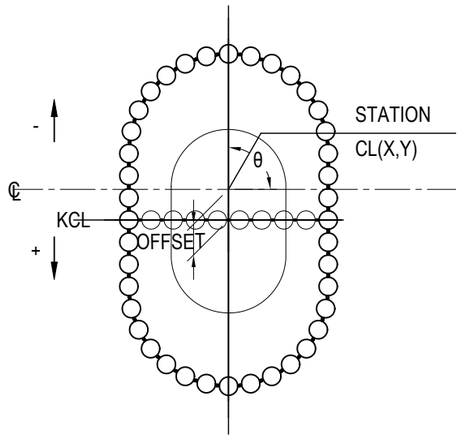
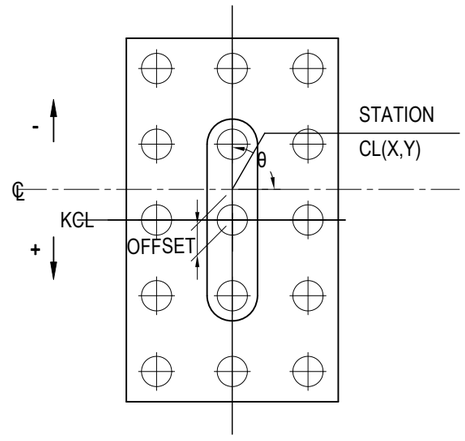
COORDINATES OF SUBSTRUCTURE (P14-P19)

NAME		P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	A2
STATION		1+424.000	1+536.000	1+648.000	1+760.000	1+872.000	1+984.000	2+088.000	2+138.000	2+188.000	2+238.000	2+288.000	2+338.000	2+388.000
CL	X	1858363.5073	1858460.4724	1858557.4375	1858654.4026	1858751.3677	1858848.3328	1858938.3718	1858981.6598	1859024.9477	1859068.2357	1859111.5237	1859154.8117	1859198.0997
	Y	204959.0244	204902.9729	204846.9214	204790.8699	204734.8184	204678.7669	204626.7190	204601.6961	204576.6731	204551.6501	204526.6271	204501.6041	204476.5811
AZIMUTH		239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	239d 58′ 10.5″	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″	90d 00′ 00″
OFFSET (m)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

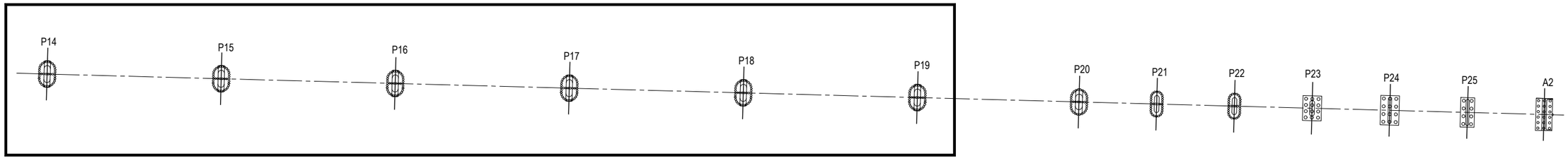


P14~ P22



P23~ A2

STEEL BOX GIRDER BRIDGE



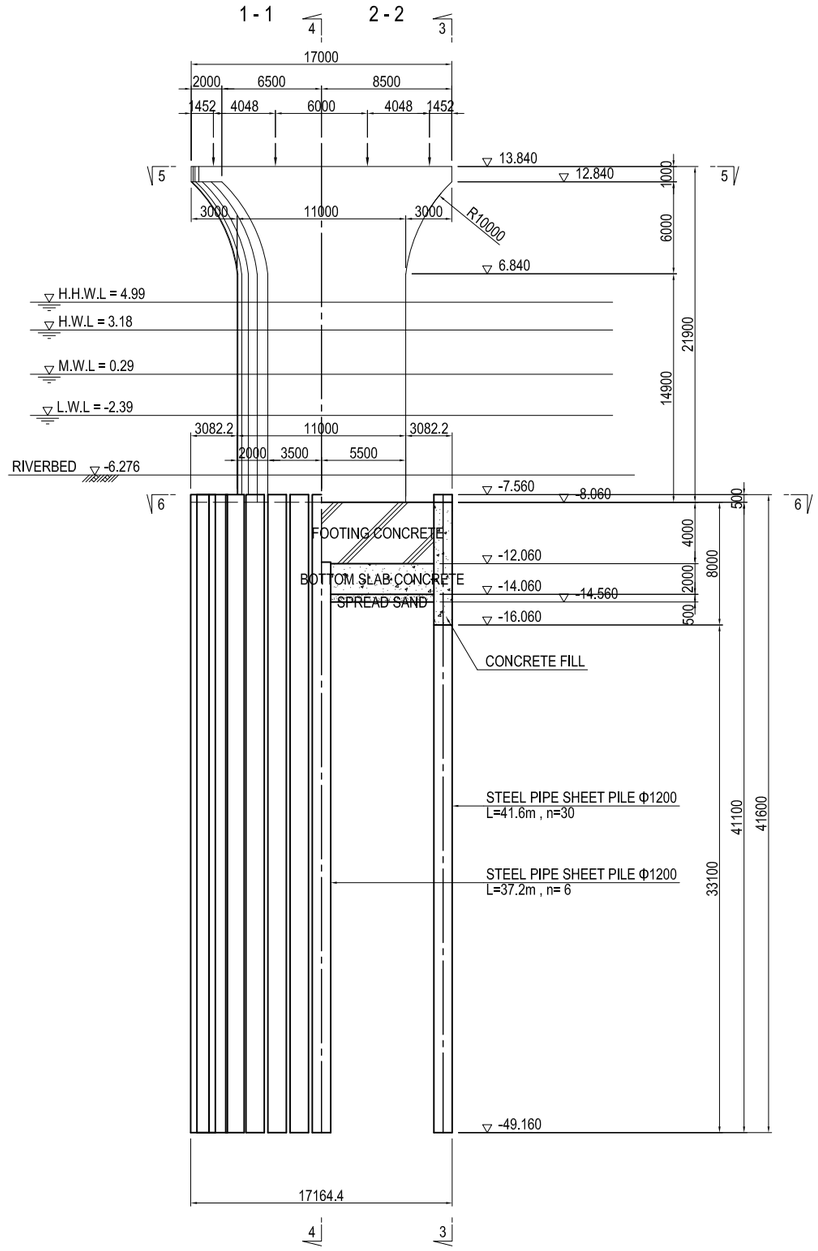
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		NAME	SIGNATURE	DATE
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	PREPARED BY	S.IMADA		29 Sep. 2017
				CHECKED BY	T. HAYAKAWA		3 Oct. 2017
				APPROVED BY	Y. SANO		6 Oct. 2017

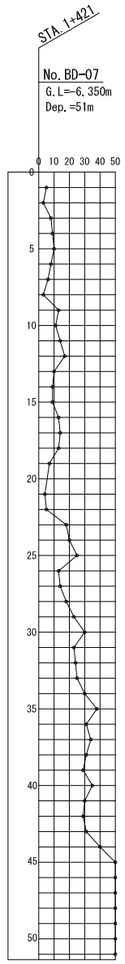
DRAWING TITLE	PACKAGE
COORDINATES OF SUBSTRUCTURE (P14-P19)	2
	DWG No.
	P2-SB-2000

GENERAL VIEW OF P14 PIER (1)

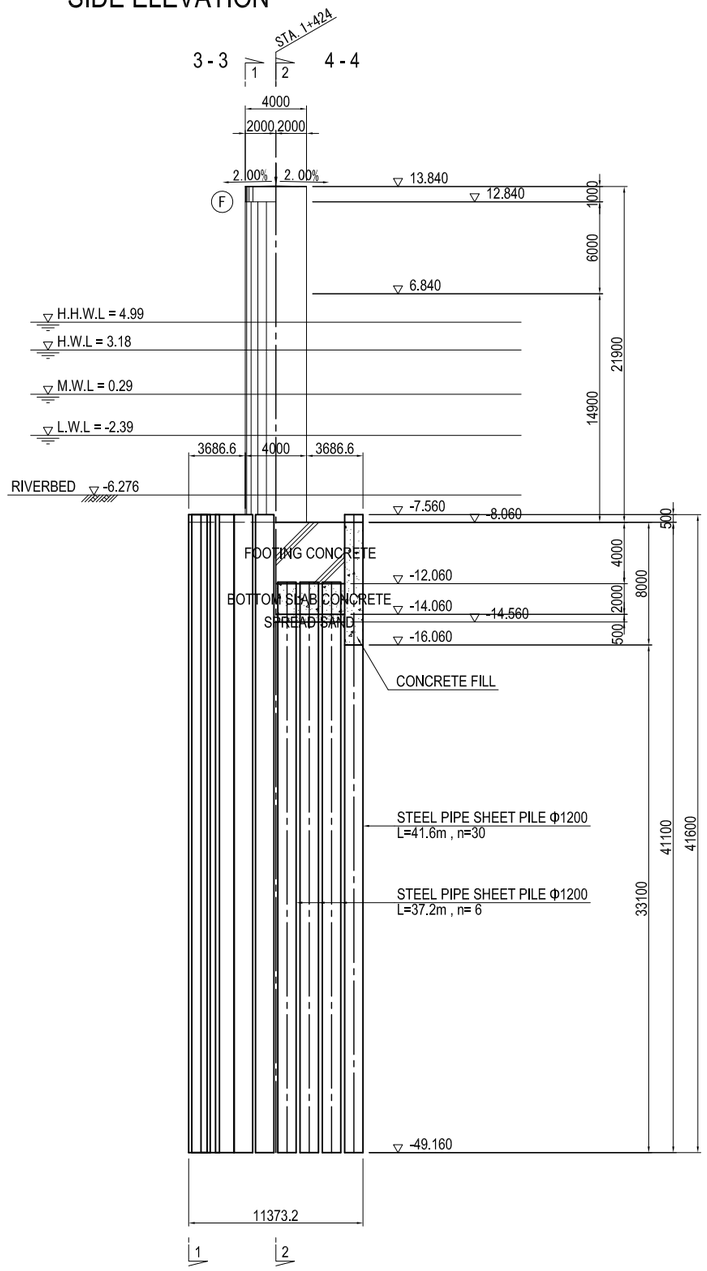
S=1:400

FRONT ELEVATION



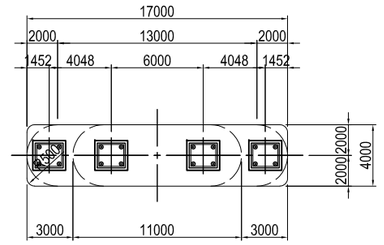


SIDE ELEVATION



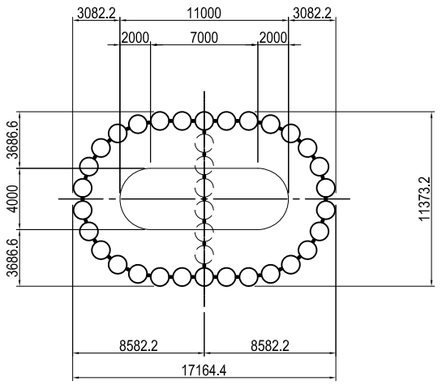
PLAN

5 - 5



PLAN

6 - 6



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	SD345
COLUMN	σck = 30 N/mm²	SD390, SD345
FOOTING	σck = 24 N/mm²	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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

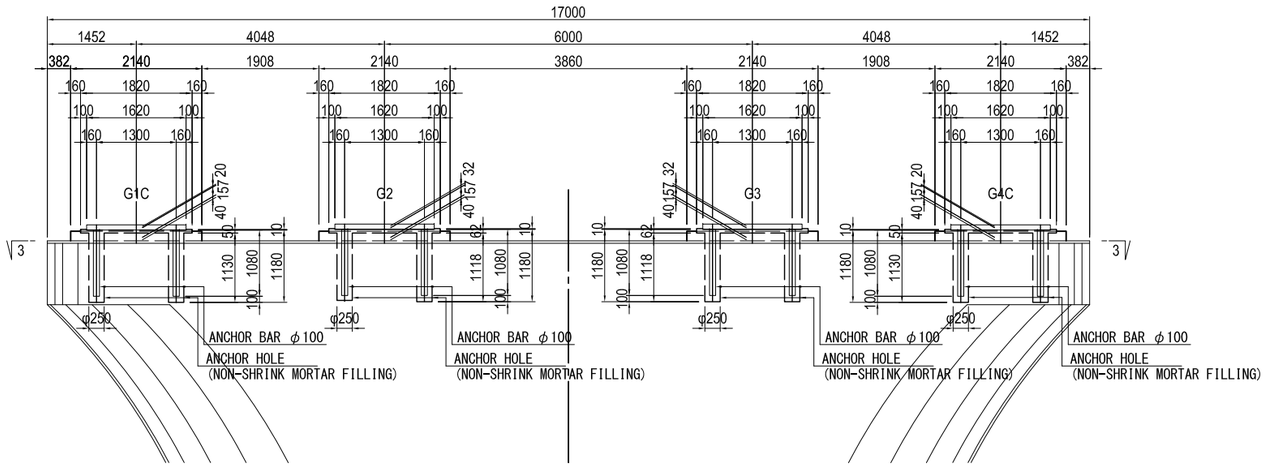
DRAWING TITLE	PACKAGE
GENERAL VIEW OF P14 PIER(1)	2
	DWG No.
	P2-SB-2001

GENERAL VIEW OF P14 PIER (2)

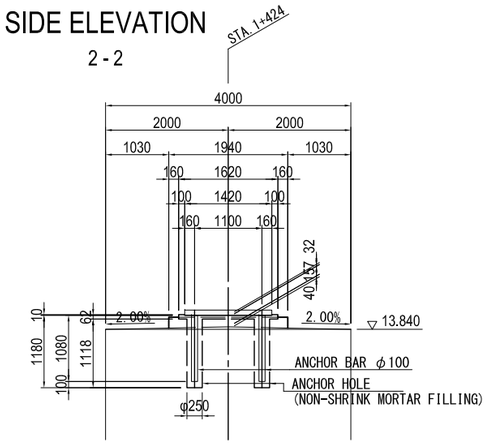
S=1:100

DETAIL OF BEARING AND ANCHOR

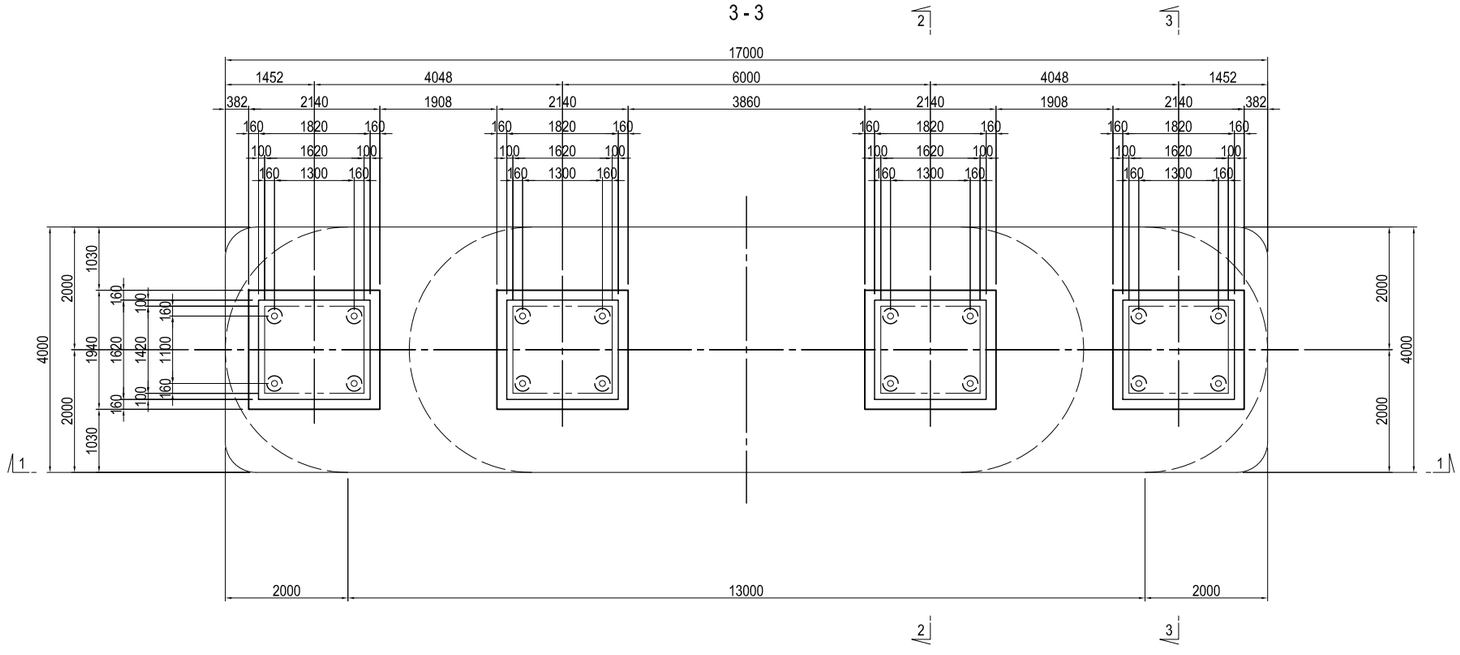
FRONT ELEVATION
1 - 1



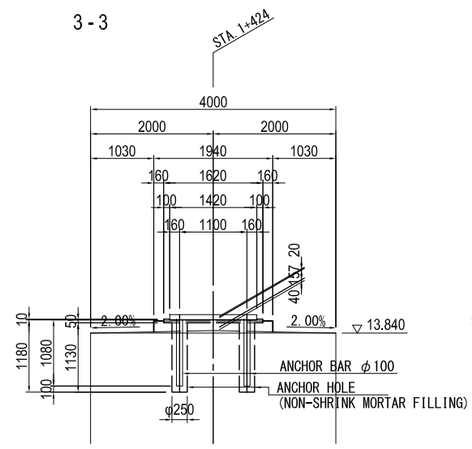
SIDE ELEVATION
2 - 2

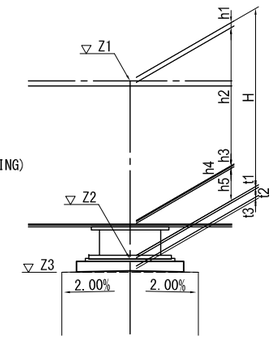


PLAN
3 - 3



SIDE ELEVATION
3 - 3





		P14 PIER			
		G1C	G2	G3	G4C
PROPOSED HEIGHT	Z1	17.297	17.378	17.378	17.297
PAVEMENT	h1	0.080	0.080	0.080	0.080
GIRDER	h2	2.709	2.790	2.790	2.709
BOTTOM FLANGE	h3	0.052	0.040	0.040	0.052
SOLE PLATE	h4	0.040	0.040	0.040	0.040
BEARING	h5	0.359	0.359	0.359	0.359
SUBTOTAL	H	3.240	3.309	3.309	3.240
ELEVATION OF BEARING BOTTOM	Z2	14.057	14.069	14.069	14.057
MORTAR	t1	0.020	0.032	0.032	0.020
BEARING BASE	t2	0.157	0.157	0.157	0.157
DRAINAGE INCLINE	t3	0.040	0.040	0.040	0.040
ELEVATION OF PIER TOP	Z3	13.840	13.840	13.840	13.840

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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

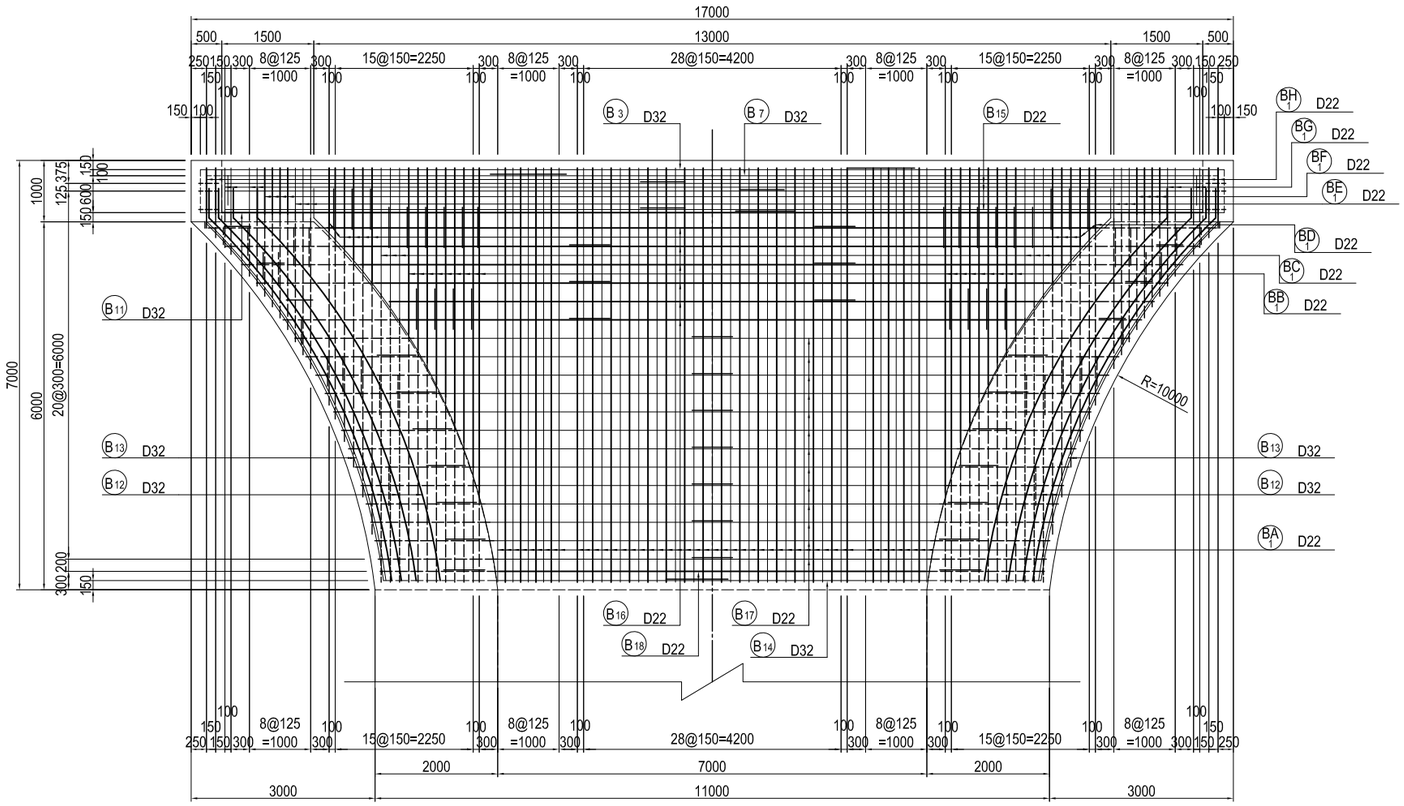
DRAWING TITLE
GENERAL VIEW OF P14 PIER(2)

PACKAGE 2
DWG No. P2-SB-2002

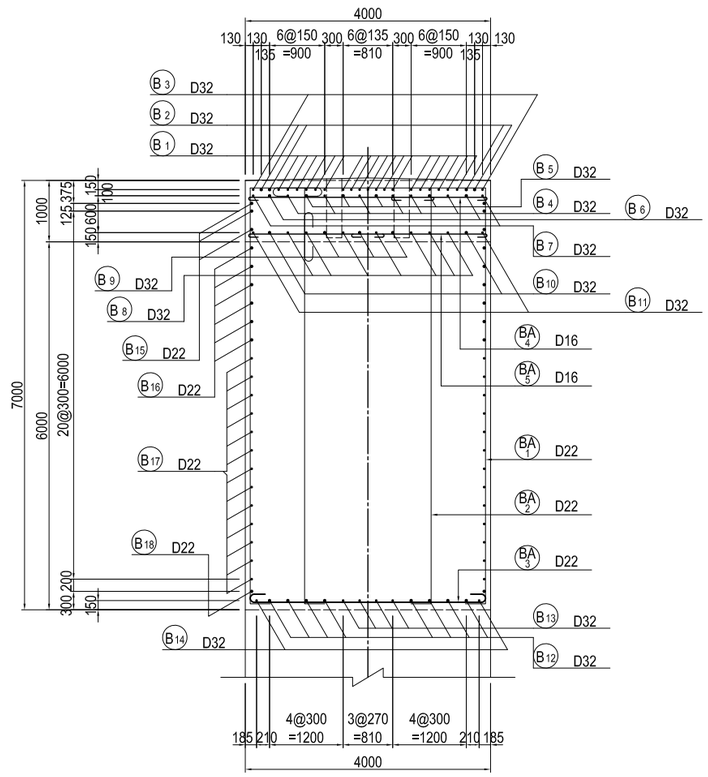
BAR ARRANGEMENT OF P14 PIER (1) S=1:100

BEAM

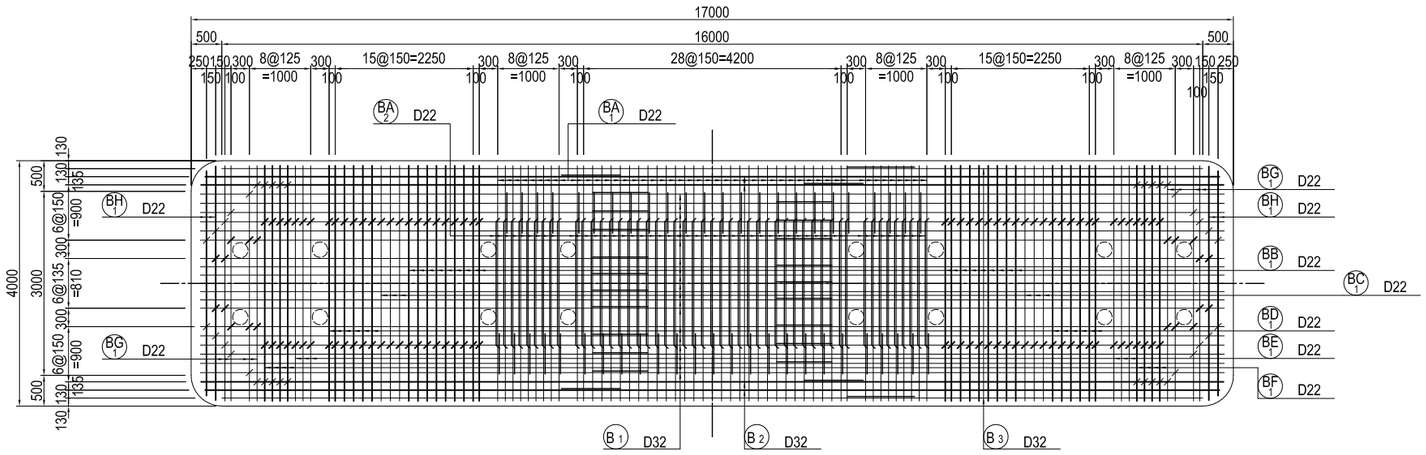
FRONT ELEVATION
1 - 1



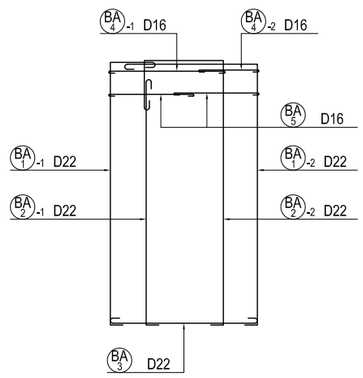
SECTION
3 - 3



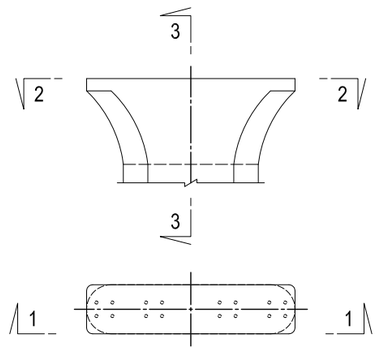
PLAN
2 - 2



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

DRAWING TITLE: BAR ARRANGEMENT OF P14 PIER (1)

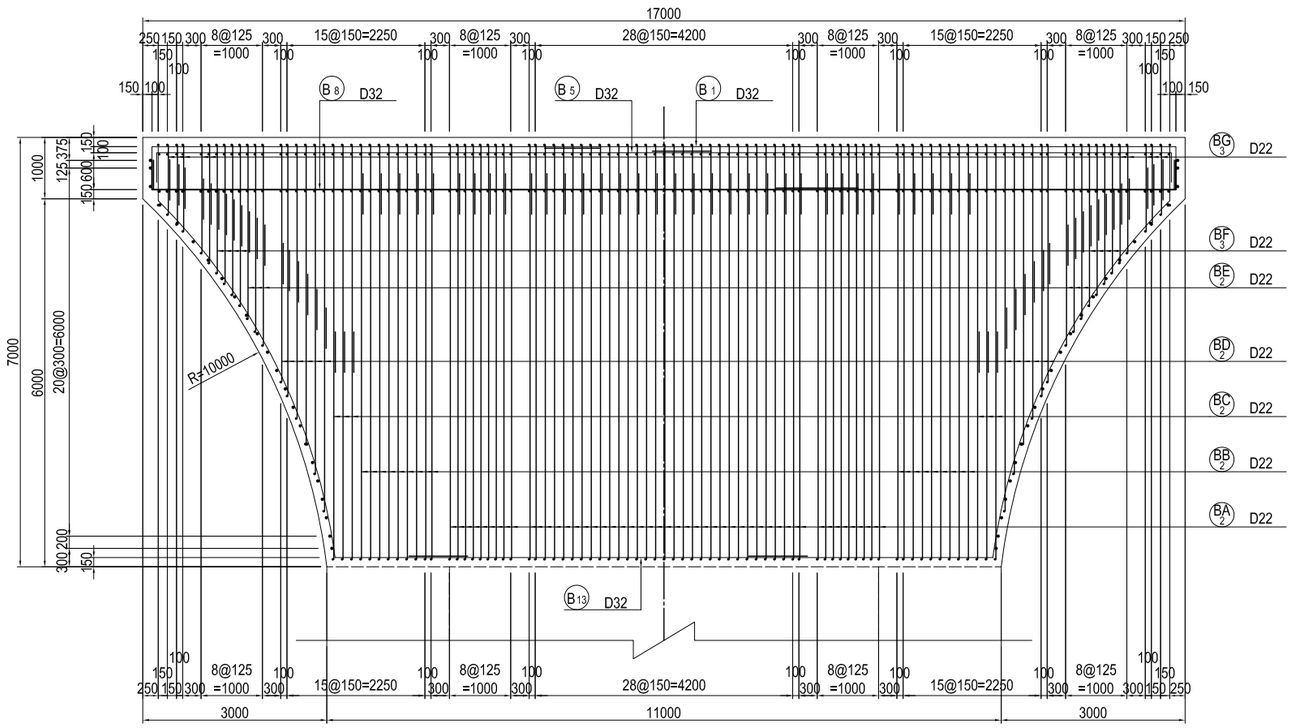
PACKAGE: 2

DWG No.: P2-SB-2003

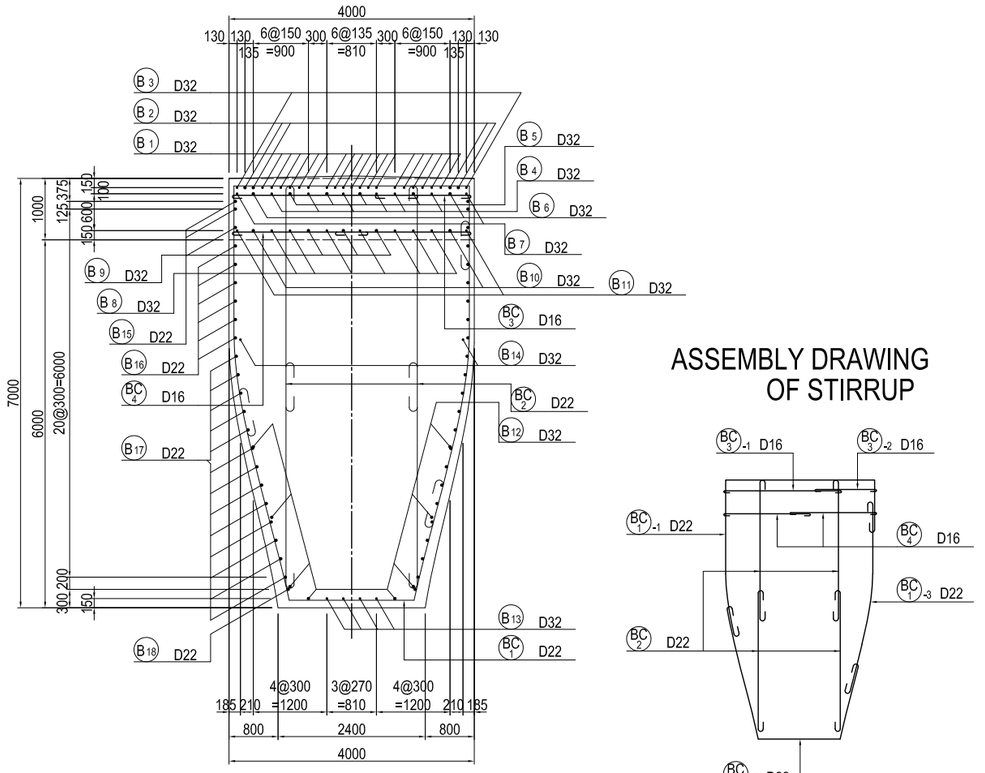
BAR ARRANGEMENT OF P14 PIER (2) S=1:100

BEAM

SECTION 4 - 4

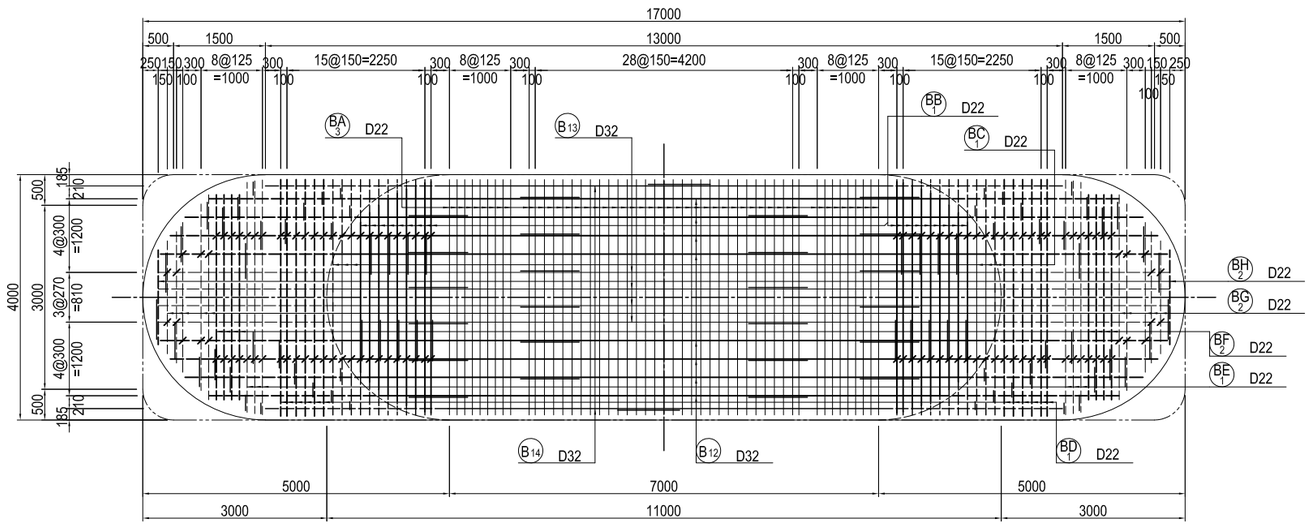


SECTION 7 - 7

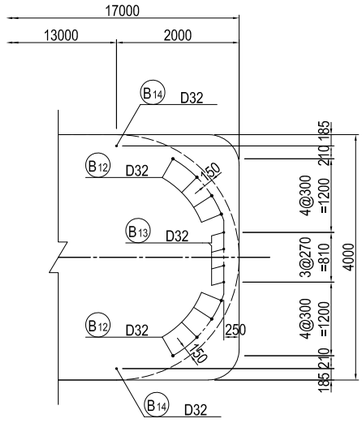


ASSEMBLY DRAWING OF STIRRUP

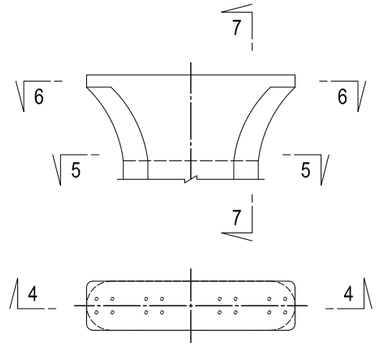
PLAN 5 - 5



PLAN 6 - 6



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	SD345

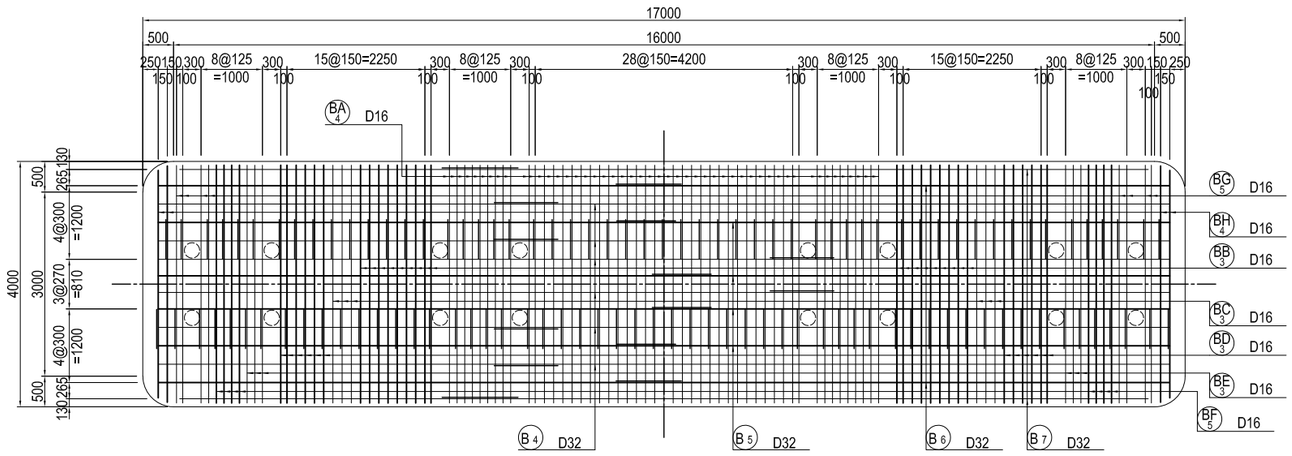
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
				NAME	SIGNATURE / DATE
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 PIER (2)	2
	DWG No.
	P2-SB-2004

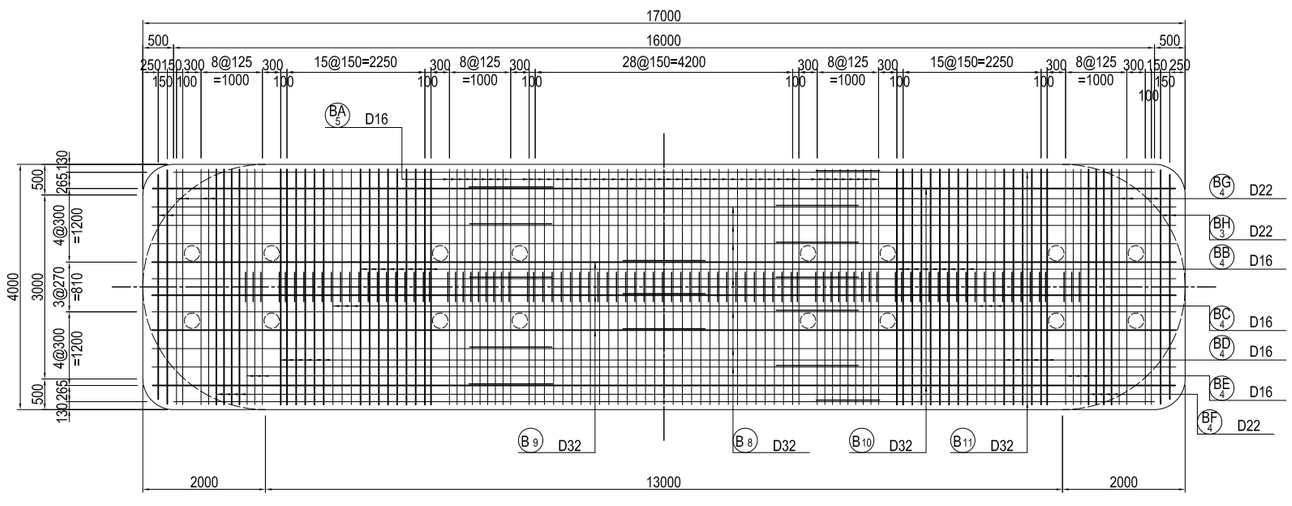
BAR ARRANGEMENT OF P14 PIER (3) S=1:100

BEAM

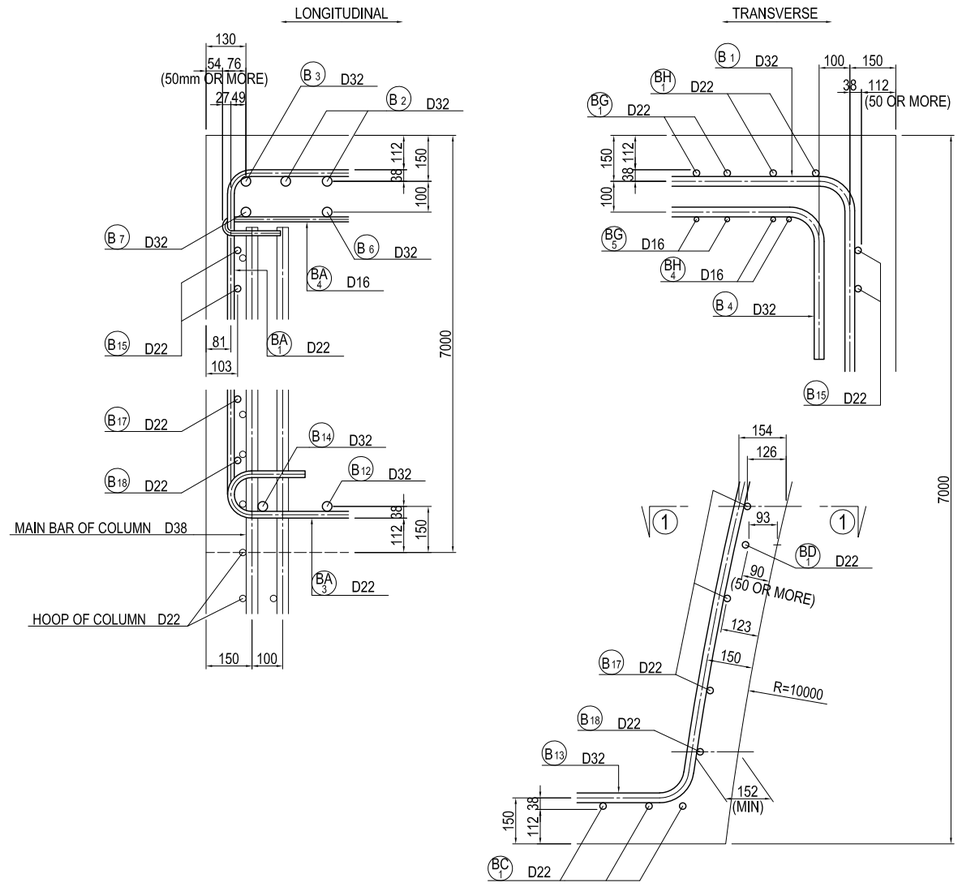
PLAN 8 - 8



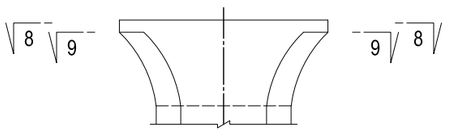
PLAN 9 - 9



DETAIL OF BEAM S=1:20



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 PIER (3)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2005

BAR ARRANGEMENT OF P14 PIER (4) S=1:100

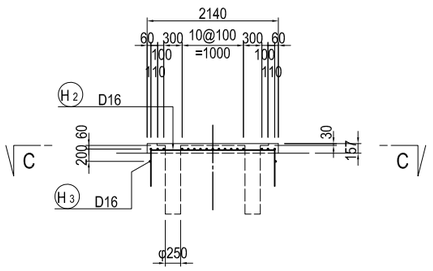
BEAM

BAR ARRANGEMENT OF BEARING BASE

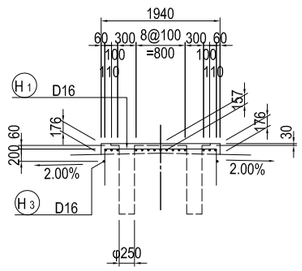
(N = 4)

SECTION

A - A

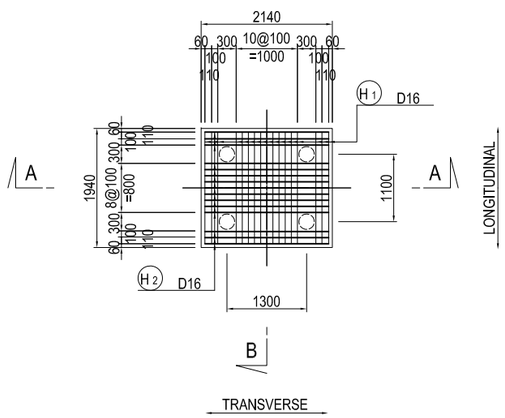


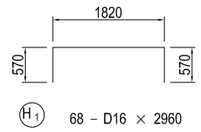
B - B



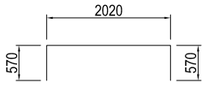
PLAN

C - C

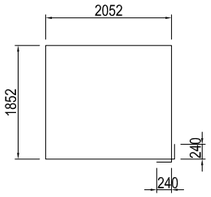




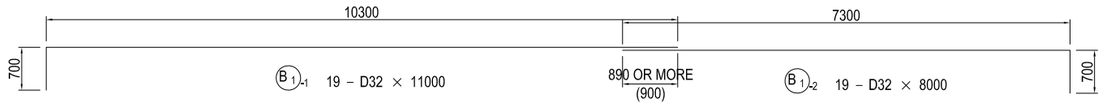
H1 68 – D16 × 2960

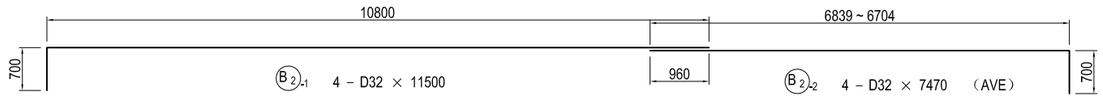


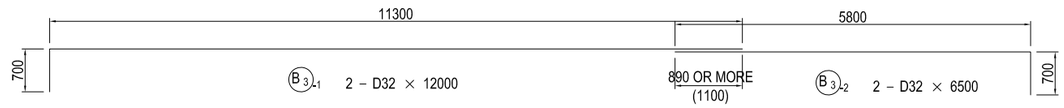
H2 60 – D16 × 3160

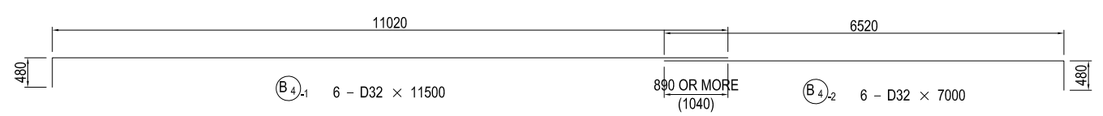


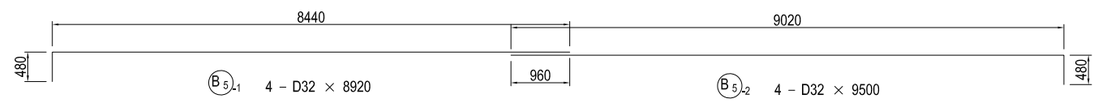
H3 4 – D16 × 8290

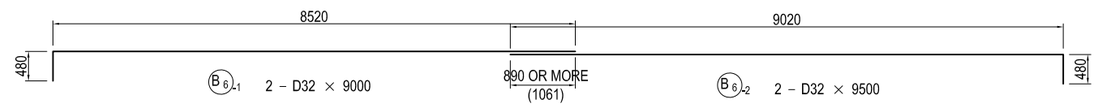


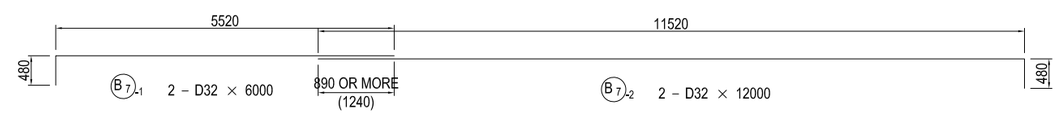












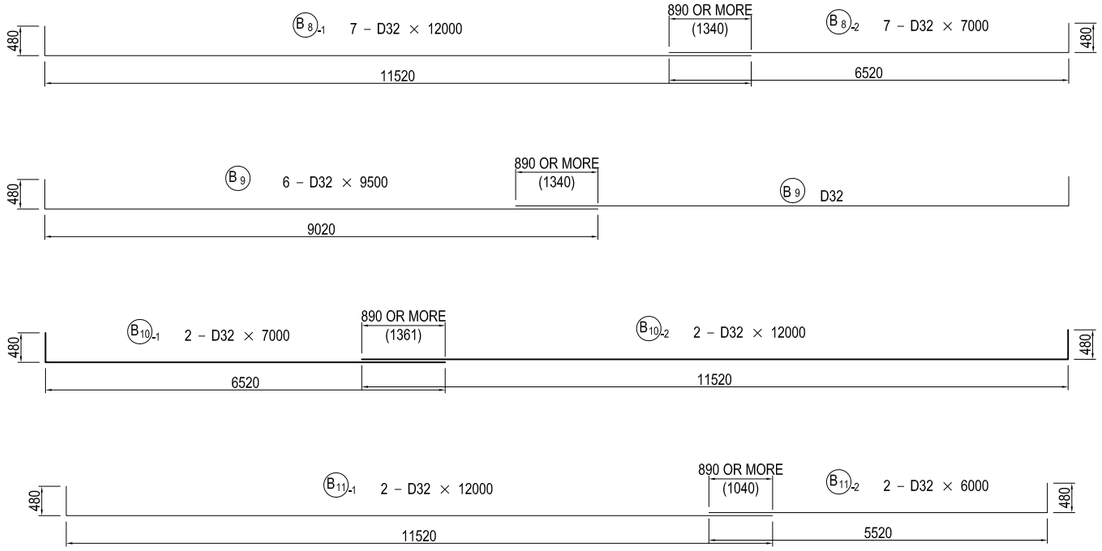
USE MATERIALS

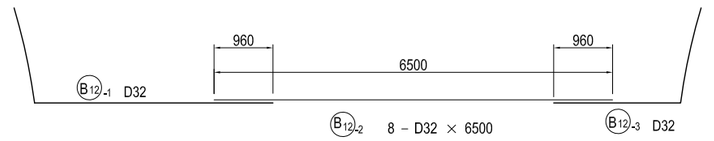
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

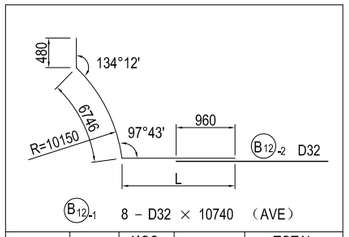
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
				NAME	SIGNATURE / DATE
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017
				DRAWING TITLE	BAR ARRANGEMENT OF P14 PIER (4)
				PACKAGE	2
				DWG No.	P2-SB-2006

BAR ARRANGEMENT OF P14 PIER (5) S=1:100

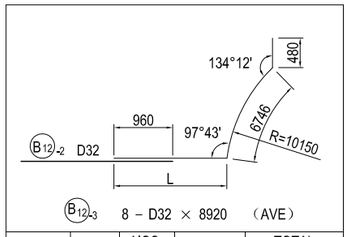
BEAM



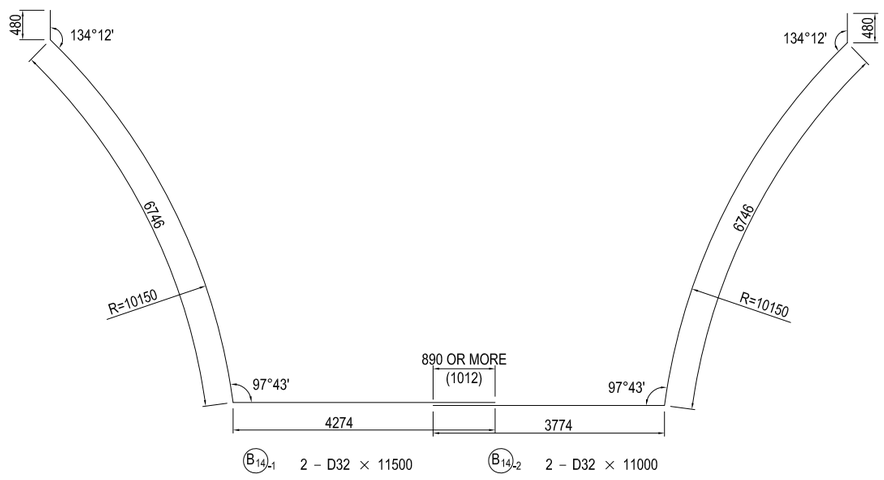


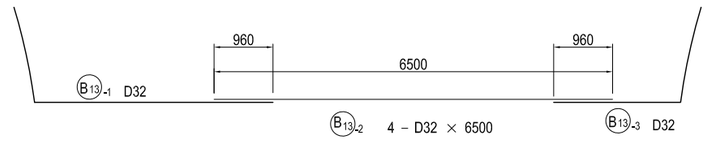


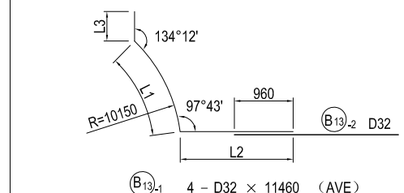
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B12-1 1	D32	2	3058	10284
2	"	2	3449	10675
3	"	2	3691	10917
4	"	2	3848	11074
AVE		8		10738



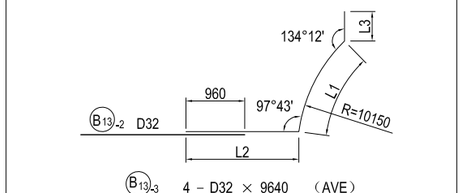
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B12-3 1	D32	2	1238	8464
2	"	2	1629	8855
3	"	2	1871	9097
4	"	2	2028	9254
AVE		8		8918







MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
B13-1 1	D32	2	6669	3943	840	11452
2	"	2	6613	3983	880	11476
AVE		4				11464



MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
B13-3 1	D32	2	6669	2123	840	9632
2	"	2	6613	2163	880	9656
AVE		4				9644

USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

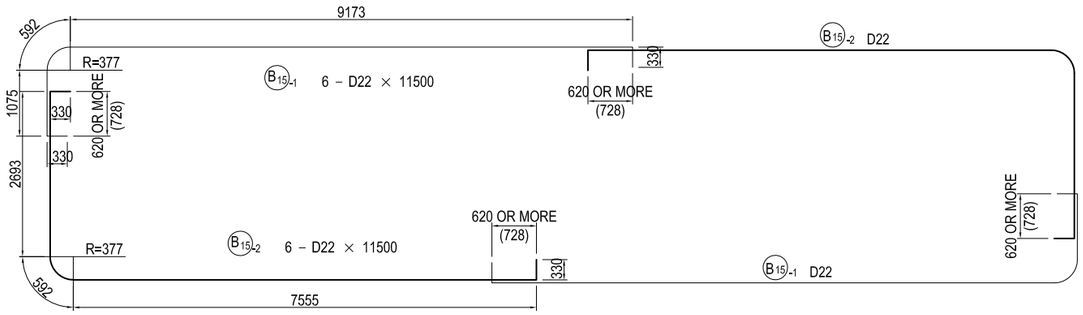
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

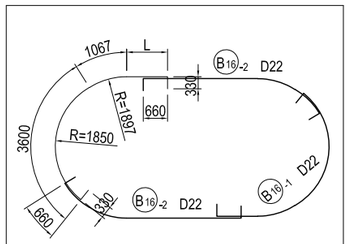
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 PIER (5)	2
	DWG No.
	P2-SB-2007

BAR ARRANGEMENT OF P14 PIER (6) S=1:100

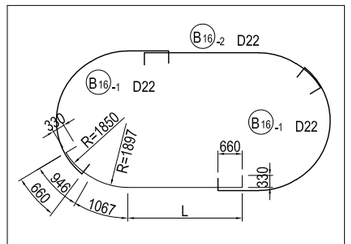
BEAM





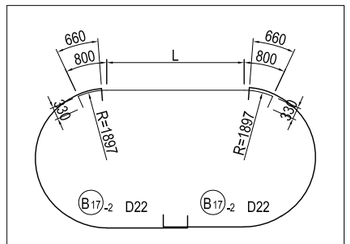
B16-1 12 – D22 × 9300 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B16-1 1	D22	2	4612	9939
2	"	2	4328	9655
3	"	2	4065	9392
4	"	2	3823	9150
5	"	2	3598	8925
6	"	2	3391	8718
AVE		12		9297



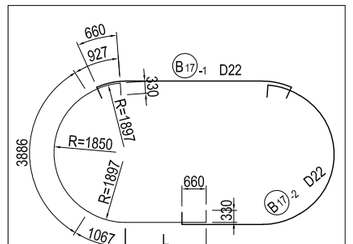
B16-2 12 – D22 × 10640 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B16-2 1	D22	2	8612	11285
2	"	2	8328	11001
3	"	2	8065	10738
4	"	2	7823	10496
5	"	2	7598	10271
6	"	2	7391	10064
AVE		12		10643



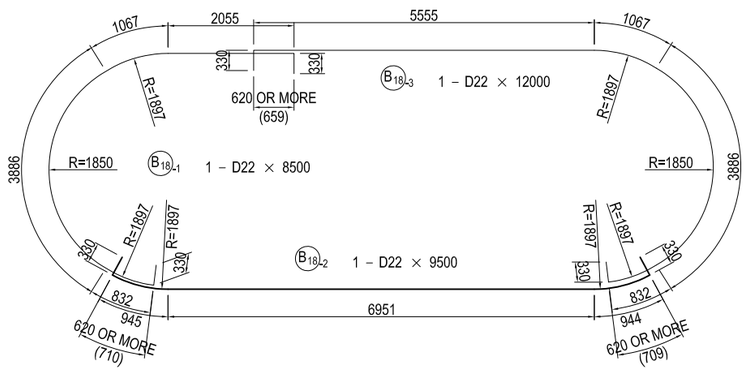
B17-1 13 – D22 × 10400 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B17-1 1	D22	1	9737	11997
2	"	1	9381	11641
3	"	1	9052	11312
4	"	1	8749	11009
5	"	1	8470	10730
6	"	1	8215	10475
7	"	1	7982	10242
8	"	1	7771	10031
9	"	1	7580	9840
10	"	1	7410	9670
11	"	1	7260	9520
12	"	1	7128	9388
13	"	1	7016	9276
AVE		13		10395



B17-2 26 – D22 × 10940 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B17-2 1	D22	2	5198	11738
2	"	2	5020	11560
3	"	2	4856	11396
4	"	2	4705	11245
5	"	2	4565	11105
6	"	2	4438	10978
7	"	2	4321	10861
8	"	2	4215	10755
9	"	2	4120	10660
10	"	2	4035	10575
11	"	2	3960	10500
12	"	2	3894	10434
13	"	2	3838	10378
AVE		26		10937



USE MATERIALS

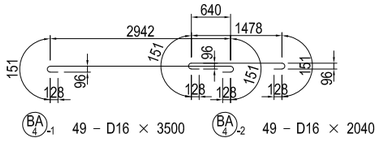
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

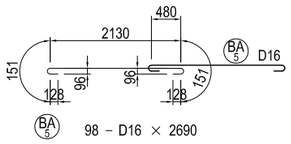
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 PIER (6)	2
	DWG No.
	P2-SB-2008

BAR ARRANGEMENT OF P14 PIER (7) S=1:100

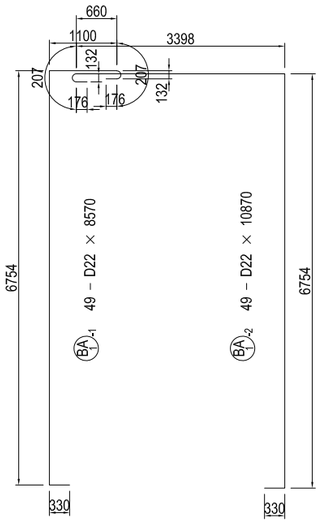
BEAM



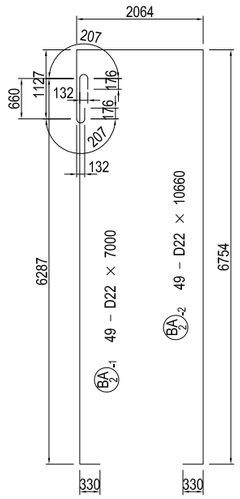
BA4-1 49 – D16 × 3500 BA4-2 49 – D16 × 2040



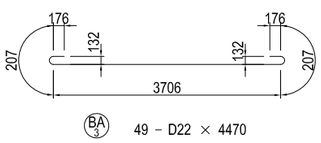
BA5 98 – D16 × 2690



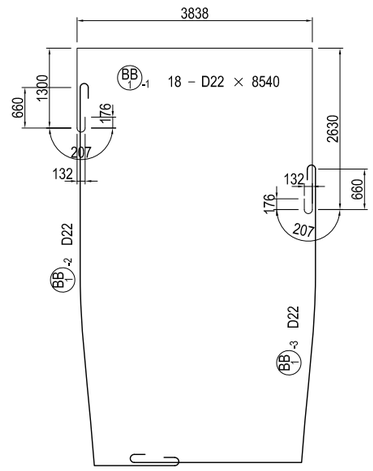
BA1-1 BA1-2

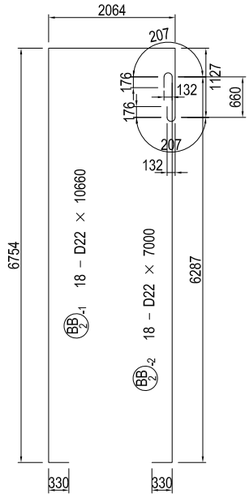


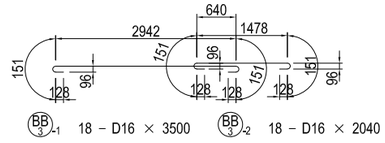
BA1-1 BA1-2



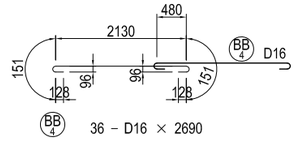
BA3 49 – D22 × 4470



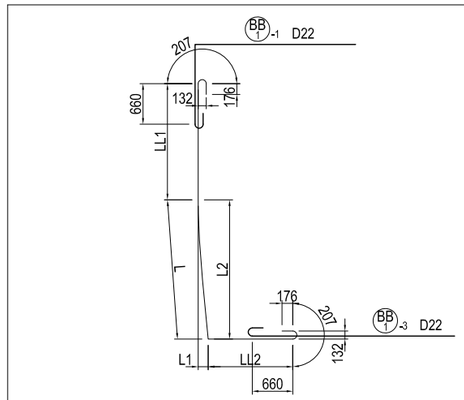




BB3-1 18 – D16 × 3500 BB3-2 18 – D16 × 2040

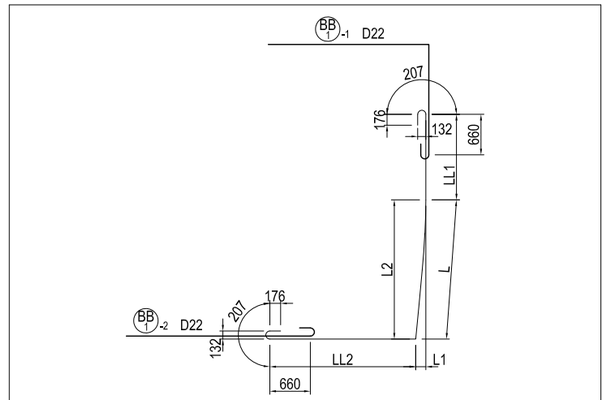


BB4 36 – D16 × 2690



BB1-2 18 – D22 × 8160 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	TOTAL LENGTH ΣL
BB1-2 1	D22	2	1464	33	1464	4650	1511	8391
2	"	2	1892	54	1891	4223	1490	8371
3	"	2	2282	97	2280	3834	1447	8329
4	"	2	2606	155	2601	3513	1389	8274
5	"	2	3029	227	3020	3094	1317	8206
6	"	2	3241	315	3225	2889	1229	8125
7	"	2	3607	416	3580	2534	1128	8035
8	"	2	3827	541	3785	2329	1003	7925
9	"	2	4115	698	4051	2063	846	7790
AVE		18						8161



BB1-3 18 – D22 × 8240 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	TOTAL LENGTH ΣL
BB1-3 1	D22	2	1464	33	1464	3320	2921	8471
2	"	2	1892	54	1891	2893	2900	8451
3	"	2	2282	97	2280	2504	2857	8409
4	"	2	2606	155	2601	2183	2799	8354
5	"	2	3029	227	3020	1764	2727	8286
6	"	2	3241	315	3225	1559	2639	8205
7	"	2	3607	416	3580	1204	2538	8115
8	"	2	3827	541	3785	999	2413	8005
9	"	2	4115	698	4051	733	2256	7870
AVE		18						8241

USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	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
				PREPARED BY	S. IMADA 27 Nov.2017
				CHECKED BY	T. HAYAKAWA 28 Nov.2017
				APPROVED BY	Y. SANO 29 Nov.2017

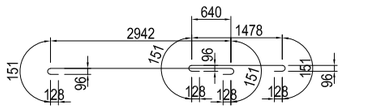
DRAWING TITLE: BAR ARRANGEMENT OF P14 PIER (7)

PACKAGE: 2

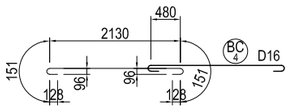
DWG No.: P2-SB-2009

BAR ARRANGEMENT OF P14 PIER (8) S=1:100

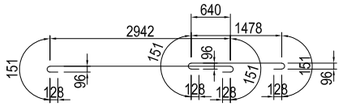
BEAM



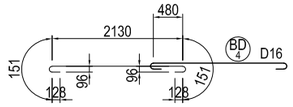
(BC3)-1 6 – D16 × 3500 (BC3)-2 6 – D16 × 2040



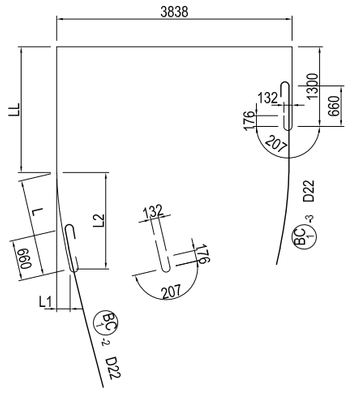
(BC4) 12 – D16 × 2690



(BD3)-1 12 – D16 × 3500 (BD3)-2 12 – D16 × 2040

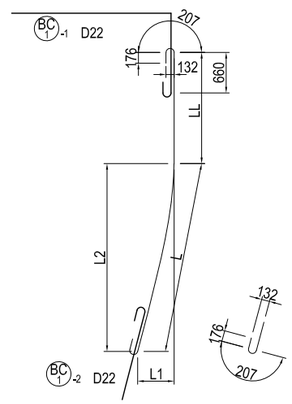


(BD4) 24 – D16 × 2690



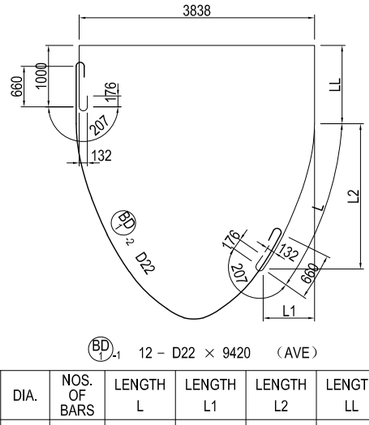
(BC1)-1 6 – D22 × 9950 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-1 1	D22	2	1591	219	1573	2451	9946
2	"	2	1871	304	1837	2177	9952
3	"	2	2008	400	1961	2049	9961
AVE		6					9953



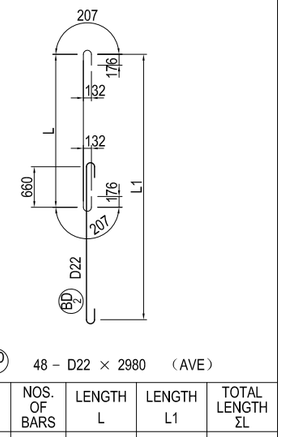
(BC1)-3 6 – D22 × 5730 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-3 1	D22	2	3129	594	3064	1811	5706
2	"	2	3426	761	3327	1537	5729
3	"	2	3591	975	3434	1409	5766
AVE		6					5734



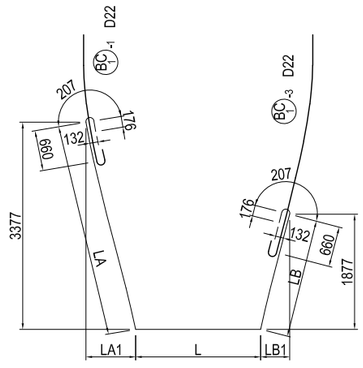
(BD1)-1 12 – D22 × 9420 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BD1-1 1	D22	2	1907	407	1855	1851	9362
2	"	2	2150	524	2071	1623	9377
3	"	2	2289	665	2171	1503	9396
4	"	2	2544	836	2369	1277	9425
5	"	2	2697	1045	2436	1167	9468
6	"	2	2879	1218	2528	1027	9510
AVE		12					9423



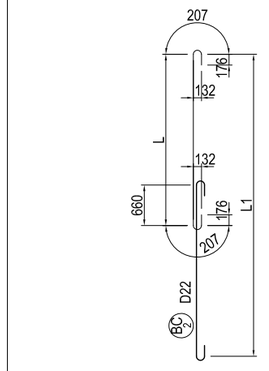
(BD2) 48 – D22 × 2980 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BD2 1	D22	8	2645	4630	3411
2	"	8	2445	4229	3211
3	"	8	2266	3872	3032
4	"	8	2105	3549	2871
5	"	8	1957	3253	2723
6	"	8	1864	3068	2630
AVE		48			2980



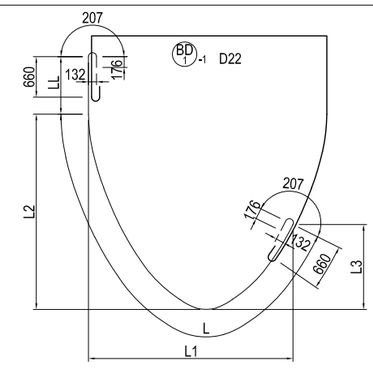
(BC1)-2 6 – D22 × 7630 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LB	LENGTH LB1	LENGTH L	TOTAL LENGTH ΣL
BC1-2 1	D22	2	3474	811	1936	474	2038	8214
2	"	2	3536	1043	1981	760	1465	7748
3	"	2	3791	1621	2209	1120	171	6937
AVE		6						7633



(BC2) 24 – D22 × 3960 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BC2 1	D22	8	3543	6425	4309
2	"	8	3159	5657	3925
3	"	8	2877	5093	3643
AVE		24			3959



(BD1)-2 12 – D22 × 8250 (AVE)

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BD1-2 1	D22	2	8159	3633	4120	2894	1511	10436
2	"	2	7303	3548	3741	2287	1283	9352
3	"	2	6546	3453	3373	1799	1163	8475
4	"	2	5999	3336	3183	1383	937	7702
5	"	2	5399	3189	2925	1015	827	6992
6	"	2	5104	3072	2841	791	687	6557
AVE		12						8252

USE MATERIALS

	CONCRETE	BAR
BEAM	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.

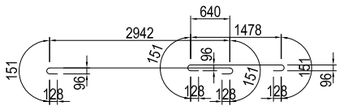
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE: BAR ARRANGEMENT OF P14 PIER (8)

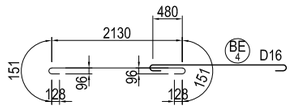
PACKAGE: 2
DWG No.: P2-SB-2010

BAR ARRANGEMENT OF P14 PIER (9) S=1:100

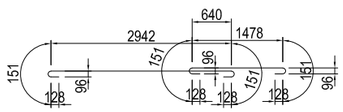
BEAM



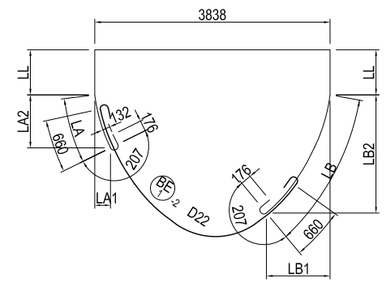
BE3-1 6 – D16 × 3500 BE3-2 6 – D16 × 2040



BE4 12 – D16 × 2690

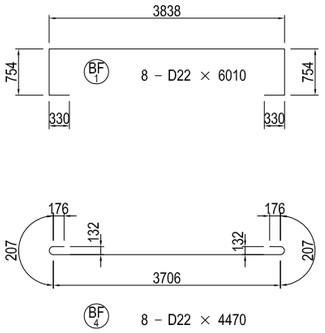


BF5-1 8 – D16 × 3500 BF5-2 8 – D16 × 2040

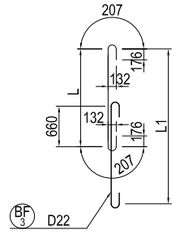


BE1-1 6 – D22 × 9620 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH LB2	LENGTH LL	TOTAL LENGTH ΣL
BE1-1 1	D22	2	820	196	793	2475	1141	2129	818	9535
2	"	2	905	257	863	2624	1351	2154	736	9605
3	"	2	970	325	906	2780	1612	2117	679	9712
AVE		6								9617

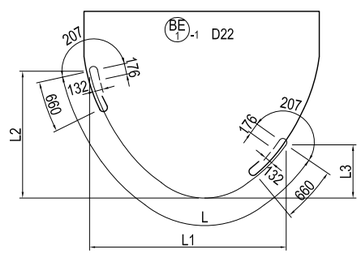


BF4 8 – D22 × 4470



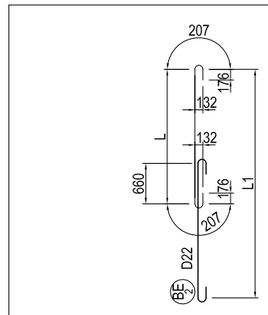
BF3 16 – D22 × 1980 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BF3 1	D22	4	1335	2009	2101
2	"	4	1251	1841	2017
3	"	4	1170	1680	1936
4	"	4	1093	1526	1859
AVE		16			1978



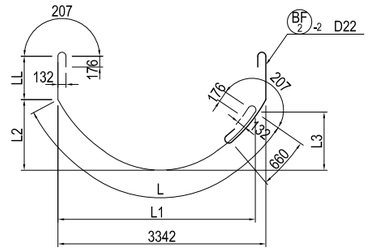
BE1-2 6 – D22 × 4990 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BE1-2 1	D22	2	4693	3139	2292	792	5459
2	"	2	4230	2959	2069	569	4996
3	"	2	3755	2725	1858	358	4521
AVE		6					4992



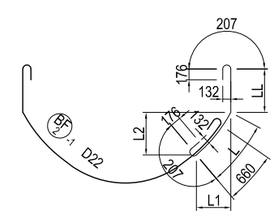
BE2 24 – D22 × 2280 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BE2 1	D22	8	1611	2561	2377
2	"	8	1514	2368	2280
3	"	8	1423	2185	2189
AVE		24			2282



BF2-1 8 – D22 × 5850 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BF2-1 1	D22	2	4397	3300	1340	1258	1228	6391
2	"	2	4172	3218	1287	1068	1092	6030
3	"	2	3933	3126	1233	887	964	5663
4	"	2	3721	3016	1196	713	829	5316
AVE		8						5850



BF2-2 8 – D22 × 2790 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BF2-2 1	D22	2	753	407	631	1228	2747
2	"	2	912	530	737	1092	2770
3	"	2	1069	665	828	964	2799
4	"	2	1243	821	914	829	2838
AVE		8					2789

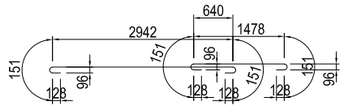
USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

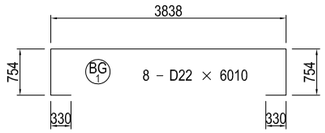
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 PIER (9)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2011

BAR ARRANGEMENT OF P14 PIER (10) S=1:100

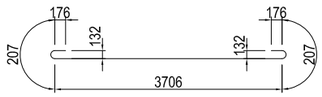
BEAM



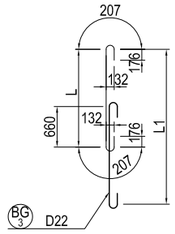
BG1-1 8 – D16 × 3500 BG1-2 8 – D16 × 2040



BG1 8 – D22 × 6010

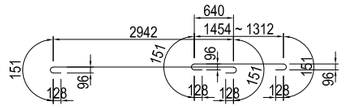


BG4 8 – D22 × 4470



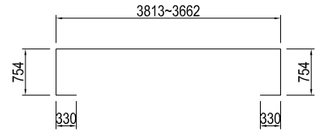
BG3 40 – D22 × 1700 （AVE）

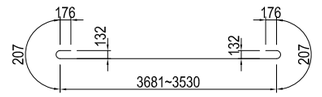
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BG3 1	D22	8	1113	1565	1879
2	"	8	1038	1415	1804
3	"	8	869	1077	1635
4	"	8	866	1071	1632
5	"	8	787	914	1553
AVE		40			1701



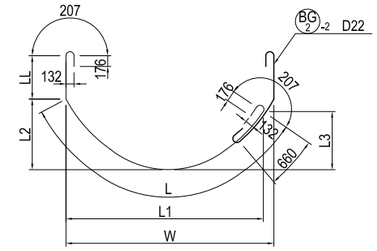
BH4-1 4 – D16 × 3500 BH4-2 4 – D16 × 1940 (AVE)

BH1 4 – D22 × 5910 (AVE)



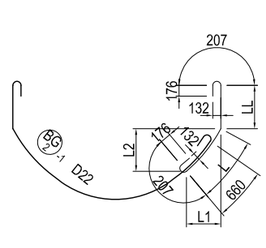


BH3 4 – D22 × 4370 (AVE)



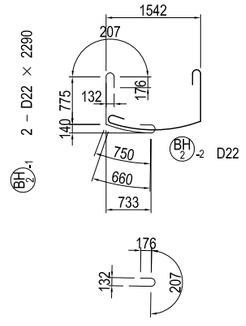
BG2-1 10 – D22 × 4390 （AVE）

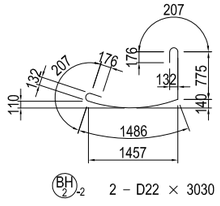
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH W	LENGTH LL	TOTAL LENGTH ΣL
BG2-1 1	D22	2	4015	3220	1151	948	3342	707	5488
2	"	2	3528	2977	876	789	3042	824	5118
3	"	2	2594	2371	491	432	2442	852	4212
4	"	2	2227	2077	369	321	2142	863	3856
5	"	2	1715	1639	271	159	1842	799	3280
AVE		10							4391



BG2-2 10 – D22 × 2390 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BG2-2 1	D22	2	898	561	694	707	2371
2	"	2	769	545	536	824	2359
3	"	2	752	645	379	852	2370
4	"	2	740	662	320	863	2369
5	"	2	892	840	269	799	2457
AVE		10					2385





BH2-2 2 – D22 × 3030

USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

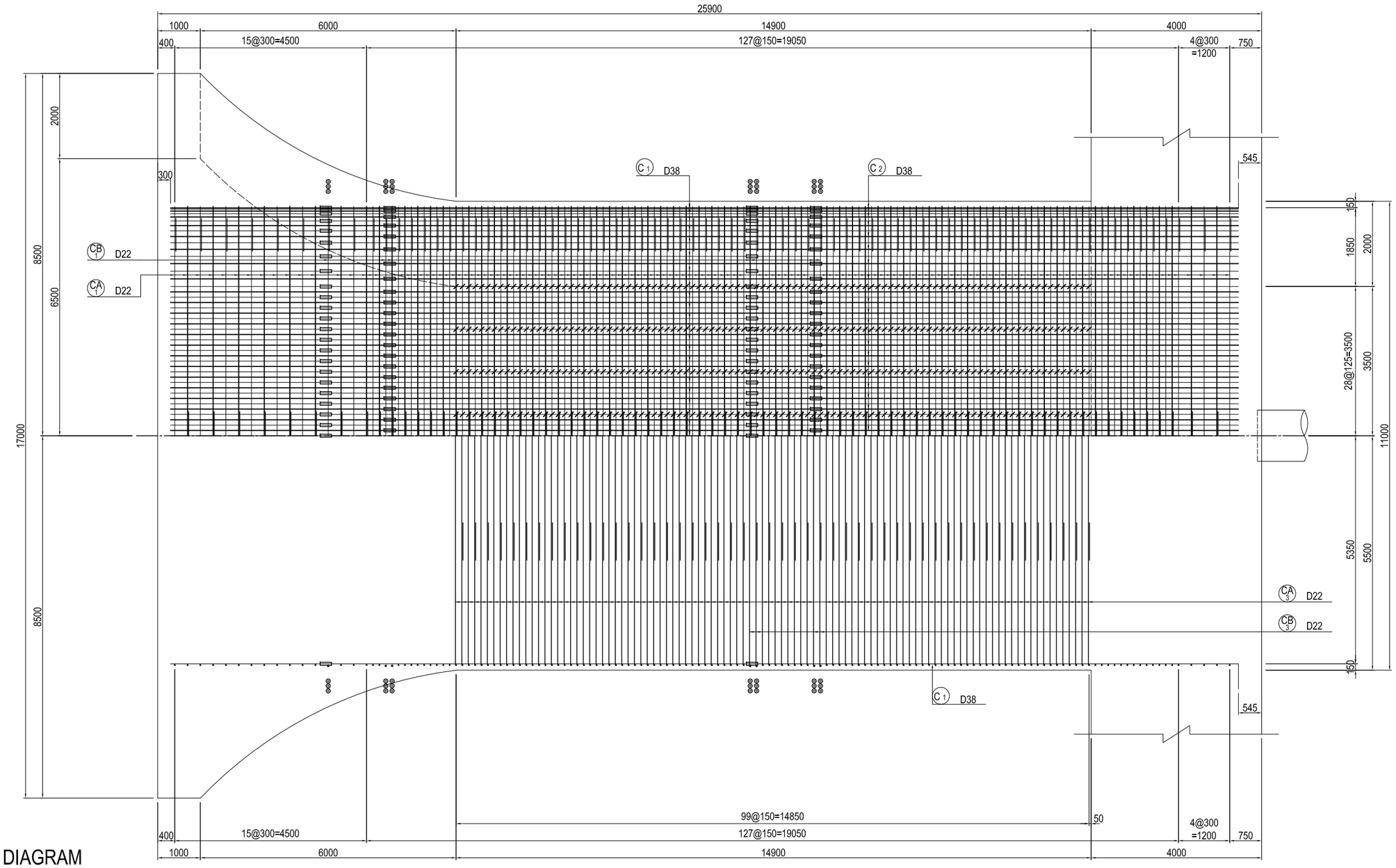
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 PIER (10)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2012

BAR ARRANGEMENT OF P14 PIER (11) S=1:100

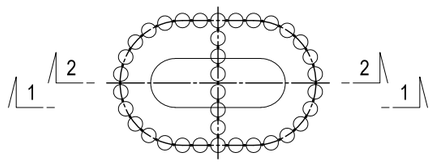
COLUMN

FRONT ELEVATION
1 - 1



SECTION
2 - 2

MARKING DIAGRAM



Notes) 1. ⊛⊛⊛ : This mark indicates hoop arranged in the location of mechanical joint.
2. ⊣▭⊢ : This mark indicates a mechanical joint.

USE MATERIALS

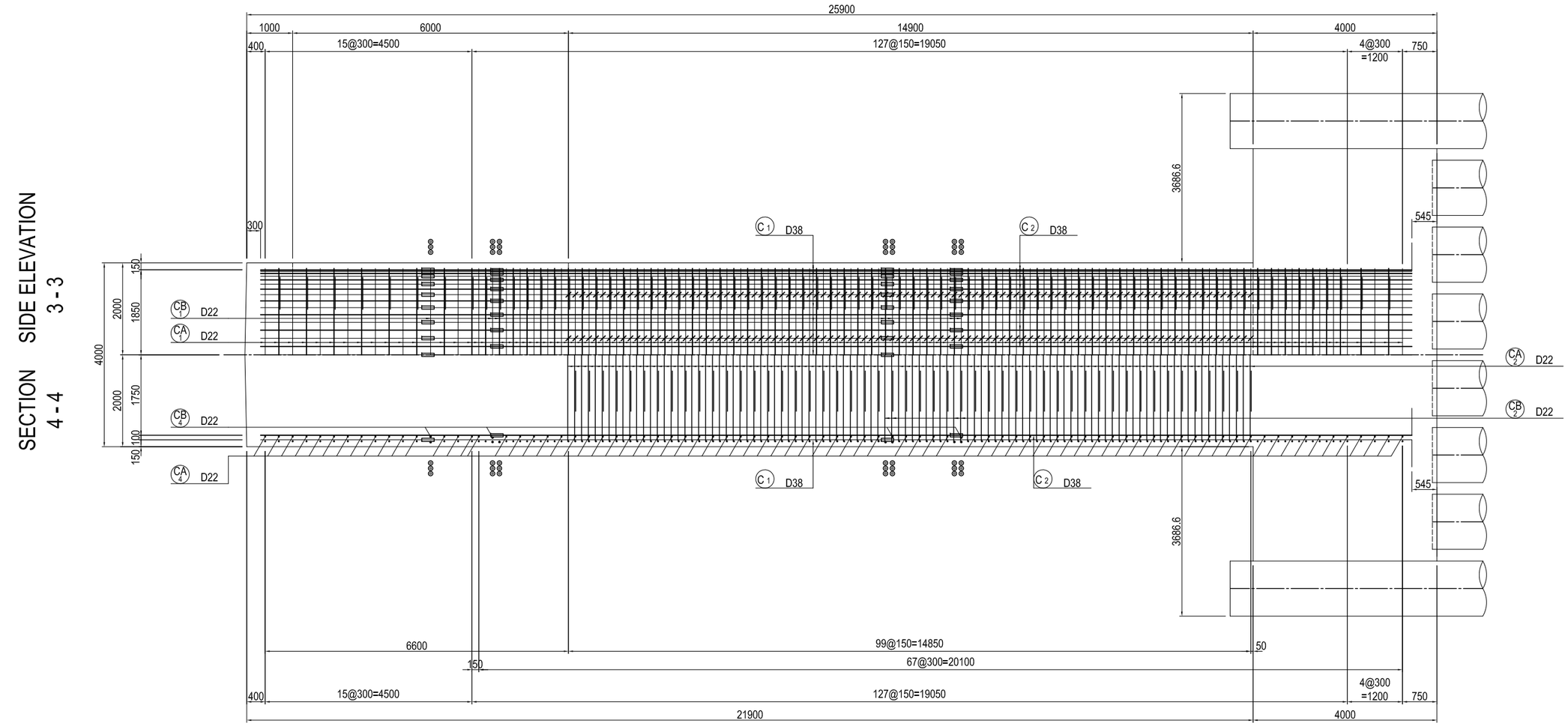
	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

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. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 PIER (11)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2013

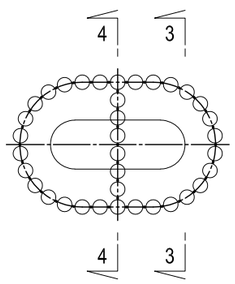
BAR ARRANGEMENT OF P14 PIER (12) S=1:100

COLUMN

SECTION 4 - 4 SIDE ELEVATION 3 - 3



MARKING DIAGRAM



Notes) 1. ⊚⊚⊚ : This mark indicates hoop arranged in the location of mechanical joint.
2. —⊟— : This mark indicates a mechanical joint.

USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	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.	

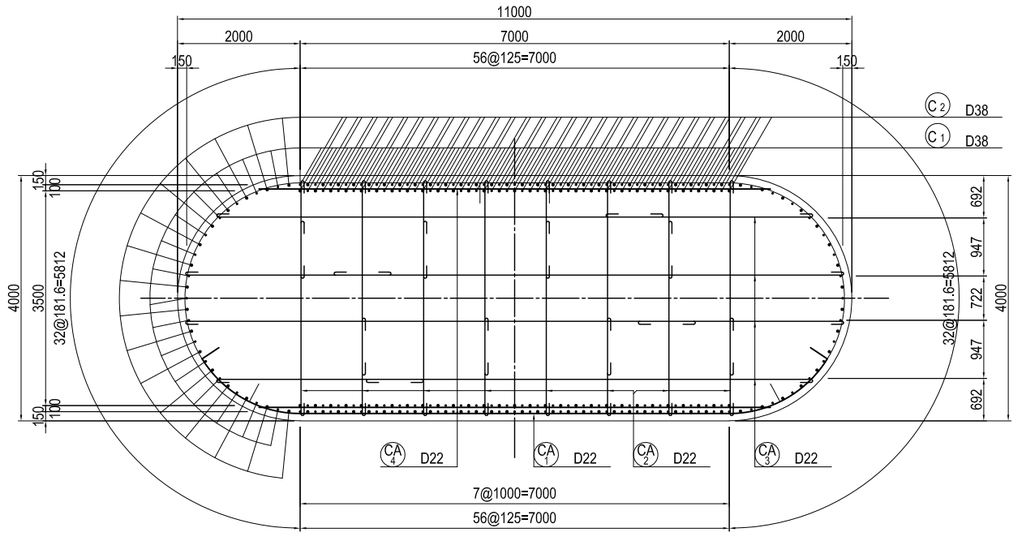
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 PIER (12)	2
	DWG No.
	P2-SB-2014

BAR ARRANGEMENT OF P14 PIER (13) S=1:100

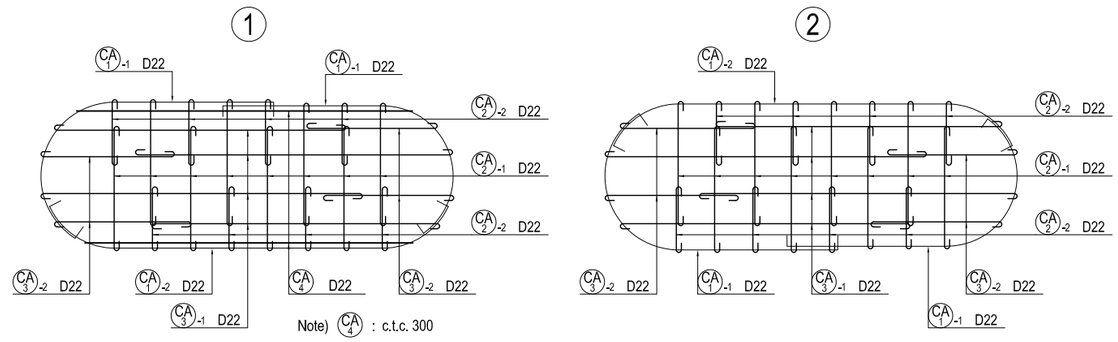
COLUMN

PLAN
5 - 5

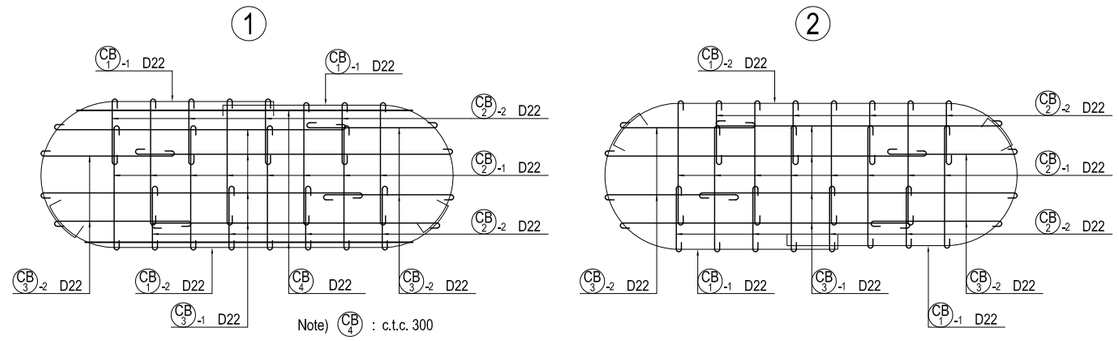


ASSEMBLY DRAWING OF HOOP
(c.t.c. 150)

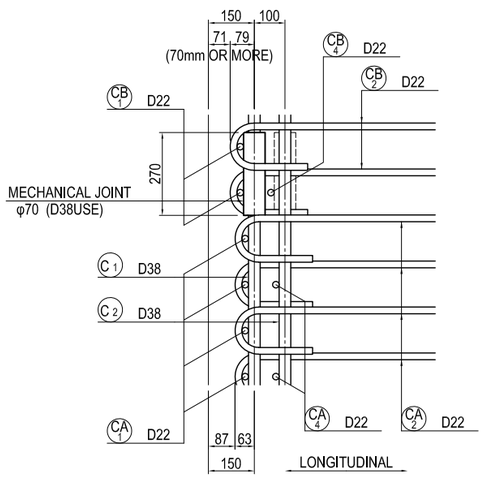
【STANDARD PART】



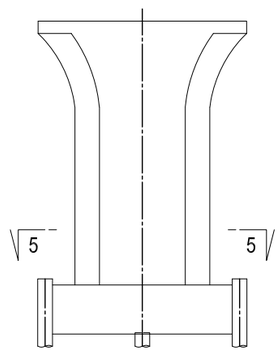
【MECHANICAL JOINT PART】



DETAIL OF COLUMN S=1:20



MARKING DIAGRAM



USE MATERIALS

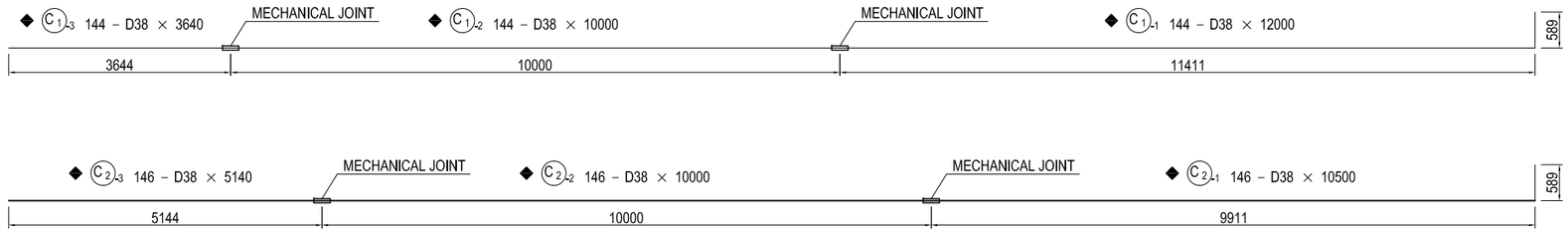
	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

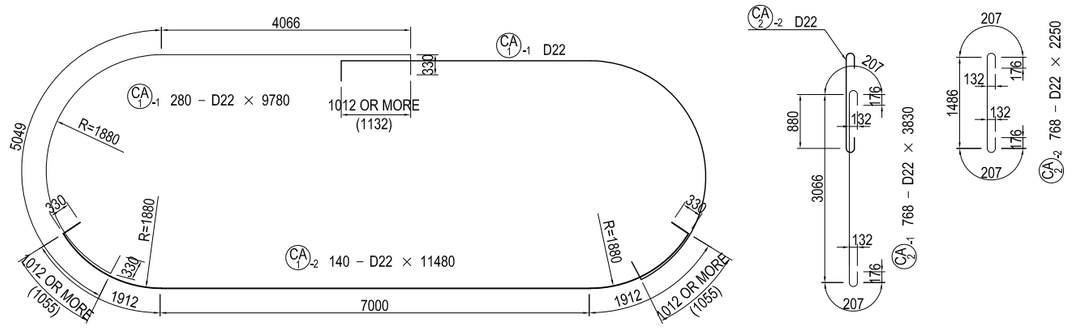
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

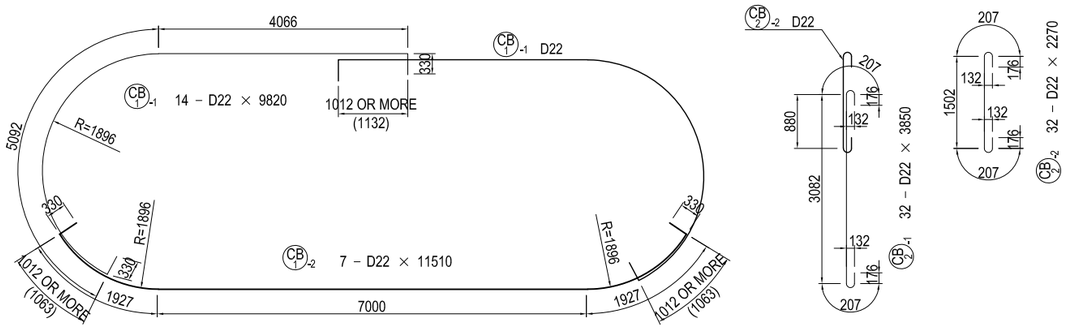
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 PIER (13)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2015

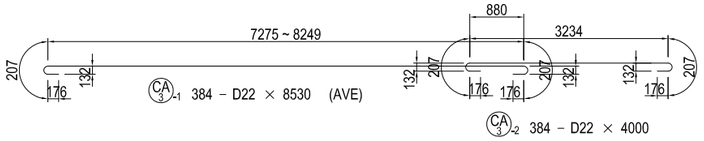
BAR ARRANGEMENT OF P14 PIER (14) S=1:100

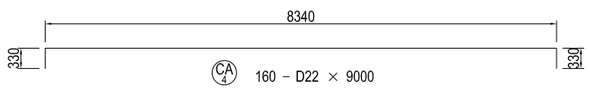
COLUMN

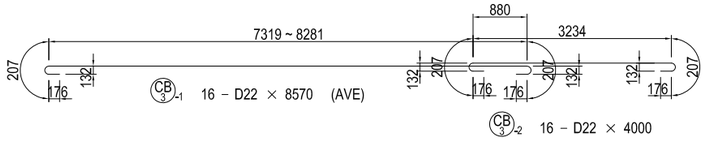


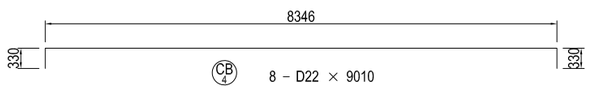




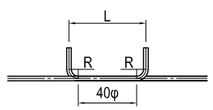








LAP LENGTH LIST OF HOOP



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

Notes) 1. ◆ : SD390
2. —▭— : MECHANICAL JOINT

USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

DRAWING TITLE: BAR ARRANGEMENT OF P14 PIER (14)

PACKAGE: 2

DWG No.: P2-SB-2016

BAR ARRANGEMENT OF P14 PIER (15) NOT TO SCALE

BAR SCHEDULE (SD390)

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
C 1-1	D38	12000	144	8.95	107.40	15466	(144)
1-2	"	10000	144	"	89.50	12888	(144)
1-3	"	3640	144	"	32.58	4692	
2-1	"	10500	146	"	93.98	13721	(146)
2-2	"	10000	146	"	89.50	13067	(146)
2-3	"	5140	146	"	46.00	6716	
					SUBTOTAL	66550 kg	
							(MECHANICAL JOINT)
	SD390		D38		66550 kg		(580)
			TOTAL		66550 kg		(580)

BAR SCHEDULE (SD345)

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 1-1	D32	11000	19	6.23	68.53	1302	
1-2	"	8000	19	"	49.84	947	
2-1	"	11500	4	"	71.65	287	
2-2	"	7470	4	"	46.54	186	(AVE)
3-1	"	12000	2	"	74.76	150	
3-2	"	6500	2	"	40.50	81	
4-1	"	11500	6	"	71.65	430	
4-2	"	7000	6	"	43.61	262	
5-1	"	8920	4	"	55.57	222	
5-2	"	9500	4	"	59.19	237	
6-1	"	9000	2	"	56.07	112	
6-2	"	9500	2	"	59.19	118	
7-1	"	6000	2	"	37.38	75	
7-2	"	12000	2	"	74.76	150	
8-1	"	12000	7	"	74.76	523	
8-2	"	7000	7	"	43.61	305	
9	"	9500	6	"	59.19	355	
10-1	"	7000	2	"	43.61	87	
10-2	"	12000	2	"	74.76	150	
11-1	"	12000	2	"	74.76	150	
11-2	"	6000	2	"	37.38	75	
12-1	"	10740	8	"	66.91	535	(AVE)
12-2	"	6500	8	"	40.50	324	
12-3	"	8920	8	"	55.57	445	(AVE)
13-1	"	11460	4	"	71.40	286	(AVE)
13-2	"	6500	4	"	40.50	162	
13-3	"	9640	4	"	60.06	240	(AVE)
14-1	"	11500	2	"	71.65	143	
14-2	"	11000	2	"	68.53	137	
15-1	D22	11500	6	3.04	34.96	210	
15-2	"	11500	6	"	34.96	210	
16-1	"	9300	12	"	28.27	339	(AVE)
16-2	"	10640	12	"	32.35	388	(AVE)
17-1	"	10400	13	"	31.62	411	(AVE)
17-2	"	10940	26	"	33.26	865	(AVE)
18-1	"	8500	1	"	25.84	26	
18-2	"	9500	1	"	28.88	29	
18-3	"	12000	1	"	36.48	36	
					SUBTOTAL	10990 kg	
BA 1-1	D22	8570	49	3.04	26.05	1276	
1-2	"	10870	49	"	33.04	1619	
2-1	"	7000	49	"	21.28	1043	
2-2	"	10660	49	"	32.41	1588	
3	"	4470	49	"	13.59	666	
4-1	D16	3500	49	1.56	5.46	268	
4-2	"	2040	49	"	3.18	156	
5	"	2690	98	"	4.20	412	
					SUBTOTAL	7028 kg	

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BB 1-1	D22	8540	18	3.04	25.96	467	
1-2	"	8160	18	"	24.81	447	(AVE)
1-3	"	8240	18	"	25.05	451	(AVE)
2-1	"	10660	18	"	32.41	583	
2-2	"	7000	18	"	21.28	383	
3-1	D16	3500	18	1.56	5.46	98	
3-2	"	2040	18	"	3.18	57	"
4	"	2690	36	"	4.20	151	"
					SUBTOTAL	2637 kg	
BC 1-1	D22	9950	6	3.04	30.25	182	(AVE)
1-2	"	7630	6	"	23.20	139	(AVE)
1-3	"	5730	6	"	17.42	105	(AVE)
2	"	3960	24	"	12.04	289	(AVE)
3-1	D16	3500	6	1.56	5.46	33	
3-2	"	2040	6	"	3.18	19	"
4	"	2690	12	"	4.20	50	"
					SUBTOTAL	817 kg	
BD 1-1	D22	9420	12	3.04	28.64	344	(AVE)
1-2	"	8250	12	"	25.08	301	(AVE)
2	"	2980	48	"	9.06	435	(AVE)
3-1	D16	3500	12	1.56	5.46	66	
3-2	"	2040	12	"	3.18	38	"
4	"	2690	24	"	4.20	101	"
					SUBTOTAL	1285 kg	
BE 1-1	D22	9620	6	3.04	29.24	175	(AVE)
1-2	"	4990	6	"	15.17	91	(AVE)
2	"	2280	24	"	6.93	166	(AVE)
3-1	D16	3500	6	1.56	5.46	33	
3-2	"	2040	6	"	3.18	19	"
4	"	2690	12	"	4.20	50	"
					SUBTOTAL	534 kg	
BF 1	D22	6010	8	3.04	18.27	146	
2-1	"	5850	8	"	17.78	142	(AVE)
2-2	"	2790	8	"	8.48	68	(AVE)
3	"	1980	16	"	6.02	96	(AVE)
4	"	4470	8	"	13.59	109	
5-1	D16	3500	8	1.56	5.46	44	
5-2	"	2040	8	"	3.18	25	"
					SUBTOTAL	630 kg	
BG 1	D22	6010	8	3.04	18.27	146	
2-1	"	4390	10	"	13.35	134	(AVE)
2-2	"	2390	10	"	7.27	73	(AVE)
3	"	1700	40	"	5.17	207	(AVE)
4	"	4470	8	"	13.59	109	
5-1	D16	3500	8	1.56	5.46	44	
5-2	"	2040	8	"	3.18	25	"
					SUBTOTAL	738 kg	

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BH 1	D22	5910	4	3.04	17.97	72	(AVE)
2-1	"	2290	2	"	6.96	14	
2-2	"	3030	2	"	9.21	18	
3	"	4370	4	"	13.28	53	(AVE)
4-1	D16	3500	4	1.56	5.46	22	
4-2	"	1940	4	"	3.03	12	(AVE)
					SUBTOTAL	191 kg	
H 1	D16	2960	68	1.56	4.62	314	
2	"	3160	60	"	4.93	296	"
3	"	8290	4	"	12.93	52	
					SUBTOTAL	662 kg	
CA 1-1	D22	9780	280	3.04	29.73	8324	
1-2	"	11480	140	"	34.90	4886	
2-1	"	3830	768	"	11.64	8940	
2-2	"	2250	768	"	6.84	5253	"
3-1	"	8530	384	"	25.93	9957	(AVE)
3-2	"	4000	384	"	12.16	4669	"
4	"	9000	160	"	27.36	4378	
					SUBTOTAL	46407 kg	
CB 1-1	D22	9820	14	3.04	29.85	418	
1-2	"	11510	7	"	34.99	245	
2-1	"	3850	32	"	11.70	374	
2-2	"	2270	32	"	6.90	221	"
3-1	"	8570	16	"	26.05	417	(AVE)
3-2	"	4000	16	"	12.16	195	"
4	"	9010	8	"	27.39	219	
					SUBTOTAL	2089 kg	
	SD345		D32		8476 kg		
			D22		63147 "		
			D16		2385 "		
			TOTAL		74008 kg		

USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

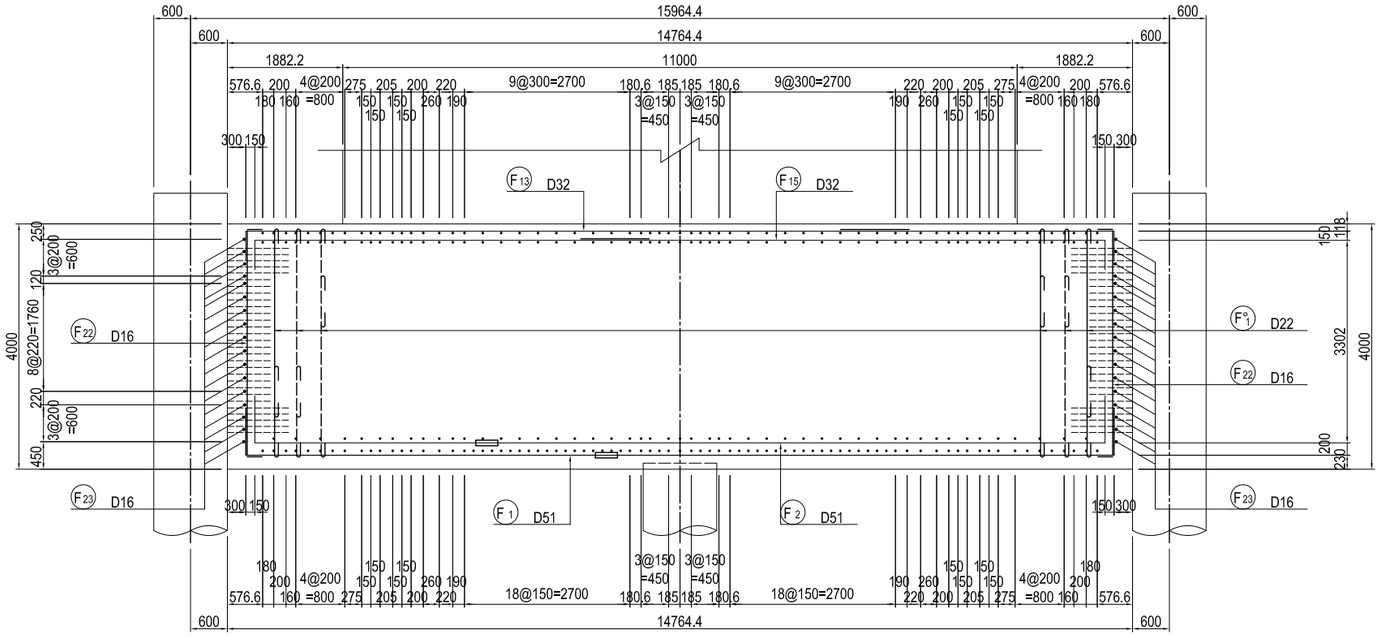
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.	

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

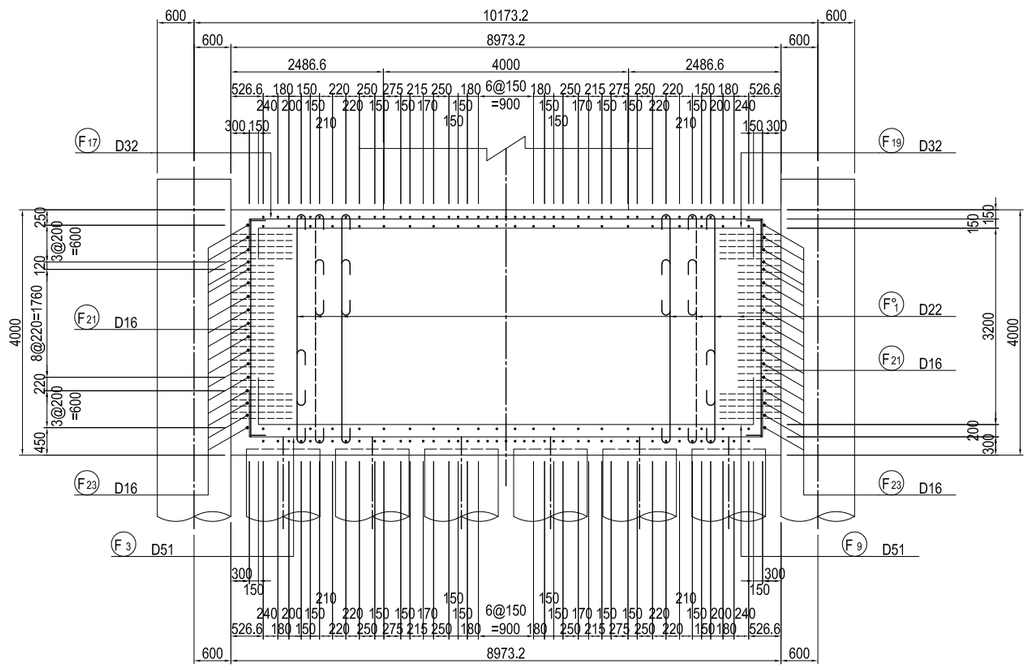
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 PIER (15)	2
	DWG No.
	P2-SB-2017

BAR ARRANGEMENT OF P14 FOOTING (1) S=1:100

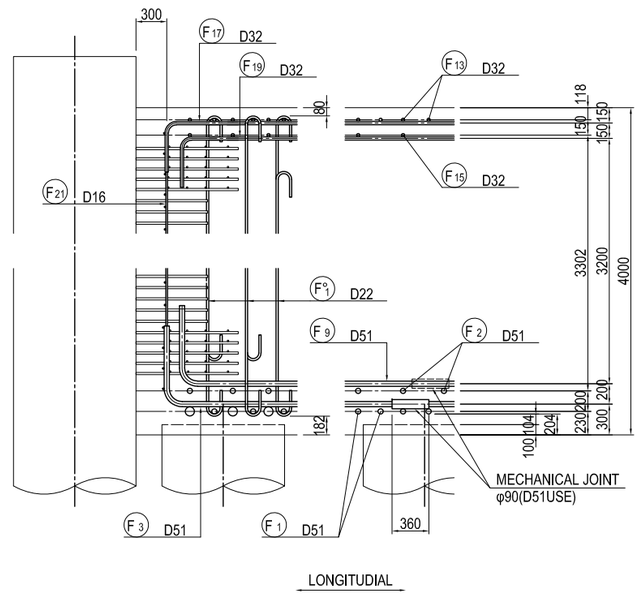
SECTION 1 - 1



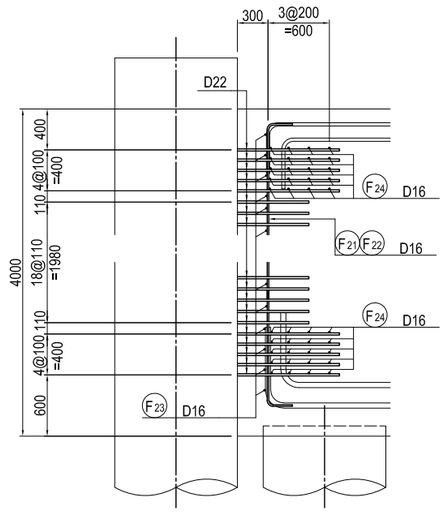
SECTION 2 - 2



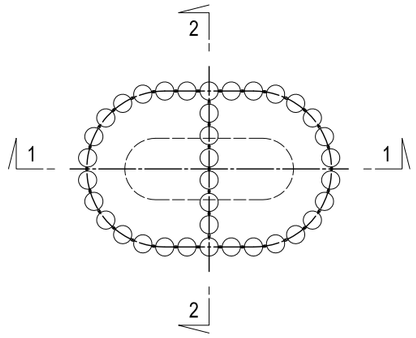
DETAIL OF PILE CAP S=1:60



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



MARKING DIAGRAM



Note) : MECHANICAL JOINT

USE MATERIALS

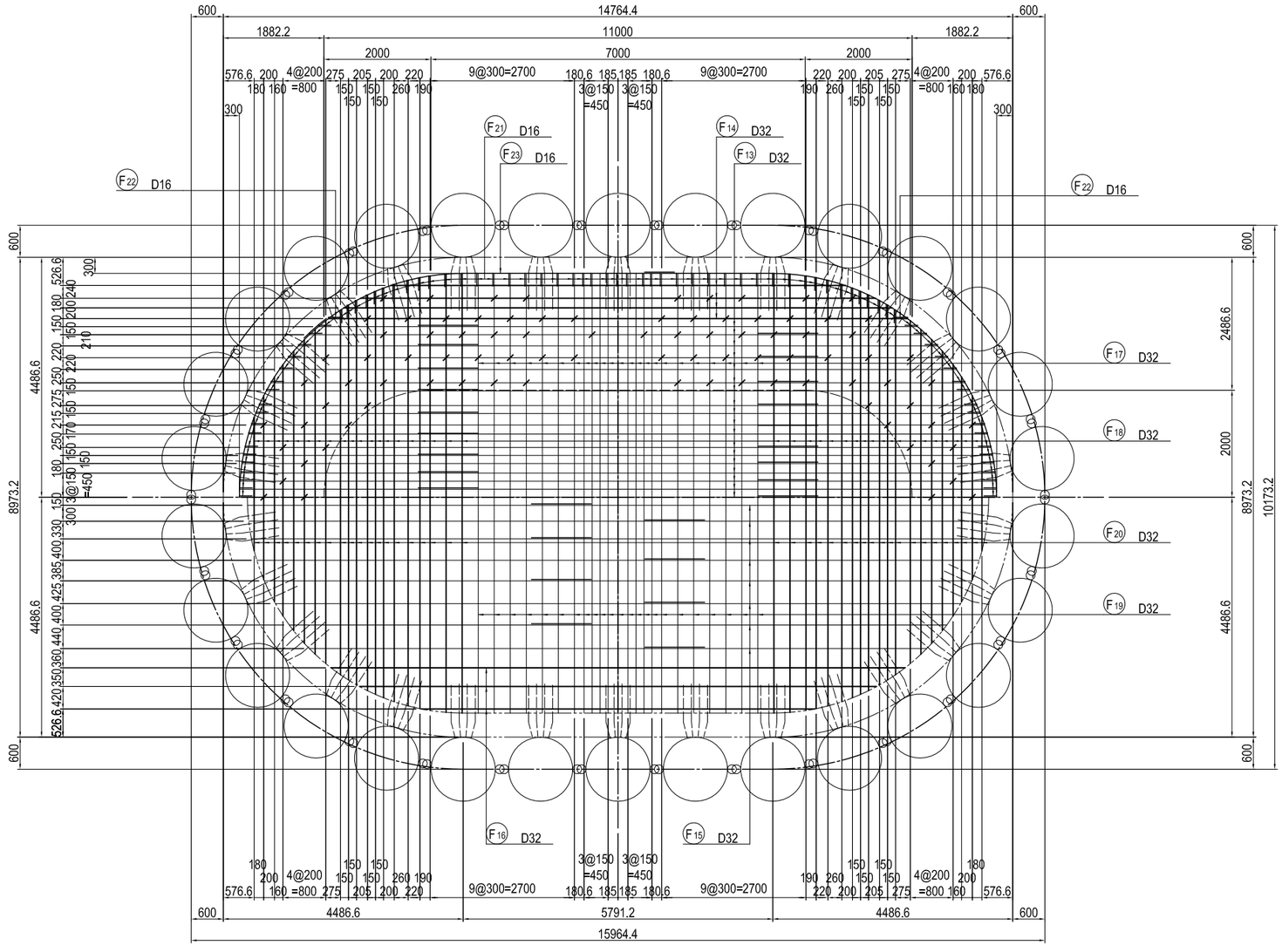
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

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. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 FOOTING (1)
CHECKED BY	T. HAYAKAWA		28 Nov.2017	PACKAGE 2
APPROVED BY	Y. SANO		29 Nov.2017	DWG No. P2-SB-2018

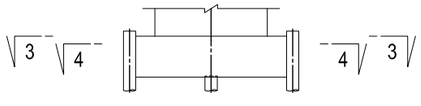
BAR ARRANGEMENT OF P14 FOOTING (2) S=1:100

PLAN 3 - 3

PLAN 4 - 4



MARKING DIAGRAM



USE MATERIALS

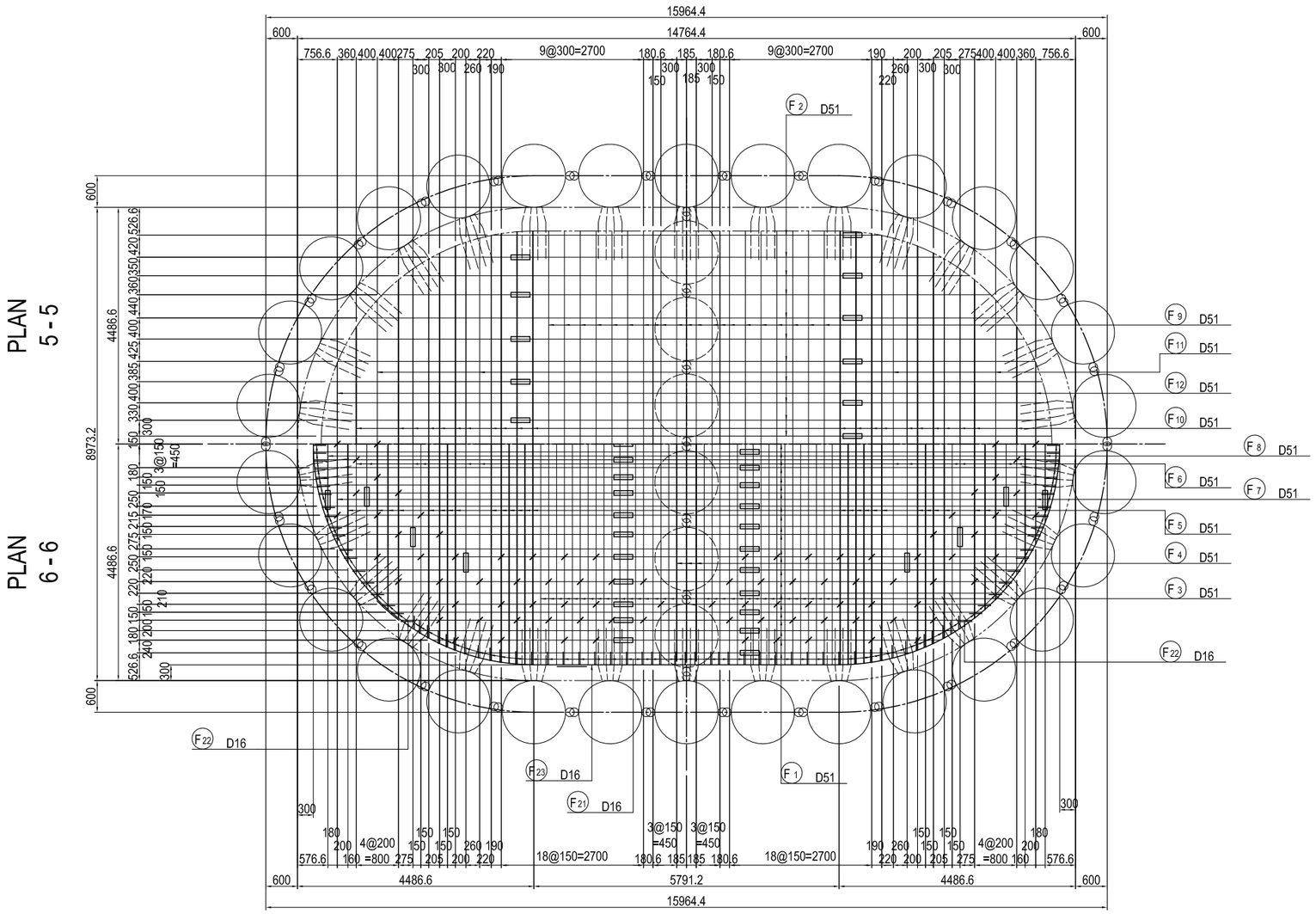
	CONCRETE	BAR
FOOTING	σck = 24 N/mm 2	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 FOOTING (2)	2
	DWG No.
	P2-SB-2019

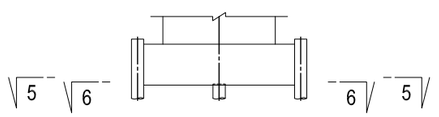
BAR ARRANGEMENT OF P14 FOOTING (3) S=1:100



PLAN 5 - 5

PLAN 6 - 6

MARKING DIAGRAM



Note) : MECHANICAL JOINT

USE MATERIALS

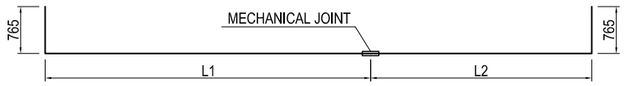
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

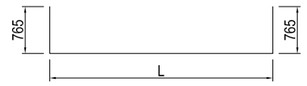
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 FOOTING (3)	2
	DWG No.
	P2-SB-2020

BAR ARRANGEMENT OF P14 FOOTING (4) S=1:100



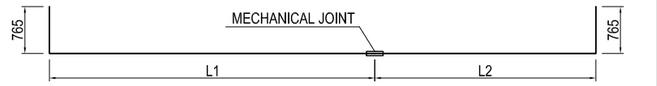
(F1)-1 43 – D51 × 8270 （AVE）　(F1)-2 43 – D51 × 5870 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F1 -1 1	D51	1	8282	9047	F1 -2 1	D51	1	5882	6647
2	"	2	8280	9045	2	"	2	5880	6645
3	"	2	8271	9036	3	"	2	5871	6636
4	"	2	8258	9023	4	"	2	5858	6623
5	"	2	8235	9000	5	"	2	5835	6600
6	"	2	8209	8974	6	"	2	5809	6574
7	"	2	8178	8943	7	"	2	5778	6543
8	"	2	8112	8877	8	"	2	5712	6477
9	"	2	8059	8824	9	"	2	5659	6424
10	"	2	7979	8744	10	"	2	5579	6344
11	"	2	7915	8680	11	"	2	5515	6280
12	"	2	7779	8544	12	"	2	5379	6144
13	"	2	7694	8459	13	"	2	5294	6059
14	"	2	7533	8298	14	"	2	5133	5898
15	"	2	7369	8134	15	"	2	4969	5734
16	"	2	7181	7946	16	"	2	4781	5546
17	"	2	6974	7739	17	"	2	4574	5339
18	"	2	6807	7572	18	"	2	4407	5172
19	"	2	6620	7385	19	"	2	4220	4985
20	"	2	6331	7096	20	"	2	3931	4696
21	"	2	6016	6781	21	"	2	3616	4381
22	"	2	5454	6219	22	"	2	3054	3819
AVE		43		8272	AVE		43		5872



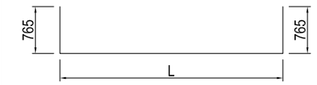
(F5) 28 – D51 × 8930 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F5 1	D51	2	8373	9903
2	"	2	8366	9896
3	"	2	8349	9879
4	"	2	8320	9850
5	"	2	8281	9811
6	"	2	8215	9745
7	"	2	7825	9355
8	"	2	7704	9234
9	"	2	7569	9099
10	"	2	7361	8891
11	"	2	6610	8140
12	"	2	6278	7808
13	"	2	5901	7431
14	"	2	4502	6032
AVE		28		8934



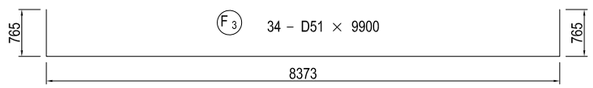
(F2)-1 22 – D51 × 9940 （AVE）　(F2)-2 22 – D51 × 3640 （AVE）

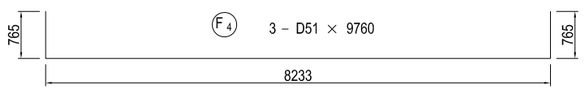
MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F2 -1 1	D51	2	10079	10844	F2 -2 1	D51	2	3779	4544
2	"	2	10057	10822	2	"	2	3757	4522
3	"	2	10006	10771	3	"	2	3706	4471
4	"	2	9906	10671	4	"	2	3606	4371
5	"	2	9766	10531	5	"	2	3466	4231
6	"	2	9558	10323	6	"	2	3258	4023
7	"	2	9299	10064	7	"	2	2999	3764
8	"	2	8924	9689	8	"	2	2624	3389
9	"	2	8519	9284	9	"	2	2219	2984
10	"	2	7985	8750	10	"	2	1685	2450
11	"	2	6828	7593	11	"	2	528	1293
AVE		22		9940	AVE		22		3640

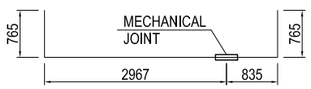


(F10) 22 – D51 × 8690 （AVE）

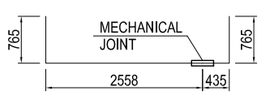
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F10 1	D51	2	8073	9603
2	"	2	8048	9578
3	"	2	7977	9507
4	"	2	7908	9438
5	"	2	7650	9180
6	"	2	7503	9033
7	"	2	7236	8766
8	"	2	7018	8548
9	"	2	6642	8172
10	"	2	6226	7756
11	"	2	4444	5974
AVE		22		8687



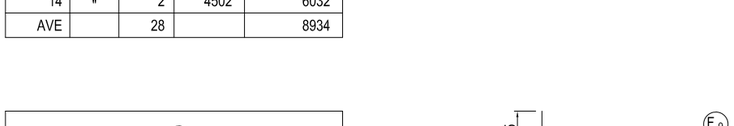




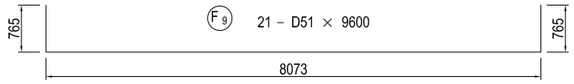
(F7)-1 2 – D51 × 3730　(F7)-2 2 – D51 × 1600

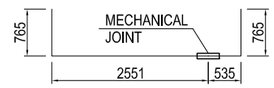


(F8)-1 2 – D51 × 3320　(F8)-2 2 – D51 × 1200

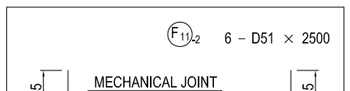


MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F6 -1 1	D51	2	6381	7146
2	"	2	6231	6996
3	"	2	5456	6221
4	"	2	5268	6033
5	"	2	3734	4499
6	"	2	3233	3998
AVE		12		5816





(F12)-1 2 – D51 × 3320　(F12)-2 2 – D51 × 1300



MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F11 -1 1	D51	2	6071	6836
2	"	2	3732	4497
AVE		4		5667

USE MATERIALS

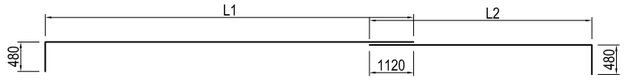
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

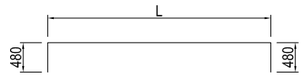
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 FOOTING (4)	2
	DWG No.
	P2-SB-2021

BAR ARRANGEMENT OF P14 FOOTING (5) S=1:100



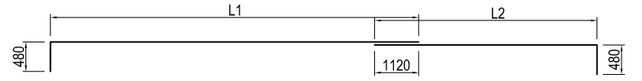
F13-1 35 – D32 × 10850 （AVE）　　F13-2 35 – D32 × 4490 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F13-1 1	D32	1	10822	11302	F13-2 1	D32	1	4462	4942
2	"	2	10820	11300	2	"	2	4460	4940
3	"	2	10811	11291	3	"	2	4451	4931
4	"	2	10798	11278	4	"	2	4438	4918
5	"	2	10775	11255	5	"	2	4415	4895
6	"	2	10749	11229	6	"	2	4389	4869
7	"	2	10718	11198	7	"	2	4358	4838
8	"	2	10652	11132	8	"	2	4292	4772
9	"	2	10599	11079	9	"	2	4239	4719
10	"	2	10519	10999	10	"	2	4159	4639
11	"	2	10455	10935	11	"	2	4095	4575
12	"	2	10319	10799	12	"	2	3959	4439
13	"	2	10234	10714	13	"	2	3874	4354
14	"	2	10073	10553	14	"	2	3713	4193
15	"	2	9909	10389	15	"	2	3549	4029
16	"	2	9721	10201	16	"	2	3361	3841
17	"	2	9514	9994	17	"	2	3154	3634
18	"	2	9347	9827	18	"	2	2987	3467
AVE		35		10847	AVE		35		4487



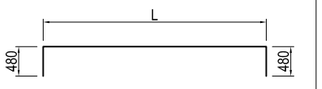
F18 40 – D32 × 7680 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F18 1	D32	2	8373	9333
2	"	2	8349	9309
3	"	2	8281	9241
4	"	2	8215	9175
5	"	2	8116	9076
6	"	2	7966	8926
7	"	2	7825	8785
8	"	2	7704	8664
9	"	2	7569	8529
10	"	2	7361	8321
11	"	2	7191	8151
12	"	2	7003	7963
13	"	2	6610	7570
14	"	2	6278	7238
15	"	2	5901	6861
16	"	2	5469	6429
17	"	2	4968	5928
18	"	2	4502	5462
19	"	2	3802	4762
20	"	2	2993	3953
AVE		40		7684



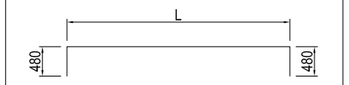
F15-1 16 – D32 × 8650 （AVE）　　F15-2 16 – D32 × 6530 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F15-1 1	D32	2	8549	9029	F15-2 1	D32	2	6429	6909
2	"	2	8527	9007	2	"	2	6407	6887
3	"	2	8476	8956	3	"	2	6356	6836
4	"	2	8376	8856	4	"	2	6256	6736
5	"	2	8236	8716	5	"	2	6116	6596
6	"	2	8028	8508	6	"	2	5908	6388
7	"	2	7769	8249	7	"	2	5649	6129
8	"	2	7394	7874	8	"	2	5274	5754
AVE		16		8649	AVE		16		6529



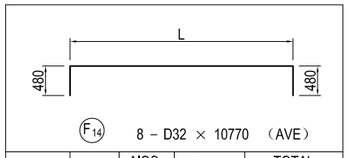
F16 6 – D32 × 10220 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F16 1	D32	2	10738	11698
2	"	2	9671	10631
3	"	2	7356	8316
AVE		6		10215



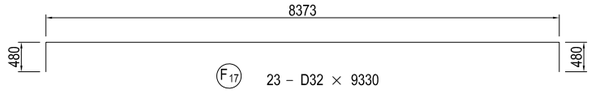
F20 40 – D32 × 7270 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F20 1	D32	2	8073	9033
2	"	2	8048	9008
3	"	2	7977	8937
4	"	2	7909	8869
5	"	2	7806	8766
6	"	2	7650	8610
7	"	2	7503	8463
8	"	2	7377	8337
9	"	2	7236	8196
10	"	2	7018	7978
11	"	2	6839	7799
12	"	2	6641	7601
13	"	2	6226	7186
14	"	2	5872	6832
15	"	2	5467	6427
16	"	2	4998	5958
17	"	2	4444	5404
18	"	2	3916	4876
19	"	2	3086	4046
20	"	2	2006	2966
AVE		40		7265

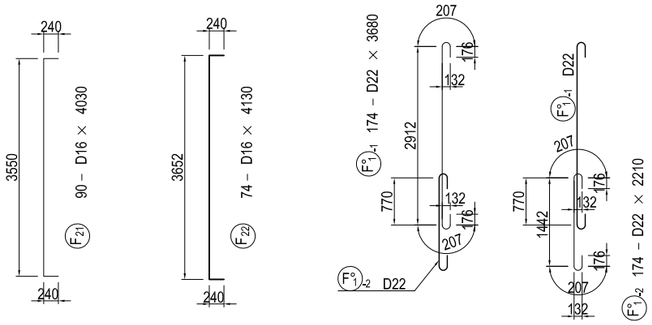


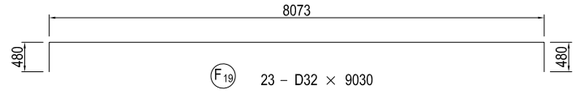
F14 8 – D32 × 10770 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F14 1	D32	2	10840	11800
2	"	2	10262	11222
3	"	2	9633	10593
4	"	2	8509	9469
AVE		8		10771



F17 23 – D32 × 9330





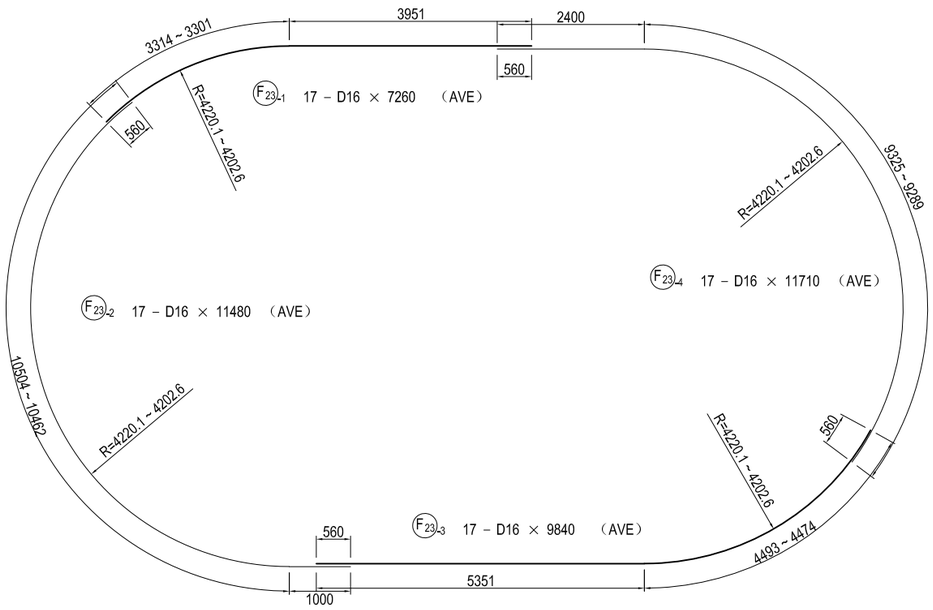
F19 23 – D32 × 9030

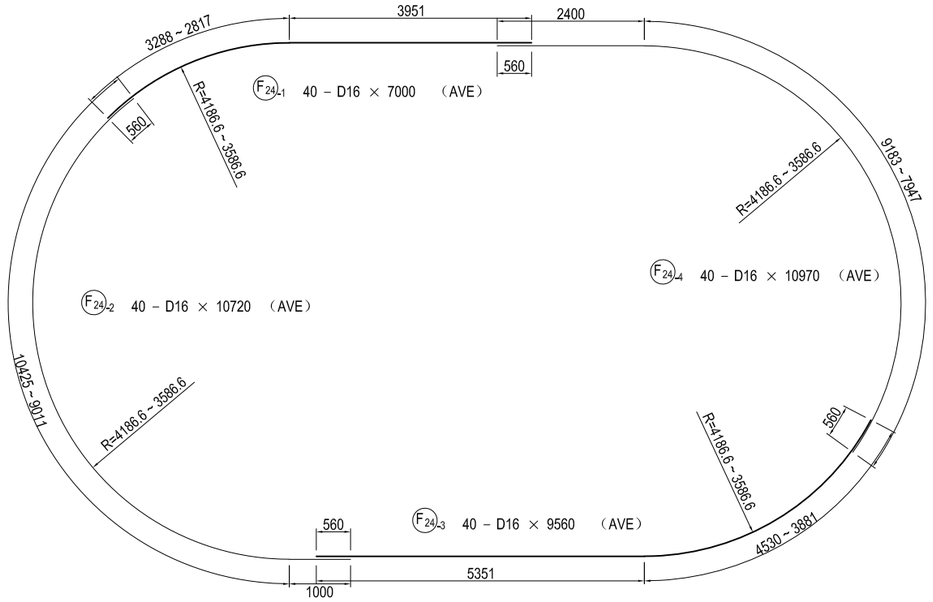
USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	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. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P14 FOOTING (5)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2022

BAR ARRANGEMENT OF P14 FOOTING (6) S=1:100





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

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
F 1-1	D51	8270	43	15.9	131.49	5654	(43) (AVE)
1-2	"	5870	43	"	93.33	4013	(AVE)
2-1	"	9940	22	"	158.05	3477	(22) (AVE)
2-2	"	3640	22	"	57.88	1273	(AVE)
3	"	9900	34	"	157.41	5352	
4	"	9760	3	"	155.18	466	"
5	"	8930	28	"	141.99	3976	" (AVE)
6-1	"	5820	12	"	92.54	1110	(12) (AVE)
6-2	"	2500	12	"	39.75	477	
7-1	"	3730	2	"	59.31	119	(2)
7-2	"	1600	2	"	25.44	51	
8-1	"	3320	2	"	52.79	106	(2)
8-2	"	1200	2	"	19.08	38	
9	"	9600	21	"	152.64	3205	
10	"	8690	22	"	138.17	3040	" (AVE)
11-1	"	5670	4	"	90.15	361	(4) (AVE)
11-2	"	2500	4	"	39.75	159	
12-1	"	3320	2	"	52.79	106	(2)
12-2	"	1300	2	"	20.67	41	
13-1	D32	10850	35	6.23	67.60	2366	(AVE)
13-2	"	4490	35	"	27.97	979	(AVE)
14	"	10770	8	"	67.10	537	(AVE)
15-1	"	8650	16	"	53.89	862	(AVE)
15-2	"	6530	16	"	40.68	651	(AVE)
16	"	10220	6	"	63.67	382	(AVE)
17	"	9330	23	"	58.13	1337	"
18	"	7680	40	"	47.85	1914	" (AVE)
19	"	9030	23	"	56.26	1294	"
20	"	7270	40	"	45.29	1812	" (AVE)
21	D16	4030	90	1.56	6.29	566	
22	"	4130	74	"	6.44	477	"
23-1	"	7260	17	"	11.33	193	(AVE)
23-2	"	11480	17	"	17.91	304	(AVE)
23-3	"	9840	17	"	15.35	261	(AVE)
23-4	"	11710	17	"	18.27	311	(AVE)
24-1	"	7000	40	"	10.92	437	(AVE)
24-2	"	10720	40	"	16.72	669	(AVE)
24-3	"	9560	40	"	14.91	596	(AVE)
24-4	"	10970	40	"	17.11	684	(AVE)
					SUBTOTAL	49656 kg	
F° 1-1	D22	3680	174	3.04	11.19	1947	
1-2	"	2210	174	"	6.72	1169	"
					SUBTOTAL	3116 kg	
							(MECHANICAL JOINT)
				D51	33024 kg	(87)	
				D32	12134 "		
				D22	3116 "		
				D16	4498 "		
				TOTAL	52772 kg	(87)	

USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

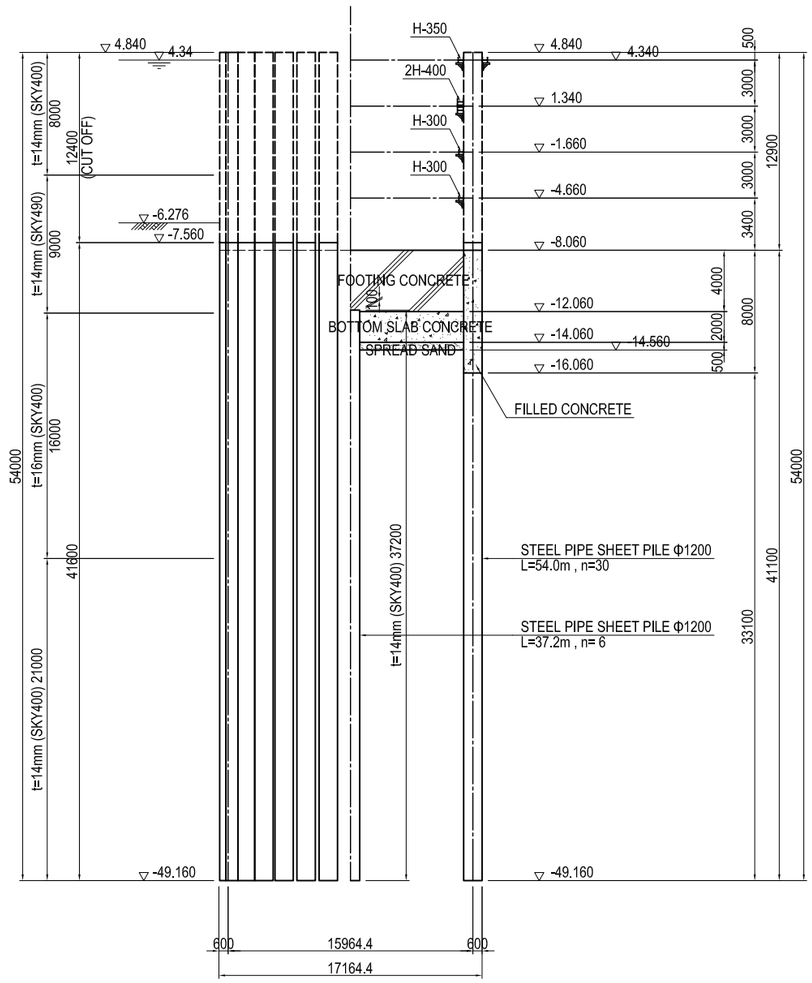
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P14 FOOTING (6)	2
	DWG No.
	P2-SB-2023

GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P14 PIER

S=1:400

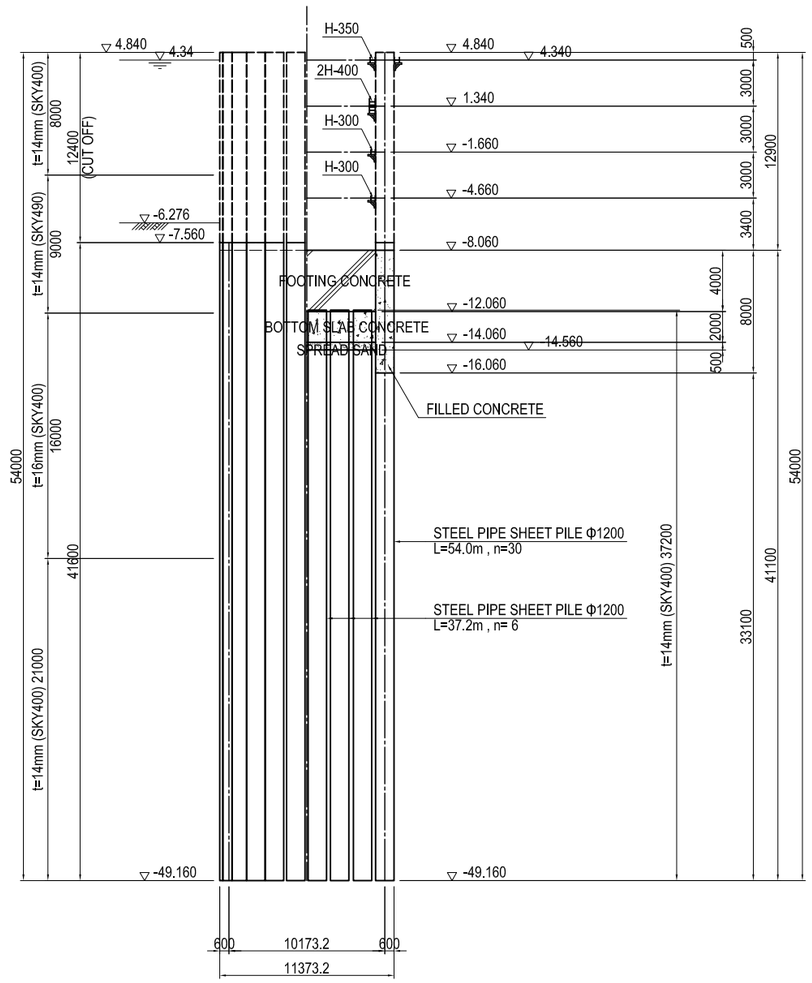
FRONT ELEVATION

1 - 1 2 - 2

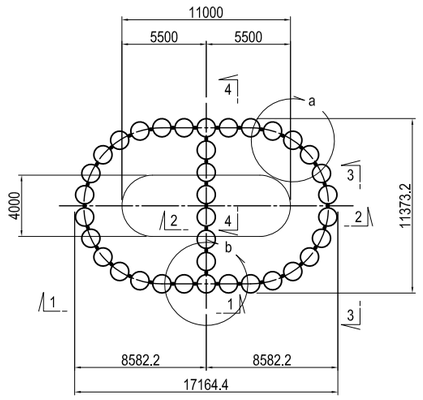


SIDE ELEVATION

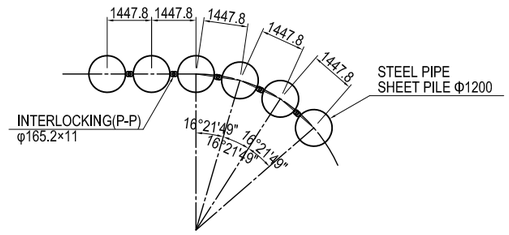
3 - 3 4 - 4



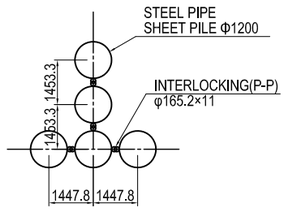
PLAN



DETAIL a S=1:200



DETAIL b S=1:200



USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

Note: Temporary support can be used for reference only.

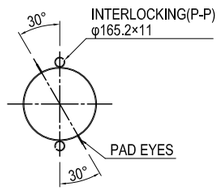
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P14 PIER	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2024

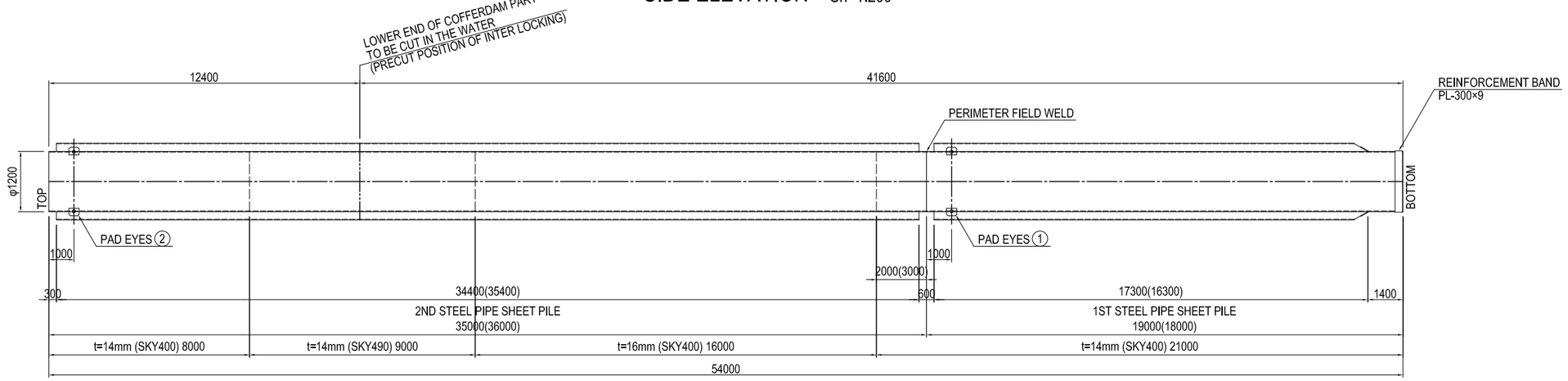
DETAIL OF STEEL PIPE SHEET PILE OF P14 PIER (1)

CROSS SECTION S=1:200

TYPE A
(TYPE B)

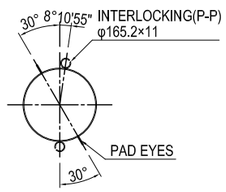


SIDE ELEVATION Sv=1:100 Sh=1:200

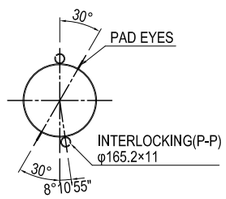


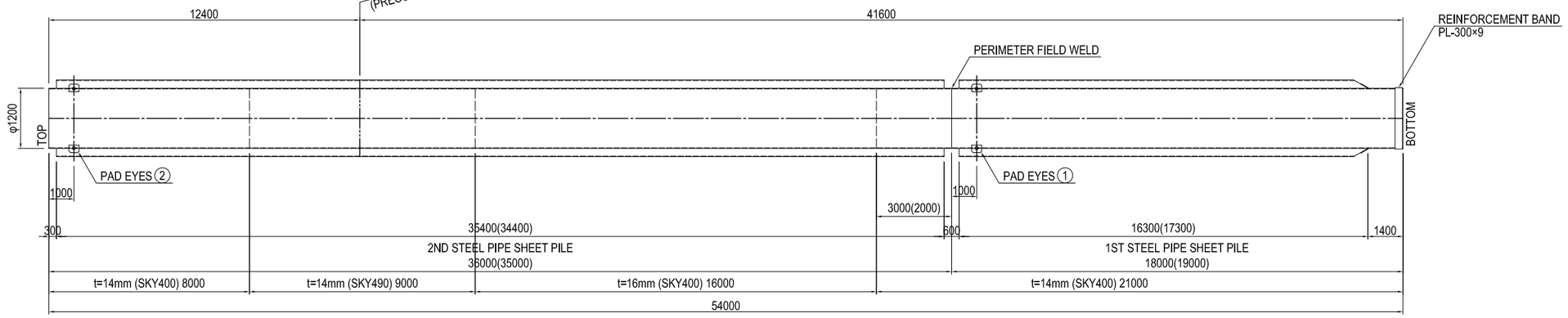
CROSS SECTION S=1:200

TYPE C
(TYPE D)

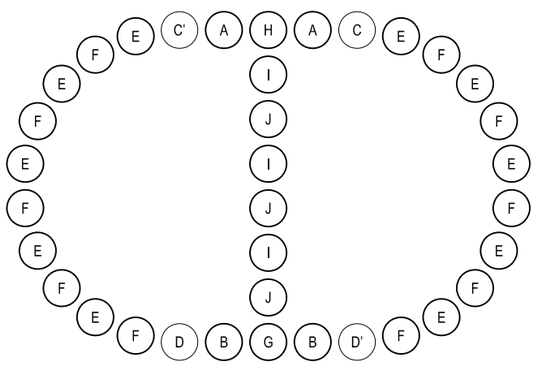


TYPE C'
(TYPE D')



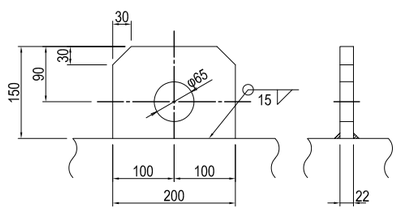


STEEL PIPE SHEET PILE TYPE AND POSITION

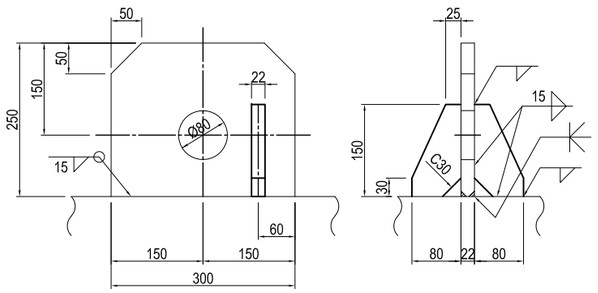


DETAIL OF EYES S=1:10

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.

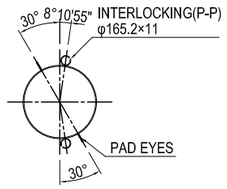
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	DETAIL OF STEEL PIPE SHEET PILE OF P14 PIER (1)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2025

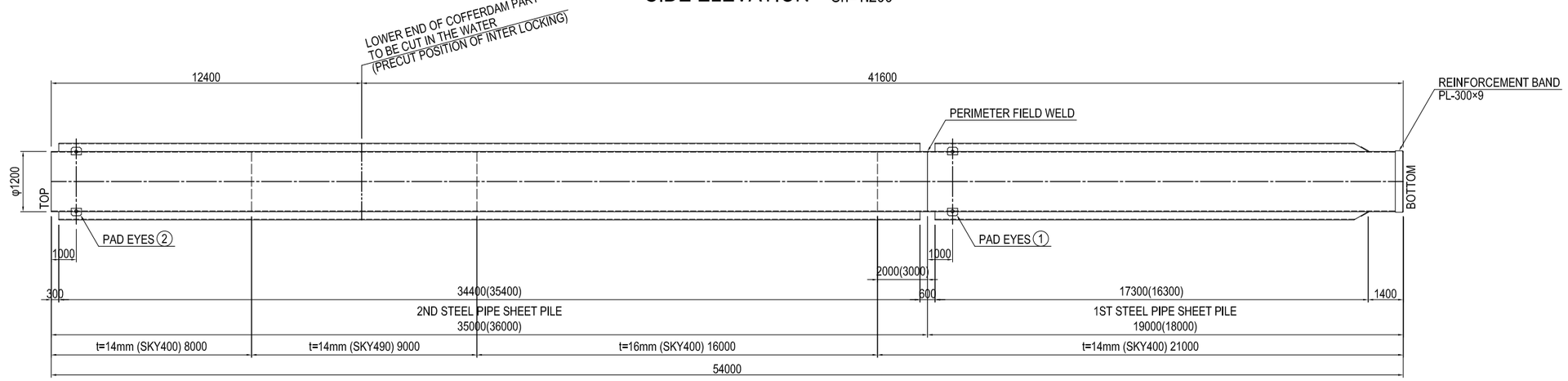
DETAIL OF STEEL PIPE SHEET PILE OF P14 PIER (2)

CROSS SECTION S=1:200

TYPE E
(TYPE F)

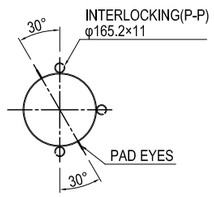


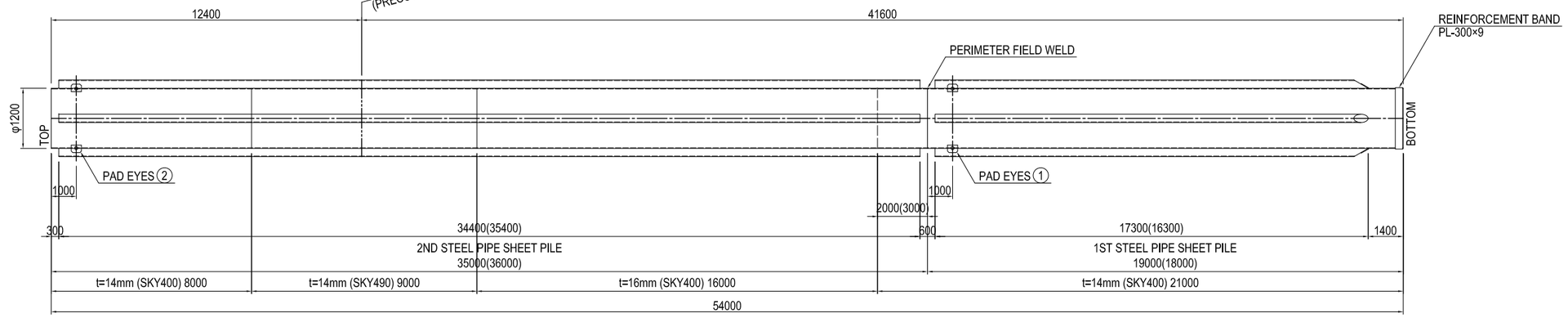
SIDE ELEVATION Sv=1:100 Sh=1:200



CROSS SECTION S=1:200

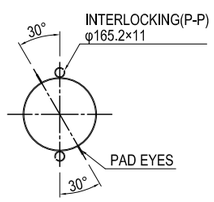
TYPE G
(TYPE H)

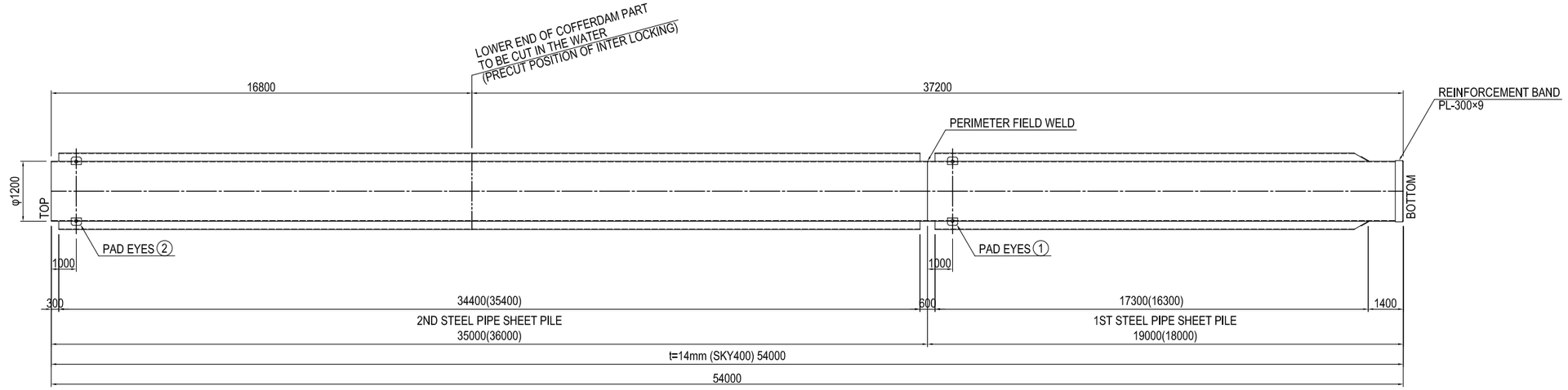




CROSS SECTION S=1:200

TYPE I
(TYPE J)





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

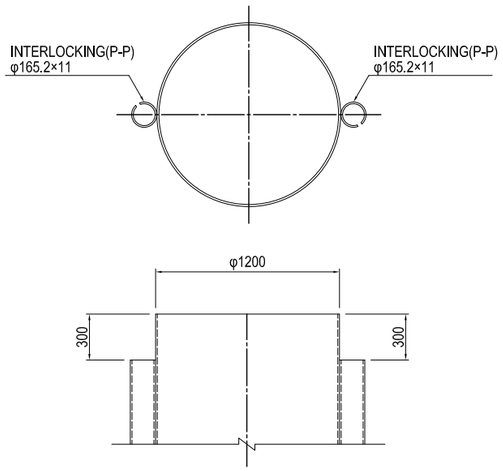
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

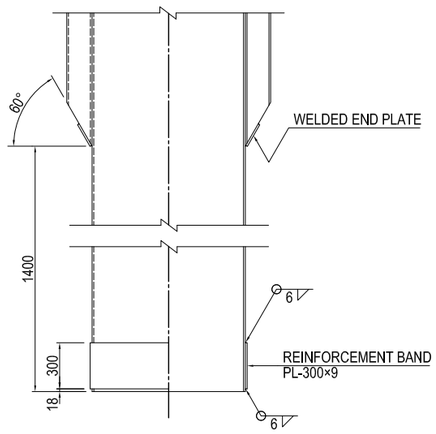
DRAWING TITLE	PACKAGE
DETAIL OF STEEL PIPE SHEET PILE OF P14 PIER (2)	2
	DWG No.
	P2-SB-2026

DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P14 PIER

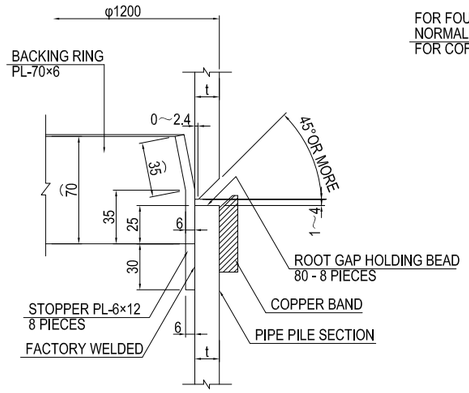
DETAIL OF STEEL PIPE SHEET PILE TOP S=1:40



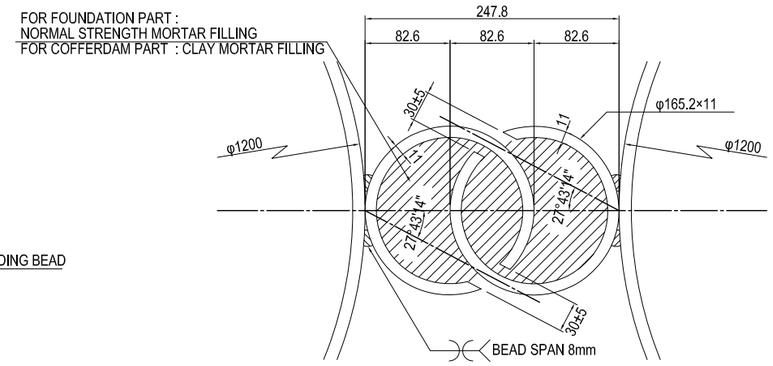
DETAIL OF STEEL PIPE SHEET PILE TOE S=1:40



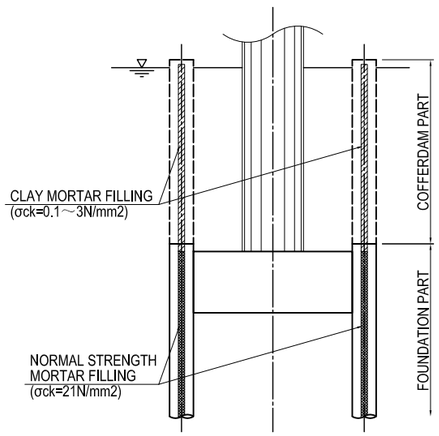
DETAIL OF PERIMETER FIELD WELDING OF STEEL PIPE SHEET PILE S=1:4



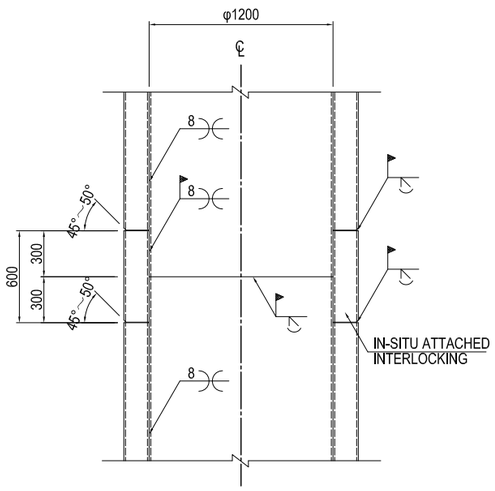
DETAIL OF CONNECTED INTERLOCKING(P-P) S=1:6



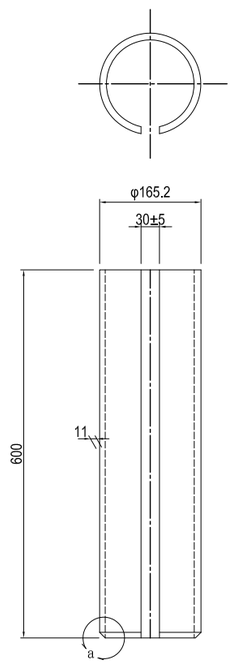
TREATMENT OF STEEL PIPE SHEET PILE INTERLOCKING



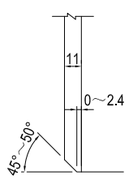
DETAIL OF IN-SITU LONGITUDINAL WELDING PART S=1:40



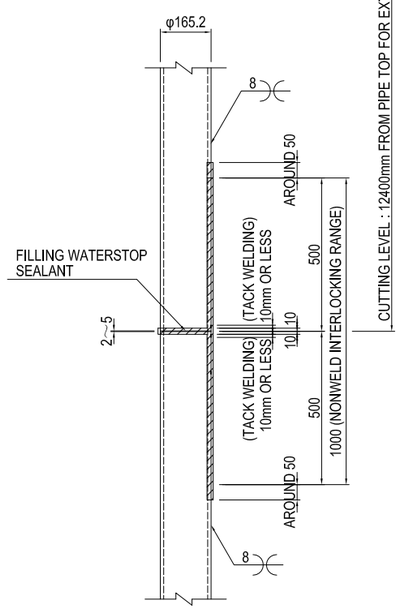
DETAIL OF IN-SITU ATTACHED INTERLOCKING S=1:10



DETAIL a

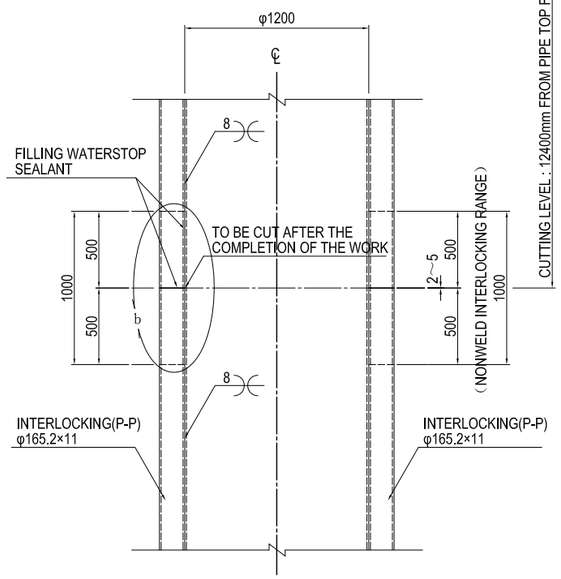


DETAIL b



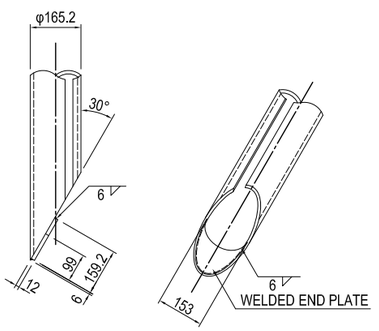
CUTTING LEVEL : 12400mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING

DETAIL OF PRECUT INTERRLOCKING S=1:40



CUTTING LEVEL : 12400mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING

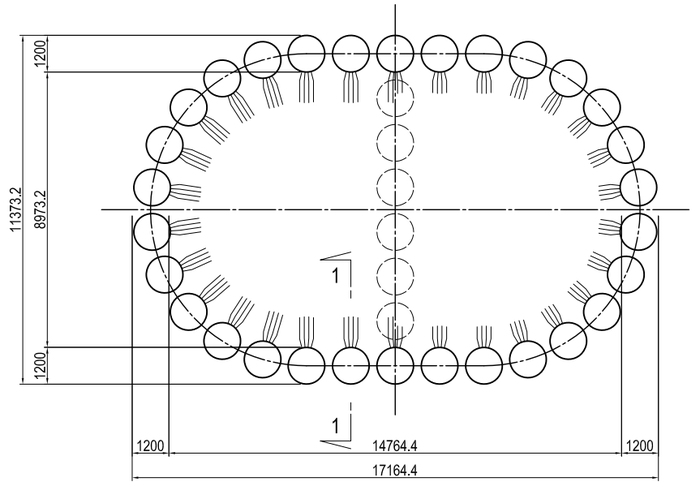
DETAIL OF INTERRLOCKING TOE S=1:20



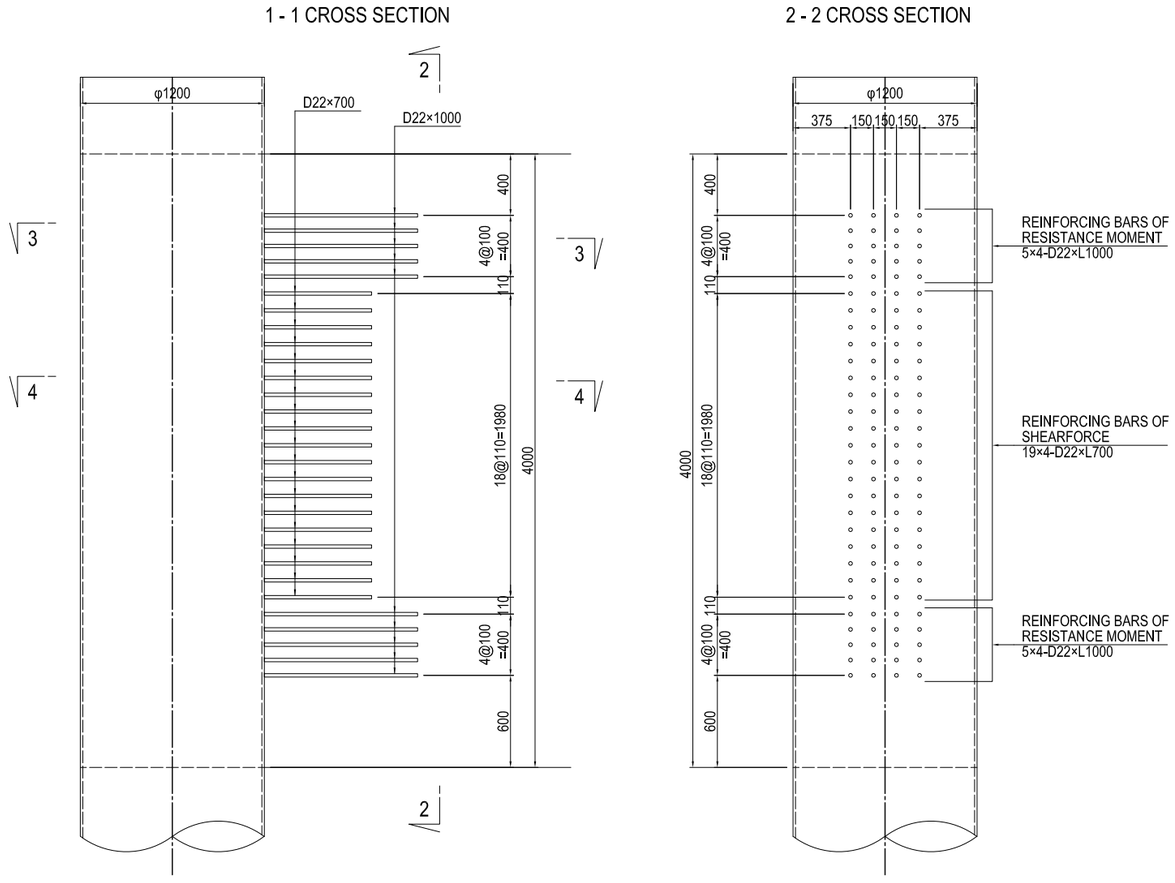
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017
DRAWING TITLE	DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P14 PIER		
PACKAGE	2		
DWG No.	P2-SB-2027		

DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P14 PIER

PLAN S=1:200

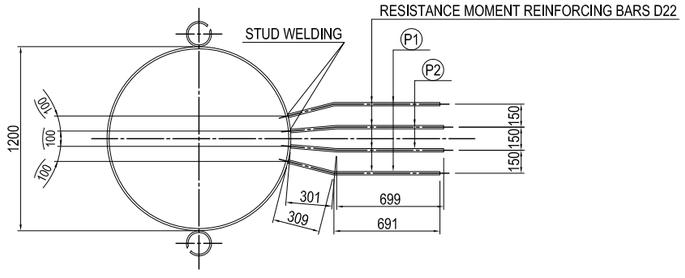


DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:40

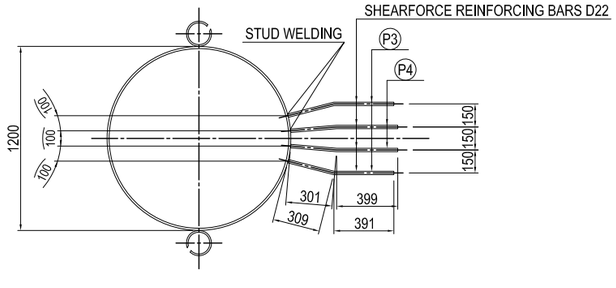


CROSS SECTION OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND REINFORCING BARS S=1:40

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



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



FABRICATION OF REINFORCING BARS S=1:40

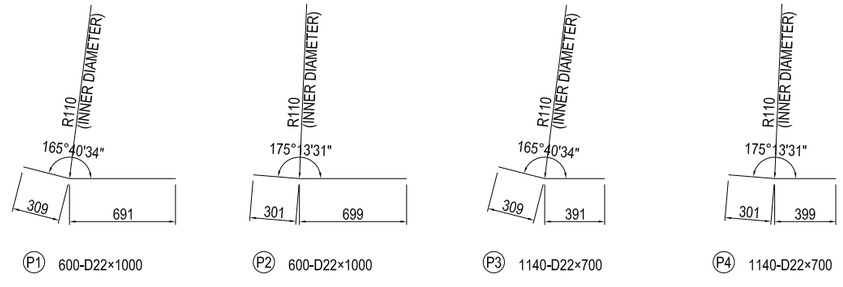


TABLE OF REINFORCING BARS

MARK	TYPE	LENGTH (mm)	PIECES (piece)	UNIT WEIGHT (kg/m)	UNIT WEIGHT (kg/piece)	WEIGHT (kg)	GRADE	MEMO
P1	D22	1000	600	3.04	3.04	1824.0	SD345 for STUD WELDING	
P2	D22	1000	600	3.04	3.04	1824.0	SD345 for STUD WELDING	
P3	D22	700	1140	3.04	2.13	2428.2	SD345 for STUD WELDING	
P4	D22	700	1140	3.04	2.13	2428.2	SD345 for STUD WELDING	
				D22	8504.4	kg		
				TOTAL WEIGHT	8504.4	kg		

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

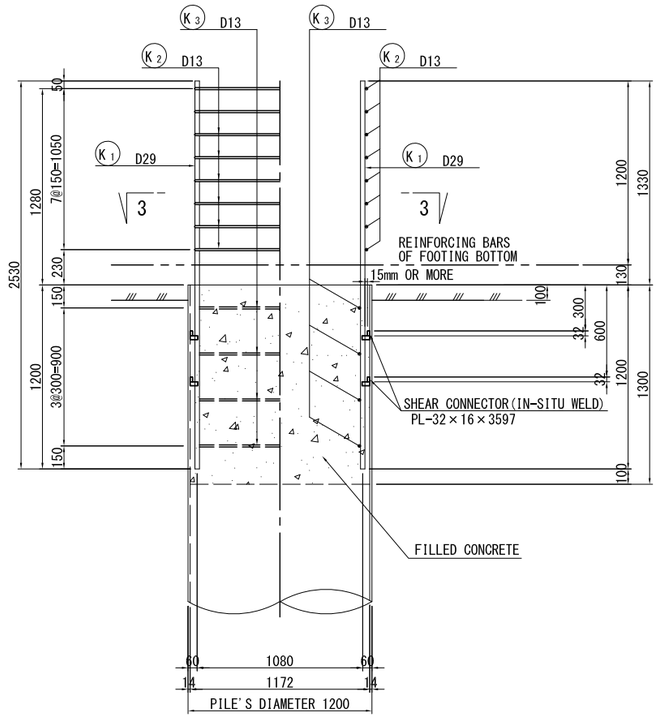
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

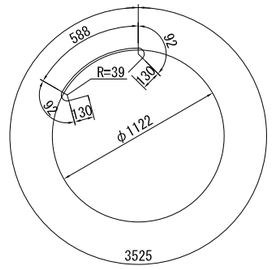
DRAWING TITLE	PACKAGE
DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P14 PIER	2
	DWG No.
	P2-SB-2028

DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P14 PIER S=1:40

DETAIL OF PILE TOP

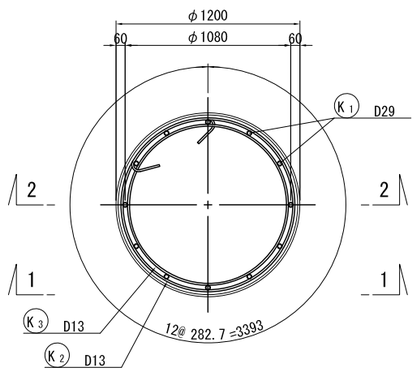
1 - 1　2 - 2

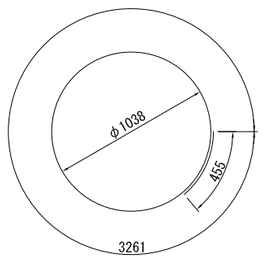




K2　8 - D13 × 4560

3 - 3

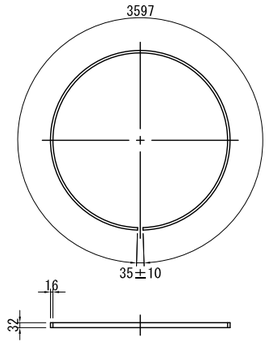




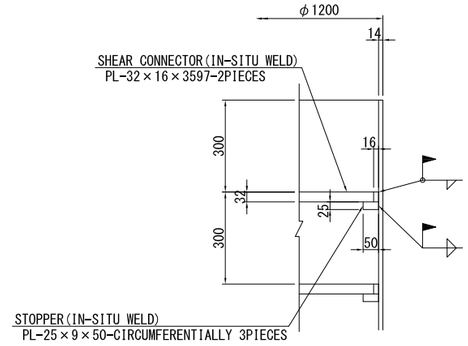
K3　4 - D13 × 3720

DETAIL OF ATTACHMENT OF SHEAR CONNECTOR

CENTER OF LENGTH



SETTING IN THE FIELD S=1:20



MATERIAL LIST

WEIGHT/EA.

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	2530	12	5.04	12.75	153	SD345	|
K2	D13	4560	8	0.995	4.54	36.3	SD345	○
K3	D13	3720	4	0.995	3.70	14.8	SD345	○
TOTAL						204		
FILLED CONCRETE　(σck = 24 N/mm^2)								
V = 1/4 × π × 1.172^2 × 1.300　=　1.402 m^3								

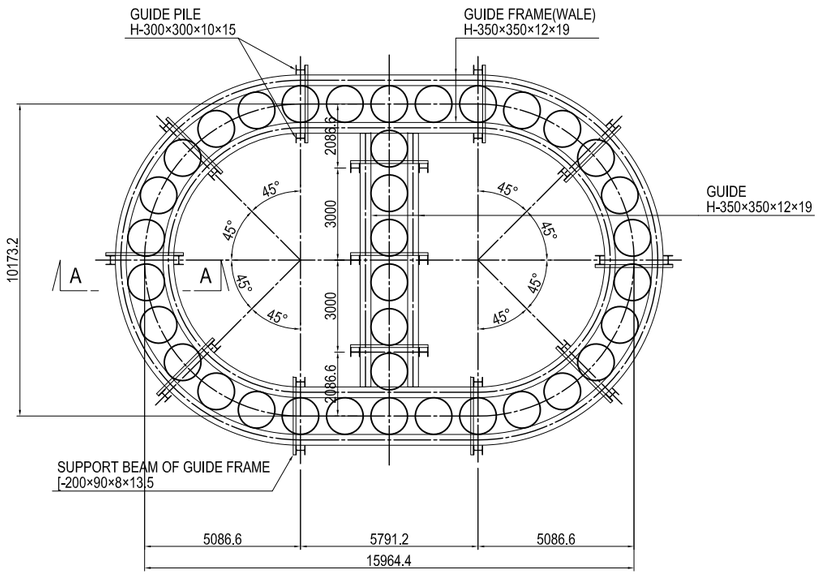
ITEM	DIVISION		UNIT CONTENT	WEIGHT/EA.	QUANTITY
NUMBER OF PILE			Number		6
PILE TOP	SS400	TOTAL	kg	29.4	176.4
REINFORCEMENT	SD345	D29	kg	153	918
		D13	kg	51	307
		TOTAL	kg	204	1225
FILLED CONCRETE	σck = 24 N/mm^2		m^3	1.402	8.4

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM	
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.	

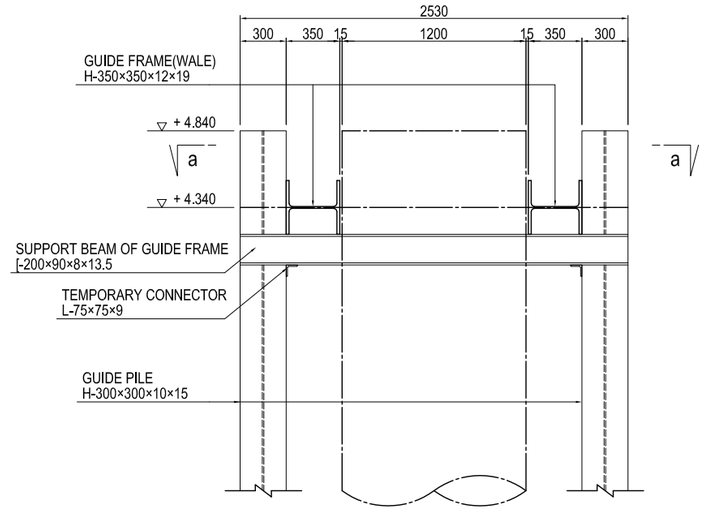
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P14 PIER	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2029

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P14 PIER (1)

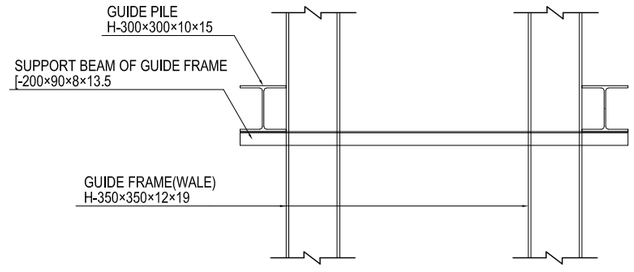
LAYOUT PLAN OF GUIDE FRAMES AND GUIDE PILES S=1:200



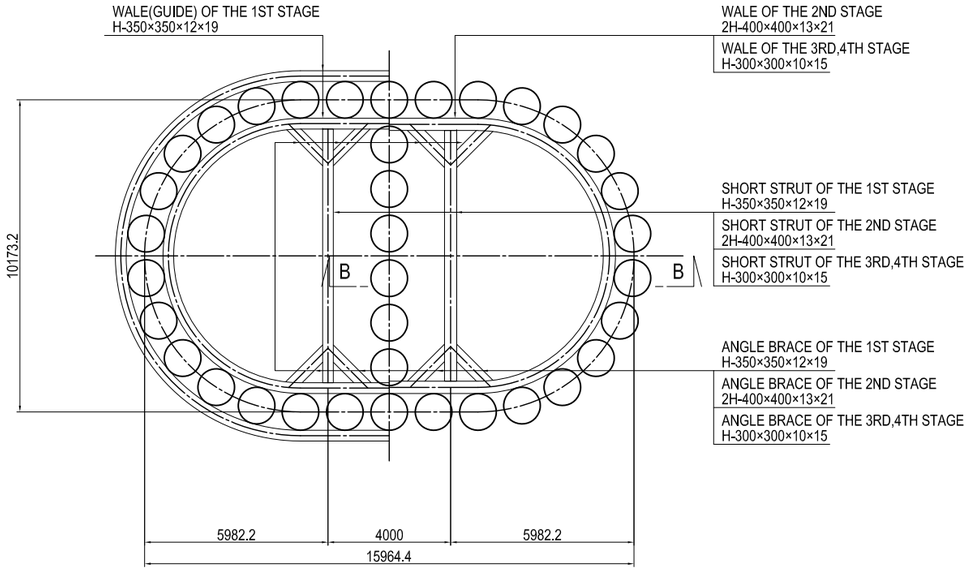
DETAIL OF ATTACHMENT OF GUIDE PILES AND GUIDE FRAMES S=1:40



a - a



LAYOUT PLAN OF STRUTS AND WALES S=1:200

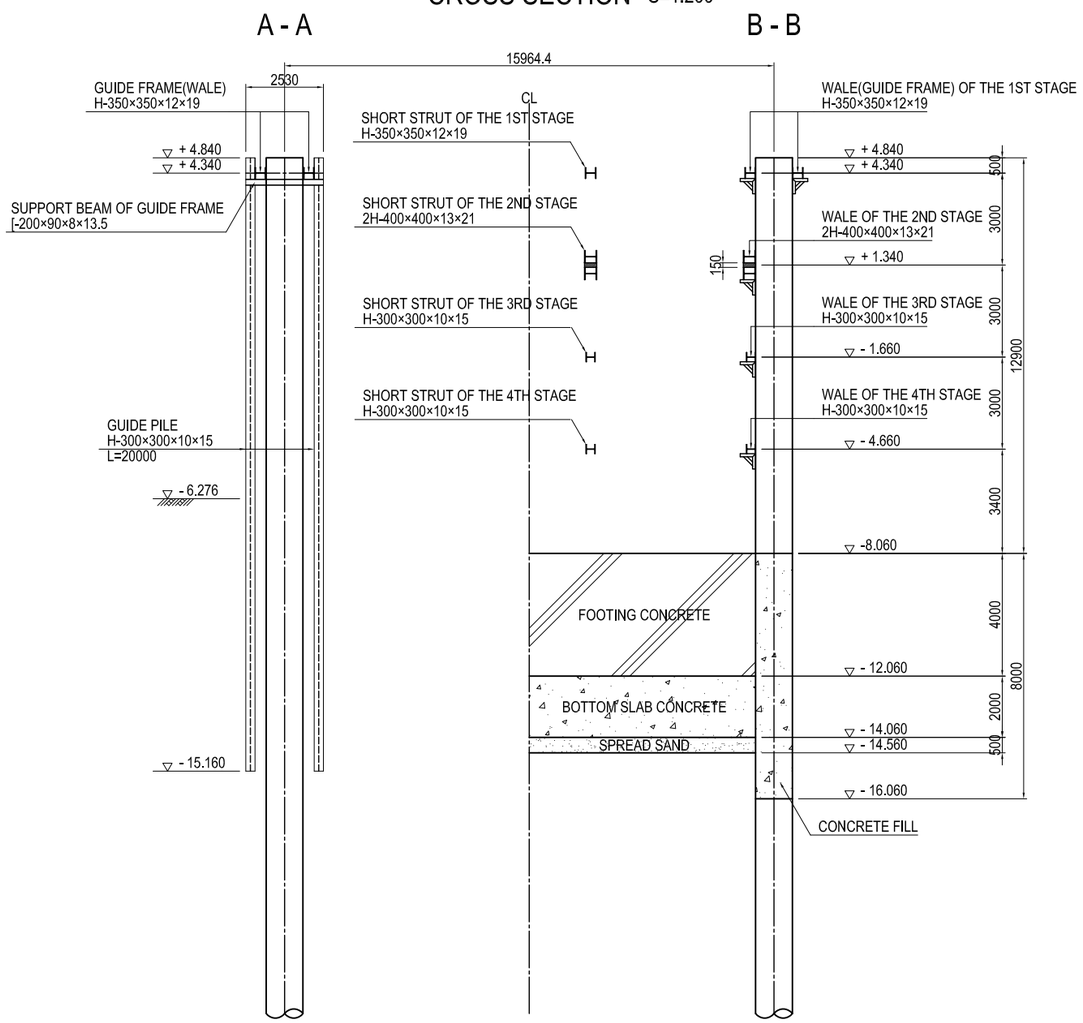


PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

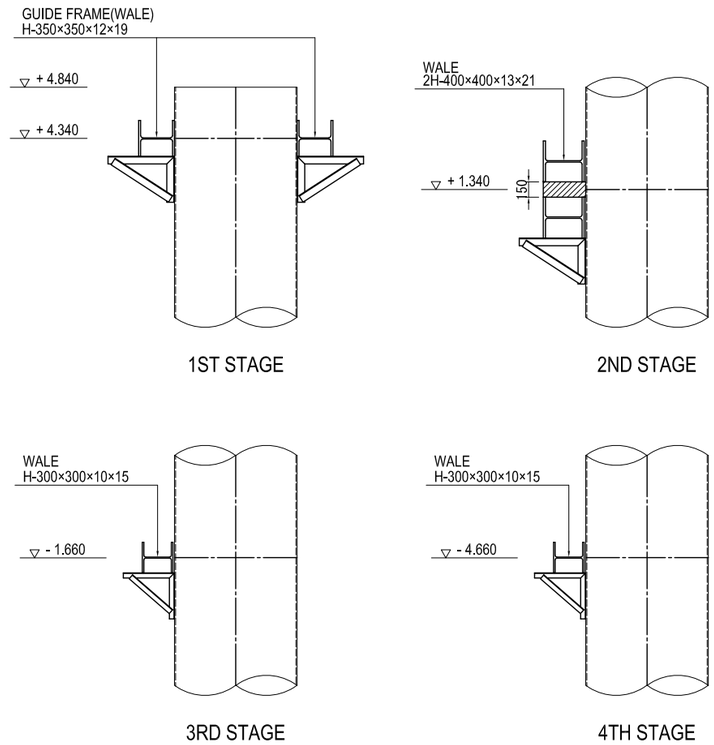
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P14 PIER (1)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2030

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P14 PIER (2)

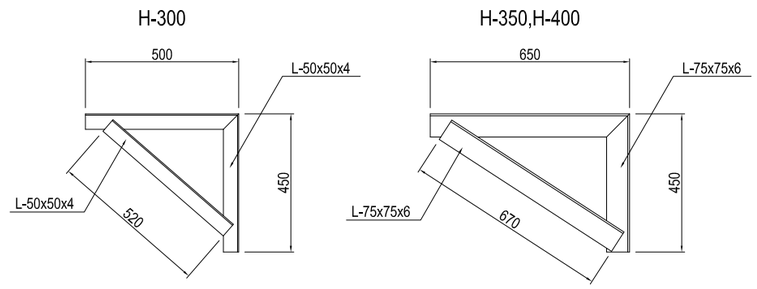
CROSS SECTION S=1:200



DETAIL OF ATTACHMENT OF WALE S=1:60



DETAIL OF BRACKET S=1:20

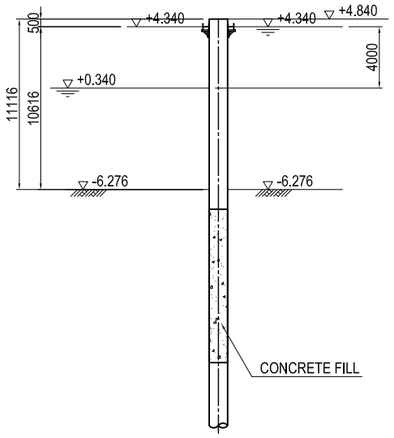
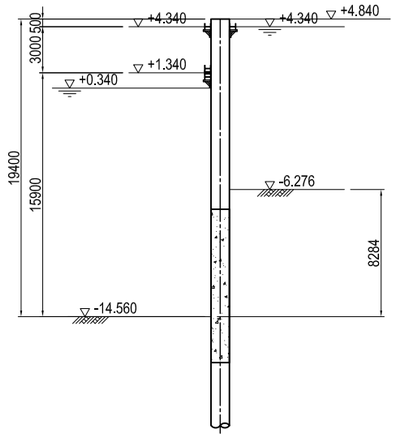
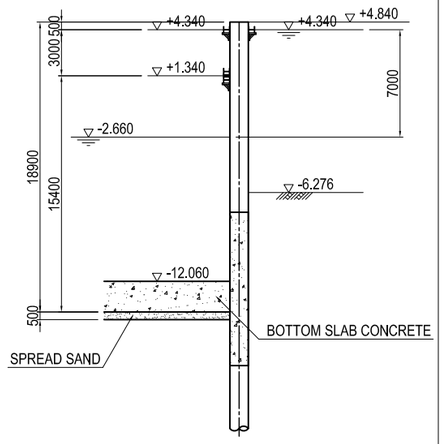
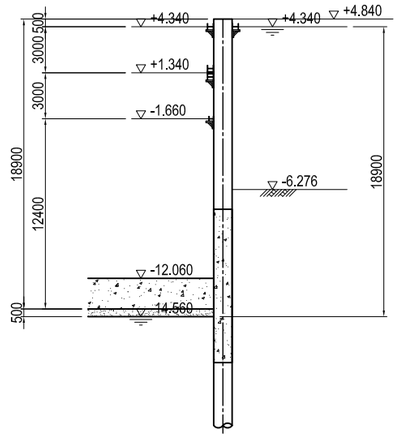
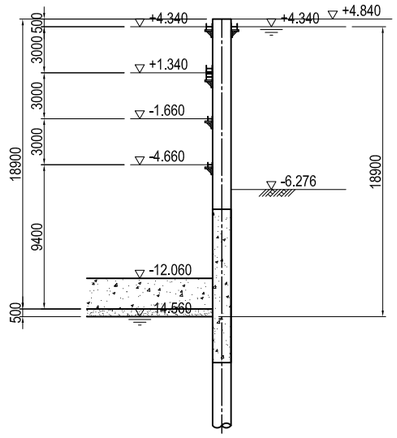


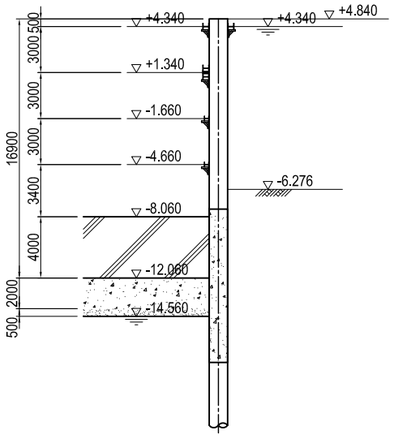
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P14 PIER (2)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2031

(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P14 PIER

S=1:400

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
				
Excavate inside of exterior sheet pilles and filled with concrete as shown. Draining the inside of cofferdam up to +0.340m level. The 1st support Installation.	The 2nd support Installation. Underwater excavation up to -14.560m level.	Draining the inside of cofferdam up to -2.660m level. Placement of spread sand followed by Casting undeawater bottom slab concrete.	The 3rd support Installation. Dry up inside the cofferdam.	The 4th support Installation.

STEP 6				
				
Casting of footing concrete.				

Note : This drawing can be used for reference only.

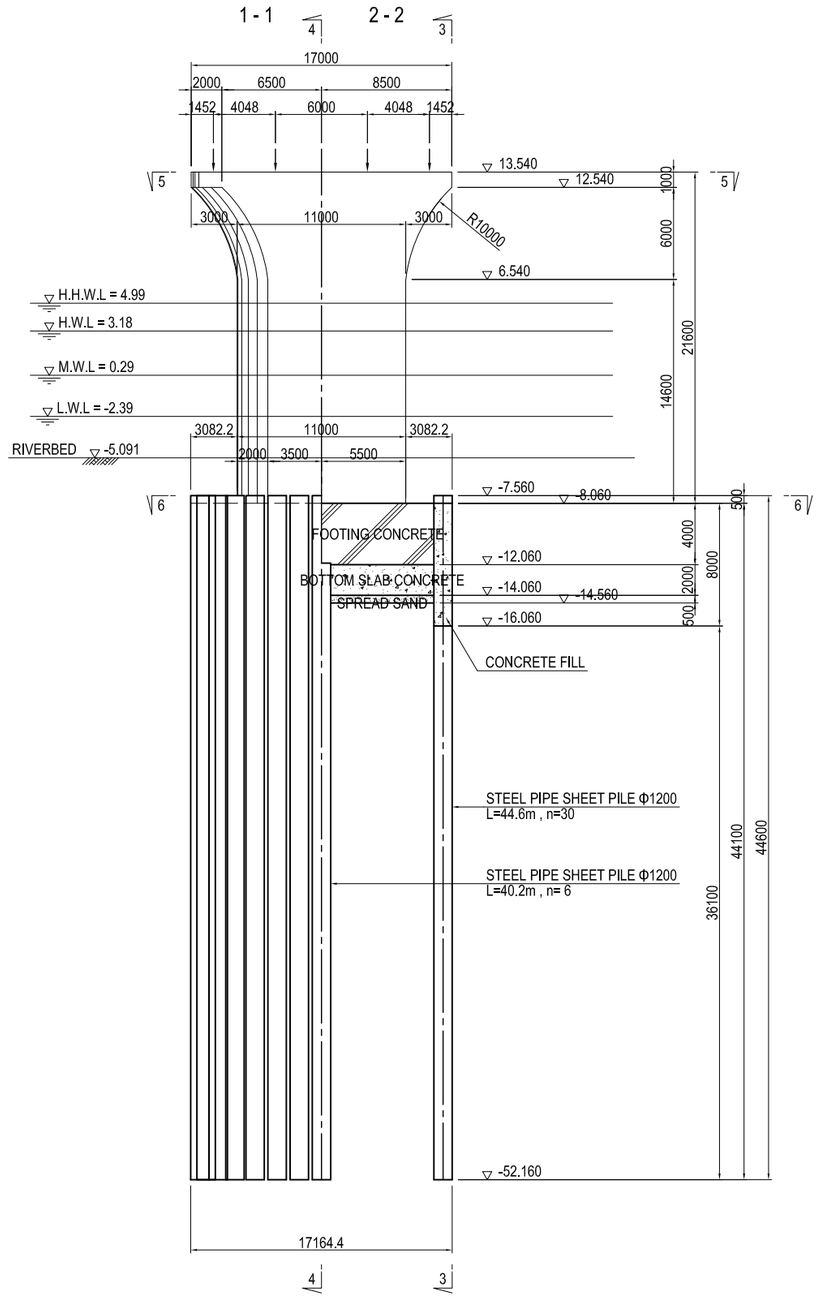
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P14 PIER	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2032

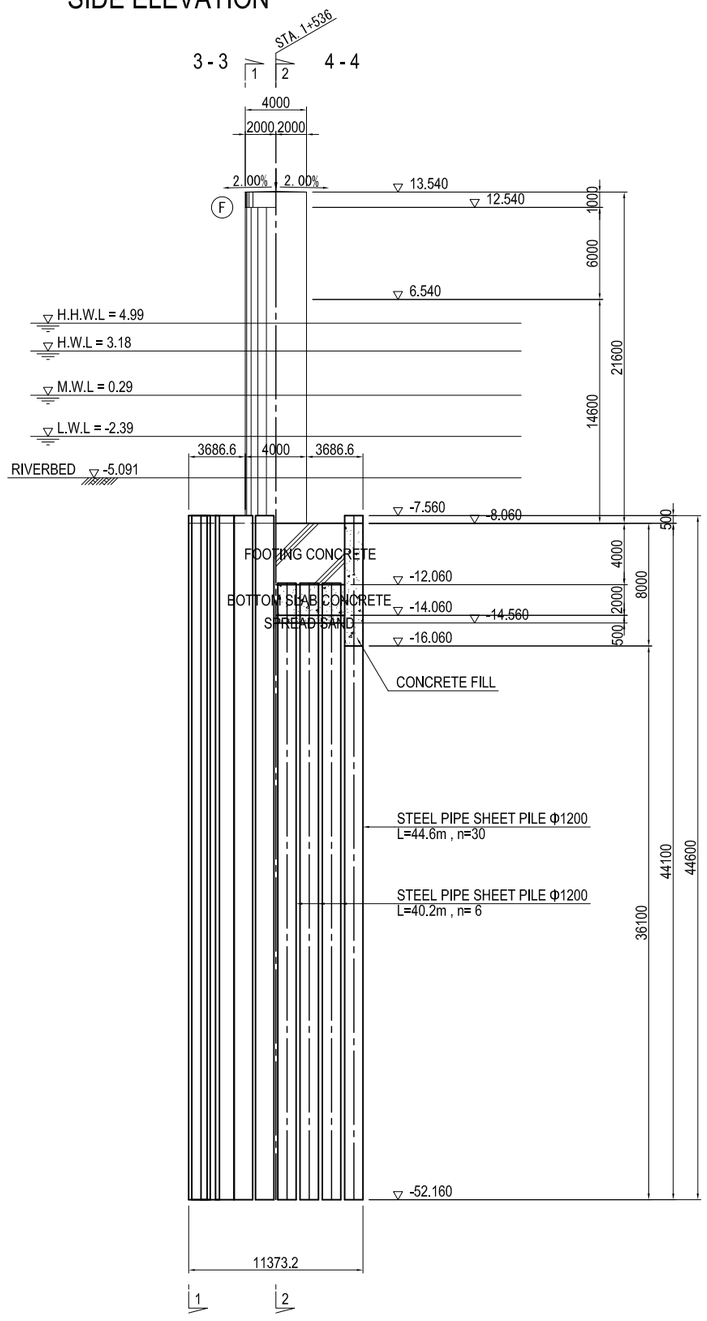
GENERAL VIEW OF P15 PIER (1)

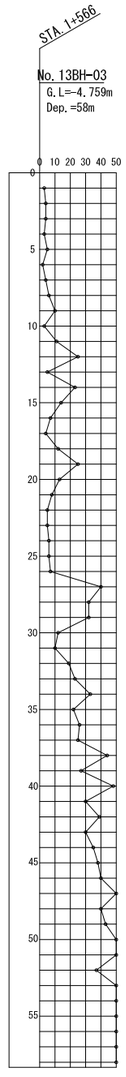
S=1:400

FRONT ELEVATION



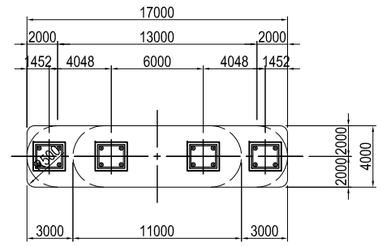
SIDE ELEVATION





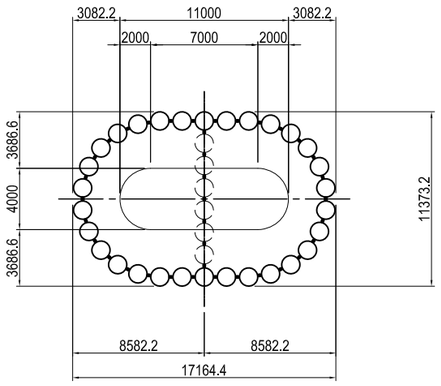
PLAN

5 - 5



PLAN

6 - 6



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	SD345
COLUMN	σck = 30 N/mm²	SD390 • SD345
FOOTING	σck = 24 N/mm²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
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.		

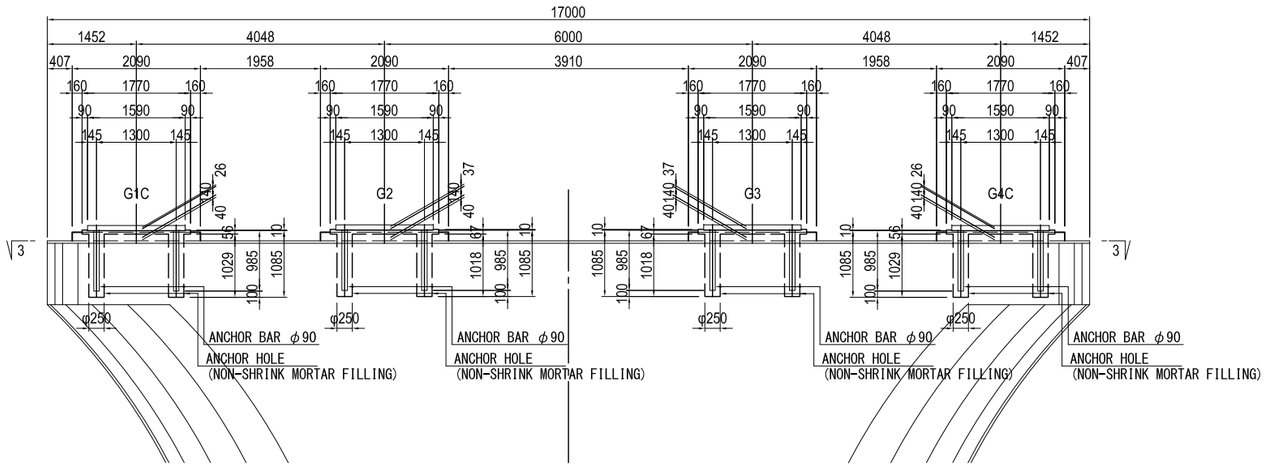
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	GENERAL VIEW OF P15 PIER (1)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2101

GENERAL VIEW OF P15 PIER (2)

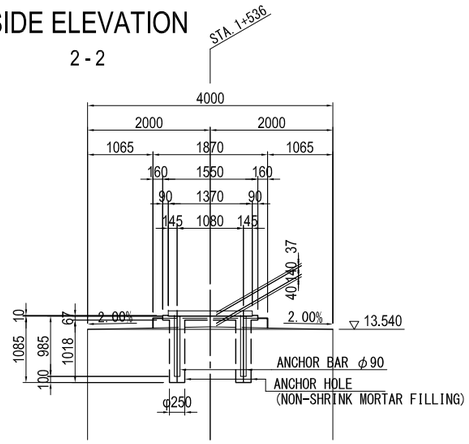
S=1:100

DETAIL OF BEARING AND ANCHOR

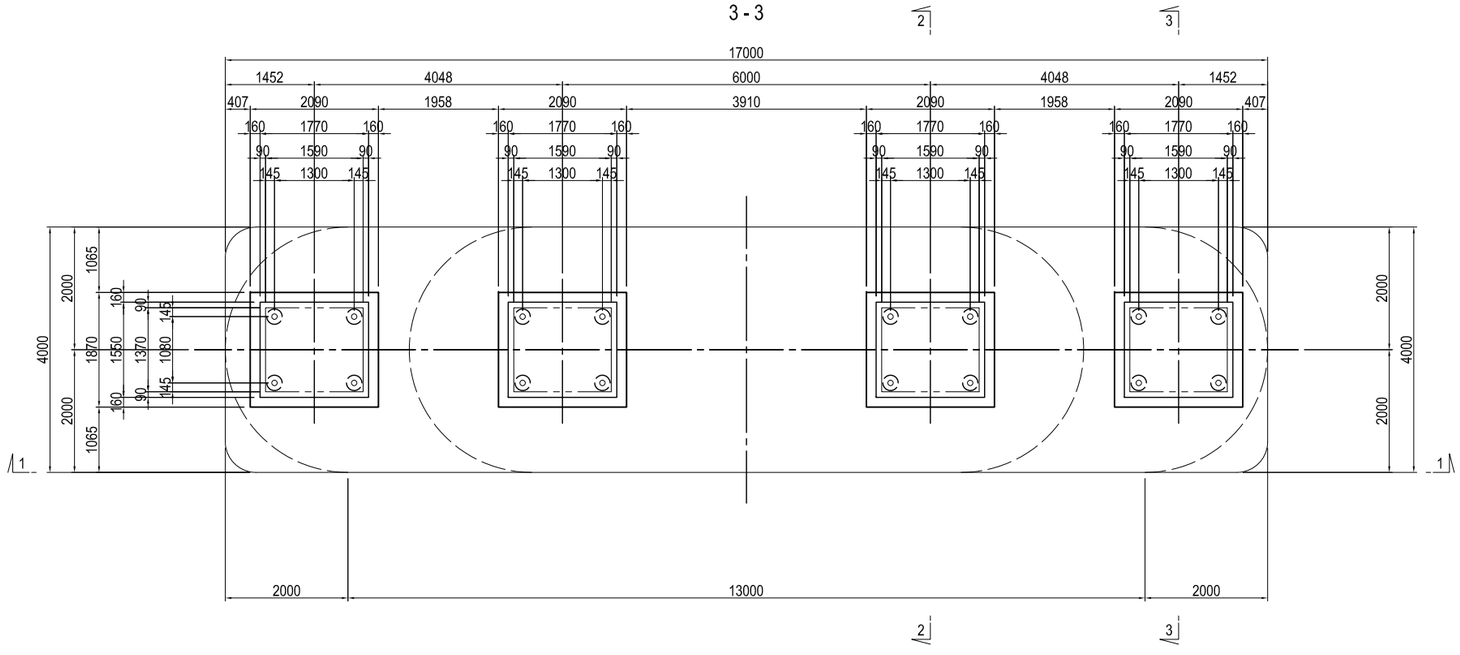
FRONT ELEVATION
1 - 1



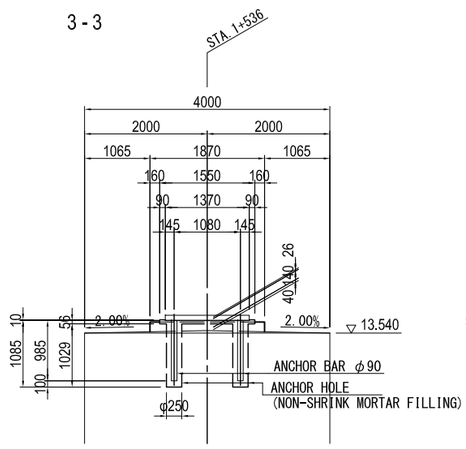
SIDE ELEVATION
2 - 2

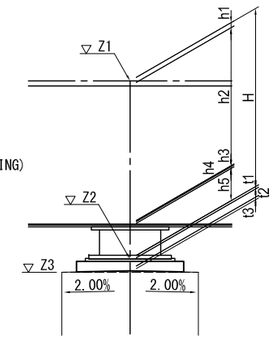


PLAN
3 - 3



SIDE ELEVATION
3 - 3





		P15 PIER			
		G1C	G2	G3	G4C
PROPOSED HEIGHT	Z1	16.961	17.042	17.042	16.961
PAVEMENT	h1	0.080	0.080	0.080	0.080
GIRDER	h2	2.709	2.790	2.790	2.709
BOTTOM FLANGE	h3	0.038	0.027	0.027	0.038
SOLE PLATE	h4	0.035	0.035	0.035	0.035
BEARING	h5	0.353	0.353	0.353	0.353
SUBTOTAL	H	3.215	3.285	3.285	3.215
ELEVATION OF BEARING BOTTOM	Z2	13.746	13.757	13.757	13.746
MORTAR	t1	0.026	0.037	0.037	0.026
BEARING BASE	t2	0.140	0.140	0.140	0.140
DRAINAGE INCLINE	t3	0.040	0.040	0.040	0.040
ELEVATION OF PIER TOP	Z3	13.540	13.540	13.540	13.540

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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE
GENERAL VIEW OF P15 PIER (2)

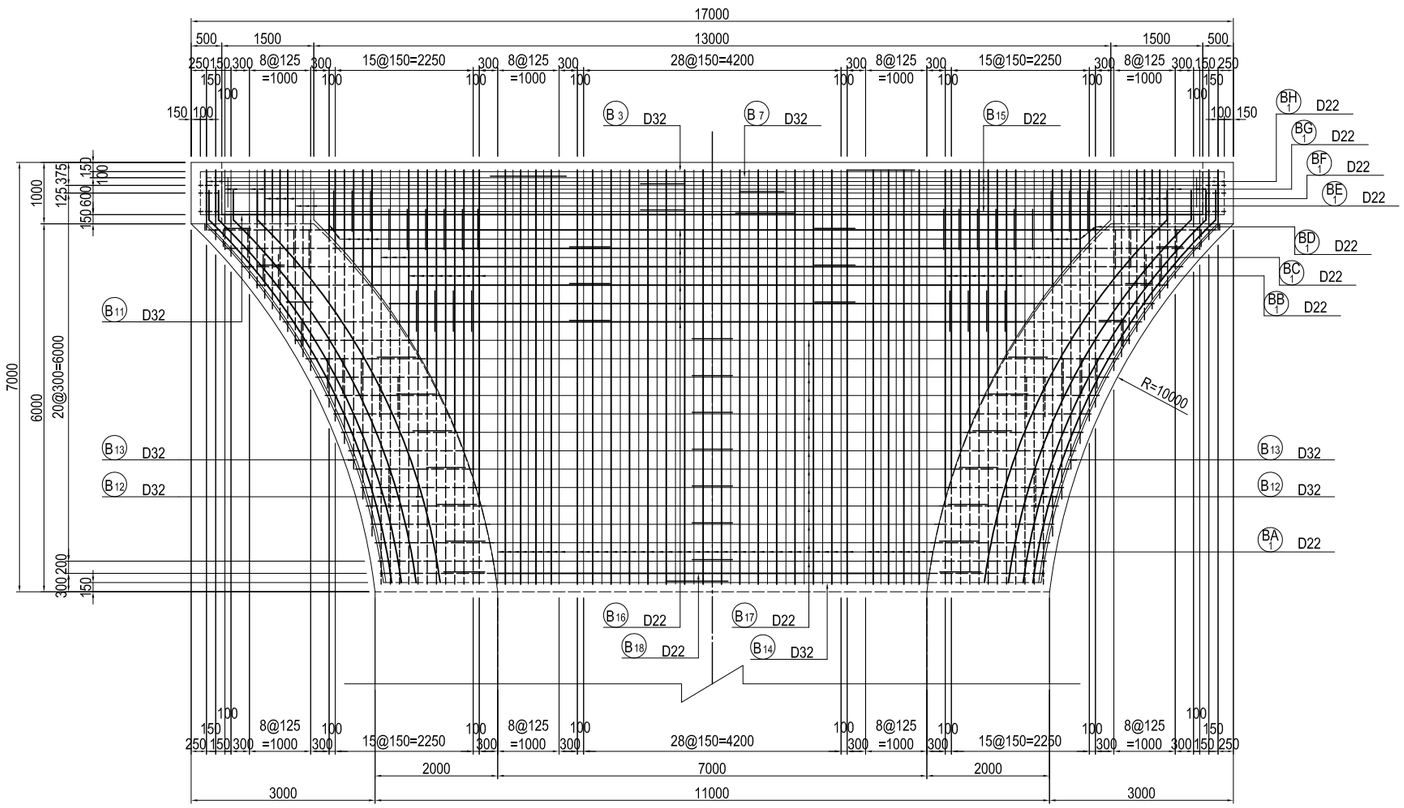
PACKAGE
2

DWG No.
P2-SB-2102

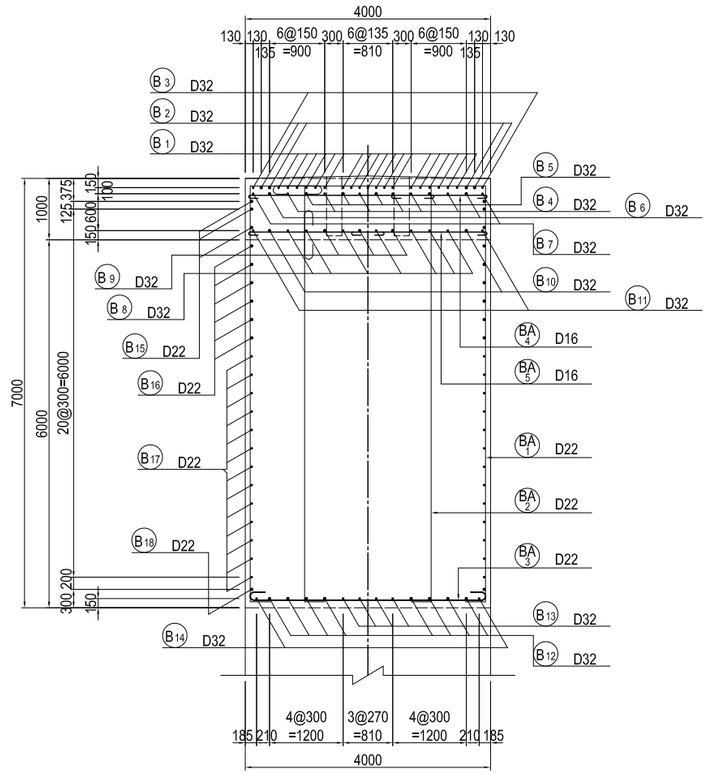
BAR ARRANGEMENT OF P15 PIER (1) S=1:100

BEAM

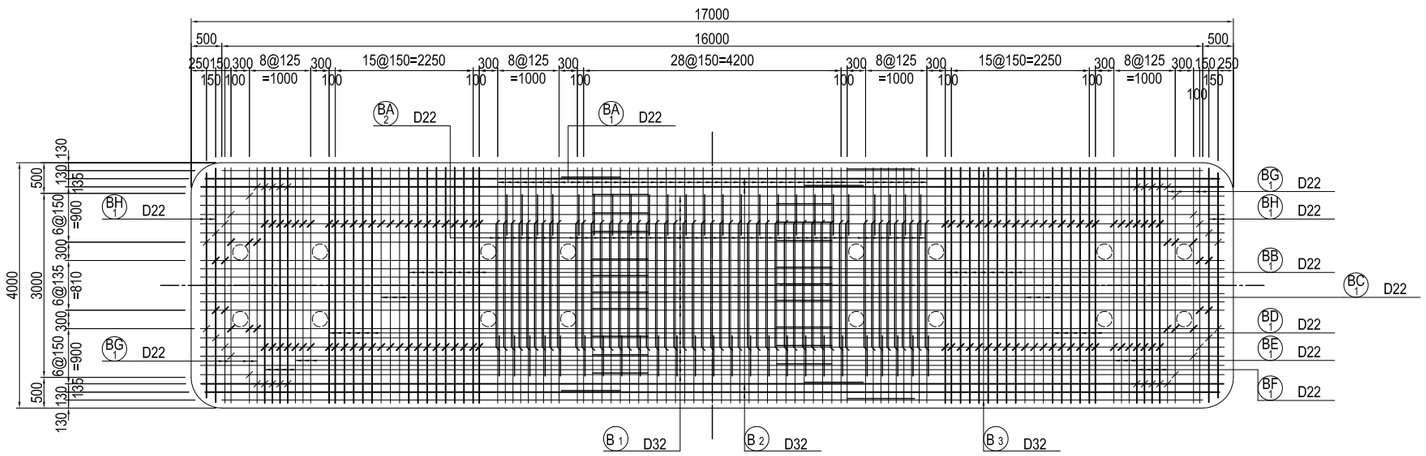
FRONT ELEVATION
1 - 1



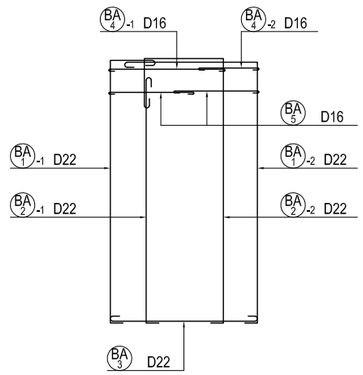
SECTION
3 - 4



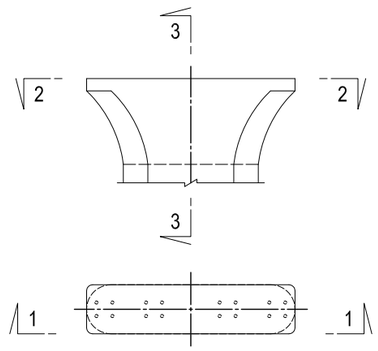
PLAN
2 - 2



ASSEMBLY DRAWING OF STIRRUP



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

DRAWING TITLE: BAR ARRANGEMENT OF P15 PIER (1)

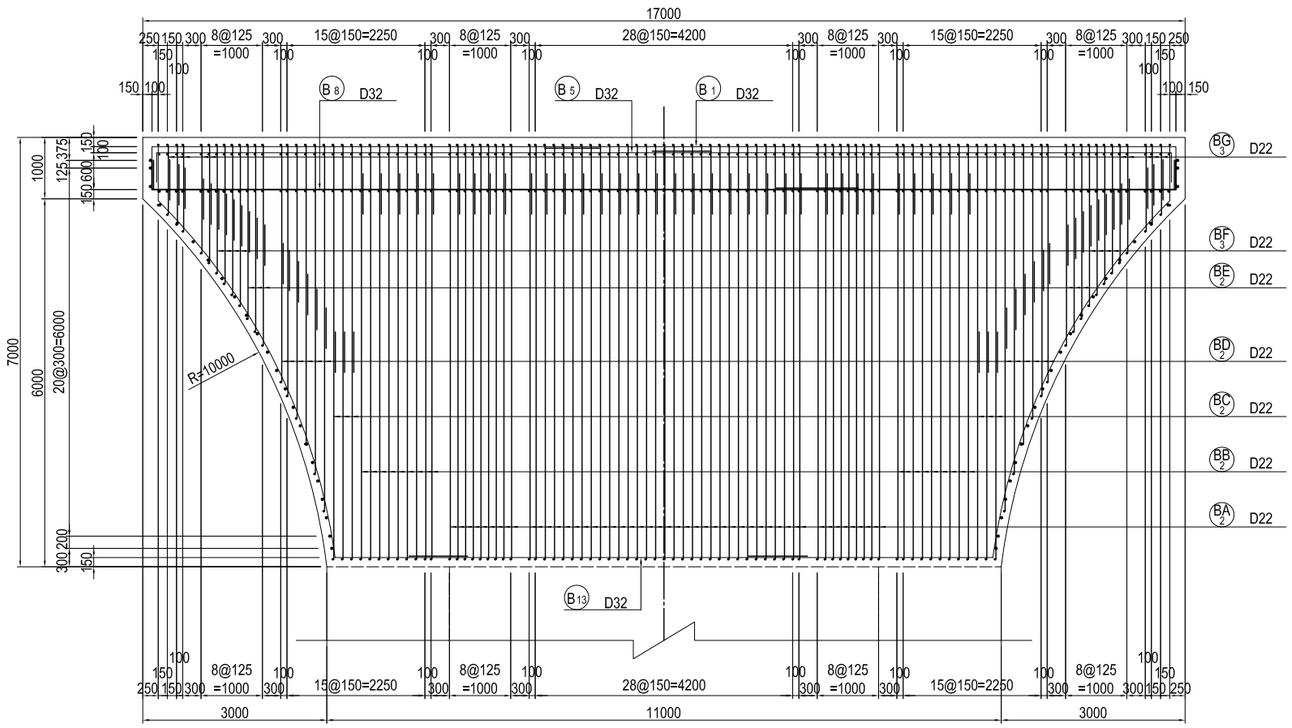
PACKAGE: 2

DWG No.: P2-SB-2103

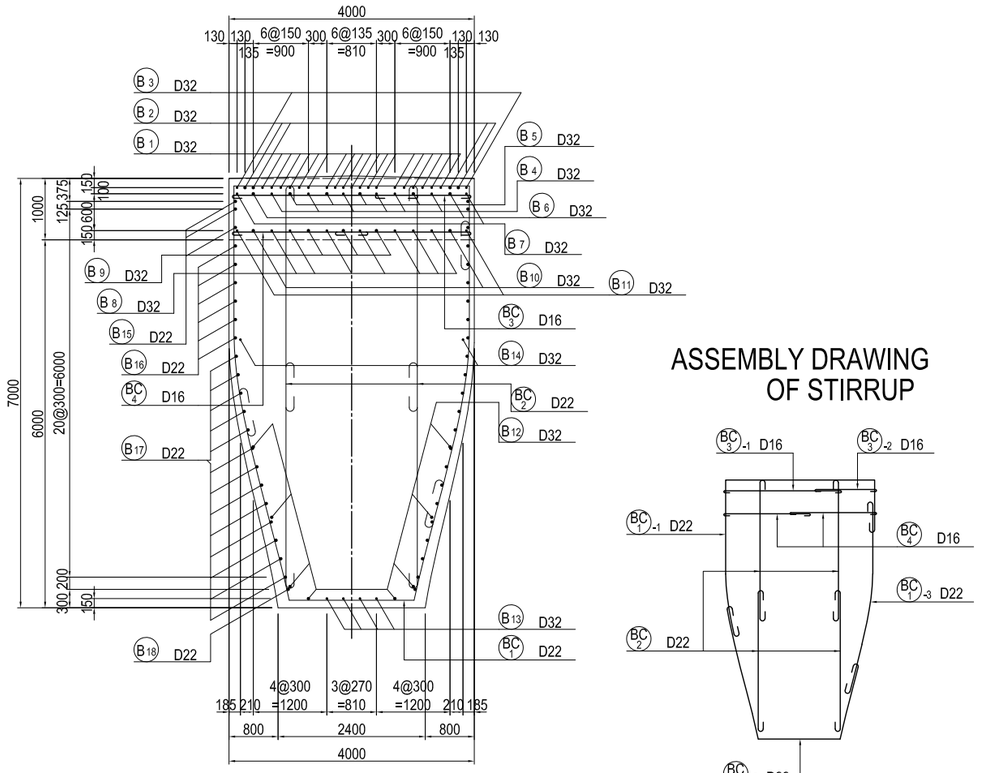
BAR ARRANGEMENT OF P15 PIER (2) S=1:100

BEAM

SECTION 4 - 4

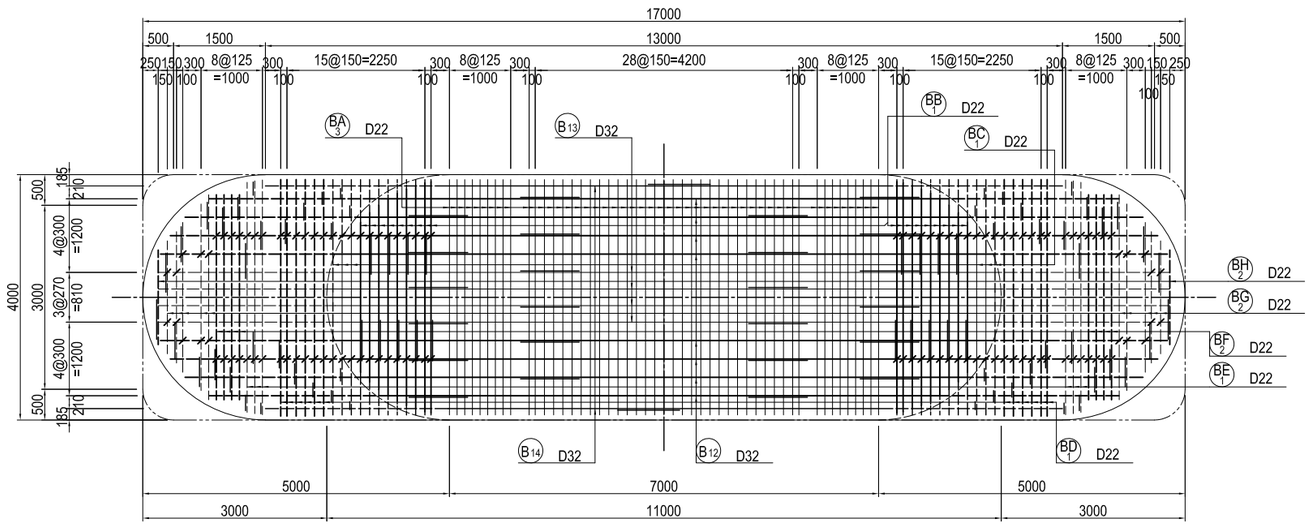


SECTION 7 - 7

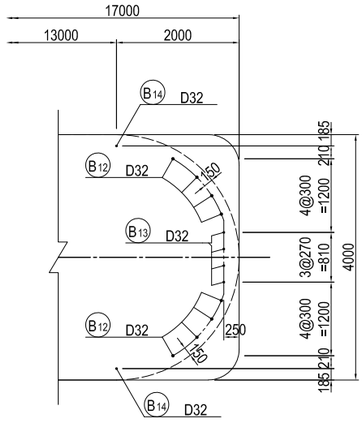


ASSEMBLY DRAWING OF STIRRUP

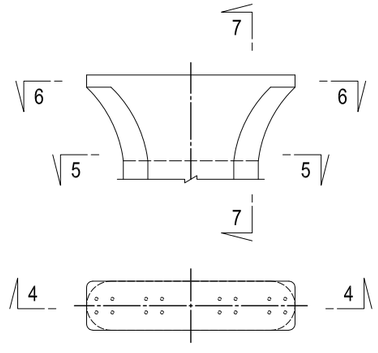
PLAN 5 - 5



PLAN 6 - 6



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	SD345

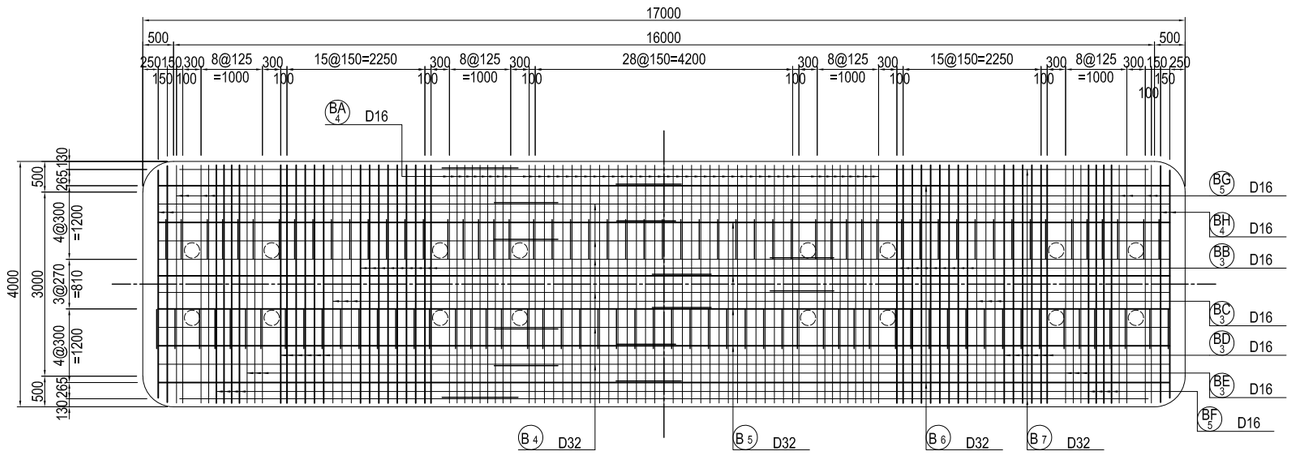
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (2)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2104

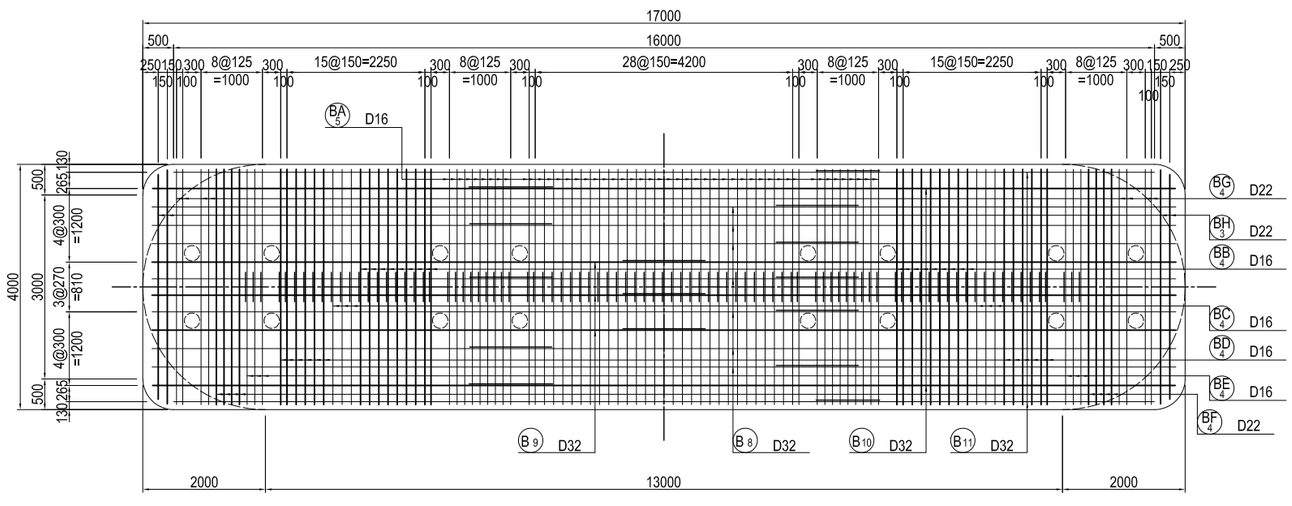
BAR ARRANGEMENT OF P15 PIER (3) S=1:100

BEAM

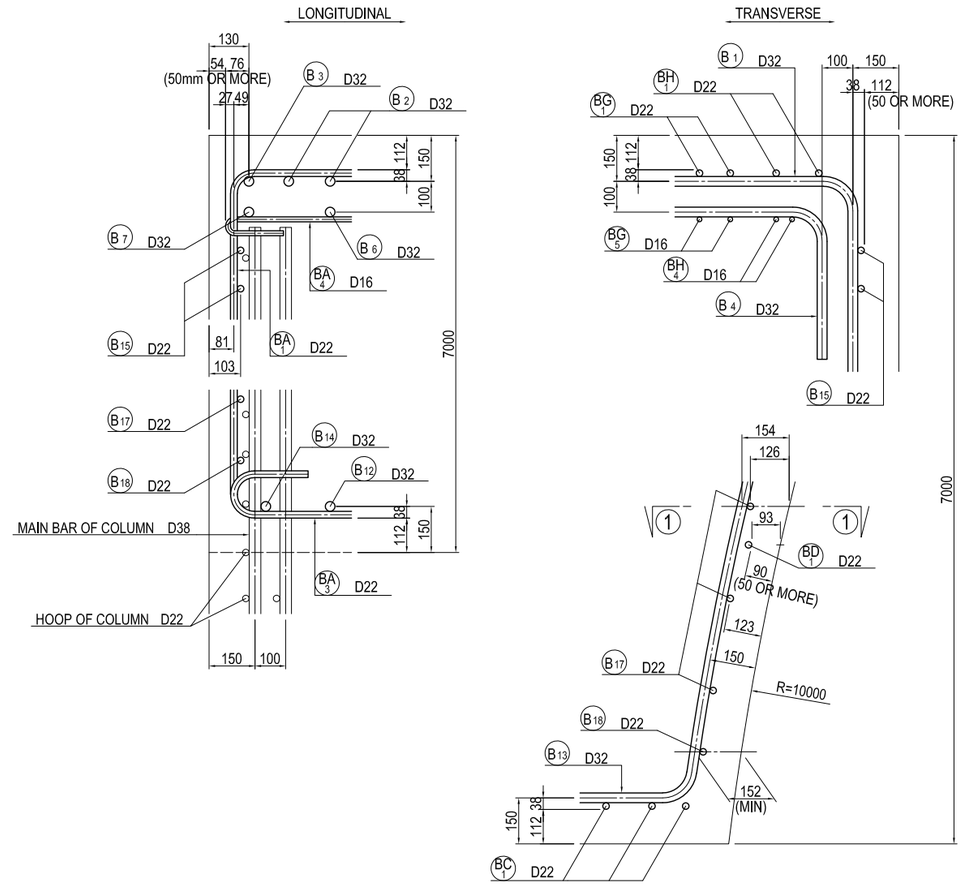
PLAN 8 - 8

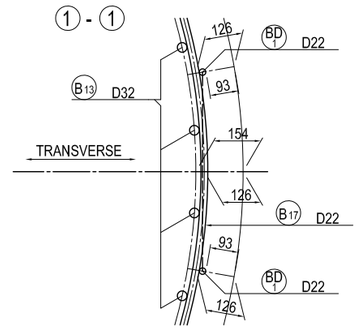


PLAN 9 - 9

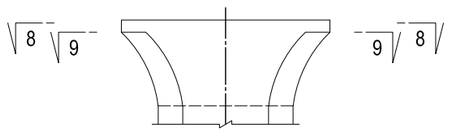


DETAIL OF BEAM S=1:20





MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
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.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (3)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2105

BAR ARRANGEMENT OF P15 PIER (4) S=1:100

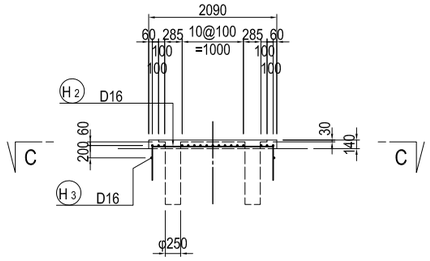
BEAM

BAR ARRANGEMENT OF BEARING BASE

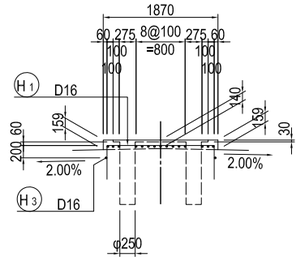
(N = 4)

SECTION

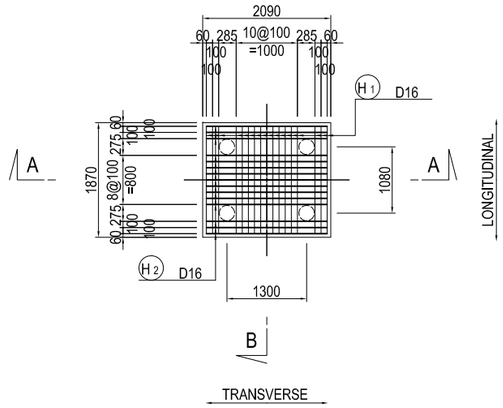
A - A

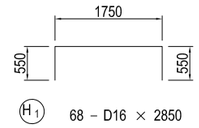


B - B

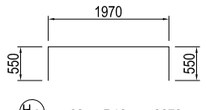


PLAN
C - C

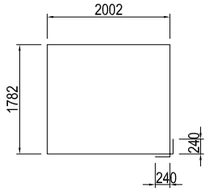




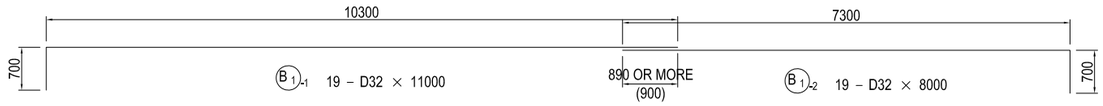
H1 68 – D16 × 2850

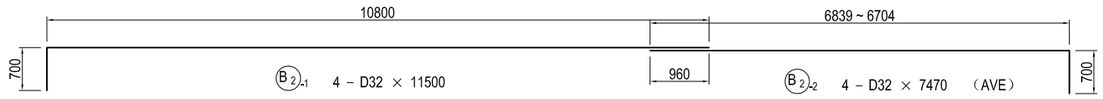


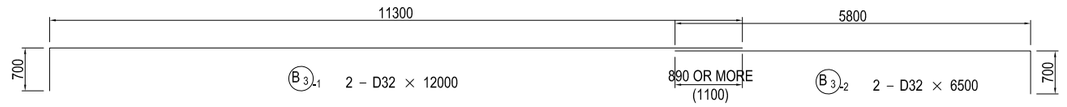
H2 60 – D16 × 3070

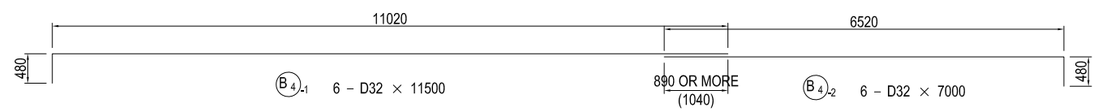


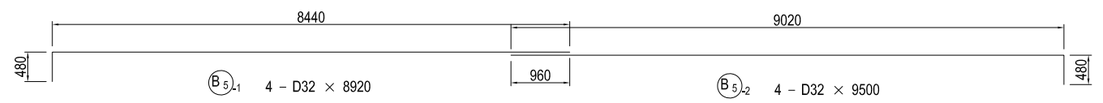
H3 4 – D16 × 8050

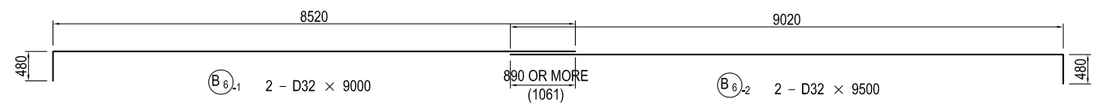












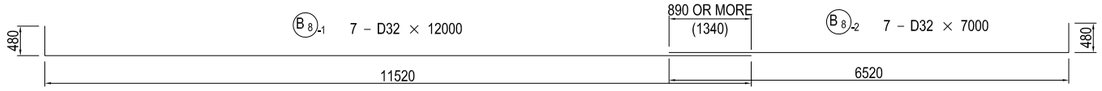
USE MATERIALS

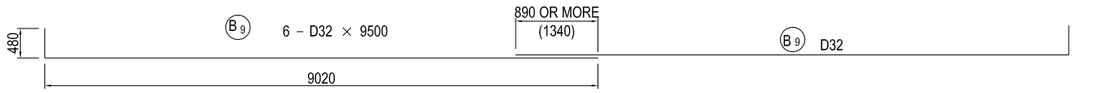
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

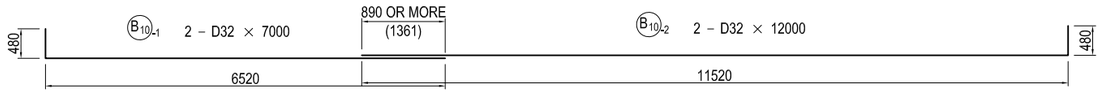
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (4)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2106

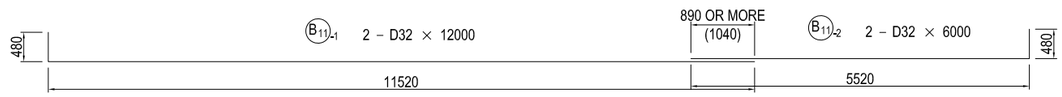
BAR ARRANGEMENT OF P15 PIER (5) S=1:100

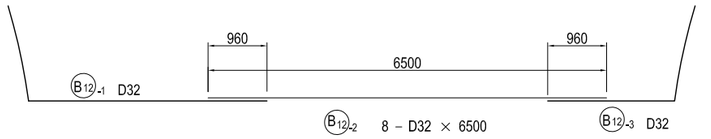
BEAM

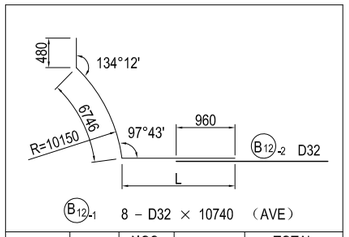




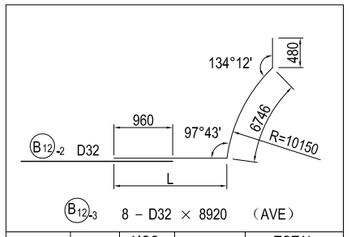




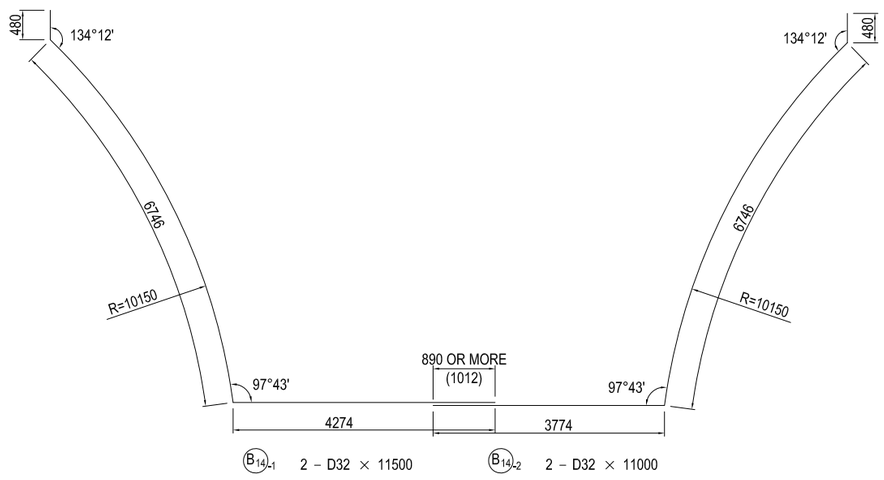


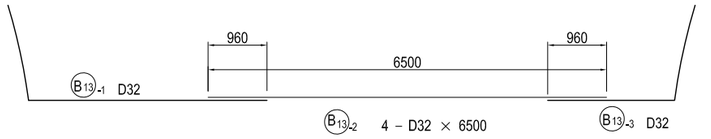


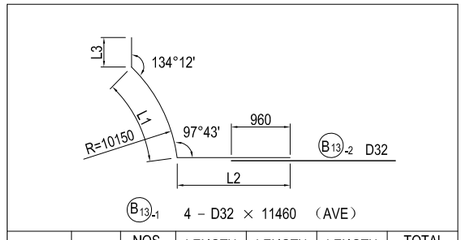
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B12-1 1	D32	2	3058	10284
2	"	2	3449	10675
3	"	2	3691	10917
4	"	2	3848	11074
AVE		8		10738



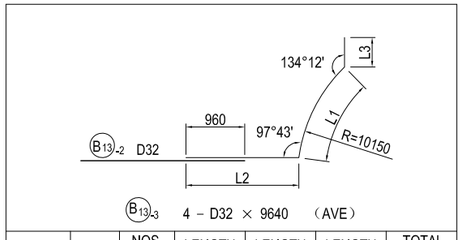
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B12-3 1	D32	2	1238	8464
2	"	2	1629	8855
3	"	2	1871	9097
4	"	2	2028	9254
AVE		8		8918







MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
B13-1 1	D32	2	6669	3943	840	11452
2	"	2	6613	3983	880	11476
AVE		4				11464



MARKS	DIA.	NOS. OF BARS	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
B13-3 1	D32	2	6669	2123	840	9632
2	"	2	6613	2163	880	9656
AVE		4				9644

USE MATERIALS

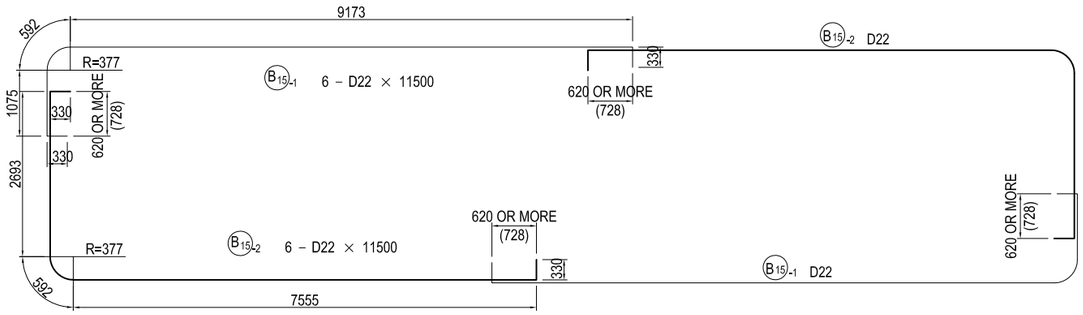
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

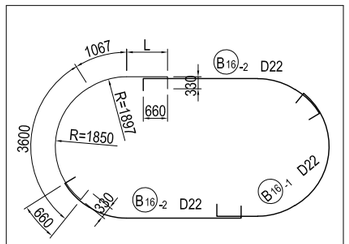
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (5)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2107

BAR ARRANGEMENT OF P15 PIER (6) S=1:100

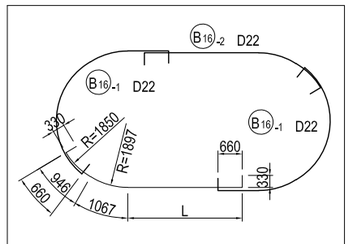
BEAM





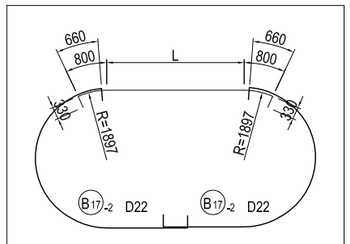
B16-1 12 – D22 × 9300 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B16-1 1	D22	2	4612	9939
2	"	2	4328	9655
3	"	2	4065	9392
4	"	2	3823	9150
5	"	2	3598	8925
6	"	2	3391	8718
AVE		12		9297



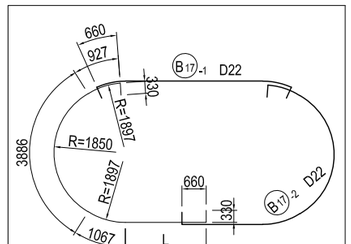
B16-2 12 – D22 × 10640 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B16-2 1	D22	2	8612	11285
2	"	2	8328	11001
3	"	2	8065	10738
4	"	2	7823	10496
5	"	2	7598	10271
6	"	2	7391	10064
AVE		12		10643



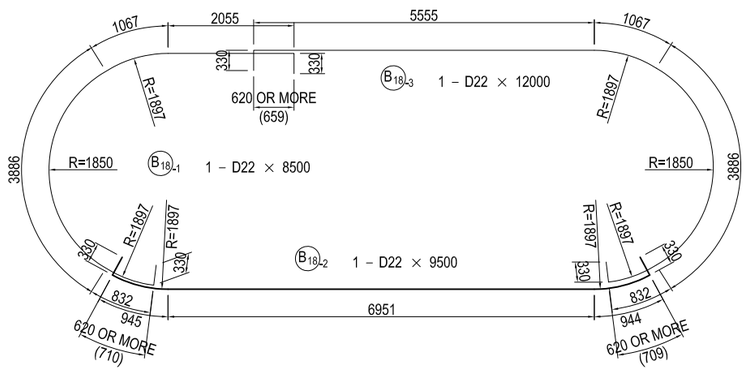
B17-1 13 – D22 × 10400 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B17-1 1	D22	1	9737	11997
2	"	1	9381	11641
3	"	1	9052	11312
4	"	1	8749	11009
5	"	1	8470	10730
6	"	1	8215	10475
7	"	1	7982	10242
8	"	1	7771	10031
9	"	1	7580	9840
10	"	1	7410	9670
11	"	1	7260	9520
12	"	1	7128	9388
13	"	1	7016	9276
AVE		13		10395



B17-2 26 – D22 × 10940 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
B17-2 1	D22	2	5198	11738
2	"	2	5020	11560
3	"	2	4856	11396
4	"	2	4705	11245
5	"	2	4565	11105
6	"	2	4438	10978
7	"	2	4321	10861
8	"	2	4215	10755
9	"	2	4120	10660
10	"	2	4035	10575
11	"	2	3960	10500
12	"	2	3894	10434
13	"	2	3838	10378
AVE		26		10937



USE MATERIALS

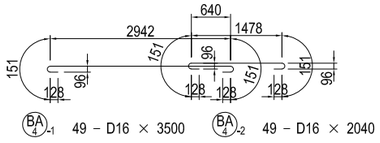
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

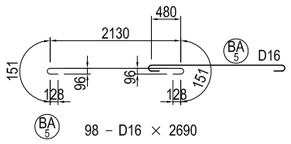
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 PIER (6)	2
	DWG No.
	P2-SB-2108

BAR ARRANGEMENT OF P15 PIER (7) S=1:100

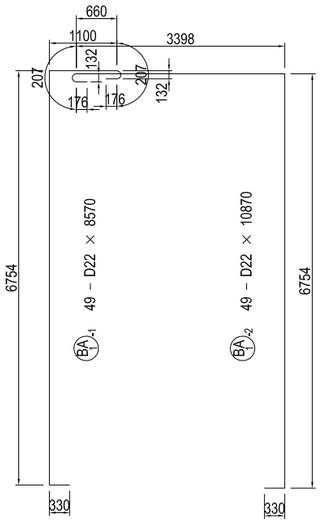
BEAM

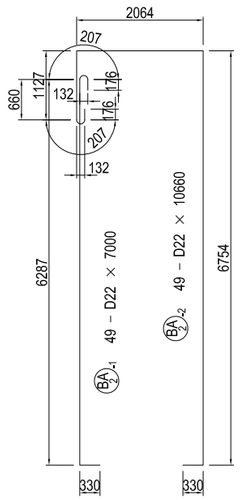


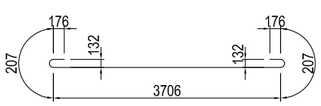
BA4-1 49 – D16 × 3500 BA4-2 49 – D16 × 2040



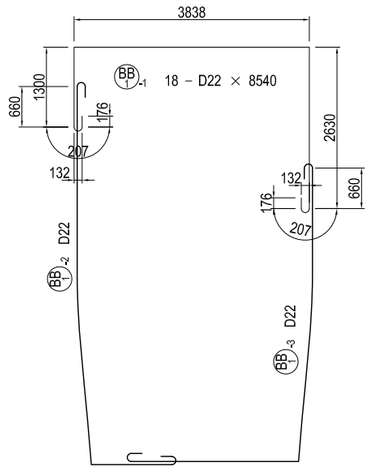
BA5 98 – D16 × 2690

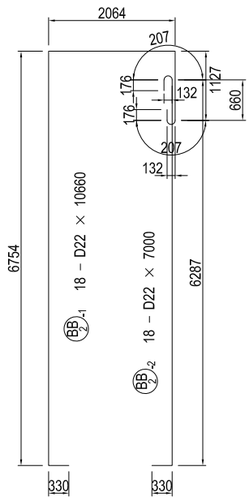


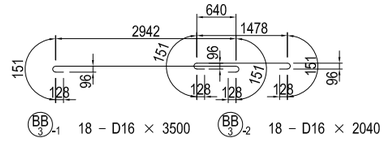




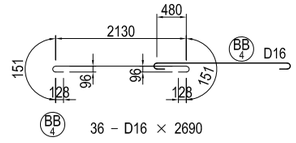
BA3 49 – D22 × 4470



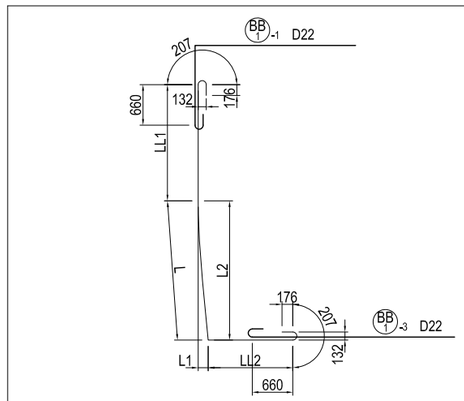




BB3-1 18 – D16 × 3500 BB3-2 18 – D16 × 2040

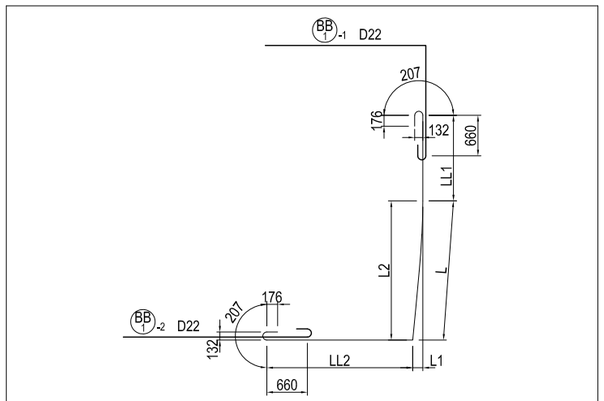


BB4 36 – D16 × 2690



BB1-2 18 – D22 × 8160 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	TOTAL LENGTH ΣL
BB1-2 1	D22	2	1464	33	1464	4650	1511	8391
2	"	2	1892	54	1891	4223	1490	8371
3	"	2	2282	97	2280	3834	1447	8329
4	"	2	2606	155	2601	3513	1389	8274
5	"	2	3029	227	3020	3094	1317	8206
6	"	2	3241	315	3225	2889	1229	8125
7	"	2	3607	416	3580	2534	1128	8035
8	"	2	3827	541	3785	2329	1003	7925
9	"	2	4115	698	4051	2063	846	7790
AVE		18						8161



BB1-3 18 – D22 × 8240 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL1	LENGTH LL2	TOTAL LENGTH ΣL
BB1-3 1	D22	2	1464	33	1464	3320	2921	8471
2	"	2	1892	54	1891	2893	2900	8451
3	"	2	2282	97	2280	2504	2857	8409
4	"	2	2606	155	2601	2183	2799	8354
5	"	2	3029	227	3020	1764	2727	8286
6	"	2	3241	315	3225	1559	2639	8205
7	"	2	3607	416	3580	1204	2538	8115
8	"	2	3827	541	3785	999	2413	8005
9	"	2	4115	698	4051	733	2256	7870
AVE		18						8241

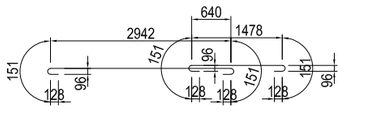
USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm²	SD345

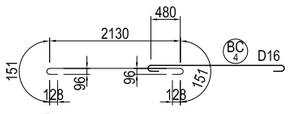
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		
				NAME	SIGNATURE / DATE
				PREPARED BY	S. IMADA 27 Nov.2017
				CHECKED BY	T. HAYAKAWA 28 Nov.2017
				APPROVED BY	Y. SANO 29 Nov.2017
				DRAWING TITLE	BAR ARRANGEMENT OF P15 PIER (7)
				PACKAGE	2
				DWG No.	P2-SB-2109

BAR ARRANGEMENT OF P15 PIER (8) S=1:100

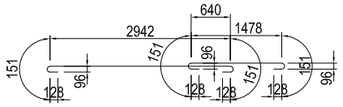
BEAM



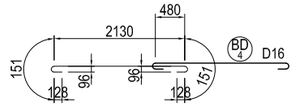
(BC3)-1 6 – D16 × 3500 (BC3)-2 6 – D16 × 2040



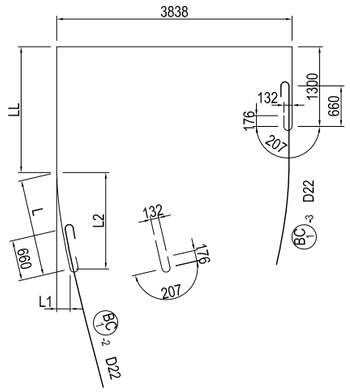
(BC4) 12 – D16 × 2690



(BD3)-1 12 – D16 × 3500 (BD3)-2 12 – D16 × 2040

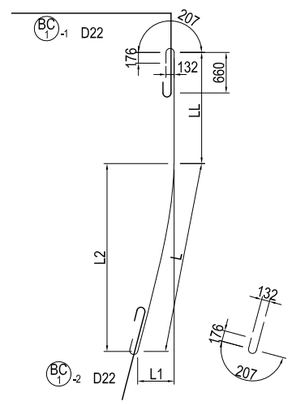


(BD4) 24 – D16 × 2690



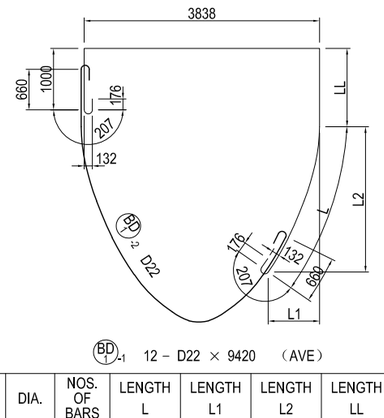
(BC1)-1 6 – D22 × 9950 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-1 1	D22	2	1591	219	1573	2451	9946
2	"	2	1871	304	1837	2177	9952
3	"	2	2008	400	1961	2049	9961
AVE		6					9953



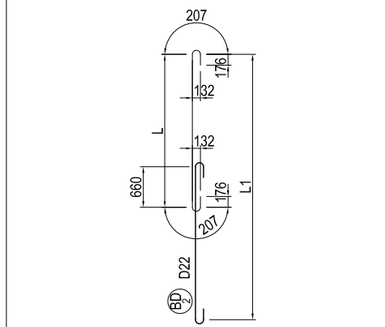
(BC1)-3 6 – D22 × 5730 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BC1-3 1	D22	2	3129	594	3064	1811	5706
2	"	2	3426	761	3327	1537	5729
3	"	2	3591	975	3434	1409	5766
AVE		6					5734



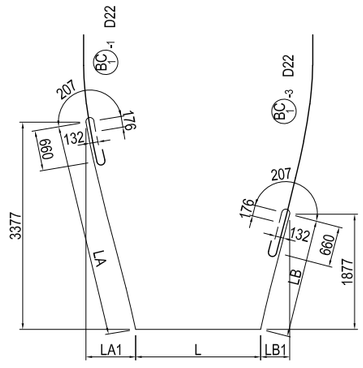
(BD1)-1 12 – D22 × 9420 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BD1-1 1	D22	2	1907	407	1855	1851	9362
2	"	2	2150	524	2071	1623	9377
3	"	2	2289	665	2171	1503	9396
4	"	2	2544	836	2369	1277	9425
5	"	2	2697	1045	2436	1167	9468
6	"	2	2879	1218	2528	1027	9510
AVE		12					9423



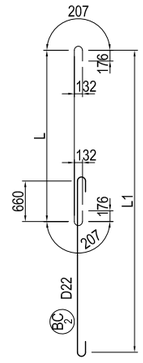
(BD2) 48 – D22 × 2980 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BD2 1	D22	8	2645	4630	3411
2	"	8	2445	4229	3211
3	"	8	2266	3872	3032
4	"	8	2105	3549	2871
5	"	8	1957	3253	2723
6	"	8	1864	3068	2630
AVE		48			2980



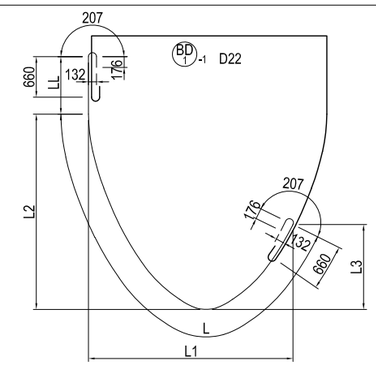
(BC1)-2 6 – D22 × 7630 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LB	LENGTH LB1	LENGTH L	TOTAL LENGTH ΣL
BC1-2 1	D22	2	3474	811	1936	474	2038	8214
2	"	2	3536	1043	1981	760	1465	7748
3	"	2	3791	1621	2209	1120	171	6937
AVE		6						7633



(BC2) 24 – D22 × 3960 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BC2 1	D22	8	3543	6425	4309
2	"	8	3159	5657	3925
3	"	8	2877	5093	3643
AVE		24			3959



(BD1)-2 12 – D22 × 8250 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BD1-2 1	D22	2	8159	3633	4120	2894	1511	10436
2	"	2	7303	3548	3741	2287	1283	9352
3	"	2	6546	3453	3373	1799	1163	8475
4	"	2	5999	3336	3183	1383	937	7702
5	"	2	5399	3189	2925	1015	827	6992
6	"	2	5104	3072	2841	791	687	6557
AVE		12						8252

USE MATERIALS

	CONCRETE	BAR
BEAM	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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

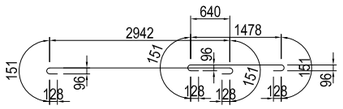
DRAWING TITLE: BAR ARRANGEMENT OF P15 PIER (8)

PACKAGE: 2

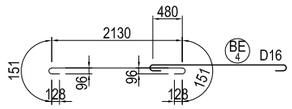
DWG No.: P2-SB-2110

BAR ARRANGEMENT OF P15 PIER (9) S=1:100

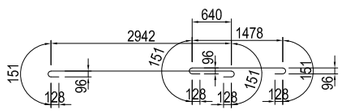
BEAM



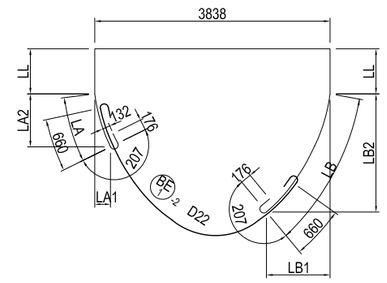
BE3-1 6 – D16 × 3500 BE3-2 6 – D16 × 2040



BE4 12 – D16 × 2690

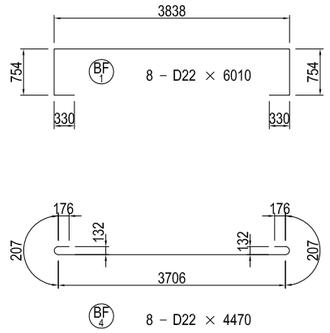


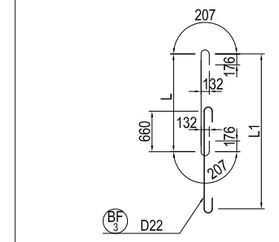
BF5-1 8 – D16 × 3500 BF5-2 8 – D16 × 2040



BE1-1 6 – D22 × 9620 （AVE）

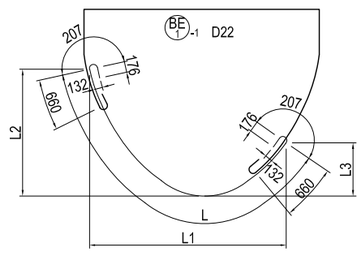
MARKS	DIA.	NOS. OF BARS	LENGTH LA	LENGTH LA1	LENGTH LA2	LENGTH LB	LENGTH LB1	LENGTH LB2	LENGTH LL	TOTAL LENGTH ΣL
BE1-1 1	D22	2	820	196	793	2475	1141	2129	818	9535
2	"	2	905	257	863	2624	1351	2154	736	9605
3	"	2	970	325	906	2780	1612	2117	679	9712
AVE		6								9617





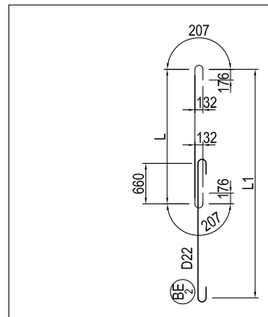
BF3 16 – D22 × 1980 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BF3 1	D22	4	1335	2009	2101
2	"	4	1251	1841	2017
3	"	4	1170	1680	1936
4	"	4	1093	1526	1859
AVE		16			1978



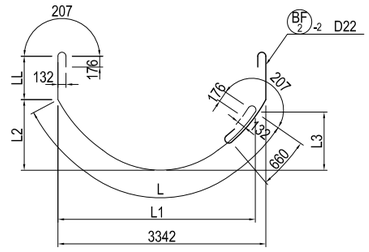
BE1-2 6 – D22 × 4990 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	TOTAL LENGTH ΣL
BE1-2 1	D22	2	4693	3139	2292	792	5459
2	"	2	4230	2959	2069	569	4996
3	"	2	3755	2725	1858	358	4521
AVE		6					4992



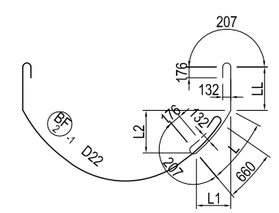
BE2 24 – D22 × 2280 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BE2 1	D22	8	1611	2561	2377
2	"	8	1514	2368	2280
3	"	8	1423	2185	2189
AVE		24			2282



BF2-1 8 – D22 × 5850 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH LL	TOTAL LENGTH ΣL
BF2-1 1	D22	2	4397	3300	1340	1258	1228	6391
2	"	2	4172	3218	1287	1068	1092	6030
3	"	2	3933	3126	1233	887	964	5663
4	"	2	3721	3016	1196	713	829	5316
AVE		8						5850



BF2-2 8 – D22 × 2790 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BF2-2 1	D22	2	753	407	631	1228	2747
2	"	2	912	530	737	1092	2770
3	"	2	1069	665	828	964	2799
4	"	2	1243	821	914	829	2838
AVE		8					2789

USE MATERIALS

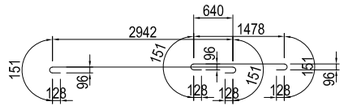
	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
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.		

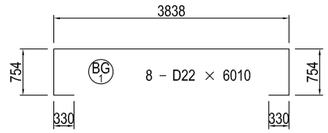
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (9)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2111

BAR ARRANGEMENT OF P15 PIER (10) S=1:100

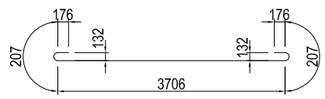
BEAM



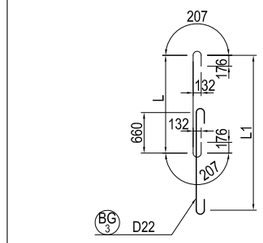
BG1-1 8 – D16 × 3500 BG1-2 8 – D16 × 2040



BG1 8 – D22 × 6010

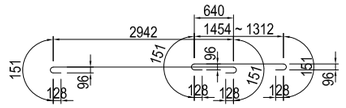


BG4 8 – D22 × 4470



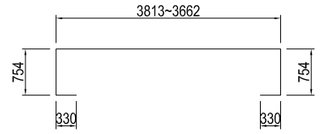
BG3 40 – D22 × 1700 （AVE）

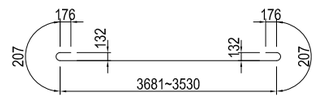
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	TOTAL LENGTH ΣL
BG3 1	D22	8	1113	1565	1879
2	"	8	1038	1415	1804
3	"	8	869	1077	1635
4	"	8	866	1071	1632
5	"	8	787	914	1553
AVE		40			1701



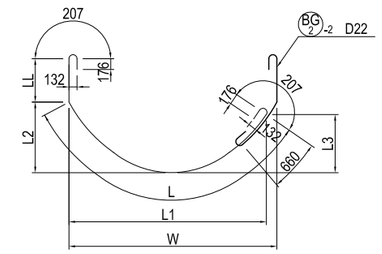
BH4-1 4 – D16 × 3500 BH4-2 4 – D16 × 1940 (AVE)

BH1 4 – D22 × 5910 (AVE)



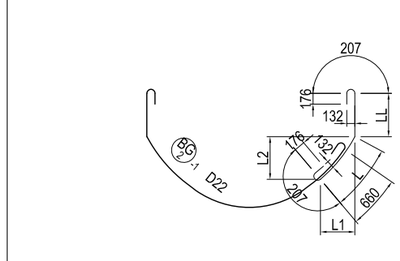


BH3 4 – D22 × 4370 (AVE)



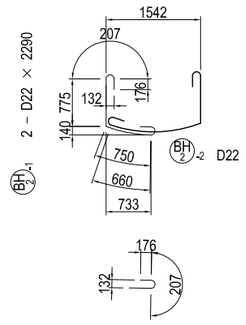
BG2-1 10 – D22 × 4390 （AVE）

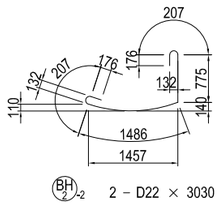
MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH L3	LENGTH W	LENGTH LL	TOTAL LENGTH ΣL
BG2-1 1	D22	2	4015	3220	1151	948	3342	707	5488
2	"	2	3528	2977	876	789	3042	824	5118
3	"	2	2594	2371	491	432	2442	852	4212
4	"	2	2227	2077	369	321	2142	863	3856
5	"	2	1715	1639	271	159	1842	799	3280
AVE		10							4391



BG2-2 10 – D22 × 2390 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	LENGTH L1	LENGTH L2	LENGTH LL	TOTAL LENGTH ΣL
BG2-2 1	D22	2	898	561	694	707	2371
2	"	2	769	545	536	824	2359
3	"	2	752	645	379	852	2370
4	"	2	740	662	320	863	2369
5	"	2	892	840	269	799	2457
AVE		10					2385





BH2-2 2 – D22 × 3030

USE MATERIALS

	CONCRETE	BAR
BEAM	σck = 30 N/mm 2	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

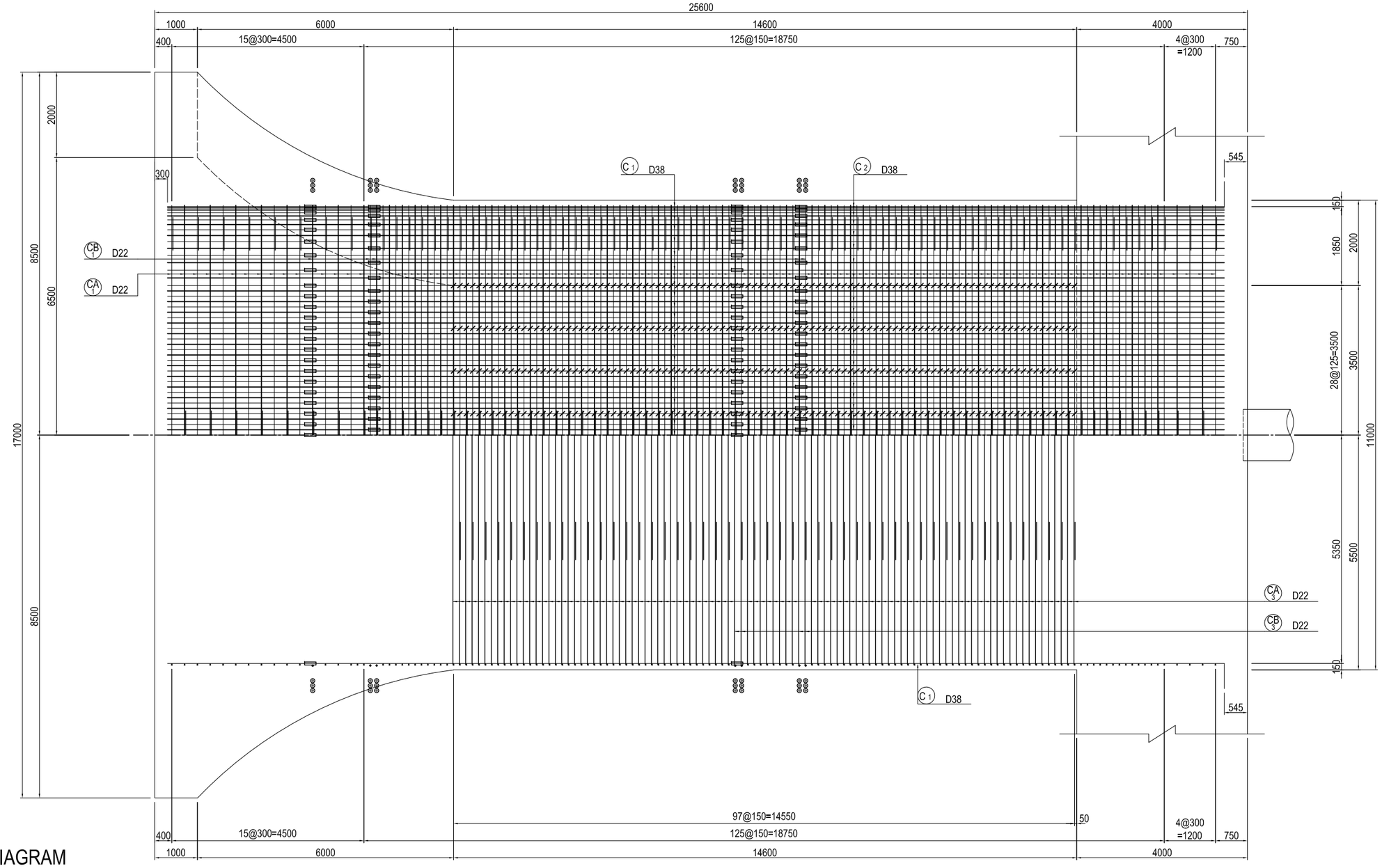
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (10)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2112

BAR ARRANGEMENT OF P15 PIER (11) S=1:100

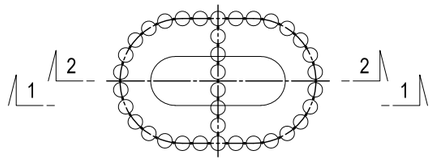
COLUMN

FRONT ELEVATION
1 - 1

SECTION
2 - 2



MARKING DIAGRAM



Notes) 1. ⊚⊚⊚ : This mark indicates hoop arranged in the location of mechanical joint.
2. ⊣▭⊢ : This mark indicates a mechanical joint.

USE MATERIALS

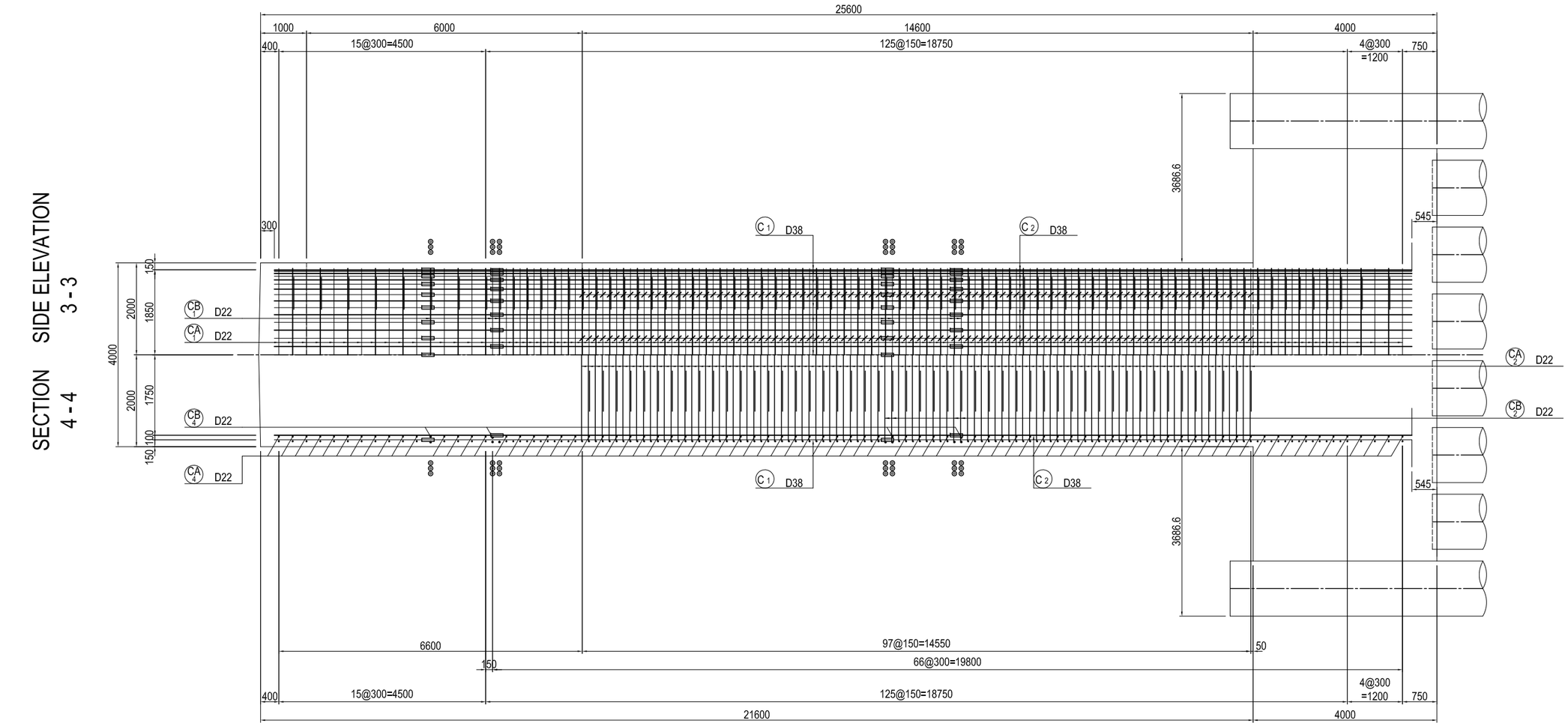
	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

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. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (11)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2113

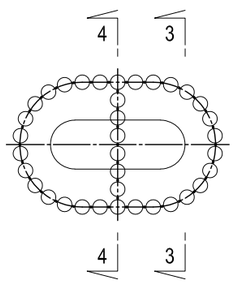
BAR ARRANGEMENT OF P15 PIER (12) S=1:100

COLUMN

SECTION 4 - 4 SIDE ELEVATION 3 - 3



MARKING DIAGRAM



Notes) 1. ⊙⊙⊙ : This mark indicates hoop arranged in the location of mechanical joint.
2. ⊟ : This mark indicates a mechanical joint.

USE MATERIALS

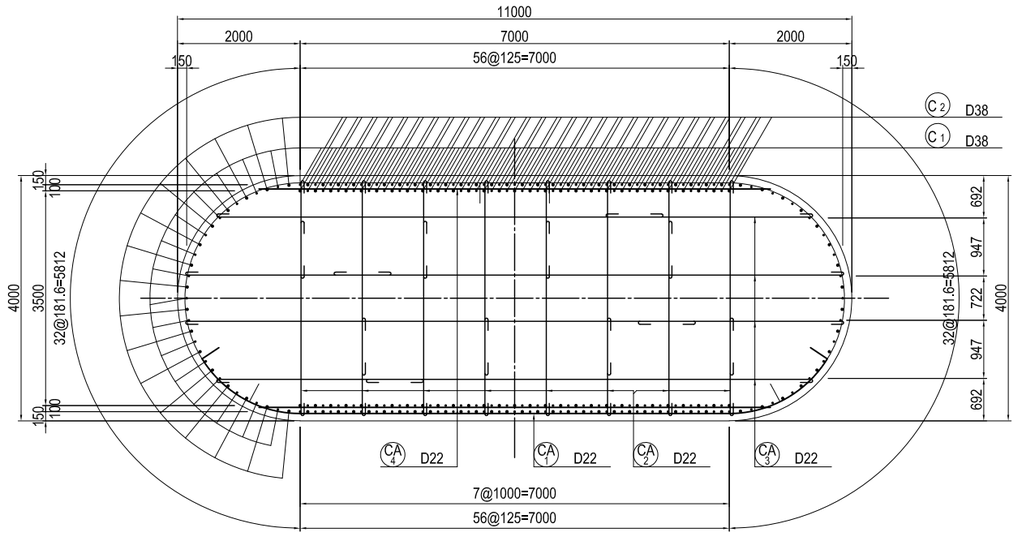
	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

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. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (12) / 2
CHECKED BY	T. HAYAKAWA		28 Nov.2017	DWG No.
APPROVED BY	Y. SANO		29 Nov.2017	P2-SB-2114

BAR ARRANGEMENT OF P15 PIER (13) S=1:100

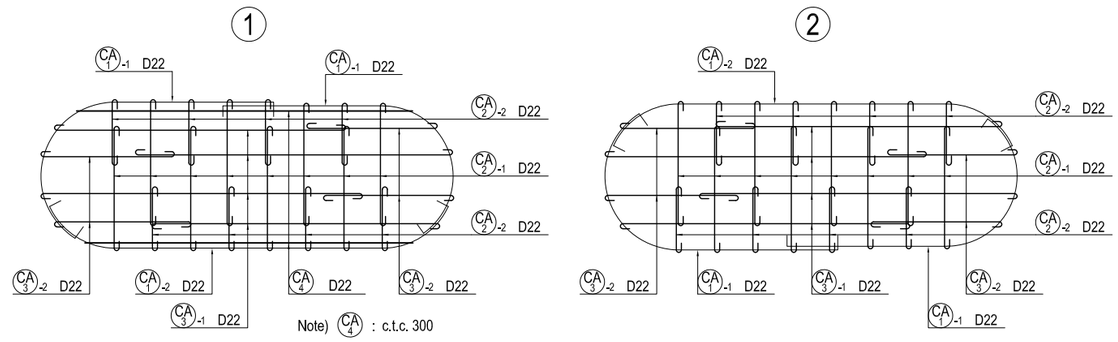
COLUMN

PLAN
5 - 5

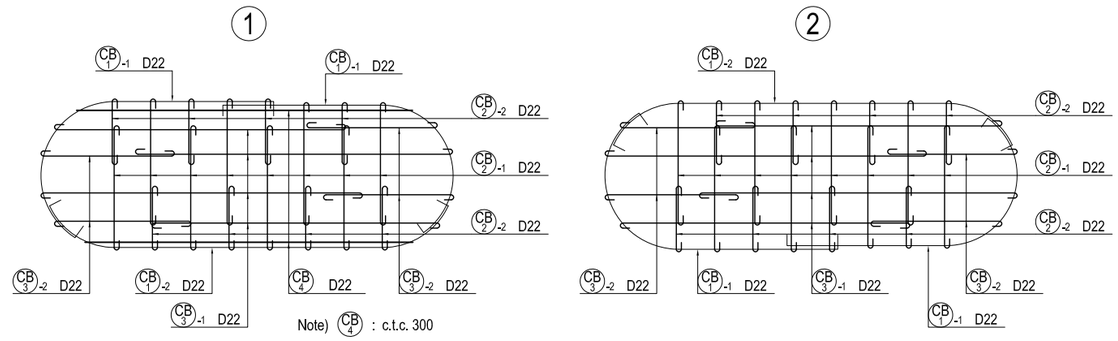


ASSEMBLY DRAWING OF HOOP
(c.t.c. 150)

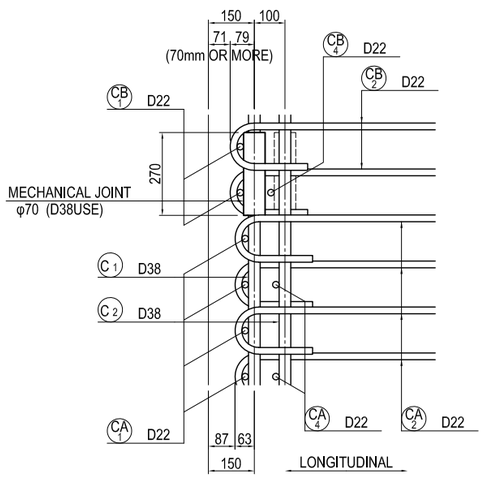
【STANDARD PART】



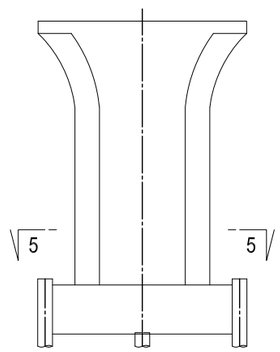
【MECHANICAL JOINT PART】



DETAIL OF COLUMN S=1:20



MARKING DIAGRAM



USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

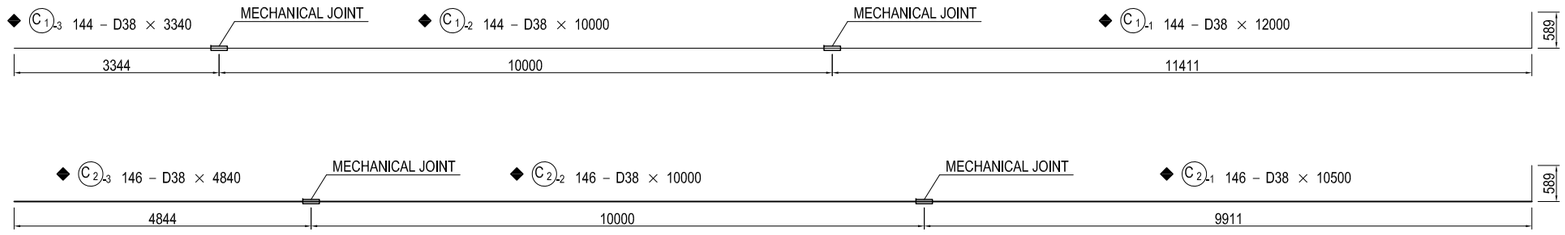
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

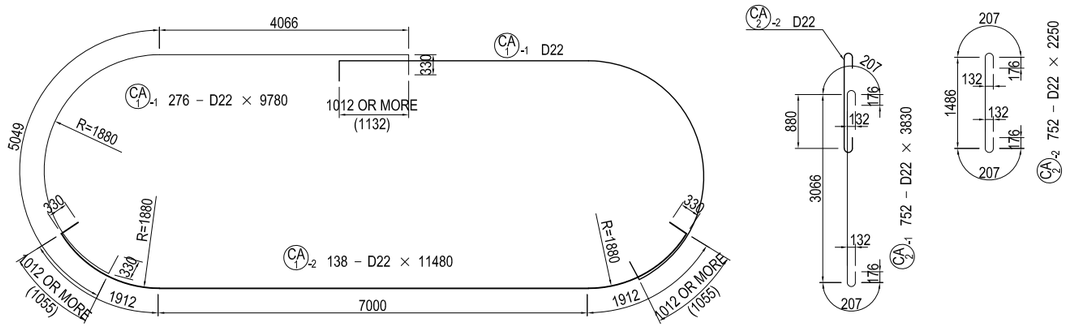
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

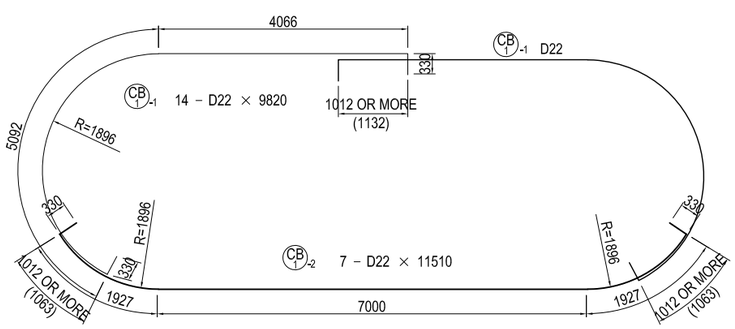
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 PIER (13)	2
	DWG No.
	P2-SB-2115

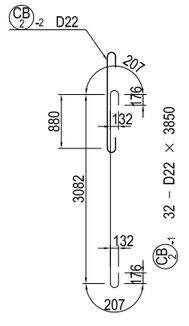
BAR ARRANGEMENT OF P15 PIER (14) S=1:100

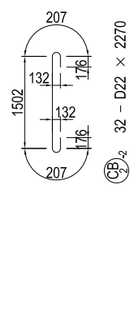
COLUMN

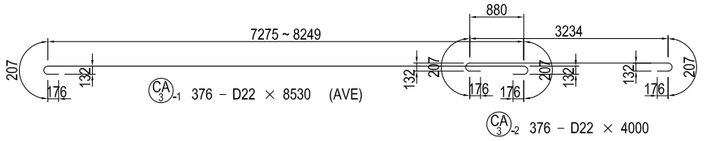


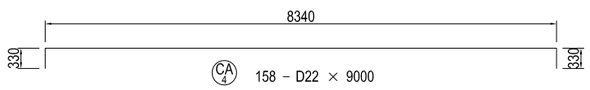


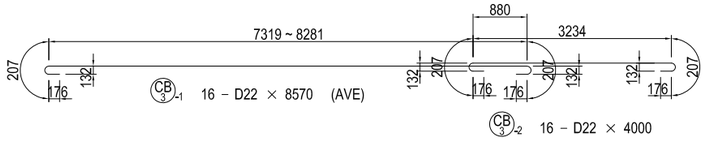


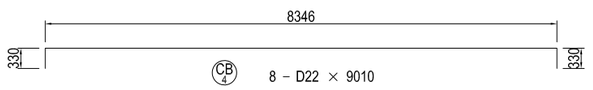




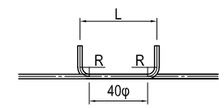








LAP LENGTH LIST OF HOOP



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

Notes) 1. ◆ : SD390
2. —▭— : MECHANICAL JOINT

USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	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
				PREPARED BY	S. IMADA / 27 Nov.2017
				CHECKED BY	T. HAYAKAWA / 28 Nov.2017
				APPROVED BY	Y. SANO / 29 Nov.2017

DRAWING TITLE: BAR ARRANGEMENT OF P15 PIER (14)

PACKAGE: 2

DWG No.: P2-SB-2116

BAR ARRANGEMENT OF P15 PIER (15) NOT TO SCALE

BAR SCHEDULE (SD390)

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
C 1-1	D38	12000	144	8.95	107.40	15466	(144)
1-2	"	10000	144	"	89.50	12888	(144)
1-3	"	3340	144	"	29.89	4304	
2-1	"	10500	146	"	93.98	13721	(146)
2-2	"	10000	146	"	89.50	13067	(146)
2-3	"	4840	146	"	43.32	6325	
					SUBTOTAL	65771 kg	
							(MECHANICAL JOINT)
	SD390		D38		65771 kg		(580)
			TOTAL		65771 kg		(580)

BAR SCHEDULE (SD345)

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
B 1-1	D32	11000	19	6.23	68.53	1302	
1-2	"	8000	19	"	49.84	947	
2-1	"	11500	4	"	71.65	287	
2-2	"	7470	4	"	46.54	186	(AVE)
3-1	"	12000	2	"	74.76	150	
3-2	"	6500	2	"	40.50	81	
4-1	"	11500	6	"	71.65	430	
4-2	"	7000	6	"	43.61	262	
5-1	"	8920	4	"	55.57	222	
5-2	"	9500	4	"	59.19	237	
6-1	"	9000	2	"	56.07	112	
6-2	"	9500	2	"	59.19	118	
7-1	"	6000	2	"	37.38	75	
7-2	"	12000	2	"	74.76	150	
8-1	"	12000	7	"	74.76	523	
8-2	"	7000	7	"	43.61	305	
9	"	9500	6	"	59.19	355	
10-1	"	7000	2	"	43.61	87	
10-2	"	12000	2	"	74.76	150	
11-1	"	12000	2	"	74.76	150	
11-2	"	6000	2	"	37.38	75	
12-1	"	10740	8	"	66.91	535	(AVE)
12-2	"	6500	8	"	40.50	324	
12-3	"	8920	8	"	55.57	445	(AVE)
13-1	"	11460	4	"	71.40	286	(AVE)
13-2	"	6500	4	"	40.50	162	
13-3	"	9640	4	"	60.06	240	(AVE)
14-1	"	11500	2	"	71.65	143	
14-2	"	11000	2	"	68.53	137	
15-1	D22	11500	6	3.04	34.96	210	
15-2	"	11500	6	"	34.96	210	
16-1	"	9300	12	"	28.27	339	(AVE)
16-2	"	10640	12	"	32.35	388	(AVE)
17-1	"	10400	13	"	31.62	411	(AVE)
17-2	"	10940	26	"	33.26	865	(AVE)
18-1	"	8500	1	"	25.84	26	
18-2	"	9500	1	"	28.88	29	
18-3	"	12000	1	"	36.48	36	
					SUBTOTAL	10990 kg	
BA 1-1	D22	8570	49	3.04	26.05	1276	
1-2	"	10870	49	"	33.04	1619	
2-1	"	7000	49	"	21.28	1043	
2-2	"	10660	49	"	32.41	1588	
3	"	4470	49	"	13.59	666	
4-1	D16	3500	49	1.56	5.46	268	
4-2	"	2040	49	"	3.18	156	
5	"	2690	98	"	4.20	412	
					SUBTOTAL	7028 kg	

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BB 1-1	D22	8540	18	3.04	25.96	467	
1-2	"	8160	18	"	24.81	447	(AVE)
1-3	"	8240	18	"	25.05	451	(AVE)
2-1	"	10660	18	"	32.41	583	
2-2	"	7000	18	"	21.28	383	
3-1	D16	3500	18	1.56	5.46	98	
3-2	"	2040	18	"	3.18	57	"
4	"	2690	36	"	4.20	151	"
					SUBTOTAL	2637 kg	
BC 1-1	D22	9950	6	3.04	30.25	182	(AVE)
1-2	"	7630	6	"	23.20	139	(AVE)
1-3	"	5730	6	"	17.42	105	(AVE)
2	"	3960	24	"	12.04	289	(AVE)
3-1	D16	3500	6	1.56	5.46	33	
3-2	"	2040	6	"	3.18	19	"
4	"	2690	12	"	4.20	50	"
					SUBTOTAL	817 kg	
BD 1-1	D22	9420	12	3.04	28.64	344	(AVE)
1-2	"	8250	12	"	25.08	301	(AVE)
2	"	2980	48	"	9.06	435	(AVE)
3-1	D16	3500	12	1.56	5.46	66	
3-2	"	2040	12	"	3.18	38	"
4	"	2690	24	"	4.20	101	"
					SUBTOTAL	1285 kg	
BE 1-1	D22	9620	6	3.04	29.24	175	(AVE)
1-2	"	4990	6	"	15.17	91	(AVE)
2	"	2280	24	"	6.93	166	(AVE)
3-1	D16	3500	6	1.56	5.46	33	
3-2	"	2040	6	"	3.18	19	"
4	"	2690	12	"	4.20	50	"
					SUBTOTAL	534 kg	
BF 1	D22	6010	8	3.04	18.27	146	
2-1	"	5850	8	"	17.78	142	(AVE)
2-2	"	2790	8	"	8.48	68	(AVE)
3	"	1980	16	"	6.02	96	(AVE)
4	"	4470	8	"	13.59	109	
5-1	D16	3500	8	1.56	5.46	44	
5-2	"	2040	8	"	3.18	25	"
					SUBTOTAL	630 kg	
BG 1	D22	6010	8	3.04	18.27	146	
2-1	"	4390	10	"	13.35	134	(AVE)
2-2	"	2390	10	"	7.27	73	(AVE)
3	"	1700	40	"	5.17	207	(AVE)
4	"	4470	8	"	13.59	109	
5-1	D16	3500	8	1.56	5.46	44	
5-2	"	2040	8	"	3.18	25	"
					SUBTOTAL	738 kg	

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
BH 1	D22	5910	4	3.04	17.97	72	(AVE)
2-1	"	2290	2	"	6.96	14	
2-2	"	3030	2	"	9.21	18	
3	"	4370	4	"	13.28	53	(AVE)
4-1	D16	3500	4	1.56	5.46	22	
4-2	"	1940	4	"	3.03	12	(AVE)
					SUBTOTAL	191 kg	
H 1	D16	2850	68	1.56	4.45	303	
2	"	3070	60	"	4.79	287	"
3	"	8050	4	"	12.56	50	
					SUBTOTAL	640 kg	
CA 1-1	D22	9780	276	3.04	29.73	8205	
1-2	"	11480	138	"	34.90	4816	
2-1	"	3830	752	"	11.64	8753	
2-2	"	2250	752	"	6.84	5144	"
3-1	"	8530	376	"	25.93	9750	(AVE)
3-2	"	4000	376	"	12.16	4572	"
4	"	9000	158	"	27.36	4323	
					SUBTOTAL	45563 kg	
CB 1-1	D22	9820	14	3.04	29.85	418	
1-2	"	11510	7	"	34.99	245	
2-1	"	3850	32	"	11.70	374	
2-2	"	2270	32	"	6.90	221	"
3-1	"	8570	16	"	26.05	417	(AVE)
3-2	"	4000	16	"	12.16	195	"
4	"	9010	8	"	27.39	219	
					SUBTOTAL	2089 kg	
	SD345		D32		8476 kg		
			D22		62303 "		
			D16		2363 "		
			TOTAL		73142 kg		

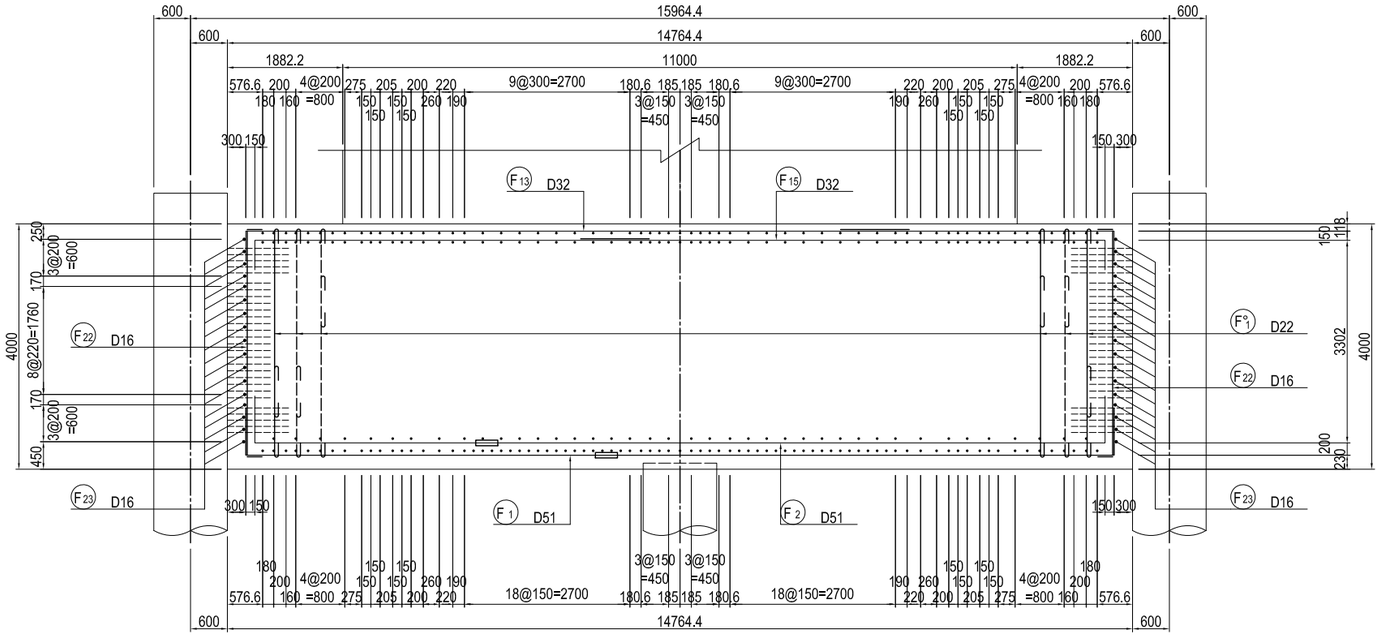
USE MATERIALS

	CONCRETE	BAR	
COLUMN	σck = 30 N/mm²	MAIN BAR	SD390
		OTHERS	SD345

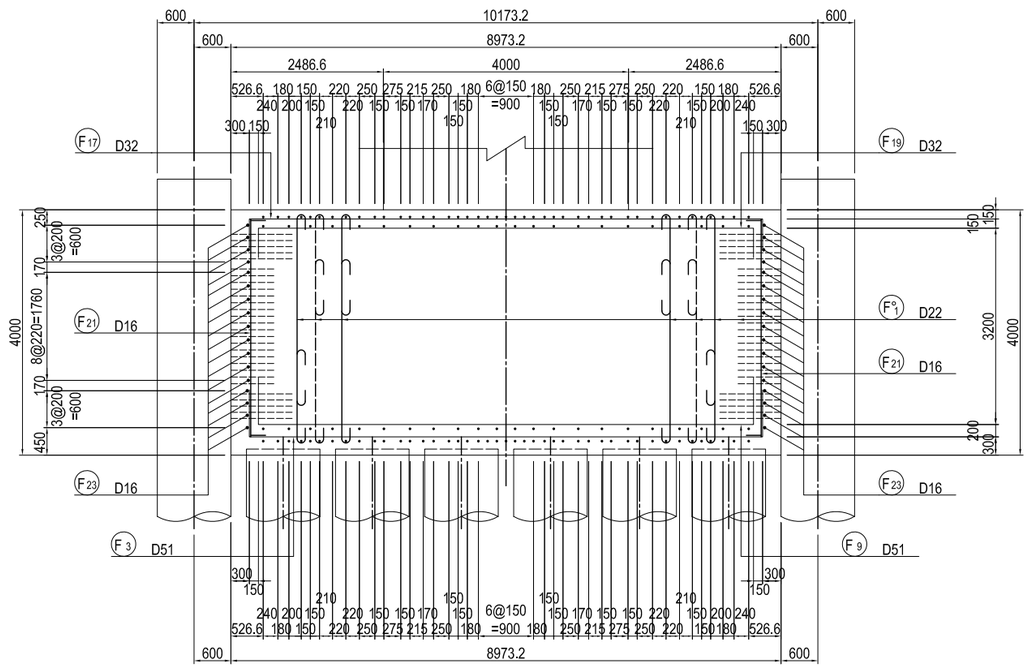
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT			
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY			
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE			
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.			
	NAME	SIGNATURE	DATE	DRAWING TITLE / PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 PIER (15) / 2
CHECKED BY	T. HAYAKAWA		28 Nov.2017	DWG No.
APPROVED BY	Y. SANO		29 Nov.2017	P2-SB-2117

BAR ARRANGEMENT OF P15 FOOTING (1) S=1:100

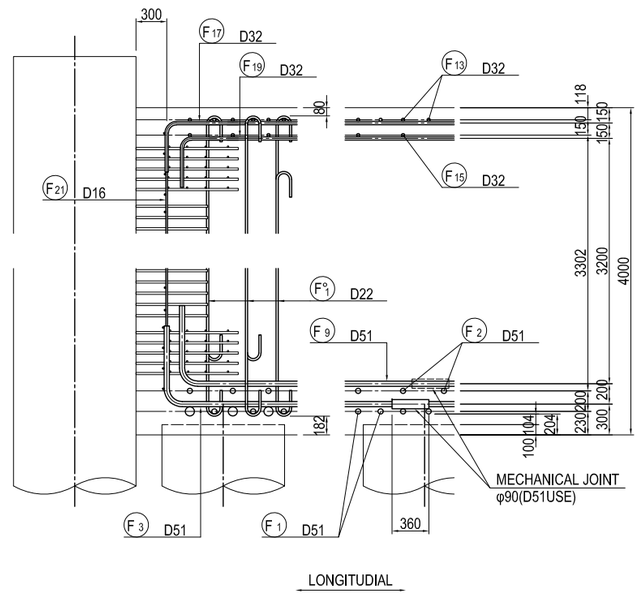
SECTION 1 - 1



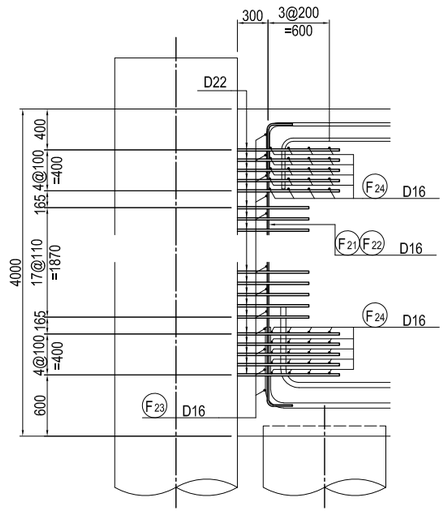
SECTION 2 - 2



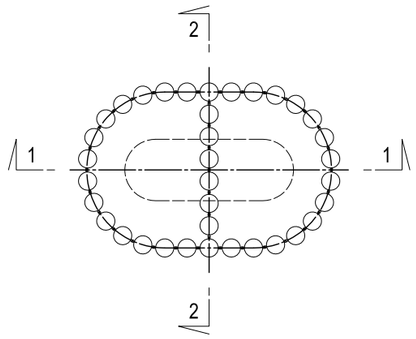
DETAIL OF PILE CAP S=1:60



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



MARKING DIAGRAM



Note) : MECHANICAL JOINT

USE MATERIALS

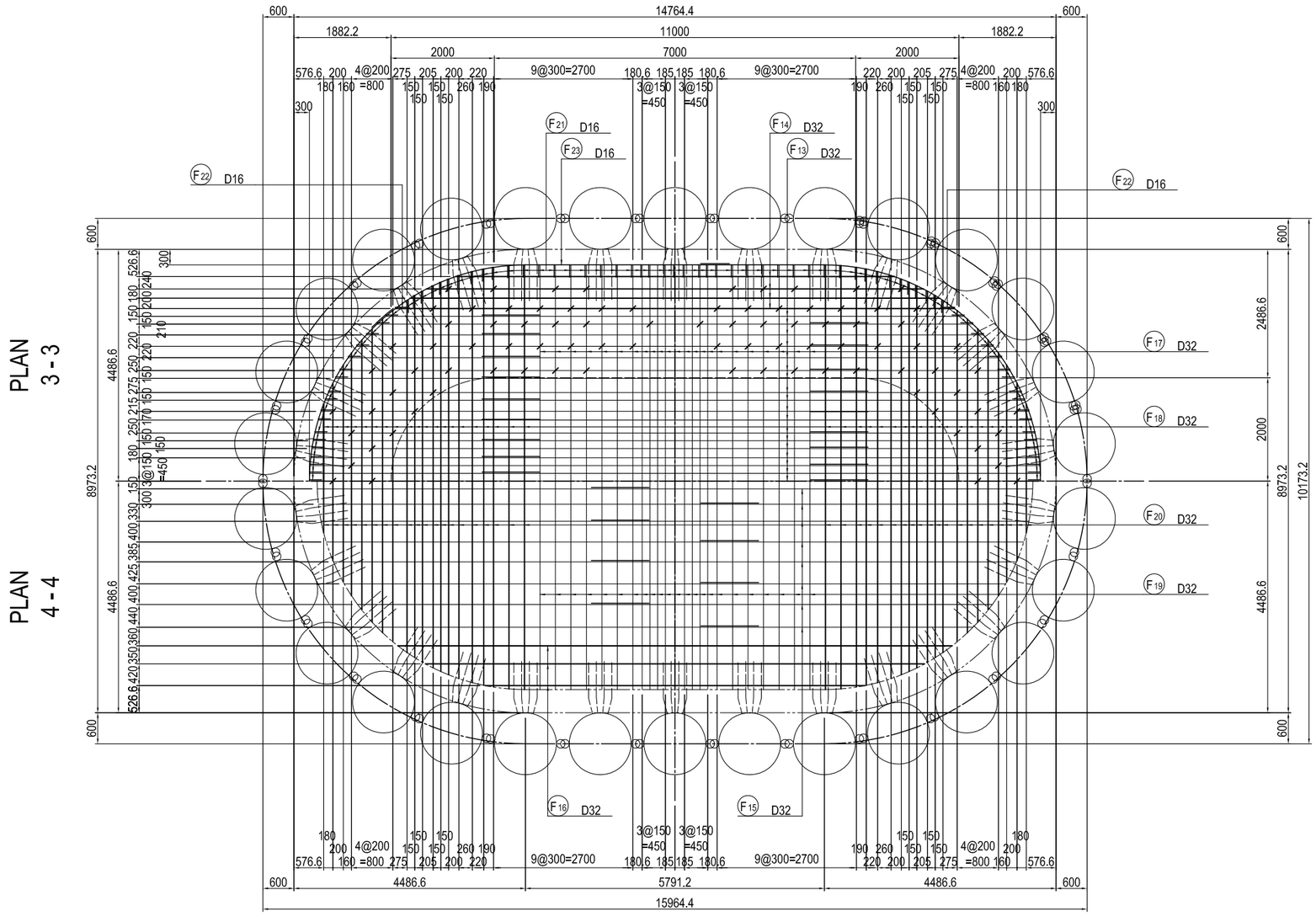
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

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.		

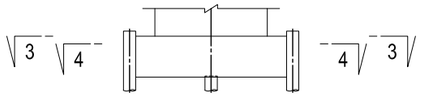
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 FOOTING (1)	2
	DWG No.
	P2-SB-2118

BAR ARRANGEMENT OF P15 FOOTING (2) S=1:100



MARKING DIAGRAM



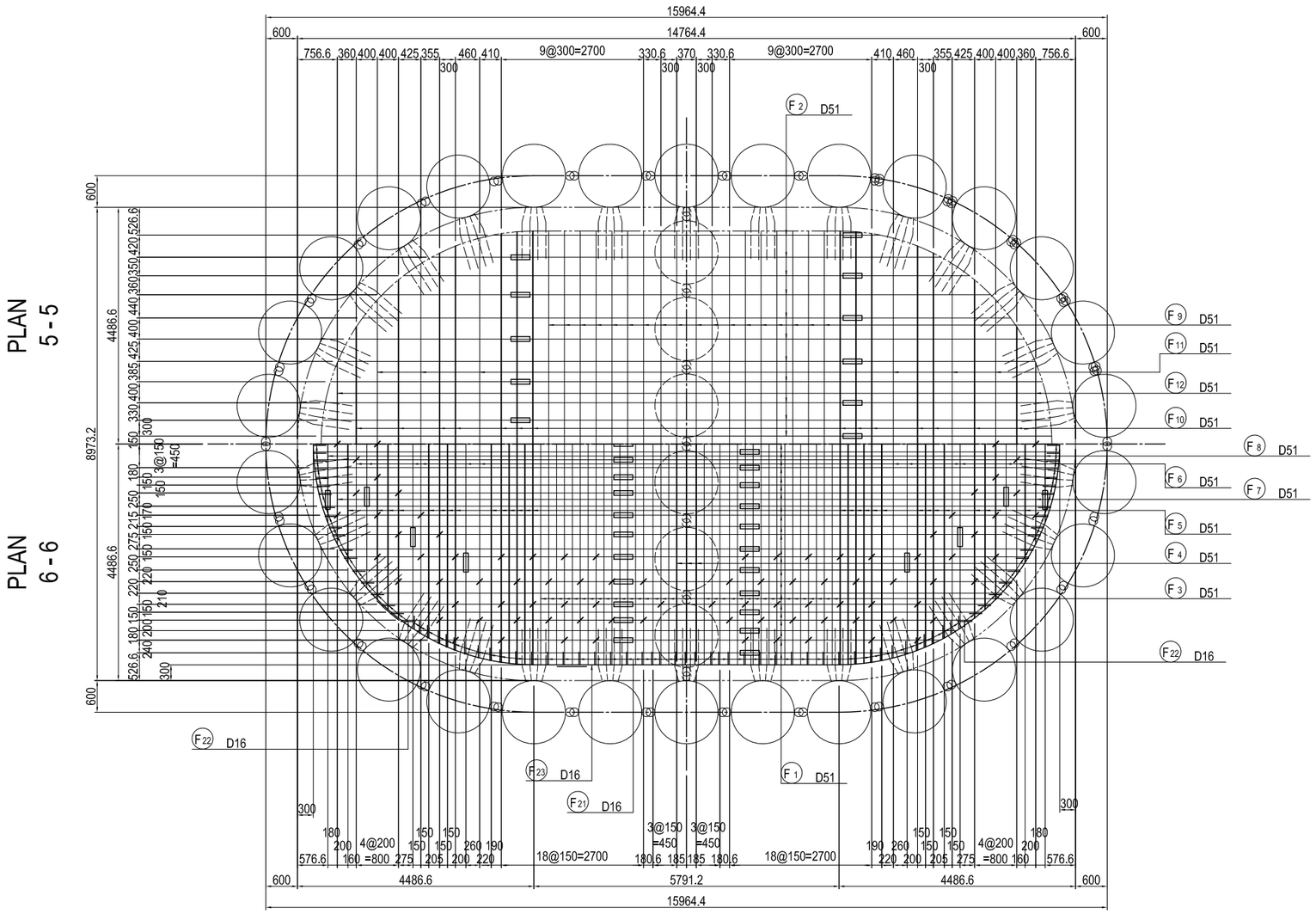
USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm 2	SD345

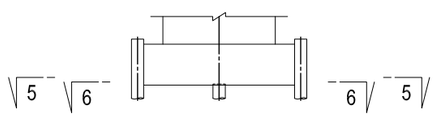
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 FOOTING (2)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2119

BAR ARRANGEMENT OF P15 FOOTING (3) S=1:100



MARKING DIAGRAM



USE MATERIALS

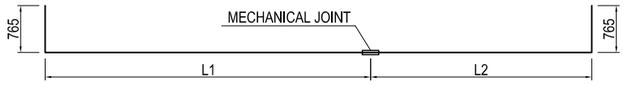
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

Note) : MECHANICAL JOINT

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
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.		

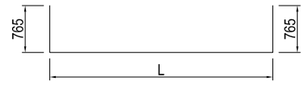
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	BAR ARRANGEMENT OF P15 FOOTING (3)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2120

BAR ARRANGEMENT OF P15 FOOTING (4) S=1:100



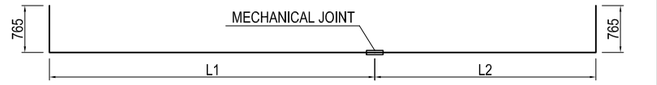
(F1)-1 43 – D51 × 8270 （AVE）　(F1)-2 43 – D51 × 5870 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F1 -1 1	D51	1	8282	9047	F1 -2 1	D51	1	5882	6647
2	"	2	8280	9045	2	"	2	5880	6645
3	"	2	8271	9036	3	"	2	5871	6636
4	"	2	8258	9023	4	"	2	5858	6623
5	"	2	8235	9000	5	"	2	5835	6600
6	"	2	8209	8974	6	"	2	5809	6574
7	"	2	8178	8943	7	"	2	5778	6543
8	"	2	8112	8877	8	"	2	5712	6477
9	"	2	8059	8824	9	"	2	5659	6424
10	"	2	7979	8744	10	"	2	5579	6344
11	"	2	7915	8680	11	"	2	5515	6280
12	"	2	7779	8544	12	"	2	5379	6144
13	"	2	7694	8459	13	"	2	5294	6059
14	"	2	7533	8298	14	"	2	5133	5898
15	"	2	7369	8134	15	"	2	4969	5734
16	"	2	7181	7946	16	"	2	4781	5546
17	"	2	6974	7739	17	"	2	4574	5339
18	"	2	6807	7572	18	"	2	4407	5172
19	"	2	6620	7385	19	"	2	4220	4985
20	"	2	6331	7096	20	"	2	3931	4696
21	"	2	6016	6781	21	"	2	3616	4381
22	"	2	5454	6219	22	"	2	3054	3819
AVE		43		8272	AVE		43		5872



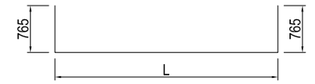
(F5) 28 – D51 × 8930 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F5 1	D51	2	8373	9903
2	"	2	8366	9896
3	"	2	8349	9879
4	"	2	8320	9850
5	"	2	8281	9811
6	"	2	8215	9745
7	"	2	7825	9355
8	"	2	7704	9234
9	"	2	7569	9099
10	"	2	7361	8891
11	"	2	6610	8140
12	"	2	6278	7808
13	"	2	5901	7431
14	"	2	4502	6032
AVE		28		8934



(F2)-1 22 – D51 × 9940 （AVE）　(F2)-2 22 – D51 × 3640 （AVE）

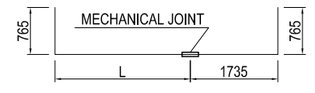
MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F2 -1 1	D51	2	10079	10844	F2 -2 1	D51	2	3779	4544
2	"	2	10057	10822	2	"	2	3757	4522
3	"	2	10006	10771	3	"	2	3706	4471
4	"	2	9906	10671	4	"	2	3606	4371
5	"	2	9766	10531	5	"	2	3466	4231
6	"	2	9558	10323	6	"	2	3258	4023
7	"	2	9299	10064	7	"	2	2999	3764
8	"	2	8924	9689	8	"	2	2624	3389
9	"	2	8519	9284	9	"	2	2219	2984
10	"	2	7985	8750	10	"	2	1685	2450
11	"	2	6828	7593	11	"	2	528	1293
AVE		22		9940	AVE		22		3640



(F10) 14 – D51 × 8600 （AVE）

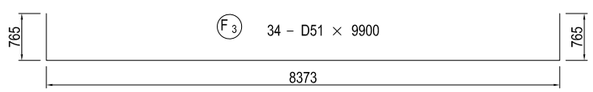
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F10 1	D51	2	8073	9603
2	"	2	8048	9578
3	"	2	7977	9507
4	"	2	7503	9033
5	"	2	7236	8766
6	"	2	6226	7756
7	"	2	4444	5974
AVE		14		8602

(F11)-2 6 – D51 × 2500

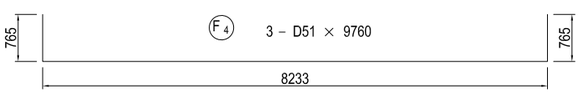


(F11)-1 6 – D51 × 5730 （AVE）

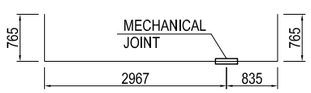
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F11 -1 1	D51	2	6071	6836
2	"	2	5104	5869
3	"	2	3732	4497
AVE		6		5734



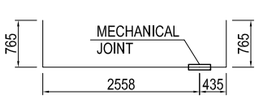
(F3) 34 – D51 × 9900



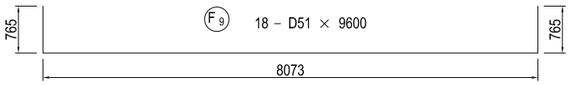
(F4) 3 – D51 × 9760



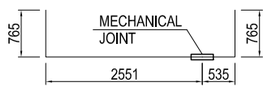
(F7)-1 2 – D51 × 3730　(F7)-2 2 – D51 × 1600



(F8)-1 2 – D51 × 3320　(F8)-2 2 – D51 × 1200



(F9) 18 – D51 × 9600



(F12)-1 2 – D51 × 3320　(F12)-2 2 – D51 × 1300

USE MATERIALS

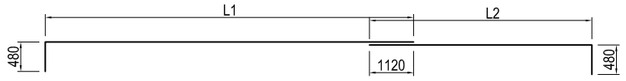
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

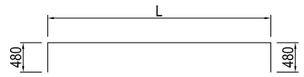
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 FOOTING (4)	2
	DWG No.
	P2-SB-2121

BAR ARRANGEMENT OF P15 FOOTING (5) S=1:100



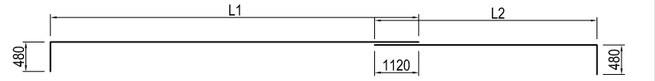
F13-1 35 – D32 × 10850 （AVE）　　F13-2 35 – D32 × 4490 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F13-1 1	D32	1	10822	11302	F13-2 1	D32	1	4462	4942
2	"	2	10820	11300	2	"	2	4460	4940
3	"	2	10811	11291	3	"	2	4451	4931
4	"	2	10798	11278	4	"	2	4438	4918
5	"	2	10775	11255	5	"	2	4415	4895
6	"	2	10749	11229	6	"	2	4389	4869
7	"	2	10718	11198	7	"	2	4358	4838
8	"	2	10652	11132	8	"	2	4292	4772
9	"	2	10599	11079	9	"	2	4239	4719
10	"	2	10519	10999	10	"	2	4159	4639
11	"	2	10455	10935	11	"	2	4095	4575
12	"	2	10319	10799	12	"	2	3959	4439
13	"	2	10234	10714	13	"	2	3874	4354
14	"	2	10073	10553	14	"	2	3713	4193
15	"	2	9909	10389	15	"	2	3549	4029
16	"	2	9721	10201	16	"	2	3361	3841
17	"	2	9514	9994	17	"	2	3154	3634
18	"	2	9347	9827	18	"	2	2987	3467
AVE		35		10847	AVE		35		4487



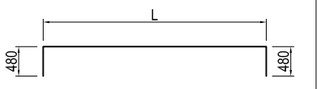
F18 40 – D32 × 7680 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F18 1	D32	2	8373	9333
2	"	2	8349	9309
3	"	2	8281	9241
4	"	2	8215	9175
5	"	2	8116	9076
6	"	2	7966	8926
7	"	2	7825	8785
8	"	2	7704	8664
9	"	2	7569	8529
10	"	2	7361	8321
11	"	2	7191	8151
12	"	2	7003	7963
13	"	2	6610	7570
14	"	2	6278	7238
15	"	2	5901	6861
16	"	2	5469	6429
17	"	2	4968	5928
18	"	2	4502	5462
19	"	2	3802	4762
20	"	2	2993	3953
AVE		40		7684



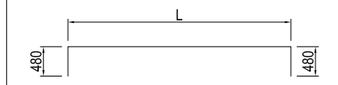
F15-1 16 – D32 × 8650 （AVE）　　F15-2 16 – D32 × 6530 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L1	TOTAL LENGTH ΣL	MARKS	DIA.	NOS. OF BARS	LENGTH L2	TOTAL LENGTH ΣL
F15-1 1	D32	2	8549	9029	F15-2 1	D32	2	6429	6909
2	"	2	8527	9007	2	"	2	6407	6887
3	"	2	8476	8956	3	"	2	6356	6836
4	"	2	8376	8856	4	"	2	6256	6736
5	"	2	8236	8716	5	"	2	6116	6596
6	"	2	8028	8508	6	"	2	5908	6388
7	"	2	7769	8249	7	"	2	5649	6129
8	"	2	7394	7874	8	"	2	5274	5754
AVE		16		8649	AVE		16		6529



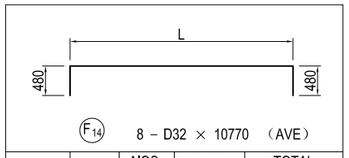
F16 6 – D32 × 10220 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F16 1	D32	2	10738	11698
2	"	2	9671	10631
3	"	2	7356	8316
AVE		6		10215



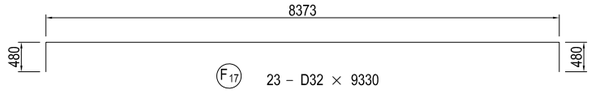
F20 40 – D32 × 7270 （AVE）

MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F20 1	D32	2	8073	9033
2	"	2	8048	9008
3	"	2	7977	8937
4	"	2	7909	8869
5	"	2	7806	8766
6	"	2	7650	8610
7	"	2	7503	8463
8	"	2	7377	8337
9	"	2	7236	8196
10	"	2	7018	7978
11	"	2	6839	7799
12	"	2	6641	7601
13	"	2	6226	7186
14	"	2	5872	6832
15	"	2	5467	6427
16	"	2	4998	5958
17	"	2	4444	5404
18	"	2	3916	4876
19	"	2	3086	4046
20	"	2	2006	2966
AVE		40		7265

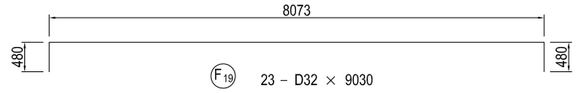


F14 8 – D32 × 10770 （AVE）

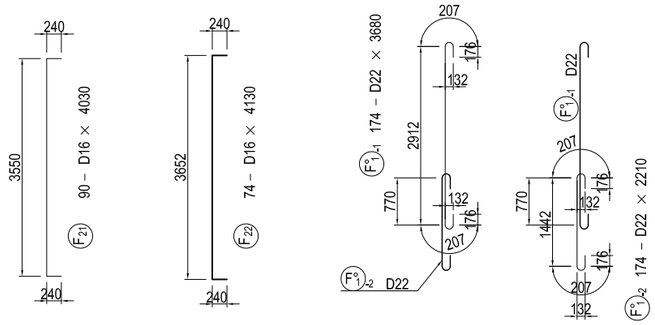
MARKS	DIA.	NOS. OF BARS	LENGTH L	TOTAL LENGTH ΣL
F14 1	D32	2	10840	11800
2	"	2	10262	11222
3	"	2	9633	10593
4	"	2	8509	9469
AVE		8		10771



F17 23 – D32 × 9330



F19 23 – D32 × 9030



USE MATERIALS

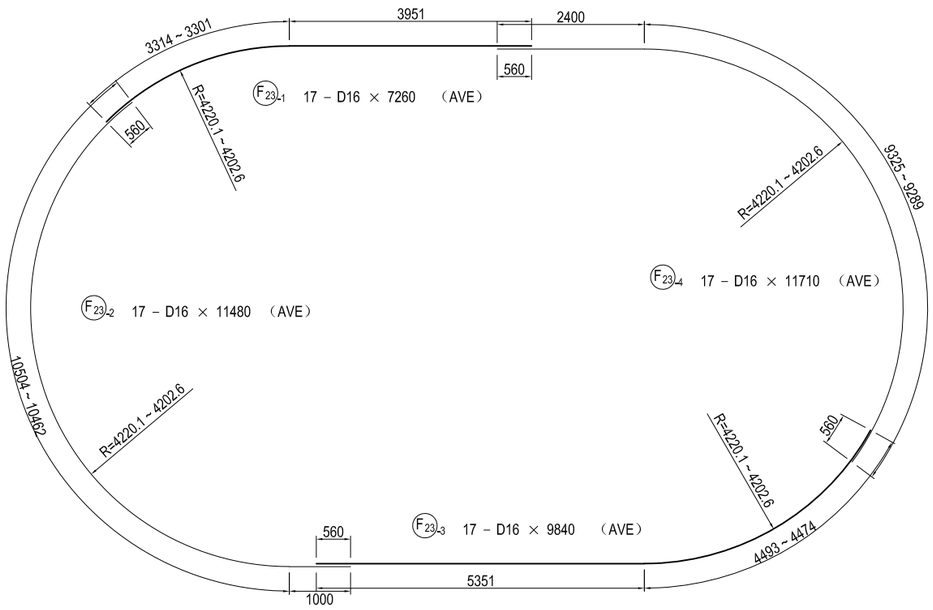
	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

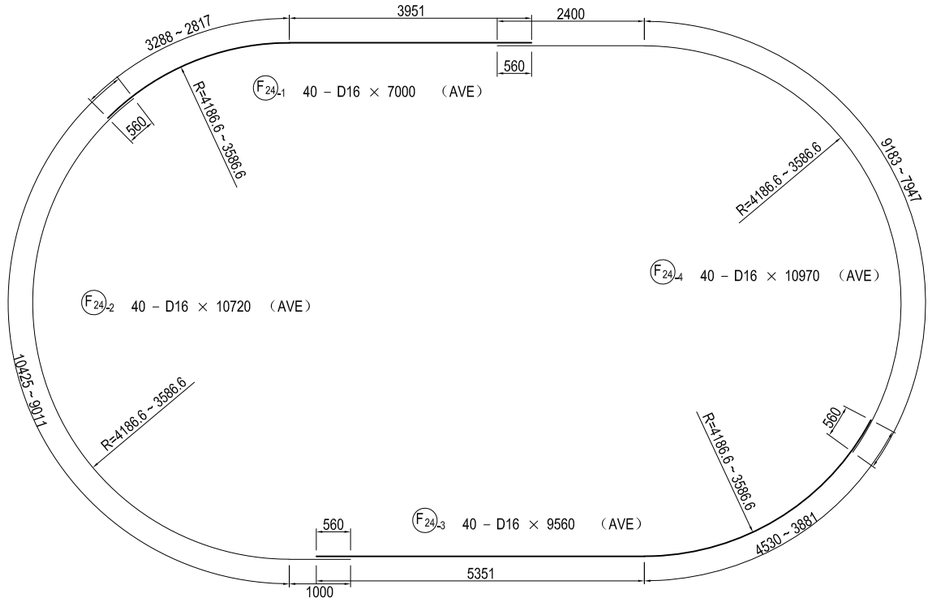
PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 FOOTING (5)	2
	DWG No.
	P2-SB-2122

BAR ARRANGEMENT OF P15 FOOTING (6) S=1:100





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

BAR SCHEDULE

MARKS	DIA.	LENGTH (mm)	NOS. OF BARS	UNIT WEIGHT (kg/m)	WEIGHT/EA. (kg)	WEIGHT (kg)	REMARKS
F 1-1	D51	8270	43	15.9	131.49	5654	(43) (AVE)
1-2	"	5870	43	"	93.33	4013	(AVE)
2-1	"	9940	22	"	158.05	3477	(22) (AVE)
2-2	"	3640	22	"	57.88	1273	(AVE)
3	"	9900	34	"	157.41	5352	
4	"	9760	3	"	155.18	466	"
5	"	8930	28	"	141.99	3976	" (AVE)
6-1	"	5820	12	"	92.54	1110	(12) (AVE)
6-2	"	2500	12	"	39.75	477	
7-1	"	3730	2	"	59.31	119	(2)
7-2	"	1600	2	"	25.44	51	
8-1	"	3320	2	"	52.79	106	(2)
8-2	"	1200	2	"	19.08	38	
9	"	9600	18	"	152.64	2748	
10	"	8600	14	"	136.74	1914	" (AVE)
11-1	"	5730	6	"	91.11	547	(6) (AVE)
11-2	"	2500	6	"	39.75	239	
12-1	"	3320	2	"	52.79	106	(2)
12-2	"	1300	2	"	20.67	41	
13-1	D32	10850	35	6.23	67.60	2366	(AVE)
13-2	"	4490	35	"	27.97	979	(AVE)
14	"	10770	8	"	67.10	537	(AVE)
15-1	"	8650	16	"	53.89	862	(AVE)
15-2	"	6530	16	"	40.68	651	(AVE)
16	"	10220	6	"	63.67	382	(AVE)
17	"	9330	23	"	58.13	1337	"
18	"	7680	40	"	47.85	1914	" (AVE)
19	"	9030	23	"	56.26	1294	"
20	"	7270	40	"	45.29	1812	" (AVE)
21	D16	4030	90	1.56	6.29	566	
22	"	4130	74	"	6.44	477	"
23-1	"	7260	17	"	11.33	193	(AVE)
23-2	"	11480	17	"	17.91	304	(AVE)
23-3	"	9840	17	"	15.35	261	(AVE)
23-4	"	11710	17	"	18.27	311	(AVE)
24-1	"	7000	40	"	10.92	437	(AVE)
24-2	"	10720	40	"	16.72	669	(AVE)
24-3	"	9560	40	"	14.91	596	(AVE)
24-4	"	10970	40	"	17.11	684	(AVE)
					SUBTOTAL	48339 kg	
F° 1-1	D22	3680	174	3.04	11.19	1947	
1-2	"	2210	174	"	6.72	1169	"
					SUBTOTAL	3116 kg	
							(MECHANICAL JOINT)
				D51	31707 kg		(89)
				D32	12134 "		
				D22	3116 "		
				D16	4498 "		
				TOTAL	51455 kg		(89)

USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	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
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

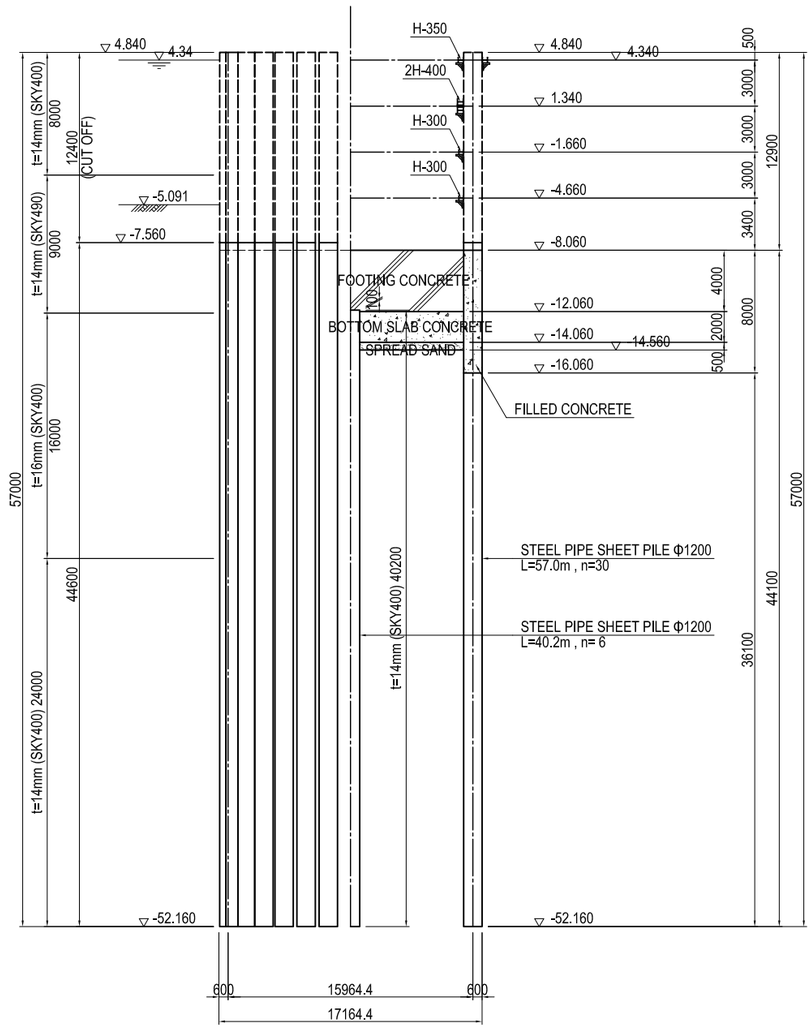
DRAWING TITLE	PACKAGE
BAR ARRANGEMENT OF P15 FOOTING (6)	2
	DWG No.
	P2-SB-2123

GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P15 PIER

S=1:400

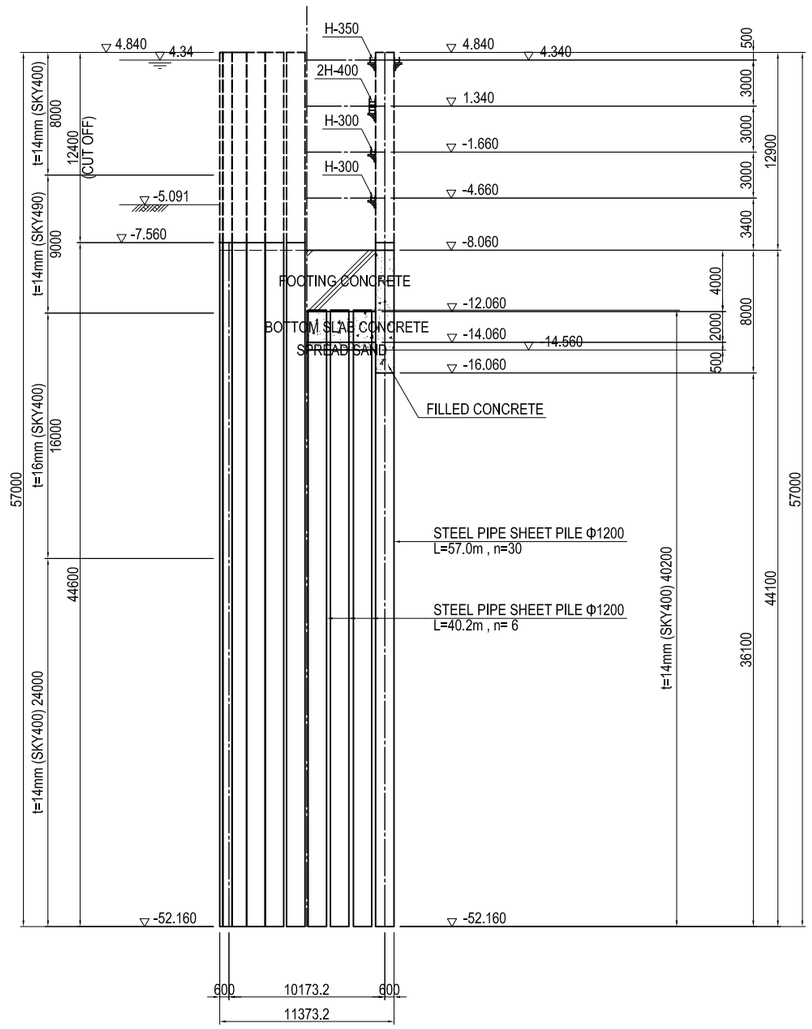
FRONT ELEVATION

1 - 1 2 - 2

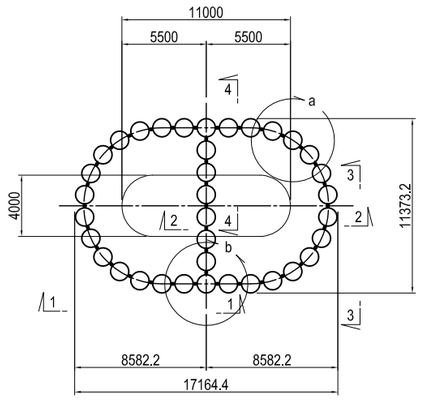


SIDE ELEVATION

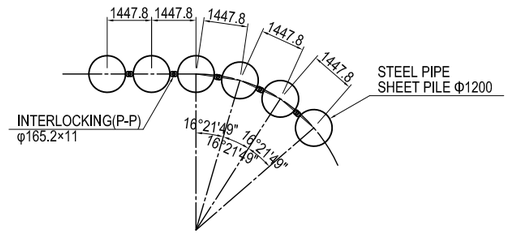
3 - 3 4 - 4



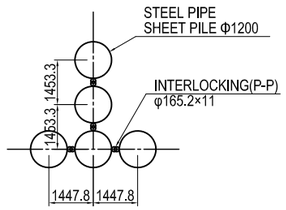
PLAN



DETAIL a S=1:200



DETAIL b S=1:200



USE MATERIALS

	CONCRETE	BAR
FOOTING	σck = 24 N/mm²	SD345

Note: Temporary support can be used for reference only.

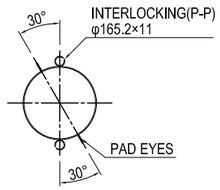
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	GENERAL VIEW OF STEEL PIPE SHEET PILE FOUNDATION OF P15 PIER	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2124

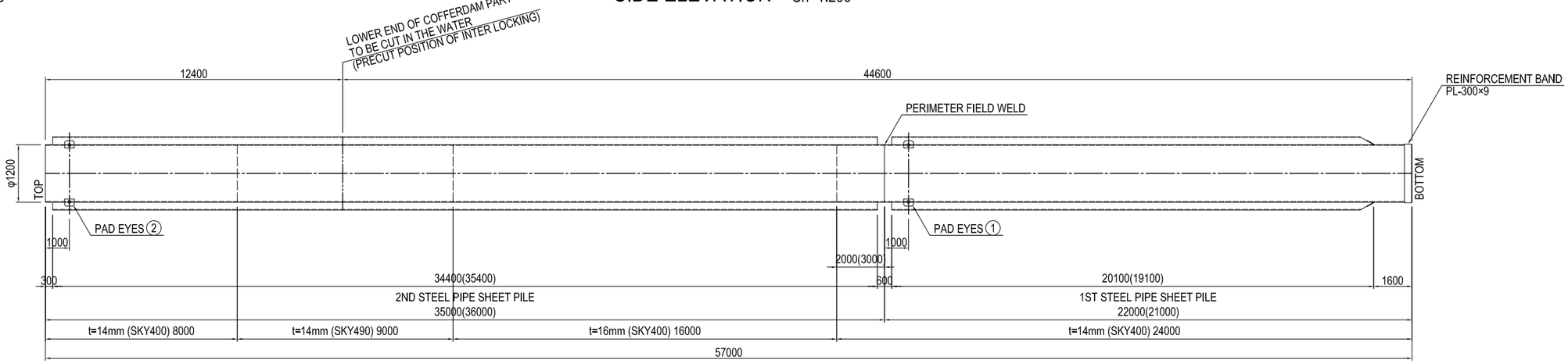
DETAIL OF STEEL PIPE SHEET PILE OF P15 PIER (1)

CROSS SECTION S=1:200

TYPE A
(TYPE B)

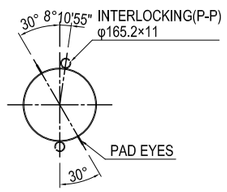


SIDE ELEVATION Sv=1:100 Sh=1:200

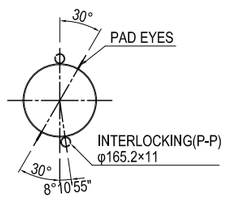


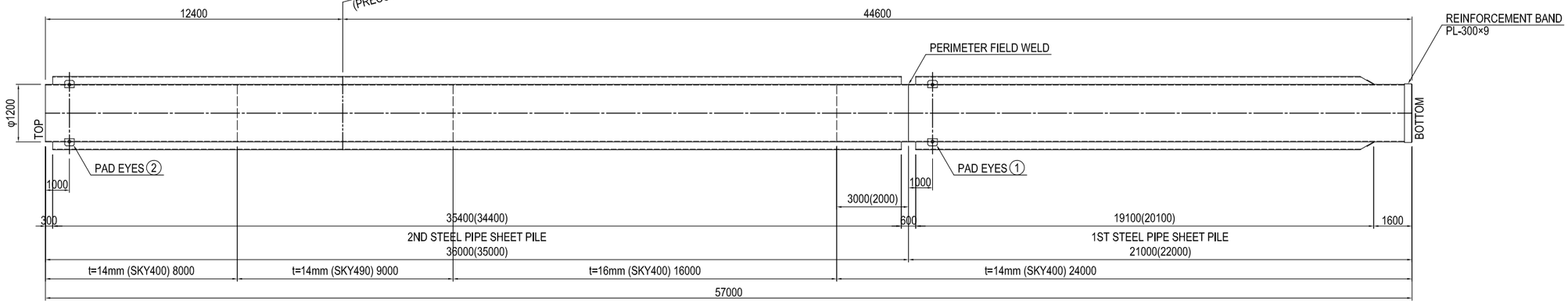
CROSS SECTION S=1:200

TYPE C
(TYPE D)

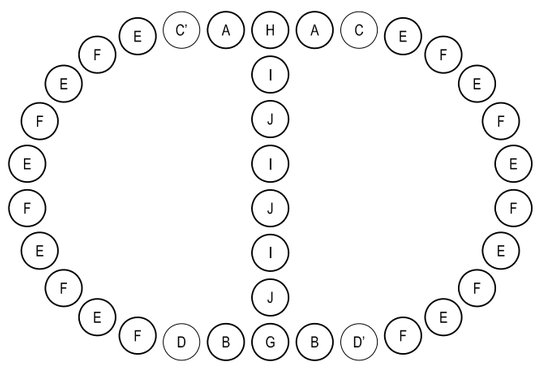


TYPE C'
(TYPE D')



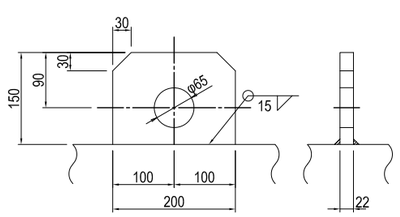


STEEL PIPE SHEET PILE TYPE AND POSITION

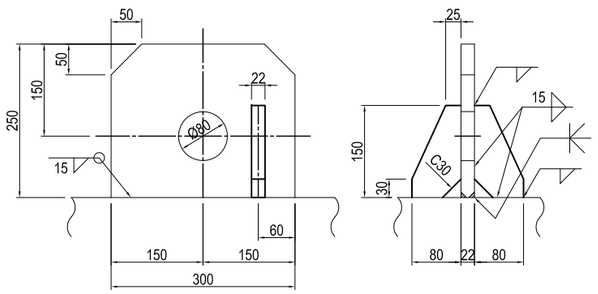


DETAIL OF EYES S=1:10

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.

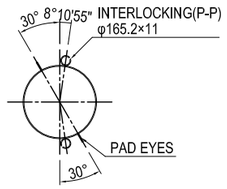
PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	DETAIL OF STEEL PIPE SHEET PILE OF P15 PIER (1)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2125

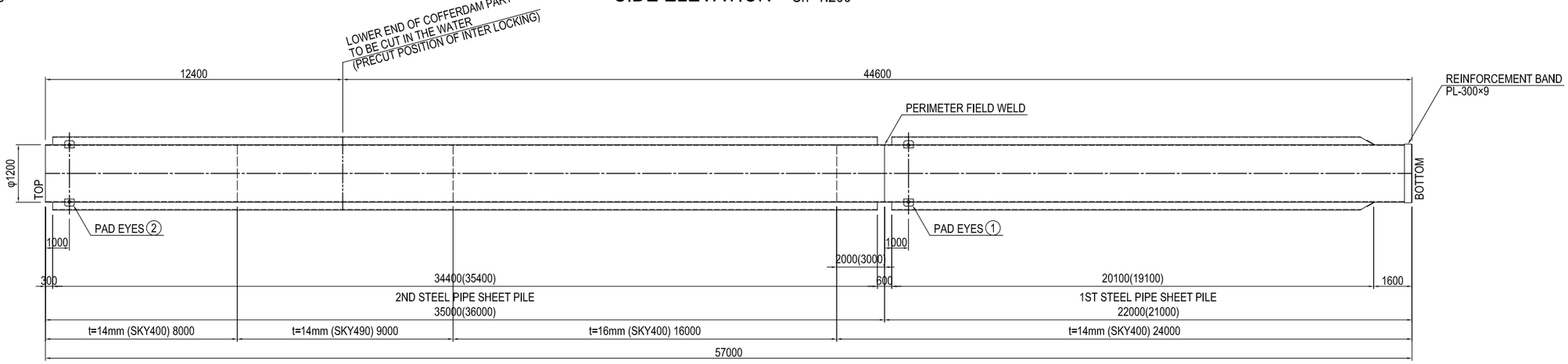
DETAIL OF STEEL PIPE SHEET PILE OF P15 PIER (2)

CROSS SECTION S=1:200

TYPE E
(TYPE F)

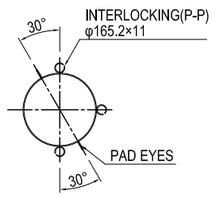


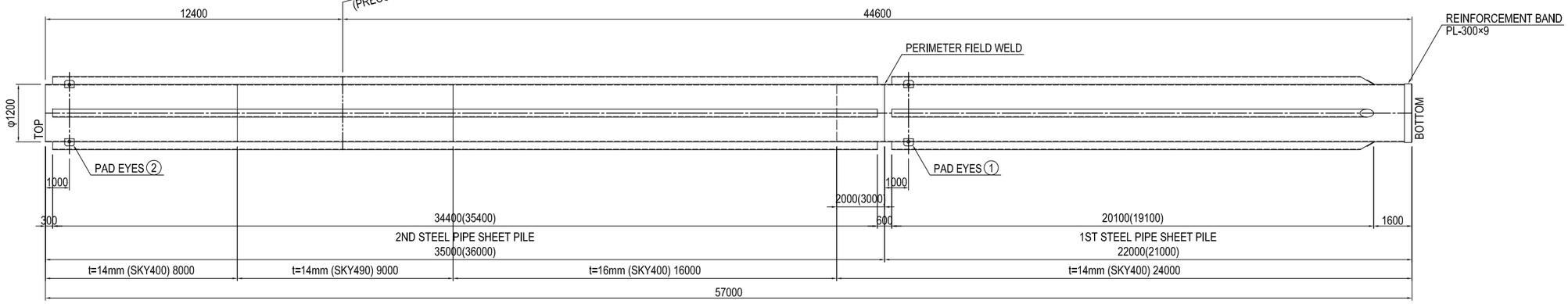
SIDE ELEVATION Sv=1:100 Sh=1:200



CROSS SECTION S=1:200

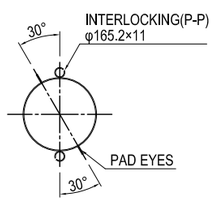
TYPE G
(TYPE H)

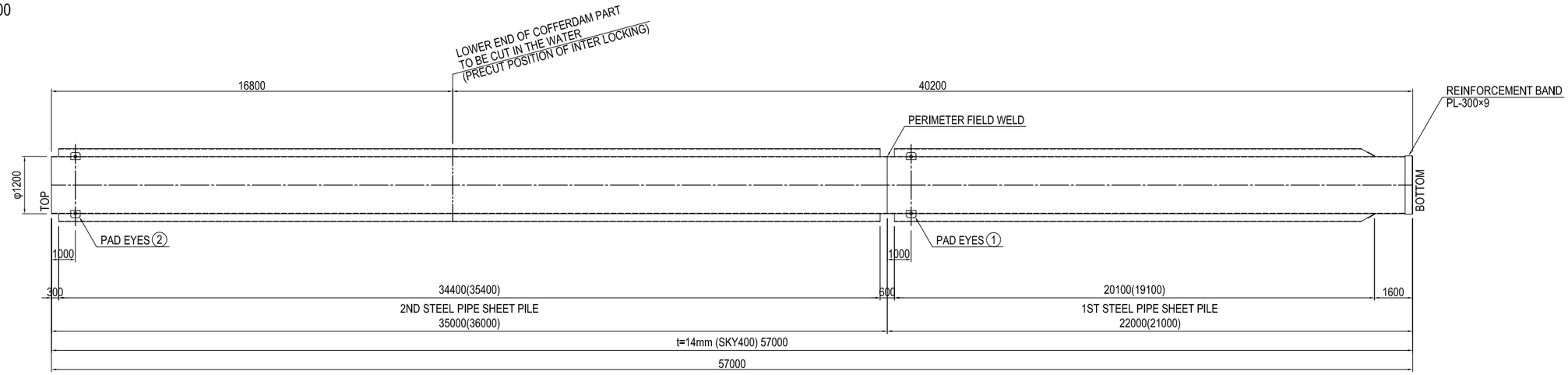




CROSS SECTION S=1:200

TYPE I
(TYPE J)





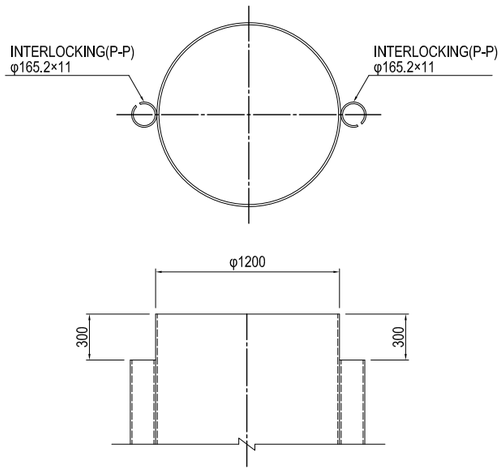
Note: Drawing of Pad Eye (metal fitting for hanging) and the position of perimeter field weld can be used for reference only.

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.		

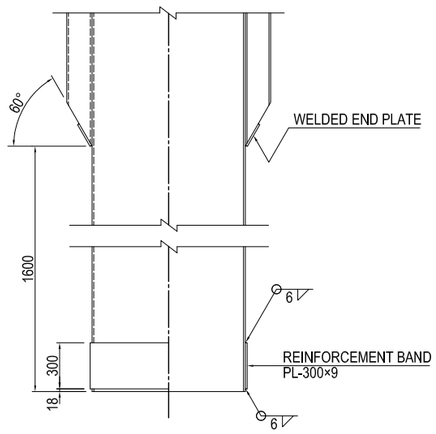
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	DETAIL OF STEEL PIPE SHEET PILE OF P15 PIER (2)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2126

DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P15 PIER

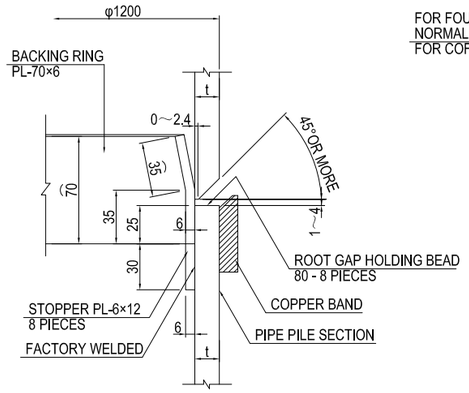
DETAIL OF STEEL PIPE SHEET PILE TOP S=1:40



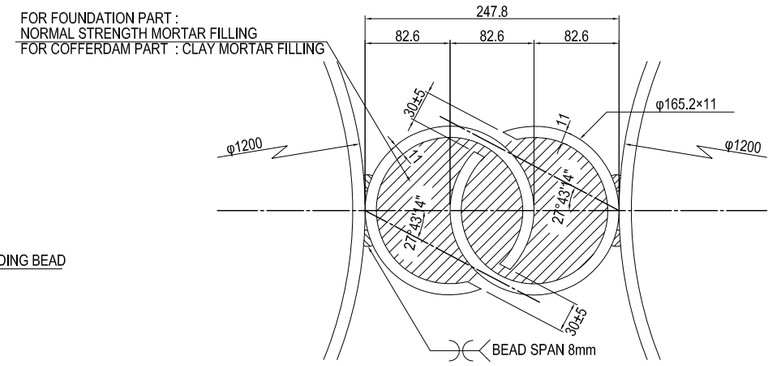
DETAIL OF STEEL PIPE SHEET PILE TOE S=1:40



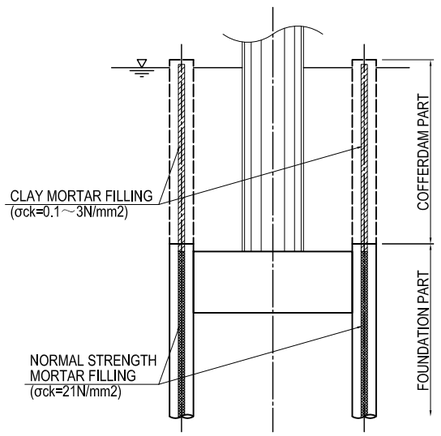
DETAIL OF PERIMETER FIELD WELDING OF STEEL PIPE SHEET PILE S=1:4



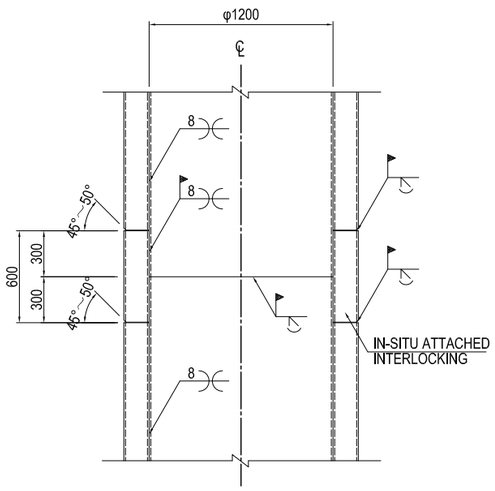
DETAIL OF CONNECTED INTERLOCKING(P-P) S=1:6



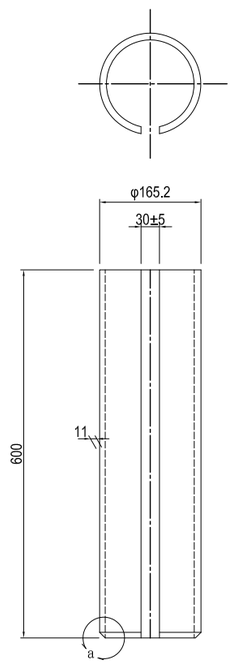
TREATMENT OF STEEL PIPE SHEET PILE INTERLOCKING



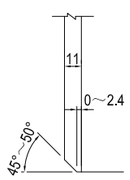
DETAIL OF IN-SITU LONGITUDINAL WELDING PART S=1:40



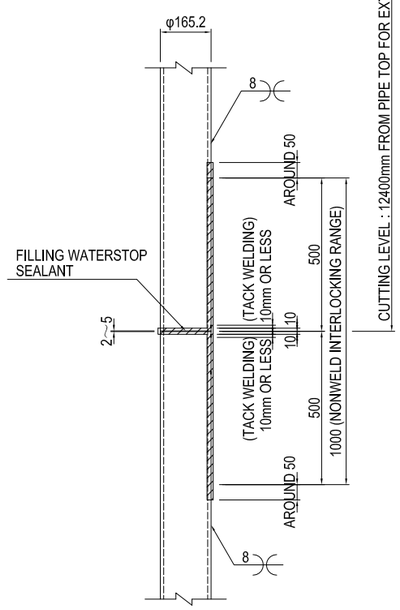
DETAIL OF IN-SITU ATTACHED INTERLOCKING S=1:10



DETAIL a

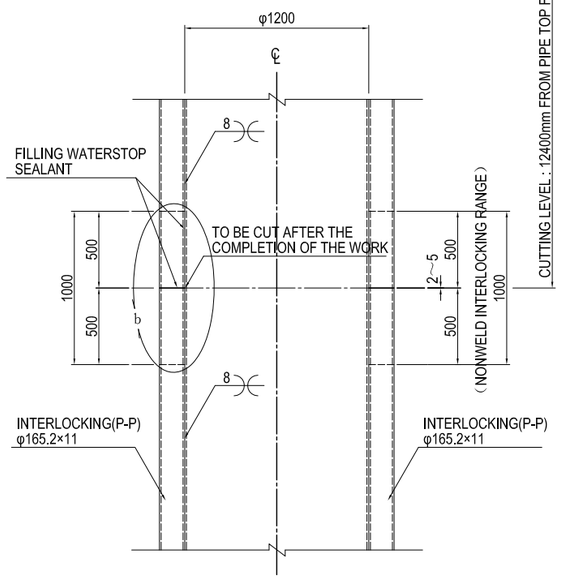


DETAIL b



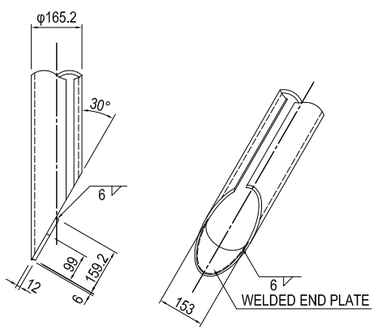
CUTTING LEVEL : 12400mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING

DETAIL OF PRECUT INTERRLOCKING S=1:40



CUTTING LEVEL : 12400mm FROM PIPE TOP FOR EXTERNAL-WALL SHEET PILING

DETAIL OF INTERRLOCKING TOE S=1:20



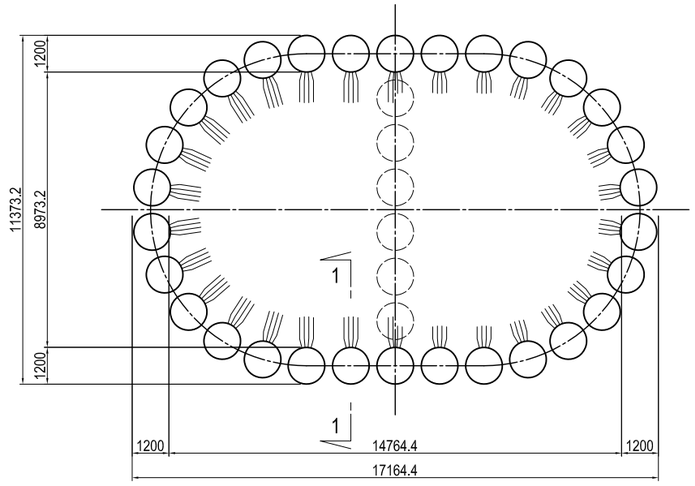
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

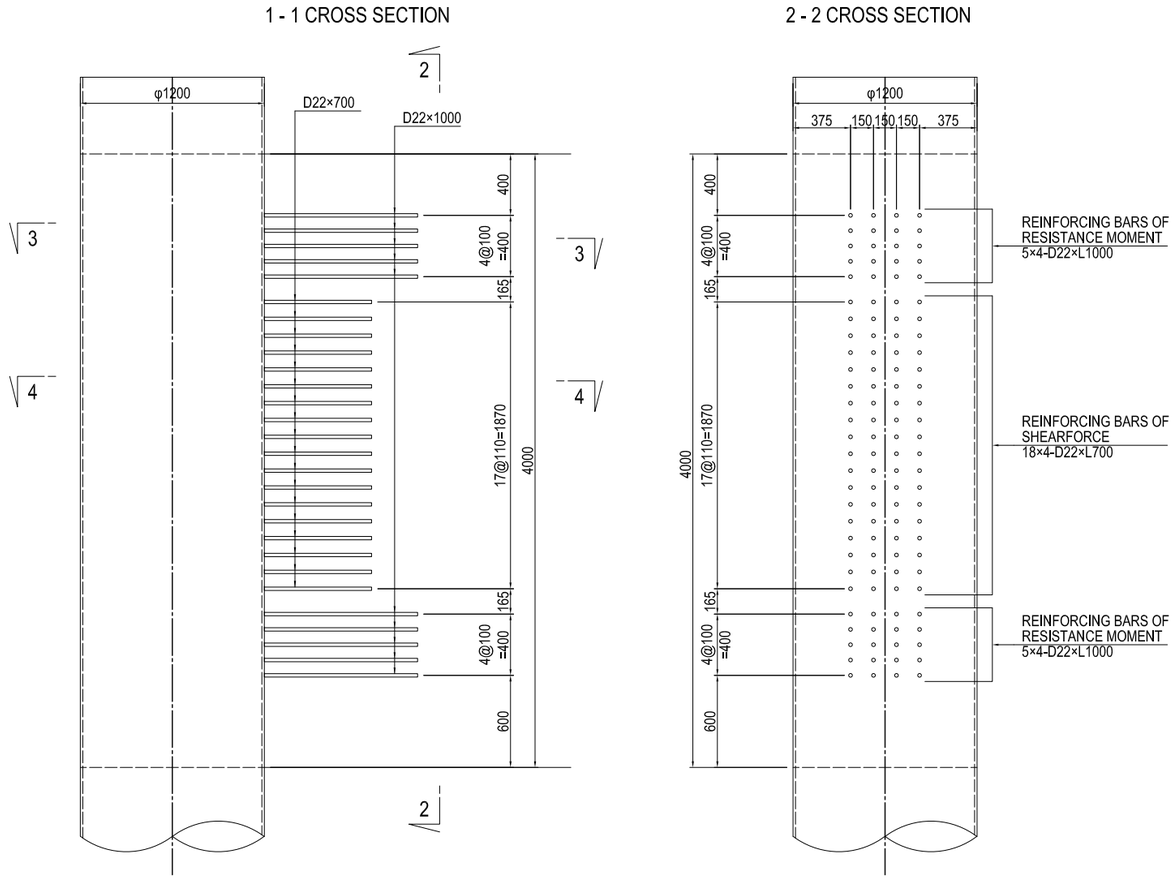
DRAWING TITLE	PACKAGE
DETAIL OF INTERLOCKING OF STEEL PIPE SHEET PILE OF P15 PIER	2
	DWG No.
	P2-SB-2127

DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P15 PIER

PLAN S=1:200

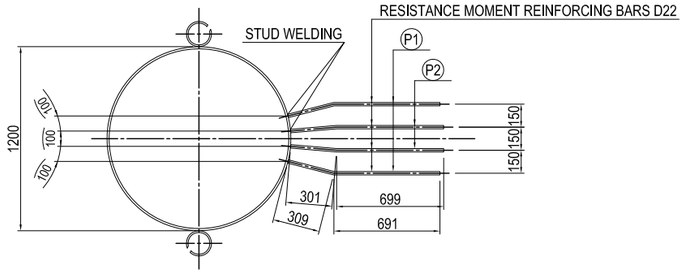


DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING S=1:40

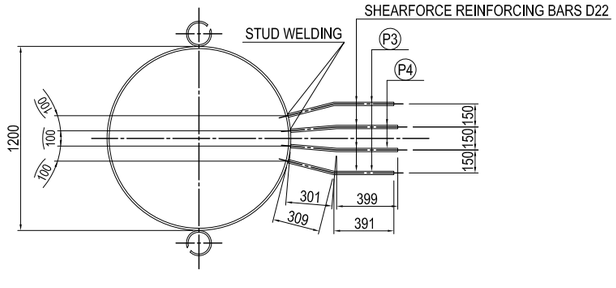


CROSS SECTION OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND REINFORCING BARS S=1:40

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



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



FABRICATION OF REINFORCING BARS S=1:40

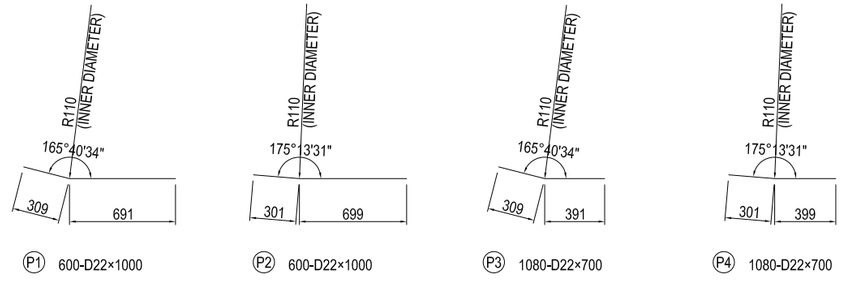


TABLE OF REINFORCING BARS

MARK	TYPE	LENGTH (mm)	PIECES (piece)	UNIT WEIGHT (kg/m)	UNIT WEIGHT (kg/piece)	WEIGHT (kg)	GRADE	MEMO
P1	D22	1000	600	3.04	3.04	1824.0	SD345 for STUD WELDING	
P2	D22	1000	600	3.04	3.04	1824.0	SD345 for STUD WELDING	
P3	D22	700	1080	3.04	2.13	2300.4	SD345 for STUD WELDING	
P4	D22	700	1080	3.04	2.13	2300.4	SD345 for STUD WELDING	
				D22		8248.8	kg	
				TOTAL WEIGHT		8248.8	kg	

PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM
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.

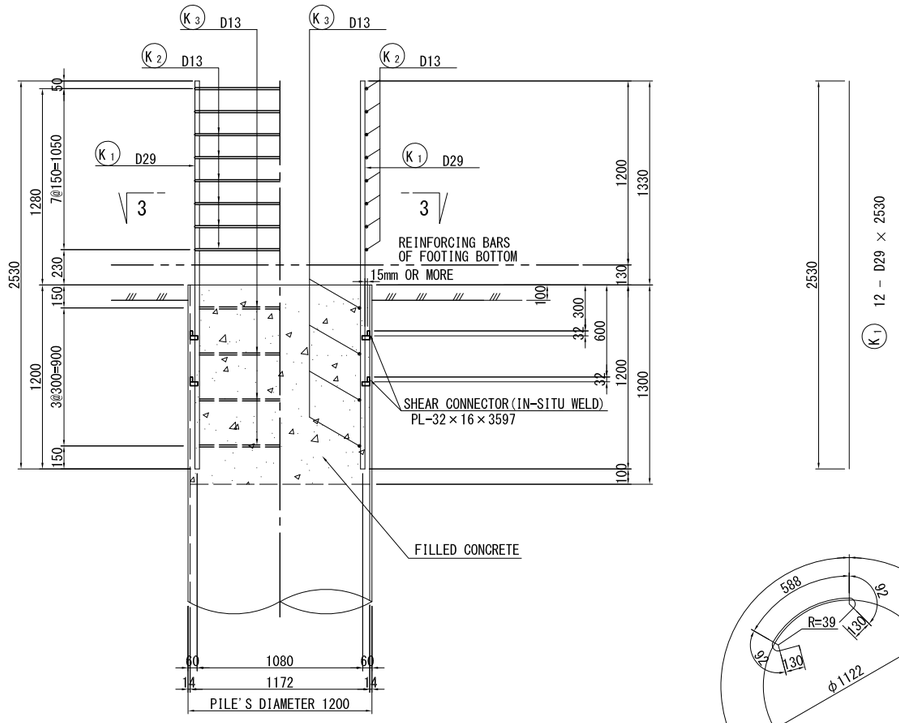
	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

DRAWING TITLE	PACKAGE
DETAIL OF CONNECTION BETWEEN STEEL PIPE SHEET PILE AND FOOTING OF P15 PIER	2
	DWG No.
	P2-SB-2128

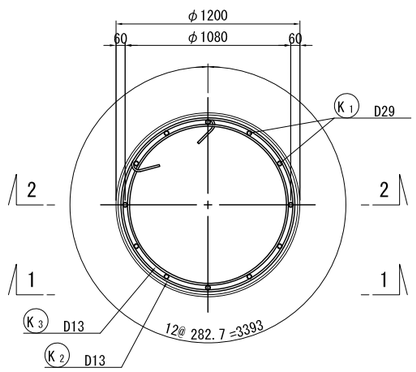
DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P15 PIER S=1:40

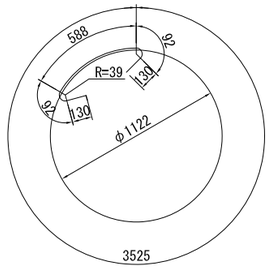
DETAIL OF PILE TOP

1 - 1　2 - 2

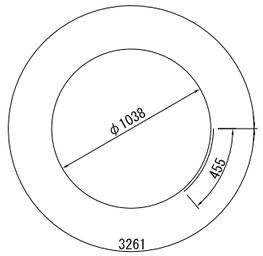


3 - 3





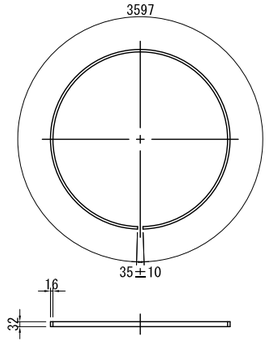
K2　8 - D13 × 4560



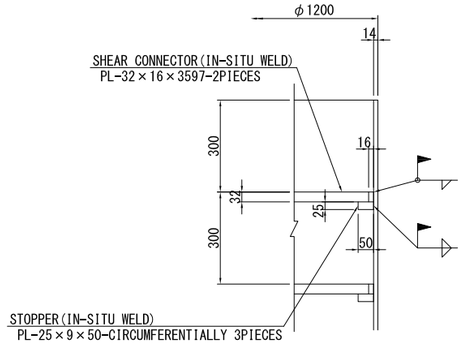
K3　4 - D13 × 3720

DETAIL OF ATTACHMENT OF SHEAR CONNECTOR

CENTER OF LENGTH



SETTING IN THE FIELD S=1:20



MATERIAL LIST

WEIGHT/EA.

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	2530	12	5.04	12.75	153	SD345	|
K2	D13	4560	8	0.995	4.54	36.3	SD345	○
K3	D13	3720	4	0.995	3.70	14.8	SD345	○
TOTAL						204		
FILLED CONCRETE　(σck = 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		6
PILE TOP	SS400	TOTAL	kg	29.4	176.4
REINFORCEMENT	SD345	D29	kg	153	918
		D13	kg	51	307
		TOTAL	kg	204	1225
FILLED CONCRETE	σck = 24 N/mm^2		m^3	1.402	8.4

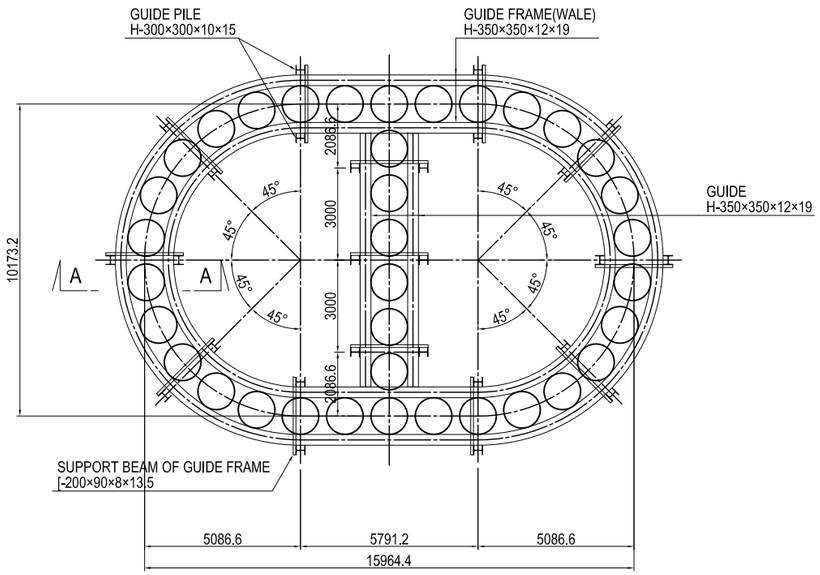
PROJECT NAME	DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT		
FINANCED BY	JAPAN INTERNATIONAL COOPERATION AGENCY		
COUNTERPART	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE		
JICA STUDY TEAM	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE
PREPARED BY	S. IMADA		27 Nov.2017
CHECKED BY	T. HAYAKAWA		28 Nov.2017
APPROVED BY	Y. SANO		29 Nov.2017

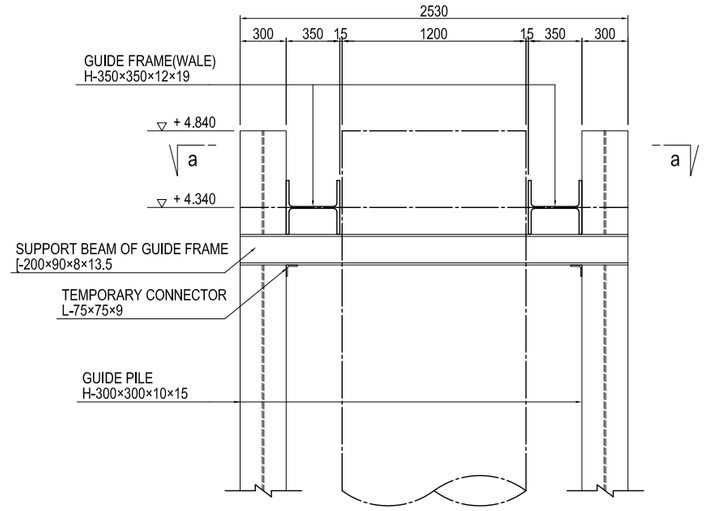
DRAWING TITLE	PACKAGE
DETAIL OF PILE TOP CONNECTION TO THE BASE CONCRETE OF P15 PIER	2
	DWG No.
	P2-SB-2129

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P15 PIER (1)

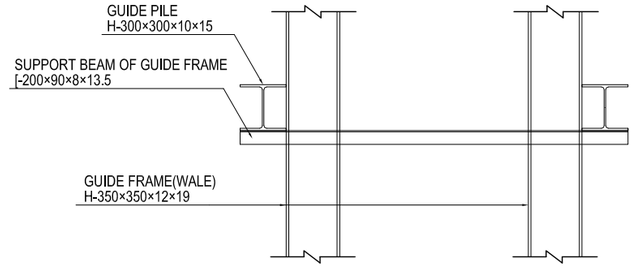
LAYOUT PLAN OF GUIDE FRAMES AND GUIDE PILES S=1:200



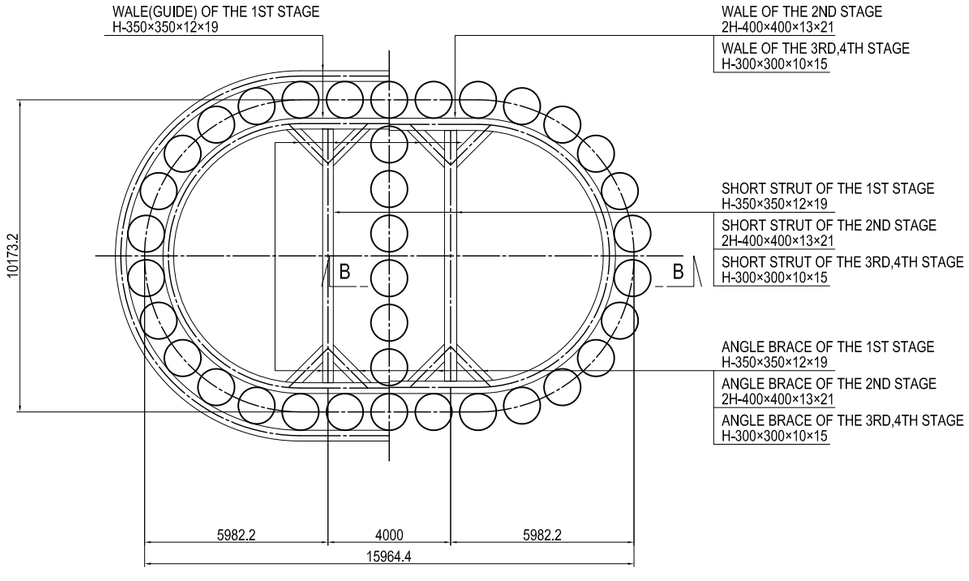
DETAIL OF ATTACHMENT OF GUIDE PILES AND GUIDE FRAMES S=1:40



a - a



LAYOUT PLAN OF STRUTS AND WALES S=1:200

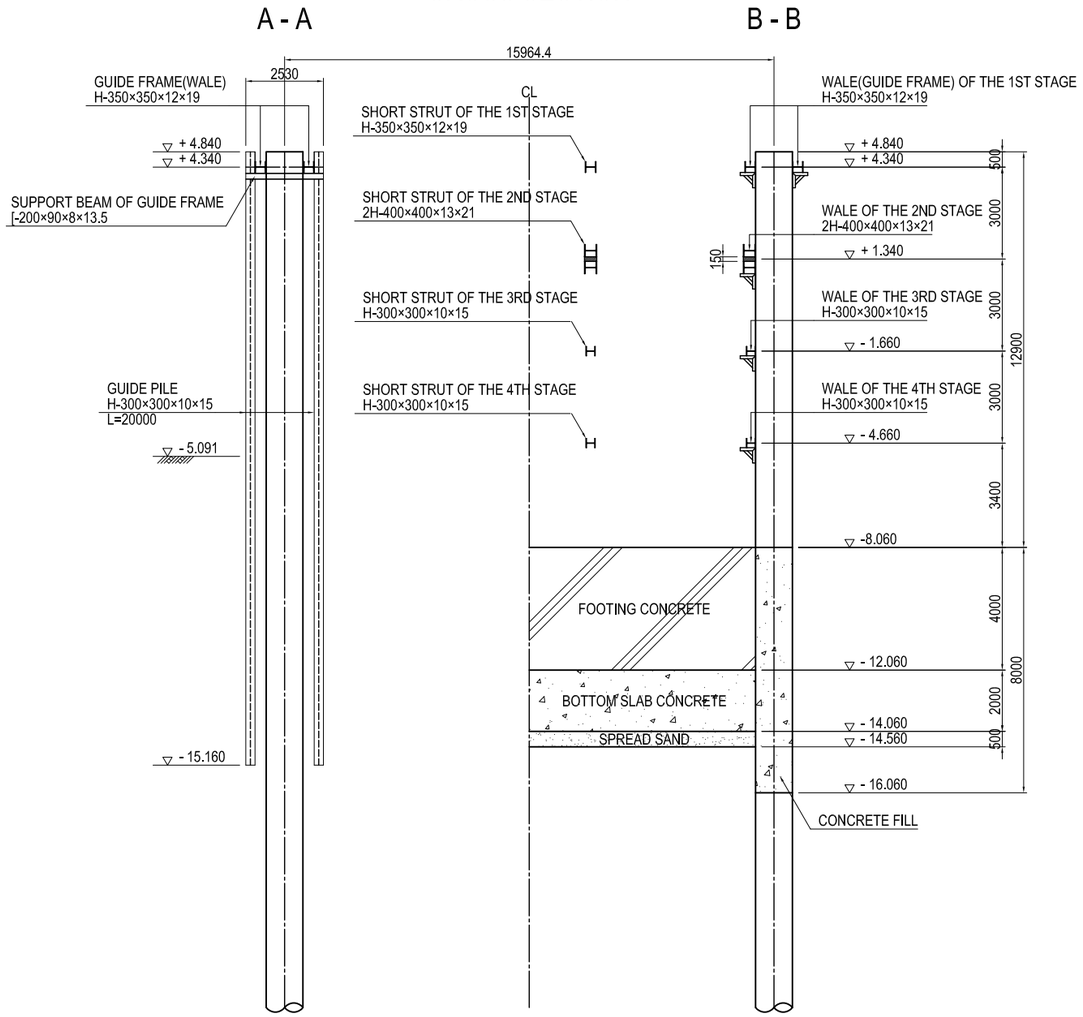


PROJECT NAME: DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	FINANCED BY: JAPAN INTERNATIONAL COOPERATION AGENCY	COUNTERPART: REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	JICA STUDY TEAM: NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

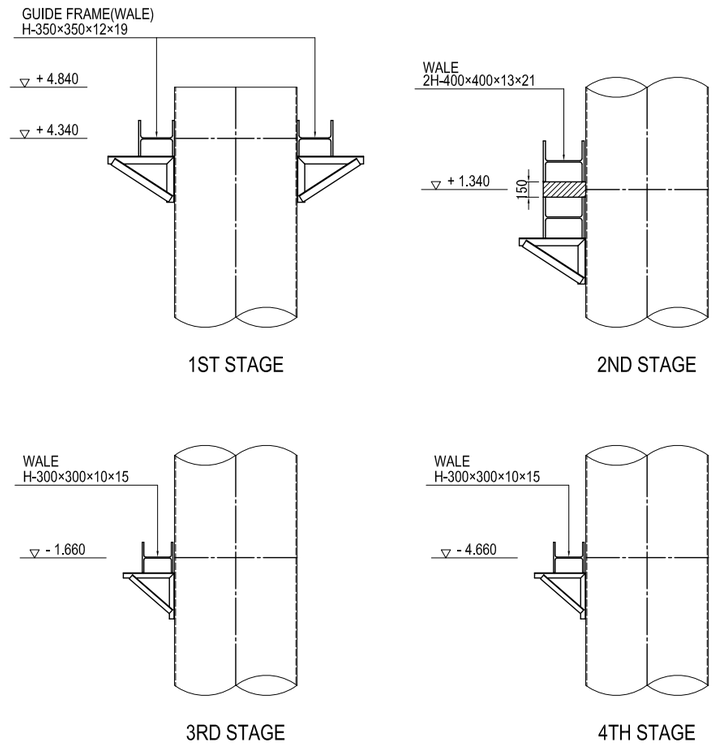
	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P15 PIER (1)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2130

(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P15 PIER (2)

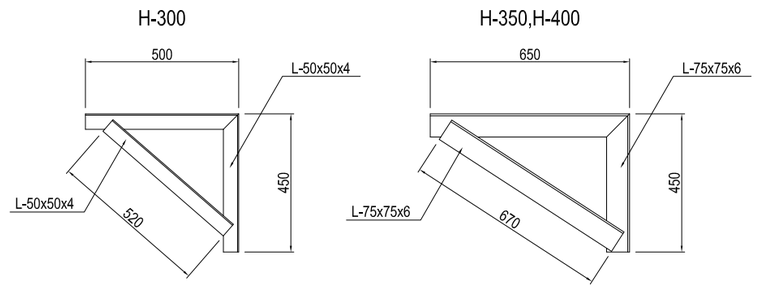
CROSS SECTION S=1:200



DETAIL OF ATTACHMENT OF WALE S=1:60



DETAIL OF BRACKET S=1:20

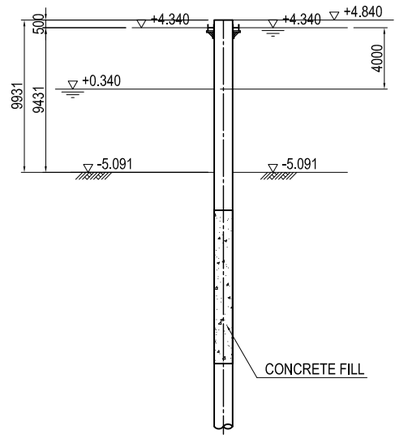


PROJECT NAME	FINANCED BY	COUNTERPART	JICA STUDY TEAM		
DETAILED DESIGN ON BAGO RIVER BRIDGE CONSTRUCTION PROJECT	JAPAN INTERNATIONAL COOPERATION AGENCY	REPUBLIC OF THE UNION OF MYANMAR MINISTRY OF CONSTRUCTION DEPARTMENT OF BRIDGE	NIPPON KOEI CO., LTD. ORIENTAL CONSULTANTS GLOBAL CO., LTD. METROPOLITAN EXPRESSWAY COMPANY LIMITED CHODAI CO.,LTD. NIPPON ENGINEERING CONSULTANTS CO.,LTD.		

	NAME	SIGNATURE	DATE	DRAWING TITLE	PACKAGE
PREPARED BY	S. IMADA		27 Nov.2017	(REFERENCE) LAYOUT PLAN OF COFFERDAM PART OF P15 PIER (2)	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2131

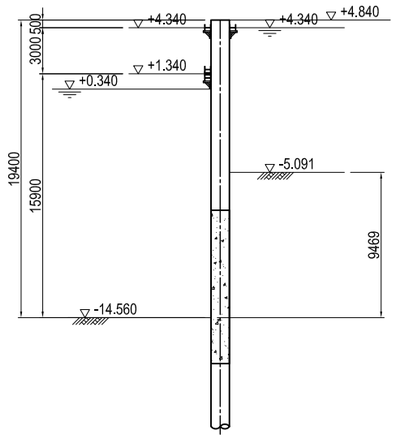
(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P15 PIER S=1:400

STEP 1



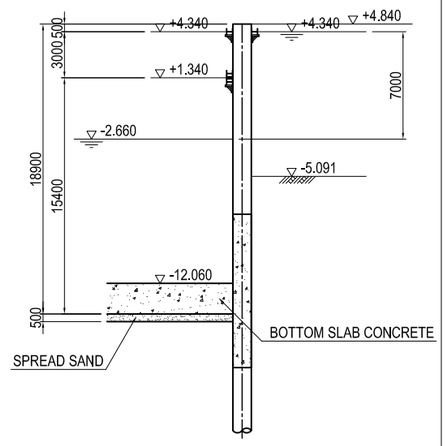
Excavate inside of exterior sheet pilles and filled with concrete as shown.
draining the inside of cofferdam up to +0.340m level.
the 1st support Installation.

STEP 2



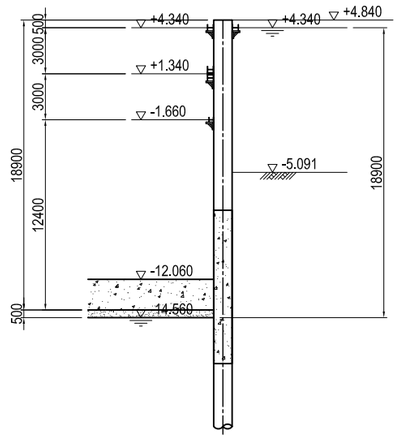
The 2nd support Installation.
underwater excavation up to -14.560m level.

STEP 3



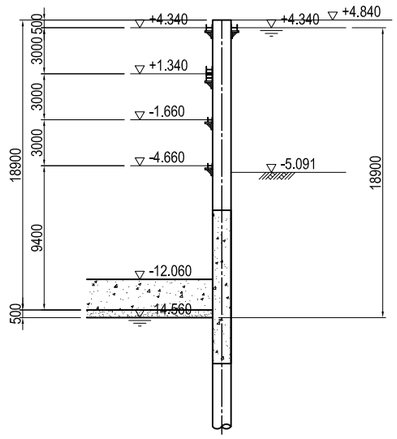
Draining the inside of cofferdam up to -2.660m level.
Placement of spread sand followed by
Casting undeawater bottom slab concrete.

STEP 4



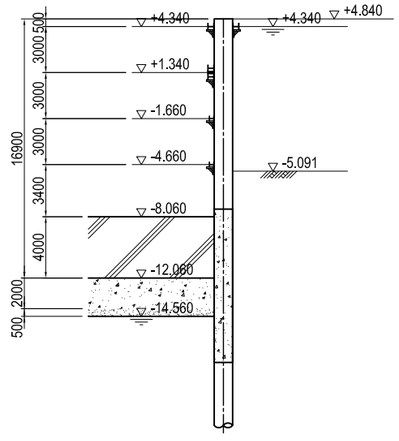
The 3rd support Installation.
Dry up inside the cofferdam.

STEP 5



The 4th support Installation.

STEP 6



Casting of footing concrete.

Note : This drawing can be used for reference only.

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. IMADA		27 Nov.2017	(REFERENCE) CONSTRUCTION PLAN OF STEEL PIPE SHEET PILE WORK OF P15 PIER	2
CHECKED BY	T. HAYAKAWA		28 Nov.2017		DWG No.
APPROVED BY	Y. SANO		29 Nov.2017		P2-SB-2132