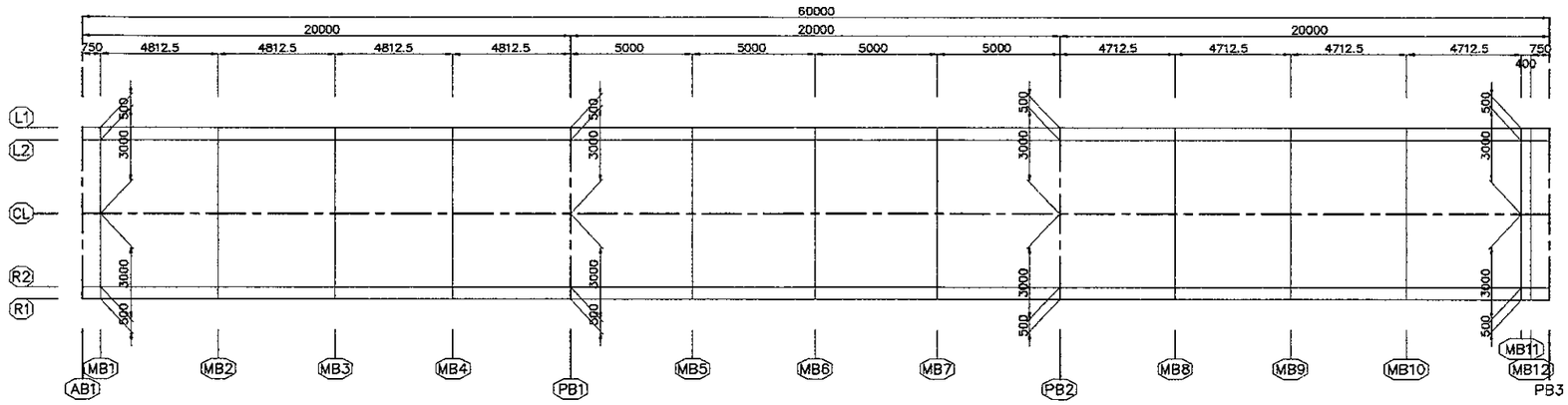
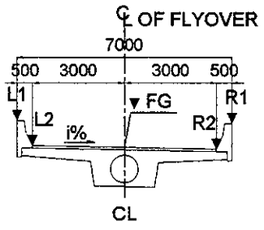
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI	APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 250 1 : 200 FULL SIZE A3	COORDINATES AND ELEVATION FOR PC GIRDER	MCL-041 SHEET NO : 41 / 59
	Sign:	Sign:	Sign:	Sign:				
	Date:	Date:	Date:	Date:				



PLAN VIEW
SCALE 1:250

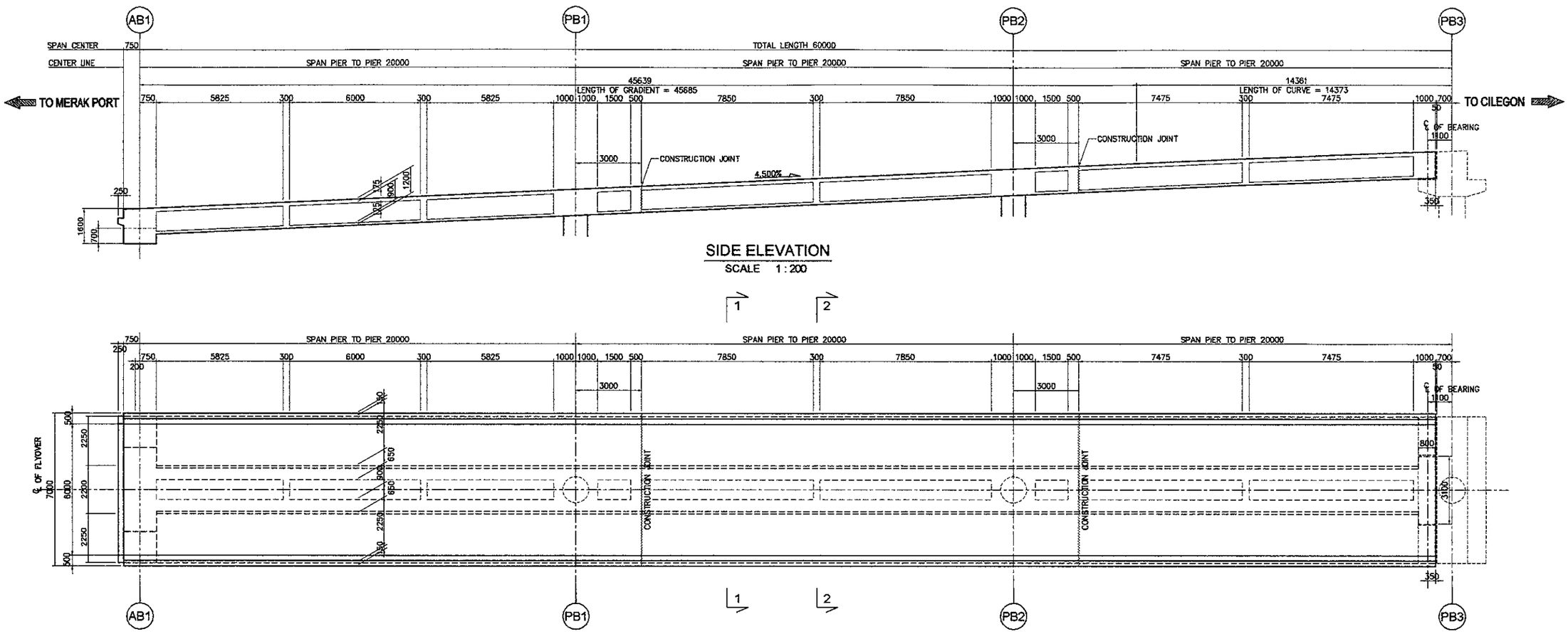


SECTION VIEW
SCALE 1:200

LIST OF COORDINATES

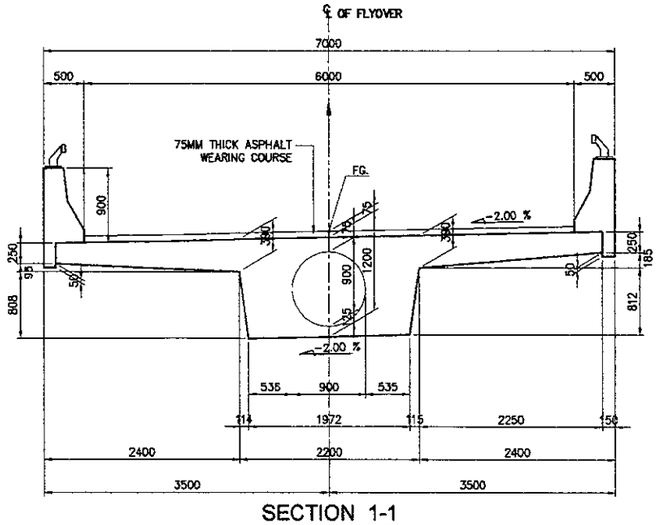
LABEL \ STA		AB1	MB1	MB2	MB3	MB4	PB1	MB5	MB6	MB7	PB2	MB8	MB9	MB10	MB11	MB12	PB3
		0+288.8610	0+289.6110	0+294.4235	0+299.2360	0+304.0485	0+308.8610	0+313.8610	0+318.8610	0+323.8610	0+328.8610	0+333.5735	0+338.2860	0+342.9985	0+347.7110	0+348.1110	0+348.8610
L1	E	610541.3444	610541.8096	610544.7943	610547.7791	610550.7639	610553.7487	610556.8498	610559.9509	610563.0519	610566.153	610589.0758	610571.9985	610574.9213	610577.8441	610578.0922	610578.5573
	N	9344250.5468	9344249.9585	9344246.1834	9344242.4083	9344238.6333	9344234.8582	9344230.936	9344227.0139	9344223.0917	9344219.1696	9344215.4729	9344211.7763	9344208.0797	9344204.383	9344204.0692	9344203.4809
	Z	10.1221	10.1558	10.3724	10.5889	10.8055	11.0221	11.2471	11.4721	11.6971	11.9221	12.1341	12.3413	12.5334	12.7102	12.7245	12.7510
L2	E	610540.9522	610541.4173	610544.4021	610547.3869	610550.3717	610553.3565	610556.4576	610559.5586	610562.6597	610585.7608	610568.6836	610571.8063	610574.5291	610577.4518	610577.6999	610578.1651
	N	9344250.2367	9344249.6484	9344245.8733	9344242.0982	9344238.3232	9344234.5481	9344230.6259	9344226.7038	9344222.7818	9344218.8594	9344215.1628	9344211.4662	9344207.7695	9344204.0729	9344203.7591	9344203.1708
	Z	9.2971	9.3308	9.5474	9.7639	9.9805	10.1971	10.4221	10.6471	10.8721	11.0971	11.3091	11.5163	11.7084	11.8852	11.8995	11.9260
CL	E	610538.5989	610539.064	610542.0488	610545.0336	610548.0184	610551.0032	610554.1043	610557.2053	610560.3064	610563.4075	610586.3303	610569.253	610572.1758	610575.0986	610575.3466	610575.8118
	N	9344248.3761	9344247.7877	9344244.0127	9344240.2376	9344236.4625	9344232.6874	9344228.7653	9344224.8431	9344220.921	9344216.9988	9344213.3022	9344209.6055	9344205.9089	9344202.2123	9344201.8985	9344201.3102
	Z	9.3571	9.3908	9.6074	9.8239	10.0405	10.2571	10.4821	10.7071	10.9321	11.1571	11.3891	11.5763	11.7684	11.9452	11.9595	11.9860
R2	E	610536.2456	610536.7108	610539.6955	610542.6803	610545.6651	610548.6499	610551.751	610554.852	610557.9531	610561.0542	610563.977	610566.8997	610569.8225	610572.7453	610572.9933	610573.4585
	N	9344246.5154	9344245.9271	9344242.152	9344238.3769	9344234.6019	9344230.8268	9344226.9046	9344222.9825	9344219.0603	9344215.1382	9344211.4415	9344207.7449	9344204.0483	9344200.3516	9344200.0378	9344199.4495
	Z	9.4171	9.4508	9.6674	9.8839	10.1005	10.3171	10.5421	10.7671	10.9921	11.2171	11.4291	11.6363	11.8284	12.0052	12.0195	12.0460
R1	E	610535.8534	610536.3185	610539.3033	610542.2881	610545.2729	610548.2577	610551.3588	610554.4598	610557.5609	610560.662	610563.5848	610566.5075	610569.4303	610572.353	610572.6011	610573.0663
	N	9344248.2053	9344245.617	9344241.8419	9344238.0668	9344234.2918	9344230.5167	9344226.5945	9344222.6724	9344218.7502	9344214.828	9344211.1314	9344207.4348	9344203.7381	9344200.0415	9344199.7277	9344199.1394
	Z	10.2421	10.2758	10.4924	10.7089	10.9255	11.1421	11.3671	11.5921	11.8171	12.0421	12.2541	12.4613	12.6534	12.8302	12.8445	12.8710

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	Name	H. HONDA	CHECKED BY	Name	T. OKUMURA	SUBMITTED BY	Name	M. KIUCHI	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : DIMENSION PLAN OF PC SUPERSTRUCTURE AB1 - PB3	DRAWING NO : MCL-042
		Sign			Sign			Sign					SHEET NO : 42 / 59
REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		Date			Date			Date					
APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400	Sign		Date									

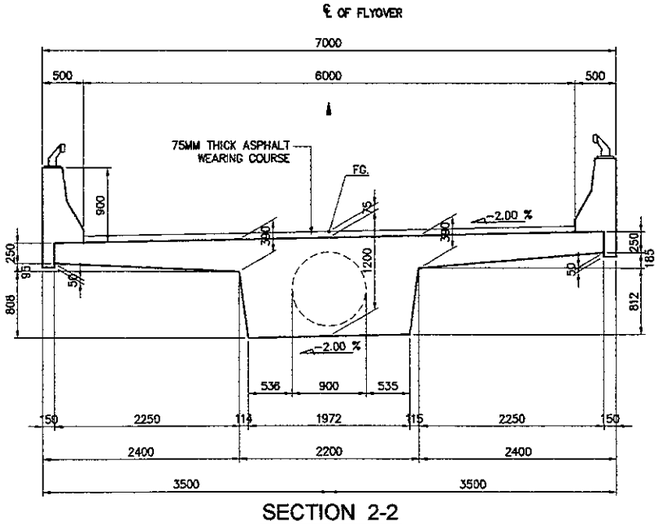


SIDE ELEVATION
SCALE 1 : 200

PLAN
SCALE 1 : 200

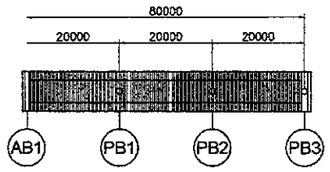


SECTION 1-1
SCALE 1 : 75



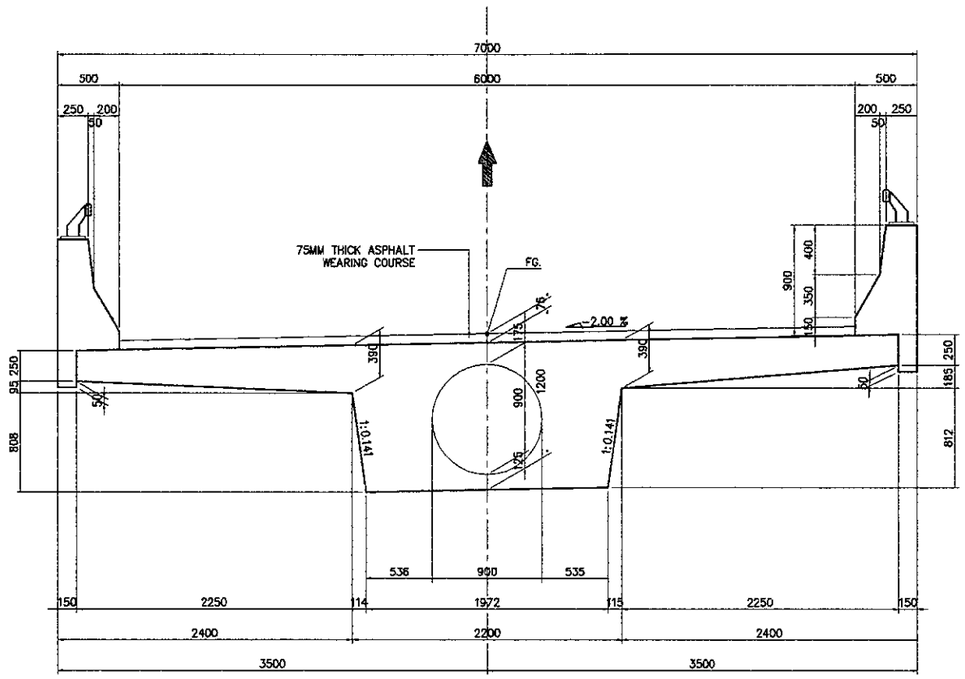
SECTION 2-2
SCALE 1 : 75

NOTES :
1. All dimension are in mm unless noted otherwise.
2. Concrete Girder and Slab fc'= 35 MPa.
3. All Reinforcing steel shall be BJTD 40 or ASTM A615 Grade 60 deformed bars.
4. The Contractor shall be responsible to carry out the following before Construction :
   a) Verification of all elevations and dimensions, using actual field survey.
   b) Preparation and submission of shop drawings for all bridge components for the Engineer's approval.



KEY PLAN

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 50 FULL SIZE A3	TYPICAL CROSS SECTION AB1-PB3	MCL-043 SHEET NO : 43 / 59
	Sign:	Sign:	Sign:	APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400 Sign: Date:				
	Date:	Date:	Date:					



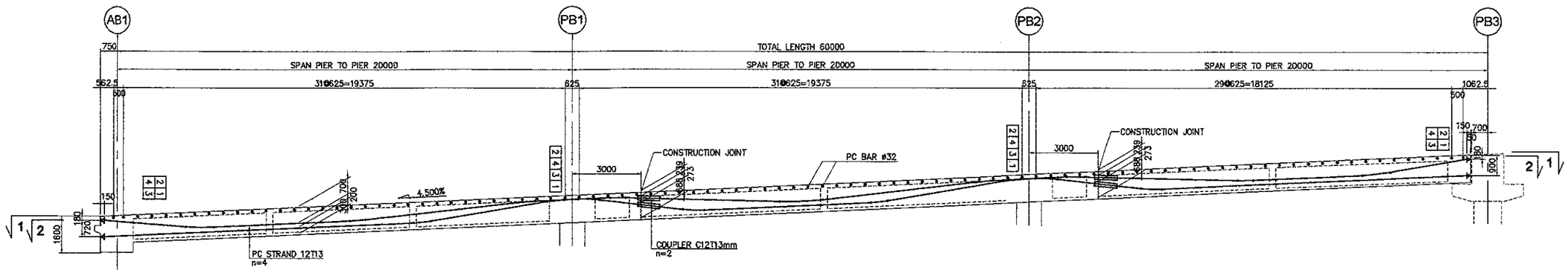
INFORMATION OF PC SUPERSTUCTURE

	AB1	PB1	PB2	PB3
FG.	9.357	10.257	11.157	11.954
Super Elev	-2.000%	-2.000%	-2.000%	-2.000%
Top Slab	9.282	10.182	11.082	11.879
Bottom Girder	7.682	8.982	9.882	10.679
Station	0+288.861	0+308.861	0+328.861	0+347.961

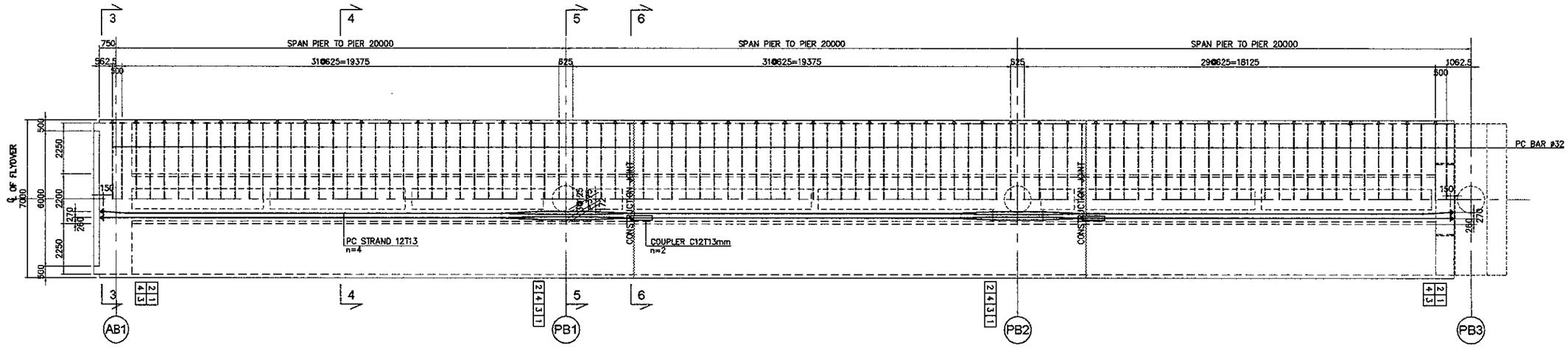
TYPICAL CROSS SECTION
(Span Length = 20 M)

SCALE : 1 : 50

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES AB1-PB3 (1) (1 OF 2)	DRAWING NO : MCL-044 SHEET NO : 44 / 59
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400			
	Date		Date		Date			Sign Date			

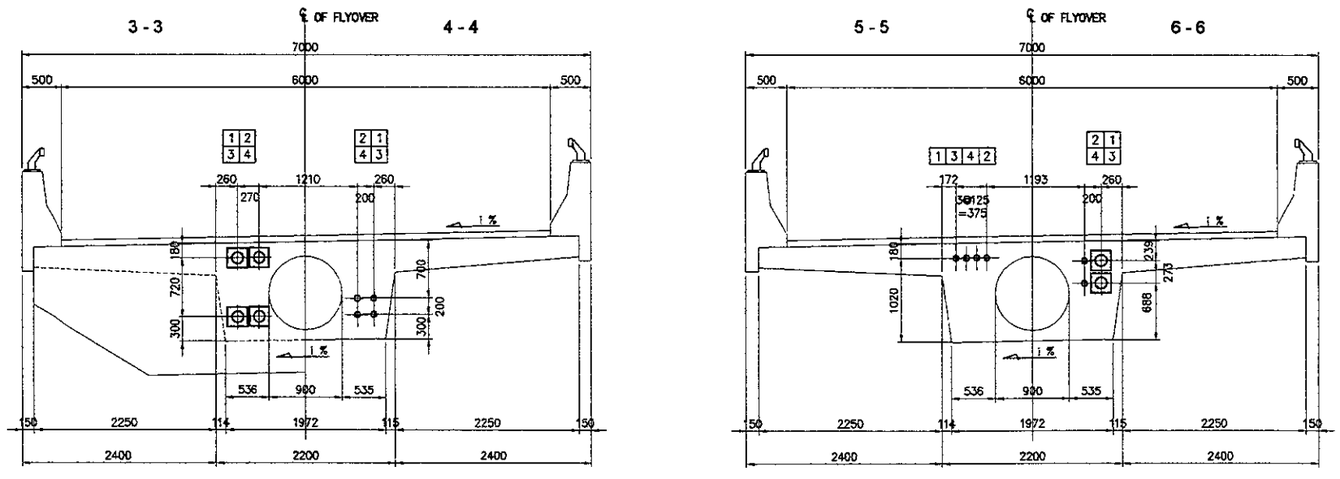


SIDE ELEVATION
SCALE 1 : 200



SECTION 1-1
SCALE 1 : 200

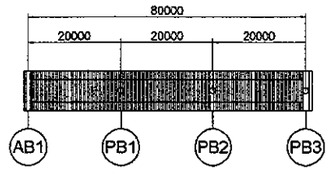
SECTION 2-2
SCALE 1 : 200



CROSS SECTION
SCALE 1 : 100

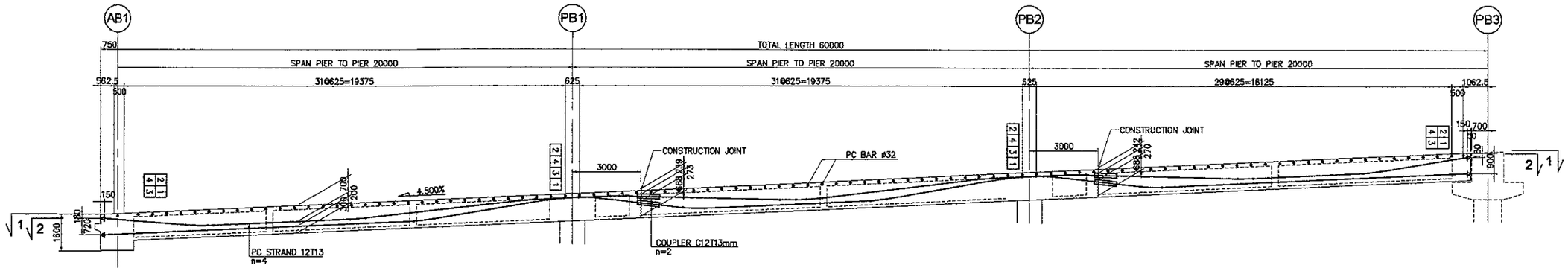
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND) Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

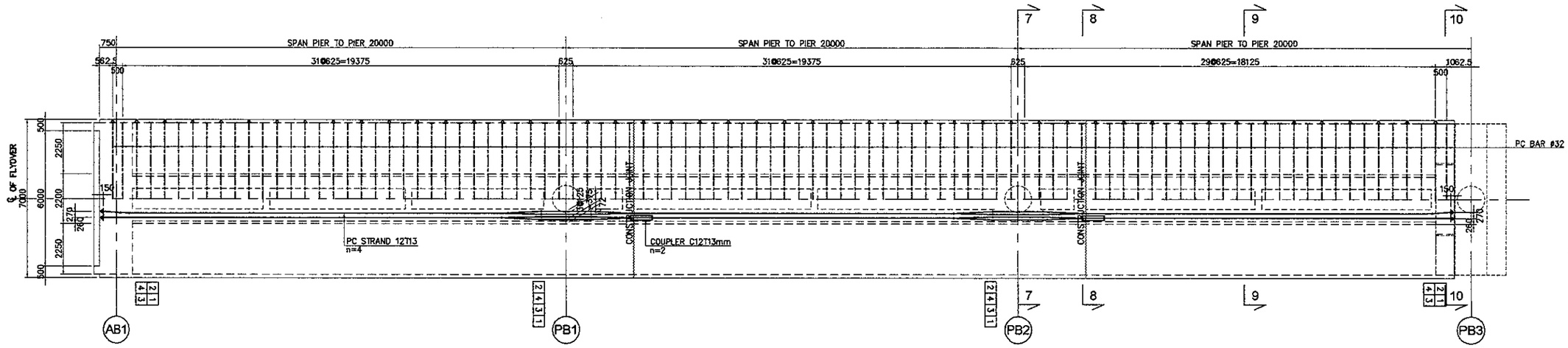


KEY PLAN

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA		Name T. OKUMURA		Name M. KIUCHI			DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 200 1 : 100 FULL SIZE A3	ARRANGEMENT OF PC CABLES AB1-PB3 (2 OF 2)	MCL-045 SHEET NO : 45 / 59
	Sign		Sign		Sign		APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign NIP. : 110038400 Date				
	Date		Date		Date						

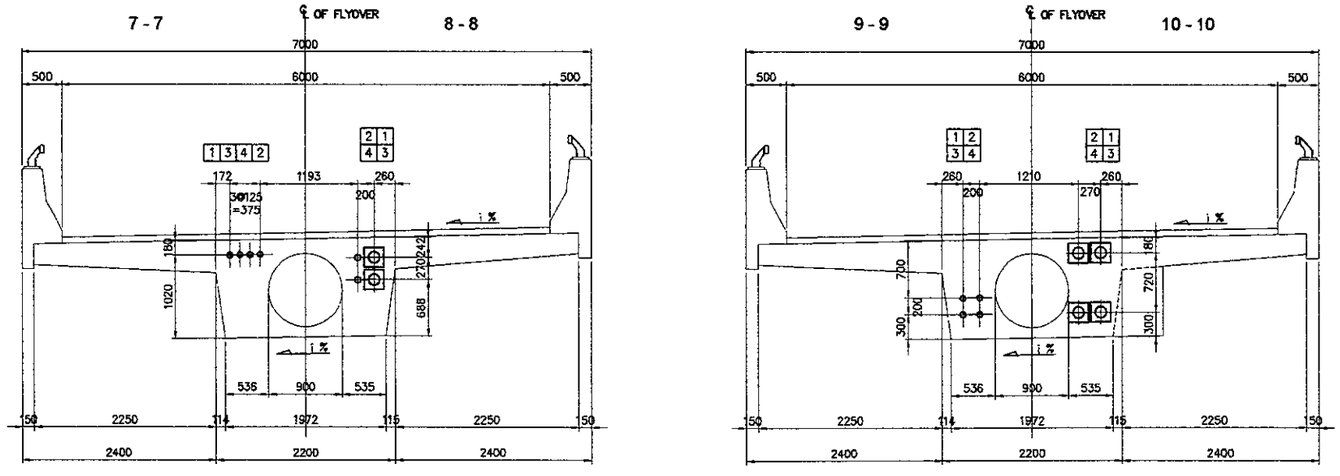


SIDE ELEVATION
SCALE 1 : 200



SECTION 1-1
SCALE 1 : 200

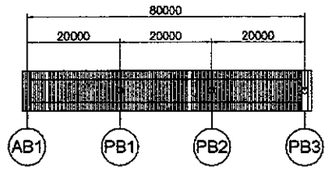
SECTION 2-2
SCALE 1 : 200



CROSS SECTION
SCALE 1 : 100

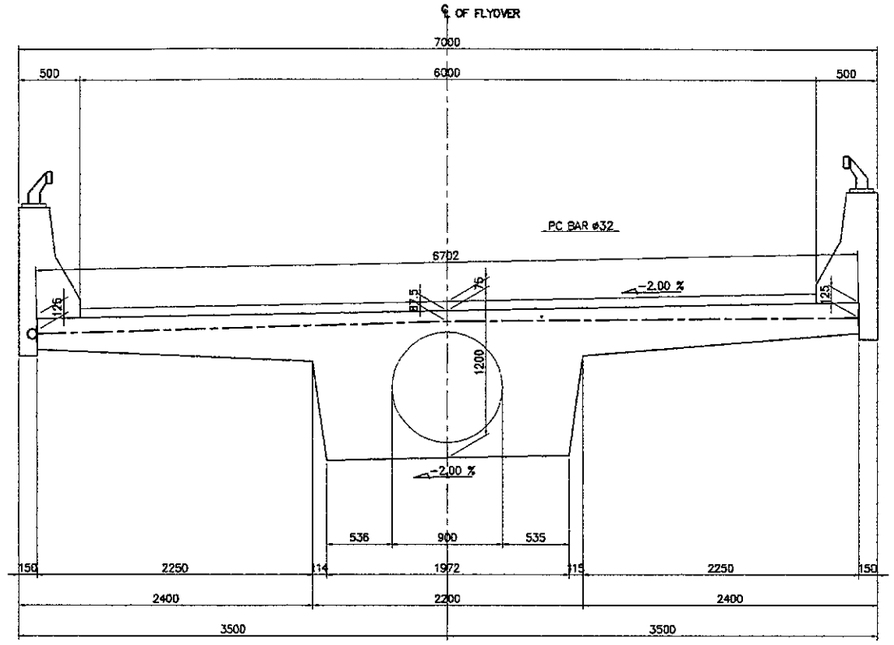
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND) Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

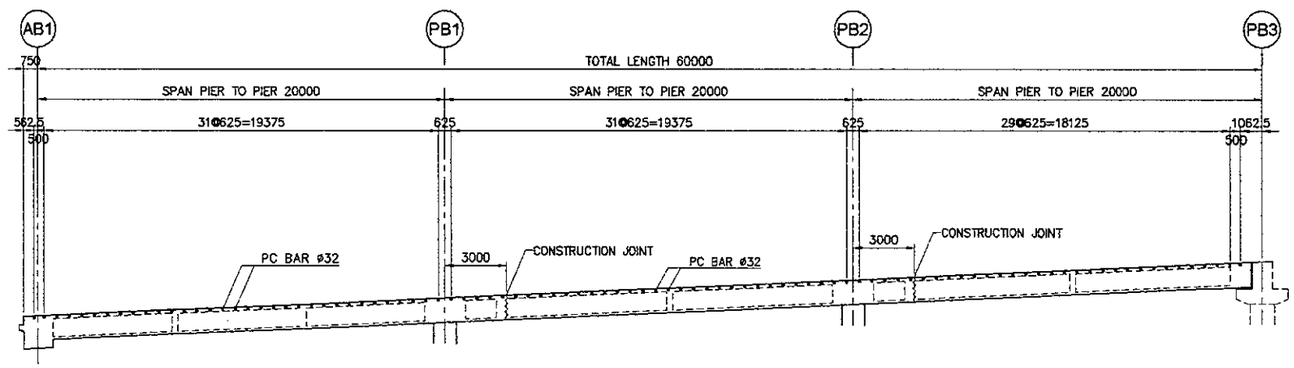


KEY PLAN

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	Name: H. HONDA Sign: Date:	CHECKED BY	Name: T. OKUMURA Sign: Date:	SUBMITTED BY	Name: M. KIUCHI Sign: Date:	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (Sign:) NIP. : 110038400 (Date:)	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 50 1 : 300 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC BAR AB1-PB3	DRAWING NO : MCL-046 SHEET NO : 46 / 59



TRANVERSAL PC BAR
SCALE 1 : 50



LONGITUDINAL PC BAR ARRANGEMENT
SCALE 1 : 300

TABEL OF PC BAR

Length (m)	Nos.	Unit Weight (kg/m)	Weight / 1 nos (kg)	Weight (kg)	Remarks
6.702	96	6.31	42.29	4,059.80	Stressing Anchorage One Side Staggered
TOTAL LENGTH (L) =			643.392	m	
TOTAL WEIGHT (W) =			4,059.80	kg	

NOTES :
1. All dimension are in mm unless noted otherwise.

⊣— Stressing Anchorage
⊢— Dead End Anchorage

JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign	
	NIP. : 110038400	Date	

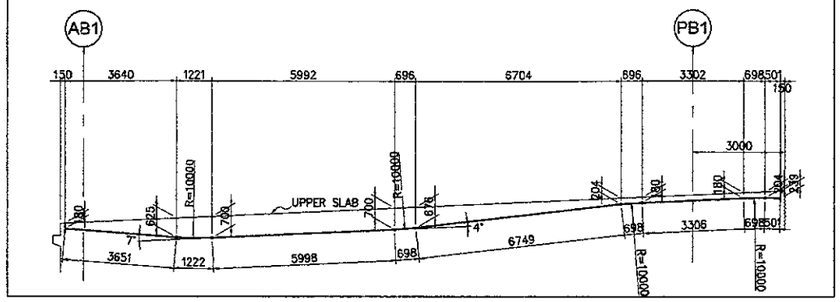
PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

SCALE : –
FULL SIZE A3

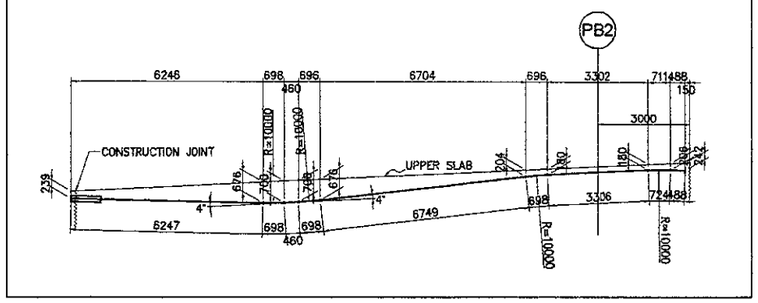
DRAWING TITLE :
PC CABLES SCHEDULE AB1-PB3

DRAWING NO : MCL-047
SHEET NO : 47 / 59

CONSTRUCTION SECTION NO.1 (C1)



CONSTRUCTION SECTION NO.2 (C1)



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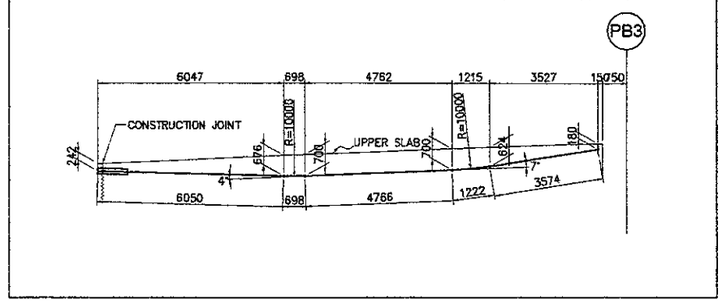
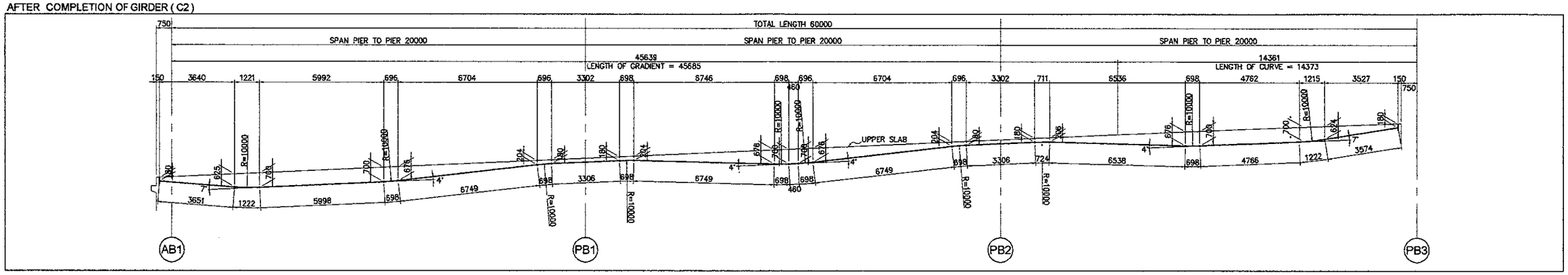
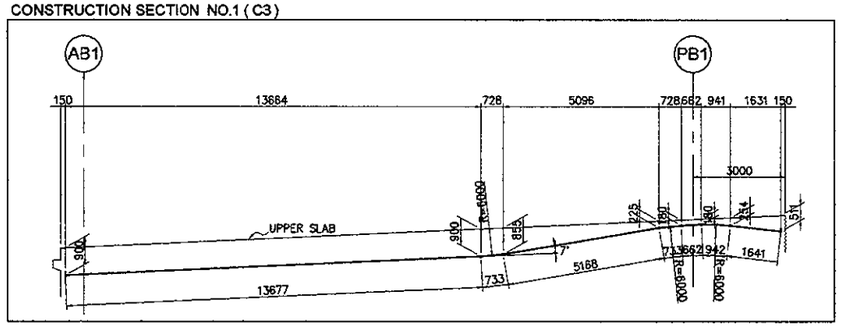


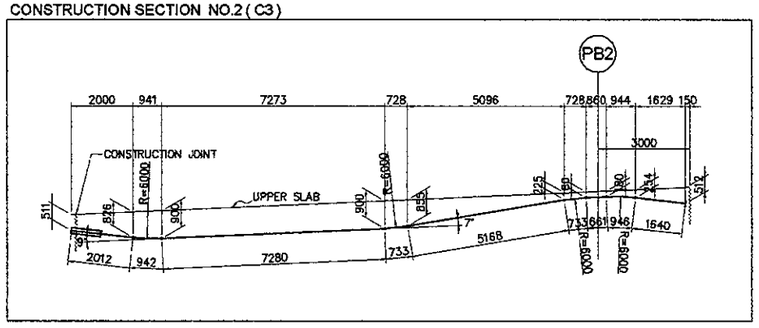
AFTER COMPLETION OF GIRDER (C2)



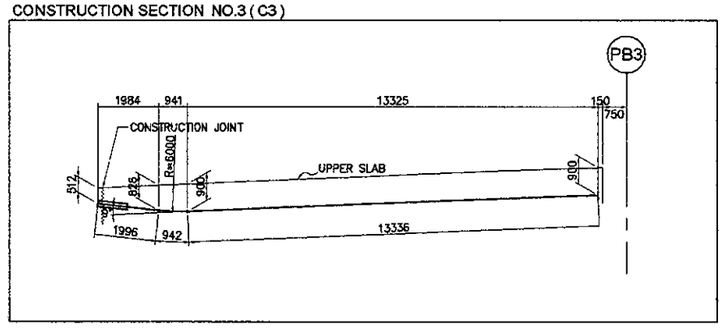
CONSTRUCTION SECTION NO.1 (C3)



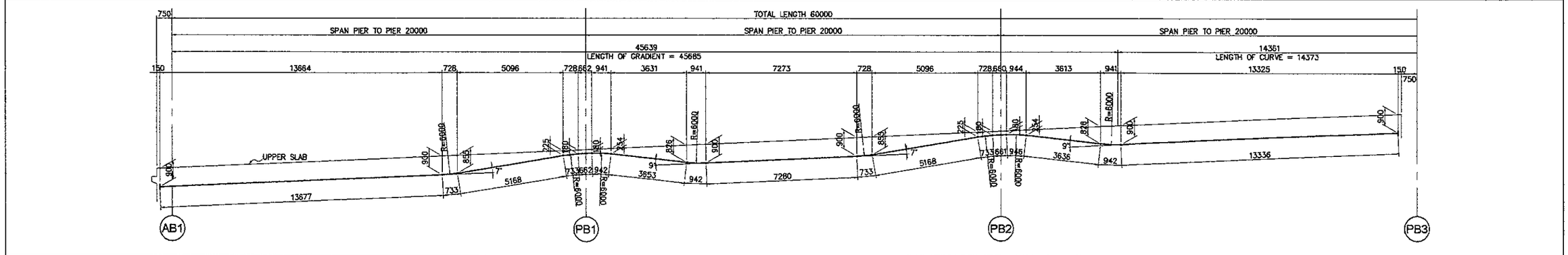
CONSTRUCTION SECTION NO.2 (C3)



CONSTRUCTION SECTION NO.3 (C3)



AFTER COMPLETION OF GIRDER (C4)



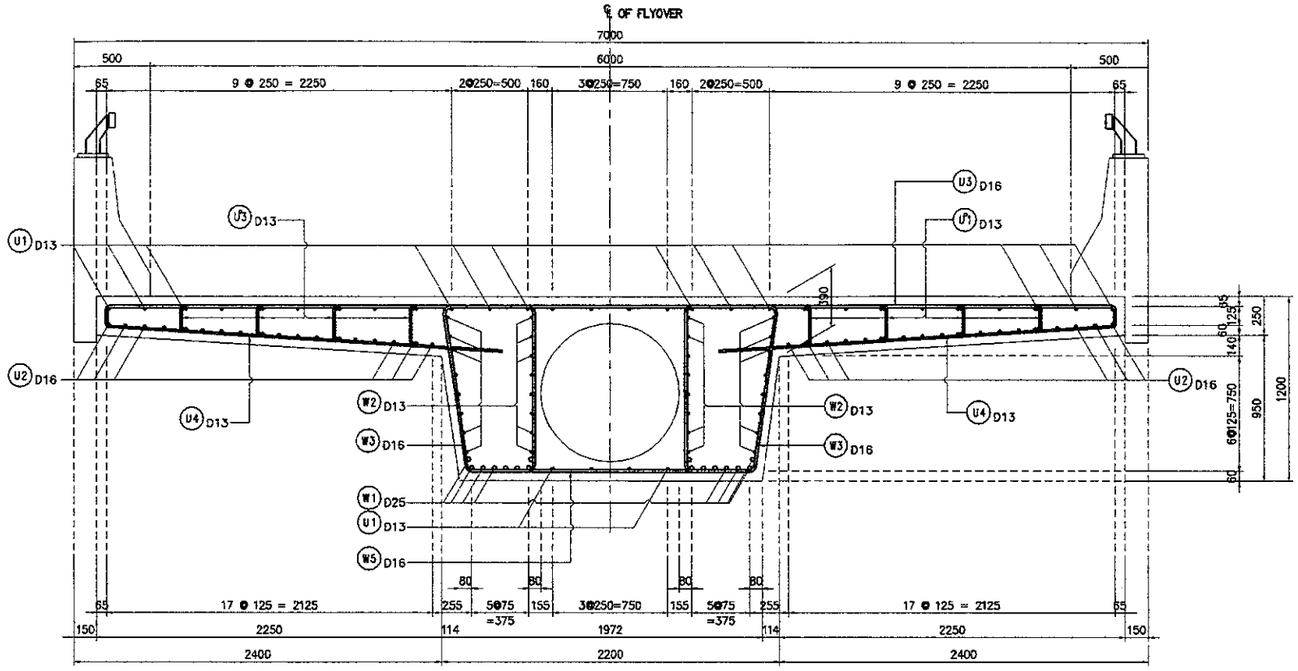
PC CABLES SCHEDULE AB1 - PB3

SCALE : NON

NOTES :
1. All dimension are in mm unless noted otherwise
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND)
   . Nominal Diameter 12.7mm
3. ⌒ Shows Bending Point Of Prestressing Cable

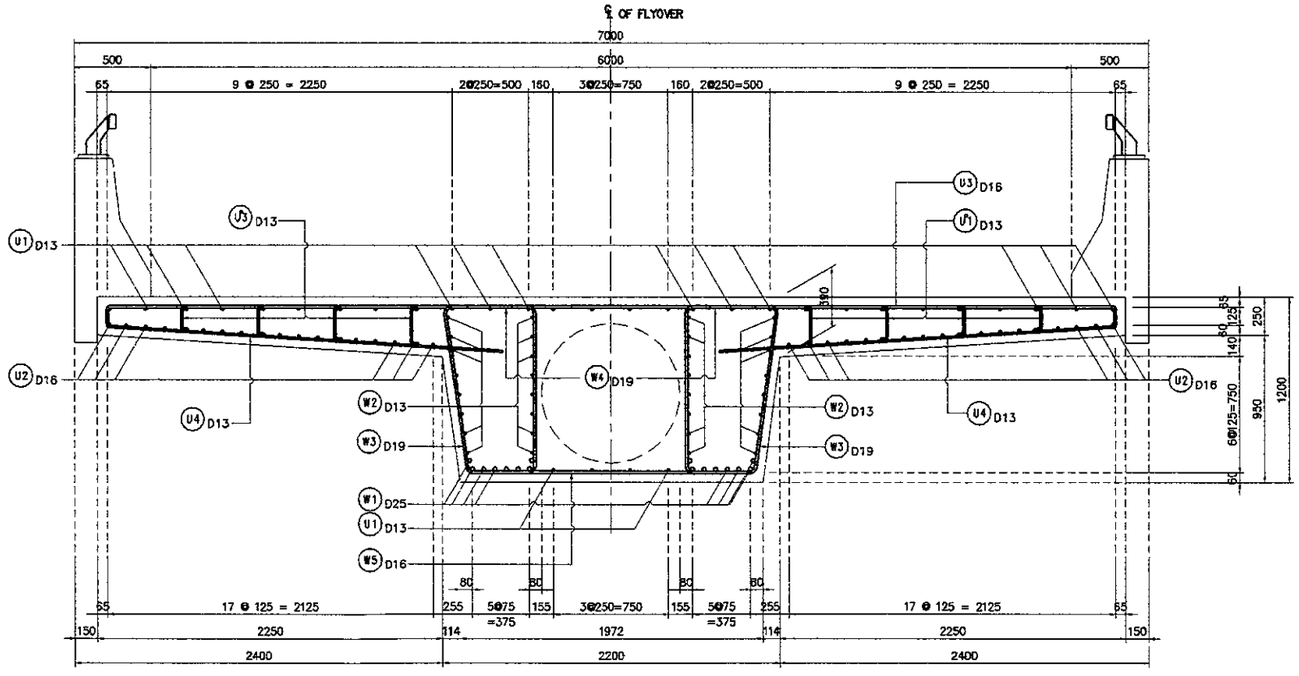
Stressing Anchorage
Dead End Anchorage

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 40 FULL SIZE A3	DRAWING TITLE : TYPICAL DETAIL OF CROSS SECTION REINFORCEMENT AB1-PB3	DRAWING NO : MCL-048 SHEET NO : 48 / 59
	Name H. HONDA		Name T. OKUMURA		Name M. KIUCHI						
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY Ir. HERRY VAZA M,Eng.Sc NIP. : 11D038400	Sign / Date			



SECTION AT MID SPAN

SCALE 1 : 40



SECTION AT PIER

SCALE 1 : 40

JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign	
	NIP. : 110038400	Date	

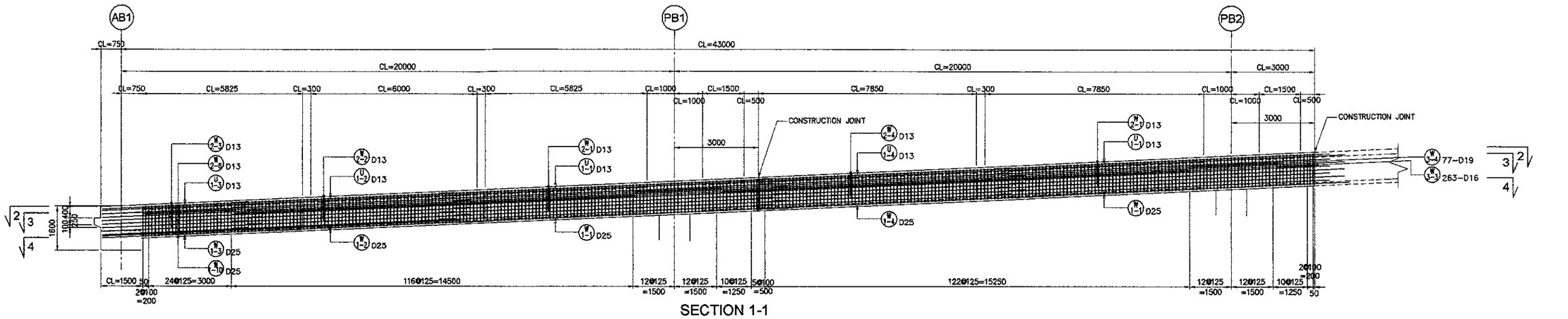
PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

SCALE : 1 : 150
FULL SIZE A3

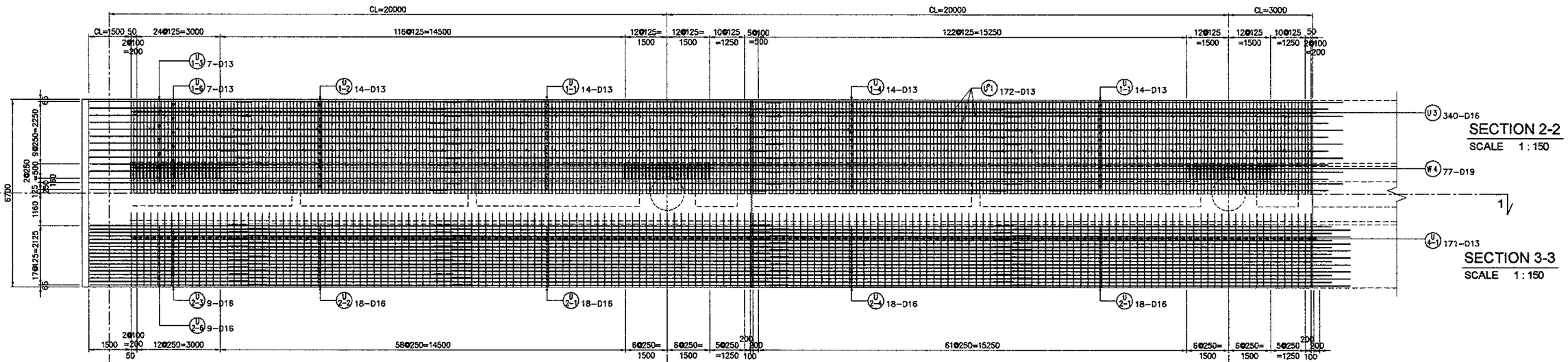
DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER AB1-PB2

DRAWING NO : MCL-049

SHEET NO : 49 / 59



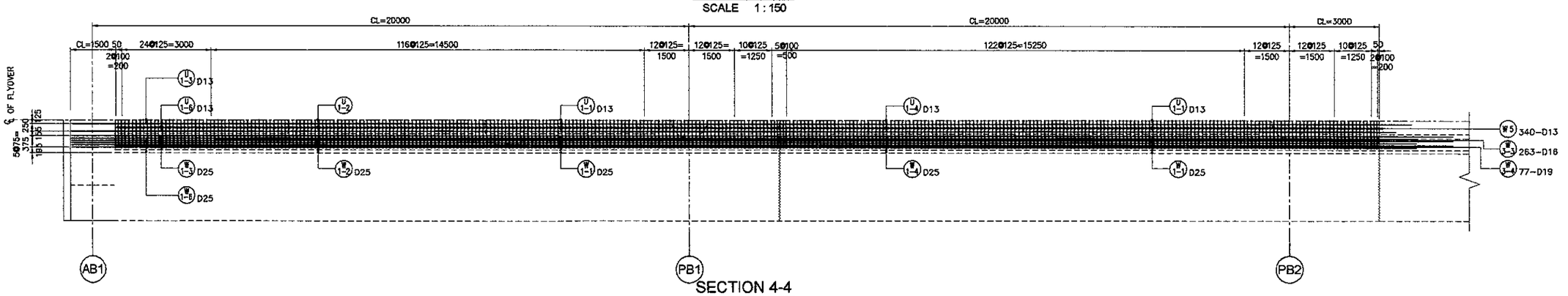
SECTION 1-1
SCALE 1 : 150



SECTION 2-2
SCALE 1 : 150

SECTION 3-3
SCALE 1 : 150

P L A N
SCALE 1 : 150



SECTION 4-4
SCALE 1 : 150

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI
	Sign:	Sign:	Sign:
	Date:	Date:	Date:

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

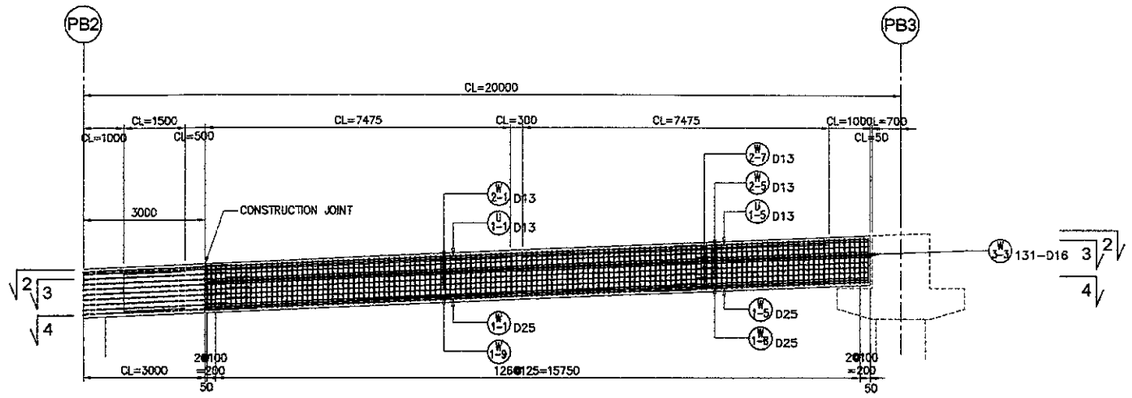
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (Sign:) — NIP. : 110038400 (Date:)

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

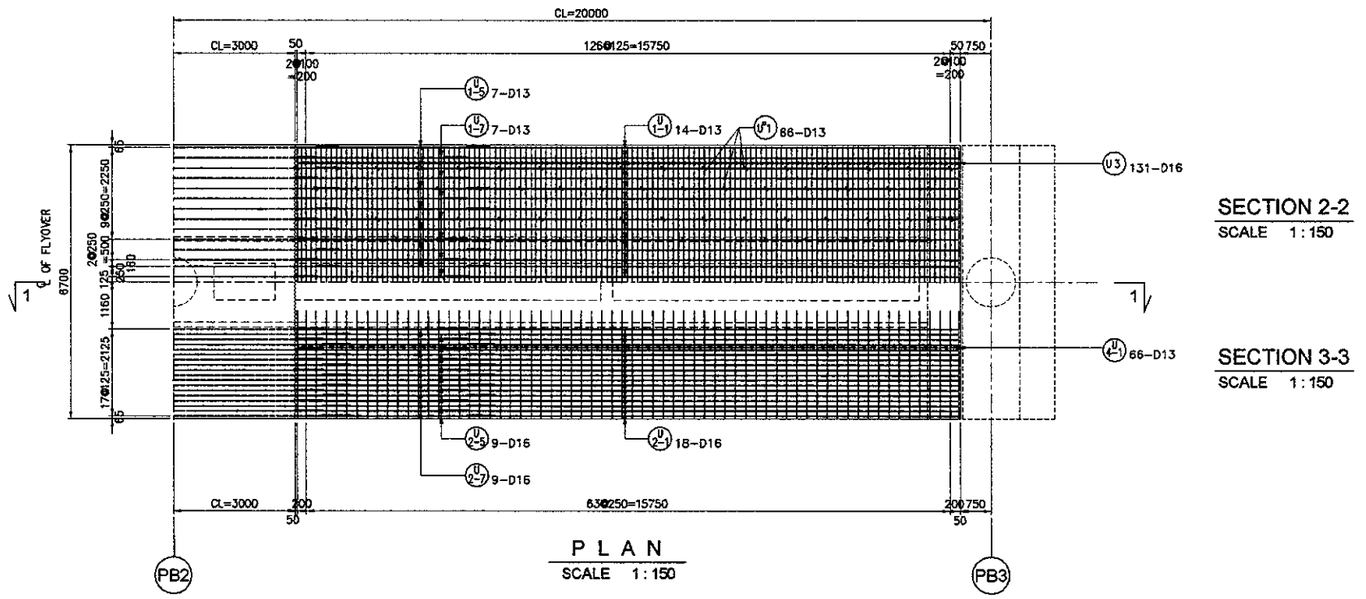
SCALE : 1 : 150 — FULL SIZE A3

DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER PB2-PB3

DRAWING NO : MCL-050
SHEET NO : 50 / 59



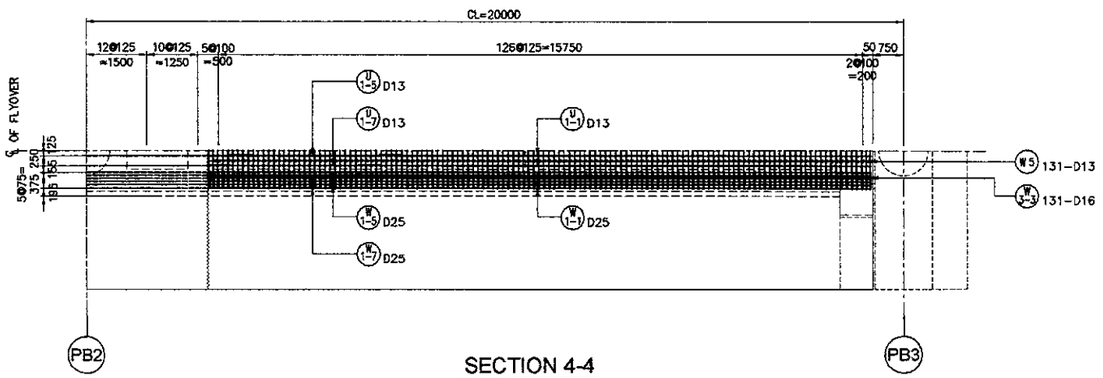
SECTION 1-1
SCALE 1 : 150



SECTION 2-2
SCALE 1 : 150

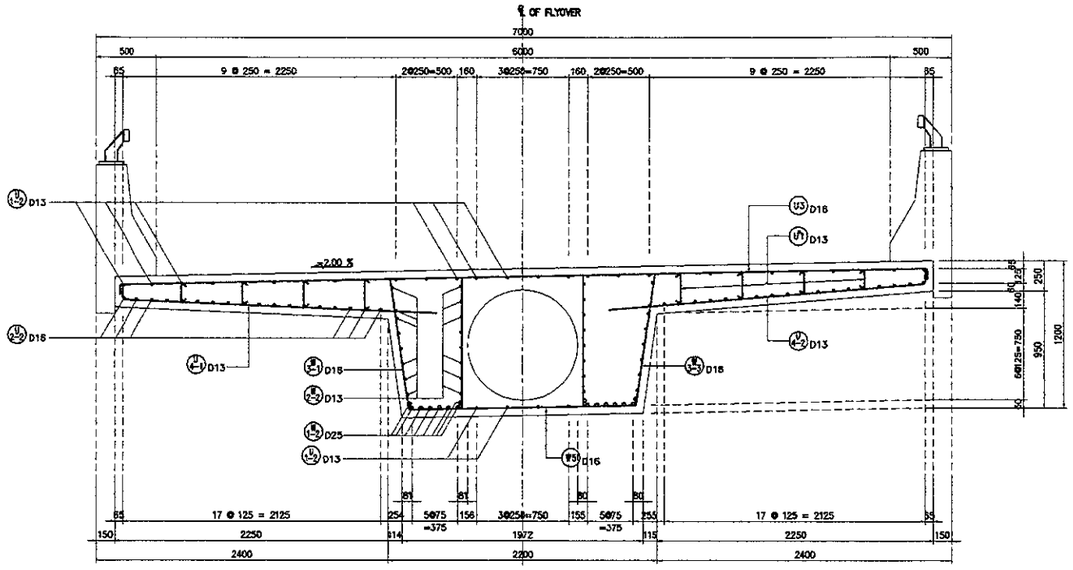
SECTION 3-3
SCALE 1 : 150

PLAN
SCALE 1 : 150

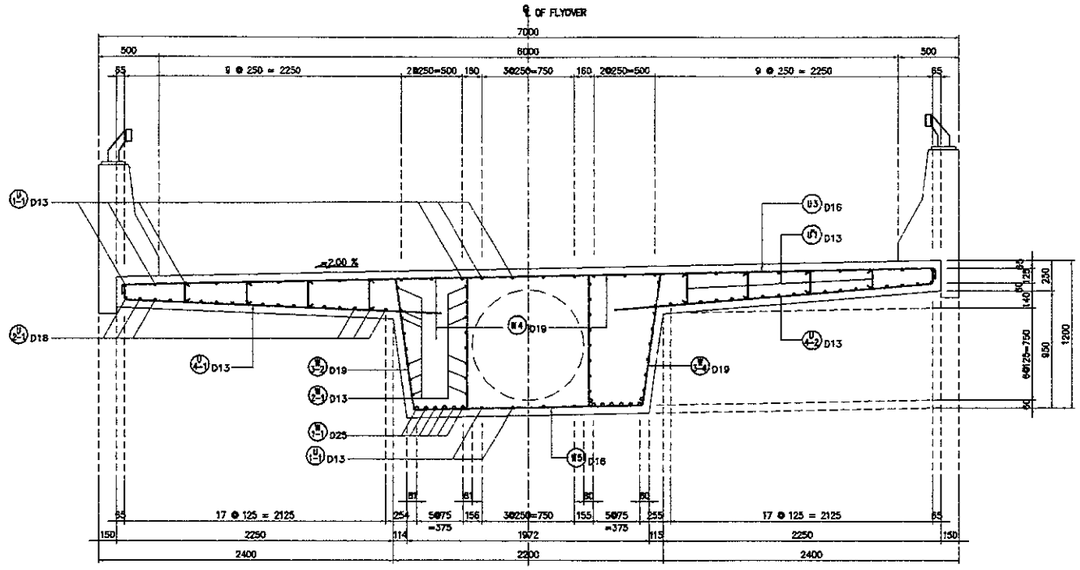


SECTION 4-4
SCALE 1 : 150

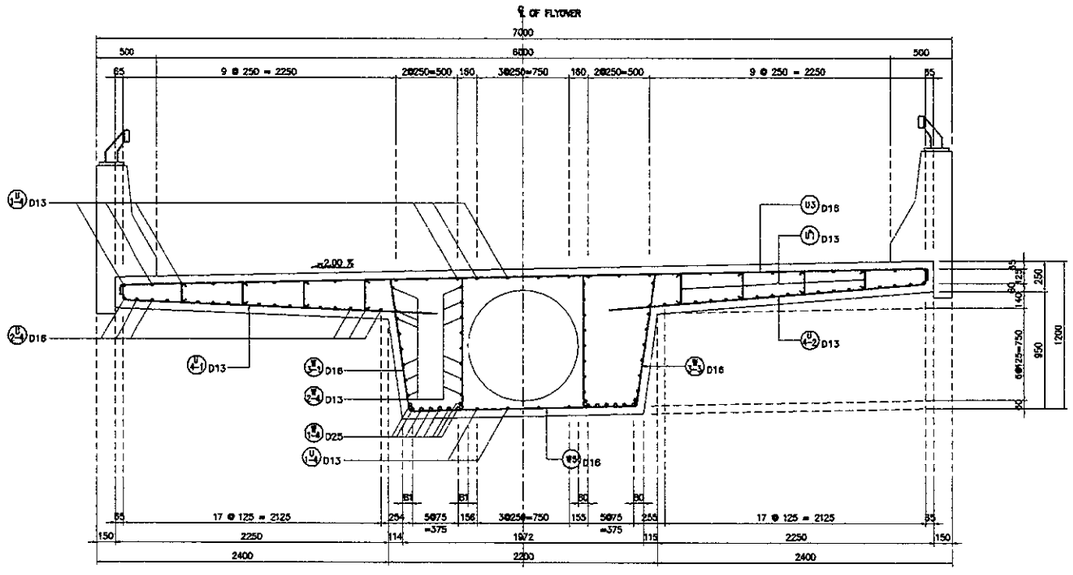
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 50 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER AB1-PB3	DRAWING NO : MCL-051 SHEET NO : 51 / 59
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400	Sign Date		



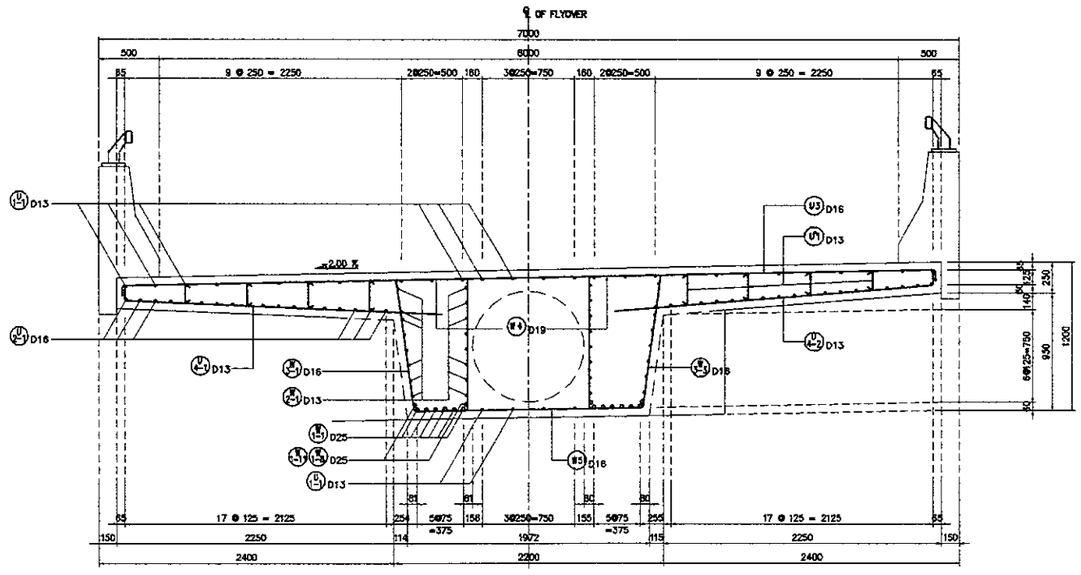
SECTION MID SPAN AB1~PB1
SCALE 1 : 50



SECTION AT PB1&PB2
SCALE 1 : 50

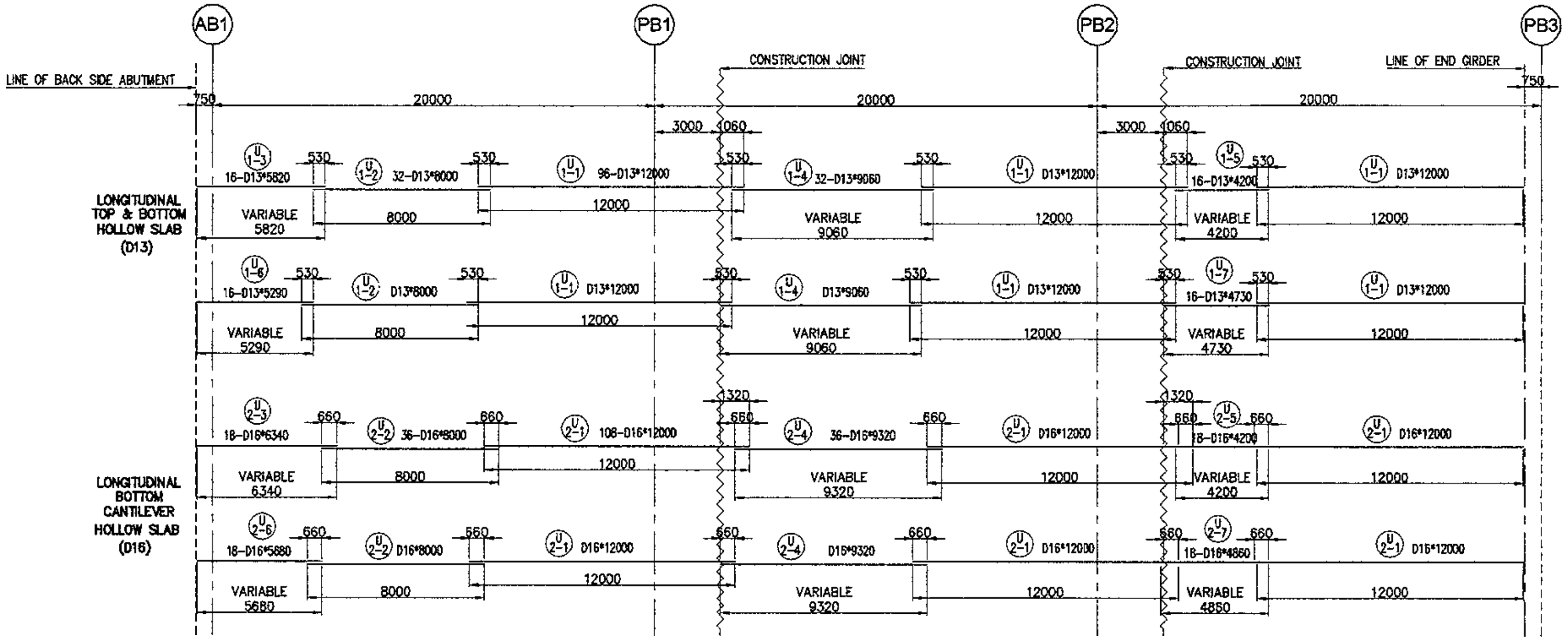


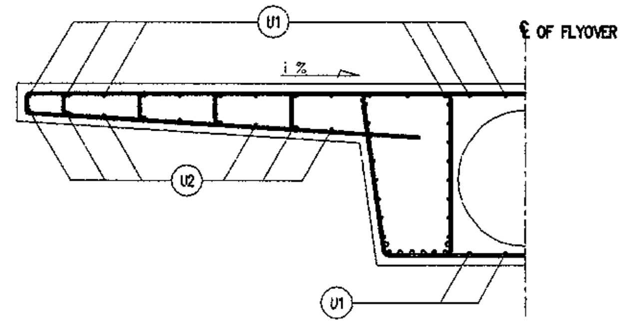
SECTION MID SPAN PB1~PB2
SCALE 1 : 50

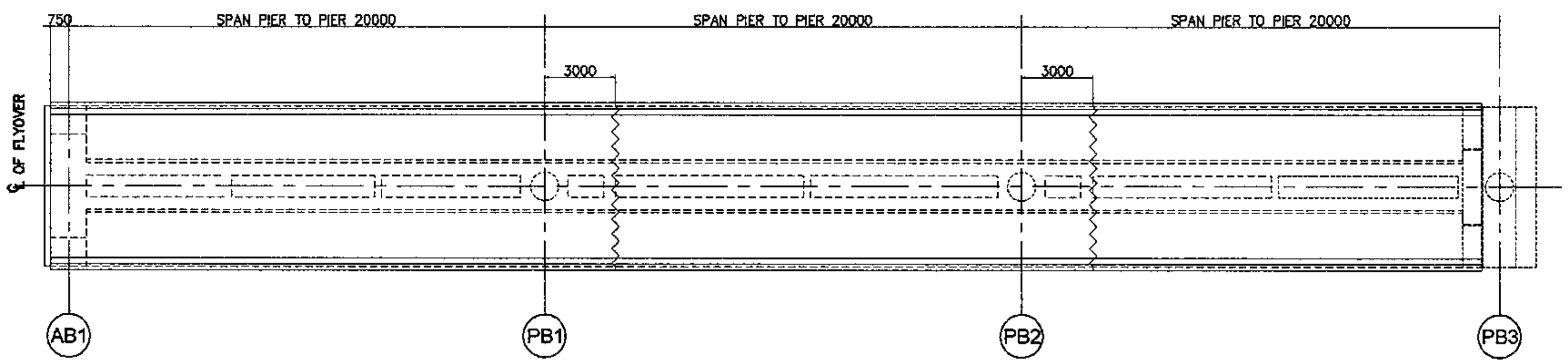


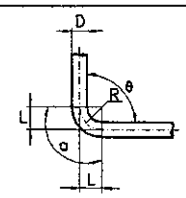
SECTION AT P3
SCALE 1 : 50

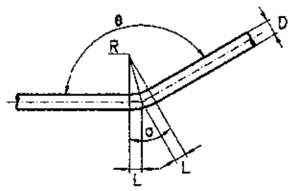
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION	SCALE	DRAWING TITLE	DRAWING NO
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI	APPROVED BY Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	FULL SIZE A3	REINFORCEMENT SCHEDULE FOR PC GIRDER AB1-PB3 (1 OF 3)	MCL-052
	Sign	Sign	Sign	Sign				SHEET NO :
	Date	Date	Date	Date				52 / 59





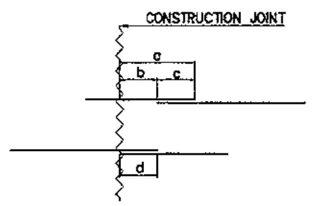




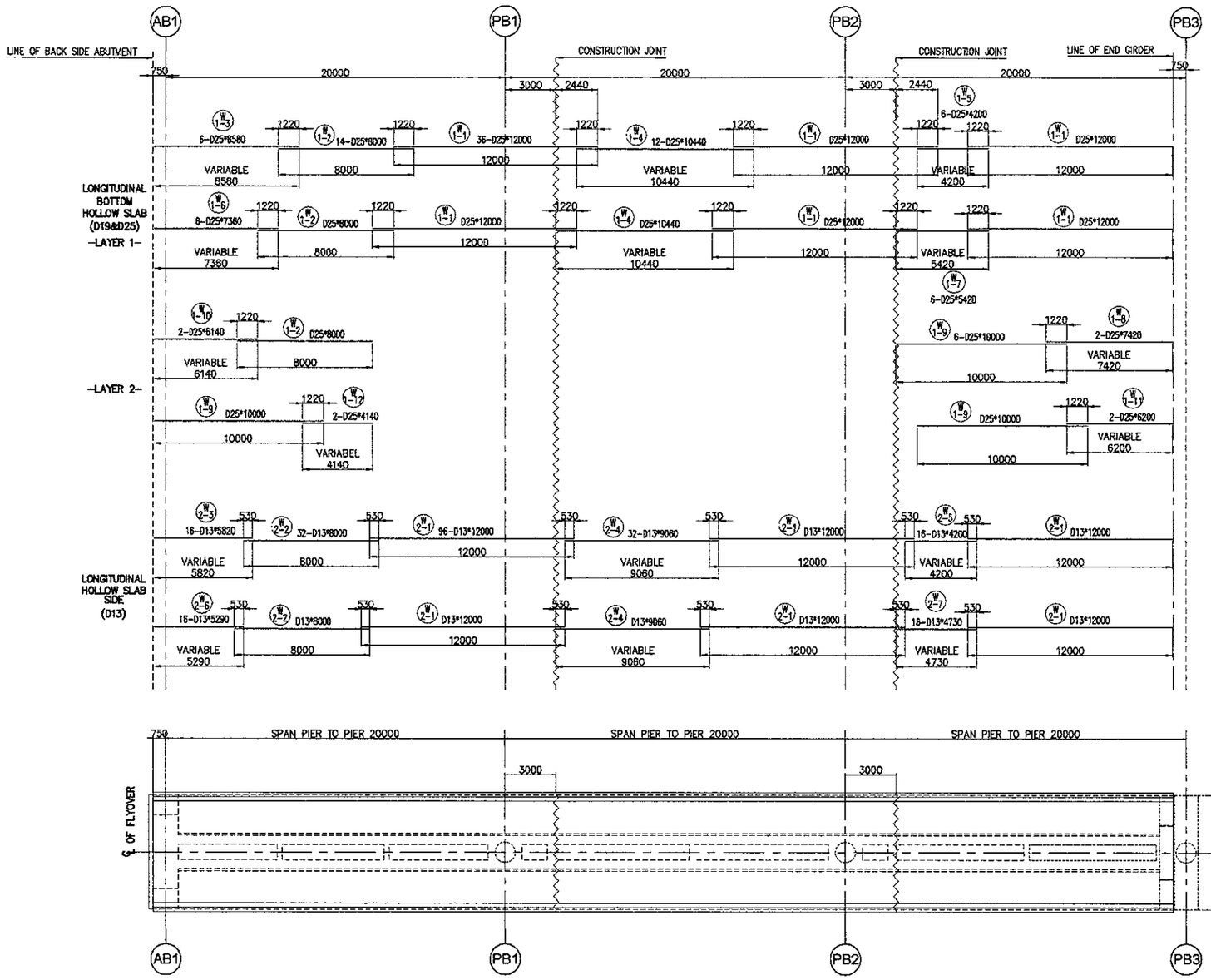


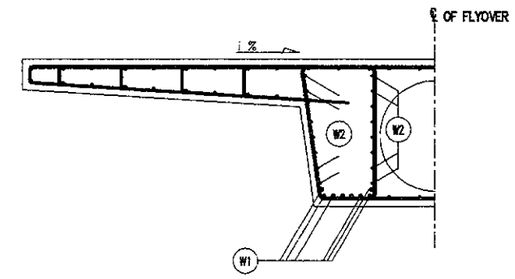
	MAIN REBARS										STIRRUP						
	θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL	θ=135° a	θ=135° ΔL	R=2.5ϕ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL
D 13	39	71.5	92	96	82	53	16	17	56	3	32.5	77	80	68	45	51	14
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17

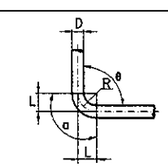
	a	b	c	d
D 13	1060	530	530	530
D 16	1320	660	660	660

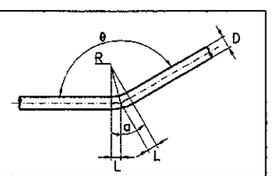


JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	Name H. HONDA Sign Date	CHECKED BY	Name T. OKUMURA Sign Date	SUBMITTED BY	Name M. KUCHI Sign Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (NIP. : 110038400) Sign Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER AB1-PB3 (2 OF 3)	DRAWING NO : MCL-053 SHEET NO : 53 / 59



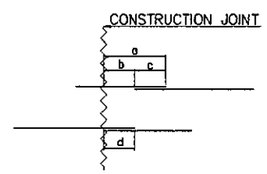




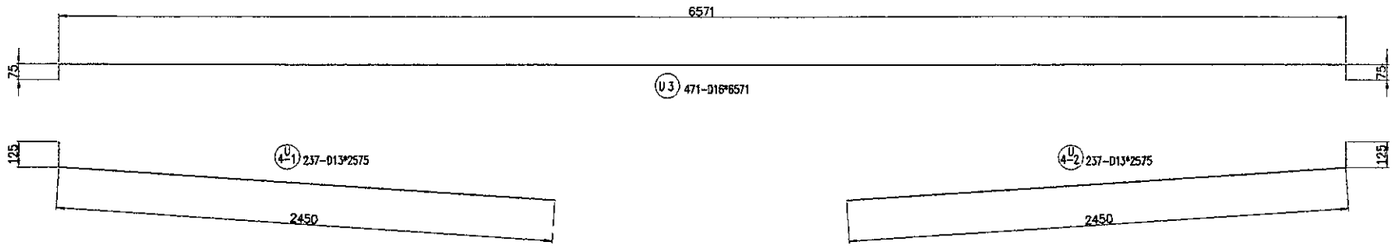


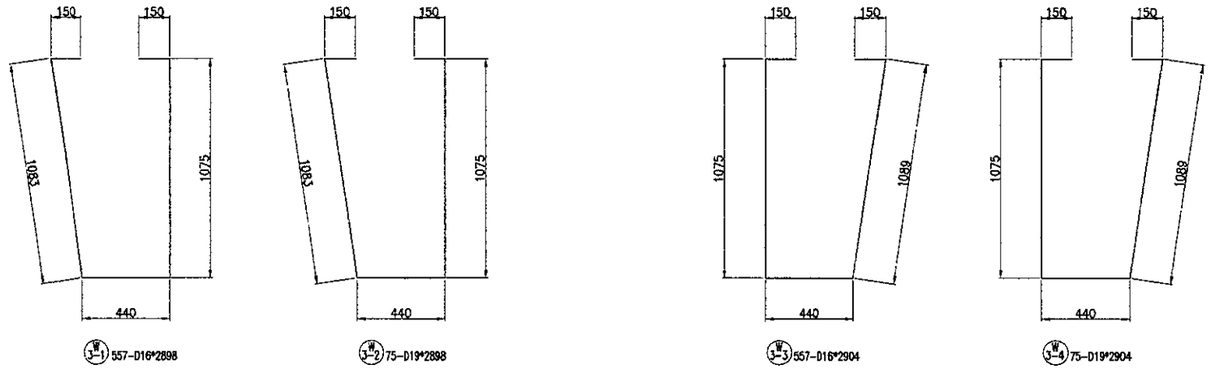
MAIN REBARS											STIRRUP						
	θ≤90° R=3φ	θ>90° R=5.5φ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL	θ=135° a	θ=135° ΔL	R=2.5φ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL
D 19	57	104.5	134	141	119	78	90	25	82	5	47.5	112	117	100	65	75	20
D 25	75	137.5	177	185	103	118	32	32	108	6	75	177	185	157	103	118	32

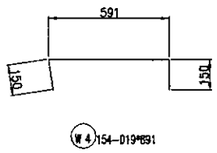
	a	b	c	d
D 13	1060	530	530	530
D 19	1560	780	780	780
D 25	2440	1220	1220	1220

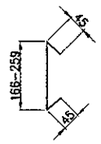


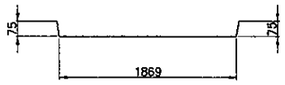
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI	APPROVED BY Ir. HERRY VAZA M,Eng.Sc	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE		REINFORCEMENT SCHEDULE FOR PC GIRDER AB1-PB3 (3 OF 3)	MCL-054
	Sign	Sign	Sign	NIP. : 110038400 Sign		FULL SIZE A3		SHEET NO : 54 / 59
	Date	Date	Date	Date				

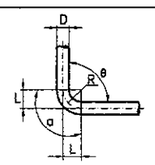


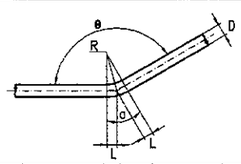












MAIN REBARS											STIRRUP							
	θ≤90° R=3φ	θ>90° R=5.5φ	θ=45°		θ=60°		θ=90°		θ=135°		R=2.5φ	θ=45°		θ=60°		θ=90°		
			α	ΔL	α	ΔL	α	ΔL	α	ΔL		α	ΔL	α	ΔL	α	ΔL	
D 13	39	71.5	92	96	82	53	16	17	56	3	32.5	77	80	68	45	51	14	
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17	
D 19	57	104.5	134	141	119	78	90	25	82	5	47.5	112	117	100	65	75	20	

BAR BENDING SCHEDULE

REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
U 1 – 1	13	12000	96	1.04	12.48	1198		
U 1 – 2	13	8000	32	1.04	8.32	266		
U 1 – 3	13	5820	16	1.04	6.05	97		
U 1 – 4	13	9060	32	1.04	9.42	302		
U 1 – 5	13	4200	16	1.04	4.37	70		
U 1 – 6	13	5290	16	1.04	5.5	88		
U 1 – 7	13	4730	16	1.04	4.92	79		
U 2 – 1	16	12000	108	1.58	18.96	2048		
U 2 – 2	16	8000	36	1.58	12.64	455		
U 2 – 3	16	6340	18	1.58	10.02	180		
U 2 – 4	16	9320	36	1.58	14.73	530		
U 2 – 5	16	4200	18	1.58	6.64	119		
U 2 – 6	16	5680	18	1.58	8.97	162		
U 2 – 7	16	4860	18	1.58	7.68	138		
U 3	16	6791	471	1.58	10.38	48.89		
U 4 – 1	13	2580	237	1.04	2.68	636		
U 4 – 2	13	2580	237	1.04	2.68	636		
U* 1	13	303	238	1.04	0.32	75		
SUB TOTAL – 1						11969		

REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
W 1 – 1	25	12000	36	3.85	46.2	1663		
W 1 – 2	25	8000	14	3.85	30.8	431		
W 1 – 3	25	8580	6	3.85	33.03	198		
W 1 – 4	25	10440	12	3.85	40.19	482		
W 1 – 5	25	4200	6	3.85	16.17	97		
W 1 – 6	25	7360	6	3.85	28.34	170		
W 1 – 7	25	5420	6	3.85	20.87	125		
W 1 – 8	25	7420	2	3.85	28.57	57		
W 1 – 9	25	10000	6	3.85	38.5	231		
W 1 – 10	25	6140	2	3.85	23.64	47		
W 1 – 11	25	6200	2	3.85	23.87	48		
W 1 – 12	25	4140	2	3.85	15.94	32		
W 2 – 1	13	12000	128	1.04	12.48	1597		
W 2 – 2	13	8000	32	1.04	8.32	266		
W 2 – 3	13	5820	16	1.04	6.05	97		
W 2 – 4	13	9060	32	1.04	9.42	302		
W 2 – 5	13	4200	16	1.04	4.37	70		
W 2 – 6	13	5290	16	1.04	5.5	88		
W 2 – 7	13	4730	16	1.04	4.92	79		
W 3 – 1	16	2898	557	1.58	4.58	2550		
W 3 – 2	19	2898	75	2.23	6.46	485		
W 3 – 3	16	2904	557	1.58	4.59	2556		
W 3 – 4	19	2904	75	2.23	6.48	486		
W 4	19	891	154	2.23	1.99	307		
W 5	16	2019	471	1.58	2.95	1391		
SUB TOTAL – 2						13855		
TOTAL REBAR WEIGHT P4 – P8						25822		

JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

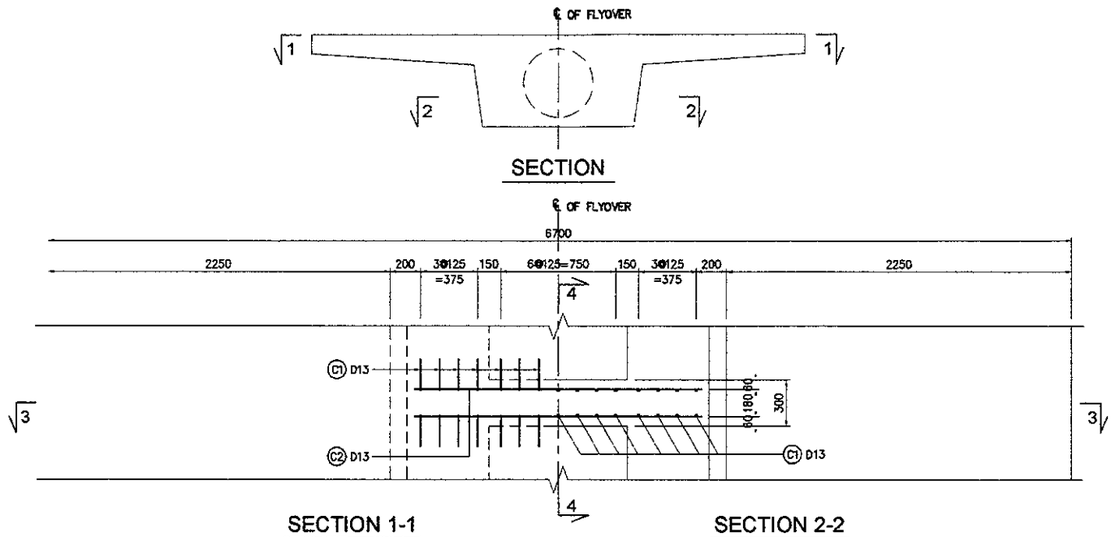
APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign	
	NIP. : 110038400	Date	

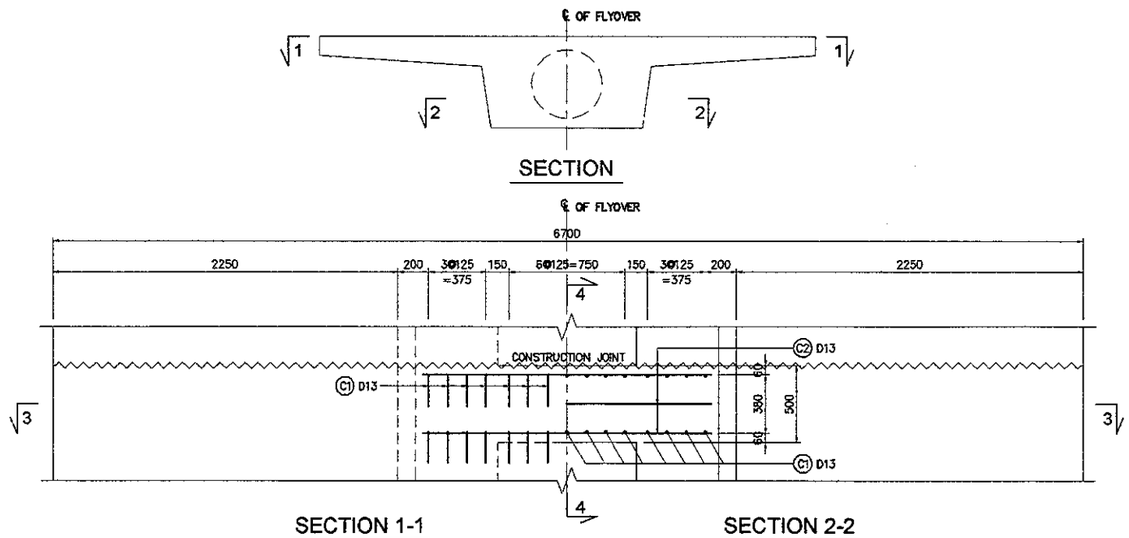
PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

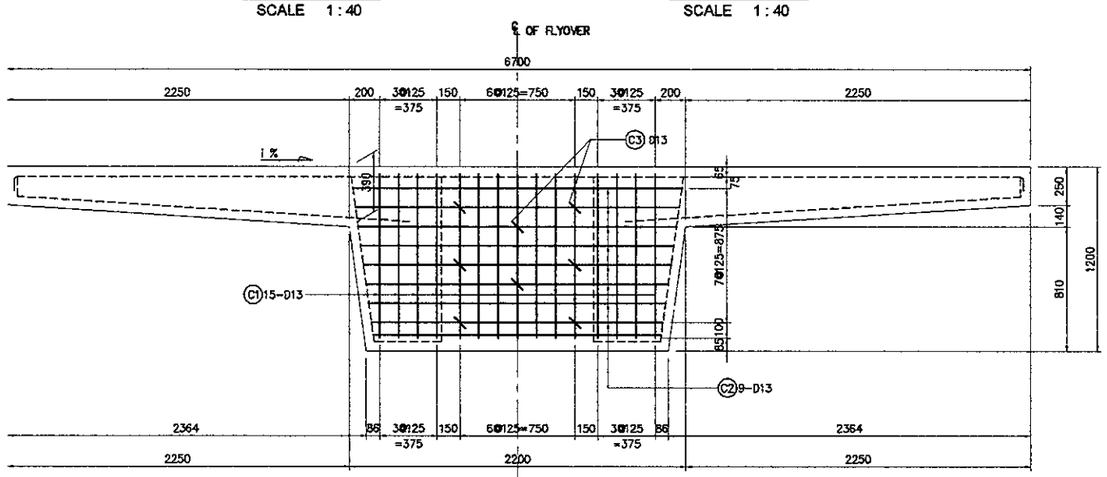
SCALE : 1 : 150
FULL SIZE A3

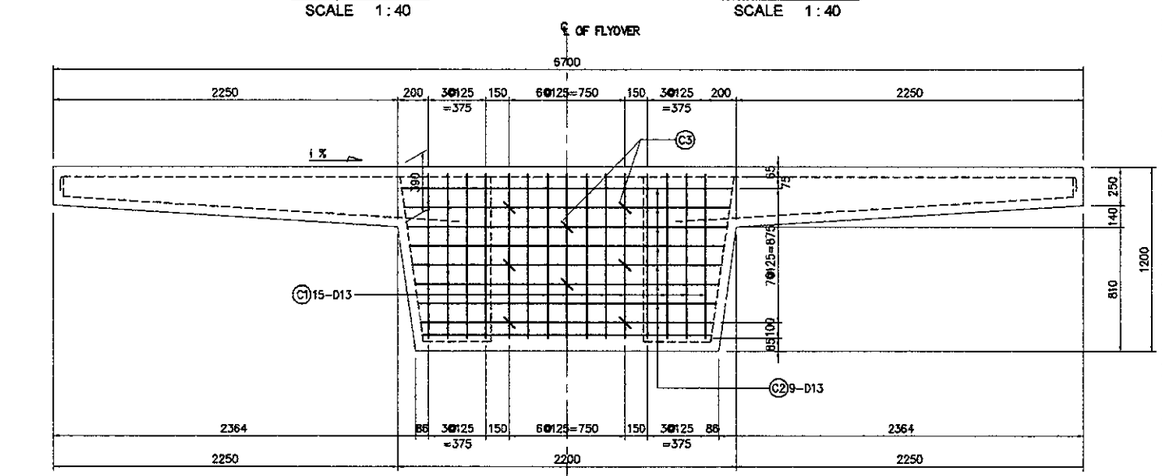
DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS DIAPHRAGM AB1 - PB3

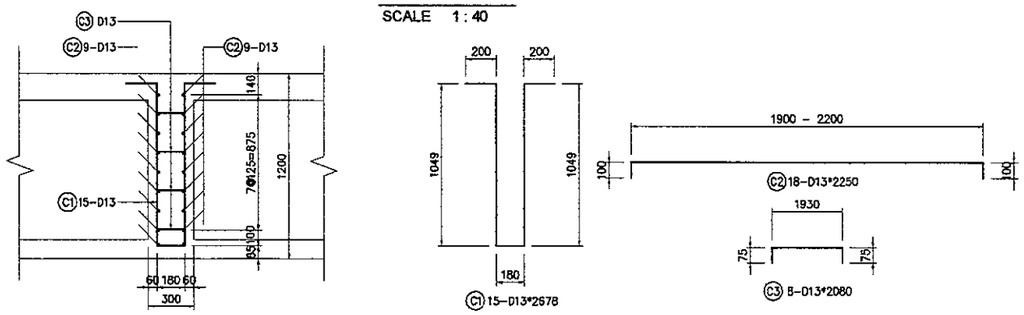
DRAWING NO : MCL-055
SHEET NO : 55 / 59





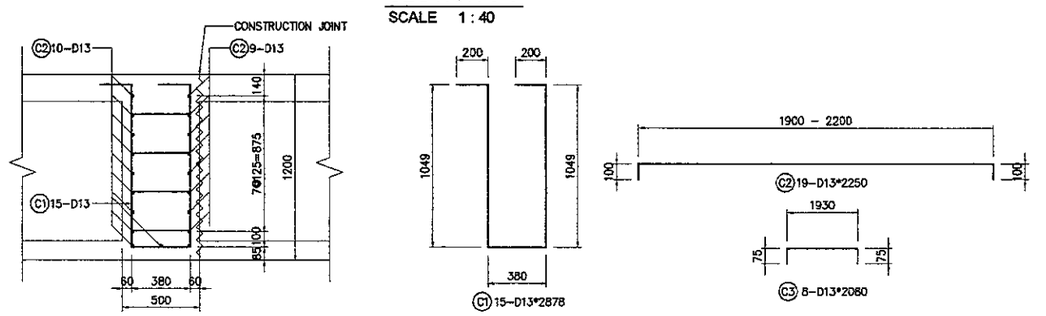






BAR BENDING SCHEDULE

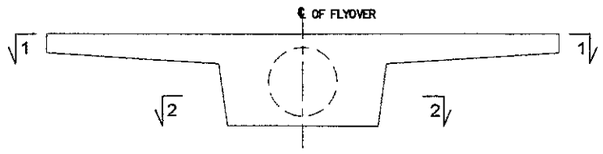
REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
C1	13	2678	15	1.04	2.79	42		
C2	13	2250	18	1.04	2.34	42		
C3	13	2080	8	1.04	2.16	17		
TOTAL REBAR WEIGHT A1 – P4						101 x 5 = 506 Kg		



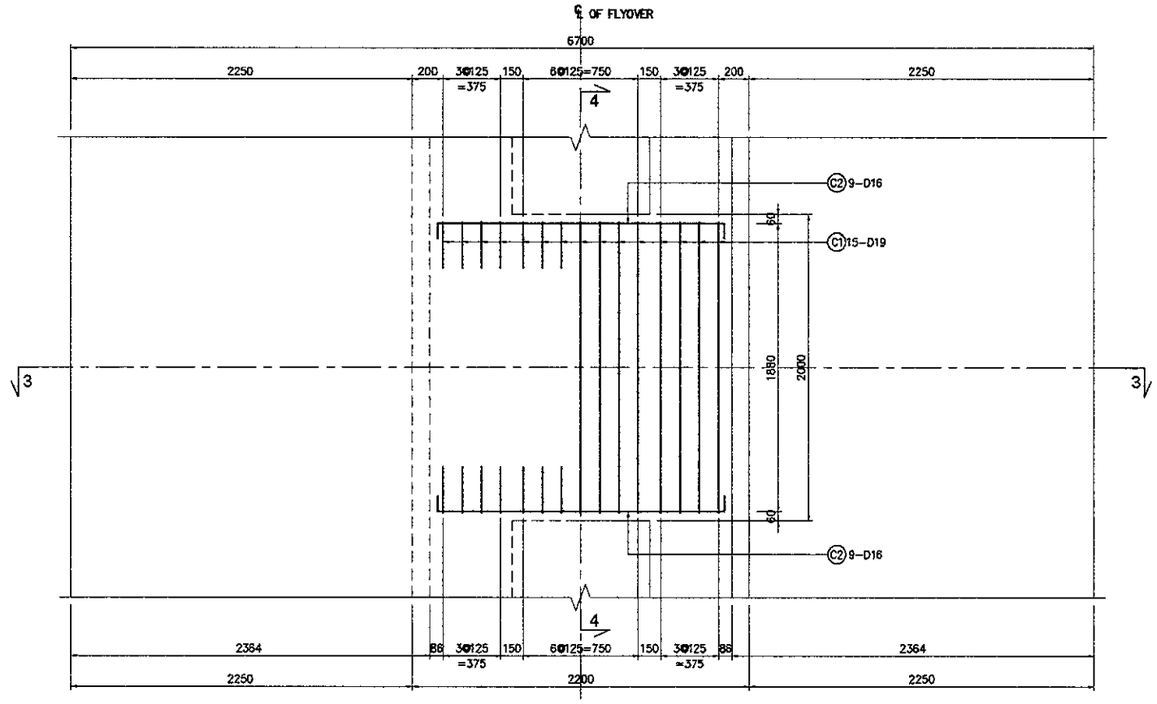
BAR BENDING SCHEDULE

REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
C1	13	2878	15	1.04	2.99	45		
C2	13	2250	19	1.04	2.34	44		
C3	13	2080	8	1.04	2.16	17		
TOTAL REBAR WEIGHT A1 – P4						106 x 3 = 318 Kg		

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 150 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS PB1, PB2	DRAWING NO : MCL-056 SHEET NO : 56 / 59
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400 Sign Date				

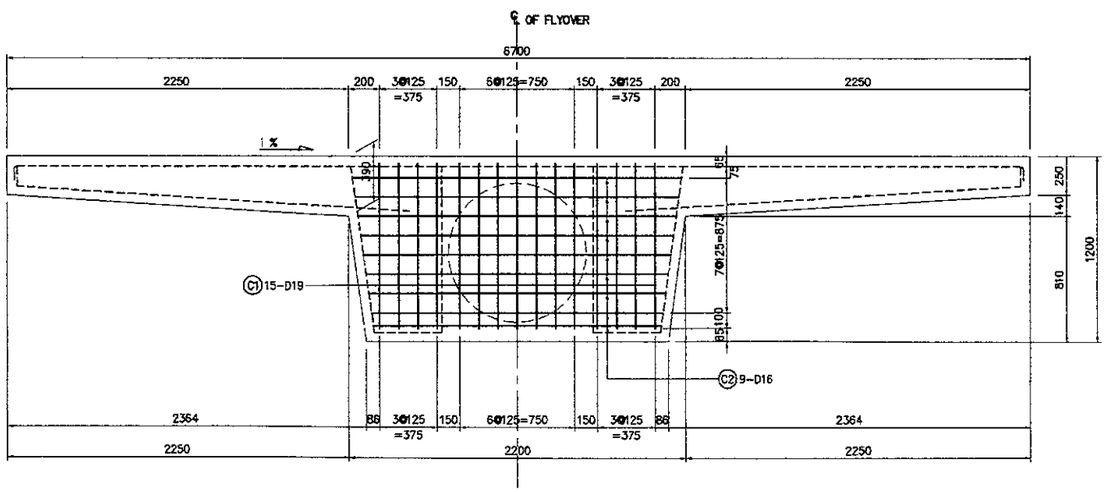


SECTION



SECTION 1-1
SCALE 1 : 40

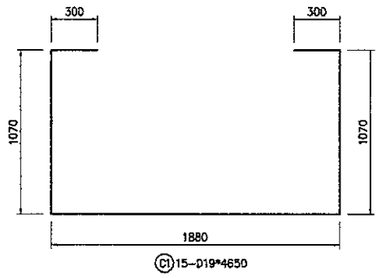
SECTION 2-2
SCALE 1 : 40

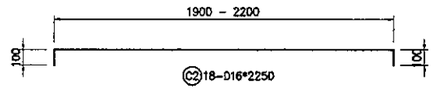


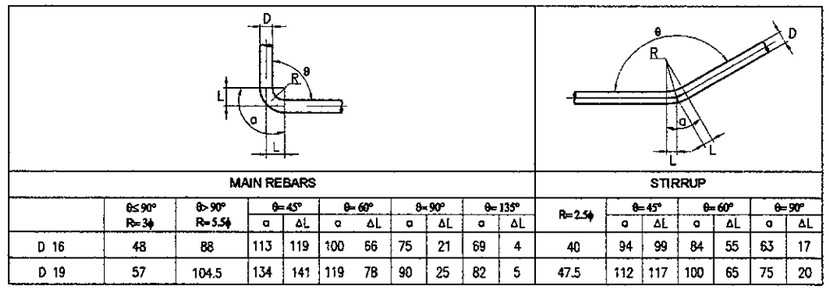
SECTION 3-3
SCALE 1 : 40

BAR BENDING SCHEDULE

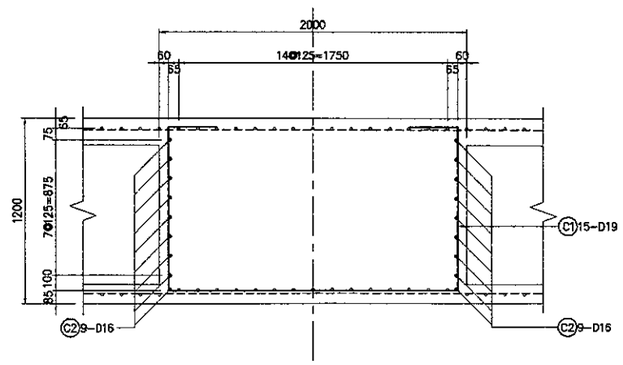
REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
C1	19	4620	15	2.23	10.30	155		
C2	16	2250	18	1.58	3.56	84		
TOTAL REBAR WEIGHT PB1-PB2						219 x 2 = 438 Kg		





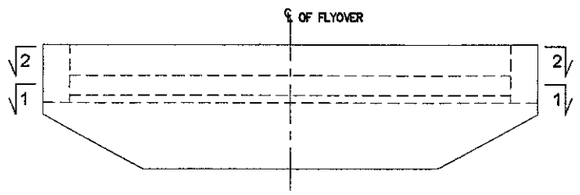


	MAIN REBARS										STIRRUP						
	θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45°		θ=60°		θ=90°		θ=135°		R=2.5ϕ	θ=45°		θ=60°		θ=90°	
			a	ΔL	a	ΔL	a	ΔL	a	ΔL		a	ΔL	a	ΔL	a	ΔL
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17
D 19	57	104.5	134	141	119	78	90	25	82	5	47.5	112	117	100	65	75	20

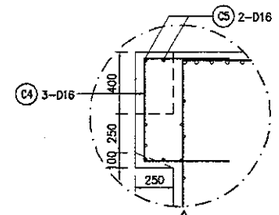


SECTION 4-4
SCALE 1 : 40

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M.Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 150 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS AB1	DRAWING NO : MCL-057 SHEET NO : 57 / 59

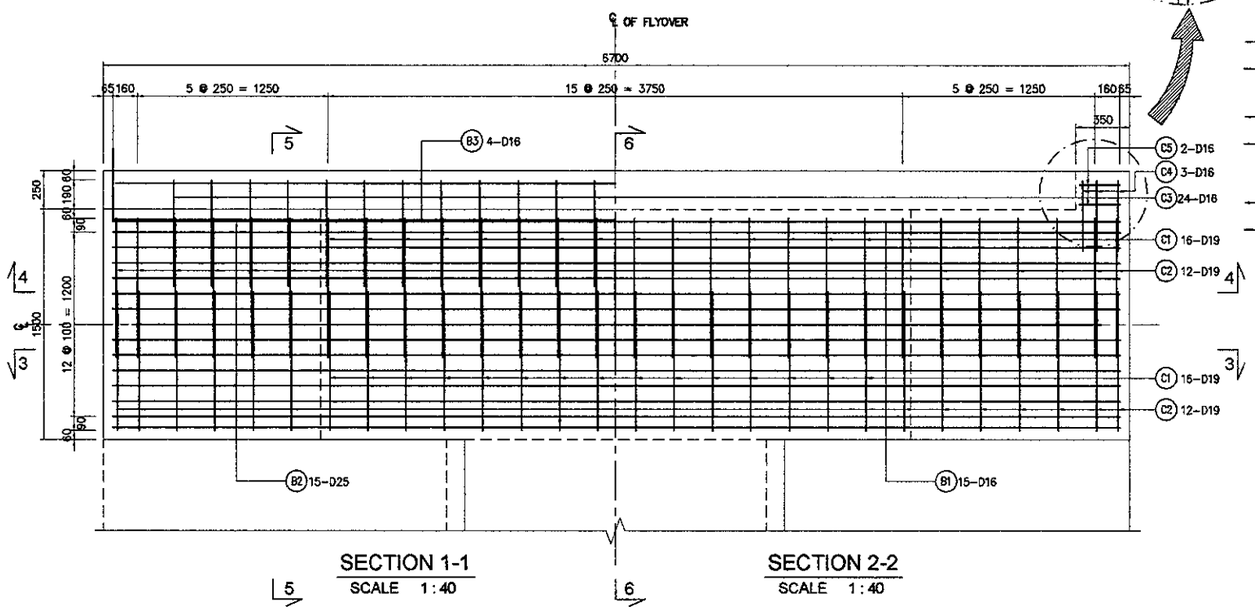


SECTION



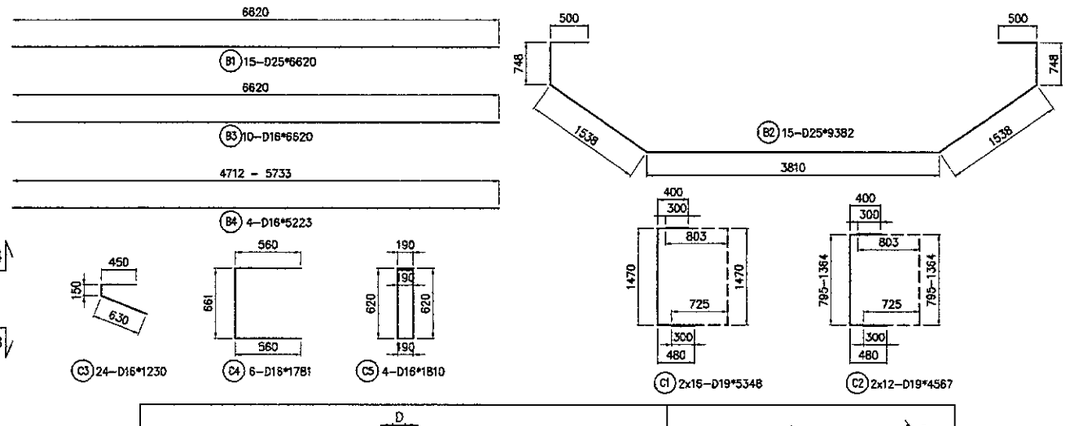
BAR BENDING SCHEDULE

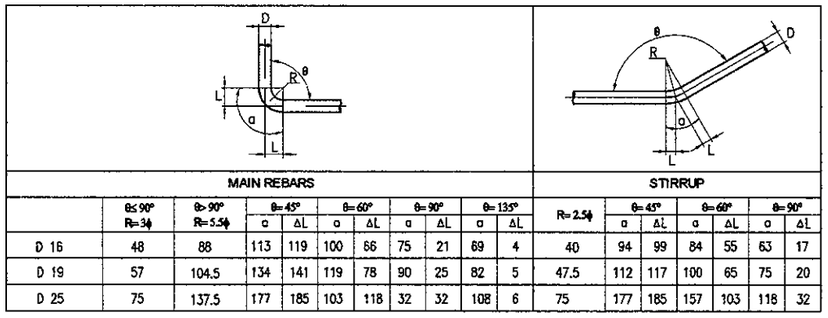
REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
B1	25	6620	15	3.85	25.49	382		
B2	25	9382	15	3.85	36.12	542		
B3	16	6620	10	1.58	10.46	105		
B4	16	5223	4	1.58	8.25	33		
C1	19	5348	32	2.23	11.93	382		
C2	19	4567	24	2.23	10.18	244		
C3	16	1230	24	1.58	1.94	47		
C4	16	1781	6	1.58	2.81	17		
C5	16	1810	4	1.58	2.86	11		
TOTAL REBAR WEIGHT ABUTMENT AB1						1763		



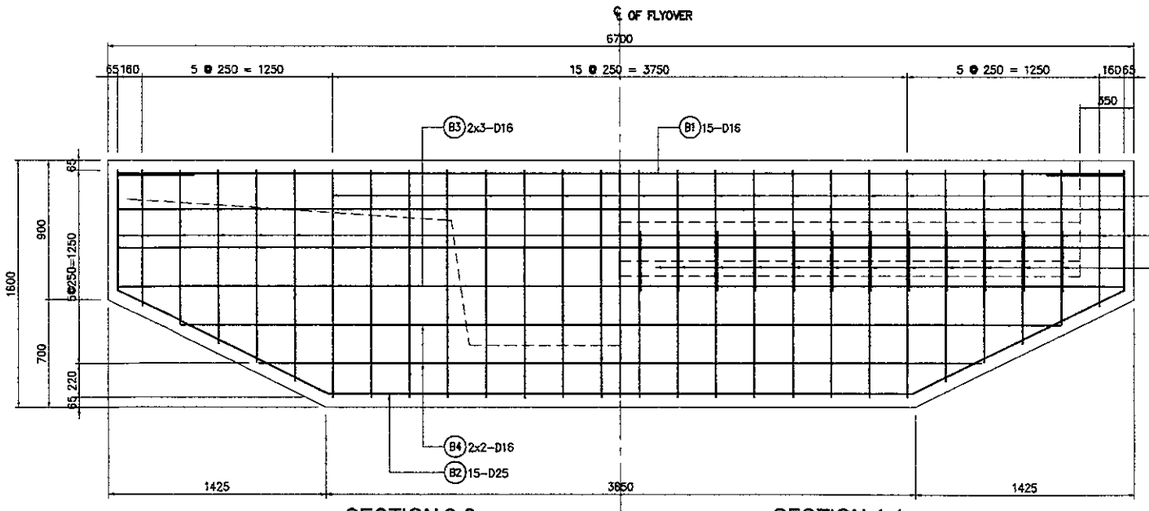
SECTION 1-1
SCALE 1 : 40

SECTION 2-2
SCALE 1 : 40



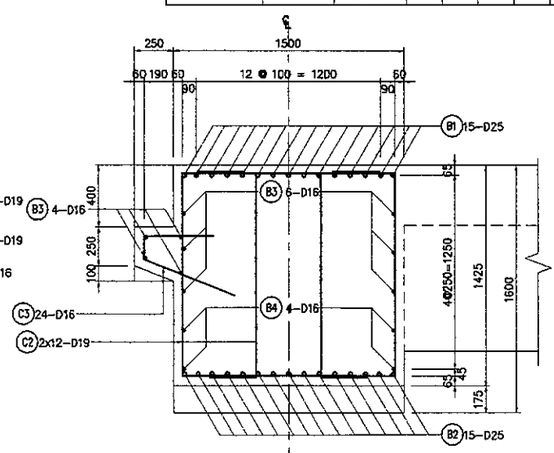


	MAIN REBARS: θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL	θ=135° a	θ=135° ΔL	STIRRUP: R=2.5ϕ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17
D 19	57	104.5	134	141	119	78	90	25	82	5	47.5	112	117	100	65	75	20
D 25	75	137.5	177	185	103	118	32	32	108	6	75	177	185	157	103	118	32

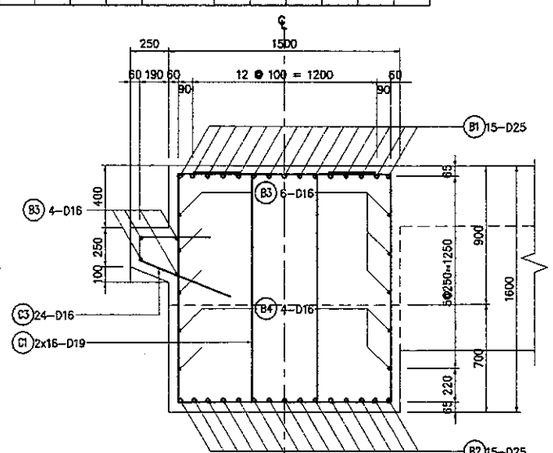


SECTION 3-3
SCALE 1 : 40

SECTION 4-4
SCALE 1 : 40

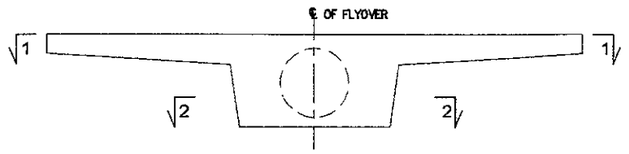


SECTION 5-5
SCALE 1 : 40



SECTION 6-6
SCALE 1 : 40

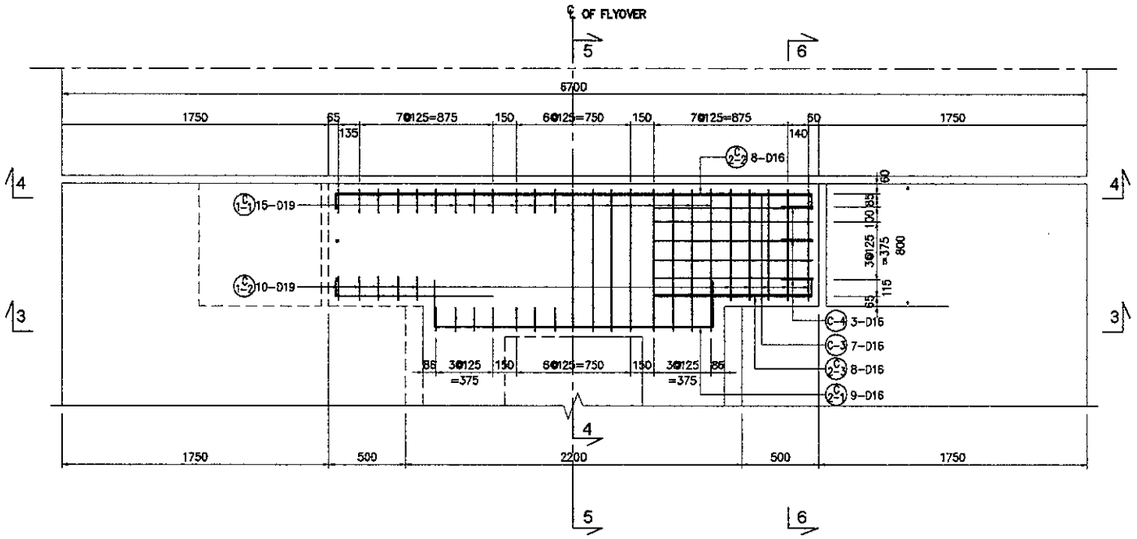
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 150 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS PB3	DRAWING NO : MCL-058 SHEET NO : 58 / 59



SECTION

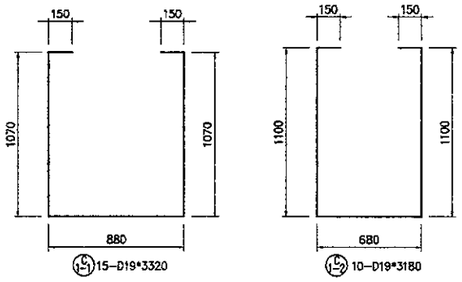
BAR BENDING SCHEDULE

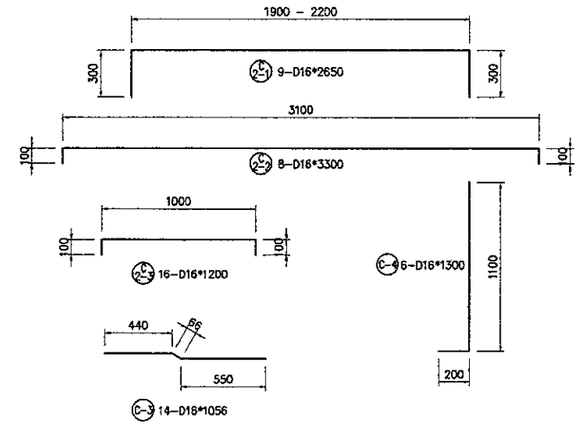
REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
C 1–1	19	3320	15	2.23	7.46	111		
C 1–2	19	3180	10	2.23	7.09	71		
C 2–1	16	2650	9	1.58	4.19	38		
C 2–2	16	3300	8	1.58	5.21	42		
C 2–3	16	1200	16	1.58	1.9	30		
C 3	16	1056	14	1.58	1.67	23		
C 4	16	1300	6	1.58	2.05	12		
TOTAL REBAR WEIGHT PB3						327 Kg		

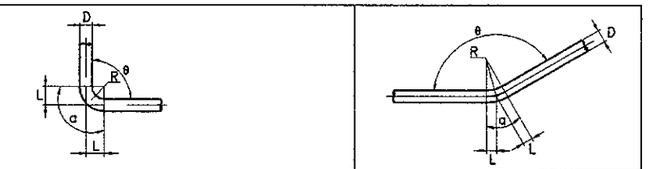


SECTION 1-1
SCALE 1 : 40

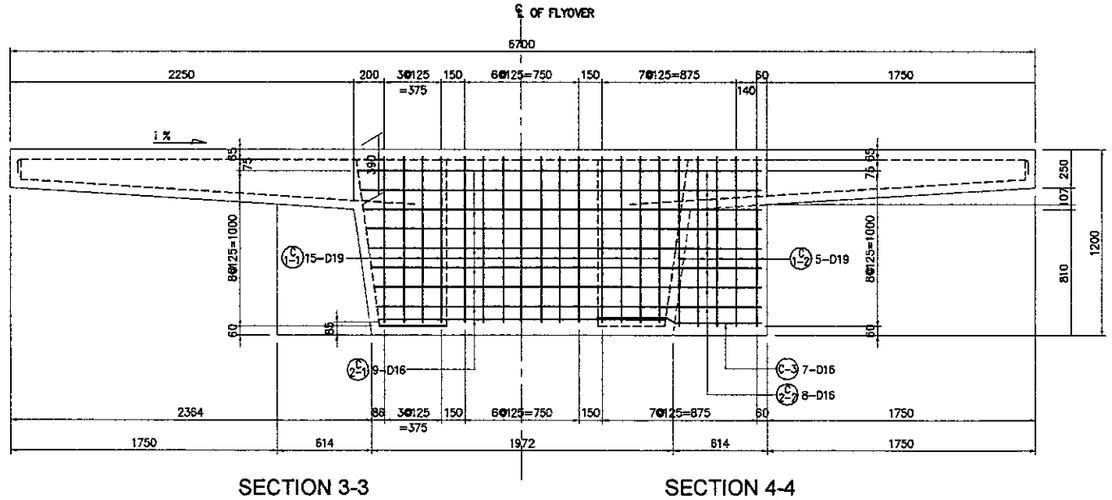
SECTION 2-2
SCALE 1 : 40





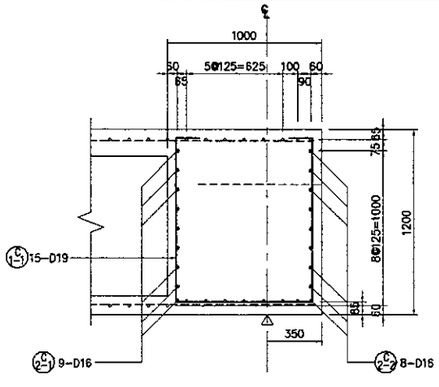


	MAIN REBARS										STIRRUP					
	θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45°		θ=60°		θ=90°		θ=135°		R=2.5ϕ	θ=45°		θ=60°		θ=90°	
			α	ΔL	α	ΔL	α	ΔL	α	ΔL		α	ΔL	α	ΔL	α	ΔL
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17
D 19	57	104.5	134	141	119	78	90	25	82	5	47.5	112	117	100	65	75	20

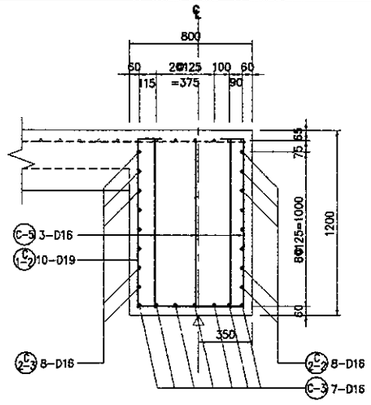


SECTION 3-3
SCALE 1 : 40

SECTION 4-4
SCALE 1 : 40

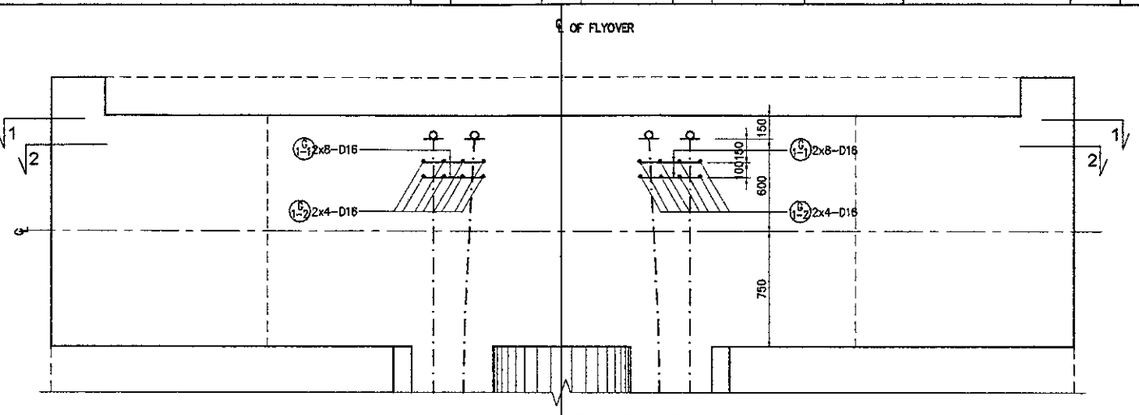


SECTION 5-5
SCALE 1 : 40

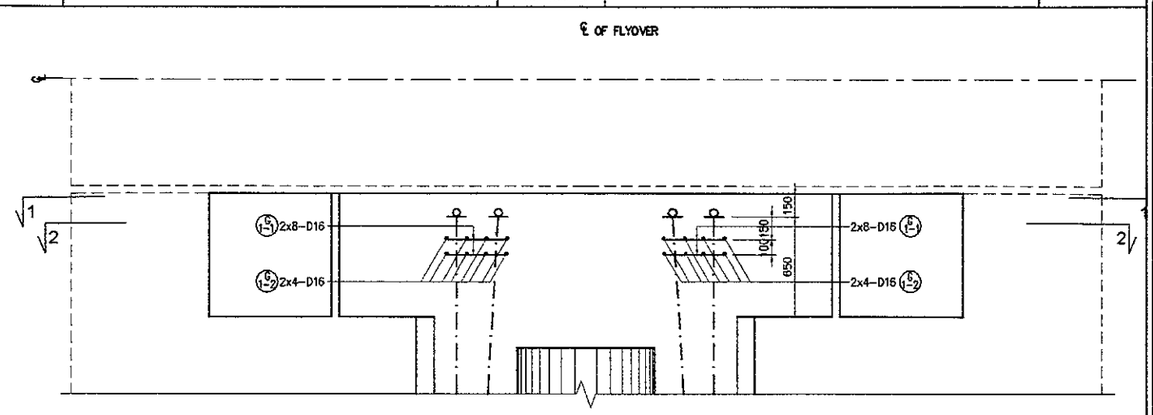


SECTION 6-6
SCALE 1 : 40

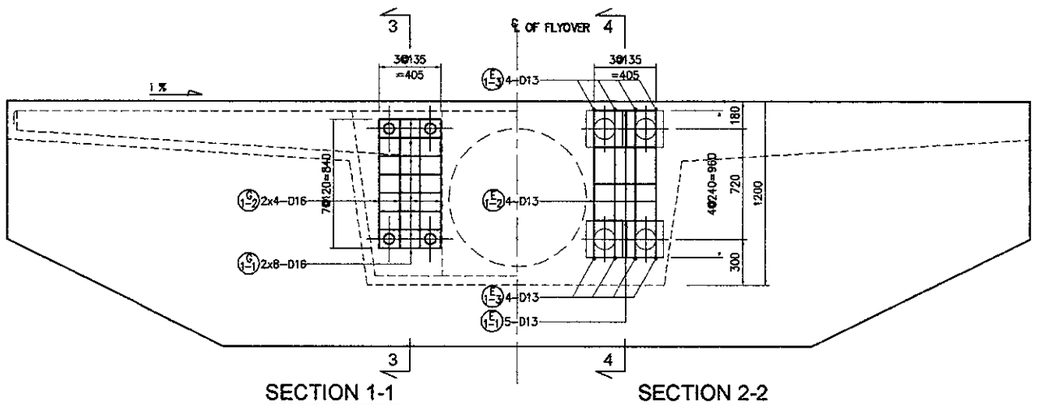
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 150 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR ANCHORAGES AB1 & PB3	DRAWING NO : MCL-059 SHEET NO : 59 / 59
	Name H. HONDA		Name T. OKUMURA		Name M. KIUCHI					
	Sign		Sign		Sign					
	Date		Date		Date		APPROVED BY Ir. HERRY VAZA M,Eng,Sc NIP. : 110038400	Sign Date		



PLAN ANCHORAGES AB1
SCALE 1 : 40

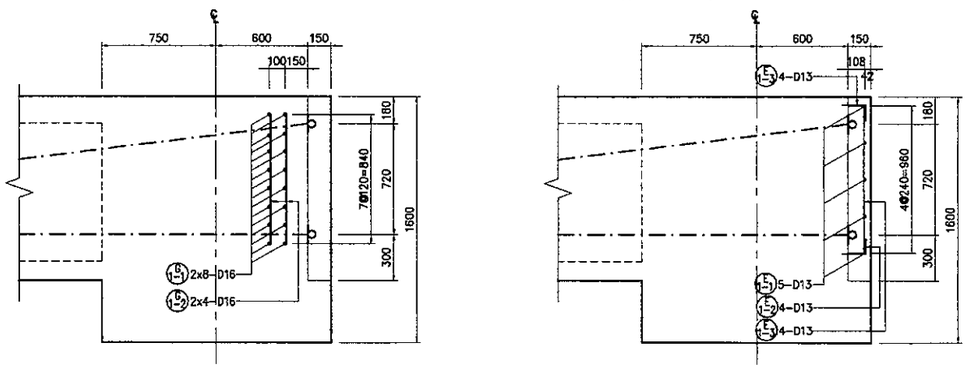


PLAN ANCHORAGES PB3
SCALE 1 : 40



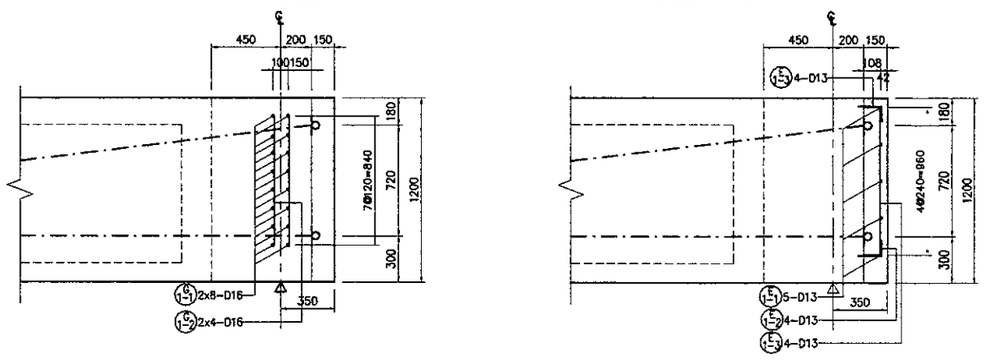
SECTION 1-1
SCALE 1 : 40

SECTION 2-2
SCALE 1 : 40



SECTION 3-3
SCALE 1 : 40

SECTION 4-4
SCALE 1 : 40

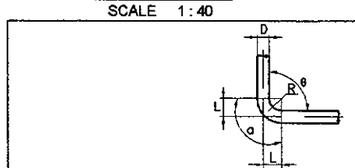


SECTION 1-1
SCALE 1 : 40

SECTION 2-2
SCALE 1 : 40

SECTION 3-3
SCALE 1 : 40

SECTION 4-4
SCALE 1 : 40

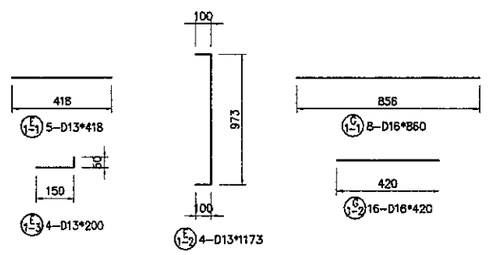


MAIN REBARS

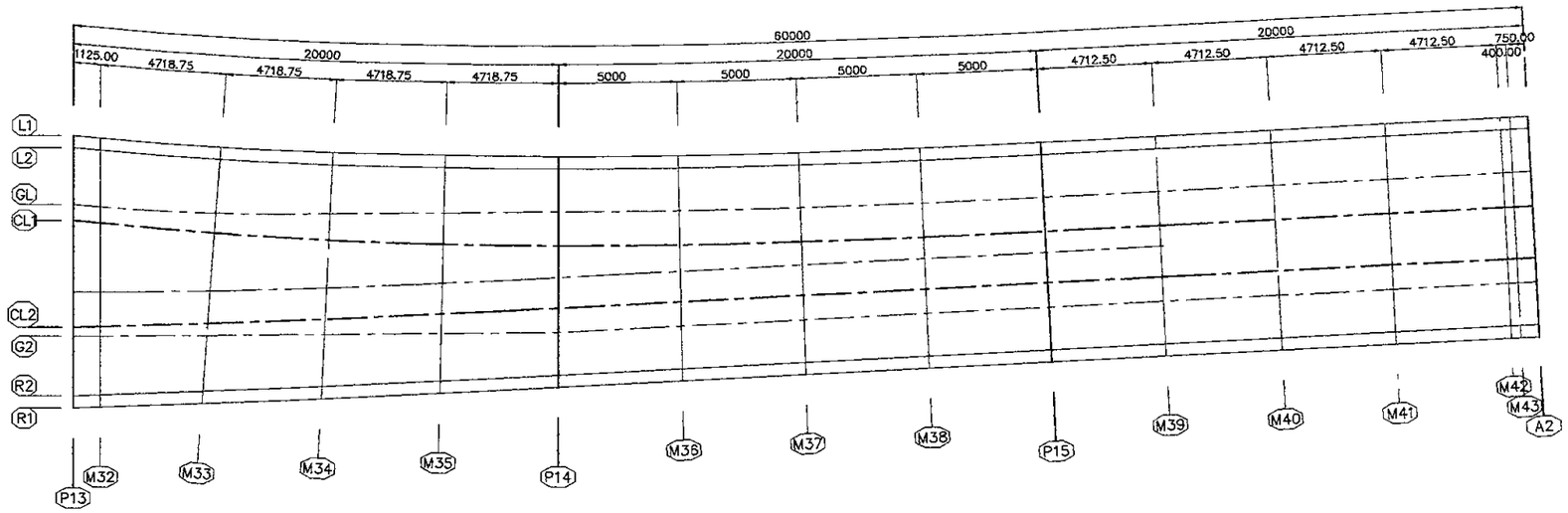
	θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45° a	θ=45° ΔL	θ=60° a	θ=60° ΔL	θ=90° a	θ=90° ΔL	θ=135° a	θ=135° ΔL
D 13	39	71.5	92	96	82	53	16	17	56	3
D 16	48	88	113	119	100	66	75	21	69	4

BAR BENDING SCHEDULE

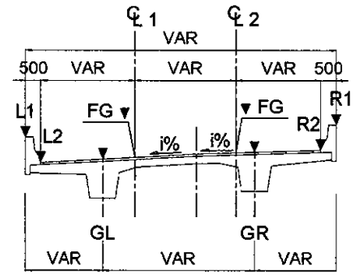
REBAR NAME	DIA (mm)	LENGTH (mm)	NOS.	WEIGHT / METER (Kg / meter)	WEIGHT (Kg)	TOTAL WEIGHT (Kg)	DIAGRAM	REMARKS
E 1–1	13	418	5	1.04	0.44	2.2		
E 1–2	13	1173	4	1.04	1.22	5		
E 1–3	13	200	4	1.04	0.21	1		
C 1–1	16	860	8	1.58	1.36	11		
C 1–2	16	420	16	1.58	0.66	11		
TOTAL REBAR WEIGHT AB1 – PB3						29 x 4 = 118 Kg		



JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 250 1 : 200 FULL SIZE A3	COORDINATES AND ELEVATION FOR PC GIRDER	MCR-001 SHEET NO : 01 / 21
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign				
	Date	Date	Date	NIP. : 110038400 Date				



PLAN VIEW
SCALE 1:250

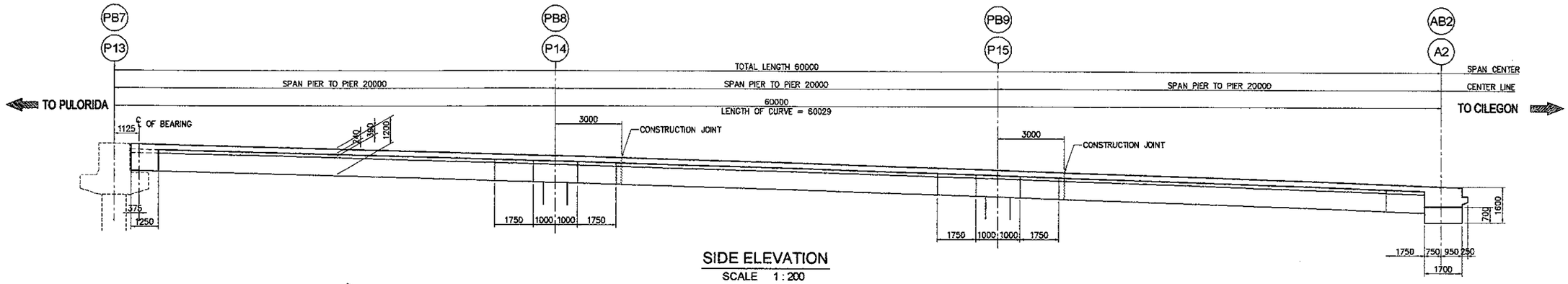


SECTION VIEW
SCALE 1:200

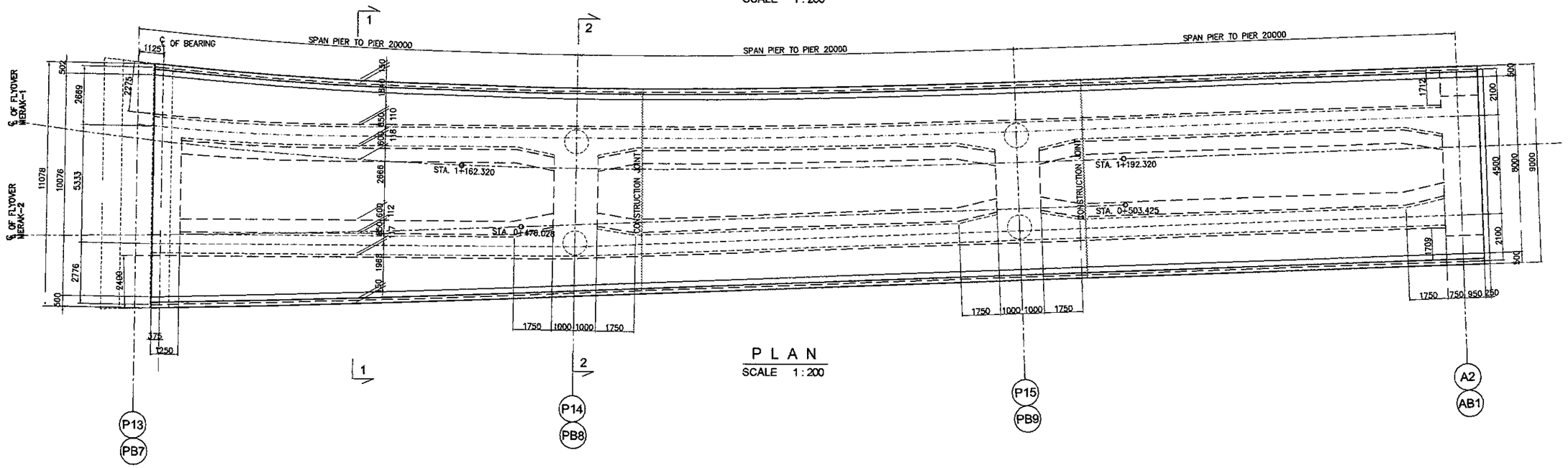
LIST OF COORDINATES

LABEL \ STA		P13	M32	M33	M34	M35	P14	M36	M37	M38	P15	M39	M40	M41	M42	M43	A2
		1+147.5000	1+148.6310	1+153.3440	1+158.0620	1+162.7810	1+167.5000	1+172.5000	1+177.5000	1+182.5000	1+187.5000	1+192.2120	1+196.9250	1+201.6370	1+206.3500	1+206.7500	1+207.5000
L1	E	610653.2058	610653.9171	610657.1103	610660.1885	610663.3531	610666.555	610670.033	610673.5825	610677.1882	610680.8348	610684.2958	610687.7646	610691.2333	610694.7021	610694.9965	610695.5485
	N	9344124.0605	9344123.1828	9344119.3826	9344115.9229	9344112.5442	9344109.1908	9344105.6988	9344102.2566	9344098.8498	9344095.4634	9344092.2761	9344089.0862	9344085.8963	9344082.7064	9344082.4356	9344081.9279
	Z	12.3116	12.2845	12.1619	12.0395	11.914	11.8011	11.675	11.5422	11.4028	11.2567	11.1021	10.9345	10.7611	10.5817	10.5662	10.537
L2	E	610652.8454	610653.5578	610656.7282	610659.8145	610662.9876	610666.1972	610669.682	610673.237	610676.8466	610680.4956	610683.9574	610687.4261	610690.8949	610694.3636	610694.658	610695.2101
	N	9344123.7097	9344122.832	9344119.0601	9344115.591	9344112.2031	9344108.8416	9344105.3427	9344101.8952	9344098.4847	9344095.096	9344091.9061	9344088.7182	9344085.5282	9344082.3383	9344082.0676	9344081.5599
	Z	11.4866	11.4595	11.3369	11.2145	11.0890	10.9761	10.8500	10.7172	10.5778	10.4317	10.2771	10.1095	9.9361	9.7567	9.7412	9.7120
GL	E	610651.1857	610651.9009	610655.0414	610658.3216	610661.6317	610664.9377	610668.4538	610672.0279	610675.6512	610679.3064	610682.7728	610686.2415	610689.7103	610693.179	610693.4735	610694.0255
	N	9344122.0891	9344121.2151	9344117.6363	9344114.2659	9344110.9382	9344107.6124	9344104.0961	9344100.6301	9344097.2066	9344093.8103	9344090.6199	9344087.43	9344084.2401	9344081.0502	9344080.7795	9344080.2718
	Z	11.6103	11.5833	11.4605	11.3263	11.1911	11.0630	10.9259	10.7826	10.6327	10.4761	10.3221	10.1545	9.9811	9.8017	9.7862	9.7570
CL1	E	610650.7202	610651.4252	610654.4203	610657.5085	610660.6843	610663.9428	610667.4712	610671.0605	610674.6948	610678.3586	610681.8251	610685.2939	610688.7626	610692.2314	610692.5258	610693.0778
	N	9344121.6348	9344120.7509	9344117.112	9344113.5443	9344110.0543	9344106.6415	9344103.0989	9344099.6181	9344096.1842	9344092.7818	9344089.5894	9344086.3995	9344083.2096	9344080.0197	9344079.749	9344079.2413
	Z	11.6450	11.6186	11.5060	11.3872	11.2624	11.1317	10.9867	10.8350	10.6767	10.5117	10.3501	10.1825	10.0091	9.8297	9.8142	9.7850
CL2	E	610647.5835	610648.3899	610651.5791	610655.0804	610658.5952	610662.1174	610665.8365	610669.5435	610673.2413	610676.9318	610680.4036	610683.8724	610687.3411	610690.8099	610691.1043	610691.6563
	N	9344118.5738	9344117.7889	9344114.7137	9344111.3893	9344108.1053	9344104.86	9344101.4399	9344098.0309	9344094.6302	9344091.2365	9344088.0437	9344084.8538	9344081.6639	9344078.474	9344078.2032	9344077.6955
	Z	11.8474	11.8148	11.6848	11.5390	11.3920	11.2344	11.0689	10.9029	10.7341	10.5606	10.3921	10.2245	10.0511	9.8717	9.8562	9.8270
GR	E	610647.3156	610648.1093	610651.2086	610654.6162	610658.0141	610661.4012	610665.1347	610668.8527	610672.5584	610676.2535	610679.7257	610683.1955	610686.6642	610690.133	610690.4274	610690.9794
	N	9344118.3124	9344117.515	9344114.401	9344110.9773	9344107.5633	9344104.1611	9344100.7276	9344097.3082	9344093.9001	9344090.5019	9344087.3076	9344084.1177	9344080.9278	9344077.7379	9344077.4671	9344076.9595
	Z	11.8592	11.8273	11.7014	11.5610	11.4184	11.2653	11.0974	10.9290	10.7580	10.5824	10.4121	10.2446	10.0711	9.8917	9.8762	9.8470
R2	E	610645.5675	610648.3796	610649.4408	610653.0063	610656.5779	610660.1464	610663.9052	610667.643	610671.3627	610675.0861	610678.5422	610682.0109	610685.4796	610688.9484	610689.2428	610689.7949
	N	9344116.6064	9344115.827	9344112.9088	9344109.5484	9344106.2234	9344102.9365	9344099.4798	9344096.0426	9344092.6218	9344089.2161	9344086.0195	9344082.8296	9344079.6397	9344076.4498	9344076.179	9344075.6713
	Z	11.9367	11.9040	11.7799	11.6333	11.4837	11.3195	11.1471	10.9747	10.7998	10.6206	10.4891	10.3215	10.1481	9.9687	9.9532	9.9240
R1	E	610645.2094	610646.0215	610649.0563	610652.6308	610656.2113	610659.7861	610663.5541	610667.2974	610671.0212	610674.7269	610678.2037	610681.6724	610685.1412	610688.6099	610688.9044	610689.4564
	N	9344116.257	9344115.4776	9344112.5843	9344109.2151	9344105.8814	9344102.5868	9344099.1235	9344095.681	9344092.2566	9344088.8487	9344085.6515	9344082.4615	9344079.2715	9344076.0817	9344075.811	9344075.3033
	Z	12.7617	12.729	12.6049	12.4583	12.3087	12.1445	11.9721	11.7997	11.6248	11.4456	11.3141	11.1465	10.9731	10.7937	10.7782	10.749

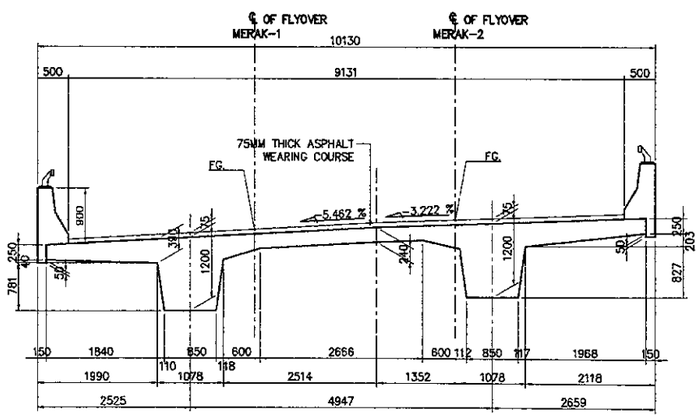
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : DIMENSION PLAN OF PC SUPERSTRUCTURE P13 - A2 (1 OF 2)	DRAWING NO : MCR-002 SHEET NO : 02 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc			
	Date		Date		Date			NIP. : 110038400			



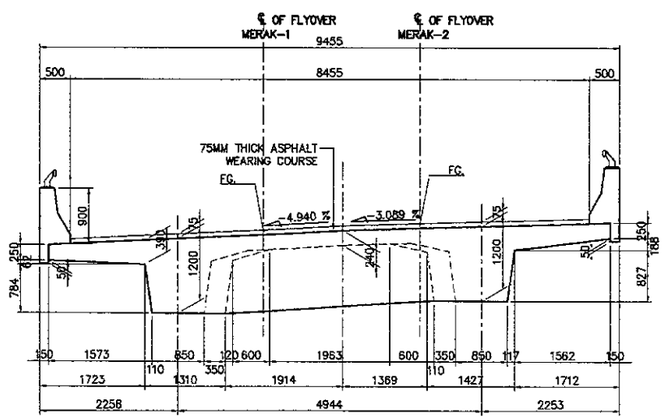
SIDE ELEVATION
SCALE 1 : 200



P L A N
SCALE 1 : 200

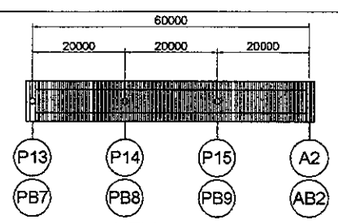


SECTION 1-1
SCALE 1 : 100



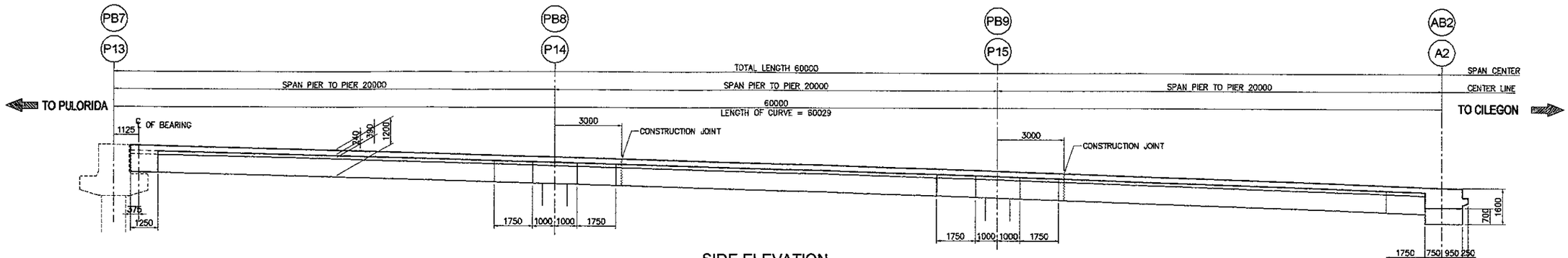
SECTION 2-2
SCALE 1 : 100

NOTES :
1. All dimension are in mm unless noted otherwise.
2. Concrete Girder and Slab fc'= 35 MPa.
3. All Reinforcing steel shall be BJTD 40, or ASTM A615 Grade 60 deformed bars.
4. The Contractor shall be responsible to carry out the following before Construction :
   a) Verification of all elevations and dimensions, using actual field survey.
   b) Preparation and submission of shop drawings for all bridge components for the Engineer's approval.

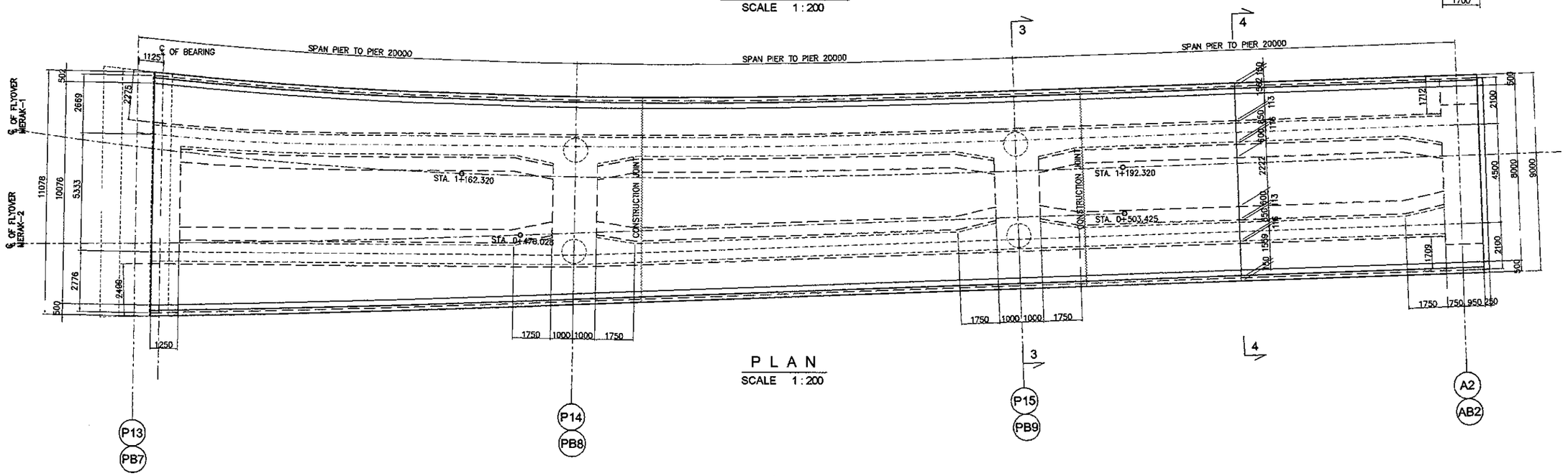


KEY PLAN

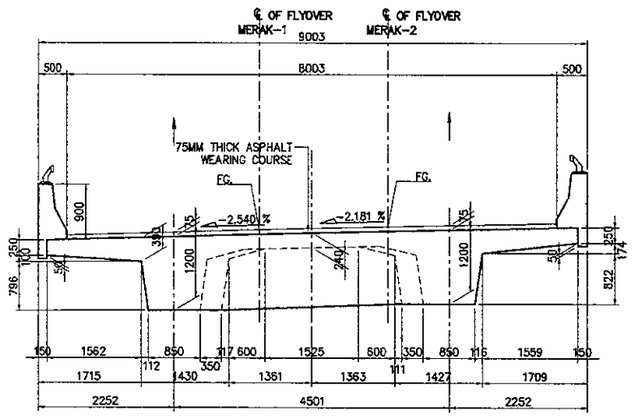
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : DIMENSION PLAN OF PC SUPERSTRUCTURE P13 - A2 (2 OF 2)	DRAWING NO : MCR-003 SHEET NO : 03 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400			



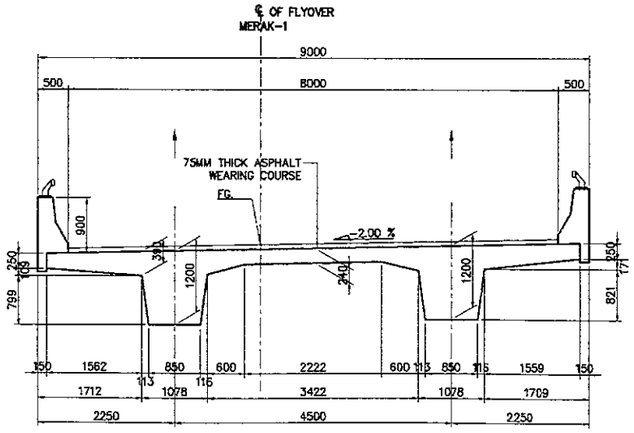
SIDE ELEVATION
SCALE 1 : 200



P L A N
SCALE 1 : 200



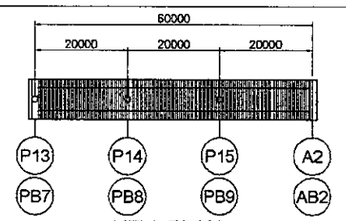
SECTION 3-3
SCALE 1 : 100



SECTION 4-4
SCALE 1 : 100

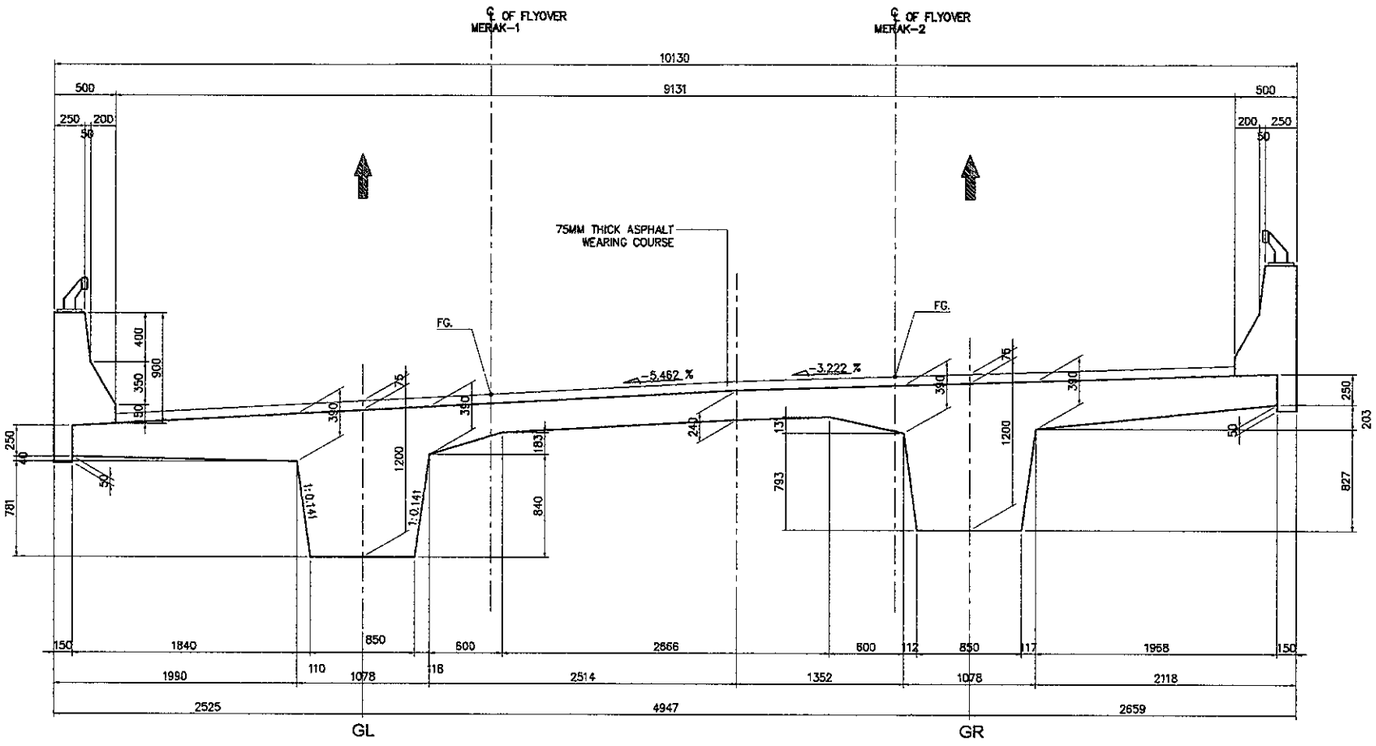
NOTES :

1. All dimension are in mm unless noted otherwise.
2. Concrete Girder and Slab fc'= 35 MPa.
3. All Reinforcing steel shall be BJTD 40. or ASTM A615 Grade 60 deformed bars.
4. The Contractor shall be responsible to carry out the following before Construction :
   a) Verification of all elevations and dimensions, using actual field survey.
   b) Preparation and submission of shop drawings for all bridge components for the Engineer's approval.



KEY PLAN

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 50 FULL SIZE A3	DRAWING TITLE : TYPICAL CROSS SECTION P13-A2 (1 OF 2)	DRAWING NO : MCR-004 SHEET NO : 04 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI				
	Sign		Sign		Sign					
	Date		Date		Date		APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 11003840D Sign Date			



INFORMATION OF PC SUPERSTUCTURE

	P13 \ PB7		P14 \ PB8		P15 \ PB9		A2
	P13	PB7	P14	PB8	P15	PB9	
FG.	11.645	11.692	11.131	11.305	10.512	10.638	9.785
Super Elev. GL							
Super Elev. GR							
Top Slab Girder GL							
Top Slab Girder GR							
Bottom GL							
Bottom GR							
Station	1+147.50	0+458.490	1+167.50	0+478.474	1+187.50	0+498.600	1+207.50

TYPICAL CROSS SECTION
(Span Length = 20 M)

SCALE : 1 : 50

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI
	Sign:	Sign:	Sign:
	Date:	Date:	Date:

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

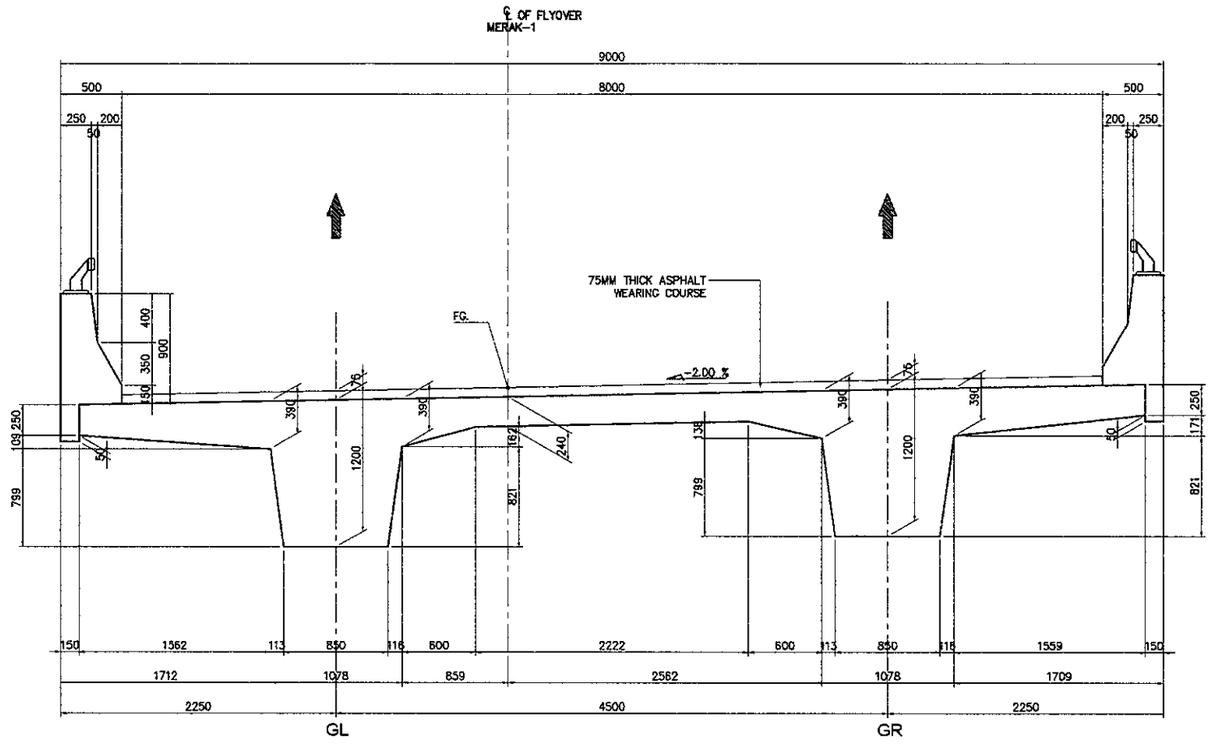
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc — NIP. : 110038400 — Sign: — Date:

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

SCALE : 1 : 50
FULL SIZE A3

DRAWING TITLE :
TYPICAL CROSS SECTION P13-A2 (2 OF 2)

DRAWING NO : MCR-005
SHEET NO : 05 / 21



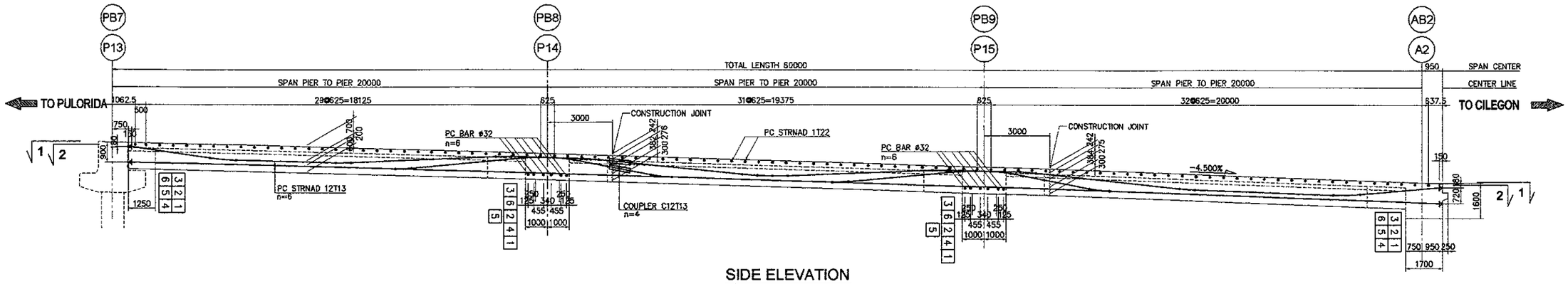
INFORMATION OF PC SUPERSTUCTURE

	P13 \ PB7		P14 \ PB8		P15 \ PB9		A2
	P13	PB7	P14	PB8	P15	PB9	
FG.	11.645	11.892	11.131	11.305	10.512	10.638	9.785
Super Elev. GL							
Super Elev. GR							
Top Slab Girder GL							
Top Slab Girder GR							
Bottom GL							
Bottom GR							
Station	1+147.50	0+458.490	1+167.50	0+478.474	1+187.50	0+498.600	1+207.50

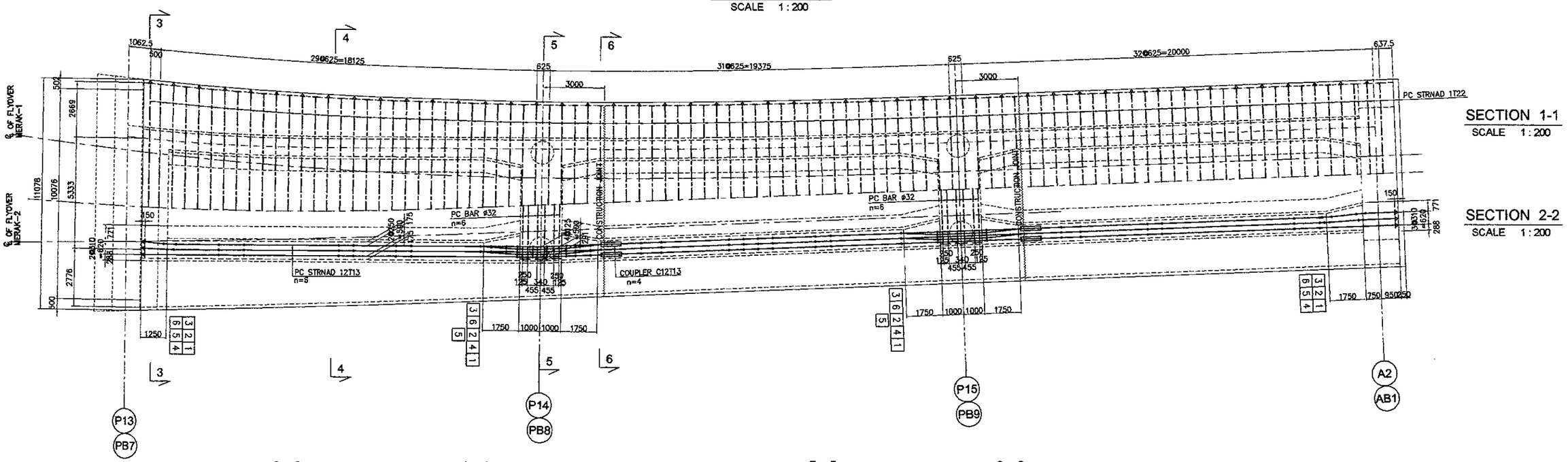
TYPICAL CROSS SECTION
(Span Length = 20 M)

SCALE : 1 : 50

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES P13-A2 (1 OF 3)	DRAWING NO : MCR-006 SHEET NO : 06 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400			



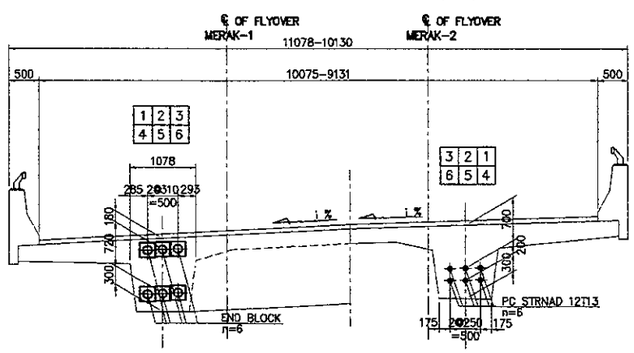
SIDE ELEVATION
SCALE 1 : 200



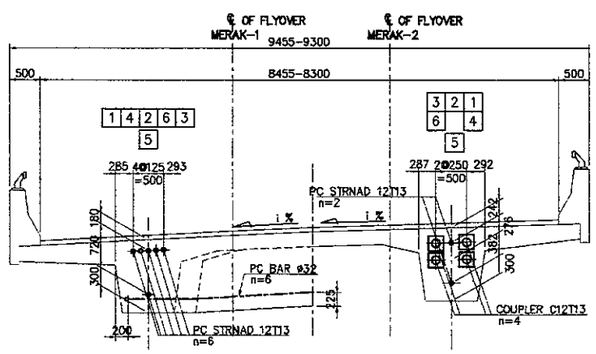
SECTION 1-1
SCALE 1 : 200

SECTION 2-2
SCALE 1 : 200

3 - 3 4 - 4



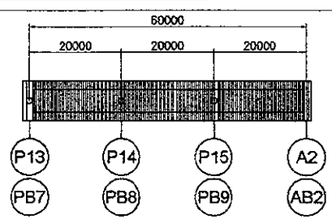
5 - 5 6 - 6



CROSS SECTION
SCALE 1 : 100

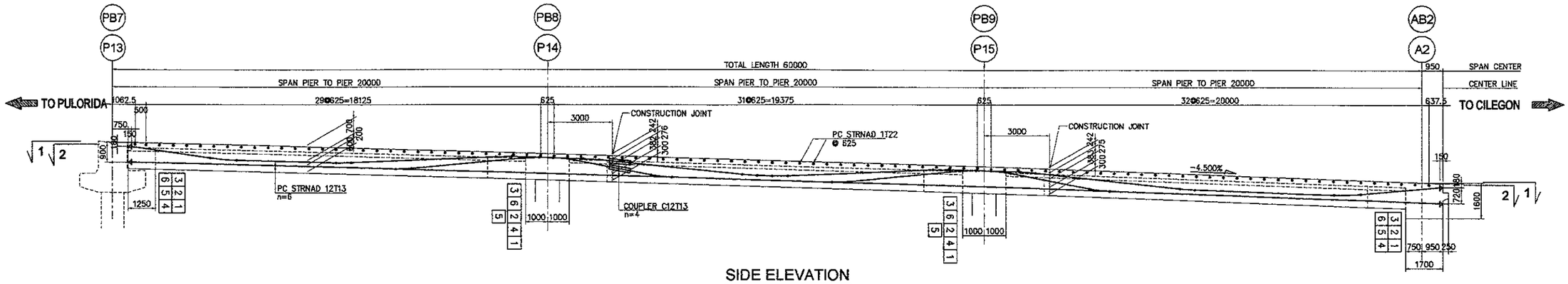
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND) Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

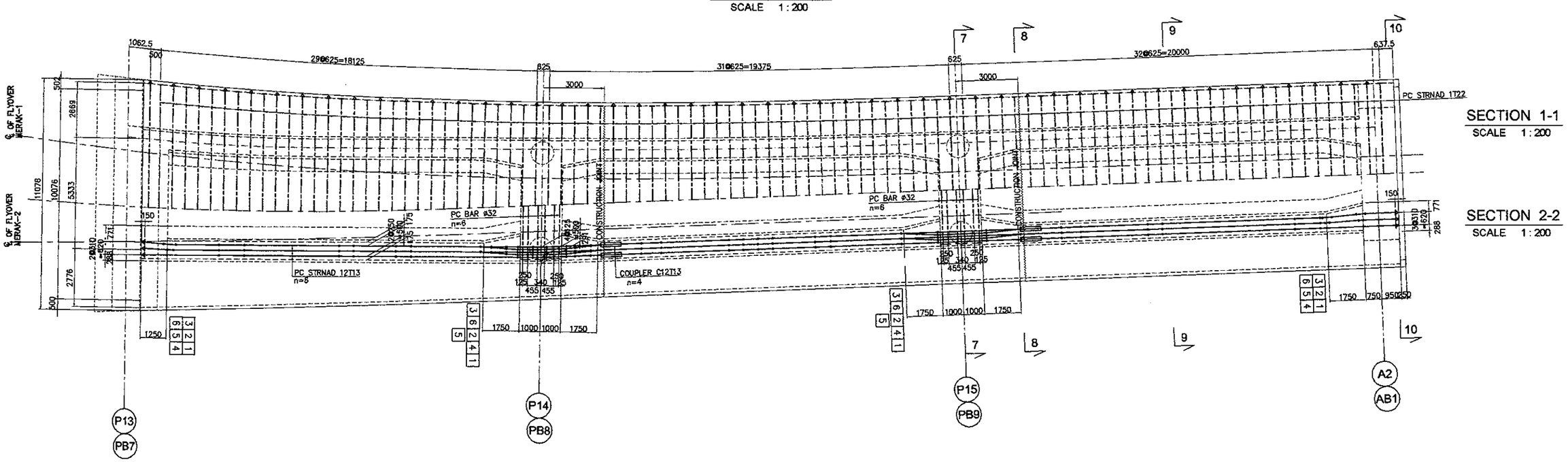


KEY PLAN

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI			DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 200 1 : 100	ARRANGEMENT OF PC CABLES P13-A2 (2 OF 3)	MCR-007
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc				SHEET NO :
	Date		Date		Date			NIP. : 110038400 Sign / Date		FULL SIZE A3		07 / 21



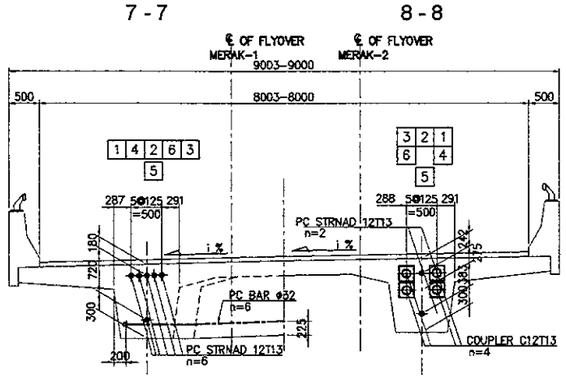
SIDE ELEVATION
SCALE 1 : 200



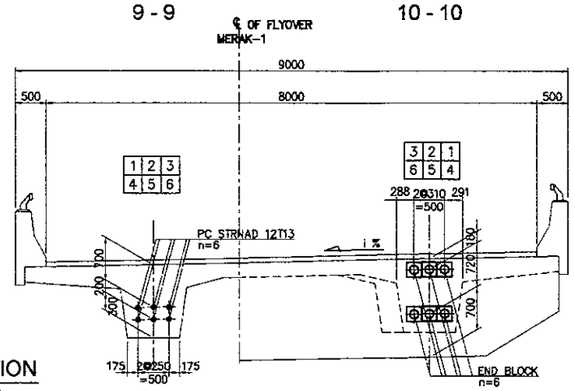
SECTION 1-1
SCALE 1 : 200

SECTION 2-2
SCALE 1 : 200

7 - 7 8 - 8



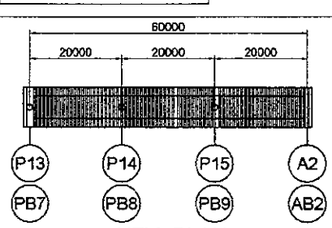
9 - 9 10 - 10



CROSS SECTION
SCALE 1 : 100

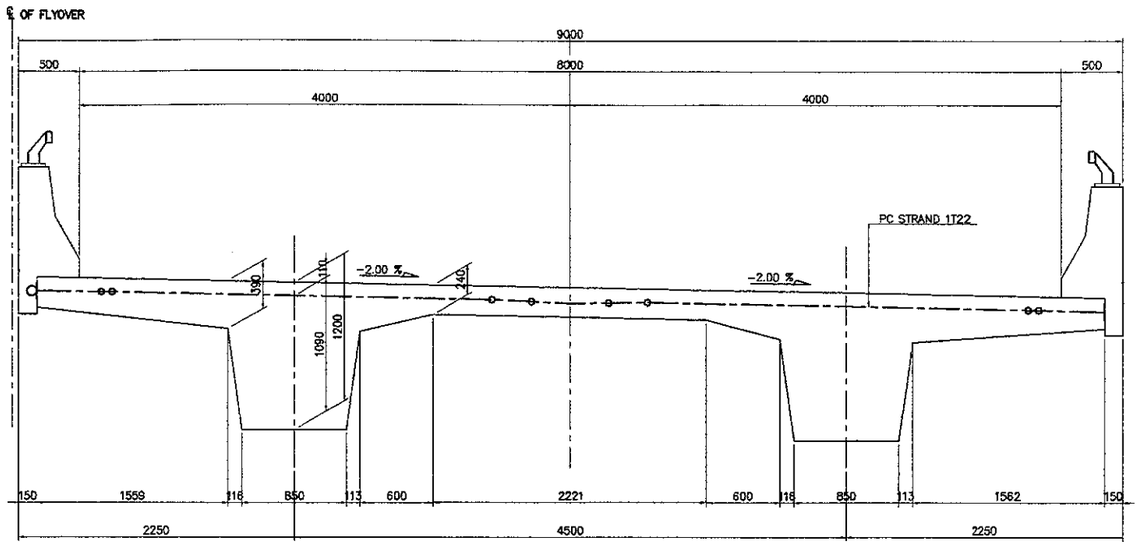
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND) Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

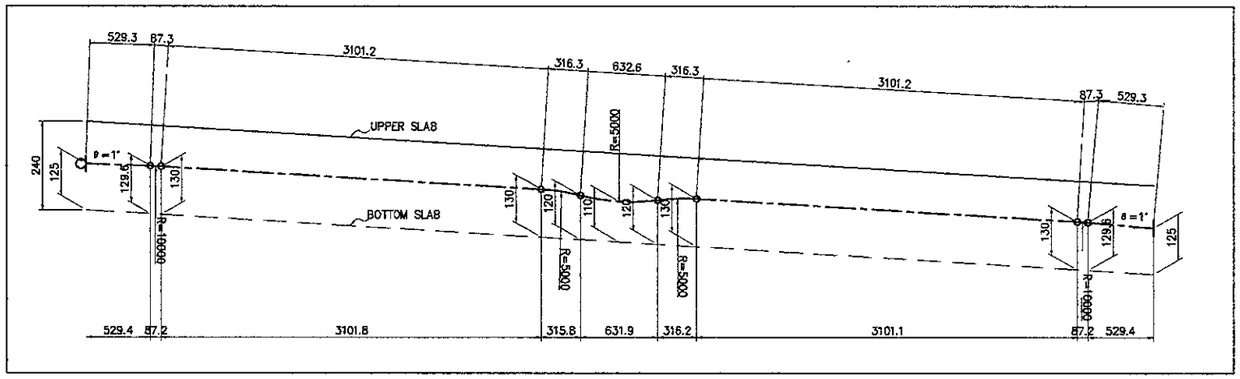


KEY PLAN

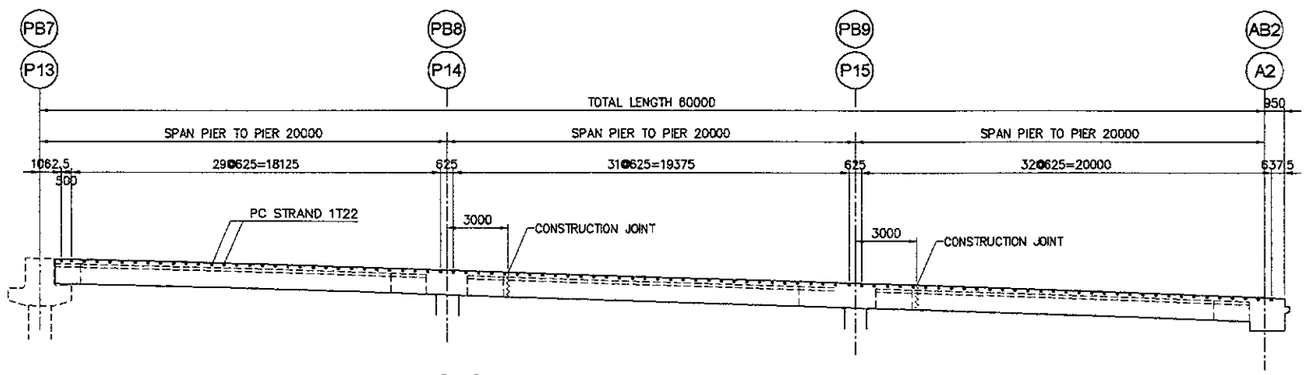
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI	APPROVED BY: Ir. HERRY VAZA M,Eng.Sc	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 50 1 : 300 FULL SIZE A3	ARRANGEMENT OF PC CABLES P13-A2 (3 OF 3)	MCR-008 SHEET NO : 08 / 21
	Sign	Sign	Sign	NIP. : 110038400 Sign				
	Date	Date	Date	Date				



TRANVERSAL PC CABLE
SCALE 1 : 50



PC CABLE PROFILE



LONGITUDINAL PC CABLE ARRANGEMENT
SCALE 1 : 300

TABEL OF PC TENDONS

Length (m)	Nos.	Unit Weight (kg/m)	Weight / 1 nos (kg)	Weight (kg)	Remarks
9.890	96	2.482	24.55	2356.51	Stressing Anchorage One Side Staggered
TOTAL LENGTH (L) =			949.440	m	
TOTAL WEIGHT (W) =			2356.51	kg	

NOTES :
1. All dimension are in mm unless noted otherwise.
2. ⌒ Shows Bending Point Of Prestressing Cable.

⊣ Stressing Anchorage
⊢ Dead End Anchorage

JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign	
	NIP. : 110038400	Date	

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

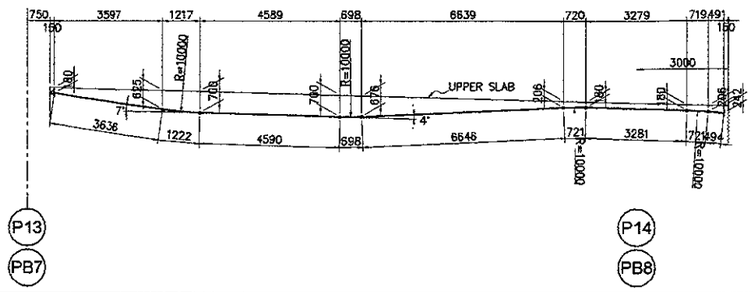
SCALE : 1 : 50 + : 300 (FULL SIZE A3)

DRAWING TITLE : PC CABLES SCHEDULE P13-A2

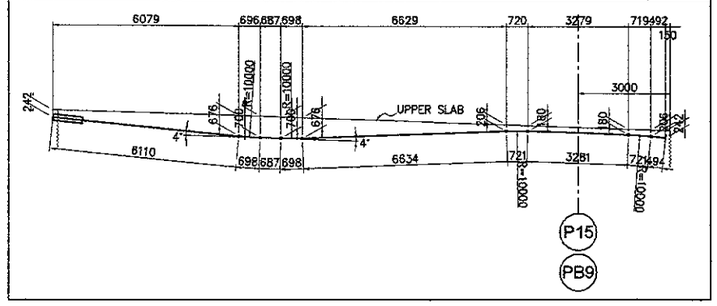
DRAWING NO : MCR-009

SHEET NO : 09 / 21

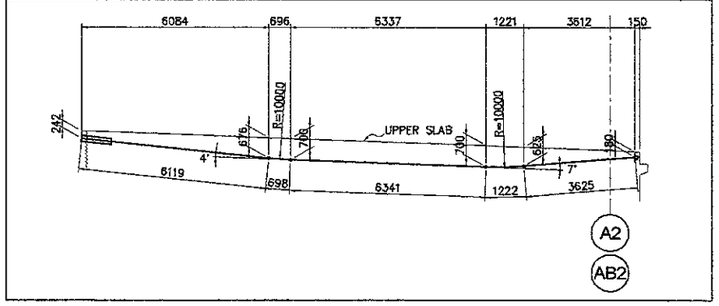
CONSTRUCTION SECTION NO.1 (C1 & C3)



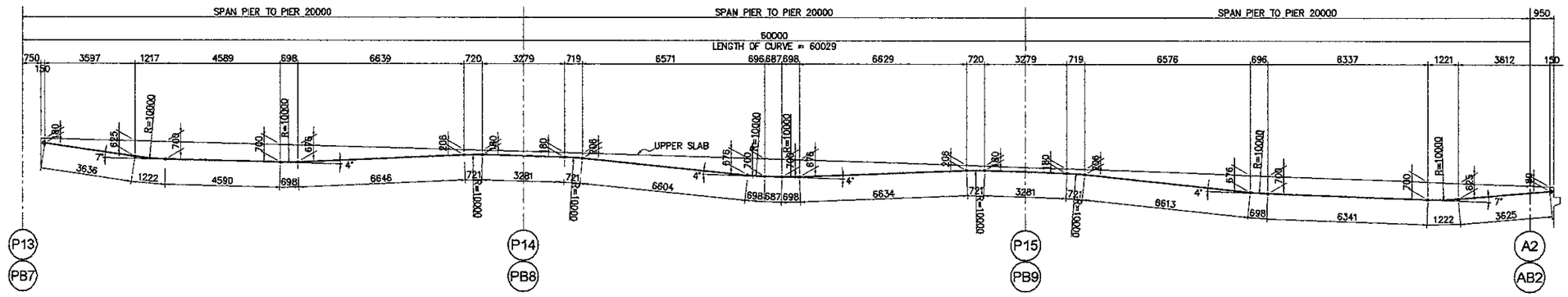
CONSTRUCTION SECTION NO.2 (C1 & C3)



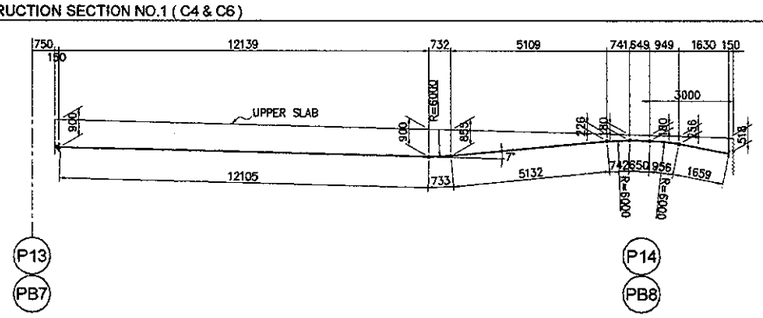
CONSTRUCTION SECTION NO.3 (C1 & C3)



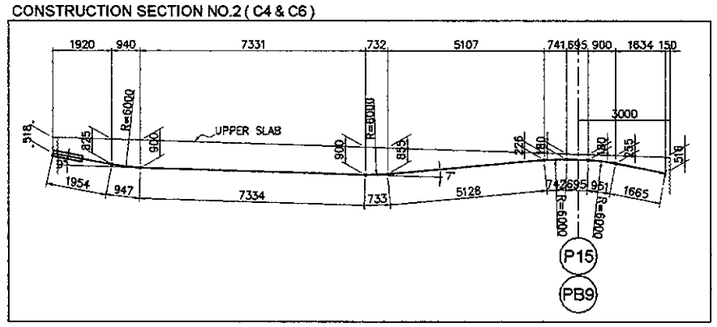
AFTER COMPLETION OF GIRDER (C2)



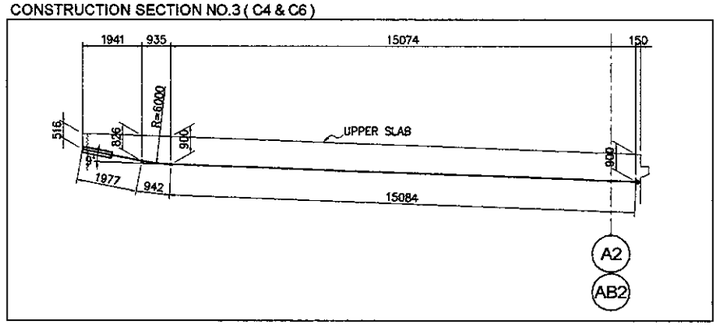
CONSTRUCTION SECTION NO.1 (C4 & C6)



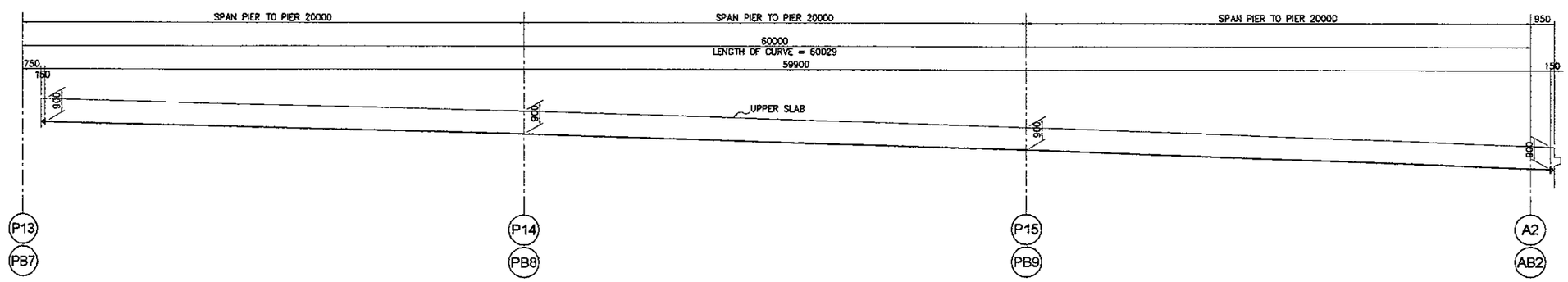
CONSTRUCTION SECTION NO.2 (C4 & C6)



CONSTRUCTION SECTION NO.3 (C4 & C6)



AFTER COMPLETION OF GIRDER (C5)



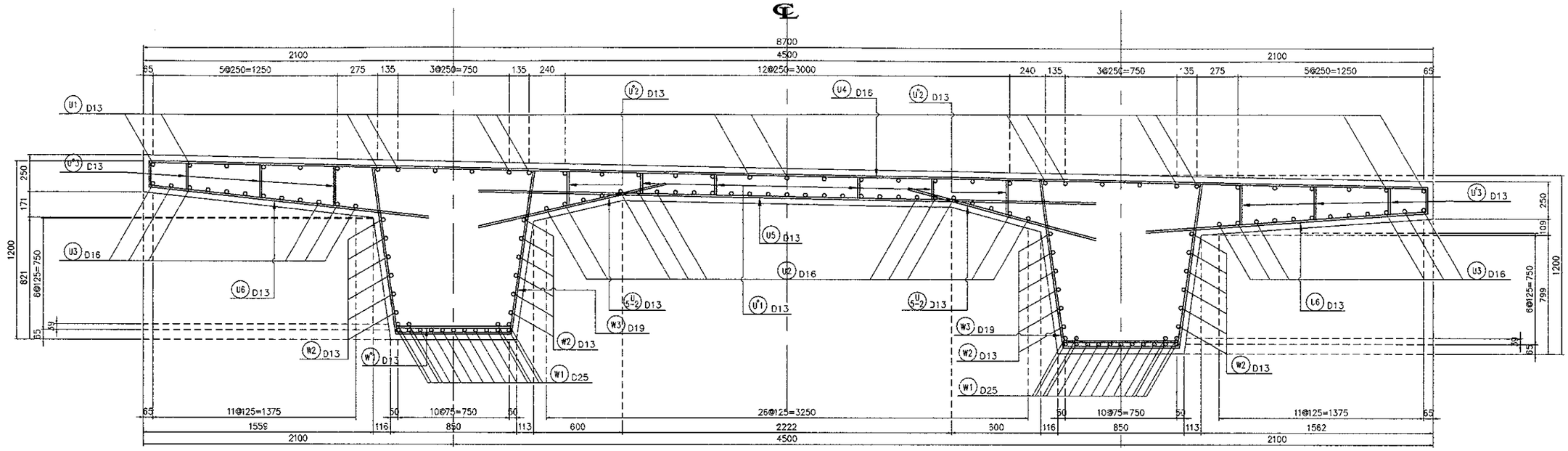
PC CABLES SCHEDULE P13 - A2

SCALE : NON

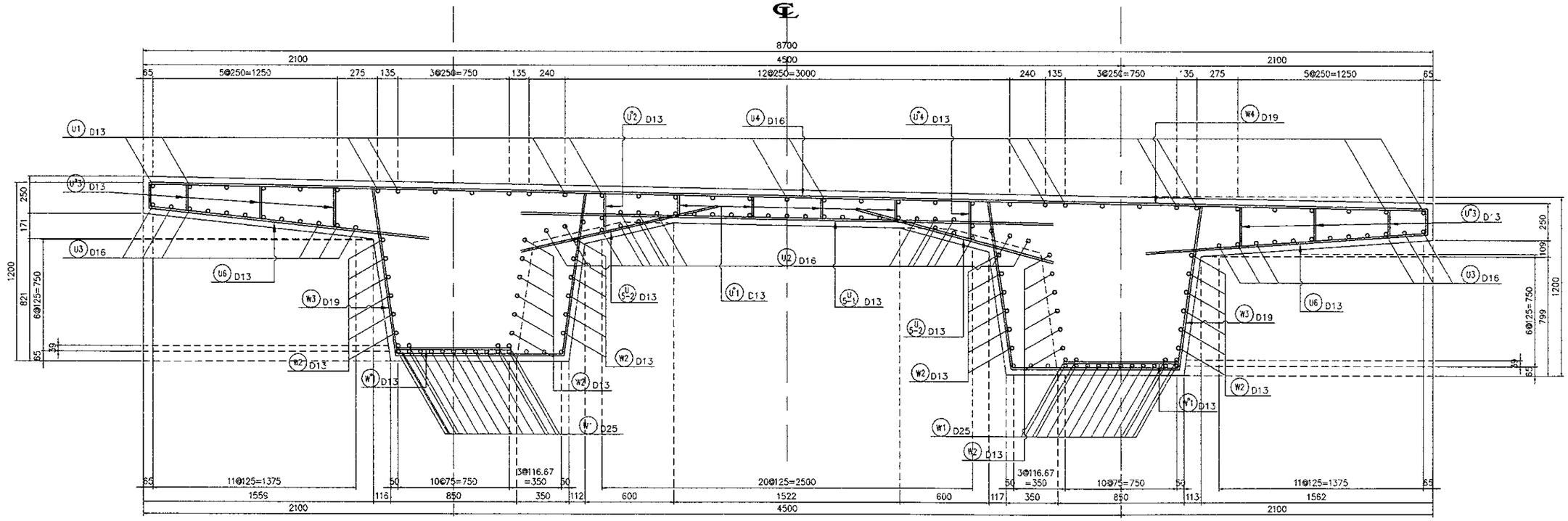
NOTES :
1. All dimension are in mm unless noted otherwise
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND)
   Nominal Diameter 12.7mm
3. ~ Shows Bending Point Of Prestressing Cable

Stressing Anchorage
Dead End Anchorage

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 30 FULL SIZE A3	DRAWING TITLE : TYPICAL DETAIL OF CROSS SECTION REINFORCEMENT P13-A2	DRAWING NO : MCR-010 SHEET NO : 10 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign						
	Date		Date		Date		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400			



SECTION AT MID SPAN
SCALE 1:30



SECTION AT PIER
SCALE 1:30

JAPAN INTERNATIONAL COOPERATION AGENCY

KATAHIRA & ENGINEERS INTERNATIONAL

DESIGNED BY		CHECKED BY		SUBMITTED BY	
Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI
Sign		Sign		Sign	
Date		Date		Date	

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

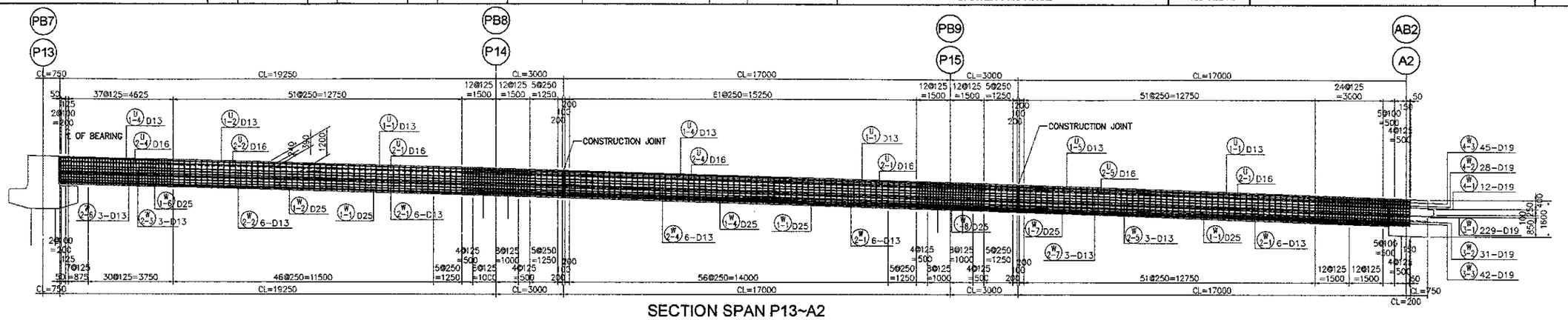
APPROVED BY | Ir. HERRY VAZA M,Eng.Sc | Sign |
NIP. : 11003840 | Date |

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

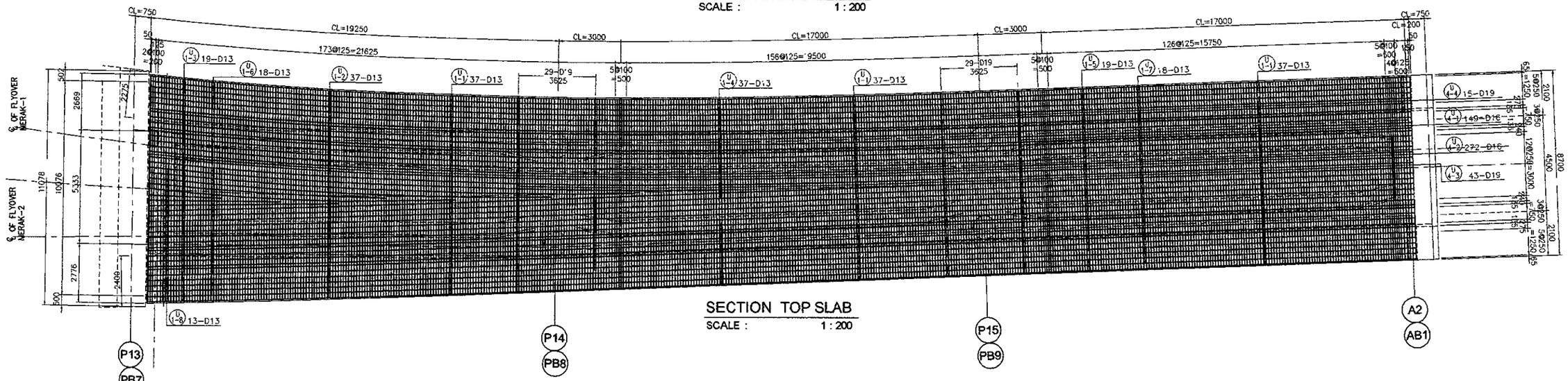
SCALE : 1 : 200
FULL SIZE A3

DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER P13 - A2 (1 OF 2)

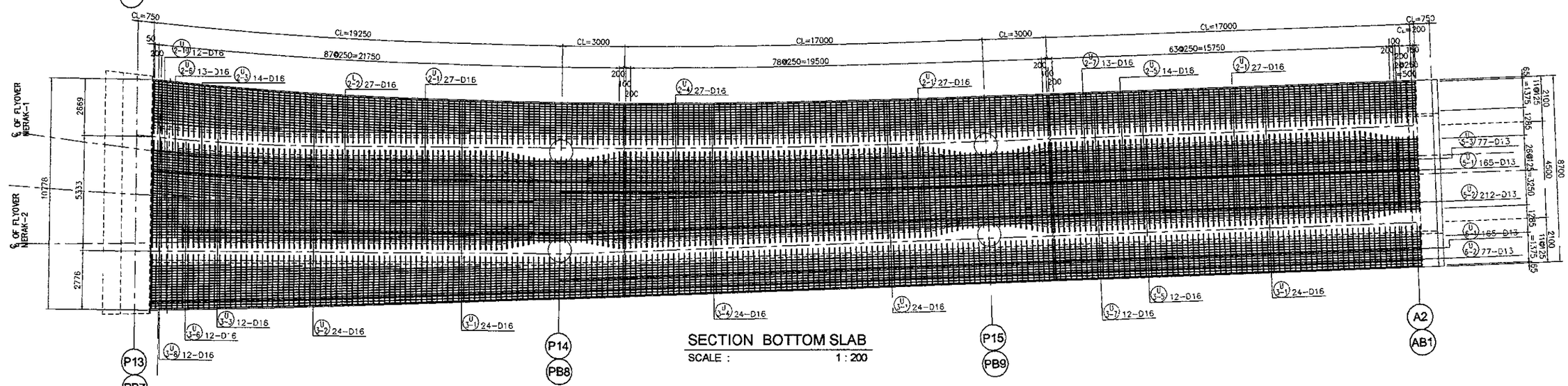
DRAWING NO : MCR-011
SHEET NO : 11 / 21



SECTION SPAN P13~A2
SCALE : 1 : 200

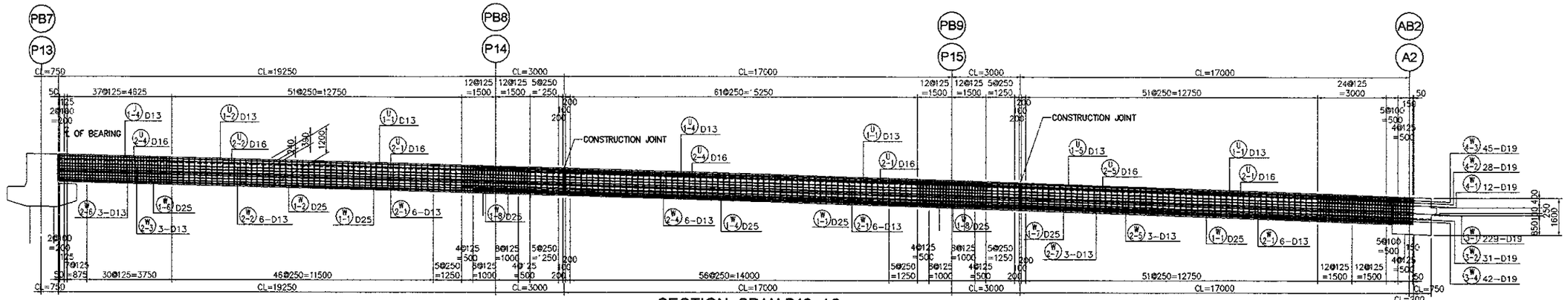


SECTION TOP SLAB
SCALE : 1 : 200



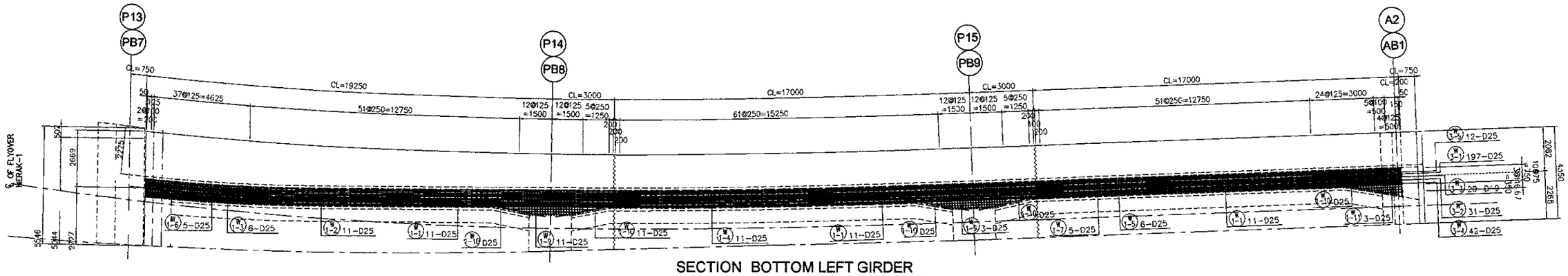
SECTION BOTTOM SLAB
SCALE : 1 : 200

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 200 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER P13 - A2 (2 OF 2)	DRAWING NO : MCR-012 SHEET NO : 12 / 21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc			
	Date		Date		Date			NIP. : 110038400			



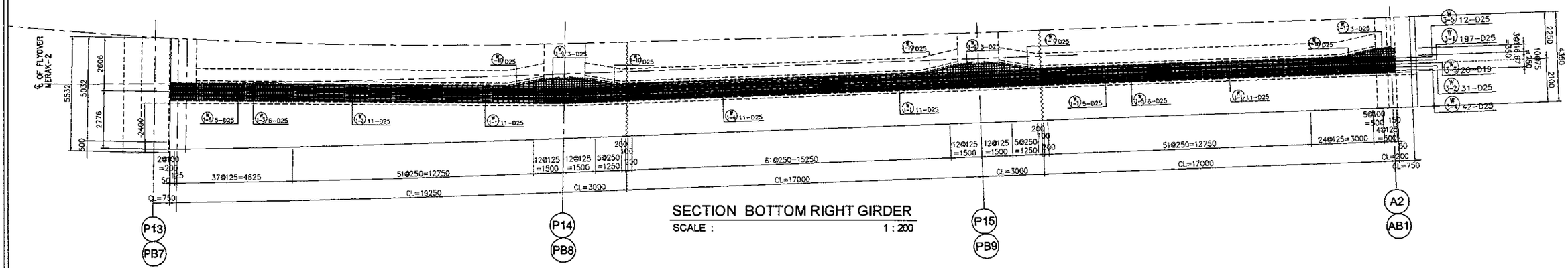
SECTION SPAN P13~A2

SCALE : 1 : 200



SECTION BOTTOM LEFT GIRDER

SCALE : 1 : 200



SECTION BOTTOM RIGHT GIRDER

SCALE : 1 : 200

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI
	Sign:	Sign:	Sign:
	Date:	Date:	Date:

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

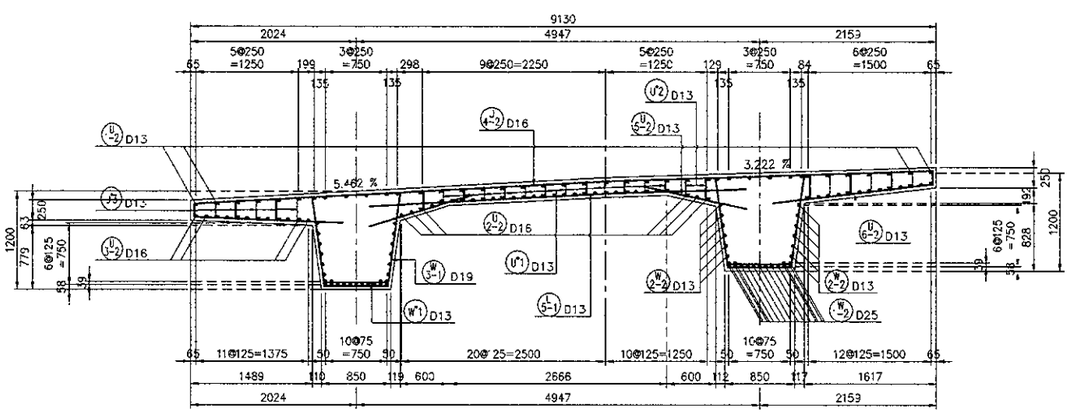
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (NIP. : 110038400) — Sign: — Date:

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

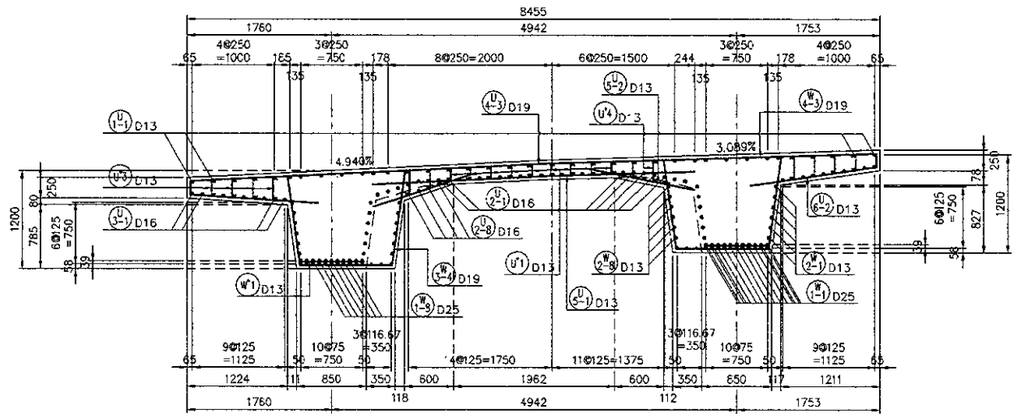
SCALE : 1 : 75
FULL SIZE A3

DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT
FOR PC GIRDER P13 - A2 (1 OF 2)

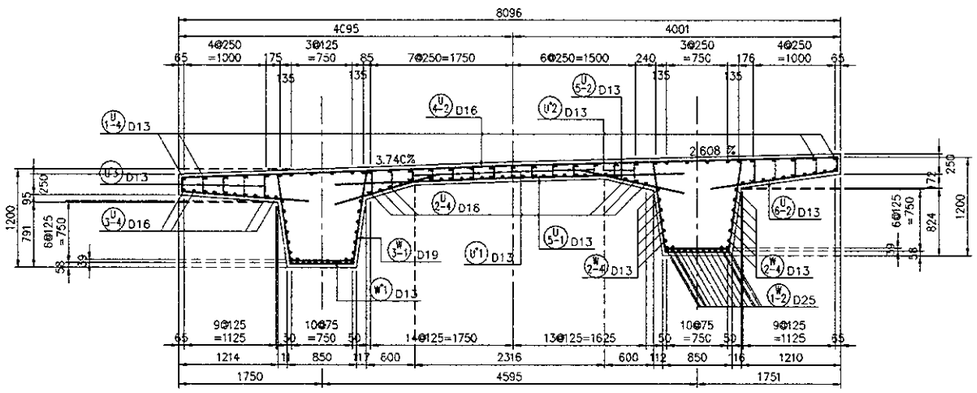
DRAWING NO : MCR-013
SHEET NO : 13 / 21



SECTION MID SPAN P13~P14
SCALE : 1 : 75

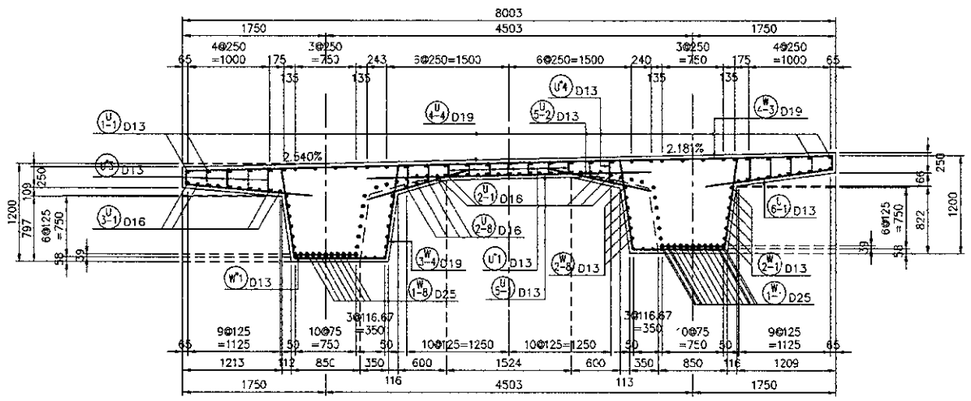


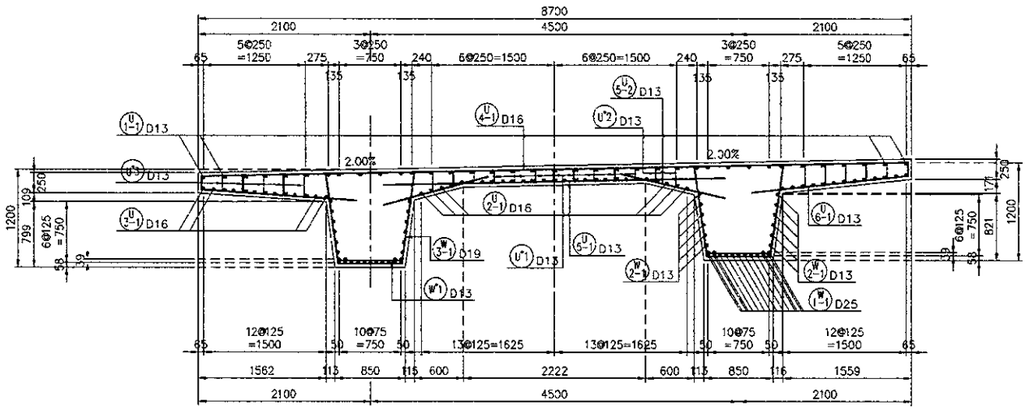
SECTION AT P14
SCALE : 1 : 75

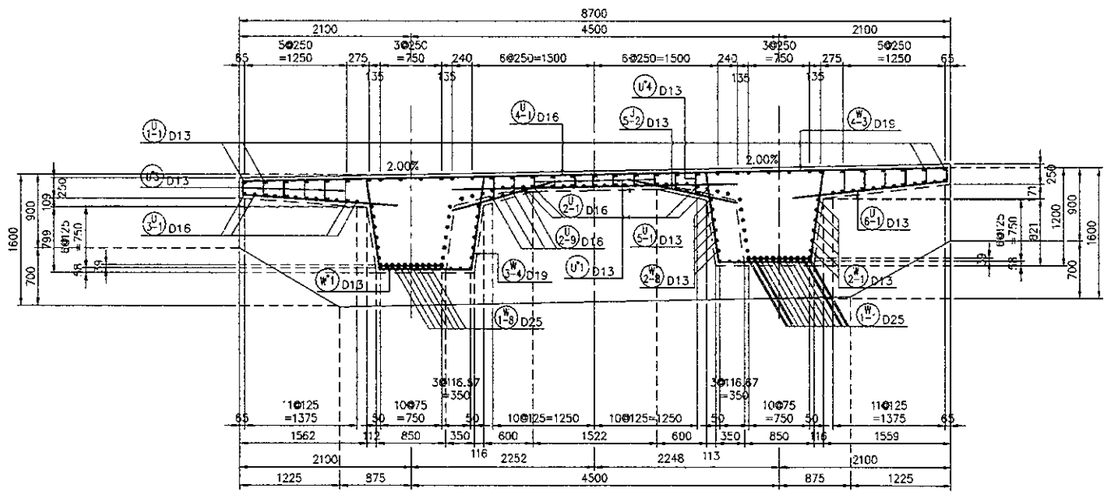


SECTION MID SPAN P14~P15
SCALE : 1 : 75

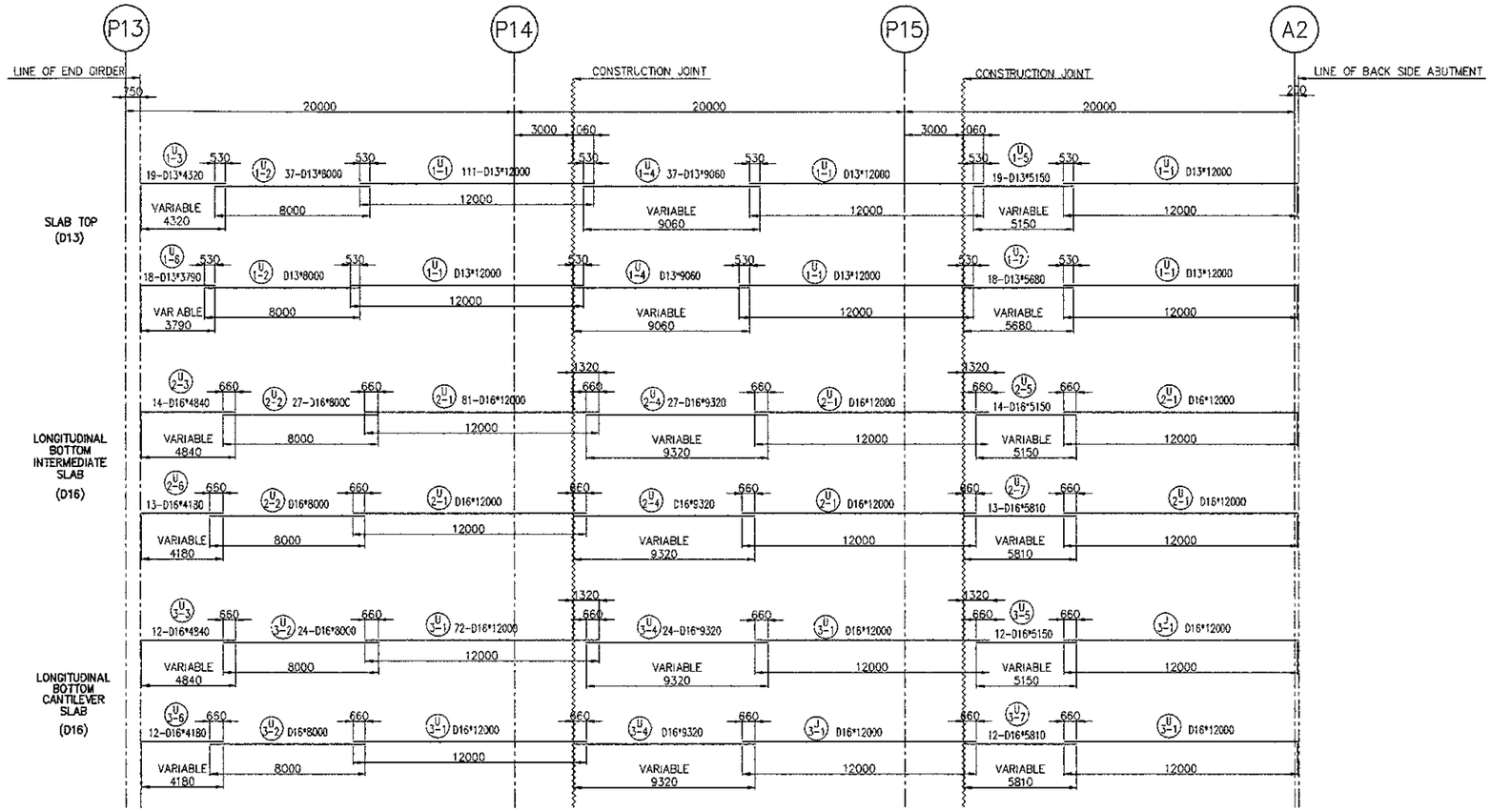
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	1 : 75 FULL SIZE A3	ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER P13 - A2 (2 OF 2)	MCR-014 SHEET NO : 14 / 21
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc				
	Date	Date	Date	NIP. : 110038400 Date				

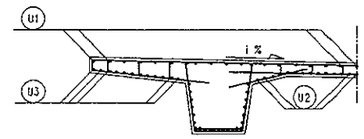


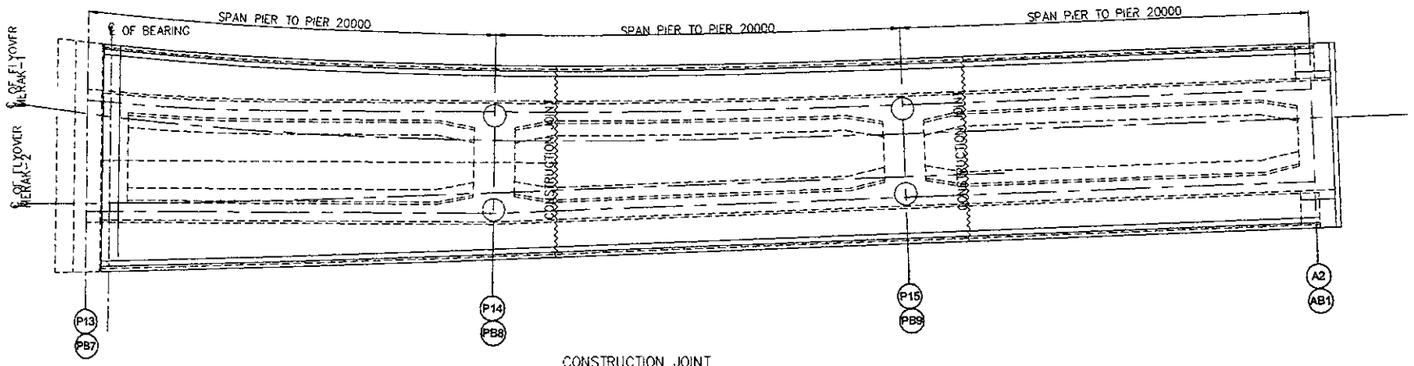




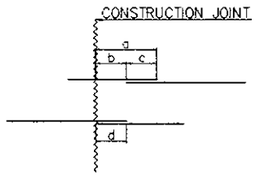
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 300 FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER P13 - A2 (1 OF 3)	DRAWING NO : MCR-015 SHEET NO : 15 / 21
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI					
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc				
	Date	Date	Date	NIP. : 110038400 Date				







	a	b	c	d
D 13	1060	530	530	530
D 16	1320	660	660	660



	MAIN REBARS										STIRRUP						
	θ=90° R=3d	θ=90° R=5.5d	θ=45° α	θ=45° ΔL	θ=60° α	θ=60° ΔL	θ=90° α	θ=90° ΔL	θ=135° α	θ=135° ΔL	R=2.5d	θ=45° α	θ=45° ΔL	θ=60° α	θ=60° ΔL	θ=90° α	θ=90° ΔL
D 13	39	71.5	92	98	82	53	61	17	56	3	32.5	77	80	68	45	51	14
D 16	48	88	113	119	100	68	75	21	69	4	40	94	99	84	56	63	17

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI
	Sign:	Sign:	Sign:
	Date:	Date:	Date:

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

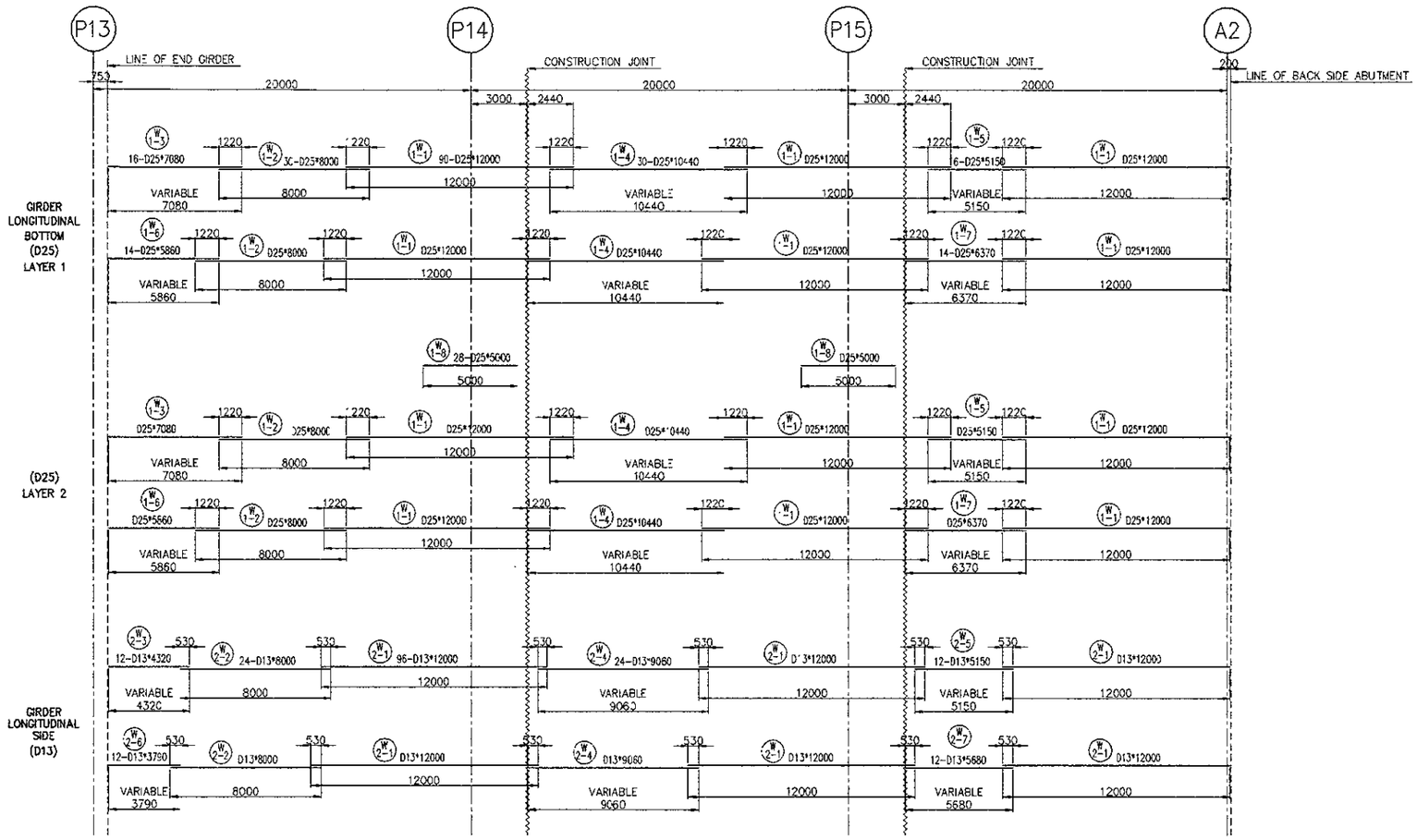
APPROVED BY: Ir. HERRY VAZA M,Eng,Sc (NIP. : 110038400) — Sign: — Date:

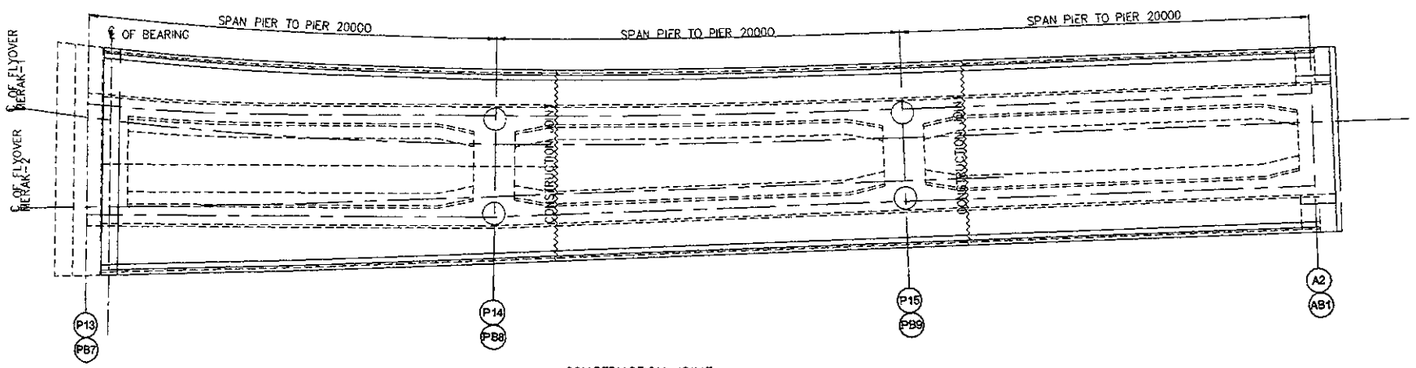
PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

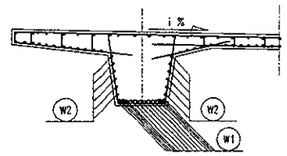
SCALE : 1 : 300 — FULL SIZE A3

DRAWING TITLE :
REINFORCEMENT SCHEDULE FOR PC GIRDER P13 - A2 (2 OF 3)

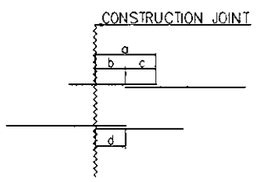
DRAWING NO : MCR-016
SHEET NO : 16 / 21

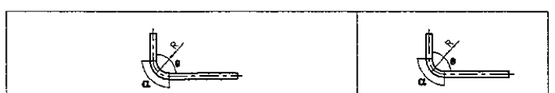






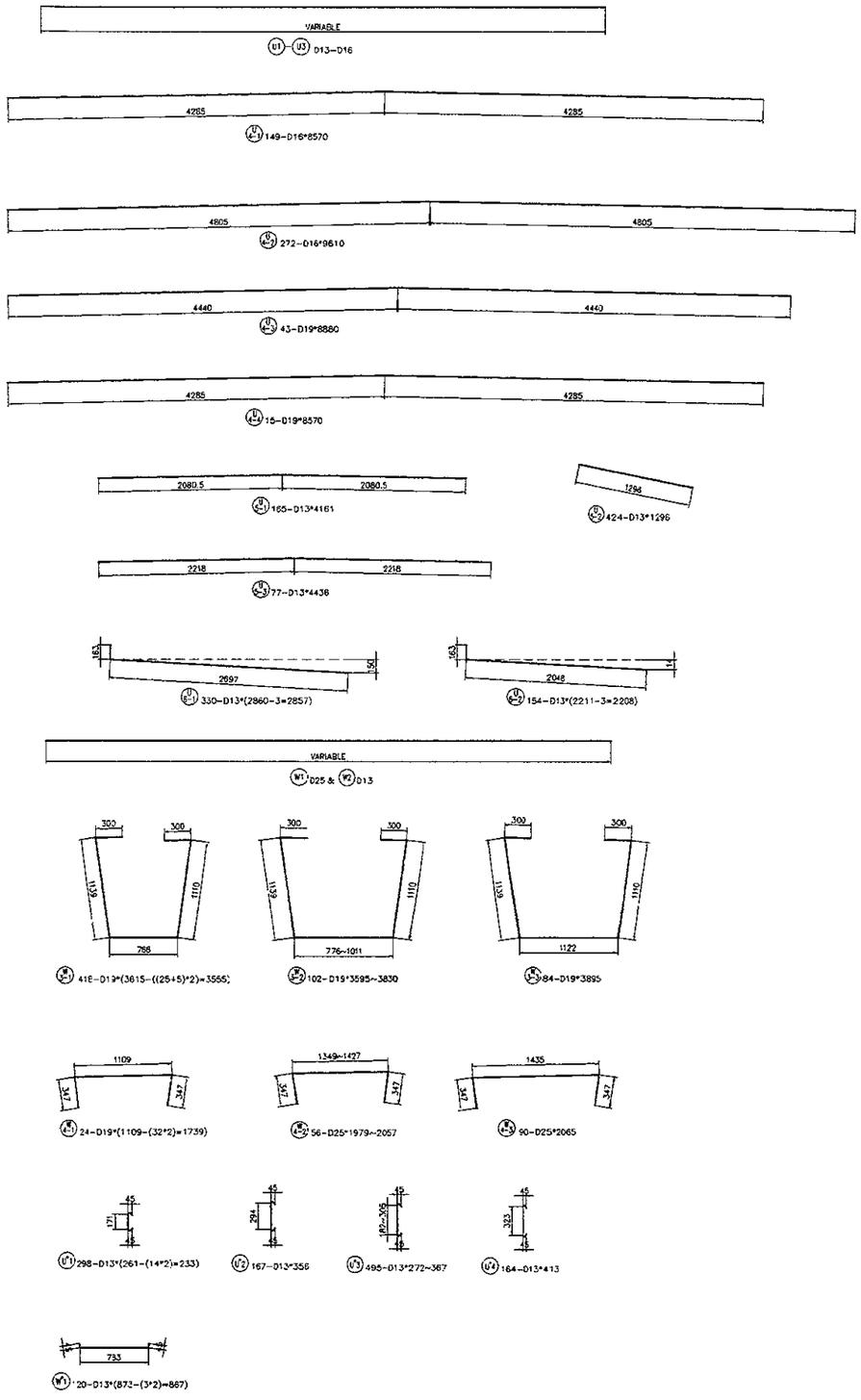
	a	b	c	d
D 13	1060	530	530	530
D 19	1560	780	780	780





	MAIN REBARS										STIRRUP					
	θ≤90° R=3d	θ>90° R=5.5d	θ=45°		θ=60°		θ=90°		θ=135°		R=2.5d	θ=45°		θ=60°		θ=90°
			a	Δl	a	Δl	a	Δl	a	Δl		a	Δl	a	Δl	a	Δl
D 13	39	71.5	92	98	82	83	61	17	66	3	32.5	77	80	68	45	51	14
D 19	57	104.5	134	141	119	78	89	25	82	5	47.5	112	117	99	66	75	20

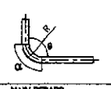
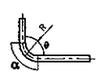
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : NTS FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER P13-A2 (3 OF 3)	DRAWING NO : MCR-017 SHEET NO : 17 /21
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI				
	Sign		Sign		Sign					
	Date		Date		Date		APPROVED BY Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400 Sign Date			



BAR BENDING SCHEDULE

REBAR NAME	DIA. (mm)	LENGTH (mm)	NOS.	UNIT WEIGHT (kg/m')	WEIGHT (kg)	TOTAL WEIGHT (kg)	DIAGRAM	REMARKS
U ' - 1	13	'2000	111	1.04	12.48	1385		
U ' - 2	13	8000	37	1.04	8.32	308		
U ' - 3	13	4320	19	1.04	4.49	85		varies length
U ' - 4	13	9060	37	1.04	9.42	349		varies length
U ' - 5	13	5150	19	1.04	5.36	'02		varies length
U ' - 6	13	3790	18	1.04	3.94	71		varies length
U ' - 7	13	5680	19	1.04	5.91	'05		varies length
U 2 - 1	16	'2000	81	1.58	18.96	1536		
U 2 - 2	16	8000	27	1.58	12.64	341		
U 2 - 3	16	4840	14	1.58	7.65	'07		varies length
U 2 - 4	16	9320	27	1.58	14.73	398		varies length
U 2 - 5	16	5150	14	1.58	8.14	'14		varies length
U 2 - 6	16	4188	13	1.58	6.60	86		varies length
U 2 - 7	16	5810	13	1.58	9.18	'19		varies length
U 2 - 8	16	3164	16	1.58	5.00	80		varies length
U 2 - 9	16	1582	8	1.58	2.50	20		varies length
U 2 - 10	16	8429	12	1.58	13.32	'60		varies length
U 3 - 1	16	'2000	72	1.58	18.96	1365		
U 3 - 2	16	8000	24	1.58	12.64	303		
U 3 - 3	16	4840	12	1.58	7.65	92		varies length
U 3 - 4	16	9320	24	1.58	14.73	353		varies length
U 3 - 5	16	5150	12	1.58	8.14	98		varies length
U 3 - 6	16	4188	12	1.58	6.60	79		varies length
U 3 - 7	16	5810	13	1.58	9.18	'19		varies length
U 3 - 8	16	7948	12	1.58	12.55	'51		varies length
U 4 - 1	16	8570	149	1.58	13.54	2018		
U 4 - 2	16	9810	272	1.58	15.18	4130		varies length
U 4 - 3	19	5898	43	2.23	19.80	852		varies length
U 4 - 4	19	8570	16	2.23	19.11	287		
U 5 - 1	13	4161	185	1.04	4.33	714		
U 5 - 2	13	1296	424	1.04	1.35	571		
U 5 - 3	13	6436	77	1.04	6.61	355		varies length
U 6 - 1	13	2857	330	1.04	2.97	981		
U 6 - 2	13	2208	154	1.04	2.30	354		varies length
U' '	13	233	298	1.04	0.24	72		
U' 2	13	356	167	1.04	0.37	62		varies length
U' 3	13	320	495	1.04	0.33	'65		varies length
U' 4	13	413	164	1.04	0.43	70		varies length
SUB TOTAL - 1						10687		

REBAR NAME	DIA. (mm)	LENGTH (mm)	NOS.	UNIT WEIGHT (kg/m')	WEIGHT (kg)	TOTAL WEIGHT (kg)	DIAGRAM	REMARKS
W 1 - 1	25	12000	90	3.85	46.20	4158		
W 1 - 2	25	8000	30	3.85	30.80	924		
W 1 - 3	25	7060	16	3.85	27.26	436		
W 1 - 4	25	10440	30	3.85	40.19	1206		varies length
W 1 - 5	25	5150	16	3.85	19.83	317		
W 1 - 6	25	5860	14	3.85	22.56	316		
W 1 - 7	25	6370	14	3.85	24.52	343		
W 1 - 8	25	5000	26	3.85	19.25	539		varies length
W 1 - 9	25	2830	12	3.85	10.90	131		varies length
W 1 - 10	25	3275	10	3.85	12.61	126		varies length
W 1 - 11	25	1316	6	3.85	5.06	30		varies length
W 2 - 1	13	12000	72	1.04	12.48	899		
W 2 - 2	13	8000	24	1.04	8.32	200		
W 2 - 3	13	4320	12	1.04	4.49	54		varies length
W 2 - 4	13	9060	24	1.04	9.42	226		
W 2 - 5	13	5150	12	1.04	5.36	64		
W 2 - 6	13	3790	12	1.04	3.94	47		varies length
W 2 - 7	13	5680	12	1.04	5.91	71		varies length
W 2 - 8	13	3186	20	1.04	3.31	66		varies length
W 2 - 9	13	1693	10	1.04	1.66	17		varies length
W 3 - 1	19	3565	418	2.23	7.93	3314		
W 3 - 2	19	3683	182	2.23	8.21	838		varies length
W 3 - 3	19	3895	84	2.23	8.65	730		
W 4 - 1	19	1739	24	2.23	3.88	93		
W 4 - 2	19	2918	86	2.23	4.50	252		varies length
W 4 - 3	19	2085	90	2.23	4.60	414		
W' 1	13	867	120	1.04	0.90	108		
SUB TOTAL - 2						15818		
TOTAL REBAR WEIGHT P13 - A2						26478		

	MAIN REBARS										STIRRUP						
	θ≤90° R=3φ	θ>90° R=3.5φ	θ=45°		θ=60°		θ=90°		θ=135°		R=2.5φ	θ=45°		θ=60°		θ=90°	
			α	ΔL	α	ΔL	α	ΔL	α	ΔL		α	ΔL	α	ΔL	α	ΔL
D 13	39	71.5	92	98	82	83	81	17	65	3	32.5	77	80	68	48	51	14
D 16	48	88	113	119	100	88	75	21	92	4	40	94	99	84	55	63	17
D 19	57	104.5	134	141	119	78	89	25	82	5	47.5	112	117	99	65	75	20
D 25	75	137.5	117	166	157	103	118	32	108	6	75*	177	186	157	103	118	32

* R=3φ

JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY
	Name: H. HONDA	Name: T. OKUMURA	Name: M. KIUCHI
	Sign:	Sign:	Sign:
	Date:	Date:	Date:

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

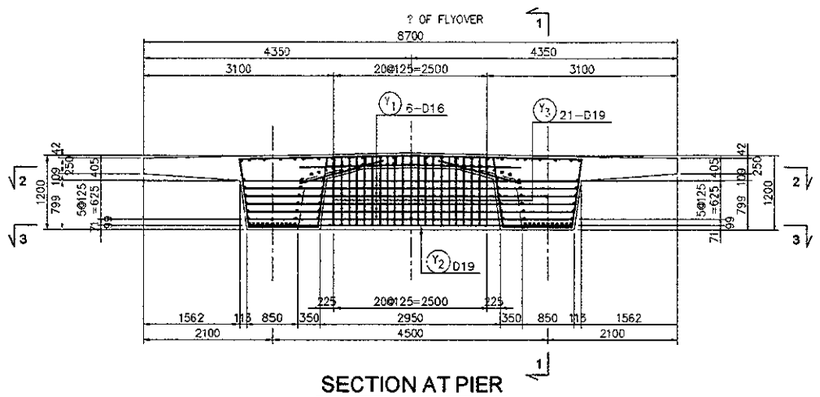
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (NIP. : 110038400) — Sign: — Date:

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
MERAK FLYOVER - CONTRACT PACKAGE 1
(MERAK - BALARAJA)
BANTEN PROVINCE

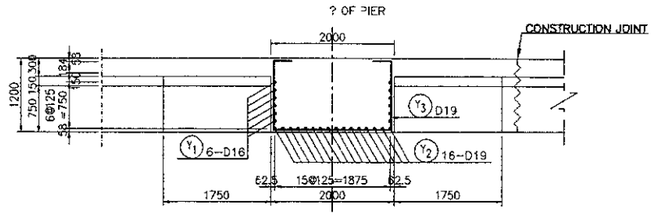
SCALE : 1 : 100 — FULL SIZE A3

DRAWING TITLE :
ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS P14, P15

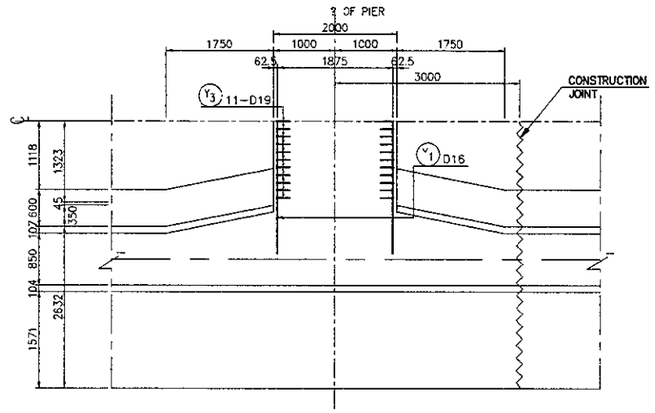
DRAWING NO : MCR-018
SHEET NO : 18 / 21



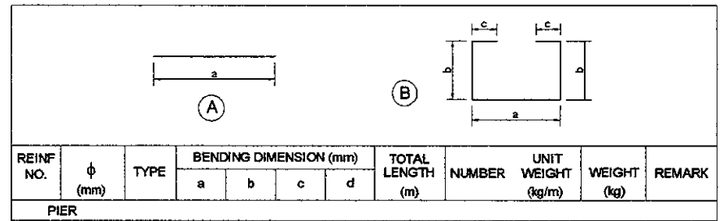
SECTION AT PIER
SCALE : 1 :100



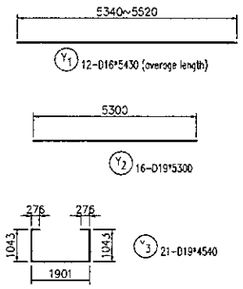
SECTION 1 - 1
SCALE : 1 : 100

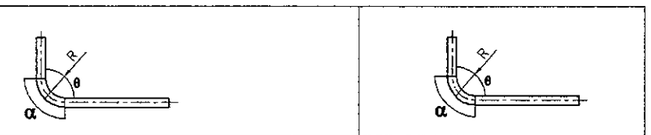


SECTION 2 - 2
SCALE : 1 : 100

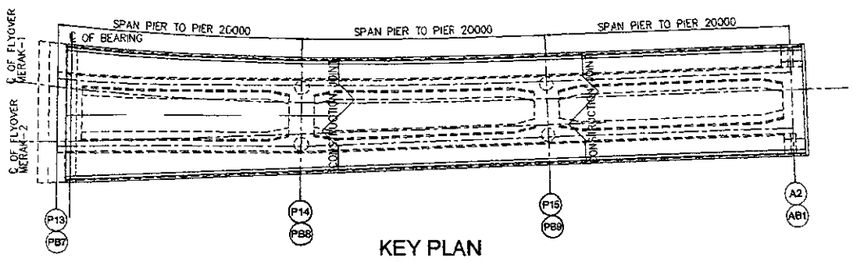


REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
PIER											
Y 1	D16	A	5430				5.43	12	1.58	103	—
2	D19	A	5300				5.3	16	2.23	189	—
3	D19	B	1901	1043	276		4.54	21	2.23	213	⊓
									D19	402	
									D16	103	
									TOTAL (per 1 pier)	505	
PIER LOCATION							P13 - A2 (P14, P15)				
REBAR WEIGHT TOTAL							505 x 2 = 1010 kg				

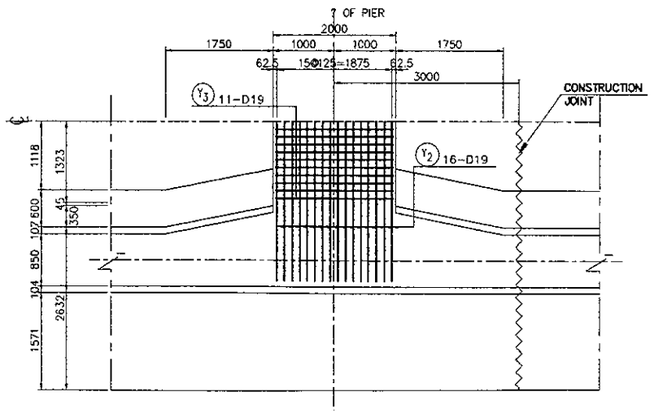




BAR SIZE	MAIN REBARS θ≤ 90° R= 3ϕ	θ> 90° R= 5.5ϕ	θ= 45° α	θ= 45° ΔL	θ= 60° α	θ= 60° ΔL	θ= 90° α	θ= 90° ΔL	θ= 135° α	θ= 135° ΔL	STIRRUP R= 2.5ϕ	θ= 45° α	θ= 45° ΔL	θ= 60° α	θ= 60° ΔL	θ= 90° α	θ= 90° ΔL
D 16	48	88	113	119	100	66	75	21	69	4	40	94	99	84	55	63	17
D 19	57	104.5	134	141	119	78	89	25	82	5	47.5	112	117	98	66	75	20

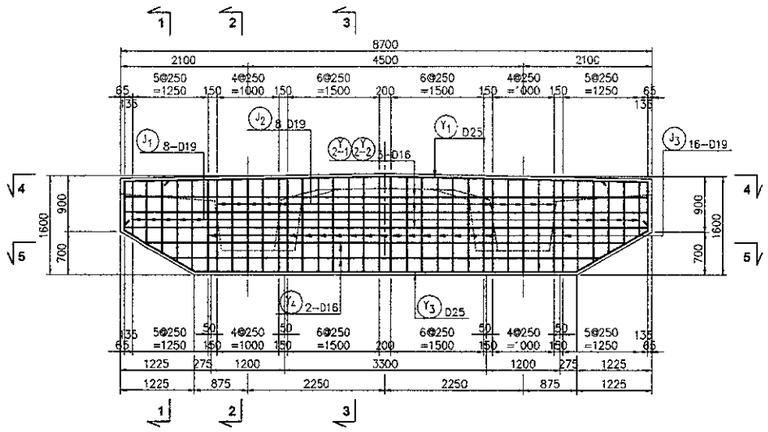


KEY PLAN
SCALE : 1 : 500

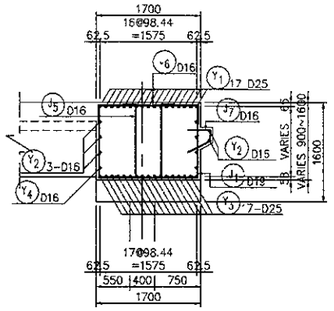


SECTION 3 - 3
SCALE : 1 : 100

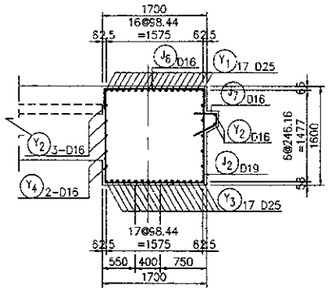
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA / MINISTRY OF PUBLIC WORKS / DIRECTORATE GENERAL OF HIGHWAYS; APPROVED BY Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT / MERAK FLYOVER - CONTRACT PACKAGE 1 / (MERAK - BALARAJA) / BANTEN PROVINCE	SCALE : 1 : 100 / 1 : 500 / FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS A2	DRAWING NO : MCR-019 / SHEET NO : 19 / 21



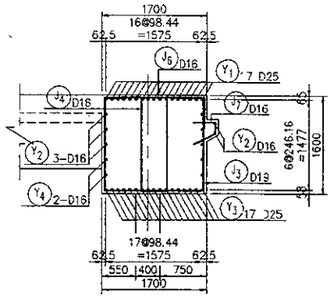
SECTION AT ABUTMENT
SCALE : 1 :100



SECTION 1 - 1
SCALE : 1 : 100

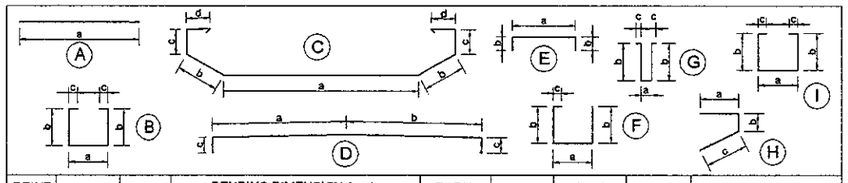


SECTION 2 - 2
SCALE : 1 : 100

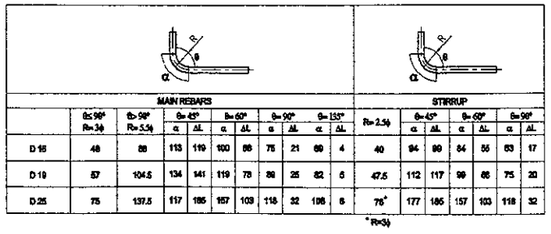


SECTION 3 - 3
SCALE : 1 : 100

BAR BENDING ABUTMENT

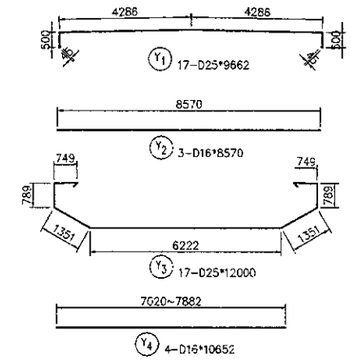


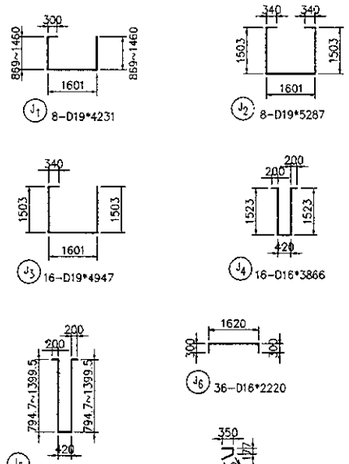
REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	e	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
A 2												
J 1	D19	F	1601	1078	300			4.57	8	2.23	82	
2	D19	I	1601	1503	340			5.287	8	2.23	94	
3	D19	F	1601	1503	340			4.947	16	2.23	177	
4	D16	G	420	1523	200			3.866	16	1.58	98	
5	D16	G	420	1097.1	200			3.0142	10	1.58	48	
6	D16	E	1620	300				2.22	36	1.58	126	
7	D16	H	350	177	391			0.918	36	1.58	52	
Y 1	D25	D	4286	4286	500			9.572	17	3.85	626	
2	D16	A	8570					8.57	3	1.58	41	
3	D25	C	6222	1351	789	749		12	17	3.85	785	
4	D16	A	10652					10.652	4	1.58	67	
										D25	1411	
										D19	353	
										D16	432	
									REBAR WEIGHT TOTAL		2196 kg	

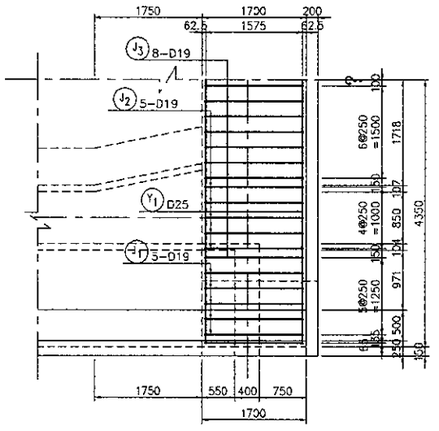


	MAIN REBARS										STIRRUP						
	θ≤90° R=3ϕ	θ>90° R=5.5ϕ	θ=45° α	θ=45° Δℓ	θ=60° α	θ=60° Δℓ	θ=90° α	θ=90° Δℓ	θ=135° α	θ=135° Δℓ	R=2.5ϕ	θ=45° α	θ=45° Δℓ	θ=60° α	θ=60° Δℓ	θ=90° α	θ=90° Δℓ
D16	48	88	113	119	100	88	75	21	89	4	40	94	99	84	88	63	17
D19	57	104.5	134	141	119	78	89	25	82	5	47.5	112	117	99	88	75	20
D25	75	137.5	117	165	157	103	118	32	108	6	75*	177	185	157	103	118	32

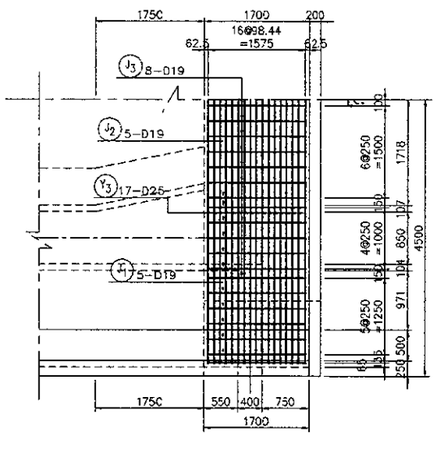
*R=3ϕ



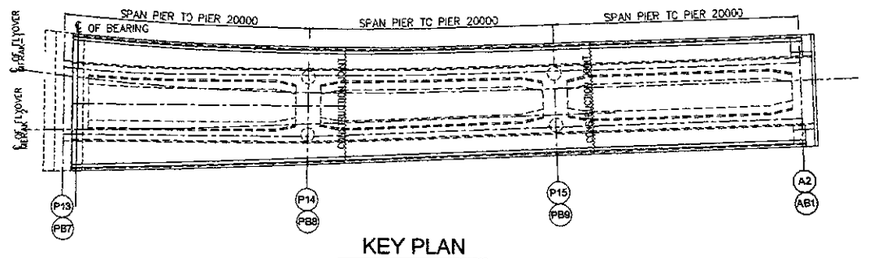




SECTION 4 - 4
SCALE : 1 : 100

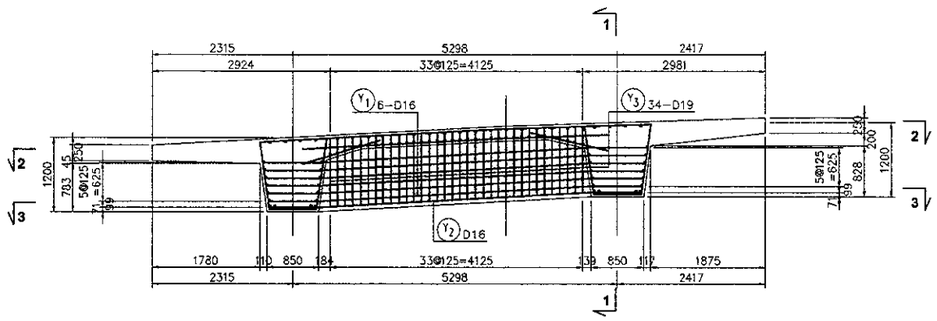


SECTION 5 - 5
SCALE : 1 : 100

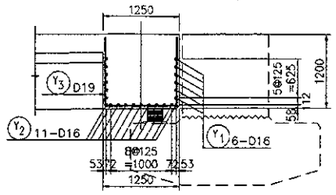


KEY PLAN
SCALE : 1 : 500

JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 100 1 : 500 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS P13	DRAWING NO : MCR-020 SHEET NO : 20 / 21

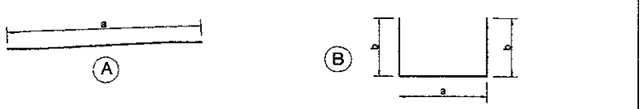


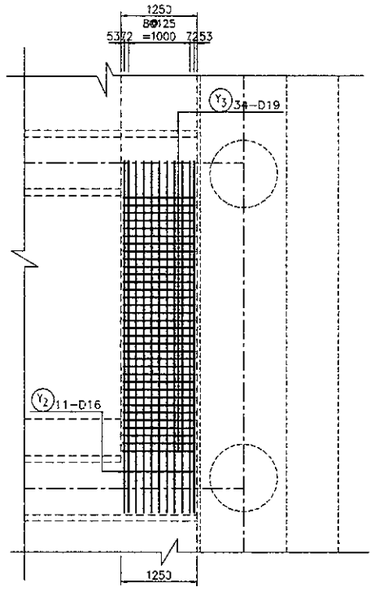
SECTION AT COPING PIER
SCALE : 1 :100



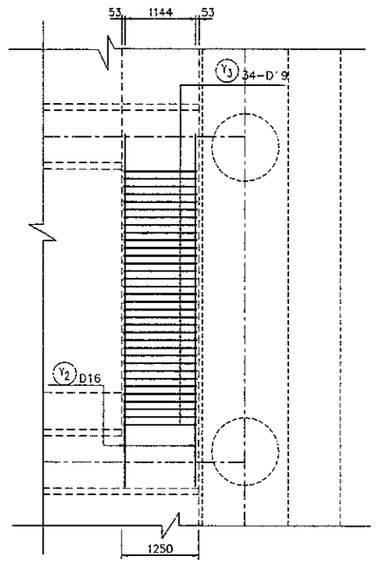
SECTION 1 - 1
SCALE : 1 : 100

REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
PIER											
Y 1	D16	A	6200				6.2	12	1.58	118	—
2	D16	A	6084				6.084	11	1.58	106	—
3	D19	B	1165	1110			3.345	34	2.23	254	⌴
									D19	254	
									D16	224	
									REBAR WEIGHT TOTAL		478 kg



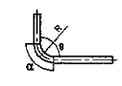


SECTION 2 - 2
SCALE : 1 : 100

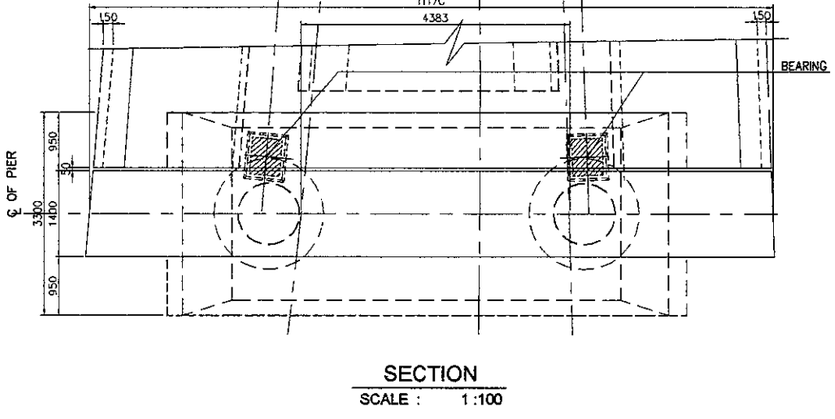


SECTION 3 - 3
SCALE : 1 : 100

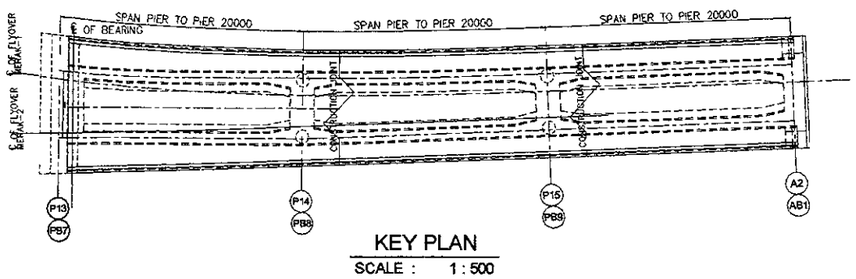
STIRRUP



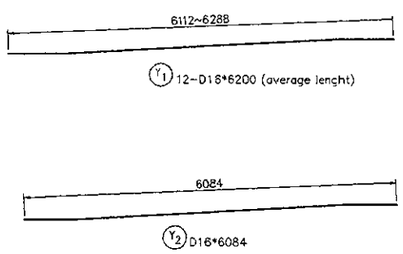
	R=2.5ϕ	θ=45° α	θ=45° ΔL	θ=60° α	θ=60° ΔL	θ=90° α	θ=90° ΔL
D16	40	94	99	84	55	63	17
D19	47.5	112	117	99	66	75	20

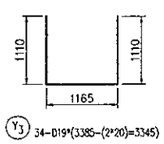


SECTION
SCALE : 1 :100

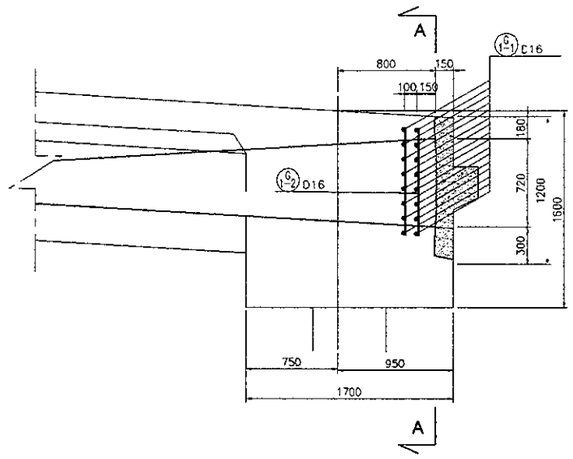


KEY PLAN
SCALE : 1 : 500

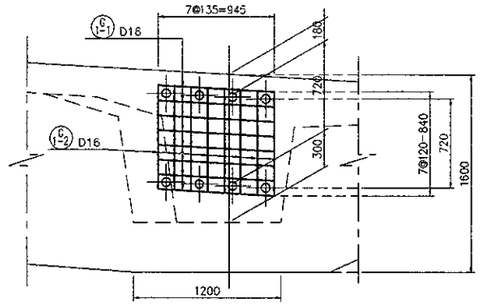




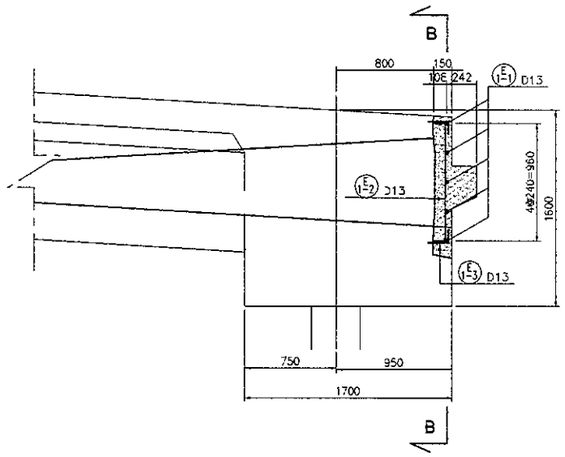
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE	SCALE : 1 : 50 1 : 500 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR ANCHORAGE P13 - A2	DRAWING NO : MCR-021 SHEET NO : 21 / 21



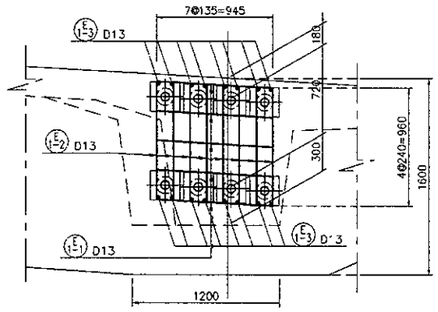
SECTION END ANCHORAGE
SCALE : 1 : 50



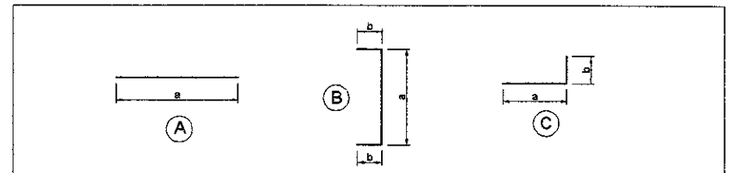
SECTION A - A
SCALE : 1 : 50



SECTION END ANCHORAGE
SCALE : 1 : 50

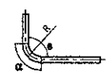


SECTION B - B
SCALE : 1 : 50

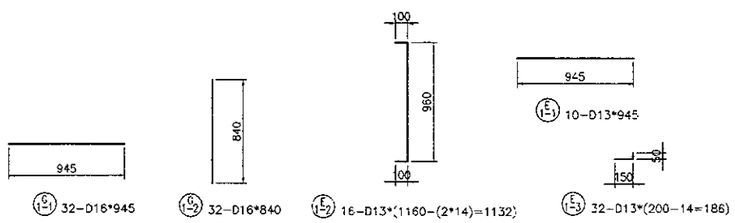


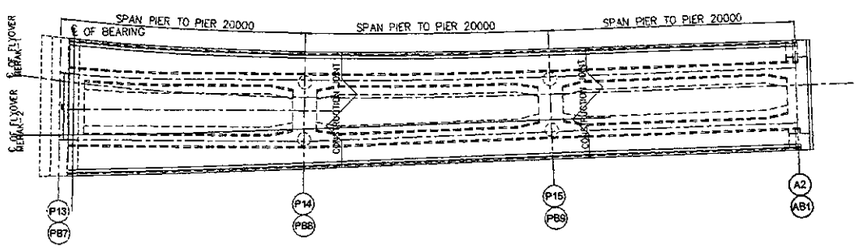
REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
E 1-1	D13	A	945				0.945	16	1.04	16	—
E 1-2	D13	B	960	100			1.132	10	1.04	12	⌴
E 1-3	D13	C	150	50			0.186	32	1.04	6	⌴
G 1-1	D16	A	945				0.945	32	1.58	48	—
G 1-2	D16	A	840				0.84	32	1.58	43	—
									D16	91	
									D13	34	
								REBAR WEIGHT TOTAL		125 kg	

STIRRUP



	R= 2.5ϕ	θ= 45°		θ= 60°		θ= 90°	
		α	ΔL	α	ΔL	α	ΔL
D16	40	94	99	84	55	83	17
D19	47.5	112	117	99	66	75	20





KEY PLAN
SCALE : 1 : 500