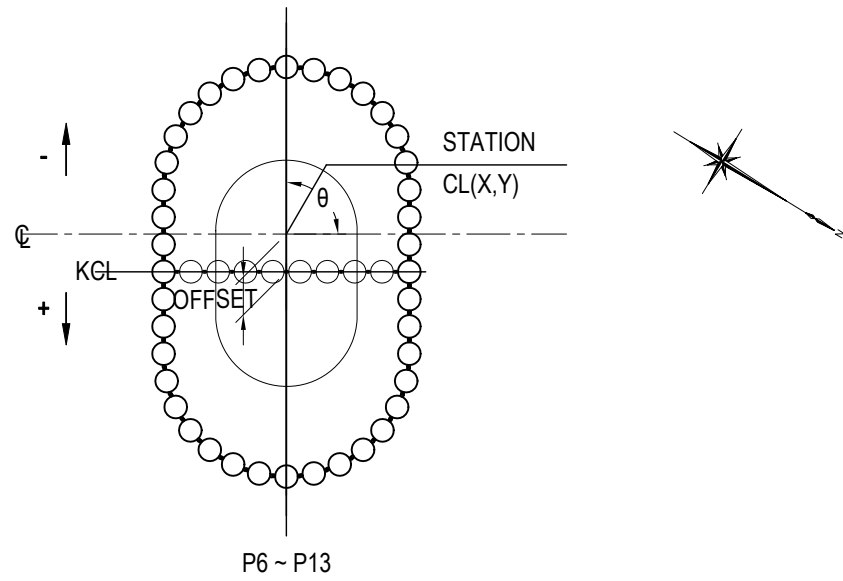
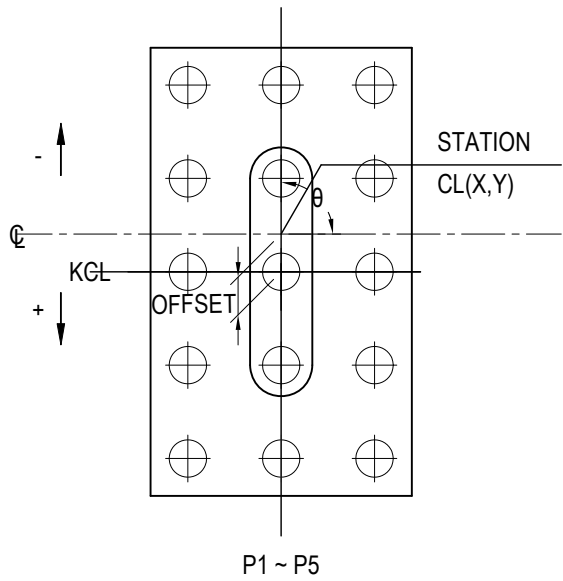
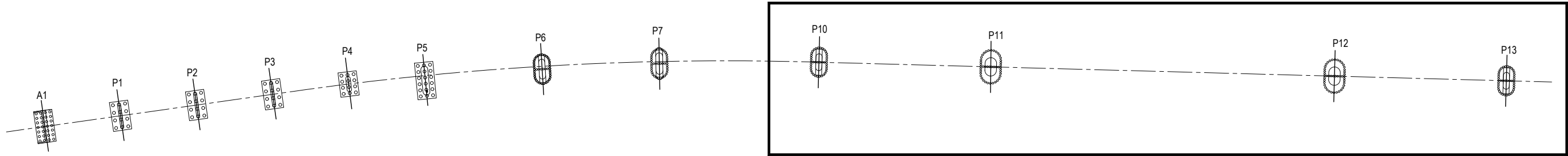


COORDINATES OF SUBSTRUCTURE (P10-P13)

NAME		A1	P1	P2	P3	P4	P5	P6	P7	P10	P11	P12	P13
STATION		0+357.000	0+407.000	0+457.000	0+507.000	0+557.000	0+607.000	0+683.500	0+760.000	0+864.000	0+976.000	1+200.000	1+312.000
CL	X	1857470.9529	1857509.4534	1857547.9538	1857586.4543	1857625.1499	1857664.5904	1857726.3888	1857789.8660	1857878.6819	1857975.6469	1858169.5771	1858266.5422
	Y	205539.2366	205507.3350	205475.4334	205443.5317	205411.8684	205381.1387	205336.0555	205293.3684	205239.2819	205183.2304	205071.1274	205015.0759
AZIMUTH		230d 21' 17.0"	230d 21' 17.0"	230d 21' 17.0"	230d 21' 17.0"	231d 21' 36.9"	232d 47' 33.6"	234d 59' 3.2"	237d 10' 32.8"	239d 58' 10.5"	239d 58' 10.5"	239d 58' 10.5"	239d 58' 10.5"
SKEW ANGLE (θ)		90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"	90d 00' 00"
OFFSET (m)		0.000	0.000	0.000	0.000	0.000	+4.000	+1.832	+0.538	0.000	0.000	0.000	0.000



STEEL CABLE STAYED BRIDGE

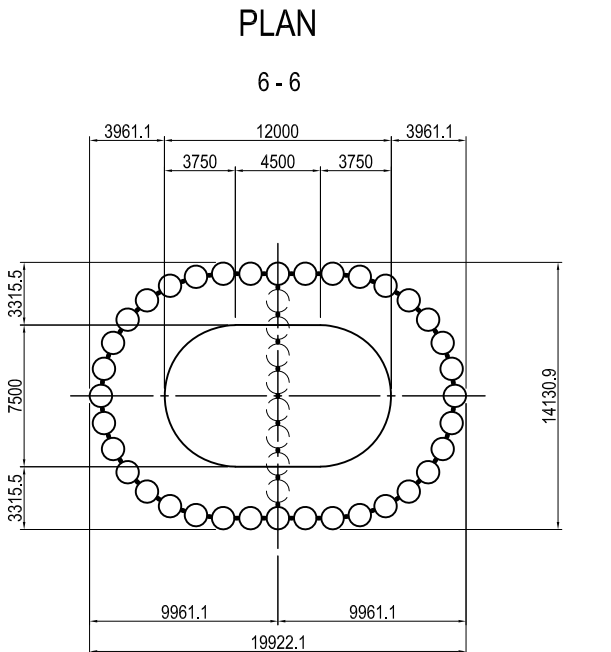
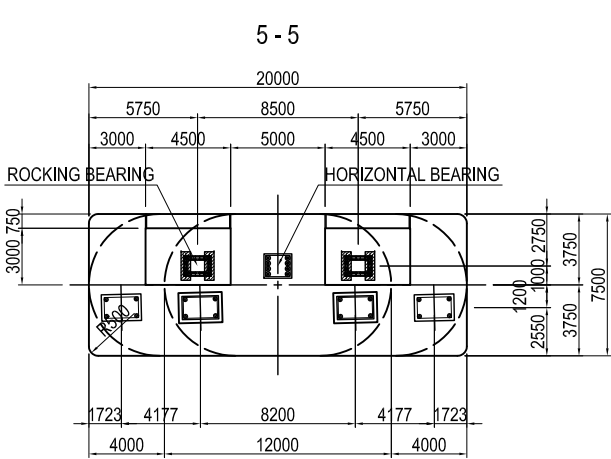
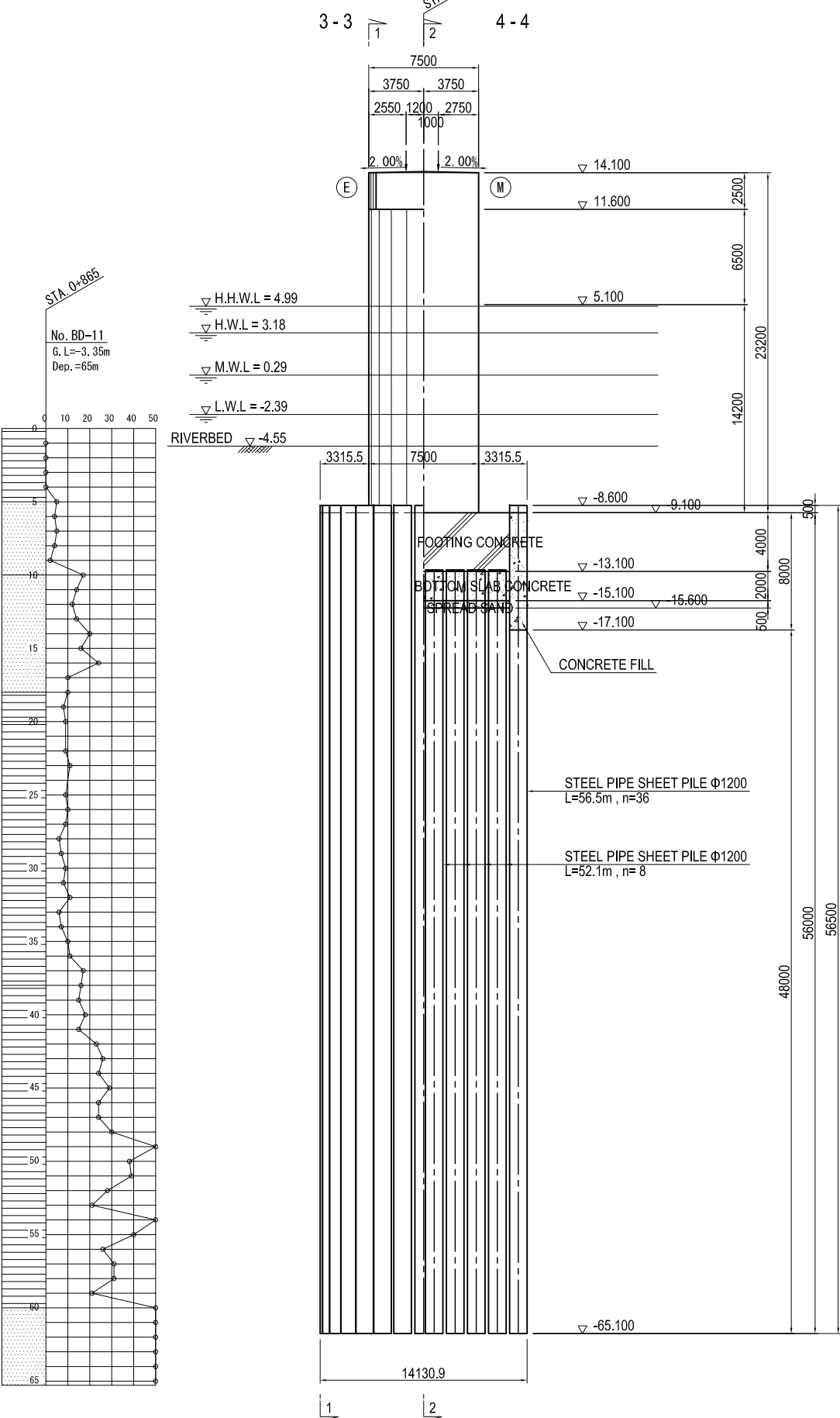
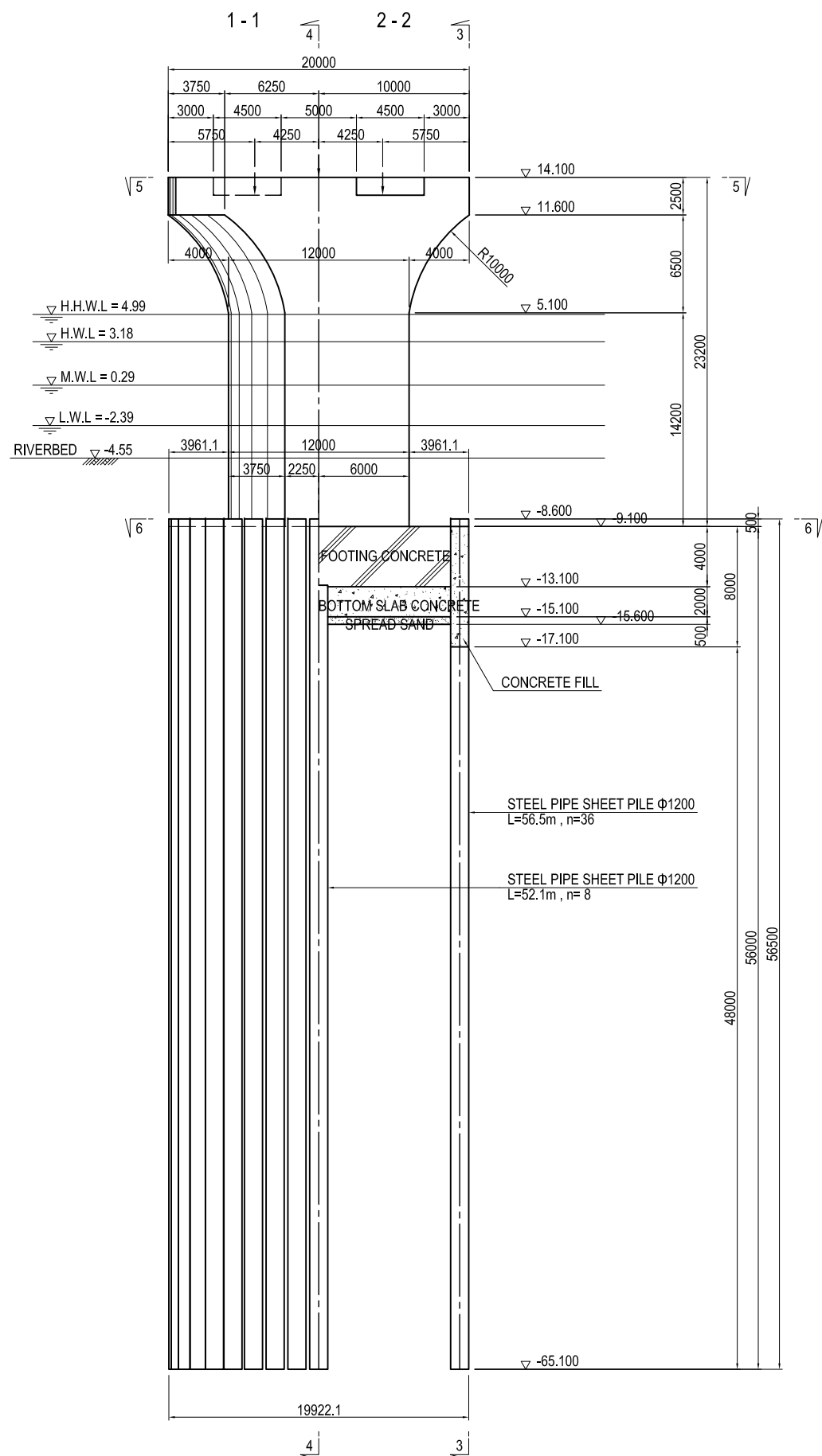


GENERAL ARRANGEMENT OF P10 PIER (1)S=1:400

FRONT ELEVATION

SIDE ELEVATION

PLAN



USE MATERIALS

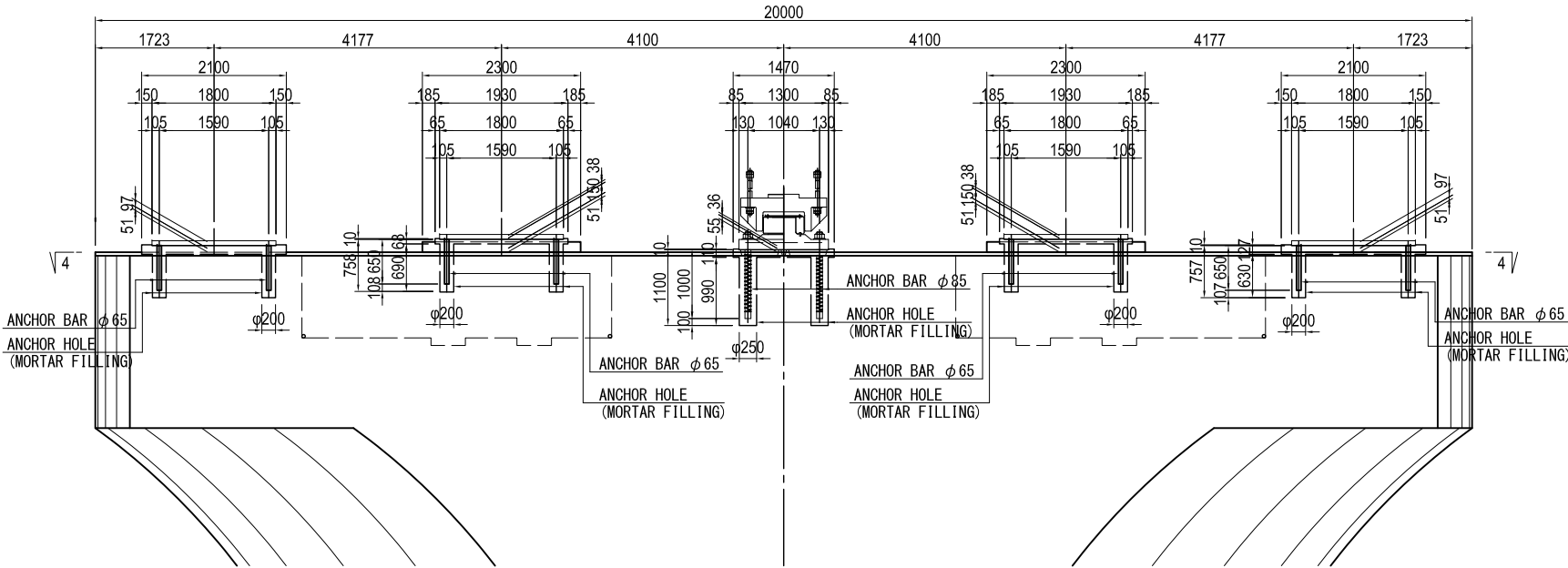
	CONCRETE	BAR
BEAM+ COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

GENERAL ARRANGEMENT OF P10 PIER (2) S=1:100

DETAIL OF BEARING AND ANCHOR

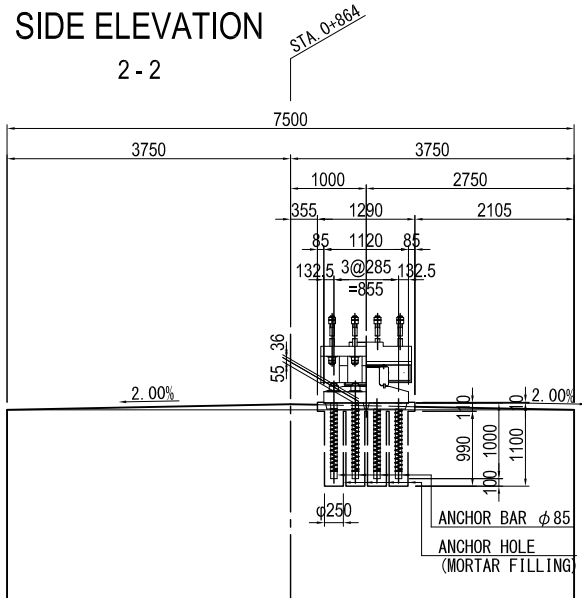
FRONT ELEVATION

1-1



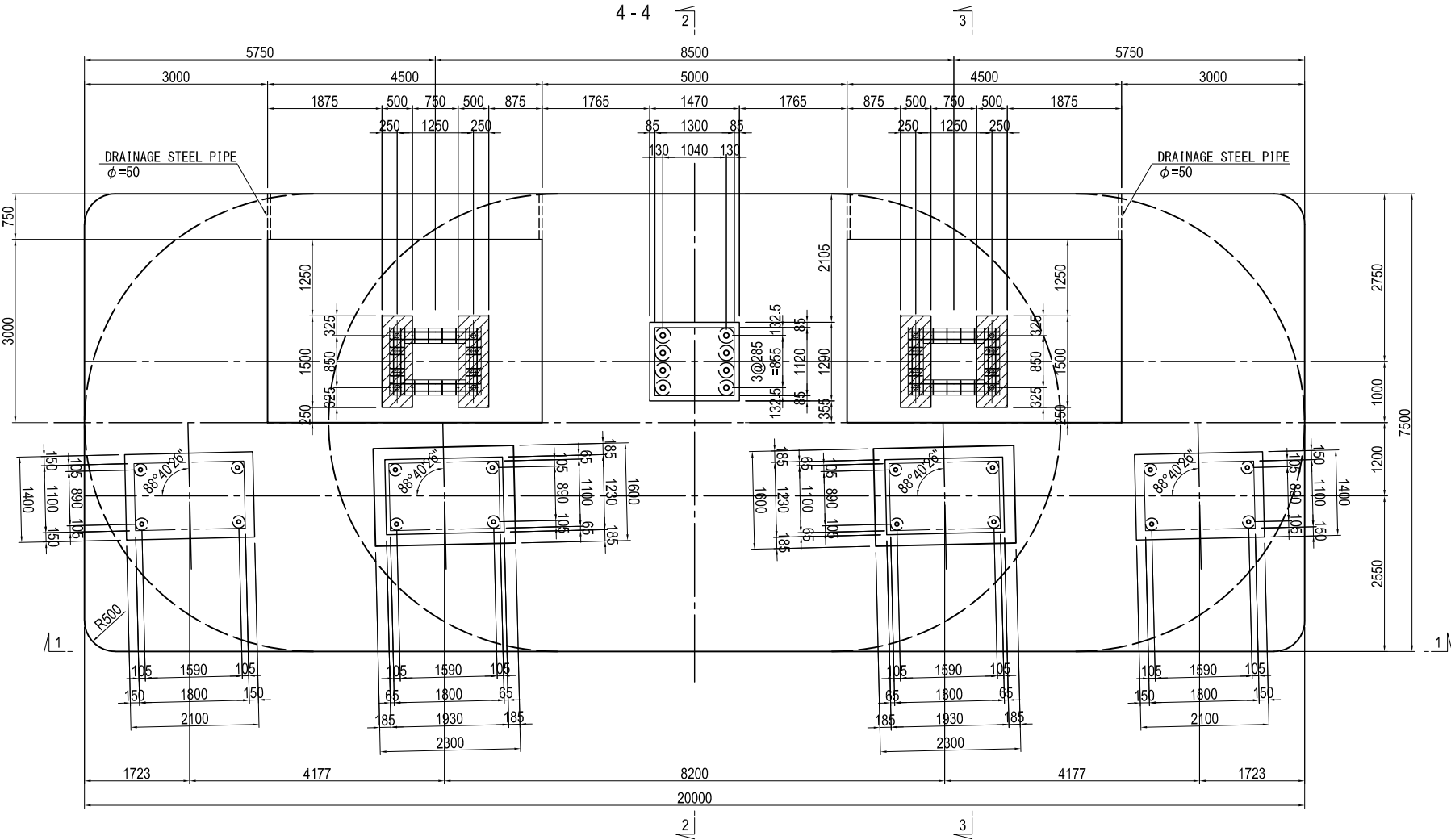
SIDE ELEVATION

2-2

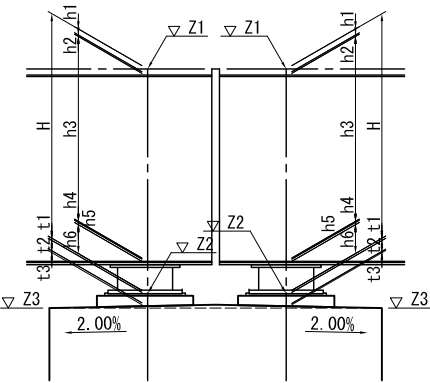
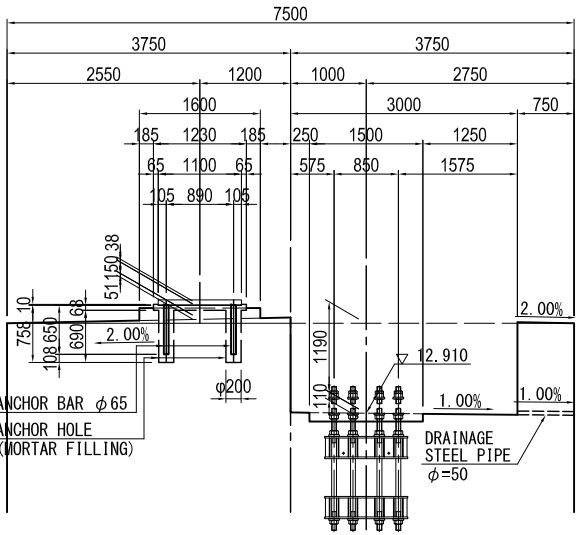


PLAN

4-4



3-3

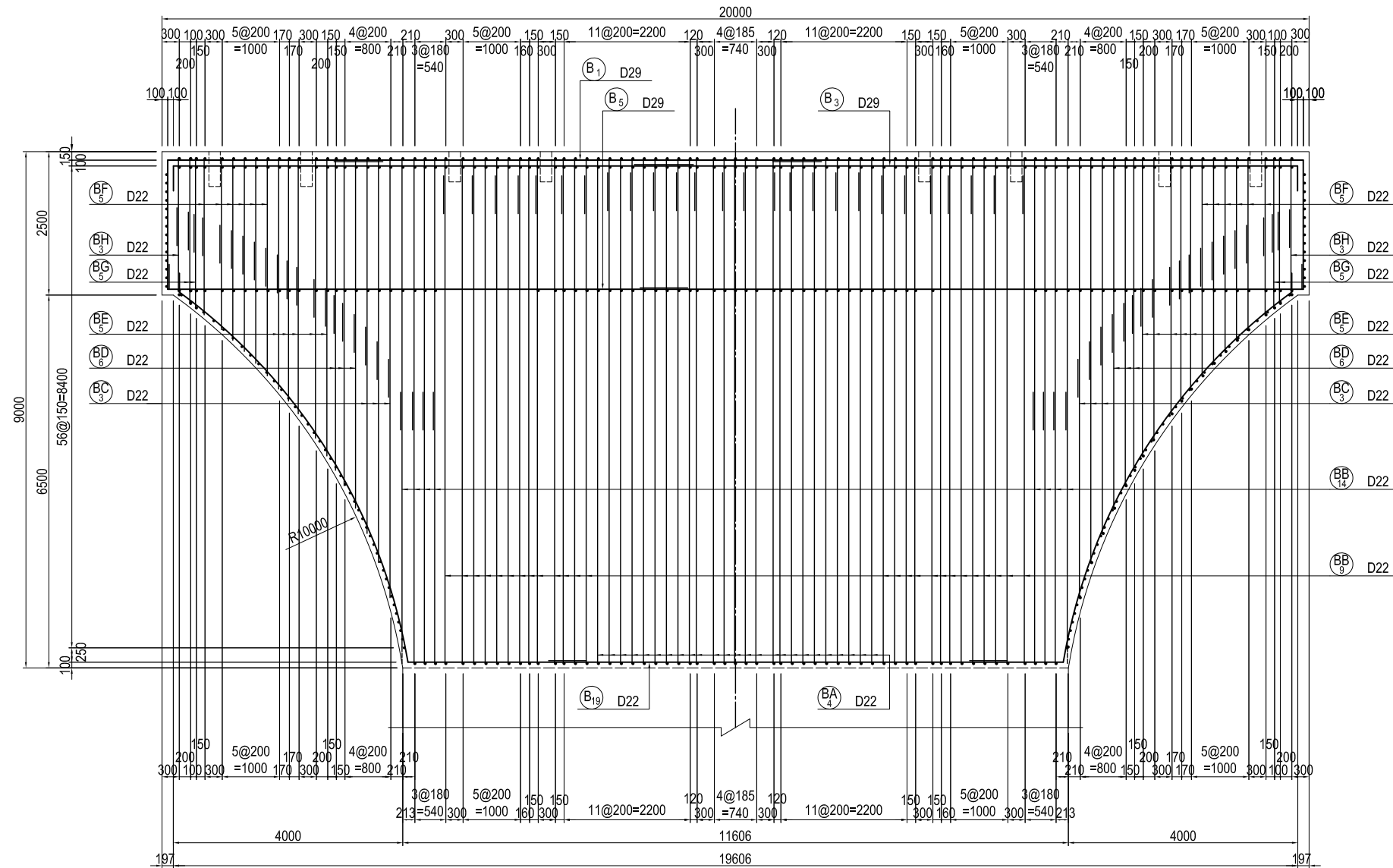


		P10 PIER (S2)				P10 PIER (S1)		
		G1-S	G2	G3	G4-S	SL1	CL	SR1
PROPOSED HEIGHT	Z1	17.626	17.709	17.709	17.626	17.712	17.797	17.712
PAVEMENT	h1	0.080	0.080	0.080	0.080	0.080	0.080	0.080
UPPER FLANGE	h2	0.016	0.016	0.016	0.016	—	—	—
GIRDER	h3	2.706	2.700	2.700	2.706	2.615	2.700	2.615
BOTTOM FLANGE	h4	0.012	0.010	0.010	0.012	0.014	0.014	0.014
SOLE PLATE	h5	0.037	0.037	0.037	0.037	—	0.062	—
BEARING	h6	0.527	0.527	0.527	0.527	—	0.750	—
SUBTOTAL	H	3.378	3.370	3.370	3.378	0.903	3.606	0.903
ELEVATION OF BEARING BOTTOM	Z2	14.248	14.339	14.339	14.248	14.100	14.191	14.100
MORTAR	t1	0.097	0.038	0.038	0.097	—	0.036	—
BEARING BASE	t2	—	0.150	0.150	—	—	—	—
DRAINAGE INCLINE	t3	0.051	0.051	0.051	0.051	—	0.055	—
ELEVATION OF PIER TOP	Z3	14.100	14.100	14.100	14.100	14.100	14.100	14.100

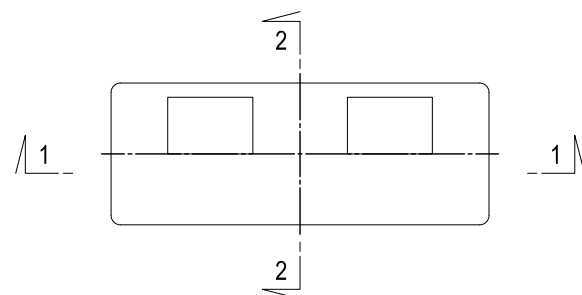
BAR ARRANGEMENT OF P10 PIER (1) S=1:100

BEAM

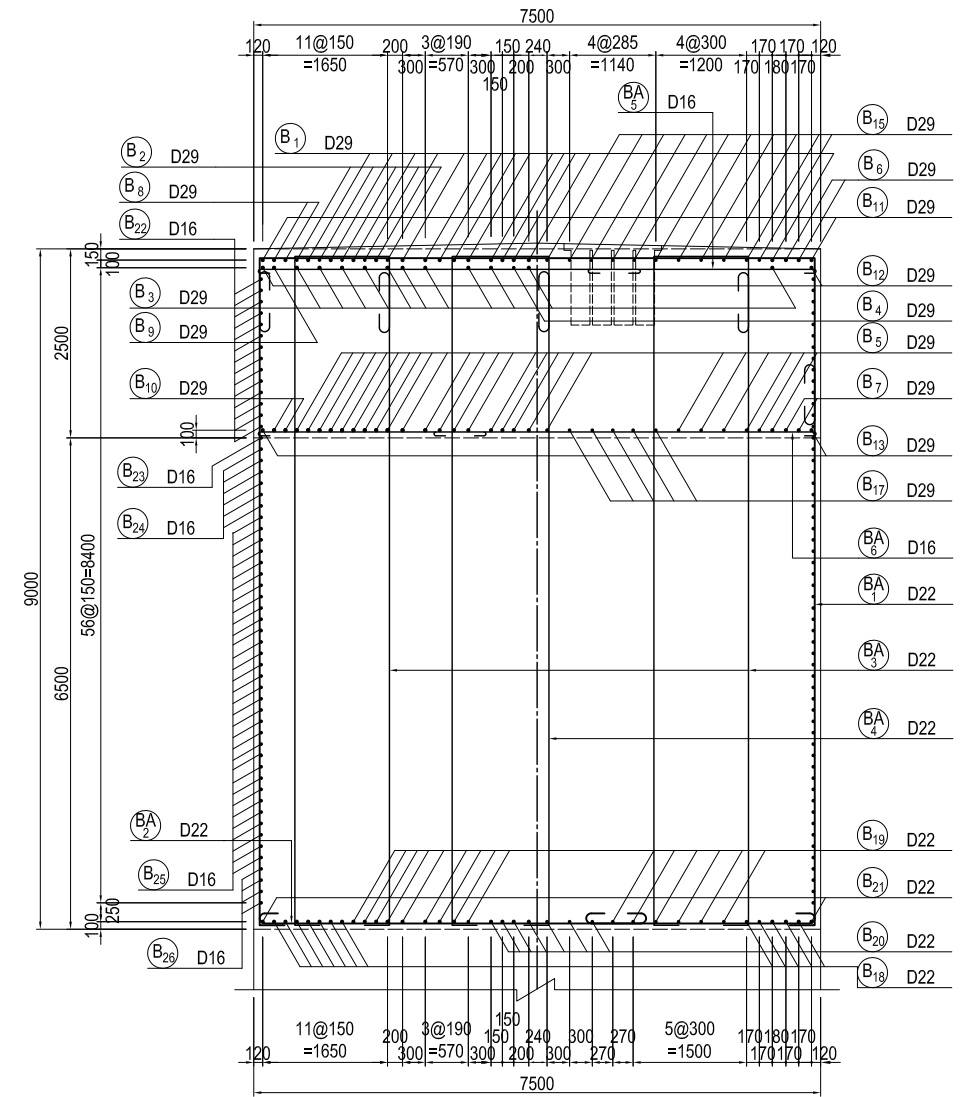
SECTION
1 - 1



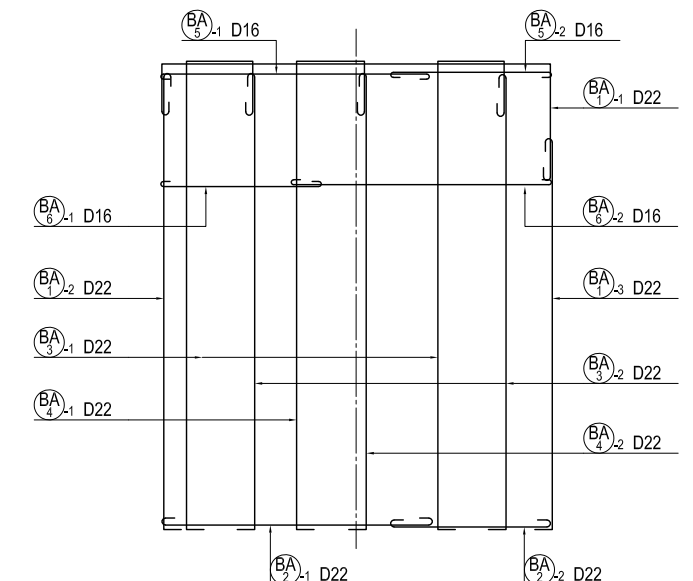
MARKING DIAGRAM



SECTION
2 - 2



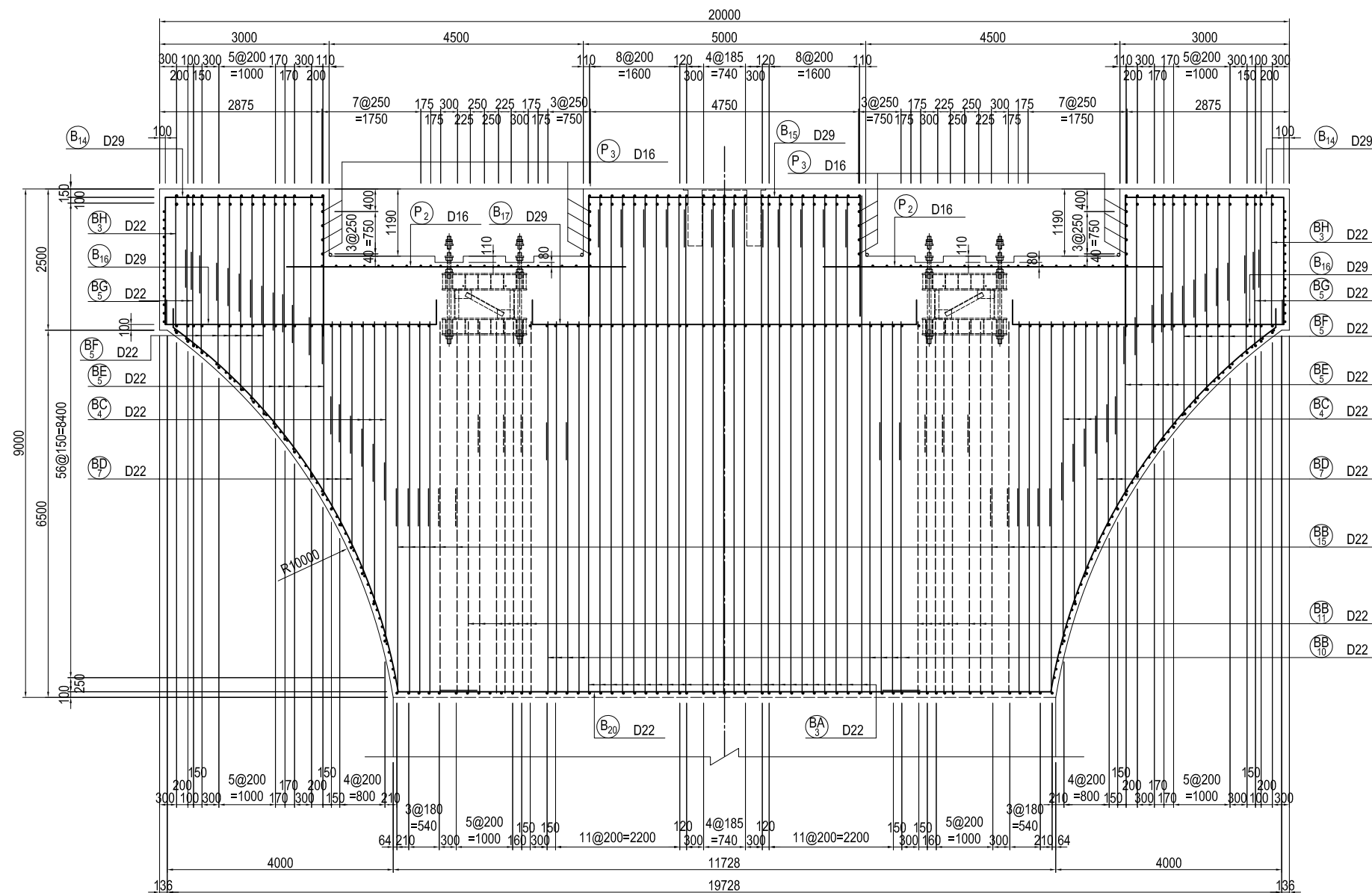
ASSEMBLY DRAWING OF STIRRUP



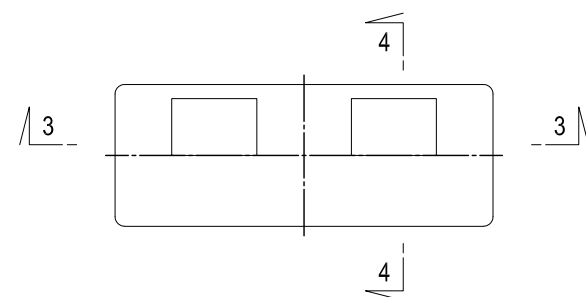
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. TOKUMARU	徳丸 祥明	27. Nov. 2017	BAR ARRANGEMENT OF P10 PIER (1)	1
				CHECKED BY T. HAYAKAWA	平川 知那	28. Nov. 2017		DWG No.
				APPROVED BY Y. SANO	佐野 祐一	29. Nov. 2017		P1-CS-2003

BAR ARRANGEMENT OF P10 PIER (2) S=1:100

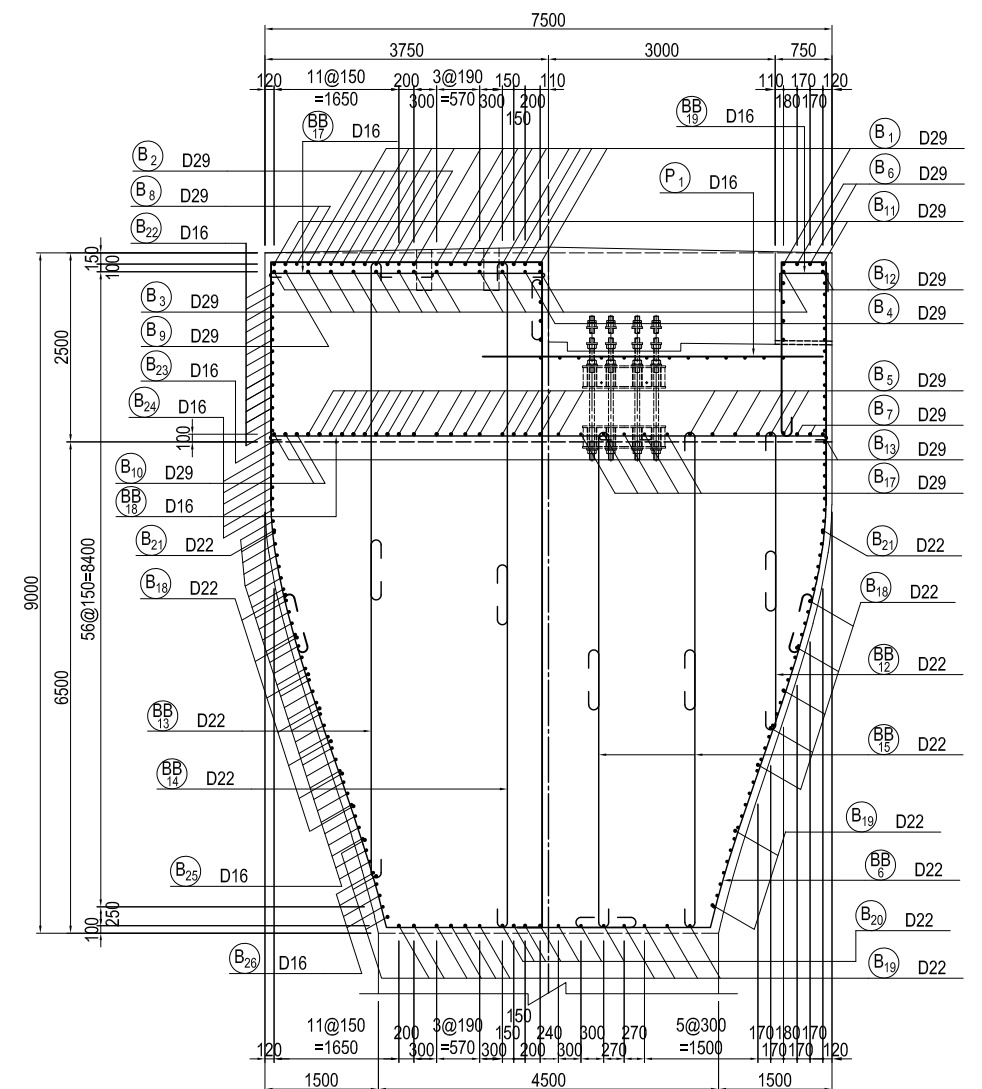
SECTION 3 - 3 BEAM



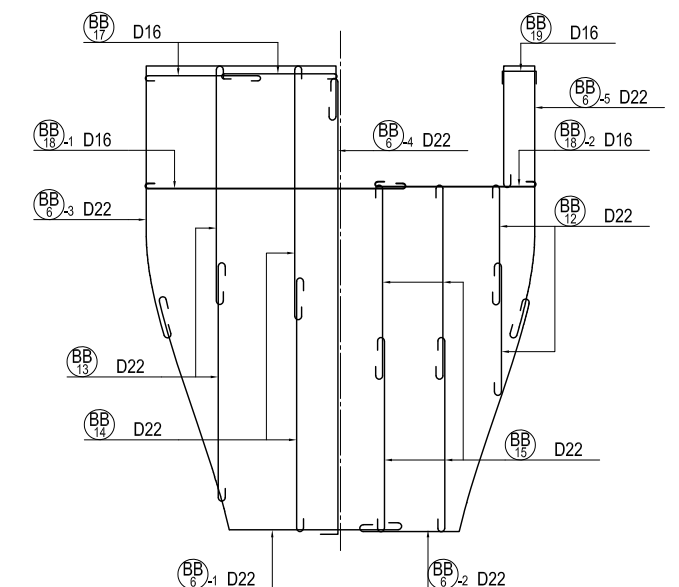
MARKING DIAGRAM



SECTION 4 - 4

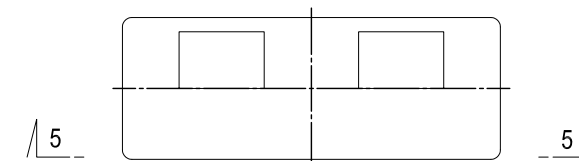


ASSEMBLY DRAWING OF STIRRUP



PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. TOKUMARU	徳丸 祥樹	27. Nov. 2017	BAR ARRANGEMENT OF P10 PIER (2)	1
				CHECKED BY T. HAYAKAWA	平川 知那	28. Nov. 2017		DWG No.
				APPROVED BY Y. SANO	佐野 祐一	29. Nov. 2017		P1-CS-2004

5 - 5



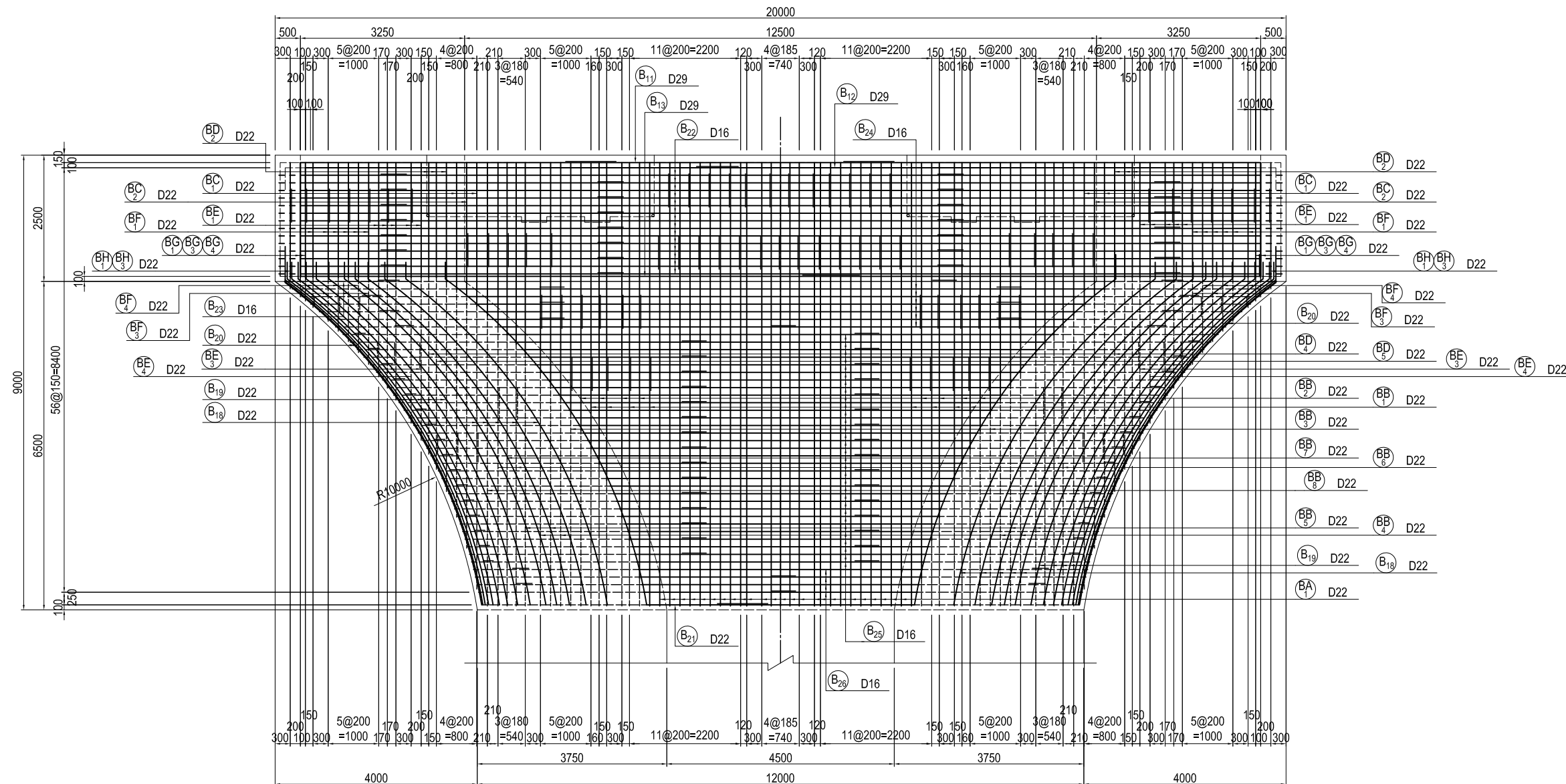
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BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

BAR ARRANGEMENT OF P10 PIER (4) S=1:100

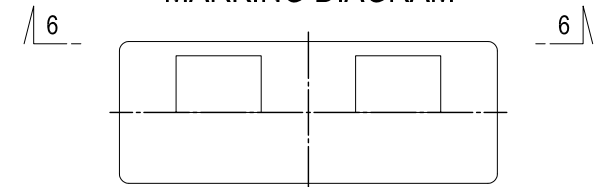
BEAM

FRONT ELEVATION

6 - 6



MARKING DIAGRAM



USE MATERIALS

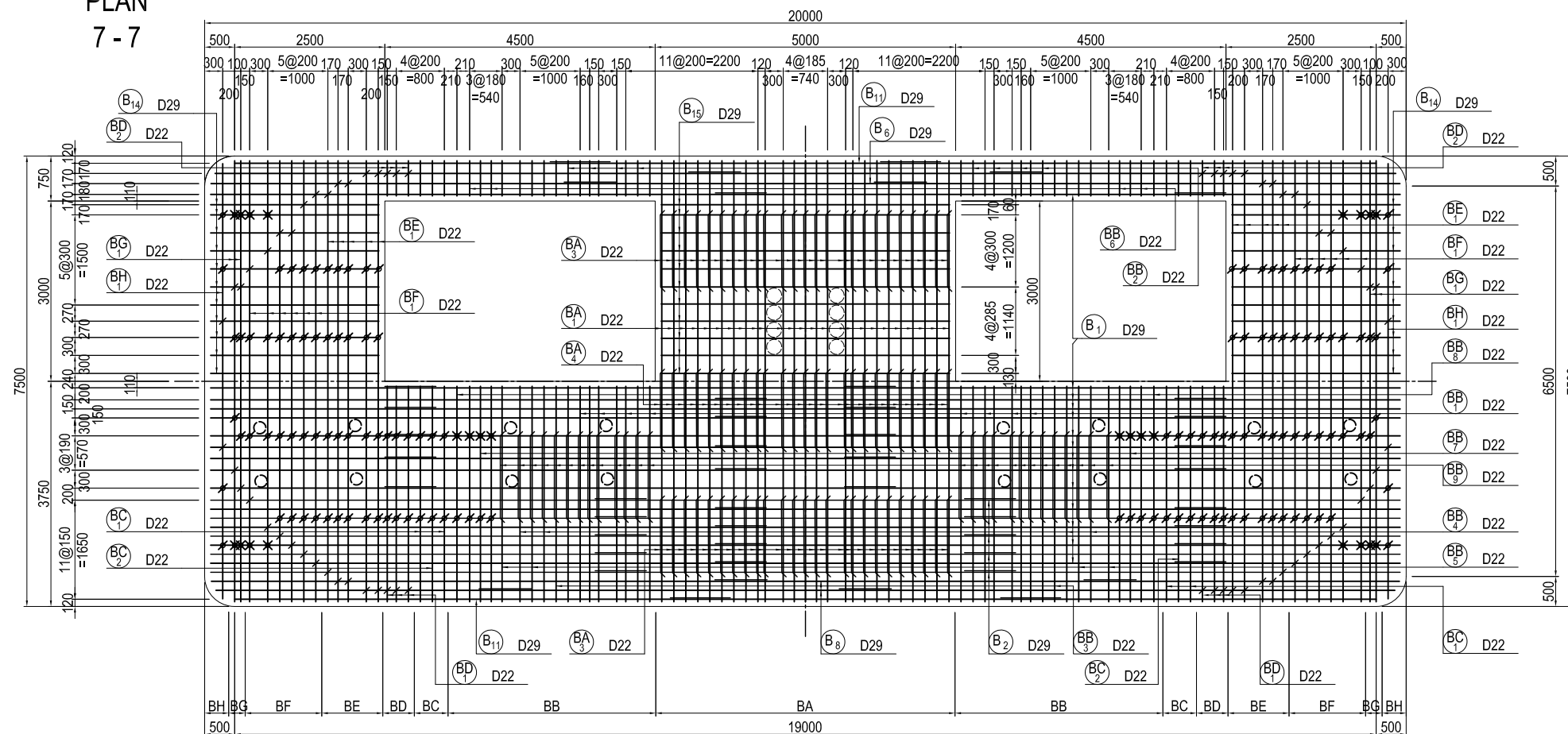
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov. 2017 28. Nov. 2017 29. Nov. 2017	BAR ARRANGEMENT OF P10 PIER (4)	1 DWG No. P1-CS-2006

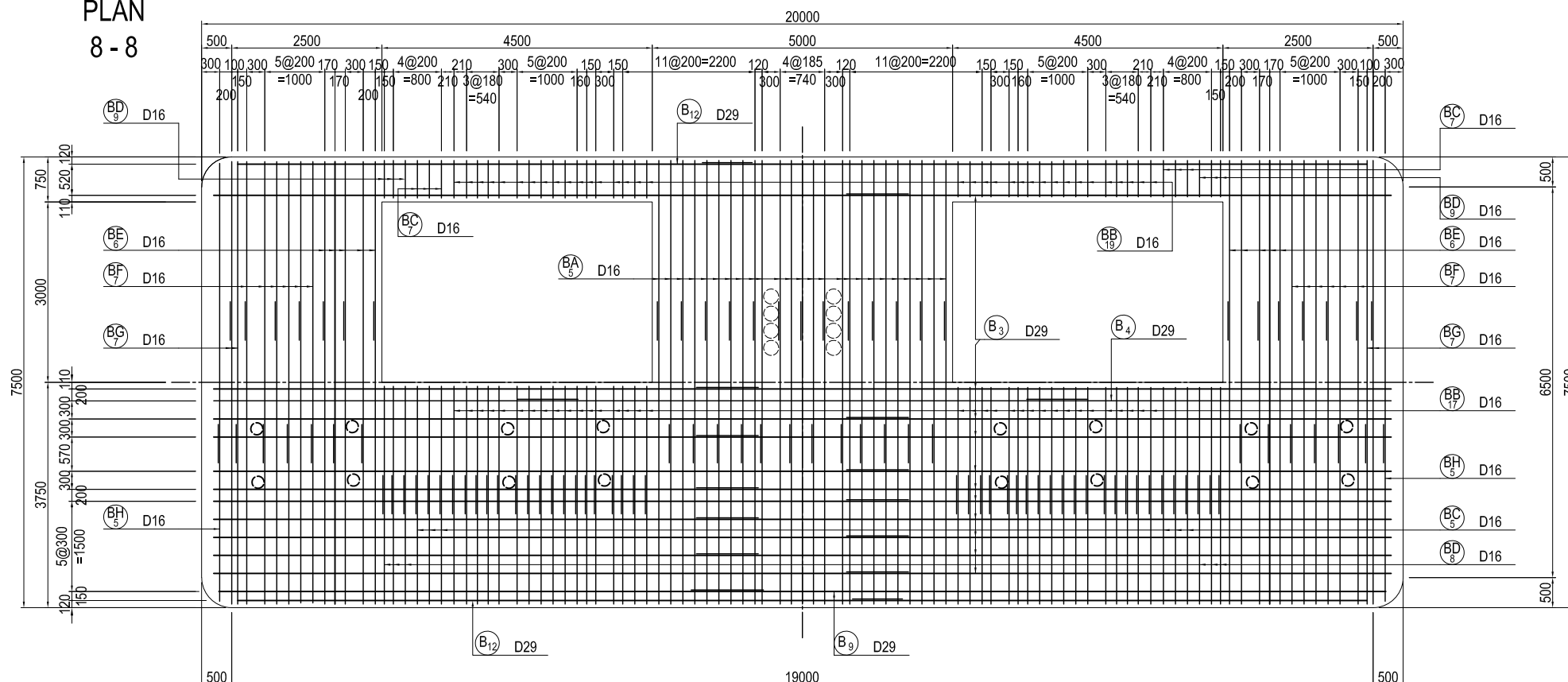
BAR ARRANGEMENT OF P10 PIER (5) S=1:100

BEAM

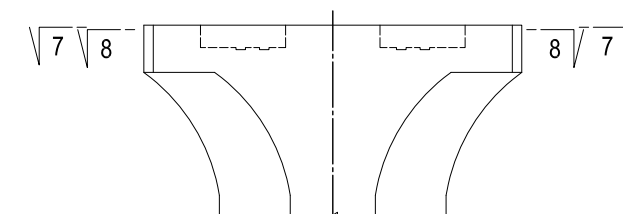
PLAN
7-7



PLAN
8-8



MARKING DIAGRAM



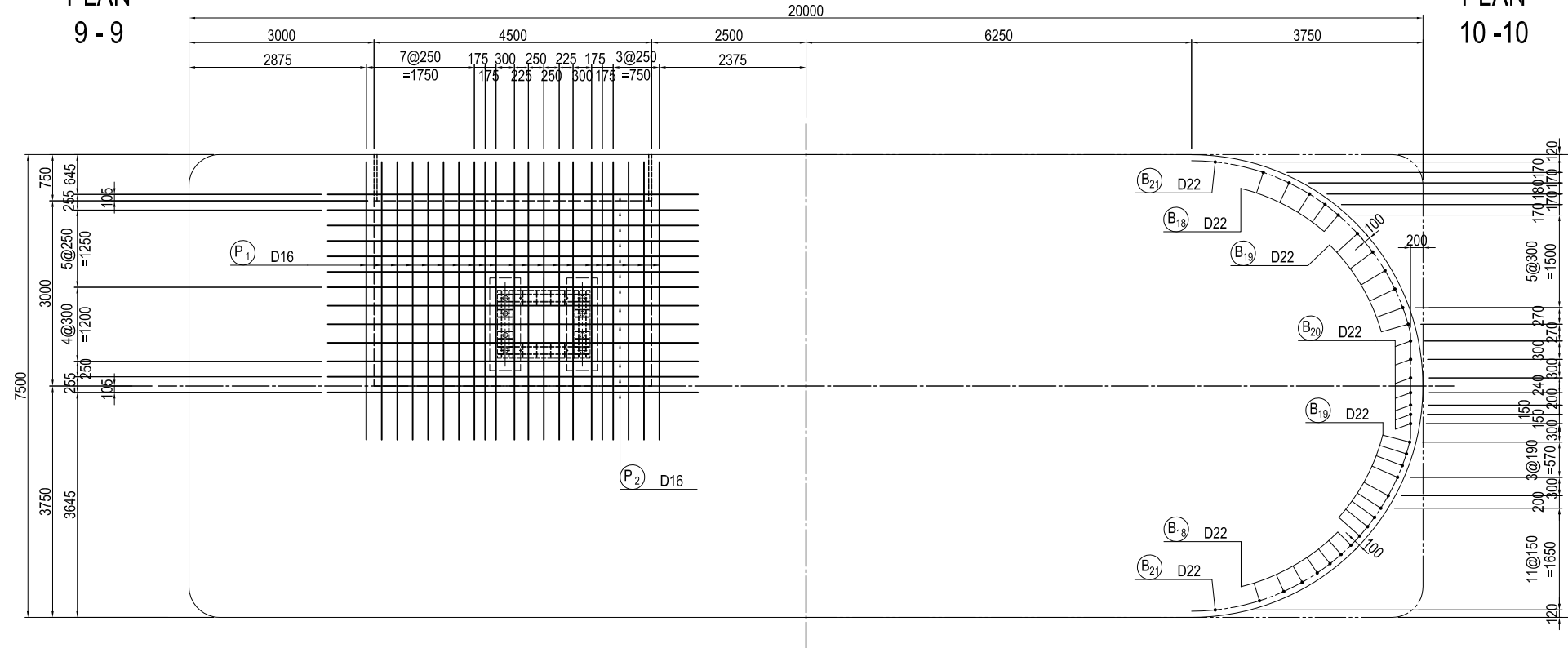
USE MATERIALS

BEAM-COLUMN	CONCRETE	BAR
	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P10 PIER (6)

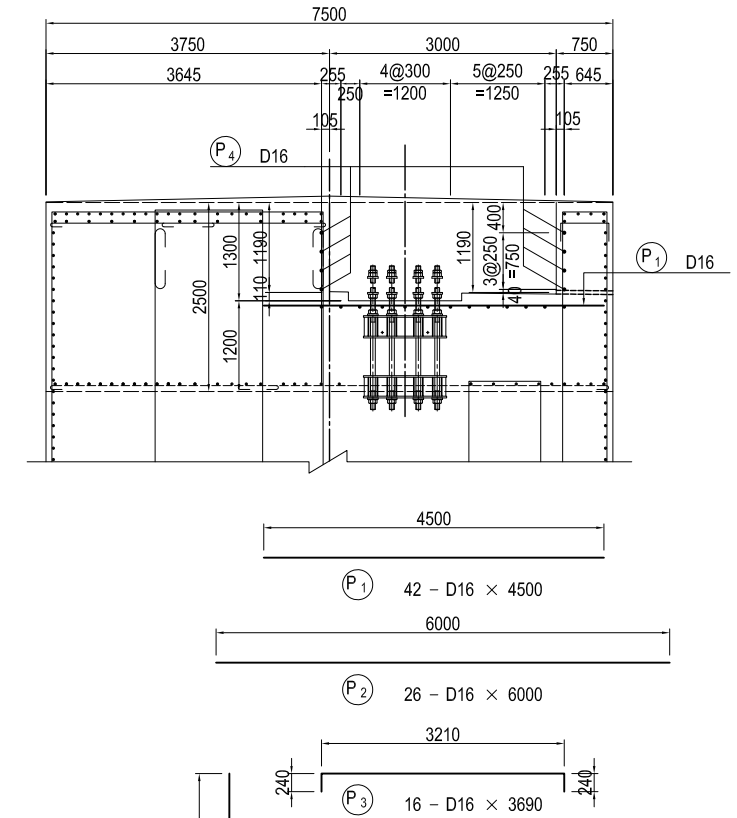
S=1:100

PLAN
9 - 9

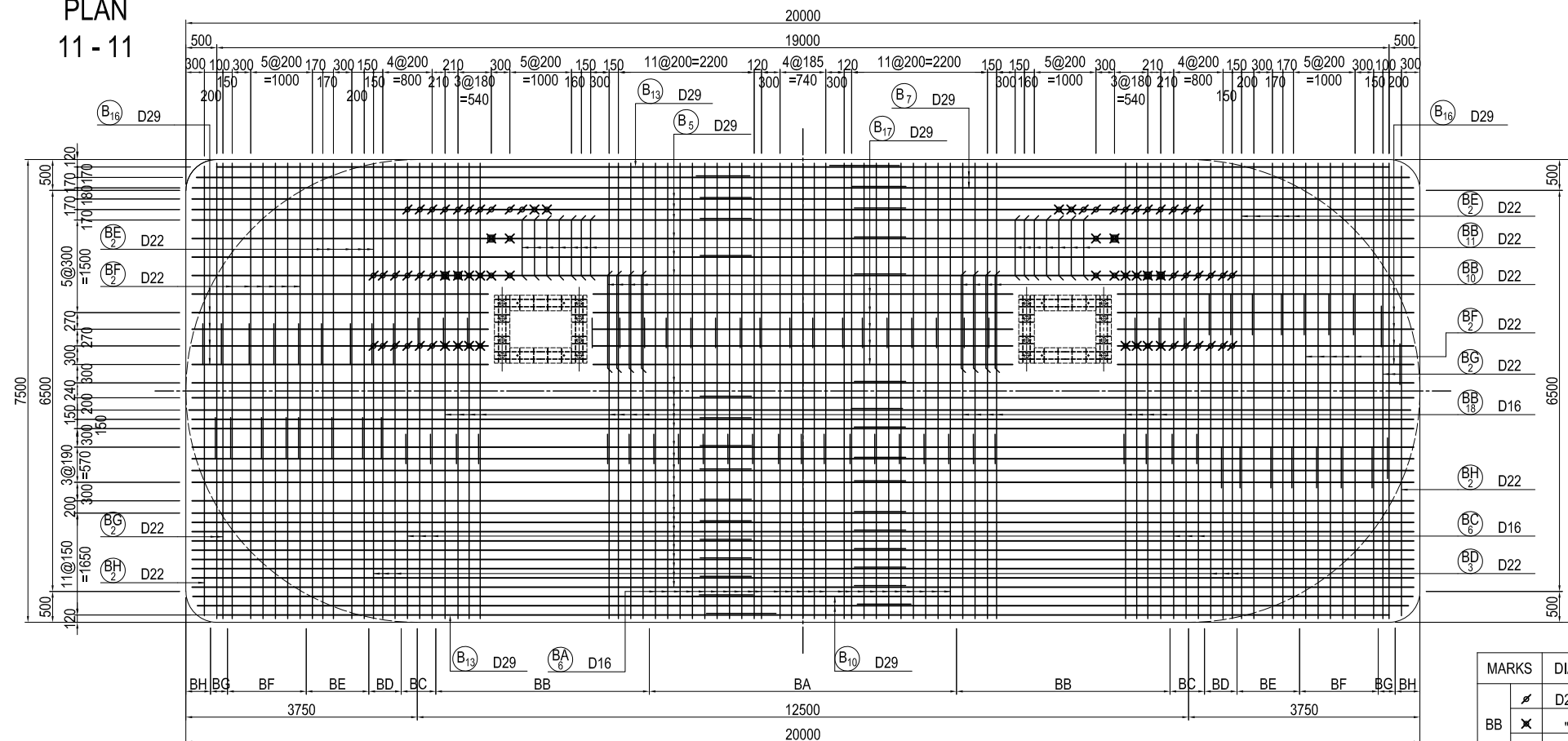


PLAN
10 - 10

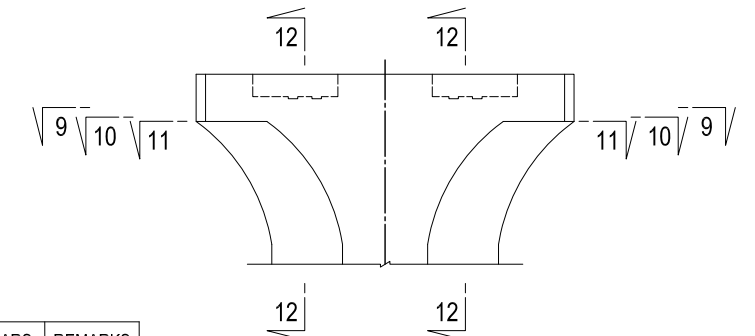
SECTION
12 - 12



PLAN
11 - 11



MARKING DIAGRAM



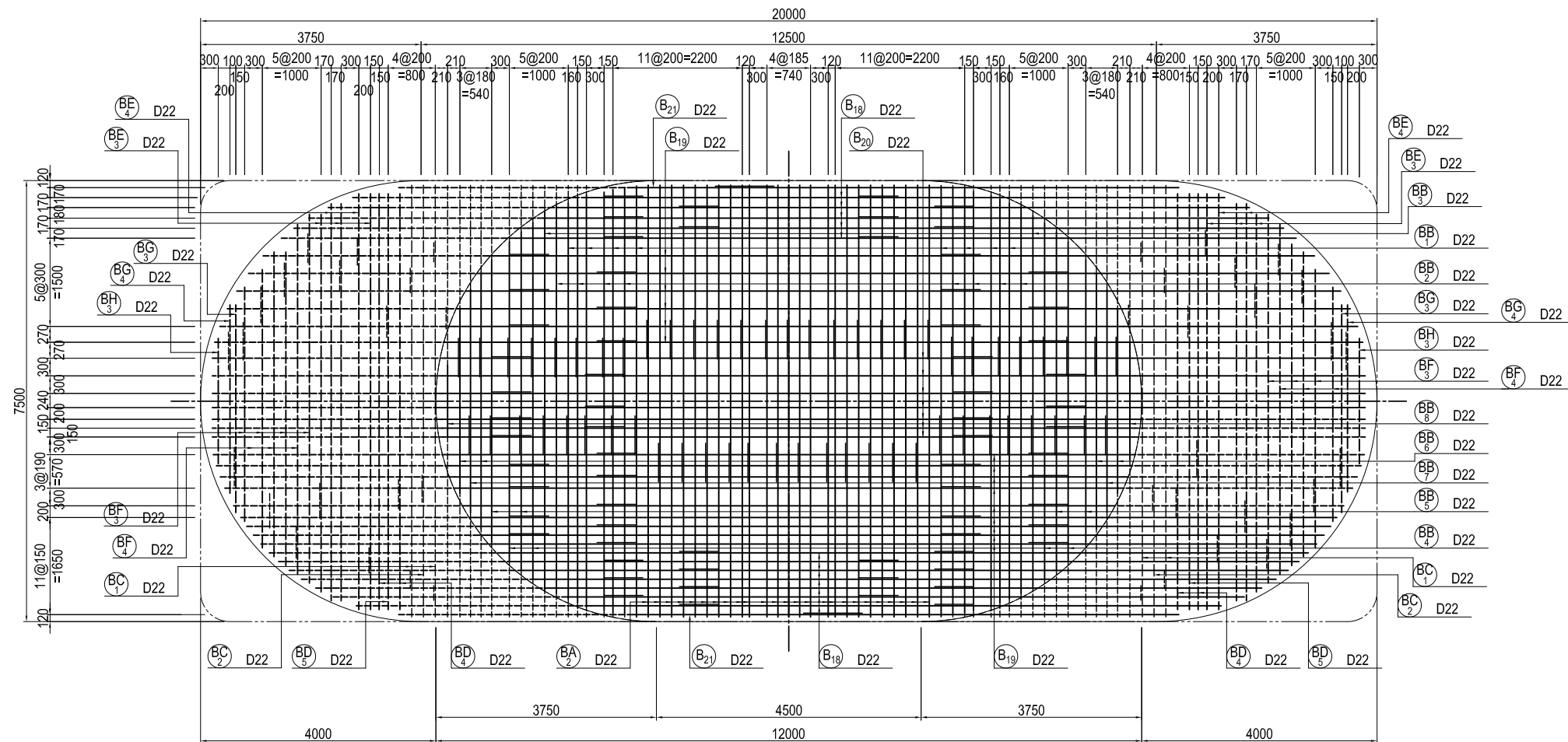
USE MATERIALS

BEAM-COLUMN	CONCRETE	BAR
	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

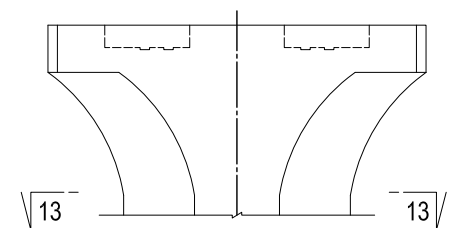
MARKS	DIA.	NOS. OF BARS	REMARKS
BB	D22	14 x 2 = 28	(BB)
BB	"	22 x 2 = 44	(BB)
BB	"	6 x 2 = 12	(BB)
BC	"	18 x 2 = 36	(BC)
BD	"	12 x 2 = 24	(BD)

BAR ARRANGEMENT OF P10 PIER (7) S=1:100
BEAM

PLAN
13 - 13



MARKING DIAGRAM



USE MATERIALS

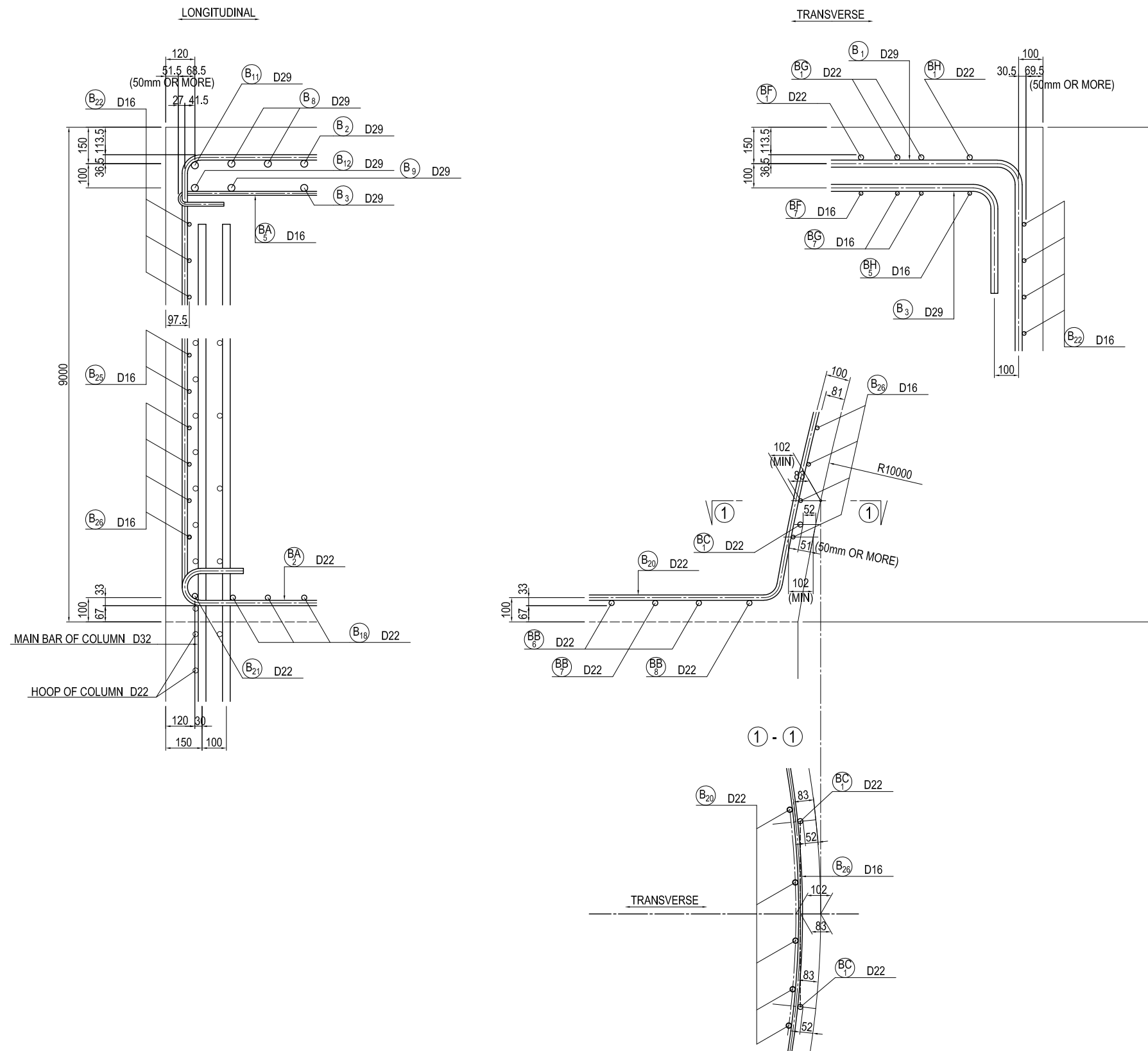
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

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 BAR ARRANGEMENT OF P10 PIER (7)	PACKAGE 1 DWG No. P1-CS-2009
				PREPARED BY	S.TOKUMARU	徳丸 祥樹		
				CHECKED BY	T. HAYAKAWA	平川 知那		
				APPROVED BY	Y. SANO	佐野 祐一		

BAR ARRANGEMENT OF P10 PIER (8) S=1:20

BEAM

DETAIL OF BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	BAR ARRANGEMENT OF P10 PIER (8)	1 DWG No. P1-CS-2010

BAR ARRANGEMENT OF P10 PIER (9) S=1:100

BEAM

BAR ARRANGEMENT OF BEARING BASE

< G1-S , G4-S >

SECTION

< G2 , G3 >

SECTION

< CL >

SECTION

A - A

B - B

D - D

E - E

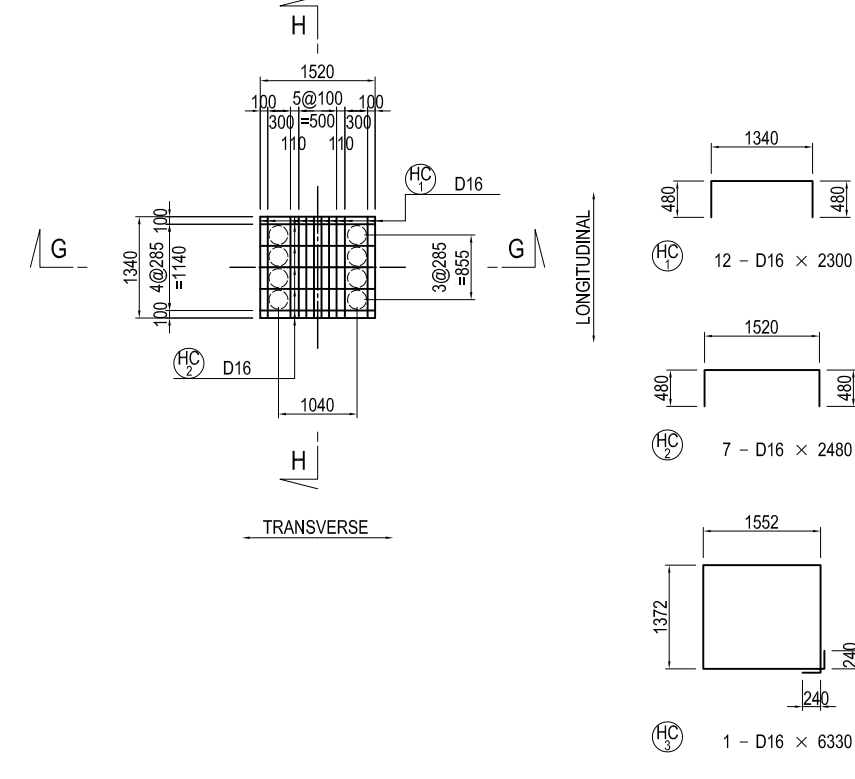
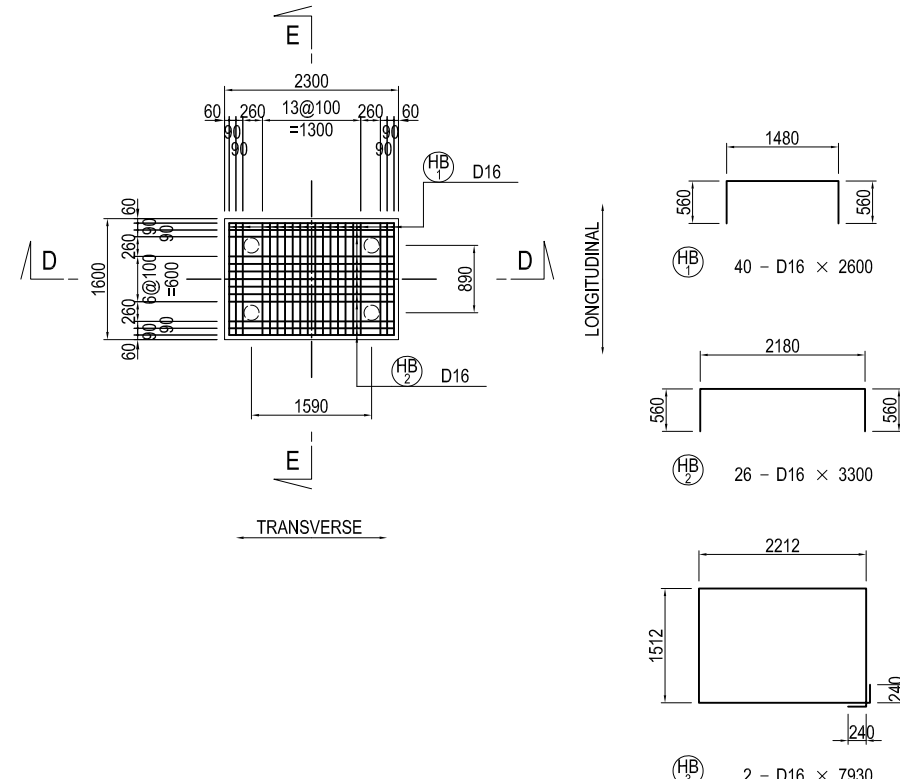
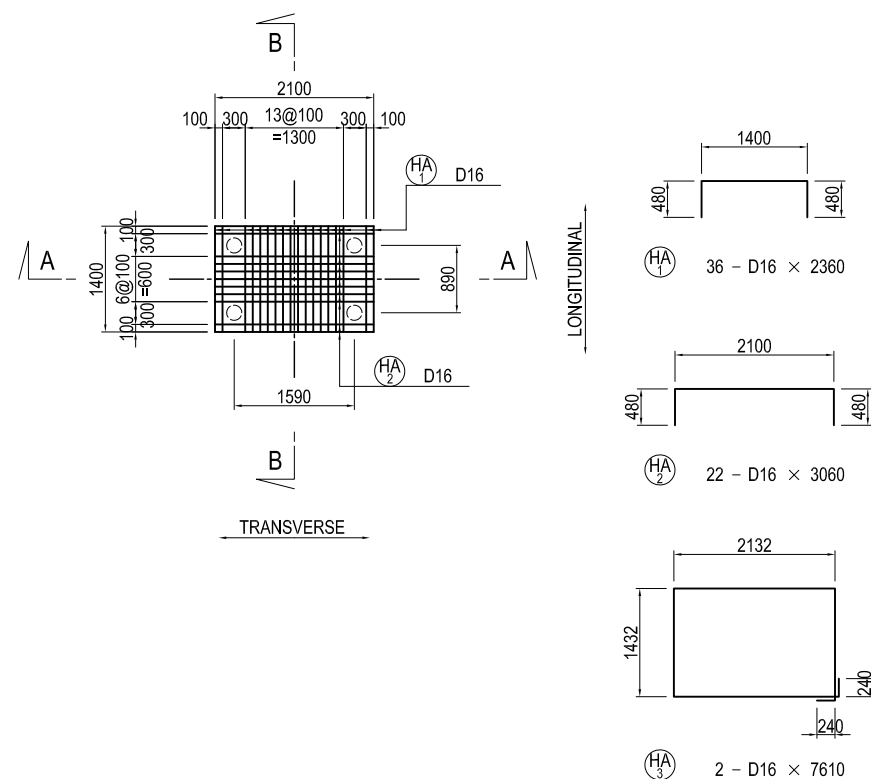
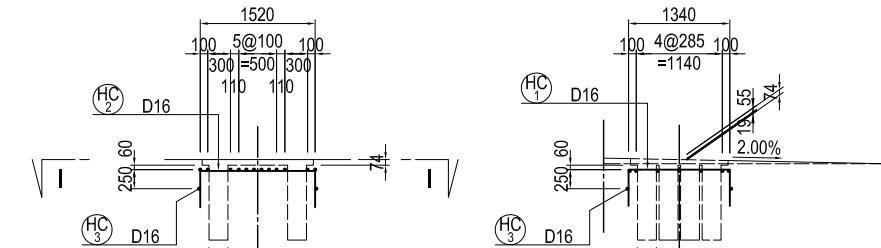
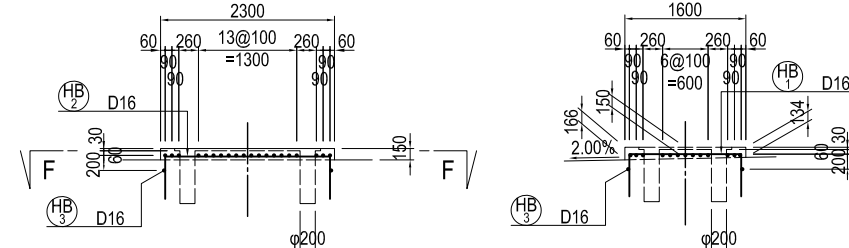
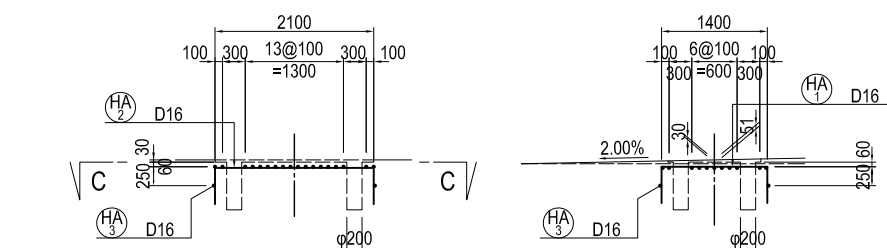
G - G

H - H

PLAN
C - C

PLAN
F - F

PLAN
I - I

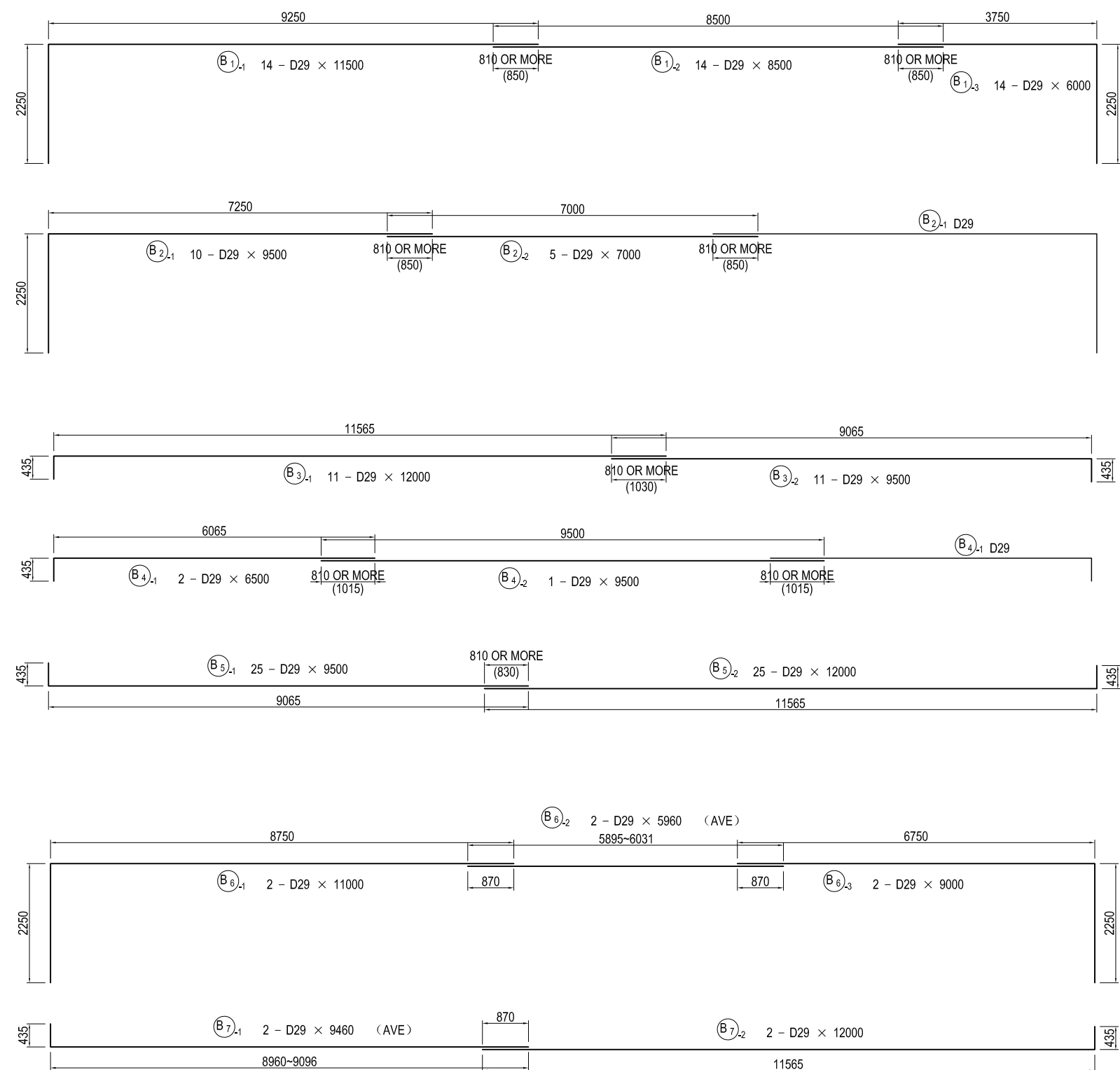


USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA 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. TOKUMARU T. HAYAKAWA Y. SANO	SIGNATURE 徳丸 祥朗 平川 知那 沼崎 祐一	DATE 27. Nov.2017 28. Nov.2017 29. Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF P10 PIER (9)	PACKAGE 1 DWG No. P1-CS-2011
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BAR ARRANGEMENT OF P10 PIER (10) S=1:100
BEAM

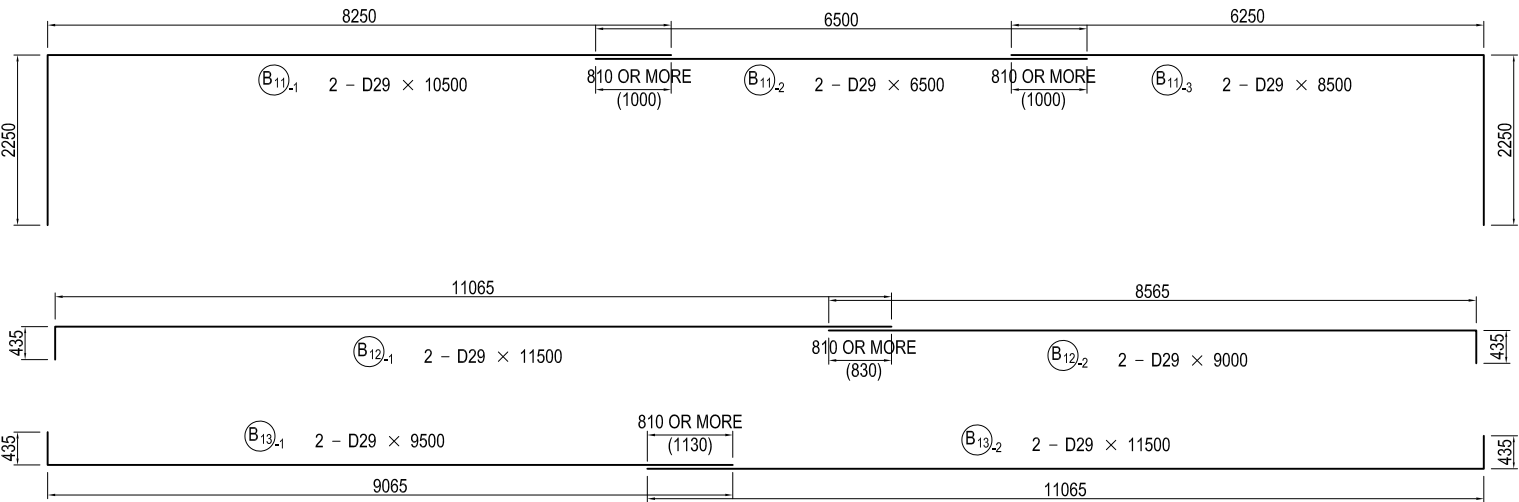
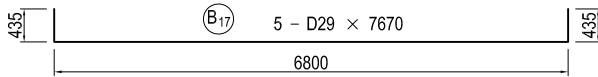
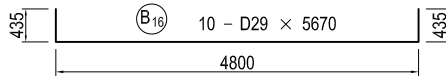
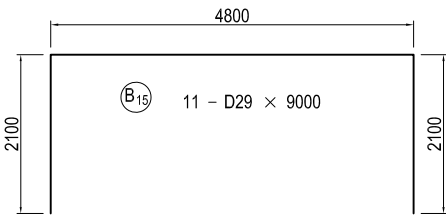
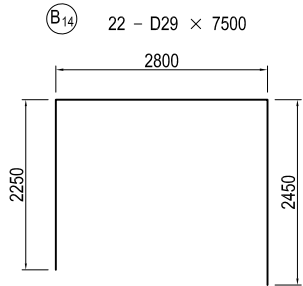
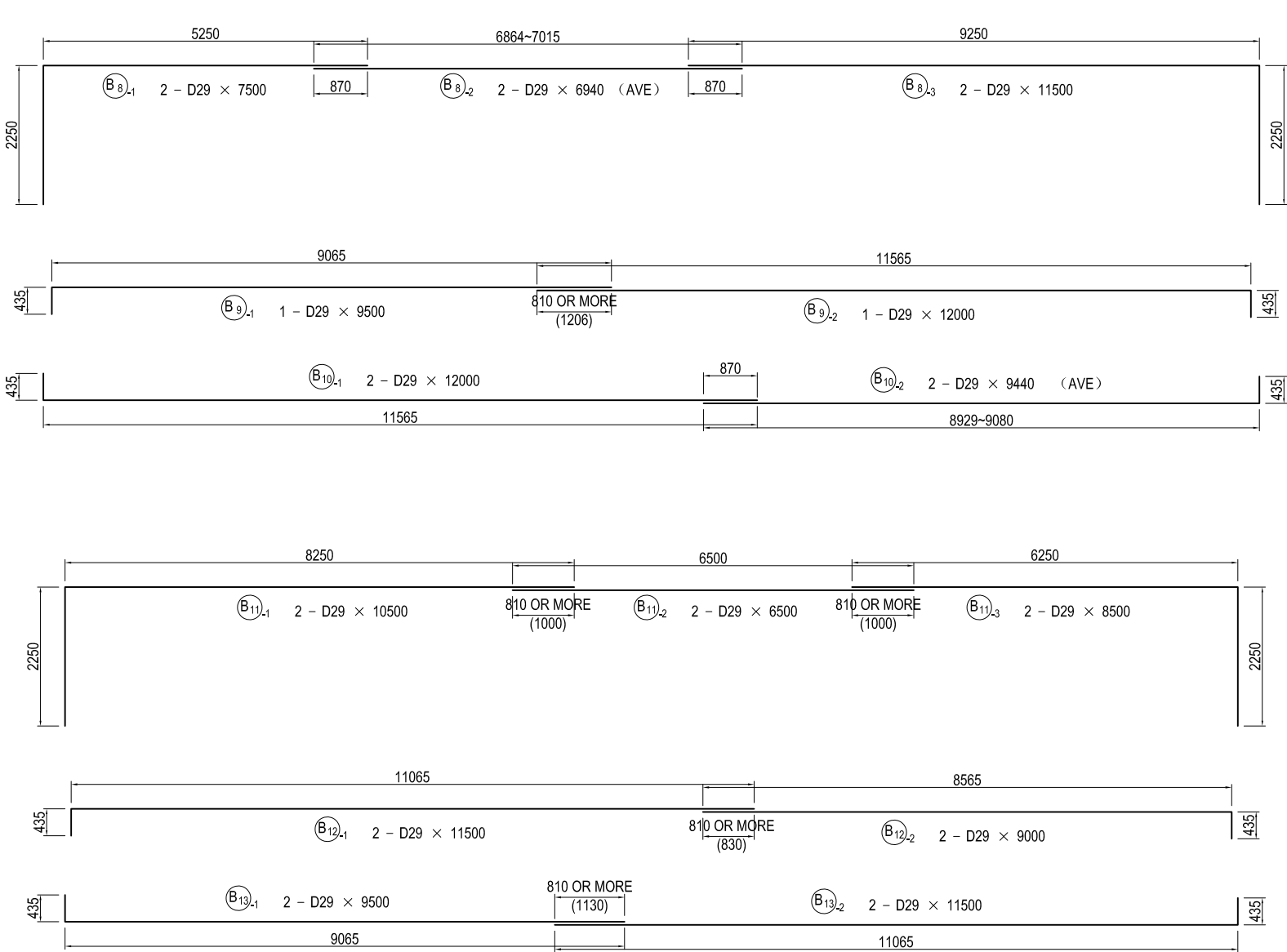


USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

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 BAR ARRANGEMENT OF P10 PIER (10)	PACKAGE 1 DWG No. P1-CS-2012
				PREPARED BY	S.TOKUMARU		27. Nov.2017		
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		
				APPROVED BY	Y. SANO		29. Nov.2017		

BAR ARRANGEMENT OF P10 PIER (11) S=1:100
BEAM

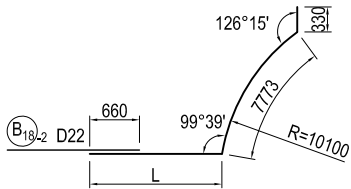
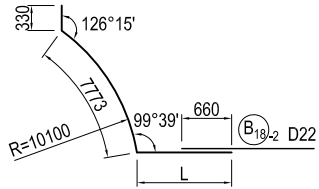
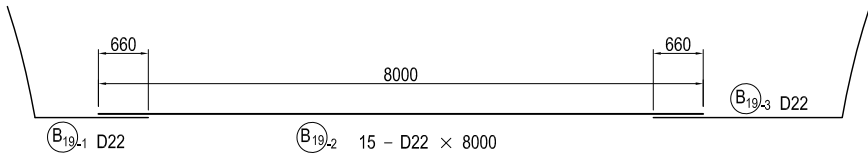
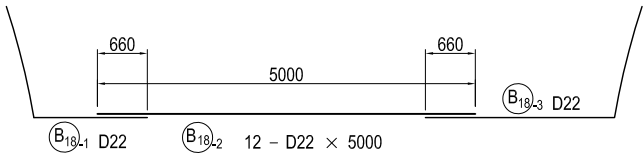


USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

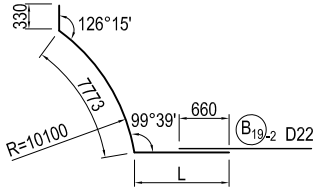
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.		NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P10 PIER (11)	PACKAGE 1 DWG No. P1-CS-2013
				PREPARED BY	S.TOKUMARU	徳丸 祥樹	27. Nov.2017		
				CHECKED BY	T. HAYAKAWA	平川 知那	28. Nov.2017		
				APPROVED BY	Y. SANO	佐野 祐一	29. Nov.2017		

BAR ARRANGEMENT OF P10 PIER (12) S=1:100

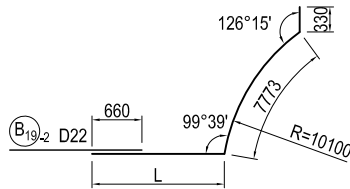


MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B18-1 1	D22	1	948	9051
2	"	1	1366	9469
3	"	1	1696	9799
4	"	1	1948	10051
5	"	1	2162	10265
6	"	1	2367	10470
7	"	1	2208	10311
8	"	1	2028	10131
9	"	1	1820	9923
10	"	1	1577	9680
11	"	1	1280	9383
12	"	1	886	8989
AVE		12	1691	9794

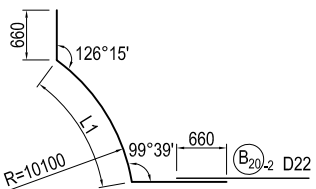
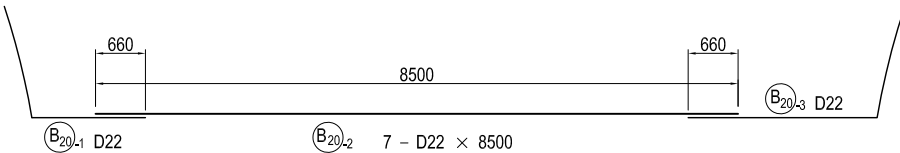
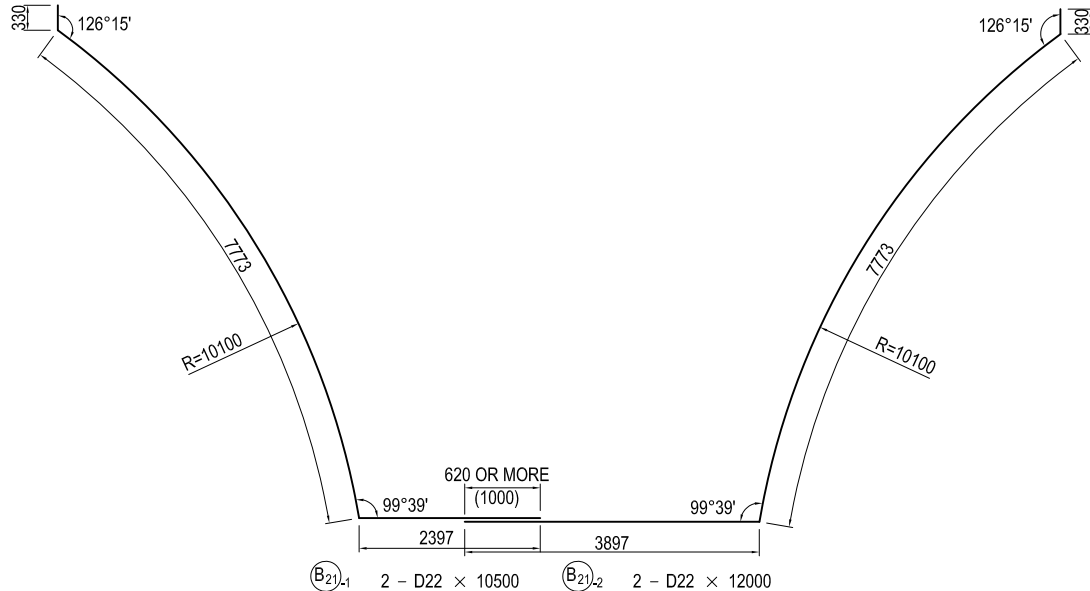
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B18-3 1	D22	1	2228	10331
2	"	1	2646	10749
3	"	1	2976	11079
4	"	1	3228	11331
5	"	1	3442	11545
6	"	1	3647	11750
7	"	1	3488	11591
8	"	1	3308	11411
9	"	1	3100	11203
10	"	1	2857	10960
11	"	1	2560	10663
12	"	1	2166	10269
AVE		12	2971	11074



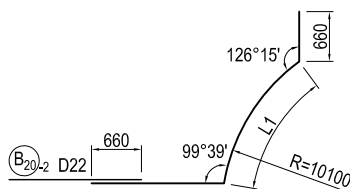
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B19-1 1	D22	1	873	8976
2	"	1	1120	9223
3	"	1	1320	9423
4	"	1	1480	9583
5	"	1	1607	9710
6	"	1	1695	9798
7	"	1	1720	9823
8	"	1	1666	9769
9	"	1	1600	9703
10	"	1	1522	9625
11	"	1	1372	9475
12	"	1	1252	9355
13	"	1	1149	9252
14	"	1	1035	9138
15	"	1	908	9011
AVE		15	1355	9458



MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B19-3 1	D22	1	2353	10456
2	"	1	2600	10703
3	"	1	2800	10903
4	"	1	2960	11063
5	"	1	3087	11190
6	"	1	3176	11279
7	"	1	3200	11303
8	"	1	3146	11249
9	"	1	3080	11183
10	"	1	3002	11105
11	"	1	2852	10955
12	"	1	2732	10835
13	"	1	2629	10732
14	"	1	2515	10618
15	"	1	2388	10491
AVE		15	2835	10938



MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
B20-1 1	D22	1	7740	1461	9861
2	"	1	7680	1510	9850
3	"	1	7651	1533	9844
4	"	1	7650	1534	9844
5	"	1	7665	1522	9847
6	"	1	7685	1506	9851
7	"	1	7712	1484	9856
AVE		7	7683	1507	9850

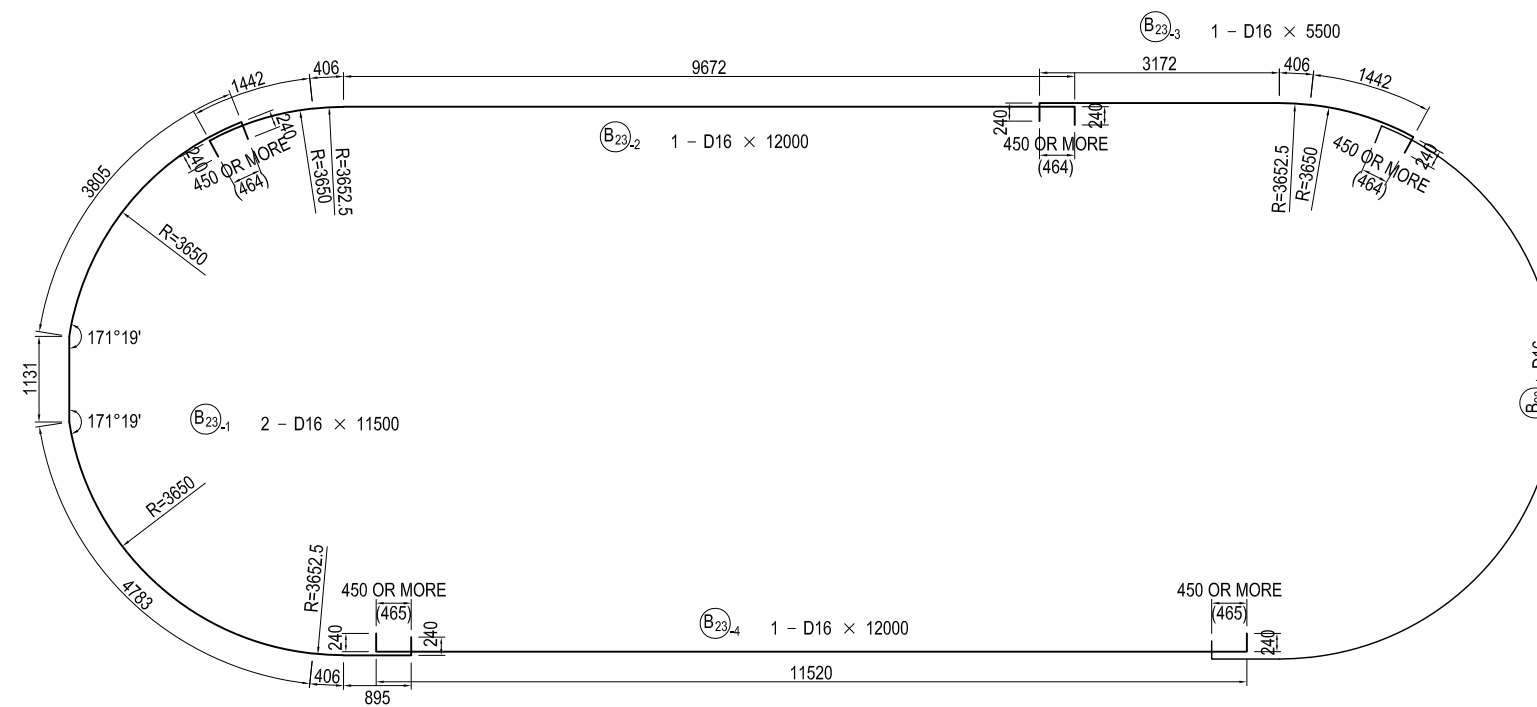
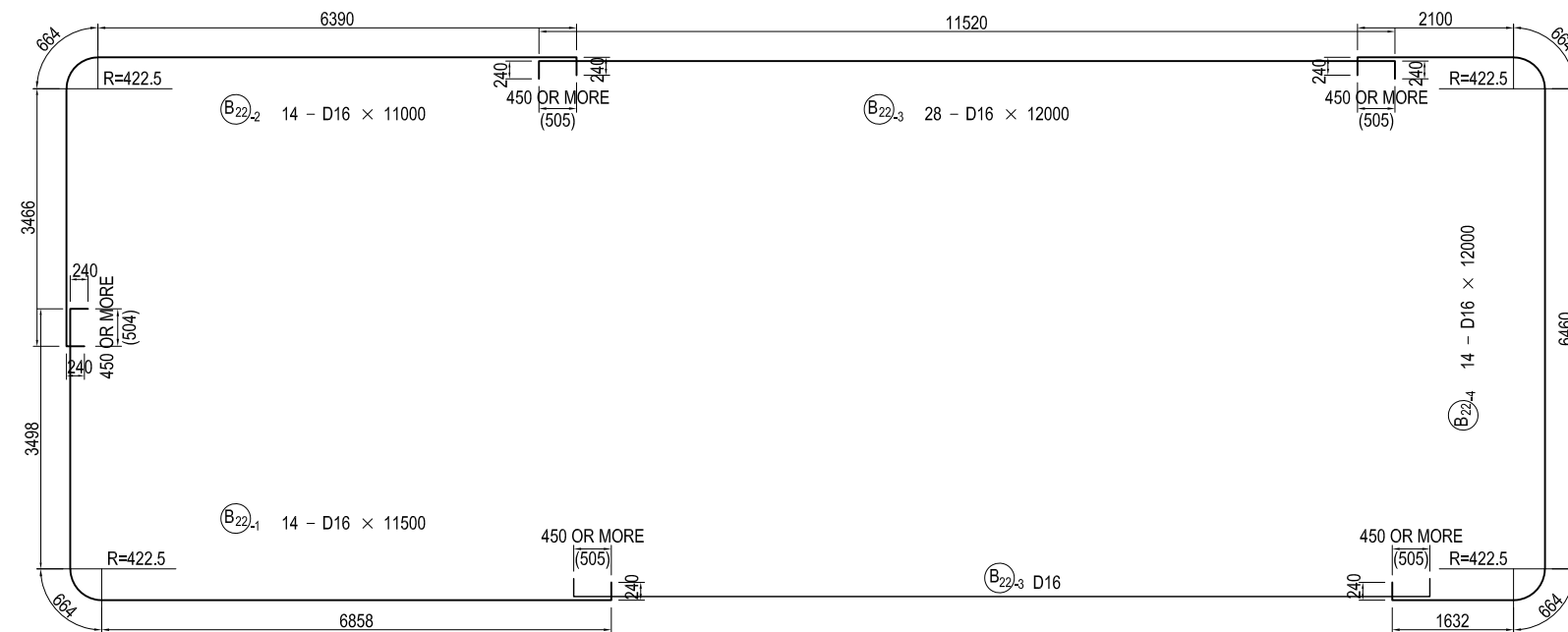


MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	TOTAL LENGTH ΣL
B20-3 1	D22	1	7740	3041	11441
2	"	1	7680	3090	11430
3	"	1	7651	3113	11424
4	"	1	7650	3114	11424
5	"	1	7665	3102	11427
6	"	1	7685	3086	11431
7	"	1	7712	3064	11436
AVE		7	7683	3087	11430

USE MATERIALS

BEAM-COLUMN	CONCRETE	BAR
	σ _{ck} = 30 N/mm ²	SD345

$S=1:100$



USE MATERIALS

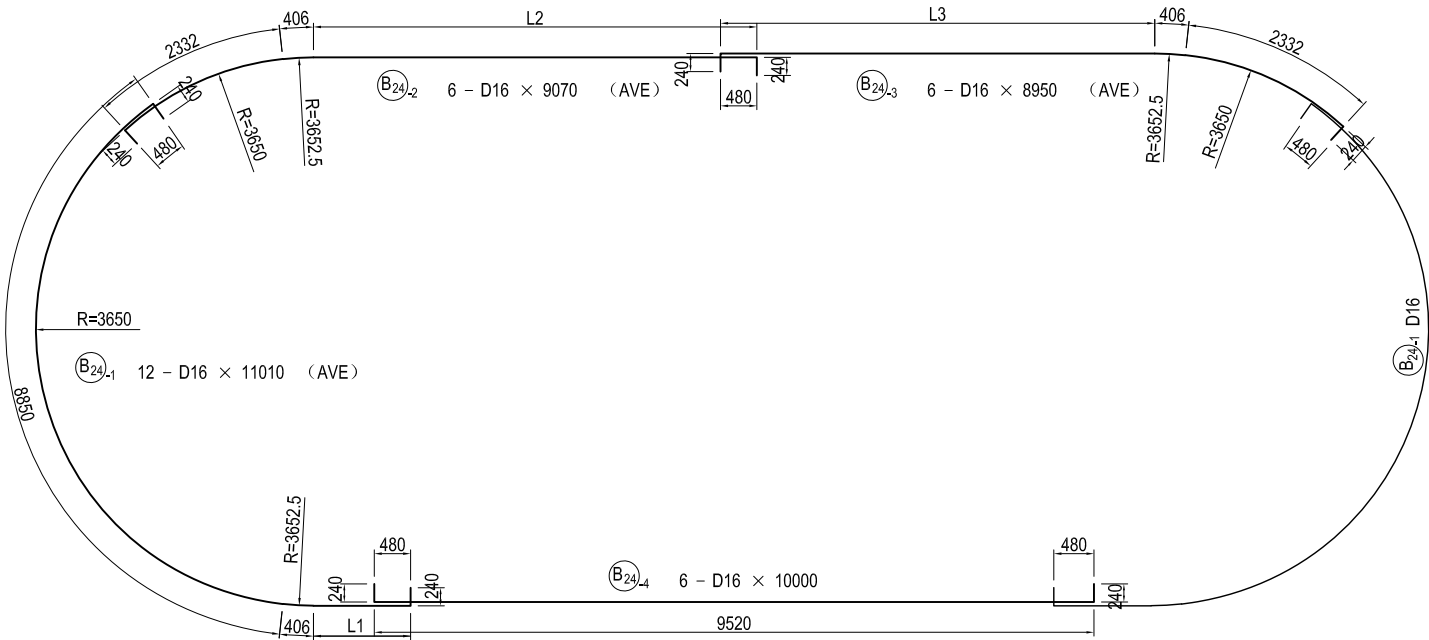
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	 JAPAN INTERNATIONAL COOPERATION AGENCY	 REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	 NIPPON KOEI CO., LTD.  ORIENTAL CONSULTANTS GLOBAL CO., LTD.  METROPOLITAN EXPRESSWAY COMPANY LIMITED  CHODAI CO., LTD.  NIPPON ENGINEERING CONSULTANTS CO. LTD.	PREPARED BY	S.TOKUMARU		27. Nov.2017	BAR ARRANGEMENT OF P10 PIER (13)	1
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		DWG No.
				APPROVED BY	Y. SANO		29. Nov.2017		P1-CS-2015

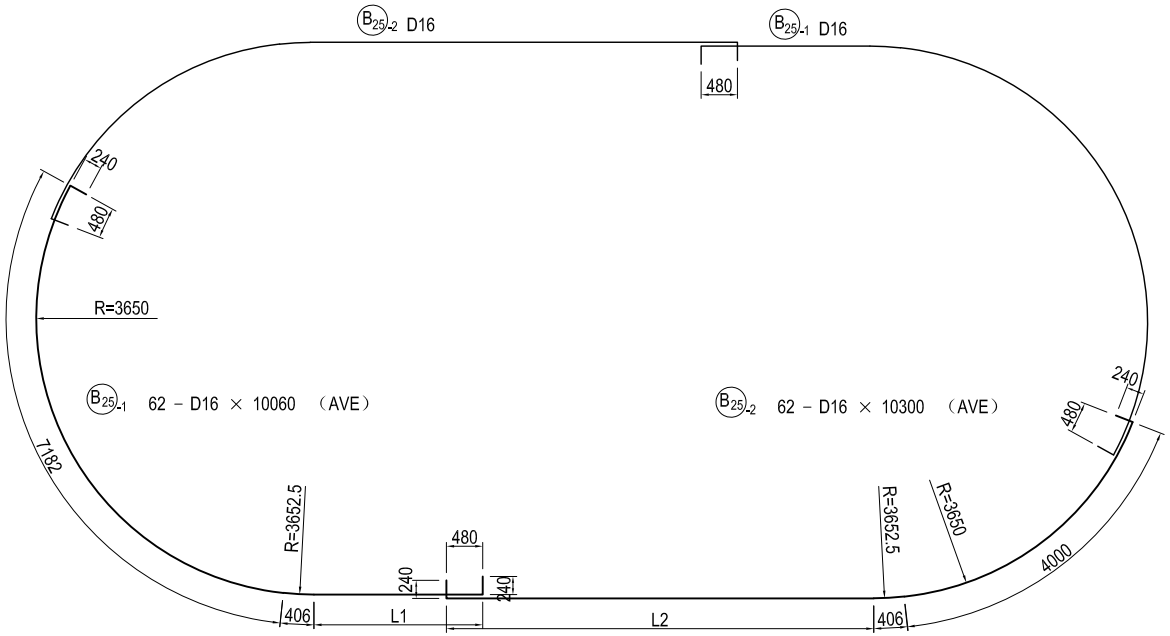
BAR ARRANGEMENT OF P10 PIER (14) S=1:100
BEAM

MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
B24-2 1	D16	1	6293	9511
2	"	1	6106	9324
3	"	1	5927	9145
4	"	1	5756	8974
5	"	1	5593	8811
6	"	1	5437	8655
AVE		6	5852	9070

MARKS	DIA.	NOS. OF BARS	LENGTH L3	TOTAL LENGTH ΣL
B24-3 1	D16	1	6173	9391
2	"	1	5986	9204
3	"	1	5807	9025
4	"	1	5636	8854
5	"	1	5473	8691
6	"	1	5317	8535
AVE		6	5732	8950



MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL
B24-1 1	D16	2	1713	11449
2	"	2	1526	11262
3	"	2	1347	11083
4	"	2	1176	10912
5	"	2	1013	10749
6	"	2	857	10593
AVE		12	1272	11008

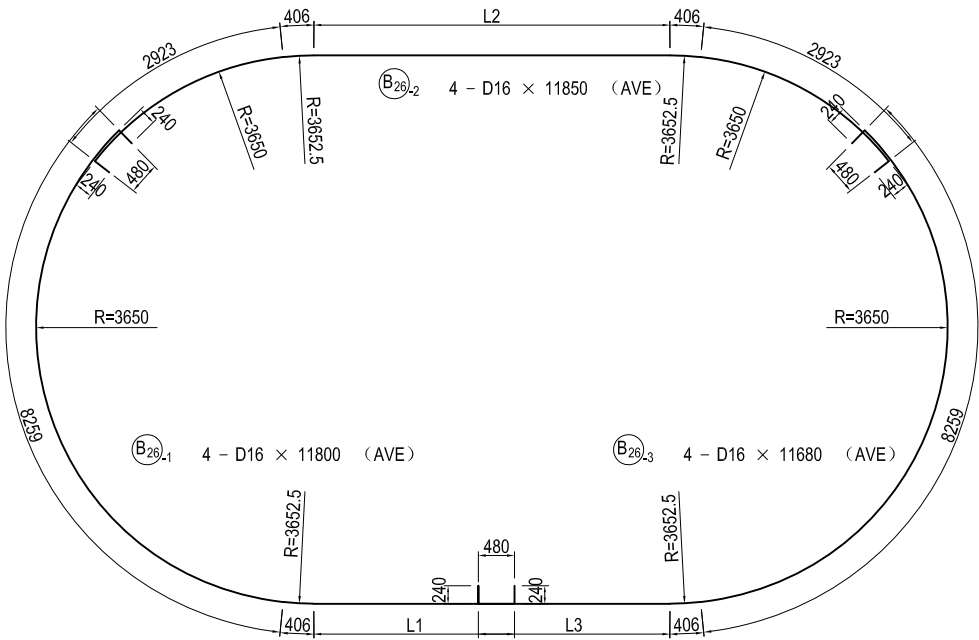


MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL
B25-1 1	D16	2	3518	11586
2	"	2	3374	11442
3	"	2	3236	11304
4	"	2	3104	11172
5	"	2	2977	11045
6	"	2	2854	10922
7	"	2	2737	10805
8	"	2	2624	10692
9	"	2	2515	10583
10	"	2	2410	10478
11	"	2	2309	10377
12	"	2	2213	10281
13	"	2	2119	10187
14	"	2	2030	10098
15	"	2	1944	10012
16	"	2	1861	9929
17	"	2	1781	9849
18	"	2	1705	9773
19	"	2	1632	9700
20	"	2	1562	9630
21	"	2	1495	9563
22	"	2	1430	9498
23	"	2	1369	9437
24	"	2	1310	9378
25	"	2	1255	9323
26	"	2	1201	9269
27	"	2	1151	9219
28	"	2	1103	9171
29	"	2	1057	9125
30	"	2	1015	9083
31	"	2	974	9042
AVE		62	1996	10064

MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
B25-2 1	D16	2	6938	11824
2	"	2	6794	11680
3	"	2	6656	11542
4	"	2	6524	11410
5	"	2	6397	11283
6	"	2	6274	11160
7	"	2	6157	11043
8	"	2	6044	10930
9	"	2	5935	10821
10	"	2	5830	10716
11	"	2	5729	10615
12	"	2	5633	10519
13	"	2	5539	10425
14	"	2	5450	10336
15	"	2	5364	10250
16	"	2	5281	10167
17	"	2	5201	10087
18	"	2	5125	10011
19	"	2	5052	9938
20	"	2	4982	9868
21	"	2	4915	9801
22	"	2	4850	9736
23	"	2	4789	9675
24	"	2	4730	9616
25	"	2	4675	9561
26	"	2	4621	9507
27	"	2	4571	9457
28	"	2	4523	9409
29	"	2	4477	9363
30	"	2	4435	9321
31	"	2	4394	9280
AVE		62	5416	10302

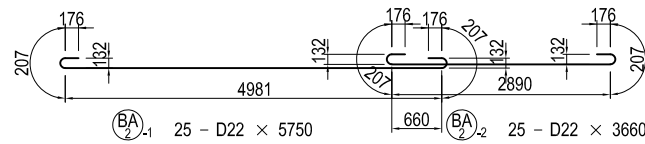
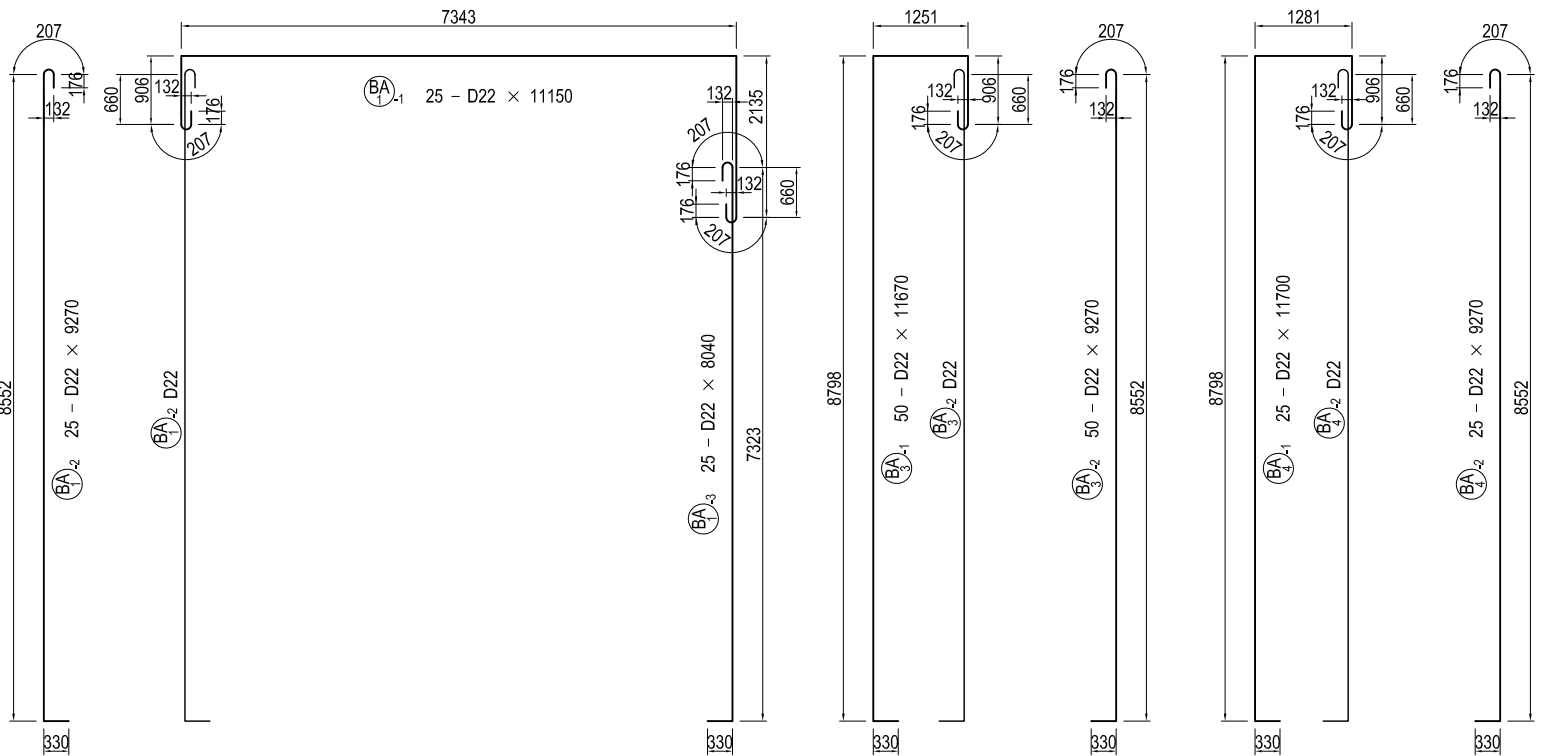
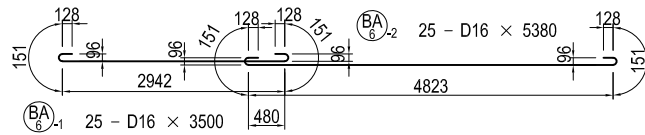
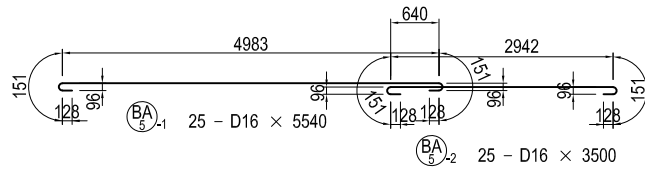
BAR ARRANGEMENT OF P10 PIER (15) S=1:100
BEAM

MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
B26-2 1	D16	1	4813	11951
2	"	1	4742	11880
3	"	1	4676	11814
4	"	1	4614	11752
AVE		4	4711	11849



MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL
B26-1 1	D16	1	2706	11851
2	"	1	2671	11816
3	"	1	2638	11783
4	"	1	2607	11752
AVE		4	2656	11801

MARKS	DIA.	NOS. OF BARS	LENGTH L3	TOTAL LENGTH ΣL
B26-3 1	D16	1	2586	11731
2	"	1	2551	11696
3	"	1	2518	11663
4	"	1	2487	11632
AVE		4	2536	11681

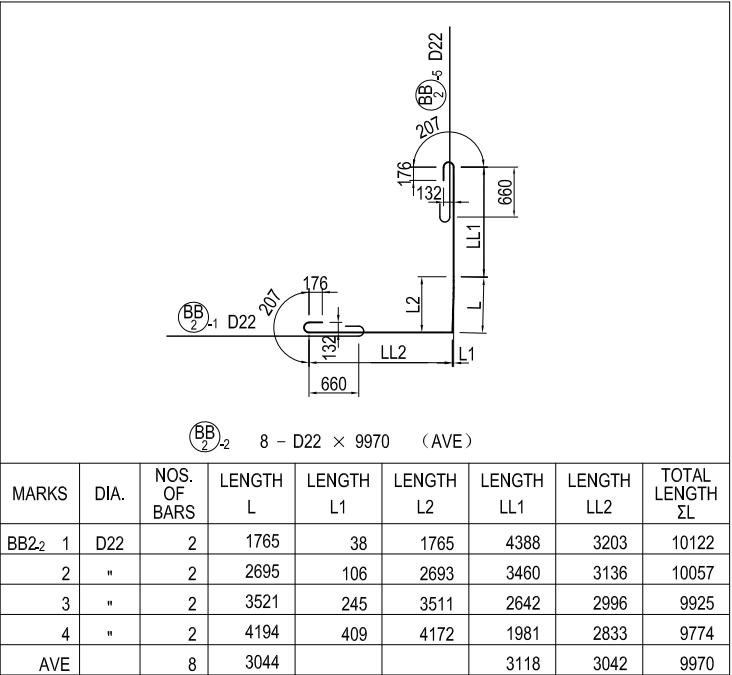
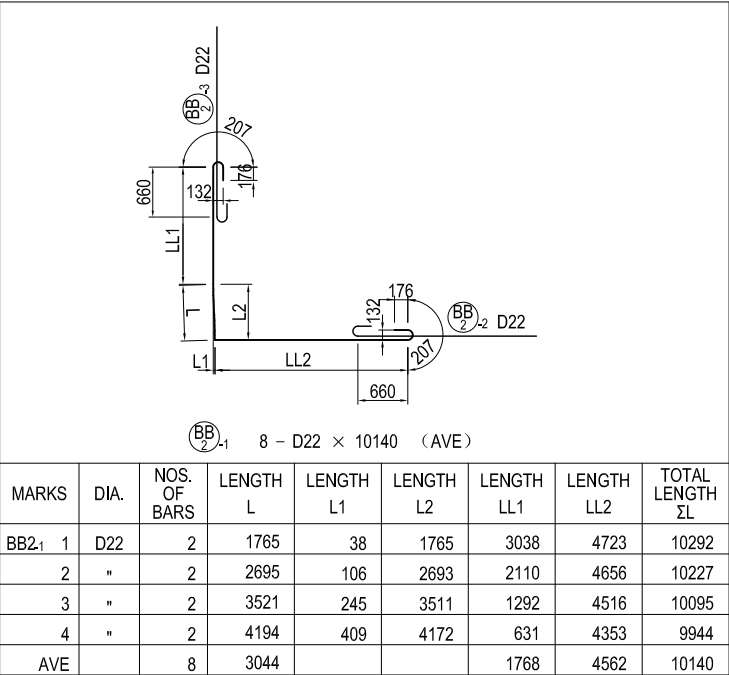
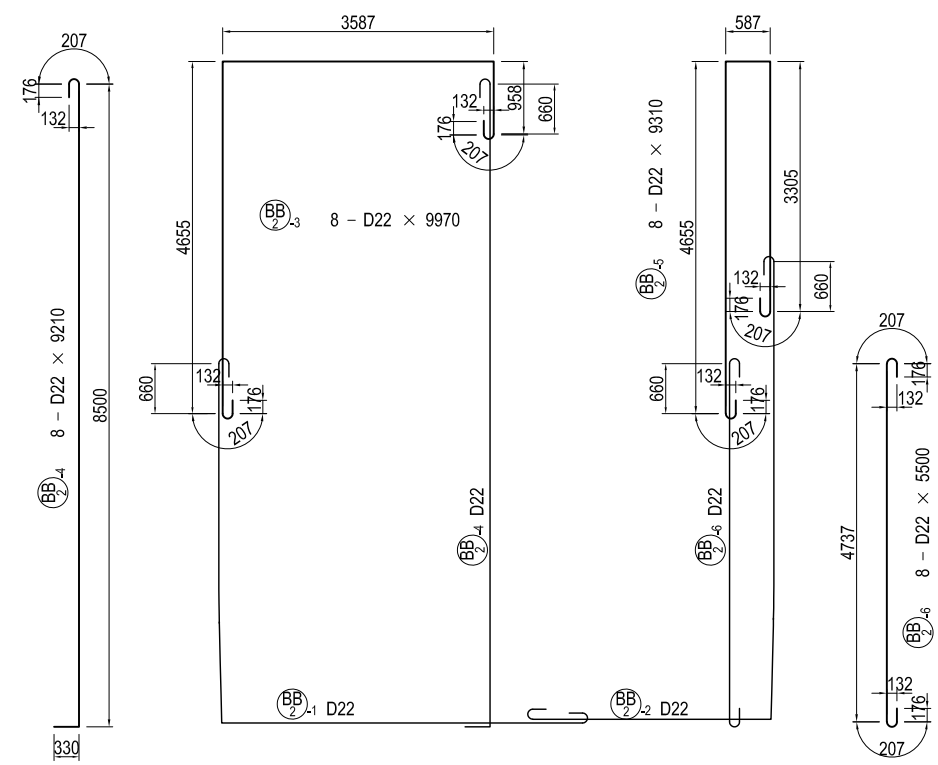
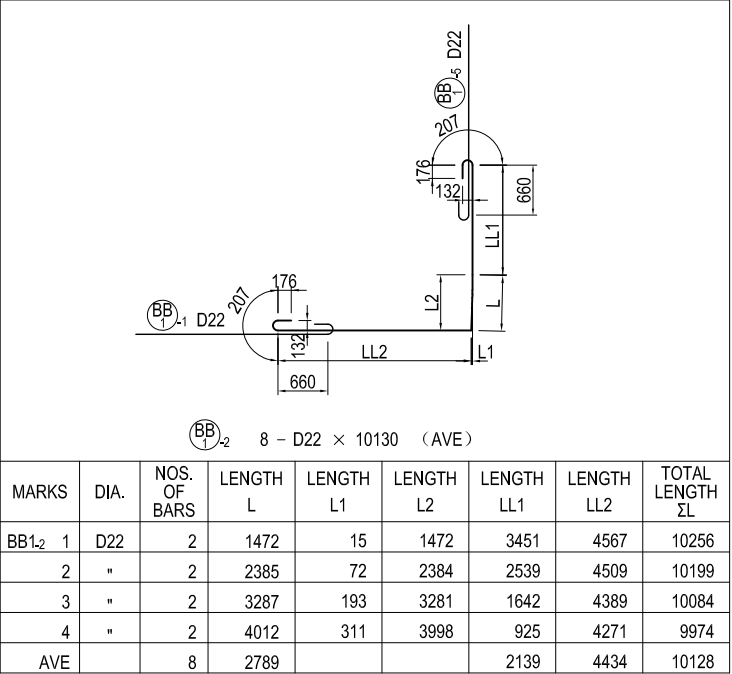
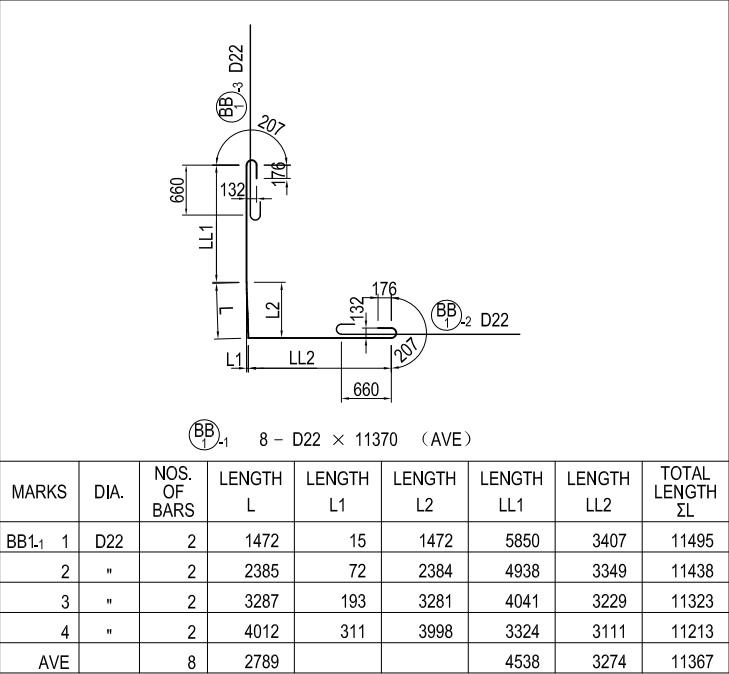
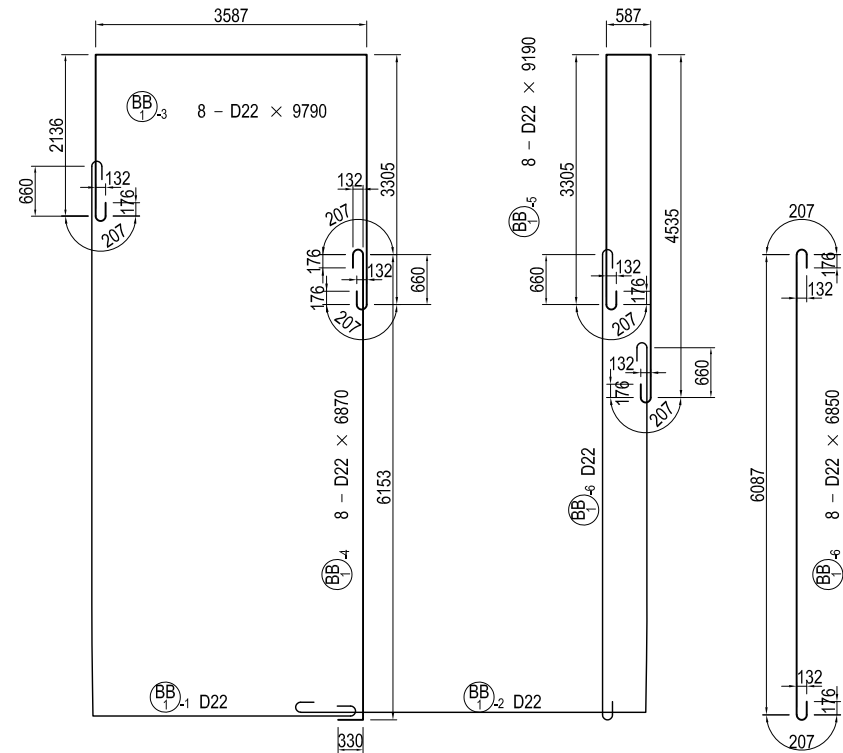


USE MATERIALS

BEAM-COLUMN	CONCRETE	BAR
	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	BAR ARRANGEMENT OF P10 PIER (15)	1 DWG No. P1-CS-2017

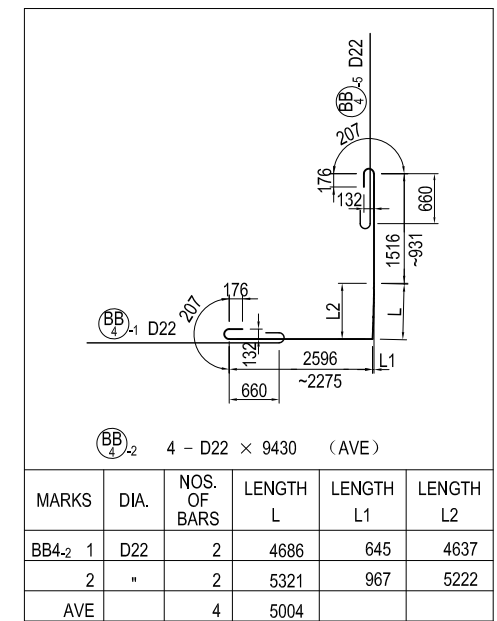
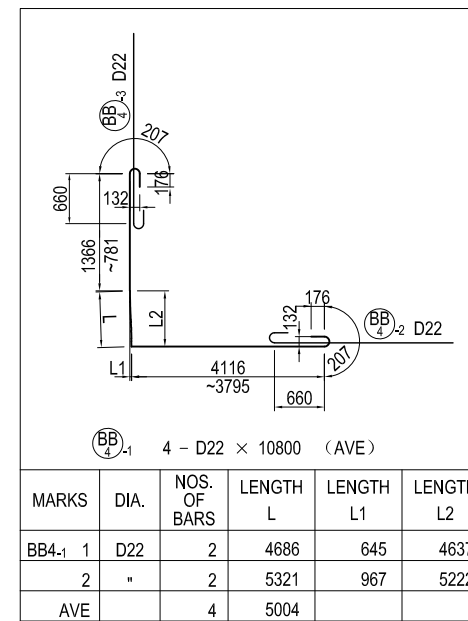
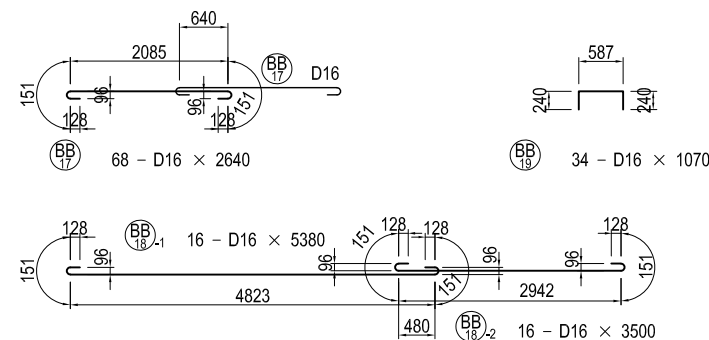
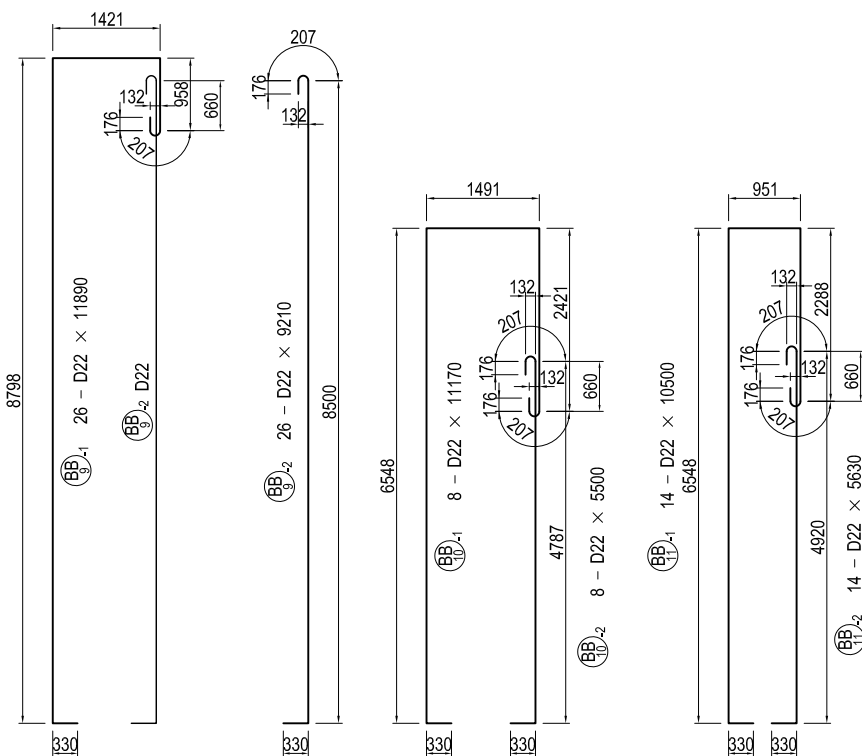
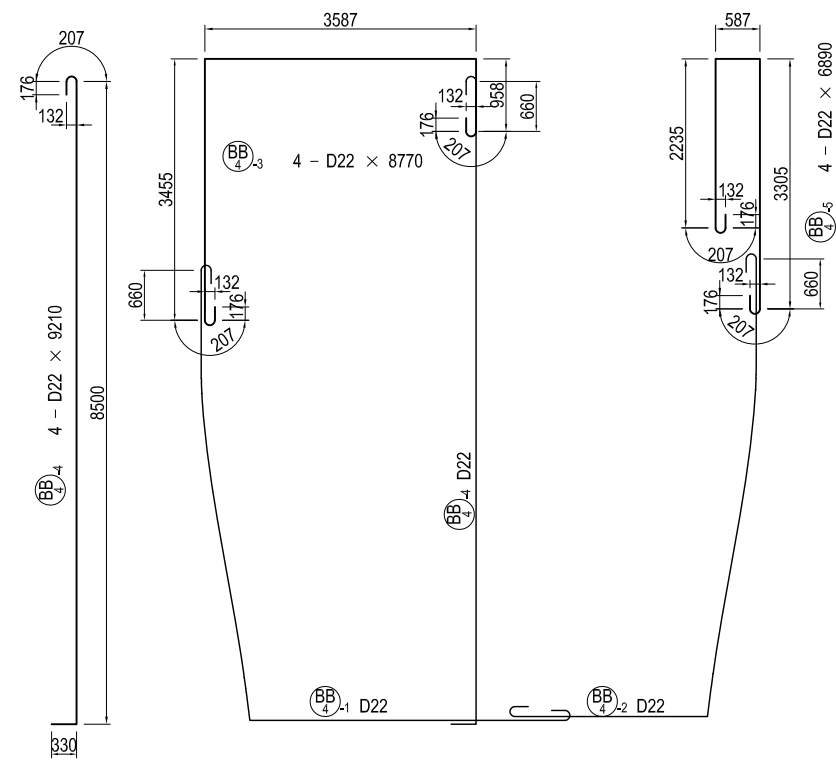
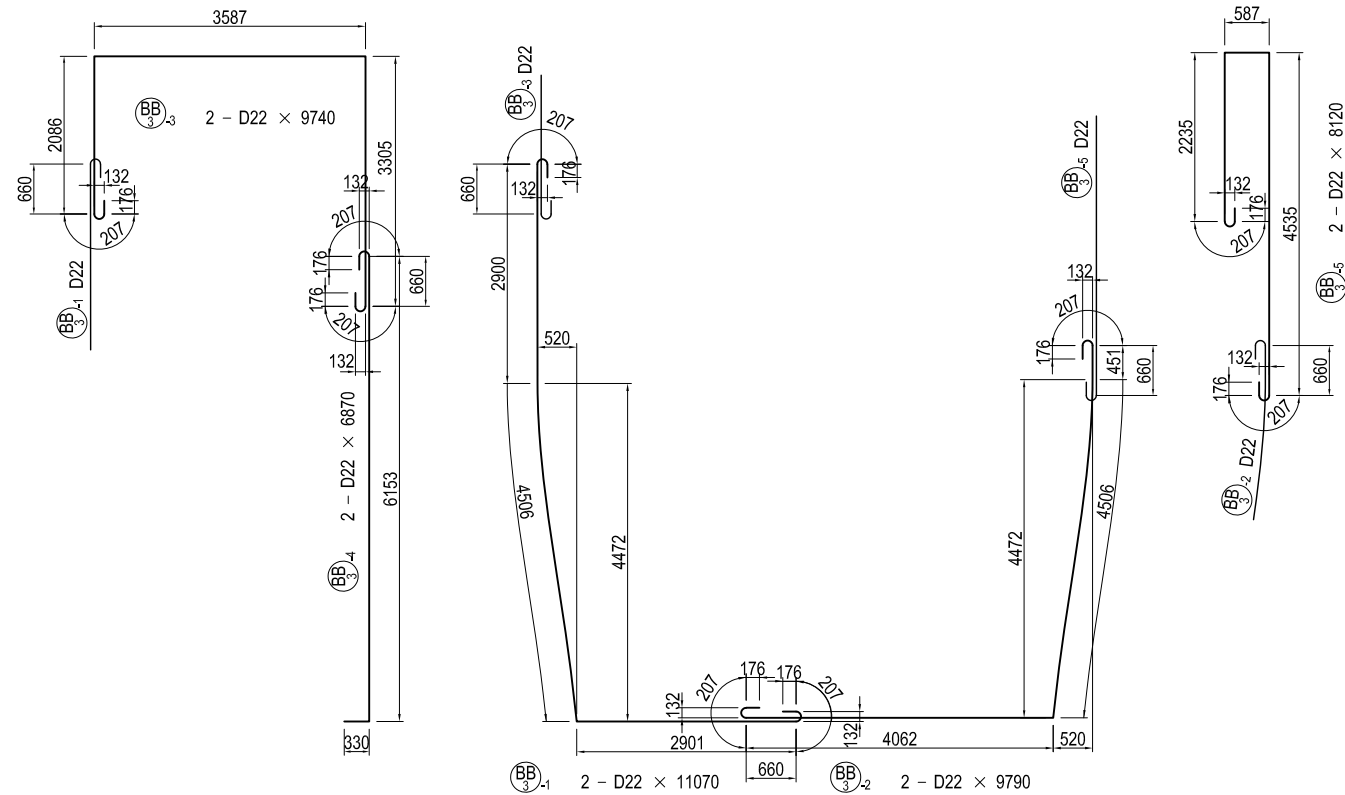
BAR ARRANGEMENT OF P10 PIER (16) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	σck = 30 N/mm ²	SD345

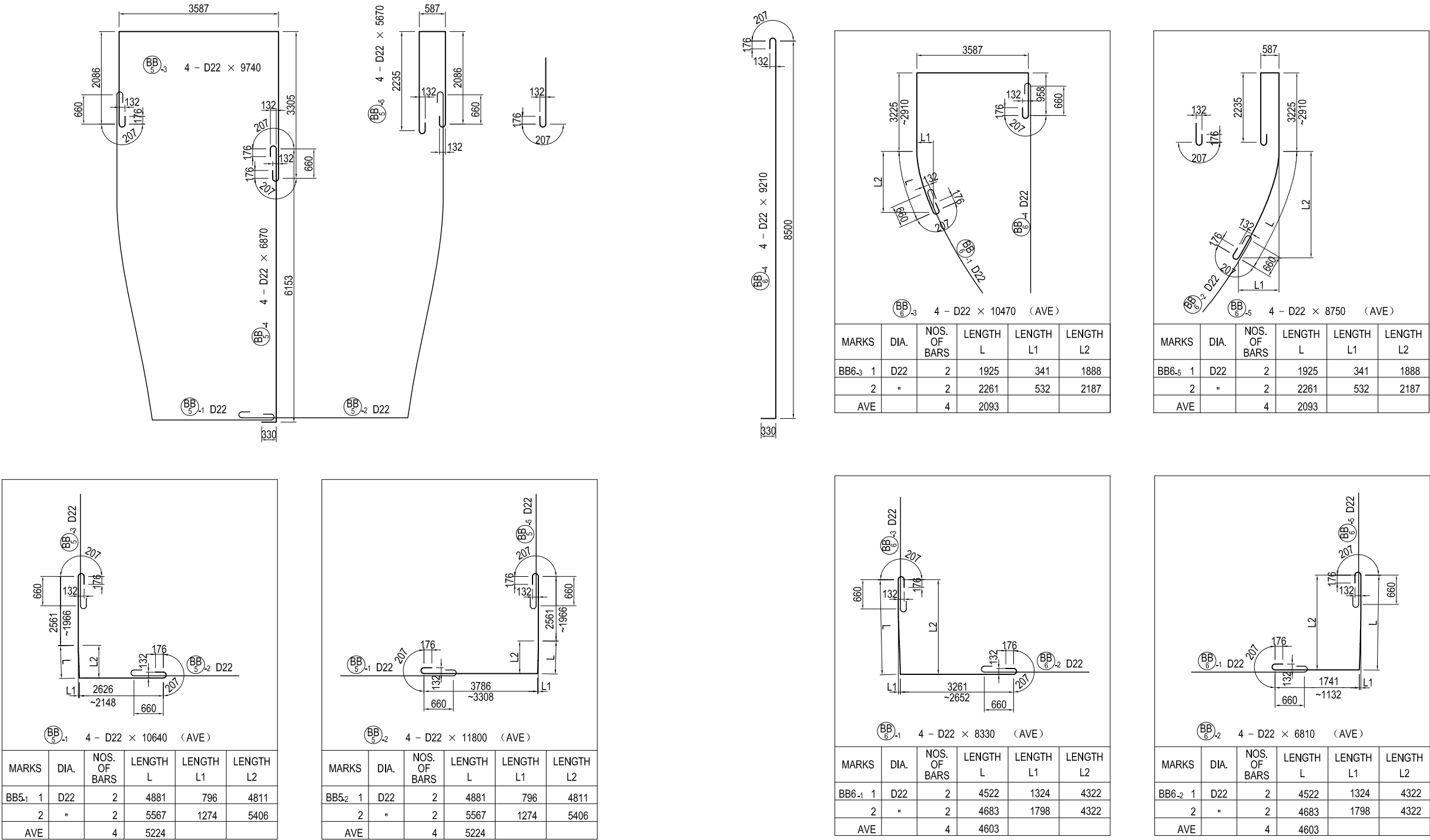
BAR ARRANGEMENT OF P10 PIER (17) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM•COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

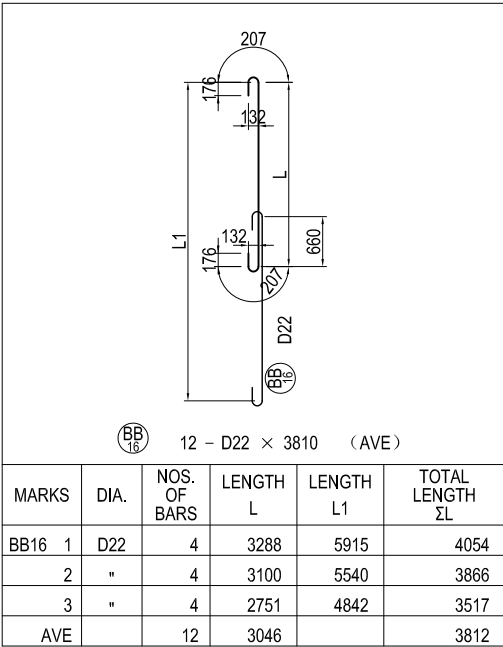
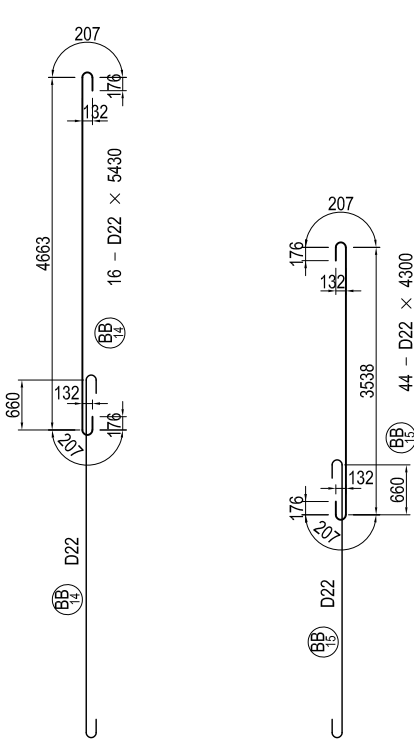
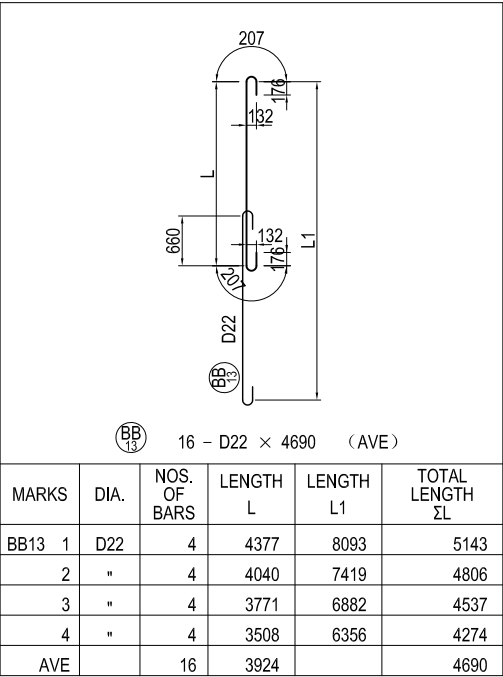
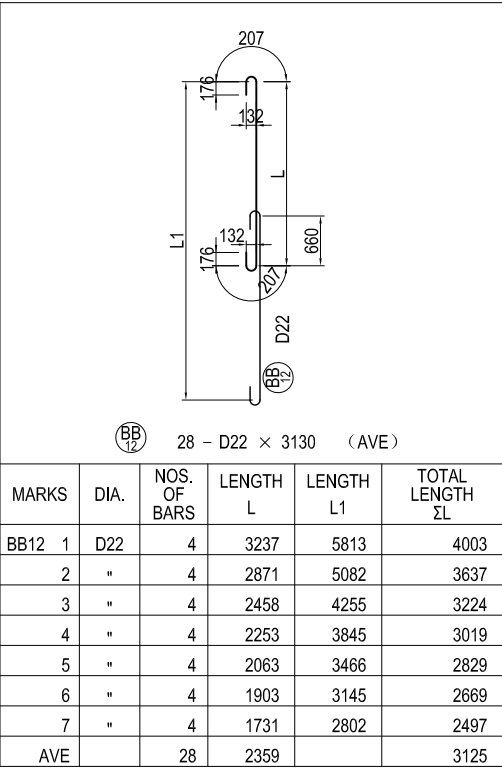
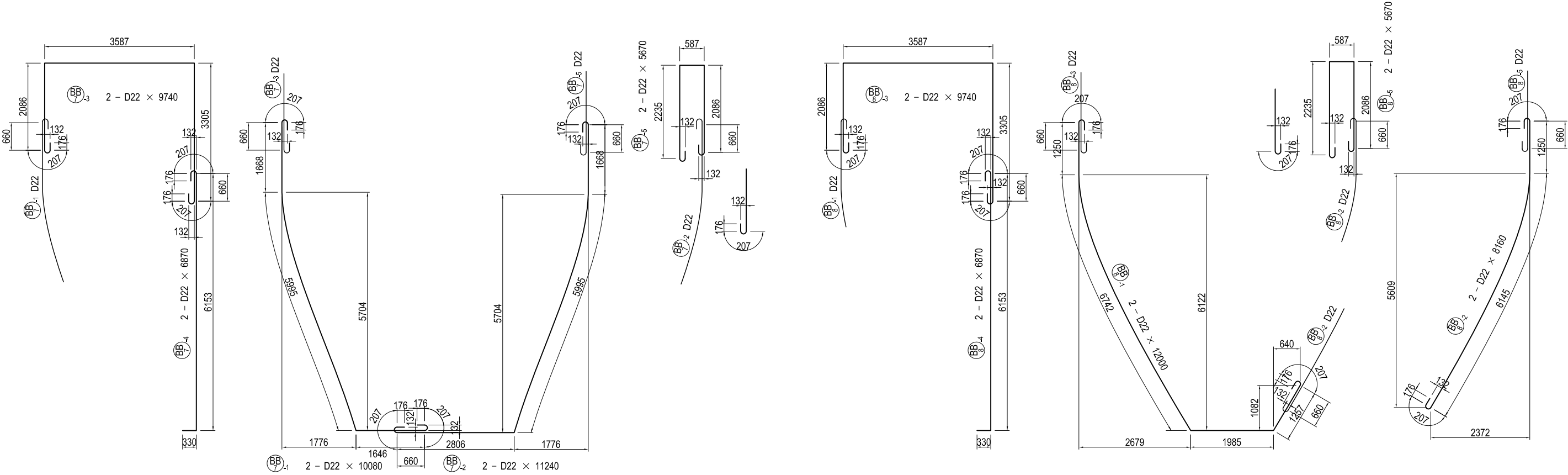
BAR ARRANGEMENT OF P10 PIER (18) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	σ _{ck} = 30 N/mm ²	SD345

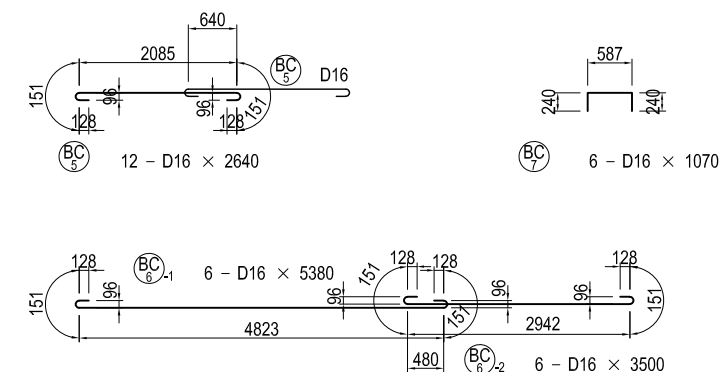
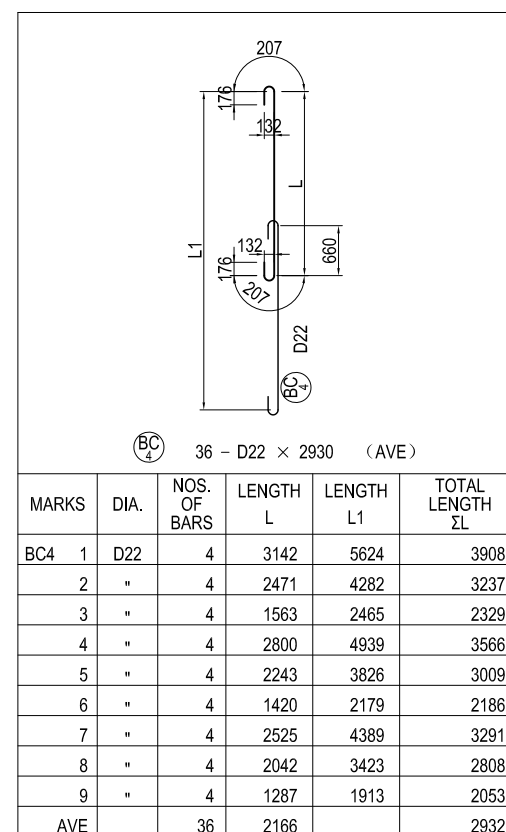
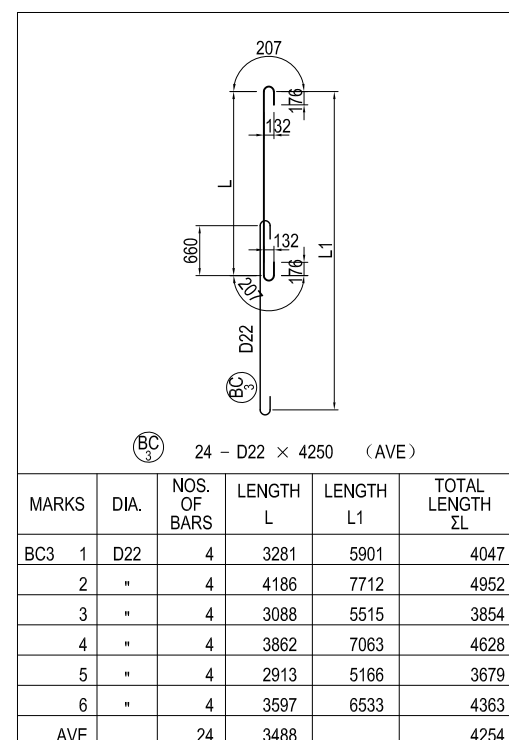
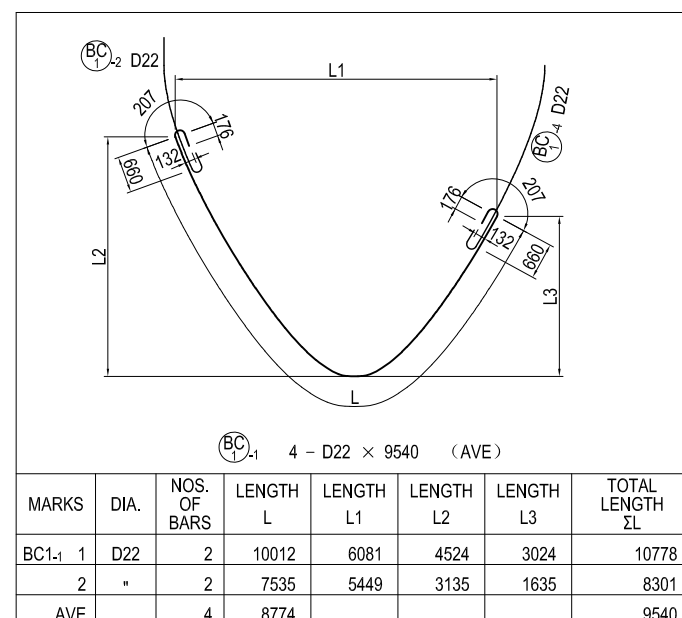
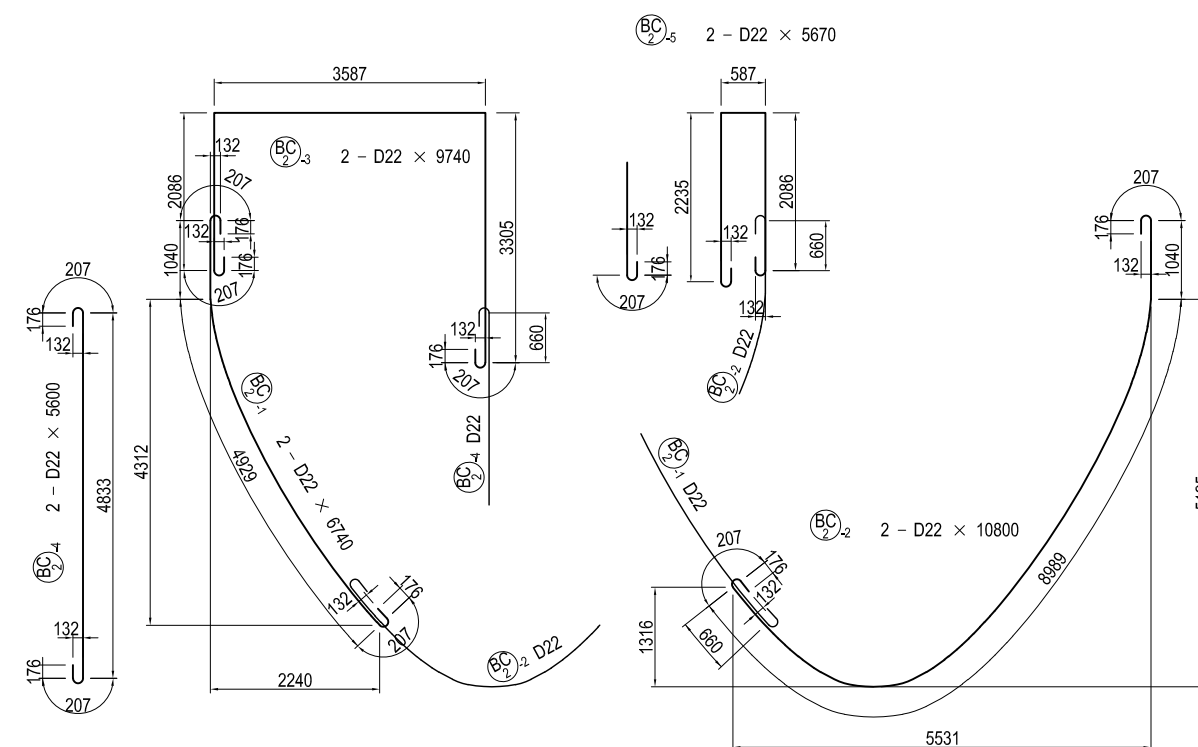
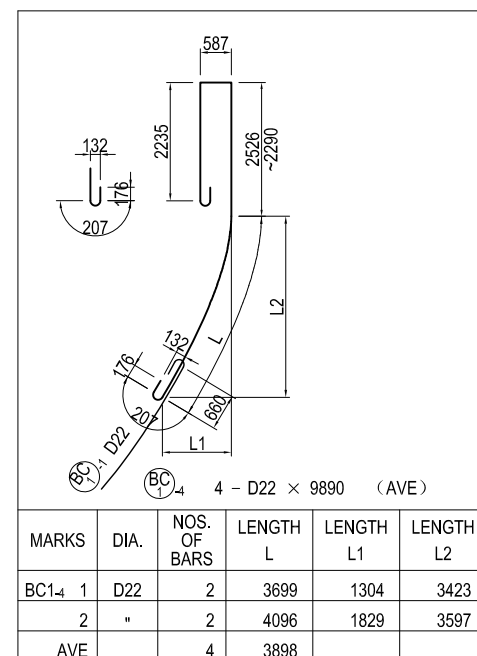
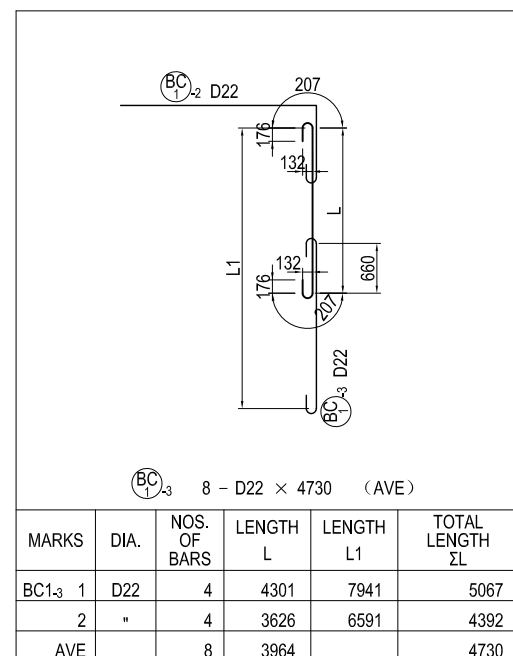
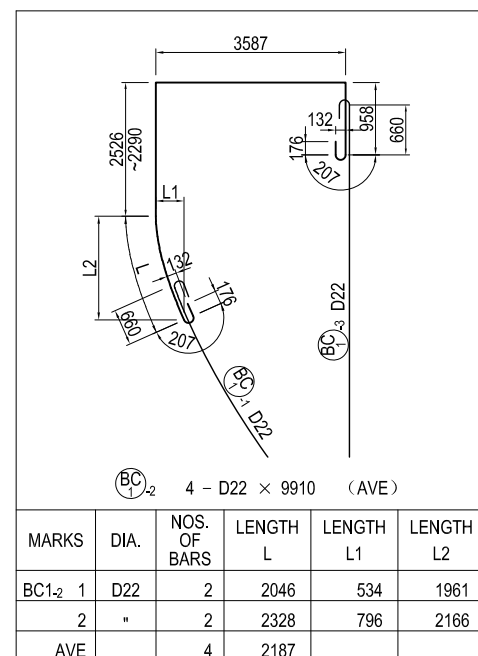
BAR ARRANGEMENT OF P10 PIER (19) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM•COLUMN	σck = 30 N/mm ²	SD345

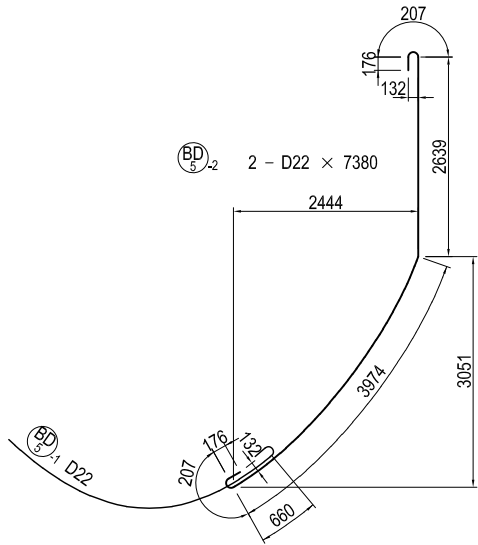
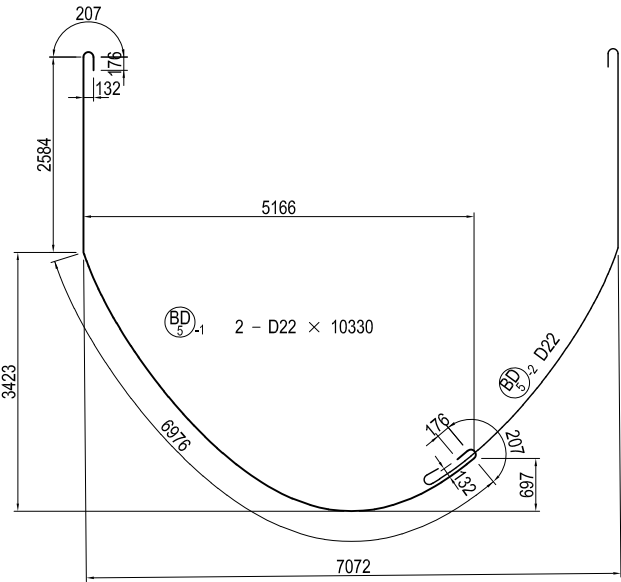
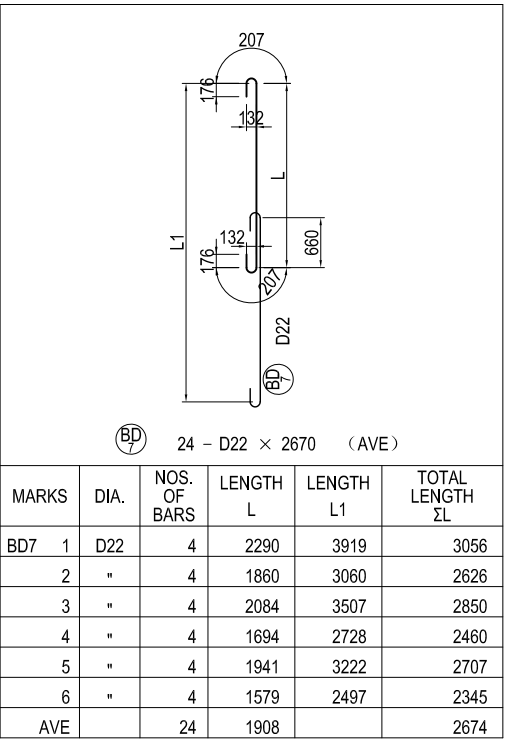
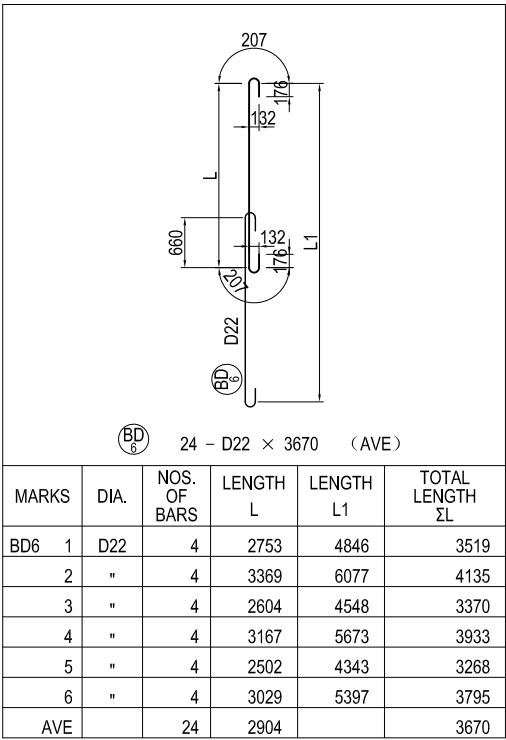
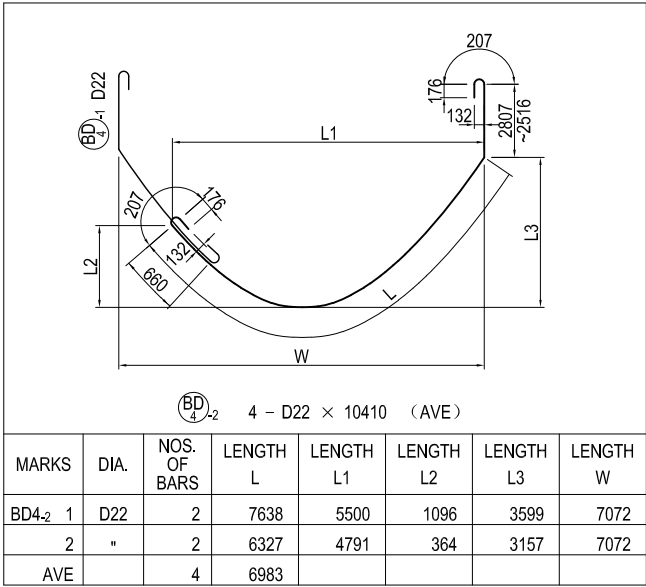
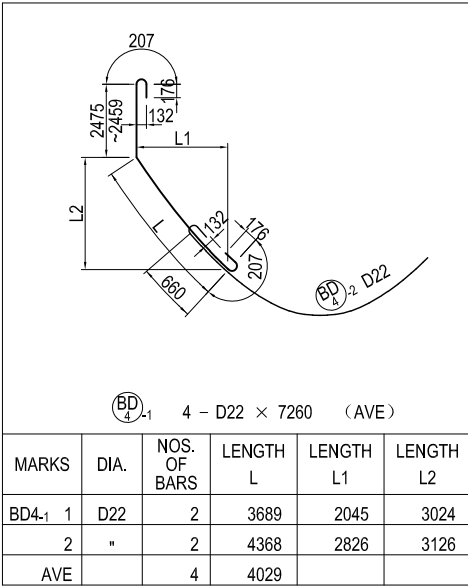
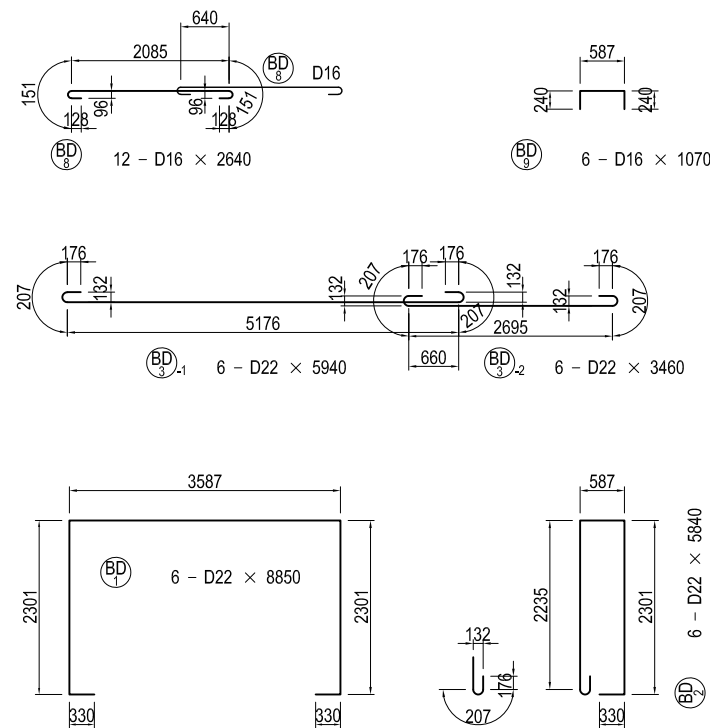
BAR ARRANGEMENT OF P10 PIER (20) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM • COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

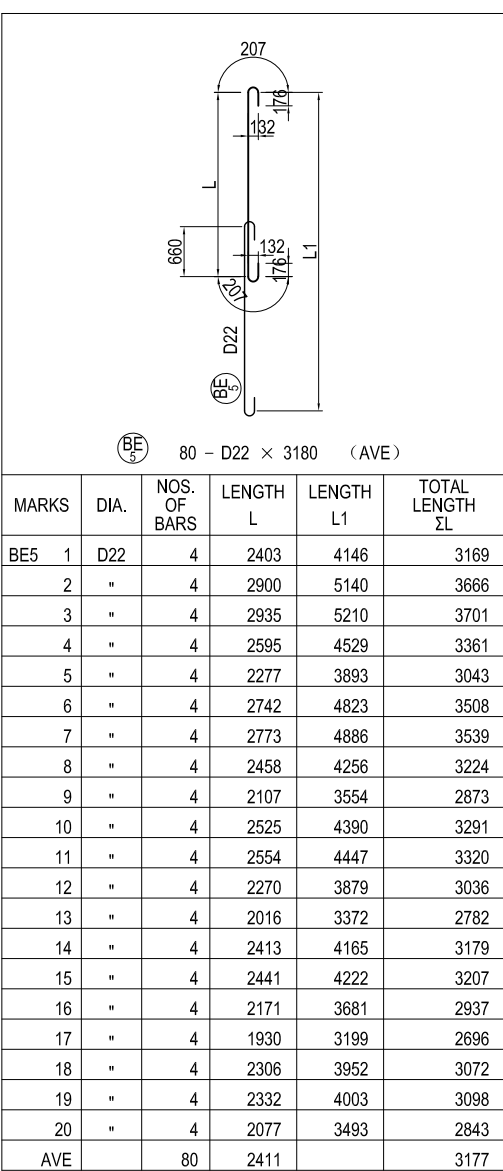
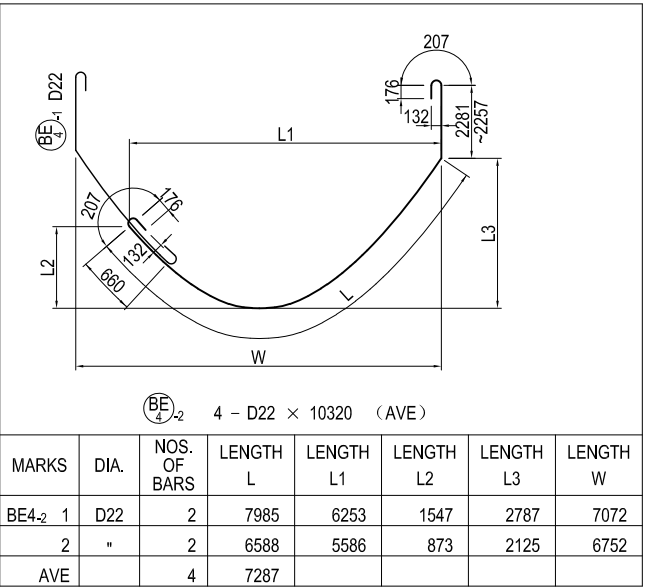
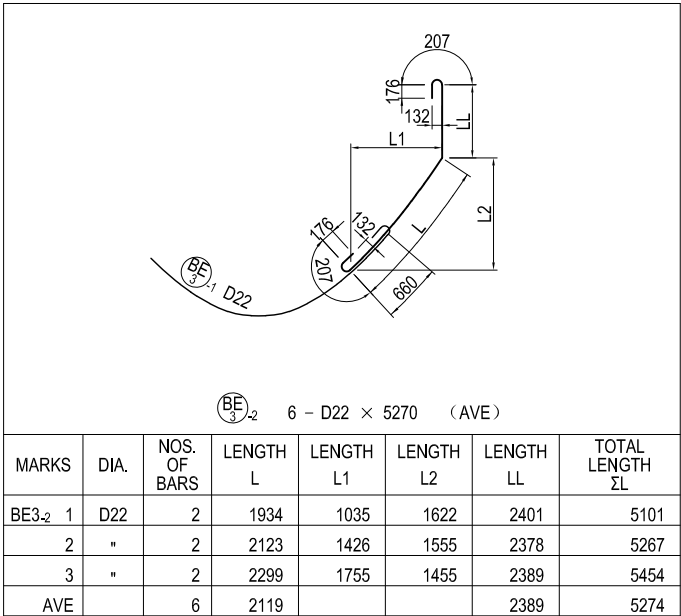
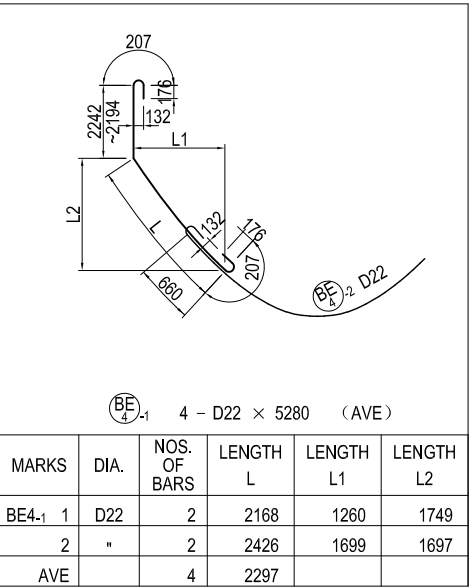
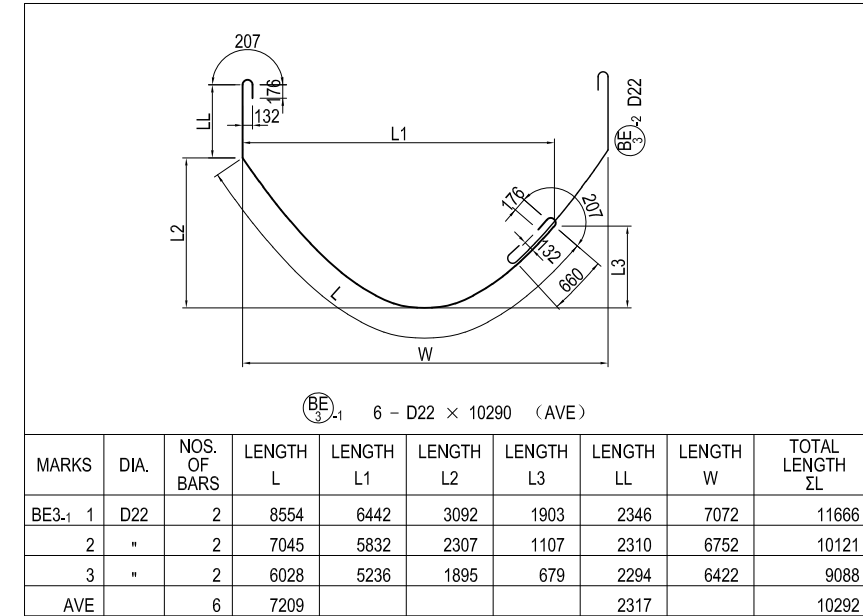
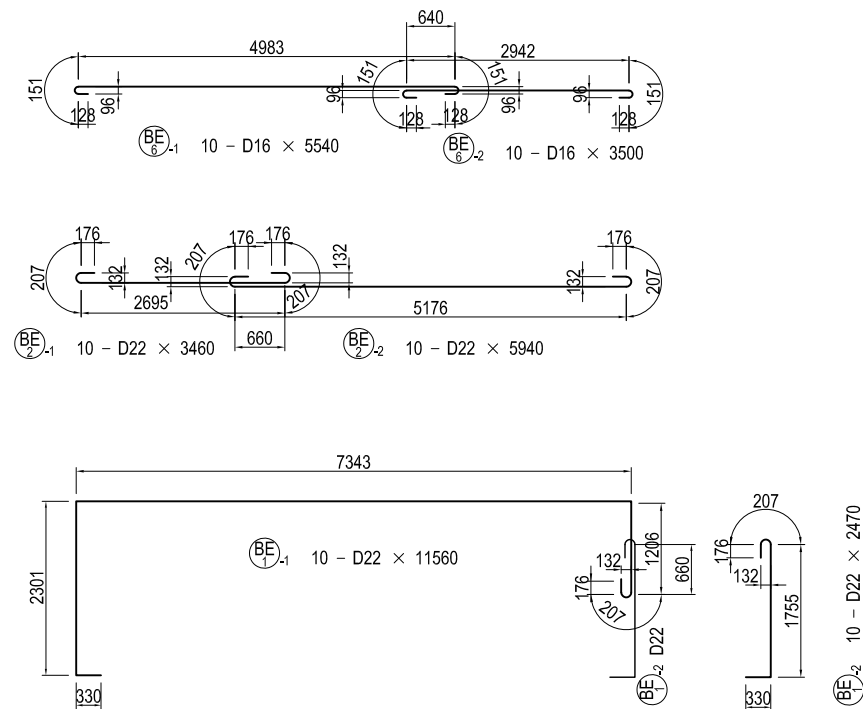
BAR ARRANGEMENT OF P10 PIER (21) S=1:100
BEAM



USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	σck = 30 N/mm ²	SD345

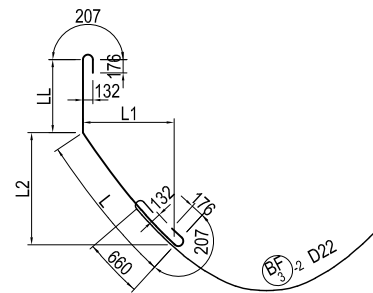
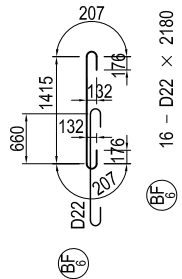
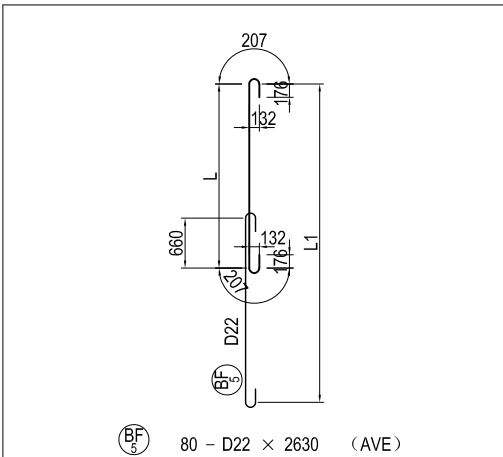
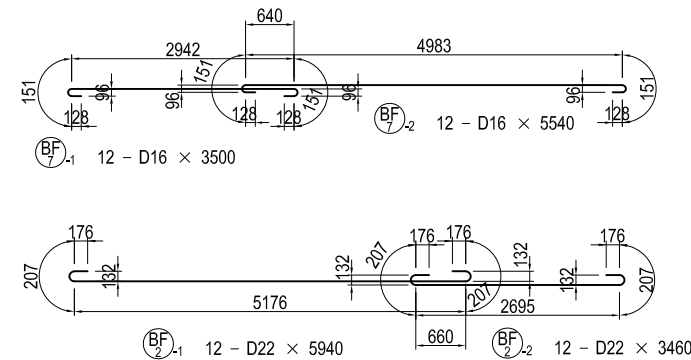
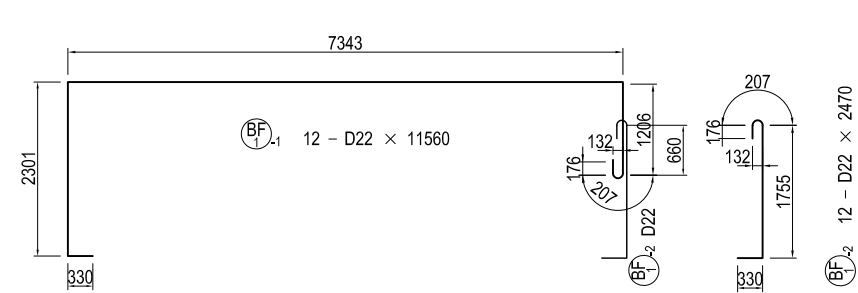
BAR ARRANGEMENT OF P10 PIER (22) S=1:100
BEAM



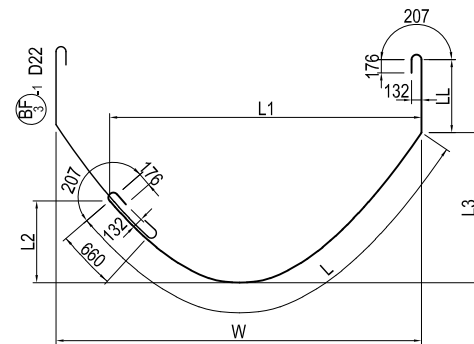
USE MATERIALS

	CONCRETE	BAR
BEAM•COLUMN	σck = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P10 PIER (23) S=1:100
BEAM

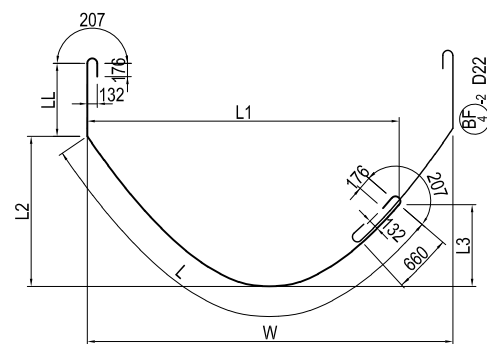


MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BF3-1 1	D22	2	1031	745	709	2337	4134
2	"	2	1086	886	626	2342	4194
3	"	2	1310	1167	587	2280	4356
AVE		6	1142			2320	4228

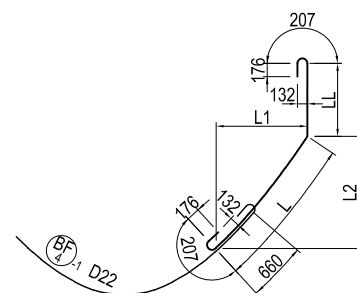


MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	LENGTH W	TOTAL LENGTH ΣL
BF3-2 1	D22	2	6942	6021	1333	1701	2241	6272	9949
2	"	2	5409	5000	860	915	2554	5332	8729
3	"	2	4372	4172	485	648	2446	4732	7584
AVE		6	5574				2414		8754

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BF5 1	D22	4	1833	3005	2599
2	"	4	2188	3716	2954
3	"	4	2212	3763	2978
4	"	4	1972	3284	2738
5	"	4	1741	2822	2507
6	"	4	2077	3493	2843
7	"	4	2099	3538	2865
8	"	4	1873	3085	2639
9	"	4	1654	2648	2420
10	"	4	1972	3284	2738
11	"	4	1993	3326	2759
12	"	4	1779	2898	2545
13	"	4	1572	2483	2338
14	"	4	1873	3086	2639
15	"	4	1893	3126	2659
16	"	4	1690	2720	2456
17	"	4	1779	2898	2545
18	"	4	1798	2936	2564
19	"	4	1648	2635	2414
20	"	4	1665	2670	2431
AVE		80	1866		2632



MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	LENGTH W	TOTAL LENGTH ΣL
BF4-1 1	D22	2	6276	5615	1361	1102	2350	5952	9392
2	"	2	5218	4869	947	655	2317	5182	8301
3	"	2	3485	3383	501	212	2321	3982	6572
AVE		6	4993				2329		8088

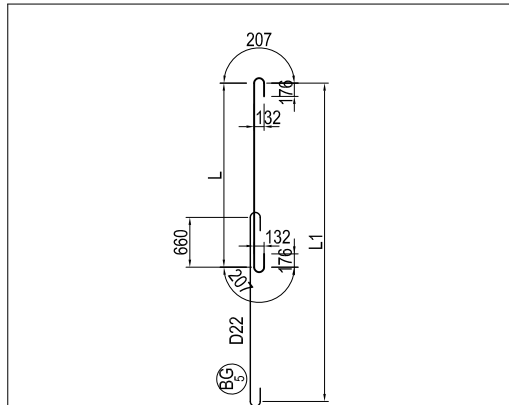
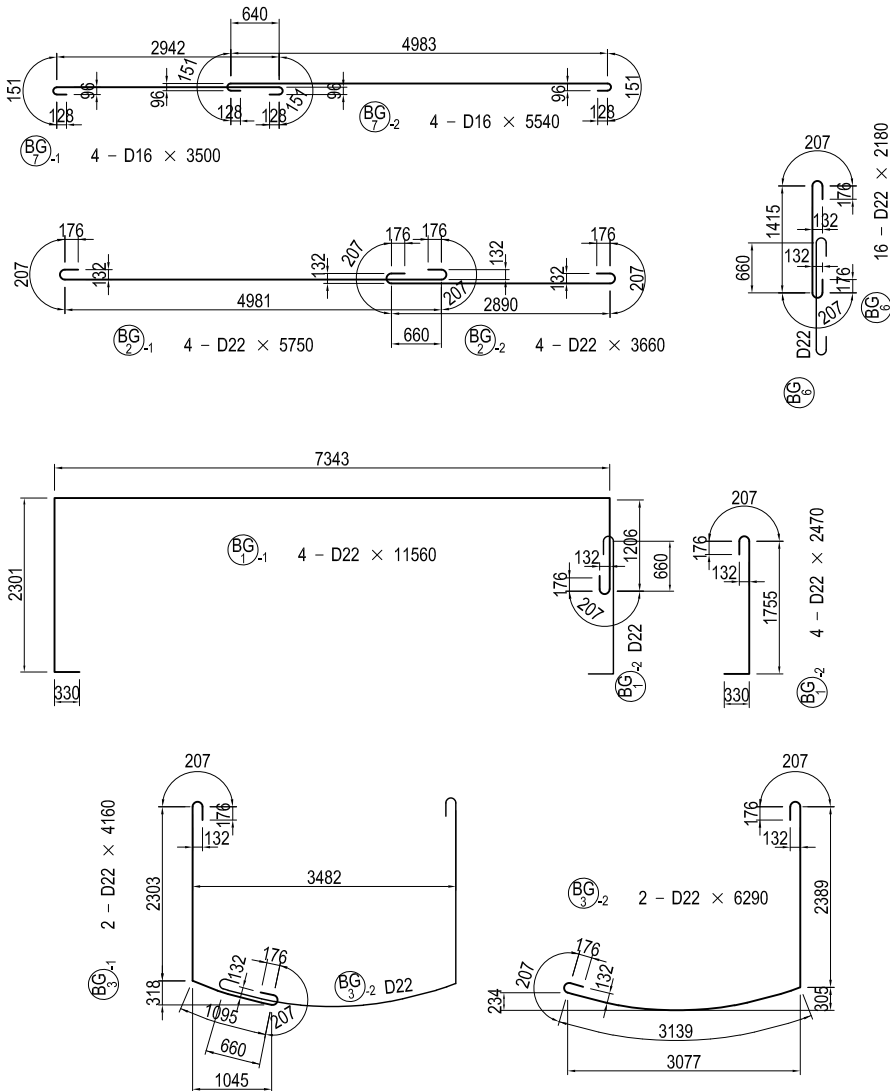


MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BF4-2 1	D22	2	1124	862	717	2291	4181
2	"	2	1006	865	509	2397	4169
3	"	2	1304	1240	391	2375	4445
AVE		6	1145			2354	4265

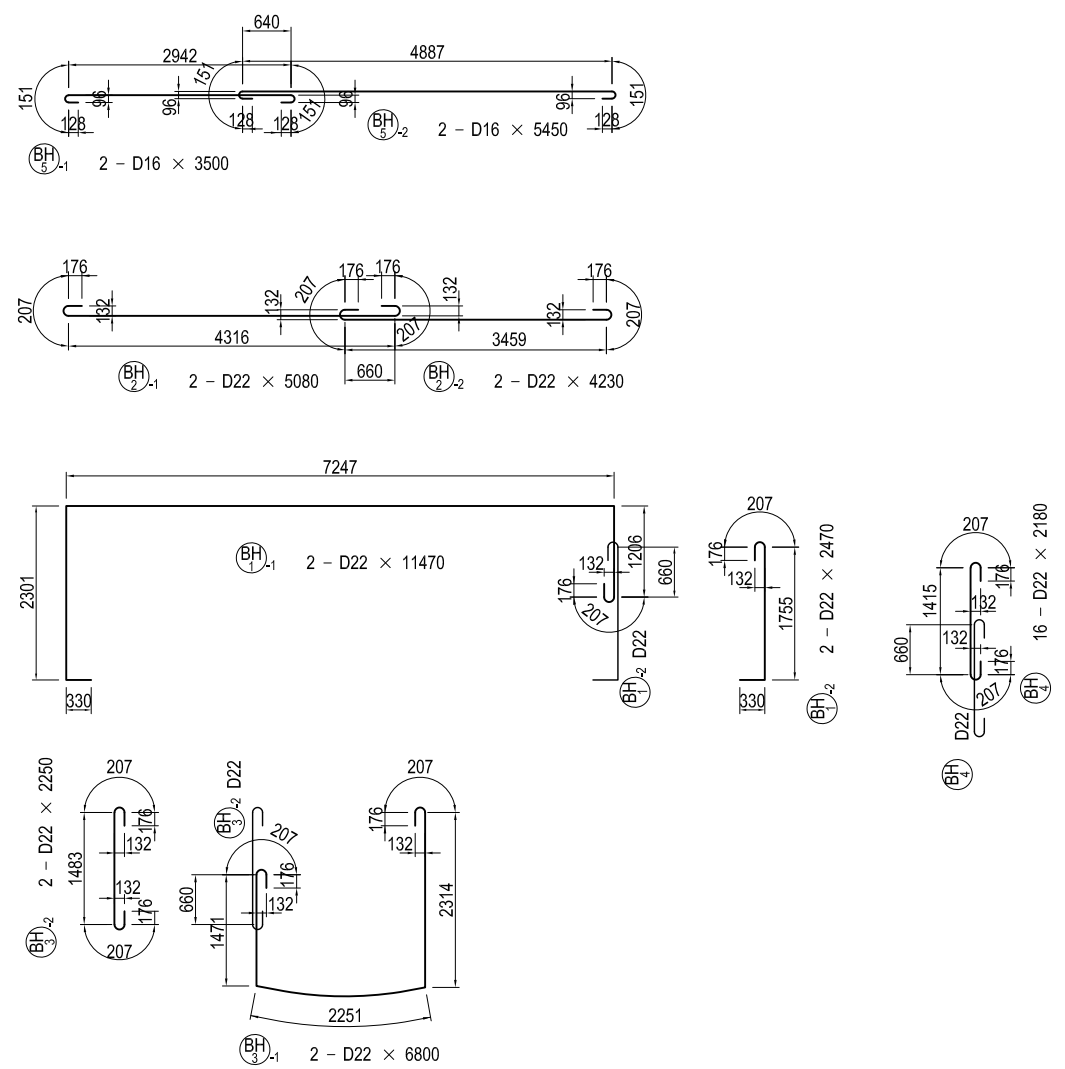
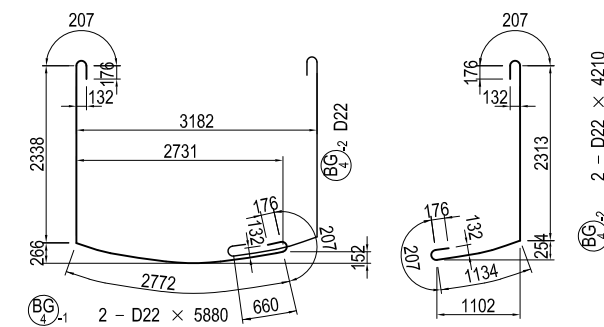
USE MATERIALS

BEAM・COLUMN	CONCRETE	BAR
	σ _{ck} = 30 N/mm ²	SD345

BAR ARRANGEMENT OF P10 PIER (24) S=1:100
BEAM



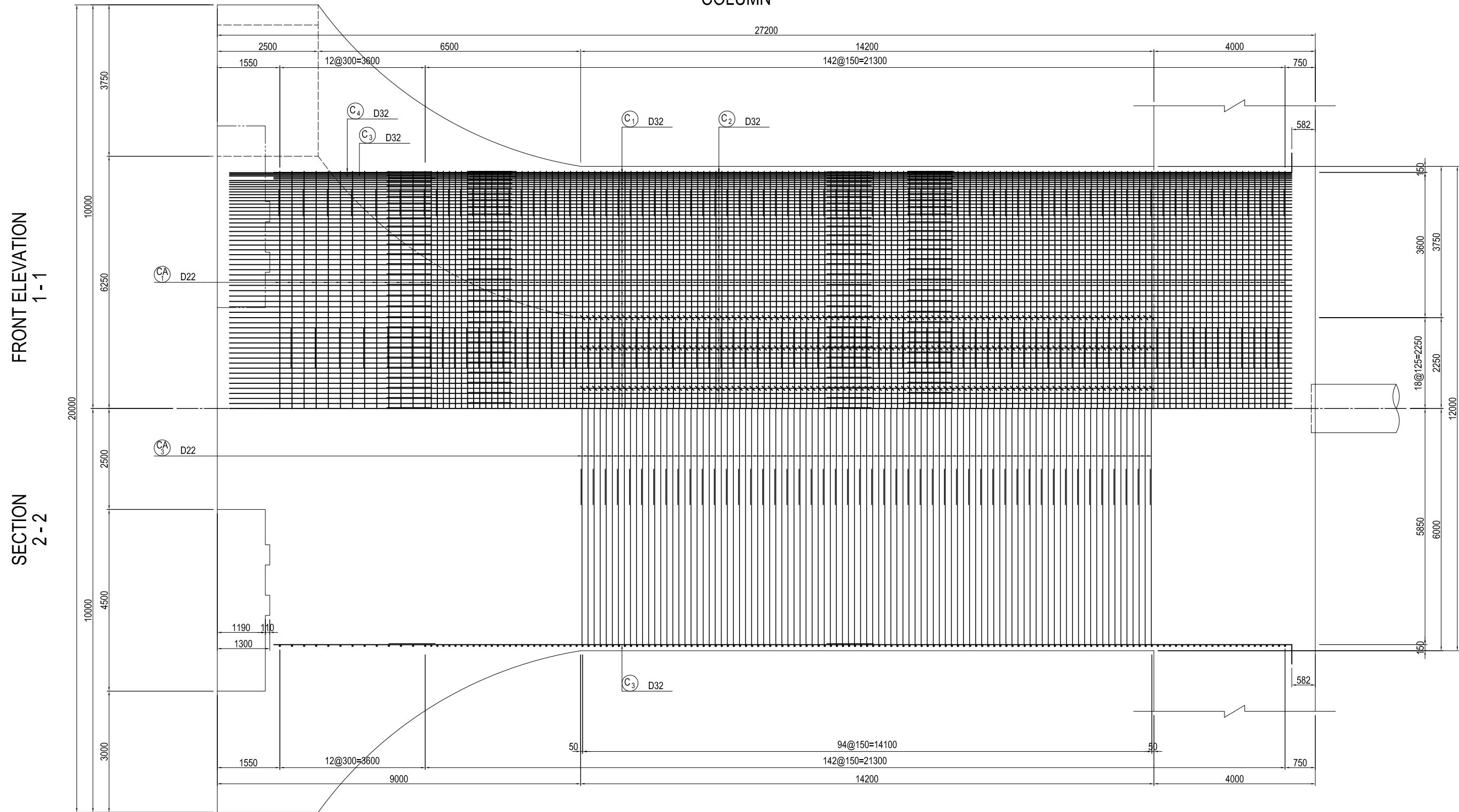
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BG5 1	D22	4	1586	2511	2352
2	"	4	1603	2545	2369
3	"	4	1571	2482	2337
4	"	4	1562	2464	2328
AVE		16	1581		2347



USE MATERIALS

BEAM•COLUMN	CONCRETE	BAR
	σck = 30 N/mm ²	SD345

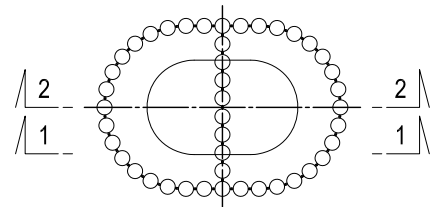
BAR ARRANGEMENT OF P10 PIER (25) S=1:100
COLUMN



FRONT ELEVATION
1-1

SECTION
2-2

MARKING DIAGRAM

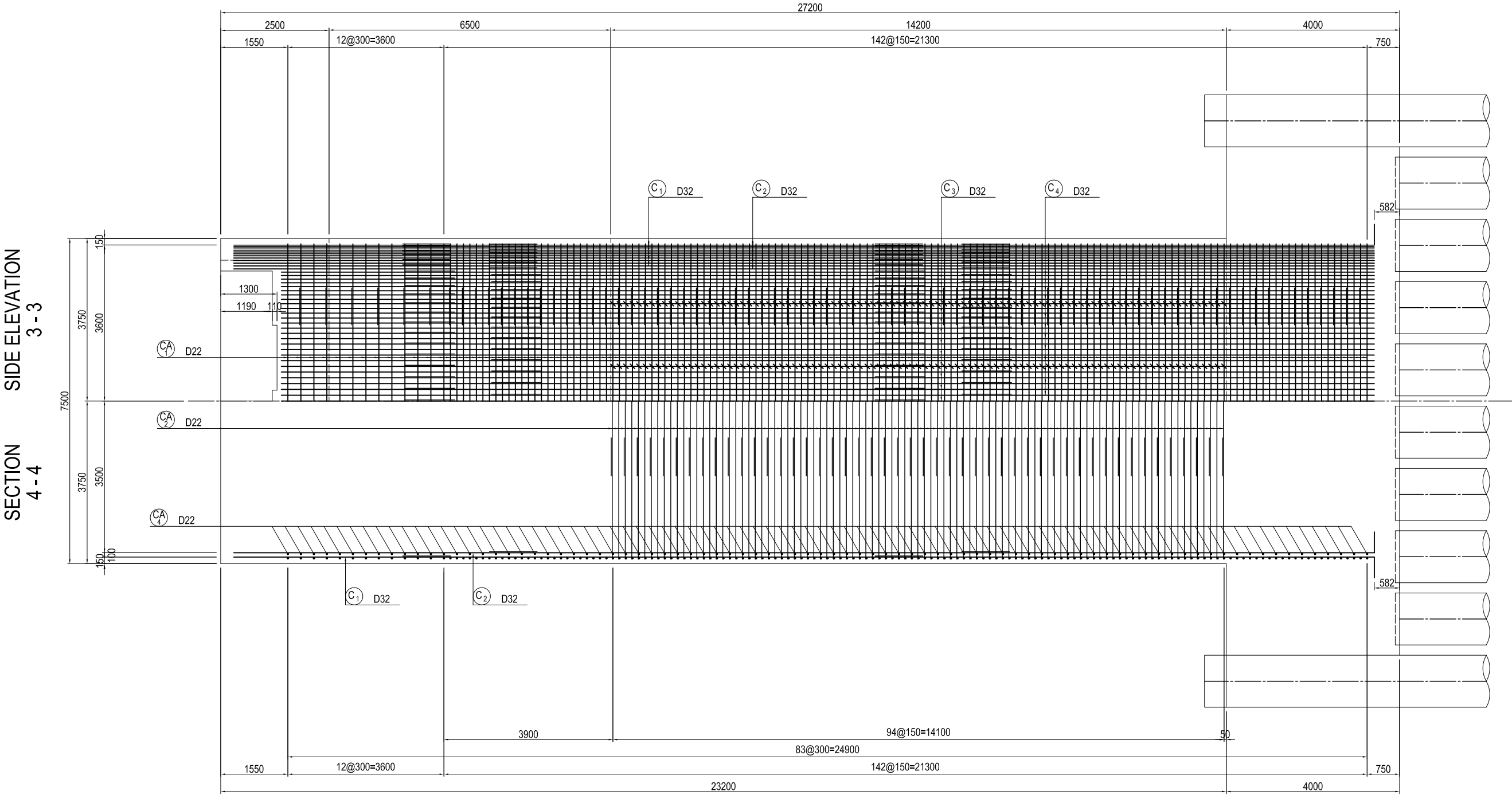


USE MATERIALS

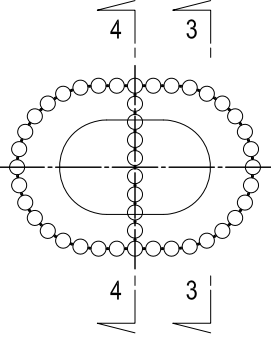
	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

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 BAR ARRANGEMENT OF P10 PIER (25)	PACKAGE 1 DWG No. P1-CS-2027
				PREPARED BY	S.TOKUMARU	徳丸 祥樹		
				CHECKED BY	T. HAYAKAWA	平川 知那		
				APPROVED BY	Y. SANO	佐野 祐一		

BAR ARRANGEMENT OF P10 PIER (26) S=1:100
COLUMN



MARKING DIAGRAM



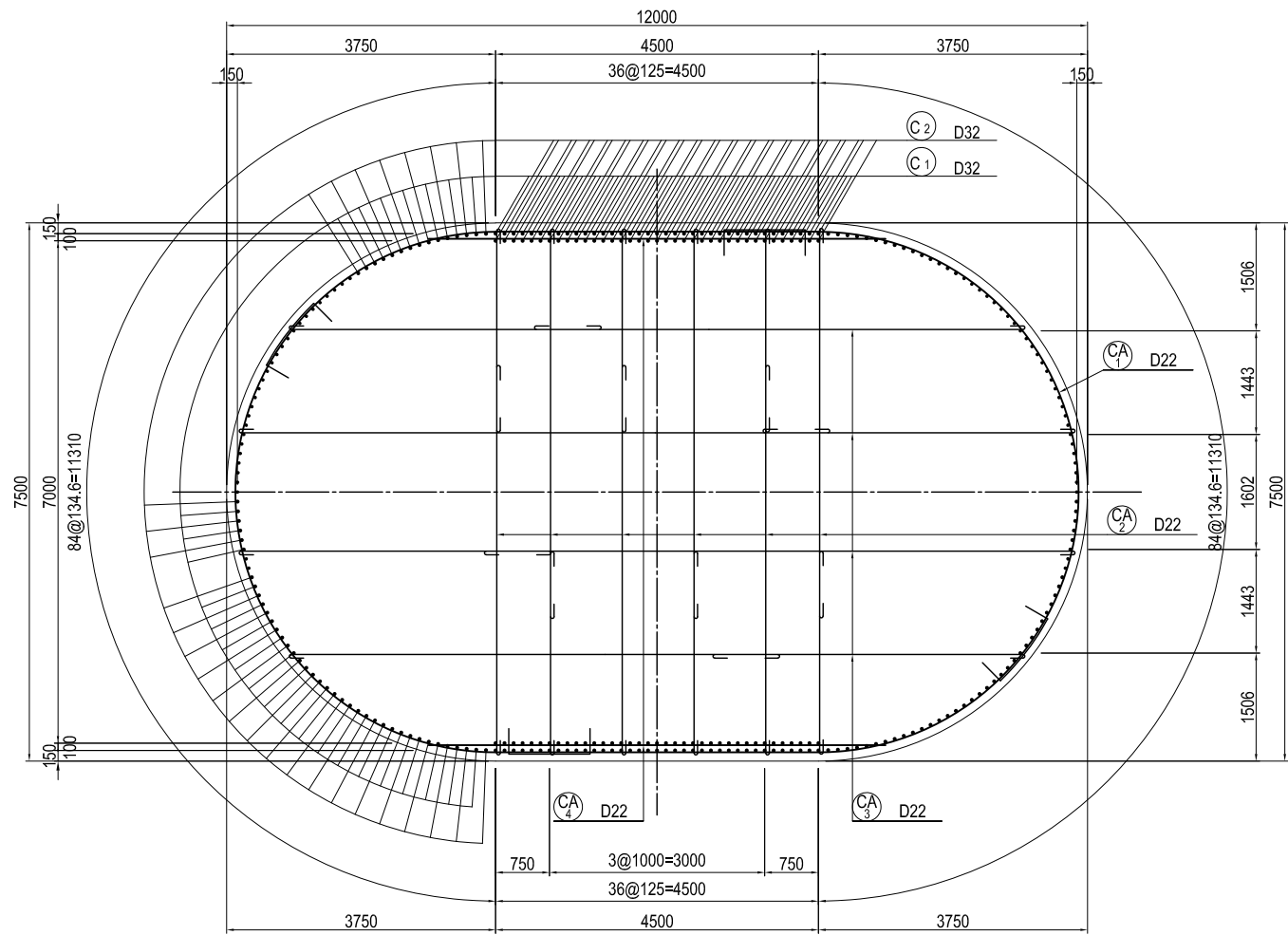
USE MATERIALS

	CONCRETE	BAR
BEAM・COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

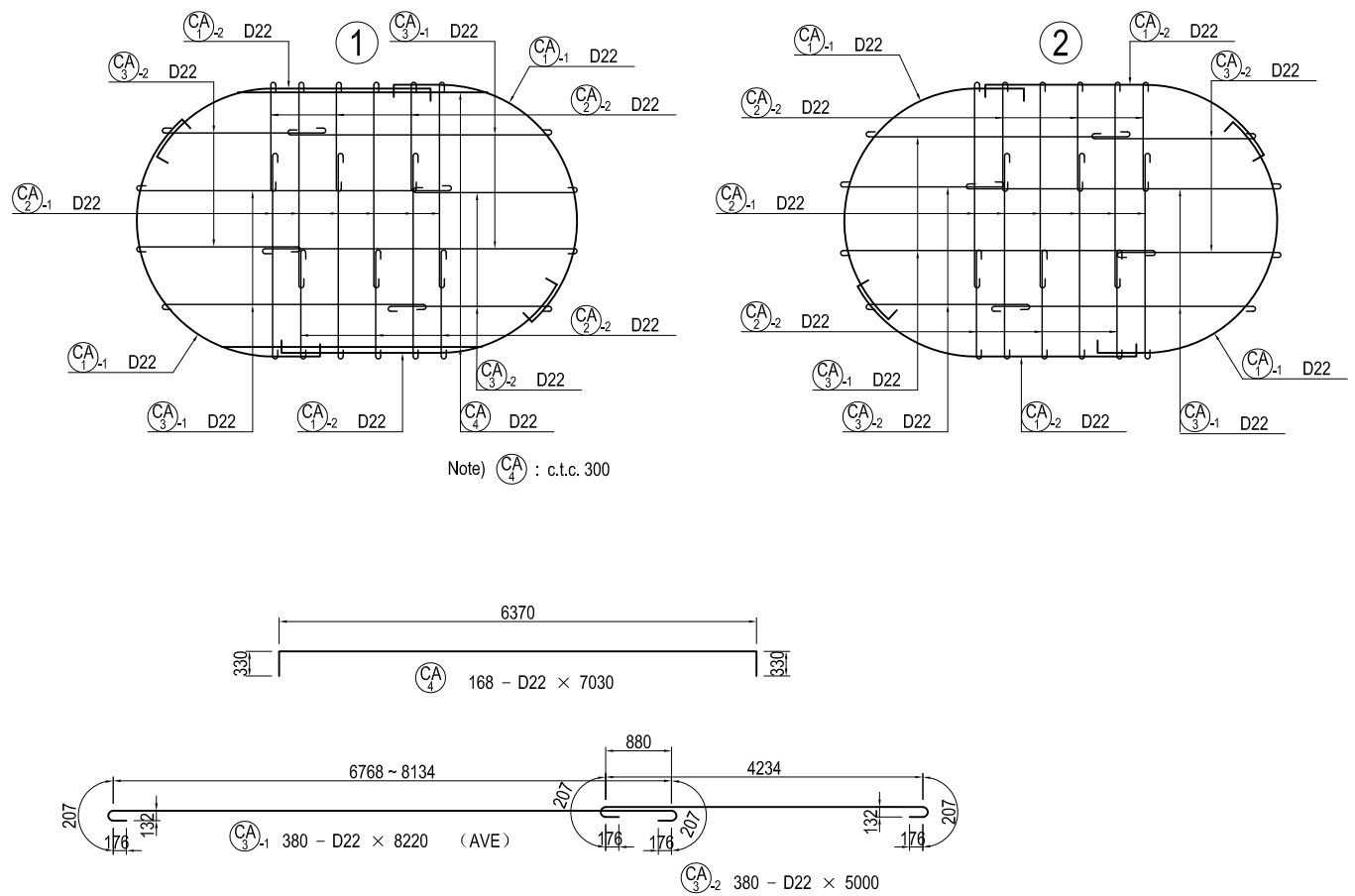
PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.		NAME	SIGNATURE	DATE	DRAWING TITLE BAR ARRANGEMENT OF P10 PIER (26)	PACKAGE 1 DWG No. P1-CS-2028
				PREPARED BY	S.TOKUMARU	徳丸 祥樹	27. Nov.2017		
				CHECKED BY	T. HAYAKAWA	平川 知那	28. Nov.2017		
				APPROVED BY	Y. SANO	佐野 祐一	29. Nov.2017		

BAR ARRANGEMENT OF P10 PIER (27) S=1:100
COLUMN

PLAN
5 - 5

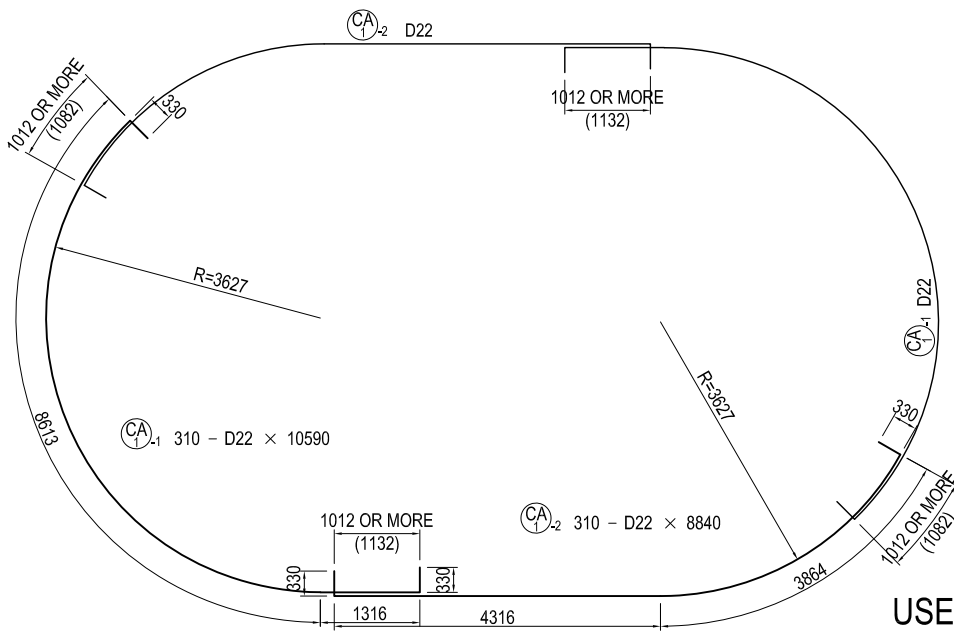
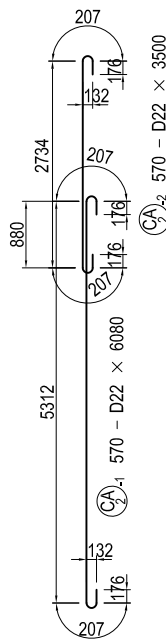
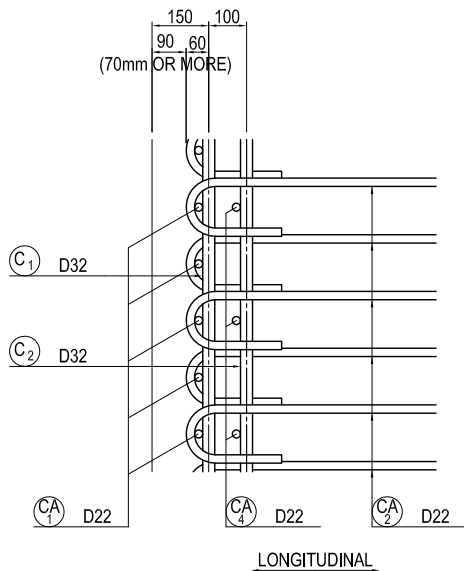
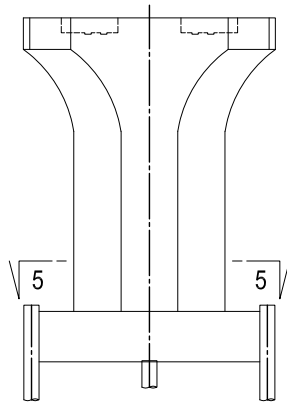


ASSEMBLY DRAWING OF HOOP
(c.t.c. 150)



DETAIL OF COLUMN S=1:20

MARKING DIAGRAM



LAP LENGTH LIST OF HOOP

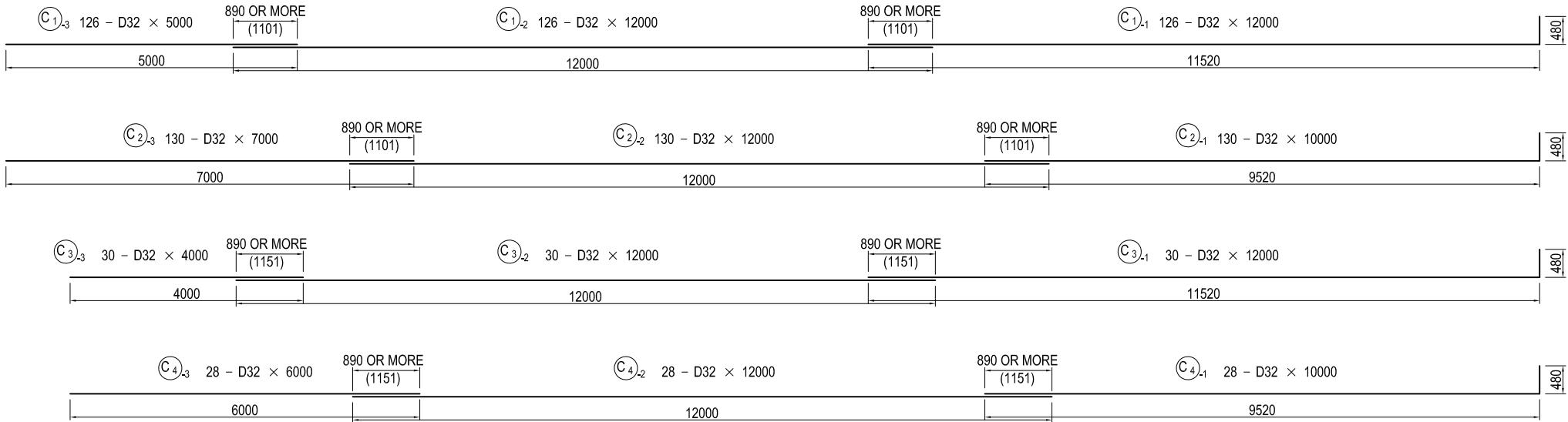
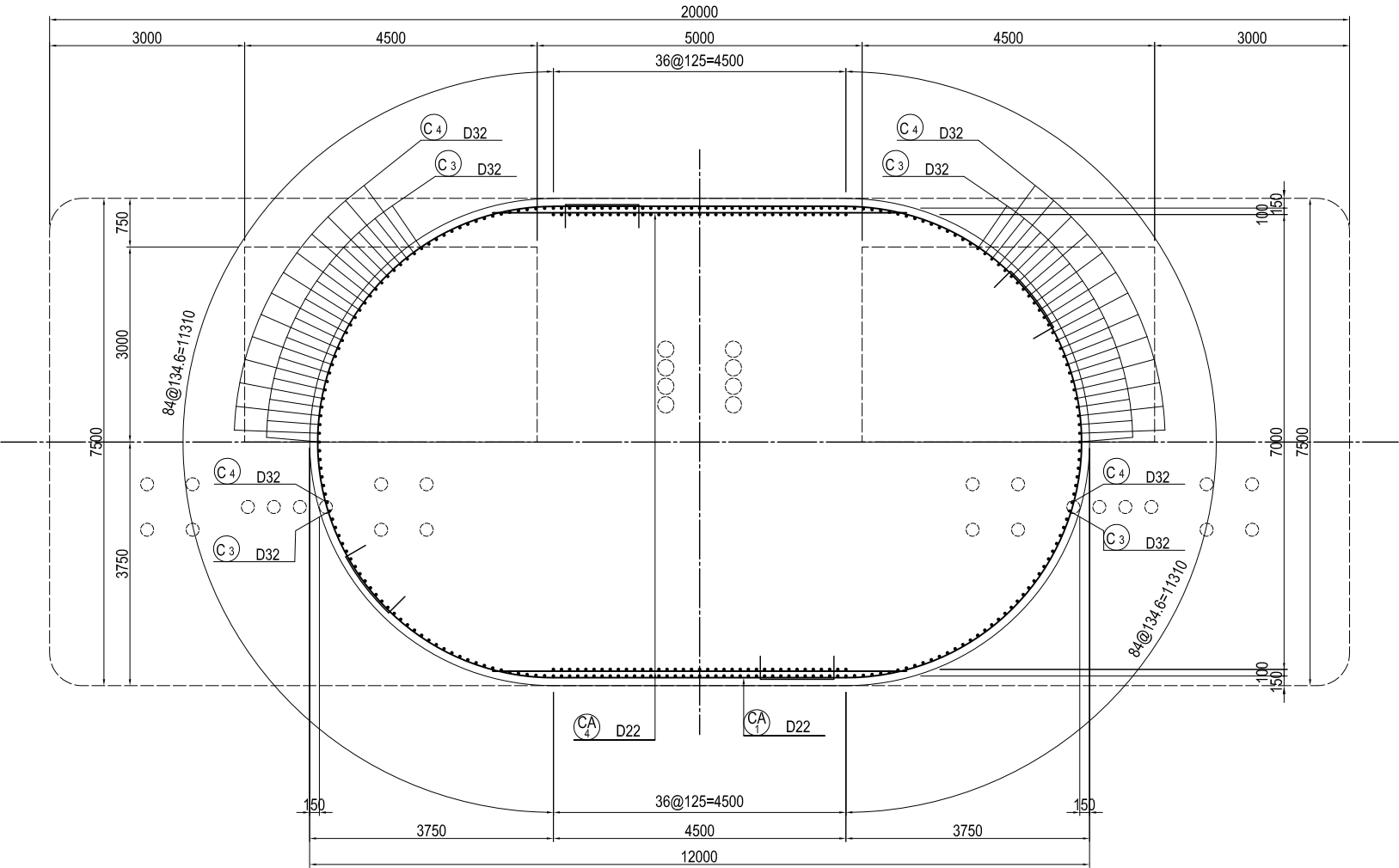
DIA.	R	LAP LENGTH (40φ)	L
D13	39	520	598
D16	48	640	736
D19	57	760	874
D22	66	880	1012
D25	75	1000	1150
D29	87	1160	1334
D32	96	1280	1472

USE MATERIALS

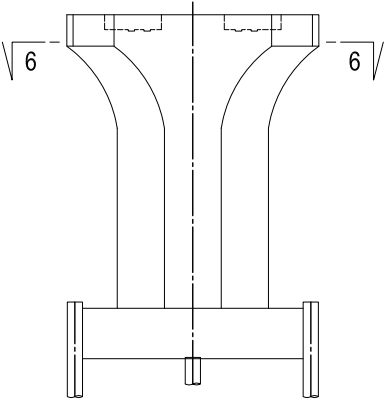
BEAM-COLUMN	CONCRETE $\sigma_{ck} = 30 \text{ N/mm}^2$	BAR SD345

BAR ARRANGEMENT OF P10 PIER (28) S=1:100
COLUMN

PLAN
6 - 6



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. TOKUMARU		27. Nov. 2017	BAR ARRANGEMENT OF P10 PIER (28)	1
				CHECKED BY T. HAYAKAWA		28. Nov. 2017		DWG No.
				APPROVED BY Y. SANO		29. Nov. 2017		P1-CS-2030

BAR ARRANGEMENT OF P10 PIER (29) NOT TO SCALE

BAR SCHEDULE

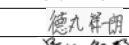
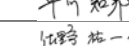
MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 1-1	D29	11500	14	5.04	57.96	811	┐
1-2	"	8500	14	"	42.84	600	━
1-3	"	6000	14	"	30.24	423	┐
2-1	"	9500	10	"	47.88	479	┐
2-2	"	7000	5	"	35.28	176	━
3-1	"	12000	11	"	60.48	665	┐
3-2	"	9500	11	"	47.88	527	┐
4-1	"	6500	2	"	32.76	66	┐
4-2	"	9500	1	"	47.88	48	━
5-1	"	9500	25	"	47.88	1197	┐
5-2	"	12000	25	"	60.48	1512	┐
6-1	"	11000	2	"	55.44	111	┐
6-2	"	5960	2	"	30.04	60	━ (AVE)
6-3	"	9000	2	"	45.36	91	┐
7-1	"	9460	2	"	47.68	95	┐ (AVE)
7-2	"	12000	2	"	60.48	121	┐
8-1	"	7500	2	"	37.80	76	┐
8-2	"	6940	2	"	34.98	70	━ (AVE)
8-3	"	11500	2	"	57.96	116	┐
9-1	"	9500	1	"	47.88	48	┐
9-2	"	12000	1	"	60.48	60	┐
10-1	"	12000	2	"	60.48	121	┐
10-2	"	9440	2	"	47.58	95	┐ (AVE)
11-1	"	10500	2	"	52.92	106	┐
11-2	"	6500	2	"	32.76	66	━
11-3	"	8500	2	"	42.84	86	┐
12-1	"	11500	2	"	57.96	116	┐
12-2	"	9000	2	"	45.36	91	┐
13-1	"	9500	2	"	47.88	96	┐
13-2	"	11500	2	"	57.96	116	┐
14	"	7500	22	"	37.80	832	┐
15	"	9000	11	"	45.36	499	┐
16	"	5670	10	"	28.58	286	┐
17	"	7670	5	"	38.66	193	"
18-1	D22	9790	12	3.04	29.76	357	┐ (AVE)
18-2	"	5000	12	"	15.20	182	━
18-3	"	11070	12	"	33.65	404	┐ (AVE)
19-1	"	9460	15	"	28.76	431	┐ (AVE)
19-2	"	8000	15	"	24.32	365	━
19-3	"	10940	15	"	33.26	499	┐ (AVE)
20-1	"	9850	7	"	29.94	210	┐ (AVE)
20-2	"	8500	7	"	25.84	181	━
20-3	"	11430	7	"	34.75	243	┐ (AVE)
21-1	"	10500	2	"	31.92	64	┐
21-2	"	12000	2	"	36.48	73	┐

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 22-1	D16	11500	14	1.56	17.94	251	┐
22-2	"	11000	14	"	17.16	240	┐
22-3	"	12000	28	"	18.72	524	┐
22-4	"	12000	14	"	18.72	262	┐
23-1	"	11500	2	"	17.94	36	┐
23-2	"	12000	1	"	18.72	19	┐
23-3	"	5500	1	"	8.58	9	┐
23-4	"	12000	1	"	18.72	19	┐
24-1	"	11010	12	"	17.18	206	┐ (AVE)
24-2	"	9070	6	"	14.15	85	┐ (AVE)
24-3	"	8950	6	"	13.96	84	┐ (AVE)
24-4	"	10000	6	"	15.60	94	┐
25-1	"	10060	62	"	15.69	973	┐ (AVE)
25-2	"	10300	62	"	16.07	996	┐ (AVE)
26-1	"	11800	4	"	18.41	74	┐ (AVE)
26-2	"	11850	4	"	18.49	74	┐ (AVE)
26-3	"	11680	4	"	18.22	73	┐ (AVE)
SUBTOTAL						17083 kg	
BA 1-1	D22	11150	25	3.04	33.90	848	┐
1-2	"	9270	25	"	28.18	705	┐
1-3	"	8040	25	"	24.44	611	┐
2-1	"	5750	25	"	17.48	437	┐
2-2	"	3660	25	"	11.13	278	"
3-1	"	11670	50	"	35.48	1774	┐
3-2	"	9270	50	"	28.18	1409	┐
4-1	"	11700	25	"	35.57	889	┐
4-2	"	9270	25	"	28.18	705	┐
5-1	D16	5540	25	1.56	8.64	216	┐
5-2	"	3500	25	"	5.46	137	"
6-1	"	3500	25	"	5.46	137	┐
6-2	"	5380	25	"	8.39	210	"
SUBTOTAL						8356 kg	
BB 1-1	D22	11370	8	3.04	34.56	276	┐ (AVE)
1-2	"	10130	8	"	30.80	246	┐ (AVE)
1-3	"	9790	8	"	29.76	238	┐
1-4	"	6870	8	"	20.88	167	┐
1-5	"	9190	8	"	27.94	224	┐
1-6	"	6850	8	"	20.82	167	┐
2-1	"	10140	8	"	30.83	247	┐ (AVE)
2-2	"	9970	8	"	30.31	242	┐ (AVE)
2-3	"	9970	8	"	30.31	242	┐
2-4	"	9210	8	"	28.00	224	┐
2-5	"	9310	8	"	28.30	226	┐
2-6	"	5500	8	"	16.72	134	┐

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BB 3-1	D22	11070	2	3.04	33.65	67	┐
3-2	"	9790	2	"	29.76	60	┐
3-3	"	9740	2	"	29.61	59	┐
3-4	"	6870	2	"	20.88	42	┐
3-5	"	8120	2	"	24.68	49	┐
4-1	"	10800	4	"	32.83	131	┐ (AVE)
4-2	"	9430	4	"	28.67	115	┐ (AVE)
4-3	"	8770	4	"	26.66	107	┐
4-4	"	9210	4	"	28.00	112	┐
4-5	"	6890	4	"	20.95	84	┐
5-1	"	10640	4	"	32.35	129	┐ (AVE)
5-2	"	11800	4	"	35.87	143	┐ (AVE)
5-3	"	9740	4	"	29.61	118	┐
5-4	"	6870	4	"	20.88	84	┐
5-5	"	5670	4	"	17.24	69	┐
6-1	"	8330	4	"	25.32	101	┐ (AVE)
6-2	"	6810	4	"	20.70	83	┐ (AVE)
6-3	"	10470	4	"	31.83	127	┐ (AVE)
6-4	"	9210	4	"	28.00	112	┐
6-5	"	8750	4	"	26.60	106	┐
7-1	"	10080	2	"	30.64	61	┐ (AVE)
7-2	"	11240	2	"	34.17	68	┐
7-3	"	9740	2	"	29.61	59	┐
7-4	"	6870	2	"	20.88	42	┐
7-5	"	5670	2	"	17.24	34	┐
8-1	"	12000	2	"	36.48	73	┐
8-2	"	8160	2	"	24.81	50	┐
8-3	"	9740	2	"	29.61	59	┐
8-4	"	6870	2	"	20.88	42	┐
8-5	"	5670	2	"	17.24	34	┐
9-1	"	11890	26	"	36.15	940	┐
9-2	"	9210	26	"	28.00	728	┐
10-1	"	11170	8	"	33.96	272	┐
10-2	"	5500	8	"	16.72	134	┐
11-1	"	10500	14	"	31.92	447	┐
11-2	"	5630	14	"	17.12	240	┐
12	"	3130	28	"	9.52	267	┐ (AVE)
13	"	4690	16	"	14.26	228	┐ (AVE)
14	"	5430	16	"	16.51	264	"
15	"	4300	44	"	13.07	575	┐
16	"	3810	12	"	11.58	139	" (AVE)
17	D16	2640	68	1.56	4.12	280	┐
18-1	"	5380	16	"	8.39	134	┐
18-2	"	3500	16	"	5.46	87	"
19	"	1070	34	"	1.67	57	┐
SUBTOTAL						9845 kg	

USE MATERIALS

	CONCRETE	BAR
BEAM•COLUMN	σck = 30 N/mm ²	SD345

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 BAR ARRANGEMENT OF P10 PIER (29)	PACKAGE 1 DWG No. P1-CS-2031
				PREPARED BY	S .TOKUMARU		27. Nov.2017		
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		
				APPROVED BY	Y. SANO		29. Nov.2017		

BAR ARRANGEMENT OF P10 PIER (30) NOT TO SCALE

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/E.A. (kg)	WEIGHT (kg)	REMARKS
BC	1-1	D22	9540	4	3.04	29.00	116 ☞ (AVE)
	1-2	"	9910	4	"	30.13	121 ☞ (AVE)
	1-3	"	4730	8	"	14.38	115 ☞ (AVE)
	1-4	"	9890	4	"	30.07	120 ☞ (AVE)
	2-1	"	6740	2	"	20.49	41 ☞
	2-2	"	10800	2	"	32.83	66 ☞
	2-3	"	9740	2	"	29.61	59 ☞
	2-4	"	5600	2	"	17.02	34 ☞
	2-5	"	5670	2	"	17.24	34 ☞
	3	"	4250	24	"	12.92	310 ☞ (AVE)
	4	"	2930	36	"	8.91	321 ☞ (AVE)
	5	D16	2640	12	1.56	4.12	49 ☞
	6-1	"	5380	6	"	8.39	50 ☞
	6-2	"	3500	6	"	5.46	33 "
	7	"	1070	6	"	1.67	10 ☞
SUBTOTAL						1479	kg
BD	1	D22	8850	6	3.04	26.90	161 ☞
	2	"	5840	6	"	17.75	107 ☞
	3-1	"	5940	6	"	18.06	108 ☞
	3-2	"	3460	6	"	10.52	63 "
	4-1	"	7260	4	"	22.07	88 ☞ (AVE)
	4-2	"	10410	4	"	31.65	127 ☞ (AVE)
	5-1	"	10330	2	"	31.40	63 ☞
	5-2	"	7380	2	"	22.44	45 ☞
	6	"	3670	24	"	11.16	268 ☞ (AVE)
	7	"	2670	24	"	8.12	195 ☞ (AVE)
	8	D16	2640	12	1.56	4.12	49 ☞
	9	"	1070	6	"	1.67	10 ☞
SUBTOTAL						1284	kg
BE	1-1	D22	11560	10	3.04	35.14	351 ☞
	1-2	"	2470	10	"	7.51	75 ☞
	2-1	"	3460	10	"	10.52	105 ☞
	2-2	"	5940	10	"	18.06	181 "
	3-1	"	10290	6	"	31.28	188 ☞ (AVE)
	3-2	"	5270	6	"	16.02	96 ☞ (AVE)
	4-1	"	5280	4	"	16.05	64 ☞ (AVE)
	4-2	"	10320	4	"	31.37	125 ☞ (AVE)
	5	"	3180	80	"	9.67	774 ☞ (AVE)
	6-1	D16	5540	10	1.56	8.64	86 ☞
	6-2	"	3500	10	"	5.46	55 "
SUBTOTAL						2100	kg
BF	1-1	D22	11560	12	3.04	35.14	422 ☞
	1-2	"	2470	12	"	7.51	90 ☞
	2-1	"	5940	12	"	18.06	217 ☞
	2-2	"	3460	12	"	10.52	126 "
	3-1	"	4230	6	"	12.86	77 ☞ (AVE)
	3-2	"	8750	6	"	26.60	160 ☞ (AVE)

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/E.A. (kg)	WEIGHT (kg)	REMARKS	
BF	4-1	D22	8090	6	3.04	24.59	148	⤴ (AVE)
	4-2	"	4270	6	"	12.98	78	⤴ (AVE)
	5	"	2630	80	"	8.00	640	⤴ (AVE)
	6	"	2180	16	"	6.63	106	"
	7-1	D16	3500	12	1.56	5.46	66	⤴
	7-2	"	5540	12	"	8.64	104	"
SUBTOTAL						2234	kg	
BG	1-1	D22	11560	4	3.04	35.14	141	⤴
	1-2	"	2470	4	"	7.51	30	⤴
	2-1	"	5750	4	"	17.48	70	⤴
	2-2	"	3660	4	"	11.13	45	"
	3-1	"	4160	2	"	12.65	25	⤴
	3-2	"	6290	2	"	19.12	38	⤴
	4-1	"	5880	2	"	17.88	36	⤴
	4-2	"	4210	2	"	12.80	26	⤴
	5	"	2350	16	"	7.14	114	⤴ (AVE)
	6	"	2180	16	"	6.63	106	"
	7-1	D16	3500	4	1.56	5.46	22	⤴
	7-2	"	5540	4	"	8.64	35	"
SUBTOTAL						688	kg	
BH	1-1	D22	11470	2	3.04	34.87	70	⤴
	1-2	"	2470	2	"	7.51	15	⤴
	2-1	"	5080	2	"	15.44	31	⤴
	2-2	"	4230	2	"	12.86	26	"
	3-1	"	6800	2	"	20.67	41	⤴
	3-2	"	2250	2	"	6.84	14	⤴
	4	"	2180	16	"	6.63	106	"
	5-1	D16	3500	2	1.56	5.46	11	⤴
	5-2	"	5450	2	"	8.50	17	"
SUBTOTAL						331	kg	
P	1	D16	4500	42	1.56	7.02	295	—
	2	"	6000	26	"	9.36	243	"
	3	"	3690	16	"	5.76	92	⤴
	4	"	4750	16	"	7.41	119	
SUBTOTAL						749	kg	
HA	1	D16	2360	36	1.56	3.68	132	⤴
	2	"	3060	22	"	4.77	105	"
	3	"	7610	2	"	11.87	24	⤴
SUBTOTAL						261	kg	
HB	1	D16	2600	40	1.56	4.06	162	⤴
	2	"	3300	26	"	5.15	134	"
	3	"	7930	2	"	12.37	25	⤴
SUBTOTAL						321	kg	

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS	
HC	1	D16	2300	12	1.56	3.59	43	□
	2	"	2480	7	"	3.87	27	"
	3	"	6330	1	"	9.87	10	□
SUBTOTAL							80	kg
C	1-1	D32	12000	126	6.23	74.76	9420	┘
	1-2	"	12000	126	"	74.76	9420	—
	1-3	"	5000	126	"	31.15	3925	"
	2-1	"	10000	130	"	62.30	8099	┘
	2-2	"	12000	130	"	74.76	9719	—
	2-3	"	7000	130	"	43.61	5669	"
	3-1	"	12000	30	"	74.76	2243	┘
	3-2	"	12000	30	"	74.76	2243	—
	3-3	"	4000	30	"	24.92	748	"
	4-1	"	10000	28	"	62.30	1744	┘
	4-2	"	12000	28	"	74.76	2093	—
	4-3	"	6000	28	"	37.38	1047	"
SUBTOTAL							56370	kg
CA	1-1	D22	10590	310	3.04	32.19	9979	┘
	1-2	"	8840	310	"	26.87	8330	┘
	2-1	"	6080	570	"	18.48	10534	┘
	2-2	"	3500	570	"	10.64	6065	"
	3-1	"	8220	380	"	24.99	9496	┘ (AVE)
	3-2	"	5000	380	"	15.20	5776	"
	4	"	7030	168	"	21.37	3590	┘
SUBTOTAL							53770	kg
D32					56370	kg		
D29					10055	"		
D22					81241	"		
D16					7285	"		
TOTAL					154951	kg		

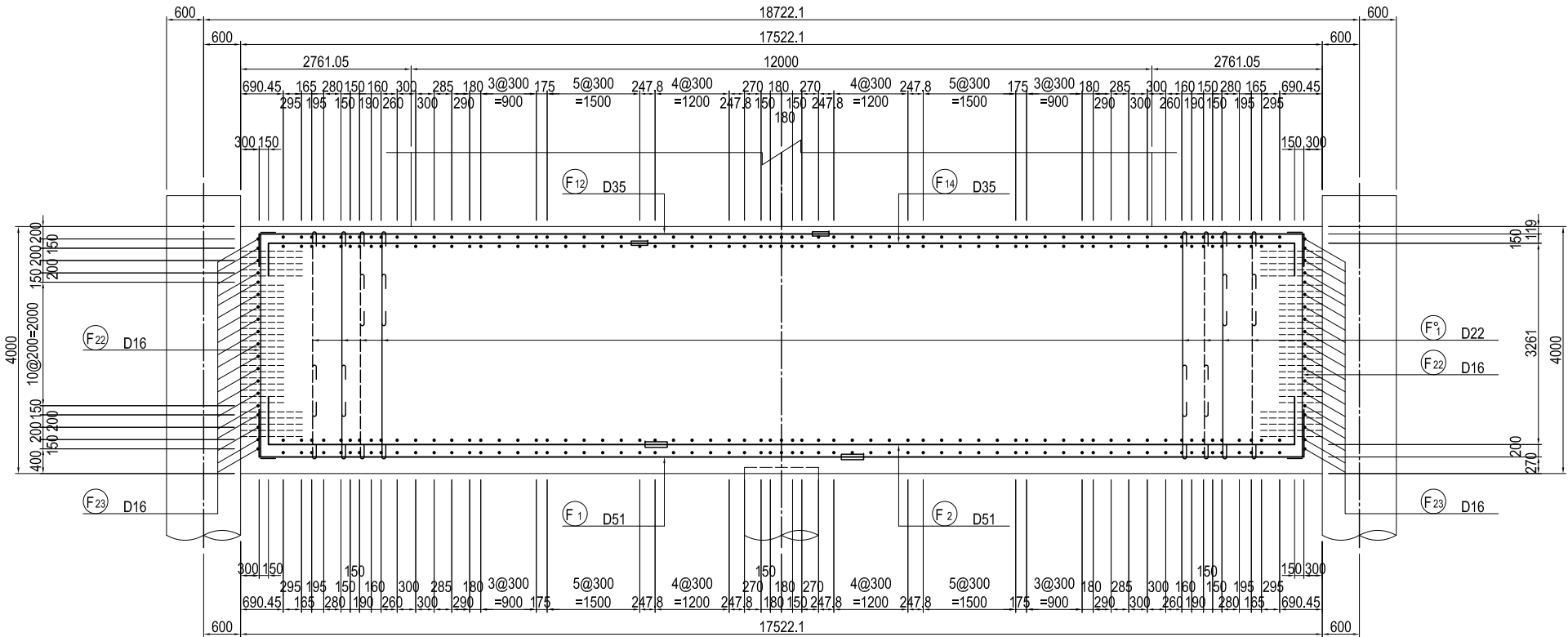
USE MATERIALS

	CONCRETE	BAR
BEAM-COLUMN	$\sigma_{ck} = 30 \text{ N/mm}^2$	SD345

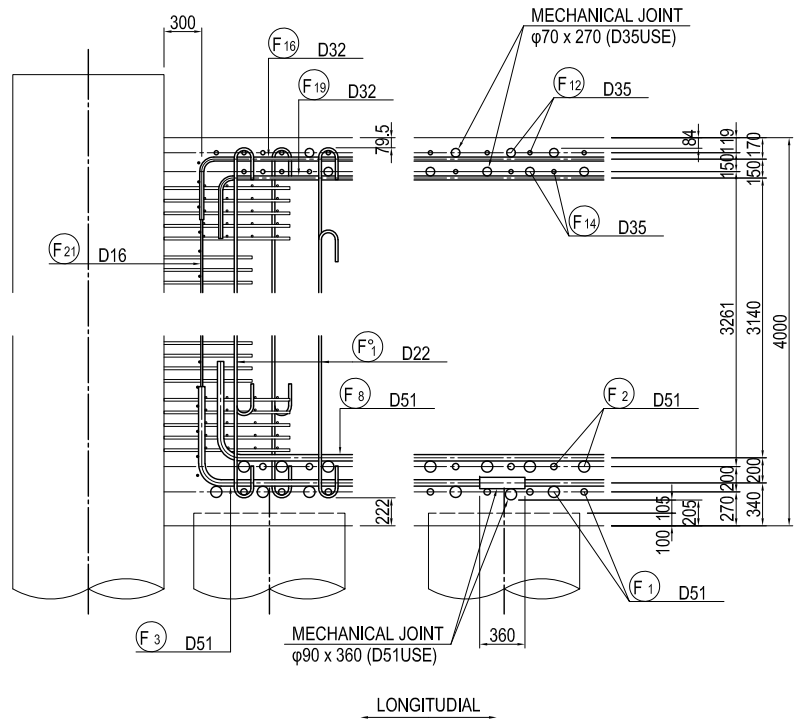
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	 JAPAN INTERNATIONAL COOPERATION AGENCY	 REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	 NIPPON KOEI CO., LTD.  ORIENTAL CONSULTANTS GLOBAL CO., LTD.  METROPOLITAN EXPRESSWAY COMPANY LIMITED  CHODAI CO., LTD.  NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY	S. TOKUMARU		27. Nov.2017	BAR ARRANGEMENT OF P10 PIER (30)	1
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		DWG No.
				APPROVED BY	Y. SANO		29. Nov.2017		P1-CS-2032

BAR ARRANGEMENT OF P10 FOOTING (1) S=1:100

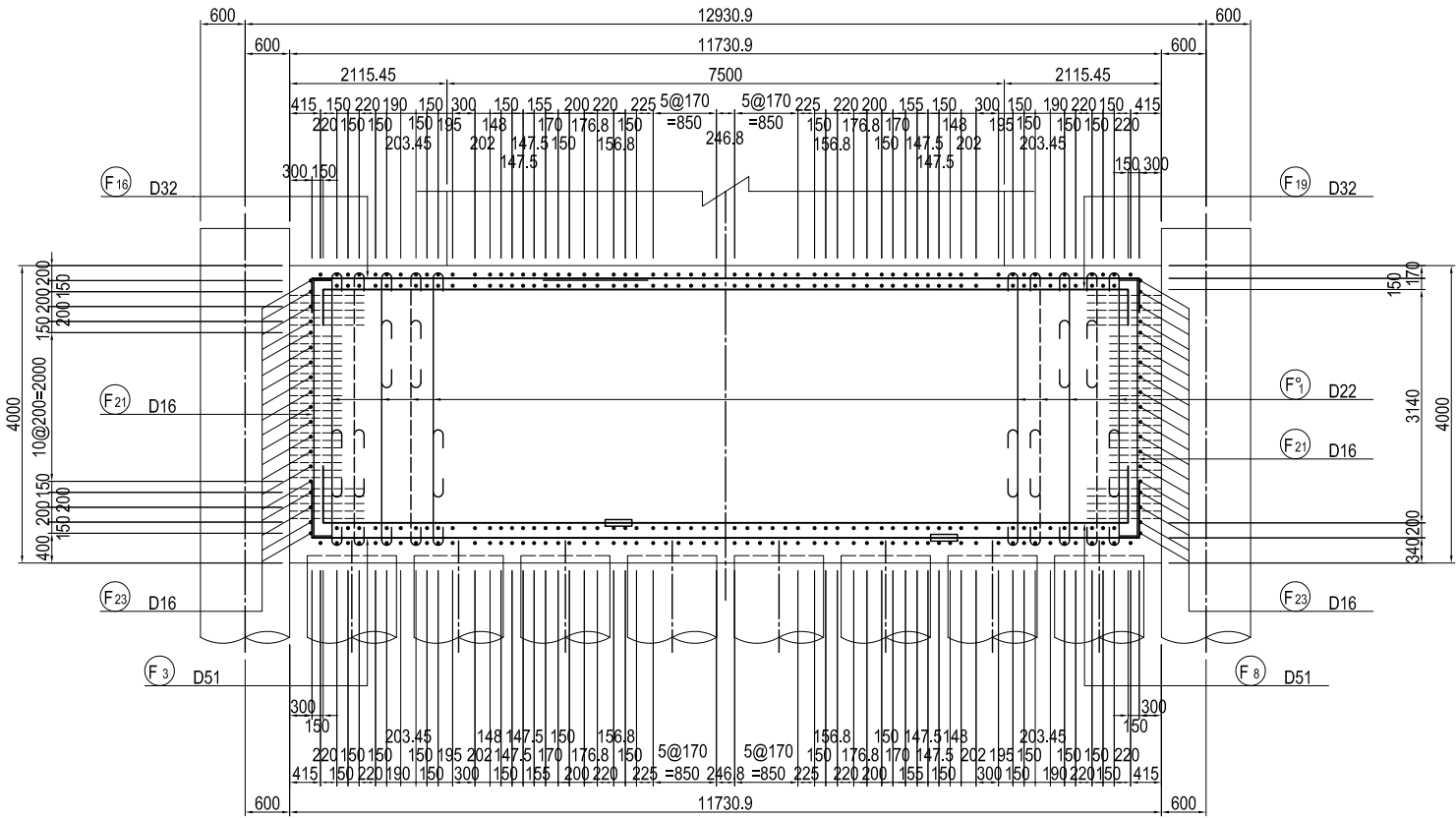
SECTION
1 - 1



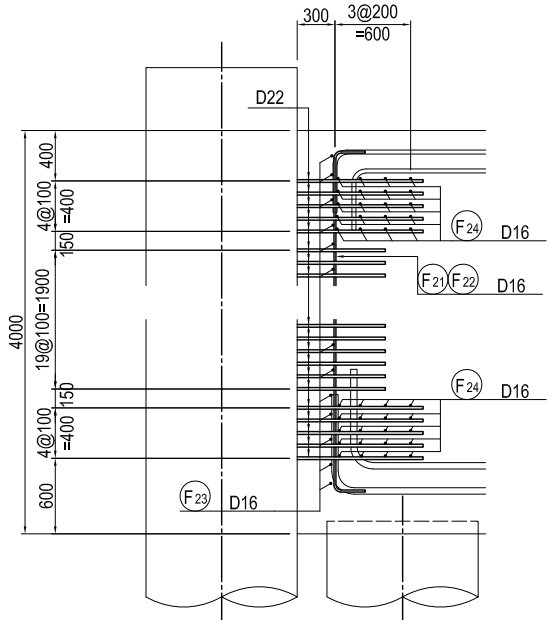
DETAIL OF PILE CAP S=1:60



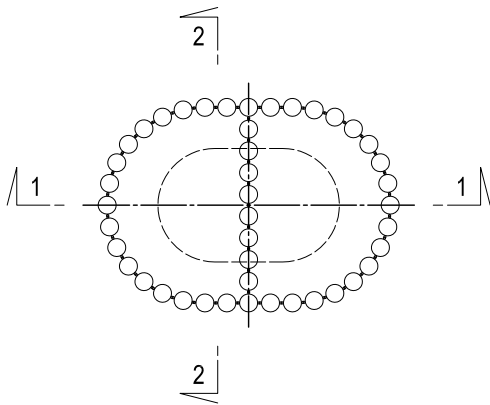
SECTION
2 - 2



DETAIL OF CONNECTION BETWEEN
STEEL PIPE SHEET PILE AND FOOTING
S=1:60



MARKING DIAGRAM



Note) — : MECHANICAL JOINT

USE MATERIALS

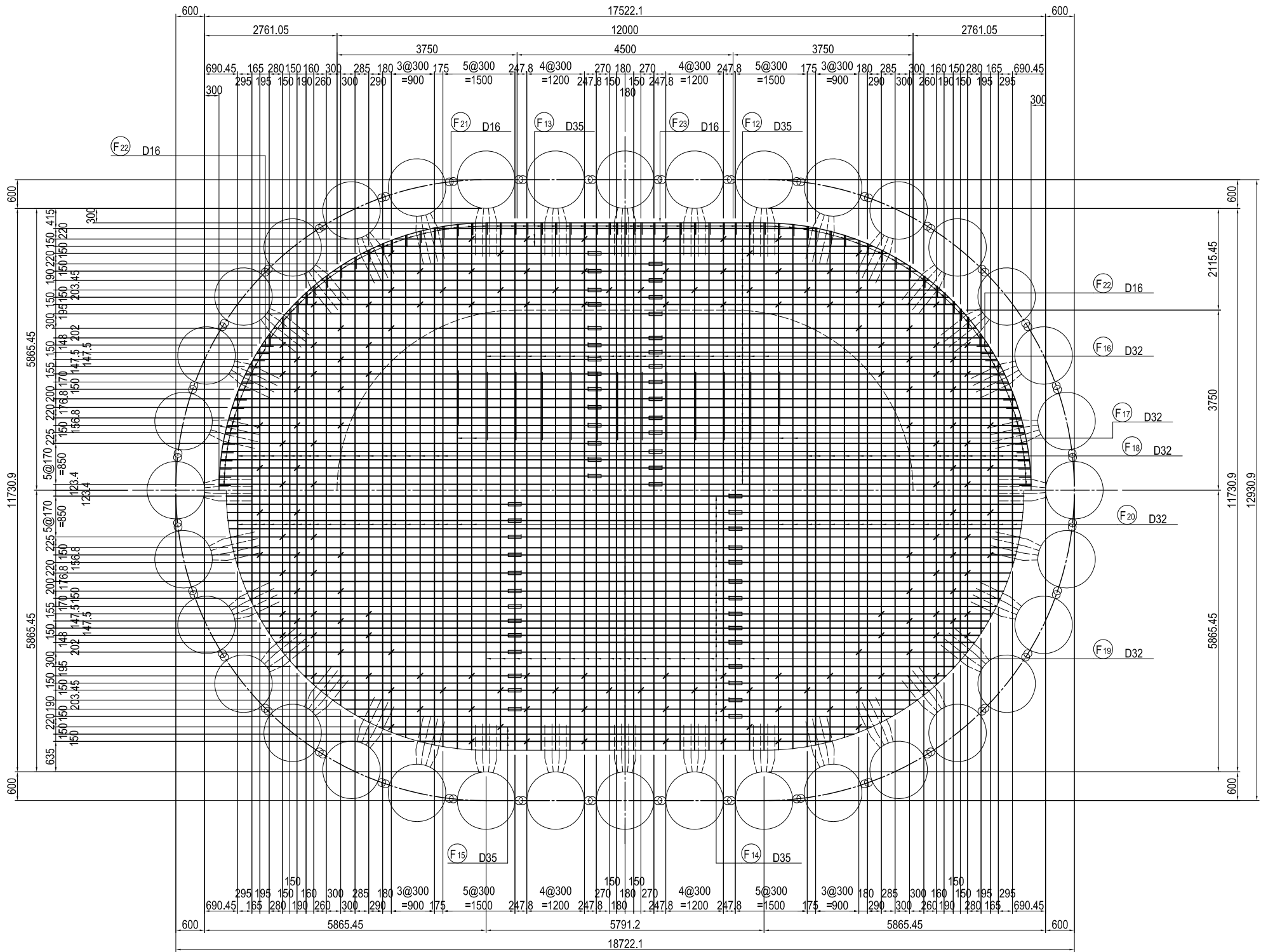
	CONCRETE	BAR
FOOTING	σck = 24 N/mm ²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S. TOKUMARU T. HAYAKAWA Y. SANO	27. Nov. 2017 28. Nov. 2017 29. Nov. 2017	BAR ARRANGEMENT OF P10 FOOTING (1)	1 DWG No. P1-CS-2033

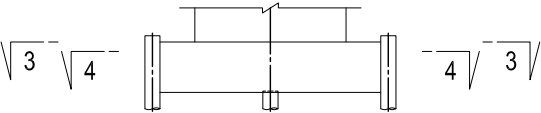
BAR ARRANGEMENT OF P10 FOOTING (2) S=1:100

PLAN
3-3

PLAN
4-4



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

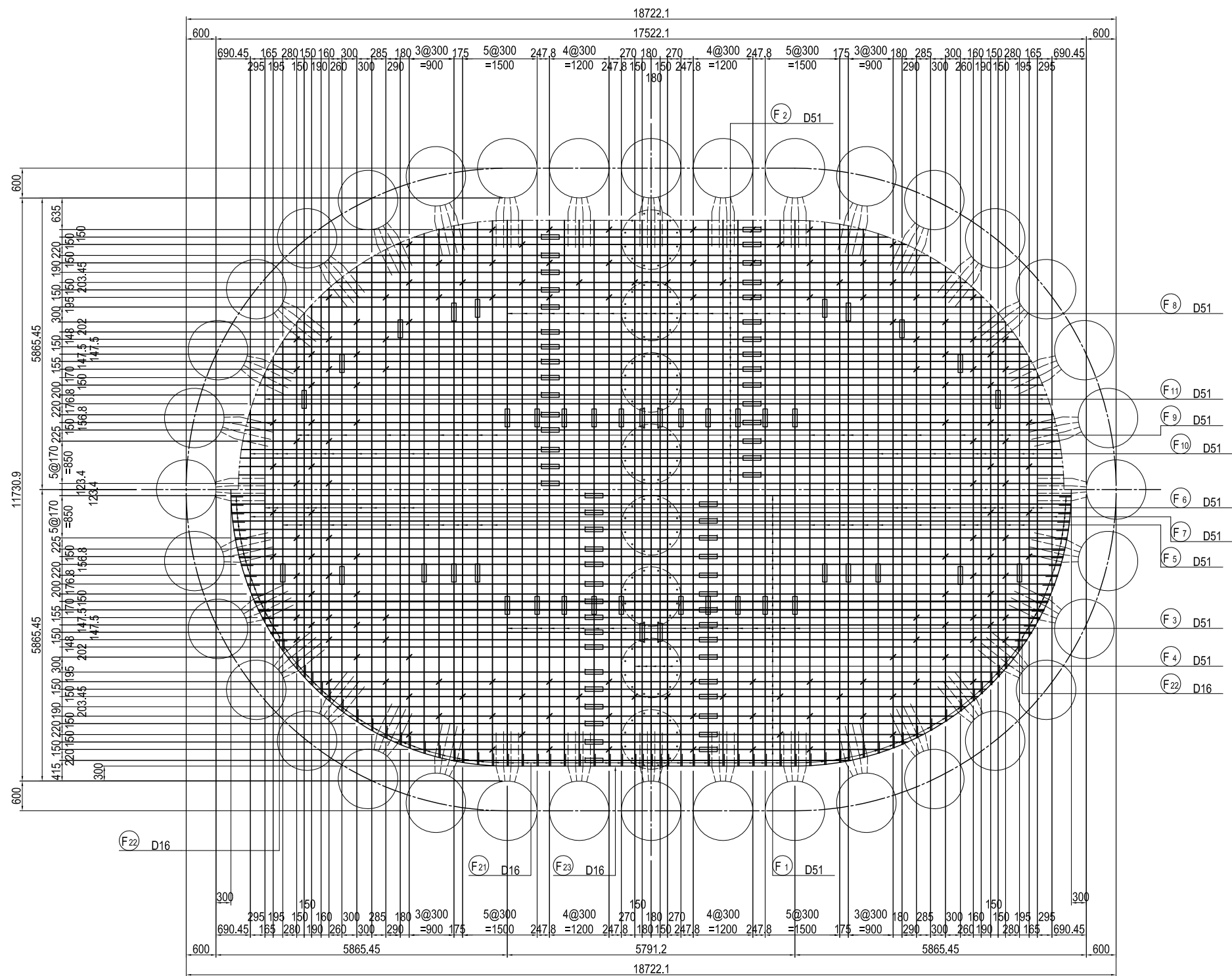
Note) : MECHANICAL JOINT

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.TOKUMARU T. HAYAKAWA Y. SANO	SIGNATURE 	DATE 27. Nov.2017 28. Nov.2017 29. Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF P10 FOOTING (2)	PACKAGE 1 DWG No. P1-CS-2034
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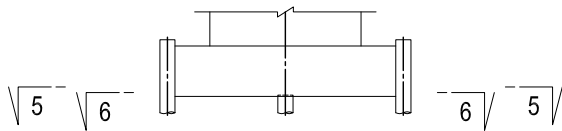
BAR ARRANGEMENT OF P10 FOOTING (3) S=1:100

PLAN
5-5

PLAN
6-6



MARKING DIAGRAM



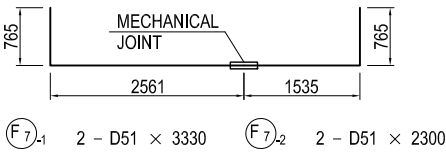
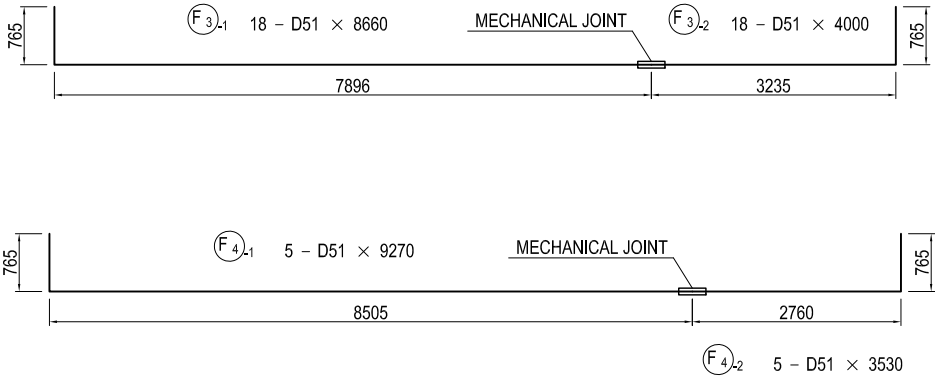
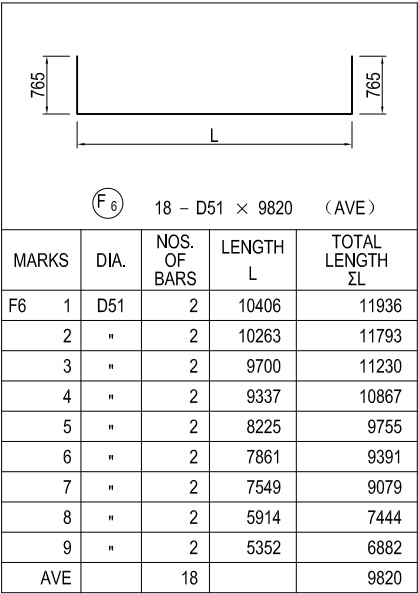
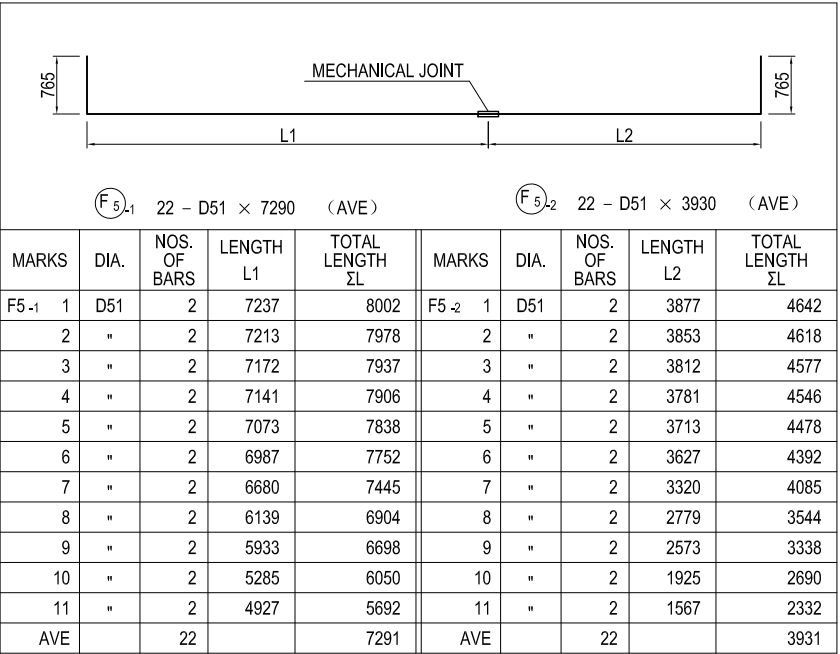
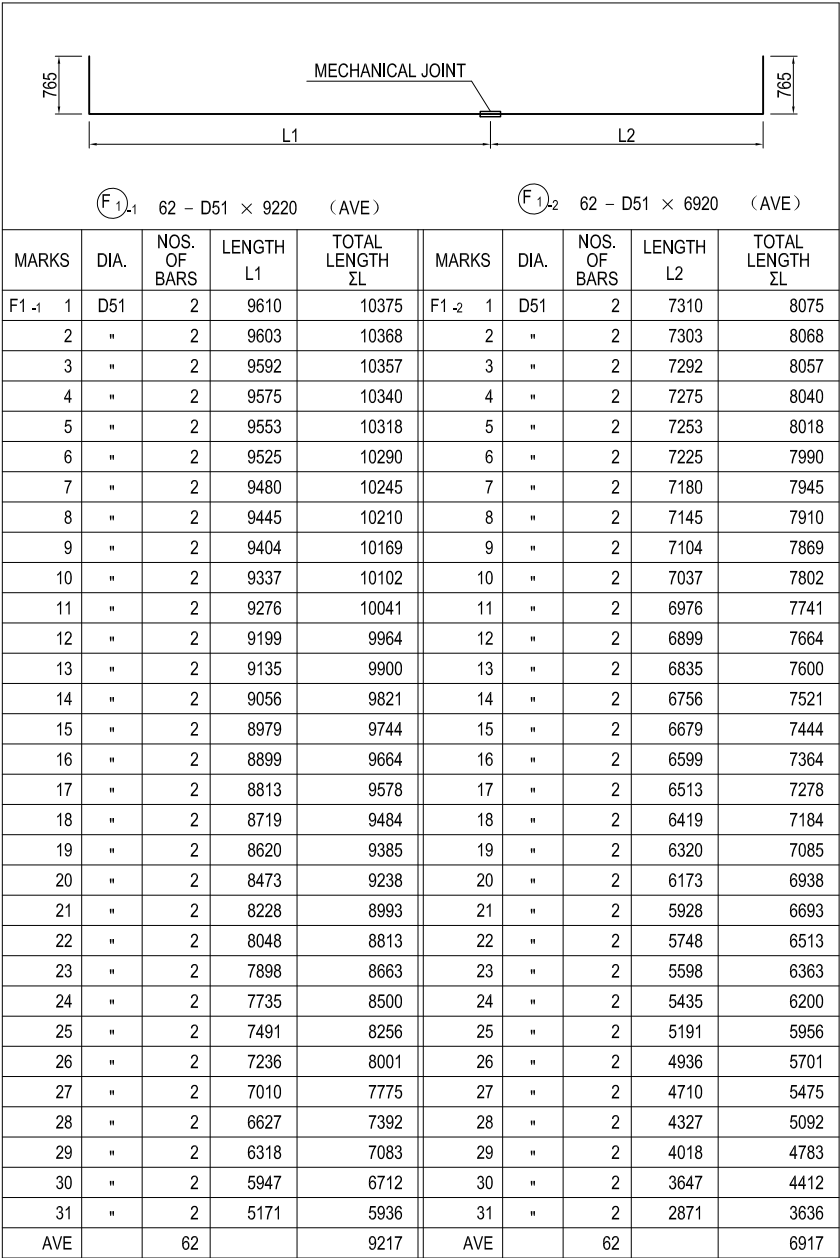
USE MATERIALS

	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

Note)  : MECHANICAL JOINT

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. TOKUMARU T. HAYAKAWA Y. SANO	SIGNATURE   	DATE 27. Nov.2017 28. Nov.2017 29. Nov.2017	DRAWING TITLE BAR ARRANGEMENT OF P10 FOOTING (3)	PACKAGE 1 DWG No. P1-CS-2035
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BAR ARRANGEMENT OF P10 FOOTING (4) S=1:100

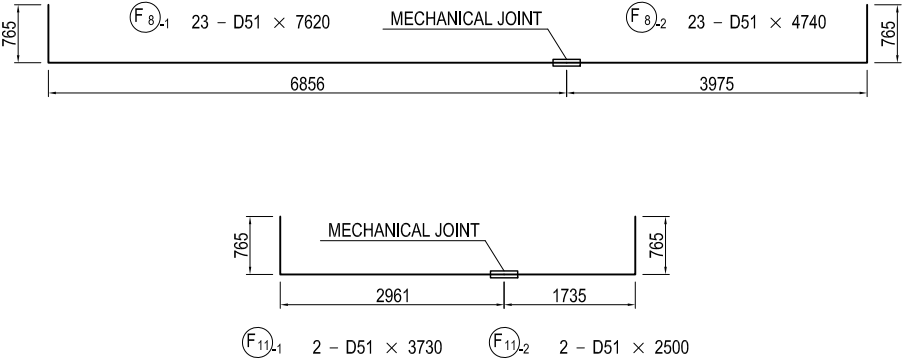
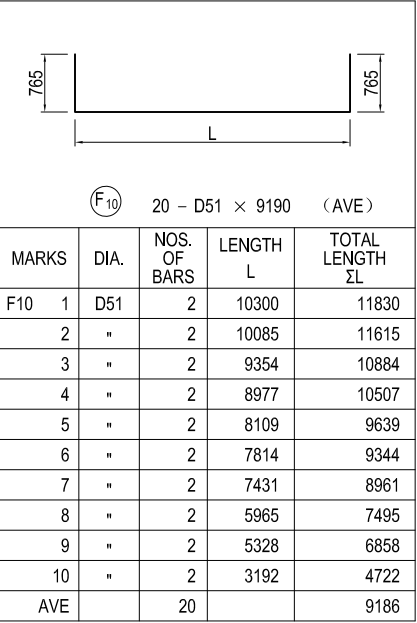
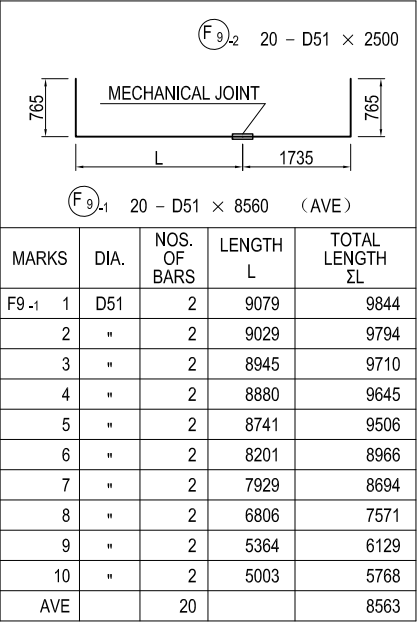
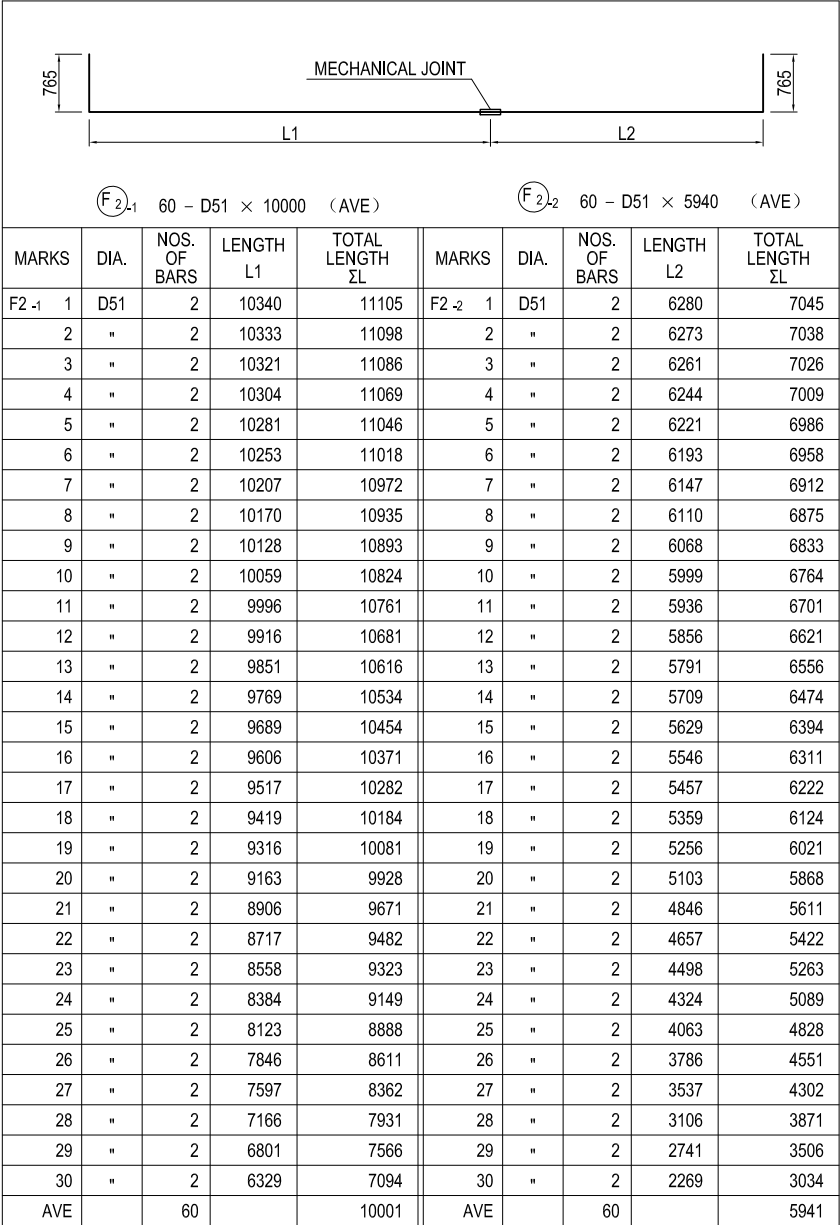


USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm ²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	BAR ARRANGEMENT OF P10 FOOTING (4)	1 DWG No. P1-CS-2036

BAR ARRANGEMENT OF P10 FOOTING (5) S=1:100

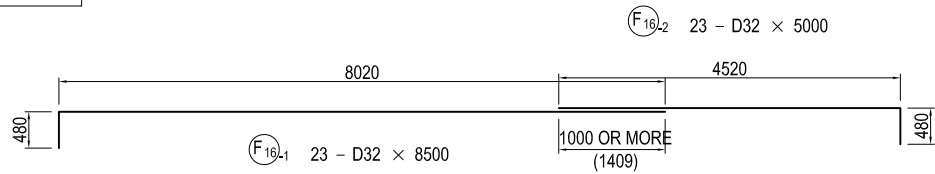
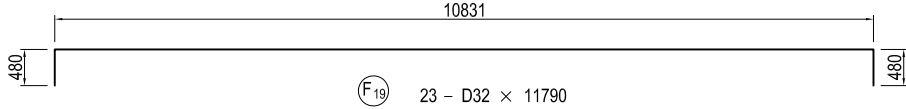
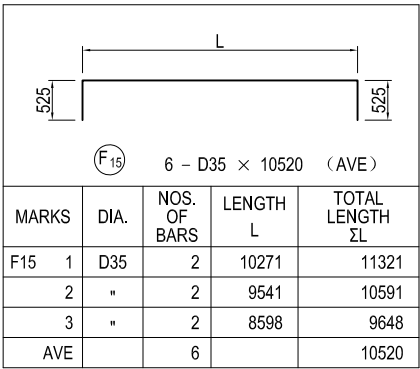
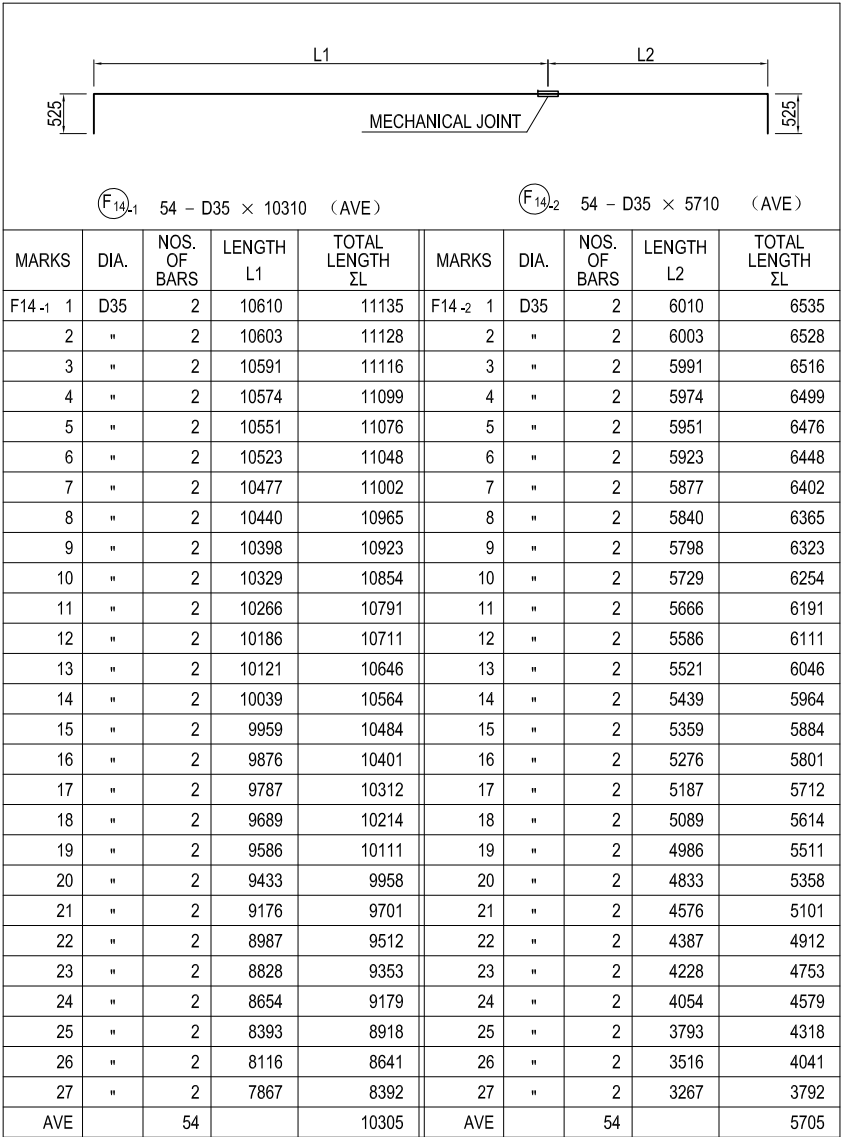
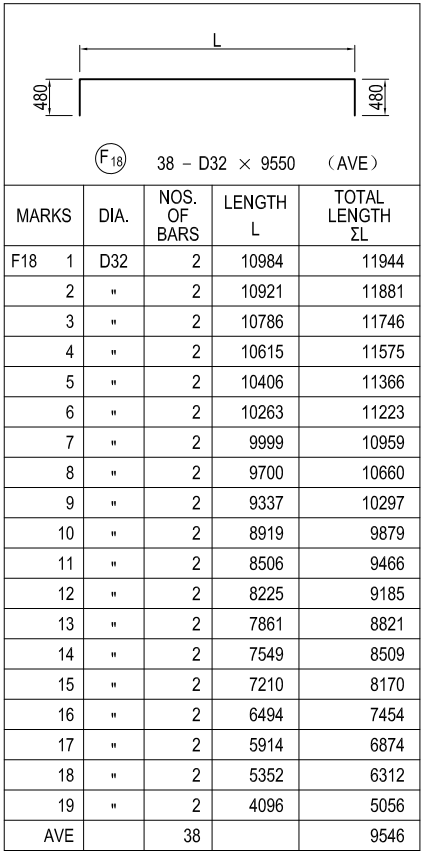
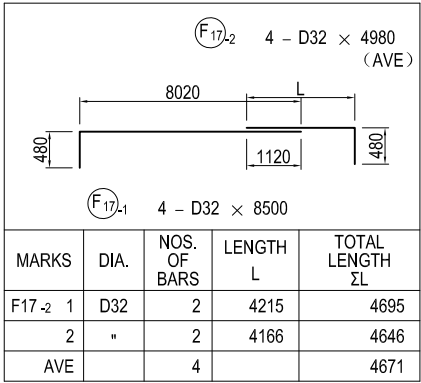
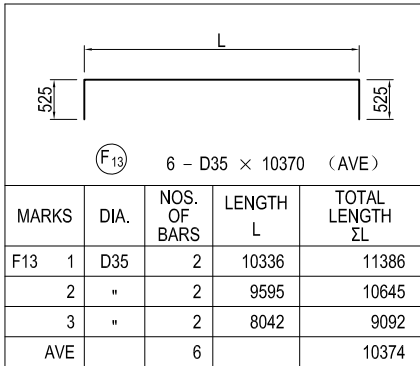
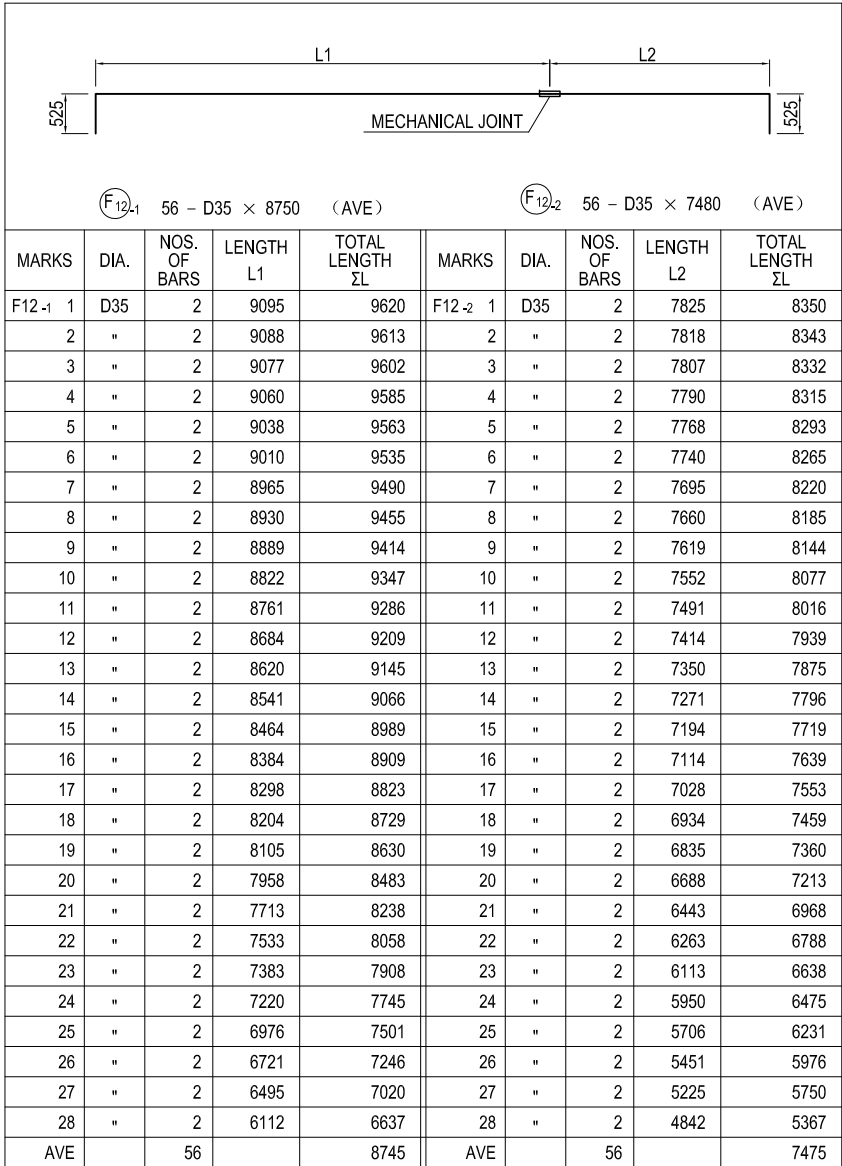


USE MATERIALS

FOOTING	CONCRETE	BAR
	σ _{ck} = 24 N/mm ²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov. 2017 28. Nov. 2017 29. Nov. 2017	BAR ARRANGEMENT OF P10 FOOTING (5)	1 DWG No. P1-CS-2037

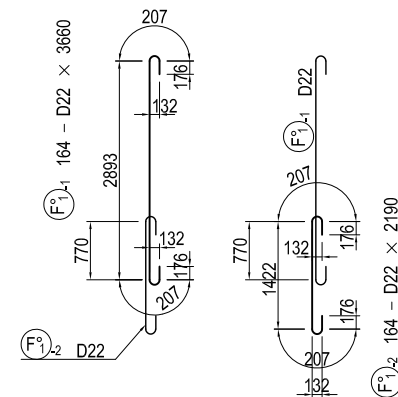
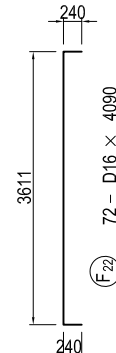
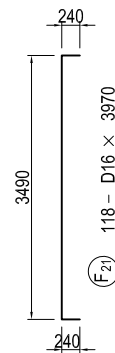
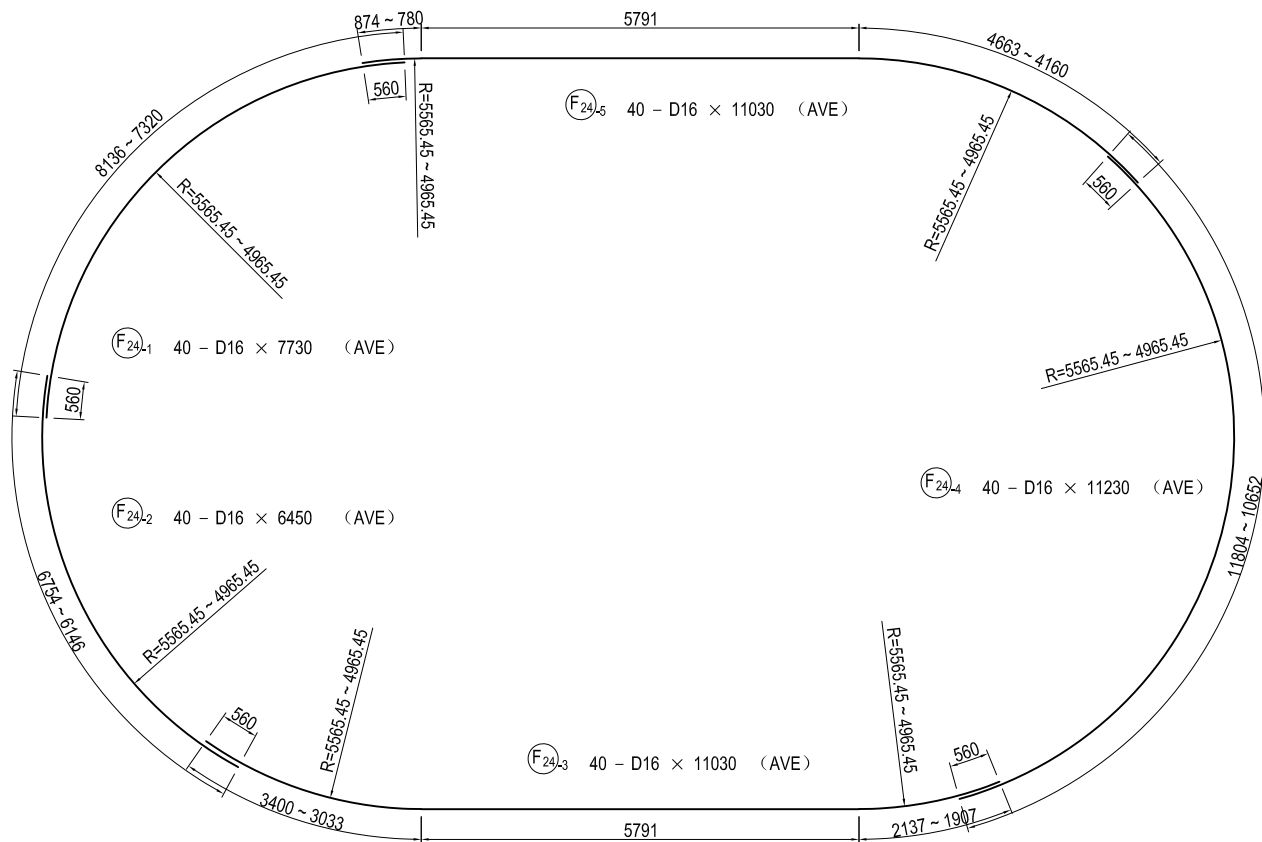
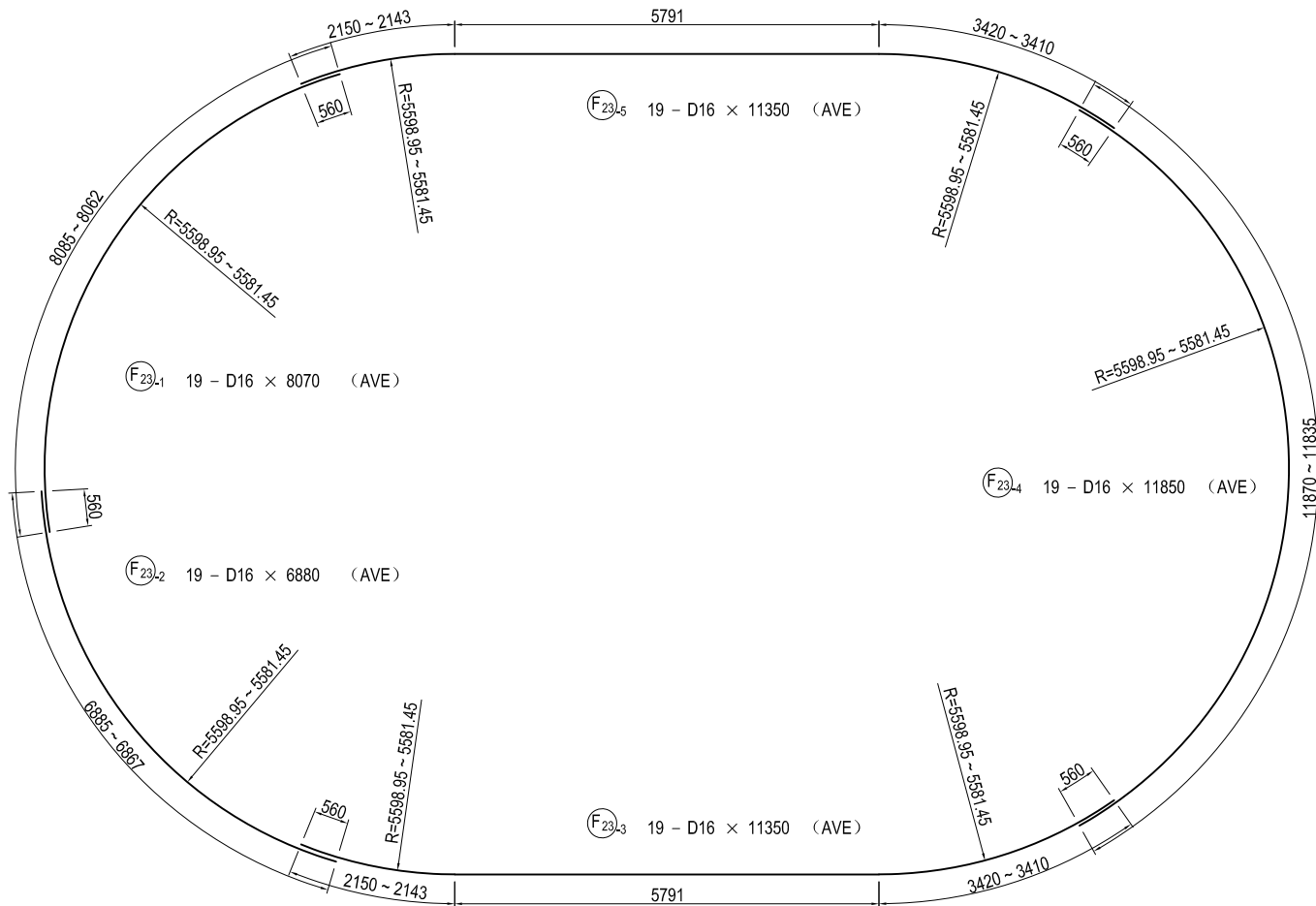
BAR ARRANGEMENT OF P10 FOOTING (6) S=1:100



USE MATERIALS

FOOTING	CONCRETE σck = 24 N/mm ²	BAR SD345
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BAR ARRANGEMENT OF P10 FOOTING (7) S=1:100



Note) The joint position of the reinforcing bar is rotated 180 degrees for each step arranged.

USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm ²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	BAR ARRANGEMENT OF P10 FOOTING (7)	1 DWG No. P1-CS-2039

BAR ARRANGEMENT OF P10 FOOTING (8) NOT TO SCALE

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
F 1-1	D51	9220	62	15.9	146.60	9089	┐ ⁽⁶²⁾ (AVE)
1-2	"	6920	62	"	110.03	6822	┐ ⁽⁶²⁾ (AVE)
2-1	"	10000	60	"	159.00	9540	┐ ⁽⁶⁰⁾ (AVE)
2-2	"	5940	60	"	94.45	5667	┐ ⁽⁶⁰⁾ (AVE)
3-1	"	8660	18	"	137.69	2478	┐ ⁽¹⁸⁾
3-2	"	4000	18	"	63.60	1145	┐
4-1	"	9270	5	"	147.39	737	┐ ⁽⁵⁾
4-2	"	3530	5	"	56.13	281	┐
5-1	"	7290	22	"	115.91	2550	┐ ⁽²²⁾ (AVE)
5-2	"	3930	22	"	62.49	1375	┐ ⁽²²⁾ (AVE)
6	"	9820	18	"	156.14	2811	┐ ⁽¹⁸⁾ (AVE)
7-1	"	3330	2	"	52.95	106	┐ ⁽²⁾
7-2	"	2300	2	"	36.57	73	┐
8-1	"	7620	23	"	121.16	2787	┐ ⁽²³⁾
8-2	"	4740	23	"	75.37	1734	┐
9-1	"	8560	20	"	136.10	2722	┐ ⁽²⁰⁾ (AVE)
9-2	"	2500	20	"	39.75	795	┐
10	"	9190	20	"	146.12	2922	┐ ⁽²⁰⁾ (AVE)
11-1	"	3730	2	"	59.31	119	┐ ⁽²⁾
11-2	"	2500	2	"	39.75	80	┐
12-1	D35	8750	56	7.51	65.71	3680	┐ ⁽⁵⁶⁾ (AVE)
12-2	"	7480	56	"	56.17	3146	┐ ⁽⁵⁶⁾ (AVE)
13	"	10370	6	"	77.88	467	┐ ⁽⁶⁾ (AVE)
14-1	"	10310	54	"	77.43	4181	┐ ⁽⁵⁴⁾ (AVE)
14-2	"	5710	54	"	42.88	2316	┐ ⁽⁵⁴⁾ (AVE)
15	"	10520	6	"	79.01	474	┐ ⁽⁶⁾ (AVE)
16-1	D32	8500	23	6.23	52.96	1218	┐
16-2	"	5000	23	"	31.15	716	┐
17-1	"	8500	4	"	52.96	212	┐
17-2	"	4980	4	"	31.03	124	┐ ⁽⁴⁾ (AVE)
18	"	9550	38	"	59.50	2261	┐ ⁽³⁸⁾ (AVE)
19	"	11790	23	"	73.45	1689	"
20	"	9370	42	"	58.38	2452	" ⁽⁴²⁾ (AVE)

[illegible]

USE MATERIALS

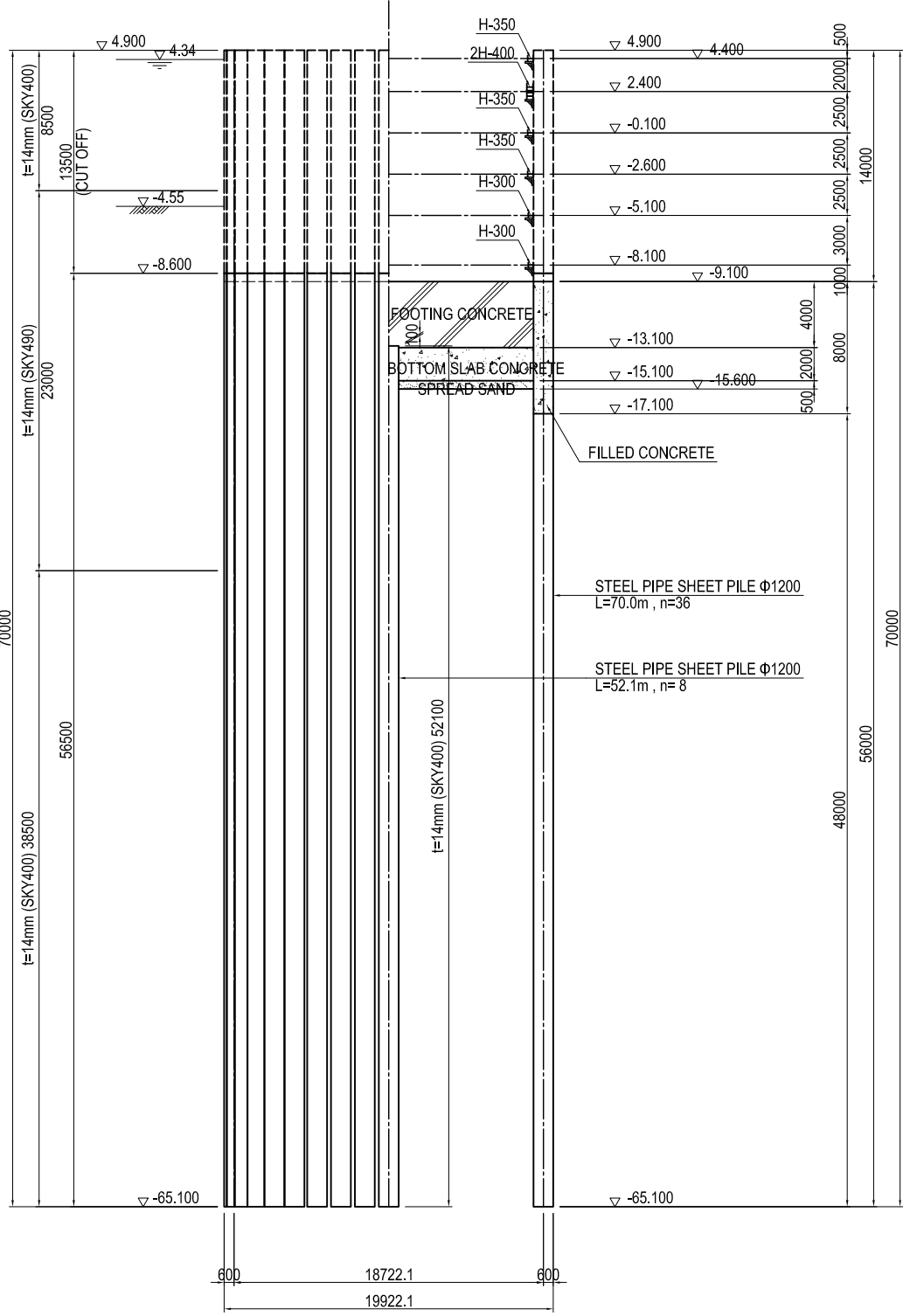
	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

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	PACKAGE
				PREPARED BY	S.TOKUMARU		27. Nov.2017	BAR ARRANGEMENT OF P10 FOOTING (8)	1
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		DWG No.
				APPROVED BY	Y. SANO		29. Nov.2017		P1-CS-2040

GENERAL DRAWING OF STEEL PIPE SHEET PILE FOUNDATION OF P10 PIER S=1:400

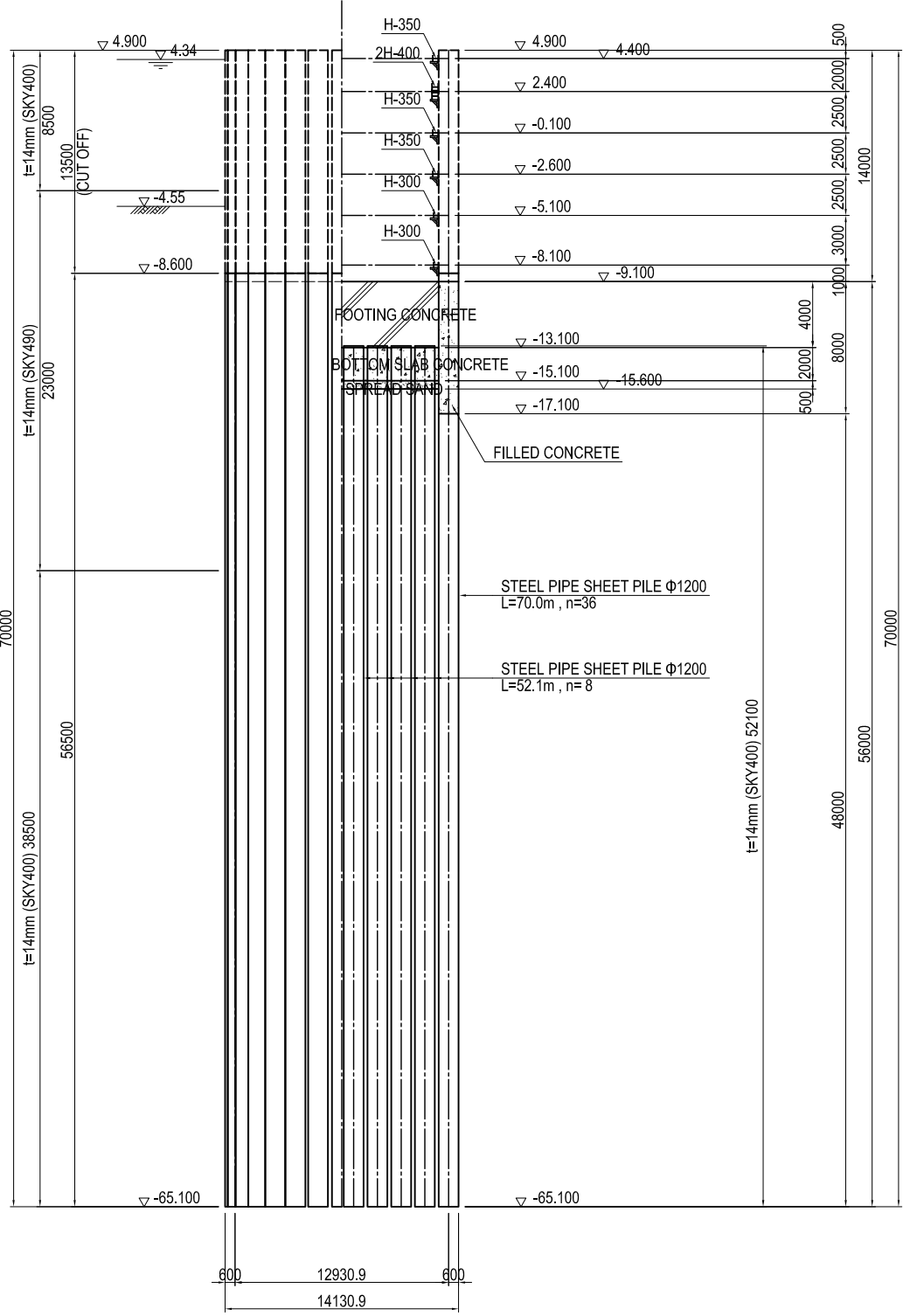
FRONT ELEVATION

1 - 1 2 - 2

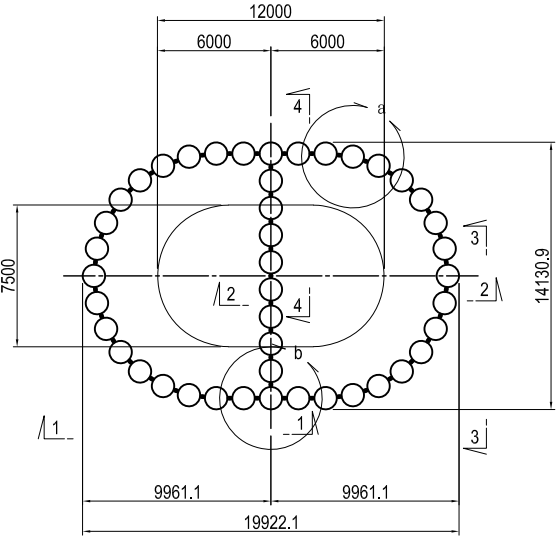


SIDE ELEVATION

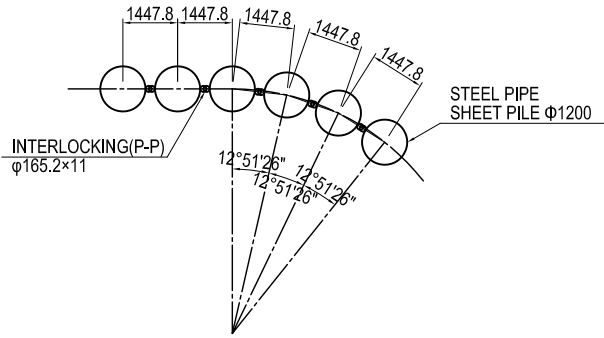
3 - 3 4 - 4



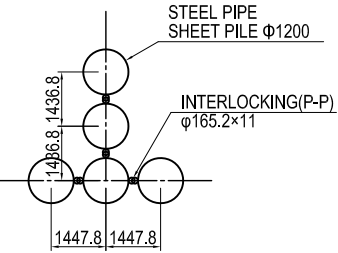
PLAN



DETAIL a S=1:200



DETAIL b S=1:200



USE MATERIALS

	CONCRETE	BAR
FOOTING	$\sigma_{ck} = 24 \text{ N/mm}^2$	SD345

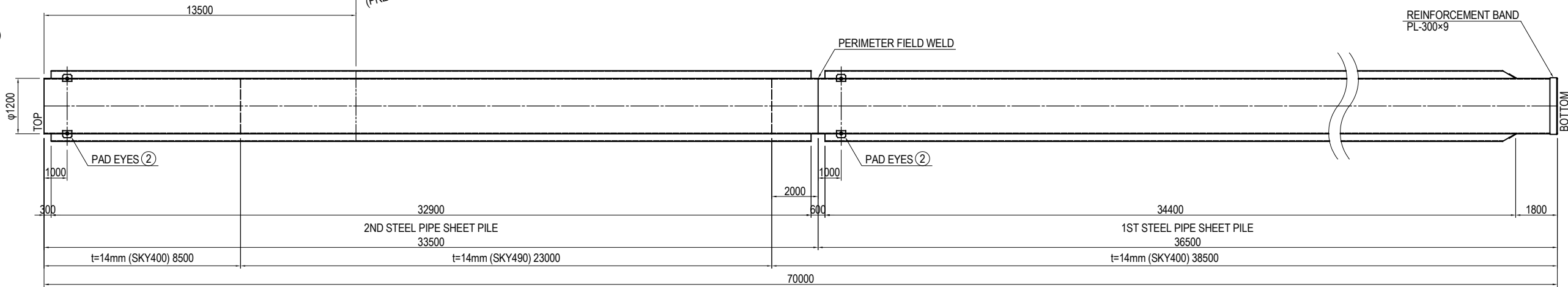
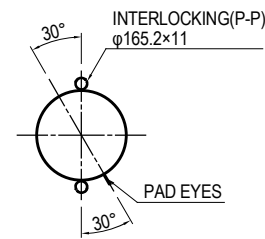
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	GENERAL DRAWING OF STEEL PIPE SHEET PILE FOUNDATION OF P10 PIER	1 DWG No. P1-CS-2041

DETAIL OF STEEL PIPE SHEET PILE OF P10 PIER (1)

CROSS SECTION S=1:200

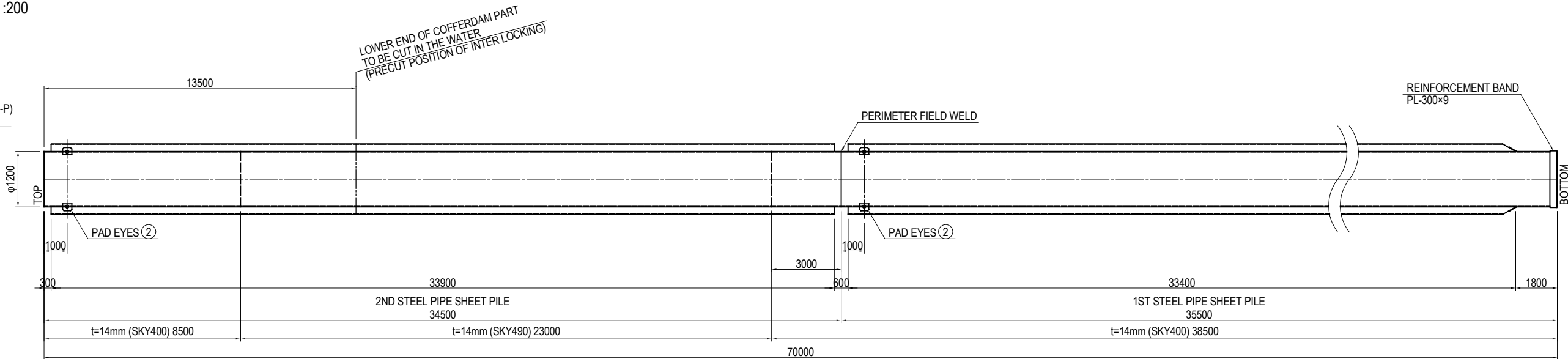
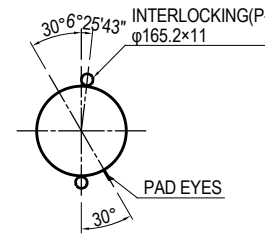
SIDE ELEVATION Sv=1:100
Sh=1:200

TYPE A

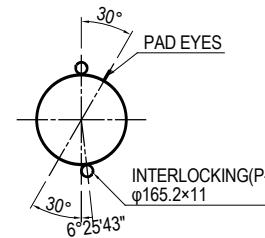


CROSS SECTION S=1:200

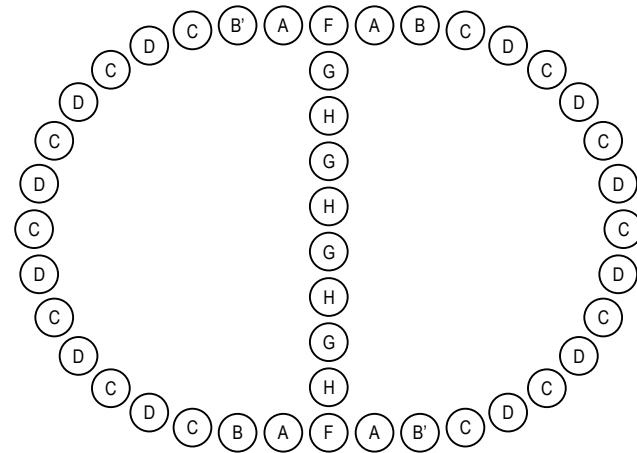
TYPE B



TYPE B'

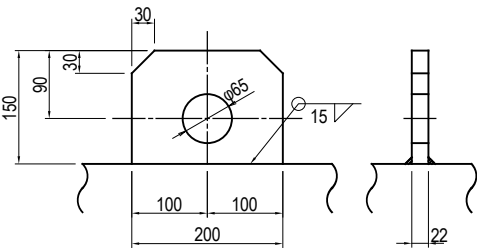


STEEL PIPE SHEET PILE TYPE AND POSITION

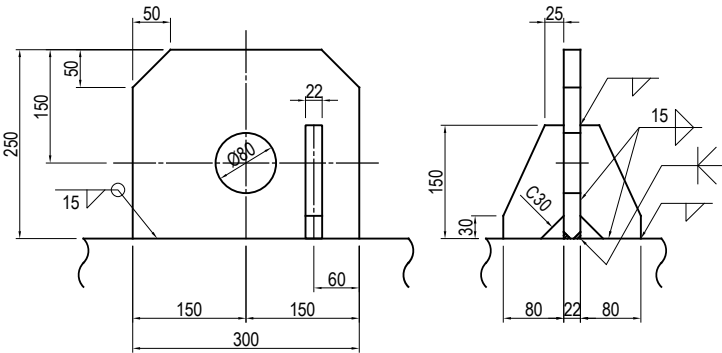


DETAIL OF EYES S=1:10

PAD EYES ① PL-200x150x22 (SM490A)



PAD EYES ② PL-300x250x22 (SM490A)



Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

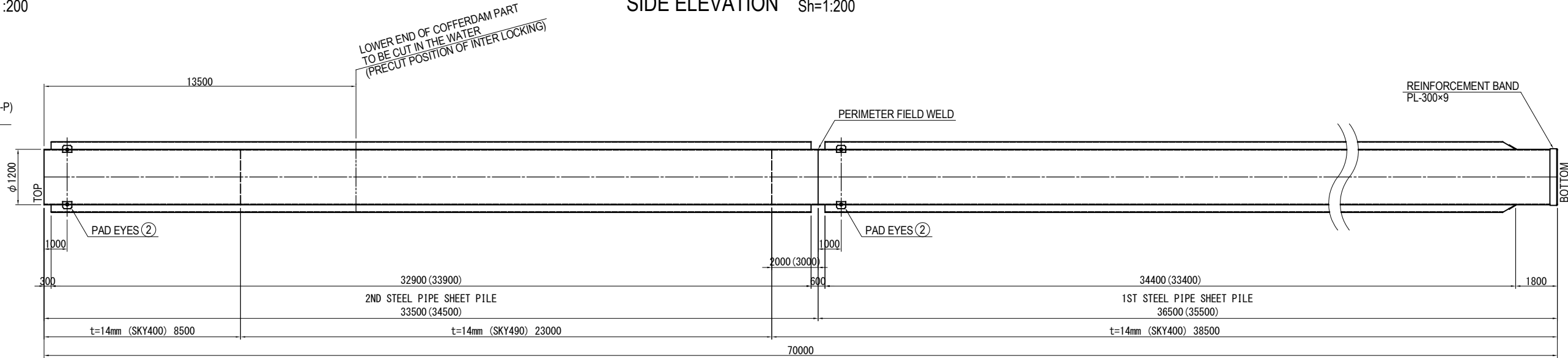
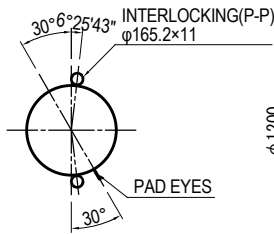
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	S. TOKUMARU	徳丸 祥明	27. Nov. 2017	DETAIL OF STEEL PIPE SHEET PILE OF P10 PIER (1)	1
				T. HAYAKAWA	平川 知平	28. Nov. 2017		DWG No.
				Y. SANO	佐野 祐一	29. Nov. 2017		P1-CS-2042

DETAIL OF STEEL PIPE SHEET PILE OF P10 PIER (2)

CROSS SECTION S=1:200

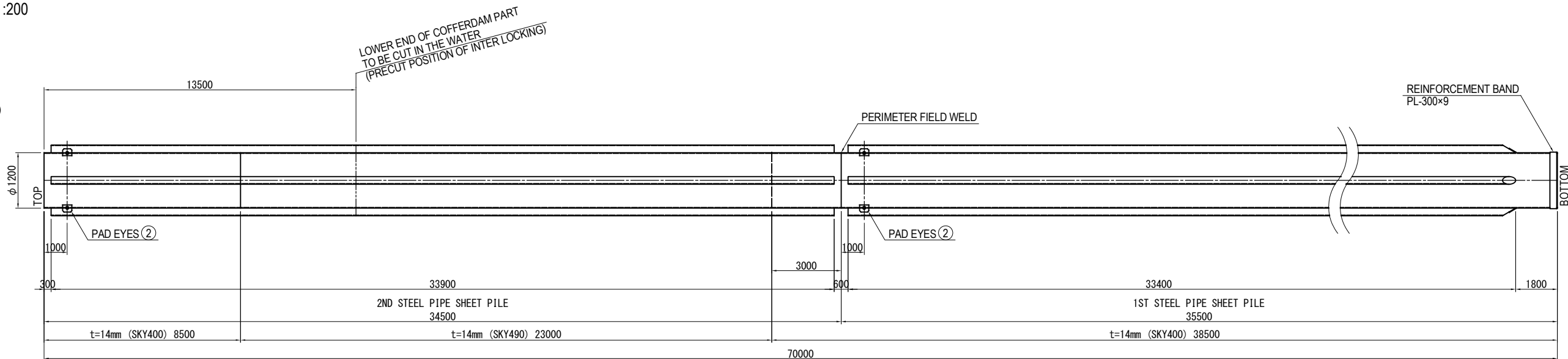
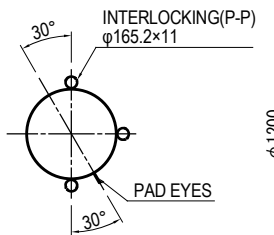
SIDE ELEVATION Sv=1:100
Sh=1:200

TYPE C
(TYPE D)



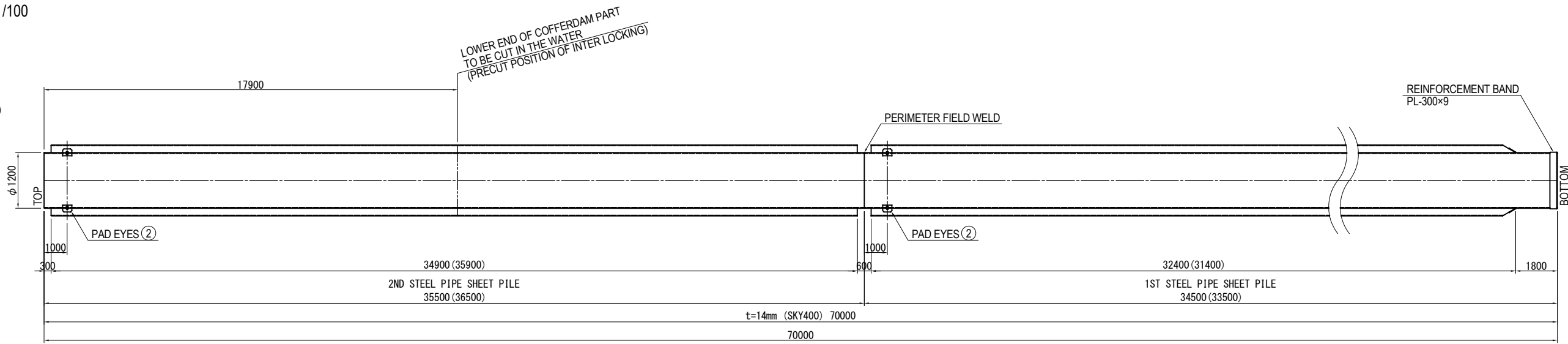
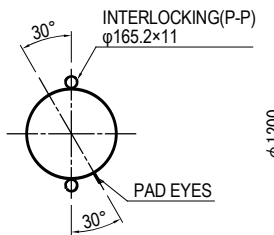
CROSS SECTION S=1:200

TYPE F



CROSS SECTION S=1/100

TYPE G
(TYPE H)

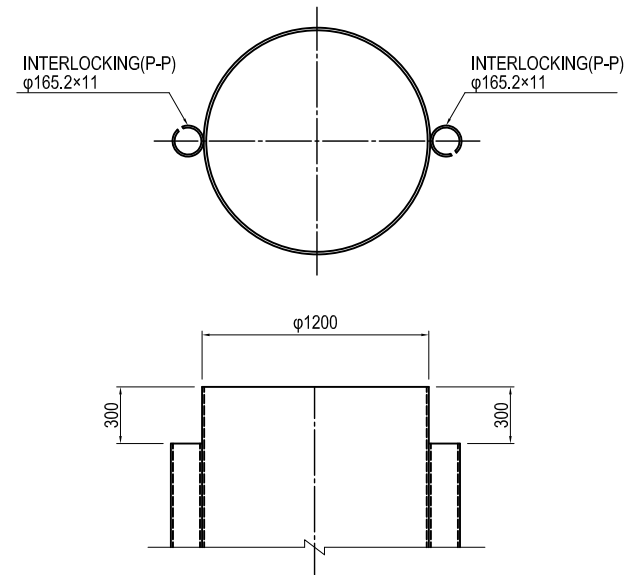


Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

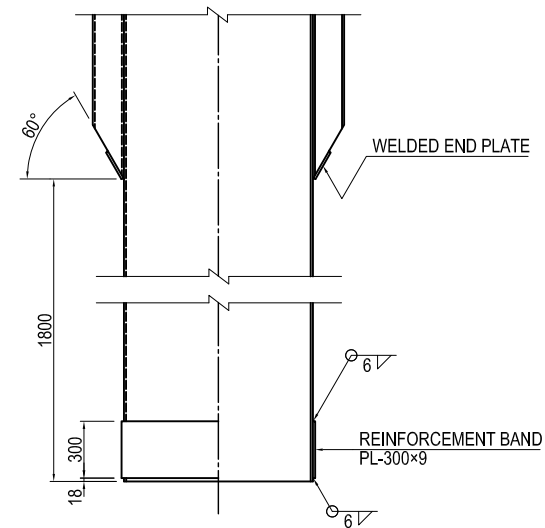
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S. TOKUMARU T. HAYAKAWA Y. SANO	27. Nov. 2017 28. Nov. 2017 29. Nov. 2017	DETAIL OF STEEL PIPE SHEET PILE OF P10 PIER (2)	1 DWG No. P1-CS-2043

DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P10 PIER

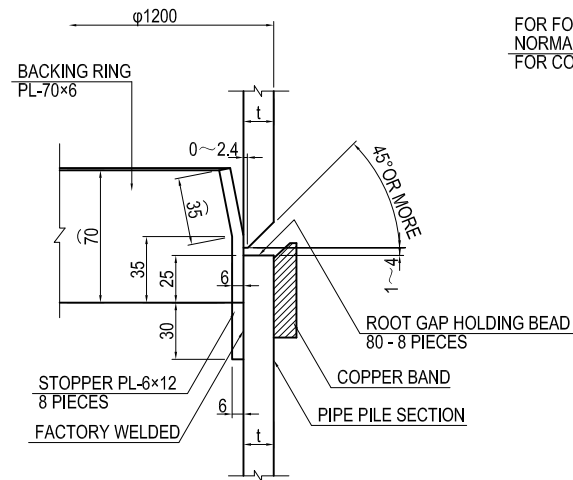
DETAIL OF STEEL PIPE
SHEET PILE TOP S=1:40



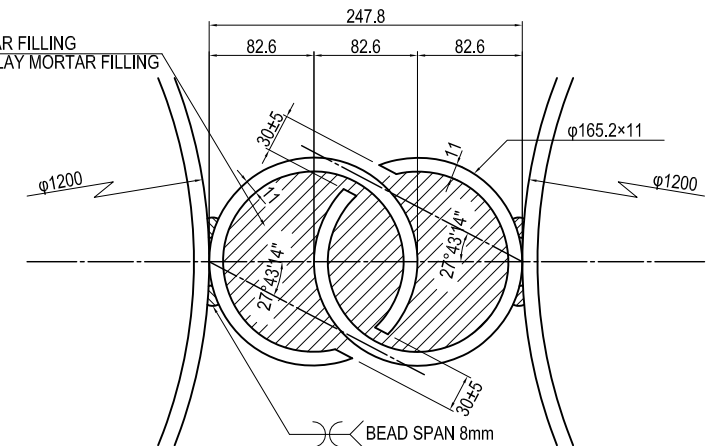
DETAIL OF STEEL PIPE
SHEET PILE TOE S=1:40



DETAIL OF PERIMETER FIELD
WELDING OF STEEL PIPE SHEET PILE S=1:4

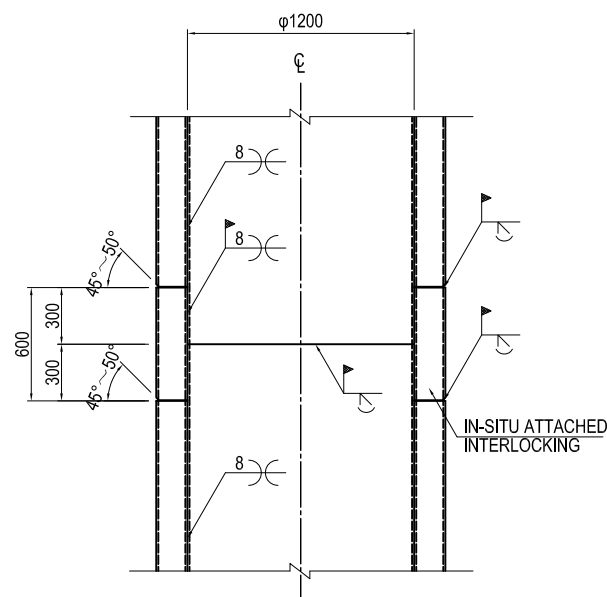


DETAIL OF CONNECTED
INTERLOCKING(P-P) S=1:6

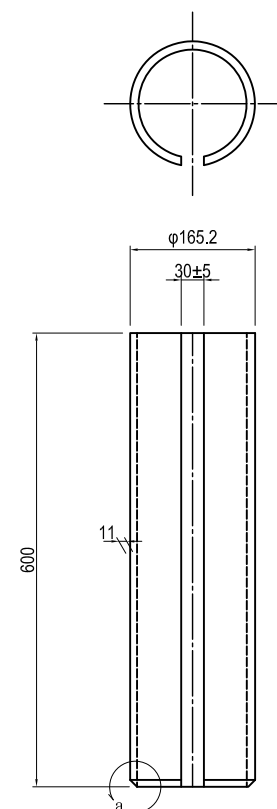


TREATMENT OF STEEL PIPE SHEET PILE INTERLOCKING

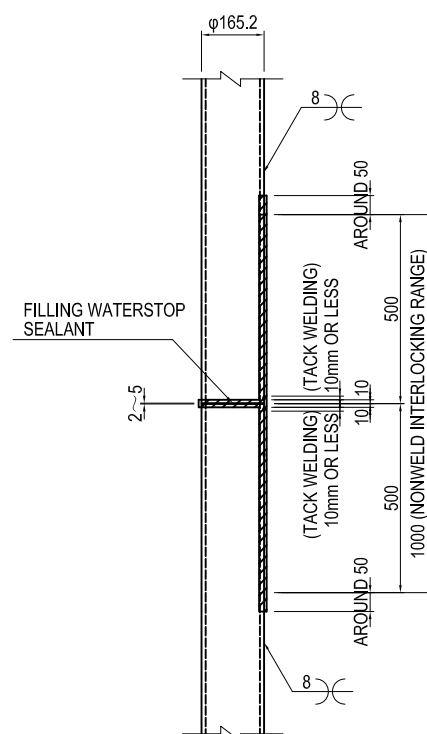
DETAIL OF IN-SITU
LONGITUDINAL WELDING PART S=1:40



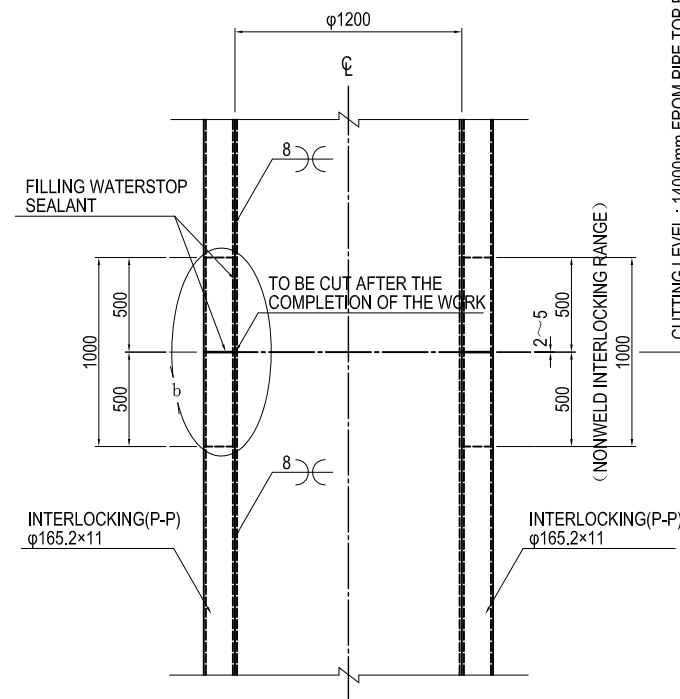
DETAIL OF IN-SITU ATTACHED INTERLOCKING S=1:10



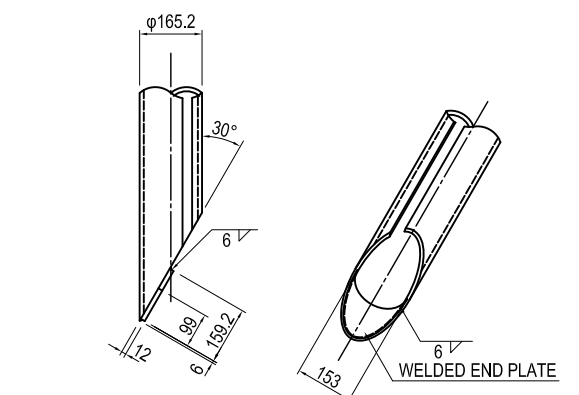
DETAIL b



DETAIL OF PRECUT INTERLOCKING S=1:40



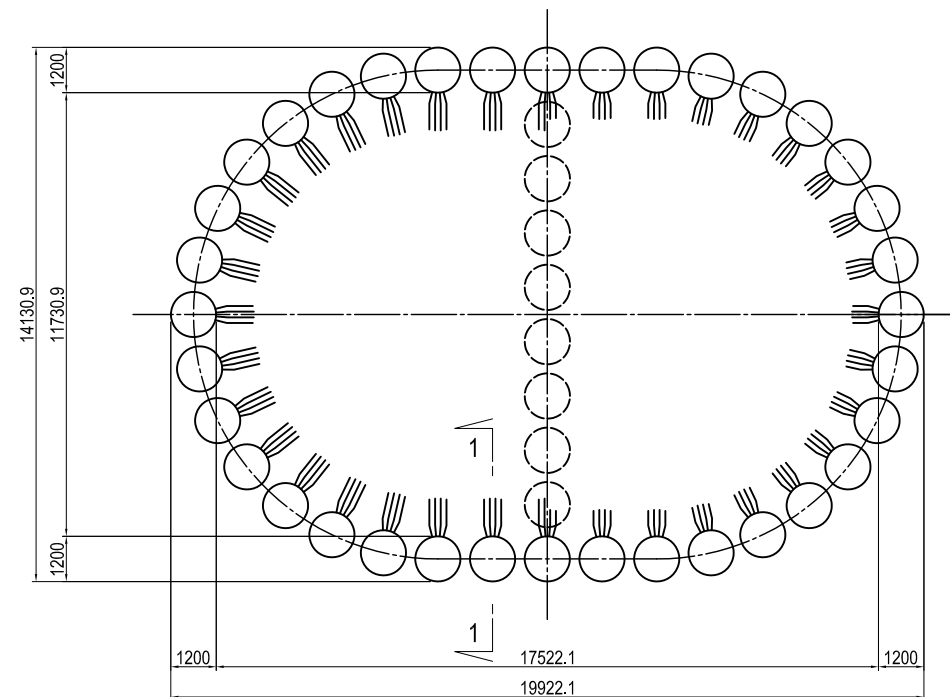
DETAIL OF
INTERLOCKING TOE S=1:20



PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	 JAPAN INTERNATIONAL COOPERATION AGENCY	 REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	 NIPPON KOEI CO., LTD.  ORIENTAL CONSULTANTS GLOBAL CO., LTD.  METROPOLITAN EXPRESSWAY COMPANY LIMITED  CHODAI CO., LTD.  NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY	S. TOKUMARU		27. Nov.2017	DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P10 PIER	1
				CHECKED BY	T. HAYAKAWA		28. Nov.2017		DWG No.
				APPROVED BY	Y. SANO		29. Nov.2017		P1-CS-2044

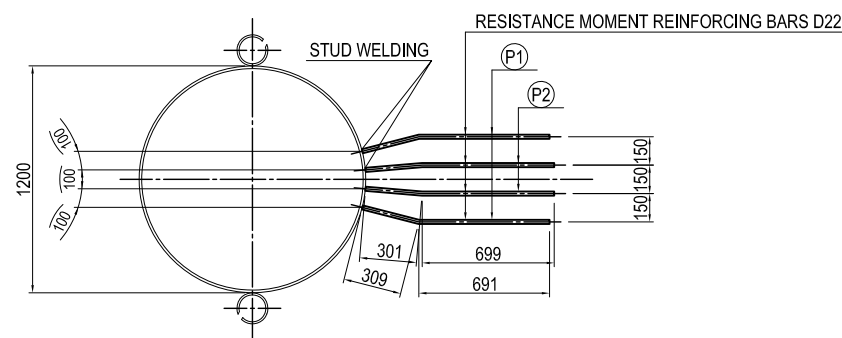
DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P10 PIER

PLAN S=1:200

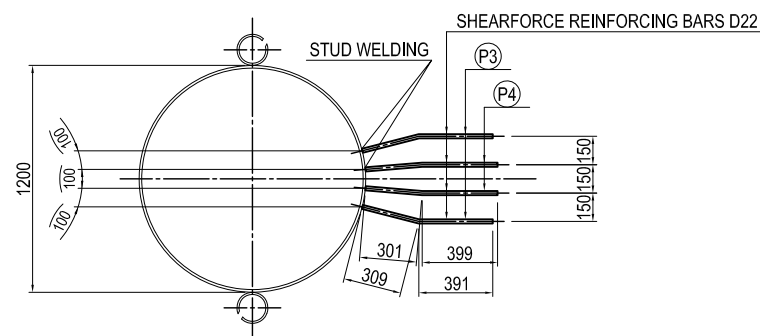


CROSS SECTION OF CONNECTION BETWEEN
STEEL PIPE SHEET PILE AND REINFORCING BARS S=1:40

3 - 3 CROSS SECTION
(RESISTANCE MOMENT REINFORCING BARS CONNECTION PART)

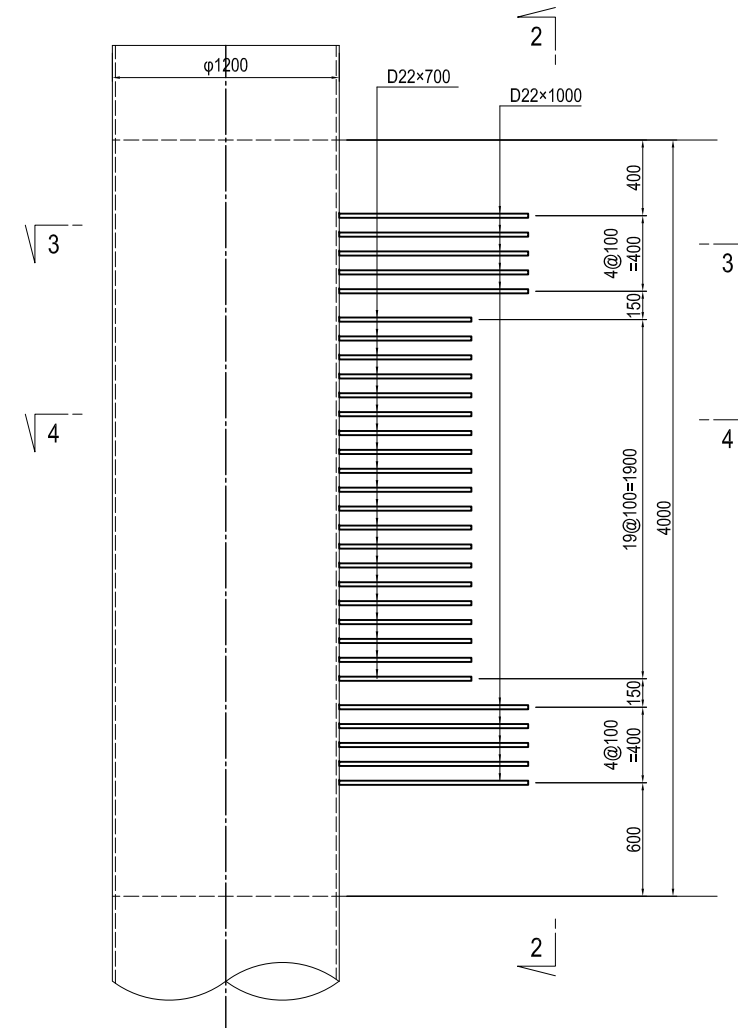


4 - 4 CROSS SECTION
(SHEARFORCE REINFORCING BARS CONNECTION PART)

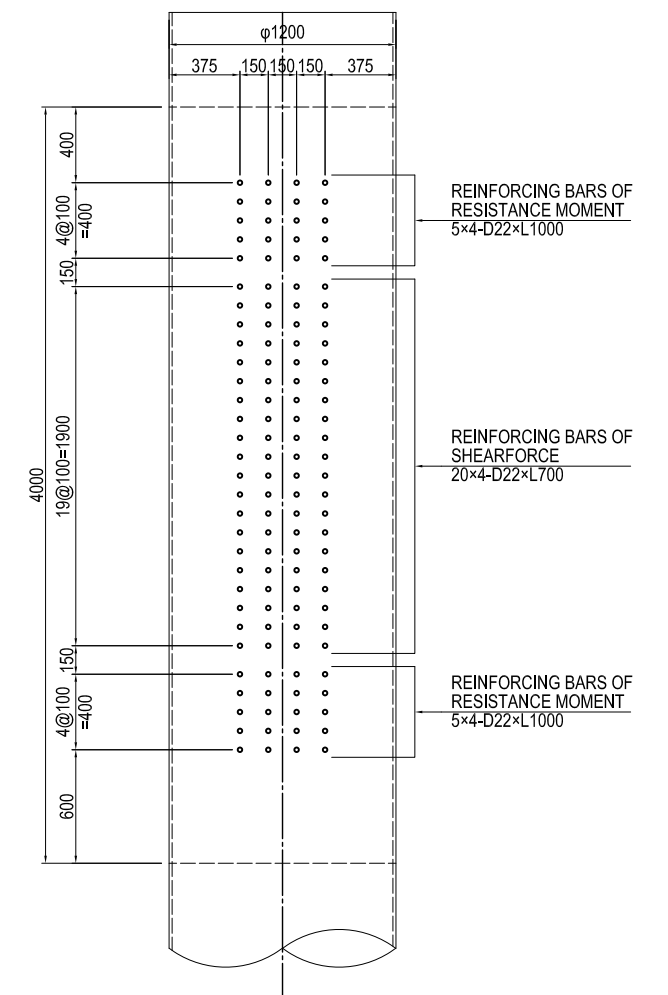


DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:40

1 - 1 CROSS SECTION



2 - 2 CROSS SECTION



FABRICATION OF REINFORCING BARS $s=1:40$

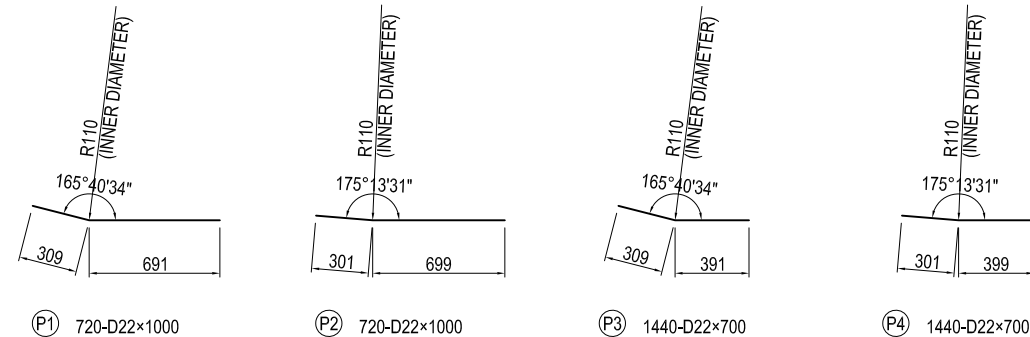
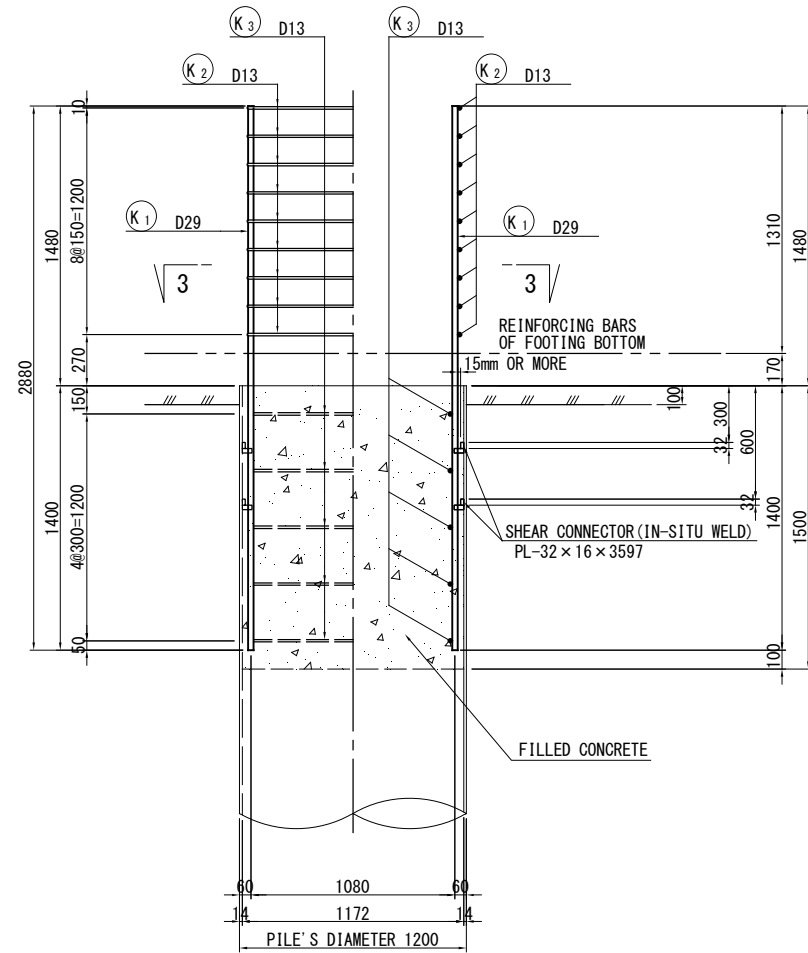


TABLE OF REINFORCING BARS

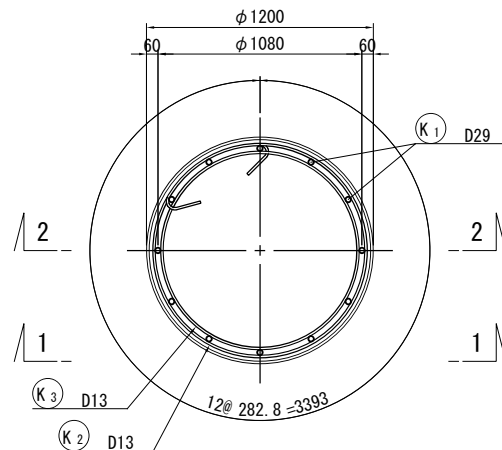
[illegible]

DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P10 PIER S=1:40

DETAIL OF PILE TOP

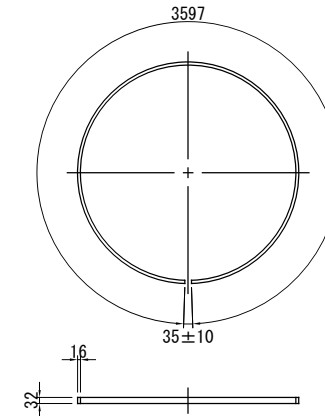
$$1 - 1 \quad 2 - 2$$


3 - 3

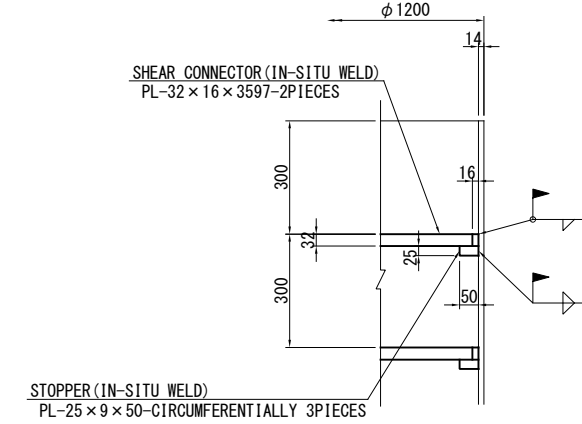


DETAIL OF ATTACHMENT OF SHEAR CONNECTOR

CENTER OF LENGTH



SETTING IN THE FIELD S=1:20



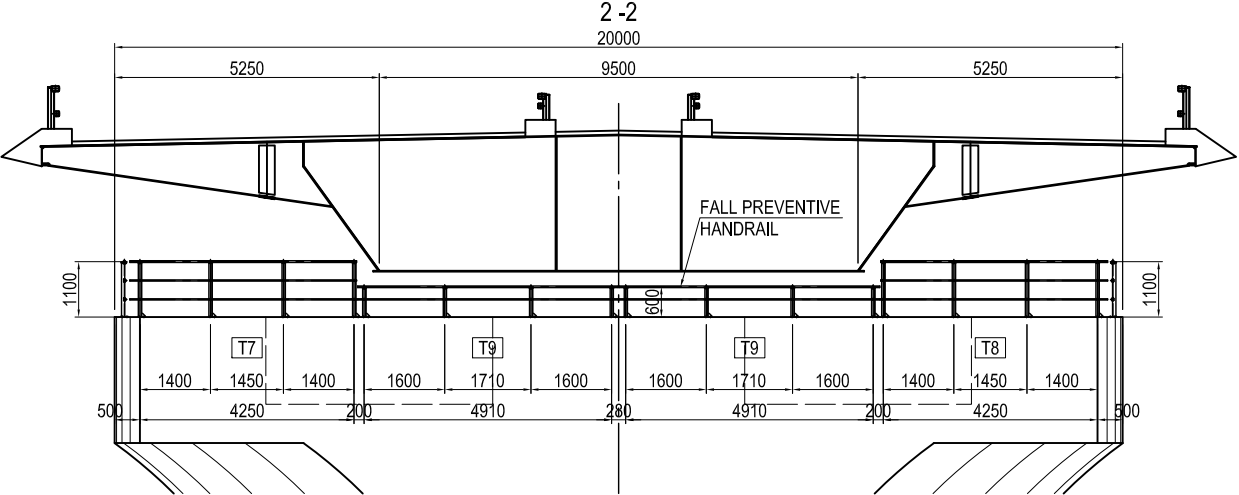
MATERIAL LIST

MARKS	SECTION SIZE	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	MATERIAL	REMARKS
PILE TOP ACCOMPANYING ITEMS								
PL	PL-32*16	3597	2	4.019	14.456	28.9	SS400	SHEAR CONNECTOR
PL	PL-25*9	50	6	1.766	0.088	0.5	SS400	STOPPER
REINFORCEMENT								
K1	D29	2880	12	5.04	14.52	174	SD345	I
K2	D13	4560	9	0.995	4.54	41	SD345	⊙
K3	D13	3720	5	0.995	3.70	19	SD345	○
TOTAL						234		
FILLED CONCRETE (σ _{ck} = 24 N/mm ²)								
V = 1/4 × π × 1.172 ² × 1.300 = 1.402 m ³								

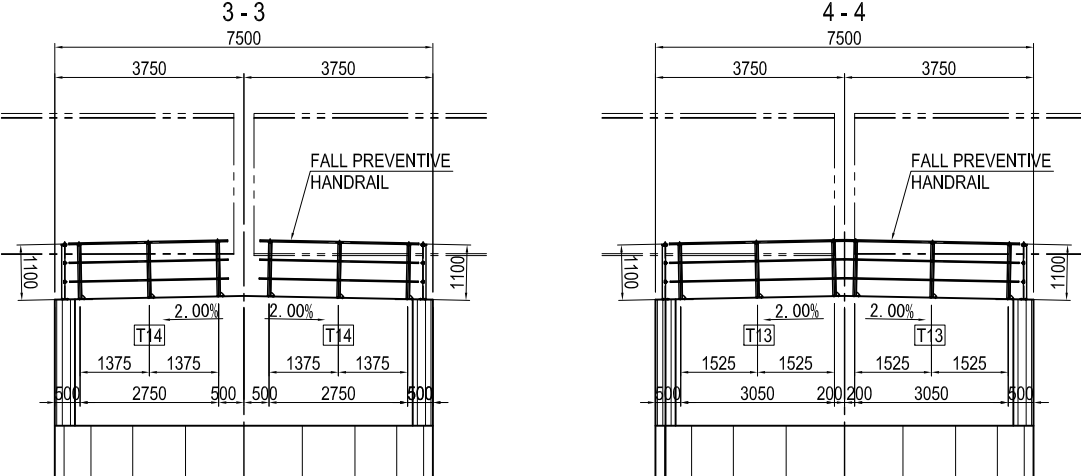
ITEM	DIVISION		UNIT CONTENT	WEIGHT/EA.	QUANTITY
NUMBER OF PILE			Number		8
PILE TOP	SS400	TOTAL	kg	29. 4	235. 2
REINFORCEMENT	SD345	D29	kg	174	1392
		D13	kg	60	480
		TOTAL	kg	234	1872
FILLED CONCRETE	$\sigma_{ck} = 24 \text{ N/mm}^2$		m^3	1. 402	11. 2

FALL PREVENTIVE HANDRAIL OF P10 PIER (1) S=1:150

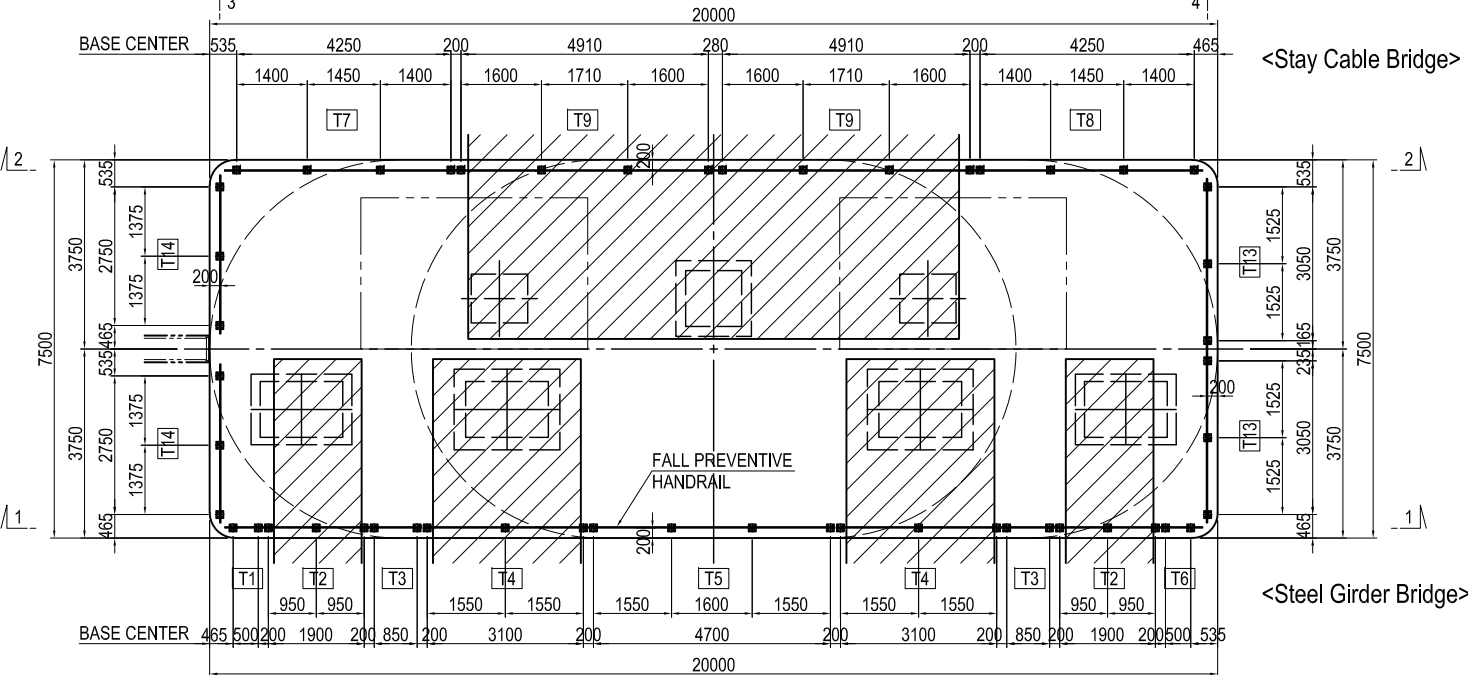
FRONT ELEVATION



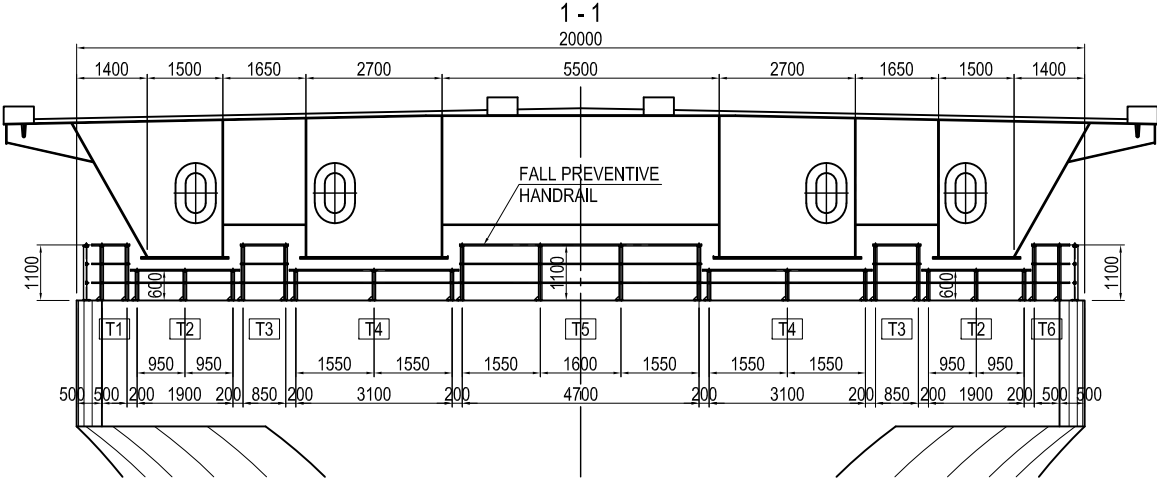
SIDE ELEVATION



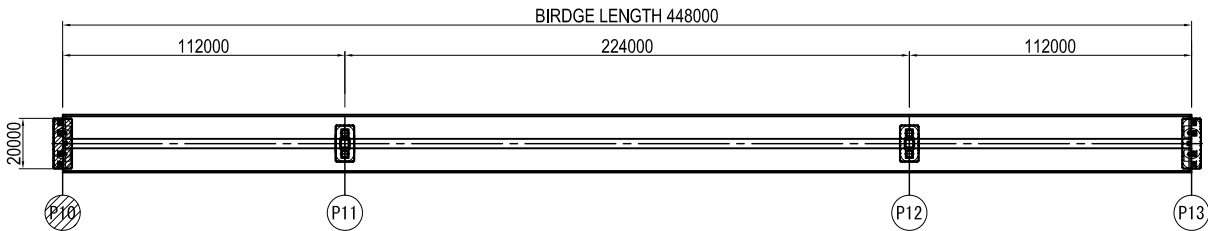
PLAN



FRONT ELEVATION

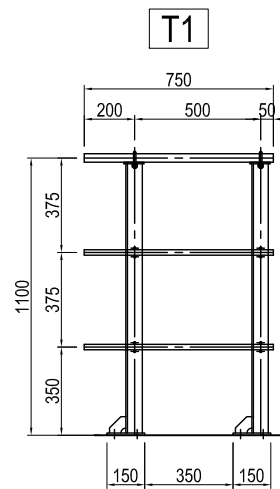


KEY PLAN

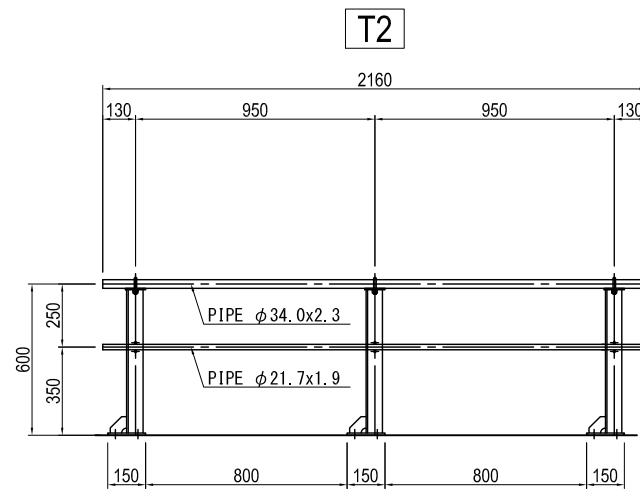


PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY CHECKED BY APPROVED BY	S.TOKUMARU T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	FALL PREVENTIVE HANDRAIL OF P10 PIER (1)	1 DWG No. P1-CS-2047

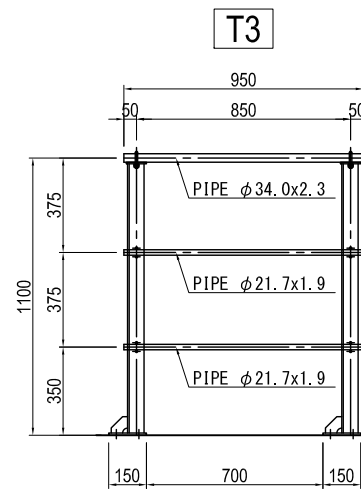
FALL PREVENTIVE HANDRAIL OF P10 PIER (2) S=1:30



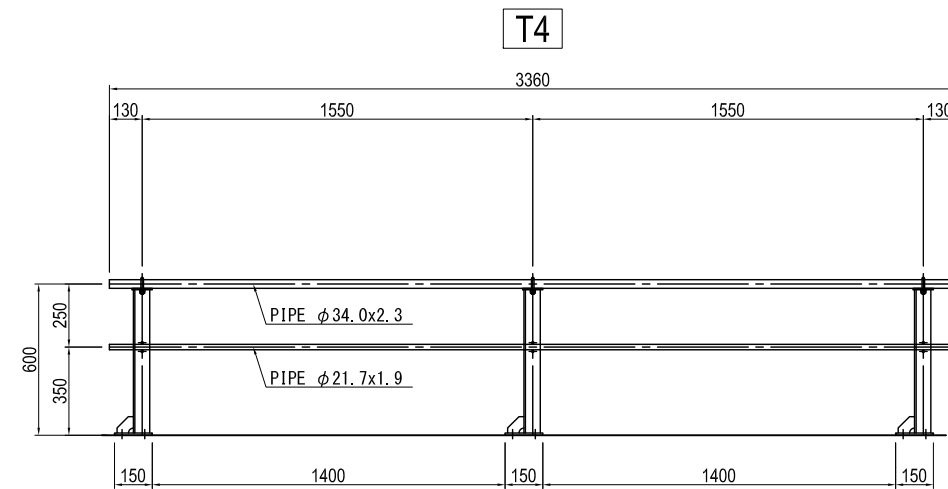
- <T1> Production volume : 1(per pier)
 1-PIPE ϕ 34. 0x2. 3x750 (STK400)
 2-PIPE ϕ 21. 7x1. 9x750 (STK400)
 2-L 65x65x6x1069
 2-PL 115x6x80 (SM400A)
 2-BASE PL 150x9x150 (SM400A)
 2-RIB PL 65x6x65 (SM400A)
 2-U. Bolt M10 Nominal25C
 4-U. Bolt M10 Nominal15C
 8-Driving anchor M16x125



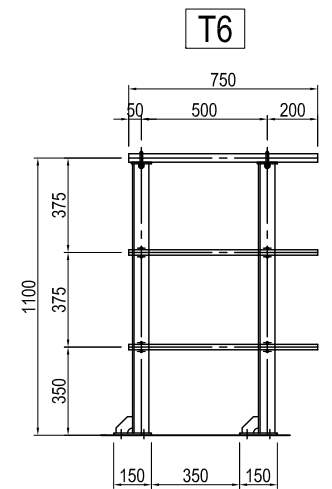
- <T2> Production volume : 2(per pier)
 1-PIPE ϕ 34. 0x2. 3x2160 (STK400)
 1-PIPE ϕ 21. 7x1. 9x2160 (STK400)
 3-L 65x65x6x569
 3-PL 115x6x80 (SM400A)
 3-BASE PL 150x9x150 (SM400A)
 3-RIB PL 65x6x65 (SM400A)
 3-U. Bolt M10 Nominal25C
 3-U. Bolt M10 Nominal15C
 12-Driving anchor M16x125



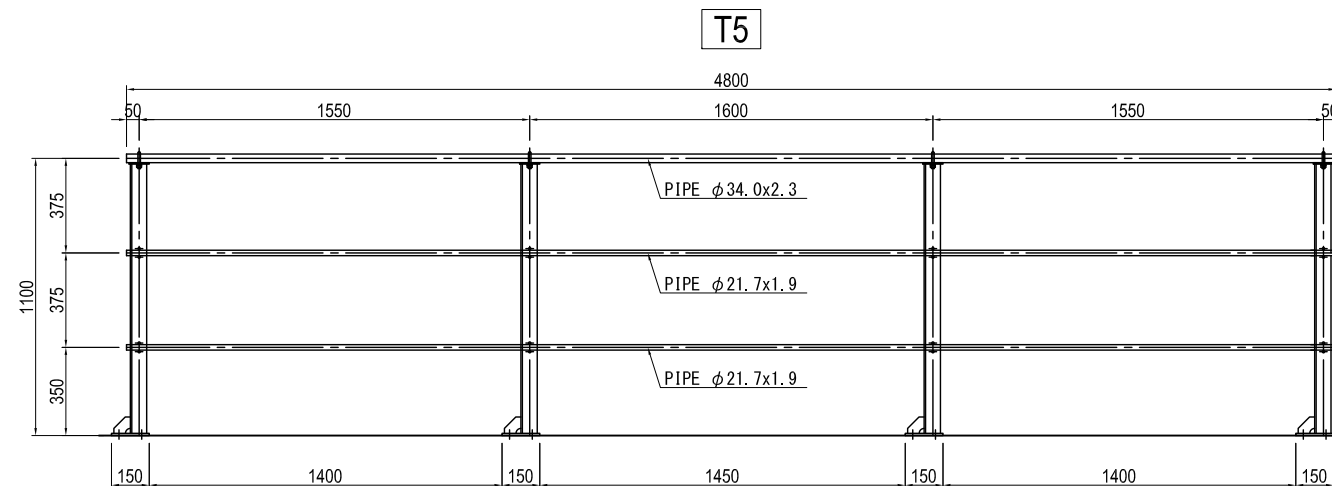
- <T3> Production volume : 2(per pier)
 1-PIPE ϕ 34. 0x2. 3x950 (STK400)
 2-PIPE ϕ 21. 7x1. 9x950 (STK400)
 2-L 65x65x6x1069
 2-PL 115x6x80 (SM400A)
 2-BASE PL 150x9x150 (SM400A)
 2-RIB PL 65x6x65 (SM400A)
 2-U. Bolt M10 Nominal25C
 4-U. Bolt M10 Nominal15C
 8-Driving anchor M16x125



- <T4> Production volume : 2(per pier)
 1-PIPE ϕ 34. 0x2. 3x3360 (STK400)
 1-PIPE ϕ 21. 7x1. 9x3360 (STK400)
 3-L 65x65x6x569
 3-PL 115x6x80 (SM400A)
 3-BASE PL 150x9x150 (SM400A)
 3-RIB PL 65x6x65 (SM400A)
 3-U. Bolt M10 Nominal25C
 3-U. Bolt M10 Nominal15C
 12-Driving anchor M16x125



- <T6> Production volume : 1(per pier)
 1-PIPE ϕ 34. 0x2. 3x750 (STK400)
 2-PIPE ϕ 21. 7x1. 9x750 (STK400)
 2-L 65x65x6x1069
 2-PL 115x6x80 (SM400A)
 2-BASE PL 150x9x150 (SM400A)
 2-RIB PL 65x6x65 (SM400A)
 2-U. Bolt M10 Nominal25C
 4-U. Bolt M10 Nominal15C
 8-Driving anchor M16x125

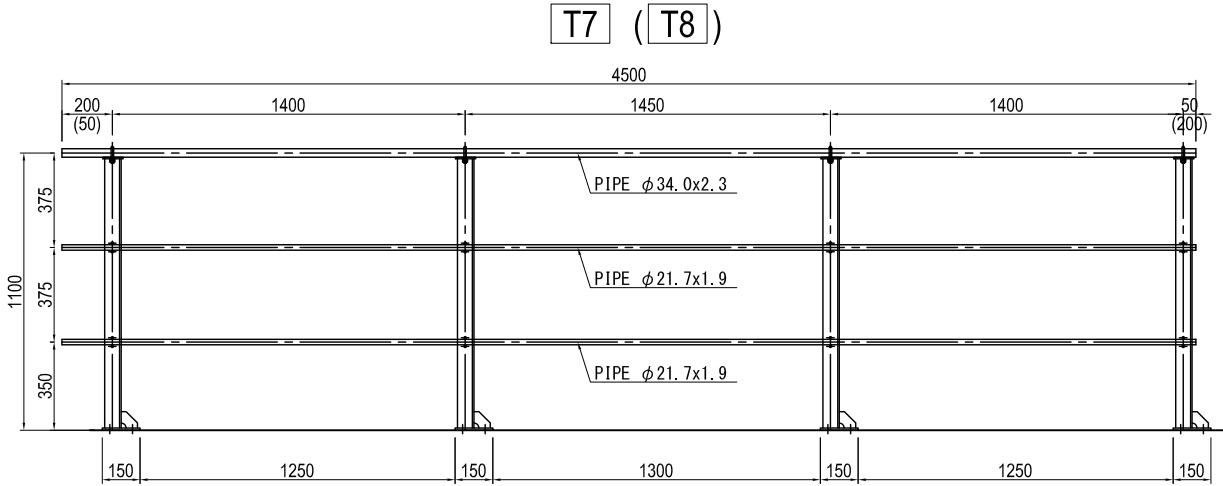


- <T5> Production volume : 1(per pier)
 1-PIPE ϕ 34. 0x2. 3x4800 (STK400)
 2-PIPE ϕ 21. 7x1. 9x4800 (STK400)
 4-L 65x65x6x1069
 4-PL 115x6x80 (SM400A)
 4-BASE PL 150x9x150 (SM400A)
 4-RIB PL 65x6x65 (SM400A)
 4-U. Bolt M10 Nominal25C
 8-U. Bolt M10 Nominal15C
 16-Driving anchor M16x125

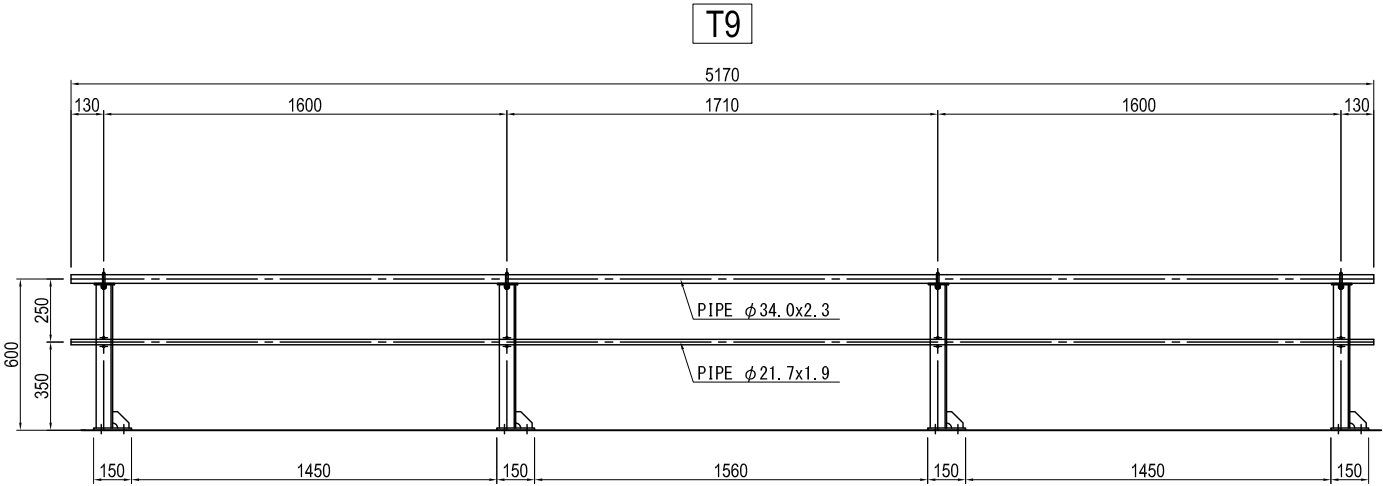
- Note) 1 All materials without special mention are SS400.
 2 The surface treatment of the steel member is hot-dip galvanized.
 (The amount of zinc deposition shall be JIS H 8641 2 type HDZ 55.
 However, bolts and nuts and members with a thickness
 of less than 3.2 mm shall be HDZ35.)

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. TOKUMARU		27. Nov.2017	FALL PREVENTIVE HANDRAIL OF P10 PIER (2)	1
				CHECKED BY T. HAYAKAWA		28. Nov.2017		DWG No.
				APPROVED BY Y. SANO		29. Nov.2017		P1-CS-2048

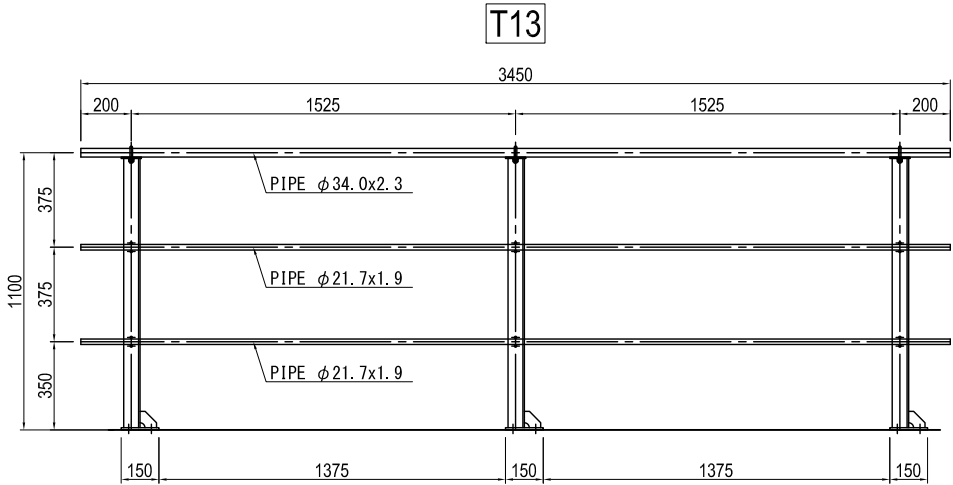
FALL PREVENTIVE HANDRAIL OF P10 PIER (3) S=1:30



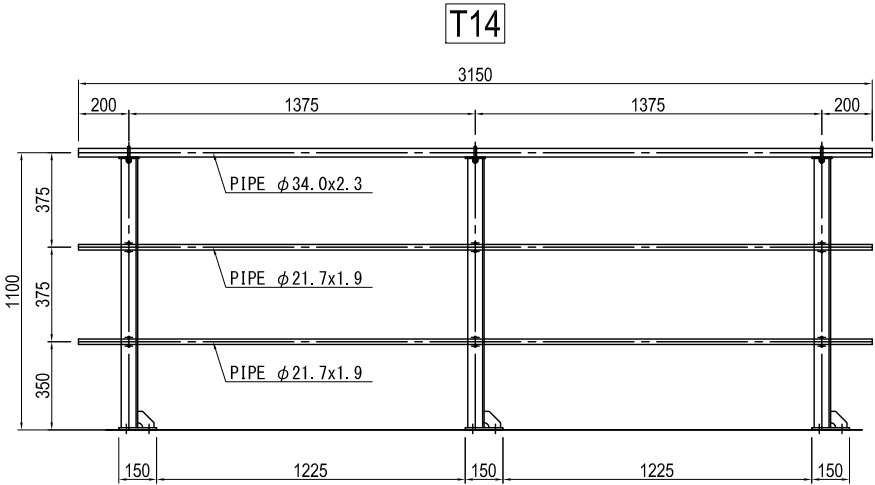
<T7, T8> Production volume : each1(per pier)
1-PIPE φ34.0x2.3x4500 (STK400) 4-RIB PL 65x6x65 (SM400A)
2-PIPE φ21.7x1.9x4500 (STK400) 4-U. Bolt M10 Nominal25C
4-L 65x65x6x1069 8-U. Bolt M10 Nominal15C
4-PL 115x6x80 (SM400A) 16-Driving anchor M16x125
4-BASE PL 150x9x150 (SM400A)



<T9> Production volume : 2(per pier)
1-PIPE φ34.0x2.3x5170 (STK400) 4-RIB PL 65x6x65 (SM400A)
1-PIPE φ21.7x1.9x5170 (STK400) 4-U. Bolt M10 Nominal25C
4-L 65x65x6x569 4-U. Bolt M10 Nominal15C
4-PL 115x6x80 (SM400A) 16-Driving anchor M16x125
4-BASE PL 150x9x150 (SM400A)



<T13> Production volume : 2(per pier)
1-PIPE φ34.0x2.3x3450 (STK400) 3-RIB PL 65x6x65 (SM400A)
2-PIPE φ21.7x1.9x3450 (STK400) 3-U. Bolt M10 Nominal25C
3-L 65x65x6x1068 6-U. Bolt M10 Nominal15C
3-PL 115x6x80 (SM400A) 12-Driving anchor M16x125
3-BASE PL 150x9x150 (SM400A)



<T14> Production volume : 2(per pier)
1-PIPE φ34.0x2.3x3150 (STK400) 3-RIB PL 65x6x65 (SM400A)
2-PIPE φ21.7x1.9x3150 (STK400) 3-U. Bolt M10 Nominal25C
3-L 65x65x6x1068 6-U. Bolt M10 Nominal15C
3-PL 115x6x80 (SM400A) 12-Driving anchor M16x125
3-BASE PL 150x9x150 (SM400A)

Note) 1 All materials without special mention are SS400.
2 The surface treatment of the steel member is hot-dip galvanized.
(The amount of zinc deposition shall be JIS H 8641 2 type HDZ 55.
However, bolts and nuts and members with a thickness
of less than 3.2 mm shall be HDZ35.)

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	PREPARED BY S. TOKUMARU		27. Nov. 2017	FALL PREVENTIVE HANDRAIL OF P10 PIER (3)	1
				CHECKED BY T. HAYAKAWA		28. Nov. 2017		DWG No.
				APPROVED BY Y. SANO		29. Nov. 2017		P1-CS-2049

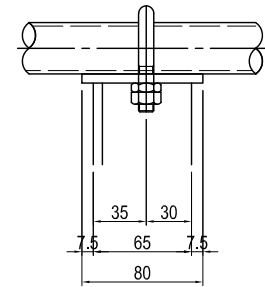
S=1:20

S=1:20



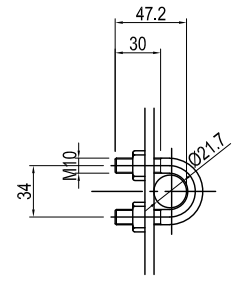
S=1:5

U.Bolt Nominal 25C

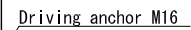


S=1:5

U.Bolt Nominal 15C



S=1:10

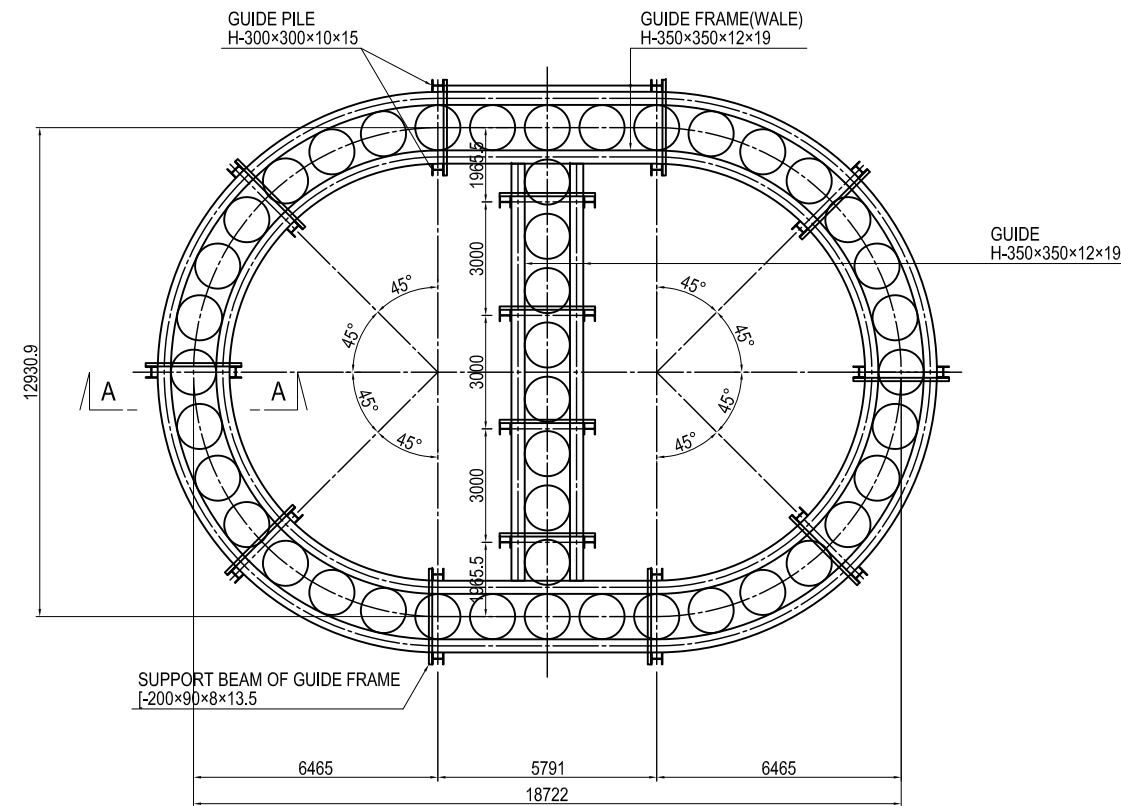


- 2 The surface treatment of the steel member is hot-dip galvanized.
(The amount of zinc deposition shall be JIS H 8641 2 type HDZ 55.
However, bolts and nuts and members with a thickness
of less than 3.2 mm shall be HDZ35.)

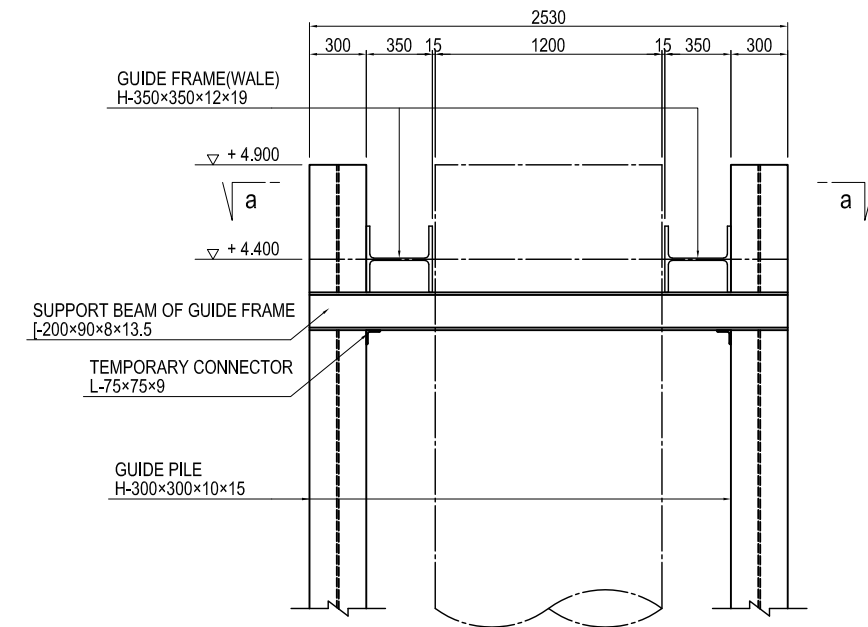
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S.TOKUMARU	徳丸 祥朗	27. Nov.2017	FALL PREVENTIVE HANDRAIL OF P10 PIER (4)	1
CHECKED BY	T. HAYAKAWA	平川 知那	28. Nov.2017		DWG No.
APPROVED BY	Y. SANO	佐野 裕一	29. Nov.2017		P1-CS-2050

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P10 PIER (1)

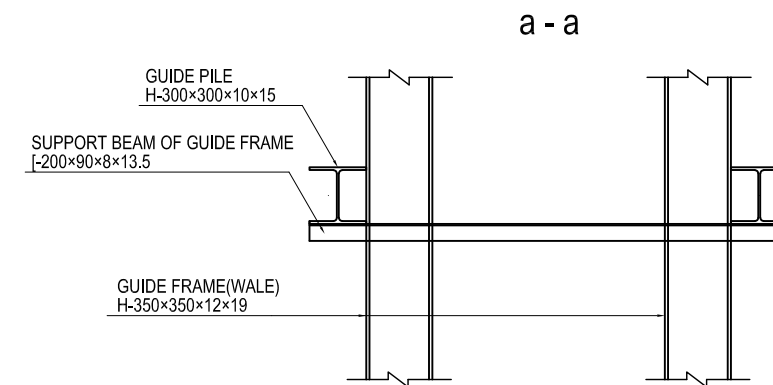
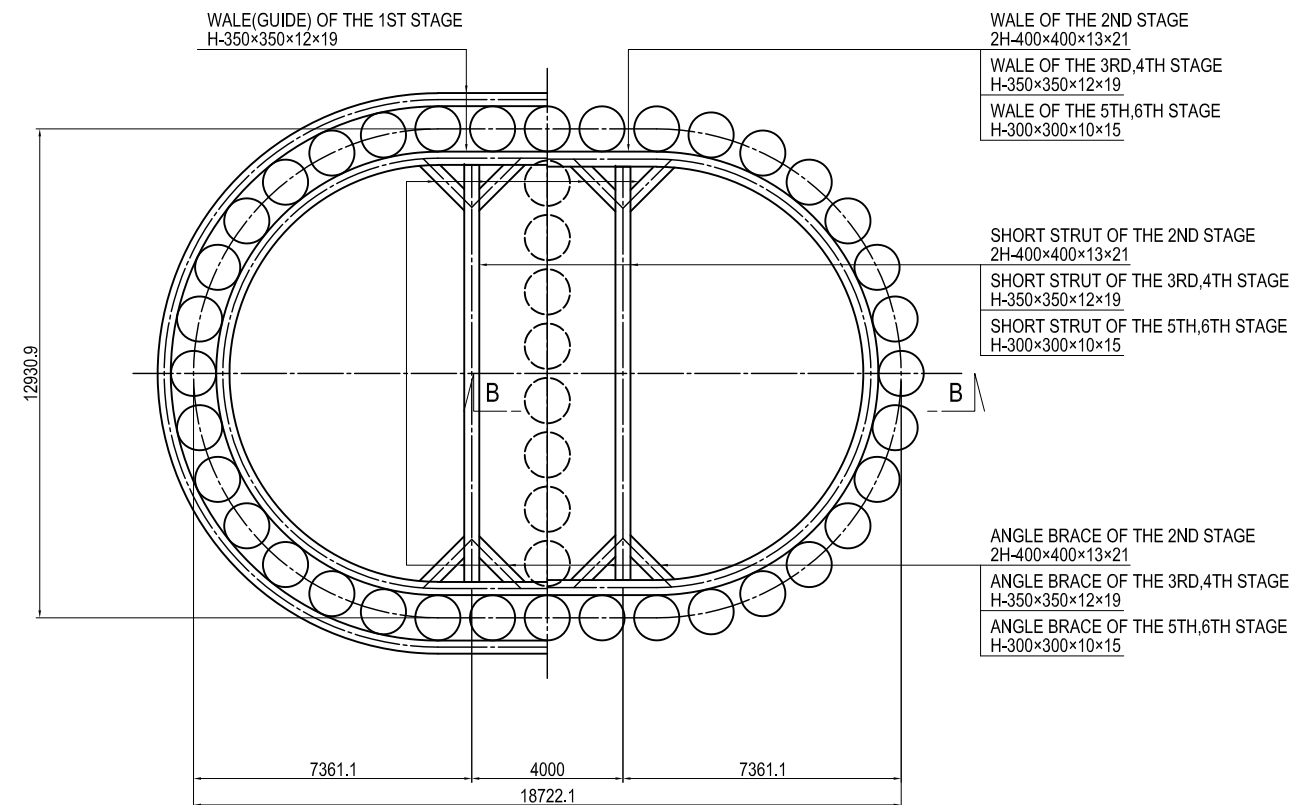
LAYOUT PLAN OF GUIDE FRAMES AND GUIDE PILES S=1:200



DETAIL OF ATTACHMENT OF GUIDE PILES AND GUIDE FRAMES S=1:40



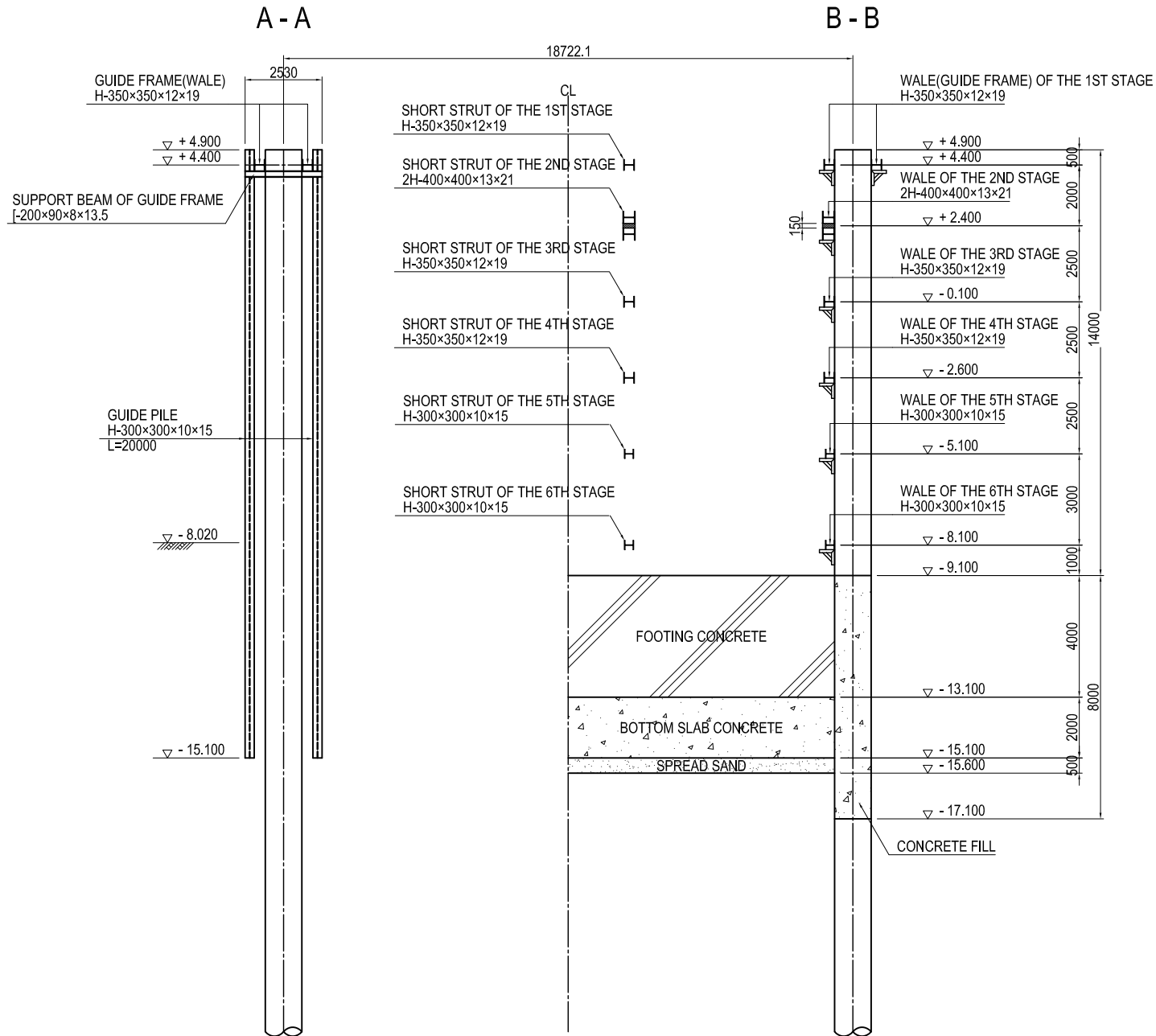
LAYOUT PLAN OF STRUTS AND WALES S=1:200



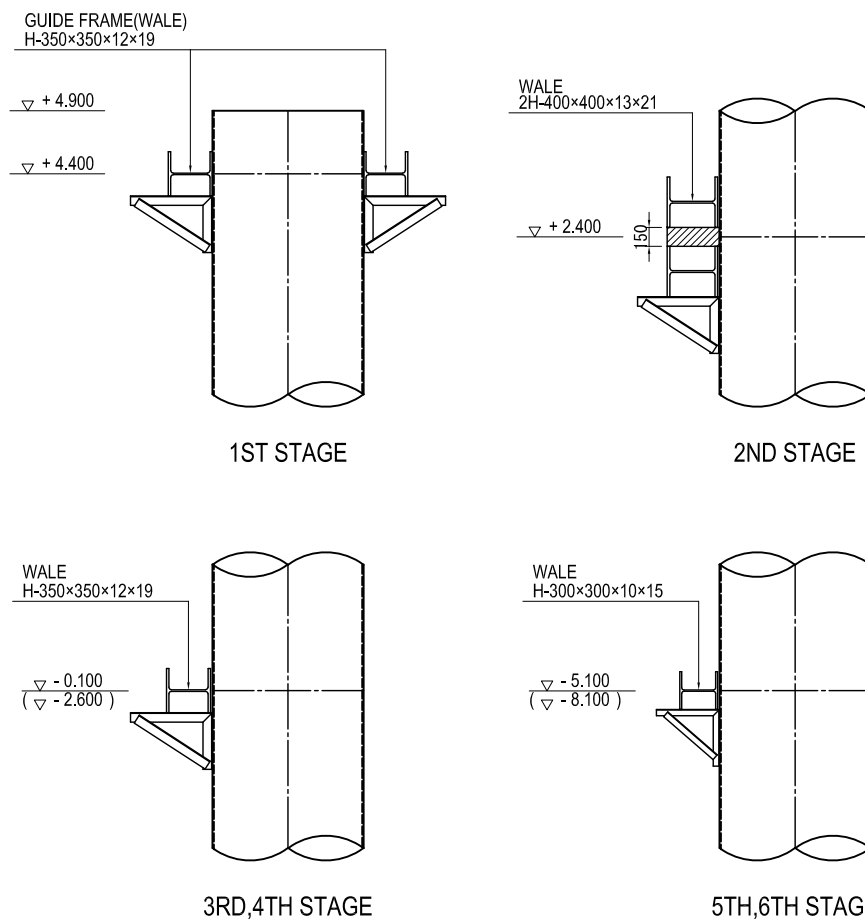
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO., LTD. NIPPON ENGINEERING CONSULTANTS CO., LTD.	T. HAYAKAWA	平川 知那	27. Nov. 2017	(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P10 PIER (1)	1
				T. HAYAKAWA	平川 知那	28. Nov. 2017		DWG No.
				Y. SANO	佐野 祐一	29. Nov. 2017		P1-CS-2051

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P10 PIER (2)

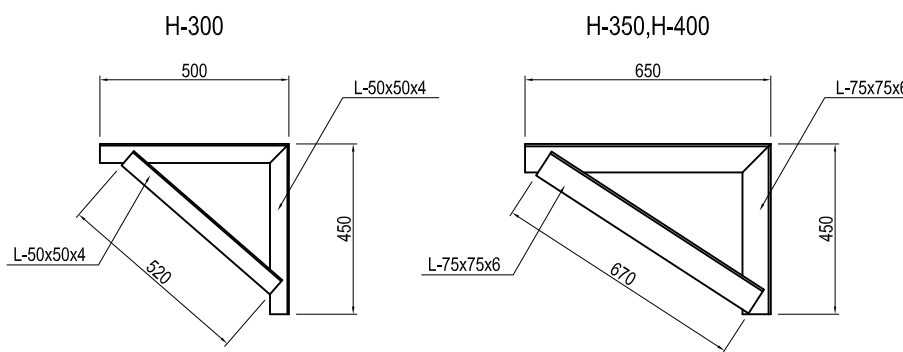
CROSS SECTION S=1:200



DETAIL OF ATTACHMENT OF WALE S=1:60

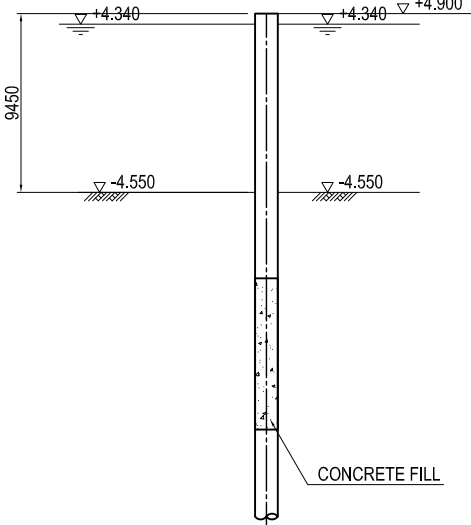
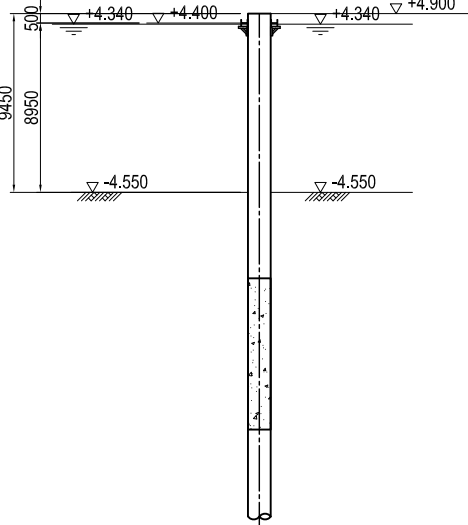
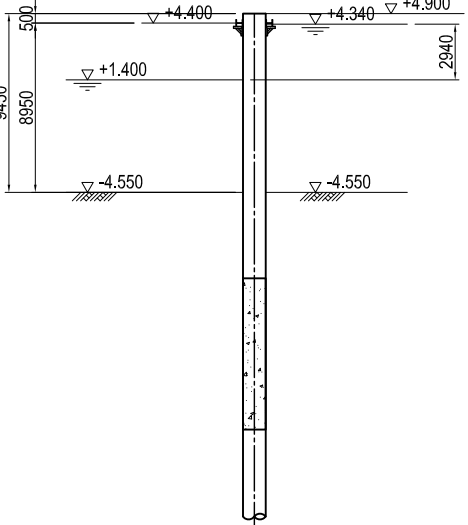
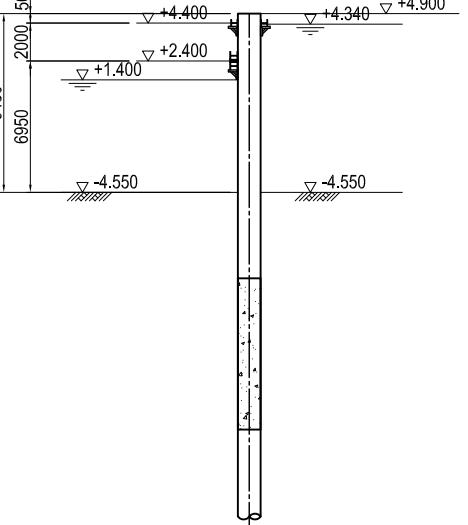
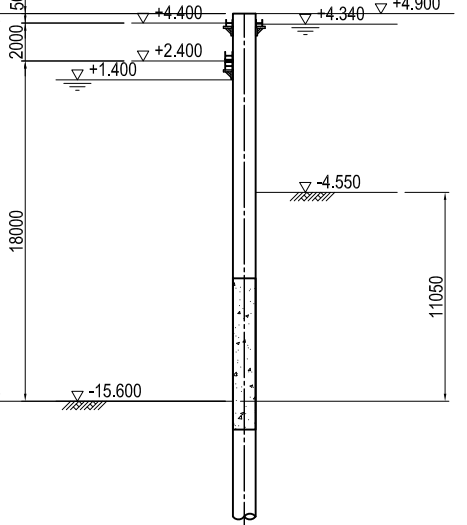
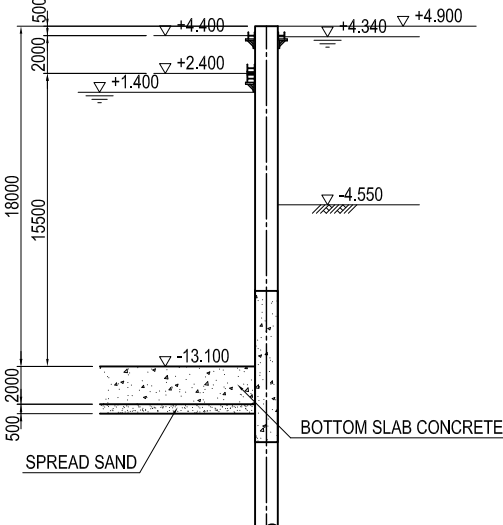
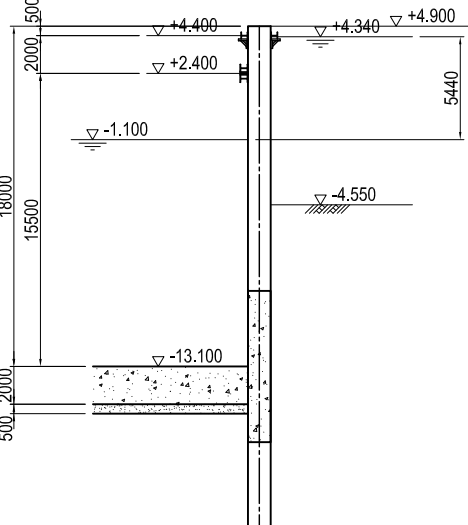
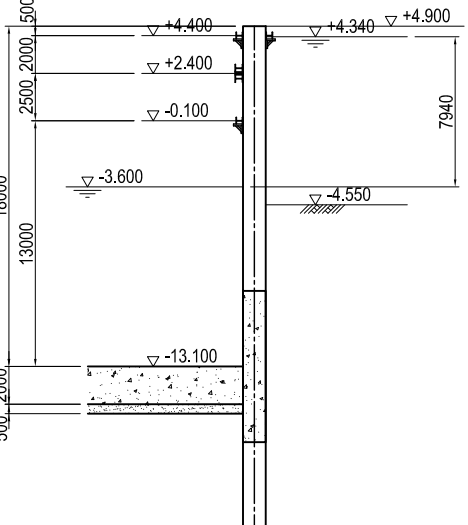
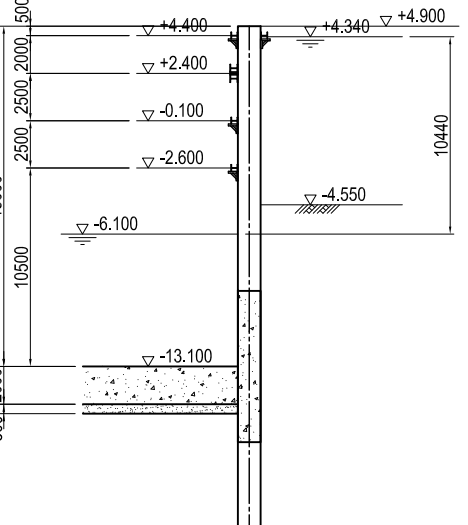
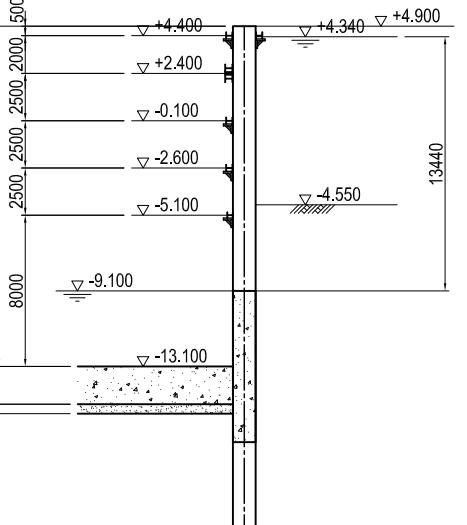


DETAIL OF BRACKET S=1:20



PROJECT NAME DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY JICA 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 (REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P10 PIER (2)	PACKAGE
				PREPARED BY	T. HAYAKAWA	27. Nov.2017		1
				CHECKED BY	T. HAYAKAWA	28. Nov.2017		DWG No.
				APPROVED BY	Y. SANO	29. Nov.2017		P1-CS-2052

(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P10 PIER (1) S=1:400

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
				
Excavate inside of exterior sheet piles and filled with concrete as shown.	The 1st support Installation.	Draining the inside of cofferdam up to +1.400m level.	The 2nd support Installation.	Underwater excavation up to -15.600m level.
STEP 6	STEP 7	STEP 8	STEP 9	STEP 10
				
Placement of spread sand followed by casting undewater bottom slab concrete.	Draining the inside of cofferdam up to -1.100m level.	Draining the inside of cofferdam up to -3.600m level. after the 3rd support Installation.	Draining the inside of cofferdam up to -6.100m level. after the 4th support Installation.	Draining the inside of cofferdam up to -9.100m level. after the 5th support Installation.

Note : This drawing can be used for reference only.

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JICA JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	PREPARED BY CHECKED BY APPROVED BY	T. HAYAKAWA T. HAYAKAWA Y. SANO	27. Nov.2017 28. Nov.2017 29. Nov.2017	(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P10 PIER (1)	1 DWG No. P1-CS-2053

(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P10 PIER (2) S=1:400

[illegible]

Note : This drawing can be used for reference only.