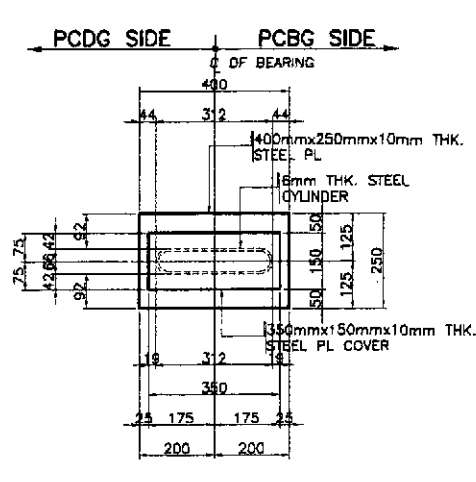
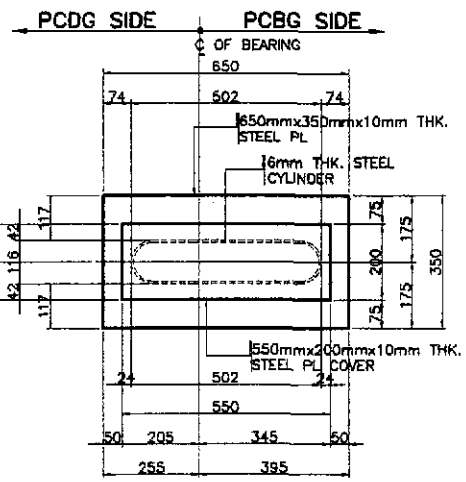
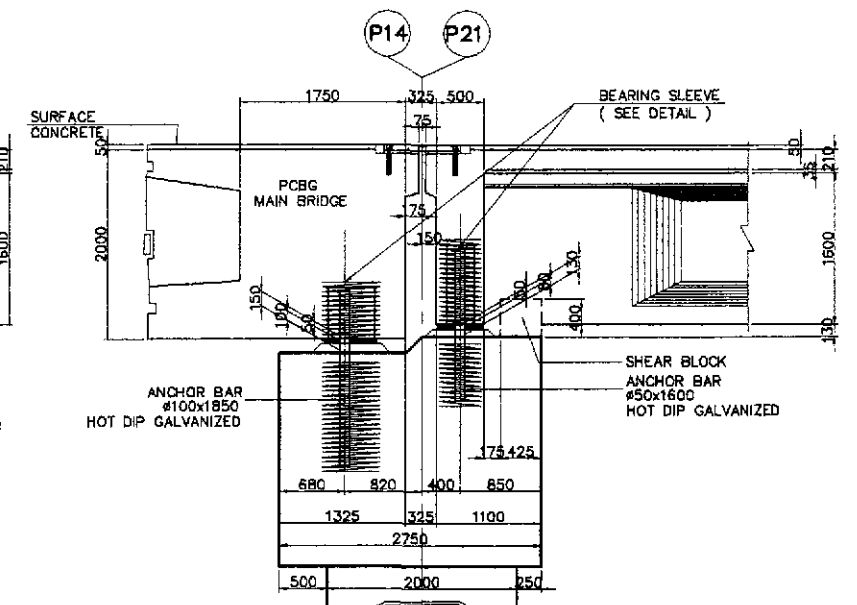
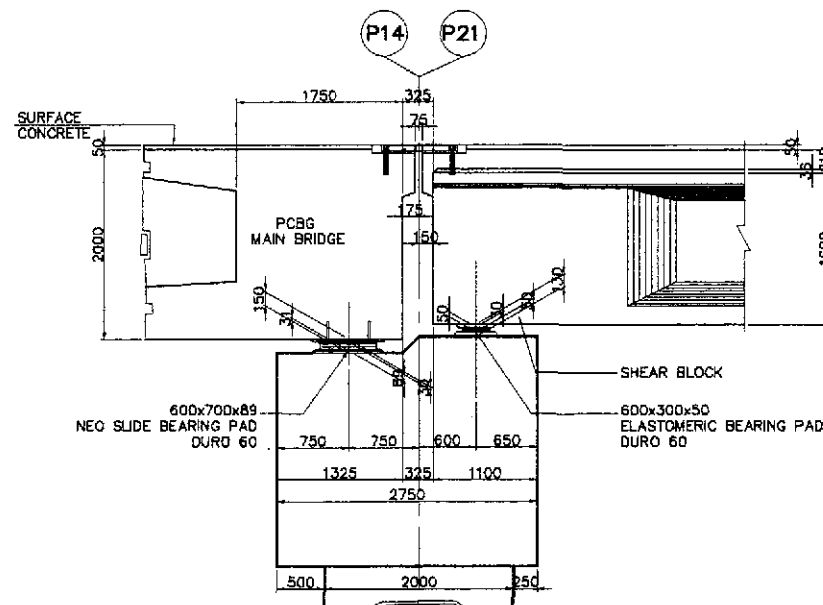
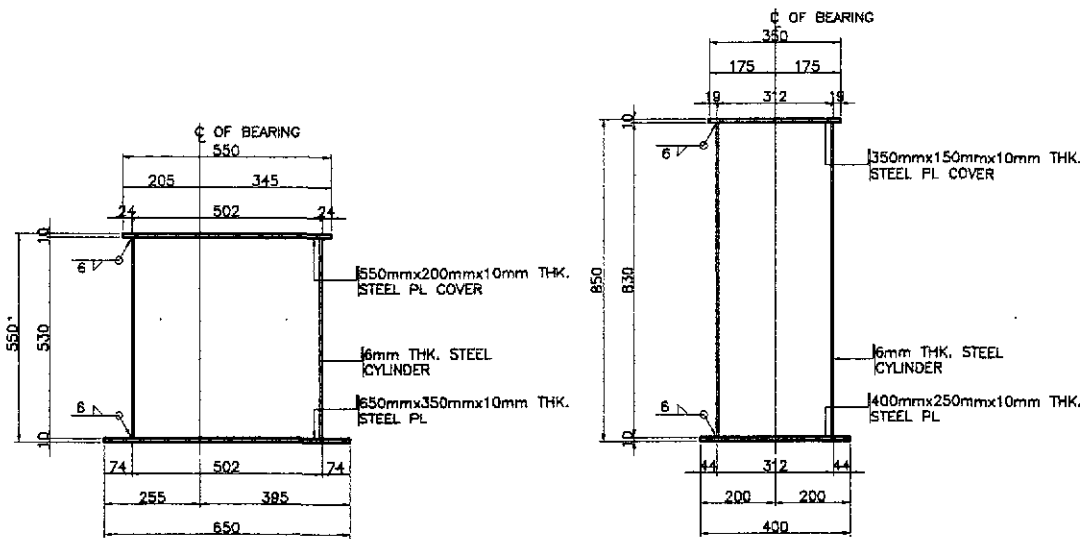


MISCELLANEOUS DRAWINGS



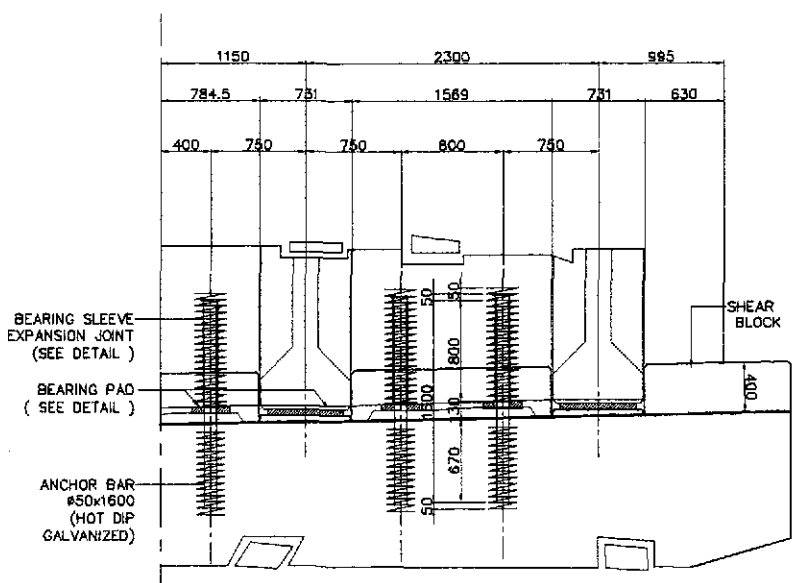
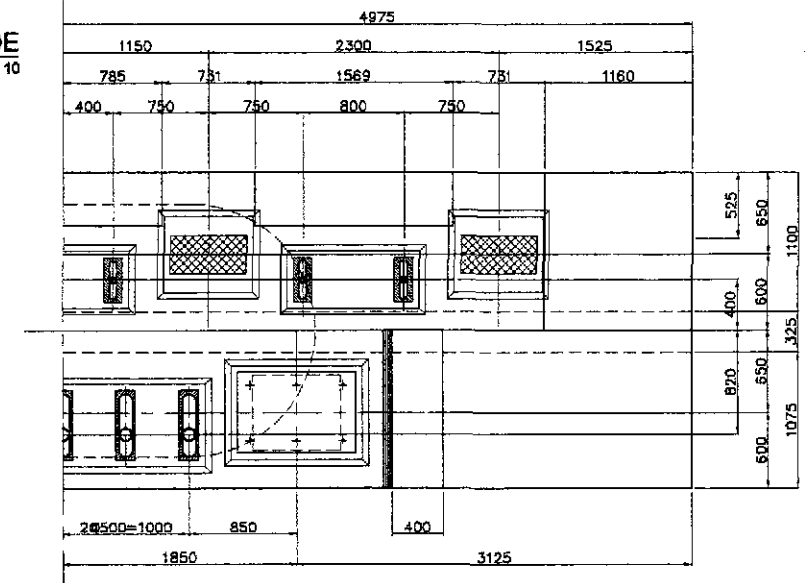
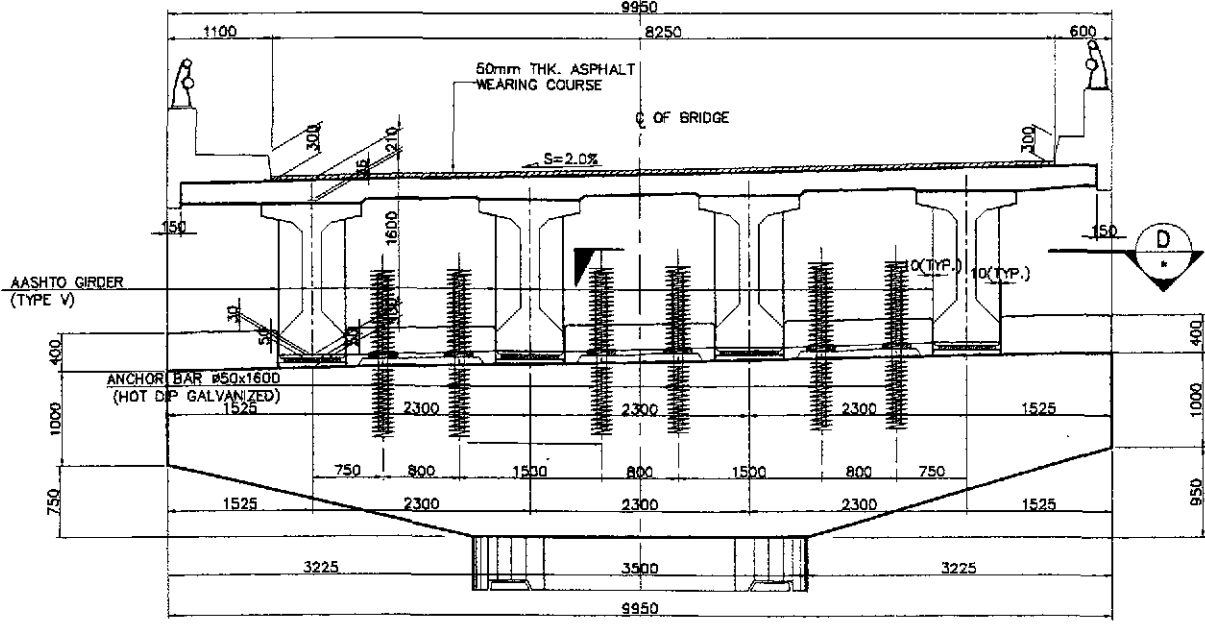
E SECTION @ BEARING PAD (PIERS P14 & P21)
SCALE 1:40

F SECTION @ ANCHOR BAR (PIERS P14 & P21)
SCALE 1:40

NOTE :
1. ALL METALS SHOWN IN THIS DRAWING SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS FOR ZINC (HOT-GALVANIZE) COATING CONFORMING TO AASHTO M111 (ASTM A123) OR AASHTO M232 (ASTM A153). THE WEIGHT OF ZINC COATING SHALL AVERAGE NOT LESS THAN 365 g PER SQ. METER OF ACTUAL SURFACE AREA WITH NO INDIVIDUAL SPECIMEN HAVING A COATING OF LESS THAN 305 g PER SQ. METER.

C BEARING SLEEVE DETAILS @ PCBG SIDE
SCALE 1:40

C BEARING SLEEVE DETAILS @ PCDG SIDE
SCALE 1:40



G PLAN @ PIERS P14 & P21
SCALE 1:30

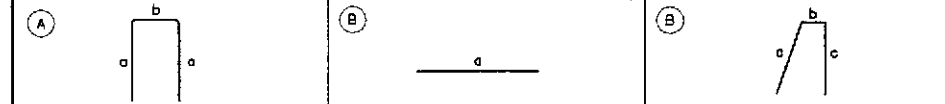
H SECTION (PCDG)
SCALE 1:30

C SECTION (SHOWING REINF. CONCRETE PROTRUSION)
SCALE 1:40

1 DETAILS OF BEARING AND ANCHOR BARS FOR PIER 14 & PIER 21
SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAILS OF BEARING & ANCHOR BARS FOR PIER 14 & PIER 21 (2 OF 2) (ULTIMATE STAGE)	SHEET NO. : B8M-82
	CHECKED	9/27/02	[Signature]		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS						
	SUBMITTED	9/30/02	[Signature]		BUREAU OF DESIGN						
					OFFICE OF THE SECRETARY						
				Submitted By:	Reviewed By:	Recommended By:	Approved By:				
				DANILO C. TRAJANO Project Director	ADRIANO M. DORCY Chief, Bridges Division	GILBERTO S. REYES Director IV (OIC)	MANUEL M. BONGAN Undersecretary	SIMEON A. DATUMANONG Secretary			

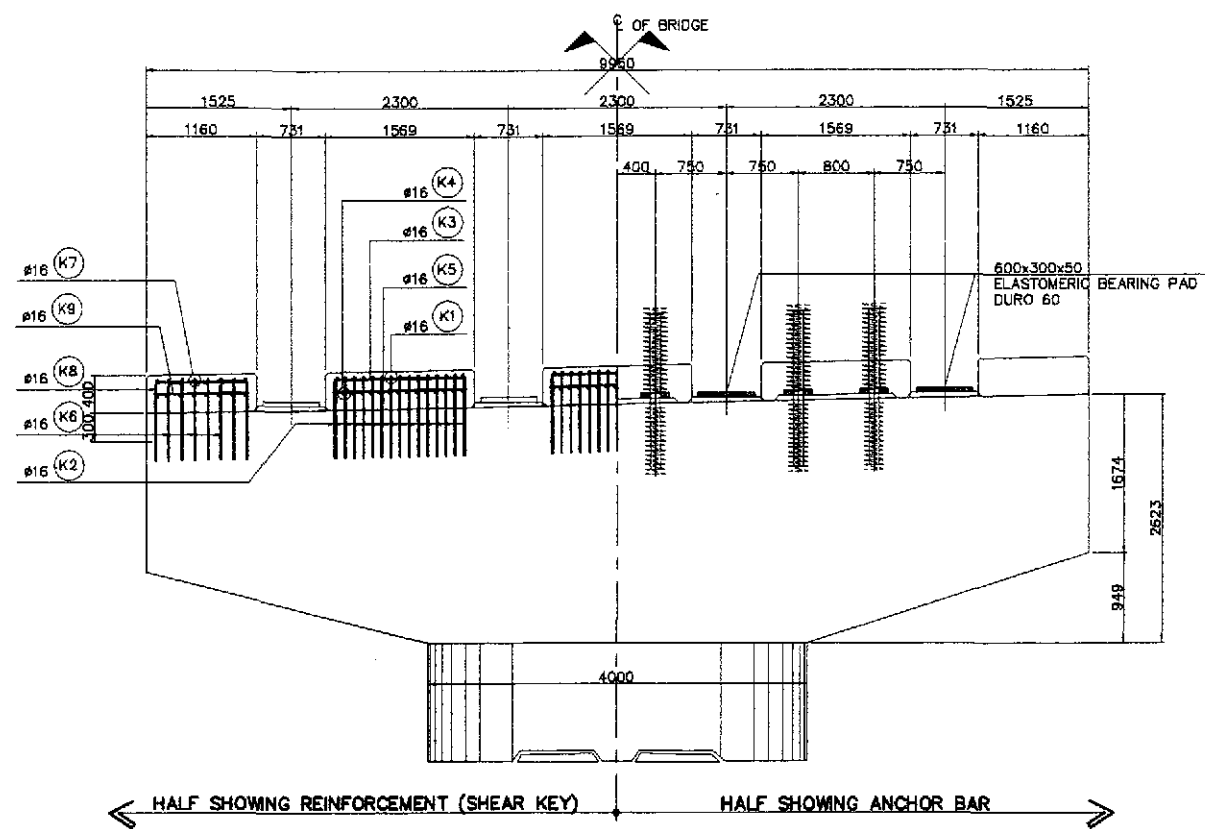
BAR BENDING DIAGRAM



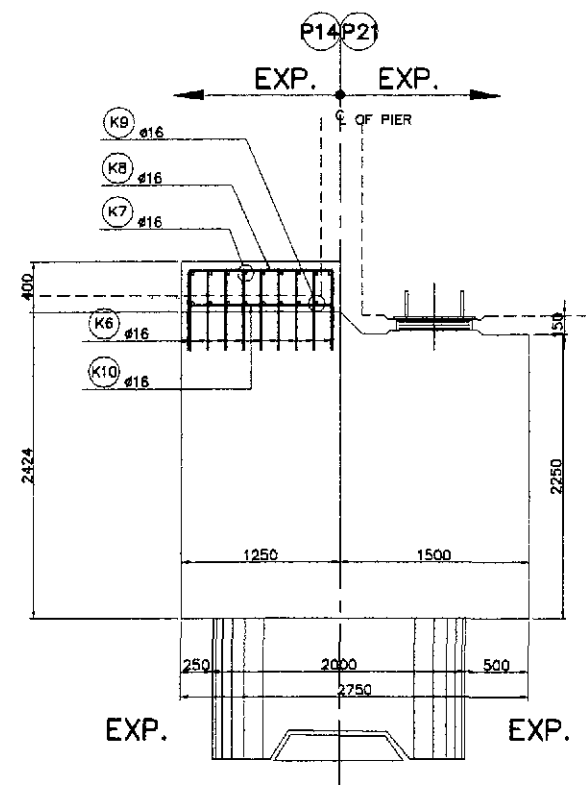
SCHEDULE OF REINFORCEMENT

LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT(kgs.)	
				a	b	c	d	e				Grade 40	Grade 80
SHEAR KEY PIER P14 & P21	K1	16	A	850	325				2025	45	1.579		143.89
	K2	16	A	850	210				1910	45	1.579		135.72
	K3	16	A	850	1470				3170	6	1.579		30.03
	K4	16	STR	325					325	12	1.579		6.16
	K5	16	STR	1470					1470	39	1.579		90.52
	K6	16	A	850	155				1855	54	1.579		158.17
	K7	16	A	850	1060				2760	18	1.579		78.44
	K8	16	A	850	1150				2850	16	1.579		72.00
	K9	16	STR	1060					1060	14	1.579		23.43
	K10	16	STR	1150					1150	12	1.579		21.79
	K11	16	A	850	300				2000	30	1.579		94.74
	K12	16	A	850	100				1800	30	1.579		85.27
	K13	16	A	850	1400				3100	4	1.579		19.58
	K14	16	STR	1400					2800	4	1.579		17.66
	K15	16	STR	300					600	4	1.579		3.79
TOTAL WEIGHT =											0.00	760.15	
TOTAL WEIGHT FOR (2) COPING =											0.00	1520.31	

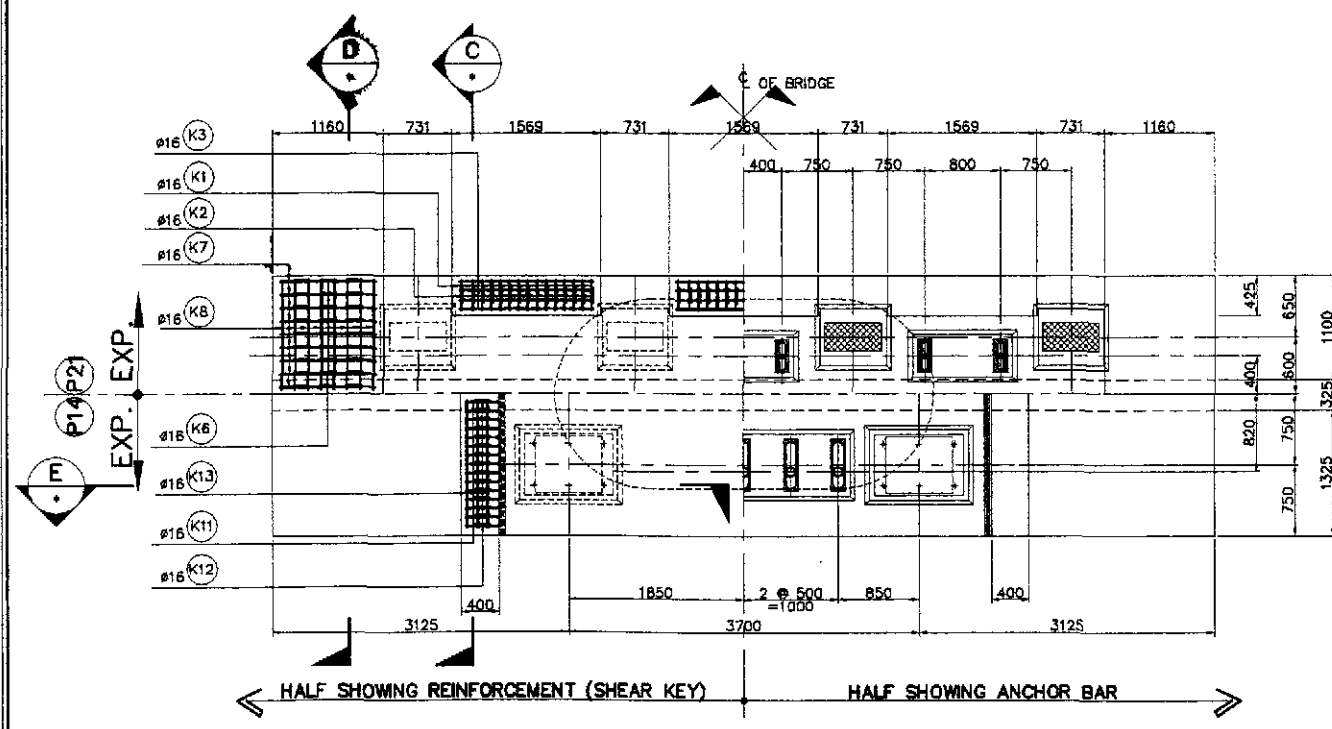
THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.



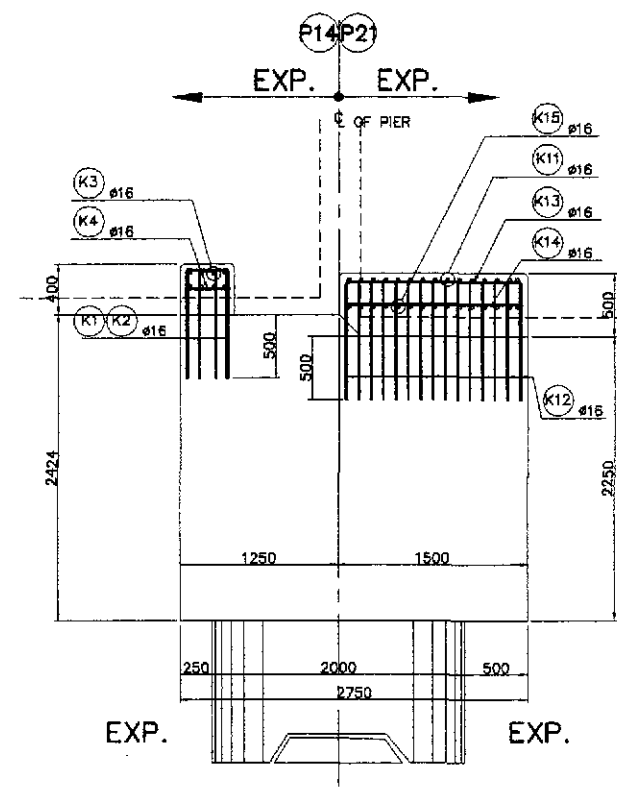
B ELEVATION @ AASHTO GIRDER SIDE
SCALE 1:40



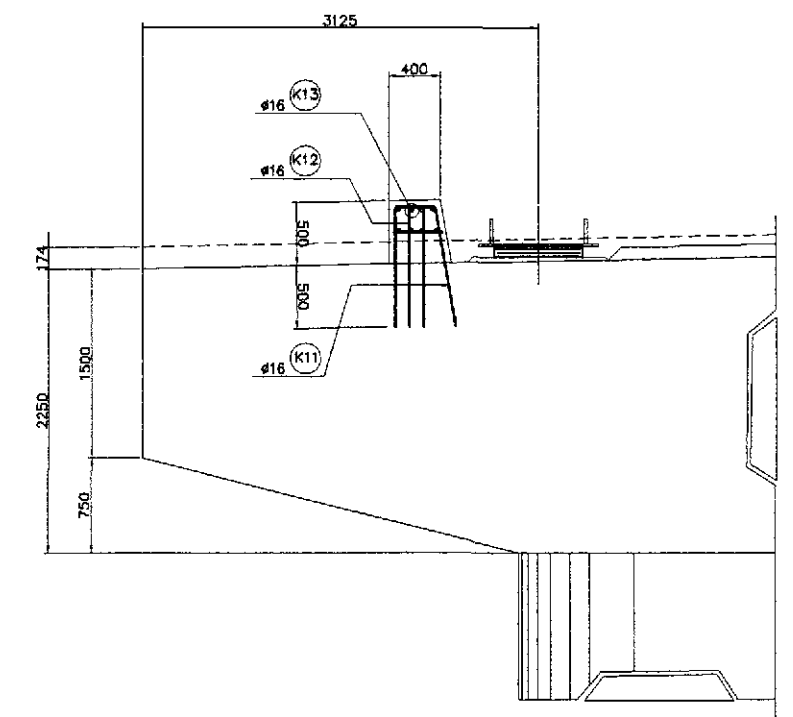
D SECTION
SCALE 1:30



A PLAN
SCALE 1:40



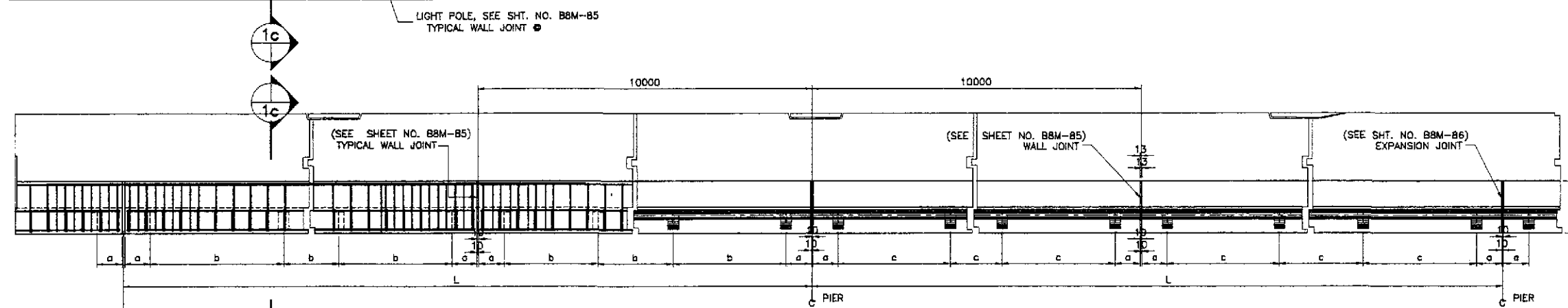
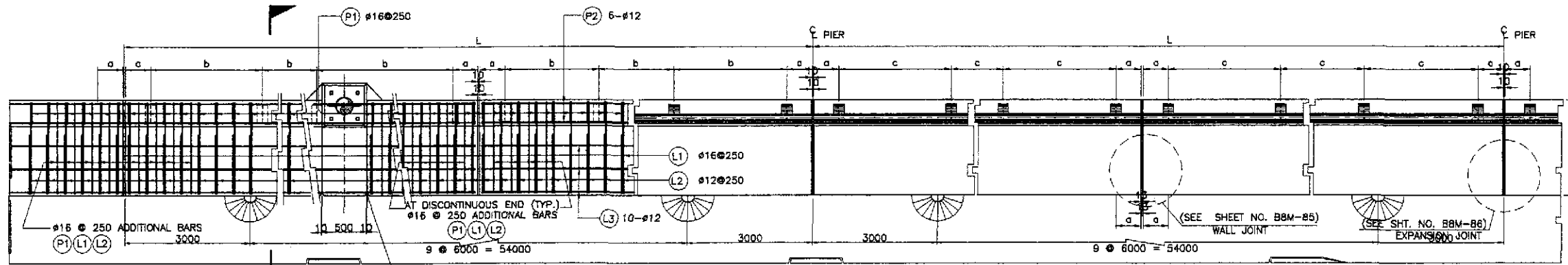
C SECTION
SCALE 1:30



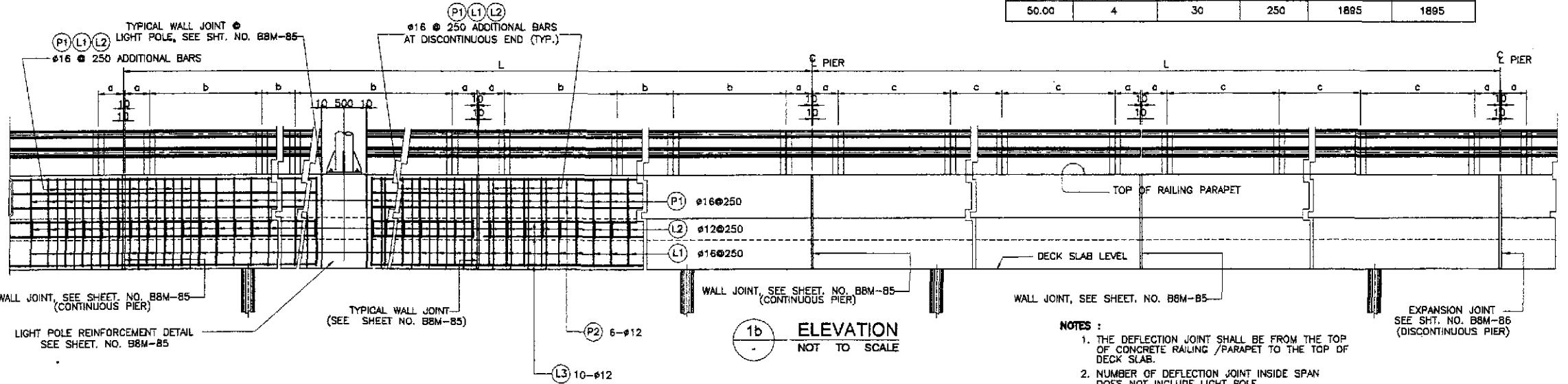
E SECTION
SCALE 1:30

1 DETAIL OF SHEAR KEY (PIER 14 & PIER 21)
SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE	<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p>	PROJECT AND LOCATION :		SCALE :	SHEET CONTENTS :	SHEET NO. :		
	CHECKED	9/27/02	J.C. SANTOS		THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)		AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAIL OF SHEAR KEY (P14 & P21) (ULTIMATE STAGE)	B8M-83		
SUBMITTED	9/30/02	TEAM LEADER	PLARIDEL BYPASS - CONTRACT PACKAGE III		FULL SIZE A1						
Submitted By: DANILO C. TRAJANO Project Director				Reviewed By: ADRIANO M. DORCY Chief, Bridges Division		Recommended By: GILBERTO S. REYES Director IV (OIC)		Recommended By: MANUEL M. BONDAN Undersecretary		Approved By: SIMEON A. DATUMANONG Secretary	



1a PLAN
NOT TO SCALE

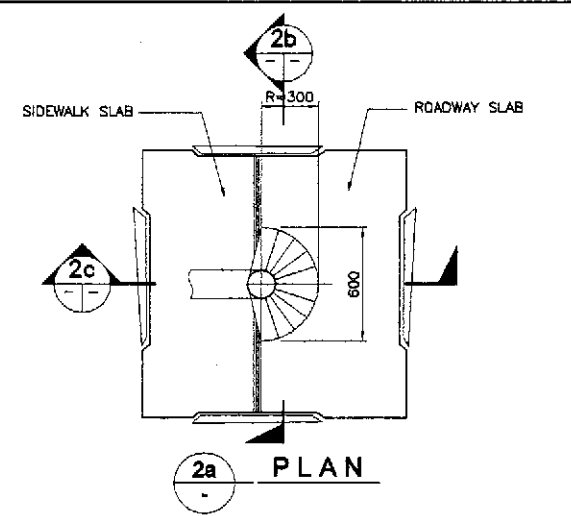


1b ELEVATION
NOT TO SCALE

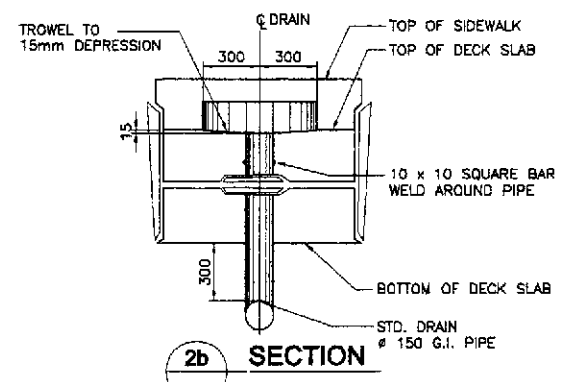
1 TYPICAL RAILING AND SIDEWALK DETAILS
SCALE AS SHOWN

SCHEDULE OF RAILING					
SPAN LENGTH (m)	NO. OF DEFLECTION JT. INSIDE SPAN	NO. OF RAIL POST PER SIDE/SPAN	a (mm)	b (mm)	c (mm)
60.00	5	36	250	1895	1895
50.00	4	30	250	1885	1885

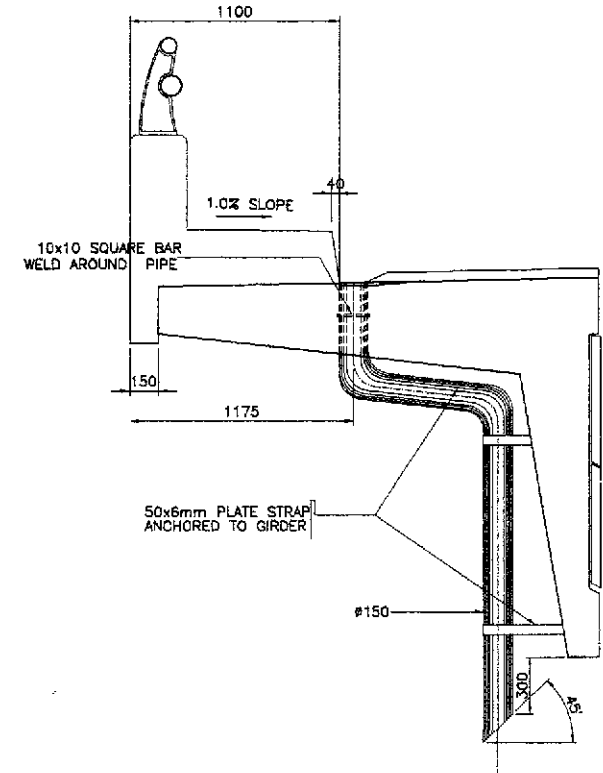
- NOTES:
1. THE DEFLECTION JOINT SHALL BE FROM THE TOP OF CONCRETE RAILING /PARAPET TO THE TOP OF DECK SLAB.
 2. NUMBER OF DEFLECTION JOINT INSIDE SPAN DOES NOT INCLUDE LIGHT POLE.



2a PLAN



2b SECTION



2c SECTION

2 TYPICAL DRAIN DETAILS
SCALE 1:20

JICA
JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL
YEO YACHIYO ENGINEERING CO., LTD.

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

BUREAU OF DESIGN
OFFICE OF THE SECRETARY

Submitted By: **DANILO C. TRAJANO** (Project Director)
Reviewed By: **ADRIANO M. DOROY** (Chief, Bridges Division)
Recommended By: **GILBERTO S. REYES** (Director IV (OIC))
Manuel M. BONDAN (Undersecretary)
Simeon A. DATUMANONG (Secretary)

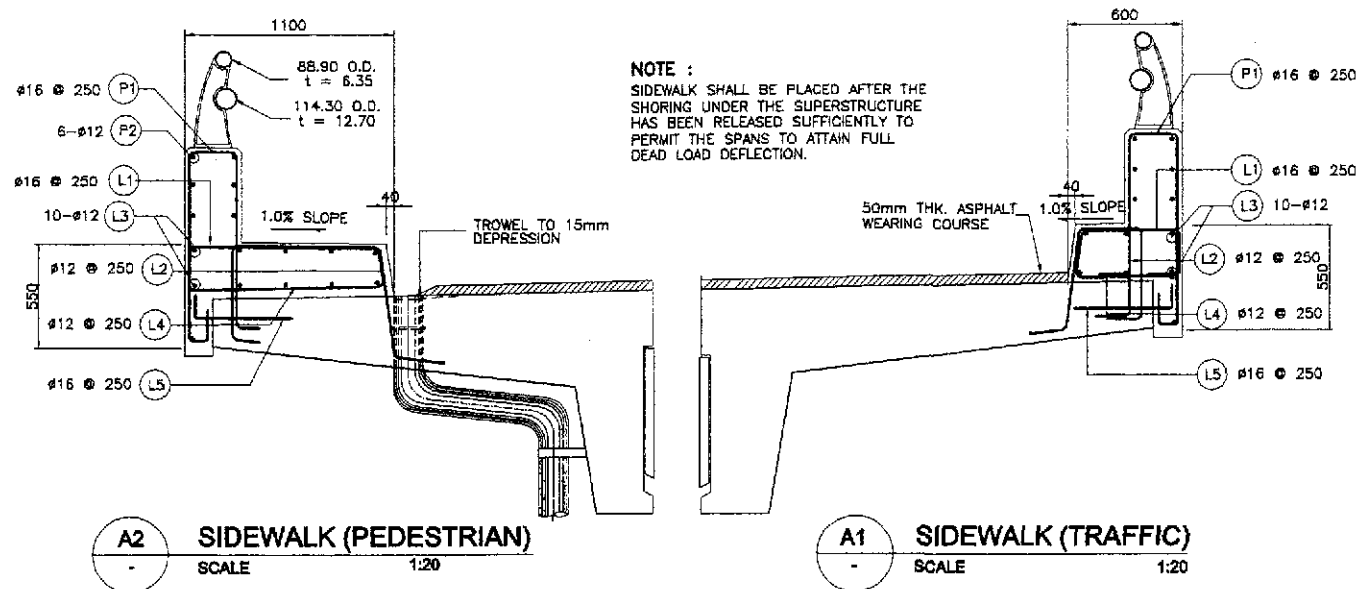
PROJECT AND LOCATION :
THE DETAILED DESIGN STUDY ON
UPGRADING INTER-URBAN HIGHWAY SYSTEM
ALONG THE PAN-PHILIPPINE HIGHWAY
(Plaridel, Cabanatuan and San Jose Bypasses)

PLARIDEL BYPASS - CONTRACT PACKAGE III

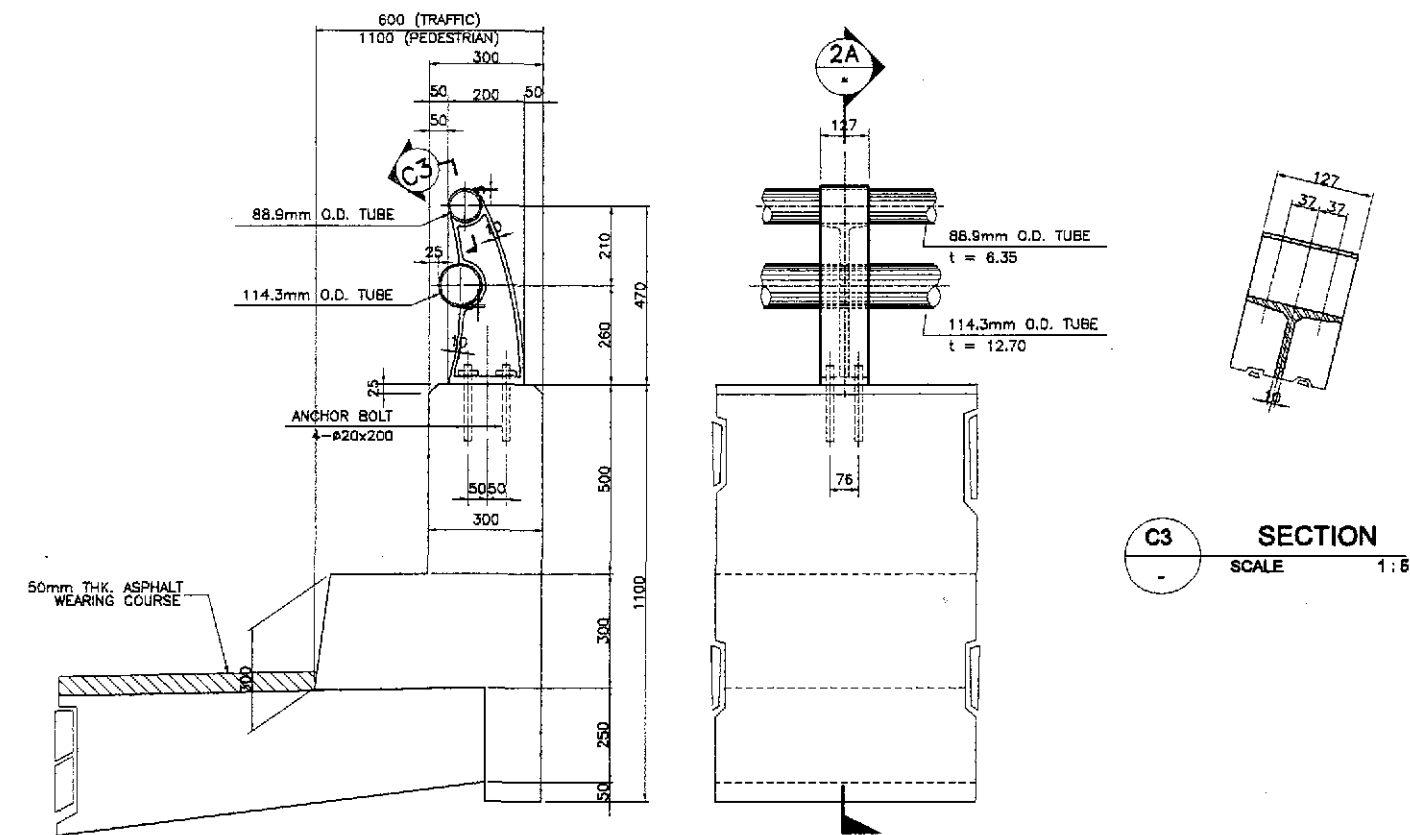
SCALE : AS SHOWN / FULL SIZE A1

SHEET CONTENTS :
BRIDGE NO. 8 ANGAT RIVER BRIDGE
TYPICAL SIDEWALK, RAILING AND
DRAIN DETAIL
(ULTIMATE STAGE)

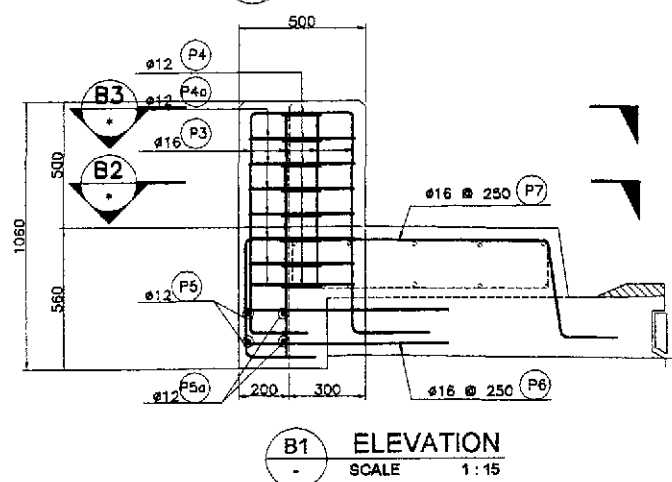
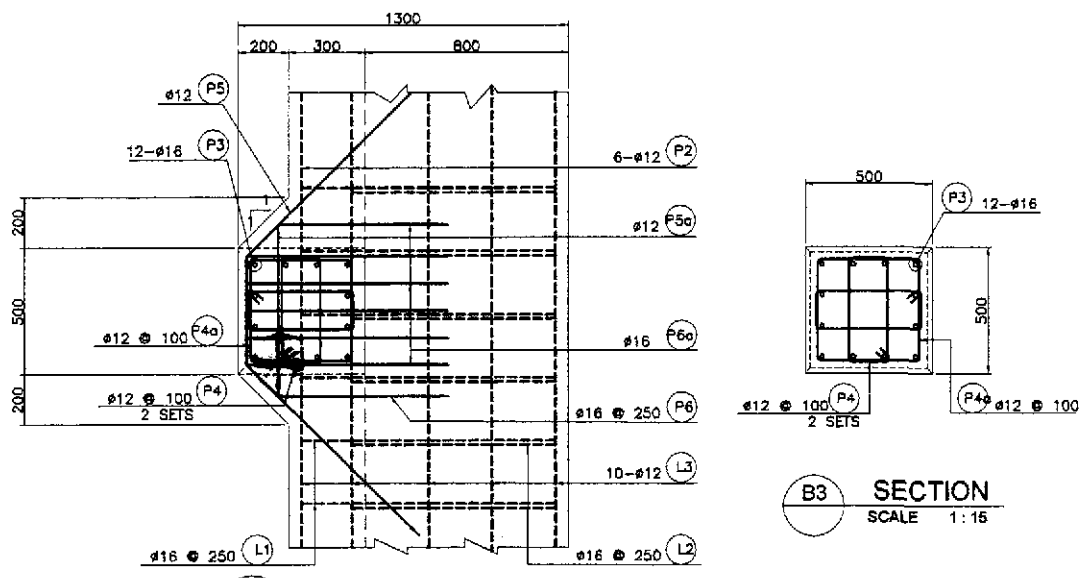
SHEET NO. : B8M-84



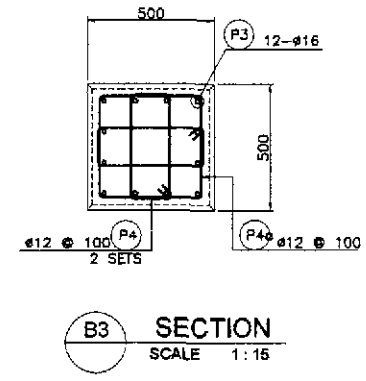
A SIDEWALK REINFORCEMENT DETAILS
SCALE AS SHOWN



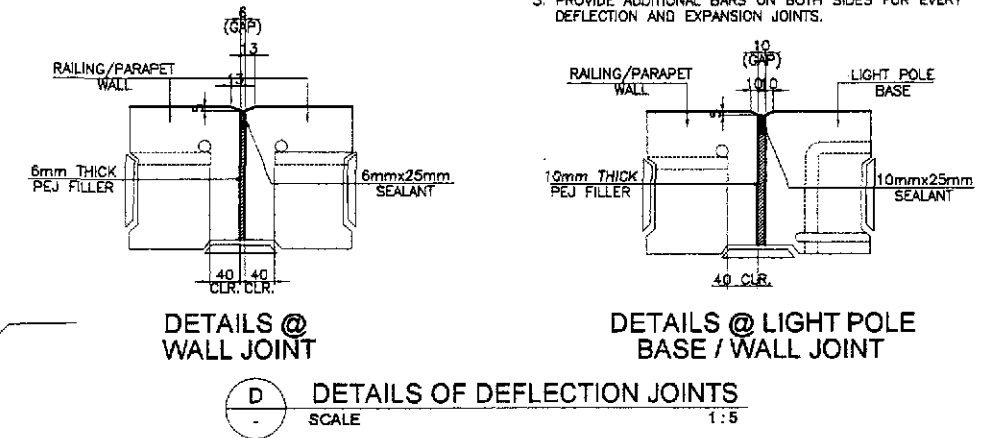
C DETAILED DIMENSION OF RAILING
SCALE AS SHOWN



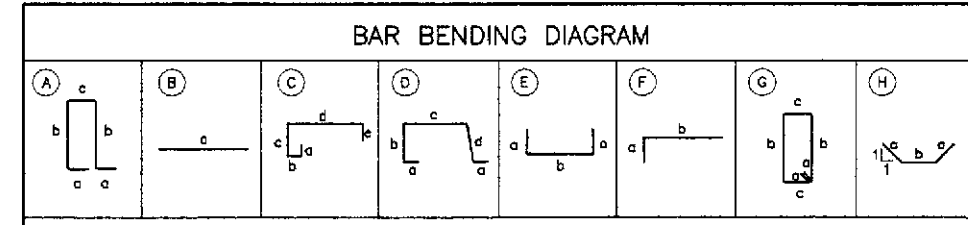
B LIGHT POLE BASE REINF. DETAIL
SCALE AS SHOWN



1 SIDEWALK & LIGHT POLE BASE REINF. DETAILS, RAILING DIMENSIONS
SCALE AS SHOWN



- NOTES :**
- FOR LOCATION OF JOINTS SEE DWG. NO. B8M-84.
 - PROVIDE DEFLECTION JOINTS AT EVERY CONTINUOUS PIER EXCEPT @ LIGHT POST POSITION. ALSO PROVIDE FIVE (5) ADDITIONAL DEFLECTION JOINTS IN BETWEEN PIERS FOR 60 METERS SPAN AND FOUR (4) ADDITIONAL DEFLECTION JOINTS IN BETWEEN PIERS FOR 50 METERS SPAN.
 - PROVIDE ADDITIONAL BARS ON BOTH SIDES FOR EVERY DEFLECTION AND EXPANSION JOINTS.

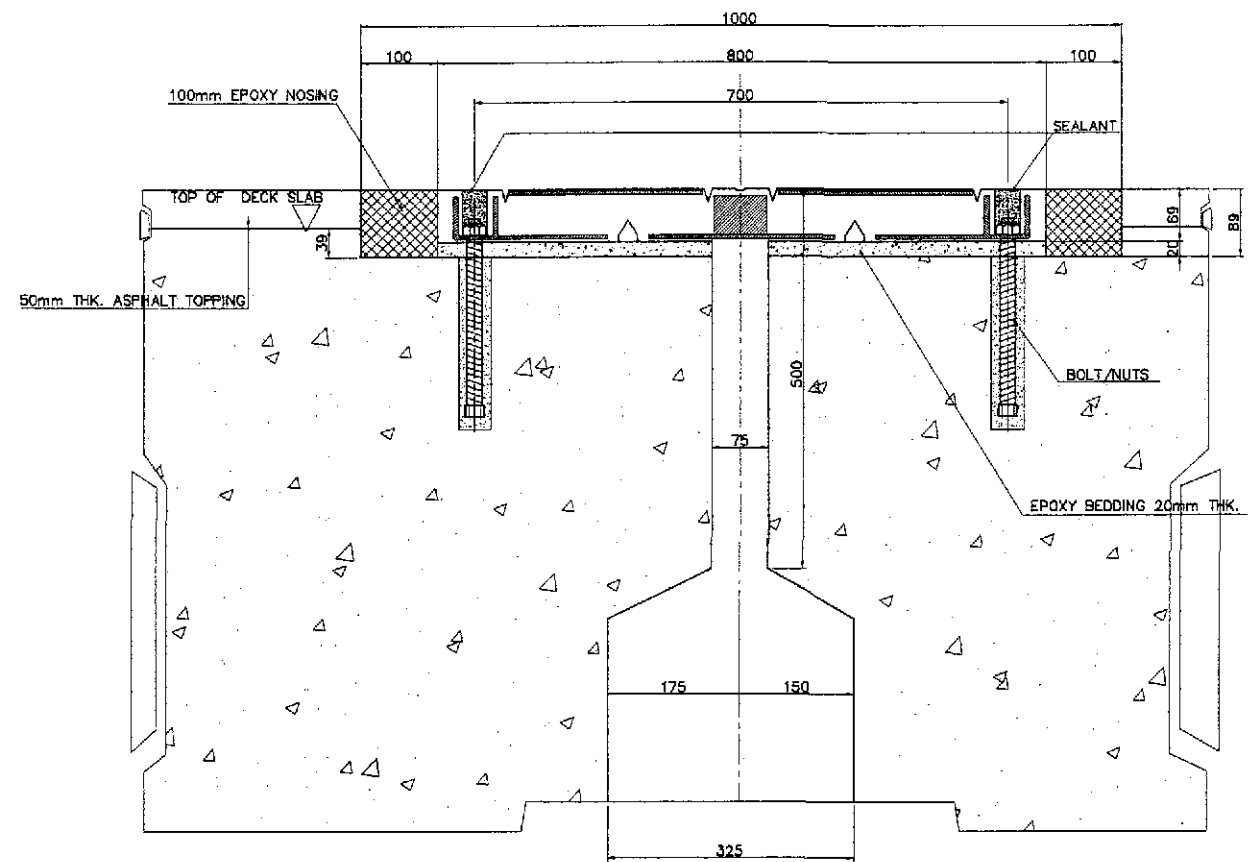


SCHEDULE OF REINFORCEMENT

LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT(kgs.)	
				a	b	c	d	e				Grade 40	Grade 60
PARAPET	P1	16	A	300	720	220			2260	1920	1.578	6847	
	P2	12	B	9874					9874	480	0.888	4209	
TOTAL WEIGHT FOR 7 SPANS = 11056 Kgs.													
SIDEWALK PEDESTRIAN	L1	16	C	100	70	450	980	260	1860	1920	1.578	5635	
	L2	12	D	200	375	700	375		1850	1920	0.888	3154	
	L3	12	B	9874					9874	440	0.888	3858	
	L4	12	E	200	980				1380	1920	0.888	2353	
	L5	12	F	200	400				600	1920	0.888	1023	
TOTAL WEIGHT FOR 7 SPANS = 16023 Kgs.													
SIDEWALK TRAFFIC	L1	16	C	100	70	4750	480	260	5660	1920	1.578	17148	
	L2	12	D	200	375	200	375		1350	1920	0.888	2302	
	L3	12	B	9874					9874	280	0.888	2455	
	L4	12	E	220	480				880	1920	0.888	1500	
	L5	12	F	200	400				600	1920	0.888	1023	
TOTAL WEIGHT FOR 7 SPANS = 24428 Kgs.													
LIGHT POST	P3	16	F	300	910				1210	12	1.578	23	
	P4	12	G	150	150	420			1440	16	0.888	20	
	P4a	12	G	150	420	420			1880	8	0.888	14	
	P5	12	H	1000	500				2500	2	0.888	4	
	P5a	12	B	700					700	2	0.888	1	
	P6	16	E	650	130				1430	5	1.578	11	
	P6a	16	E	750	130				1630	5	1.578	13	
P7	12	C	100	250	4750	1160	260	6520	3	0.888	17		
TOTAL WEIGHT PER POST = 103 Kgs.													
TOTAL WEIGHT FOR 14 POST = 1236 Kgs.													

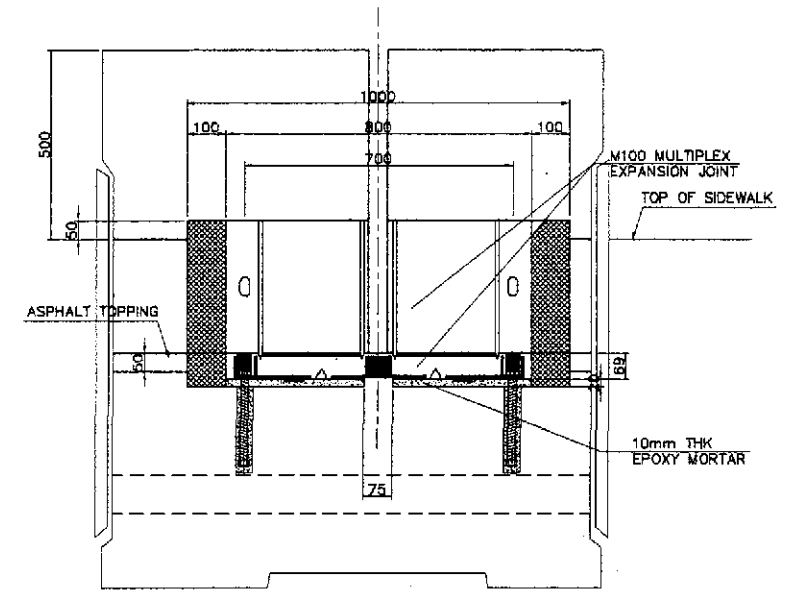
THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECKED AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES				PROJECT AND LOCATION :		SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	9/27/02	[Signature]		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				THE DETAILED DESIGN STUDY ON		AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE	B8M-85
	SUBMITTED	9/27/02	[Signature]		BUREAU OF DESIGN				UPGRADING INTER-URBAN HIGHWAY SYSTEM		FULL SIZE A1	SIDEWALK & LIGHT POLE BASE REINF. DETAILS, RAILING DIMENSIONS (ULTIMATE STAGE)	
				OFFICE OF THE SECRETARY				ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)					
				Submitted By: DANILO C. TRAJANO, Project Director				Recommended By: ADRIANO M. DOROY, Chief, Bridges Division		Approved By: GILBERTO S. REYES, Director IV (GIC)			
				Recommended By: MANUEL M. BONUAN, Undersecretary				Approved By: SIMEON A. DATUMANONG, Secretary					
								PLARIDEL BYPASS - CONTRACT PACKAGE III					

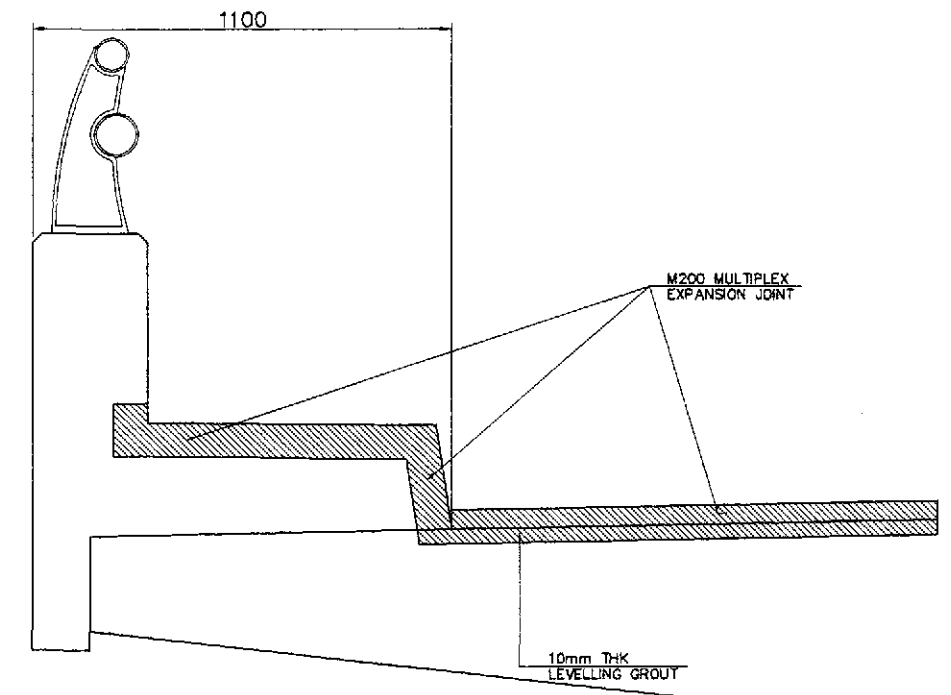


A SECTION (M200 MULTIFLEX)
SCALE 1:5

- NOTES :**
1. THE EXPANSION JOINT SHALL BE MULTIFLEX M200 OR EQUIVALENT.
 2. THE CONTRACTOR SHALL GUARANTEE WATERTIGHTNESS OF EXPANSION JOINTS INCLUDING SIDEWALK JOINTS.
 3. THE EXPANSION JOINT SHALL HAVE A 15-YEAR WARRANTY PERIOD. DAMAGES ON THE JOINTS WITHIN THIS PERIOD SHALL BE REPLACED BY THE CONTRACTOR.
 4. VERIFY ACTUAL DIMENSIONS OF EXPANSION JOINT BLOCK-OUT AS PER MANUFACTURER'S RECOMMENDATION.

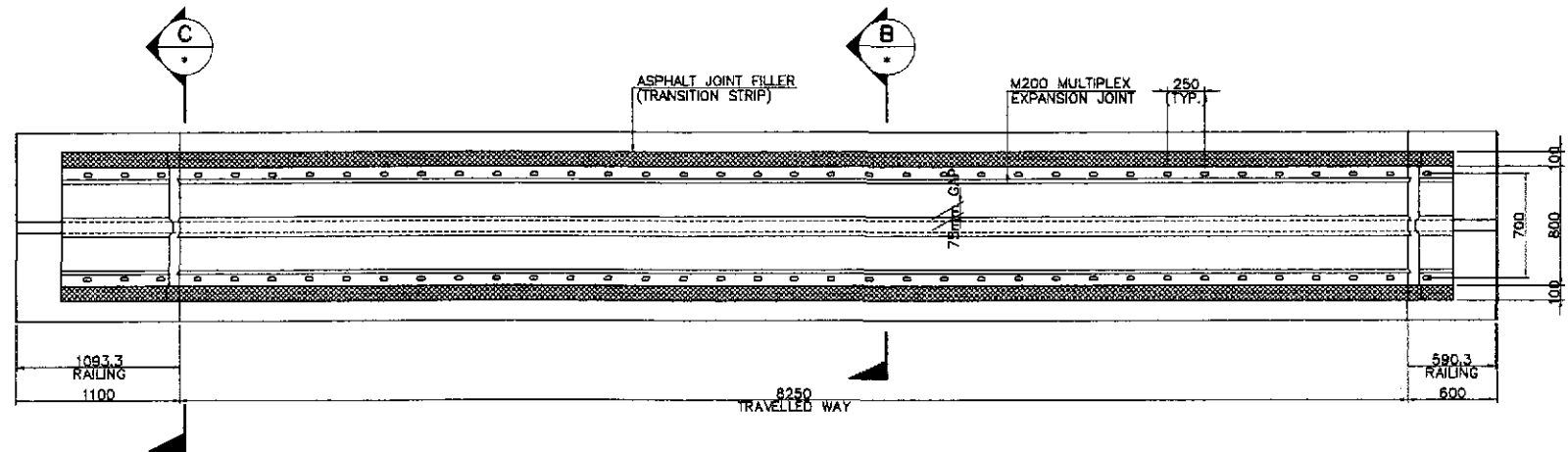


C DETAIL
SCALE 1:10



D DETAIL
SCALE 1:10

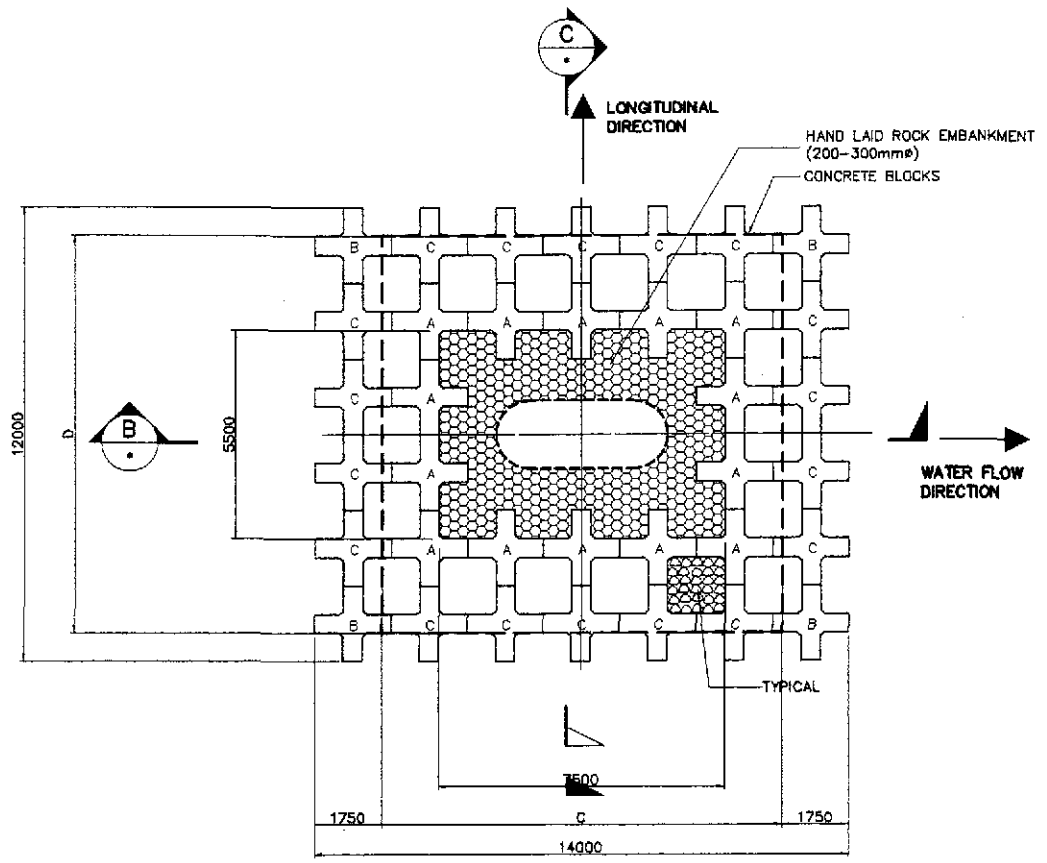
LOCATION	EXPANSION JOINT TYPE	MOVEMENT (mm)	LENGTH (m)
PIER 14	MULTIFLEX M200	±100(TOTAL=200mm)	10.20
PIER 21	MULTIFLEX M200	±100(TOTAL=200mm)	10.20



A PLAN (M200 MULTIFLEX)
SCALE 1:25

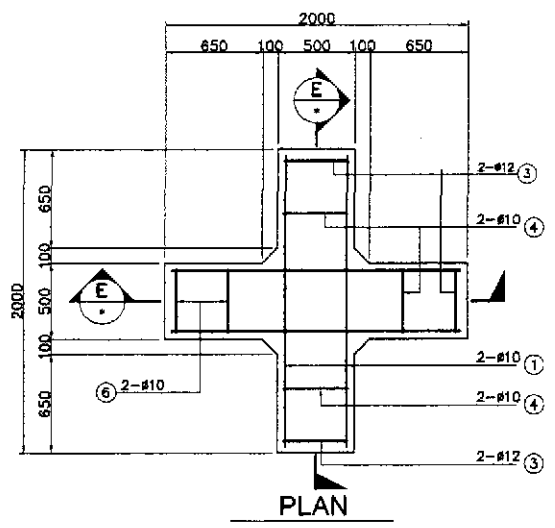
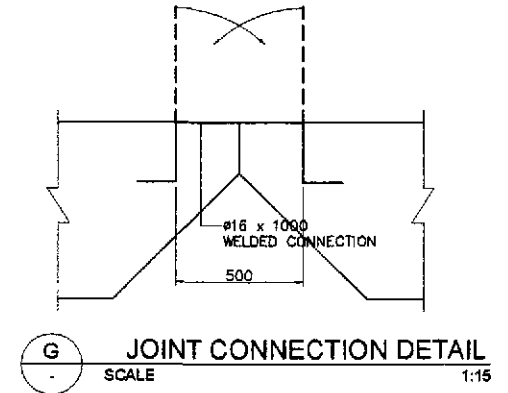
1 EXPANSION JOINT DETAILS
SCALE AS SHOWN

	DATE: 9/25/02 DESIGNED: M. SANTOS CHECKED: J. SANTOS SUBMITTED: 9/30/02	SIGNATURE: M. SANTOS TEAM LEADER		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE EXPANSION JOINT DETAILS (ULTIMATE STAGE)	SHEET NO. : B8M-86
	BUREAU OF DESIGN Submitted By: DANILO C. TRAJANO, Project Director Reviewed By: ADRIANO M. DOROY, Chief, Bridges Division Recommended By: GILBERTO S. REYES, Director IV (GIC) Office of the Secretary Approved By: MANUEL M. BONOAN, Undersecretary Approved By: SIMEON A. DATUMANONG, Secretary							
	JICA JAPAN INTERNATIONAL COOPERATION AGENCY							

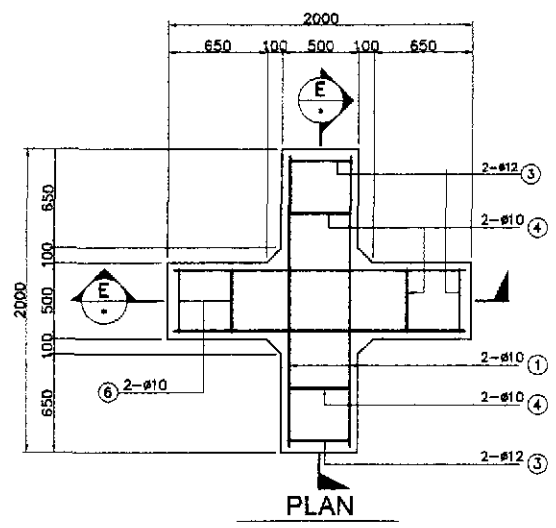


A PLAN SHOWING CONCRETE BLOCK ARRANGEMENT
SCALE 1:100

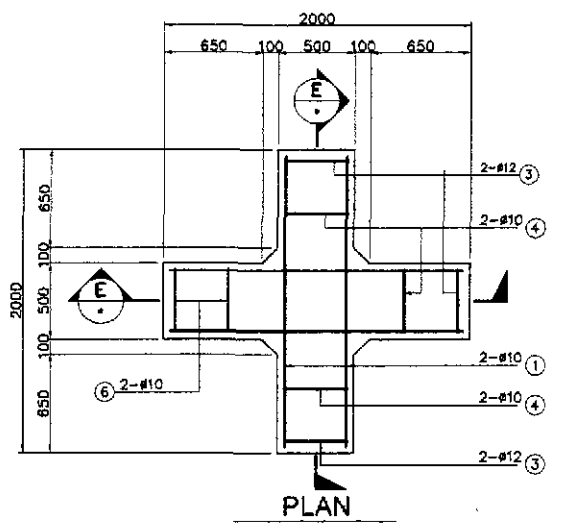
PIER NO.	COLUMN DIMENSION		FOOTING DIMENSION			ELEVATION	
	A	B	C	D	E	ELEV 1	ELEV 2
P14	4000	2000	10500	6750	2250	+9.23	+0.99
P15	4500	2500	10500	10500	2500	+1.053	-2.16
P16	4500	2500	10500	10500	2500	-0.348	-2.02
P17	4500	2500	10500	10500	2500	-0.588	-1.97
P18	4500	2500	10500	10500	2500	+4.490	-1.97
P19	4500	2500	10500	10500	2500	+6.416	-2.02
P20	4500	2500	10500	10500	2500	+3.990	-2.12
P21	4000	2000	10500	6750	2250	+8.081	+0.98



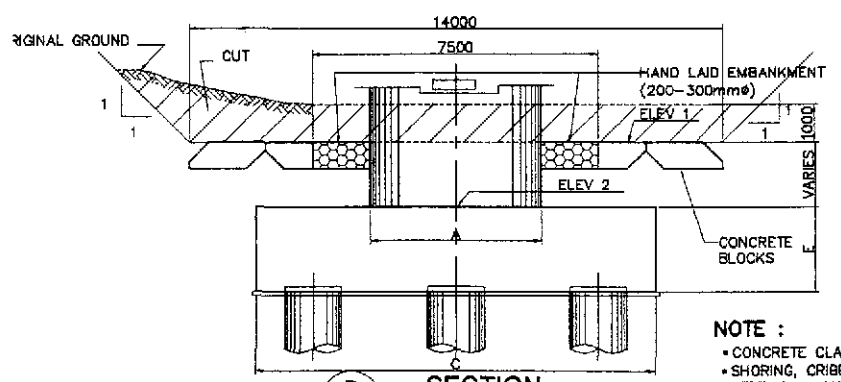
PLAN



PLAN

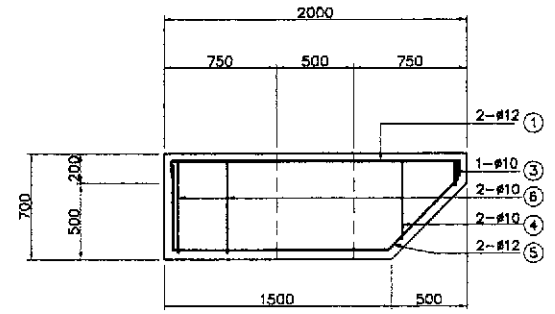


PLAN

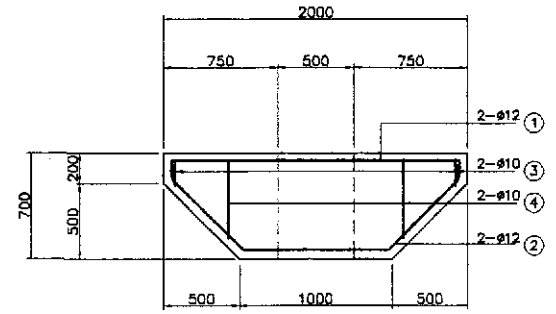


B SECTION
SCALE 1:100

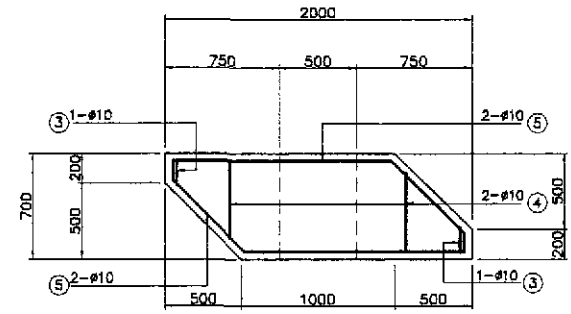
NOTE :
 • CONCRETE CLASS "B" FOR CONCRETE BLOCKS.
 • SHORING, CRIBBING & RELATED WORK REQUIRED FOR CONCRETE BLOCK SETTING & HAND LAID EMBANKMENT AS SPECIFIED IN THIS DRAWING WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED AS A SUBSIDIARY OBLIGATION OF THE CONTRACTOR UNDER PAY ITEMS 103(2)g RIVERBED EXCAVATION (AOWL) & 103(2)c RIVERBED EXCAVATION (BOWL).



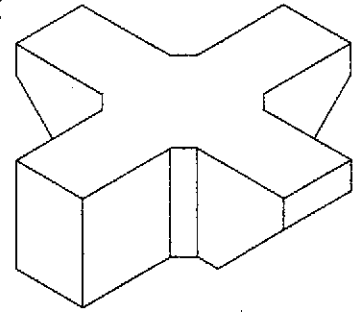
SECTION



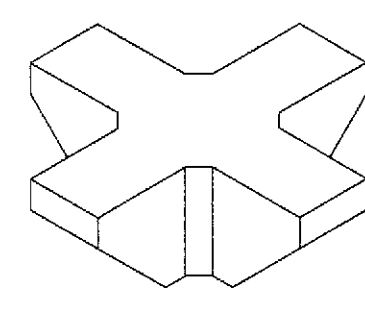
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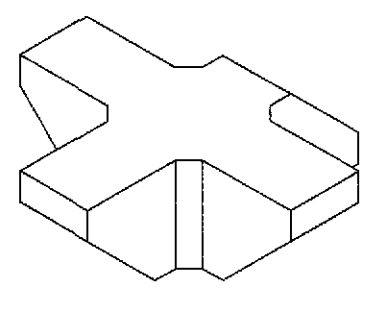
SECTION



ISOMETRIC VIEW



ISOMETRIC VIEW

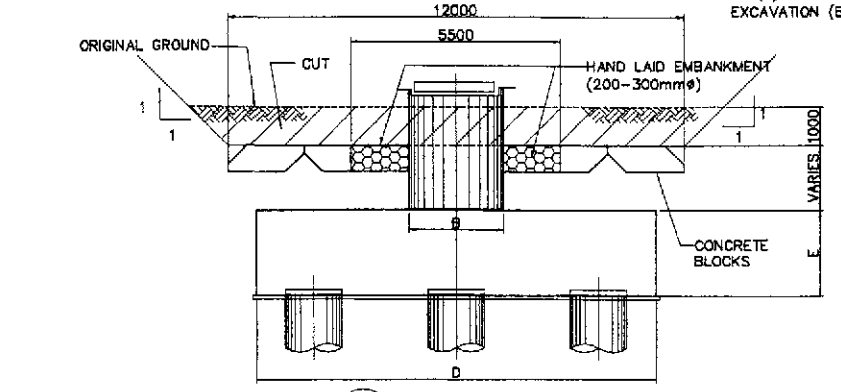


ISOMETRIC VIEW

D TYPE-A CONC. BLOCK
SCALE 1:25

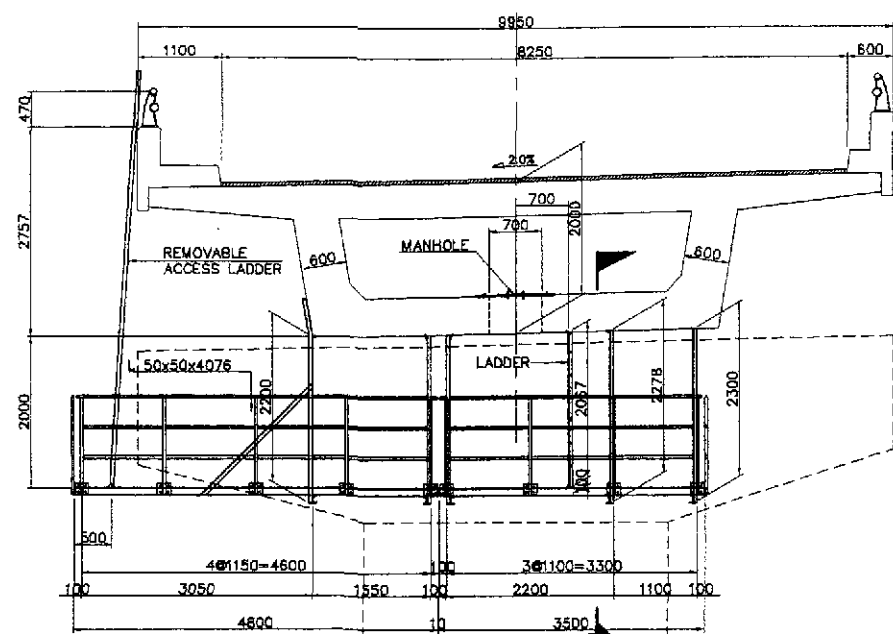
E TYPE-B CONC. BLOCK
SCALE 1:25

F TYPE-C CONC. BLOCK
SCALE 1:25

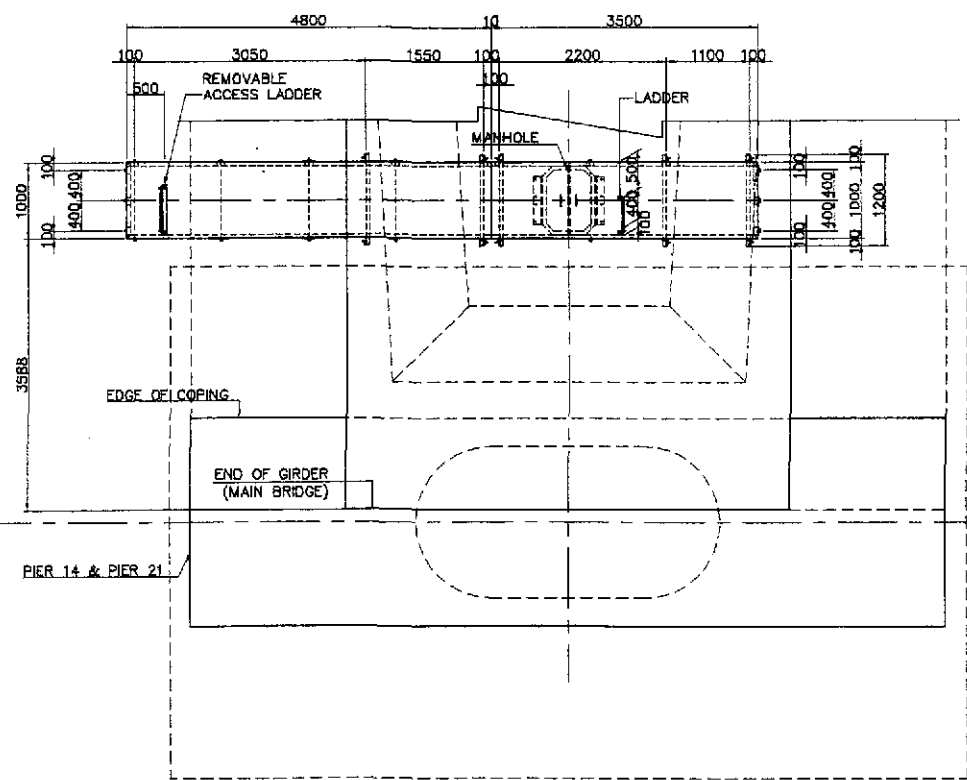


C SECTION
SCALE 1:100

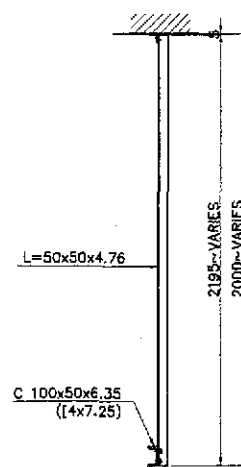
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAILS OF PIER PROTECTION (PIER 14 TO PIER 21) (ULTIMATE STAGE)	SHEET NO. : B8M-87
	CHECKED	9/27/02	[Signature]		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO, Project Director Reviewed By: PERFECTO L. ZAPLAN JR., Chief, Hydraulics Division (OIC) Recommended By: GILBERTO S. REYES, Director IV (OIC) Recommended By: MANUEL M. BONGAN, Undersecretary Approved By: SIMEON A. DATUMANONG, Secretary	OFFICE OF THE SECRETARY Approved By: [Signature/Approver]					
	SUBMITTED	9/3/02	[Signature]		TEAM LEADER						



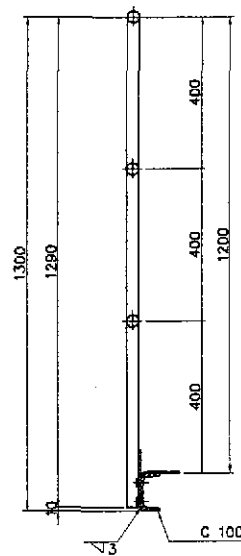
B ELEVATION
SCALE 1:50



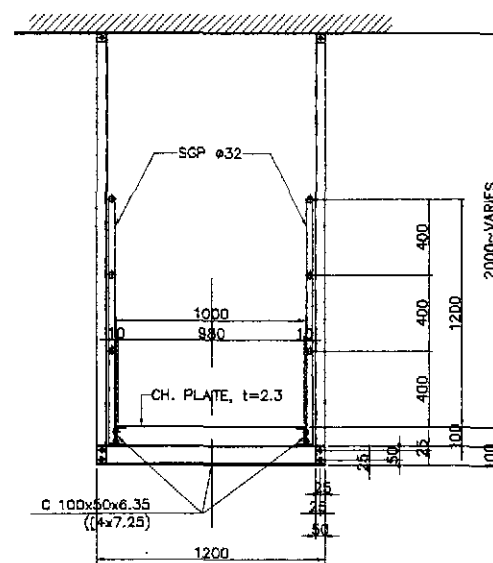
A PLAN
SCALE 1:50



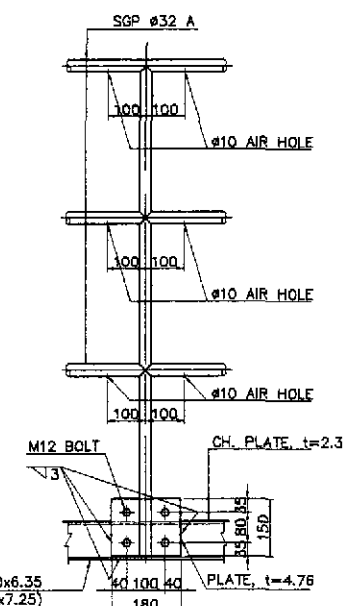
B SECTION
SCALE 1:20



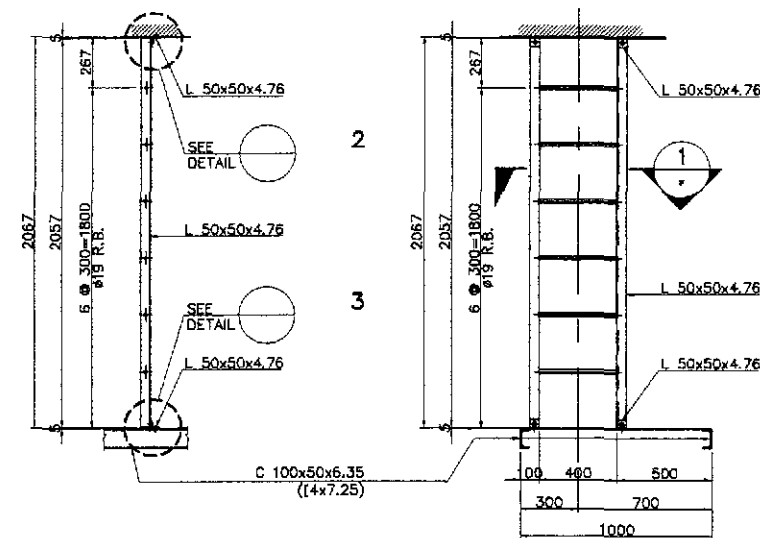
D DETAIL OF HANDRAIL
SCALE 1:10



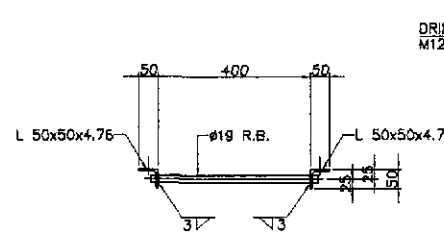
B SECTION
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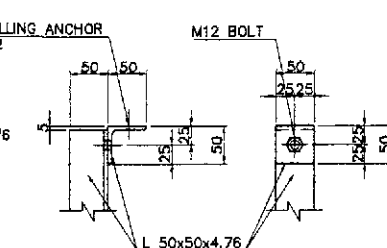
D DETAIL OF HANDRAIL
SCALE 1:10



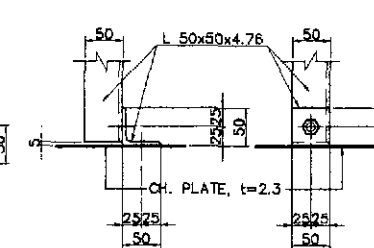
C DETAIL OF LADDER
SCALE 1:20



1 SECTION
SCALE 1:10

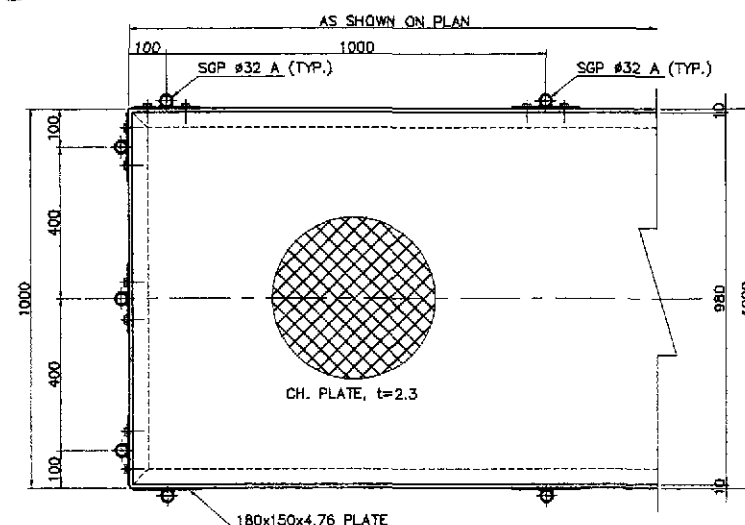


2 DETAIL
SCALE 1:5



3 DETAIL
SCALE 1:5

NOTE :
1. ALL MATERIALS SHOWN IN THIS DRAWINGS, UNLESS OTHERWISE NOTED, SHALL BE ZINC, HOT DIP GALVANIZED (JIS H8641 HD 255)

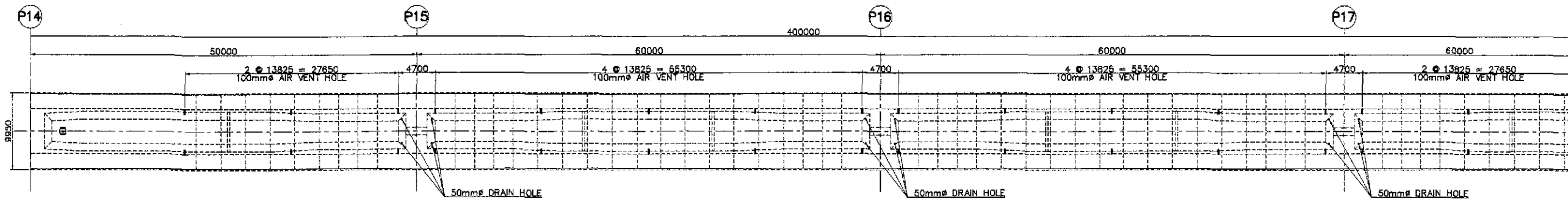


E DETAIL OF FLOOR
SCALE 1:10

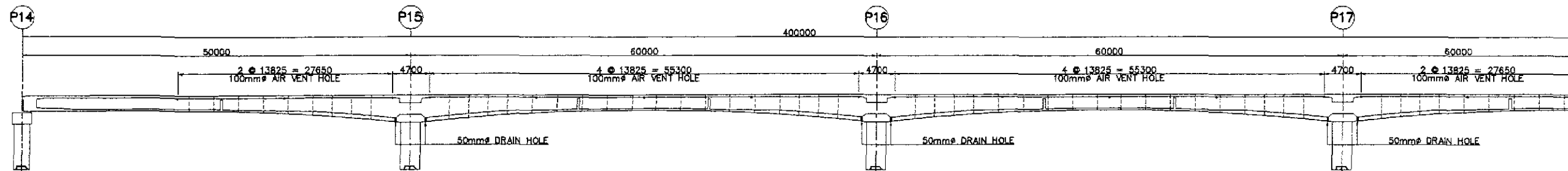
SUMMARY OF QUANTITIES (PER CATWALK)

MARK	ITEM	SIZE	MATERIAL	NO. (PCS)	UNIT WT. (kg/m)	WEIGHT (kg)	REMARKS
A36	C	100x50x6.35(C4x7.25)	8310	2	10.8	179.496	
A36	C	100x50x6.35(C4x7.25)	1000	18	10.8	194.400	
A36	C	100x50x6.35(C4x7.25)	1200	5	10.8	64.800	
A36	L	50x50x4.76	2300	2	3.64	16.744	SUPPORT
A36	L	50x50x4.76	2278	2	3.64	16.584	SUPPORT
A36	L	50x50x4.76	2067	2	3.64	15.048	LADDER
A36	L	50x50x4.76	2228	4	3.64	32.440	SUPPORT
A36	L	50x50x4.76	2700	2	3.64	19.656	SUPPORT
A36	L	50x50x4.76	50	24	3.64	4.368	BRACKET
A36	CH. PLATE	980x2.3	8310	1	19.34	160.715	DECK
A36	PLATE	150x6	180	24	5.57	24.062	
SGP	PIPE	32A	1300	15	3.7	72.150	POST
SGP	PIPE	20A	3400	2	1.82	12.376	TOP RAIL
SGP	PIPE	20A	4700	2	1.82	17.108	TOP RAIL
SGP	PIPE	20A	3300	4	1.82	24.024	MID RAIL
SGP	PIPE	20A	4600	4	1.82	33.488	MID RAIL
SGP	PIPE	20A	800	6	1.82	8.736	END SIDE RAIL
R.B.	20A		430	6	1.82	4.696	LADDER
B.N.	M12x105		130	1	22.230	22.230	
REMOVABLE LADDER	ALUMINUM			1	SET		
TOTAL WEIGHT =						823.12	
TOTAL WEIGHT FOR (N=2) =						1,846.24	

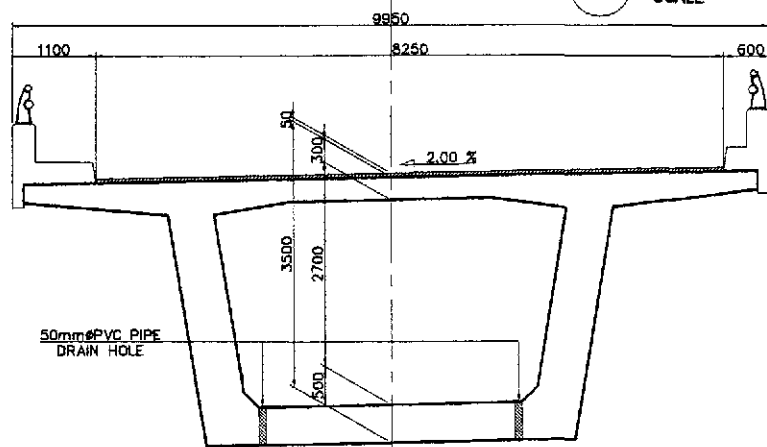
	DESIGNED: 9/25/02 CHECKED: 9/27/02 SUBMITTED: 9/25/02	DATE: 9/25/02 SIGNATURE: [Signature] TEAM LEADER	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN	PROJECT AND LOCATION: THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE: AS SHOWN FULL SIZE A1	SHEET CONTENTS: BRIDGE NO. 8 ANGAT RIVER BRIDGE GIRDER END CATWALK DETAIL (PIER 14 & PIER 21) (ULTIMATE STAGE)	SHEET NO. : B8M-88	
	JICA JAPAN INTERNATIONAL COOPERATION AGENCY			PROJECT AND LOCATION: THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III			SHEET NO. : B8M-88	
	KATAHIRA & ENGINEERS INTERNATIONAL YEO YACHIYO ENGINEERING CO., LTD.			PROJECT AND LOCATION: THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III			SHEET NO. : B8M-88	



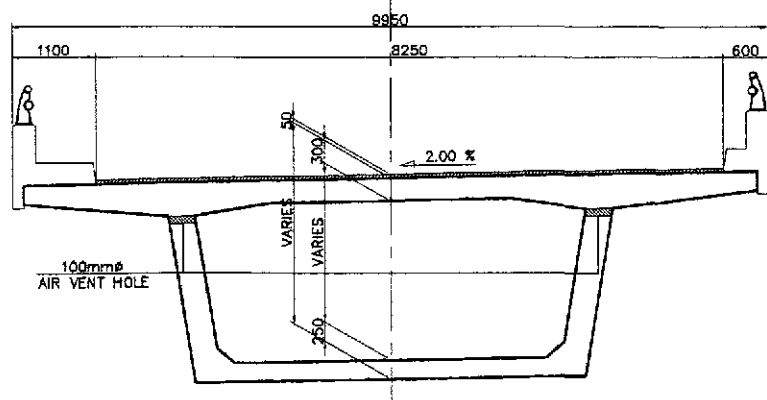
A HALF SHOWING TOP SLAB (SHOWING AIR VENT HOLE LOCATION)
SCALE 1:300



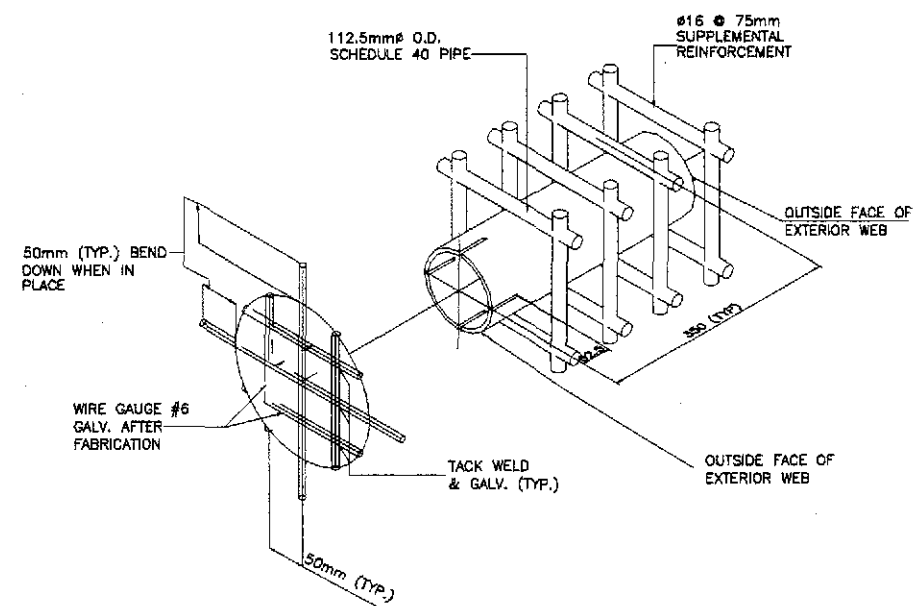
B HALF SHOWING ELEVATION (SHOWING AIR VENT & DRAIN HOLE LOCATION)
SCALE 1:300



C SECTION @ DRAIN HOLE LOCATION
SCALE 1:50



D SECTION @ DRAIN AIR VENTHOLE LOCATION
SCALE 1:50



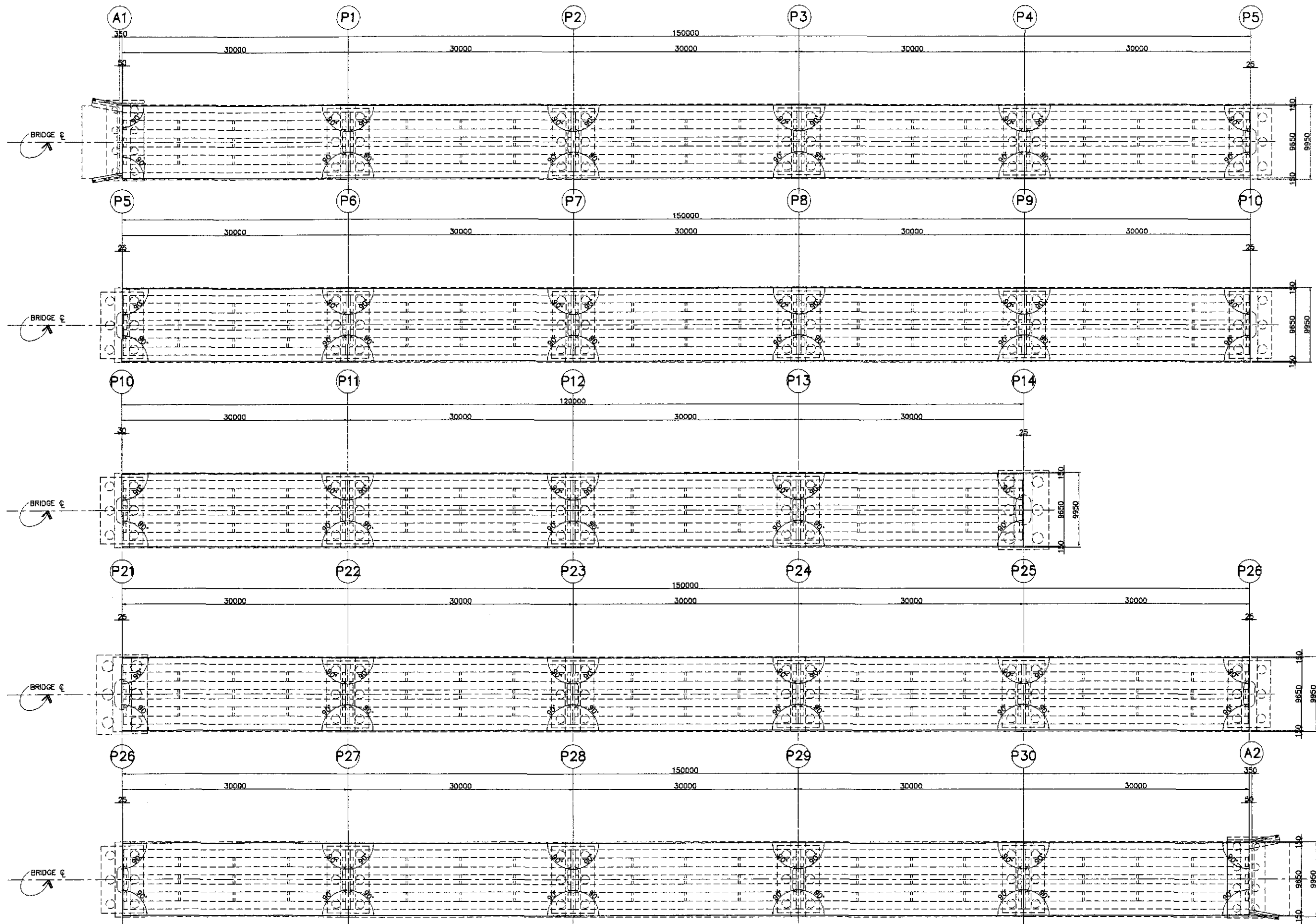
E AIR VENT OPENING ASSEMBLY (TYPICAL)
SCALE AS SHOWN

NOTE :
1. PROVIDE 50mm PVC PIPE DRAIN HOLES AT LOW POINT OF BOTTOM SLAB.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE AIR VENT HOLE AND DRAIN HOLE DETAILS (ULTIMATE STAGE)	SHEET NO. : B8M-89
	CHECKED	9/27/02	M. SANTOS		BUREAU OF DESIGN						
	SUBMITTED	9/27/02	M. SANTOS		OFFICE OF THE SECRETARY						
					FUHL - PMO Submitted By:	Reviewed By:	Recommended By:	Recommended By:	Approved By:		
					DANILLO C. TRAJANO Project Director	ADRIANO M. DORCY Chief, Bridges Division	GILBERTO S. REYES Director IV (CIC)	MANUEL M. BONDAN Undersecretary	SIMEON A. DATUMANONG Secretary		

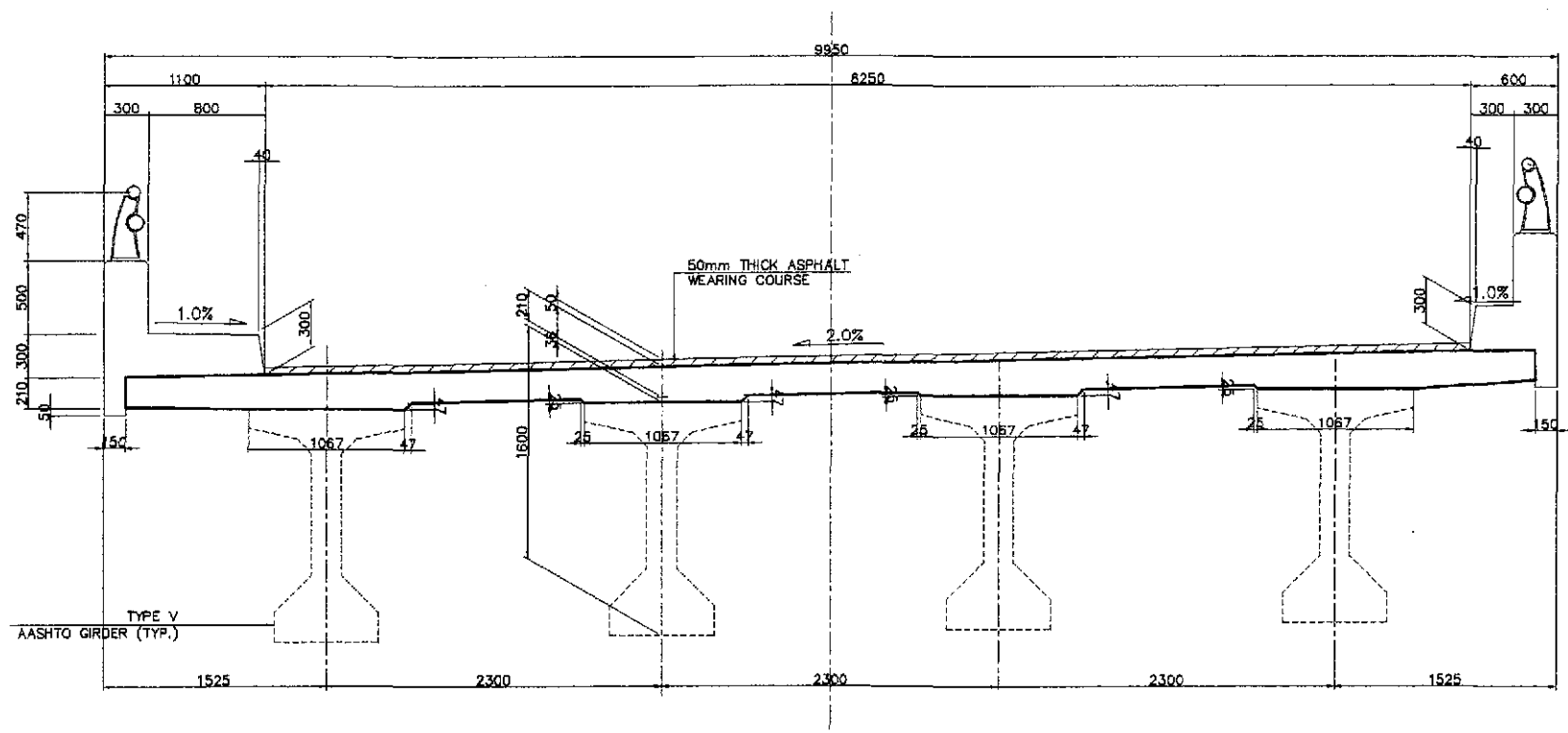
APPROACH SPANS

LAYOUT AND DIMENSIONS

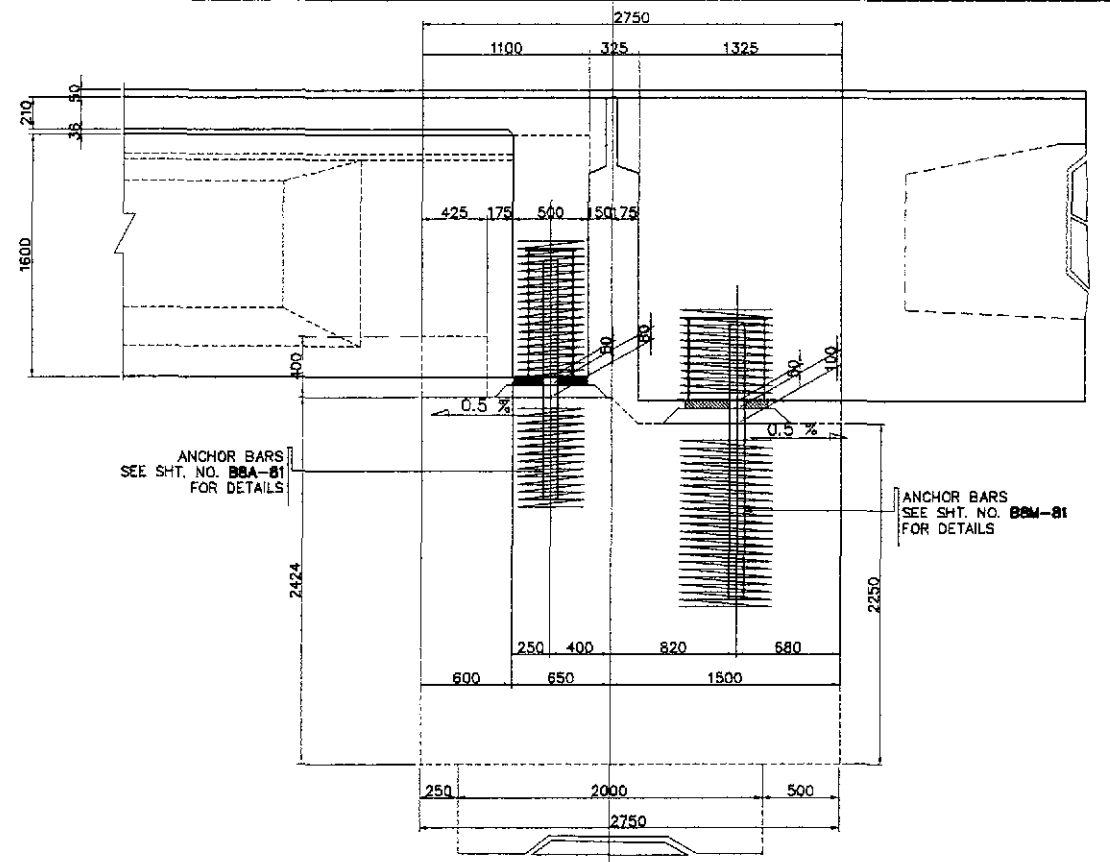


DECK SLAB LAYOUT PLAN (ABUT. 1 TO ABUT. 2)
SCALE 1:250

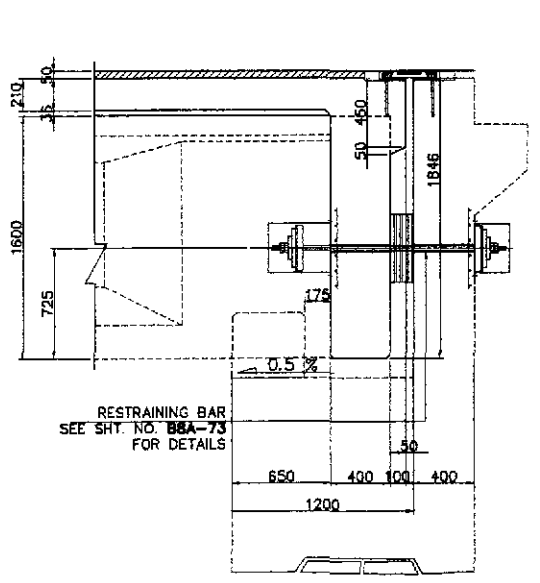
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE DECK SLAB LAYOUT PLAN (1 OF 2) (ULTIMATE STAGE)	SHEET NO. : B8A-01
	CHECKED	9/27/02	J. Santos		BUREAU OF DESIGN						
	SUBMITTED	9/27/02	Mr. Rando		Submitted By: DANILLO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DOROY Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (D/C)				



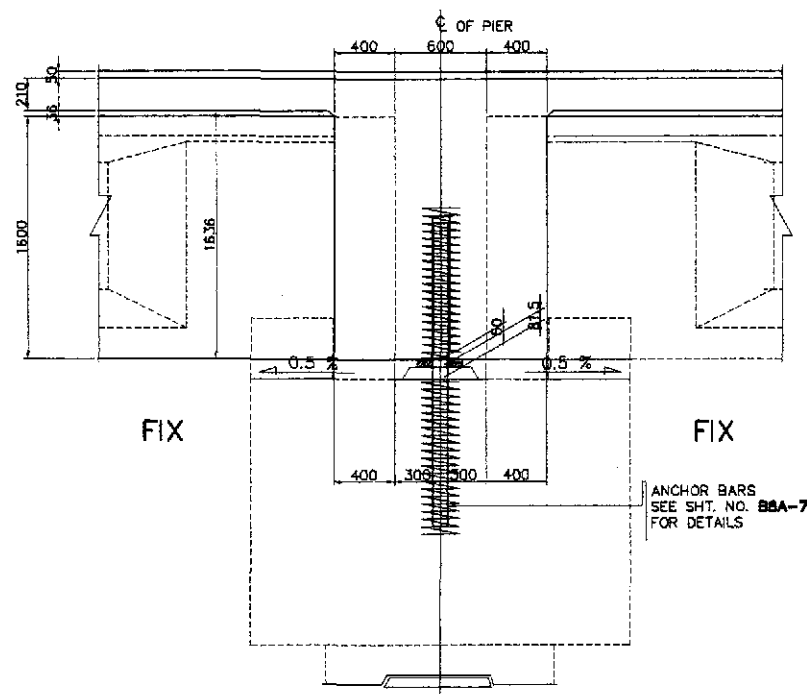
A TYPICAL SECTION
SCALE 1:25



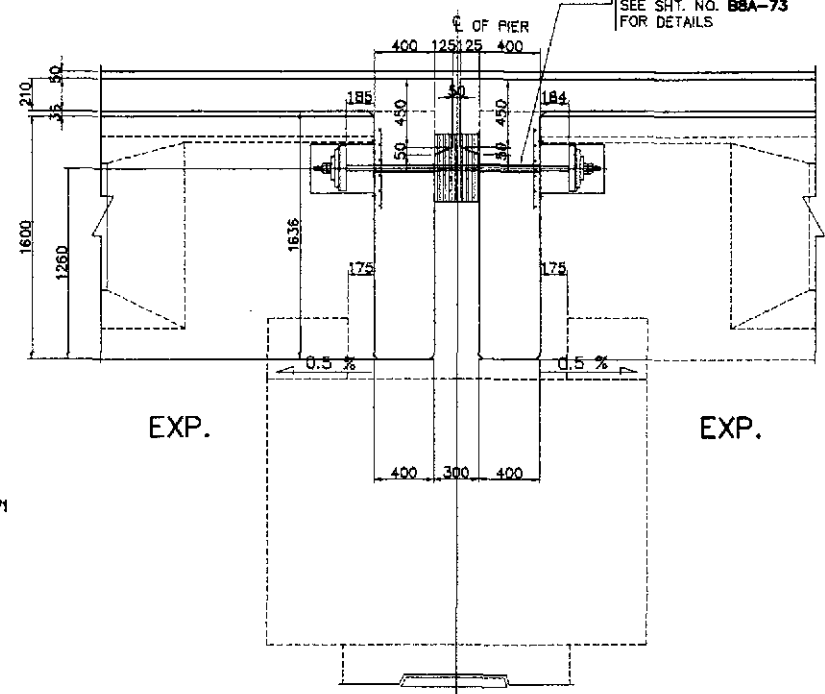
B SECTION @ END DIAPHRAGM (P14 & P21)
SCALE 1:25



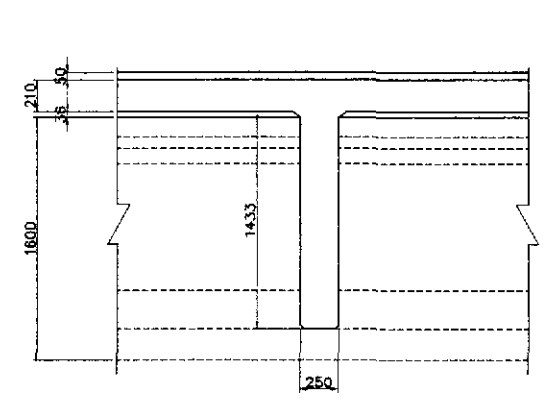
C SECTION @ END DIAPHRAGM (ABUTMENT)
SCALE 1:25



D SECTION @ END DIAPHRAGM (FIX-FIX PIERS)
SCALE 1:25

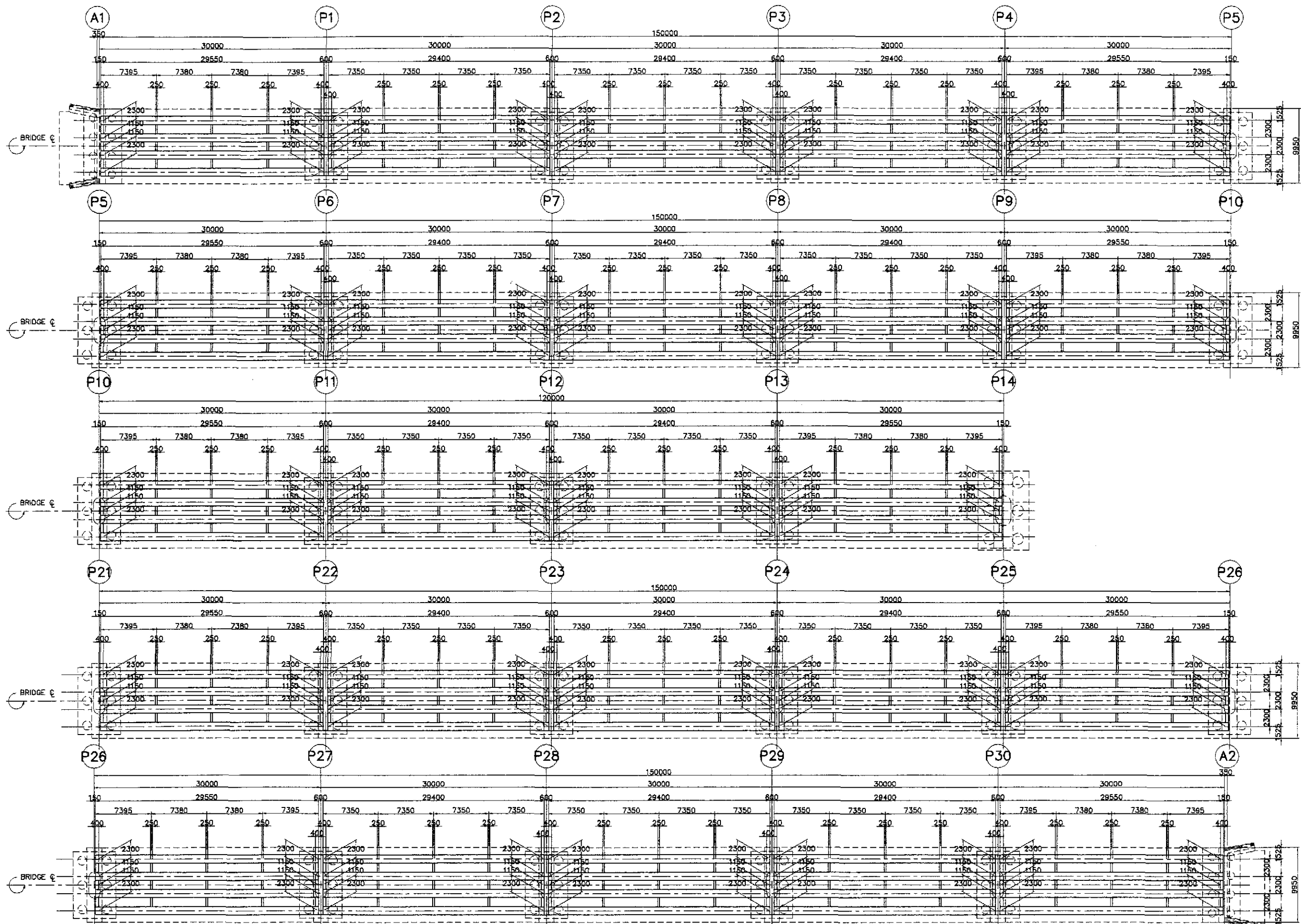


E SECTION @ END DIAPHRAGM (EXP-EXP. PIERS)
SCALE 1:25



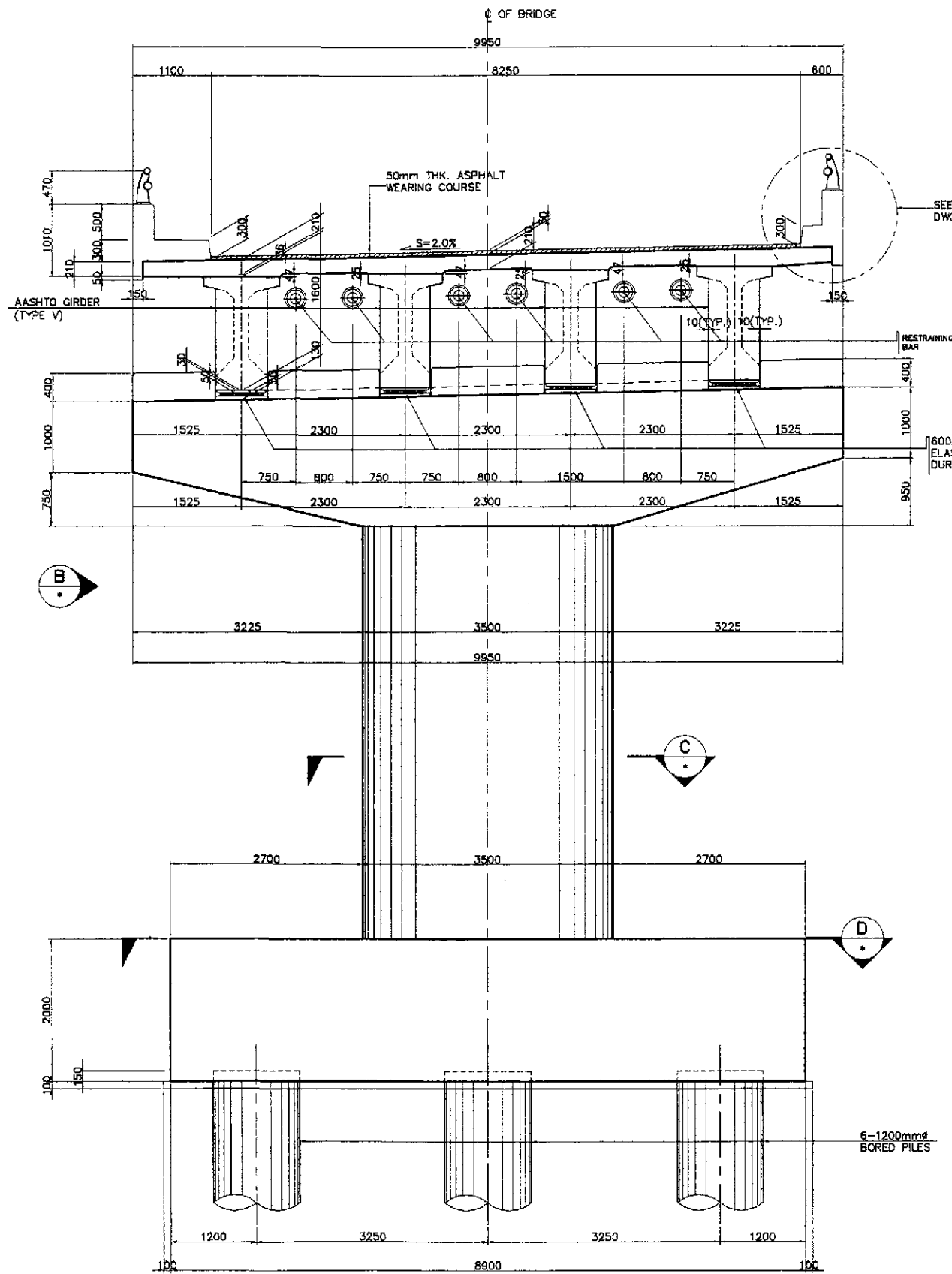
F SECTION @ INTERMEDIATE DIAPHRAGM
SCALE 1:25

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	9/27/02	J. C. SANTOS		BUREAU OF DESIGN	THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)			AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE DECK SLAB LAYOUT PLAN (2 OF 2) (ULTIMATE STAGE)	B8A-02
	SUBMITTED	9/29/02	Mr. Santos TEAM LEADER		OFFICE OF THE SECRETARY	PLARIDEL BYPASS - CONTRACT PACKAGE III			FULL SIZE A1		
				Submitted By:	Reviewed By:	Recommended By:	Approved By:				
				DANILO C. TRAJANO Project Director	ADRIANO M. DOROS Chief, Bridge Division	GILBERTO S. REYES Director IV (DC)	MANUEL M. BONDAN Undersecretary				

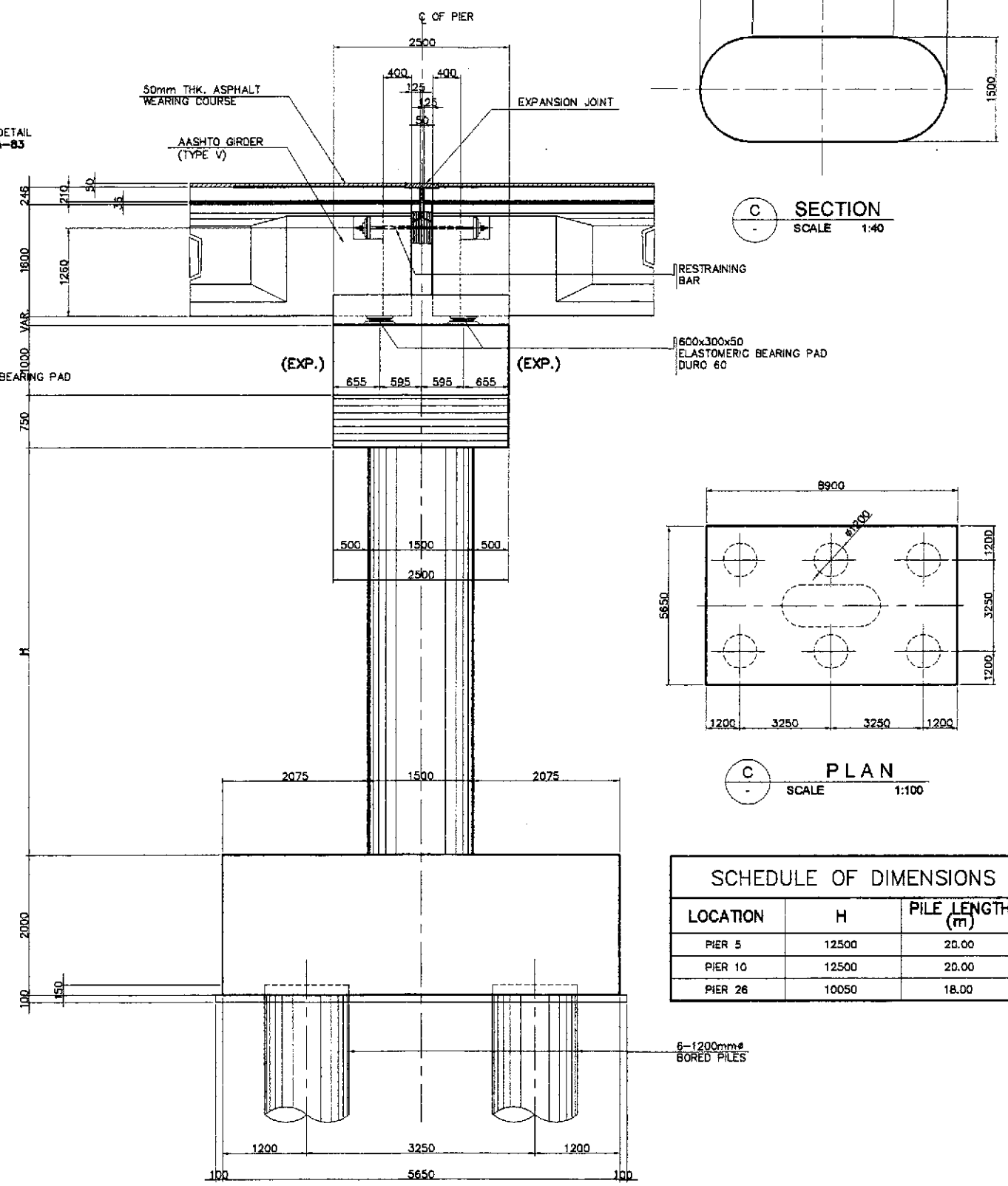


○ SUPERSTRUCTURE LAYOUT (ABUT. 1 TO P14, P21 TO ABUT. A-2)
SCALE 1:250

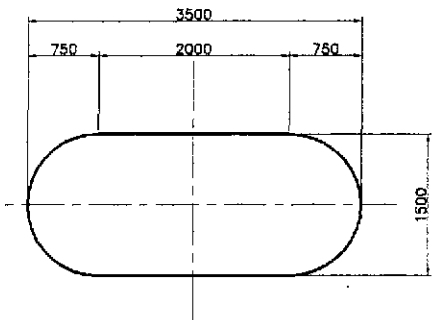
	DESIGNED	DATE	SIGNATURE	<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p>	<p>PROJECT AND LOCATION :</p> <p>THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)</p> <p>PLARIDEL BYPASS - CONTRACT PACKAGE III</p>	<p>SCALE :</p> <p>AS SHOWN</p> <p>FULL SIZE A1</p>	<p>SHEET CONTENTS :</p> <p>BRIDGE NO. 8 ANGAT RIVER BRIDGE GIRDER LAYOUT PLAN</p> <p>(ULTIMATE STAGE)</p>	<p>SHEET NO. :</p> <p>B8A-03</p>	
	CHECKED	9/27/02	J. C. SANTOS						<p>BUREAU OF DESIGN</p> <p>Submitted By: DANILLO D. TRAJANO Project Director</p> <p>Reviewed By: ADRIANO M. DORAY Chief, Bridges Division</p> <p>Recommended By: GILBERTO S. REYES Director IV (CIC)</p> <p>Recommended By: MANUEL M. BONOAN Undersecretary</p> <p>Approved By: SIMEON A. DATUMANONG Secretary</p>
	SUBMITTED	9/30/02	J. C. SANTOS						<p>OFFICE OF THE SECRETARY</p> <p>(See cover sheet for Signature/Arrows)</p>



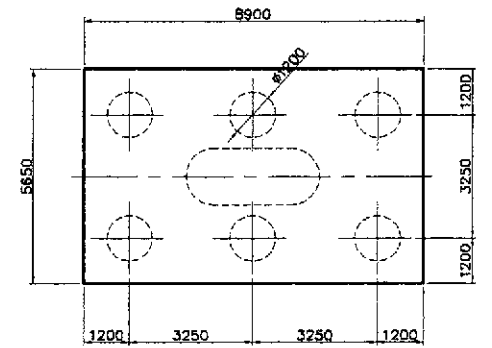
A ELEVATION
SCALE 1:40



B SIDE ELEVATION
SCALE 1:40



C SECTION
SCALE 1:40

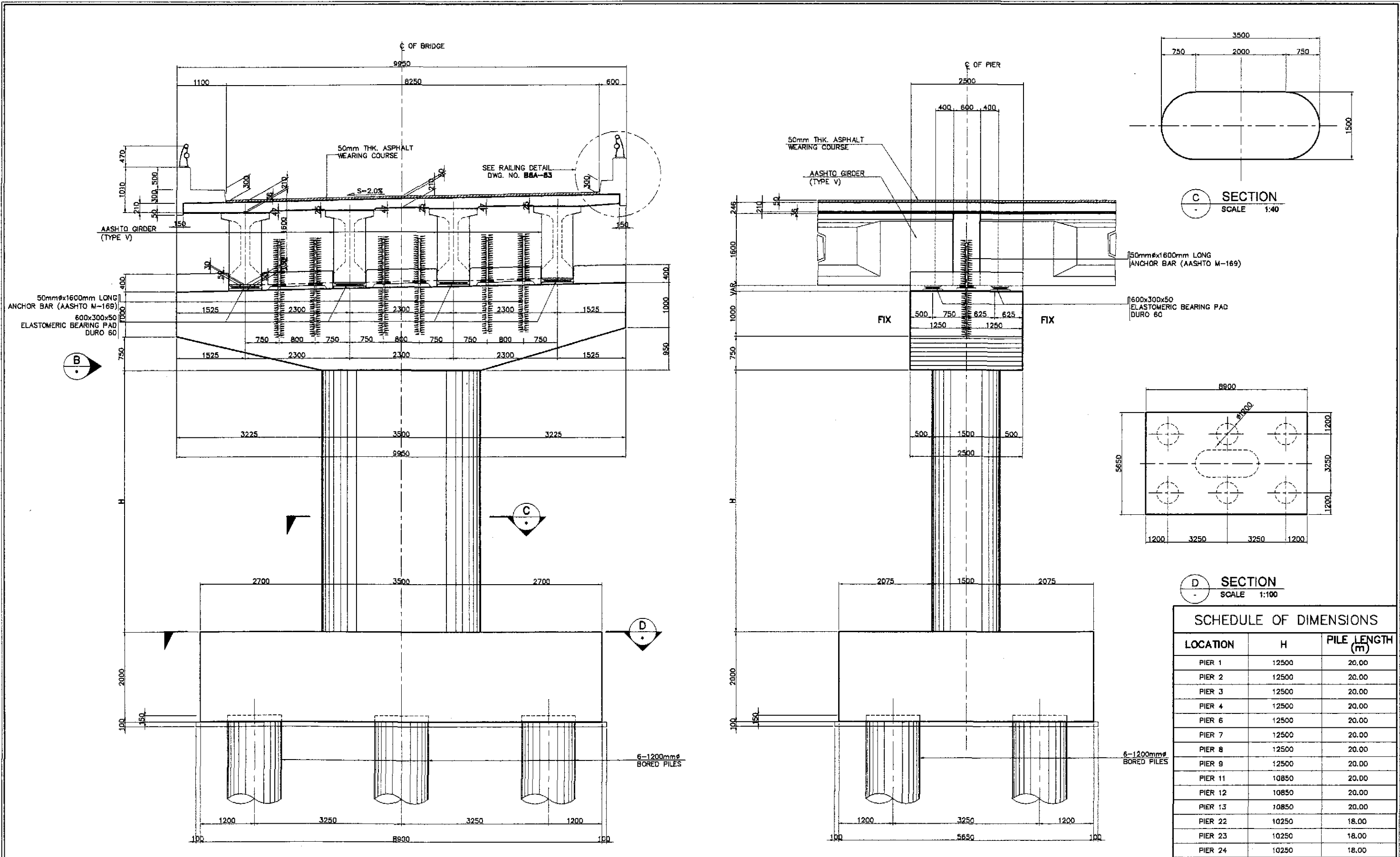


D PLAN
SCALE 1:100

SCHEDULE OF DIMENSIONS		
LOCATION	H	PILE LENGTH (m)
PIER 5	12500	20.00
PIER 10	12500	20.00
PIER 26	10050	18.00

1 PIER LAYOUT & DIMENSIONS (P5, P10 & P26)
SCALE AS SHOWN

	DESIGNED: 9/25/02 CHECKED: 9/27/02 SUBMITTED: 9/30/02	DATE: 9/25/02 SIGNATURE: [Signature] NAME: J. F. SANTOS TITLE: TEAM LEADER		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN	PROJECT AND LOCATION: THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE: AS SHOWN FULL SIZE A1	SHEET CONTENTS: BRIDGE NO. 8 ANGAT RIVER BRIDGE PIER LAYOUT & DIMENSIONS (P5, P10, & P26) (ULTIMATE STAGE)	SHEET NO.: B8A-05
	Submitted By: DANILLO C. TRAJANO, Project Director Reviewed By: ADRIANO M. DORAY, Chief, Bridges Division Recommended By: GILBERTO S. REYES, Director IV (GIC) Approved By: MANUEL M. BONDAN, Undersecretary Approved By: SIMEON A. DATLIMANONG, Secretary							
	JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS YEO YACHIYO ENGINEERING CO., LTD.							



A ELEVATION
SCALE 1:40

B SIDE ELEVATION
SCALE 1:40

1 PIER LAYOUT & DIMENSIONS
(P1 TO P4, P6 TO P9, P11 TO P13, P22 TO P25 & P27 TO P30)
SCALE AS SHOWN

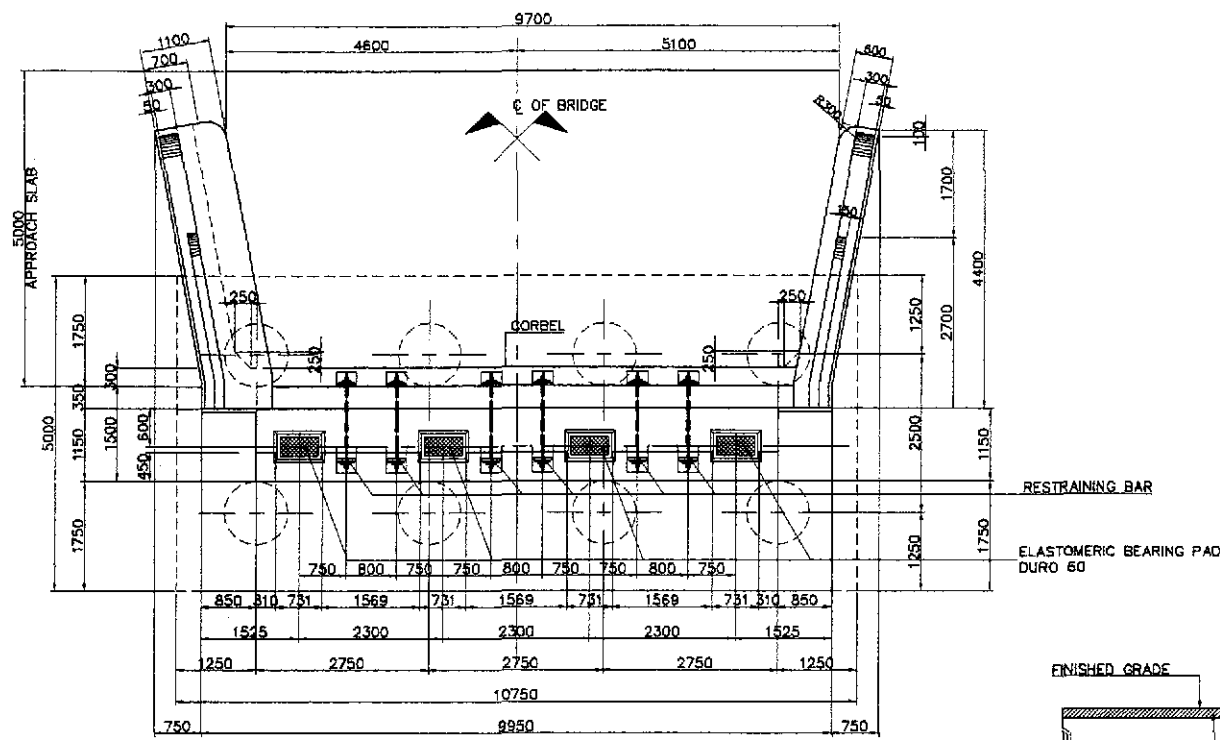
D SECTION
SCALE 1:100

C SECTION
SCALE 1:40

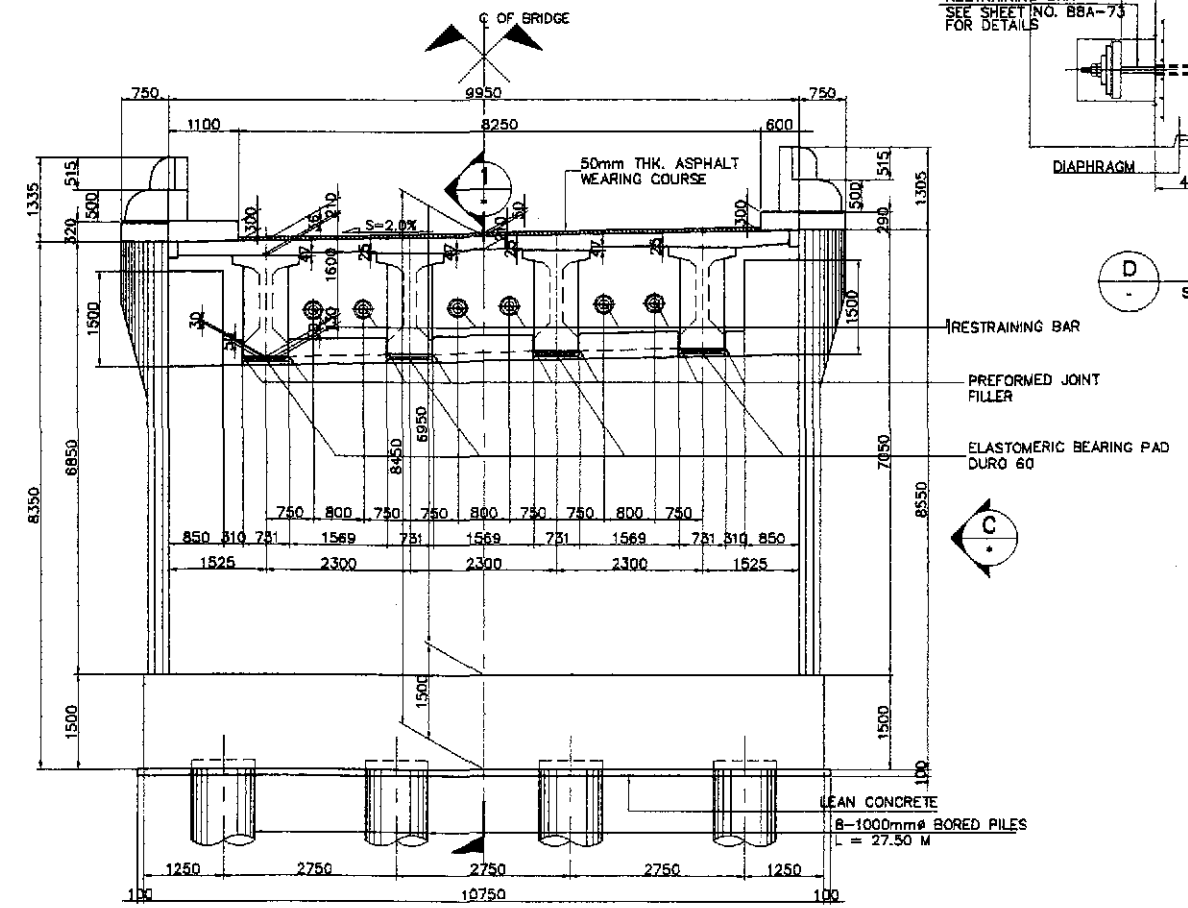
SCHEDULE OF DIMENSIONS

LOCATION	H	PILE LENGTH (m)
PIER 1	12500	20.00
PIER 2	12500	20.00
PIER 3	12500	20.00
PIER 4	12500	20.00
PIER 6	12500	20.00
PIER 7	12500	20.00
PIER 8	12500	20.00
PIER 9	12500	20.00
PIER 11	10850	20.00
PIER 12	10850	20.00
PIER 13	10850	20.00
PIER 22	10250	18.00
PIER 23	10250	18.00
PIER 24	10250	18.00
PIER 25	10250	18.00
PIER 27	10050	18.00
PIER 28	10050	18.00
PIER 29	10050	18.00
PIER 30	10050	18.00

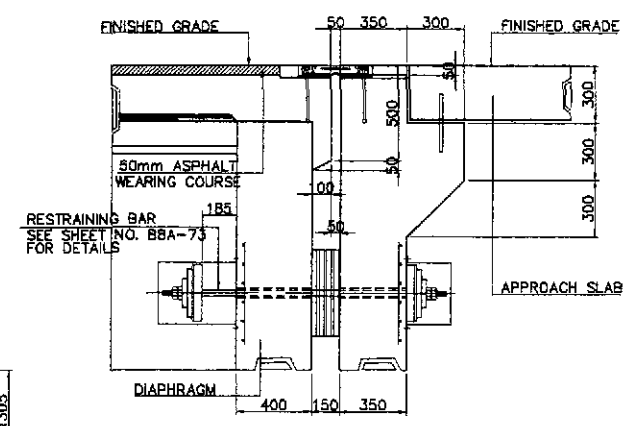
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE PIER LAYOUT & DIMENSIONS (P1-P4, P6-P9, P11-P13, P22-P25 & P27-P30) (ULTIMATE STAGE)	SHEET NO. : B8A-06
	CHECKED	9/27/02	J. C. SANTOS		BUREAU OF DESIGN						
	SUBMITTED	9/20/02	J. C. SANTOS TEAM LEADER		Submitted By:	Reviewed By:	Recommended By:				
					DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (OC)	MANUEL M. BONDAN Undersecretary	SIMEON A. DATUMAHONG Secretary		



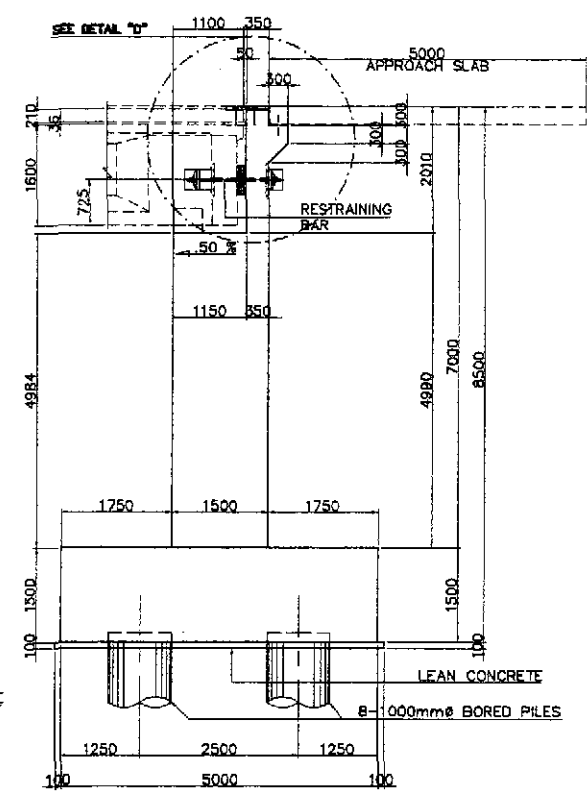
A PLAN
SCALE 1:80



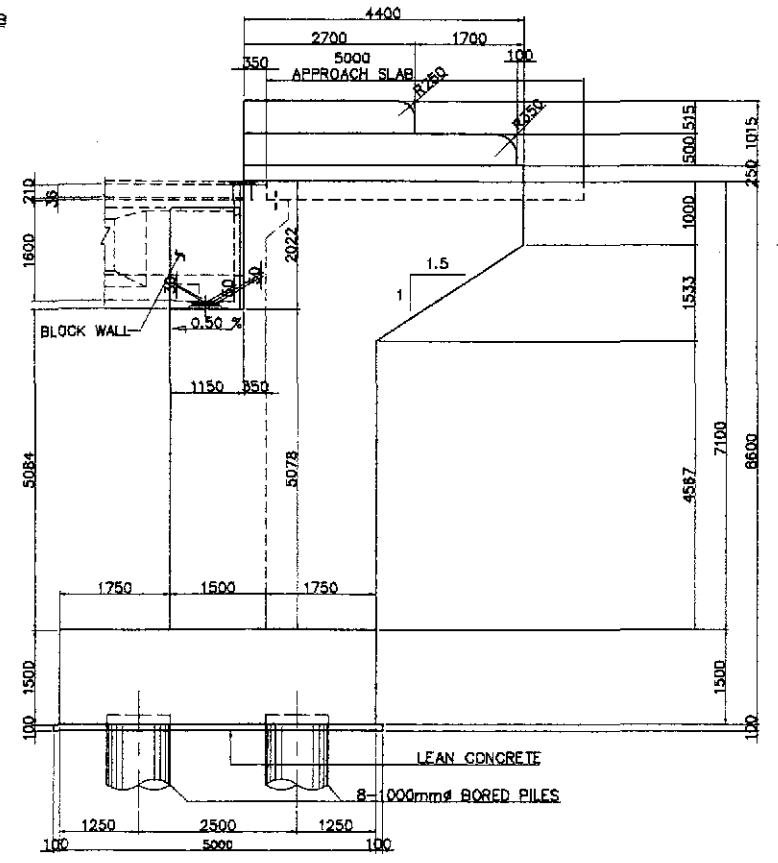
B ELEVATION
SCALE 1:80



D DETAIL
SCALE 1:20



1 SECTION
SCALE 1:80



C SIDE ELEVATION
SCALE 1:80

A ABUTMENT LAYOUT & DIMENSIONS (ABUT. A1 & A2)
SCALE AS SHOWN

JICA
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL
YEO YACHIYO ENGINEERING CO., LTD.

DESIGNED	DATE	SIGNATURE
9/25/02		
CHECKED	DATE	SIGNATURE
9/27/02		
SUBMITTED	DATE	SIGNATURE
9/30/02		

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
BUREAU OF DESIGN
OFFICE OF THE SECRETARY

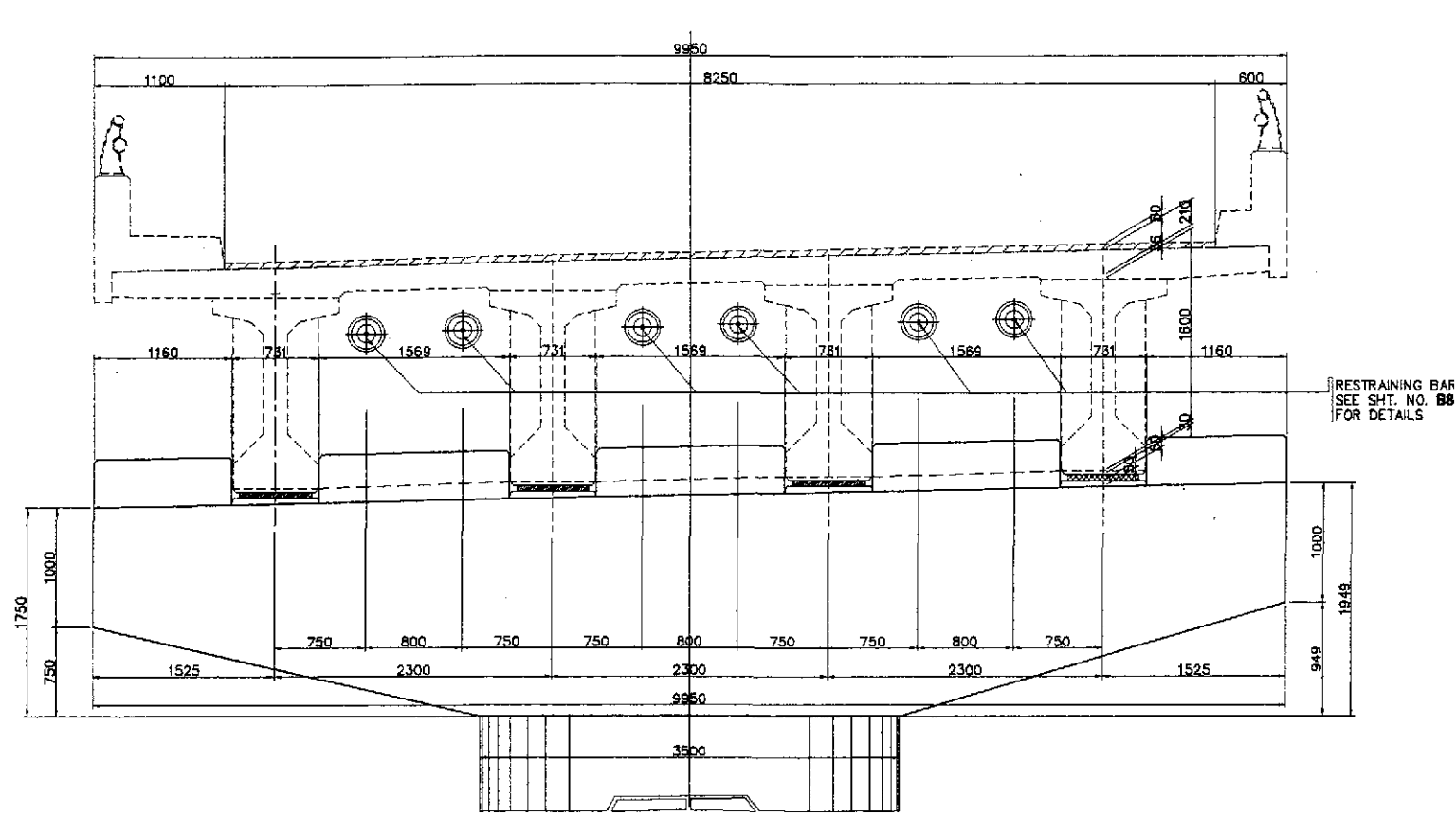
Submitted By:	Reviewed By:	Recommended By:	Recommended By:	Approved By:
DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (GIC)	MANUEL M. BONCAN Undersecretary	SIMEON A. DATUMANONG Secretary

PROJECT AND LOCATION :
THE DETAILED DESIGN STUDY ON
UPGRADING INTER-URBAN HIGHWAY SYSTEM
ALONG THE PAN-PHILIPPINE HIGHWAY
(Plaridel, Cabanatuan and San Jose Bypasses)
PLARIDEL BYPASS - CONTRACT PACKAGE III

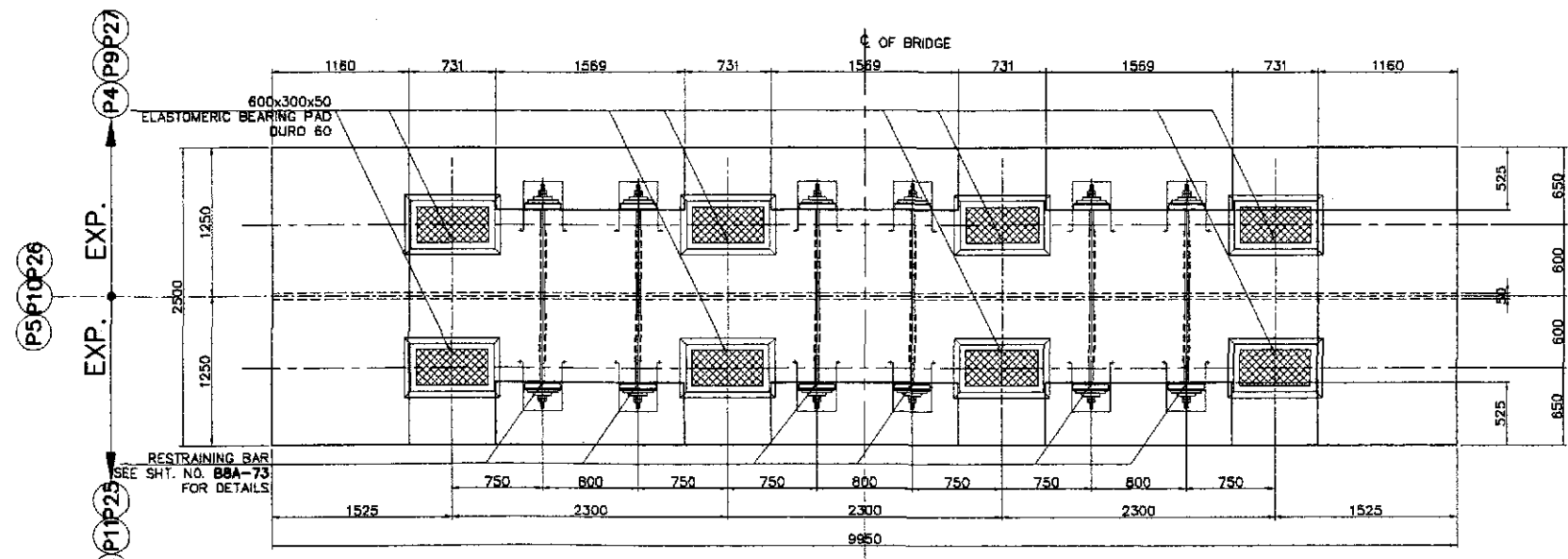
SCALE :
AS SHOWN
FULL SIZE A1

SHEET CONTENTS :
BRIDGE NO. 8 ANGAT RIVER BRIDGE
ABUTMENT LAYOUT & DIMENSIONS
(ABUTMENT A1 & A2)
(ULTIMATE STAGE)

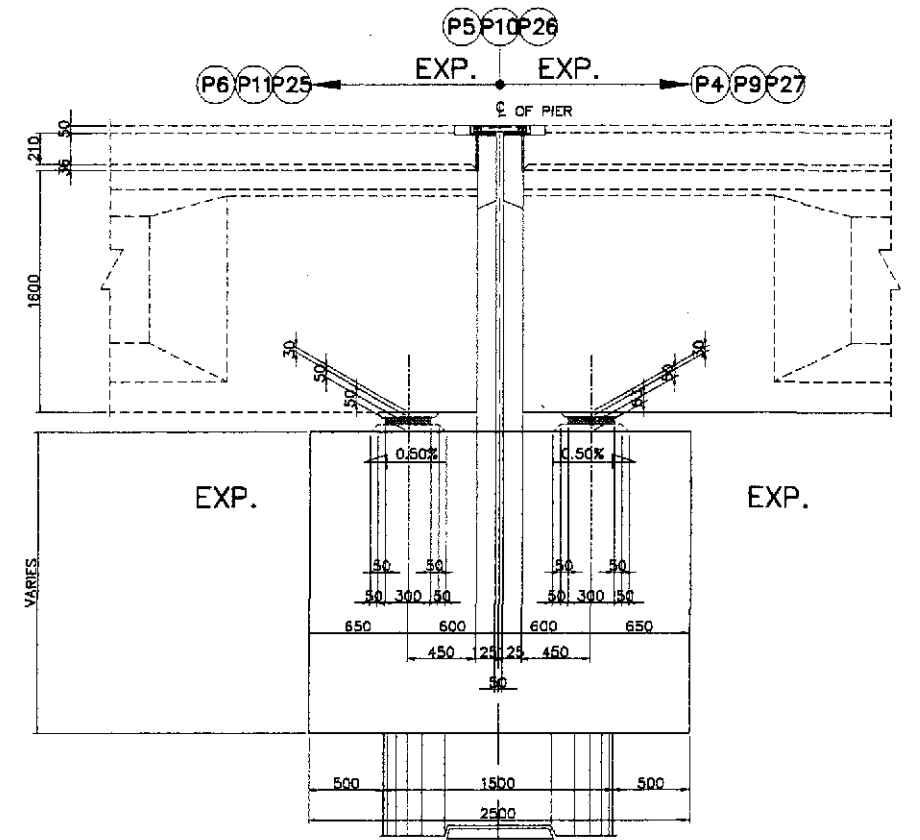
SHEET NO. :
B8A-07



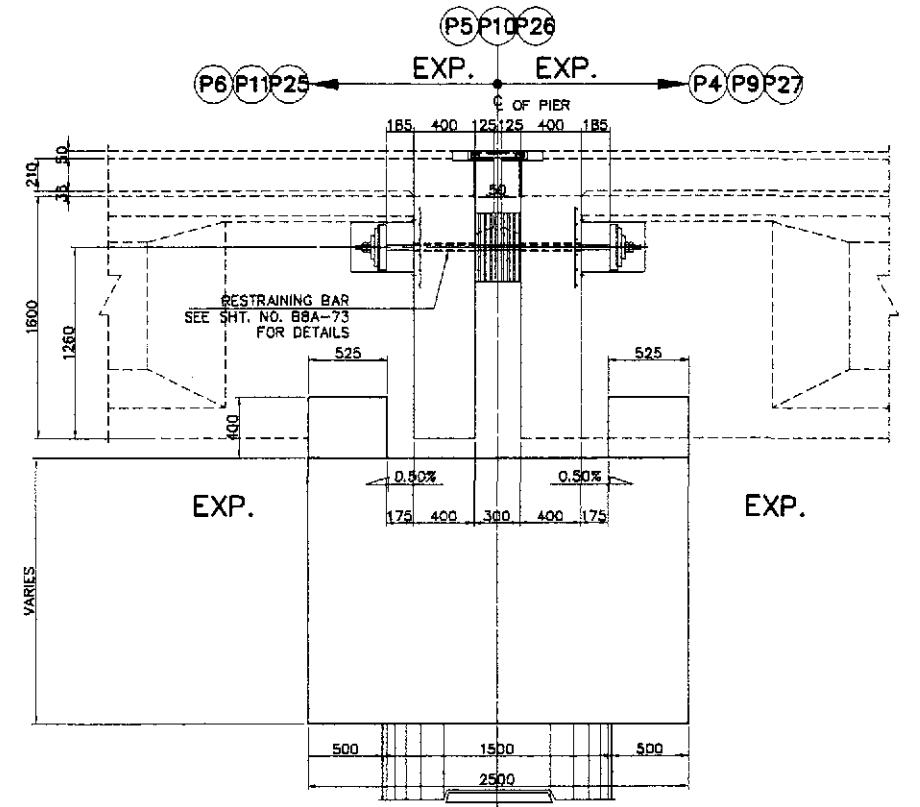
A ELEVATION
SCALE 1:30



B PLAN
SCALE 1:30



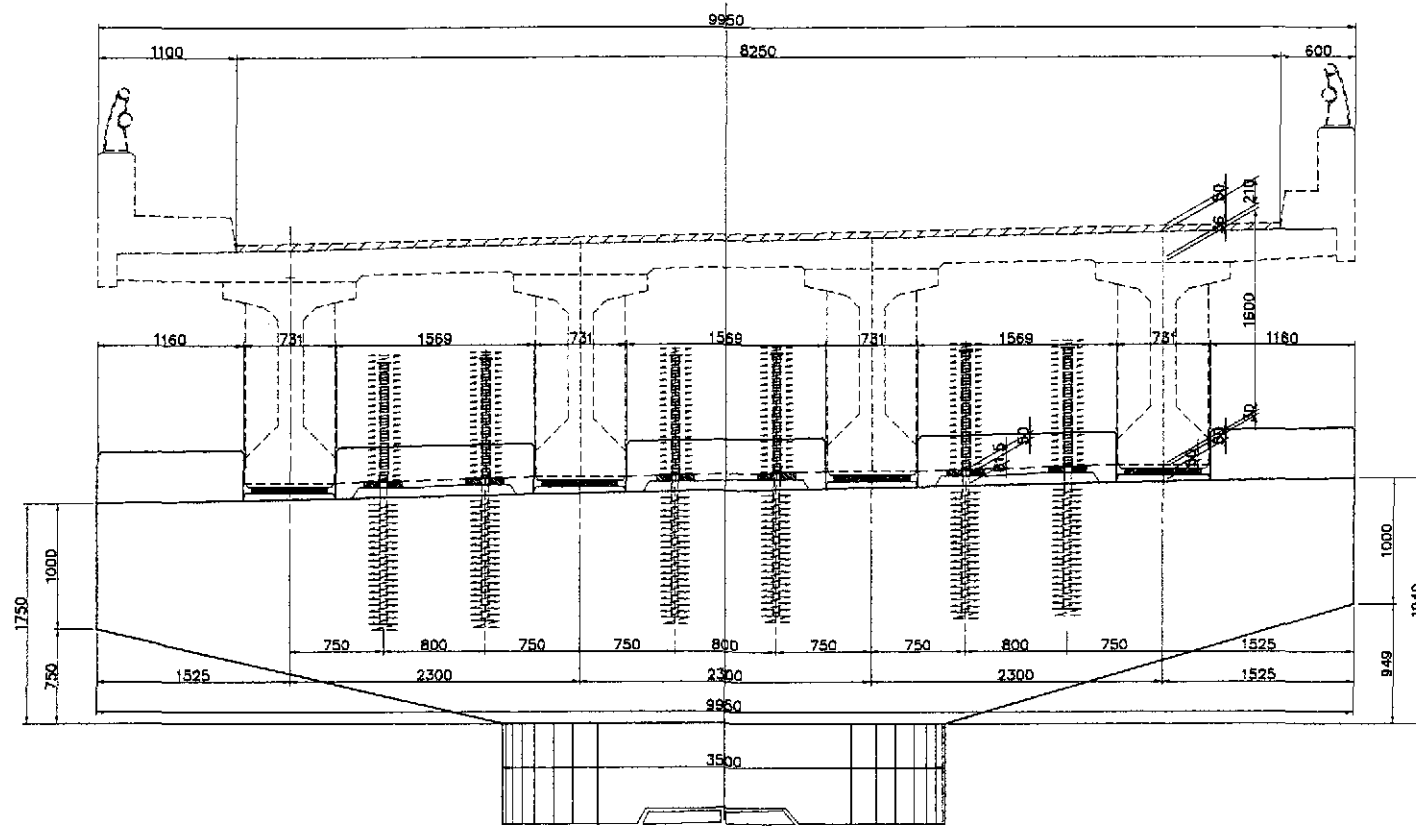
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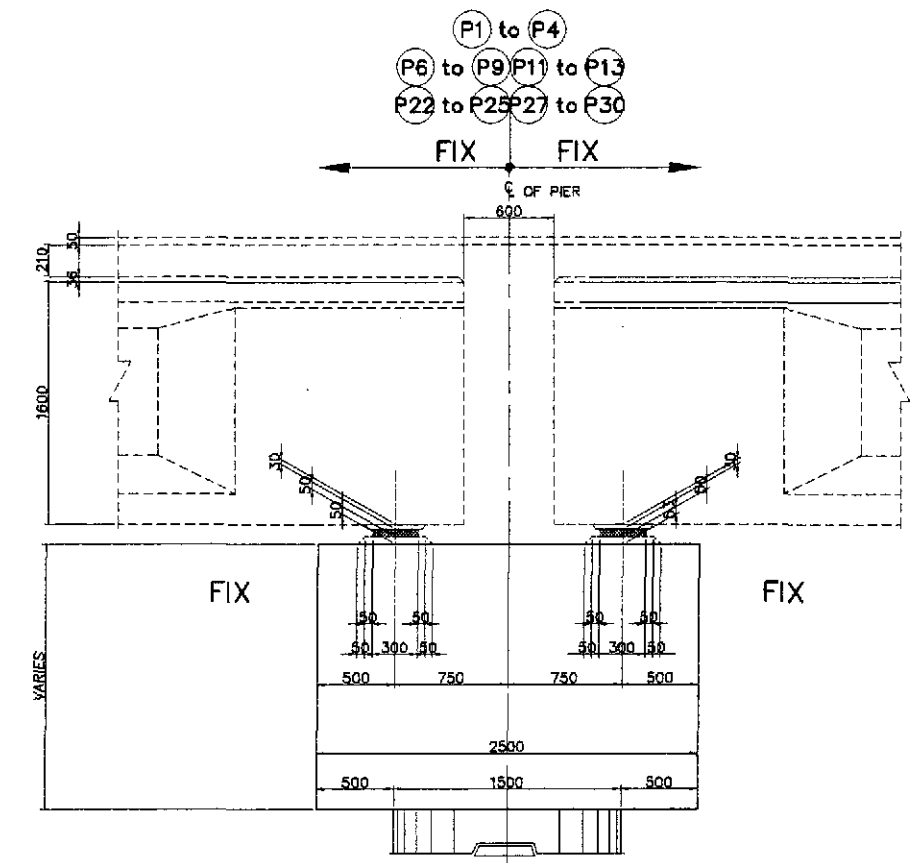
D SECTION @ RESTRAINING BAR
SCALE 1:25

1 COPING LAYOUT AND DIMENSIONS (P5, P10 & P26)
SCALE AS SHOWN

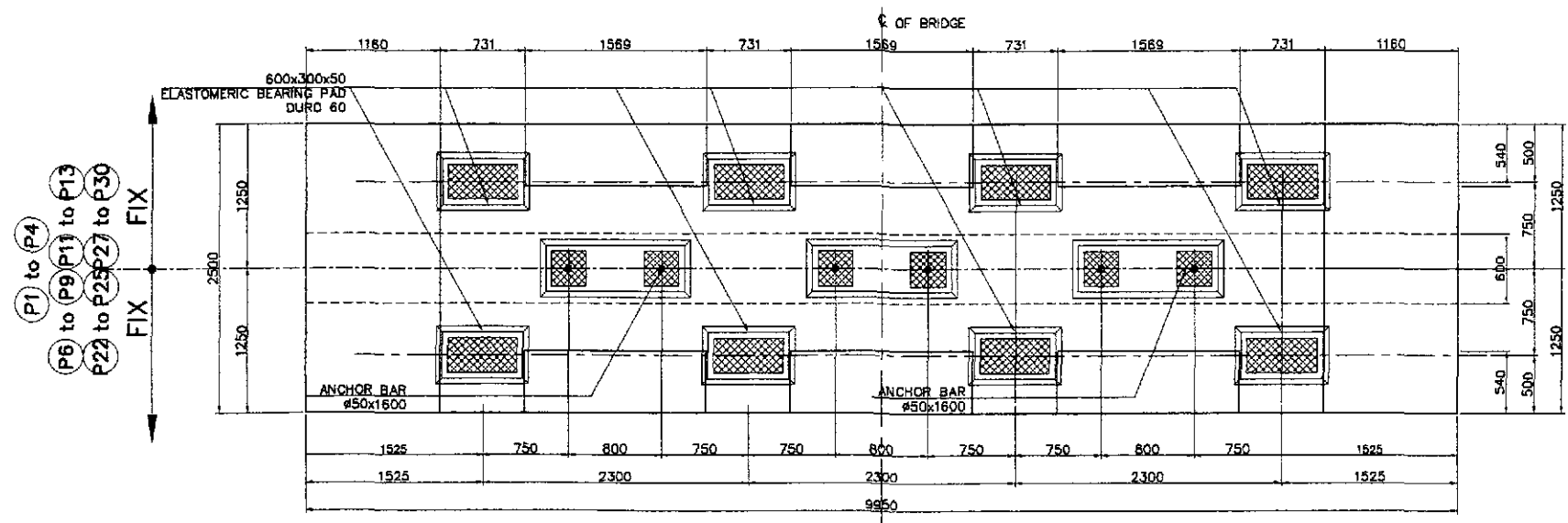
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE COPING LAYOUT & DIMENSIONS (P5, P10, & P26) (ULTIMATE STAGE)	SHEET NO. : B8A-08	
	CHECKED	9/27/02	J. C. SANTOS		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO Project Director	OFFICE OF THE SECRETARY Reviewed By: ADRIANO M. DORCY Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (CIC)					Approved By: MANUEL M. BONGCAN Undersecretary
	SUBMITTED	9/24/02	M. Kuyod		Project Director	Chief, Bridges Division	Director IV (CIC)					Undersecretary



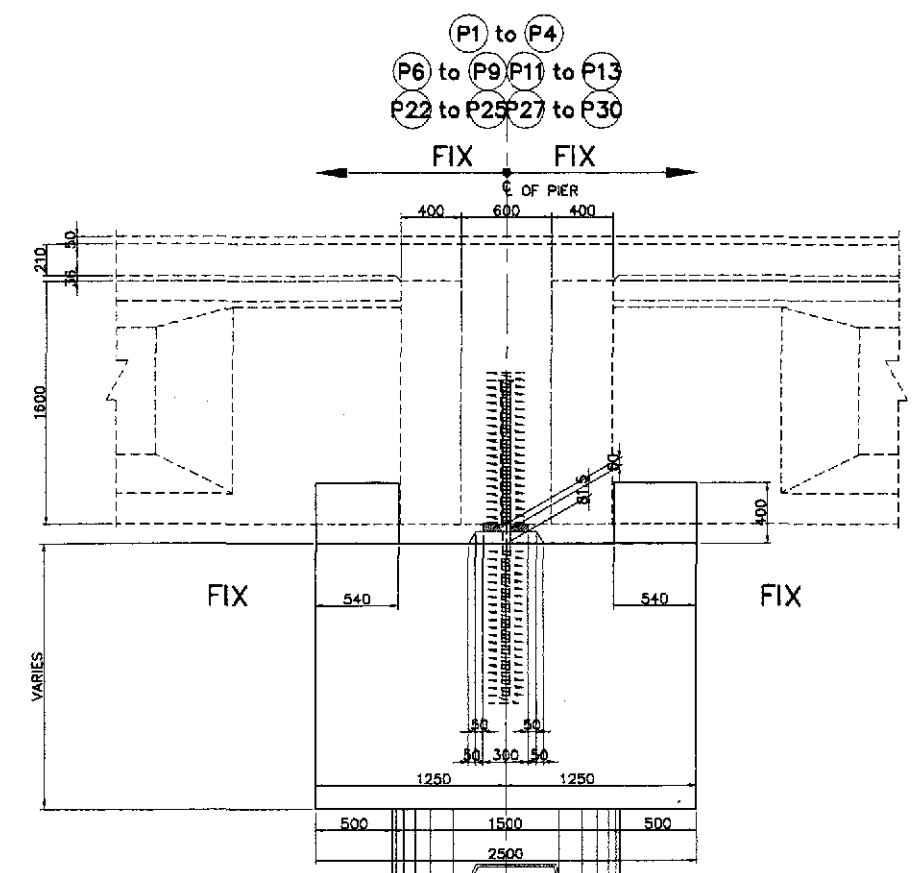
A ELEVATION
SCALE 1:30



C SECTION @ BEARING PAD
SCALE 1:25



B PLAN
SCALE 1:30

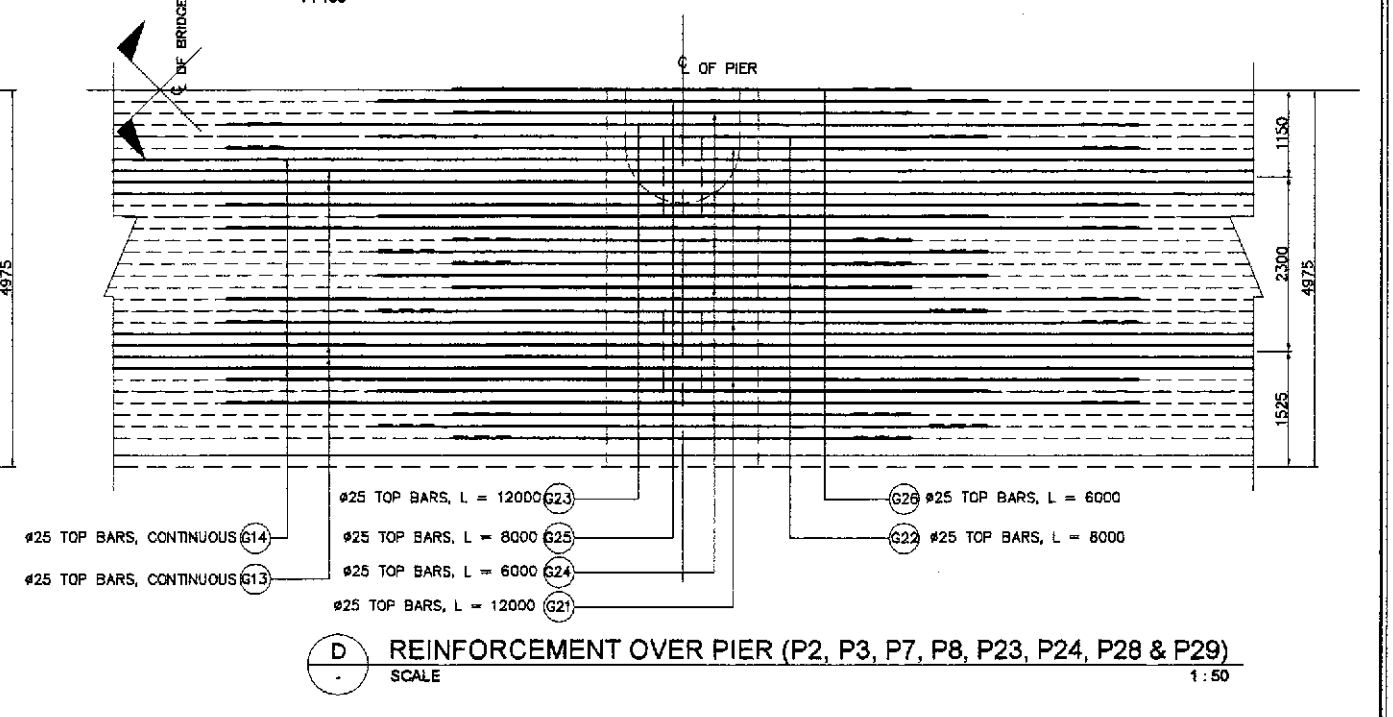
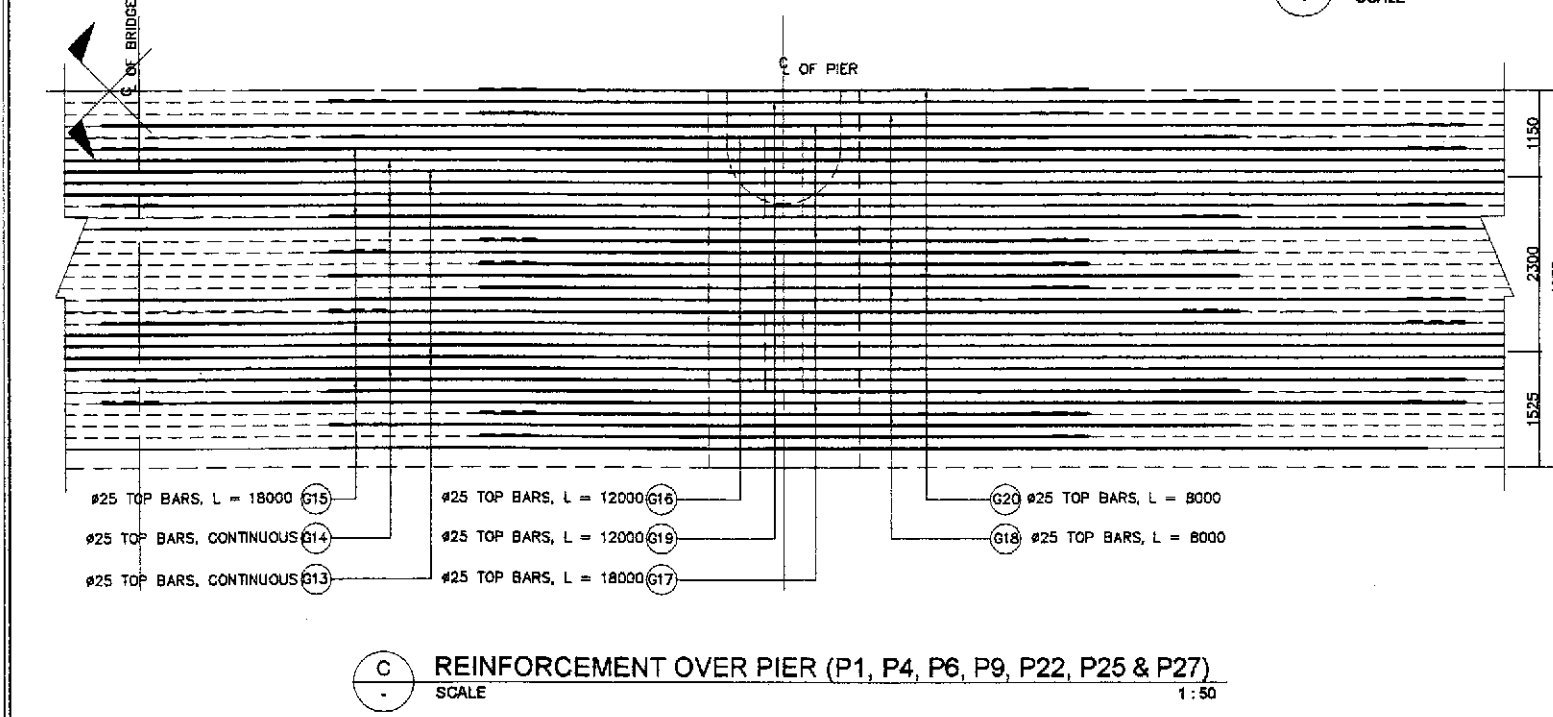
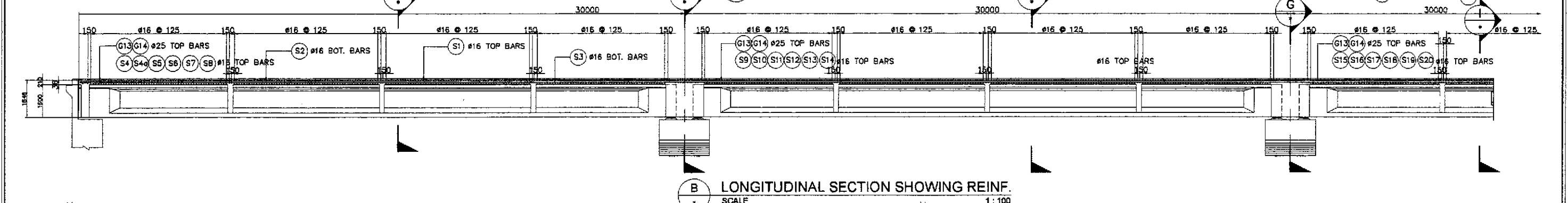
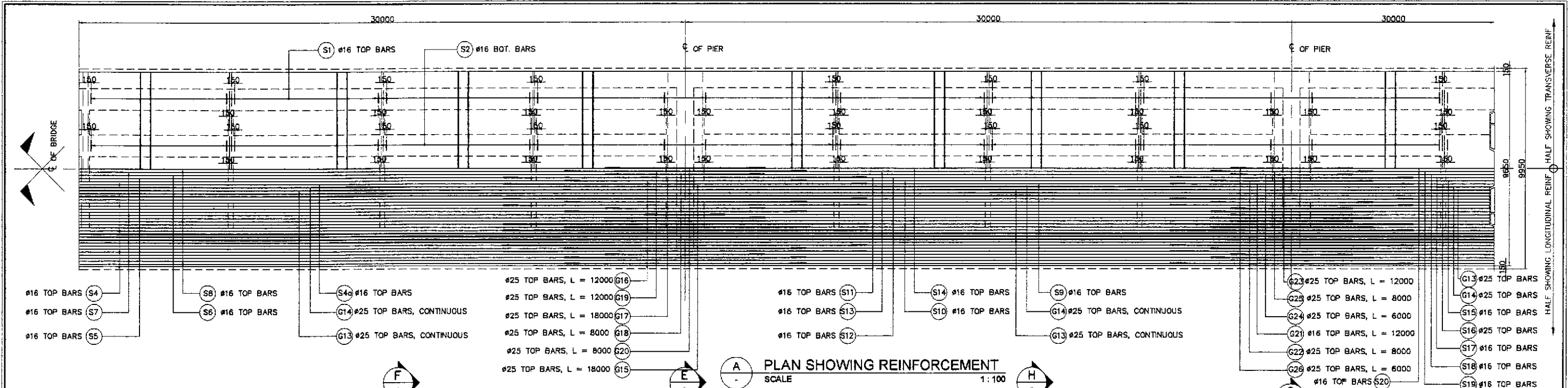


D SECTION @ ANCHOR BAR
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1 COPING LAYOUT AND DIMENSIONS (P1 to P4, P6 to P9, P11 to P13, P22 to P25 & P27 to P30)
SCALE AS SHOWN

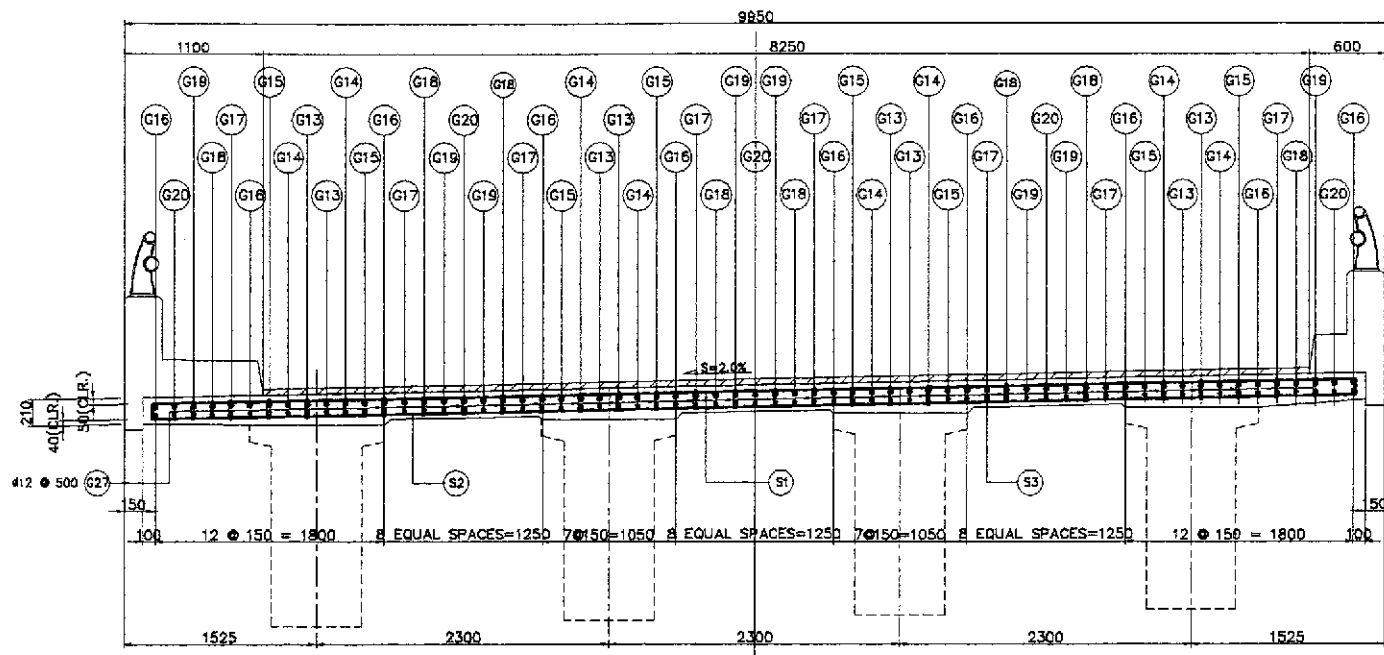
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE COPING LAYOUT & DIMENSIONS (P1-P4, P6-P9, P11-P13, P22-P25 & P27-P30) (ULTIMATE STAGE)	SHEET NO. : B8A-09
	CHECKED	9/27/02	<i>[Signature]</i>		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS						
	SUBMITTED	9/30/02	<i>[Signature]</i>	BUREAU OF DESIGN			OFFICE OF THE SECRETARY				
				Submitted By:	Reviewed By:	Recommended By:	Approved By:				
				DANILO C. TRAJANO Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (G/C)	MANUEL M. BONGAN Undersecretary	SIMEON A. DATUMANONG Secretary			

SUPERSTRUCTURE

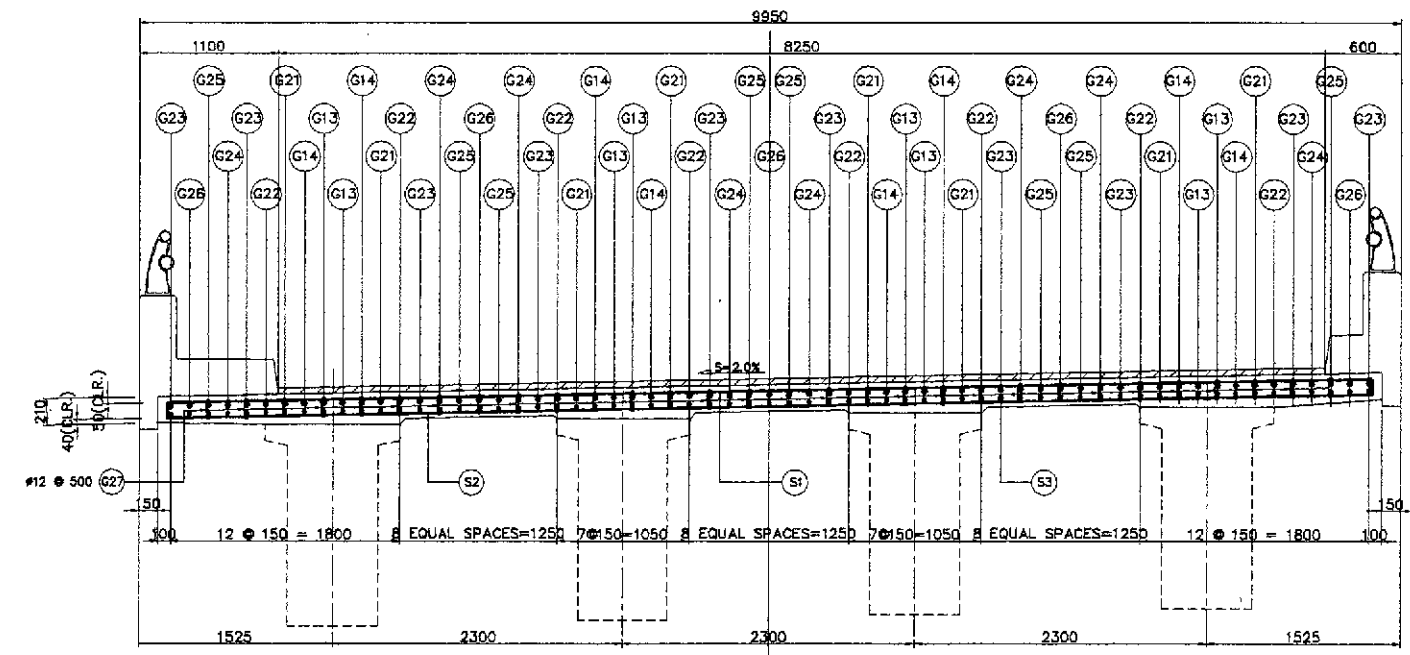


1 5 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (1 of 3)
SCALE AS SHOWN

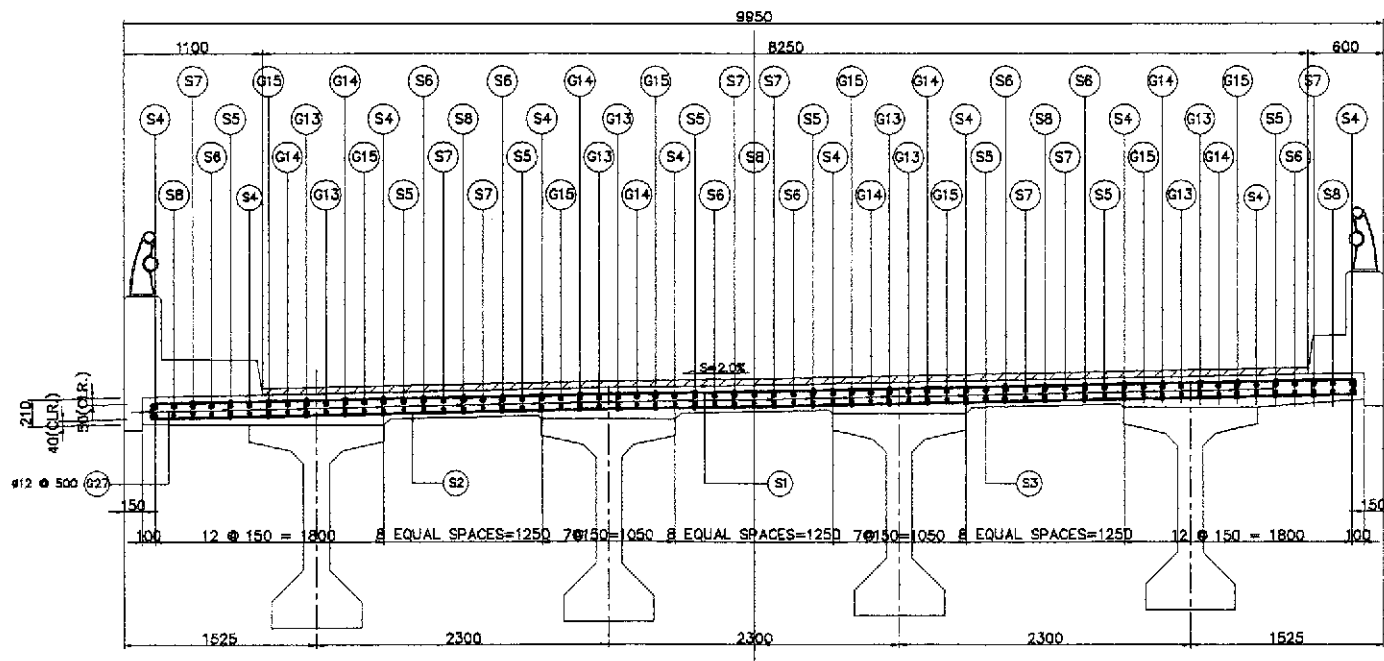
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE 5-SPAN CONTINUOUS DECK SLAB REINF. DETAILS (1 OF 3) (ULTIMATE STAGE)	SHEET NO. : B8A-21		
	CHECKED	9/27/02	J.C. SANTOS		BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO Project Director	OFFICE OF THE SECRETARY Reviewed By: ADRIANO M. DOROS Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (GIC)					Approved By: MANUEL M. BONDAN Undersecretary	Approved By: SIMEON A. DATUMANONG Secretary
	SUBMITTED	9/30/02	J.C. SANTOS		Submitted By: DANILLO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DOROS Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (GIC)					Approved By: MANUEL M. BONDAN Undersecretary	Approved By: SIMEON A. DATUMANONG Secretary



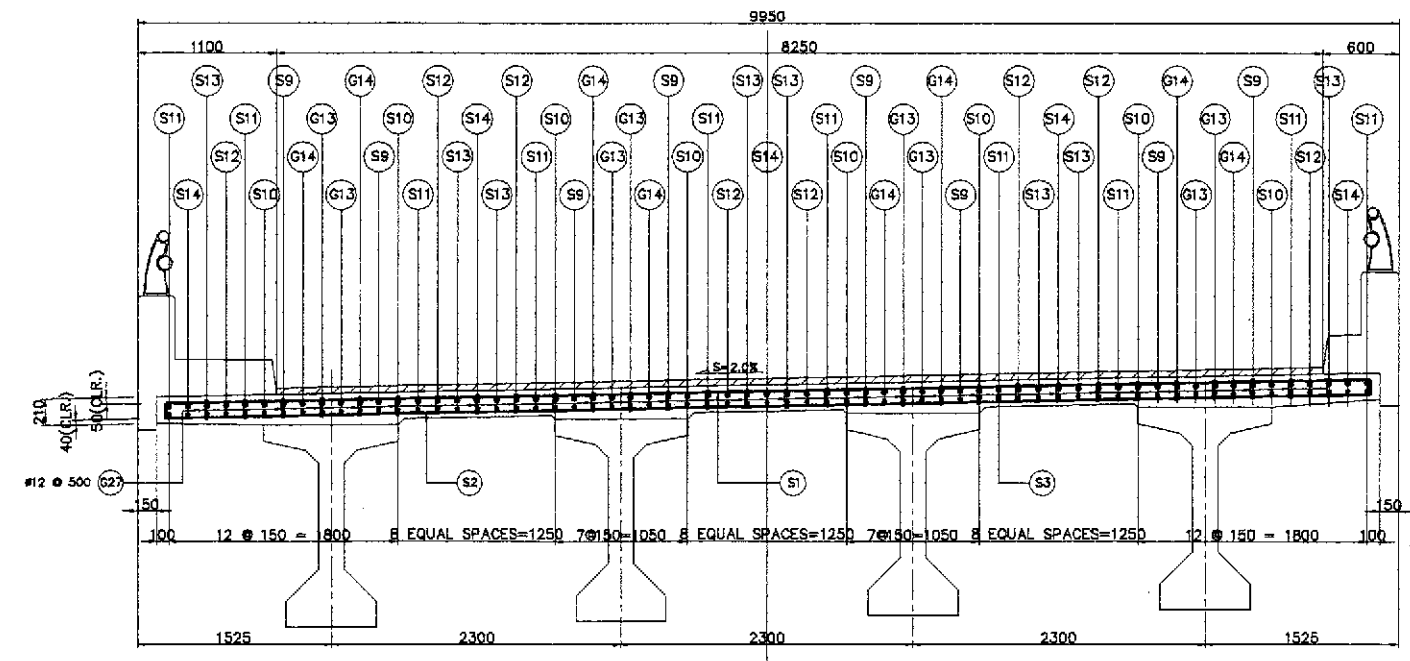
E SECTION
SCALE 1:30



G SECTION
SCALE 1:30



F SECTION
SCALE 1:30



H SECTION
SCALE 1:30

1 5 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (2 of 3)
SCALE AS SHOWN

JICA
JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS
YEO YACHIRO ENGINEERING CO., LTD.

DESIGNED	DATE	SIGNATURE
9/27/02	9/27/02	<i>[Signature]</i>
CHECKED	DATE	SIGNATURE
9/27/02	9/27/02	<i>[Signature]</i>
SUBMITTED	DATE	SIGNATURE
9/30/02	9/30/02	<i>[Signature]</i>

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		
BUREAU OF DESIGN		
Submitted By:	Reviewed By:	Recommended By:
DANILO C. TRAJANO Project Director	ADRIANO M. DORAY Chief, Bridges Division	GILBERTO S. REYES Director IV (DIC)
OFFICE OF THE SECRETARY		
Recommended By:	Approved By:	
MANUEL M. BONOAN Undersecretary	SIMEON A. DATUMANONG Secretary	

PROJECT AND LOCATION :
THE DETAILED DESIGN STUDY ON
UPGRADING INTER-URBAN HIGHWAY SYSTEM
ALONG THE PAN-PHILIPPINE HIGHWAY
(Plaridel, Cabanatuan and San Jose Bypasses)

PLARIDEL BYPASS - CONTRACT PACKAGE III

SCALE :
AS SHOWN
FULL SIZE A1

SHEET CONTENTS :
BRIDGE NO. 8 ANGAT RIVER BRIDGE
5-SPAN CONTINUOUS DECK SLAB
REINF. DETAILS (2 OF 3)
(ULTIMATE STAGE)

SHEET NO. :
B8A-22

BAR BENDING DIAGRAM

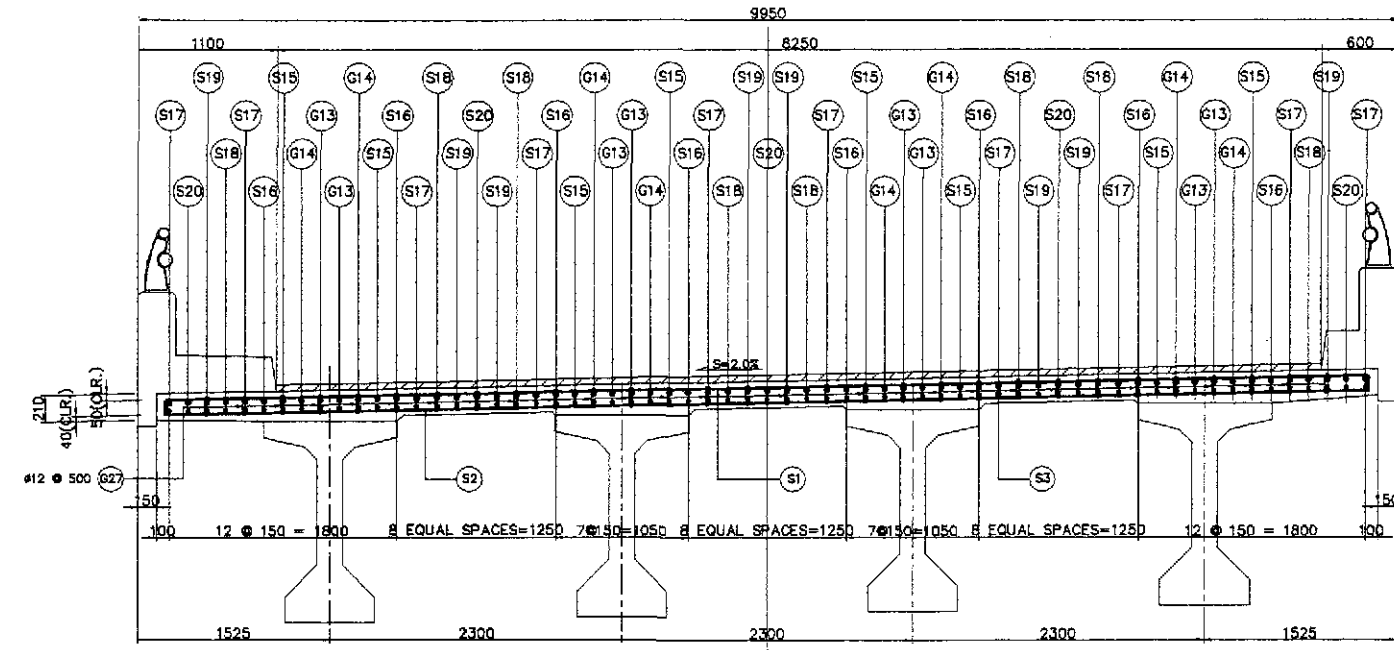


SCHEDULE OF REINFORCEMENT

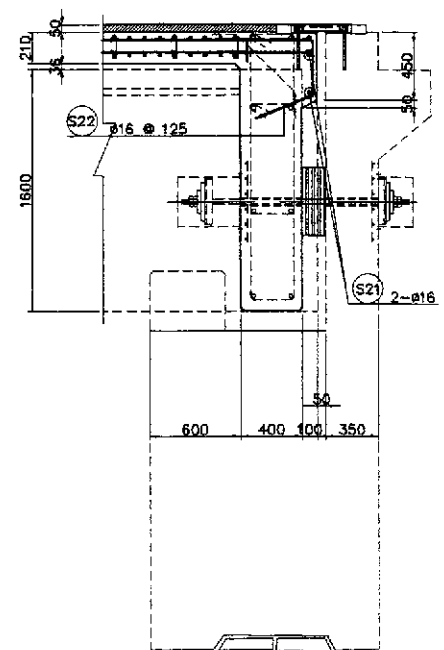
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT						LENGTH (mm)	NO. REQ'D.	WEIGHT (kg)		REMARKS
				a	b	c	d	e	f			GRADE 40	GRADE 60	
TYPICAL 5-SPAN CONTINUOUS (5 @ 30,000)	S1	16	A	110	9550					9770	1200	1.578	18500.47	
	S2	16	A	110	9550					9770	1200	1.578	18500.47	
	S3	16	B	149900						149900	63	1.578	14902.16	
	S4	16	B	23950						23950	20	1.578	755.86	
	S4a	16	B	20950						20950	16	1.578	528.95	
	S5	16	B	20950						20950	16	1.578	528.95	
	S6	16	B	25950						25950	16	1.578	655.19	
	S7	16	B	23950						23950	16	1.578	604.89	
	S8	16	B	25950						25950	12	1.578	491.39	
	S9	16	B	15000						15000	16	1.578	378.72	
	S10	16	B	20000						20000	16	1.578	504.96	
	S11	16	B	15000						15000	16	1.578	378.72	
	S12	16	B	23000						23000	16	1.578	580.70	
	S13	16	B	20000						20000	16	1.578	504.96	
	S14	16	B	23000						23000	12	1.578	435.53	
	S15	16	B	22000						22000	10	1.578	347.16	
	S16	16	B	18000						18000	8	1.578	227.23	
	S17	16	B	18000						18000	8	1.578	227.23	
	S18	16	B	24000						24000	8	1.578	302.98	
	S19	16	B	22000						22000	8	1.578	277.73	
	S20	16	B	24000						24000	6	1.578	227.23	
	S21	16	B	6900						6900	4	1.578	43.55	
	S22	16	C	50	420	350	425			1245	110	1.578	216.11	
	G13	25	B	149900						149900	16	3.853		9241.04
	G14	25	B	149900						149900	16	3.853		9241.04
	G15	25	B	18000						18000	16	3.853		1109.66
	G16	25	B	12000						12000	16	3.853		739.78
G17	25	B	18000						18000	16	3.853		1109.66	
G18	25	B	8000						8000	16	3.853		493.18	
G19	25	B	12000						12000	16	3.853		739.78	
G20	25	B	8000						8000	10	3.853		308.24	
G21	25	B	12000						12000	16	3.853		739.78	
G22	25	B	8000						8000	16	3.853		493.18	
G23	25	B	12000						12000	16	3.853		739.78	
G24	25	B	6000						6000	16	3.853		369.89	
G25	25	B	8000						8000	16	3.853		493.18	
G26	25	B	6000						6000	10	3.853		231.18	
G27	12	D	150	110					410	4125	0.888	1501.83		
TOTAL WEIGHT											61,622.76	26049.36		

1) SPLICE LENGTH NOT INCLUDED
 2) LENGTH OF SPLICE IS 1000mm
 3) SPLACING OF CONTINUOUS BARS (#25) IS ALLOWED ONLY 600mm FROM CENTERLINE OF PIERS.
 4) ESTIMATED QUANTITY FOR 5 SPAN CONTINUOUS (5 SPANS @ 30,000) ONLY.

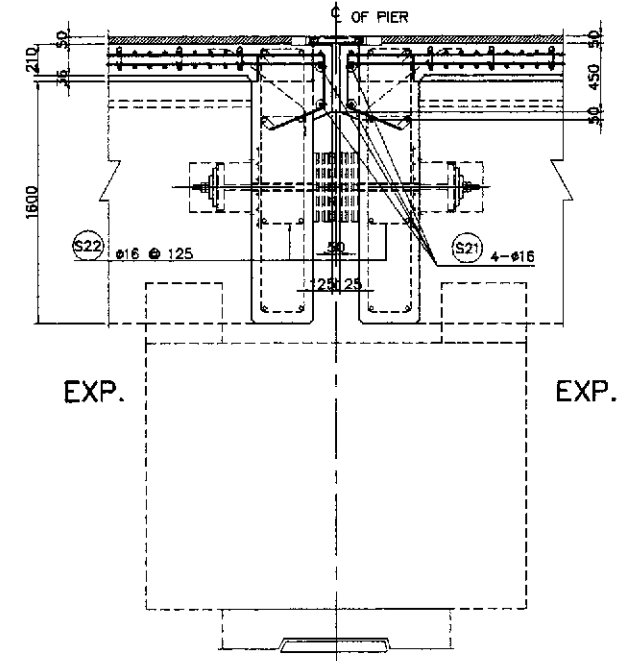
THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.



I SECTION SCALE 1:30



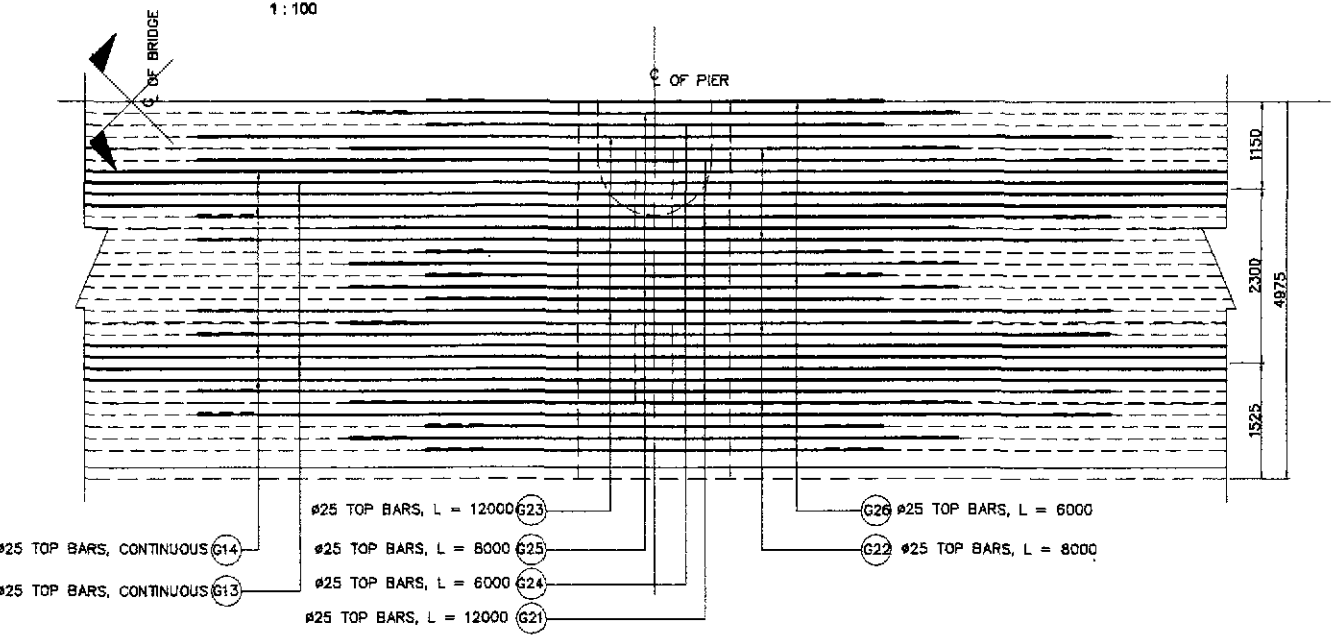
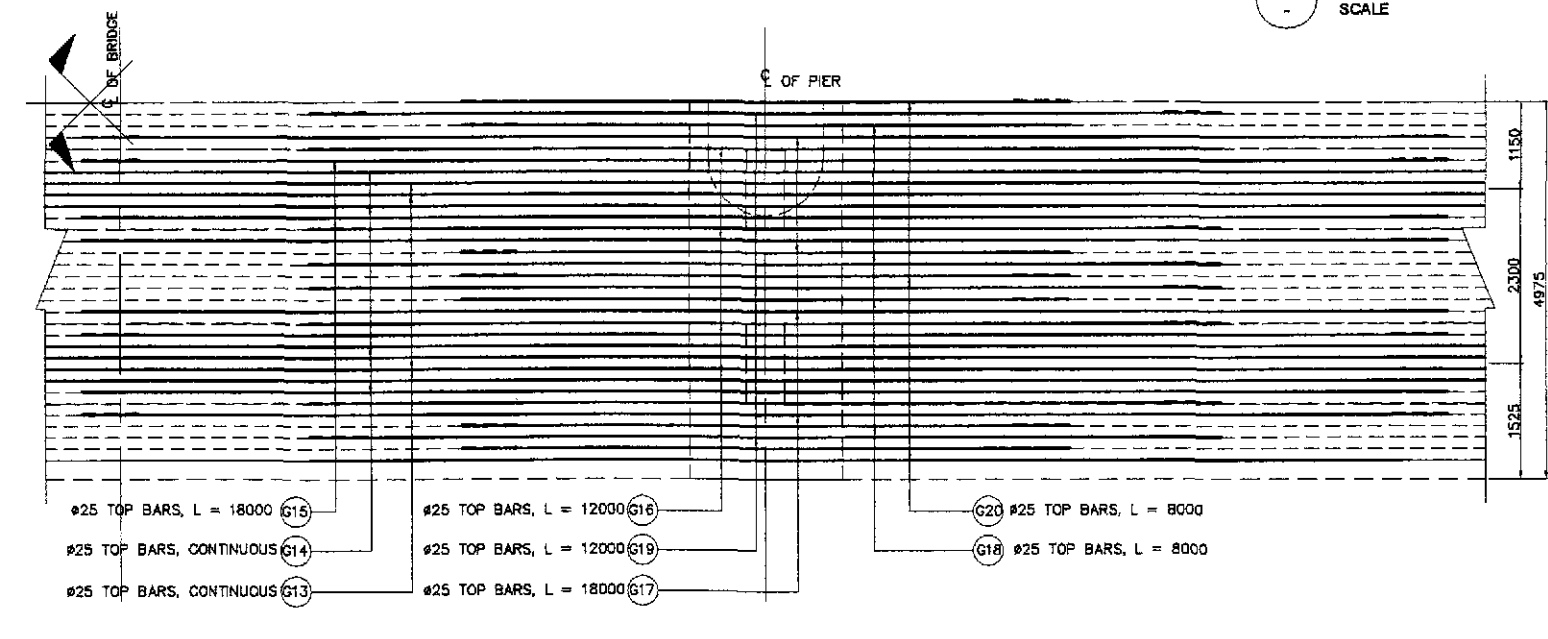
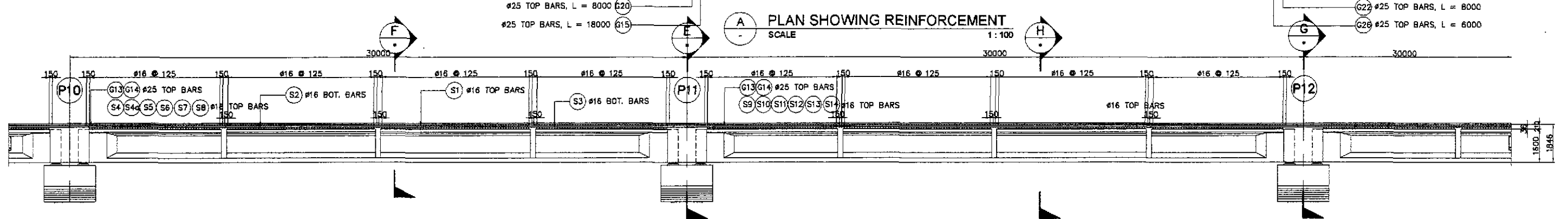
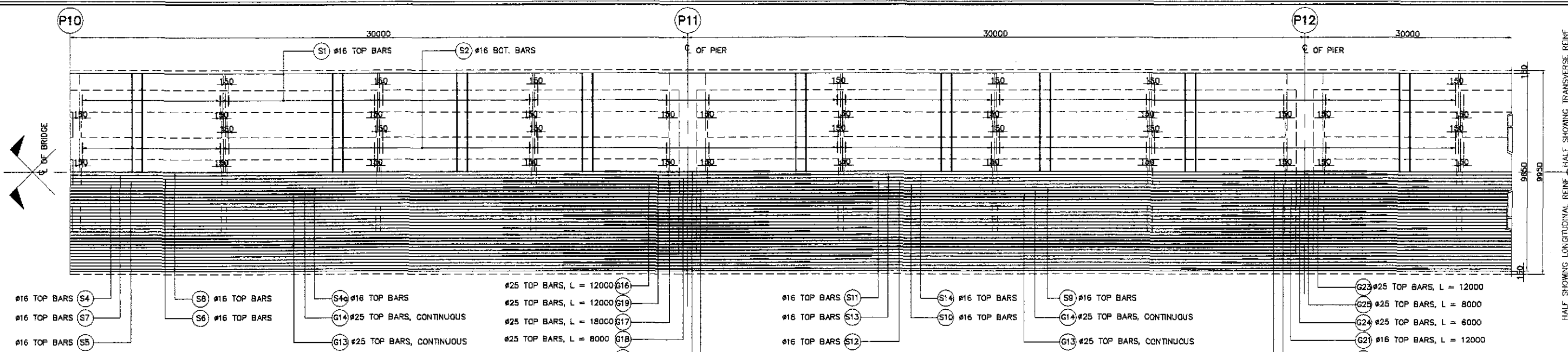
J DETAIL @ ABUTMENT SCALE 1:25



K DETAIL @ FIX-EXP. PIER SCALE 1:25

1 5 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (3 of 3) SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE	<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p>	PROJECT AND LOCATION :			SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	9/23/02	[Signature]		THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)			AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE 5-SPAN CONTINUOUS DECK SLAB REINF. DETAILS (3 OF 3) (ULTIMATE STAGE)	B8A-23
	SUBMITTED	9/23/02	[Signature]		PLARIDEL BYPASS - CONTRACT PACKAGE III			FULL SIZE A1		
BUREAU OF DESIGN Submitted By: DANILLO C. TRAJANO, Project Director Reviewed By: ADRIANO M. DORGY, Chief, Bridges Division Recommended By: GILBERTO S. REYES, Director IV (GIC) Office of the Secretary Recommended By: MANUEL M. BONGAN, Undersecretary Approved By: SIMEON A. DATUMANONG, Secretary										

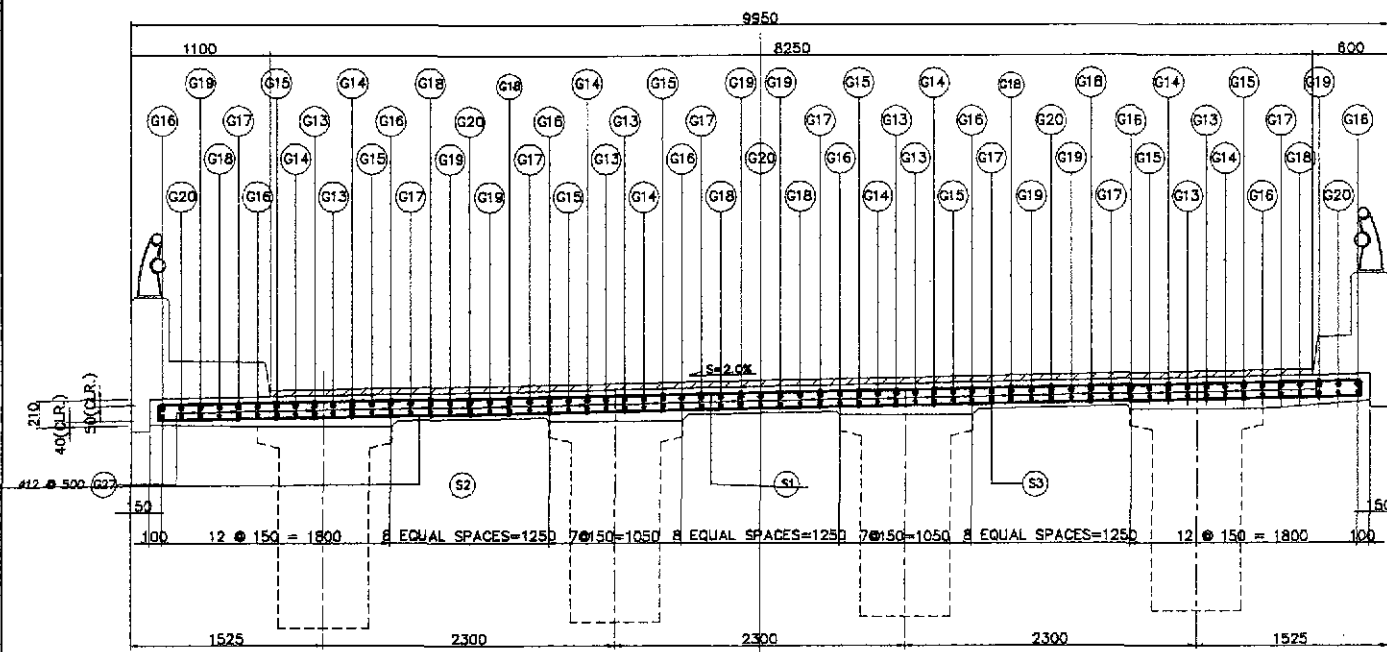


C REINFORCEMENT OVER PIER (P11 & P13)
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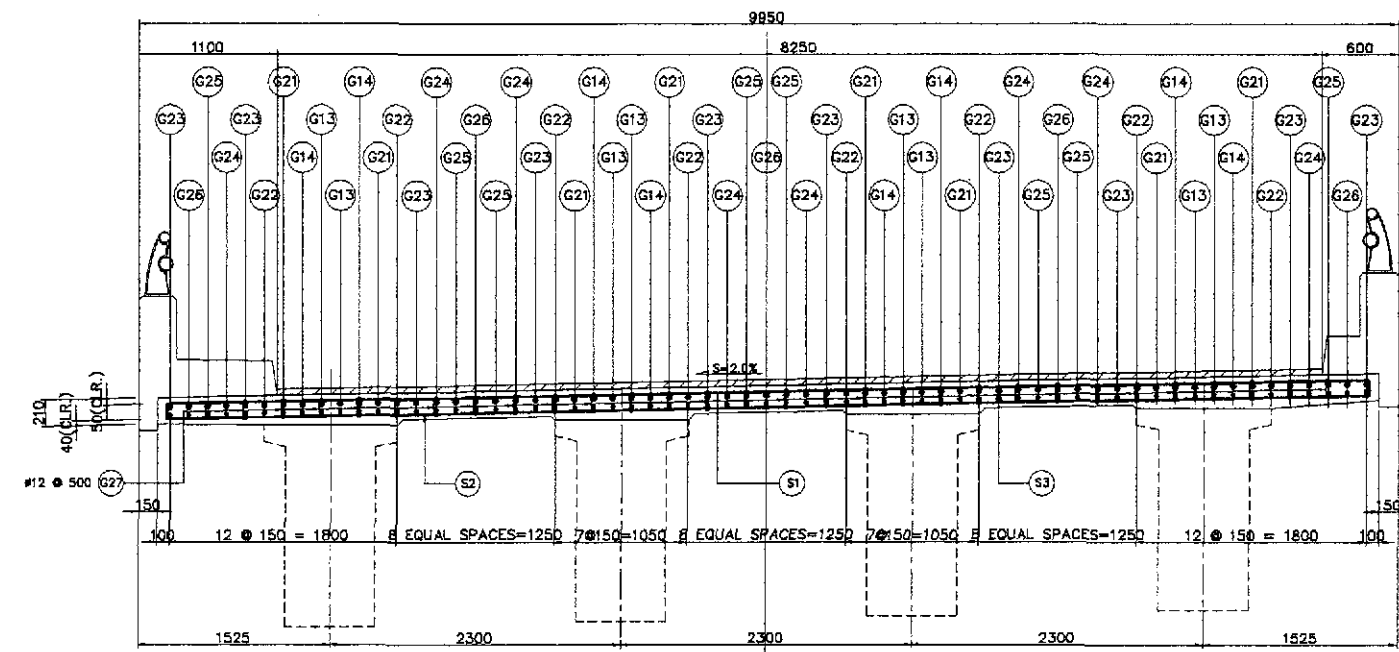
D REINFORCEMENT OVER PIER (P12)
SCALE 1:50

1 4 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (1 of 3)
SCALE AS SHOWN

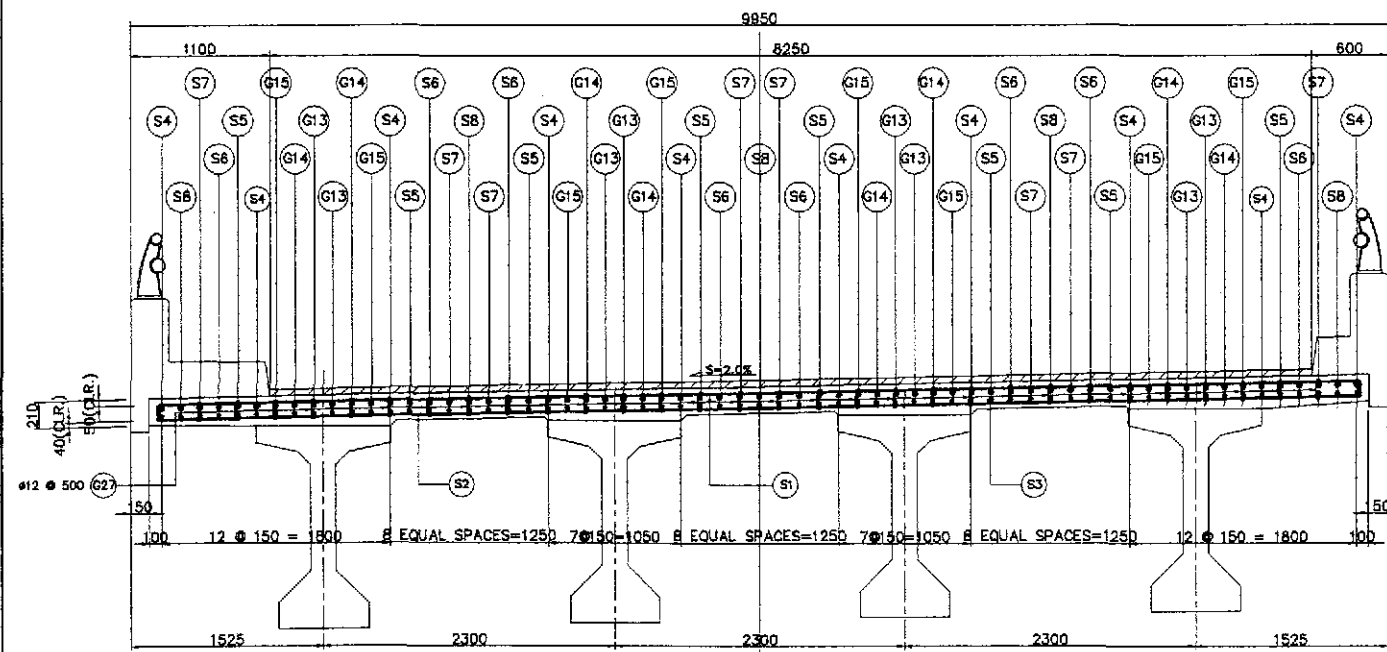
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE 4-SPAN CONTINUOUS DECK SLAB REINF. DETAILS (1 OF 3) (ULTIMATE STAGE)	SHEET NO. : B8A-24
	CHECKED	9/27/02	J.C. SANTOS		BUREAU OF DESIGN						
	SUBMITTED	9/30/02	TEAM LEADER		DANILLO C. TRAJAND Project Director	ADRIANO M. DOROY Chief, Bridges Division	GILBERTO S. REYES Director IV (D/C)				



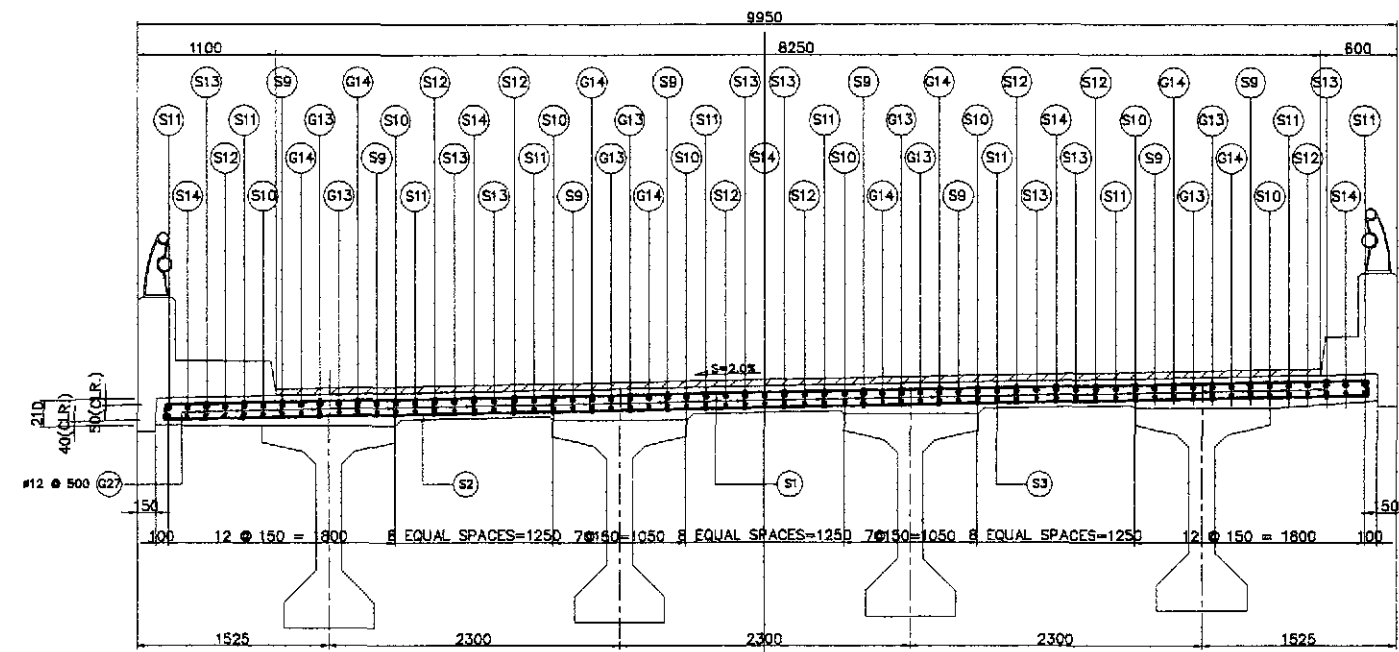
E SECTION
SCALE 1:30



G SECTION
SCALE 1:30



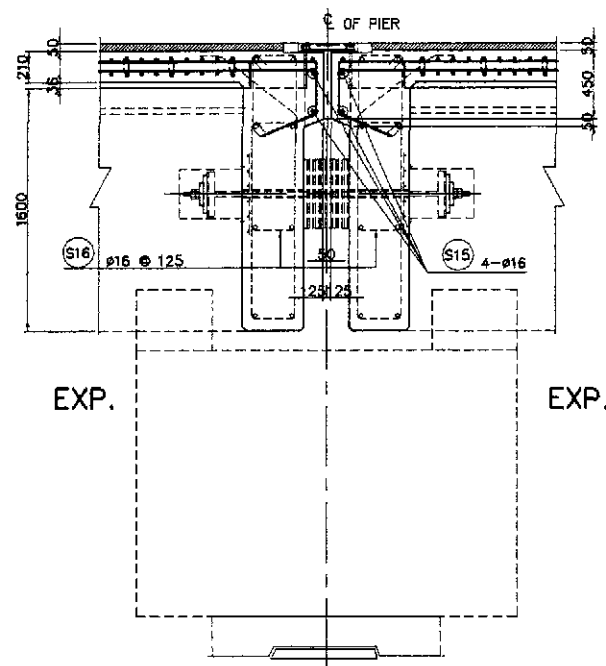
F SECTION
SCALE 1:30



H SECTION
SCALE 1:30

1 4 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (2 of 3)
SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE	<p>REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS</p>	PROJECT AND LOCATION :			SCALE :	SHEET CONTENTS :	SHEET NO. :	
	CHECKED	9/25/02	<i>[Signature]</i>		BUREAU OF DESIGN	THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)			AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE 4-SPAN CONTINUOUS DECK SLAB REINF. DETAILS (2 OF 3) (ULTIMATE STAGE)	B8A-25
	SUBMITTED	9/30/02	<i>[Signature]</i>		OFFICE OF THE SECRETARY	PLARIDEL BYPASS - CONTRACT PACKAGE III			FULL SIZE A1		
Submitted By: DANILLO C. TRAJANO, Project Director Reviewed By: ADRIANO M. DOROY, Chief, Bridges Division Recommended By: GILBERTO S. REYES, Director IV (CIC) Recommended By: MANUEL M. BONDAN, Undersecretary Approved By: SIMEON A. DATUMANONG, Secretary											



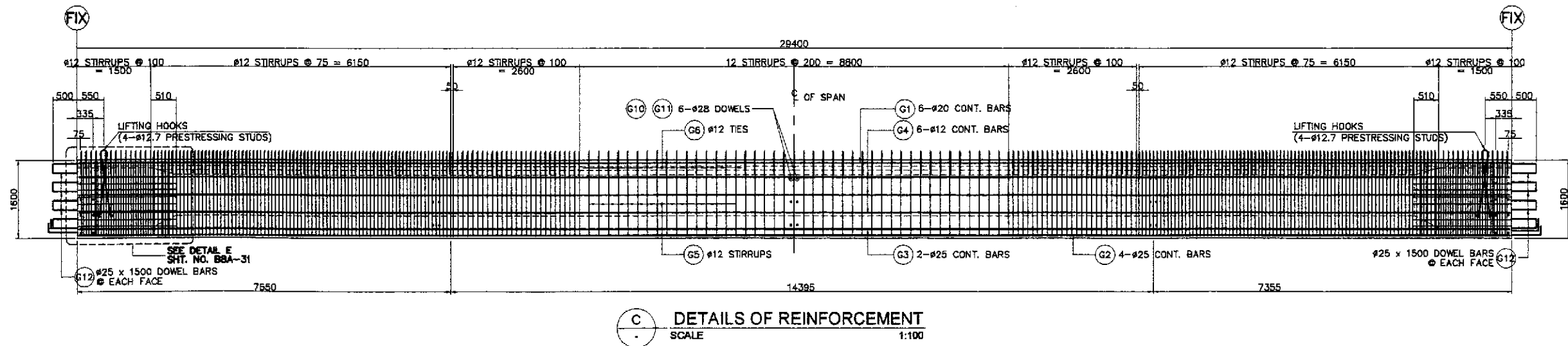
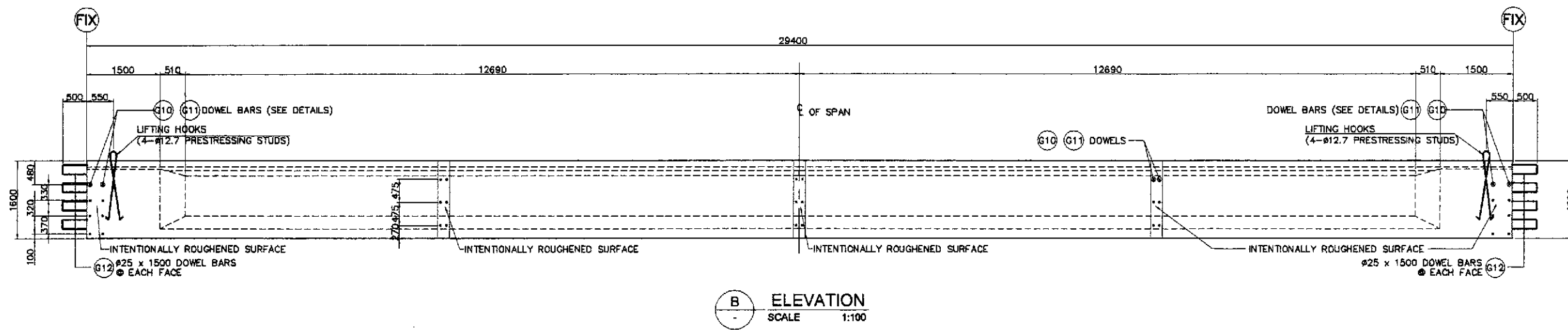
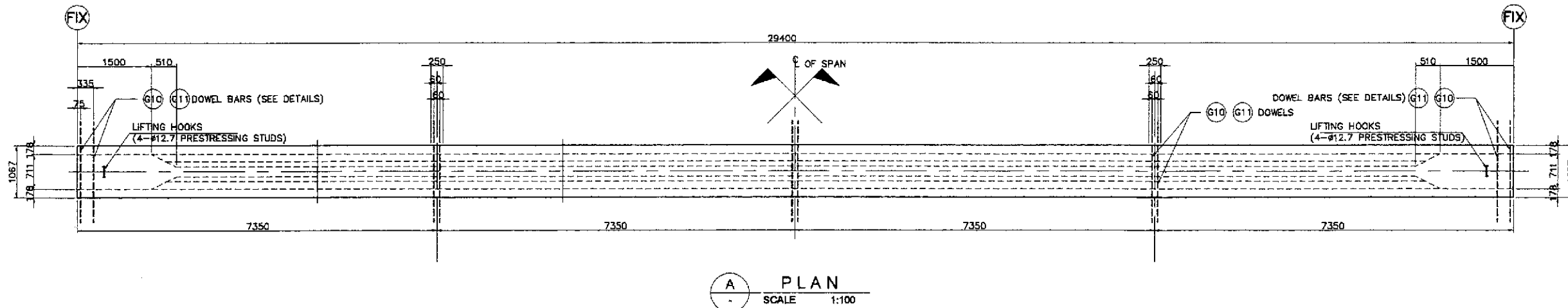
1
-
DETAIL @ FIX-EXP. PIER
SCALE 1:25

BAR BENDING DIAGRAM																
A		B		C		D										
SCHEDULE OF REINFORCEMENT																
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT						LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)		REMARKS	
				a	b	c	d	e	f				GRADE 40	GRADE 60		
TYPICAL 4-SPAN CONTINUOUS (5 @ 30,000)	S1	16	A	110	9550					9770	960	1.578	14800.38		1) SPLICE LENGTH NOT INCLUDED 2) LENGTH OF SPLICE IS 1000mm 3) SPACING OF CONTINUOUS BARS (#25) IS ALLOWED ONLY 6000mm FROM CENTERLINE OF PIERS. 4) ESTIMATED QUANTITY FOR 4 SPAN CONTINUOUS (4 SPANS @ 30,000) ONLY.	
	S2	16	A	110	9550					9770	960	1.578	14800.38			
	S3	16	B			119900					119900	63	1.578	11919.74		
	S4	16	B			23950					23950	16	1.578	604.69		
	S4a	16	B			20950					20950	16	1.578	528.95		
	S5	16	B			20950					20950	16	1.578	528.95		
	S6	16	B			25950					25950	16	1.578	655.19		
	S7	16	B			23950					23950	16	1.578	604.69		
	S8	16	B			25950					25950	12	1.578	491.39		
	S9	16	B			15000					15000	16	1.578	378.72		
	S10	16	B			20000					20000	16	1.578	504.96		
	S11	16	B			15000					15000	16	1.578	378.72		
	S12	16	B			23000					23000	16	1.578	580.70		
	S13	16	B			20000					20000	16	1.578	504.96		
	S14	16	B			23000					23000	12	1.578	435.53		
	S15	16	B			6900					6900	4	1.578	43.55		
	S16	16	C		50	420	350	425			1245	110	1.578	216.11		
	G13	25	B			149900					149900	16	3.853	9241.04		
	G14	25	B			149900					149900	16	3.853	9241.04		
	G15	25	B			18000					18000	16	3.853	1109.66		
	G16	25	B			12000					12000	16	3.853	739.78		
	G17	25	B			18000					18000	16	3.853	1109.66		
	G18	25	B			8000					8000	16	3.853	493.18		
	G19	25	B			12000					12000	16	3.853	739.78		
	G20	25	B			8000					8000	10	3.853	308.24		
	G21	25	B			12000					12000	8	3.853	369.89		
	G22	25	B			8000					8000	8	3.853	246.59		
G23	25	B			12000					12000	8	3.853	369.89			
G24	25	B			8000					6000	8	3.853	184.94			
G25	25	B			8000					8000	8	3.853	246.59			
G26	25	B			6000					6000	5	3.853	115.59			
G27	12	D		150	110					410	3300	0.888	1201.46			
TOTAL WEIGHT =												48,178.05	24,515.87			

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

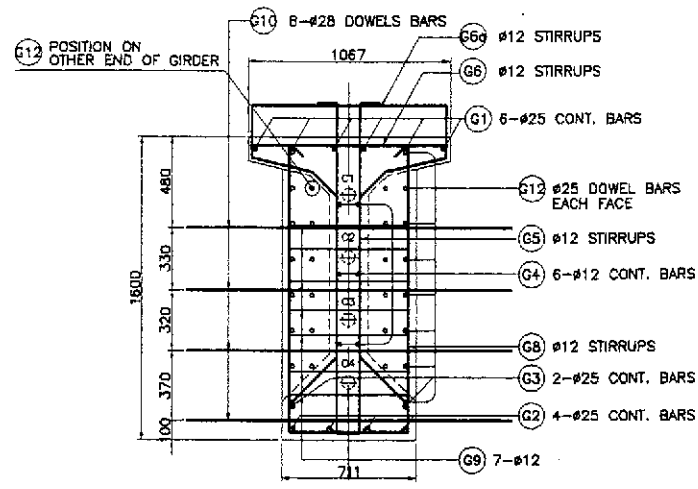
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-
4 SPAN CONTINUOUS DECK SLAB REINF. DETAILS (3 of 3)
SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE	REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS BUREAU OF DESIGN			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)		SCALE : AS SHOWN		SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE 4-SPAN CONTINUOUS DECK SLAB REINF. DETAILS (3 OF 3) (ULTIMATE STAGE)		SHEET NO. : B8A-26			
	CHECKED	DATE	SIGNATURE												OFFICE OF THE SECRETARY	
	SUBMITTED	DATE	SIGNATURE												OFFICE OF THE SECRETARY	
				Submitted By: DANILLO C. TRAJANO, Project Director			Recommended By: ADRIANO M. DOROY, Chief, Bridge Division		Recommended By: GILBERTO S. REYES, Director IV (D/C)		Approved By: MANUEL M. BONOAN, Undersecretary		Approved By: SIMEON A. DATUMANONG, Secretary			
PLARIDEL BYPASS - CONTRACT PACKAGE III							FULL SIZE A1									

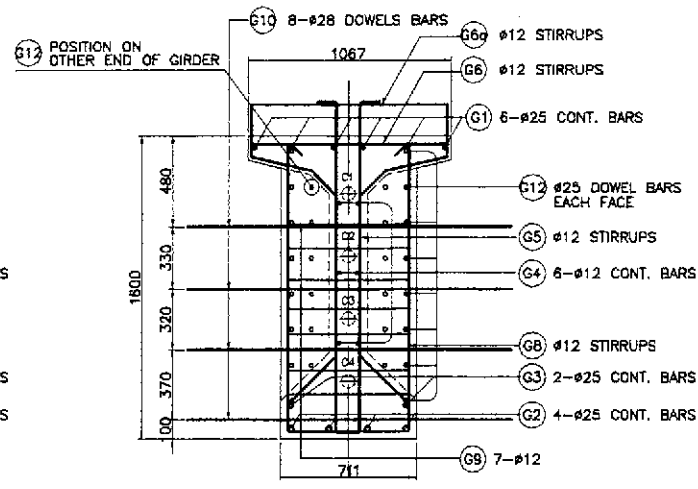


DETAILS OF AASHTO GIRDER TYPE V REINF., FIX-FIX (1 of 2)
SCALE AS SHOWN

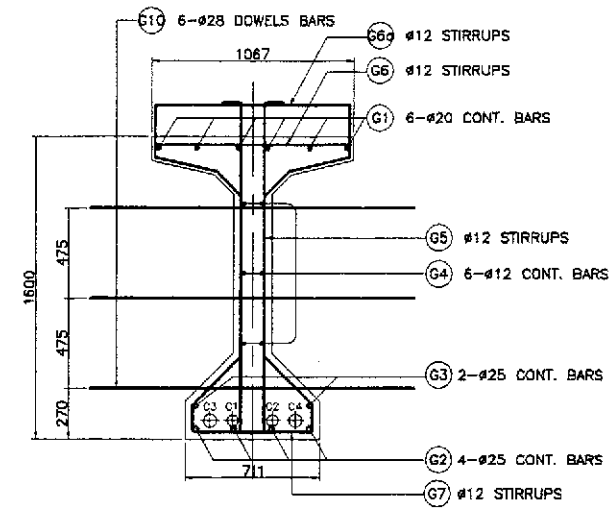
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES			PROJECT AND LOCATION : THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses) PLARIDEL BYPASS - CONTRACT PACKAGE III	SCALE : AS SHOWN FULL SIZE A1	SHEET CONTENTS : BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAILS OF AASHTO GIRDER TYPE V REINF., FIX-FIX (1 OF 2) (ULTIMATE STAGE)	SHEET NO. : B8A-27
	CHECKED	9/27/02	M. S. NAVAL		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS						
	SUBMITTED	9/27/02	M. S. NAVAL		Submitted By: DANILLO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DOROY Chief, Bridges Division	Recommended By: GILBERTO S. REYES Director IV (OIC)				



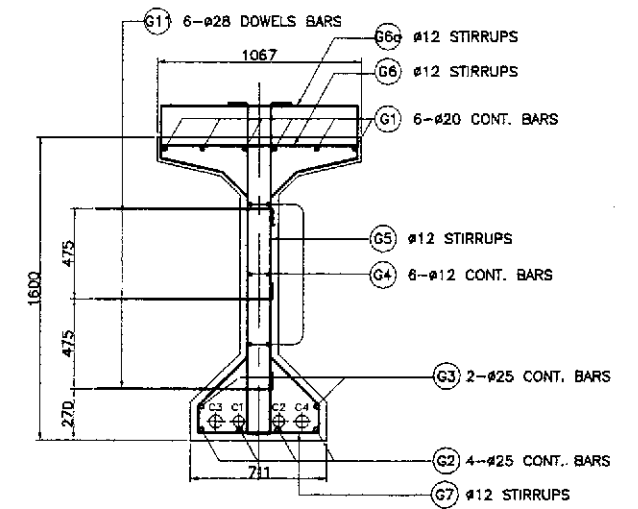
INTERIOR GIRDER



EXTERIOR GIRDER



INTERIOR GIRDER

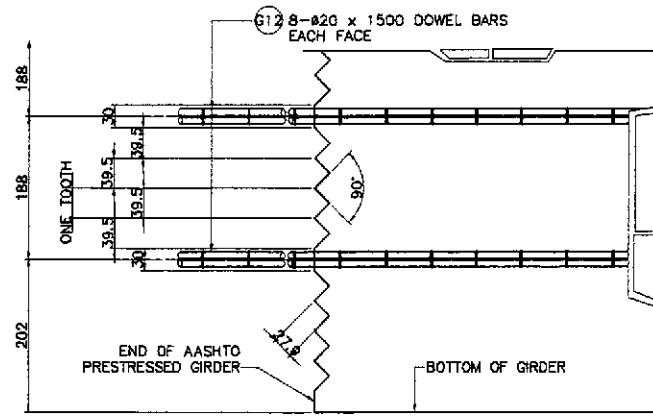


EXTERIOR GIRDER

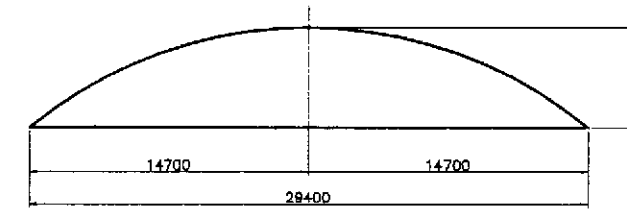
A SECTION AT END DIAPHRAGM
SCALE 1:40

B SECTION AT INTERMEDIATE DIAPHRAGM
SCALE 1:40

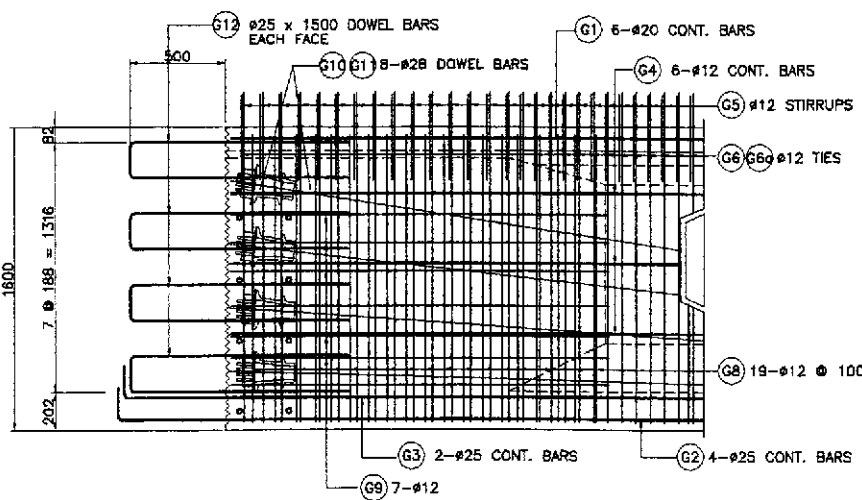
NOTE: REBAR G12 SHOULD BE MOVED 75mm INWARD ON THE OTHER END OF THE GIRDER TO AVOID CONFLICT WITH THE ADJACENT GIRDER AT THE END DIAPHRAGM.



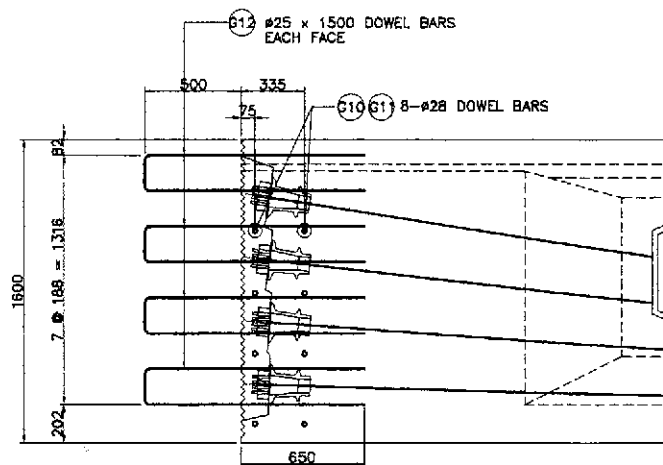
C TOOTH DETAIL
SCALE 1:10



D CAMBER DIAGRAM
NOT TO SCALE

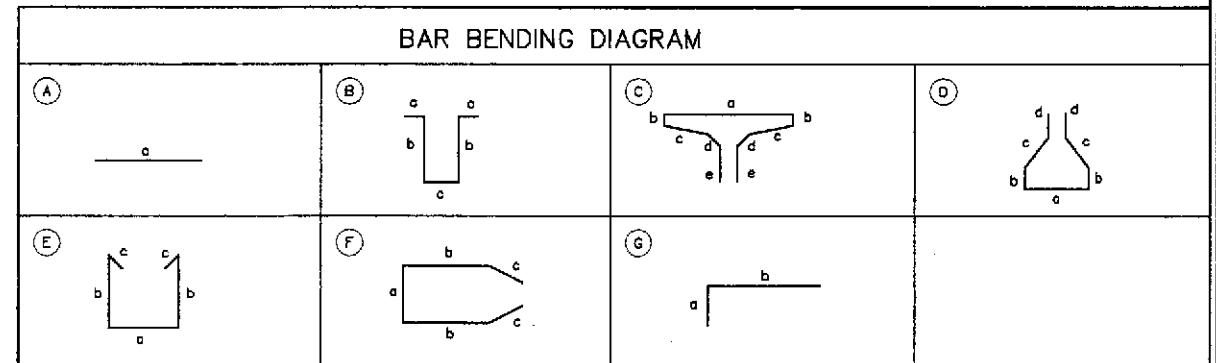


E END BLOCK REINF. DETAIL
SCALE 1:40



F END BLOCK DOWELS DETAIL
SCALE 1:40

1 DETAILS OF AASHTO GIRDER TYPE V REINF., FIX-FIX (2 OF 2)
SCALE AS SHOWN

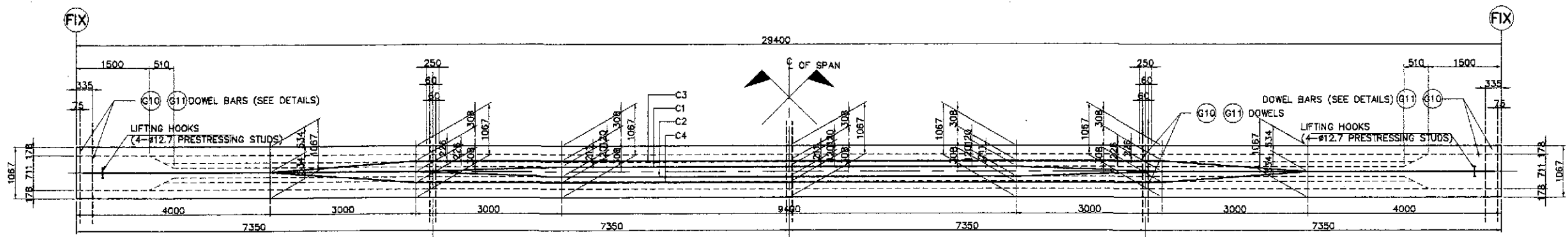


SCHEDULE OF REINFORCEMENT

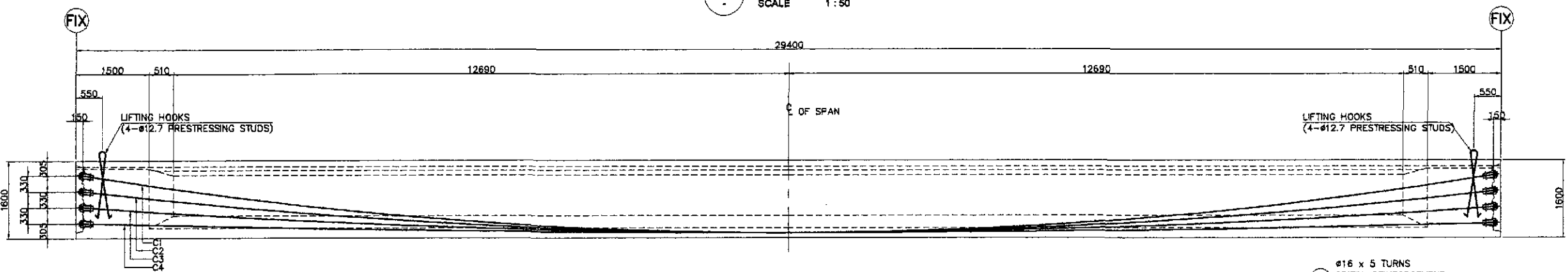
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION (mm) OUT TO OUT					LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)		REMARKS
				a	b	c	d	e				GRADE 40	GRADE 60	
	G1	20	A	29400					29400	6	2.466	435.00		1) Quantities for one (1) girder only.
	G2	25	A	30400					30400	4	3.854	468.57		
	G3	25	A	30400					30400	2	3.854	234.13		
	G4	12	A	29400					29400	6	0.888	156.70		2) Splice length, not included.*
	G5	12	B	200	1700	103			2203	297	0.888	581.01		
	G6	12	C	1000	50	340	200	150	2480	297	0.888	654.07		3) Bar mark G10 is for interior girder only.
	G6a	12	C	1000	150	340	200	150	2680	297	0.888	706.81		
	G7	12	D	835	160	550	150		2355	297	0.888	621.10		
	G8	12	E	635	1900	150			4735	32	0.888	134.55		4) Bar mark G11 is for exterior girder only.
	G9	12	F	611	1450	570			4651	14	0.888	57.82		
	G10	25	A	1200					1200	16	3.854	74.00		
	G11	25	G	200	600				800	16	3.854	49.33		
	G12	25	A	1500					1500	32	3.854	185.00		
TOTAL WEIGHT (EXTERIOR GIRDER) =											2912.06	1372.30		
TOTAL WEIGHT (INTERIOR GIRDER) =											2912.06	1397.00		

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

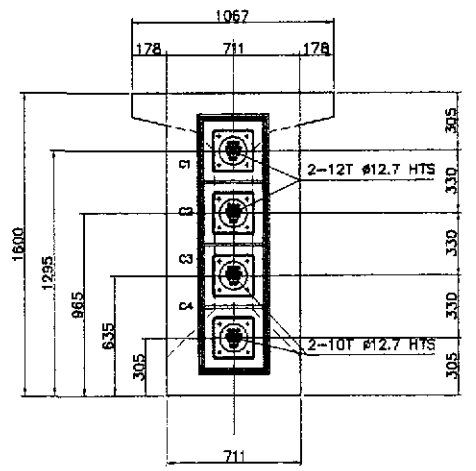
	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS				PROJECT AND LOCATION :	SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	9/27/02	J. SANTOS		BUREAU OF DESIGN				THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)	AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAILS OF AASHTO GIRDER TYPE V REINF., FIX-FIX (2 OF 2) (ULTIMATE STAGE)	B8A-28
	SUBMITTED	9/29/02	M. RIVERA		OFFICE OF THE SECRETARY				PLARIDEL BYPASS - CONTRACT PACKAGE III	FULL SIZE A1		
Submitted By:		Reviewed By:		Recommended By:		Approved By:						
DANILO C. TRAJANO Project Director		ADRIANO M. DOROY Chief, Bridges Division		GILBERTO S. REYES Director IV (OIC)		MANUEL M. BONDAN Undersecretary		SIMEON A. DATUMANONG Secretary				



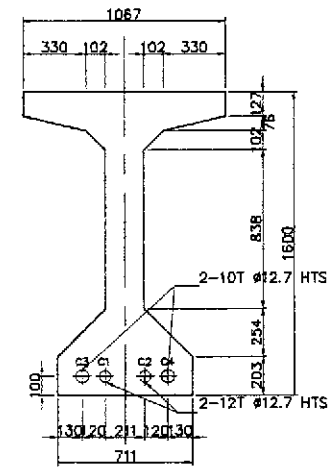
A PLAN
SCALE 1:50



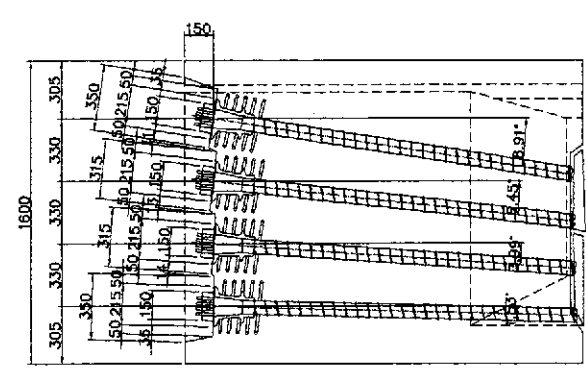
B ELEVATION
SCALE 1:50



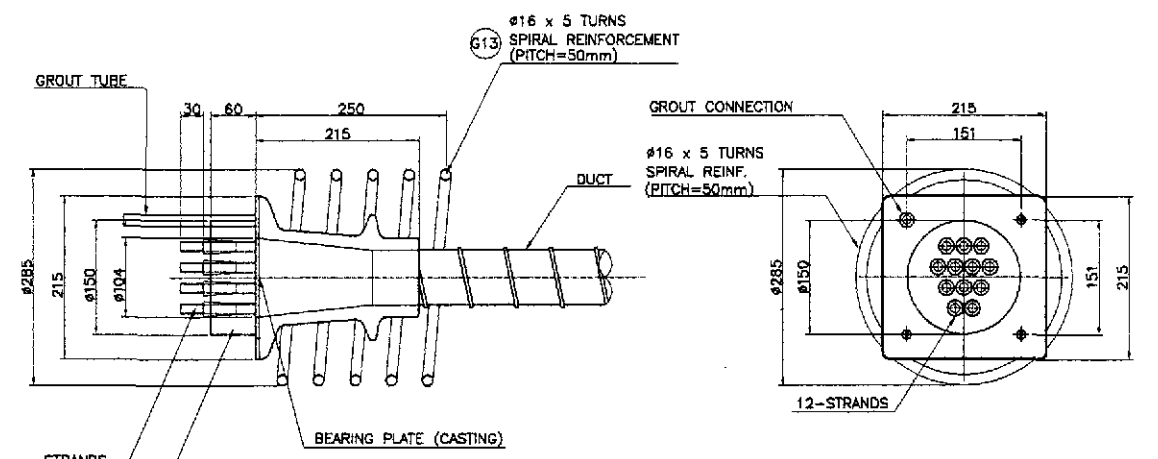
C SECTION @ GIRDER END
SCALE 1:20



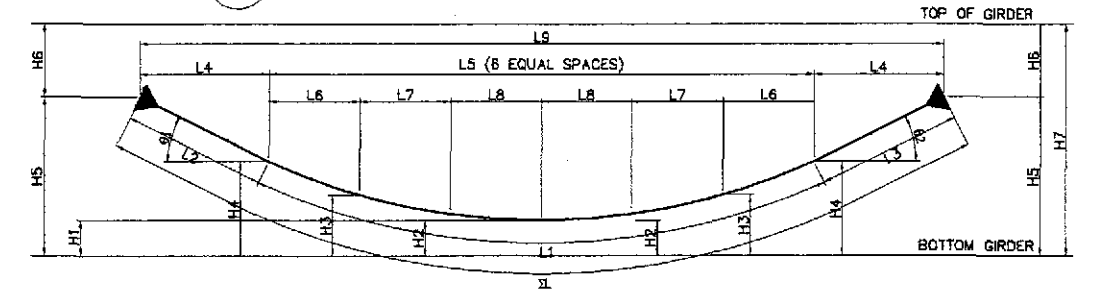
D SECTION @ MIDSPAN
SCALE 1:20



E ANCHORAGE DETAILS
SCALE 1:20



F VSL PRESTRESSING ANCHORAGE TYPE EC (LIVE END)
SCALE 1:5

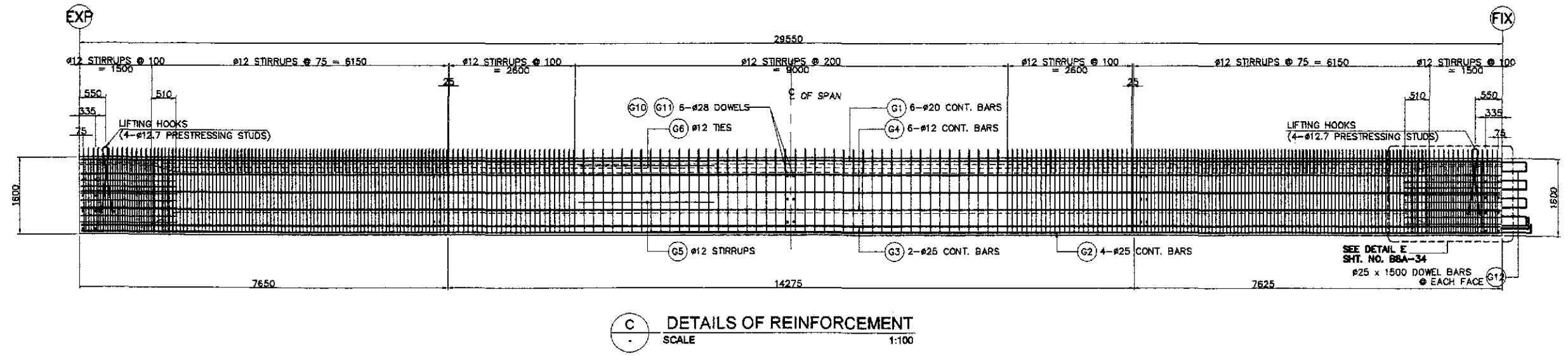
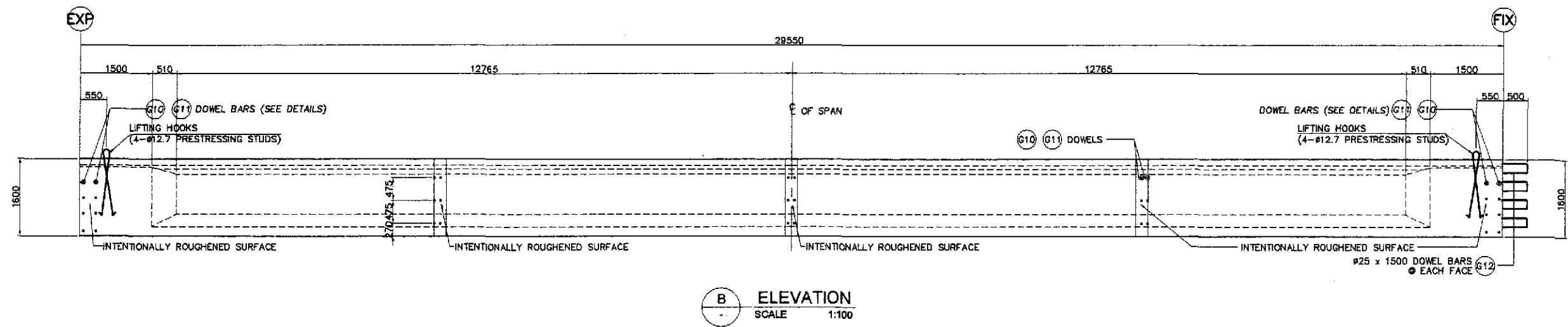
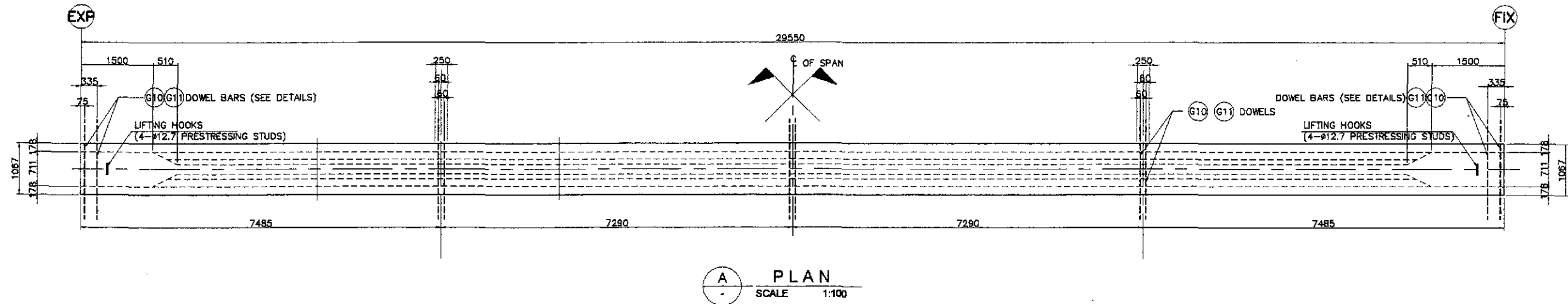


TENDON VERTICAL PROFILE																				TYPE - SIZE	FORCE IN TENDON @ JACK BEFORE LOCK OFF (KN)	ANCHORAGE SLIP (mm)	TENDON PRESTRESS FORCE @ MIDSPAN (KN)	TENDON LENGTH (mm)	TOTAL LENGTH (mm)	TOTAL WEIGHT OF TENDON (kg)			
TENDON DESIGNATION	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	L6 (mm)	L7 (mm)	L8 (mm)	L9 (mm)	1L (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	H6 (mm)	H7 (mm)	θ1 (degree)	θ2 (degree)										
C1	26380	1500	1500	1482	26286	4381.0	4381.0	4381.0	29100	29380	100	207	527	1064	1295	305	1600	8.91°	8.91°	12-dia. 12.7	1545	6	1444	32080	384,960	298.34			
C2	26320	1500	1500	1491	26269	4378.2	4378.2	4378.2	29100	29320	100	177	409	797	985	635	1600	6.45°	6.45°	12-dia. 12.7	1545	6	1444	32020	384,240	297.79			
C3	26280	1500	1500	1496	26257	4376.2	4376.2	4376.2	29100	29280	100	148	291	531	835	965	1600	3.99°	3.99°	10-dia. 12.7	1290	6	1203	31980	319,800	247.84			
C4	26250	1500	1500	1499	26251	4350.2	4350.2	4350.2	29100	29250	100	118	173	285	305	1295	1600	1.53°	1.53°	10-dia. 12.7	1290	6	1203	31950	319,500	247.61			
				TOTAL																						1,408,500		1,091.58	

NOTE: AFTER FRICTION LOSS AND WEDGE DRAW-IN ONLY.

1 DETAILS OF AASHTO GIRDER PRESTRESSING CABLE (FIX-FIX PIERS)
SCALE AS SHOWN

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS					PROJECT AND LOCATION:					SCALE:	SHEET CONTENTS:		SHEET NO.:
	CHECKED	9/25/02	[Signature]		BUREAU OF DESIGN					THE DETAILED DESIGN STUDY ON UPGRADING INTER-URBAN HIGHWAY SYSTEM ALONG THE PAN-PHILIPPINE HIGHWAY (Plaridel, Cabanatuan and San Jose Bypasses)					AS SHOWN	BRIDGE NO. 8 ANGAT RIVER BRIDGE DETAILS OF AASHTO GIRDER PRESTRESSING CABLE (FIX-FIX PIERS) (ULTIMATE STAGE)		B8A-29
	SUBMITTED	9/25/02	[Signature]		OFFICE OF THE SECRETARY					PLARIDEL BYPASS - CONTRACT PACKAGE III					FULL SIZE A1			



1 DETAILS OF AASHTO GIRDER TYPE V REINF., EXP.-FIX (1 of 2)
SCALE AS SHOWN

JICA
JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS
INTERNATIONAL

YEO YACHIYO ENGINEERING
CO., LTD.

DATE	SIGNATURE
DESIGNED 9/25/02	[Signature]
CHECKED 9/27/02	[Signature]
SUBMITTED 9/29/02	[Signature]

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	
BUREAU OF DESIGN	
Submitted By: DANILO C. TRAJANO Project Director	Reviewed By: ADRIANO M. DORON Chief, Bridges Division
Recommended By: GILBERTO S. REYES Director IV (DIC)	Recommended By: MANUEL M. BONOAN Undersecretary
Approved By: SIMEON A. DATUMANONG Secretary	

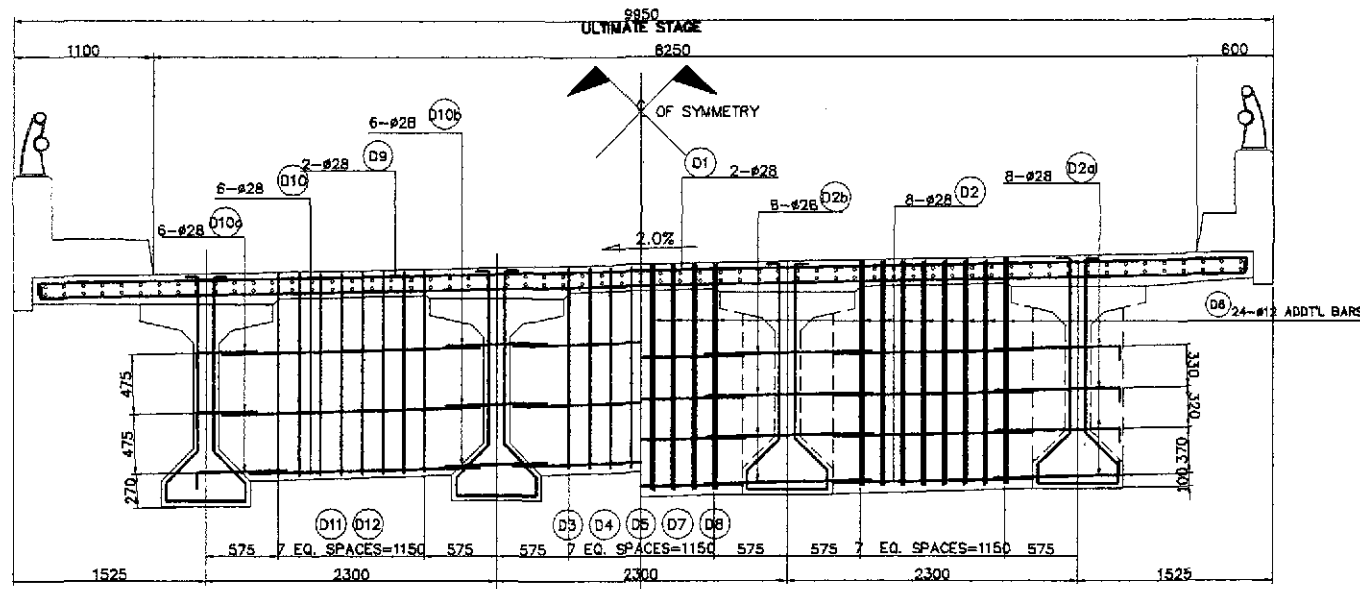
PROJECT AND LOCATION :
THE DETAILED DESIGN STUDY ON
UPGRADING INTER-URBAN HIGHWAY SYSTEM
ALONG THE PAN-PHILIPPINE HIGHWAY
(Plaridel, Cabanatuan and San Jose Bypasses)

PLARIDEL BYPASS - CONTRACT PACKAGE III

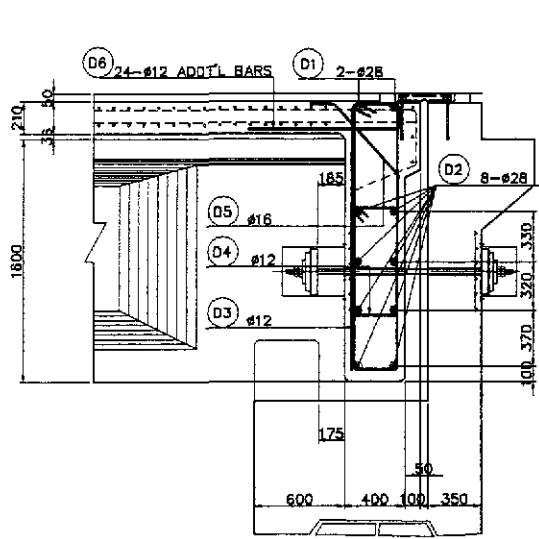
SCALE :
AS SHOWN
FULL SIZE A1

SHEET CONTENTS :
BRIDGE NO. 8 ANGAT RIVER BRIDGE
DETAILS OF AASHTO GIRDER TYPE V
REINF., EXP.-FIX (1 OF 2)
(ULTIMATE STAGE)

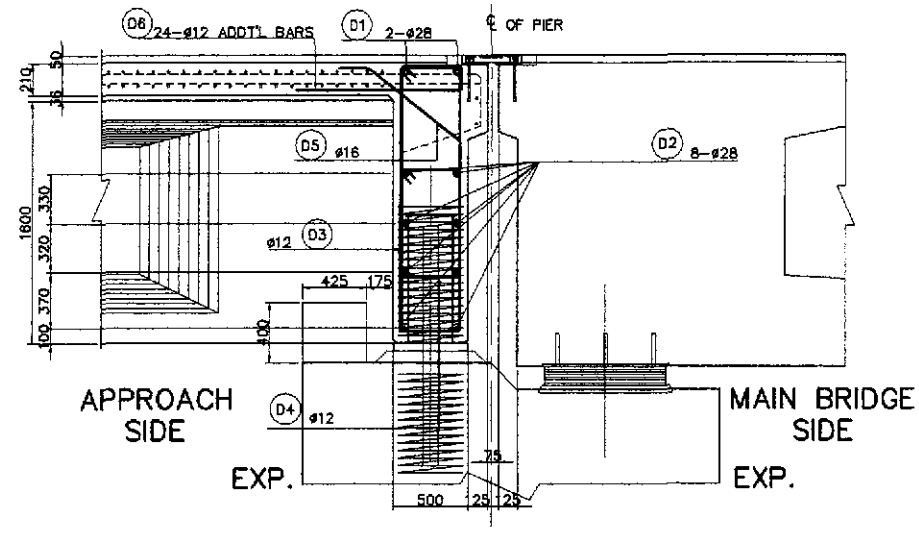
SHEET NO. :
B8A-30



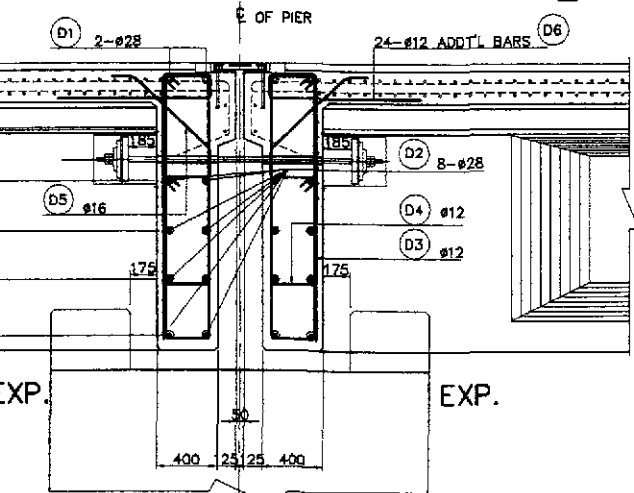
A TRANSVERSE SECTION
SCALE 1:30



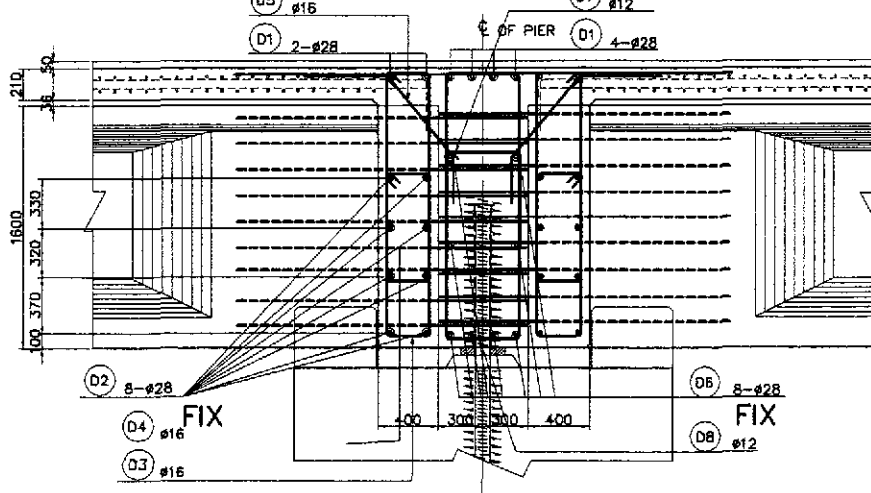
B SECTION @ ABUTMENT
SCALE 1:25



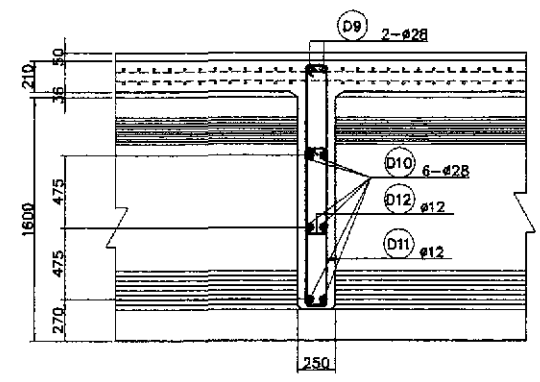
C SECTION @ P14 & P21 (EXP. PIERS)
SCALE 1:25



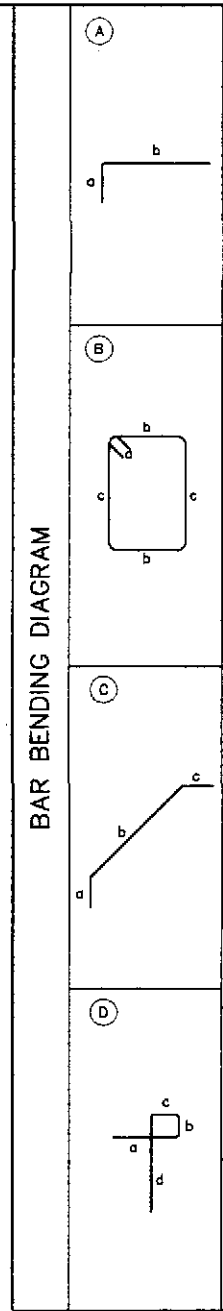
D SECTION @ EXP. PIER
SCALE 1:25



E SECTION @ FIXED PIER
SCALE 1:25



F SECTION @ INTERMEDIATE DIAPHRAGM
SCALE 1:25



SCHEDULE OF REINFORCEMENT														
LOCATION	BAR MARK	SIZE (mm)	BEND TYPE	DIMENSION(mm) OUT TO OUT						LENGTH (mm)	NO. REQ'D.	UNIT WEIGHT (kg/m)	WEIGHT (kg)	
				a	b	c	d	e	f				GRADE 40	GRADE 60
END DIAPHRAGM @ EXP. PIER	D1	28	STR	9550						9550	4	4.834		184.66
	D2	28	STR	1550						1550	48	4.834		359.65
	D2a	28	A	300	1000					1300	32	4.834		201.09
	D2b	28	STR	1300						1300	32	4.834		201.09
	D3	12	B	125	250	1645				4040	48	0.888	172.20	
	D4	12	B	125	250	690				2130	48	0.888	90.79	
END DIAPHRAGM @ EXP. PIER (PIER 14 & PIER 21)	D1	28	STR	9550						9550	4	4.834		184.66
	D2	28	STR	1550						1550	48	4.834		359.65
	D2a	28	A	300	1000					1300	32	4.834		201.09
	D2b	28	STR	1300						1300	32	4.834		201.09
	D3	12	B	125	250	1645				4250	48	0.888	180.73	
	D4	12	B	125	350	690				2330	48	0.888	99.31	
END DIAPHRAGM @ FIXED PIER	D1	28	STR	9550						9550	4	4.834		184.66
	D2	28	STR	1550						1550	48	4.834		359.65
	D2a	28	A	300	1000					1300	32	4.834		201.09
	D2b	28	STR	1300						1300	32	4.834		201.09
	D3	12	B	125	250	1645				4040	48	0.888	172.20	
	D4	12	B	125	250	690				2130	48	0.888	90.79	
END DIAPHRAGM @ ABUTMENT #1	D1	28	STR	9550						9550	2	4.834		92.33
	D2	28	STR	1550						1550	24	4.834		179.82
	D2a	28	A	300	1000					1300	16	4.834		100.55
	D2b	28	STR	1300						1300	16	4.834		100.55
	D3	12	B	125	250	1645				4040	24	0.888	86.10	
	D4	12	B	125	250	690				2130	24	0.888	45.39	
END DIAPHRAGM @ ABUTMENT #2	D1	28	STR	12550						12550	2	4.834		121.33
	D2	28	STR	1550						1550	24	4.834		239.77
	D2a	28	A	300	1000					1300	16	4.834		100.55
	D2b	28	STR	1300						1300	16	4.834		150.82
	D3	12	B	125	250	1645				4040	24	0.888	114.80	
	D4	12	B	125	250	690				2130	24	0.888	60.53	
INTERMEDIATE DIAPHRAGM FOR 4 CRORDER SUPERSTRUCTURE	D5	16	C	300	700	300				1300	24	1.578	65.64	
	D6	12	D	1000	160	300	1700			3160	24	0.888	67.50	
											TOTAL WEIGHT PER END DIAPHRAGM =	308.47	612.47	
	D9	28	STR	9550						9550	2	4.834		92.33
	D10	28	STR	1550						1550	18	4.834		134.87
	D10a	28	A	300	500					800	18	4.834		69.61
INTERMEDIATE DIAPHRAGM FOR 5 CRORDER SUPERSTRUCTURE	D10b	28	STR	800						800	18	4.834		69.61
	D11	12	B	125	150	1550				3650	24	0.888	77.79	
	D12	12	B	125	150	550				1650	24	0.888	35.16	
											TOTAL WEIGHT PER INTERMEDIATE DIAPHRAGM =	112.95	366.42	
	D9	28	STR	12550						12550	2	4.834		121.33
	D10	28	STR	1550						1550	24	4.834		179.82
										TOTAL WEIGHT PER INTERMEDIATE DIAPHRAGM =	150.60	486.78		

THE REINFORCEMENT SHOWN ON THIS TABLE IS FOR REFERENCE ONLY. THE CONTRACTOR SHOULD CHECK AND VERIFY ALL DIMENSIONS, SIZES AND QUANTITIES OF REINFORCEMENT.

	DESIGNED	DATE	SIGNATURE		REPUBLIC OF THE PHILIPPINES			PROJECT AND LOCATION :		SCALE :	SHEET CONTENTS :	SHEET NO. :
	CHECKED	9/27/02	[Signature]		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			THE DETAILED DESIGN STUDY ON				
	SUBMITTED	9/27/02	[Signature]		BUREAU OF DESIGN			UPGRADING INTER-URBAN HIGHWAY SYSTEM				
					OFFICE OF THE SECRETARY			ALONG THE PAN-PHILIPPINE HIGHWAY		AS SHOWN	FULL SIZE A1	B8A-33
					Recommended By:			(Plaridel, Cabanatuan and San Jose Bypasses)				
					Approved By:			PLARIDEL BYPASS - CONTRACT PACKAGE III				
					Submitted By:							
					Reviewed By:							
					Recommended By:							
					Approved By:							
					Submitted By:							
					Reviewed By:							
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					Approved By:							
					Submitted By:							
					Reviewed By:							
					Recommended By:							
					Approved By:							