	0	17	120	0.04
	[7]	-29	210	17	0	17	120	0.04
LWEB	[8]	-30	210	0	0	0	120	0.02
	[9]	-27	255	40	12	52	145	0.14
RWEB	[10]	1	255	44	12	57	145	0.15
	[11]	41	255	36	12	48	145	0.13
RWEB	[12]	-28	255	43	12	55	145	0.16
	[13]	1	255	47	12	59	145	0.17
	[14]	41	255	38	12	50	145	0.15

LFLG	[15]	41	255	0	0	0	145	0.03
	[16]	41	255	17	6	24	145	0.05
	[17]	41	255	19	6	25	145	0.06
	[18]	41	255	0	0	0	145	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	36	210	0	0	0	120	0.03
	[2]	37	210	7	0	7	120	0.03
DECK-C	[3]	37	210	7	0	7	120	0.03
	[4]	37	210	19	8	28	120	0.08
	[5]	39	210	19	8	19	120	0.06
	[6]	39	210	17	0	17	120	0.05
DECK-R	[7]	39	210	17	0	17	120	0.05
	[8]	40	210	0	0	0	120	0.04
LWEB	[9]	36	255	40	12	52	145	0.15
	[10]	-1	255	44	12	57	145	0.15
	[11]	-55	255	36	12	48	145	0.15
RWEB	[12]	38	255	43	12	55	145	0.17
	[13]	-1	255	47	12	59	145	0.17
	[14]	-55	255	38	12	50	145	0.17
LFLG	[15]	-56	255	0	0	0	145	0.05
	[16]	-56	185	17	6	24	145	0.07
	[17]	-56	185	19	6	25	145	0.08
	[18]	-56	255	0	0	0	145	0.05

Girder Name : G-2 Section Name : Sec-27:Left (Girder number= 2 Section number= 27)

Section force Mx-Max Mx = 9384 kN·m Sy = 2624 kN T = -2020 kN·m
Mx-Min Mx = -12618 kN·m Sy = 2624 kN T = -2020 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 21 (SM570)	617.4	617.3
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2526.5
Gravity center	ex (cm)	19.7	20.0
	ey (cm)	162.9	165.4
Moment of inertia	Ix (cm4)	38870903	37882652
	Iy (cm4)	43418552	43394393
Torsion Constant	J (cm4)	28384321	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66526.7 kN·m	66526.7 kN·m
Mxr(lower)=	57666.1 kN·m	41839.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-27	210	0	0	0	120	0.02
	[2]	-27	210	7	0	7	120	0.02
DECK-C	[3]	-27	210	7	0	7	120	0.02
	[4]	-27	210	19	8	28	120	0.07
	[5]	-29	210	19	8	19	120	0.04
DECK-R	[6]	-29	210	17	0	17	120	0.04
	[7]	-29	210	17	0	17	120	0.04
LWEB	[8]	-30	210	0	0	0	120	0.02
	[9]	-27	255	40	12	52	145	0.14
RWEB	[10]	1	255	44	12	57	145	0.15
	[11]	41	255	36	12	48	145	0.13
RWEB	[12]	-28	255	43	12	55	145	0.16
	[13]	1	255	47	12	59	145	0.17
	[14]	41	255	38	12	50	145	0.15

LFLG	[15]	41	255	0	0	0	145	0.03
	[16]	41	255	17	6	24	145	0.05
	[17]	41	255	19	6	25	145	0.06
	[18]	41	255	0	0	0	145	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	36	210	0	0	0	120	0.03
	[2]	37	210	7	0	7	120	0.03
DECK-C	[3]	37	210	7	0	7	120	0.03
	[4]	37	210	19	8	28	120	0.08
	[5]	39	210	19	8	19	120	0.06
DECK-R	[6]	39	210	17	0	17	120	0.05
	[7]	39	210	17	0	17	120	0.05
	[8]	40	210	0	0	0	120	0.04
LWEB	[9]	36	255	40	12	52	145	0.15
	[10]	-1	255	44	12	57	145	0.15
RWEB	[11]	-55	255	36	12	48	145	0.15
	[12]	38	255	43	12	55	145	0.17
	[13]	-1	255	47	12	59	145	0.17
LFLG	[14]	-55	255	38	12	50	145	0.17
	[15]	-56	255	0	0	0	145	0.05
	[16]	-56	185	17	6	24	145	0.07
	[17]	-56	185	19	6	25	145	0.08
	[18]	-56	255	0	0	0	145	0.05

Girder Name : G-2 Section Name : Sec-27:Right (Girder number= 2 Section number= 27)

Section force Mx = 27846 kN·m Sy = 1983 kN T = -1693 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 21 (SM570)	617.4	617.4
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	60071.4 kN·m	43584.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-80	210	0	0	0	120	0.15
	[2]	-81	210	5	0	5	120	0.15
DECK-C	[3]	-81	210	5	0	5	120	0.15
	[4]	-81	210	15	7	22	120	0.18
	[5]	-85	210	14	7	15	120	0.18
DECK-R	[6]	-85	210	13	0	13	120	0.18
	[7]	-85	210	13	0	13	120	0.18
LWEB	[8]	-87	210	0	0	0	120	0.17
	[9]	-80	255	30	10	41	145	0.18
RWEB	[10]	0	255	34	10	44	145	0.09
	[11]	117	255	27	10	37	145	0.27
	[12]	-84	255	32	10	42	145	0.19
LFLG	[13]	0	255	36	10	46	145	0.10
	[14]	117	255	29	10	39	145	0.28
	[15]	118	255	0	0	0	145	0.21
	[16]	118	255	13	5	18	145	0.23
	[17]	118	255	14	5	19	145	0.23
	[18]	118	255	0	0	0	145	0.21

Girder Name : G-2 Section Name : Sec-28:J-27 (Girder number= 2 Section number= 28)

Section force Mx = 27846 kN·m Sy = 1983 kN T = -1693 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	49470.5 kN·m	38479.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-80	210	0	0	0	120	0.15
	[2]	-81	210	5	0	5	120	0.15
DECK-C	[3]	-81	210	5	0	5	120	0.15
	[4]	-81	210	15	7	22	120	0.18
	[5]	-85	210	14	7	15	120	0.18
DECK-R	[6]	-85	210	13	0	13	120	0.18
	[7]	-85	210	13	0	13	120	0.18
LWEB	[8]	-87	210	0	0	0	120	0.17
	[9]	-80	210	30	10	41	120	0.26
RWEB	[10]	0	210	34	10	44	120	0.13
	[11]	117	210	27	10	37	120	0.40
	[12]	-84	210	32	10	42	120	0.28
LFLG	[13]	0	210	36	10	46	120	0.15
	[14]	117	210	29	10	39	120	0.42
	[15]	118	210	0	0	0	120	0.32
	[16]	118	210	13	5	18	120	0.34
	[17]	118	210	14	5	19	120	0.34
	[18]	118	210	0	0	0	120	0.32

Girder Name : G-2 Section Name : Sec-28:J-28 (Girder number= 2 Section number= 28)

Section force Mx = 39549 kN·m Sy = 1197 kN T = -1230 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	49470.5 kN·m	38479.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-114	210	0	0	0	120	0.29
	[2]	-115	210	3	0	3	120	0.30
DECK-C	[3]	-115	210	3	0	3	120	0.30
	[4]	-115	210	9	5	14	120	0.32
	[5]	-121	210	8	5	10	120	0.34
DECK-R	[6]	-121	210	8	0	8	120	0.34
	[7]	-121	210	8	0	8	120	0.34
LWEB	[8]	-124	210	0	0	0	120	0.35
	[9]	-114	210	18	7	26	120	0.34
	[10]	0	210	20	7	28	120	0.05
RWEB	[11]	166	210	16	7	24	120	0.66
	[12]	-119	210	19	7	27	120	0.37
	[13]	0	210	22	7	29	120	0.06
LFLG	[14]	166	210	17	7	25	120	0.67
	[15]	168	210	0	0	0	120	0.64
	[16]	168	210	8	4	12	120	0.65
	[17]	168	210	9	4	12	120	0.65
	[18]	168	210	0	0	0	120	0.64

Girder Name : G-2 Section Name : Sec-29:J-29 (Girder number= 2 Section number= 29)

Section force Mx = 43685 kN·m Sy = 598 kN T = -1106 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	49470.5 kN·m	38479.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-126	210	0	0	0	120	0.36
	[2]	-127	210	2	0	2	120	0.37
DECK-C	[3]	-127	210	2	0	2	120	0.37
	[4]	-127	210	4	5	9	120	0.37
	[5]	-134	210	4	5	7	120	0.41
DECK-R	[6]	-134	210	4	0	4	120	0.41
	[7]	-134	210	4	0	4	120	0.41
LWEB	[8]	-137	210	0	0	0	120	0.43
	[9]	-126	210	9	7	16	120	0.38
RWEB	[10]	0	210	10	7	17	120	0.02
	[11]	183	210	8	7	15	120	0.78
	[12]	-132	210	10	7	16	120	0.41
LFLG	[13]	0	210	11	7	17	120	0.02
	[14]	183	210	9	7	15	120	0.78
	[15]	185	210	0	0	0	120	0.78
	[16]	185	210	4	3	7	120	0.78
	[17]	185	210	4	3	8	120	0.78
	[18]	185	210	0	0	0	120	0.78

Girder Name : G-2 Section Name : Sec-30:Mx-Max (Girder number= 2 Section number= 30)

Section force Mx = 43744 kN·m Sy = 534 kN T = -1106 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	49470.5 kN·m	38479.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-126	210	0	0	0	120	0.36
	[2]	-127	210	1	0	1	120	0.37
DECK-C	[3]	-127	210	1	0	1	120	0.37
	[4]	-128	210	4	5	9	120	0.37
	[5]	-134	210	4	5	7	120	0.41
DECK-R	[6]	-134	210	3	0	4	120	0.41
	[7]	-134	210	3	0	4	120	0.41
LWEB	[8]	-137	210	0	0	0	120	0.43
	[9]	-126	210	8	7	15	120	0.37
	[10]	0	210	9	7	16	120	0.02
RWEB	[11]	183	210	7	7	14	120	0.78
	[12]	-132	210	9	7	15	120	0.41
	[13]	0	210	10	7	16	120	0.02
LFLG	[14]	183	210	8	7	14	120	0.78
	[15]	186	210	0	0	0	120	0.78
	[16]	186	210	4	3	7	120	0.79
	[17]	186	210	4	3	7	120	0.79
	[18]	186	210	0	0	0	120	0.78

Girder Name : G-2 Section Name : Sec-31:J-30 (Girder number= 2 Section number= 31)

Section force Mx = 42572 kN·m Sy = -841 kN T = -1105 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2568.6
Gravity center	ex (cm)	19.7	19.7
	ey (cm)	162.9	162.9
Moment of inertia	Ix (cm4)	38870903	38870903
	Iy (cm4)	43418552	43418552
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.9 kN·m	66856.9 kN·m
	Mxr(lower)=	49470.5 kN·m	38479.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-122	210	0	0	0	120	0.34
	[2]	-124	210	2	0	2	120	0.35
DECK-C	[3]	-124	210	2	0	2	120	0.35
	[4]	-124	210	6	5	11	120	0.36
	[5]	-130	210	6	5	8	120	0.39
DECK-R	[6]	-131	210	5	0	6	120	0.39
	[7]	-131	210	5	0	6	120	0.39
LWEB	[8]	-134	210	0	0	0	120	0.41
	[9]	-122	210	13	7	20	120	0.37
	[10]	0	210	14	7	21	120	0.03
RWEB	[11]	178	210	11	7	18	120	0.74
	[12]	-128	210	14	7	20	120	0.40
	[13]	0	210	15	7	22	120	0.03
LFLG	[14]	178	210	12	7	19	120	0.75
	[15]	181	210	0	0	0	120	0.74
	[16]	181	210	6	3	9	120	0.75
	[17]	181	210	6	3	9	120	0.75
	[18]	181	210	0	0	0	120	0.74

Girder Name : G-2 Section Name : Sec-32:J-31 (Girder number= 2 Section number= 32)

Section force Mx = 35606 kN·m Sy = -1440 kN T = -1188 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 16 (SM490Y)	470.4	470.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2421.6	2421.6
Gravity center	ex (cm)	20.9	20.9
	ey (cm)	172.9	172.9
Moment of inertia	Ix (cm4)	34638480	34638480
	Iy (cm4)	42299044	42299044
Torsion Constant	J (cm4)	26981324	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64892.8 kN·m	64892.8 kN·m
	Mxr(lower)=	41683.8 kN·m	23251.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-105	210	0	0	0	120	0.25
	[2]	-106	210	4	0	4	120	0.26
DECK-C	[3]	-106	210	4	0	4	120	0.26
	[4]	-106	210	11	5	16	120	0.27
	[5]	-112	210	10	5	11	120	0.29
DECK-R	[6]	-112	210	10	0	10	120	0.29
	[7]	-112	210	10	0	10	120	0.29
	[8]	-115	210	0	0	0	120	0.30
LWEB	[9]	-105	210	23	7	30	120	0.31
	[10]	0	210	25	7	32	120	0.07
	[11]	178	210	19	7	26	120	0.76
RWEB	[12]	-110	210	24	7	31	120	0.34
	[13]	0	210	26	7	33	120	0.08
	[14]	178	210	20	7	27	120	0.77
LFLG	[15]	179	210	0	0	0	120	0.73
	[16]	179	210	12	5	17	120	0.75
	[17]	179	210	13	5	18	120	0.75
	[18]	179	210	0	0	0	120	0.73

Girder Name : G-2 Section Name : Sec-32:J-32 (Girder number= 2 Section number= 32)

Section force Mx-Max Mx = 22410 kN·m Sy = -2046 kN T = -1384 kN·m
 Mx-Min Mx = -140 kN·m Sy = -2046 kN T = -1384 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 16 (SM490Y)	470.4	470.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2421.6	2421.6
Gravity center	ex (cm)	20.9	20.9
	ey (cm)	172.9	172.9
Moment of inertia	Ix (cm4)	34638480	34638480
	Iy (cm4)	42299044	42299044
Torsion Constant	J (cm4)	26981324	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64892.8 kN·m	64892.8 kN·m
	Mxr(lower)=	41683.8 kN·m	23251.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-66	210	0	0	0	120	0.10
	[2]	-67	210	6	0	6	120	0.10
DECK-C	[3]	-67	210	6	0	6	120	0.10
	[4]	-67	210	15	6	21	120	0.13
	[5]	-70	210	15	6	15	120	0.13
DECK-R	[6]	-71	210	14	0	14	120	0.13
	[7]	-71	210	14	0	14	120	0.13
LWEB	[8]	-73	210	0	0	0	120	0.12
	[9]	-66	210	32	8	40	120	0.21
RWEB	[10]	0	210	35	8	44	120	0.13
	[11]	112	210	26	8	35	120	0.37
RWEB	[12]	-69	210	34	8	42	120	0.23
	[13]	0	210	37	8	46	120	0.14
	[14]	112	210	28	8	37	120	0.38

LFLG	[15]	113	210	0	0	0	120	0.29
	[16]	113	210	17	6	23	120	0.32
	[17]	113	210	18	6	24	120	0.33
	[18]	113	210	0	0	0	120	0.29
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	6	0	6	120	0.00
DECK-C	[3]	0	210	6	0	6	120	0.00
	[4]	0	210	15	6	21	120	0.03
	[5]	0	210	15	6	15	120	0.02
DECK-R	[6]	0	210	14	0	14	120	0.01
	[7]	0	210	14	0	14	120	0.01
	[8]	0	210	0	0	0	120	0.00
LWEB	[9]	0	210	32	8	40	120	0.11
	[10]	0	210	35	8	44	120	0.13
	[11]	-1	210	26	8	35	120	0.08
RWEB	[12]	0	210	34	8	42	120	0.12
	[13]	0	210	37	8	46	120	0.14
	[14]	-1	210	28	8	37	120	0.09
LFLG	[15]	-1	210	0	0	0	120	0.00
	[16]	-1	117	17	6	23	120	0.04
	[17]	-1	117	18	6	24	120	0.04
	[18]	-1	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-33:Left (Girder number= 2 Section number= 33)

Section force Mx-Max Mx = 22410 kN·m Sy = -2046 kN T = -1384 kN·m
 Mx-Min Mx = -140 kN·m Sy = -2046 kN T = -1384 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
	LFLG Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 16 (SM490Y)	470.4	470.4
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2421.6	2421.6
Gravity center	ex (cm)	20.9	20.9
	ey (cm)	172.9	172.9
Moment of inertia	Ix (cm4)	34638480	34638480
	Iy (cm4)	42299044	42299044
Torsion Constant	J (cm4)	26981324	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	64892.8 kN·m	64892.8 kN·m	
Mxr(lower)=	41683.8 kN·m		23251.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-66	210	0	0	0	120	0.10
	[2]	-67	210	6	0	6	120	0.10
	DECK-C [3]	-67	210	6	0	6	120	0.10
	[4]	-67	210	15	6	21	120	0.13
	[5]	-70	210	15	6	15	120	0.13
	[6]	-71	210	14	0	14	120	0.13
	DECK-R [7]	-71	210	14	0	14	120	0.13
	[8]	-73	210	0	0	0	120	0.12
	LWEB [9]	-66	210	32	8	40	120	0.21
	[10]	0	210	35	8	44	120	0.13
	[11]	112	210	26	8	35	120	0.37
	RWEB [12]	-69	210	34	8	42	120	0.23
	[13]	0	210	37	8	46	120	0.14
	[14]	112	210	28	8	37	120	0.38

LFLG	[15]	113	210	0	0	0	120	0.29
	[16]	113	210	17	6	23	120	0.32
	[17]	113	210	18	6	24	120	0.33
	[18]	113	210	0	0	0	120	0.29
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	6	0	6	120	0.00
DECK-C	[3]	0	210	6	0	6	120	0.00
	[4]	0	210	15	6	21	120	0.03
	[5]	0	210	15	6	15	120	0.02
DECK-R	[6]	0	210	14	0	14	120	0.01
	[7]	0	210	14	0	14	120	0.01
	[8]	0	210	0	0	0	120	0.00
LWEB	[9]	0	210	32	8	40	120	0.11
	[10]	0	210	35	8	44	120	0.13
	[11]	-1	210	26	8	35	120	0.08
RWEB	[12]	0	210	34	8	42	120	0.12
	[13]	0	210	37	8	46	120	0.14
	[14]	-1	210	28	8	37	120	0.09
LFLG	[15]	-1	210	0	0	0	120	0.00
	[16]	-1	117	17	6	23	120	0.04
	[17]	-1	117	18	6	24	120	0.04
	[18]	-1	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-33:J-33 (Girder number= 2 Section number= 33)

Section force Mx-Max Mx = 4408 kN·m Sy = -2703 kN T = -1634 kN·m
Mx-Min Mx = -15462 kN·m Sy = -2703 kN T = -1634 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 16 (SM490Y)	470.4	470.3
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2421.6	2379.5
Gravity center	ex (cm)	20.9	21.3
	ey (cm)	172.9	175.7
Moment of inertia	Ix (cm4)	34638480	33516689
	Iy (cm4)	42299044	42272867
Torsion Constant	J (cm4)	26981324	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	64425.6 kN·m	64425.6 kN·m
Mxr(lower)=	39687.4 kN·m	22137.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	7	0	7	120	0.01
DECK-C	[3]	-13	210	7	0	7	120	0.01
	[4]	-13	210	20	7	27	120	0.06
	[5]	-14	210	20	7	20	120	0.03
DECK-R	[6]	-14	210	18	0	18	120	0.03
	[7]	-14	210	18	0	18	120	0.03
LWEB	[8]	-14	210	0	0	0	120	0.00
	[9]	-13	210	42	10	52	120	0.19
RWEB	[10]	0	210	46	10	56	120	0.22
	[11]	23	210	35	10	45	120	0.15
	[12]	-14	210	45	10	55	120	0.21
	[13]	0	210	49	10	59	120	0.24
	[14]	23	210	38	10	47	120	0.17

LFLG	[15]	23	210	0	0	0	120	0.01
	[16]	23	210	22	7	29	120	0.07
	[17]	23	210	24	7	31	120	0.08
	[18]	23	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	46	210	0	0	0	120	0.05
	[2]	46	210	7	0	7	120	0.05
DECK-C	[3]	46	210	7	0	7	120	0.05
	[4]	46	210	20	7	27	120	0.10
	[5]	49	210	20	7	20	120	0.08
DECK-R	[6]	49	210	18	0	18	120	0.08
	[7]	49	210	18	0	18	120	0.08
	[8]	50	210	0	0	0	120	0.06
LWEB	[9]	46	210	42	10	52	120	0.24
	[10]	-1	210	46	10	56	120	0.22
RWEB	[11]	-81	210	35	10	45	120	0.29
	[12]	48	210	45	10	55	120	0.26
	[13]	-1	210	49	10	59	120	0.24
LFLG	[14]	-81	210	38	10	47	120	0.31
	[15]	-82	210	0	0	0	120	0.15
	[16]	-82	117	22	7	29	120	0.21
	[17]	-82	117	24	7	31	120	0.22
	[18]	-82	210	0	0	0	120	0.15

Girder Name : G-2 Section Name : Sec-34:Left (Girder number= 2 Section number= 34)

Section force Mx-Max Mx = 4408 kN·m Sy = -2703 kN T = -1634 kN·m
Mx-Min Mx = -15462 kN·m Sy = -2703 kN T = -1634 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 22 (SM490Y)	646.8	646.7
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2555.9
Gravity center	ex (cm)	19.5	19.8
	ey (cm)	161.0	163.5
Moment of inertia	Ix (cm4)	39662788	38698510
	Iy (cm4)	43641629	43617833
Torsion Constant	J (cm4)	28602995	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66881.6 kN·m	66881.6 kN·m
Mxr(lower)=	49047.4 kN·m	39719.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	7	0	7	120	0.01
DECK-C	[3]	-13	210	7	0	7	120	0.01
	[4]	-13	210	20	7	27	120	0.05
	[5]	-13	210	19	7	19	120	0.03
DECK-R	[6]	-14	210	18	0	18	120	0.03
	[7]	-14	210	18	0	18	120	0.03
LWEB	[8]	-14	210	0	0	0	120	0.00
	[9]	-13	210	41	10	51	120	0.19
RWEB	[10]	0	210	46	10	56	120	0.21
	[11]	19	210	37	10	47	120	0.16
	[12]	-13	210	44	10	54	120	0.20
	[13]	0	210	49	10	58	120	0.24
	[14]	19	210	40	10	50	120	0.18

LFLG	[15]	19	210	0	0	0	120	0.01
	[16]	19	210	17	5	22	120	0.04
	[17]	19	210	19	5	23	120	0.05
	[18]	19	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	44	210	0	0	0	120	0.04
	[2]	45	210	7	0	7	120	0.05
DECK-C	[3]	45	210	7	0	7	120	0.05
	[4]	45	210	20	7	27	120	0.10
	[5]	47	210	19	7	19	120	0.08
	[6]	47	210	18	0	18	120	0.07
DECK-R	[7]	47	210	18	0	18	120	0.07
	[8]	49	210	0	0	0	120	0.05
LWEB	[9]	44	210	41	10	51	120	0.23
	[10]	-1	210	46	10	56	120	0.21
	[11]	-65	210	37	10	47	120	0.25
RWEB	[12]	47	210	44	10	54	120	0.25
	[13]	-1	210	49	10	58	120	0.24
	[14]	-65	210	40	10	50	120	0.27
LFLG	[15]	-66	210	0	0	0	120	0.10
	[16]	-66	170	17	5	22	120	0.13
	[17]	-66	170	19	5	23	120	0.14
	[18]	-66	210	0	0	0	120	0.10

Girder Name : G-2 Section Name : Sec-34:J-34 (Girder number= 2 Section number= 34)

Section force Mx = -35572 kN·m Sy = -3242 kN T = -2032 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 22 (SM490Y)	646.8	638.7
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2536.6
Gravity center	ex (cm)	19.5	19.3
	ey (cm)	161.0	163.5
Moment of inertia	Ix (cm4)	39662788	38326114
	Iy (cm4)	43641629	43175228
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66268.5 kN·m	66268.5 kN·m
	Mxr(lower)=	48579.7 kN·m	39341.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	103	210	0	0	0	120	0.24
	[2]	104	210	9	0	9	120	0.25
DECK-C	[3]	104	210	9	0	9	120	0.25
	[4]	105	210	24	8	32	120	0.32
	[5]	110	210	23	8	23	120	0.31
DECK-R	[6]	110	210	21	0	21	120	0.31
	[7]	110	210	21	0	21	120	0.31
	[8]	113	210	0	0	0	120	0.29
LWEB	[9]	103	210	50	12	62	120	0.51
	[10]	-2	210	55	12	67	120	0.31
	[11]	-152	210	44	12	56	120	0.74
RWEB	[12]	108	210	52	12	65	120	0.56
	[13]	-2	210	58	12	70	120	0.35
	[14]	-152	210	48	12	60	120	0.77
LFLG	[15]	-154	210	0	0	0	120	0.54
	[16]	-154	170	21	6	27	120	0.59
	[17]	-154	170	22	6	28	120	0.59
	[18]	-154	210	0	0	0	120	0.54

Girder Name : G-2 Section Name : Sec-35:J-35 (Girder number= 2 Section number= 35)

Section force Mx = -64490 kN·m Sy = -3801 kN T = -2350 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	656.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	307.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 11 (SM570)	301.5	301.5
1-RWEB PL	2795 * 11 (SM570)	307.4	307.4
1-LFLG PL	2940 * 30 (SM570)	882.0	859.3
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3309.6	3212.2
Gravity center	ex (cm)	19.2	18.3
	ey (cm)	152.7	154.3
Moment of inertia	Ix (cm4)	53681040	51751798
	Iy (cm4)	53494679	52211203
Torsion Constant	J (cm4)	31816126	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	83245.1 kN·m	83245.1 kN·m
	Mxr(lower)=	83895.5 kN·m	83895.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	150	210	0	0	0	120	0.51
	[2]	152	210	7	0	8	120	0.52
DECK-C	[3]	152	210	7	0	8	120	0.52
	[4]	152	210	20	7	27	120	0.58
	[5]	159	210	19	7	20	120	0.60
DECK-R	[6]	159	210	18	0	18	120	0.60
	[7]	159	210	18	0	18	120	0.60
LWEB	[8]	163	210	1	0	1	120	0.60
	[9]	149	255	59	14	73	145	0.59
RWEB	[10]	-2	255	64	14	78	145	0.29
	[11]	-192	255	56	14	70	145	0.80
	[12]	156	255	61	14	75	145	0.64
LFLG	[13]	-2	255	67	14	81	145	0.31
	[14]	-192	255	59	14	73	145	0.82
	[15]	-196	255	0	0	0	145	0.59
	[16]	-196	255	19	5	24	145	0.62
	[17]	-196	255	20	5	25	145	0.62
	[18]	-196	255	0	0	0	145	0.59

Girder Name : G-2 Section Name : Sec-36:Mx-Min_L (Girder number= 2 Section number= 36)

Section force Mx = -74314 kN·m Sy = -3977 kN T = -2350 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
LFLG	Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	654.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	304.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 11 (SM570)	301.5	301.5
1-RWEB PL	2795 * 11 (SM570)	307.4	307.4
1-LFLG PL	2940 * 30 (SM570)	882.0	855.8
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3309.6	3203.6
Gravity center	ex (cm)	19.2	18.1
	ey (cm)	152.7	154.3
Moment of inertia	Ix (cm4)	53681040	51584165
	Iy (cm4)	53494679	52020916
Torsion Constant	J (cm4)	31816126	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	82971.3 kN·m	82971.3 kN·m
	Mxr(lower)=	83639.4 kN·m	83639.4 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	173	210	0	0	0	120	0.68
	[2]	175	210	8	0	8	120	0.70
DECK-C	[3]	175	210	8	0	8	120	0.70
	[4]	176	210	21	7	28	120	0.76
	[5]	184	210	20	7	21	120	0.79
DECK-R	[6]	184	210	19	0	19	120	0.79
	[7]	184	210	19	0	19	120	0.79
LWEB	[8]	188	210	1	0	1	120	0.80
	[9]	173	255	61	14	76	145	0.73
RWEB	[10]	-2	255	67	14	81	145	0.31
	[11]	-222	255	58	14	72	145	1.01
	[12]	180	255	64	14	78	145	0.79
	[13]	-2	255	70	14	84	145	0.34
	[14]	-222	255	61	14	75	145	1.03

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	20	5	25	145	0.82
	[17]	-227	255	21	5	26	145	0.82
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-2 Section Name : Sec-36:Mx-Min_R (Girder number= 2 Section number= 36)

Section force Mx = -74314 kN·m Sy = 3750 kN T = -2432 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
	LFLG Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	654.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	304.7
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 11 (SM570)	301.5	301.5
1-RWEB PL	2795 * 11 (SM570)	307.4	307.4
1-LFLG PL	2940 * 30 (SM570)	882.0	855.8
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3309.6	3203.6
Gravity center	ex (cm)	19.2	18.1
	ey (cm)	152.7	154.3
Moment of inertia	Ix (cm4)	53681040	51584165
	Iy (cm4)	53494679	52020916
Torsion Constant	J (cm4)	31816126	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	82971.3 kN·m	82971.3 kN·m	82971.3 kN·m
Mxr(lower)=	83639.4 kN·m	83639.4 kN·m	83639.4 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
	DECK-L [1]	173	210	0	0	0	120	0.68
	[2]	175	210	7	0	7	120	0.70
	DECK-C [3]	175	210	7	0	7	120	0.70
	[4]	176	210	20	7	27	120	0.75
	[5]	184	210	19	7	19	120	0.79
	[6]	184	210	18	0	18	120	0.79
	DECK-R [7]	184	210	18	0	18	120	0.79
	[8]	188	210	1	0	1	120	0.80
	LWEB [9]	173	255	58	15	73	145	0.71
	[10]	-2	255	63	15	78	145	0.29
	[11]	-222	255	55	15	70	145	0.99
	RWEB [12]	180	255	60	15	75	145	0.77
	[13]	-2	255	66	15	81	145	0.31
	[14]	-222	255	58	15	72	145	1.01

LFLG	[15]	-227	255	0	0	0	145	0.79
	[16]	-227	255	19	5	24	145	0.82
	[17]	-227	255	20	5	25	145	0.82
	[18]	-227	255	0	0	0	145	0.79

Girder Name : G-2 Section Name : Sec-37:J-36 (Girder number= 2 Section number= 37)

Section force Mx = -64791 kN·m Sy = 3572 kN T = -2432 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 22 (SM490Y)	141.9	141.9
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 22 (SM490Y)	673.3	656.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 22 (SM490Y)	323.5	307.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2741 * 11 (SM570)	301.5	301.5
1-RWEB PL	2795 * 11 (SM570)	307.4	307.4
1-LFLG PL	2940 * 30 (SM570)	882.0	859.3
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3309.6	3212.2
Gravity center	ex (cm)	19.2	18.3
	ey (cm)	152.7	154.3
Moment of inertia	Ix (cm4)	53681040	51751798
	Iy (cm4)	53494679	52211203
Torsion Constant	J (cm4)	31816126	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	83245.1 kN·m	83245.1 kN·m
	Mxr(lower)=	83895.5 kN·m	83895.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	151	210	0	0	0	120	0.51
	[2]	152	210	7	0	7	120	0.53
DECK-C	[3]	152	210	7	0	7	120	0.53
	[4]	153	210	19	7	26	120	0.58
	[5]	160	210	18	7	18	120	0.60
DECK-R	[6]	160	210	17	0	17	120	0.60
	[7]	160	210	17	0	17	120	0.60
LWEB	[8]	163	210	1	0	1	120	0.61
	[9]	150	255	55	15	70	145	0.58
RWEB	[10]	-2	255	60	15	75	145	0.27
	[11]	-193	255	52	15	67	145	0.79
	[12]	157	255	57	15	72	145	0.63
LFLG	[13]	-2	255	63	15	77	145	0.29
	[14]	-193	255	55	15	70	145	0.80
	[15]	-197	255	0	0	0	145	0.60
	[16]	-197	255	18	5	23	145	0.62
	[17]	-197	255	19	5	24	145	0.62
	[18]	-197	255	0	0	0	145	0.60

Girder Name : G-2 Section Name : Sec-38:J-37 (Girder number= 2 Section number= 38)

Section force Mx = -36758 kN·m Sy = 3067 kN T = -2233 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 23 (SM490Y)	676.2	667.8
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2627.4	2565.6
Gravity center	ex (cm)	19.3	19.1
	ey (cm)	159.2	161.6
Moment of inertia	Ix (cm4)	40437900	39114509
	Iy (cm4)	43864454	43397689
Torsion Constant	J (cm4)	28806377	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66603.2 kN·m	66603.2 kN·m
	Mxr(lower)=	50116.1 kN·m	42049.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	106	210	0	0	0	120	0.26
	[2]	107	210	8	0	8	120	0.27
DECK-C	[3]	107	210	8	0	8	120	0.27
	[4]	108	210	22	9	32	120	0.33
	[5]	113	210	21	9	22	120	0.32
DECK-R	[6]	113	210	20	0	20	120	0.32
	[7]	113	210	20	0	20	120	0.32
	[8]	116	210	0	0	0	120	0.30
LWEB	[9]	106	210	47	13	60	120	0.51
	[10]	-2	210	52	13	65	120	0.30
RWEB	[11]	-152	210	42	13	56	120	0.74
	[12]	111	210	49	13	63	120	0.56
	[13]	-2	210	55	13	68	120	0.33
LFLG	[14]	-152	210	45	13	59	120	0.76
	[15]	-154	210	0	0	0	120	0.54
	[16]	-154	176	19	6	25	120	0.58
	[17]	-154	176	20	6	27	120	0.59
	[18]	-154	210	0	0	0	120	0.54

Girder Name : G-2 Section Name : Sec-38:Right (Girder number= 2 Section number= 38)

Section force Mx-Max Mx = 3519 kN·m Sy = 2616 kN T = -1944 kN·m
Mx-Min Mx = -16139 kN·m Sy = 2616 kN T = -1944 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 23 (SM490Y)	676.2	676.1
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2627.4	2585.3
Gravity center	ex (cm)	19.3	19.6
	ey (cm)	159.2	161.6
Moment of inertia	Ix (cm4)	40437900	39496778
	Iy (cm4)	43864454	43841007
Torsion Constant	J (cm4)	28806377	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	67218.8 kN·m	67218.8 kN·m
Mxr(lower)=	50604.2 kN·m	42459.3 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-10	210	0	0	0	120	0.00
	[2]	-10	210	7	0	7	120	0.01
DECK-C	[3]	-10	210	7	0	7	120	0.01
	[4]	-10	210	19	8	27	120	0.05
	[5]	-11	210	18	8	19	120	0.03
DECK-R	[6]	-11	210	17	0	17	120	0.02
	[7]	-11	210	17	0	17	120	0.02
LWEB	[8]	-11	210	0	0	0	120	0.00
	[9]	-10	210	40	12	52	120	0.19
RWEB	[10]	0	210	44	12	56	120	0.22
	[11]	14	210	36	12	48	120	0.16
RWEB	[12]	-11	210	42	12	54	120	0.20
	[13]	0	210	47	12	59	120	0.24
	[14]	14	210	39	12	50	120	0.18

	LFLG	[15]	15	210	0	0	0	120	0.00
		[16]	15	210	16	6	22	120	0.04
		[17]	15	210	17	6	23	120	0.04
		[18]	15	210	0	0	0	120	0.00
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	46	210	0	0	0	120	0.05
		[2]	47	210	7	0	7	120	0.05
	DECK-C	[3]	47	210	7	0	7	120	0.05
		[4]	47	210	19	8	27	120	0.10
		[5]	49	210	18	8	19	120	0.08
		[6]	49	210	17	0	17	120	0.08
	DECK-R	[7]	49	210	17	0	17	120	0.08
		[8]	50	210	0	0	0	120	0.06
	LWEB	[9]	46	210	40	12	52	120	0.23
		[10]	-1	210	44	12	56	120	0.22
		[11]	-66	210	36	12	48	120	0.26
	RWEB	[12]	48	210	42	12	54	120	0.25
		[13]	-1	210	47	12	59	120	0.24
		[14]	-66	210	39	12	50	120	0.28
	LFLG	[15]	-67	210	0	0	0	120	0.10
		[16]	-67	176	16	6	22	120	0.13
		[17]	-67	176	17	6	23	120	0.14
		[18]	-67	210	0	0	0	120	0.10

Girder Name : G-2 Section Name : Sec-39:J-38 (Girder number= 2 Section number= 39)

Section force Mx-Max Mx = 3519 kN·m Sy = 2616 kN T = -1944 kN·m
Mx-Min Mx = -16139 kN·m Sy = 2616 kN T = -1944 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	440.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2350.1
Gravity center	ex (cm)	21.2	21.5
	ey (cm)	175.1	178.0
Moment of inertia	Ix (cm4)	33732695	32581137
	Iy (cm4)	42074248	42047621
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63924.8 kN·m	63924.8 kN·m
	Mxr(lower)=	38124.4 kN·m	18917.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-10	210	0	0	0	120	0.00
	[2]	-11	210	7	0	7	120	0.01
DECK-C	[3]	-11	210	7	0	7	120	0.01
	[4]	-11	210	20	8	28	120	0.06
	[5]	-11	210	19	8	19	120	0.03
DECK-R	[6]	-11	210	18	0	18	120	0.02
	[7]	-11	210	18	0	18	120	0.02
LWEB	[8]	-12	210	0	0	0	120	0.00
	[9]	-10	210	41	12	53	120	0.20
RWEB	[10]	0	210	45	12	57	120	0.22
	[11]	19	210	33	12	45	120	0.15
RWEB	[12]	-11	210	44	12	55	120	0.21
	[13]	0	210	48	12	60	120	0.25
	[14]	19	210	36	12	48	120	0.17

LFLG	[15]	19	210	0	0	0	120	0.01
	[16]	19	210	23	9	31	120	0.08
	[17]	19	210	25	9	33	120	0.09
	[18]	19	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	48	210	0	0	0	120	0.05
	[2]	49	210	7	0	7	120	0.06
DECK-C	[3]	49	210	7	0	7	120	0.06
	[4]	49	210	20	8	28	120	0.11
	[5]	51	210	19	8	19	120	0.09
DECK-R	[6]	52	210	18	0	18	120	0.08
	[7]	52	210	18	0	18	120	0.08
	[8]	53	210	0	0	0	120	0.06
LWEB	[9]	48	210	41	12	53	120	0.25
	[10]	-1	210	45	12	57	120	0.22
RWEB	[11]	-88	210	33	12	45	120	0.32
	[12]	51	210	44	12	55	120	0.27
	[13]	-1	210	48	12	60	120	0.25
LFLG	[14]	-88	210	36	12	48	120	0.33
	[15]	-89	210	0	0	0	120	0.18
	[16]	-89	104	23	9	31	120	0.25
	[17]	-89	104	25	9	33	120	0.26
	[18]	-89	210	0	0	0	120	0.18

Girder Name : G-2 Section Name : Sec-39:J-39 (Girder number= 2 Section number= 39)

Section force Mx-Max Mx = 21335 kN·m Sy = 1934 kN T = -1515 kN·m
 Mx-Min Mx = -1164 kN·m Sy = 1934 kN T = -1515 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-63	210	0	0	0	120	0.09
	[2]	-64	210	5	0	5	120	0.09
DECK-C	[3]	-64	210	5	0	5	120	0.09
	[4]	-64	210	15	6	21	120	0.12
	[5]	-67	210	14	6	14	120	0.12
DECK-R	[6]	-68	210	13	0	13	120	0.12
	[7]	-68	210	13	0	13	120	0.12
LWEB	[8]	-70	210	0	0	0	120	0.11
	[9]	-63	210	31	9	40	120	0.20
RWEB	[10]	0	210	33	9	42	120	0.13
	[11]	111	210	25	9	34	120	0.36
	[12]	-66	210	32	9	41	120	0.22
	[13]	0	210	35	9	44	120	0.14
	[14]	111	210	27	9	36	120	0.37

	LFLG	[15]	112	210	0	0	0	120	0.28
		[16]	112	210	17	7	24	120	0.32
		[17]	112	210	18	7	25	120	0.33
		[18]	112	210	0	0	0	120	0.28
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	3	210	0	0	0	120	0.00
		[2]	3	210	5	0	5	120	0.00
	DECK-C	[3]	3	210	5	0	5	120	0.00
		[4]	3	210	15	6	21	120	0.03
		[5]	4	210	14	6	14	120	0.01
		[6]	4	210	13	0	13	120	0.01
	DECK-R	[7]	4	210	13	0	13	120	0.01
		[8]	4	210	0	0	0	120	0.00
	LWEB	[9]	3	210	31	9	40	120	0.11
		[10]	0	210	33	9	42	120	0.13
		[11]	-6	210	25	9	34	120	0.08
	RWEB	[12]	4	210	32	9	41	120	0.12
		[13]	0	210	35	9	44	120	0.14
		[14]	-6	210	27	9	36	120	0.09
	LFLG	[15]	-6	210	0	0	0	120	0.00
		[16]	-6	104	17	7	24	120	0.04
		[17]	-6	104	18	7	25	120	0.04
		[18]	-6	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-40:Left (Girder number= 2 Section number= 40)

Section force Mx-Max Mx = 21335 kN·m Sy = 1934 kN T = -1515 kN·m
 Mx-Min Mx = -1164 kN·m Sy = 1934 kN T = -1515 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-63	210	0	0	0	120	0.09
	[2]	-64	210	5	0	5	120	0.09
DECK-C	[3]	-64	210	5	0	5	120	0.09
	[4]	-64	210	15	6	21	120	0.12
	[5]	-67	210	14	6	14	120	0.12
DECK-R	[6]	-68	210	13	0	13	120	0.12
	[7]	-68	210	13	0	13	120	0.12
LWEB	[8]	-70	210	0	0	0	120	0.11
	[9]	-63	210	31	9	40	120	0.20
RWEB	[10]	0	210	33	9	42	120	0.13
	[11]	111	210	25	9	34	120	0.36
	[12]	-66	210	32	9	41	120	0.22
	[13]	0	210	35	9	44	120	0.14
	[14]	111	210	27	9	36	120	0.37

	LFLG	[15]	112	210	0	0	0	120	0.28
		[16]	112	210	17	7	24	120	0.32
		[17]	112	210	18	7	25	120	0.33
		[18]	112	210	0	0	0	120	0.28
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	3	210	0	0	0	120	0.00
		[2]	3	210	5	0	5	120	0.00
	DECK-C	[3]	3	210	5	0	5	120	0.00
		[4]	3	210	15	6	21	120	0.03
		[5]	4	210	14	6	14	120	0.01
		[6]	4	210	13	0	13	120	0.01
	DECK-R	[7]	4	210	13	0	13	120	0.01
		[8]	4	210	0	0	0	120	0.00
	LWEB	[9]	3	210	31	9	40	120	0.11
		[10]	0	210	33	9	42	120	0.13
		[11]	-6	210	25	9	34	120	0.08
	RWEB	[12]	4	210	32	9	41	120	0.12
		[13]	0	210	35	9	44	120	0.14
		[14]	-6	210	27	9	36	120	0.09
	LFLG	[15]	-6	210	0	0	0	120	0.00
		[16]	-6	104	17	7	24	120	0.04
		[17]	-6	104	18	7	25	120	0.04
		[18]	-6	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-40:J-40 (Girder number= 2 Section number= 40)

Section force Mx = 32981 kN·m Sy = 1220 kN T = -1179 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-97	210	0	0	0	120	0.22
	[2]	-99	210	3	0	3	120	0.22
DECK-C	[3]	-99	210	3	0	3	120	0.22
	[4]	-99	210	9	5	14	120	0.24
	[5]	-104	210	9	5	10	120	0.25
DECK-R	[6]	-105	210	8	0	8	120	0.25
	[7]	-105	210	8	0	8	120	0.25
	[8]	-108	210	0	0	0	120	0.26
LWEB	[9]	-97	210	19	7	26	120	0.26
	[10]	0	210	21	7	28	120	0.06
RWEB	[11]	171	210	15	7	23	120	0.70
	[12]	-103	210	20	7	27	120	0.29
	[13]	0	210	22	7	29	120	0.06
LFLG	[14]	171	210	17	7	24	120	0.70
	[15]	173	210	0	0	0	120	0.68
	[16]	173	210	11	5	16	120	0.69
	[17]	173	210	12	5	17	120	0.70
	[18]	173	210	0	0	0	120	0.68

Girder Name : G-2 Section Name : Sec-41:J-41 (Girder number= 2 Section number= 41)

Section force Mx = 38055 kN·m Sy = 649 kN T = -1100 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-110	210	0	0	0	120	0.28
	[2]	-112	210	2	0	2	120	0.28
DECK-C	[3]	-112	210	2	0	2	120	0.28
	[4]	-112	210	5	5	9	120	0.29
	[5]	-117	210	5	5	7	120	0.32
DECK-R	[6]	-118	210	4	0	4	120	0.32
	[7]	-118	210	4	0	4	120	0.32
LWEB	[8]	-121	210	0	0	0	120	0.33
	[9]	-110	210	10	7	17	120	0.30
	[10]	0	210	11	7	18	120	0.02
RWEB	[11]	170	210	9	7	15	120	0.67
	[12]	-116	210	11	7	17	120	0.32
	[13]	0	210	12	7	18	120	0.02
LFLG	[14]	170	210	9	7	16	120	0.68
	[15]	172	210	0	0	0	120	0.67
	[16]	172	210	5	4	8	120	0.68
	[17]	172	210	5	4	9	120	0.68
	[18]	172	210	0	0	0	120	0.67

Girder Name : G-2 Section Name : Sec-42:Mx-Max (Girder number= 2 Section number= 42)

Section force Mx = 38463 kN·m Sy = -467 kN T = -1100 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-111	210	0	0	0	120	0.28
	[2]	-113	210	1	0	1	120	0.29
DECK-C	[3]	-113	210	1	0	1	120	0.29
	[4]	-113	210	3	5	8	120	0.29
	[5]	-119	210	3	5	6	120	0.32
DECK-R	[6]	-119	210	3	0	3	120	0.32
	[7]	-119	210	3	0	3	120	0.32
LWEB	[8]	-122	210	0	0	0	120	0.34
	[9]	-111	210	7	7	14	120	0.30
	[10]	0	210	8	7	15	120	0.01
RWEB	[11]	172	210	6	7	13	120	0.68
	[12]	-117	210	8	7	14	120	0.32
	[13]	0	210	8	7	15	120	0.02
LFLG	[14]	172	210	7	7	13	120	0.69
	[15]	174	210	0	0	0	120	0.69
	[16]	174	210	3	4	7	120	0.69
	[17]	174	210	4	4	7	120	0.69
	[18]	174	210	0	0	0	120	0.69

Girder Name : G-2 Section Name : Sec-43:J-42 (Girder number= 2 Section number= 43)

Section force Mx = 38041 kN·m Sy = -670 kN T = -1108 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-110	210	0	0	0	120	0.28
	[2]	-112	210	2	0	2	120	0.28
DECK-C	[3]	-112	210	2	0	2	120	0.28
	[4]	-112	210	5	5	10	120	0.29
	[5]	-117	210	5	5	7	120	0.32
DECK-R	[6]	-118	210	4	0	4	120	0.32
	[7]	-118	210	4	0	4	120	0.32
LWEB	[8]	-121	210	0	0	0	120	0.33
	[9]	-110	210	10	7	17	120	0.30
	[10]	0	210	11	7	18	120	0.02
RWEB	[11]	170	210	9	7	16	120	0.68
	[12]	-116	210	11	7	18	120	0.33
	[13]	0	210	12	7	19	120	0.02
LFLG	[14]	170	210	10	7	16	120	0.68
	[15]	172	210	0	0	0	120	0.67
	[16]	172	210	5	4	9	120	0.68
	[17]	172	210	5	4	9	120	0.68
	[18]	172	210	0	0	0	120	0.67

Girder Name : G-2 Section Name : Sec-44:J-43 (Girder number= 2 Section number= 44)

Section force Mx = 32840 kN·m Sy = -1257 kN T = -1219 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-97	210	0	0	0	120	0.21
	[2]	-98	210	3	0	4	120	0.22
DECK-C	[3]	-98	210	3	0	4	120	0.22
	[4]	-99	210	10	5	15	120	0.24
	[5]	-104	210	9	5	10	120	0.25
DECK-R	[6]	-104	210	8	0	9	120	0.25
	[7]	-104	210	8	0	9	120	0.25
LWEB	[8]	-107	210	0	0	0	120	0.26
	[9]	-97	210	20	7	27	120	0.26
RWEB	[10]	0	210	22	7	29	120	0.06
	[11]	170	210	16	7	23	120	0.70
	[12]	-102	210	21	7	28	120	0.29
LFLG	[13]	0	210	23	7	30	120	0.06
	[14]	170	210	17	7	25	120	0.70
	[15]	172	210	0	0	0	120	0.67
	[16]	172	210	11	5	16	120	0.69
	[17]	172	210	12	5	17	120	0.69
	[18]	172	210	0	0	0	120	0.67

Girder Name : G-2 Section Name : Sec-44:J-44 (Girder number= 2 Section number= 44)

Section force Mx-Max Mx = 21314 kN·m Sy = -1914 kN T = -1382 kN·m
 Mx-Min Mx = -403 kN·m Sy = -1914 kN T = -1382 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
	LFLG Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m	
Mxr(lower)=	40123.8 kN·m		19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-63	210	0	0	0	120	0.09
	[2]	-64	210	5	0	5	120	0.09
	DECK-C [3]	-64	210	5	0	5	120	0.09
	[4]	-64	210	14	6	20	120	0.12
	[5]	-67	210	14	6	14	120	0.12
	[6]	-68	210	13	0	13	120	0.12
	DECK-R [7]	-68	210	13	0	13	120	0.12
	[8]	-69	210	0	0	0	120	0.11
	LWEB [9]	-63	210	30	8	39	120	0.19
	[10]	0	210	33	8	41	120	0.12
	[11]	111	210	24	8	33	120	0.35
	RWEB [12]	-66	210	32	8	40	120	0.21
	[13]	0	210	35	8	43	120	0.13
	[14]	111	210	26	8	35	120	0.36

LFLG	[15]	112	210	0	0	0	120	0.28
	[16]	112	210	17	6	23	120	0.32
	[17]	112	210	18	6	24	120	0.32
	[18]	112	210	0	0	0	120	0.28
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	1	210	0	0	0	120	0.00
	[2]	1	210	5	0	5	120	0.00
DECK-C	[3]	1	210	5	0	5	120	0.00
	[4]	1	210	14	6	20	120	0.03
	[5]	1	210	14	6	14	120	0.01
DECK-R	[6]	1	210	13	0	13	120	0.01
	[7]	1	210	13	0	13	120	0.01
	[8]	1	210	0	0	0	120	0.00
LWEB	[9]	1	210	30	8	39	120	0.10
	[10]	0	210	33	8	41	120	0.12
	[11]	-2	210	24	8	33	120	0.07
RWEB	[12]	1	210	32	8	40	120	0.11
	[13]	0	210	35	8	43	120	0.13
	[14]	-2	210	26	8	35	120	0.08
LFLG	[15]	-2	210	0	0	0	120	0.00
	[16]	-2	104	17	6	23	120	0.04
	[17]	-2	104	18	6	24	120	0.04
	[18]	-2	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-45:Left (Girder number= 2 Section number= 45)

Section force Mx-Max Mx = 21314 kN·m Sy = -1914 kN T = -1382 kN·m
Mx-Min Mx = -403 kN·m Sy = -1914 kN T = -1382 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-63	210	0	0	0	120	0.09
	[2]	-64	210	5	0	5	120	0.09
DECK-C	[3]	-64	210	5	0	5	120	0.09
	[4]	-64	210	14	6	20	120	0.12
	[5]	-67	210	14	6	14	120	0.12
DECK-R	[6]	-68	210	13	0	13	120	0.12
	[7]	-68	210	13	0	13	120	0.12
LWEB	[8]	-69	210	0	0	0	120	0.11
	[9]	-63	210	30	8	39	120	0.19
RWEB	[10]	0	210	33	8	41	120	0.12
	[11]	111	210	24	8	33	120	0.35
	[12]	-66	210	32	8	40	120	0.21
	[13]	0	210	35	8	43	120	0.13
	[14]	111	210	26	8	35	120	0.36

LFLG	[15]	112	210	0	0	0	120	0.28
	[16]	112	210	17	6	23	120	0.32
	[17]	112	210	18	6	24	120	0.32
	[18]	112	210	0	0	0	120	0.28
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	1	210	0	0	0	120	0.00
	[2]	1	210	5	0	5	120	0.00
DECK-C	[3]	1	210	5	0	5	120	0.00
	[4]	1	210	14	6	20	120	0.03
	[5]	1	210	14	6	14	120	0.01
DECK-R	[6]	1	210	13	0	13	120	0.01
	[7]	1	210	13	0	13	120	0.01
LWEB	[8]	1	210	0	0	0	120	0.00
	[9]	1	210	30	8	39	120	0.10
	[10]	0	210	33	8	41	120	0.12
RWEB	[11]	-2	210	24	8	33	120	0.07
	[12]	1	210	32	8	40	120	0.11
	[13]	0	210	35	8	43	120	0.13
LFLG	[14]	-2	210	26	8	35	120	0.08
	[15]	-2	210	0	0	0	120	0.00
	[16]	-2	104	17	6	23	120	0.04
	[17]	-2	104	18	6	24	120	0.04
	[18]	-2	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-45:J-45 (Girder number= 2 Section number= 45)

Section force Mx-Max Mx = 4391 kN·m Sy = -2612 kN T = -1628 kN·m
Mx-Min Mx = -14772 kN·m Sy = -2612 kN T = -1628 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	440.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2350.1
Gravity center	ex (cm)	21.2	21.5
	ey (cm)	175.1	178.0
Moment of inertia	Ix (cm4)	33732695	32581137
	Iy (cm4)	42074248	42047621
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63924.8 kN·m	63924.8 kN·m
	Mxr(lower)=	38124.4 kN·m	18917.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	7	0	7	120	0.01
DECK-C	[3]	-13	210	7	0	7	120	0.01
	[4]	-13	210	20	7	27	120	0.05
	[5]	-14	210	19	7	19	120	0.03
DECK-R	[6]	-14	210	18	0	18	120	0.03
	[7]	-14	210	18	0	18	120	0.03
LWEB	[8]	-14	210	0	0	0	120	0.00
	[9]	-13	210	41	10	51	120	0.18
RWEB	[10]	0	210	45	10	55	120	0.21
	[11]	24	210	33	10	43	120	0.14
RWEB	[12]	-14	210	43	10	53	120	0.20
	[13]	0	210	48	10	58	120	0.23
	[14]	24	210	36	10	46	120	0.16

LFLG	[15]	24	210	0	0	0	120	0.01
	[16]	24	210	23	7	30	120	0.08
	[17]	24	210	25	7	32	120	0.08
	[18]	24	210	0	0	0	120	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	44	210	0	0	0	120	0.04
	[2]	44	210	7	0	7	120	0.05
DECK-C	[3]	44	210	7	0	7	120	0.05
	[4]	45	210	20	7	27	120	0.09
	[5]	47	210	19	7	19	120	0.08
DECK-R	[6]	47	210	18	0	18	120	0.07
	[7]	47	210	18	0	18	120	0.07
	[8]	49	210	0	0	0	120	0.05
LWEB	[9]	44	210	41	10	51	120	0.22
	[10]	-1	210	45	10	55	120	0.21
RWEB	[11]	-81	210	33	10	43	120	0.28
	[12]	46	210	43	10	53	120	0.25
	[13]	-1	210	48	10	58	120	0.23
LFLG	[14]	-81	210	36	10	46	120	0.29
	[15]	-81	210	0	0	0	120	0.15
	[16]	-81	104	23	7	30	120	0.21
	[17]	-81	104	25	7	32	120	0.22
	[18]	-81	210	0	0	0	120	0.15

Girder Name : G-2 Section Name : Sec-46:Left (Girder number= 2 Section number= 46)

Section force Mx-Max Mx = 4391 kN·m Sy = -2612 kN T = -1628 kN·m
Mx-Min Mx = -14772 kN·m Sy = -2612 kN T = -1628 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	587.9
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2497.1
Gravity center	ex (cm)	20.0	20.3
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	37048583
	Iy (cm4)	43195212	43170678
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66152.5 kN·m	66152.5 kN·m
	Mxr(lower)=	55773.4 kN·m	38040.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-13	210	0	0	0	120	0.00
	[2]	-13	210	7	0	7	120	0.01
DECK-C	[3]	-13	210	7	0	7	120	0.01
	[4]	-13	210	19	7	26	120	0.05
	[5]	-14	210	19	7	19	120	0.03
DECK-R	[6]	-14	210	17	0	17	120	0.02
	[7]	-14	210	17	0	17	120	0.02
LWEB	[8]	-14	210	0	0	0	120	0.00
	[9]	-13	255	40	10	50	145	0.12
RWEB	[10]	0	255	44	10	54	145	0.14
	[11]	20	255	35	10	45	145	0.10
	[12]	-13	255	43	10	52	145	0.13
	[13]	0	255	47	10	57	145	0.15
	[14]	20	255	38	10	48	145	0.11

LFLG	[15]	20	255	0	0	0	145	0.01
	[16]	20	255	18	5	23	145	0.03
	[17]	20	255	19	5	25	145	0.04
	[18]	20	255	0	0	0	145	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	43	210	0	0	0	120	0.04
	[2]	43	210	7	0	7	120	0.05
DECK-C	[3]	43	210	7	0	7	120	0.05
	[4]	43	210	19	7	26	120	0.09
	[5]	46	210	19	7	19	120	0.07
DECK-R	[6]	46	210	17	0	17	120	0.07
	[7]	46	210	17	0	17	120	0.07
	[8]	47	210	0	0	0	120	0.05
LWEB	[9]	43	255	40	10	50	145	0.15
	[10]	-1	255	44	10	54	145	0.14
	[11]	-67	255	35	10	45	145	0.16
RWEB	[12]	45	255	43	10	52	145	0.16
	[13]	-1	255	47	10	57	145	0.15
	[14]	-67	255	38	10	48	145	0.18
LFLG	[15]	-68	255	0	0	0	145	0.07
	[16]	-68	174	18	5	23	145	0.10
	[17]	-68	174	19	5	25	145	0.10
	[18]	-68	255	0	0	0	145	0.07

Girder Name : G-2 Section Name : Sec-46:J-46 (Girder number= 2 Section number= 46)

Section force Mx = -34283 kN·m Sy = -3172 kN T = -2011 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	580.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2478.5
Gravity center	ex (cm)	20.0	19.8
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	36696864
	Iy (cm4)	43195212	42729554
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65544.9 kN·m	65544.9 kN·m
	Mxr(lower)=	55255.0 kN·m	37687.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	100	210	0	0	0	120	0.23
	[2]	101	210	9	0	9	120	0.24
DECK-C	[3]	101	210	9	0	9	120	0.24
	[4]	102	210	23	8	32	120	0.30
	[5]	107	210	22	8	23	120	0.29
DECK-R	[6]	107	210	21	0	21	120	0.29
	[7]	107	210	21	0	21	120	0.29
LWEB	[8]	110	210	0	0	0	120	0.27
	[9]	100	255	49	12	61	145	0.33
RWEB	[10]	-2	255	54	12	66	145	0.21
	[11]	-156	255	43	12	55	145	0.52
	[12]	105	255	52	12	64	145	0.36
LFLG	[13]	-2	255	57	12	69	145	0.23
	[14]	-156	255	46	12	58	145	0.54
	[15]	-158	255	0	0	0	145	0.38
	[16]	-158	174	22	7	28	145	0.42
	[17]	-158	174	24	7	30	145	0.43
	[18]	-158	255	0	0	0	145	0.38

Girder Name : G-2 Section Name : Sec-47:J-47 (Girder number= 2 Section number= 47)

Section force Mx = -62382 kN·m Sy = -3682 kN T = -2339 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 21 (SM490Y)	642.7	626.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 21 (SM490Y)	308.8	293.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2742 * 11 (SM570)	301.6	301.6
1-RWEB PL	2796 * 11 (SM570)	307.6	307.6
1-LFLG PL	2940 * 29 (SM570)	852.6	830.7
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3228.7	3133.6
Gravity center	ex (cm)	19.0	18.1
	ey (cm)	152.1	153.8
Moment of inertia	Ix (cm4)	52170676	50289598
	Iy (cm4)	52095600	50868758
Torsion Constant	J (cm4)	31415405	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	80572.4 kN·m	80572.4 kN·m
	Mxr(lower)=	81847.6 kN·m	81847.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	150	210	0	0	0	120	0.51
	[2]	152	210	7	0	8	120	0.52
DECK-C	[3]	152	210	7	0	8	120	0.52
	[4]	152	210	21	7	28	120	0.58
	[5]	159	210	20	7	20	120	0.60
DECK-R	[6]	159	210	18	0	18	120	0.60
	[7]	159	210	18	0	18	120	0.60
	[8]	163	210	1	0	1	120	0.60
LWEB	[9]	149	255	57	14	71	145	0.58
	[10]	-2	255	62	14	76	145	0.27
	[11]	-191	255	54	14	68	145	0.78
RWEB	[12]	156	255	59	14	73	145	0.63
	[13]	-2	255	65	14	79	145	0.30
	[14]	-191	255	57	14	71	145	0.80
LFLG	[15]	-194	255	0	0	0	145	0.58
	[16]	-194	255	19	5	24	145	0.61
	[17]	-194	255	20	5	26	145	0.61
	[18]	-194	255	0	0	0	145	0.58

Girder Name : G-2 Section Name : Sec-48:Mx-Min_L (Girder number= 2 Section number= 48)

Section force Mx = -71828 kN·m Sy = -3859 kN T = -2339 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
	LFLG Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 21 (SM490Y)	642.7	624.4
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 21 (SM490Y)	308.8	290.8
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2742 * 11 (SM570)	301.6	301.6
1-RWEB PL	2796 * 11 (SM570)	307.6	307.6
1-LFLG PL	2940 * 31 (SM570)	911.4	884.3
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3287.5	3182.3
Gravity center	ex (cm)	18.7	17.6
	ey (cm)	149.3	150.9
Moment of inertia	Ix (cm4)	53560122	51505142
	Iy (cm4)	52539990	51128486
Torsion Constant	J (cm4)	31700512	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	80784.6 kN·m	80784.6 kN·m	
Mxr(lower)=	85261.6 kN·m	85261.6 kN·m	

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
	DECK-L [1]	173	210	0	0	0	120	0.67
	[2]	174	210	8	0	8	120	0.69
	DECK-C [3]	174	210	8	0	8	120	0.69
	[4]	175	210	22	7	29	120	0.75
	[5]	182	210	21	7	21	120	0.78
	[6]	183	210	19	0	19	120	0.78
	DECK-R [7]	183	210	19	0	19	120	0.78
	[8]	187	210	1	0	1	120	0.79
	LWEB [9]	172	255	59	14	73	145	0.71
	[10]	-2	255	65	14	79	145	0.30
	[11]	-210	255	57	14	71	145	0.92
	RWEB [12]	179	255	62	14	76	145	0.77
	[13]	-2	255	68	14	82	145	0.32
	[14]	-210	255	60	14	74	145	0.94

LFLG	[15]	-215	255	0	0	0	145	0.71
	[16]	-215	255	19	5	24	145	0.74
	[17]	-215	255	20	5	25	145	0.74
	[18]	-215	255	0	0	0	145	0.71

Girder Name : G-2 Section Name : Sec-48:Mx-Min_R (Girder number= 2 Section number= 48)

Section force Mx = -71828 kN·m Sy = 3803 kN T = -2470 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
LFLG	Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 21 (SM490Y)	642.7	624.4
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 21 (SM490Y)	308.8	290.8
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2742 * 11 (SM570)	301.6	301.6
1-RWEB PL	2796 * 11 (SM570)	307.6	307.6
1-LFLG PL	2940 * 31 (SM570)	911.4	884.3
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3287.5	3182.3
Gravity center	ex (cm)	18.7	17.6
	ey (cm)	149.3	150.9
Moment of inertia	Ix (cm4)	53560122	51505142
	Iy (cm4)	52539990	51128486
Torsion Constant	J (cm4)	31700512	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	80784.6 kN·m	80784.6 kN·m
	Mxr(lower)=	85261.6 kN·m	85261.6 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	173	210	0	0	0	120	0.67
	[2]	174	210	8	0	8	120	0.69
DECK-C	[3]	174	210	8	0	8	120	0.69
	[4]	175	210	21	8	29	120	0.75
	[5]	182	210	20	8	20	120	0.78
DECK-R	[6]	183	210	19	0	19	120	0.78
	[7]	183	210	19	0	19	120	0.78
LWEB	[8]	187	210	1	0	1	120	0.79
	[9]	172	255	58	15	73	145	0.71
RWEB	[10]	-2	255	64	15	79	145	0.29
	[11]	-210	255	56	15	71	145	0.92
	[12]	179	255	61	15	76	145	0.77
	[13]	-2	255	67	15	82	145	0.32
	[14]	-210	255	59	15	74	145	0.94

LFLG	[15]	-215	255	0	0	0	145	0.71
	[16]	-215	255	19	5	24	145	0.74
	[17]	-215	255	20	5	25	145	0.74
	[18]	-215	255	0	0	0	145	0.71

Girder Name : G-2 Section Name : Sec-49:J-48 (Girder number= 2 Section number= 49)

Section force Mx = -62109 kN·m Sy = 3625 kN T = -2470 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 21 (SM490Y)	135.5	135.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 21 (SM490Y)	642.7	626.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 21 (SM490Y)	308.8	293.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2742 * 11 (SM570)	301.6	301.6
1-RWEB PL	2796 * 11 (SM570)	307.6	307.6
1-LFLG PL	2940 * 28 (SM570)	823.2	802.0
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3199.3	3104.9
Gravity center	ex (cm)	19.2	18.3
	ey (cm)	153.5	155.2
Moment of inertia	Ix (cm4)	51458180	49580396
	Iy (cm4)	51873118	50647512
Torsion Constant	J (cm4)	31260806	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	80321.6 kN·m	80321.6 kN·m
	Mxr(lower)=	80006.5 kN·m	80006.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	150	210	0	0	0	120	0.51
	[2]	151	210	7	0	8	120	0.52
DECK-C	[3]	151	210	7	0	8	120	0.52
	[4]	152	210	20	8	28	120	0.58
	[5]	158	210	19	8	20	120	0.60
DECK-R	[6]	159	210	18	0	18	120	0.59
	[7]	159	210	18	0	18	120	0.59
LWEB	[8]	162	210	1	0	1	120	0.60
	[9]	149	255	56	15	71	145	0.58
RWEB	[10]	-2	255	61	15	76	145	0.27
	[11]	-194	255	53	15	68	145	0.80
	[12]	156	255	58	15	73	145	0.63
LFLG	[13]	-2	255	64	15	79	145	0.30
	[14]	-194	255	56	15	71	145	0.82
	[15]	-198	255	0	0	0	145	0.60
	[16]	-198	255	19	6	25	145	0.63
	[17]	-198	255	21	6	26	145	0.64
	[18]	-198	255	0	0	0	145	0.60

Girder Name : G-2 Section Name : Sec-50:J-49 (Girder number= 2 Section number= 50)

Section force Mx = -33638 kN·m Sy = 3063 kN T = -2188 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	580.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2478.5
Gravity center	ex (cm)	20.0	19.8
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	36696864
	Iy (cm4)	43195212	42729554
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65544.9 kN·m	65544.9 kN·m
	Mxr(lower)=	55255.0 kN·m	37687.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	98	210	0	0	0	120	0.22
	[2]	100	210	8	0	8	120	0.23
DECK-C	[3]	100	210	8	0	8	120	0.23
	[4]	100	210	23	9	32	120	0.30
	[5]	105	210	22	9	22	120	0.28
DECK-R	[6]	105	210	20	0	20	120	0.28
	[7]	105	210	20	0	20	120	0.28
	[8]	108	210	0	0	0	120	0.26
LWEB	[9]	98	255	47	13	60	145	0.32
	[10]	-2	255	52	13	65	145	0.20
	[11]	-153	255	41	13	54	145	0.50
RWEB	[12]	103	255	50	13	63	145	0.35
	[13]	-2	255	55	13	68	145	0.22
	[14]	-153	255	44	13	58	145	0.52
LFLG	[15]	-155	255	0	0	0	145	0.37
	[16]	-155	174	21	7	28	145	0.41
	[17]	-155	174	23	7	30	145	0.41
	[18]	-155	255	0	0	0	145	0.37

Girder Name : G-2 Section Name : Sec-50:Right (Girder number= 2 Section number= 50)

Section force Mx-Max Mx = 5676 kN·m Sy = 2553 kN T = -1822 kN·m
Mx-Min Mx = -14812 kN·m Sy = 2553 kN T = -1822 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	587.9
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2497.1
Gravity center	ex (cm)	20.0	20.3
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	37048583
	Iy (cm4)	43195212	43170678
Torsion Constant	J (cm4)	28148444	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66152.5 kN·m	66152.5 kN·m
Mxr(lower)=	55773.4 kN·m	38040.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-16	210	0	0	0	120	0.01
	[2]	-17	210	7	0	7	120	0.01
DECK-C	[3]	-17	210	7	0	7	120	0.01
	[4]	-17	210	19	8	26	120	0.05
	[5]	-18	210	18	8	18	120	0.03
DECK-R	[6]	-18	210	17	0	17	120	0.03
	[7]	-18	210	17	0	17	120	0.03
LWEB	[8]	-18	210	0	0	0	120	0.01
	[9]	-16	255	39	11	50	145	0.12
RWEB	[10]	0	255	43	11	54	145	0.14
	[11]	26	255	34	11	45	145	0.11
	[12]	-17	255	42	11	53	145	0.14
	[13]	0	255	46	11	57	145	0.15
	[14]	26	255	37	11	48	145	0.12

LFLG	[15]	26	255	0	0	0	145	0.01
	[16]	26	255	18	6	24	145	0.04
	[17]	26	255	19	6	25	145	0.04
	[18]	26	255	0	0	0	145	0.01
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	43	210	0	0	0	120	0.04
	[2]	43	210	7	0	7	120	0.05
DECK-C	[3]	43	210	7	0	7	120	0.05
	[4]	44	210	19	8	26	120	0.09
	[5]	46	210	18	8	18	120	0.07
DECK-R	[6]	46	210	17	0	17	120	0.07
	[7]	46	210	17	0	17	120	0.07
	[8]	47	210	0	0	0	120	0.05
LWEB	[9]	43	255	39	11	50	145	0.15
	[10]	-1	255	43	11	54	145	0.14
RWEB	[11]	-67	255	34	11	45	145	0.17
	[12]	45	255	42	11	53	145	0.16
	[13]	-1	255	46	11	57	145	0.15
LFLG	[14]	-67	255	37	11	48	145	0.18
	[15]	-68	255	0	0	0	145	0.07
	[16]	-68	174	18	6	24	145	0.10
	[17]	-68	174	19	6	25	145	0.10
	[18]	-68	255	0	0	0	145	0.07

Girder Name : G-2 Section Name : Sec-51:J-50 (Girder number= 2 Section number= 51)

Section force Mx-Max Mx = 5676 kN·m Sy = 2553 kN T = -1822 kN·m
Mx-Min Mx = -14812 kN·m Sy = 2553 kN T = -1822 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	440.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2350.1
Gravity center	ex (cm)	21.2	21.5
	ey (cm)	175.1	178.0
Moment of inertia	Ix (cm4)	33732695	32581137
	Iy (cm4)	42074248	42047621
Torsion Constant	J (cm4)	26615994	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63924.8 kN·m	63924.8 kN·m
Mxr(lower)=	38124.4 kN·m	18917.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-17	210	0	0	0	120	0.01
	[2]	-17	210	7	0	7	120	0.01
DECK-C	[3]	-17	210	7	0	7	120	0.01
	[4]	-17	210	19	8	27	120	0.06
	[5]	-18	210	19	8	19	120	0.03
DECK-R	[6]	-18	210	17	0	17	120	0.03
	[7]	-18	210	17	0	17	120	0.03
	[8]	-19	210	0	0	0	120	0.01
LWEB	[9]	-17	210	40	11	51	120	0.19
	[10]	1	210	44	11	55	120	0.21
RWEB	[11]	31	210	32	11	43	120	0.15
	[12]	-18	210	42	11	53	120	0.21
	[13]	1	210	47	11	58	120	0.23
	[14]	31	210	35	11	46	120	0.17

LFLG	[15]	31	210	0	0	0	120	0.02
	[16]	31	210	22	8	30	120	0.09
	[17]	31	210	24	8	32	120	0.09
	[18]	31	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	44	210	0	0	0	120	0.04
	[2]	45	210	7	0	7	120	0.05
DECK-C	[3]	45	210	7	0	7	120	0.05
	[4]	45	210	19	8	27	120	0.10
	[5]	47	210	19	8	19	120	0.07
DECK-R	[6]	47	210	17	0	17	120	0.07
	[7]	47	210	17	0	17	120	0.07
	[8]	49	210	0	0	0	120	0.05
LWEB	[9]	44	210	40	11	51	120	0.23
	[10]	-1	210	44	11	55	120	0.21
	[11]	-81	210	32	11	43	120	0.28
RWEB	[12]	46	210	42	11	53	120	0.25
	[13]	-1	210	47	11	58	120	0.23
	[14]	-81	210	35	11	46	120	0.30
LFLG	[15]	-82	210	0	0	0	120	0.15
	[16]	-82	104	22	8	30	120	0.21
	[17]	-82	104	24	8	32	120	0.22
	[18]	-82	210	0	0	0	120	0.15

Girder Name : G-2 Section Name : Sec-51:J-51 (Girder number= 2 Section number= 51)

Section force Mx = 23327 kN·m Sy = 1914 kN T = -1484 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-69	210	0	0	0	120	0.11
	[2]	-70	210	5	0	5	120	0.11
DECK-C	[3]	-70	210	5	0	5	120	0.11
	[4]	-70	210	14	6	21	120	0.14
	[5]	-74	210	14	6	14	120	0.14
DECK-R	[6]	-74	210	13	0	13	120	0.14
	[7]	-74	210	13	0	13	120	0.14
LWEB	[8]	-76	210	0	0	0	120	0.13
	[9]	-69	210	30	9	39	120	0.21
RWEB	[10]	0	210	33	9	42	120	0.12
	[11]	121	210	24	9	33	120	0.41
	[12]	-73	210	32	9	41	120	0.24
LFLG	[13]	0	210	35	9	44	120	0.13
	[14]	121	210	26	9	35	120	0.42
	[15]	122	210	0	0	0	120	0.34
	[16]	122	210	17	7	23	120	0.38
	[17]	122	210	18	7	25	120	0.38
	[18]	122	210	0	0	0	120	0.34

Girder Name : G-2 Section Name : Sec-52:J-52 (Girder number= 2 Section number= 52)

Section force Mx = 35466 kN·m Sy = 1263 kN T = -1209 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	529.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	44801.2 kN·m	29590.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-103	210	0	0	0	120	0.24
	[2]	-104	210	3	0	3	120	0.25
DECK-C	[3]	-104	210	3	0	3	120	0.25
	[4]	-105	210	9	5	14	120	0.26
	[5]	-110	210	9	5	10	120	0.28
DECK-R	[6]	-110	210	8	0	8	120	0.28
	[7]	-110	210	8	0	8	120	0.28
	[8]	-113	210	0	0	0	120	0.29
LWEB	[9]	-103	210	20	7	27	120	0.29
	[10]	0	210	22	7	29	120	0.06
	[11]	164	210	17	7	24	120	0.65
RWEB	[12]	-109	210	21	7	28	120	0.32
	[13]	0	210	23	7	30	120	0.06
	[14]	164	210	18	7	25	120	0.66
LFLG	[15]	166	210	0	0	0	120	0.63
	[16]	166	210	9	4	14	120	0.64
	[17]	166	210	10	4	15	120	0.64
	[18]	166	210	0	0	0	120	0.63

Girder Name : G-2 Section Name : Sec-53:J-53 (Girder number= 2 Section number= 53)

Section force Mx = 41062 kN·m Sy = 683 kN T = -1141 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 22 (SM490Y)	646.8	646.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2598.0
Gravity center	ex (cm)	19.5	19.5
	ey (cm)	161.0	161.0
Moment of inertia	Ix (cm4)	39662788	39662788
	Iy (cm4)	43641629	43641629
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67191.0 kN·m	67191.0 kN·m
	Mxr(lower)=	51025.0 kN·m	41321.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-118	210	0	0	0	120	0.31
	[2]	-119	210	2	0	2	120	0.32
DECK-C	[3]	-119	210	2	0	2	120	0.32
	[4]	-119	210	5	5	10	120	0.33
	[5]	-125	210	5	5	8	120	0.36
DECK-R	[6]	-125	210	4	0	4	120	0.36
	[7]	-125	210	4	0	4	120	0.36
	[8]	-128	210	0	0	0	120	0.37
LWEB	[9]	-118	210	10	7	17	120	0.33
	[10]	0	210	12	7	18	120	0.02
	[11]	167	210	9	7	16	120	0.65
RWEB	[12]	-123	210	11	7	18	120	0.37
	[13]	0	210	12	7	19	120	0.03
	[14]	167	210	10	7	17	120	0.65
LFLG	[15]	169	210	0	0	0	120	0.65
	[16]	169	210	4	3	8	120	0.65
	[17]	169	210	5	3	8	120	0.65
	[18]	169	210	0	0	0	120	0.65

Girder Name : G-2 Section Name : Sec-54:Mx-Max (Girder number= 2 Section number= 54)

Section force Mx = 41598 kN·m Sy = -477 kN T = -1210 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 22 (SM490Y)	646.8	646.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2598.0
Gravity center	ex (cm)	19.5	19.5
	ey (cm)	161.0	161.0
Moment of inertia	Ix (cm4)	39662788	39662788
	Iy (cm4)	43641629	43641629
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67191.0 kN·m	67191.0 kN·m
	Mxr(lower)=	51025.0 kN·m	41321.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-119	210	0	0	0	120	0.32
	[2]	-121	210	1	0	1	120	0.33
DECK-C	[3]	-121	210	1	0	1	120	0.33
	[4]	-121	210	3	5	9	120	0.34
	[5]	-127	210	3	5	7	120	0.37
DECK-R	[6]	-127	210	3	0	3	120	0.37
	[7]	-127	210	3	0	3	120	0.37
	[8]	-130	210	0	0	0	120	0.38
LWEB	[9]	-119	210	7	7	15	120	0.34
	[10]	0	210	8	7	15	120	0.02
	[11]	169	210	7	7	14	120	0.66
RWEB	[12]	-125	210	8	7	15	120	0.37
	[13]	0	210	9	7	16	120	0.02
	[14]	169	210	7	7	14	120	0.66
LFLG	[15]	171	210	0	0	0	120	0.66
	[16]	171	210	3	4	7	120	0.67
	[17]	171	210	3	4	7	120	0.67
	[18]	171	210	0	0	0	120	0.66

Girder Name : G-2 Section Name : Sec-55:J-54 (Girder number= 2 Section number= 55)

Section force Mx = 41283 kN·m Sy = -651 kN T = -1210 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 22 (SM490Y)	646.8	646.8
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2598.0
Gravity center	ex (cm)	19.5	19.5
	ey (cm)	161.0	161.0
Moment of inertia	Ix (cm4)	39662788	39662788
	Iy (cm4)	43641629	43641629
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67191.0 kN·m	67191.0 kN·m
	Mxr(lower)=	51025.0 kN·m	41321.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-118	210	0	0	0	120	0.32
	[2]	-120	210	2	0	2	120	0.32
DECK-C	[3]	-120	210	2	0	2	120	0.32
	[4]	-120	210	5	5	10	120	0.33
	[5]	-126	210	5	5	8	120	0.36
DECK-R	[6]	-126	210	4	0	4	120	0.36
	[7]	-126	210	4	0	4	120	0.36
LWEB	[8]	-129	210	0	0	0	120	0.38
	[9]	-118	210	10	7	17	120	0.34
	[10]	0	210	11	7	18	120	0.02
RWEB	[11]	168	210	9	7	16	120	0.66
	[12]	-124	210	11	7	18	120	0.37
	[13]	0	210	12	7	19	120	0.03
LFLG	[14]	168	210	10	7	17	120	0.66
	[15]	170	210	0	0	0	120	0.65
	[16]	170	210	4	4	8	120	0.66
	[17]	170	210	4	4	8	120	0.66
	[18]	170	210	0	0	0	120	0.65

Girder Name : G-2 Section Name : Sec-56:J-55 (Girder number= 2 Section number= 56)

Section force Mx = 36264 kN·m Sy = -1257 kN T = -1314 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	529.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	44801.2 kN·m	29590.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-106	210	0	0	0	120	0.25
	[2]	-107	210	3	0	3	120	0.26
DECK-C	[3]	-107	210	3	0	3	120	0.26
	[4]	-107	210	9	5	15	120	0.28
	[5]	-113	210	9	5	11	120	0.30
DECK-R	[6]	-113	210	8	0	8	120	0.29
	[7]	-113	210	8	0	8	120	0.29
LWEB	[8]	-116	210	0	0	0	120	0.30
	[9]	-106	210	20	8	27	120	0.31
	[10]	0	210	21	8	29	120	0.06
RWEB	[11]	168	210	17	8	24	120	0.68
	[12]	-111	210	21	8	29	120	0.34
	[13]	0	210	23	8	31	120	0.07
LFLG	[14]	168	210	18	8	26	120	0.69
	[15]	170	210	0	0	0	120	0.66
	[16]	170	210	9	5	14	120	0.67
	[17]	170	210	10	5	15	120	0.67
	[18]	170	210	0	0	0	120	0.66

Girder Name : G-2 Section Name : Sec-57:J-56 (Girder number= 2 Section number= 57)

Section force Mx = 24680 kN·m Sy = -1938 kN T = -1434 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	529.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	44801.2 kN·m	29590.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-72	210	0	0	0	120	0.12
	[2]	-73	210	5	0	5	120	0.12
DECK-C	[3]	-73	210	5	0	5	120	0.12
	[4]	-73	210	14	6	20	120	0.15
	[5]	-77	210	14	6	14	120	0.15
DECK-R	[6]	-77	210	13	0	13	120	0.15
	[7]	-77	210	13	0	13	120	0.15
LWEB	[8]	-79	210	0	0	0	120	0.14
	[9]	-72	210	30	9	39	120	0.22
RWEB	[10]	0	210	33	9	42	120	0.12
	[11]	114	210	26	9	34	120	0.38
	[12]	-76	210	32	9	40	120	0.24
LFLG	[13]	0	210	35	9	44	120	0.13
	[14]	114	210	28	9	36	120	0.39
	[15]	116	210	0	0	0	120	0.30
	[16]	116	210	15	5	20	120	0.33
	[17]	116	210	16	5	21	120	0.33
	[18]	116	210	0	0	0	120	0.30

Girder Name : G-2 Section Name : Sec-57:J-57 (Girder number= 2 Section number= 57)

Section force Mx-Max Mx = 7452 kN·m Sy = -2636 kN T = -1643 kN·m
Mx-Min Mx = -13111 kN·m Sy = -2636 kN T = -1643 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 18 (SM490Y)	529.2	529.1
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2438.3
Gravity center	ex (cm)	20.4	20.8
	ey (cm)	168.8	171.5
Moment of inertia	Ix (cm4)	36388639	35323176
	Iy (cm4)	42747710	42722384
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65339.3 kN·m	65339.3 kN·m
	Mxr(lower)=	42810.9 kN·m	28275.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-22	210	0	0	0	120	0.01
	[2]	-22	210	7	0	7	120	0.01
DECK-C	[3]	-22	210	7	0	7	120	0.01
	[4]	-22	210	20	7	26	120	0.06
	[5]	-23	210	19	7	19	120	0.04
DECK-R	[6]	-23	210	17	0	17	120	0.03
	[7]	-23	210	17	0	17	120	0.03
LWEB	[8]	-24	210	0	0	0	120	0.01
	[9]	-22	210	41	10	51	120	0.19
RWEB	[10]	1	210	45	10	55	120	0.21
	[11]	36	210	35	10	45	120	0.17
RWEB	[12]	-23	210	43	10	53	120	0.21
	[13]	1	210	48	10	58	120	0.23
	[14]	36	210	37	10	47	120	0.19

	LFLG	[15]	37	210	0	0	0	120	0.03
		[16]	37	210	20	6	26	120	0.08
		[17]	37	210	21	6	27	120	0.08
		[18]	37	210	0	0	0	120	0.03
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	38	210	0	0	0	120	0.03
		[2]	39	210	7	0	7	120	0.04
	DECK-C	[3]	39	210	7	0	7	120	0.04
		[4]	39	210	20	7	26	120	0.08
		[5]	41	210	19	7	19	120	0.06
		[6]	41	210	17	0	17	120	0.06
	DECK-R	[7]	41	210	17	0	17	120	0.06
		[8]	42	210	0	0	0	120	0.04
	LWEB	[9]	38	210	41	10	51	120	0.21
		[10]	-1	210	45	10	55	120	0.21
		[11]	-64	210	35	10	45	120	0.23
	RWEB	[12]	40	210	43	10	53	120	0.23
		[13]	-1	210	48	10	58	120	0.23
		[14]	-64	210	37	10	47	120	0.25
	LFLG	[15]	-64	210	0	0	0	120	0.09
		[16]	-64	139	20	6	26	120	0.14
		[17]	-64	139	21	6	27	120	0.15
		[18]	-64	210	0	0	0	120	0.09

Girder Name : G-2 Section Name : Sec-58:Left (Girder number= 2 Section number= 58)

Section force Mx-Max Mx = 7452 kN·m Sy = -2636 kN T = -1643 kN·m
Mx-Min Mx = -13111 kN·m Sy = -2636 kN T = -1643 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	617.3
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2526.5
Gravity center	ex (cm)	19.7	20.0
	ey (cm)	162.9	165.4
Moment of inertia	Ix (cm4)	38870903	37882652
	Iy (cm4)	43418552	43394393
Torsion Constant	J (cm4)	28384321	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	66526.7 kN·m	66526.7 kN·m
Mxr(lower)=	47489.7 kN·m	36938.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-21	210	0	0	0	120	0.01
	[2]	-22	210	7	0	7	120	0.01
DECK-C	[3]	-22	210	7	0	7	120	0.01
	[4]	-22	210	19	7	26	120	0.06
	[5]	-23	210	19	7	19	120	0.04
DECK-R	[6]	-23	210	17	0	17	120	0.03
	[7]	-23	210	17	0	17	120	0.03
LWEB	[8]	-24	210	0	0	0	120	0.01
	[9]	-21	210	40	10	50	120	0.19
RWEB	[10]	0	210	45	10	55	120	0.21
	[11]	33	210	36	10	46	120	0.17
RWEB	[12]	-23	210	43	10	53	120	0.20
	[13]	0	210	47	10	57	120	0.23
	[14]	33	210	38	10	48	120	0.19

LFLG	[15]	33	210	0	0	0	120	0.02
	[16]	33	210	17	5	23	120	0.06
	[17]	33	210	19	5	24	120	0.06
	[18]	33	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	38	210	7	0	7	120	0.04
DECK-C	[3]	38	210	7	0	7	120	0.04
	[4]	38	210	19	7	26	120	0.08
	[5]	40	210	19	7	19	120	0.06
DECK-R	[6]	40	210	17	0	17	120	0.06
	[7]	40	210	17	0	17	120	0.06
	[8]	41	210	0	0	0	120	0.04
LWEB	[9]	38	210	40	10	50	120	0.21
	[10]	-1	210	45	10	55	120	0.21
	[11]	-57	210	36	10	46	120	0.22
RWEB	[12]	40	210	43	10	53	120	0.23
	[13]	-1	210	47	10	57	120	0.23
	[14]	-57	210	38	10	48	120	0.24
LFLG	[15]	-58	210	0	0	0	120	0.08
	[16]	-58	163	17	5	23	120	0.11
	[17]	-58	163	19	5	24	120	0.12
	[18]	-58	210	0	0	0	120	0.08

Girder Name : G-2 Section Name : Sec-58:J-58 (Girder number= 2 Section number= 58)

Section force Mx = -31566 kN·m Sy = -3165 kN T = -2020 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 21 (SM490Y)	617.4	609.7
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2568.6	2507.5
Gravity center	ex (cm)	19.7	19.5
	ey (cm)	162.9	165.4
Moment of inertia	Ix (cm4)	38870903	37520435
	Iy (cm4)	43418552	42952519
Torsion Constant	J (cm4)	28384321	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65916.2 kN·m	65916.2 kN·m
	Mxr(lower)=	47042.4 kN·m	36590.7 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	92	210	0	0	0	120	0.19
	[2]	93	210	8	0	9	120	0.20
DECK-C	[3]	93	210	8	0	9	120	0.20
	[4]	93	210	23	8	32	120	0.27
	[5]	98	210	22	8	22	120	0.25
DECK-R	[6]	98	210	21	0	21	120	0.25
	[7]	98	210	21	0	21	120	0.25
	[8]	101	210	0	0	0	120	0.23
LWEB	[9]	92	210	49	12	61	120	0.45
	[10]	-2	210	54	12	66	120	0.30
	[11]	-139	210	43	12	55	120	0.65
RWEB	[12]	97	210	51	12	64	120	0.49
	[13]	-2	210	57	12	69	120	0.33
	[14]	-139	210	46	12	58	120	0.68
LFLG	[15]	-141	210	0	0	0	120	0.45
	[16]	-141	163	21	6	27	120	0.50
	[17]	-141	163	23	6	29	120	0.51
	[18]	-141	210	0	0	0	120	0.45

Girder Name : G-2 Section Name : Sec-59:J-59 (Girder number= 2 Section number= 59)

Section force Mx = -59491 kN·m Sy = -3683 kN T = -2277 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 20 (SM490Y)	612.1	597.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 20 (SM490Y)	294.1	279.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2743 * 11 (SM570)	301.7	301.7
1-RWEB PL	2797 * 11 (SM570)	307.7	307.7
1-LFLG PL	2940 * 28 (SM570)	823.2	802.0
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3147.8	3054.9
Gravity center	ex (cm)	18.8	17.9
	ey (cm)	151.5	153.2
Moment of inertia	Ix (cm4)	50657749	48825275
	Iy (cm4)	50696303	49526161
Torsion Constant	J (cm4)	30990633	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	77900.1 kN·m	77900.1 kN·m
	Mxr(lower)=	79794.8 kN·m	79794.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	148	210	0	0	0	120	0.50
	[2]	150	210	8	0	8	120	0.51
DECK-C	[3]	150	210	8	0	8	120	0.51
	[4]	150	210	22	8	29	120	0.57
	[5]	157	210	21	8	21	120	0.59
DECK-R	[6]	157	210	19	0	19	120	0.58
	[7]	157	210	19	0	19	120	0.58
LWEB	[8]	160	210	1	0	1	120	0.58
	[9]	148	255	56	14	70	145	0.57
RWEB	[10]	-2	255	62	14	76	145	0.27
	[11]	-187	255	54	14	67	145	0.75
	[12]	154	255	59	14	73	145	0.62
LFLG	[13]	-2	255	65	14	79	145	0.30
	[14]	-187	255	57	14	70	145	0.77
	[15]	-190	255	0	0	0	145	0.56
	[16]	-190	255	20	5	25	145	0.59
	[17]	-190	255	21	5	26	145	0.59
	[18]	-190	255	0	0	0	145	0.56

Girder Name : G-2 Section Name : Sec-60:Mx-Min_L (Girder number= 2 Section number= 60)

Section force Mx = -68915 kN·m Sy = -3859 kN T = -2277 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
LFLG	Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 20 (SM490Y)	612.1	594.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 20 (SM490Y)	294.1	277.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2743 * 11 (SM570)	301.7	301.7
1-RWEB PL	2797 * 11 (SM570)	307.7	307.7
1-LFLG PL	2940 * 28 (SM570)	823.2	798.7
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3147.8	3046.9
Gravity center	ex (cm)	18.8	17.8
	ey (cm)	151.5	153.2
Moment of inertia	Ix (cm4)	50657749	48670620
	Iy (cm4)	50696303	49352820
Torsion Constant	J (cm4)	30990633	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	77651.0 kN·m	77651.0 kN·m
Mxr(lower)=	79555.7 kN·m	79555.7 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	172	210	0	0	0	120	0.67
	[2]	174	210	8	0	8	120	0.69
DECK-C	[3]	174	210	8	0	8	120	0.69
	[4]	174	210	23	8	30	120	0.75
	[5]	182	210	22	8	22	120	0.78
DECK-R	[6]	182	210	20	0	20	120	0.78
	[7]	182	210	20	0	20	120	0.78
LWEB	[8]	186	210	1	0	1	120	0.79
	[9]	171	255	59	14	73	145	0.70
RWEB	[10]	-2	255	65	14	79	145	0.29
	[11]	-217	255	56	14	70	145	0.96
	[12]	179	255	62	14	76	145	0.77
	[13]	-2	255	68	14	82	145	0.32
	[14]	-217	255	59	14	73	145	0.98

LFLG	[15]	-221	255	0	0	0	145	0.75
	[16]	-221	255	21	5	26	145	0.78
	[17]	-221	255	22	5	27	145	0.79
	[18]	-221	255	0	0	0	145	0.75

Girder Name : G-2 Section Name : Sec-60:Mx-Min_R (Girder number= 2 Section number= 60)

Section force Mx = -68915 kN·m Sy = 3663 kN T = -2403 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2613
	Cantilever	1650	1565
LFLG	Intermediate	2700	2613

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 20 (SM490Y)	612.1	594.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 20 (SM490Y)	294.1	277.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2743 * 11 (SM570)	301.7	301.7
1-RWEB PL	2797 * 11 (SM570)	307.7	307.7
1-LFLG PL	2940 * 28 (SM570)	823.2	798.7
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3147.8	3046.9
Gravity center	ex (cm)	18.8	17.8
	ey (cm)	151.5	153.2
Moment of inertia	Ix (cm4)	50657749	48670620
	Iy (cm4)	50696303	49352820
Torsion Constant	J (cm4)	30990633	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	77651.0 kN·m	77651.0 kN·m
	Mxr(lower)=	79555.7 kN·m	79555.7 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	172	210	0	0	0	120	0.67
	[2]	174	210	8	0	8	120	0.69
DECK-C	[3]	174	210	8	0	8	120	0.69
	[4]	174	210	21	8	29	120	0.75
	[5]	182	210	21	8	21	120	0.78
DECK-R	[6]	182	210	19	0	19	120	0.78
	[7]	182	210	19	0	19	120	0.78
	[8]	186	210	1	0	1	120	0.79
LWEB	[9]	171	255	56	14	71	145	0.69
	[10]	-2	255	62	14	76	145	0.28
RWEB	[11]	-217	255	53	14	68	145	0.94
	[12]	179	255	59	14	73	145	0.75
	[13]	-2	255	65	14	79	145	0.30
	[14]	-217	255	56	14	71	145	0.96

LFLG	[15]	-221	255	0	0	0	145	0.75
	[16]	-221	255	20	6	25	145	0.78
	[17]	-221	255	21	6	27	145	0.78
	[18]	-221	255	0	0	0	145	0.75

Girder Name : G-2 Section Name : Sec-61:J-60 (Girder number= 2 Section number= 61)

Section force Mx = -59491 kN·m Sy = 3485 kN T = -2403 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2624
	Cantilever	1650	1576
LFLG	Intermediate	2700	2624

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 20 (SM490Y)	129.0	129.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 20 (SM490Y)	612.1	597.0
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 20 (SM490Y)	294.1	279.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2743 * 11 (SM570)	301.7	301.7
1-RWEB PL	2797 * 11 (SM570)	307.7	307.7
1-LFLG PL	2940 * 28 (SM570)	823.2	802.0
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3147.8	3054.9
Gravity center	ex (cm)	18.8	17.9
	ey (cm)	151.5	153.2
Moment of inertia	Ix (cm4)	50657749	48825275
	Iy (cm4)	50696303	49526161
Torsion Constant	J (cm4)	30990633	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	77900.1 kN·m	77900.1 kN·m
	Mxr(lower)=	79794.8 kN·m	79794.8 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	148	210	0	0	0	120	0.50
	[2]	150	210	7	0	8	120	0.51
DECK-C	[3]	150	210	7	0	8	120	0.51
	[4]	150	210	20	8	28	120	0.57
	[5]	157	210	20	8	20	120	0.58
DECK-R	[6]	157	210	18	0	18	120	0.58
	[7]	157	210	18	0	18	120	0.58
	[8]	160	210	1	0	1	120	0.58
LWEB	[9]	148	255	53	14	68	145	0.55
	[10]	-2	255	59	14	73	145	0.25
	[11]	-187	255	51	14	65	145	0.74
RWEB	[12]	154	255	56	14	70	145	0.60
	[13]	-2	255	62	14	76	145	0.28
	[14]	-187	255	54	14	68	145	0.76
LFLG	[15]	-190	255	0	0	0	145	0.56
	[16]	-190	255	19	6	24	145	0.58
	[17]	-190	255	20	6	26	145	0.59
	[18]	-190	255	0	0	0	145	0.56

Girder Name : G-2 Section Name : Sec-62:J-61 (Girder number= 2 Section number= 62)

Section force Mx = -32166 kN·m Sy = 2928 kN T = -2192 kN·m

Effective buckling length Lx = 8000 mm Ly = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2663
	Cantilever	1650	1614
LFLG	Intermediate	2700	2663

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	580.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2478.5
Gravity center	ex (cm)	20.0	19.8
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	36696864
	Iy (cm4)	43195212	42729554
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65544.9 kN·m	65544.9 kN·m
	Mxr(lower)=	55255.0 kN·m	37687.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	94	210	0	0	0	120	0.20
	[2]	95	210	8	0	8	120	0.21
DECK-C	[3]	95	210	8	0	8	120	0.21
	[4]	95	210	22	9	31	120	0.27
	[5]	100	210	21	9	21	120	0.26
DECK-R	[6]	101	210	19	0	19	120	0.26
	[7]	101	210	19	0	19	120	0.26
	[8]	103	210	0	0	0	120	0.24
LWEB	[9]	94	255	45	13	58	145	0.30
	[10]	-2	255	50	13	63	145	0.19
	[11]	-147	255	39	13	53	145	0.46
RWEB	[12]	99	255	48	13	61	145	0.33
	[13]	-2	255	53	13	66	145	0.21
	[14]	-147	255	42	13	56	145	0.48
LFLG	[15]	-148	255	0	0	0	145	0.34
	[16]	-148	174	20	7	27	145	0.37
	[17]	-148	174	22	7	29	145	0.38
	[18]	-148	255	0	0	0	145	0.34

Girder Name : G-2 Section Name : Sec-62:Right (Girder number= 2 Section number= 62)

Section force Mx-Max Mx = 5269 kN·m Sy = 2402 kN T = -1805 kN·m
Mx-Min Mx = -14203 kN·m Sy = 2402 kN T = -1805 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	587.9
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2497.1
Gravity center	ex (cm)	20.0	20.3
	ey (cm)	164.8	167.4
Moment of inertia	Ix (cm4)	38061661	37048583
	Iy (cm4)	43195212	43170678
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66152.5 kN·m	66152.5 kN·m
	Mxr(lower)=	55773.4 kN·m	38040.7 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-15	210	0	0	0	120	0.01
	[2]	-15	210	6	0	7	120	0.01
DECK-C	[3]	-15	210	6	0	7	120	0.01
	[4]	-15	210	18	7	25	120	0.05
	[5]	-16	210	17	7	17	120	0.03
DECK-R	[6]	-16	210	16	0	16	120	0.02
	[7]	-16	210	16	0	16	120	0.02
LWEB	[8]	-17	210	0	0	0	120	0.01
	[9]	-15	255	37	11	48	145	0.11
RWEB	[10]	0	255	41	11	52	145	0.13
	[11]	24	255	32	11	43	145	0.10
	[12]	-16	255	39	11	50	145	0.12
	[13]	0	255	43	11	54	145	0.14
	[14]	24	255	35	11	46	145	0.11

	LFLG	[15]	24	255	0	0	0	145	0.01
		[16]	24	255	16	6	22	145	0.03
		[17]	24	255	18	6	24	145	0.04
		[18]	24	255	0	0	0	145	0.01
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	41	210	0	0	0	120	0.04
		[2]	42	210	6	0	7	120	0.04
	DECK-C	[3]	42	210	6	0	7	120	0.04
		[4]	42	210	18	7	25	120	0.08
		[5]	44	210	17	7	17	120	0.06
		[6]	44	210	16	0	16	120	0.06
	DECK-R	[7]	44	210	16	0	16	120	0.06
		[8]	45	210	0	0	0	120	0.05
	LWEB	[9]	41	255	37	11	48	145	0.14
		[10]	-1	255	41	11	52	145	0.13
		[11]	-64	255	32	11	43	145	0.15
	RWEB	[12]	43	255	39	11	50	145	0.15
		[13]	-1	255	43	11	54	145	0.14
		[14]	-64	255	35	11	46	145	0.16
	LFLG	[15]	-65	255	0	0	0	145	0.06
		[16]	-65	174	16	6	22	145	0.09
		[17]	-65	174	18	6	24	145	0.09
		[18]	-65	255	0	0	0	145	0.06

Girder Name : G-2 Section Name : Sec-63:J-62 (Girder number= 2 Section number= 63)

Section force Mx-Max Mx = 5269 kN·m Sy = 2402 kN T = -1805 kN·m
Mx-Min Mx = -14203 kN·m Sy = 2402 kN T = -1805 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	440.9
3-RIB PL	220 * 19 (SM490Y)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2350.1
Gravity center	ex (cm)	21.2	21.5
	ey (cm)	175.1	178.0
Moment of inertia	Ix (cm4)	33732695	32581137
	Iy (cm4)	42074248	42047621
Torsion Constant	J (cm4)	26615994	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	63924.8 kN·m	63924.8 kN·m
Mxr(lower)=	38124.4 kN·m	18917.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-16	210	0	0	0	120	0.01
	[2]	-16	210	7	0	7	120	0.01
DECK-C	[3]	-16	210	7	0	7	120	0.01
	[4]	-16	210	18	7	26	120	0.05
	[5]	-17	210	17	7	18	120	0.03
DECK-R	[6]	-17	210	16	0	16	120	0.02
	[7]	-17	210	16	0	16	120	0.02
LWEB	[8]	-17	210	0	0	0	120	0.01
	[9]	-16	210	38	11	49	120	0.17
RWEB	[10]	0	210	41	11	52	120	0.19
	[11]	29	210	31	11	41	120	0.14
RWEB	[12]	-17	210	40	11	51	120	0.19
	[13]	0	210	44	11	55	120	0.21
	[14]	29	210	33	11	44	120	0.15

LFLG	[15]	29	210	0	0	0	120	0.02
	[16]	29	210	21	8	29	120	0.08
	[17]	29	210	23	8	31	120	0.08
	[18]	29	210	0	0	0	120	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	42	210	0	0	0	120	0.04
	[2]	43	210	7	0	7	120	0.04
DECK-C	[3]	43	210	7	0	7	120	0.04
	[4]	43	210	18	7	26	120	0.09
	[5]	45	210	17	7	18	120	0.07
DECK-R	[6]	45	210	16	0	16	120	0.06
	[7]	45	210	16	0	16	120	0.06
	[8]	47	210	0	0	0	120	0.05
LWEB	[9]	42	210	38	11	49	120	0.21
	[10]	-1	210	41	11	52	120	0.19
	[11]	-78	210	31	11	41	120	0.26
RWEB	[12]	45	210	40	11	51	120	0.22
	[13]	-1	210	44	11	55	120	0.21
	[14]	-78	210	33	11	44	120	0.27
LFLG	[15]	-78	210	0	0	0	120	0.14
	[16]	-78	104	21	8	29	120	0.20
	[17]	-78	104	23	8	31	120	0.20
	[18]	-78	210	0	0	0	120	0.14

Girder Name : G-2 Section Name : Sec-63:J-63 (Girder number= 2 Section number= 63)

Section force Mx-Max Mx = 21852 kN·m Sy = 1805 kN T = -1594 kN·m
Mx-Min Mx = -556 kN·m Sy = 1805 kN T = -1594 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
	LFLG Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m	
Mxr(lower)=	40123.8 kN·m	19909.0 kN·m	

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-65	210	0	0	0	120	0.09
	[2]	-65	210	5	0	5	120	0.10
	DECK-C [3]	-65	210	5	0	5	120	0.10
	[4]	-66	210	14	7	20	120	0.13
	[5]	-69	210	13	7	14	120	0.12
	[6]	-69	210	12	0	12	120	0.12
	DECK-R [7]	-69	210	12	0	12	120	0.12
	[8]	-71	210	0	0	0	120	0.12
	LWEB [9]	-65	210	28	10	38	120	0.20
	[10]	0	210	31	10	41	120	0.12
	[11]	113	210	23	10	33	120	0.37
	RWEB [12]	-68	210	30	10	40	120	0.21
	[13]	0	210	33	10	43	120	0.13
	[14]	113	210	25	10	34	120	0.37

	LFLG	[15]	114	210	0	0	0	120	0.30
		[16]	114	210	16	7	23	120	0.33
		[17]	114	210	17	7	24	120	0.34
		[18]	114	210	0	0	0	120	0.30
Mx-Min	[Check point]		σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L	[1]	2	210	0	0	0	120	0.00
		[2]	2	210	5	0	5	120	0.00
	DECK-C	[3]	2	210	5	0	5	120	0.00
		[4]	2	210	14	7	20	120	0.03
		[5]	2	210	13	7	14	120	0.01
		[6]	2	210	12	0	12	120	0.01
	DECK-R	[7]	2	210	12	0	12	120	0.01
		[8]	2	210	0	0	0	120	0.00
	LWEB	[9]	2	210	28	10	38	120	0.10
		[10]	0	210	31	10	41	120	0.12
		[11]	-3	210	23	10	33	120	0.07
	RWEB	[12]	2	210	30	10	40	120	0.11
		[13]	0	210	33	10	43	120	0.13
		[14]	-3	210	25	10	34	120	0.08
	LFLG	[15]	-3	210	0	0	0	120	0.00
		[16]	-3	104	16	7	23	120	0.04
		[17]	-3	104	17	7	24	120	0.04
		[18]	-3	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-64:Left (Girder number= 2 Section number= 64)

Section force Mx-Max Mx = 21852 kN·m Sy = 1805 kN T = -1594 kN·m
Mx-Min Mx = -556 kN·m Sy = 1805 kN T = -1594 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
	LFLG Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m	
Mxr(lower)=	40123.8 kN·m		19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-65	210	0	0	0	120	0.09
	[2]	-65	210	5	0	5	120	0.10
	DECK-C [3]	-65	210	5	0	5	120	0.10
	[4]	-66	210	14	7	20	120	0.13
	[5]	-69	210	13	7	14	120	0.12
	[6]	-69	210	12	0	12	120	0.12
	DECK-R [7]	-69	210	12	0	12	120	0.12
	[8]	-71	210	0	0	0	120	0.12
	LWEB [9]	-65	210	28	10	38	120	0.20
	[10]	0	210	31	10	41	120	0.12
	[11]	113	210	23	10	33	120	0.37
	RWEB [12]	-68	210	30	10	40	120	0.21
	[13]	0	210	33	10	43	120	0.13
	[14]	113	210	25	10	34	120	0.37

LFLG	[15]	114	210	0	0	0	120	0.30
	[16]	114	210	16	7	23	120	0.33
	[17]	114	210	17	7	24	120	0.34
	[18]	114	210	0	0	0	120	0.30
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	2	210	0	0	0	120	0.00
	[2]	2	210	5	0	5	120	0.00
DECK-C	[3]	2	210	5	0	5	120	0.00
	[4]	2	210	14	7	20	120	0.03
	[5]	2	210	13	7	14	120	0.01
DECK-R	[6]	2	210	12	0	12	120	0.01
	[7]	2	210	12	0	12	120	0.01
	[8]	2	210	0	0	0	120	0.00
LWEB	[9]	2	210	28	10	38	120	0.10
	[10]	0	210	31	10	41	120	0.12
RWEB	[11]	-3	210	23	10	33	120	0.07
	[12]	2	210	30	10	40	120	0.11
	[13]	0	210	33	10	43	120	0.13
LFLG	[14]	-3	210	25	10	34	120	0.08
	[15]	-3	210	0	0	0	120	0.00
	[16]	-3	104	16	7	23	120	0.04
	[17]	-3	104	17	7	24	120	0.04
	[18]	-3	210	0	0	0	120	0.00

Girder Name : G-2 Section Name : Sec-64:J-64 (Girder number= 2 Section number= 64)

Section force Mx = 33079 kN·m Sy = 1160 kN T = -1378 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
	Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-98	210	0	0	0	120	0.22
	[2]	-99	210	3	0	3	120	0.22
DECK-C	[3]	-99	210	3	0	3	120	0.22
	[4]	-99	210	9	6	14	120	0.24
	[5]	-105	210	8	6	11	120	0.26
DECK-R	[6]	-105	210	8	0	8	120	0.25
	[7]	-105	210	8	0	8	120	0.25
LWEB	[8]	-108	210	0	0	0	120	0.26
	[9]	-98	210	18	8	27	120	0.27
RWEB	[10]	0	210	20	8	28	120	0.06
	[11]	172	210	15	8	23	120	0.71
	[12]	-103	210	19	8	28	120	0.29
LFLG	[13]	0	210	21	8	30	120	0.06
	[14]	172	210	16	8	24	120	0.71
	[15]	173	210	0	0	0	120	0.68
	[16]	173	210	10	6	16	120	0.70
	[17]	173	210	11	6	17	120	0.70
	[18]	173	210	0	0	0	120	0.68

Girder Name : G-2 Section Name : Sec-65:J-65 (Girder number= 2 Section number= 65)

Section force Mx = 37242 kN·m Sy = 578 kN T = -1240 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-108	210	0	0	0	120	0.26
	[2]	-109	210	2	0	2	120	0.27
DECK-C	[3]	-109	210	2	0	2	120	0.27
	[4]	-110	210	4	5	9	120	0.28
	[5]	-115	210	4	5	8	120	0.30
DECK-R	[6]	-115	210	4	0	4	120	0.30
	[7]	-115	210	4	0	4	120	0.30
LWEB	[8]	-118	210	0	0	0	120	0.32
	[9]	-108	210	9	7	16	120	0.28
RWEB	[10]	0	210	10	7	17	120	0.02
	[11]	167	210	8	7	15	120	0.65
	[12]	-113	210	9	7	17	120	0.31
LFLG	[13]	0	210	10	7	18	120	0.02
	[14]	167	210	8	7	16	120	0.65
	[15]	169	210	0	0	0	120	0.65
	[16]	169	210	4	4	8	120	0.65
	[17]	169	210	4	4	9	120	0.65
	[18]	169	210	0	0	0	120	0.65

Girder Name : G-2 Section Name : Sec-66:Mx-Max (Girder number= 2 Section number= 66)

Section force Mx = 37287 kN·m Sy = 523 kN T = -1240 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-108	210	0	0	0	120	0.26
	[2]	-109	210	1	0	1	120	0.27
DECK-C	[3]	-109	210	1	0	1	120	0.27
	[4]	-110	210	4	5	9	120	0.28
	[5]	-115	210	4	5	7	120	0.30
DECK-R	[6]	-115	210	3	0	4	120	0.30
	[7]	-115	210	3	0	4	120	0.30
LWEB	[8]	-118	210	0	0	0	120	0.32
	[9]	-108	210	8	7	16	120	0.28
RWEB	[10]	0	210	9	7	16	120	0.02
	[11]	167	210	7	7	14	120	0.65
	[12]	-113	210	9	7	16	120	0.31
LFLG	[13]	0	210	9	7	17	120	0.02
	[14]	167	210	8	7	15	120	0.65
	[15]	169	210	0	0	0	120	0.65
	[16]	169	210	4	4	8	120	0.65
	[17]	169	210	4	4	8	120	0.65
	[18]	169	210	0	0	0	120	0.65

Girder Name : G-2 Section Name : Sec-67:J-66 (Girder number= 2 Section number= 67)

Section force Mx = 36064 kN·m Sy = -831 kN T = -1175 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 19 (SM490Y)	558.6	558.6
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2509.8	2509.8
Gravity center	ex (cm)	20.2	20.2
	ey (cm)	166.8	166.8
Moment of inertia	Ix (cm4)	37234453	37234453
	Iy (cm4)	42971601	42971601
Torsion Constant	J (cm4)	27893122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66134.9 kN·m	66134.9 kN·m
	Mxr(lower)=	46358.6 kN·m	32623.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-104	210	0	0	0	120	0.25
	[2]	-106	210	2	0	2	120	0.25
DECK-C	[3]	-106	210	2	0	2	120	0.25
	[4]	-106	210	6	5	11	120	0.26
	[5]	-111	210	6	5	8	120	0.29
DECK-R	[6]	-112	210	5	0	6	120	0.28
	[7]	-112	210	5	0	6	120	0.28
	[8]	-115	210	0	0	0	120	0.30
LWEB	[9]	-105	210	13	7	20	120	0.28
	[10]	0	210	14	7	21	120	0.03
	[11]	162	210	11	7	18	120	0.61
RWEB	[12]	-110	210	14	7	21	120	0.30
	[13]	0	210	15	7	22	120	0.03
	[14]	162	210	12	7	19	120	0.62
LFLG	[15]	163	210	0	0	0	120	0.61
	[16]	163	210	6	4	10	120	0.61
	[17]	163	210	6	4	11	120	0.61
	[18]	163	210	0	0	0	120	0.61

Girder Name : G-2 Section Name : Sec-68:J-67 (Girder number= 2 Section number= 68)

Section force Mx = 28950 kN·m Sy = -1444 kN T = -1228 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		64428.2 kN·m	64428.2 kN·m
Mxr(lower)=		40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-85	210	0	0	0	120	0.17
	[2]	-87	210	4	0	4	120	0.17
DECK-C	[3]	-87	210	4	0	4	120	0.17
	[4]	-87	210	11	5	16	120	0.19
	[5]	-92	210	11	5	11	120	0.20
DECK-R	[6]	-92	210	10	0	10	120	0.20
	[7]	-92	210	10	0	10	120	0.20
	[8]	-94	210	0	0	0	120	0.20
LWEB	[9]	-86	210	23	7	30	120	0.23
	[10]	0	210	25	7	32	120	0.07
RWEB	[11]	150	210	18	7	26	120	0.56
	[12]	-90	210	24	7	31	120	0.25
	[13]	0	210	26	7	34	120	0.08
LFLG	[14]	150	210	20	7	27	120	0.56
	[15]	152	210	0	0	0	120	0.52
	[16]	152	210	13	5	18	120	0.54
	[17]	152	210	14	5	19	120	0.55
	[18]	152	210	0	0	0	120	0.52

Girder Name : G-2 Section Name : Sec-68:J-68 (Girder number= 2 Section number= 68)

Section force Mx-Max Mx = 16383 kN·m Sy = -2152 kN T = -1398 kN·m
 Mx-Min Mx = -5804 kN·m Sy = -2152 kN T = -1398 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 15 (SM490Y)	441.0	441.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2392.2	2392.2
Gravity center	ex (cm)	21.2	21.2
	ey (cm)	175.1	175.1
Moment of inertia	Ix (cm4)	33732695	33732695
	Iy (cm4)	42074248	42074248
Torsion Constant	J (cm4)	26615994	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	64428.2 kN·m	64428.2 kN·m
Mxr(lower)=	40123.8 kN·m	19909.0 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-48	210	0	0	0	120	0.05
	[2]	-49	210	6	0	6	120	0.06
DECK-C	[3]	-49	210	6	0	6	120	0.06
	[4]	-49	210	16	6	22	120	0.09
	[5]	-52	210	16	6	16	120	0.08
DECK-R	[6]	-52	210	14	0	15	120	0.08
	[7]	-52	210	14	0	15	120	0.08
LWEB	[8]	-53	210	0	0	0	120	0.06
	[9]	-48	210	34	8	42	120	0.18
RWEB	[10]	0	210	37	8	46	120	0.14
	[11]	85	210	27	8	36	120	0.25
	[12]	-51	210	36	8	44	120	0.19
	[13]	0	210	39	8	48	120	0.16
	[14]	85	210	30	8	38	120	0.26

LFLG	[15]	86	210	0	0	0	120	0.17
	[16]	86	210	19	6	25	120	0.21
	[17]	86	210	20	6	27	120	0.22
	[18]	86	210	0	0	0	120	0.17
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	17	210	0	0	0	120	0.01
	[2]	17	210	6	0	6	120	0.01
DECK-C	[3]	17	210	6	0	6	120	0.01
	[4]	17	210	16	6	22	120	0.04
	[5]	18	210	16	6	16	120	0.02
DECK-R	[6]	18	210	14	0	15	120	0.02
	[7]	18	210	14	0	15	120	0.02
	[8]	19	210	0	0	0	120	0.01
LWEB	[9]	17	210	34	8	42	120	0.13
	[10]	0	210	37	8	46	120	0.14
	[11]	-30	210	27	8	36	120	0.11
RWEB	[12]	18	210	36	8	44	120	0.14
	[13]	0	210	39	8	48	120	0.16
	[14]	-30	210	30	8	38	120	0.12
LFLG	[15]	-30	210	0	0	0	120	0.02
	[16]	-30	104	19	6	25	120	0.06
	[17]	-30	104	20	6	27	120	0.07
	[18]	-30	210	0	0	0	120	0.02

Girder Name : G-2 Section Name : Sec-69:Left (Girder number= 2 Section number= 69)

Section force Mx-Max Mx = 16383 kN·m Sy = -2152 kN T = -1398 kN·m
Mx-Min Mx = -5804 kN·m Sy = -2152 kN T = -1398 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 17 (SM570)	499.8	499.8
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2451.0
Gravity center	ex (cm)	20.7	20.7
	ey (cm)	170.8	170.8
	Moment of inertia Ix (cm4)	35523549	35523549
	Iy (cm4)	42523528	42523528
Torsion Constant	J (cm4)	27313033	

Resisting bending moment	(+)	(-)
In-plane Mxr(upper)=	65330.6 kN·m	65330.6 kN·m
Mxr(lower)=	52509.3 kN·m	27352.1 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-48	210	0	0	0	120	0.05
	[2]	-48	210	6	0	6	120	0.06
DECK-C	[3]	-48	210	6	0	6	120	0.06
	[4]	-49	210	16	6	22	120	0.09
	[5]	-51	210	15	6	16	120	0.08
DECK-R	[6]	-51	210	14	0	14	120	0.07
	[7]	-51	210	14	0	14	120	0.07
LWEB	[8]	-53	210	0	0	0	120	0.06
	[9]	-48	255	34	8	42	145	0.12
RWEB	[10]	0	255	37	8	45	145	0.10
	[11]	79	255	28	8	36	145	0.16
	[12]	-50	255	35	8	44	145	0.13
	[13]	0	255	39	8	48	145	0.11
	[14]	79	255	30	8	39	145	0.17

LFLG	[15]	80	255	0	0	0	145	0.10
	[16]	80	255	17	5	22	145	0.12
	[17]	80	255	18	5	24	145	0.12
	[18]	80	255	0	0	0	145	0.10
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	17	210	0	0	0	120	0.01
	[2]	17	210	6	0	6	120	0.01
DECK-C	[3]	17	210	6	0	6	120	0.01
	[4]	17	210	16	6	22	120	0.04
	[5]	18	210	15	6	16	120	0.02
DECK-R	[6]	18	210	14	0	14	120	0.02
	[7]	18	210	14	0	14	120	0.02
	[8]	19	210	0	0	0	120	0.01
LWEB	[9]	17	255	34	8	42	145	0.09
	[10]	0	255	37	8	45	145	0.10
	[11]	-28	255	28	8	36	145	0.08
RWEB	[12]	18	255	35	8	44	145	0.10
	[13]	0	255	39	8	48	145	0.11
	[14]	-28	255	30	8	39	145	0.08
LFLG	[15]	-28	255	0	0	0	145	0.01
	[16]	-28	133	17	5	22	145	0.04
	[17]	-28	133	18	5	24	145	0.04
	[18]	-28	255	0	0	0	145	0.01

Girder Name : G-2 Section Name : Sec-69:J-69 (Girder number= 2 Section number= 69)

Section force Mx = -21740 kN·m Sy = -2828 kN T = 1667 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2699
	Cantilever	1650	1649
LFLG	Intermediate	2700	2699

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.6
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 17 (SM570)	499.8	499.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2451.0	2408.9
Gravity center	ex (cm)	20.7	21.0
	ey (cm)	170.8	173.6
Moment of inertia	Ix (cm4)	35523549	34430439
	Iy (cm4)	42523528	42497784
Torsion Constant	J (cm4)	27313033	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	64896.2 kN·m	64896.2 kN·m
	Mxr(lower)=	50088.8 kN·m	26091.2 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	64	210	0	0	0	120	0.09
	[2]	65	210	8	0	8	120	0.10
DECK-C	[3]	65	210	8	0	8	120	0.10
	[4]	65	210	21	7	28	120	0.15
	[5]	68	210	20	7	20	120	0.13
DECK-R	[6]	68	210	19	0	19	120	0.13
	[7]	68	210	19	0	19	120	0.13
	[8]	70	210	0	0	0	120	0.11
LWEB	[9]	64	255	44	10	54	145	0.20
	[10]	-2	255	48	10	58	145	0.16
	[11]	-110	255	37	10	47	145	0.29
RWEB	[12]	67	255	47	10	57	145	0.22
	[13]	-2	255	51	10	61	145	0.18
	[14]	-110	255	40	10	50	145	0.30
LFLG	[15]	-111	255	0	0	0	145	0.19
	[16]	-111	133	22	7	29	145	0.23
	[17]	-111	133	24	7	31	145	0.23
	[18]	-111	255	0	0	0	145	0.19

Girder Name : G-2 Section Name : Sec-70:J-70 (Girder number= 2 Section number= 70)

Section force Mx = -43930 kN·m Sy = -3310 kN T = -2190 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2659
	Cantilever	1650	1611
LFLG	Intermediate	2700	2659

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	483.2
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	229.0
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 24 (SM570)	705.6	695.8
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2656.8	2592.5
Gravity center	ex (cm)	19.1	18.8
	ey (cm)	157.4	159.8
Moment of inertia	Ix (cm4)	41196797	39842982
	Iy (cm4)	44087034	43581123
Torsion Constant	J (cm4)	28996107	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66856.8 kN·m	66856.8 kN·m
	Mxr(lower)=	62648.6 kN·m	52265.5 kN·m

Stress (N/mm²)

Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	127	210	0	0	0	120	0.36
	[2]	128	210	9	0	9	120	0.38
DECK-C	[3]	128	210	9	0	9	120	0.38
	[4]	128	210	24	9	33	120	0.45
	[5]	134	210	23	9	23	120	0.45
DECK-R	[6]	135	210	21	0	21	120	0.44
	[7]	135	210	21	0	21	120	0.44
	[8]	138	210	0	0	1	120	0.43
LWEB	[9]	127	255	50	13	63	145	0.44
	[10]	-3	255	56	13	69	145	0.23
	[11]	-176	255	46	13	59	145	0.64
RWEB	[12]	133	255	53	13	66	145	0.48
	[13]	-3	255	59	13	72	145	0.25
	[14]	-176	255	49	13	63	145	0.66
LFLG	[15]	-179	255	0	0	0	145	0.49
	[16]	-179	213	19	6	26	145	0.52
	[17]	-179	213	21	6	27	145	0.53
	[18]	-179	255	0	0	0	145	0.49

Girder Name : G-2 Section Name : Sec-71:J-71 (Girder number= 2 Section number= 71)

Section force Mx = -73166 kN·m Sy = -3850 kN T = -2526 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2616
	Cantilever	1650	1570
LFLG	Intermediate	2700	2616

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 25 (SM490Y)	765.2	744.1
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 25 (SM490Y)	367.6	347.5
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2738 * 11 (SM570)	301.2	301.2
1-RWEB PL	2792 * 11 (SM570)	307.1	307.1
1-LFLG PL	2940 * 34 (SM570)	999.6	971.0
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3581.9	3470.3
Gravity center	ex (cm)	19.5	18.4
	ey (cm)	152.9	154.4
Moment of inertia	Ix (cm4)	58922402	56715937
	Iy (cm4)	57913817	56341353
Torsion Constant	J (cm4)	33020709	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	91301.8 kN·m	91301.8 kN·m
	Mxr(lower)=	91657.5 kN·m	91657.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	155	210	0	0	0	120	0.55
	[2]	157	210	7	0	7	120	0.56
DECK-C	[3]	157	210	7	0	7	120	0.56
	[4]	157	210	18	7	25	120	0.60
	[5]	164	210	17	7	18	120	0.63
DECK-R	[6]	165	210	16	0	16	120	0.63
	[7]	165	210	16	0	16	120	0.63
	[8]	168	210	1	0	1	120	0.64
LWEB	[9]	154	255	60	15	75	145	0.63
	[10]	-2	255	65	15	80	145	0.30
RWEB	[11]	-199	255	57	15	72	145	0.86
	[12]	161	255	62	15	77	145	0.68
	[13]	-2	255	67	15	82	145	0.32
LFLG	[14]	-199	255	60	15	75	145	0.88
	[15]	-204	255	0	0	0	145	0.64
	[16]	-204	255	17	5	22	145	0.66
	[17]	-204	255	18	5	23	145	0.66
	[18]	-204	255	0	0	0	145	0.64

Girder Name : G-2 Section Name : Sec-72:Mx-Min_L (Girder number= 2 Section number= 72)

Section force Mx = -83091 kN·m Sy = -4026 kN T = -2526 kN·m

Effective buckling length Lx = 8000 mmLy = 8000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2603
	Cantilever	1650	1557
LFLG	Intermediate	2700	2603

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 25 (SM490Y)	765.2	740.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 25 (SM490Y)	367.6	344.4
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2738 * 13 (SM570)	355.9	355.9
1-RWEB PL	2792 * 13 (SM570)	363.0	363.0
1-LFLG PL	2940 * 34 (SM570)	999.6	966.6
7-RIB PL	240 * 19 (SM570)	319.2	273.6

Section property		Total	In-plane
Section area	A (cm2)	3719.1	3593.0
Gravity center	ex (cm)	18.8	17.6
	ey (cm)	151.6	153.0
Moment of inertia	Ix (cm4)	60093235	57627770
	Iy (cm4)	60116479	58302822
Torsion Constant	J (cm4)	37242789	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	91828.9 kN·m	91828.9 kN·m
	Mxr(lower)=	93941.5 kN·m	93941.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ mx	σ a	τ sy	τ t	Σ τ	τ a	κ
DECK-L	[1]	175	210	0	0	0	120	0.70
	[2]	177	210	7	0	7	120	0.72
DECK-C	[3]	177	210	7	0	7	120	0.72
	[4]	178	210	19	7	26	120	0.76
	[5]	186	210	18	7	18	120	0.80
DECK-R	[6]	186	210	17	0	17	120	0.80
	[7]	186	210	17	0	17	120	0.80
LWEB	[8]	190	210	1	0	1	120	0.82
	[9]	174	255	52	13	65	145	0.67
RWEB	[10]	-2	255	57	13	70	145	0.23
	[11]	-221	255	50	13	62	145	0.93
	[12]	182	255	55	13	67	145	0.73
	[13]	-2	255	60	13	73	145	0.25
	[14]	-221	255	52	13	65	145	0.95

LFLG	[15]	-226	255	0	0	0	145	0.78
	[16]	-226	255	18	5	23	145	0.81
	[17]	-226	255	19	5	24	145	0.81
	[18]	-226	255	0	0	0	145	0.78

Girder Name : G-2 Section Name : Sec-72:Mx-Min_R (Girder number= 2 Section number= 72)

Section force Mx = -83091 kN·m Sy = 4197 kN T = -2614 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
 Radius of curvature R = 0.0 m
 Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2603
	Cantilever	1650	1557
LFLG	Intermediate	2700	2603

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 25 (SM490Y)	765.2	740.8
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 25 (SM490Y)	367.6	344.4
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2738 * 13 (SM570)	355.9	355.9
1-RWEB PL	2792 * 13 (SM570)	363.0	363.0
1-LFLG PL	2940 * 34 (SM570)	999.6	966.6
7-RIB PL	240 * 19 (SM570)	319.2	273.6

Section property		Total	In-plane
Section area	A (cm2)	3719.1	3593.0
Gravity center	ex (cm)	18.8	17.6
	ey (cm)	151.6	153.0
Moment of inertia	Ix (cm4)	60093235	57627770
	Iy (cm4)	60116479	58302822
Torsion Constant	J (cm4)	37242789	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	91828.9 kN·m	91828.9 kN·m
	Mxr(lower)=	93941.5 kN·m	93941.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	175	210	0	0	0	120	0.70
	[2]	177	210	7	0	7	120	0.72
DECK-C	[3]	177	210	7	0	7	120	0.72
	[4]	178	210	20	7	27	120	0.77
	[5]	186	210	19	7	19	120	0.81
DECK-R	[6]	186	210	17	0	17	120	0.81
	[7]	186	210	17	0	17	120	0.81
LWEB	[8]	190	210	1	0	1	120	0.82
	[9]	174	255	54	13	68	145	0.68
RWEB	[10]	-2	255	60	13	73	145	0.25
	[11]	-221	255	52	13	65	145	0.95
	[12]	182	255	57	13	70	145	0.74
	[13]	-2	255	63	13	76	145	0.27
	[14]	-221	255	55	13	68	145	0.97

LFLG	[15]	-226	255	0	0	0	145	0.78
	[16]	-226	255	18	5	24	145	0.81
	[17]	-226	255	20	5	25	145	0.81
	[18]	-226	255	0	0	0	145	0.78

Girder Name : G-2 Section Name : Sec-73:J-72 (Girder number= 2 Section number= 73)

Section force Mx = -69519 kN·m Sy = 3981 kN T = -2614 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2621
	Cantilever	1650	1574
LFLG	Intermediate	2700	2621

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 25 (SM490Y)	161.3	161.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 25 (SM490Y)	765.2	745.3
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 25 (SM490Y)	367.6	348.6
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2738 * 13 (SM570)	355.9	355.9
1-RWEB PL	2792 * 13 (SM570)	363.0	363.0
1-LFLG PL	2940 * 32 (SM570)	940.8	915.4
7-RIB PL	220 * 19 (SM570)	292.6	250.8

Section property		Total	In-plane
Section area	A (cm2)	3633.7	3527.7
Gravity center	ex (cm)	19.3	18.3
	ey (cm)	155.0	156.5
Moment of inertia	Ix (cm4)	58200492	56088909
	Iy (cm4)	59540725	58052467
Torsion Constant	J (cm4)	36917122	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	91736.7 kN·m	91736.7 kN·m
	Mxr(lower)=	89586.5 kN·m	89586.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	147	210	0	0	0	120	0.49
	[2]	148	210	7	0	7	120	0.50
DECK-C	[3]	148	210	7	0	7	120	0.50
	[4]	149	210	19	7	26	120	0.55
	[5]	155	210	18	7	18	120	0.57
DECK-R	[6]	156	210	16	0	17	120	0.57
	[7]	156	210	16	0	17	120	0.57
	[8]	159	210	1	0	1	120	0.57
LWEB	[9]	145	255	52	13	65	145	0.53
	[10]	-2	255	57	13	70	145	0.23
	[11]	-194	255	49	13	62	145	0.76
RWEB	[12]	152	255	54	13	67	145	0.57
	[13]	-2	255	59	13	73	145	0.25
	[14]	-194	255	51	13	65	145	0.78
LFLG	[15]	-198	255	0	0	0	145	0.60
	[16]	-198	255	18	5	24	145	0.63
	[17]	-198	255	20	5	25	145	0.63
	[18]	-198	255	0	0	0	145	0.60

Girder Name : G-2 Section Name : Sec-74:J-73 (Girder number= 2 Section number= 74)

Section force Mx = -37523 kN·m Sy = 3483 kN T = -2209 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2668
	Cantilever	1650	1619
LFLG	Intermediate	2700	2668

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	484.5
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	230.3
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 22 (SM570)	646.8	639.7
3-RIB PL	220 * 19 (SM570)	125.4	83.6

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2539.0
Gravity center	ex (cm)	19.5	19.4
	ey (cm)	161.0	163.5
Moment of inertia	Ix (cm4)	39662788	38371636
	Iy (cm4)	43641629	43237379
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66346.4 kN·m	66346.4 kN·m
	Mxr(lower)=	59056.7 kN·m	45183.1 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	109	210	0	0	0	120	0.27
	[2]	110	210	9	0	9	120	0.28
DECK-C	[3]	110	210	9	0	9	120	0.28
	[4]	110	210	25	9	35	120	0.36
	[5]	116	210	24	9	25	120	0.35
DECK-R	[6]	116	210	23	0	23	120	0.34
	[7]	116	210	23	0	23	120	0.34
LWEB	[8]	119	210	0	0	0	120	0.32
	[9]	109	255	53	13	67	145	0.39
RWEB	[10]	-2	255	59	13	72	145	0.25
	[11]	-160	255	48	13	61	145	0.57
	[12]	114	255	56	13	70	145	0.43
LFLG	[13]	-2	255	63	13	76	145	0.27
	[14]	-160	255	51	13	65	145	0.59
	[15]	-162	255	0	0	0	145	0.40
	[16]	-162	195	22	7	29	145	0.44
	[17]	-162	195	24	7	31	145	0.45
	[18]	-162	255	0	0	0	145	0.40

Girder Name : G-2 Section Name : Sec-74:Right (Girder number= 2 Section number= 74)

Section force Mx-Max Mx = 9447 kN·m Sy = 2895 kN T = -1694 kN·m
Mx-Min Mx = -13038 kN·m Sy = 2895 kN T = -1694 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
	DECK	Cantilever	825 825
		Intermediate	2700 2700
		Cantilever	1650 1650
	LFLG	Intermediate	2700 2700

Section dimensions	Section area(cm2)	Total	in plane
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 22 (SM570)	646.8	646.8
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2598.0	2598.0
Gravity center	ex (cm)	19.5	19.5
	ey (cm)	161.0	161.0
Moment of inertia	Ix (cm4)	39662788	39662788
	Iy (cm4)	43641629	43641629
Torsion Constant	J (cm4)	28602995	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=	67191.0 kN·m	67191.0 kN·m	
Mxr(lower)=	61959.0 kN·m		47403.6 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
	DECK-L [1]	-27	210	0	0	0	120	0.02
	[2]	-27	210	8	0	8	120	0.02
	DECK-C [3]	-27	210	8	0	8	120	0.02
	[4]	-27	210	21	7	28	120	0.07
	[5]	-29	210	20	7	20	120	0.05
	[6]	-29	210	19	0	19	120	0.04
	DECK-R [7]	-29	210	19	0	19	120	0.04
	[8]	-30	210	0	0	0	120	0.02
	LWEB [9]	-27	255	44	10	54	145	0.15
	[10]	0	255	49	10	59	145	0.17
	[11]	38	255	40	10	50	145	0.14
	RWEB [12]	-28	255	47	10	57	145	0.17
	[13]	0	255	52	10	62	145	0.18
	[14]	38	255	43	10	53	145	0.16

LFLG	[15]	39	255	0	0	0	145	0.02
	[16]	39	255	18	5	23	145	0.05
	[17]	39	255	20	5	25	145	0.05
	[18]	39	255	0	0	0	145	0.02
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	37	210	0	0	0	120	0.03
	[2]	38	210	8	0	8	120	0.04
DECK-C	[3]	38	210	8	0	8	120	0.04
	[4]	38	210	21	7	28	120	0.09
	[5]	40	210	20	7	20	120	0.06
DECK-R	[6]	40	210	19	0	19	120	0.06
	[7]	40	210	19	0	19	120	0.06
	[8]	41	210	0	0	0	120	0.04
LWEB	[9]	37	255	44	10	54	145	0.16
	[10]	0	255	49	10	59	145	0.17
	[11]	-53	255	40	10	50	145	0.16
RWEB	[12]	39	255	47	10	57	145	0.18
	[13]	0	255	52	10	62	145	0.18
	[14]	-53	255	43	10	53	145	0.18
LFLG	[15]	-54	255	0	0	0	145	0.04
	[16]	-54	195	18	5	23	145	0.07
	[17]	-54	195	20	5	25	145	0.07
	[18]	-54	255	0	0	0	145	0.04

Girder Name : G-2 Section Name : Sec-75:J-74 (Girder number= 2 Section number= 75)

Section force Mx-Max Mx = 9447 kN·m Sy = 2895 kN T = -1694 kN·m
Mx-Min Mx = -13038 kN·m Sy = 2895 kN T = -1694 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm
Radius of curvature R = 0.0 m
Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 18 (SM570)	529.2	529.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	54401.5 kN·m	31584.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-27	210	0	0	0	120	0.02
	[2]	-28	210	8	0	8	120	0.02
DECK-C	[3]	-28	210	8	0	8	120	0.02
	[4]	-28	210	22	7	29	120	0.07
	[5]	-29	210	21	7	21	120	0.05
DECK-R	[6]	-29	210	19	0	19	120	0.05
	[7]	-29	210	19	0	19	120	0.05
LWEB	[8]	-30	210	0	0	0	120	0.02
	[9]	-28	255	45	10	55	145	0.16
RWEB	[10]	0	255	49	10	60	145	0.17
	[11]	44	255	38	10	48	145	0.14
RWEB	[12]	-29	255	48	10	58	145	0.17
	[13]	0	255	52	10	63	145	0.19
	[14]	44	255	41	10	51	145	0.15

LFLG	[15]	44	255	0	0	0	145	0.03
	[16]	44	255	22	6	28	145	0.07
	[17]	44	255	24	6	30	145	0.07
	[18]	44	255	0	0	0	145	0.03
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	38	210	0	0	0	120	0.03
	[2]	38	210	8	0	8	120	0.04
DECK-C	[3]	38	210	8	0	8	120	0.04
	[4]	39	210	22	7	29	120	0.09
	[5]	40	210	21	7	21	120	0.07
DECK-R	[6]	41	210	19	0	19	120	0.06
	[7]	41	210	19	0	19	120	0.06
	[8]	42	210	0	0	0	120	0.04
LWEB	[9]	38	255	45	10	55	145	0.17
	[10]	0	255	49	10	60	145	0.17
RWEB	[11]	-60	255	38	10	48	145	0.17
	[12]	40	255	48	10	58	145	0.18
	[13]	0	255	52	10	63	145	0.19
LFLG	[14]	-60	255	41	10	51	145	0.18
	[15]	-61	255	0	0	0	145	0.06
	[16]	-61	148	22	6	28	145	0.09
	[17]	-61	148	24	6	30	145	0.10
	[18]	-61	255	0	0	0	145	0.06

Girder Name : G-2 Section Name : Sec-75:J-75 (Girder number= 2 Section number= 75)

Section force Mx = 29898 kN·m Sy = 2137 kN T = -1218 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 18 (SM570)	529.2	529.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	54401.5 kN·m	31584.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-87	210	0	0	0	120	0.17
	[2]	-88	210	6	0	6	120	0.18
DECK-C	[3]	-88	210	6	0	6	120	0.18
	[4]	-88	210	16	5	21	120	0.21
	[5]	-93	210	15	5	15	120	0.21
DECK-R	[6]	-93	210	14	0	14	120	0.21
	[7]	-93	210	14	0	14	120	0.21
	[8]	-95	210	0	0	0	120	0.21
LWEB	[9]	-87	255	33	7	41	145	0.19
	[10]	0	255	37	7	44	145	0.09
	[11]	139	255	28	7	35	145	0.36
RWEB	[12]	-91	255	35	7	42	145	0.21
	[13]	0	255	39	7	46	145	0.10
	[14]	139	255	30	7	38	145	0.36
LFLG	[15]	140	255	0	0	0	145	0.30
	[16]	140	255	16	4	20	145	0.32
	[17]	140	255	17	4	22	145	0.32
	[18]	140	255	0	0	0	145	0.30

Girder Name : G-2 Section Name : Sec-76:J-76 (Girder number= 2 Section number= 76)

Section force Mx = 44215 kN·m Sy = 1427 kN T = 1095 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 18 (SM570)	529.2	529.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2480.4	2480.4
Gravity center	ex (cm)	20.4	20.4
	ey (cm)	168.8	168.8
Moment of inertia	Ix (cm4)	36388639	36388639
	Iy (cm4)	42747710	42747710
Torsion Constant	J (cm4)	27615703	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	65744.0 kN·m	65744.0 kN·m
	Mxr(lower)=	54401.5 kN·m	31584.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-129	210	0	0	0	120	0.38
	[2]	-130	210	4	0	4	120	0.39
DECK-C	[3]	-130	210	4	0	4	120	0.39
	[4]	-131	210	11	5	15	120	0.40
	[5]	-137	210	10	5	10	120	0.43
DECK-R	[6]	-138	210	9	0	9	120	0.44
	[7]	-138	210	9	0	9	120	0.44
LWEB	[8]	-141	210	0	0	0	120	0.45
	[9]	-129	255	22	7	29	145	0.29
	[10]	0	255	24	7	31	145	0.05
RWEB	[11]	205	255	19	7	25	145	0.68
	[12]	-135	255	23	7	30	145	0.32
	[13]	0	255	26	7	32	145	0.05
LFLG	[14]	205	255	20	7	27	145	0.68
	[15]	207	255	0	0	0	145	0.66
	[16]	207	255	11	4	15	145	0.67
	[17]	207	255	12	4	16	145	0.67
	[18]	207	255	0	0	0	145	0.66

Girder Name : G-2 Section Name : Sec-77:J-77 (Girder number= 2 Section number= 77)

Section force Mx = 51538 kN·m Sy = 857 kN T = 1001 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 23 (SM570)	676.2	676.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2627.4	2627.4
Gravity center	ex (cm)	19.3	19.3
	ey (cm)	159.2	159.2
Moment of inertia	Ix (cm4)	40437900	40437900
	Iy (cm4)	43864454	43864454
Torsion Constant	J (cm4)	28806377	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67509.0 kN·m	67509.0 kN·m
	Mxr(lower)=	63845.3 kN·m	51151.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-147	210	0	0	0	120	0.49
	[2]	-149	210	2	0	2	120	0.50
DECK-C	[3]	-149	210	2	0	2	120	0.50
	[4]	-149	210	6	4	10	120	0.51
	[5]	-156	210	6	4	8	120	0.56
DECK-R	[6]	-157	210	6	0	6	120	0.56
	[7]	-157	210	6	0	6	120	0.56
	[8]	-160	210	0	0	0	120	0.58
LWEB	[9]	-147	255	13	6	19	145	0.35
	[10]	0	255	14	6	21	145	0.02
	[11]	203	255	12	6	18	145	0.65
RWEB	[12]	-154	255	14	6	20	145	0.38
	[13]	0	255	15	6	21	145	0.02
	[14]	203	255	13	6	19	145	0.65
LFLG	[15]	206	255	0	0	0	145	0.65
	[16]	206	255	5	3	8	145	0.65
	[17]	206	255	6	3	9	145	0.66
	[18]	206	255	0	0	0	145	0.65

Girder Name : G-2 Section Name : Sec-78: Mx-Max (Girder number= 2 Section number= 78)

Section force Mx = 53239 kN·m Sy = 478 kN T = -987 kN·m

Effective buckling length Lx = 10000 mm Ly = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 23 (SM570)	676.2	676.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2627.4	2627.4
Gravity center	ex (cm)	19.3	19.3
	ey (cm)	159.2	159.2
Moment of inertia	Ix (cm4)	40437900	40437900
	Iy (cm4)	43864454	43864454
Torsion Constant	J (cm4)	28806377	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	67509.0 kN·m	67509.0 kN·m
	Mxr(lower)=	63845.3 kN·m	51151.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-152	210	0	0	0	120	0.52
	[2]	-154	210	1	0	1	120	0.54
DECK-C	[3]	-154	210	1	0	1	120	0.54
	[4]	-154	210	3	4	8	120	0.54
	[5]	-161	210	3	4	6	120	0.59
DECK-R	[6]	-162	210	3	0	3	120	0.59
	[7]	-162	210	3	0	3	120	0.59
LWEB	[8]	-166	210	0	0	0	120	0.62
	[9]	-152	255	7	6	13	145	0.36
	[10]	0	255	8	6	14	145	0.01
RWEB	[11]	210	255	7	6	13	145	0.68
	[12]	-159	255	8	6	14	145	0.40
	[13]	0	255	9	6	15	145	0.01
LFLG	[14]	210	255	7	6	13	145	0.68
	[15]	213	255	0	0	0	145	0.70
	[16]	213	255	3	3	6	145	0.70
	[17]	213	255	3	3	6	145	0.70
	[18]	213	255	0	0	0	145	0.70

Girder Name : G-2 Section Name : Sec-79:J-78 (Girder number= 2 Section number= 79)

Section force Mx = 53095 kN·m Sy = -515 kN T = -987 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 23 (SM570)	676.2	676.2
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2627.4	2627.4
Gravity center	ex (cm)	19.3	19.3
	ey (cm)	159.2	159.2
Moment of inertia	Ix (cm4)	40437900	40437900
	Iy (cm4)	43864454	43864454
Torsion Constant	J (cm4)	28806377	

Resisting bending moment		(+)	(-)
In-plane Mxr(upper)=		67509.0 kN·m	67509.0 kN·m
Mxr(lower)=		63845.3 kN·m	51151.4 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-152	210	0	0	0	120	0.52
	[2]	-153	210	1	0	1	120	0.53
DECK-C	[3]	-153	210	1	0	1	120	0.53
	[4]	-154	210	4	4	8	120	0.54
	[5]	-161	210	4	4	6	120	0.59
DECK-R	[6]	-161	210	3	0	3	120	0.59
	[7]	-161	210	3	0	3	120	0.59
LWEB	[8]	-165	210	0	0	0	120	0.62
	[9]	-152	255	8	6	14	145	0.36
	[10]	0	255	9	6	15	145	0.01
RWEB	[11]	209	255	7	6	13	145	0.68
	[12]	-159	255	8	6	14	145	0.40
	[13]	0	255	9	6	15	145	0.01
LFLG	[14]	209	255	8	6	14	145	0.68
	[15]	212	255	0	0	0	145	0.69
	[16]	212	255	3	3	6	145	0.69
	[17]	212	255	3	3	6	145	0.69
	[18]	212	255	0	0	0	145	0.69

Girder Name : G-2 Section Name : Sec-80:J-79 (Girder number= 2 Section number= 80)

Section force Mx = 49318 kN·m Sy = -913 kN T = -1338 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM570)	302.2	302.2
1-RWEB PL	2801 * 11 (SM570)	308.1	308.1
1-LFLG PL	2940 * 20 (SM570)	588.0	588.0
3-RIB PL	220 * 19 (SM570)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2539.2
Gravity center	ex (cm)	20.0	20.0
	ey (cm)	164.8	164.8
Moment of inertia	Ix (cm4)	38061661	38061661
	Iy (cm4)	43195212	43195212
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66505.4 kN·m	66505.4 kN·m
	Mxr(lower)=	58182.6 kN·m	39683.9 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-142	210	0	0	0	120	0.46
	[2]	-144	210	2	0	3	120	0.47
DECK-C	[3]	-144	210	2	0	3	120	0.47
	[4]	-144	210	7	6	12	120	0.48
	[5]	-151	210	6	6	9	120	0.53
DECK-R	[6]	-152	210	6	0	6	120	0.53
	[7]	-152	210	6	0	6	120	0.53
	[8]	-156	210	0	0	0	120	0.55
LWEB	[9]	-142	255	14	8	22	145	0.34
	[10]	0	255	16	8	24	145	0.03
RWEB	[11]	214	255	12	8	20	145	0.72
	[12]	-149	255	15	8	23	145	0.37
	[13]	0	255	16	8	25	145	0.03
LFLG	[14]	214	255	13	8	21	145	0.72
	[15]	216	255	0	0	0	145	0.72
	[16]	216	255	6	4	11	145	0.72
	[17]	216	255	7	4	11	145	0.72
	[18]	216	255	0	0	0	145	0.72

Girder Name : G-2 Section Name : Sec-81:J-80 (Girder number= 2 Section number= 81)

Section force Mx = 40078 kN·m Sy = -1533 kN T = -1725 kN·m

Effective buckling length Lx = 10000 mmLy = 10000 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 20 (SM490Y)	588.0	588.0
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2539.2	2539.2
Gravity center	ex (cm)	20.0	20.0
	ey (cm)	164.8	164.8
Moment of inertia	Ix (cm4)	38061661	38061661
	Iy (cm4)	43195212	43195212
Torsion Constant	J (cm4)	28148444	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	66505.4 kN·m	66505.4 kN·m
	Mxr(lower)=	47915.1 kN·m	35582.6 kN·m

Stress (N/mm²)

Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-116	210	0	0	0	120	0.30
	[2]	-117	210	4	0	4	120	0.31
DECK-C	[3]	-117	210	4	0	4	120	0.31
	[4]	-117	210	11	7	18	120	0.34
	[5]	-123	210	11	7	13	120	0.36
DECK-R	[6]	-123	210	10	0	10	120	0.35
	[7]	-123	210	10	0	10	120	0.35
	[8]	-127	210	0	0	0	120	0.36
LWEB	[9]	-116	210	24	10	34	120	0.38
	[10]	0	210	26	10	36	120	0.09
	[11]	174	210	21	10	31	120	0.75
RWEB	[12]	-121	210	25	10	35	120	0.42
	[13]	0	210	28	10	38	120	0.10
	[14]	174	210	22	10	33	120	0.76
LFLG	[15]	176	210	0	0	0	120	0.70
	[16]	176	210	11	6	16	120	0.72
	[17]	176	210	11	6	17	120	0.72
	[18]	176	210	0	0	0	120	0.70

Girder Name : G-2 Section Name : Sec-82:J-81 (Girder number= 2 Section number= 82)

Section force Mx = 20963 kN·m Sy = -2480 kN T = 1832 kN·m

Effective buckling length Lx = 13100 mmLy = 13100 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 13 (SM490Y)	382.2	382.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2333.4	2333.4
Gravity center	ex (cm)	21.7	21.7
	ey (cm)	179.5	179.5
Moment of inertia	Ix (cm4)	31855841	31855841
	Iy (cm4)	41623670	41623670
Torsion Constant	J (cm4)	25760752	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63407.8 kN·m	63407.8 kN·m
	Mxr(lower)=	37001.4 kN·m	13724.5 kN·m

Stress (N/mm ²)								
Mx-Max	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	-63	210	0	0	0	120	0.09
	[2]	-63	210	7	0	7	120	0.09
DECK-C	[3]	-63	210	7	0	7	120	0.09
	[4]	-64	210	19	8	27	120	0.14
	[5]	-67	210	18	8	18	120	0.13
DECK-R	[6]	-67	210	17	0	17	120	0.12
	[7]	-67	210	17	0	17	120	0.12
LWEB	[8]	-69	210	0	0	0	120	0.11
	[9]	-63	210	40	11	51	120	0.27
RWEB	[10]	0	210	43	11	54	120	0.20
	[11]	118	210	31	11	42	120	0.44
	[12]	-66	210	42	11	53	120	0.29
LFLG	[13]	0	210	46	11	57	120	0.22
	[14]	118	210	33	11	44	120	0.45
	[15]	119	210	0	0	0	120	0.32
	[16]	119	210	24	9	34	120	0.40
	[17]	119	210	26	9	36	120	0.41
	[18]	119	210	0	0	0	120	0.32

Girder Name : G-2 Section Name : Sec-82:Right (Girder number= 2 Section number= 82)

Section force Mx = 0 kN·m Sy = -2944 kN T = 1832 kN·m

Effective buckling length Lx = 13100 mmLy = 13100 mm

Radius of curvature R = 0.0 m

Inclination DECK = 2.0 %

Effective width(mm)		Full width	In-plane
DECK	Cantilever	825	825
	Intermediate	2700	2700
	Cantilever	1650	1650
LFLG	Intermediate	2700	2700

Section dimensions	Section area(cm2)	Total in plane	
1-DECK-L PL	645 * 16 (SM490Y)	103.2	103.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
1-DECK-C PL	3061 * 16 (SM490Y)	489.7	489.7
4-U.RIB 320 * 240 * 8 (SM490Y)		215.6	215.6
1-DECK-R PL	1470 * 16 (SM490Y)	235.2	235.2
1-U.RIB 320 * 240 * 8 (SM490Y)		53.9	53.9
2-BULB PL	230 * 11 (SM490Y)	64.0	64.0
1-LWEB PL	2747 * 11 (SM490Y)	302.2	302.2
1-RWEB PL	2801 * 11 (SM490Y)	308.1	308.1
1-LFLG PL	2940 * 13 (SM490Y)	382.2	382.2
3-RIB PL	220 * 19 (SM490Y)	125.4	125.4

Section property		Total	In-plane
Section area	A (cm2)	2333.4	2333.4
Gravity center	ex (cm)	21.7	21.7
	ey (cm)	179.5	179.5
Moment of inertia	Ix (cm4)	31855841	31855841
	Iy (cm4)	41623670	41623670
Torsion Constant	J (cm4)	25760752	

Resisting bending moment		(+)	(-)
In-plane	Mxr(upper)=	63407.8 kN·m	63407.8 kN·m
	Mxr(lower)=	37001.4 kN·m	13724.5 kN·m

Stress (N/mm ²)								
Mx-Min	[Check point]	σ_{mx}	σ_a	τ_{sy}	τ_t	$\Sigma \tau$	τ_a	κ
DECK-L	[1]	0	210	0	0	0	120	0.00
	[2]	0	210	8	0	8	120	0.00
DECK-C	[3]	0	210	8	0	8	120	0.00
	[4]	0	210	23	8	30	120	0.06
	[5]	0	210	22	8	22	120	0.03
DECK-R	[6]	0	210	20	0	20	120	0.03
	[7]	0	210	20	0	20	120	0.03
	[8]	0	210	0	0	0	120	0.00
LWEB	[9]	0	210	47	11	58	120	0.23
	[10]	0	210	51	11	62	120	0.27
	[11]	0	210	36	11	47	120	0.16
RWEB	[12]	0	210	50	11	61	120	0.25
	[13]	0	210	54	11	65	120	0.30
	[14]	0	210	39	11	50	120	0.18
LFLG	[15]	0	210	0	0	0	120	0.00
	[16]	0	210	29	9	38	120	0.10
	[17]	0	210	31	9	41	120	0.11
	[18]	0	210	0	0	0	120	0.00

3-3 Splice Calculation of main Girder

Calculate web plate · lower flange

Design policy

Stress check method for joints on tensile flange and longitudinal ribs without bolt hole area

Checking formula : $\sigma_{tn} = \sigma_{tmax} \cdot A_g / A_n \leq \sigma_{ta}$

Where

σ_{tn} : Acting stress without bolt hole area

σ_{tmax} : Acting stress

A_g : Gross section area (Flange section area + longitudinal rib section area)

A_n : Net section area (Flange section area without bolt hole area + longitudinal rib section area without bolt holes)

σ_{ta} : Allowable tensile stress

Required number of bolts for tensile flange and longitudinal ribs

$\sigma_{tn} = \sigma_{tmax} \cdot A_g / A_n$

When $\sigma_{tn} \geq 0.75 \sigma_{ta}$ $\sigma_t = \sigma_{tn}$

When $\sigma_{tn} < 0.75 \sigma_{ta}$ $\sigma_t = 0.75 \sigma_{ta}$

Required number of bolts $\sigma_t \cdot A_n S / \rho a$

Where

$0.75 \sigma_{ta}$: 75% of allowable stress

σ_t : Design tensile stress for bolts

$A_n S$: Net area of flange and longitudinal ribs respectively

(1) G-1 J-1 (Sec-1) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM490Y)

(b) Design stress

$$\sigma_U = -72 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

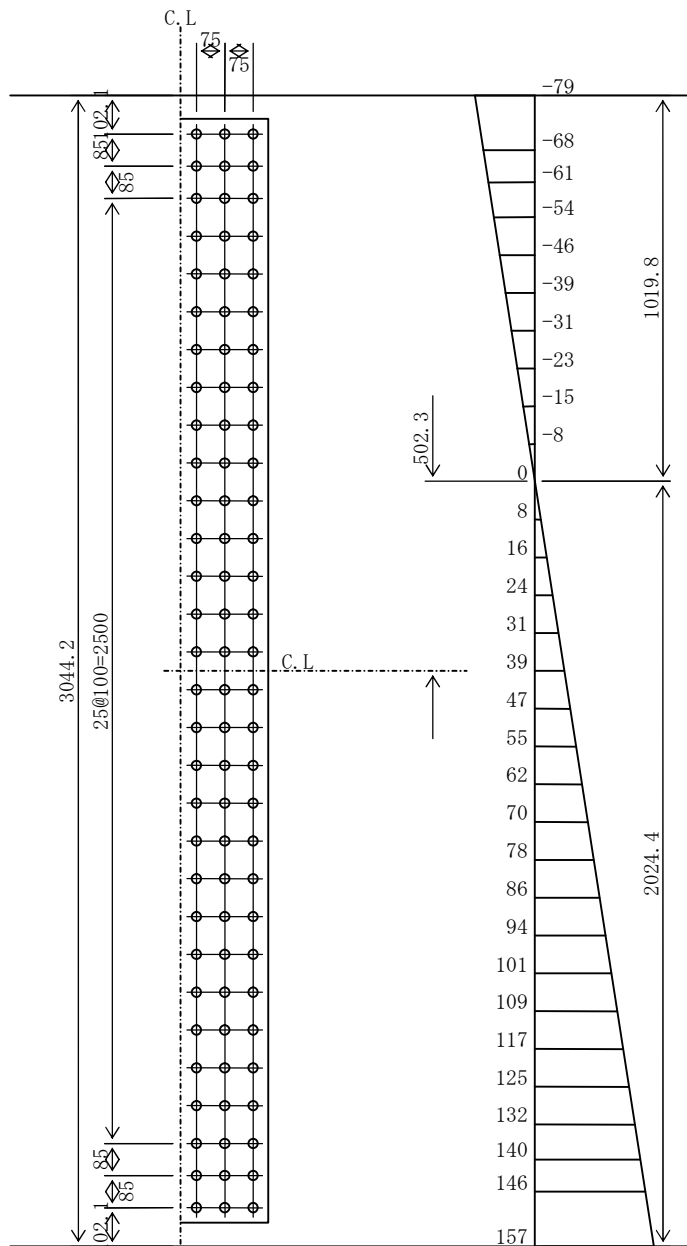
$$\sigma_L = 144 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

$$\sigma_{Un} = 158 * 72 / 144 = 79 \text{ N/mm}^2$$

$$\sigma_{Ln} = 158 \text{ N/mm}^2$$

$$\tau = 47 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.5 \text{ cm}$

Total force to be shared

$$P_1 = 145 * 12 * (146 + 157) / 2 = 263565 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 263565 / (108000 * 1.00) = 2.4 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 90 = 47 * 36531 / 90 = 19155 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((263565 / 3)^2 + 19155^2)} = 89919 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2920 * 9 \quad A_s = 525.6 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 5060835 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3743007 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 158 * 3743007 * 10^4 / 2024 = 2912 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2912 * 10^6 / (5060835 * 10^4) * 1962 = 113 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(2) G-1 J-1 (Sec-1) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM490Y)

(b) Design stress

$$\sigma_U = -77 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

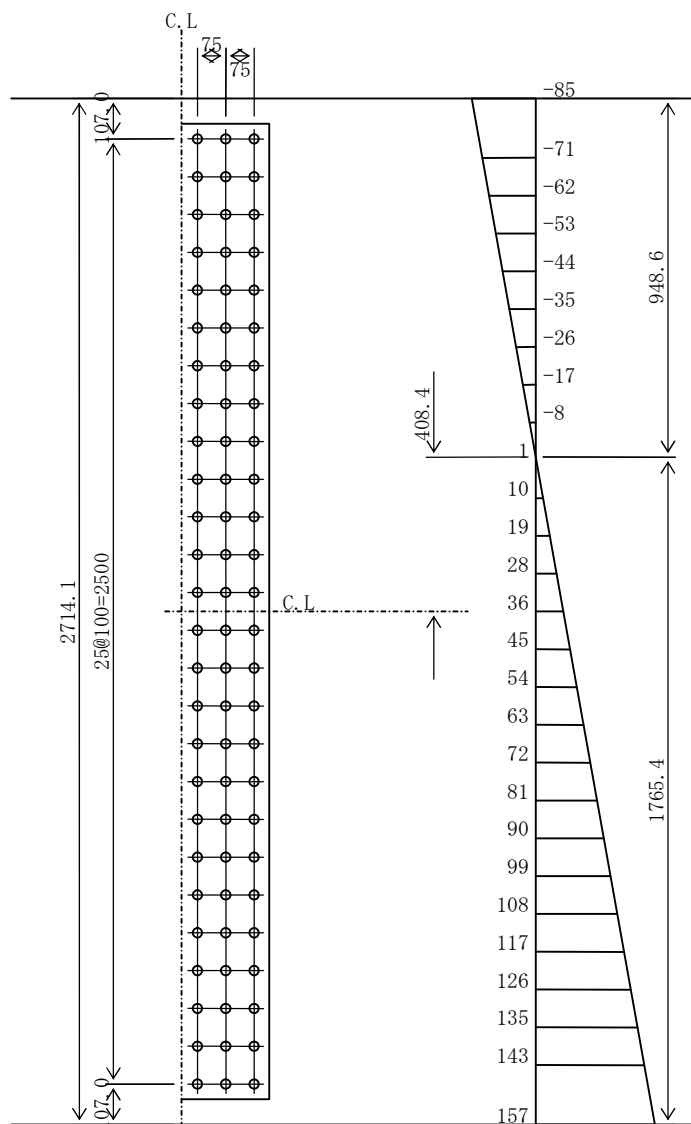
$$\sigma_L = 143 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

$$\sigma_{Un} = 158 * 77 / 143 = 85 \text{ N/mm}^2$$

$$\sigma_{Ln} = 158 \text{ N/mm}^2$$

$$\tau = 48 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.7 \text{ cm}$

Total force to be shared

$$P_1 = 157 * 12 * (143 + 157) / 2 = 283604 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 283604 / (108000 * 1.00) = 2.6 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 78 = 48 * 32569 / 78 = 20019 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((283604 / 3)^2 + 20019^2)} = 96631 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

2-SPL PL 2580 * 9 $A_s = 464.4 \text{ cm}^2$ (SM490Y)

Moment of inertia of splice plates $I_s = 3350630 \text{ cm}^4 > I_w$

Moment of inertia of web plate $I_w = 2542491 \text{ cm}^4$

Bending moment to be shared by the web

$$M_w = 158 * 2542491 * 10^4 / 1765 = 2268 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2268 * 10^6 / (3350630 * 10^4) * 1698 = 115 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(3) G-1 J-1 (Sec-1) LFLG

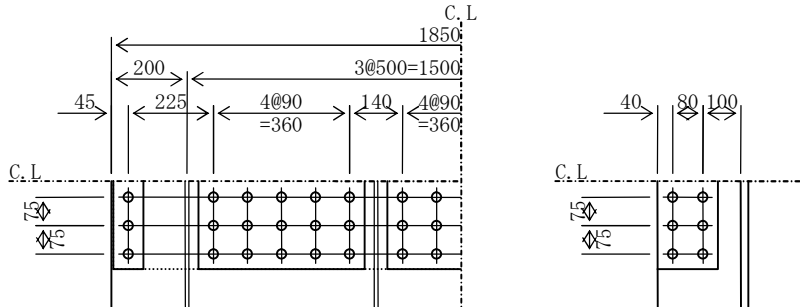
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 145 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 20 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 83.6 & &= 453.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ (370.0 - (17 * 2.5) * 2.0) * 1.1 &= 313.5 < 370.0 & \therefore A_n &= 313.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 313.5 + 71.1 & &= 384.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 145 * 453.6 / 384.6 & &= 171 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 171 * 31350 = 5363771 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 31350 / 1.1 = 4488750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 171 * 7106 = 1215788 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5363771 + 1215788) / 210 = 31331 \text{ mm}^2 = 313.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5363771 / 108000 = 49.7 \text{ pcs. (51 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1215788 / 108000 = 11.3 \text{ pcs. (2 @ 6 = 12 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,3 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 51 = 5363771 / 51 = 105172 \text{ N} \\ \rho_s &= \tau * A_g / 51 = 20 * 37000 / 51 = 14156 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105172^2 + 14156^2)} = 106120 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3<	17.6 ∴ 13.3
3-SPL PL	440 * 11	(145.2 -	3*(5*2.5)* 1.1)*1.1= 114.3<	145.2 ∴ 114.3
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 12	(76.8 -	4*(2*2.5)* 1.2)*1.1= 58.1<	76.8 ∴ 58.1
<hr/>				
		405.2		325.8
				> AnR

(4) G-1 J-2 (Sec-2) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM490Y)

(b) Design stress

$\sigma_U = -122 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

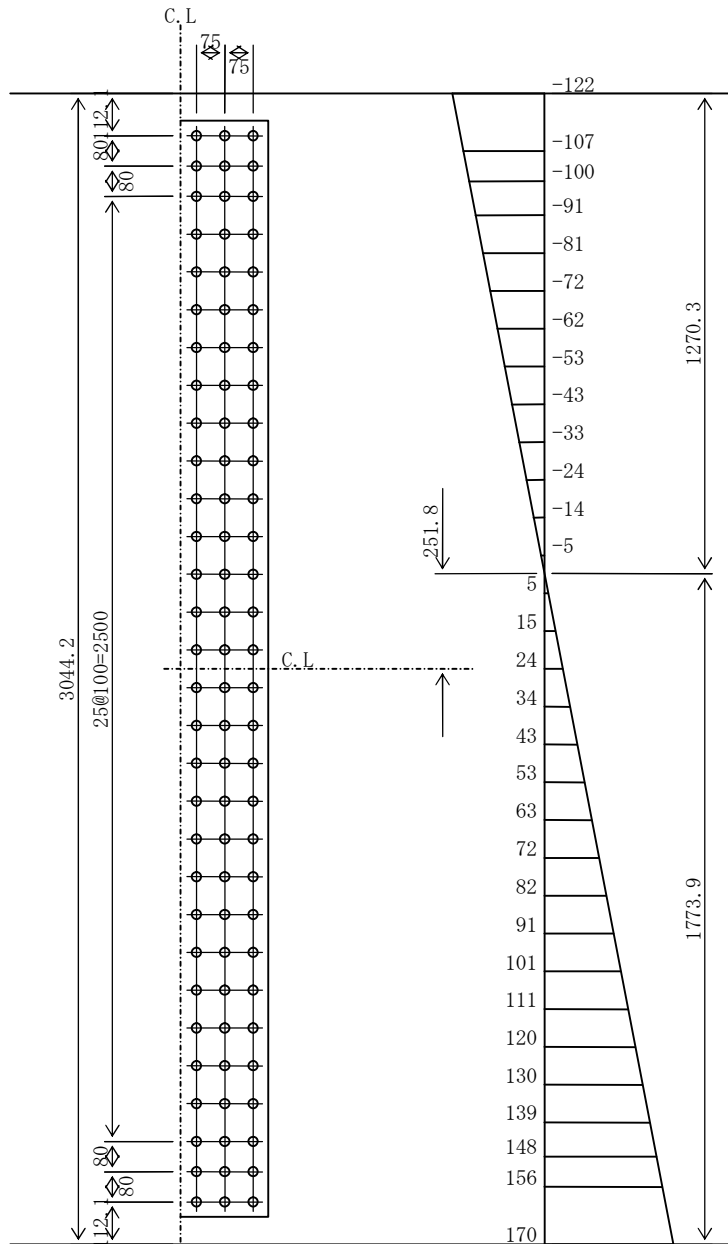
$\sigma_L = 170 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

$\sigma_{Un} = 122 \text{ N/mm}^2$

$\sigma_{Ln} = 170 \text{ N/mm}^2$

$\tau = 35 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 15.2 \text{ cm}$

Total force to be shared

$$P_1 = 152 * 12 * (156 + 170) / 2 = 297536 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 297536 / (108000 * 1.00) = 2.8 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 90 = 35 * 36531 / 90 = 14333 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((297536 / 3)^2 + 14333^2)} = 100209 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3989327 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3052779 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 170 * 3052779 * 10^4 / 1774 = 2931 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2931 * 10^6 / (3989327 * 10^4) * 1702 = 125 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(5) G-1 J-2 (Sec-2) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM490Y)

(b) Design stress

$\sigma_U = -128 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

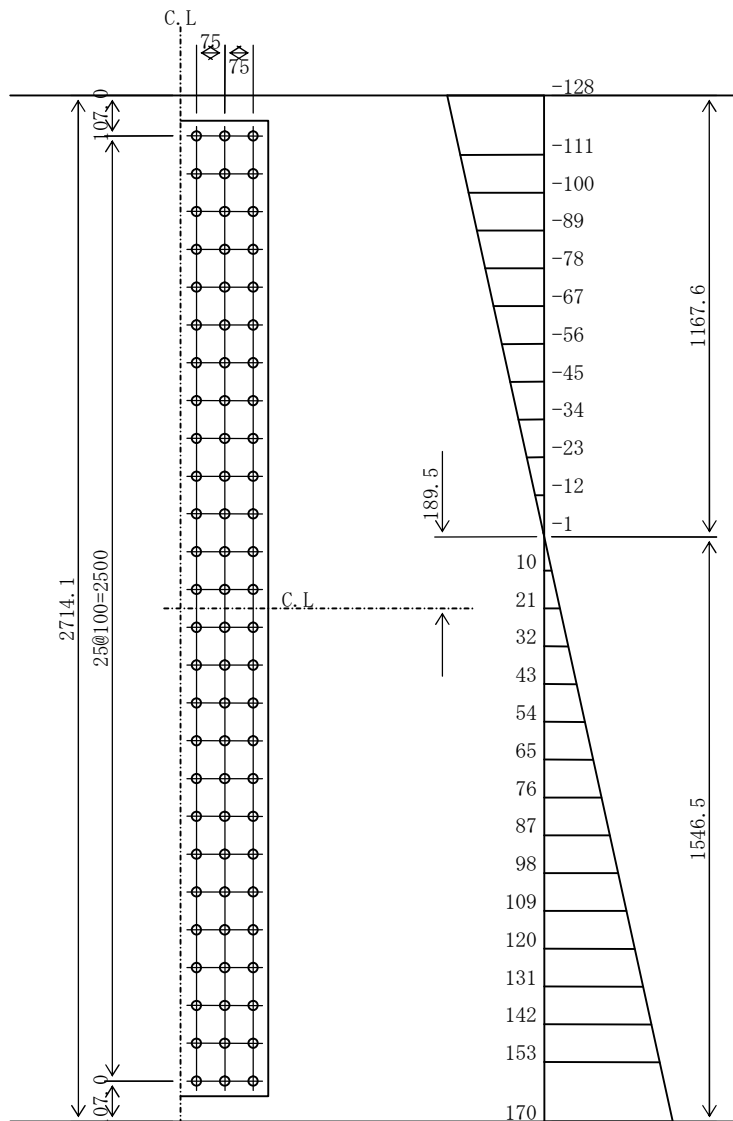
$\sigma_L = 170 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

$\sigma_{Un} = 128 \text{ N/mm}^2$

$\sigma_{Ln} = 170 \text{ N/mm}^2$

$\tau = 36 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.7$ cm

Total force to be shared

$$P_1 = 157 * 12 * (153 + 170) / 2 = 303985 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 303985 / (108000 * 1.00) = 2.8 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 78 = 36 * 32569 / 78 = 15072 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((303985 / 3)^2 + 15072^2)} = 102443 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2742779 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2116228 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 170 * 2116228 * 10^4 / 1547 = 2325 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2325 * 10^6 / (2742779 * 10^4) * 1479 = 125 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(6) G-1 J-2 (Sec-2) LFLG

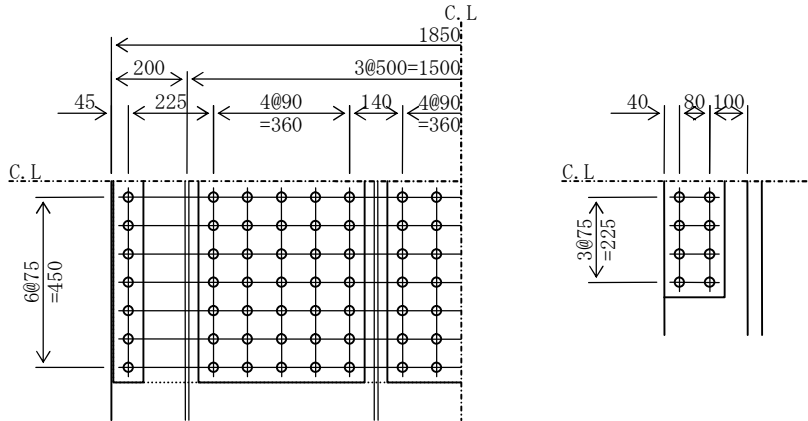
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 174 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 9 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A_g &= 703.0 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 703.0 + 83.6 & &= 786.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A &= 703.0 \\ (703.0 - (17 * 2.5) * 3.8) * 1.1 &= 595.7 < 703.0 & \therefore A_n &= 595.7 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 595.7 + 71.1 & &= 666.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 174 * 786.6 / 666.7 & &= 205 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 205 * 595.7 = 122355.74 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 595.7 / 1.1 = 85286.25 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 205 * 71.1 = 14596.83 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 71.1 / 1.1 = 10174.50 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (122355.74 + 14596.83) / 210 = 65216 \text{ mm}^2 = 652.2 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 122355.74 / 108000 = 113.3 \text{ pcs.}$ (119 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 14596.83 / 108000 = 13.5 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{\text{max}} = 7.4 \text{ unites}$)

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 119 = 122355.74 / 119 = 102820 \text{ N} \\ \rho_s &= \tau * A_g / 119 = 9 * 70300 / 119 = 5176 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{102820^2 + 5176^2} = 102950 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 25	(40.0 -	2*(1*2.5)* 2.5)*1.1= 30.3<	40.0 ∴ 30.3
3-SPL PL	440 * 25	(330.0 -	3*(5*2.5)* 2.5)*1.1= 259.9<	330.0 ∴259.9
1-SPL PL	1840 * 19	(349.6 -	(17*2.5)* 1.9)*1.1= 295.7<	349.6 ∴295.7
4-SPL PL	160 * 15	(96.0 -	4*(2*2.5)* 1.5)*1.1= 72.6<	96.0 ∴ 72.6
<hr/>				
		815.6		658.5
				> AnR

(7) G-1 J-3 (Sec-3) LFLG

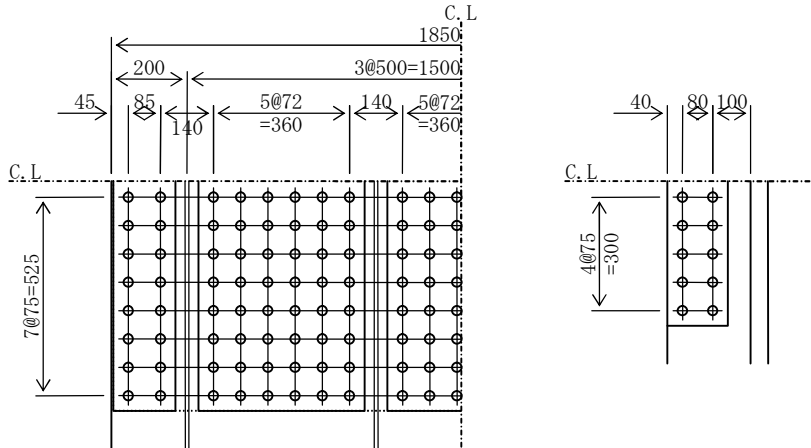
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 195 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 5 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 46 & & A_g &= 851.0 \text{ cm}^2 & (\text{SM570-H}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 851.0 + 83.6 & &= 934.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 46 & & A &= 851.0 \\ (851.0 - (21 * 2.5) * 4.6) * 1.1 &= 670.5 < 851.0 & \therefore A_n &= 670.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 670.5 + 71.1 & &= 741.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 195 * 934.6 / 741.5 & &= 245 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 245 * 670.5 = 16440765 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 670.5 / 1.1 = 11656687 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 245 * 71.1 = 1742532 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 71.1 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (16440765 + 1742532) / 255 = 71307 \text{ mm}^2 = 713.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 16440765 / 108000 = 152.2 \text{ pcs. (168 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1742532 / 108000 = 16.1 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 8,5 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 168 = 16440765 / 168 = 97862 \text{ N} \\ \rho_s &= \tau * A_g / 168 = 5 * 85100 / 168 = 2667 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(97862^2 + 2667^2)} = 97898 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
1-SPL PL	165 * 31	(51.1 -	(2*2.5)* 3.1)*1.1= 39.2<	51.1 ∴ 39.2
3-SPL PL	440 * 31	(409.2 -	3*(6*2.5)* 3.1)*1.1= 296.7<	409.2 ∴ 296.7
1-SPL PL	80 * 31	(24.8 -	(1*2.5)* 3.1)*1.1= 18.8<	24.8 ∴ 18.8
1-SPL PL	1840 * 23	(423.2 -	(21*2.5)* 2.3)*1.1= 332.7<	423.2 ∴ 332.7
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		998.0		755.1
				> AnR

(8) G-1 J-4 (Sec-4) LWEB
 G-1 J-3 (Sec-3) LWEB

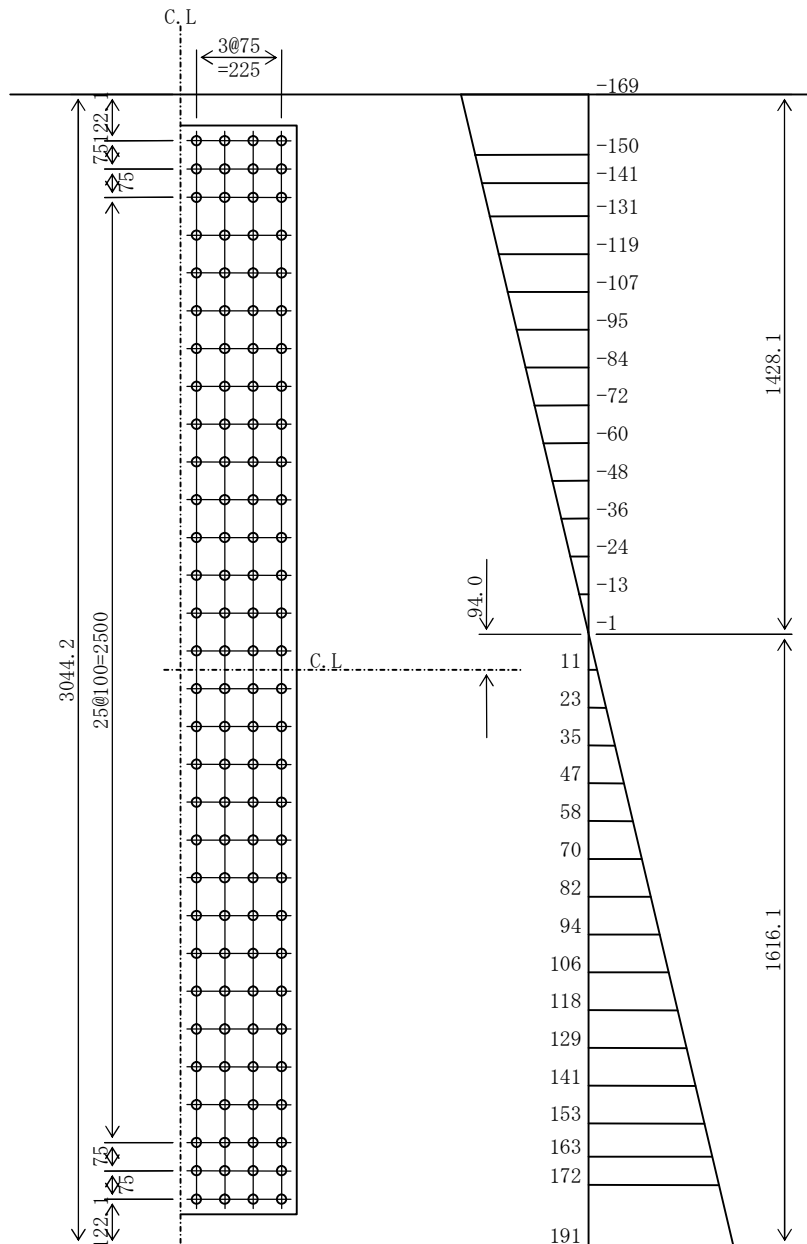
(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -168 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 190 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 168 / 190 = 169 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 16 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 16.0$ cm

Total force to be shared

$$P_1 = 160 * 12 * (172 + 191) / 2 = 348213 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 348213 / (108000 * 1.00) = 3.2 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 16 * 36531 / 120 = 4754 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((348213 / 4)^2 + 4754^2)} = 87183 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2880 * 9 \quad A_s = 518.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3628950 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2853407 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2853407 * 10^4 / 1616 = 3377 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3377 * 10^6 / (3628950 * 10^4) * 1534 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(9) G-1 J-4 (Sec-4) RWEB
 G-1 J-3 (Sec-3) RWEB

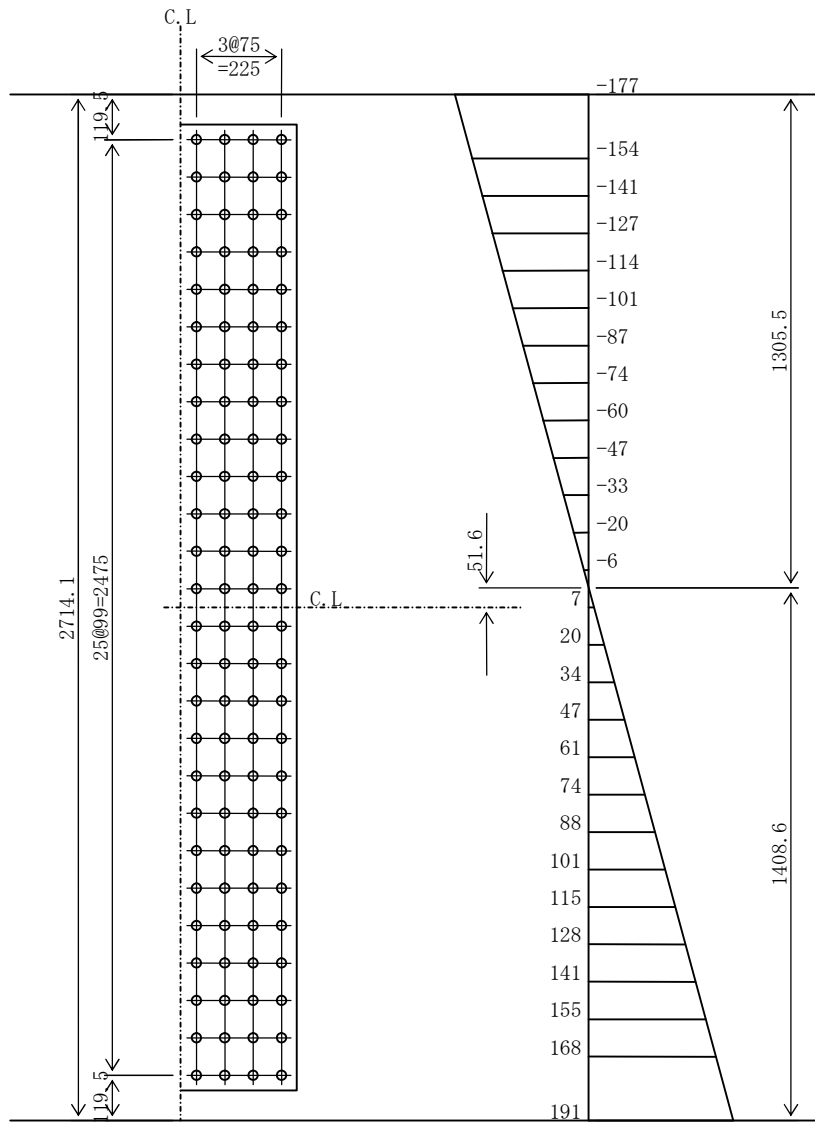
(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -176 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 190 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 176 / 190 = 177 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 16 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.9$ cm

Total force to be shared

$$P_1 = 169 * 12 * (168 + 191) / 2 = 364682 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 364682 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 16 * 32569 / 104 = 4971 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((364682 / 4)^2 + 4971^2)} = 91306 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2514100 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2007947 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2007947 * 10^4 / 1409 = 2726 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2726 * 10^6 / (2514100 * 10^4) * 1329 = 144 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(10) G-1 J-4(Sec-4) LFLG

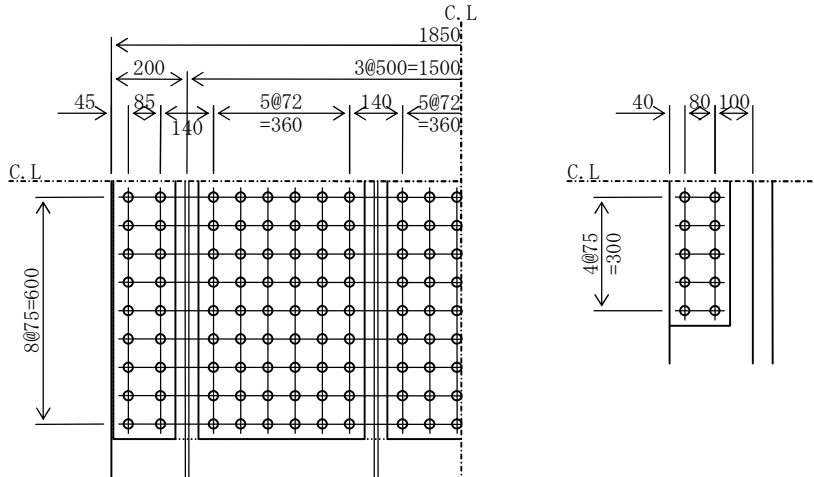
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 197 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 3 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 52 & & A_g &= 962.0 \text{ cm}^2 & (\text{SM570-H}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 962.0 + 83.6 & &= 1045.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 52 & & A &= 962.0 \\ & (962.0 - (21 * 2.5) * 5.2) * 1.1 & &= 757.9 < 962.0 & \therefore A_n = 757.9 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ & (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 & &= 71.1 < 83.6 & \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 757.9 + 71.1 & &= 829.0 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 197 * 1045.6 / 829.0 & &= 248 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 248 * 75790 = 18793208 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 75790 / 1.1 = 13177125 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 248 * 7106 = 1762034 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (18793208 + 1762034) / 255 = 80609 \text{ mm}^2 = 806.1 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 0.98) = 18793208 / 105840 = 177.6 \text{ pcs.}$ (189 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 1762034 / 108000 = 16.3 \text{ pcs.}$ (2 @ 10 = 20 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{\max} = 9,5 \text{ unites}$)

(h) Tensile force per one bolt

$$\rho p = Pt / 189 = 18793208 / 189 = 99435 \text{ N}$$

$$\rho s = \tau * Ag / 189 = 3 * 96200 / 189 = 1609 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(99435^2 + 1609^2)} = 99448 \text{ N} < \rho a = 105840 \text{ N}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
1-SPL PL	165 * 35	(57.8 -	(2*2.5)* 3.5)*1.1= 44.3<	57.8 ∴ 44.3
3-SPL PL	440 * 35	(462.0 -	3*(6*2.5)* 3.5)*1.1= 335.0<	462.0 ∴ 335.0
1-SPL PL	80 * 35	(28.0 -	(1*2.5)* 3.5)*1.1= 21.2<	28.0 ∴ 21.2
1-SPL PL	1840 * 26	(478.4 -	(21*2.5)* 2.6)*1.1= 376.1<	478.4 ∴ 376.1
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		1115.8		844.3
				> AnR

(11) G-1 J-5(Sec-6) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$\sigma_U = -168 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

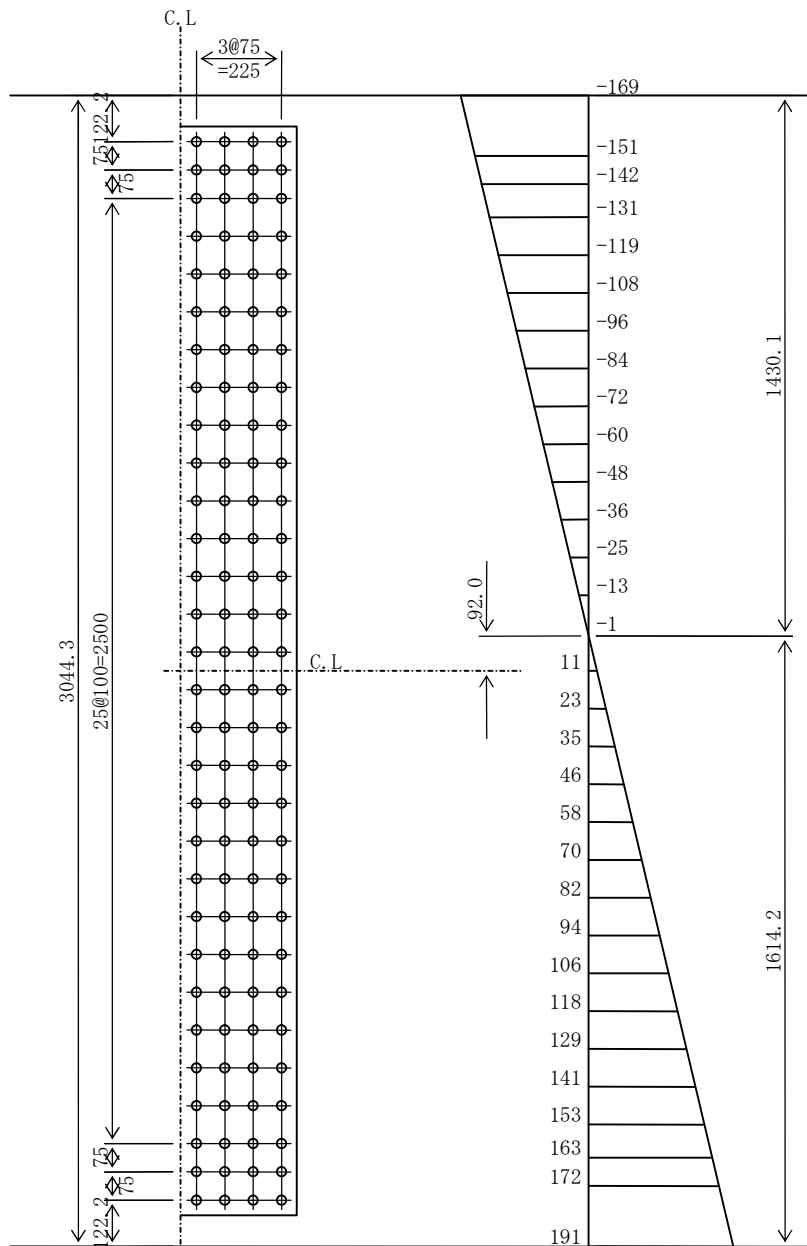
$\sigma_L = 190 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 191 * 168 / 190 = 169 \text{ N/mm}^2$

$\sigma_{Ln} = 191 \text{ N/mm}^2$

$\tau = 19 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 16.0$ cm

Total force to be shared

$$P_1 = 160 * 12 * (172 + 191) / 2 = 348301 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 348301 / (108000 * 1.00) = 3.2 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 19 * 36532 / 120 = 5780 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((348301 / 4)^2 + 5780^2)} = 87267 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2880 * 9 \quad A_s = 518.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3627082 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2852386 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2852386 * 10^4 / 1614 = 3380 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3380 * 10^6 / (3627082 * 10^4) * 1532 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(12) G-1 J-5(Sec-6) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM570)

(b) Design stress

$$\sigma_U = -174 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

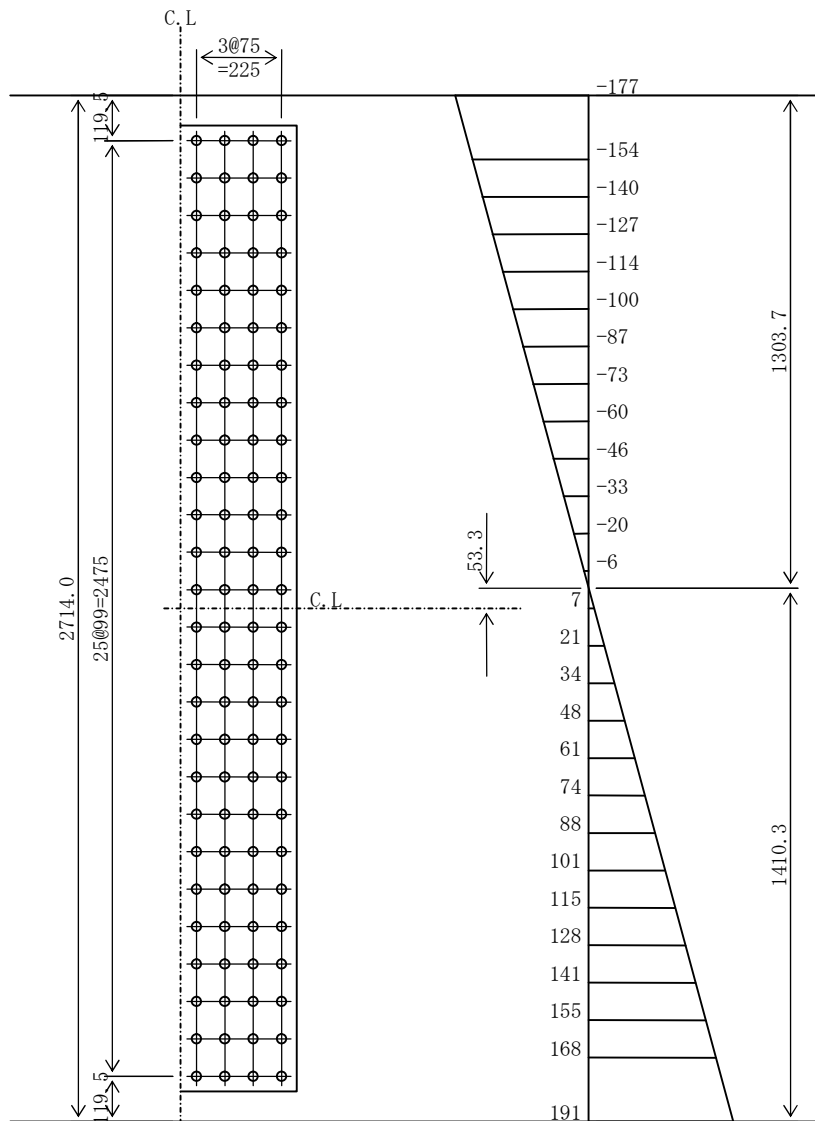
$$\sigma_L = 189 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 174 / 189 = 177 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 19 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.9 \text{ cm}$

Total force to be shared

$$P_1 = 169 * 12 * (168 + 191) / 2 = 364631 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 364631 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 19 * 32568 / 104 = 6029 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((364631 / 4)^2 + 6029^2)} = 91357 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2514950 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2008374 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2008374 * 10^4 / 1410 = 2723 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2723 * 10^6 / (2514950 * 10^4) * 1331 = 144 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(13) G-1 J-5(Sec-6) LFLG

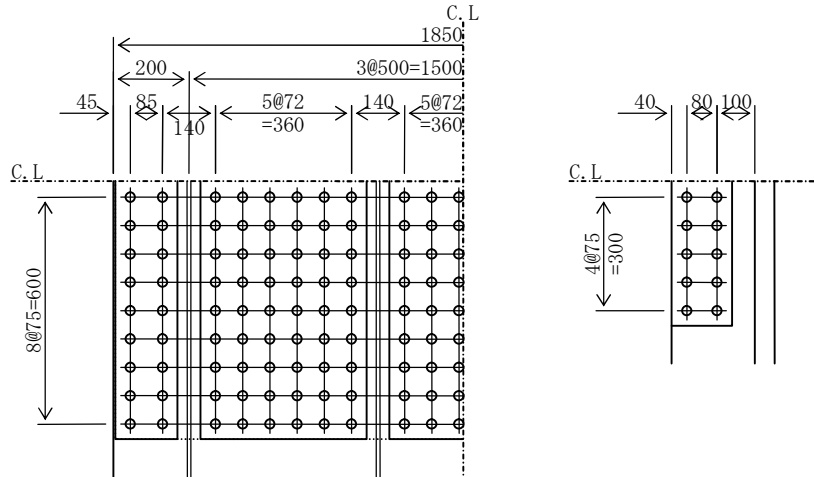
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 197 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 4 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 52 & & A_g &= 962.0 \text{ cm}^2 & (\text{SM570-H}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 962.0 + 83.6 & &= 1045.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 52 & & A &= 962.0 \\ & (962.0 - (21 * 2.5) * 5.2) * 1.1 & &= 757.9 < 962.0 & \therefore A_n = 757.9 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ & (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 & &= 71.1 < 83.6 & \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 757.9 + 71.1 & &= 829.0 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 197 * 1045.6 / 829.0 & &= 248 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 248 * 75790 = 18799230 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 75790 / 1.1 = 13177125 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 248 * 7106 = 1762598 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (18799230 + 1762598) / 255 = 80635 \text{ mm}^2 = 806.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 0.98) = 18799230 / 105840 = 177.6 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1762598 / 108000 = 16.3 \text{ pcs. (2 @ 10 = 20 bolts will be used.)} \\ & \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ & \rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9,5 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 189 = 18799230 / 189 = 99467 \text{ N}$$

$$\rho s = \tau * Ag / 189 = 4 * 96200 / 189 = 1856 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(99467^2 + 1856^2)} = 99484 \text{ N} < \rho a = 105840 \text{ N}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
1-SPL PL	165 * 34	(56.1 -	(2*2.5)* 3.4)*1.1= 43.0<	56.1 ∴ 43.0
3-SPL PL	440 * 34	(448.8 -	3*(6*2.5)* 3.4)*1.1= 325.4<	448.8 ∴ 325.4
1-SPL PL	80 * 34	(27.2 -	(1*2.5)* 3.4)*1.1= 20.6<	27.2 ∴ 20.6
1-SPL PL	1840 * 26	(478.4 -	(21*2.5)* 2.6)*1.1= 376.1<	478.4 ∴ 376.1
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		1100.1		832.8
				> AnR

(14) G-1 J-6(Sec-7) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$$\sigma_U = -155 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

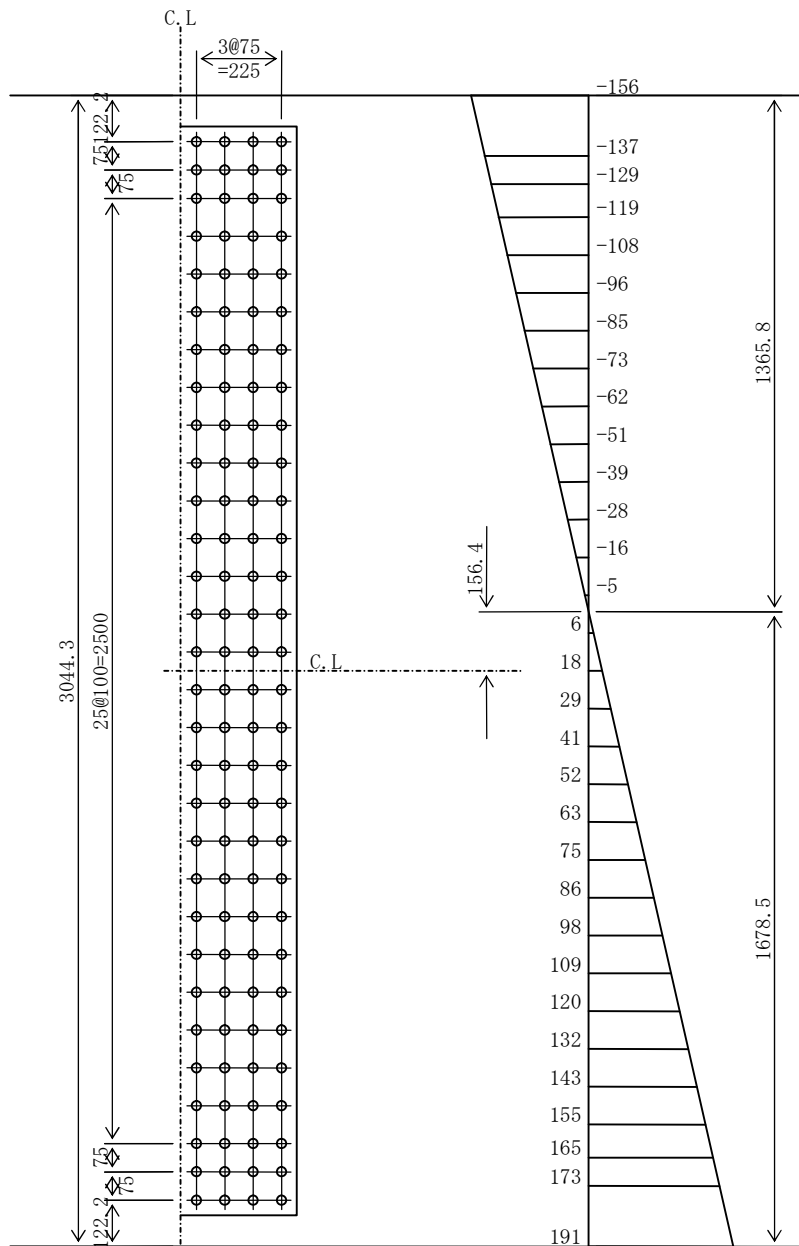
$$\sigma_L = 191 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 155 / 191 = 156 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 27 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 16.0$ cm

Total force to be shared

$$P_1 = 160 * 12 * (173 + 191) / 2 = 349020 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 349020 / (108000 * 1.00) = 3.2 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 27 * 36532 / 120 = 8313 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((349020 / 4)^2 + 8313^2)} = 87650 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2880 * 9 \quad A_s = 518.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3709930 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2910834 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2910834 * 10^4 / 1679 = 3317 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3317 * 10^6 / (3709930 * 10^4) * 1596 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(15) G-1 J-6(Sec-7) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM570)

(b) Design stress

$$\sigma_U = -161 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

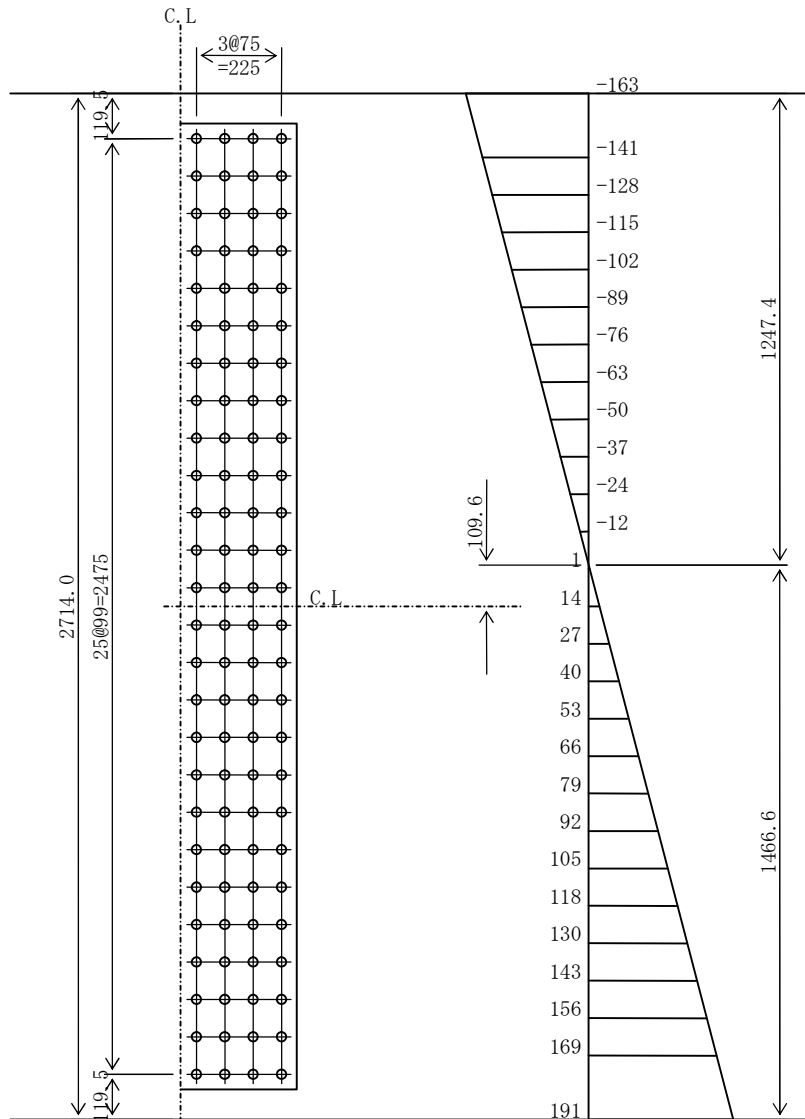
$$\sigma_L = 189 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 161 / 189 = 163 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 28 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.9$ cm

Total force to be shared

$$P_1 = 169 * 12 * (169 + 191) / 2 = 365505 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 365505 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 28 * 32568 / 104 = 8696 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((365505 / 4)^2 + 8696^2)} = 91789 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)}$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2557060 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2038159 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2038159 * 10^4 / 1467 = 2658 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2658 * 10^6 / (2557060 * 10^4) * 1387 = 144 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(16) G-1 J-6(Sec-7) LFLG

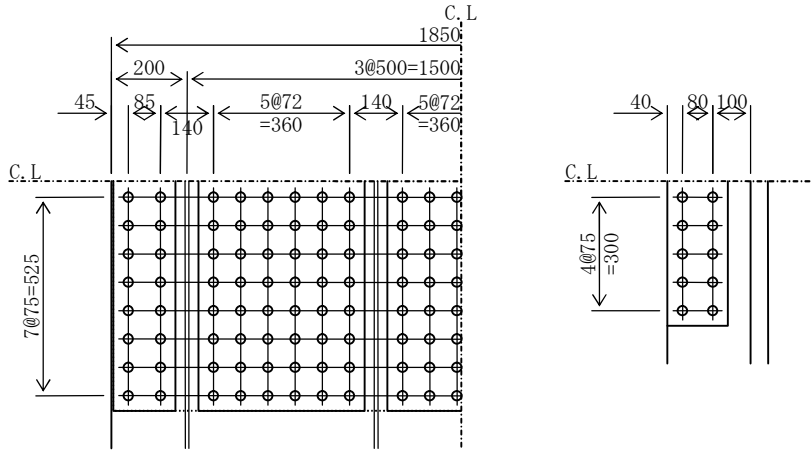
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 196 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 6 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 46 & & A_g &= 851.0 \text{ cm}^2 & (\text{SM570-H}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 851.0 + 83.6 & &= 934.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 46 & & A &= 851.0 \\ (851.0 - (21 * 2.5) * 4.6) * 1.1 &= 670.5 < 851.0 & \therefore A_n &= 670.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 670.5 + 71.1 & &= 741.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 196 * 934.6 / 741.5 & &= 248 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 248 * 670.5 = 16603434 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 670.5 / 1.1 = 11656687 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 248 * 71.1 = 1759773 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 71.1 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (16603434 + 1759773) / 255 = 72013 \text{ mm}^2 = 720.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 16603434 / 108000 = 153.7 \text{ pcs. (168 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1759773 / 108000 = 16.3 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 8,5 \text{ unites})$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 168 = 16603434 / 168 = 98830 \text{ N} \\ \rho_s &= \tau * A_g / 168 = 6 * 85100 / 168 = 2897 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(98830^2 + 2897^2)} = 98872 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
1-SPL PL	165 * 29	(47.9 -	(2*2.5)* 2.9)*1.1= 36.7<	47.9 ∴ 36.7
3-SPL PL	440 * 29	(382.8 -	3*(6*2.5)* 2.9)*1.1= 277.5<	382.8 ∴277.5
1-SPL PL	80 * 29	(23.2 -	(1*2.5)* 2.9)*1.1= 17.5<	23.2 ∴ 17.5
1-SPL PL	1840 * 25	(460.0 -	(21*2.5)* 2.5)*1.1= 361.6<	460.0 ∴361.6
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		1003.4		761.1
				> AnR

(17) G-1 J-7(Sec-8) LFLG

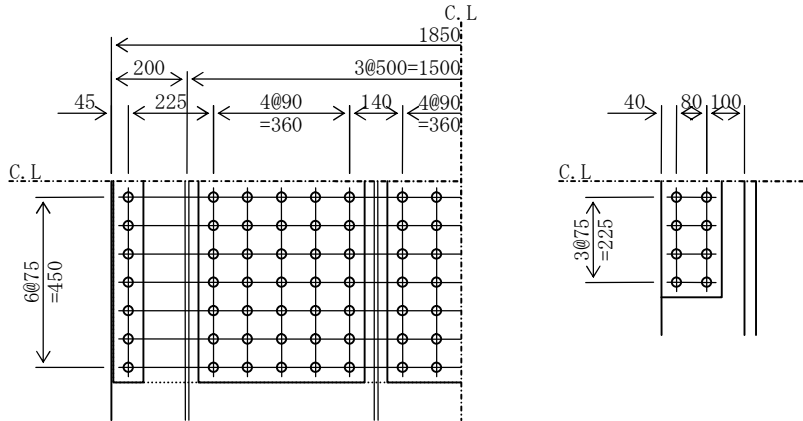
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 204 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 12 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 30 & & A_g &= 555.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 555.0 + 83.6 & &= 638.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 30 & & A &= 555.0 \\ (555.0 - (17 * 2.5) * 3.0) * 1.1 &= 470.3 < 555.0 & \therefore A_n &= 470.3 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 470.3 + 71.1 & &= 541.3 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 204 * 638.6 / 541.3 & &= 241 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 241 * 47025 = 11320325 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 47025 / 1.1 = 8175938 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 241 * 7106 = 1710627 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (11320325 + 1710627) / 255 = 51102 \text{ mm}^2 = 511.0 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 11320325 / 108000 = 104.8 \text{ pcs.}$ (119 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 1710627 / 108000 = 15.8 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{\text{max}} = 7,4 \text{ unites}$)

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 119 = 11320325 / 119 = 95129 \text{ N} \\ \rho_s &= \tau * A_g / 119 = 12 * 55500 / 119 = 5474 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{95129^2 + 5474^2} = 95286 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 19	(30.4 -	2*(1*2.5)* 1.9)*1.1= 23.0<	30.4 ∴ 23.0
3-SPL PL	440 * 19	(250.8 -	3*(5*2.5)* 1.9)*1.1= 197.5<	250.8 ∴197.5
1-SPL PL	1840 * 15	(276.0 -	(17*2.5)* 1.5)*1.1= 233.5<	276.0 ∴233.5
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		646.8		521.7
				> AnR

(18) G-1 J-8(Sec-9) LFLG

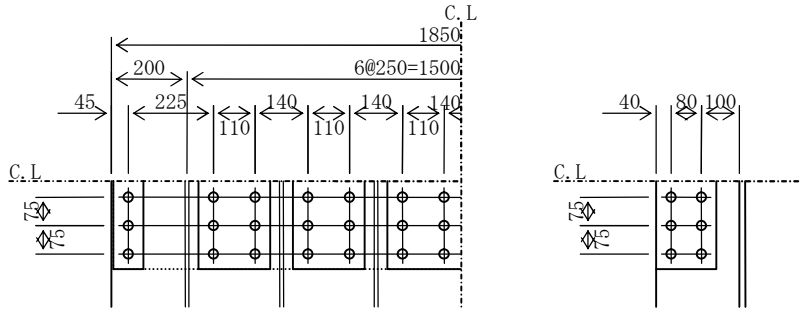
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 136 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 28 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 16 & & A_g &= 296.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 296.0 + 209.0 & &= 505.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 16 & & A &= 296.0 \\ (296.0 - (14 * 2.5) * 1.6) * 1.1 &= 264.0 < 296.0 & \therefore A_n &= 264.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 264.0 + 177.7 & &= 441.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 136 * 505.0 / 441.6 & &= 155 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 155 * 26400 = 4101541 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 26400 / 1.1 = 3780000 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 155 * 17765 = 2759995 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (4101541 + 2759995) / 210 = 32674 \text{ mm}^2 = 326.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 4101541 / 108000 = 38.0 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2759995 / 108000 = 25.6 \text{ pcs. (5 @ 6 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 42 = 4101541 / 42 = 97656 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 28 * 29600 / 42 = 19399 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97656^2 + 19399^2} = 99564 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
6-SPL PL	190 * 10	(114.0 -	6*(2*2.5)*1.0)*1.1= 92.4 <	114.0 ∴ 92.4
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)*0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 11	(176.0 -	10*(2*2.5)*1.1)*1.1= 133.1 <	176.0 ∴ 133.1
<hr/>				
		471.6		385.1
				> AnR

(19) G-1 J-9(Sec-9) LFLG

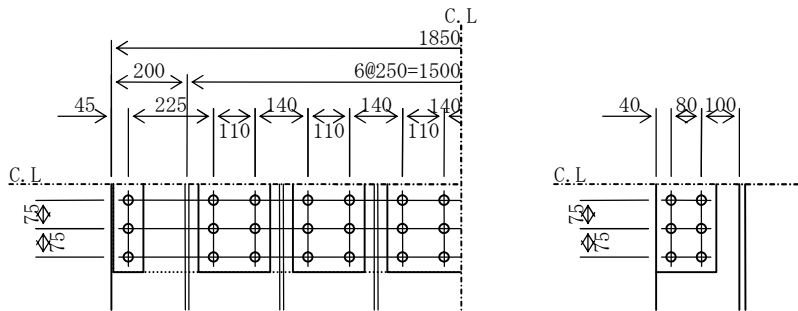
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 12 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -91 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 158 = 119 \text{ N/mm}^2 \\ \therefore \sigma_c &= 119 \text{ N/mm}^2 \\ \tau_{max} &= 31 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 16 & \quad A_g = 296.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 296.0 + 209.0 = 505.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 16 & \quad A = 296.0 \\ (296.0 - (14 * 2.5) * 1.6) * 1.1 &= 264.0 < 296.0 \quad \therefore A_n = 264.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & \quad A_r = 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 \quad \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 264.0 + 177.7 = 441.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 12 * 505.0 / 441.6 = 14 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 26400 / 1.1 = 3780000 \text{ N} \\ &> \sigma_{tn} * A_n = 14 * 26400 = 374890 \text{ N} \\ P_c &= \sigma_c * A_g = 119 * 29600 = 3509176 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 14 * 17765 = 252270 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 119 * 20900 = 2477763 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (3780000 + 2543625) / 210 = 30112 \text{ mm}^2 = 301.1 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (3509176 + 2477763) / 210 = 28509 \text{ mm}^2 = 285.1 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3780000 / 108000 = 35.0 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2543625 / 108000 = 23.6 \text{ pcs. (5 @ 6 = 30 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 42 = 3780000 / 42 = 90000 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 31 * 29600 / 42 = 21589 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(90000)^2 + (21589)^2} = 92553 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
6-SPL PL	190 * 9	(102.6 -	6*(2*2.5)* 0.9)*1.1= 83.2<	102.6 ∴ 83.2
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5<	165.6 ∴147.5
10-SPL PL	160 * 11	(176.0 -	10*(2*2.5)* 1.1)*1.1= 133.1<	176.0 ∴133.1
<hr/>				
		458.6		374.7
		> Ag _R		> An _R

(20) G-1 J-10 (Sec-10) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2708 * 12 A = 325.0 cm² (SM570)

(b) Design stress

$\sigma_U = 107 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

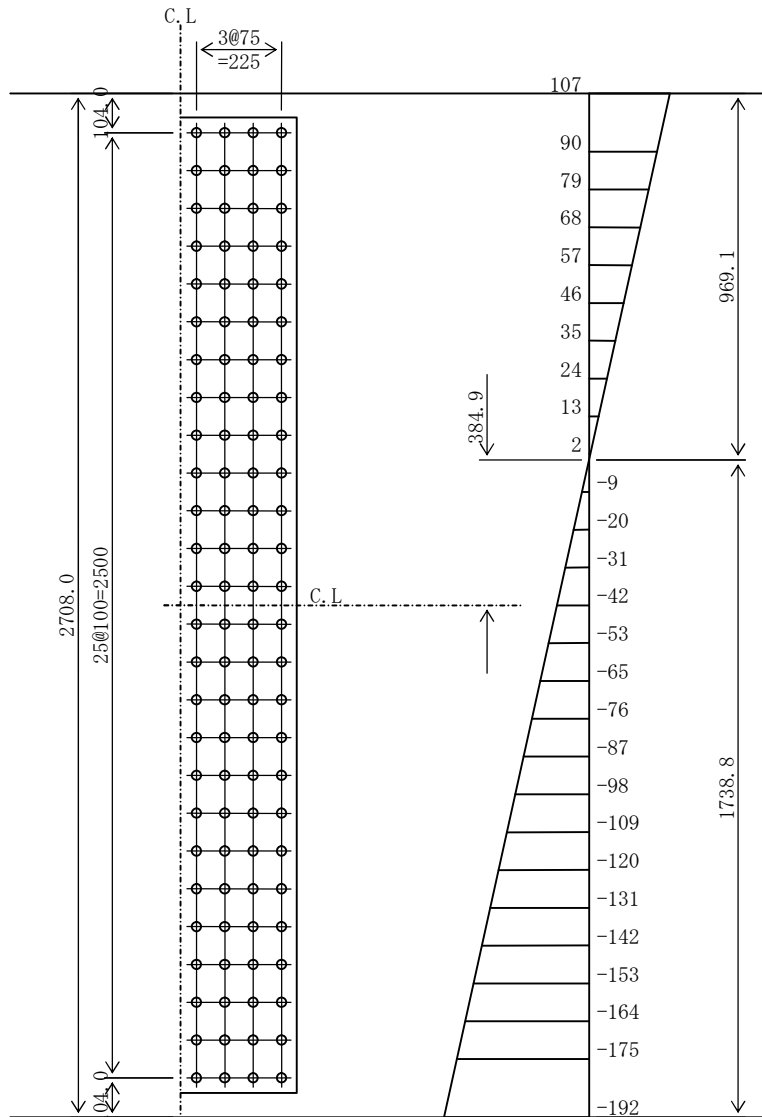
$\sigma_L = -192 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 107 \text{ N/mm}^2$

$\sigma_{Ln} = 192 \text{ N/mm}^2$

$\tau = 70 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.4 \text{ cm}$

Total force to be shared

$$P_1 = 154 * 12 * (175 + 192) / 2 = 338785 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 338785 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 70 * 32496 / 104 = 21992 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((338785 / 4)^2 + 21992^2)} = 87505 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3263850 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2467137 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 192 * 2467137 * 10^4 / 1739 = 2722 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2722 * 10^6 / (3263850 * 10^4) * 1675 = 140 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(21) G-1 J-10(Sec-10) LFLG

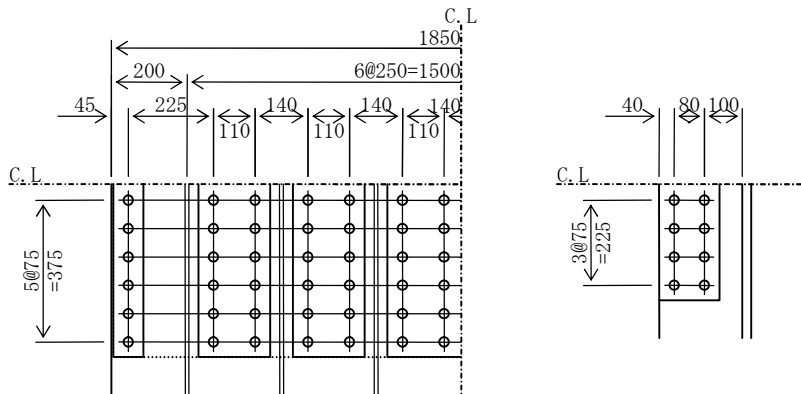
(a) Acting stress

$$\begin{aligned}\sigma_{\text{cmax}} &= -194 \text{ N/mm}^2 & 0.75 \sigma_{\text{ca}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_{\text{c}} &= 194 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 25 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 24 & \quad A_g = 444.0 \text{ cm}^2 \quad (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 444.0 + 209.0 = 653.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 194 * 44400 = 8634468 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 194 * 20900 = 4064423 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8634468 + 4064423) / 255 = 49800 \text{ mm}^2 = 498.0 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8634468 / 108000 = 79.9 \text{ pcs.}$ (84 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 4064423 / 108000 = 37.6 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 6,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 84 = 8634468 / 84 = 102791 \text{ N} \\ \rho_s &= \tau * A_g / 84 = 25 * 44400 / 84 = 13413 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{102791^2 + 13413^2} = 103663 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 13	20.8
6-SPL PL	190 * 13	148.2
1-SPL PL	1840 * 10	184.0
10-SPL PL	160 * 11	176.0

$$529.0$$

$$> A_{gR} = 498.0 \text{ cm}^2$$

(22) G-1 J-11 (Sec-11) LFLG

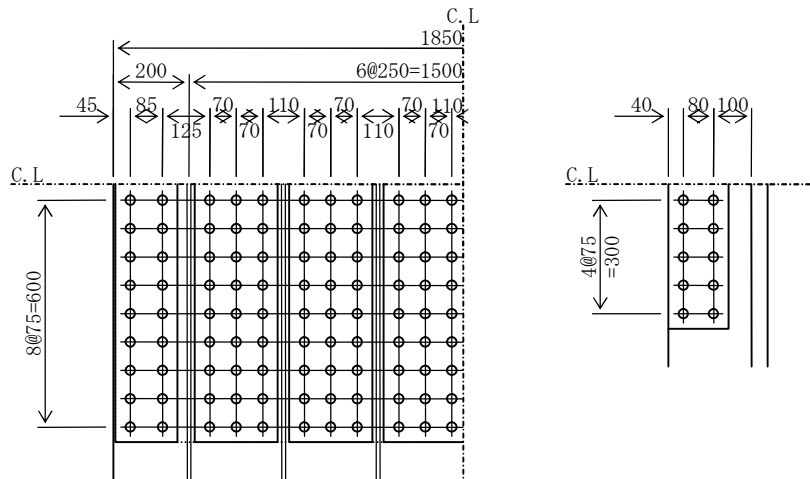
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -220 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 220 \text{ N/mm}^2 \\ \tau_{\max} &= 17 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 43 & & A_g &= 795.5 \text{ cm}^2 & (\text{SM570-H}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 795.5 + 209.0 & &= 1004.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 220 * 79550 = 17528763 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 220 * 20900 = 4605294 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (17528763 + 4605294) / 255 = 86800 \text{ mm}^2 = 868.0 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 17528763 / 105840 = 165.6 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4605294 / 108000 = 42.6 \text{ pcs. (5 @ 10 = 50 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 189 = 17528763 / 189 = 92745 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 17 * 79550 / 189 = 7290 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(92745^2 + 7290^2)} = 93031 \text{ N} < \rho_a = 105840 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 30	49.5
6-SPL PL	220 * 30	396.0
1-SPL PL	80 * 30	24.0
1-SPL PL	1840 * 21	386.4
10-SPL PL	160 * 12	192.0

1047.9

> AgR = 868.0cm²

(23) G-1 J-12 (Sec-13) LWEB
 G-1 J-11 (Sec-11) LWEB

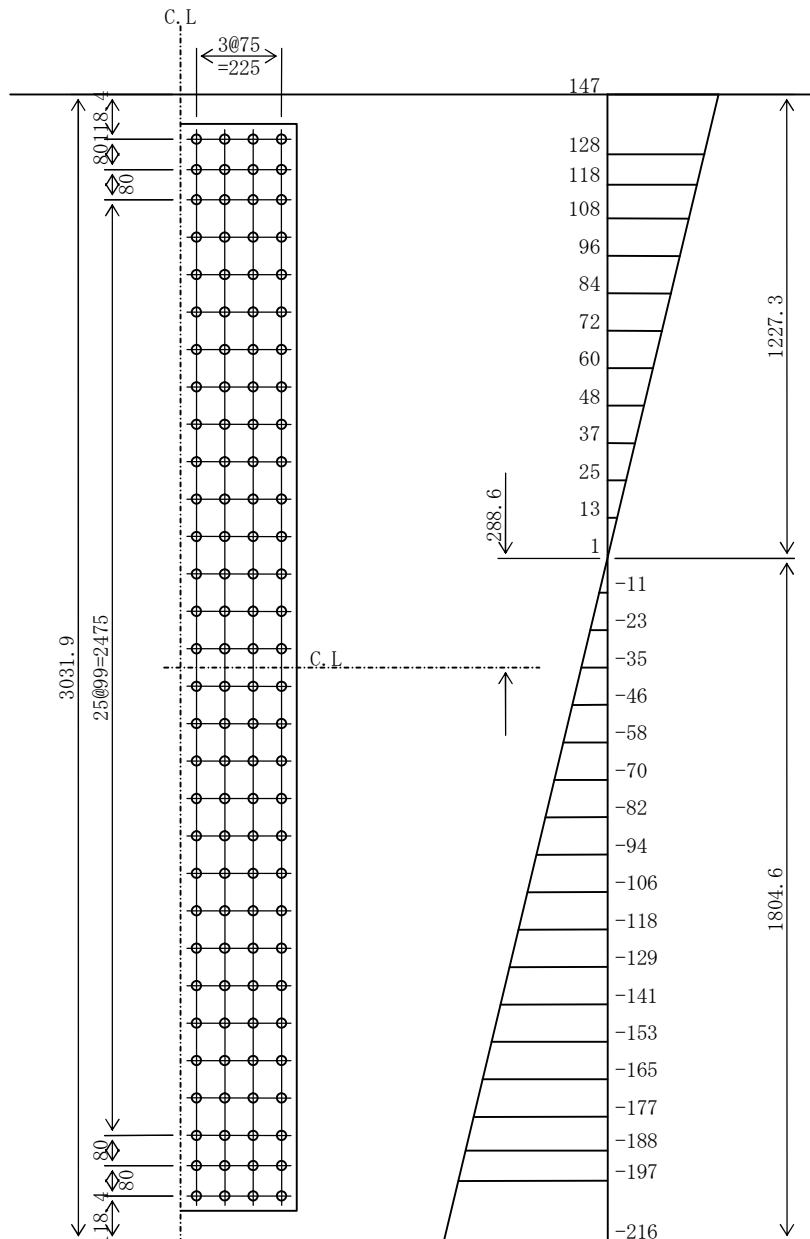
(a) Section area of main plate (Web plate)

1-LWEB PL 3032 * 12 A = 363.8 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 147 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -216 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 147 \text{ N/mm}^2 \\ \sigma_{Ln} &= 216 \text{ N/mm}^2 \\ \tau &= 70 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 15.8$ cm

Total force to be shared

$$P_1 = 158 * 12 * (197 + 216) / 2 = 393006 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 393006 / (108000 * 1.00) = 3.6 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 70 * 36382 / 120 = 21120 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((393006 / 4)^2 + 21120^2)} = 100496 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2875 * 9 \quad A_s = 517.5 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3995657 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3090047 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 216 * 3090047 * 10^4 / 1805 = 3702 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3702 * 10^6 / (3995657 * 10^4) * 1726 = 160 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(24) G-1 J-12 (Sec-13) RWEB
 G-1 J-11 (Sec-11) RWEB

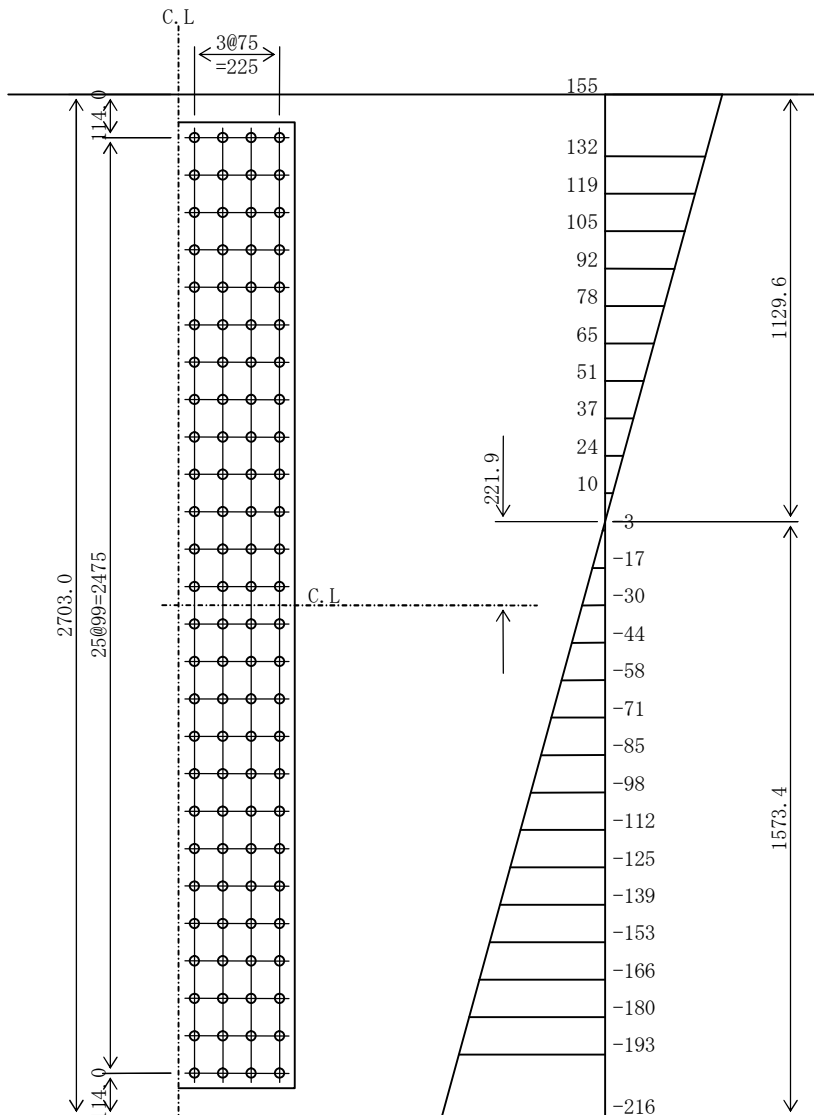
(a) Section area of main plate (Web plate)

1-RWEB PL 2703 * 12 A = 324.4 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 155 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -216 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 155 \text{ N/mm}^2 \\ \sigma_{Ln} &= 216 \text{ N/mm}^2 \\ \tau &= 73 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.3 \text{ cm}$

Total force to be shared

$$P_1 = 163 * 12 * (193 + 216) / 2 = 401273 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 401273 / (108000 * 1.00) = 3.7 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 73 * 32436 / 104 = 22678 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((401273 / 4)^2 + 22678^2)} = 102850 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

2-SPL PL 2555 * 9 $A_s = 459.9 \text{ cm}^2$ (SM570)

Moment of inertia of splice plates $I_s = 2728230 \text{ cm}^4 > I_w$

Moment of inertia of web plate $I_w = 2134508 \text{ cm}^4$

Bending moment to be shared by the web

$$M_w = 216 * 2134508 * 10^4 / 1573 = 2927 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2927 * 10^6 / (2728230 * 10^4) * 1499 = 161 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(25) G-1 J-12(Sec-13) LFLG

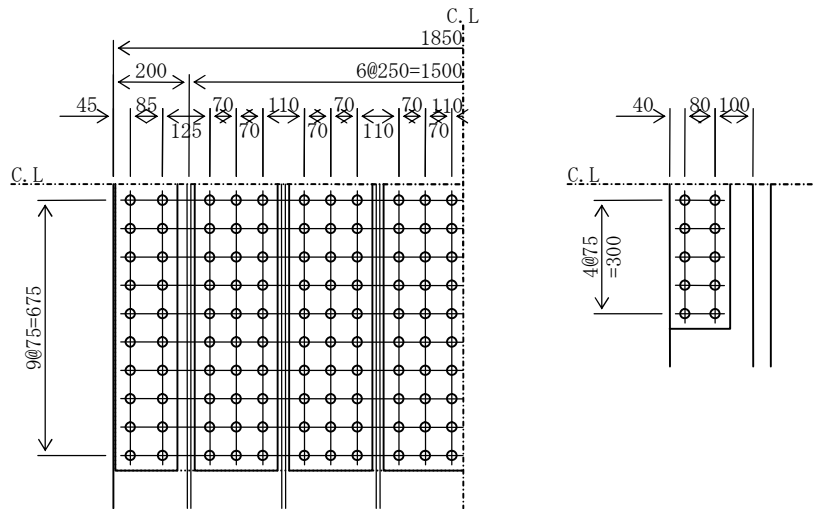
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -222 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 222 \text{ N/mm}^2 \\ \tau_{\max} &= 15 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 47 & & A_g &= 869.5 \text{ cm}^2 & (\text{SM570-H}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 869.5 + 209.0 & &= 1078.5 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 222 * 86950 = 19318464 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 222 * 20900 = 4643541 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (19318464 + 4643541) / 255 = 93969 \text{ mm}^2 = 939.7 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 0.96) = 19318464 / 103680 = 186.3 \text{ pcs.}$ (210 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 4643541 / 108000 = 43.0 \text{ pcs.}$ (5 @ 10 = 50 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 10,5 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 210 = 19318464 / 210 = 91993 \text{ N} \\ \rho_s &= \tau * A_g / 210 = 15 * 86950 / 210 = 6038 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(91993^2 + 6038^2)} = 92191 \text{ N} < \rho_a = 103680 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ag _s (cm ²)
1-SPL PL	165 * 32	52.8
6-SPL PL	220 * 32	422.4
1-SPL PL	80 * 32	25.6
1-SPL PL	1840 * 23	423.2
10-SPL PL	160 * 12	192.0

1116.0

> Ag_R = 939.7 cm²

(26) G-1 J-13(Sec-14) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3038 * 12 A = 364.5 cm² (SM490Y)

(b) Design stress

$\sigma_U = 103 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

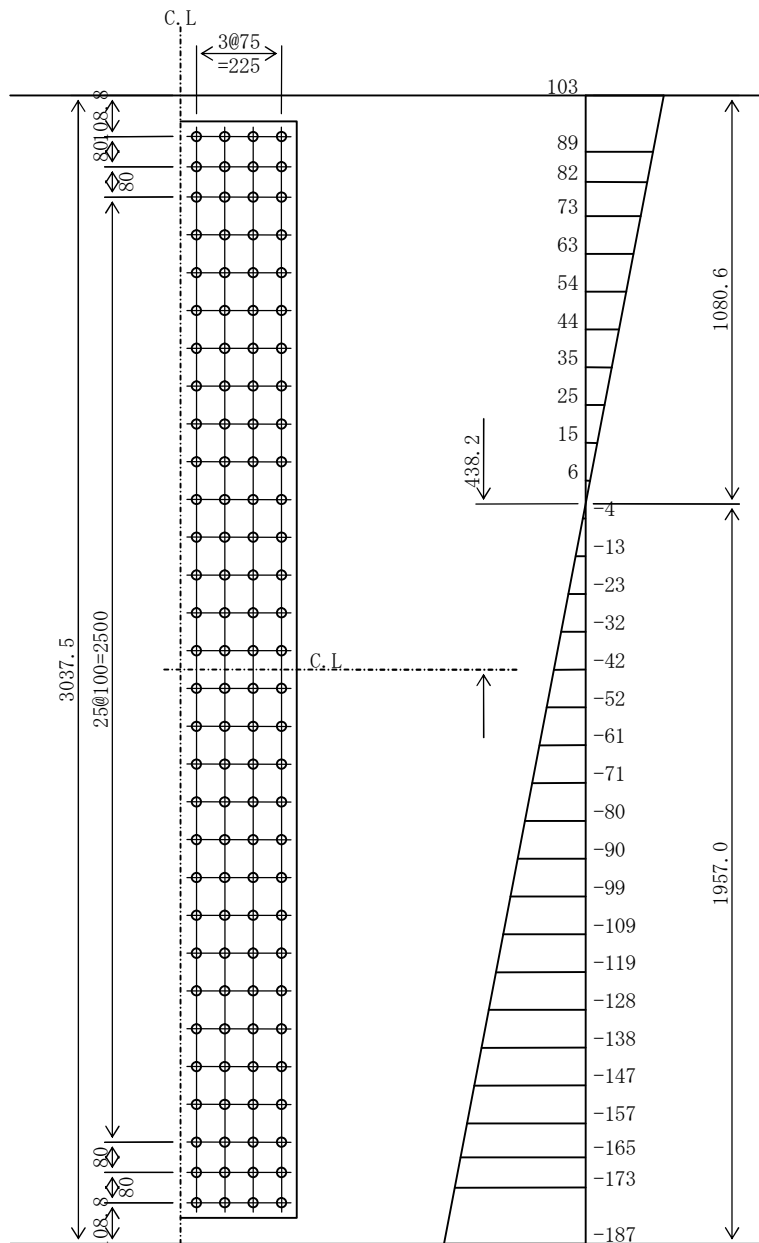
$\sigma_L = -187 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

$\sigma_{Un} = 103 \text{ N/mm}^2$

$\sigma_{Ln} = 187 \text{ N/mm}^2$

$\tau = 59 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.9$ cm

Total force to be shared

$$P_1 = 149 * 12 * (173 + 187) / 2 = 321678 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 321678 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 59 * 36450 / 120 = 17775 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((321678 / 4)^2 + 17775^2)} = 82360 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4660670 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3502537 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 187 * 3502537 * 10^4 / 1957 = 3352 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3352 * 10^6 / (4660670 * 10^4) * 1888 = 136 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(27) G-1 J-13(Sec-14) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2708 * 12 A = 325.0 cm² (SM490Y)

(b) Design stress

$\sigma_U = 110 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

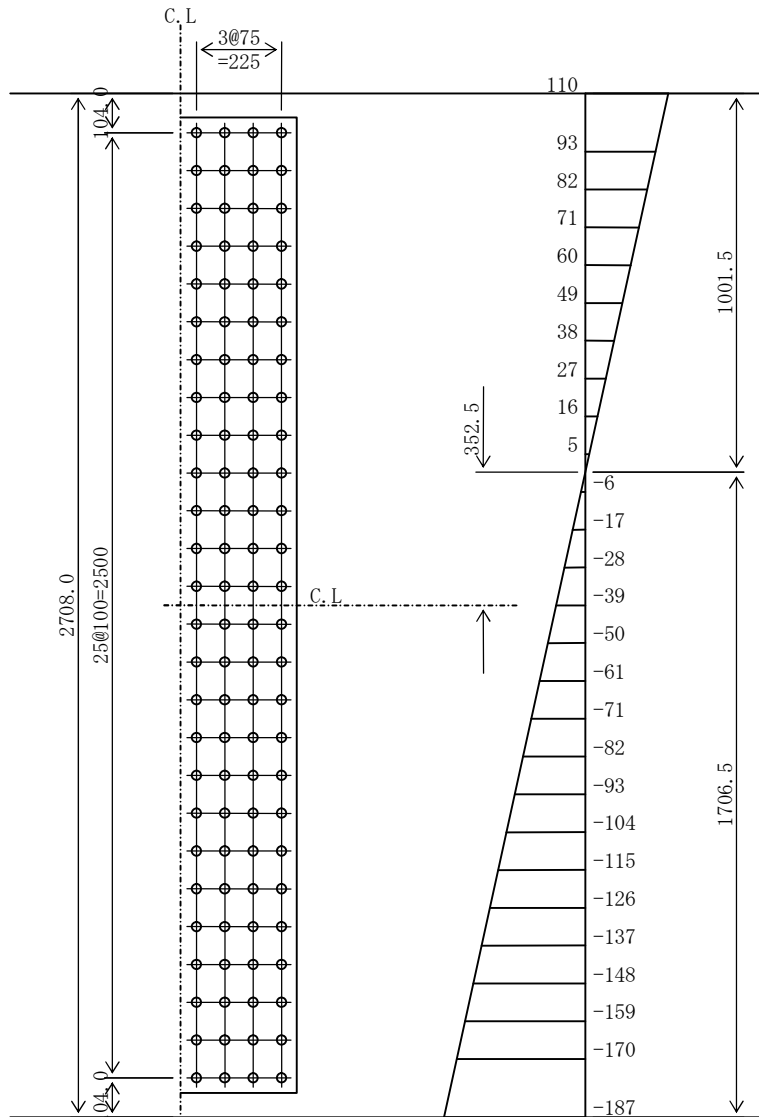
$\sigma_L = -187 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

$\sigma_{Un} = 110 \text{ N/mm}^2$

$\sigma_{Ln} = 187 \text{ N/mm}^2$

$\tau = 60 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.4$ cm

Total force to be shared

$$P_1 = 154 * 12 * (170 + 187) / 2 = 329857 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 329857 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 60 * 32496 / 104 = 18858 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((329857 / 4)^2 + 18858^2)} = 84593 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3153126 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2389659 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 187 * 2389659 * 10^4 / 1707 = 2618 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2618 * 10^6 / (3153126 * 10^4) * 1643 = 136 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(28) G-1 J-13(Sec-14) LFLG

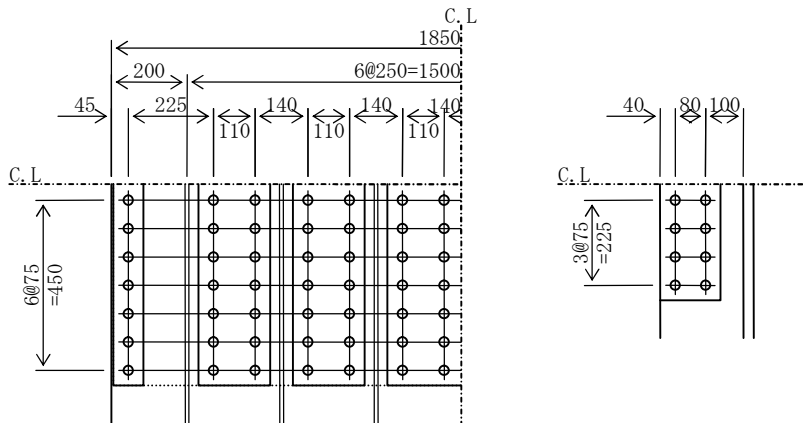
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -190 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \therefore \sigma_c &= 190 \text{ N/mm}^2 \\ \tau_{\max} &= 20 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 27 & \quad A_g = 499.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 499.5 + 209.0 = 708.5 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 190 * 49950 = 9484956 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 190 * 20900 = 3968680 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (9484956 + 3968680) / 210 = 64065 \text{ mm}^2 = 640.6 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 9484956 / 108000 = 87.8 \text{ pcs. (98 bolts will be used.)}$
- Rib $n_r = P_{cr} / (108000 * 1.00) = 3968680 / 108000 = 36.7 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 7,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 98 = 9484956 / 98 = 96785 \text{ N} \\ \rho_s &= \tau * A_g / 98 = 20 * 49950 / 98 = 10216 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{96785^2 + 10216^2} = 97323 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL 80 * 18		28.8
6-SPL PL 190 * 18		205.2
1-SPL PL 1840 * 13		239.2
10-SPL PL 160 * 12		192.0

$$665.2$$

$$> A_{gR} = 640.6 \text{ cm}^2$$

(29) G-1 J-14(Sec-15) LFLG

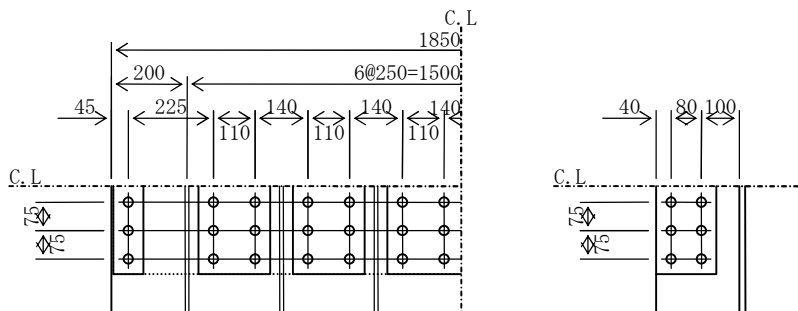
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -131 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 158 = 119 \text{ N/mm}^2 \\ \therefore \sigma_c &= 131 \text{ N/mm}^2 \\ \tau_{\max} &= 26 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 16 & & A_g &= 296.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 296.0 + 209.0 & &= 505.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 131 * 29600 = 3879465 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 131 * 20900 = 2739217 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (3879465 + 2739217) / 210 = 31518 \text{ mm}^2 = 315.2 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 3879465 / 108000 = 35.9 \text{ pcs.}$ (42 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 2739217 / 108000 = 25.4 \text{ pcs.}$ (5 @ 6 = 30 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 42 = 3879465 / 42 = 92368 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 26 * 29600 / 42 = 18558 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{92368^2 + 18558^2} = 94214 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(h) Check of splice plates

(SM490Y)		$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
6-SPL PL	190 * 9	102.6
1-SPL PL	1840 * 9	165.6
10-SPL PL	160 * 9	144.0

$$426.6$$

$$> A_{gR} = 315.2 \text{ cm}^2$$

(30) G-1 J-16(Sec-16) LFLG

G-1 J-32(Sec-33) LFLG, G-1 J-51(Sec-51) LFLG, G-1 J-56(Sec-57) LFLG

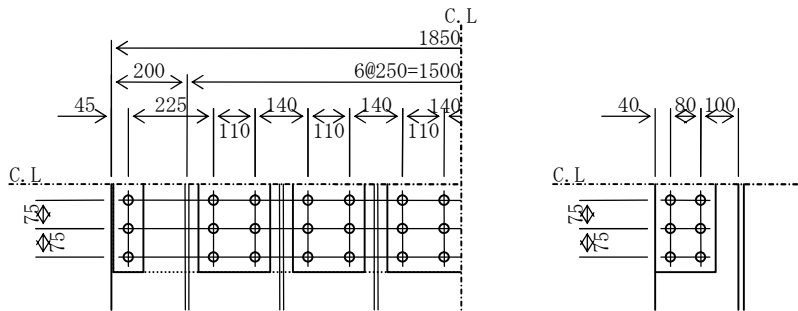
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 133 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 17 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A_g &= 259.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 259.0 + 209.0 & &= 468.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A &= 259.0 \\ (259.0 - (14 * 2.5) * 1.4) * 1.1 &= 231.0 < 259.0 & \therefore A_n &= 231.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 231.0 + 177.7 & &= 408.7 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 133 * 468.0 / 408.7 & &= 153 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 153 * 23100 = 3529905 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 23100 / 1.1 = 3307500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 153 * 17765 = 2714665 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (3529905 + 2714665) / 210 = 29736 \text{ mm}^2 = 297.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3529905 / 108000 = 32.7 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2714665 / 108000 = 25.1 \text{ pcs. (5 @ 6 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 42 = 3529905 / 42 = 84045 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 17 * 25900 / 42 = 10602 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(84045)^2 + (10602)^2} = 84711 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
6-SPL PL	190 * 9	(102.6 -	6*(2*2.5)*0.9)*1.1= 83.2 <	102.6 ∴ 83.2
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)*0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 11	(176.0 -	10*(2*2.5)*1.1)*1.1= 133.1 <	176.0 ∴ 133.1
<hr/>				
		458.6		374.7
				> AnR

(31) G-1 J-17(Sec-17) RWEB

G-1 J-8(Sec-9) RWEB, G-1 J-9(Sec-9) RWEB, G-1 J-14(Sec-15) RWEB, G-1 J-15(Sec-16) RWEB
G-1 J-16(Sec-16) RWEB, G-1 J-18(Sec-19) RWEB, G-1 J-19(Sec-20) RWEB
G-1 J-20(Sec-20) RWEB, G-1 J-21(Sec-21) RWEB, G-1 J-22(Sec-22) RWEB
G-1 J-26(Sec-27) RWEB, G-1 J-27(Sec-27) RWEB, G-1 J-31(Sec-32) RWEB
G-1 J-32(Sec-33) RWEB, G-1 J-33(Sec-33) RWEB, G-1 J-34(Sec-34) RWEB
G-1 J-38(Sec-39) RWEB, G-1 J-39(Sec-39) RWEB, G-1 J-40(Sec-40) RWEB
G-1 J-41(Sec-41) RWEB, G-1 J-42(Sec-43) RWEB, G-1 J-43(Sec-44) RWEB
G-1 J-44(Sec-45) RWEB, G-1 J-45(Sec-45) RWEB, G-1 J-49(Sec-50) RWEB
G-1 J-50(Sec-51) RWEB, G-1 J-51(Sec-51) RWEB, G-1 J-52(Sec-52) RWEB
G-1 J-53(Sec-53) RWEB, G-1 J-54(Sec-55) RWEB, G-1 J-55(Sec-56) RWEB
G-1 J-56(Sec-57) RWEB, G-1 J-57(Sec-57) RWEB, G-1 J-58(Sec-58) RWEB
G-1 J-62(Sec-63) RWEB, G-1 J-63(Sec-63) RWEB, G-1 J-64(Sec-64) RWEB
G-1 J-65(Sec-65) RWEB, G-1 J-66(Sec-67) RWEB, G-1 J-67(Sec-68) RWEB
G-1 J-68(Sec-68) RWEB, G-1 J-69(Sec-69) RWEB, G-1 J-74(Sec-75) RWEB
G-1 J-75(Sec-75) RWEB, G-1 J-81(Sec-82) RWEB

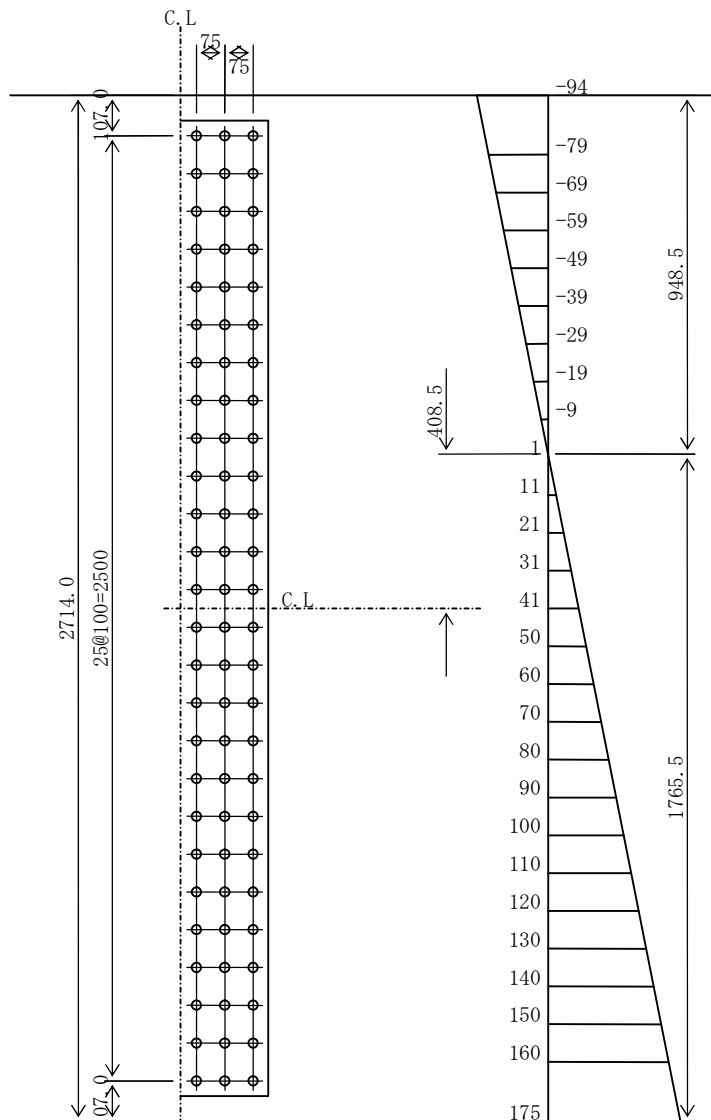
(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM490Y)

(b) Design stress

$$\begin{aligned}\sigma_U &= -94 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_L &= 175 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_{Un} &= 94 \text{ N/mm}^2 \\ \sigma_{Ln} &= 175 \text{ N/mm}^2 \\ \tau &= 18 \text{ N/mm}^2\end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.7 \text{ cm}$

Total force to be shared

$$P_1 = 157 * 12 * (160 + 175) / 2 = 315298 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 315298 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 78 = 18 * 32568 / 78 = 7691 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((315298 / 3)^2 + 7691^2)} = 105380 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3350810 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2542419 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 175 * 2542419 * 10^4 / 1765 = 2522 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2522 * 10^6 / (3350810 * 10^4) * 1698 = 128 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(32) G-1 J-17(Sec-17) LFLG

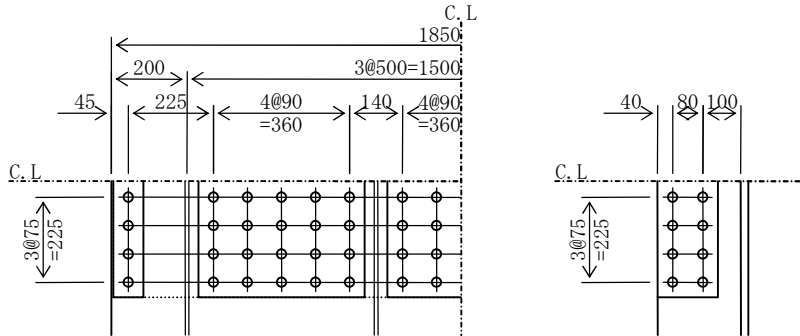
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 177 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 8 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & \quad A_g = 370.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 83.6 = 453.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & \quad A = 370.0 \\ (370.0 - (17 * 2.5) * 2.0) * 1.1 &= 313.5 < 370.0 \quad \therefore A_n = 313.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & \quad A_r = 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 \quad \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 313.5 + 71.1 = 384.6 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 177 * 453.6 / 384.6 = 209 \text{ N/mm}^2 \\ &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 209 * 31350 = 6549922 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 31350 / 1.1 = 4488750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 209 * 7106 = 1484649 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6549922 + 1484649) / 210 = 38260 \text{ mm}^2 = 382.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6549922 / 108000 = 60.6 \text{ pcs. (68 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1484649 / 108000 = 13.7 \text{ pcs. (2 @ 8 = 16 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,4 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 68 = 6549922 / 68 = 96322 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 8 * 37000 / 68 = 4246 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(96322^2 + 4246^2)} = 96416 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9<	22.4 ∴ 16.9
3-SPL PL	440 * 14	(184.8 -	3*(5*2.5)* 1.4)*1.1= 145.5<	184.8 ∴145.5
1-SPL PL	1840 * 10	(184.0 -	(17*2.5)* 1.0)*1.1= 155.7<	184.0 ∴155.7
4-SPL PL	160 * 15	(96.0 -	4*(2*2.5)* 1.5)*1.1= 72.6<	96.0 ∴ 72.6
<hr/>				
		487.2		390.7
				> AnR

(33) G-1 J-18(Sec-19) LFLG

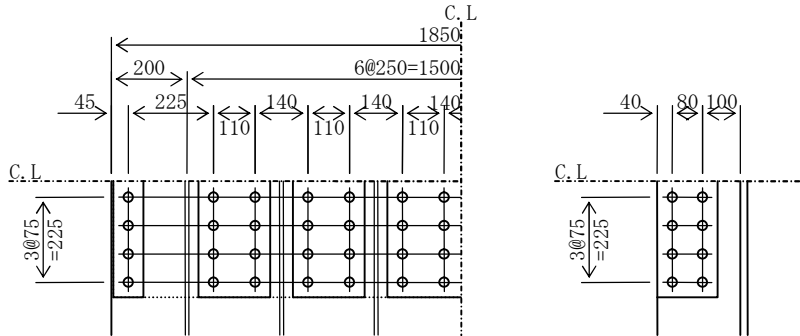
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 165 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 7 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 19 & & A_g &= 351.5 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 351.5 + 209.0 & &= 560.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 19 & & A &= 351.5 \\ (351.5 - (14 * 2.5) * 1.9) * 1.1 &= 313.5 < 351.5 & \therefore A_n &= 313.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 313.5 + 177.7 & &= 491.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 165 * 560.5 / 491.1 & &= 188 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 188 * 31350 = 5903353 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 31350 / 1.1 = 4488750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 188 * 17765 = 3345233 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5903353 + 3345233) / 210 = 44041 \text{ mm}^2 = 440.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5903353 / 108000 = 54.7 \text{ pcs. (56 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3345233 / 108000 = 31.0 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 56 = 5903353 / 56 = 105417 \text{ N} \\ \rho_s &= \tau * A_g / 56 = 7 * 35150 / 56 = 4254 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105417^2 + 4254^2)} = 105503 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9<	22.4 ∴ 16.9
6-SPL PL	190 * 14	(159.6 -	6*(2*2.5)* 1.4)*1.1= 129.4<	159.6 ∴ 129.4
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5<	165.6 ∴ 147.5
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4<	224.0 ∴ 169.4
<hr/>				
		571.6		463.2
				> AnR

(34) G-1 J-19 (Sec-20) LFLG

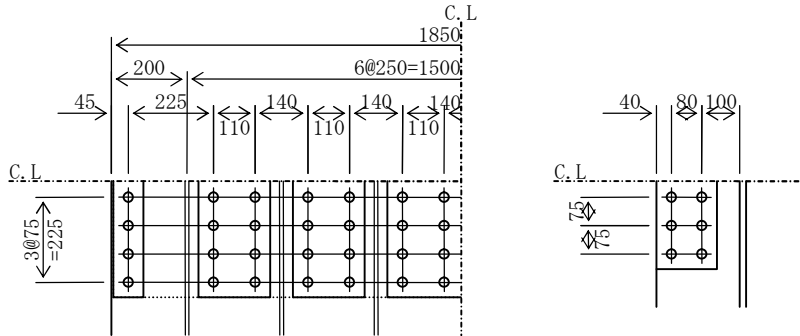
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 158 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A_g &= 314.5 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 209.0 & &= 523.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A &= 314.5 \\ (314.5 - (14 * 2.5) * 1.7) * 1.1 &= 280.5 < 314.5 & \therefore A_n &= 280.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 280.5 + 177.7 & &= 458.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 158 * 523.5 / 458.1 & &= 180 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 180 * 28050 = 5061882 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 28050 / 1.1 = 4016250 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 180 * 17765 = 3205858 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5061882 + 3205858) / 210 = 39370 \text{ mm}^2 = 393.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5061882 / 108000 = 46.9 \text{ pcs. (56 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3205858 / 108000 = 29.7 \text{ pcs. (5 @ 6 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 56 = 5061882 / 56 = 90391 \text{ N} \\ \rho_s &= \tau * A_g / 56 = 11 * 31450 / 56 = 6443 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(90391^2 + 6443^2)} = 90620 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 12	(19.2 -	2*(1*2.5)* 1.2)*1.1= 14.5<	19.2 ∴ 14.5
6-SPL PL	190 * 12	(136.8 -	6*(2*2.5)* 1.2)*1.1= 110.9<	136.8 ∴ 110.9
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5<	165.6 ∴ 147.5
10-SPL PL	160 * 13	(208.0 -	10*(2*2.5)* 1.3)*1.1= 157.3<	208.0 ∴ 157.3
<hr/>				
		529.6		430.2
				> AnR

(35) G-1 J-20 (Sec-20) LFLG
 G-1 J-21 (Sec-21) LFLG

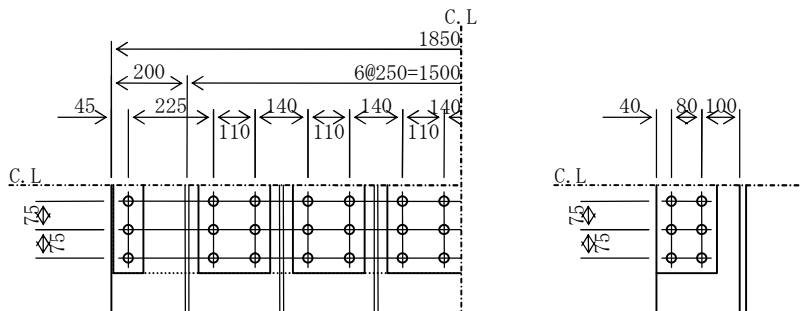
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 107 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -6 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 178 = 134 \text{ N/mm}^2 \\ \therefore \sigma_c &= 134 \text{ N/mm}^2 \\ \tau_{max} &= 17 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 17 & \quad A_g = 314.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 209.0 = 523.5 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 17 & \quad A = 314.5 \\ & (314.5 - (14 * 2.5) * 1.7) * 1.1 = 280.5 < 314.5 \quad \therefore A_n = 280.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & \quad A_r = 209.0 \\ & (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 = 177.7 < 209.0 \quad \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 280.5 + 177.7 = 458.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 107 * 523.5 / 458.1 = 122 \text{ N/mm}^2 \\ & < \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 28050 / 1.1 = 4016250 \text{ N} \\ & > \sigma_{tn} * A_n = 122 * 28050 = 3414972 \text{ N} \\ P_c &= \sigma_c * A_g = 134 * 31450 = 4209142 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N} \\ & > \sigma_{tn} * A_{nr} = 122 * 17765 = 2162816 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 134 * 20900 = 2797172 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (4016250 + 2543625) / 210 = 31237 \text{ mm}^2 = 312.4 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (4209142 + 2797172) / 210 = 33363 \text{ mm}^2 = 333.6 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_c / (108000 * 1.00) = 4209142 / 108000 = 39.0 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 2797172 / 108000 = 25.9 \text{ pcs. (5 @ 6 = 30 bolts will be used.)} \\ & \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ & \rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = P_c / 42 = 4209142 / 42 = 100218 \text{ N}$$

$$\rho s = \tau * A_g / 42 = 17 * 31450 / 42 = 12553 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(100218^2 + 12553^2)} = 101001 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	$A_g(\text{cm}^2)$	deduction of bolt holes	Ans(cm^2)
2-SPL PL	80 * 10	(16.0 - 2*(1*2.5)*1.0)*1.1=	12.1 < 16.0	\therefore 12.1
6-SPL PL	190 * 10	(114.0 - 6*(2*2.5)*1.0)*1.1=	92.4 < 114.0	\therefore 92.4
1-SPL PL	1840 * 9	(165.6 - (14*2.5)*0.9)*1.1=	147.5 < 165.6	\therefore 147.5
10-SPL PL	160 * 11	(176.0 - 10*(2*2.5)*1.1)*1.1=	133.1 < 176.0	\therefore 133.1
		471.6		385.1
		> AgR		> AnR

(36) G-1 J-22 (Sec-22) LFLG

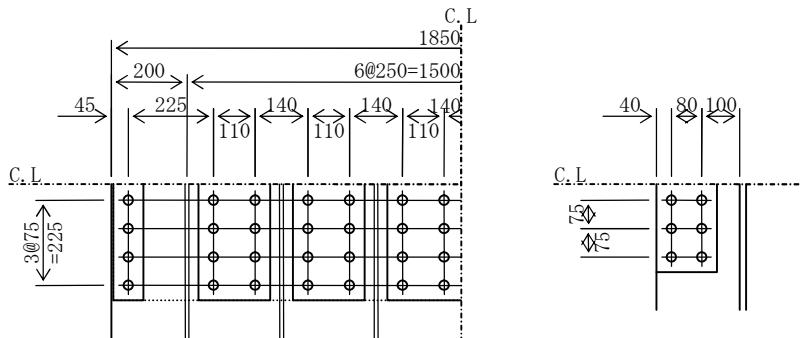
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -154 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 178 = 134 \text{ N/mm}^2 \\ \therefore \sigma_c &= 154 \text{ N/mm}^2 \\ \tau_{\max} &= 28 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 17 & \quad A_g = 314.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 209.0 = 523.5 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 154 * 31450 = 4830406 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 154 * 20900 = 3210031 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (4830406 + 3210031) / 210 = 38288 \text{ mm}^2 = 382.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 4830406 / 108000 = 44.7 \text{ pcs.}$ (56 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 3210031 / 108000 = 29.7 \text{ pcs.}$ (5 @ 6 = 30 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,3 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 56 = 4830406 / 56 = 86257 \text{ N} \\ \rho_s &= \tau * A_g / 56 = 28 * 31450 / 56 = 15515 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(86257^2 + 15515^2)} = 87641 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
6-SPL PL	190 * 9	102.6
1-SPL PL	1840 * 9	165.6
10-SPL PL	160 * 10	160.0

$$442.6$$

$$> A_{gR} = 382.9 \text{ cm}^2$$

(37) G-1 J-23 (Sec-23) LWEB
 G-1 J-24 (Sec-25) LWEB

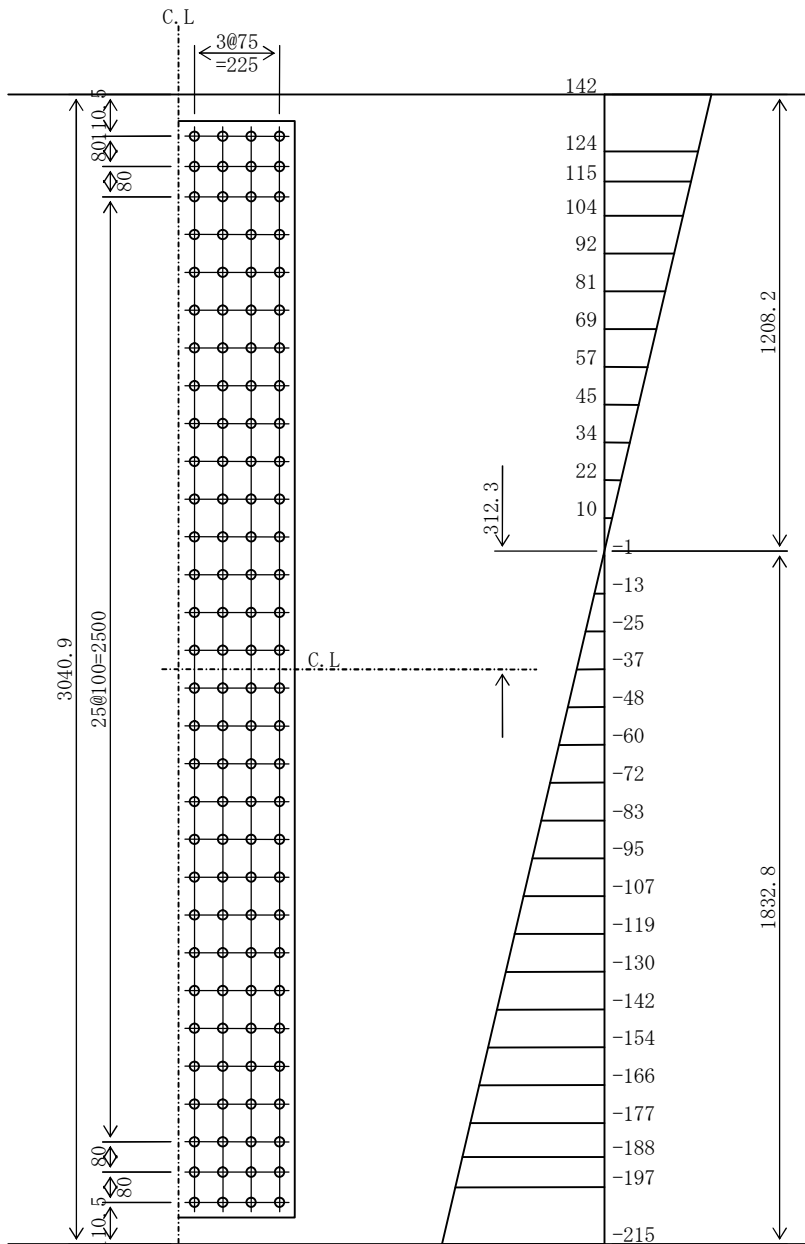
(a) Section area of main plate (Web plate)

1-LWEB PL 3041 * 12 A = 364.9 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 142 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -215 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 142 \text{ N/mm}^2 \\ \sigma_{Ln} &= 215 \text{ N/mm}^2 \\ \tau &= 66 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 12 * (197 + 215) / 2 = 371975 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 371975 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 66 * 36491 / 120 = 19926 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((371975 / 4)^2 + 19926^2)} = 95105 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4167402 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3167926 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 215 * 3167926 * 10^4 / 1833 = 3713 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3713 * 10^6 / (4167402 * 10^4) * 1762 = 157 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(38) G-1 J-23 (Sec-23) RWEB
 G-1 J-24 (Sec-25) RWEB

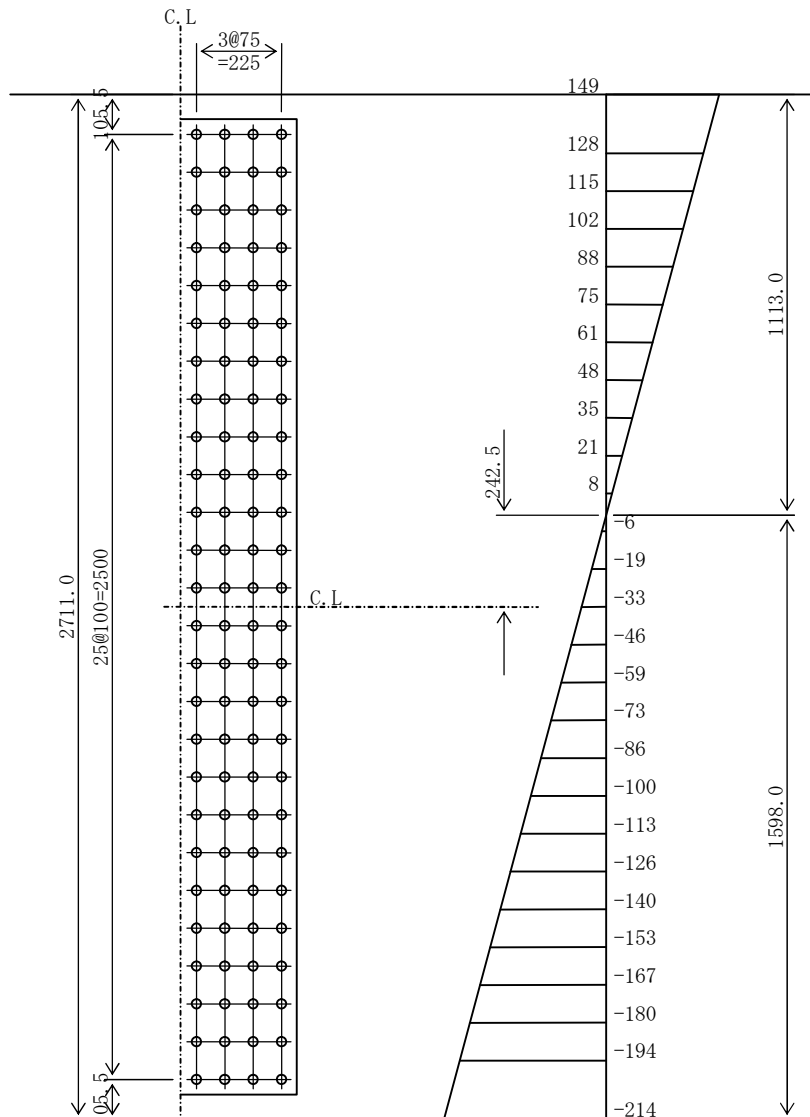
(a) Section area of main plate (Web plate)

1-RWEB PL 2711 * 12 A = 325.3 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -214 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 149 \text{ N/mm}^2 \\ \sigma_{Ln} &= 214 \text{ N/mm}^2 \\ \tau &= 67 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 12 * (194 + 214) / 2 = 380535 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 380535 / (108000 * 1.00) = 3.5 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 67 * 32532 / 104 = 21100 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((380535 / 4)^2 + 21100^2)} = 97446 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2849072 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2183719 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 214 * 2183719 * 10^4 / 1598 = 2929 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2929 * 10^6 / (2849072 * 10^4) * 1532 = 158 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(39) G-1 J-23 (Sec-23) LFLG

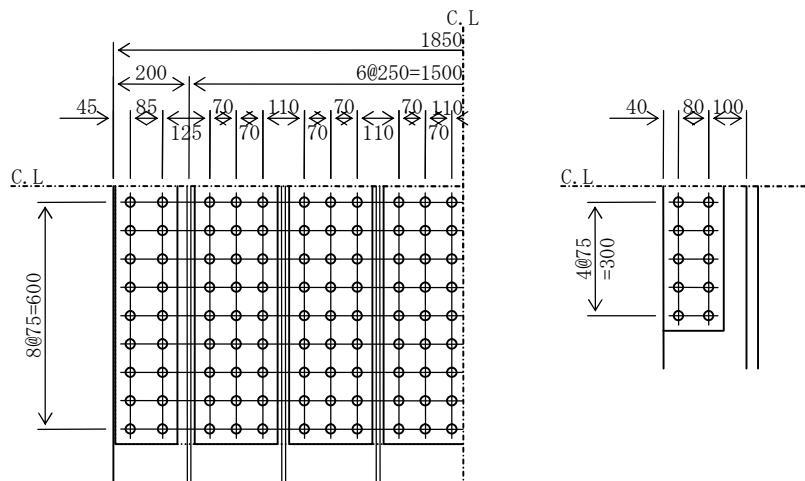
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -218 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 218 \text{ N/mm}^2 \\ \tau_{\max} &= 20 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 30 & \quad A_g = 555.0 \text{ cm}^2 \quad (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 555.0 + 209.0 = 764.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 218 * 55500 = 12120534 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 218 * 20900 = 4564309 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (12120534 + 4564309) / 255 = 65431 \text{ mm}^2 = 654.3 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 12120534 / 105840 = 114.5 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4564309 / 108000 = 42.3 \text{ pcs. (5 @ 10 = 50 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 189 = 12120534 / 189 = 64130 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 20 * 55500 / 189 = 5940 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(64130)^2 + (5940)^2} = 64404 \text{ N} < \rho_a = 105840 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 21	34.6
6-SPL PL	220 * 21	277.2
1-SPL PL	80 * 21	16.8
1-SPL PL	1840 * 15	276.0
10-SPL PL	160 * 12	192.0

796.6

> AgR = 654.3cm²

(40) G-1 J-24 (Sec-25) LFLG

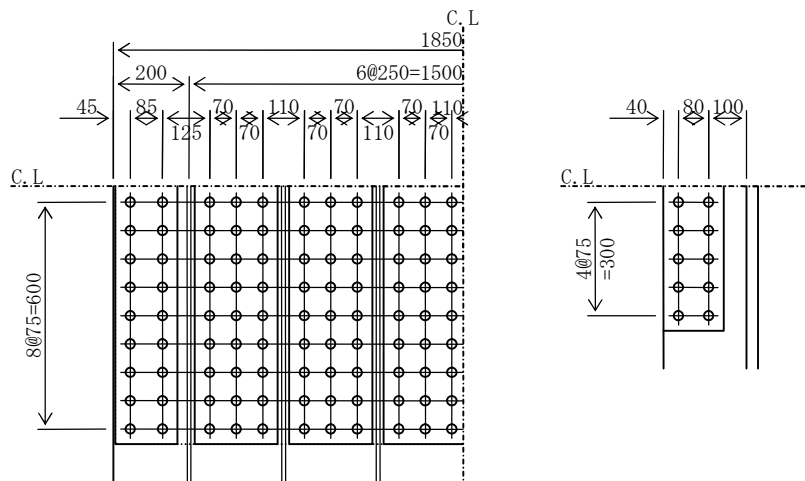
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -216 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 216 \text{ N/mm}^2 \\ \tau_{\max} &= 21 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 30 & \quad A_g = 555.0 \text{ cm}^2 \quad (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 555.0 + 209.0 = 764.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 216 * 55500 = 12013641 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 216 * 20900 = 4524056 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (12013641 + 4524056) / 255 = 64854 \text{ mm}^2 = 648.5 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 12013641 / 105840 = 113.5 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4524056 / 108000 = 41.9 \text{ pcs. (5 @ 10 = 50 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 189 = 12013641 / 189 = 63564 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 21 * 55500 / 189 = 6094 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(63564^2 + 6094^2)} = 63856 \text{ N} < \rho_a = 105840 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 20	33.0
6-SPL PL	220 * 20	264.0
1-SPL PL	80 * 20	16.0
1-SPL PL	1840 * 15	276.0
10-SPL PL	160 * 12	192.0

781.0

> AgR = 648.5cm²

(41) G-1 J-25 (Sec-26) LFLG

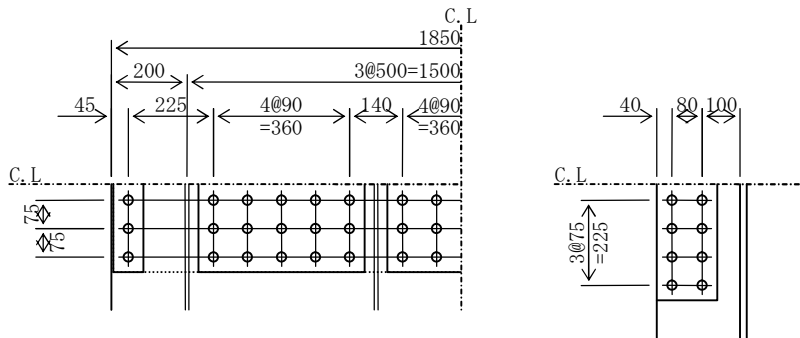
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -162 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 200 = 150 \text{ N/mm}^2 \\ \therefore \sigma_c &= 162 \text{ N/mm}^2 \\ \tau_{\max} &= 25 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 18 & & A_g &= 333.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 333.0 + 83.6 & &= 416.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 162 * 33300 = 5387973 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 162 * 8360 = 1352656 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (5387973 + 1352656) / 255 = 26434 \text{ mm}^2 = 264.3 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 5387973 / 108000 = 49.9 \text{ pcs.}$ (51 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1352656 / 108000 = 12.5 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 51 = 5387973 / 51 = 105647 \text{ N} \\ \rho_s &= \tau * A_g / 51 = 25 * 33300 / 51 = 16368 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(105647)^2 + (16368)^2} = 106907 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 9	14.4
3-SPL PL	440 * 9	118.8
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 9	57.6

$$356.4$$

$$> A_{gR} = 264.3 \text{ cm}^2$$

(42) G-1 J-27 (Sec-27) LFLG

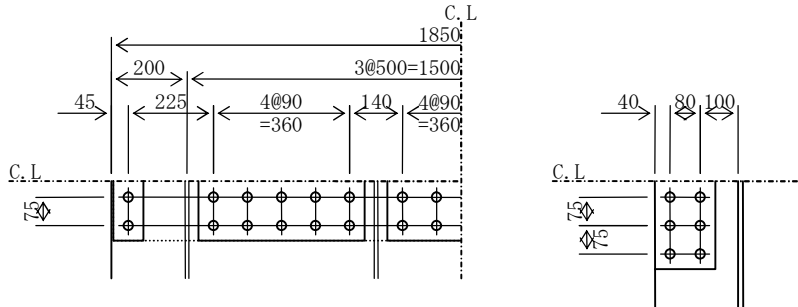
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 151 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 20 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 13 & & A_g &= 240.5 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 240.5 + 83.6 & &= 324.1 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 13 & & A &= 240.5 \\ (240.5 - (17 * 2.5) * 1.3) * 1.1 &= 203.8 < 240.5 & \therefore A_n &= 203.8 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 203.8 + 71.1 & &= 274.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 151 * 324.1 / 274.8 & &= 178 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 178 * 20378 = 3621932 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 20378 / 1.1 = 2917687 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 178 * 7106 = 1263033 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (3621932 + 1263033) / 210 = 23262 \text{ mm}^2 = 232.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3621932 / 108000 = 33.5 \text{ pcs. (34 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1263033 / 108000 = 11.7 \text{ pcs. (2 @ 6 = 12 bolts will be used.)} \\ &(\text{High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites})\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 34 = 3621932 / 34 = 106527 \text{ N} \\ \rho_s &= \tau * A_g / 34 = 20 * 24050 / 34 = 14487 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(106527^2 + 14487^2)} = 107508 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
3-SPL PL	440 * 9	(118.8 -	3*(5*2.5)* 0.9)*1.1= 93.6<	118.8 ∴ 93.6
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 13	(83.2 -	4*(2*2.5)* 1.3)*1.1= 62.9<	83.2 ∴ 62.9
<hr/>				
		382.0		307.5
				> AnR

(43) G-1 J-28 (Sec-28) LFLG

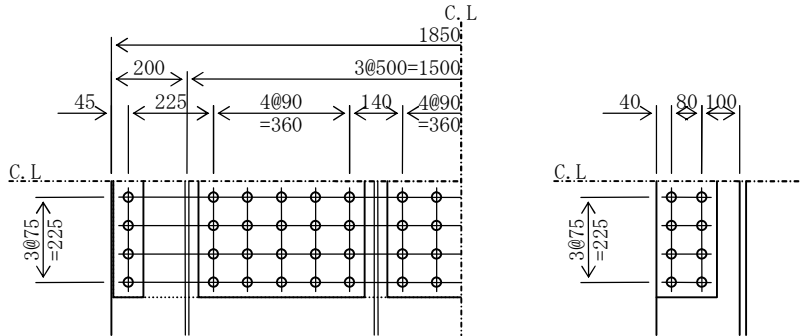
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 203 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 12 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A_g &= 314.5 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 83.6 & &= 398.1 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A &= 314.5 \\ (314.5 - (17 * 2.5) * 1.7) * 1.1 &= 266.5 < 314.5 & \therefore A_n &= 266.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 266.5 + 71.1 & &= 337.5 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 203 * 398.1 / 337.5 & &= 239 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 239 * 26648 = 6373005 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 191 * 26648 / 1.1 = 4633031 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 239 * 7106 = 1699468 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6373005 + 1699468) / 255 = 31657 \text{ mm}^2 = 316.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6373005 / 108000 = 59.0 \text{ pcs. (68 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1699468 / 108000 = 15.7 \text{ pcs. (2 @ 8 = 16 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4.4 \text{ unites})$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 68 = 6373005 / 68 = 93721 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 12 * 31450 / 68 = 5427 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{93721^2 + 5427^2} = 93878 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3<	17.6 ∴ 13.3
3-SPL PL	440 * 11	(145.2 -	3*(5*2.5)* 1.1)*1.1= 114.3<	145.2 ∴ 114.3
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		418.0		335.5
				> AnR

(44) G-1 J-29 (Sec-30) LFLG

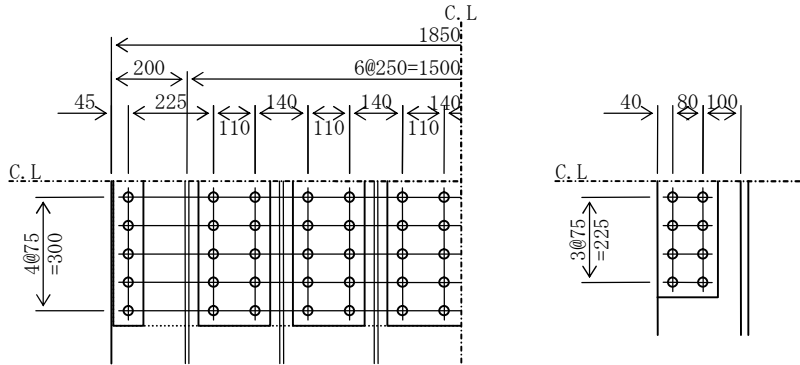
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 188 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 7 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 209.0 & &= 579.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ (370.0 - (14 * 2.5) * 2.0) * 1.1 &= 330.0 < 370.0 & \therefore A_n &= 330.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 330.0 + 177.7 & &= 507.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 188 * 579.0 / 507.6 & &= 215 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 215 * 33000 = 7091364 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 33000 / 1.1 = 5737500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 215 * 17765 = 3817517 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 17765 / 1.1 = 3088687 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7091364 + 3817517) / 255 = 42780 \text{ mm}^2 = 427.8 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7091364 / 108000 = 65.7 \text{ pcs. (70 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3817517 / 108000 = 35.3 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 7091364 / 70 = 101305 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 7 * 37000 / 70 = 3944 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{101305^2 + 3944^2} = 101382 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 13	(20.8 -	2*(1*2.5)* 1.3)*1.1= 15.7 <	20.8 ∴ 15.7
6-SPL PL	190 * 13	(148.2 -	6*(2*2.5)* 1.3)*1.1= 120.1 <	148.2 ∴ 120.1
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 13	(208.0 -	10*(2*2.5)* 1.3)*1.1= 157.3 <	208.0 ∴ 157.3
<hr/>				
		542.6		440.7
				> AnR

(45) G-1 J-30 (Sec-31) LWEB
 G-1 J-29 (Sec-30) LWEB

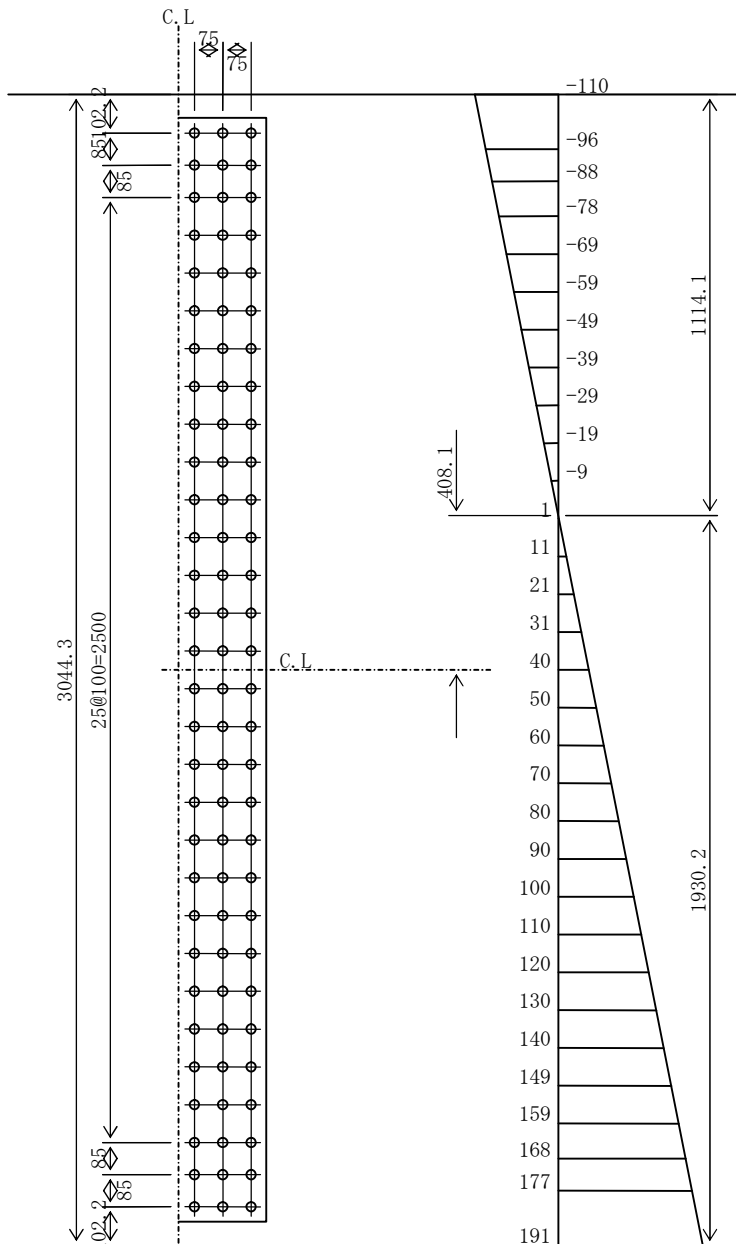
(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -109 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 188 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 109 / 188 = 110 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 16 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.5 \text{ cm}$

Total force to be shared

$$P_1 = 145 * 12 * (177 + 191) / 2 = 319583 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 319583 / (108000 * 1.00) = 3.0 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 90 = 16 * 36532 / 90 = 6341 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((319583 / 3)^2 + 6341^2)} = 106716 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2920 * 9 \quad A_s = 525.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4609786 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3429845 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 3429845 * 10^4 / 1930 = 3398 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3398 * 10^6 / (4609786 * 10^4) * 1868 = 138 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(46) G-1 J-30 (Sec-31) LFLG

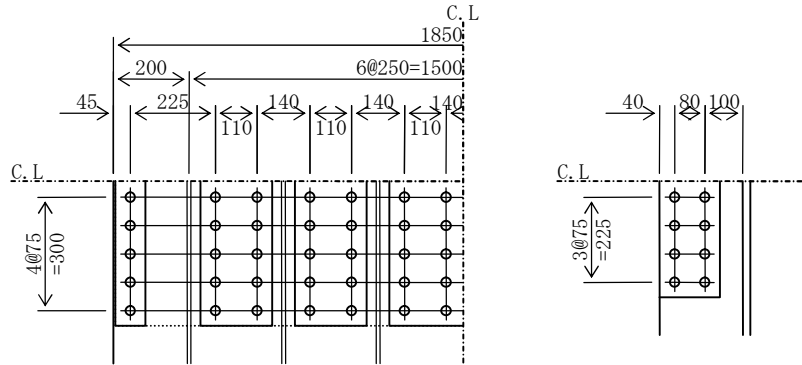
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 190 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 7 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 209.0 & &= 579.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ & (370.0 - (14 * 2.5) * 2.0) * 1.1 & &= 330.0 < 370.0 & \therefore A_n = 330.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ & (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 & &= 177.7 < 209.0 & \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 330.0 + 177.7 & &= 507.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 190 * 579.0 / 507.6 & &= 217 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 217 * 33000 = 7149515 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 33000 / 1.1 = 5737500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 217 * 17765 = 3848822 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 17765 / 1.1 = 3088687 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7149515 + 3848822) / 255 = 43131 \text{ mm}^2 = 431.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7149515 / 108000 = 66.2 \text{ pcs. (70 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3848822 / 108000 = 35.6 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 7149515 / 70 = 102136 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 7 * 37000 / 70 = 3905 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(102136^2 + 3905^2)} = 102211 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9 <	22.4 ∴ 16.9
6-SPL PL	190 * 14	(159.6 -	6*(2*2.5)* 1.4)*1.1= 129.4 <	159.6 ∴ 129.4
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 13	(208.0 -	10*(2*2.5)* 1.3)*1.1= 157.3 <	208.0 ∴ 157.3
<hr/>				
		555.6		451.1
				> AnR

(47) G-1 J-34(Sec-34) LFLG

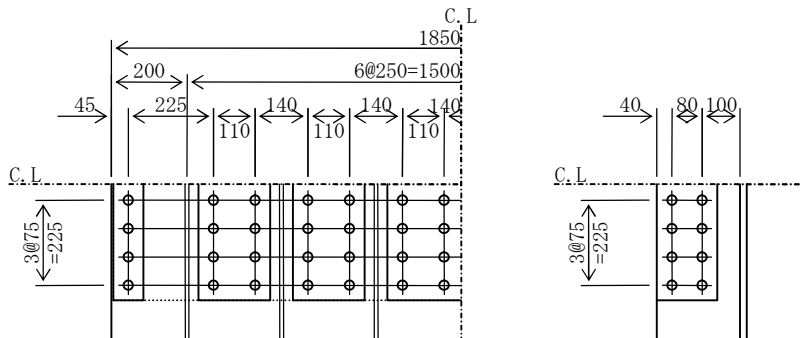
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -169 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 200 = 150 \text{ N/mm}^2 \\ \therefore \sigma_c &= 169 \text{ N/mm}^2 \\ \tau_{\max} &= 28 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 18 & \quad A_g = 333.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 333.0 + 209.0 = 542.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 169 * 33300 = 5631030 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 169 * 20900 = 3534190 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (5631030 + 3534190) / 210 = 43644 \text{ mm}^2 = 436.4 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 5631030 / 108000 = 52.1 \text{ pcs.}$ (56 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 3534190 / 108000 = 32.7 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 56 = 5631030 / 56 = 100554 \text{ N} \\ \rho_s &= \tau * A_g / 56 = 28 * 33300 / 56 = 16928 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(100554^2 + 16928^2)} = 101969 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 10	16.0
6-SPL PL	190 * 10	114.0
1-SPL PL	1840 * 9	165.6
10-SPL PL	160 * 11	176.0

$$471.6$$

$$> A_{gR} = 436.4 \text{ cm}^2$$

(48) G-1 J-35 (Sec-35) LFLG

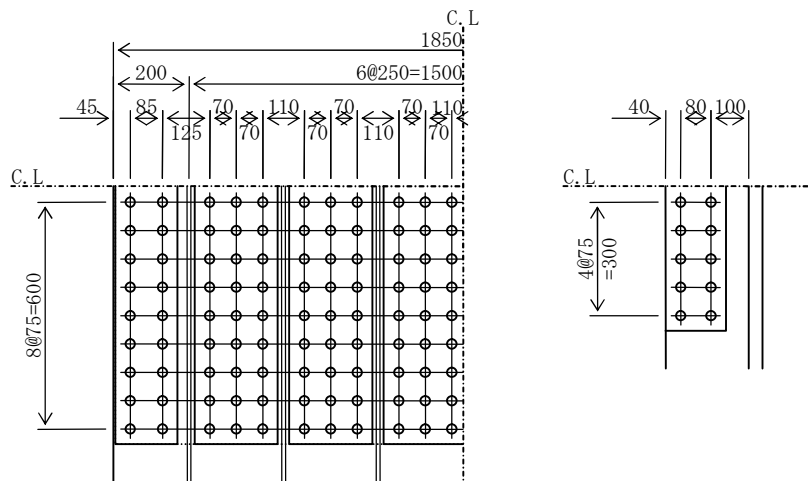
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -219 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 219 \text{ N/mm}^2 \\ \tau_{\max} &= 19 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 36 & & A_g &= 666.0 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 666.0 + 209.0 & &= 875.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 219 * 66600 = 14554764 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 219 * 20900 = 4567486 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (14554764 + 4567486) / 255 = 74989 \text{ mm}^2 = 749.9 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 14554764 / 105840 = 137.5 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4567486 / 108000 = 42.3 \text{ pcs. (5 @ 10 = 50 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 189 = 14554764 / 189 = 77009 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 19 * 66600 / 189 = 6525 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(77009)^2 + (6525)^2} = 77285 \text{ N} < \rho_a = 105840 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 25	41.3
6-SPL PL	220 * 25	330.0
1-SPL PL	80 * 25	20.0
1-SPL PL	1840 * 18	331.2
10-SPL PL	160 * 12	192.0

914.5

> AgR = 749.9cm²

(49) G-1 J-36 (Sec-37) LWEB

G-1 J-10 (Sec-10) LWEB, G-1 J-35 (Sec-35) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3038 * 12 A = 364.5 cm² (SM570)

(b) Design stress

$\sigma_U = 142 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

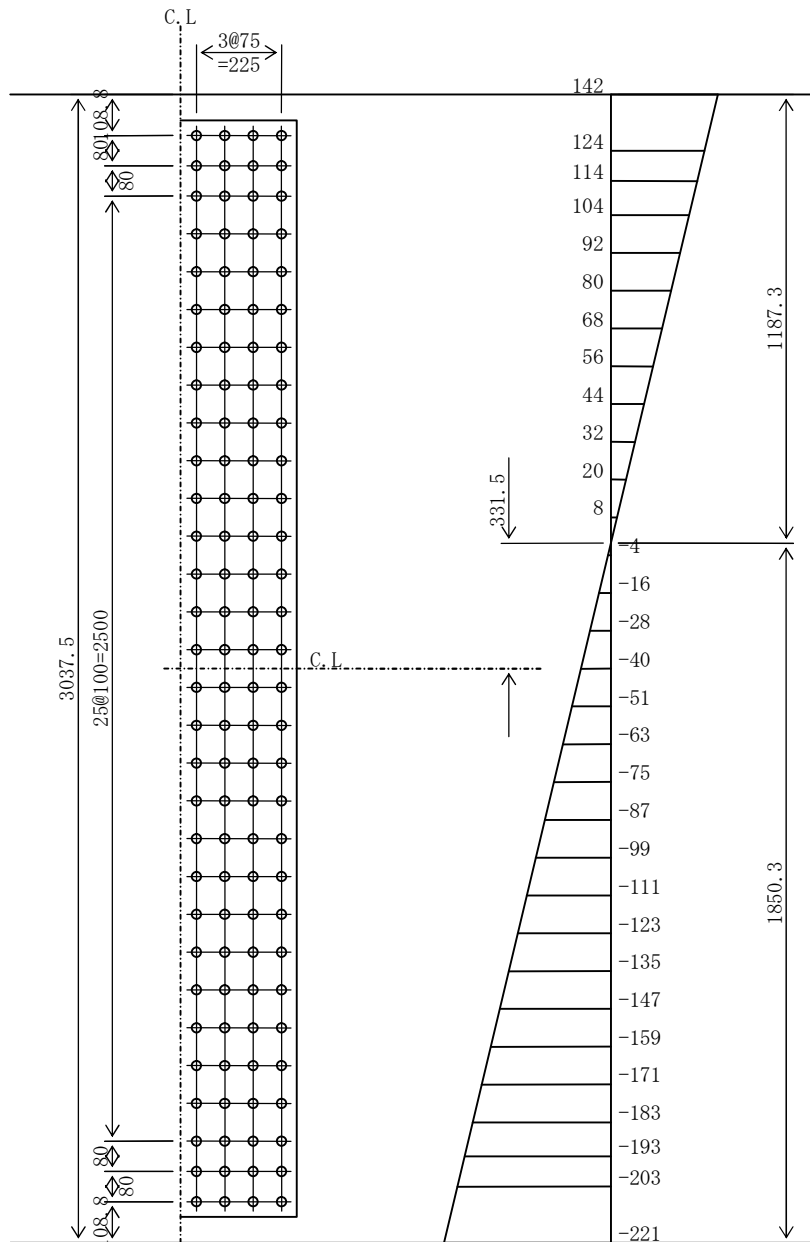
$\sigma_L = -221 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 142 \text{ N/mm}^2$

$\sigma_{Ln} = 221 \text{ N/mm}^2$

$\tau = 69 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.9$ cm

Total force to be shared

$$P_1 = 149 * 12 * (203 + 221) / 2 = 378164 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 378164 / (108000 * 1.00) = 3.5 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 69 * 36450 / 120 = 21011 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((378164 / 4)^2 + 21011^2)} = 96848 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4232007 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3203207 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 221 * 3203207 * 10^4 / 1850 = 3821 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3821 * 10^6 / (4232007 * 10^4) * 1782 = 161 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(50) G-1 J-36 (Sec-37) RWEB
 G-1 J-35 (Sec-35) RWEB

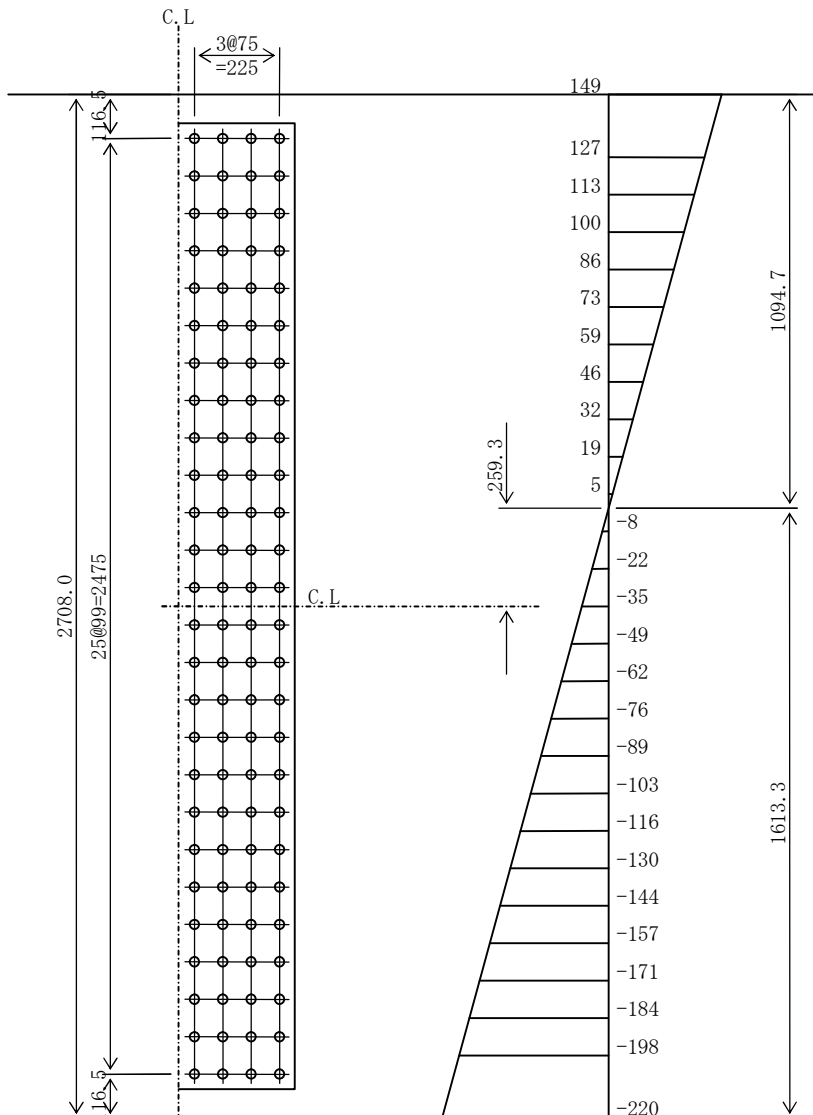
(a) Section area of main plate (Web plate)

1-RWEB PL 2708 * 12 $A = 325.0 \text{ cm}^2$ (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -220 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 149 \text{ N/mm}^2 \\ \sigma_{Ln} &= 220 \text{ N/mm}^2 \\ \tau &= 72 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.6 \text{ cm}$

Total force to be shared

$$P_1 = 166 * 12 * (198 + 220) / 2 = 416129 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 416129 / (108000 * 1.00) = 3.9 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 72 * 32496 / 104 = 22376 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((416129 / 4)^2 + 22376^2)} = 106411 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2811069 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2204318 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 220 * 2204318 * 10^4 / 1613 = 3009 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3009 * 10^6 / (2811069 * 10^4) * 1537 = 165 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(51) G-1 J-36 (Sec-37) LFLG

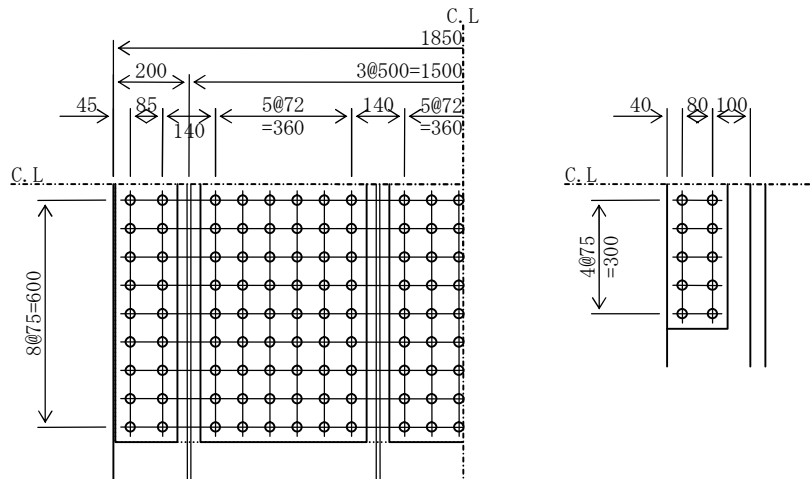
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -226 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 226 \text{ N/mm}^2 \\ \tau_{\max} &= 16 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 40 & & A_g &= 740.0 \text{ cm}^2 \quad (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 740.0 + 83.6 & &= 823.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 226 * 74000 = 16701282 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 226 * 8360 = 1886793 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (16701282 + 1886793) / 255 = 72894 \text{ mm}^2 = 728.9 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 16701282 / 105840 = 157.8 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 1886793 / 108000 = 17.5 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 189 = 16701282 / 189 = 88367 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 16 * 74000 / 189 = 6280 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(88367^2 + 6280^2)} = 88589 \text{ N} < \rho_a = 105840 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 25	41.3
3-SPL PL	440 * 25	330.0
1-SPL PL	80 * 25	20.0
1-SPL PL	1840 * 20	368.0
4-SPL PL	160 * 12	76.8

836.0

> AgR = 728.9cm²

(52) G-1 J-37 (Sec-38) LWEB

G-1 J-8 (Sec-9) LWEB, G-1 J-9 (Sec-9) LWEB, G-1 J-14 (Sec-15) LWEB, G-1 J-15 (Sec-16) LWEB
G-1 J-16 (Sec-16) LWEB, G-1 J-17 (Sec-17) LWEB, G-1 J-18 (Sec-19) LWEB
G-1 J-19 (Sec-20) LWEB, G-1 J-20 (Sec-20) LWEB, G-1 J-21 (Sec-21) LWEB
G-1 J-22 (Sec-22) LWEB, G-1 J-26 (Sec-27) LWEB, G-1 J-27 (Sec-27) LWEB
G-1 J-31 (Sec-32) LWEB, G-1 J-32 (Sec-33) LWEB, G-1 J-33 (Sec-33) LWEB
G-1 J-34 (Sec-34) LWEB, G-1 J-38 (Sec-39) LWEB, G-1 J-39 (Sec-39) LWEB
G-1 J-40 (Sec-40) LWEB, G-1 J-41 (Sec-41) LWEB, G-1 J-42 (Sec-43) LWEB
G-1 J-43 (Sec-44) LWEB, G-1 J-44 (Sec-45) LWEB, G-1 J-45 (Sec-45) LWEB
G-1 J-49 (Sec-50) LWEB, G-1 J-50 (Sec-51) LWEB, G-1 J-51 (Sec-51) LWEB
G-1 J-52 (Sec-52) LWEB, G-1 J-53 (Sec-53) LWEB, G-1 J-54 (Sec-55) LWEB
G-1 J-55 (Sec-56) LWEB, G-1 J-56 (Sec-57) LWEB, G-1 J-57 (Sec-57) LWEB
G-1 J-58 (Sec-58) LWEB, G-1 J-62 (Sec-63) LWEB, G-1 J-63 (Sec-63) LWEB
G-1 J-64 (Sec-64) LWEB, G-1 J-65 (Sec-65) LWEB, G-1 J-66 (Sec-67) LWEB
G-1 J-67 (Sec-68) LWEB, G-1 J-68 (Sec-68) LWEB, G-1 J-69 (Sec-69) LWEB
G-1 J-74 (Sec-75) LWEB, G-1 J-75 (Sec-75) LWEB, G-1 J-81 (Sec-82) LWEB

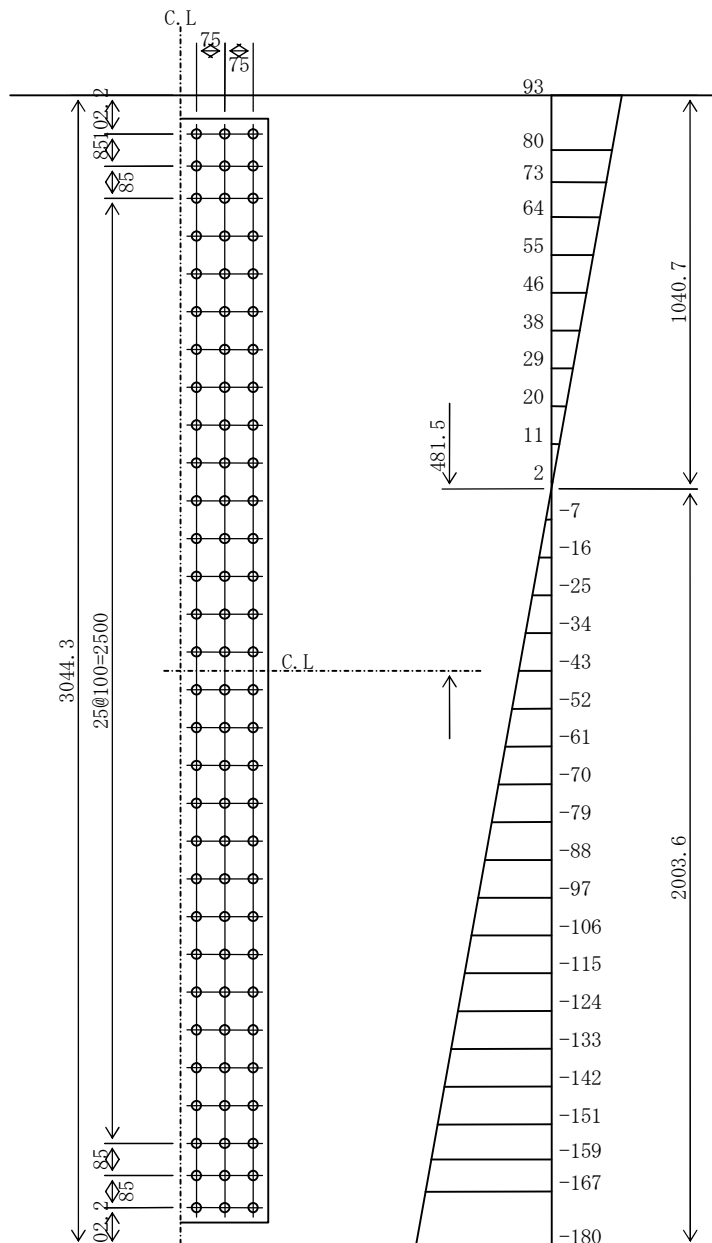
(a) Section area of main plate (Web plate)

$$1\text{-LWEB PL } 3044 * 12 \quad A = 365.3 \text{ cm}^2 \quad (\text{SM490Y})$$

(b) Design stress

$$\begin{aligned} \sigma_U &= 93 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_L &= -180 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_{Un} &= 93 \text{ N/mm}^2 \\ \sigma_{Ln} &= 180 \text{ N/mm}^2 \\ \tau &= 58 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.5$ cm

Total force to be shared

$$P_1 = 145 * 12 * (167 + 180) / 2 = 300508 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 300508 / (108000 * 1.00) = 2.8 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 90 = 58 * 36532 / 90 = 23719 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((300508 / 3)^2 + 23719^2)} = 102939 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 2920 * 9 \quad A_s = 525.6 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4952949 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3668363 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 180 * 3668363 * 10^4 / 2004 = 3288 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3288 * 10^6 / (4952949 * 10^4) * 1941 = 129 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(53) G-1 J-37 (Sec-38) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM490Y)

(b) Design stress

$\sigma_U = 99 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

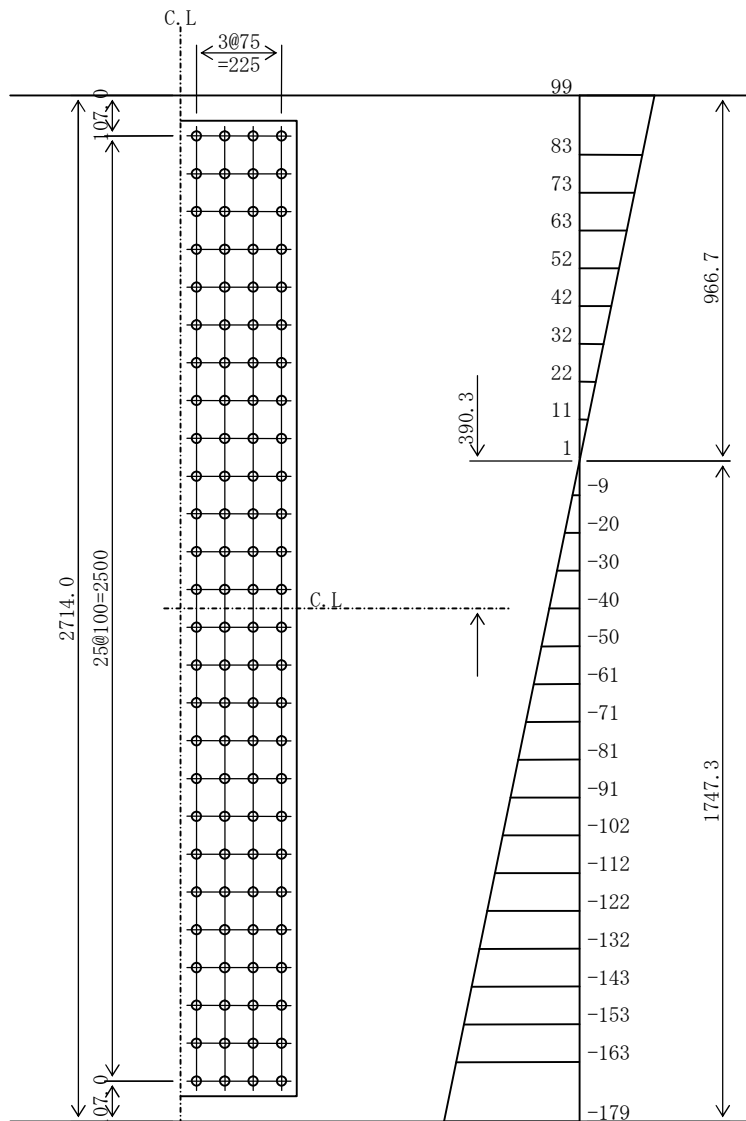
$\sigma_L = -179 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$

$\sigma_{Un} = 99 \text{ N/mm}^2$

$\sigma_{Ln} = 179 \text{ N/mm}^2$

$\tau = 59 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.7 \text{ cm}$

Total force to be shared

$$P_1 = 157 * 12 * (163 + 179) / 2 = 322491 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 322491 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 59 * 32568 / 104 = 18606 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((322491 / 4)^2 + 18606^2)} = 82742 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3283419 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2495158 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 179 * 2495158 * 10^4 / 1747 = 2559 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2559 * 10^6 / (3283419 * 10^4) * 1680 = 131 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(54) G-1 J-37(Sec-38) LFLG

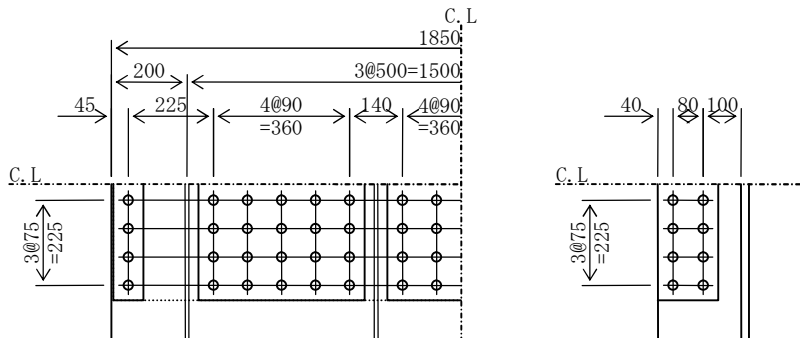
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -181 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 202 = 151 \text{ N/mm}^2 \\ \therefore \sigma_c &= 181 \text{ N/mm}^2 \\ \tau_{\max} &= 23 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 21 & \quad A_g = 388.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 388.5 + 83.6 = 472.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 181 * 38850 = 7046652 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 181 * 8360 = 1516345 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (7046652 + 1516345) / 210 = 40776 \text{ mm}^2 = 407.8 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 7046652 / 108000 = 65.2 \text{ pcs.}$ (68 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1516345 / 108000 = 14.0 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 68 = 7046652 / 68 = 103627 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 23 * 38850 / 68 = 13220 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(103627)^2 + (13220)^2} = 104467 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

(SM490Y)		$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 12	19.2
3-SPL PL	440 * 12	158.4
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 12	76.8

$$420.0$$

$$> A_{gR} = 407.8 \text{ cm}^2$$

(55) G-1 J-38 (Sec-39) LFLG
 G-1 J-26 (Sec-27) LFLG

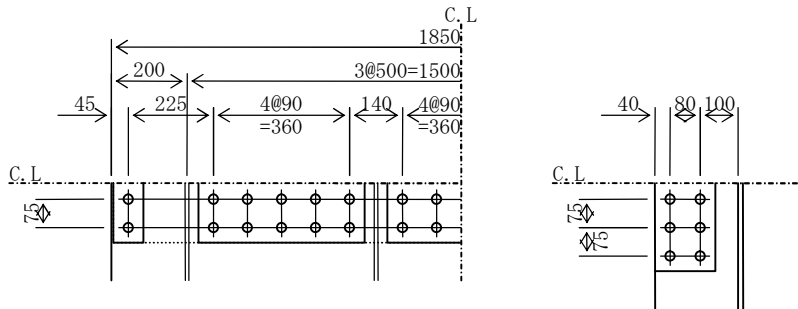
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 23 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -96 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 104 = 78 \text{ N/mm}^2 \\ \therefore \sigma_c &= 96 \text{ N/mm}^2 \\ \tau_{max} &= 28 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 13 & \quad A_g = 240.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 240.5 + 83.6 = 324.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 13 & \quad A = 240.5 \\ (240.5 - (17 * 2.5) * 1.3) * 1.1 &= 203.8 < 240.5 \quad \therefore A_n = 203.8 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & \quad A_r = 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 \quad \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 203.8 + 71.1 = 274.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 23 * 324.1 / 274.8 = 27 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 20378 / 1.1 = 2917687 \text{ N} \\ &> \sigma_{tn} * A_n = 27 * 20378 = 554401 \text{ N} \\ P_c &= \sigma_c * A_g = 96 * 24050 = 2302908 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 27 * 7106 = 193330 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 96 * 8360 = 800512 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (2917687 + 1017450) / 210 = 18739 \text{ mm}^2 = 187.4 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (2302908 + 800512) / 210 = 14778 \text{ mm}^2 = 147.8 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 2917687 / 108000 = 27.0 \text{ pcs. (34 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1017450 / 108000 = 9.4 \text{ pcs. (2 @ 6 = 12 bolts will be used.)} \\ \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ \rho_a &= 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2.3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 34 = 2917687 / 34 = 85814 \text{ N}$$

$$\rho s = \tau * Ag / 34 = 28 * 24050 / 34 = 19869 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(85814^2 + 19869^2)} = 88084 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
3-SPL PL	440 * 9	(118.8 -	3*(5*2.5)* 0.9)*1.1= 93.6<	118.8 ∴ 93.6
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 11	(70.4 -	4*(2*2.5)* 1.1)*1.1= 53.2<	70.4 ∴ 53.2
			369.2	297.8
			> AgR	> AnR

(56) G-1 J-39 (Sec-39) LFLG

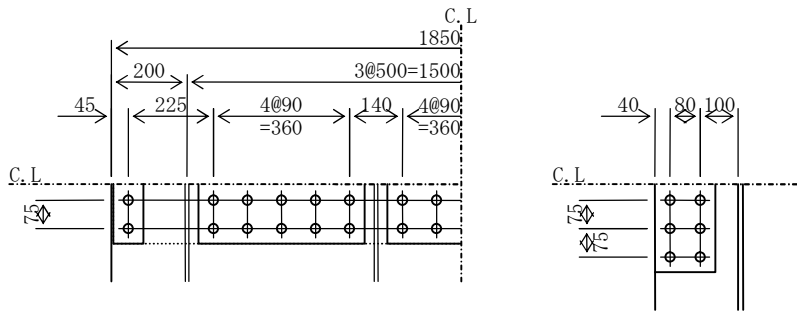
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 139 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -4 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 104 = 78 \text{ N/mm}^2 \\ \therefore \sigma_c &= 78 \text{ N/mm}^2 \\ \tau_{max} &= 22 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 13 & \quad A_g = 240.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 240.5 + 83.6 = 324.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 13 & \quad A = 240.5 \\ (240.5 - (17 * 2.5) * 1.3) * 1.1 &= 203.8 < 240.5 \quad \therefore A_n = 203.8 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & \quad A_r = 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 \quad \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 203.8 + 71.1 = 274.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 139 * 324.1 / 274.8 = 164 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 164 * 20378 = 3341475 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 20378 / 1.1 = 2917687 \text{ N} \\ P_c &= \sigma_c * A_g = 78 * 24050 = 1882249 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 164 * 7106 = 1165232 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 78 * 8360 = 654287 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (3341475 + 1165232) / 210 = 21461 \text{ mm}^2 = 214.6 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (1882249 + 654287) / 210 = 12079 \text{ mm}^2 = 120.8 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3341475 / 108000 = 30.9 \text{ pcs. (34 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1165232 / 108000 = 10.8 \text{ pcs. (2 @ 6 = 12 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 34 = 3341475 / 34 = 98279 \text{ N} \\ \rho_s &= \tau * A_g / 34 = 22 * 24050 / 34 = 15246 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(98279)^2 + (15246)^2} = 99454 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
3-SPL PL	440 * 9	(118.8 -	3*(5*2.5)* 0.9)*1.1= 93.6<	118.8 ∴ 93.6
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 12	(76.8 -	4*(2*2.5)* 1.2)*1.1= 58.1<	76.8 ∴ 58.1
		375.6		302.6
		> Ag _R		> An _R

(57) G-1 J-40 (Sec-40) LFLG

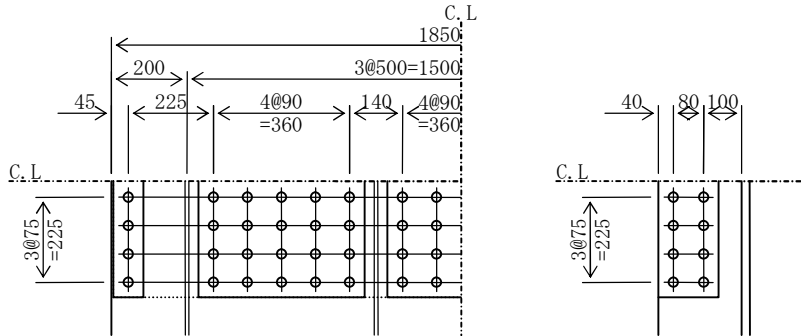
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 176 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 10 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 22 & & A_g &= 407.0 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 407.0 + 83.6 & &= 490.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 22 & & A &= 407.0 \\ (407.0 - (17 * 2.5) * 2.2) * 1.1 &= 344.9 < 407.0 & \therefore A_n &= 344.9 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 344.9 + 71.1 & &= 415.9 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 176 * 490.6 / 415.9 & &= 208 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 208 * 34485 = 7157925 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 34485 / 1.1 = 4937625 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 208 * 7106 = 1474966 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7157925 + 1474966) / 210 = 41109 \text{ mm}^2 = 411.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7157925 / 108000 = 66.3 \text{ pcs. (68 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1474966 / 108000 = 13.7 \text{ pcs. (2 @ 8 = 16 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 68 = 7157925 / 68 = 105264 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 10 * 40700 / 68 = 6118 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105264^2 + 6118^2)} = 105441 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 15	(24.0 -	2*(1*2.5)* 1.5)*1.1= 18.2 <	24.0 ∴ 18.2
3-SPL PL	440 * 15	(198.0 -	3*(5*2.5)* 1.5)*1.1= 155.9 <	198.0 ∴ 155.9
1-SPL PL	1840 * 11	(202.4 -	(17*2.5)* 1.1)*1.1= 171.2 <	202.4 ∴ 171.2
4-SPL PL	160 * 15	(96.0 -	4*(2*2.5)* 1.5)*1.1= 72.6 <	96.0 ∴ 72.6
<hr/>				
		520.4		417.9
				> AnR

(58) G-1 J-42 (Sec-43) LFLG
 G-1 J-41 (Sec-41) LFLG

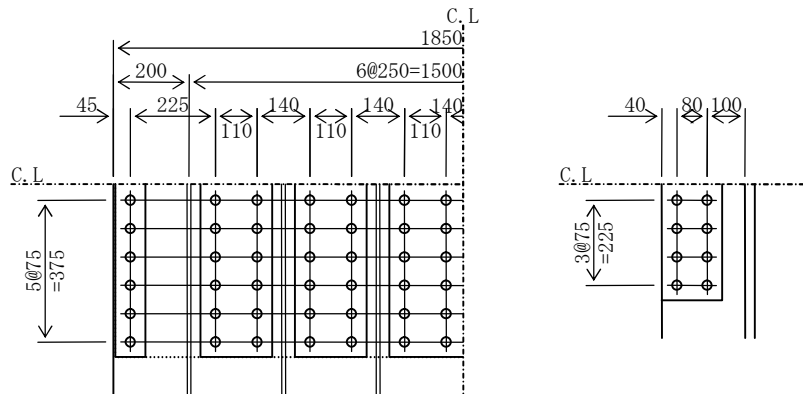
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 168 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 6 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 26 & & A_g &= 481.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 481.0 + 209.0 & &= 690.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 26 & & A &= 481.0 \\ (481.0 - (14 * 2.5) * 2.6) * 1.1 &= 429.0 < 481.0 & \therefore A_n &= 429.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 429.0 + 177.7 & &= 606.7 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 168 * 690.0 / 606.7 & &= 192 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 192 * 42900 = 8216016 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 42900 / 1.1 = 6142500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 192 * 17765 = 3402273 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8216016 + 3402273) / 210 = 55325 \text{ mm}^2 = 553.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8216016 / 108000 = 76.1 \text{ pcs. (84 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3402273 / 108000 = 31.5 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 6,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 84 = 8216016 / 84 = 97810 \text{ N} \\ \rho_s &= \tau * A_g / 84 = 6 * 48100 / 84 = 3377 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97810^2 + 3377^2} = 97868 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 19	(30.4 -	2*(1*2.5)*1.9)*1.1= 23.0 <	30.4 ∴ 23.0
6-SPL PL	190 * 19	(216.6 -	6*(2*2.5)*1.9)*1.1= 175.6 <	216.6 ∴ 175.6
1-SPL PL	1840 * 12	(220.8 -	(14*2.5)*1.2)*1.1= 196.7 <	220.8 ∴ 196.7
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)*1.4)*1.1= 169.4 <	224.0 ∴ 169.4
<hr/>				
		691.8		564.6
				> AnR

(59) G-1 J-44 (Sec-45) LFLG

G-1 J-15 (Sec-16) LFLG, G-1 J-33 (Sec-33) LFLG, G-1 J-45 (Sec-45) LFLG
G-1 J-50 (Sec-51) LFLG, G-1 J-57 (Sec-57) LFLG, G-1 J-62 (Sec-63) LFLG
G-1 J-63 (Sec-63) LFLG

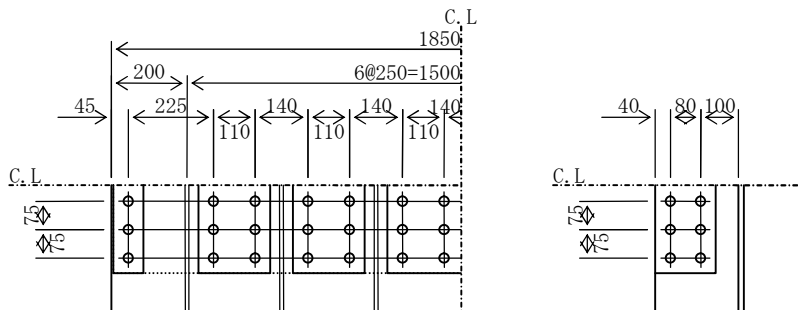
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 121 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -1 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 121 = 91 \text{ N/mm}^2 \\ \therefore \sigma_c &= 91 \text{ N/mm}^2 \\ \tau_{max} &= 22 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & \quad A_g = 259.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 259.0 + 209.0 = 468.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & \quad A = 259.0 \\ (259.0 - (14 * 2.5) * 1.4) * 1.1 &= 231.0 < 259.0 \quad \therefore A_n = 231.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & \quad A_r = 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 \quad \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 231.0 + 177.7 = 408.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 121 * 468.0 / 408.7 = 139 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 23100 / 1.1 = 3307500 \text{ N} \\ &> \sigma_{tn} * A_n = 139 * 23100 = 3208611 \text{ N} \\ P_c &= \sigma_c * A_g = 91 * 25900 = 2350872 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 139 * 17765 = 2467574 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 91 * 20900 = 1897036 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned}A_{nR} &= (P_t + P_{tr}) / \sigma_a = (3307500 + 2543625) / 210 = 27863 \text{ mm}^2 = 278.6 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (2350872 + 1897036) / 210 = 20228 \text{ mm}^2 = 202.3 \text{ cm}^2\end{aligned}$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3307500 / 108000 = 30.6 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2543625 / 108000 = 23.6 \text{ pcs. (5 @ 6 = 30 bolts will be used.)} \\ \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:)} \\ \rho_a &= 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 42 = 3307500 / 42 = 78750 \text{ N}$$

$$\rho s = \tau * Ag / 42 = 22 * 25900 / 42 = 13627 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(78750^2 + 13627^2)} = 79920 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	AgS(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 - 2*(1*2.5)*0.9)*1.1=	10.9 < 14.4	∴ 10.9
6-SPL PL	190 * 9	(102.6 - 6*(2*2.5)*0.9)*1.1=	83.2 < 102.6	∴ 83.2
1-SPL PL	1840 * 9	(165.6 - (14*2.5)*0.9)*1.1=	147.5 < 165.6	∴ 147.5
10-SPL PL	160 * 11	(176.0 - 10*(2*2.5)*1.1)*1.1=	133.1 < 176.0	∴ 133.1
		458.6		374.7
		> AgR		> AnR

(60) G-1 J-46 (Sec-46) LFLG
 G-1 J-61 (Sec-62) LFLG

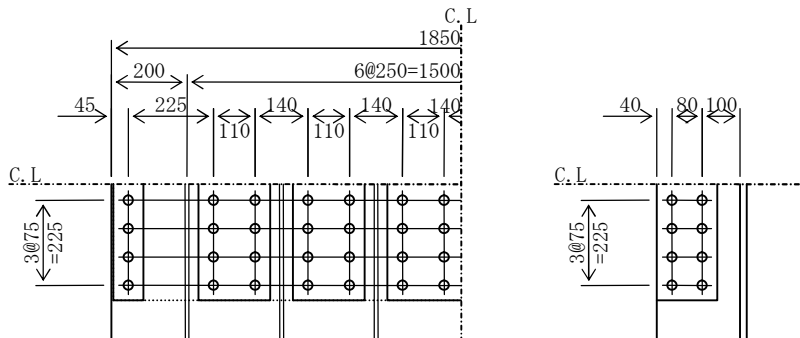
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -164 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 200 = 150 \text{ N/mm}^2 \\ \therefore \sigma_c &= 164 \text{ N/mm}^2 \\ \tau_{\max} &= 28 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 18 & \quad Ag = 333.0 \text{ cm}^2 \quad (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & \quad Agr = 209.0 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma Ag = Ag + Agr &= 333.0 + 209.0 = 542.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * Ag = 164 * 33300 = 5466794 \text{ N}$
- Rib $P_{cr} = \sigma_c * Agr = 164 * 20900 = 3431111 \text{ N}$

(e) Required section area of the splice plates

$$AgR = (P_c + P_{cr}) / \sigma_a = (5466794 + 3431111) / 255 = 34894 \text{ mm}^2 = 348.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 5466794 / 108000 = 50.6 \text{ pcs.}$ (56 bolts will be used.)

- Rib $n_r = P_{cr} / (108000 * 1.00) = 3431111 / 108000 = 31.8 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites})$$

(g) Tensile force per one bolt

$$\rho_p = P_c / 56 = 5466794 / 56 = 97621 \text{ N}$$

$$\rho_s = \tau * Ag / 56 = 28 * 33300 / 56 = 16756 \text{ N}$$

$$\rho = \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97621^2 + 16756^2} = 99049 \text{ N} < \rho_a = 108000 \text{ N}$$

(h) Check of splice plates

	(SM570)	$Ag_s \text{ (cm}^2\text{)}$
2-SPL PL	80 * 9	14.4
6-SPL PL	190 * 9	102.6
1-SPL PL	1840 * 9	165.6
10-SPL PL	160 * 9	144.0

$$426.6$$

$$> AgR = 348.9 \text{ cm}^2$$

(61) G-1 J-47 (Sec-47) LWEB
 G-1 J-48 (Sec-49) LWEB

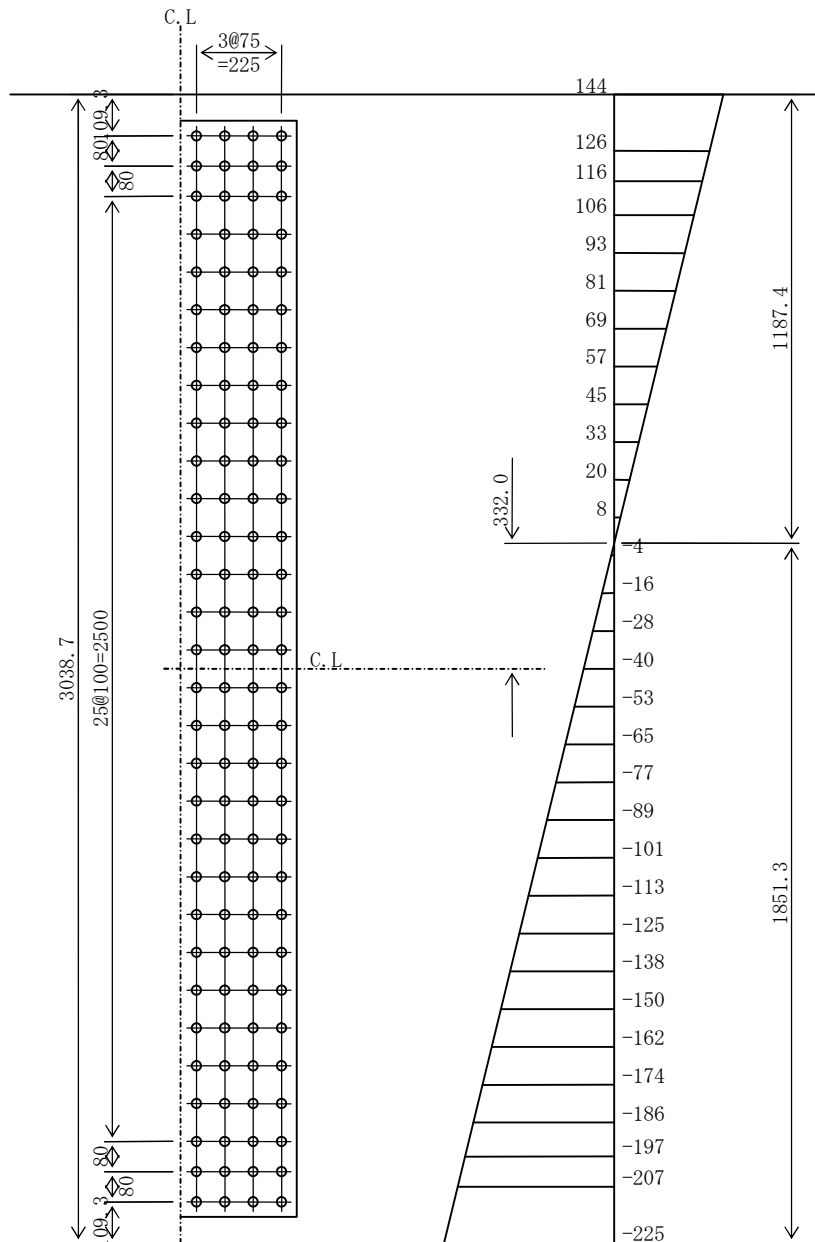
(a) Section area of main plate (Web plate)

1-LWEB PL 3039 * 12 A = 364.6 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 144 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -225 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 144 \text{ N/mm}^2 \\ \sigma_{Ln} &= 225 \text{ N/mm}^2 \\ \tau &= 70 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.9$ cm

Total force to be shared

$$P_1 = 149 * 12 * (207 + 225) / 2 = 387102 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 387102 / (108000 * 1.00) = 3.6 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 70 * 36464 / 120 = 21372 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((387102 / 4)^2 + 21372^2)} = 99107 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4233627 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3207632 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 225 * 3207632 * 10^4 / 1851 = 3900 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3900 * 10^6 / (4233627 * 10^4) * 1782 = 164 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(62) G-1 J-47 (Sec-47) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2709 * 12 A = 325.1 cm² (SM570)

(b) Design stress

$$\sigma_U = 152 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

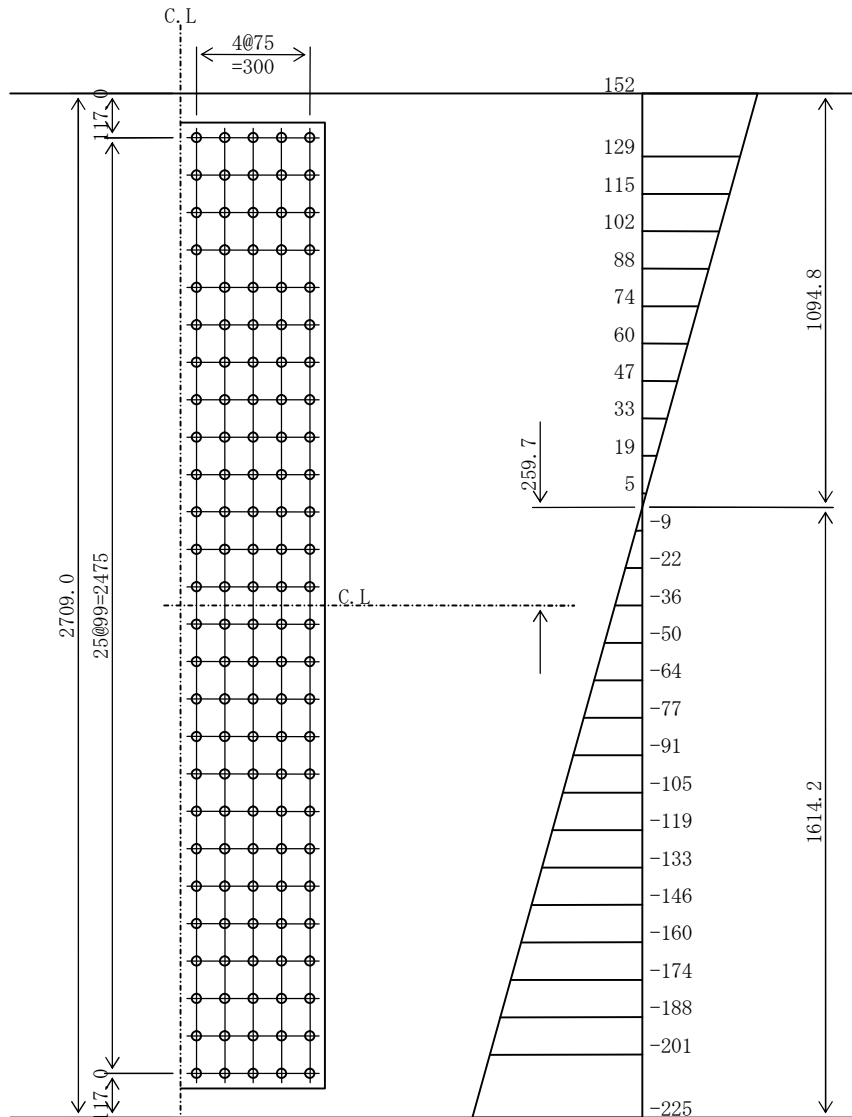
$$\sigma_L = -225 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 152 \text{ N/mm}^2$$

$$\sigma_{Ln} = 225 \text{ N/mm}^2$$

$$\tau = 73 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.6 \text{ cm}$

Total force to be shared

$$P_1 = 166 * 12 * (201 + 225) / 2 = 425625 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 425625 / (108000 * 1.00) = 3.9 \text{ pcs. (5 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 130 = 73 * 32508 / 130 = 18170 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((425625 / 5)^2 + 18170^2)} = 87043 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 5 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2812027 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2207277 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 225 * 2207277 * 10^4 / 1614 = 3071 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3071 * 10^6 / (2812027 * 10^4) * 1537 = 168 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(63) G-1 J-47 (Sec-47) LFLG

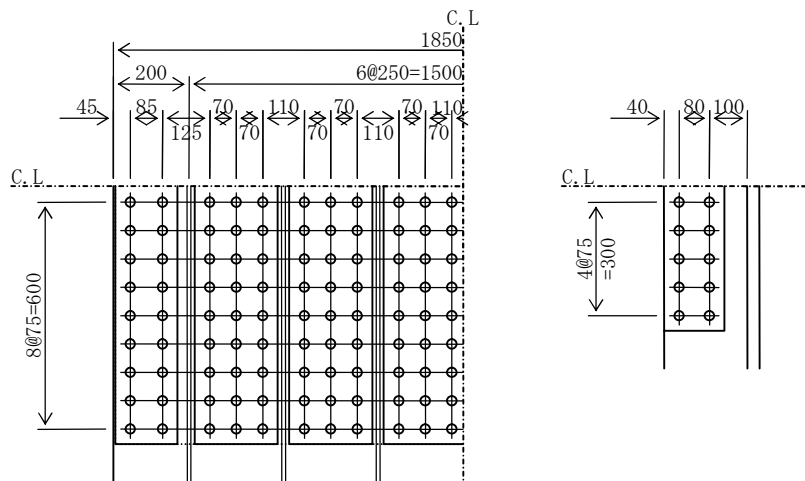
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -229 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 229 \text{ N/mm}^2 \\ \tau_{\max} &= 21 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 32 & & A_g &= 592.0 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 592.0 + 209.0 & &= 801.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_c &= \sigma_c * A_g = 229 * 59200 = 13560648 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 229 * 20900 = 4787459 \text{ N} \end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (13560648 + 4787459) / 255 = 71953 \text{ mm}^2 = 719.5 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 13560648 / 105840 = 128.1 \text{ pcs. (189 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4787459 / 108000 = 44.3 \text{ pcs. (5 @ 10 = 50 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9.5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 189 = 13560648 / 189 = 71749 \text{ N} \\ \rho_s &= \tau * A_g / 189 = 21 * 59200 / 189 = 6439 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(71749^2 + 6439^2)} = 72038 \text{ N} < \rho_a = 105840 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
1-SPL PL	165 * 23	38.0
6-SPL PL	220 * 23	303.6
1-SPL PL	80 * 23	18.4
1-SPL PL	1840 * 16	294.4
10-SPL PL	160 * 12	192.0

846.3

> AgR = 719.5cm²

(64) G-1 J-48 (Sec-49) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2709 * 12 A = 325.1 cm² (SM570)

(b) Design stress

$\sigma_U = 149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

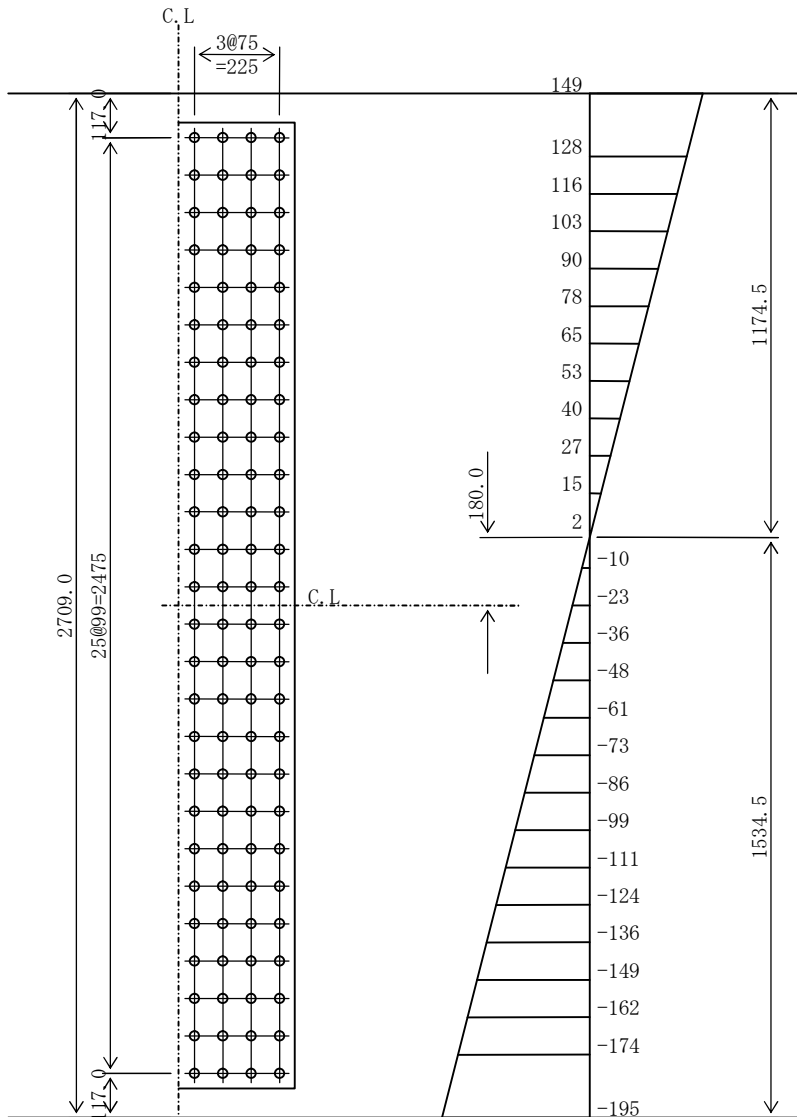
$\sigma_L = -195 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 149 \text{ N/mm}^2$

$\sigma_{Ln} = 195 \text{ N/mm}^2$

$\tau = 72 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.6$ cm

Total force to be shared

$$P_1 = 166 * 12 * (174 + 195) / 2 = 369087 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 369087 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 72 * 32508 / 104 = 22352 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((369087 / 4)^2 + 22352^2)} = 94940 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2650928 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2093404 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 195 * 2093404 * 10^4 / 1535 = 2665 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2665 * 10^6 / (2650928 * 10^4) * 1458 = 147 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(65) G-1 J-48 (Sec-49) LFLG

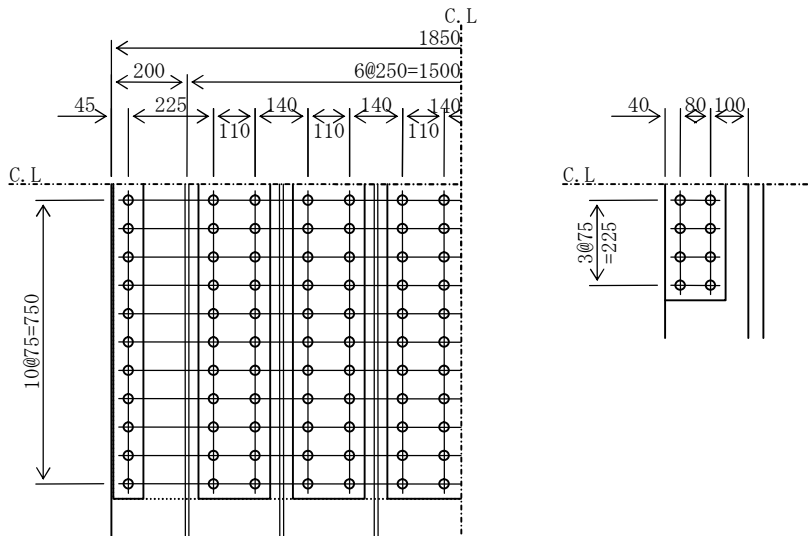
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -200 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 200 \text{ N/mm}^2 \\ \tau_{\max} &= 17 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 40 & & A_g &= 740.0 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 740.0 + 209.0 & &= 949.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 200 * 74000 = 14830932 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 200 * 20900 = 4188736 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (14830932 + 4188736) / 255 = 74587 \text{ mm}^2 = 745.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 0.94) = 14830932 / 101520 = 146.1 \text{ pcs.}$ (154 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 4188736 / 108000 = 38.8 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 11,4 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 154 = 14830932 / 154 = 96305 \text{ N} \\ \rho_s &= \tau * A_g / 154 = 17 * 74000 / 154 = 8030 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{96305^2 + 8030^2} = 96639 \text{ N} < \rho_a = 101520 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
2-SPL PL	80 * 23	36.8
6-SPL PL	190 * 23	262.2
1-SPL PL	1840 * 16	294.4
10-SPL PL	160 * 11	176.0

769.4

> AgR = 745.9cm²

(66) G-1 J-49 (Sec-50) LFLG

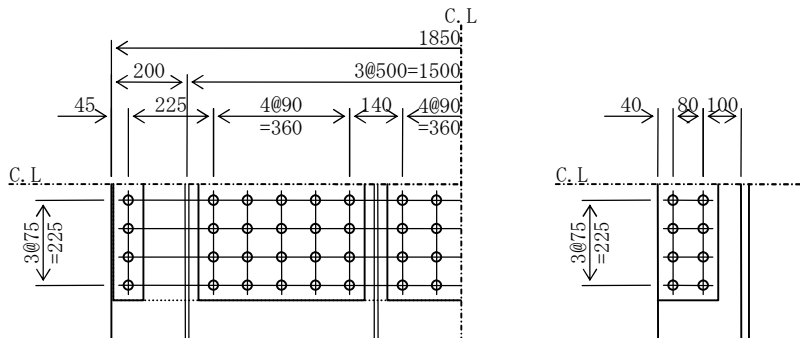
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -176 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 202 = 151 \text{ N/mm}^2 \\ \therefore \sigma_c &= 176 \text{ N/mm}^2 \\ \tau_{\max} &= 23 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 21 & \quad A_g = 388.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 388.5 + 83.6 = 472.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 176 * 38850 = 6827305 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 176 * 8360 = 1469145 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (6827305 + 1469145) / 210 = 39507 \text{ mm}^2 = 395.1 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 6827305 / 108000 = 63.2 \text{ pcs.}$ (68 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1469145 / 108000 = 13.6 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 68 = 6827305 / 68 = 100402 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 23 * 38850 / 68 = 13266 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(100402)^2 + (13266)^2} = 101274 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 11	17.6
3-SPL PL	440 * 11	145.2
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 11	70.4

$$398.8$$

$$> A_{gR} = 395.1 \text{ cm}^2$$

(67) G-1 J-52 (Sec-52) LFLG

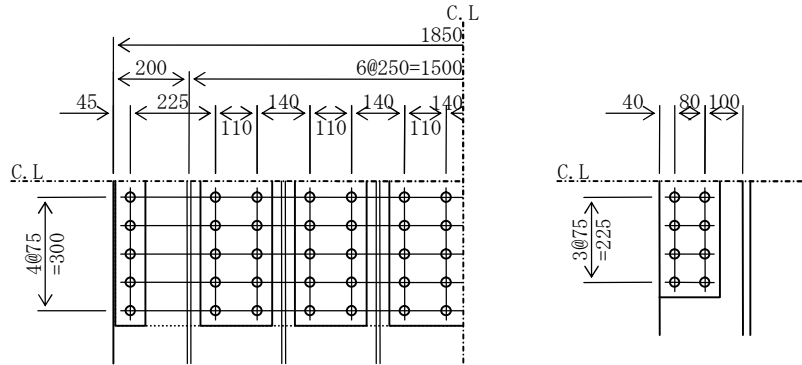
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 171 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 12 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 209.0 & &= 579.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ & (370.0 - (14 * 2.5) * 2.0) * 1.1 & &= 330.0 < 370.0 & \therefore A_n = 330.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ & (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 & &= 177.7 < 209.0 & \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 330.0 + 177.7 & &= 507.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 171 * 579.0 / 507.6 & &= 195 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 195 * 33000 = 6437777 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 33000 / 1.1 = 4725000 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 195 * 17765 = 3465670 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6437777 + 3465670) / 210 = 47159 \text{ mm}^2 = 471.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6437777 / 108000 = 59.6 \text{ pcs. (70 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3465670 / 108000 = 32.1 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 6437777 / 70 = 91968 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 12 * 37000 / 70 = 6162 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{91968^2 + 6162^2} = 92174 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 15	(24.0 -	2*(1*2.5)* 1.5)*1.1= 18.2 <	24.0 ∴ 18.2
6-SPL PL	190 * 15	(171.0 -	6*(2*2.5)* 1.5)*1.1= 138.6 <	171.0 ∴ 138.6
1-SPL PL	1840 * 10	(184.0 -	(14*2.5)* 1.0)*1.1= 163.9 <	184.0 ∴ 163.9
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4 <	224.0 ∴ 169.4
<hr/>				
		603.0		490.0
				> AnR

(68) G-1 J-54 (Sec-55) LFLG
 G-1 J-53 (Sec-53) LFLG

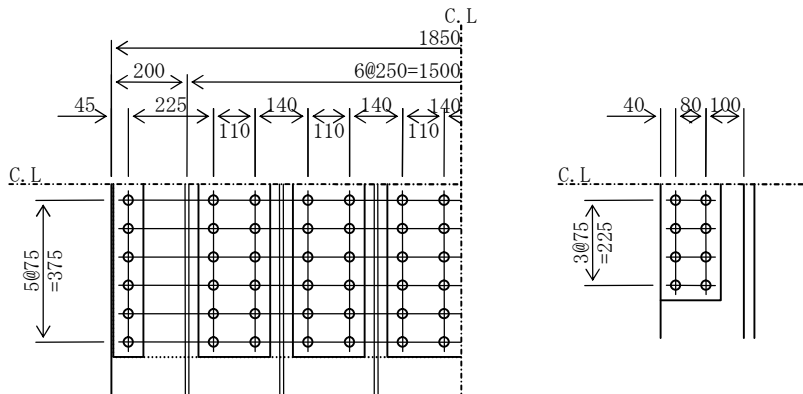
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\max} &= 6 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 28 & & A_g &= 518.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 518.0 + 209.0 & &= 727.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 28 & & A &= 518.0 \\ (518.0 - (14 * 2.5) * 2.8) * 1.1 &= 462.0 < 518.0 & \therefore A_n &= 462.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 462.0 + 177.7 & &= 639.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 170 * 727.0 / 639.7 & &= 193 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 193 * 46200 = 8908209 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 46200 / 1.1 = 6615000 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 193 * 17765 = 3425419 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8908209 + 3425419) / 210 = 58732 \text{ mm}^2 = 587.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8908209 / 108000 = 82.5 \text{ pcs. (84 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3425419 / 108000 = 31.7 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 84 = 8908209 / 84 = 106050 \text{ N} \\ \rho_s &= \tau * A_g / 84 = 6 * 51800 / 84 = 3405 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(106050)^2 + (3405)^2} = 106105 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 20	(32.0 -	2*(1*2.5)* 2.0)*1.1= 24.2 <	32.0 ∴ 24.2
6-SPL PL	190 * 20	(228.0 -	6*(2*2.5)* 2.0)*1.1= 184.8 <	228.0 ∴ 184.8
1-SPL PL	1840 * 13	(239.2 -	(14*2.5)* 1.3)*1.1= 213.1 <	239.2 ∴ 213.1
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4 <	224.0 ∴ 169.4
<hr/>				
		723.2		591.5
				> AnR

(69) G-1 J-55 (Sec-56) LFLG

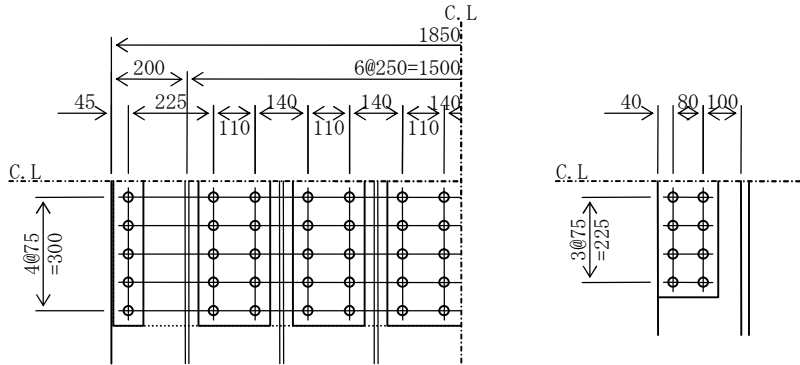
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 21 & & A_g &= 388.5 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 388.5 + 209.0 & &= 597.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 21 & & A &= 388.5 \\ (388.5 - (14 * 2.5) * 2.1) * 1.1 &= 346.5 < 388.5 & \therefore A_n &= 346.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 346.5 + 177.7 & &= 524.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 170 * 597.5 / 524.1 & &= 193 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 193 * 34650 = 6702932 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 34650 / 1.1 = 4961250 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 193 * 17765 = 3436583 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6702932 + 3436583) / 210 = 48283 \text{ mm}^2 = 482.8 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 6702932 / 108000 = 62.1 \text{ pcs.}$ (70 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 3436583 / 108000 = 31.8 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 6702932 / 70 = 95756 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 11 * 38850 / 70 = 6178 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{95756^2 + 6178^2} = 95955 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 15	(24.0 -	2*(1*2.5)* 1.5)*1.1= 18.2 <	24.0 ∴ 18.2
6-SPL PL	190 * 15	(171.0 -	6*(2*2.5)* 1.5)*1.1= 138.6 <	171.0 ∴ 138.6
1-SPL PL	1840 * 10	(184.0 -	(14*2.5)* 1.0)*1.1= 163.9 <	184.0 ∴ 163.9
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4 <	224.0 ∴ 169.4
		603.0		490.0
				> AnR

(70) G-1 J-58 (Sec-58) LFLG

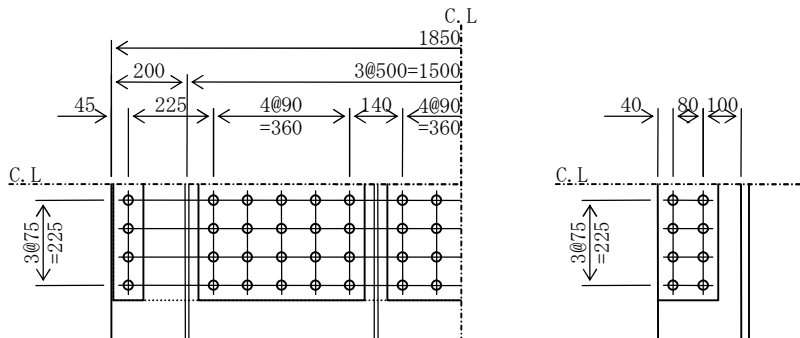
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -160 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 202 = 151 \text{ N/mm}^2 \\ \therefore \sigma_c &= 160 \text{ N/mm}^2 \\ \tau_{\max} &= 23 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 21 & \quad A_g = 388.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 388.5 + 83.6 = 472.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 160 * 38850 = 6213319 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 160 * 8360 = 1337023 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (6213319 + 1337023) / 210 = 35954 \text{ mm}^2 = 359.5 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 6213319 / 108000 = 57.5 \text{ pcs.}$ (68 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1337023 / 108000 = 12.4 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 68 = 6213319 / 68 = 91372 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 23 * 38850 / 68 = 12926 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(91372^2 + 12926^2)} = 92282 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

(SM490Y)		$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 10	16.0
3-SPL PL	440 * 10	132.0
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 10	64.0

$$377.6$$

$$> A_{gR} = 359.5 \text{ cm}^2$$

(71) G-1 J-59 (Sec-59) LFLG

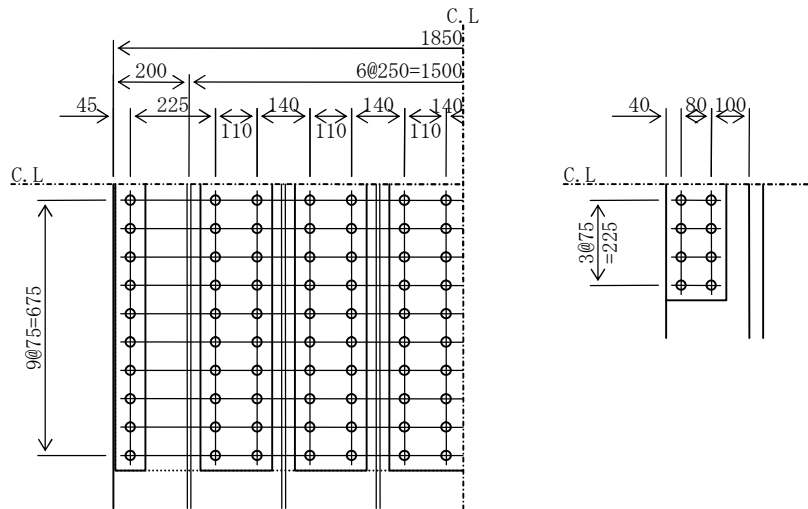
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= -199 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 199 \text{ N/mm}^2 \\ \tau_{\max} &= 18 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 37 & & A_g &= 684.5 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 684.5 + 209.0 & &= 893.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_c &= \sigma_c * A_g = 199 * 68450 = 13639142 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 199 * 20900 = 4164471 \text{ N}\end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (13639142 + 4164471) / 255 = 69818 \text{ mm}^2 = 698.2 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_c / (108000 * 0.96) = 13639142 / 103680 = 131.6 \text{ pcs. (140 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4164471 / 108000 = 38.6 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 10,4 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 140 = 13639142 / 140 = 97422 \text{ N} \\ \rho_s &= \tau * A_g / 140 = 18 * 68450 / 140 = 8713 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(97422^2 + 8713^2)} = 97811 \text{ N} < \rho_a = 103680 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
2-SPL PL	80 * 21	33.6
6-SPL PL	190 * 21	239.4
1-SPL PL	1840 * 15	276.0
10-SPL PL	160 * 11	176.0

725.0

> AgR = 698.2cm²

(72) G-1 J-60 (Sec-61) LWEB
 G-1 J-59 (Sec-59) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3040 * 12 A = 364.8 cm² (SM570)

(b) Design stress

$\sigma_U = 142 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

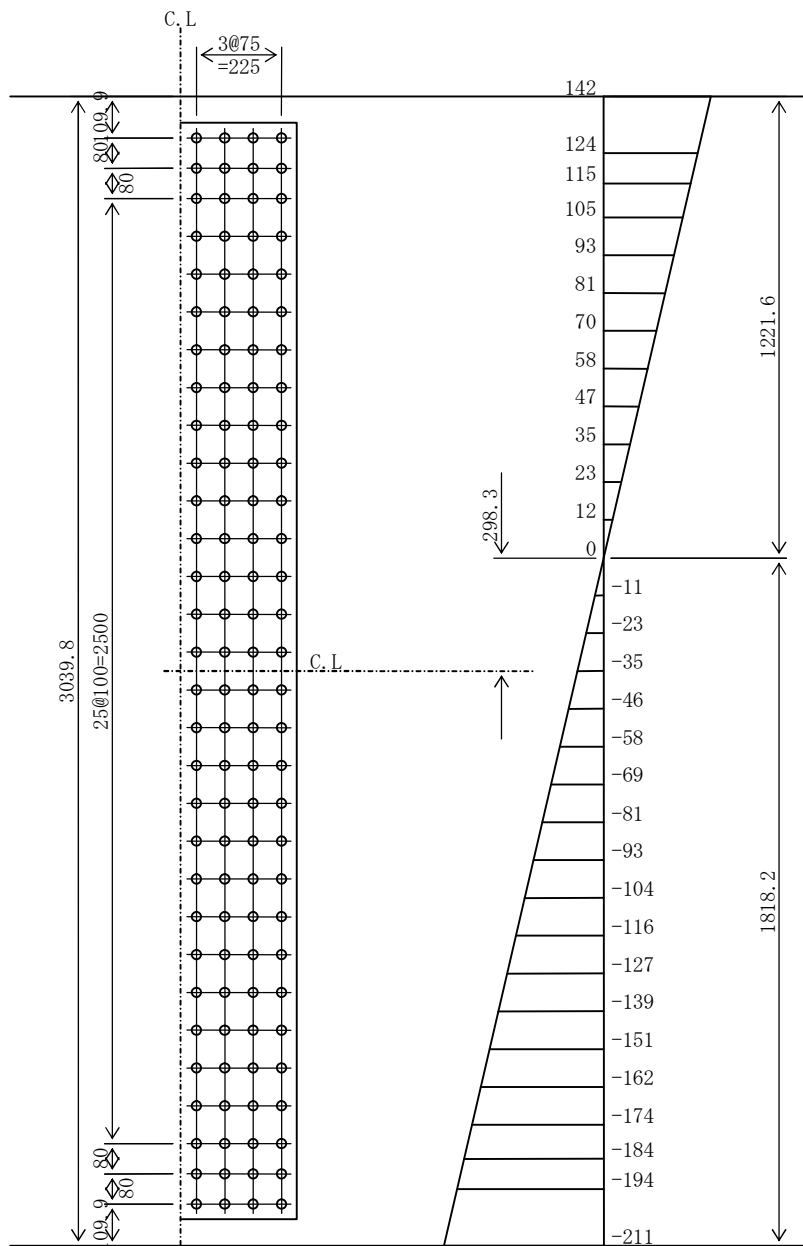
$\sigma_L = -211 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 142 \text{ N/mm}^2$

$\sigma_{Ln} = 211 \text{ N/mm}^2$

$\tau = 67 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 12 * (194 + 211) / 2 = 363939 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 363939 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 67 * 36478 / 120 = 20312 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((363939 / 4)^2 + 20312^2)} = 93225 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4122924 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3133564 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 211 * 3133564 * 10^4 / 1818 = 3637 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3637 * 10^6 / (4122924 * 10^4) * 1748 = 154 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(73) G-1 J-60 (Sec-61) RWEB
 G-1 J-59 (Sec-59) RWEB

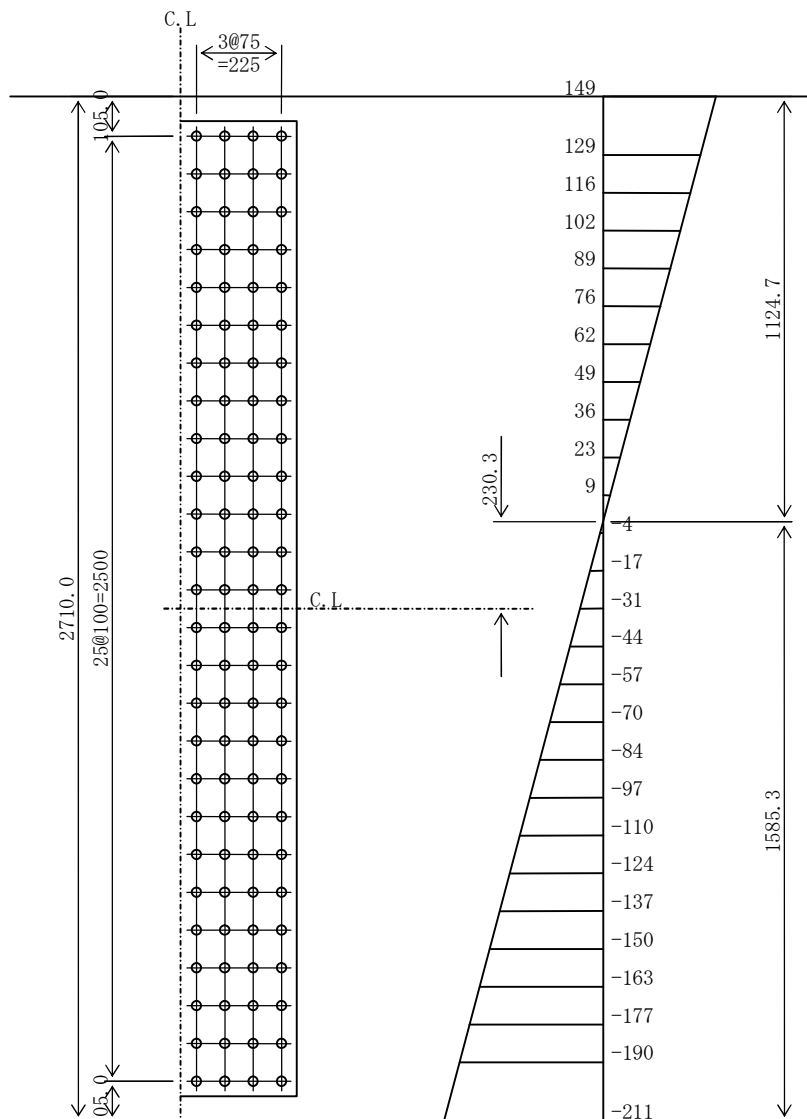
(a) Section area of main plate (Web plate)

1-RWEB PL 2710 * 12 A = 325.2 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -211 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 149 \text{ N/mm}^2 \\ \sigma_{Ln} &= 211 \text{ N/mm}^2 \\ \tau &= 69 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 12 * (190 + 211) / 2 = 372493 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 372493 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 69 * 32520 / 104 = 21544 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((372493 / 4)^2 + 21544^2)} = 95583 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2822313 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2162706 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 211 * 2162706 * 10^4 / 1585 = 2873 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2873 * 10^6 / (2822313 * 10^4) * 1520 = 155 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(74) G-1 J-60 (Sec-61) LFLG

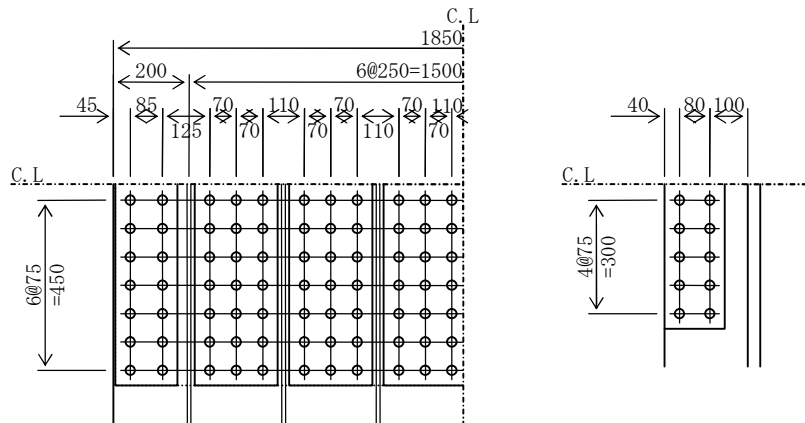
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -215 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 215 \text{ N/mm}^2 \\ \tau_{\max} &= 19 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 33 & & A_g &= 610.5 \text{ cm}^2 & (\text{SM570}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 610.5 + 209.0 & &= 819.5 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_c &= \sigma_c * A_g = 215 * 61050 = 13122331 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 215 * 20900 = 4492330 \text{ N} \end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (13122331 + 4492330) / 255 = 69077 \text{ mm}^2 = 690.8 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_c / (108000 * 1.00) = 13122331 / 108000 = 121.5 \text{ pcs. (147 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 4492330 / 108000 = 41.6 \text{ pcs. (5 @ 10 = 50 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 7.5 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 147 = 13122331 / 147 = 89268 \text{ N} \\ \rho_s &= \tau * A_g / 147 = 19 * 61050 / 147 = 7951 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{89268^2 + 7951^2} = 89621 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
1-SPL PL	165 * 22	36.3
6-SPL PL	220 * 22	290.4
1-SPL PL	80 * 22	17.6
1-SPL PL	1840 * 16	294.4
10-SPL PL	160 * 11	176.0

$$814.7$$

$$> A_{gR} = 690.8 \text{ cm}^2$$

(75) G-1 J-64(Sec-64) LFLG

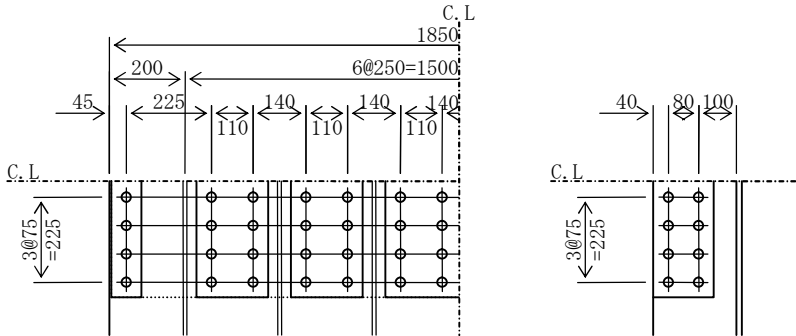
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 172 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 14 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A_g &= 259.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 259.0 + 209.0 & &= 468.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A &= 259.0 \\ (259.0 - (14 * 2.5) * 1.4) * 1.1 &= 231.0 < 259.0 & \therefore A_n &= 231.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 231.0 + 177.7 & &= 408.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 172 * 468.0 / 408.7 & &= 197 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 197 * 23100 = 4547732 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 23100 / 1.1 = 3307500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 197 * 17765 = 3497422 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (4547732 + 3497422) / 210 = 38310 \text{ mm}^2 = 383.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 4547732 / 108000 = 42.1 \text{ pcs. (56 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3497422 / 108000 = 32.4 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 56 = 4547732 / 56 = 81209 \text{ N} \\ \rho_s &= \tau * A_g / 56 = 14 * 25900 / 56 = 6642 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(81209^2 + 6642^2)} = 81481 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
6-SPL PL	190 * 11	(125.4 -	6*(2*2.5)* 1.1)*1.1= 101.6 <	125.4 ∴ 101.6
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4 <	224.0 ∴ 169.4
<hr/>				
		532.6		431.9
				> AnR

(76) G-1 J-65 (Sec-65) LFLG

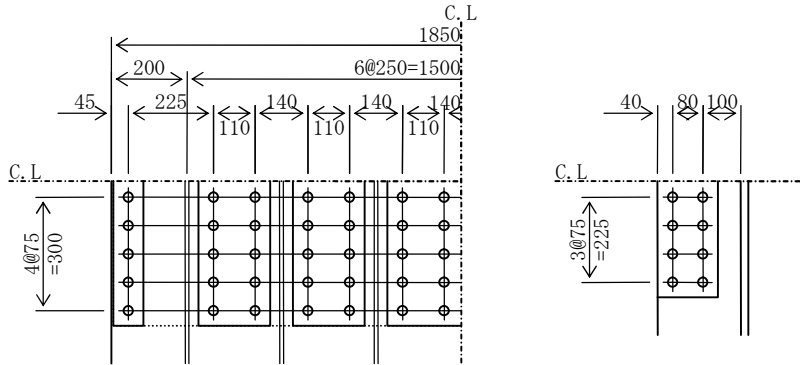
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 169 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 7 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 209.0 & &= 579.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ (370.0 - (14 * 2.5) * 2.0) * 1.1 &= 330.0 < 370.0 & \therefore A_n &= 330.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 330.0 + 177.7 & &= 507.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 169 * 579.0 / 507.6 & &= 193 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 193 * 33000 = 6366604 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 33000 / 1.1 = 4725000 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 193 * 17765 = 3427355 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6366604 + 3427355) / 210 = 46638 \text{ mm}^2 = 466.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6366604 / 108000 = 59.0 \text{ pcs. (70 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3427355 / 108000 = 31.7 \text{ pcs. (5 @ 8 = 40 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 6366604 / 70 = 90951 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 7 * 37000 / 70 = 3574 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(90951^2 + 3574^2)} = 91022 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 15	(24.0 -	2*(1*2.5)* 1.5)*1.1= 18.2 <	24.0 ∴ 18.2
6-SPL PL	190 * 15	(171.0 -	6*(2*2.5)* 1.5)*1.1= 138.6 <	171.0 ∴ 138.6
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4 <	224.0 ∴ 169.4
<hr/>				
		584.6		473.7
				> AnR

(77) G-1 J-66 (Sec-67) LFLG

G-1 J-31 (Sec-32) LFLG, G-1 J-43 (Sec-44) LFLG

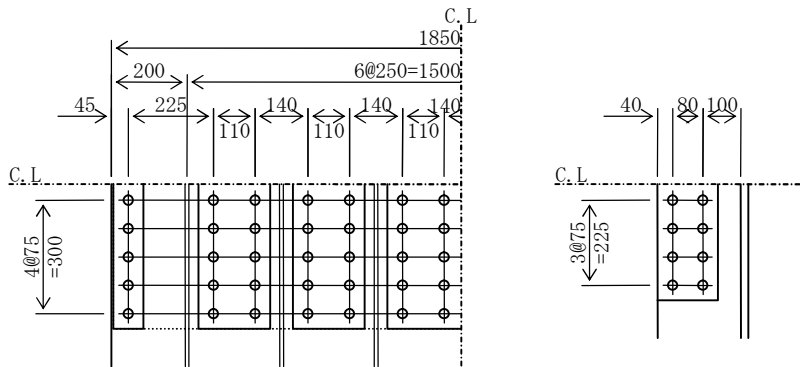
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 165 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 8 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A_g &= 370.0 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 370.0 + 209.0 & &= 579.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 20 & & A &= 370.0 \\ (370.0 - (14 * 2.5) * 2.0) * 1.1 &= 330.0 < 370.0 & \therefore A_n &= 330.0 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 330.0 + 177.7 & &= 507.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 165 * 579.0 / 507.6 & &= 189 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 189 * 33000 = 6227945 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 33000 / 1.1 = 4725000 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 189 * 17765 = 3352710 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6227945 + 3352710) / 210 = 45622 \text{ mm}^2 = 456.2 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6227945 / 108000 = 57.7 \text{ pcs. (70 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3352710 / 108000 = 31.0 \text{ pcs. (5 @ 8 = 40 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 70 = 6227945 / 70 = 88971 \text{ N} \\ \rho_s &= \tau * A_g / 70 = 8 * 37000 / 70 = 4096 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{88971^2 + 4096^2} = 89065 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9<	22.4 ∴ 16.9
6-SPL PL	190 * 14	(159.6 -	6*(2*2.5)* 1.4)*1.1= 129.4<	159.6 ∴ 129.4
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)* 0.9)*1.1= 147.5<	165.6 ∴ 147.5
10-SPL PL	160 * 14	(224.0 -	10*(2*2.5)* 1.4)*1.1= 169.4<	224.0 ∴ 169.4
<hr/>				
		571.6		463.2
				> AnR

(78) G-1 J-67 (Sec-68) LFLG

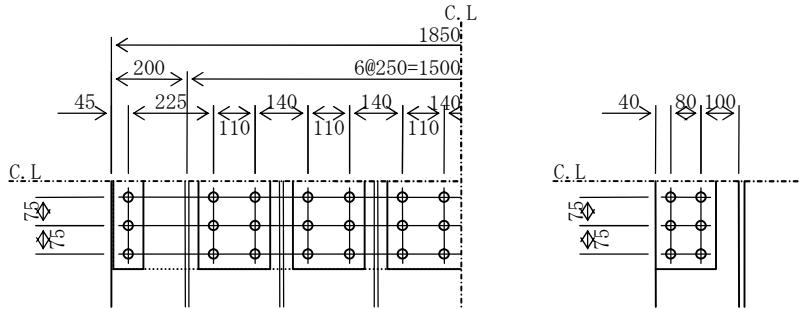
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 150 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 16 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 15 & & A_g &= 277.5 \text{ cm}^2 & (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 277.5 + 209.0 & &= 486.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 15 & & A &= 277.5 \\ (277.5 - (14 * 2.5) * 1.5) * 1.1 &= 247.5 < 277.5 & \therefore A_n &= 247.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & & A_r &= 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 & \therefore A_{nr} &= 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 247.5 + 177.7 & &= 425.2 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 150 * 486.5 / 425.2 & &= 171 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 171 * 24750 = 4240631 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 24750 / 1.1 = 3543750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 171 * 17765 = 3043831 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (4240631 + 3043831) / 210 = 34688 \text{ mm}^2 = 346.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 4240631 / 108000 = 39.3 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 3043831 / 108000 = 28.2 \text{ pcs. (5 @ 6 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,3 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 42 = 4240631 / 42 = 100967 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 16 * 27750 / 42 = 10349 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(100967)^2 + (10349)^2} = 101496 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
6-SPL PL	190 * 10	(114.0 -	6*(2*2.5)*1.0)*1.1= 92.4 <	114.0 ∴ 92.4
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)*0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 12	(192.0 -	10*(2*2.5)*1.2)*1.1= 145.2 <	192.0 ∴ 145.2
<hr/>				
		487.6		397.2
				> AnR

(79) G-1 J-68 (Sec-68) LFLG

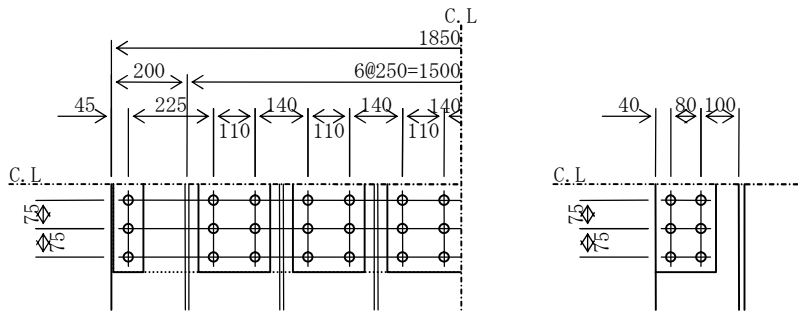
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 83 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -25 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 139 = 104 \text{ N/mm}^2 \\ \therefore \sigma_c &= 104 \text{ N/mm}^2 \\ \tau_{max} &= 21 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 15 & \quad A_g = 277.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 5\text{-RIB PL } 220 * 19 & \quad A_{gr} = 209.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 277.5 + 209.0 = 486.5 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 15 & \quad A = 277.5 \\ (277.5 - (14 * 2.5) * 1.5) * 1.1 &= 247.5 < 277.5 \quad \therefore A_n = 247.5 \text{ cm}^2 \\ 5\text{-RIB PL } 220 * 19 & \quad A_r = 209.0 \\ (209.0 - 5 * (2 * 2.5) * 1.9) * 1.1 &= 177.7 < 209.0 \quad \therefore A_{nr} = 177.7 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 247.5 + 177.7 = 425.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 83 * 486.5 / 425.2 = 95 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 24750 / 1.1 = 3543750 \text{ N} \\ &> \sigma_{tn} * A_n = 95 * 24750 = 2350201 \text{ N} \\ P_c &= \sigma_c * A_g = 104 * 27750 = 2891481 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 17765 / 1.1 = 2543625 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 95 * 17765 = 1686922 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 104 * 20900 = 2177728 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned}A_{nR} &= (P_t + P_{tr}) / \sigma_a = (3543750 + 2543625) / 210 = 28988 \text{ mm}^2 = 289.9 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (2891481 + 2177728) / 210 = 24139 \text{ mm}^2 = 241.4 \text{ cm}^2\end{aligned}$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 3543750 / 108000 = 32.8 \text{ pcs. (42 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2543625 / 108000 = 23.6 \text{ pcs. (5 @ 6 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 42 = 3543750 / 42 = 84375 \text{ N} \\ \rho_s &= \tau * A_g / 42 = 21 * 27750 / 42 = 13956 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(84375^2 + 13956^2)} = 85521 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
6-SPL PL	190 * 9	(102.6 -	6*(2*2.5)*0.9)*1.1= 83.2 <	102.6 ∴ 83.2
1-SPL PL	1840 * 9	(165.6 -	(14*2.5)*0.9)*1.1= 147.5 <	165.6 ∴ 147.5
10-SPL PL	160 * 11	(176.0 -	10*(2*2.5)*1.1)*1.1= 133.1 <	176.0 ∴ 133.1
			458.6	374.7
			> Ag _R	> An _R

(80) G-1 J-69 (Sec-69) LFLG

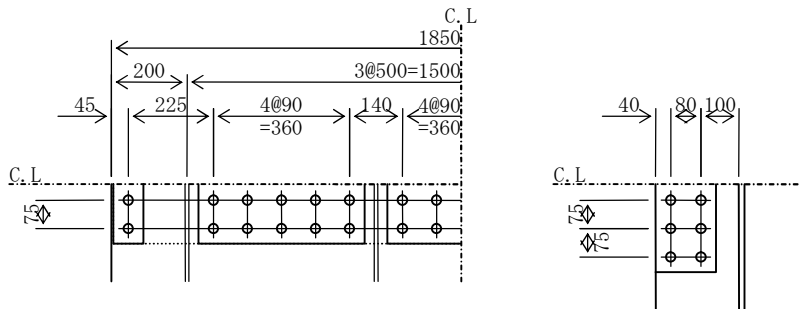
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -118 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 139 = 104 \text{ N/mm}^2 \\ \therefore \sigma_c &= 118 \text{ N/mm}^2 \\ \tau_{\max} &= 25 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 15 & & A_g &= 277.5 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 277.5 + 83.6 & &= 361.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 118 * 27750 = 3284906 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 118 * 8360 = 989615 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (3284906 + 989615) / 210 = 20355 \text{ mm}^2 = 203.5 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 3284906 / 108000 = 30.4 \text{ pcs.}$ (34 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 989615 / 108000 = 9.2 \text{ pcs.}$ (2 @ 6 = 12 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 2,3 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 34 = 3284906 / 34 = 96615 \text{ N} \\ \rho_s &= \tau * A_g / 34 = 25 * 27750 / 34 = 20198 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(96615)^2 + (20198)^2} = 98704 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
3-SPL PL	440 * 9	118.8
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 9	57.6

$$356.4$$

$$> A_{gR} = 203.5 \text{ cm}^2$$

(81) G-1 J-70 (Sec-70) LFLG

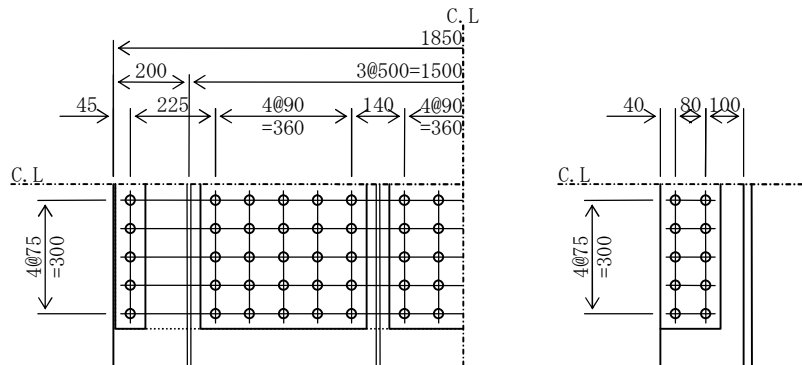
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -208 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 250 = 187 \text{ N/mm}^2 \\ \therefore \sigma_c &= 208 \text{ N/mm}^2 \\ \tau_{\max} &= 22 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 22 & & A_g &= 407.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 407.0 + 83.6 & &= 490.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 208 * 40700 = 8467757 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 208 * 8360 = 1739323 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8467757 + 1739323) / 255 = 40028 \text{ mm}^2 = 400.3 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8467757 / 108000 = 78.4 \text{ pcs. (85 bolts will be used.)}$
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1739323 / 108000 = 16.1 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 5,5 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 85 = 8467757 / 85 = 99621 \text{ N} \\ \rho_s &= \tau * A_g / 85 = 22 * 40700 / 85 = 10583 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{99621^2 + 10583^2} = 100181 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 12	19.2
3-SPL PL	440 * 12	158.4
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 11	70.4

$$413.6$$

$$> A_{gR} = 400.3 \text{ cm}^2$$

(82) G-1 J-71 (Sec-71) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3034 * 12 A = 364.1 cm² (SM570)

(b) Design stress

$\sigma_U = 141 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

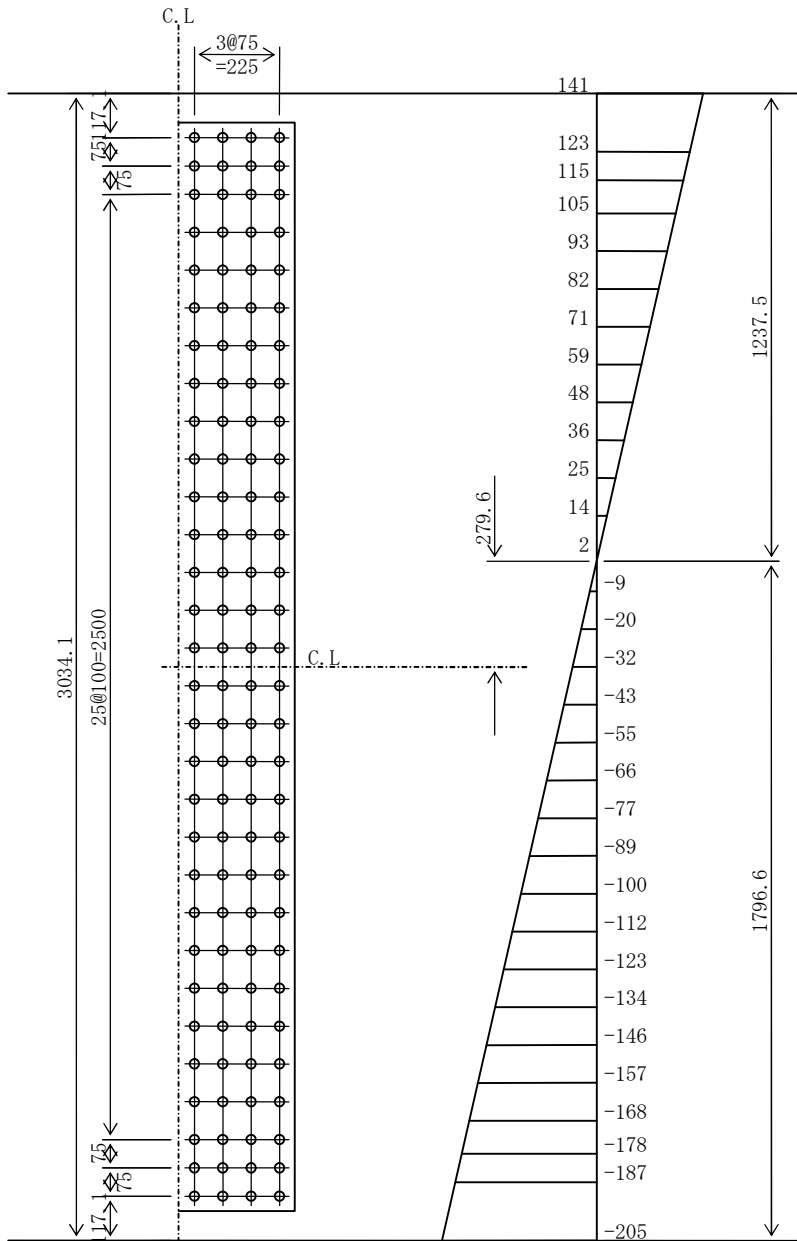
$\sigma_L = -205 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 141 \text{ N/mm}^2$

$\sigma_{Ln} = 205 \text{ N/mm}^2$

$\tau = 70 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 12 * (187 + 205) / 2 = 363149 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 363149 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 70 * 36410 / 120 = 21144 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((363149 / 4)^2 + 21144^2)} = 93217 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2880 * 9 \quad A_s = 518.4 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3988382 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3077815 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 205 * 3077815 * 10^4 / 1797 = 3505 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3505 * 10^6 / (3988382 * 10^4) * 1720 = 151 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(83) G-1 J-71 (Sec-71) RWEB
 G-1 J-72 (Sec-73) RWEB

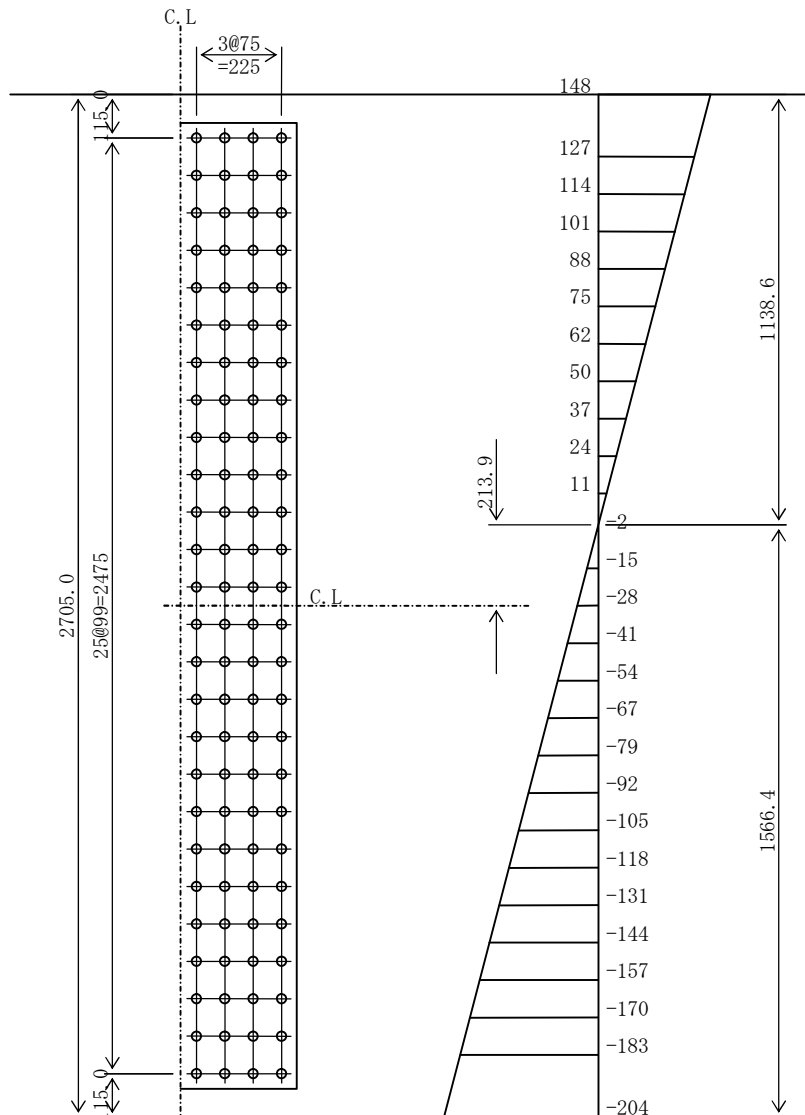
(a) Section area of main plate (Web plate)

1-RWEB PL 2705 * 12 A = 324.6 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 148 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -204 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 148 \text{ N/mm}^2 \\ \sigma_{Ln} &= 204 \text{ N/mm}^2 \\ \tau &= 73 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.4 \text{ cm}$

Total force to be shared

$$P_1 = 164 * 12 * (183 + 204) / 2 = 381810 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 381810 / (108000 * 1.00) = 3.5 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 73 * 32460 / 104 = 22665 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((381810 / 4)^2 + 22665^2)} = 98106 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2712362 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2127814 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 204 * 2127814 * 10^4 / 1566 = 2773 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2773 * 10^6 / (2712362 * 10^4) * 1491 = 152 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(84) G-1 J-71 (Sec-71) LFLG

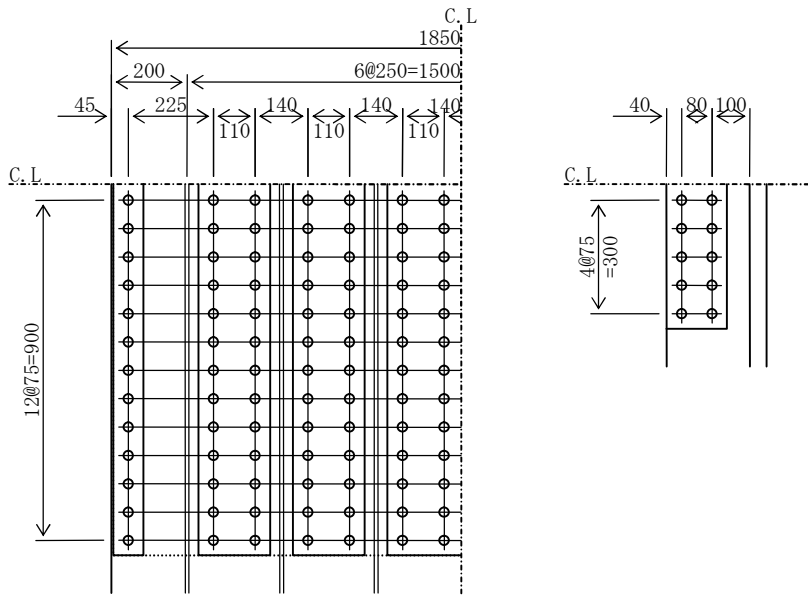
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -210 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 210 \text{ N/mm}^2 \\ \tau_{\max} &= 15 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 44 & & A_g &= 814.0 \text{ cm}^2 & (\text{SM570-H}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 814.0 + 209.0 & &= 1023.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 210 * 81400 = 17083825 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 210 * 20900 = 4386388 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (17083825 + 4386388) / 255 = 84197 \text{ mm}^2 = 842.0 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 0.92) = 17083825 / 99360 = 171.9 \text{ pcs.}$ (182 bolts will be used.)

- Rib $n_r = P_{cr} / (108000 * 1.00) = 4386388 / 108000 = 40.6 \text{ pcs.}$ (5 @ 10 = 50 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 13,5 \text{ unites)$$

(g) Tensile force per one bolt

$$\rho_p = P_c / 182 = 17083825 / 182 = 93867 \text{ N}$$

$$\rho_s = \tau * A_g / 182 = 15 * 81400 / 182 = 6877 \text{ N}$$

$$\rho = \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{93867^2 + 6877^2} = 94119 \text{ N} < \rho_a = 99360 \text{ N}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
2-SPL PL	80 * 26	41.6
6-SPL PL	190 * 26	296.4
1-SPL PL	1840 * 19	349.6
10-SPL PL	160 * 11	176.0

863.6

> AgR = 842.0cm²

(85) G-1 J-72 (Sec-73) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3034 * 12 A = 364.1 cm² (SM570)

(b) Design stress

$\sigma_U = 134 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

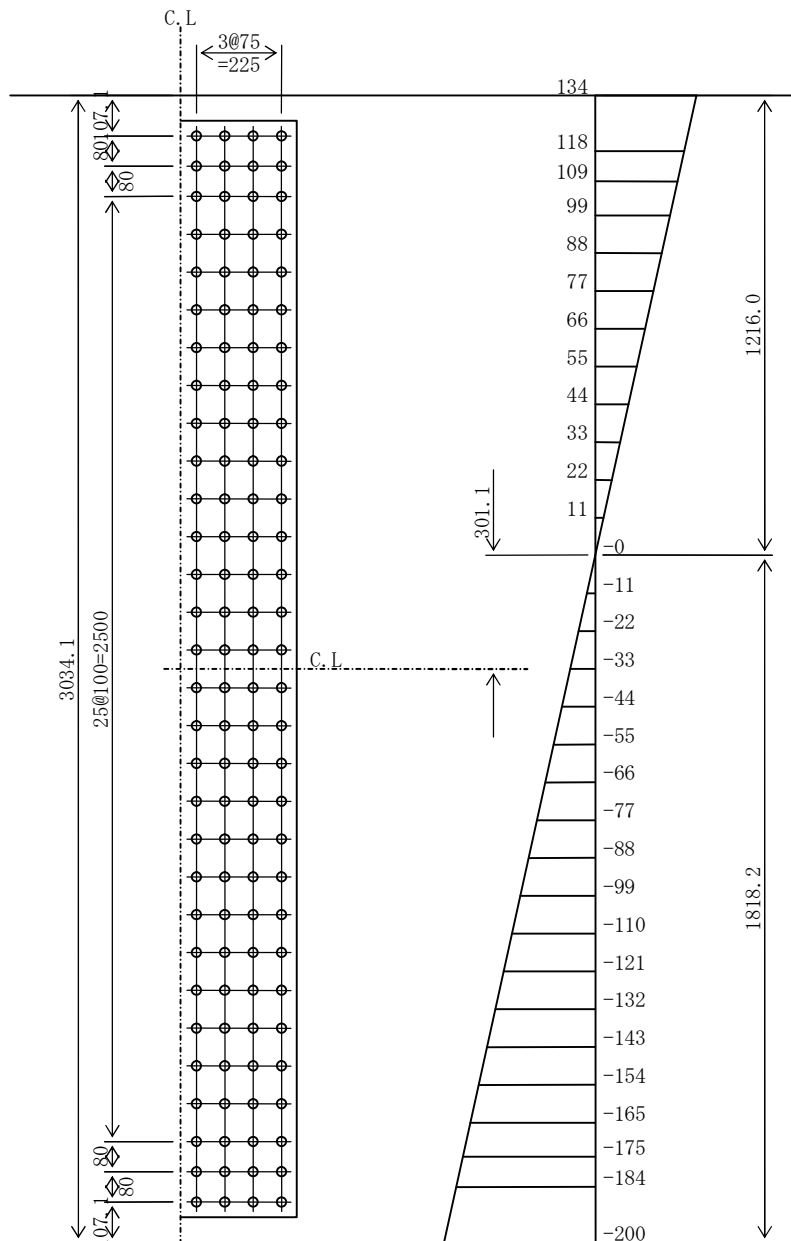
$\sigma_L = -200 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 134 \text{ N/mm}^2$

$\sigma_{Ln} = 200 \text{ N/mm}^2$

$\tau = 72 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.7 \text{ cm}$

Total force to be shared

$$P_1 = 147 * 12 * (184 + 200) / 2 = 338950 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 338950 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 72 * 36410 / 120 = 21848 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((338950 / 4)^2 + 21848^2)} = 87509 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2900 * 9 \quad A_s = 522.0 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4131559 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3123287 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 200 * 3123287 * 10^4 / 1818 = 3438 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3438 * 10^6 / (4131559 * 10^4) * 1751 = 146 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(86) G-1 J-72 (Sec-73) LFLG

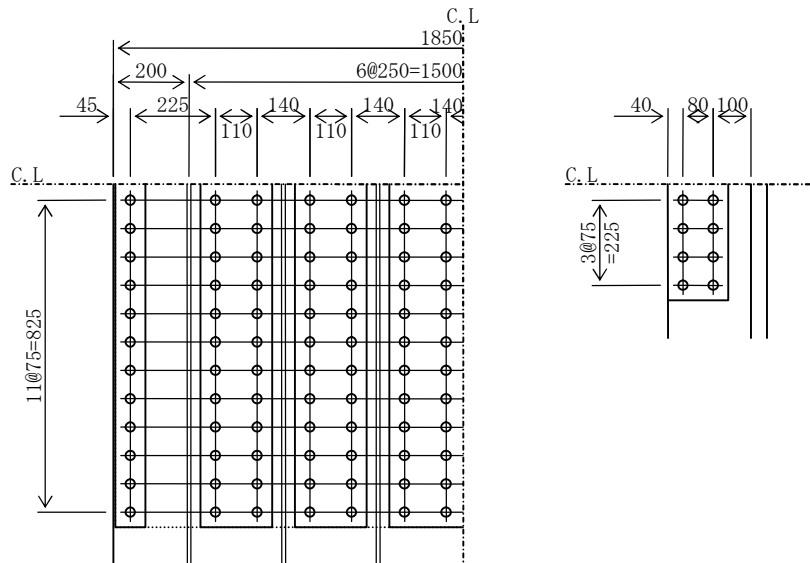
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -205 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 205 \text{ N/mm}^2 \\ \tau_{\max} &= 17 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 42 & & A_g &= 777.0 \text{ cm}^2 & (\text{SM570-H}) \\ 5\text{-RIB PL } 220 * 19 & & A_{gr} &= 209.0 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 777.0 + 209.0 & &= 986.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 205 * 77700 = 15929588 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 205 * 20900 = 4284793 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (15929588 + 4284793) / 255 = 79272 \text{ mm}^2 = 792.7 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 0.92) = 15929588 / 99360 = 160.3 \text{ pcs.}$ (168 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 4284793 / 108000 = 39.7 \text{ pcs.}$ (5 @ 8 = 40 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 12,4 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 168 = 15929588 / 168 = 94819 \text{ N} \\ \rho_s &= \tau * A_g / 168 = 17 * 77700 / 168 = 7675 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(94819)^2 + (7675)^2} = 95129 \text{ N} < \rho_a = 99360 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
2-SPL PL	80 * 24	38.4
6-SPL PL	190 * 24	273.6
1-SPL PL	1840 * 17	312.8
10-SPL PL	160 * 11	176.0

800.8

> AgR = 792.7 cm²

(87) G-1 J-73 (Sec-74) LFLG

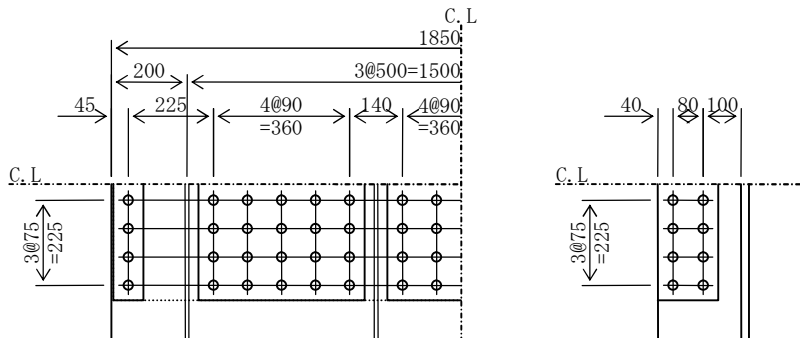
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -184 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 243 = 182 \text{ N/mm}^2 \\ \therefore \sigma_c &= 184 \text{ N/mm}^2 \\ \tau_{\max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 21 & \quad A_g = 388.5 \text{ cm}^2 \quad (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 388.5 + 83.6 = 472.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 184 * 38850 = 7152402 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 184 * 8360 = 1539101 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (7152402 + 1539101) / 255 = 34084 \text{ mm}^2 = 340.8 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 7152402 / 108000 = 66.2 \text{ pcs.}$ (68 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1539101 / 108000 = 14.3 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 68 = 7152402 / 68 = 105182 \text{ N} \\ \rho_s &= \tau * A_g / 68 = 24 * 38850 / 68 = 13879 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105182^2 + 13879^2)} = 106094 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 10	16.0
3-SPL PL	440 * 10	132.0
1-SPL PL	1840 * 9	165.6
4-SPL PL	160 * 10	64.0

$$377.6$$

$$> A_{gR} = 340.8 \text{ cm}^2$$

(88) G-1 J-74 (Sec-75) LFLG

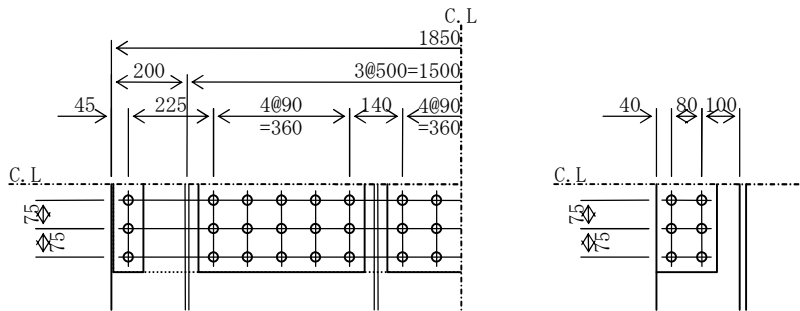
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 52 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -67 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 176 = 132 \text{ N/mm}^2 \\ \therefore \sigma_c &= 132 \text{ N/mm}^2 \\ \tau_{max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 17 & \quad A_g = 314.5 \text{ cm}^2 \quad (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & \quad A_{gr} = 83.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 83.6 = 398.1 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 17 & \quad A = 314.5 \\ & (314.5 - (17 * 2.5) * 1.7) * 1.1 = 266.5 < 314.5 \quad \therefore A_n = 266.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & \quad A_r = 83.6 \\ & (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 = 71.1 < 83.6 \quad \therefore A_{nr} = 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 266.5 + 71.1 = 337.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 52 * 398.1 / 337.5 = 61 \text{ N/mm}^2 \\ & < \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 26648 / 1.1 = 3815438 \text{ N} \\ & > \sigma_{tn} * A_n = 61 * 26648 = 1638517 \text{ N} \\ P_c &= \sigma_c * A_g = 132 * 31450 = 4149183 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N} \\ & > \sigma_{tn} * A_{nr} = 61 * 7106 = 436938 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 132 * 8360 = 1102931 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (3815438 + 1017450) / 210 = 23014 \text{ mm}^2 = 230.1 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (4149183 + 1102931) / 210 = 25010 \text{ mm}^2 = 250.1 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_c / (108000 * 1.00) = 4149183 / 108000 = 38.4 \text{ pcs. (51 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 1102931 / 108000 = 10.2 \text{ pcs. (2 @ 6 = 12 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 51 = 4149183 / 51 = 81357 \text{ N} \\ \rho_s &= \tau * A_g / 51 = 24 * 31450 / 51 = 14514 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(81357)^2 + (14514)^2} = 82641 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
3-SPL PL	440 * 9	(118.8 -	3*(5*2.5)* 0.9)*1.1= 93.6<	118.8 ∴ 93.6
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 11	(70.4 -	4*(2*2.5)* 1.1)*1.1= 53.2<	70.4 ∴ 53.2
<hr/>				
		369.2		297.8
		> Ag _R		> An _R

(89) G-1 J-75 (Sec-75) LFLG

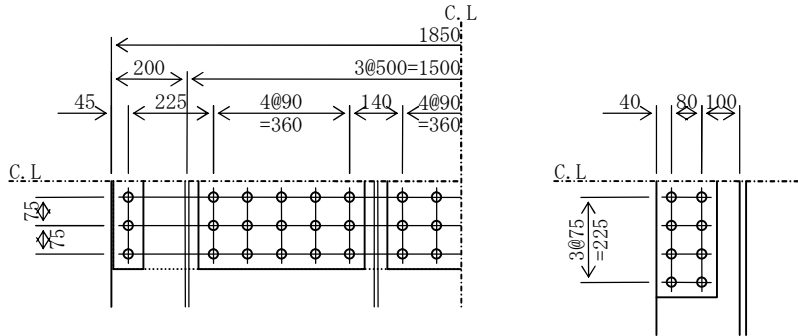
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 19 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A_g &= 314.5 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 314.5 + 83.6 & &= 398.1 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 17 & & A &= 314.5 \\ (314.5 - (17 * 2.5) * 1.7) * 1.1 &= 266.5 < 314.5 & \therefore A_n &= 266.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 266.5 + 71.1 & &= 337.5 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 170 * 398.1 / 337.5 & &= 201 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 201 * 26648 = 5357661 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 26648 / 1.1 = 3815438 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 201 * 7106 = 1428710 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5357661 + 1428710) / 210 = 32316 \text{ mm}^2 = 323.2 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5357661 / 108000 = 49.6 \text{ pcs. (51 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1428710 / 108000 = 13.2 \text{ pcs. (2 @ 8 = 16 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 51 = 5357661 / 51 = 105052 \text{ N} \\ \rho_s &= \tau * A_g / 51 = 19 * 31450 / 51 = 11415 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(105052)^2 + (11415)^2} = 105671 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3<	17.6 ∴ 13.3
3-SPL PL	440 * 11	(145.2 -	3*(5*2.5)* 1.1)*1.1= 114.3<	145.2 ∴ 114.3
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1<	165.6 ∴ 140.1
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		418.0		335.5
				> AnR

(90) G-1 J-76 (Sec-76) LWEB

G-1 J-7 (Sec-8) LWEB, G-1 J-25 (Sec-26) LWEB, G-1 J-28 (Sec-28) LWEB, G-1 J-46 (Sec-46) LWEB
 G-1 J-61 (Sec-62) LWEB, G-1 J-70 (Sec-70) LWEB, G-1 J-73 (Sec-74) LWEB
 G-1 J-80 (Sec-81) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$$\sigma_U = -121 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

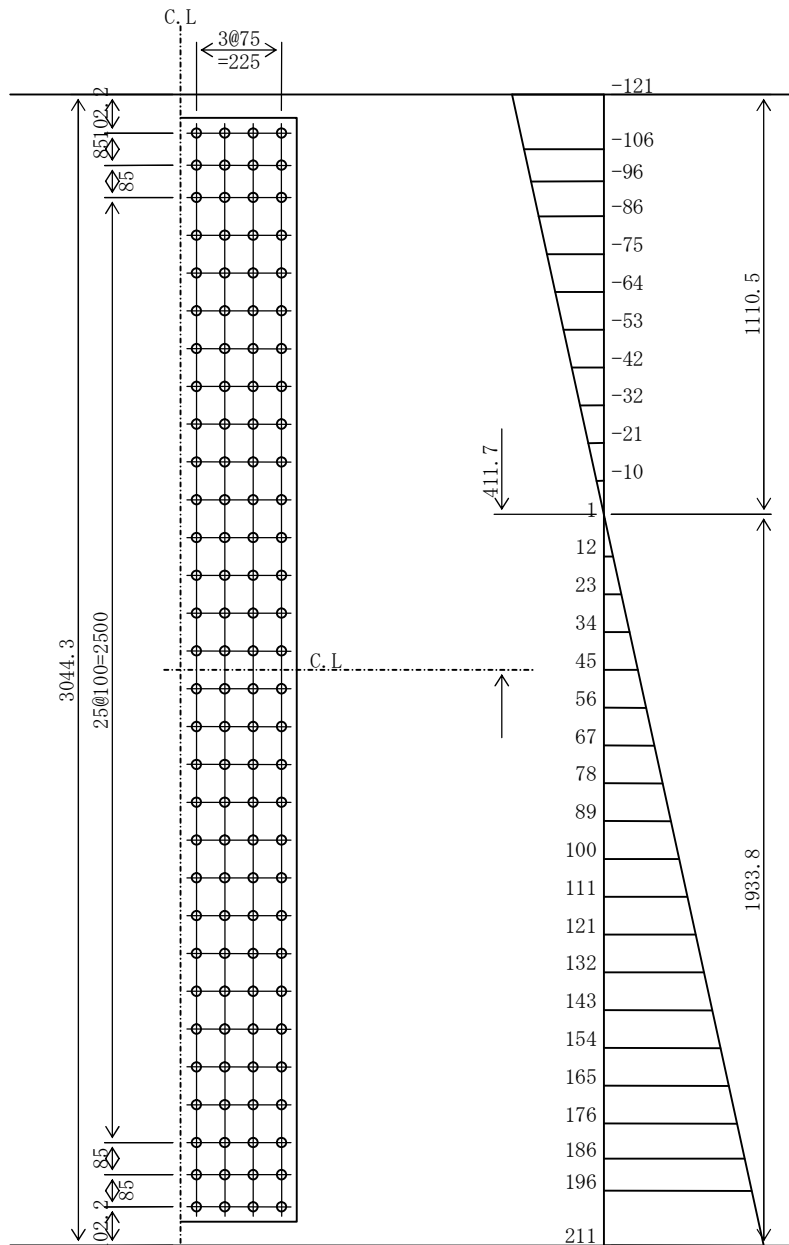
$$\sigma_L = 211 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 121 \text{ N/mm}^2$$

$$\sigma_{Ln} = 211 \text{ N/mm}^2$$

$$\tau = 32 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 14.5 \text{ cm}$

Total force to be shared

$$P_1 = 145 * 12 * (196 + 211) / 2 = 353131 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 353131 / (108000 * 1.00) = 3.3 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 32 * 36532 / 120 = 9792 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((353131 / 4)^2 + 9792^2)} = 88824 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2920 * 9 \quad A_s = 525.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 4625276 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3440611 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 211 * 3440611 * 10^4 / 1934 = 3760 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3760 * 10^6 / (4625276 * 10^4) * 1872 = 152 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(91) G-1 J-76 (Sec-76) RWEB

G-1 J-7 (Sec-8) RWEB, G-1 J-25 (Sec-26) RWEB, G-1 J-28 (Sec-28) RWEB, G-1 J-29 (Sec-30) RWEB
 G-1 J-30 (Sec-31) RWEB, G-1 J-46 (Sec-46) RWEB, G-1 J-61 (Sec-62) RWEB
 G-1 J-70 (Sec-70) RWEB, G-1 J-73 (Sec-74) RWEB, G-1 J-80 (Sec-81) RWEB

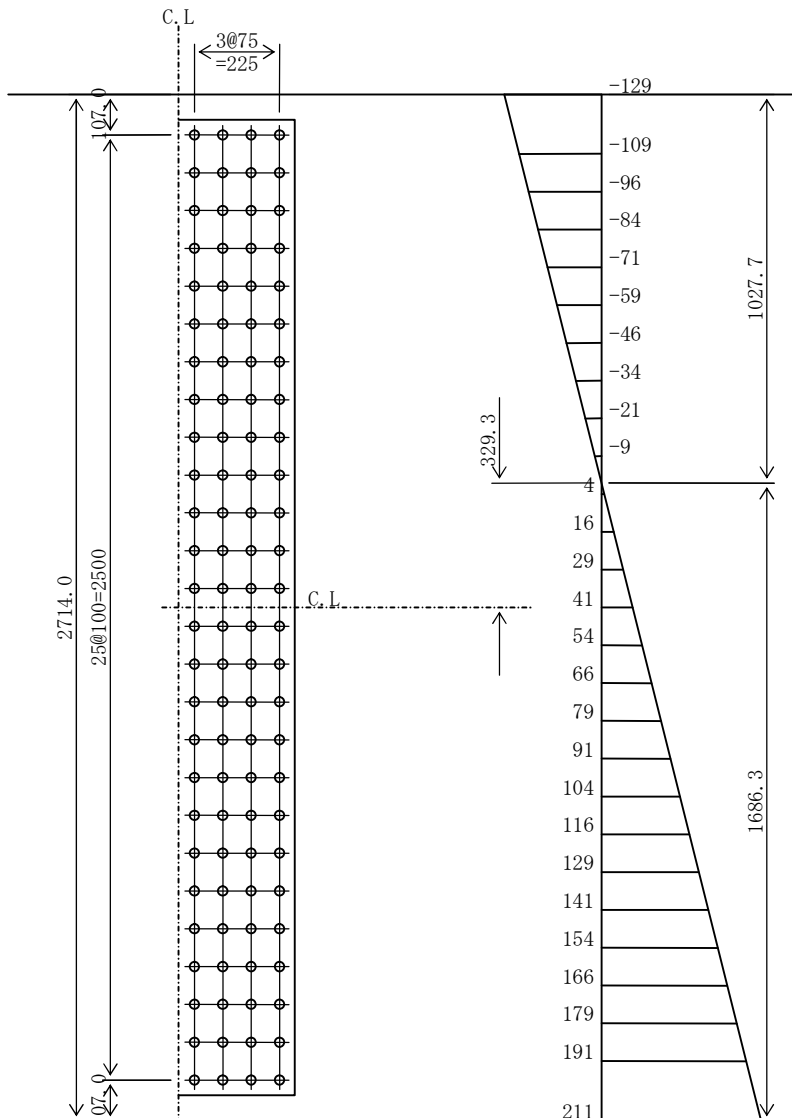
(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -129 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 211 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 129 \text{ N/mm}^2 \\ \sigma_{Ln} &= 211 \text{ N/mm}^2 \\ \tau &= 33 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 15.7$ cm

Total force to be shared

$$P_1 = 157 * 12 * (191 + 211) / 2 = 378803 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 378803 / (108000 * 1.00) = 3.5 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 33 * 32568 / 104 = 10274 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((378803 / 4)^2 + 10274^2)} = 95256 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2580 * 9 \quad A_s = 464.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3079615 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2352233 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 211 * 2352233 * 10^4 / 1686 = 2942 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2942 * 10^6 / (3079615 * 10^4) * 1619 = 155 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(92) G-1 J-76 (Sec-76) LFLG

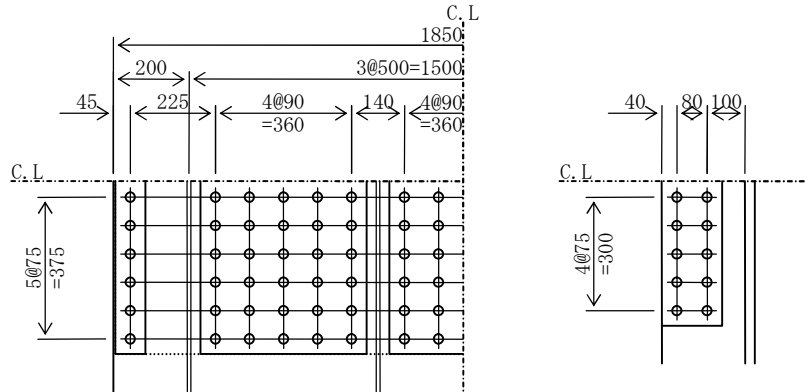
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 214 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 26 & & A_g &= 481.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 481.0 + 83.6 & &= 564.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 26 & & A &= 481.0 \\ (481.0 - (17 * 2.5) * 2.6) * 1.1 &= 407.6 < 481.0 & \therefore A_n &= 407.6 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 407.6 + 71.1 & &= 478.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 214 * 564.6 / 478.6 & &= 253 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 253 * 40755 = 10294983 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 40755 / 1.1 = 7085812 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 253 * 7106 = 1795023 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10294983 + 1795023) / 255 = 47412 \text{ mm}^2 = 474.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10294983 / 108000 = 95.3 \text{ pcs. (102 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1795023 / 108000 = 16.6 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,5 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 102 = 10294983 / 102 = 100931 \text{ N} \\ \rho_s &= \tau * A_g / 102 = 11 * 48100 / 102 = 5035 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{100931^2 + 5035^2} = 101057 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 18	(28.8 -	2*(1*2.5)* 1.8)*1.1= 21.8 <	28.8 ∴ 21.8
3-SPL PL	440 * 18	(237.6 -	3*(5*2.5)* 1.8)*1.1= 187.1 <	237.6 ∴ 187.1
1-SPL PL	1840 * 13	(239.2 -	(17*2.5)* 1.3)*1.1= 202.3 <	239.2 ∴ 202.3
4-SPL PL	160 * 15	(96.0 -	4*(2*2.5)* 1.5)*1.1= 72.6 <	96.0 ∴ 72.6
<hr/>				
		601.6		483.8
				> AnR

(93) G-1 J-77 (Sec-77) LWEB

G-1 J-78 (Sec-79) LWEB, G-1 J-79 (Sec-80) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 3044 * 12 A = 365.3 cm² (SM570)

(b) Design stress

$\sigma_U = -145 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

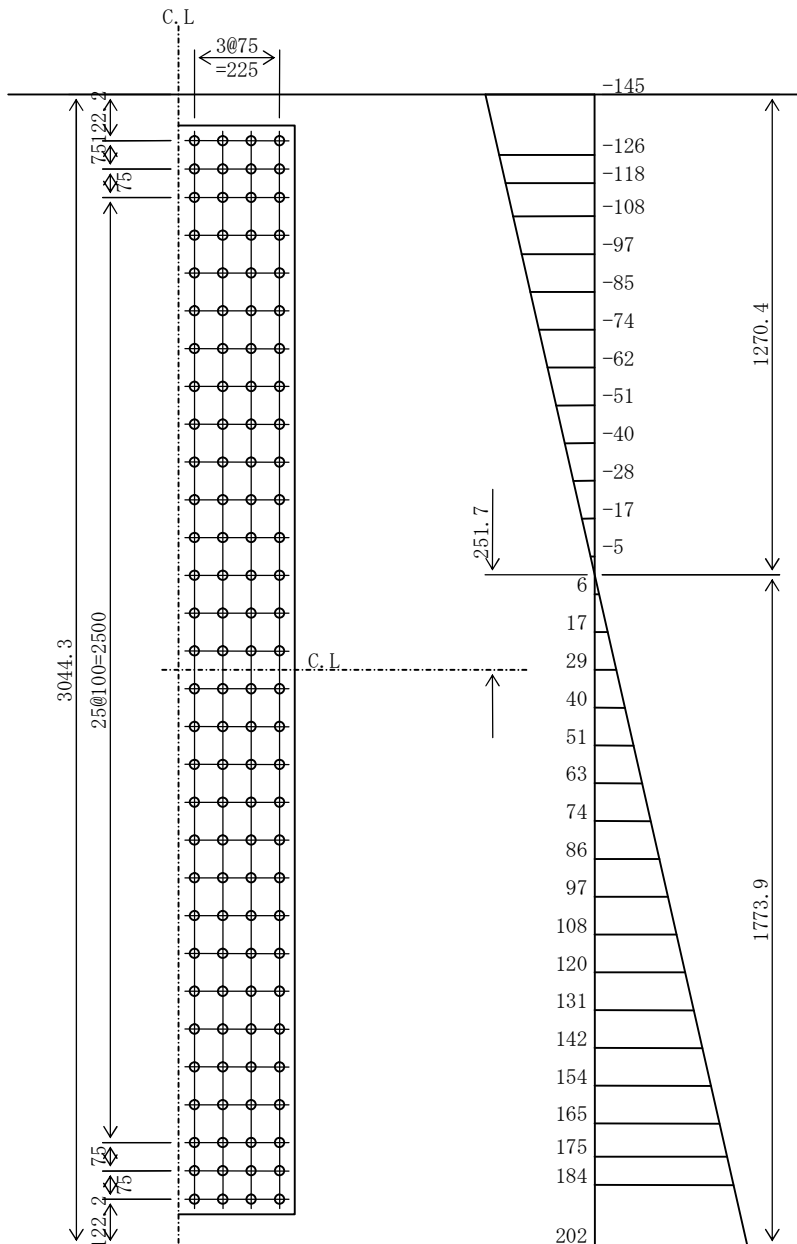
$\sigma_L = 202 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 145 \text{ N/mm}^2$

$\sigma_{Ln} = 202 \text{ N/mm}^2$

$\tau = 22 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 30th row

Sharing width: $b_1 = 16.0$ cm

Total force to be shared

$$P_1 = 160 * 12 * (184 + 202) / 2 = 369433 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 369433 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 120 = 22 * 36532 / 120 = 6585 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c30} = \sqrt{((369433 / 4)^2 + 6585^2)} = 92593 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2880 * 9 \quad A_s = 518.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3911704 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 3053029 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 202 * 3053029 * 10^4 / 1774 = 3475 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3475 * 10^6 / (3911704 * 10^4) * 1692 = 150 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(94) G-1 J-77 (Sec-77) RWEB

G-1 J-78 (Sec-79) RWEB, G-1 J-79 (Sec-80) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2714 * 12 A = 325.7 cm² (SM570)

(b) Design stress

$\sigma_U = -152 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

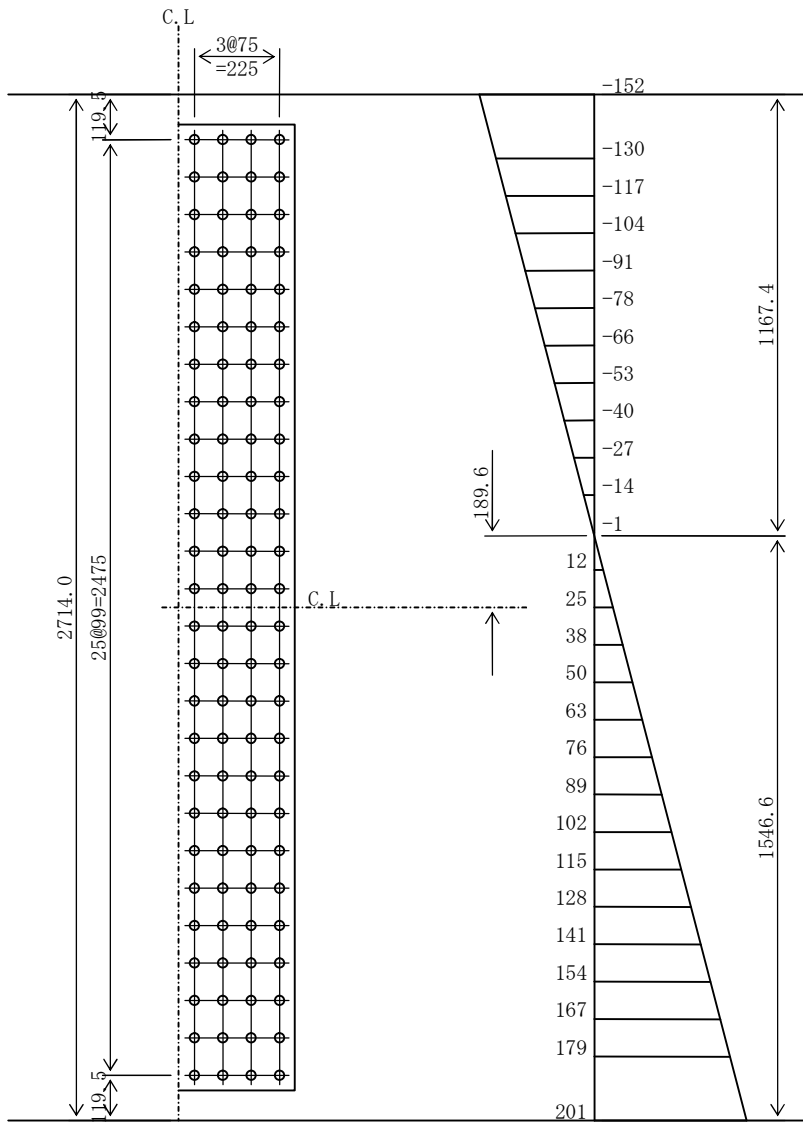
$\sigma_L = 201 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 152 \text{ N/mm}^2$

$\sigma_{Ln} = 201 \text{ N/mm}^2$

$\tau = 22 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 26th row

Sharing width: $b_1 = 16.9$ cm

Total force to be shared

$$P_1 = 169 * 12 * (179 + 201) / 2 = 386210 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 386210 / (108000 * 1.00) = 3.6 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 104 = 22 * 32568 / 104 = 6923 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c26} = \sqrt{((386210 / 4)^2 + 6923^2)} = 96800 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2555 * 9 \quad A_s = 459.9 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2667127 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2116101 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 201 * 2116101 * 10^4 / 1547 = 2756 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2756 * 10^6 / (2667127 * 10^4) * 1467 = 152 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(95) G-1 J-77(Sec-77) LFLG

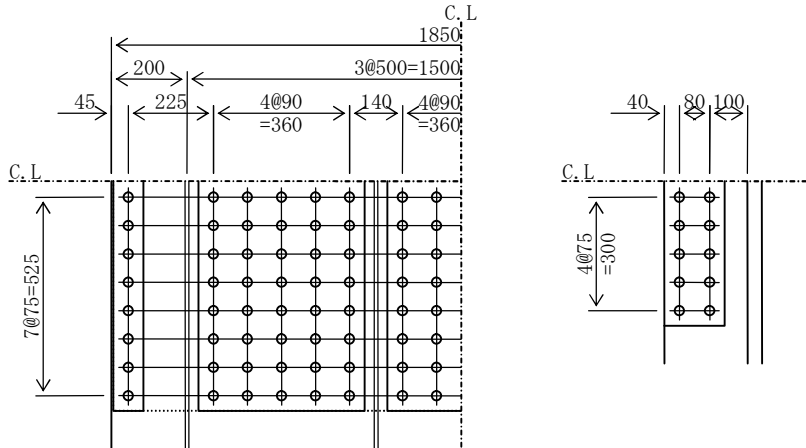
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 206 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 5 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A_g &= 703.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 703.0 + 83.6 & &= 786.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A &= 703.0 \\ (703.0 - (17 * 2.5) * 3.8) * 1.1 &= 595.7 < 703.0 & \therefore A_n &= 595.7 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 595.7 + 71.1 & &= 666.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 206 * 786.6 / 666.7 & &= 244 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 244 * 59565 = 14504792 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 59565 / 1.1 = 10356188 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 244 * 7106 = 1730396 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (14504792 + 1730396) / 255 = 63667 \text{ mm}^2 = 636.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 14504792 / 108000 = 134.3 \text{ pcs. (136 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1730396 / 108000 = 16.0 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 8,5 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 136 = 14504792 / 136 = 106653 \text{ N} \\ \rho_s &= \tau * A_g / 136 = 5 * 70300 / 136 = 2774 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(106653^2 + 2774^2)} = 106689 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 29	(46.4 -	2*(1*2.5)* 2.9)*1.1= 35.1 <	46.4 ∴ 35.1
3-SPL PL	440 * 29	(382.8 -	3*(5*2.5)* 2.9)*1.1= 301.5 <	382.8 ∴ 301.5
1-SPL PL	1840 * 22	(404.8 -	(17*2.5)* 2.2)*1.1= 342.4 <	404.8 ∴ 342.4
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8 <	89.6 ∴ 67.8
<hr/>				
		923.6		746.7
				> AnR

(96) G-1 J-78 (Sec-79) LFLG

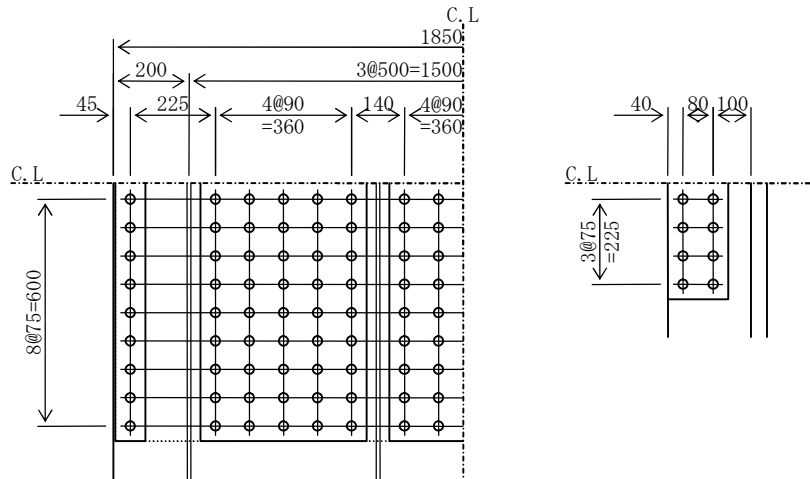
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= 204 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 3 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 42 & & A_g &= 777.0 \text{ cm}^2 & (\text{SM570-H}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 777.0 + 83.6 & &= 860.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 1850 * 42 & & A &= 777.0 \\ & (777.0 - (17 * 2.5) * 4.2) * 1.1 & &= 658.4 < 777.0 & \therefore A_n &= 658.4 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ & (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 & &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 658.4 + 71.1 & &= 729.4 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 204 * 860.6 / 729.4 & &= 240 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 255 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 240 * 65835 = 15810392 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 65835 / 1.1 = 11446313 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 240 * 7106 = 1706519 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (15810392 + 1706519) / 255 = 68694 \text{ mm}^2 = 686.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 0.98) = 15810392 / 105840 = 149.4 \text{ pcs. (153 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1706519 / 108000 = 15.8 \text{ pcs. (2 @ 8 = 16 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\rho p = Pt / 153 = 15810392 / 153 = 103336 \text{ N}$$

$$\rho s = \tau * Ag / 153 = 3 * 77700 / 153 = 1449 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(103336^2 + 1449^2)} = 103346 \text{ N} < \rho a = 105840 \text{ N}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 32	(51.2 -	2*(1*2.5)* 3.2)*1.1= 38.7 <	51.2 ∴ 38.7
3-SPL PL	440 * 32	(422.4 -	3*(5*2.5)* 3.2)*1.1= 332.6 <	422.4 ∴ 332.6
1-SPL PL	1840 * 24	(441.6 -	(17*2.5)* 2.4)*1.1= 373.6 <	441.6 ∴ 373.6
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8 <	89.6 ∴ 67.8
<hr/>				
		1004.8		812.7
				> AnR

(97) G-1 J-79 (Sec-80) LFLG

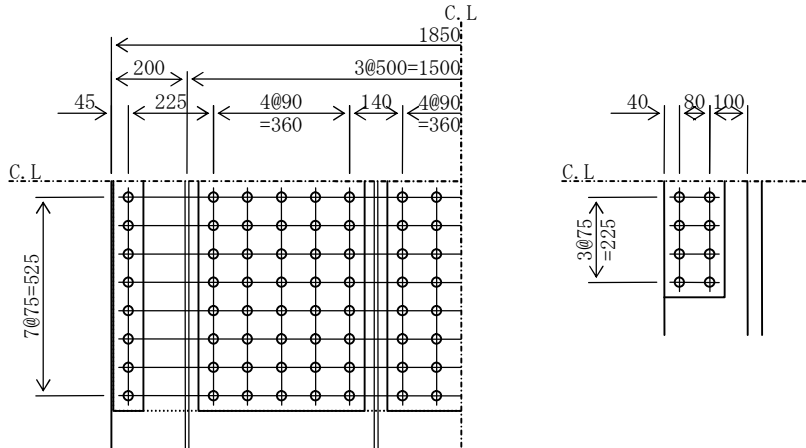
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 201 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 6 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A_g &= 703.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 703.0 + 83.6 & &= 786.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 38 & & A &= 703.0 \\ (703.0 - (17 * 2.5) * 3.8) * 1.1 &= 595.7 < 703.0 & \therefore A_n &= 595.7 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 595.7 + 71.1 & &= 666.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 201 * 786.6 / 666.7 & &= 237 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 237 * 59565 = 14107029 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 59565 / 1.1 = 10356188 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 237 * 7106 = 1682944 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (14107029 + 1682944) / 255 = 61921 \text{ mm}^2 = 619.2 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 14107029 / 108000 = 130.6 \text{ pcs.}$ (136 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 1682944 / 108000 = 15.6 \text{ pcs.}$ (2 @ 8 = 16 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 8,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 136 = 14107029 / 136 = 103728 \text{ N} \\ \rho_s &= \tau * A_g / 136 = 6 * 70300 / 136 = 3196 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(103728^2 + 3196^2)} = 103777 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 28	(44.8 -	2*(1*2.5)* 2.8)*1.1= 33.9<	44.8 ∴ 33.9
3-SPL PL	440 * 28	(369.6 -	3*(5*2.5)* 2.8)*1.1= 291.1<	369.6 ∴291.1
1-SPL PL	1840 * 21	(386.4 -	(17*2.5)* 2.1)*1.1= 326.9<	386.4 ∴326.9
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		890.4		719.6
				> AnR

(98) G-1 J-80 (Sec-81) LFLG

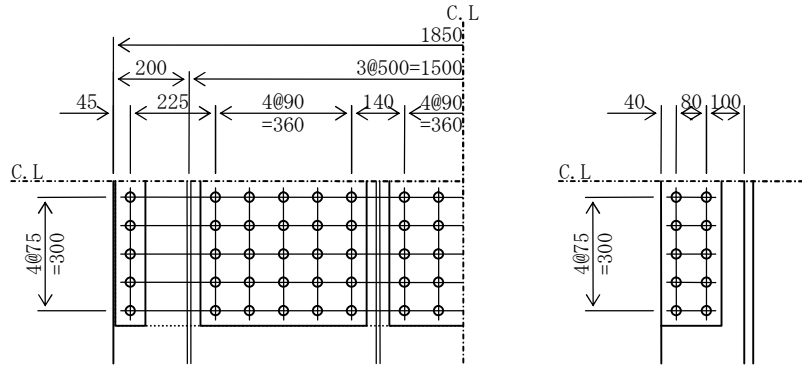
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 206 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 13 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 24 & & A_g &= 444.0 \text{ cm}^2 & (\text{SM570}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 444.0 + 83.6 & &= 527.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 24 & & A &= 444.0 \\ (444.0 - (17 * 2.5) * 2.4) * 1.1 &= 376.2 < 444.0 & \therefore A_n &= 376.2 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 376.2 + 71.1 & &= 447.3 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 206 * 527.6 / 447.3 & &= 243 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 243 * 37620 = 9158599 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 37620 / 1.1 = 6540750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 243 * 7106 = 1729958 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 7106 / 1.1 = 1235475 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (9158599 + 1729958) / 255 = 42700 \text{ mm}^2 = 427.0 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 9158599 / 108000 = 84.8 \text{ pcs. (85 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1729958 / 108000 = 16.0 \text{ pcs. (2 @ 10 = 20 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5.5 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 85 = 9158599 / 85 = 107748 \text{ N} \\ \rho_s &= \tau * A_g / 85 = 13 * 44400 / 85 = 6896 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(107748^2 + 6896^2)} = 107969 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 16	(25.6 -	2*(1*2.5)* 1.6)*1.1= 19.4<	25.6 ∴ 19.4
3-SPL PL	440 * 16	(211.2 -	3*(5*2.5)* 1.6)*1.1= 166.3<	211.2 ∴ 166.3
1-SPL PL	1840 * 12	(220.8 -	(17*2.5)* 1.2)*1.1= 186.8<	220.8 ∴ 186.8
4-SPL PL	160 * 14	(89.6 -	4*(2*2.5)* 1.4)*1.1= 67.8<	89.6 ∴ 67.8
<hr/>				
		547.2		440.2
				> AnR

(99) G-1 J-81 (Sec-82) LFLG

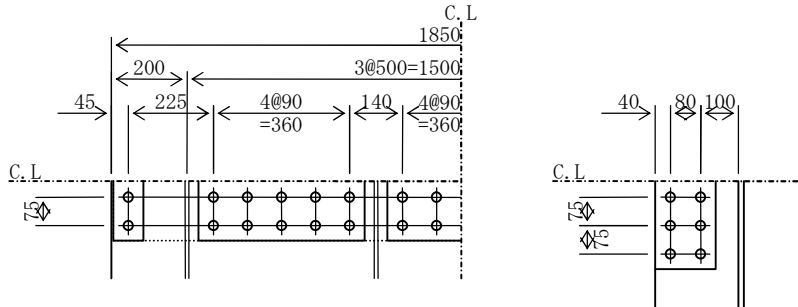
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 132 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 26 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A_g &= 259.0 \text{ cm}^2 & (\text{SM490Y}) \\ 2\text{-RIB PL } 220 * 19 & & A_{gr} &= 83.6 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 259.0 + 83.6 & &= 342.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 1850 * 14 & & A &= 259.0 \\ (259.0 - (17 * 2.5) * 1.4) * 1.1 &= 219.5 < 259.0 & \therefore A_n &= 219.5 \text{ cm}^2 \\ 2\text{-RIB PL } 220 * 19 & & A_r &= 83.6 \\ (83.6 - 2 * (2 * 2.5) * 1.9) * 1.1 &= 71.1 < 83.6 & \therefore A_{nr} &= 71.1 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 219.5 + 71.1 & &= 290.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 132 * 342.6 / 290.5 & &= 155 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 155 * 21945 = 3409593 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 21945 / 1.1 = 3142125 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 155 * 7106 = 1104059 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 7106 / 1.1 = 1017450 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (3409593 + 1104059) / 210 = 21494 \text{ mm}^2 = 214.9 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 3409593 / 108000 = 31.6 \text{ pcs.}$ (34 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 1104059 / 108000 = 10.2 \text{ pcs.}$ (2 @ 6 = 12 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{max} = 2,3 \text{ unites}$)

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 34 = 3409593 / 34 = 100282 \text{ N} \\ \rho_s &= \tau * A_g / 34 = 26 * 25900 / 34 = 19632 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(100282^2 + 19632^2)} = 102186 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
3-SPL PL	440 * 9	(118.8 -	3*(5*2.5)* 0.9)*1.1= 93.6 <	118.8 ∴ 93.6
1-SPL PL	1840 * 9	(165.6 -	(17*2.5)* 0.9)*1.1= 140.1 <	165.6 ∴ 140.1
4-SPL PL	160 * 11	(70.4 -	4*(2*2.5)* 1.1)*1.1= 53.2 <	70.4 ∴ 53.2
<hr/>				
		369.2		297.8
				> AnR

(100) G-2 J-1 (Sec-1) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM490Y)

(b) Design stress

$$\sigma_U = -64 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

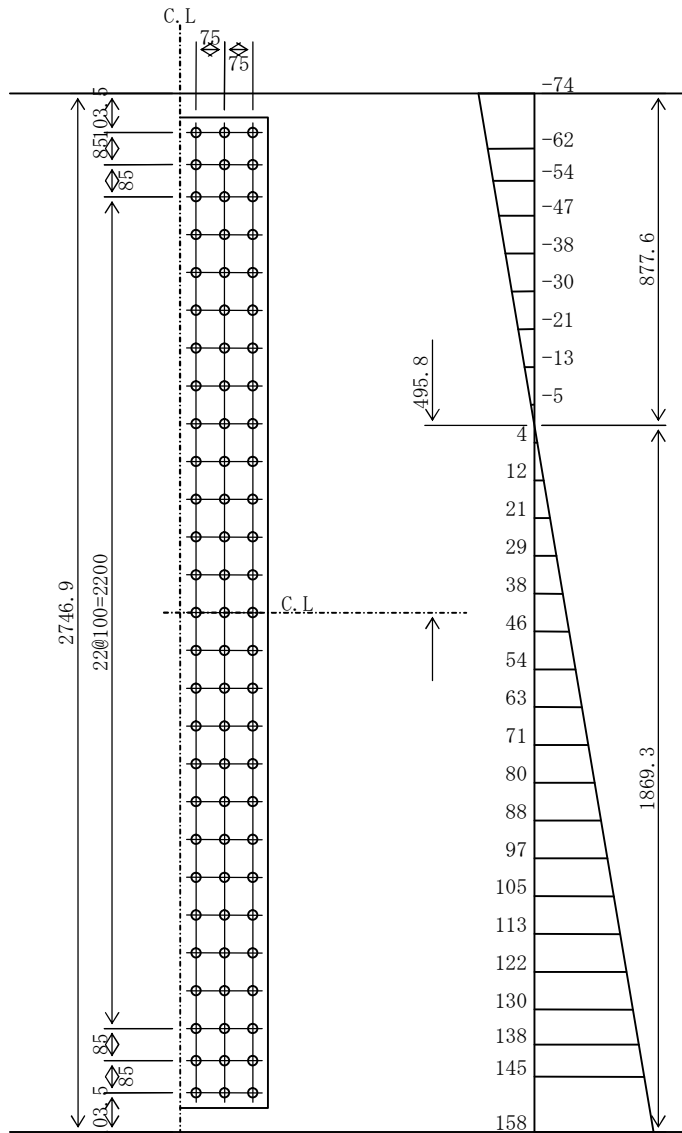
$$\sigma_L = 137 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

$$\sigma_{Un} = 158 * 64 / 137 = 74 \text{ N/mm}^2$$

$$\sigma_{Ln} = 158 \text{ N/mm}^2$$

$$\tau = 53 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6 \text{ cm}$

Total force to be shared

$$P_1 = 146 * 11 * (145 + 158) / 2 = 242989 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 242989 / (108000 * 1.00) = 2.2 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 53 * 30216 / 81 = 19860 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((242989 / 3)^2 + 19860^2)} = 83395 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

2-SPL PL 2620 * 9 $A_s = 471.6 \text{ cm}^2$ (SM490Y)

Moment of inertia of splice plates $I_s = 3857114 \text{ cm}^4 > I_w$

Moment of inertia of web plate $I_w = 2642788 \text{ cm}^4$

Bending moment to be shared by the web

$$M_w = 158 * 2642788 * 10^4 / 1869 = 2227 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2227 * 10^6 / (3857114 * 10^4) * 1806 = 104 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(101) G-2 J-1 (Sec-1) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM490Y)

(b) Design stress

$$\sigma_U = -68 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

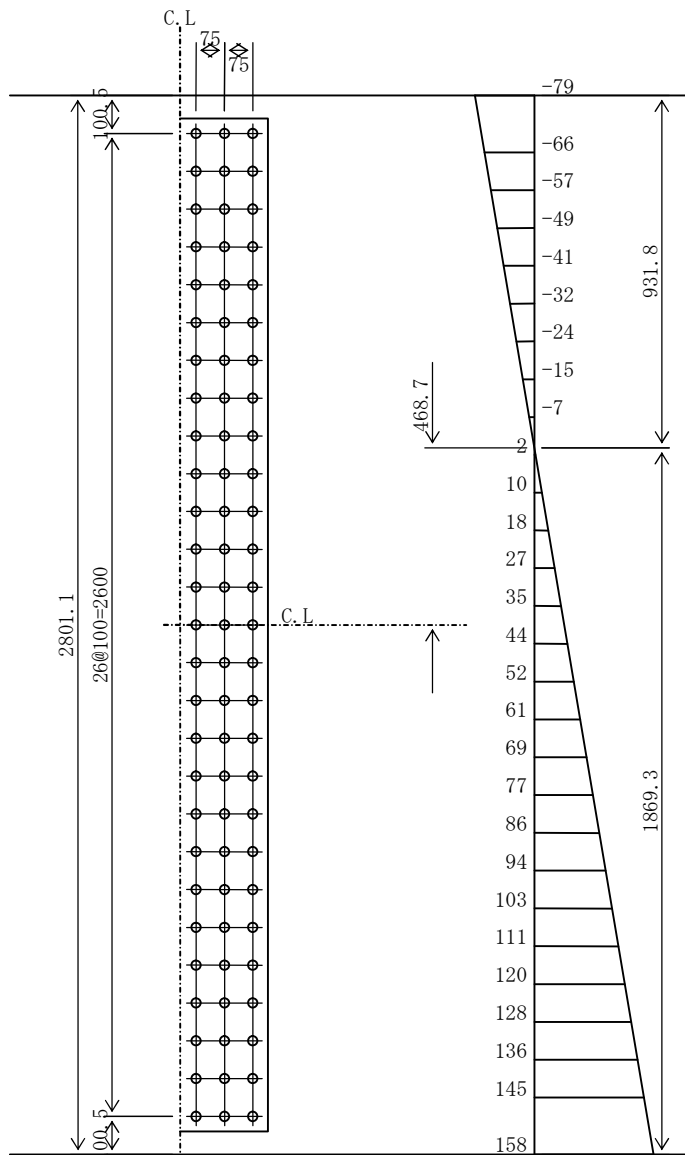
$$\sigma_L = 137 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2$$

$$\sigma_{Un} = 158 * 68 / 137 = 79 \text{ N/mm}^2$$

$$\sigma_{Ln} = 158 \text{ N/mm}^2$$

$$\tau = 58 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.1 \text{ cm}$

Total force to be shared

$$P_1 = 151 * 11 * (145 + 158) / 2 = 250317 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 250317 / (108000 * 1.00) = 2.3 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 58 * 30812 / 81 = 22146 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((250317 / 3)^2 + 22146^2)} = 86328 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \text{ (SM490Y)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3947213 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2691595 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 158 * 2691595 * 10^4 / 1869 = 2268 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2268 * 10^6 / (3947213 * 10^4) * 1809 = 104 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(102) G-2 J-1 (Sec-1) LFLG

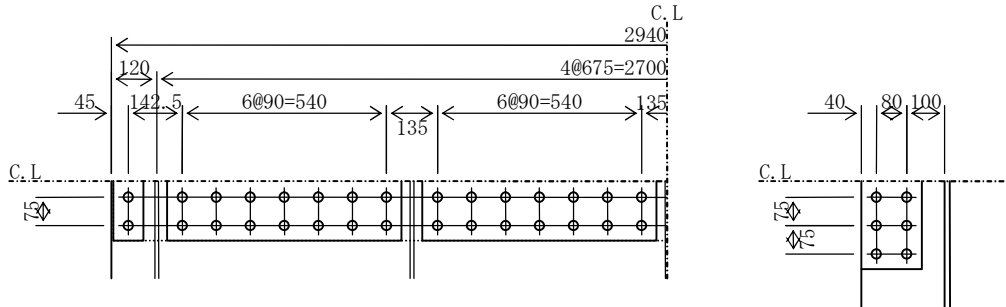
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 138 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 34 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 14 & & A_g &= 411.6 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 411.6 + 125.4 & &= 537.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 14 & & A &= 411.6 \\ (411.6 - (30 * 2.5) * 1.4) * 1.1 &= 337.3 < 411.6 & \therefore A_n &= 337.3 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 337.3 + 106.6 & &= 443.9 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 138 * 537.0 / 443.9 & &= 167 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 167 * 33726 = 5638462 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 33726 / 1.1 = 4828950 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 167 * 10659 = 1782019 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5638462 + 1782019) / 210 = 35336 \text{ mm}^2 = 353.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5638462 / 108000 = 52.2 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1782019 / 108000 = 16.5 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ & \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ & \rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2.3 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 60 = 5638462 / 60 = 93974 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 34 * 41160 / 60 = 23571 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(93974^2 + 23571^2)} = 96885 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 12	(115.2 -	6*(2*2.5)* 1.2)*1.1= 87.1 <	115.2 ∴ 87.1
<hr/>				
		616.5		490.1
				> AnR

(103) G-2 J-2(Sec-2) LFLG

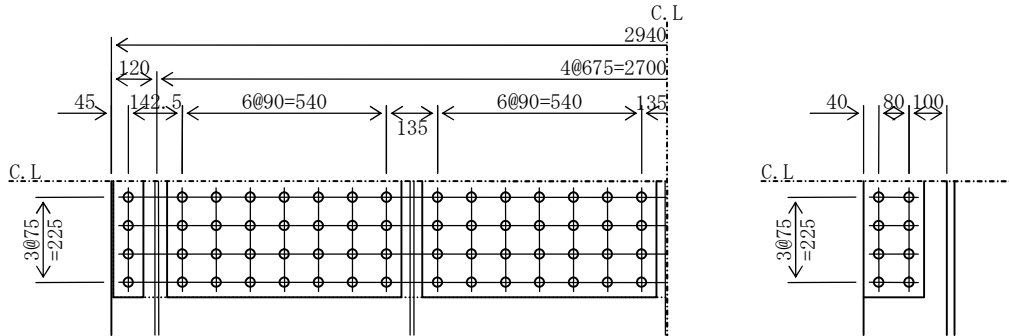
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 198 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 20 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & & A_g &= 588.0 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 588.0 + 125.4 & &= 713.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & & A &= 588.0 \\ (588.0 - (30 * 2.5) * 2.0) * 1.1 &= 481.8 < 588.0 & \therefore A_n &= 481.8 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 481.8 + 106.6 & &= 588.4 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 198 * 713.4 / 588.4 & &= 240 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 240 * 48180 = 11578184 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 48180 / 1.1 = 8376750 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 240 * 10659 = 2561475 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (11578184 + 2561475) / 255 = 55450 \text{ mm}^2 = 554.5 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 11578184 / 108000 = 107.2 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2561475 / 108000 = 23.7 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 11578184 / 120 = 96485 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 20 * 58800 / 120 = 9605 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(96485^2 + 9605^2)} = 96962 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
4-SPL PL	620 * 11	(272.8 -	4*(7*2.5)* 1.1)*1.1= 215.4 <	272.8 ∴ 215.4
1-SPL PL	2930 * 10	(293.0 -	(30*2.5)* 1.0)*1.1= 239.8 <	293.0 ∴ 239.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		717.8		570.1
				> AnR

(104) G-2 J-3 (Sec-3) LFLG

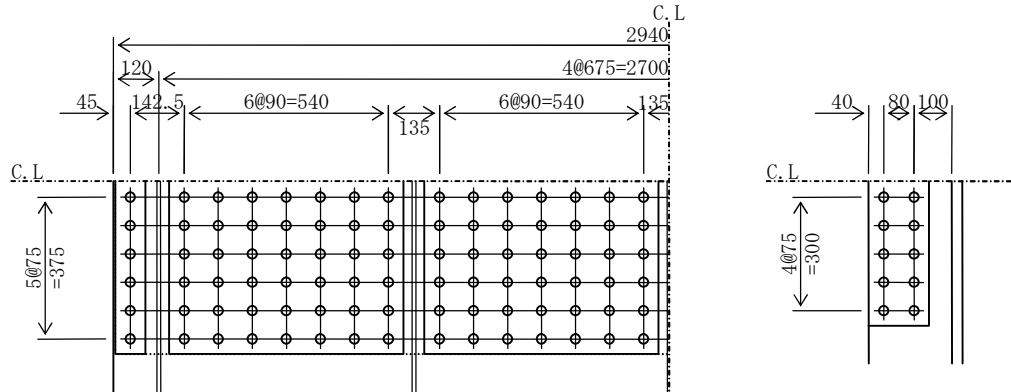
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 203 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 28 & \quad A_g = 823.2 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 823.2 + 125.4 = 948.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 28 & \quad A = 823.2 \\ (823.2 - (30 * 2.5) * 2.8) * 1.1 &= 674.5 < 823.2 \quad \therefore A_n = 674.5 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 674.5 + 106.6 = 781.1 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 203 * 948.6 / 781.1 = 247 \text{ N/mm}^2 \\ &< \sigma_{\text{ta}} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 247 * 67452 = 16660945 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 191 * 67452 / 1.1 = 11727450 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 247 * 10659 = 2632821 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (16660945 + 2632821) / 255 = 75662 \text{ mm}^2 = 756.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 16660945 / 108000 = 154.3 \text{ pcs. (180 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2632821 / 108000 = 24.4 \text{ pcs. (3 @ 10 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 6,5 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 180 = 16660945 / 180 = 92561 \text{ N} \\ \rho_s &= \tau * A_g / 180 = 11 * 82320 / 180 = 4804 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{92561^2 + 4804^2} = 92685 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 16	(25.6 -	2*(1*2.5)* 1.6)*1.1= 19.4 <	25.6 ∴ 19.4
4-SPL PL	620 * 16	(396.8 -	4*(7*2.5)* 1.6)*1.1= 313.3 <	396.8 ∴ 313.3
1-SPL PL	2930 * 14	(410.2 -	(30*2.5)* 1.4)*1.1= 335.7 <	410.2 ∴ 335.7
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		976.6		777.3
				> AnR

(105) G-2 J-4 (Sec-4) LWEB

G-2 J-2 (Sec-2) LWEB, G-2 J-3 (Sec-3) LWEB

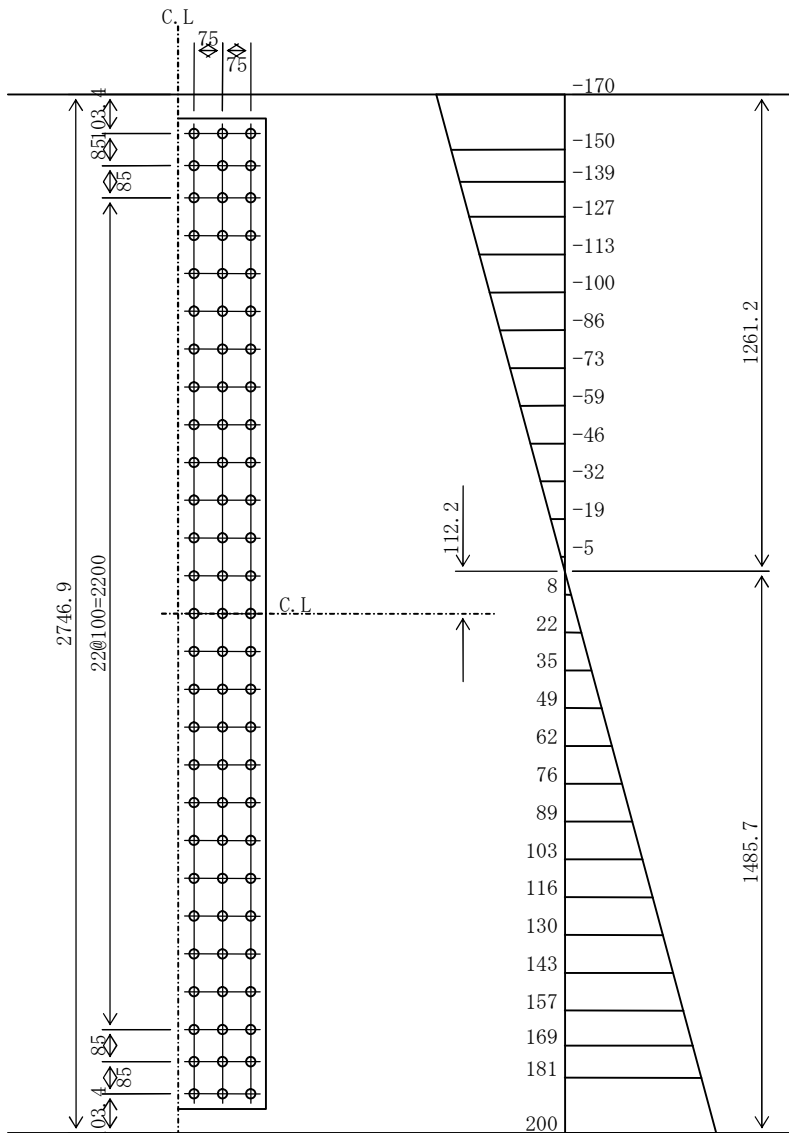
(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM570)

(b) Design stress

$$\begin{aligned}\sigma_U &= -170 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 200 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 170 \text{ N/mm}^2 \\ \sigma_{Ln} &= 200 \text{ N/mm}^2 \\ \tau &= 19 \text{ N/mm}^2\end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6 \text{ cm}$

Total force to be shared

$$P_1 = 146 * 11 * (181 + 200) / 2 = 306022 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 306022 / (108000 * 1.00) = 2.8 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 19 * 30216 / 81 = 6978 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((306022 / 3)^2 + 6978^2)} = 102246 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2757129 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1937982 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 200 * 1937982 * 10^4 / 1486 = 2615 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2615 * 10^6 / (2757129 * 10^4) * 1422 = 135 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(106) G-2 J-4 (Sec-4) RWEB

G-2 J-2 (Sec-2) RWEB, G-2 J-3 (Sec-3) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM570)

(b) Design stress

$$\sigma_U = -177 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

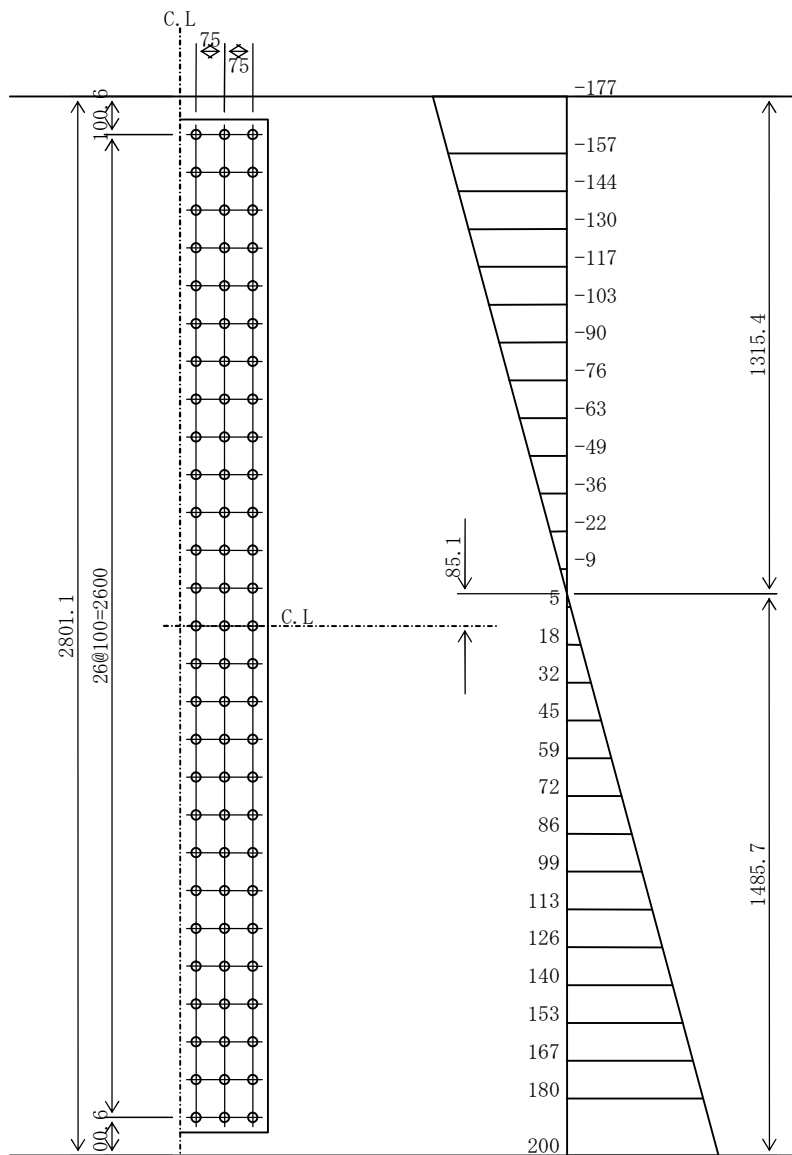
$$\sigma_L = 200 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 177 \text{ N/mm}^2$$

$$\sigma_{Ln} = 200 \text{ N/mm}^2$$

$$\tau = 20 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.1 \text{ cm}$

Total force to be shared

$$P_1 = 151 * 11 * (180 + 200) / 2 = 315175 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 315175 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 20 * 30812 / 81 = 7450 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((315175 / 3)^2 + 7450^2)} = 105322 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2922288 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2036986 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 200 * 2036986 * 10^4 / 1486 = 2749 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2749 * 10^6 / (2922288 * 10^4) * 1425 = 134 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(107) G-2 J-5 (Sec-6) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM570)

(b) Design stress

$$\sigma_U = -174 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

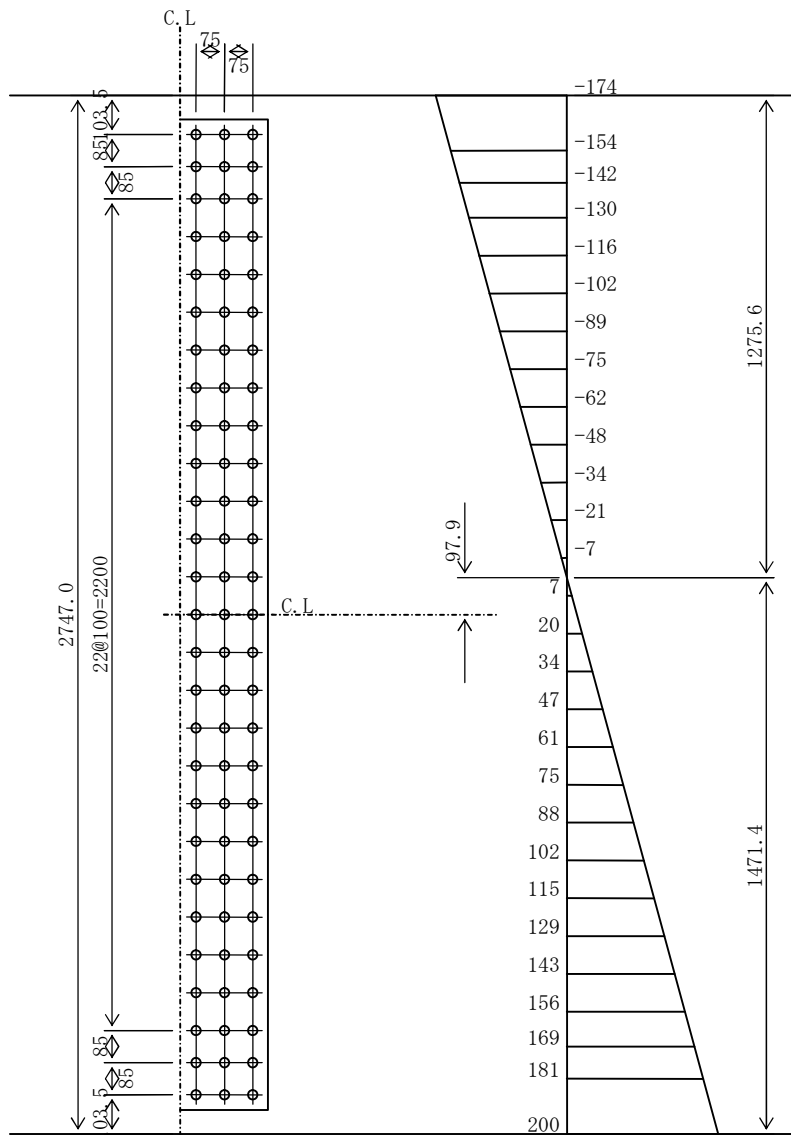
$$\sigma_L = 200 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 174 \text{ N/mm}^2$$

$$\sigma_{Ln} = 200 \text{ N/mm}^2$$

$$\tau = 21 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6$ cm

Total force to be shared

$$P_1 = 146 * 11 * (181 + 200) / 2 = 305825 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 305825 / (108000 * 1.00) = 2.8 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 21 * 30217 / 81 = 7717 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((305825 / 3)^2 + 7717^2)} = 102233 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2742927 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1929072 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 200 * 1929072 * 10^4 / 1471 = 2627 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2627 * 10^6 / (2742927 * 10^4) * 1408 = 135 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(108) G-2 J-5 (Sec-6) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM570)

(b) Design stress

$$\sigma_U = -179 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

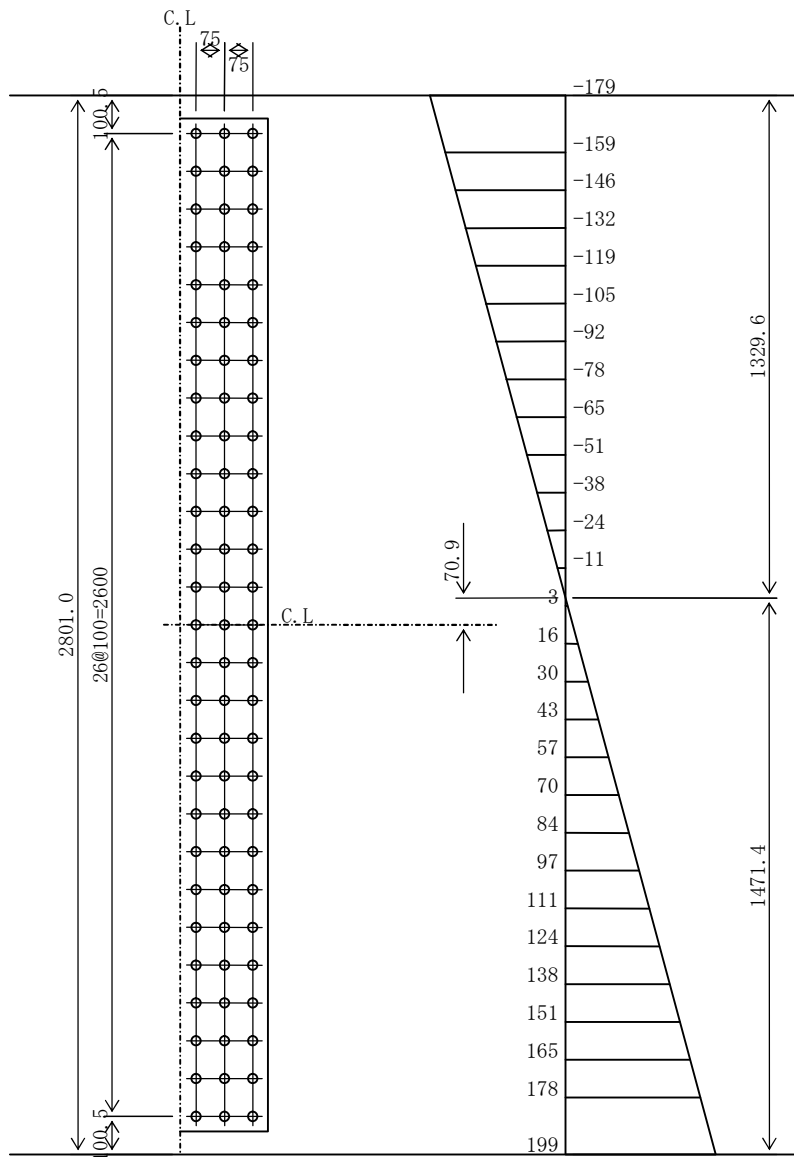
$$\sigma_L = 199 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 179 \text{ N/mm}^2$$

$$\sigma_{Ln} = 199 \text{ N/mm}^2$$

$$\tau = 22 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.1 \text{ cm}$

Total force to be shared

$$P_1 = 151 * 11 * (178 + 199) / 2 = 311942 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 311942 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 22 * 30811 / 81 = 8230 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((311942 / 3)^2 + 8230^2)} = 104306 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2911575 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2029949 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 199 * 2029949 * 10^4 / 1471 = 2740 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2740 * 10^6 / (2911575 * 10^4) * 1411 = 133 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(109) G-2 J-5 (Sec-6) LFLG
 G-2 J-4 (Sec-4) LFLG

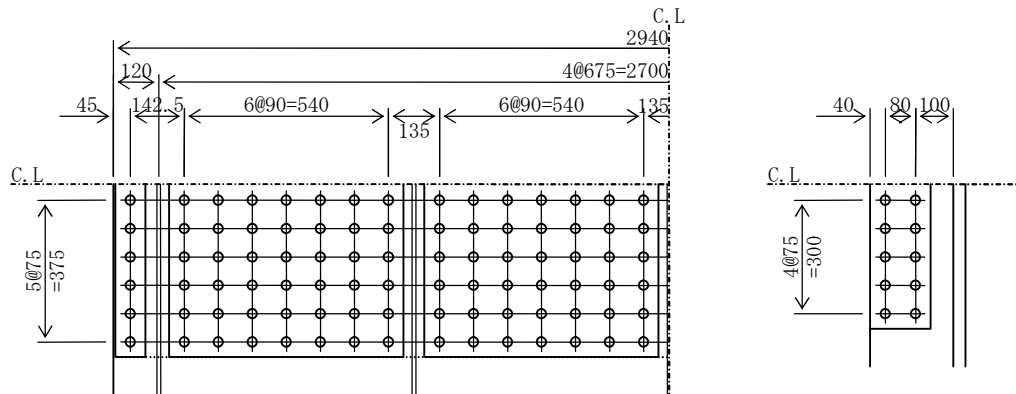
(a) Acting stress

$$\begin{aligned}\sigma_{\max} &= 205 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\max} &= 7 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 32 & & A_g &= 940.8 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 940.8 + 125.4 & &= 1066.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 32 & & A &= 940.8 \\ (940.8 - (30 * 2.5) * 3.2) * 1.1 &= 770.9 < 940.8 & \therefore A_n &= 770.9 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 770.9 + 106.6 & &= 877.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 205 * 1066.2 / 877.5 & &= 249 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 249 * 77088 = 19185071 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 77088 / 1.1 = 13402800 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 249 * 10659 = 2652730 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (19185071 + 2652730) / 255 = 85638 \text{ mm}^2 = 856.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 19185071 / 108000 = 177.6 \text{ pcs. (180 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2652730 / 108000 = 24.6 \text{ pcs. (3 @ 10 = 30 bolts will be used.)} \\ &(\text{High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,5 \text{ unites})\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 180 = 19185071 / 180 = 106584 \text{ N} \\ \rho_s &= \tau * A_g / 180 = 7 * 94080 / 180 = 3418 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(106584)^2 + (3418)^2} = 106639 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 18	(28.8 -	2*(1*2.5)* 1.8)*1.1= 21.8 <	28.8 ∴ 21.8
4-SPL PL	620 * 18	(446.4 -	4*(7*2.5)* 1.8)*1.1= 352.4 <	446.4 ∴ 352.4
1-SPL PL	2930 * 16	(468.8 -	(30*2.5)* 1.6)*1.1= 383.7 <	468.8 ∴ 383.7
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		1088.0		866.8
				> AnR

(110) G-2 J-6 (Sec-7) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM570)

(b) Design stress

$$\sigma_U = -156 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

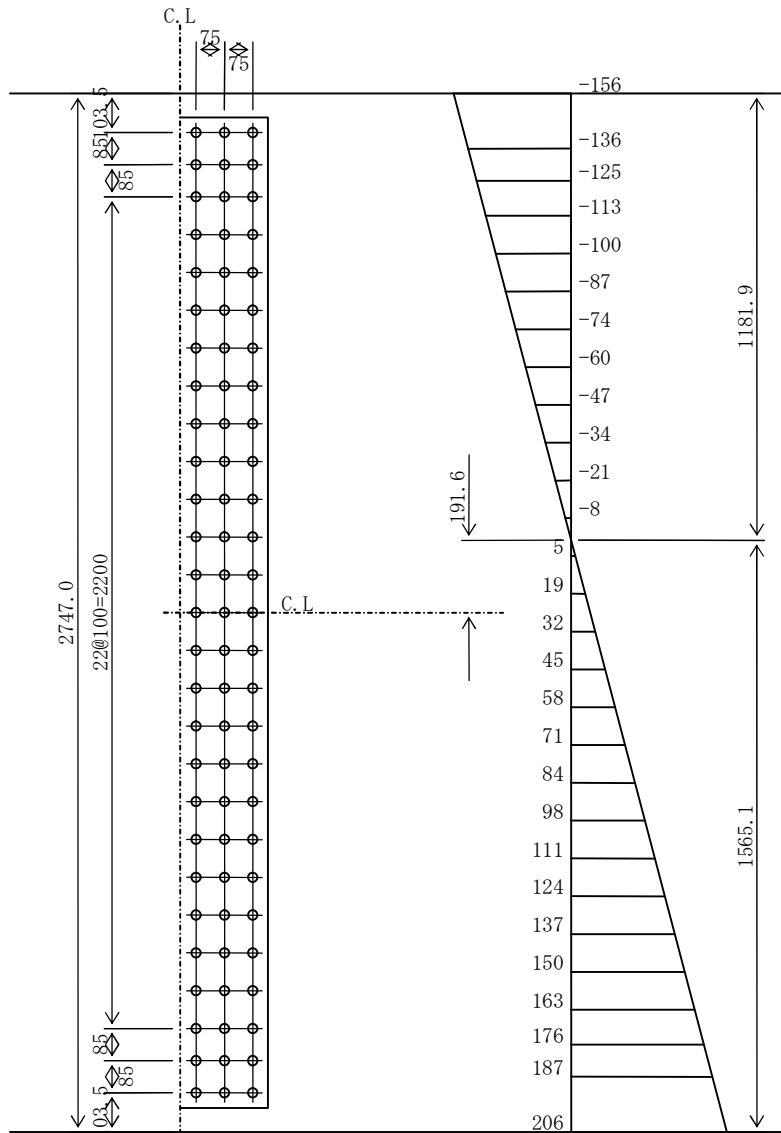
$$\sigma_L = 206 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 156 \text{ N/mm}^2$$

$$\sigma_{Ln} = 206 \text{ N/mm}^2$$

$$\tau = 32 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6 \text{ cm}$

Total force to be shared

$$P_1 = 146 * 11 * (187 + 206) / 2 = 315436 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 315436 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 32 * 30217 / 81 = 12042 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((315436 / 3)^2 + 12042^2)} = 105833 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2870796 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2011040 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 206 * 2011040 * 10^4 / 1565 = 2647 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2647 * 10^6 / (2870796 * 10^4) * 1502 = 138 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(111) G-2 J-6 (Sec-7) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM570)

(b) Design stress

$\sigma_U = -161 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

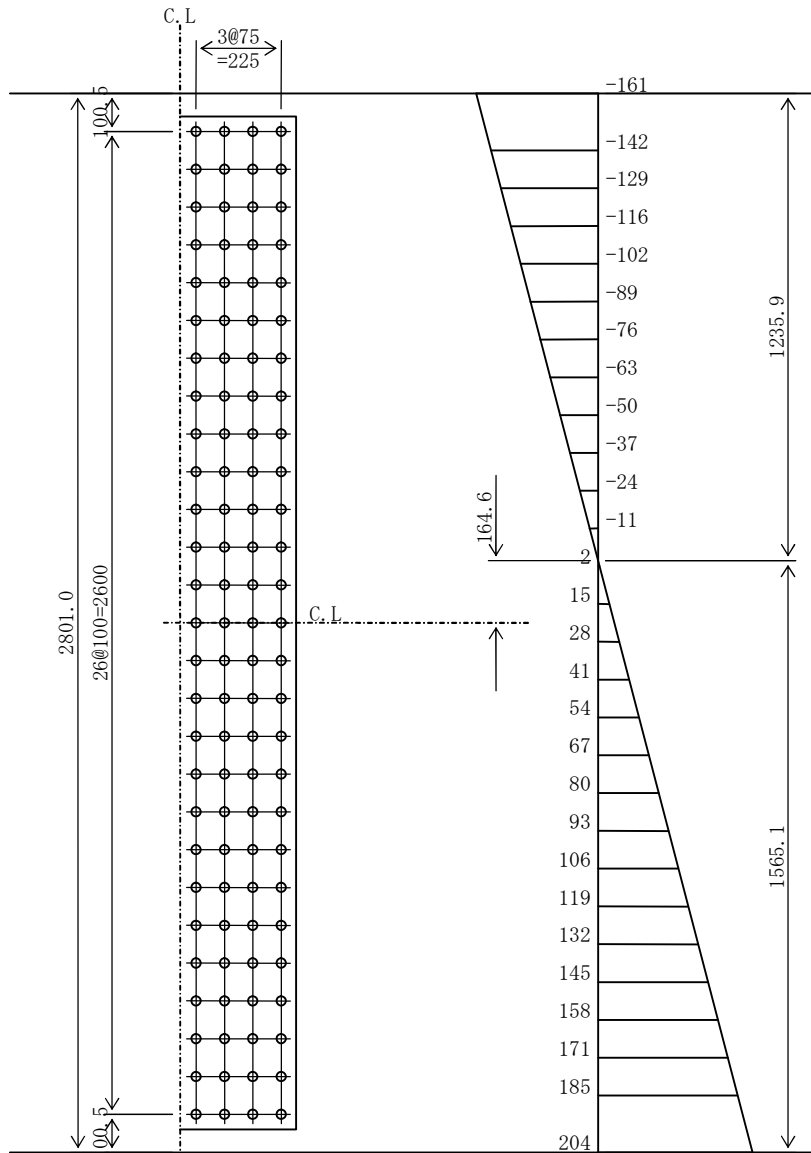
$\sigma_L = 204 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 161 \text{ N/mm}^2$

$\sigma_{Ln} = 204 \text{ N/mm}^2$

$\tau = 34 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 11 * (185 + 204) / 2 = 321739 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 321739 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 34 * 30811 / 108 = 9729 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((321739 / 4)^2 + 9729^2)} = 81021 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3017980 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2097869 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 204 * 2097869 * 10^4 / 1565 = 2737 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2737 * 10^6 / (3017980 * 10^4) * 1505 = 136 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(112) G-2 J-6(Sec-7) LFLG

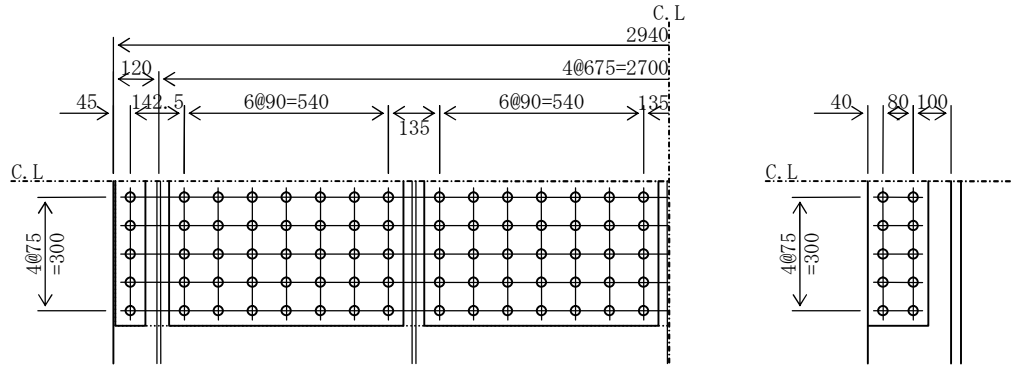
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 210 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 12 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 26 & \quad A_g = 764.4 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 764.4 + 125.4 = 889.8 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 26 & \quad A = 764.4 \\ & (764.4 - (30 * 2.5) * 2.6) * 1.1 = 626.3 < 764.4 \quad \therefore A_n = 626.3 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 = 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 626.3 + 106.6 = 732.9 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 210 * 889.8 / 732.9 = 254 \text{ N/mm}^2 \\ & < \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 254 * 62634 = 15932358 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 62634 / 1.1 = 10889775 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 254 * 10659 = 2711355 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (15932358 + 2711355) / 255 = 73113 \text{ mm}^2 = 731.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 15932358 / 108000 = 147.5 \text{ pcs. (150 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2711355 / 108000 = 25.1 \text{ pcs. (3 @ 10 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5.5 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 150 = 15932358 / 150 = 106216 \text{ N} \\ \rho_s &= \tau * A_g / 150 = 12 * 76440 / 150 = 6154 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{106216^2 + 6154^2} = 106394 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 15	(24.0 -	2*(1*2.5)* 1.5)*1.1= 18.2 <	24.0 ∴ 18.2
4-SPL PL	620 * 15	(372.0 -	4*(7*2.5)* 1.5)*1.1= 293.7 <	372.0 ∴ 293.7
1-SPL PL	2930 * 14	(410.2 -	(30*2.5)* 1.4)*1.1= 335.7 <	410.2 ∴ 335.7
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		950.2		756.5
				> AnR

(113) G-2 J-7(Sec-8) LFLG

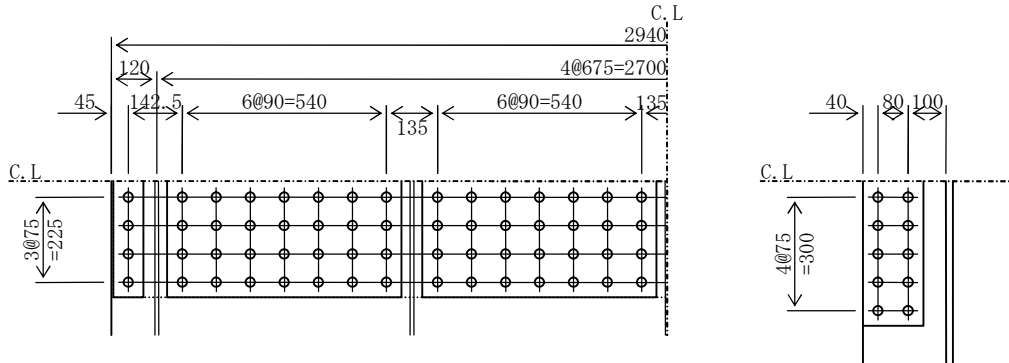
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 206 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 21 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A_g &= 529.2 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 & &= 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A &= 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 & \therefore A_n &= 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 & &= 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 206 * 654.6 / 540.2 & &= 249 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 249 * 43362 = 10809814 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 191 * 43362 / 1.1 = 7539075 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 249 * 10659 = 2657207 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10809814 + 2657207) / 255 = 52812 \text{ mm}^2 = 528.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10809814 / 108000 = 100.1 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2657207 / 108000 = 24.6 \text{ pcs. (3 @ 10 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,5 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 10809814 / 120 = 90082 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 21 * 52920 / 120 = 9328 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(90082^2 + 9328^2)} = 90563 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)*1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)*1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		671.7		532.6
				> AnR

(114) G-2 J-8 (Sec-9) LFLG
 G-2 J-56 (Sec-57) LFLG

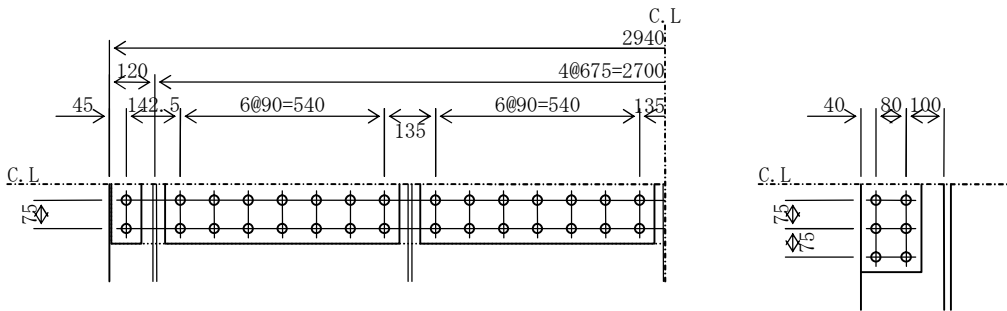
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 118 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 26 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A_g &= 529.2 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 & &= 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A &= 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 & \therefore A_n &= 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 & &= 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 118 * 654.6 / 540.2 & &= 143 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 143 * 43362 = 6217735 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 43362 / 1.1 = 6208650 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 143 * 10659 = 1528408 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6217735 + 1528408) / 210 = 36886 \text{ mm}^2 = 368.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6217735 / 108000 = 57.6 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1528408 / 108000 = 14.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 60 = 6217735 / 60 = 103629 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 26 * 52920 / 60 = 23248 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(103629^2 + 23248^2)} = 106205 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

(115) G-2 J-9 (Sec-9) LFLG
 G-2 J-57 (Sec-57) LFLG

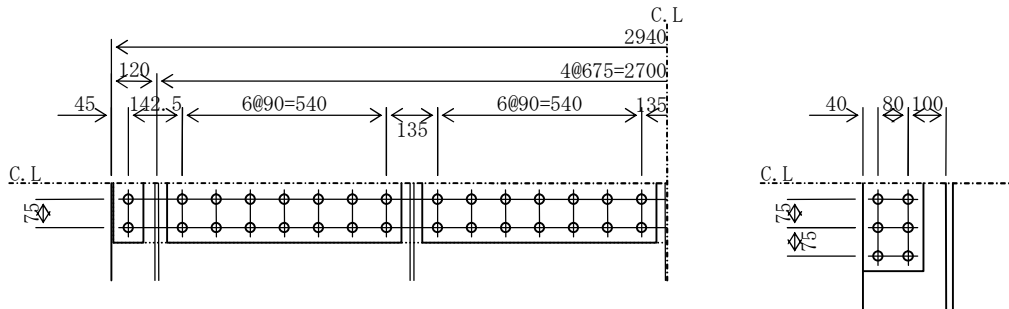
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 8 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -96 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 139 = 104 \text{ N/mm}^2 \\ \therefore \sigma_c &= 104 \text{ N/mm}^2 \\ \tau_{max} &= 33 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 18 & \quad A_g = 529.2 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 = 654.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 18 & \quad A = 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 \quad \therefore A_n = 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 = 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 8 * 654.6 / 540.2 = 9 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 43362 / 1.1 = 6208650 \text{ N} \\ &> \sigma_{tn} * A_n = 9 * 43362 = 397758 \text{ N} \\ P_c &= \sigma_c * A_g = 104 * 52920 = 5505003 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 9 * 10659 = 97775 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 104 * 12540 = 1304474 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (6208650 + 1526175) / 210 = 36833 \text{ mm}^2 = 368.3 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (5505003 + 1304474) / 210 = 32426 \text{ mm}^2 = 324.3 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6208650 / 108000 = 57.5 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1526175 / 108000 = 14.1 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\sigma_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 60 = 6208650 / 60 = 103478 \text{ N}$$

$$\rho s = \tau * Ag / 60 = 33 * 52920 / 60 = 28911 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(103478^2 + 28911^2)} = 107440 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)*0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)*1.1)*1.1= 79.9 <	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(116) G-2 J-10(Sec-10) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2741 * 13 A = 356.3 cm² (SM570)

(b) Design stress

$$\sigma_U = 112 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

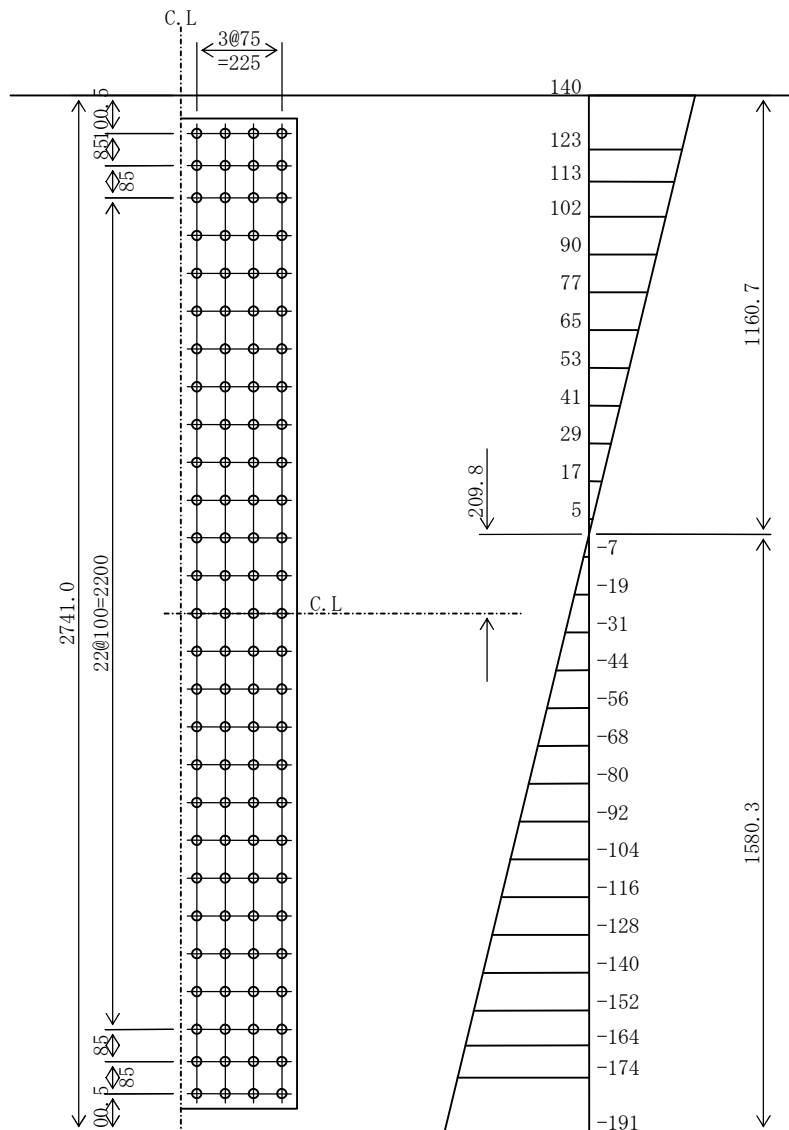
$$\sigma_L = -153 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 112 / 153 = 140 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 68 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.3 \text{ cm}$

Total force to be shared

$$P_1 = 143 * 13 * (174 + 191) / 2 = 339443 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 339443 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 68 * 35633 / 108 = 22377 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((339443 / 4)^2 + 22377^2)} = 87762 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2905333 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2387813 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2387813 * 10^4 / 1580 = 2890 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2890 * 10^6 / (2905333 * 10^4) * 1520 = 151 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(117) G-2 J-10(Sec-10) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2795 * 13 A = 363.3 cm² (SM570)

(b) Design stress

$$\sigma_U = 118 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

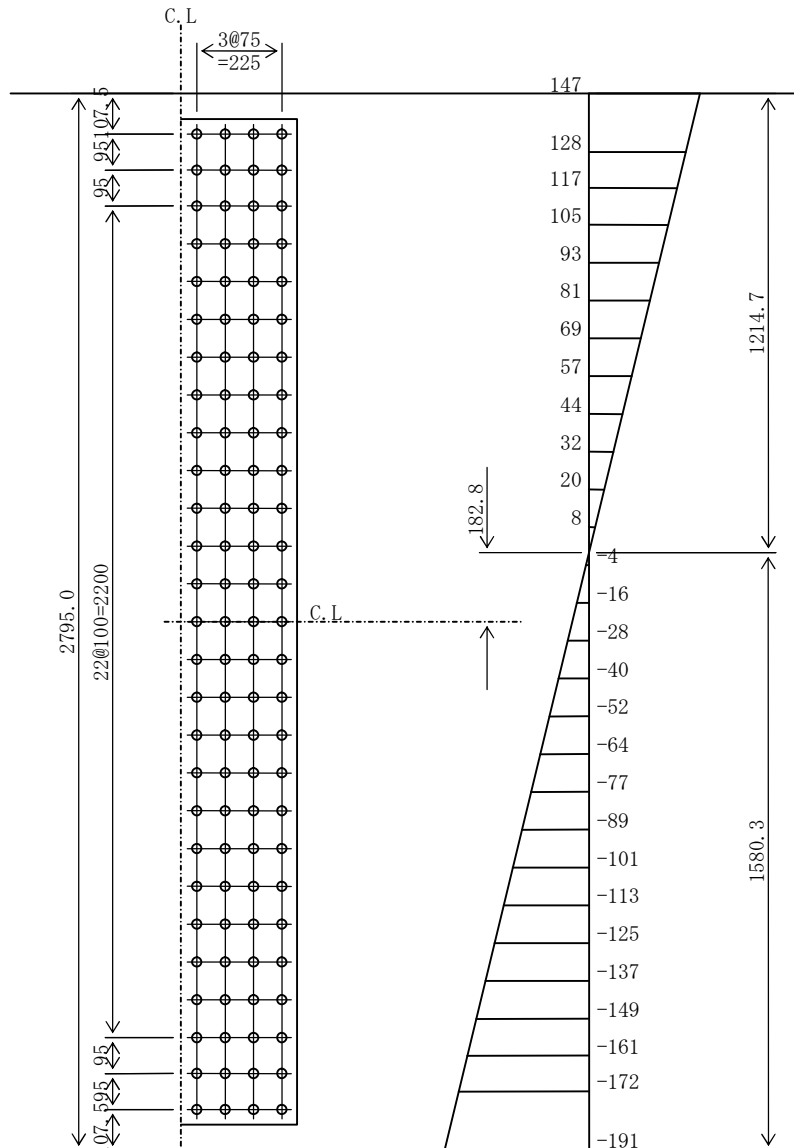
$$\sigma_L = -153 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 118 / 153 = 147 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 71 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 13 * (172 + 191) / 2 = 366466 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 366466 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 71 * 36335 / 108 = 23840 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((366466 / 4)^2 + 23840^2)} = 94667 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)}$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2983207 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2486858 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2486858 * 10^4 / 1580 = 3010 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3010 * 10^6 / (2983207 * 10^4) * 1513 = 153 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(118) G-2 J-11 (Sec-11) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2736 * 13 A = 355.7 cm² (SM570)

(b) Design stress

$\sigma_U = 150 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

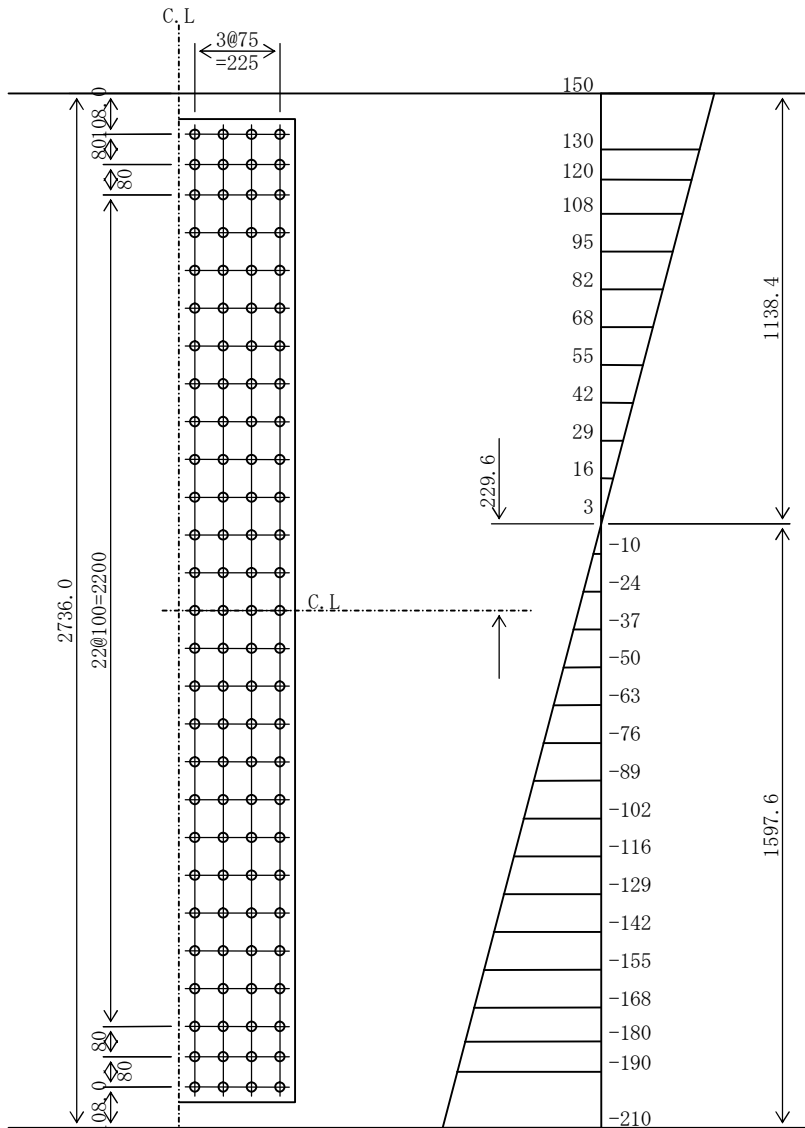
$\sigma_L = -210 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 150 \text{ N/mm}^2$

$\sigma_{Ln} = 210 \text{ N/mm}^2$

$\tau = 77 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.8 \text{ cm}$

Total force to be shared

$$P_1 = 148 * 13 * (190 + 210) / 2 = 385222 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 385222 / (108000 * 1.00) = 3.6 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 77 * 35568 / 108 = 25226 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((385222 / 4)^2 + 25226^2)} = 99554 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2600 * 9 \quad A_s = 468.0 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2883127 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2406260 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 210 * 2406260 * 10^4 / 1598 = 3162 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3162 * 10^6 / (2883127 * 10^4) * 1530 = 168 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(119) G-2 J-11 (Sec-11) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2790 * 13 A = 362.7 cm² (SM570)

(b) Design stress

$\sigma_U = 157 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

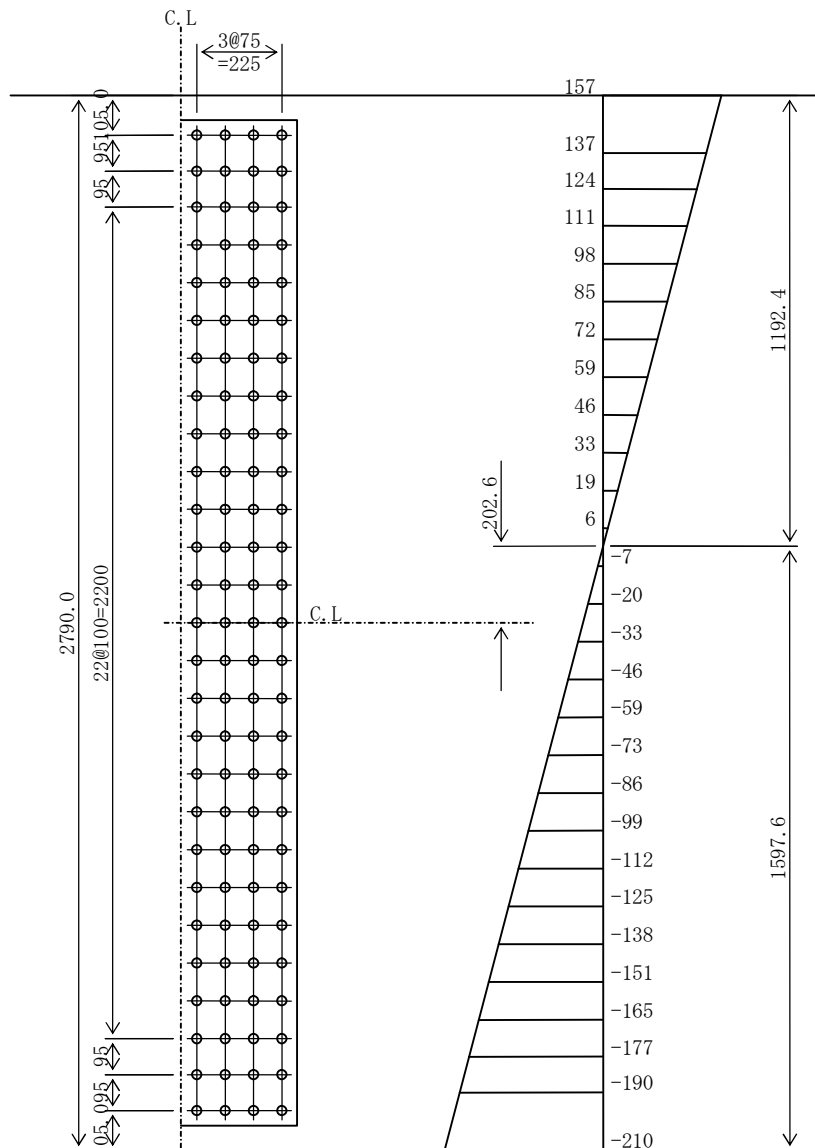
$\sigma_L = -210 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 157 \text{ N/mm}^2$

$\sigma_{Ln} = 210 \text{ N/mm}^2$

$\tau = 79 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.2 \text{ cm}$

Total force to be shared

$$P_1 = 152 * 13 * (190 + 210) / 2 = 396348 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 396348 / (108000 * 1.00) = 3.7 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 79 * 36270 / 108 = 26643 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((396348 / 4)^2 + 26643^2)} = 102607 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3019704 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2501614 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 210 * 2501614 * 10^4 / 1598 = 3287 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3287 * 10^6 / (3019704 * 10^4) * 1533 = 167 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(120) G-2 J-11(Sec-11) LFLG

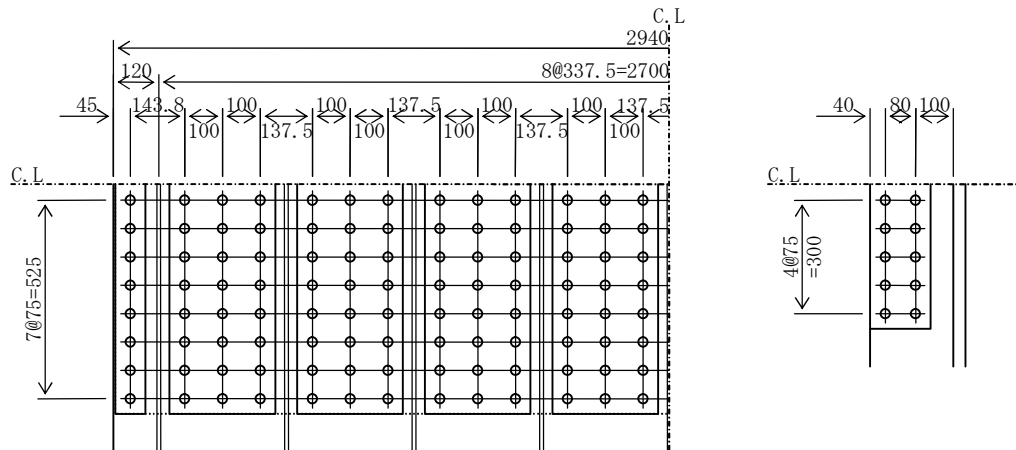
(a) Acting stress

$$\begin{aligned} \sigma_{cmax} &= -214 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 214 \text{ N/mm}^2 \\ \tau_{max} &= 27 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 32 & & A_g &= 940.8 \text{ cm}^2 & (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & & A_{gr} &= 292.6 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 940.8 + 292.6 = 1233.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 214 * 94080 = 20147420 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 214 * 29260 = 6266088 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (20147420 + 6266088) / 255 = 103582 \text{ mm}^2 = 1035.8 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 20147420 / 108000 = 186.6 \text{ pcs.}$ (208 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 6266088 / 108000 = 58.0 \text{ pcs.}$ (7 @ 10 = 70 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 8,5 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 208 = 20147420 / 208 = 96863 \text{ N} \\ \rho_s &= \tau * A_g / 208 = 27 * 94080 / 208 = 12258 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{96863^2 + 12258^2} = 97635 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL 80 * 17		27.2
8-SPL PL 280 * 17		380.8
1-SPL PL 2930 * 15		439.5
14-SPL PL 160 * 11		246.4

$$1093.9$$

$$> A_{gR} = 1035.8 \text{ cm}^2$$

(121) G-2 J-12(Sec-13) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2736 * 11 A = 301.0 cm² (SM570)

(b) Design stress

$$\sigma_U = 158 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

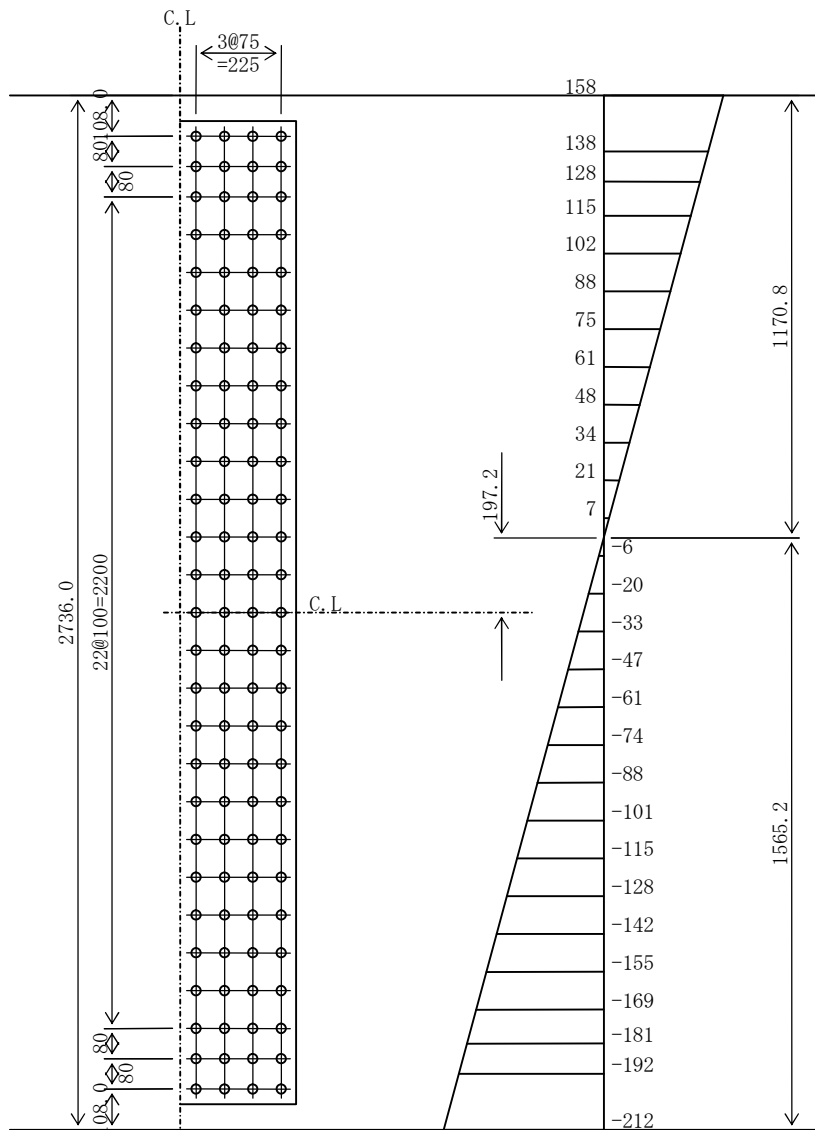
$$\sigma_L = -212 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 158 \text{ N/mm}^2$$

$$\sigma_{Ln} = 212 \text{ N/mm}^2$$

$$\tau = 83 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.8$ cm

Total force to be shared

$$P_1 = 148 * 11 * (192 + 212) / 2 = 328438 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 328438 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 83 * 30096 / 108 = 23066 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((328438 / 4)^2 + 23066^2)} = 85288 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2600 * 9 \quad A_s = 468.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2818481 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1994494 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 212 * 1994494 * 10^4 / 1565 = 2698 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2698 * 10^6 / (2818481 * 10^4) * 1497 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(122) G-2 J-12(Sec-13) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2790 * 11 A = 306.9 cm² (SM570)

(b) Design stress

$\sigma_U = 166 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

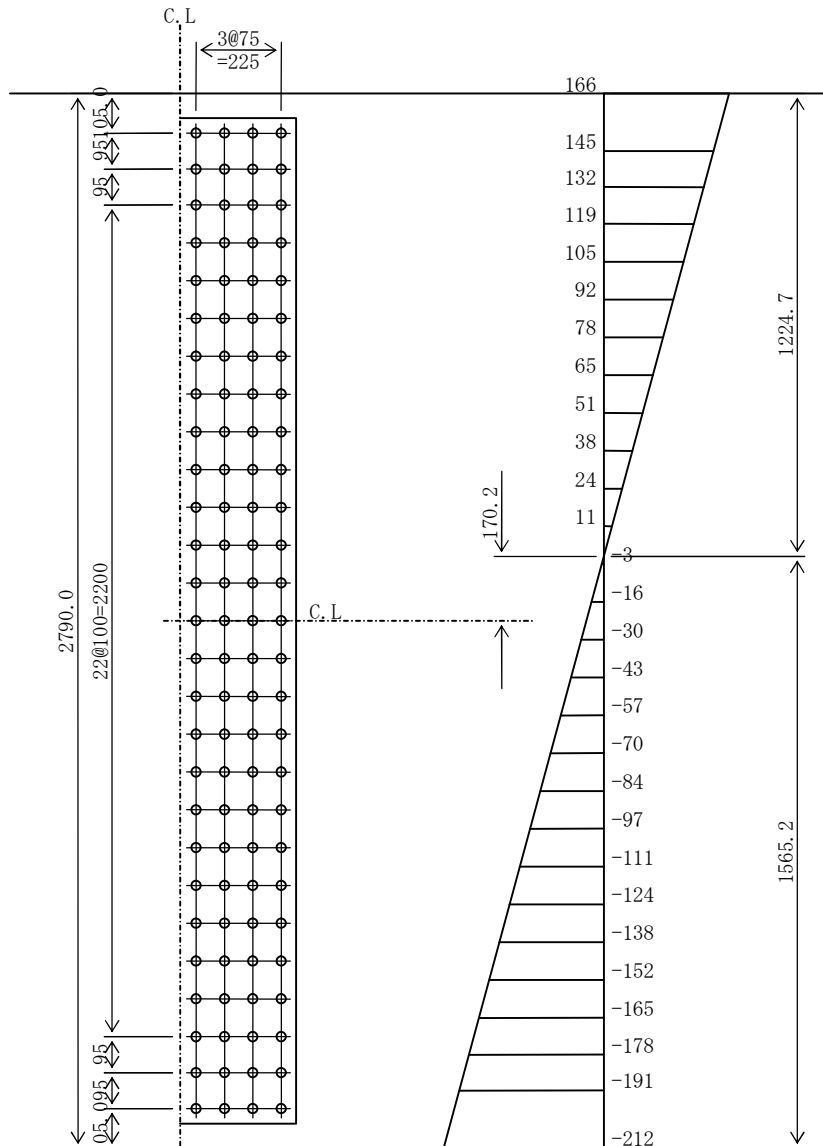
$\sigma_L = -212 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 166 \text{ N/mm}^2$

$\sigma_{Ln} = 212 \text{ N/mm}^2$

$\tau = 85 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.2 \text{ cm}$

Total force to be shared

$$P_1 = 152 * 11 * (191 + 212) / 2 = 337914 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 337914 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 85 * 30690 / 108 = 24205 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((337914 / 4)^2 + 24205^2)} = 87878 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2961943 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2079727 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 212 * 2079727 * 10^4 / 1565 = 2814 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2814 * 10^6 / (2961943 * 10^4) * 1500 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(123) G-2 J-12(Sec-13) LFLG

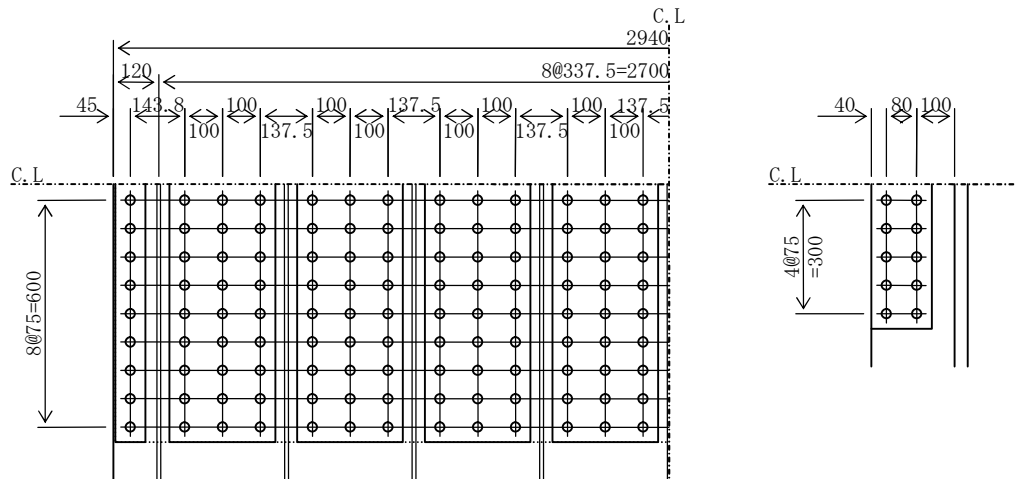
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -216 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 216 \text{ N/mm}^2 \\ \tau_{\max} &= 23 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 35 & \quad A_g = 1029.0 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 1029.0 + 292.6 = 1321.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_c &= \sigma_c * A_g = 216 * 102900 = 22277130 \text{ N} \\ \bullet \text{ Rib } P_{cr} &= \sigma_c * A_{gr} = 216 * 29260 = 6334585 \text{ N} \end{aligned}$$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (22277130 + 6334585) / 255 = 112203 \text{ mm}^2 = 1122.0 \text{ cm}^2$$

(f) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_c / (108000 * 0.98) = 22277130 / 105840 = 210.5 \text{ pcs. (234 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{cr} / (108000 * 1.00) = 6334585 / 108000 = 58.7 \text{ pcs. (7 @ 10 = 70 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 9,5 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 234 = 22277130 / 234 = 95201 \text{ N} \\ \rho_s &= \tau * A_g / 234 = 23 * 102900 / 234 = 10207 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(95201^2 + 10207^2)} = 95747 \text{ N} < \rho_a = 105840 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ags (cm ²)
2-SPL PL	80 * 18	28.8
8-SPL PL	280 * 18	403.2
1-SPL PL	2930 * 16	468.8
14-SPL PL	160 * 11	246.4

1147.2

> AgR = 1122.0cm²

(124) G-2 J-13(Sec-14) LWEB

G-2 J-35(Sec-35) LWEB, G-2 J-36(Sec-37) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2741 * 11 A = 301.5 cm² (SM570)

(b) Design stress

$$\sigma_U = 115 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

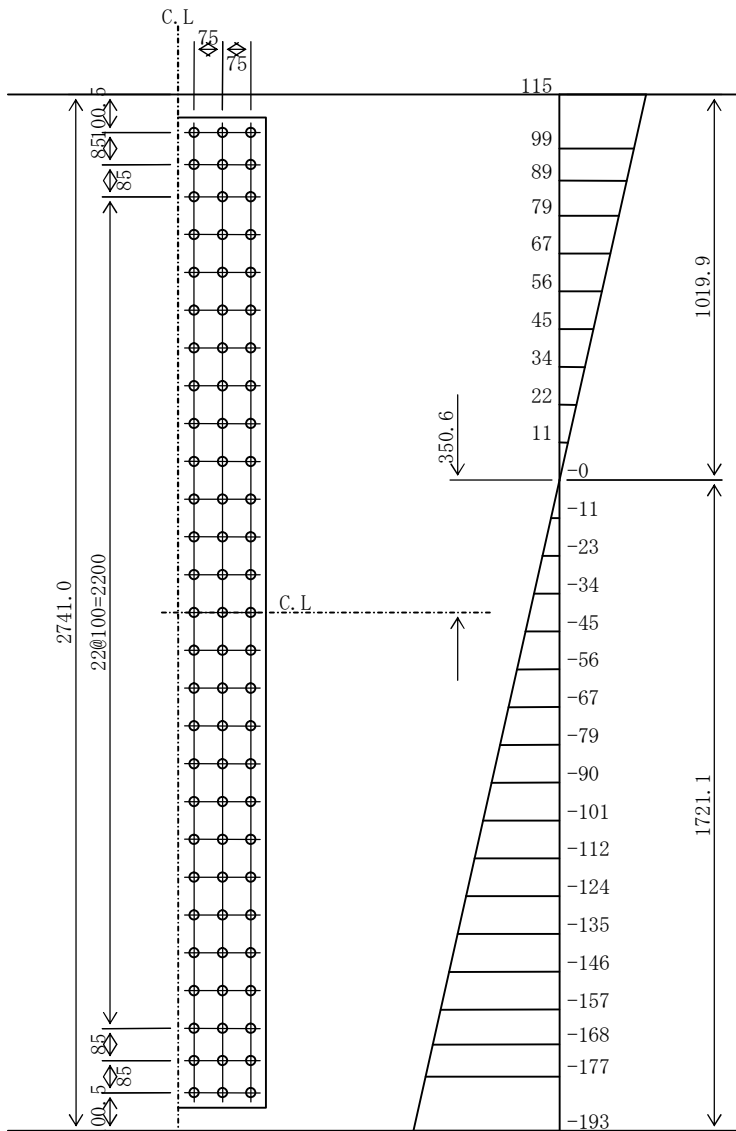
$$\sigma_L = -193 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 115 \text{ N/mm}^2$$

$$\sigma_{Ln} = 193 \text{ N/mm}^2$$

$$\tau = 71 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.3 \text{ cm}$

Total force to be shared

$$P_1 = 143 * 11 * (177 + 193) / 2 = 291591 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 291591 / (108000 * 1.00) = 2.7 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 71 * 30151 / 81 = 26577 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((291591 / 3)^2 + 26577^2)} = 100765 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

2-SPL PL 2620 * 9 $A_s = 471.6 \text{ cm}^2$ (SM570)

Moment of inertia of splice plates $I_s = 3277346 \text{ cm}^4 > I_w$

Moment of inertia of web plate $I_w = 2258297 \text{ cm}^4$

Bending moment to be shared by the web

$$M_w = 193 * 2258297 * 10^4 / 1721 = 2538 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2538 * 10^6 / (3277346 * 10^4) * 1661 = 129 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(125) G-2 J-13(Sec-14) RWEB

G-2 J-35(Sec-35) RWEB, G-2 J-36(Sec-37) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2795 * 11 A = 307.4 cm² (SM570)

(b) Design stress

$$\sigma_U = 121 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

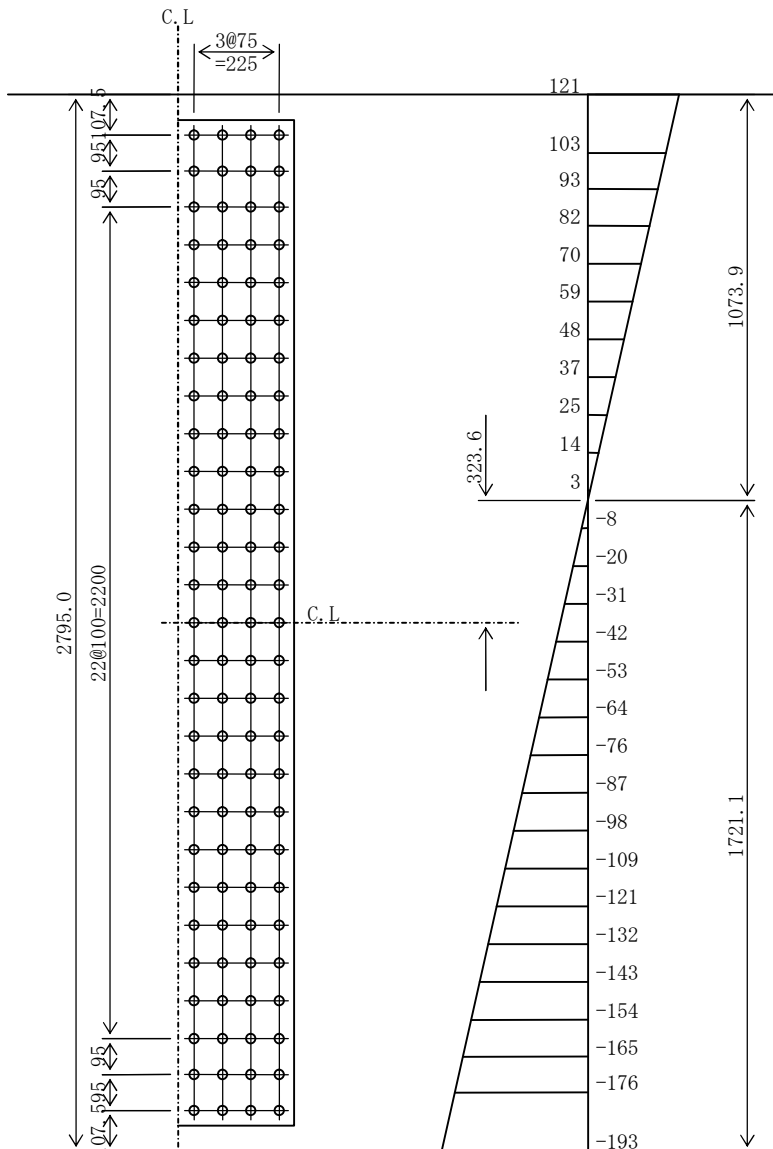
$$\sigma_L = -193 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 121 \text{ N/mm}^2$$

$$\sigma_{Ln} = 193 \text{ N/mm}^2$$

$$\tau = 74 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 11 * (176 + 193) / 2 = 314911 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 314911 / (108000 * 1.00) = 2.9 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 74 * 30745 / 108 = 21057 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((314911 / 4)^2 + 21057^2)} = 81495 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3324503 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2323420 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 193 * 2323420 * 10^4 / 1721 = 2611 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2611 * 10^6 / (3324503 * 10^4) * 1654 = 130 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(126) G-2 J-13(Sec-14) LFLG

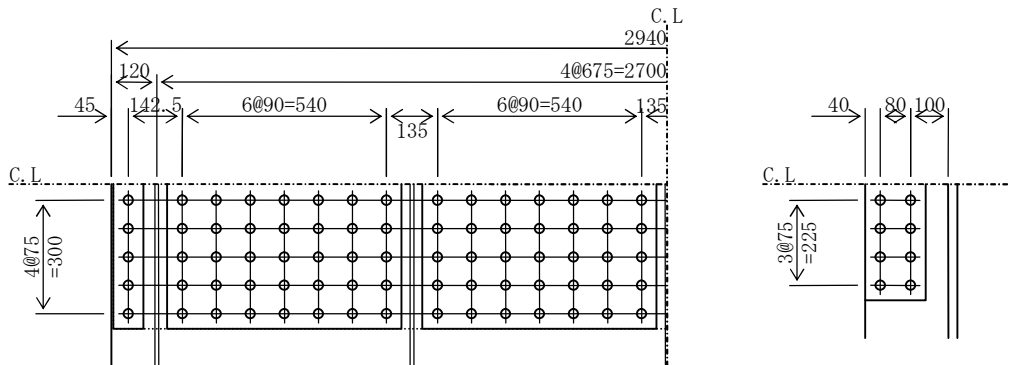
(a) Acting stress

$$\begin{aligned} \sigma_{\text{cmax}} &= -196 \text{ N/mm}^2 & 0.75 \sigma_{\text{ca}} &= 0.75 * 213 = 160 \text{ N/mm}^2 \\ \therefore \sigma_{\text{c}} &= 196 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 28 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 24 & & A_g &= 705.6 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 705.6 + 125.4 & &= 831.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 196 * 70560 = 13837310 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 196 * 12540 = 2459182 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (13837310 + 2459182) / 255 = 63908 \text{ mm}^2 = 639.1 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 13837310 / 108000 = 128.1 \text{ pcs.}$ (150 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 2459182 / 108000 = 22.8 \text{ pcs.}$ (3 @ 8 = 24 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 5.4 \text{ unites})$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 150 = 13837310 / 150 = 92249 \text{ N} \\ \rho_s &= \tau * A_g / 150 = 28 * 70560 / 150 = 12984 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(92249^2 + 12984^2)} = 93158 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 11	17.6
4-SPL PL	620 * 11	272.8
1-SPL PL	2930 * 10	293.0
6-SPL PL	160 * 11	105.6

$$689.0$$

$$> A_{gR} = 639.1 \text{ cm}^2$$

(127) G-2 J-14(Sec-15) LFLG

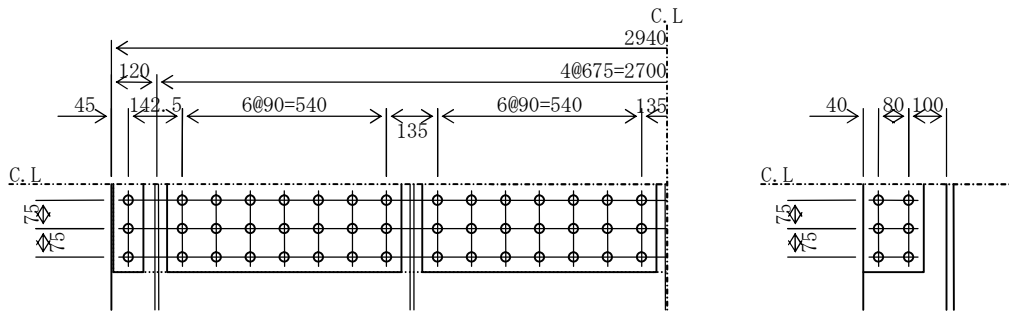
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -125 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 148 = 111 \text{ N/mm}^2 \\ \therefore \sigma_c &= 125 \text{ N/mm}^2 \\ \tau_{\max} &= 27 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 19 & \quad A_g = 558.6 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 558.6 + 125.4 = 684.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 125 * 55860 = 6958480 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 125 * 12540 = 1562108 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (6958480 + 1562108) / 210 = 40574 \text{ mm}^2 = 405.7 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 6958480 / 108000 = 64.4 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1562108 / 108000 = 14.5 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 90 = 6958480 / 90 = 77316 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 27 * 55860 / 90 = 17042 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(77316)^2 + (17042)^2} = 79172 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(h) Check of splice plates

(SM490Y)		A _{gs} (cm ²)
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 405.7 \text{ cm}^2$$

(128) G-2 J-15(Sec-16) LFLG

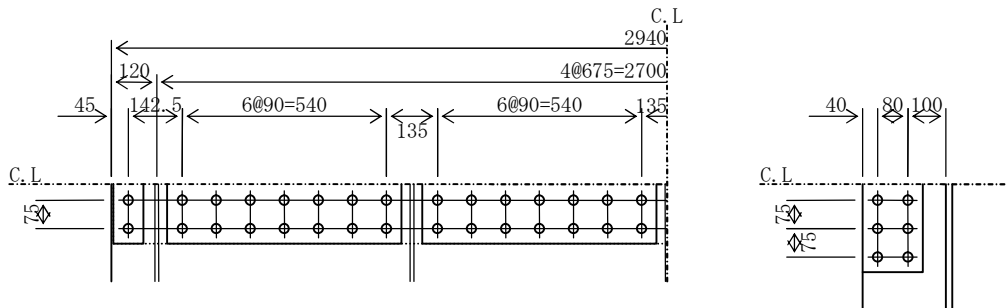
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 61 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -51 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 129 = 96 \text{ N/mm}^2 \\ \therefore \sigma_c &= 96 \text{ N/mm}^2 \\ \tau_{max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 17 & \quad A_g = 499.8 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 499.8 + 125.4 = 625.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 17 & \quad A = 499.8 \\ (499.8 - (30 * 2.5) * 1.7) * 1.1 &= 409.5 < 499.8 \quad \therefore A_n = 409.5 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 409.5 + 106.6 = 516.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 61 * 625.2 / 516.1 = 74 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 40953 / 1.1 = 5863725 \text{ N} \\ &> \sigma_{tn} * A_n = 74 * 40953 = 3016530 \text{ N} \\ P_c &= \sigma_c * A_g = 96 * 49980 = 4818809 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 74 * 10659 = 785124 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 96 * 12540 = 1209041 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (5863725 + 1526175) / 210 = 35190 \text{ mm}^2 = 351.9 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (4818809 + 1209041) / 210 = 28704 \text{ mm}^2 = 287.0 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5863725 / 108000 = 54.3 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1526175 / 108000 = 14.1 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 60 = 5863725 / 60 = 97729 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 24 * 49980 / 60 = 20180 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(97729^2 + 20180^2)} = 99791 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)*0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)*1.1)*1.1= 79.9 <	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(129) G-2 J-16(Sec-16) LFLG

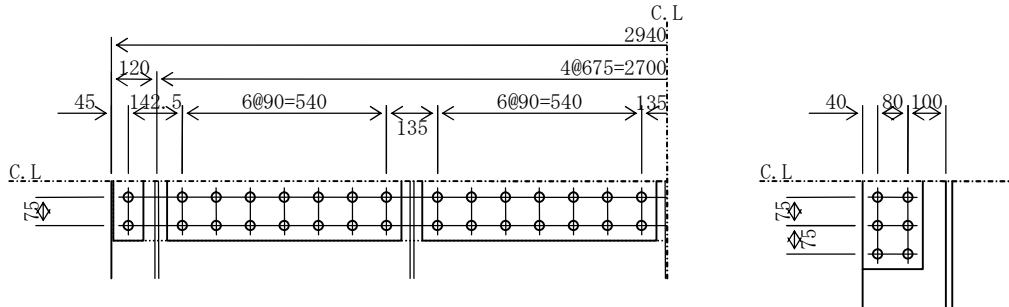
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 127 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 18 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 17 & & A_g &= 499.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 499.8 + 125.4 & &= 625.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{- LFLG PL } 2940 * 17 & & A &= 499.8 \\ (499.8 - (30 * 2.5) * 1.7) * 1.1 &= 409.5 < 499.8 & \therefore A_n &= 409.5 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 409.5 + 106.6 & &= 516.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 127 * 625.2 / 516.1 & &= 154 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 154 * 40953 = 6323168 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 40953 / 1.1 = 5863725 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 154 * 10659 = 1645756 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6323168 + 1645756) / 210 = 37947 \text{ mm}^2 = 379.5 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6323168 / 108000 = 58.5 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1645756 / 108000 = 15.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ &(\text{High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites})\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 60 = 6323168 / 60 = 105386 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 18 * 49980 / 60 = 14851 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105386^2 + 14851^2)} = 106427 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

(130) G-2 J-17(Sec-17) LFLG

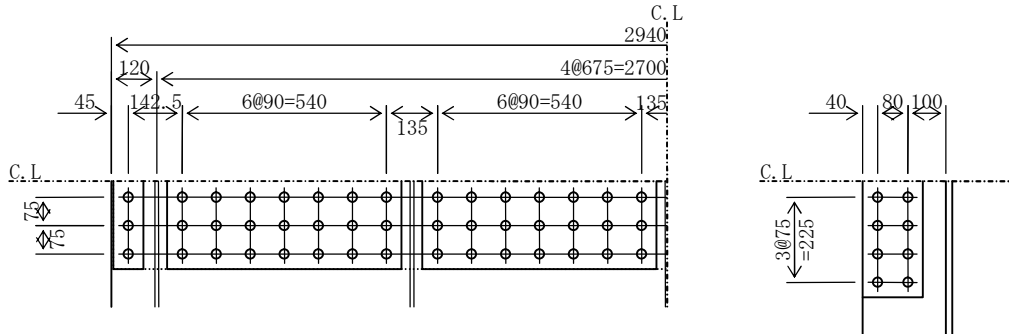
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 165 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 17 & & A_g &= 499.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 499.8 + 125.4 & &= 625.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 17 & & A &= 499.8 \\ & (499.8 - (30 * 2.5) * 1.7) * 1.1 & &= 409.5 < 499.8 \quad \therefore A_n = 409.5 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 & &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 409.5 + 106.6 & &= 516.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 165 * 625.2 / 516.1 & &= 200 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 200 * 40953 = 8175888 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 40953 / 1.1 = 5863725 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 200 * 10659 = 2127971 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8175888 + 2127971) / 210 = 49066 \text{ mm}^2 = 490.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8175888 / 108000 = 75.7 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2127971 / 108000 = 19.7 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 8175888 / 90 = 90843 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 11 * 49980 / 90 = 6321 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(90843)^2 + (6321)^2} = 91063 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)*1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)*1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		662.1		525.4
				> AnR

(131) G-2 J-18(Sec-19) LFLG

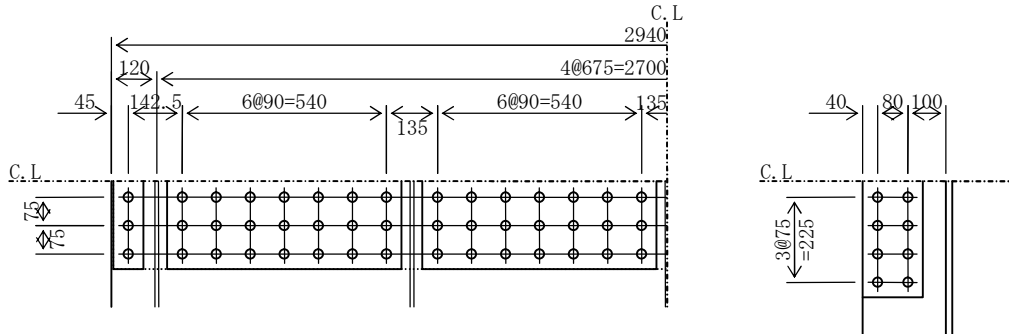
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 9 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 17 & & A_g &= 499.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 499.8 + 125.4 & &= 625.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 17 & & A &= 499.8 \\ (499.8 - (30 * 2.5) * 1.7) * 1.1 &= 409.5 < 499.8 & \therefore A_n &= 409.5 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 409.5 + 106.6 & &= 516.1 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 170 * 625.2 / 516.1 & &= 206 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 206 * 40953 = 8442135 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 40953 / 1.1 = 5863725 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 206 * 10659 = 2197268 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8442135 + 2197268) / 210 = 50664 \text{ mm}^2 = 506.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8442135 / 108000 = 78.2 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2197268 / 108000 = 20.3 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 8442135 / 90 = 93802 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 9 * 49980 / 90 = 5210 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(93802)^2 + (5210)^2} = 93946 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)*1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)*1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		671.7		532.6
				> AnR

(132) G-2 J-22 (Sec-22) LFLG

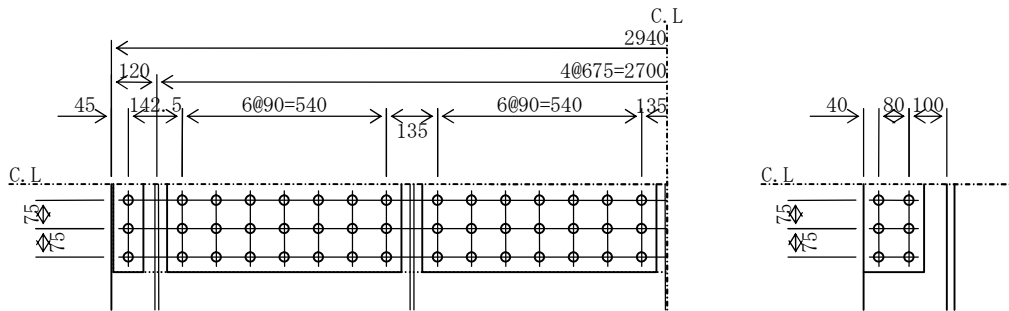
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -148 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 156 = 117 \text{ N/mm}^2 \\ \therefore \sigma_c &= 148 \text{ N/mm}^2 \\ \tau_{\max} &= 30 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 20 & \quad A_g = 588.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 588.0 + 125.4 = 713.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 148 * 58800 = 8712925 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 148 * 12540 = 1858165 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8712925 + 1858165) / 210 = 50339 \text{ mm}^2 = 503.4 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8712925 / 108000 = 80.7 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1858165 / 108000 = 17.2 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 90 = 8712925 / 90 = 96810 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 30 * 58800 / 90 = 19422 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(96810^2 + 19422^2)} = 98739 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

(SM490Y)		A _{gs} (cm ²)
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 503.4 \text{ cm}^2$$

(133) G-2 J-23 (Sec-23) LWEB
 G-2 J-24 (Sec-25) LWEB

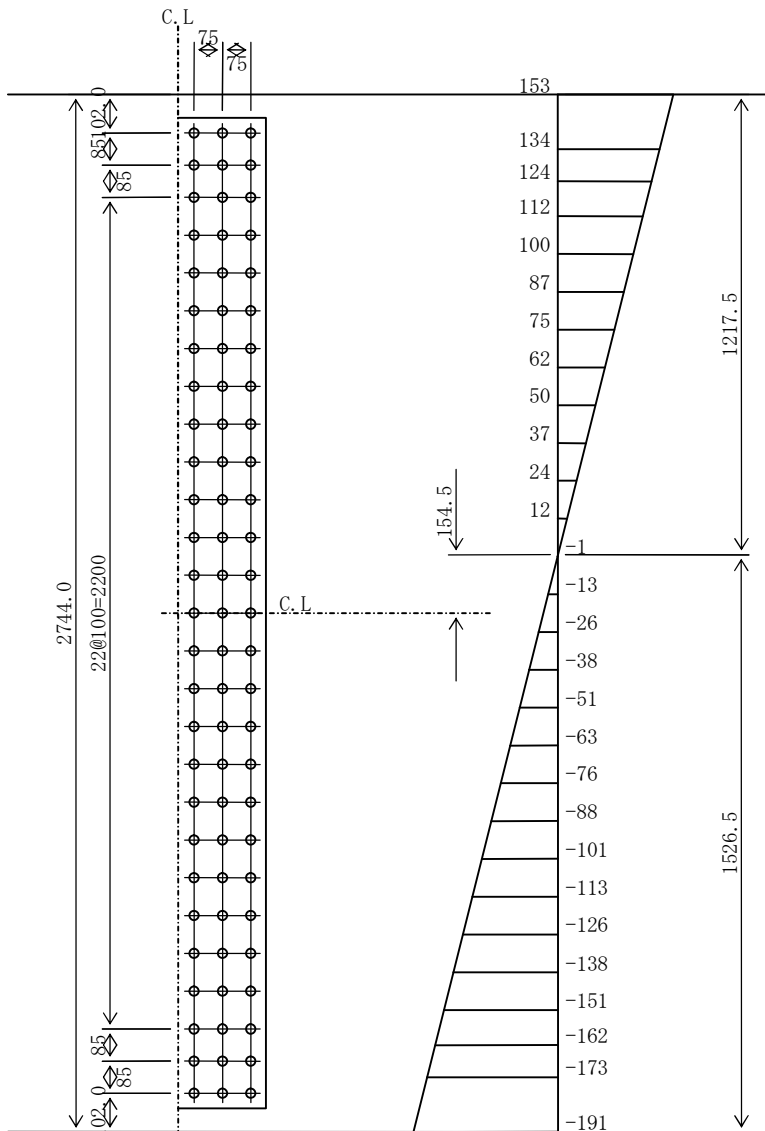
(a) Section area of main plate (Web plate)

1-LWEB PL 2744 * 11 A = 301.8 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 152 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -191 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 152 / 191 = 153 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 75 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.4$ cm

Total force to be shared

$$P_1 = 144 * 11 * (173 + 191) / 2 = 289600 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 289600 / (108000 * 1.00) = 2.7 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 75 * 30184 / 81 = 28030 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((289600 / 3)^2 + 28030^2)} = 100520 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2810280 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1965970 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 1965970 * 10^4 / 1526 = 2463 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2463 * 10^6 / (2810280 * 10^4) * 1464 = 128 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(134) G-2 J-23(Sec-23) RWEB
 G-2 J-24(Sec-25) RWEB

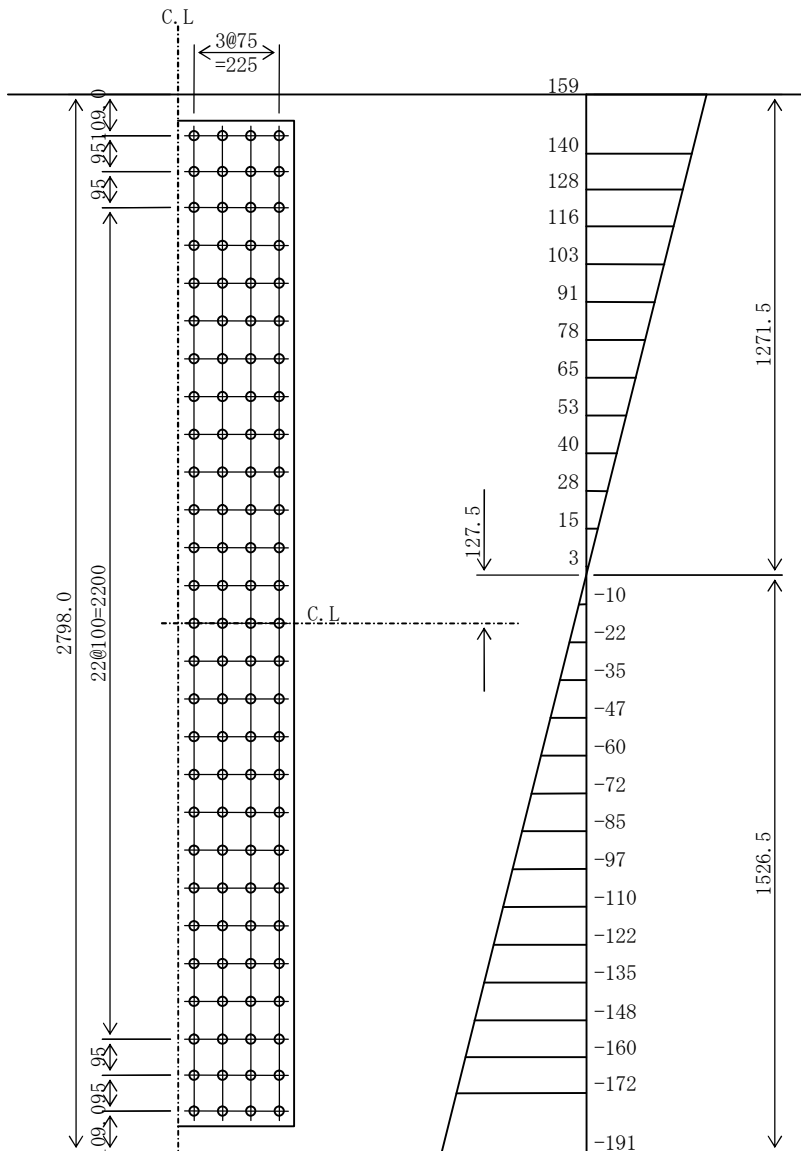
(a) Section area of main plate (Web plate)

1-RWEB PL 2798 * 11 A = 307.8 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 159 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -191 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 159 / 191 = 159 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 78 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.6 \text{ cm}$

Total force to be shared

$$P_1 = 156 * 11 * (172 + 191) / 2 = 312356 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 312356 / (108000 * 1.00) = 2.9 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 78 * 30778 / 108 = 22347 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((312356 / 4)^2 + 22347^2)} = 81224 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2900999 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2057982 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2057982 * 10^4 / 1526 = 2578 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2578 * 10^6 / (2900999 * 10^4) * 1457 = 130 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(135) G-2 J-23(Sec-23) LFLG

G-2 J-10(Sec-10) LFLG, G-2 J-24(Sec-25) LFLG

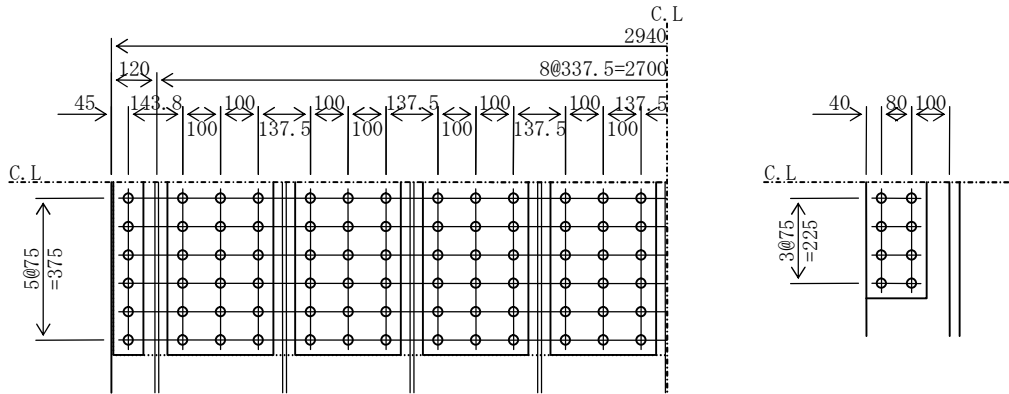
(a) Acting stress

$$\begin{aligned} \sigma_{cmax} &= -194 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 194 \text{ N/mm}^2 \\ \tau_{max} &= 27 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 27 & \quad A_g = 793.8 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 793.8 + 292.6 = 1086.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 194 * 79380 = 15394322 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 194 * 29260 = 5674450 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (15394322 + 5674450) / 255 = 82623 \text{ mm}^2 = 826.2 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 15394322 / 108000 = 142.5 \text{ pcs.}$ (156 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5674450 / 108000 = 52.5 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 6,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 156 = 15394322 / 156 = 98682 \text{ N} \\ \rho_s &= \tau * A_g / 156 = 27 * 79380 / 156 = 13852 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(98682^2 + 13852^2)} = 99649 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 13	20.8
8-SPL PL	280 * 13	291.2
1-SPL PL	2930 * 11	322.3
14-SPL PL	160 * 10	224.0

$$858.3$$

$$> A_{gR} = 826.2 \text{ cm}^2$$

(136) G-2 J-25 (Sec-26) LFLG

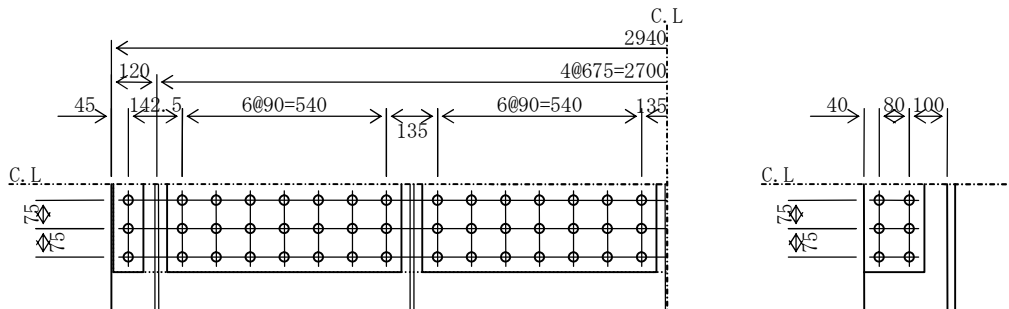
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -139 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 185 = 139 \text{ N/mm}^2 \\ \therefore \sigma_c &= 139 \text{ N/mm}^2 \\ \tau_{\max} &= 29 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & \quad A_g = 617.4 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 = 742.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 139 * 61740 = 8567073 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 139 * 12540 = 1740057 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8567073 + 1740057) / 255 = 40420 \text{ mm}^2 = 404.2 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8567073 / 108000 = 79.3 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1740057 / 108000 = 16.1 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 90 = 8567073 / 90 = 95190 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 29 * 61740 / 90 = 19959 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(95190^2 + 19959^2)} = 97260 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 404.2 \text{ cm}^2$$

(137) G-2 J-26(Sec-26) LFLG

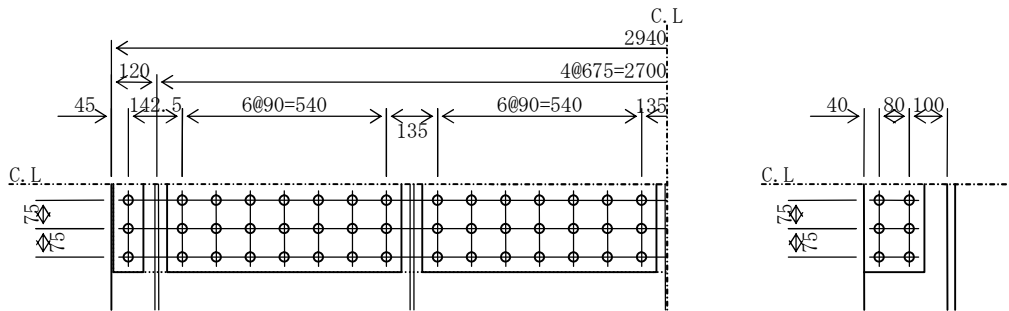
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 41 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \sigma_{cmax} &= -56 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 185 = 139 \text{ N/mm}^2 \\ \therefore \sigma_c &= 139 \text{ N/mm}^2 \\ \tau_{max} &= 25 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & \quad A_g = 617.4 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 = 742.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & \quad A = 617.4 \\ & (617.4 - (30 * 2.5) * 2.1) * 1.1 = 505.9 < 617.4 \quad \therefore A_n = 505.9 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 = 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 505.9 + 106.6 = 612.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 41 * 742.8 / 612.5 = 50 \text{ N/mm}^2 \\ & < \sigma_{ta} = 255 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 50589 / 1.1 = 8795588 \text{ N} \\ & > \sigma_{tn} * A_n = 50 * 50589 = 2546028 \text{ N} \\ P_c &= \sigma_c * A_g = 139 * 61740 = 8567073 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N} \\ & > \sigma_{tn} * A_{nr} = 50 * 10659 = 536443 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 139 * 12540 = 1740057 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (8795588 + 1853212) / 255 = 41760 \text{ mm}^2 = 417.6 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (8567073 + 1740057) / 255 = 40420 \text{ mm}^2 = 404.2 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8795588 / 108000 = 81.4 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1853212 / 108000 = 17.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ & \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ & \rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 90 = 8795588 / 90 = 97729 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 25 * 61740 / 90 = 17220 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97729^2 + 17220^2} = 99234 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM570)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2<	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8<	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9<	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(138) G-2 J-27(Sec-28) LFLG

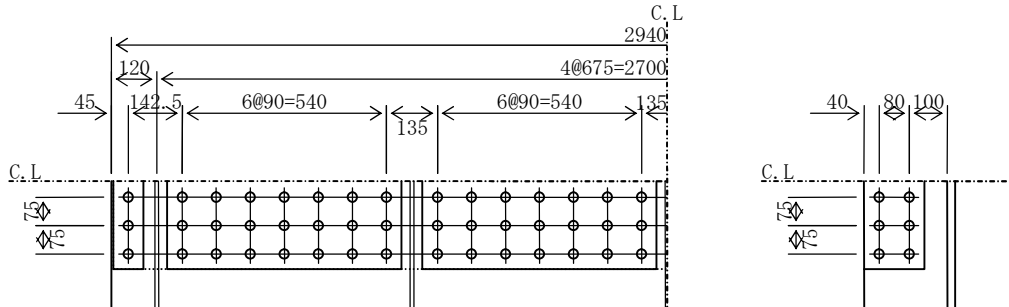
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 118 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 19 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & & A_g &= 617.4 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 & &= 742.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & & A &= 617.4 \\ & (617.4 - (30 * 2.5) * 2.1) * 1.1 & &= 505.9 < 617.4 \quad \therefore A_n = 505.9 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 & &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 505.9 + 106.6 & &= 612.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 118 * 742.8 / 612.5 & &= 143 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 143 * 50589 = 7252297 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 50589 / 1.1 = 7243425 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 143 * 10659 = 1528044 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7252297 + 1528044) / 210 = 41811 \text{ mm}^2 = 418.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7252297 / 108000 = 67.2 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1528044 / 108000 = 14.1 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 3,3 \text{ unites}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 90 = 7252297 / 90 = 80581 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 19 * 61740 / 90 = 13370 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(80581^2 + 13370^2)} = 81683 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

(139) G-2 J-28 (Sec-28) LFLG

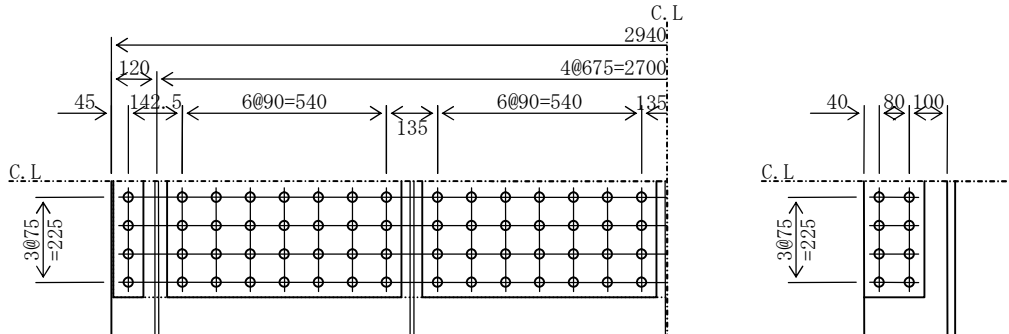
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 168 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 12 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & & A_g &= 617.4 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 & &= 742.8 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & & A &= 617.4 \\ (617.4 - (30 * 2.5) * 2.1) * 1.1 &= 505.9 < 617.4 & \therefore A_n &= 505.9 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 505.9 + 106.6 & &= 612.5 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 168 * 742.8 / 612.5 & &= 204 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 204 * 50589 = 10300316 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 50589 / 1.1 = 7243425 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 204 * 10659 = 2170256 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10300316 + 2170256) / 210 = 59384 \text{ mm}^2 = 593.8 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10300316 / 108000 = 95.4 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2170256 / 108000 = 20.1 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4.4 \text{ unites})$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 10300316 / 120 = 85836 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 12 * 61740 / 120 = 6394 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(85836^2 + 6394^2)} = 86074 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 12	(19.2 -	2*(1*2.5)* 1.2)*1.1= 14.5 <	19.2 ∴ 14.5
4-SPL PL	620 * 12	(297.6 -	4*(7*2.5)* 1.2)*1.1= 235.0 <	297.6 ∴ 235.0
1-SPL PL	2930 * 11	(322.3 -	(30*2.5)* 1.1)*1.1= 263.8 <	322.3 ∴ 263.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		783.1		622.2
				> AnR

(140) G-2 J-29 (Sec-29) LWEB

G-2 J-8 (Sec-9) LWEB, G-2 J-9 (Sec-9) LWEB, G-2 J-14 (Sec-15) LWEB, G-2 J-15 (Sec-16) LWEB
G-2 J-16 (Sec-16) LWEB, G-2 J-17 (Sec-17) LWEB, G-2 J-18 (Sec-19) LWEB
G-2 J-19 (Sec-20) LWEB, G-2 J-20 (Sec-20) LWEB, G-2 J-21 (Sec-21) LWEB
G-2 J-22 (Sec-22) LWEB, G-2 J-27 (Sec-28) LWEB, G-2 J-28 (Sec-28) LWEB
G-2 J-30 (Sec-31) LWEB, G-2 J-31 (Sec-32) LWEB, G-2 J-32 (Sec-32) LWEB
G-2 J-33 (Sec-33) LWEB, G-2 J-34 (Sec-34) LWEB, G-2 J-37 (Sec-38) LWEB
G-2 J-38 (Sec-39) LWEB, G-2 J-39 (Sec-39) LWEB, G-2 J-40 (Sec-40) LWEB
G-2 J-41 (Sec-41) LWEB, G-2 J-42 (Sec-43) LWEB, G-2 J-43 (Sec-44) LWEB
G-2 J-44 (Sec-44) LWEB, G-2 J-45 (Sec-45) LWEB, G-2 J-50 (Sec-51) LWEB
G-2 J-51 (Sec-51) LWEB, G-2 J-52 (Sec-52) LWEB, G-2 J-53 (Sec-53) LWEB
G-2 J-54 (Sec-55) LWEB, G-2 J-55 (Sec-56) LWEB, G-2 J-56 (Sec-57) LWEB
G-2 J-57 (Sec-57) LWEB, G-2 J-58 (Sec-58) LWEB, G-2 J-62 (Sec-63) LWEB
G-2 J-63 (Sec-63) LWEB, G-2 J-64 (Sec-64) LWEB, G-2 J-65 (Sec-65) LWEB
G-2 J-66 (Sec-67) LWEB, G-2 J-67 (Sec-68) LWEB, G-2 J-68 (Sec-68) LWEB
G-2 J-80 (Sec-81) LWEB, G-2 J-81 (Sec-82) LWEB

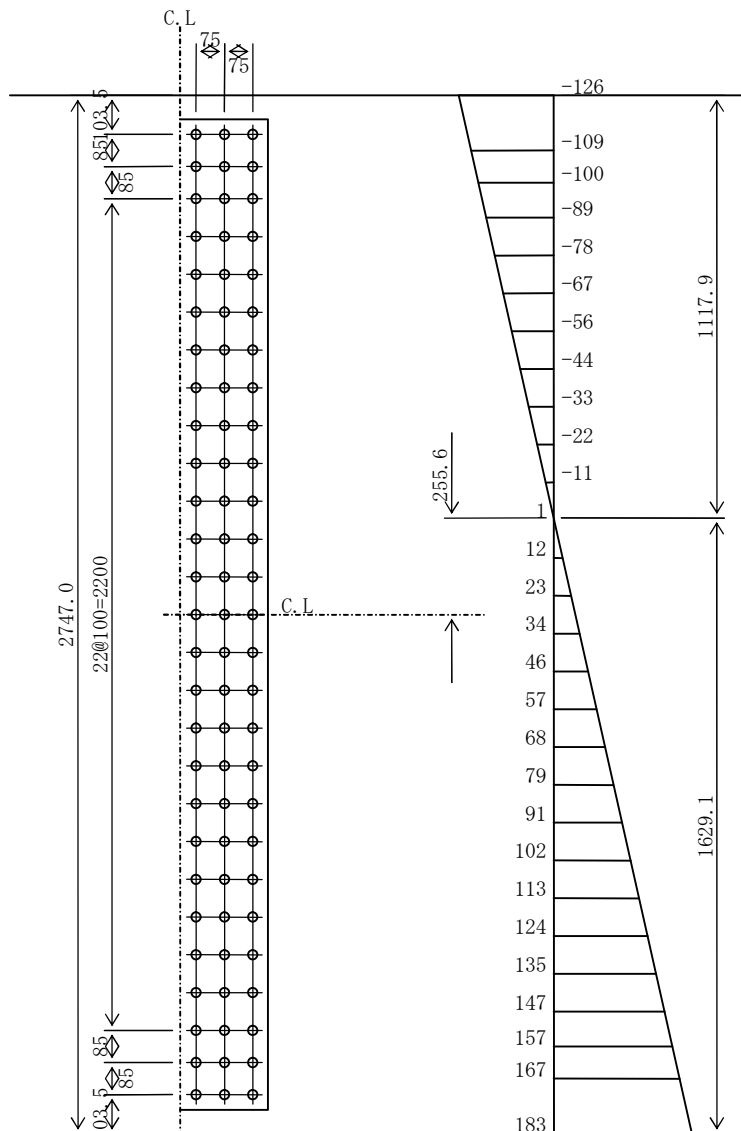
(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM490Y)

(b) Design stress

$$\begin{aligned}\sigma_U &= -126 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_L &= 183 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_{Un} &= 126 \text{ N/mm}^2 \\ \sigma_{Ln} &= 183 \text{ N/mm}^2 \\ \tau &= 17 \text{ N/mm}^2\end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6$ cm

Total force to be shared

$$P_1 = 146 * 11 * (167 + 183) / 2 = 280846 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 280846 / (108000 * 1.00) = 2.6 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 17 * 30217 / 81 = 6269 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((280846 / 3)^2 + 6269^2)} = 93825 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$\rho_a = 108000$ N (inorganic zinc primer is applied.) $N_{max} = 3$ unites)

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3005698 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2097480 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 183 * 2097480 * 10^4 / 1629 = 2357 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2357 * 10^6 / (3005698 * 10^4) * 1566 = 123 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(141) G-2 J-29 (Sec-29) RWEB

G-2 J-8 (Sec-9) RWEB, G-2 J-9 (Sec-9) RWEB, G-2 J-14 (Sec-15) RWEB, G-2 J-15 (Sec-16) RWEB
G-2 J-16 (Sec-16) RWEB, G-2 J-17 (Sec-17) RWEB, G-2 J-18 (Sec-19) RWEB
G-2 J-19 (Sec-20) RWEB, G-2 J-20 (Sec-20) RWEB, G-2 J-21 (Sec-21) RWEB
G-2 J-22 (Sec-22) RWEB, G-2 J-27 (Sec-28) RWEB, G-2 J-28 (Sec-28) RWEB
G-2 J-30 (Sec-31) RWEB, G-2 J-31 (Sec-32) RWEB, G-2 J-32 (Sec-32) RWEB
G-2 J-33 (Sec-33) RWEB, G-2 J-34 (Sec-34) RWEB, G-2 J-37 (Sec-38) RWEB
G-2 J-38 (Sec-39) RWEB, G-2 J-39 (Sec-39) RWEB, G-2 J-40 (Sec-40) RWEB
G-2 J-41 (Sec-41) RWEB, G-2 J-42 (Sec-43) RWEB, G-2 J-43 (Sec-44) RWEB
G-2 J-44 (Sec-44) RWEB, G-2 J-45 (Sec-45) RWEB, G-2 J-50 (Sec-51) RWEB
G-2 J-51 (Sec-51) RWEB, G-2 J-52 (Sec-52) RWEB, G-2 J-53 (Sec-53) RWEB
G-2 J-54 (Sec-55) RWEB, G-2 J-55 (Sec-56) RWEB, G-2 J-56 (Sec-57) RWEB
G-2 J-57 (Sec-57) RWEB, G-2 J-58 (Sec-58) RWEB, G-2 J-62 (Sec-63) RWEB
G-2 J-63 (Sec-63) RWEB, G-2 J-64 (Sec-64) RWEB, G-2 J-65 (Sec-65) RWEB
G-2 J-66 (Sec-67) RWEB, G-2 J-67 (Sec-68) RWEB, G-2 J-68 (Sec-68) RWEB
G-2 J-80 (Sec-81) RWEB, G-2 J-81 (Sec-82) RWEB

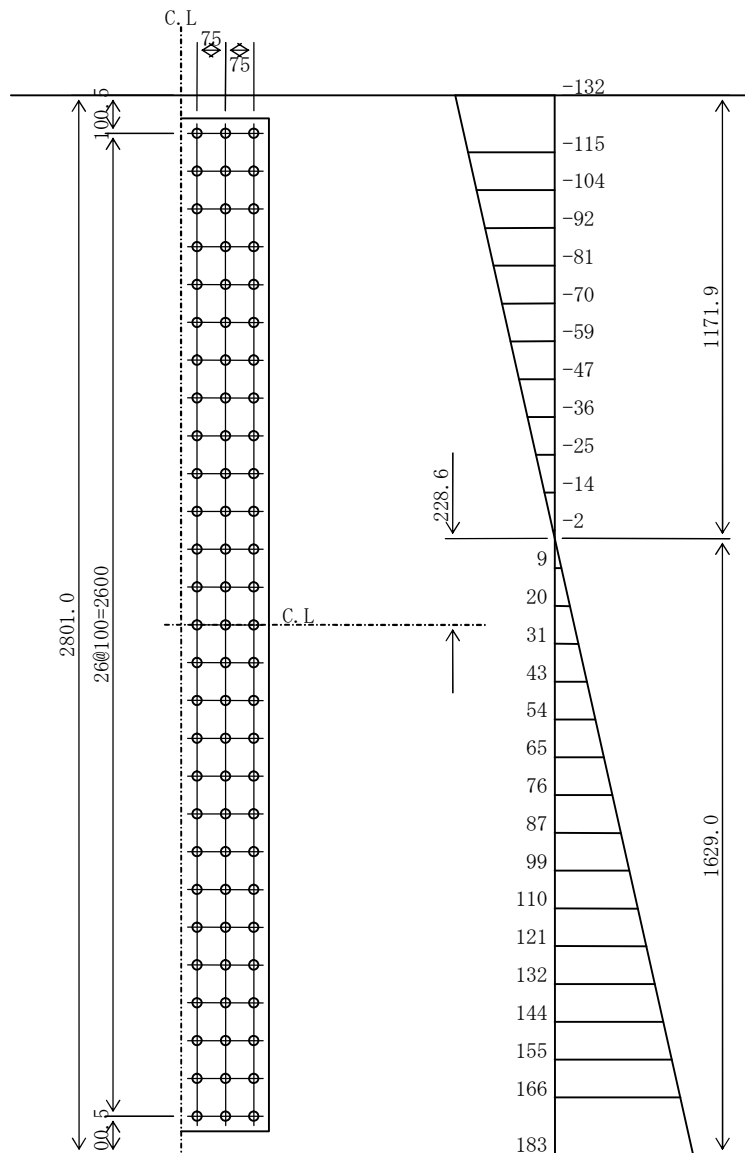
(a) Section area of main plate (Web plate)

$$1\text{-RWEB PL } 2801 * 11 \quad A = 308.1 \text{ cm}^2 \quad (\text{SM490Y})$$

(b) Design stress

$$\begin{aligned} \sigma_U &= -132 \text{ N/mm}^2 < \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_L &= 183 \text{ N/mm}^2 > \sigma_a * 0.75 = 210 * 0.75 = 158 \text{ N/mm}^2 \\ \sigma_{Un} &= 132 \text{ N/mm}^2 \\ \sigma_{Ln} &= 183 \text{ N/mm}^2 \\ \tau &= 17 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 11 * (166 + 183) / 2 = 289084 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 289084 / (108000 * 1.00) = 2.7 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 17 * 30811 / 81 = 6630 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((289084 / 3)^2 + 6630^2)} = 96589 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3139310 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2175360 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 183 * 2175360 * 10^4 / 1629 = 2445 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2445 * 10^6 / (3139310 * 10^4) * 1569 = 122 \text{ N/mm}^2 < \sigma_a = 210 \text{ N/mm}^2$$

(142) G-2 J-29(Sec-29) LFLG

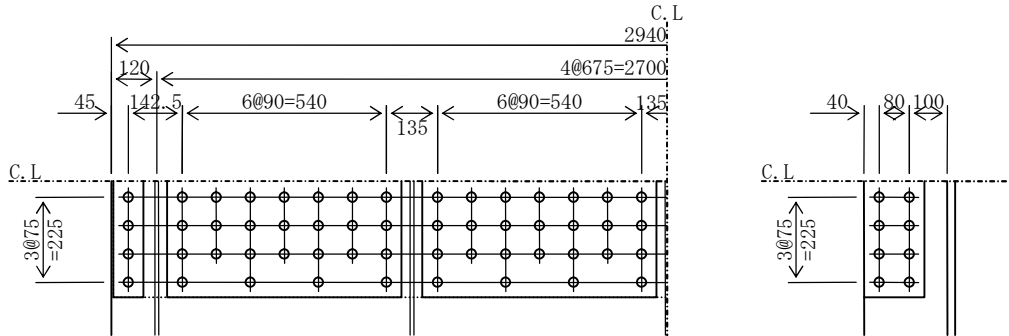
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 185 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 8 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & & A_g &= 617.4 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 & &= 742.8 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & & A &= 617.4 \\ (617.4 - (18 * 2.5) * 2.1) * 1.1 &= 575.2 < 617.4 & \therefore A_n &= 575.2 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 575.2 + 106.6 & &= 681.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 185 * 742.8 / 681.8 & &= 202 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 202 * 57519 = 11620907 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 57519 / 1.1 = 8235675 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 202 * 10659 = 2153501 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (11620907 + 2153501) / 210 = 65592 \text{ mm}^2 = 655.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 11620907 / 108000 = 107.6 \text{ pcs. (108 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2153501 / 108000 = 19.9 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4.4 \text{ unites})$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 108 = 11620907 / 108 = 107601 \text{ N} \\ \rho_s &= \tau * A_g / 108 = 8 * 61740 / 108 = 4436 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(107601)^2 + (4436)^2} = 107692 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9<	22.4 ∴ 16.9
4-SPL PL	620 * 14	(347.2 -	4*(7*2.5)* 1.4)*1.1= 274.1<	347.2 ∴ 274.1
1-SPL PL	2930 * 12	(351.6 -	(30*2.5)* 1.2)*1.1= 287.8<	351.6 ∴ 287.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9<	144.0 ∴ 108.9
<hr/>				
		865.2		687.7
				> AnR

(143) G-2 J-30(Sec-31) LFLG

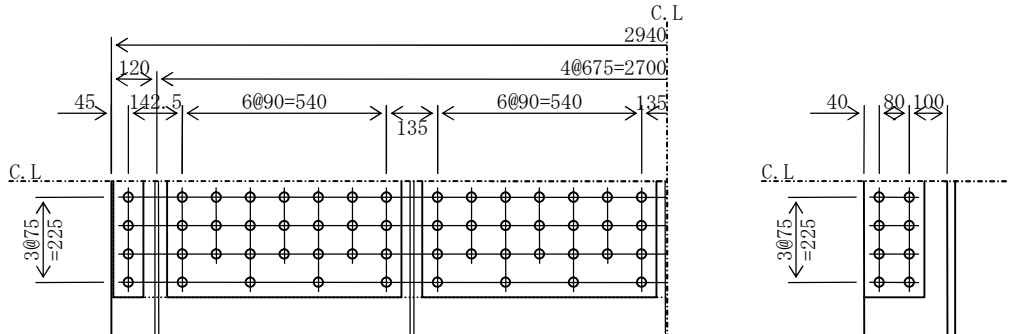
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 181 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 9 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & \quad A_g = 617.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 = 742.8 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 21 & \quad A = 617.4 \\ (617.4 - (18 * 2.5) * 2.1) * 1.1 &= 575.2 < 617.4 \quad \therefore A_n = 575.2 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 575.2 + 106.6 = 681.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 181 * 742.8 / 681.8 = 197 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 197 * 575.2 = 11325056 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 575.2 / 1.1 = 8235675 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 197 * 106.6 = 2098677 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 106.6 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (11325056 + 2098677) / 210 = 63923 \text{ mm}^2 = 639.2 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 11325056 / 108000 = 104.9 \text{ pcs. (108 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2098677 / 108000 = 19.4 \text{ pcs. (3 @ 8 = 24 bolts will be used.)} \\ \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ \rho_a &= 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4.4 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 108 = 11325056 / 108 = 104862 \text{ N} \\ \rho_s &= \tau * A_g / 108 = 9 * 61740 / 108 = 5424 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{104862^2 + 5424^2} = 105002 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 13	(20.8 -	2*(1*2.5)* 1.3)*1.1= 15.7 <	20.8 ∴ 15.7
4-SPL PL	620 * 13	(322.4 -	4*(7*2.5)* 1.3)*1.1= 254.5 <	322.4 ∴ 254.5
1-SPL PL	2930 * 12	(351.6 -	(30*2.5)* 1.2)*1.1= 287.8 <	351.6 ∴ 287.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6

829.2

659.7
> AnR

(144) G-2 J-31 (Sec-32) LFLG

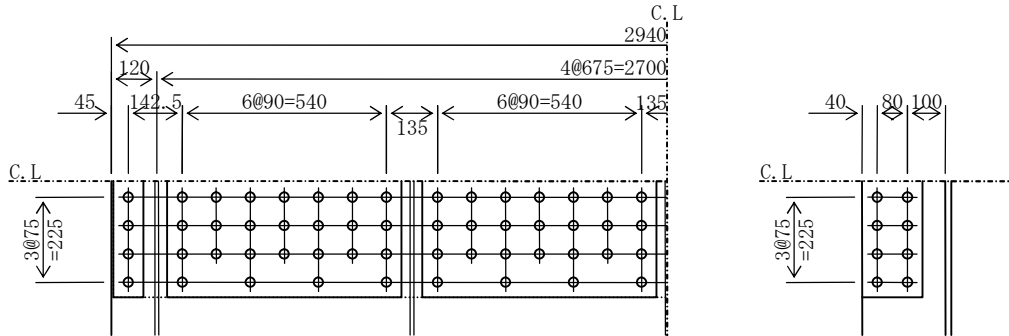
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 179 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 18 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 16 & & A_g &= 470.4 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 470.4 + 125.4 & &= 595.8 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 16 & & A &= 470.4 \\ (470.4 - (18 * 2.5) * 1.6) * 1.1 &= 438.2 < 470.4 & \therefore A_n &= 438.2 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 438.2 + 106.6 & &= 544.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 179 * 595.8 / 544.8 & &= 196 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 196 * 43824 = 8596624 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 43824 / 1.1 = 6274800 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 196 * 10659 = 2090896 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8596624 + 2090896) / 210 = 50893 \text{ mm}^2 = 508.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8596624 / 108000 = 79.6 \text{ pcs. (108 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2090896 / 108000 = 19.4 \text{ pcs. (3 @ 8 = 24 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4,4 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 108 = 8596624 / 108 = 79598 \text{ N} \\ \rho_s &= \tau * A_g / 108 = 18 * 47040 / 108 = 7762 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{79598^2 + 7762^2} = 79976 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)*1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)*1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)*1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		662.1		525.4
				> AnR

(145) G-2 J-32 (Sec-32) LFLG
 G-2 J-33 (Sec-33) LFLG

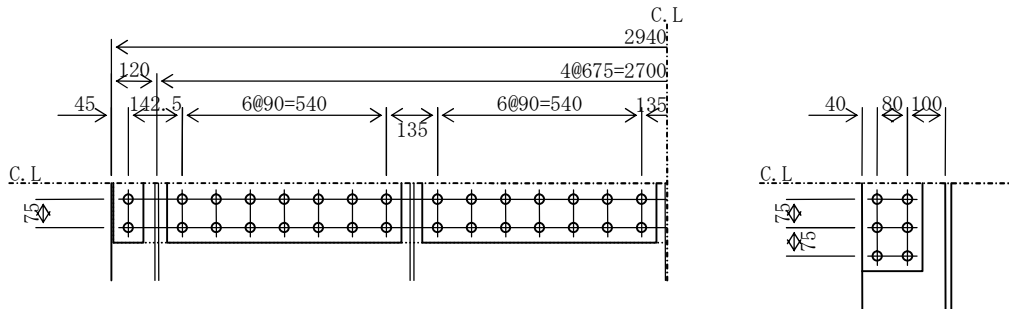
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 113 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -1 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 117 = 88 \text{ N/mm}^2 \\ \therefore \sigma_c &= 88 \text{ N/mm}^2 \\ \tau_{max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 16 & \quad A_g = 470.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 470.4 + 125.4 = 595.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 16 & \quad A = 470.4 \\ (470.4 - (30 * 2.5) * 1.6) * 1.1 &= 385.4 < 470.4 \quad \therefore A_n = 385.4 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 385.4 + 106.6 = 492.0 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 113 * 595.8 / 492.0 = 137 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 38544 / 1.1 = 5518800 \text{ N} \\ &> \sigma_{tn} * A_n = 137 * 38544 = 5269475 \text{ N} \\ P_c &= \sigma_c * A_g = 88 * 47040 = 4132629 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 137 * 10659 = 1457226 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 88 * 12540 = 1101683 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (5518800 + 1526175) / 210 = 33548 \text{ mm}^2 = 335.5 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (4132629 + 1101683) / 210 = 24925 \text{ mm}^2 = 249.3 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5518800 / 108000 = 51.1 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1526175 / 108000 = 14.1 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ \text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ \rho_a &= 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2.3 \text{ unites)} \end{aligned}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 60 = 5518800 / 60 = 91980 \text{ N}$$

$$\rho s = \tau * Ag / 60 = 24 * 47040 / 60 = 18864 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(91980)^2 + (18864)^2} = 93894 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)*0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)*1.1)*1.1= 79.9 <	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(146) G-2 J-34(Sec-34) LFLG

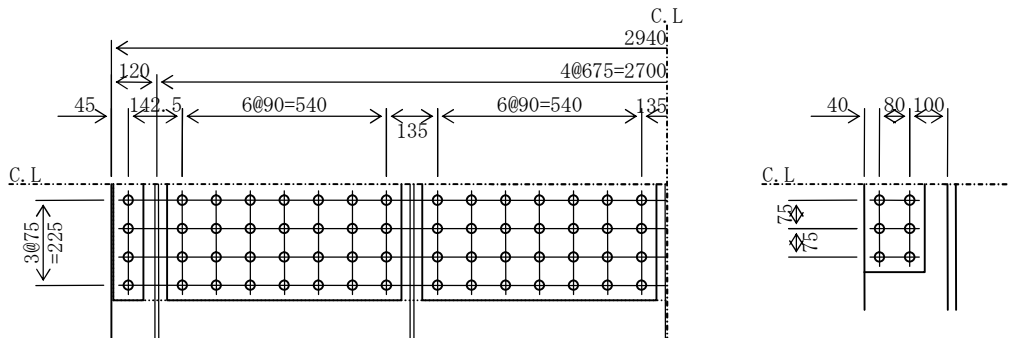
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -154 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 170 = 128 \text{ N/mm}^2 \\ \therefore \sigma_c &= 154 \text{ N/mm}^2 \\ \tau_{\max} &= 28 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 22 & & A_g &= 646.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 646.8 + 125.4 & &= 772.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 154 * 64680 = 9945779 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 154 * 12540 = 1928263 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (9945779 + 1928263) / 210 = 56543 \text{ mm}^2 = 565.4 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 9945779 / 108000 = 92.1 \text{ pcs.}$ (120 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1928263 / 108000 = 17.9 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,3 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 120 = 9945779 / 120 = 82881 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 28 * 64680 / 120 = 15286 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(82881^2 + 15286^2)} = 84279 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 10	96.0

$$597.3$$

$$> A_{gR} = 565.4 \text{ cm}^2$$

(147) G-2 J-35(Sec-35) LFLG

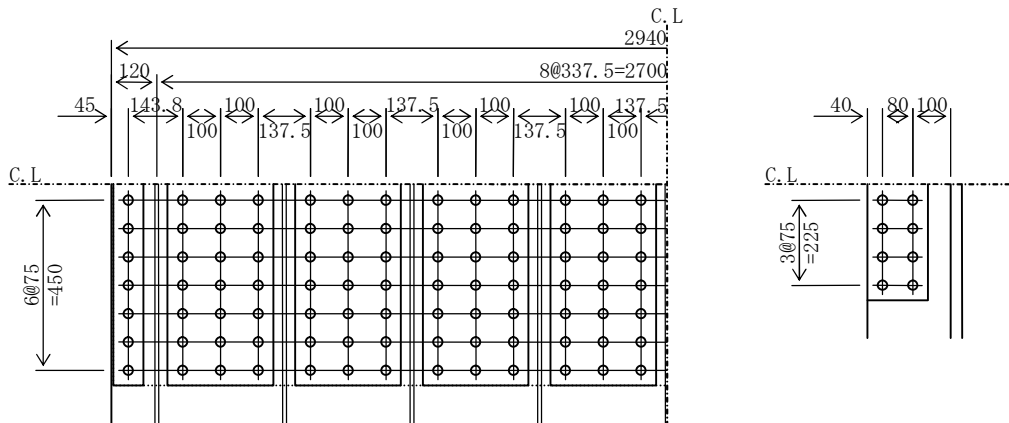
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -196 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 196 \text{ N/mm}^2 \\ \tau_{\max} &= 25 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 30 & \quad A_g = 882.0 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 882.0 + 292.6 = 1174.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 196 * 88200 = 17288611 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 196 * 29260 = 5735428 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (17288611 + 5735428) / 255 = 90290 \text{ mm}^2 = 902.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 17288611 / 108000 = 160.1 \text{ pcs.}$ (182 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5735428 / 108000 = 53.1 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 7,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 182 = 17288611 / 182 = 94992 \text{ N} \\ \rho_s &= \tau * A_g / 182 = 25 * 88200 / 182 = 12289 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{94992^2 + 12289^2} = 95784 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL 80 * 14		22.4
8-SPL PL 280 * 14		313.6
1-SPL PL 2930 * 12		351.6
14-SPL PL 160 * 10		224.0

$$911.6$$

$$> A_{gR} = 902.9 \text{ cm}^2$$

(148) G-2 J-36(Sec-37) LFLG

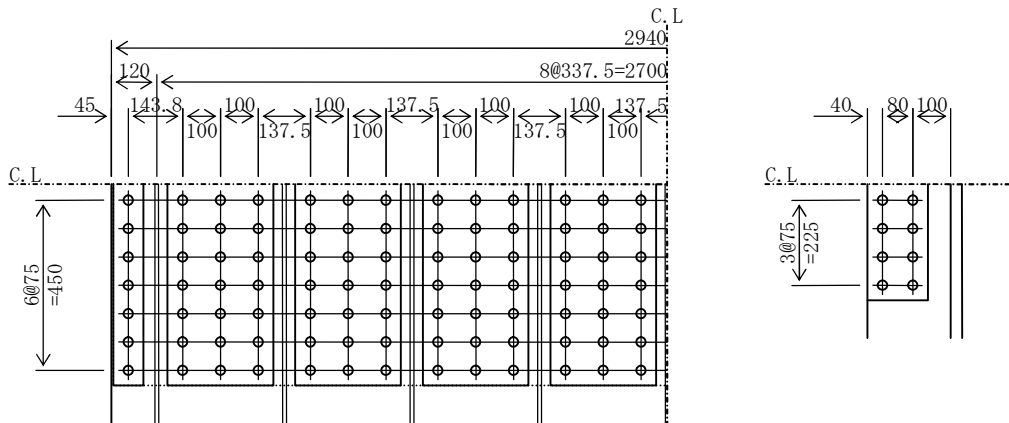
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -197 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 197 \text{ N/mm}^2 \\ \tau_{\max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 30 & \quad Ag = 882.0 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad Agr = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma Ag = Ag + Agr &= 882.0 + 292.6 = 1174.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * Ag = 197 * 88200 = 17369402 \text{ N}$
- Rib $P_{cr} = \sigma_c * Agr = 197 * 29260 = 5762230 \text{ N}$

(e) Required section area of the splice plates

$$AgR = (P_c + P_{cr}) / \sigma_a = (17369402 + 5762230) / 255 = 90712 \text{ mm}^2 = 907.1 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 17369402 / 108000 = 160.8 \text{ pcs.}$ (182 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5762230 / 108000 = 53.4 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 7,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 182 = 17369402 / 182 = 95436 \text{ N} \\ \rho_s &= \tau * Ag / 182 = 24 * 88200 / 182 = 11788 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{95436^2 + 11788^2} = 96162 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ag _s (cm ²)
2-SPL PL	80 * 14	22.4
8-SPL PL	280 * 14	313.6
1-SPL PL	2930 * 12	351.6
14-SPL PL	160 * 11	246.4

$$934.0$$

$$> AgR = 907.1 \text{ cm}^2$$

(149) G-2 J-37(Sec-38) LFLG

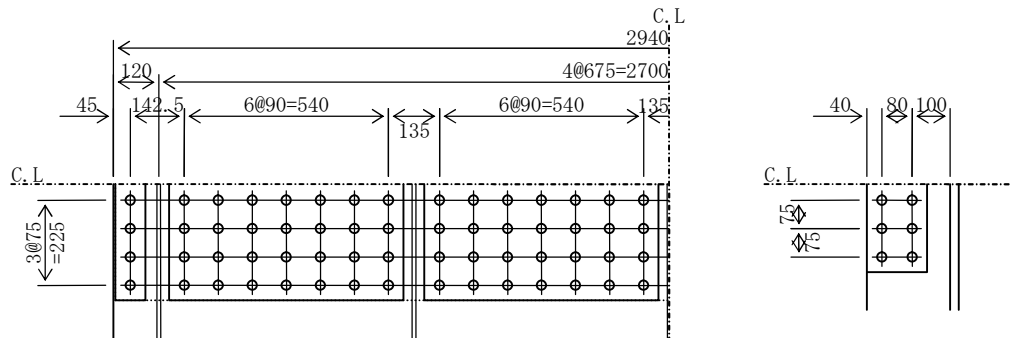
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -154 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 176 = 132 \text{ N/mm}^2 \\ \therefore \sigma_c &= 154 \text{ N/mm}^2 \\ \tau_{\max} &= 27 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 23 & \quad A_g = 676.2 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 676.2 + 125.4 = 801.6 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 154 * 67620 = 10415171 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 154 * 12540 = 1931474 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (10415171 + 1931474) / 210 = 58794 \text{ mm}^2 = 587.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 10415171 / 108000 = 96.4 \text{ pcs.}$ (120 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1931474 / 108000 = 17.9 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,3 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 120 = 10415171 / 120 = 86793 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 27 * 67620 / 120 = 15040 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(86793^2 + 15040^2)} = 88087 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM490Y)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 10	16.0
4-SPL PL	620 * 10	248.0
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 10	96.0

$$623.7$$

$$> A_{gR} = 587.9 \text{ cm}^2$$

(150) G-2 J-40 (Sec-40) LFLG
 G-2 J-43 (Sec-44) LFLG

(a) Acting stress

$$\sigma_{tmax} = 173 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 210 = 158 \text{ N/mm}^2$$

$$\tau_{max} = 17 \text{ N/mm}^2$$

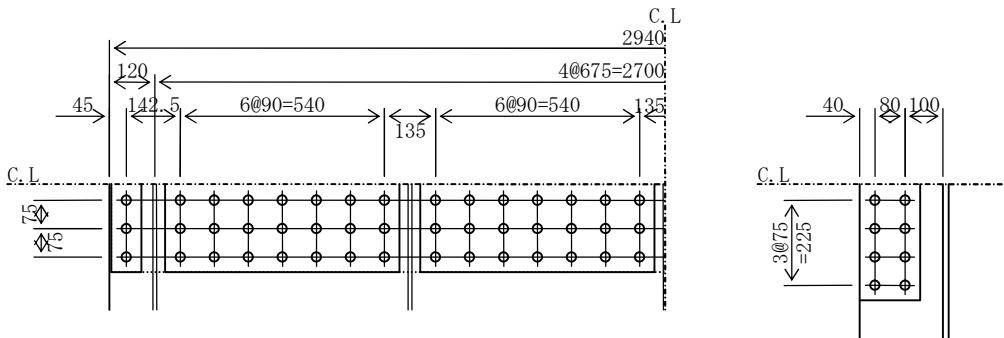
(b) Section area of main plate

$$1\text{-LFLG PL } 2940 * 15 \quad A_g = 441.0 \text{ cm}^2 \quad (\text{SM490Y})$$

$$3\text{-RIB PL } 220 * 19 \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\Sigma A_g = A_g + A_{gr} = 441.0 + 125.4 = 566.4 \text{ cm}^2$$

(c) Bolt arrangement



(d) Check of section of main plate

$$1\text{-LFLG PL } 2940 * 15 \quad A = 441.0$$

$$(441.0 - (30 * 2.5) * 1.5) * 1.1 = 361.4 < 441.0 \quad \therefore A_n = 361.4 \text{ cm}^2$$

$$3\text{-RIB PL } 220 * 19 \quad A_r = 125.4$$

$$(125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 = 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2$$

$$\Sigma A_n = A_n + A_{nr} = 361.4 + 106.6 = 467.9 \text{ cm}^2$$

$$\sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n = 173 * 566.4 / 467.9 = 209 \text{ N/mm}^2$$

$$< \sigma_{ta} = 210 \text{ N/mm}^2$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 209 * 361.35 = 7550048 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 361.35 / 1.1 = 5173875 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 209 * 106.59 = 2227092 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 106.59 / 1.1 = 1526175 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7550048 + 2227092) / 210 = 46558 \text{ mm}^2 = 465.6 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 7550048 / 108000 = 69.9 \text{ pcs. (90 bolts will be used.)}$
- Rib $n_r = P_{tr} / (108000 * 1.00) = 2227092 / 108000 = 20.6 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\rho_p = P_t / 90 = 7550048 / 90 = 83889 \text{ N}$$

$$\rho_s = \tau * A_g / 90 = 17 * 44100 / 90 = 8201 \text{ N}$$

$$\rho = \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(83889)^2 + (8201)^2} = 84289 \text{ N} < \rho_a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)*0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)*1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		645.3		511.8
				> AnR

(151) G-2 J-41 (Sec-41) LFLG
 G-2 J-42 (Sec-43) LFLG

(a) Acting stress

$$\sigma_{tmax} = 172 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 210 = 158 \text{ N/mm}^2$$

$$\tau_{max} = 9 \text{ N/mm}^2$$

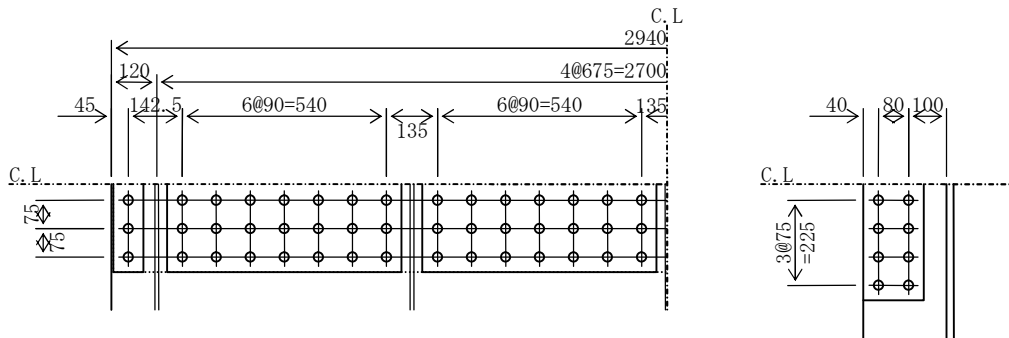
(b) Section area of main plate

$$1\text{-LFLG PL } 2940 * 19 \quad A_g = 558.6 \text{ cm}^2 \quad (\text{SM490Y})$$

$$3\text{-RIB PL } 220 * 19 \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y})$$

$$\Sigma A_g = A_g + A_{gr} = 558.6 + 125.4 = 684.0 \text{ cm}^2$$

(c) Bolt arrangement



(d) Check of section of main plate

$$1\text{-LFLG PL } 2940 * 19 \quad A = 558.6$$

$$(558.6 - (30 * 2.5) * 1.9) * 1.1 = 457.7 < 558.6 \quad \therefore A_n = 457.7 \text{ cm}^2$$

$$3\text{-RIB PL } 220 * 19 \quad A_r = 125.4$$

$$(125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 = 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2$$

$$\Sigma A_n = A_n + A_{nr} = 457.7 + 106.6 = 564.3 \text{ cm}^2$$

$$\sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n = 172 * 684.0 / 564.3 = 209 \text{ N/mm}^2$$

$$< \sigma_{ta} = 210 \text{ N/mm}^2$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 209 * 45771 = 9564031 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 45771 / 1.1 = 6553575 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 209 * 10659 = 2227240 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (9564031 + 2227240) / 210 = 56149 \text{ mm}^2 = 561.5 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 9564031 / 108000 = 88.6 \text{ pcs. (90 bolts will be used.)}$
- Rib $n_r = P_{tr} / (108000 * 1.00) = 2227240 / 108000 = 20.6 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\rho_p = P_t / 90 = 9564031 / 90 = 106267 \text{ N}$$

$$\rho_s = \tau * A_g / 90 = 9 * 55860 / 90 = 5511 \text{ N}$$

$$\rho = \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(106267)^2 + (5511)^2} = 106410 \text{ N} < \rho_a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
4-SPL PL	620 * 11	(272.8 -	4*(7*2.5)* 1.1)*1.1= 215.4 <	272.8 ∴ 215.4
1-SPL PL	2930 * 10	(293.0 -	(30*2.5)* 1.0)*1.1= 239.8 <	293.0 ∴ 239.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		727.4		577.4
				> AnR

(152) G-2 J-46 (Sec-46) LFLG
 G-2 J-49 (Sec-50) LFLG

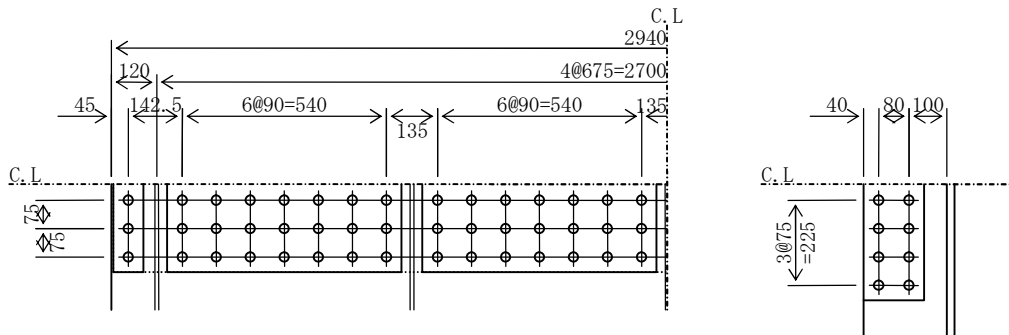
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -158 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 174 = 130 \text{ N/mm}^2 \\ \therefore \sigma_c &= 158 \text{ N/mm}^2 \\ \tau_{\max} &= 30 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 20 & \quad Ag = 588.0 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad Agr = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma Ag = Ag + Agr &= 588.0 + 125.4 = 713.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * Ag = 158 * 58800 = 9302983 \text{ N}$
- Rib $P_{cr} = \sigma_c * Agr = 158 * 12540 = 1984004 \text{ N}$

(e) Required section area of the splice plates

$$AgR = (P_c + P_{cr}) / \sigma_a = (9302983 + 1984004) / 255 = 44263 \text{ mm}^2 = 442.6 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 9302983 / 108000 = 86.1 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1984004 / 108000 = 18.4 \text{ pcs.}$ (3 @ 8 = 24 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 90 = 9302983 / 90 = 103366 \text{ N} \\ \rho_s &= \tau * Ag / 90 = 30 * 58800 / 90 = 19763 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(103366^2 + 19763^2)} = 105239 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ag _s (cm ²)
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$\begin{aligned} &587.7 \\ &> AgR = 442.6 \text{ cm}^2 \end{aligned}$$

(153) G-2 J-47 (Sec-47) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2796 * 11 A = 307.6 cm² (SM570)

(b) Design stress

$$\sigma_U = 156 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

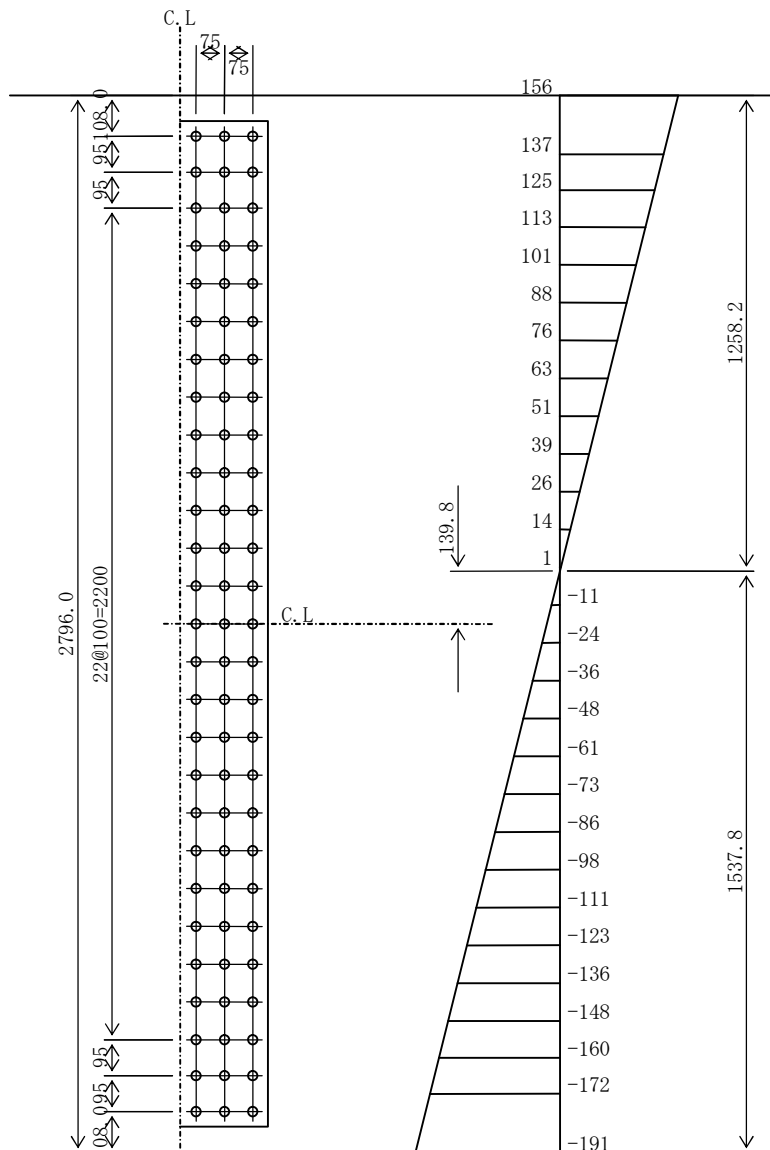
$$\sigma_L = -191 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 156 / 191 = 156 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 79 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.5$ cm

Total force to be shared

$$P_1 = 155 * 11 * (172 + 191) / 2 = 310590 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 310590 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 79 * 30756 / 81 = 29997 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((310590 / 3)^2 + 29997^2)} = 107788 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2916740 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2063755 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2063755 * 10^4 / 1538 = 2567 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2567 * 10^6 / (2916740 * 10^4) * 1470 = 129 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(154) G-2 J-47(Sec-47) LFLG

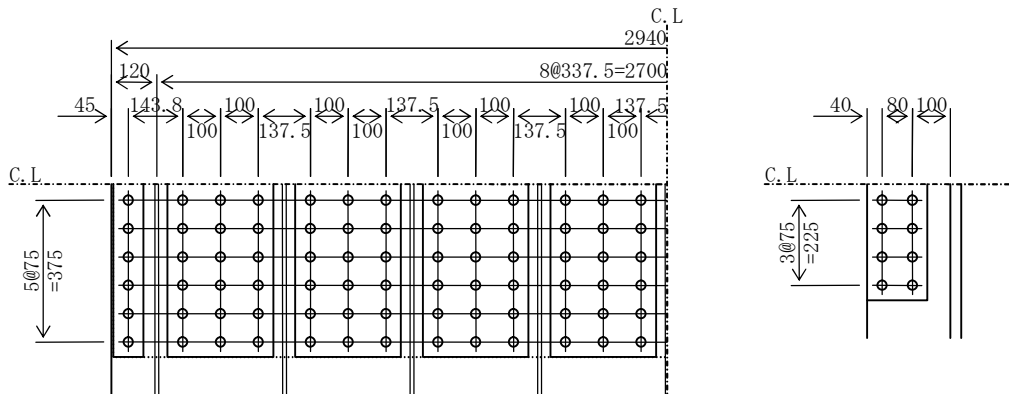
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -194 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 194 \text{ N/mm}^2 \\ \tau_{\max} &= 26 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 29 & \quad Ag = 852.6 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad Agr = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma Ag = Ag + Agr &= 852.6 + 292.6 = 1145.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * Ag = 194 * 85260 = 16570622 \text{ N}$
- Rib $P_{cr} = \sigma_c * Agr = 194 * 29260 = 5686798 \text{ N}$

(e) Required section area of the splice plates

$$AgR = (P_c + P_{cr}) / \sigma_a = (16570622 + 5686798) / 255 = 87284 \text{ mm}^2 = 872.8 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 16570622 / 108000 = 153.4 \text{ pcs.}$ (156 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5686798 / 108000 = 52.7 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 156 = 16570622 / 156 = 106222 \text{ N} \\ \rho_s &= \tau * Ag / 156 = 26 * 85260 / 156 = 13974 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(106222^2 + 13974^2)} = 107137 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	Ag _s (cm ²)
2-SPL PL	80 * 14	22.4
8-SPL PL	280 * 14	313.6
1-SPL PL	2930 * 11	322.3
14-SPL PL	160 * 10	224.0

$$882.3$$

$$> AgR = 872.8 \text{ cm}^2$$

(155) G-2 J-48 (Sec-49) LWEB
 G-2 J-47 (Sec-47) LWEB

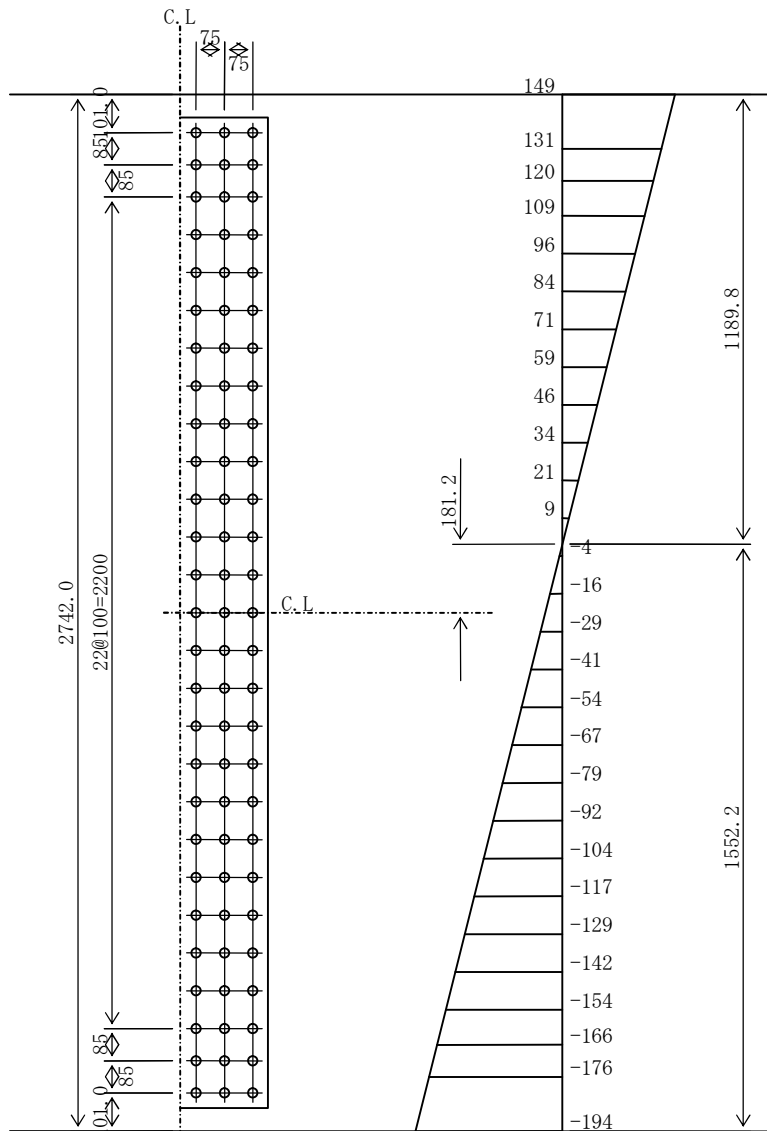
(a) Section area of main plate (Web plate)

1-LWEB PL 2742 * 11 A = 301.6 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -194 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 149 \text{ N/mm}^2 \\ \sigma_{Ln} &= 194 \text{ N/mm}^2 \\ \tau &= 76 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.3 \text{ cm}$

Total force to be shared

$$P_1 = 143 * 11 * (176 + 194) / 2 = 292745 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 292745 / (108000 * 1.00) = 2.7 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 76 * 30162 / 81 = 28264 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((292745 / 3)^2 + 28264^2)} = 101592 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2852630 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1988865 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 194 * 1988865 * 10^4 / 1552 = 2491 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2491 * 10^6 / (2852630 * 10^4) * 1491 = 130 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(156) G-2 J-48 (Sec-49) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2796 * 11 A = 307.6 cm² (SM570)

(b) Design stress

$$\sigma_U = 156 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

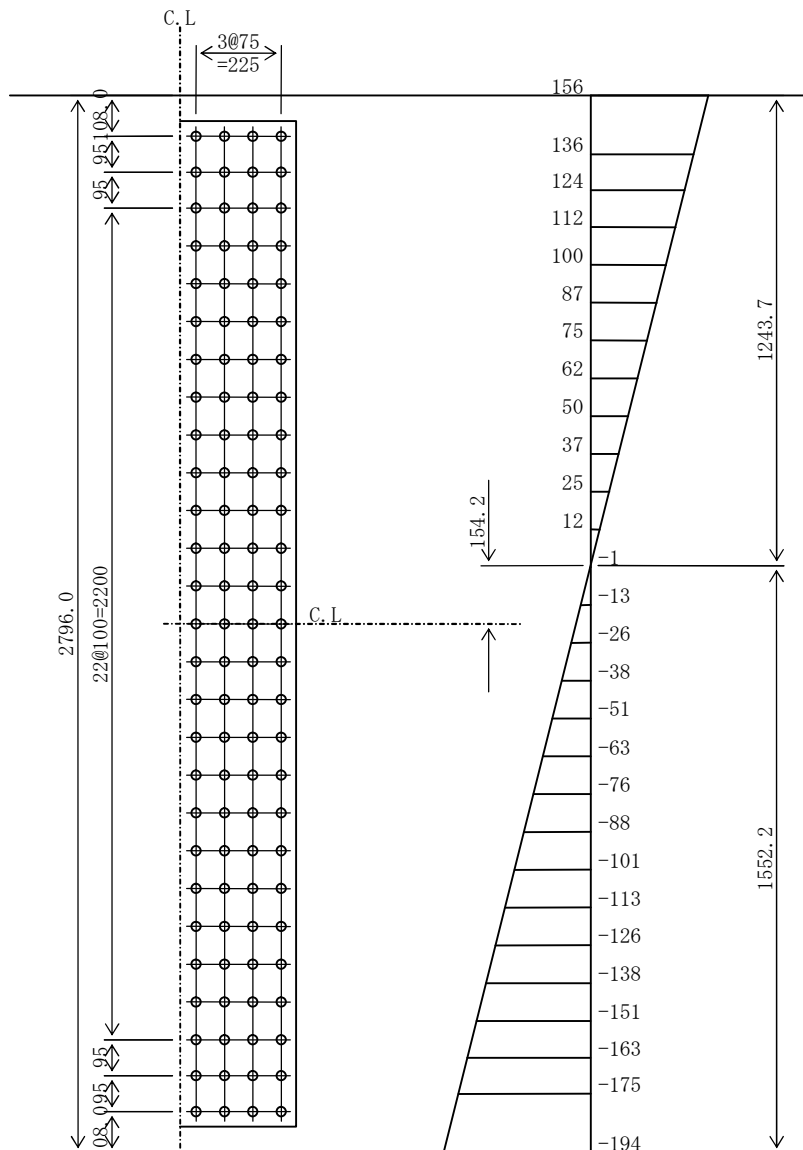
$$\sigma_L = -194 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 156 \text{ N/mm}^2$$

$$\sigma_{Ln} = 194 \text{ N/mm}^2$$

$$\tau = 79 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.5 \text{ cm}$

Total force to be shared

$$P_1 = 155 * 11 * (175 + 194) / 2 = 315940 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 315940 / (108000 * 1.00) = 2.9 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 79 * 30756 / 108 = 22452 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((315940 / 4)^2 + 22452^2)} = 82114 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2937083 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2076823 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 194 * 2076823 * 10^4 / 1552 = 2602 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2602 * 10^6 / (2937083 * 10^4) * 1484 = 131 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(157) G-2 J-48 (Sec-49) LFLG

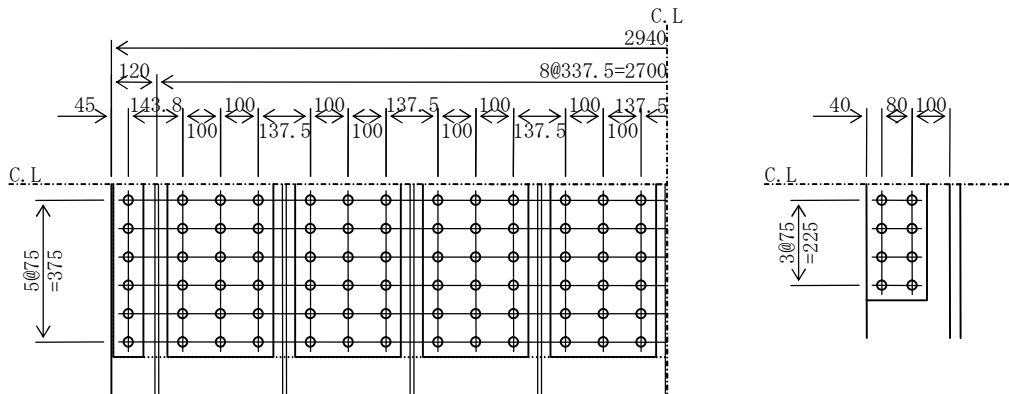
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -198 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 198 \text{ N/mm}^2 \\ \tau_{\max} &= 26 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 28 & \quad A_g = 823.2 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 823.2 + 292.6 = 1115.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 198 * 82320 = 16295738 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 198 * 29260 = 5792193 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (16295738 + 5792193) / 255 = 86619 \text{ mm}^2 = 866.2 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 16295738 / 108000 = 150.9 \text{ pcs.}$ (156 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5792193 / 108000 = 53.6 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 156 = 16295738 / 156 = 104460 \text{ N} \\ \rho_s &= \tau * A_g / 156 = 26 * 82320 / 156 = 13932 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{104460^2 + 13932^2} = 105385 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 13	20.8
8-SPL PL	280 * 13	291.2
1-SPL PL	2930 * 12	351.6
14-SPL PL	160 * 11	246.4

$$910.0$$

$$> A_{gR} = 866.2 \text{ cm}^2$$

(158) G-2 J-51 (Sec-51) LFLG

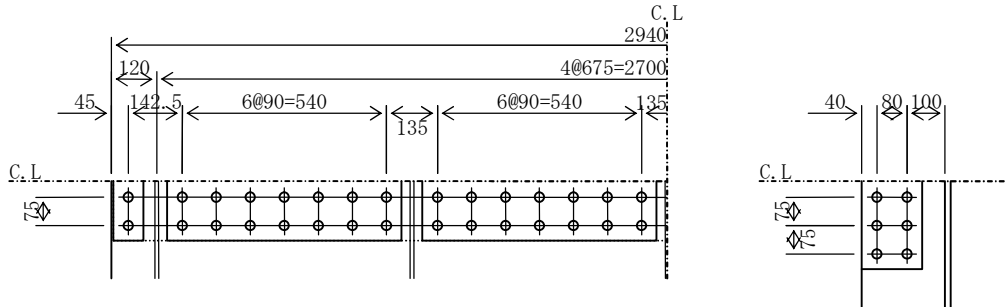
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 122 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 25 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & & A_g &= 441.0 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 441.0 + 125.4 & &= 566.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & & A &= 441.0 \\ (441.0 - (30 * 2.5) * 1.5) * 1.1 &= 361.4 < 441.0 & \therefore A_n &= 361.4 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 361.4 + 106.6 & &= 467.9 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 122 * 566.4 / 467.9 & &= 148 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 148 * 36135 = 5339912 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 36135 / 1.1 = 5173875 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 148 * 10659 = 1575152 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (5339912 + 1575152) / 210 = 32929 \text{ mm}^2 = 329.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5339912 / 108000 = 49.4 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1575152 / 108000 = 14.6 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ &(\text{High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2.3 \text{ unites})\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 60 = 5339912 / 60 = 88999 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 25 * 44100 / 60 = 18109 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(88999)^2 + (18109)^2} = 90822 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

(159) G-2 J-52 (Sec-52) LFLG

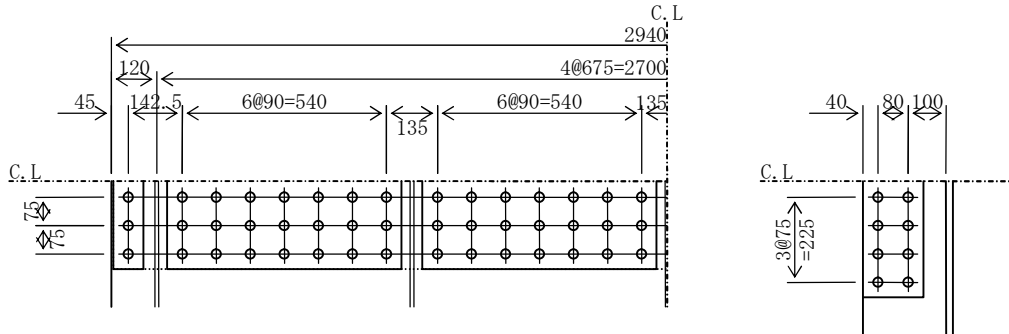
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 166 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 15 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A_g &= 529.2 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 & &= 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A &= 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 & \therefore A_n &= 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 & &= 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 166 * 654.6 / 540.2 & &= 201 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 201 * 43362 = 8735063 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 43362 / 1.1 = 6208650 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 201 * 10659 = 2147204 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8735063 + 2147204) / 210 = 51820 \text{ mm}^2 = 518.2 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8735063 / 108000 = 80.9 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2147204 / 108000 = 19.9 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 8735063 / 90 = 97056 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 15 * 52920 / 90 = 8652 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(97056^2 + 8652^2)} = 97441 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)* 1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)* 1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		662.1		525.4
				> AnR

(160) G-2 J-53(Sec-53) LFLG

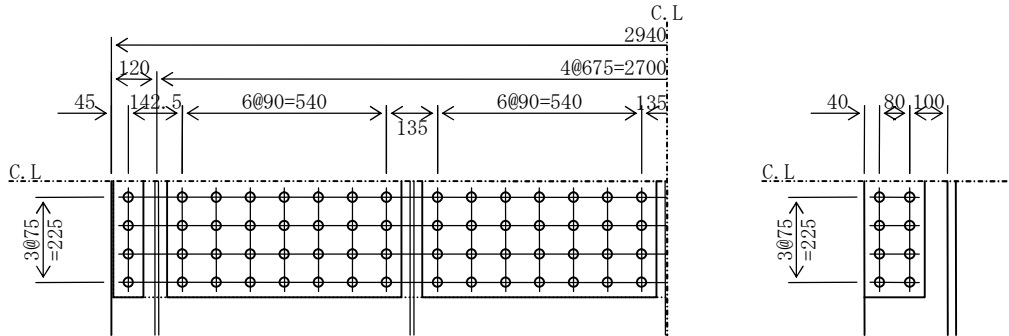
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 169 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 8 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 22 & & A_g &= 646.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 646.8 + 125.4 & &= 772.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 22 & & A &= 646.8 \\ (646.8 - (30 * 2.5) * 2.2) * 1.1 &= 530.0 < 646.8 & \therefore A_n &= 530.0 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 530.0 + 106.6 & &= 636.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 169 * 772.2 / 636.6 & &= 205 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 205 * 52998 = 10864745 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 52998 / 1.1 = 7588350 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 205 * 10659 = 2185126 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10864745 + 2185126) / 210 = 62142 \text{ mm}^2 = 621.4 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10864745 / 108000 = 100.6 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2185126 / 108000 = 20.2 \text{ pcs. (3 @ 8 = 24 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4,4 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 10864745 / 120 = 90540 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 8 * 64680 / 120 = 4379 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{90540^2 + 4379^2} = 90645 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags(cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 13	(20.8 -	2*(1*2.5)* 1.3)*1.1= 15.7<	20.8 ∴ 15.7
4-SPL PL	620 * 13	(322.4 -	4*(7*2.5)* 1.3)*1.1= 254.5<	322.4 ∴254.5
1-SPL PL	2930 * 11	(322.3 -	(30*2.5)* 1.1)*1.1= 263.8<	322.3 ∴263.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6<	134.4 ∴101.6
<hr/>				
		799.9		635.7
				> AnR

(161) G-2 J-54(Sec-55) LFLG

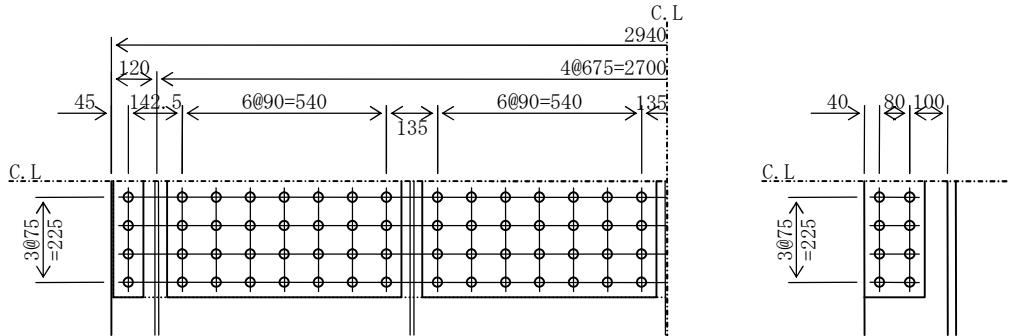
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 8 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 22 & & A_g &= 646.8 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 646.8 + 125.4 & &= 772.2 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 22 & & A &= 646.8 \\ & (646.8 - (30 * 2.5) * 2.2) * 1.1 &= 530.0 < 646.8 & \therefore A_n = 530.0 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 530.0 + 106.6 &= 636.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 170 * 772.2 / 636.6 &= 206 \text{ N/mm}^2 \\ & & < \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 206 * 52998 = 10923056 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 52998 / 1.1 = 7588350 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 206 * 10659 = 2196854 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10923056 + 2196854) / 210 = 62476 \text{ mm}^2 = 624.8 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10923056 / 108000 = 101.1 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2196854 / 108000 = 20.3 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 10923056 / 120 = 91025 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 8 * 64680 / 120 = 4372 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(91025^2 + 4372^2)} = 91130 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 13	(20.8 -	2*(1*2.5)* 1.3)*1.1= 15.7 <	20.8 ∴ 15.7
4-SPL PL	620 * 13	(322.4 -	4*(7*2.5)* 1.3)*1.1= 254.5 <	322.4 ∴ 254.5
1-SPL PL	2930 * 11	(322.3 -	(30*2.5)* 1.1)*1.1= 263.8 <	322.3 ∴ 263.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		809.5		643.0
				> AnR

(162) G-2 J-55 (Sec-56) LFLG

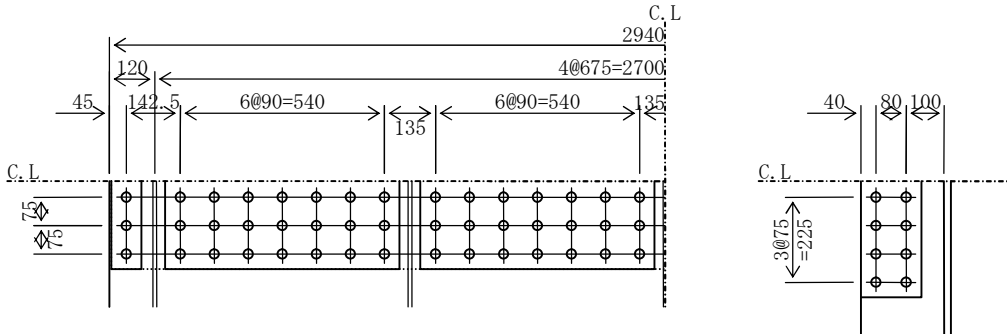
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 170 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 15 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A_g &= 529.2 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 & &= 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A &= 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 & \therefore A_n &= 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 & &= 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 170 * 654.6 / 540.2 & &= 206 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 206 * 43362 = 8931630 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 43362 / 1.1 = 6208650 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 206 * 10659 = 2195522 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (8931630 + 2195522) / 210 = 52986 \text{ mm}^2 = 529.9 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 8931630 / 108000 = 82.7 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2195522 / 108000 = 20.3 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 8931630 / 90 = 99240 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 15 * 52920 / 90 = 8849 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(99240^2 + 8849^2)} = 99634 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 10	(16.0 -	2*(1*2.5)* 1.0)*1.1= 12.1 <	16.0 ∴ 12.1
4-SPL PL	620 * 10	(248.0 -	4*(7*2.5)* 1.0)*1.1= 195.8 <	248.0 ∴ 195.8
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		671.7		532.6
				> AnR

(163) G-2 J-58 (Sec-58) LFLG

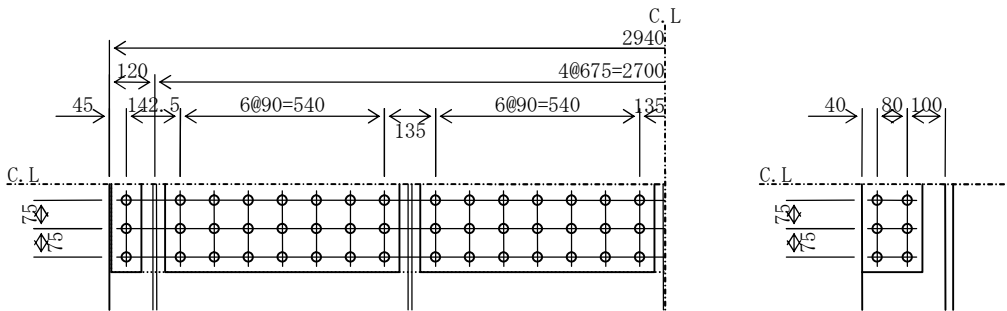
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -141 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 163 = 123 \text{ N/mm}^2 \\ \therefore \sigma_c &= 141 \text{ N/mm}^2 \\ \tau_{\max} &= 29 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 21 & \quad A_g = 617.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 617.4 + 125.4 = 742.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 141 * 61740 = 8699907 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 141 * 12540 = 1767036 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8699907 + 1767036) / 210 = 49843 \text{ mm}^2 = 498.4 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8699907 / 108000 = 80.6 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1767036 / 108000 = 16.4 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 90 = 8699907 / 90 = 96666 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 29 * 61740 / 90 = 19869 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(96666^2 + 19869^2)} = 98686 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

(SM490Y)		A _{gs} (cm ²)
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 498.4 \text{ cm}^2$$

(164) G-2 J-59 (Sec-59) LWEB
 G-2 J-60 (Sec-61) LWEB

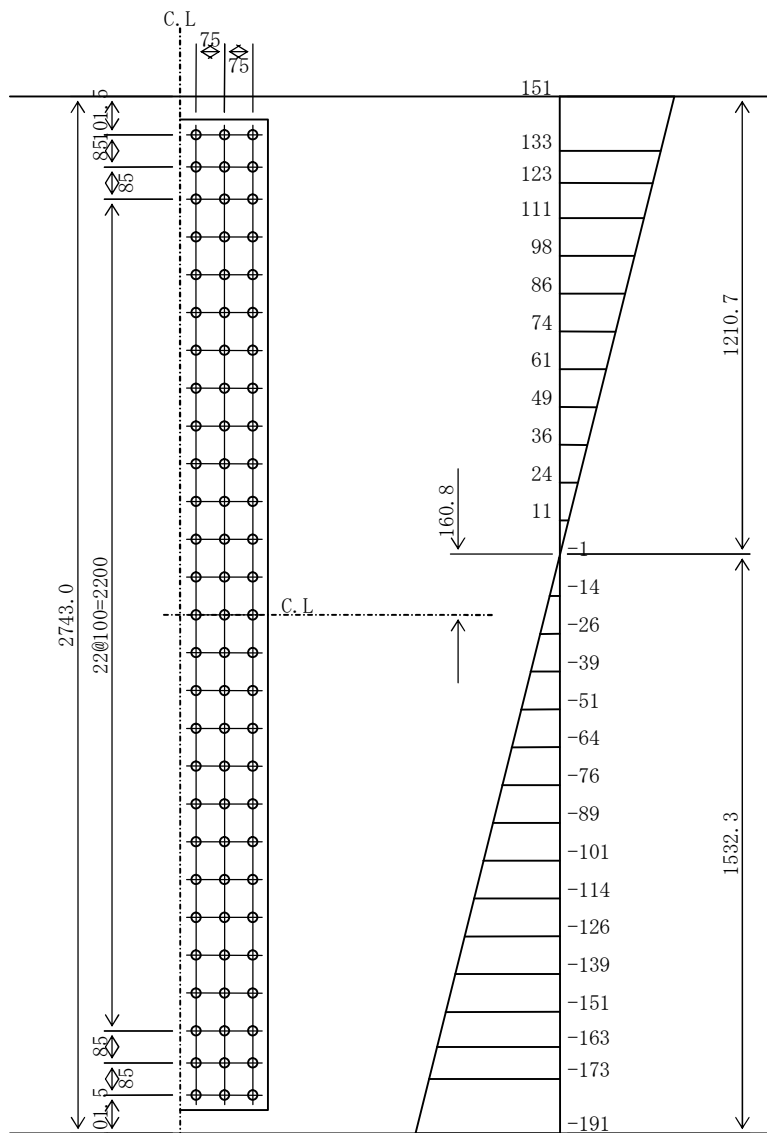
(a) Section area of main plate (Web plate)

1-LWEB PL 2743 * 11 A = 301.7 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= 148 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= -187 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 191 * 148 / 187 = 151 \text{ N/mm}^2 \\ \sigma_{Ln} &= 191 \text{ N/mm}^2 \\ \tau &= 76 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.4$ cm

Total force to be shared

$$P_1 = 144 * 11 * (173 + 191) / 2 = 288702 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 288702 / (108000 * 1.00) = 2.7 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 76 * 30173 / 81 = 28192 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((288702 / 3)^2 + 28192^2)} = 100278 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2819666 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1969879 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 1969879 * 10^4 / 1532 = 2459 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2459 * 10^6 / (2819666 * 10^4) * 1471 = 128 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(165) G-2 J-59 (Sec-59) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2797 * 11 A = 307.7 cm² (SM570)

(b) Design stress

$$\sigma_U = 154 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

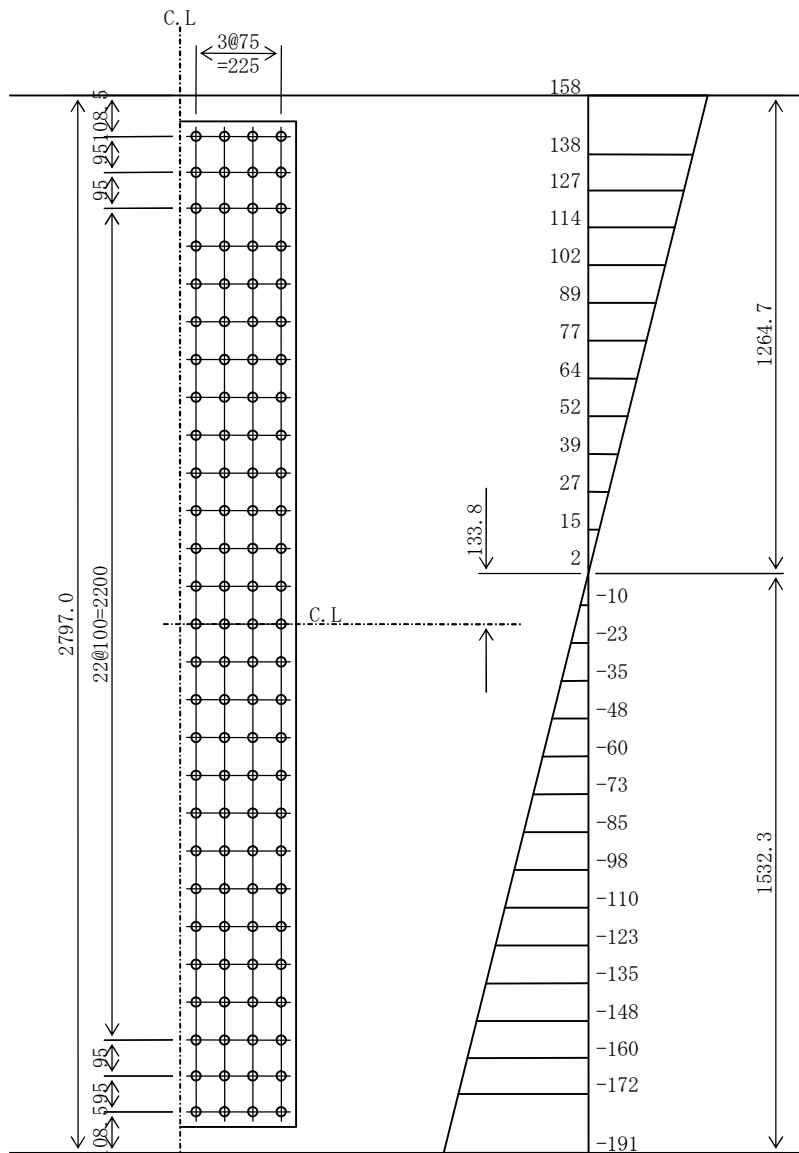
$$\sigma_L = -187 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 154 / 187 = 158 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 79 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.6 \text{ cm}$

Total force to be shared

$$P_1 = 156 * 11 * (172 + 191) / 2 = 311475 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 311475 / (108000 * 1.00) = 2.9 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 79 * 30767 / 108 = 22451 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((311475 / 4)^2 + 22451^2)} = 81041 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2908893 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2060885 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2060885 * 10^4 / 1532 = 2572 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2572 * 10^6 / (2908893 * 10^4) * 1464 = 129 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(166) G-2 J-59 (Sec-59) LFLG
 G-2 J-60 (Sec-61) LFLG

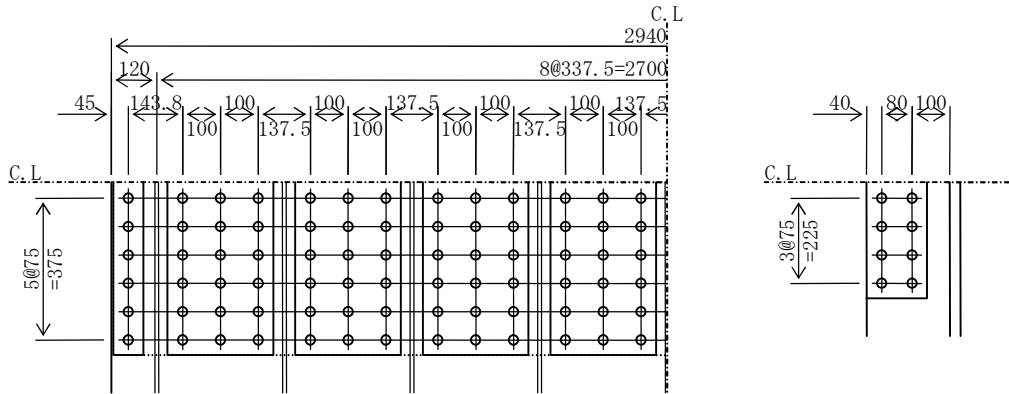
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -190 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 191 \text{ N/mm}^2 \\ \tau_{\max} &= 26 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 28 & \quad A_g = 823.2 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 823.2 + 292.6 = 1115.8 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 191 * 82320 = 15743700 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 191 * 29260 = 5595975 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (15743700 + 5595975) / 255 = 83685 \text{ mm}^2 = 836.9 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 15743700 / 108000 = 145.8 \text{ pcs.}$ (156 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5595975 / 108000 = 51.8 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 6,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 156 = 15743700 / 156 = 100921 \text{ N} \\ \rho_s &= \tau * A_g / 156 = 26 * 82320 / 156 = 13904 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(100921)^2 + (13904)^2} = 101874 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 13	20.8
8-SPL PL	280 * 13	291.2
1-SPL PL	2930 * 11	322.3
14-SPL PL	160 * 10	224.0

$$858.3$$

$$> A_{gR} = 836.9 \text{ cm}^2$$

(167) G-2 J-60 (Sec-61) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2797 * 11 A = 307.7 cm² (SM570)

(b) Design stress

$$\sigma_U = 154 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

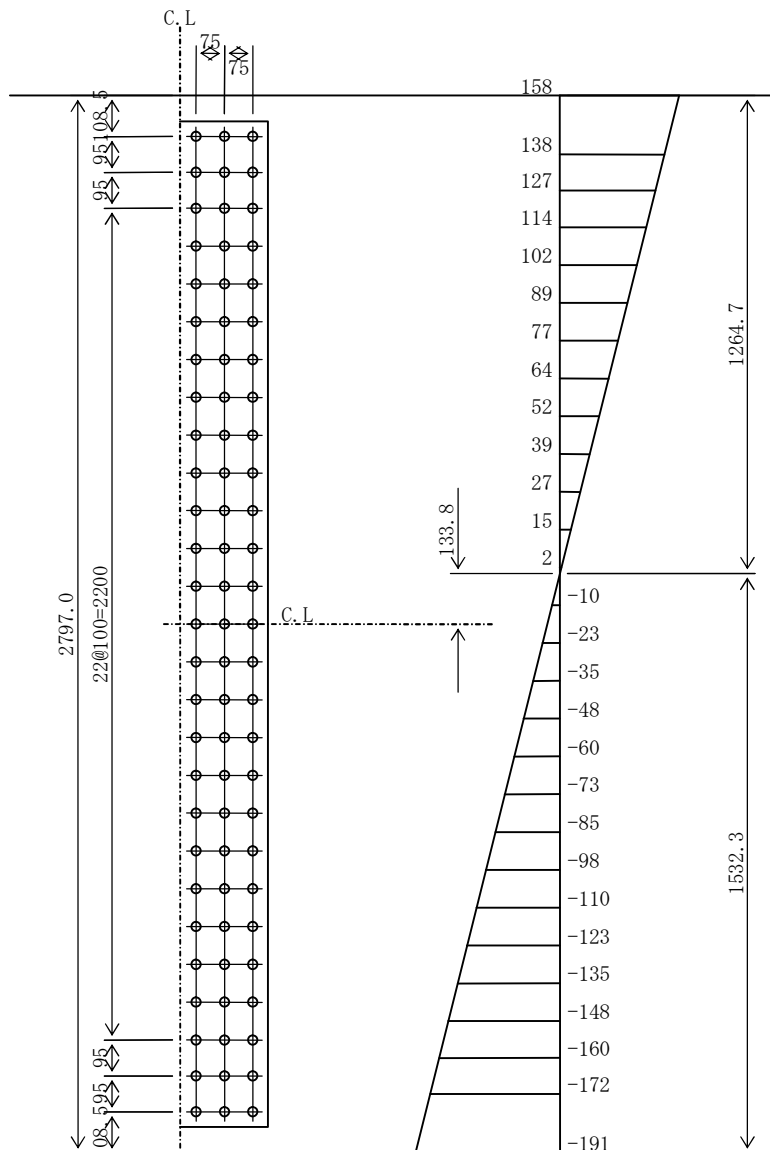
$$\sigma_L = -187 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 191 * 154 / 187 = 158 \text{ N/mm}^2$$

$$\sigma_{Ln} = 191 \text{ N/mm}^2$$

$$\tau = 76 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.6$ cm

Total force to be shared

$$P_1 = 156 * 11 * (172 + 191) / 2 = 311475 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 311475 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 76 * 30767 / 81 = 28895 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((311475 / 3)^2 + 28895^2)} = 107771 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2908893 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2060885 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 191 * 2060885 * 10^4 / 1532 = 2572 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2572 * 10^6 / (2908893 * 10^4) * 1464 = 129 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(168) G-2 J-61 (Sec-62) LFLG

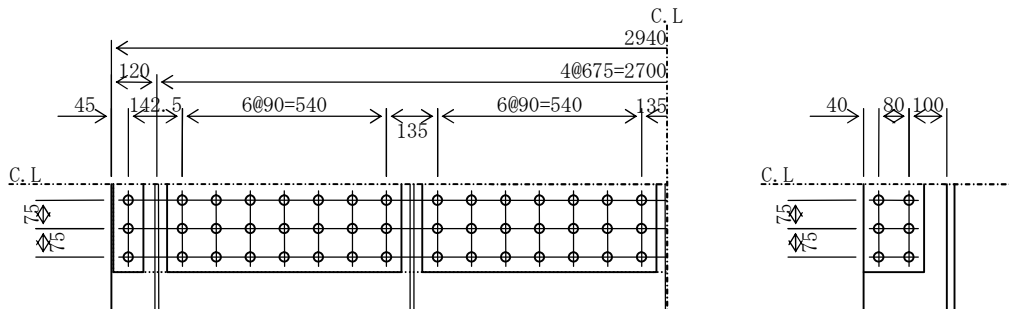
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -148 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 174 = 130 \text{ N/mm}^2 \\ \therefore \sigma_c &= 148 \text{ N/mm}^2 \\ \tau_{\max} &= 29 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 20 & \quad A_g = 588.0 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 588.0 + 125.4 = 713.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 148 * 58800 = 8728448 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 148 * 12540 = 1861475 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (8728448 + 1861475) / 255 = 41529 \text{ mm}^2 = 415.3 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 8728448 / 108000 = 80.8 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1861475 / 108000 = 17.2 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 90 = 8728448 / 90 = 96983 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 29 * 58800 / 90 = 18971 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(96983^2 + 18971^2)} = 98821 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs} (\text{cm}^2)$
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 415.3 \text{ cm}^2$$

(169) G-2 J-63 (Sec-63) LFLG

G-2 J-20 (Sec-20) LFLG, G-2 J-21 (Sec-21) LFLG, G-2 J-38 (Sec-39) LFLG
 G-2 J-39 (Sec-39) LFLG, G-2 J-44 (Sec-44) LFLG, G-2 J-45 (Sec-45) LFLG
 G-2 J-50 (Sec-51) LFLG, G-2 J-62 (Sec-63) LFLG, G-2 J-68 (Sec-68) LFLG

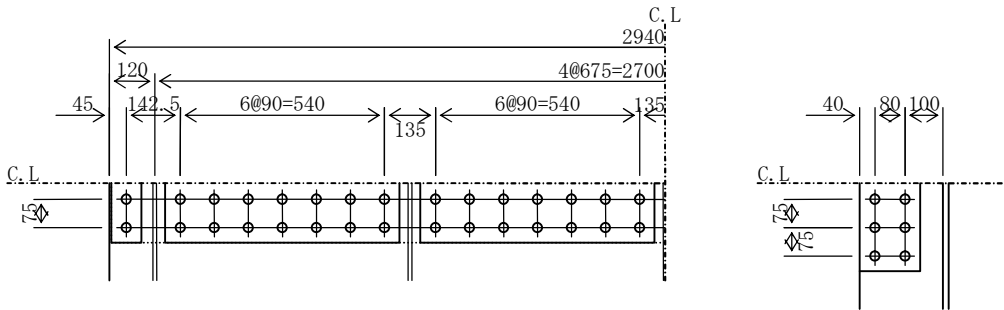
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 114 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \sigma_{cmax} &= -3 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 104 = 78 \text{ N/mm}^2 \\ \therefore \sigma_c &= 78 \text{ N/mm}^2 \\ \tau_{max} &= 24 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 15 & \quad A_g = 441.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 441.0 + 125.4 = 566.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 15 & \quad A = 441.0 \\ (441.0 - (30 * 2.5) * 1.5) * 1.1 &= 361.4 < 441.0 \quad \therefore A_n = 361.4 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 361.4 + 106.6 = 467.9 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 114 * 566.4 / 467.9 = 138 \text{ N/mm}^2 \\ &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 36135 / 1.1 = 5173875 \text{ N} \\ &> \sigma_{tn} * A_n = 138 * 36135 = 5002384 \text{ N} \\ P_c &= \sigma_c * A_g = 78 * 44100 = 3446415 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 138 * 10659 = 1475589 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 78 * 12540 = 980001 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned} A_{nR} &= (P_t + P_{tr}) / \sigma_a = (5173875 + 1526175) / 210 = 31905 \text{ mm}^2 = 319.1 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (3446415 + 980001) / 210 = 21078 \text{ mm}^2 = 210.8 \text{ cm}^2 \end{aligned}$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 5173875 / 108000 = 47.9 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1526175 / 108000 = 14.1 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites}$$

(h) Tensile force per one bolt

$$\rho p = Pt / 60 = 5173875 / 60 = 86231 \text{ N}$$

$$\rho s = \tau * Ag / 60 = 24 * 44100 / 60 = 17711 \text{ N}$$

$$\rho = \sqrt{(\rho p)^2 + (\rho s)^2} = \sqrt{(86231)^2 + (17711)^2} = 88031 \text{ N} < \rho a = 108000 \text{ N}$$

(i) Check of splice plates

	(SM490Y)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)*0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)*0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)*0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)*1.1)*1.1= 79.9 <	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(170) G-2 J-64 (Sec-64) LFLG
 G-2 J-19 (Sec-20) LFLG

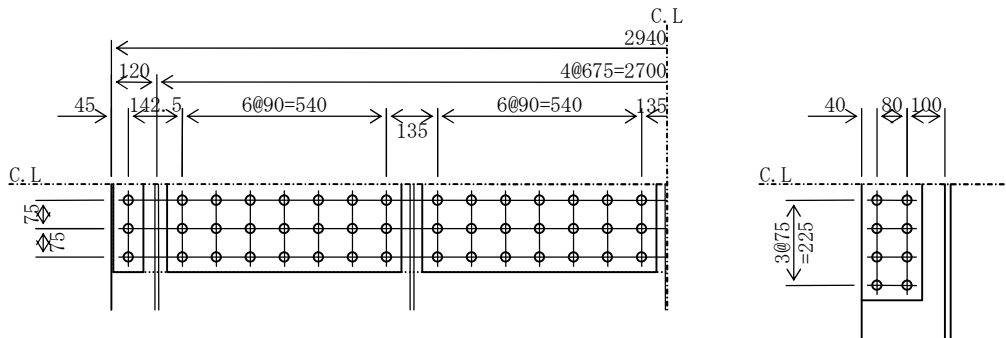
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 173 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 17 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & & A_g &= 441.0 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g &= A_g + A_{gr} = 441.0 + 125.4 = 566.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & & A &= 441.0 \\ (441.0 - (30 * 2.5) * 1.5) * 1.1 &= 361.4 < 441.0 & \therefore A_n &= 361.4 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n &= A_n + A_{nr} = 361.4 + 106.6 = 467.9 \text{ cm}^2 \\ \sigma_{tn} &= \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n = 173 * 566.4 / 467.9 = 210 \text{ N/mm}^2 \\ &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 210 * 361.35 = 757244.2 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 361.35 / 1.1 = 517387.5 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 210 * 106.59 = 223369.8 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 106.59 / 1.1 = 152617.5 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (757244.2 + 223369.8) / 210 = 46696 \text{ mm}^2 = 467.0 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 757244.2 / 108000 = 70.1 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 223369.8 / 108000 = 20.7 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 757244.2 / 90 = 84138 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 17 * 44100 / 90 = 8353 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(84138)^2 + (8353)^2} = 84552 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		635.7		504.6
				> AnR

(171) G-2 J-65 (Sec-65) LFLG

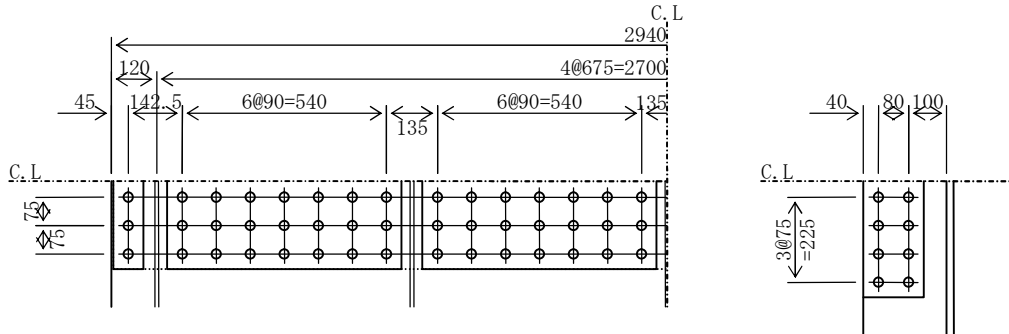
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 169 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 9 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 19 & & A_g &= 558.6 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 558.6 + 125.4 & &= 684.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 19 & & A &= 558.6 \\ & (558.6 - (30 * 2.5) * 1.9) * 1.1 & &= 457.7 < 558.6 & \therefore A_n = 457.7 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 & &= 106.6 < 125.4 & \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 457.7 + 106.6 & &= 564.3 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 169 * 684.0 / 564.3 & &= 204 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

- Main plate $P_t = \sigma_{tn} * A_n = 204 * 45771 = 9359531 \text{ N}$
 $> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 45771 / 1.1 = 6553575 \text{ N}$
- Rib $P_{tr} = \sigma_{tn} * A_{nr} = 204 * 10659 = 2179617 \text{ N}$
 $> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (9359531 + 2179617) / 210 = 54948 \text{ mm}^2 = 549.5 \text{ cm}^2$$

(g) Required bolt number

- Main plate $n = P_t / (108000 * 1.00) = 9359531 / 108000 = 86.7 \text{ pcs.}$ (90 bolts will be used.)
- Rib $n_r = P_{tr} / (108000 * 1.00) = 2179617 / 108000 = 20.2 \text{ pcs.}$ (3 @ 8 = 24 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 3,4 \text{ unites}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 90 = 9359531 / 90 = 103995 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 9 * 55860 / 90 = 5471 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(103995^2 + 5471^2)} = 104139 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
4-SPL PL	620 * 11	(272.8 -	4*(7*2.5)* 1.1)*1.1= 215.4 <	272.8 ∴ 215.4
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		698.1		553.4
				> AnR

(172) G-2 J-66(Sec-67) LFLG

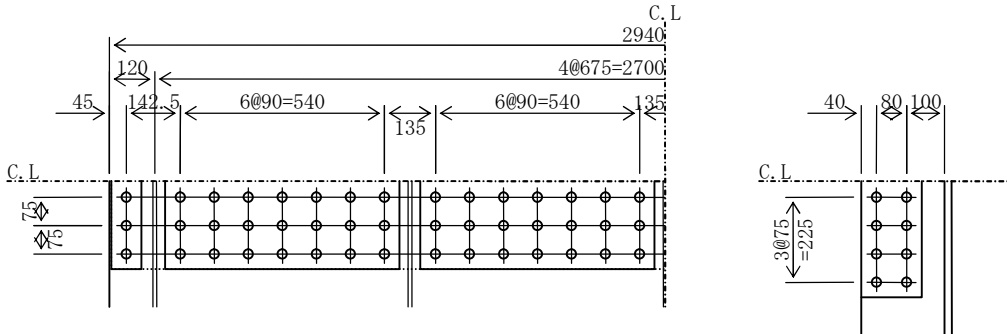
(a) Acting stress

$$\begin{aligned} \sigma_{tmax} &= 163 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 11 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 19 & & A_g &= 558.6 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 558.6 + 125.4 & &= 684.0 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 19 & & A &= 558.6 \\ & (558.6 - (30 * 2.5) * 1.9) * 1.1 & &= 457.7 < 558.6 & \therefore A_n = 457.7 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 & &= 106.6 < 125.4 & \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 457.7 + 106.6 & &= 564.3 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 163 * 684.0 / 564.3 & &= 198 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 210 \text{ N/mm}^2 \end{aligned}$$

(e) Design axial force

$$\begin{aligned} \bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 198 * 45771 = 9063601 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 45771 / 1.1 = 6553575 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 198 * 10659 = 2110702 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N} \end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (9063601 + 2110702) / 210 = 53211 \text{ mm}^2 = 532.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned} \bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 9063601 / 108000 = 83.9 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2110702 / 108000 = 19.5 \text{ pcs. (3 @ 8 = 24 bolts will be used.)} \end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,4 \text{ unites}$$

(h) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_t / 90 = 9063601 / 90 = 100707 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 11 * 55860 / 90 = 6548 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(100707^2 + 6548^2)} = 100919 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
4-SPL PL	620 * 11	(272.8 -	4*(7*2.5)* 1.1)*1.1= 215.4 <	272.8 ∴ 215.4
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		688.5		546.1
				> AnR

(173) G-2 J-67(Sec-68) LFLG

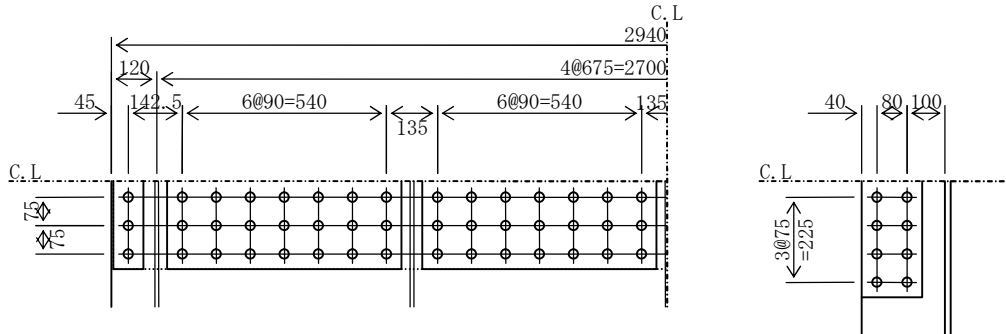
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 152 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 19 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & \quad A_g = 441.0 \text{ cm}^2 \quad (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 441.0 + 125.4 = 566.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 15 & \quad A = 441.0 \\ (441.0 - (30 * 2.5) * 1.5) * 1.1 &= 361.4 < 441.0 \quad \therefore A_n = 361.4 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 361.4 + 106.6 = 467.9 \text{ cm}^2 \\ \sigma_{\text{tn}} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 152 * 566.4 / 467.9 = 183 \text{ N/mm}^2 \\ &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{\text{tn}} * A_n = 183 * 36135 = 6627172 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 36135 / 1.1 = 5173875 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{\text{tn}} * A_{nr} = 183 * 10659 = 1954864 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (6627172 + 1954864) / 210 = 40867 \text{ mm}^2 = 408.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 6627172 / 108000 = 61.4 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1954864 / 108000 = 18.1 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 3,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 6627172 / 90 = 73635 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 19 * 44100 / 90 = 9345 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(73635)^2 + (9345)^2} = 74226 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 13	(124.8 -	6*(2*2.5)* 1.3)*1.1= 94.4 <	124.8 ∴ 94.4

626.1

497.3

> AnR

(174) G-2 J-69 (Sec-69) LFLG

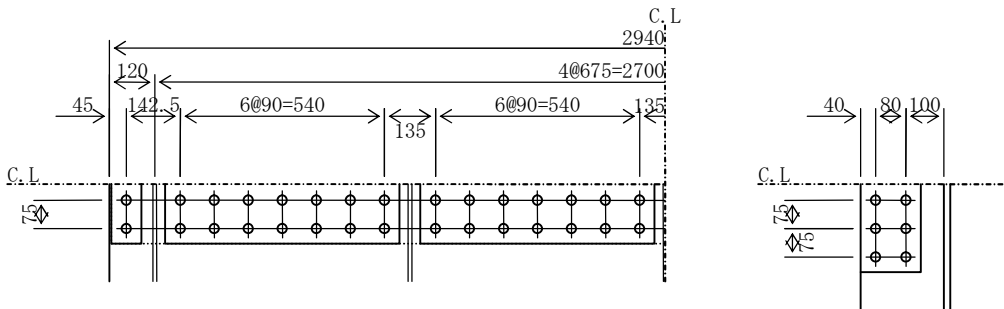
(a) Acting stress

$$\begin{aligned} \sigma_{\max} &= -111 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 133 = 100 \text{ N/mm}^2 \\ \therefore \sigma_c &= 111 \text{ N/mm}^2 \\ \tau_{\max} &= 31 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 17 & \quad A_g = 499.8 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 499.8 + 125.4 = 625.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 111 * 49980 = 5531586 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 111 * 12540 = 1387877 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (5531586 + 1387877) / 255 = 27135 \text{ mm}^2 = 271.4 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 5531586 / 108000 = 51.2 \text{ pcs.}$ (60 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 1387877 / 108000 = 12.9 \text{ pcs.}$ (3 @ 6 = 18 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 2,3 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 60 = 5531586 / 60 = 92193 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 31 * 49980 / 60 = 25482 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(92193)^2 + (25482)^2} = 95650 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 271.4 \text{ cm}^2$$

(175) G-2 J-70(Sec-70) LFLG

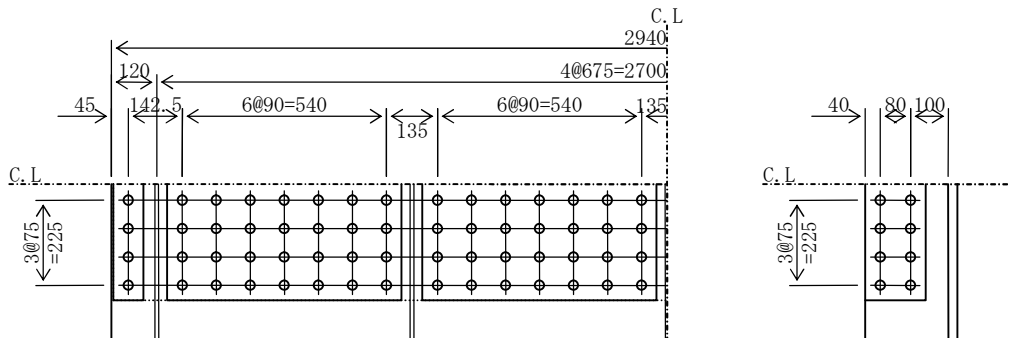
(a) Acting stress

$$\begin{aligned}\sigma_{c \max} &= -179 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 213 = 160 \text{ N/mm}^2 \\ \therefore \sigma_c &= 179 \text{ N/mm}^2 \\ \tau_{\max} &= 27 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 24 & \quad A_g = 705.6 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 705.6 + 125.4 = 831.0 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 179 * 70560 = 12616692 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 179 * 12540 = 2242252 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (12616692 + 2242252) / 255 = 58270 \text{ mm}^2 = 582.7 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 12616692 / 108000 = 116.8 \text{ pcs.}$ (120 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 2242252 / 108000 = 20.8 \text{ pcs.}$ (3 @ 8 = 24 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_c / 120 = 12616692 / 120 = 105139 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 27 * 70560 / 120 = 15948 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(105139^2 + 15948^2)} = 106342 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 10	16.0
4-SPL PL	620 * 10	248.0
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 10	96.0

$$623.7$$

$$> A_{gR} = 582.7 \text{ cm}^2$$

(176) G-2 J-71 (Sec-71) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2738 * 11 A = 301.2 cm² (SM570)

(b) Design stress

$\sigma_U = 154 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

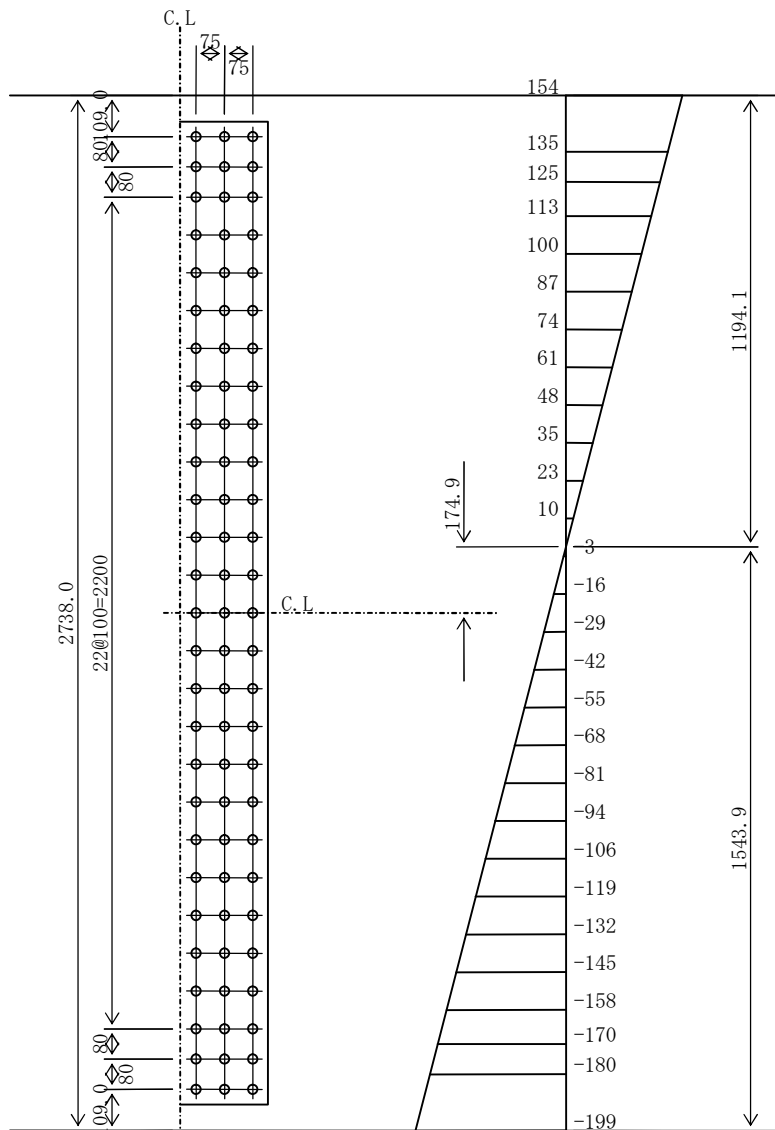
$\sigma_L = -199 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 154 \text{ N/mm}^2$

$\sigma_{Ln} = 199 \text{ N/mm}^2$

$\tau = 80 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.9$ cm

Total force to be shared

$$P_1 = 149 * 11 * (180 + 199) / 2 = 310679 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 310679 / (108000 * 1.00) = 2.9 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 80 * 30118 / 81 = 29662 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((310679 / 3)^2 + 29662^2)} = 107724 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

2-SPL PL 2600 * 9 $A_s = 468.0 \text{ cm}^2$ (SM570)

Moment of inertia of splice plates $I_s = 2779551 \text{ cm}^4 > I_w$

Moment of inertia of web plate $I_w = 1973647 \text{ cm}^4$

Bending moment to be shared by the web

$$M_w = 199 * 1973647 * 10^4 / 1544 = 2546 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2546 * 10^6 / (2779551 * 10^4) * 1475 = 135 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(177) G-2 J-71 (Sec-71) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2792 * 11 A = 307.1 cm² (SM570)

(b) Design stress

$$\sigma_U = 161 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

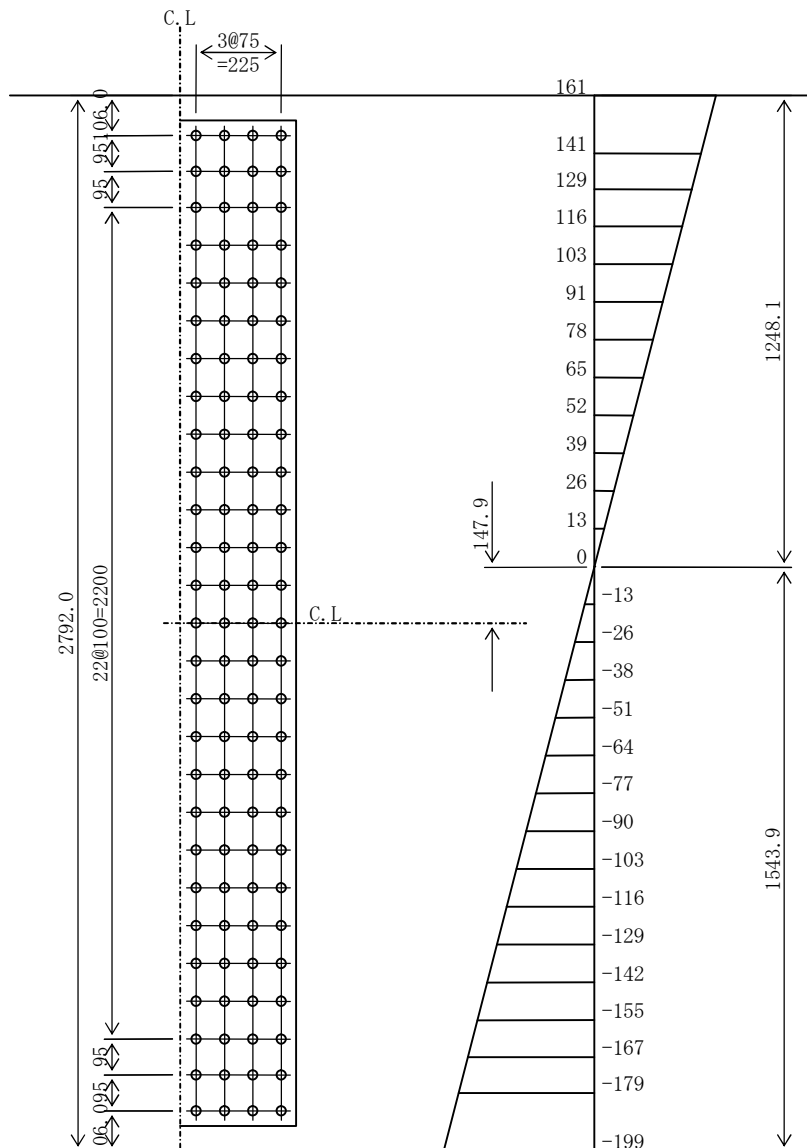
$$\sigma_L = -199 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 161 \text{ N/mm}^2$$

$$\sigma_{Ln} = 199 \text{ N/mm}^2$$

$$\tau = 82 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.3$ cm

Total force to be shared

$$P_1 = 153 * 11 * (179 + 199) / 2 = 319572 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 319572 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 82 * 30712 / 108 = 23430 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((319572 / 4)^2 + 23430^2)} = 83258 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2927892 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2062233 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 199 * 2062233 * 10^4 / 1544 = 2660 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2660 * 10^6 / (2927892 * 10^4) * 1478 = 134 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(178) G-2 J-71 (Sec-71) LFLG

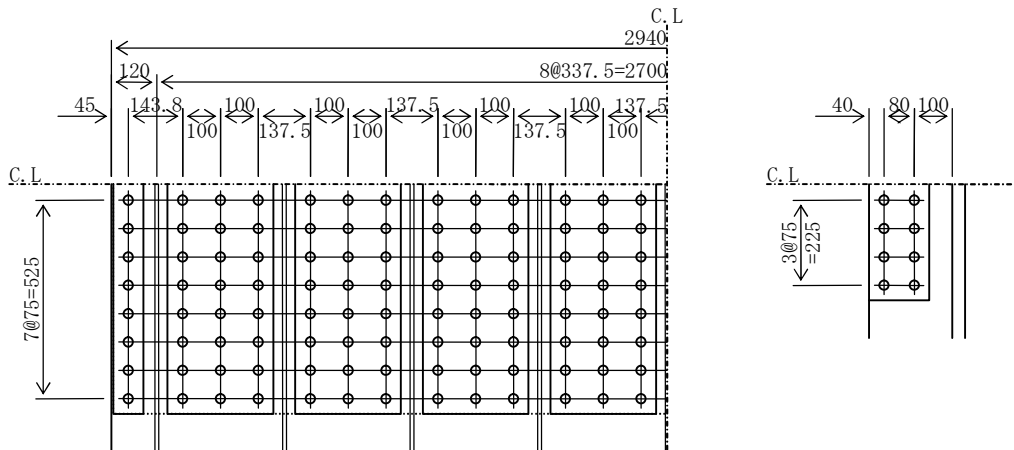
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -204 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 204 \text{ N/mm}^2 \\ \tau_{\max} &= 23 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 34 & \quad A_g = 999.6 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 999.6 + 292.6 = 1292.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 204 * 99960 = 20347258 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 204 * 29260 = 5955990 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (20347258 + 5955990) / 255 = 103150 \text{ mm}^2 = 1031.5 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 20347258 / 108000 = 188.4 \text{ pcs.}$ (208 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5955990 / 108000 = 55.1 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 8,4 \text{ unites)}$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 208 = 20347258 / 208 = 97823 \text{ N} \\ \rho_s &= \tau * A_g / 208 = 23 * 99960 / 208 = 11040 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97823^2 + 11040^2} = 98444 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs} (\text{cm}^2)$
2-SPL PL 80 * 17		27.2
8-SPL PL 280 * 17		380.8
1-SPL PL 2930 * 13		380.9
14-SPL PL 160 * 11		246.4

$$1035.3$$

$$> A_{gR} = 1031.5 \text{ cm}^2$$

(179) G-2 J-72 (Sec-73) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2738 * 13 A = 355.9 cm² (SM570)

(b) Design stress

$\sigma_U = 145 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

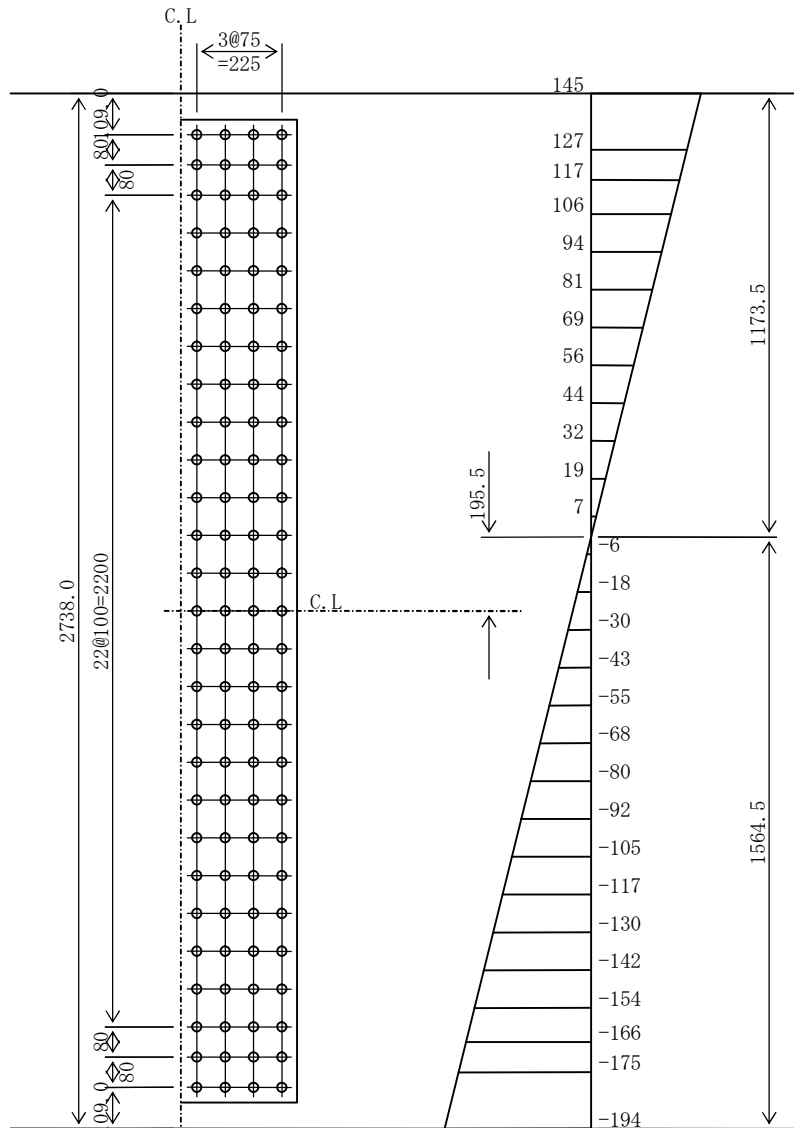
$\sigma_L = -194 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 145 \text{ N/mm}^2$

$\sigma_{Ln} = 194 \text{ N/mm}^2$

$\tau = 70 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.9$ cm

Total force to be shared

$$P_1 = 149 * 13 * (175 + 194) / 2 = 357720 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 357720 / (108000 * 1.00) = 3.3 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 70 * 35594 / 108 = 23081 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((357720 / 4)^2 + 23081^2)} = 92360 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2600 * 9 \quad A_s = 468.0 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2815312 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2359690 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 194 * 2359690 * 10^4 / 1565 = 2925 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2925 * 10^6 / (2815312 * 10^4) * 1496 = 155 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(180) G-2 J-72 (Sec-73) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2792 * 13 A = 363.0 cm² (SM570)

(b) Design stress

$\sigma_U = 152 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

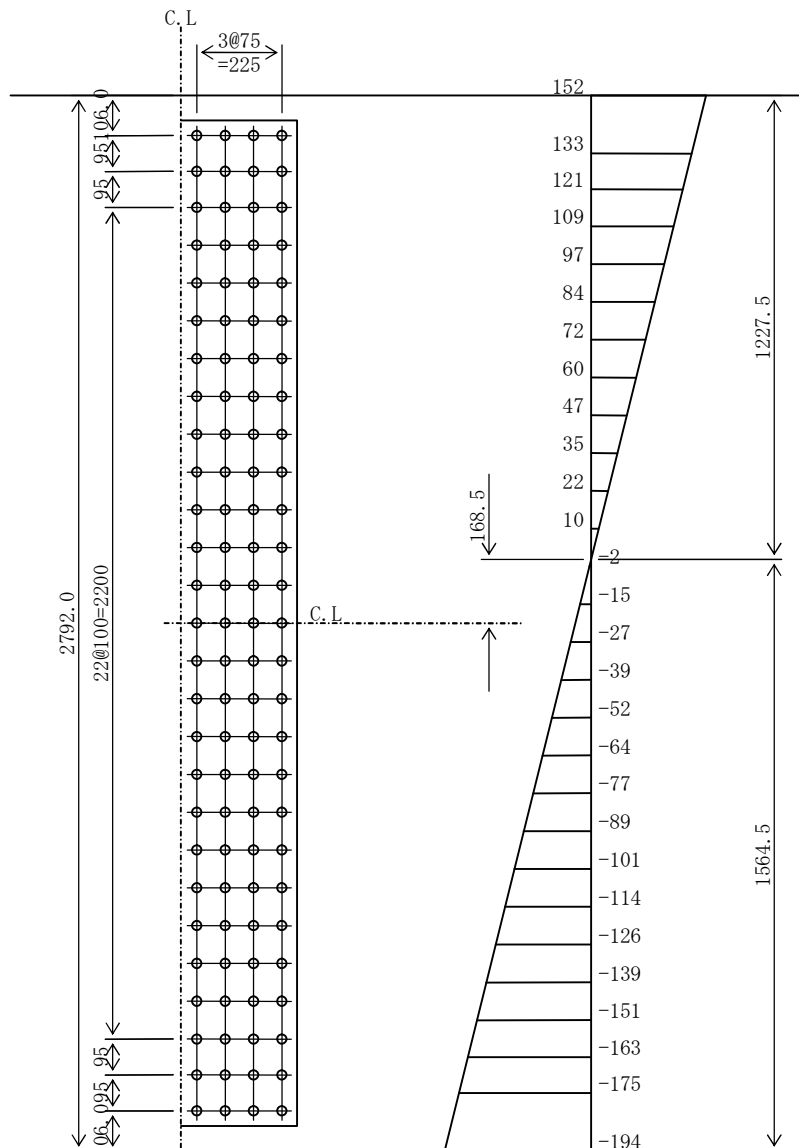
$\sigma_L = -194 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$

$\sigma_{Un} = 152 \text{ N/mm}^2$

$\sigma_{Ln} = 194 \text{ N/mm}^2$

$\tau = 73 \text{ N/mm}^2$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.3 \text{ cm}$

Total force to be shared

$$P_1 = 153 * 13 * (175 + 194) / 2 = 367967 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 367967 / (108000 * 1.00) = 3.4 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 73 * 36296 / 108 = 24442 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((367967 / 4)^2 + 24442^2)} = 95183 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2660 * 9 \quad A_s = 478.8 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2959143 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2460875 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 194 * 2460875 * 10^4 / 1565 = 3050 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 3050 * 10^6 / (2959143 * 10^4) * 1499 = 154 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(181) G-2 J-72(Sec-73) LFLG

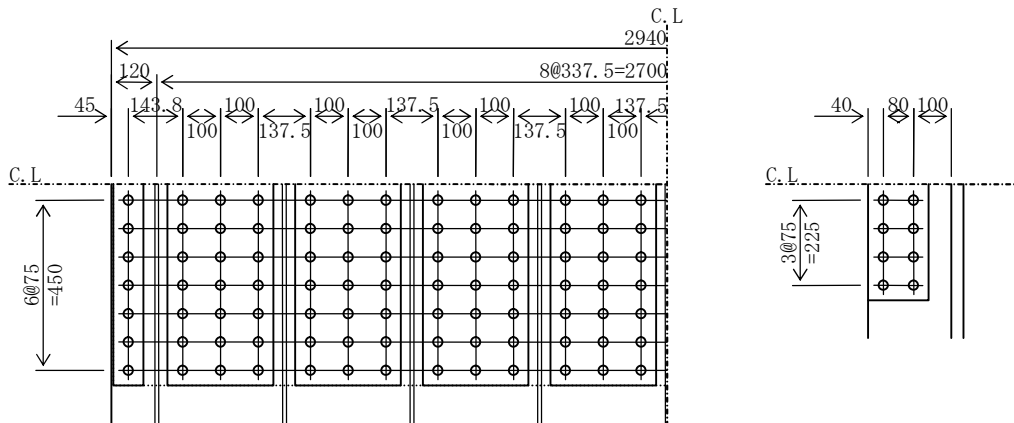
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -198 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \therefore \sigma_c &= 198 \text{ N/mm}^2 \\ \tau_{\max} &= 25 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 32 & \quad A_g = 940.8 \text{ cm}^2 \quad (\text{SM570}) \\ 7\text{-RIB PL } 220 * 19 & \quad A_{gr} = 292.6 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 940.8 + 292.6 = 1233.4 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 198 * 94080 = 18616644 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 198 * 29260 = 5789998 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (18616644 + 5789998) / 255 = 95712 \text{ mm}^2 = 957.1 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 18616644 / 108000 = 172.4 \text{ pcs.}$ (182 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 5789998 / 108000 = 53.6 \text{ pcs.}$ (7 @ 8 = 56 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 7,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 182 = 18616644 / 182 = 102289 \text{ N} \\ \rho_s &= \tau * A_g / 182 = 25 * 94080 / 182 = 12883 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(102289)^2 + (12883)^2} = 103097 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 16	25.6
8-SPL PL	280 * 16	358.4
1-SPL PL	2930 * 13	380.9
14-SPL PL	160 * 10	224.0

$$988.9$$

$$> A_{gR} = 957.1 \text{ cm}^2$$

(182) G-2 J-73 (Sec-74) LFLG

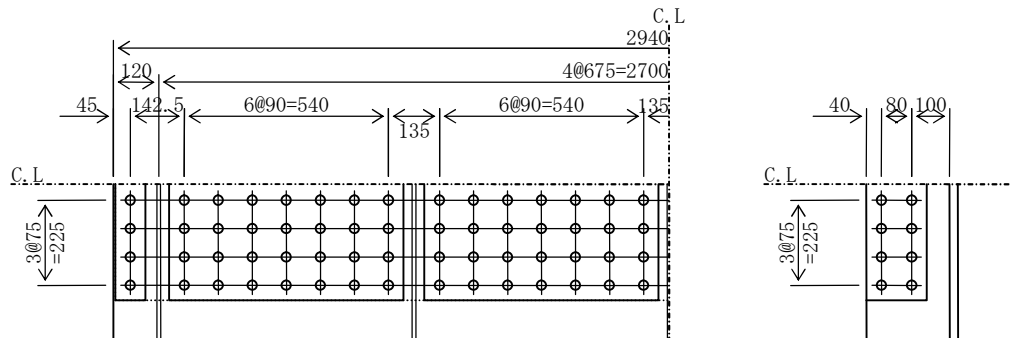
(a) Acting stress

$$\begin{aligned} \sigma_{c \max} &= -162 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 195 = 146 \text{ N/mm}^2 \\ \therefore \sigma_c &= 162 \text{ N/mm}^2 \\ \tau_{\max} &= 31 \text{ N/mm}^2 \end{aligned}$$

(b) Section area of main plate

$$\begin{aligned} 1\text{-LFLG PL } 2940 * 22 & \quad A_g = 646.8 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 646.8 + 125.4 = 772.2 \text{ cm}^2 \end{aligned}$$

(c) Bolt arrangement



(d) Design axial force

- Main plate $P_c = \sigma_c * A_g = 162 * 64680 = 10479454 \text{ N}$
- Rib $P_{cr} = \sigma_c * A_{gr} = 162 * 12540 = 2031731 \text{ N}$

(e) Required section area of the splice plates

$$A_{gR} = (P_c + P_{cr}) / \sigma_a = (10479454 + 2031731) / 255 = 49063 \text{ mm}^2 = 490.6 \text{ cm}^2$$

(f) Required bolt number

- Main plate $n = P_c / (108000 * 1.00) = 10479454 / 108000 = 97.0 \text{ pcs.}$ (120 bolts will be used.)
- Rib $n_r = P_{cr} / (108000 * 1.00) = 2031731 / 108000 = 18.8 \text{ pcs.}$ (3 @ 8 = 24 bolts will be used.)

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 4,4 \text{ unites)$$

(g) Tensile force per one bolt

$$\begin{aligned} \rho_p &= P_c / 120 = 10479454 / 120 = 87329 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 31 * 64680 / 120 = 16463 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(87329^2 + 16463^2)} = 88867 \text{ N} < \rho_a = 108000 \text{ N} \end{aligned}$$

(h) Check of splice plates

	(SM570)	$A_{gs}(\text{cm}^2)$
2-SPL PL	80 * 9	14.4
4-SPL PL	620 * 9	223.2
1-SPL PL	2930 * 9	263.7
6-SPL PL	160 * 9	86.4

$$587.7$$

$$> A_{gR} = 490.6 \text{ cm}^2$$

(183) G-2 J-74(Sec-75) LFLG

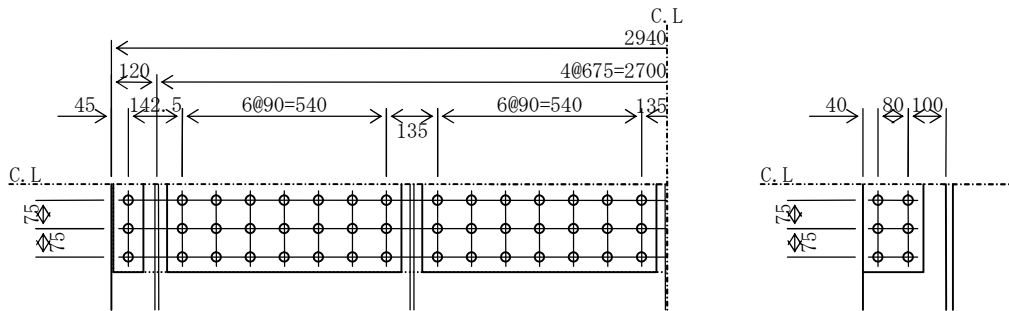
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 44 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \sigma_{cmax} &= -61 \text{ N/mm}^2 & 0.75 \sigma_{ca} &= 0.75 * 148 = 111 \text{ N/mm}^2 \\ \therefore \sigma_c &= 111 \text{ N/mm}^2 \\ \tau_{max} &= 30 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & \quad A_g = 529.2 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 = 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & \quad A = 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 \quad \therefore A_n = 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 = 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 44 * 654.6 / 540.2 = 54 \text{ N/mm}^2 \\ &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 43362 / 1.1 = 7539075 \text{ N} \\ &> \sigma_{tn} * A_n = 54 * 43362 = 2326804 \text{ N} \\ P_c &= \sigma_c * A_g = 111 * 52920 = 5876105 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 54 * 10659 = 571962 \text{ N} \\ P_{cr} &= \sigma_c * A_{gr} = 111 * 12540 = 1392410 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$\begin{aligned}A_{nR} &= (P_t + P_{tr}) / \sigma_a = (7539075 + 1853212) / 255 = 36833 \text{ mm}^2 = 368.3 \text{ cm}^2 \\ A_{gR} &= (P_c + P_{cr}) / \sigma_a = (5876105 + 1392410) / 255 = 28504 \text{ mm}^2 = 285.0 \text{ cm}^2\end{aligned}$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7539075 / 108000 = 69.8 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1853212 / 108000 = 17.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)} \\ &\text{(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:} \\ &\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)}\end{aligned}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 7539075 / 90 = 83768 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 30 * 52920 / 90 = 17497 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{(83768)^2 + (17497)^2} = 85575 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ag _s (cm ²)	deduction of bolt holes	Ans(cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9<	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2<	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8<	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9<	105.6 ∴ 79.9
		606.9		482.8
		> Ag _R		> An _R

(184) G-2 J-75 (Sec-75) LFLG

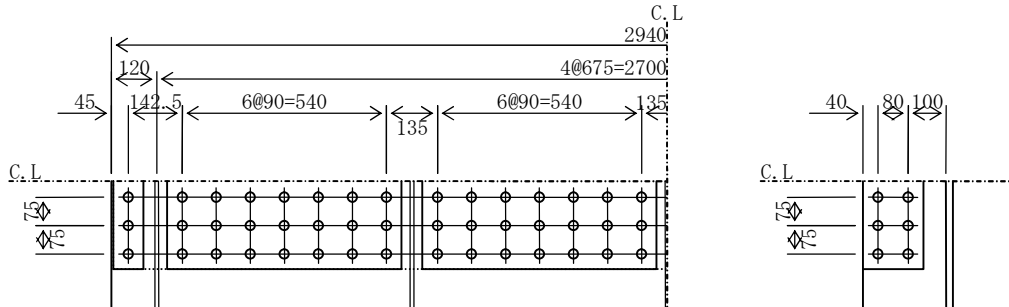
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 140 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 22 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & \quad A_g = 529.2 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 = 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & \quad A = 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 \quad \therefore A_n = 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 = 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 140 * 654.6 / 540.2 = 170 \text{ N/mm}^2 \\ &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 43362 / 1.1 = 7539075 \text{ N} \\ &> \sigma_{tn} * A_n = 170 * 43362 = 7363561 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N} \\ &> \sigma_{tn} * A_{nr} = 170 * 10659 = 1810069 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (7539075 + 1853212) / 255 = 36833 \text{ mm}^2 = 368.3 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 7539075 / 108000 = 69.8 \text{ pcs. (90 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1853212 / 108000 = 17.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3,3 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 90 = 7539075 / 90 = 83768 \text{ N} \\ \rho_s &= \tau * A_g / 90 = 22 * 52920 / 90 = 12844 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(83768^2 + 12844^2)} = 84747 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

(185) G-2 J-76(Sec-76) LFLG

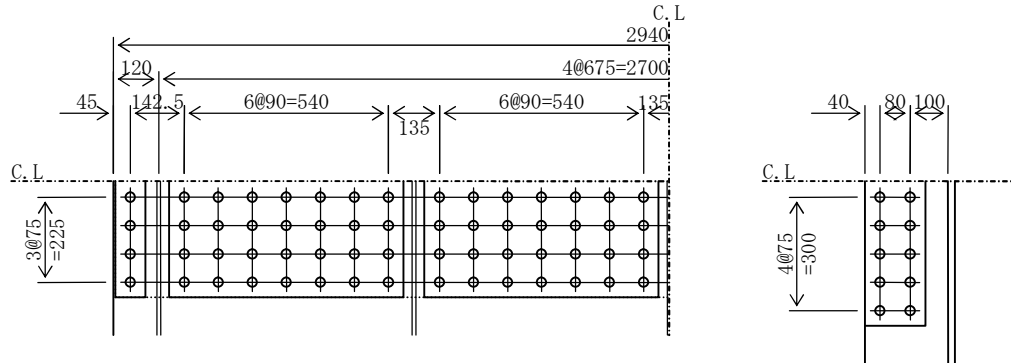
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 207 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 16 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A_g &= 529.2 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 529.2 + 125.4 & &= 654.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 18 & & A &= 529.2 \\ (529.2 - (30 * 2.5) * 1.8) * 1.1 &= 433.6 < 529.2 & \therefore A_n &= 433.6 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 433.6 + 106.6 & &= 540.2 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 207 * 654.6 / 540.2 & &= 251 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 251 * 43362 = 10889733 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 43362 / 1.1 = 7539075 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 251 * 10659 = 2676852 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10889733 + 2676852) / 255 = 53202 \text{ mm}^2 = 532.0 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10889733 / 108000 = 100.8 \text{ pcs. (120 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2676852 / 108000 = 24.8 \text{ pcs. (3 @ 10 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,5 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 120 = 10889733 / 120 = 90748 \text{ N} \\ \rho_s &= \tau * A_g / 120 = 16 * 52920 / 120 = 6892 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(90748^2 + 6892^2)} = 91009 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 11	(17.6 -	2*(1*2.5)* 1.1)*1.1= 13.3 <	17.6 ∴ 13.3
4-SPL PL	620 * 11	(272.8 -	4*(7*2.5)* 1.1)*1.1= 215.4 <	272.8 ∴ 215.4
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		698.1		553.4
				> AnR

(186) G-2 J-77 (Sec-77) RWEB

G-2 J-25 (Sec-26) RWEB, G-2 J-26 (Sec-26) RWEB, G-2 J-46 (Sec-46) RWEB
 G-2 J-49 (Sec-50) RWEB, G-2 J-61 (Sec-62) RWEB, G-2 J-69 (Sec-69) RWEB
 G-2 J-70 (Sec-70) RWEB, G-2 J-73 (Sec-74) RWEB, G-2 J-74 (Sec-75) RWEB
 G-2 J-75 (Sec-75) RWEB

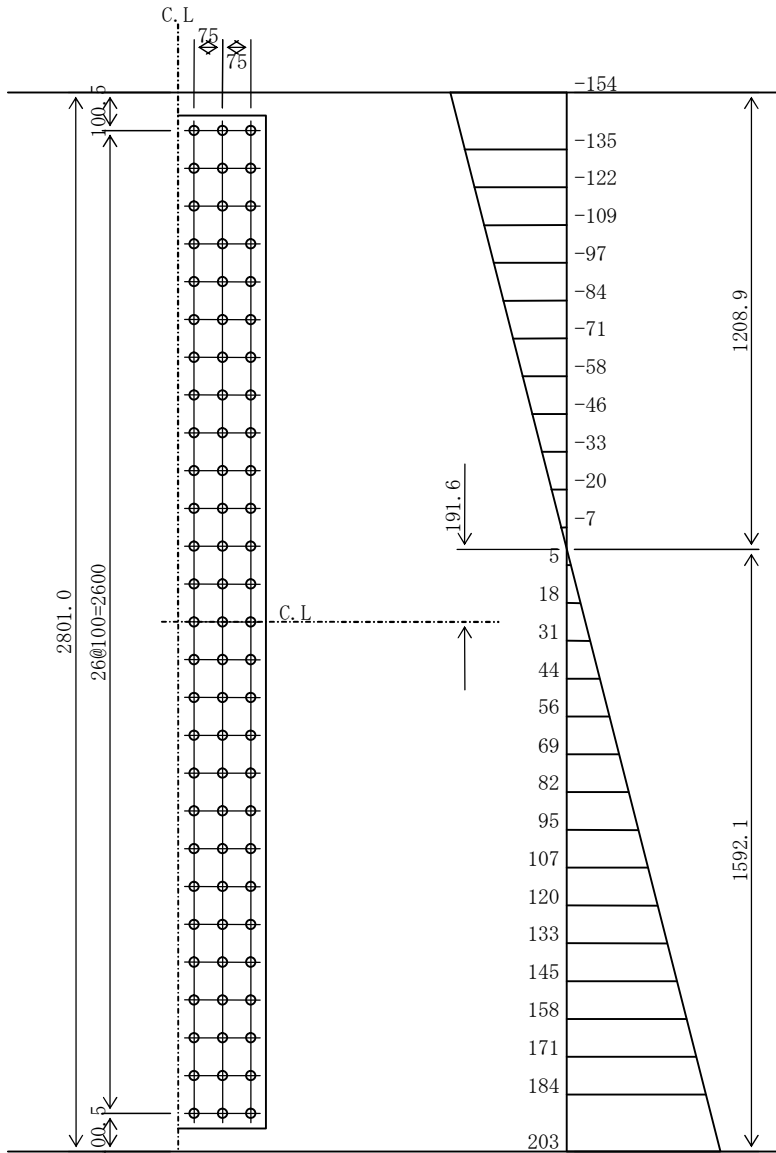
(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -154 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 203 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 154 \text{ N/mm}^2 \\ \sigma_{Ln} &= 203 \text{ N/mm}^2 \\ \tau &= 21 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 11 * (184 + 203) / 2 = 320042 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 320042 / (108000 * 1.00) = 3.0 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 21 * 30811 / 81 = 8144 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((320042 / 3)^2 + 8144^2)} = 106991 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3064418 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2127527 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 203 * 2127527 * 10^4 / 1592 = 2712 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2712 * 10^6 / (3064418 * 10^4) * 1532 = 136 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(187) G-2 J-77(Sec-77) LFLG

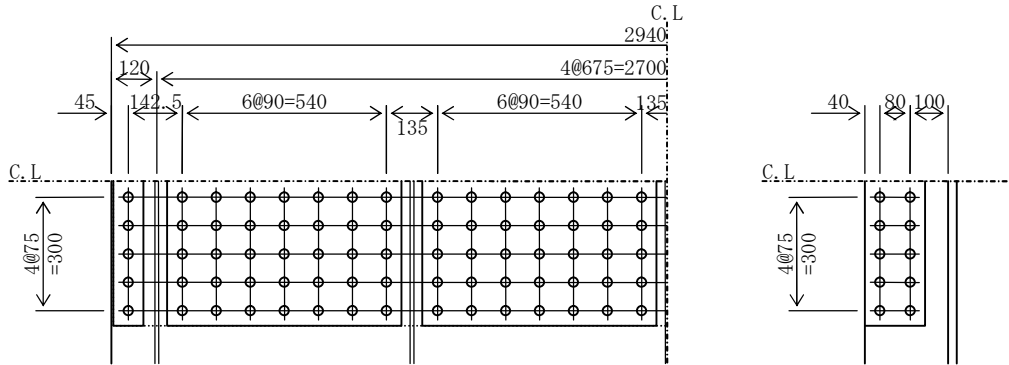
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 206 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 9 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 23 & & A_g &= 676.2 \text{ cm}^2 & (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 676.2 + 125.4 & &= 801.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 23 & & A &= 676.2 \\ & (676.2 - (30 * 2.5) * 2.3) * 1.1 & &= 554.1 < 676.2 & \therefore A_n = 554.1 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 & &= 106.6 < 125.4 & \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 554.1 + 106.6 & &= 660.7 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 206 * 801.6 / 660.7 & &= 250 \text{ N/mm}^2 \\ & & &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 250 * 554.1 = 138382.94 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 554.1 / 1.1 = 96332.63 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 250 * 106.6 = 26621.61 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 106.6 / 1.1 = 18532.12 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (138382.94 + 26621.61) / 255 = 64708 \text{ mm}^2 = 647.1 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 138382.94 / 108000 = 128.1 \text{ pcs. (150 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 26621.61 / 108000 = 24.6 \text{ pcs. (3 @ 10 = 30 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5.5 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 150 = 138382.94 / 150 = 92255 \text{ N} \\ \rho_s &= \tau * A_g / 150 = 9 * 67620 / 150 = 3853 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{92255^2 + 3853^2} = 92336 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 13	(20.8 -	2*(1*2.5)* 1.3)*1.1= 15.7 <	20.8 ∴ 15.7
4-SPL PL	620 * 13	(322.4 -	4*(7*2.5)* 1.3)*1.1= 254.5 <	322.4 ∴ 254.5
1-SPL PL	2930 * 12	(351.6 -	(30*2.5)* 1.2)*1.1= 287.8 <	351.6 ∴ 287.8
6-SPL PL	160 * 15	(144.0 -	6*(2*2.5)* 1.5)*1.1= 108.9 <	144.0 ∴ 108.9
<hr/>				
		838.8		666.9
				> AnR

(188) G-2 J-78 (Sec-79) LWEB

G-2 J-7 (Sec-8) LWEB, G-2 J-25 (Sec-26) LWEB, G-2 J-26 (Sec-26) LWEB, G-2 J-46 (Sec-46) LWEB
 G-2 J-49 (Sec-50) LWEB, G-2 J-61 (Sec-62) LWEB, G-2 J-69 (Sec-69) LWEB
 G-2 J-70 (Sec-70) LWEB, G-2 J-73 (Sec-74) LWEB, G-2 J-74 (Sec-75) LWEB
 G-2 J-75 (Sec-75) LWEB, G-2 J-76 (Sec-76) LWEB, G-2 J-77 (Sec-77) LWEB

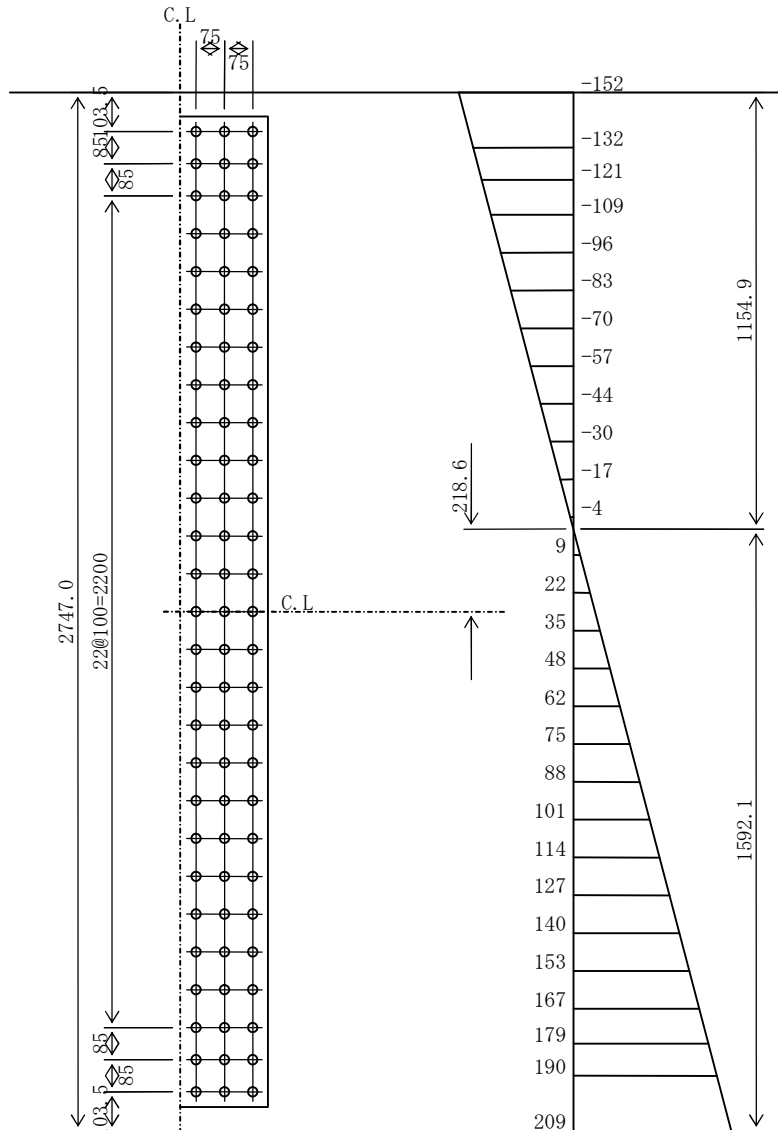
(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM570)

(b) Design stress

$$\begin{aligned} \sigma_U &= -152 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_L &= 209 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2 \\ \sigma_{Un} &= 152 \text{ N/mm}^2 \\ \sigma_{Ln} &= 209 \text{ N/mm}^2 \\ \tau &= 15 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6 \text{ cm}$

Total force to be shared

$$P_1 = 146 * 11 * (190 + 209) / 2 = 320327 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 320327 / (108000 * 1.00) = 3.0 \text{ pcs. (3 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 81 = 15 * 30217 / 81 = 5464 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((320327 / 3)^2 + 5464^2)} = 106915 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 3 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \quad (\text{SM570})$$

$$\text{Moment of inertia of splice plates} \quad I_s = 2923072 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2044539 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 209 * 2044539 * 10^4 / 1592 = 2684 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2684 * 10^6 / (2923072 * 10^4) * 1529 = 140 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(189) G-2 J-78(Sec-79) LFLG

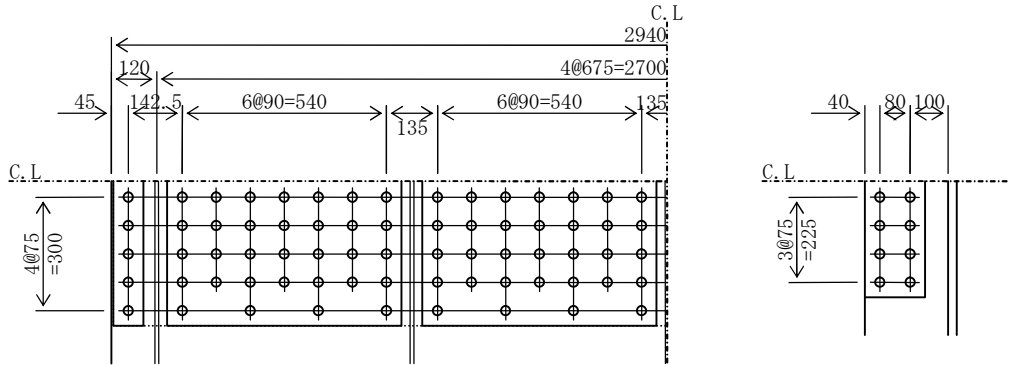
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 212 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 6 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 23 & \quad A_g = 676.2 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 676.2 + 125.4 = 801.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 23 & \quad A = 676.2 \\ & (676.2 - (18 * 2.5) * 2.3) * 1.1 = 630.0 < 676.2 \quad \therefore A_n = 630.0 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ & (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 = 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 630.0 + 106.6 = 736.6 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 212 * 801.6 / 736.6 = 231 \text{ N/mm}^2 \\ & < \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 231 * 62997 = 14538994 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 62997 / 1.1 = 10952888 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 231 * 10659 = 2459976 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (14538994 + 2459976) / 255 = 66663 \text{ mm}^2 = 666.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 14538994 / 108000 = 134.6 \text{ pcs. (138 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2459976 / 108000 = 22.8 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 5,4 \text{ unites)$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 138 = 14538994 / 138 = 105355 \text{ N} \\ \rho_s &= \tau * A_g / 138 = 6 * 67620 / 138 = 3061 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{105355^2 + 3061^2} = 105399 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 14	(22.4 -	2*(1*2.5)* 1.4)*1.1= 16.9 <	22.4 ∴ 16.9
4-SPL PL	620 * 14	(347.2 -	4*(7*2.5)* 1.4)*1.1= 274.1 <	347.2 ∴ 274.1
1-SPL PL	2930 * 12	(351.6 -	(30*2.5)* 1.2)*1.1= 287.8 <	351.6 ∴ 287.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		855.6		680.5
				> AnR

(190) G-2 J-79 (Sec-80) LWEB

(a) Section area of main plate (Web plate)

1-LWEB PL 2747 * 11 A = 302.2 cm² (SM570)

(b) Design stress

$$\sigma_U = -142 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

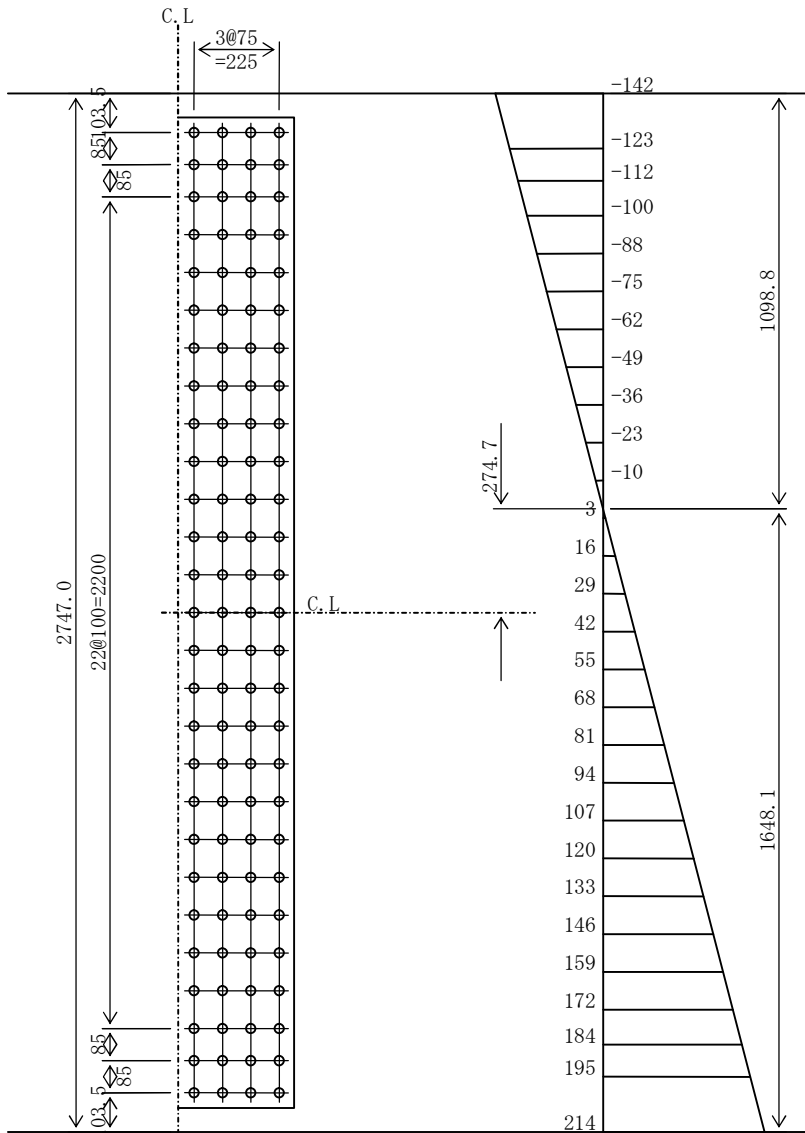
$$\sigma_L = 214 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 142 \text{ N/mm}^2$$

$$\sigma_{Ln} = 214 \text{ N/mm}^2$$

$$\tau = 24 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 14.6$ cm

Total force to be shared

$$P_1 = 146 * 11 * (195 + 214) / 2 = 327778 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 327778 / (108000 * 1.00) = 3.0 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 24 * 30217 / 108 = 6598 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((327778 / 4)^2 + 6598^2)} = 82210 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2620 * 9 \quad A_s = 471.6 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3053450 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2128077 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 214 * 2128077 * 10^4 / 1648 = 2757 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2757 * 10^6 / (3053450 * 10^4) * 1585 = 143 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(191) G-2 J-79 (Sec-80) RWEB

G-2 J-7 (Sec-8) RWEB, G-2 J-76 (Sec-76) RWEB, G-2 J-78 (Sec-79) RWEB

(a) Section area of main plate (Web plate)

1-RWEB PL 2801 * 11 A = 308.1 cm² (SM570)

(b) Design stress

$$\sigma_U = -149 \text{ N/mm}^2 < \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

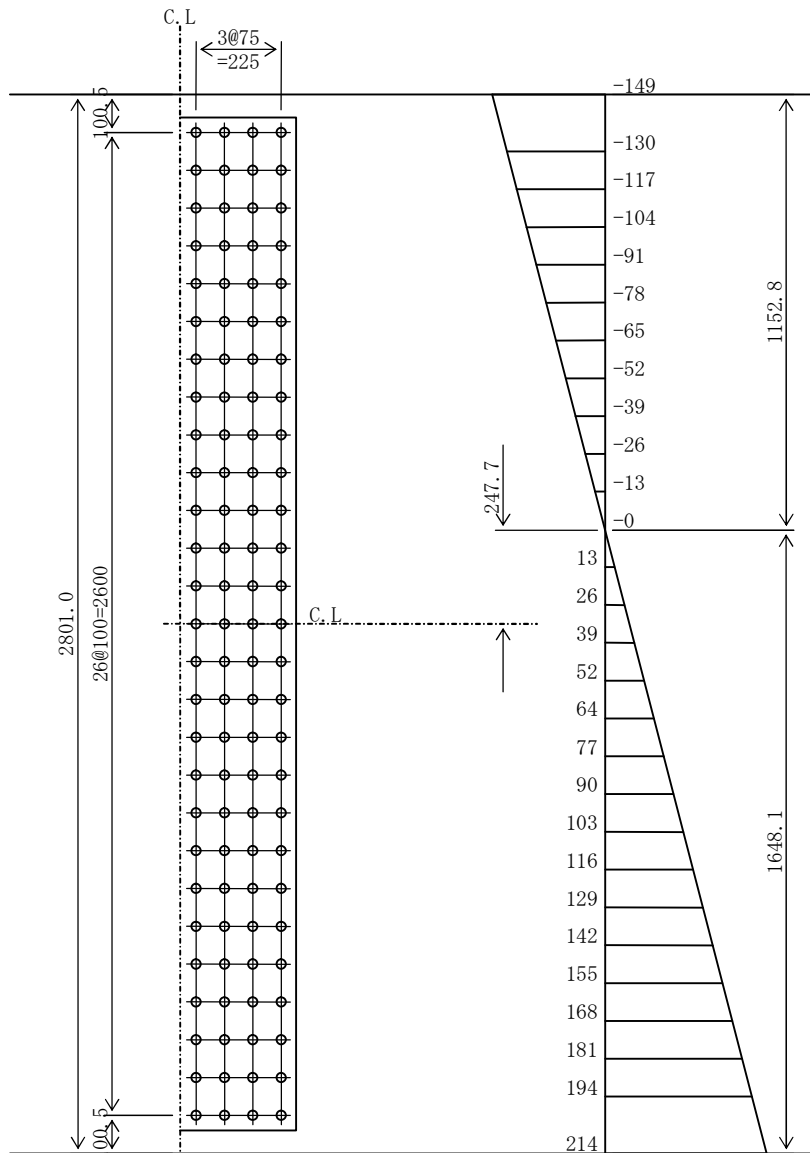
$$\sigma_L = 214 \text{ N/mm}^2 > \sigma_a * 0.75 = 255 * 0.75 = 191 \text{ N/mm}^2$$

$$\sigma_{Un} = 149 \text{ N/mm}^2$$

$$\sigma_{Ln} = 214 \text{ N/mm}^2$$

$$\tau = 25 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 27th row

Sharing width: $b_1 = 15.0$ cm

Total force to be shared

$$P_1 = 150 * 11 * (194 + 214) / 2 = 337399 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 337399 / (108000 * 1.00) = 3.1 \text{ pcs. (4 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 108 = 25 * 30811 / 108 = 7000 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c27} = \sqrt{((337399 / 4)^2 + 7000^2)} = 84640 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 4 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 2680 * 9 \quad A_s = 482.4 \text{ cm}^2 \text{ (SM570)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 3183184 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 2203383 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 214 * 2203383 * 10^4 / 1648 = 2855 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 2855 * 10^6 / (3183184 * 10^4) * 1588 = 142 \text{ N/mm}^2 < \sigma_a = 255 \text{ N/mm}^2$$

(192) G-2 J-79(Sec-80) LFLG

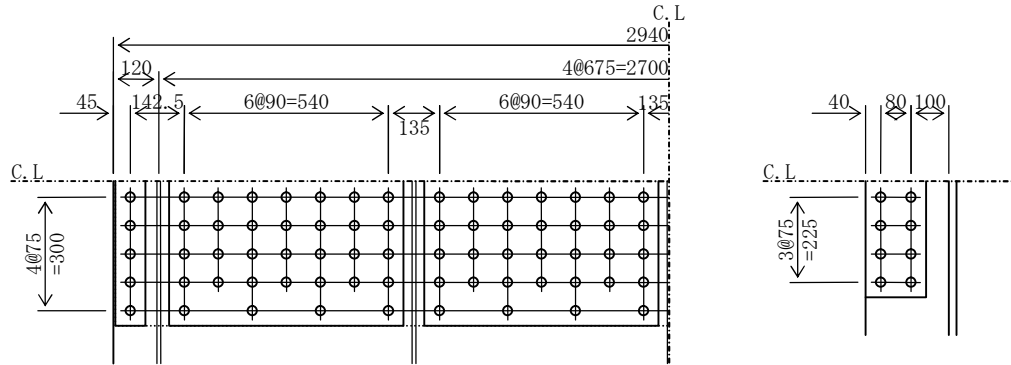
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 216 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 255 = 191 \text{ N/mm}^2 \\ \tau_{max} &= 11 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & \quad A_g = 588.0 \text{ cm}^2 \quad (\text{SM570}) \\ 3\text{-RIB PL } 220 * 19 & \quad A_{gr} = 125.4 \text{ cm}^2 \quad (\text{SM570}) \\ \Sigma A_g = A_g + A_{gr} &= 588.0 + 125.4 = 713.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & \quad A = 588.0 \\ (588.0 - (18 * 2.5) * 2.0) * 1.1 &= 547.8 < 588.0 \quad \therefore A_n = 547.8 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & \quad A_r = 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 \quad \therefore A_{nr} = 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 547.8 + 106.6 = 654.4 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 216 * 713.4 / 654.4 = 236 \text{ N/mm}^2 \\ &< \sigma_{ta} = 255 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 236 * 54780 = 12908379 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 191 * 54780 / 1.1 = 9524250 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 236 * 10659 = 2511691 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 191 * 10659 / 1.1 = 1853212 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (12908379 + 2511691) / 255 = 60471 \text{ mm}^2 = 604.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 12908379 / 108000 = 119.5 \text{ pcs. (138 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2511691 / 108000 = 23.3 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{max} = 5,4 \text{ unites}$)

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 138 = 12908379 / 138 = 93539 \text{ N} \\ \rho_s &= \tau * A_g / 138 = 11 * 58800 / 138 = 4783 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{93539^2 + 4783^2} = 93661 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM570)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 12	(19.2 -	2*(1*2.5)* 1.2)*1.1= 14.5 <	19.2 ∴ 14.5
4-SPL PL	620 * 12	(297.6 -	4*(7*2.5)* 1.2)*1.1= 235.0 <	297.6 ∴ 235.0
1-SPL PL	2930 * 11	(322.3 -	(30*2.5)* 1.1)*1.1= 263.8 <	322.3 ∴ 263.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		773.5		614.9
				> AnR

(193) G-2 J-80(Sec-81) LFLG

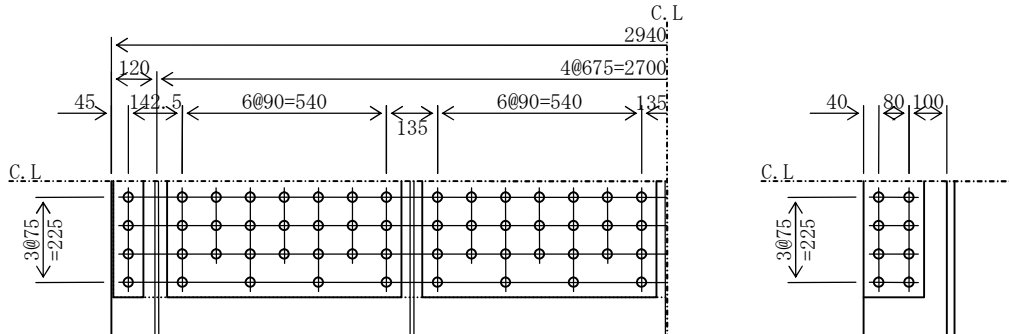
(a) Acting stress

$$\begin{aligned}\sigma_{\text{tmax}} &= 176 \text{ N/mm}^2 & 0.75 \sigma_{\text{ta}} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{\text{max}} &= 17 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & & A_g &= 588.0 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 588.0 + 125.4 & &= 713.4 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 20 & & A &= 588.0 \\ (588.0 - (18 * 2.5) * 2.0) * 1.1 &= 547.8 < 588.0 & \therefore A_n &= 547.8 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 547.8 + 106.6 & &= 654.4 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{\text{tmax}} * \Sigma A_g / \Sigma A_n &= 176 * 713.4 / 654.4 & &= 191 \text{ N/mm}^2 \\ && &< \sigma_{\text{ta}} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 191 * 54780 = 10490025 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_n / 1.1 = 158 * 54780 / 1.1 = 7843500 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 191 * 10659 = 2041131 \text{ N} \\ &> 0.75 \sigma_{\text{ta}} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (10490025 + 2041131) / 210 = 59672 \text{ mm}^2 = 596.7 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 10490025 / 108000 = 97.1 \text{ pcs. (108 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 2041131 / 108000 = 18.9 \text{ pcs. (3 @ 8 = 24 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\text{max}} = 4,4 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 108 = 10490025 / 108 = 97130 \text{ N} \\ \rho_s &= \tau * A_g / 108 = 17 * 58800 / 108 = 9319 \text{ N} \\ \rho &= \sqrt{(\rho_p)^2 + (\rho_s)^2} = \sqrt{97130^2 + 9319^2} = 97576 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 12	(19.2 -	2*(1*2.5)* 1.2)*1.1= 14.5 <	19.2 ∴ 14.5
4-SPL PL	620 * 12	(297.6 -	4*(7*2.5)* 1.2)*1.1= 235.0 <	297.6 ∴ 235.0
1-SPL PL	2930 * 11	(322.3 -	(30*2.5)* 1.1)*1.1= 263.8 <	322.3 ∴ 263.8
6-SPL PL	160 * 14	(134.4 -	6*(2*2.5)* 1.4)*1.1= 101.6 <	134.4 ∴ 101.6
<hr/>				
		773.5		614.9
				> AnR

(194) G-2 J-81 (Sec-82) LFLG

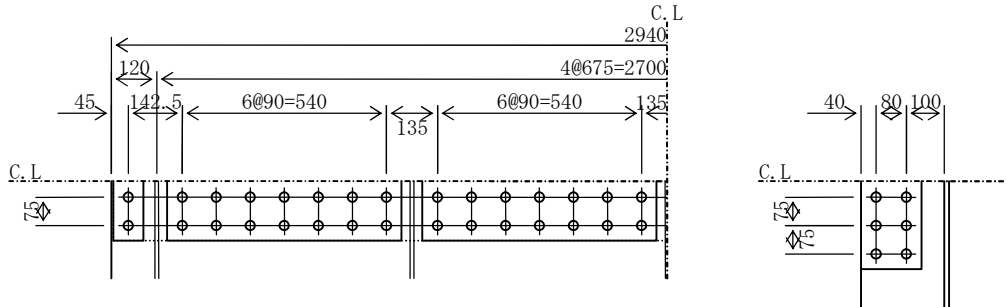
(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 119 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 210 = 158 \text{ N/mm}^2 \\ \tau_{max} &= 36 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 13 & & A_g &= 382.2 \text{ cm}^2 & (\text{SM490Y}) \\ 3\text{-RIB PL } 220 * 19 & & A_{gr} &= 125.4 \text{ cm}^2 & (\text{SM490Y}) \\ \Sigma A_g = A_g + A_{gr} &= 382.2 + 125.4 & &= 507.6 \text{ cm}^2\end{aligned}$$

(c) Bolt arrangement



(d) Check of section of main plate

$$\begin{aligned}1\text{-LFLG PL } 2940 * 13 & & A &= 382.2 \\ (382.2 - (30 * 2.5) * 1.3) * 1.1 &= 313.2 < 382.2 & \therefore A_n &= 313.2 \text{ cm}^2 \\ 3\text{-RIB PL } 220 * 19 & & A_r &= 125.4 \\ (125.4 - 3 * (2 * 2.5) * 1.9) * 1.1 &= 106.6 < 125.4 & \therefore A_{nr} &= 106.6 \text{ cm}^2 \\ \Sigma A_n = A_n + A_{nr} &= 313.2 + 106.6 & &= 419.8 \text{ cm}^2 \\ \sigma_{tn} = \sigma_{tmax} * \Sigma A_g / \Sigma A_n &= 119 * 507.6 / 419.8 & &= 144 \text{ N/mm}^2 \\ && &< \sigma_{ta} = 210 \text{ N/mm}^2\end{aligned}$$

(e) Design axial force

$$\begin{aligned}\bullet \text{ Main plate } P_t &= \sigma_{tn} * A_n = 144 * 31317 = 4505715 \text{ N} \\ &> 0.75 \sigma_{ta} * A_n / 1.1 = 158 * 31317 / 1.1 = 4484025 \text{ N} \\ \bullet \text{ Rib } P_{tr} &= \sigma_{tn} * A_{nr} = 144 * 10659 = 1533557 \text{ N} \\ &> 0.75 \sigma_{ta} * A_{nr} / 1.1 = 158 * 10659 / 1.1 = 1526175 \text{ N}\end{aligned}$$

(f) Required section area of the splice plates

$$A_{nR} = (P_t + P_{tr}) / \sigma_a = (4505715 + 1533557) / 210 = 28758 \text{ mm}^2 = 287.6 \text{ cm}^2$$

(g) Required bolt number

$$\begin{aligned}\bullet \text{ Main plate } n &= P_t / (108000 * 1.00) = 4505715 / 108000 = 41.7 \text{ pcs. (60 bolts will be used.)} \\ \bullet \text{ Rib } n_r &= P_{tr} / (108000 * 1.00) = 1533557 / 108000 = 14.2 \text{ pcs. (3 @ 6 = 18 bolts will be used.)}\end{aligned}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2,3 \text{ unites)}$$

(h) Tensile force per one bolt

$$\begin{aligned}\rho_p &= P_t / 60 = 4505715 / 60 = 75095 \text{ N} \\ \rho_s &= \tau * A_g / 60 = 36 * 38220 / 60 = 22729 \text{ N} \\ \rho &= \sqrt{(\rho_p^2 + \rho_s^2)} = \sqrt{(75095^2 + 22729^2)} = 78460 \text{ N} < \rho_a = 108000 \text{ N}\end{aligned}$$

(i) Check of splice plates

	(SM490Y)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	80 * 9	(14.4 -	2*(1*2.5)* 0.9)*1.1= 10.9 <	14.4 ∴ 10.9
4-SPL PL	620 * 9	(223.2 -	4*(7*2.5)* 0.9)*1.1= 176.2 <	223.2 ∴ 176.2
1-SPL PL	2930 * 9	(263.7 -	(30*2.5)* 0.9)*1.1= 215.8 <	263.7 ∴ 215.8
6-SPL PL	160 * 11	(105.6 -	6*(2*2.5)* 1.1)*1.1= 79.9 <	105.6 ∴ 79.9
<hr/>				
		606.9		482.8
				> AnR

3-4 Summary of Splice calculation of MainGirde

Calculation table of field joint

1) Flange

• Main plate

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
1	D-1	J-1(Sec-1)	DECK-1	718	16	SM490Y	---	158	11	---	---	16.8	21	86385	9	9	110.1	147.3	*1
2	D-1	J-1(Sec-1)	DECK-2	482	16	SM490Y	---	158	11	---	---	11.3	12	101510	9	9	98.3	131.6	*2
3	D-1	J-2(Sec-2)	DECK-1	718	16	SM490Y	---	158	8	---	---	16.8	21	86257	9	9	110.1	147.3	3
4	D-1	J-2(Sec-2)	DECK-2	482	16	SM490Y	---	158	8	---	---	11.2	12	101373	9	9	98.3	131.5	4
5	D-1	J-3(Sec-3)	DECK-1	718	16	SM490Y	---	158	5	---	---	16.8	21	86191	9	9	110.1	147.3	*3
6	D-1	J-3(Sec-3)	DECK-2	482	16	SM490Y	---	158	5	---	---	11.2	12	101294	9	9	98.3	131.5	*4
7	D-1	J-4(Sec-4)	DECK-1	718	16	SM490Y	---	-169	2	---	---	18.0	21	92591	9	11	118.4	163.1	*5
8	D-1	J-4(Sec-4)	DECK-2	482	16	SM490Y	---	-169	2	---	---	12.1	16	81612	9	11	105.6	138.9	*6
9	D-1	J-5(Sec-6)	DECK-1	718	16	SM490Y	---	-170	4	---	---	18.1	21	92871	9	11	118.7	163.1	*7
10	D-1	J-5(Sec-6)	DECK-2	482	16	SM490Y	---	-170	4	---	---	12.1	16	81852	9	11	105.9	138.9	*8
11	D-1	J-6(Sec-7)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86221	9	9	110.1	147.3	*9
12	D-1	J-6(Sec-7)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101309	9	9	98.3	131.5	*10
13	D-1	J-7(Sec-8)	DECK-1	718	16	SM490Y	---	158	10	---	---	16.8	21	86315	9	9	110.1	147.3	9
14	D-1	J-7(Sec-8)	DECK-2	482	16	SM490Y	---	158	10	---	---	11.2	12	101419	9	9	98.3	131.5	10
15	D-1	J-8(Sec-9)	DECK-1	718	16	SM490Y	---	158	13	---	---	16.8	21	86449	9	9	110.1	147.3	9
16	D-1	J-8(Sec-9)	DECK-2	482	16	SM490Y	---	158	13	---	---	11.2	12	101577	9	9	98.3	131.5	10
17	D-1	J-9(Sec-9)	DECK-1	718	16	SM490Y	158	158	15	---	57	16.8	21	86554	9	9	110.1	150.1	24
18	D-1	J-9(Sec-9)	DECK-2	482	16	SM490Y	158	158	15	---	59	11.2	12	101701	9	9	98.3	131.5	98
19	D-1	J-10(Sec-10)	DECK-1	718	22	SM490Y	158	158	13	---	120	23.0	28	89160	9	9	142.4	150.1	13
20	D-1	J-10(Sec-10)	DECK-2	482	22	SM490Y	158	158	13	---	122	15.5	16	104762	9	9	120.0	131.5	14
21	D-1	J-11(Sec-11)	DECK-1	718	27	SM490Y	166	158	13	---	166	28.3	35	87506	12	16	151.7	179.8	11

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
22	D-1	J-11 (Sec-11)	DECK-2	482	27	SM490Y	167	158	13	---	167	19.0	20	102819	12	16	123.6	138.1	12
23	D-1	J-12 (Sec-13)	DECK-1	718	27	SM490Y	177	158	11	---	177	28.3	35	87439	12	16	161.2	179.8	*11
24	D-1	J-12 (Sec-13)	DECK-2	482	27	SM490Y	178	158	11	---	178	19.0	20	102740	12	16	131.4	138.1	*12
25	D-1	J-13 (Sec-14)	DECK-1	718	22	SM490Y	158	158	11	---	124	23.0	28	89053	9	9	142.4	150.1	*13
26	D-1	J-13 (Sec-14)	DECK-2	482	22	SM490Y	158	158	11	---	125	15.5	16	104637	9	9	120.0	131.5	*14
27	D-1	J-14 (Sec-15)	DECK-1	718	16	SM490Y	158	158	12	---	82	16.8	21	86401	9	9	110.1	150.1	24
28	D-1	J-14 (Sec-15)	DECK-2	482	16	SM490Y	158	158	12	---	84	11.2	12	101521	9	9	98.3	131.5	98
29	D-1	J-15 (Sec-16)	DECK-1	718	16	SM490Y	158	158	9	---	32	16.8	21	86298	9	9	110.1	150.1	24
30	D-1	J-15 (Sec-16)	DECK-2	482	16	SM490Y	158	158	9	---	33	11.2	12	101400	9	9	98.3	131.5	98
31	D-1	J-16 (Sec-16)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86225	9	9	110.1	147.3	9
32	D-1	J-16 (Sec-16)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101314	9	9	98.3	131.5	10
33	D-1	J-17 (Sec-17)	DECK-1	718	16	SM490Y	---	158	4	---	---	16.8	21	86181	9	9	110.1	147.3	9
34	D-1	J-17 (Sec-17)	DECK-2	482	16	SM490Y	---	158	4	---	---	11.2	12	101263	9	9	98.3	131.5	10
35	D-1	J-18 (Sec-19)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86165	9	9	110.1	147.3	9
36	D-1	J-18 (Sec-19)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101244	9	9	98.3	131.5	10
37	D-1	J-19 (Sec-20)	DECK-1	718	16	SM490Y	---	158	5	---	---	16.8	21	86197	9	9	110.1	147.3	9
38	D-1	J-19 (Sec-20)	DECK-2	482	16	SM490Y	---	158	5	---	---	11.2	12	101280	9	9	98.3	131.5	10
39	D-1	J-20 (Sec-20)	DECK-1	718	16	SM490Y	158	158	8	---	4	16.8	21	86261	9	9	110.1	150.1	24
40	D-1	J-20 (Sec-20)	DECK-2	482	16	SM490Y	158	158	8	---	4	11.2	12	101357	9	9	98.3	131.5	98
41	D-1	J-21 (Sec-21)	DECK-1	718	16	SM490Y	158	158	11	---	43	16.8	21	86347	9	9	110.1	150.1	24
42	D-1	J-21 (Sec-21)	DECK-2	482	16	SM490Y	158	158	11	---	45	11.2	12	101457	9	9	98.3	131.5	98
43	D-1	J-22 (Sec-22)	DECK-1	718	16	SM490Y	158	158	13	---	98	16.8	21	86460	9	9	110.1	150.1	24
44	D-1	J-22 (Sec-22)	DECK-2	482	16	SM490Y	158	158	13	---	101	11.2	12	101590	9	9	98.3	131.5	98
45	D-1	J-23 (Sec-23)	DECK-1	718	19	SM490Y	168	158	14	---	168	19.9	21	102722	9	11	114.9	136.1	*15
46	D-1	J-23 (Sec-23)	DECK-2	482	19	SM490Y	172	158	14	---	172	13.4	16	90523	9	11	99.3	111.0	*16
47	D-1	J-24 (Sec-25)	DECK-1	718	19	SM490Y	167	158	14	---	167	19.9	21	102730	9	11	113.9	136.1	15
48	D-1	J-24 (Sec-25)	DECK-2	482	19	SM490Y	170	158	14	---	170	13.4	16	90531	9	11	98.4	111.0	16

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
49	D-1	J-25 (Sec-26)	DECK-1	718	16	SM490Y	158	158	14	---	92	16.8	21	86474	9	9	110.1	150.1	24
50	D-1	J-25 (Sec-26)	DECK-2	482	16	SM490Y	158	158	14	---	94	11.2	12	101606	9	9	98.3	131.5	98
51	D-1	J-26 (Sec-27)	DECK-1	718	16	SM490Y	158	158	10	---	34	16.8	21	86343	9	9	110.1	150.1	24
52	D-1	J-26 (Sec-27)	DECK-2	482	16	SM490Y	158	158	10	---	35	11.2	12	101452	9	9	98.3	131.5	98
53	D-1	J-27 (Sec-27)	DECK-1	718	16	SM490Y	---	158	8	---	---	16.8	21	86256	9	9	110.1	147.3	9
54	D-1	J-27 (Sec-27)	DECK-2	482	16	SM490Y	---	158	8	---	---	11.2	12	101351	9	9	98.3	131.5	10
55	D-1	J-28 (Sec-28)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86209	9	9	110.1	147.3	9
56	D-1	J-28 (Sec-28)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101295	9	9	98.3	131.5	10
57	D-1	J-29 (Sec-30)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86171	9	9	110.1	147.3	9
58	D-1	J-29 (Sec-30)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101251	9	9	98.3	131.5	10
59	D-1	J-30 (Sec-31)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86171	9	9	110.1	147.3	9
60	D-1	J-30 (Sec-31)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101250	9	9	98.3	131.5	10
61	D-1	J-31 (Sec-32)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86214	9	9	110.1	147.3	9
62	D-1	J-31 (Sec-32)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101301	9	9	98.3	131.5	10
63	D-1	J-32 (Sec-33)	DECK-1	718	16	SM490Y	---	158	9	---	---	16.8	21	86295	9	9	110.1	147.3	9
64	D-1	J-32 (Sec-33)	DECK-2	482	16	SM490Y	---	158	9	---	---	11.2	12	101396	9	9	98.3	131.5	10
65	D-1	J-33 (Sec-33)	DECK-1	718	16	SM490Y	158	158	12	---	48	16.8	21	86397	9	9	110.1	150.1	24
66	D-1	J-33 (Sec-33)	DECK-2	482	16	SM490Y	158	158	12	---	49	11.2	12	101516	9	9	98.3	131.5	98
67	D-1	J-34 (Sec-34)	DECK-1	718	16	SM490Y	158	158	15	---	110	16.8	21	86527	9	9	110.1	150.1	24
68	D-1	J-34 (Sec-34)	DECK-2	482	16	SM490Y	158	158	15	---	114	11.2	12	101668	9	9	98.3	131.5	98
69	D-1	J-35 (Sec-35)	DECK-1	718	22	SM490Y	170	158	13	---	170	23.0	28	89164	10	13	130.5	152.4	*17
70	D-1	J-35 (Sec-35)	DECK-2	482	22	SM490Y	172	158	13	---	172	15.5	16	104768	10	13	109.9	121.1	*18
71	D-1	J-36 (Sec-37)	DECK-1	718	22	SM490Y	169	158	13	---	169	23.0	28	89146	10	13	130.0	152.4	17
72	D-1	J-36 (Sec-37)	DECK-2	482	22	SM490Y	171	158	13	---	171	15.5	16	104746	10	13	109.5	121.1	18
73	D-1	J-37 (Sec-38)	DECK-1	718	16	SM490Y	158	158	14	---	110	16.8	21	86498	9	9	110.1	150.1	24
74	D-1	J-37 (Sec-38)	DECK-2	482	16	SM490Y	158	158	14	---	113	11.2	12	101634	9	9	98.3	131.5	98
75	D-1	J-38 (Sec-39)	DECK-1	718	16	SM490Y	158	158	11	---	48	16.8	21	86373	9	9	110.1	150.1	24

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
76	D-1	J-38 (Sec-39)	DECK-2	482	16	SM490Y	158	158	11	---	49	11.2	12	101488	9	9	98.3	131.5	98
77	D-1	J-39 (Sec-39)	DECK-1	718	16	SM490Y	158	158	9	---	2	16.8	21	86285	9	9	110.1	150.1	24
78	D-1	J-39 (Sec-39)	DECK-2	482	16	SM490Y	158	158	9	---	2	11.2	12	101385	9	9	98.3	131.5	98
79	D-1	J-40 (Sec-40)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86219	9	9	110.1	147.3	9
80	D-1	J-40 (Sec-40)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101307	9	9	98.3	131.5	10
81	D-1	J-41 (Sec-41)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86172	9	9	110.1	147.3	9
82	D-1	J-41 (Sec-41)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101252	9	9	98.3	131.5	10
83	D-1	J-42 (Sec-43)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86172	9	9	110.1	147.3	9
84	D-1	J-42 (Sec-43)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101252	9	9	98.3	131.5	10
85	D-1	J-43 (Sec-44)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86218	9	9	110.1	147.3	9
86	D-1	J-43 (Sec-44)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101306	9	9	98.3	131.5	10
87	D-1	J-44 (Sec-45)	DECK-1	718	16	SM490Y	158	158	9	---	1	16.8	21	86293	9	9	110.1	150.1	24
88	D-1	J-44 (Sec-45)	DECK-2	482	16	SM490Y	158	158	9	---	1	11.2	12	101394	9	9	98.3	131.5	98
89	D-1	J-45 (Sec-45)	DECK-1	718	16	SM490Y	158	158	12	---	47	16.8	21	86386	9	9	110.1	150.1	24
90	D-1	J-45 (Sec-45)	DECK-2	482	16	SM490Y	158	158	12	---	48	11.2	12	101503	9	9	98.3	131.5	98
91	D-1	J-46 (Sec-46)	DECK-1	718	16	SM490Y	158	158	14	---	107	16.8	21	86508	9	9	110.1	150.1	24
92	D-1	J-46 (Sec-46)	DECK-2	482	16	SM490Y	158	158	14	---	110	11.2	12	101647	9	9	98.3	131.5	98
93	D-1	J-47 (Sec-47)	DECK-1	718	21	SM490Y	172	158	14	---	172	22.0	28	85137	10	13	127.4	152.4	*19
94	D-1	J-47 (Sec-47)	DECK-2	482	21	SM490Y	175	158	14	---	175	14.8	16	100036	10	13	108.2	121.1	*20
95	D-1	J-48 (Sec-49)	DECK-1	718	21	SM490Y	169	158	13	---	169	22.0	28	85111	10	13	125.4	152.4	19
96	D-1	J-48 (Sec-49)	DECK-2	482	21	SM490Y	172	158	13	---	172	14.8	16	100005	10	13	106.4	121.1	20
97	D-1	J-49 (Sec-50)	DECK-1	718	16	SM490Y	158	158	14	---	107	16.8	21	86502	9	9	110.1	150.1	24
98	D-1	J-49 (Sec-50)	DECK-2	482	16	SM490Y	158	158	14	---	110	11.2	12	101639	9	9	98.3	131.5	98
99	D-1	J-50 (Sec-51)	DECK-1	718	16	SM490Y	158	158	11	---	46	16.8	21	86377	9	9	110.1	150.1	24
100	D-1	J-50 (Sec-51)	DECK-2	482	16	SM490Y	158	158	11	---	47	11.2	12	101493	9	9	98.3	131.5	98
101	D-1	J-51 (Sec-51)	DECK-1	718	16	SM490Y	---	158	9	---	---	16.8	21	86284	9	9	110.1	147.3	9
102	D-1	J-51 (Sec-51)	DECK-2	482	16	SM490Y	---	158	9	---	---	11.2	12	101383	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
103	D-1	J-52 (Sec-52)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86216	9	9	110.1	147.3	9
104	D-1	J-52 (Sec-52)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101303	9	9	98.3	131.5	10
105	D-1	J-53 (Sec-53)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86171	9	9	110.1	147.3	9
106	D-1	J-53 (Sec-53)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101251	9	9	98.3	131.5	10
107	D-1	J-54 (Sec-55)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86172	9	9	110.1	147.3	9
108	D-1	J-54 (Sec-55)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101251	9	9	98.3	131.5	10
109	D-1	J-55 (Sec-56)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86215	9	9	110.1	147.3	9
110	D-1	J-55 (Sec-56)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101302	9	9	98.3	131.5	10
111	D-1	J-56 (Sec-57)	DECK-1	718	16	SM490Y	---	158	9	---	---	16.8	21	86286	9	9	110.1	147.3	9
112	D-1	J-56 (Sec-57)	DECK-2	482	16	SM490Y	---	158	9	---	---	11.2	12	101385	9	9	98.3	131.5	10
113	D-1	J-57 (Sec-57)	DECK-1	718	16	SM490Y	158	158	11	---	39	16.8	21	86377	9	9	110.1	150.1	24
114	D-1	J-57 (Sec-57)	DECK-2	482	16	SM490Y	158	158	11	---	40	11.2	12	101492	9	9	98.3	131.5	98
115	D-1	J-58 (Sec-58)	DECK-1	718	16	SM490Y	158	158	14	---	97	16.8	21	86505	9	9	110.1	150.1	24
116	D-1	J-58 (Sec-58)	DECK-2	482	16	SM490Y	158	158	14	---	100	11.2	12	101643	9	9	98.3	131.5	98
117	D-1	J-59 (Sec-59)	DECK-1	718	20	SM490Y	166	158	14	---	166	20.9	28	81100	10	13	118.1	150.2	*21
118	D-1	J-59 (Sec-59)	DECK-2	482	20	SM490Y	169	158	14	---	169	14.1	16	95292	10	13	101.1	121.1	23
119	D-1	J-60 (Sec-61)	DECK-1	718	20	SM490Y	169	158	13	---	169	20.9	28	81063	10	13	120.1	152.4	*22
120	D-1	J-60 (Sec-61)	DECK-2	482	20	SM490Y	172	158	13	---	172	14.1	16	95249	10	13	102.8	121.1	*23
121	D-1	J-61 (Sec-62)	DECK-1	718	16	SM490Y	158	158	13	---	102	16.8	21	86462	9	9	110.1	150.1	24
122	D-1	J-61 (Sec-62)	DECK-2	482	16	SM490Y	158	158	13	---	105	11.2	12	101592	9	9	98.3	131.5	98
123	D-1	J-62 (Sec-63)	DECK-1	718	16	SM490Y	158	158	11	---	44	16.8	21	86349	9	9	110.1	150.1	24
124	D-1	J-62 (Sec-63)	DECK-2	482	16	SM490Y	158	158	11	---	46	11.2	12	101460	9	9	98.3	131.5	98
125	D-1	J-63 (Sec-63)	DECK-1	718	16	SM490Y	158	158	8	---	2	16.8	21	86257	9	9	110.1	150.1	24
126	D-1	J-63 (Sec-63)	DECK-2	482	16	SM490Y	158	158	8	---	2	11.2	12	101352	9	9	98.3	131.5	98
127	D-1	J-64 (Sec-64)	DECK-1	718	16	SM490Y	---	158	5	---	---	16.8	21	86200	9	9	110.1	147.3	9
128	D-1	J-64 (Sec-64)	DECK-2	482	16	SM490Y	---	158	5	---	---	11.2	12	101284	9	9	98.3	131.5	10
129	D-1	J-65 (Sec-65)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86168	9	9	110.1	147.3	9

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
130	D-1	J-65 (Sec-65)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101247	9	9	98.3	131.5	10
131	D-1	J-66 (Sec-67)	DECK-1	718	16	SM490Y	---	158	3	---	---	16.8	21	86175	9	9	110.1	147.3	9
132	D-1	J-66 (Sec-67)	DECK-2	482	16	SM490Y	---	158	3	---	---	11.2	12	101255	9	9	98.3	131.5	10
133	D-1	J-67 (Sec-68)	DECK-1	718	16	SM490Y	---	158	6	---	---	16.8	21	86225	9	9	110.1	147.3	9
134	D-1	J-67 (Sec-68)	DECK-2	482	16	SM490Y	---	158	6	---	---	11.2	12	101314	9	9	98.3	131.5	10
135	D-1	J-68 (Sec-68)	DECK-1	718	16	SM490Y	158	158	9	---	15	16.8	21	86292	9	9	110.1	150.1	24
136	D-1	J-68 (Sec-68)	DECK-2	482	16	SM490Y	158	158	9	---	16	11.2	12	101392	9	9	98.3	131.5	98
137	D-1	J-69 (Sec-69)	DECK-1	718	16	SM490Y	158	158	12	---	62	16.8	21	86397	9	9	110.1	150.1	24
138	D-1	J-69 (Sec-69)	DECK-2	482	16	SM490Y	158	158	12	---	64	11.2	12	101516	9	9	98.3	131.5	98
139	D-1	J-70 (Sec-70)	DECK-1	718	16	SM490Y	158	158	15	---	129	16.8	21	86532	9	9	110.1	150.1	*24
140	D-1	J-70 (Sec-70)	DECK-2	482	16	SM490Y	158	158	15	---	133	11.2	12	101674	9	9	98.3	131.5	98
141	D-1	J-71 (Sec-71)	DECK-1	718	25	SM490Y	169	158	12	---	169	26.2	28	101249	12	16	144.4	179.8	*25
142	D-1	J-71 (Sec-71)	DECK-2	482	25	SM490Y	170	158	12	---	170	17.6	20	95174	12	16	119.1	138.1	*26
143	D-1	J-72 (Sec-73)	DECK-1	718	25	SM490Y	161	158	12	---	161	26.2	28	101264	12	16	137.2	177.6	*27
144	D-1	J-72 (Sec-73)	DECK-2	482	25	SM490Y	162	158	12	---	162	17.6	20	95187	12	16	113.1	138.1	26
145	D-1	J-73 (Sec-74)	DECK-1	718	16	SM490Y	158	158	15	---	112	16.8	21	86557	9	9	110.1	150.1	24
146	D-1	J-73 (Sec-74)	DECK-2	482	16	SM490Y	158	158	15	---	115	11.2	12	101704	9	9	98.3	131.5	98
147	D-1	J-74 (Sec-75)	DECK-1	718	16	SM490Y	158	158	12	---	37	16.8	21	86423	9	9	110.1	150.1	24
148	D-1	J-74 (Sec-75)	DECK-2	482	16	SM490Y	158	158	12	---	38	11.2	12	101547	9	9	98.3	131.5	98
149	D-1	J-75 (Sec-75)	DECK-1	718	16	SM490Y	---	158	10	---	---	16.8	21	86340	9	9	110.1	147.3	9
150	D-1	J-75 (Sec-75)	DECK-2	482	16	SM490Y	---	158	10	---	---	11.2	12	101449	9	9	98.3	131.5	10
151	D-1	J-76 (Sec-76)	DECK-1	718	16	SM490Y	---	158	8	---	---	16.8	21	86261	9	9	110.1	147.3	9
152	D-1	J-76 (Sec-76)	DECK-2	482	16	SM490Y	---	158	8	---	---	11.2	12	101356	9	9	98.3	131.5	10
153	D-1	J-77 (Sec-77)	DECK-1	718	16	SM490Y	---	158	5	---	---	16.8	21	86195	9	9	110.1	147.3	9
154	D-1	J-77 (Sec-77)	DECK-2	482	16	SM490Y	---	158	5	---	---	11.2	12	101279	9	9	98.3	131.5	10
155	D-1	J-78 (Sec-79)	DECK-1	718	16	SM490Y	---	158	2	---	---	16.8	21	86162	9	9	110.1	147.3	9
156	D-1	J-78 (Sec-79)	DECK-2	482	16	SM490Y	---	158	2	---	---	11.2	12	101240	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
157	D-1	J-79 (Sec-80)	DECK-1	718	16	SM490Y	---	158	5	---	---	16.8	21	86203	9	9	110.1	147.3	9
158	D-1	J-79 (Sec-80)	DECK-2	482	16	SM490Y	---	158	5	---	---	11.2	12	101288	9	9	98.3	131.5	10
159	D-1	J-80 (Sec-81)	DECK-1	718	16	SM490Y	---	158	8	---	---	16.8	21	86277	9	9	110.1	147.3	9
160	D-1	J-80 (Sec-81)	DECK-2	482	16	SM490Y	---	158	8	---	---	11.2	12	101375	9	9	98.3	131.5	10
161	D-1	J-81 (Sec-82)	DECK-1	718	16	SM490Y	---	158	11	---	---	16.8	21	86369	9	9	110.1	147.3	9
162	D-1	J-81 (Sec-82)	DECK-2	482	16	SM490Y	---	158	11	---	---	11.2	12	101483	9	9	98.3	131.5	10
163	G-1	J-1 (Sec-1)	DECK-1	1048	16	SM490Y	---	158	25	---	---	24.5	27	99046	9	10	173.7	215.3	30
164	G-1	J-1 (Sec-1)	DECK-2	2312	16	SM490Y	---	158	25	---	---	53.9	72	81945	9	10	439.1	591.3	48
165	G-1	J-2 (Sec-2)	DECK-1	1048	16	SM490Y	---	158	19	---	---	24.5	27	98531	9	10	173.7	215.3	30
166	G-1	J-2 (Sec-2)	DECK-2	2312	16	SM490Y	---	158	19	---	---	53.9	72	81519	9	10	439.1	591.3	48
167	G-1	J-3 (Sec-3)	DECK-1	1048	16	SM490Y	---	-163	14	---	---	25.4	27	101828	9	10	180.2	215.3	30
168	G-1	J-3 (Sec-3)	DECK-2	2312	16	SM490Y	---	-163	14	---	---	56.0	72	84247	9	10	455.6	591.3	29
169	G-1	J-4 (Sec-4)	DECK-1	1048	16	SM490Y	---	-178	10	---	---	27.7	36	83184	9	10	196.7	220.9	*28
170	G-1	J-4 (Sec-4)	DECK-2	2312	16	SM490Y	---	-178	10	---	---	61.1	72	91762	9	10	497.3	591.3	*29
171	G-1	J-5 (Sec-6)	DECK-1	1048	16	SM490Y	---	-177	11	---	---	27.5	36	82501	9	10	195.0	220.9	28
172	G-1	J-5 (Sec-6)	DECK-2	2312	16	SM490Y	---	-177	11	---	---	60.6	72	91009	9	10	493.0	591.3	29
173	G-1	J-6 (Sec-7)	DECK-1	1048	16	SM490Y	---	-164	15	---	---	25.4	27	101974	9	10	180.4	215.3	*30
174	G-1	J-6 (Sec-7)	DECK-2	2312	16	SM490Y	---	-164	15	---	---	56.0	72	84368	9	10	456.0	591.3	29
175	G-1	J-7 (Sec-8)	DECK-1	1048	16	SM490Y	---	158	21	---	---	24.5	27	98672	9	10	173.7	215.3	30
176	G-1	J-7 (Sec-8)	DECK-2	2312	16	SM490Y	---	158	21	---	---	53.9	72	81636	9	10	439.1	591.3	48
177	G-1	J-8 (Sec-9)	DECK-1	1048	16	SM490Y	---	158	27	---	---	24.5	27	99224	9	10	173.7	215.3	30
178	G-1	J-8 (Sec-9)	DECK-2	2312	16	SM490Y	---	158	27	---	---	53.9	72	82092	9	10	439.1	591.3	48
179	G-1	J-9 (Sec-9)	DECK-1	1048	16	SM490Y	158	158	30	---	58	24.5	32	83999	9	10	173.7	219.4	43
180	G-1	J-9 (Sec-9)	DECK-2	2312	16	SM490Y	158	158	30	---	62	53.9	72	82366	9	10	439.1	591.3	44
181	G-1	J-10 (Sec-10)	DECK-1	1048	22	SM490Y	158	158	26	---	122	33.6	40	92033	9	11	220.9	226.4	33
182	G-1	J-10 (Sec-10)	DECK-2	2312	22	SM490Y	158	158	26	---	129	74.2	90	90244	9	10	543.2	591.3	34
183	G-1	J-11 (Sec-11)	DECK-1	1048	27	SM490Y	167	158	25	---	167	41.3	48	93974	12	19	247.8	267.1	31

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
184	G-1	J-11 (Sec-11)	DECK-2	2312	27	SM490Y	175	158	25	---	175	91.0	108	92147	12	19	600.0	653.1	32
185	G-1	J-12 (Sec-13)	DECK-1	1048	27	SM490Y	177	158	23	---	177	41.3	48	93794	12	19	262.8	267.1	*31
186	G-1	J-12 (Sec-13)	DECK-2	2312	27	SM490Y	186	158	23	---	186	95.1	108	95947	12	19	636.2	653.1	*32
187	G-1	J-13 (Sec-14)	DECK-1	1048	22	SM490Y	158	158	23	---	125	33.6	40	91750	9	11	220.9	226.4	*33
188	G-1	J-13 (Sec-14)	DECK-2	2312	22	SM490Y	158	158	23	---	132	74.2	90	89966	9	10	543.2	591.3	*34
189	G-1	J-14 (Sec-15)	DECK-1	1048	16	SM490Y	158	158	26	---	83	24.5	32	83622	9	10	173.7	219.4	43
190	G-1	J-14 (Sec-15)	DECK-2	2312	16	SM490Y	158	158	26	---	89	53.9	72	81996	9	10	439.1	591.3	44
191	G-1	J-15 (Sec-16)	DECK-1	1048	16	SM490Y	158	158	20	---	32	24.5	32	83209	9	10	173.7	219.4	43
192	G-1	J-15 (Sec-16)	DECK-2	2312	16	SM490Y	158	158	20	---	34	53.9	72	81591	9	10	439.1	591.3	44
193	G-1	J-16 (Sec-16)	DECK-1	1048	16	SM490Y	---	158	15	---	---	24.5	27	98249	9	10	173.7	215.3	30
194	G-1	J-16 (Sec-16)	DECK-2	2312	16	SM490Y	---	158	15	---	---	53.9	72	81286	9	10	439.1	591.3	48
195	G-1	J-17 (Sec-17)	DECK-1	1048	16	SM490Y	---	158	10	---	---	24.5	27	98006	9	10	173.7	215.3	30
196	G-1	J-17 (Sec-17)	DECK-2	2312	16	SM490Y	---	158	10	---	---	53.9	72	81085	9	10	439.1	591.3	48
197	G-1	J-18 (Sec-19)	DECK-1	1048	16	SM490Y	---	158	8	---	---	24.5	27	97929	9	10	173.7	215.3	30
198	G-1	J-18 (Sec-19)	DECK-2	2312	16	SM490Y	---	158	8	---	---	53.9	72	81021	9	10	439.1	591.3	48
199	G-1	J-19 (Sec-20)	DECK-1	1048	16	SM490Y	---	158	12	---	---	24.5	27	98086	9	10	173.7	215.3	30
200	G-1	J-19 (Sec-20)	DECK-2	2312	16	SM490Y	---	158	12	---	---	53.9	72	81151	9	10	439.1	591.3	48
201	G-1	J-20 (Sec-20)	DECK-1	1048	16	SM490Y	158	158	17	---	4	24.5	32	83022	9	10	173.7	219.4	43
202	G-1	J-20 (Sec-20)	DECK-2	2312	16	SM490Y	158	158	17	---	4	53.9	72	81408	9	10	439.1	591.3	44
203	G-1	J-21 (Sec-21)	DECK-1	1048	16	SM490Y	158	158	23	---	44	24.5	32	83382	9	10	173.7	219.4	43
204	G-1	J-21 (Sec-21)	DECK-2	2312	16	SM490Y	158	158	23	---	47	53.9	72	81761	9	10	439.1	591.3	44
205	G-1	J-22 (Sec-22)	DECK-1	1048	16	SM490Y	158	158	28	---	100	24.5	32	83864	9	10	173.7	219.4	43
206	G-1	J-22 (Sec-22)	DECK-2	2312	16	SM490Y	158	158	28	---	107	53.9	72	82234	9	10	439.1	591.3	44
207	G-1	J-23 (Sec-23)	DECK-1	1048	19	SM490Y	169	158	29	---	169	29.0	32	99659	9	14	190.8	211.9	*35
208	G-1	J-23 (Sec-23)	DECK-2	2312	19	SM490Y	179	158	29	---	179	64.7	72	98612	9	14	475.1	528.2	*36
209	G-1	J-24 (Sec-25)	DECK-1	1048	19	SM490Y	167	158	30	---	167	29.0	32	99751	9	14	189.2	211.9	35
210	G-1	J-24 (Sec-25)	DECK-2	2312	19	SM490Y	178	158	30	---	178	64.1	72	97861	9	14	470.9	528.2	36

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
211	G-1	J-25 (Sec-26)	DECK-1	1048	16	SM490Y	158	158	30	---	93	24.5	32	83981	9	10	173.7	219.4	43
212	G-1	J-25 (Sec-26)	DECK-2	2312	16	SM490Y	158	158	30	---	100	53.9	72	82349	9	10	439.1	591.3	44
213	G-1	J-26 (Sec-27)	DECK-1	1048	16	SM490Y	158	158	24	---	35	24.5	32	83501	9	10	173.7	219.4	43
214	G-1	J-26 (Sec-27)	DECK-2	2312	16	SM490Y	158	158	24	---	38	53.9	72	81878	9	10	439.1	591.3	44
215	G-1	J-27 (Sec-27)	DECK-1	1048	16	SM490Y	---	158	19	---	---	24.5	27	98483	9	10	173.7	215.3	30
216	G-1	J-27 (Sec-27)	DECK-2	2312	16	SM490Y	---	158	19	---	---	53.9	72	81480	9	10	439.1	591.3	48
217	G-1	J-28 (Sec-28)	DECK-1	1048	16	SM490Y	---	158	13	---	---	24.5	27	98153	9	10	173.7	215.3	30
218	G-1	J-28 (Sec-28)	DECK-2	2312	16	SM490Y	---	158	13	---	---	53.9	72	81207	9	10	439.1	591.3	48
219	G-1	J-29 (Sec-30)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97967	9	10	173.7	215.3	30
220	G-1	J-29 (Sec-30)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81053	9	10	439.1	591.3	48
221	G-1	J-30 (Sec-31)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97964	9	10	173.7	215.3	30
222	G-1	J-30 (Sec-31)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81050	9	10	439.1	591.3	48
223	G-1	J-31 (Sec-32)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98173	9	10	173.7	215.3	30
224	G-1	J-31 (Sec-32)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81224	9	10	439.1	591.3	48
225	G-1	J-32 (Sec-33)	DECK-1	1048	16	SM490Y	---	158	19	---	---	24.5	27	98539	9	10	173.7	215.3	30
226	G-1	J-32 (Sec-33)	DECK-2	2312	16	SM490Y	---	158	19	---	---	53.9	72	81526	9	10	439.1	591.3	48
227	G-1	J-33 (Sec-33)	DECK-1	1048	16	SM490Y	158	158	25	---	48	24.5	32	83568	9	10	173.7	219.4	43
228	G-1	J-33 (Sec-33)	DECK-2	2312	16	SM490Y	158	158	25	---	52	53.9	72	81944	9	10	439.1	591.3	44
229	G-1	J-34 (Sec-34)	DECK-1	1048	16	SM490Y	158	158	31	---	112	24.5	32	84091	9	10	173.7	219.4	43
230	G-1	J-34 (Sec-34)	DECK-2	2312	16	SM490Y	158	158	31	---	120	53.9	72	82456	9	10	439.1	591.3	44
231	G-1	J-35 (Sec-35)	DECK-1	1048	22	SM490Y	170	158	27	---	170	33.6	40	92135	10	15	215.1	226.6	*37
232	G-1	J-35 (Sec-35)	DECK-2	2312	22	SM490Y	180	158	27	---	180	75.1	90	91394	10	15	528.9	561.4	*38
233	G-1	J-36 (Sec-37)	DECK-1	1048	22	SM490Y	170	158	27	---	170	33.6	40	92113	10	15	214.5	226.6	37
234	G-1	J-36 (Sec-37)	DECK-2	2312	22	SM490Y	179	158	27	---	179	74.9	90	91124	10	15	527.4	561.4	38
235	G-1	J-37 (Sec-38)	DECK-1	1048	16	SM490Y	158	158	31	---	112	24.5	32	84109	9	10	173.7	219.4	43
236	G-1	J-37 (Sec-38)	DECK-2	2312	16	SM490Y	158	158	31	---	120	53.9	72	82474	9	10	439.1	591.3	44
237	G-1	J-38 (Sec-39)	DECK-1	1048	16	SM490Y	158	158	26	---	49	24.5	32	83609	9	10	173.7	219.4	43

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
238	G-1	J-38 (Sec-39)	DECK-2	2312	16	SM490Y	158	158	26	---	52	53.9	72	81983	9	10	439.1	591.3	44
239	G-1	J-39 (Sec-39)	DECK-1	1048	16	SM490Y	158	158	20	---	2	24.5	32	83166	9	10	173.7	219.4	43
240	G-1	J-39 (Sec-39)	DECK-2	2312	16	SM490Y	158	158	20	---	2	53.9	72	81549	9	10	439.1	591.3	44
241	G-1	J-40 (Sec-40)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98206	9	10	173.7	215.3	30
242	G-1	J-40 (Sec-40)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81250	9	10	439.1	591.3	48
243	G-1	J-41 (Sec-41)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97968	9	10	173.7	215.3	30
244	G-1	J-41 (Sec-41)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81054	9	10	439.1	591.3	48
245	G-1	J-42 (Sec-43)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97967	9	10	173.7	215.3	30
246	G-1	J-42 (Sec-43)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81053	9	10	439.1	591.3	48
247	G-1	J-43 (Sec-44)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98201	9	10	173.7	215.3	30
248	G-1	J-43 (Sec-44)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81246	9	10	439.1	591.3	48
249	G-1	J-44 (Sec-45)	DECK-1	1048	16	SM490Y	158	158	19	---	1	24.5	32	83139	9	10	173.7	219.4	43
250	G-1	J-44 (Sec-45)	DECK-2	2312	16	SM490Y	158	158	19	---	1	53.9	72	81523	9	10	439.1	591.3	44
251	G-1	J-45 (Sec-45)	DECK-1	1048	16	SM490Y	158	158	25	---	47	24.5	32	83546	9	10	173.7	219.4	43
252	G-1	J-45 (Sec-45)	DECK-2	2312	16	SM490Y	158	158	25	---	51	53.9	72	81922	9	10	439.1	591.3	44
253	G-1	J-46 (Sec-46)	DECK-1	1048	16	SM490Y	158	158	31	---	109	24.5	32	84061	9	10	173.7	219.4	43
254	G-1	J-46 (Sec-46)	DECK-2	2312	16	SM490Y	158	158	31	---	116	53.9	72	82427	9	10	439.1	591.3	44
255	G-1	J-47 (Sec-47)	DECK-1	1048	21	SM490Y	173	158	29	---	173	32.1	40	88067	10	15	210.7	226.6	*39
256	G-1	J-47 (Sec-47)	DECK-2	2312	21	SM490Y	183	158	29	---	183	72.9	90	88792	10	15	520.1	561.4	*40
257	G-1	J-48 (Sec-49)	DECK-1	1048	21	SM490Y	169	158	28	---	169	32.1	40	88044	10	15	206.4	226.6	39
258	G-1	J-48 (Sec-49)	DECK-2	2312	21	SM490Y	179	158	28	---	179	71.4	90	87036	10	15	509.6	561.4	40
259	G-1	J-49 (Sec-50)	DECK-1	1048	16	SM490Y	158	158	31	---	108	24.5	32	84121	9	10	173.7	219.4	43
260	G-1	J-49 (Sec-50)	DECK-2	2312	16	SM490Y	158	158	31	---	116	53.9	72	82485	9	10	439.1	591.3	44
261	G-1	J-50 (Sec-51)	DECK-1	1048	16	SM490Y	158	158	25	---	46	24.5	32	83583	9	10	173.7	219.4	43
262	G-1	J-50 (Sec-51)	DECK-2	2312	16	SM490Y	158	158	25	---	50	53.9	72	81958	9	10	439.1	591.3	44
263	G-1	J-51 (Sec-51)	DECK-1	1048	16	SM490Y	---	158	19	---	---	24.5	27	98549	9	10	173.7	215.3	30
264	G-1	J-51 (Sec-51)	DECK-2	2312	16	SM490Y	---	158	19	---	---	53.9	72	81534	9	10	439.1	591.3	48

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
265	G-1	J-52 (Sec-52)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98189	9	10	173.7	215.3	30
266	G-1	J-52 (Sec-52)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81236	9	10	439.1	591.3	48
267	G-1	J-53 (Sec-53)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97963	9	10	173.7	215.3	30
268	G-1	J-53 (Sec-53)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81049	9	10	439.1	591.3	48
269	G-1	J-54 (Sec-55)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97968	9	10	173.7	215.3	30
270	G-1	J-54 (Sec-55)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81053	9	10	439.1	591.3	48
271	G-1	J-55 (Sec-56)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98186	9	10	173.7	215.3	30
272	G-1	J-55 (Sec-56)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81234	9	10	439.1	591.3	48
273	G-1	J-56 (Sec-57)	DECK-1	1048	16	SM490Y	---	158	19	---	---	24.5	27	98503	9	10	173.7	215.3	30
274	G-1	J-56 (Sec-57)	DECK-2	2312	16	SM490Y	---	158	19	---	---	53.9	72	81496	9	10	439.1	591.3	48
275	G-1	J-57 (Sec-57)	DECK-1	1048	16	SM490Y	158	158	25	---	39	24.5	32	83526	9	10	173.7	219.4	43
276	G-1	J-57 (Sec-57)	DECK-2	2312	16	SM490Y	158	158	25	---	42	53.9	72	81902	9	10	439.1	591.3	44
277	G-1	J-58 (Sec-58)	DECK-1	1048	16	SM490Y	158	158	30	---	99	24.5	32	84043	9	10	173.7	219.4	43
278	G-1	J-58 (Sec-58)	DECK-2	2312	16	SM490Y	158	158	30	---	106	53.9	72	82409	9	10	439.1	591.3	44
279	G-1	J-59 (Sec-59)	DECK-1	1048	20	SM490Y	166	158	29	---	166	30.6	32	104939	9	14	195.1	211.9	41
280	G-1	J-59 (Sec-59)	DECK-2	2312	20	SM490Y	176	158	29	---	176	67.4	72	102899	9	14	483.5	528.2	42
281	G-1	J-60 (Sec-61)	DECK-1	1048	20	SM490Y	169	158	29	---	169	30.6	32	104853	9	14	198.7	211.9	*41
282	G-1	J-60 (Sec-61)	DECK-2	2312	20	SM490Y	179	158	29	---	179	68.0	72	103722	9	14	492.4	528.2	*42
283	G-1	J-61 (Sec-62)	DECK-1	1048	16	SM490Y	158	158	30	---	103	24.5	32	83975	9	10	173.7	219.4	43
284	G-1	J-61 (Sec-62)	DECK-2	2312	16	SM490Y	158	158	30	---	110	53.9	72	82343	9	10	439.1	591.3	44
285	G-1	J-62 (Sec-63)	DECK-1	1048	16	SM490Y	158	158	24	---	45	24.5	32	83465	9	10	173.7	219.4	43
286	G-1	J-62 (Sec-63)	DECK-2	2312	16	SM490Y	158	158	24	---	48	53.9	72	81842	9	10	439.1	591.3	44
287	G-1	J-63 (Sec-63)	DECK-1	1048	16	SM490Y	158	158	18	---	2	24.5	32	83060	9	10	173.7	219.4	43
288	G-1	J-63 (Sec-63)	DECK-2	2312	16	SM490Y	158	158	18	---	2	53.9	72	81445	9	10	439.1	591.3	44
289	G-1	J-64 (Sec-64)	DECK-1	1048	16	SM490Y	---	158	13	---	---	24.5	27	98116	9	10	173.7	215.3	30
290	G-1	J-64 (Sec-64)	DECK-2	2312	16	SM490Y	---	158	13	---	---	53.9	72	81176	9	10	439.1	591.3	48
291	G-1	J-65 (Sec-65)	DECK-1	1048	16	SM490Y	---	158	8	---	---	24.5	27	97939	9	10	173.7	215.3	30

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
292	G-1	J-65 (Sec-65)	DECK-2	2312	16	SM490Y	---	158	8	---	---	53.9	72	81030	9	10	439.1	591.3	48
293	G-1	J-66 (Sec-67)	DECK-1	1048	16	SM490Y	---	158	9	---	---	24.5	27	97979	9	10	173.7	215.3	30
294	G-1	J-66 (Sec-67)	DECK-2	2312	16	SM490Y	---	158	9	---	---	53.9	72	81062	9	10	439.1	591.3	48
295	G-1	J-67 (Sec-68)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98222	9	10	173.7	215.3	30
296	G-1	J-67 (Sec-68)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81263	9	10	439.1	591.3	48
297	G-1	J-68 (Sec-68)	DECK-1	1048	16	SM490Y	158	158	20	---	15	24.5	32	83158	9	10	173.7	219.4	43
298	G-1	J-68 (Sec-68)	DECK-2	2312	16	SM490Y	158	158	20	---	16	53.9	72	81541	9	10	439.1	591.3	44
299	G-1	J-69 (Sec-69)	DECK-1	1048	16	SM490Y	158	158	25	---	63	24.5	32	83595	9	10	173.7	219.4	43
300	G-1	J-69 (Sec-69)	DECK-2	2312	16	SM490Y	158	158	25	---	68	53.9	72	81970	9	10	439.1	591.3	44
301	G-1	J-70 (Sec-70)	DECK-1	1048	16	SM490Y	158	158	31	---	131	24.5	32	84085	9	10	173.7	219.4	*43
302	G-1	J-70 (Sec-70)	DECK-2	2312	16	SM490Y	158	158	31	---	140	53.9	72	82450	9	10	439.1	591.3	*44
303	G-1	J-71 (Sec-71)	DECK-1	1048	25	SM490Y	169	158	24	---	169	38.2	40	104353	11	18	236.1	252.4	*45
304	G-1	J-71 (Sec-71)	DECK-2	2312	25	SM490Y	178	158	24	---	178	84.3	90	102349	11	18	574.8	620.0	*46
305	G-1	J-72 (Sec-73)	DECK-1	1048	25	SM490Y	161	158	25	---	161	38.2	40	104444	11	18	224.6	248.0	*47
306	G-1	J-72 (Sec-73)	DECK-2	2312	25	SM490Y	169	158	25	---	169	84.3	90	102414	11	18	546.8	620.0	46
307	G-1	J-73 (Sec-74)	DECK-1	1048	16	SM490Y	158	158	33	---	113	24.5	32	84272	9	10	173.7	219.4	43
308	G-1	J-73 (Sec-74)	DECK-2	2312	16	SM490Y	158	158	33	---	121	53.9	72	82634	9	10	439.1	591.3	44
309	G-1	J-74 (Sec-75)	DECK-1	1048	16	SM490Y	158	158	27	---	38	24.5	32	83703	9	10	173.7	219.4	43
310	G-1	J-74 (Sec-75)	DECK-2	2312	16	SM490Y	158	158	27	---	40	53.9	72	82076	9	10	439.1	591.3	44
311	G-1	J-75 (Sec-75)	DECK-1	1048	16	SM490Y	---	158	21	---	---	24.5	27	98680	9	10	173.7	215.3	30
312	G-1	J-75 (Sec-75)	DECK-2	2312	16	SM490Y	---	158	21	---	---	53.9	72	81643	9	10	439.1	591.3	48
313	G-1	J-76 (Sec-76)	DECK-1	1048	16	SM490Y	---	158	17	---	---	24.5	27	98376	9	10	173.7	215.3	30
314	G-1	J-76 (Sec-76)	DECK-2	2312	16	SM490Y	---	158	17	---	---	53.9	72	81391	9	10	439.1	591.3	48
315	G-1	J-77 (Sec-77)	DECK-1	1048	16	SM490Y	---	158	12	---	---	24.5	27	98080	9	10	173.7	215.3	30
316	G-1	J-77 (Sec-77)	DECK-2	2312	16	SM490Y	---	158	12	---	---	53.9	72	81147	9	10	439.1	591.3	*48
317	G-1	J-78 (Sec-79)	DECK-1	1048	16	SM490Y	---	-162	7	---	---	25.1	27	100524	9	10	178.4	215.3	30
318	G-1	J-78 (Sec-79)	DECK-2	2312	16	SM490Y	---	-162	7	---	---	55.4	72	83169	9	10	450.9	591.3	29

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Sp1 THK	Sp1 THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
319	G-1	J-79 (Sec-80)	DECK-1	1048	16	SM490Y	---	158	14	---	---	24.5	27	98173	9	10	173.7	215.3	30
320	G-1	J-79 (Sec-80)	DECK-2	2312	16	SM490Y	---	158	14	---	---	53.9	72	81223	9	10	439.1	591.3	48
321	G-1	J-80 (Sec-81)	DECK-1	1048	16	SM490Y	---	158	20	---	---	24.5	27	98570	9	10	173.7	215.3	30
322	G-1	J-80 (Sec-81)	DECK-2	2312	16	SM490Y	---	158	20	---	---	53.9	72	81552	9	10	439.1	591.3	48
323	G-1	J-81 (Sec-82)	DECK-1	1048	16	SM490Y	---	158	25	---	---	24.5	27	99029	9	10	173.7	215.3	30
324	G-1	J-81 (Sec-82)	DECK-2	2312	16	SM490Y	---	158	25	---	---	53.9	72	81932	9	10	439.1	591.3	48
325	D-2	J-1 (Sec-1)	DECK	1290	16	SM490Y	---	158	7	---	---	30.1	40	81366	9	9	235.7	305.1	*49
326	D-2	J-2 (Sec-2)	DECK	1290	16	SM490Y	---	158	5	---	---	30.1	40	81309	9	9	235.7	305.1	*50
327	D-2	J-3 (Sec-3)	DECK	1290	16	SM490Y	---	-165	3	---	---	31.5	40	85188	9	9	247.0	305.1	51
328	D-2	J-4 (Sec-4)	DECK	1290	16	SM490Y	---	-180	1	---	---	34.4	40	92929	9	9	269.4	305.1	*51
329	D-2	J-5 (Sec-6)	DECK	1290	16	SM490Y	---	-178	2	---	---	34.0	40	91921	9	9	266.5	305.1	*52
330	D-2	J-6 (Sec-7)	DECK	1290	16	SM490Y	---	-165	4	---	---	31.5	40	85082	9	9	246.6	305.1	*53
331	D-2	J-7 (Sec-8)	DECK	1290	16	SM490Y	---	158	6	---	---	30.1	40	81327	9	9	235.7	305.1	62
332	D-2	J-8 (Sec-9)	DECK	1290	16	SM490Y	---	158	8	---	---	30.1	40	81377	9	9	235.7	305.1	62
333	D-2	J-9 (Sec-9)	DECK	1290	16	SM490Y	158	158	9	---	68	30.1	40	81406	9	9	235.7	305.1	60
334	D-2	J-10 (Sec-10)	DECK	1290	22	SM490Y	158	158	8	---	133	41.4	50	89508	9	9	293.7	305.1	55
335	D-2	J-11 (Sec-11)	DECK	1290	27	SM490Y	178	158	7	---	178	50.8	60	91522	12	19	331.6	348.7	54
336	D-2	J-12 (Sec-13)	DECK	1290	27	SM490Y	188	158	6	---	188	53.7	60	96774	12	19	350.9	348.7	*54
337	D-2	J-13 (Sec-14)	DECK	1290	22	SM490Y	158	158	7	---	136	41.4	50	89476	9	9	293.7	305.1	*55
338	D-2	J-14 (Sec-15)	DECK	1290	16	SM490Y	158	158	7	---	91	30.1	40	81361	9	9	235.7	305.1	60
339	D-2	J-15 (Sec-16)	DECK	1290	16	SM490Y	158	158	6	---	37	30.1	40	81327	9	9	235.7	305.1	60
340	D-2	J-16 (Sec-16)	DECK	1290	16	SM490Y	---	158	4	---	---	30.1	40	81298	9	9	235.7	305.1	62
341	D-2	J-17 (Sec-17)	DECK	1290	16	SM490Y	---	158	2	---	---	30.1	40	81279	9	9	235.7	305.1	62
342	D-2	J-18 (Sec-19)	DECK	1290	16	SM490Y	---	158	2	---	---	30.1	40	81275	9	9	235.7	305.1	62
343	D-2	J-19 (Sec-20)	DECK	1290	16	SM490Y	---	158	3	---	---	30.1	40	81285	9	9	235.7	305.1	62
344	D-2	J-20 (Sec-20)	DECK	1290	16	SM490Y	158	158	5	---	4	30.1	40	81309	9	9	235.7	305.1	60
345	D-2	J-21 (Sec-21)	DECK	1290	16	SM490Y	158	158	7	---	50	30.1	40	81345	9	9	235.7	305.1	60

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
346	D-2	J-22 (Sec-22)	DECK	1290	16	SM490Y	158	158	8	----	112	30.1	40	81383	9	9	235.7	305.1	60
347	D-2	J-23 (Sec-23)	DECK	1290	19	SM490Y	181	158	9	----	181	36.4	40	98386	10	14	258.9	291.9	*56
348	D-2	J-24 (Sec-25)	DECK	1290	19	SM490Y	180	158	8	----	180	36.2	40	97835	10	14	257.5	291.9	56
349	D-2	J-25 (Sec-26)	DECK	1290	16	SM490Y	158	158	8	----	108	30.1	40	81383	9	9	235.7	305.1	60
350	D-2	J-26 (Sec-26)	DECK	1290	16	SM490Y	158	158	7	----	43	30.1	40	81354	9	9	235.7	305.1	60
351	D-2	J-27 (Sec-28)	DECK	1290	16	SM490Y	----	158	5	----	----	30.1	40	81318	9	9	235.7	305.1	62
352	D-2	J-28 (Sec-28)	DECK	1290	16	SM490Y	----	158	3	----	----	30.1	40	81288	9	9	235.7	305.1	62
353	D-2	J-29 (Sec-29)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81275	9	9	235.7	305.1	62
354	D-2	J-30 (Sec-31)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81279	9	9	235.7	305.1	62
355	D-2	J-31 (Sec-32)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81296	9	9	235.7	305.1	62
356	D-2	J-32 (Sec-33)	DECK	1290	16	SM490Y	----	158	6	----	----	30.1	40	81321	9	9	235.7	305.1	62
357	D-2	J-33 (Sec-33)	DECK	1290	16	SM490Y	158	158	7	----	55	30.1	40	81361	9	9	235.7	305.1	60
358	D-2	J-34 (Sec-34)	DECK	1290	16	SM490Y	158	158	9	----	123	30.1	40	81396	9	9	235.7	305.1	60
359	D-2	J-35 (Sec-35)	DECK	1290	22	SM490Y	181	158	8	----	181	42.2	50	91359	10	14	289.2	291.9	*57
360	D-2	J-36 (Sec-37)	DECK	1290	22	SM490Y	181	158	8	----	181	42.1	50	91118	10	14	288.5	291.9	57
361	D-2	J-37 (Sec-38)	DECK	1290	16	SM490Y	158	158	8	----	127	30.1	40	81383	9	9	235.7	305.1	60
362	D-2	J-38 (Sec-39)	DECK	1290	16	SM490Y	158	158	7	----	57	30.1	40	81357	9	9	235.7	305.1	60
363	D-2	J-39 (Sec-39)	DECK	1290	16	SM490Y	158	158	5	----	2	30.1	40	81319	9	9	235.7	305.1	60
364	D-2	J-40 (Sec-40)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81294	9	9	235.7	305.1	62
365	D-2	J-41 (Sec-41)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81277	9	9	235.7	305.1	62
366	D-2	J-42 (Sec-43)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81276	9	9	235.7	305.1	62
367	D-2	J-43 (Sec-44)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81293	9	9	235.7	305.1	62
368	D-2	J-44 (Sec-45)	DECK	1290	16	SM490Y	158	158	6	----	1	30.1	40	81321	9	9	235.7	305.1	60
369	D-2	J-45 (Sec-45)	DECK	1290	16	SM490Y	158	158	7	----	52	30.1	40	81356	9	9	235.7	305.1	60
370	D-2	J-46 (Sec-46)	DECK	1290	16	SM490Y	158	158	9	----	120	30.1	40	81392	9	9	235.7	305.1	60
371	D-2	J-47 (Sec-47)	DECK	1290	21	SM490Y	184	158	8	----	184	41.0	50	88708	10	14	284.1	291.9	*58
372	D-2	J-48 (Sec-49)	DECK	1290	21	SM490Y	181	158	8	----	181	40.2	50	86849	10	14	278.2	291.9	58

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
373	D-2	J-49 (Sec-50)	DECK	1290	16	SM490Y	158	158	8	----	117	30.1	40	81384	9	9	235.7	305.1	60
374	D-2	J-50 (Sec-51)	DECK	1290	16	SM490Y	158	158	7	----	53	30.1	40	81352	9	9	235.7	305.1	60
375	D-2	J-51 (Sec-51)	DECK	1290	16	SM490Y	----	158	5	----	----	30.1	40	81317	9	9	235.7	305.1	62
376	D-2	J-52 (Sec-52)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81292	9	9	235.7	305.1	62
377	D-2	J-53 (Sec-53)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81276	9	9	235.7	305.1	62
378	D-2	J-54 (Sec-55)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81276	9	9	235.7	305.1	62
379	D-2	J-55 (Sec-56)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81292	9	9	235.7	305.1	62
380	D-2	J-56 (Sec-57)	DECK	1290	16	SM490Y	----	158	5	----	----	30.1	40	81318	9	9	235.7	305.1	62
381	D-2	J-57 (Sec-57)	DECK	1290	16	SM490Y	158	158	7	----	46	30.1	40	81355	9	9	235.7	305.1	60
382	D-2	J-58 (Sec-58)	DECK	1290	16	SM490Y	158	158	9	----	110	30.1	40	81391	9	9	235.7	305.1	60
383	D-2	J-59 (Sec-59)	DECK	1290	20	SM490Y	177	158	9	----	177	37.6	40	101741	9	14	263.7	280.6	59
384	D-2	J-60 (Sec-61)	DECK	1290	20	SM490Y	181	158	8	----	181	38.3	40	103510	9	14	268.7	280.6	*59
385	D-2	J-61 (Sec-62)	DECK	1290	16	SM490Y	158	158	8	----	112	30.1	40	81375	9	9	235.7	305.1	60
386	D-2	J-62 (Sec-63)	DECK	1290	16	SM490Y	158	158	7	----	50	30.1	40	81343	9	9	235.7	305.1	60
387	D-2	J-63 (Sec-63)	DECK	1290	16	SM490Y	158	158	5	----	2	30.1	40	81311	9	9	235.7	305.1	60
388	D-2	J-64 (Sec-64)	DECK	1290	16	SM490Y	----	158	3	----	----	30.1	40	81287	9	9	235.7	305.1	62
389	D-2	J-65 (Sec-65)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81274	9	9	235.7	305.1	62
390	D-2	J-66 (Sec-67)	DECK	1290	16	SM490Y	----	158	2	----	----	30.1	40	81279	9	9	235.7	305.1	62
391	D-2	J-67 (Sec-68)	DECK	1290	16	SM490Y	----	158	4	----	----	30.1	40	81297	9	9	235.7	305.1	62
392	D-2	J-68 (Sec-68)	DECK	1290	16	SM490Y	158	158	6	----	20	30.1	40	81328	9	9	235.7	305.1	60
393	D-2	J-69 (Sec-69)	DECK	1290	16	SM490Y	158	158	8	----	76	30.1	40	81369	9	9	235.7	305.1	60
394	D-2	J-70 (Sec-70)	DECK	1290	16	SM490Y	158	158	9	----	151	30.1	40	81400	9	9	191.6	246.5	*60
395	D-2	J-71 (Sec-71)	DECK	1290	25	SM490Y	183	158	7	----	183	48.4	50	104576	12	19	321.3	348.7	*61
396	D-2	J-72 (Sec-73)	DECK	1290	25	SM490Y	173	158	7	----	173	47.0	50	101686	12	19	303.5	348.7	61
397	D-2	J-73 (Sec-74)	DECK	1290	16	SM490Y	158	158	9	----	130	30.1	40	81416	9	9	235.7	305.1	60
398	D-2	J-74 (Sec-75)	DECK	1290	16	SM490Y	158	158	8	----	45	30.1	40	81373	9	9	235.7	305.1	60
399	D-2	J-75 (Sec-75)	DECK	1290	16	SM490Y	----	158	6	----	----	30.1	40	81326	9	9	235.7	305.1	62

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
400	D-2	J-76(Sec-76)	DECK	1290	16	SM490Y	---	158	5	---	---	30.1	40	81308	9	9	235.7	305.1	62
401	D-2	J-77(Sec-77)	DECK	1290	16	SM490Y	---	158	3	---	---	30.1	40	81285	9	9	235.7	305.1	*62
402	D-2	J-78(Sec-79)	DECK	1290	16	SM490Y	---	-163	1	---	---	31.2	40	84328	9	9	244.5	305.1	53
403	D-2	J-79(Sec-80)	DECK	1290	16	SM490Y	---	158	3	---	---	30.1	40	81287	9	9	235.7	305.1	62
404	D-2	J-80(Sec-81)	DECK	1290	16	SM490Y	---	158	5	---	---	30.1	40	81314	9	9	235.7	305.1	62
405	D-2	J-81(Sec-82)	DECK	1290	16	SM490Y	---	158	7	---	---	30.1	40	81349	9	9	235.7	305.1	62
406	G-2	J-1(Sec-1)	DECK	3060	16	SM490Y	---	158	28	---	---	71.4	84	93223	9	9	528.9	710.1	63
407	G-2	J-2(Sec-2)	DECK	3060	16	SM490Y	---	158	21	---	---	71.4	84	92637	9	9	528.9	710.1	63
408	G-2	J-3(Sec-3)	DECK	3060	16	SM490Y	---	-160	15	---	---	72.6	84	93762	9	9	537.7	710.1	*63
409	G-2	J-4(Sec-4)	DECK	3060	16	SM490Y	---	-180	10	---	---	81.7	84	105174	9	9	604.9	710.1	123
410	G-2	J-5(Sec-6)	DECK	3060	16	SM490Y	---	-182	11	---	---	82.5	84	106250	9	9	611.1	710.1	123
411	G-2	J-6(Sec-7)	DECK	3060	16	SM490Y	---	-164	16	---	---	74.2	84	95858	9	9	549.7	710.1	123
412	G-2	J-7(Sec-8)	DECK	3060	16	SM490Y	---	158	20	---	---	71.4	84	92570	9	9	528.9	710.1	63
413	G-2	J-8(Sec-9)	DECK	3060	16	SM490Y	---	158	25	---	---	71.4	84	92979	9	9	528.9	710.1	63
414	G-2	J-9(Sec-9)	DECK	3060	16	SM490Y	158	158	31	---	73	71.4	78	100788	9	9	528.9	704.7	71
415	G-2	J-10(Sec-10)	DECK	3060	22	SM490Y	158	158	28	---	142	98.2	104	103500	9	9	666.6	704.7	66
416	G-2	J-11(Sec-11)	DECK	3060	27	SM490Y	190	158	26	---	190	125.7	130	105770	12	19	797.3	828.0	*64
417	G-2	J-12(Sec-13)	DECK	3060	27	SM490Y	200	158	24	---	200	132.9	156	92896	12	19	842.5	828.0	*65
418	G-2	J-13(Sec-14)	DECK	3060	22	SM490Y	158	158	26	---	146	98.2	104	103320	9	9	666.6	704.7	*66
419	G-2	J-14(Sec-15)	DECK	3060	16	SM490Y	158	158	28	---	98	71.4	78	100379	9	9	528.9	704.7	71
420	G-2	J-15(Sec-16)	DECK	3060	16	SM490Y	158	158	22	---	39	71.4	78	99858	9	9	528.9	704.7	71
421	G-2	J-16(Sec-16)	DECK	3060	16	SM490Y	---	158	17	---	---	71.4	84	92308	9	9	528.9	710.1	63
422	G-2	J-17(Sec-17)	DECK	3060	16	SM490Y	---	158	11	---	---	71.4	84	92014	9	9	528.9	710.1	63
423	G-2	J-18(Sec-19)	DECK	3060	16	SM490Y	---	158	9	---	---	71.4	84	91950	9	9	528.9	710.1	63
424	G-2	J-19(Sec-20)	DECK	3060	16	SM490Y	---	158	13	---	---	71.4	84	92133	9	9	528.9	710.1	63
425	G-2	J-20(Sec-20)	DECK	3060	16	SM490Y	158	158	19	---	5	71.4	78	99575	9	9	528.9	704.7	71
426	G-2	J-21(Sec-21)	DECK	3060	16	SM490Y	158	158	26	---	54	71.4	78	100156	9	9	528.9	704.7	71

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
427	G-2	J-22 (Sec-22)	DECK	3060	16	SM490Y	158	158	31	---	120	71.4	78	100800	9	9	528.9	704.7	71
428	G-2	J-23 (Sec-23)	DECK	3060	19	SM490Y	192	158	31	---	192	89.6	104	94573	10	14	613.1	684.4	*67
429	G-2	J-24 (Sec-25)	DECK	3060	19	SM490Y	191	158	31	---	191	89.2	104	94192	10	14	610.4	684.4	67
430	G-2	J-25 (Sec-26)	DECK	3060	16	SM490Y	158	158	32	---	115	71.4	78	100887	9	9	528.9	704.7	71
431	G-2	J-26 (Sec-26)	DECK	3060	16	SM490Y	158	158	28	---	46	71.4	78	100375	9	9	528.9	704.7	71
432	G-2	J-27 (Sec-28)	DECK	3060	16	SM490Y	---	158	22	---	---	71.4	84	92658	9	9	528.9	710.1	63
433	G-2	J-28 (Sec-28)	DECK	3060	16	SM490Y	---	158	14	---	---	71.4	84	92157	9	9	528.9	710.1	63
434	G-2	J-29 (Sec-29)	DECK	3060	16	SM490Y	---	158	9	---	---	71.4	84	91949	9	9	528.9	710.1	63
435	G-2	J-30 (Sec-31)	DECK	3060	16	SM490Y	---	158	11	---	---	71.4	84	92014	9	9	528.9	710.1	63
436	G-2	J-31 (Sec-32)	DECK	3060	16	SM490Y	---	158	16	---	---	71.4	84	92259	9	9	528.9	710.1	63
437	G-2	J-32 (Sec-32)	DECK	3060	16	SM490Y	158	158	21	---	1	71.4	78	99749	9	9	528.9	704.7	71
438	G-2	J-33 (Sec-33)	DECK	3060	16	SM490Y	158	158	27	---	59	71.4	78	100318	9	9	528.9	704.7	71
439	G-2	J-34 (Sec-34)	DECK	3060	16	SM490Y	158	158	32	---	131	71.4	78	100901	9	9	528.9	704.7	71
440	G-2	J-35 (Sec-35)	DECK	3060	22	SM490Y	189	158	27	---	189	101.9	104	107292	10	14	673.8	684.4	68
441	G-2	J-36 (Sec-37)	DECK	3060	22	SM490Y	190	158	26	---	190	102.4	104	107676	10	14	677.0	684.4	*68
442	G-2	J-37 (Sec-38)	DECK	3060	16	SM490Y	158	158	32	---	135	71.4	78	100834	9	9	528.9	704.7	71
443	G-2	J-38 (Sec-39)	DECK	3060	16	SM490Y	158	158	28	---	62	71.4	78	100399	9	9	528.9	704.7	71
444	G-2	J-39 (Sec-39)	DECK	3060	16	SM490Y	158	158	21	---	4	71.4	78	99731	9	9	528.9	704.7	71
445	G-2	J-40 (Sec-40)	DECK	3060	16	SM490Y	---	158	14	---	---	71.4	84	92169	9	9	528.9	710.1	63
446	G-2	J-41 (Sec-41)	DECK	3060	16	SM490Y	---	158	9	---	---	71.4	84	91962	9	9	528.9	710.1	63
447	G-2	J-42 (Sec-43)	DECK	3060	16	SM490Y	---	158	10	---	---	71.4	84	91969	9	9	528.9	710.1	63
448	G-2	J-43 (Sec-44)	DECK	3060	16	SM490Y	---	158	15	---	---	71.4	84	92192	9	9	528.9	710.1	63
449	G-2	J-44 (Sec-44)	DECK	3060	16	SM490Y	158	158	20	---	2	71.4	78	99674	9	9	528.9	704.7	71
450	G-2	J-45 (Sec-45)	DECK	3060	16	SM490Y	158	158	27	---	56	71.4	78	100256	9	9	528.9	704.7	71
451	G-2	J-46 (Sec-46)	DECK	3060	16	SM490Y	158	158	32	---	128	71.4	78	100850	9	9	528.9	704.7	71
452	G-2	J-47 (Sec-47)	DECK	3060	21	SM490Y	189	158	28	---	189	97.3	104	102516	10	14	650.3	684.4	*69
453	G-2	J-48 (Sec-49)	DECK	3060	21	SM490Y	188	158	28	---	188	97.2	104	102379	10	14	649.3	684.4	69

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
454	G-2	J-49 (Sec-50)	DECK	3060	16	SM490Y	158	158	32	---	125	71.4	78	100842	9	9	528.9	704.7	71
455	G-2	J-50 (Sec-51)	DECK	3060	16	SM490Y	158	158	27	---	56	71.4	78	100294	9	9	528.9	704.7	71
456	G-2	J-51 (Sec-51)	DECK	3060	16	SM490Y	---	158	21	---	---	71.4	84	92586	9	9	528.9	710.1	63
457	G-2	J-52 (Sec-52)	DECK	3060	16	SM490Y	---	158	14	---	---	71.4	84	92184	9	9	528.9	710.1	63
458	G-2	J-53 (Sec-53)	DECK	3060	16	SM490Y	---	158	10	---	---	71.4	84	91975	9	9	528.9	710.1	63
459	G-2	J-54 (Sec-55)	DECK	3060	16	SM490Y	---	158	10	---	---	71.4	84	91977	9	9	528.9	710.1	63
460	G-2	J-55 (Sec-56)	DECK	3060	16	SM490Y	---	158	15	---	---	71.4	84	92205	9	9	528.9	710.1	63
461	G-2	J-56 (Sec-57)	DECK	3060	16	SM490Y	---	158	20	---	---	71.4	84	92565	9	9	528.9	710.1	63
462	G-2	J-57 (Sec-57)	DECK	3060	16	SM490Y	158	158	26	---	49	71.4	78	100246	9	9	528.9	704.7	71
463	G-2	J-58 (Sec-58)	DECK	3060	16	SM490Y	158	158	32	---	117	71.4	78	100836	9	9	528.9	704.7	71
464	G-2	J-59 (Sec-59)	DECK	3060	20	SM490Y	186	158	29	---	186	91.5	104	96561	10	14	618.6	684.4	*70
465	G-2	J-60 (Sec-61)	DECK	3060	20	SM490Y	186	158	28	---	186	91.5	104	96485	10	14	618.6	684.4	70
466	G-2	J-61 (Sec-62)	DECK	3060	16	SM490Y	158	158	31	---	120	71.4	78	100722	9	9	528.9	704.7	71
467	G-2	J-62 (Sec-63)	DECK	3060	16	SM490Y	158	158	26	---	54	71.4	78	100168	9	9	528.9	704.7	71
468	G-2	J-63 (Sec-63)	DECK	3060	16	SM490Y	158	158	20	---	2	71.4	78	99678	9	9	528.9	704.7	71
469	G-2	J-64 (Sec-64)	DECK	3060	16	SM490Y	---	158	15	---	---	71.4	84	92188	9	9	528.9	710.1	63
470	G-2	J-65 (Sec-65)	DECK	3060	16	SM490Y	---	158	9	---	---	71.4	84	91964	9	9	528.9	710.1	63
471	G-2	J-66 (Sec-67)	DECK	3060	16	SM490Y	---	158	11	---	---	71.4	84	92025	9	9	528.9	710.1	63
472	G-2	J-67 (Sec-68)	DECK	3060	16	SM490Y	---	158	16	---	---	71.4	84	92274	9	9	528.9	710.1	63
473	G-2	J-68 (Sec-68)	DECK	3060	16	SM490Y	158	158	22	---	22	71.4	78	99830	9	9	528.9	704.7	71
474	G-2	J-69 (Sec-69)	DECK	3060	16	SM490Y	158	158	28	---	82	71.4	78	100422	9	9	528.9	704.7	71
475	G-2	J-70 (Sec-70)	DECK	3060	16	SM490Y	161	158	33	---	161	71.4	78	101024	9	9	452.8	567.3	*71
476	G-2	J-71 (Sec-71)	DECK	3060	25	SM490Y	195	158	25	---	195	119.5	130	100342	12	19	769.1	828.0	*72
477	G-2	J-72 (Sec-73)	DECK	3060	25	SM490Y	184	158	26	---	184	112.9	130	95034	12	19	727.0	828.0	72
478	G-2	J-73 (Sec-74)	DECK	3060	16	SM490Y	158	158	35	---	138	71.4	78	101226	9	9	528.9	704.7	71
479	G-2	J-74 (Sec-75)	DECK	3060	16	SM490Y	158	158	29	---	48	71.4	78	100478	9	9	528.9	704.7	71
480	G-2	J-75 (Sec-75)	DECK	3060	16	SM490Y	---	158	21	---	---	71.4	84	92610	9	9	528.9	710.1	63

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
481	G-2	J-76(Sec-76)	DECK	3060	16	SM490Y	---	158	15	---	---	71.4	84	92225	9	9	528.9	710.1	63
482	G-2	J-77(Sec-77)	DECK	3060	16	SM490Y	---	158	10	---	---	71.4	84	92000	9	9	528.9	710.1	63
483	G-2	J-78(Sec-79)	DECK	3060	16	SM490Y	---	-161	8	---	---	73.1	84	94127	9	9	541.7	710.1	123
484	G-2	J-79(Sec-80)	DECK	3060	16	SM490Y	---	158	12	---	---	71.4	84	92079	9	9	528.9	710.1	63
485	G-2	J-80(Sec-81)	DECK	3060	16	SM490Y	---	158	18	---	---	71.4	84	92429	9	9	528.9	710.1	63
486	G-2	J-81(Sec-82)	DECK	3060	16	SM490Y	---	158	27	---	---	71.4	84	93104	9	9	528.9	710.1	63
487	D-3	J-1(Sec-1)	DECK-1	789	16	SM490Y	---	158	25	---	---	18.4	21	95784	9	9	135.1	181.3	*73
488	D-3	J-1(Sec-1)	DECK-2	3550	16	SM490Y	---	158	25	---	---	82.8	99	91452	9	9	689.8	865.0	*74
489	D-3	J-1(Sec-1)	DECK-3	492	16	SM490Y	---	158	25	---	---	11.5	12	104604	9	9	99.5	132.5	*75
490	D-3	J-2(Sec-2)	DECK-1	773	16	SM490Y	---	158	17	---	---	18.0	21	93276	9	9	133.2	179.1	*76
491	D-3	J-2(Sec-2)	DECK-2	3089	16	SM490Y	---	158	17	---	---	72.1	87	89977	9	9	634.6	777.1	*77
492	D-3	J-2(Sec-2)	DECK-3	484	16	SM490Y	---	158	17	---	---	11.3	12	102110	9	9	98.5	131.7	*78
493	D-3	J-3(Sec-3)	DECK-1	756	16	SM490Y	---	-165	10	---	---	18.5	24	83364	9	9	137.5	175.9	*79
494	D-3	J-3(Sec-3)	DECK-2	2613	16	SM490Y	---	-165	10	---	---	63.9	78	88613	9	9	554.8	656.9	*80
495	D-3	J-3(Sec-3)	DECK-3	475	16	SM490Y	---	-165	10	---	---	11.6	12	104638	9	9	102.1	130.9	*81
496	D-3	J-4(Sec-4)	DECK-1	721	16	SM490Y	---	-185	5	---	---	19.7	24	88841	9	9	148.9	171.6	*82
497	D-3	J-4(Sec-4)	DECK-2	2163	16	SM490Y	---	-185	5	---	---	59.2	72	88795	9	9	557.5	623.2	*83
498	D-3	J-4(Sec-4)	DECK-3	456	16	SM490Y	---	-185	5	---	---	12.5	16	84322	9	9	111.6	129.2	*84
499	D-3	J-5(Sec-6)	DECK-1	704	16	SM490Y	---	-185	6	---	---	19.3	24	86874	9	9	146.7	169.6	*85
500	D-3	J-5(Sec-6)	DECK-2	1832	16	SM490Y	---	-185	6	---	---	50.2	60	90436	9	9	511.9	518.6	*86
501	D-3	J-5(Sec-6)	DECK-3	447	16	SM490Y	---	-185	6	---	---	12.3	16	82834	9	9	110.6	128.4	*87
502	D-3	J-6(Sec-7)	DECK-1	761	16	SM490Y	---	-167	11	---	---	18.8	24	84789	9	9	139.5	176.5	*88
503	D-3	J-6(Sec-7)	DECK-2	1701	16	SM490Y	---	-167	11	---	---	42.0	50	90922	9	9	444.5	483.3	*89
504	D-3	J-6(Sec-7)	DECK-3	478	16	SM490Y	---	-167	11	---	---	11.8	12	106355	9	9	103.4	131.1	*90
505	D-3	J-7(Sec-8)	DECK-1	770	16	SM490Y	---	158	13	---	---	18.0	21	92723	9	9	132.8	178.8	121
506	D-3	J-7(Sec-8)	DECK-2	1688	16	SM490Y	---	158	13	---	---	39.4	45	94856	9	9	322.5	408.8	122
507	D-3	J-7(Sec-8)	DECK-3	482	16	SM490Y	---	158	13	---	---	11.2	12	101584	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
508	D-3	J-8(Sec-9)	DECK-1	770	16	SM490Y	---	158	17	---	---	18.0	21	92940	9	9	132.8	178.8	121
509	D-3	J-8(Sec-9)	DECK-2	1688	16	SM490Y	---	158	17	---	---	39.4	45	95077	9	9	322.5	408.8	119
510	D-3	J-8(Sec-9)	DECK-3	482	16	SM490Y	---	158	17	---	---	11.2	12	101822	9	9	98.3	131.5	10
511	D-3	J-9(Sec-9)	DECK-1	770	16	SM490Y	158	158	22	---	76	18.0	21	93309	9	9	132.8	178.8	96
512	D-3	J-9(Sec-9)	DECK-2	1688	16	SM490Y	158	158	22	---	71	39.4	45	95455	9	9	322.5	421.0	102
513	D-3	J-9(Sec-9)	DECK-3	482	16	SM490Y	158	158	22	---	76	11.2	12	102226	9	9	98.3	131.5	98
514	D-3	J-10(Sec-10)	DECK-1	770	16	SM490Y	180	158	25	---	180	18.0	21	93567	9	9	125.3	142.2	96
515	D-3	J-10(Sec-10)	DECK-2	1688	16	SM490Y	167	158	25	---	167	39.4	45	95719	9	9	304.2	364.8	97
516	D-3	J-10(Sec-10)	DECK-3	482	16	SM490Y	179	158	25	---	179	11.2	12	102509	9	9	92.7	105.1	98
517	D-3	J-11(Sec-11)	DECK-1	770	22	SM490Y	192	158	20	27	192	31.4	35	97408	13	19	199.6	215.4	*91
518	D-3	J-11(Sec-11)	DECK-2	1688	22	SM490Y	184	158	20	27	184	66.6	75	96429	13	19	474.9	561.3	94
519	D-3	J-11(Sec-11)	DECK-3	482	22	SM490Y	194	158	20	27	194	20.3	24	91938	13	19	143.0	151.1	*92
520	D-3	J-12(Sec-13)	DECK-1	770	22	SM490Y	203	158	18	27	203	33.3	42	85821	13	19	211.4	215.4	*93
521	D-3	J-12(Sec-13)	DECK-2	1688	22	SM490Y	195	158	18	27	195	70.5	75	101940	13	19	502.9	561.3	*94
522	D-3	J-12(Sec-13)	DECK-3	482	22	SM490Y	205	158	18	27	205	21.5	24	97211	13	19	151.4	151.1	*95
523	D-3	J-13(Sec-14)	DECK-1	770	16	SM490Y	186	158	21	---	186	18.1	21	93690	9	9	129.8	142.2	*96
524	D-3	J-13(Sec-14)	DECK-2	1688	16	SM490Y	173	158	21	---	173	39.4	45	95384	9	9	315.2	364.8	*97
525	D-3	J-13(Sec-14)	DECK-3	482	16	SM490Y	185	158	21	---	185	11.5	12	104653	9	9	96.0	105.1	*98
526	D-3	J-14(Sec-15)	DECK-1	770	16	SM490Y	158	158	18	---	102	18.0	21	93000	9	9	132.8	178.8	96
527	D-3	J-14(Sec-15)	DECK-2	1688	16	SM490Y	158	158	18	---	95	39.4	45	95139	9	9	322.5	421.0	102
528	D-3	J-14(Sec-15)	DECK-3	482	16	SM490Y	158	158	18	---	101	11.2	12	101887	9	9	98.3	131.5	98
529	D-3	J-15(Sec-16)	DECK-1	770	16	SM490Y	158	158	14	---	41	18.0	21	92777	9	9	132.8	178.8	96
530	D-3	J-15(Sec-16)	DECK-2	1688	16	SM490Y	158	158	14	---	38	39.4	45	94911	9	9	322.5	421.0	117
531	D-3	J-15(Sec-16)	DECK-3	482	16	SM490Y	158	158	14	---	41	11.2	12	101643	9	9	98.3	131.5	98
532	D-3	J-16(Sec-16)	DECK-1	770	16	SM490Y	---	158	10	---	---	18.0	21	92589	9	9	132.8	178.8	121
533	D-3	J-16(Sec-16)	DECK-2	1688	16	SM490Y	---	158	10	---	---	39.4	45	94719	9	9	322.5	408.8	119
534	D-3	J-16(Sec-16)	DECK-3	482	16	SM490Y	---	158	10	---	---	11.2	12	101438	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
535	D-3	J-17 (Sec-17)	DECK-1	770	16	SM490Y	---	158	6	---	---	18.0	21	92460	9	9	132.8	178.8	121
536	D-3	J-17 (Sec-17)	DECK-2	1688	16	SM490Y	---	158	6	---	---	39.4	45	94587	9	9	322.5	408.8	119
537	D-3	J-17 (Sec-17)	DECK-3	482	16	SM490Y	---	158	6	---	---	11.2	12	101296	9	9	98.3	131.5	10
538	D-3	J-18 (Sec-19)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92433	9	9	132.8	178.8	121
539	D-3	J-18 (Sec-19)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94559	9	9	322.5	408.8	119
540	D-3	J-18 (Sec-19)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101266	9	9	98.3	131.5	10
541	D-3	J-19 (Sec-20)	DECK-1	770	16	SM490Y	---	158	8	---	---	18.0	21	92513	9	9	132.8	178.8	121
542	D-3	J-19 (Sec-20)	DECK-2	1688	16	SM490Y	---	158	8	---	---	39.4	45	94640	9	9	322.5	408.8	119
543	D-3	J-19 (Sec-20)	DECK-3	482	16	SM490Y	---	158	8	---	---	11.2	12	101354	9	9	98.3	131.5	10
544	D-3	J-20 (Sec-20)	DECK-1	770	16	SM490Y	158	158	12	---	5	18.0	21	92665	9	9	132.8	178.8	96
545	D-3	J-20 (Sec-20)	DECK-2	1688	16	SM490Y	158	158	12	---	5	39.4	45	94796	9	9	322.5	421.0	117
546	D-3	J-20 (Sec-20)	DECK-3	482	16	SM490Y	158	158	12	---	5	11.2	12	101521	9	9	98.3	131.5	98
547	D-3	J-21 (Sec-21)	DECK-1	770	16	SM490Y	158	158	17	---	56	18.0	21	92907	9	9	132.8	178.8	96
548	D-3	J-21 (Sec-21)	DECK-2	1688	16	SM490Y	158	158	17	---	52	39.4	45	95044	9	9	322.5	421.0	117
549	D-3	J-21 (Sec-21)	DECK-3	482	16	SM490Y	158	158	17	---	56	11.2	12	101786	9	9	98.3	131.5	98
550	D-3	J-22 (Sec-22)	DECK-1	770	16	SM490Y	158	158	20	---	124	18.0	21	93143	9	9	132.8	178.8	96
551	D-3	J-22 (Sec-22)	DECK-2	1688	16	SM490Y	158	158	20	---	116	39.4	45	95285	9	9	322.5	421.0	117
552	D-3	J-22 (Sec-22)	DECK-3	482	16	SM490Y	158	158	20	---	124	11.2	12	102044	9	9	98.3	131.5	98
553	D-3	J-23 (Sec-23)	DECK-1	770	19	SM490Y	199	158	20	---	199	22.9	28	88963	9	13	157.3	161.2	*99
554	D-3	J-23 (Sec-23)	DECK-2	1688	19	SM490Y	187	158	20	---	187	47.4	60	85963	9	13	377.7	422.6	*100
555	D-3	J-23 (Sec-23)	DECK-3	482	19	SM490Y	198	158	20	---	198	14.6	16	99227	9	13	114.3	117.0	*101
556	D-3	J-24 (Sec-25)	DECK-1	770	19	SM490Y	198	158	19	---	198	22.8	28	88568	9	13	156.6	161.2	99
557	D-3	J-24 (Sec-25)	DECK-2	1688	19	SM490Y	186	158	19	---	186	47.2	60	85581	9	13	376.0	422.6	100
558	D-3	J-24 (Sec-25)	DECK-3	482	19	SM490Y	197	158	19	---	197	14.5	16	98786	9	13	113.8	117.0	101
559	D-3	J-25 (Sec-26)	DECK-1	770	16	SM490Y	158	158	20	---	120	18.0	21	93141	9	9	132.8	178.8	96
560	D-3	J-25 (Sec-26)	DECK-2	1688	16	SM490Y	158	158	20	---	111	39.4	45	95283	9	9	322.5	421.0	117
561	D-3	J-25 (Sec-26)	DECK-3	482	16	SM490Y	158	158	20	---	119	11.2	12	102042	9	9	98.3	131.5	98

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
562	D-3	J-26 (Sec-26)	DECK-1	770	16	SM490Y	158	158	17	----	48	18.0	21	92949	9	9	132.8	178.8	96
563	D-3	J-26 (Sec-26)	DECK-2	1688	16	SM490Y	158	158	17	----	45	39.4	45	95087	9	9	322.5	421.0	102
564	D-3	J-26 (Sec-26)	DECK-3	482	16	SM490Y	158	158	17	----	48	11.2	12	101832	9	9	98.3	131.5	98
565	D-3	J-27 (Sec-28)	DECK-1	770	16	SM490Y	----	158	13	----	----	18.0	21	92714	9	9	132.8	178.8	121
566	D-3	J-27 (Sec-28)	DECK-2	1688	16	SM490Y	----	158	13	----	----	39.4	45	94846	9	9	322.5	408.8	122
567	D-3	J-27 (Sec-28)	DECK-3	482	16	SM490Y	----	158	13	----	----	11.2	12	101575	9	9	98.3	131.5	10
568	D-3	J-28 (Sec-28)	DECK-1	770	16	SM490Y	----	158	8	----	----	18.0	21	92515	9	9	132.8	178.8	121
569	D-3	J-28 (Sec-28)	DECK-2	1688	16	SM490Y	----	158	8	----	----	39.4	45	94643	9	9	322.5	408.8	122
570	D-3	J-28 (Sec-28)	DECK-3	482	16	SM490Y	----	158	8	----	----	11.2	12	101357	9	9	98.3	131.5	10
571	D-3	J-29 (Sec-29)	DECK-1	770	16	SM490Y	----	158	4	----	----	18.0	21	92429	9	9	132.8	178.8	121
572	D-3	J-29 (Sec-29)	DECK-2	1688	16	SM490Y	----	158	4	----	----	39.4	45	94555	9	9	322.5	408.8	122
573	D-3	J-29 (Sec-29)	DECK-3	482	16	SM490Y	----	158	4	----	----	11.2	12	101263	9	9	98.3	131.5	10
574	D-3	J-30 (Sec-31)	DECK-1	770	16	SM490Y	----	158	6	----	----	18.0	21	92457	9	9	132.8	178.8	121
575	D-3	J-30 (Sec-31)	DECK-2	1688	16	SM490Y	----	158	6	----	----	39.4	45	94584	9	9	322.5	408.8	122
576	D-3	J-30 (Sec-31)	DECK-3	482	16	SM490Y	----	158	6	----	----	11.2	12	101293	9	9	98.3	131.5	10
577	D-3	J-31 (Sec-32)	DECK-1	770	16	SM490Y	----	158	10	----	----	18.0	21	92574	9	9	132.8	178.8	121
578	D-3	J-31 (Sec-32)	DECK-2	1688	16	SM490Y	----	158	10	----	----	39.4	45	94703	9	9	322.5	408.8	119
579	D-3	J-31 (Sec-32)	DECK-3	482	16	SM490Y	----	158	10	----	----	11.2	12	101421	9	9	98.3	131.5	10
580	D-3	J-32 (Sec-32)	DECK-1	770	16	SM490Y	158	158	14	----	1	18.0	21	92750	9	9	132.8	178.8	96
581	D-3	J-32 (Sec-32)	DECK-2	1688	16	SM490Y	158	158	14	----	1	39.4	45	94884	9	9	322.5	421.0	117
582	D-3	J-32 (Sec-32)	DECK-3	482	16	SM490Y	158	158	14	----	1	11.2	12	101614	9	9	98.3	131.5	98
583	D-3	J-33 (Sec-33)	DECK-1	770	16	SM490Y	158	158	18	----	61	18.0	21	93011	9	9	132.8	178.8	96
584	D-3	J-33 (Sec-33)	DECK-2	1688	16	SM490Y	158	158	18	----	57	39.4	45	95150	9	9	322.5	421.0	102
585	D-3	J-33 (Sec-33)	DECK-3	482	16	SM490Y	158	158	18	----	61	11.2	12	101900	9	9	98.3	131.5	98
586	D-3	J-34 (Sec-34)	DECK-1	770	16	SM490Y	158	158	21	----	136	18.0	21	93230	9	9	132.8	178.8	96
587	D-3	J-34 (Sec-34)	DECK-2	1688	16	SM490Y	158	158	21	----	127	39.4	45	95374	9	9	322.5	421.0	*102
588	D-3	J-34 (Sec-34)	DECK-3	482	16	SM490Y	158	158	21	----	136	11.2	12	102139	9	9	98.3	131.5	98

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
589	D-3	J-35 (Sec-35)	DECK-1	770	22	SM490Y	196	158	18	---	196	26.1	28	101199	10	15	173.0	177.1	103
590	D-3	J-35 (Sec-35)	DECK-2	1688	22	SM490Y	184	158	18	---	184	54.3	60	98328	10	15	411.6	460.5	104
591	D-3	J-35 (Sec-35)	DECK-3	482	22	SM490Y	194	158	18	---	194	16.6	20	90180	10	15	123.9	127.0	105
592	D-3	J-36 (Sec-37)	DECK-1	770	22	SM490Y	197	158	17	---	197	26.2	28	101600	10	15	173.8	177.1	*103
593	D-3	J-36 (Sec-37)	DECK-2	1688	22	SM490Y	185	158	17	---	185	54.5	60	98709	10	15	413.5	460.5	*104
594	D-3	J-36 (Sec-37)	DECK-3	482	22	SM490Y	195	158	17	---	195	16.7	20	90539	10	15	124.5	127.0	*105
595	D-3	J-37 (Sec-38)	DECK-1	770	16	SM490Y	158	158	20	---	140	18.0	21	93138	9	9	132.8	178.8	96
596	D-3	J-37 (Sec-38)	DECK-2	1688	16	SM490Y	158	158	20	---	131	39.4	45	95280	9	9	322.5	421.0	117
597	D-3	J-37 (Sec-38)	DECK-3	482	16	SM490Y	158	158	20	---	139	11.2	12	102039	9	9	98.3	131.5	98
598	D-3	J-38 (Sec-39)	DECK-1	770	16	SM490Y	158	158	18	---	64	18.0	21	92980	9	9	132.8	178.8	96
599	D-3	J-38 (Sec-39)	DECK-2	1688	16	SM490Y	158	158	18	---	60	39.4	45	95118	9	9	322.5	421.0	117
600	D-3	J-38 (Sec-39)	DECK-3	482	16	SM490Y	158	158	18	---	64	11.2	12	101866	9	9	98.3	131.5	98
601	D-3	J-39 (Sec-39)	DECK-1	770	16	SM490Y	158	158	13	---	5	18.0	21	92718	9	9	132.8	178.8	96
602	D-3	J-39 (Sec-39)	DECK-2	1688	16	SM490Y	158	158	13	---	4	39.4	45	94850	9	9	322.5	421.0	117
603	D-3	J-39 (Sec-39)	DECK-3	482	16	SM490Y	158	158	13	---	5	11.2	12	101578	9	9	98.3	131.5	98
604	D-3	J-40 (Sec-40)	DECK-1	770	16	SM490Y	---	158	8	---	---	18.0	21	92527	9	9	132.8	178.8	121
605	D-3	J-40 (Sec-40)	DECK-2	1688	16	SM490Y	---	158	8	---	---	39.4	45	94655	9	9	322.5	408.8	119
606	D-3	J-40 (Sec-40)	DECK-3	482	16	SM490Y	---	158	8	---	---	11.2	12	101369	9	9	98.3	131.5	10
607	D-3	J-41 (Sec-41)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92435	9	9	132.8	178.8	121
608	D-3	J-41 (Sec-41)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94561	9	9	322.5	408.8	122
609	D-3	J-41 (Sec-41)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101269	9	9	98.3	131.5	10
610	D-3	J-42 (Sec-43)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92437	9	9	132.8	178.8	121
611	D-3	J-42 (Sec-43)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94563	9	9	322.5	408.8	122
612	D-3	J-42 (Sec-43)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101271	9	9	98.3	131.5	10
613	D-3	J-43 (Sec-44)	DECK-1	770	16	SM490Y	---	158	9	---	---	18.0	21	92535	9	9	132.8	178.8	121
614	D-3	J-43 (Sec-44)	DECK-2	1688	16	SM490Y	---	158	9	---	---	39.4	45	94663	9	9	322.5	408.8	119
615	D-3	J-43 (Sec-44)	DECK-3	482	16	SM490Y	---	158	9	---	---	11.2	12	101378	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
616	D-3	J-44 (Sec-44)	DECK-1	770	16	SM490Y	158	158	13	---	2	18.0	21	92711	9	9	132.8	178.8	96
617	D-3	J-44 (Sec-44)	DECK-2	1688	16	SM490Y	158	158	13	---	1	39.4	45	94843	9	9	322.5	421.0	117
618	D-3	J-44 (Sec-44)	DECK-3	482	16	SM490Y	158	158	13	---	2	11.2	12	101571	9	9	98.3	131.5	98
619	D-3	J-45 (Sec-45)	DECK-1	770	16	SM490Y	158	158	18	---	59	18.0	21	92977	9	9	132.8	178.8	96
620	D-3	J-45 (Sec-45)	DECK-2	1688	16	SM490Y	158	158	18	---	55	39.4	45	95115	9	9	322.5	421.0	117
621	D-3	J-45 (Sec-45)	DECK-3	482	16	SM490Y	158	158	18	---	58	11.2	12	101863	9	9	98.3	131.5	98
622	D-3	J-46 (Sec-46)	DECK-1	770	16	SM490Y	158	158	21	---	133	18.0	21	93207	9	9	132.8	178.8	96
623	D-3	J-46 (Sec-46)	DECK-2	1688	16	SM490Y	158	158	21	---	124	39.4	45	95351	9	9	322.5	421.0	117
624	D-3	J-46 (Sec-46)	DECK-3	482	16	SM490Y	158	158	21	---	132	11.2	12	102115	9	9	98.3	131.5	98
625	D-3	J-47 (Sec-47)	DECK-1	770	21	SM490Y	196	158	18	---	196	24.9	28	96633	10	15	166.9	177.1	*106
626	D-3	J-47 (Sec-47)	DECK-2	1688	21	SM490Y	184	158	18	---	184	51.7	60	93729	10	15	398.2	460.5	*107
627	D-3	J-47 (Sec-47)	DECK-3	482	21	SM490Y	194	158	18	---	194	15.9	16	107684	10	15	120.1	127.0	*108
628	D-3	J-48 (Sec-49)	DECK-1	770	21	SM490Y	195	158	18	---	195	24.9	28	96497	10	15	166.7	177.1	106
629	D-3	J-48 (Sec-49)	DECK-2	1688	21	SM490Y	184	158	18	---	184	51.7	60	93654	10	15	397.7	460.5	107
630	D-3	J-48 (Sec-49)	DECK-3	482	21	SM490Y	194	158	18	---	194	15.8	16	107534	10	15	120.0	127.0	108
631	D-3	J-49 (Sec-50)	DECK-1	770	16	SM490Y	158	158	20	---	130	18.0	21	93154	9	9	132.8	178.8	96
632	D-3	J-49 (Sec-50)	DECK-2	1688	16	SM490Y	158	158	20	---	121	39.4	45	95297	9	9	322.5	421.0	117
633	D-3	J-49 (Sec-50)	DECK-3	482	16	SM490Y	158	158	20	---	130	11.2	12	102057	9	9	98.3	131.5	98
634	D-3	J-50 (Sec-51)	DECK-1	770	16	SM490Y	158	158	17	---	59	18.0	21	92952	9	9	132.8	178.8	96
635	D-3	J-50 (Sec-51)	DECK-2	1688	16	SM490Y	158	158	17	---	55	39.4	45	95090	9	9	322.5	421.0	117
636	D-3	J-50 (Sec-51)	DECK-3	482	16	SM490Y	158	158	17	---	59	11.2	12	101835	9	9	98.3	131.5	98
637	D-3	J-51 (Sec-51)	DECK-1	770	16	SM490Y	---	158	13	---	---	18.0	21	92711	9	9	132.8	178.8	121
638	D-3	J-51 (Sec-51)	DECK-2	1688	16	SM490Y	---	158	13	---	---	39.4	45	94843	9	9	322.5	408.8	119
639	D-3	J-51 (Sec-51)	DECK-3	482	16	SM490Y	---	158	13	---	---	11.2	12	101571	9	9	98.3	131.5	10
640	D-3	J-52 (Sec-52)	DECK-1	770	16	SM490Y	---	158	8	---	---	18.0	21	92532	9	9	132.8	178.8	121
641	D-3	J-52 (Sec-52)	DECK-2	1688	16	SM490Y	---	158	8	---	---	39.4	45	94660	9	9	322.5	408.8	122
642	D-3	J-52 (Sec-52)	DECK-3	482	16	SM490Y	---	158	8	---	---	11.2	12	101375	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
643	D-3	J-53 (Sec-53)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92438	9	9	132.8	178.8	121
644	D-3	J-53 (Sec-53)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94564	9	9	322.5	408.8	119
645	D-3	J-53 (Sec-53)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101272	9	9	98.3	131.5	10
646	D-3	J-54 (Sec-55)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92434	9	9	132.8	178.8	121
647	D-3	J-54 (Sec-55)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94560	9	9	322.5	408.8	119
648	D-3	J-54 (Sec-55)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101268	9	9	98.3	131.5	10
649	D-3	J-55 (Sec-56)	DECK-1	770	16	SM490Y	---	158	8	---	---	18.0	21	92530	9	9	132.8	178.8	121
650	D-3	J-55 (Sec-56)	DECK-2	1688	16	SM490Y	---	158	8	---	---	39.4	45	94659	9	9	322.5	408.8	122
651	D-3	J-55 (Sec-56)	DECK-3	482	16	SM490Y	---	158	8	---	---	11.2	12	101373	9	9	98.3	131.5	10
652	D-3	J-56 (Sec-57)	DECK-1	770	16	SM490Y	---	158	13	---	---	18.0	21	92709	9	9	132.8	178.8	121
653	D-3	J-56 (Sec-57)	DECK-2	1688	16	SM490Y	---	158	13	---	---	39.4	45	94841	9	9	322.5	408.8	122
654	D-3	J-56 (Sec-57)	DECK-3	482	16	SM490Y	---	158	13	---	---	11.2	12	101568	9	9	98.3	131.5	10
655	D-3	J-57 (Sec-57)	DECK-1	770	16	SM490Y	158	158	18	---	51	18.0	21	92969	9	9	132.8	178.8	96
656	D-3	J-57 (Sec-57)	DECK-2	1688	16	SM490Y	158	158	18	---	47	39.4	45	95107	9	9	322.5	421.0	102
657	D-3	J-57 (Sec-57)	DECK-3	482	16	SM490Y	158	158	18	---	51	11.2	12	101854	9	9	98.3	131.5	98
658	D-3	J-58 (Sec-58)	DECK-1	770	16	SM490Y	158	158	21	---	122	18.0	21	93197	9	9	132.8	178.8	96
659	D-3	J-58 (Sec-58)	DECK-2	1688	16	SM490Y	158	158	21	---	113	39.4	45	95340	9	9	322.5	421.0	117
660	D-3	J-58 (Sec-58)	DECK-3	482	16	SM490Y	158	158	21	---	121	11.2	12	102104	9	9	98.3	131.5	98
661	D-3	J-59 (Sec-59)	DECK-1	770	20	SM490Y	193	158	19	---	193	23.4	28	90923	9	13	158.8	161.2	*109
662	D-3	J-59 (Sec-59)	DECK-2	1688	20	SM490Y	181	158	19	---	181	49.2	60	89267	9	13	379.9	422.6	*110
663	D-3	J-59 (Sec-59)	DECK-3	482	20	SM490Y	192	158	19	---	192	14.9	16	101365	9	13	114.8	117.0	*111
664	D-3	J-60 (Sec-61)	DECK-1	770	20	SM490Y	193	158	18	---	193	23.4	28	90860	9	13	158.8	161.2	109
665	D-3	J-60 (Sec-61)	DECK-2	1688	20	SM490Y	181	158	18	---	181	49.2	60	89199	9	13	379.9	422.6	110
666	D-3	J-60 (Sec-61)	DECK-3	482	20	SM490Y	192	158	18	---	192	14.9	16	101297	9	13	114.8	117.0	111
667	D-3	J-61 (Sec-62)	DECK-1	770	16	SM490Y	158	158	19	---	125	18.0	21	93089	9	9	132.8	178.8	96
668	D-3	J-61 (Sec-62)	DECK-2	1688	16	SM490Y	158	158	19	---	116	39.4	45	95230	9	9	322.5	421.0	117
669	D-3	J-61 (Sec-62)	DECK-3	482	16	SM490Y	158	158	19	---	124	11.2	12	101986	9	9	98.3	131.5	98

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
670	D-3	J-62 (Sec-63)	DECK-1	770	16	SM490Y	158	158	16	---	56	18.0	21	92889	9	9	132.8	178.8	96
671	D-3	J-62 (Sec-63)	DECK-2	1688	16	SM490Y	158	158	16	---	53	39.4	45	95026	9	9	322.5	421.0	117
672	D-3	J-62 (Sec-63)	DECK-3	482	16	SM490Y	158	158	16	---	56	11.2	12	101766	9	9	98.3	131.5	98
673	D-3	J-63 (Sec-63)	DECK-1	770	16	SM490Y	158	158	12	---	2	18.0	21	92677	9	9	132.8	178.8	96
674	D-3	J-63 (Sec-63)	DECK-2	1688	16	SM490Y	158	158	12	---	2	39.4	45	94809	9	9	322.5	421.0	117
675	D-3	J-63 (Sec-63)	DECK-3	482	16	SM490Y	158	158	12	---	2	11.2	12	101534	9	9	98.3	131.5	98
676	D-3	J-64 (Sec-64)	DECK-1	770	16	SM490Y	---	158	8	---	---	18.0	21	92515	9	9	132.8	178.8	121
677	D-3	J-64 (Sec-64)	DECK-2	1688	16	SM490Y	---	158	8	---	---	39.4	45	94643	9	9	322.5	408.8	119
678	D-3	J-64 (Sec-64)	DECK-3	482	16	SM490Y	---	158	8	---	---	11.2	12	101357	9	9	98.3	131.5	10
679	D-3	J-65 (Sec-65)	DECK-1	770	16	SM490Y	---	158	4	---	---	18.0	21	92428	9	9	132.8	178.8	121
680	D-3	J-65 (Sec-65)	DECK-2	1688	16	SM490Y	---	158	4	---	---	39.4	45	94554	9	9	322.5	408.8	122
681	D-3	J-65 (Sec-65)	DECK-3	482	16	SM490Y	---	158	4	---	---	11.2	12	101261	9	9	98.3	131.5	10
682	D-3	J-66 (Sec-67)	DECK-1	770	16	SM490Y	---	158	6	---	---	18.0	21	92457	9	9	132.8	178.8	121
683	D-3	J-66 (Sec-67)	DECK-2	1688	16	SM490Y	---	158	6	---	---	39.4	45	94583	9	9	322.5	408.8	122
684	D-3	J-66 (Sec-67)	DECK-3	482	16	SM490Y	---	158	6	---	---	11.2	12	101293	9	9	98.3	131.5	10
685	D-3	J-67 (Sec-68)	DECK-1	770	16	SM490Y	---	158	10	---	---	18.0	21	92577	9	9	132.8	178.8	121
686	D-3	J-67 (Sec-68)	DECK-2	1688	16	SM490Y	---	158	10	---	---	39.4	45	94707	9	9	322.5	408.8	119
687	D-3	J-67 (Sec-68)	DECK-3	482	16	SM490Y	---	158	10	---	---	11.2	12	101425	9	9	98.3	131.5	10
688	D-3	J-68 (Sec-68)	DECK-1	770	16	SM490Y	158	158	15	---	23	18.0	21	92792	9	9	132.8	178.8	96
689	D-3	J-68 (Sec-68)	DECK-2	1688	16	SM490Y	158	158	15	---	21	39.4	45	94926	9	9	322.5	421.0	117
690	D-3	J-68 (Sec-68)	DECK-3	482	16	SM490Y	158	158	15	---	23	11.2	12	101660	9	9	98.3	131.5	98
691	D-3	J-69 (Sec-69)	DECK-1	770	16	SM490Y	158	158	19	---	85	18.0	21	93061	9	9	132.8	178.8	96
692	D-3	J-69 (Sec-69)	DECK-2	1688	16	SM490Y	158	158	19	---	79	39.4	45	95202	9	9	322.5	421.0	102
693	D-3	J-69 (Sec-69)	DECK-3	482	16	SM490Y	158	158	19	---	85	11.2	12	101955	9	9	98.3	131.5	98
694	D-3	J-70 (Sec-70)	DECK-1	770	16	SM490Y	167	158	21	---	167	18.0	21	93252	9	9	116.4	142.2	96
695	D-3	J-70 (Sec-70)	DECK-2	1688	16	SM490Y	158	158	21	---	155	39.4	45	95396	9	9	282.5	353.9	*112
696	D-3	J-70 (Sec-70)	DECK-3	482	16	SM490Y	166	158	21	---	166	11.2	12	102164	9	9	86.1	105.1	98

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Spl THK	Spl THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
697	D-3	J-71 (Sec-71)	DECK-1	770	25	SM490Y	202	158	16	---	202	30.6	35	94832	12	72	197.5	460.5	*113
698	D-3	J-71 (Sec-71)	DECK-2	1688	25	SM490Y	191	158	16	---	191	64.0	75	92555	12	72	466.3	1159.4	*114
699	D-3	J-71 (Sec-71)	DECK-3	482	25	SM490Y	200	158	16	---	200	19.5	20	105514	12	72	139.8	304.2	*115
700	D-3	J-72 (Sec-73)	DECK-1	770	25	SM490Y	191	158	17	---	191	28.9	35	89750	12	72	186.7	460.5	113
701	D-3	J-72 (Sec-73)	DECK-2	1688	25	SM490Y	181	158	17	---	181	61.5	75	89107	12	72	441.0	1148.6	*116
702	D-3	J-72 (Sec-73)	DECK-3	482	25	SM490Y	189	158	17	---	189	18.4	20	99857	12	72	132.2	304.2	115
703	D-3	J-73 (Sec-74)	DECK-1	770	16	SM490Y	158	158	23	---	144	18.0	21	93356	9	9	132.8	178.8	96
704	D-3	J-73 (Sec-74)	DECK-2	1688	16	SM490Y	158	158	23	---	134	39.4	45	95503	9	9	322.5	421.0	*117
705	D-3	J-73 (Sec-74)	DECK-3	482	16	SM490Y	158	158	23	---	143	11.2	12	102278	9	9	98.3	131.5	98
706	D-3	J-74 (Sec-75)	DECK-1	770	16	SM490Y	158	158	19	---	50	18.0	21	93084	9	9	132.8	178.8	96
707	D-3	J-74 (Sec-75)	DECK-2	1688	16	SM490Y	158	158	19	---	47	39.4	45	95225	9	9	322.5	421.0	102
708	D-3	J-74 (Sec-75)	DECK-3	482	16	SM490Y	158	158	19	---	50	11.2	12	101980	9	9	98.3	131.5	98
709	D-3	J-75 (Sec-75)	DECK-1	770	16	SM490Y	---	158	14	---	---	18.0	21	92774	9	9	132.8	178.8	121
710	D-3	J-75 (Sec-75)	DECK-2	1688	16	SM490Y	---	158	14	---	---	39.4	45	94907	9	9	322.5	408.8	122
711	D-3	J-75 (Sec-75)	DECK-3	482	16	SM490Y	---	158	14	---	---	11.2	12	101640	9	9	98.3	131.5	10
712	D-3	J-76 (Sec-76)	DECK-1	770	16	SM490Y	---	158	9	---	---	18.0	21	92568	9	9	132.8	178.8	121
713	D-3	J-76 (Sec-76)	DECK-2	1688	16	SM490Y	---	158	9	---	---	39.4	45	94697	9	9	322.5	408.8	122
714	D-3	J-76 (Sec-76)	DECK-3	482	16	SM490Y	---	158	9	---	---	11.2	12	101414	9	9	98.3	131.5	10
715	D-3	J-77 (Sec-77)	DECK-1	770	16	SM490Y	---	-160	6	---	---	18.3	21	94111	9	9	135.2	178.8	118
716	D-3	J-77 (Sec-77)	DECK-2	1688	16	SM490Y	---	-160	6	---	---	40.1	45	96276	9	9	328.3	408.8	119
717	D-3	J-77 (Sec-77)	DECK-3	482	16	SM490Y	---	-160	6	---	---	11.4	12	103105	9	9	100.0	131.5	120
718	D-3	J-78 (Sec-79)	DECK-1	770	16	SM490Y	---	-165	3	---	---	18.8	21	96915	9	9	139.3	178.8	*118
719	D-3	J-78 (Sec-79)	DECK-2	1688	16	SM490Y	---	-165	3	---	---	41.3	45	99144	9	9	338.2	408.8	*119
720	D-3	J-78 (Sec-79)	DECK-3	482	16	SM490Y	---	-165	3	---	---	11.8	12	106177	9	9	103.1	131.5	*120
721	D-3	J-79 (Sec-80)	DECK-1	770	16	SM490Y	---	158	6	---	---	18.0	21	92468	9	9	132.8	178.8	*121
722	D-3	J-79 (Sec-80)	DECK-2	1688	16	SM490Y	---	158	6	---	---	39.4	45	94595	9	9	322.5	408.8	*122
723	D-3	J-79 (Sec-80)	DECK-3	482	16	SM490Y	---	158	6	---	---	11.2	12	101305	9	9	98.3	131.5	10

Mem No.	Girder Name	Joint Name	Member	Width	THK	Grade	Stress			Flg THK	Flg stress	Req Bolts	Applied Bolts	Bolts Stress	Sp1 THK	Sp1 THK	Req Area	Total Area	Group No.
							σt	σc	τ		σtn	n		ρ	1	2	Ar	As	
724	D-3	J-80 (Sec-81)	DECK-1	770	16	SM490Y	---	158	10	---	---	18.0	21	92591	9	9	132.8	178.8	121
725	D-3	J-80 (Sec-81)	DECK-2	1688	16	SM490Y	---	158	10	---	---	39.4	45	94720	9	9	322.5	408.8	122
726	D-3	J-80 (Sec-81)	DECK-3	482	16	SM490Y	---	158	10	---	---	11.2	12	101439	9	9	98.3	131.5	10
727	D-3	J-81 (Sec-82)	DECK-1	770	16	SM490Y	---	158	17	---	---	18.0	21	92935	9	9	132.8	178.8	121
728	D-3	J-81 (Sec-82)	DECK-2	1688	16	SM490Y	---	158	17	---	---	39.4	45	95073	9	9	322.5	408.8	119
729	D-3	J-81 (Sec-82)	DECK-3	482	16	SM490Y	---	158	17	---	---	11.2	12	101817	9	9	98.3	131.5	10

• L-rib

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ tnr	thickness up t	Req Bolts n	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
1	D-1	J-1(Sec-1)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	*1
2	D-1	J-1(Sec-1)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	*2
3	D-1	J-2(Sec-2)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	3
4	D-1	J-2(Sec-2)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	4
5	D-1	J-3(Sec-3)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	*3
6	D-1	J-3(Sec-3)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	*4
7	D-1	J-4(Sec-4)	DECK-1	1-BULB PL 230 * 11	---	---	5.0	6	10	10	---	---	*5
8	D-1	J-4(Sec-4)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	8.4	12	9	---	---	---	*6
9	D-1	J-5(Sec-6)	DECK-1	1-BULB PL 230 * 11	---	---	5.0	6	10	10	---	---	*7
10	D-1	J-5(Sec-6)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	8.5	12	9	---	---	---	*8
11	D-1	J-6(Sec-7)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	*9
12	D-1	J-6(Sec-7)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	*10
13	D-1	J-7(Sec-8)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	9
14	D-1	J-7(Sec-8)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	10
15	D-1	J-8(Sec-9)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	9	9	---	---	9
16	D-1	J-8(Sec-9)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	10
17	D-1	J-9(Sec-9)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	10	10	---	---	24
18	D-1	J-9(Sec-9)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	98
19	D-1	J-10(Sec-10)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	10	10	---	---	13
20	D-1	J-10(Sec-10)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	14
21	D-1	J-11(Sec-11)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	12	12	---	---	11
22	D-1	J-11(Sec-11)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	12
23	D-1	J-12(Sec-13)	DECK-1	1-BULB PL 230 * 11	---	---	4.9	5	12	12	---	---	*11
24	D-1	J-12(Sec-13)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	7.9	8	9	---	---	---	*12
25	D-1	J-13(Sec-14)	DECK-1	1-BULB PL 230 * 11	---	---	4.7	5	10	10	---	---	*13

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
26	D-1	J-13 (Sec-14)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*14
27	D-1	J-14 (Sec-15)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
28	D-1	J-14 (Sec-15)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
29	D-1	J-15 (Sec-16)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
30	D-1	J-15 (Sec-16)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
31	D-1	J-16 (Sec-16)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
32	D-1	J-16 (Sec-16)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
33	D-1	J-17 (Sec-17)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
34	D-1	J-17 (Sec-17)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
35	D-1	J-18 (Sec-19)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
36	D-1	J-18 (Sec-19)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
37	D-1	J-19 (Sec-20)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
38	D-1	J-19 (Sec-20)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
39	D-1	J-20 (Sec-20)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
40	D-1	J-20 (Sec-20)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
41	D-1	J-21 (Sec-21)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
42	D-1	J-21 (Sec-21)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
43	D-1	J-22 (Sec-22)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
44	D-1	J-22 (Sec-22)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
45	D-1	J-23 (Sec-23)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	*15
46	D-1	J-23 (Sec-23)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*16
47	D-1	J-24 (Sec-25)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	15
48	D-1	J-24 (Sec-25)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	16
49	D-1	J-25 (Sec-26)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
50	D-1	J-25 (Sec-26)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
51	D-1	J-26 (Sec-27)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
52	D-1	J-26 (Sec-27)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
53	D-1	J-27 (Sec-27)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
54	D-1	J-27 (Sec-27)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
55	D-1	J-28 (Sec-28)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
56	D-1	J-28 (Sec-28)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
57	D-1	J-29 (Sec-30)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
58	D-1	J-29 (Sec-30)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
59	D-1	J-30 (Sec-31)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
60	D-1	J-30 (Sec-31)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
61	D-1	J-31 (Sec-32)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
62	D-1	J-31 (Sec-32)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
63	D-1	J-32 (Sec-33)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
64	D-1	J-32 (Sec-33)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
65	D-1	J-33 (Sec-33)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
66	D-1	J-33 (Sec-33)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
67	D-1	J-34 (Sec-34)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
68	D-1	J-34 (Sec-34)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
69	D-1	J-35 (Sec-35)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	*17
70	D-1	J-35 (Sec-35)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*18
71	D-1	J-36 (Sec-37)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	17
72	D-1	J-36 (Sec-37)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	18
73	D-1	J-37 (Sec-38)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
74	D-1	J-37 (Sec-38)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
75	D-1	J-38 (Sec-39)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
76	D-1	J-38 (Sec-39)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
77	D-1	J-39 (Sec-39)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
78	D-1	J-39 (Sec-39)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
79	D-1	J-40 (Sec-40)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
80	D-1	J-40 (Sec-40)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
81	D-1	J-41 (Sec-41)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
82	D-1	J-41 (Sec-41)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
83	D-1	J-42 (Sec-43)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
84	D-1	J-42 (Sec-43)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
85	D-1	J-43 (Sec-44)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
86	D-1	J-43 (Sec-44)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
87	D-1	J-44 (Sec-45)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
88	D-1	J-44 (Sec-45)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
89	D-1	J-45 (Sec-45)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
90	D-1	J-45 (Sec-45)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
91	D-1	J-46 (Sec-46)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
92	D-1	J-46 (Sec-46)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
93	D-1	J-47 (Sec-47)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.8	5	12	12	---	---	*19
94	D-1	J-47 (Sec-47)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*20
95	D-1	J-48 (Sec-49)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	19
96	D-1	J-48 (Sec-49)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	20
97	D-1	J-49 (Sec-50)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
98	D-1	J-49 (Sec-50)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
99	D-1	J-50 (Sec-51)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
100	D-1	J-50 (Sec-51)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
101	D-1	J-51 (Sec-51)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
102	D-1	J-51 (Sec-51)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
103	D-1	J-52 (Sec-52)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
104	D-1	J-52 (Sec-52)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
105	D-1	J-53 (Sec-53)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
106	D-1	J-53 (Sec-53)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
107	D-1	J-54 (Sec-55)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
108	D-1	J-54 (Sec-55)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
109	D-1	J-55 (Sec-56)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
110	D-1	J-55 (Sec-56)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
111	D-1	J-56 (Sec-57)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
112	D-1	J-56 (Sec-57)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
113	D-1	J-57 (Sec-57)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
114	D-1	J-57 (Sec-57)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
115	D-1	J-58 (Sec-58)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
116	D-1	J-58 (Sec-58)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
117	D-1	J-59 (Sec-59)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	11	11	---	---	*21
118	D-1	J-59 (Sec-59)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	23
119	D-1	J-60 (Sec-61)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	*22
120	D-1	J-60 (Sec-61)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*23
121	D-1	J-61 (Sec-62)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
122	D-1	J-61 (Sec-62)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
123	D-1	J-62 (Sec-63)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
124	D-1	J-62 (Sec-63)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
125	D-1	J-63 (Sec-63)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
126	D-1	J-63 (Sec-63)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
127	D-1	J-64 (Sec-64)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
128	D-1	J-64 (Sec-64)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
129	D-1	J-65 (Sec-65)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
130	D-1	J-65 (Sec-65)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
131	D-1	J-66 (Sec-67)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
132	D-1	J-66 (Sec-67)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
133	D-1	J-67 (Sec-68)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
134	D-1	J-67 (Sec-68)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
135	D-1	J-68 (Sec-68)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
136	D-1	J-68 (Sec-68)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
137	D-1	J-69 (Sec-69)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
138	D-1	J-69 (Sec-69)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
139	D-1	J-70 (Sec-70)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	*24
140	D-1	J-70 (Sec-70)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
141	D-1	J-71 (Sec-71)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	12	12	---	---	*25
142	D-1	J-71 (Sec-71)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*26
143	D-1	J-72 (Sec-73)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	11	11	---	---	*27
144	D-1	J-72 (Sec-73)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	26
145	D-1	J-73 (Sec-74)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
146	D-1	J-73 (Sec-74)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
147	D-1	J-74 (Sec-75)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	10	10	---	---	24
148	D-1	J-74 (Sec-75)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
149	D-1	J-75 (Sec-75)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
150	D-1	J-75 (Sec-75)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
151	D-1	J-76 (Sec-76)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
152	D-1	J-76 (Sec-76)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
153	D-1	J-77 (Sec-77)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
154	D-1	J-77 (Sec-77)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
155	D-1	J-78 (Sec-79)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
156	D-1	J-78 (Sec-79)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
157	D-1	J-79 (Sec-80)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
158	D-1	J-79 (Sec-80)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
159	D-1	J-80 (Sec-81)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
160	D-1	J-80 (Sec-81)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
161	D-1	J-81 (Sec-82)	DECK-1	1-BULB PL 230 * 11	---	---	---	4.7	5	9	9	---	---	9
162	D-1	J-81 (Sec-82)	DECK-2	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
163	G-1	J-1 (Sec-1)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
164	G-1	J-1 (Sec-1)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
165	G-1	J-2 (Sec-2)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
166	G-1	J-2 (Sec-2)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
167	G-1	J-3 (Sec-3)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.7	10	9	9	---	---	30
168	G-1	J-3 (Sec-3)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	32.6	48	9	---	---	---	29
169	G-1	J-4 (Sec-4)	DECK-1	2-BULB PL 230 * 11	---	---	---	10.6	12	10	10	---	---	*28
170	G-1	J-4 (Sec-4)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	35.6	48	9	---	---	---	*29
171	G-1	J-5 (Sec-6)	DECK-1	2-BULB PL 230 * 11	---	---	---	10.5	12	10	10	---	---	28
172	G-1	J-5 (Sec-6)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	35.3	48	9	---	---	---	29
173	G-1	J-6 (Sec-7)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.7	10	9	9	---	---	*30
174	G-1	J-6 (Sec-7)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	32.6	48	9	---	---	---	29
175	G-1	J-7 (Sec-8)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
176	G-1	J-7 (Sec-8)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
177	G-1	J-8 (Sec-9)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
178	G-1	J-8 (Sec-9)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
179	G-1	J-9 (Sec-9)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
180	G-1	J-9 (Sec-9)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
181	G-1	J-10 (Sec-10)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	33
182	G-1	J-10 (Sec-10)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	34
183	G-1	J-11 (Sec-11)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	12	12	---	---	31
184	G-1	J-11 (Sec-11)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	32
185	G-1	J-12 (Sec-13)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.9	10	12	12	---	---	*31
186	G-1	J-12 (Sec-13)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*32
187	G-1	J-13 (Sec-14)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	*33

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
188	G-1	J-13 (Sec-14)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*34
189	G-1	J-14 (Sec-15)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
190	G-1	J-14 (Sec-15)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
191	G-1	J-15 (Sec-16)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
192	G-1	J-15 (Sec-16)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
193	G-1	J-16 (Sec-16)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
194	G-1	J-16 (Sec-16)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
195	G-1	J-17 (Sec-17)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
196	G-1	J-17 (Sec-17)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
197	G-1	J-18 (Sec-19)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
198	G-1	J-18 (Sec-19)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
199	G-1	J-19 (Sec-20)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
200	G-1	J-19 (Sec-20)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
201	G-1	J-20 (Sec-20)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
202	G-1	J-20 (Sec-20)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
203	G-1	J-21 (Sec-21)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
204	G-1	J-21 (Sec-21)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
205	G-1	J-22 (Sec-22)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
206	G-1	J-22 (Sec-22)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
207	G-1	J-23 (Sec-23)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.4	10	12	12	---	---	*35
208	G-1	J-23 (Sec-23)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*36
209	G-1	J-24 (Sec-25)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	12	12	---	---	35
210	G-1	J-24 (Sec-25)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	36
211	G-1	J-25 (Sec-26)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
212	G-1	J-25 (Sec-26)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
213	G-1	J-26 (Sec-27)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
214	G-1	J-26 (Sec-27)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
215	G-1	J-27 (Sec-27)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
216	G-1	J-27 (Sec-27)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
217	G-1	J-28 (Sec-28)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
218	G-1	J-28 (Sec-28)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
219	G-1	J-29 (Sec-30)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
220	G-1	J-29 (Sec-30)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
221	G-1	J-30 (Sec-31)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
222	G-1	J-30 (Sec-31)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
223	G-1	J-31 (Sec-32)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
224	G-1	J-31 (Sec-32)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
225	G-1	J-32 (Sec-33)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
226	G-1	J-32 (Sec-33)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
227	G-1	J-33 (Sec-33)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
228	G-1	J-33 (Sec-33)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
229	G-1	J-34 (Sec-34)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
230	G-1	J-34 (Sec-34)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
231	G-1	J-35 (Sec-35)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.5	10	12	12	---	---	*37
232	G-1	J-35 (Sec-35)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*38
233	G-1	J-36 (Sec-37)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.5	10	12	12	---	---	37
234	G-1	J-36 (Sec-37)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	38
235	G-1	J-37 (Sec-38)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
236	G-1	J-37 (Sec-38)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
237	G-1	J-38 (Sec-39)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
238	G-1	J-38 (Sec-39)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
239	G-1	J-39 (Sec-39)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
240	G-1	J-39 (Sec-39)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
241	G-1	J-40 (Sec-40)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
242	G-1	J-40 (Sec-40)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
243	G-1	J-41 (Sec-41)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
244	G-1	J-41 (Sec-41)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
245	G-1	J-42 (Sec-43)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
246	G-1	J-42 (Sec-43)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
247	G-1	J-43 (Sec-44)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
248	G-1	J-43 (Sec-44)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
249	G-1	J-44 (Sec-45)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
250	G-1	J-44 (Sec-45)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
251	G-1	J-45 (Sec-45)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
252	G-1	J-45 (Sec-45)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
253	G-1	J-46 (Sec-46)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
254	G-1	J-46 (Sec-46)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
255	G-1	J-47 (Sec-47)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.6	10	12	12	---	---	*39
256	G-1	J-47 (Sec-47)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*40
257	G-1	J-48 (Sec-49)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.4	10	12	12	---	---	39
258	G-1	J-48 (Sec-49)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	40
259	G-1	J-49 (Sec-50)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
260	G-1	J-49 (Sec-50)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
261	G-1	J-50 (Sec-51)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
262	G-1	J-50 (Sec-51)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
263	G-1	J-51 (Sec-51)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
264	G-1	J-51 (Sec-51)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
265	G-1	J-52 (Sec-52)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
266	G-1	J-52 (Sec-52)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
267	G-1	J-53 (Sec-53)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
268	G-1	J-53 (Sec-53)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up t	Req Bolts n	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
269	G-1	J-54 (Sec-55)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
270	G-1	J-54 (Sec-55)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
271	G-1	J-55 (Sec-56)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
272	G-1	J-55 (Sec-56)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
273	G-1	J-56 (Sec-57)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
274	G-1	J-56 (Sec-57)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
275	G-1	J-57 (Sec-57)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
276	G-1	J-57 (Sec-57)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
277	G-1	J-58 (Sec-58)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
278	G-1	J-58 (Sec-58)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
279	G-1	J-59 (Sec-59)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	12	12	---	---	41
280	G-1	J-59 (Sec-59)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	42
281	G-1	J-60 (Sec-61)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.4	10	12	12	---	---	*41
282	G-1	J-60 (Sec-61)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*42
283	G-1	J-61 (Sec-62)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
284	G-1	J-61 (Sec-62)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
285	G-1	J-62 (Sec-63)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
286	G-1	J-62 (Sec-63)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
287	G-1	J-63 (Sec-63)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
288	G-1	J-63 (Sec-63)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
289	G-1	J-64 (Sec-64)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
290	G-1	J-64 (Sec-64)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
291	G-1	J-65 (Sec-65)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
292	G-1	J-65 (Sec-65)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
293	G-1	J-66 (Sec-67)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
294	G-1	J-66 (Sec-67)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
295	G-1	J-67 (Sec-68)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
296	G-1	J-67 (Sec-68)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
297	G-1	J-68 (Sec-68)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
298	G-1	J-68 (Sec-68)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
299	G-1	J-69 (Sec-69)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
300	G-1	J-69 (Sec-69)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
301	G-1	J-70 (Sec-70)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	*43
302	G-1	J-70 (Sec-70)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*44
303	G-1	J-71 (Sec-71)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.4	10	12	12	---	---	*45
304	G-1	J-71 (Sec-71)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*46
305	G-1	J-72 (Sec-73)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	11	11	---	---	*47
306	G-1	J-72 (Sec-73)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	46
307	G-1	J-73 (Sec-74)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
308	G-1	J-73 (Sec-74)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
309	G-1	J-74 (Sec-75)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	10	10	---	---	43
310	G-1	J-74 (Sec-75)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	44
311	G-1	J-75 (Sec-75)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
312	G-1	J-75 (Sec-75)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
313	G-1	J-76 (Sec-76)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
314	G-1	J-76 (Sec-76)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
315	G-1	J-77 (Sec-77)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
316	G-1	J-77 (Sec-77)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*48
317	G-1	J-78 (Sec-79)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.6	10	9	9	---	---	30
318	G-1	J-78 (Sec-79)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	32.3	48	9	---	---	---	29
319	G-1	J-79 (Sec-80)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
320	G-1	J-79 (Sec-80)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
321	G-1	J-80 (Sec-81)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
322	G-1	J-80 (Sec-81)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
323	G-1	J-81 (Sec-82)	DECK-1	2-BULB PL 230 * 11	---	---	---	9.3	10	9	9	---	---	30
324	G-1	J-81 (Sec-82)	DECK-2	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	48
325	D-2	J-1 (Sec-1)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*49
326	D-2	J-2 (Sec-2)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*50
327	D-2	J-3 (Sec-3)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	16.5	24	9	---	---	---	51
328	D-2	J-4 (Sec-4)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	18.0	24	9	---	---	---	*51
329	D-2	J-5 (Sec-6)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	17.8	24	9	---	---	---	*52
330	D-2	J-6 (Sec-7)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	16.5	24	9	---	---	---	*53
331	D-2	J-7 (Sec-8)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
332	D-2	J-8 (Sec-9)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
333	D-2	J-9 (Sec-9)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
334	D-2	J-10 (Sec-10)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	55
335	D-2	J-11 (Sec-11)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	54
336	D-2	J-12 (Sec-13)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*54
337	D-2	J-13 (Sec-14)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*55
338	D-2	J-14 (Sec-15)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
339	D-2	J-15 (Sec-16)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
340	D-2	J-16 (Sec-16)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
341	D-2	J-17 (Sec-17)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
342	D-2	J-18 (Sec-19)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
343	D-2	J-19 (Sec-20)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
344	D-2	J-20 (Sec-20)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
345	D-2	J-21 (Sec-21)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
346	D-2	J-22 (Sec-22)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
347	D-2	J-23 (Sec-23)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*56
348	D-2	J-24 (Sec-25)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	56
349	D-2	J-25 (Sec-26)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
350	D-2	J-26 (Sec-26)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
351	D-2	J-27 (Sec-28)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
352	D-2	J-28 (Sec-28)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
353	D-2	J-29 (Sec-29)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
354	D-2	J-30 (Sec-31)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
355	D-2	J-31 (Sec-32)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
356	D-2	J-32 (Sec-33)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
357	D-2	J-33 (Sec-33)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
358	D-2	J-34 (Sec-34)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
359	D-2	J-35 (Sec-35)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*57
360	D-2	J-36 (Sec-37)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	57
361	D-2	J-37 (Sec-38)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
362	D-2	J-38 (Sec-39)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
363	D-2	J-39 (Sec-39)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
364	D-2	J-40 (Sec-40)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
365	D-2	J-41 (Sec-41)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
366	D-2	J-42 (Sec-43)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
367	D-2	J-43 (Sec-44)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
368	D-2	J-44 (Sec-45)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
369	D-2	J-45 (Sec-45)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
370	D-2	J-46 (Sec-46)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
371	D-2	J-47 (Sec-47)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	*58
372	D-2	J-48 (Sec-49)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	58
373	D-2	J-49 (Sec-50)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
374	D-2	J-50 (Sec-51)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	60
375	D-2	J-51 (Sec-51)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
376	D-2	J-52 (Sec-52)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
377	D-2	J-53 (Sec-53)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
378	D-2	J-54 (Sec-55)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
379	D-2	J-55 (Sec-56)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
380	D-2	J-56 (Sec-57)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
381	D-2	J-57 (Sec-57)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
382	D-2	J-58 (Sec-58)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
383	D-2	J-59 (Sec-59)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	59
384	D-2	J-60 (Sec-61)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	*59
385	D-2	J-61 (Sec-62)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
386	D-2	J-62 (Sec-63)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
387	D-2	J-63 (Sec-63)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
388	D-2	J-64 (Sec-64)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
389	D-2	J-65 (Sec-65)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
390	D-2	J-66 (Sec-67)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
391	D-2	J-67 (Sec-68)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
392	D-2	J-68 (Sec-68)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
393	D-2	J-69 (Sec-69)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
394	D-2	J-70 (Sec-70)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	*60
395	D-2	J-71 (Sec-71)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	*61
396	D-2	J-72 (Sec-73)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	61
397	D-2	J-73 (Sec-74)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
398	D-2	J-74 (Sec-75)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	60
399	D-2	J-75 (Sec-75)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
400	D-2	J-76 (Sec-76)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62
401	D-2	J-77 (Sec-77)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	*62
402	D-2	J-78 (Sec-79)	DECK	2-U. RIB 320 * 240 * 8	---	---	16.3	24	9	---	---	---	---	53
403	D-2	J-79 (Sec-80)	DECK	2-U. RIB 320 * 240 * 8	---	---	15.7	16	9	---	---	---	---	62

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
404	D-2	J-80 (Sec-81)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
405	D-2	J-81 (Sec-82)	DECK	2-U. RIB 320 * 240 * 8	---	---	---	15.7	16	9	---	---	---	62
406	G-2	J-1 (Sec-1)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
407	G-2	J-2 (Sec-2)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
408	G-2	J-3 (Sec-3)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	32.0	32	9	---	---	---	*63
409	G-2	J-4 (Sec-4)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	36.0	48	9	---	---	---	123
410	G-2	J-5 (Sec-6)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	36.3	48	9	---	---	---	123
411	G-2	J-6 (Sec-7)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	32.7	48	9	---	---	---	123
412	G-2	J-7 (Sec-8)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
413	G-2	J-8 (Sec-9)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
414	G-2	J-9 (Sec-9)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
415	G-2	J-10 (Sec-10)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	66
416	G-2	J-11 (Sec-11)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*64
417	G-2	J-12 (Sec-13)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*65
418	G-2	J-13 (Sec-14)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*66
419	G-2	J-14 (Sec-15)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
420	G-2	J-15 (Sec-16)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
421	G-2	J-16 (Sec-16)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
422	G-2	J-17 (Sec-17)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
423	G-2	J-18 (Sec-19)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
424	G-2	J-19 (Sec-20)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
425	G-2	J-20 (Sec-20)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
426	G-2	J-21 (Sec-21)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
427	G-2	J-22 (Sec-22)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71
428	G-2	J-23 (Sec-23)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	*67
429	G-2	J-24 (Sec-25)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	67
430	G-2	J-25 (Sec-26)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	71

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ tnr	thickness up t	Req Bolts n	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
431	G-2	J-26 (Sec-26)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
432	G-2	J-27 (Sec-28)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
433	G-2	J-28 (Sec-28)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
434	G-2	J-29 (Sec-29)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
435	G-2	J-30 (Sec-31)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
436	G-2	J-31 (Sec-32)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
437	G-2	J-32 (Sec-32)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
438	G-2	J-33 (Sec-33)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
439	G-2	J-34 (Sec-34)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
440	G-2	J-35 (Sec-35)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	68
441	G-2	J-36 (Sec-37)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	*68
442	G-2	J-37 (Sec-38)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
443	G-2	J-38 (Sec-39)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
444	G-2	J-39 (Sec-39)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
445	G-2	J-40 (Sec-40)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
446	G-2	J-41 (Sec-41)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
447	G-2	J-42 (Sec-43)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
448	G-2	J-43 (Sec-44)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
449	G-2	J-44 (Sec-44)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
450	G-2	J-45 (Sec-45)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
451	G-2	J-46 (Sec-46)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
452	G-2	J-47 (Sec-47)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	*69
453	G-2	J-48 (Sec-49)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	69
454	G-2	J-49 (Sec-50)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
455	G-2	J-50 (Sec-51)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
456	G-2	J-51 (Sec-51)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
457	G-2	J-52 (Sec-52)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ tnr	thickness up t	Req Bolts n	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
458	G-2	J-53 (Sec-53)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
459	G-2	J-54 (Sec-55)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
460	G-2	J-55 (Sec-56)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
461	G-2	J-56 (Sec-57)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
462	G-2	J-57 (Sec-57)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
463	G-2	J-58 (Sec-58)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
464	G-2	J-59 (Sec-59)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	*70
465	G-2	J-60 (Sec-61)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	70
466	G-2	J-61 (Sec-62)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
467	G-2	J-62 (Sec-63)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
468	G-2	J-63 (Sec-63)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
469	G-2	J-64 (Sec-64)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
470	G-2	J-65 (Sec-65)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
471	G-2	J-66 (Sec-67)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
472	G-2	J-67 (Sec-68)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
473	G-2	J-68 (Sec-68)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
474	G-2	J-69 (Sec-69)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
475	G-2	J-70 (Sec-70)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	*71
476	G-2	J-71 (Sec-71)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	*72
477	G-2	J-72 (Sec-73)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	72
478	G-2	J-73 (Sec-74)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
479	G-2	J-74 (Sec-75)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	71
480	G-2	J-75 (Sec-75)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
481	G-2	J-76 (Sec-76)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
482	G-2	J-77 (Sec-77)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63
483	G-2	J-78 (Sec-79)	DECK	4-U. RIB 320 * 240 * 8	---	---	32.2	48	9	---	---	---	123
484	G-2	J-79 (Sec-80)	DECK	4-U. RIB 320 * 240 * 8	---	---	31.4	32	9	---	---	---	63

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
485	G-2	J-80 (Sec-81)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
486	G-2	J-81 (Sec-82)	DECK	4-U. RIB 320 * 240 * 8	---	---	---	31.4	32	9	---	---	---	63
487	D-3	J-1 (Sec-1)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*73
488	D-3	J-1 (Sec-1)	DECK-2	11-BULB PL 230 * 11	---	---	---	51.3	55	9	9	---	---	*74
489	D-3	J-1 (Sec-1)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*75
490	D-3	J-2 (Sec-2)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*76
491	D-3	J-2 (Sec-2)	DECK-2	11-BULB PL 230 * 11	---	---	---	51.3	55	9	9	---	---	*77
492	D-3	J-2 (Sec-2)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*78
493	D-3	J-3 (Sec-3)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	8.2	12	9	---	---	---	*79
494	D-3	J-3 (Sec-3)	DECK-2	9-BULB PL 230 * 11	---	---	---	44.0	45	9	9	---	---	*80
495	D-3	J-3 (Sec-3)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	8.2	12	9	---	---	---	*81
496	D-3	J-4 (Sec-4)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	9.2	12	9	---	---	---	*82
497	D-3	J-4 (Sec-4)	DECK-2	9-BULB PL 230 * 11	---	---	---	49.2	54	11	11	---	---	*83
498	D-3	J-4 (Sec-4)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	9.2	12	9	---	---	---	*84
499	D-3	J-5 (Sec-6)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	9.2	12	9	---	---	---	*85
500	D-3	J-5 (Sec-6)	DECK-2	9-BULB PL 230 * 11	---	---	---	49.3	54	11	11	---	---	*86
501	D-3	J-5 (Sec-6)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	9.2	12	9	---	---	---	*87
502	D-3	J-6 (Sec-7)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	8.3	12	9	---	---	---	*88
503	D-3	J-6 (Sec-7)	DECK-2	9-BULB PL 230 * 11	---	---	---	44.4	45	10	10	---	---	*89
504	D-3	J-6 (Sec-7)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	8.3	12	9	---	---	---	*90
505	D-3	J-7 (Sec-8)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
506	D-3	J-7 (Sec-8)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
507	D-3	J-7 (Sec-8)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
508	D-3	J-8 (Sec-9)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
509	D-3	J-8 (Sec-9)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
510	D-3	J-8 (Sec-9)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
511	D-3	J-9 (Sec-9)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
512	D-3	J-9(Sec-9)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
513	D-3	J-9(Sec-9)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
514	D-3	J-10(Sec-10)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
515	D-3	J-10(Sec-10)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.4	25	12	12	---	---	97
516	D-3	J-10(Sec-10)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
517	D-3	J-11(Sec-11)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*91
518	D-3	J-11(Sec-11)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.7	30	14	14	---	---	94
519	D-3	J-11(Sec-11)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	12	9	---	---	---	*92
520	D-3	J-12(Sec-13)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	12	9	---	---	---	*93
521	D-3	J-12(Sec-13)	DECK-2	5-BULB PL 230 * 11	---	---	---	27.3	30	14	14	---	---	*94
522	D-3	J-12(Sec-13)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*95
523	D-3	J-13(Sec-14)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*96
524	D-3	J-13(Sec-14)	DECK-2	5-BULB PL 230 * 11	---	---	---	24.2	25	12	12	---	---	*97
525	D-3	J-13(Sec-14)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*98
526	D-3	J-14(Sec-15)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
527	D-3	J-14(Sec-15)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
528	D-3	J-14(Sec-15)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
529	D-3	J-15(Sec-16)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
530	D-3	J-15(Sec-16)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
531	D-3	J-15(Sec-16)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
532	D-3	J-16(Sec-16)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
533	D-3	J-16(Sec-16)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
534	D-3	J-16(Sec-16)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
535	D-3	J-17(Sec-17)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
536	D-3	J-17(Sec-17)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
537	D-3	J-17(Sec-17)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
538	D-3	J-18(Sec-19)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
539	D-3	J-18 (Sec-19)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
540	D-3	J-18 (Sec-19)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
541	D-3	J-19 (Sec-20)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
542	D-3	J-19 (Sec-20)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
543	D-3	J-19 (Sec-20)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
544	D-3	J-20 (Sec-20)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
545	D-3	J-20 (Sec-20)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
546	D-3	J-20 (Sec-20)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
547	D-3	J-21 (Sec-21)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
548	D-3	J-21 (Sec-21)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
549	D-3	J-21 (Sec-21)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
550	D-3	J-22 (Sec-22)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
551	D-3	J-22 (Sec-22)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
552	D-3	J-22 (Sec-22)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
553	D-3	J-23 (Sec-23)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*99
554	D-3	J-23 (Sec-23)	DECK-2	5-BULB PL 230 * 11	---	---	---	26.0	30	13	13	---	---	*100
555	D-3	J-23 (Sec-23)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*101
556	D-3	J-24 (Sec-25)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	99
557	D-3	J-24 (Sec-25)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.9	30	13	13	---	---	100
558	D-3	J-24 (Sec-25)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	101
559	D-3	J-25 (Sec-26)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
560	D-3	J-25 (Sec-26)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
561	D-3	J-25 (Sec-26)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
562	D-3	J-26 (Sec-26)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
563	D-3	J-26 (Sec-26)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
564	D-3	J-26 (Sec-26)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
565	D-3	J-27 (Sec-28)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
566	D-3	J-27 (Sec-28)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
567	D-3	J-27 (Sec-28)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
568	D-3	J-28 (Sec-28)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
569	D-3	J-28 (Sec-28)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
570	D-3	J-28 (Sec-28)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
571	D-3	J-29 (Sec-29)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
572	D-3	J-29 (Sec-29)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
573	D-3	J-29 (Sec-29)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
574	D-3	J-30 (Sec-31)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
575	D-3	J-30 (Sec-31)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
576	D-3	J-30 (Sec-31)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
577	D-3	J-31 (Sec-32)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
578	D-3	J-31 (Sec-32)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
579	D-3	J-31 (Sec-32)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
580	D-3	J-32 (Sec-32)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
581	D-3	J-32 (Sec-32)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
582	D-3	J-32 (Sec-32)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
583	D-3	J-33 (Sec-33)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
584	D-3	J-33 (Sec-33)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
585	D-3	J-33 (Sec-33)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
586	D-3	J-34 (Sec-34)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
587	D-3	J-34 (Sec-34)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	*102
588	D-3	J-34 (Sec-34)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
589	D-3	J-35 (Sec-35)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	103
590	D-3	J-35 (Sec-35)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.7	30	13	13	---	---	104
591	D-3	J-35 (Sec-35)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	105
592	D-3	J-36 (Sec-37)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*103

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
593	D-3	J-36 (Sec-37)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.9	30	13	13	---	---	*104
594	D-3	J-36 (Sec-37)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*105
595	D-3	J-37 (Sec-38)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
596	D-3	J-37 (Sec-38)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
597	D-3	J-37 (Sec-38)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
598	D-3	J-38 (Sec-39)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
599	D-3	J-38 (Sec-39)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
600	D-3	J-38 (Sec-39)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
601	D-3	J-39 (Sec-39)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
602	D-3	J-39 (Sec-39)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
603	D-3	J-39 (Sec-39)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
604	D-3	J-40 (Sec-40)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
605	D-3	J-40 (Sec-40)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
606	D-3	J-40 (Sec-40)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
607	D-3	J-41 (Sec-41)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
608	D-3	J-41 (Sec-41)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
609	D-3	J-41 (Sec-41)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
610	D-3	J-42 (Sec-43)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
611	D-3	J-42 (Sec-43)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
612	D-3	J-42 (Sec-43)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
613	D-3	J-43 (Sec-44)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
614	D-3	J-43 (Sec-44)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
615	D-3	J-43 (Sec-44)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
616	D-3	J-44 (Sec-44)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
617	D-3	J-44 (Sec-44)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
618	D-3	J-44 (Sec-44)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
619	D-3	J-45 (Sec-45)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
620	D-3	J-45 (Sec-45)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
621	D-3	J-45 (Sec-45)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
622	D-3	J-46 (Sec-46)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
623	D-3	J-46 (Sec-46)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
624	D-3	J-46 (Sec-46)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
625	D-3	J-47 (Sec-47)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*106
626	D-3	J-47 (Sec-47)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.7	30	13	13	---	---	*107
627	D-3	J-47 (Sec-47)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*108
628	D-3	J-48 (Sec-49)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	106
629	D-3	J-48 (Sec-49)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.7	30	13	13	---	---	107
630	D-3	J-48 (Sec-49)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	108
631	D-3	J-49 (Sec-50)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
632	D-3	J-49 (Sec-50)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
633	D-3	J-49 (Sec-50)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
634	D-3	J-50 (Sec-51)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
635	D-3	J-50 (Sec-51)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
636	D-3	J-50 (Sec-51)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
637	D-3	J-51 (Sec-51)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
638	D-3	J-51 (Sec-51)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
639	D-3	J-51 (Sec-51)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
640	D-3	J-52 (Sec-52)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
641	D-3	J-52 (Sec-52)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
642	D-3	J-52 (Sec-52)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
643	D-3	J-53 (Sec-53)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
644	D-3	J-53 (Sec-53)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
645	D-3	J-53 (Sec-53)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
646	D-3	J-54 (Sec-55)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
647	D-3	J-54 (Sec-55)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
648	D-3	J-54 (Sec-55)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
649	D-3	J-55 (Sec-56)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
650	D-3	J-55 (Sec-56)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
651	D-3	J-55 (Sec-56)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
652	D-3	J-56 (Sec-57)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
653	D-3	J-56 (Sec-57)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
654	D-3	J-56 (Sec-57)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
655	D-3	J-57 (Sec-57)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
656	D-3	J-57 (Sec-57)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
657	D-3	J-57 (Sec-57)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
658	D-3	J-58 (Sec-58)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
659	D-3	J-58 (Sec-58)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
660	D-3	J-58 (Sec-58)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
661	D-3	J-59 (Sec-59)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*109
662	D-3	J-59 (Sec-59)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.3	30	13	13	---	---	*110
663	D-3	J-59 (Sec-59)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*111
664	D-3	J-60 (Sec-61)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	109
665	D-3	J-60 (Sec-61)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.3	30	13	13	---	---	110
666	D-3	J-60 (Sec-61)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	111
667	D-3	J-61 (Sec-62)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
668	D-3	J-61 (Sec-62)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
669	D-3	J-61 (Sec-62)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
670	D-3	J-62 (Sec-63)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
671	D-3	J-62 (Sec-63)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
672	D-3	J-62 (Sec-63)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
673	D-3	J-63 (Sec-63)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
674	D-3	J-63 (Sec-63)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
675	D-3	J-63 (Sec-63)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
676	D-3	J-64 (Sec-64)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
677	D-3	J-64 (Sec-64)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
678	D-3	J-64 (Sec-64)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
679	D-3	J-65 (Sec-65)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
680	D-3	J-65 (Sec-65)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
681	D-3	J-65 (Sec-65)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
682	D-3	J-66 (Sec-67)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
683	D-3	J-66 (Sec-67)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
684	D-3	J-66 (Sec-67)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
685	D-3	J-67 (Sec-68)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
686	D-3	J-67 (Sec-68)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
687	D-3	J-67 (Sec-68)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
688	D-3	J-68 (Sec-68)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
689	D-3	J-68 (Sec-68)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	117
690	D-3	J-68 (Sec-68)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
691	D-3	J-69 (Sec-69)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
692	D-3	J-69 (Sec-69)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
693	D-3	J-69 (Sec-69)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
694	D-3	J-70 (Sec-70)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
695	D-3	J-70 (Sec-70)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	11	11	---	---	*112
696	D-3	J-70 (Sec-70)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
697	D-3	J-71 (Sec-71)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*113
698	D-3	J-71 (Sec-71)	DECK-2	5-BULB PL 230 * 11	---	---	---	26.7	30	13	13	---	---	*114
699	D-3	J-71 (Sec-71)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*115
700	D-3	J-72 (Sec-73)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	113

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up	Req Bolts	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
701	D-3	J-72 (Sec-73)	DECK-2	5-BULB PL 230 * 11	---	---	---	25.3	30	12	12	---	---	*116
702	D-3	J-72 (Sec-73)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	115
703	D-3	J-73 (Sec-74)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
704	D-3	J-73 (Sec-74)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	*117
705	D-3	J-73 (Sec-74)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
706	D-3	J-74 (Sec-75)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	96
707	D-3	J-74 (Sec-75)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	10	10	---	---	102
708	D-3	J-74 (Sec-75)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	98
709	D-3	J-75 (Sec-75)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
710	D-3	J-75 (Sec-75)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
711	D-3	J-75 (Sec-75)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
712	D-3	J-76 (Sec-76)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
713	D-3	J-76 (Sec-76)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
714	D-3	J-76 (Sec-76)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
715	D-3	J-77 (Sec-77)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	8.0	12	9	---	---	---	118
716	D-3	J-77 (Sec-77)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.7	25	9	9	---	---	119
717	D-3	J-77 (Sec-77)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	8.0	12	9	---	---	---	120
718	D-3	J-78 (Sec-79)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	8.2	12	9	---	---	---	*118
719	D-3	J-78 (Sec-79)	DECK-2	5-BULB PL 230 * 11	---	---	---	24.5	25	9	9	---	---	*119
720	D-3	J-78 (Sec-79)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	8.2	12	9	---	---	---	*120
721	D-3	J-79 (Sec-80)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	*121
722	D-3	J-79 (Sec-80)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	*122
723	D-3	J-79 (Sec-80)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
724	D-3	J-80 (Sec-81)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121
725	D-3	J-80 (Sec-81)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	122
726	D-3	J-80 (Sec-81)	DECK-3	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10
727	D-3	J-81 (Sec-82)	DECK-1	1-U. RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	121

Mem No.	Girder Name	Joint Name	Member	Section dimensions	σ	tnr	thickness up t	Req Bolts n	Applied Bolts	Spl THK 1	Spl THK 2	Req Area Arr	Total Area Asr	Group No.
728	D-3	J-81 (Sec-82)	DECK-2	5-BULB PL 230 * 11	---	---	---	23.3	25	9	9	---	---	119
729	D-3	J-81 (Sec-82)	DECK-3	1-U.RIB 320 * 240 * 8	---	---	---	7.9	8	9	---	---	---	10

4-1 Calculation of Cross Girder

§ 5 Design of Cross-beam

Design Policy

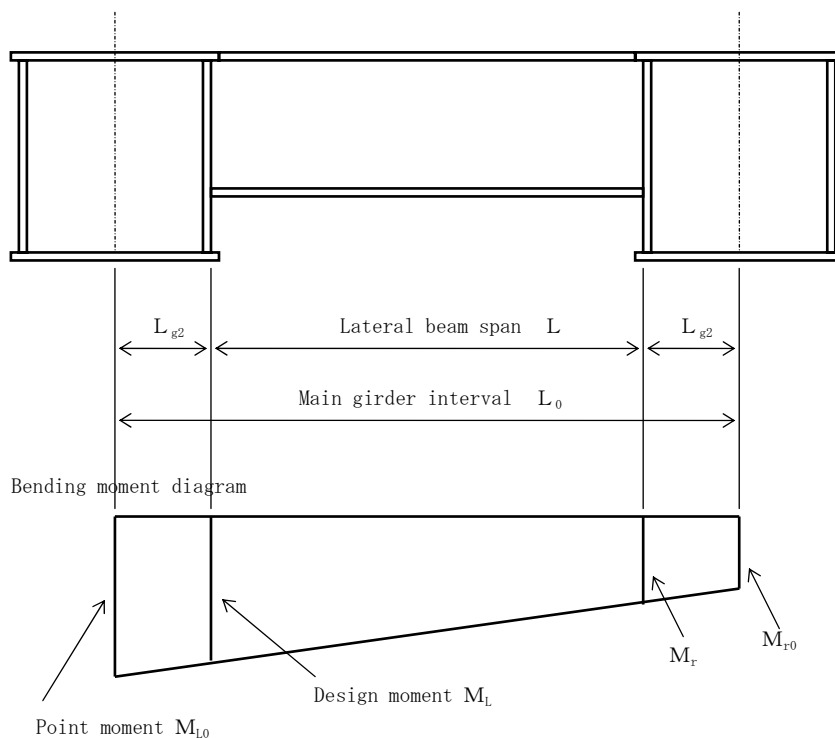
- * Let`s consider that the design sectional force will be the larger one of the sectional force due to the main structure and the sectional force due to the floor combination effect.
- * The value obtained by analyzing the steel deck plate is used as the sectional force due to the floor combination effect.

* Since the cross-beam bending moment at the center of the main girder is calculated by the Lattice calculation for the sectional force due to the main structure, is calculated by converting it to the bending moment at the cross beam installation position. For conversion method, the bending moment changed linearly between the centers of main girder is obtained by the following expression.

$$\text{Bending moment at left side} \quad M_L = M_{L0} + (M_{r0} - M_{L0}) * (L_{g2} / L_0)$$

$$\text{Bending moment at right side} \quad M_r = M_{r0} + (M_{L0} - M_{r0}) * (L_{g2} / L_0)$$

- * For maximum and minimum bending moment, use the larger one on the left and right side.
- * For shear force, the larger absolute one among Lattice calculation results is adopted.



- * Inspection of superimposing for floor assembly acting stress intensity and Lattice acting stress intensity is performed.
- * For the design sectional force at the attachment position (spliced/joint), the value of the cross-sectional calculation point is used as it is.

5 – 1 Sectional Force

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR1-001 (End)	MAX: 1007.4	961.8	L0= 4.177	L= 1.177	MAX: 994.6	-531.6
	MIN: -1338.2	-1032.9	L = 1.650	R= 1.350	MIN: -1252.2	
CR1-002 (Int)	MAX: 411.7	209.6	L0= 4.179	L= 1.177	MAX: 354.8	-216.0
	MIN: -236.1	-579.6	L = 1.651	R= 1.350	MIN: -468.6	
CR1-003 (Int)	MAX: 419.1	316.6	L0= 4.179	L= 1.177	MAX: 390.2	-198.2
	MIN: -332.0	-533.5	L = 1.651	R= 1.350	MIN: -468.4	
CR1-004 (Int)	MAX: 574.4	271.9	L0= 4.179	L= 1.177	MAX: 489.1	-247.0
	MIN: -350.9	-613.6	L = 1.651	R= 1.350	MIN: -528.7	
CR1-005 (Int)	MAX: 685.7	294.4	L0= 4.179	L= 1.177	MAX: 575.4	-268.0
	MIN: -302.1	-594.0	L = 1.651	R= 1.350	MIN: -499.7	
CR1-006 (Int)	MAX: 848.5	183.6	L0= 4.177	L= 1.177	MAX: 661.1	-331.8
	MIN: -183.0	-682.2	L = 1.650	R= 1.350	MIN: -520.8	
CR1-007 (Int)	MAX: 432.3	403.4	L0= 4.177	L= 1.177	MAX: 424.1	-183.8
	MIN: -434.6	-475.8	L = 1.650	R= 1.350	MIN: -462.5	
CR1-008 (Int)	MAX: 468.0	319.7	L0= 4.177	L= 1.177	MAX: 426.2	-239.9
	MIN: -396.2	-663.8	L = 1.650	R= 1.350	MIN: -577.3	
CR1-009 (Int)	MAX: 739.6	-164.2	L0= 4.177	L= 1.177	MAX: 484.9	-394.5
	MIN: -161.3	-1019.5	L = 1.650	R= 1.350	MIN: -742.2	
CR1-010 (Int)	MAX: 564.9	111.7	L0= 4.177	L= 1.177	MAX: 437.2	-305.4
	MIN: -360.4	-802.2	L = 1.650	R= 1.350	MIN: -659.4	
CR1-011 (Int)	MAX: 493.2	503.8	L0= 4.177	L= 1.177	MAX: 500.4	265.5
	MIN: -641.0	-500.4	L = 1.650	R= 1.350	MIN: -601.4	
CR1-012 (Sup)	MAX: 617.4	779.2	L0= 4.177	L= 1.177	MAX: 726.9	402.2
	MIN: -954.0	-611.8	L = 1.650	R= 1.350	MIN: -857.6	
CR1-013 (Int)	MAX: 452.2	392.5	L0= 4.177	L= 1.177	MAX: 435.4	-224.1
	MIN: -484.6	-525.7	L = 1.650	R= 1.350	MIN: -512.4	
CR1-014 (Int)	MAX: 481.5	202.4	L0= 4.177	L= 1.177	MAX: 402.8	-270.0
	MIN: -361.6	-721.5	L = 1.650	R= 1.350	MIN: -605.2	
CR1-015 (Int)	MAX: 428.9	120.9	L0= 4.177	L= 1.177	MAX: 342.1	-250.5
	MIN: -367.3	-723.9	L = 1.650	R= 1.350	MIN: -608.7	
CR1-016 (Int)	MAX: 480.8	26.4	L0= 4.177	L= 1.177	MAX: 352.8	-289.1
	MIN: -368.2	-869.9	L = 1.650	R= 1.350	MIN: -707.8	
CR1-017 (Int)	MAX: 562.2	-83.1	L0= 4.177	L= 1.177	MAX: 380.3	-336.2
	MIN: -376.6	-985.4	L = 1.650	R= 1.350	MIN: -788.6	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR1-018 (Int)	MAX: 508.1	-10.1	L0= 4.177	L= 1.177	MAX: 362.1	-306.1
	MIN: -401.2	-910.0	L = 1.650	R= 1.350	MIN: -745.6	
CR1-019 (Int)	MAX: 443.4	130.0	L0= 4.177	L= 1.177	MAX: 355.1	-254.2
	MIN: -451.5	-783.3	L = 1.650	R= 1.350	MIN: -676.1	
CR1-020 (Int)	MAX: 445.7	119.7	L0= 4.177	L= 1.177	MAX: 353.8	-267.6
	MIN: -403.3	-803.9	L = 1.650	R= 1.350	MIN: -674.4	
CR1-021 (Int)	MAX: 553.9	2.9	L0= 4.177	L= 1.177	MAX: 398.6	-316.0
	MIN: -369.8	-864.9	L = 1.650	R= 1.350	MIN: -704.8	
CR1-022 (Int)	MAX: 494.5	124.3	L0= 4.177	L= 1.177	MAX: 390.2	-267.5
	MIN: -362.5	-694.1	L = 1.650	R= 1.350	MIN: -586.9	
CR1-023 (Int)	MAX: 447.2	386.2	L0= 4.177	L= 1.177	MAX: 430.0	-211.8
	MIN: -509.5	-485.4	L = 1.650	R= 1.350	MIN: -502.7	
CR1-024 (Sup)	MAX: 575.1	678.7	L0= 4.177	L= 1.177	MAX: 645.2	359.2
	MIN: -870.7	-543.2	L = 1.650	R= 1.350	MIN: -778.4	
CR1-025 (Int)	MAX: 443.6	405.3	L0= 4.177	L= 1.177	MAX: 432.8	216.0
	MIN: -525.1	-440.8	L = 1.650	R= 1.350	MIN: -501.3	
CR1-026 (Int)	MAX: 396.7	351.0	L0= 4.177	L= 1.177	MAX: 383.8	197.1
	MIN: -553.1	-445.5	L = 1.650	R= 1.350	MIN: -522.8	
CR1-027 (Int)	MAX: 549.6	54.5	L0= 4.177	L= 1.177	MAX: 410.1	-323.0
	MIN: -374.7	-946.6	L = 1.650	R= 1.350	MIN: -761.8	
CR1-028 (Int)	MAX: 758.6	-316.9	L0= 4.177	L= 1.177	MAX: 455.6	-456.6
	MIN: -210.4	-1290.9	L = 1.650	R= 1.350	MIN: -941.7	
CR1-029 (Int)	MAX: 505.0	-48.6	L0= 4.177	L= 1.177	MAX: 349.0	-324.3
	MIN: -411.0	-976.6	L = 1.650	R= 1.350	MIN: -793.8	
CR1-030 (Int)	MAX: 460.6	60.3	L0= 4.177	L= 1.177	MAX: 347.8	-282.6
	MIN: -430.6	-864.1	L = 1.650	R= 1.350	MIN: -724.0	
CR1-031 (Int)	MAX: 448.8	115.4	L0= 4.177	L= 1.177	MAX: 354.9	-260.2
	MIN: -429.5	-791.5	L = 1.650	R= 1.350	MIN: -674.5	
CR1-032 (Int)	MAX: 451.7	153.3	L0= 4.177	L= 1.177	MAX: 367.6	-260.6
	MIN: -412.1	-772.7	L = 1.650	R= 1.350	MIN: -656.2	
CR1-033 (Int)	MAX: 553.1	60.7	L0= 4.177	L= 1.177	MAX: 414.4	-293.6
	MIN: -386.1	-798.7	L = 1.650	R= 1.350	MIN: -665.3	
CR1-034 (Int)	MAX: 443.5	249.2	L0= 4.177	L= 1.177	MAX: 388.8	-216.4
	MIN: -404.7	-559.8	L = 1.650	R= 1.350	MIN: -509.7	
CR1-035 (Int)	MAX: 460.5	365.2	L0= 4.177	L= 1.177	MAX: 433.7	-209.9
	MIN: -494.5	-463.0	L = 1.650	R= 1.350	MIN: -485.7	

Name of cross beam	Left-side node	Right-side node	Main girder Crossbeam span	Width of main girder/2	Installation point of cross beam	
	Moment	Moment	L0, L (m)	Lg2 (m)	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR1-036 (Sup)	MAX: 588.9	621.7	L0= 4.177	L= 1.177	MAX: 611.1	338.9
	MIN: -843.9	-523.0	L = 1.650	R= 1.350	MIN: -753.5	
CR1-037 (Int)	MAX: 453.6	419.7	L0= 4.177	L= 1.177	MAX: 444.0	227.2
	MIN: -562.2	-416.4	L = 1.650	R= 1.350	MIN: -521.1	
CR1-038 (Int)	MAX: 435.0	309.6	L0= 4.177	L= 1.177	MAX: 399.7	-187.7
	MIN: -525.6	-450.2	L = 1.650	R= 1.350	MIN: -504.4	
CR1-039 (Int)	MAX: 644.3	1.6	L0= 4.177	L= 1.177	MAX: 463.2	-351.8
	MIN: -376.1	-968.7	L = 1.650	R= 1.350	MIN: -777.2	
CR1-040 (Int)	MAX: 669.8	-136.2	L0= 4.177	L= 1.177	MAX: 442.7	-377.4
	MIN: -332.8	-1044.6	L = 1.650	R= 1.350	MIN: -814.5	
CR1-041 (Int)	MAX: 454.2	187.4	L0= 4.177	L= 1.177	MAX: 379.0	-256.2
	MIN: -471.3	-779.5	L = 1.650	R= 1.350	MIN: -679.9	
CR1-042 (Int)	MAX: 441.9	199.2	L0= 4.177	L= 1.177	MAX: 373.6	-237.5
	MIN: -464.3	-726.6	L = 1.650	R= 1.350	MIN: -641.8	
CR1-043 (Int)	MAX: 447.2	186.6	L0= 4.177	L= 1.177	MAX: 373.8	-244.6
	MIN: -450.6	-740.7	L = 1.650	R= 1.350	MIN: -647.0	
CR1-044 (Int)	MAX: 529.3	50.0	L0= 4.177	L= 1.177	MAX: 394.3	-297.8
	MIN: -398.7	-852.8	L = 1.650	R= 1.350	MIN: -706.0	
CR1-045 (Int)	MAX: 605.7	-16.5	L0= 4.177	L= 1.177	MAX: 430.3	-327.2
	MIN: -380.2	-885.1	L = 1.650	R= 1.350	MIN: -721.9	
CR1-046 (Int)	MAX: 462.5	196.8	L0= 4.177	L= 1.177	MAX: 387.6	-233.1
	MIN: -390.6	-600.2	L = 1.650	R= 1.350	MIN: -532.5	
CR1-047 (Int)	MAX: 450.9	422.1	L0= 4.177	L= 1.177	MAX: 442.8	234.6
	MIN: -590.0	-415.9	L = 1.650	R= 1.350	MIN: -541.0	
CR1-048 (Sup)	MAX: 592.3	655.2	L0= 4.177	L= 1.177	MAX: 634.9	358.8
	MIN: -893.5	-523.0	L = 1.650	R= 1.350	MIN: -789.1	
CR1-049 (Int)	MAX: 468.0	360.8	L0= 4.177	L= 1.177	MAX: 437.8	-221.5
	MIN: -484.3	-492.6	L = 1.650	R= 1.350	MIN: -489.9	
CR1-050 (Int)	MAX: 445.6	254.5	L0= 4.177	L= 1.177	MAX: 391.7	-211.6
	MIN: -431.1	-554.8	L = 1.650	R= 1.350	MIN: -514.8	
CR1-051 (Int)	MAX: 560.1	46.1	L0= 4.177	L= 1.177	MAX: 415.2	-302.4
	MIN: -390.6	-835.3	L = 1.650	R= 1.350	MIN: -691.6	
CR1-052 (Int)	MAX: 552.3	-3.0	L0= 4.177	L= 1.177	MAX: 395.8	-312.2
	MIN: -384.6	-889.6	L = 1.650	R= 1.350	MIN: -726.4	
CR1-053 (Int)	MAX: 444.4	132.4	L0= 4.177	L= 1.177	MAX: 356.5	-258.3
	MIN: -417.8	-778.8	L = 1.650	R= 1.350	MIN: -662.1	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR1-054 (Int)	MAX: 438.4	161.4	L0= 4.177	L= 1.177	MAX: 360.4	-247.4
	MIN: -442.6	-749.3	L = 1.650	R= 1.350	MIN: -650.1	
CR1-055 (Int)	MAX: 450.2	123.5	L0= 4.177	L= 1.177	MAX: 358.1	-265.7
	MIN: -421.1	-791.7	L = 1.650	R= 1.350	MIN: -671.9	
CR1-056 (Int)	MAX: 557.5	-15.9	L0= 4.177	L= 1.177	MAX: 395.9	-320.0
	MIN: -386.1	-914.0	L = 1.650	R= 1.350	MIN: -743.4	
CR1-057 (Int)	MAX: 604.2	-12.9	L0= 4.177	L= 1.177	MAX: 430.3	-329.6
	MIN: -378.9	-906.2	L = 1.650	R= 1.350	MIN: -735.8	
CR1-058 (Int)	MAX: 441.8	264.5	L0= 4.177	L= 1.177	MAX: 391.8	-210.2
	MIN: -428.3	-557.8	L = 1.650	R= 1.350	MIN: -516.0	
CR1-059 (Int)	MAX: 447.3	405.3	L0= 4.177	L= 1.177	MAX: 435.5	224.4
	MIN: -562.2	-421.8	L = 1.650	R= 1.350	MIN: -522.7	
CR1-060 (Sup)	MAX: 580.3	642.7	L0= 4.177	L= 1.177	MAX: 622.6	352.1
	MIN: -878.3	-513.9	L = 1.650	R= 1.350	MIN: -775.6	
CR1-061 (Int)	MAX: 454.9	362.8	L0= 4.177	L= 1.177	MAX: 428.9	-215.2
	MIN: -481.9	-488.4	L = 1.650	R= 1.350	MIN: -486.3	
CR1-062 (Int)	MAX: 439.8	217.5	L0= 4.177	L= 1.177	MAX: 377.2	-225.0
	MIN: -390.7	-585.0	L = 1.650	R= 1.350	MIN: -522.2	
CR1-063 (Int)	MAX: 477.0	125.2	L0= 4.177	L= 1.177	MAX: 377.9	-264.2
	MIN: -400.1	-752.7	L = 1.650	R= 1.350	MIN: -638.7	
CR1-064 (Int)	MAX: 539.9	-10.4	L0= 4.177	L= 1.177	MAX: 384.8	-315.7
	MIN: -385.0	-918.2	L = 1.650	R= 1.350	MIN: -745.9	
CR1-065 (Int)	MAX: 516.3	-30.0	L0= 4.177	L= 1.177	MAX: 362.4	-314.2
	MIN: -393.4	-912.9	L = 1.650	R= 1.350	MIN: -745.0	
CR1-066 (Int)	MAX: 447.2	66.4	L0= 4.177	L= 1.177	MAX: 339.9	-278.2
	MIN: -414.6	-843.0	L = 1.650	R= 1.350	MIN: -704.6	
CR1-067 (Int)	MAX: 440.0	84.5	L0= 4.177	L= 1.177	MAX: 339.9	-276.7
	MIN: -410.9	-851.7	L = 1.650	R= 1.350	MIN: -709.3	
CR1-068 (Int)	MAX: 592.5	-99.2	L0= 4.177	L= 1.177	MAX: 397.6	-345.8
	MIN: -354.1	-983.6	L = 1.650	R= 1.350	MIN: -780.2	
CR1-069 (Int)	MAX: 548.2	57.1	L0= 4.177	L= 1.177	MAX: 409.8	-304.3
	MIN: -363.7	-852.5	L = 1.650	R= 1.350	MIN: -694.5	
CR1-070 (Int)	MAX: 417.3	311.2	L0= 4.177	L= 1.177	MAX: 387.4	-187.9
	MIN: -497.0	-451.0	L = 1.650	R= 1.350	MIN: -484.1	
CR1-071 (Int)	MAX: 440.0	380.9	L0= 4.177	L= 1.177	MAX: 423.4	-206.5
	MIN: -501.9	-441.3	L = 1.650	R= 1.350	MIN: -484.8	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR1-072 (Sup)	MAX: 600.1	692.5	L0= 4.177	L= 1.177	MAX: 662.7	366.9
	MIN: -893.5	-568.0	L = 1.650	R= 1.350	MIN: -801.8	
CR1-073 (Int)	MAX: 489.3	428.3	L0= 4.177	L= 1.177	MAX: 472.1	238.8
	MIN: -600.1	-490.2	L = 1.650	R= 1.350	MIN: -569.2	
CR1-074 (Int)	MAX: 468.2	183.9	L0= 4.177	L= 1.177	MAX: 388.1	-259.8
	MIN: -414.3	-727.3	L = 1.650	R= 1.350	MIN: -626.2	
CR1-075 (Int)	MAX: 723.1	-224.9	L0= 4.177	L= 1.177	MAX: 455.9	-421.7
	MIN: -242.8	-1177.7	L = 1.650	R= 1.350	MIN: -875.5	
CR1-076 (Int)	MAX: 633.3	-151.6	L0= 4.177	L= 1.177	MAX: 412.1	-372.7
	MIN: -345.5	-1059.1	L = 1.650	R= 1.350	MIN: -828.5	
CR1-077 (Int)	MAX: 448.5	193.7	L0= 4.177	L= 1.177	MAX: 376.7	-250.1
	MIN: -461.9	-753.1	L = 1.650	R= 1.350	MIN: -659.0	
CR1-078 (Int)	MAX: 431.3	322.9	L0= 4.177	L= 1.177	MAX: 400.7	-200.7
	MIN: -510.9	-605.7	L = 1.650	R= 1.350	MIN: -575.0	
CR1-079 (Int)	MAX: 382.4	353.1	L0= 4.177	L= 1.177	MAX: 374.1	193.4
	MIN: -612.8	-471.8	L = 1.650	R= 1.350	MIN: -573.1	
CR1-080 (Int)	MAX: 455.9	140.2	L0= 4.177	L= 1.177	MAX: 366.9	-259.9
	MIN: -390.6	-729.6	L = 1.650	R= 1.350	MIN: -620.0	
CR1-081 (Int)	MAX: 806.8	-293.7	L0= 4.177	L= 1.177	MAX: 496.7	-452.4
	MIN: 9.7	-1166.2	L = 1.650	R= 1.350	MIN: -786.1	
CR1-082 (End)	MAX: 957.4	1110.3	L0= 4.177	L= 1.177	MAX: 1060.9	591.9
	MIN: -1570.4	-983.7	L = 1.650	R= 1.350	MIN: -1405.1	
CR2-001 (End)	MAX: 607.9	607.9	L0= 8.200	L= 1.350	MAX: 607.9	-175.7
	MIN: -724.8	-724.8	L = 5.500	R= 1.350	MIN: -724.8	
CR2-002 (Int)	MAX: 360.7	360.5	L0= 7.848	L= 1.350	MAX: 360.6	-81.4
	MIN: -503.7	-503.7	L = 5.147	R= 1.350	MIN: -503.7	
CR2-003 (Int)	MAX: 454.6	454.3	L0= 7.346	L= 1.350	MAX: 454.5	-122.7
	MIN: -586.6	-586.5	L = 4.645	R= 1.350	MIN: -586.6	
CR2-004 (Int)	MAX: 528.2	528.0	L0= 6.843	L= 1.350	MAX: 528.2	-155.9
	MIN: -634.8	-634.7	L = 4.142	R= 1.350	MIN: -634.8	
CR2-005 (Int)	MAX: 688.1	688.3	L0= 6.340	L= 1.350	MAX: 688.3	-179.0
	MIN: -633.3	-633.3	L = 3.639	R= 1.350	MIN: -633.3	
CR2-006 (Int)	MAX: 756.6	757.0	L0= 6.001	L= 1.350	MAX: 757.0	-187.5
	MIN: -625.1	-625.1	L = 3.301	R= 1.350	MIN: -625.1	
CR2-007 (Int)	MAX: 565.3	565.5	L0= 6.000	L= 1.350	MAX: 565.5	-175.2
	MIN: -620.6	-620.6	L = 3.300	R= 1.350	MIN: -620.6	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR2-008 (Int)	MAX: 486.9	486.9	L0= 6.000	L= 1.350	MAX: 486.9	-165.6
	MIN: -752.8	-752.8	L = 3.300	R= 1.350	MIN: -752.8	
CR2-009 (Int)	MAX: 347.1	347.1	L0= 6.000	L= 1.350	MAX: 347.1	-167.3
	MIN: -915.2	-915.2	L = 3.300	R= 1.350	MIN: -915.2	
CR2-010 (Int)	MAX: 521.0	521.0	L0= 6.000	L= 1.350	MAX: 521.0	-194.7
	MIN: -872.2	-872.2	L = 3.300	R= 1.350	MIN: -872.2	
CR2-011 (Int)	MAX: 629.0	628.9	L0= 6.000	L= 1.350	MAX: 629.0	-218.5
	MIN: -756.0	-756.0	L = 3.300	R= 1.350	MIN: -756.0	
CR2-012 (Sup)	MAX: 503.9	503.9	L0= 6.000	L= 1.350	MAX: 503.9	-184.0
	MIN: -592.5	-592.5	L = 3.300	R= 1.350	MIN: -592.5	
CR2-013 (Int)	MAX: 541.0	541.0	L0= 6.000	L= 1.350	MAX: 541.0	-186.5
	MIN: -668.4	-668.4	L = 3.300	R= 1.350	MIN: -668.4	
CR2-014 (Int)	MAX: 544.6	544.6	L0= 6.000	L= 1.350	MAX: 544.6	-203.5
	MIN: -848.5	-848.6	L = 3.300	R= 1.350	MIN: -848.6	
CR2-015 (Int)	MAX: 397.2	397.2	L0= 6.000	L= 1.350	MAX: 397.2	-167.8
	MIN: -880.1	-880.1	L = 3.300	R= 1.350	MIN: -880.1	
CR2-016 (Int)	MAX: 284.3	284.3	L0= 6.000	L= 1.350	MAX: 284.3	-167.2
	MIN: -978.1	-978.1	L = 3.300	R= 1.350	MIN: -978.1	
CR2-017 (Int)	MAX: 233.5	233.5	L0= 6.000	L= 1.350	MAX: 233.5	-173.6
	MIN: -1053.4	-1053.4	L = 3.300	R= 1.350	MIN: -1053.4	
CR2-018 (Int)	MAX: 257.7	257.7	L0= 6.000	L= 1.350	MAX: 257.7	-175.6
	MIN: -1030.6	-1030.6	L = 3.300	R= 1.350	MIN: -1030.6	
CR2-019 (Int)	MAX: 316.9	316.9	L0= 6.000	L= 1.350	MAX: 316.9	-173.6
	MIN: -970.6	-970.6	L = 3.300	R= 1.350	MIN: -970.6	
CR2-020 (Int)	MAX: 335.2	335.2	L0= 6.000	L= 1.350	MAX: 335.2	-171.4
	MIN: -947.2	-947.2	L = 3.300	R= 1.350	MIN: -947.2	
CR2-021 (Int)	MAX: 383.3	383.3	L0= 6.000	L= 1.350	MAX: 383.3	-184.7
	MIN: -943.8	-943.8	L = 3.300	R= 1.350	MIN: -943.8	
CR2-022 (Int)	MAX: 520.2	520.2	L0= 6.000	L= 1.350	MAX: 520.2	-182.0
	MIN: -819.6	-819.6	L = 3.300	R= 1.350	MIN: -819.6	
CR2-023 (Int)	MAX: 522.5	522.5	L0= 6.000	L= 1.350	MAX: 522.5	-172.7
	MIN: -634.1	-634.1	L = 3.300	R= 1.350	MIN: -634.1	
CR2-024 (Sup)	MAX: 419.9	419.9	L0= 6.000	L= 1.350	MAX: 419.9	-152.8
	MIN: -488.5	-488.5	L = 3.300	R= 1.350	MIN: -488.5	
CR2-025 (Int)	MAX: 522.1	522.1	L0= 6.000	L= 1.350	MAX: 522.1	-170.8
	MIN: -582.0	-582.0	L = 3.300	R= 1.350	MIN: -582.0	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR2-026 (Int)	MAX: 529.6	529.6	L0= 6.000	L= 1.350	MAX: 529.6	-180.0
	MIN: -718.3	-718.3	L = 3.300	R= 1.350	MIN: -718.3	
CR2-027 (Int)	MAX: 338.4	338.4	L0= 6.000	L= 1.350	MAX: 338.4	-174.5
	MIN: -985.5	-985.5	L = 3.300	R= 1.350	MIN: -985.5	
CR2-028 (Int)	MAX: 140.0	140.0	L0= 6.000	L= 1.350	MAX: 140.0	-174.8
	MIN: -1170.3	-1170.3	L = 3.300	R= 1.350	MIN: -1170.3	
CR2-029 (Int)	MAX: 193.6	193.6	L0= 6.000	L= 1.350	MAX: 193.6	-177.0
	MIN: -1106.5	-1106.5	L = 3.300	R= 1.350	MIN: -1106.5	
CR2-030 (Int)	MAX: 273.9	273.9	L0= 6.000	L= 1.350	MAX: 273.9	-176.0
	MIN: -1032.0	-1032.0	L = 3.300	R= 1.350	MIN: -1032.0	
CR2-031 (Int)	MAX: 331.6	331.6	L0= 6.000	L= 1.350	MAX: 331.7	-174.7
	MIN: -967.5	-967.5	L = 3.300	R= 1.350	MIN: -967.5	
CR2-032 (Int)	MAX: 376.8	376.8	L0= 6.000	L= 1.350	MAX: 376.8	-174.4
	MIN: -924.9	-924.9	L = 3.300	R= 1.350	MIN: -924.9	
CR2-033 (Int)	MAX: 437.1	437.1	L0= 6.000	L= 1.350	MAX: 437.1	-178.9
	MIN: -891.1	-891.1	L = 3.300	R= 1.350	MIN: -891.1	
CR2-034 (Int)	MAX: 529.0	529.0	L0= 6.000	L= 1.350	MAX: 529.0	-176.0
	MIN: -742.8	-742.8	L = 3.300	R= 1.350	MIN: -742.8	
CR2-035 (Int)	MAX: 495.7	495.7	L0= 6.000	L= 1.350	MAX: 495.7	-163.8
	MIN: -578.0	-578.0	L = 3.300	R= 1.350	MIN: -578.0	
CR2-036 (Sup)	MAX: 370.7	370.7	L0= 6.000	L= 1.350	MAX: 370.7	-134.3
	MIN: -422.9	-422.9	L = 3.300	R= 1.350	MIN: -422.9	
CR2-037 (Int)	MAX: 501.3	501.3	L0= 6.000	L= 1.350	MAX: 501.3	-163.3
	MIN: -543.8	-543.8	L = 3.300	R= 1.350	MIN: -543.8	
CR2-038 (Int)	MAX: 535.4	535.4	L0= 6.000	L= 1.350	MAX: 535.4	-176.5
	MIN: -707.4	-707.4	L = 3.300	R= 1.350	MIN: -707.4	
CR2-039 (Int)	MAX: 381.7	381.7	L0= 6.000	L= 1.350	MAX: 381.7	-181.7
	MIN: -963.6	-963.6	L = 3.300	R= 1.350	MIN: -963.7	
CR2-040 (Int)	MAX: 266.4	266.4	L0= 6.000	L= 1.350	MAX: 266.4	-176.0
	MIN: -1040.4	-1040.4	L = 3.300	R= 1.350	MIN: -1040.4	
CR2-041 (Int)	MAX: 342.3	342.3	L0= 6.000	L= 1.350	MAX: 342.3	-174.7
	MIN: -956.0	-956.0	L = 3.300	R= 1.350	MIN: -956.0	
CR2-042 (Int)	MAX: 379.5	379.5	L0= 6.000	L= 1.350	MAX: 379.5	-174.4
	MIN: -919.6	-919.6	L = 3.300	R= 1.350	MIN: -919.6	
CR2-043 (Int)	MAX: 374.3	374.3	L0= 6.000	L= 1.350	MAX: 374.3	-174.4
	MIN: -922.2	-922.2	L = 3.300	R= 1.350	MIN: -922.2	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR2-044 (Int)	MAX: 339.3	339.3	L0= 6.000	L= 1.350	MAX: 339.3	-174.4
	MIN: -954.9	-954.9	L = 3.300	R= 1.350	MIN: -954.9	
CR2-045 (Int)	MAX: 388.1	388.1	L0= 6.000	L= 1.350	MAX: 388.1	-178.8
	MIN: -936.6	-936.6	L = 3.300	R= 1.350	MIN: -936.7	
CR2-046 (Int)	MAX: 525.5	525.5	L0= 6.000	L= 1.350	MAX: 525.5	-176.0
	MIN: -764.0	-764.0	L = 3.300	R= 1.350	MIN: -764.1	
CR2-047 (Int)	MAX: 499.3	499.3	L0= 6.000	L= 1.350	MAX: 499.3	-163.6
	MIN: -565.0	-565.0	L = 3.300	R= 1.350	MIN: -565.0	
CR2-048 (Sup)	MAX: 370.8	370.8	L0= 6.000	L= 1.350	MAX: 370.8	-134.8
	MIN: -430.1	-430.1	L = 3.300	R= 1.350	MIN: -430.1	
CR2-049 (Int)	MAX: 497.0	497.0	L0= 6.000	L= 1.350	MAX: 497.0	-164.8
	MIN: -595.3	-595.3	L = 3.300	R= 1.350	MIN: -595.3	
CR2-050 (Int)	MAX: 526.9	526.9	L0= 6.000	L= 1.350	MAX: 526.9	-176.6
	MIN: -756.6	-756.6	L = 3.300	R= 1.350	MIN: -756.6	
CR2-051 (Int)	MAX: 404.1	404.1	L0= 6.000	L= 1.350	MAX: 404.2	-178.5
	MIN: -920.5	-920.5	L = 3.300	R= 1.350	MIN: -920.5	
CR2-052 (Int)	MAX: 317.2	317.2	L0= 6.000	L= 1.350	MAX: 317.2	-172.7
	MIN: -969.6	-969.6	L = 3.300	R= 1.350	MIN: -969.6	
CR2-053 (Int)	MAX: 340.8	340.8	L0= 6.000	L= 1.350	MAX: 340.8	-173.5
	MIN: -946.6	-946.6	L = 3.300	R= 1.350	MIN: -946.6	
CR2-054 (Int)	MAX: 364.7	364.7	L0= 6.000	L= 1.350	MAX: 364.7	-178.7
	MIN: -946.1	-946.1	L = 3.300	R= 1.350	MIN: -946.1	
CR2-055 (Int)	MAX: 344.6	344.6	L0= 6.000	L= 1.350	MAX: 344.6	-180.1
	MIN: -964.8	-964.8	L = 3.300	R= 1.350	MIN: -964.8	
CR2-056 (Int)	MAX: 316.0	316.0	L0= 6.000	L= 1.350	MAX: 316.0	-176.9
	MIN: -996.1	-996.1	L = 3.300	R= 1.350	MIN: -996.1	
CR2-057 (Int)	MAX: 382.1	382.1	L0= 6.000	L= 1.350	MAX: 382.1	-178.0
	MIN: -948.3	-948.3	L = 3.300	R= 1.350	MIN: -948.3	
CR2-058 (Int)	MAX: 524.6	524.6	L0= 6.000	L= 1.350	MAX: 524.6	-173.9
	MIN: -745.3	-745.3	L = 3.300	R= 1.350	MIN: -745.3	
CR2-059 (Int)	MAX: 496.1	496.1	L0= 6.000	L= 1.350	MAX: 496.2	-160.5
	MIN: -558.4	-558.4	L = 3.300	R= 1.350	MIN: -558.4	
CR2-060 (Sup)	MAX: 363.0	363.0	L0= 6.000	L= 1.350	MAX: 363.0	-131.8
	MIN: -420.4	-420.4	L = 3.300	R= 1.350	MIN: -420.4	
CR2-061 (Int)	MAX: 491.2	491.2	L0= 6.000	L= 1.350	MAX: 491.2	-160.6
	MIN: -586.9	-586.9	L = 3.300	R= 1.350	MIN: -586.9	

Name of cross beam	Left-side node	Right-side node	Main girder Crossbeam span	Width of main girder/2	Installation point of cross beam	
	Moment	Moment	L0, L (m)	Lg2 (m)	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR2-062 (Int)	MAX: 522.8 MIN: -759.1	522.8 -759.1	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 522.8 MIN: -759.1	-174.0
CR2-063 (Int)	MAX: 424.7 MIN: -907.8	424.7 -907.8	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 424.7 MIN: -907.8	-176.4
CR2-064 (Int)	MAX: 323.5 MIN: -1017.3	323.5 -1017.3	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 323.5 MIN: -1017.3	-179.9
CR2-065 (Int)	MAX: 297.8 MIN: -1045.1	297.8 -1045.1	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 297.8 MIN: -1045.1	-187.8
CR2-066 (Int)	MAX: 305.2 MIN: -1028.6	305.2 -1028.6	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 305.2 MIN: -1028.6	-183.6
CR2-067 (Int)	MAX: 285.2 MIN: -1009.1	285.2 -1009.1	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 285.2 MIN: -1009.1	-172.5
CR2-068 (Int)	MAX: 260.2 MIN: -1014.7	260.2 -1014.7	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 260.2 MIN: -1014.7	-170.2
CR2-069 (Int)	MAX: 393.6 MIN: -911.2	393.6 -911.2	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 393.6 MIN: -911.2	-174.5
CR2-070 (Int)	MAX: 526.4 MIN: -720.2	526.4 -720.2	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 526.4 MIN: -720.2	-183.8
CR2-071 (Int)	MAX: 509.7 MIN: -574.3	509.7 -574.3	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 509.7 MIN: -574.3	-169.8
CR2-072 (Sup)	MAX: 437.2 MIN: -506.6	437.2 -506.6	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 437.2 MIN: -506.6	-159.7
CR2-073 (Int)	MAX: 591.9 MIN: -711.1	591.9 -711.1	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 591.9 MIN: -711.1	-198.4
CR2-074 (Int)	MAX: 493.0 MIN: -903.4	493.0 -903.4	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 493.0 MIN: -903.4	-192.3
CR2-075 (Int)	MAX: 218.5 MIN: -1088.3	218.5 -1088.3	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 218.5 MIN: -1088.3	-174.4
CR2-076 (Int)	MAX: 206.6 MIN: -1070.0	206.6 -1070.0	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 206.6 MIN: -1070.0	-172.3
CR2-077 (Int)	MAX: 361.9 MIN: -932.7	361.9 -932.7	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 361.9 MIN: -932.7	-175.3
CR2-078 (Int)	MAX: 477.7 MIN: -829.6	477.7 -829.6	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 477.7 MIN: -829.6	-177.2
CR2-079 (Int)	MAX: 494.2 MIN: -783.3	494.2 -783.3	L0= 6.000 L = 3.300	L= 1.350 R= 1.350	MAX: 494.2 MIN: -783.3	-178.2

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR2-080 (Int)	MAX: 361.5	361.5	L0= 6.000	L= 1.350	MAX: 361.5	-167.3
	MIN: -861.9	-861.9	L = 3.300	R= 1.350	MIN: -862.0	
CR2-081 (Int)	MAX: 171.9	171.9	L0= 6.000	L= 1.350	MAX: 171.9	127.7
	MIN: -846.8	-846.8	L = 3.300	R= 1.350	MIN: -846.8	
CR2-082 (End)	MAX: 677.4	677.4	L0= 6.000	L= 1.350	MAX: 677.4	-271.6
	MIN: -855.2	-855.2	L = 3.300	R= 1.350	MIN: -855.2	
CR3-001 (End)	MAX: 961.8	1007.3	L0= 4.177	L= 1.350	MAX: 994.5	-589.5
	MIN: -1032.9	-1338.2	L = 1.650	R= 1.177	MIN: -1252.2	
CR3-002 (Int)	MAX: 209.5	411.7	L0= 4.179	L= 1.350	MAX: 354.7	216.0
	MIN: -579.6	-236.0	L = 1.651	R= 1.177	MIN: -468.6	
CR3-003 (Int)	MAX: 316.5	419.1	L0= 4.179	L= 1.350	MAX: 390.2	198.2
	MIN: -533.5	-332.0	L = 1.651	R= 1.177	MIN: -468.4	
CR3-004 (Int)	MAX: 271.9	574.4	L0= 4.179	L= 1.350	MAX: 489.1	247.0
	MIN: -613.5	-350.9	L = 1.651	R= 1.177	MIN: -528.7	
CR3-005 (Int)	MAX: 294.5	685.7	L0= 4.179	L= 1.350	MAX: 575.5	268.0
	MIN: -594.0	-302.1	L = 1.651	R= 1.177	MIN: -499.7	
CR3-006 (Int)	MAX: 183.8	848.6	L0= 4.177	L= 1.350	MAX: 661.3	331.8
	MIN: -682.1	-183.0	L = 1.650	R= 1.177	MIN: -520.8	
CR3-007 (Int)	MAX: 403.5	432.3	L0= 4.177	L= 1.350	MAX: 424.2	183.8
	MIN: -475.8	-434.6	L = 1.650	R= 1.177	MIN: -462.5	
CR3-008 (Int)	MAX: 319.8	468.0	L0= 4.177	L= 1.350	MAX: 426.3	239.9
	MIN: -663.8	-396.2	L = 1.650	R= 1.177	MIN: -577.3	
CR3-009 (Int)	MAX: -164.2	739.6	L0= 4.177	L= 1.350	MAX: 484.9	394.5
	MIN: -1019.5	-161.3	L = 1.650	R= 1.177	MIN: -742.2	
CR3-010 (Int)	MAX: 111.7	564.9	L0= 4.177	L= 1.350	MAX: 437.2	305.4
	MIN: -802.2	-360.4	L = 1.650	R= 1.177	MIN: -659.4	
CR3-011 (Int)	MAX: 503.8	493.2	L0= 4.177	L= 1.350	MAX: 500.4	-276.2
	MIN: -500.4	-641.0	L = 1.650	R= 1.177	MIN: -601.4	
CR3-012 (Sup)	MAX: 779.3	617.4	L0= 4.177	L= 1.350	MAX: 726.9	-426.3
	MIN: -611.8	-954.0	L = 1.650	R= 1.177	MIN: -857.6	
CR3-013 (Int)	MAX: 392.5	452.1	L0= 4.177	L= 1.350	MAX: 435.3	224.1
	MIN: -525.6	-484.6	L = 1.650	R= 1.177	MIN: -512.4	
CR3-014 (Int)	MAX: 202.4	481.4	L0= 4.177	L= 1.350	MAX: 402.8	270.0
	MIN: -721.5	-361.6	L = 1.650	R= 1.177	MIN: -605.2	
CR3-015 (Int)	MAX: 120.9	428.9	L0= 4.177	L= 1.350	MAX: 342.1	250.5
	MIN: -723.9	-367.3	L = 1.650	R= 1.177	MIN: -608.7	

Name of cross beam	Left-side node	Right-side node	Main girder Crossbeam span	Width of main girder/2	Installation point of cross beam	
	Moment	Moment	L0, L (m)	Lg2 (m)	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR3-016(Int)	MAX: 26.4	480.8	L0= 4.177	L= 1.350	MAX: 352.8	289.1
	MIN: -869.9	-368.2	L = 1.650	R= 1.177	MIN: -707.8	
CR3-017(Int)	MAX: -83.1	562.2	L0= 4.177	L= 1.350	MAX: 380.3	336.2
	MIN: -985.4	-376.6	L = 1.650	R= 1.177	MIN: -788.6	
CR3-018(Int)	MAX: -10.1	508.1	L0= 4.177	L= 1.350	MAX: 362.1	306.1
	MIN: -910.0	-401.2	L = 1.650	R= 1.177	MIN: -745.6	
CR3-019(Int)	MAX: 130.0	443.4	L0= 4.177	L= 1.350	MAX: 355.1	254.2
	MIN: -783.3	-451.5	L = 1.650	R= 1.177	MIN: -676.1	
CR3-020(Int)	MAX: 119.7	445.7	L0= 4.177	L= 1.350	MAX: 353.8	267.6
	MIN: -803.9	-403.3	L = 1.650	R= 1.177	MIN: -674.4	
CR3-021(Int)	MAX: 2.9	553.9	L0= 4.177	L= 1.350	MAX: 398.6	316.0
	MIN: -864.9	-369.8	L = 1.650	R= 1.177	MIN: -704.8	
CR3-022(Int)	MAX: 124.3	494.5	L0= 4.177	L= 1.350	MAX: 390.2	267.5
	MIN: -694.1	-362.5	L = 1.650	R= 1.177	MIN: -586.9	
CR3-023(Int)	MAX: 386.2	447.2	L0= 4.177	L= 1.350	MAX: 430.0	211.8
	MIN: -485.4	-509.5	L = 1.650	R= 1.177	MIN: -502.7	
CR3-024(Sup)	MAX: 678.7	575.1	L0= 4.177	L= 1.350	MAX: 645.2	-380.7
	MIN: -543.2	-870.7	L = 1.650	R= 1.177	MIN: -778.4	
CR3-025(Int)	MAX: 405.3	443.6	L0= 4.177	L= 1.350	MAX: 432.8	-224.9
	MIN: -440.8	-525.1	L = 1.650	R= 1.177	MIN: -501.3	
CR3-026(Int)	MAX: 351.0	396.7	L0= 4.177	L= 1.350	MAX: 383.8	-202.4
	MIN: -445.5	-553.1	L = 1.650	R= 1.177	MIN: -522.8	
CR3-027(Int)	MAX: 54.5	549.6	L0= 4.177	L= 1.350	MAX: 410.1	323.0
	MIN: -946.6	-374.7	L = 1.650	R= 1.177	MIN: -761.8	
CR3-028(Int)	MAX: -316.9	758.6	L0= 4.177	L= 1.350	MAX: 455.6	456.6
	MIN: -1290.9	-210.4	L = 1.650	R= 1.177	MIN: -941.7	
CR3-029(Int)	MAX: -48.6	505.0	L0= 4.177	L= 1.350	MAX: 349.0	324.3
	MIN: -976.6	-411.0	L = 1.650	R= 1.177	MIN: -793.8	
CR3-030(Int)	MAX: 60.3	460.6	L0= 4.177	L= 1.350	MAX: 347.8	282.6
	MIN: -864.1	-430.6	L = 1.650	R= 1.177	MIN: -724.0	
CR3-031(Int)	MAX: 115.4	448.8	L0= 4.177	L= 1.350	MAX: 354.9	260.2
	MIN: -791.5	-429.5	L = 1.650	R= 1.177	MIN: -674.5	
CR3-032(Int)	MAX: 153.3	451.7	L0= 4.177	L= 1.350	MAX: 367.6	260.6
	MIN: -772.7	-412.1	L = 1.650	R= 1.177	MIN: -656.2	
CR3-033(Int)	MAX: 60.7	553.1	L0= 4.177	L= 1.350	MAX: 414.4	293.6
	MIN: -798.7	-386.1	L = 1.650	R= 1.177	MIN: -665.3	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR3-034 (Int)	MAX: 249.2	443.5	L0= 4.177	L= 1.350	MAX: 388.8	216.4
	MIN: -559.8	-404.7	L = 1.650	R= 1.177	MIN: -509.7	
CR3-035 (Int)	MAX: 365.2	460.5	L0= 4.177	L= 1.350	MAX: 433.7	209.9
	MIN: -463.0	-494.5	L = 1.650	R= 1.177	MIN: -485.7	
CR3-036 (Sup)	MAX: 621.7	588.9	L0= 4.177	L= 1.350	MAX: 611.1	-360.3
	MIN: -523.0	-843.9	L = 1.650	R= 1.177	MIN: -753.5	
CR3-037 (Int)	MAX: 419.7	453.6	L0= 4.177	L= 1.350	MAX: 444.0	-236.8
	MIN: -416.4	-562.2	L = 1.650	R= 1.177	MIN: -521.1	
CR3-038 (Int)	MAX: 309.6	435.0	L0= 4.177	L= 1.350	MAX: 399.7	187.7
	MIN: -450.2	-525.6	L = 1.650	R= 1.177	MIN: -504.4	
CR3-039 (Int)	MAX: 1.6	644.3	L0= 4.177	L= 1.350	MAX: 463.2	351.8
	MIN: -968.7	-376.1	L = 1.650	R= 1.177	MIN: -777.2	
CR3-040 (Int)	MAX: -136.2	669.8	L0= 4.177	L= 1.350	MAX: 442.7	377.4
	MIN: -1044.6	-332.8	L = 1.650	R= 1.177	MIN: -814.5	
CR3-041 (Int)	MAX: 187.4	454.2	L0= 4.177	L= 1.350	MAX: 379.0	256.2
	MIN: -779.5	-471.3	L = 1.650	R= 1.177	MIN: -679.9	
CR3-042 (Int)	MAX: 199.2	441.9	L0= 4.177	L= 1.350	MAX: 373.6	237.5
	MIN: -726.6	-464.3	L = 1.650	R= 1.177	MIN: -641.8	
CR3-043 (Int)	MAX: 186.6	447.2	L0= 4.177	L= 1.350	MAX: 373.8	244.6
	MIN: -740.7	-450.6	L = 1.650	R= 1.177	MIN: -647.0	
CR3-044 (Int)	MAX: 50.0	529.3	L0= 4.177	L= 1.350	MAX: 394.3	297.8
	MIN: -852.8	-398.7	L = 1.650	R= 1.177	MIN: -706.0	
CR3-045 (Int)	MAX: -16.5	605.7	L0= 4.177	L= 1.350	MAX: 430.3	327.2
	MIN: -885.1	-380.2	L = 1.650	R= 1.177	MIN: -721.9	
CR3-046 (Int)	MAX: 196.8	462.5	L0= 4.177	L= 1.350	MAX: 387.6	233.1
	MIN: -600.2	-390.6	L = 1.650	R= 1.177	MIN: -532.5	
CR3-047 (Int)	MAX: 422.1	450.9	L0= 4.177	L= 1.350	MAX: 442.8	-243.9
	MIN: -415.9	-590.0	L = 1.650	R= 1.177	MIN: -541.0	
CR3-048 (Sup)	MAX: 655.2	592.3	L0= 4.177	L= 1.350	MAX: 634.9	-380.0
	MIN: -523.0	-893.5	L = 1.650	R= 1.177	MIN: -789.1	
CR3-049 (Int)	MAX: 360.8	468.0	L0= 4.177	L= 1.350	MAX: 437.8	221.5
	MIN: -492.6	-484.3	L = 1.650	R= 1.177	MIN: -489.9	
CR3-050 (Int)	MAX: 254.5	445.6	L0= 4.177	L= 1.350	MAX: 391.7	211.6
	MIN: -554.8	-431.1	L = 1.650	R= 1.177	MIN: -514.8	
CR3-051 (Int)	MAX: 46.1	560.1	L0= 4.177	L= 1.350	MAX: 415.2	302.4
	MIN: -835.3	-390.6	L = 1.650	R= 1.177	MIN: -691.6	

Name of cross beam	Left-side node	Right-side node	Main girder Crossbeam span	Width of main girder/2	Installation point of cross beam	
	Moment	Moment	L0, L (m)	Lg2 (m)	Moment	Shear force
	M0 (kN.m)	M0 (kN.m)	L0, L (m)	Lg2 (m)	M (kN.m)	S (kN)
CR3-052 (Int)	MAX: -3.0	552.3	L0= 4.177	L= 1.350	MAX: 395.8	312.2
	MIN: -889.6	-384.6	L = 1.650	R= 1.177	MIN: -726.4	
CR3-053 (Int)	MAX: 132.4	444.4	L0= 4.177	L= 1.350	MAX: 356.5	258.3
	MIN: -778.8	-417.8	L = 1.650	R= 1.177	MIN: -662.1	
CR3-054 (Int)	MAX: 161.4	438.4	L0= 4.177	L= 1.350	MAX: 360.4	247.4
	MIN: -749.3	-442.6	L = 1.650	R= 1.177	MIN: -650.1	
CR3-055 (Int)	MAX: 123.5	450.2	L0= 4.177	L= 1.350	MAX: 358.1	265.7
	MIN: -791.7	-421.1	L = 1.650	R= 1.177	MIN: -671.9	
CR3-056 (Int)	MAX: -15.9	557.5	L0= 4.177	L= 1.350	MAX: 395.9	320.0
	MIN: -914.0	-386.1	L = 1.650	R= 1.177	MIN: -743.4	
CR3-057 (Int)	MAX: -12.9	604.2	L0= 4.177	L= 1.350	MAX: 430.3	329.6
	MIN: -906.2	-378.9	L = 1.650	R= 1.177	MIN: -735.8	
CR3-058 (Int)	MAX: 264.5	441.8	L0= 4.177	L= 1.350	MAX: 391.8	210.2
	MIN: -557.8	-428.3	L = 1.650	R= 1.177	MIN: -516.0	
CR3-059 (Int)	MAX: 405.3	447.3	L0= 4.177	L= 1.350	MAX: 435.5	-232.5
	MIN: -421.8	-562.2	L = 1.650	R= 1.177	MIN: -522.7	
CR3-060 (Sup)	MAX: 642.7	580.3	L0= 4.177	L= 1.350	MAX: 622.6	-373.6
	MIN: -513.9	-878.3	L = 1.650	R= 1.177	MIN: -775.6	
CR3-061 (Int)	MAX: 362.8	454.9	L0= 4.177	L= 1.350	MAX: 428.9	215.2
	MIN: -488.4	-481.9	L = 1.650	R= 1.177	MIN: -486.3	
CR3-062 (Int)	MAX: 217.5	439.8	L0= 4.177	L= 1.350	MAX: 377.2	225.0
	MIN: -585.0	-390.7	L = 1.650	R= 1.177	MIN: -522.2	
CR3-063 (Int)	MAX: 125.2	477.0	L0= 4.177	L= 1.350	MAX: 377.9	264.2
	MIN: -752.7	-400.1	L = 1.650	R= 1.177	MIN: -638.7	
CR3-064 (Int)	MAX: -10.4	539.9	L0= 4.177	L= 1.350	MAX: 384.8	315.7
	MIN: -918.2	-385.0	L = 1.650	R= 1.177	MIN: -745.9	
CR3-065 (Int)	MAX: -30.0	516.3	L0= 4.177	L= 1.350	MAX: 362.4	314.2
	MIN: -912.9	-393.4	L = 1.650	R= 1.177	MIN: -745.0	
CR3-066 (Int)	MAX: 66.4	447.2	L0= 4.177	L= 1.350	MAX: 339.9	278.2
	MIN: -843.0	-414.6	L = 1.650	R= 1.177	MIN: -704.6	
CR3-067 (Int)	MAX: 84.5	440.0	L0= 4.177	L= 1.350	MAX: 339.9	276.7
	MIN: -851.7	-410.9	L = 1.650	R= 1.177	MIN: -709.3	
CR3-068 (Int)	MAX: -99.2	592.5	L0= 4.177	L= 1.350	MAX: 397.6	345.8
	MIN: -983.6	-354.1	L = 1.650	R= 1.177	MIN: -780.2	
CR3-069 (Int)	MAX: 57.1	548.2	L0= 4.177	L= 1.350	MAX: 409.8	304.3
	MIN: -852.5	-363.7	L = 1.650	R= 1.177	MIN: -694.5	

Name of cross beam	Left-side	Right-side	Main girder	Width of	Installation point of	
	node	node	Crossbeam	main	cross beam	
	Moment	Moment	span	girder/2	Moment	Shear force
	M0 (kN. m)	M0 (kN. m)	L0, L (m)	Lg2 (m)	M (kN. m)	S (kN)
CR3-070 (Int)	MAX: 311.2	417.3	L0= 4.177	L= 1.350	MAX: 387.4	187.9
	MIN: -451.0	-497.0	L = 1.650	R= 1.177	MIN: -484.1	
CR3-071 (Int)	MAX: 380.9	440.0	L0= 4.177	L= 1.350	MAX: 423.4	-212.1
	MIN: -441.3	-501.9	L = 1.650	R= 1.177	MIN: -484.8	
CR3-072 (Sup)	MAX: 692.5	600.1	L0= 4.177	L= 1.350	MAX: 662.7	-390.4
	MIN: -568.0	-893.5	L = 1.650	R= 1.177	MIN: -801.8	
CR3-073 (Int)	MAX: 428.3	489.3	L0= 4.177	L= 1.350	MAX: 472.1	-248.7
	MIN: -490.2	-600.1	L = 1.650	R= 1.177	MIN: -569.2	
CR3-074 (Int)	MAX: 183.9	468.2	L0= 4.177	L= 1.350	MAX: 388.1	259.8
	MIN: -727.3	-414.3	L = 1.650	R= 1.177	MIN: -626.2	
CR3-075 (Int)	MAX: -224.9	723.1	L0= 4.177	L= 1.350	MAX: 455.9	421.7
	MIN: -1177.7	-242.8	L = 1.650	R= 1.177	MIN: -875.5	
CR3-076 (Int)	MAX: -151.6	633.3	L0= 4.177	L= 1.350	MAX: 412.1	372.7
	MIN: -1059.1	-345.5	L = 1.650	R= 1.177	MIN: -828.5	
CR3-077 (Int)	MAX: 193.7	448.5	L0= 4.177	L= 1.350	MAX: 376.7	250.1
	MIN: -753.1	-461.9	L = 1.650	R= 1.177	MIN: -659.0	
CR3-078 (Int)	MAX: 322.9	431.3	L0= 4.177	L= 1.350	MAX: 400.7	200.7
	MIN: -605.7	-510.9	L = 1.650	R= 1.177	MIN: -575.0	
CR3-079 (Int)	MAX: 353.1	382.4	L0= 4.177	L= 1.350	MAX: 374.1	-200.0
	MIN: -471.8	-612.8	L = 1.650	R= 1.177	MIN: -573.1	
CR3-080 (Int)	MAX: 140.2	455.9	L0= 4.177	L= 1.350	MAX: 366.9	259.9
	MIN: -729.6	-390.6	L = 1.650	R= 1.177	MIN: -620.0	
CR3-081 (Int)	MAX: -293.7	806.8	L0= 4.177	L= 1.350	MAX: 496.7	452.4
	MIN: -1166.2	9.7	L = 1.650	R= 1.177	MIN: -786.1	
CR3-082 (End)	MAX: 1110.3	957.4	L0= 4.177	L= 1.350	MAX: 1060.9	-683.0
	MIN: -983.7	-1570.4	L = 1.650	R= 1.177	MIN: -1405.1	

5 – 2 Sectional Force due to Floor Assembly Effect

* The values calculated in the analysis chapter of steel deck is used.

Edge (end) cross-beam

Bending moment	M =	0.0 kN·m
Shear force	S =	0.0 kN

Intermediate cross-beam

Bending moment	M =	87.4 kN·m
Shear force	S =	175.0 kN

5 – 3 Conclusion of the section

(1) Cross beam 1 CR1-001 (End member)

Section forces and condition of the calculation

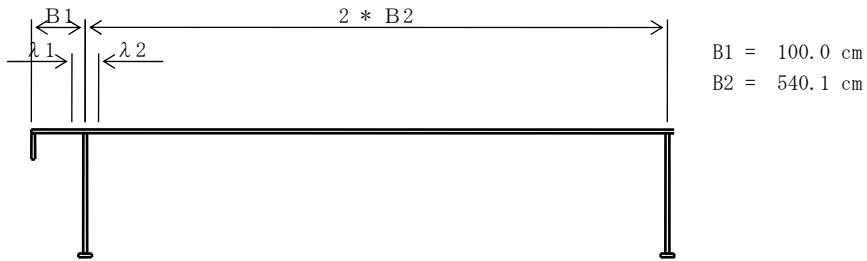
Section force	M = -1252.2 kN·m	S = -531.6 kN
Section force at joint	M _j = -1252.2 kN·m	S _j = -531.6 kN
Loss part shearing force	S _k = -531.6 kN	
Distance between fixing points.	L = 1.650 m	

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0$ cm

L_c: Horizontal digit span

Effective width (The main girder action)



$$B1/Li = 100.0 / 165.0 = 0.61$$

$$\lambda 1 = 0.15 * Li = 0.15 * 165.0 = 24.7 \text{ cm}$$

$$B2/Li = 540.1 / 165.0 = 3.27$$

$$\lambda 2 = 0.15 * Li = 0.15 * 165.0 = 24.7 \text{ cm}$$

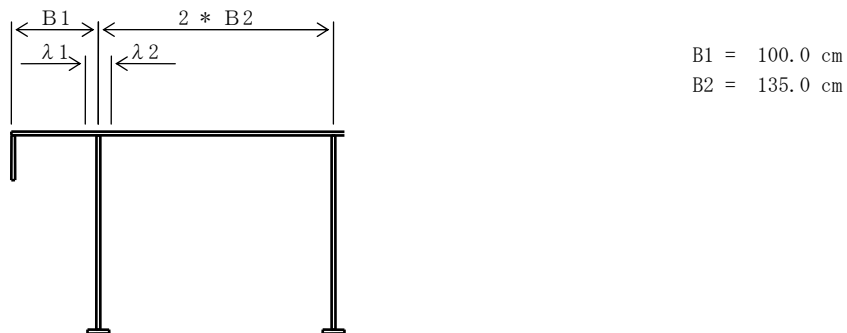
$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 24.7 + 24.7 = 49.5 \text{ cm}$$

Equivalent span length (Floor assembly action)

$$Li = 0.6 * Lc = 0.6 * 165.0 = 99.0 \text{ cm}$$

Lc : Horizontal digit span

Effective width (Floor assembly action)



$$B1/Li = 100.0 / 99.0 = 1.01$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 135.0 / 99.0 = 1.36$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	495 * 16(SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9(SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12(SM400)	30.00	111.30	3339	371631

$$308.46 \qquad -5492 \quad 2170208$$

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm} , \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	297 * 16(SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9(SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12(SM400)	30.00	111.30	3339	371631

$$276.78 \qquad -1959 \quad 1776354$$

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm} , \quad Y_L = 118.98 \text{ cm}$$

Bending stress

$$\sigma_u = -1252.2 * 10^6 * -945.0 / (2072433 * 10^4) = 57 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1252.2 * 10^6 * 1297.0 / (2072433 * 10^4) = -78 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -531.6 * 10^3 / 19926 = 27 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-78 / 140)^2 + (27 / 80)^2 = 0.42 < 1.2$$

*For the joint

Bending stress

$$\sigma_u = -1252.2 * 10^6 * -945.0 / (2072433 * 10^4) = 57 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1252.2 * 10^6 * 1297.0 / (2072433 * 10^4) = -78 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -531.6 \cdot 10^3 / 19926 = 27 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

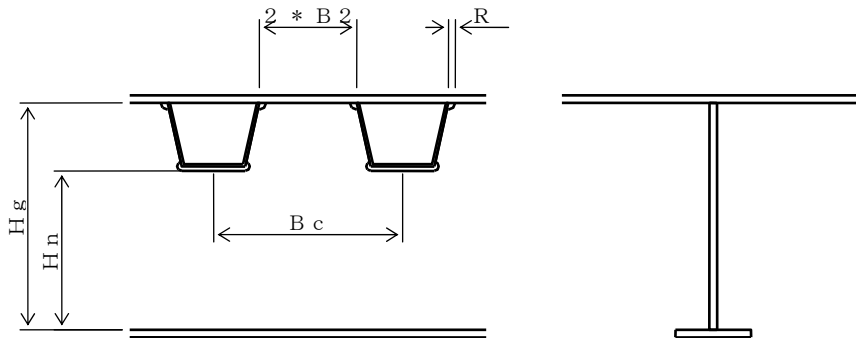
Combined stress

$$\kappa = (-78 / 140)^2 + (27 / 80)^2 = 0.42 < 1.2$$

The main girder action stress intensity and Floor assembly action stress intensity

$$\text{DECK } (57) + (0) = 57 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -531.6 \cdot 10^3 / 19926 = -27 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = -27 * 221.4 / 193.7 = -30 \text{ N/mm}^2 < \tau_a$$

(2) Cross beam 1 CR1-014 (Intermediate)

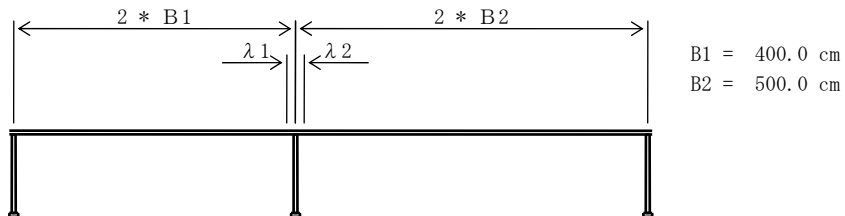
Section forces and condition of the calculation

The main girder action $M = -605.2 \text{ kN}\cdot\text{m}$ $S = -270.0 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -605.2 \text{ kN}\cdot\text{m}$ $S_j = -270.0 \text{ kN}$
Loss part shearing force $S_k = -270.0 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)



$$B1/L_i = 400.0 / 165.0 = 2.42$$

$$\lambda 1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$$

$$B2/L_i = 500.0 / 165.0 = 3.03$$

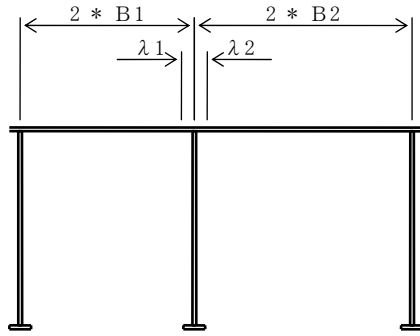
$$\lambda 2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 24.7 + 24.7 = 49.5 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 100.0 cm
B2 = 125.0 cm

$$B1/Li = 100.0 / 99.0 = 1.01$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	495 * 16(SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9(SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12(SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm} , \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	297 * 16(SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9(SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12(SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm} , \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -605.2 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 28 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -605.2 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -38 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -270.0 \cdot 10^3 / 19926 = 14 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-38 / 140)^2 + (14 / 80)^2 = 0.10 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -1052.2 / (1762482 \cdot 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1189.8 / (1762482 \cdot 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -605.2 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 28 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -605.2 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -38 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -270.0 \cdot 10^3 / 19926 = 14 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

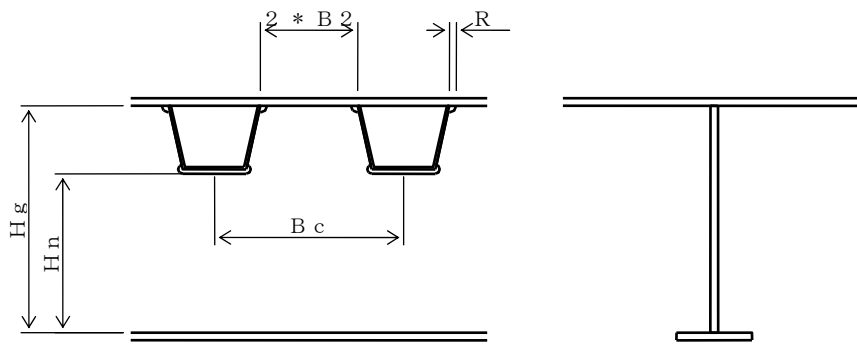
Combined stress

$$\kappa = (-38 / 140)^2 + (14 / 80)^2 = 0.10 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (28) + (5) = 33 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -270.0 \cdot 10^3 / 19926 = -14 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -14 \cdot 221.4 / 193.7 = -15 \text{ N/mm}^2 < \tau_a$$

(3) Cross beam 1 CR1-021 (Intermediate)

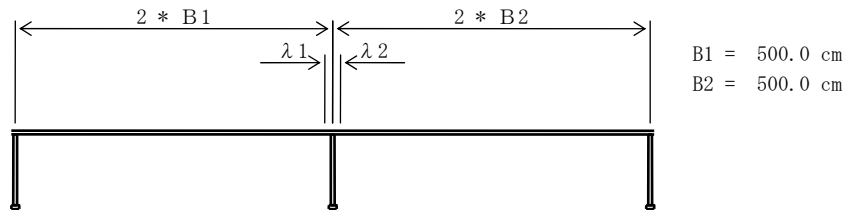
Section forces and condition of the calculation

The main girder action $M = -704.8 \text{ kN}\cdot\text{m}$ $S = -316.0 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -704.8 \text{ kN}\cdot\text{m}$ $S_j = -316.0 \text{ kN}$
Loss part shearing force $S_k = -316.0 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

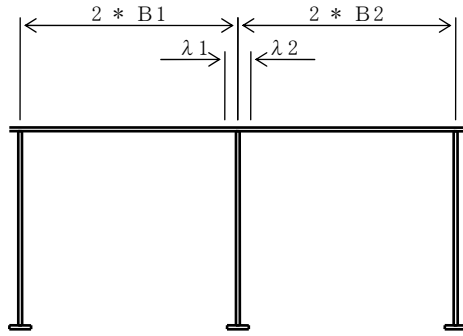


$B_1/L_i = 500.0 / 165.0 = 3.03$
 $\lambda_1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
 $B_2/L_i = 500.0 / 165.0 = 3.03$
 $\lambda_2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
Effective widthtotal $\lambda = \lambda_1 + \lambda_2 = 24.7 + 24.7 = 49.5 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 125.0 cm
B2 = 125.0 cm

$$B1/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm}, \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm}, \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -704.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 32 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -704.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -44 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -316.0 \times 10^3 / 19926 = 16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-44 / 140)^2 + (16 / 80)^2 = 0.14 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \times 10^6 * -1052.2 / (1762482 \times 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \times 10^6 * 1189.8 / (1762482 \times 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \times 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -704.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 32 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -704.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -44 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -316.0 \times 10^3 / 19926 = 16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

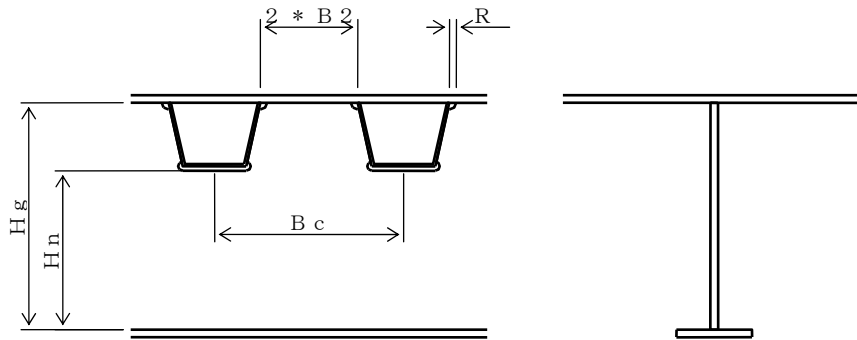
Combined stress

$$\kappa = (-44 / 140)^2 + (16 / 80)^2 = 0.14 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (32) + (5) = 37 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -316.0 \cdot 10^3 / 19926 = -16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = -16 * 221.4 / 193.7 = -18 \text{ N/mm}^2 < \tau_a$$

(4) Cross beam 1 CR1-029 (Intermediate)

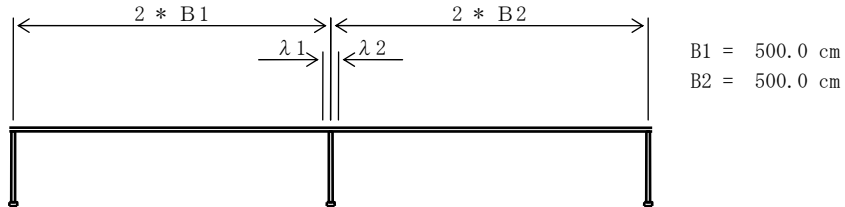
Section forces and condition of the calculation

The main girder action $M = -793.8 \text{ kN}\cdot\text{m}$ $S = -324.3 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -793.8 \text{ kN}\cdot\text{m}$ $S_j = -324.3 \text{ kN}$
Loss part shearing force $S_k = -324.3 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

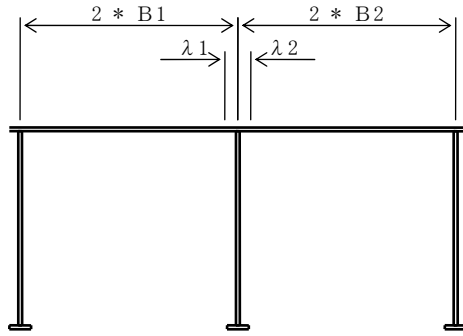


$B_1/L_i = 500.0 / 165.0 = 3.03$
 $\lambda_1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
 $B_2/L_i = 500.0 / 165.0 = 3.03$
 $\lambda_2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
Effective widthtotal $\lambda = \lambda_1 + \lambda_2 = 24.7 + 24.7 = 49.5 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 125.0 cm
B2 = 125.0 cm

$$B1/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm}, \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm}, \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -793.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 36 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -793.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -50 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -324.3 \times 10^3 / 19926 = 16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-49 / 140)^2 + (16 / 80)^2 = 0.16 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \times 10^6 * -1052.2 / (1762482 \times 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \times 10^6 * 1189.8 / (1762482 \times 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \times 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -793.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 36 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -793.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -50 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -324.3 \times 10^3 / 19926 = 16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

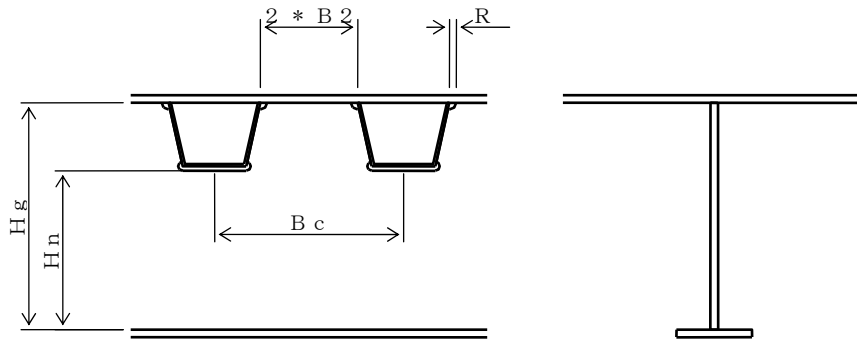
Combined stress

$$\kappa = (-49 / 140)^2 + (16 / 80)^2 = 0.16 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (36) + (5) = 41 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -324.3 \cdot 10^3 / 19926 = -16 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -16 \cdot 221.4 / 193.7 = -19 \text{ N/mm}^2 < \tau_a$$

(5) Cross beam 1 CR1-038 (Intermediate)

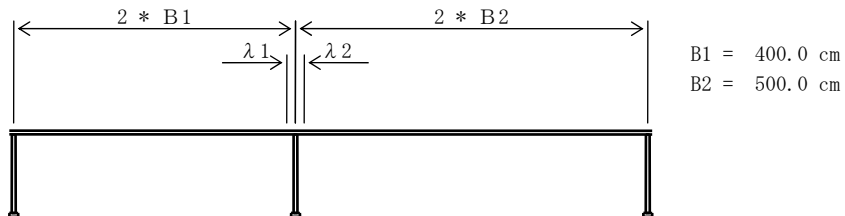
Section forces and condition of the calculation

The main girder action $M = -504.4 \text{ kN}\cdot\text{m}$ $S = -187.7 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -504.4 \text{ kN}\cdot\text{m}$ $S_j = -187.7 \text{ kN}$
Loss part shearing force $S_k = -187.7 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

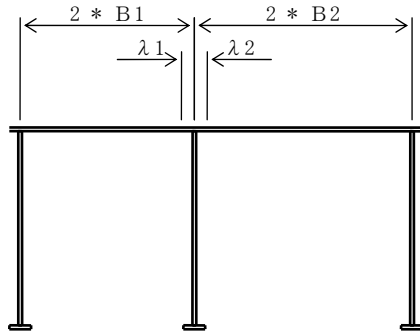


$B1/L_i = 400.0 / 165.0 = 2.42$
 $\lambda 1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
 $B2/L_i = 500.0 / 165.0 = 3.03$
 $\lambda 2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
Effective widthtotal $\lambda = \lambda 1 + \lambda 2 = 24.7 + 24.7 = 49.5 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 100.0 cm
B2 = 125.0 cm

$$B1/Li = 100.0 / 99.0 = 1.01$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm} , \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm} , \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -504.4 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 23 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -504.4 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -32 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -187.7 \cdot 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-31 / 140)^2 + (9 / 80)^2 = 0.06 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -1052.2 / (1762482 \cdot 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1189.8 / (1762482 \cdot 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -504.4 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 23 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -504.4 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -32 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -187.7 \cdot 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

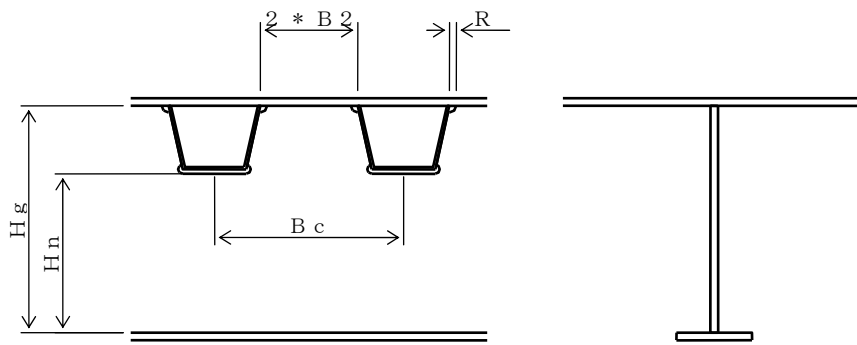
Combined stress

$$\kappa = (-31 / 140)^2 + (9 / 80)^2 = 0.06 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (23) + (5) = 28 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -187.7 * 10^3 / 19926 = -9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = -9 * 221.4 / 193.7 = -11 \text{ N/mm}^2 < \tau_a$$

(6) Cross beam 1 CR1-072 (Intermediate)

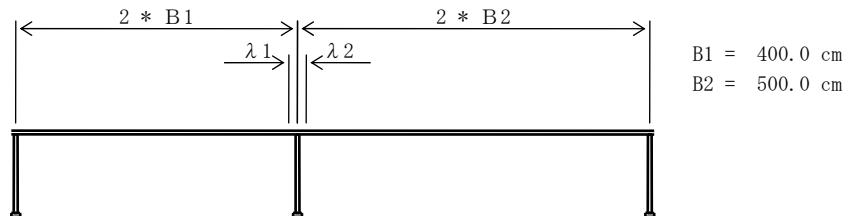
Section forces and condition of the calculation

The main girder action $M = -801.8 \text{ kN}\cdot\text{m}$ $S = 366.9 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -801.8 \text{ kN}\cdot\text{m}$ $S_j = 366.9 \text{ kN}$
Loss part shearing force $S_k = 366.9 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

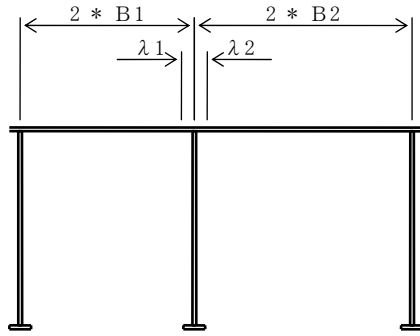


$B_1/L_i = 400.0 / 165.0 = 2.42$
 $\lambda_1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
 $B_2/L_i = 500.0 / 165.0 = 3.03$
 $\lambda_2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
Effective widthtotal $\lambda = \lambda_1 + \lambda_2 = 24.7 + 24.7 = 49.5 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 100.0 cm
B2 = 125.0 cm

$$B1/Li = 100.0 / 99.0 = 1.01$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm} , \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm} , \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -801.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 37 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -801.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -50 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 366.9 \times 10^3 / 19926 = 18 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-50 / 140)^2 + (18 / 80)^2 = 0.18 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \times 10^6 * -1052.2 / (1762482 \times 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \times 10^6 * 1189.8 / (1762482 \times 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \times 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -801.8 \times 10^6 * -945.0 / (2072433 \times 10^4) = 37 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -801.8 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -50 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 366.9 \times 10^3 / 19926 = 18 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

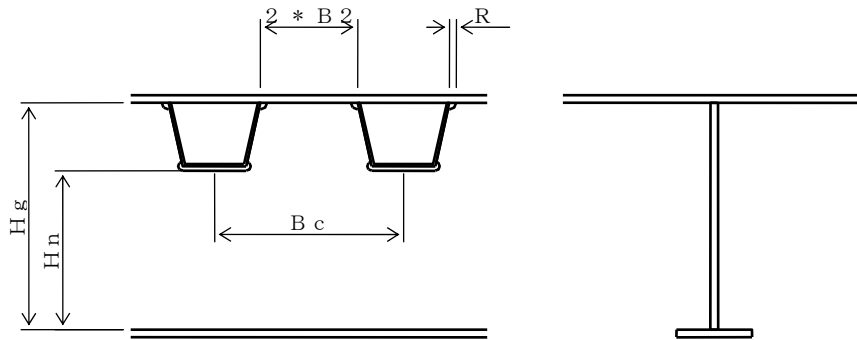
Combined stress

$$\kappa = (-50 / 140)^2 + (18 / 80)^2 = 0.18 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (37) + (5) = 42 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = 366.9 \cdot 10^3 / 19926 = 18 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = 18 \cdot 221.4 / 193.7 = 21 \text{ N/mm}^2 < \tau_a$$

(7) Cross beam 1 CR1-082 (End member)

Section forces and condition of the calculation

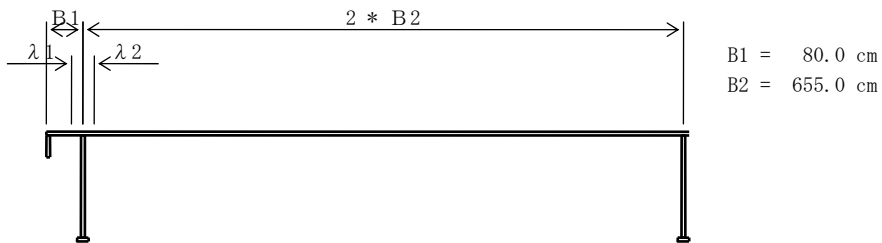
Section force $M = -1405.1 \text{ kN}\cdot\text{m}$ $S = 591.9 \text{ kN}$
Section force at joint $M_j = -1405.1 \text{ kN}\cdot\text{m}$ $S_j = 591.9 \text{ kN}$
Loss part shearing force $S_k = 591.9 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (The main girder action)



$$B_1/L_i = 80.0 / 165.0 = 0.48$$

$$\lambda_1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$$

$$B_2/L_i = 655.0 / 165.0 = 3.97$$

$$\lambda_2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$$

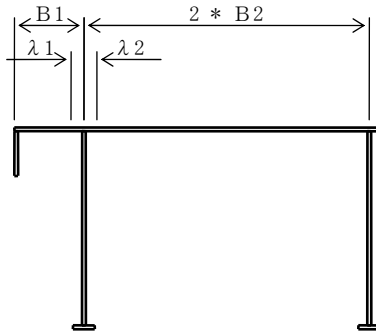
$$\text{Effective width total } \lambda = \lambda_1 + \lambda_2 = 24.7 + 24.7 = 49.5 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 80.0 cm
B2 = 163.8 cm

$$B1/Li = 80.0 / 99.0 = 0.81$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 163.8 / 99.0 = 1.65$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm}, \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm}, \quad Y_L = 118.98 \text{ cm}$$

Bending stress

$$\sigma_u = -1405.1 \times 10^6 * -945.0 / (2072433 \times 10^4) = 64 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1405.1 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -88 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 591.9 \times 10^3 / 19926 = 30 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-87 / 140)^2 + (30 / 80)^2 = 0.53 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -1405.1 \times 10^6 * -945.0 / (2072433 \times 10^4) = 64 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1405.1 \times 10^6 * 1297.0 / (2072433 \times 10^4) = -88 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 591.9 \times 10^3 / 19926 = 30 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

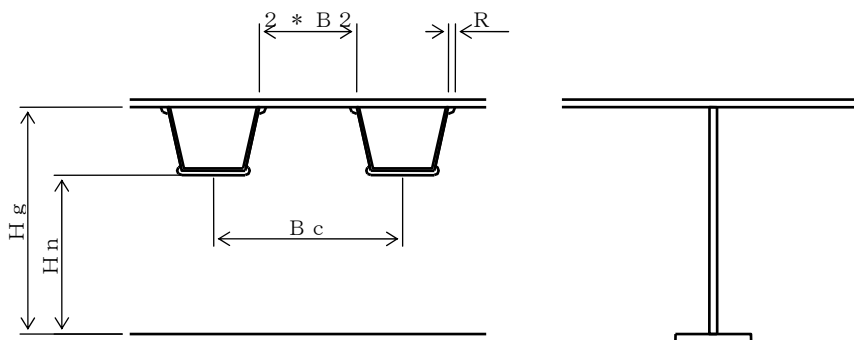
Combined stress

$$\kappa = (-87 / 140)^2 + (30 / 80)^2 = 0.53 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (64) + (0) = 64 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = 591.9 \times 10^3 / 19926 = 30 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = 30 * 221.4 / 193.7 = 34 \text{ N/mm}^2 < \tau_a$$

(8) Cross beam2 CR2-001 (End member)

Section forces and condition of the calculation

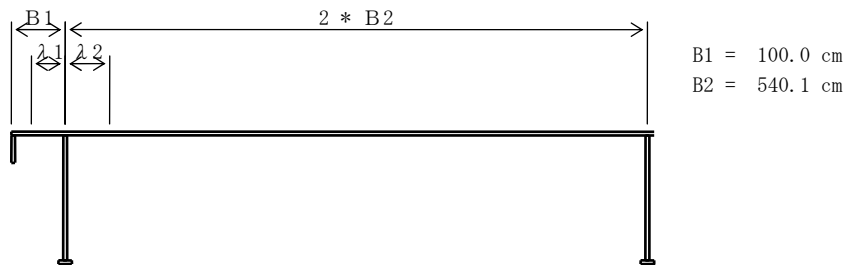
Section force $M = -724.8 \text{ kN}\cdot\text{m}$ $S = -175.7 \text{ kN}$
Section force at joint $M_j = -724.8 \text{ kN}\cdot\text{m}$ $S_j = -175.7 \text{ kN}$
Loss part shearing force $S_k = -175.7 \text{ kN}$
Distance between fixing points. $L = 5.500 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$$L_i = 1.0 * L_c = 1.0 * 550.0 = 550.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (The main girder action)



$$B_1/L_i = 100.0 / 550.0 = 0.18$$

$$\lambda_1 = \{ 1.06 - 3.2 * (B_1/L_i) + 4.5 * (B_1/L_i)^2 \} * B_1$$
$$= \{ 1.06 - 3.2 * 0.18 + 4.5 * 0.18^2 \} * 100.0 = 62.7 \text{ cm}$$

$$B_2/L_i = 540.1 / 550.0 = 0.98$$

$$\lambda_2 = 0.15 * L_i = 0.15 * 550.0 = 82.5 \text{ cm}$$

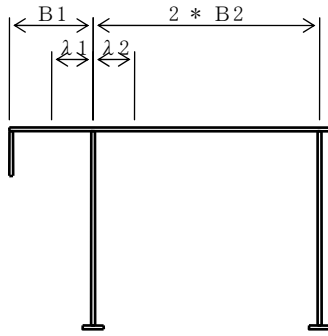
$$\text{Effective widthtotal } \lambda = \lambda_1 + \lambda_2 = 62.7 + 82.5 = 145.2 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$$L_i = 0.6 * L_c = 0.6 * 550.0 = 330.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 100.0 cm
B2 = 135.0 cm

$$B1/Li = 100.0 / 330.0 = 0.30$$

$$\lambda 1 = 0.15 * Li = 0.15 * 330.0 = 49.5 \text{ cm}$$

$$B2/Li = 135.0 / 330.0 = 0.41$$

$$\lambda 2 = 0.15 * Li = 0.15 * 330.0 = 49.5 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 49.5 + 49.5 = 99.0 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	1452 * 16 (SM400)	232.31	-115.85	-26913	3117894
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			469.40		-23444	4432858

$$E = -23444 / 469.40 = -49.94 \text{ cm}$$

$$I = 4432858 - 469.40 * (-49.94)^2 = 3261988 \text{ cm}^4$$

$$Y_u = -66.71 \text{ cm}, \quad Y_L = 166.19 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Bending stress

$$\sigma_u = -724.8 \times 10^6 * -667.1 / (3261988 \times 10^4) = 15 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -724.8 \times 10^6 * 1661.9 / (3261988 \times 10^4) = -37 \text{ N/mm}^2 < \sigma_{ca} = 84 \text{ N/mm}^2$$

Shear stress

$$\tau = -175.7 \times 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-37 / 140)^2 + (8 / 80)^2 = 0.08 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -724.8 \times 10^6 * -667.1 / (3261988 \times 10^4) = 15 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -724.8 \times 10^6 * 1661.9 / (3261988 \times 10^4) = -37 \text{ N/mm}^2 < \sigma_{ca} = 84 \text{ N/mm}^2$$

Shear stress

$$\tau = -175.7 \times 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

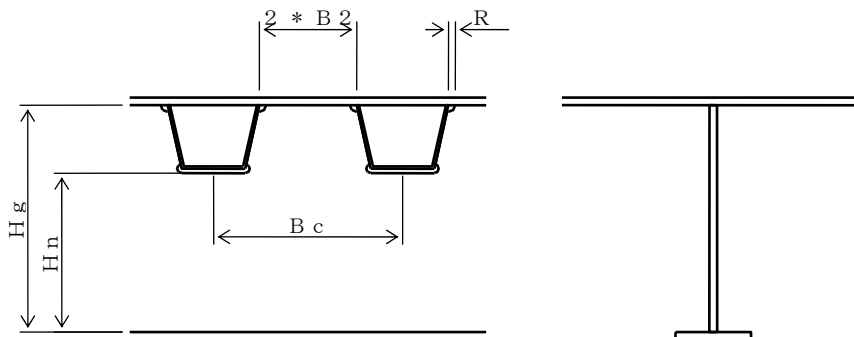
Combined stress

$$\kappa = (-37 / 140)^2 + (8 / 80)^2 = 0.08 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (15) + (0) = 15 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -175.7 \times 10^3 / 20709 = -8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = -8 * 230.1 / 202.4 = -10 \text{ N/mm}^2 < \tau_a$$

(9) Cross beam2 CR2-012 (Intermediate)

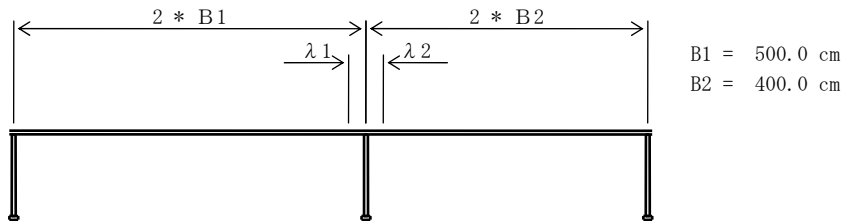
Section forces and condition of the calculation

The main girder action $M = -592.5 \text{ kN}\cdot\text{m}$ $S = -184.0 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -592.5 \text{ kN}\cdot\text{m}$ $S_j = -184.0 \text{ kN}$
Loss part shearing force $S_k = -184.0 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

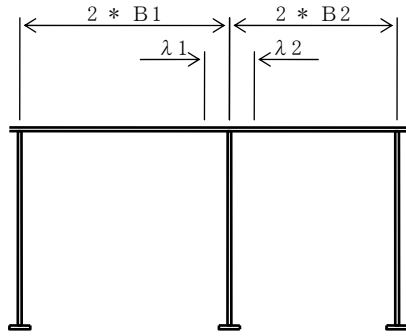


$B1/L_i = 500.0 / 330.0 = 1.52$
 $\lambda 1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
 $B2/L_i = 400.0 / 330.0 = 1.21$
 $\lambda 2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
Effective widthtotal $\lambda = \lambda 1 + \lambda 2 = 49.5 + 49.5 = 99.0 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 125.0 cm
B2 = 100.0 cm

$$B1/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 100.0 / 198.0 = 0.51$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -592.5 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 16 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -592.5 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -32 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -184.0 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-31 / 140)^2 + (9 / 80)^2 = 0.06 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -592.5 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 16 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -592.5 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -32 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -184.0 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

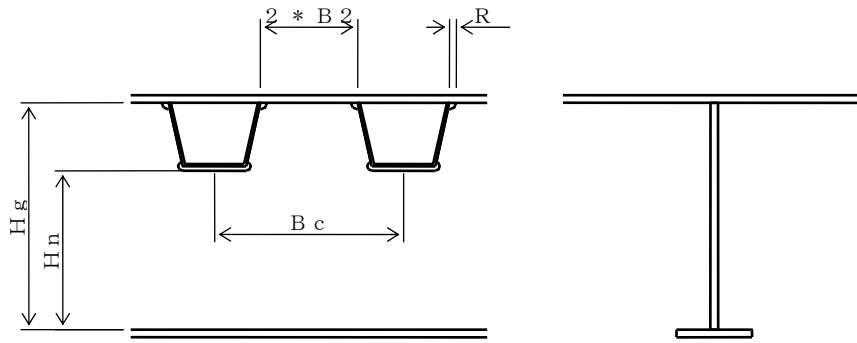
Combined stress

$$\kappa = (-31 / 140)^2 + (9 / 80)^2 = 0.06 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (16) + (3) = 20 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -184.0 \cdot 10^3 / 20709 = -9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -9 \cdot 230.1 / 202.4 = -10 \text{ N/mm}^2 < \tau_a$$

(10) Cross beam2 CR2-024 (Intermediate)

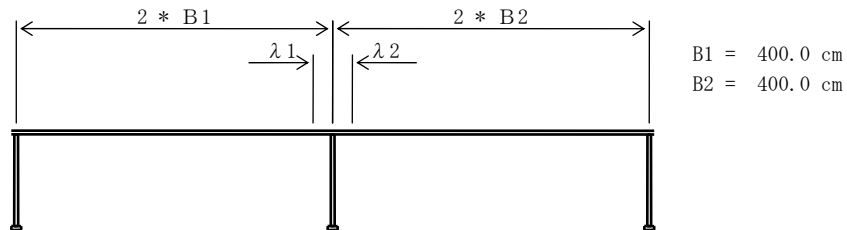
Section forces and condition of the calculation

The main girder action $M = -488.5 \text{ kN}\cdot\text{m}$ $S = -152.8 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -488.5 \text{ kN}\cdot\text{m}$ $S_j = 175.4 \text{ kN}$
Loss part shearing force $S_k = 175.4 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)



$$B_1/L_i = 400.0 / 330.0 = 1.21$$

$$\lambda_1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$$

$$B_2/L_i = 400.0 / 330.0 = 1.21$$

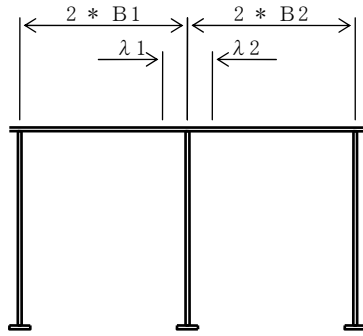
$$\lambda_2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda_1 + \lambda_2 = 49.5 + 49.5 = 99.0 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 100.0 cm
B2 = 100.0 cm

$$B1/Li = 100.0 / 198.0 = 0.51$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 100.0 / 198.0 = 0.51$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -488.5 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 13 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -488.5 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -26 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -152.8 \cdot 10^3 / 20709 = 7 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-26 / 140)^2 + (7 / 80)^2 = 0.04 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -488.5 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 13 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -488.5 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -26 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

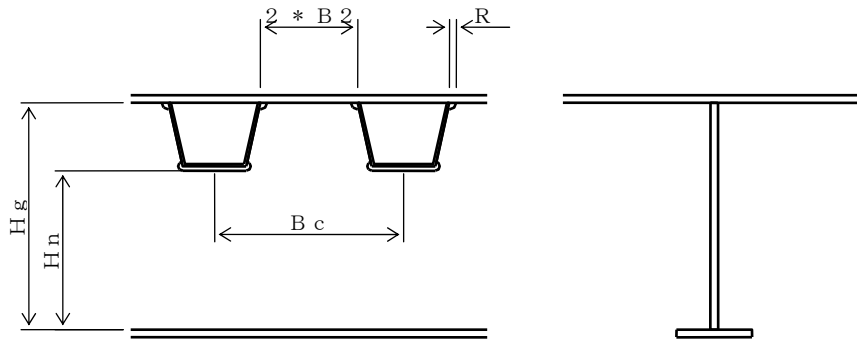
Combined stress

$$\kappa = (-26 / 140)^2 + (8 / 80)^2 = 0.05 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (13) + (3) = 17 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = 175.4 * 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = 8 * 230.1 / 202.4 = 10 \text{ N/mm}^2 < \tau_a$$

(11) Cross beam2 CR2-028 (Intermediate)

Section forces and condition of the calculation

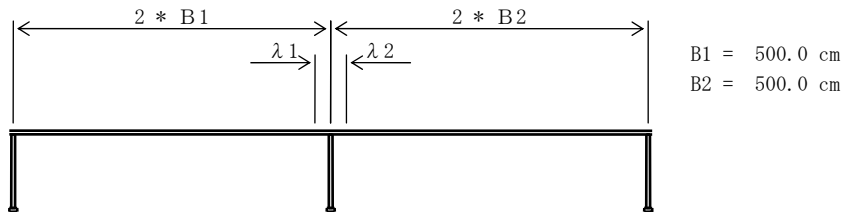
The main girder action $M = -1170.3 \text{ kN}\cdot\text{m}$ $S = -174.8 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -1170.3 \text{ kN}\cdot\text{m}$ $S_j = 175.4 \text{ kN}$
Loss part shearing force $S_k = 175.4 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (The main girder action)



$$B_1/L_i = 500.0 / 330.0 = 1.52$$

$$\lambda_1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$$

$$B_2/L_i = 500.0 / 330.0 = 1.52$$

$$\lambda_2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$$

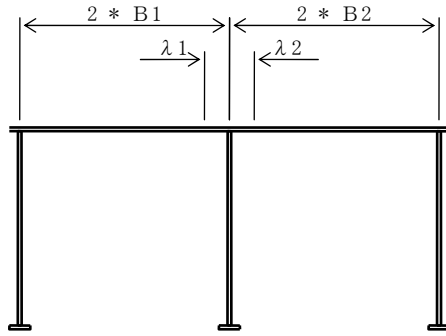
$$\text{Effective width total } \lambda = \lambda_1 + \lambda_2 = 49.5 + 49.5 = 99.0 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (Floor assembly action)



$$B1 = 125.0 \text{ cm}$$

$$B2 = 125.0 \text{ cm}$$

$$B1/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -1170.3 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 32 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1170.3 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -63 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -174.8 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-62 / 140)^2 + (8 / 80)^2 = 0.21 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -1170.3 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 32 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1170.3 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -63 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

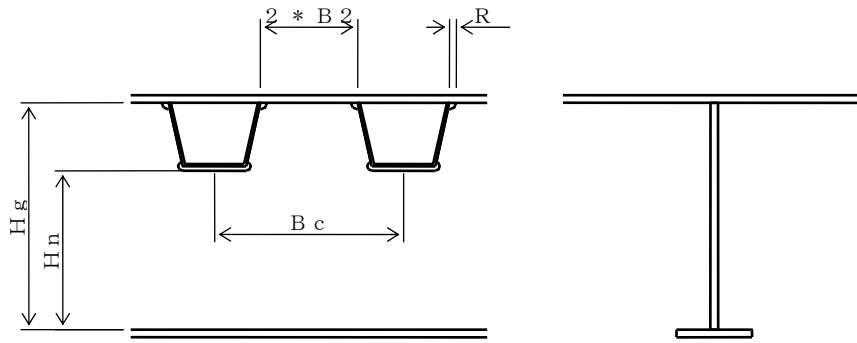
Combined stress

$$\kappa = (-62 / 140)^2 + (8 / 80)^2 = 0.21 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (32) + (3) = 36 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defecty



$$\tau_k = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = 8 \cdot 230.1 / 202.4 = 10 \text{ N/mm}^2 < \tau_a$$

(12) Cross beam2 CR2-056 (Intermediate)

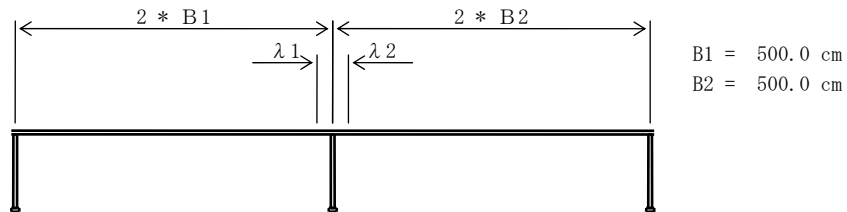
Section forces and condition of the calculation

The main girder action $M = -996.1 \text{ kN}\cdot\text{m}$ $S = -176.9 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -996.1 \text{ kN}\cdot\text{m}$ $S_j = -176.9 \text{ kN}$
Loss part shearing force $S_k = -176.9 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

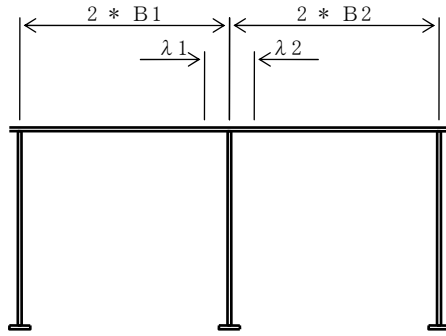


$B_1/L_i = 500.0 / 330.0 = 1.52$
 $\lambda 1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
 $B_2/L_i = 500.0 / 330.0 = 1.52$
 $\lambda 2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
Effective widthtotal $\lambda = \lambda 1 + \lambda 2 = 49.5 + 49.5 = 99.0 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



$B1 = 125.0 \text{ cm}$
 $B2 = 125.0 \text{ cm}$

$$B1/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -996.1 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 27 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -996.1 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -53 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -176.9 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-53 / 140)^2 + (9 / 80)^2 = 0.15 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -996.1 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 27 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -996.1 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -53 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -176.9 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

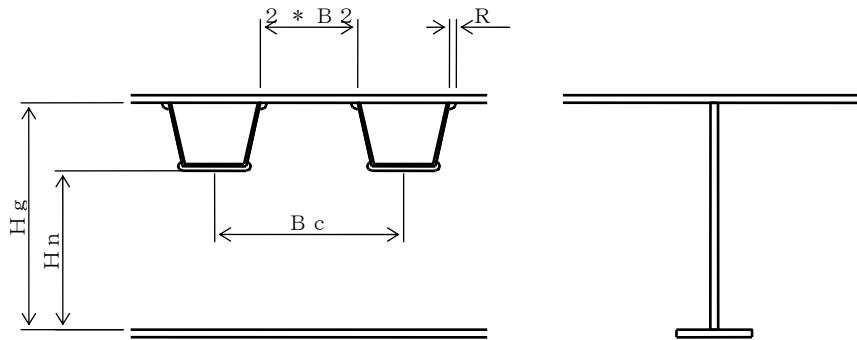
Combined stress

$$\kappa = (-53 / 140)^2 + (9 / 80)^2 = 0.15 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (27) + (3) = 31 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defecty



$$\tau_k = -176.9 \cdot 10^3 / 20709 = -9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -9 \cdot 230.1 / 202.4 = -10 \text{ N/mm}^2 < \tau_a$$

(13) Cross beam2 CR2-074 (Intermediate)

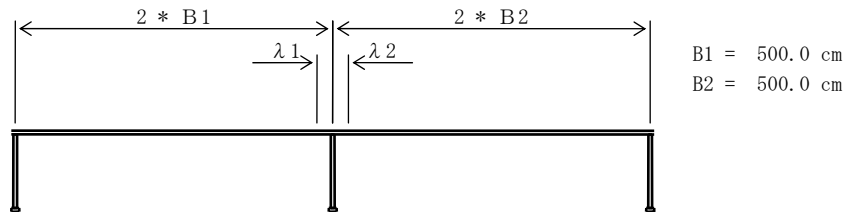
Section forces and condition of the calculation

The main girder action $M = -903.4 \text{ kN}\cdot\text{m}$ $S = -192.3 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -903.4 \text{ kN}\cdot\text{m}$ $S_j = -192.3 \text{ kN}$
Loss part shearing force $S_k = -192.3 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

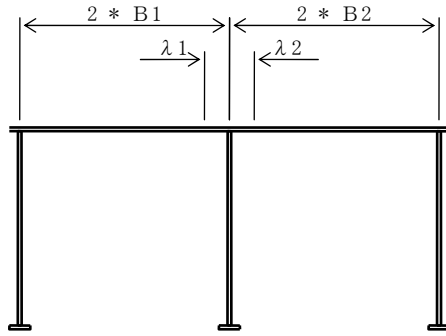


$B_1/L_i = 500.0 / 330.0 = 1.52$
 $\lambda_1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
 $B_2/L_i = 500.0 / 330.0 = 1.52$
 $\lambda_2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
Effective widthtotal $\lambda = \lambda_1 + \lambda_2 = 49.5 + 49.5 = 99.0 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



$B1 = 125.0 \text{ cm}$
 $B2 = 125.0 \text{ cm}$

$$B1/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -903.4 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 25 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -903.4 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -48 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -192.3 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-48 / 140)^2 + (9 / 80)^2 = 0.13 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -903.4 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 25 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -903.4 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -48 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -192.3 \cdot 10^3 / 20709 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

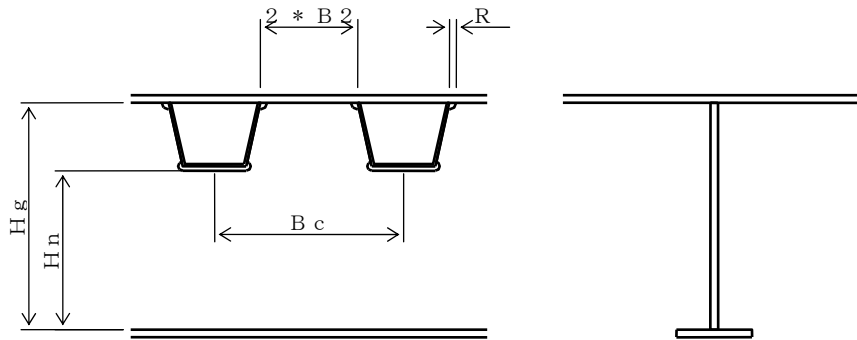
Combined stress

$$\kappa = (-48 / 140)^2 + (9 / 80)^2 = 0.13 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (25) + (3) = 28 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defecty



$$\tau_k = -192.3 \cdot 10^3 / 20709 = -9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -9 \cdot 230.1 / 202.4 = -11 \text{ N/mm}^2 < \tau_a$$

(14) Cross beam2 CR2-075 (Intermediate)

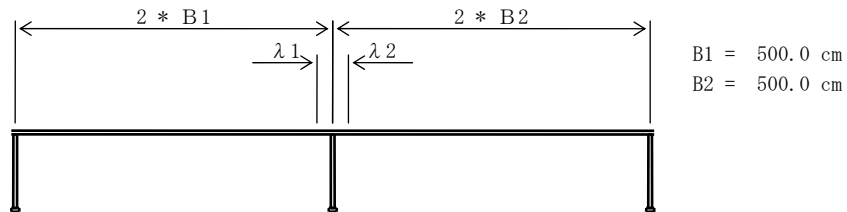
Section forces and condition of the calculation

The main girder action $M = -1088.3 \text{ kN}\cdot\text{m}$ $S = -174.4 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -1088.3 \text{ kN}\cdot\text{m}$ $S_j = 175.4 \text{ kN}$
Loss part shearing force $S_k = 175.4 \text{ kN}$
Distance between fixing points. $L = 3.300 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

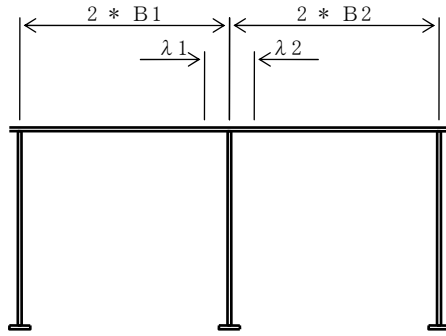


$B_1/L_i = 500.0 / 330.0 = 1.52$
 $\lambda_1 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
 $B_2/L_i = 500.0 / 330.0 = 1.52$
 $\lambda_2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$
Effective widthtotal $\lambda = \lambda_1 + \lambda_2 = 49.5 + 49.5 = 99.0 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 125.0 cm
B2 = 125.0 cm

$$B1/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 125.0 / 198.0 = 0.63$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	990 * 16 (SM400)	158.40	-115.85	-18351	2125922
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			395.49		-14881	3440885

$$E = -14881 / 395.49 = -37.63 \text{ cm}$$

$$I = 3440885 - 395.49 * (-37.63)^2 = 2880951 \text{ cm}^4$$

$$Y_u = -79.02 \text{ cm}, \quad Y_L = 153.88 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -1088.3 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 30 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1088.3 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -58 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -174.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-58 / 140)^2 + (8 / 80)^2 = 0.18 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -939.5 / (2419304 \cdot 10^4) = 3 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1389.5 / (2419304 \cdot 10^4) = -5 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-5 / 140)^2 + (8 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -1088.3 \cdot 10^6 * -790.2 / (2880951 \cdot 10^4) = 30 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -1088.3 \cdot 10^6 * 1538.8 / (2880951 \cdot 10^4) = -58 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

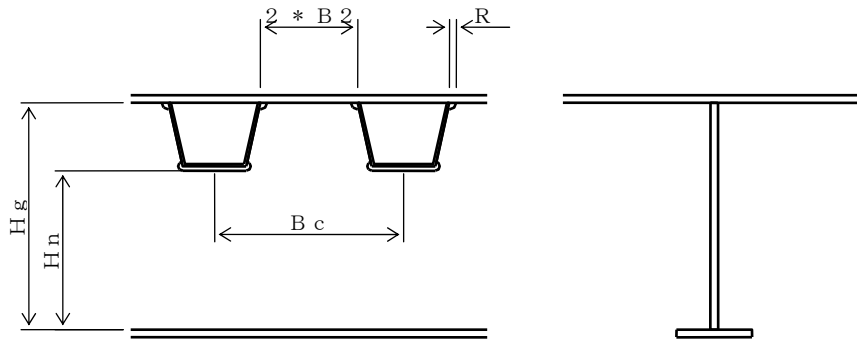
Combined stress

$$\kappa = (-58 / 140)^2 + (8 / 80)^2 = 0.18 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (30) + (3) = 33 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defecty



$$\tau_k = 175.4 \cdot 10^3 / 20709 = 8 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = 8 \cdot 230.1 / 202.4 = 10 \text{ N/mm}^2 < \tau_a$$

(15) Cross beam2 CR2-082 (End member)

Section forces and condition of the calculation

$$\text{Section force} \quad M = -855.2 \text{ kN}\cdot\text{m} \quad S = -271.6 \text{ kN}$$

$$\text{Section force at joint} \quad M_j = -855.2 \text{ kN}\cdot\text{m} \quad S_j = -271.6 \text{ kN}$$

$$\text{Loss part shearing force} \quad S_k = -271.6 \text{ kN}$$

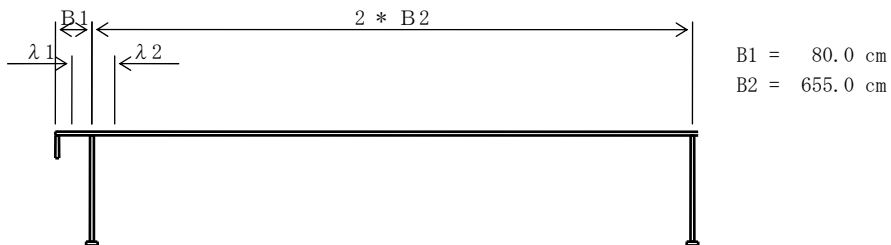
$$\text{Distance between fixing points.} \quad L = 3.300 \text{ m}$$

Equivalent span l e n g t h (The main girder action)

$$L_i = 1.0 * L_c = 1.0 * 330.0 = 330.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (The main girder action)



$$B_1/L_i = 80.0 / 330.0 = 0.24$$

$$\lambda 1 = \{ 1.06 - 3.2 * (B_1/L_i) + 4.5 * (B_1/L_i)^2 \} * B_1$$

$$= \{ 1.06 - 3.2 * 0.24 + 4.5 * 0.24^2 \} * 80.0 = 43.9 \text{ cm}$$

$$B_2/L_i = 655.0 / 330.0 = 1.98$$

$$\lambda 2 = 0.15 * L_i = 0.15 * 330.0 = 49.5 \text{ cm}$$

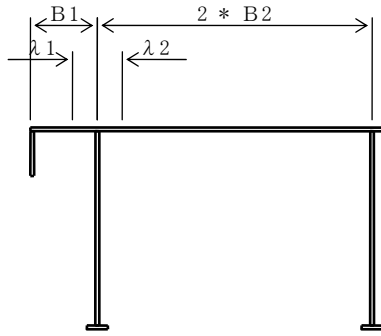
$$\text{Effective widthtotal} \quad \lambda = \lambda 1 + \lambda 2 = 43.9 + 49.5 = 93.4 \text{ cm}$$

Equivalent span l e n g t h (Floor assembly action)

$$L_i = 0.6 * L_c = 0.6 * 330.0 = 198.0 \text{ cm}$$

L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 80.0 cm
B2 = 163.8 cm

$$B1/Li = 80.0 / 198.0 = 0.40$$

$$\lambda 1 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$B2/Li = 163.8 / 198.0 = 0.83$$

$$\lambda 2 = 0.15 * Li = 0.15 * 198.0 = 29.7 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 29.7 + 29.7 = 59.4 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	934 * 16 (SM400)	149.43	-115.85	-17312	2005591
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			386.52		-13842	3320554

$$E = -13842 / 386.52 = -35.81 \text{ cm}$$

$$I = 3320554 - 386.52 * (-35.81)^2 = 2824819 \text{ cm}^4$$

$$Y_u = -80.84 \text{ cm}, \quad Y_L = 152.06 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	594 * 16 (SM400)	95.04	-115.85	-11010	1275553
1-WEB	PL	2301 * 9 (SM400)	207.09	0.00	0	913716
1-LFLG	PL	250 * 12 (SM400)	30.00	115.65	3470	401248
			332.13		-7541	2590516

$$E = -7541 / 332.13 = -22.70 \text{ cm}$$

$$I = 2590516 - 332.13 * (-22.70)^2 = 2419304 \text{ cm}^4$$

$$Y_u = -93.95 \text{ cm}, \quad Y_L = 138.95 \text{ cm}$$

Bending stress

$$\sigma_u = -855.2 \cdot 10^6 \cdot -808.4 / (2824819 \cdot 10^4) = 24 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$
$$\sigma_L = -855.2 \cdot 10^6 \cdot 1520.6 / (2824819 \cdot 10^4) = -46 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -271.6 \cdot 10^3 / 20709 = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-46 / 140)^2 + (13 / 80)^2 = 0.13 < 1.2$$

*For the joint

Bending stress

$$\sigma_u = -855.2 \cdot 10^6 \cdot -808.4 / (2824819 \cdot 10^4) = 24 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$
$$\sigma_L = -855.2 \cdot 10^6 \cdot 1520.6 / (2824819 \cdot 10^4) = -46 \text{ N/mm}^2 < \sigma_{ca} = 111 \text{ N/mm}^2$$

Shear stress

$$\tau = -271.6 \cdot 10^3 / 20709 = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

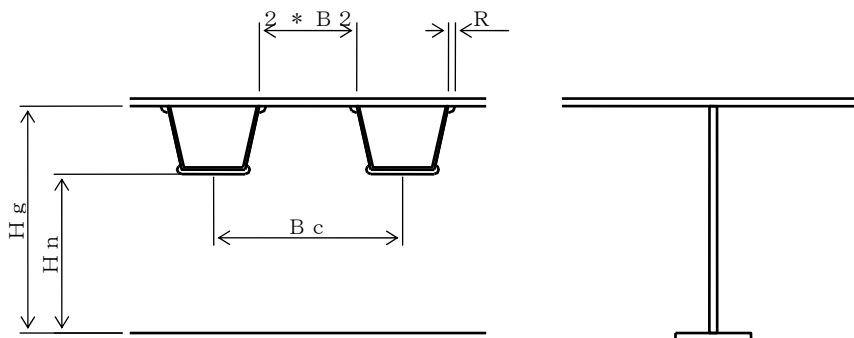
Combined stress

$$\kappa = (-46 / 140)^2 + (13 / 80)^2 = 0.13 < 1.2$$

The main girder action stress intensity and floor assembly action stress intensity

$$\text{DECK} \quad (24) + (0) = 24 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defect



$$\tau_k = -271.6 \cdot 10^3 / 20709 = -13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -13 \cdot 230.1 / 202.4 = -15 \text{ N/mm}^2 < \tau_a$$

(13 CR3-012 (Intermediate)

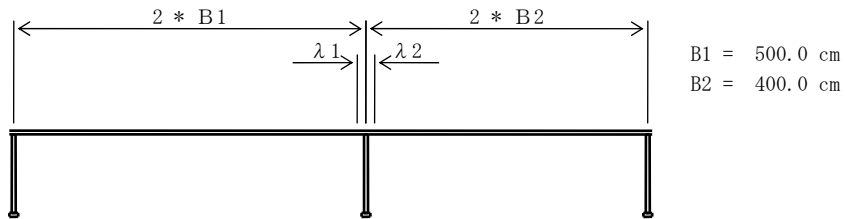
Section forces and condition of the calculation

The main girder action $M = -857.6 \text{ kN}\cdot\text{m}$ $S = -426.3 \text{ kN}$
Floor assembly action $M = -87.8 \text{ kN}\cdot\text{m}$ $S = 175.4 \text{ kN}$
Section force at joint $M_j = -857.6 \text{ kN}\cdot\text{m}$ $S_j = -426.3 \text{ kN}$
Loss part shearing force $S_k = -426.3 \text{ kN}$
Distance between fixing points. $L = 1.650 \text{ m}$

Equivalent span l e n g t h (The main girder action)

$L_i = 1.0 * L_c = 1.0 * 165.0 = 165.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (The main girder action)

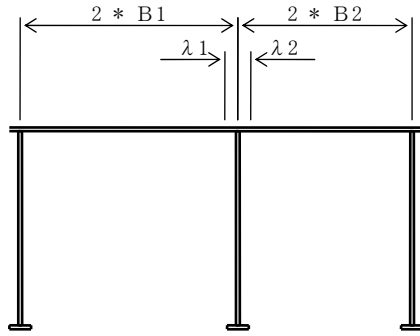


$B1/L_i = 500.0 / 165.0 = 3.03$
 $\lambda 1 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
 $B2/L_i = 400.0 / 165.0 = 2.42$
 $\lambda 2 = 0.15 * L_i = 0.15 * 165.0 = 24.7 \text{ cm}$
Effective widthtotal $\lambda = \lambda 1 + \lambda 2 = 24.7 + 24.7 = 49.5 \text{ cm}$

Equivalent span l e n g t h (Floor assembly action)

$L_i = 0.6 * L_c = 0.6 * 165.0 = 99.0 \text{ cm}$
 L_c : Horizontal digit span

Effective width (Floor assembly action)



B1 = 125.0 cm
B2 = 100.0 cm

$$B1/Li = 125.0 / 99.0 = 1.26$$

$$\lambda 1 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$B2/Li = 100.0 / 99.0 = 1.01$$

$$\lambda 2 = 0.15 * Li = 0.15 * 99.0 = 14.8 \text{ cm}$$

$$\text{Effective widthtotal } \lambda = \lambda 1 + \lambda 2 = 14.8 + 14.8 = 29.7 \text{ cm}$$

Section area and moment of inertia (The main girder action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	495 * 16 (SM400)	79.20	-111.50	-8831	984634
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			308.46		-5492	2170208

$$E = -5492 / 308.46 = -17.80 \text{ cm}$$

$$I = 2170208 - 308.46 * (-17.80)^2 = 2072433 \text{ cm}^4$$

$$Y_u = -94.50 \text{ cm}, \quad Y_L = 129.70 \text{ cm}$$

Section area and moment of inertia (Floor assembly action)

			A(cm ²)	Y(cm)	AY(cm ³)	I(cm ⁴)
1-DECK	PL	297 * 16 (SM400)	47.52	-111.50	-5298	590781
1-WEB	PL	2214 * 9 (SM400)	199.26	0.00	0	813943
1-LFLG	PL	250 * 12 (SM400)	30.00	111.30	3339	371631
			276.78		-1959	1776354

$$E = -1959 / 276.78 = -7.08 \text{ cm}$$

$$I = 1776354 - 276.78 * (-7.08)^2 = 1762482 \text{ cm}^4$$

$$Y_u = -105.22 \text{ cm}, \quad Y_L = 118.98 \text{ cm}$$

***The main girder action**

Bending stress

$$\sigma_u = -857.6 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 39 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -857.6 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -54 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -426.3 \cdot 10^3 / 19926 = 21 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-53 / 140)^2 + (21 / 80)^2 = 0.22 < 1.2$$

***Floor assembly action**

Bending stress

$$\sigma_u = -87.8 \cdot 10^6 * -1052.2 / (1762482 \cdot 10^4) = 5 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -87.8 \cdot 10^6 * 1189.8 / (1762482 \cdot 10^4) = -6 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = 175.4 \cdot 10^3 / 19926 = 9 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-6 / 140)^2 + (9 / 80)^2 = 0.01 < 1.2$$

***For the joint**

Bending stress

$$\sigma_u = -857.6 \cdot 10^6 * -945.0 / (2072433 \cdot 10^4) = 39 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -857.6 \cdot 10^6 * 1297.0 / (2072433 \cdot 10^4) = -54 \text{ N/mm}^2 < \sigma_{ca} = 131 \text{ N/mm}^2$$

Shear stress

$$\tau = -426.3 \cdot 10^3 / 19926 = 21 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

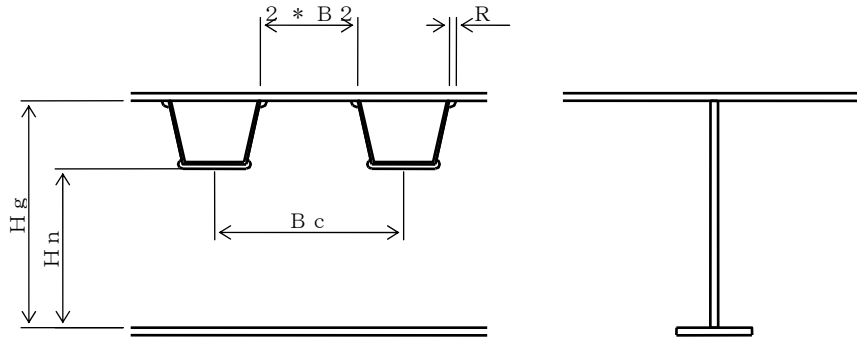
Combined stress

$$\kappa = (-53 / 140)^2 + (21 / 80)^2 = 0.22 < 1.2$$

The main girder action Stress intensity and Floor assembly action Stress intensity

$$\text{DECK} \quad (39) + (5) = 44 \text{ N/mm}^2 < \sigma_a = 195 \text{ N/mm}^2$$

Shear stress of the vertical ribs defecty



$$\tau_k = -426.3 \cdot 10^3 / 19926 = -21 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k \cdot H_g / H_n = -21 \cdot 221.4 / 193.7 = -24 \text{ N/mm}^2 < \tau_a$$

5 - 4 Calculation of field

(1) Cross beam 1 CR1-082 (End member) DECK

Cross beam 1 CR1-001 (End member) DECK, Cross beam 1 CR1-014 DECK, Cross beam 1 CR1-021 DECK

Cross beam 1 CR1-029 DECK, Cross beam 1 CR1-038 DECK, Cross beam 1 CR1-072 DECK, Cross beam 3 CR3-012 DECK

(a) Acting stress

$$\sigma_{tmax} = 64 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 \cdot 140 = 105 \text{ N/mm}^2$$

$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 495 \cdot 16 \quad A_g = 79.2 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t \cdot A_g = 105 \cdot 7920 = 831600 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 831600 / 140 = 5940 \text{ mm}^2 = 59.4 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 831600 / 108000 = 7.7$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 0 \text{ unites)$$

(2) Cross beam 1 CR1-082 (End member) LFLG

Cross beam 1 CR1-001 (End member) LFLG, Cross beam 1 CR1-014 LFLG, Cross beam 1 CR1-021 LFLG

Cross beam 1 CR1-029 LFLG, Cross beam 1 CR1-038 LFLG, Cross beam 1 CR1-072 LFLG

Cross beam 2 CR2-001 (End member) LFLG, Cross beam 2 CR2-012 LFLG, Cross beam 2 CR2-024 LFLG

Cross beam 2 CR2-028 LFLG, Cross beam 2 CR2-056 LFLG, Cross beam 2 CR2-074 LFLG, Cross beam 2 CR2-075 LFLG

Cross beam 2 CR2-082 (End member) LFLG, Cross beam 3 CR3-012 LFLG

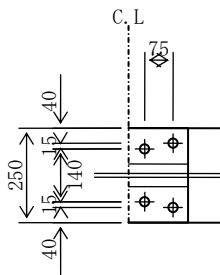
(a) Acting stress

$$\sigma_{tmax} = 88 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-LFLG PL } 250 * 12 \quad A_g = 30.0 \text{ cm}^2 \quad (\text{SM400})$$

(c) Bolt arrangement



(d) Check of section of main plate

$$1\text{-LFLG PL } 250 * 12 \quad A = 30.0$$

$$(30.0 - (2 * 2.5) * 1.2) * 1.1 = 26.4 < 30.0 \quad \therefore A_n = 26.4 \text{ cm}^2$$

$$\sigma_{tn} = \sigma_{tmax} * A_g / A_n = 88 * 30.0 / 26.4 = 100 \text{ N/mm}^2$$

$$< \sigma_{ta} = 140 \text{ N/mm}^2$$

(e) Design axial force

$$P_t = \sigma_{tn} * A_n = 100 * 2640 = 263817 \text{ N}$$

$$> 0.75 \sigma_{ta} * A_n / 1.1 = 105 * 2640 / 1.1 = 252000 \text{ N}$$

(f) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 263817 / 140 = 1884 \text{ mm}^2 = 18.8 \text{ cm}^2$$

(g) Required bolt number

$$n = P_t / (108000 * 1.00) = 263817 / 108000 = 2.4 \text{ pcs. (4 bolts will be used.)}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$P_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 2 \text{ unites)}$$

(h) Check of splice plates

	(SS400)	Ags (cm ²)	deduction of bolt holes	Ans (cm ²)
2-SPL PL	95 * 9	(17.1 -	2*(1*2.5)* 0.9)*1.1= 13.9 <	17.1 ∴ 13.9
1-SPL PL	250 * 9	(22.5 -	(2*2.5)* 0.9)*1.1= 19.8 <	22.5 ∴ 19.8
<hr/>				
		39.6		33.7
				> AnR

(3) Cross beam 1 CR1-082 (End member) WEB

Cross beam 1 CR1-001 (End member) WEB, Cross beam 1 CR1-014 WEB, Cross beam 1 CR1-021 WEB

Cross beam 1 CR1-029 WEB, Cross beam 1 CR1-038 WEB, Cross beam 1 CR1-072 WEB, Cross beam 3 CR3-012 WEB

(a) Section area of main plate (Web plate)

1-WEB PL 2214 * 9 A = 199.3 cm² (SM400)

(b) Design stress

$$\sigma_U = 63 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

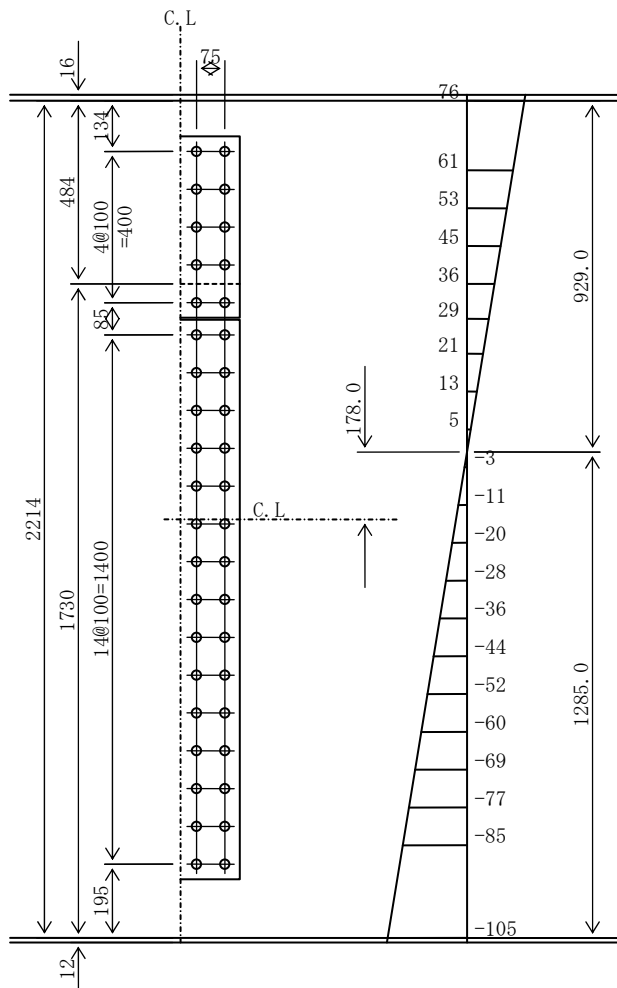
$$\sigma_L = -87 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

$$\sigma_{Un} = 105 * 63 / 87 = 76 \text{ N/mm}^2$$

$$\sigma_{Ln} = 105 \text{ N/mm}^2$$

$$\tau = 30 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 20th row

$$\text{Sharing width: } b1 = 24.5 \text{ cm}$$

Total force to be shared

$$P1 = 245 * 9 * (85 + 105) / 2 = 209454 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N1 = 209454 / (108000 * 1.00) = 1.9 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

$$\text{Sharing width: } b2 = 18.4 \text{ cm}$$

Total force to be shared

$$P2 = 184 * 9 * (76 + 61) / 2 = 113250 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N2 = 113250 / (108000 * 1.00) = 1.0 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 40 = 30 * 19926 / 40 = 14798 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c20} = \sqrt{((209454 / 2)^2 + 14798^2)} = 105767 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((113250 / 2)^2 + 14798^2)} = 58526 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2 \text{ unites)$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1480 * 9 \quad A_s = 266.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1213972 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 877106 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 877106 * 10^4 / 1285 = 717 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 717 * 10^6 / (1213972 * 10^4) * 1130 = 67 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

(4) Cross beam 2 CR2-001 (End member) DECK

(a) Acting stress

$$\sigma_{tmax} = 15 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$
$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 1452 * 16 \quad A_g = 232.3 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 23232 = 2439360 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 2439360 / 140 = 17424 \text{ mm}^2 = 174.2 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 2439360 / 108000 = 22.6$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

(5) Cross beam 2 CR2-028 DECK

Cross beam 2 CR2-012 DECK, Cross beam 2 CR2-024 DECK, Cross beam 2 CR2-056 DECK, Cross beam 2 CR2-074 DECK

Cross beam 2 CR2-075 DECK

(a) Acting stress

$$\sigma_{tmax} = 32 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$

$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 990 * 16 \quad A_g = 158.4 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 15840 = 1663200 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 1663200 / 140 = 11880 \text{ mm}^2 = 118.8 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 1663200 / 108000 = 15.4$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

(6) Cross beam 2 CR2-028 WEB

Cross beam 2 CR2-001 (End member) WEB, Cross beam 2 CR2-012 WEB, Cross beam 2 CR2-024 WEB

Cross beam 2 CR2-056 WEB, Cross beam 2 CR2-074 WEB, Cross beam 2 CR2-075 WEB

Cross beam 2 CR2-082 (End member) WEB

(a) Section area of main plate (Web plate)

$$1\text{-WEB PL } 2301 * 9 \quad A = 207.1 \text{ cm}^2 \quad (\text{SM400})$$

(b) Design stress

$$\sigma_U = 31 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

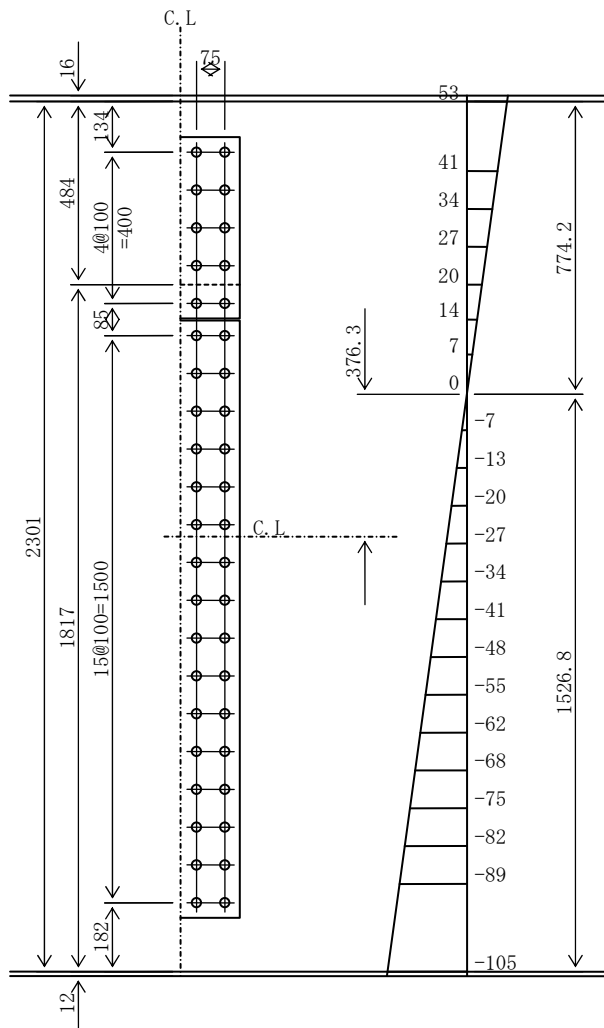
$$\sigma_L = -62 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

$$\sigma_{Un} = 105 * 31 / 62 = 53 \text{ N/mm}^2$$

$$\sigma_{Ln} = 105 \text{ N/mm}^2$$

$$\tau = 8 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 21th row

Sharing width: $b_1 = 23.2 \text{ cm}$

Total force to be shared

$$P_1 = 232 * 9 * (89 + 105) / 2 = 202583 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 202583 / (108000 * 1.00) = 1.9 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

Sharing width: $b_2 = 18.4 \text{ cm}$

Total force to be shared

$$P_2 = 184 * 9 * (53 + 41) / 2 = 77698 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_2 = 77698 / (108000 * 1.00) = 0.7 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 42 = 8 * 20709 / 42 = 4176 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c21} = \sqrt{((202583 / 2)^2 + 4176^2)} = 101377 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((77698 / 2)^2 + 4176^2)} = 39073 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1580 * 9 \quad A_s = 284.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1781740 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1206906 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 1206906 * 10^4 / 1527 = 830 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 830 * 10^6 / (1781740 * 10^4) * 1385 = 65 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

(7) Cross beam 2 CR2-082 (End member) DECK

(a) Acting stress

$$\sigma_{tmax} = 24 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$
$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 934 * 16 \quad A_g = 149.4 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 14944 = 1569120 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 1569120 / 140 = 11208 \text{ mm}^2 = 112.1 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 1569120 / 108000 = 14.5$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

4-2 MG Diaphragm

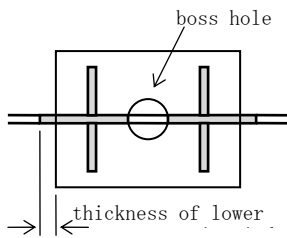
(1) MGSupDiaphragm

4-9 Calculation of support diaphragm

Stress at support diaphragm is checked by the following policy.

(a) Check of bearing stress

$$\sigma_b = R_v / A_n \leq \sigma_{ba}$$



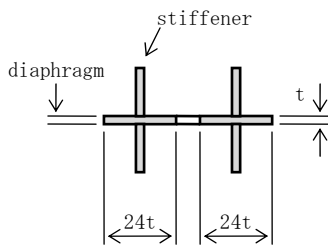
σ_b : bearing stress

R_v : reaction force for support

A_n : Effective section area of bearing
(shown in the left sketch in gray)

σ_{ba} : allowable bearing stress

(b) vertical stress of stiffeners



$$\sigma_v = R_v / A_g \leq \sigma_{ca}$$

σ_v : Vertical stress

R_v : Reaction force

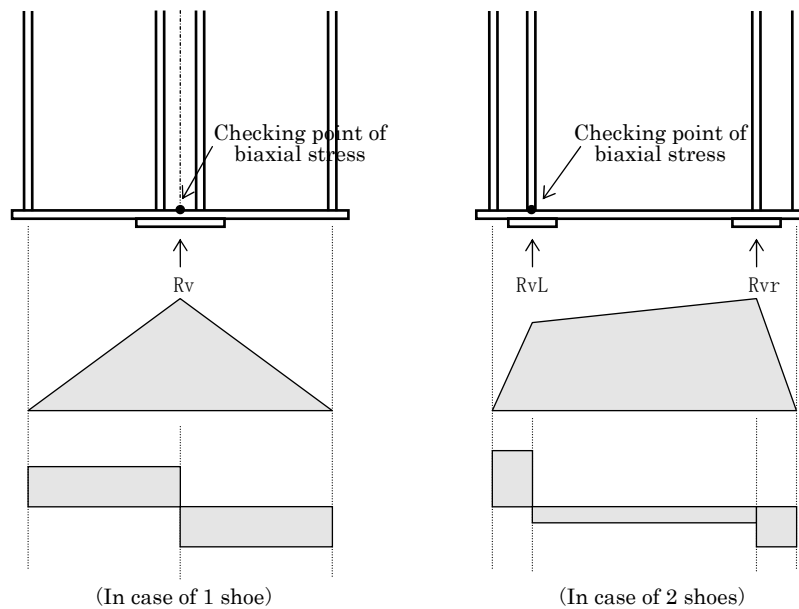
A_g : Effective area of stiffeners

(Colored area in the figure)

σ_{ca} : allowable compressive stress

(c) Check of horizontal stress of diaphragm

The diaphragm is assumed as a simple beam supported at webs, and bending and shear stresses caused by the reaction force are checked.



(d) Check of biaxial stress

Biaxial stress of the diaphragm is checked using actual stresses calculated from (b) and (c) .

$$(\sigma_v / \sigma_a)^2 - (\sigma_v / \sigma_a) * (\sigma_L / \sigma_a) + (\sigma_L / \sigma_a)^2 + (\tau / \tau_a)^2 \leq 1.2$$

$\sigma_v \cdot \sigma_L$: Actual stress calculated at (b) and (c) .

σ_a : Allowable tensile stress

τ_a : Allowable shear stress

(e) Calculation of fillet weld size

Between vertical stiffener and diaphragm

Required throat thickness: $A_{req} = 2 * R_v / (n * h * \tau_a)$

Required size : $S_{req} = A_{req} / 0.707$

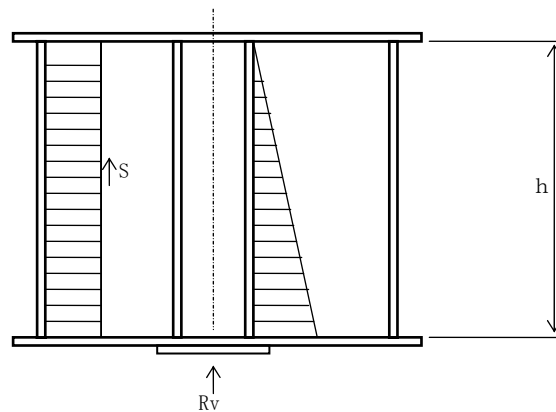
Between diaphragm and web of main girder

Required throat thickness: $A_{req} = S / (n * h * \tau_a)$

Required size : $S_{req} = A_{req} / 0.707$

Where

n : Number of welding lines



(Distribution of shear force)

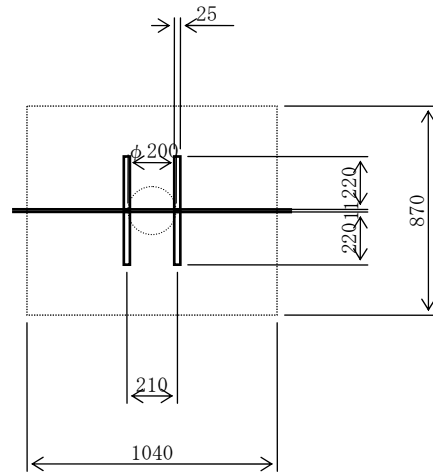
(1) Main girder: G-1 Support: S-1

Group stiffener

G-4 Maingirder support : S-1

Reaction force $R_v = 3112.3$ (kN)

Torsion momen $T_m = 1338.0$ (kN·m)



(a) Check of bearing stress

Ag (cm ²)	Boss hole void	An (cm ²)
4-STIFF PL 220*25 (SM400)	=	220.00
1-DIA PL 1080*11 (SM400)	=	118.80 - 20.0*1.1 = 96.80

(DIA L = 1040 + 20 + 20) $\Sigma An = 316.80$ cm²

$\sigma_b = 3112.3 \times 10^3 / 31680 = 98$ N/mm² < $\sigma_{ba} = 210$ N/mm²

(b) Check of vertical stress

	Ag (cm ²)	I (cm ⁴)
4-STIFF PL 220*25 (SM400)	= 220.00	38222
1-DIA PL 474*11 (SM400)	= 52.14	0

$\Sigma Ag = 272.14$ cm² 38222 cm⁴

From "1.7 * Astiff = 374.00", $A_v = 272.14$ cm²

$\sigma_{cao} = 140$ N/mm²

$I = 38222$ cm⁴ , $r = 11.85$ cm

$L = 135.32$ cm , $L/r = 11.42$

$\sigma_{cag} = 140$ N/mm²

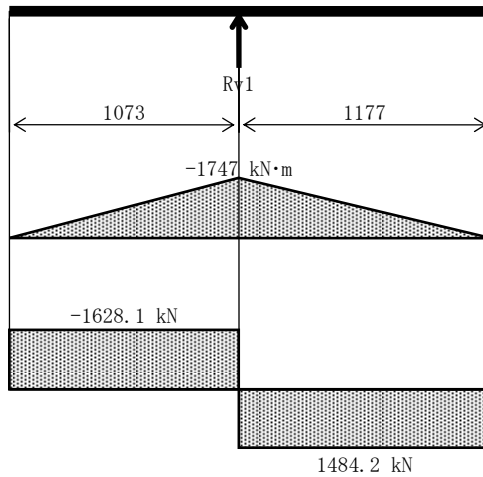
$b/t = 220 / 25 = 8.800 < 12.8$

$\sigma_{cal} = 140$ N/mm²

$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 140 * 140 / 140 = 140$ N/mm²

$\sigma_v = 3112.3 \times 10^3 / 27214 = 114$ N/mm² < $\sigma_{ca} = 140$ N/mm²

(c) Check of horizontal stress



Bending moment $M_{max} = -1747.0 \text{ (kN}\cdot\text{m)}$

Shear force $S_{max} = -1628.1 \text{ (kN)}$

Torsion moment $T_m = 1338.0 \text{ (kN}\cdot\text{m)}$

		$A \text{ (cm}^2\text{)}$	$Y \text{ (cm)}$	$AY \text{ (cm}^3\text{)}$	$I \text{ (cm}^4\text{)}$
1-FLG PL	384*16 (SM490Y) =	61.44	-136.1	-8363	1138451
1-WEB PL	2706*11 (SM400) =	297.71	0.0	0	1817257
1-FLG PL	480*20 (SM490Y) =	96.00	136.3	13087	1784060
		455.15		4724	4739768
					-49022
				$I =$	4690745

$$e = 4724 / 455.15 = 10.38 \text{ cm}$$

$$Y_u = -147.30 \text{ cm}, \quad Y_L = 126.94 \text{ cm}$$

① Bending stress

$$\sigma_u = -1747.0 \cdot 10^6 \cdot -1473.0 / 4690745 \cdot 10^4 = 55 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -1747.0 \cdot 10^6 \cdot 1269.4 / 4690745 \cdot 10^4 = -47 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (270.6 - 0.0) * 1.1 = 297.7 \text{ cm}^2$$

$$\tau_s = 1628.1 * 10^3 / 29771 = 55 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 1338.0 * 10^6 / (2 * 2706 * 2250 * 11) = 10 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 55 + 10 = 65 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

③ Shear stress

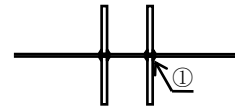
$$\kappa = (55 / 140)^2 + (65 / 80)^2 = 0.81 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-114 / 140)^2 - (-114 / 140) * (-47 / 140) + (-47 / 140)^2 + (65 / 80)^2 = 1.16 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 3112.3 * 10^3) / (8 * 2706 * 80)$$

$$= 3.6 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 3.6 / 0.707 = 5.1 \text{ mm} \rightarrow 8 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 25)} = 7.1)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 1628.1 * 10^3 / (2 * 2730 * 80)$$

$$+ 1338.0 * 10^6 / (2 * 2 * 2706 * 2250 * 80)$$

$$= 4.4 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 4.4 / 0.707 = 6.2 \text{ mm} \rightarrow 7 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 12)} = 4.9)$$

iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

(2) Main girder: G-1 Support: S-2

Group stiffener

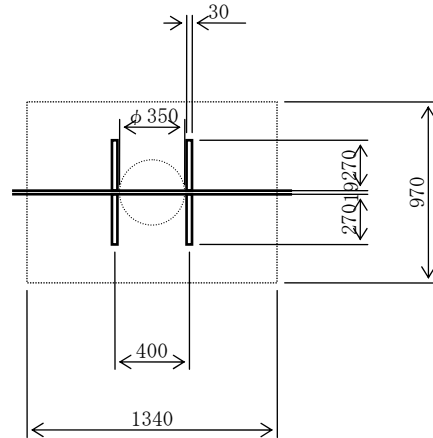
G-1Maingirder support : S-7

G-4Maingirder support : S-2

G-4Maingirder support : S-7

Reaction force $R_v = 8043.9$ (kN)

Torsion momen $T_m = 1677.5$ (kN·m)



(a) Check of bearing stress

			A_g (cm ²)	Boss hole void	A_n (cm ²)
4-STIFF	PL	270*30 (SM490Y)	= 324.00		324.00
1-DIA	PL	1444*19 (SM490Y)	= 274.36	- 35.0*1.9	= 207.86
(DIA L = 1340 + 52 + 52)					$\Sigma A_n = 531.86$ cm ²
$\sigma_b = 8043.9 \times 10^3 / 53186 = 151$ N/mm ² < $\sigma_{ba} = 315$ N/mm ²					

(b) Check of vertical stress

			A_g (cm ²)	I (cm ⁴)
4-STIFF	PL	270*30 (SM490Y)	= 324.00	87338
1-DIA	PL	746*19 (SM490Y)	= 141.74	0
			$\Sigma A_g = 465.74$ cm ²	87338 cm ⁴

From $1.7 * A_{stiff} = 550.80$, $A_v = 465.74$ cm²

$$\sigma_{cao} = 210 \text{ N/mm}^2$$

$$I = 87338 \text{ cm}^4, \quad r = 13.69 \text{ cm}$$

$$L = 135.32 \text{ cm}, \quad L/r = 9.88$$

$$\sigma_{cag} = 210 \text{ N/mm}^2$$

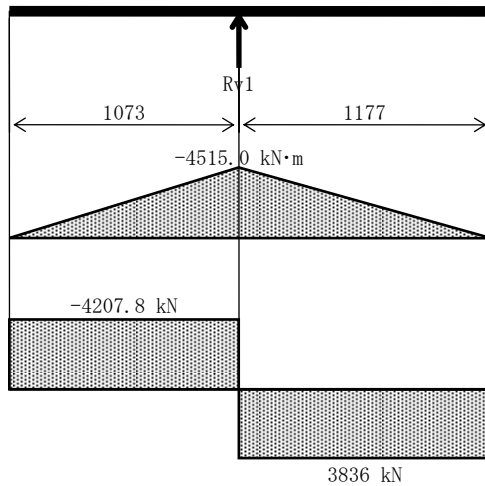
$$b/t = 270 / 30 = 9.000 < 10.5$$

$$\sigma_{cal} = 210 \text{ N/mm}^2$$

$$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 210 * 210 / 210 = 210 \text{ N/mm}^2$$

$$\sigma_v = 8043.9 \times 10^3 / 46574 = 173 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

(c) Check of horizontal stress



Bending moment $M_{max} = -4515.0 \text{ (kN}\cdot\text{m)}$

Shear force $S_{max} = -4207.8 \text{ (kN)}$

Torsion moment $T_m = 1677.5 \text{ (kN}\cdot\text{m)}$

		$A \text{ (cm}^2\text{)}$	$Y \text{ (cm)}$	$AY \text{ (cm}^3\text{)}$	$I \text{ (cm}^4\text{)}$
1-FLG PL	648*27 (SM490Y) =	174.96	-136.7	-23912	3268167
1-WEB PL	2706*19 (SM490Y) =	514.23	0.0	0	3138898
1-FLG PL	1248*52 (SM570-H) =	648.96	137.9	89507	12345006
		1338.15		65594	18752071
					-3215340
				$I =$	15536731

$$e = 65594 / 1338.15 = 49.02 \text{ cm}$$

$$Y_u = -187.04 \text{ cm}, \quad Y_L = 91.50 \text{ cm}$$

① Bending stress

$$\sigma_u = -4515.0 \cdot 10^6 \cdot -1870.4 / 15536731 \cdot 10^4 = 54 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -4515.0 \cdot 10^6 \cdot 915.0 / 15536731 \cdot 10^4 = -27 \text{ N/mm}^2 < \sigma_{ca} = 255 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (270.6 - 0.0) * 1.9 = 514.2 \text{ cm}^2$$

$$\tau_s = 4207.8 * 10^3 / 51423 = 82 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 1677.5 * 10^6 / (2 * 2706 * 2250 * 19) = 7 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 82 + 7 = 89 \text{ N/mm}^2 < \tau_a = 120 \text{ N/mm}^2$$

③ Shear stress

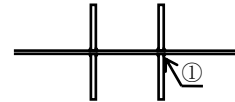
$$\kappa = (54 / 210)^2 + (89 / 120)^2 = 0.62 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-173 / 210)^2 - (-173 / 210) * (-27 / 210) + (-27 / 210)^2 + (89 / 120)^2 = 1.14 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 8043.9 * 10^3) / (8 * 2706 * 120)$$

$$= 6.2 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=19\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{req} = 6.2 / 0.707 = 8.8 \text{ mm} \rightarrow 9 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 30)} = 7.7)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 4207.8 * 10^3 / (2 * 2730 * 120)$$

$$+ 1677.5 * 10^6 / (2 * 2 * 2706 * 2250 * 120)$$

$$= 7.0 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=16\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{req} = 7.0 / 0.707 = 9.9 \text{ mm} \rightarrow 10 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 19)} = 6.2)$$

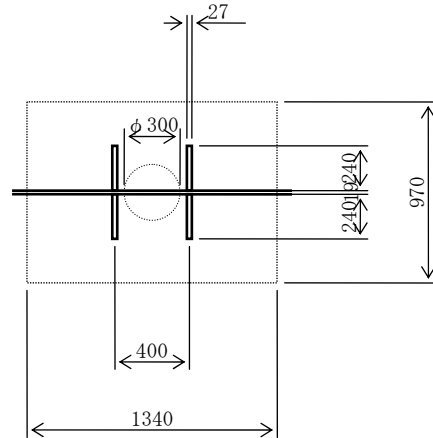
iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

(3) Main girder: G-1 Support: S-3

Group stiffener

- G-1Maingirder support : S-4
- G-1Maingirder support : S-5
- G-1Maingirder support : S-6
- G-4Maingirder support : S-3
- G-4Maingirder support : S-4
- G-4Maingirder support : S-5
- G-4Maingirder support : S-6



Reaction force $R_v = 7020.0$ (kN)
 Torsion momen $T_m = 1532.2$ (kN·m)

(a) Check of bearing stress

			A_g (cm ²)	Boss hole void	A_n (cm ²)
4-STIFF	PL	240*27 (SM490Y)	= 259.20		259.20
1-DIA	PL	1416*19 (SM490Y)	= 269.04	- 30.0*1.9 =	212.04

(DIA L = 1340 + 38 + 38) $\Sigma A_n = 471.24$ cm²
 $\sigma_b = 7020.0 \times 10^3 / 47124 = 149$ N/mm² < $\sigma_{ba} = 315$ N/mm²

(b) Check of vertical stress

			A_g (cm ²)	I (cm ⁴)
4-STIFF	PL	240*27 (SM490Y)	= 259.20	55913
1-DIA	PL	746*19 (SM490Y)	= 141.74	0

$\Sigma A_g = 400.94$ cm² 55913 cm⁴

From $1.7 * A_{stiff} = 440.64$ ", $A_v = 400.94$ cm²

$$\sigma_{cao} = 210 \text{ N/mm}^2$$

$$I = 55913 \text{ cm}^4, \quad r = 11.81 \text{ cm}$$

$$L = 135.32 \text{ cm}, \quad L/r = 11.46$$

$$\sigma_{cag} = 210 \text{ N/mm}^2$$

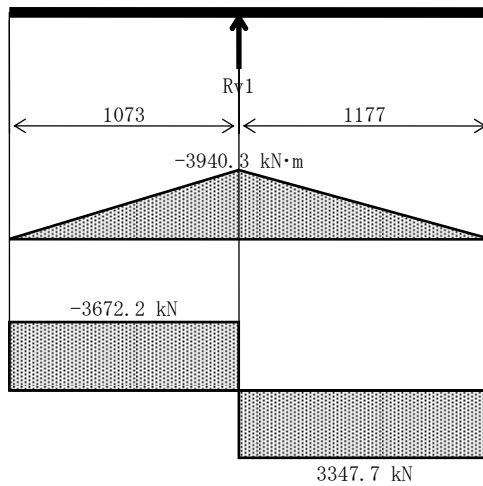
$$b/t = 240 / 27 = 8.889 < 10.5$$

$$\sigma_{cal} = 210 \text{ N/mm}^2$$

$$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 210 * 210 / 210 = 210 \text{ N/mm}^2$$

$$\sigma_v = 7020.0 * 10^3 / 40094 = 175 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

(c) Check of horizontal stress



Bending moment $M_{max} = -3940.3 \text{ (kN}\cdot\text{m)}$

Shear force $S_{max} = -3672.2 \text{ (kN)}$

Torsion moment $T_m = 1532.2 \text{ (kN}\cdot\text{m)}$

		A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-FLG PL	456*19 (SM490Y) =	86.64	-136.3	-11807	1608933
1-WEB PL	2706*19 (SM490Y) =	514.23	0.0	0	3138898
1-FLG PL	912*38 (SM570) =	346.56	137.2	47556	6525777
		947.43		35749	11273609
					-1348930
				I =	9924679

$$e = 35749 / 947.43 = 37.73 \text{ cm}$$

$$Y_u = -174.96 \text{ cm}, \quad Y_L = 101.39 \text{ cm}$$

① Bending stress

$$\begin{aligned}\sigma_u &= -3940.3 \times 10^6 \times -1749.6 / 9924679 \times 10^4 = 69 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2 \\ \sigma_L &= -3940.3 \times 10^6 \times 1013.9 / 9924679 \times 10^4 = -40 \text{ N/mm}^2 < \sigma_{ca} = 255 \text{ N/mm}^2\end{aligned}$$

② Shear stress

Checking at manhole

$$\begin{aligned}A_w &= (270.6 - 0.0) \times 1.9 = 514.2 \text{ cm}^2 \\ \tau_s &= 3672.2 \times 10^3 / 51423 = 71 \text{ N/mm}^2\end{aligned}$$

Shear stress due to torsion moment

$$\tau_t = 1532.2 \times 10^6 / (2 \times 2706 \times 2250 \times 19) = 7 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 71 + 7 = 78 \text{ N/mm}^2 < \tau_a = 120 \text{ N/mm}^2$$

③ Shear stress

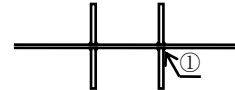
$$\kappa = (69 / 210)^2 + (78 / 120)^2 = 0.53 < 1.2$$

(d) Check of biaxial stress

$$\begin{aligned}\alpha &= (-175 / 210)^2 - (-175 / 210) \times (-40 / 210) \\ &\quad + (-40 / 210)^2 + (78 / 120)^2 = 0.99 < 1.2\end{aligned}$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\begin{aligned}\text{Required throat thickness: } A_{req} &= (2 \times 7020.0 \times 10^3) / (8 \times 2706 \times 120) \\ &= 5.4 \text{ mm} < 0.707 \times \min(S_{max}, \text{Member thickness}=19\text{mm}) = 8.48 \text{ mm} \\ \text{Required size: } S_{req} &= 5.4 / 0.707 = 7.6 \text{ mm} \rightarrow 8 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 \times 27)} = 7.3)\end{aligned}$$

ii) Between diaphragm and web of main girder

$$\begin{aligned}\text{Required throat thickness: } A_{req} &= 3672.2 \times 10^3 / (2 \times 2730 \times 120) \\ &\quad + 1532.2 \times 10^6 / (2 \times 2 \times 2706 \times 2250 \times 120) \\ &= 6.1 \text{ mm} < 0.707 \times \min(S_{max}, \text{Member thickness}=12\text{mm}) = 8.48 \text{ mm} \\ \text{Required size: } S_{req} &= 6.1 / 0.707 = 8.6 \text{ mm} \rightarrow 9 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 \times 19)} = 6.2)\end{aligned}$$

iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

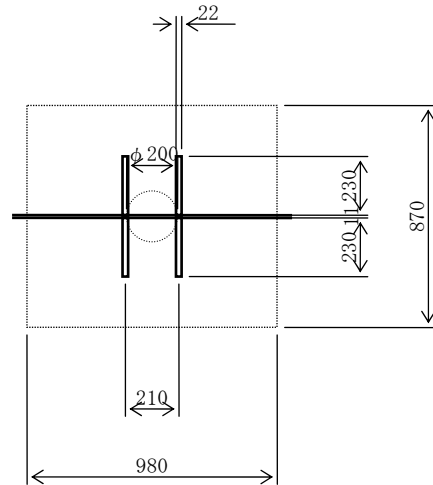
(4) Main girder: G-1 Support: S-8

Group stiffener

G-4Maingirder support : S-8

Reaction force $R_v = 2916.6$ (kN)

Torsion momen $T_m = 1363.9$ (kN·m)



(a) Check of bearing stress

			A_g (cm ²)	Boss hole void	A_n (cm ²)
4-STIFF	PL	230*22 (SM400) =	202.40		202.40
1-DIA	PL	1008*11 (SM400) =	110.88	- 20.0*1.1 =	88.88
(DIA L = 980 + 14 + 14)					$\Sigma A_n = 291.28$ cm ²
$\sigma_b = 2916.6 \times 10^3 / 29128 = 100$ N/mm ² < $\sigma_{ba} = 210$ N/mm ²					

(b) Check of vertical stress

			A_g (cm ²)	I (cm ⁴)
4-STIFF	PL	230*22 (SM400) =	202.40	38312
1-DIA	PL	474*11 (SM400) =	52.14	0
			$\Sigma A_g = 254.54$ cm ²	38312 cm ⁴

From $1.7 * A_{stiff} = 344.08$, $A_v = 254.54$ cm²

$$\sigma_{cao} = 140 \text{ N/mm}^2$$

$$I = 38312 \text{ cm}^4, \quad r = 12.27 \text{ cm}$$

$$L = 135.32 \text{ cm}, \quad L/r = 11.03$$

$$\sigma_{cag} = 140 \text{ N/mm}^2$$

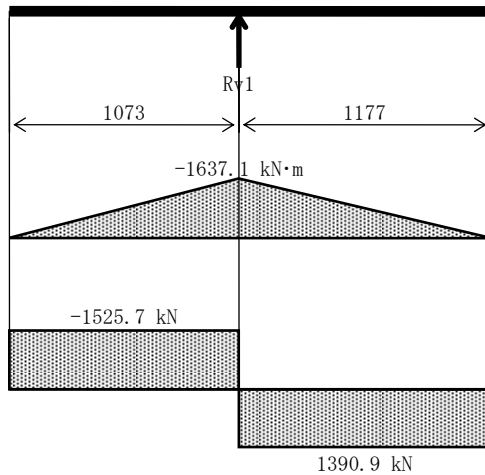
$$b/t = 230 / 22 = 10.455 < 12.8$$

$$\sigma_{cal} = 140 \text{ N/mm}^2$$

$$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 140 * 140 / 140 = 140 \text{ N/mm}^2$$

$$\sigma_v = 2916.6 \times 10^3 / 25454 = 115 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

(c) Check of horizontal stress



Bending moment $M_{max} = -1637.1 \text{ (kN}\cdot\text{m)}$

Shear force $S_{max} = -1525.7 \text{ (kN)}$

Torsion moment $T_m = 1363.9 \text{ (kN}\cdot\text{m)}$

		$A \text{ (cm}^2\text{)}$	$Y \text{ (cm)}$	$AY \text{ (cm}^3\text{)}$	$I \text{ (cm}^4\text{)}$
1-FLG PL	384*16 (SM490Y) =	61.44	-136.1	-8363	1138451
1-WEB PL	2706*11 (SM400) =	297.71	0.0	0	1817257
1-FLG PL	336*14 (SM490Y) =	47.04	136.0	6399	870346
		406.19		-1965	3826054
					-9505
				$I =$	3816549

$e = -1965 / 406.19 = -4.84 \text{ cm}$

$Y_u = -132.09 \text{ cm}$, $Y_L = 141.56 \text{ cm}$

① Bending stress

$\sigma_u = -1637.1 \cdot 10^6 \cdot -1320.9 / 3816549 \cdot 10^4 = 57 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$

$\sigma_L = -1637.1 \cdot 10^6 \cdot 1415.6 / 3816549 \cdot 10^4 = -61 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$

② Shear stress

Checking at manhole

$$A_w = (270.6 - 0.0) * 1.1 = 297.7 \text{ cm}^2$$

$$\tau_s = 1525.7 * 10^3 / 29771 = 51 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 1363.9 * 10^6 / (2 * 2706 * 2250 * 11) = 10 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 51 + 10 = 61 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

③ Shear stress

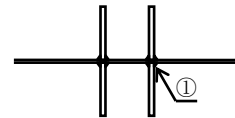
$$\kappa = (-61 / 140)^2 + (61 / 80)^2 = 0.78 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-115 / 140)^2 - (-115 / 140) * (-61 / 140) + (-61 / 140)^2 + (61 / 80)^2 = 1.09 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 2916.6 * 10^3) / (8 * 2706 * 80)$$

$$= 3.4 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 3.4 / 0.707 = 4.8 \text{ mm} \rightarrow 7 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 22)} = 6.6)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 1525.7 * 10^3 / (2 * 2730 * 80)$$

$$+ 1363.9 * 10^6 / (2 * 2 * 2706 * 2250 * 80)$$

$$= 4.2 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 4.2 / 0.707 = 5.9 \text{ mm} \rightarrow 6 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 12)} = 4.9)$$

iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

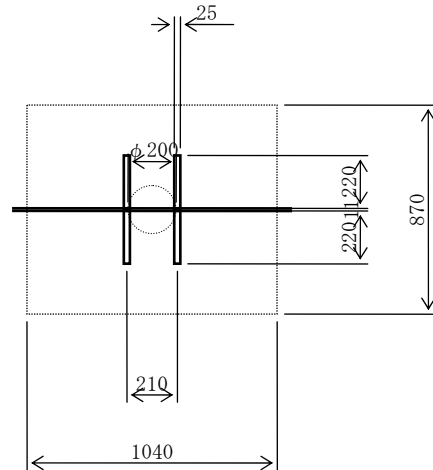
(5) Main girder: G-2 Support: S-1

Group stiffener

G-3 Maingirder support : S-1

Reaction force $R_v = 3198.0$ (kN)

Torsion momen $T_m = 1844.7$ (kN·m)



(a) Check of bearing stress

Ag(cm ²)	Boss hole void	An(cm ²)
4-STIFF PL 220*25 (SM400)	=	220.00
1-DIA PL 1080*11 (SM400)	=	118.80 - 20.0*1.1 = 96.80

(DIA L = 1040 + 20 + 20) $\Sigma An = 316.80 \text{ cm}^2$

$\sigma_b = 3196.0 \times 10^3 / 31680 = 101 \text{ N/mm}^2 < \sigma_{ba} = 210 \text{ N/mm}^2$

(b) Check of vertical stress

	Ag(cm ²)	I(cm ⁴)
4-STIFF PL 220*25 (SM400)	= 220.00	38222
1-DIA PL 474*11 (SM400)	= 52.14	0
$\Sigma Ag = 272.14 \text{ cm}^2$		38222 cm^4

From " Astiff = 374.00 より $A_v = 272.14 \text{ cm}^2$

$\sigma_{cao} = 140 \text{ N/mm}^2$

$I = 38222 \text{ cm}^4$, $r = 11.85 \text{ cm}$

$L = 139.50 \text{ cm}$, $L/r = 11.77$

$\sigma_{cag} = 140 \text{ N/mm}^2$

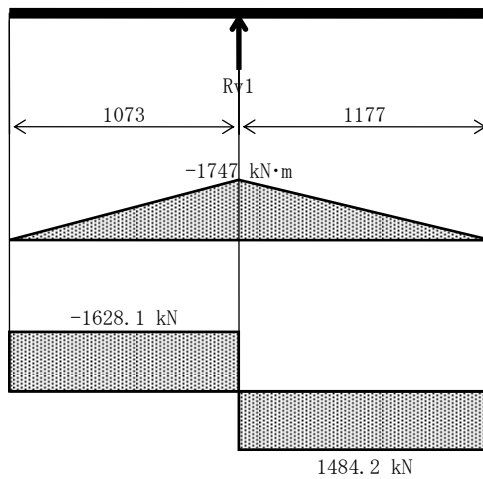
$b/t = 220 / 25 = 8.800 < 12.8$

$\sigma_{cal} = 140 \text{ N/mm}^2$

$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 140 * 140 / 140 = 140 \text{ N/mm}^2$

$\sigma_v = 3198.0 \times 10^3 / 27214 = 118 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$

(c) Check of horizontal stress



Bending moment $M_{max} = -2158.7$ (kN·m)

Shear force $S_{max} = -1599.0$ (kN)

Torsion moment $T_m = 1844.7$ (kN·m)

		A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-FLG PL	384*16 (SM490Y) =	61.44	-140.3	-8620	1209390
1-WEB PL	2790*11 (SM400) =	306.90	0.0	0	1990784
1-FLG PL	336*14 (SM490Y) =	47.04	140.2	6595	924620
		415.38		-2025	4124794
					-9872
				I =	4114922

$$e = -2025 / 415.38 = -4.88 \text{ cm}$$

$$Y_u = -136.22 \text{ cm}, \quad Y_L = 145.78 \text{ cm}$$

① Bending stress

$$\sigma_u = -2158.7 \times 10^6 \times -136.2 / 4114922 \times 10^4 = 71 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -2158.7 \times 10^6 \times 145.8 / 4114922 \times 10^4 = -76 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (279.0 - 0.0) * 1.1 = 306.9 \text{ cm}^2$$

$$\tau_s = 1599.0 * 10^3 / 30690 = 52 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 1844.7 * 10^6 / (2 * 2790 * 2700 * 11) = 11 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 53.7 + 13.9 = 67.6 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

③ Shear stress

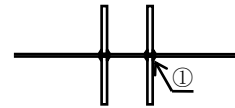
$$\kappa = (63 / 140)^2 + (68 / 80)^2 = 0.93 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-118 / 140)^2 - (-118 / 140) * (-63 / 140) + (-63 / 140)^2 + (68 / 80)^2 = 1.16 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 3112.3 * 10^3) / (8 * 2706 * 80)$$

$$= 3.6 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 3.6 / 0.707 = 5.1 \text{ mm} \rightarrow 8 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 25)} = 7.1)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 1628.1 * 10^3 / (2 * 2730 * 80)$$

$$+ 1338.0 * 10^6 / (2 * 2 * 2706 * 2250 * 80)$$

$$= 4.4 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 4.4 / 0.707 = 6.2 \text{ mm} \rightarrow 7 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 12)} = 4.9)$$

iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

(6) Main girder: G-2 Support: S-2

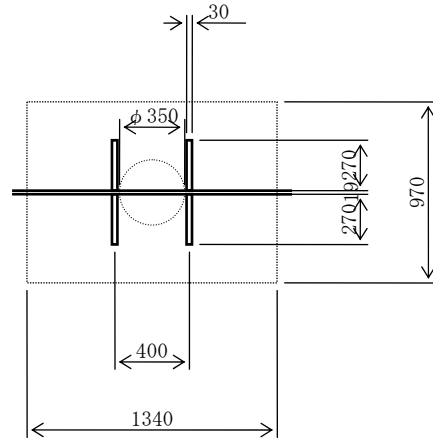
Group stiffener

G-2Maingirder support : S-7

G-3Maingirder support : S-2

G-3Maingirder support : S-7

Reaction force $R_v = 8020.8$ (kN)
 Torsion momen $T_m = 3034.6$ (kN·m)



(a) Check of bearing stress

			A_g (cm ²)	Boss hole void	A_n (cm ²)
4-STIFF	PL	270*30 (SM490Y)	= 324.00		324.00
1-DIA	PL	1420*19 (SM490Y)	= 269.80	- 35.0*1.9 =	203.30
(DIA L = 1340 + 40 + 40)					$\Sigma A_n = 527.30$ cm ²
$\sigma_b = 8020.8 \times 10^3 / 52730 = 152$ N/mm ² < $\sigma_{ba} = 315$ N/mm ²					

(b) Check of vertical stress

			A_g (cm ²)	I (cm ⁴)
4-STIFF	PL	270*30 (SM490Y)	= 324.00	87338
1-DIA	PL	746*19 (SM490Y)	= 141.74	0
			$\Sigma A_g = 465.74$ cm ²	87338 cm ⁴

From $1.7 * A_{stiff} = 550.80$ より $A_v = 486.64$ cm²

$\sigma_{cao} = 210$ N/mm²

$I = 87338$ cm⁴ , $r = 13.40$ cm

$L = 139.50$ cm , $L/r = 10.41$

$\sigma_{cag} = 210$ N/mm²

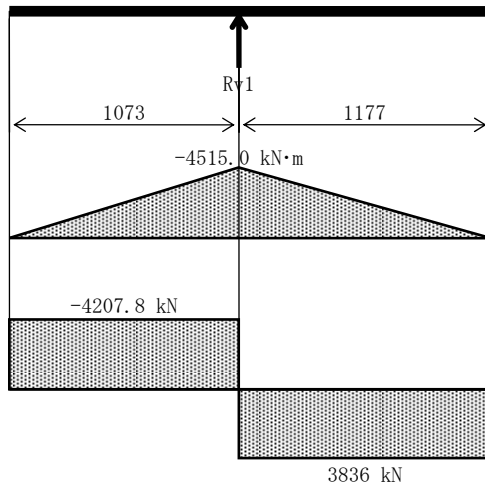
$b/t = 270 / 30 = 9.000 < 10.5$

$\sigma_{cal} = 210$ N/mm²

$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 210 * 210 / 210 = 210$ N/mm²

$\sigma_v = 8020.8 \times 10^3 / 48664 = 165$ N/mm² < $\sigma_{ca} = 210$ N/mm²

(c) Check of horizontal stress



Bending moment $M_{max} = -5414.0 \text{ (kN}\cdot\text{m)}$
 Shear force $S_{max} = -4010.4 \text{ (kN)}$
 Torsion moment $T_m = 3034.6 \text{ (kN}\cdot\text{m)}$

		$A \text{ (cm}^2\text{)}$	$Y \text{ (cm)}$	$AY \text{ (cm}^3\text{)}$	$I \text{ (cm}^4\text{)}$
1-FLG PL	648*27 (SM490Y) =	174.96	-140.9	-24643	3470983
1-WEB PL	2790*19 (SM490Y) =	530.10	0.0	0	3438626
1-FLG PL	960*40 (SM570) =	384.00	141.5	54336	7688544
		1089.06		29693	14598153
					-809567
				$I =$	13788586

$$e = 29693 / 1089.06 = 27.26 \text{ cm}$$

$$Y_u = -169.46 \text{ cm}, \quad Y_L = 116.24 \text{ cm}$$

① Bending stress

$$\sigma_u = -5414.0 \cdot 10^6 \cdot -169.46 / 13788586 \cdot 10^4 = 67 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -5414.0 \cdot 10^6 \cdot 116.24 / 13788586 \cdot 10^4 = -46 \text{ N/mm}^2 < \sigma_{ca} = 255 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (279.0 - 0.0) * 1.9 = 530.1 \text{ cm}^2$$

$$\tau_s = 4010.4 * 10^3 / 53010 = 76 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 3034.6 * 10^6 / (2 * 2790 * 2700 * 19) = 11 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 76 + 11 = 86 \text{ N/mm}^2 < \tau_a = 120 \text{ N/mm}^2$$

③ Shear stress

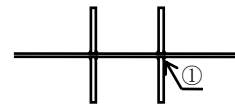
$$\kappa = (67 / 210)^2 + (86 / 120)^2 = 0.62 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-165 / 210)^2 - (-165 / 210) * (-46 / 210) + (-46 / 210)^2 + (86 / 120)^2 = 1.01 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 8043.9 * 10^3) / (8 * 2706 * 120)$$

$$= 6.2 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=19\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{req} = 6.2 / 0.707 = 8.8 \text{ mm} \rightarrow 9 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 30)} = 7.7)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 4207.8 * 10^3 / (2 * 2730 * 120)$$

$$+ 1677.5 * 10^6 / (2 * 2 * 2706 * 2250 * 120)$$

$$= 7.0 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=16\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{req} = 7.0 / 0.707 = 9.9 \text{ mm} \rightarrow 10 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 19)} = 6.2)$$

iii) Between lower flange and diaphragm

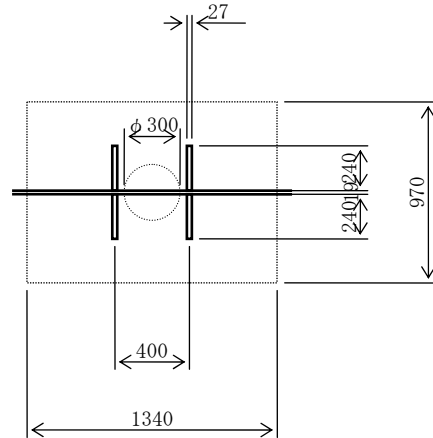
Full penetration weld is applied. (Within sole plate)

(7) Main girder: G-2 Support: S-3

Group stiffener

- G-2Maingirder support : S-4
- G-2Maingirder support : S-5
- G-2Maingirder support : S-6
- G-3Maingirder support : S-3
- G-3Maingirder support : S-4
- G-3Maingirder support : S-5
- G-3Maingirder support : S-6

Reaction force $R_v = 6956.9$ (kN)
 Torsion momen $T_m = 2554.5$ (kN·m)



(a) Check of bearing stress

			A_g (cm ²)	ボス孔欠損	A_n (cm ²)
4-STIFF	PL	240*27 (SM490Y)	= 259.20		259.20
1-DIA	PL	1394*19 (SM490Y)	= 264.86	- 30.0*1.9 =	207.86

(DIA L = 1340 + 27 + 27) $\Sigma A_n = 467.06$ cm²
 $\sigma_b = 6956.9 \times 10^3 / 46706 = 149$ N/mm² < $\sigma_{ba} = 315$ N/mm²

(b) Check of vertical stress

			Ag (cm ²)	I (cm ⁴)
4-STIFF	PL	240*27 (SM490Y) =	259.20	55913
1-DIA	PL	856*19 (SM490Y) =	162.64	0
$\Sigma Ag =$			421.84 cm ²	55913 cm ⁴

$$1.7 * A_{stiff} = 440.64 \text{ より } A_v = 421.84 \text{ cm}^2$$

$$\sigma_{cao} = 210 \text{ N/mm}^2$$

$$I = 55913 \text{ cm}^4, \quad r = 11.51 \text{ cm}$$

$$L = 139.50 \text{ cm}, \quad L/r = 12.12$$

$$\sigma_{cag} = 210 \text{ N/mm}^2$$

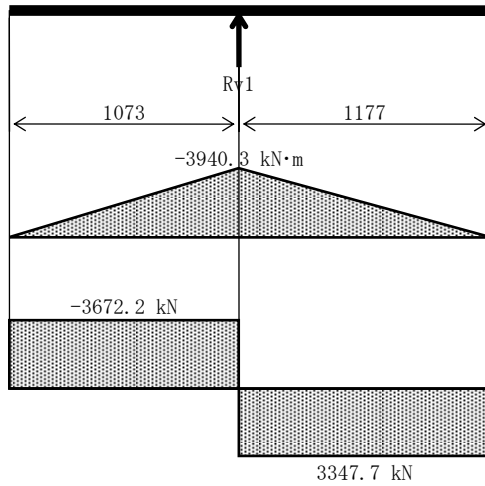
$$b/t = 240 / 27 = 8.889 < 10.5$$

$$\sigma_{cal} = 210 \text{ N/mm}^2$$

$$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 210 * 210 / 210 = 210 \text{ N/mm}^2$$

$$\sigma_v = 6956.9 * 10^3 / 42184 = 165 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

(c) Check of horizontal stress



$$\text{Bending moment } M_{max} = -4695.9 \text{ (kN}\cdot\text{m)}$$

$$\text{Shear force } S_{max} = -3478.5 \text{ (kN)}$$

$$\text{Torsion moment } T_m = 2554.5 \text{ (kN}\cdot\text{m)}$$

		A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-FLG PL	456*19 (SM490Y) =	86.64	-140.5	-12169	1709078
1-WEB PL	2790*19 (SM490Y) =	530.10	0.0	0	3438626
1-FLG PL	648*27 (SM570) =	174.96	140.9	24643	3470983
		791.70		12475	8618687
					-196557
				I =	8422131

$$e = 12475 / 791.70 = 15.76 \text{ cm}$$

$$Y_u = -157.16 \text{ cm}, \quad Y_L = 126.44 \text{ cm}$$

① Bending stress

$$\sigma_u = -4695.9 \times 10^6 \times -1571.6 / 8422131 \times 10^4 = 88 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -4695.9 \times 10^6 \times 1264.4 / 8422131 \times 10^4 = -71 \text{ N/mm}^2 < \sigma_{ca} = 255 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (279.0 - 0.0) \times 1.9 = 530.1 \text{ cm}^2$$

$$\tau_s = 3478.5 \times 10^3 / 53010 = 66 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 2554.5 \times 10^6 / (2 \times 2790 \times 2700 \times 19) = 9 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 66 + 9 = 75 \text{ N/mm}^2 < \tau_a = 120 \text{ N/mm}^2$$

③ Shear stress

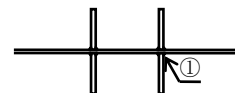
$$\kappa = (88 / 210)^2 + (75 / 120)^2 = 0.56 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-165 / 210)^2 - (-165 / 210) \times (-71 / 210) + (-71 / 210)^2 + (75 / 120)^2 = 0.85 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{\text{req}} = (2 * 7020.0 * 10^3) / (8 * 2706 * 120)$$

$$= 5.4 \text{ mm} < 0.707 * \min(S_{\text{max}}, \text{Member thickness}=19\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{\text{req}} = 5.4 / 0.707 = 7.6 \text{ mm} \rightarrow 8 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 27)} = 7.3)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{\text{req}} = 3672.2 * 10^3 / (2 * 2730 * 120)$$

$$+ 1532.2 * 10^6 / (2 * 2 * 2706 * 2250 * 120)$$

$$= 6.1 \text{ mm} < 0.707 * \min(S_{\text{max}}, \text{Member thickness}=12\text{mm}) = 8.48 \text{ mm}$$

$$\text{Required size: } S_{\text{req}} = 6.1 / 0.707 = 8.6 \text{ mm} \rightarrow 9 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 19)} = 6.2)$$

iii) Between lower flange and diaphragm

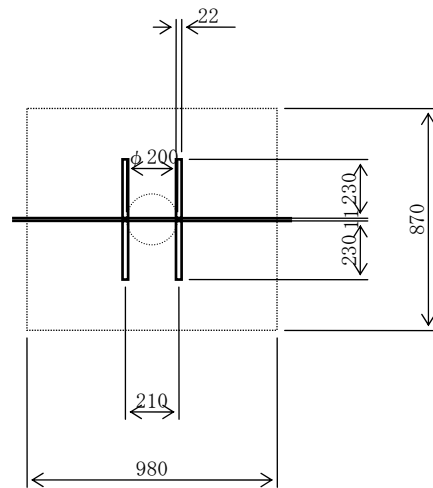
Full penetration weld is applied. (Within sole plate)

(8) Main girder: G-2 Support: S-8

Group stiffener

G-3Maingirder support : S-8

Reaction force $R_v = 2740.6$ (kN)
 Torsion momen $T_m = 1832.4$ (kN·m)



(a) Check of bearing stress

			A_g (cm ²)	Boss hole void	A_n (cm ²)
4-STIFF	PL	230*22 (SM400) =	202.40		202.40
1-DIA	PL	1006*11 (SM400) =	110.66	- 20.0*1.1 =	88.66
(DIA L = 980 + 13 + 13)					$\Sigma A_n = 291.06$ cm ²
$\sigma_b = 2740.6 \times 10^3 / 29106 = 94$ N/mm ² < $\sigma_{ba} = 210$ N/mm ²					

(b) Check of vertical stress

			A_g (cm ²)	I (cm ⁴)
4-STIFF	PL	230*22 (SM400) =	202.40	38312
1-DIA	PL	474*11 (SM400) =	52.14	0
			$\Sigma A_g = 254.54$ cm ²	38312 cm ⁴

From $1.7 * A_{stiff} = 344.08$ より $A_v = 254.54$ cm²

$$\sigma_{cao} = 140 \text{ N/mm}^2$$

$$I = 38312 \text{ cm}^4, \quad r = 12.27 \text{ cm}$$

$$L = 139.50 \text{ cm}, \quad L/r = 11.37$$

$$\sigma_{cag} = 140 \text{ N/mm}^2$$

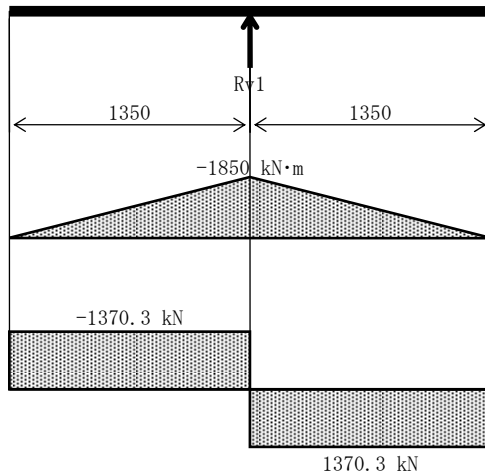
$$b/t = 230 / 22 = 10.455 < 12.8$$

$$\sigma_{cal} = 140 \text{ N/mm}^2$$

$$\sigma_{ca} = \sigma_{cag} * \sigma_{cal} / \sigma_{cao} = 140 * 140 / 140 = 140 \text{ N/mm}^2$$

$$\sigma_v = 2740.6 \times 10^3 / 25454 = 108 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

(c) Check of horizontal stress



Bending moment $M_{max} = -1849.9 \text{ (kN}\cdot\text{m)}$
 Shear force $S_{max} = -1370.3 \text{ (kN)}$
 Torsion moment $T_m = 1832.4 \text{ (kN}\cdot\text{m)}$

		$A \text{ (cm}^2\text{)}$	$Y \text{ (cm)}$	$AY \text{ (cm}^3\text{)}$	$I \text{ (cm}^4\text{)}$
1-FLG PL	384*16 (SM490Y) =	61.44	-140.3	-8620	1209390
1-WEB PL	2790*11 (SM400) =	306.90	0.0	0	1990784
1-FLG PL	312*13 (SM490Y) =	40.56	140.2	5684	796680
		408.90		-2936	3996854
					-21075
				$I =$	3975780

$$e = -2936 / 408.90 = -7.18 \text{ cm}$$

$$Y_u = -133.92 \text{ cm}, \quad Y_L = 147.98 \text{ cm}$$

① Bending stress

$$\sigma_u = -1849.9 \times 10^6 \times -1339.2 / 3975780 \times 10^4 = 62 \text{ N/mm}^2 < \sigma_{ta} = 210 \text{ N/mm}^2$$

$$\sigma_L = -1849.9 \times 10^6 \times 1479.8 / 3975780 \times 10^4 = -69 \text{ N/mm}^2 < \sigma_{ca} = 210 \text{ N/mm}^2$$

② Shear stress

Checking at manhole

$$A_w = (279.0 - 0.0) * 1.1 = 306.9 \text{ cm}^2$$

$$\tau_s = 1370.3 * 10^3 / 30690 = 45 \text{ N/mm}^2$$

Shear stress due to torsion moment

$$\tau_t = 1832.4 * 10^6 / (2 * 2790 * 2700 * 11) = 11 \text{ N/mm}^2$$

Sum of shear stress

$$\Sigma \tau = 45 + 11 = 56 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

③ Shear stress

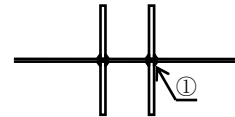
$$\kappa = (-69 / 140)^2 + (56 / 80)^2 = 0.73 < 1.2$$

(d) Check of biaxial stress

$$\alpha = (-108 / 140)^2 - (-108 / 140) * (-69 / 140) + (-69 / 140)^2 + (56 / 80)^2 = 0.94 < 1.2$$

(e) Weld size

Maximum weld size: $S_{max} = 12 \text{ mm}$



i) Between stiffener and diaphragm (①)

$$\text{Required throat thickness: } A_{req} = (2 * 2916.6 * 10^3) / (8 * 2706 * 80)$$

$$= 3.4 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 3.4 / 0.707 = 4.8 \text{ mm} \rightarrow 7 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 22)} = 6.6)$$

ii) Between diaphragm and web of main girder

$$\text{Required throat thickness: } A_{req} = 1525.7 * 10^3 / (2 * 2730 * 80)$$

$$+ 1363.9 * 10^6 / (2 * 2 * 2706 * 2250 * 80)$$

$$= 4.2 \text{ mm} < 0.707 * \min(S_{max}, \text{Member thickness}=11\text{mm}) = 7.78 \text{ mm}$$

$$\text{Required size: } S_{req} = 4.2 / 0.707 = 5.9 \text{ mm} \rightarrow 6 \text{ mm} \quad (\sqrt{(2t)} = \sqrt{(2 * 12)} = 4.9)$$

iii) Between lower flange and diaphragm

Full penetration weld is applied. (Within sole plate)

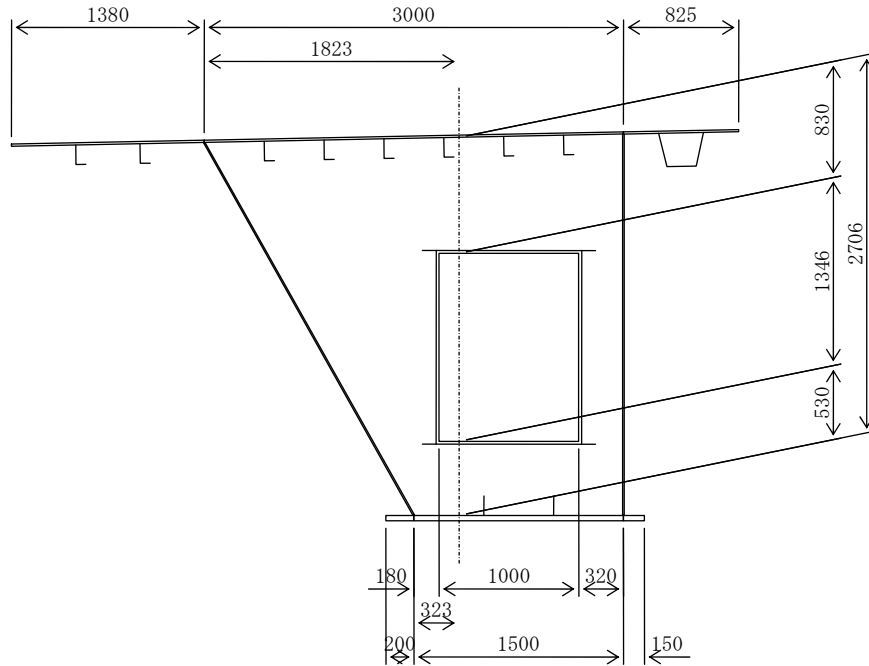
(2) MGMidDiaphragm

Calculation of mid diagram

Girder G-1, Diaphragm D-1 Frame type,

Girder G-1 Dia D-2 , Girder G-1 Dia D-3 , Girder G-1 Dia D-4 , Girder G-1 Dia D-5
Girder G-1 Dia D-6 , Girder G-1 Dia D-7 , Girder G-1 Dia D-8 , Girder G-1 Dia D-9
Girder G-1 Dia D-10 , Girder G-1 Dia D-12 , Girder G-1 Dia D-13 , Girder G-1 Dia D-14
Girder G-1 Dia D-15 , Girder G-1 Dia D-16 , Girder G-1 Dia D-17 , Girder G-1 Dia D-18
Girder G-1 Dia D-19 , Girder G-1 Dia D-20 , Girder G-1 Dia D-23 , Girder G-1 Dia D-24
Girder G-1 Dia D-25 , Girder G-1 Dia D-26 , Girder G-1 Dia D-27 , Girder G-1 Dia D-28
Girder G-1 Dia D-29 , Girder G-1 Dia D-30 , Girder G-1 Dia D-31 , Girder G-1 Dia D-34
Girder G-1 Dia D-35 , Girder G-1 Dia D-36 , Girder G-1 Dia D-37 , Girder G-1 Dia D-38
Girder G-1 Dia D-39 , Girder G-1 Dia D-40 , Girder G-1 Dia D-41 , Girder G-1 Dia D-42
Girder G-1 Dia D-45 , Girder G-1 Dia D-46 , Girder G-1 Dia D-47 , Girder G-1 Dia D-48
Girder G-1 Dia D-49 , Girder G-1 Dia D-50 , Girder G-1 Dia D-51 , Girder G-1 Dia D-52
Girder G-1 Dia D-53 , Girder G-1 Dia D-56 , Girder G-1 Dia D-57 , Girder G-1 Dia D-58
Girder G-1 Dia D-59 , Girder G-1 Dia D-60 , Girder G-1 Dia D-61 , Girder G-1 Dia D-62
Girder G-1 Dia D-63 , Girder G-1 Dia D-64 , Girder G-1 Dia D-66 , Girder G-1 Dia D-67
Girder G-1 Dia D-68 , Girder G-1 Dia D-69 , Girder G-1 Dia D-70 , Girder G-1 Dia D-71
Girder G-1 Dia D-72 , Girder G-1 Dia D-73 , Girder G-1 Dia D-74

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 88.650 \text{ m}$
Interval of diaphragms	$L_d = 10.802 \text{ m}$
Thickness of diaphragm	$T_d = 9 \text{ mm (SM400)}$
Manhole width	$b = 1000 \text{ mm}$
Manhole height	$h = 1346 \text{ mm}$

(b) Section of girder

Upper flange

Web spacing	$B_u = 3000 \text{ mm}$	$T_u = 16 \text{ mm}$	$A_u = 480.10 \text{ cm}^2$
Over edge length at left side	$B_{uL} = 1380 \text{ mm}$	$T_{uL} = 16 \text{ mm}$	$A_{uL} = 220.84 \text{ cm}^2$
Over edge length at right side	$B_{uR} = 825 \text{ mm}$	$T_{uR} = 16 \text{ mm}$	$A_{uR} = 132.03 \text{ cm}^2$
Slope	$= 2.01 \%$		

リブ断面 2-Bulb 230*11 $A = 63.96 \text{ cm}^2$ $I_y = 24 \text{ cm}^4$

リブ断面(Medium) 6-Bulb 230*11 $A = 191.88 \text{ cm}^2$ $I_y = 24 \text{ cm}^4$

リブ断面(Right) 1-U-320*240*8 $A = 53.90 \text{ cm}^2$ $I_y = 7195 \text{ cm}^4$

Total area $F_u = 1142.7 \text{ cm}^2$

Lower flange

Web spacing	$B_L = 1500 \text{ mm}$	$T_L = 38 \text{ mm}$	$A_L = 570.00 \text{ cm}^2$
Over edge length at left side	$B_{LL} = 200 \text{ mm}$	$T_{LL} = 38 \text{ mm}$	$A_{LL} = 76.00 \text{ cm}^2$
Over edge length at right side	$B_{LR} = 150 \text{ mm}$	$T_{LR} = 38 \text{ mm}$	$A_{LR} = 57.00 \text{ cm}^2$

Rib section 2-PL 220* 19 $A = 83.60 \text{ cm}^2$

Total area $F_L = 786.6 \text{ cm}^2$

Web

Height	Hw =	2706 mm
Thickness	Tw =	12 mm
Total area	Fh =	347.5 cm ²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$L_u = 88.650 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * L_u - 1.0 = 0.14 * 88.650 - 1.0 = 11.411 \text{ m} > L_d = 10.802 \text{ m}$$

(3) Calculation of Aperture ratio ρ

$$\begin{aligned}\rho &= \sqrt{\{ (b * h) / ((B_u + B_L) * H_w / 2) \}} \\ &= \sqrt{\{ (1000 * 1346) / ((3000 + 1500) * 2706 / 2) \}} = 0.47 > 0.40\end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned}e &= I_L / B_L + ((B_u + 2 * B_L) / 12) * F_h \\ &= 2057265 / 150.0 + ((300.0 + 2 * 150.0) / 12) * 347.5 = 31090 \text{ cm}^3\end{aligned}$$

$$\begin{aligned}f &= I_u / B_u + ((2 * B_u + B_L) / 12) * F_h \\ &= 25556886 / 300.0 + ((2 * 300.0 + 150.0) / 12) * 347.5 = 106908 \text{ cm}^3\end{aligned}$$

$$\begin{aligned}\alpha_1 &= e / (e + f) * (B_u + B_L) / 4 * H_w \\ &= 31090 / (31090 + 106908) * (300.0 + 150.0) / 4 * 270.6 = 6858 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\alpha_2 &= f / (e + f) * (B_u + B_L) / 4 * H_w \\ &= 106908 / (31090 + 106908) * (300.0 + 150.0) / 4 * 270.6 = 23584 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}I_{dw} &= 1/3 \{ \alpha_1^2 * F_u * (1 + (b_{u1} + b_{u2}) / B_u)^2 \\ &\quad + \alpha_2^2 * F_L * (1 + (b_{L1} + b_{L2}) / B_L)^2 \\ &\quad + 2 * (\alpha_1^2 - \alpha_1 * \alpha_2 + \alpha_2^2) * F_h \} \\ &= 1/3 \{ 6858^2 * 1142.7 * (1 + (138.0 + 82.5) / 300.0)^2 \\ &\quad + 23584^2 * 786.6 * (1 + (20.0 + 15.0) / 150.0)^2 \\ &\quad + 2 * (6858^2 - 6858 * 23584 + 23584^2) * 347.5 \} \\ &= 3.781 * 10^{11} \text{ cm}^6 = 3.781 * 10^{17} \text{ mm}^6\end{aligned}$$

$$I_u : \text{Moment of inertia about vertical axis for uflg incl. ribs} = 25556886 \text{ cm}^4$$

$$I_L : \text{Moment of inertia about vertical axis for lflg incl. ribs} = 2057265 \text{ cm}^4$$

$$F_u : \text{Total section area of upper flange (including ribs)} = 1142.7 \text{ cm}^2$$

$$F_L : \text{Total section area of lower flange (including ribs)} = 786.6 \text{ cm}^2$$

$$F_h : \text{Section area of web par piece} = 347.5 \text{ cm}^2$$

$$H_w : \text{Height of web} = 270.6 \text{ cm}$$

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_{d^3}$$
$$= 20 * 2.0 * 10^5 * 3.781 * 10^{17} / 11411.1^3 = 1.018 * 10^{12} \text{ N}\cdot\text{mm}$$

E_s : Young's modulus of steel = $2.0 * 10^5 \text{ N/mm}^2$

I_{dw} : Warping constant

L_{dreq} : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h$$

$$= 180.04/159467 + 180.04/64051 + 6*238.55/52480 = 3.12 * 10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 238.55^2/52480^2 = 6.20 * 10^{-5} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 180.04*238.55/(159467*52480) = 1.03 * 10^{-5} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 180.04*238.55/(52480*64051) = 2.56 * 10^{-5} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 180.04^2/(159467*64051) = 3.17 * 10^{-6} \text{ cm}^{-6}$$

$$K = \frac{48 * 2.0 * 10^5 * 3.12 * 10^{-2} * 10^{-3}}{(6.20 * 10^{-5} + 1.03 * 10^{-5} + 2.56 * 10^{-5} + 3.17 * 10^{-6}) * 10^{-6}}$$

$$= 2.967 * 10^{12} \text{ N}\cdot\text{mm}$$

Where,

E_s : Young's modulus of steel = $2.0 * 10^5 \text{ N/mm}^2$

bb : Distance between neutral axes of vertical members cm

hh : Distance between neutral axes of horizontal members cm

II_u : Moment of inertia of upper member of the frame cm^4

II_L : Moment of inertia of lower member of the frame cm^4

II_h : Moment of inertia of vertical members of the frame cm^4

Effective width of ange is up to 24 times thickness)

$$1 - \text{FLG PL} \quad 384 * 16 = 61.44 \text{cm}^2 \quad II_u = 159467 \text{ cm}^4$$

$$1 - \text{WEB PL} \quad 830 * 9 = A_w = 74.70 \text{cm}^2 \quad D_u = 31.12 \text{ cm}$$

$$2 - \text{COL PL} \quad 95 * 10 = A_f = 19.00 \text{cm}^2 \quad D_L = 53.48 \text{ cm}$$

Effective width of lower flange is up to 24 times thickness)

$$\begin{array}{lclclcl}
 1 - \text{FLG PL} & 912 * 38 = & 346.56\text{cm}^2 & = & 64051 \text{ cm}^4 \\
 1 - \text{WEB PL} & 530 * 9 = \text{Aw} = & 47.70\text{cm}^2 & \text{Du} = & 6.32 \text{ cm} \\
 2 - \text{COL PL} & 45 * 9 = \text{Af} = & 8.10\text{cm}^2 & \text{DL} = & 50.48 \text{ cm}
 \end{array}$$

Effective width of web is up to 24 times thickness)

$$\begin{array}{lclclcl}
 1 - \text{FLG PL} & 288 * 12 = & 34.56\text{cm}^2 & \text{ange} = & 52480 \text{ cm}^4 \\
 1 - \text{WEB PL} & 625 * 9 = \text{Aw} = & 56.25\text{cm}^2 & \text{Du} = & 23.68 \text{ cm} \\
 2 - \text{COL PL} & 45 * 9 = \text{Af} = & 8.10\text{cm}^2 & \text{DL} = & 40.02 \text{ cm}
 \end{array}$$

Therefore,

$$\begin{array}{lcl}
 \text{bb} & = & 100.0 + 2 * 40.02 = 180.04 \text{ cm} \\
 \text{hh} & = & 134.6 + 53.48 + 50.48 = 238.55 \text{ cm}
 \end{array}$$

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.47$

Calculation of ratio of area

$$\max(\text{Af}/\text{Aw}) = 19.00 / 74.70 = 0.254$$

Where,

Af : Collar plate section area of diaphragm

Aw : Web section area of diaphragm

Calculation of height width ration

$$(B_u + B_L) / (2 * H_w) = (300.0 + 150.0) / (2 * 270.6) = 0.83$$

By "Designing manual of steel highway bridge"

$$\beta = 1.823$$

(c) Calculation of correction stiffness

$$\begin{aligned}
 K' &= K * \beta = 2.967 * 10^{12} * 1.823 = 5.409 * 10^{12} \text{ N}\cdot\text{mm} \\
 &> K_{req} = 1.018 * 10^{12} \text{ N}\cdot\text{mm}
 \end{aligned}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 2.002 m

(Roadway 4.575 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment } T_{dia} = T_{p1} * D + T_{p2} * L_d$$

T_{p1} : Torque moment due to p_1 load

T_{p2} : Torque moment due to p_2 load

D : Loading length = 10.000 m

L_d : Diaphragm spacing = 10.802 m

Left Loading

$$T_{p1} = 10.0 * 2.573^2 / 2 = 33.10 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 2.573^2 / 2 = 10.57 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = 33.1 * 10.000 + 10.6 * 10.802 = 445.15 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} \mu_u &= (T_{dia} / 4) * (b_b / I_{IL} + 3 * h_h / I_{IH}) / (b_b / I_{IU} + b_b / I_{IL} + 6 * h_h / I_{IH}) \\ &= (445.15 / 4) * (180.04 / 64051 + 3 * 238.55 / 52480) \\ &\quad / (180.04 / 159467 + 180.04 / 64051 + 6 * 238.55 / 52480) \\ &= 58.64 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} \mu_L &= (T_{dia} / 4) * (b_b / I_{IU} + 3 * h_h / I_{IH}) / (b_b / I_{IU} + b_b / I_{IL} + 6 * h_h / I_{IH}) \\ &= (445.15 / 4) * (180.04 / 159467 + 3 * 238.55 / 52480) \\ &\quad / (180.04 / 159467 + 180.04 / 64051 + 6 * 238.55 / 52480) \\ &= 52.65 \text{ kN}\cdot\text{m} \end{aligned}$$

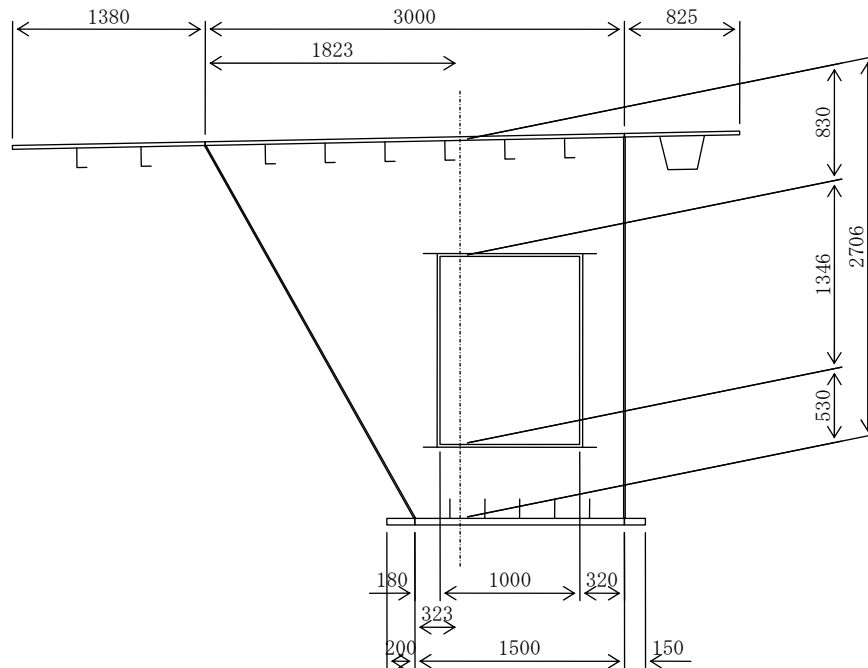
$$\begin{aligned} \sigma_u &= \mu_u * D_u / I_{IH} \\ &= 58.64 * 10^6 * 236.8 / (52480 * 10^4) = 26 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

$$\begin{aligned} \sigma_L &= \mu_L * D_L / I_{IH} \\ &= 52.65 * 10^6 * 400.2 / (52480 * 10^4) = 40 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

Girder G-1, Diaphragm D-11 Frame type,

Girder G-1 Dia D-65

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 52.647$ m
Interval of diaphragms	$L_d = 8.000$ m
Thickness of diaphragm	$T_d = 15$ mm (SM400)
Manhole width	$b = 1000$ mm
Manhole height	$h = 1346$ mm

(b) Section of girder

Upper flange

Web spacing	$B_u = 3000$ mm , $T_u = 26$ mm , $A_u = 780.16$ cm ²
Over edge length at left side	$B_{uL} = 1380$ mm , $T_{uL} = 26$ mm , $A_{uL} = 358.87$ cm ²
Over edge length at right side	$B_{uR} = 825$ mm , $T_{uR} = 26$ mm , $A_{uR} = 214.54$ cm ²
Slope	= 2.00 %

Section 2-Bulb 230*11 $A = 63.96$ cm² $I_y = 24$ cm⁴

Section (Medium) 6-Bulb 230*11 $A = 191.88$ cm² $I_y = 24$ cm⁴

Section (Right) 1-U-320*240*8 $A = 53.90$ cm² $I_y = 7195$ cm⁴

Total area $F_u = 1663.3$ cm²

Lower flange

Web spacing	BL = 1500 mm , TL = 47 mm , AL = 705.00 cm ²
Over edge length at left side	BLL = 200 mm , TLL = 47 mm , ALL = 94.00 cm ²
Over edge length at right side	BLR = 150 mm , TLR = 47 mm , ALR = 70.50 cm ²
Rib section	5-PL 220* 19 A = 209.00 cm ²
Total area	FL = 1078.5 cm ²

Web

Height	Hw = 2706 mm
Thickness	Tw = 12 mm
Total area	Fh = 347.5 cm ²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$Lu = 52.647 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * Lu - 1.0 = 0.14 * 52.647 - 1.0 = 6.371 \text{ m} < L_d = 8.000 \text{ m}$$

Diaphragm added to the intermediate part

(3) Calculation of Aperture ratio ρ

$$\begin{aligned} \rho &= \sqrt{ \{ (b * h) / ((Bu+BL) * Hw / 2) \} } \\ &= \sqrt{ \{ (1000 * 1346) / ((3000+1500) * 2706 / 2) \} } = 0.47 > 0.40 \end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned} e &= IL / BL + ((Bu + 2 * BL) / 12) * Fh \\ &= 2741136 / 150.0 + ((300.0 + 2 * 150.0) / 12) * 347.5 = 35649 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} f &= I_u / Bu + ((2 * Bu + BL) / 12) * Fh \\ &= 37712306 / 300.0 + ((2 * 300.0 + 150.0) / 12) * 347.5 = 147426 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \alpha 1 &= e / (e + f) * (Bu + BL) / 4 * Hw \\ &= 35649 / (35649 + 147426) * (300.0 + 150.0) / 4 * 270.6 = 5928 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \alpha 2 &= f / (e + f) * (Bu + BL) / 4 * Hw \\ &= 147426 / (35649 + 147426) * (300.0 + 150.0) / 4 * 270.6 = 24515 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} I_{dw} &= 1/3 \{ \alpha 1^2 * Fu * (1 + (bu1 + bu2) / Bu)^2 \\ &\quad + \alpha 2^2 * FL * (1 + (bL1 + bL2) / BL)^2 \\ &\quad + 2 * (\alpha 1^2 - \alpha 1 * \alpha 2 + \alpha 2^2) * Fh \} \\ &= 1/3 \{ 5928^2 * 1663.3 * (1 + (138.0 + 82.5) / 300.0)^2 \\ &\quad + 24515^2 * 1078.5 * (1 + (20.0 + 15.0) / 150.0)^2 \\ &\quad + 2 * (5928^2 - 5928 * 24515 + 24515^2) * 347.5 \} \\ &= 5.010 * 10^{11} \text{ cm}^6 = 5.010 * 10^{17} \text{ mm}^6 \end{aligned}$$

Iu	: Moment of inertia about vertical axis for uflg incl. ribs	=	37712306 cm ⁴
IL	: Moment of inertia about vertical axis for lflg incl. ribs	=	2741136 cm ⁴
Fu	: Total section area of upper flange (including ribs)	=	1663.3 cm ²
FL	: Total section area of lower flange (including ribs)	=	1078.5 cm ²
Fh	: Section area of web par piece	=	347.5 cm ²
Hw	: Height of web	=	270.6 cm

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_d^3$$

$$= 20 * 2.0 * 10^5 * 5.010 * 10^{17} / 6370.6^3 = 7.751 * 10^{12} \text{ N}\cdot\text{mm}$$

Es : Young's modulus of steel = 2.0*10⁵ N/mm²
 Idw : Warping constant
 Ldreq : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h = 175.22/271726 + 175.22/95452 + 6*247.33/66778 = 2.47*10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 247.33^2/66778^2 = 4.12*10^{-5} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 175.22*247.33/(271726*66778) = 4.78*10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 175.22*247.33/(66778*95452) = 1.36*10^{-5} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 175.22^2/(271726*95452) = 1.18*10^{-6} \text{ cm}^{-6}$$

$$K = \frac{48 * 2.0 * 10^5 * 2.47 * 10^{-2} * 10^{-3}}{(4.12 * 10^{-5} + 4.78 * 10^{-6} + 1.36 * 10^{-5} + 1.18 * 10^{-6}) * 10^{-6}}$$

$$= 3.906 * 10^{12} \text{ N}\cdot\text{mm}$$

Where,

Es : Young's modulus of steel = 2.0×10^5 N/mm²
bb : Distance between neutral axes of vertical members cm
hh : Distance between neutral axes of horizontal members cm
IIu : Moment of inertia of upper member of the frame cm⁴
IIL : Moment of inertia of lower member of the frame cm⁴
IIh : Moment of inertia of vertical members of the frame cm⁴

Effective width of ange is up to 24 times thickness)

1 - FLG PL 624 * 26 = 162.24cm² IIu = 271726 cm⁴
1 - WEB PL 830 * 15 = Aw =124.50cm² Du = 23.81 cm
2 - COL PL 95 * 10 = Af= 19.00cm² DL = 61.79 cm

Effective width of lower flange is up to 24 times thickness)

1 - FLG PL 1128 * 47 = 530.16cm² = 95452 cm⁴
1 - WEB PL 530 * 15 = Aw = 79.50cm² Du = 6.76 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 50.94 cm

Effective width of web is up to 24 times thickness)

1 - FLG PL 288 * 12 = 34.56cm² ange = 66778 cm⁴
1 - WEB PL 625 * 15 = Aw = 93.75cm² Du = 26.09 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 37.61 cm

Therefore,

bb = 100.0 + 2 * 37.61 = 175.22 cm
hh = 134.6 + 61.79 + 50.94 = 247.33 cm

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.47$

Calculation of ratio of area

$$\max(Af/Aw) = 19.00 / 124.50 = 0.153$$

Where,

Af : Collar plate section area of diaphragm

Aw : Web section area of diaphragm

Calculation of height width ration

$$(Bu + BL) / (2 * Hw) = (300.0 + 150.0) / (2 * 270.6) = 0.83$$

By "Designing manual of steel highway bridge"

$$\beta = 2.077$$

(c) Calculation of correction stiffness

$$K' = K * \beta = 3.906 * 10^{12} * 2.077 = 8.114 * 10^{12} \text{ N}\cdot\text{mm}$$

$$> K_{req} = 7.751 * 10^{12} \text{ N}\cdot\text{mm}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 2.002 m

(Roadway 4.575 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment dia} = (T_{p1} + T_{p2}) * L_d$$

T_{p1} : Torque moment due to p1 load

T_{p2} : Torque moment due to p2 load

L_d : Diaphragm spacing = 8.000 m

Left Loading

$$T_{p1} = 10.0 * 2.573^2 / 2 = 33.10 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 2.573^2 / 2 = 10.53 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = (33.1 + 10.5) * 8.000 = 349.02 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} M_u &= (T_{dia} / 4) * (bb / I_{IL} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (349.02 / 4) * (175.22 / 95452 + 3 * 247.33 / 66778) \\ &\quad / (175.22 / 271726 + 175.22 / 95452 + 6 * 247.33 / 66778) \\ &= 45.73 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} M_L &= (T_{dia} / 4) * (bb / I_{Iu} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (349.02 / 4) * (175.22 / 271726 + 3 * 247.33 / 66778) \\ &\quad / (175.22 / 271726 + 175.22 / 95452 + 6 * 247.33 / 66778) \\ &= 41.52 \text{ kN}\cdot\text{m} \end{aligned}$$

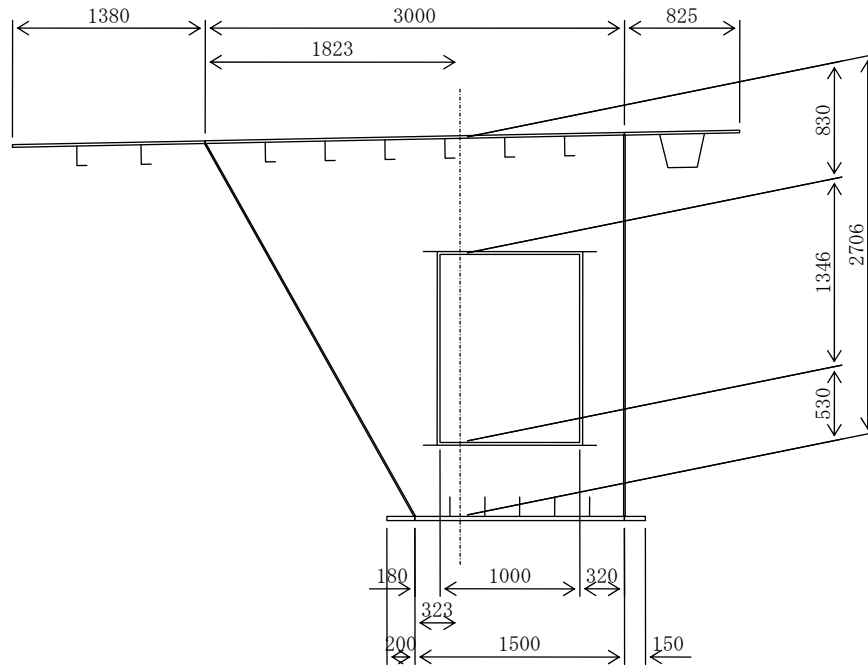
$$\begin{aligned} \sigma_u &= M_u * D_u / I_{Ih} \\ &= 45.73 * 10^6 * 260.9 / (66778 * 10^4) = 18 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

$$\begin{aligned} \sigma_L &= M_L * D_L / I_{Ih} \\ &= 41.52 * 10^6 * 376.1 / (66778 * 10^4) = 23 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

Girder G-1, Diaphragm D-21 Frame type,

Girder G-1 Dia D-22 , Girder G-1 Dia D-32 , Girder G-1 Dia D-33 , Girder G-1 Dia D-43
 Girder G-1 Dia D-44 , Girder G-1 Dia D-54 , Girder G-1 Dia D-55

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 52.800 \text{ m}$
Interval of diaphragms	$L_d = 8.000 \text{ m}$
Thickness of diaphragm	$T_d = 13 \text{ mm (SM400)}$
Manhole width	$b = 1000 \text{ mm}$
Manhole height	$h = 1346 \text{ mm}$

(b) Section of girder

Upper flange

Web spacing	$B_u = 3000 \text{ mm}$	$T_u = 19 \text{ mm}$	$A_u = 570.11 \text{ cm}^2$
Over edge length at left side	$B_{uL} = 1380 \text{ mm}$	$T_{uL} = 19 \text{ mm}$	$A_{uL} = 262.25 \text{ cm}^2$
Over edge length at right side	$B_{uR} = 825 \text{ mm}$	$T_{uR} = 19 \text{ mm}$	$A_{uR} = 156.78 \text{ cm}^2$
Slope	$= 2.00 \%$		
Section	2-Bulb 230*11	$A = 63.96 \text{ cm}^2$	$I_y = 24 \text{ cm}^4$
Section(Medium)	6-Bulb 230*11	$A = 191.88 \text{ cm}^2$	$I_y = 24 \text{ cm}^4$
Section(Right)	1-U-320*240*8	$A = 53.90 \text{ cm}^2$	$I_y = 7195 \text{ cm}^4$
Total area	$F_u = 1298.9 \text{ cm}^2$		

Lower flange

Web spacing BL = 1500 mm , TL = 30 mm , AL = 450.00 cm²
Over edge length at left side BLL = 200 mm , TLL = 30 mm , ALL = 60.00 cm²
Over edge length at right side BLR = 150 mm , TLR = 30 mm , ALR = 45.00 cm²
Rib section 5-PL 220* 19 A = 209.00 cm²
Total area FL = 764.0 cm²

Web

Height Hw = 2706 mm
Thickness Tw = 12 mm
Total area Fh = 347.5 cm²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$Lu = 52.800 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * Lu - 1.0 = 0.14 * 52.800 - 1.0 = 6.392 \text{ m} < L_d = 8.000 \text{ m}$$

Diaphragm added to the intermediate part

(3) Calculation of Aperture ratio ρ

$$\begin{aligned} \rho &= \sqrt{ \{ (b * h) / ((Bu+BL) * Hw / 2) \} } \\ &= \sqrt{ \{ (1000 * 1346) / ((3000+1500) * 2706 / 2) \} } = 0.47 > 0.40 \end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned} e &= I_L / BL + ((Bu + 2 * BL) / 12) * F_h \\ &= 1844156 / 150.0 + ((300.0 + 2 * 150.0) / 12) * 347.5 = 29669 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} f &= I_u / Bu + ((2 * Bu + BL) / 12) * F_h \\ &= 29203512 / 300.0 + ((2 * 300.0 + 150.0) / 12) * 347.5 = 119064 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \alpha_1 &= e / (e + f) * (Bu + BL) / 4 * H_w \\ &= 29669 / (29669 + 119064) * (300.0 + 150.0) / 4 * 270.6 = 6073 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \alpha_2 &= f / (e + f) * (Bu + BL) / 4 * H_w \\ &= 119064 / (29669 + 119064) * (300.0 + 150.0) / 4 * 270.6 = 24370 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} I_{dw} &= 1/3 \{ \alpha_1^2 * F_u * (1 + (bu_1 + bu_2) / Bu)^2 \\ &\quad + \alpha_2^2 * F_L * (1 + (bL_1 + bL_2) / BL)^2 \\ &\quad + 2 * (\alpha_1^2 - \alpha_1 * \alpha_2 + \alpha_2^2) * F_h \} \\ &= 1/3 \{ 6073^2 * 1298.9 * (1 + (138.0 + 82.5) / 300.0)^2 \\ &\quad + 24370^2 * 764.0 * (1 + (20.0 + 15.0) / 150.0)^2 \\ &\quad + 2 * (6073^2 - 6073 * 24370 + 24370^2) * 347.5 \} \\ &= 3.900 * 10^{11} \text{ cm}^6 = 3.900 * 10^{17} \text{ mm}^6 \end{aligned}$$

Iu	: Moment of inertia about vertical axis for uflg incl. ribs	=	29203512 cm ⁴
IL	: Moment of inertia about vertical axis for lflg incl. ribs	=	1844156 cm ⁴
Fu	: Total section area of upper flange (including ribs)	=	1298.9 cm ²
FL	: Total section area of lower flange (including ribs)	=	764.0 cm ²
Fh	: Section area of web par piece	=	347.5 cm ²
Hw	: Height of web	=	270.6 cm

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_d^3$$

$$= 20 * 2.0 * 10^5 * 3.900 * 10^{17} / 6392.0^3 = 5.973 * 10^{12} \text{ N}\cdot\text{mm}$$

E_s : Young's modulus of steel = 2.0*10⁵ N/mm²

I_{dw} : Warping constant

L_{dreq} : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h = 176.50/206577 + 176.50/73229 + 6*236.33/62153 = 2.61*10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 236.33^2/62153^2 = 4.34*10^{-5} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 176.50*236.33/(206577*62153) = 6.50*10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 176.50*236.33/(62153*73229) = 1.83*10^{-5} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 176.50^2/(206577*73229) = 2.06*10^{-6} \text{ cm}^{-6}$$

$$K = \frac{48 * 2.0*10^5 * 2.61*10^{-2} * 10^{-3}}{(4.34*10^{-5} + 6.50*10^{-6} + 1.83*10^{-5} + 2.06*10^{-6}) * 10^{-6}}$$

$$= 3.563*10^{12} \text{ N}\cdot\text{mm}$$

Where,

Es : Young's modulus of steel = 2.0×10^5 N/mm²
bb : Distance between neutral axes of vertical members cm
hh : Distance between neutral axes of horizontal members cm
IIu : Moment of inertia of upper member of the frame cm⁴
IIL : Moment of inertia of lower member of the frame cm⁴
IIh : Moment of inertia of vertical members of the frame cm⁴

Effective width of ange is up to 24 times thickness)

1 - FLG PL 456 * 19 = 86.64cm² IIu = 206577 cm⁴
1 - WEB PL 830 * 13 = Aw =107.90cm² Du = 29.65 cm
2 - COL PL 95 * 10 = Af= 19.00cm² DL = 55.25 cm

Effective width of lower flange is up to 24 times thickness)

1 - FLG PL 720 * 30 = 216.00cm² = 73229 cm⁴
1 - WEB PL 530 * 13 = Aw = 68.90cm² Du = 9.52 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 46.48 cm

Effective width of web is up to 24 times thickness)

1 - FLG PL 288 * 12 = 34.56cm² ange = 62153 cm⁴
1 - WEB PL 625 * 13 = Aw = 81.25cm² Du = 25.45 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 38.25 cm

Therefore,

bb = 100.0 + 2 * 38.25 = 176.50 cm
hh = 134.6 + 55.25 + 46.48 = 236.33 cm

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.47$

Calculation of ratio of area

$$\max(Af/Aw) = 19.00 / 107.90 = 0.176$$

Where,

Af : Collar plate section area of diaphragm

Aw : Web section area of diaphragm

Calculation of height width ration

$$(Bu + BL) / (2 * Hw) = (300.0 + 150.0) / (2 * 270.6) = 0.83$$

By "Designing manual of steel highway bridge"

$$\beta = 2.011$$

(c) Calculation of correction stiffness

$$K' = K * \beta = 3.563 * 10^{12} * 2.011 = 7.166 * 10^{12} \text{ N}\cdot\text{mm}$$

$$> K_{req} = 5.973 * 10^{12} \text{ N}\cdot\text{mm}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 2.002 m

(Roadway 4.575 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment dia} = (T_{p1} + T_{p2}) * L_d$$

T_{p1} : Torque moment due to p1 load

T_{p2} : Torque moment due to p2 load

L_d : Diaphragm spacing = 8.000 m

Left Loading

$$T_{p1} = 10.0 * 2.573^2 / 2 = 33.10 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 2.573^2 / 2 = 10.53 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = (33.1 + 10.5) * 8.000 = 349.02 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} M_u &= (T_{dia} / 4) * (bb / I_{IL} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (349.02 / 4) * (176.50 / 73229 + 3 * 236.33 / 62153) \\ &\quad / (176.50 / 206577 + 176.50 / 73229 + 6 * 236.33 / 62153) \\ &= 46.23 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} M_L &= (T_{dia} / 4) * (bb / I_{Iu} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (349.02 / 4) * (176.50 / 206577 + 3 * 236.33 / 62153) \\ &\quad / (176.50 / 206577 + 176.50 / 73229 + 6 * 236.33 / 62153) \\ &= 41.03 \text{ kN}\cdot\text{m} \end{aligned}$$

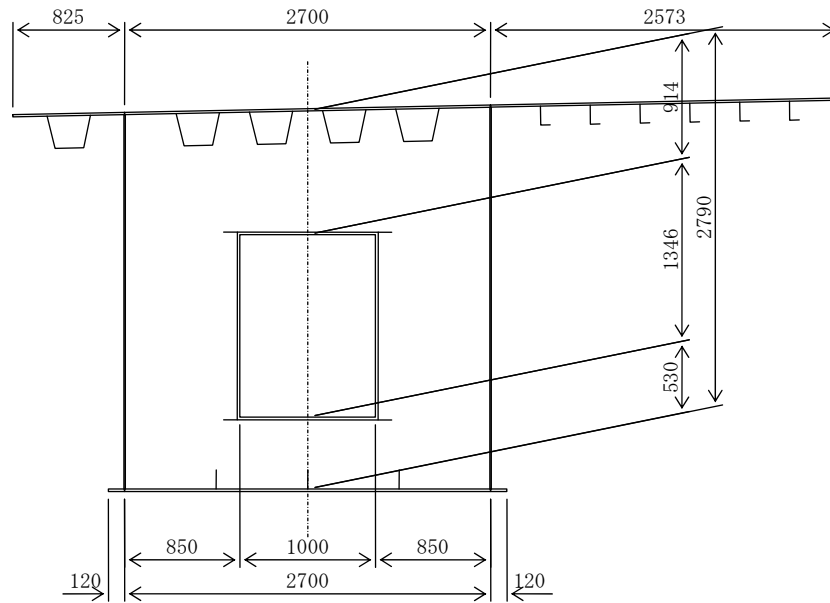
$$\begin{aligned} \sigma_u &= M_u * D_u / I_{Ih} \\ &= 46.23 * 10^6 * 254.5 / (62153 * 10^4) = 19 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

$$\begin{aligned} \sigma_L &= M_L * D_L / I_{Ih} \\ &= 41.03 * 10^6 * 382.5 / (62153 * 10^4) = 25 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

Girder G-2, Diaphragm D-1 Frame type,

Girder G-2 Dia D-2 , Girder G-2 Dia D-3 , Girder G-2 Dia D-4 , Girder G-2 Dia D-5
Girder G-2 Dia D-6 , Girder G-2 Dia D-7 , Girder G-2 Dia D-8 , Girder G-2 Dia D-9
Girder G-2 Dia D-10 , Girder G-2 Dia D-12 , Girder G-2 Dia D-13 , Girder G-2 Dia D-14
Girder G-2 Dia D-15 , Girder G-2 Dia D-16 , Girder G-2 Dia D-17 , Girder G-2 Dia D-18
Girder G-2 Dia D-19 , Girder G-2 Dia D-20 , Girder G-2 Dia D-23 , Girder G-2 Dia D-24
Girder G-2 Dia D-25 , Girder G-2 Dia D-26 , Girder G-2 Dia D-27 , Girder G-2 Dia D-28
Girder G-2 Dia D-29 , Girder G-2 Dia D-30 , Girder G-2 Dia D-31 , Girder G-2 Dia D-34
Girder G-2 Dia D-35 , Girder G-2 Dia D-36 , Girder G-2 Dia D-37 , Girder G-2 Dia D-38
Girder G-2 Dia D-39 , Girder G-2 Dia D-40 , Girder G-2 Dia D-41 , Girder G-2 Dia D-42
Girder G-2 Dia D-45 , Girder G-2 Dia D-46 , Girder G-2 Dia D-47 , Girder G-2 Dia D-48
Girder G-2 Dia D-49 , Girder G-2 Dia D-50 , Girder G-2 Dia D-51 , Girder G-2 Dia D-52
Girder G-2 Dia D-53 , Girder G-2 Dia D-56 , Girder G-2 Dia D-57 , Girder G-2 Dia D-58
Girder G-2 Dia D-59 , Girder G-2 Dia D-60 , Girder G-2 Dia D-61 , Girder G-2 Dia D-62
Girder G-2 Dia D-63 , Girder G-2 Dia D-64 , Girder G-2 Dia D-66 , Girder G-2 Dia D-67
Girder G-2 Dia D-68 , Girder G-2 Dia D-69 , Girder G-2 Dia D-70 , Girder G-2 Dia D-71
Girder G-2 Dia D-72 , Girder G-2 Dia D-73 , Girder G-2 Dia D-74

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 88.650 \text{ m}$
Interval of diaphragms	$L_d = 10.802 \text{ m}$
Thickness of diaphragm	$T_d = 9 \text{ mm (SM400)}$
Manhole width	$b = 1000 \text{ mm}$
Manhole height	$h = 1346 \text{ mm}$

(b) Section of girder

Upper flange

Web spacing	$B_u = 2700 \text{ mm}$	$T_u = 16 \text{ mm}$	$A_u = 432.09 \text{ cm}^2$
Over edge length at left side	$B_{uL} = 825 \text{ mm}$	$T_{uL} = 16 \text{ mm}$	$A_{uL} = 132.03 \text{ cm}^2$
Over edge length at right side	$B_{uR} = 2573 \text{ mm}$	$T_{uR} = 16 \text{ mm}$	$A_{uR} = 411.76 \text{ cm}^2$
Slope	$= 2.01 \%$		
Section	1-U-320*240*8	$A = 53.90 \text{ cm}^2$	$I_y = 7195 \text{ cm}^4$
Section (Medium)	4-U-320*240*8	$A = 215.60 \text{ cm}^2$	$I_y = 7195 \text{ cm}^4$
Section (Right)	6-Bulb 230*11	$A = 191.88 \text{ cm}^2$	$I_y = 24 \text{ cm}^4$
Total area	$F_u = 1437.3 \text{ cm}^2$		

Lower flange

Web spacing	$B_L = 2700 \text{ mm}$	$T_L = 20 \text{ mm}$	$A_L = 540.00 \text{ cm}^2$
Over edge length at left side	$B_{LL} = 120 \text{ mm}$	$T_{LL} = 20 \text{ mm}$	$A_{LL} = 24.00 \text{ cm}^2$
Over edge length at right side	$B_{LR} = 120 \text{ mm}$	$T_{LR} = 20 \text{ mm}$	$A_{LR} = 24.00 \text{ cm}^2$
Rib section	3-PL 220* 19	$A = 125.40 \text{ cm}^2$	
Total area	$F_L = 713.4 \text{ cm}^2$		

Web

Height	Hw =	2790 mm
Thickness	Tw =	11 mm
Total area	Fh =	306.9 cm ²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$L_u = 88.650 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * L_u - 1.0 = 0.14 * 88.650 - 1.0 = 11.411 \text{ m} > L_d = 10.802 \text{ m}$$

(3) Calculation of Aperture ratio ρ

$$\begin{aligned}\rho &= \sqrt{\{ (b * h) / ((B_u + B_L) * H_w / 2) \}} \\ &= \sqrt{\{ (1000 * 1346) / ((2700 + 2700) * 2790 / 2) \}} = 0.42 > 0.40\end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned}e &= I_L / B_L + ((B_u + 2 * B_L) / 12) * F_h \\ &= 4616267 / 270.0 + ((270.0 + 2 * 270.0) / 12) * 306.9 = 37813 \text{ cm}^3\end{aligned}$$

$$\begin{aligned}f &= I_u / B_u + ((2 * B_u + B_L) / 12) * F_h \\ &= 54287190 / 270.0 + ((2 * 270.0 + 270.0) / 12) * 306.9 = 221779 \text{ cm}^3\end{aligned}$$

$$\begin{aligned}\alpha_1 &= e / (e + f) * (B_u + B_L) / 4 * H_w \\ &= 37813 / (37813 + 221779) * (270.0 + 270.0) / 4 * 279.0 = 5486 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}\alpha_2 &= f / (e + f) * (B_u + B_L) / 4 * H_w \\ &= 221779 / (37813 + 221779) * (270.0 + 270.0) / 4 * 279.0 = 32179 \text{ cm}^2\end{aligned}$$

$$\begin{aligned}I_{dw} &= 1/3 \{ \alpha_1^2 * F_u * (1 + (b_{u1} + b_{u2}) / B_u)^2 \\ &\quad + \alpha_2^2 * F_L * (1 + (b_{L1} + b_{L2}) / B_L)^2 \\ &\quad + 2 * (\alpha_1^2 - \alpha_1 * \alpha_2 + \alpha_2^2) * F_h \} \\ &= 1/3 \{ 5486^2 * 1437.3 * (1 + (82.5 + 257.3) / 270.0)^2 \\ &\quad + 32179^2 * 713.4 * (1 + (12.0 + 12.0) / 270.0)^2 \\ &\quad + 2 * (5486^2 - 5486 * 32179 + 32179^2) * 306.9 \} \\ &= 5.474 * 10^{11} \text{ cm}^6 = 5.474 * 10^{17} \text{ mm}^6\end{aligned}$$

$$I_u : \text{Moment of inertia about vertical axis for uflg incl. ribs} = 54287190 \text{ cm}^4$$

$$I_L : \text{Moment of inertia about vertical axis for lflg incl. ribs} = 4616267 \text{ cm}^4$$

$$F_u : \text{Total section area of upper flange (including ribs)} = 1437.3 \text{ cm}^2$$

$$F_L : \text{Total section area of lower flange (including ribs)} = 713.4 \text{ cm}^2$$

$$F_h : \text{Section area of web par piece} = 306.9 \text{ cm}^2$$

$$H_w : \text{Height of web} = 279.0 \text{ cm}$$

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_{d^3}$$
$$= 20 * 2.0 * 10^5 * 5.474 * 10^{17} / 11411.1^3 = 1.474 * 10^{12} \text{ N}\cdot\text{mm}$$

E_s : Young's modulus of steel = $2.0 * 10^5 \text{ N/mm}^2$

I_{dw} : Warping constant

L_{dreq} : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h$$

$$= 201.29/200091 + 201.29/49064 + 6*235.42/105330 = 1.85 * 10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 235.42^2/105330^2 = 1.50 * 10^{-5} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 201.29*235.42/(200091*105330) = 4.50 * 10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 201.29*235.42/(105330*49064) = 1.83 * 10^{-5} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 201.29^2/(200091*49064) = 4.13 * 10^{-6} \text{ cm}^{-6}$$

$$48 * 2.0 * 10^5 * 1.85 * 10^{-2} * 10^{-3}$$

$$K = \frac{48 * 2.0 * 10^5 * 1.85 * 10^{-2} * 10^{-3}}{(1.50 * 10^{-5} + 4.50 * 10^{-6} + 1.83 * 10^{-5} + 4.13 * 10^{-6}) * 10^{-6}}$$

$$= 4.238 * 10^{12} \text{ N}\cdot\text{mm}$$

Where,

E_s : Young's modulus of steel = $2.0 * 10^5 \text{ N/mm}^2$

bb : Distance between neutral axes of vertical members cm

hh : Distance between neutral axes of horizontal members cm

II_u : Moment of inertia of upper member of the frame cm^4

II_L : Moment of inertia of lower member of the frame cm^4

II_h : Moment of inertia of vertical members of the frame cm^4

Effective width of ange is up to 24 times thickness)

$$1 - \text{FLG PL} \quad 384 * 16 = 61.44 \text{cm}^2 \quad II_u = 200091 \text{ cm}^4$$

$$1 - \text{WEB PL} \quad 914 * 9 = A_w = 82.26 \text{cm}^2 \quad D_u = 34.79 \text{ cm}$$

$$2 - \text{COL PL} \quad 95 * 10 = A_f = 19.00 \text{cm}^2 \quad D_L = 58.21 \text{ cm}$$

Effective width of lower flange is up to 24 times thickness)

$$\begin{aligned}
 1 - \text{FLG PL} & \quad 480 * 20 = 96.00\text{cm}^2 & = & 49064 \text{ cm}^4 \\
 1 - \text{WEB PL} & \quad 530 * 9 = A_w = 47.70\text{cm}^2 & D_u = & 12.39 \text{ cm} \\
 2 - \text{COL PL} & \quad 45 * 9 = A_f = 8.10\text{cm}^2 & D_L = & 42.61 \text{ cm}
 \end{aligned}$$

Effective width of web is up to 24 times thickness)

$$\begin{aligned}
 1 - \text{FLG PL} & \quad 264 * 11 = 29.04\text{cm}^2 & \text{ange} = & 105330 \text{ cm}^4 \\
 1 - \text{WEB PL} & \quad 850 * 9 = A_w = 76.50\text{cm}^2 & D_u = & 35.45 \text{ cm} \\
 2 - \text{COL PL} & \quad 45 * 9 = A_f = 8.10\text{cm}^2 & D_L = & 50.65 \text{ cm}
 \end{aligned}$$

Therefore,

$$\begin{aligned}
 bb & = 100.0 + 2 * 50.65 = 201.29 \text{ cm} \\
 hh & = 134.6 + 58.21 + 42.61 = 235.42 \text{ cm}
 \end{aligned}$$

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.42$

Calculation of ratio of area

$$\max(A_f/A_w) = 19.00 / 82.26 = 0.231$$

Where,

A_f : Collar plate section area of diaphragm

A_w : Web section area of diaphragm

Calculation of height width ration

$$(B_u + B_L) / (2 * H_w) = (270.0 + 270.0) / (2 * 279.0) = 0.97$$

By "Designing manual of steel highway bridge"

$$\beta = 1.746$$

(c) Calculation of correction stiffness

$$\begin{aligned}
 K' & = K * \beta = 4.238 * 10^{12} * 1.746 = 7.399 * 10^{12} \text{ N}\cdot\text{mm} \\
 & > K_{req} = 1.474 * 10^{12} \text{ N}\cdot\text{mm}
 \end{aligned}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 3.923 m

(Roadway 6.098 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment } T_{dia} = T_{p1} * D + T_{p2} * L_d$$

T_{p1} : Torque moment due to p_1 load

T_{p2} : Torque moment due to p_2 load

D : Loading length = 10.000 m

L_d : Diaphragm spacing = 10.802 m

Right Loading

$$T_{p1} = 10.0 * 3.923^2 / 2 = 76.95 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 3.923^2 / 2 = 24.56 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = 76.9 * 10.000 + 24.6 * 10.802 = 1034.81 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} \mu_u &= (T_{dia} / 4) * (bb / I_{IL} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (1034.81 / 4) * (201.29 / 49064 + 3 * 235.42 / 105330) \\ &\quad / (201.29 / 200091 + 201.29 / 49064 + 6 * 235.42 / 105330) \\ &= 150.98 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} \mu_L &= (T_{dia} / 4) * (bb / I_{Iu} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (1034.81 / 4) * (201.29 / 200091 + 3 * 235.42 / 105330) \\ &\quad / (201.29 / 200091 + 201.29 / 49064 + 6 * 235.42 / 105330) \\ &= 107.72 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\sigma_u = \mu_u * D_u / I_{Ih}$$

$$= 150.98 * 10^6 * 354.5 / (105330 * 10^4) = 51 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

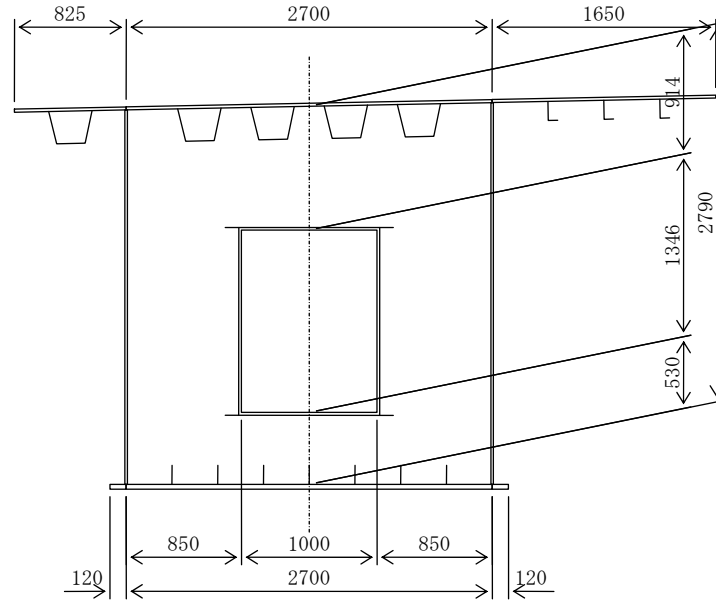
$$\sigma_L = \mu_L * D_L / I_{Ih}$$

$$= 107.72 * 10^6 * 506.5 / (105330 * 10^4) = 52 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

Girder G-2, Diaphragm D-11 Frame type,

Girder G-2 Dia D-65

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 52.647 \text{ m}$
Interval of diaphragms	$L_d = 8.000 \text{ m}$
Thickness of diaphragm	$T_d = 15 \text{ mm (SM400)}$
Manhole width	$b = 1000 \text{ mm}$
Manhole height	$h = 1346 \text{ mm}$

(b) Section of girder

Upper flange

Web spacing	$B_u = 2700 \text{ mm}$	$T_u = 22 \text{ mm}$	$A_u = 594.12 \text{ cm}^2$
Over edge length at left side	$B_{uL} = 825 \text{ mm}$	$T_{uL} = 22 \text{ mm}$	$A_{uL} = 181.54 \text{ cm}^2$
Over edge length at right side	$B_{uR} = 1650 \text{ mm}$	$T_{uR} = 22 \text{ mm}$	$A_{uR} = 363.07 \text{ cm}^2$
Slope	$= 2.00 \%$		

Section 1-U-320*240*8 $A = 53.90 \text{ cm}^2$ $I_y = 7195 \text{ cm}^4$

Section (Medium) 4-U-320*240*8 $A = 215.60 \text{ cm}^2$ $I_y = 7195 \text{ cm}^4$

Section (Right) 3-Bulb 230*11 $A = 95.94 \text{ cm}^2$ $I_y = 24 \text{ cm}^4$

Total area $F_u = 1504.2 \text{ cm}^2$

Lower flange

Web spacing BL = 2700 mm , TL = 35 mm , AL = 945.00 cm²
Over edge length at left side BLL = 120 mm , TLL = 35 mm , ALL = 42.00 cm²
Over edge length at right side BLR = 120 mm , TLR = 35 mm , ALR = 42.00 cm²
Rib section 7-PL 220* 19 A = 292.60 cm²
Total area FL = 1321.6 cm²

Web

Height Hw = 2790 mm
Thickness Tw = 19 mm
Total area Fh = 530.1 cm²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$Lu = 52.647 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * Lu - 1.0 = 0.14 * 52.647 - 1.0 = 6.371 \text{ m} < L_d = 8.000 \text{ m}$$

Diaphragm added to the intermediate part

(3) Calculation of Aperture ratio ρ

$$\begin{aligned} \rho &= \sqrt{ \{ (b * h) / ((Bu+BL) * Hw / 2) \} } \\ &= \sqrt{ \{ (1000 * 1346) / ((2700+2700) * 2790 / 2) \} } = 0.42 > 0.40 \end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned} e &= IL / BL + ((Bu + 2 * BL) / 12) * Fh \\ &= 8745046 / 270.0 + ((270.0 + 2 * 270.0) / 12) * 530.1 = 68171 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} f &= I_u / Bu + ((2 * Bu + BL) / 12) * Fh \\ &= 34496286 / 270.0 + ((2 * 270.0 + 270.0) / 12) * 530.1 = 163546 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \alpha 1 &= e / (e + f) * (Bu + BL) / 4 * Hw \\ &= 68171 / (68171 + 163546) * (270.0 + 270.0) / 4 * 279.0 = 11081 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \alpha 2 &= f / (e + f) * (Bu + BL) / 4 * Hw \\ &= 163546 / (68171 + 163546) * (270.0 + 270.0) / 4 * 279.0 = 26584 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} I_{dw} &= 1/3 \{ \alpha 1^2 * Fu * (1 + (bu1 + bu2) / Bu)^2 \\ &\quad + \alpha 2^2 * FL * (1 + (bL1 + bL2) / BL)^2 \\ &\quad + 2 * (\alpha 1^2 - \alpha 1 * \alpha 2 + \alpha 2^2) * Fh \} \\ &= 1/3 \{ 11081^2 * 1504.2 * (1 + (82.5 + 165.0) / 270.0)^2 \\ &\quad + 26584^2 * 1321.6 * (1 + (12.0 + 12.0) / 270.0)^2 \\ &\quad + 2 * (11081^2 - 11081 * 26584 + 26584^2) * 530.1 \} \\ &= 7.844 * 10^{11} \text{ cm}^6 = 7.844 * 10^{17} \text{ mm}^6 \end{aligned}$$

Iu	: Moment of inertia about vertical axis for uflg incl. ribs	=	34496286 cm ⁴
IL	: Moment of inertia about vertical axis for lflg incl. ribs	=	8745046 cm ⁴
Fu	: Total section area of upper flange (including ribs)	=	1504.2 cm ²
FL	: Total section area of lower flange (including ribs)	=	1321.6 cm ²
Fh	: Section area of web par piece	=	530.1 cm ²
Hw	: Height of web	=	279.0 cm

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_{d^3}$$

$$= 20 * 2.0 * 10^5 * 7.844 * 10^{17} / 6370.6^3 = 1.214 * 10^{13} \text{ N}\cdot\text{mm}$$

Es : Young's modulus of steel = 2.0*10⁵ N/mm²

Idw : Warping constant

Ldreq : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h = 215.96/307077 + 215.96/85537 + 6*245.01/200076 = 1.06 * 10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 245.01^2 / 200076^2 = 4.50 * 10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 215.96 * 245.01 / (307077 * 200076) = 1.72 * 10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 215.96 * 245.01 / (200076 * 85537) = 6.18 * 10^{-6} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 215.96^2 / (307077 * 85537) = 1.78 * 10^{-6} \text{ cm}^{-6}$$

$$K = \frac{48 * 2.0 * 10^5 * 1.06 * 10^{-2} * 10^{-3}}{(4.50 * 10^{-6} + 1.72 * 10^{-6} + 6.18 * 10^{-6} + 1.78 * 10^{-6}) * 10^{-6}}$$

$$= 7.160 * 10^{12} \text{ N}\cdot\text{mm}$$

Where,

Es : Young's modulus of steel = 2.0×10^5 N/mm²
bb : Distance between neutral axes of vertical members cm
hh : Distance between neutral axes of horizontal members cm
IIu : Moment of inertia of upper member of the frame cm⁴
IIL : Moment of inertia of lower member of the frame cm⁴
IIh : Moment of inertia of vertical members of the frame cm⁴

Effective width of ange is up to 24 times thickness)

1 - FLG PL 528 * 22 = 116.16cm² IIu = 307077 cm⁴
1 - WEB PL 914 * 15 = Aw =137.10cm² Du = 30.95 cm
2 - COL PL 95 * 10 = Af= 19.00cm² DL = 62.65 cm

Effective width of lower flange is up to 24 times thickness)

1 - FLG PL 840 * 35 = 294.00cm² = 85537 cm⁴
1 - WEB PL 530 * 15 = Aw = 79.50cm² Du = 8.75 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 47.75 cm

Effective width of web is up to 24 times thickness)

1 - FLG PL 456 * 19 = 86.64cm² ange = 200076 cm⁴
1 - WEB PL 850 * 15 = Aw =127.50cm² Du = 28.92 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 57.98 cm

Therefore,

bb = 100.0 + 2 * 57.98 = 215.96 cm
hh = 134.6 + 62.65 + 47.75 = 245.01 cm

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.42$

Calculation of ratio of area

$$\max(Af/Aw) = 19.00 / 137.10 = 0.139$$

Where,

Af : Collar plate section area of diaphragm

Aw : Web section area of diaphragm

Calculation of height width ration

$$(Bu + BL) / (2 * Hw) = (270.0 + 270.0) / (2 * 279.0) = 0.97$$

By "Designing manual of steel highway bridge"

$$\beta = 1.994$$

(c) Calculation of correction stiffness

$$K' = K * \beta = 7.160 * 10^{12} * 1.994 = 1.427 * 10^{13} \text{ N}\cdot\text{mm}$$

$$> K_{req} = 1.214 * 10^{13} \text{ N}\cdot\text{mm}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 3.000 m

(Roadway 5.175 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment dia} = (T_{p1} + T_{p2}) * L_d$$

T_{p1} : Torque moment due to p1 load

T_{p2} : Torque moment due to p2 load

L_d : Diaphragm spacing = 8.000 m

Right Loading

$$T_{p1} = 10.0 * 3.000^2 / 2 = 45.00 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 3.000^2 / 2 = 14.31 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = (45.0 + 14.3) * 8.000 = 474.48 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} M_u &= (T_{dia} / 4) * (bb / I_{IL} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (474.48 / 4) * (215.96 / 85537 + 3 * 245.01 / 200076) \\ &\quad / (215.96 / 307077 + 215.96 / 85537 + 6 * 245.01 / 200076) \\ &= 69.53 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} M_L &= (T_{dia} / 4) * (bb / I_{Iu} + 3 * hh / I_{Ih}) / (bb / I_{Iu} + bb / I_{IL} + 6 * hh / I_{Ih}) \\ &= (474.48 / 4) * (215.96 / 307077 + 3 * 245.01 / 200076) \\ &\quad / (215.96 / 307077 + 215.96 / 85537 + 6 * 245.01 / 200076) \\ &= 49.09 \text{ kN}\cdot\text{m} \end{aligned}$$

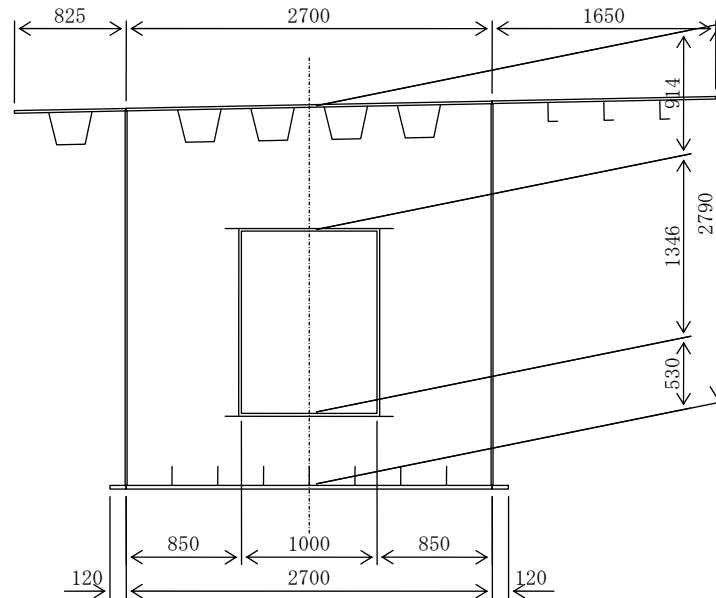
$$\begin{aligned} \sigma_u &= M_u * D_u / I_{Ih} \\ &= 69.53 * 10^6 * 289.2 / (200076 * 10^4) = 10 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

$$\begin{aligned} \sigma_L &= M_L * D_L / I_{Ih} \\ &= 49.09 * 10^6 * 579.8 / (200076 * 10^4) = 14 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

Girder G-2, Diaphragm D-21 Frame type,

Girder G-2 Dia D-22 , Girder G-2 Dia D-32 , Girder G-2 Dia D-33 , Girder G-2 Dia D-43
 Girder G-2 Dia D-44 , Girder G-2 Dia D-54 , Girder G-2 Dia D-55

(1) Design conditions



(a) Diaphragm

Equivalent span	$L_u = 52.800 \text{ m}$
Interval of diaphragms	$L_d = 8.000 \text{ m}$
Thickness of diaphragm	$T_d = 13 \text{ mm (SM400)}$
Manhole width	$b = 1000 \text{ mm}$
Manhole height	$h = 1346 \text{ mm}$

(b) Section of girder

Upper flange

Web spacing	$B_u = 2700 \text{ mm}$	$T_u = 19 \text{ mm}$	$A_u = 513.10 \text{ cm}^2$
Over edge length at left side	$B_{uL} = 825 \text{ mm}$	$T_{uL} = 19 \text{ mm}$	$A_{uL} = 156.78 \text{ cm}^2$
Over edge length at right side	$B_{uR} = 1650 \text{ mm}$	$T_{uR} = 19 \text{ mm}$	$A_{uR} = 313.56 \text{ cm}^2$
Slope	$= 2.00 \%$		

Section 1-U-320*240*8 $A = 53.90 \text{ cm}^2$ $I_y = 7195 \text{ cm}^4$

Section (Medium) 4-U-320*240*8 $A = 215.60 \text{ cm}^2$ $I_y = 7195 \text{ cm}^4$

Section (Right) 3-Bulb 230*11 $A = 95.94 \text{ cm}^2$ $I_y = 24 \text{ cm}^4$

Total area $F_u = 1348.9 \text{ cm}^2$

Lower flange

Web spacing	BL = 2700 mm , TL = 27 mm , AL = 729.00 cm ²
Over edge length at left side	BLL = 120 mm , TLL = 27 mm , ALL = 32.40 cm ²
Over edge length at right side	BLR = 120 mm , TLR = 27 mm , ALR = 32.40 cm ²
Rib section	7-PL 220* 19 A = 292.60 cm ²
Total area	FL = 1086.4 cm ²

Web

Height	Hw = 2790 mm
Thickness	Tw = 14 mm
Total area	Fh = 390.6 cm ²

(2) Checking diaphragm spacing

Limit spacing of diaphragms

$$Lu = 52.800 > 50.000 \text{ m}$$

$$\text{Therefore, } L_{dreq} = 0.14 * Lu - 1.0 = 0.14 * 52.800 - 1.0 = 6.392 \text{ m} < L_d = 8.000 \text{ m}$$

Diaphragm added to the intermediate part

(3) Calculation of Aperture ratio ρ

$$\begin{aligned} \rho &= \sqrt{ \{ (b * h) / ((Bu+BL) * Hw / 2) \} } \\ &= \sqrt{ \{ (1000 * 1346) / ((2700+2700) * 2790 / 2) \} } = 0.42 > 0.40 \end{aligned}$$

Therefore, Frame type is applied and stiffness is corrected.

(4) Calculation of required stiffness of diaphragm

(a) Calculation of warping constant I_{dw}

$$\begin{aligned} e &= I_L / BL + ((Bu + 2 * BL) / 12) * F_h \\ &= 7050900 / 270.0 + ((270.0 + 2 * 270.0) / 12) * 390.6 = 52480 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} f &= I_u / Bu + ((2 * Bu + BL) / 12) * F_h \\ &= 30766382 / 270.0 + ((2 * 270.0 + 270.0) / 12) * 390.6 = 140315 \text{ cm}^3 \end{aligned}$$

$$\begin{aligned} \alpha_1 &= e / (e + f) * (Bu + BL) / 4 * H_w \\ &= 52480 / (52480 + 140315) * (270.0 + 270.0) / 4 * 279.0 = 10253 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} \alpha_2 &= f / (e + f) * (Bu + BL) / 4 * H_w \\ &= 140315 / (52480 + 140315) * (270.0 + 270.0) / 4 * 279.0 = 27412 \text{ cm}^2 \end{aligned}$$

$$\begin{aligned} I_{dw} &= 1/3 \{ \alpha_1^2 * F_u * (1 + (bu_1 + bu_2) / Bu)^2 \\ &\quad + \alpha_2^2 * F_L * (1 + (bL_1 + bL_2) / BL)^2 \\ &\quad + 2 * (\alpha_1^2 - \alpha_1 * \alpha_2 + \alpha_2^2) * F_h \} \\ &= 1/3 \{ 10253^2 * 1348.9 * (1 + (82.5 + 165.0) / 270.0)^2 \\ &\quad + 27412^2 * 1086.4 * (1 + (12.0 + 12.0) / 270.0)^2 \\ &\quad + 2 * (10253^2 - 10253 * 27412 + 27412^2) * 390.6 \} \\ &= 6.462 * 10^{11} \text{ cm}^6 = 6.462 * 10^{17} \text{ mm}^6 \end{aligned}$$

Iu	: Moment of inertia about vertical axis for uflg incl. ribs	=	30766382 cm ⁴
IL	: Moment of inertia about vertical axis for lflg incl. ribs	=	7050900 cm ⁴
Fu	: Total section area of upper flange (including ribs)	=	1348.9 cm ²
FL	: Total section area of lower flange (including ribs)	=	1086.4 cm ²
Fh	: Section area of web par piece	=	390.6 cm ²
Hw	: Height of web	=	279.0 cm

(b) Calculation of required stiffness Kreq

$$K_{req} = 20 * E_s * I_{dw} / L_d^3$$

$$= 20 * 2.0 * 10^5 * 6.462 * 10^{17} / 6392.0^3 = 9.897 * 10^{12} \text{ N}\cdot\text{mm}$$

E_s : Young's modulus of steel = 2.0*10⁵ N/mm²

I_{dw} : Warping constant

L_{dreq} : Limit interval of diaphragms

(5) Calculation of actual stiffness of diaphragms

(a) Actual stiffness

$$K = \frac{48 * E_s * (bb/II_u + bb/II_L + 6*hh/II_h)}{3*hh^2/II_h^2 + 2*bb*hh/II_u*II_h + 2*bb*hh/II_h*II_L + bb^2/II_u*II_L}$$

$$bb/II_u + bb/II_L + 6*hh/II_h = 205.62/260505 + 205.62/69669 + 6*239.72/149704 = 1.33*10^{-2} \text{ cm}^{-3}$$

$$3*hh^2/II_h^2 = 3 * 239.72^2/149704^2 = 7.69*10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_u*II_h) = 2 * 205.62*239.72/(260505*149704) = 2.53*10^{-6} \text{ cm}^{-6}$$

$$2*bb*hh/(II_h*II_L) = 2 * 205.62*239.72/(149704*69669) = 9.45*10^{-6} \text{ cm}^{-6}$$

$$bb^2/(II_u*II_L) = 205.62^2/(260505*69669) = 2.33*10^{-6} \text{ cm}^{-6}$$

$$K = \frac{48 * 2.0 * 10^5 * 1.33 * 10^{-2} * 10^{-3}}{(7.69 * 10^{-6} + 2.53 * 10^{-6} + 9.45 * 10^{-6} + 2.33 * 10^{-6}) * 10^{-6}}$$

$$= 5.824 * 10^{12} \text{ N}\cdot\text{mm}$$

Where,

Es : Young's modulus of steel = 2.0×10^5 N/mm²
bb : Distance between neutral axes of vertical members cm
hh : Distance between neutral axes of horizontal members cm
IIu : Moment of inertia of upper member of the frame cm⁴
IIL : Moment of inertia of lower member of the frame cm⁴
IIh : Moment of inertia of vertical members of the frame cm⁴

Effective width of ange is up to 24 times thickness)

1 - FLG PL 456 * 19 = 86.64cm² IIu = 260505 cm⁴
1 - WEB PL 914 * 13 = Aw =118.82cm² Du = 33.25 cm
2 - COL PL 95 * 10 = Af= 19.00cm² DL = 60.05 cm

Effective width of lower flange is up to 24 times thickness)

1 - FLG PL 648 * 27 = 174.96cm² = 69669 cm⁴
1 - WEB PL 530 * 13 = Aw = 68.90cm² Du = 10.63 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 45.07 cm

Effective width of web is up to 24 times thickness)

1 - FLG PL 336 * 14 = 47.04cm² ange = 149704 cm⁴
1 - WEB PL 850 * 13 = Aw =110.50cm² Du = 33.59 cm
2 - COL PL 45 * 9 = Af= 8.10cm² DL = 52.81 cm

Therefore,

bb = 100.0 + 2 * 52.81 = 205.62 cm
hh = 134.6 + 60.05 + 45.07 = 239.72 cm

(b) Calculation of correction factor β

$0.4 < \rho < 0.8$ Thus stiffness is corrected. $\rho = 0.42$

Calculation of ratio of area

$$\max(Af/Aw) = 19.00 / 118.82 = 0.160$$

Where,

Af : Collar plate section area of diaphragm

Aw : Web section area of diaphragm

Calculation of height width ration

$$(Bu + BL) / (2 * Hw) = (270.0 + 270.0) / (2 * 279.0) = 0.97$$

By "Designing manual of steel highway bridge"

$$\beta = 1.929$$

(c) Calculation of correction stiffness

$$K' = K * \beta = 5.824 * 10^{12} * 1.929 = 1.123 * 10^{13} \text{ N}\cdot\text{mm}$$

$$> K_{req} = 9.897 * 10^{12} \text{ N}\cdot\text{mm}$$

(6) Checking of diaphragm stress

(a) Live loads

B-Live loads	Loading width	5.500 m
	Loading length	10.000 m
	p1-Load	10.0 kN/m ²
	p2-Load	3.2 kN/m ²

2.633507e-308ft Loading width

Right Loading width 3.000 m

(Roadway 5.175 m)

(b) Calculation of the distortional moment

$$\text{Distortional moment dia} = (T_{p1} + T_{p2}) * L_d$$

T_{p1} : Torque moment due to p1 load

T_{p2} : Torque moment due to p2 load

L_d : Diaphragm spacing = 8.000 m

Right Loading

$$T_{p1} = 10.0 * 3.000^2 / 2 = 45.00 \text{ kN}\cdot\text{m/m}$$

$$T_{p2} = 3.2 * 3.000^2 / 2 = 14.31 \text{ kN}\cdot\text{m/m}$$

Distortional moment that act to diaphragm

$$T_{dia} = (45.0 + 14.3) * 8.000 = 474.48 \text{ kN}\cdot\text{m}$$

(c) Checking of the stress due to distortional moment

Bending Stress of Vertical Member

$$\begin{aligned} \text{Mu} &= (\text{Tdia} / 4) * (\text{bb} / \text{IIL} + 3 * \text{hh} / \text{IIh}) / (\text{bb} / \text{IIu} + \text{bb} / \text{IIL} + 6 * \text{hh} / \text{IIh}) \\ &= (474.48 / 4) * (205.62 / 69669 + 3 * 239.72 / 149704) \\ &\quad / (205.62 / 260505 + 205.62 / 69669 + 6 * 239.72 / 149704) \\ &= 68.92 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} \text{ML} &= (\text{Tdia} / 4) * (\text{bb} / \text{IIu} + 3 * \text{hh} / \text{IIh}) / (\text{bb} / \text{IIu} + \text{bb} / \text{IIL} + 6 * \text{hh} / \text{IIh}) \\ &= (474.48 / 4) * (205.62 / 260505 + 3 * 239.72 / 149704) \\ &\quad / (205.62 / 260505 + 205.62 / 69669 + 6 * 239.72 / 149704) \\ &= 49.70 \text{ kN}\cdot\text{m} \end{aligned}$$

$$\begin{aligned} \sigma_u &= \text{Mu} * \text{Du} / \text{IIh} \\ &= 68.92 * 10^6 * 335.9 / (149704 * 10^4) = 15 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

$$\begin{aligned} \sigma_L &= \text{ML} * \text{DL} / \text{IIh} \\ &= 49.70 * 10^6 * 528.1 / (149704 * 10^4) = 18 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2 \end{aligned}$$

4-3 Calculation of ribs

Explanation of calculation formula

Required section area of longitudinal rib

$$AL \cdot req = b * t / (10 * n)$$

Required stiffness of longitudinal rib

$$IL \cdot req = b * t^3 / 11 * \gamma L \cdot req$$

Required stiffness ratio of longitudinal rib and required stiffness of transverse rib

$\alpha \leq \alpha 0$ and stiffness ratio of transverse rib satisfies $Ic \cdot req$

$$\begin{aligned} \gamma L \cdot req &= 4 \alpha^2 n * (t0/t)^2 * (1+n * \delta L) - (\alpha^2+1)^2/n && (t \geq t0) \\ &= 4 \alpha^2 n * (1+n * \delta L) - (\alpha^2+1)^2/n && (t < t0) \dots\dots (4.2.5) \end{aligned}$$

Where required stiffness ratio of transverse rib is as follows

$$Ic \cdot req = (b * t^3 / 11) * \{ (1 + n * \gamma L \cdot req) / (4 * \alpha^3) \} \dots\dots\dots (4.2.6)$$

2) Except case 1)

$$\begin{aligned} \gamma L \cdot req &= [\{ 2n^2 * (t0/t)^2 * (1+n * \delta L) - 1 \}^2 - 1] / n && (t \geq t0) \\ &= [\{ 2n^2 * (1+n * \delta L) - 1 \}^2 - 1] / n && (t < t0) \dots\dots\dots (4.2.7) \end{aligned}$$

Explanation of codes

- | | | | |
|----------------------|------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------|
| t | : Thickness of stiffener | b | : Total width of stiffener |
| a | : Interval of transverse ribs longitudinal | n | : Number of panel to be separated by longitudinal |
| α | : Aspect ratio of stiffener | $\alpha 0$ | = a / b |
| $\alpha 0$ | : Limit size ratio in length and width | $\alpha 0$ | = $\sqrt[4]{(1+n * \gamma L)}$ |
| δL | : Section area ratio of one(1) longitudinal rib | δL | = AL / (b * t) |
| γL | : Stiffness ratio of longitudinal rib | γL | = IL / (b * t ³ / 11) |
| t0 | : Thickness specified in the Table 4.2.6 in 'Spec. for Highway Bridges II' | | |
| t0 = b / (k * f * n) | | | |
| t0 | : Thickness specified in the Table 3.2.6 in 'Spec. for Highway Bridges II' | t0 | |
| t0 = b / (k * f * n) | | | |
| | Provided, SM400:k=28 SM490:k=24 SM490Y:k=22 SM570:k=22 | | |
| f | : Modification factor by stress grade (is =1) 「in the Table 4.2.4 in 'Spec. for Highway Bridges II'」 | | |
| AL | : Section area of one(1) longitudinal rib | | |
| IL | : Moment of inertia of one(1) longitudinal rib | | |
| Ic | : Moment of inertia of one(1) transverse rib | | |

Calculation of longitudinal ribs

(1) Main Girder G-1 Name of stiffener : LFLG

(a) Dimension of sections

node stiffener No.	section No.	node width length	Transverse thickness rib nos.	Transverse thickness interval	Transverse thickness rib nos.	Longitudinal height	Longitudinal thickness	Longitudinal thickness	Longitudinal grade	Longitudinal b	
t	t0	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	
8	9	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
9	9	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
9	10	10000	3	2500	5	220	19	SM570	1500	24	11.4
10	10	10000	3	2500	5	220	19	SM570	1500	24	11.4
10	11	10000	3	2500	5	220	19	SM570-H	1500	43	11.4
11	11	10000	3	2500	5	220	19	SM570-H	1500	43	11.4
11	12	10000	3	2500	5	220	19	SM570-H	1500	52	11.4
12	12	8000	3	2000	5	220	19	SM570-H	1500	52	11.4
12	13	8000	3	2000	5	220	19	SM570-H	1500	47	11.4
13	13	8000	3	2000	5	220	19	SM570-H	1500	47	11.4
13	14	8000	3	2000	5	220	19	SM490Y	1500	27	11.4
14	14	10000	3	2500	5	220	19	SM490Y	1500	27	11.4
14	15	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
15	15	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
15	16	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
16	16	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
20	20	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
20	21	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
21	21	10000	3	2500	5	220	19	SM490Y	1500	17	11.4

21	22	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
22	22	8000	3	2000	5	220	19	SM490Y	1500	17	11.4
22	23	8000	3	2000	5	220	19	SM570	1500	30	11.4
23	23	8000	3	2000	5	220	19	SM570	1500	30	11.4
23	24	8000	3	2000	5	220	19	SM570	1500	38	11.4
24	24	8000	3	2000	5	220	19	SM570	1500	38	11.4
24	25	8000	3	2000	5	220	19	SM570	1500	30	11.4
25	25	8000	3	2000	5	220	19	SM570	1500	30	11.4
25	26	8000	3	2000	2	220	19	SM570	1500	18	22.7
26	26	10000	3	2500	2	220	19	SM570	1500	18	22.7
26	27	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
27	27	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
32	33	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
33	33	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
33	34	10000	3	2500	5	220	19	SM490Y	1500	18	11.4
34	34	8000	3	2000	5	220	19	SM490Y	1500	18	11.4
34	35	8000	3	2000	5	220	19	SM570	1500	36	11.4
35	35	8000	3	2000	5	220	19	SM570	1500	36	11.4
35	36	8000	3	2000	5	220	19	SM570-H	1500	46	11.4
36	36	8000	3	2000	5	220	19	SM570-H	1500	46	11.4
36	37	8000	3	2000	2	220	19	SM570	1500	40	22.7
37	37	8000	3	2000	2	220	19	SM570	1500	40	22.7
37	38	8000	3	2000	2	220	19	SM490Y	1500	21	22.7
38	38	10000	3	2500	2	220	19	SM490Y	1500	21	22.7

38	39	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
39	39	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
39	40	10000	3	2500	2	220	19	SM490Y	1500	22	22.7
44	44	10000	3	2500	5	220	19	SM490Y	1500	20	11.4
44	45	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
45	45	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
45	46	10000	3	2500	5	220	19	SM570	1500	18	11.4
46	46	8000	3	2000	5	220	19	SM570	1500	18	11.4
46	47	8000	3	2000	5	220	19	SM570	1500	32	11.4
47	47	8000	3	2000	5	220	19	SM570	1500	32	11.4
47	48	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
48	48	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
48	49	8000	3	2000	2	220	19	SM570	1500	40	22.7
49	49	8000	3	2000	2	220	19	SM570	1500	40	22.7
49	50	8000	3	2000	2	220	19	SM490Y	1500	21	22.7
50	50	10000	3	2500	2	220	19	SM490Y	1500	21	22.7
50	51	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
51	51	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
56	57	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
57	57	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
57	58	10000	3	2500	2	220	19	SM490Y	1500	21	22.7
58	58	8000	3	2000	2	220	19	SM490Y	1500	21	22.7

58	59	8000	3	2000	2	220	19	SM570	1500	37	22.7
59	59	8000	3	2000	2	220	19	SM570	1500	37	22.7
59	60	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
60	60	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
60	61	8000	3	2000	5	220	19	SM570	1500	33	11.4
61	61	8000	3	2000	5	220	19	SM570	1500	33	11.4
61	62	8000	3	2000	5	220	19	SM570	1500	18	11.4
62	62	10000	3	2500	5	220	19	SM570	1500	18	11.4
62	63	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
63	63	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
63	64	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
67	68	10000	3	2500	5	220	19	SM490Y	1500	15	11.4
68	68	10000	3	2500	5	220	19	SM490Y	1500	15	11.4
68	69	10000	3	2500	2	220	19	SM490Y	1500	15	22.7
69	69	10000	3	2500	2	220	19	SM490Y	1500	15	22.7
69	70	10000	3	2500	2	220	19	SM570	1500	22	22.7
70	70	8000	3	2000	2	220	19	SM570	1500	22	22.7
70	71	8000	3	2000	2	220	19	SM570-H	1500	44	22.7
71	71	8000	3	2000	2	220	19	SM570-H	1500	44	22.7
71	72	8000	3	2000	5	220	19	SM570-H	1500	54	11.4
72	72	10000	3	2500	5	220	19	SM570-H	1500	54	11.4
72	73	10000	3	2500	5	220	19	SM570-H	1500	42	11.4
73	73	10000	3	2500	5	220	19	SM570-H	1500	42	11.4

73	74	10000	3	2500	2	220	19	SM570	1500	21	22.7
74	74	10000	3	2500	2	220	19	SM570	1500	21	22.7
74	75	10000	3	2500	2	220	19	SM490Y	1500	17	22.7
75	75	10000	3	2500	2	220	19	SM490Y	1500	17	22.7

(b) Calculation of required stiffness

node No.	section No.	δL	γL	α	$\alpha 0$	$\gamma L \cdot req$	$AL \cdot req$ (cm ²)	AL	IL $\cdot req$ (cm ⁴)	IL	Ic $\cdot req$ (cm ⁴)	Ic
8	9	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
9	9	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
9	10	0.116	35.8	1.667	3.832	22.98	6.0	41.8	4332	6744	1414	58028
10	10	0.116	35.8	1.667	3.832	22.98	6.0	41.8	4332	6744	1414	58028
10	11	0.065	6.2	1.667	2.488	4.09	10.8	41.8	4432	6744	1494	58028
11	11	0.065	6.2	1.667	2.488	4.09	10.8	41.8	4432	6744	1494	58028
11	12	0.054	3.5	1.667	2.168	1.83	13.0	41.8	3507	6744	1240	58028
12	12	0.054	3.5	1.333	2.168	1.41	13.0	41.8	2697	6744	1909	58028
12	13	0.059	4.8	1.333	2.332	2.10	11.8	41.8	2967	6744	2027	58028
13	13	0.059	4.8	1.333	2.332	2.10	11.8	41.8	2967	6744	2027	58028
13	14	0.103	25.1	1.333	3.510	10.95	6.8	41.8	2940	6744	1889	58028
14	14	0.103	25.1	1.667	3.510	16.74	6.8	41.8	4494	6744	1471	58028
14	15	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
15	15	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
15	16	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
16	16	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
20	20	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
20	21	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
21	21	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
21	22	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
22	22	0.164	100.7	1.333	4.959	36.53	4.3	41.8	2447	6744	1556	58028
22	23	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
23	23	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
23	24	0.073	9.0	1.333	2.724	4.21	9.5	41.8	3149	6744	2072	58028
24	24	0.073	9.0	1.333	2.724	4.21	9.5	41.8	3149	6744	2072	58028
24	25	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
25	25	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
25	26	0.155	84.8	1.333	3.998	28.67	9.0	41.8	2280	6744	730	58028
26	26	0.155	84.8	1.667	3.998	44.06	9.0	41.8	3504	6744	572	58028

26	27	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
27	27	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
32	33	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
33	33	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
33	34	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
34	34	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
34	35	0.077	10.6	1.333	2.835	4.94	9.0	41.8	3143	6744	2056	58028
35	35	0.077	10.6	1.333	2.835	4.94	9.0	41.8	3143	6744	2056	58028
35	36	0.061	5.1	1.333	2.369	2.26	11.5	41.8	3005	6744	2042	58028
36	36	0.061	5.1	1.333	2.369	2.26	11.5	41.8	3005	6744	2042	58028
36	37	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
37	37	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
37	38	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
38	38	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
38	39	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
39	39	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
39	40	0.127	46.4	1.667	3.442	41.24	11.0	41.8	5988	6744	978	58028
44	44	0.139	61.8	1.667	4.391	37.14	5.0	41.8	4051	6744	1318	58028
44	45	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
45	45	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
45	46	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
46	46	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
46	47	0.087	15.1	1.333	3.093	6.91	8.0	41.8	3086	6744	2000	58028
47	47	0.087	15.1	1.333	3.093	6.91	8.0	41.8	3086	6744	2000	58028
47	48	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
48	48	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
48	49	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
49	49	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
49	50	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
50	50	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
50	51	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
51	51	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
56	57	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
57	57	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
57	58	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
58	58	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
58	59	0.075	9.8	1.333	2.346	7.30	18.5	41.8	5039	6744	1667	58028
59	59	0.075	9.8	1.333	2.346	7.30	18.5	41.8	5039	6744	1667	58028

59	60	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
60	60	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
60	61	0.084	13.8	1.333	3.023	6.34	8.3	41.8	3105	6744	2017	58028
61	61	0.084	13.8	1.333	3.023	6.34	8.3	41.8	3105	6744	2017	58028
61	62	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
62	62	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
62	63	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
63	63	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
63	64	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
67	68	0.186	146.5	1.667	5.447	78.53	3.8	41.8	3614	6744	1173	58028
68	68	0.186	146.5	1.667	5.447	78.53	3.8	41.8	3614	6744	1173	58028
68	69	0.186	146.5	1.667	4.582	47.15	7.5	41.8	2170	6744	354	58028
69	69	0.186	146.5	1.667	4.582	47.15	7.5	41.8	2170	6744	354	58028
69	70	0.127	46.4	1.667	3.442	41.24	11.0	41.8	5988	6744	978	58028
70	70	0.127	46.4	1.333	3.442	26.87	11.0	41.8	3901	6744	1250	58028
70	71	0.063	5.8	1.333	2.072	4.20	22.0	41.8	4880	6744	1667	58028
71	71	0.063	5.8	1.333	2.072	4.20	22.0	41.8	4880	6744	1667	58028
71	72	0.052	3.1	1.333	2.111	1.19	13.5	41.8	2552	6744	1841	58028
72	72	0.052	3.1	1.667	2.111	1.49	13.5	41.8	3195	6744	1151	58028
72	73	0.066	6.7	1.667	2.531	4.44	10.5	41.8	4490	6744	1509	58028
73	73	0.066	6.7	1.667	2.531	4.44	10.5	41.8	4490	6744	1509	58028
73	74	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
74	74	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
74	75	0.164	100.7	1.667	4.172	44.97	8.5	41.8	3013	6744	492	58028
75	75	0.164	100.7	1.667	4.172	44.97	8.5	41.8	3013	6744	492	58028

(2) Main Girder G-2 Name of stiffener : LFLG

(a) Dimension of sections

node stiffener No.	section No.	node width length	node thickness rib nos.	Transverse thickness interval	Transverse thickness rib nos.	Longitudinal height	Longitudinal thickness	Longitudinal grade	b		
t	t0	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
8	9	10000	3	2500	3	220	19	SM490Y	2700	18	30.7
9	9	10000	3	2500	3	220	19	SM490Y	2700	18	30.7
9	10	10000	3	2500	7	220	19	SM570	2700	27	15.3
10	10	10000	3	2500	7	220	19	SM570	2700	27	15.3

10	11	10000	3	2500	7	220	19	SM570	2700	32	15.3
11	11	10000	3	2500	7	220	19	SM570	2700	32	15.3
11	12	10000	3	2500	7	240	19	SM570	2700	40	15.3
12	12	8000	3	2000	7	240	19	SM570	2700	40	15.3
12	13	8000	3	2000	7	220	19	SM570	2700	35	15.3
13	13	8000	3	2000	7	220	19	SM570	2700	35	15.3
13	14	8000	3	2000	3	220	19	SM570	2700	24	30.7
14	14	10000	3	2500	3	220	19	SM570	2700	24	30.7
14	15	10000	3	2500	3	220	19	SM490Y	2700	19	30.7
15	15	10000	3	2500	3	220	19	SM490Y	2700	19	30.7
15	16	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
16	16	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
20	20	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
20	21	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
21	21	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
21	22	10000	3	2500	3	220	19	SM490Y	2700	20	30.7
22	22	8000	3	2000	3	220	19	SM490Y	2700	20	30.7
22	23	8000	3	2000	7	220	19	SM570	2700	27	15.3
23	23	8000	3	2000	7	220	19	SM570	2700	27	15.3
23	24	8000	3	2000	7	220	19	SM570	2700	32	15.3
24	24	8000	3	2000	7	220	19	SM570	2700	32	15.3
24	25	8000	3	2000	7	220	19	SM570	2700	27	15.3
25	25	8000	3	2000	7	220	19	SM570	2700	27	15.3

25	26	8000	3	2000	3	220	19	SM570	2700	21	30.7
26	26	10000	3	2500	3	220	19	SM570	2700	21	30.7
26	27	10000	3	2500	3	220	19	SM570	2700	21	30.7
27	27	10000	3	2500	3	220	19	SM570	2700	21	30.7
32	32	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
32	33	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
33	33	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
33	34	10000	3	2500	3	220	19	SM490Y	2700	22	30.7
34	34	8000	3	2000	3	220	19	SM490Y	2700	22	30.7
34	35	8000	3	2000	7	220	19	SM570	2700	30	15.3
35	35	8000	3	2000	7	220	19	SM570	2700	30	15.3
35	36	8000	3	2000	7	220	19	SM570	2700	35	15.3
36	36	8000	3	2000	7	220	19	SM570	2700	35	15.3
36	37	8000	3	2000	7	220	19	SM570	2700	30	15.3
37	37	8000	3	2000	7	220	19	SM570	2700	30	15.3
37	38	8000	3	2000	3	220	19	SM490Y	2700	23	30.7
38	38	10000	3	2500	3	220	19	SM490Y	2700	23	30.7
38	39	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
39	39	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
39	40	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
44	44	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
44	45	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
45	45	10000	3	2500	3	220	19	SM490Y	2700	15	30.7

45	46	10000	3	2500	3	220	19	SM570	2700	20	30.7
46	46	8000	3	2000	3	220	19	SM570	2700	20	30.7
46	47	8000	3	2000	7	220	19	SM570	2700	29	15.3
47	47	8000	3	2000	7	220	19	SM570	2700	29	15.3
47	48	8000	3	2000	7	220	19	SM570	2700	32	15.3
48	48	8000	3	2000	7	220	19	SM570	2700	32	15.3
48	49	8000	3	2000	7	220	19	SM570	2700	28	15.3
49	49	8000	3	2000	7	220	19	SM570	2700	28	15.3
49	50	8000	3	2000	3	220	19	SM570	2700	20	30.7
50	50	10000	3	2500	3	220	19	SM570	2700	20	30.7
50	51	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
51	51	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
56	57	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
57	57	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
57	58	10000	3	2500	3	220	19	SM490Y	2700	21	30.7
58	58	8000	3	2000	3	220	19	SM490Y	2700	21	30.7
58	59	8000	3	2000	7	220	19	SM570	2700	28	15.3
59	59	8000	3	2000	7	220	19	SM570	2700	28	15.3
59	60	8000	3	2000	7	220	19	SM570	2700	33	15.3
60	60	8000	3	2000	7	220	19	SM570	2700	33	15.3
60	61	8000	3	2000	7	220	19	SM570	2700	28	15.3
61	61	8000	3	2000	7	220	19	SM570	2700	28	15.3
61	62	8000	3	2000	3	220	19	SM570	2700	20	30.7
62	62	10000	3	2500	3	220	19	SM570	2700	20	30.7

62	63	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
63	63	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
63	64	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
67	68	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
68	68	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
68	69	10000	3	2500	3	220	19	SM570	2700	17	30.7
69	69	10000	3	2500	3	220	19	SM570	2700	17	30.7
69	70	10000	3	2500	3	220	19	SM570	2700	24	30.7
70	70	8000	3	2000	3	220	19	SM570	2700	24	30.7
70	71	8000	3	2000	7	220	19	SM570	2700	33	15.3
71	71	8000	3	2000	7	220	19	SM570	2700	33	15.3
71	72	8000	3	2000	7	240	19	SM570	2700	39	15.3
72	72	10000	3	2500	7	240	19	SM570	2700	39	15.3
72	73	10000	3	2500	7	220	19	SM570	2700	32	15.3
73	73	10000	3	2500	7	220	19	SM570	2700	32	15.3
73	74	10000	3	2500	3	220	19	SM570	2700	22	30.7
74	74	10000	3	2500	3	220	19	SM570	2700	22	30.7
74	75	10000	3	2500	3	220	19	SM570	2700	18	30.7
75	75	10000	3	2500	3	220	19	SM570	2700	18	30.7

(b) Calculation of required stiffness

node No.	section No.	δL	γL	α	$\alpha 0$	$\gamma L \cdot req$	$AL \cdot req$ (cm ²)	AL	IL $\cdot req$ (cm ⁴)	IL	Ic $\cdot req$ (cm ⁴)	Ic
8	9	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
9	9	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
9	10	0.057	14.0	0.926	3.258	12.49	9.1	41.8	6033	6744	15353	58028
10	10	0.057	14.0	0.926	3.258	12.49	9.1	41.8	6033	6744	15353	58028

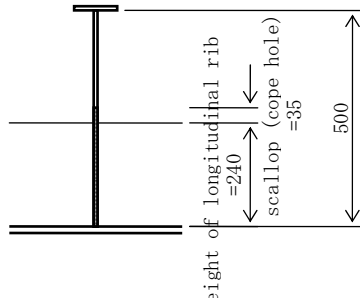
10	11	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
11	11	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
11	12	0.042	5.6	0.926	2.598	4.97	13.5	45.6	7803	8755	20154	56763
12	12	0.042	5.6	0.741	2.598	3.16	13.5	45.6	4957	8755	25356	56763
12	13	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
13	13	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
13	14	0.065	19.9	0.741	2.995	10.44	16.2	41.8	3544	6744	8928	58028
14	14	0.065	19.9	0.926	2.995	16.39	16.2	41.8	5563	6744	7115	58028
14	15	0.081	40.1	0.926	3.563	17.33	12.8	41.8	2917	6744	3728	58028
15	15	0.081	40.1	0.926	3.563	17.33	12.8	41.8	2917	6744	3728	58028
15	16	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
16	16	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
20	20	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
20	21	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
21	21	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
21	22	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
22	22	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
22	23	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
23	23	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
23	24	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
24	24	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
24	25	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
25	25	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
25	26	0.074	29.7	0.741	3.307	10.77	14.2	41.8	2448	6744	6162	58028
26	26	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
26	27	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
27	27	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
32	32	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
32	33	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
33	33	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
33	34	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
34	34	0.070	25.8	0.741	3.195	10.65	14.9	41.8	2784	6744	7010	58028
34	35	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
35	35	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
35	36	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
36	36	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
36	37	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
37	37	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028

37	38	0.067	22.6	0.741	3.091	10.54	15.5	41.8	3149	6744	7931	58028
38	38	0.067	22.6	0.926	3.091	16.55	15.5	41.8	4942	6744	6320	58028
38	39	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
39	39	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
39	40	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
44	44	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
44	45	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
45	45	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
45	46	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
46	46	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
46	47	0.053	11.3	0.741	3.090	6.71	9.8	41.8	4018	6744	20140	58028
47	47	0.053	11.3	0.741	3.090	6.71	9.8	41.8	4018	6744	20140	58028
47	48	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
48	48	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
48	49	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
49	49	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
49	50	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
50	50	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
50	51	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
51	51	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
56	57	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
57	57	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
57	58	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
58	58	0.074	29.7	0.741	3.307	10.77	14.2	41.8	2448	6744	6162	58028
58	59	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
59	59	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
59	60	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
60	60	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
60	61	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
61	61	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
61	62	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
62	62	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
62	63	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
63	63	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
63	64	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
67	68	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
68	68	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
68	69	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
69	69	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028

69	70	0.065	19.9	0.926	2.995	16.39	16.2	41.8	5563	6744	7115	58028
70	70	0.065	19.9	0.741	2.995	10.44	16.2	41.8	3544	6744	8928	58028
70	71	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
71	71	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
71	72	0.043	6.0	0.741	2.647	3.36	13.2	45.6	4890	8755	24956	56763
72	72	0.043	6.0	0.926	2.647	5.28	13.2	45.6	7694	8755	19843	56763
72	73	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
73	73	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
73	74	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
74	74	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
74	75	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
75	75	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028

Calculation of transverse ribs

Section of transverse rib



				Ag (cm ²)	I (cm ⁴)
1-WEB	PL	500*	(SM400) =	45.00	37500
1-FLG	PL	100*10	(SM400) =	10.00	25503

$$I_c = 63003 - 0.9 * (24.0 + 3.5)^3 / 3 = \Sigma Ag = 55.00 \text{ cm}^2 \quad 63003 \text{ cm}^4 \geq I_c \cdot req = 25356 \text{ cm}^4$$

Calculation of ribs

Explanation of calculation formula

Required section area of longitudinal rib

$$AL \cdot req = b * t / (10 * n)$$

Required stiffness of longitudinal rib

$$IL \cdot req = b * t^3 / 11 * \gamma L \cdot req$$

Required stiffness ratio of longitudinal rib and required stiffness of transverse rib

$\alpha \leq \alpha 0$ and stiffness ratio of transverse rib satisfies $Ic \cdot req$

$$\begin{aligned} \gamma L \cdot req &= 4 \alpha^2 n * (t0/t)^2 * (1+n * \delta L) - (\alpha^2+1)^2/n && (t \geq t0) \\ &= 4 \alpha^2 n * (1+n * \delta L) - (\alpha^2+1)^2/n && (t < t0) \dots\dots (4.2.5) \end{aligned}$$

Where required stiffness ratio of transverse rib is as follows

$$Ic \cdot req = (b * t^3 / 11) * \{ (1 + n * \gamma L \cdot req) / (4 * \alpha^3) \} \dots\dots\dots (4.2.6)$$

2) Except case 1)

$$\begin{aligned} \gamma L \cdot req &= [\{ 2n^2 * (t0/t)^2 * (1+n * \delta L) - 1 \}^2 - 1] / n && (t \geq t0) \\ &= [\{ 2n^2 * (1+n * \delta L) - 1 \}^2 - 1] / n && (t < t0) \dots\dots\dots (4.2.7) \end{aligned}$$

Explanation of codes

- | | | | |
|------------|-----------------------------------------------------------------------------------------------------|------------|---------------------------------------------------|
| t | : Thickness of stiffener | b | : Total width of stiffener |
| a | : Interval of transverse ribs longitudinal | n | : Number of panel to be separated by longitudinal |
| α | : Aspect ratio of stiffener | $\alpha 0$ | = a / b |
| $\alpha 0$ | : Limit size ratio in length and width | $\alpha 0$ | = $\sqrt[4]{(1+n * \gamma L)}$ |
| δL | : Section area ratio of one(1) longitudinal rib | δL | = AL / (b * t) |
| γL | : Stiffness ratio of longitudinal rib | γL | = IL / (b * t ³ / 11) |
| t0 | : Thickness specified in the Table 4.2.6 in 'Spec. for Highway Bridges II' | | |
| t0 | = b / (k * f * n) | | |
| t0 | : Thickness specified in the Table 3.2.6 in 'Spec. for Highway Bridges II' | t0 | |
| t0 | = b / (k * f * n) | | |
| | Provided, SM400:k=28 SM490:k=24 SM490Y:k=22 SM570:k=22 | | |
| f | : Modification factor by stress grade(is =1) 「in the Table 4.2.4 in 'Spec. for Highway Bridges II'」 | | |
| AL | : Section area of one(1) longitudinal rib | | |
| IL | : Moment of inertia of one(1) longitudinal rib | | |
| Ic | : Moment of inertia of one(1) transverse rib | | |

Calculation of longitudinal ribs

(1) Main Girder G-1 Name of stiffener : LFLG

(a) Dimension of sections

node stiffener No.	section No.	node width length	Transverse thickness rib nos.	Transverse thickness interval	Transverse thickness rib nos.	Longitudinal height	Longitudinal thickness	Longitudinal thickness	Longitudinal grade	b	
t	t0	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	
8	9	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
9	9	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
9	10	10000	3	2500	5	220	19	SM570	1500	24	11.4
10	10	10000	3	2500	5	220	19	SM570	1500	24	11.4
10	11	10000	3	2500	5	220	19	SM570-H	1500	43	11.4
11	11	10000	3	2500	5	220	19	SM570-H	1500	43	11.4
11	12	10000	3	2500	5	220	19	SM570-H	1500	52	11.4
12	12	8000	3	2000	5	220	19	SM570-H	1500	52	11.4
12	13	8000	3	2000	5	220	19	SM570-H	1500	47	11.4
13	13	8000	3	2000	5	220	19	SM570-H	1500	47	11.4
13	14	8000	3	2000	5	220	19	SM490Y	1500	27	11.4
14	14	10000	3	2500	5	220	19	SM490Y	1500	27	11.4
14	15	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
15	15	10000	3	2500	5	220	19	SM490Y	1500	16	11.4
15	16	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
16	16	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
20	20	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
20	21	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
21	21	10000	3	2500	5	220	19	SM490Y	1500	17	11.4

21	22	10000	3	2500	5	220	19	SM490Y	1500	17	11.4
22	22	8000	3	2000	5	220	19	SM490Y	1500	17	11.4
22	23	8000	3	2000	5	220	19	SM570	1500	30	11.4
23	23	8000	3	2000	5	220	19	SM570	1500	30	11.4
23	24	8000	3	2000	5	220	19	SM570	1500	38	11.4
24	24	8000	3	2000	5	220	19	SM570	1500	38	11.4
24	25	8000	3	2000	5	220	19	SM570	1500	30	11.4
25	25	8000	3	2000	5	220	19	SM570	1500	30	11.4
25	26	8000	3	2000	2	220	19	SM570	1500	18	22.7
26	26	10000	3	2500	2	220	19	SM570	1500	18	22.7
26	27	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
27	27	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
32	33	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
33	33	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
33	34	10000	3	2500	5	220	19	SM490Y	1500	18	11.4
34	34	8000	3	2000	5	220	19	SM490Y	1500	18	11.4
34	35	8000	3	2000	5	220	19	SM570	1500	36	11.4
35	35	8000	3	2000	5	220	19	SM570	1500	36	11.4
35	36	8000	3	2000	5	220	19	SM570-H	1500	46	11.4
36	36	8000	3	2000	5	220	19	SM570-H	1500	46	11.4
36	37	8000	3	2000	2	220	19	SM570	1500	40	22.7
37	37	8000	3	2000	2	220	19	SM570	1500	40	22.7
37	38	8000	3	2000	2	220	19	SM490Y	1500	21	22.7
38	38	10000	3	2500	2	220	19	SM490Y	1500	21	22.7

38	39	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
39	39	10000	3	2500	2	220	19	SM490Y	1500	13	22.7
39	40	10000	3	2500	2	220	19	SM490Y	1500	22	22.7
44	44	10000	3	2500	5	220	19	SM490Y	1500	20	11.4
44	45	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
45	45	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
45	46	10000	3	2500	5	220	19	SM570	1500	18	11.4
46	46	8000	3	2000	5	220	19	SM570	1500	18	11.4
46	47	8000	3	2000	5	220	19	SM570	1500	32	11.4
47	47	8000	3	2000	5	220	19	SM570	1500	32	11.4
47	48	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
48	48	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
48	49	8000	3	2000	2	220	19	SM570	1500	40	22.7
49	49	8000	3	2000	2	220	19	SM570	1500	40	22.7
49	50	8000	3	2000	2	220	19	SM490Y	1500	21	22.7
50	50	10000	3	2500	2	220	19	SM490Y	1500	21	22.7
50	51	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
51	51	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
56	57	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
57	57	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
57	58	10000	3	2500	2	220	19	SM490Y	1500	21	22.7
58	58	8000	3	2000	2	220	19	SM490Y	1500	21	22.7

58	59	8000	3	2000	2	220	19	SM570	1500	37	22.7
59	59	8000	3	2000	2	220	19	SM570	1500	37	22.7
59	60	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
60	60	8000	3	2000	2	220	19	SM570-H	1500	46	22.7
60	61	8000	3	2000	5	220	19	SM570	1500	33	11.4
61	61	8000	3	2000	5	220	19	SM570	1500	33	11.4
61	62	8000	3	2000	5	220	19	SM570	1500	18	11.4
62	62	10000	3	2500	5	220	19	SM570	1500	18	11.4
62	63	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
63	63	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
63	64	10000	3	2500	5	220	19	SM490Y	1500	14	11.4
67	68	10000	3	2500	5	220	19	SM490Y	1500	15	11.4
68	68	10000	3	2500	5	220	19	SM490Y	1500	15	11.4
68	69	10000	3	2500	2	220	19	SM490Y	1500	15	22.7
69	69	10000	3	2500	2	220	19	SM490Y	1500	15	22.7
69	70	10000	3	2500	2	220	19	SM570	1500	22	22.7
70	70	8000	3	2000	2	220	19	SM570	1500	22	22.7
70	71	8000	3	2000	2	220	19	SM570-H	1500	44	22.7
71	71	8000	3	2000	2	220	19	SM570-H	1500	44	22.7
71	72	8000	3	2000	5	220	19	SM570-H	1500	54	11.4
72	72	10000	3	2500	5	220	19	SM570-H	1500	54	11.4
72	73	10000	3	2500	5	220	19	SM570-H	1500	42	11.4
73	73	10000	3	2500	5	220	19	SM570-H	1500	42	11.4

73	74	10000	3	2500	2	220	19	SM570	1500	21	22.7
74	74	10000	3	2500	2	220	19	SM570	1500	21	22.7
74	75	10000	3	2500	2	220	19	SM490Y	1500	17	22.7
75	75	10000	3	2500	2	220	19	SM490Y	1500	17	22.7

(b) Calculation of required stiffness

node No.	section No.	δL	γL	α	$\alpha 0$	$\gamma L \cdot req$	$AL \cdot req$ (cm ²)	AL	IL $\cdot req$ (cm ⁴)	IL	Ic $\cdot req$ (cm ⁴)	Ic
8	9	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
9	9	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
9	10	0.116	35.8	1.667	3.832	22.98	6.0	41.8	4332	6744	1414	58028
10	10	0.116	35.8	1.667	3.832	22.98	6.0	41.8	4332	6744	1414	58028
10	11	0.065	6.2	1.667	2.488	4.09	10.8	41.8	4432	6744	1494	58028
11	11	0.065	6.2	1.667	2.488	4.09	10.8	41.8	4432	6744	1494	58028
11	12	0.054	3.5	1.667	2.168	1.83	13.0	41.8	3507	6744	1240	58028
12	12	0.054	3.5	1.333	2.168	1.41	13.0	41.8	2697	6744	1909	58028
12	13	0.059	4.8	1.333	2.332	2.10	11.8	41.8	2967	6744	2027	58028
13	13	0.059	4.8	1.333	2.332	2.10	11.8	41.8	2967	6744	2027	58028
13	14	0.103	25.1	1.333	3.510	10.95	6.8	41.8	2940	6744	1889	58028
14	14	0.103	25.1	1.667	3.510	16.74	6.8	41.8	4494	6744	1471	58028
14	15	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
15	15	0.174	120.7	1.667	5.190	66.39	4.0	41.8	3708	6744	1204	58028
15	16	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
16	16	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
20	20	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
20	21	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
21	21	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
21	22	0.164	100.7	1.667	4.959	56.71	4.3	41.8	3799	6744	1235	58028
22	22	0.164	100.7	1.333	4.959	36.53	4.3	41.8	2447	6744	1556	58028
22	23	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
23	23	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
23	24	0.073	9.0	1.333	2.724	4.21	9.5	41.8	3149	6744	2072	58028
24	24	0.073	9.0	1.333	2.724	4.21	9.5	41.8	3149	6744	2072	58028
24	25	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
25	25	0.093	18.3	1.333	3.245	8.25	7.5	41.8	3037	6744	1960	58028
25	26	0.155	84.8	1.333	3.998	28.67	9.0	41.8	2280	6744	730	58028
26	26	0.155	84.8	1.667	3.998	44.06	9.0	41.8	3504	6744	572	58028

26	27	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
27	27	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
32	33	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
33	33	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
33	34	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
34	34	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
34	35	0.077	10.6	1.333	2.835	4.94	9.0	41.8	3143	6744	2056	58028
35	35	0.077	10.6	1.333	2.835	4.94	9.0	41.8	3143	6744	2056	58028
35	36	0.061	5.1	1.333	2.369	2.26	11.5	41.8	3005	6744	2042	58028
36	36	0.061	5.1	1.333	2.369	2.26	11.5	41.8	3005	6744	2042	58028
36	37	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
37	37	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
37	38	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
38	38	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
38	39	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
39	39	0.214	225.1	1.667	5.100	50.01	6.5	41.8	1498	6744	244	58028
39	40	0.127	46.4	1.667	3.442	41.24	11.0	41.8	5988	6744	978	58028
44	44	0.139	61.8	1.667	4.391	37.14	5.0	41.8	4051	6744	1318	58028
44	45	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
45	45	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
45	46	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
46	46	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
46	47	0.087	15.1	1.333	3.093	6.91	8.0	41.8	3086	6744	2000	58028
47	47	0.087	15.1	1.333	3.093	6.91	8.0	41.8	3086	6744	2000	58028
47	48	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
48	48	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
48	49	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
49	49	0.070	7.7	1.333	2.218	5.75	20.0	41.8	5022	6744	1681	58028
49	50	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
50	50	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
50	51	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
51	51	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
56	57	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
57	57	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
57	58	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
58	58	0.133	53.4	1.333	3.563	27.25	10.5	41.8	3442	6744	1102	58028
58	59	0.075	9.8	1.333	2.346	7.30	18.5	41.8	5039	6744	1667	58028
59	59	0.075	9.8	1.333	2.346	7.30	18.5	41.8	5039	6744	1667	58028

59	60	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
60	60	0.061	5.1	1.333	2.008	3.58	23.0	41.8	4754	6744	1644	58028
60	61	0.084	13.8	1.333	3.023	6.34	8.3	41.8	3105	6744	2017	58028
61	61	0.084	13.8	1.333	3.023	6.34	8.3	41.8	3105	6744	2017	58028
61	62	0.155	84.8	1.333	4.752	31.51	4.5	41.8	2506	6744	1594	58028
62	62	0.155	84.8	1.667	4.752	48.87	4.5	41.8	3887	6744	1264	58028
62	63	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
63	63	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
63	64	0.199	180.2	1.667	5.736	94.00	3.5	41.8	3517	6744	1142	58028
67	68	0.186	146.5	1.667	5.447	78.53	3.8	41.8	3614	6744	1173	58028
68	68	0.186	146.5	1.667	5.447	78.53	3.8	41.8	3614	6744	1173	58028
68	69	0.186	146.5	1.667	4.582	47.15	7.5	41.8	2170	6744	354	58028
69	69	0.186	146.5	1.667	4.582	47.15	7.5	41.8	2170	6744	354	58028
69	70	0.127	46.4	1.667	3.442	41.24	11.0	41.8	5988	6744	978	58028
70	70	0.127	46.4	1.333	3.442	26.87	11.0	41.8	3901	6744	1250	58028
70	71	0.063	5.8	1.333	2.072	4.20	22.0	41.8	4880	6744	1667	58028
71	71	0.063	5.8	1.333	2.072	4.20	22.0	41.8	4880	6744	1667	58028
71	72	0.052	3.1	1.333	2.111	1.19	13.5	41.8	2552	6744	1841	58028
72	72	0.052	3.1	1.667	2.111	1.49	13.5	41.8	3195	6744	1151	58028
72	73	0.066	6.7	1.667	2.531	4.44	10.5	41.8	4490	6744	1509	58028
73	73	0.066	6.7	1.667	2.531	4.44	10.5	41.8	4490	6744	1509	58028
73	74	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
74	74	0.133	53.4	1.667	3.563	41.85	10.5	41.8	5285	6744	863	58028
74	75	0.164	100.7	1.667	4.172	44.97	8.5	41.8	3013	6744	492	58028
75	75	0.164	100.7	1.667	4.172	44.97	8.5	41.8	3013	6744	492	58028

(2) Main Girder G-2 Name of stiffener : LFLG

(a) Dimension of sections

node stiffener No.	section No.	node width length	node thickness rib nos.	Transverse thickness interval	Transverse thickness rib nos.	Longitudinal height	Longitudinal thickness	Longitudinal grade	b		
t	t0	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			
8	9	10000	3	2500	3	220	19	SM490Y	2700	18	30.7
9	9	10000	3	2500	3	220	19	SM490Y	2700	18	30.7
9	10	10000	3	2500	7	220	19	SM570	2700	27	15.3
10	10	10000	3	2500	7	220	19	SM570	2700	27	15.3

10	11	10000	3	2500	7	220	19	SM570	2700	32	15.3
11	11	10000	3	2500	7	220	19	SM570	2700	32	15.3
11	12	10000	3	2500	7	240	19	SM570	2700	40	15.3
12	12	8000	3	2000	7	240	19	SM570	2700	40	15.3
12	13	8000	3	2000	7	220	19	SM570	2700	35	15.3
13	13	8000	3	2000	7	220	19	SM570	2700	35	15.3
13	14	8000	3	2000	3	220	19	SM570	2700	24	30.7
14	14	10000	3	2500	3	220	19	SM570	2700	24	30.7
14	15	10000	3	2500	3	220	19	SM490Y	2700	19	30.7
15	15	10000	3	2500	3	220	19	SM490Y	2700	19	30.7
15	16	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
16	16	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
20	20	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
20	21	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
21	21	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
21	22	10000	3	2500	3	220	19	SM490Y	2700	20	30.7
22	22	8000	3	2000	3	220	19	SM490Y	2700	20	30.7
22	23	8000	3	2000	7	220	19	SM570	2700	27	15.3
23	23	8000	3	2000	7	220	19	SM570	2700	27	15.3
23	24	8000	3	2000	7	220	19	SM570	2700	32	15.3
24	24	8000	3	2000	7	220	19	SM570	2700	32	15.3
24	25	8000	3	2000	7	220	19	SM570	2700	27	15.3
25	25	8000	3	2000	7	220	19	SM570	2700	27	15.3

25	26	8000	3	2000	3	220	19	SM570	2700	21	30.7
26	26	10000	3	2500	3	220	19	SM570	2700	21	30.7
26	27	10000	3	2500	3	220	19	SM570	2700	21	30.7
27	27	10000	3	2500	3	220	19	SM570	2700	21	30.7
32	32	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
32	33	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
33	33	10000	3	2500	3	220	19	SM490Y	2700	16	30.7
33	34	10000	3	2500	3	220	19	SM490Y	2700	22	30.7
34	34	8000	3	2000	3	220	19	SM490Y	2700	22	30.7
34	35	8000	3	2000	7	220	19	SM570	2700	30	15.3
35	35	8000	3	2000	7	220	19	SM570	2700	30	15.3
35	36	8000	3	2000	7	220	19	SM570	2700	35	15.3
36	36	8000	3	2000	7	220	19	SM570	2700	35	15.3
36	37	8000	3	2000	7	220	19	SM570	2700	30	15.3
37	37	8000	3	2000	7	220	19	SM570	2700	30	15.3
37	38	8000	3	2000	3	220	19	SM490Y	2700	23	30.7
38	38	10000	3	2500	3	220	19	SM490Y	2700	23	30.7
38	39	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
39	39	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
39	40	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
44	44	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
44	45	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
45	45	10000	3	2500	3	220	19	SM490Y	2700	15	30.7

45	46	10000	3	2500	3	220	19	SM570	2700	20	30.7
46	46	8000	3	2000	3	220	19	SM570	2700	20	30.7
46	47	8000	3	2000	7	220	19	SM570	2700	29	15.3
47	47	8000	3	2000	7	220	19	SM570	2700	29	15.3
47	48	8000	3	2000	7	220	19	SM570	2700	32	15.3
48	48	8000	3	2000	7	220	19	SM570	2700	32	15.3
48	49	8000	3	2000	7	220	19	SM570	2700	28	15.3
49	49	8000	3	2000	7	220	19	SM570	2700	28	15.3
49	50	8000	3	2000	3	220	19	SM570	2700	20	30.7
50	50	10000	3	2500	3	220	19	SM570	2700	20	30.7
50	51	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
51	51	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
56	57	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
57	57	10000	3	2500	3	220	19	SM490Y	2700	17	30.7
57	58	10000	3	2500	3	220	19	SM490Y	2700	21	30.7
58	58	8000	3	2000	3	220	19	SM490Y	2700	21	30.7
58	59	8000	3	2000	7	220	19	SM570	2700	28	15.3
59	59	8000	3	2000	7	220	19	SM570	2700	28	15.3
59	60	8000	3	2000	7	220	19	SM570	2700	33	15.3
60	60	8000	3	2000	7	220	19	SM570	2700	33	15.3
60	61	8000	3	2000	7	220	19	SM570	2700	28	15.3
61	61	8000	3	2000	7	220	19	SM570	2700	28	15.3
61	62	8000	3	2000	3	220	19	SM570	2700	20	30.7
62	62	10000	3	2500	3	220	19	SM570	2700	20	30.7

62	63	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
63	63	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
63	64	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
67	68	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
68	68	10000	3	2500	3	220	19	SM490Y	2700	15	30.7
68	69	10000	3	2500	3	220	19	SM570	2700	17	30.7
69	69	10000	3	2500	3	220	19	SM570	2700	17	30.7
69	70	10000	3	2500	3	220	19	SM570	2700	24	30.7
70	70	8000	3	2000	3	220	19	SM570	2700	24	30.7
70	71	8000	3	2000	7	220	19	SM570	2700	33	15.3
71	71	8000	3	2000	7	220	19	SM570	2700	33	15.3
71	72	8000	3	2000	7	240	19	SM570	2700	39	15.3
72	72	10000	3	2500	7	240	19	SM570	2700	39	15.3
72	73	10000	3	2500	7	220	19	SM570	2700	32	15.3
73	73	10000	3	2500	7	220	19	SM570	2700	32	15.3
73	74	10000	3	2500	3	220	19	SM570	2700	22	30.7
74	74	10000	3	2500	3	220	19	SM570	2700	22	30.7
74	75	10000	3	2500	3	220	19	SM570	2700	18	30.7
75	75	10000	3	2500	3	220	19	SM570	2700	18	30.7

(b) Calculation of required stiffness

node No.	section No.	δL	γL	α	$\alpha 0$	$\gamma L \cdot req$	$AL \cdot req$ (cm^2)	AL	IL $\cdot req$ (cm^4)	IL	$Ic \cdot req$ (cm^4)	Ic
8	9	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
9	9	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
9	10	0.057	14.0	0.926	3.258	12.49	9.1	41.8	6033	6744	15353	58028
10	10	0.057	14.0	0.926	3.258	12.49	9.1	41.8	6033	6744	15353	58028

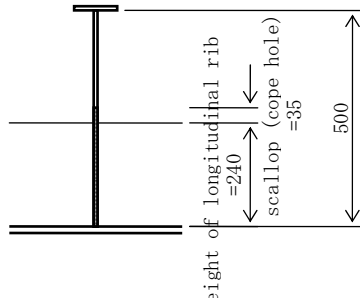
10	11	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
11	11	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
11	12	0.042	5.6	0.926	2.598	4.97	13.5	45.6	7803	8755	20154	56763
12	12	0.042	5.6	0.741	2.598	3.16	13.5	45.6	4957	8755	25356	56763
12	13	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
13	13	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
13	14	0.065	19.9	0.741	2.995	10.44	16.2	41.8	3544	6744	8928	58028
14	14	0.065	19.9	0.926	2.995	16.39	16.2	41.8	5563	6744	7115	58028
14	15	0.081	40.1	0.926	3.563	17.33	12.8	41.8	2917	6744	3728	58028
15	15	0.081	40.1	0.926	3.563	17.33	12.8	41.8	2917	6744	3728	58028
15	16	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
16	16	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
20	20	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
20	21	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
21	21	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
21	22	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
22	22	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
22	23	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
23	23	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
23	24	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
24	24	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
24	25	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
25	25	0.057	14.0	0.741	3.258	7.97	9.1	41.8	3850	6744	19242	58028
25	26	0.074	29.7	0.741	3.307	10.77	14.2	41.8	2448	6744	6162	58028
26	26	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
26	27	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
27	27	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
32	32	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
32	33	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
33	33	0.097	67.1	0.926	4.051	18.16	10.8	41.8	1826	6744	2332	58028
33	34	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
34	34	0.070	25.8	0.741	3.195	10.65	14.9	41.8	2784	6744	7010	58028
34	35	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
35	35	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
35	36	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
36	36	0.044	6.4	0.741	2.689	4.27	11.8	41.8	4491	6744	22745	58028
36	37	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028
37	37	0.052	10.2	0.741	3.013	6.19	10.1	41.8	4100	6744	20584	58028

37	38	0.067	22.6	0.741	3.091	10.54	15.5	41.8	3149	6744	7931	58028
38	38	0.067	22.6	0.926	3.091	16.55	15.5	41.8	4942	6744	6320	58028
38	39	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
39	39	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
39	40	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
44	44	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
44	45	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
45	45	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
45	46	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
46	46	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
46	47	0.053	11.3	0.741	3.090	6.71	9.8	41.8	4018	6744	20140	58028
47	47	0.053	11.3	0.741	3.090	6.71	9.8	41.8	4018	6744	20140	58028
47	48	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
48	48	0.048	8.4	0.741	2.872	5.30	10.8	41.8	4261	6744	21461	58028
48	49	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
49	49	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
49	50	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
50	50	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
50	51	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
51	51	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
56	57	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
57	57	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
57	58	0.074	29.7	0.926	3.307	16.90	14.2	41.8	3842	6744	4911	58028
58	58	0.074	29.7	0.741	3.307	10.77	14.2	41.8	2448	6744	6162	58028
58	59	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
59	59	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
59	60	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
60	60	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
60	61	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
61	61	0.055	12.5	0.741	3.171	7.30	9.4	41.8	3935	6744	19693	58028
61	62	0.077	34.3	0.741	3.430	10.90	13.5	41.8	2140	6744	5386	58028
62	62	0.077	34.3	0.926	3.430	17.10	13.5	41.8	3358	6744	4292	58028
62	63	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
63	63	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
63	64	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
67	68	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
68	68	0.103	81.4	0.926	4.251	18.52	10.1	41.8	1534	6744	1959	58028
68	69	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028
69	69	0.091	55.9	0.926	3.872	17.85	11.5	41.8	2153	6744	2750	58028

69	70	0.065	19.9	0.926	2.995	16.39	16.2	41.8	5563	6744	7115	58028
70	70	0.065	19.9	0.741	2.995	10.44	16.2	41.8	3544	6744	8928	58028
70	71	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
71	71	0.047	7.6	0.741	2.808	4.92	11.1	41.8	4339	6744	21893	58028
71	72	0.043	6.0	0.741	2.647	3.36	13.2	45.6	4890	8755	24956	56763
72	72	0.043	6.0	0.926	2.647	5.28	13.2	45.6	7694	8755	19843	56763
72	73	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
73	73	0.048	8.4	0.926	2.872	8.31	10.8	41.8	6687	6744	17102	58028
73	74	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
74	74	0.070	25.8	0.926	3.195	16.72	14.9	41.8	4369	6744	5586	58028
74	75	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028
75	75	0.086	47.1	0.926	3.710	17.57	12.1	41.8	2516	6744	3214	58028

Calculation of transverse ribs

Section of transverse rib



				Ag (cm ²)	I (cm ⁴)
1-WEB	PL	500*	Height of longitudinal rib = 240 (SM400)	= 45.00	37500
1-FLG	PL	100*10	scallop (cope hole) = 35 (SM400)	= 10.00	25503

$$I_c = 63003 - 0.9 * \left(\frac{\sum A_g = 55.00 \text{ cm}^2}{3} \right)^3 = 56763 \text{ cm}^4 \geq I_{c \cdot req} = 25356 \text{ cm}^4$$

Calculation of stiffeners

Description of the formula:

Check of spacing of vertical stiffeners

It will be confirmed that K1 and K2 shall satisfy the below formula.

$$K1 = a/b \leq 1.5$$

1) In case no horizontal stiffeners are used

$$K2 = [b/(100*t)]^4 * [(\sigma/345)^2 + \{\tau/(77+58*(b/a)^2)\}^2] \leq 1 : (a/b > 1)$$

$$K2 = [b/(100*t)]^4 * [(\sigma/345)^2 + \{\tau/(58+77*(b/a)^2)\}^2] \leq 1 : (a/b \leq 1)$$

2) In case one rung of stiffener is used

$$K2 = [b/(100*t)]^4 * [(\sigma/900)^2 + \{\tau/(120+58*(b/a)^2)\}^2] \leq 1 : (a/b > 0.80)$$

$$K2 = [b/(100*t)]^4 * [(\sigma/900)^2 + \{\tau/(90+77*(b/a)^2)\}^2] \leq 1 : (a/b \leq 0.80)$$

2) In case two rungs of stiffener are used

$$K2 = [b/(100*t)]^4 * [(\sigma/3000)^2 + \{\tau/(187+58*(b/a)^2)\}^2] \leq 1 : (a/b > 0.64)$$

$$K2 = [b/(100*t)]^4 * [(\sigma/3000)^2 + \{\tau/(140+77*(b/a)^2)\}^2] \leq 1 : (a/b \leq 0.64)$$

Required stiffness of vertical stiffener

$$Iv \cdot req = b * t^3 / 11 * \gamma v \cdot req \quad \gamma v \cdot req = 8.0 * (b/a)^2$$

Minimum width : $b/30 + 50$ (mm)

Minimum thickness : 1/13 of width of the stiffener

Required stiffness of horizontal stiffener

$$Ih \cdot req = b * t^3 / 11 * \gamma h \cdot req \quad \gamma h \cdot req = 30 * (a/b)$$

Definition of the symbol

a : Spacing between vertical stiffeners

b : Width of web

t : Thickness of web

σ : Edge compressive stress of web

τ : Shear stress of web

* Vertical stiffener interval of calculating required stiffness of vertical stiffener uses max value that meet K1 and K2.

Section of stiffeners

*Section of vertical stiffeners

Section code : VStfNo = 1

1-PL 170 * 16

$$I_v = 1.6 * 17.0^3 / 3 = 2620 \text{ cm}^4 \geq 2070 \text{ cm}^4$$

*Section of horizontal stiffeners

Section code : HStfNo = 1

1-PL 160 * 16

$$I_h = 1.6 * 16.0^3 / 3 = 2185 \text{ cm}^4 \geq 1871 \text{ cm}^4$$

Section code : HStfNo = 2

1-PL 160 * 18

$$I_h = 1.8 * 16.0^3 / 3 = 2458 \text{ cm}^4 \geq 2338 \text{ cm}^4$$

Check of spacing and calculation of required stiffness

(1) Main girder G-1 Web name : LWEB

(a) Check of section and web thickness

Pnl. No.	Sec. No.	Panel Length (mm)	Stiff. Qty	Stiff. Spacing (mm)	Stiff. rung	Stress		Web Grade	Web height (mm)	Web thk. (mm)	Rq' d thk. (mm)
						σ_c	τ				
1	1	10802	7	1350	2	0	59	SM490Y	3044	12	10.4
1	1	10802	7	1350	2	-72	47	SM490Y	3044	12	10.4
1	2	10802	7	1350	2	-68	46	SM490Y	3044	12	10.4
1	2	10802	7	1350	2	-76	44	SM490Y	3044	12	10.4
2	2	10003	7	1250	2	-76	45	SM490Y	3044	12	10.4
2	2	10003	7	1250	2	-122	35	SM490Y	3044	12	10.4
2	3	10003	7	1250	2	-120	35	SM570	3044	12	11.6
2	3	10003	7	1250	2	-125	34	SM570	3044	12	11.6
3	3	10003	7	1250	2	-125	34	SM570	3044	12	11.6
3	3	10003	7	1250	2	-153	24	SM570	3044	12	11.6
3	4	10003	7	1250	2	-152	24	SM570	3044	12	11.6
3	4	10003	7	1250	2	-155	23	SM570	3044	12	11.6
4	4	10003	7	1250	2	-155	25	SM570	3044	12	11.6
4	4	10003	7	1250	2	-168	16	SM570	3044	12	11.6
4	5	10003	7	1250	2	-168	16	SM570	3044	12	11.6
4	5	10003	7	1250	2	-169	14	SM570	3044	12	11.6
5	5	10001	7	1250	2	-170	15	SM570	3044	12	11.6
5	5	10001	7	1250	2	-171	14	SM570	3044	12	11.6
5	5	10001	7	1250	2	-168	19	SM570	3044	12	11.6
5	6	10001	7	1250	2	-168	19	SM570	3044	12	11.6
5	6	10001	7	1250	2	-167	20	SM570	3044	12	11.6
6	6	10000	7	1250	2	-167	17	SM570	3044	12	11.6
6	6	10000	7	1250	2	-154	27	SM570	3044	12	11.6
6	7	10000	7	1250	2	-155	27	SM570	3044	12	11.6
6	7	10000	7	1250	2	-152	29	SM570	3044	12	11.6
7	7	10000	7	1250	2	-151	29	SM570	3044	12	11.6
7	7	10000	7	1250	2	-120	39	SM570	3044	12	11.6
7	8	10000	7	1250	2	-125	40	SM570	3044	12	11.6
7	8	10000	7	1250	2	-119	41	SM570	3044	12	11.6
8	8	10000	7	1250	2	-119	40	SM570	3044	12	11.6
8	8	10000	7	1250	2	-69	51	SM570	3044	12	11.6
8	9	10000	7	1250	2	-72	52	SM490Y	3044	12	10.4
8	9	10000	7	1250	2	-64	53	SM490Y	3044	12	10.4
9	9	10000	7	1250	2	-64	48	SM490Y	3044	12	10.4
9	9	10000	7	1250	2	-91	58	SM490Y	3044	12	10.4
9	10	10000	7	1250	2	-75	57	SM570	3044	12	11.6
9	10	10000	7	1250	2	-87	59	SM570	3044	12	11.6

10	10	10000	7	1250	2	-87	58	SM570	3044	12	11.6
10	10	10000	7	1250	2	-196	69	SM570	3044	12	11.6
10	11	10000	7	1250	2	-134	66	SM570	3033	12	11.6
10	11	10000	7	1250	2	-146	68	SM570	3033	12	11.6
11	11	10000	7	1250	2	-146	70	SM570	3033	12	11.6
11	11	10000	7	1250	2	-215	77	SM570	3033	12	11.6
11	12	10000	7	1250	2	-182	58	SM570	3033	16	11.6
11	12	10000	7	1250	2	-222	62	SM570	3033	16	11.6
12	12	8000	7	1000	2	-222	56	SM570	3033	16	11.6
12	12	8000	7	1000	2	-195	53	SM570	3033	16	11.6
12	13	8000	7	1000	2	-217	70	SM570	3033	12	11.6
12	13	8000	7	1000	2	-171	64	SM570	3033	12	11.6
13	13	8000	7	1000	2	-171	63	SM570	3033	12	11.6
13	13	8000	7	1000	2	-131	57	SM570	3033	12	11.6
13	14	8000	7	1000	2	-191	59	SM490Y	3044	12	10.4
13	14	8000	7	1000	2	-159	55	SM490Y	3044	12	10.4
14	14	10000	7	1250	2	-159	55	SM490Y	3044	12	10.4
14	14	10000	7	1250	2	-101	48	SM490Y	3044	12	10.4
14	15	10000	7	1250	2	-130	49	SM490Y	3044	12	10.4
14	15	10000	7	1250	2	-93	44	SM490Y	3044	12	10.4
15	15	10000	7	1250	2	-93	46	SM490Y	3044	12	10.4
15	15	10000	7	1250	2	-50	38	SM490Y	3044	12	10.4
15	16	10000	7	1250	2	-53	38	SM490Y	3044	12	10.4
15	16	10000	7	1250	2	-46	34	SM490Y	3044	12	10.4
16	16	10000	7	1250	2	-46	35	SM490Y	3044	12	10.4
16	16	10000	7	1250	2	-67	28	SM490Y	3044	12	10.4
16	17	10000	7	1250	2	-67	28	SM490Y	3044	12	10.4
16	17	10000	7	1250	2	-77	23	SM490Y	3044	12	10.4
17	17	10000	7	1250	2	-77	26	SM490Y	3044	12	10.4
17	17	10000	7	1250	2	-88	18	SM490Y	3044	12	10.4
17	18	10000	7	1250	2	-88	18	SM490Y	3044	12	10.4
17	18	10000	7	1250	2	-91	14	SM490Y	3044	12	10.4
18	18	10000	7	1250	2	-91	17	SM490Y	3044	12	10.4
18	18	10000	7	1250	2	-93	13	SM490Y	3044	12	10.4
18	19	10000	7	1250	2	-92	13	SM490Y	3044	12	10.4
18	19	10000	7	1250	2	-92	13	SM490Y	3044	12	10.4
18	19	10000	7	1250	2	-90	19	SM490Y	3044	12	10.4
19	19	10000	7	1250	2	-90	17	SM490Y	3044	12	10.4
19	19	10000	7	1250	2	-84	22	SM490Y	3044	12	10.4
19	20	10000	7	1250	2	-85	22	SM490Y	3044	12	10.4
19	20	10000	7	1250	2	-70	29	SM490Y	3044	12	10.4
20	20	10000	7	1250	2	-70	28	SM490Y	3044	12	10.4
20	20	10000	7	1250	2	-57	33	SM490Y	3044	12	10.4
20	21	10000	7	1250	2	-57	33	SM490Y	3044	12	10.4
20	21	10000	7	1250	2	-43	40	SM490Y	3044	12	10.4

21	21	10000	7	1250	2	-43	39	SM490Y	3044	12	10.4
21	21	10000	7	1250	2	-68	43	SM490Y	3044	12	10.4
21	22	10000	7	1250	2	-68	43	SM490Y	3044	12	10.4
21	22	10000	7	1250	2	-120	51	SM490Y	3044	12	10.4
22	22	8000	7	1000	2	-120	50	SM490Y	3044	12	10.4
22	22	8000	7	1000	2	-152	54	SM490Y	3044	12	10.4
22	23	8000	7	1000	2	-113	53	SM570	3041	12	11.6
22	23	8000	7	1000	2	-160	59	SM570	3041	12	11.6
23	23	8000	7	1000	2	-160	59	SM570	3041	12	11.6
23	23	8000	7	1000	2	-215	66	SM570	3041	12	11.6
23	24	8000	7	1000	2	-186	65	SM570	3041	12	11.6
23	24	8000	7	1000	2	-217	69	SM570	3041	12	11.6
24	24	8000	7	1000	2	-217	70	SM570	3041	12	11.6
24	24	8000	7	1000	2	-184	66	SM570	3041	12	11.6
24	25	8000	7	1000	2	-213	67	SM570	3041	12	11.6
24	25	8000	7	1000	2	-154	61	SM570	3041	12	11.6
25	25	8000	7	1000	2	-154	60	SM570	3041	12	11.6
25	25	8000	7	1000	2	-103	54	SM570	3041	12	11.6
25	26	8000	7	1000	2	-160	56	SM570	3044	12	11.6
25	26	8000	7	1000	2	-120	52	SM570	3044	12	11.6
26	26	10000	7	1250	2	-120	52	SM570	3044	12	11.6
26	26	10000	7	1250	2	-58	44	SM570	3044	12	11.6
26	27	10000	7	1250	2	-69	45	SM490Y	3044	12	10.4
26	27	10000	7	1250	2	-37	40	SM490Y	3044	12	10.4
27	27	10000	7	1250	2	-37	42	SM490Y	3044	12	10.4
27	27	10000	7	1250	2	-63	34	SM490Y	3044	12	10.4
27	28	10000	7	1250	2	-62	34	SM570	3044	12	11.6
27	28	10000	7	1250	2	-75	29	SM570	3044	12	11.6
28	28	10000	7	1250	2	-75	32	SM570	3044	12	11.6
28	28	10000	7	1250	2	-94	24	SM570	3044	12	11.6
28	29	10000	7	1250	2	-91	24	SM570	3044	12	11.6
28	29	10000	7	1250	2	-99	19	SM570	3044	12	11.6
29	29	10000	7	1250	2	-99	23	SM570	3044	12	11.6
29	29	10000	7	1250	2	-107	16	SM570	3044	12	11.6
29	30	10000	7	1250	2	-108	16	SM570	3044	12	11.6
29	30	10000	7	1250	2	-109	14	SM570	3044	12	11.6
30	30	10000	7	1250	2	-109	14	SM570	3044	12	11.6
30	30	10000	7	1250	2	-109	13	SM570	3044	12	11.6
30	30	10000	7	1250	2	-109	16	SM570	3044	12	11.6
30	31	10000	7	1250	2	-109	16	SM570	3044	12	11.6
30	31	10000	7	1250	2	-102	23	SM570	3044	12	11.6
31	31	10000	7	1250	2	-102	21	SM570	3044	12	11.6
31	31	10000	7	1250	2	-94	25	SM570	3044	12	11.6
31	32	10000	7	1250	2	-94	25	SM490Y	3044	12	10.4
31	32	10000	7	1250	2	-75	33	SM490Y	3044	12	10.4

32	32	10000	7	1250	2	-75	32	SM490Y	3044	12	10.4
32	32	10000	7	1250	2	-60	36	SM490Y	3044	12	10.4
32	33	10000	7	1250	2	-62	37	SM490Y	3044	12	10.4
32	33	10000	7	1250	2	-47	44	SM490Y	3044	12	10.4
33	33	10000	7	1250	2	-47	43	SM490Y	3044	12	10.4
33	33	10000	7	1250	2	-79	48	SM490Y	3044	12	10.4
33	34	10000	7	1250	2	-71	47	SM490Y	3044	12	10.4
33	34	10000	7	1250	2	-131	55	SM490Y	3044	12	10.4
34	34	8000	7	1000	2	-131	55	SM490Y	3044	12	10.4
34	34	8000	7	1000	2	-168	59	SM490Y	3044	12	10.4
34	35	8000	7	1000	2	-113	57	SM570	3039	12	11.6
34	35	8000	7	1000	2	-161	63	SM570	3039	12	11.6
35	35	8000	7	1000	2	-161	64	SM570	3039	12	11.6
35	35	8000	7	1000	2	-215	70	SM570	3039	12	11.6
35	36	8000	7	1000	2	-179	60	SM570	3039	14	11.6
35	36	8000	7	1000	2	-209	63	SM570	3039	14	11.6
36	36	8000	7	1000	2	-209	63	SM570	3039	14	11.6
36	36	8000	7	1000	2	-179	59	SM570	3039	14	11.6
36	37	8000	7	1000	2	-221	69	SM570	3039	12	11.6
36	37	8000	7	1000	2	-165	63	SM570	3039	12	11.6
37	37	8000	7	1000	2	-165	62	SM570	3039	12	11.6
37	37	8000	7	1000	2	-116	56	SM570	3039	12	11.6
37	38	8000	7	1000	2	-180	58	SM490Y	3044	12	10.4
37	38	8000	7	1000	2	-140	55	SM490Y	3044	12	10.4
38	38	10000	7	1250	2	-140	54	SM490Y	3044	12	10.4
38	38	10000	7	1250	2	-74	47	SM490Y	3044	12	10.4
38	39	10000	7	1250	2	-95	48	SM490Y	3044	12	10.4
38	39	10000	7	1250	2	-55	43	SM490Y	3044	12	10.4
39	39	10000	7	1250	2	-55	45	SM490Y	3044	12	10.4
39	39	10000	7	1250	2	-58	37	SM490Y	3044	12	10.4
39	40	10000	7	1250	2	-55	36	SM490Y	3044	12	10.4
39	40	10000	7	1250	2	-71	31	SM490Y	3044	12	10.4
40	40	10000	7	1250	2	-71	34	SM490Y	3044	12	10.4
40	40	10000	7	1250	2	-92	26	SM490Y	3044	12	10.4
40	41	10000	7	1250	2	-89	26	SM490Y	3044	12	10.4
40	41	10000	7	1250	2	-98	22	SM490Y	3044	12	10.4
41	41	10000	7	1250	2	-98	23	SM490Y	3044	12	10.4
41	41	10000	7	1250	2	-107	16	SM490Y	3044	12	10.4
41	42	10000	7	1250	2	-107	16	SM490Y	3044	12	10.4
41	42	10000	7	1250	2	-108	13	SM490Y	3044	12	10.4
42	42	10000	7	1250	2	-108	14	SM490Y	3044	12	10.4
42	42	10000	7	1250	2	-108	13	SM490Y	3044	12	10.4
42	42	10000	7	1250	2	-108	16	SM490Y	3044	12	10.4
42	43	10000	7	1250	2	-108	16	SM490Y	3044	12	10.4
42	43	10000	7	1250	2	-100	23	SM490Y	3044	12	10.4

43	43	10000	7	1250	2	-100	21	SM490Y	3044	12	10.4
43	43	10000	7	1250	2	-92	26	SM490Y	3044	12	10.4
43	44	10000	7	1250	2	-94	26	SM490Y	3044	12	10.4
43	44	10000	7	1250	2	-75	34	SM490Y	3044	12	10.4
44	44	10000	7	1250	2	-75	31	SM490Y	3044	12	10.4
44	44	10000	7	1250	2	-60	36	SM490Y	3044	12	10.4
44	45	10000	7	1250	2	-61	37	SM490Y	3044	12	10.4
44	45	10000	7	1250	2	-46	44	SM490Y	3044	12	10.4
45	45	10000	7	1250	2	-46	43	SM490Y	3044	12	10.4
45	45	10000	7	1250	2	-78	47	SM490Y	3044	12	10.4
45	46	10000	7	1250	2	-70	47	SM570	3044	12	11.6
45	46	10000	7	1250	2	-128	54	SM570	3044	12	11.6
46	46	8000	7	1000	2	-128	54	SM570	3044	12	11.6
46	46	8000	7	1000	2	-163	58	SM570	3044	12	11.6
46	47	8000	7	1000	2	-118	56	SM570	3039	12	11.6
46	47	8000	7	1000	2	-168	62	SM570	3039	12	11.6
47	47	8000	7	1000	2	-168	64	SM570	3039	12	11.6
47	47	8000	7	1000	2	-225	70	SM570	3039	12	11.6
47	48	8000	7	1000	2	-191	60	SM570	3039	14	11.6
47	48	8000	7	1000	2	-223	63	SM570	3039	14	11.6
48	48	8000	7	1000	2	-223	63	SM570	3039	14	11.6
48	48	8000	7	1000	2	-191	59	SM570	3039	14	11.6
48	49	8000	7	1000	2	-217	69	SM570	3039	12	11.6
48	49	8000	7	1000	2	-161	63	SM570	3039	12	11.6
49	49	8000	7	1000	2	-161	62	SM570	3039	12	11.6
49	49	8000	7	1000	2	-112	56	SM570	3039	12	11.6
49	50	8000	7	1000	2	-174	59	SM490Y	3044	12	10.4
49	50	8000	7	1000	2	-135	55	SM490Y	3044	12	10.4
50	50	10000	7	1250	2	-135	55	SM490Y	3044	12	10.4
50	50	10000	7	1250	2	-74	47	SM490Y	3044	12	10.4
50	51	10000	7	1250	2	-76	48	SM490Y	3044	12	10.4
50	51	10000	7	1250	2	-45	43	SM490Y	3044	12	10.4
51	51	10000	7	1250	2	-45	44	SM490Y	3044	12	10.4
51	51	10000	7	1250	2	-64	36	SM490Y	3044	12	10.4
51	52	10000	7	1250	2	-63	36	SM490Y	3044	12	10.4
51	52	10000	7	1250	2	-78	31	SM490Y	3044	12	10.4
52	52	10000	7	1250	2	-78	33	SM490Y	3044	12	10.4
52	52	10000	7	1250	2	-98	26	SM490Y	3044	12	10.4
52	53	10000	7	1250	2	-95	25	SM490Y	3044	12	10.4
52	53	10000	7	1250	2	-104	21	SM490Y	3044	12	10.4
53	53	10000	7	1250	2	-104	23	SM490Y	3044	12	10.4
53	53	10000	7	1250	2	-112	16	SM490Y	3044	12	10.4
53	54	10000	7	1250	2	-112	16	SM490Y	3044	12	10.4
53	54	10000	7	1250	2	-113	13	SM490Y	3044	12	10.4

54	54	10000	7	1250	2	-113	14	SM490Y	3044	12	10.4
54	54	10000	7	1250	2	-113	14	SM490Y	3044	12	10.4
54	54	10000	7	1250	2	-112	16	SM490Y	3044	12	10.4
54	55	10000	7	1250	2	-112	16	SM490Y	3044	12	10.4
54	55	10000	7	1250	2	-105	23	SM490Y	3044	12	10.4
55	55	10000	7	1250	2	-105	21	SM490Y	3044	12	10.4
55	55	10000	7	1250	2	-97	25	SM490Y	3044	12	10.4
55	56	10000	7	1250	2	-99	26	SM490Y	3044	12	10.4
55	56	10000	7	1250	2	-80	33	SM490Y	3044	12	10.4
56	56	10000	7	1250	2	-80	31	SM490Y	3044	12	10.4
56	56	10000	7	1250	2	-65	35	SM490Y	3044	12	10.4
56	57	10000	7	1250	2	-67	36	SM490Y	3044	12	10.4
56	57	10000	7	1250	2	-38	43	SM490Y	3044	12	10.4
57	57	10000	7	1250	2	-38	42	SM490Y	3044	12	10.4
57	57	10000	7	1250	2	-64	47	SM490Y	3044	12	10.4
57	58	10000	7	1250	2	-63	46	SM490Y	3044	12	10.4
57	58	10000	7	1250	2	-121	54	SM490Y	3044	12	10.4
58	58	8000	7	1000	2	-121	54	SM490Y	3044	12	10.4
58	58	8000	7	1000	2	-158	58	SM490Y	3044	12	10.4
58	59	8000	7	1000	2	-108	56	SM570	3040	12	11.6
58	59	8000	7	1000	2	-159	62	SM570	3040	12	11.6
59	59	8000	7	1000	2	-159	63	SM570	3040	12	11.6
59	59	8000	7	1000	2	-217	69	SM570	3040	12	11.6
59	60	8000	7	1000	2	-185	69	SM570	3040	12	11.6
59	60	8000	7	1000	2	-217	72	SM570	3040	12	11.6
60	60	8000	7	1000	2	-217	70	SM570	3040	12	11.6
60	60	8000	7	1000	2	-186	66	SM570	3040	12	11.6
60	61	8000	7	1000	2	-211	67	SM570	3040	12	11.6
60	61	8000	7	1000	2	-157	61	SM570	3040	12	11.6
61	61	8000	7	1000	2	-157	60	SM570	3040	12	11.6
61	61	8000	7	1000	2	-110	54	SM570	3040	12	11.6
61	62	8000	7	1000	2	-155	56	SM570	3044	12	11.6
61	62	8000	7	1000	2	-121	52	SM570	3044	12	11.6
62	62	10000	7	1250	2	-121	52	SM570	3044	12	11.6
62	62	10000	7	1250	2	-67	44	SM570	3044	12	11.6
62	63	10000	7	1250	2	-74	45	SM490Y	3044	12	10.4
62	63	10000	7	1250	2	-45	40	SM490Y	3044	12	10.4
63	63	10000	7	1250	2	-45	41	SM490Y	3044	12	10.4
63	63	10000	7	1250	2	-57	33	SM490Y	3044	12	10.4
63	64	10000	7	1250	2	-57	33	SM490Y	3044	12	10.4
63	64	10000	7	1250	2	-70	29	SM490Y	3044	12	10.4
64	64	10000	7	1250	2	-70	31	SM490Y	3044	12	10.4
64	64	10000	7	1250	2	-87	23	SM490Y	3044	12	10.4
64	65	10000	7	1250	2	-84	23	SM490Y	3044	12	10.4
64	65	10000	7	1250	2	-91	18	SM490Y	3044	12	10.4

65	65	10000	7	1250	2	-91	21	SM490Y	3044	12	10.4
65	65	10000	7	1250	2	-97	14	SM490Y	3044	12	10.4
65	66	10000	7	1250	2	-97	14	SM490Y	3044	12	10.4
65	66	10000	7	1250	2	-97	13	SM490Y	3044	12	10.4
65	66	10000	7	1250	2	-97	15	SM490Y	3044	12	10.4
66	66	10000	7	1250	2	-97	13	SM490Y	3044	12	10.4
66	66	10000	7	1250	2	-95	17	SM490Y	3044	12	10.4
66	67	10000	7	1250	2	-95	17	SM490Y	3044	12	10.4
66	67	10000	7	1250	2	-85	24	SM490Y	3044	12	10.4
67	67	10000	7	1250	2	-85	22	SM490Y	3044	12	10.4
67	67	10000	7	1250	2	-76	27	SM490Y	3044	12	10.4
67	68	10000	7	1250	2	-77	27	SM490Y	3044	12	10.4
67	68	10000	7	1250	2	-56	35	SM490Y	3044	12	10.4
68	68	10000	7	1250	2	-56	32	SM490Y	3044	12	10.4
68	68	10000	7	1250	2	-43	37	SM490Y	3044	12	10.4
68	69	10000	7	1250	2	-44	37	SM490Y	3044	12	10.4
68	69	10000	7	1250	2	-76	45	SM490Y	3044	12	10.4
69	69	10000	7	1250	2	-76	44	SM490Y	3044	12	10.4
69	69	10000	7	1250	2	-118	48	SM490Y	3044	12	10.4
69	70	10000	7	1250	2	-96	47	SM570	3044	12	11.6
69	70	10000	7	1250	2	-166	55	SM570	3044	12	11.6
70	70	8000	7	1000	2	-166	55	SM570	3044	12	11.6
70	70	8000	7	1000	2	-206	59	SM570	3044	12	11.6
70	71	8000	7	1000	2	-126	56	SM570	3034	12	11.6
70	71	8000	7	1000	2	-172	62	SM570	3034	12	11.6
71	71	8000	7	1000	2	-172	64	SM570	3034	12	11.6
71	71	8000	7	1000	2	-225	70	SM570	3034	12	11.6
71	72	8000	7	1000	2	-177	69	SM570	3034	12	11.6
71	72	8000	7	1000	2	-204	73	SM570	3034	12	11.6
72	72	10000	7	1250	2	-204	76	SM570	3034	12	11.6
72	72	10000	7	1250	2	-168	71	SM570	3034	12	11.6
72	73	10000	7	1250	2	-200	72	SM570	3034	12	11.6
72	73	10000	7	1250	2	-136	65	SM570	3034	12	11.6
73	73	10000	7	1250	2	-136	64	SM570	3034	12	11.6
73	73	10000	7	1250	2	-102	59	SM570	3034	12	11.6
73	74	10000	7	1250	2	-182	62	SM570	3044	12	11.6
73	74	10000	7	1250	2	-98	54	SM570	3044	12	11.6
74	74	10000	7	1250	2	-98	55	SM570	3044	12	11.6
74	74	10000	7	1250	2	-59	50	SM570	3044	12	11.6
74	75	10000	7	1250	2	-66	51	SM490Y	3044	12	10.4
74	75	10000	7	1250	2	-59	43	SM490Y	3044	12	10.4
75	75	10000	7	1250	2	-59	45	SM490Y	3044	12	10.4
75	75	10000	7	1250	2	-79	41	SM490Y	3044	12	10.4
75	76	10000	7	1250	2	-76	40	SM570	3044	12	11.6
75	76	10000	7	1250	2	-106	32	SM570	3044	12	11.6

76	76	10000	7	1250	2	-106	37	SM570	3044	12	11.6
76	76	10000	7	1250	2	-121	32	SM570	3044	12	11.6
76	77	10000	7	1250	2	-117	32	SM570	3044	12	11.6
76	77	10000	7	1250	2	-137	24	SM570	3044	12	11.6
77	77	10000	7	1250	2	-137	26	SM570	3044	12	11.6
77	77	10000	7	1250	2	-145	22	SM570	3044	12	11.6
77	78	10000	7	1250	2	-143	22	SM570	3044	12	11.6
77	78	10000	7	1250	2	-151	14	SM570	3044	12	11.6
78	78	10000	7	1250	2	-151	16	SM570	3044	12	11.6
78	78	10000	7	1250	2	-152	12	SM570	3044	12	11.6
78	78	10000	7	1250	2	-152	12	SM570	3044	12	11.6
78	79	10000	7	1250	2	-152	12	SM570	3044	12	11.6
78	79	10000	7	1250	2	-147	18	SM570	3044	12	11.6
79	79	10000	7	1250	2	-147	20	SM570	3044	12	11.6
79	79	10000	7	1250	2	-139	24	SM570	3044	12	11.6
79	80	10000	7	1250	2	-141	25	SM570	3044	12	11.6
79	80	10000	7	1250	2	-122	32	SM570	3044	12	11.6
80	80	10000	7	1250	2	-122	31	SM570	3044	12	11.6
80	80	10000	7	1250	2	-107	36	SM570	3044	12	11.6
80	81	10000	7	1250	2	-112	36	SM570	3044	12	11.6
80	81	10000	7	1250	2	-82	44	SM570	3044	12	11.6
81	81	13100	7	1638	2	-82	39	SM570	3044	12	11.6
81	81	13100	7	1638	2	-54	45	SM570	3044	12	11.6
81	82	13100	7	1638	2	-57	47	SM490Y	3044	12	10.4
81	82	13100	7	1638	2	0	58	SM490Y	3044	12	10.4

(b) Check of spacing and required stiffness

Panel No.	Sec. No.	a/b	Spacing Check	Maximum Spacing	$\gamma v \cdot req$	$Iv \cdot req$ (cm ⁴)	Iv	VStf No	$\gamma h \cdot req$	$Ih \cdot req$ (cm ⁴)	Ih	HStf No
1	1	0.44	0.51	1724	24.96	1193	2620	1	13.31	636	2185	1
1	1	0.44	0.35	2113	16.61	794	2620	1	13.31	636	2185	1
1	2	0.44	0.33	2213	15.14	724	2620	1	13.31	636	2185	1
1	2	0.44	0.31	2319	13.79	660	2620	1	13.31	636	2185	1
2	2	0.41	0.27	2224	14.98	717	2620	1	12.32	589	2185	1
2	2	0.41	0.21	3330	6.68	320	2620	1	12.32	589	2185	1
2	3	0.41	0.21	3403	6.40	306	2620	1	12.32	589	2185	1
2	3	0.41	0.20	3776	5.20	249	2620	1	12.32	589	2185	1
3	3	0.41	0.21	3570	5.82	278	2620	1	12.32	589	2185	1
3	3	0.41	0.18	4566	3.56	170	2620	1	12.32	589	2185	1
3	4	0.41	0.18	4566	3.56	170	2620	1	12.32	589	2185	1
3	4	0.41	0.17	4566	3.56	170	2620	1	12.32	589	2185	1
4	4	0.41	0.19	4566	3.56	170	2620	1	12.32	589	2185	1
4	4	0.41	0.16	4566	3.56	170	2620	1	12.32	589	2185	1
4	5	0.41	0.16	4566	3.56	170	2620	1	12.32	589	2185	1
4	5	0.41	0.15	4566	3.56	170	2620	1	12.32	589	2185	1

5	5	0.41	0.16	4566	3.56	170	2620	1	12.32	589	2185	1
5	5	0.41	0.16	4566	3.56	170	2620	1	12.32	589	2185	1
5	5	0.41	0.17	4566	3.56	170	2620	1	12.32	589	2185	1
5	6	0.41	0.17	4566	3.56	170	2620	1	12.32	589	2185	1
5	6	0.41	0.18	4567	3.56	170	2620	1	12.32	589	2185	1
6	6	0.41	0.16	4567	3.56	170	2620	1	12.32	589	2185	1
6	6	0.41	0.19	4567	3.56	170	2620	1	12.32	589	2185	1
6	7	0.41	0.20	4567	3.56	170	2620	1	12.32	589	2185	1
6	7	0.41	0.20	4567	3.56	170	2620	1	12.32	589	2185	1
7	7	0.41	0.20	4567	3.56	170	2620	1	12.32	589	2185	1
7	7	0.41	0.24	2729	9.95	476	2620	1	12.32	589	2185	1
7	8	0.41	0.25	2625	10.76	515	2620	1	12.32	589	2185	1
7	8	0.41	0.26	2488	11.98	573	2620	1	12.32	589	2185	1
8	8	0.41	0.25	2590	11.06	529	2620	1	12.32	589	2185	1
8	8	0.41	0.32	1945	19.60	937	2620	1	12.32	589	2185	1
8	9	0.41	0.34	1901	20.52	981	2620	1	12.32	589	2185	1
8	9	0.41	0.35	1859	21.46	1026	2620	1	12.32	589	2185	1
9	9	0.41	0.28	2087	17.02	814	2620	1	12.32	589	2185	1
9	9	0.41	0.44	1711	25.33	1211	2620	1	12.32	589	2185	1
9	10	0.41	0.41	1747	24.30	1162	2620	1	12.32	589	2185	1
9	10	0.41	0.44	1705	25.51	1220	2620	1	12.32	589	2185	1
10	10	0.41	0.43	1723	24.98	1195	2620	1	12.32	589	2185	1
10	10	0.41	0.72	1436	35.97	1720	2620	1	12.32	589	2185	1
10	11	0.41	0.59	1534	31.27	1490	2620	1	12.36	589	2185	1
10	11	0.41	0.63	1501	32.68	1557	2620	1	12.36	589	2185	1
11	11	0.41	0.66	1467	34.21	1630	2620	1	12.36	589	2185	1
11	11	0.41	0.90	1306	43.16	2056	2620	1	12.36	589	2185	1
11	12	0.41	0.17	4367	3.86	436	2620	1	12.36	1396	2185	1
11	12	0.41	0.21	3513	5.96	673	2620	1	12.36	1396	2185	1
12	12	0.33	0.13	4550	3.56	402	2620	1	9.89	1117	2185	1
12	12	0.33	0.10	4550	3.56	402	2620	1	9.89	1117	2185	1
12	13	0.33	0.49	1399	37.59	1791	2620	1	9.89	471	2185	1
12	13	0.33	0.36	1545	30.83	1469	2620	1	9.89	471	2185	1
13	13	0.33	0.36	1562	30.18	1438	2620	1	9.89	471	2185	1
13	13	0.33	0.26	1722	24.82	1183	2620	1	9.89	471	2185	1
13	14	0.33	0.36	1611	28.56	1366	2620	1	9.85	471	2185	1
13	14	0.33	0.29	1731	24.73	1183	2620	1	9.85	471	2185	1
14	14	0.41	0.47	1731	24.75	1184	2620	1	12.32	589	2185	1
14	14	0.41	0.31	2049	17.65	844	2620	1	12.32	589	2185	1
14	15	0.41	0.36	1953	19.44	930	2620	1	12.32	589	2185	1
14	15	0.41	0.27	2271	14.37	687	2620	1	12.32	589	2185	1
15	15	0.41	0.28	2185	15.54	743	2620	1	12.32	589	2185	1
15	15	0.41	0.18	3023	8.12	388	2620	1	12.32	589	2185	1
15	16	0.41	0.18	2981	8.34	399	2620	1	12.32	589	2185	1
15	16	0.41	0.14	4217	4.17	199	2620	1	12.32	589	2185	1

16	16	0.41	0.16	3558	5.86	280	2620	1	12.32	589	2185	1
16	16	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
16	17	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
16	17	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
17	17	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
17	17	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
17	18	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
17	18	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
18	18	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
18	18	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
18	19	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
18	19	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
18	19	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
19	19	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
19	19	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
19	20	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
19	20	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
20	20	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
20	20	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
20	21	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
20	21	0.41	0.20	2707	10.12	484	2620	1	12.32	589	2185	1
21	21	0.41	0.18	2929	8.64	413	2620	1	12.32	589	2185	1
21	21	0.41	0.24	2389	12.99	621	2620	1	12.32	589	2185	1
21	22	0.41	0.24	2389	12.99	621	2620	1	12.32	589	2185	1
21	22	0.41	0.37	1894	20.66	988	2620	1	12.32	589	2185	1
22	22	0.33	0.21	1908	20.38	974	2620	1	9.85	471	2185	1
22	22	0.33	0.27	1765	23.80	1138	2620	1	9.85	471	2185	1
22	23	0.33	0.22	1848	21.65	1034	2620	1	9.87	471	2185	1
22	23	0.33	0.31	1652	27.09	1294	2620	1	9.87	471	2185	1
23	23	0.33	0.32	1638	27.56	1317	2620	1	9.87	471	2185	1
23	23	0.33	0.46	1460	34.69	1657	2620	1	9.87	471	2185	1
23	24	0.33	0.40	1506	32.61	1558	2620	1	9.87	471	2185	1
23	24	0.33	0.48	1412	37.13	1774	2620	1	9.87	471	2185	1
24	24	0.33	0.49	1391	38.22	1826	2620	1	9.87	471	2185	1
24	24	0.33	0.40	1484	33.58	1604	2620	1	9.87	471	2185	1
24	25	0.33	0.46	1440	35.66	1704	2620	1	9.87	471	2185	1
24	25	0.33	0.32	1614	28.41	1357	2620	1	9.87	471	2185	1
25	25	0.33	0.31	1626	27.99	1337	2620	1	9.87	471	2185	1
25	25	0.33	0.22	1813	22.50	1075	2620	1	9.87	471	2185	1
25	26	0.33	0.30	1707	25.44	1217	2620	1	9.85	471	2185	1
25	26	0.33	0.22	1849	21.69	1037	2620	1	9.85	471	2185	1
26	26	0.41	0.38	1858	21.47	1027	2620	1	12.32	589	2185	1
26	26	0.41	0.24	2316	13.82	661	2620	1	12.32	589	2185	1
26	27	0.41	0.26	2243	14.74	705	2620	1	12.32	589	2185	1
26	27	0.41	0.20	2700	10.17	486	2620	1	12.32	589	2185	1

27	27	0.41	0.21	2519	11.68	559	2620	1	12.32	589	2185	1
27	27	0.41	0.15	3942	4.77	228	2620	1	12.32	589	2185	1
27	28	0.41	0.15	4166	4.27	204	2620	1	12.32	589	2185	1
27	28	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
28	28	0.41	0.15	4567	3.56	170	2620	1	12.32	589	2185	1
28	28	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
28	29	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
28	29	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
29	29	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
29	29	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
29	30	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
29	30	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
30	30	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
30	30	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
30	30	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
30	31	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
30	31	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
31	31	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
31	31	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
31	32	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
31	32	0.41	0.15	4457	3.73	178	2620	1	12.32	589	2185	1
32	32	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
32	32	0.41	0.17	3357	6.58	315	2620	1	12.32	589	2185	1
32	33	0.41	0.17	3224	7.13	341	2620	1	12.32	589	2185	1
32	33	0.41	0.24	2311	13.88	664	2620	1	12.32	589	2185	1
33	33	0.41	0.23	2398	12.89	617	2620	1	12.32	589	2185	1
33	33	0.41	0.30	2062	17.45	834	2620	1	12.32	589	2185	1
33	34	0.41	0.29	2100	16.82	804	2620	1	12.32	589	2185	1
33	34	0.41	0.43	1764	23.81	1139	2620	1	12.32	589	2185	1
34	34	0.33	0.25	1758	23.99	1147	2620	1	9.85	471	2185	1
34	34	0.33	0.33	1635	27.74	1327	2620	1	9.85	471	2185	1
34	35	0.33	0.24	1736	24.52	1171	2620	1	9.87	471	2185	1
34	35	0.33	0.34	1569	30.00	1432	2620	1	9.87	471	2185	1
35	35	0.33	0.35	1544	30.97	1478	2620	1	9.87	471	2185	1
35	35	0.33	0.49	1391	38.17	1822	2620	1	9.87	471	2185	1
35	36	0.33	0.19	2223	14.94	1133	2620	1	9.87	748	2185	1
35	36	0.33	0.23	2040	17.76	1346	2620	1	9.87	748	2185	1
36	36	0.33	0.23	2070	17.25	1307	2620	1	9.87	748	2185	1
36	36	0.33	0.19	2262	14.44	1094	2620	1	9.87	748	2185	1
36	37	0.33	0.50	1398	37.79	1804	2620	1	9.87	471	2185	1
36	37	0.33	0.35	1559	30.39	1451	2620	1	9.87	471	2185	1
37	37	0.33	0.34	1578	29.66	1416	2620	1	9.87	471	2185	1
37	37	0.33	0.24	1751	24.10	1150	2620	1	9.87	471	2185	1
37	38	0.33	0.34	1633	27.80	1329	2620	1	9.85	471	2185	1
37	38	0.33	0.26	1764	23.82	1139	2620	1	9.85	471	2185	1

38	38	0.41	0.43	1778	23.44	1121	2620	1	12.32	589	2185	1
38	38	0.41	0.28	2149	16.05	768	2620	1	12.32	589	2185	1
38	39	0.41	0.31	2049	17.66	845	2620	1	12.32	589	2185	1
38	39	0.41	0.23	2408	12.79	611	2620	1	12.32	589	2185	1
39	39	0.41	0.25	2281	14.25	682	2620	1	12.32	589	2185	1
39	39	0.41	0.17	3209	7.20	344	2620	1	12.32	589	2185	1
39	40	0.41	0.16	3477	6.13	293	2620	1	12.32	589	2185	1
39	40	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
40	40	0.41	0.16	3974	4.70	225	2620	1	12.32	589	2185	1
40	40	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
40	41	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
40	41	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
41	41	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
41	41	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
41	42	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
41	42	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
42	42	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
42	42	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
42	42	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
42	43	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
42	43	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
43	43	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
43	43	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
43	44	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
43	44	0.41	0.16	4041	4.54	217	2620	1	12.32	589	2185	1
44	44	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
44	44	0.41	0.17	3395	6.43	308	2620	1	12.32	589	2185	1
44	45	0.41	0.17	3258	6.98	334	2620	1	12.32	589	2185	1
44	45	0.41	0.24	2323	13.73	657	2620	1	12.32	589	2185	1
45	45	0.41	0.22	2459	12.26	586	2620	1	12.32	589	2185	1
45	45	0.41	0.29	2102	16.78	803	2620	1	12.32	589	2185	1
45	46	0.41	0.28	2141	16.17	774	2620	1	12.32	589	2185	1
45	46	0.41	0.42	1786	23.25	1112	2620	1	12.32	589	2185	1
46	46	0.33	0.24	1783	23.31	1115	2620	1	9.85	471	2185	1
46	46	0.33	0.31	1659	26.96	1289	2620	1	9.85	471	2185	1
46	47	0.33	0.24	1744	24.28	1159	2620	1	9.87	471	2185	1
46	47	0.33	0.35	1571	29.93	1429	2620	1	9.87	471	2185	1
47	47	0.33	0.36	1538	31.24	1491	2620	1	9.87	471	2185	1
47	47	0.33	0.51	1378	38.90	1857	2620	1	9.87	471	2185	1
47	48	0.33	0.20	2218	15.01	1138	2620	1	9.87	748	2185	1
47	48	0.33	0.24	2028	17.96	1362	2620	1	9.87	748	2185	1
48	48	0.33	0.24	2046	17.64	1337	2620	1	9.87	748	2185	1
48	48	0.33	0.20	2241	14.71	1115	2620	1	9.87	748	2185	1
48	49	0.33	0.49	1404	37.47	1789	2620	1	9.87	471	2185	1
48	49	0.33	0.34	1563	30.24	1444	2620	1	9.87	471	2185	1

49	49	0.33	0.34	1578	29.68	1417	2620	1	9.87	471	2185	1
49	49	0.33	0.24	1748	24.19	1155	2620	1	9.87	471	2185	1
49	50	0.33	0.34	1634	27.76	1328	2620	1	9.85	471	2185	1
49	50	0.33	0.26	1763	23.87	1141	2620	1	9.85	471	2185	1
50	50	0.41	0.43	1770	23.68	1132	2620	1	12.32	589	2185	1
50	50	0.41	0.28	2116	16.56	792	2620	1	12.32	589	2185	1
50	51	0.41	0.29	2086	17.04	815	2620	1	12.32	589	2185	1
50	51	0.41	0.22	2433	12.53	599	2620	1	12.32	589	2185	1
51	51	0.41	0.24	2334	13.61	651	2620	1	12.32	589	2185	1
51	51	0.41	0.17	3278	6.90	330	2620	1	12.32	589	2185	1
51	52	0.41	0.17	3412	6.37	304	2620	1	12.32	589	2185	1
51	52	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
52	52	0.41	0.16	4214	4.18	200	2620	1	12.32	589	2185	1
52	52	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
52	53	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
52	53	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
53	53	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
53	53	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
53	54	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
53	54	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
54	54	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
54	54	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
54	54	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
54	55	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
54	55	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
55	55	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
55	55	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
55	56	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
55	56	0.41	0.16	4243	4.12	197	2620	1	12.32	589	2185	1
56	56	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
56	56	0.41	0.16	3621	5.66	271	2620	1	12.32	589	2185	1
56	57	0.41	0.17	3439	6.27	300	2620	1	12.32	589	2185	1
56	57	0.41	0.23	2397	12.91	617	2620	1	12.32	589	2185	1
57	57	0.41	0.21	2524	11.64	557	2620	1	12.32	589	2185	1
57	57	0.41	0.27	2150	16.03	767	2620	1	12.32	589	2185	1
57	58	0.41	0.27	2182	15.57	744	2620	1	12.32	589	2185	1
57	58	0.41	0.40	1807	22.70	1085	2620	1	12.32	589	2185	1
58	58	0.33	0.23	1800	22.87	1094	2620	1	9.85	471	2185	1
58	58	0.33	0.31	1672	26.52	1268	2620	1	9.85	471	2185	1
58	59	0.33	0.23	1767	23.67	1130	2620	1	9.87	471	2185	1
58	59	0.33	0.33	1592	29.18	1393	2620	1	9.87	471	2185	1
59	59	0.33	0.34	1562	30.29	1446	2620	1	9.87	471	2185	1
59	59	0.33	0.49	1401	37.68	1799	2620	1	9.87	471	2185	1
59	60	0.33	0.42	1447	35.28	1685	2620	1	9.87	471	2185	1
59	60	0.33	0.51	1361	39.91	1906	2620	1	9.87	471	2185	1

60	60	0.33	0.49	1397	37.85	1807	2620	1	9.87	471	2185	1
60	60	0.33	0.41	1488	33.37	1593	2620	1	9.87	471	2185	1
60	61	0.33	0.46	1446	35.38	1689	2620	1	9.87	471	2185	1
60	61	0.33	0.32	1613	28.40	1356	2620	1	9.87	471	2185	1
61	61	0.33	0.32	1626	27.96	1335	2620	1	9.87	471	2185	1
61	61	0.33	0.22	1809	22.58	1078	2620	1	9.87	471	2185	1
61	62	0.33	0.29	1722	24.99	1195	2620	1	9.85	471	2185	1
61	62	0.33	0.22	1856	21.51	1029	2620	1	9.85	471	2185	1
62	62	0.41	0.38	1864	21.35	1021	2620	1	12.32	589	2185	1
62	62	0.41	0.25	2311	13.88	664	2620	1	12.32	589	2185	1
62	63	0.41	0.26	2267	14.43	690	2620	1	12.32	589	2185	1
62	63	0.41	0.20	2727	9.97	477	2620	1	12.32	589	2185	1
63	63	0.41	0.20	2621	10.80	516	2620	1	12.32	589	2185	1
63	63	0.41	0.14	4296	4.02	192	2620	1	12.32	589	2185	1
63	64	0.41	0.14	4296	4.02	192	2620	1	12.32	589	2185	1
63	64	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
64	64	0.41	0.13	4567	3.56	170	2620	1	12.32	589	2185	1
64	64	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
64	65	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
64	65	0.41	0.08	4567	3.56	170	2620	1	12.32	589	2185	1
65	65	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
65	65	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
65	66	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
65	66	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
65	66	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
66	66	0.41	0.06	4567	3.56	170	2620	1	12.32	589	2185	1
66	66	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
66	67	0.41	0.07	4567	3.56	170	2620	1	12.32	589	2185	1
66	67	0.41	0.10	4567	3.56	170	2620	1	12.32	589	2185	1
67	67	0.41	0.09	4567	3.56	170	2620	1	12.32	589	2185	1
67	67	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
67	68	0.41	0.11	4567	3.56	170	2620	1	12.32	589	2185	1
67	68	0.41	0.16	3726	5.34	255	2620	1	12.32	589	2185	1
68	68	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
68	68	0.41	0.17	3225	7.13	341	2620	1	12.32	589	2185	1
68	69	0.41	0.17	3126	7.59	363	2620	1	12.32	589	2185	1
68	69	0.41	0.27	2227	14.95	715	2620	1	12.32	589	2185	1
69	69	0.41	0.25	2341	13.52	647	2620	1	12.32	589	2185	1
69	69	0.41	0.34	1996	18.60	890	2620	1	12.32	589	2185	1
69	70	0.41	0.30	2085	17.06	816	2620	1	12.32	589	2185	1
69	70	0.41	0.48	1732	24.71	1182	2620	1	12.32	589	2185	1
70	70	0.33	0.30	1722	25.01	1196	2620	1	9.85	471	2185	1
70	70	0.33	0.39	1588	29.40	1406	2620	1	9.85	471	2185	1
70	71	0.33	0.25	1740	24.32	1159	2620	1	9.89	471	2185	1
70	71	0.33	0.35	1570	29.86	1423	2620	1	9.89	471	2185	1

71	71	0.33	0.36	1543	30.93	1474	2620	1	9.89	471	2185	1
71	71	0.33	0.51	1388	38.25	1823	2620	1	9.89	471	2185	1
71	72	0.33	0.41	1450	35.01	1669	2620	1	9.89	471	2185	1
71	72	0.33	0.49	1373	39.09	1863	2620	1	9.89	471	2185	1
72	72	0.41	0.85	1336	41.29	1968	2620	1	12.36	589	2185	1
72	72	0.41	0.72	1428	36.14	1722	2620	1	12.36	589	2185	1
72	73	0.41	0.78	1386	38.33	1827	2620	1	12.36	589	2185	1
72	73	0.41	0.57	1560	30.25	1442	2620	1	12.36	589	2185	1
73	73	0.41	0.55	1579	29.53	1407	2620	1	12.36	589	2185	1
73	73	0.41	0.45	1692	25.71	1226	2620	1	12.36	589	2185	1
73	74	0.41	0.60	1560	30.48	1458	2620	1	12.32	589	2185	1
73	74	0.41	0.39	1812	22.59	1080	2620	1	12.32	589	2185	1
74	74	0.41	0.39	1801	22.86	1093	2620	1	12.32	589	2185	1
74	74	0.41	0.31	1972	19.06	912	2620	1	12.32	589	2185	1
74	75	0.41	0.32	1937	19.77	945	2620	1	12.32	589	2185	1
74	75	0.41	0.23	2415	12.72	608	2620	1	12.32	589	2185	1
75	75	0.41	0.26	2235	14.84	710	2620	1	12.32	589	2185	1
75	75	0.41	0.22	2605	10.93	523	2620	1	12.32	589	2185	1
75	76	0.41	0.21	2735	9.92	474	2620	1	12.32	589	2185	1
75	76	0.41	0.17	4567	3.56	170	2620	1	12.32	589	2185	1
76	76	0.41	0.21	3122	7.61	364	2620	1	12.32	589	2185	1
76	76	0.41	0.19	4428	3.78	181	2620	1	12.32	589	2185	1
76	77	0.41	0.18	4567	3.56	170	2620	1	12.32	589	2185	1
76	77	0.41	0.15	4567	3.56	170	2620	1	12.32	589	2185	1
77	77	0.41	0.16	4567	3.56	170	2620	1	12.32	589	2185	1
77	77	0.41	0.15	4567	3.56	170	2620	1	12.32	589	2185	1
77	78	0.41	0.15	4567	3.56	170	2620	1	12.32	589	2185	1
77	78	0.41	0.13	4567	3.56	170	2620	1	12.32	589	2185	1
78	78	0.41	0.13	4567	3.56	170	2620	1	12.32	589	2185	1
78	78	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
78	78	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
78	79	0.41	0.12	4567	3.56	170	2620	1	12.32	589	2185	1
78	79	0.41	0.14	4567	3.56	170	2620	1	12.32	589	2185	1
79	79	0.41	0.15	4567	3.56	170	2620	1	12.32	589	2185	1
79	79	0.41	0.16	4567	3.56	170	2620	1	12.32	589	2185	1
79	80	0.41	0.16	4567	3.56	170	2620	1	12.32	589	2185	1
79	80	0.41	0.19	4567	3.56	170	2620	1	12.32	589	2185	1
80	80	0.41	0.18	4567	3.56	170	2620	1	12.32	589	2185	1
80	80	0.41	0.20	3321	6.72	321	2620	1	12.32	589	2185	1
80	81	0.41	0.21	3134	7.55	361	2620	1	12.32	589	2185	1
80	81	0.41	0.26	2309	13.90	665	2620	1	12.32	589	2185	1
81	81	0.54	0.42	2790	9.53	456	2620	1	16.14	772	2185	1
81	81	0.54	0.53	2239	14.79	707	2620	1	16.14	772	2185	1
81	82	0.54	0.57	2141	16.17	773	2620	1	16.14	772	2185	1
81	82	0.54	0.84	1755	24.07	1151	2620	1	16.14	772	2185	1

(2) Main girder G-1 Web name : RWEB

(a) Check of section and web thickness

Pnl. No.	Sec. No.	Panel Length (mm)	Stiff. Qty	Stiff. Spacing (mm)	Stiff. rung	Stress		Web Grade	Web height (mm)	Web thk. (mm)	Rq' d thk. (mm)
						σ_c	τ				
1	1	10802	7	1350	2	0	60	SM490Y	2714	12	9.2
1	1	10802	7	1350	2	-77	48	SM490Y	2714	12	9.2
1	2	10802	7	1350	2	-72	47	SM490Y	2714	12	9.2
1	2	10802	7	1350	2	-80	45	SM490Y	2714	12	9.2
2	2	10003	7	1250	2	-80	46	SM490Y	2714	12	9.2
2	2	10003	7	1250	2	-128	36	SM490Y	2714	12	9.2
2	3	10003	7	1250	2	-126	36	SM570	2714	12	10.4
2	3	10003	7	1250	2	-131	34	SM570	2714	12	10.4
3	3	10003	7	1250	2	-131	35	SM570	2714	12	10.4
3	3	10003	7	1250	2	-161	25	SM570	2714	12	10.4
3	4	10003	7	1250	2	-159	25	SM570	2714	12	10.4
3	4	10003	7	1250	2	-162	23	SM570	2714	12	10.4
4	4	10003	7	1250	2	-162	26	SM570	2714	12	10.4
4	4	10003	7	1250	2	-176	16	SM570	2714	12	10.4
4	5	10003	7	1250	2	-176	16	SM570	2714	12	10.4
4	5	10003	7	1250	2	-177	14	SM570	2714	12	10.4
5	5	10002	7	1250	2	-176	16	SM570	2714	12	10.4
5	5	10002	7	1250	2	-177	14	SM570	2714	12	10.4
5	5	10002	7	1250	2	-174	19	SM570	2714	12	10.4
5	6	10002	7	1250	2	-174	19	SM570	2714	12	10.4
5	6	10002	7	1250	2	-173	21	SM570	2714	12	10.4
6	6	10000	7	1250	2	-173	17	SM570	2714	12	10.4
6	6	10000	7	1250	2	-159	28	SM570	2714	12	10.4
6	7	10000	7	1250	2	-161	28	SM570	2714	12	10.4
6	7	10000	7	1250	2	-158	29	SM570	2714	12	10.4
7	7	10000	7	1250	2	-159	30	SM570	2714	12	10.4
7	7	10000	7	1250	2	-126	40	SM570	2714	12	10.4
7	8	10000	7	1250	2	-132	41	SM570	2714	12	10.4
7	8	10000	7	1250	2	-126	42	SM570	2714	12	10.4
8	8	10000	7	1250	2	-126	41	SM570	2714	12	10.4
8	8	10000	7	1250	2	-73	52	SM570	2714	12	10.4
8	9	10000	7	1250	2	-76	53	SM490Y	2714	12	9.2
8	9	10000	7	1250	2	-68	54	SM490Y	2714	12	9.2
9	9	10000	7	1250	2	-68	49	SM490Y	2714	12	9.2
9	9	10000	7	1250	2	-91	59	SM490Y	2714	12	9.2
9	10	10000	7	1250	2	-75	59	SM570	2714	12	10.4
9	10	10000	7	1250	2	-87	60	SM570	2714	12	10.4
10	10	10000	7	1250	2	-87	59	SM570	2714	12	10.4
10	10	10000	7	1250	2	-195	70	SM570	2714	12	10.4
10	11	10000	7	1250	2	-134	69	SM570	2704	12	10.3
10	11	10000	7	1250	2	-146	71	SM570	2704	12	10.3

11	11	10000	7	1250	2	-146	73	SM570	2704	12	10.3
11	11	10000	7	1250	2	-215	81	SM570	2704	12	10.3
11	12	10000	7	1250	2	-182	60	SM570	2704	16	10.3
11	12	10000	7	1250	2	-221	64	SM570	2704	16	10.3
12	12	8000	7	1000	2	-221	57	SM570	2704	16	10.3
12	12	8000	7	1000	2	-194	54	SM570	2704	16	10.3
12	13	8000	7	1000	2	-216	73	SM570	2704	12	10.3
12	13	8000	7	1000	2	-170	66	SM570	2704	12	10.3
13	13	8000	7	1000	2	-170	65	SM570	2704	12	10.3
13	13	8000	7	1000	2	-131	59	SM570	2704	12	10.3
13	14	8000	7	1000	2	-190	60	SM490Y	2714	12	9.2
13	14	8000	7	1000	2	-159	56	SM490Y	2714	12	9.2
14	14	10000	7	1250	2	-159	56	SM490Y	2714	12	9.2
14	14	10000	7	1250	2	-100	49	SM490Y	2714	12	9.2
14	15	10000	7	1250	2	-130	50	SM490Y	2714	12	9.2
14	15	10000	7	1250	2	-93	45	SM490Y	2714	12	9.2
15	15	10000	7	1250	2	-93	46	SM490Y	2714	12	9.2
15	15	10000	7	1250	2	-50	39	SM490Y	2714	12	9.2
15	16	10000	7	1250	2	-53	39	SM490Y	2714	12	9.2
15	16	10000	7	1250	2	-49	34	SM490Y	2714	12	9.2
16	16	10000	7	1250	2	-49	36	SM490Y	2714	12	9.2
16	16	10000	7	1250	2	-72	28	SM490Y	2714	12	9.2
16	17	10000	7	1250	2	-71	28	SM490Y	2714	12	9.2
16	17	10000	7	1250	2	-82	23	SM490Y	2714	12	9.2
17	17	10000	7	1250	2	-82	26	SM490Y	2714	12	9.2
17	17	10000	7	1250	2	-94	18	SM490Y	2714	12	9.2
17	18	10000	7	1250	2	-93	18	SM490Y	2714	12	9.2
17	18	10000	7	1250	2	-97	14	SM490Y	2714	12	9.2
18	18	10000	7	1250	2	-97	18	SM490Y	2714	12	9.2
18	18	10000	7	1250	2	-99	14	SM490Y	2714	12	9.2
18	19	10000	7	1250	2	-98	14	SM490Y	2714	12	9.2
18	19	10000	7	1250	2	-98	14	SM490Y	2714	12	9.2
18	19	10000	7	1250	2	-95	19	SM490Y	2714	12	9.2
19	19	10000	7	1250	2	-95	17	SM490Y	2714	12	9.2
19	19	10000	7	1250	2	-89	22	SM490Y	2714	12	9.2
19	20	10000	7	1250	2	-90	22	SM490Y	2714	12	9.2
19	20	10000	7	1250	2	-74	30	SM490Y	2714	12	9.2
20	20	10000	7	1250	2	-74	29	SM490Y	2714	12	9.2
20	20	10000	7	1250	2	-61	33	SM490Y	2714	12	9.2
20	21	10000	7	1250	2	-61	33	SM490Y	2714	12	9.2
20	21	10000	7	1250	2	-43	41	SM490Y	2714	12	9.2
21	21	10000	7	1250	2	-43	39	SM490Y	2714	12	9.2
21	21	10000	7	1250	2	-68	44	SM490Y	2714	12	9.2
21	22	10000	7	1250	2	-68	44	SM490Y	2714	12	9.2
21	22	10000	7	1250	2	-120	52	SM490Y	2714	12	9.2

22	22	8000	7	1000	2	-120	51	SM490Y	2714	12	9.2
22	22	8000	7	1000	2	-152	55	SM490Y	2714	12	9.2
22	23	8000	7	1000	2	-112	54	SM570	2711	12	10.3
22	23	8000	7	1000	2	-159	60	SM570	2711	12	10.3
23	23	8000	7	1000	2	-159	61	SM570	2711	12	10.3
23	23	8000	7	1000	2	-214	67	SM570	2711	12	10.3
23	24	8000	7	1000	2	-185	67	SM570	2711	12	10.3
23	24	8000	7	1000	2	-217	71	SM570	2711	12	10.3
24	24	8000	7	1000	2	-217	72	SM570	2711	12	10.3
24	24	8000	7	1000	2	-184	68	SM570	2711	12	10.3
24	25	8000	7	1000	2	-212	69	SM570	2711	12	10.3
24	25	8000	7	1000	2	-154	62	SM570	2711	12	10.3
25	25	8000	7	1000	2	-154	62	SM570	2711	12	10.3
25	25	8000	7	1000	2	-103	56	SM570	2711	12	10.3
25	26	8000	7	1000	2	-160	57	SM570	2714	12	10.4
25	26	8000	7	1000	2	-120	53	SM570	2714	12	10.4
26	26	10000	7	1250	2	-120	53	SM570	2714	12	10.4
26	26	10000	7	1250	2	-58	45	SM570	2714	12	10.4
26	27	10000	7	1250	2	-68	46	SM490Y	2714	12	9.2
26	27	10000	7	1250	2	-40	41	SM490Y	2714	12	9.2
27	27	10000	7	1250	2	-40	42	SM490Y	2714	12	9.2
27	27	10000	7	1250	2	-68	34	SM490Y	2714	12	9.2
27	28	10000	7	1250	2	-66	34	SM570	2714	12	10.4
27	28	10000	7	1250	2	-80	29	SM570	2714	12	10.4
28	28	10000	7	1250	2	-80	33	SM570	2714	12	10.4
28	28	10000	7	1250	2	-101	25	SM570	2714	12	10.4
28	29	10000	7	1250	2	-96	24	SM570	2714	12	10.4
28	29	10000	7	1250	2	-105	20	SM570	2714	12	10.4
29	29	10000	7	1250	2	-105	23	SM570	2714	12	10.4
29	29	10000	7	1250	2	-114	16	SM570	2714	12	10.4
29	30	10000	7	1250	2	-114	16	SM570	2714	12	10.4
29	30	10000	7	1250	2	-116	14	SM570	2714	12	10.4
30	30	10000	7	1250	2	-116	14	SM570	2714	12	10.4
30	30	10000	7	1250	2	-116	14	SM570	2714	12	10.4
30	30	10000	7	1250	2	-115	16	SM570	2714	12	10.4
30	31	10000	7	1250	2	-115	16	SM570	2714	12	10.4
30	31	10000	7	1250	2	-108	23	SM570	2714	12	10.4
31	31	10000	7	1250	2	-108	21	SM570	2714	12	10.4
31	31	10000	7	1250	2	-99	26	SM570	2714	12	10.4
31	32	10000	7	1250	2	-99	26	SM490Y	2714	12	9.2
31	32	10000	7	1250	2	-80	33	SM490Y	2714	12	9.2
32	32	10000	7	1250	2	-80	32	SM490Y	2714	12	9.2
32	32	10000	7	1250	2	-64	37	SM490Y	2714	12	9.2
32	33	10000	7	1250	2	-66	37	SM490Y	2714	12	9.2
32	33	10000	7	1250	2	-47	45	SM490Y	2714	12	9.2

33	33	10000	7	1250	2	-47	44	SM490Y	2714	12	9.2
33	33	10000	7	1250	2	-79	49	SM490Y	2714	12	9.2
33	34	10000	7	1250	2	-71	48	SM490Y	2714	12	9.2
33	34	10000	7	1250	2	-131	56	SM490Y	2714	12	9.2
34	34	8000	7	1000	2	-131	56	SM490Y	2714	12	9.2
34	34	8000	7	1000	2	-167	60	SM490Y	2714	12	9.2
34	35	8000	7	1000	2	-113	59	SM570	2709	12	10.3
34	35	8000	7	1000	2	-160	65	SM570	2709	12	10.3
35	35	8000	7	1000	2	-160	66	SM570	2709	12	10.3
35	35	8000	7	1000	2	-214	73	SM570	2709	12	10.3
35	36	8000	7	1000	2	-179	62	SM570	2709	14	10.3
35	36	8000	7	1000	2	-208	65	SM570	2709	14	10.3
36	36	8000	7	1000	2	-208	64	SM570	2709	14	10.3
36	36	8000	7	1000	2	-178	61	SM570	2709	14	10.3
36	37	8000	7	1000	2	-221	72	SM570	2709	12	10.3
36	37	8000	7	1000	2	-164	65	SM570	2709	12	10.3
37	37	8000	7	1000	2	-164	64	SM570	2709	12	10.3
37	37	8000	7	1000	2	-116	58	SM570	2709	12	10.3
37	38	8000	7	1000	2	-179	59	SM490Y	2714	12	9.2
37	38	8000	7	1000	2	-140	56	SM490Y	2714	12	9.2
38	38	10000	7	1250	2	-140	55	SM490Y	2714	12	9.2
38	38	10000	7	1250	2	-74	47	SM490Y	2714	12	9.2
38	39	10000	7	1250	2	-95	48	SM490Y	2714	12	9.2
38	39	10000	7	1250	2	-55	44	SM490Y	2714	12	9.2
39	39	10000	7	1250	2	-55	45	SM490Y	2714	12	9.2
39	39	10000	7	1250	2	-63	37	SM490Y	2714	12	9.2
39	40	10000	7	1250	2	-59	36	SM490Y	2714	12	9.2
39	40	10000	7	1250	2	-75	32	SM490Y	2714	12	9.2
40	40	10000	7	1250	2	-75	35	SM490Y	2714	12	9.2
40	40	10000	7	1250	2	-98	27	SM490Y	2714	12	9.2
40	41	10000	7	1250	2	-94	27	SM490Y	2714	12	9.2
40	41	10000	7	1250	2	-103	22	SM490Y	2714	12	9.2
41	41	10000	7	1250	2	-103	24	SM490Y	2714	12	9.2
41	41	10000	7	1250	2	-113	16	SM490Y	2714	12	9.2
41	42	10000	7	1250	2	-113	16	SM490Y	2714	12	9.2
41	42	10000	7	1250	2	-114	13	SM490Y	2714	12	9.2
42	42	10000	7	1250	2	-114	14	SM490Y	2714	12	9.2
42	42	10000	7	1250	2	-114	14	SM490Y	2714	12	9.2
42	42	10000	7	1250	2	-113	16	SM490Y	2714	12	9.2
42	43	10000	7	1250	2	-113	16	SM490Y	2714	12	9.2
42	43	10000	7	1250	2	-106	23	SM490Y	2714	12	9.2
43	43	10000	7	1250	2	-106	22	SM490Y	2714	12	9.2
43	43	10000	7	1250	2	-97	26	SM490Y	2714	12	9.2
43	44	10000	7	1250	2	-100	27	SM490Y	2714	12	9.2
43	44	10000	7	1250	2	-79	34	SM490Y	2714	12	9.2

44	44	10000	7	1250	2	-79	32	SM490Y	2714	12	9.2
44	44	10000	7	1250	2	-63	37	SM490Y	2714	12	9.2
44	45	10000	7	1250	2	-65	37	SM490Y	2714	12	9.2
44	45	10000	7	1250	2	-46	45	SM490Y	2714	12	9.2
45	45	10000	7	1250	2	-46	43	SM490Y	2714	12	9.2
45	45	10000	7	1250	2	-78	48	SM490Y	2714	12	9.2
45	46	10000	7	1250	2	-70	48	SM570	2714	12	10.4
45	46	10000	7	1250	2	-127	55	SM570	2714	12	10.4
46	46	8000	7	1000	2	-127	55	SM570	2714	12	10.4
46	46	8000	7	1000	2	-162	59	SM570	2714	12	10.4
46	47	8000	7	1000	2	-118	58	SM570	2709	12	10.3
46	47	8000	7	1000	2	-167	64	SM570	2709	12	10.3
47	47	8000	7	1000	2	-167	66	SM570	2709	12	10.3
47	47	8000	7	1000	2	-225	73	SM570	2709	12	10.3
47	48	8000	7	1000	2	-190	62	SM570	2709	14	10.3
47	48	8000	7	1000	2	-223	65	SM570	2709	14	10.3
48	48	8000	7	1000	2	-223	64	SM570	2709	14	10.3
48	48	8000	7	1000	2	-190	61	SM570	2709	14	10.3
48	49	8000	7	1000	2	-216	72	SM570	2709	12	10.3
48	49	8000	7	1000	2	-161	65	SM570	2709	12	10.3
49	49	8000	7	1000	2	-161	64	SM570	2709	12	10.3
49	49	8000	7	1000	2	-112	58	SM570	2709	12	10.3
49	50	8000	7	1000	2	-174	60	SM490Y	2714	12	9.2
49	50	8000	7	1000	2	-135	56	SM490Y	2714	12	9.2
50	50	10000	7	1250	2	-135	56	SM490Y	2714	12	9.2
50	50	10000	7	1250	2	-74	48	SM490Y	2714	12	9.2
50	51	10000	7	1250	2	-76	48	SM490Y	2714	12	9.2
50	51	10000	7	1250	2	-45	44	SM490Y	2714	12	9.2
51	51	10000	7	1250	2	-45	45	SM490Y	2714	12	9.2
51	51	10000	7	1250	2	-69	37	SM490Y	2714	12	9.2
51	52	10000	7	1250	2	-66	37	SM490Y	2714	12	9.2
51	52	10000	7	1250	2	-83	32	SM490Y	2714	12	9.2
52	52	10000	7	1250	2	-83	34	SM490Y	2714	12	9.2
52	52	10000	7	1250	2	-104	26	SM490Y	2714	12	9.2
52	53	10000	7	1250	2	-100	26	SM490Y	2714	12	9.2
52	53	10000	7	1250	2	-109	21	SM490Y	2714	12	9.2
53	53	10000	7	1250	2	-109	23	SM490Y	2714	12	9.2
53	53	10000	7	1250	2	-118	16	SM490Y	2714	12	9.2
53	54	10000	7	1250	2	-118	16	SM490Y	2714	12	9.2
53	54	10000	7	1250	2	-119	13	SM490Y	2714	12	9.2
54	54	10000	7	1250	2	-119	14	SM490Y	2714	12	9.2
54	54	10000	7	1250	2	-119	14	SM490Y	2714	12	9.2
54	54	10000	7	1250	2	-118	16	SM490Y	2714	12	9.2
54	55	10000	7	1250	2	-118	16	SM490Y	2714	12	9.2
54	55	10000	7	1250	2	-110	23	SM490Y	2714	12	9.2

55	55	10000	7	1250	2	-110	21	SM490Y	2714	12	9.2
55	55	10000	7	1250	2	-102	26	SM490Y	2714	12	9.2
55	56	10000	7	1250	2	-105	26	SM490Y	2714	12	9.2
55	56	10000	7	1250	2	-85	34	SM490Y	2714	12	9.2
56	56	10000	7	1250	2	-85	31	SM490Y	2714	12	9.2
56	56	10000	7	1250	2	-69	36	SM490Y	2714	12	9.2
56	57	10000	7	1250	2	-71	36	SM490Y	2714	12	9.2
56	57	10000	7	1250	2	-40	44	SM490Y	2714	12	9.2
57	57	10000	7	1250	2	-40	43	SM490Y	2714	12	9.2
57	57	10000	7	1250	2	-64	47	SM490Y	2714	12	9.2
57	58	10000	7	1250	2	-62	47	SM490Y	2714	12	9.2
57	58	10000	7	1250	2	-120	55	SM490Y	2714	12	9.2
58	58	8000	7	1000	2	-120	55	SM490Y	2714	12	9.2
58	58	8000	7	1000	2	-158	59	SM490Y	2714	12	9.2
58	59	8000	7	1000	2	-108	57	SM570	2710	12	10.3
58	59	8000	7	1000	2	-158	64	SM570	2710	12	10.3
59	59	8000	7	1000	2	-158	65	SM570	2710	12	10.3
59	59	8000	7	1000	2	-216	72	SM570	2710	12	10.3
59	60	8000	7	1000	2	-184	71	SM570	2710	12	10.3
59	60	8000	7	1000	2	-217	75	SM570	2710	12	10.3
60	60	8000	7	1000	2	-217	72	SM570	2710	12	10.3
60	60	8000	7	1000	2	-185	68	SM570	2710	12	10.3
60	61	8000	7	1000	2	-211	69	SM570	2710	12	10.3
60	61	8000	7	1000	2	-157	63	SM570	2710	12	10.3
61	61	8000	7	1000	2	-157	62	SM570	2710	12	10.3
61	61	8000	7	1000	2	-110	56	SM570	2710	12	10.3
61	62	8000	7	1000	2	-154	57	SM570	2714	12	10.4
61	62	8000	7	1000	2	-121	53	SM570	2714	12	10.4
62	62	10000	7	1250	2	-121	53	SM570	2714	12	10.4
62	62	10000	7	1250	2	-66	45	SM570	2714	12	10.4
62	63	10000	7	1250	2	-74	45	SM490Y	2714	12	9.2
62	63	10000	7	1250	2	-45	41	SM490Y	2714	12	9.2
63	63	10000	7	1250	2	-45	42	SM490Y	2714	12	9.2
63	63	10000	7	1250	2	-61	34	SM490Y	2714	12	9.2
63	64	10000	7	1250	2	-61	34	SM490Y	2714	12	9.2
63	64	10000	7	1250	2	-75	29	SM490Y	2714	12	9.2
64	64	10000	7	1250	2	-75	31	SM490Y	2714	12	9.2
64	64	10000	7	1250	2	-92	23	SM490Y	2714	12	9.2
64	65	10000	7	1250	2	-89	23	SM490Y	2714	12	9.2
64	65	10000	7	1250	2	-96	18	SM490Y	2714	12	9.2
65	65	10000	7	1250	2	-96	21	SM490Y	2714	12	9.2
65	65	10000	7	1250	2	-102	14	SM490Y	2714	12	9.2
65	66	10000	7	1250	2	-102	14	SM490Y	2714	12	9.2
65	66	10000	7	1250	2	-103	13	SM490Y	2714	12	9.2
65	66	10000	7	1250	2	-103	15	SM490Y	2714	12	9.2

66	66	10000	7	1250	2	-103	13	SM490Y	2714	12	9.2
66	66	10000	7	1250	2	-100	17	SM490Y	2714	12	9.2
66	67	10000	7	1250	2	-100	17	SM490Y	2714	12	9.2
66	67	10000	7	1250	2	-90	25	SM490Y	2714	12	9.2
67	67	10000	7	1250	2	-90	23	SM490Y	2714	12	9.2
67	67	10000	7	1250	2	-80	27	SM490Y	2714	12	9.2
67	68	10000	7	1250	2	-82	28	SM490Y	2714	12	9.2
67	68	10000	7	1250	2	-60	35	SM490Y	2714	12	9.2
68	68	10000	7	1250	2	-60	33	SM490Y	2714	12	9.2
68	68	10000	7	1250	2	-45	37	SM490Y	2714	12	9.2
68	69	10000	7	1250	2	-47	38	SM490Y	2714	12	9.2
68	69	10000	7	1250	2	-76	46	SM490Y	2714	12	9.2
69	69	10000	7	1250	2	-76	44	SM490Y	2714	12	9.2
69	69	10000	7	1250	2	-117	49	SM490Y	2714	12	9.2
69	70	10000	7	1250	2	-96	48	SM570	2714	12	10.4
69	70	10000	7	1250	2	-166	56	SM570	2714	12	10.4
70	70	8000	7	1000	2	-166	56	SM570	2714	12	10.4
70	70	8000	7	1000	2	-205	60	SM570	2714	12	10.4
70	71	8000	7	1000	2	-126	59	SM570	2705	12	10.3
70	71	8000	7	1000	2	-172	65	SM570	2705	12	10.3
71	71	8000	7	1000	2	-172	66	SM570	2705	12	10.3
71	71	8000	7	1000	2	-224	73	SM570	2705	12	10.3
71	72	8000	7	1000	2	-176	72	SM570	2705	12	10.3
71	72	8000	7	1000	2	-204	76	SM570	2705	12	10.3
72	72	10000	7	1250	2	-204	79	SM570	2705	12	10.3
72	72	10000	7	1250	2	-167	74	SM570	2705	12	10.3
72	73	10000	7	1250	2	-200	75	SM570	2705	12	10.3
72	73	10000	7	1250	2	-135	67	SM570	2705	12	10.3
73	73	10000	7	1250	2	-135	66	SM570	2705	12	10.3
73	73	10000	7	1250	2	-102	62	SM570	2705	12	10.3
73	74	10000	7	1250	2	-182	63	SM570	2714	12	10.4
73	74	10000	7	1250	2	-97	55	SM570	2714	12	10.4
74	74	10000	7	1250	2	-97	56	SM570	2714	12	10.4
74	74	10000	7	1250	2	-59	51	SM570	2714	12	10.4
74	75	10000	7	1250	2	-66	51	SM490Y	2714	12	9.2
74	75	10000	7	1250	2	-63	44	SM490Y	2714	12	9.2
75	75	10000	7	1250	2	-63	46	SM490Y	2714	12	9.2
75	75	10000	7	1250	2	-85	41	SM490Y	2714	12	9.2
75	76	10000	7	1250	2	-81	41	SM570	2714	12	10.4
75	76	10000	7	1250	2	-112	33	SM570	2714	12	10.4
76	76	10000	7	1250	2	-112	37	SM570	2714	12	10.4
76	76	10000	7	1250	2	-129	33	SM570	2714	12	10.4
76	77	10000	7	1250	2	-123	32	SM570	2714	12	10.4
76	77	10000	7	1250	2	-144	25	SM570	2714	12	10.4
77	77	10000	7	1250	2	-144	27	SM570	2714	12	10.4
77	77	10000	7	1250	2	-152	22	SM570	2714	12	10.4
77	78	10000	7	1250	2	-150	22	SM570	2714	12	10.4
77	78	10000	7	1250	2	-158	15	SM570	2714	12	10.4

78	78	10000	7	1250	2	-158	16	SM570	2714	12	10.4
78	78	10000	7	1250	2	-159	13	SM570	2714	12	10.4
78	78	10000	7	1250	2	-159	12	SM570	2714	12	10.4
78	79	10000	7	1250	2	-159	12	SM570	2714	12	10.4
78	79	10000	7	1250	2	-154	18	SM570	2714	12	10.4
79	79	10000	7	1250	2	-154	21	SM570	2714	12	10.4
79	79	10000	7	1250	2	-146	25	SM570	2714	12	10.4
79	80	10000	7	1250	2	-148	25	SM570	2714	12	10.4
79	80	10000	7	1250	2	-128	33	SM570	2714	12	10.4
80	80	10000	7	1250	2	-128	32	SM570	2714	12	10.4
80	80	10000	7	1250	2	-113	36	SM570	2714	12	10.4
80	81	10000	7	1250	2	-119	37	SM570	2714	12	10.4
80	81	10000	7	1250	2	-87	45	SM570	2714	12	10.4
81	81	13100	7	1637	2	-87	40	SM570	2714	12	10.4
81	81	13100	7	1637	2	-57	46	SM570	2714	12	10.4
81	82	13100	7	1637	2	-61	47	SM490Y	2714	12	9.2
81	82	13100	7	1637	2	0	58	SM490Y	2714	12	9.2

(b) Check of spacing and required stiffness

Panel No.	Sec. No.	a/b	Spacing Check	Maximum Spacing	$\gamma v \cdot req$	$Iv \cdot req$ (cm ⁴)	Iv	VStf No	$\gamma h \cdot req$	$Ih \cdot req$ (cm ⁴)	Ih	HStf No
1	1	0.50	0.46	1885	16.58	707	2620	1	14.93	636	2185	1
1	1	0.50	0.31	2660	8.33	355	2620	1	14.92	636	2185	1
1	2	0.50	0.30	2824	7.39	315	2620	1	14.92	636	2185	1
1	2	0.50	0.28	3068	6.26	267	2620	1	14.92	636	2185	1
2	2	0.46	0.24	2851	7.25	309	2620	1	13.82	589	2185	1
2	2	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
2	3	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
2	3	0.46	0.17	4071	3.56	152	2620	1	13.82	589	2185	1
3	3	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
3	3	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
3	4	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
3	4	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
4	4	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
4	4	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
4	5	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
4	5	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
5	5	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
5	5	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
5	5	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
5	6	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
5	6	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
6	6	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
6	6	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
6	7	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
6	7	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1

7	7	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
7	7	0.46	0.21	4071	3.56	152	2620	1	13.82	589	2185	1
7	8	0.46	0.22	4071	3.56	152	2620	1	13.82	589	2185	1
7	8	0.46	0.23	3591	4.57	195	2620	1	13.82	589	2185	1
8	8	0.46	0.22	3932	3.81	162	2620	1	13.82	589	2185	1
8	8	0.46	0.29	2324	10.91	465	2620	1	13.82	589	2185	1
8	9	0.46	0.30	2246	11.68	498	2620	1	13.82	589	2185	1
8	9	0.46	0.32	2152	12.72	542	2620	1	13.82	589	2185	1
9	9	0.46	0.26	2602	8.70	371	2620	1	13.82	589	2185	1
9	9	0.46	0.39	1879	16.68	711	2620	1	13.82	589	2185	1
9	10	0.46	0.37	1925	15.90	678	2620	1	13.82	589	2185	1
9	10	0.46	0.40	1855	17.12	730	2620	1	13.82	589	2185	1
10	10	0.46	0.39	1889	16.51	704	2620	1	13.82	589	2185	1
10	10	0.46	0.62	1537	24.94	1063	2620	1	13.82	589	2185	1
10	11	0.46	0.54	1600	22.85	970	2620	1	13.87	589	2185	1
10	11	0.46	0.57	1566	23.87	1014	2620	1	13.87	589	2185	1
11	11	0.46	0.61	1527	25.09	1066	2620	1	13.87	589	2185	1
11	11	0.46	0.80	1371	31.12	1322	2620	1	13.87	589	2185	1
11	12	0.46	0.15	4056	3.56	358	2620	1	13.87	1396	2185	1
11	12	0.46	0.18	4056	3.56	358	2620	1	13.87	1396	2185	1
12	12	0.37	0.10	4056	3.56	358	2620	1	11.09	1117	2185	1
12	12	0.37	0.08	4056	3.56	358	2620	1	11.09	1117	2185	1
12	13	0.37	0.41	1482	26.65	1132	2620	1	11.09	471	2185	1
12	13	0.37	0.31	1630	22.01	935	2620	1	11.09	471	2185	1
13	13	0.37	0.31	1649	21.51	914	2620	1	11.09	471	2185	1
13	13	0.37	0.23	1865	16.82	714	2620	1	11.09	471	2185	1
13	14	0.37	0.29	1759	19.04	812	2620	1	11.05	471	2185	1
13	14	0.37	0.24	1947	15.54	663	2620	1	11.05	471	2185	1
14	14	0.46	0.40	1944	15.59	665	2620	1	13.82	589	2185	1
14	14	0.46	0.28	2534	9.18	391	2620	1	13.82	589	2185	1
14	15	0.46	0.30	2407	10.17	434	2620	1	13.82	589	2185	1
14	15	0.46	0.23	3038	6.38	272	2620	1	13.82	589	2185	1
15	15	0.46	0.25	2835	7.33	313	2620	1	13.82	589	2185	1
15	15	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
15	16	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
15	16	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
16	16	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
16	16	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
16	17	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
16	17	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
17	17	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
17	17	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
17	18	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
17	18	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1

18	18	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
18	18	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
18	19	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
18	19	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
18	19	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
19	19	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
19	19	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
19	20	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
19	20	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
20	20	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
20	20	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
20	21	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
20	21	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
21	21	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
21	21	0.46	0.21	3297	5.42	231	2620	1	13.82	589	2185	1
21	22	0.46	0.21	3297	5.42	231	2620	1	13.82	589	2185	1
21	22	0.46	0.32	2263	11.51	491	2620	1	13.82	589	2185	1
22	22	0.37	0.18	2295	11.18	477	2620	1	11.05	471	2185	1
22	22	0.37	0.23	2018	14.46	617	2620	1	11.05	471	2185	1
22	23	0.37	0.19	2123	13.05	556	2620	1	11.07	471	2185	1
22	23	0.37	0.26	1790	18.35	781	2620	1	11.07	471	2185	1
23	23	0.37	0.27	1767	18.84	802	2620	1	11.07	471	2185	1
23	23	0.37	0.37	1569	23.87	1017	2620	1	11.07	471	2185	1
23	24	0.37	0.33	1605	22.84	973	2620	1	11.07	471	2185	1
23	24	0.37	0.40	1509	25.81	1099	2620	1	11.07	471	2185	1
24	24	0.37	0.41	1485	26.65	1135	2620	1	11.07	471	2185	1
24	24	0.37	0.34	1578	23.62	1006	2620	1	11.07	471	2185	1
24	25	0.37	0.38	1544	24.66	1050	2620	1	11.07	471	2185	1
24	25	0.37	0.27	1724	19.79	843	2620	1	11.07	471	2185	1
25	25	0.37	0.27	1743	19.36	824	2620	1	11.07	471	2185	1
25	25	0.37	0.19	2048	14.01	597	2620	1	11.07	471	2185	1
25	26	0.37	0.24	1920	15.98	681	2620	1	11.05	471	2185	1
25	26	0.37	0.19	2172	12.49	532	2620	1	11.05	471	2185	1
26	26	0.46	0.33	2193	12.26	523	2620	1	13.82	589	2185	1
26	26	0.46	0.22	3125	6.03	257	2620	1	13.82	589	2185	1
26	27	0.46	0.23	2996	6.56	280	2620	1	13.82	589	2185	1
26	27	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
27	27	0.46	0.19	3734	4.23	180	2620	1	13.82	589	2185	1
27	27	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
27	28	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
27	28	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
28	28	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
28	28	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
28	29	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
28	29	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1

29	29	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
29	29	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
29	30	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
29	30	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
30	30	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
30	30	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
30	30	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
30	31	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
30	31	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
31	31	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
31	31	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
31	32	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
31	32	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
32	32	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
32	32	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
32	33	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
32	33	0.46	0.22	3097	6.15	262	2620	1	13.82	589	2185	1
33	33	0.46	0.21	3326	5.33	227	2620	1	13.82	589	2185	1
33	33	0.46	0.26	2577	8.87	378	2620	1	13.82	589	2185	1
33	34	0.46	0.26	2630	8.52	363	2620	1	13.82	589	2185	1
33	34	0.46	0.37	1997	14.78	630	2620	1	13.82	589	2185	1
34	34	0.37	0.22	1986	14.94	637	2620	1	11.05	471	2185	1
34	34	0.37	0.27	1788	18.42	785	2620	1	11.05	471	2185	1
34	35	0.37	0.22	1896	16.34	695	2620	1	11.07	471	2185	1
34	35	0.37	0.29	1664	21.20	902	2620	1	11.07	471	2185	1
35	35	0.37	0.30	1635	21.96	934	2620	1	11.07	471	2185	1
35	35	0.37	0.41	1480	26.79	1140	2620	1	11.07	471	2185	1
35	36	0.37	0.16	2893	7.02	474	2620	1	11.07	748	2185	1
35	36	0.37	0.19	2544	9.07	613	2620	1	11.07	748	2185	1
36	36	0.37	0.18	2605	8.65	585	2620	1	11.07	748	2185	1
36	36	0.37	0.15	2983	6.60	446	2620	1	11.07	748	2185	1
36	37	0.37	0.41	1493	26.33	1121	2620	1	11.07	471	2185	1
36	37	0.37	0.30	1656	21.42	912	2620	1	11.07	471	2185	1
37	37	0.37	0.29	1678	20.84	887	2620	1	11.07	471	2185	1
37	37	0.37	0.21	1927	15.81	673	2620	1	11.07	471	2185	1
37	38	0.37	0.28	1798	18.23	777	2620	1	11.05	471	2185	1
37	38	0.37	0.22	2008	14.62	623	2620	1	11.05	471	2185	1
38	38	0.46	0.37	2035	14.23	607	2620	1	13.82	589	2185	1
38	38	0.46	0.25	2741	7.84	334	2620	1	13.82	589	2185	1
38	39	0.46	0.27	2593	8.76	374	2620	1	13.82	589	2185	1
38	39	0.46	0.20	3418	5.04	215	2620	1	13.82	589	2185	1
39	39	0.46	0.22	3073	6.24	266	2620	1	13.82	589	2185	1
39	39	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
39	40	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
39	40	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1

40	40	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
40	40	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
40	41	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
40	41	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
41	41	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
41	41	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
41	42	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
41	42	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
42	42	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
42	42	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
42	42	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
42	43	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
42	43	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
43	43	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
43	43	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
43	44	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
43	44	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
44	44	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
44	44	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
44	45	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
44	45	0.46	0.22	3127	6.03	257	2620	1	13.82	589	2185	1
45	45	0.46	0.20	3499	4.81	205	2620	1	13.82	589	2185	1
45	45	0.46	0.26	2657	8.34	356	2620	1	13.82	589	2185	1
45	46	0.46	0.25	2714	8.00	341	2620	1	13.82	589	2185	1
45	46	0.46	0.36	2037	14.21	606	2620	1	13.82	589	2185	1
46	46	0.37	0.21	2034	14.25	608	2620	1	11.05	471	2185	1
46	46	0.37	0.26	1827	17.66	753	2620	1	11.05	471	2185	1
46	47	0.37	0.22	1917	15.97	680	2620	1	11.07	471	2185	1
46	47	0.37	0.30	1672	21.01	894	2620	1	11.07	471	2185	1
47	47	0.37	0.31	1632	22.04	938	2620	1	11.07	471	2185	1
47	47	0.37	0.42	1472	27.08	1152	2620	1	11.07	471	2185	1
47	48	0.37	0.16	2902	6.97	471	2620	1	11.07	748	2185	1
47	48	0.37	0.20	2542	9.09	614	2620	1	11.07	748	2185	1
48	48	0.37	0.19	2581	8.81	596	2620	1	11.07	748	2185	1
48	48	0.37	0.16	2960	6.70	453	2620	1	11.07	748	2185	1
48	49	0.37	0.40	1498	26.17	1114	2620	1	11.07	471	2185	1
48	49	0.37	0.30	1659	21.34	908	2620	1	11.07	471	2185	1
49	49	0.37	0.29	1676	20.91	890	2620	1	11.07	471	2185	1
49	49	0.37	0.21	1919	15.94	678	2620	1	11.07	471	2185	1
49	50	0.37	0.27	1795	18.29	780	2620	1	11.05	471	2185	1
49	50	0.37	0.22	2000	14.73	628	2620	1	11.05	471	2185	1
50	50	0.46	0.37	2012	14.55	620	2620	1	13.82	589	2185	1
50	50	0.46	0.25	2671	8.26	352	2620	1	13.82	589	2185	1
50	51	0.46	0.26	2626	8.54	364	2620	1	13.82	589	2185	1
50	51	0.46	0.20	3426	5.02	214	2620	1	13.82	589	2185	1

51	51	0.46	0.21	3157	5.91	252	2620	1	13.82	589	2185	1
51	51	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
51	52	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
51	52	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
52	52	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
52	52	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
52	53	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
52	53	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
53	53	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
53	53	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
53	54	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
53	54	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
54	54	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
54	54	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
54	54	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
54	55	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
54	55	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
55	55	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
55	55	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
55	56	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
55	56	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
56	56	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
56	56	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
56	57	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
56	57	0.46	0.21	3307	5.39	230	2620	1	13.82	589	2185	1
57	57	0.46	0.19	3685	4.34	185	2620	1	13.82	589	2185	1
57	57	0.46	0.24	2749	7.80	332	2620	1	13.82	589	2185	1
57	58	0.46	0.24	2799	7.52	321	2620	1	13.82	589	2185	1
57	58	0.46	0.35	2077	13.67	583	2620	1	13.82	589	2185	1
58	58	0.37	0.20	2064	13.84	590	2620	1	11.05	471	2185	1
58	58	0.37	0.25	1848	17.25	736	2620	1	11.05	471	2185	1
58	59	0.37	0.21	1956	15.35	653	2620	1	11.07	471	2185	1
58	59	0.37	0.28	1694	20.47	871	2620	1	11.07	471	2185	1
59	59	0.37	0.29	1659	21.35	909	2620	1	11.07	471	2185	1
59	59	0.37	0.40	1496	26.26	1118	2620	1	11.07	471	2185	1
59	60	0.37	0.36	1531	25.07	1067	2620	1	11.07	471	2185	1
59	60	0.37	0.43	1446	28.09	1196	2620	1	11.07	471	2185	1
60	60	0.37	0.41	1491	26.44	1126	2620	1	11.07	471	2185	1
60	60	0.37	0.34	1581	23.49	1000	2620	1	11.07	471	2185	1
60	61	0.37	0.38	1547	24.55	1045	2620	1	11.07	471	2185	1
60	61	0.37	0.28	1722	19.82	844	2620	1	11.07	471	2185	1
61	61	0.37	0.27	1741	19.39	825	2620	1	11.07	471	2185	1
61	61	0.37	0.20	2039	14.13	601	2620	1	11.07	471	2185	1
61	62	0.37	0.24	1937	15.70	669	2620	1	11.05	471	2185	1
61	62	0.37	0.19	2181	12.39	528	2620	1	11.05	471	2185	1

62	62	0.46	0.33	2194	12.24	522	2620	1	13.82	589	2185	1
62	62	0.46	0.22	3096	6.15	262	2620	1	13.82	589	2185	1
62	63	0.46	0.23	3021	6.46	275	2620	1	13.82	589	2185	1
62	63	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
63	63	0.46	0.18	4020	3.65	155	2620	1	13.82	589	2185	1
63	63	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
63	64	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
63	64	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
64	64	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
64	64	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
64	65	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
64	65	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
65	65	0.46	0.07	4071	3.56	152	2620	1	13.82	589	2185	1
65	65	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
65	66	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
65	66	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
65	66	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
66	66	0.46	0.05	4071	3.56	152	2620	1	13.82	589	2185	1
66	66	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
66	67	0.46	0.06	4071	3.56	152	2620	1	13.82	589	2185	1
66	67	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
67	67	0.46	0.08	4071	3.56	152	2620	1	13.82	589	2185	1
67	67	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
67	68	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
67	68	0.46	0.14	4071	3.56	152	2620	1	13.82	589	2185	1
68	68	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
68	68	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
68	69	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
68	69	0.46	0.23	2941	6.81	290	2620	1	13.82	589	2185	1
69	69	0.46	0.22	3229	5.65	241	2620	1	13.82	589	2185	1
69	69	0.46	0.29	2496	9.46	403	2620	1	13.82	589	2185	1
69	70	0.46	0.27	2620	8.59	366	2620	1	13.82	589	2185	1
69	70	0.46	0.40	1963	15.29	652	2620	1	13.82	589	2185	1
70	70	0.37	0.25	1944	15.59	665	2620	1	11.05	471	2185	1
70	70	0.37	0.31	1741	19.43	829	2620	1	11.05	471	2185	1
70	71	0.37	0.22	1897	16.26	691	2620	1	11.09	471	2185	1
70	71	0.37	0.30	1662	21.18	900	2620	1	11.09	471	2185	1
71	71	0.37	0.31	1630	22.02	936	2620	1	11.09	471	2185	1
71	71	0.37	0.42	1475	26.91	1143	2620	1	11.09	471	2185	1
71	72	0.37	0.36	1519	25.35	1077	2620	1	11.09	471	2185	1
71	72	0.37	0.42	1442	28.15	1196	2620	1	11.09	471	2185	1
72	72	0.46	0.76	1399	29.89	1270	2620	1	13.86	589	2185	1
72	72	0.46	0.65	1490	26.38	1121	2620	1	13.86	589	2185	1
72	73	0.46	0.69	1459	27.51	1169	2620	1	13.86	589	2185	1
72	73	0.46	0.52	1636	21.88	930	2620	1	13.86	589	2185	1

73	73	0.46	0.50	1658	21.30	905	2620	1	13.86	589	2185	1
73	73	0.46	0.42	1804	17.99	764	2620	1	13.86	589	2185	1
73	74	0.46	0.51	1688	20.69	882	2620	1	13.82	589	2185	1
73	74	0.46	0.34	2073	13.71	584	2620	1	13.82	589	2185	1
74	74	0.46	0.35	2050	14.02	598	2620	1	13.82	589	2185	1
74	74	0.46	0.28	2385	10.36	442	2620	1	13.82	589	2185	1
74	75	0.46	0.29	2339	10.77	459	2620	1	13.82	589	2185	1
74	75	0.46	0.21	3383	5.15	220	2620	1	13.82	589	2185	1
75	75	0.46	0.23	2923	6.90	294	2620	1	13.82	589	2185	1
75	75	0.46	0.20	3998	3.69	157	2620	1	13.82	589	2185	1
75	76	0.46	0.19	4071	3.56	152	2620	1	13.82	589	2185	1
75	76	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
76	76	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
76	76	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
76	77	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
76	77	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
77	77	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
77	77	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
77	78	0.46	0.12	4071	3.56	152	2620	1	13.82	589	2185	1
77	78	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
78	78	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
78	78	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
78	78	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
78	79	0.46	0.09	4071	3.56	152	2620	1	13.82	589	2185	1
78	79	0.46	0.10	4071	3.56	152	2620	1	13.82	589	2185	1
79	79	0.46	0.11	4071	3.56	152	2620	1	13.82	589	2185	1
79	79	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
79	80	0.46	0.13	4071	3.56	152	2620	1	13.82	589	2185	1
79	80	0.46	0.16	4071	3.56	152	2620	1	13.82	589	2185	1
80	80	0.46	0.15	4071	3.56	152	2620	1	13.82	589	2185	1
80	80	0.46	0.17	4071	3.56	152	2620	1	13.82	589	2185	1
80	81	0.46	0.18	4071	3.56	152	2620	1	13.82	589	2185	1
80	81	0.46	0.23	3083	6.20	264	2620	1	13.82	589	2185	1
81	81	0.60	0.36	4071	3.56	152	2620	1	18.10	772	2185	1
81	81	0.60	0.46	2904	6.99	298	2620	1	18.10	772	2185	1
81	82	0.60	0.49	2744	7.82	334	2620	1	18.10	772	2185	1
81	82	0.60	0.72	1957	15.38	656	2620	1	18.10	772	2185	1

(3) Main girder G-2 Web name : LWEB

(a) Check of section and web thickness

Pnl. No.	Sec. No.	Panel Length (mm)	Stiff. Qty	Stiff. Spacing (mm)	Stiff. rumg	Stress		Web Grade	Web height (mm)	Web thk. (mm)	Rq' d thk. (mm)
						σ_c	τ				
1	1	10802	7	1350	2	0	64	SM490Y	2747	11	9.3
1	1	10802	7	1350	2	-64	53	SM490Y	2747	11	9.3
1	2	10802	7	1350	2	-63	52	SM570	2747	11	10.5
1	2	10802	7	1350	2	-70	51	SM570	2747	11	10.5

2	2	10003	7	1250	2	-70	49	SM570	2747	11	10.5
2	2	10003	7	1250	2	-114	41	SM570	2747	11	10.5
2	3	10003	7	1250	2	-112	40	SM570	2747	11	10.5
2	3	10003	7	1250	2	-117	39	SM570	2747	11	10.5
3	3	10003	7	1250	2	-119	38	SM570	2747	11	10.5
3	3	10003	7	1250	2	-151	29	SM570	2747	11	10.5
3	4	10003	7	1250	2	-149	29	SM570	2747	11	10.5
3	4	10003	7	1250	2	-153	28	SM570	2747	11	10.5
4	4	10003	7	1250	2	-153	27	SM570	2747	11	10.5
4	4	10003	7	1250	2	-170	19	SM570	2747	11	10.5
4	5	10003	7	1250	2	-170	19	SM570	2747	11	10.5
4	5	10003	7	1250	2	-172	18	SM570	2747	11	10.5
5	5	10002	7	1250	2	-173	15	SM570	2747	11	10.5
5	5	10002	7	1250	2	-175	16	SM570	2747	11	10.5
5	5	10002	7	1250	2	-174	21	SM570	2747	11	10.5
5	6	10002	7	1250	2	-174	21	SM570	2747	11	10.5
5	6	10002	7	1250	2	-173	22	SM570	2747	11	10.5
6	6	10000	7	1250	2	-173	24	SM570	2747	11	10.5
6	6	10000	7	1250	2	-153	32	SM570	2747	11	10.5
6	7	10000	7	1250	2	-156	32	SM570	2747	11	10.5
6	7	10000	7	1250	2	-152	33	SM570	2747	11	10.5
7	7	10000	7	1250	2	-157	34	SM570	2747	11	10.5
7	7	10000	7	1250	2	-124	42	SM570	2747	11	10.5
7	8	10000	7	1250	2	-128	42	SM570	2747	11	10.5
7	8	10000	7	1250	2	-122	43	SM570	2747	11	10.5
8	8	10000	7	1250	2	-122	45	SM570	2747	11	10.5
8	8	10000	7	1250	2	-73	53	SM570	2747	11	10.5
8	9	10000	7	1250	2	-73	53	SM490Y	2747	11	9.3
8	9	10000	7	1250	2	-66	54	SM490Y	2747	11	9.3
9	9	10000	7	1250	2	-66	58	SM490Y	2747	11	9.3
9	9	10000	7	1250	2	-95	66	SM490Y	2747	11	9.3
9	10	10000	7	1250	2	-61	55	SM570	2747	13	10.5
9	10	10000	7	1250	2	-71	56	SM570	2747	13	10.5
10	10	10000	7	1250	2	-71	61	SM570	2747	13	10.5
10	10	10000	7	1250	2	-156	68	SM570	2747	13	10.5
10	11	10000	7	1250	2	-130	46	SM570	2741	19	10.5
10	11	10000	7	1250	2	-142	47	SM570	2741	19	10.5
11	11	10000	7	1250	2	-142	49	SM570	2741	19	10.5
11	11	10000	7	1250	2	-202	53	SM570	2741	19	10.5
11	12	10000	7	1250	2	-171	52	SM570	2736	19	10.4
11	12	10000	7	1250	2	-204	54	SM570	2736	19	10.4
12	12	8000	7	1000	2	-204	50	SM570	2736	19	10.4
12	12	8000	7	1000	2	-180	48	SM570	2736	19	10.4
12	13	8000	7	1000	2	-202	48	SM570	2741	19	10.5
12	13	8000	7	1000	2	-160	45	SM570	2741	19	10.5

13	13	8000	7	1000	2	-160	44	SM570	2741	19	10.5
13	13	8000	7	1000	2	-123	41	SM570	2741	19	10.5
13	14	8000	7	1000	2	-197	71	SM570	2747	11	10.5
13	14	8000	7	1000	2	-164	68	SM570	2747	11	10.5
14	14	10000	7	1250	2	-164	63	SM570	2747	11	10.5
14	14	10000	7	1250	2	-104	57	SM570	2747	11	10.5
14	15	10000	7	1250	2	-123	57	SM490Y	2747	11	9.3
14	15	10000	7	1250	2	-85	54	SM490Y	2747	11	9.3
15	15	10000	7	1250	2	-85	51	SM490Y	2747	11	9.3
15	15	10000	7	1250	2	-47	46	SM490Y	2747	11	9.3
15	16	10000	7	1250	2	-51	46	SM490Y	2747	11	9.3
15	16	10000	7	1250	2	-53	42	SM490Y	2747	11	9.3
16	16	10000	7	1250	2	-53	39	SM490Y	2747	11	9.3
16	16	10000	7	1250	2	-77	34	SM490Y	2747	11	9.3
16	17	10000	7	1250	2	-77	34	SM490Y	2747	11	9.3
16	17	10000	7	1250	2	-88	30	SM490Y	2747	11	9.3
17	17	10000	7	1250	2	-88	27	SM490Y	2747	11	9.3
17	17	10000	7	1250	2	-99	21	SM490Y	2747	11	9.3
17	18	10000	7	1250	2	-99	21	SM490Y	2747	11	9.3
17	18	10000	7	1250	2	-102	18	SM490Y	2747	11	9.3
18	18	10000	7	1250	2	-102	16	SM490Y	2747	11	9.3
18	18	10000	7	1250	2	-103	16	SM490Y	2747	11	9.3
18	18	10000	7	1250	2	-102	17	SM490Y	2747	11	9.3
18	19	10000	7	1250	2	-102	17	SM490Y	2747	11	9.3
18	19	10000	7	1250	2	-97	22	SM490Y	2747	11	9.3
19	19	10000	7	1250	2	-97	23	SM490Y	2747	11	9.3
19	19	10000	7	1250	2	-90	27	SM490Y	2747	11	9.3
19	20	10000	7	1250	2	-91	27	SM490Y	2747	11	9.3
19	20	10000	7	1250	2	-75	33	SM490Y	2747	11	9.3
20	20	10000	7	1250	2	-75	35	SM490Y	2747	11	9.3
20	20	10000	7	1250	2	-61	39	SM490Y	2747	11	9.3
20	21	10000	7	1250	2	-61	39	SM490Y	2747	11	9.3
20	21	10000	7	1250	2	-45	44	SM490Y	2747	11	9.3
21	21	10000	7	1250	2	-45	49	SM490Y	2747	11	9.3
21	21	10000	7	1250	2	-77	52	SM490Y	2747	11	9.3
21	22	10000	7	1250	2	-61	41	SM490Y	2747	14	9.3
21	22	10000	7	1250	2	-110	45	SM490Y	2747	14	9.3
22	22	8000	7	1000	2	-110	49	SM490Y	2747	14	9.3
22	22	8000	7	1000	2	-140	51	SM490Y	2747	14	9.3
22	23	8000	7	1000	2	-100	51	SM570	2744	14	10.5
22	23	8000	7	1000	2	-140	54	SM570	2744	14	10.5
23	23	8000	7	1000	2	-140	55	SM570	2744	14	10.5
23	23	8000	7	1000	2	-185	59	SM570	2744	14	10.5
23	24	8000	7	1000	2	-166	59	SM570	2744	14	10.5
23	24	8000	7	1000	2	-192	61	SM570	2744	14	10.5

24	24	8000	7	1000	2	-192	61	SM570	2744	14	10.5
24	24	8000	7	1000	2	-165	59	SM570	2744	14	10.5
24	25	8000	7	1000	2	-185	59	SM570	2744	14	10.5
24	25	8000	7	1000	2	-138	55	SM570	2744	14	10.5
25	25	8000	7	1000	2	-138	55	SM570	2744	14	10.5
25	25	8000	7	1000	2	-96	51	SM570	2744	14	10.5
25	26	8000	7	1000	2	-137	66	SM570	2747	11	10.5
25	26	8000	7	1000	2	-106	63	SM570	2747	11	10.5
26	26	10000	7	1250	2	-106	62	SM570	2747	11	10.5
26	26	10000	7	1250	2	-55	57	SM570	2747	11	10.5
26	27	10000	7	1250	2	-55	57	SM570	2747	11	10.5
26	27	10000	7	1250	2	-48	53	SM570	2747	11	10.5
27	27	10000	7	1250	2	-48	50	SM570	2747	11	10.5
27	27	10000	7	1250	2	-80	44	SM570	2747	11	10.5
27	28	10000	7	1250	2	-80	44	SM490Y	2747	11	9.3
27	28	10000	7	1250	2	-96	40	SM490Y	2747	11	9.3
28	28	10000	7	1250	2	-96	33	SM490Y	2747	11	9.3
28	28	10000	7	1250	2	-114	28	SM490Y	2747	11	9.3
28	29	10000	7	1250	2	-114	28	SM490Y	2747	11	9.3
28	29	10000	7	1250	2	-120	24	SM490Y	2747	11	9.3
29	29	10000	7	1250	2	-120	22	SM490Y	2747	11	9.3
29	29	10000	7	1250	2	-126	17	SM490Y	2747	11	9.3
29	30	10000	7	1250	2	-126	17	SM490Y	2747	11	9.3
29	30	10000	7	1250	2	-126	16	SM490Y	2747	11	9.3
29	30	10000	7	1250	2	-125	17	SM490Y	2747	11	9.3
30	30	10000	7	1250	2	-125	18	SM490Y	2747	11	9.3
30	30	10000	7	1250	2	-122	21	SM490Y	2747	11	9.3
30	31	10000	7	1250	2	-122	21	SM490Y	2747	11	9.3
30	31	10000	7	1250	2	-112	27	SM490Y	2747	11	9.3
31	31	10000	7	1250	2	-112	28	SM490Y	2747	11	9.3
31	31	10000	7	1250	2	-102	32	SM490Y	2747	11	9.3
31	32	10000	7	1250	2	-105	32	SM490Y	2747	11	9.3
31	32	10000	7	1250	2	-83	38	SM490Y	2747	11	9.3
32	32	10000	7	1250	2	-83	40	SM490Y	2747	11	9.3
32	32	10000	7	1250	2	-66	44	SM490Y	2747	11	9.3
32	33	10000	7	1250	2	-66	44	SM490Y	2747	11	9.3
32	33	10000	7	1250	2	-45	49	SM490Y	2747	11	9.3
33	33	10000	7	1250	2	-45	53	SM490Y	2747	11	9.3
33	33	10000	7	1250	2	-81	56	SM490Y	2747	11	9.3
33	34	10000	7	1250	2	-65	56	SM490Y	2747	11	9.3
33	34	10000	7	1250	2	-120	61	SM490Y	2747	11	9.3
34	34	8000	7	1000	2	-120	64	SM490Y	2747	11	9.3
34	34	8000	7	1000	2	-152	67	SM490Y	2747	11	9.3
34	35	8000	7	1000	2	-105	67	SM570	2741	11	10.5
34	35	8000	7	1000	2	-146	71	SM570	2741	11	10.5

35	35	8000	7	1000	2	-146	73	SM570	2741	11	10.5
35	35	8000	7	1000	2	-192	78	SM570	2741	11	10.5
35	36	8000	7	1000	2	-170	66	SM570	2741	13	10.5
35	36	8000	7	1000	2	-197	68	SM570	2741	13	10.5
36	36	8000	7	1000	2	-197	66	SM570	2741	13	10.5
36	36	8000	7	1000	2	-171	63	SM570	2741	13	10.5
36	37	8000	7	1000	2	-193	75	SM570	2741	11	10.5
36	37	8000	7	1000	2	-149	70	SM570	2741	11	10.5
37	37	8000	7	1000	2	-149	70	SM570	2741	11	10.5
37	37	8000	7	1000	2	-109	65	SM570	2741	11	10.5
37	38	8000	7	1000	2	-152	65	SM490Y	2747	11	9.3
37	38	8000	7	1000	2	-122	62	SM490Y	2747	11	9.3
38	38	10000	7	1250	2	-122	62	SM490Y	2747	11	9.3
38	38	10000	7	1250	2	-66	56	SM490Y	2747	11	9.3
38	39	10000	7	1250	2	-88	57	SM490Y	2747	11	9.3
38	39	10000	7	1250	2	-49	53	SM490Y	2747	11	9.3
39	39	10000	7	1250	2	-49	48	SM490Y	2747	11	9.3
39	39	10000	7	1250	2	-63	42	SM490Y	2747	11	9.3
39	40	10000	7	1250	2	-63	42	SM490Y	2747	11	9.3
39	40	10000	7	1250	2	-79	39	SM490Y	2747	11	9.3
40	40	10000	7	1250	2	-79	34	SM490Y	2747	11	9.3
40	40	10000	7	1250	2	-97	28	SM490Y	2747	11	9.3
40	41	10000	7	1250	2	-96	28	SM490Y	2747	11	9.3
40	41	10000	7	1250	2	-103	24	SM490Y	2747	11	9.3
41	41	10000	7	1250	2	-103	23	SM490Y	2747	11	9.3
41	41	10000	7	1250	2	-110	18	SM490Y	2747	11	9.3
41	42	10000	7	1250	2	-110	18	SM490Y	2747	11	9.3
41	42	10000	7	1250	2	-111	15	SM490Y	2747	11	9.3
41	42	10000	7	1250	2	-111	15	SM490Y	2747	11	9.3
42	42	10000	7	1250	2	-111	15	SM490Y	2747	11	9.3
42	42	10000	7	1250	2	-110	18	SM490Y	2747	11	9.3
42	43	10000	7	1250	2	-110	18	SM490Y	2747	11	9.3
42	43	10000	7	1250	2	-103	24	SM490Y	2747	11	9.3
43	43	10000	7	1250	2	-103	25	SM490Y	2747	11	9.3
43	43	10000	7	1250	2	-95	29	SM490Y	2747	11	9.3
43	44	10000	7	1250	2	-97	29	SM490Y	2747	11	9.3
43	44	10000	7	1250	2	-78	35	SM490Y	2747	11	9.3
44	44	10000	7	1250	2	-78	38	SM490Y	2747	11	9.3
44	44	10000	7	1250	2	-63	41	SM490Y	2747	11	9.3
44	45	10000	7	1250	2	-63	41	SM490Y	2747	11	9.3
44	45	10000	7	1250	2	-45	47	SM490Y	2747	11	9.3
45	45	10000	7	1250	2	-45	51	SM490Y	2747	11	9.3
45	45	10000	7	1250	2	-81	55	SM490Y	2747	11	9.3
45	46	10000	7	1250	2	-67	54	SM570	2747	11	10.5
45	46	10000	7	1250	2	-123	60	SM570	2747	11	10.5

46	46	8000	7	1000	2	-123	63	SM570	2747	11	10.5
46	46	8000	7	1000	2	-156	66	SM570	2747	11	10.5
46	47	8000	7	1000	2	-104	65	SM570	2742	11	10.5
46	47	8000	7	1000	2	-145	70	SM570	2742	11	10.5
47	47	8000	7	1000	2	-145	71	SM570	2742	11	10.5
47	47	8000	7	1000	2	-191	76	SM570	2742	11	10.5
47	48	8000	7	1000	2	-175	64	SM570	2742	13	10.5
47	48	8000	7	1000	2	-203	67	SM570	2742	13	10.5
48	48	8000	7	1000	2	-203	67	SM570	2742	13	10.5
48	48	8000	7	1000	2	-175	64	SM570	2742	13	10.5
48	49	8000	7	1000	2	-194	76	SM570	2742	11	10.5
48	49	8000	7	1000	2	-147	71	SM570	2742	11	10.5
49	49	8000	7	1000	2	-147	69	SM570	2742	11	10.5
49	49	8000	7	1000	2	-104	65	SM570	2742	11	10.5
49	50	8000	7	1000	2	-153	65	SM570	2747	11	10.5
49	50	8000	7	1000	2	-120	62	SM570	2747	11	10.5
50	50	10000	7	1250	2	-120	60	SM570	2747	11	10.5
50	50	10000	7	1250	2	-67	54	SM570	2747	11	10.5
50	51	10000	7	1250	2	-81	55	SM490Y	2747	11	9.3
50	51	10000	7	1250	2	-46	52	SM490Y	2747	11	9.3
51	51	10000	7	1250	2	-46	48	SM490Y	2747	11	9.3
51	51	10000	7	1250	2	-69	42	SM490Y	2747	11	9.3
51	52	10000	7	1250	2	-68	42	SM490Y	2747	11	9.3
51	52	10000	7	1250	2	-84	38	SM490Y	2747	11	9.3
52	52	10000	7	1250	2	-84	35	SM490Y	2747	11	9.3
52	52	10000	7	1250	2	-103	29	SM490Y	2747	11	9.3
52	53	10000	7	1250	2	-102	29	SM490Y	2747	11	9.3
52	53	10000	7	1250	2	-110	25	SM490Y	2747	11	9.3
53	53	10000	7	1250	2	-110	24	SM490Y	2747	11	9.3
53	53	10000	7	1250	2	-118	18	SM490Y	2747	11	9.3
53	54	10000	7	1250	2	-117	16	SM490Y	2747	13	9.3
53	54	10000	7	1250	2	-118	13	SM490Y	2747	13	9.3
54	54	10000	7	1250	2	-118	13	SM490Y	2747	13	9.3
54	54	10000	7	1250	2	-118	13	SM490Y	2747	13	9.3
54	54	10000	7	1250	2	-117	16	SM490Y	2747	13	9.3
54	55	10000	7	1250	2	-117	16	SM490Y	2747	13	9.3
54	55	10000	7	1250	2	-111	20	SM490Y	2747	13	9.3
55	55	10000	7	1250	2	-111	22	SM490Y	2747	13	9.3
55	55	10000	7	1250	2	-103	25	SM490Y	2747	13	9.3
55	56	10000	7	1250	2	-105	25	SM490Y	2747	13	9.3
55	56	10000	7	1250	2	-87	30	SM490Y	2747	13	9.3
56	56	10000	7	1250	2	-87	33	SM490Y	2747	13	9.3
56	56	10000	7	1250	2	-71	36	SM490Y	2747	13	9.3
56	57	10000	7	1250	2	-72	42	SM490Y	2747	11	9.3
56	57	10000	7	1250	2	-41	48	SM490Y	2747	11	9.3

57	57	10000	7	1250	2	-41	52	SM490Y	2747	11	9.3
57	57	10000	7	1250	2	-66	55	SM490Y	2747	11	9.3
57	58	10000	7	1250	2	-57	55	SM490Y	2747	11	9.3
57	58	10000	7	1250	2	-108	60	SM490Y	2747	11	9.3
58	58	8000	7	1000	2	-108	63	SM490Y	2747	11	9.3
58	58	8000	7	1000	2	-139	66	SM490Y	2747	11	9.3
58	59	8000	7	1000	2	-98	65	SM570	2743	11	10.5
58	59	8000	7	1000	2	-140	70	SM570	2743	11	10.5
59	59	8000	7	1000	2	-140	71	SM570	2743	11	10.5
59	59	8000	7	1000	2	-187	76	SM570	2743	11	10.5
59	60	8000	7	1000	2	-167	75	SM570	2743	11	10.5
59	60	8000	7	1000	2	-194	78	SM570	2743	11	10.5
60	60	8000	7	1000	2	-194	76	SM570	2743	11	10.5
60	60	8000	7	1000	2	-167	73	SM570	2743	11	10.5
60	61	8000	7	1000	2	-187	73	SM570	2743	11	10.5
60	61	8000	7	1000	2	-141	68	SM570	2743	11	10.5
61	61	8000	7	1000	2	-141	67	SM570	2743	11	10.5
61	61	8000	7	1000	2	-100	62	SM570	2743	11	10.5
61	62	8000	7	1000	2	-147	63	SM570	2747	11	10.5
61	62	8000	7	1000	2	-115	60	SM570	2747	11	10.5
62	62	10000	7	1250	2	-115	57	SM570	2747	11	10.5
62	62	10000	7	1250	2	-64	52	SM570	2747	11	10.5
62	63	10000	7	1250	2	-78	52	SM490Y	2747	11	9.3
62	63	10000	7	1250	2	-45	49	SM490Y	2747	11	9.3
63	63	10000	7	1250	2	-45	47	SM490Y	2747	11	9.3
63	63	10000	7	1250	2	-65	41	SM490Y	2747	11	9.3
63	64	10000	7	1250	2	-63	28	SM490Y	2747	16	9.3
63	64	10000	7	1250	2	-78	26	SM490Y	2747	16	9.3
64	64	10000	7	1250	2	-78	24	SM490Y	2747	16	9.3
64	64	10000	7	1250	2	-95	20	SM490Y	2747	16	9.3
64	65	10000	7	1250	2	-94	20	SM490Y	2747	16	9.3
64	65	10000	7	1250	2	-101	17	SM490Y	2747	16	9.3
65	65	10000	7	1250	2	-101	15	SM490Y	2747	16	9.3
65	65	10000	7	1250	2	-106	12	SM490Y	2747	16	9.3
65	66	10000	7	1250	2	-106	12	SM490Y	2747	16	9.3
65	66	10000	7	1250	2	-106	11	SM490Y	2747	16	9.3
65	66	10000	7	1250	2	-106	12	SM490Y	2747	16	9.3
66	66	10000	7	1250	2	-106	12	SM490Y	2747	16	9.3
66	66	10000	7	1250	2	-103	15	SM490Y	2747	16	9.3
66	67	10000	7	1250	2	-105	21	SM490Y	2747	11	9.3
66	67	10000	7	1250	2	-94	27	SM490Y	2747	11	9.3
67	67	10000	7	1250	2	-94	29	SM490Y	2747	11	9.3
67	67	10000	7	1250	2	-84	32	SM490Y	2747	11	9.3
67	68	10000	7	1250	2	-86	32	SM490Y	2747	11	9.3
67	68	10000	7	1250	2	-63	38	SM490Y	2747	11	9.3

68	68	10000	7	1250	2	-63	42	SM490Y	2747	11	9.3
68	68	10000	7	1250	2	-48	46	SM490Y	2747	11	9.3
68	69	10000	7	1250	2	-48	45	SM570	2747	11	10.5
68	69	10000	7	1250	2	-69	51	SM570	2747	11	10.5
69	69	10000	7	1250	2	-69	55	SM570	2747	11	10.5
69	69	10000	7	1250	2	-110	58	SM570	2747	11	10.5
69	70	10000	7	1250	2	-86	58	SM570	2747	11	10.5
69	70	10000	7	1250	2	-145	63	SM570	2747	11	10.5
70	70	8000	7	1000	2	-145	66	SM570	2747	11	10.5
70	70	8000	7	1000	2	-176	69	SM570	2747	11	10.5
70	71	8000	7	1000	2	-118	54	SM570	2738	14	10.5
70	71	8000	7	1000	2	-156	58	SM570	2738	14	10.5
71	71	8000	7	1000	2	-156	59	SM570	2738	14	10.5
71	71	8000	7	1000	2	-198	63	SM570	2738	14	10.5
71	72	8000	7	1000	2	-175	63	SM570	2738	14	10.5
71	72	8000	7	1000	2	-199	65	SM570	2738	14	10.5
72	72	10000	7	1250	2	-199	68	SM570	2738	14	10.5
72	72	10000	7	1250	2	-166	65	SM570	2738	14	10.5
72	73	10000	7	1250	2	-192	65	SM570	2738	14	10.5
72	73	10000	7	1250	2	-134	60	SM570	2738	14	10.5
73	73	10000	7	1250	2	-134	59	SM570	2738	14	10.5
73	73	10000	7	1250	2	-103	57	SM570	2738	14	10.5
73	74	10000	7	1250	2	-160	72	SM570	2747	11	10.5
73	74	10000	7	1250	2	-88	67	SM570	2747	11	10.5
74	74	10000	7	1250	2	-88	63	SM570	2747	11	10.5
74	74	10000	7	1250	2	-53	59	SM570	2747	11	10.5
74	75	10000	7	1250	2	-60	60	SM570	2747	11	10.5
74	75	10000	7	1250	2	-66	54	SM570	2747	11	10.5
75	75	10000	7	1250	2	-66	47	SM570	2747	11	10.5
75	75	10000	7	1250	2	-87	44	SM570	2747	11	10.5
75	76	10000	7	1250	2	-87	44	SM570	2747	11	10.5
75	76	10000	7	1250	2	-116	38	SM570	2747	11	10.5
76	76	10000	7	1250	2	-116	34	SM570	2747	11	10.5
76	76	10000	7	1250	2	-129	31	SM570	2747	11	10.5
76	77	10000	7	1250	2	-126	31	SM570	2747	11	10.5
76	77	10000	7	1250	2	-141	25	SM570	2747	11	10.5
77	77	10000	7	1250	2	-141	24	SM570	2747	11	10.5
77	77	10000	7	1250	2	-147	21	SM570	2747	11	10.5
77	78	10000	7	1250	2	-147	21	SM570	2747	11	10.5
77	78	10000	7	1250	2	-152	15	SM570	2747	11	10.5
78	78	10000	7	1250	2	-152	15	SM570	2747	11	10.5
78	78	10000	7	1250	2	-152	14	SM570	2747	11	10.5
78	78	10000	7	1250	2	-152	15	SM570	2747	11	10.5
78	79	10000	7	1250	2	-152	15	SM570	2747	11	10.5
78	79	10000	7	1250	2	-146	19	SM570	2747	11	10.5

79	79	10000	7	1250	2	-146	20	SM570	2747	11	10.5
79	79	10000	7	1250	2	-141	23	SM570	2747	11	10.5
79	80	10000	7	1250	2	-142	24	SM570	2747	11	10.5
79	80	10000	7	1250	2	-128	29	SM570	2747	11	10.5
80	80	10000	7	1250	2	-128	33	SM570	2747	11	10.5
80	80	10000	7	1250	2	-116	36	SM570	2747	11	10.5
80	81	10000	7	1250	2	-116	36	SM490Y	2747	11	9.3
80	81	10000	7	1250	2	-89	42	SM490Y	2747	11	9.3
81	81	13100	10	1191	2	-89	48	SM490Y	2747	11	9.3
81	81	13100	10	1191	2	-61	53	SM490Y	2747	11	9.3
81	82	13100	10	1191	2	-63	54	SM490Y	2747	11	9.3
81	82	13100	10	1191	2	0	62	SM490Y	2747	11	9.3

(b) Check of spacing and required stiffness

Panel No.	Sec. No.	a/b	Spacing Check	Maximum Spacing	$\gamma v \cdot req$	$Iv \cdot req$ (cm ⁴)	Iv	VStf No	$\gamma h \cdot req$	$Ih \cdot req$ (cm ⁴)	Ih	HStf No
1	1	0.49	0.76	1498	26.89	894	2620	1	14.75	490	2185	1
1	1	0.49	0.54	1726	20.26	673	2620	1	14.75	490	2185	1
1	2	0.49	0.52	1753	19.64	653	2620	1	14.75	490	2185	1
1	2	0.49	0.50	1812	18.39	611	2620	1	14.75	490	2185	1
2	2	0.46	0.39	1871	17.24	573	2620	1	13.66	454	2185	1
2	2	0.46	0.30	2435	10.18	339	2620	1	13.66	454	2185	1
2	3	0.46	0.29	2496	9.69	322	2620	1	13.66	454	2185	1
2	3	0.46	0.28	2638	8.68	288	2620	1	13.66	454	2185	1
3	3	0.46	0.27	2807	7.66	255	2620	1	13.66	454	2185	1
3	3	0.46	0.22	4120	3.56	118	2620	1	13.66	454	2185	1
3	4	0.46	0.22	4120	3.56	118	2620	1	13.66	454	2185	1
3	4	0.46	0.22	4120	3.56	118	2620	1	13.66	454	2185	1
4	4	0.46	0.21	4120	3.56	118	2620	1	13.66	454	2185	1
4	4	0.46	0.18	4120	3.56	118	2620	1	13.66	454	2185	1
4	5	0.46	0.18	4120	3.56	118	2620	1	13.66	454	2185	1
4	5	0.46	0.17	4120	3.56	118	2620	1	13.66	454	2185	1
5	5	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
5	5	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
5	5	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
5	6	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
5	6	0.46	0.20	4120	3.56	118	2620	1	13.65	454	2185	1
6	6	0.46	0.22	4120	3.56	118	2620	1	13.65	454	2185	1
6	6	0.46	0.25	4120	3.56	118	2620	1	13.65	454	2185	1
6	7	0.46	0.26	4120	3.56	118	2620	1	13.65	454	2185	1
6	7	0.46	0.27	3669	4.49	149	2620	1	13.65	454	2185	1
7	7	0.46	0.28	3527	4.85	161	2620	1	13.65	454	2185	1
7	7	0.46	0.32	2319	11.23	373	2620	1	13.65	454	2185	1
7	8	0.46	0.33	2261	11.81	392	2620	1	13.65	454	2185	1
7	8	0.46	0.34	2180	12.70	422	2620	1	13.65	454	2185	1
8	8	0.46	0.36	2071	14.08	468	2620	1	13.65	454	2185	1
8	8	0.46	0.44	1732	20.12	669	2620	1	13.65	454	2185	1
8	9	0.46	0.44	1732	20.12	669	2620	1	13.65	454	2185	1
8	9	0.46	0.45	1704	20.78	691	2620	1	13.65	454	2185	1

9	9	0.46	0.52	1600	23.57	784	2620	1	13.65	454	2185	1
9	9	0.46	0.69	1436	29.27	973	2620	1	13.65	454	2185	1
9	10	0.46	0.24	2669	8.47	465	2620	1	13.65	749	2185	1
9	10	0.46	0.25	2574	9.11	500	2620	1	13.65	749	2185	1
10	10	0.46	0.29	2249	11.94	655	2620	1	13.65	749	2185	1
10	10	0.46	0.40	1885	17.00	933	2620	1	13.65	749	2185	1
10	11	0.46	0.04	4111	3.56	608	2620	1	13.68	2338	2458	2
10	11	0.46	0.05	4111	3.56	608	2620	1	13.68	2338	2458	2
11	11	0.46	0.05	4111	3.56	608	2620	1	13.68	2338	2458	2
11	11	0.46	0.07	4111	3.56	608	2620	1	13.68	2338	2458	2
11	12	0.46	0.06	4104	3.56	607	2620	1	13.71	2338	2458	2
11	12	0.46	0.07	4104	3.56	607	2620	1	13.71	2338	2458	2
12	12	0.37	0.04	4104	3.56	607	2620	1	10.96	1871	2458	2
12	12	0.37	0.03	4104	3.56	607	2620	1	10.96	1871	2458	2
12	13	0.36	0.04	4111	3.56	608	2620	1	10.94	1871	2185	1
12	13	0.36	0.03	4111	3.56	608	2620	1	10.94	1871	2185	1
13	13	0.36	0.03	4111	3.56	608	2620	1	10.94	1871	2185	1
13	13	0.36	0.02	4111	3.56	608	2620	1	10.94	1871	2185	1
13	14	0.36	0.54	1297	35.90	1193	2620	1	10.92	363	2185	1
13	14	0.36	0.46	1363	32.50	1080	2620	1	10.92	363	2185	1
14	14	0.46	0.70	1455	28.53	948	2620	1	13.65	454	2185	1
14	14	0.46	0.53	1615	23.15	770	2620	1	13.65	454	2185	1
14	15	0.46	0.55	1591	23.86	793	2620	1	13.65	454	2185	1
14	15	0.46	0.46	1700	20.90	695	2620	1	13.65	454	2185	1
15	15	0.46	0.42	1774	19.18	637	2620	1	13.65	454	2185	1
15	15	0.46	0.32	2099	13.70	455	2620	1	13.65	454	2185	1
15	16	0.46	0.32	2083	13.91	462	2620	1	13.65	454	2185	1
15	16	0.46	0.28	2351	10.92	363	2620	1	13.65	454	2185	1
16	16	0.46	0.24	2711	8.21	273	2620	1	13.65	454	2185	1
16	16	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
16	17	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
16	17	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
17	17	0.46	0.14	4120	3.56	118	2620	1	13.65	454	2185	1
17	17	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
17	18	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
17	18	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1
18	18	0.46	0.08	4120	3.56	118	2620	1	13.65	454	2185	1
18	18	0.46	0.08	4120	3.56	118	2620	1	13.65	454	2185	1
18	18	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1
18	19	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1
18	19	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
19	19	0.46	0.12	4120	3.56	118	2620	1	13.65	454	2185	1
19	19	0.46	0.14	4120	3.56	118	2620	1	13.65	454	2185	1
19	20	0.46	0.14	4120	3.56	118	2620	1	13.65	454	2185	1
19	20	0.46	0.18	4120	3.56	118	2620	1	13.65	454	2185	1

20	20	0.46	0.21	3563	4.76	158	2620	1	13.65	454	2185	1
20	20	0.46	0.24	2807	7.66	255	2620	1	13.65	454	2185	1
20	21	0.46	0.24	2807	7.66	255	2620	1	13.65	454	2185	1
20	21	0.46	0.30	2191	12.57	418	2620	1	13.65	454	2185	1
21	21	0.46	0.36	1914	16.48	548	2620	1	13.65	454	2185	1
21	21	0.46	0.43	1743	19.87	660	2620	1	13.65	454	2185	1
21	22	0.46	0.10	4120	3.56	244	2620	1	13.65	935	2185	1
21	22	0.46	0.14	4120	3.56	244	2620	1	13.65	935	2185	1
22	22	0.36	0.09	4120	3.56	244	2620	1	10.92	748	2185	1
22	22	0.36	0.11	4120	3.56	244	2620	1	10.92	748	2185	1
22	23	0.36	0.09	4116	3.56	243	2620	1	10.93	748	2185	1
22	23	0.36	0.12	4116	3.56	243	2620	1	10.93	748	2185	1
23	23	0.36	0.12	3865	4.03	276	2620	1	10.93	748	2185	1
23	23	0.36	0.16	3037	6.53	447	2620	1	10.93	748	2185	1
23	24	0.36	0.14	3120	6.19	423	2620	1	10.93	748	2185	1
23	24	0.36	0.17	2794	7.72	528	2620	1	10.93	748	2185	1
24	24	0.36	0.17	2776	7.82	535	2620	1	10.93	748	2185	1
24	24	0.36	0.14	3101	6.27	429	2620	1	10.93	748	2185	1
24	25	0.36	0.16	3019	6.61	452	2620	1	10.93	748	2185	1
24	25	0.36	0.12	3842	4.08	279	2620	1	10.93	748	2185	1
25	25	0.36	0.12	3944	3.87	265	2620	1	10.93	748	2185	1
25	25	0.36	0.09	4116	3.56	243	2620	1	10.93	748	2185	1
25	26	0.36	0.40	1422	29.86	993	2620	1	10.92	363	2185	1
25	26	0.36	0.34	1489	27.24	905	2620	1	10.92	363	2185	1
26	26	0.46	0.63	1499	26.88	893	2620	1	13.65	454	2185	1
26	26	0.46	0.49	1641	22.42	745	2620	1	13.65	454	2185	1
26	27	0.46	0.49	1641	22.42	745	2620	1	13.65	454	2185	1
26	27	0.46	0.43	1732	20.12	669	2620	1	13.65	454	2185	1
27	27	0.46	0.37	1885	17.00	565	2620	1	13.65	454	2185	1
27	27	0.46	0.31	2204	12.43	413	2620	1	13.65	454	2185	1
27	28	0.46	0.31	2204	12.43	413	2620	1	13.65	454	2185	1
27	28	0.46	0.28	2498	9.68	322	2620	1	13.65	454	2185	1
28	28	0.46	0.21	4120	3.56	118	2620	1	13.65	454	2185	1
28	28	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
28	29	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
28	29	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
29	29	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
29	29	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
29	30	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
29	30	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
29	30	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
30	30	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
30	30	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
30	31	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
30	31	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1

31	31	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
31	31	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
31	32	0.46	0.20	4120	3.56	118	2620	1	13.65	454	2185	1
31	32	0.46	0.24	2911	7.12	237	2620	1	13.65	454	2185	1
32	32	0.46	0.27	2567	9.16	304	2620	1	13.65	454	2185	1
32	32	0.46	0.30	2244	11.99	398	2620	1	13.65	454	2185	1
32	33	0.46	0.30	2244	11.99	398	2620	1	13.65	454	2185	1
32	33	0.46	0.37	1895	16.80	558	2620	1	13.65	454	2185	1
33	33	0.46	0.42	1744	19.84	660	2620	1	13.65	454	2185	1
33	33	0.46	0.50	1639	22.47	747	2620	1	13.65	454	2185	1
33	34	0.46	0.48	1664	21.80	725	2620	1	13.65	454	2185	1
33	34	0.46	0.62	1511	26.46	879	2620	1	13.65	454	2185	1
34	34	0.36	0.37	1455	28.50	947	2620	1	10.92	363	2185	1
34	34	0.36	0.44	1389	31.27	1039	2620	1	10.92	363	2185	1
34	35	0.36	0.38	1426	29.56	980	2620	1	10.94	363	2185	1
34	35	0.36	0.47	1335	33.72	1118	2620	1	10.94	363	2185	1
35	35	0.36	0.49	1312	34.94	1159	2620	1	10.94	363	2185	1
35	35	0.36	0.61	1221	40.33	1338	2620	1	10.94	363	2185	1
35	36	0.36	0.23	1942	15.93	872	2620	1	10.94	599	2185	1
35	36	0.36	0.26	1826	18.02	986	2620	1	10.94	599	2185	1
36	36	0.36	0.25	1925	16.22	888	2620	1	10.94	599	2185	1
36	36	0.36	0.22	2061	14.15	775	2620	1	10.94	599	2185	1
36	37	0.36	0.58	1257	38.02	1261	2620	1	10.94	363	2185	1
36	37	0.36	0.46	1356	32.71	1085	2620	1	10.94	363	2185	1
37	37	0.36	0.46	1357	32.66	1083	2620	1	10.94	363	2185	1
37	37	0.36	0.37	1452	28.49	945	2620	1	10.94	363	2185	1
37	38	0.36	0.42	1418	30.01	998	2620	1	10.92	363	2185	1
37	38	0.36	0.36	1487	27.29	907	2620	1	10.92	363	2185	1
38	38	0.46	0.63	1504	26.70	887	2620	1	13.65	454	2185	1
38	38	0.46	0.48	1656	22.01	732	2620	1	13.65	454	2185	1
38	39	0.46	0.51	1623	22.92	762	2620	1	13.65	454	2185	1
38	39	0.46	0.43	1729	20.20	671	2620	1	13.65	454	2185	1
39	39	0.46	0.36	1943	15.99	532	2620	1	13.65	454	2185	1
39	39	0.46	0.29	2334	11.08	368	2620	1	13.65	454	2185	1
39	40	0.46	0.29	2334	11.08	368	2620	1	13.65	454	2185	1
39	40	0.46	0.25	2711	8.22	273	2620	1	13.65	454	2185	1
40	40	0.46	0.20	3969	3.83	127	2620	1	13.65	454	2185	1
40	40	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
40	41	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
40	41	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
41	41	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
41	41	0.46	0.10	4120	3.56	118	2620	1	13.65	454	2185	1
41	42	0.46	0.10	4120	3.56	118	2620	1	13.65	454	2185	1
41	42	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1
41	42	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1

42	42	0.46	0.09	4120	3.56	118	2620	1	13.65	454	2185	1
42	42	0.46	0.10	4120	3.56	118	2620	1	13.65	454	2185	1
42	43	0.46	0.10	4120	3.56	118	2620	1	13.65	454	2185	1
42	43	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
43	43	0.46	0.14	4120	3.56	118	2620	1	13.65	454	2185	1
43	43	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
43	44	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
43	44	0.46	0.21	3633	4.57	152	2620	1	13.65	454	2185	1
44	44	0.46	0.24	2895	7.20	239	2620	1	13.65	454	2185	1
44	44	0.46	0.27	2447	10.08	335	2620	1	13.65	454	2185	1
44	45	0.46	0.27	2447	10.08	335	2620	1	13.65	454	2185	1
44	45	0.46	0.34	2009	14.96	497	2620	1	13.65	454	2185	1
45	45	0.46	0.40	1802	18.60	618	2620	1	13.65	454	2185	1
45	45	0.46	0.48	1675	21.52	715	2620	1	13.65	454	2185	1
45	46	0.46	0.46	1699	20.92	695	2620	1	13.65	454	2185	1
45	46	0.46	0.60	1535	25.63	852	2620	1	13.65	454	2185	1
46	46	0.36	0.36	1472	27.85	926	2620	1	10.92	363	2185	1
46	46	0.36	0.43	1403	30.69	1020	2620	1	10.92	363	2185	1
46	47	0.36	0.37	1447	28.72	953	2620	1	10.94	363	2185	1
46	47	0.36	0.46	1353	32.85	1090	2620	1	10.94	363	2185	1
47	47	0.36	0.47	1339	33.57	1114	2620	1	10.94	363	2185	1
47	47	0.36	0.59	1244	38.88	1290	2620	1	10.94	363	2185	1
47	48	0.36	0.23	2000	15.04	824	2620	1	10.94	599	2185	1
47	48	0.36	0.26	1873	17.15	939	2620	1	10.94	599	2185	1
48	48	0.36	0.26	1877	17.07	935	2620	1	10.94	599	2185	1
48	48	0.36	0.22	2008	14.92	817	2620	1	10.94	599	2185	1
48	49	0.36	0.59	1242	38.99	1294	2620	1	10.94	363	2185	1
48	49	0.36	0.47	1340	33.51	1112	2620	1	10.94	363	2185	1
49	49	0.36	0.45	1361	32.49	1078	2620	1	10.94	363	2185	1
49	49	0.36	0.36	1459	28.27	938	2620	1	10.94	363	2185	1
49	50	0.36	0.42	1417	30.06	999	2620	1	10.92	363	2185	1
49	50	0.36	0.35	1489	27.24	905	2620	1	10.92	363	2185	1
50	50	0.46	0.60	1533	25.70	854	2620	1	13.65	454	2185	1
50	50	0.46	0.46	1694	21.03	699	2620	1	13.65	454	2185	1
50	51	0.46	0.48	1671	21.63	719	2620	1	13.65	454	2185	1
50	51	0.46	0.40	1795	18.73	623	2620	1	13.65	454	2185	1
51	51	0.46	0.35	1973	15.51	516	2620	1	13.65	454	2185	1
51	51	0.46	0.28	2378	10.67	355	2620	1	13.65	454	2185	1
51	52	0.46	0.28	2411	10.38	345	2620	1	13.65	454	2185	1
51	52	0.46	0.25	2829	7.54	251	2620	1	13.65	454	2185	1
52	52	0.46	0.21	3677	4.47	148	2620	1	13.65	454	2185	1
52	52	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
52	53	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
52	53	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
53	53	0.46	0.14	4120	3.56	118	2620	1	13.65	454	2185	1
53	53	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
53	54	0.46	0.05	4120	3.56	195	2620	1	13.65	749	2185	1
53	54	0.46	0.04	4120	3.56	195	2620	1	13.65	749	2185	1

54	54	0.46	0.04	4120	3.56	195	2620	1	13.65	749	2185	1
54	54	0.46	0.04	4120	3.56	195	2620	1	13.65	749	2185	1
54	54	0.46	0.05	4120	3.56	195	2620	1	13.65	749	2185	1
54	55	0.46	0.05	4120	3.56	195	2620	1	13.65	749	2185	1
54	55	0.46	0.06	4120	3.56	195	2620	1	13.65	749	2185	1
55	55	0.46	0.06	4120	3.56	195	2620	1	13.65	749	2185	1
55	55	0.46	0.07	4120	3.56	195	2620	1	13.65	749	2185	1
55	56	0.46	0.07	4120	3.56	195	2620	1	13.65	749	2185	1
55	56	0.46	0.08	4120	3.56	195	2620	1	13.65	749	2185	1
56	56	0.46	0.10	4120	3.56	195	2620	1	13.65	749	2185	1
56	56	0.46	0.11	4120	3.56	195	2620	1	13.65	749	2185	1
56	57	0.46	0.28	2385	10.61	353	2620	1	13.65	454	2185	1
56	57	0.46	0.34	1986	15.31	509	2620	1	13.65	454	2185	1
57	57	0.46	0.40	1794	18.75	623	2620	1	13.65	454	2185	1
57	57	0.46	0.47	1677	21.47	714	2620	1	13.65	454	2185	1
57	58	0.46	0.46	1692	21.08	701	2620	1	13.65	454	2185	1
57	58	0.46	0.59	1537	25.54	849	2620	1	13.65	454	2185	1
58	58	0.36	0.35	1485	27.39	910	2620	1	10.92	363	2185	1
58	58	0.36	0.41	1418	30.02	998	2620	1	10.92	363	2185	1
58	59	0.36	0.36	1450	28.63	950	2620	1	10.94	363	2185	1
58	59	0.36	0.45	1356	32.72	1086	2620	1	10.94	363	2185	1
59	59	0.36	0.46	1346	33.22	1103	2620	1	10.94	363	2185	1
59	59	0.36	0.58	1251	38.48	1277	2620	1	10.94	363	2185	1
59	60	0.36	0.54	1270	37.34	1239	2620	1	10.94	363	2185	1
59	60	0.36	0.62	1216	40.70	1351	2620	1	10.94	363	2185	1
60	60	0.36	0.59	1244	38.93	1292	2620	1	10.94	363	2185	1
60	60	0.36	0.52	1301	35.58	1181	2620	1	10.94	363	2185	1
60	61	0.36	0.55	1281	36.68	1217	2620	1	10.94	363	2185	1
60	61	0.36	0.43	1383	31.46	1044	2620	1	10.94	363	2185	1
61	61	0.36	0.42	1398	30.78	1022	2620	1	10.94	363	2185	1
61	61	0.36	0.33	1501	26.71	886	2620	1	10.94	363	2185	1
61	62	0.36	0.39	1461	28.29	940	2620	1	10.92	363	2185	1
61	62	0.36	0.33	1536	25.60	851	2620	1	10.92	363	2185	1
62	62	0.46	0.55	1593	23.80	791	2620	1	13.65	454	2185	1
62	62	0.46	0.41	1779	19.08	634	2620	1	13.65	454	2185	1
62	63	0.46	0.43	1746	19.80	658	2620	1	13.65	454	2185	1
62	63	0.46	0.36	1920	16.37	544	2620	1	13.65	454	2185	1
63	63	0.46	0.33	2044	14.45	480	2620	1	13.65	454	2185	1
63	63	0.46	0.26	2511	9.57	318	2620	1	13.65	454	2185	1
63	64	0.46	0.03	4120	3.56	364	2620	1	13.65	1396	2185	1
63	64	0.46	0.03	4120	3.56	364	2620	1	13.65	1396	2185	1
64	64	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
64	64	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
64	65	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
64	65	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1

65	65	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
65	65	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
65	66	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
65	66	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
65	66	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
66	66	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
66	66	0.46	0.02	4120	3.56	364	2620	1	13.65	1396	2185	1
66	67	0.46	0.11	4120	3.56	118	2620	1	13.65	454	2185	1
66	67	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
67	67	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
67	67	0.46	0.18	4120	3.56	118	2620	1	13.65	454	2185	1
67	68	0.46	0.19	4120	3.56	118	2620	1	13.65	454	2185	1
67	68	0.46	0.23	2882	7.27	242	2620	1	13.65	454	2185	1
68	68	0.46	0.28	2373	10.72	356	2620	1	13.65	454	2185	1
68	68	0.46	0.32	2107	13.59	452	2620	1	13.65	454	2185	1
68	69	0.46	0.31	2125	13.37	444	2620	1	13.65	454	2185	1
68	69	0.46	0.41	1802	18.59	618	2620	1	13.65	454	2185	1
69	69	0.46	0.47	1676	21.49	714	2620	1	13.65	454	2185	1
69	69	0.46	0.56	1574	24.38	810	2620	1	13.65	454	2185	1
69	70	0.46	0.53	1604	23.46	780	2620	1	13.65	454	2185	1
69	70	0.46	0.69	1455	28.52	948	2620	1	13.65	454	2185	1
70	70	0.36	0.42	1407	30.47	1013	2620	1	10.92	363	2185	1
70	70	0.36	0.49	1343	33.49	1113	2620	1	10.92	363	2185	1
70	71	0.37	0.11	4107	3.56	243	2620	1	10.96	748	2185	1
70	71	0.37	0.13	3371	5.28	360	2620	1	10.96	748	2185	1
71	71	0.37	0.14	3173	5.96	407	2620	1	10.96	748	2185	1
71	71	0.37	0.18	2658	8.49	580	2620	1	10.96	748	2185	1
71	72	0.37	0.16	2723	8.09	552	2620	1	10.96	748	2185	1
71	72	0.37	0.18	2497	9.62	657	2620	1	10.96	748	2185	1
72	72	0.46	0.32	2328	11.07	756	2620	1	13.70	935	2185	1
72	72	0.46	0.28	2559	9.16	626	2620	1	13.70	935	2185	1
72	73	0.46	0.30	2497	9.62	657	2620	1	13.70	935	2185	1
72	73	0.46	0.23	3035	6.51	445	2620	1	13.70	935	2185	1
73	73	0.46	0.23	3180	5.93	405	2620	1	13.70	935	2185	1
73	73	0.46	0.20	3732	4.31	294	2620	1	13.70	935	2185	1
73	74	0.46	0.89	1312	35.08	1166	2620	1	13.65	454	2185	1
73	74	0.46	0.69	1435	29.30	974	2620	1	13.65	454	2185	1
74	74	0.46	0.62	1503	26.73	888	2620	1	13.65	454	2185	1
74	74	0.46	0.53	1585	24.04	799	2620	1	13.65	454	2185	1
74	75	0.46	0.54	1572	24.42	812	2620	1	13.65	454	2185	1
74	75	0.46	0.45	1707	20.71	688	2620	1	13.65	454	2185	1
75	75	0.46	0.35	1987	15.29	508	2620	1	13.65	454	2185	1
75	75	0.46	0.32	2193	12.55	417	2620	1	13.65	454	2185	1
75	76	0.46	0.32	2193	12.55	417	2620	1	13.65	454	2185	1
75	76	0.46	0.27	2756	7.95	264	2620	1	13.65	454	2185	1

76	76	0.46	0.23	3571	4.73	157	2620	1	13.65	454	2185	1
76	76	0.46	0.21	4120	3.56	118	2620	1	13.65	454	2185	1
76	77	0.46	0.21	4120	3.56	118	2620	1	13.65	454	2185	1
76	77	0.46	0.18	4120	3.56	118	2620	1	13.65	454	2185	1
77	77	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
77	77	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
77	78	0.46	0.16	4120	3.56	118	2620	1	13.65	454	2185	1
77	78	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
78	78	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
78	78	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
78	78	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
78	79	0.46	0.13	4120	3.56	118	2620	1	13.65	454	2185	1
78	79	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
79	79	0.46	0.15	4120	3.56	118	2620	1	13.65	454	2185	1
79	79	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
79	80	0.46	0.17	4120	3.56	118	2620	1	13.65	454	2185	1
79	80	0.46	0.20	4120	3.56	118	2620	1	13.65	454	2185	1
80	80	0.46	0.23	4074	3.64	121	2620	1	13.65	454	2185	1
80	80	0.46	0.26	3046	6.51	216	2620	1	13.65	454	2185	1
80	81	0.46	0.26	3046	6.51	216	2620	1	13.65	454	2185	1
80	81	0.46	0.30	2326	11.16	371	2620	1	13.65	454	2185	1
81	81	0.43	0.34	1906	16.62	552	2620	1	13.01	432	2185	1
81	81	0.43	0.38	1729	20.20	671	2620	1	13.01	432	2185	1
81	82	0.43	0.39	1701	20.87	694	2620	1	13.01	432	2185	1
81	82	0.43	0.50	1530	25.80	857	2620	1	13.01	432	2185	1

(4) Main girder G-2 Web name : RWEB

(a) Check of section and web thickness

Pnl. No.	Sec. No.	Panel Length (mm)	Stiff. Qty	Stiff. Spacing (mm)	Stiff. rumg	Stress		Web Grade	Web height (mm)	Web thk. (mm)	Rq' d thk. (mm)
						σ_c	τ				
1	1	10802	7	1350	2	0	70	SM490Y	2801	11	9.5
1	1	10802	7	1350	2	-68	58	SM490Y	2801	11	9.5
1	2	10802	7	1350	2	-66	57	SM570	2801	11	10.7
1	2	10802	7	1350	2	-74	56	SM570	2801	11	10.7
2	2	10003	7	1250	2	-74	54	SM570	2801	11	10.7
2	2	10003	7	1250	2	-121	44	SM570	2801	11	10.7
2	3	10003	7	1250	2	-117	44	SM570	2801	11	10.7
2	3	10003	7	1250	2	-122	42	SM570	2801	11	10.7
3	3	10003	7	1250	2	-125	41	SM570	2801	11	10.7
3	3	10003	7	1250	2	-158	31	SM570	2801	11	10.7
3	4	10003	7	1250	2	-156	31	SM570	2801	11	10.7
3	4	10003	7	1250	2	-159	30	SM570	2801	11	10.7
4	4	10003	7	1250	2	-159	29	SM570	2801	11	10.7
4	4	10003	7	1250	2	-177	20	SM570	2801	11	10.7
4	5	10003	7	1250	2	-177	20	SM570	2801	11	10.7
4	5	10003	7	1250	2	-179	18	SM570	2801	11	10.7

5	5	10002	7	1250	2	-178	16	SM570	2801	11	10.7
5	5	10002	7	1250	2	-180	17	SM570	2801	11	10.7
5	5	10002	7	1250	2	-179	22	SM570	2801	11	10.7
5	6	10002	7	1250	2	-179	22	SM570	2801	11	10.7
5	6	10002	7	1250	2	-178	23	SM570	2801	11	10.7
6	6	10000	7	1250	2	-178	26	SM570	2801	11	10.7
6	6	10000	7	1250	2	-158	34	SM570	2801	11	10.7
6	7	10000	7	1250	2	-161	34	SM570	2801	11	10.7
6	7	10000	7	1250	2	-157	35	SM570	2801	11	10.7
7	7	10000	7	1250	2	-164	35	SM570	2801	11	10.7
7	7	10000	7	1250	2	-130	44	SM570	2801	11	10.7
7	8	10000	7	1250	2	-134	44	SM570	2801	11	10.7
7	8	10000	7	1250	2	-128	45	SM570	2801	11	10.7
8	8	10000	7	1250	2	-128	47	SM570	2801	11	10.7
8	8	10000	7	1250	2	-77	56	SM570	2801	11	10.7
8	9	10000	7	1250	2	-77	56	SM490Y	2801	11	9.5
8	9	10000	7	1250	2	-69	57	SM490Y	2801	11	9.5
9	9	10000	7	1250	2	-69	61	SM490Y	2801	11	9.5
9	9	10000	7	1250	2	-95	70	SM490Y	2801	11	9.5
9	10	10000	7	1250	2	-61	59	SM570	2801	13	10.7
9	10	10000	7	1250	2	-71	60	SM570	2801	13	10.7
10	10	10000	7	1250	2	-71	64	SM570	2801	13	10.7
10	10	10000	7	1250	2	-156	72	SM570	2801	13	10.7
10	11	10000	7	1250	2	-130	49	SM570	2795	19	10.7
10	11	10000	7	1250	2	-142	50	SM570	2795	19	10.7
11	11	10000	7	1250	2	-142	52	SM570	2795	19	10.7
11	11	10000	7	1250	2	-202	56	SM570	2795	19	10.7
11	12	10000	7	1250	2	-171	55	SM570	2790	19	10.6
11	12	10000	7	1250	2	-204	57	SM570	2790	19	10.6
12	12	8000	7	1000	2	-204	52	SM570	2790	19	10.6
12	12	8000	7	1000	2	-180	50	SM570	2790	19	10.6
12	13	8000	7	1000	2	-202	51	SM570	2795	19	10.7
12	13	8000	7	1000	2	-160	48	SM570	2795	19	10.7
13	13	8000	7	1000	2	-160	46	SM570	2795	19	10.7
13	13	8000	7	1000	2	-123	43	SM570	2795	19	10.7
13	14	8000	7	1000	2	-197	75	SM570	2801	11	10.7
13	14	8000	7	1000	2	-164	72	SM570	2801	11	10.7
14	14	10000	7	1250	2	-164	66	SM570	2801	11	10.7
14	14	10000	7	1250	2	-104	60	SM570	2801	11	10.7
14	15	10000	7	1250	2	-123	60	SM490Y	2801	11	9.5
14	15	10000	7	1250	2	-85	56	SM490Y	2801	11	9.5
15	15	10000	7	1250	2	-85	54	SM490Y	2801	11	9.5
15	15	10000	7	1250	2	-47	48	SM490Y	2801	11	9.5
15	16	10000	7	1250	2	-51	48	SM490Y	2801	11	9.5
15	16	10000	7	1250	2	-55	44	SM490Y	2801	11	9.5

16	16	10000	7	1250	2	-55	41	SM490Y	2801	11	9.5
16	16	10000	7	1250	2	-81	35	SM490Y	2801	11	9.5
16	17	10000	7	1250	2	-81	35	SM490Y	2801	11	9.5
16	17	10000	7	1250	2	-92	31	SM490Y	2801	11	9.5
17	17	10000	7	1250	2	-92	28	SM490Y	2801	11	9.5
17	17	10000	7	1250	2	-104	22	SM490Y	2801	11	9.5
17	18	10000	7	1250	2	-104	22	SM490Y	2801	11	9.5
17	18	10000	7	1250	2	-108	18	SM490Y	2801	11	9.5
18	18	10000	7	1250	2	-108	17	SM490Y	2801	11	9.5
18	18	10000	7	1250	2	-108	16	SM490Y	2801	11	9.5
18	18	10000	7	1250	2	-108	18	SM490Y	2801	11	9.5
18	19	10000	7	1250	2	-108	18	SM490Y	2801	11	9.5
18	19	10000	7	1250	2	-102	23	SM490Y	2801	11	9.5
19	19	10000	7	1250	2	-102	24	SM490Y	2801	11	9.5
19	19	10000	7	1250	2	-95	28	SM490Y	2801	11	9.5
19	20	10000	7	1250	2	-96	28	SM490Y	2801	11	9.5
19	20	10000	7	1250	2	-79	34	SM490Y	2801	11	9.5
20	20	10000	7	1250	2	-79	37	SM490Y	2801	11	9.5
20	20	10000	7	1250	2	-64	40	SM490Y	2801	11	9.5
20	21	10000	7	1250	2	-64	40	SM490Y	2801	11	9.5
20	21	10000	7	1250	2	-45	47	SM490Y	2801	11	9.5
21	21	10000	7	1250	2	-45	51	SM490Y	2801	11	9.5
21	21	10000	7	1250	2	-77	55	SM490Y	2801	11	9.5
21	22	10000	7	1250	2	-61	43	SM490Y	2801	14	9.5
21	22	10000	7	1250	2	-110	48	SM490Y	2801	14	9.5
22	22	8000	7	1000	2	-110	52	SM490Y	2801	14	9.5
22	22	8000	7	1000	2	-140	54	SM490Y	2801	14	9.5
22	23	8000	7	1000	2	-100	53	SM570	2798	14	10.7
22	23	8000	7	1000	2	-140	57	SM570	2798	14	10.7
23	23	8000	7	1000	2	-140	58	SM570	2798	14	10.7
23	23	8000	7	1000	2	-185	62	SM570	2798	14	10.7
23	24	8000	7	1000	2	-166	62	SM570	2798	14	10.7
23	24	8000	7	1000	2	-192	65	SM570	2798	14	10.7
24	24	8000	7	1000	2	-192	65	SM570	2798	14	10.7
24	24	8000	7	1000	2	-165	62	SM570	2798	14	10.7
24	25	8000	7	1000	2	-185	62	SM570	2798	14	10.7
24	25	8000	7	1000	2	-138	58	SM570	2798	14	10.7
25	25	8000	7	1000	2	-138	58	SM570	2798	14	10.7
25	25	8000	7	1000	2	-96	54	SM570	2798	14	10.7
25	26	8000	7	1000	2	-137	69	SM570	2801	11	10.7
25	26	8000	7	1000	2	-106	66	SM570	2801	11	10.7
26	26	10000	7	1250	2	-106	65	SM570	2801	11	10.7
26	26	10000	7	1250	2	-55	59	SM570	2801	11	10.7
26	27	10000	7	1250	2	-55	59	SM570	2801	11	10.7
26	27	10000	7	1250	2	-50	56	SM570	2801	11	10.7

27	27	10000	7	1250	2	-50	52	SM570	2801	11	10.7
27	27	10000	7	1250	2	-84	46	SM570	2801	11	10.7
27	28	10000	7	1250	2	-84	46	SM490Y	2801	11	9.5
27	28	10000	7	1250	2	-101	42	SM490Y	2801	11	9.5
28	28	10000	7	1250	2	-101	35	SM490Y	2801	11	9.5
28	28	10000	7	1250	2	-119	29	SM490Y	2801	11	9.5
28	29	10000	7	1250	2	-119	29	SM490Y	2801	11	9.5
28	29	10000	7	1250	2	-126	25	SM490Y	2801	11	9.5
29	29	10000	7	1250	2	-126	23	SM490Y	2801	11	9.5
29	29	10000	7	1250	2	-132	17	SM490Y	2801	11	9.5
29	30	10000	7	1250	2	-132	17	SM490Y	2801	11	9.5
29	30	10000	7	1250	2	-132	16	SM490Y	2801	11	9.5
29	30	10000	7	1250	2	-131	17	SM490Y	2801	11	9.5
30	30	10000	7	1250	2	-131	18	SM490Y	2801	11	9.5
30	30	10000	7	1250	2	-128	22	SM490Y	2801	11	9.5
30	31	10000	7	1250	2	-128	22	SM490Y	2801	11	9.5
30	31	10000	7	1250	2	-117	28	SM490Y	2801	11	9.5
31	31	10000	7	1250	2	-117	29	SM490Y	2801	11	9.5
31	31	10000	7	1250	2	-107	33	SM490Y	2801	11	9.5
31	32	10000	7	1250	2	-110	33	SM490Y	2801	11	9.5
31	32	10000	7	1250	2	-87	40	SM490Y	2801	11	9.5
32	32	10000	7	1250	2	-87	42	SM490Y	2801	11	9.5
32	32	10000	7	1250	2	-69	46	SM490Y	2801	11	9.5
32	33	10000	7	1250	2	-69	46	SM490Y	2801	11	9.5
32	33	10000	7	1250	2	-45	52	SM490Y	2801	11	9.5
33	33	10000	7	1250	2	-45	55	SM490Y	2801	11	9.5
33	33	10000	7	1250	2	-81	59	SM490Y	2801	11	9.5
33	34	10000	7	1250	2	-65	58	SM490Y	2801	11	9.5
33	34	10000	7	1250	2	-120	64	SM490Y	2801	11	9.5
34	34	8000	7	1000	2	-120	68	SM490Y	2801	11	9.5
34	34	8000	7	1000	2	-152	70	SM490Y	2801	11	9.5
34	35	8000	7	1000	2	-105	69	SM570	2795	11	10.7
34	35	8000	7	1000	2	-146	74	SM570	2795	11	10.7
35	35	8000	7	1000	2	-146	76	SM570	2795	11	10.7
35	35	8000	7	1000	2	-192	81	SM570	2795	11	10.7
35	36	8000	7	1000	2	-170	69	SM570	2795	13	10.7
35	36	8000	7	1000	2	-197	71	SM570	2795	13	10.7
36	36	8000	7	1000	2	-197	68	SM570	2795	13	10.7
36	36	8000	7	1000	2	-171	66	SM570	2795	13	10.7
36	37	8000	7	1000	2	-193	77	SM570	2795	11	10.7
36	37	8000	7	1000	2	-149	72	SM570	2795	11	10.7
37	37	8000	7	1000	2	-149	72	SM570	2795	11	10.7
37	37	8000	7	1000	2	-109	67	SM570	2795	11	10.7
37	38	8000	7	1000	2	-152	68	SM490Y	2801	11	9.5
37	38	8000	7	1000	2	-122	66	SM490Y	2801	11	9.5

38	38	10000	7	1250	2	-122	65	SM490Y	2801	11	9.5
38	38	10000	7	1250	2	-66	59	SM490Y	2801	11	9.5
38	39	10000	7	1250	2	-88	60	SM490Y	2801	11	9.5
38	39	10000	7	1250	2	-49	56	SM490Y	2801	11	9.5
39	39	10000	7	1250	2	-49	51	SM490Y	2801	11	9.5
39	39	10000	7	1250	2	-66	44	SM490Y	2801	11	9.5
39	40	10000	7	1250	2	-66	44	SM490Y	2801	11	9.5
39	40	10000	7	1250	2	-83	41	SM490Y	2801	11	9.5
40	40	10000	7	1250	2	-83	36	SM490Y	2801	11	9.5
40	40	10000	7	1250	2	-103	29	SM490Y	2801	11	9.5
40	41	10000	7	1250	2	-100	29	SM490Y	2801	11	9.5
40	41	10000	7	1250	2	-108	25	SM490Y	2801	11	9.5
41	41	10000	7	1250	2	-108	24	SM490Y	2801	11	9.5
41	41	10000	7	1250	2	-116	18	SM490Y	2801	11	9.5
41	42	10000	7	1250	2	-116	18	SM490Y	2801	11	9.5
41	42	10000	7	1250	2	-117	15	SM490Y	2801	11	9.5
41	42	10000	7	1250	2	-117	15	SM490Y	2801	11	9.5
42	42	10000	7	1250	2	-117	15	SM490Y	2801	11	9.5
42	42	10000	7	1250	2	-116	19	SM490Y	2801	11	9.5
42	43	10000	7	1250	2	-116	19	SM490Y	2801	11	9.5
42	43	10000	7	1250	2	-108	25	SM490Y	2801	11	9.5
43	43	10000	7	1250	2	-108	26	SM490Y	2801	11	9.5
43	43	10000	7	1250	2	-100	30	SM490Y	2801	11	9.5
43	44	10000	7	1250	2	-102	30	SM490Y	2801	11	9.5
43	44	10000	7	1250	2	-83	36	SM490Y	2801	11	9.5
44	44	10000	7	1250	2	-83	40	SM490Y	2801	11	9.5
44	44	10000	7	1250	2	-66	43	SM490Y	2801	11	9.5
44	45	10000	7	1250	2	-66	43	SM490Y	2801	11	9.5
44	45	10000	7	1250	2	-45	49	SM490Y	2801	11	9.5
45	45	10000	7	1250	2	-45	54	SM490Y	2801	11	9.5
45	45	10000	7	1250	2	-81	58	SM490Y	2801	11	9.5
45	46	10000	7	1250	2	-67	57	SM570	2801	11	10.7
45	46	10000	7	1250	2	-123	63	SM570	2801	11	10.7
46	46	8000	7	1000	2	-123	66	SM570	2801	11	10.7
46	46	8000	7	1000	2	-156	69	SM570	2801	11	10.7
46	47	8000	7	1000	2	-104	68	SM570	2796	11	10.7
46	47	8000	7	1000	2	-145	73	SM570	2796	11	10.7
47	47	8000	7	1000	2	-145	74	SM570	2796	11	10.7
47	47	8000	7	1000	2	-191	79	SM570	2796	11	10.7
47	48	8000	7	1000	2	-175	67	SM570	2796	13	10.7
47	48	8000	7	1000	2	-203	70	SM570	2796	13	10.7
48	48	8000	7	1000	2	-203	70	SM570	2796	13	10.7
48	48	8000	7	1000	2	-175	67	SM570	2796	13	10.7
48	49	8000	7	1000	2	-194	79	SM570	2796	11	10.7
48	49	8000	7	1000	2	-147	74	SM570	2796	11	10.7

49	49	8000	7	1000	2	-147	72	SM570	2796	11	10.7
49	49	8000	7	1000	2	-104	67	SM570	2796	11	10.7
49	50	8000	7	1000	2	-153	68	SM570	2801	11	10.7
49	50	8000	7	1000	2	-120	65	SM570	2801	11	10.7
50	50	10000	7	1250	2	-120	63	SM570	2801	11	10.7
50	50	10000	7	1250	2	-67	57	SM570	2801	11	10.7
50	51	10000	7	1250	2	-81	58	SM490Y	2801	11	9.5
50	51	10000	7	1250	2	-46	54	SM490Y	2801	11	9.5
51	51	10000	7	1250	2	-46	50	SM490Y	2801	11	9.5
51	51	10000	7	1250	2	-73	44	SM490Y	2801	11	9.5
51	52	10000	7	1250	2	-71	44	SM490Y	2801	11	9.5
51	52	10000	7	1250	2	-88	40	SM490Y	2801	11	9.5
52	52	10000	7	1250	2	-88	36	SM490Y	2801	11	9.5
52	52	10000	7	1250	2	-109	30	SM490Y	2801	11	9.5
52	53	10000	7	1250	2	-107	30	SM490Y	2801	11	9.5
52	53	10000	7	1250	2	-115	26	SM490Y	2801	11	9.5
53	53	10000	7	1250	2	-115	25	SM490Y	2801	11	9.5
53	53	10000	7	1250	2	-124	19	SM490Y	2801	11	9.5
53	54	10000	7	1250	2	-122	16	SM490Y	2801	13	9.5
53	54	10000	7	1250	2	-124	13	SM490Y	2801	13	9.5
54	54	10000	7	1250	2	-124	13	SM490Y	2801	13	9.5
54	54	10000	7	1250	2	-124	14	SM490Y	2801	13	9.5
54	54	10000	7	1250	2	-123	16	SM490Y	2801	13	9.5
54	55	10000	7	1250	2	-123	16	SM490Y	2801	13	9.5
54	55	10000	7	1250	2	-116	21	SM490Y	2801	13	9.5
55	55	10000	7	1250	2	-116	23	SM490Y	2801	13	9.5
55	55	10000	7	1250	2	-108	26	SM490Y	2801	13	9.5
55	56	10000	7	1250	2	-110	26	SM490Y	2801	13	9.5
55	56	10000	7	1250	2	-91	31	SM490Y	2801	13	9.5
56	56	10000	7	1250	2	-91	34	SM490Y	2801	13	9.5
56	56	10000	7	1250	2	-75	37	SM490Y	2801	13	9.5
56	57	10000	7	1250	2	-76	44	SM490Y	2801	11	9.5
56	57	10000	7	1250	2	-44	50	SM490Y	2801	11	9.5
57	57	10000	7	1250	2	-44	54	SM490Y	2801	11	9.5
57	57	10000	7	1250	2	-66	58	SM490Y	2801	11	9.5
57	58	10000	7	1250	2	-57	57	SM490Y	2801	11	9.5
57	58	10000	7	1250	2	-108	63	SM490Y	2801	11	9.5
58	58	8000	7	1000	2	-108	66	SM490Y	2801	11	9.5
58	58	8000	7	1000	2	-139	69	SM490Y	2801	11	9.5
58	59	8000	7	1000	2	-98	68	SM570	2797	11	10.7
58	59	8000	7	1000	2	-140	73	SM570	2797	11	10.7
59	59	8000	7	1000	2	-140	74	SM570	2797	11	10.7
59	59	8000	7	1000	2	-187	79	SM570	2797	11	10.7
59	60	8000	7	1000	2	-167	79	SM570	2797	11	10.7
59	60	8000	7	1000	2	-194	82	SM570	2797	11	10.7

60	60	8000	7	1000	2	-194	79	SM570	2797	11	10.7
60	60	8000	7	1000	2	-167	76	SM570	2797	11	10.7
60	61	8000	7	1000	2	-187	76	SM570	2797	11	10.7
60	61	8000	7	1000	2	-141	71	SM570	2797	11	10.7
61	61	8000	7	1000	2	-141	70	SM570	2797	11	10.7
61	61	8000	7	1000	2	-100	65	SM570	2797	11	10.7
61	62	8000	7	1000	2	-147	66	SM570	2801	11	10.7
61	62	8000	7	1000	2	-115	63	SM570	2801	11	10.7
62	62	10000	7	1250	2	-115	60	SM570	2801	11	10.7
62	62	10000	7	1250	2	-64	54	SM570	2801	11	10.7
62	63	10000	7	1250	2	-78	55	SM490Y	2801	11	9.5
62	63	10000	7	1250	2	-45	51	SM490Y	2801	11	9.5
63	63	10000	7	1250	2	-45	49	SM490Y	2801	11	9.5
63	63	10000	7	1250	2	-68	43	SM490Y	2801	11	9.5
63	64	10000	7	1250	2	-66	30	SM490Y	2801	16	9.5
63	64	10000	7	1250	2	-82	27	SM490Y	2801	16	9.5
64	64	10000	7	1250	2	-82	25	SM490Y	2801	16	9.5
64	64	10000	7	1250	2	-100	21	SM490Y	2801	16	9.5
64	65	10000	7	1250	2	-99	21	SM490Y	2801	16	9.5
64	65	10000	7	1250	2	-106	18	SM490Y	2801	16	9.5
65	65	10000	7	1250	2	-106	16	SM490Y	2801	16	9.5
65	65	10000	7	1250	2	-112	13	SM490Y	2801	16	9.5
65	66	10000	7	1250	2	-112	13	SM490Y	2801	16	9.5
65	66	10000	7	1250	2	-112	12	SM490Y	2801	16	9.5
65	66	10000	7	1250	2	-111	12	SM490Y	2801	16	9.5
66	66	10000	7	1250	2	-111	13	SM490Y	2801	16	9.5
66	66	10000	7	1250	2	-108	16	SM490Y	2801	16	9.5
66	67	10000	7	1250	2	-110	22	SM490Y	2801	11	9.5
66	67	10000	7	1250	2	-99	28	SM490Y	2801	11	9.5
67	67	10000	7	1250	2	-99	30	SM490Y	2801	11	9.5
67	67	10000	7	1250	2	-88	34	SM490Y	2801	11	9.5
67	68	10000	7	1250	2	-90	34	SM490Y	2801	11	9.5
67	68	10000	7	1250	2	-67	40	SM490Y	2801	11	9.5
68	68	10000	7	1250	2	-67	44	SM490Y	2801	11	9.5
68	68	10000	7	1250	2	-51	48	SM490Y	2801	11	9.5
68	69	10000	7	1250	2	-50	48	SM570	2801	11	10.7
68	69	10000	7	1250	2	-69	54	SM570	2801	11	10.7
69	69	10000	7	1250	2	-69	58	SM570	2801	11	10.7
69	69	10000	7	1250	2	-110	61	SM570	2801	11	10.7
69	70	10000	7	1250	2	-86	61	SM570	2801	11	10.7
69	70	10000	7	1250	2	-145	67	SM570	2801	11	10.7
70	70	8000	7	1000	2	-145	70	SM570	2801	11	10.7
70	70	8000	7	1000	2	-176	72	SM570	2801	11	10.7
70	71	8000	7	1000	2	-118	56	SM570	2792	14	10.7
70	71	8000	7	1000	2	-156	60	SM570	2792	14	10.7

71	71	8000	7	1000	2	-156	61	SM570	2792	14	10.7
71	71	8000	7	1000	2	-198	65	SM570	2792	14	10.7
71	72	8000	7	1000	2	-175	65	SM570	2792	14	10.7
71	72	8000	7	1000	2	-199	68	SM570	2792	14	10.7
72	72	10000	7	1250	2	-199	70	SM570	2792	14	10.7
72	72	10000	7	1250	2	-166	67	SM570	2792	14	10.7
72	73	10000	7	1250	2	-192	68	SM570	2792	14	10.7
72	73	10000	7	1250	2	-134	63	SM570	2792	14	10.7
73	73	10000	7	1250	2	-134	62	SM570	2792	14	10.7
73	73	10000	7	1250	2	-103	59	SM570	2792	14	10.7
73	74	10000	7	1250	2	-160	76	SM570	2801	11	10.7
73	74	10000	7	1250	2	-88	70	SM570	2801	11	10.7
74	74	10000	7	1250	2	-88	66	SM570	2801	11	10.7
74	74	10000	7	1250	2	-53	62	SM570	2801	11	10.7
74	75	10000	7	1250	2	-60	63	SM570	2801	11	10.7
74	75	10000	7	1250	2	-70	57	SM570	2801	11	10.7
75	75	10000	7	1250	2	-70	50	SM570	2801	11	10.7
75	75	10000	7	1250	2	-91	46	SM570	2801	11	10.7
75	76	10000	7	1250	2	-91	46	SM570	2801	11	10.7
75	76	10000	7	1250	2	-122	40	SM570	2801	11	10.7
76	76	10000	7	1250	2	-122	36	SM570	2801	11	10.7
76	76	10000	7	1250	2	-135	32	SM570	2801	11	10.7
76	77	10000	7	1250	2	-132	32	SM570	2801	11	10.7
76	77	10000	7	1250	2	-148	26	SM570	2801	11	10.7
77	77	10000	7	1250	2	-148	25	SM570	2801	11	10.7
77	77	10000	7	1250	2	-154	21	SM570	2801	11	10.7
77	78	10000	7	1250	2	-154	21	SM570	2801	11	10.7
77	78	10000	7	1250	2	-159	15	SM570	2801	11	10.7
78	78	10000	7	1250	2	-159	16	SM570	2801	11	10.7
78	78	10000	7	1250	2	-159	15	SM570	2801	11	10.7
78	78	10000	7	1250	2	-159	15	SM570	2801	11	10.7
78	79	10000	7	1250	2	-159	15	SM570	2801	11	10.7
78	79	10000	7	1250	2	-153	20	SM570	2801	11	10.7
79	79	10000	7	1250	2	-153	21	SM570	2801	11	10.7
79	79	10000	7	1250	2	-147	24	SM570	2801	11	10.7
79	80	10000	7	1250	2	-149	25	SM570	2801	11	10.7
79	80	10000	7	1250	2	-134	31	SM570	2801	11	10.7
80	80	10000	7	1250	2	-134	34	SM570	2801	11	10.7
80	80	10000	7	1250	2	-121	38	SM570	2801	11	10.7
80	81	10000	7	1250	2	-121	38	SM490Y	2801	11	9.5
80	81	10000	7	1250	2	-93	44	SM490Y	2801	11	9.5
81	81	13100	10	1191	2	-93	51	SM490Y	2801	11	9.5
81	81	13100	10	1191	2	-63	56	SM490Y	2801	11	9.5
81	82	13100	10	1191	2	-66	57	SM490Y	2801	11	9.5
81	82	13100	10	1191	2	0	65	SM490Y	2801	11	9.5

(b) Check of spacing and required stiffness

Panel No.	Sec. No.	a/b	Spacing Check	Maximum Spacing	$\gamma v \cdot \text{req}$	$Iv \cdot \text{req}$ (cm ⁴)	Iv	VStf No	$\gamma h \cdot \text{req}$	$Ih \cdot \text{req}$ (cm ⁴)	Ih	HStf No
1	1	0.48	0.94	1380	32.94	1116	2620	1	14.46	490	2185	1
1	1	0.48	0.66	1581	25.11	851	2620	1	14.46	490	2185	1
1	2	0.48	0.64	1599	24.56	832	2620	1	14.46	490	2185	1
1	2	0.48	0.61	1635	23.49	796	2620	1	14.46	490	2185	1
2	2	0.45	0.47	1669	22.53	764	2620	1	13.39	454	2185	1
2	2	0.45	0.36	2042	15.06	510	2620	1	13.39	454	2185	1
2	3	0.45	0.35	2077	14.55	493	2620	1	13.39	454	2185	1
2	3	0.45	0.34	2168	13.35	453	2620	1	13.39	454	2185	1
3	3	0.45	0.33	2276	12.12	411	2620	1	13.39	454	2185	1
3	3	0.45	0.26	4004	3.92	133	2620	1	13.39	454	2185	1
3	4	0.45	0.26	4077	3.78	128	2620	1	13.39	454	2185	1
3	4	0.45	0.25	4202	3.56	121	2620	1	13.39	454	2185	1
4	4	0.45	0.24	4202	3.56	121	2620	1	13.39	454	2185	1
4	4	0.45	0.21	4202	3.56	121	2620	1	13.39	454	2185	1
4	5	0.45	0.21	4202	3.56	121	2620	1	13.39	454	2185	1
4	5	0.45	0.20	4202	3.56	121	2620	1	13.39	454	2185	1
5	5	0.45	0.19	4202	3.56	121	2620	1	13.39	454	2185	1
5	5	0.45	0.19	4202	3.56	121	2620	1	13.39	454	2185	1
5	5	0.45	0.22	4202	3.56	121	2620	1	13.39	454	2185	1
5	6	0.45	0.22	4202	3.56	121	2620	1	13.39	454	2185	1
5	6	0.45	0.23	4202	3.56	121	2620	1	13.39	454	2185	1
6	6	0.45	0.25	4202	3.56	121	2620	1	13.39	454	2185	1
6	6	0.45	0.29	3109	6.49	220	2620	1	13.39	454	2185	1
6	7	0.45	0.30	3051	6.74	229	2620	1	13.39	454	2185	1
6	7	0.45	0.30	2839	7.79	264	2620	1	13.39	454	2185	1
7	7	0.45	0.31	2811	7.94	269	2620	1	13.39	454	2185	1
7	7	0.45	0.37	2053	14.89	505	2620	1	13.39	454	2185	1
7	8	0.45	0.38	2011	15.52	526	2620	1	13.39	454	2185	1
7	8	0.45	0.39	1951	16.48	559	2620	1	13.39	454	2185	1
8	8	0.45	0.41	1869	17.97	609	2620	1	13.39	454	2185	1
8	8	0.45	0.50	1638	23.40	793	2620	1	13.39	454	2185	1
8	9	0.45	0.50	1638	23.40	793	2620	1	13.39	454	2185	1
8	9	0.45	0.51	1613	24.12	817	2620	1	13.39	454	2185	1
9	9	0.45	0.59	1519	27.19	922	2620	1	13.39	454	2185	1
9	9	0.45	0.78	1369	33.48	1135	2620	1	13.39	454	2185	1
9	10	0.45	0.28	2288	11.99	671	2620	1	13.39	749	2185	1
9	10	0.45	0.29	2223	12.71	711	2620	1	13.39	749	2185	1
10	10	0.45	0.33	1998	15.73	880	2620	1	13.39	749	2185	1
10	10	0.45	0.46	1728	21.03	1177	2620	1	13.39	749	2185	1
10	11	0.45	0.05	4192	3.56	620	2620	1	13.42	2338	2458	2
10	11	0.45	0.05	4192	3.56	620	2620	1	13.42	2338	2458	2
11	11	0.45	0.06	4192	3.56	620	2620	1	13.42	2338	2458	2
11	11	0.45	0.07	4192	3.56	620	2620	1	13.42	2338	2458	2
11	12	0.45	0.07	4185	3.56	619	2620	1	13.44	2338	2458	2
11	12	0.45	0.08	4185	3.56	619	2620	1	13.44	2338	2458	2

12	12	0.36	0.04	4185	3.56	619	2620	1	10.75	1871	2458	2
12	12	0.36	0.04	4185	3.56	619	2620	1	10.75	1871	2458	2
12	13	0.36	0.04	4192	3.56	620	2620	1	10.73	1871	2185	1
12	13	0.36	0.03	4192	3.56	620	2620	1	10.73	1871	2185	1
13	13	0.36	0.03	4192	3.56	620	2620	1	10.73	1871	2185	1
13	13	0.36	0.02	4192	3.56	620	2620	1	10.73	1871	2185	1
13	14	0.36	0.60	1239	40.90	1386	2620	1	10.71	363	2185	1
13	14	0.36	0.51	1303	37.00	1254	2620	1	10.71	363	2185	1
14	14	0.45	0.78	1383	32.80	1112	2620	1	13.39	454	2185	1
14	14	0.45	0.59	1533	26.71	905	2620	1	13.39	454	2185	1
14	15	0.45	0.62	1511	27.48	931	2620	1	13.39	454	2185	1
14	15	0.45	0.52	1612	24.15	819	2620	1	13.39	454	2185	1
15	15	0.45	0.48	1671	22.48	762	2620	1	13.39	454	2185	1
15	15	0.45	0.36	1906	17.28	586	2620	1	13.39	454	2185	1
15	16	0.45	0.36	1894	17.49	593	2620	1	13.39	454	2185	1
15	16	0.45	0.31	2101	14.22	482	2620	1	13.39	454	2185	1
16	16	0.45	0.27	2354	11.33	384	2620	1	13.39	454	2185	1
16	16	0.45	0.22	3212	6.08	206	2620	1	13.39	454	2185	1
16	17	0.45	0.22	3212	6.08	206	2620	1	13.39	454	2185	1
16	17	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
17	17	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
17	17	0.45	0.12	4201	3.56	121	2620	1	13.39	454	2185	1
17	18	0.45	0.12	4201	3.56	121	2620	1	13.39	454	2185	1
17	18	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
18	18	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
18	18	0.45	0.09	4201	3.56	121	2620	1	13.39	454	2185	1
18	18	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
18	19	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
18	19	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
19	19	0.45	0.14	4201	3.56	121	2620	1	13.39	454	2185	1
19	19	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
19	20	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
19	20	0.45	0.20	3508	5.10	173	2620	1	13.39	454	2185	1
20	20	0.45	0.23	2892	7.50	254	2620	1	13.39	454	2185	1
20	20	0.45	0.27	2424	10.68	362	2620	1	13.39	454	2185	1
20	21	0.45	0.27	2424	10.68	362	2620	1	13.39	454	2185	1
20	21	0.45	0.34	1978	16.05	544	2620	1	13.39	454	2185	1
21	21	0.45	0.41	1766	20.13	682	2620	1	13.39	454	2185	1
21	21	0.45	0.49	1652	22.99	779	2620	1	13.39	454	2185	1
21	22	0.45	0.11	4201	3.56	248	2620	1	13.39	935	2185	1
21	22	0.45	0.16	4201	3.56	248	2620	1	13.39	935	2185	1
22	22	0.36	0.10	4201	3.56	248	2620	1	10.71	748	2185	1
22	22	0.36	0.12	3718	4.54	317	2620	1	10.71	748	2185	1
22	23	0.36	0.10	4101	3.72	260	2620	1	10.72	748	2185	1
22	23	0.36	0.13	3195	6.14	428	2620	1	10.72	748	2185	1

23	23	0.36	0.13	3028	6.83	477	2620	1	10.72	748	2185	1
23	23	0.36	0.17	2550	9.63	672	2620	1	10.72	748	2185	1
23	24	0.36	0.16	2601	9.26	646	2620	1	10.72	748	2185	1
23	24	0.36	0.19	2388	10.98	766	2620	1	10.72	748	2185	1
24	24	0.36	0.19	2378	11.07	773	2620	1	10.72	748	2185	1
24	24	0.36	0.16	2591	9.33	651	2620	1	10.72	748	2185	1
24	25	0.36	0.17	2541	9.70	677	2620	1	10.72	748	2185	1
24	25	0.36	0.13	3020	6.87	479	2620	1	10.72	748	2185	1
25	25	0.36	0.13	3063	6.68	466	2620	1	10.72	748	2185	1
25	25	0.36	0.10	3844	4.24	296	2620	1	10.72	748	2185	1
25	26	0.36	0.45	1358	34.04	1154	2620	1	10.71	363	2185	1
25	26	0.36	0.38	1421	31.08	1053	2620	1	10.71	363	2185	1
26	26	0.45	0.70	1429	30.76	1042	2620	1	13.39	454	2185	1
26	26	0.45	0.55	1561	25.77	873	2620	1	13.39	454	2185	1
26	27	0.45	0.55	1561	25.77	873	2620	1	13.39	454	2185	1
26	27	0.45	0.48	1643	23.25	788	2620	1	13.39	454	2185	1
27	27	0.45	0.42	1744	20.64	700	2620	1	13.39	454	2185	1
27	27	0.45	0.35	1984	15.94	540	2620	1	13.39	454	2185	1
27	28	0.45	0.35	1984	15.94	540	2620	1	13.39	454	2185	1
27	28	0.45	0.32	2202	12.94	439	2620	1	13.39	454	2185	1
28	28	0.45	0.23	3166	6.26	212	2620	1	13.39	454	2185	1
28	28	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
28	29	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
28	29	0.45	0.17	4201	3.56	121	2620	1	13.39	454	2185	1
29	29	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
29	29	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
29	30	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
29	30	0.45	0.12	4201	3.56	121	2620	1	13.39	454	2185	1
29	30	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
30	30	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
30	30	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
30	31	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
30	31	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
31	31	0.45	0.20	4201	3.56	121	2620	1	13.39	454	2185	1
31	31	0.45	0.22	3687	4.62	157	2620	1	13.39	454	2185	1
31	32	0.45	0.23	3558	4.96	168	2620	1	13.39	454	2185	1
31	32	0.45	0.27	2481	10.20	346	2620	1	13.39	454	2185	1
32	32	0.45	0.30	2251	12.39	420	2620	1	13.39	454	2185	1
32	32	0.45	0.34	2014	15.47	524	2620	1	13.39	454	2185	1
32	33	0.45	0.34	2014	15.47	524	2620	1	13.39	454	2185	1
32	33	0.45	0.42	1750	20.49	694	2620	1	13.39	454	2185	1
33	33	0.45	0.48	1653	22.97	778	2620	1	13.39	454	2185	1
33	33	0.45	0.56	1557	25.89	878	2620	1	13.39	454	2185	1
33	34	0.45	0.54	1578	25.21	854	2620	1	13.39	454	2185	1
33	34	0.45	0.70	1436	30.42	1031	2620	1	13.39	454	2185	1

34	34	0.36	0.41	1388	32.58	1104	2620	1	10.71	363	2185	1
34	34	0.36	0.48	1325	35.73	1211	2620	1	10.71	363	2185	1
34	35	0.36	0.41	1373	33.14	1121	2620	1	10.73	363	2185	1
34	35	0.36	0.51	1286	37.77	1277	2620	1	10.73	363	2185	1
35	35	0.36	0.54	1265	39.04	1320	2620	1	10.73	363	2185	1
35	35	0.36	0.67	1177	45.13	1526	2620	1	10.73	363	2185	1
35	36	0.36	0.25	1782	19.68	1098	2620	1	10.73	599	2185	1
35	36	0.36	0.29	1708	21.43	1196	2620	1	10.73	599	2185	1
36	36	0.36	0.27	1771	19.93	1113	2620	1	10.73	599	2185	1
36	36	0.36	0.24	1881	17.67	986	2620	1	10.73	599	2185	1
36	37	0.36	0.63	1212	42.58	1440	2620	1	10.73	363	2185	1
36	37	0.36	0.50	1307	36.59	1238	2620	1	10.73	363	2185	1
37	37	0.36	0.50	1307	36.58	1237	2620	1	10.73	363	2185	1
37	37	0.36	0.40	1399	31.94	1080	2620	1	10.73	363	2185	1
37	38	0.36	0.46	1353	34.29	1162	2620	1	10.71	363	2185	1
37	38	0.36	0.39	1418	31.20	1057	2620	1	10.71	363	2185	1
38	38	0.45	0.70	1432	30.62	1038	2620	1	13.39	454	2185	1
38	38	0.45	0.54	1573	25.36	859	2620	1	13.39	454	2185	1
38	39	0.45	0.57	1545	26.30	892	2620	1	13.39	454	2185	1
38	39	0.45	0.48	1642	23.27	789	2620	1	13.39	454	2185	1
39	39	0.45	0.40	1782	19.77	670	2620	1	13.39	454	2185	1
39	39	0.45	0.32	2087	14.40	488	2620	1	13.39	454	2185	1
39	40	0.45	0.32	2087	14.40	488	2620	1	13.39	454	2185	1
39	40	0.45	0.28	2359	11.28	382	2620	1	13.39	454	2185	1
40	40	0.45	0.22	3096	6.55	222	2620	1	13.39	454	2185	1
40	40	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
40	41	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
40	41	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
41	41	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
41	41	0.45	0.11	4201	3.56	121	2620	1	13.39	454	2185	1
41	42	0.45	0.11	4201	3.56	121	2620	1	13.39	454	2185	1
41	42	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
41	42	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
42	42	0.45	0.10	4201	3.56	121	2620	1	13.39	454	2185	1
42	42	0.45	0.12	4201	3.56	121	2620	1	13.39	454	2185	1
42	43	0.45	0.12	4201	3.56	121	2620	1	13.39	454	2185	1
42	43	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
43	43	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
43	43	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
43	44	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
43	44	0.45	0.23	2922	7.35	249	2620	1	13.39	454	2185	1
44	44	0.45	0.27	2480	10.20	346	2620	1	13.39	454	2185	1
44	44	0.45	0.30	2169	13.34	452	2620	1	13.39	454	2185	1
44	45	0.45	0.30	2169	13.34	452	2620	1	13.39	454	2185	1
44	45	0.45	0.38	1834	18.67	633	2620	1	13.39	454	2185	1

45	45	0.45	0.45	1693	21.91	742	2620	1	13.39	454	2185	1
45	45	0.45	0.53	1590	24.83	842	2620	1	13.39	454	2185	1
45	46	0.45	0.51	1610	24.21	821	2620	1	13.39	454	2185	1
45	46	0.45	0.67	1459	29.50	1000	2620	1	13.39	454	2185	1
46	46	0.36	0.41	1404	31.85	1080	2620	1	10.71	363	2185	1
46	46	0.36	0.48	1338	35.08	1189	2620	1	10.71	363	2185	1
46	47	0.36	0.40	1391	32.30	1093	2620	1	10.73	363	2185	1
46	47	0.36	0.50	1302	36.91	1249	2620	1	10.73	363	2185	1
47	47	0.36	0.51	1289	37.63	1273	2620	1	10.73	363	2185	1
47	47	0.36	0.64	1197	43.62	1476	2620	1	10.73	363	2185	1
47	48	0.36	0.25	1827	18.73	1046	2620	1	10.73	599	2185	1
47	48	0.36	0.29	1735	20.78	1161	2620	1	10.73	599	2185	1
48	48	0.36	0.29	1738	20.69	1156	2620	1	10.73	599	2185	1
48	48	0.36	0.25	1835	18.58	1038	2620	1	10.73	599	2185	1
48	49	0.36	0.65	1196	43.73	1479	2620	1	10.73	363	2185	1
48	49	0.36	0.51	1291	37.53	1270	2620	1	10.73	363	2185	1
49	49	0.36	0.49	1309	36.48	1234	2620	1	10.73	363	2185	1
49	49	0.36	0.39	1403	31.77	1075	2620	1	10.73	363	2185	1
49	50	0.36	0.47	1352	34.33	1164	2620	1	10.71	363	2185	1
49	50	0.36	0.39	1420	31.13	1055	2620	1	10.71	363	2185	1
50	50	0.45	0.67	1458	29.52	1001	2620	1	13.39	454	2185	1
50	50	0.45	0.51	1607	24.29	823	2620	1	13.39	454	2185	1
50	51	0.45	0.53	1588	24.90	844	2620	1	13.39	454	2185	1
50	51	0.45	0.45	1690	21.97	745	2620	1	13.39	454	2185	1
51	51	0.45	0.39	1806	19.25	652	2620	1	13.39	454	2185	1
51	51	0.45	0.32	2119	13.98	474	2620	1	13.39	454	2185	1
51	52	0.45	0.31	2141	13.69	464	2620	1	13.39	454	2185	1
51	52	0.45	0.28	2434	10.59	359	2620	1	13.39	454	2185	1
52	52	0.45	0.24	2936	7.28	247	2620	1	13.39	454	2185	1
52	52	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
52	53	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
52	53	0.45	0.17	4201	3.56	121	2620	1	13.39	454	2185	1
53	53	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
53	53	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
53	54	0.45	0.06	4201	3.56	199	2620	1	13.39	749	2185	1
53	54	0.45	0.05	4201	3.56	199	2620	1	13.39	749	2185	1
54	54	0.45	0.05	4201	3.56	199	2620	1	13.39	749	2185	1
54	54	0.45	0.05	4201	3.56	199	2620	1	13.39	749	2185	1
54	54	0.45	0.06	4201	3.56	199	2620	1	13.39	749	2185	1
54	55	0.45	0.06	4201	3.56	199	2620	1	13.39	749	2185	1
54	55	0.45	0.07	4201	3.56	199	2620	1	13.39	749	2185	1
55	55	0.45	0.07	4201	3.56	199	2620	1	13.39	749	2185	1
55	55	0.45	0.08	4201	3.56	199	2620	1	13.39	749	2185	1
55	56	0.45	0.08	4201	3.56	199	2620	1	13.39	749	2185	1
55	56	0.45	0.10	4201	3.56	199	2620	1	13.39	749	2185	1

56	56	0.45	0.11	4201	3.56	199	2620	1	13.39	749	2185	1
56	56	0.45	0.12	4201	3.56	199	2620	1	13.39	749	2185	1
56	57	0.45	0.32	2120	13.96	473	2620	1	13.39	454	2185	1
56	57	0.45	0.39	1813	19.09	647	2620	1	13.39	454	2185	1
57	57	0.45	0.45	1686	22.07	748	2620	1	13.39	454	2185	1
57	57	0.45	0.53	1591	24.79	840	2620	1	13.39	454	2185	1
57	58	0.45	0.51	1604	24.38	826	2620	1	13.39	454	2185	1
57	58	0.45	0.66	1462	29.38	996	2620	1	13.39	454	2185	1
58	58	0.36	0.39	1415	31.33	1062	2620	1	10.71	363	2185	1
58	58	0.36	0.45	1353	34.30	1163	2620	1	10.71	363	2185	1
58	59	0.36	0.40	1393	32.27	1092	2620	1	10.73	363	2185	1
58	59	0.36	0.49	1303	36.84	1247	2620	1	10.73	363	2185	1
59	59	0.36	0.50	1295	37.34	1264	2620	1	10.73	363	2185	1
59	59	0.36	0.63	1203	43.28	1465	2620	1	10.73	363	2185	1
59	60	0.36	0.60	1221	41.96	1420	2620	1	10.73	363	2185	1
59	60	0.36	0.68	1169	45.78	1549	2620	1	10.73	363	2185	1
60	60	0.36	0.65	1195	43.80	1482	2620	1	10.73	363	2185	1
60	60	0.36	0.56	1251	40.00	1354	2620	1	10.73	363	2185	1
60	61	0.36	0.60	1231	41.27	1397	2620	1	10.73	363	2185	1
60	61	0.36	0.47	1330	35.38	1197	2620	1	10.73	363	2185	1
61	61	0.36	0.46	1343	34.68	1174	2620	1	10.73	363	2185	1
61	61	0.36	0.37	1441	30.13	1020	2620	1	10.73	363	2185	1
61	62	0.36	0.43	1393	32.35	1096	2620	1	10.71	363	2185	1
61	62	0.36	0.36	1463	29.31	993	2620	1	10.71	363	2185	1
62	62	0.45	0.61	1513	27.41	929	2620	1	13.39	454	2185	1
62	62	0.45	0.46	1677	22.33	757	2620	1	13.39	454	2185	1
62	63	0.45	0.48	1656	22.89	776	2620	1	13.39	454	2185	1
62	63	0.45	0.40	1771	20.02	678	2620	1	13.39	454	2185	1
63	63	0.45	0.37	1865	18.04	611	2620	1	13.39	454	2185	1
63	63	0.45	0.30	2221	12.72	431	2620	1	13.39	454	2185	1
63	64	0.45	0.03	4201	3.56	371	2620	1	13.39	1396	2185	1
63	64	0.45	0.03	4201	3.56	371	2620	1	13.39	1396	2185	1
64	64	0.45	0.03	4201	3.56	371	2620	1	13.39	1396	2185	1
64	64	0.45	0.03	4201	3.56	371	2620	1	13.39	1396	2185	1
64	65	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
64	65	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
65	65	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
65	65	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
65	66	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
65	66	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
65	66	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
66	66	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
66	66	0.45	0.02	4201	3.56	371	2620	1	13.39	1396	2185	1
66	67	0.45	0.13	4201	3.56	121	2620	1	13.39	454	2185	1
66	67	0.45	0.17	4201	3.56	121	2620	1	13.39	454	2185	1

67	67	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
67	67	0.45	0.21	3641	4.73	160	2620	1	13.39	454	2185	1
67	68	0.45	0.21	3534	5.02	170	2620	1	13.39	454	2185	1
67	68	0.45	0.26	2470	10.29	349	2620	1	13.39	454	2185	1
68	68	0.45	0.32	2114	14.05	476	2620	1	13.39	454	2185	1
68	68	0.45	0.36	1911	17.18	582	2620	1	13.39	454	2185	1
68	69	0.45	0.35	1923	16.97	575	2620	1	13.39	454	2185	1
68	69	0.45	0.46	1689	22.00	746	2620	1	13.39	454	2185	1
69	69	0.45	0.53	1591	24.81	841	2620	1	13.39	454	2185	1
69	69	0.45	0.63	1496	28.05	951	2620	1	13.39	454	2185	1
69	70	0.45	0.59	1523	27.06	917	2620	1	13.39	454	2185	1
69	70	0.45	0.77	1384	32.77	1111	2620	1	13.39	454	2185	1
70	70	0.36	0.47	1343	34.80	1179	2620	1	10.71	363	2185	1
70	70	0.36	0.54	1281	38.25	1296	2620	1	10.71	363	2185	1
70	71	0.36	0.12	3364	5.51	384	2620	1	10.75	748	2185	1
70	71	0.36	0.15	2806	7.92	552	2620	1	10.75	748	2185	1
71	71	0.36	0.15	2690	8.62	600	2620	1	10.75	748	2185	1
71	71	0.36	0.19	2336	11.42	796	2620	1	10.75	748	2185	1
71	72	0.36	0.18	2384	10.98	764	2620	1	10.75	748	2185	1
71	72	0.36	0.20	2218	12.68	883	2620	1	10.75	748	2185	1
72	72	0.45	0.36	2091	14.26	993	2620	1	13.43	935	2185	1
72	72	0.45	0.31	2267	12.13	845	2620	1	13.43	935	2185	1
72	73	0.45	0.33	2221	12.65	881	2620	1	13.43	935	2185	1
72	73	0.45	0.26	2604	9.20	641	2620	1	13.43	935	2185	1
73	73	0.45	0.25	2690	8.62	600	2620	1	13.43	935	2185	1
73	73	0.45	0.22	3023	6.82	475	2620	1	13.43	935	2185	1
73	74	0.45	0.99	1254	39.93	1353	2620	1	13.39	454	2185	1
73	74	0.45	0.78	1371	33.37	1131	2620	1	13.39	454	2185	1
74	74	0.45	0.69	1431	30.66	1039	2620	1	13.39	454	2185	1
74	74	0.45	0.60	1507	27.65	937	2620	1	13.39	454	2185	1
74	75	0.45	0.61	1496	28.04	950	2620	1	13.39	454	2185	1
74	75	0.45	0.51	1618	23.99	813	2620	1	13.39	454	2185	1
75	75	0.45	0.40	1808	19.20	651	2620	1	13.39	454	2185	1
75	75	0.45	0.36	1966	16.23	550	2620	1	13.39	454	2185	1
75	76	0.45	0.36	1966	16.23	550	2620	1	13.39	454	2185	1
75	76	0.45	0.31	2364	11.23	381	2620	1	13.39	454	2185	1
76	76	0.45	0.27	2854	7.71	261	2620	1	13.39	454	2185	1
76	76	0.45	0.25	3706	4.57	155	2620	1	13.39	454	2185	1
76	77	0.45	0.24	3841	4.26	144	2620	1	13.39	454	2185	1
76	77	0.45	0.21	4201	3.56	121	2620	1	13.39	454	2185	1
77	77	0.45	0.20	4201	3.56	121	2620	1	13.39	454	2185	1
77	77	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
77	78	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
77	78	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1

78	78	0.45	0.16	4201	3.56	121	2620	1	13.39	454	2185	1
78	78	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
78	78	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
78	79	0.45	0.15	4201	3.56	121	2620	1	13.39	454	2185	1
78	79	0.45	0.17	4201	3.56	121	2620	1	13.39	454	2185	1
79	79	0.45	0.18	4201	3.56	121	2620	1	13.39	454	2185	1
79	79	0.45	0.19	4201	3.56	121	2620	1	13.39	454	2185	1
79	80	0.45	0.20	4201	3.56	121	2620	1	13.39	454	2185	1
79	80	0.45	0.23	4201	3.56	121	2620	1	13.39	454	2185	1
80	80	0.45	0.26	3150	6.33	214	2620	1	13.39	454	2185	1
80	80	0.45	0.29	2574	9.47	321	2620	1	13.39	454	2185	1
80	81	0.45	0.29	2574	9.47	321	2620	1	13.39	454	2185	1
80	81	0.45	0.34	2077	14.54	493	2620	1	13.39	454	2185	1
81	81	0.43	0.38	1756	20.36	690	2620	1	12.76	432	2185	1
81	81	0.43	0.43	1638	23.39	793	2620	1	12.76	432	2185	1
81	82	0.43	0.44	1616	24.05	815	2620	1	12.76	432	2185	1
81	82	0.43	0.56	1461	29.41	997	2620	1	12.76	432	2185	1

Check of stress of horizontal stiffener

(1) Main girder G-1 Web name : LWEB

Pnl. No.	Sec. No.	Web Grade	Web height (mm)	Edge stress of the web		Neutral axis Point (mm)	Stiff. rumg	Stiff. Point (mm)	Stiff. Stress (N/mm ²)	Stiff. Grade
				σ_c (N/mm ²)	σ_t (N/mm ²)					
1	1	SM490Y	3044	-72	144	1020	2	426	-42	SM490Y
								1096	5	SM400
2	2	SM490Y	3044	-122	170	1270	2	426	-81	SM490Y
								1096	-17	SM400
3	3	SM570	3044	-153	189	1364	2	426	-105	SM490Y
								1096	-30	SM400
4	4	SM570	3044	-168	190	1428	2	426	-118	SM490Y
								1096	-39	SM400
5	5	SM570	3044	-171	193	1430	2	426	-120	SM490Y
								1096	-40	SM400
5	6	SM570	3044	-168	190	1430	2	426	-118	SM490Y
								1096	-39	SM400
6	7	SM570	3044	-155	191	1366	2	426	-107	SM490Y
								1096	-31	SM400
7	8	SM570	3044	-125	201	1167	2	426	-79	SM490Y
								1096	-8	SM400
9	9	SM490Y	3044	-91	48	1989	2	426	-71	SM490Y
								1096	-41	SM400
10	10	SM570	3044	-196	123	1868	2	426	-151	SM490Y
								1096	-81	SM400
11	11	SM570	3033	-215	142	1827	2	425	-165	SM490Y
								1092	-87	SM400
11	12	SM570	3033	-222	169	1724	2	425	-167	SM490Y
								1092	-81	SM400
12	13	SM570	3033	-217	151	1786	2	425	-165	SM490Y
								1092	-84	SM400
13	14	SM490Y	3044	-191	127	1829	2	426	-146	SM490Y
								1096	-76	SM400
14	15	SM490Y	3044	-130	69	1989	2	426	-102	SM490Y
								1096	-58	SM400
15	16	SM490Y	3044	-53	27	2020	2	426	-42	SM490Y
								1096	-24	SM400
17	17	SM490Y	3044	-88	175	1020	2	426	-51	SM490Y
								1096	7	SM400
18	18	SM490Y	3044	-93	176	1051	2	426	-55	SM490Y
								1096	4	SM400
18	19	SM490Y	3044	-92	164	1100	2	426	-57	SM490Y
								1096	-0	SM400
19	20	SM490Y	3044	-85	157	1070	2	426	-51	SM490Y
								1096	2	SM400
21	21	SM490Y	3044	-68	37	1974	2	426	-53	SM490Y
								1096	-30	SM400
22	22	SM490Y	3044	-152	83	1969	2	426	-119	SM490Y
								1096	-68	SM400
23	23	SM570	3041	-215	142	1833	2	426	-165	SM490Y
								1095	-87	SM400
23	24	SM570	3041	-217	163	1736	2	426	-164	SM490Y
								1095	-80	SM400
24	25	SM570	3041	-213	140	1833	2	426	-163	SM490Y
								1095	-86	SM400
25	26	SM570	3044	-160	78	2051	2	426	-127	SM490Y
								1096	-75	SM400

26	27	SM490Y	3044	-69	29	2141	2	426	-55	SM490Y
								1096	-33	SM400
28	28	SM570	3044	-94	201	972	2	426	-53	SM490Y
								1096	12	SM400
29	29	SM570	3044	-107	191	1096	2	426	-66	SM490Y
								1096	0	SM400
30	30	SM570	3044	-109	190	1114	2	426	-68	SM490Y
								1096	-2	SM400
30	31	SM570	3044	-109	188	1114	2	426	-67	SM490Y
								1096	-2	SM400
31	32	SM490Y	3044	-94	163	1114	2	426	-58	SM490Y
								1096	-2	SM400
33	33	SM490Y	3044	-79	40	2020	2	426	-63	SM490Y
								1096	-36	SM400
34	34	SM490Y	3044	-168	94	1954	2	426	-131	SM490Y
								1096	-74	SM400
35	35	SM570	3039	-215	147	1805	2	425	-164	SM490Y
								1094	-85	SM400
35	36	SM570	3039	-209	167	1690	2	425	-156	SM490Y
								1094	-74	SM400
36	37	SM570	3039	-221	146	1830	2	425	-170	SM490Y
								1094	-89	SM400
37	38	SM490Y	3044	-180	93	2004	2	426	-141	SM490Y
								1096	-81	SM400
38	39	SM490Y	3044	-95	40	2141	2	426	-76	SM490Y
								1096	-46	SM400
40	40	SM490Y	3044	-92	174	1051	2	426	-55	SM490Y
								1096	4	SM400
41	41	SM490Y	3044	-107	165	1196	2	426	-69	SM490Y
								1096	-9	SM400
42	42	SM490Y	3044	-108	168	1196	2	426	-70	SM490Y
								1096	-9	SM400
42	43	SM490Y	3044	-108	166	1196	2	426	-69	SM490Y
								1096	-9	SM400
43	44	SM490Y	3044	-94	163	1114	2	426	-58	SM490Y
								1096	-2	SM400
45	45	SM490Y	3044	-78	39	2020	2	426	-61	SM490Y
								1096	-36	SM400
46	46	SM570	3044	-163	91	1954	2	426	-127	SM490Y
								1096	-71	SM400
47	47	SM570	3039	-225	144	1851	2	425	-173	SM490Y
								1094	-92	SM400
47	48	SM570	3039	-223	164	1752	2	425	-169	SM490Y
								1094	-84	SM400
48	49	SM570	3039	-217	143	1830	2	425	-166	SM490Y
								1094	-87	SM400
49	50	SM490Y	3044	-174	90	2004	2	426	-137	SM490Y
								1096	-79	SM400
50	51	SM490Y	3044	-76	39	2020	2	426	-60	SM490Y
								1096	-35	SM400
52	52	SM490Y	3044	-98	169	1114	2	426	-60	SM490Y
								1096	-2	SM400
53	53	SM490Y	3044	-112	166	1222	2	426	-73	SM490Y
								1096	-12	SM400
54	54	SM490Y	3044	-113	169	1222	2	426	-74	SM490Y
								1096	-12	SM400
54	55	SM490Y	3044	-112	167	1222	2	426	-73	SM490Y
								1096	-12	SM400
55	56	SM490Y	3044	-99	168	1128	2	426	-62	SM490Y
								1096	-3	SM400

57	57	SM490Y	3044	-64	33	2020	2	426	-51	SM490Y
								1096	-29	SM400
58	58	SM490Y	3044	-158	82	2004	2	426	-125	SM490Y
								1096	-72	SM400
59	59	SM570	3040	-217	141	1845	2	426	-167	SM490Y
								1094	-88	SM400
59	60	SM570	3040	-217	163	1738	2	426	-164	SM490Y
								1094	-81	SM400
60	61	SM570	3040	-211	142	1818	2	426	-162	SM490Y
								1094	-84	SM400
61	62	SM570	3044	-155	86	1954	2	426	-121	SM490Y
								1096	-68	SM400
62	63	SM490Y	3044	-74	38	2020	2	426	-58	SM490Y
								1096	-34	SM400
64	64	SM490Y	3044	-87	171	1025	2	426	-51	SM490Y
								1096	6	SM400
65	65	SM490Y	3044	-97	168	1114	2	426	-60	SM490Y
								1096	-2	SM400
65	66	SM490Y	3044	-97	168	1114	2	426	-60	SM490Y
								1096	-2	SM400
66	67	SM490Y	3044	-95	164	1114	2	426	-58	SM490Y
								1096	-2	SM400
67	68	SM490Y	3044	-77	149	1040	2	426	-46	SM490Y
								1096	4	SM400
69	69	SM490Y	3044	-118	52	2106	2	426	-94	SM490Y
								1096	-56	SM400
70	70	SM570	3044	-206	109	1988	2	426	-162	SM490Y
								1096	-92	SM400
71	71	SM570	3034	-225	142	1862	2	425	-174	SM490Y
								1092	-93	SM400
71	72	SM570	3034	-204	161	1697	2	425	-153	SM490Y
								1092	-73	SM400
72	73	SM570	3034	-200	134	1818	2	425	-153	SM490Y
								1092	-80	SM400
73	74	SM570	3044	-182	95	2004	2	426	-144	SM490Y
								1096	-83	SM400
74	75	SM490Y	3044	-66	31	2073	2	426	-53	SM490Y
								1096	-31	SM400
76	76	SM570	3044	-121	211	1111	2	426	-75	SM490Y
								1096	-2	SM400
77	77	SM570	3044	-145	202	1270	2	426	-96	SM490Y
								1096	-20	SM400
78	78	SM570	3044	-152	199	1318	2	426	-103	SM490Y
								1096	-26	SM400
78	79	SM570	3044	-152	198	1318	2	426	-103	SM490Y
								1096	-26	SM400
79	80	SM570	3044	-141	196	1270	2	426	-93	SM490Y
								1096	-19	SM400
80	81	SM570	3044	-112	204	1081	2	426	-68	SM490Y
								1096	2	SM400
81	82	SM490Y	3044	-57	131	921	2	426	-31	SM490Y
								1096	11	SM400

(2) Main girder G-1 Web name : RWEB

Pnl. No.	Sec. No.	Web Grade	Web height (mm)	Edge stress of the web		Neutral axis Point (mm)	Stiff. rumg	Stiff. Point (mm)	Stiff. Stress (N/mm ²)	Stiff. Grade
				σ_c (N/mm ²)	σ_t (N/mm ²)					
1	1	SM490Y	2714	-77	143	949	2	380	-46	SM490Y
								977	2	SM400
2	2	SM490Y	2714	-128	170	1168	2	380	-87	SM490Y
								977	-21	SM400
3	3	SM570	2714	-161	189	1249	2	380	-112	SM490Y
								977	-35	SM400
4	4	SM570	2714	-176	190	1305	2	380	-125	SM490Y
								977	-44	SM400
4	5	SM570	2714	-177	191	1305	2	380	-125	SM490Y
								977	-44	SM400
5	6	SM570	2714	-174	189	1304	2	380	-124	SM490Y
								977	-44	SM400
6	7	SM570	2714	-161	189	1247	2	380	-112	SM490Y
								977	-35	SM400
7	8	SM570	2714	-132	200	1077	2	380	-85	SM490Y
								977	-12	SM400
9	9	SM490Y	2714	-91	51	1734	2	380	-71	SM490Y
								977	-40	SM400
10	10	SM570	2714	-195	130	1629	2	380	-150	SM490Y
								977	-78	SM400
11	11	SM570	2704	-215	150	1593	2	379	-164	SM490Y
								973	-84	SM400
11	12	SM570	2704	-221	177	1503	2	379	-166	SM490Y
								973	-78	SM400
12	13	SM570	2704	-216	159	1557	2	379	-164	SM490Y
								973	-81	SM400
13	14	SM490Y	2714	-190	133	1595	2	380	-145	SM490Y
								977	-74	SM400
14	15	SM490Y	2714	-130	73	1734	2	380	-101	SM490Y
								977	-57	SM400
16	16	SM490Y	2714	-72	132	953	2	380	-43	SM490Y
								977	2	SM400
17	17	SM490Y	2714	-94	175	949	2	380	-56	SM490Y
								977	3	SM400
18	18	SM490Y	2714	-99	176	976	2	380	-60	SM490Y
								977	0	SM400
18	19	SM490Y	2714	-98	163	1018	2	380	-61	SM490Y
								977	-4	SM400
19	20	SM490Y	2714	-90	156	993	2	380	-56	SM490Y
								977	-1	SM400
21	21	SM490Y	2714	-68	39	1721	2	380	-53	SM490Y
								977	-29	SM400
22	22	SM490Y	2714	-152	88	1717	2	380	-118	SM490Y
								977	-66	SM400
23	23	SM570	2711	-214	149	1598	2	380	-163	SM490Y
								976	-83	SM400
23	24	SM570	2711	-217	172	1514	2	380	-163	SM490Y
								976	-77	SM400
24	25	SM570	2711	-212	148	1598	2	380	-162	SM490Y
								976	-83	SM400
25	26	SM570	2714	-160	83	1789	2	380	-126	SM490Y
								977	-73	SM400
26	27	SM490Y	2714	-68	31	1867	2	380	-55	SM490Y
								977	-33	SM400

28	28	SM570	2714	-101	201	906	2	380	-58	SM490Y
								977	8	SM400
29	29	SM570	2714	-114	190	1015	2	380	-71	SM490Y
								977	-4	SM400
30	30	SM570	2714	-116	189	1031	2	380	-73	SM490Y
								977	-6	SM400
30	31	SM570	2714	-115	188	1031	2	380	-73	SM490Y
								977	-6	SM400
31	32	SM490Y	2714	-99	162	1031	2	380	-63	SM490Y
								977	-5	SM400
33	33	SM490Y	2714	-79	43	1761	2	380	-62	SM490Y
								977	-35	SM400
34	34	SM490Y	2714	-167	99	1704	2	380	-130	SM490Y
								977	-71	SM400
35	35	SM570	2709	-214	155	1573	2	379	-163	SM490Y
								975	-81	SM400
35	36	SM570	2709	-208	175	1473	2	379	-155	SM490Y
								975	-70	SM400
36	37	SM570	2709	-221	154	1595	2	379	-168	SM490Y
								975	-86	SM400
37	38	SM490Y	2714	-179	99	1747	2	380	-140	SM490Y
								977	-79	SM400
38	39	SM490Y	2714	-95	43	1867	2	380	-76	SM490Y
								977	-45	SM400
40	40	SM490Y	2714	-98	174	976	2	380	-60	SM490Y
								977	0	SM400
41	41	SM490Y	2714	-113	165	1103	2	380	-74	SM490Y
								977	-13	SM400
42	42	SM490Y	2714	-114	167	1103	2	380	-75	SM490Y
								977	-13	SM400
42	43	SM490Y	2714	-113	166	1103	2	380	-74	SM490Y
								977	-13	SM400
43	44	SM490Y	2714	-100	163	1031	2	380	-63	SM490Y
								977	-5	SM400
45	45	SM490Y	2714	-78	42	1761	2	380	-61	SM490Y
								977	-35	SM400
46	46	SM570	2714	-162	96	1704	2	380	-126	SM490Y
								977	-69	SM400
47	47	SM570	2709	-225	152	1614	2	379	-172	SM490Y
								975	-89	SM400
47	48	SM570	2709	-223	172	1527	2	379	-167	SM490Y
								975	-80	SM400
48	49	SM570	2709	-216	151	1595	2	379	-165	SM490Y
								975	-84	SM400
49	50	SM490Y	2714	-174	96	1747	2	380	-136	SM490Y
								977	-77	SM400
50	51	SM490Y	2714	-76	41	1761	2	380	-60	SM490Y
								977	-34	SM400
52	52	SM490Y	2714	-104	169	1031	2	380	-65	SM490Y
								977	-5	SM400
53	53	SM490Y	2714	-118	166	1125	2	380	-78	SM490Y
								977	-16	SM400
54	54	SM490Y	2714	-119	168	1125	2	380	-79	SM490Y
								977	-16	SM400
54	55	SM490Y	2714	-118	167	1125	2	380	-78	SM490Y
								977	-16	SM400
55	56	SM490Y	2714	-105	168	1043	2	380	-67	SM490Y
								977	-7	SM400
57	57	SM490Y	2714	-64	35	1761	2	380	-50	SM490Y
								977	-29	SM400

58	58	SM490Y	2714	-158	87	1747	2	380	-124	SM490Y
								977	-70	SM400
59	59	SM570	2710	-216	148	1608	2	379	-165	SM490Y
								976	-85	SM400
59	60	SM570	2710	-217	171	1515	2	379	-163	SM490Y
								976	-77	SM400
60	61	SM570	2710	-211	149	1585	2	379	-160	SM490Y
								976	-81	SM400
61	62	SM570	2714	-154	91	1704	2	380	-120	SM490Y
								977	-66	SM400
62	63	SM490Y	2714	-74	40	1761	2	380	-58	SM490Y
								977	-33	SM400
64	64	SM490Y	2714	-92	171	953	2	380	-55	SM490Y
								977	2	SM400
65	65	SM490Y	2714	-102	167	1031	2	380	-65	SM490Y
								977	-5	SM400
65	66	SM490Y	2714	-103	168	1031	2	380	-65	SM490Y
								977	-5	SM400
66	67	SM490Y	2714	-100	164	1031	2	380	-63	SM490Y
								977	-5	SM400
67	68	SM490Y	2714	-82	148	966	2	380	-50	SM490Y
								977	1	SM400
69	69	SM490Y	2714	-117	56	1837	2	380	-93	SM490Y
								977	-55	SM400
70	70	SM570	2714	-205	116	1733	2	380	-160	SM490Y
								977	-90	SM400
71	71	SM570	2705	-224	150	1623	2	379	-172	SM490Y
								974	-90	SM400
71	72	SM570	2705	-204	169	1479	2	379	-152	SM490Y
								974	-70	SM400
72	73	SM570	2705	-200	141	1585	2	379	-152	SM490Y
								974	-77	SM400
73	74	SM570	2714	-182	101	1748	2	380	-142	SM490Y
								977	-80	SM400
74	75	SM490Y	2714	-66	33	1808	2	380	-52	SM490Y
								977	-30	SM400
76	76	SM570	2714	-129	211	1028	2	380	-81	SM490Y
								977	-6	SM400
77	77	SM570	2714	-152	201	1167	2	380	-103	SM490Y
								977	-25	SM400
78	78	SM570	2714	-159	198	1209	2	380	-109	SM490Y
								977	-31	SM400
78	79	SM570	2714	-159	198	1209	2	380	-109	SM490Y
								977	-31	SM400
79	80	SM570	2714	-148	196	1167	2	380	-100	SM490Y
								977	-24	SM400
80	81	SM570	2714	-119	204	1002	2	380	-74	SM490Y
								977	-3	SM400
81	82	SM490Y	2714	-61	131	862	2	380	-34	SM490Y
								977	8	SM400

(3) Main girder G-2 Web name : LWEB

Pnl. No.	Sec. No.	Web Grade	Web height (mm)	Edge stress of the web		Neutral axis Point (mm)	Stiff. rumg	Stiff. Point (mm)	Stiff. Stress (N/mm ²)	Stiff. Grade
				σ_c (N/mm ²)	σ_t (N/mm ²)					
1	1	SM490Y	2747	-64	137	878	2	385	-36	SM490Y
								989	8	SM400
2	2	SM570	2747	-114	196	1013	2	385	-71	SM490Y
								989	-3	SM400
3	3	SM570	2747	-151	200	1181	2	385	-102	SM490Y
								989	-25	SM400
4	4	SM570	2747	-170	200	1261	2	385	-118	SM490Y
								989	-37	SM400
5	5	SM570	2747	-175	204	1268	2	385	-122	SM490Y
								989	-38	SM400
5	6	SM570	2747	-174	200	1276	2	385	-121	SM490Y
								989	-39	SM400
7	7	SM570	2747	-157	201	1207	2	385	-107	SM490Y
								989	-28	SM400
7	8	SM570	2747	-128	204	1059	2	385	-81	SM490Y
								989	-8	SM400
9	9	SM490Y	2747	-95	57	1715	2	385	-74	SM490Y
								989	-40	SM400
10	10	SM570	2747	-156	138	1458	2	385	-115	SM490Y
								989	-50	SM400
11	11	SM570	2741	-202	167	1500	2	384	-151	SM490Y
								987	-69	SM400
11	12	SM570	2736	-204	172	1484	2	383	-152	SM490Y
								985	-69	SM400
12	13	SM570	2741	-202	176	1465	2	384	-149	SM490Y
								987	-66	SM400
13	14	SM570	2747	-197	141	1598	2	385	-149	SM490Y
								989	-75	SM400
14	15	SM490Y	2747	-123	77	1694	2	385	-95	SM490Y
								989	-51	SM400
16	16	SM490Y	2747	-77	126	1039	2	385	-48	SM490Y
								989	-4	SM400
17	17	SM490Y	2747	-99	163	1039	2	385	-63	SM490Y
								989	-5	SM400
18	18	SM490Y	2747	-103	169	1039	2	385	-65	SM490Y
								989	-5	SM400
18	19	SM490Y	2747	-102	168	1039	2	385	-65	SM490Y
								989	-5	SM400
19	20	SM490Y	2747	-91	160	996	2	385	-56	SM490Y
								989	-1	SM400
21	21	SM490Y	2747	-77	42	1780	2	385	-60	SM490Y
								989	-34	SM400
22	22	SM490Y	2747	-140	92	1656	2	385	-108	SM490Y
								989	-56	SM400
23	23	SM570	2744	-185	149	1519	2	384	-138	SM490Y
								988	-65	SM400
23	24	SM570	2744	-192	171	1451	2	384	-141	SM490Y
								988	-61	SM400
24	25	SM570	2744	-185	149	1519	2	384	-138	SM490Y
								988	-65	SM400
25	26	SM570	2747	-137	90	1654	2	385	-105	SM490Y
								989	-55	SM400
27	27	SM570	2747	-80	117	1118	2	385	-53	SM490Y
								989	-9	SM400

28	28	SM490Y	2747	-114	166	1118	2	385	-75	SM490Y
								989	-13	SM400
29	29	SM490Y	2747	-126	183	1118	2	385	-82	SM490Y
								989	-15	SM400
29	30	SM490Y	2747	-126	183	1118	2	385	-83	SM490Y
								989	-15	SM400
30	31	SM490Y	2747	-122	178	1118	2	385	-80	SM490Y
								989	-14	SM400
31	32	SM490Y	2747	-105	178	1018	2	385	-65	SM490Y
								989	-3	SM400
33	33	SM490Y	2747	-81	46	1757	2	385	-63	SM490Y
								989	-35	SM400
34	34	SM490Y	2747	-152	103	1635	2	385	-116	SM490Y
								989	-60	SM400
35	35	SM570	2741	-192	149	1543	2	384	-144	SM490Y
								987	-69	SM400
35	36	SM570	2741	-197	169	1473	2	384	-145	SM490Y
								987	-65	SM400
36	37	SM570	2741	-193	150	1543	2	384	-145	SM490Y
								987	-70	SM400
37	38	SM490Y	2747	-152	106	1616	2	385	-116	SM490Y
								989	-59	SM400
38	39	SM490Y	2747	-88	48	1780	2	385	-69	SM490Y
								989	-39	SM400
40	40	SM490Y	2747	-97	171	996	2	385	-60	SM490Y
								989	-1	SM400
41	41	SM490Y	2747	-110	170	1079	2	385	-71	SM490Y
								989	-9	SM400
41	42	SM490Y	2747	-111	172	1079	2	385	-72	SM490Y
								989	-9	SM400
42	43	SM490Y	2747	-110	170	1079	2	385	-71	SM490Y
								989	-9	SM400
43	44	SM490Y	2747	-97	170	996	2	385	-60	SM490Y
								989	-1	SM400
45	45	SM490Y	2747	-81	44	1780	2	385	-63	SM490Y
								989	-36	SM400
46	46	SM570	2747	-156	100	1674	2	385	-120	SM490Y
								989	-64	SM400
47	47	SM570	2742	-191	149	1538	2	384	-143	SM490Y
								987	-68	SM400
47	48	SM570	2742	-203	170	1492	2	384	-150	SM490Y
								987	-69	SM400
48	49	SM570	2742	-194	149	1552	2	384	-146	SM490Y
								987	-71	SM400
49	50	SM570	2747	-153	98	1674	2	385	-118	SM490Y
								989	-63	SM400
50	51	SM490Y	2747	-81	44	1780	2	385	-63	SM490Y
								989	-36	SM400
52	52	SM490Y	2747	-103	164	1059	2	385	-66	SM490Y
								989	-7	SM400
53	53	SM490Y	2747	-118	172	1118	2	385	-77	SM490Y
								989	-14	SM400
54	54	SM490Y	2747	-118	170	1128	2	385	-78	SM490Y
								989	-15	SM400
54	55	SM490Y	2747	-117	169	1128	2	385	-77	SM490Y
								989	-14	SM400
55	56	SM490Y	2747	-105	169	1053	2	385	-67	SM490Y
								989	-6	SM400
57	57	SM490Y	2747	-66	39	1736	2	385	-51	SM490Y
								989	-28	SM400

58	58	SM490Y	2747	-139	92	1654	2	385	-107	SM490Y
								989	-56	SM400
59	59	SM570	2743	-187	148	1532	2	384	-140	SM490Y
								987	-66	SM400
59	60	SM570	2743	-194	170	1462	2	384	-143	SM490Y
								987	-63	SM400
60	61	SM570	2743	-187	148	1532	2	384	-140	SM490Y
								987	-66	SM400
61	62	SM570	2747	-147	94	1674	2	385	-113	SM490Y
								989	-60	SM400
62	63	SM490Y	2747	-78	42	1780	2	385	-61	SM490Y
								989	-34	SM400
64	64	SM490Y	2747	-95	158	1034	2	385	-60	SM490Y
								989	-4	SM400
65	65	SM490Y	2747	-106	166	1072	2	385	-68	SM490Y
								989	-8	SM400
65	66	SM490Y	2747	-106	166	1072	2	385	-68	SM490Y
								989	-8	SM400
66	67	SM490Y	2747	-105	162	1079	2	385	-67	SM490Y
								989	-9	SM400
67	68	SM490Y	2747	-86	150	996	2	385	-53	SM490Y
								989	-1	SM400
69	69	SM570	2747	-110	64	1736	2	385	-85	SM490Y
								989	-47	SM400
70	70	SM570	2747	-176	127	1598	2	385	-134	SM490Y
								989	-67	SM400
71	71	SM570	2738	-198	152	1549	2	383	-149	SM490Y
								986	-72	SM400
71	72	SM570	2738	-199	172	1469	2	383	-147	SM490Y
								986	-66	SM400
72	73	SM570	2738	-192	145	1562	2	383	-145	SM490Y
								986	-71	SM400
73	74	SM570	2747	-160	109	1635	2	385	-122	SM490Y
								989	-63	SM400
75	75	SM570	2747	-87	139	1059	2	385	-55	SM490Y
								989	-6	SM400
76	76	SM570	2747	-129	205	1059	2	385	-82	SM490Y
								989	-9	SM400
77	77	SM570	2747	-147	203	1155	2	385	-98	SM490Y
								989	-21	SM400
78	78	SM570	2747	-152	210	1155	2	385	-101	SM490Y
								989	-22	SM400
78	79	SM570	2747	-152	209	1155	2	385	-101	SM490Y
								989	-22	SM400
79	80	SM570	2747	-142	214	1099	2	385	-93	SM490Y
								989	-14	SM400
80	81	SM490Y	2747	-116	174	1099	2	385	-75	SM490Y
								989	-12	SM400
81	82	SM490Y	2747	-63	118	952	2	385	-37	SM490Y
								989	2	SM400

(4) Main girder G-2 Web name : RWEB

Pnl. No.	Sec. No.	Web Grade	Web height (mm)	Edge stress of the web (N/mm ²)		Neutral axis Point (mm)	Stiff. rumg	Stiff. Point (mm)	Stiff. Stress (N/mm ²)	Stiff. Grade
				σ_c	σ_t					
1	1	SM490Y	2801	-68	137	932	2	392	-40	SM490Y
								1008	6	SM400
2	2	SM570	2801	-121	196	1067	2	392	-76	SM490Y
								1008	-7	SM400
3	3	SM570	2801	-158	200	1235	2	392	-108	SM490Y
								1008	-29	SM400
4	4	SM570	2801	-177	200	1315	2	392	-125	SM490Y
								1008	-41	SM400
5	5	SM570	2801	-180	202	1323	2	392	-127	SM490Y
								1008	-43	SM400
5	6	SM570	2801	-179	199	1330	2	392	-127	SM490Y
								1008	-43	SM400
7	7	SM570	2801	-164	201	1261	2	392	-113	SM490Y
								1008	-33	SM400
7	8	SM570	2801	-134	204	1113	2	392	-87	SM490Y
								1008	-13	SM400
9	9	SM490Y	2801	-95	60	1715	2	392	-73	SM490Y
								1008	-39	SM400
10	10	SM570	2801	-156	143	1458	2	392	-114	SM490Y
								1008	-48	SM400
11	11	SM570	2795	-202	175	1500	2	391	-150	SM490Y
								1006	-67	SM400
11	12	SM570	2790	-204	180	1484	2	391	-150	SM490Y
								1004	-66	SM400
12	13	SM570	2795	-202	183	1465	2	391	-148	SM490Y
								1006	-63	SM400
13	14	SM570	2801	-197	148	1598	2	392	-148	SM490Y
								1008	-72	SM400
14	15	SM490Y	2801	-123	80	1694	2	392	-95	SM490Y
								1008	-50	SM400
16	16	SM490Y	2801	-81	126	1093	2	392	-52	SM490Y
								1008	-6	SM400
17	17	SM490Y	2801	-104	163	1093	2	392	-67	SM490Y
								1008	-8	SM400
18	18	SM490Y	2801	-108	169	1093	2	392	-69	SM490Y
								1008	-8	SM400
18	19	SM490Y	2801	-108	168	1093	2	392	-69	SM490Y
								1008	-8	SM400
19	20	SM490Y	2801	-96	160	1050	2	392	-60	SM490Y
								1008	-4	SM400
21	21	SM490Y	2801	-77	44	1780	2	392	-60	SM490Y
								1008	-33	SM400
22	22	SM490Y	2801	-140	97	1656	2	392	-107	SM490Y
								1008	-55	SM400
23	23	SM570	2798	-185	156	1519	2	392	-138	SM490Y
								1007	-62	SM400
23	24	SM570	2798	-192	178	1451	2	392	-140	SM490Y
								1007	-59	SM400
24	25	SM570	2798	-185	155	1519	2	392	-137	SM490Y
								1007	-62	SM400
25	26	SM570	2801	-137	95	1654	2	392	-104	SM490Y
								1008	-53	SM400
27	27	SM570	2801	-84	117	1172	2	392	-56	SM490Y
								1008	-12	SM400

28	28	SM490Y	2801	-119	166	1172	2	392	-79	SM490Y
								1008	-17	SM400
29	29	SM490Y	2801	-132	183	1172	2	392	-88	SM490Y
								1008	-18	SM400
29	30	SM490Y	2801	-132	183	1172	2	392	-88	SM490Y
								1008	-18	SM400
30	31	SM490Y	2801	-128	178	1172	2	392	-85	SM490Y
								1008	-18	SM400
31	32	SM490Y	2801	-110	178	1072	2	392	-70	SM490Y
								1008	-7	SM400
33	33	SM490Y	2801	-81	48	1757	2	392	-63	SM490Y
								1008	-35	SM400
34	34	SM490Y	2801	-152	108	1635	2	392	-115	SM490Y
								1008	-58	SM400
35	35	SM570	2795	-192	156	1543	2	391	-144	SM490Y
								1006	-67	SM400
35	36	SM570	2795	-197	176	1473	2	391	-144	SM490Y
								1006	-62	SM400
36	37	SM570	2795	-193	157	1543	2	391	-144	SM490Y
								1006	-67	SM400
37	38	SM490Y	2801	-152	111	1616	2	392	-115	SM490Y
								1008	-57	SM400
38	39	SM490Y	2801	-88	51	1780	2	392	-69	SM490Y
								1008	-38	SM400
40	40	SM490Y	2801	-103	171	1050	2	392	-64	SM490Y
								1008	-4	SM400
41	41	SM490Y	2801	-116	170	1133	2	392	-76	SM490Y
								1008	-13	SM400
41	42	SM490Y	2801	-117	172	1133	2	392	-77	SM490Y
								1008	-13	SM400
42	43	SM490Y	2801	-116	170	1133	2	392	-76	SM490Y
								1008	-13	SM400
43	44	SM490Y	2801	-102	170	1050	2	392	-64	SM490Y
								1008	-4	SM400
45	45	SM490Y	2801	-81	46	1780	2	392	-63	SM490Y
								1008	-35	SM400
46	46	SM570	2801	-156	105	1674	2	392	-120	SM490Y
								1008	-62	SM400
47	47	SM570	2796	-191	156	1538	2	391	-142	SM490Y
								1007	-66	SM400
47	48	SM570	2796	-203	177	1492	2	391	-149	SM490Y
								1007	-66	SM400
48	49	SM570	2796	-194	156	1552	2	391	-145	SM490Y
								1007	-68	SM400
49	50	SM570	2801	-153	103	1674	2	392	-117	SM490Y
								1008	-61	SM400
50	51	SM490Y	2801	-81	46	1780	2	392	-63	SM490Y
								1008	-35	SM400
52	52	SM490Y	2801	-109	164	1113	2	392	-70	SM490Y
								1008	-10	SM400
53	53	SM490Y	2801	-124	172	1172	2	392	-82	SM490Y
								1008	-17	SM400
54	54	SM490Y	2801	-124	170	1182	2	392	-83	SM490Y
								1008	-18	SM400
54	55	SM490Y	2801	-123	169	1182	2	392	-82	SM490Y
								1008	-18	SM400
55	56	SM490Y	2801	-110	169	1107	2	392	-71	SM490Y
								1008	-10	SM400
57	57	SM490Y	2801	-66	41	1736	2	392	-51	SM490Y
								1008	-28	SM400

58	58	SM490Y	2801	-139	97	1654	2	392	-106	SM490Y
								1008	-54	SM400
59	59	SM570	2797	-187	154	1532	2	392	-139	SM490Y
								1007	-64	SM400
59	60	SM570	2797	-194	177	1462	2	392	-142	SM490Y
								1007	-60	SM400
60	61	SM570	2797	-187	154	1532	2	392	-139	SM490Y
								1007	-64	SM400
61	62	SM570	2801	-147	99	1674	2	392	-112	SM490Y
								1008	-58	SM400
62	63	SM490Y	2801	-78	45	1780	2	392	-60	SM490Y
								1008	-34	SM400
64	64	SM490Y	2801	-100	158	1088	2	392	-64	SM490Y
								1008	-7	SM400
65	65	SM490Y	2801	-112	166	1126	2	392	-73	SM490Y
								1008	-12	SM400
65	66	SM490Y	2801	-112	166	1126	2	392	-73	SM490Y
								1008	-12	SM400
66	67	SM490Y	2801	-110	162	1133	2	392	-72	SM490Y
								1008	-12	SM400
67	68	SM490Y	2801	-90	150	1050	2	392	-57	SM490Y
								1008	-4	SM400
69	69	SM570	2801	-110	67	1736	2	392	-85	SM490Y
								1008	-46	SM400
70	70	SM570	2801	-176	133	1598	2	392	-133	SM490Y
								1008	-65	SM400
71	71	SM570	2792	-198	159	1549	2	391	-148	SM490Y
								1005	-70	SM400
71	72	SM570	2792	-199	179	1469	2	391	-146	SM490Y
								1005	-63	SM400
72	73	SM570	2792	-192	151	1562	2	391	-144	SM490Y
								1005	-69	SM400
73	74	SM570	2801	-160	114	1635	2	392	-122	SM490Y
								1008	-61	SM400
75	75	SM570	2801	-91	139	1113	2	392	-59	SM490Y
								1008	-9	SM400
76	76	SM570	2801	-135	205	1113	2	392	-88	SM490Y
								1008	-13	SM400
77	77	SM570	2801	-154	203	1209	2	392	-104	SM490Y
								1008	-26	SM400
78	78	SM570	2801	-159	210	1209	2	392	-108	SM490Y
								1008	-26	SM400
78	79	SM570	2801	-159	209	1209	2	392	-107	SM490Y
								1008	-26	SM400
79	80	SM570	2801	-149	214	1153	2	392	-99	SM490Y
								1008	-19	SM400
80	81	SM490Y	2801	-121	174	1153	2	392	-80	SM490Y
								1008	-15	SM400
81	82	SM490Y	2801	-66	118	1006	2	392	-40	SM490Y
								1008	0	SM400

5-1 Analysis of Steel Deck

§ 2 Design of Steel Deck

Design Policy

(1) Analytical Model by “Equivalent Lattice Method”

The analysis of steel deck is performed by “Equivalent Lattice Method”. “Equivalent Lattice Method” is to treat the steel deck which is stiffened with vertical and lateral ribs as a deck plate of Plane Lattice Model and analyzed by a general deformation method.

(2) Analytical Stiffness

(a) Flexural Rigidity of Member

The flexural rigidity of vertical and lateral ribs are calculated by considering the effective width of deck plate as a flange according to (Route II Steel Bridge Version, Table-9.4.2). The equivalent span length of lateral rib is calculated by setting the effective width as L for the middle part and 2L for the overhang part.

The torsional rigidity is accounted by the vertical rib of the U-shaped steel. Also, a virtual distribution girder equivalent to the lateral rib interval shall be provided in order to consider the load distribution between the vertical ribs by the deck plate.

(b) Torsional Rigidity of U-Shaped Steel

Vertical ribs are considered as one bar member without any cross-sectional deformation. Therefore, the torsional rigidity (using only the simple torsional resistance) is not reduced, it is 100% valid and is calculated by the following formula.

$$\text{Torsional rigidity} = 4 \cdot A^2 / \left\{ (u/t_R) + (a/t_p) \right\}$$

A : Cross-sectional area surrounded by U-shaped steel

u : Expanded width of U-shaped steel

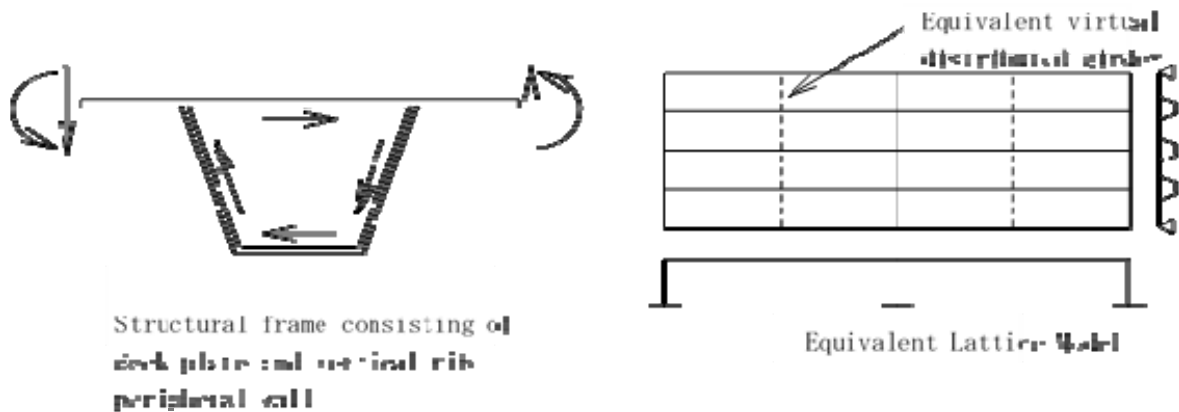
a : Upper width of U-shaped steel

t_R : Thickness of U-shaped steel

t_p : Thickness of the deck plate

(c) Calculation of the Equivalent Virtual Distribution Girder

The virtual distribution girder that performs the load distribution between the vertical ribs gives the bending rigidity equivalent to the rigid structure consisting of the deck plate and the vertical rib peripheral wall in consideration of the sectional deformation of the vertical rib. Since this rigid structure continues long in the direction of the bridge axis, firstly the equivalent cross-sectional secondary moment per unit length is obtained, and in the Lattice Model, one distribution girder is provided at the lateral rib intervals to provide bending rigidity.



(3) Sectional Force from Influence Line Analysis

In calculating the section force, the influence line analysis is performed at all points, and the maximum / minimum section force is calculated for each of the vertical and lateral rib member.

(4) Others

Calculation of bracket attachment is designed with the maximum girder height among the group members.

2 – 1 Load

(1) Dead Load

Pavement (Road section)		$0.080 \text{ m} * 22.50 \text{ kN/m}^3 =$	1.80 kN/m^2
Steel weight			$= 2.00 \text{ kN/m}^2$
Barrier (Left)	$= 4.85 \text{ kN/m}$	Distance from barrier inner side line =	0.300 m
(Right)	$= 4.85 \text{ kN/m}$	”	$= 0.300 \text{ m}$
Guard rail (Left)	$= 0.79 \text{ kN/m}$	”	$= 0.300 \text{ m}$
(Right)	$= 0.49 \text{ kN/m}$	”	$= 0.300 \text{ m}$

Median strip load: Refer to the load intensity for each model

(2) Live Load

T- Load (B- Live load) Rear wheel load $P = 100 \text{ kN}$

※) At the median strip, T - load is not loaded.

(3) Impact Coefficient

Vertical rib $i = 0.4$

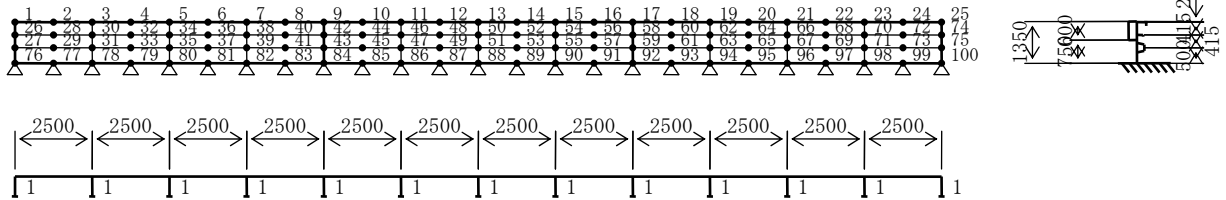
Lateral rib & Bracket $i = 20/(50+L)$ L: Span length of Lateral rib and Bracket (m)

2 – 2 Equivalent Lattice Analysis

2 – 2 – 1 Analysis Model

(1) Model – 1 (From 6th ~ 9th Crossing, G-1 Left Overhang Portion)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Guard rail (Left side)	0.79 kN/m
Barrier (Right side)	4.85 kN/m
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 1 BULB PL 230 * 11

Sec- 2 U.RIB 320 * 240 * 8

Side stringer (vertical)

Sec- 1 WEB PL 400 * 10 FLG PL 100 * 10

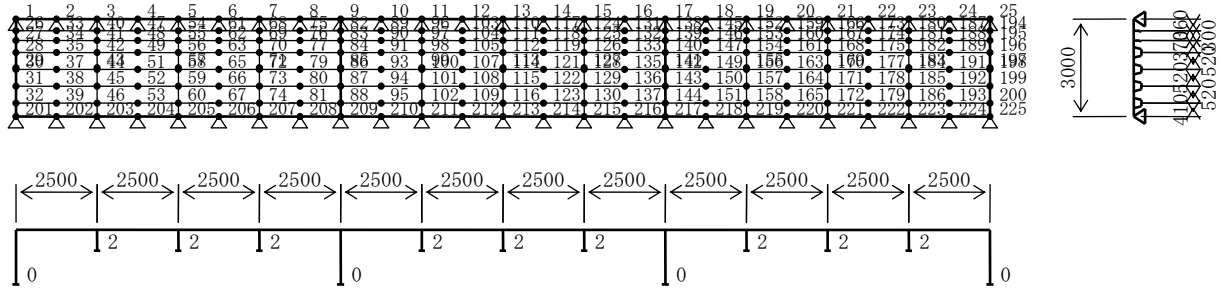
Bracket

Sec- 1 WEB PL 750 * 9 FLG PL 200 * 10

(Stiffness is the average of the tip and the base)

(2) Model-2 (From 6th ~ 9th Crossing, G-1 Box Girder Inside)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 1 BULB PL 230 * 11

Sec- 2 U.RIB 320 * 240 * 8

Lateral rib

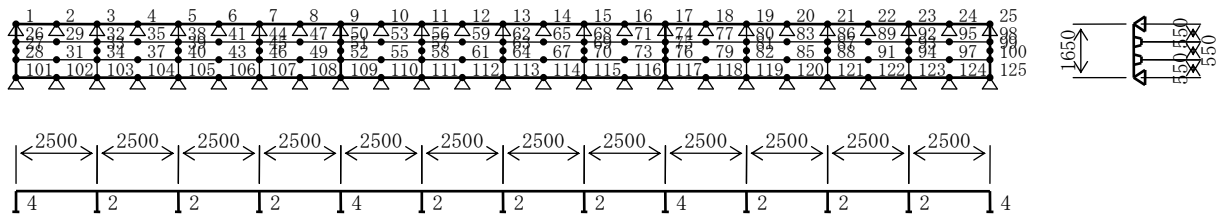
Sec- 2 WEB PL 750 * 9 FLG PL 200 * 10

Diaphragm

WEB PL 2100 * 10 FLG PL 220 * 10

(3) Model-3 (From 6th ~ 9th Crossing, G-1 ~ G-2 Middle Deck Section)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 2 U.RIB 320 * 240 * 8

Lateral rib

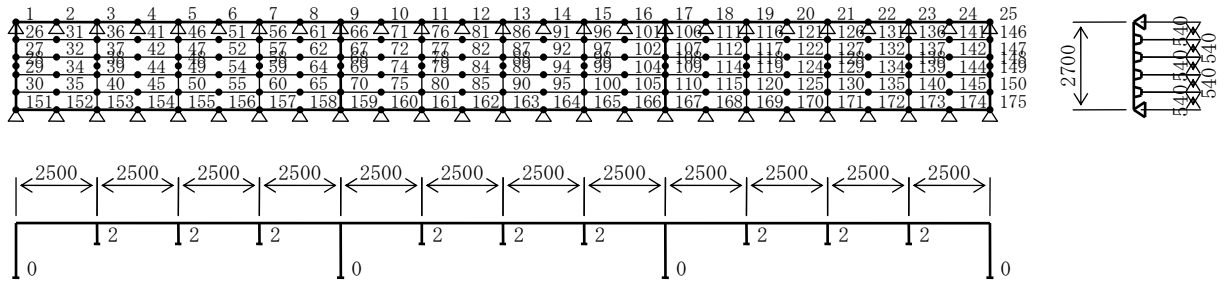
Sec- 2 WEB PL 750 * 9 FLG PL 200 * 10

Cross-beam

Sec- 4 WEB PL 750 * 9 FLG PL 220 * 12

(4) Model-4 ((From 6th ~ 9th Crossing, G-2 Box Girder Inside)

(a) Structural Shape and Dead Load Intensity



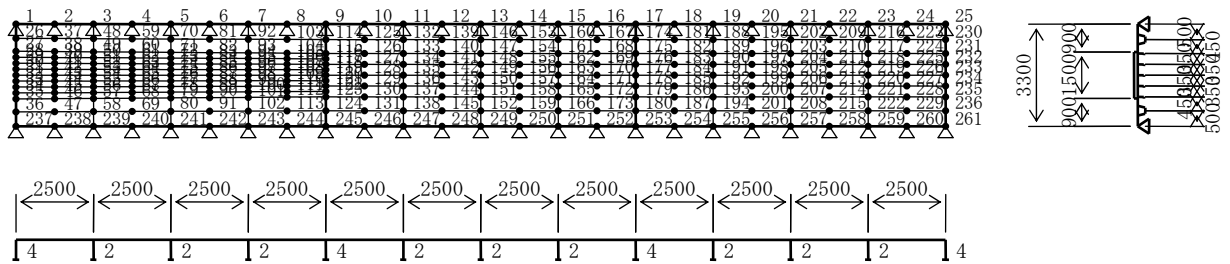
Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate	16 mm
Vertical rib	
Sec- 2	U. RIB 320 * 240 * 8
Lateral rib	
Sec- 2	WEB PL 750 * 9 FLG PL 200 * 10
Diaphragm	
	WEB PL 2100 * 10 FLG PL 220 * 10

(5) Model-5 (From 6th ~ 9th Crossing, G-2 ~ G-3 Middle Deck Section)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²
Median strip	8.09 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 1 BULB PL 230 * 11

Sec- 2 U. RIB 320 * 240 * 8

Lateral rib

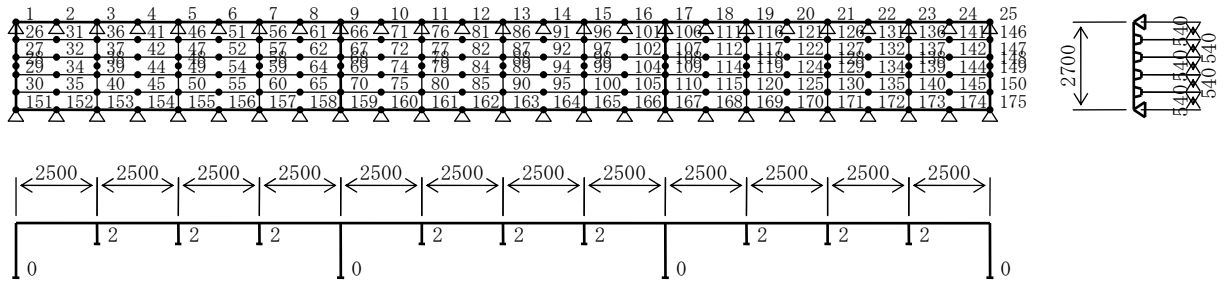
Sec- 2 WEB PL 750 * 9 FLG PL 200 * 10

Cross-beam

Sec- 4 WEB PL 750 * 9 FLG PL 220 * 12

(6) Model-6 (From 6th ~ 9th Crossing, G-3 Box Girder Inside)

(a) Structural Shape and Dead Load Intensity



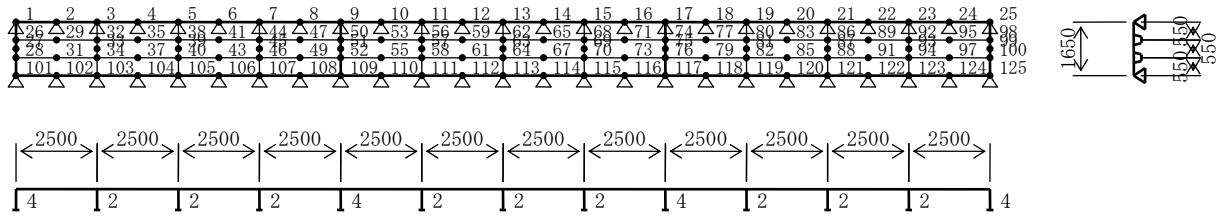
Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate	16 mm
Vertical rib	
Sec- 2	U. RIB 320 * 240 * 8
Lateral rib	
Sec- 2	WEB PL 750 * 9 FLG PL 200 * 10
Diaphragm	
	WEB PL 2100 * 10 FLG PL 220 * 10

(7) Model-7 (From 6th ~ 9th Crossing, G-3 ~ G-4 Middle Deck Section)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate	16 mm
-------------------------	-------

Vertical rib

Sec- 2 U.RIB 320 * 240 * 8

Lateral rib

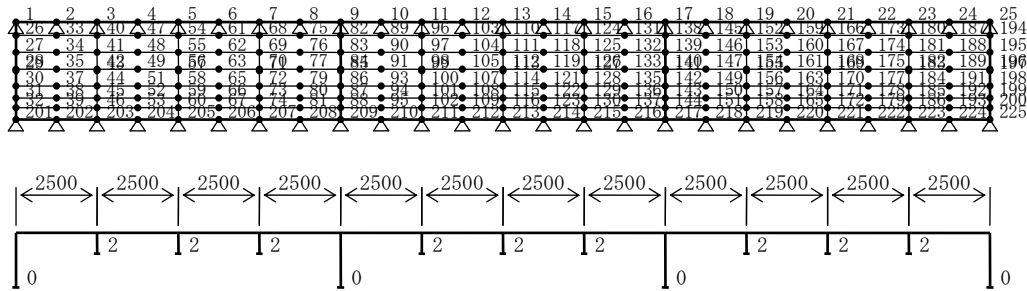
Sec- 2 WEB PL 750 * 9 FLG PL 200 * 10

Cross-beam

Sec- 4 WEB PL 750 * 9 FLG PL 220 * 12

(8) Model-8 (From 6th ~ 9th Crossing, G-4 Box Girder Inside)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 1 BULB PL 230 * 11

Sec- 2 U.RIB 320 * 240 * 8

Lateral rib

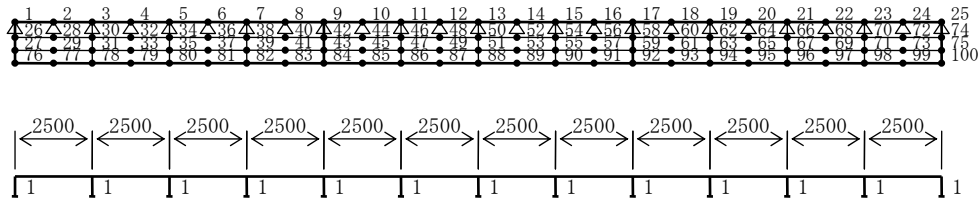
Sec- 2 WEB PL 750 * 9 FLG PL 200 * 10

Diaphragm

WEB PL 2100 * 10 FLG PL 220 * 10

(9) Model-9 (From 6th ~ 9th Crossing, G-4 Right Overhang Portion)

(a) Structural Shape and Dead Load Intensity



Pavement (Road section)	1.80 kN/m ²
Guard rail (Right side)	0.49 kN/m
Barrier (Right side)	4.85 kN/m
Steel weight	2.00 kN/m ²

(b) Cross-sectional Shape

Thickness of deck plate 16 mm

Vertical rib

Sec- 1 BULB PL 230 * 11

Sec- 2 U.RIB 320 * 240 * 8

Side stringer

Sec- 1 WEB PL 400 * 10 FLG PL 100 * 10

Bracket

Sec- 1 WEB PL 750 * 9 FLG PL 200 * 10

(Stiffness is the average of the tip and the base)

2 – 2 – 2 List of Analytical Results

(1) Model – 1 (From 6th ~ 9th Crossing, G-1 Left Overhang Portion)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Bracket	Sec-1	4.000	1.500	1.000	1.000

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load Type	Bending moment (kN·m)	Shear force (kN)	
Vertical rib	Sec-1	At Max. bending	68	Dead load	1.53	0.30	
				T- Load	10.32	-11.64	
				Total	11.85	-11.34	
		At Min. bending	70	Dead load	-1.82	-5.66	
				T- Load	-5.74	-2.77	
				Total	-7.56	-8.43	
	At Max. shear	70	Dead load	-1.82	-5.66		
			T- Load	0.37	-20.83		
			Total	-1.46	-26.49		
	Stringer	Sec-2	At Max. bending	33	Dead load	0.72	0.36
					T- Load	37.84	-57.47
					Total	38.56	-57.11
At Min. bending			31	Dead load	-1.04	2.46	
				T- Load	-22.09	12.81	
				Total	-23.13	15.27	
At Max. shear		31	Dead load	-1.04	2.46		
			T- Load	0.34	101.18		
			Total	-0.70	103.64		
Bracket		Sec-1	At Min. bending	78	Dead load	-21.15	-22.60
					T- Load	-65.53	-136.13
					Total	-86.68	-158.73
	At Max. shear		78	Dead load	-21.99	-23.41	
				T- Load	-33.02	-137.72	
				Total	-55.02	-161.13	

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-1	68	T - Load	0.31
	Sec-2	33	T - Load	0.48
Stringer	Sec-1	3	T - Load	0.07
Bracket	Sec-1	3	T - Load	0.07

(2) Model-2 (From 6th ~ 9th Crossing, G-1 Box Girder Inside)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Vertical rib	Sec-2	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 commentary)

The lateral rib, converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)		
Vertical rib	Sec-1	At Max. bending	47	Dead load	0.44	0.07		
				T - Load	27.37	-32.68		
				Total	27.81	-32.60		
					Additional Total	27.81	-32.60	
		At Min. bending	180	Dead load	-0.54	-1.57		
				T - Load	-16.06	-10.16		
	Total			-16.61	-11.73			
				Additional Total	-16.61	-11.73		
	At Max. shear	83	Dead load	-0.57	1.61			
			T - Load	0.05	87.15			
			Total	-0.51	88.76			
						Additional Total	-0.51	88.76
Sec-2			At Max. bending	52	Dead load	0.72	0.01	
					T - Load	40.52	-59.99	
	Total	41.25			-59.97			
				Additional Total	41.25	-59.97		
	At Min. bending	46	Dead load	-0.78	2.23			
			T - Load	-21.91	12.80			
Total			-22.69	15.03				
			Additional Total	-22.69	15.03			
At Max. shear	143	Dead load	-1.03	-2.63				
		T - Load	0.18	-106.23				
		Total	-0.85	-108.86				
					Additional Total	-0.85	-108.86	
		Lateral rib	Sec-2	At Max. bending	44	Dead load	11.32	-3.19
						T - Load	129.11	19.75
Total	140.43					16.56		
					Additional Total	112.34	16.56	
At Min. bending	126			Dead load	9.13	5.89		
				T - Load	-16.26	-11.49		
		Total	-7.12	-5.60				
			Additional Total	-112.34	-5.60			
At Max. shear	203	Dead load	0.00	-13.17				
		T - Load	0.00	-204.60				
		Total	0.00	-217.76				
			Additional Total	0.00	-217.76			

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-1	48	T - Load	0.79
	Sec-2	51	T - Load	0.65
Lateral rib	Sec-2	43	T - Load	0.21

(3) Model-3 (From 6th ~ 9th Crossing, G-1 ~ G-2 Middle Deck Section)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000
Cross-beam	Sec-4	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 commentary)

The lateral rib and the cross-beam converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)	
Vertical rib	Sec-2	At Max. bending	37	Dead load	0.74	0.09	
				T - Load	43.39	-58.24	
				Total	44.13	-58.16	
		Additional Total				44.13	-58.16
		At Min. bending	34	Dead load	-1.01	2.70	
				T - Load	-25.09	13.67	
	Total			-26.10	16.36		
	Additional Total				-26.10	16.36	
	At Max. shear	34	Dead load	-1.01	2.70		
			T - Load	0.37	107.92		
			Total	-0.63	110.62		
	Additional Total				-0.63	110.62	
Lateral rib	Sec-2	At Max. bending	34	Dead load	3.13	-5.68	
				T - Load	47.57	-32.90	
				Total	50.70	-38.58	
		Additional Total				40.56	-38.58
		At Min. bending	38	Dead load	2.79	5.07	
				T - Load	-6.85	-12.46	
	Total			-4.06	-7.39		
	Additional Total				-40.56	-7.39	
	At Max. shear	3	Dead load	0.00	5.68		
			T - Load	0.00	150.83		
			Total	0.00	156.51		
	Additional Total				0.00	156.51	
Cross-beam	Sec-4	At Max. bending	50	Dead load	2.85	5.19	
				T - Load	47.51	32.78	
				Total	50.36	37.97	
		Additional Total				40.29	37.97
		At Min. bending	50	Dead load	2.85	5.19	
				T - Load	-5.49	-9.99	
	Total			-2.64	-4.80		
	Additional Total				-40.29	-4.80	
	At Max. shear	9	Dead load	0.00	5.19		
			T - Load	0.00	150.70		
			Total	0.00	155.89		
	Additional Total				0.00	155.89	

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-2	37	T - Load	0.56
Lateral rib	Sec-2	33	T - Load	0.03
Cross beam	Sec-4	51	T - Load	0.02

(4) Model—4 (From 6th ~ 9th Crossing, G-2 Box Girder Inside)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L (m)	Vertical rib span B (m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 commentary)

The lateral rib, converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)
Vertical rib	Sec-2	At Max. bending	45	Dead load	0.73	0.05
				T- Load	43.43	-57.88
				Total	44.16	-57.83
				Additional Total	44.16	-57.83
		At Min. bending	40	Dead load	-0.93	2.61
				T- Load	-23.97	13.43
				Total	-24.90	16.05
				Additional Total	-24.90	16.05
		At Max. shear	67	Dead load	-1.01	2.70
				T- Load	0.18	107.48
				Total	-0.83	110.18
				Additional Total	-0.83	110.18
Lateral rib	Sec-2	At Max. bending	39	Dead load	8.89	-5.52
				T- Load	110.82	0.88
				Total	119.71	-4.64
				Additional Total	95.77	-4.64
		At Min. bending	77	Dead load	7.95	4.92
				T- Load	-14.20	-9.31
				Total	-6.25	-4.39
				Additional Total	-95.77	-4.39
		At Max. shear	3	Dead load	0.00	11.05
				T- Load	0.00	195.64
				Total	0.00	206.68
				Additional Total	0.00	206.68

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-2	44	T - Load	0.63
Lateral rib	Sec-2	38	T - Load	0.15

(5) Model-5 (From 6th ~ 9th Crossing, G-2 ~ G-3 Middle Deck Section)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000
Cross-beam	Sec-4	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 Commentary)

The lateral rib and cross-beam, converts the simple beam model into a continuous beam

Span bending moment = 0.8 * moment of simple beam

Fulcrum bending moment = -0.8 * moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)		
Vertical rib	Sec-1	At Max. bending	60	Dead load	0.66	0.01		
				T - Load	25.43	-29.41		
				Total	26.10	-29.40		
					Additional Total	26.10	-29.40	
		At Min. bending	49	Dead load	-0.74	2.23		
				T - Load	-15.11	7.55		
	Total			-15.85	9.78			
				Additional Total	-15.85	9.78		
	At Max. shear	49	Dead load	-0.74	2.23			
			T - Load	0.59	59.57			
			Total	-0.15	61.80			
				Additional Total	-0.15	61.80		
Sec-2	At Max. bending	209	Dead load	0.69	-0.01			
			T - Load	44.94	-50.91			
			Total	45.63	-50.92			
						Additional Total	45.63	-50.92
			At Min. bending	216	Dead load	-0.74	-2.28	
					T - Load	-25.37	-12.72	
	Total	-26.11			-15.00			
				Additional Total	-26.11	-15.00		
	At Max. shear	114	Dead load	-0.78	2.33			
			T - Load	0.78	102.55			
			Total	0.00	104.88			
				Additional Total	0.00	104.88		
Lateral rib	Sec-2	At Max. bending	219	Dead load	30.02	-4.78		
				T - Load	82.04	0.80		
				Total	112.06	-3.97		
					Additional Total	89.65	-3.97	
		At Min. bending	5	Dead load	0.00	25.02		
				T - Load	0.00	-13.78		
	Total			0.00	11.25			
				Additional Total	-89.65	11.25		
	At Max. shear	23	Dead load	0.00	27.10			
			T - Load	0.00	150.54			
			Total	0.00	177.64			
				Additional Total	0.00	177.64		
Cross-beam	Sec-4	At Max. bending	177	Dead load	28.21	-4.44		
				T - Load	81.06	0.99		
				Total	109.27	-3.45		
					Additional Total	87.42	-3.45	
		At Min. bending	9	Dead load	0.00	24.67		
				T - Load	0.00	-11.44		
	Total			0.00	13.23			
				Additional Total	-87.42	13.23		
	At Max. shear	17	Dead load	0.00	25.29			

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)
				T - Load	0.00	149.69
				Total	0.00	174.98
				Additional Total	0.00	174.98

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load Type	Deflection (mm)
Vertical rib	Sec-1	60	T - Load	0.84
	Sec-2	209	T - Load	0.62
Lateral rib	Sec-2	219	T - Load	0.18
Cross-beam	Sec-4	119	T - Load	0.16

(6) Model—6 (From 6th ~ 9th Crossing, G-3 Box Girder Inside)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L (m)	Vertical rib span B (m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 Commentary)

The lateral rib converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load Type	Bending moment (kN·m)	Shear force (kN)
Vertical rib	Sec-2	At Max. bending	45	Dead load	0.73	0.07
				T - Load	43.43	-50.63
				Total	44.16	-50.56
				Additional Total	44.16	-50.56
		At Min. bending	40	Dead load	-0.93	2.61
				T - Load	-23.97	13.43
				Total	-24.90	16.05
				Additional Total	-24.90	16.05
		At Max. shear	69	Dead load	-1.01	2.70
				T - Load	0.18	107.48
				Total	-0.83	110.18
				Additional Total	-0.83	110.18
Lateral rib	Sec-2	At Max. bending	39	Dead load	8.89	-5.52
				T - Load	110.82	0.88
				Total	119.71	-4.64
				Additional Total	95.77	-4.64
		At Min. bending	79	Dead load	7.95	-4.92
				T - Load	-14.20	9.31
				Total	-6.25	4.39
				Additional Total	-95.77	4.39
		At Max. shear	153	Dead load	0.00	-11.05
				T - Load	0.00	-195.64
				Total	0.00	-206.68
				Additional Total	0.00	-206.68

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-2	44	T - Load	0.63
Lateral rib	Sec-2	38	T - Load	0.15

(7) Model—7 (From 6th ~ 9th Crossing, G-3 ~ G-4 Middle Deck Section)

Multiplication coefficient of steel deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000
Cross-beam	Sec-4	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 Commentary)

The lateral rib and cross-beam, converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)		
Vertical rib	Sec-2	At Max. bending	37	Dead load	0.74	0.11		
				T - Load	43.39	-51.11		
				Total	44.13	-51.00		
						Additional Total	44.13	-51.00
		At Min. bending	34	Dead load	-1.01	2.70		
				T - Load	-25.09	13.67		
	Total			-26.10	16.36			
					Additional Total	-26.10	16.36	
	At Max. shear	34	Dead load	-1.01	2.70			
			T - Load	0.37	107.92			
			Total	-0.63	110.62			
					Additional Total	-0.63	110.62	
Lateral rib	Sec-2	At Max. bending	34	Dead load	3.13	-5.68		
				T - Load	47.57	-32.90		
				Total	50.70	-38.58		
						Additional Total	40.56	-38.58
		At Min. bending	40	Dead load	2.79	-5.07		
				T - Load	-6.85	12.46		
	Total			-4.06	7.39			
					Additional Total	-40.56	7.39	
	At Max. shear	103	Dead load	0.00	-5.68			
			T - Load	0.00	-150.83			
			Total	0.00	-156.51			
					Additional Total	0.00	-156.51	
Cross-beam	Sec-4	At Max. bending	52	Dead load	2.85	-5.19		
				T - Load	47.51	-32.78		
				Total	50.36	-37.97		
						Additional Total	40.29	-37.97
		At Min. bending	52	Dead load	2.85	-5.19		
				T - Load	-5.49	9.99		
	Total			-2.64	4.80			
					Additional Total	-40.29	4.80	
	At Max. shear	109	Dead load	0.00	-5.19			
			T - Load	0.00	-150.70			
			Total	0.00	-155.89			
					Additional Total	0.00	-155.89	

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-2	37	T - Load	0.56
Lateral rib	Sec-2	33	T - Load	0.03
Cross-beam	Sec-4	51	T - Load	0.02

(8) Model—8 (From 6th ~ 9th Crossing, G-4 Box Girder Inside)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L(m)	Vertical rib span B(m)	k_0	Multiplication coefficient k_d
Lateral rib	Sec-2	4.000	1.500	1.000	1.000

Conversion coefficient as of continuous beam (Route II 9.4.2 commentary)

The lateral rib, converts the simple beam model into a continuous beam

Span bending moment = $0.8 \times$ moment of simple beam

Fulcrum bending moment = $0.8 \times$ moment of simple beam

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)	
Vertical rib	Sec-1	At Max. bending	53	Dead load	0.44	0.07	
				T - Load	27.37	-32.68	
				Total	27.81	-32.61	
					Additional Total	27.81	-32.61
		At Min. bending	46	Dead load	-0.54	1.57	
				T - Load	-16.06	10.16	
	Total			-16.61	11.73		
				Additional Total	-16.61	11.73	
	Sec-2	At Max. bending	48	Dead load	0.72	0.01	
				T - Load	40.52	-59.99	
				Total	41.25	-59.97	
					Additional Total	41.25	-59.97
At Min. bending		40	Dead load	-0.78	2.23		
			T - Load	-21.91	12.80		
	Total		-22.69	15.03			
			Additional Total	-22.69	15.03		
Sec-2	At Max. shear	139	Dead load	-1.03	-2.63		
			T - Load	0.18	-106.23		
			Total	-0.85	-108.86		
				Additional Total	-0.85	-108.86	
	Lateral rib	Sec-2	At Max. bending	42	Dead load	11.32	3.19
					T - Load	129.11	-19.75
Total					140.43	-16.56	
					Additional Total	112.34	-16.56
At Min. bending			128	Dead load	9.13	-5.89	
				T - Load	-16.26	11.49	
		Total		-7.12	5.60		
				Additional Total	-112.34	5.60	
At Max. shear		3	Dead load	0.00	13.17		
	T - Load		0.00	204.60			
	Total		0.00	217.76			
			Additional Total	0.00	217.76		

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-1	52	T - Load	0.79
	Sec-2	49	T - Load	0.65
Lateral rib	Sec-2	43	T - Load	0.21

(9) Model-9 (From 6th ~ 9th Crossing, G-4 Right Overhang Portion)

Multiplication coefficient of Steel Deck due to B-Live Load (Route II 9.4.2)

Member	Cross-section	Lateral rib span L (m)	Vertical rib span B (m)	k_0	Multiplication coefficient k_d
Bracket	Sec-1	4.000	1.500	1.000	1.000

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Point of interest	Load type	Bending moment (kN·m)	Shear force (kN)	
Vertical rib	Sec-1	At Max. bending	33	Dead load	1.46	-0.29	
				T - Load	10.32	-9.45	
				Total	11.79	-9.73	
		At Min. bending	31	Dead load	-1.75	5.42	
				T - Load	-5.74	2.77	
				Total	-7.49	8.20	
	At Max. shear	31	Dead load	-1.75	5.42		
			T - Load	0.37	20.83		
			Total	-1.38	26.26		
	Sec-2	At Max. bending	32	Dead load	0.71	0.34	
				T - Load	37.84	-57.47	
				Total	38.55	-57.12	
At Min. bending		70	Dead load	-1.03	-2.44		
			T - Load	-22.09	-12.81		
			Total	-23.12	-15.25		
At Max. shear	30	Dead load	-1.03	2.44			
		T - Load	0.34	101.18			
		Total	-0.69	103.62			
Stringer	Sec-1	At Max. bending	83	Dead load	0.95	-0.14	
				T - Load	0.62	0.09	
				Total	1.56	-0.05	
		At Min. bending	80	Dead load	-0.97	2.90	
				T - Load	-1.25	1.36	
				Total	-2.22	4.26	
	At Max. shear	80	Dead load	-0.97	2.90		
			T - Load	-1.25	1.36		
			Total	-2.22	4.26		
	Bracket	Sec-1	At Min. bending	3	Dead load	-21.15	22.60
					T - Load	-65.53	136.13
					Total	-86.68	158.73
At Max. shear		3	Dead load	-21.15	22.60		
			T - Load	-33.02	137.72		
			Total	-54.18	160.32		

(b) List of Deflection due to Live Load

Member	Cross-section	Point of interest	Load type	Deflection (mm)
Vertical rib	Sec-1	33	T - Load	0.31
	Sec-2	32	T - Load	0.48
Stringer	Sec-1	78	T - Load	0.07
Bracket	Sec-1	78	T - Load	0.07

(10) Design Sectional Force & Deflection

(a) List of Cross-sectional Force

Member	Cross-section	Case of interest	Bending moment (kN·m)	Shear force (kN)	Calculation Model
Vertical rib	Sec-1	At Max. bending	27.81	-32.61	Model - 8
		At Min. bending	-16.61	88.76	Model - 8
		At Max. shear	-16.61	88.76	Model - 2
	Sec-2	At Max. bending	45.63	-50.92	Model - 5
		At Min. bending	-26.11	110.62	Model - 5
		At Max. shear	-26.10	110.62	Model - 3
Stringer	Sec-1	At Max. bending	1.60	-0.06	Model - 1
		At Min. bending	-2.27	-4.39	Model - 1
		At Max. shear	-2.27	-4.39	Model - 1
Lateral rib	Sec-2	At Max. bending	112.34	-16.56	Model - 8
		At Min. bending	-112.34	217.76	Model - 8
		At Max. shear	-112.34	217.76	Model - 8
Bracket	Sec-1	At Min. bending	-86.68	-160.32	Model - 9
		At Max. shear	-86.68	-160.32	Model - 9
Cross-beam	Sec-4	At Max. bending	87.42	-3.45	Model - 5
		At Min. bending	-87.42	-174.98	Model - 5
		At Max. shear	-87.42	174.98	Model - 5

(b) List of Deflection due to Live Load

Member	Cross-section	Deflection (mm)	Calculation Model
Vertical rib	Sec-1	0.84	Model - 5
	Sec-2	0.65	Model - 8
Stringer	Sec-1	0.07	Model - 1
Lateral rib	Sec-2	0.21	Model - 8
Bracket	Sec-1	0.07	Model - 1
Cross-beam	Sec-4	0.16	Model - 5

5-2 Calculation of Longitudinal Rib

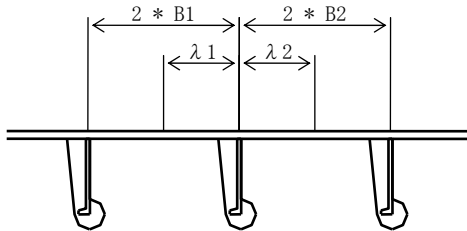
2-3 Calculation for Longitudinal Rib

(1) Model-2 Sec-1(Support Part)

Sectional Force and Conditions of the Calculation

$$\begin{array}{ll} \text{For Sectional calculation} & M = -16.58 \text{ kN}\cdot\text{m} \quad S = 88.77 \text{ kN} \\ \text{For Joint (Spliced) part} & M_j = -0.53 \text{ kN}\cdot\text{m} \quad S_j = 88.77 \text{ kN} \end{array}$$

Calculation of Effective Width



$$\text{*Equivalent span length } L = 0.6 * LC = 0.6 * 250.0 = 150.0 \text{ cm}$$

LC : Transverse rib interval (Longitudinal rib span length)

$$B1 = 15.0 \text{ cm}$$

$$B2 = 10.4 \text{ cm}$$

$$B1 / L = 15.0 / 150.0 = 0.10$$

$$\begin{aligned} \lambda 1 &= \{1.06 - 3.2 * (B1 / L) + 4.5 * (B1 / L)^2\} * B1 \\ &= \{1.06 - 3.2 * (0.10) + 4.5 * (0.10)^2\} * B1 \\ &= 11.8 \text{ cm} \end{aligned}$$

$$B2 / L = 10.4 / 150.0 = 0.07$$

$$\begin{aligned} \lambda 2 &= \{1.06 - 3.2 * (B2 / L) + 4.5 * (B2 / L)^2\} * B2 \\ &= \{1.06 - 3.2 * (0.07) + 4.5 * (0.07)^2\} * B2 \\ &= 8.9 \text{ cm} \end{aligned}$$

*Total effective width

$$\begin{aligned} \lambda &= \lambda 1 + \lambda 2 = 11.8 + 8.9 \\ &= 20.7 \text{ cm} \end{aligned}$$

Sectional Properties

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	207 * 16 (SM400)	33.15	-14.44	-478.6	6911.5
1-BULB	PL	230 * 11 (SM400)	31.98	0.00	0.0	1680.0

$$65.13 \quad -478.6 \quad 8591.5$$

$$e = -478.6 / 65.13 = -7.35 \text{ cm}$$

$$I = 8591.5 - 65.13 * (-7.35)^2 = 5074 \text{ cm}^4$$

$$Y_u = -7.89 \text{ cm}, \quad Y_L = 16.71 \text{ cm}$$

$$W_u = -643 \text{ cm}^3, \quad W_L = 304 \text{ cm}^3$$

Actual Stress

Bending stress intensity

$$\begin{aligned} \sigma_u &= -16.58 * 10^6 / (-643 * 10^3) = 26 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2 \\ \sigma_L &= -16.58 * 10^6 / (304 * 10^3) = -55 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2 \end{aligned}$$

Shear stress intensity

$$\tau = 88.77 * 10^3 / (25.3 * 10^2) = 35 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (55 / 140)^2 + (35 / 80)^2 = 0.34 < 1.2$$

For the Joint (Spliced) Part

Bending stress intensity

$$\begin{aligned}\sigma_u &= -0.53 * 10^6 / (-643 * 10^3) = 1 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2 \\ \sigma_L &= -0.53 * 10^6 / (304 * 10^3) = -2 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2\end{aligned}$$

Shear stress intensity

$$\tau = 88.77 * 10^3 / (25.3 * 10^2) = 35 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

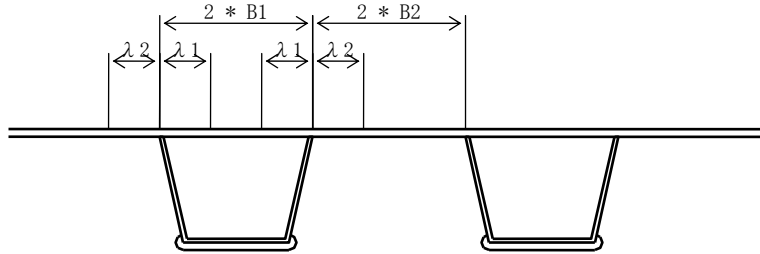
$$\kappa = (2 / 140)^2 + (35 / 80)^2 = 0.19 < 1.2$$

(2) Model-3 Sec-2 (Support Part)

Sectional Force and Conditions of the Calculation

For Sectional calculation $M = -26.04 \text{ kN}\cdot\text{m}$ $S = 110.57 \text{ kN}$
 For Joint (Spliced) part $M_j = -26.04 \text{ kN}\cdot\text{m}$ $S_j = 110.57 \text{ kN}$

Calculation of Effective Width



*Equivalent span length $L = 0.6 * LC = 0.6 * 250.0 = 150.0 \text{ cm}$

LC : Transverse rib interval (Longitudinal rib span length)

$B1 = 16.2 \text{ cm}$

$B2 = 11.3 \text{ cm}$

$B1 / L = 16.2 / 150.0 = 0.11$

$\lambda 1 = \{1.06 - 3.2 * (B1 / L) + 4.5 * (B1 / L)^2\} * B1$
 $= \{1.06 - 3.2 * (0.11) + 4.5 * (0.11)^2\} * B1$
 $= 12.4 \text{ cm}$

$B2 / L = 11.3 / 150.0 = 0.08$

$\lambda 2 = \{1.06 - 3.2 * (B2 / L) + 4.5 * (B2 / L)^2\} * B2$
 $= \{1.06 - 3.2 * (0.08) + 4.5 * (0.08)^2\} * B2$
 $= 9.5 \text{ cm}$

*Total effective width

$\lambda = (\lambda 1 + \lambda 2) * 2 = (12.4 + 9.5) * 2$
 $= 43.9 \text{ cm}$

Sectional Properties

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	439 * 16 (SM400)	70.30	-16.01	-1125.5	18019.3
1-U. RIB	320 * 240 * 8 (SM400)		53.90	0.00	0.0	3315.0
			124.20		-1125.5	21334.3

$e = -1125.5 / 124.20 = -9.06 \text{ cm}$

$I = 21334.3 - 124.20 * (-9.06)^2 = 11135 \text{ cm}^4$

$Y_u = -7.75 \text{ cm}, Y_L = 18.05 \text{ cm}$

$W_u = -1437 \text{ cm}^3, W_L = 617 \text{ cm}^3$

Actual Stress

Bending stress intensity

$\sigma_u = -26.04 * 10^6 / (-1437 * 10^3) = 18 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$

$\sigma_L = -26.04 * 10^6 / (617 * 10^3) = -42 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$

Shear stress intensity

$\tau = 110.57 * 10^3 / (38.7 * 10^2) = 29 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$

Combined stress intensity

$\kappa = (42 / 140)^2 + (29 / 80)^2 = 0.22 < 1.2$

For the Joint (Spliced) Part

Bending stress intensity

$$\begin{aligned}\sigma_u &= -26.04 * 10^6 / (-1437 * 10^3) = 18 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2 \\ \sigma_L &= -26.04 * 10^6 / (617 * 10^3) = -42 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2\end{aligned}$$

Shear stress intensity

$$\tau = 110.57 * 10^3 / (38.7 * 10^2) = 29 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

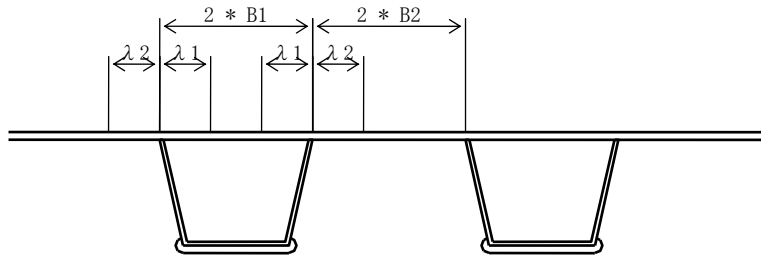
$$\kappa = (42 / 140)^2 + (29 / 80)^2 = 0.22 < 1.2$$

(3) Model-5 Sec-2 (Span Part)

Sectional Force and Conditions of the Calculation

For Sectional calculation $M = 45.69 \text{ kN}\cdot\text{m}$ $S = 50.92 \text{ kN}$
 For Joint (Spliced) part $M_j = 45.69 \text{ kN}\cdot\text{m}$ $S_j = 50.92 \text{ kN}$

Calculation of Effective Width



*Equivalent span length $L = 0.6 * LC = 0.6 * 250.0 = 150.0 \text{ cm}$

LC : Transverse rib interval (Longitudinal rib span length)

$B1 = 16.2 \text{ cm}$

$B2 = 14.4 \text{ cm}$

$B1 / L = 16.2 / 150.0 = 0.11$

$\lambda 1 = \{1.06 - 3.2 * (B1 / L) + 4.5 * (B1 / L)^2\} * B1$
 $= \{1.06 - 3.2 * (0.11) + 4.5 * (0.11)^2\} * B1$
 $= 12.4 \text{ cm}$

$B2 / L = 14.4 / 150.0 = 0.10$

$\lambda 2 = \{1.06 - 3.2 * (B2 / L) + 4.5 * (B2 / L)^2\} * B2$
 $= \{1.06 - 3.2 * (0.10) + 4.5 * (0.10)^2\} * B2$
 $= 11.4 \text{ cm}$

*Total effective width

$\lambda = (\lambda 1 + \lambda 2) * 2 = (12.4 + 11.4) * 2$
 $= 47.7 \text{ cm}$

Sectional Properties

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	477 * 16 (SM400)	76.36	-16.01	-1222.6	19573.6
1-U. RIB	320 * 240 * 8 (SM400)		53.90	0.00	0.0	3315.0
			130.26		-1222.6	22888.6

$e = -1222.6 / 130.26 = -9.39 \text{ cm}$

$I = 22888.6 - 130.26 * (-9.39)^2 = 11414 \text{ cm}^4$

$Y_u = -7.42 \text{ cm}, Y_L = 18.38 \text{ cm}$

$W_u = -1537 \text{ cm}^3, W_L = 621 \text{ cm}^3$

Actual Stress

Bending stress intensity

$\sigma_u = 45.69 * 10^6 / (-1537 * 10^3) = -30 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$

$\sigma_L = 45.69 * 10^6 / (621 * 10^3) = 74 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$

Shear stress intensity

$\tau = 50.92 * 10^3 / (38.7 * 10^2) = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$

Combined stress intensity

$\kappa = (74 / 140)^2 + (13 / 80)^2 = 0.30 < 1.2$

For the Joint (Spliced) Part

Bending stress intensity

$$\begin{aligned}\sigma_u &= 45.69 * 10^6 / (-1537 * 10^3) = -30 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2 \\ \sigma_L &= 45.69 * 10^6 / (621 * 10^3) = 74 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2\end{aligned}$$

Shear stress intensity

$$\tau = 50.92 * 10^3 / (38.7 * 10^2) = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (74 / 140)^2 + (13 / 80)^2 = 0.30 < 1.2$$

Verification of Deflection due to Live Load

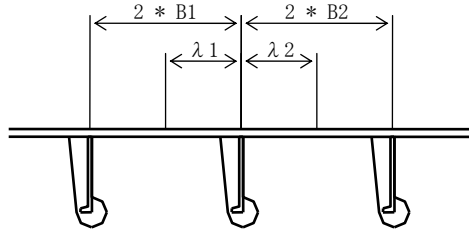
$$\begin{aligned}\delta &= 0.6 \text{ mm} < \delta_a \\ \delta_a &= L / 500 = 2500 / 500 = 5.0 \text{ mm}\end{aligned}$$

(4) Model-8 Sec-1 (Span Part)

Sectional Force and Conditions of the Calculation

For Sectional calculation $M = 27.83 \text{ kN}\cdot\text{m}$ $S = 32.60 \text{ kN}$
 For Joint (Spliced) part $M_j = 27.83 \text{ kN}\cdot\text{m}$ $S_j = 32.60 \text{ kN}$

Calculation of Effective Width



*Equivalent span length $L = 0.6 * LC = 0.6 * 250.0 = 150.0 \text{ cm}$

LC : Transverse rib interval (Longitudinal rib span length)

$B1 = 15.0 \text{ cm}$

$B2 = 18.0 \text{ cm}$

$B1 / L = 15.0 / 150.0 = 0.10$

$$\begin{aligned} \lambda 1 &= \{1.06 - 3.2 * (B1 / L) + 4.5 * (B1 / L)^2\} * B1 \\ &= \{1.06 - 3.2 * (0.10) + 4.5 * (0.10)^2\} * B1 \\ &= 11.8 \text{ cm} \end{aligned}$$

$B2 / L = 18.0 / 150.0 = 0.12$

$$\begin{aligned} \lambda 2 &= \{1.06 - 3.2 * (B2 / L) + 4.5 * (B2 / L)^2\} * B2 \\ &= \{1.06 - 3.2 * (0.12) + 4.5 * (0.12)^2\} * B2 \\ &= 13.3 \text{ cm} \end{aligned}$$

*Total effective width

$$\begin{aligned} \lambda &= \lambda 1 + \lambda 2 = 11.8 + 13.3 \\ &= 25.1 \text{ cm} \end{aligned}$$

Sectional Properties

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	251 * 16 (SM400)	40.18	-14.44	-580.1	8377.0
1-BULB	PL	230 * 11 (SM400)	31.98	0.00	0.0	1680.0
			72.16		-580.1	10057.0

$$e = -580.1 / 72.16 = -8.04 \text{ cm}$$

$$I = 10057.0 - 72.16 * -8.04^2 = 5393 \text{ cm}^4$$

$$Y_u = -7.20 \text{ cm}, \quad Y_L = 17.40 \text{ cm}$$

$$W_u = -749 \text{ cm}^3, \quad W_L = 310 \text{ cm}^3$$

Actual Stress

Bending stress intensity

$$\sigma_u = 27.83 * 10^6 / (-749 * 10^3) = -37 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

$$\sigma_L = 27.83 * 10^6 / (310 * 10^3) = 90 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

Shear stress intensity

$$\tau = 32.60 * 10^3 / (25.3 * 10^2) = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (90 / 140)^2 + (13 / 80)^2 = 0.44 < 1.2$$

For the Joint (Spliced) Part

Bending stress intensity

$$\begin{aligned}\sigma_u &= 27.83 * 10^6 / (-749 * 10^3) = -37 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2 \\ \sigma_L &= 27.83 * 10^6 / (310 * 10^3) = 90 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2\end{aligned}$$

Shear stress intensity

$$\tau = 32.60 * 10^3 / (25.3 * 10^2) = 13 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (90 / 140)^2 + (13 / 80)^2 = 0.44 < 1.2$$

Verification of Deflection due to Live Load

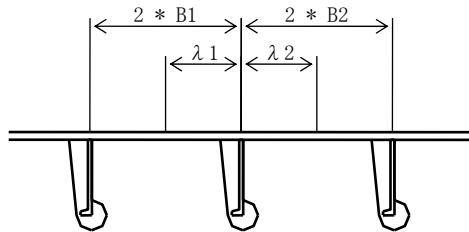
$$\begin{aligned}\delta &= 0.8 \text{ mm} < \delta_a \\ \delta_a &= L / 500 = 2500 / 500 = 5.0 \text{ mm}\end{aligned}$$

(6) Model-8 Sec-1 (Support Part)

Sectional Force and Conditions of Calculation

For Sectional calculation $M = -16.58 \text{ kN}\cdot\text{m}$ $S = 88.77 \text{ kN}$
 For Joint (Spliced) part $M_j = -16.58 \text{ kN}\cdot\text{m}$ $S_j = 88.77 \text{ kN}$

Calculation of Effective Width



*Equivalent span length $L = 0.6 * LC = 0.6 * 250.0 = 150.0 \text{ cm}$
 LC : Transverse rib interval (Longitudinal rib span length)

$B1 = 15.0 \text{ cm}$

$B2 = 18.0 \text{ cm}$

$B1 / L = 15.0 / 150.0 = 0.10$

$$\begin{aligned} \lambda 1 &= \{1.06 - 3.2 * (B1 / L) + 4.5 * (B1 / L)^2\} * B1 \\ &= \{1.06 - 3.2 * (0.10) + 4.5 * (0.10)^2\} * B1 \\ &= 11.8 \text{ cm} \end{aligned}$$

$B2 / L = 18.0 / 150.0 = 0.12$

$$\begin{aligned} \lambda 2 &= \{1.06 - 3.2 * (B2 / L) + 4.5 * (B2 / L)^2\} * B2 \\ &= \{1.06 - 3.2 * (0.12) + 4.5 * (0.12)^2\} * B2 \\ &= 13.3 \text{ cm} \end{aligned}$$

*Total effective width

$$\begin{aligned} \lambda &= \lambda 1 + \lambda 2 = 11.8 + 13.3 \\ &= 25.1 \text{ cm} \end{aligned}$$

Sectional Properties

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	251 * 16 (SM400)	40.18	-14.44	-580.1	8377.0
1-BULB	PL	230 * 11 (SM400)	31.98	0.00	0.0	1680.0
			72.16		-580.1	10057.0

$$e = -580.1 / 72.16 = -8.04 \text{ cm}$$

$$I = 10057.0 - 72.16 * -8.04^2 = 5393 \text{ cm}^4$$

$$Y_u = -7.20 \text{ cm}, \quad Y_L = 17.40 \text{ cm}$$

$$W_u = -749 \text{ cm}^3, \quad W_L = 310 \text{ cm}^3$$

Actual Stress

Bending stress intensity

$$\sigma_u = -16.58 * 10^6 / (-749 * 10^3) = 22 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -16.58 * 10^6 / (310 * 10^3) = -54 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

Shear stress intensity

$$\tau = 88.77 * 10^3 / (25.3 * 10^2) = 35 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (53 / 140)^2 + (35 / 80)^2 = 0.34 < 1.2$$

For the Joint (Spliced) Part

Bending stress intensity

$$\begin{aligned}\sigma_u &= -16.58 * 10^6 / (-749 * 10^3) = 22 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2 \\ \sigma_L &= -16.58 * 10^6 / (310 * 10^3) = -53 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2\end{aligned}$$

Shear stress intensity

$$\tau = 88.77 * 10^3 / (25.3 * 10^2) = 35 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress intensity

$$\kappa = (53 / 140)^2 + (35 / 80)^2 = 0.34 < 1.2$$

5-3 Calculation of Cross Rib

2-4 Calculation for Lateral Rib

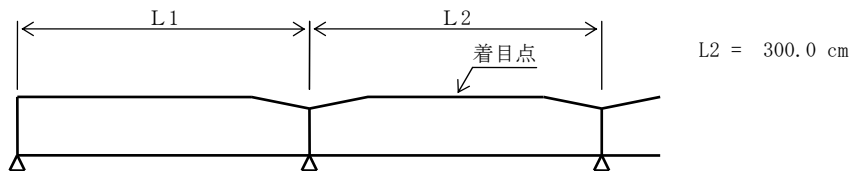
2-4-1 Determination of Cross-section

(1) Model-8 Sec-2 (Mid span)

Section forces and condition of the calculation

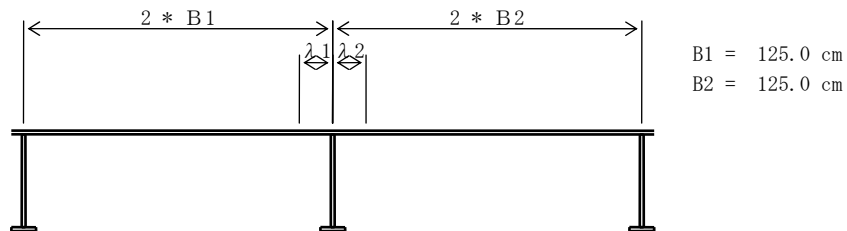
Section force	M	=	111.2 kN·m	S	=	16.8 kN
Shear force of missing part	S_k	=	16.8 kN			
Distance between fixing points	L	=	3.000 m			

Equivalent Span Length



$$L_i = 0.6 * L_2 = 0.6 * 300.0 = 180.0 \text{ cm}$$

Effective Width



$$B_1/L_i = 125.0 / 180.0 = 0.69$$

$$\lambda_1 = 0.15 * L_i = 0.15 * 180.0 = 27.0 \text{ cm}$$

$$B_2/L_i = 125.0 / 180.0 = 0.69$$

$$\lambda_2 = 0.15 * L_i = 0.15 * 180.0 = 27.0 \text{ cm}$$

$$\text{Total effective width } \lambda = \lambda_1 + \lambda_2 = 27.0 + 27.0 = 54.0 \text{ cm}$$

Sectional Area and Moment of Inertia

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	540 * 16 (SM400)	86.40	-38.30	-3309	126739
1-WEB	PL	750 * 9 (SM400)	67.50	0.00	0	31641
1-LFLG	PL	200 * 10 (SM400)	20.00	38.00	760	28880

$$173.90 \quad -2549 \quad 187260$$

$$E = -2549 / 173.90 = -14.66 \text{ cm}$$

$$I = 187260 - 173.90 * (-14.66)^2 = 149894 \text{ cm}^4$$

$$Y_u = -24.44 \text{ cm}, \quad Y_L = 53.16 \text{ cm}$$

Bending stress

$$\sigma_u = 111.2 * 10^6 * -244.4 / (149894 * 10^4) = -18 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

$$\sigma_L = 111.2 * 10^6 * 531.6 / (149894 * 10^4) = 39 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

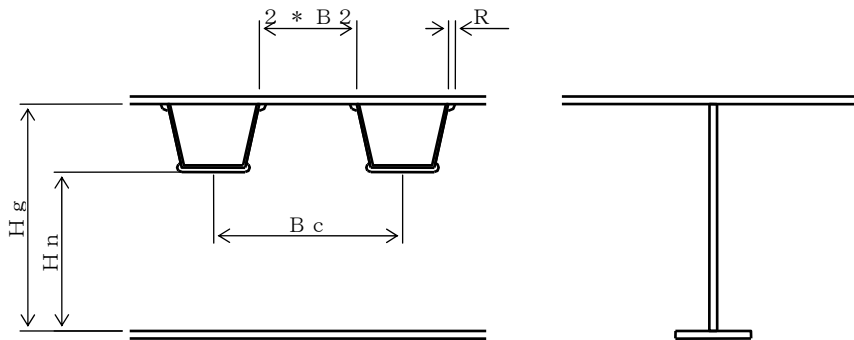
Shear stress

$$\tau = 16.8 * 10^3 / 6750 = 2 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (39 / 140)^2 + (2 / 80)^2 = 0.08 < 1.2$$

Shear Stress of Vertical Rib-Missing Part



$$\tau_k = 16.8 * 10^3 / 6750 = 2 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = 2 * 75.0 / 47.3 = 4 \text{ N/mm}^2 < \tau_a$$

Verification of Deflection

$$\text{Deflection due to live load } \delta = 0.2 \text{ mm} \leq \delta_a = L / 500 = 3000 / 500 = 6.0 \text{ mm}$$

Calculation of Stiffener

$b = 75.0$: Abdominal plate height (cm)

$t = 0.9$: Abdominal plate thickness (cm)

$\sigma = 17$: Edge compressive stress intensity of abdominal plate (N/mm²)

$\tau = 2$: Shear stress intensity of abdominal plate (N/mm²)

Verification of Abdominal Plate Thickness

$$K_h = \sqrt{(\sigma_a / \sigma)} = \sqrt{(140 / 17)} = 2.9 \quad \therefore K_h = 1.2$$

$$b / (152 * K_h) = 75.0 / (152 * 1.2) = 0.4 \text{ cm} < t = 0.9 \text{ cm}$$

The horizontal stiffener is omitted.

Vertical Stiffener

$$K_v = \sqrt{(\tau_a / \tau)} = \sqrt{(80 / 2)} = 5.7 \quad \therefore K_v = 1.2$$

$$70 * t * K_v = 70 * 0.9 * 1.2 = 75.6 \text{ cm} > b = 75.0 \text{ cm}$$

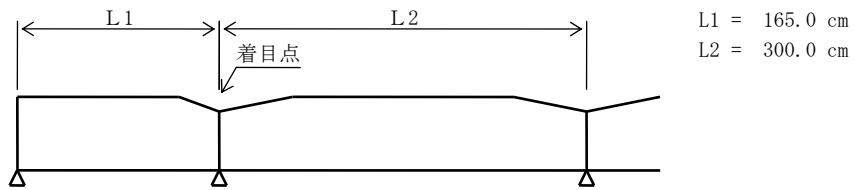
The vertical stiffener is omitted.

(2) Model-8 Sec-2 (Support)

Sectional Force and Conditions of the Calculation

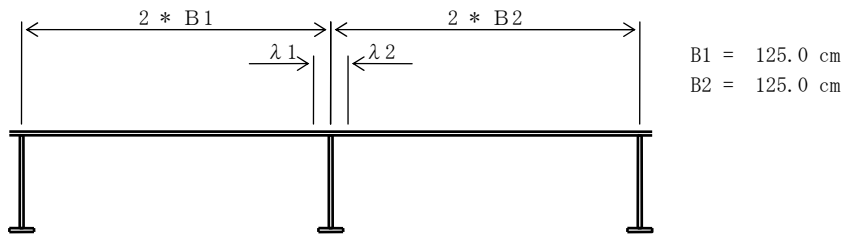
Section force	$M = -111.2 \text{ kN}\cdot\text{m}$	$S = 217.1 \text{ kN}$
Section force at joint	$M_j = -111.2 \text{ kN}\cdot\text{m}$	$S_j = 217.1 \text{ kN}$
Shear force of missing part	$S_k = 217.1 \text{ kN}$	
Distance between fixing points	$L = 0.750 \text{ m}$	

Equivalent Span Length



$$L_i = 0.2 * (L_1 + L_2) = 0.2 * (165.0 + 300.0) = 93.0 \text{ cm}$$

Effective Width



$$B_1/L_i = 125.0 / 93.0 = 1.34$$

$$\lambda_1 = 0.15 * L_i = 0.15 * 93.0 = 14.0 \text{ cm}$$

$$B_2/L_i = 125.0 / 93.0 = 1.34$$

$$\lambda_2 = 0.15 * L_i = 0.15 * 93.0 = 14.0 \text{ cm}$$

$$\text{Total effective width } \lambda = \lambda_1 + \lambda_2 = 14.0 + 14.0 = 27.9 \text{ cm}$$

Section area and moment of inertia

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	279 * 16 (SM400)	44.64	-38.30	-1710	65482
1-WEB	PL	750 * 9 (SM400)	67.50	0.00	0	31641
1-LFLG	PL	200 * 10 (SM400)	20.00	38.00	760	28880

$$132.14 \qquad -950 \qquad 126003$$

$$E = -950 / 132.14 = -7.19 \text{ cm}$$

$$I = 126003 - 132.14 * (-7.19)^2 = 119177 \text{ cm}^4$$

$$Y_u = -31.91 \text{ cm} , \quad Y_L = 45.69 \text{ cm}$$

Bending stress

$$\sigma_u = -111.2 * 10^6 * (-319.1) / (119177 * 10^4) = 30 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -111.2 * 10^6 * 456.9 / (119177 * 10^4) = -43 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

Shear stress

$$\tau = 217.1 * 10^3 / 6750 = 32 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-42 / 140)^2 + (32 / 80)^2 = 0.25 < 1.2$$

*For the Joint (Attachment/Spliced)

Bending stress

$$\sigma_u = -111.2 * 10^6 * (-319.1) / (119177 * 10^4) = 30 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -111.2 * 10^6 * 456.9 / (119177 * 10^4) = -43 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

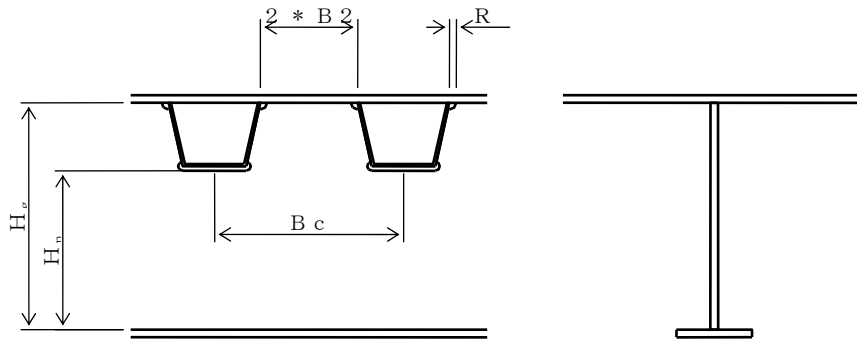
Shear stress

$$\tau = 217.1 * 10^3 / 6750 = 32 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-42 / 140)^2 + (32 / 80)^2 = 0.25 < 1.2$$

Shear Stress of Vertical Rib-Missing Part



$$\tau_k = 217.1 \cdot 10^3 / 6750 = 32 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = 32 * 75.0 / 47.3 = 51 \text{ N/mm}^2 < \tau_a$$

Calculation of Stiffener

b = 75.0 : Abdominal plate height (cm)

t = 0.9 : Abdominal plate thickness (cm)

σ = 42 : Edge compressive stress intensity of abdominal plate (N/mm²)

τ = 32 : Shear stress intensity of abdominal plate (N/mm²)

Verification of Abdominal Plate Thickness

$$K_h = \sqrt{(\sigma_a / \sigma)} = \sqrt{(140 / 42)} = 1.8 \therefore K_h = 1.2$$

$$b / (152 * K_h) = 75.0 / (152 * 1.2) = 0.4 \text{ cm} < t = 0.9 \text{ cm}$$

The horizontal stiffener is omitted.

Vertical Stiffener

$$K_v = \sqrt{(\tau_a / \tau)} = \sqrt{(80 / 32)} = 1.6 \therefore K_v = 1.2$$

$$70 * t * K_v = 70 * 0.9 * 1.2 = 75.6 \text{ cm} > b = 75.0 \text{ cm}$$

The vertical stiffener is omitted.

5-4 Calculation of Bracket Section

2-6 Calculation for Bracket

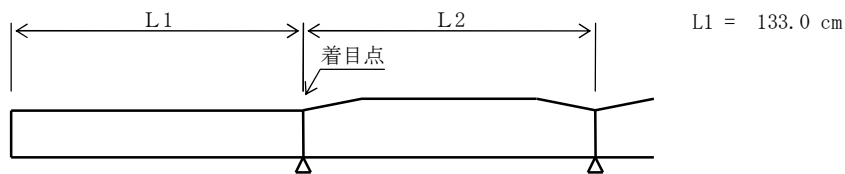
2-6-1 Determination of Cross-section

(1) Model-9 Sec-1 (Intermediate Span)

Section Forces and Condition of the Calculation

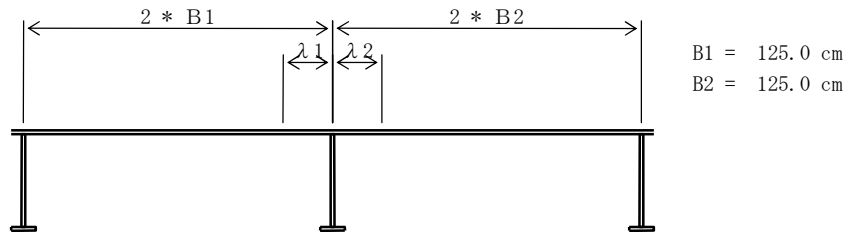
Section force	M	=	-86.2 kN·m	S	=	160.1 kN
Section force at joint	M _j	=	-86.2 kN·m	S _j	=	160.1 kN
Shear force of missing part	S _k	=	160.1 kN			
Distance between fixing points.	L	=	1.330 m			

Equivalent Span Length



$$L_i = 2 * L_1 = 2 * 133.0 = 266.0 \text{ cm}$$

Effective Width



B_1/L_i	=	$125.0 / 266.0 = 0.47$
λ_1	=	$0.15 * L_i = 0.15 * 266.0 = 39.9 \text{ cm}$
B_2/L_i	=	$125.0 / 266.0 = 0.47$
λ_2	=	$0.15 * L_i = 0.15 * 266.0 = 39.9 \text{ cm}$
Total effective width	$\lambda = \lambda_1 + \lambda_2$	$= 39.9 + 39.9 = 79.8 \text{ cm}$

Sectional Area and Moment of Inertia

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	798 * 16 (SM400)	127.68	-38.30	-4890	187293
1-WEB	PL	750 * 9 (SM400)	67.50	0.00	0	31641
1-LFLG	PL	200 * 10 (SM400)	20.00	38.00	760	28880

$$215.18 \quad -4130 \quad 247813$$

$$E = -4130 / 215.18 = -19.19 \text{ cm}$$

$$I = 247813 - 215.18 * (-19.19)^2 = 168540 \text{ cm}^4$$

$$Y_u = -19.91 \text{ cm}, \quad Y_L = 57.69 \text{ cm}$$

Bending stress

$$\sigma_u = -86.2 * 10^6 * -199.1 / (168540 * 10^4) = 10 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -86.2 * 10^6 * 576.9 / (168540 * 10^4) = -30 \text{ N/mm}^2 < \sigma_{ca} = 134 \text{ N/mm}^2$$

Shear stress

$$\tau = 160.1 * 10^3 / 6750 = 24 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-29 / 140)^2 + (24 / 80)^2 = 0.13 < 1.2$$

*For the joint

Bending stress

$$\sigma_u = -86.2 * 10^6 * -199.1 / (168540 * 10^4) = 10 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -86.2 * 10^6 * 576.9 / (168540 * 10^4) = -30 \text{ N/mm}^2 < \sigma_{ca} = 134 \text{ N/mm}^2$$

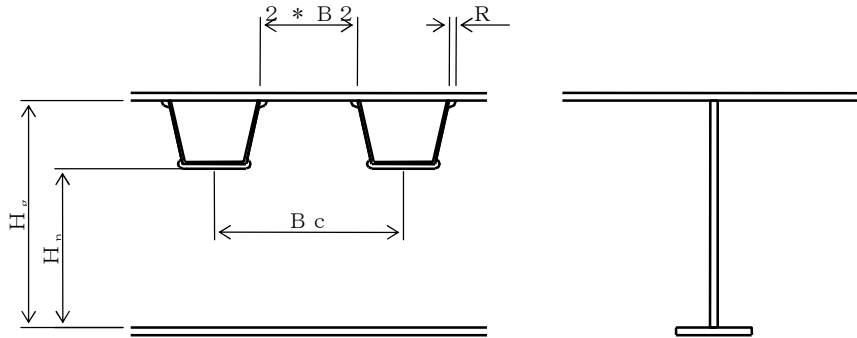
Shear stress

$$\tau = 160.1 * 10^3 / 6750 = 24 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-29 / 140)^2 + (24 / 80)^2 = 0.13 < 1.2$$

Shear Stress of Vertical Rib-Missing Part



$$\tau_k = 160.1 \cdot 10^3 / 6750 = 24 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

$$\tau_v = \tau_k * H_g / H_n = 24 * 75.0 / 47.3 = 38 \text{ N/mm}^2 < \tau_a$$

Verification of Deflection

$$\text{Deflection due to live load } \delta = 0.1 \text{ mm} \leq \delta_a = L / 300 = 1330 / 300 = 4.4 \text{ mm}$$

Calculation of Stiffener

$$b = 75.0 : \text{Abdominal plate height (cm)}$$

$$t = 0.9 : \text{Abdominal plate thickness (cm)}$$

$$\sigma = 29 : \text{Edge compressive stress intensity of abdominal plate (N/mm}^2\text{)}$$

$$\tau = 24 : \text{Shear stress intensity of abdominal plate (N/mm}^2\text{)}$$

Verification of Deflection

$$K_h = \sqrt{(\sigma_a / \sigma)} = \sqrt{(140 / 29)} = 2.2 \therefore K_h = 1.2$$

$$b / (152 * K_h) = 75.0 / (152 * 1.2) = 0.4 \text{ cm} < t = 0.9 \text{ cm}$$

The horizontal stiffener is omitted.

Vertical Stiffener

$$K_v = \sqrt{(\tau_a / \tau)} = \sqrt{(80 / 24)} = 1.8 \therefore K_v = 1.2$$

$$70 * t * K_v = 70 * 0.9 * 1.2 = 75.6 \text{ cm} > b = 75.0 \text{ cm}$$

The vertical stiffener is omitted.

5-5 Calculation of Longitudinal Side Beam

2-5 Calculation for the Side Stringer (Side Girder)

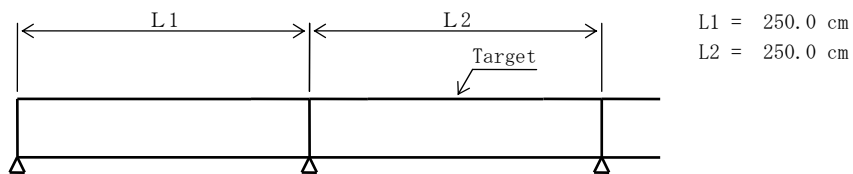
2-5-1 Determination of Cross-section

(1) Model-1 Sec-1 (Mid Span)

Sectional Force and Conditions of the Calculation

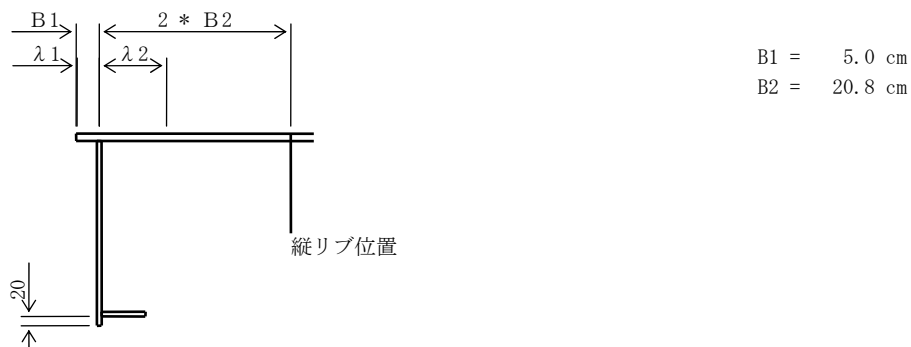
Sectional force	M =	1.6 kN·m	S =	0.1 kN
Distance between the fixed points	L =	2.500 m		

Equivalent Span Length



$$L_i = 0.6 * L2 = 0.6 * 250.0 = 150.0 \text{ cm};$$

Effective Width



$$B1/L_i = 5.0 / 150.0 = 0.03$$

$$\begin{aligned} \lambda 1 &= \{ 1.06 - 3.2 * (B1/L_i) + 4.5 * (B1/L_i)^2 \} * B1 \\ &= \{ 1.06 - 3.2 * 0.03 + 4.5 * 0.03^2 \} * 5.0 \\ &= 4.8 \text{ cm} \end{aligned}$$

$$B2/L_i = 20.8 / 150.0 = 0.14$$

$$\begin{aligned} \lambda 2 &= \{ 1.06 - 3.2 * (B2/L_i) + 4.5 * (B2/L_i)^2 \} * B2 \\ &= \{ 1.06 - 3.2 * 0.14 + 4.5 * 0.14^2 \} * 20.8 \\ &= 14.6 \text{ cm} \end{aligned}$$

$$\text{Total effective width} \quad \lambda 1 + \lambda 2 = 4.8 + 14.6 = 19.4 \text{ cm}$$

Sectional Area and Moment of Inertia

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	194 * 16 (SM400)	31.02	-20.80	-645	13421
1-WEB	PL	400 * 10 (SM400)	40.00	0.00	0	5333
1-LFLG	PL	100 * 10 (SM400)	10.00	17.50	175	3063

$$81.02 \quad -470 \quad 21817$$

$$E = -470 / 81.02 = -5.80 \text{ cm}$$

$$I = 21817 - 81.02 * (-5.80)^2 = 19088 \text{ cm}^4$$

$$Y_u = -15.80 \text{ cm}, \quad Y_L = 25.80 \text{ cm}$$

Bending stress

$$\sigma_u = 1.6 * 10^6 * -158.0 / (19088 * 10^4) = -1 \text{ N/mm}^2 < \sigma_{ca} = 140 \text{ N/mm}^2$$

$$\sigma_L = 1.6 * 10^6 * 258.0 / (19088 * 10^4) = 2 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

Shear stress

$$\tau = 0.1 * 10^3 / 4000 = 0 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (2 / 140)^2 + (0 / 80)^2 = 0.00 < 1.2$$

Verification of the Deflection

$$\text{Deflection due to live load } \delta = 0.1 \text{ mm} \leq \delta_a = L / 500 = 2500 / 500 = 5.0 \text{ mm}$$

Calculation of Stiffener

$$b = 40.0 : \text{Abdominal plate height (cm)}$$

$$t = 1.0 : \text{Abdominal plate thickness (cm)}$$

$$\sigma = 1 : \text{Edge compressive stress intensity of abdominal plate (N/mm}^2\text{)}$$

$$\tau = 0 : \text{Shear stress intensity of abdominal plate (N/mm}^2\text{)}$$

Verification of Abdominal Plate Thickness

$$K_h = \sqrt{(\sigma_a / \sigma)} = \sqrt{(140 / 1)} = 10.8 \therefore K_h = 1.2$$

$$b / (152 * K_h) = 40.0 / (152 * 1.2) = 0.2 \text{ cm} < t = 1.0 \text{ cm}$$

The horizontal stiffener is omitted.

Vertical Stiffener

$$K_v = \sqrt{(\tau_a / \tau)} = \sqrt{(80 / 0)} = 73.0 \therefore K_v = 1.2$$

$$70 * t * K_v = 70 * 1.0 * 1.2 = 84.0 \text{ cm} > b = 40.0 \text{ cm}$$

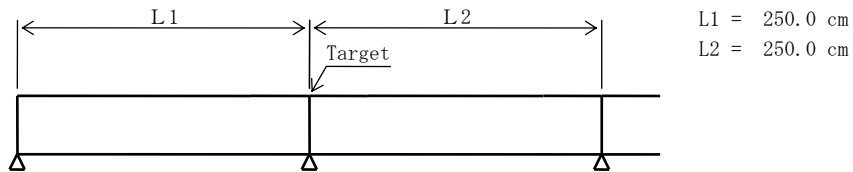
The vertical stiffener is omitted.

(2) Model-1 Sec-1 (Support)

Sectional Force and Conditions of the Calculation

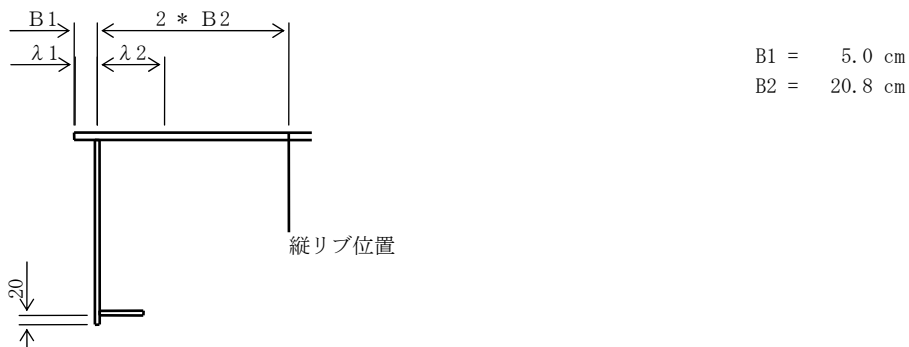
Section force $M = -2.3 \text{ kN}\cdot\text{m}$ $S = 4.4 \text{ kN}$
 Section force at joint $M_j = -2.3 \text{ kN}\cdot\text{m}$ $S_j = 4.4 \text{ kN}$
 Distance between fixing points. $L = 0.625 \text{ m}$

Equivalent Span Length



$$L_i = 0.6 * L2 = 0.6 * 250.0 = 150.0 \text{ cm}$$

Effective Width



$$B1/L_i = 5.0 / 150.0 = 0.03$$

$$\begin{aligned} \lambda 1 &= \{ 1.06 - 3.2 * (B1/L_i) + 4.5 * (B1/L_i)^2 \} * B1 \\ &= \{ 1.06 - 3.2 * 0.03 + 4.5 * 0.03^2 \} * 5.0 \\ &= 4.8 \text{ cm} \end{aligned}$$

$$B2/L_i = 20.8 / 150.0 = 0.14$$

$$\begin{aligned} \lambda 2 &= \{ 1.06 - 3.2 * (B2/L_i) + 4.5 * (B2/L_i)^2 \} * B2 \\ &= \{ 1.06 - 3.2 * 0.14 + 4.5 * 0.14^2 \} * 20.8 \\ &= 14.6 \text{ cm} \end{aligned}$$

$$\text{Total effective width } \lambda = \lambda 1 + \lambda 2 = 4.8 + 14.6 = 19.4 \text{ cm}$$

Sectional Area and Moment of Inertia

			A (cm ²)	Y (cm)	AY (cm ³)	I (cm ⁴)
1-DECK	PL	194 * 16 (SM400)	31.02	-20.80	-645	13421
1-WEB	PL	400 * 10 (SM400)	40.00	0.00	0	5333
1-LFLG	PL	100 * 10 (SM400)	10.00	17.50	175	3063

$$81.02 \quad -470 \quad 21817$$

$$E = -470 / 81.02 = -5.80 \text{ cm}$$

$$I = 21817 - 81.02 * (-5.80)^2 = 19088 \text{ cm}^4$$

$$Y_u = -15.80 \text{ cm}, \quad Y_L = 25.80 \text{ cm}$$

Bending stress

$$\sigma_u = -2.3 * 10^6 * -158.0 / (19088 * 10^4) = 2 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -2.3 * 10^6 * 258.0 / (19088 * 10^4) = -3 \text{ N/mm}^2 < \sigma_{ca} = 134 \text{ N/mm}^2$$

Shear stress

$$\tau = 4.4 * 10^3 / 4000 = 1 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-3 / 140)^2 + (1 / 80)^2 = 0.00 < 1.2$$

* For the Joint (attachment/spliced)

Bending stress

$$\sigma_u = -2.3 * 10^6 * -158.0 / (19088 * 10^4) = 2 \text{ N/mm}^2 < \sigma_{ta} = 140 \text{ N/mm}^2$$

$$\sigma_L = -2.3 * 10^6 * 258.0 / (19088 * 10^4) = -3 \text{ N/mm}^2 < \sigma_{ca} = 134 \text{ N/mm}^2$$

Shear stress

$$\tau = 4.4 * 10^3 / 4000 = 1 \text{ N/mm}^2 < \tau_a = 80 \text{ N/mm}^2$$

Combined stress

$$\kappa = (-3 / 140)^2 + (1 / 80)^2 = 0.00 < 1.2$$

Calculation of Stiffener

$b = 40.0$: Abdominal plate height (cm)

$t = 1.0$: Abdominal plate thickness (cm)

$\sigma = 3$: Edge compressive stress intensity of abdominal plate (N/mm²)

$\tau = 1$: Shear stress intensity of abdominal plate (N/mm²)

Verification of Abdominal Plate Thickness

$$K_h = \sqrt{(\sigma_a / \sigma)} = \sqrt{(140 / 3)} = 6.8 \quad \therefore K_h = 1.2$$

$$b / (152 * K_h) = 40.0 / (152 * 1.2) = 0.2 \text{ cm} < t = 1.0 \text{ cm}$$

The horizontal stiffener is omitted.

Vertical Stiffener

$$K_v = \sqrt{(\tau_a / \tau)} = \sqrt{(80 / 1)} = 8.5 \quad \therefore K_v = 1.2$$

$$70 * t * K_v = 70 * 1.0 * 1.2 = 84.0 \text{ cm} > b = 40.0 \text{ cm}$$

The vertical stiffener is omitted.

5-6 Combination Stress Check of Longitudinal Rib

Primary Stress as a member of Main Girder and Secondary Stress as a Floor Beam shall be combined .

(1) Primary Stress as a Main Girder

(Refer to 3.1 and 3.2 of Calculation of Section)

Maximum Primary Stress due to Bending Moment

$$\sigma u = 0 \text{ N/mm}^2 \quad \sigma L = 0 \text{ N/mm}^2$$

Minimum Primary Stress due to Bending Moment

$$\sigma u = 0 \text{ N/mm}^2 \quad \sigma L = 0 \text{ N/mm}^2$$

(2) Combination Stress Check

The Stress at bottom flange of longitudinal rib as primary stress is calculated by considering of liner relation between the stress of deck and lower flange of man girder.

Note of symbolcharacter

- σm N/mm² :Primary stress
- σf N/mm² :Floor stress
- $\Sigma \sigma$ N/mm² :Combination Stress
- σa N/mm² :Allowable stress

Check Point: S-xL= Left Side of the X-th section S-xR= right Side of the X-th section
S-xPn= The n-th Peak Point of the X-th section P-x = The cross point of X

* Girder G-1

Check point	Top of Deck Plate(Top Flange)				Bottom Flange of Longi. Rib			
	σm	σf	$\Sigma \sigma$	σa (Mat.)	σm	σf	$\Sigma \sigma$	σa (Mat.)
S-1L	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-1R	-79	0	-79	295 (SM490Y)	-61	0	-61	295 (SM490Y)
S-2R	-131	0	-131	295 (SM490Y)	-106	0	-106	295 (SM490Y)
S-3R	-164	0	-164	295 (SM490Y)	-134	0	-134	295 (SM490Y)
S-4R	-179	0	-179	295 (SM490Y)	-148	0	-148	295 (SM490Y)
S-5P1	-179	0	-179	295 (SM490Y)	-148	0	-148	295 (SM490Y)
S-5R	-177	0	-177	295 (SM490Y)	-146	0	-146	295 (SM490Y)
S-7L	-164	0	-164	295 (SM490Y)	-134	0	-134	295 (SM490Y)
S-8L	-135	0	-135	295 (SM490Y)	-107	0	-107	295 (SM490Y)
S-9L	-78	0	-78	295 (SM490Y)	-60	0	-60	295 (SM490Y)
S-10L	51	0	51	295 (SM490Y)	40	0	40	295 (SM490Y)
S-10R	133	0	133	295 (SM490Y)	106	0	106	295 (SM490Y)
S-11R	155	0	155	295 (SM490Y)	124	0	124	295 (SM490Y)
S-12P2	182	0	182	295 (SM490Y)	148	0	148	295 (SM490Y)
S-12P3	182	0	182	295 (SM490Y)	148	0	148	295 (SM490Y)
S-13L	164	0	164	295 (SM490Y)	132	0	132	295 (SM490Y)
S-14L	136	0	136	295 (SM490Y)	109	0	109	295 (SM490Y)
S-15L	75	0	75	295 (SM490Y)	58	0	58	295 (SM490Y)
S-16L	-35	0	-35	295 (SM490Y)	-27	0	-27	295 (SM490Y)
S-16L	29	0	29	295 (SM490Y)	22	0	22	295 (SM490Y)
S-16R	-74	0	-74	295 (SM490Y)	-56	0	-56	295 (SM490Y)
S-17R	-97	0	-97	295 (SM490Y)	-74	0	-74	295 (SM490Y)
S-18R	-101	0	-101	295 (SM490Y)	-78	0	-78	295 (SM490Y)
S-19P4	-100	0	-100	295 (SM490Y)	-78	0	-78	295 (SM490Y)
S-20L	-92	0	-92	295 (SM490Y)	-72	0	-72	295 (SM490Y)
S-20R	-62	0	-62	295 (SM490Y)	-48	0	-48	295 (SM490Y)
S-20R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-22L	40	0	40	295 (SM490Y)	31	0	31	295 (SM490Y)

S-22R	91	0	91	295 (SM490Y)	70	0	70	295 (SM490Y)
S-23R	153	0	153	295 (SM490Y)	122	0	122	295 (SM490Y)
S-24P5	175	0	175	295 (SM490Y)	143	0	143	295 (SM490Y)
S-24P6	175	0	175	295 (SM490Y)	143	0	143	295 (SM490Y)
S-25L	152	0	152	295 (SM490Y)	121	0	121	295 (SM490Y)
S-26L	85	0	85	295 (SM490Y)	65	0	65	295 (SM490Y)
S-27L	-23	0	-23	295 (SM490Y)	-17	0	-17	295 (SM490Y)
S-27L	32	0	32	295 (SM490Y)	24	0	24	295 (SM490Y)
S-27R	-70	0	-70	295 (SM490Y)	-52	0	-52	295 (SM490Y)
S-28R	-104	0	-104	295 (SM490Y)	-78	0	-78	295 (SM490Y)
S-30L	-117	0	-117	295 (SM490Y)	-91	0	-91	295 (SM490Y)
S-30P7	-119	0	-119	295 (SM490Y)	-93	0	-93	295 (SM490Y)
S-30R	-118	0	-118	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-31R	-102	0	-102	295 (SM490Y)	-80	0	-80	295 (SM490Y)
S-33L	-68	0	-68	295 (SM490Y)	-52	0	-52	295 (SM490Y)
S-34L	43	0	43	295 (SM490Y)	33	0	33	295 (SM490Y)
S-34R	102	0	102	295 (SM490Y)	79	0	79	295 (SM490Y)
S-35R	159	0	159	295 (SM490Y)	128	0	128	295 (SM490Y)
S-36P8	179	0	179	295 (SM490Y)	147	0	147	295 (SM490Y)
S-36P9	179	0	179	295 (SM490Y)	147	0	147	295 (SM490Y)
S-37L	158	0	158	295 (SM490Y)	127	0	127	295 (SM490Y)
S-38L	102	0	102	295 (SM490Y)	78	0	78	295 (SM490Y)
S-39L	-11	0	-11	295 (SM490Y)	-8	0	-8	295 (SM490Y)
S-39L	44	0	44	295 (SM490Y)	33	0	33	295 (SM490Y)
S-39R	-65	0	-65	295 (SM490Y)	-48	0	-48	295 (SM490Y)
S-39R	2	0	2	295 (SM490Y)	1	0	1	295 (SM490Y)
S-40R	-100	0	-100	295 (SM490Y)	-77	0	-77	295 (SM490Y)
S-41R	-115	0	-115	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-42P10	-117	0	-117	295 (SM490Y)	-93	0	-93	295 (SM490Y)
S-42R	-116	0	-116	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-44L	-102	0	-102	295 (SM490Y)	-80	0	-80	295 (SM490Y)
S-45L	-67	0	-67	295 (SM490Y)	-51	0	-51	295 (SM490Y)
S-45L	1	0	1	295 (SM490Y)	0	0	0	295 (SM490Y)
S-46L	42	0	42	295 (SM490Y)	33	0	33	295 (SM490Y)
S-46R	99	0	99	295 (SM490Y)	77	0	77	295 (SM490Y)
S-47R	156	0	156	295 (SM490Y)	125	0	125	295 (SM490Y)
S-48P11	177	0	177	295 (SM490Y)	143	0	143	295 (SM490Y)
S-48P12	177	0	177	295 (SM490Y)	143	0	143	295 (SM490Y)
S-49L	155	0	155	295 (SM490Y)	124	0	124	295 (SM490Y)
S-50L	99	0	99	295 (SM490Y)	76	0	76	295 (SM490Y)
S-51L	-17	0	-17	295 (SM490Y)	-13	0	-13	295 (SM490Y)
S-51L	42	0	42	295 (SM490Y)	32	0	32	295 (SM490Y)
S-51R	-70	0	-70	295 (SM490Y)	-54	0	-54	295 (SM490Y)
S-52R	-106	0	-106	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-53R	-120	0	-120	295 (SM490Y)	-96	0	-96	295 (SM490Y)
S-54P13	-122	0	-122	295 (SM490Y)	-98	0	-98	295 (SM490Y)
S-54R	-121	0	-121	295 (SM490Y)	-97	0	-97	295 (SM490Y)
S-56L	-107	0	-107	295 (SM490Y)	-84	0	-84	295 (SM490Y)
S-57L	-73	0	-73	295 (SM490Y)	-56	0	-56	295 (SM490Y)
S-58L	35	0	35	295 (SM490Y)	27	0	27	295 (SM490Y)
S-58R	90	0	90	295 (SM490Y)	69	0	69	295 (SM490Y)
S-59R	152	0	152	295 (SM490Y)	121	0	121	295 (SM490Y)
S-60P14	175	0	175	295 (SM490Y)	142	0	142	295 (SM490Y)
S-60P15	175	0	175	295 (SM490Y)	142	0	142	295 (SM490Y)
S-61L	153	0	153	295 (SM490Y)	123	0	123	295 (SM490Y)
S-62L	94	0	94	295 (SM490Y)	73	0	73	295 (SM490Y)
S-63L	-16	0	-16	295 (SM490Y)	-12	0	-12	295 (SM490Y)
S-63L	41	0	41	295 (SM490Y)	31	0	31	295 (SM490Y)
S-63R	-63	0	-63	295 (SM490Y)	-48	0	-48	295 (SM490Y)
S-63R	1	0	1	295 (SM490Y)	1	0	1	295 (SM490Y)

S-64R	-95	0	-95	295 (SM490Y)	-73	0	-73	295 (SM490Y)
S-65R	-105	0	-105	295 (SM490Y)	-82	0	-82	295 (SM490Y)
S-66P16	-105	0	-105	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-66R	-103	0	-103	295 (SM490Y)	-80	0	-80	295 (SM490Y)
S-68L	-84	0	-84	295 (SM490Y)	-65	0	-65	295 (SM490Y)
S-69L	-48	0	-48	295 (SM490Y)	-36	0	-36	295 (SM490Y)
S-69L	15	0	15	295 (SM490Y)	11	0	11	295 (SM490Y)
S-69R	58	0	58	295 (SM490Y)	43	0	43	295 (SM490Y)
S-70R	119	0	119	295 (SM490Y)	92	0	92	295 (SM490Y)
S-71R	154	0	154	295 (SM490Y)	123	0	123	295 (SM490Y)
S-72P17	174	0	174	295 (SM490Y)	141	0	141	295 (SM490Y)
S-72P18	174	0	174	295 (SM490Y)	141	0	141	295 (SM490Y)
S-73L	147	0	147	295 (SM490Y)	116	0	116	295 (SM490Y)
S-74L	103	0	103	295 (SM490Y)	79	0	79	295 (SM490Y)
S-75L	-27	0	-27	295 (SM490Y)	-20	0	-20	295 (SM490Y)
S-75L	34	0	34	295 (SM490Y)	26	0	26	295 (SM490Y)
S-75R	-87	0	-87	295 (SM490Y)	-66	0	-66	295 (SM490Y)
S-76R	-132	0	-132	295 (SM490Y)	-103	0	-103	295 (SM490Y)
S-77R	-155	0	-155	295 (SM490Y)	-125	0	-125	295 (SM490Y)
S-78P19	-162	0	-162	295 (SM490Y)	-132	0	-132	295 (SM490Y)
S-78R	-162	0	-162	295 (SM490Y)	-132	0	-132	295 (SM490Y)
S-80L	-151	0	-151	295 (SM490Y)	-122	0	-122	295 (SM490Y)
S-81L	-122	0	-122	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-82L	-63	0	-63	295 (SM490Y)	-47	0	-47	295 (SM490Y)
S-82R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)

*** Girder G-2**

Check point	Top of Deck Plate (Top Flange)				Bottom Flange of Longi. Rib			
	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)
S-1L	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-1R	-73	0	-73	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-2R	-127	0	-127	295 (SM490Y)	-99	0	-99	295 (SM490Y)
S-3R	-164	0	-164	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-4R	-183	0	-183	295 (SM490Y)	-151	0	-151	295 (SM490Y)
S-5P1	-185	0	-185	295 (SM490Y)	-152	0	-152	295 (SM490Y)
S-5R	-184	0	-184	295 (SM490Y)	-151	0	-151	295 (SM490Y)
S-7L	-166	0	-166	295 (SM490Y)	-134	0	-134	295 (SM490Y)
S-8L	-139	0	-139	295 (SM490Y)	-110	0	-110	295 (SM490Y)
S-8R	-80	0	-80	295 (SM490Y)	-63	0	-63	295 (SM490Y)
S-10L	59	0	59	295 (SM490Y)	48	0	48	295 (SM490Y)
S-10R	149	0	149	295 (SM490Y)	122	0	122	295 (SM490Y)
S-11R	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-12P2	188	0	188	295 (SM490Y)	153	0	153	295 (SM490Y)
S-12P3	188	0	188	295 (SM490Y)	153	0	153	295 (SM490Y)
S-13L	169	0	169	295 (SM490Y)	136	0	136	295 (SM490Y)
S-14L	153	0	153	295 (SM490Y)	123	0	123	295 (SM490Y)
S-15L	83	0	83	295 (SM490Y)	66	0	66	295 (SM490Y)
S-16L	-40	0	-40	295 (SM490Y)	-31	0	-31	295 (SM490Y)
S-16L	34	0	34	295 (SM490Y)	26	0	26	295 (SM490Y)
S-16R	-84	0	-84	295 (SM490Y)	-66	0	-66	295 (SM490Y)
S-17R	-108	0	-108	295 (SM490Y)	-85	0	-85	295 (SM490Y)
S-18P4	-112	0	-112	295 (SM490Y)	-88	0	-88	295 (SM490Y)
S-18R	-112	0	-112	295 (SM490Y)	-88	0	-88	295 (SM490Y)
S-20L	-100	0	-100	295 (SM490Y)	-78	0	-78	295 (SM490Y)
S-20R	-67	0	-67	295 (SM490Y)	-52	0	-52	295 (SM490Y)
S-20R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-22L	44	0	44	295 (SM490Y)	35	0	35	295 (SM490Y)
S-22R	100	0	100	295 (SM490Y)	80	0	80	295 (SM490Y)

S-23R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-24P5	186	0	186	295 (SM490Y)	152	0	152	295 (SM490Y)
S-24P6	186	0	186	295 (SM490Y)	152	0	152	295 (SM490Y)
S-25L	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-26L	98	0	98	295 (SM490Y)	78	0	78	295 (SM490Y)
S-27L	40	0	40	295 (SM490Y)	31	0	31	295 (SM490Y)
S-27R	-87	0	-87	295 (SM490Y)	-69	0	-69	295 (SM490Y)
S-28R	-123	0	-123	295 (SM490Y)	-99	0	-99	295 (SM490Y)
S-29R	-136	0	-136	295 (SM490Y)	-109	0	-109	295 (SM490Y)
S-30P7	-136	0	-136	295 (SM490Y)	-109	0	-109	295 (SM490Y)
S-30R	-133	0	-133	295 (SM490Y)	-106	0	-106	295 (SM490Y)
S-32L	-114	0	-114	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-32R	-72	0	-72	295 (SM490Y)	-56	0	-56	295 (SM490Y)
S-32R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-34L	48	0	48	295 (SM490Y)	39	0	39	295 (SM490Y)
S-34R	112	0	112	295 (SM490Y)	89	0	89	295 (SM490Y)
S-35R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-36P8	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-36P9	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-37L	164	0	164	295 (SM490Y)	132	0	132	295 (SM490Y)
S-38L	115	0	115	295 (SM490Y)	92	0	92	295 (SM490Y)
S-39L	-11	0	-11	295 (SM490Y)	-9	0	-9	295 (SM490Y)
S-39L	53	0	53	295 (SM490Y)	41	0	41	295 (SM490Y)
S-39R	-69	0	-69	295 (SM490Y)	-54	0	-54	295 (SM490Y)
S-39R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-40R	-107	0	-107	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-41R	-120	0	-120	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-42P10	-121	0	-121	295 (SM490Y)	-96	0	-96	295 (SM490Y)
S-42R	-120	0	-120	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-44L	-106	0	-106	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-44R	-69	0	-69	295 (SM490Y)	-54	0	-54	295 (SM490Y)
S-44R	1	0	1	295 (SM490Y)	1	0	1	295 (SM490Y)
S-46L	47	0	47	295 (SM490Y)	37	0	37	295 (SM490Y)
S-46R	109	0	109	295 (SM490Y)	86	0	86	295 (SM490Y)
S-47R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-48P11	185	0	185	295 (SM490Y)	150	0	150	295 (SM490Y)
S-48P12	185	0	185	295 (SM490Y)	150	0	150	295 (SM490Y)
S-49L	163	0	163	295 (SM490Y)	130	0	130	295 (SM490Y)
S-50L	107	0	107	295 (SM490Y)	85	0	85	295 (SM490Y)
S-51L	-19	0	-19	295 (SM490Y)	-14	0	-14	295 (SM490Y)
S-51L	48	0	48	295 (SM490Y)	37	0	37	295 (SM490Y)
S-51R	-76	0	-76	295 (SM490Y)	-59	0	-59	295 (SM490Y)
S-52R	-113	0	-113	295 (SM490Y)	-89	0	-89	295 (SM490Y)
S-53R	-128	0	-128	295 (SM490Y)	-102	0	-102	295 (SM490Y)
S-54P13	-128	0	-128	295 (SM490Y)	-103	0	-103	295 (SM490Y)
S-54R	-127	0	-127	295 (SM490Y)	-102	0	-102	295 (SM490Y)
S-56L	-115	0	-115	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-57L	-79	0	-79	295 (SM490Y)	-62	0	-62	295 (SM490Y)
S-58L	41	0	41	295 (SM490Y)	33	0	33	295 (SM490Y)
S-58R	100	0	100	295 (SM490Y)	79	0	79	295 (SM490Y)
S-59R	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-60P14	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-60P15	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-61L	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-62L	102	0	102	295 (SM490Y)	81	0	81	295 (SM490Y)
S-63L	-17	0	-17	295 (SM490Y)	-13	0	-13	295 (SM490Y)
S-63L	46	0	46	295 (SM490Y)	36	0	36	295 (SM490Y)
S-63R	-71	0	-71	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-63R	2	0	2	295 (SM490Y)	1	0	1	295 (SM490Y)
S-64R	-104	0	-104	295 (SM490Y)	-82	0	-82	295 (SM490Y)

S-65R	-116	0	-116	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-66P16	-116	0	-116	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-67L	-114	0	-114	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-68L	-94	0	-94	295 (SM490Y)	-73	0	-73	295 (SM490Y)
S-68R	-53	0	-53	295 (SM490Y)	-41	0	-41	295 (SM490Y)
S-68R	19	0	19	295 (SM490Y)	15	0	15	295 (SM490Y)
S-69R	70	0	70	295 (SM490Y)	55	0	55	295 (SM490Y)
S-70R	137	0	137	295 (SM490Y)	110	0	110	295 (SM490Y)
S-71R	167	0	167	295 (SM490Y)	134	0	134	295 (SM490Y)
S-72P17	187	0	187	295 (SM490Y)	152	0	152	295 (SM490Y)
S-72P18	187	0	187	295 (SM490Y)	152	0	152	295 (SM490Y)
S-73L	159	0	159	295 (SM490Y)	127	0	127	295 (SM490Y)
S-74L	118	0	118	295 (SM490Y)	94	0	94	295 (SM490Y)
S-75L	-30	0	-30	295 (SM490Y)	-24	0	-24	295 (SM490Y)
S-75L	41	0	41	295 (SM490Y)	33	0	33	295 (SM490Y)
S-75R	-95	0	-95	295 (SM490Y)	-75	0	-75	295 (SM490Y)
S-76R	-140	0	-140	295 (SM490Y)	-111	0	-111	295 (SM490Y)
S-77R	-159	0	-159	295 (SM490Y)	-128	0	-128	295 (SM490Y)
S-78P19	-165	0	-165	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-78R	-164	0	-164	295 (SM490Y)	-132	0	-132	295 (SM490Y)
S-80L	-155	0	-155	295 (SM490Y)	-123	0	-123	295 (SM490Y)
S-80R	-126	0	-126	295 (SM490Y)	-100	0	-100	295 (SM490Y)
S-82L	-69	0	-69	295 (SM490Y)	-53	0	-53	295 (SM490Y)
S-82R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)

*** Girder G-3**

Check Point	Top of Deck Plate (Top Flange)				Bottom Flange of Longi. Rib			
	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)
S-1L	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-1R	-73	0	-73	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-2R	-127	0	-127	295 (SM490Y)	-99	0	-99	295 (SM490Y)
S-3R	-164	0	-164	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-4R	-183	0	-183	295 (SM490Y)	-151	0	-151	295 (SM490Y)
S-5P1	-185	0	-185	295 (SM490Y)	-152	0	-152	295 (SM490Y)
S-5R	-184	0	-184	295 (SM490Y)	-151	0	-151	295 (SM490Y)
S-7L	-166	0	-166	295 (SM490Y)	-134	0	-134	295 (SM490Y)
S-8L	-139	0	-139	295 (SM490Y)	-110	0	-110	295 (SM490Y)
S-8R	-80	0	-80	295 (SM490Y)	-63	0	-63	295 (SM490Y)
S-10L	59	0	59	295 (SM490Y)	48	0	48	295 (SM490Y)
S-10R	149	0	149	295 (SM490Y)	122	0	122	295 (SM490Y)
S-11R	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-12P2	188	0	188	295 (SM490Y)	153	0	153	295 (SM490Y)
S-12P3	188	0	188	295 (SM490Y)	153	0	153	295 (SM490Y)
S-13L	169	0	169	295 (SM490Y)	136	0	136	295 (SM490Y)
S-14L	153	0	153	295 (SM490Y)	123	0	123	295 (SM490Y)
S-15L	83	0	83	295 (SM490Y)	66	0	66	295 (SM490Y)
S-16L	-40	0	-40	295 (SM490Y)	-31	0	-31	295 (SM490Y)
S-16L	34	0	34	295 (SM490Y)	26	0	26	295 (SM490Y)
S-16R	-84	0	-84	295 (SM490Y)	-66	0	-66	295 (SM490Y)
S-17R	-108	0	-108	295 (SM490Y)	-85	0	-85	295 (SM490Y)
S-18P4	-112	0	-112	295 (SM490Y)	-88	0	-88	295 (SM490Y)
S-18R	-112	0	-112	295 (SM490Y)	-88	0	-88	295 (SM490Y)
S-20L	-100	0	-100	295 (SM490Y)	-78	0	-78	295 (SM490Y)
S-20R	-67	0	-67	295 (SM490Y)	-52	0	-52	295 (SM490Y)
S-20R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-22L	44	0	44	295 (SM490Y)	35	0	35	295 (SM490Y)
S-22R	100	0	100	295 (SM490Y)	80	0	80	295 (SM490Y)
S-23R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)

S-24P5	186	0	186	295 (SM490Y)	152	0	152	295 (SM490Y)
S-24P6	186	0	186	295 (SM490Y)	152	0	152	295 (SM490Y)
S-25L	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-26L	98	0	98	295 (SM490Y)	78	0	78	295 (SM490Y)
S-27L	40	0	40	295 (SM490Y)	31	0	31	295 (SM490Y)
S-27R	-87	0	-87	295 (SM490Y)	-69	0	-69	295 (SM490Y)
S-28R	-123	0	-123	295 (SM490Y)	-99	0	-99	295 (SM490Y)
S-29R	-136	0	-136	295 (SM490Y)	-109	0	-109	295 (SM490Y)
S-30P7	-136	0	-136	295 (SM490Y)	-109	0	-109	295 (SM490Y)
S-30R	-133	0	-133	295 (SM490Y)	-106	0	-106	295 (SM490Y)
S-32L	-114	0	-114	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-32R	-72	0	-72	295 (SM490Y)	-56	0	-56	295 (SM490Y)
S-32R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-34L	48	0	48	295 (SM490Y)	39	0	39	295 (SM490Y)
S-34R	112	0	112	295 (SM490Y)	89	0	89	295 (SM490Y)
S-35R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-36P8	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-36P9	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-37L	164	0	164	295 (SM490Y)	132	0	132	295 (SM490Y)
S-38L	115	0	115	295 (SM490Y)	92	0	92	295 (SM490Y)
S-39L	-11	0	-11	295 (SM490Y)	-9	0	-9	295 (SM490Y)
S-39L	53	0	53	295 (SM490Y)	41	0	41	295 (SM490Y)
S-39R	-69	0	-69	295 (SM490Y)	-54	0	-54	295 (SM490Y)
S-39R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-40R	-107	0	-107	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-41R	-120	0	-120	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-42P10	-121	0	-121	295 (SM490Y)	-96	0	-96	295 (SM490Y)
S-42R	-120	0	-120	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-44L	-106	0	-106	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-44R	-69	0	-69	295 (SM490Y)	-54	0	-54	295 (SM490Y)
S-44R	1	0	1	295 (SM490Y)	1	0	1	295 (SM490Y)
S-46L	47	0	47	295 (SM490Y)	37	0	37	295 (SM490Y)
S-46R	109	0	109	295 (SM490Y)	86	0	86	295 (SM490Y)
S-47R	163	0	163	295 (SM490Y)	131	0	131	295 (SM490Y)
S-48P11	185	0	185	295 (SM490Y)	150	0	150	295 (SM490Y)
S-48P12	185	0	185	295 (SM490Y)	150	0	150	295 (SM490Y)
S-49L	163	0	163	295 (SM490Y)	130	0	130	295 (SM490Y)
S-50L	107	0	107	295 (SM490Y)	85	0	85	295 (SM490Y)
S-51L	-19	0	-19	295 (SM490Y)	-14	0	-14	295 (SM490Y)
S-51L	48	0	48	295 (SM490Y)	37	0	37	295 (SM490Y)
S-51R	-76	0	-76	295 (SM490Y)	-59	0	-59	295 (SM490Y)
S-52R	-113	0	-113	295 (SM490Y)	-89	0	-89	295 (SM490Y)
S-53R	-128	0	-128	295 (SM490Y)	-102	0	-102	295 (SM490Y)
S-54P13	-128	0	-128	295 (SM490Y)	-103	0	-103	295 (SM490Y)
S-54R	-127	0	-127	295 (SM490Y)	-102	0	-102	295 (SM490Y)
S-56L	-115	0	-115	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-57L	-79	0	-79	295 (SM490Y)	-62	0	-62	295 (SM490Y)
S-58L	41	0	41	295 (SM490Y)	33	0	33	295 (SM490Y)
S-58R	100	0	100	295 (SM490Y)	79	0	79	295 (SM490Y)
S-59R	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-60P14	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-60P15	184	0	184	295 (SM490Y)	150	0	150	295 (SM490Y)
S-61L	161	0	161	295 (SM490Y)	129	0	129	295 (SM490Y)
S-62L	102	0	102	295 (SM490Y)	81	0	81	295 (SM490Y)
S-63L	-17	0	-17	295 (SM490Y)	-13	0	-13	295 (SM490Y)
S-63L	46	0	46	295 (SM490Y)	36	0	36	295 (SM490Y)
S-63R	-71	0	-71	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-63R	2	0	2	295 (SM490Y)	1	0	1	295 (SM490Y)
S-64R	-104	0	-104	295 (SM490Y)	-82	0	-82	295 (SM490Y)
S-65R	-116	0	-116	295 (SM490Y)	-92	0	-92	295 (SM490Y)

S-66P16	-116	0	-116	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-67L	-114	0	-114	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-68L	-94	0	-94	295 (SM490Y)	-73	0	-73	295 (SM490Y)
S-68R	-53	0	-53	295 (SM490Y)	-41	0	-41	295 (SM490Y)
S-68R	19	0	19	295 (SM490Y)	15	0	15	295 (SM490Y)
S-69R	70	0	70	295 (SM490Y)	55	0	55	295 (SM490Y)
S-70R	137	0	137	295 (SM490Y)	110	0	110	295 (SM490Y)
S-71R	167	0	167	295 (SM490Y)	134	0	134	295 (SM490Y)
S-72P17	187	0	187	295 (SM490Y)	152	0	152	295 (SM490Y)
S-72P18	187	0	187	295 (SM490Y)	152	0	152	295 (SM490Y)
S-73L	159	0	159	295 (SM490Y)	127	0	127	295 (SM490Y)
S-74L	118	0	118	295 (SM490Y)	94	0	94	295 (SM490Y)
S-75L	-30	0	-30	295 (SM490Y)	-24	0	-24	295 (SM490Y)
S-75L	41	0	41	295 (SM490Y)	33	0	33	295 (SM490Y)
S-75R	-95	0	-95	295 (SM490Y)	-75	0	-75	295 (SM490Y)
S-76R	-140	0	-140	295 (SM490Y)	-111	0	-111	295 (SM490Y)
S-77R	-159	0	-159	295 (SM490Y)	-128	0	-128	295 (SM490Y)
S-78P19	-165	0	-165	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-78R	-164	0	-164	295 (SM490Y)	-132	0	-132	295 (SM490Y)
S-80L	-155	0	-155	295 (SM490Y)	-123	0	-123	295 (SM490Y)
S-80R	-126	0	-126	295 (SM490Y)	-100	0	-100	295 (SM490Y)
S-82L	-69	0	-69	295 (SM490Y)	-53	0	-53	295 (SM490Y)
S-82R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)

*** Girder G-4**

Check Point	Top of Deck Plate (Top Flange)				Bottom Flange of Longi. Rib			
	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)	σ_m	σ_f	$\Sigma \sigma$	σ_a (Mat.)
S-1L	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)
S-1R	-79	0	-79	295 (SM490Y)	-60	0	-60	295 (SM490Y)
S-2R	-131	0	-131	295 (SM490Y)	-104	0	-104	295 (SM490Y)
S-3R	-164	0	-164	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-4R	-179	0	-179	295 (SM490Y)	-146	0	-146	295 (SM490Y)
S-5P1	-179	0	-179	295 (SM490Y)	-147	0	-147	295 (SM490Y)
S-5R	-177	0	-177	295 (SM490Y)	-145	0	-145	295 (SM490Y)
S-7L	-164	0	-164	295 (SM490Y)	-133	0	-133	295 (SM490Y)
S-8L	-135	0	-135	295 (SM490Y)	-105	0	-105	295 (SM490Y)
S-9L	-78	0	-78	295 (SM490Y)	-59	0	-59	295 (SM490Y)
S-10L	51	0	51	295 (SM490Y)	39	0	39	295 (SM490Y)
S-10R	133	0	133	295 (SM490Y)	104	0	104	295 (SM490Y)
S-11R	155	0	155	295 (SM490Y)	122	0	122	295 (SM490Y)
S-12P2	182	0	182	295 (SM490Y)	147	0	147	295 (SM490Y)
S-12P3	182	0	182	295 (SM490Y)	147	0	147	295 (SM490Y)
S-13L	164	0	164	295 (SM490Y)	131	0	131	295 (SM490Y)
S-14L	136	0	136	295 (SM490Y)	108	0	108	295 (SM490Y)
S-15L	75	0	75	295 (SM490Y)	57	0	57	295 (SM490Y)
S-16L	-35	0	-35	295 (SM490Y)	-27	0	-27	295 (SM490Y)
S-16L	29	0	29	295 (SM490Y)	22	0	22	295 (SM490Y)
S-16R	-74	0	-74	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-17R	-97	0	-97	295 (SM490Y)	-73	0	-73	295 (SM490Y)
S-18R	-101	0	-101	295 (SM490Y)	-77	0	-77	295 (SM490Y)
S-19P4	-100	0	-100	295 (SM490Y)	-77	0	-77	295 (SM490Y)
S-20L	-92	0	-92	295 (SM490Y)	-71	0	-71	295 (SM490Y)
S-20R	-62	0	-62	295 (SM490Y)	-48	0	-48	295 (SM490Y)
S-20R	4	0	4	295 (SM490Y)	3	0	3	295 (SM490Y)
S-22L	40	0	40	295 (SM490Y)	31	0	31	295 (SM490Y)
S-22R	91	0	91	295 (SM490Y)	69	0	69	295 (SM490Y)
S-23R	153	0	153	295 (SM490Y)	121	0	121	295 (SM490Y)
S-24P5	175	0	175	295 (SM490Y)	141	0	141	295 (SM490Y)

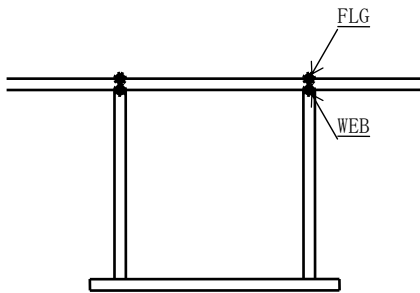
S-24P6	175	0	175	295 (SM490Y)	141	0	141	295 (SM490Y)
S-25L	152	0	152	295 (SM490Y)	120	0	120	295 (SM490Y)
S-26L	85	0	85	295 (SM490Y)	64	0	64	295 (SM490Y)
S-27L	-23	0	-23	295 (SM490Y)	-17	0	-17	295 (SM490Y)
S-27L	32	0	32	295 (SM490Y)	23	0	23	295 (SM490Y)
S-27R	-70	0	-70	295 (SM490Y)	-51	0	-51	295 (SM490Y)
S-28R	-104	0	-104	295 (SM490Y)	-77	0	-77	295 (SM490Y)
S-30L	-117	0	-117	295 (SM490Y)	-90	0	-90	295 (SM490Y)
S-30P7	-119	0	-119	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-30R	-118	0	-118	295 (SM490Y)	-91	0	-91	295 (SM490Y)
S-31R	-102	0	-102	295 (SM490Y)	-79	0	-79	295 (SM490Y)
S-33L	-68	0	-68	295 (SM490Y)	-51	0	-51	295 (SM490Y)
S-34L	43	0	43	295 (SM490Y)	33	0	33	295 (SM490Y)
S-34R	102	0	102	295 (SM490Y)	78	0	78	295 (SM490Y)
S-35R	159	0	159	295 (SM490Y)	126	0	126	295 (SM490Y)
S-36P8	179	0	179	295 (SM490Y)	145	0	145	295 (SM490Y)
S-36P9	179	0	179	295 (SM490Y)	145	0	145	295 (SM490Y)
S-37L	158	0	158	295 (SM490Y)	125	0	125	295 (SM490Y)
S-38L	102	0	102	295 (SM490Y)	77	0	77	295 (SM490Y)
S-39L	-11	0	-11	295 (SM490Y)	-8	0	-8	295 (SM490Y)
S-39L	44	0	44	295 (SM490Y)	32	0	32	295 (SM490Y)
S-39R	-65	0	-65	295 (SM490Y)	-47	0	-47	295 (SM490Y)
S-39R	2	0	2	295 (SM490Y)	1	0	1	295 (SM490Y)
S-40R	-100	0	-100	295 (SM490Y)	-76	0	-76	295 (SM490Y)
S-41R	-115	0	-115	295 (SM490Y)	-91	0	-91	295 (SM490Y)
S-42P10	-117	0	-117	295 (SM490Y)	-92	0	-92	295 (SM490Y)
S-42R	-116	0	-116	295 (SM490Y)	-91	0	-91	295 (SM490Y)
S-44L	-102	0	-102	295 (SM490Y)	-79	0	-79	295 (SM490Y)
S-45L	-67	0	-67	295 (SM490Y)	-50	0	-50	295 (SM490Y)
S-45L	1	0	1	295 (SM490Y)	0	0	0	295 (SM490Y)
S-46L	42	0	42	295 (SM490Y)	32	0	32	295 (SM490Y)
S-46R	99	0	99	295 (SM490Y)	76	0	76	295 (SM490Y)
S-47R	156	0	156	295 (SM490Y)	123	0	123	295 (SM490Y)
S-48P11	177	0	177	295 (SM490Y)	142	0	142	295 (SM490Y)
S-48P12	177	0	177	295 (SM490Y)	142	0	142	295 (SM490Y)
S-49L	155	0	155	295 (SM490Y)	122	0	122	295 (SM490Y)
S-50L	99	0	99	295 (SM490Y)	75	0	75	295 (SM490Y)
S-51L	-17	0	-17	295 (SM490Y)	-13	0	-13	295 (SM490Y)
S-51L	42	0	42	295 (SM490Y)	32	0	32	295 (SM490Y)
S-51R	-70	0	-70	295 (SM490Y)	-53	0	-53	295 (SM490Y)
S-52R	-106	0	-106	295 (SM490Y)	-82	0	-82	295 (SM490Y)
S-53R	-120	0	-120	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-54P13	-122	0	-122	295 (SM490Y)	-96	0	-96	295 (SM490Y)
S-54R	-121	0	-121	295 (SM490Y)	-95	0	-95	295 (SM490Y)
S-56L	-107	0	-107	295 (SM490Y)	-83	0	-83	295 (SM490Y)
S-57L	-73	0	-73	295 (SM490Y)	-55	0	-55	295 (SM490Y)
S-58L	35	0	35	295 (SM490Y)	27	0	27	295 (SM490Y)
S-58R	90	0	90	295 (SM490Y)	68	0	68	295 (SM490Y)
S-59R	152	0	152	295 (SM490Y)	120	0	120	295 (SM490Y)
S-60P14	175	0	175	295 (SM490Y)	141	0	141	295 (SM490Y)
S-60P15	175	0	175	295 (SM490Y)	141	0	141	295 (SM490Y)
S-61L	153	0	153	295 (SM490Y)	121	0	121	295 (SM490Y)
S-62L	94	0	94	295 (SM490Y)	72	0	72	295 (SM490Y)
S-63L	-16	0	-16	295 (SM490Y)	-12	0	-12	295 (SM490Y)
S-63L	41	0	41	295 (SM490Y)	31	0	31	295 (SM490Y)
S-63R	-63	0	-63	295 (SM490Y)	-47	0	-47	295 (SM490Y)
S-63R	1	0	1	295 (SM490Y)	1	0	1	295 (SM490Y)
S-64R	-95	0	-95	295 (SM490Y)	-71	0	-71	295 (SM490Y)
S-65R	-105	0	-105	295 (SM490Y)	-81	0	-81	295 (SM490Y)
S-66P16	-105	0	-105	295 (SM490Y)	-81	0	-81	295 (SM490Y)

S-66R	-103	0	-103	295 (SM490Y)	-79	0	-79	295 (SM490Y)
S-68L	-84	0	-84	295 (SM490Y)	-64	0	-64	295 (SM490Y)
S-69L	-48	0	-48	295 (SM490Y)	-35	0	-35	295 (SM490Y)
S-69L	15	0	15	295 (SM490Y)	11	0	11	295 (SM490Y)
S-69R	58	0	58	295 (SM490Y)	42	0	42	295 (SM490Y)
S-70R	119	0	119	295 (SM490Y)	91	0	91	295 (SM490Y)
S-71R	154	0	154	295 (SM490Y)	121	0	121	295 (SM490Y)
S-72P17	174	0	174	295 (SM490Y)	140	0	140	295 (SM490Y)
S-72P18	174	0	174	295 (SM490Y)	140	0	140	295 (SM490Y)
S-73L	147	0	147	295 (SM490Y)	115	0	115	295 (SM490Y)
S-74L	103	0	103	295 (SM490Y)	78	0	78	295 (SM490Y)
S-75L	-27	0	-27	295 (SM490Y)	-20	0	-20	295 (SM490Y)
S-75L	34	0	34	295 (SM490Y)	25	0	25	295 (SM490Y)
S-75R	-87	0	-87	295 (SM490Y)	-65	0	-65	295 (SM490Y)
S-76R	-132	0	-132	295 (SM490Y)	-102	0	-102	295 (SM490Y)
S-77R	-155	0	-155	295 (SM490Y)	-124	0	-124	295 (SM490Y)
S-78P19	-162	0	-162	295 (SM490Y)	-131	0	-131	295 (SM490Y)
S-78R	-162	0	-162	295 (SM490Y)	-131	0	-131	295 (SM490Y)
S-80L	-151	0	-151	295 (SM490Y)	-120	0	-120	295 (SM490Y)
S-81L	-122	0	-122	295 (SM490Y)	-93	0	-93	295 (SM490Y)
S-82L	-63	0	-63	295 (SM490Y)	-46	0	-46	295 (SM490Y)
S-82R	0	0	0	295 (SM490Y)	0	0	0	295 (SM490Y)

5-7 Biaxial Stress Check of Cross Beam

§ 6 Check of biaxial stress

Calculation procedure of converted stress



Checking location is shown by black dot in the sketch above.

Maximum value of checking result is output, based on checking of right & left sides of node point respectively, and of positive & negative stress respectively.

6 - 1 Results

Biaxial calculation formula

$$K = \left(\frac{\sigma_x}{\sigma_a} \right)^2 - \left(\frac{\sigma_x}{\sigma_a} \right) * \left(\frac{\sigma_y}{\sigma_a} \right) + \left(\frac{\sigma_y}{\sigma_a} \right)^2 + \left(\frac{\tau}{\tau_a} \right)^2 \leq 1.2$$

σ_x : normal stress of main girder (N/mm²) τ_x : shear stress of main girder (N/mm²)
 σ_y : normal stress of cross beam (N/mm²) τ_y : shear stress of cross beam (N/mm²)
 σ_a : allowable tensile stress of main girder (N/mm²) τ_a : allowable shear stress of main girder or cross beam (N/mm²)

Where, by checking location

FLG point $\left(\frac{\tau}{\tau_a} \right) = \left(\frac{\tau_x}{\tau_{xa}} \right)$

WEB point $\left(\frac{\tau}{\tau_a} \right) = \text{Max} \left(\frac{\tau_x}{\tau_{xa}}, \left(\frac{\tau_y}{\text{Max}(\tau_{xa}, \tau_{ya})} \right) \right)$

(1) Main girder G-1 Web name : LWEB(UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	10	210	24	0	120	0.04
			WEB	0	9	210	54	22	120	0.21
	2	2	FLG	-77	10	210	19	0	120	0.18
			WEB	-76	9	210	41	22	120	0.26
	3	3	FLG	-126	10	210	15	0	120	0.40
			WEB	-124	9	210	31	22	145	0.42
	4	4	FLG	-155	10	210	12	0	120	0.59
			WEB	-154	9	210	23	22	145	0.59
	5	5	FLG	-170	10	210	8	0	120	0.70
			WEB	-168	9	210	14	22	145	0.70
	6	6	FLG	-168	10	210	9	0	120	0.68
			WEB	-166	9	210	18	22	145	0.68
	7	7	FLG	-153	10	210	12	0	120	0.57
			WEB	-151	9	210	26	22	145	0.58
	8	8	FLG	-120	10	210	17	0	120	0.37
			WEB	-118	9	210	37	22	145	0.41
	9	9	FLG	-64	10	210	22	0	120	0.14
			WEB	-63	9	210	49	22	120	0.27
	10	10	FLG	55	0	210	24	0	120	0.11
			WEB	54	0	210	53	0	145	0.20
11	11	FLG	95	0	210	17	0	120	0.23	
		WEB	93	0	210	65	0	145	0.40	
Int. sup.	12	12	FLG	171	0	210	19	0	120	0.69
			WEB	167	0	210	56	0	145	0.78
13	13	FLG	118	0	210	16	0	120	0.33	
		WEB	115	0	210	59	0	145	0.47	
14	14	FLG	106	0	210	23	0	120	0.29	
		WEB	105	0	210	50	0	120	0.42	
15	15	FLG	50	0	210	19	0	120	0.08	
		WEB	49	0	210	42	0	120	0.18	
16	16	FLG	-47	10	210	15	0	120	0.08	
		WEB	-46	9	210	33	22	120	0.13	
17	17	FLG	-77	10	210	11	0	120	0.16	
		WEB	-76	9	210	24	22	120	0.19	
18	18	FLG	-92	10	210	8	0	120	0.22	
		WEB	-91	9	210	13	22	120	0.24	
19	19	FLG	-90	10	210	9	0	120	0.21	
		WEB	-89	9	210	18	22	120	0.23	
20	20	FLG	-71	10	210	12	0	120	0.14	
		WEB	-70	9	210	27	22	120	0.18	
21	21	FLG	-32	10	210	17	0	120	0.05	
		WEB	-31	9	210	37	22	120	0.12	
22	22	FLG	66	0	210	21	0	120	0.13	
		WEB	65	0	210	46	0	120	0.25	
23	23	FLG	103	0	210	20	0	120	0.27	
		WEB	101	0	210	54	0	145	0.37	
Int. sup.	24	24	FLG	165	0	210	24	0	120	0.65
			WEB	162	0	210	64	0	145	0.79
25	25	FLG	99	0	210	21	0	120	0.26	
		WEB	98	0	210	56	0	145	0.37	
26	26	FLG	58	0	210	23	0	120	0.11	
		WEB	58	0	210	48	0	145	0.19	
27	27	FLG	-37	10	210	18	0	120	0.07	
		WEB	-37	9	210	39	22	120	0.15	
28	28	FLG	-76	10	210	14	0	120	0.16	
		WEB	-75	9	210	30	22	145	0.19	

	29	29	FLG	-100	10	210	10	0	120	0.26
			WEB	-98	9	210	18	22	145	0.27
	30	30	FLG	-110	10	210	7	0	120	0.30
			WEB	-109	9	210	13	22	145	0.32
	31	31	FLG	-102	10	210	10	0	120	0.27
			WEB	-101	9	210	21	22	145	0.28
	32	32	FLG	-76	10	210	14	0	120	0.16
			WEB	-75	9	210	30	22	120	0.21
	33	33	FLG	-32	10	210	18	0	120	0.06
			WEB	-31	9	210	41	22	120	0.15
	34	34	FLG	74	0	210	23	0	120	0.16
			WEB	72	0	210	51	0	120	0.30
	35	35	FLG	108	0	210	20	0	120	0.29
			WEB	106	0	210	59	0	145	0.42
Int. sup.	36	36	FLG	168	0	210	22	0	120	0.68
			WEB	166	0	210	57	0	145	0.78
	37	37	FLG	107	0	210	20	0	120	0.29
			WEB	105	0	210	58	0	145	0.41
	38	38	FLG	73	0	210	24	0	120	0.16
			WEB	72	0	210	50	0	120	0.29
	39	39	FLG	-28	10	210	19	0	120	0.05
			WEB	-28	9	210	42	22	120	0.14
	40	40	FLG	-71	10	210	14	0	120	0.15
			WEB	-70	9	210	31	22	120	0.20
	41	41	FLG	-99	10	210	10	0	120	0.25
			WEB	-97	9	210	20	22	120	0.27
	42	42	FLG	-109	10	210	7	0	120	0.30
			WEB	-108	9	210	12	22	120	0.32
	43	43	FLG	-101	10	210	10	0	120	0.26
			WEB	-99	9	210	21	22	120	0.28
	44	44	FLG	-75	10	210	14	0	120	0.16
			WEB	-74	9	210	31	22	120	0.21
	45	45	FLG	-31	10	210	18	0	120	0.05
			WEB	-31	9	210	41	22	120	0.14
	46	46	FLG	72	0	210	23	0	120	0.15
			WEB	71	0	210	50	0	145	0.23
	47	47	FLG	105	0	210	20	0	120	0.28
			WEB	104	0	210	59	0	145	0.41
Int. sup.	48	48	FLG	166	0	210	22	0	120	0.66
			WEB	163	0	210	57	0	145	0.76
	49	49	FLG	104	0	210	20	0	120	0.28
			WEB	103	0	210	58	0	145	0.40
	50	50	FLG	70	0	210	24	0	120	0.15
			WEB	69	0	210	51	0	120	0.29
	51	51	FLG	-35	10	210	19	0	120	0.06
			WEB	-34	9	210	41	22	120	0.15
	52	52	FLG	-79	10	210	14	0	120	0.17
			WEB	-77	9	210	30	22	120	0.22
	53	53	FLG	-104	10	210	10	0	120	0.28
			WEB	-103	9	210	19	22	120	0.30
	54	54	FLG	-114	10	210	7	0	120	0.32
			WEB	-112	9	210	12	22	120	0.35
	55	55	FLG	-105	10	210	10	0	120	0.28
			WEB	-104	9	210	21	22	120	0.30
	56	56	FLG	-80	10	210	14	0	120	0.18
			WEB	-79	9	210	30	22	120	0.22
	57	57	FLG	-38	10	210	18	0	120	0.07
			WEB	-38	9	210	40	22	120	0.15
	58	58	FLG	63	0	210	23	0	120	0.13
			WEB	62	0	210	50	0	120	0.26

	59	59	FLG	101	0	210	21	0	120	0.26
			WEB	99	0	210	58	0	145	0.38
Int. sup.	60	60	FLG	164	0	210	23	0	120	0.65
			WEB	162	0	210	66	0	145	0.80
	61	61	FLG	103	0	210	20	0	120	0.27
			WEB	102	0	210	56	0	145	0.38
	62	62	FLG	68	0	210	22	0	120	0.14
			WEB	67	0	210	48	0	145	0.21
	63	63	FLG	-31	10	210	18	0	120	0.05
			WEB	-31	9	210	38	22	120	0.13
	64	64	FLG	-71	10	210	13	0	120	0.14
			WEB	-70	9	210	28	22	120	0.18
	65	65	FLG	-92	10	210	9	0	120	0.22
			WEB	-90	9	210	17	22	120	0.24
	66	66	FLG	-98	10	210	7	0	120	0.24
			WEB	-96	9	210	14	22	120	0.27
	67	67	FLG	-86	10	210	10	0	120	0.19
			WEB	-85	9	210	22	22	120	0.22
	68	68	FLG	-57	10	210	14	0	120	0.10
			WEB	-56	9	210	32	22	120	0.15
	69	69	FLG	34	0	210	19	0	120	0.05
			WEB	34	0	210	42	0	120	0.15
	70	70	FLG	89	0	210	23	0	120	0.22
			WEB	87	0	210	51	0	145	0.30
	71	71	FLG	107	0	210	17	0	120	0.28
			WEB	105	0	210	59	0	145	0.42
Int. sup.	72	72	FLG	164	0	210	19	0	120	0.63
			WEB	160	0	210	70	0	145	0.82
	73	73	FLG	90	0	210	17	0	120	0.20
			WEB	88	0	210	60	0	145	0.35
	74	74	FLG	51	0	210	23	0	120	0.10
			WEB	50	0	210	50	0	145	0.18
	75	75	FLG	-59	10	210	19	0	120	0.12
			WEB	-58	9	210	42	22	120	0.21
	76	76	FLG	-107	10	210	15	0	120	0.30
			WEB	-105	9	210	33	22	145	0.33
	77	77	FLG	-137	10	210	11	0	120	0.47
			WEB	-136	9	210	23	22	145	0.47
	78	78	FLG	-152	10	210	7	0	120	0.56
			WEB	-150	9	210	13	22	145	0.56
	79	79	FLG	-147	10	210	10	0	120	0.53
			WEB	-146	9	210	16	22	145	0.54
	80	80	FLG	-123	10	210	14	0	120	0.38
			WEB	-121	9	210	29	22	145	0.40
	81	81	FLG	-82	10	210	19	0	120	0.20
			WEB	-81	9	210	40	22	145	0.24
End. sup.	82	82	FLG	0	10	210	24	0	120	0.04
			WEB	0	9	210	53	22	120	0.20

(2) Main girder G-1 Web name : RWEB(UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	-54	210	31	0	120	0.13
			WEB	0	53	210	55	24	120	0.28
	2	2	FLG	-81	22	210	24	0	120	0.24
			WEB	-80	21	210	42	8	120	0.32
	3	3	FLG	-132	22	210	18	0	120	0.49
			WEB	-130	21	210	32	8	145	0.51
	4	4	FLG	-163	26	210	14	0	120	0.73
			WEB	-161	26	210	24	12	145	0.72
	5	5	FLG	-178	26	210	9	0	120	0.84
			WEB	-175	26	210	14	12	145	0.82
	6	6	FLG	-174	30	210	11	0	120	0.84
			WEB	-172	30	210	19	14	145	0.82
	7	7	FLG	-160	22	210	16	0	120	0.68
			WEB	-158	21	210	27	8	145	0.68
	8	8	FLG	-127	26	210	22	0	120	0.49
			WEB	-125	26	210	38	12	145	0.51
	9	9	FLG	-68	34	210	27	0	120	0.24
			WEB	-67	34	210	50	14	120	0.35
	10	10	FLG	58	-30	210	30	0	120	0.20
			WEB	57	-30	210	55	14	145	0.28
11	11	FLG	101	-16	210	23	0	120	0.31	
		WEB	98	-16	210	68	12	145	0.48	
Int. sup.	12	12	FLG	180	-23	210	26	0	120	0.88
			WEB	176	-22	210	58	19	145	0.96
13	13	FLG	124	-16	210	21	0	120	0.43	
		WEB	121	-16	210	62	12	145	0.57	
14	14	FLG	112	-26	210	29	0	120	0.43	
		WEB	110	-26	210	51	12	120	0.54	
15	15	FLG	53	-30	210	24	0	120	0.16	
		WEB	52	-30	210	43	14	120	0.24	
16	16	FLG	-50	34	210	19	0	120	0.14	
		WEB	-49	34	210	33	14	120	0.19	
17	17	FLG	-83	34	210	14	0	120	0.26	
		WEB	-81	34	210	24	14	120	0.28	
18	18	FLG	-98	34	210	10	0	120	0.33	
		WEB	-96	34	210	16	14	120	0.33	
19	19	FLG	-96	30	210	10	0	120	0.30	
		WEB	-94	30	210	18	14	120	0.31	
20	20	FLG	-75	30	210	15	0	120	0.22	
		WEB	-74	30	210	27	14	120	0.25	
21	21	FLG	-34	30	210	21	0	120	0.10	
		WEB	-33	30	210	37	14	120	0.17	
22	22	FLG	70	-26	210	27	0	120	0.22	
		WEB	69	-26	210	47	12	120	0.32	
23	23	FLG	109	-18	210	26	0	120	0.37	
		WEB	107	-18	210	56	8	145	0.46	
Int. sup.	24	24	FLG	173	-29	210	31	0	120	0.88
			WEB	170	-29	210	66	16	145	1.00
25	25	FLG	105	-18	210	27	0	120	0.35	
		WEB	103	-18	210	58	8	145	0.45	
26	26	FLG	62	-26	210	28	0	120	0.19	
		WEB	61	-26	210	49	12	145	0.25	
27	27	FLG	-40	34	210	22	0	120	0.13	
		WEB	-39	34	210	39	14	120	0.20	
28	28	FLG	-81	26	210	17	0	120	0.23	
		WEB	-80	26	210	30	8	145	0.25	

	29	29	FLG	-106	34	210	12	0	120	0.37
			WEB	-104	34	210	21	14	145	0.37
	30	30	FLG	-117	34	210	8	0	120	0.43
			WEB	-115	34	210	13	14	145	0.42
	31	31	FLG	-108	30	210	12	0	120	0.37
			WEB	-107	30	210	21	14	145	0.37
	32	32	FLG	-81	30	210	17	0	120	0.24
			WEB	-79	30	210	31	14	120	0.28
	33	33	FLG	-34	30	210	23	0	120	0.11
			WEB	-33	30	210	41	14	120	0.19
	34	34	FLG	78	-26	210	29	0	120	0.26
			WEB	77	-26	210	52	12	120	0.38
	35	35	FLG	114	-17	210	26	0	120	0.39
			WEB	111	-16	210	61	8	145	0.51
Int. sup.	36	36	FLG	177	-26	210	29	0	120	0.89
			WEB	174	-26	210	59	16	145	0.97
	37	37	FLG	113	-20	210	26	0	120	0.39
			WEB	111	-20	210	60	12	145	0.51
	38	38	FLG	78	-22	210	29	0	120	0.25
			WEB	77	-21	210	51	8	120	0.36
	39	39	FLG	-30	34	210	23	0	120	0.11
			WEB	-30	34	210	42	14	120	0.19
	40	40	FLG	-76	24	210	18	0	120	0.21
			WEB	-75	23	210	32	8	120	0.25
	41	41	FLG	-104	30	210	12	0	120	0.35
			WEB	-103	30	210	22	14	120	0.36
	42	42	FLG	-115	30	210	8	0	120	0.41
			WEB	-114	30	210	12	14	120	0.40
	43	43	FLG	-106	30	210	12	0	120	0.36
			WEB	-105	30	210	21	14	120	0.37
	44	44	FLG	-80	34	210	18	0	120	0.25
			WEB	-79	34	210	31	14	120	0.29
	45	45	FLG	-34	34	210	23	0	120	0.11
			WEB	-33	34	210	41	14	120	0.19
	46	46	FLG	76	-26	210	29	0	120	0.25
			WEB	75	-26	210	51	12	145	0.31
	47	47	FLG	111	-20	210	26	0	120	0.39
			WEB	109	-20	210	61	12	145	0.51
Int. sup.	48	48	FLG	174	-26	210	29	0	120	0.87
			WEB	171	-26	210	59	16	145	0.95
	49	49	FLG	110	-17	210	26	0	120	0.37
			WEB	108	-16	210	60	8	145	0.49
	50	50	FLG	75	-26	210	29	0	120	0.25
			WEB	74	-26	210	51	12	120	0.37
	51	51	FLG	-37	30	210	23	0	120	0.11
			WEB	-36	30	210	41	14	120	0.19
	52	52	FLG	-83	34	210	17	0	120	0.27
			WEB	-82	34	210	31	14	120	0.31
	53	53	FLG	-110	30	210	12	0	120	0.38
			WEB	-108	30	210	21	14	120	0.39
	54	54	FLG	-120	30	210	8	0	120	0.44
			WEB	-118	30	210	12	14	120	0.43
	55	55	FLG	-111	30	210	12	0	120	0.39
			WEB	-109	30	210	21	14	120	0.40
	56	56	FLG	-85	34	210	17	0	120	0.28
			WEB	-84	34	210	31	14	120	0.32
	57	57	FLG	-41	34	210	22	0	120	0.13
			WEB	-40	34	210	40	14	120	0.21
	58	58	FLG	67	-26	210	28	0	120	0.21
			WEB	66	-26	210	51	12	120	0.33

	59	59	FLG	106	-21	210	27	0	120	0.37
			WEB	105	-21	210	60	12	145	0.48
Int. sup.	60	60	FLG	173	-28	210	30	0	120	0.87
			WEB	170	-27	210	69	16	145	1.00
	61	61	FLG	109	-17	210	26	0	120	0.37
			WEB	107	-17	210	58	8	145	0.47
	62	62	FLG	72	-26	210	28	0	120	0.23
			WEB	71	-26	210	49	12	145	0.28
	63	63	FLG	-34	30	210	21	0	120	0.10
			WEB	-33	30	210	38	14	120	0.17
	64	64	FLG	-76	34	210	16	0	120	0.23
			WEB	-74	34	210	29	14	120	0.27
	65	65	FLG	-97	34	210	11	0	120	0.32
			WEB	-96	34	210	19	14	120	0.33
	66	66	FLG	-103	30	210	8	0	120	0.34
			WEB	-102	30	210	14	14	120	0.34
	67	67	FLG	-91	34	210	13	0	120	0.30
			WEB	-89	34	210	23	14	120	0.31
	68	68	FLG	-60	34	210	18	0	120	0.18
			WEB	-59	34	210	32	14	120	0.22
	69	69	FLG	37	-30	210	23	0	120	0.12
			WEB	36	-30	210	42	14	120	0.20
	70	70	FLG	94	-22	210	29	0	120	0.32
			WEB	93	-21	210	52	8	145	0.38
	71	71	FLG	113	-14	210	22	0	120	0.36
			WEB	111	-14	210	62	8	145	0.50
Int. sup.	72	72	FLG	172	-22	210	26	0	120	0.82
			WEB	168	-22	210	73	16	145	0.99
	73	73	FLG	95	-17	210	22	0	120	0.28
			WEB	93	-16	210	63	12	145	0.43
	74	74	FLG	54	-30	210	29	0	120	0.18
			WEB	53	-30	210	51	14	145	0.24
	75	75	FLG	-63	24	210	23	0	120	0.18
			WEB	-62	23	210	42	8	120	0.26
	76	76	FLG	-113	24	210	19	0	120	0.39
			WEB	-112	23	210	34	8	145	0.41
	77	77	FLG	-145	30	210	14	0	120	0.61
			WEB	-143	30	210	24	14	145	0.61
	78	78	FLG	-159	26	210	9	0	120	0.69
			WEB	-157	26	210	15	12	145	0.68
	79	79	FLG	-155	26	210	11	0	120	0.66
			WEB	-153	26	210	19	12	145	0.65
	80	80	FLG	-129	30	210	17	0	120	0.51
			WEB	-127	30	210	30	14	145	0.52
	81	81	FLG	-87	34	210	23	0	120	0.31
			WEB	-86	34	210	41	14	145	0.34
End. sup.	82	82	FLG	0	-61	210	30	0	120	0.15
			WEB	0	60	210	54	26	120	0.28

(3) Main girder G-2 Web name : LWEB(UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	-54	210	33	0	120	0.14
			WEB	0	53	210	60	24	120	0.32
	2	2	FLG	-71	22	210	26	0	120	0.21
			WEB	-70	21	210	48	8	145	0.26
	3	3	FLG	-120	22	210	19	0	120	0.42
			WEB	-118	21	210	35	8	145	0.44
	4	4	FLG	-154	26	210	15	0	120	0.66
			WEB	-152	26	210	26	12	145	0.66
	5	5	FLG	-174	26	210	8	0	120	0.81
			WEB	-172	26	210	14	12	145	0.79
	6	6	FLG	-174	30	210	12	0	120	0.84
			WEB	-172	30	210	22	14	145	0.83
	7	7	FLG	-158	22	210	16	0	120	0.68
			WEB	-156	21	210	31	8	145	0.69
	8	8	FLG	-123	26	210	22	0	120	0.46
			WEB	-121	26	210	41	12	145	0.50
	9	9	FLG	-66	34	210	28	0	120	0.23
			WEB	-65	34	210	54	14	120	0.37
	10	10	FLG	64	-30	210	33	0	120	0.23
			WEB	63	-30	210	54	14	145	0.29
11	11	FLG	105	-16	210	24	0	120	0.33	
		WEB	102	-15	210	45	12	145	0.37	
Int. sup.	12	12	FLG	176	-22	210	26	0	120	0.85
			WEB	172	-22	210	49	19	145	0.88
13	13	FLG	125	-16	210	22	0	120	0.44	
		WEB	122	-15	210	41	12	145	0.46	
14	14	FLG	119	-26	210	33	0	120	0.48	
		WEB	117	-26	210	63	12	145	0.58	
15	15	FLG	56	-30	210	26	0	120	0.18	
		WEB	55	-30	210	50	14	120	0.30	
16	16	FLG	-53	34	210	21	0	120	0.16	
		WEB	-52	34	210	39	14	120	0.23	
17	17	FLG	-89	34	210	15	0	120	0.29	
		WEB	-87	34	210	28	14	120	0.32	
18	18	FLG	-103	34	210	9	0	120	0.35	
		WEB	-102	34	210	16	14	120	0.36	
19	19	FLG	-98	30	210	12	0	120	0.32	
		WEB	-96	30	210	22	14	120	0.33	
20	20	FLG	-75	30	210	17	0	120	0.22	
		WEB	-74	30	210	33	14	120	0.27	
21	21	FLG	-33	30	210	24	0	120	0.11	
		WEB	-33	30	210	45	14	120	0.21	
22	22	FLG	73	-26	210	29	0	120	0.24	
		WEB	72	-26	210	44	12	120	0.31	
23	23	FLG	115	-18	210	28	0	120	0.41	
		WEB	113	-18	210	50	8	145	0.46	
Int. sup.	24	24	FLG	174	-29	210	31	0	120	0.89
			WEB	171	-29	210	55	16	145	0.94
25	25	FLG	113	-18	210	29	0	120	0.40	
		WEB	112	-18	210	50	8	145	0.46	
26	26	FLG	70	-26	210	31	0	120	0.23	
		WEB	69	-26	210	58	12	145	0.32	
27	27	FLG	-48	34	210	26	0	120	0.16	
		WEB	-47	34	210	49	14	145	0.23	
28	28	FLG	-97	26	210	20	0	120	0.31	
		WEB	-96	26	210	37	8	120	0.37	

	29	29	FLG	-121	34	210	12	0	120	0.47
			WEB	-120	34	210	23	14	120	0.48
	30	30	FLG	-126	34	210	9	0	120	0.49
			WEB	-125	34	210	16	14	120	0.49
	31	31	FLG	-113	30	210	14	0	120	0.40
			WEB	-111	30	210	26	14	120	0.42
	32	32	FLG	-83	30	210	20	0	120	0.26
			WEB	-82	30	210	37	14	120	0.32
	33	33	FLG	-34	30	210	25	0	120	0.12
			WEB	-33	30	210	49	14	120	0.23
	34	34	FLG	82	-26	210	31	0	120	0.28
			WEB	81	-26	210	59	12	120	0.45
	35	35	FLG	116	-16	210	26	0	120	0.40
			WEB	113	-16	210	68	8	145	0.56
Int. sup.	36	36	FLG	172	-25	210	28	0	120	0.84
			WEB	169	-25	210	63	16	145	0.94
	37	37	FLG	117	-19	210	25	0	120	0.41
			WEB	115	-19	210	65	12	145	0.56
	38	38	FLG	86	-22	210	30	0	120	0.28
			WEB	85	-21	210	57	8	120	0.44
	39	39	FLG	-31	34	210	26	0	120	0.12
			WEB	-31	34	210	50	14	120	0.24
	40	40	FLG	-80	24	210	19	0	120	0.23
			WEB	-78	23	210	36	8	120	0.28
	41	41	FLG	-104	30	210	12	0	120	0.35
			WEB	-102	30	210	23	14	120	0.36
	42	42	FLG	-112	30	210	8	0	120	0.39
			WEB	-111	30	210	14	14	120	0.39
	43	43	FLG	-104	30	210	13	0	120	0.35
			WEB	-102	30	210	24	14	120	0.37
	44	44	FLG	-79	34	210	19	0	120	0.25
			WEB	-78	34	210	35	14	120	0.31
	45	45	FLG	-33	34	210	25	0	120	0.12
			WEB	-32	34	210	48	14	120	0.23
	46	46	FLG	80	-26	210	30	0	120	0.27
			WEB	78	-26	210	58	12	145	0.36
	47	47	FLG	116	-20	210	26	0	120	0.41
			WEB	114	-20	210	66	12	145	0.56
Int. sup.	48	48	FLG	173	-26	210	29	0	120	0.85
			WEB	170	-26	210	61	16	145	0.94
	49	49	FLG	115	-17	210	26	0	120	0.40
			WEB	112	-16	210	66	8	145	0.54
	50	50	FLG	78	-26	210	30	0	120	0.26
			WEB	77	-26	210	57	12	145	0.35
	51	51	FLG	-37	30	210	25	0	120	0.12
			WEB	-37	30	210	48	14	120	0.23
	52	52	FLG	-85	34	210	19	0	120	0.28
			WEB	-83	34	210	35	14	120	0.33
	53	53	FLG	-111	30	210	13	0	120	0.39
			WEB	-109	30	210	23	14	120	0.40
	54	54	FLG	-119	30	210	8	0	120	0.43
			WEB	-118	30	210	12	14	120	0.43
	55	55	FLG	-111	30	210	13	0	120	0.39
			WEB	-110	30	210	20	14	120	0.40
	56	56	FLG	-87	34	210	19	0	120	0.29
			WEB	-86	34	210	30	14	120	0.32
	57	57	FLG	-42	34	210	25	0	120	0.14
			WEB	-41	34	210	48	14	120	0.25
	58	58	FLG	72	-26	210	30	0	120	0.24
			WEB	71	-26	210	58	12	120	0.40

	59	59	FLG	113	-21	210	27	0	120	0.40
			WEB	111	-21	210	66	12	145	0.54
Int. sup.	60	60	FLG	172	-28	210	30	0	120	0.86
			WEB	169	-27	210	72	16	145	1.02
	61	61	FLG	113	-17	210	27	0	120	0.39
			WEB	111	-17	210	63	8	145	0.52
	62	62	FLG	75	-26	210	29	0	120	0.25
			WEB	74	-26	210	55	12	145	0.33
	63	63	FLG	-35	30	210	24	0	120	0.11
			WEB	-34	30	210	45	14	120	0.21
	64	64	FLG	-79	34	210	18	0	120	0.25
			WEB	-77	34	210	23	14	120	0.26
	65	65	FLG	-102	34	210	13	0	120	0.35
			WEB	-101	34	210	16	14	120	0.35
	66	66	FLG	-107	30	210	9	0	120	0.36
			WEB	-105	30	210	11	14	120	0.36
	67	67	FLG	-95	34	210	14	0	120	0.32
			WEB	-93	34	210	26	14	120	0.34
	68	68	FLG	-64	34	210	20	0	120	0.20
			WEB	-63	34	210	39	14	120	0.27
	69	69	FLG	43	-30	210	26	0	120	0.14
			WEB	42	-30	210	51	14	145	0.21
	70	70	FLG	105	-22	210	32	0	120	0.38
			WEB	104	-21	210	61	8	145	0.48
	71	71	FLG	122	-14	210	23	0	120	0.42
			WEB	119	-14	210	55	8	145	0.51
Int. sup.	72	72	FLG	175	-22	210	26	0	120	0.84
			WEB	171	-22	210	62	16	145	0.94
	73	73	FLG	103	-17	210	24	0	120	0.33
			WEB	101	-16	210	56	12	145	0.42
	74	74	FLG	61	-30	210	32	0	120	0.22
			WEB	60	-30	210	61	14	145	0.32
	75	75	FLG	-67	24	210	26	0	120	0.20
			WEB	-66	23	210	50	8	145	0.26
	76	76	FLG	-117	24	210	18	0	120	0.41
			WEB	-115	23	210	35	8	145	0.43
	77	77	FLG	-142	30	210	12	0	120	0.59
			WEB	-140	30	210	23	14	145	0.59
	78	78	FLG	-153	26	210	8	0	120	0.64
			WEB	-151	26	210	14	12	145	0.63
	79	79	FLG	-148	26	210	11	0	120	0.60
			WEB	-146	26	210	19	12	145	0.60
	80	80	FLG	-129	30	210	17	0	120	0.51
			WEB	-127	30	210	31	14	145	0.52
	81	81	FLG	-90	34	210	24	0	120	0.32
			WEB	-88	34	210	45	14	120	0.41
End. sup.	82	82	FLG	0	-61	210	30	0	120	0.15
			WEB	0	60	210	58	26	120	0.31

(4) Main girder G-2 Web name : RWEB(UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	-14	210	13	0	120	0.02
			WEB	0	14	210	66	8	120	0.31
	2	2	FLG	-75	22	210	12	0	120	0.19
			WEB	-74	21	210	52	8	145	0.30
	3	3	FLG	-126	26	210	11	0	120	0.46
			WEB	-124	26	210	38	12	145	0.50
	4	4	FLG	-160	30	210	10	0	120	0.72
			WEB	-158	30	210	28	14	145	0.73
	5	5	FLG	-180	30	210	8	0	120	0.88
			WEB	-178	30	210	17	14	145	0.87
	6	6	FLG	-179	34	210	9	0	120	0.90
			WEB	-177	34	210	24	14	145	0.90
	7	7	FLG	-165	30	210	12	0	120	0.76
			WEB	-163	30	210	32	14	145	0.79
	8	8	FLG	-129	34	210	15	0	120	0.52
			WEB	-127	34	210	43	14	145	0.58
	9	9	FLG	-70	26	210	18	0	120	0.19
			WEB	-69	26	210	56	8	120	0.38
	10	10	FLG	67	-24	210	23	0	120	0.19
			WEB	66	-23	210	57	8	145	0.30
11	11	FLG	110	-20	210	16	0	120	0.35	
		WEB	107	-20	210	47	14	145	0.42	
12	12	FLG	184	-9	210	18	0	120	0.83	
		WEB	180	-9	210	51	8	145	0.90	
13	13	FLG	130	-18	210	16	0	120	0.46	
		WEB	127	-18	210	43	14	145	0.51	
14	14	FLG	124	-24	210	23	0	120	0.47	
		WEB	123	-23	210	65	8	145	0.62	
15	15	FLG	58	-24	210	18	0	120	0.14	
		WEB	58	-23	210	52	8	120	0.30	
16	16	FLG	-56	26	210	14	0	120	0.13	
		WEB	-55	26	210	41	8	120	0.23	
17	17	FLG	-93	29	210	11	0	120	0.28	
		WEB	-92	28	210	29	7	120	0.33	
18	18	FLG	-108	29	210	7	0	120	0.36	
		WEB	-107	28	210	17	7	120	0.37	
19	19	FLG	-103	26	210	9	0	120	0.32	
		WEB	-101	26	210	22	8	120	0.34	
20	20	FLG	-79	26	210	12	0	120	0.22	
		WEB	-78	26	210	34	8	120	0.28	
21	21	FLG	-35	26	210	16	0	120	0.08	
		WEB	-35	26	210	47	8	120	0.22	
22	22	FLG	77	-24	210	21	0	120	0.22	
		WEB	76	-23	210	46	8	120	0.33	
23	23	FLG	120	-26	210	20	0	120	0.44	
		WEB	119	-25	210	53	14	145	0.53	
24	24	FLG	181	-11	210	21	0	120	0.83	
		WEB	179	-11	210	58	7	145	0.93	
25	25	FLG	119	-22	210	20	0	120	0.42	
		WEB	117	-22	210	53	12	145	0.51	
26	26	FLG	74	-34	210	21	0	120	0.24	
		WEB	73	-34	210	60	14	145	0.38	
27	27	FLG	-50	26	210	18	0	120	0.13	
		WEB	-49	26	210	51	8	145	0.22	
28	28	FLG	-101	31	210	14	0	120	0.34	
		WEB	-100	30	210	39	7	120	0.42	

	29	29	FLG	-127	31	210	9	0	120	0.48
			WEB	-125	30	210	23	7	120	0.50
	30	30	FLG	-132	29	210	7	0	120	0.51
			WEB	-131	28	210	17	7	120	0.51
	31	31	FLG	-118	26	210	10	0	120	0.41
			WEB	-117	26	210	27	8	120	0.44
	32	32	FLG	-88	26	210	13	0	120	0.26
			WEB	-87	26	210	39	8	120	0.34
	33	33	FLG	-35	24	210	17	0	120	0.08
			WEB	-35	23	210	51	8	120	0.24
	34	34	FLG	86	-34	210	21	0	120	0.29
			WEB	85	-34	210	62	14	120	0.52
	35	35	FLG	121	-19	210	17	0	120	0.41
			WEB	119	-19	210	70	12	145	0.61
Int. sup.	36	36	FLG	180	-9	210	19	0	120	0.80
			WEB	177	-9	210	65	7	145	0.95
	37	37	FLG	123	-19	210	17	0	120	0.42
			WEB	121	-19	210	67	12	145	0.60
	38	38	FLG	90	-34	210	21	0	120	0.31
			WEB	89	-34	210	60	14	120	0.52
	39	39	FLG	-33	26	210	18	0	120	0.08
			WEB	-32	26	210	52	8	120	0.24
	40	40	FLG	-84	29	210	13	0	120	0.25
			WEB	-83	28	210	38	7	120	0.32
	41	41	FLG	-109	26	210	9	0	120	0.36
			WEB	-107	26	210	24	8	120	0.38
	42	42	FLG	-118	26	210	6	0	120	0.40
			WEB	-116	26	210	14	8	120	0.40
	43	43	FLG	-109	26	210	9	0	120	0.36
			WEB	-107	26	210	24	8	120	0.38
	44	44	FLG	-83	26	210	13	0	120	0.23
			WEB	-82	26	210	37	8	120	0.31
	45	45	FLG	-34	26	210	17	0	120	0.08
			WEB	-34	26	210	50	8	120	0.23
	46	46	FLG	84	-34	210	21	0	120	0.28
			WEB	82	-34	210	61	14	145	0.42
	47	47	FLG	121	-20	210	18	0	120	0.42
			WEB	119	-20	210	68	12	145	0.61
Int. sup.	48	48	FLG	180	-10	210	19	0	120	0.81
			WEB	177	-10	210	64	7	145	0.95
	49	49	FLG	120	-20	210	18	0	120	0.41
			WEB	118	-20	210	68	12	145	0.60
	50	50	FLG	82	-34	210	21	0	120	0.27
			WEB	81	-34	210	60	14	145	0.41
	51	51	FLG	-39	26	210	17	0	120	0.10
			WEB	-39	26	210	50	8	120	0.24
	52	52	FLG	-89	26	210	13	0	120	0.26
			WEB	-87	26	210	37	8	120	0.33
	53	53	FLG	-116	26	210	9	0	120	0.40
			WEB	-115	26	210	24	8	120	0.42
	54	54	FLG	-125	26	210	7	0	120	0.45
			WEB	-123	26	210	12	8	120	0.44
	55	55	FLG	-117	26	210	10	0	120	0.40
			WEB	-115	26	210	21	8	120	0.41
	56	56	FLG	-92	26	210	13	0	120	0.27
			WEB	-91	26	210	31	8	120	0.32
	57	57	FLG	-44	26	210	17	0	120	0.11
			WEB	-43	26	210	50	8	120	0.25
	58	58	FLG	75	-34	210	21	0	120	0.24
			WEB	74	-34	210	61	14	120	0.46

	59	59	FLG	118	-21	210	18	0	120	0.40
			WEB	116	-21	210	68	12	145	0.59
Int. sup.	60	60	FLG	180	-10	210	20	0	120	0.80
			WEB	177	-10	210	75	7	145	1.02
	61	61	FLG	118	-21	210	18	0	120	0.41
			WEB	116	-21	210	66	12	145	0.58
	62	62	FLG	78	-34	210	20	0	120	0.26
			WEB	77	-34	210	58	14	145	0.38
	63	63	FLG	-37	26	210	17	0	120	0.09
			WEB	-36	26	210	47	8	120	0.22
	64	64	FLG	-83	29	210	13	0	120	0.24
			WEB	-81	28	210	24	7	120	0.26
	65	65	FLG	-107	29	210	10	0	120	0.35
			WEB	-106	28	210	16	7	120	0.36
	66	66	FLG	-112	29	210	7	0	120	0.38
			WEB	-110	28	210	12	7	120	0.37
	67	67	FLG	-99	29	210	10	0	120	0.31
			WEB	-98	28	210	28	7	120	0.35
	68	68	FLG	-67	29	210	14	0	120	0.18
			WEB	-66	28	210	41	7	120	0.28
	69	69	FLG	45	-26	210	18	0	120	0.11
			WEB	44	-26	210	53	8	145	0.22
	70	70	FLG	110	-34	210	22	0	120	0.42
			WEB	109	-34	210	63	14	145	0.57
	71	71	FLG	128	-17	210	16	0	120	0.44
			WEB	125	-16	210	57	12	145	0.56
Int. sup.	72	72	FLG	183	-10	210	18	0	120	0.82
			WEB	179	-10	210	64	8	145	0.97
	73	73	FLG	108	-22	210	16	0	120	0.35
			WEB	106	-22	210	58	14	145	0.48
	74	74	FLG	63	-24	210	22	0	120	0.17
			WEB	63	-23	210	64	8	145	0.33
	75	75	FLG	-70	29	210	17	0	120	0.20
			WEB	-69	28	210	52	7	145	0.30
	76	76	FLG	-123	29	210	12	0	120	0.45
			WEB	-121	28	210	37	7	145	0.49
	77	77	FLG	-149	26	210	9	0	120	0.61
			WEB	-147	26	210	24	8	145	0.62
	78	78	FLG	-160	24	210	6	0	120	0.68
			WEB	-158	23	210	15	8	145	0.67
	79	79	FLG	-154	34	210	8	0	120	0.69
			WEB	-152	34	210	19	14	145	0.69
	80	80	FLG	-135	24	210	13	0	120	0.51
			WEB	-133	23	210	32	8	145	0.53
	81	81	FLG	-94	24	210	17	0	120	0.28
			WEB	-93	23	210	47	8	120	0.41
End. sup.	82	82	FLG	0	-24	210	20	0	120	0.04
			WEB	0	24	210	60	12	120	0.26

(5) Main girder G-3 Web name : LWEB (UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	-14	210	12	0	120	0.02
			WEB	0	14	210	66	8	120	0.30
	2	2	FLG	-75	22	210	13	0	120	0.19
			WEB	-74	21	210	52	8	145	0.30
	3	3	FLG	-126	26	210	12	0	120	0.46
			WEB	-124	26	210	39	12	145	0.51
	4	4	FLG	-160	30	210	10	0	120	0.72
			WEB	-158	30	210	29	14	145	0.74
	5	5	FLG	-180	30	210	8	0	120	0.89
			WEB	-178	30	210	18	14	145	0.87
6	6	FLG	-179	34	210	9	0	120	0.90	
		WEB	-177	34	210	23	14	145	0.90	
7	7	FLG	-165	30	210	11	0	120	0.76	
		WEB	-163	30	210	31	14	145	0.78	
8	8	FLG	-129	34	210	14	0	120	0.52	
		WEB	-127	34	210	42	14	145	0.58	
9	9	FLG	-70	26	210	19	0	120	0.19	
		WEB	-69	26	210	57	8	120	0.39	
10	10	FLG	67	-24	210	24	0	120	0.19	
		WEB	66	-23	210	59	8	145	0.31	
11	11	FLG	110	-20	210	17	0	120	0.35	
		WEB	107	-20	210	47	14	145	0.42	
Int. sup.	12	12	FLG	184	-9	210	18	0	120	0.83
			WEB	180	-9	210	52	8	145	0.90
13	13	FLG	130	-18	210	15	0	120	0.46	
		WEB	127	-18	210	42	14	145	0.51	
14	14	FLG	124	-24	210	22	0	120	0.47	
		WEB	123	-23	210	64	8	145	0.61	
15	15	FLG	58	-24	210	17	0	120	0.14	
		WEB	58	-23	210	51	8	120	0.30	
16	16	FLG	-56	26	210	14	0	120	0.13	
		WEB	-55	26	210	40	8	120	0.23	
17	17	FLG	-93	29	210	10	0	120	0.28	
		WEB	-92	28	210	28	7	120	0.32	
18	18	FLG	-108	29	210	7	0	120	0.36	
		WEB	-107	28	210	17	7	120	0.37	
19	19	FLG	-103	26	210	9	0	120	0.32	
		WEB	-101	26	210	23	8	120	0.34	
20	20	FLG	-79	26	210	12	0	120	0.22	
		WEB	-78	26	210	34	8	120	0.28	
21	21	FLG	-35	26	210	17	0	120	0.09	
		WEB	-35	26	210	48	8	120	0.23	
22	22	FLG	77	-24	210	22	0	120	0.22	
		WEB	76	-23	210	48	8	120	0.34	
23	23	FLG	120	-26	210	20	0	120	0.44	
		WEB	119	-25	210	54	14	145	0.54	
Int. sup.	24	24	FLG	181	-11	210	22	0	120	0.83
			WEB	179	-11	210	59	7	145	0.93
25	25	FLG	119	-22	210	20	0	120	0.42	
		WEB	117	-22	210	52	12	145	0.51	
26	26	FLG	74	-34	210	21	0	120	0.24	
		WEB	73	-34	210	59	14	145	0.37	
27	27	FLG	-50	26	210	17	0	120	0.12	
		WEB	-49	26	210	50	8	145	0.22	
28	28	FLG	-101	31	210	13	0	120	0.34	
		WEB	-100	30	210	38	7	120	0.42	

	29	29	FLG	-127	31	210	9	0	120	0.48
			WEB	-125	30	210	24	7	120	0.50
	30	30	FLG	-132	29	210	8	0	120	0.51
			WEB	-131	28	210	17	7	120	0.51
	31	31	FLG	-118	26	210	10	0	120	0.41
			WEB	-117	26	210	27	8	120	0.44
	32	32	FLG	-88	26	210	14	0	120	0.26
			WEB	-87	26	210	39	8	120	0.34
	33	33	FLG	-35	24	210	18	0	120	0.08
			WEB	-35	23	210	52	8	120	0.25
	34	34	FLG	86	-34	210	22	0	120	0.29
			WEB	85	-34	210	63	14	120	0.53
	35	35	FLG	121	-19	210	18	0	120	0.41
			WEB	119	-19	210	71	12	145	0.62
Int. sup.	36	36	FLG	180	-9	210	19	0	120	0.80
			WEB	177	-9	210	66	7	145	0.95
	37	37	FLG	123	-19	210	17	0	120	0.42
			WEB	121	-19	210	67	12	145	0.60
	38	38	FLG	90	-34	210	20	0	120	0.31
			WEB	89	-34	210	59	14	120	0.51
	39	39	FLG	-33	26	210	17	0	120	0.08
			WEB	-32	26	210	50	8	120	0.23
	40	40	FLG	-84	29	210	13	0	120	0.24
			WEB	-83	28	210	37	7	120	0.32
	41	41	FLG	-109	26	210	9	0	120	0.36
			WEB	-107	26	210	24	8	120	0.38
	42	42	FLG	-118	26	210	7	0	120	0.40
			WEB	-116	26	210	15	8	120	0.40
	43	43	FLG	-109	26	210	9	0	120	0.36
			WEB	-107	26	210	24	8	120	0.38
	44	44	FLG	-83	26	210	13	0	120	0.23
			WEB	-82	26	210	37	8	120	0.31
	45	45	FLG	-34	26	210	18	0	120	0.08
			WEB	-34	26	210	51	8	120	0.24
	46	46	FLG	84	-34	210	22	0	120	0.28
			WEB	82	-34	210	62	14	145	0.43
	47	47	FLG	121	-20	210	18	0	120	0.42
			WEB	119	-20	210	69	12	145	0.61
Int. sup.	48	48	FLG	180	-10	210	19	0	120	0.81
			WEB	177	-10	210	64	7	145	0.95
	49	49	FLG	120	-20	210	17	0	120	0.41
			WEB	118	-20	210	67	12	145	0.59
	50	50	FLG	82	-34	210	20	0	120	0.27
			WEB	81	-34	210	59	14	145	0.40
	51	51	FLG	-39	26	210	16	0	120	0.09
			WEB	-39	26	210	49	8	120	0.24
	52	52	FLG	-89	26	210	13	0	120	0.26
			WEB	-87	26	210	36	8	120	0.33
	53	53	FLG	-116	26	210	9	0	120	0.40
			WEB	-115	26	210	24	8	120	0.42
	54	54	FLG	-125	26	210	7	0	120	0.45
			WEB	-123	26	210	12	8	120	0.44
	55	55	FLG	-117	26	210	10	0	120	0.40
			WEB	-115	26	210	21	8	120	0.41
	56	56	FLG	-92	26	210	13	0	120	0.27
			WEB	-91	26	210	32	8	120	0.32
	57	57	FLG	-44	26	210	18	0	120	0.11
			WEB	-43	26	210	51	8	120	0.26
	58	58	FLG	75	-34	210	21	0	120	0.25
			WEB	74	-34	210	62	14	120	0.47

	59	59	FLG	118	-21	210	19	0	120	0.41
			WEB	116	-21	210	69	12	145	0.59
Int. sup.	60	60	FLG	180	-10	210	20	0	120	0.80
			WEB	177	-10	210	75	7	145	1.02
	61	61	FLG	118	-21	210	18	0	120	0.41
			WEB	116	-21	210	65	12	145	0.57
	62	62	FLG	78	-34	210	20	0	120	0.25
			WEB	77	-34	210	57	14	145	0.37
	63	63	FLG	-37	26	210	16	0	120	0.09
			WEB	-36	26	210	46	8	120	0.21
	64	64	FLG	-83	29	210	12	0	120	0.24
			WEB	-81	28	210	24	7	120	0.26
	65	65	FLG	-107	29	210	9	0	120	0.35
			WEB	-106	28	210	16	7	120	0.36
	66	66	FLG	-112	29	210	8	0	120	0.38
			WEB	-110	28	210	12	7	120	0.37
	67	67	FLG	-99	29	210	10	0	120	0.31
			WEB	-98	28	210	27	7	120	0.35
	68	68	FLG	-67	29	210	14	0	120	0.18
			WEB	-66	28	210	42	7	120	0.28
	69	69	FLG	45	-26	210	19	0	120	0.11
			WEB	44	-26	210	55	8	145	0.23
	70	70	FLG	110	-34	210	22	0	120	0.42
			WEB	109	-34	210	64	14	145	0.57
	71	71	FLG	128	-17	210	16	0	120	0.44
			WEB	125	-16	210	57	12	145	0.56
Int. sup.	72	72	FLG	183	-10	210	17	0	120	0.82
			WEB	179	-10	210	64	8	145	0.96
	73	73	FLG	108	-22	210	16	0	120	0.35
			WEB	106	-22	210	57	14	145	0.47
	74	74	FLG	63	-24	210	21	0	120	0.17
			WEB	63	-23	210	62	8	145	0.32
	75	75	FLG	-70	29	210	17	0	120	0.20
			WEB	-69	28	210	50	7	145	0.29
	76	76	FLG	-123	29	210	12	0	120	0.45
			WEB	-121	28	210	37	7	145	0.49
	77	77	FLG	-149	26	210	9	0	120	0.61
			WEB	-147	26	210	25	8	145	0.62
	78	78	FLG	-160	24	210	7	0	120	0.68
			WEB	-158	23	210	15	8	145	0.67
	79	79	FLG	-154	34	210	8	0	120	0.69
			WEB	-152	34	210	19	14	145	0.69
	80	80	FLG	-135	24	210	12	0	120	0.51
			WEB	-133	23	210	31	8	145	0.53
	81	81	FLG	-94	24	210	18	0	120	0.29
			WEB	-93	23	210	48	8	120	0.42
End. sup.	82	82	FLG	0	-24	210	21	0	120	0.04
			WEB	0	24	210	62	12	120	0.28

(6) Main girder G-3 Web name : RWEB (UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	-54	210	33	0	120	0.14
			WEB	0	53	210	60	24	120	0.31
	2	2	FLG	-71	22	210	27	0	120	0.21
			WEB	-70	21	210	48	8	145	0.27
	3	3	FLG	-120	22	210	20	0	120	0.43
			WEB	-118	21	210	36	8	145	0.45
	4	4	FLG	-154	26	210	16	0	120	0.66
			WEB	-152	26	210	27	12	145	0.66
	5	5	FLG	-174	26	210	9	0	120	0.81
			WEB	-172	26	210	15	12	145	0.79
	6	6	FLG	-174	30	210	12	0	120	0.84
WEB			-172	30	210	22	14	145	0.83	
7	7	FLG	-158	22	210	16	0	120	0.68	
		WEB	-156	21	210	30	8	145	0.68	
8	8	FLG	-123	26	210	21	0	120	0.46	
		WEB	-121	26	210	40	12	145	0.50	
9	9	FLG	-66	34	210	28	0	120	0.23	
		WEB	-65	34	210	54	14	120	0.38	
10	10	FLG	64	-30	210	35	0	120	0.24	
		WEB	63	-30	210	56	14	145	0.30	
11	11	FLG	105	-16	210	24	0	120	0.33	
		WEB	102	-15	210	45	12	145	0.38	
Int. sup.	12	12	FLG	176	-22	210	26	0	120	0.85
			WEB	172	-22	210	49	19	145	0.88
13	13	FLG	125	-16	210	22	0	120	0.43	
		WEB	122	-15	210	41	12	145	0.46	
14	14	FLG	119	-26	210	32	0	120	0.48	
		WEB	117	-26	210	61	12	145	0.57	
15	15	FLG	56	-30	210	25	0	120	0.17	
		WEB	55	-30	210	49	14	120	0.29	
16	16	FLG	-53	34	210	20	0	120	0.16	
		WEB	-52	34	210	38	14	120	0.23	
17	17	FLG	-89	34	210	15	0	120	0.29	
		WEB	-87	34	210	27	14	120	0.32	
18	18	FLG	-103	34	210	9	0	120	0.35	
		WEB	-102	34	210	17	14	120	0.36	
19	19	FLG	-98	30	210	12	0	120	0.32	
		WEB	-96	30	210	22	14	120	0.33	
20	20	FLG	-75	30	210	18	0	120	0.22	
		WEB	-74	30	210	33	14	120	0.27	
21	21	FLG	-33	30	210	25	0	120	0.11	
		WEB	-33	30	210	46	14	120	0.22	
22	22	FLG	73	-26	210	31	0	120	0.25	
		WEB	72	-26	210	45	12	120	0.32	
23	23	FLG	115	-18	210	29	0	120	0.41	
		WEB	113	-18	210	51	8	145	0.47	
Int. sup.	24	24	FLG	174	-29	210	31	0	120	0.89
			WEB	171	-29	210	56	16	145	0.94
25	25	FLG	113	-18	210	28	0	120	0.40	
		WEB	112	-18	210	50	8	145	0.45	
26	26	FLG	70	-26	210	30	0	120	0.23	
		WEB	69	-26	210	57	12	145	0.32	
27	27	FLG	-48	34	210	25	0	120	0.16	
		WEB	-47	34	210	47	14	145	0.22	
28	28	FLG	-97	26	210	19	0	120	0.31	
		WEB	-96	26	210	36	8	120	0.37	

	29	29	FLG	-121	34	210	13	0	120	0.47
			WEB	-120	34	210	23	14	120	0.48
	30	30	FLG	-126	34	210	10	0	120	0.49
			WEB	-125	34	210	17	14	120	0.49
	31	31	FLG	-113	30	210	14	0	120	0.40
			WEB	-111	30	210	26	14	120	0.43
	32	32	FLG	-83	30	210	20	0	120	0.26
			WEB	-82	30	210	38	14	120	0.33
	33	33	FLG	-34	30	210	26	0	120	0.12
			WEB	-33	30	210	50	14	120	0.24
	34	34	FLG	82	-26	210	32	0	120	0.29
			WEB	81	-26	210	60	12	120	0.46
	35	35	FLG	116	-16	210	26	0	120	0.40
			WEB	113	-16	210	69	8	145	0.56
Int. sup.	36	36	FLG	172	-25	210	28	0	120	0.84
			WEB	169	-25	210	63	16	145	0.95
	37	37	FLG	117	-19	210	25	0	120	0.41
			WEB	115	-19	210	65	12	145	0.56
	38	38	FLG	86	-22	210	30	0	120	0.28
			WEB	85	-21	210	56	8	120	0.43
	39	39	FLG	-31	34	210	25	0	120	0.12
			WEB	-31	34	210	48	14	120	0.23
	40	40	FLG	-80	24	210	19	0	120	0.22
			WEB	-78	23	210	35	8	120	0.28
	41	41	FLG	-104	30	210	13	0	120	0.35
			WEB	-102	30	210	23	14	120	0.37
	42	42	FLG	-112	30	210	8	0	120	0.39
			WEB	-111	30	210	14	14	120	0.39
	43	43	FLG	-104	30	210	13	0	120	0.35
			WEB	-102	30	210	23	14	120	0.36
	44	44	FLG	-79	34	210	19	0	120	0.25
			WEB	-78	34	210	35	14	120	0.31
	45	45	FLG	-33	34	210	26	0	120	0.12
			WEB	-32	34	210	49	14	120	0.24
	46	46	FLG	80	-26	210	31	0	120	0.27
			WEB	78	-26	210	60	12	145	0.37
	47	47	FLG	116	-20	210	27	0	120	0.41
			WEB	114	-20	210	67	12	145	0.56
Int. sup.	48	48	FLG	173	-26	210	29	0	120	0.85
			WEB	170	-26	210	61	16	145	0.95
	49	49	FLG	115	-17	210	26	0	120	0.39
			WEB	112	-16	210	65	8	145	0.54
	50	50	FLG	78	-26	210	30	0	120	0.26
			WEB	77	-26	210	56	12	145	0.35
	51	51	FLG	-37	30	210	24	0	120	0.12
			WEB	-37	30	210	47	14	120	0.23
	52	52	FLG	-85	34	210	18	0	120	0.28
			WEB	-83	34	210	35	14	120	0.33
	53	53	FLG	-111	30	210	13	0	120	0.39
			WEB	-109	30	210	24	14	120	0.40
	54	54	FLG	-119	30	210	8	0	120	0.43
			WEB	-118	30	210	12	14	120	0.43
	55	55	FLG	-111	30	210	13	0	120	0.39
			WEB	-110	30	210	20	14	120	0.40
	56	56	FLG	-87	34	210	19	0	120	0.29
			WEB	-86	34	210	30	14	120	0.32
	57	57	FLG	-42	34	210	26	0	120	0.15
			WEB	-41	34	210	49	14	120	0.26
	58	58	FLG	72	-26	210	31	0	120	0.24
			WEB	71	-26	210	59	12	120	0.41

	59	59	FLG	113	-21	210	28	0	120	0.40
			WEB	111	-21	210	66	12	145	0.55
Int. sup.	60	60	FLG	172	-28	210	30	0	120	0.86
			WEB	169	-27	210	73	16	145	1.02
	61	61	FLG	113	-17	210	26	0	120	0.39
			WEB	111	-17	210	62	8	145	0.52
	62	62	FLG	75	-26	210	29	0	120	0.24
			WEB	74	-26	210	54	12	145	0.32
	63	63	FLG	-35	30	210	23	0	120	0.11
			WEB	-34	30	210	44	14	120	0.21
	64	64	FLG	-79	34	210	18	0	120	0.25
			WEB	-77	34	210	23	14	120	0.26
	65	65	FLG	-102	34	210	12	0	120	0.35
			WEB	-101	34	210	15	14	120	0.35
	66	66	FLG	-107	30	210	9	0	120	0.36
			WEB	-105	30	210	11	14	120	0.36
	67	67	FLG	-95	34	210	14	0	120	0.32
			WEB	-93	34	210	26	14	120	0.34
	68	68	FLG	-64	34	210	21	0	120	0.20
			WEB	-63	34	210	40	14	120	0.28
	69	69	FLG	43	-30	210	27	0	120	0.14
			WEB	42	-30	210	52	14	145	0.22
	70	70	FLG	105	-22	210	32	0	120	0.39
			WEB	104	-21	210	62	8	145	0.49
	71	71	FLG	122	-14	210	23	0	120	0.42
			WEB	119	-14	210	55	8	145	0.51
Int. sup.	72	72	FLG	175	-22	210	26	0	120	0.84
			WEB	171	-22	210	61	16	145	0.94
	73	73	FLG	103	-17	210	23	0	120	0.32
			WEB	101	-16	210	55	12	145	0.42
	74	74	FLG	61	-30	210	31	0	120	0.21
			WEB	60	-30	210	59	14	145	0.31
	75	75	FLG	-67	24	210	25	0	120	0.19
			WEB	-66	23	210	48	8	145	0.26
	76	76	FLG	-117	24	210	18	0	120	0.41
			WEB	-115	23	210	35	8	145	0.43
	77	77	FLG	-142	30	210	13	0	120	0.59
			WEB	-140	30	210	24	14	145	0.59
	78	78	FLG	-153	26	210	8	0	120	0.64
			WEB	-151	26	210	15	12	145	0.63
	79	79	FLG	-148	26	210	10	0	120	0.60
			WEB	-146	26	210	18	12	145	0.60
	80	80	FLG	-129	30	210	17	0	120	0.51
			WEB	-127	30	210	30	14	145	0.52
	81	81	FLG	-90	34	210	25	0	120	0.32
			WEB	-88	34	210	46	14	120	0.42
End. sup.	82	82	FLG	0	-61	210	31	0	120	0.15
			WEB	0	60	210	60	26	120	0.33

(7) Main girder G-4 Web name : LWEB(UFLG-side)

		Cross section								
	No.	No.	Check P' t	σx	σy	σa	τx	τy	τa	K
End. sup.	1	1	FLG	0	-54	210	30	0	120	0.13
			WEB	0	53	210	54	24	120	0.27
	2	2	FLG	-81	22	210	25	0	120	0.24
			WEB	-80	21	210	43	8	120	0.32
	3	3	FLG	-132	22	210	19	0	120	0.50
			WEB	-130	21	210	33	8	145	0.51
	4	4	FLG	-163	26	210	15	0	120	0.73
			WEB	-161	26	210	24	12	145	0.72
	5	5	FLG	-178	26	210	9	0	120	0.84
			WEB	-175	26	210	14	12	145	0.82
	6	6	FLG	-174	30	210	12	0	120	0.84
			WEB	-172	30	210	19	14	145	0.83
	7	7	FLG	-160	22	210	15	0	120	0.68
			WEB	-158	21	210	26	8	145	0.68
	8	8	FLG	-127	26	210	21	0	120	0.48
			WEB	-125	26	210	38	12	145	0.51
	9	9	FLG	-68	34	210	27	0	120	0.24
			WEB	-67	34	210	49	14	120	0.35
	10	10	FLG	58	-30	210	31	0	120	0.20
			WEB	57	-30	210	56	14	145	0.28
11	11	FLG	101	-16	210	23	0	120	0.31	
		WEB	98	-16	210	69	12	145	0.49	
12	12	FLG	180	-23	210	26	0	120	0.88	
		WEB	176	-22	210	58	19	145	0.96	
13	13	FLG	124	-16	210	21	0	120	0.43	
		WEB	121	-16	210	60	12	145	0.56	
14	14	FLG	112	-26	210	28	0	120	0.42	
		WEB	110	-26	210	50	12	120	0.53	
15	15	FLG	53	-30	210	23	0	120	0.16	
		WEB	52	-30	210	42	14	120	0.24	
16	16	FLG	-50	34	210	18	0	120	0.14	
		WEB	-49	34	210	32	14	120	0.19	
17	17	FLG	-83	34	210	14	0	120	0.26	
		WEB	-81	34	210	24	14	120	0.28	
18	18	FLG	-98	34	210	10	0	120	0.33	
		WEB	-96	34	210	17	14	120	0.33	
19	19	FLG	-96	30	210	11	0	120	0.30	
		WEB	-94	30	210	18	14	120	0.31	
20	20	FLG	-75	30	210	16	0	120	0.22	
		WEB	-74	30	210	28	14	120	0.25	
21	21	FLG	-34	30	210	21	0	120	0.10	
		WEB	-33	30	210	38	14	120	0.17	
22	22	FLG	70	-26	210	28	0	120	0.22	
		WEB	69	-26	210	48	12	120	0.33	
23	23	FLG	109	-18	210	27	0	120	0.37	
		WEB	107	-18	210	58	8	145	0.47	
24	24	FLG	173	-29	210	31	0	120	0.88	
		WEB	170	-29	210	66	16	145	1.00	
25	25	FLG	105	-18	210	27	0	120	0.35	
		WEB	103	-18	210	57	8	145	0.45	
26	26	FLG	62	-26	210	27	0	120	0.19	
		WEB	61	-26	210	48	12	145	0.24	
27	27	FLG	-40	34	210	22	0	120	0.13	
		WEB	-39	34	210	39	14	120	0.19	
28	28	FLG	-81	26	210	17	0	120	0.23	
		WEB	-80	26	210	31	8	145	0.25	

	29	29	FLG	-106	34	210	13	0	120	0.38
			WEB	-104	34	210	22	14	145	0.38
	30	30	FLG	-117	34	210	8	0	120	0.43
			WEB	-115	34	210	13	14	145	0.42
	31	31	FLG	-108	30	210	13	0	120	0.37
			WEB	-107	30	210	22	14	145	0.37
	32	32	FLG	-81	30	210	18	0	120	0.25
			WEB	-79	30	210	31	14	120	0.28
	33	33	FLG	-34	30	210	24	0	120	0.11
			WEB	-33	30	210	42	14	120	0.19
	34	34	FLG	78	-26	210	30	0	120	0.26
			WEB	77	-26	210	53	12	120	0.39
	35	35	FLG	114	-17	210	27	0	120	0.39
			WEB	111	-16	210	62	8	145	0.51
Int. sup.	36	36	FLG	177	-26	210	30	0	120	0.89
			WEB	174	-26	210	60	16	145	0.97
	37	37	FLG	113	-20	210	25	0	120	0.39
			WEB	111	-20	210	60	12	145	0.51
	38	38	FLG	78	-22	210	28	0	120	0.24
			WEB	77	-21	210	50	8	120	0.35
	39	39	FLG	-30	34	210	23	0	120	0.11
			WEB	-30	34	210	41	14	120	0.19
	40	40	FLG	-76	24	210	18	0	120	0.21
			WEB	-75	23	210	32	8	120	0.25
	41	41	FLG	-104	30	210	13	0	120	0.35
			WEB	-103	30	210	22	14	120	0.36
	42	42	FLG	-115	30	210	8	0	120	0.41
			WEB	-114	30	210	13	14	120	0.40
	43	43	FLG	-106	30	210	12	0	120	0.36
			WEB	-105	30	210	21	14	120	0.37
	44	44	FLG	-80	34	210	18	0	120	0.25
			WEB	-79	34	210	31	14	120	0.29
	45	45	FLG	-34	34	210	23	0	120	0.12
			WEB	-33	34	210	42	14	120	0.20
	46	46	FLG	76	-26	210	30	0	120	0.25
			WEB	75	-26	210	52	12	145	0.32
	47	47	FLG	111	-20	210	27	0	120	0.39
			WEB	109	-20	210	62	12	145	0.51
Int. sup.	48	48	FLG	174	-26	210	29	0	120	0.87
			WEB	171	-26	210	60	16	145	0.95
	49	49	FLG	110	-17	210	25	0	120	0.37
			WEB	108	-16	210	59	8	145	0.48
	50	50	FLG	75	-26	210	28	0	120	0.24
			WEB	74	-26	210	50	12	120	0.36
	51	51	FLG	-37	30	210	22	0	120	0.11
			WEB	-36	30	210	40	14	120	0.19
	52	52	FLG	-83	34	210	17	0	120	0.27
			WEB	-82	34	210	31	14	120	0.31
	53	53	FLG	-110	30	210	12	0	120	0.38
			WEB	-108	30	210	21	14	120	0.39
	54	54	FLG	-120	30	210	8	0	120	0.44
			WEB	-118	30	210	12	14	120	0.43
	55	55	FLG	-111	30	210	12	0	120	0.39
			WEB	-109	30	210	21	14	120	0.40
	56	56	FLG	-85	34	210	17	0	120	0.28
			WEB	-84	34	210	31	14	120	0.32
	57	57	FLG	-41	34	210	23	0	120	0.13
			WEB	-40	34	210	41	14	120	0.21
	58	58	FLG	67	-26	210	29	0	120	0.22
			WEB	66	-26	210	52	12	120	0.34

	59	59	FLG	106	-21	210	27	0	120	0.37
			WEB	105	-21	210	61	12	145	0.48
Int. sup.	60	60	FLG	173	-28	210	31	0	120	0.87
			WEB	170	-27	210	69	16	145	1.01
	61	61	FLG	109	-17	210	25	0	120	0.36
			WEB	107	-17	210	56	8	145	0.46
	62	62	FLG	72	-26	210	27	0	120	0.22
			WEB	71	-26	210	47	12	145	0.28
	63	63	FLG	-34	30	210	21	0	120	0.10
			WEB	-33	30	210	37	14	120	0.16
	64	64	FLG	-76	34	210	16	0	120	0.23
			WEB	-74	34	210	28	14	120	0.26
	65	65	FLG	-97	34	210	11	0	120	0.32
			WEB	-96	34	210	20	14	120	0.33
	66	66	FLG	-103	30	210	8	0	120	0.34
			WEB	-102	30	210	14	14	120	0.34
	67	67	FLG	-91	34	210	13	0	120	0.30
			WEB	-89	34	210	23	14	120	0.31
	68	68	FLG	-60	34	210	18	0	120	0.18
			WEB	-59	34	210	33	14	120	0.22
	69	69	FLG	37	-30	210	24	0	120	0.12
			WEB	36	-30	210	43	14	120	0.20
	70	70	FLG	94	-22	210	30	0	120	0.32
			WEB	93	-21	210	53	8	145	0.38
	71	71	FLG	113	-14	210	22	0	120	0.37
			WEB	111	-14	210	63	8	145	0.50
Int. sup.	72	72	FLG	172	-22	210	25	0	120	0.81
			WEB	168	-22	210	72	16	145	0.98
	73	73	FLG	95	-17	210	22	0	120	0.28
			WEB	93	-16	210	62	12	145	0.42
	74	74	FLG	54	-30	210	28	0	120	0.18
			WEB	53	-30	210	50	14	145	0.24
	75	75	FLG	-63	24	210	23	0	120	0.18
			WEB	-62	23	210	42	8	120	0.26
	76	76	FLG	-113	24	210	19	0	120	0.39
			WEB	-112	23	210	35	8	145	0.41
	77	77	FLG	-145	30	210	14	0	120	0.61
			WEB	-143	30	210	25	14	145	0.61
	78	78	FLG	-159	26	210	9	0	120	0.69
			WEB	-157	26	210	15	12	145	0.68
	79	79	FLG	-155	26	210	11	0	120	0.66
			WEB	-153	26	210	18	12	145	0.65
	80	80	FLG	-129	30	210	17	0	120	0.51
			WEB	-127	30	210	29	14	145	0.52
	81	81	FLG	-87	34	210	23	0	120	0.30
			WEB	-86	34	210	41	14	145	0.34
End. sup.	82	82	FLG	0	-61	210	31	0	120	0.15
			WEB	0	60	210	55	26	120	0.29

(8) Main girder G-4 Web name : RWEB (UFLG-side)

		Cross section								
	No.	No.	Check P' t	σ_x	σ_y	σ_a	τ_x	τ_y	τ_a	K
End. sup.	1	1	FLG	0	10	210	24	0	120	0.04
			WEB	0	9	210	53	22	120	0.20
	2	2	FLG	-77	10	210	20	0	120	0.18
			WEB	-76	9	210	42	22	120	0.27
	3	3	FLG	-126	10	210	16	0	120	0.40
			WEB	-124	9	210	32	22	145	0.43
	4	4	FLG	-155	10	210	12	0	120	0.59
			WEB	-154	9	210	24	22	145	0.60
	5	5	FLG	-170	10	210	8	0	120	0.70
			WEB	-168	9	210	15	22	145	0.70
	6	6	FLG	-168	10	210	10	0	120	0.68
			WEB	-166	9	210	19	22	145	0.68
	7	7	FLG	-153	10	210	12	0	120	0.57
			WEB	-151	9	210	25	22	145	0.58
	8	8	FLG	-120	10	210	17	0	120	0.37
			WEB	-118	9	210	37	22	145	0.41
	9	9	FLG	-64	10	210	21	0	120	0.14
			WEB	-63	9	210	48	22	120	0.26
	10	10	FLG	55	0	210	25	0	120	0.11
			WEB	54	0	210	54	0	145	0.21
11	11	FLG	95	0	210	18	0	120	0.23	
		WEB	93	0	210	66	0	145	0.40	
12	12	FLG	171	0	210	20	0	120	0.69	
		WEB	167	0	210	56	0	145	0.79	
13	13	FLG	118	0	210	16	0	120	0.33	
		WEB	115	0	210	58	0	145	0.46	
14	14	FLG	106	0	210	22	0	120	0.29	
		WEB	105	0	210	49	0	120	0.41	
15	15	FLG	50	0	210	18	0	120	0.08	
		WEB	49	0	210	41	0	120	0.17	
16	16	FLG	-47	10	210	14	0	120	0.08	
		WEB	-46	9	210	32	22	120	0.13	
17	17	FLG	-77	10	210	11	0	120	0.16	
		WEB	-76	9	210	24	22	120	0.19	
18	18	FLG	-92	10	210	8	0	120	0.22	
		WEB	-91	9	210	13	22	120	0.24	
19	19	FLG	-90	10	210	9	0	120	0.21	
		WEB	-89	9	210	18	22	120	0.23	
20	20	FLG	-71	10	210	13	0	120	0.14	
		WEB	-70	9	210	27	22	120	0.18	
21	21	FLG	-32	10	210	17	0	120	0.05	
		WEB	-31	9	210	37	22	120	0.13	
22	22	FLG	66	0	210	22	0	120	0.13	
		WEB	65	0	210	48	0	120	0.25	
23	23	FLG	103	0	210	21	0	120	0.27	
		WEB	101	0	210	56	0	145	0.38	
24	24	FLG	165	0	210	24	0	120	0.65	
		WEB	162	0	210	64	0	145	0.79	
25	25	FLG	99	0	210	21	0	120	0.25	
		WEB	98	0	210	55	0	145	0.36	
26	26	FLG	58	0	210	22	0	120	0.11	
		WEB	58	0	210	47	0	145	0.18	
27	27	FLG	-37	10	210	18	0	120	0.06	
		WEB	-37	9	210	38	22	120	0.14	
28	28	FLG	-76	10	210	14	0	120	0.16	
		WEB	-75	9	210	30	22	145	0.19	

	29	29	FLG	-100	10	210	10	0	120	0.26
			WEB	-98	9	210	18	22	145	0.27
	30	30	FLG	-110	10	210	7	0	120	0.30
			WEB	-109	9	210	13	22	145	0.32
	31	31	FLG	-102	10	210	10	0	120	0.27
			WEB	-101	9	210	21	22	145	0.28
	32	32	FLG	-76	10	210	14	0	120	0.16
			WEB	-75	9	210	31	22	120	0.21
	33	33	FLG	-32	10	210	19	0	120	0.06
			WEB	-31	9	210	42	22	120	0.15
	34	34	FLG	74	0	210	24	0	120	0.16
			WEB	72	0	210	52	0	120	0.31
	35	35	FLG	108	0	210	21	0	120	0.29
			WEB	106	0	210	60	0	145	0.43
Int. sup.	36	36	FLG	168	0	210	23	0	120	0.68
			WEB	166	0	210	58	0	145	0.78
	37	37	FLG	107	0	210	20	0	120	0.29
			WEB	105	0	210	58	0	145	0.41
	38	38	FLG	73	0	210	22	0	120	0.16
			WEB	72	0	210	49	0	120	0.28
	39	39	FLG	-28	10	210	19	0	120	0.05
			WEB	-28	9	210	41	22	120	0.14
	40	40	FLG	-71	10	210	15	0	120	0.15
			WEB	-70	9	210	32	22	120	0.20
	41	41	FLG	-99	10	210	10	0	120	0.25
			WEB	-97	9	210	20	22	120	0.27
	42	42	FLG	-109	10	210	7	0	120	0.30
			WEB	-108	9	210	12	22	120	0.32
	43	43	FLG	-101	10	210	10	0	120	0.26
			WEB	-99	9	210	21	22	120	0.28
	44	44	FLG	-75	10	210	14	0	120	0.16
			WEB	-74	9	210	31	22	120	0.21
	45	45	FLG	-31	10	210	19	0	120	0.06
			WEB	-31	9	210	41	22	120	0.15
	46	46	FLG	72	0	210	24	0	120	0.16
			WEB	71	0	210	51	0	145	0.24
	47	47	FLG	105	0	210	21	0	120	0.28
			WEB	104	0	210	60	0	145	0.41
Int. sup.	48	48	FLG	166	0	210	23	0	120	0.66
			WEB	163	0	210	58	0	145	0.76
	49	49	FLG	104	0	210	19	0	120	0.27
			WEB	103	0	210	57	0	145	0.39
	50	50	FLG	70	0	210	23	0	120	0.15
			WEB	69	0	210	49	0	120	0.28
	51	51	FLG	-35	10	210	18	0	120	0.06
			WEB	-34	9	210	40	22	120	0.14
	52	52	FLG	-79	10	210	14	0	120	0.17
			WEB	-77	9	210	30	22	120	0.22
	53	53	FLG	-104	10	210	10	0	120	0.28
			WEB	-103	9	210	19	22	120	0.30
	54	54	FLG	-114	10	210	7	0	120	0.32
			WEB	-112	9	210	12	22	120	0.35
	55	55	FLG	-105	10	210	10	0	120	0.28
			WEB	-104	9	210	20	22	120	0.30
	56	56	FLG	-80	10	210	14	0	120	0.18
			WEB	-79	9	210	30	22	120	0.22
	57	57	FLG	-38	10	210	19	0	120	0.07
			WEB	-38	9	210	41	22	120	0.16
	58	58	FLG	63	0	210	24	0	120	0.13
			WEB	62	0	210	51	0	120	0.27

	59	59	FLG	101	0	210	21	0	120	0.26
			WEB	99	0	210	59	0	145	0.39
Int. sup.	60	60	FLG	164	0	210	24	0	120	0.65
			WEB	162	0	210	67	0	145	0.81
	61	61	FLG	103	0	210	20	0	120	0.27
			WEB	102	0	210	55	0	145	0.38
	62	62	FLG	68	0	210	21	0	120	0.14
			WEB	67	0	210	46	0	145	0.20
	63	63	FLG	-31	10	210	17	0	120	0.05
			WEB	-31	9	210	37	22	120	0.12
	64	64	FLG	-71	10	210	13	0	120	0.14
			WEB	-70	9	210	28	22	120	0.18
	65	65	FLG	-92	10	210	9	0	120	0.22
			WEB	-90	9	210	16	22	120	0.24
	66	66	FLG	-98	10	210	7	0	120	0.24
			WEB	-96	9	210	14	22	120	0.27
	67	67	FLG	-86	10	210	10	0	120	0.19
			WEB	-85	9	210	22	22	120	0.22
	68	68	FLG	-57	10	210	15	0	120	0.10
			WEB	-56	9	210	32	22	120	0.15
	69	69	FLG	34	0	210	20	0	120	0.05
			WEB	34	0	210	43	0	120	0.15
	70	70	FLG	89	0	210	24	0	120	0.22
			WEB	87	0	210	52	0	145	0.30
	71	71	FLG	107	0	210	17	0	120	0.28
			WEB	105	0	210	60	0	145	0.42
Int. sup.	72	72	FLG	164	0	210	19	0	120	0.63
			WEB	160	0	210	69	0	145	0.81
	73	73	FLG	90	0	210	17	0	120	0.20
			WEB	88	0	210	59	0	145	0.34
	74	74	FLG	51	0	210	22	0	120	0.09
			WEB	50	0	210	49	0	145	0.17
	75	75	FLG	-59	10	210	18	0	120	0.12
			WEB	-58	9	210	42	22	120	0.21
	76	76	FLG	-107	10	210	15	0	120	0.30
			WEB	-105	9	210	34	22	145	0.33
	77	77	FLG	-137	10	210	11	0	120	0.47
			WEB	-136	9	210	24	22	145	0.47
	78	78	FLG	-152	10	210	8	0	120	0.56
			WEB	-150	9	210	14	22	145	0.56
	79	79	FLG	-147	10	210	9	0	120	0.53
			WEB	-146	9	210	17	22	145	0.54
	80	80	FLG	-123	10	210	14	0	120	0.38
			WEB	-121	9	210	28	22	145	0.40
	81	81	FLG	-82	10	210	18	0	120	0.20
			WEB	-81	9	210	40	22	145	0.24
End. sup.	82	82	FLG	0	10	210	25	0	120	0.05
			WEB	0	9	210	55	22	120	0.21

5-8 Splice Calculation of Cross Beam .rtf

Calculation of field

(1) Cross Beam 1 CR1-082 (End member) DECK

C. B. 1 CR1-001 (End member) DECK, C. B. 1 CR1-002 DECK, C. B. 1 CR1-003 DECK
C. B. 1 CR1-004 DECK, C. B. 1 CR1-005 DECK, C. B. 1 CR1-006 DECK, C. B. 1 CR1-007 DECK
C. B. 1 CR1-008 DECK, C. B. 1 CR1-009 DECK, C. B. 1 CR1-010 DECK, C. B. 1 CR1-011 DECK
C. B. 1 CR1-012 DECK, C. B. 1 CR1-013 DECK, C. B. 1 CR1-014 DECK, C. B. 1 CR1-015 DECK
C. B. 1 CR1-016 DECK, C. B. 1 CR1-017 DECK, C. B. 1 CR1-018 DECK, C. B. 1 CR1-019 DECK
C. B. 1 CR1-020 DECK, C. B. 1 CR1-021 DECK, C. B. 1 CR1-022 DECK, C. B. 1 CR1-023 DECK
C. B. 1 CR1-024 DECK, C. B. 1 CR1-025 DECK, C. B. 1 CR1-026 DECK, C. B. 1 CR1-027 DECK
C. B. 1 CR1-028 DECK, C. B. 1 CR1-029 DECK, C. B. 1 CR1-030 DECK, C. B. 1 CR1-031 DECK
C. B. 1 CR1-032 DECK, C. B. 1 CR1-033 DECK, C. B. 1 CR1-034 DECK, C. B. 1 CR1-035 DECK
C. B. 1 CR1-036 DECK, C. B. 1 CR1-037 DECK, C. B. 1 CR1-038 DECK, C. B. 1 CR1-039 DECK
C. B. 1 CR1-040 DECK, C. B. 1 CR1-041 DECK, C. B. 1 CR1-042 DECK, C. B. 1 CR1-043 DECK
C. B. 1 CR1-044 DECK, C. B. 1 CR1-045 DECK, C. B. 1 CR1-046 DECK, C. B. 1 CR1-047 DECK
C. B. 1 CR1-048 DECK, C. B. 1 CR1-049 DECK, C. B. 1 CR1-050 DECK, C. B. 1 CR1-051 DECK
C. B. 1 CR1-052 DECK, C. B. 1 CR1-053 DECK, C. B. 1 CR1-054 DECK, C. B. 1 CR1-055 DECK
C. B. 1 CR1-056 DECK, C. B. 1 CR1-057 DECK, C. B. 1 CR1-058 DECK, C. B. 1 CR1-059 DECK
C. B. 1 CR1-060 DECK, C. B. 1 CR1-061 DECK, C. B. 1 CR1-062 DECK, C. B. 1 CR1-063 DECK
C. B. 1 CR1-064 DECK, C. B. 1 CR1-065 DECK, C. B. 1 CR1-066 DECK, C. B. 1 CR1-067 DECK
C. B. 1 CR1-068 DECK, C. B. 1 CR1-069 DECK, C. B. 1 CR1-070 DECK, C. B. 1 CR1-071 DECK
C. B. 1 CR1-072 DECK, C. B. 1 CR1-073 DECK, C. B. 1 CR1-074 DECK, C. B. 1 CR1-075 DECK
C. B. 1 CR1-076 DECK, C. B. 1 CR1-077 DECK, C. B. 1 CR1-078 DECK, C. B. 1 CR1-079 DECK
C. B. 1 CR1-080 DECK, C. B. 1 CR1-081 DECK, C. B. 3 CR3-001 (End member) DECK
C. B. 3 CR3-002 DECK, C. B. 3 CR3-003 DECK, C. B. 3 CR3-004 DECK, C. B. 3 CR3-005 DECK
C. B. 3 CR3-006 DECK, C. B. 3 CR3-007 DECK, C. B. 3 CR3-008 DECK, C. B. 3 CR3-009 DECK
C. B. 3 CR3-010 DECK, C. B. 3 CR3-011 DECK, C. B. 3 CR3-012 DECK, C. B. 3 CR3-013 DECK
C. B. 3 CR3-014 DECK, C. B. 3 CR3-015 DECK, C. B. 3 CR3-016 DECK, C. B. 3 CR3-017 DECK
C. B. 3 CR3-018 DECK, C. B. 3 CR3-019 DECK, C. B. 3 CR3-020 DECK, C. B. 3 CR3-021 DECK
C. B. 3 CR3-022 DECK, C. B. 3 CR3-023 DECK, C. B. 3 CR3-024 DECK, C. B. 3 CR3-025 DECK
C. B. 3 CR3-026 DECK, C. B. 3 CR3-027 DECK, C. B. 3 CR3-028 DECK, C. B. 3 CR3-029 DECK
C. B. 3 CR3-030 DECK, C. B. 3 CR3-031 DECK, C. B. 3 CR3-032 DECK, C. B. 3 CR3-033 DECK
C. B. 3 CR3-034 DECK, C. B. 3 CR3-035 DECK, C. B. 3 CR3-036 DECK, C. B. 3 CR3-037 DECK
C. B. 3 CR3-038 DECK, C. B. 3 CR3-039 DECK, C. B. 3 CR3-040 DECK, C. B. 3 CR3-041 DECK
C. B. 3 CR3-042 DECK, C. B. 3 CR3-043 DECK, C. B. 3 CR3-044 DECK, C. B. 3 CR3-045 DECK
C. B. 3 CR3-046 DECK, C. B. 3 CR3-047 DECK, C. B. 3 CR3-048 DECK, C. B. 3 CR3-049 DECK
C. B. 3 CR3-050 DECK, C. B. 3 CR3-051 DECK, C. B. 3 CR3-052 DECK, C. B. 3 CR3-053 DECK
C. B. 3 CR3-054 DECK, C. B. 3 CR3-055 DECK, C. B. 3 CR3-056 DECK, C. B. 3 CR3-057 DECK
C. B. 3 CR3-058 DECK, C. B. 3 CR3-059 DECK, C. B. 3 CR3-060 DECK, C. B. 3 CR3-061 DECK
C. B. 3 CR3-062 DECK, C. B. 3 CR3-063 DECK, C. B. 3 CR3-064 DECK, C. B. 3 CR3-065 DECK
C. B. 3 CR3-066 DECK, C. B. 3 CR3-067 DECK, C. B. 3 CR3-068 DECK, C. B. 3 CR3-069 DECK
C. B. 3 CR3-070 DECK, C. B. 3 CR3-071 DECK, C. B. 3 CR3-072 DECK, C. B. 3 CR3-073 DECK
C. B. 3 CR3-074 DECK, C. B. 3 CR3-075 DECK, C. B. 3 CR3-076 DECK, C. B. 3 CR3-077 DECK
C. B. 3 CR3-078 DECK, C. B. 3 CR3-079 DECK, C. B. 3 CR3-080 DECK, C. B. 3 CR3-081 DECK
C. B. 3 CR3-082 (End member) DECK

(a) Acting stress

$$\sigma_{tmax} = 61 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$
$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 495 * 16 \quad A_g = 79.2 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 7920 = 831600 \text{ N}$$

(d) Required section area of the splice plates

$$AnR = P_t / \sigma_a = 831600 / 140 = 5940 \text{ mm}^2 = 59.4 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 831600 / 108000 = 7.7$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 0 \text{ unites)$$

(2) Cross Beam 1 CR1-082 (End member) LFLG

C. B. 1 CR1-001 (End member) LFLG, C. B. 1 CR1-002 LFLG, C. B. 1 CR1-003 LFLG
C. B. 1 CR1-004 LFLG, C. B. 1 CR1-005 LFLG, C. B. 1 CR1-006 LFLG, C. B. 1 CR1-007 LFLG
C. B. 1 CR1-008 LFLG, C. B. 1 CR1-009 LFLG, C. B. 1 CR1-010 LFLG, C. B. 1 CR1-011 LFLG
C. B. 1 CR1-012 LFLG, C. B. 1 CR1-013 LFLG, C. B. 1 CR1-014 LFLG, C. B. 1 CR1-015 LFLG
C. B. 1 CR1-016 LFLG, C. B. 1 CR1-017 LFLG, C. B. 1 CR1-018 LFLG, C. B. 1 CR1-019 LFLG
C. B. 1 CR1-020 LFLG, C. B. 1 CR1-021 LFLG, C. B. 1 CR1-022 LFLG, C. B. 1 CR1-023 LFLG
C. B. 1 CR1-024 LFLG, C. B. 1 CR1-025 LFLG, C. B. 1 CR1-026 LFLG, C. B. 1 CR1-027 LFLG
C. B. 1 CR1-028 LFLG, C. B. 1 CR1-029 LFLG, C. B. 1 CR1-030 LFLG, C. B. 1 CR1-031 LFLG
C. B. 1 CR1-032 LFLG, C. B. 1 CR1-033 LFLG, C. B. 1 CR1-034 LFLG, C. B. 1 CR1-035 LFLG
C. B. 1 CR1-036 LFLG, C. B. 1 CR1-037 LFLG, C. B. 1 CR1-038 LFLG, C. B. 1 CR1-039 LFLG
C. B. 1 CR1-040 LFLG, C. B. 1 CR1-041 LFLG, C. B. 1 CR1-042 LFLG, C. B. 1 CR1-043 LFLG
C. B. 1 CR1-044 LFLG, C. B. 1 CR1-045 LFLG, C. B. 1 CR1-046 LFLG, C. B. 1 CR1-047 LFLG
C. B. 1 CR1-048 LFLG, C. B. 1 CR1-049 LFLG, C. B. 1 CR1-050 LFLG, C. B. 1 CR1-051 LFLG
C. B. 1 CR1-052 LFLG, C. B. 1 CR1-053 LFLG, C. B. 1 CR1-054 LFLG, C. B. 1 CR1-055 LFLG
C. B. 1 CR1-056 LFLG, C. B. 1 CR1-057 LFLG, C. B. 1 CR1-058 LFLG, C. B. 1 CR1-059 LFLG
C. B. 1 CR1-060 LFLG, C. B. 1 CR1-061 LFLG, C. B. 1 CR1-062 LFLG, C. B. 1 CR1-063 LFLG
C. B. 1 CR1-064 LFLG, C. B. 1 CR1-065 LFLG, C. B. 1 CR1-066 LFLG, C. B. 1 CR1-067 LFLG
C. B. 1 CR1-068 LFLG, C. B. 1 CR1-069 LFLG, C. B. 1 CR1-070 LFLG, C. B. 1 CR1-071 LFLG
C. B. 1 CR1-072 LFLG, C. B. 1 CR1-073 LFLG, C. B. 1 CR1-074 LFLG, C. B. 1 CR1-075 LFLG
C. B. 1 CR1-076 LFLG, C. B. 1 CR1-077 LFLG, C. B. 1 CR1-078 LFLG, C. B. 1 CR1-079 LFLG
C. B. 1 CR1-080 LFLG, C. B. 1 CR1-081 LFLG, C. B. 2 CR2-001 (End member) LFLG
C. B. 2 CR2-002 LFLG, C. B. 2 CR2-003 LFLG, C. B. 2 CR2-004 LFLG, C. B. 2 CR2-005 LFLG
C. B. 2 CR2-006 LFLG, C. B. 2 CR2-007 LFLG, C. B. 2 CR2-008 LFLG, C. B. 2 CR2-009 LFLG
C. B. 2 CR2-010 LFLG, C. B. 2 CR2-011 LFLG, C. B. 2 CR2-012 LFLG, C. B. 2 CR2-013 LFLG
C. B. 2 CR2-014 LFLG, C. B. 2 CR2-015 LFLG, C. B. 2 CR2-016 LFLG, C. B. 2 CR2-017 LFLG
C. B. 2 CR2-018 LFLG, C. B. 2 CR2-019 LFLG, C. B. 2 CR2-020 LFLG, C. B. 2 CR2-021 LFLG
C. B. 2 CR2-022 LFLG, C. B. 2 CR2-023 LFLG, C. B. 2 CR2-024 LFLG, C. B. 2 CR2-025 LFLG
C. B. 2 CR2-026 LFLG, C. B. 2 CR2-027 LFLG, C. B. 2 CR2-028 LFLG, C. B. 2 CR2-029 LFLG
C. B. 2 CR2-030 LFLG, C. B. 2 CR2-031 LFLG, C. B. 2 CR2-032 LFLG, C. B. 2 CR2-033 LFLG
C. B. 2 CR2-034 LFLG, C. B. 2 CR2-035 LFLG, C. B. 2 CR2-036 LFLG, C. B. 2 CR2-037 LFLG
C. B. 2 CR2-038 LFLG, C. B. 2 CR2-039 LFLG, C. B. 2 CR2-040 LFLG, C. B. 2 CR2-041 LFLG
C. B. 2 CR2-042 LFLG, C. B. 2 CR2-043 LFLG, C. B. 2 CR2-044 LFLG, C. B. 2 CR2-045 LFLG
C. B. 2 CR2-046 LFLG, C. B. 2 CR2-047 LFLG, C. B. 2 CR2-048 LFLG, C. B. 2 CR2-049 LFLG
C. B. 2 CR2-050 LFLG, C. B. 2 CR2-051 LFLG, C. B. 2 CR2-052 LFLG, C. B. 2 CR2-053 LFLG
C. B. 2 CR2-054 LFLG, C. B. 2 CR2-055 LFLG, C. B. 2 CR2-056 LFLG, C. B. 2 CR2-057 LFLG
C. B. 2 CR2-058 LFLG, C. B. 2 CR2-059 LFLG, C. B. 2 CR2-060 LFLG, C. B. 2 CR2-061 LFLG
C. B. 2 CR2-062 LFLG, C. B. 2 CR2-063 LFLG, C. B. 2 CR2-064 LFLG, C. B. 2 CR2-065 LFLG
C. B. 2 CR2-066 LFLG, C. B. 2 CR2-067 LFLG, C. B. 2 CR2-068 LFLG, C. B. 2 CR2-069 LFLG
C. B. 2 CR2-070 LFLG, C. B. 2 CR2-071 LFLG, C. B. 2 CR2-072 LFLG, C. B. 2 CR2-073 LFLG
C. B. 2 CR2-074 LFLG, C. B. 2 CR2-075 LFLG, C. B. 2 CR2-076 LFLG, C. B. 2 CR2-077 LFLG
C. B. 2 CR2-078 LFLG, C. B. 2 CR2-079 LFLG, C. B. 2 CR2-080 LFLG, C. B. 2 CR2-081 LFLG
C. B. 2 CR2-082 (End member) LFLG, C. B. 3 CR3-001 (End member) LFLG, C. B. 3 CR3-002 LFLG
C. B. 3 CR3-003 LFLG, C. B. 3 CR3-004 LFLG, C. B. 3 CR3-005 LFLG, C. B. 3 CR3-006 LFLG
C. B. 3 CR3-007 LFLG, C. B. 3 CR3-008 LFLG, C. B. 3 CR3-009 LFLG, C. B. 3 CR3-010 LFLG
C. B. 3 CR3-011 LFLG, C. B. 3 CR3-012 LFLG, C. B. 3 CR3-013 LFLG, C. B. 3 CR3-014 LFLG
C. B. 3 CR3-015 LFLG, C. B. 3 CR3-016 LFLG, C. B. 3 CR3-017 LFLG, C. B. 3 CR3-018 LFLG
C. B. 3 CR3-019 LFLG, C. B. 3 CR3-020 LFLG, C. B. 3 CR3-021 LFLG, C. B. 3 CR3-022 LFLG
C. B. 3 CR3-023 LFLG, C. B. 3 CR3-024 LFLG, C. B. 3 CR3-025 LFLG, C. B. 3 CR3-026 LFLG
C. B. 3 CR3-027 LFLG, C. B. 3 CR3-028 LFLG, C. B. 3 CR3-029 LFLG, C. B. 3 CR3-030 LFLG
C. B. 3 CR3-031 LFLG, C. B. 3 CR3-032 LFLG, C. B. 3 CR3-033 LFLG, C. B. 3 CR3-034 LFLG
C. B. 3 CR3-035 LFLG, C. B. 3 CR3-036 LFLG, C. B. 3 CR3-037 LFLG, C. B. 3 CR3-038 LFLG
C. B. 3 CR3-039 LFLG, C. B. 3 CR3-040 LFLG, C. B. 3 CR3-041 LFLG, C. B. 3 CR3-042 LFLG
C. B. 3 CR3-043 LFLG, C. B. 3 CR3-044 LFLG, C. B. 3 CR3-045 LFLG, C. B. 3 CR3-046 LFLG
C. B. 3 CR3-047 LFLG, C. B. 3 CR3-048 LFLG, C. B. 3 CR3-049 LFLG, C. B. 3 CR3-050 LFLG
C. B. 3 CR3-051 LFLG, C. B. 3 CR3-052 LFLG, C. B. 3 CR3-053 LFLG, C. B. 3 CR3-054 LFLG
C. B. 3 CR3-055 LFLG, C. B. 3 CR3-056 LFLG, C. B. 3 CR3-057 LFLG, C. B. 3 CR3-058 LFLG
C. B. 3 CR3-059 LFLG, C. B. 3 CR3-060 LFLG, C. B. 3 CR3-061 LFLG, C. B. 3 CR3-062 LFLG
C. B. 3 CR3-063 LFLG, C. B. 3 CR3-064 LFLG, C. B. 3 CR3-065 LFLG, C. B. 3 CR3-066 LFLG
C. B. 3 CR3-067 LFLG, C. B. 3 CR3-068 LFLG, C. B. 3 CR3-069 LFLG, C. B. 3 CR3-070 LFLG

C. B. 3 CR3-071 LFLG, C. B. 3 CR3-072 LFLG, C. B. 3 CR3-073 LFLG, C. B. 3 CR3-074 LFLG
 C. B. 3 CR3-075 LFLG, C. B. 3 CR3-076 LFLG, C. B. 3 CR3-077 LFLG, C. B. 3 CR3-078 LFLG
 C. B. 3 CR3-079 LFLG, C. B. 3 CR3-080 LFLG, C. B. 3 CR3-081 LFLG
 C. B. 3 CR3-082(End member) LFLG

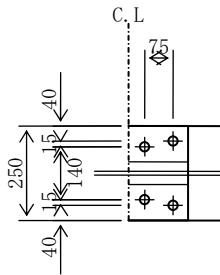
(a) Acting stress

$$\sigma_{tmax} = 82 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-LFLG PL } 250 * 12 \quad A_g = 30.0 \text{ cm}^2 \quad (\text{SM400})$$

(c) Bolt arrangement



(d) Check of section of main plate

$$1\text{-LFLG PL } 250 * 12 \quad A = 30.0$$

$$(30.0 - (2 * 2.5) * 1.2) * 1.1 = 26.4 < 30.0 \quad \therefore A_n = 26.4 \text{ cm}^2$$

$$\sigma_{tn} = \sigma_{tmax} * A_g / A_n = 82 * 30.0 / 26.4 = 94 \text{ N/mm}^2$$

$$< \sigma_{ta} = 140 \text{ N/mm}^2$$

(e) Design axial force

$$P_t = 0.75 \sigma_{ta} * A_n / 1.1 = 105 * 2640 / 1.1 = 252000 \text{ N}$$

$$> \sigma_{tn} * A_n = 94 * 2640 = 246960 \text{ N}$$

(f) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 252000 / 140 = 1800 \text{ mm}^2 = 18.0 \text{ cm}^2$$

(g) Required bolt number

$$n = P_t / (108000 * 1.00) = 252000 / 108000 = 2.3 \text{ pcs. (4 bolts will be used.)}$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:
 $\rho_a = 108000 \text{ N}$ (inorganic zinc primer is applied.) $N_{max} = 2 \text{ unites}$)

(h) Check of splice plates

	(SS400)	$A_g(\text{cm}^2)$	deduction of bolt holes	$A_n(\text{cm}^2)$	$A_{nR}(\text{cm}^2)$
2-SPL PL	95 * 9	17.1	$2 * (1 * 2.5) * 0.9 * 1.1 = 13.9$	$17.1 - 13.9 = 3.2$	17.1
1-SPL PL	250 * 9	22.5	$(2 * 2.5) * 0.9 * 1.1 = 4.95$	$22.5 - 4.95 = 17.55$	22.5
		39.6		33.7	
					$> A_{nR}$

(3) Cross Beam 1 CR1-082 (End member) WEB

C. B. 1 CR1-001 (End member) WEB, C. B. 1 CR1-006 WEB, C. B. 1 CR1-007 WEB
C. B. 1 CR1-008 WEB, C. B. 1 CR1-009 WEB, C. B. 1 CR1-010 WEB, C. B. 1 CR1-011 WEB
C. B. 1 CR1-012 WEB, C. B. 1 CR1-013 WEB, C. B. 1 CR1-014 WEB, C. B. 1 CR1-015 WEB
C. B. 1 CR1-016 WEB, C. B. 1 CR1-017 WEB, C. B. 1 CR1-018 WEB, C. B. 1 CR1-019 WEB
C. B. 1 CR1-020 WEB, C. B. 1 CR1-021 WEB, C. B. 1 CR1-022 WEB, C. B. 1 CR1-023 WEB
C. B. 1 CR1-024 WEB, C. B. 1 CR1-025 WEB, C. B. 1 CR1-026 WEB, C. B. 1 CR1-027 WEB
C. B. 1 CR1-028 WEB, C. B. 1 CR1-029 WEB, C. B. 1 CR1-030 WEB, C. B. 1 CR1-031 WEB
C. B. 1 CR1-032 WEB, C. B. 1 CR1-033 WEB, C. B. 1 CR1-034 WEB, C. B. 1 CR1-035 WEB
C. B. 1 CR1-036 WEB, C. B. 1 CR1-037 WEB, C. B. 1 CR1-038 WEB, C. B. 1 CR1-039 WEB
C. B. 1 CR1-040 WEB, C. B. 1 CR1-041 WEB, C. B. 1 CR1-042 WEB, C. B. 1 CR1-043 WEB
C. B. 1 CR1-044 WEB, C. B. 1 CR1-045 WEB, C. B. 1 CR1-046 WEB, C. B. 1 CR1-047 WEB
C. B. 1 CR1-048 WEB, C. B. 1 CR1-049 WEB, C. B. 1 CR1-050 WEB, C. B. 1 CR1-051 WEB
C. B. 1 CR1-052 WEB, C. B. 1 CR1-053 WEB, C. B. 1 CR1-054 WEB, C. B. 1 CR1-055 WEB
C. B. 1 CR1-056 WEB, C. B. 1 CR1-057 WEB, C. B. 1 CR1-058 WEB, C. B. 1 CR1-059 WEB
C. B. 1 CR1-060 WEB, C. B. 1 CR1-061 WEB, C. B. 1 CR1-062 WEB, C. B. 1 CR1-063 WEB
C. B. 1 CR1-064 WEB, C. B. 1 CR1-065 WEB, C. B. 1 CR1-066 WEB, C. B. 1 CR1-067 WEB
C. B. 1 CR1-068 WEB, C. B. 1 CR1-069 WEB, C. B. 1 CR1-070 WEB, C. B. 1 CR1-071 WEB
C. B. 1 CR1-072 WEB, C. B. 1 CR1-073 WEB, C. B. 1 CR1-074 WEB, C. B. 1 CR1-075 WEB
C. B. 1 CR1-076 WEB, C. B. 1 CR1-077 WEB, C. B. 1 CR1-078 WEB, C. B. 1 CR1-079 WEB
C. B. 1 CR1-080 WEB, C. B. 1 CR1-081 WEB, C. B. 3 CR3-001 (End member) WEB
C. B. 3 CR3-006 WEB, C. B. 3 CR3-007 WEB, C. B. 3 CR3-008 WEB, C. B. 3 CR3-009 WEB
C. B. 3 CR3-010 WEB, C. B. 3 CR3-011 WEB, C. B. 3 CR3-012 WEB, C. B. 3 CR3-013 WEB
C. B. 3 CR3-014 WEB, C. B. 3 CR3-015 WEB, C. B. 3 CR3-016 WEB, C. B. 3 CR3-017 WEB
C. B. 3 CR3-018 WEB, C. B. 3 CR3-019 WEB, C. B. 3 CR3-020 WEB, C. B. 3 CR3-021 WEB
C. B. 3 CR3-022 WEB, C. B. 3 CR3-023 WEB, C. B. 3 CR3-024 WEB, C. B. 3 CR3-025 WEB
C. B. 3 CR3-026 WEB, C. B. 3 CR3-027 WEB, C. B. 3 CR3-028 WEB, C. B. 3 CR3-029 WEB
C. B. 3 CR3-030 WEB, C. B. 3 CR3-031 WEB, C. B. 3 CR3-032 WEB, C. B. 3 CR3-033 WEB
C. B. 3 CR3-034 WEB, C. B. 3 CR3-035 WEB, C. B. 3 CR3-036 WEB, C. B. 3 CR3-037 WEB
C. B. 3 CR3-038 WEB, C. B. 3 CR3-039 WEB, C. B. 3 CR3-040 WEB, C. B. 3 CR3-041 WEB
C. B. 3 CR3-042 WEB, C. B. 3 CR3-043 WEB, C. B. 3 CR3-044 WEB, C. B. 3 CR3-045 WEB
C. B. 3 CR3-046 WEB, C. B. 3 CR3-047 WEB, C. B. 3 CR3-048 WEB, C. B. 3 CR3-049 WEB
C. B. 3 CR3-050 WEB, C. B. 3 CR3-051 WEB, C. B. 3 CR3-052 WEB, C. B. 3 CR3-053 WEB
C. B. 3 CR3-054 WEB, C. B. 3 CR3-055 WEB, C. B. 3 CR3-056 WEB, C. B. 3 CR3-057 WEB
C. B. 3 CR3-058 WEB, C. B. 3 CR3-059 WEB, C. B. 3 CR3-060 WEB, C. B. 3 CR3-061 WEB
C. B. 3 CR3-062 WEB, C. B. 3 CR3-063 WEB, C. B. 3 CR3-064 WEB, C. B. 3 CR3-065 WEB
C. B. 3 CR3-066 WEB, C. B. 3 CR3-067 WEB, C. B. 3 CR3-068 WEB, C. B. 3 CR3-069 WEB
C. B. 3 CR3-070 WEB, C. B. 3 CR3-071 WEB, C. B. 3 CR3-072 WEB, C. B. 3 CR3-073 WEB
C. B. 3 CR3-074 WEB, C. B. 3 CR3-075 WEB, C. B. 3 CR3-076 WEB, C. B. 3 CR3-077 WEB
C. B. 3 CR3-078 WEB, C. B. 3 CR3-079 WEB, C. B. 3 CR3-080 WEB, C. B. 3 CR3-081 WEB
C. B. 3 CR3-082 (End member) WEB

(a) Section area of main plate (Web plate)

1-WEB PL 2230 * 10 A = 223.0 cm² (SM400)

(b) Design stress

$$\sigma_U = 60 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

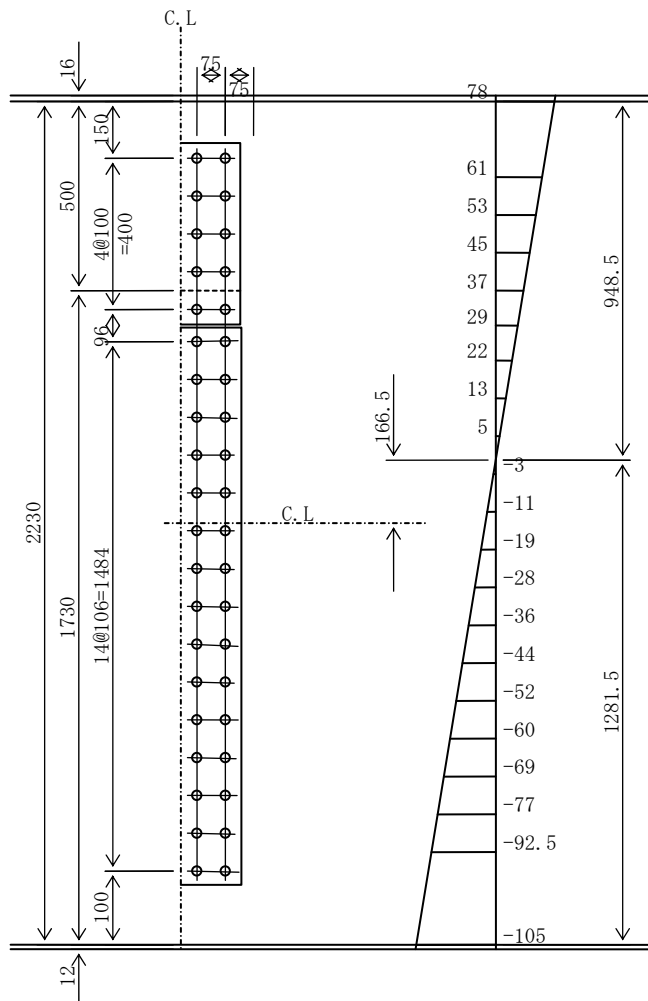
$$\sigma_L = -82 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2$$

$$\sigma_{Un} = 105 * 60 / 82 = 78 \text{ N/mm}^2$$

$$\sigma_{Ln} = 105 \text{ N/mm}^2$$

$$\tau = 27 \text{ N/mm}^2$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 20th row

Sharing width: $b_1 = 15.3 \text{ cm}$

Total force to be shared

$$P_1 = 153 * 10 * (92.5 + 105) / 2 = 151088 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 151088 / (108000 * 1.00) = 1.4 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

Sharing width: $b_2 = 20.0 \text{ cm}$

Total force to be shared

$$P_2 = 200 * 10 * (78 + 61) / 2 = 139044 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_2 = 139044 / (108000 * 1.00) = 1.3 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 55 = 27 * 22300 / 40 = 15053 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c20} = \sqrt{((151088 / 2)^2 + 15053^2)} = 75918 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((139044 / 2)^2 + 15053^2)} = 71133 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{\max} = 2 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1480 * 9 \quad A_s = 266.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1210299 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 985951 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 985951 * 10^4 / 1282 = 808 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 808 * 10^6 / (1210299 * 10^4) * 1127 = 75 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

(4) Cross Beam 2 CR2-001 (End member) DECK

(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 15 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 140 = 105 \text{ N/mm}^2 \\ \therefore \sigma_t &= 105 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$1\text{-DECK PL } 1452 * 16 \quad A_g = 232.3 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 23232 = 2439360 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 2439360 / 140 = 17424 \text{ mm}^2 = 174.2 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 2439360 / 108000 = 22.6$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

(5) Cross Beam 2 CR2-002 DECK

(a) Acting stress

$$\sigma_{tmax} = 10 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$
$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 1544 * 16 \quad A_g = 247.0 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 24704 = 2593920 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 2593920 / 140 = 18528 \text{ mm}^2 = 185.3 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 2593920 / 108000 = 24.0$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites})$$

(6) Cross Beam 2 CR2-003 DECK

(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 12 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 140 = 105 \text{ N/mm}^2 \\ \therefore \sigma_t &= 105 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$1\text{-DECK PL } 1393 * 16 \quad A_g = 222.9 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 22288 = 2340240 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 2340240 / 140 = 16716 \text{ mm}^2 = 167.2 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 2340240 / 108000 = 21.7$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites})$$

(7) Cross Beam 2 CR2-004 DECK

(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 14 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 140 = 105 \text{ N/mm}^2 \\ \therefore \sigma_t &= 105 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$1\text{-DECK PL } 1243 * 16 \quad A_g = 198.9 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 19888 = 2088240 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 2088240 / 140 = 14916 \text{ mm}^2 = 149.2 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 2088240 / 108000 = 19.3$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

(8) Cross Beam 2 CR2-005 DECK

(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 17 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 140 = 105 \text{ N/mm}^2 \\ \therefore \sigma_t &= 105 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$1\text{-DECK PL } 1092 * 16 \quad A_g = 174.7 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 17472 = 1834560 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 1834560 / 140 = 13104 \text{ mm}^2 = 131.0 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 1834560 / 108000 = 17.0$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites)$$

(9) Cross Beam 2 CR2-005 WEB

C. B. 2 CR2-002 WEB, C. B. 2 CR2-003 WEB, C. B. 2 CR2-004 WEB

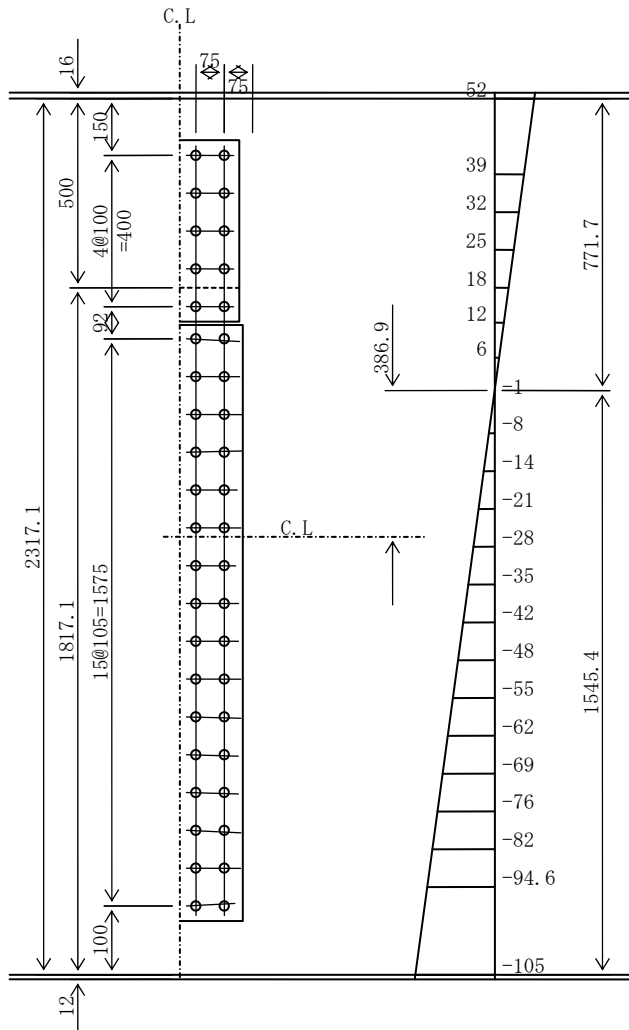
(a) Section area of main plate (Web plate)

1-WEB PL 2317 * 10 A = 2317.7 cm² (SM400)

(b) Design stress

$$\begin{aligned} \sigma_U &= 17 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_L &= -34 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_{Un} &= 105 * 17 / 34 = 52 \text{ N/mm}^2 \\ \sigma_{Ln} &= 105 \text{ N/mm}^2 \\ \tau &= 8 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 21th row

Sharing width: $b_1 = 23.2$ cm

Total force to be shared

$$P_1 = 153 * 10 * (94.6 + 105) / 2 = 152694 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 152694 / (108000 * 1.00) = 1.4 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

Sharing width: $b_2 = 20.0$ cm

Total force to be shared

$$P_2 = 200 * 10 * (52 + 39) / 2 = 91272 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_2 = 91272 / (108000 * 1.00) = 0.8 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 58 = 8 * 23171 / 42 = 4414 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c21} = \sqrt{((152099 / 2)^2 + 4414^2)} = 76477 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((91272 / 2)^2 + 4414^2)} = 45848 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1580 * 9 \quad A_s = 284.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1831664 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1383493 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 1383493 * 10^4 / 1545 = 940 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 940 * 10^6 / (1831664 * 10^4) * 1403 = 72 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

(10) Cross Beam 2 CR2-028 DECK

C. B. 2 CR2-006 DECK, C. B. 2 CR2-007 DECK, C. B. 2 CR2-008 DECK, C. B. 2 CR2-009 DECK
C. B. 2 CR2-010 DECK, C. B. 2 CR2-011 DECK, C. B. 2 CR2-012 DECK, C. B. 2 CR2-013 DECK
C. B. 2 CR2-014 DECK, C. B. 2 CR2-015 DECK, C. B. 2 CR2-016 DECK, C. B. 2 CR2-017 DECK
C. B. 2 CR2-018 DECK, C. B. 2 CR2-019 DECK, C. B. 2 CR2-020 DECK, C. B. 2 CR2-021 DECK
C. B. 2 CR2-022 DECK, C. B. 2 CR2-023 DECK, C. B. 2 CR2-024 DECK, C. B. 2 CR2-025 DECK
C. B. 2 CR2-026 DECK, C. B. 2 CR2-027 DECK, C. B. 2 CR2-029 DECK, C. B. 2 CR2-030 DECK
C. B. 2 CR2-031 DECK, C. B. 2 CR2-032 DECK, C. B. 2 CR2-033 DECK, C. B. 2 CR2-034 DECK
C. B. 2 CR2-035 DECK, C. B. 2 CR2-036 DECK, C. B. 2 CR2-037 DECK, C. B. 2 CR2-038 DECK
C. B. 2 CR2-039 DECK, C. B. 2 CR2-040 DECK, C. B. 2 CR2-041 DECK, C. B. 2 CR2-042 DECK
C. B. 2 CR2-043 DECK, C. B. 2 CR2-044 DECK, C. B. 2 CR2-045 DECK, C. B. 2 CR2-046 DECK
C. B. 2 CR2-047 DECK, C. B. 2 CR2-048 DECK, C. B. 2 CR2-049 DECK, C. B. 2 CR2-050 DECK
C. B. 2 CR2-051 DECK, C. B. 2 CR2-052 DECK, C. B. 2 CR2-053 DECK, C. B. 2 CR2-054 DECK
C. B. 2 CR2-055 DECK, C. B. 2 CR2-056 DECK, C. B. 2 CR2-057 DECK, C. B. 2 CR2-058 DECK
C. B. 2 CR2-059 DECK, C. B. 2 CR2-060 DECK, C. B. 2 CR2-061 DECK, C. B. 2 CR2-062 DECK
C. B. 2 CR2-063 DECK, C. B. 2 CR2-064 DECK, C. B. 2 CR2-065 DECK, C. B. 2 CR2-066 DECK
C. B. 2 CR2-067 DECK, C. B. 2 CR2-068 DECK, C. B. 2 CR2-069 DECK, C. B. 2 CR2-070 DECK
C. B. 2 CR2-071 DECK, C. B. 2 CR2-072 DECK, C. B. 2 CR2-073 DECK, C. B. 2 CR2-074 DECK
C. B. 2 CR2-075 DECK, C. B. 2 CR2-076 DECK, C. B. 2 CR2-077 DECK, C. B. 2 CR2-078 DECK
C. B. 2 CR2-079 DECK, C. B. 2 CR2-080 DECK, C. B. 2 CR2-081 DECK

(a) Acting stress

$$\sigma_{tmax} = 31 \text{ N/mm}^2 \quad 0.75 \sigma_{ta} = 0.75 * 140 = 105 \text{ N/mm}^2$$
$$\therefore \sigma_t = 105 \text{ N/mm}^2$$

(b) Section area of main plate

$$1\text{-DECK PL } 990 * 16 \quad A_g = 158.4 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 15840 = 1663200 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 1663200 / 140 = 11880 \text{ mm}^2 = 118.8 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 1663200 / 108000 = 15.4$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites})$$

(11) Cross Beam 2 CR2-028 WEB

C. B. 2 CR2-001 (End member) WEB, C. B. 2 CR2-006 WEB, C. B. 2 CR2-007 WEB
C. B. 2 CR2-008 WEB, C. B. 2 CR2-009 WEB, C. B. 2 CR2-010 WEB, C. B. 2 CR2-011 WEB
C. B. 2 CR2-012 WEB, C. B. 2 CR2-013 WEB, C. B. 2 CR2-014 WEB, C. B. 2 CR2-015 WEB
C. B. 2 CR2-016 WEB, C. B. 2 CR2-017 WEB, C. B. 2 CR2-018 WEB, C. B. 2 CR2-019 WEB
C. B. 2 CR2-020 WEB, C. B. 2 CR2-021 WEB, C. B. 2 CR2-022 WEB, C. B. 2 CR2-023 WEB
C. B. 2 CR2-024 WEB, C. B. 2 CR2-025 WEB, C. B. 2 CR2-026 WEB, C. B. 2 CR2-027 WEB
C. B. 2 CR2-029 WEB, C. B. 2 CR2-030 WEB, C. B. 2 CR2-031 WEB, C. B. 2 CR2-032 WEB
C. B. 2 CR2-033 WEB, C. B. 2 CR2-034 WEB, C. B. 2 CR2-035 WEB, C. B. 2 CR2-036 WEB
C. B. 2 CR2-037 WEB, C. B. 2 CR2-038 WEB, C. B. 2 CR2-039 WEB, C. B. 2 CR2-040 WEB
C. B. 2 CR2-041 WEB, C. B. 2 CR2-042 WEB, C. B. 2 CR2-043 WEB, C. B. 2 CR2-044 WEB
C. B. 2 CR2-045 WEB, C. B. 2 CR2-046 WEB, C. B. 2 CR2-047 WEB, C. B. 2 CR2-048 WEB
C. B. 2 CR2-049 WEB, C. B. 2 CR2-050 WEB, C. B. 2 CR2-051 WEB, C. B. 2 CR2-052 WEB
C. B. 2 CR2-053 WEB, C. B. 2 CR2-054 WEB, C. B. 2 CR2-055 WEB, C. B. 2 CR2-056 WEB
C. B. 2 CR2-057 WEB, C. B. 2 CR2-058 WEB, C. B. 2 CR2-059 WEB, C. B. 2 CR2-060 WEB
C. B. 2 CR2-061 WEB, C. B. 2 CR2-062 WEB, C. B. 2 CR2-063 WEB, C. B. 2 CR2-064 WEB
C. B. 2 CR2-065 WEB, C. B. 2 CR2-066 WEB, C. B. 2 CR2-067 WEB, C. B. 2 CR2-068 WEB
C. B. 2 CR2-069 WEB, C. B. 2 CR2-070 WEB, C. B. 2 CR2-071 WEB, C. B. 2 CR2-072 WEB
C. B. 2 CR2-073 WEB, C. B. 2 CR2-074 WEB, C. B. 2 CR2-075 WEB, C. B. 2 CR2-076 WEB
C. B. 2 CR2-077 WEB, C. B. 2 CR2-078 WEB, C. B. 2 CR2-079 WEB, C. B. 2 CR2-080 WEB
C. B. 2 CR2-081 WEB, C. B. 2 CR2-082 (End member) WEB

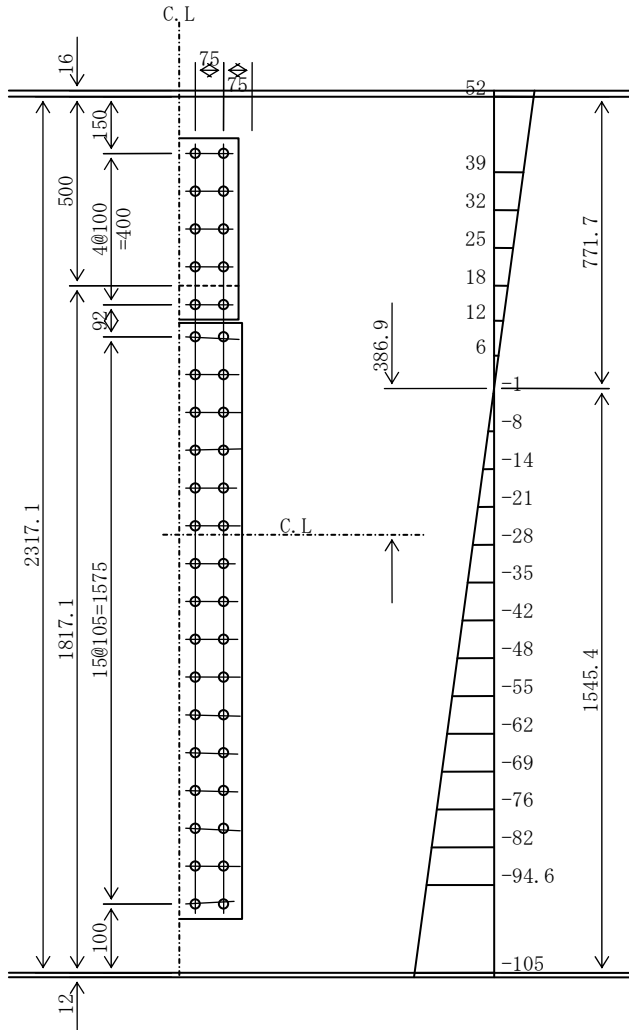
(a) Section area of main plate (Web plate)

1-WEB PL 2317 * 10 A = 231.7 cm² (SM400)

(b) Design stress

$$\begin{aligned}\sigma_U &= 31 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_L &= -58 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_{Un} &= 105 * 31 / 58 = 56 \text{ N/mm}^2 \\ \sigma_{Ln} &= 105 \text{ N/mm}^2 \\ \tau &= 8 \text{ N/mm}^2\end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 21th row

Sharing width: $b_1 = 23.2$ cm

Total force to be shared

$$P_1 = 153 * 10 * (94.6 + 105) / 2 = 152694 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 152694 / (108000 * 1.00) = 1.4 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

Sharing width: $b_2 = 20.0$ cm

Total force to be shared

$$P_2 = 200 * 10 * (52 + 39) / 2 = 91272 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_2 = 91272 / (108000 * 1.00) = 0.8 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 58 = 8 * 23171 / 42 = 4414 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c21} = \sqrt{((152099 / 2)^2 + 4414^2)} = 76477 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((91272 / 2)^2 + 4414^2)} = 45848 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1580 * 9 \quad A_s = 284.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1751815 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 1331310 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 1331310 * 10^4 / 1515 = 923 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 923 * 10^6 / (1751815 * 10^4) * 1373 = 72 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

(12) Cross Beam 2 CR2-082 (End member) DECK

(a) Acting stress

$$\begin{aligned}\sigma_{tmax} &= 24 \text{ N/mm}^2 & 0.75 \sigma_{ta} &= 0.75 * 140 = 105 \text{ N/mm}^2 \\ \therefore \sigma_t &= 105 \text{ N/mm}^2\end{aligned}$$

(b) Section area of main plate

$$1\text{-DECK PL } 934 * 16 \quad A_g = 149.4 \text{ cm}^2 \quad (\text{SM400})$$

(c) Design axial force

$$P_t = \sigma_t * A_g = 105 * 14944 = 1569120 \text{ N}$$

(d) Required section area of the splice plates

$$A_{nR} = P_t / \sigma_a = 1569120 / 140 = 11208 \text{ mm}^2 = 112.1 \text{ cm}^2$$

(e) Required bolt number

$$n = P_t / 108000 = 1569120 / 108000 = 14.5$$

(High strength friction grip bolt, S10T, M22 will be used. Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } \quad N_{max} = 0 \text{ unites})$$

(13) Cross Beam3 CR3-005 WEB

C.B. 1 CR1-002 WEB, C.B. 1 CR1-003 WEB, C.B. 1 CR1-004 WEB, C.B. 1 CR1-005 WEB
 C.B. 3 CR3-002 WEB, C.B. 3 CR3-003 WEB, C.B. 3 CR3-004 WEB

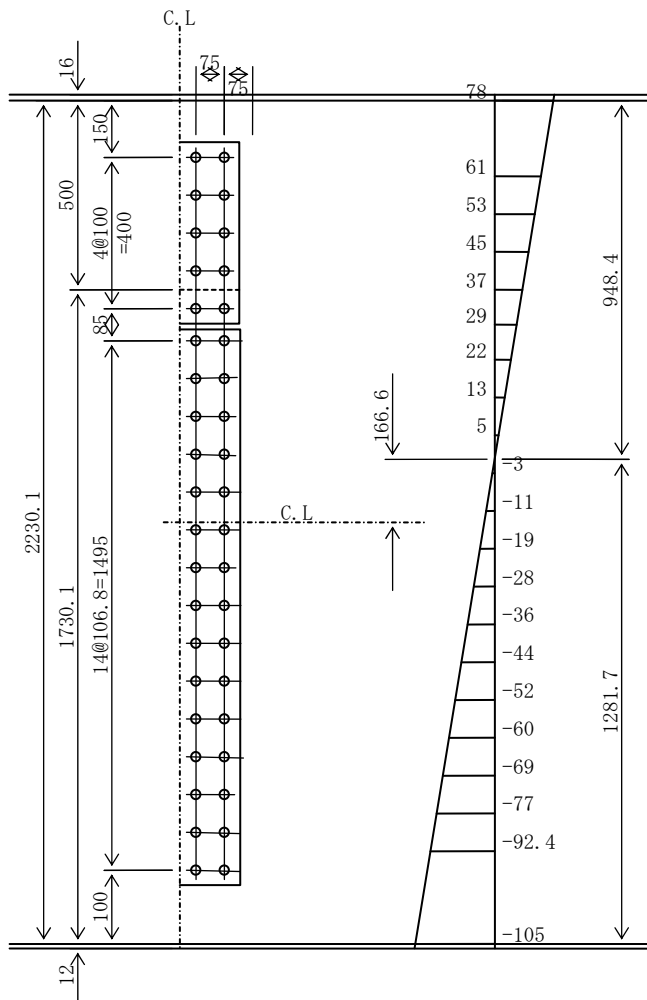
(a) Section area of main plate (Web plate)

1-WEB PL 2230 * 10 A = 223.0 cm² (SM400)

(b) Design stress

$$\begin{aligned} \sigma_U &= 25 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_L &= -33 \text{ N/mm}^2 < \sigma_a * 0.75 = 140 * 0.75 = 105 \text{ N/mm}^2 \\ \sigma_{Un} &= 105 * 25 / 33 = 78 \text{ N/mm}^2 \\ \sigma_{Ln} &= 105 \text{ N/mm}^2 \\ \tau &= 12 \text{ N/mm}^2 \end{aligned}$$

(c) Bolt arrangement and acting stress



(d) Check of bolt stress

Check of bolt at 20th row

Sharing width: $b_1 = 24.5$ cm

Total force to be shared

$$P_1 = 153.4 * 10 * (92.4 + 105) / 2 = 151406 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_1 = 151466 / (108000 * 1.00) = 1.4 \text{ pcs. (2 bolts will be used.)}$$

Check of bolt at first row

Sharing width: $b_2 = 20.0$ cm

Total force to be shared

$$P_2 = 200 * 10 * (78 + 61) / 2 = 139011 \text{ N}$$

Required bolt number (Bolt number to be used)

$$N_2 = 139011 / (108000 * 1.00) = 1.3 \text{ pcs. (2 bolts will be used.)}$$

Check of shear force

$$\rho_s = \tau * A / 55 = 12 * 22301 / 40 = 6690 \text{ N} < \rho_a = 108000 \text{ N}$$

Combined stress

$$\rho_{c20} = \sqrt{((151406 / 2)^2 + 6690^2)} = 75998 \text{ N} < \rho_a = 108000 \text{ N}$$

$$\rho_{c1} = \sqrt{((139011 / 2)^2 + 6690^2)} = 69827 \text{ N} < \rho_a = 108000 \text{ N}$$

(High strength friction grip bolt, S10T, M22 will be used. : Allowable friction forces with double surfaces:

$$\rho_a = 108000 \text{ N (inorganic zinc primer is applied.) } N_{max} = 2 \text{ unites}$$

(e) Check of splice plates

$$2\text{-SPL PL } 480 * 9 \quad A_s = 86.4 \text{ cm}^2 \text{ (SS400)}$$

$$2\text{-SPL PL } 1480 * 9 \quad A_s = 266.4 \text{ cm}^2 \text{ (SS400)}$$

$$\text{Moment of inertia of splice plates} \quad I_s = 1210382 \text{ cm}^4 > I_w$$

$$\text{Moment of inertia of web plate} \quad I_w = 986176 \text{ cm}^4$$

Bending moment to be shared by the web

$$M_w = 105 * 986176 * 10^4 / 1282 = 808 * 10^6 \text{ N}\cdot\text{mm}$$

Bending stress of splice plates

$$\sigma_{sp} = 808 * 10^6 / (1210382 * 10^4) * 1127 = 75 \text{ N/mm}^2 < \sigma_a = 140 \text{ N/mm}^2$$

6- Check of Temperature Stress

4-4 Check of temperature differential stress

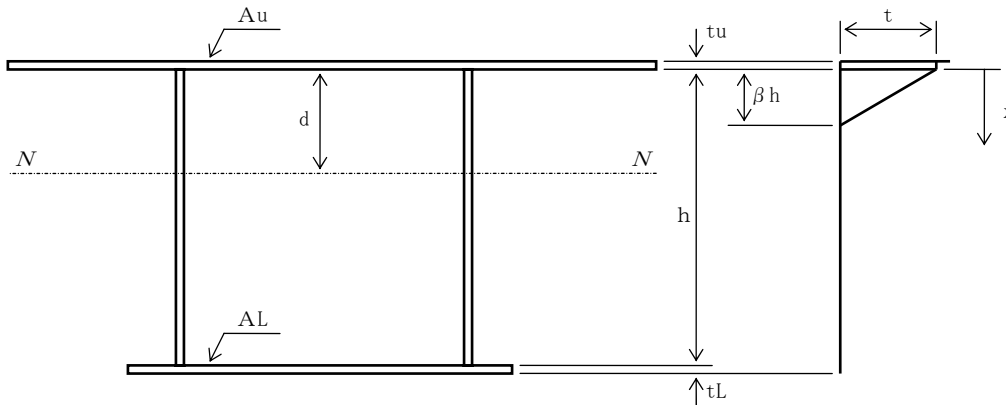
In a steel deck girder, a considerable temperature difference occurs, by direct sunlight between the steel deck and the lower flange.

In an unstable structure such as a continuous girder, deformation of the spar due to a temperature difference is restricted, in addition, additional stress is generated.

Temperature distribution is assumed as shown in the figure below, temperature differential stress is obtained by the following procedure. (「Steel road bridge design handbook」)

- (1) Obtain temperature differential stress in a static system
- (2) Find the bending moment acting on the cross section with the static system
- (3) (2) The bending moment acted on the statically indeterminate structure, and from the bending moment generated
 - (2) The bending moment component deducting becomes the statically indeterminate bending moment
- (4) (1)、(3) & Stress due to main load is superimposed and checked

Temperature distribution



(1) Temperature differential stress in a static system

$$-t u \leq x \leq 0$$

$$\sigma(x) = E \alpha t \{ a + b (d - x) - 1 \}$$

$$0 \leq x \leq \beta h$$

$$\sigma(x) = E \alpha t \{ a + b (d - x) - 1 + x / (\beta h) \}$$

$$\beta h \leq x \leq h + tL$$

$$\sigma(x) = E \alpha t \{ a + b (d - x) \}$$

Temperature differential stress in a static system ($X = -tu$)

$$\sigma_{odu} = E \alpha t \{ a + b (d + tu) - 1 \} \quad (\text{N/mm}^2)$$

Stress level on the upper side of the abdominal plate ($X = 0$)

$$\sigma_{odL} = E \alpha t \{ a + b * d - 1 \} \quad (\text{N/mm}^2)$$

The degree of stress at 30 cm from the upper side of the abdominal plate ($X = 30$)

$$\sigma_{ow} = E \alpha t \{ a + b (d - 30) \} \quad (\text{N/mm}^2)$$

Stress level below the lower flange ($X = h + tL$)

$$\sigma_{oL} = E \alpha t \{ a + b (d - (h + tL)) \} \quad (\text{N/mm}^2)$$

ここに

$a = (A_u + 1 / 2 * \beta * A_w) / A$
 $b = \{ A_u(d + t_u/2) + \beta/6 * A_w(3d - \beta h) \} / I$
 $E \alpha t = 200000 * 0.000012 * 15 = 36 \text{ (N/mm}^2\text{)}$
 $A_u \text{ (cm}^2\text{): Deck plate cross-sectional area (including longitudinal ribs)}$
 $A_w \text{ (cm}^2\text{): Web sectional area (total left and right)}$
 $t_u \text{ (cm) : Deck plate thickness}$
 $t_w \text{ (cm) : Web thickness (total left and right)}$
 $t_L \text{ (cm) : Lower flange thickness}$
 $h \text{ (cm) : Web height (spar center)}$
 $d \text{ (cm) : Distance to neutral axis}$
 $\beta \quad \quad \quad : \beta h = 30 \quad \beta = 30 / h$
 $A \text{ (cm}^2\text{): Total cross section}$
 $I \text{ (cm}^4\text{): Section Stiffness}$

Check position: S-xL= Left end of xth section S-xR= Section x right end
 S-xPn= Section x section, The n-th peak point P-x = Upper x

***Main girder G-1**

Ch position	Au	Aw	tu	tw	tL	h	d	A	I	σ_{odu}	σ_{odL}	σ_{ow}	σ_{oL}
S-1L	1252	695	1.6	2.4	1.8	270.6	89.5	2353	0.2780	-3	-3	29	-8
S-1R	1252	695	1.6	2.4	1.8	270.6	89.5	2353	0.2780	-3	-3	29	-8
S-2R	1252	695	1.6	2.4	3.5	270.6	111.2	2667	0.3716	-3	-3	29	-5
S-3R	1252	695	1.6	2.4	4.5	270.6	121.8	2852	0.4179	-3	-3	29	-5
S-4R	1252	695	1.6	2.4	5.2	270.6	128.5	2982	0.4471	-3	-3	29	-4
S-5P1	1252	695	1.6	2.4	5.2	270.6	128.3	2982	0.4470	-3	-3	29	-4
S-6L	1252	695	1.6	2.4	4.5	270.6	121.6	2852	0.4177	-3	-3	29	-5
S-7L	1252	695	1.6	2.4	3.8	270.6	114.4	2723	0.3859	-3	-3	29	-5
S-8L	1252	695	1.6	2.4	2.7	270.6	101.6	2519	0.3302	-3	-3	29	-6
S-9L	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-9R	1251	695	1.6	2.4	1.6	270.6	94.4	2423	0.2968	-3	-3	29	-7
S-10R	1238	695	1.6	2.4	2.2	270.6	102.8	2521	0.3292	-3	-3	29	-6
S-11R	1529	695	2.3	2.4	4.3	270.6	113.8	3200	0.4720	-2	-3	29	-4
S-12P2	1623	927	2.5	3.2	5.2	270.6	119.6	3692	0.5419	-3	-4	28	-5
S-12P3	1623	927	2.5	3.2	5.2	270.6	119.6	3692	0.5419	-3	-4	28	-5
S-13L	1629	695	2.5	2.4	4.7	270.6	114.0	3374	0.5044	-2	-3	29	-4
S-14L	1241	695	1.6	2.4	2.7	270.6	108.7	2616	0.3553	-3	-3	29	-6
S-15L	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-15R	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-16R	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-17R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-18R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-19P4	1252	695	1.6	2.4	1.9	270.6	98.4	2479	0.3141	-3	-3	29	-7
S-20L	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3028	-3	-3	29	-7
S-20R	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3028	-3	-3	29	-7
S-21R	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3027	-3	-3	29	-7
S-22R	1241	695	1.6	2.4	1.7	270.6	96.2	2431	0.3017	-3	-3	29	-7
S-23R	1174	695	1.6	2.4	3.0	270.6	114.6	2605	0.3634	-3	-3	28	-5
S-24P5	1271	695	1.8	2.4	3.8	270.6	119.0	2850	0.4133	-3	-3	29	-5
S-24P6	1271	695	1.8	2.4	3.8	270.6	119.0	2850	0.4133	-3	-3	29	-5
S-25L	1174	695	1.6	2.4	3.0	270.6	114.6	2605	0.3634	-3	-3	28	-5
S-26L	1241	695	1.6	2.4	1.8	270.6	90.0	2341	0.2770	-3	-3	29	-8
S-27L	1252	695	1.6	2.4	1.3	270.6	82.1	2260	0.2458	-2	-3	29	-9
S-27R	1252	695	1.6	2.4	1.3	270.6	82.0	2260	0.2458	-2	-3	29	-9
S-28R	1252	695	1.6	2.4	1.9	270.6	91.0	2371	0.2841	-3	-3	29	-8
S-29R	1252	695	1.6	2.4	2.6	270.6	100.4	2501	0.3247	-3	-3	29	-6
S-30P7	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6
S-30R	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6

S-32L	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6
S-33L	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-33R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-34R	1241	695	1.6	2.4	2.0	270.6	100.1	2486	0.3186	-3	-3	29	-7
S-35R	1275	695	1.8	2.4	3.6	270.6	116.8	2817	0.4048	-3	-3	29	-5
S-36P8	1359	811	2.0	2.8	4.6	270.6	123.6	3201	0.4684	-3	-4	28	-5
S-36P9	1359	811	2.0	2.8	4.6	270.6	123.6	3201	0.4684	-3	-4	28	-5
S-37L	1275	695	1.8	2.4	4.0	270.6	115.4	2783	0.4006	-3	-3	29	-5
S-38L	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-39L	1252	695	1.6	2.4	1.3	270.6	82.1	2260	0.2458	-2	-3	29	-9
S-39R	1252	695	1.6	2.4	1.3	270.6	82.0	2260	0.2458	-2	-3	29	-9
S-40R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-41R	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-42P10	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-42R	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-44L	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-44R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-45R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-46R	1241	695	1.6	2.4	2.0	270.6	100.1	2486	0.3186	-3	-3	29	-7
S-47R	1275	695	1.8	2.4	3.2	270.6	112.5	2743	0.3861	-3	-3	29	-5
S-48P11	1359	811	2.0	2.8	4.6	270.6	118.7	3093	0.4472	-3	-4	28	-5
S-48P12	1359	811	2.0	2.8	4.6	270.6	118.7	3093	0.4472	-3	-4	28	-5
S-49L	1275	695	1.8	2.4	4.0	270.6	115.4	2783	0.4006	-3	-3	29	-5
S-50L	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-50R	1252	695	1.6	2.4	2.1	270.6	93.8	2408	0.2961	-3	-3	29	-7
S-51R	1252	695	1.6	2.4	1.8	270.6	97.1	2461	0.3085	-3	-3	29	-7
S-52R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-53R	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-54P13	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-54R	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-56L	1252	695	1.6	2.4	2.1	270.6	100.9	2516	0.3252	-3	-3	29	-6
S-57L	1252	695	1.6	2.4	1.9	270.6	98.4	2479	0.3141	-3	-3	29	-7
S-58L	1252	695	1.6	2.4	2.1	270.6	93.8	2408	0.2961	-3	-3	29	-7
S-58R	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-59R	1275	695	1.8	2.4	3.7	270.6	112.1	2727	0.3862	-3	-3	29	-5
S-60P14	1271	695	1.8	2.4	4.6	270.6	121.7	2890	0.4272	-3	-3	29	-4
S-60P15	1271	695	1.8	2.4	4.6	270.6	121.7	2890	0.4272	-3	-3	29	-4
S-61L	1275	695	1.8	2.4	3.3	270.6	113.6	2762	0.3908	-3	-3	29	-5
S-62L	1241	695	1.6	2.4	1.8	270.6	97.5	2449	0.3074	-3	-3	29	-7
S-63L	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2910	-3	-3	29	-7
S-63R	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7
S-64R	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7
S-65R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-66P16	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-66R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-68L	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7
S-69L	1252	695	1.6	2.4	1.5	270.6	85.1	2297	0.2590	-2	-3	29	-8
S-69R	1252	695	1.6	2.4	1.5	270.6	85.1	2297	0.2590	-2	-3	29	-8
S-70R	1240	695	1.6	2.4	2.2	270.6	95.6	2414	0.3009	-3	-3	29	-7
S-71R	1575	695	2.4	2.4	4.4	270.6	108.1	3157	0.4583	-2	-3	29	-5
S-72P17	1569	695	2.4	2.4	5.4	270.6	117.5	3335	0.5065	-2	-3	29	-4
S-72P18	1569	695	2.4	2.4	5.4	270.6	117.5	3335	0.5065	-2	-3	29	-4
S-73L	1577	695	2.4	2.4	4.2	270.6	106.0	3122	0.4481	-2	-3	29	-5
S-74L	1242	695	1.6	2.4	2.1	270.6	94.1	2398	0.2953	-3	-3	29	-7
S-75L	1252	695	1.6	2.4	1.7	270.6	88.1	2334	0.2717	-3	-3	29	-8
S-75R	1252	695	1.6	2.4	1.7	270.6	88.1	2334	0.2717	-3	-3	29	-8
S-76R	1252	695	1.6	2.4	3.0	270.6	105.3	2575	0.3463	-3	-3	29	-6
S-77R	1252	695	1.6	2.4	4.4	270.6	120.8	2834	0.4135	-3	-3	29	-5
S-78P19	1252	695	1.6	2.4	4.8	270.6	124.7	2908	0.4307	-3	-3	29	-4
S-78R	1252	695	1.6	2.4	4.8	270.6	124.7	2908	0.4307	-3	-3	29	-4

S-80L	1252	695	1.6	2.4	4.4	270.6	120.8	2834	0.4135	-3	-3	29	-5
S-81L	1252	695	1.6	2.4	2.6	270.6	100.4	2501	0.3247	-3	-3	29	-6
S-82L	1252	695	1.6	2.4	1.6	270.6	86.6	2316	0.2654	-2	-3	29	-8
S-82R	1252	695	1.6	2.4	1.6	270.6	86.6	2316	0.2654	-2	-3	29	-8

***Main girder G-2**

Ch position	Au	Aw	tu	tw	tL	h	d	A	I	σ odu	σ odL	σ ow	σ ol
S-1L	1487	614	1.6	2.2	1.3	279.0	86.8	2592	0.3427	-3	-3	29	-6
S-1R	1463	614	1.6	2.2	1.3	279.0	87.8	2567	0.3404	-3	-3	29	-6
S-2R	1424	614	1.6	2.2	1.9	279.0	101.7	2705	0.3971	-3	-3	29	-5
S-3R	1352	614	1.6	2.2	2.8	279.0	120.7	2897	0.4643	-3	-3	29	-4
S-4R	1312	614	1.6	2.2	3.2	279.0	128.8	2974	0.4862	-3	-3	29	-3
S-5P1	1294	614	1.6	2.2	3.2	279.0	129.8	2957	0.4829	-3	-3	29	-3
S-5R	1283	614	1.6	2.2	3.2	279.0	130.3	2946	0.4808	-3	-3	29	-3
S-7L	1279	614	1.6	2.2	2.6	279.0	120.8	2766	0.4371	-3	-3	29	-4
S-8L	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-9L	1216	614	1.6	2.2	1.6	279.0	104.1	2408	0.3467	-3	-3	29	-5
S-9R	1214	614	1.6	2.2	1.6	279.0	101.5	2370	0.3363	-3	-3	29	-5
S-10R	1202	614	1.6	2.2	2.5	279.0	119.5	2612	0.4084	-3	-3	29	-4
S-11R	1544	1060	2.3	3.8	3.2	279.0	119.1	3594	0.5413	-4	-5	27	-5
S-12P2	1638	1060	2.5	3.8	4.0	279.0	125.5	3911	0.6134	-4	-5	28	-4
S-12P3	1638	1060	2.5	3.8	4.0	279.0	125.5	3911	0.6134	-4	-5	28	-4
S-13L	1643	1060	2.5	3.8	3.5	279.0	119.5	3778	0.5787	-4	-5	28	-5
S-14L	1204	614	1.6	2.2	2.4	279.0	117.7	2586	0.4015	-3	-3	29	-4
S-15L	1215	614	1.6	2.2	1.9	279.0	108.0	2460	0.3639	-3	-3	29	-5
S-16L	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-16R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-17R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-18P4	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-18R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-20L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-20R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-21R	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-22R	1204	781	1.6	2.8	2.0	279.0	111.9	2638	0.3812	-4	-4	28	-5
S-23R	1192	781	1.6	2.8	2.7	279.0	124.0	2818	0.4308	-4	-4	28	-4
S-24P5	1288	781	1.8	2.8	3.2	279.0	127.2	3054	0.4807	-4	-4	28	-4
S-24P6	1288	781	1.8	2.8	3.2	279.0	127.2	3054	0.4807	-4	-4	28	-4
S-25L	1192	781	1.6	2.8	2.7	279.0	124.0	2818	0.4308	-4	-4	28	-4
S-26L	1204	614	1.6	2.2	2.1	279.0	112.0	2500	0.3774	-3	-3	29	-5
S-26R	1215	614	1.6	2.2	2.1	279.0	112.0	2519	0.3811	-3	-3	29	-5
S-28L	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-28R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-29R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-30P7	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-30R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-32L	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-32R	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-33R	1215	614	1.6	2.2	1.8	279.0	105.9	2430	0.3550	-3	-3	29	-5
S-34R	1204	614	1.6	2.2	2.2	279.0	114.0	2529	0.3856	-3	-3	29	-4
S-35R	1292	614	1.8	2.2	3.0	279.0	123.4	2837	0.4571	-3	-3	29	-4
S-36P8	1360	725	2.0	2.6	3.5	279.0	128.3	3156	0.5095	-3	-4	28	-4
S-36P9	1360	725	2.0	2.6	3.5	279.0	128.3	3156	0.5095	-3	-4	28	-4
S-37L	1292	614	1.8	2.2	3.0	279.0	123.4	2837	0.4571	-3	-3	29	-4
S-38L	1204	614	1.6	2.2	2.3	279.0	115.9	2558	0.3937	-3	-3	29	-4
S-39L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-39R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-40R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-41R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-42P10	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5

S-42R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-44L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-44R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-45R	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-46R	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-47R	1292	614	1.8	2.2	2.9	279.0	121.8	2809	0.4498	-3	-3	29	-4
S-48P11	1360	725	2.0	2.6	3.2	279.0	124.0	3071	0.4886	-3	-4	28	-4
S-48P12	1360	725	2.0	2.6	3.2	279.0	124.0	3071	0.4886	-3	-4	28	-4
S-49L	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-50L	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-51L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-51R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-52R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-53R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-54P13	1216	725	1.6	2.6	2.1	279.0	115.3	2667	0.3979	-4	-4	28	-5
S-54R	1216	725	1.6	2.6	2.1	279.0	115.3	2667	0.3979	-4	-4	28	-5
S-56L	1216	725	1.6	2.6	1.9	279.0	111.5	2608	0.3814	-4	-4	28	-5
S-57L	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-57R	1215	614	1.6	2.2	1.9	279.0	108.0	2460	0.3639	-3	-3	29	-5
S-58R	1204	614	1.6	2.2	2.1	279.0	112.0	2500	0.3774	-3	-3	29	-5
S-59R	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-60P14	1288	614	1.8	2.2	3.3	279.0	128.0	2915	0.4764	-3	-3	29	-3
S-60P15	1288	614	1.8	2.2	3.3	279.0	128.0	2915	0.4764	-3	-3	29	-3
S-61L	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-62L	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-63L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-63R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-64R	1216	893	1.6	3.2	1.5	279.0	105.8	2658	0.3590	-4	-5	27	-6
S-65R	1216	893	1.6	3.2	1.7	279.0	109.6	2716	0.3766	-4	-5	27	-6
S-66P16	1216	893	1.6	3.2	1.7	279.0	109.6	2716	0.3766	-4	-5	27	-6
S-67L	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-68L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-68R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-69R	1215	614	1.6	2.2	1.7	279.0	103.7	2401	0.3459	-3	-3	29	-5
S-70R	1203	614	1.6	2.2	2.4	279.0	117.7	2585	0.4011	-3	-3	29	-4
S-71R	1590	781	2.4	2.8	3.3	279.0	117.0	3386	0.5354	-3	-4	29	-4
S-72P17	1584	781	2.4	2.8	3.9	279.0	124.9	3546	0.5779	-3	-4	29	-4
S-72P18	1584	781	2.4	2.8	3.9	279.0	124.9	3546	0.5779	-3	-4	29	-4
S-73L	1592	781	2.4	2.8	3.2	279.0	115.6	3361	0.5283	-3	-4	29	-4
S-74L	1205	614	1.6	2.2	2.2	279.0	114.0	2531	0.3861	-3	-3	29	-4
S-74R	1216	614	1.6	2.2	2.2	279.0	116.1	2584	0.3981	-3	-3	29	-4
S-76L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-76R	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-77R	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-78P19	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-78R	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-80L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-81L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-82L	1216	614	1.6	2.2	1.3	279.0	97.3	2320	0.3182	-3	-3	29	-6
S-82R	1216	614	1.6	2.2	1.3	279.0	97.3	2320	0.3182	-3	-3	29	-6

***Main girder G-3**

Ch position	Au	Aw	tu	tw	tL	h	d	A	I	σ odu	σ odL	σ ow	σ oL
S-1L	1487	614	1.6	2.2	1.3	279.0	86.8	2592	0.3427	-3	-3	29	-6
S-1R	1463	614	1.6	2.2	1.3	279.0	87.8	2567	0.3404	-3	-3	29	-6
S-2R	1424	614	1.6	2.2	1.9	279.0	101.7	2705	0.3971	-3	-3	29	-5
S-3R	1352	614	1.6	2.2	2.8	279.0	120.7	2897	0.4643	-3	-3	29	-4
S-4R	1312	614	1.6	2.2	3.2	279.0	128.8	2974	0.4862	-3	-3	29	-3
S-5P1	1294	614	1.6	2.2	3.2	279.0	129.8	2957	0.4829	-3	-3	29	-3

S-5R	1283	614	1.6	2.2	3.2	279.0	130.3	2946	0.4808	-3	-3	29	-3
S-7L	1279	614	1.6	2.2	2.6	279.0	120.8	2766	0.4371	-3	-3	29	-4
S-8L	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-9L	1216	614	1.6	2.2	1.6	279.0	104.1	2408	0.3467	-3	-3	29	-5
S-9R	1214	614	1.6	2.2	1.6	279.0	101.5	2370	0.3363	-3	-3	29	-5
S-10R	1202	614	1.6	2.2	2.5	279.0	119.5	2612	0.4084	-3	-3	29	-4
S-11R	1544	1060	2.3	3.8	3.2	279.0	119.1	3594	0.5413	-4	-5	27	-5
S-12P2	1638	1060	2.5	3.8	4.0	279.0	125.5	3911	0.6134	-4	-5	28	-4
S-12P3	1638	1060	2.5	3.8	4.0	279.0	125.5	3911	0.6134	-4	-5	28	-4
S-13L	1643	1060	2.5	3.8	3.5	279.0	119.5	3778	0.5787	-4	-5	28	-5
S-14L	1204	614	1.6	2.2	2.4	279.0	117.7	2586	0.4015	-3	-3	29	-4
S-15L	1215	614	1.6	2.2	1.9	279.0	108.0	2460	0.3639	-3	-3	29	-5
S-16L	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-16R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-17R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-18P4	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-18R	1216	614	1.6	2.2	1.7	279.0	106.2	2437	0.3557	-3	-3	29	-5
S-20L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-20R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-21R	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-22R	1204	781	1.6	2.8	2.0	279.0	111.9	2638	0.3812	-4	-4	28	-5
S-23R	1192	781	1.6	2.8	2.7	279.0	124.0	2818	0.4308	-4	-4	28	-4
S-24P5	1288	781	1.8	2.8	3.2	279.0	127.2	3054	0.4807	-4	-4	28	-4
S-24P6	1288	781	1.8	2.8	3.2	279.0	127.2	3054	0.4807	-4	-4	28	-4
S-25L	1192	781	1.6	2.8	2.7	279.0	124.0	2818	0.4308	-4	-4	28	-4
S-26L	1204	614	1.6	2.2	2.1	279.0	112.0	2500	0.3774	-3	-3	29	-5
S-26R	1215	614	1.6	2.2	2.1	279.0	112.0	2519	0.3811	-3	-3	29	-5
S-28L	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-28R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-29R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-30P7	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-30R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4
S-32L	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-32R	1216	614	1.6	2.2	1.8	279.0	108.3	2467	0.3646	-3	-3	29	-5
S-33R	1215	614	1.6	2.2	1.8	279.0	105.9	2430	0.3550	-3	-3	29	-5
S-34R	1204	614	1.6	2.2	2.2	279.0	114.0	2529	0.3856	-3	-3	29	-4
S-35R	1292	614	1.8	2.2	3.0	279.0	123.4	2837	0.4571	-3	-3	29	-4
S-36P8	1375	725	2.0	2.6	3.5	279.0	127.6	3171	0.5125	-3	-4	28	-4
S-36P9	1375	725	2.0	2.6	3.5	279.0	127.6	3171	0.5125	-3	-4	28	-4
S-37L	1292	614	1.8	2.2	3.0	279.0	123.4	2837	0.4571	-3	-3	29	-4
S-38L	1204	614	1.6	2.2	2.3	279.0	115.9	2558	0.3937	-3	-3	29	-4
S-39L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-39R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-40R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-41R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-42P10	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-42R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-44L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-44R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-45R	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-46R	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-47R	1292	614	1.8	2.2	2.9	279.0	121.8	2809	0.4498	-3	-3	29	-4
S-48P11	1375	725	2.0	2.6	3.2	279.0	123.3	3086	0.4914	-3	-4	28	-4
S-48P12	1375	725	2.0	2.6	3.2	279.0	123.3	3086	0.4914	-3	-4	28	-4
S-49L	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-50L	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-51L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-51R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-52R	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-53R	1216	614	1.6	2.2	2.1	279.0	114.2	2555	0.3900	-3	-3	29	-4

S-54P13	1216	725	1.6	2.6	2.1	279.0	115.3	2667	0.3979	-4	-4	28	-5
S-54R	1216	725	1.6	2.6	2.1	279.0	115.3	2667	0.3979	-4	-4	28	-5
S-56L	1216	725	1.6	2.6	1.9	279.0	111.5	2608	0.3814	-4	-4	28	-5
S-57L	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-57R	1215	614	1.6	2.2	1.9	279.0	108.0	2460	0.3639	-3	-3	29	-5
S-58R	1204	614	1.6	2.2	2.1	279.0	112.0	2500	0.3774	-3	-3	29	-5
S-59R	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-60P14	1288	614	1.8	2.2	3.3	279.0	128.0	2915	0.4764	-3	-3	29	-3
S-60P15	1288	614	1.8	2.2	3.3	279.0	128.0	2915	0.4764	-3	-3	29	-3
S-61L	1292	614	1.8	2.2	2.8	279.0	120.1	2780	0.4424	-3	-3	29	-4
S-62L	1204	614	1.6	2.2	2.0	279.0	110.0	2471	0.3690	-3	-3	29	-5
S-63L	1215	614	1.6	2.2	1.5	279.0	99.3	2342	0.3270	-3	-3	29	-6
S-63R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-64R	1216	893	1.6	3.2	1.5	279.0	105.8	2658	0.3590	-4	-5	27	-6
S-65R	1216	893	1.6	3.2	1.7	279.0	109.6	2716	0.3766	-4	-5	27	-6
S-66P16	1216	893	1.6	3.2	1.7	279.0	109.6	2716	0.3766	-4	-5	27	-6
S-67L	1216	614	1.6	2.2	1.9	279.0	110.3	2496	0.3732	-3	-3	29	-5
S-68L	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-68R	1216	614	1.6	2.2	1.5	279.0	101.9	2379	0.3374	-3	-3	29	-5
S-69R	1215	614	1.6	2.2	1.7	279.0	103.7	2401	0.3459	-3	-3	29	-5
S-70R	1203	614	1.6	2.2	2.4	279.0	117.7	2585	0.4011	-3	-3	29	-4
S-71R	1590	781	2.4	2.8	3.3	279.0	117.0	3386	0.5354	-3	-4	29	-4
S-72P17	1584	781	2.4	2.8	3.9	279.0	124.9	3546	0.5779	-3	-4	29	-4
S-72P18	1584	781	2.4	2.8	3.9	279.0	124.9	3546	0.5779	-3	-4	29	-4
S-73L	1592	781	2.4	2.8	3.2	279.0	115.6	3361	0.5283	-3	-4	29	-4
S-74L	1205	614	1.6	2.2	2.2	279.0	114.0	2531	0.3861	-3	-3	29	-4
S-74R	1216	614	1.6	2.2	2.2	279.0	116.1	2584	0.3981	-3	-3	29	-4
S-76L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-76R	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-77R	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-78P19	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-78R	1216	614	1.6	2.2	2.4	279.0	119.8	2643	0.4138	-3	-3	29	-4
S-80L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-81L	1216	614	1.6	2.2	2.0	279.0	112.3	2526	0.3817	-3	-3	29	-5
S-82L	1216	614	1.6	2.2	1.3	279.0	97.3	2320	0.3182	-3	-3	29	-6
S-82R	1216	614	1.6	2.2	1.3	279.0	97.3	2320	0.3182	-3	-3	29	-6

***Main girder G-4**

Ch position	Au	Aw	tu	tw	tL	h	d	A	I	σ odu	σ odL	σ ow	σ ol
S-1L	1252	695	1.6	2.4	1.8	270.6	89.5	2353	0.2780	-3	-3	29	-8
S-1R	1252	695	1.6	2.4	1.8	270.6	89.5	2353	0.2780	-3	-3	29	-8
S-2R	1252	695	1.6	2.4	3.5	270.6	111.2	2667	0.3716	-3	-3	29	-5
S-3R	1252	695	1.6	2.4	4.5	270.6	121.8	2852	0.4179	-3	-3	29	-5
S-4R	1252	695	1.6	2.4	5.2	270.6	128.5	2982	0.4471	-3	-3	29	-4
S-5P1	1252	695	1.6	2.4	5.2	270.6	128.3	2982	0.4470	-3	-3	29	-4
S-6L	1252	695	1.6	2.4	4.5	270.6	121.6	2852	0.4177	-3	-3	29	-5
S-7L	1252	695	1.6	2.4	3.8	270.6	114.4	2723	0.3859	-3	-3	29	-5
S-8L	1252	695	1.6	2.4	2.7	270.6	101.6	2519	0.3302	-3	-3	29	-6
S-9L	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-9R	1251	695	1.6	2.4	1.6	270.6	94.4	2423	0.2968	-3	-3	29	-7
S-10R	1238	695	1.6	2.4	2.2	270.6	102.8	2521	0.3292	-3	-3	29	-6
S-11R	1529	695	2.3	2.4	4.3	270.6	113.8	3200	0.4720	-2	-3	29	-4
S-12P2	1623	927	2.5	3.2	5.2	270.6	119.6	3692	0.5419	-3	-4	28	-5
S-12P3	1623	927	2.5	3.2	5.2	270.6	119.6	3692	0.5419	-3	-4	28	-5
S-13L	1629	695	2.5	2.4	4.7	270.6	114.0	3374	0.5044	-2	-3	29	-4
S-14L	1241	695	1.6	2.4	2.7	270.6	108.7	2616	0.3553	-3	-3	29	-6
S-15L	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-15R	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7
S-16R	1252	695	1.6	2.4	1.6	270.6	94.4	2424	0.2969	-3	-3	29	-7

S-17R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-18R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-19P4	1252	695	1.6	2.4	1.9	270.6	98.4	2479	0.3141	-3	-3	29	-7
S-20L	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3028	-3	-3	29	-7
S-20R	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3028	-3	-3	29	-7
S-21R	1252	695	1.6	2.4	1.7	270.6	95.8	2442	0.3027	-3	-3	29	-7
S-22R	1241	695	1.6	2.4	1.7	270.6	96.2	2431	0.3017	-3	-3	29	-7
S-23R	1174	695	1.6	2.4	3.0	270.6	114.6	2605	0.3634	-3	-3	28	-5
S-24P5	1271	695	1.8	2.4	3.8	270.6	119.0	2850	0.4133	-3	-3	29	-5
S-24P6	1271	695	1.8	2.4	3.8	270.6	119.0	2850	0.4133	-3	-3	29	-5
S-25L	1174	695	1.6	2.4	3.0	270.6	114.6	2605	0.3634	-3	-3	28	-5
S-26L	1241	695	1.6	2.4	1.8	270.6	90.0	2341	0.2770	-3	-3	29	-8
S-27L	1252	695	1.6	2.4	1.3	270.6	82.1	2260	0.2458	-2	-3	29	-9
S-27R	1252	695	1.6	2.4	1.3	270.6	82.0	2260	0.2458	-2	-3	29	-9
S-28R	1252	695	1.6	2.4	1.9	270.6	91.0	2371	0.2841	-3	-3	29	-8
S-29R	1252	695	1.6	2.4	2.6	270.6	100.4	2501	0.3247	-3	-3	29	-6
S-30P7	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6
S-30R	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6
S-32L	1252	695	1.6	2.4	2.2	270.6	102.2	2535	0.3306	-3	-3	29	-6
S-33L	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-33R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-34R	1241	695	1.6	2.4	2.0	270.6	100.1	2486	0.3186	-3	-3	29	-7
S-35R	1275	695	1.8	2.4	3.6	270.6	116.8	2817	0.4048	-3	-3	29	-5
S-36P8	1349	811	2.0	2.8	4.6	270.6	123.9	3191	0.4672	-3	-4	28	-5
S-36P9	1349	811	2.0	2.8	4.6	270.6	123.9	3191	0.4672	-3	-4	28	-5
S-37L	1275	695	1.8	2.4	4.0	270.6	115.4	2783	0.4006	-3	-3	29	-5
S-38L	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-39L	1252	695	1.6	2.4	1.3	270.6	82.1	2260	0.2458	-2	-3	29	-9
S-39R	1252	695	1.6	2.4	1.3	270.6	82.0	2260	0.2458	-2	-3	29	-9
S-40R	1252	695	1.6	2.4	2.2	270.6	95.1	2427	0.3020	-3	-3	29	-7
S-41R	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-42P10	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-42R	1252	695	1.6	2.4	2.6	270.6	107.0	2609	0.3516	-3	-3	29	-6
S-44L	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-44R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-45R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-46R	1241	695	1.6	2.4	2.0	270.6	100.1	2486	0.3186	-3	-3	29	-7
S-47R	1275	695	1.8	2.4	3.2	270.6	112.5	2743	0.3861	-3	-3	29	-5
S-48P11	1349	811	2.0	2.8	4.6	270.6	119.1	3083	0.4461	-3	-4	28	-5
S-48P12	1349	811	2.0	2.8	4.6	270.6	119.1	3083	0.4461	-3	-4	28	-5
S-49L	1275	695	1.8	2.4	4.0	270.6	115.4	2783	0.4006	-3	-3	29	-5
S-50L	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-50R	1252	695	1.6	2.4	2.1	270.6	93.8	2408	0.2961	-3	-3	29	-7
S-51R	1252	695	1.6	2.4	1.8	270.6	97.1	2461	0.3085	-3	-3	29	-7
S-52R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-53R	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-54P13	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-54R	1252	695	1.6	2.4	2.8	270.6	109.4	2646	0.3617	-3	-3	29	-6
S-56L	1252	695	1.6	2.4	2.1	270.6	100.9	2516	0.3252	-3	-3	29	-6
S-57L	1252	695	1.6	2.4	1.9	270.6	98.4	2479	0.3141	-3	-3	29	-7
S-58L	1252	695	1.6	2.4	2.1	270.6	93.8	2408	0.2961	-3	-3	29	-7
S-58R	1241	695	1.6	2.4	2.1	270.6	94.2	2396	0.2951	-3	-3	29	-7
S-59R	1275	695	1.8	2.4	3.7	270.6	112.1	2727	0.3862	-3	-3	29	-5
S-60P14	1271	695	1.8	2.4	4.6	270.6	121.7	2890	0.4272	-3	-3	29	-4
S-60P15	1271	695	1.8	2.4	4.6	270.6	121.7	2890	0.4272	-3	-3	29	-4
S-61L	1275	695	1.8	2.4	3.3	270.6	113.6	2762	0.3908	-3	-3	29	-5
S-62L	1241	695	1.6	2.4	1.8	270.6	97.5	2449	0.3074	-3	-3	29	-7
S-63L	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2910	-3	-3	29	-7
S-63R	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7
S-64R	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7

S-65R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-66P16	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-66R	1252	695	1.6	2.4	2.0	270.6	99.7	2498	0.3197	-3	-3	29	-7
S-68L	1252	695	1.6	2.4	1.5	270.6	93.0	2405	0.2911	-3	-3	29	-7
S-69L	1252	695	1.6	2.4	1.5	270.6	85.1	2297	0.2590	-2	-3	29	-8
S-69R	1252	695	1.6	2.4	1.5	270.6	85.1	2297	0.2590	-2	-3	29	-8
S-70R	1240	695	1.6	2.4	2.2	270.6	95.6	2414	0.3009	-3	-3	29	-7
S-71R	1575	695	2.4	2.4	4.4	270.6	108.1	3157	0.4583	-2	-3	29	-5
S-72P17	1569	695	2.4	2.4	5.4	270.6	117.5	3335	0.5065	-2	-3	29	-4
S-72P18	1569	695	2.4	2.4	5.4	270.6	117.5	3335	0.5065	-2	-3	29	-4
S-73L	1577	695	2.4	2.4	4.2	270.6	106.0	3122	0.4481	-2	-3	29	-5
S-74L	1242	695	1.6	2.4	2.1	270.6	94.1	2398	0.2953	-3	-3	29	-7
S-75L	1252	695	1.6	2.4	1.7	270.6	88.1	2334	0.2717	-3	-3	29	-8
S-75R	1252	695	1.6	2.4	1.7	270.6	88.1	2334	0.2717	-3	-3	29	-8
S-76R	1252	695	1.6	2.4	3.0	270.6	105.3	2575	0.3463	-3	-3	29	-6
S-77R	1252	695	1.6	2.4	4.4	270.6	120.8	2834	0.4135	-3	-3	29	-5
S-78P19	1252	695	1.6	2.4	4.8	270.6	124.7	2908	0.4307	-3	-3	29	-4
S-78R	1252	695	1.6	2.4	4.8	270.6	124.7	2908	0.4307	-3	-3	29	-4
S-80L	1252	695	1.6	2.4	4.4	270.6	120.8	2834	0.4135	-3	-3	29	-5
S-81L	1252	695	1.6	2.4	2.6	270.6	100.4	2501	0.3247	-3	-3	29	-6
S-82L	1252	695	1.6	2.4	1.6	270.6	86.6	2316	0.2654	-2	-3	29	-8
S-82R	1252	695	1.6	2.4	1.6	270.6	86.6	2316	0.2654	-2	-3	29	-8

(2) Bending moment acting on the cross-section in Statically determinate system

$$M_o = \{ A u (d + t u / 2) + \beta A w (3 d - \beta h) / 6 \} E \alpha t$$

Calculation results (3) Table reference

(3) Stress degree of statically indeterminate bending moment

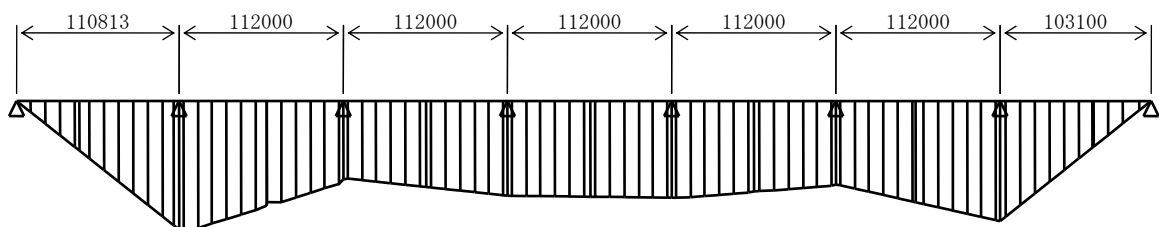
Analysis is due to the deformation method

Symbols

Mo	(kN · m)	: Bending moment acting on the cross-section in statically determinate system
Ls	(m)	: Block length
I	(m ⁴)	: Cross section stiffness
Mt	(kN · m)	: Statically indeterminate bending moment
σ_{tu}	(N/mm ²)	: Deck upper stress level
σ_{tL}	(N/mm ²)	: The lower flange side stress intensity

*Main girder G-1

Statically indeterminate bending moment diagram



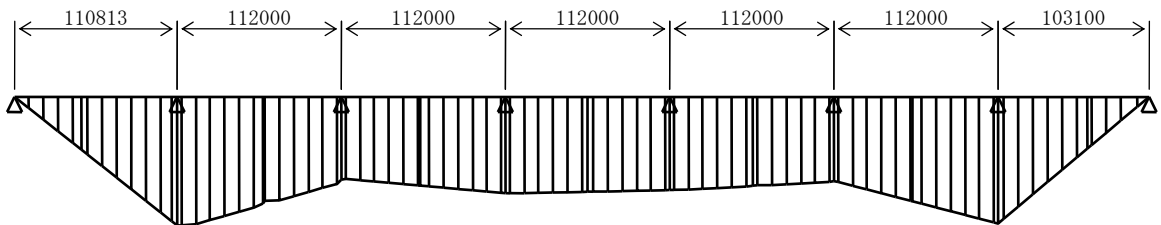
Member number	Mo	Ls	I	Mt	σ_{tu}	σ_{tL}
1	4183	9.452	0.2780	567	-2	4
2	5190	10.103	0.3716	1172	-4	5
3	5682	10.003	0.4179	1772	-5	7
4	5992	10.003	0.4471	2371	-7	8
5	5990	3.187	0.4471	2562	-7	8
6	5984	6.815	0.4470	2971	-9	11

7	5674	10.000	0.4177	3570	-11	15
8	5340	10.000	0.3860	4170	-13	22
9	4746	10.000	0.3302	4769	-15	29
10	4408	10.000	0.2969	5368	-17	32
11	4758	10.000	0.3299	5968	-19	31
12	6564	7.500	0.4758	6417	-16	22
13	7272	3.750	0.5424	6642	-15	19
14	7270	3.000	0.5423	6642	-15	21
15	7017	10.000	0.5095	6571	-20	30
16	5039	9.250	0.3560	6334	-20	38
17	4409	10.000	0.2969	6116	-20	37
18	4409	10.000	0.2969	5879	-19	35
19	4442	10.000	0.3020	5642	-18	33
20	4442	7.500	0.3020	5405	-17	32
21	4594	0.097	0.3141	5228	-17	29
22	4594	9.903	0.3141	5226	-17	30
23	4472	10.000	0.3028	4991	-16	29
24	4472	10.000	0.3028	4755	-15	28
25	4462	9.250	0.3022	4518	-15	26
26	5138	10.000	0.3681	4299	-14	19
27	5643	3.000	0.4136	4062	-12	15
28	5643	3.000	0.4136	4016	-13	18
29	5138	10.000	0.3681	4096	-14	27
30	4173	9.250	0.2775	4171	-14	32
31	3835	10.000	0.2458	4252	-14	33
32	4249	10.000	0.2841	4333	-14	28
33	4687	10.000	0.3247	4414	-14	23
34	4772	4.166	0.3306	4448	-14	23
35	4772	3.334	0.3306	4475	-14	23
36	4772	10.000	0.3306	4556	-14	24
37	4772	10.000	0.3306	4637	-15	25
38	4654	10.000	0.3197	4718	-15	26
39	4644	9.250	0.3191	4793	-15	26
40	5668	10.000	0.4098	4873	-14	19
41	6283	3.000	0.4688	4898	-13	16
42	6283	3.000	0.4688	4900	-14	19
43	5599	10.000	0.4054	4909	-16	30
44	4369	9.250	0.2956	4918	-17	38
45	3835	10.000	0.2458	4927	-17	38
46	4442	10.000	0.3020	4936	-16	29
47	4997	10.000	0.3516	4945	-15	23
48	4997	4.278	0.3516	4949	-15	23
49	4997	3.222	0.3516	4951	-15	23
50	4997	10.000	0.3516	4960	-16	27
51	4654	10.000	0.3197	4969	-16	27
52	4654	10.000	0.3197	4978	-16	27
53	4644	9.250	0.3191	4987	-16	27
54	5462	10.000	0.3906	4996	-15	21
55	6040	3.000	0.4475	4999	-13	17
56	6040	3.000	0.4475	4999	-15	20
57	5599	10.000	0.4054	4980	-16	30
58	4369	9.250	0.2956	4918	-16	30
59	4533	10.000	0.3085	4861	-16	28
60	4654	10.000	0.3197	4799	-15	26
61	5105	10.000	0.3617	4737	-15	21
62	5105	3.897	0.3617	4675	-14	21
63	5105	3.603	0.3617	4651	-14	21
64	5105	10.000	0.3617	4629	-15	24
65	4713	10.000	0.3252	4567	-15	25
66	4594	10.000	0.3141	4505	-15	27

67	4369	9.250	0.2956	4444	-14	27
68	5441	10.000	0.3908	4386	-13	18
69	5769	3.000	0.4275	4325	-12	16
70	5769	3.000	0.4275	4357	-13	18
71	5514	10.000	0.3955	4527	-15	26
72	4523	9.250	0.3079	4685	-15	29
73	4345	10.000	0.2910	4855	-16	30
74	4346	10.000	0.2911	5026	-16	31
75	4654	10.000	0.3197	5196	-16	28
76	4654	2.146	0.3197	5233	-17	28
77	4654	5.354	0.3197	5324	-17	29
78	4654	10.000	0.3197	5494	-18	34
79	4346	10.000	0.2911	5664	-19	41
80	3977	10.000	0.2590	5835	-20	42
81	4431	9.250	0.3014	5992	-19	35
82	6440	10.000	0.4628	6163	-15	22
83	6863	3.000	0.5069	6214	-15	19
84	6866	3.750	0.5071	5988	-14	23
85	6321	10.000	0.4523	5385	-17	33
86	4373	10.000	0.2958	4782	-16	32
87	4115	10.000	0.2717	4180	-14	28
88	4918	10.000	0.3463	3577	-11	17
89	5636	10.000	0.4135	2974	-9	11
90	5818	9.257	0.4307	2416	-7	8
91	5818	0.743	0.4307	2372	-7	8
92	5818	10.000	0.4307	1769	-5	7
93	5636	10.000	0.4135	1166	-4	6
94	4687	11.162	0.3247	493	-2	3

***Main girder G-2**

Statically indeterminate bending moment diagram



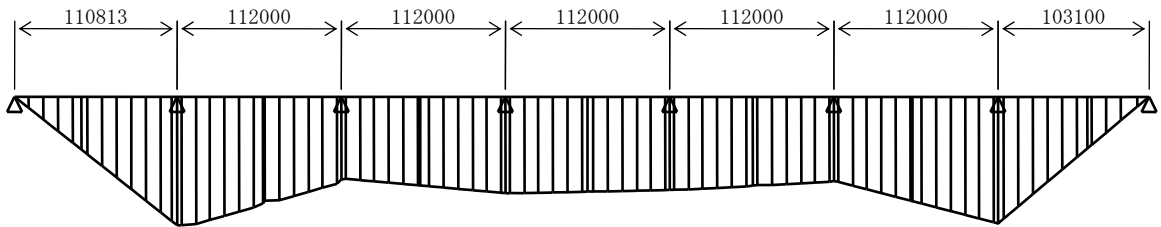
Member number	Mo	Ls	I	Mt	σ_{tu}	σ_{tL}
1	4771	9.452	0.3416	605	-2	3
2	5396	10.103	0.3996	1251	-3	6
3	6130	10.003	0.4698	1891	-5	7
4	6310	10.003	0.4900	2531	-7	8
5	6241	5.945	0.4844	2911	-8	9
6	6210	4.056	0.4818	3171	-9	10
7	6188	10.000	0.4802	3810	-11	14
8	5659	10.000	0.4335	4450	-13	21
9	4889	10.000	0.3646	5090	-16	26
10	4649	10.000	0.3421	5730	-18	31
11	5364	10.000	0.4107	6369	-19	25
12	6937	7.500	0.5436	6849	-15	21
13	7727	3.750	0.6147	7089	-15	18
14	7723	3.000	0.6144	7089	-15	20
15	7413	10.000	0.5820	7020	-21	29
16	5289	9.250	0.4035	6789	-20	32
17	4961	10.000	0.3715	6576	-20	32
18	4796	10.000	0.3557	6345	-19	31

19	4796	10.000	0.3557	6114	-19	30
20	4796	6.289	0.3557	5884	-18	29
21	4796	1.211	0.3557	5739	-17	28
22	4796	10.000	0.3557	5711	-18	30
23	4602	10.000	0.3374	5480	-17	29
24	4580	10.000	0.3355	5249	-16	29
25	5061	9.250	0.3830	5019	-15	22
26	5554	10.000	0.4331	4805	-14	18
27	6128	3.000	0.4815	4575	-12	15
28	6128	3.000	0.4815	4527	-13	17
29	5554	10.000	0.4331	4600	-14	21
30	5034	9.250	0.3792	4667	-14	21
31	5138	10.000	0.3883	4739	-14	20
32	5157	10.000	0.3900	4811	-14	21
33	5157	10.000	0.3900	4884	-15	21
34	5157	1.558	0.3900	4895	-15	21
35	5157	5.942	0.3900	4938	-15	21
36	5157	10.000	0.3900	5011	-15	24
37	4889	10.000	0.3646	5083	-15	24
38	4869	10.000	0.3628	5155	-16	25
39	5121	9.250	0.3875	5222	-16	23
40	5947	10.000	0.4596	5295	-15	18
41	6507	3.000	0.5104	5316	-14	16
42	6507	3.000	0.5104	5316	-15	18
43	5947	10.000	0.4596	5312	-16	22
44	5206	9.250	0.3956	5295	-16	29
45	4580	10.000	0.3355	5280	-16	28
46	4602	10.000	0.3374	5263	-16	28
47	4980	10.000	0.3732	5246	-16	24
48	4980	3.707	0.3732	5230	-16	24
49	4980	3.793	0.3732	5224	-16	24
50	4980	10.000	0.3732	5217	-16	28
51	4602	10.000	0.3374	5201	-16	28
52	4580	10.000	0.3355	5184	-16	29
53	4944	9.250	0.3708	5168	-16	24
54	5870	10.000	0.4523	5152	-14	18
55	6290	3.000	0.4895	5136	-13	17
56	6290	3.000	0.4895	5131	-14	19
57	5790	10.000	0.4448	5117	-15	24
58	4944	9.250	0.3708	5073	-16	28
59	4580	10.000	0.3355	5032	-15	27
60	4980	10.000	0.3732	4988	-15	23
61	5157	10.000	0.3900	4944	-15	21
62	5227	4.428	0.3979	4900	-14	20
63	5227	3.072	0.3979	4880	-14	20
64	5227	10.000	0.3979	4867	-14	22
65	5059	10.000	0.3814	4823	-14	22
66	4961	10.000	0.3715	4779	-14	23
67	5034	9.250	0.3792	4734	-14	21
68	5790	10.000	0.4448	4694	-13	17
69	6128	3.000	0.4773	4649	-13	15
70	6128	3.000	0.4773	4699	-13	17
71	5790	10.000	0.4448	4909	-15	23
72	4944	9.250	0.3708	5103	-16	28
73	4580	10.000	0.3355	5313	-16	28
74	4831	10.000	0.3590	5523	-17	27
75	5003	10.000	0.3766	5732	-17	26
76	5003	1.345	0.3766	5761	-17	26
77	5003	6.155	0.3766	5890	-18	27
78	4980	10.000	0.3732	6099	-19	32

79	4602	10.000	0.3374	6309	-19	33
80	4775	10.000	0.3539	6519	-20	33
81	5286	9.250	0.4033	6713	-20	27
82	6968	10.000	0.5388	6923	-15	21
83	7381	3.000	0.5791	6986	-15	19
84	7386	3.750	0.5795	6732	-15	21
85	6898	10.000	0.5319	6054	-18	26
86	5148	10.000	0.3899	5377	-16	22
87	5242	10.000	0.3981	4699	-14	21
88	5070	10.000	0.3817	4021	-12	18
89	5408	10.000	0.4138	3344	-10	13
90	5408	7.172	0.4138	2858	-8	11
91	5408	2.828	0.4138	2666	-8	10
92	5408	10.000	0.4138	1989	-6	9
93	5070	10.000	0.3817	1311	-4	6
94	5070	11.162	0.3817	555	-2	3

***Main girder G-3**

Statically indeterminate bending moment diagram



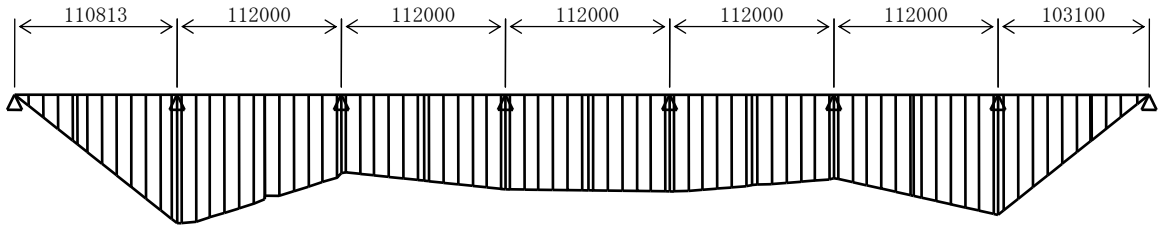
Member number	Mo	Ls	I	Mt	σ_{tu}	σ_{tL}
1	4771	9.452	0.3416	605	-2	3
2	5396	10.103	0.3996	1251	-3	6
3	6130	10.003	0.4698	1891	-5	7
4	6311	10.003	0.4900	2531	-7	8
5	6241	5.946	0.4844	2911	-8	9
6	6210	4.056	0.4818	3171	-9	10
7	6188	10.000	0.4802	3810	-11	14
8	5659	10.000	0.4335	4450	-13	21
9	4889	10.000	0.3646	5090	-16	26
10	4649	10.000	0.3421	5730	-18	31
11	5364	10.000	0.4107	6369	-19	25
12	6937	7.500	0.5436	6849	-15	21
13	7727	3.750	0.6147	7089	-15	18
14	7723	3.000	0.6144	7089	-15	20
15	7413	10.000	0.5820	7020	-21	29
16	5289	9.250	0.4035	6789	-20	32
17	4961	10.000	0.3715	6576	-20	32
18	4796	10.000	0.3557	6345	-19	31
19	4796	10.000	0.3557	6114	-19	30
20	4796	6.289	0.3557	5884	-18	29
21	4796	1.211	0.3557	5738	-17	28
22	4796	10.000	0.3557	5711	-18	30
23	4602	10.000	0.3374	5480	-17	29
24	4580	10.000	0.3355	5249	-16	29
25	5061	9.250	0.3830	5018	-15	22
26	5554	10.000	0.4331	4805	-14	18
27	6128	3.000	0.4815	4574	-12	15
28	6128	3.000	0.4815	4527	-13	17
29	5554	10.000	0.4331	4599	-14	21
30	5034	9.250	0.3792	4667	-14	21

31	5138	10.000	0.3883	4739	-14	20
32	5157	10.000	0.3900	4812	-14	21
33	5157	10.000	0.3900	4884	-15	21
34	5157	1.558	0.3900	4896	-15	21
35	5157	5.942	0.3900	4939	-15	21
36	5157	10.000	0.3900	5011	-15	24
37	4889	10.000	0.3646	5084	-15	24
38	4869	10.000	0.3628	5156	-16	25
39	5121	9.250	0.3875	5224	-16	23
40	5947	10.000	0.4596	5296	-15	18
41	6542	3.000	0.5134	5318	-13	16
42	6542	3.000	0.5134	5318	-15	18
43	5947	10.000	0.4596	5313	-16	22
44	5206	9.250	0.3956	5296	-16	29
45	4580	10.000	0.3355	5281	-16	28
46	4602	10.000	0.3374	5264	-16	28
47	4980	10.000	0.3732	5248	-16	24
48	4980	3.707	0.3732	5231	-16	24
49	4980	3.793	0.3732	5225	-16	24
50	4980	10.000	0.3732	5219	-16	28
51	4602	10.000	0.3374	5202	-16	28
52	4580	10.000	0.3355	5186	-16	29
53	4944	9.250	0.3708	5169	-16	24
54	5870	10.000	0.4523	5154	-14	18
55	6323	3.000	0.4922	5137	-13	17
56	6323	3.000	0.4922	5132	-14	19
57	5790	10.000	0.4448	5119	-15	24
58	4944	9.250	0.3708	5074	-16	28
59	4580	10.000	0.3355	5033	-15	27
60	4980	10.000	0.3732	4989	-15	23
61	5157	10.000	0.3900	4945	-15	21
62	5227	4.428	0.3979	4900	-14	20
63	5227	3.072	0.3979	4881	-14	20
64	5227	10.000	0.3979	4867	-14	22
65	5059	10.000	0.3814	4823	-14	22
66	4961	10.000	0.3715	4779	-14	23
67	5034	9.250	0.3792	4734	-14	21
68	5790	10.000	0.4448	4693	-13	17
69	6128	3.000	0.4773	4649	-13	15
70	6128	3.000	0.4773	4699	-13	17
71	5790	10.000	0.4448	4909	-15	23
72	4944	9.250	0.3708	5103	-16	28
73	4580	10.000	0.3355	5313	-16	28
74	4831	10.000	0.3590	5522	-17	27
75	5003	10.000	0.3766	5732	-17	26
76	5003	1.345	0.3766	5760	-17	26
77	5003	6.155	0.3766	5890	-18	27
78	4980	10.000	0.3732	6099	-19	32
79	4602	10.000	0.3374	6309	-19	33
80	4775	10.000	0.3539	6519	-20	33
81	5286	9.250	0.4033	6713	-20	27
82	6968	10.000	0.5388	6923	-15	21
83	7381	3.000	0.5791	6986	-15	19
84	7386	3.750	0.5795	6732	-15	21
85	6898	10.000	0.5319	6054	-18	26
86	5148	10.000	0.3899	5377	-16	22
87	5242	10.000	0.3981	4699	-14	21
88	5070	10.000	0.3817	4021	-12	18
89	5408	10.000	0.4138	3344	-10	13
90	5408	7.172	0.4138	2858	-8	11

91	5408	2.828	0.4138	2666	-8	10
92	5408	10.000	0.4138	1989	-6	9
93	5070	10.000	0.3817	1311	-4	6
94	5070	11.162	0.3817	555	-2	3

***Main girder G-4**

Statically indeterminate bending moment diagram



Member number	Mo	Ls	I	Mt	σtu	σtL
1	4182	9.452	0.2780	567	-2	4
2	5190	10.103	0.3716	1172	-4	5
3	5682	10.003	0.4179	1772	-5	7
4	5992	10.003	0.4471	2371	-7	8
5	5990	3.187	0.4471	2562	-7	8
6	5984	6.815	0.4470	2971	-9	11
7	5674	10.000	0.4177	3570	-11	15
8	5340	10.000	0.3860	4170	-13	22
9	4746	10.000	0.3302	4769	-15	29
10	4408	10.000	0.2969	5368	-17	32
11	4758	10.000	0.3299	5968	-19	31
12	6564	7.500	0.4758	6417	-16	22
13	7272	3.750	0.5424	6642	-15	19
14	7270	3.000	0.5423	6642	-15	21
15	7017	10.000	0.5095	6571	-20	30
16	5039	9.250	0.3560	6334	-20	38
17	4409	10.000	0.2969	6116	-20	37
18	4409	10.000	0.2969	5879	-19	35
19	4442	10.000	0.3020	5642	-18	33
20	4442	7.500	0.3020	5406	-17	32
21	4594	0.097	0.3141	5228	-17	29
22	4594	9.903	0.3141	5226	-17	30
23	4472	10.000	0.3028	4991	-16	29
24	4472	10.000	0.3028	4755	-15	28
25	4462	9.250	0.3022	4518	-15	26
26	5138	10.000	0.3681	4299	-14	19
27	5643	3.000	0.4136	4063	-12	15
28	5643	3.000	0.4136	4016	-13	18
29	5138	10.000	0.3681	4097	-14	27
30	4173	9.250	0.2775	4171	-14	32
31	3835	10.000	0.2458	4252	-14	33
32	4249	10.000	0.2841	4333	-14	28
33	4687	10.000	0.3247	4414	-14	23
34	4772	4.166	0.3306	4447	-14	23
35	4772	3.334	0.3306	4474	-14	23
36	4772	10.000	0.3306	4555	-14	24
37	4772	10.000	0.3306	4636	-15	25
38	4654	10.000	0.3197	4717	-15	26
39	4644	9.250	0.3191	4792	-15	26
40	5668	10.000	0.4098	4872	-14	19
41	6255	3.000	0.4676	4897	-13	16
42	6255	3.000	0.4676	4899	-14	19

43	5599	10.000	0.4054	4908	-16	30
44	4369	9.250	0.2956	4917	-17	38
45	3835	10.000	0.2458	4926	-17	38
46	4442	10.000	0.3020	4935	-16	29
47	4997	10.000	0.3516	4944	-15	23
48	4997	4.278	0.3516	4947	-15	23
49	4997	3.222	0.3516	4950	-15	23
50	4997	10.000	0.3516	4959	-16	27
51	4654	10.000	0.3197	4968	-16	27
52	4654	10.000	0.3197	4977	-16	27
53	4644	9.250	0.3191	4986	-16	27
54	5462	10.000	0.3906	4995	-15	21
55	6013	3.000	0.4464	4997	-14	17
56	6013	3.000	0.4464	4997	-15	20
57	5599	10.000	0.4054	4979	-16	30
58	4369	9.250	0.2956	4917	-16	30
59	4533	10.000	0.3085	4860	-16	28
60	4654	10.000	0.3197	4798	-15	26
61	5105	10.000	0.3617	4737	-15	21
62	5105	3.897	0.3617	4675	-14	21
63	5105	3.603	0.3617	4651	-14	21
64	5105	10.000	0.3617	4629	-15	24
65	4713	10.000	0.3252	4567	-15	25
66	4594	10.000	0.3141	4505	-15	27
67	4369	9.250	0.2956	4444	-14	27
68	5441	10.000	0.3908	4387	-13	18
69	5769	3.000	0.4275	4325	-12	16
70	5769	3.000	0.4275	4357	-13	18
71	5514	10.000	0.3955	4528	-15	26
72	4523	9.250	0.3079	4685	-15	29
73	4345	10.000	0.2910	4856	-16	30
74	4346	10.000	0.2911	5026	-16	31
75	4654	10.000	0.3197	5196	-16	28
76	4654	2.146	0.3197	5233	-17	28
77	4654	5.354	0.3197	5324	-17	29
78	4654	10.000	0.3197	5494	-18	34
79	4346	10.000	0.2911	5664	-19	41
80	3977	10.000	0.2590	5835	-20	42
81	4431	9.250	0.3014	5992	-19	35
82	6440	10.000	0.4628	6163	-15	22
83	6863	3.000	0.5069	6214	-15	19
84	6866	3.750	0.5071	5988	-14	23
85	6321	10.000	0.4523	5385	-17	33
86	4373	10.000	0.2958	4782	-16	32
87	4115	10.000	0.2717	4180	-14	28
88	4918	10.000	0.3463	3577	-11	17
89	5636	10.000	0.4135	2974	-9	11
90	5818	9.257	0.4307	2416	-7	8
91	5818	0.743	0.4307	2372	-7	8
92	5818	10.000	0.4307	1769	-5	7
93	5636	10.000	0.4135	1166	-4	6
94	4687	11.162	0.3247	493	-2	3

(4) Superposition of the stress caused by the temperature difference between stress and the main load

Symbols

σ_m (N/mm²): At all times of the working stress

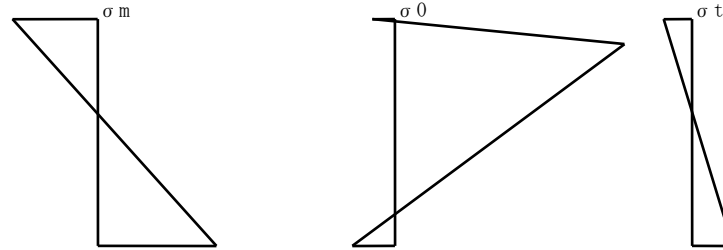
σ_o (N/mm²): Temperature differential stress in a static system

σ_t (N/mm²): Temperature differential stress in a static system

$\Sigma \sigma$ (N/mm²): The sum of all the time + temperature difference stress

σ_a (N/mm²): 15% of the allowable stress premium

It shows an example of the stress state (*Main girder G-1, S-2R)



*Main girder G-1

Ch position	Deck upper					The lower flange under side				
	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a
S-1L	0	-3	0	-3	241	0	-8	0	-8	241
S-1R	-88	-3	-2	-92	241	168	-8	4	164	241
S-2R	-143	-3	-4	-149	241	200	-5	5	199	241
S-3R	-178	-3	-5	-186	241	214	-5	7	216	293
S-4R	-193	-3	-7	-203	241	212	-4	8	215	293
S-5P1	-192	-3	-7	-203	241	214	-4	8	218	293
S-6L	-191	-3	-9	-203	241	232	-5	11	239	293
S-7L	-175	-3	-11	-189	241	236	-5	15	245	293
S-8L	-144	-3	-13	-160	241	231	-6	22	246	293
S-9L	-86	-3	-15	-104	241	152	-7	29	174	241
S-9R	53	-3	-17	33	241	-93	-7	32	-69	182
S-10R	142	-3	-19	120	241	-222	-6	31	-198	293
S-11R	180	-2	-16	162	241	-241	-4	22	-224	293
S-12P2	202	-3	-15	184	241	-250	-5	19	-236	293
S-12P3	202	-3	-15	184	241	-250	-5	19	-236	293
S-13L	180	-2	-15	163	241	-241	-4	21	-224	293
S-14L	142	-3	-20	119	241	-205	-6	30	-180	241
S-15L	76	-3	-20	53	241	-135	-7	38	-104	182
S-15R	-42	-3	-20	-65	241	75	-7	37	105	241
S-16R	-83	-3	-19	-105	241	148	-7	35	176	241
S-17R	-107	-3	-18	-128	241	189	-7	33	215	241
S-18R	-112	-3	-17	-132	241	198	-7	32	223	241
S-19P4	-112	-3	-17	-131	241	187	-7	29	209	241
S-20L	-103	-3	-17	-122	241	179	-7	30	202	241
S-20R	-71	-3	-16	-89	241	123	-7	29	145	241
S-21R	-23	-3	-15	-41	241	-68	-7	28	-47	205
S-22R	92	-3	-15	75	241	-160	-7	26	-140	205
S-23R	181	-3	-14	164	241	-239	-5	19	-225	293
S-24P5	195	-3	-12	181	241	-243	-5	15	-233	293
S-24P6	195	-3	-12	181	241	-243	-5	15	-233	293
S-25L	179	-3	-13	163	241	-237	-5	18	-225	293
S-26L	87	-3	-14	71	241	-165	-8	27	-146	230
S-27L	-30	-2	-14	-47	241	-64	-9	32	-41	120
S-27R	-80	-2	-14	-97	241	174	-9	33	198	241
S-28R	-115	-3	-14	-132	241	217	-8	28	237	293
S-29R	-130	-3	-14	-146	241	212	-6	23	229	293
S-30P7	-132	-3	-14	-148	241	208	-6	23	225	293
S-30R	-130	-3	-14	-147	241	207	-6	23	223	293
S-32L	-113	-3	-14	-130	241	179	-6	24	196	241

S-33L	-75	-3	-15	-93	241	124	-7	25	142	241
S-33R	-21	-3	-15	-38	241	34	-7	26	53	241
S-34R	105	-3	-15	87	241	-171	-7	26	-151	241
S-35R	188	-3	-14	171	241	-241	-5	19	-227	293
S-36P8	202	-3	-13	185	241	-237	-5	16	-226	293
S-36P9	202	-3	-13	185	241	-237	-5	16	-226	293
S-37L	187	-3	-14	170	241	-246	-5	19	-231	293
S-38L	105	-3	-16	87	241	-188	-7	30	-166	232
S-39L	-17	-2	-17	-36	241	-95	-9	38	-66	120
S-39R	-73	-2	-17	-93	241	159	-9	38	188	241
S-40R	-111	-3	-16	-129	241	196	-7	29	218	241
S-41R	-127	-3	-15	-145	241	187	-6	23	205	241
S-42P10	-129	-3	-15	-147	241	190	-6	23	207	241
S-42R	-128	-3	-15	-146	241	188	-6	23	206	241
S-44L	-113	-3	-16	-132	241	186	-7	27	207	241
S-44R	-74	-3	-16	-93	241	122	-7	27	143	241
S-45R	-21	-3	-16	-39	241	34	-7	27	54	241
S-46R	102	-3	-16	83	241	-166	-7	27	-145	284
S-47R	185	-3	-15	167	241	-252	-5	21	-236	293
S-48P11	199	-3	-13	182	241	-250	-5	17	-237	293
S-48P12	199	-3	-13	182	241	-250	-5	17	-237	293
S-49L	183	-3	-15	165	241	-240	-5	20	-225	293
S-50L	102	-3	-16	83	241	-183	-7	30	-160	232
S-50R	-24	-3	-16	-42	241	43	-7	30	65	241
S-51R	-78	-3	-16	-96	241	133	-7	28	154	241
S-52R	-117	-3	-15	-135	241	192	-7	26	211	241
S-53R	-132	-3	-15	-149	241	188	-6	21	204	241
S-54P13	-133	-3	-14	-150	241	190	-6	21	206	241
S-54R	-132	-3	-14	-149	241	188	-6	21	204	241
S-56L	-117	-3	-15	-135	241	189	-6	24	207	241
S-57L	-80	-3	-15	-97	241	133	-7	25	152	241
S-58L	-28	-3	-15	-45	241	51	-7	27	71	241
S-58R	93	-3	-14	76	241	-166	-7	27	-146	232
S-59R	174	-3	-13	158	241	-239	-5	18	-226	293
S-60P14	203	-3	-12	187	241	-244	-4	16	-233	293
S-60P15	203	-3	-12	187	241	-244	-4	16	-233	293
S-61L	175	-3	-13	160	241	-235	-5	18	-223	293
S-62L	97	-3	-15	79	241	-164	-7	26	-145	230
S-63L	-22	-3	-15	-40	241	-73	-7	29	-51	160
S-63R	-70	-3	-16	-89	241	128	-7	30	150	241
S-64R	-104	-3	-16	-123	241	189	-7	31	213	241
S-65R	-115	-3	-16	-134	241	189	-7	28	211	241
S-66P16	-116	-3	-17	-135	241	190	-7	28	212	241
S-66R	-113	-3	-17	-132	241	185	-7	29	207	241
S-68L	-93	-3	-18	-114	241	170	-7	34	196	241
S-69L	-56	-2	-19	-77	241	115	-8	41	147	241
S-69R	56	-2	-20	34	241	-116	-8	42	-83	160
S-70R	123	-3	-19	101	241	-215	-7	35	-187	287
S-71R	169	-2	-15	151	241	-246	-5	22	-228	293
S-72P17	193	-2	-15	176	241	-246	-4	19	-231	293
S-72P18	193	-2	-15	176	241	-246	-4	19	-231	293
S-73L	160	-2	-14	144	241	-241	-5	23	-223	293
S-74L	106	-3	-17	86	241	-189	-7	33	-164	279
S-75L	-34	-3	-16	-53	241	67	-8	32	92	241
S-75R	-98	-3	-14	-114	241	193	-8	28	213	241
S-76R	-145	-3	-11	-159	241	220	-6	17	231	293
S-77R	-171	-3	-9	-183	241	209	-5	11	215	293
S-78P19	-179	-3	-7	-189	241	207	-4	8	211	293
S-78R	-179	-3	-7	-188	241	207	-4	8	210	293
S-80L	-166	-3	-5	-174	241	202	-5	7	204	293

S-81L	-136	-3	-4	-142	241	221	-6	6	221	293
S-82L	-69	-2	-2	-74	241	140	-8	3	135	241
S-82R	0	-2	0	-2	241	0	-8	0	-8	241

***Main girder G-2**

Ch position	Deck upper					The lower flange under side				
	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a
S-1L	0	-3	0	-3	241	0	-6	0	-6	241
S-1R	-79	-3	-2	-83	241	156	-6	3	154	241
S-2R	-137	-3	-3	-143	241	222	-5	6	222	293
S-3R	-175	-3	-5	-183	241	218	-4	7	221	293
S-4R	-196	-3	-7	-206	241	220	-3	8	224	293
S-5P1	-199	-3	-8	-210	241	224	-3	9	230	293
S-5R	-199	-3	-9	-211	241	223	-3	10	229	293
S-7L	-182	-3	-11	-196	241	232	-4	14	242	293
S-8L	-154	-3	-13	-170	241	229	-5	21	245	293
S-9L	-89	-3	-16	-107	241	140	-5	26	161	241
S-9R	62	-3	-18	41	241	-101	-5	31	-76	135
S-10R	157	-3	-19	135	241	-200	-4	25	-179	254
S-11R	186	-4	-15	166	241	-238	-5	21	-222	293
S-12P2	206	-4	-15	187	241	-243	-4	18	-229	293
S-12P3	206	-4	-15	187	241	-243	-4	18	-229	293
S-13L	184	-4	-15	165	241	-235	-5	20	-219	293
S-14L	157	-3	-21	133	241	-206	-4	29	-181	245
S-15L	84	-3	-20	60	241	-126	-5	32	-98	170
S-16L	-45	-3	-20	-68	241	-49	-5	32	-22	148
S-16R	-91	-3	-19	-113	241	139	-5	31	165	241
S-17R	-117	-3	-19	-138	241	179	-5	30	204	241
S-18P4	-121	-3	-18	-142	241	186	-5	29	210	241
S-18R	-121	-3	-17	-142	241	186	-5	28	209	241
S-20L	-109	-3	-18	-130	241	178	-5	30	203	241
S-20R	-74	-3	-17	-94	241	121	-5	29	144	241
S-21R	-22	-3	-16	-41	241	-76	-6	29	-53	120
S-22R	102	-4	-15	83	241	-145	-5	22	-128	179
S-23R	189	-4	-14	171	241	-227	-4	18	-214	269
S-24P5	202	-4	-12	186	241	-232	-4	15	-221	293
S-24P6	202	-4	-12	186	241	-232	-4	15	-221	293
S-25L	188	-4	-13	171	241	-226	-4	17	-213	269
S-26L	99	-3	-14	82	241	-140	-5	21	-124	213
S-26R	-35	-3	-14	-52	241	-51	-5	21	-35	213
S-28L	-95	-3	-14	-112	241	130	-4	20	146	241
S-28R	-133	-3	-14	-150	241	182	-4	21	198	241
S-29R	-147	-3	-15	-164	241	201	-4	21	217	241
S-30P7	-147	-3	-15	-165	241	201	-4	21	218	241
S-30R	-143	-3	-15	-161	241	196	-4	21	213	241
S-32L	-123	-3	-15	-141	241	183	-5	24	202	241
S-32R	-79	-3	-15	-97	241	117	-5	24	137	241
S-33R	-19	-3	-16	-38	241	-74	-5	25	-54	160
S-34R	113	-3	-16	94	241	-156	-4	23	-138	196
S-35R	192	-3	-15	175	241	-233	-4	18	-218	289
S-36P8	207	-3	-14	190	241	-235	-4	16	-223	293
S-36P9	207	-3	-14	190	241	-235	-4	16	-223	293
S-37L	193	-3	-15	176	241	-234	-4	18	-219	289
S-38L	117	-3	-16	98	241	-156	-4	22	-138	203
S-39L	-16	-3	-16	-35	241	-87	-6	29	-63	120
S-39R	-76	-3	-16	-96	241	125	-5	28	147	241
S-40R	-116	-3	-16	-135	241	190	-5	28	212	241
S-41R	-130	-3	-16	-149	241	189	-5	24	208	241

S-42P10	-132	-3	-16	-151	241	191	-5	24	210	241
S-42R	-130	-3	-16	-149	241	189	-5	24	208	241
S-44L	-115	-3	-16	-134	241	188	-5	28	211	241
S-44R	-75	-3	-16	-94	241	122	-5	28	145	241
S-45R	-18	-3	-16	-37	241	-79	-6	29	-56	120
S-46R	111	-3	-16	92	241	-161	-5	24	-142	200
S-47R	188	-3	-14	171	241	-233	-4	18	-218	283
S-48P11	204	-3	-13	187	241	-245	-4	17	-232	293
S-48P12	204	-3	-13	187	241	-245	-4	17	-232	293
S-49L	188	-3	-14	171	241	-238	-4	19	-223	277
S-50L	109	-3	-15	90	241	-159	-5	24	-140	200
S-51L	-23	-3	-16	-41	241	-79	-6	28	-56	120
S-51R	-83	-3	-15	-101	241	135	-5	27	156	241
S-52R	-122	-3	-15	-140	241	176	-5	23	194	241
S-53R	-139	-3	-15	-157	241	190	-4	21	207	241
S-54P13	-139	-4	-14	-157	241	188	-5	20	203	241
S-54R	-138	-4	-14	-156	241	187	-5	20	202	241
S-56L	-124	-4	-14	-142	241	176	-5	22	192	241
S-57L	-86	-3	-14	-103	241	124	-5	22	141	241
S-57R	-28	-3	-14	-46	241	-59	-5	23	-41	170
S-58R	102	-3	-14	84	241	-144	-5	21	-127	188
S-59R	180	-3	-13	164	241	-228	-4	17	-215	277
S-60P14	207	-3	-13	191	241	-235	-3	15	-224	293
S-60P15	207	-3	-13	191	241	-235	-3	15	-224	293
S-61L	180	-3	-13	165	241	-228	-4	17	-215	277
S-62L	105	-3	-15	87	241	-153	-5	23	-135	200
S-63L	-21	-3	-16	-40	241	-77	-6	28	-54	120
S-63R	-77	-3	-16	-97	241	126	-5	28	149	241
S-64R	-113	-4	-17	-134	241	174	-6	27	195	241
S-65R	-125	-4	-17	-147	241	183	-6	26	203	241
S-66P16	-126	-4	-17	-147	241	183	-6	26	204	241
S-67L	-124	-3	-18	-144	241	179	-5	27	201	241
S-68L	-102	-3	-19	-124	241	167	-5	32	194	241
S-68R	-59	-3	-19	-81	241	-24	-5	33	4	120
S-69R	68	-3	-20	45	241	-108	-5	33	-80	153
S-70R	139	-3	-20	116	241	-182	-4	27	-159	245
S-71R	178	-3	-15	160	241	-235	-4	21	-218	293
S-72P17	200	-3	-15	182	241	-238	-4	19	-222	293
S-72P18	200	-3	-15	182	241	-238	-4	19	-222	293
S-73L	170	-3	-15	152	241	-228	-4	21	-211	293
S-74L	120	-3	-18	99	241	-166	-4	26	-144	224
S-74R	-37	-3	-16	-56	241	-51	-4	22	-33	224
S-76L	-104	-3	-14	-121	241	147	-5	21	163	293
S-76R	-149	-3	-12	-164	241	210	-5	18	223	293
S-77R	-167	-3	-10	-180	241	212	-4	13	221	293
S-78P19	-172	-3	-8	-184	241	218	-4	11	225	293
S-78R	-171	-3	-8	-182	241	217	-4	10	224	293
S-80L	-162	-3	-6	-171	241	227	-5	9	232	293
S-81L	-131	-3	-4	-138	241	185	-5	6	186	241
S-82L	-72	-3	-2	-77	241	126	-6	3	123	241
S-82R	0	-3	0	-3	241	0	-6	0	-6	241

*Main girder G-3

Ch position	Deck upper					The lower flange under side				
	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a
S-1L	0	-3	0	-3	241	0	-6	0	-6	241
S-1R	-79	-3	-2	-83	241	156	-6	3	154	241
S-2R	-137	-3	-3	-143	241	222	-5	6	222	293
S-3R	-175	-3	-5	-183	241	218	-4	7	221	293
S-4R	-196	-3	-7	-206	241	220	-3	8	224	293
S-5P1	-199	-3	-8	-210	241	224	-3	9	230	293
S-5R	-199	-3	-9	-211	241	223	-3	10	229	293
S-7L	-182	-3	-11	-196	241	232	-4	14	242	293
S-8L	-154	-3	-13	-170	241	229	-5	21	245	293
S-9L	-89	-3	-16	-107	241	140	-5	26	161	241
S-9R	62	-3	-18	41	241	-101	-5	31	-76	135
S-10R	157	-3	-19	135	241	-200	-4	25	-179	254
S-11R	186	-4	-15	166	241	-238	-5	21	-222	293
S-12P2	206	-4	-15	187	241	-243	-4	18	-229	293
S-12P3	206	-4	-15	187	241	-243	-4	18	-229	293
S-13L	184	-4	-15	165	241	-235	-5	20	-219	293
S-14L	157	-3	-21	133	241	-206	-4	29	-181	245
S-15L	84	-3	-20	60	241	-126	-5	32	-98	170
S-16L	-45	-3	-20	-68	241	-49	-5	32	-22	148
S-16R	-91	-3	-19	-113	241	139	-5	31	165	241
S-17R	-117	-3	-19	-138	241	179	-5	30	204	241
S-18P4	-121	-3	-18	-142	241	186	-5	29	210	241
S-18R	-121	-3	-17	-142	241	186	-5	28	209	241
S-20L	-109	-3	-18	-130	241	178	-5	30	203	241
S-20R	-74	-3	-17	-94	241	121	-5	29	144	241
S-21R	-22	-3	-16	-41	241	-76	-6	29	-53	120
S-22R	102	-4	-15	83	241	-145	-5	22	-128	179
S-23R	189	-4	-14	171	241	-227	-4	18	-214	269
S-24P5	202	-4	-12	186	241	-232	-4	15	-221	293
S-24P6	202	-4	-12	186	241	-232	-4	15	-221	293
S-25L	188	-4	-13	171	241	-226	-4	17	-213	269
S-26L	99	-3	-14	82	241	-140	-5	21	-124	213
S-26R	-35	-3	-14	-52	241	-51	-5	21	-35	213
S-28L	-95	-3	-14	-112	241	130	-4	20	146	241
S-28R	-133	-3	-14	-150	241	182	-4	21	198	241
S-29R	-147	-3	-15	-164	241	201	-4	21	217	241
S-30P7	-147	-3	-15	-165	241	201	-4	21	218	241
S-30R	-143	-3	-15	-161	241	196	-4	21	213	241
S-32L	-123	-3	-15	-141	241	183	-5	24	202	241
S-32R	-79	-3	-15	-97	241	117	-5	24	137	241
S-33R	-19	-3	-16	-38	241	-74	-5	25	-54	160
S-34R	113	-3	-16	94	241	-156	-4	23	-138	196
S-35R	192	-3	-15	175	241	-233	-4	18	-218	289
S-36P8	205	-3	-13	188	241	-235	-4	16	-222	293
S-36P9	205	-3	-13	188	241	-235	-4	16	-222	293
S-37L	193	-3	-15	176	241	-234	-4	18	-219	289
S-38L	117	-3	-16	98	241	-156	-4	22	-138	203
S-39L	-16	-3	-16	-35	241	-87	-6	29	-63	120
S-39R	-76	-3	-16	-96	241	125	-5	28	147	241
S-40R	-116	-3	-16	-135	241	190	-5	28	212	241
S-41R	-130	-3	-16	-149	241	189	-5	24	208	241
S-42P10	-132	-3	-16	-151	241	191	-5	24	210	241
S-42R	-130	-3	-16	-149	241	189	-5	24	208	241
S-44L	-115	-3	-16	-134	241	188	-5	28	211	241
S-44R	-75	-3	-16	-94	241	122	-5	28	145	241
S-45R	-18	-3	-16	-37	241	-79	-6	29	-56	120

S-46R	111	-3	-16	92	241	-161	-5	24	-142	200
S-47R	188	-3	-14	171	241	-233	-4	18	-218	283
S-48P11	202	-3	-13	185	241	-245	-4	17	-232	293
S-48P12	202	-3	-13	185	241	-245	-4	17	-232	293
S-49L	188	-3	-14	171	241	-238	-4	19	-223	277
S-50L	109	-3	-15	90	241	-159	-5	24	-140	200
S-51L	-23	-3	-16	-41	241	-79	-6	28	-56	120
S-51R	-83	-3	-15	-101	241	135	-5	27	156	241
S-52R	-122	-3	-15	-140	241	176	-5	23	194	241
S-53R	-139	-3	-15	-157	241	190	-4	21	207	241
S-54P13	-139	-4	-14	-157	241	188	-5	20	203	241
S-54R	-138	-4	-14	-156	241	187	-5	20	202	241
S-56L	-124	-4	-14	-142	241	176	-5	22	192	241
S-57L	-86	-3	-14	-103	241	124	-5	22	141	241
S-57R	-28	-3	-14	-46	241	-59	-5	23	-41	170
S-58R	102	-3	-14	84	241	-144	-5	21	-127	188
S-59R	180	-3	-13	164	241	-228	-4	17	-215	277
S-60P14	207	-3	-13	191	241	-235	-3	15	-224	293
S-60P15	207	-3	-13	191	241	-235	-3	15	-224	293
S-61L	180	-3	-13	165	241	-228	-4	17	-215	277
S-62L	105	-3	-15	87	241	-153	-5	23	-135	200
S-63L	-21	-3	-16	-40	241	-77	-6	28	-54	120
S-63R	-77	-3	-16	-97	241	126	-5	28	149	241
S-64R	-113	-4	-17	-134	241	174	-6	27	195	241
S-65R	-125	-4	-17	-147	241	183	-6	26	203	241
S-66P16	-126	-4	-17	-147	241	183	-6	26	204	241
S-67L	-124	-3	-18	-144	241	179	-5	27	201	241
S-68L	-102	-3	-19	-124	241	167	-5	32	194	241
S-68R	-59	-3	-19	-81	241	-24	-5	33	4	120
S-69R	68	-3	-20	45	241	-108	-5	33	-80	153
S-70R	139	-3	-20	116	241	-182	-4	27	-159	245
S-71R	178	-3	-15	160	241	-235	-4	21	-218	293
S-72P17	200	-3	-15	182	241	-238	-4	19	-222	293
S-72P18	200	-3	-15	182	241	-238	-4	19	-222	293
S-73L	170	-3	-15	152	241	-228	-4	21	-211	293
S-74L	120	-3	-18	99	241	-166	-4	26	-144	224
S-74R	-37	-3	-16	-56	241	-51	-4	22	-33	224
S-76L	-104	-3	-14	-121	241	147	-5	21	163	293
S-76R	-149	-3	-12	-164	241	210	-5	18	223	293
S-77R	-167	-3	-10	-180	241	212	-4	13	221	293
S-78P19	-172	-3	-8	-184	241	218	-4	11	225	293
S-78R	-171	-3	-8	-182	241	217	-4	10	224	293
S-80L	-162	-3	-6	-171	241	227	-5	9	232	293
S-81L	-131	-3	-4	-138	241	185	-5	6	186	241
S-82L	-72	-3	-2	-77	241	126	-6	3	123	241
S-82R	0	-3	0	-3	241	0	-6	0	-6	241

***Main girder G-4**

Ch position	Deck upper					The lower flange under side				
	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a	σ_m	σ_o	σ_t	$\Sigma \sigma$	σ_a
S-1L	0	-3	0	-3	241	0	-8	0	-8	241
S-1R	-88	-3	-2	-92	241	168	-8	4	164	241
S-2R	-143	-3	-4	-149	241	200	-5	5	199	241
S-3R	-178	-3	-5	-186	241	214	-5	7	216	293
S-4R	-193	-3	-7	-203	241	212	-4	8	215	293
S-5P1	-192	-3	-7	-203	241	214	-4	8	218	293
S-6L	-191	-3	-9	-203	241	232	-5	11	239	293
S-7L	-175	-3	-11	-189	241	236	-5	15	245	293

S-8L	-144	-3	-13	-160	241	231	-6	22	246	293
S-9L	-86	-3	-15	-104	241	152	-7	29	174	241
S-9R	53	-3	-17	33	241	-93	-7	32	-69	182
S-10R	142	-3	-19	120	241	-222	-6	31	-198	293
S-11R	180	-2	-16	162	241	-241	-4	22	-224	293
S-12P2	202	-3	-15	184	241	-250	-5	19	-236	293
S-12P3	202	-3	-15	184	241	-250	-5	19	-236	293
S-13L	180	-2	-15	163	241	-241	-4	21	-224	293
S-14L	142	-3	-20	119	241	-205	-6	30	-180	241
S-15L	76	-3	-20	53	241	-135	-7	38	-104	182
S-15R	-42	-3	-20	-65	241	75	-7	37	105	241
S-16R	-83	-3	-19	-105	241	148	-7	35	176	241
S-17R	-107	-3	-18	-128	241	189	-7	33	215	241
S-18R	-112	-3	-17	-132	241	198	-7	32	223	241
S-19P4	-112	-3	-17	-131	241	187	-7	29	209	241
S-20L	-103	-3	-17	-122	241	179	-7	30	202	241
S-20R	-71	-3	-16	-89	241	123	-7	29	145	241
S-21R	-23	-3	-15	-41	241	-68	-7	28	-47	205
S-22R	92	-3	-15	75	241	-160	-7	26	-140	205
S-23R	181	-3	-14	164	241	-239	-5	19	-225	293
S-24P5	195	-3	-12	181	241	-243	-5	15	-233	293
S-24P6	195	-3	-12	181	241	-243	-5	15	-233	293
S-25L	179	-3	-13	163	241	-237	-5	18	-225	293
S-26L	87	-3	-14	71	241	-165	-8	27	-146	230
S-27L	-30	-2	-14	-47	241	-64	-9	32	-41	120
S-27R	-80	-2	-14	-97	241	174	-9	33	198	241
S-28R	-115	-3	-14	-132	241	217	-8	28	237	293
S-29R	-130	-3	-14	-146	241	212	-6	23	229	293
S-30P7	-132	-3	-14	-148	241	208	-6	23	225	293
S-30R	-130	-3	-14	-147	241	207	-6	23	223	293
S-32L	-113	-3	-14	-130	241	179	-6	24	196	241
S-33L	-75	-3	-15	-93	241	124	-7	25	142	241
S-33R	-21	-3	-15	-38	241	34	-7	26	53	241
S-34R	105	-3	-15	87	241	-171	-7	26	-151	241
S-35R	188	-3	-14	171	241	-241	-5	19	-227	293
S-36P8	203	-3	-13	187	241	-237	-5	16	-226	293
S-36P9	203	-3	-13	187	241	-237	-5	16	-226	293
S-37L	187	-3	-14	170	241	-246	-5	19	-231	293
S-38L	105	-3	-16	87	241	-188	-7	30	-166	232
S-39L	-17	-2	-17	-36	241	-95	-9	38	-66	120
S-39R	-73	-2	-17	-93	241	159	-9	38	188	241
S-40R	-111	-3	-16	-129	241	196	-7	29	218	241
S-41R	-127	-3	-15	-145	241	187	-6	23	205	241
S-42P10	-129	-3	-15	-147	241	190	-6	23	207	241
S-42R	-128	-3	-15	-146	241	188	-6	23	206	241
S-44L	-113	-3	-16	-132	241	186	-7	27	207	241
S-44R	-74	-3	-16	-93	241	122	-7	27	143	241
S-45R	-21	-3	-16	-39	241	34	-7	27	54	241
S-46R	102	-3	-16	83	241	-166	-7	27	-145	284
S-47R	185	-3	-15	167	241	-252	-5	21	-236	293
S-48P11	200	-3	-14	183	241	-250	-5	17	-237	293
S-48P12	200	-3	-14	183	241	-250	-5	17	-237	293
S-49L	183	-3	-15	165	241	-240	-5	20	-225	293
S-50L	102	-3	-16	83	241	-183	-7	30	-160	232
S-50R	-24	-3	-16	-42	241	43	-7	30	65	241
S-51R	-78	-3	-16	-96	241	133	-7	28	154	241
S-52R	-117	-3	-15	-135	241	192	-7	26	211	241
S-53R	-132	-3	-15	-149	241	188	-6	21	204	241
S-54P13	-133	-3	-14	-150	241	190	-6	21	206	241
S-54R	-132	-3	-14	-149	241	188	-6	21	204	241

S-56L	-117	-3	-15	-135	241	189	-6	24	207	241
S-57L	-80	-3	-15	-97	241	133	-7	25	152	241
S-58L	-28	-3	-15	-45	241	51	-7	27	71	241
S-58R	93	-3	-14	76	241	-166	-7	27	-146	232
S-59R	174	-3	-13	158	241	-239	-5	18	-226	293
S-60P14	203	-3	-12	187	241	-244	-4	16	-233	293
S-60P15	203	-3	-12	187	241	-244	-4	16	-233	293
S-61L	175	-3	-13	160	241	-235	-5	18	-223	293
S-62L	97	-3	-15	79	241	-164	-7	26	-145	230
S-63L	-22	-3	-15	-40	241	-73	-7	29	-51	160
S-63R	-70	-3	-16	-89	241	128	-7	30	150	241
S-64R	-104	-3	-16	-123	241	189	-7	31	213	241
S-65R	-115	-3	-16	-134	241	189	-7	28	211	241
S-66P16	-116	-3	-17	-135	241	190	-7	28	212	241
S-66R	-113	-3	-17	-132	241	185	-7	29	207	241
S-68L	-93	-3	-18	-114	241	170	-7	34	196	241
S-69L	-56	-2	-19	-77	241	115	-8	41	147	241
S-69R	56	-2	-20	34	241	-116	-8	42	-83	160
S-70R	123	-3	-19	101	241	-215	-7	35	-187	287
S-71R	169	-2	-15	151	241	-246	-5	22	-228	293
S-72P17	193	-2	-15	176	241	-246	-4	19	-231	293
S-72P18	193	-2	-15	176	241	-246	-4	19	-231	293
S-73L	160	-2	-14	144	241	-241	-5	23	-223	293
S-74L	106	-3	-17	86	241	-189	-7	33	-164	279
S-75L	-34	-3	-16	-53	241	67	-8	32	92	241
S-75R	-98	-3	-14	-114	241	193	-8	28	213	241
S-76R	-145	-3	-11	-159	241	220	-6	17	231	293
S-77R	-171	-3	-9	-183	241	209	-5	11	215	293
S-78P19	-179	-3	-7	-189	241	207	-4	8	211	293
S-78R	-179	-3	-7	-188	241	207	-4	8	210	293
S-80L	-166	-3	-5	-174	241	202	-5	7	204	293
S-81L	-136	-3	-4	-142	241	221	-6	6	221	293
S-82L	-69	-2	-2	-74	241	140	-8	3	135	241
S-82R	0	-2	0	-2	241	0	-8	0	-8	241