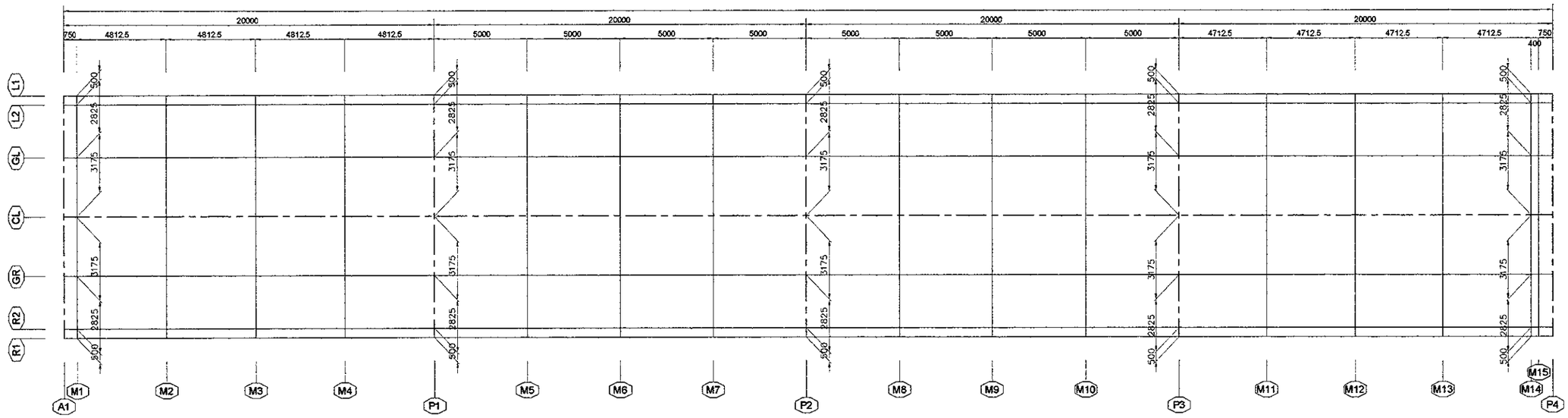
JAPAN INTERNATIONAL
COOPERATION AGENCY

DIRECTORATE GENERAL OF HIGHWAY
MINISTRY OF PUBLIC WORKS
REPUBLIC OF INDONESIA

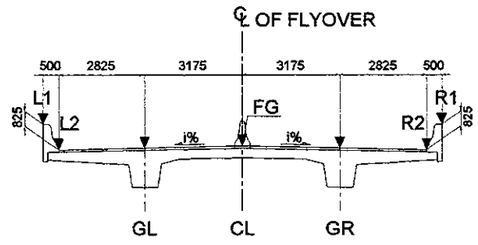
CONCRETE SUPERSTRUCTURE

KATAHIRA & ENGINEERS INTERNATIONAL

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 Sign: Date:	Name: T. OKUMURA Sign: Date:	Name: M. KIUCHI Sign: Date:	APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400 Sign: Date:	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 250 1 : 200 FULL SIZE A3	COORDINATES AND ELEVATION FOR PC GIRDER	PCL-001 SHEET NO : 01 / 21



PLAN VIEW
SCALE 1:250



SECTION VIEW
SCALE 1:200

LIST OF COORDINATES

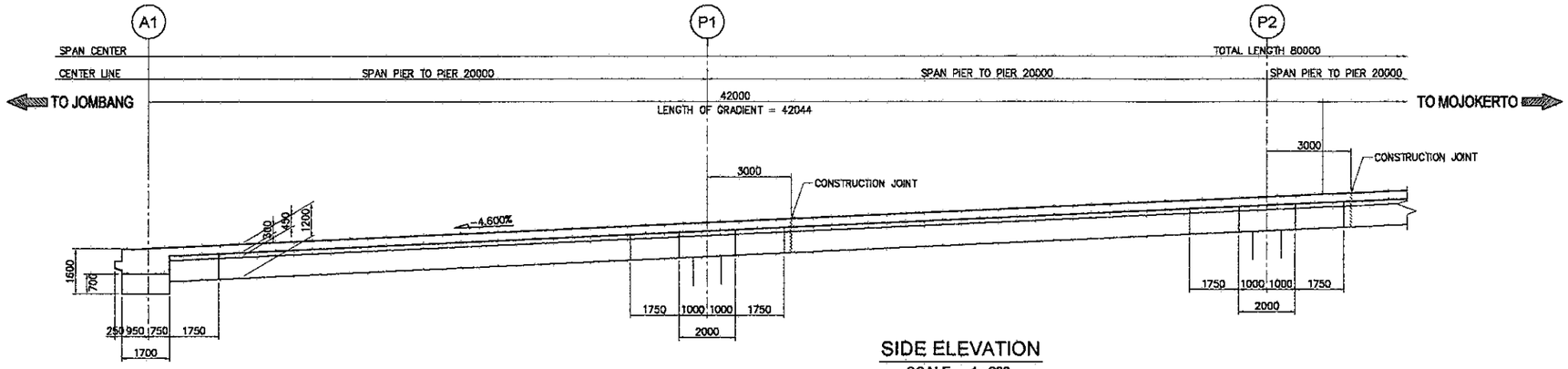
STA / LABEL		A1 0+343.0000	M1 0+343.7500	M2 0+348.5625	M3 0+353.3750	M4 0+358.1875	P1 0+363.0000	M5 0+368.0000	M6 0+373.0000	M7 0+378.0000	P2 0+383.0000	M8 0+388.0000	M9 0+393.0000	M10 0+398.0000	P3 0+403.0000	M11 0+407.7125	M12 0+412.4250	M13 0+417.1375	M14 0+421.8500	M15 0+422.2500	P4 0+423.0000
L1	E	641269.4282	641270.0980	641274.3961	641278.6942	641282.9923	641287.2904	641291.7559	641296.2215	641300.6870	641305.1526	641309.6181	641314.0836	641318.5492	641323.0147	641327.2235	641331.4323	641335.6411	641339.8498	641340.2071	641340.8769
	N	9166301.2107	9166300.8734	9166298.7085	9166296.5436	9166294.3788	9166292.2139	9166289.9647	9166287.7155	9166285.4663	9166283.2171	9166280.9679	9166278.7187	9166276.4695	9166274.2203	9166272.1004	9166269.9805	9166267.8607	9166265.7408	9166265.5609	9166265.2235
	Z	38.5030	38.5375	38.7589	38.9803	39.2016	39.4230	39.6530	39.8830	40.1130	40.343	40.5705	40.7852	40.9860	41.1728	41.3645	41.5438	41.7107	41.8652	41.8778	41.9011
L2	E	641269.2033	641269.8731	641274.1712	641278.4693	641282.7674	641287.0655	641291.5310	641295.9965	641300.4621	641304.9276	641309.3932	641313.8587	641318.3243	641322.7898	641326.9988	641331.2074	641335.4161	641339.6249	641339.9821	641340.6520
	N	9166300.7642	9166300.4268	9166298.2620	9166296.0971	9166293.9322	9166291.7674	9166289.5182	9166287.2690	9166285.0198	9166282.7706	9166280.5214	9166278.2721	9166276.0229	9166273.7737	9166271.6539	9166269.5340	9166267.4141	9166265.2942	9166265.1143	9166264.7769
	Z	37.6780	37.7125	37.9339	38.1553	38.3766	38.5980	38.8280	39.0580	39.2880	39.5180	39.7455	39.9602	40.1610	40.3478	40.5395	40.7188	40.8857	41.0402	41.0528	41.0761
GL	E	641267.9325	641268.6023	641272.9004	641277.1985	641281.4966	641285.7947	641290.2602	641294.7257	641299.1913	641303.6568	641308.1224	641312.5879	641317.0535	641321.5190	641325.7278	641329.9366	641334.1455	641338.3541	641338.7113	641339.3812
	N	9166298.2412	9166297.9038	9166295.7389	9166293.5741	9166291.4092	9166289.2443	9166286.9951	9166284.7459	9166282.4967	9166280.2475	9166277.9983	9166275.7491	9166273.4999	9166271.2507	9166269.1308	9166267.0110	9166264.8911	9166262.7712	9166262.5913	9166262.2539
	Z	37.7345	37.7690	37.9904	38.2118	38.4331	38.6545	38.8845	39.1145	39.3445	39.5745	39.8020	40.0167	40.2175	40.4043	40.5827	40.7486	40.9023	41.0434	41.0549	41.0761
CL	E	641266.5042	641267.1741	641271.4722	641275.7702	641280.0683	641284.3664	641288.8320	641293.2975	641297.7630	641302.2286	641306.6941	641311.1597	641315.6252	641320.0908	641324.2995	641328.5083	641332.7171	641336.9259	641337.2831	641337.9529
	N	9166295.4055	9166295.0682	9166292.9033	9166290.7384	9166288.5736	9166286.4087	9166284.1595	9166281.9103	9166279.6611	9166277.4119	9166275.1627	9166272.9135	9166270.6643	9166268.4151	9166266.2952	9166264.1753	9166262.0555	9166259.9356	9166259.7556	9166259.4183
	Z	37.7980	37.8325	38.0539	38.2753	38.4966	38.7180	38.9480	39.1780	39.4080	39.6380	39.8655	40.0802	40.2810	40.4678	40.6312	40.7822	40.9209	41.0471	41.0573	41.0761
GR	E	641265.0760	641265.7458	641270.0439	641274.3420	641278.6401	641282.9382	641287.4037	641291.8693	641296.3348	641300.8003	641305.2659	641309.7314	641314.1970	641318.6625	641322.8713	641327.0801	641331.2888	641335.4976	641335.8549	641336.5247
	N	9166292.5699	9166292.2325	9166290.0677	9166287.9028	9166285.7380	9166283.5731	9166281.3239	9166279.0747	9166276.8255	9166274.5763	9166272.3271	9166270.0779	9166267.8287	9166265.5795	9166263.4596	9166261.3397	9166259.2198	9166257.1000	9166256.9200	9166256.5826
	Z	37.7345	37.7690	37.9904	38.2118	38.4331	38.6545	38.8845	39.1145	39.3445	39.5745	39.8020	40.0167	40.2175	40.4043	40.5677	40.7187	40.8574	40.9836	40.9938	41.0126
R2	E	641263.8052	641264.4750	641268.7731	641273.0712	641277.3693	641281.6674	641286.1329	641290.5985	641295.0640	641299.5295	641303.9951	641308.4606	641312.9262	641317.3917	641321.6005	641325.8093	641330.0180	641334.2268	641334.5841	641335.2539
	N	9166290.0489	9166289.7095	9166287.5446	9166285.3798	9166283.2149	9166281.0501	9166278.8009	9166276.5517	9166274.3025	9166272.0533	9166269.8040	9166267.5548	9166265.3056	9166263.0564	9166260.9365	9166258.8167	9166256.6968	9166254.5769	9166254.3970	9166254.0596
	Z	37.6780	37.7125	37.9339	38.1553	38.3766	38.5980	38.8280	39.0580	39.2880	39.5180	39.7455	39.9602	40.1610	40.3478	40.5112	40.6622	40.8009	40.9271	40.9373	40.9561
R1	E	641263.5803	641264.2501	641268.5482	641272.8463	641277.1444	641281.4424	641285.9080	641290.3735	641294.8391	641299.3046	641303.7702	641308.2357	641312.7013	641317.1668	641321.3756	641325.5843	641329.7931	641334.0019	641334.3591	641335.0290
	N	9166289.6003	9166289.2630	9166287.0981	9166284.9332	9166282.7684	9166280.6035	9166278.3543	9166276.1051	9166273.8559	9166271.6067	9166269.3575	9166267.1083	9166264.8591	9166262.6099	9166260.4900	9166258.3701	9166256.2503	9166254.1304	9166253.9504	9166253.6131
	Z	38.5030	38.5375	38.7589	38.9603	39.2016	39.4230	39.6530	39.8830	40.1130	40.3430	40.5705	40.7852	40.9860	41.1728	41.3362	41.4872	41.6259	41.7521	41.7623	41.7811

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 Sign	DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	NOT TO SCALE	QUANTITIES SUMMARY FOR PC SUPERSTRUCTURE A1~P4, P7~A2	PCL-002
	Sign	Sign	Sign	NIP. : 110038400 Date		FULL SIZE A3		SHEET NO : 02/ 21
	Date	Date	Date					

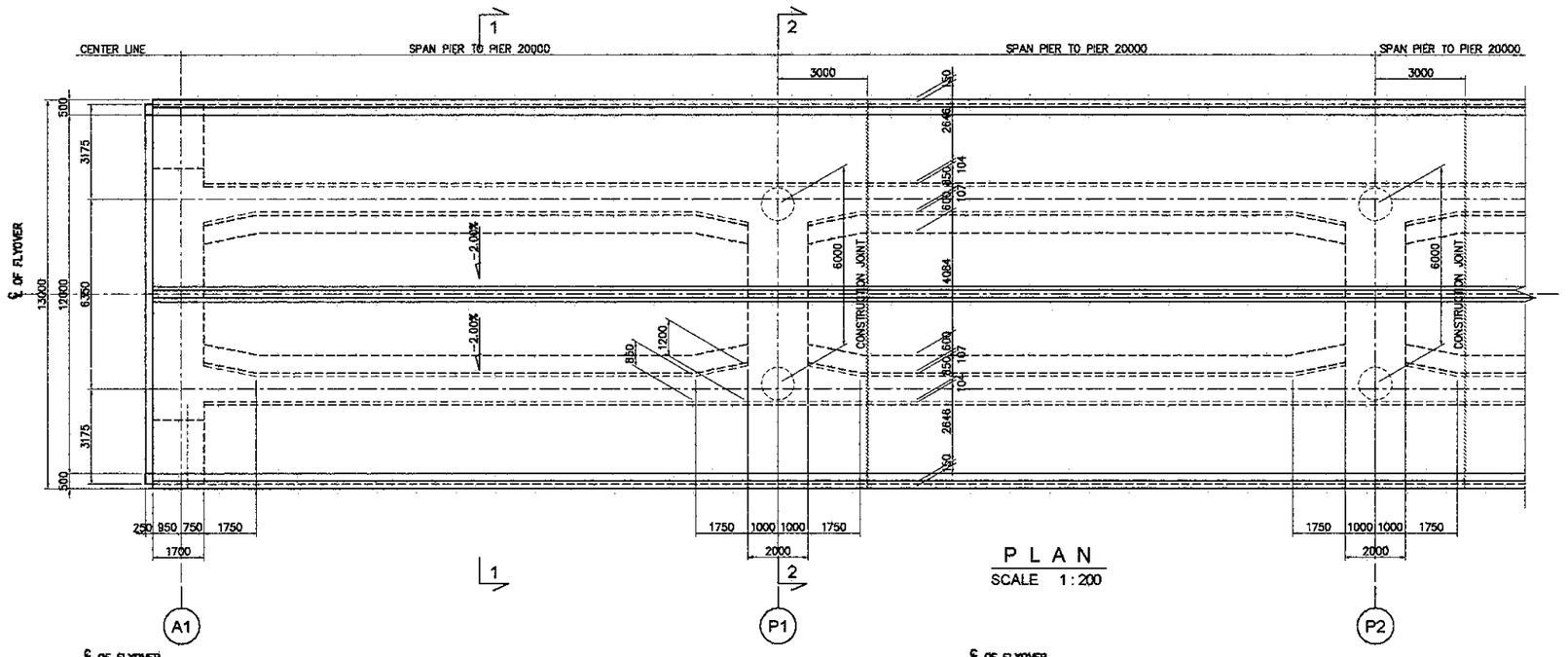
QUANTITY SUMMARY FOR PC SUPERSTRUCTURE

NO.		UNIT	QUANTITY	NOTES
1	CONCRETE f'c = 35 MPa	m^3	1,198.82	
2	PC CABLE DECK SLAB	kg	8,896.04	
3	DEAD END ANCHORAGE PC DECK SLAB	pcs	282	
4	STRESSING ANCHORAGE PC DECK SLAB	pcs	282	
5	PC CABLE PPC GIRDER	kg	26,803.64	
6	DEAD END ANCHORAGE PPC GIRDER	pcs	32	
7	STRESSING ANCHORAGE PPC GIRDER	pcs	32	
8	COUPLER	pcs	56	
9	REBAR	ton	–	
10	WATERPROOFING	m^2		
11	PAVEMENT	m^2	–	HIGHWAY PORTION

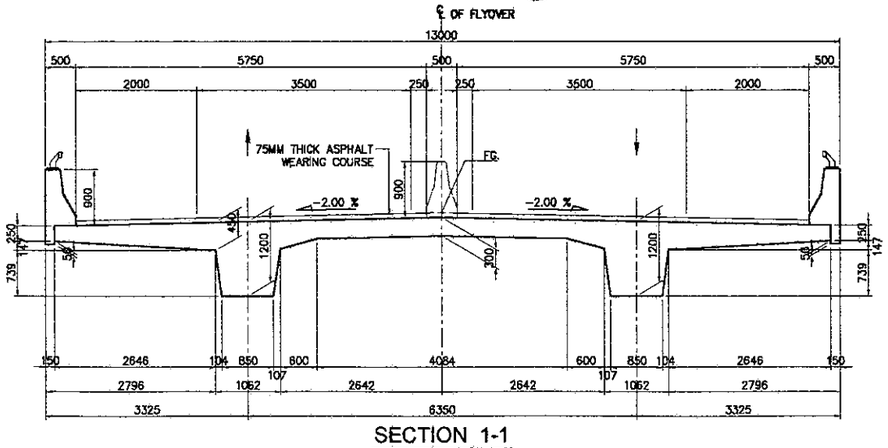
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : DIMENSION PLAN OF PC SUPERSTRUCTURE A1 - P2	DRAWING NO : PCL-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) Sign / Date				



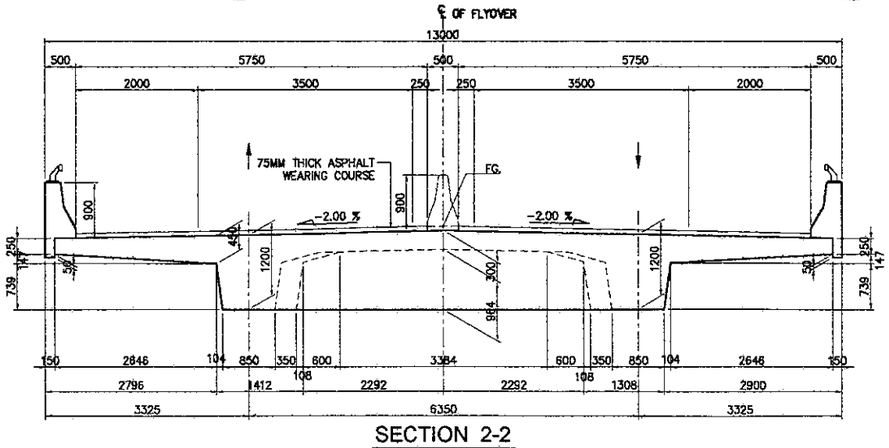
SIDE ELEVATION
SCALE 1 : 200



P L A N
SCALE 1 : 200



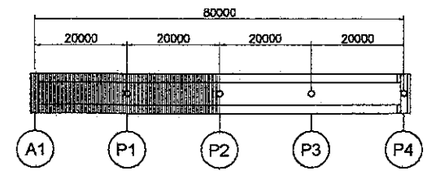
SECTION 1-1
SCALE 1 : 100



SECTION 2-2
SCALE 1 : 100

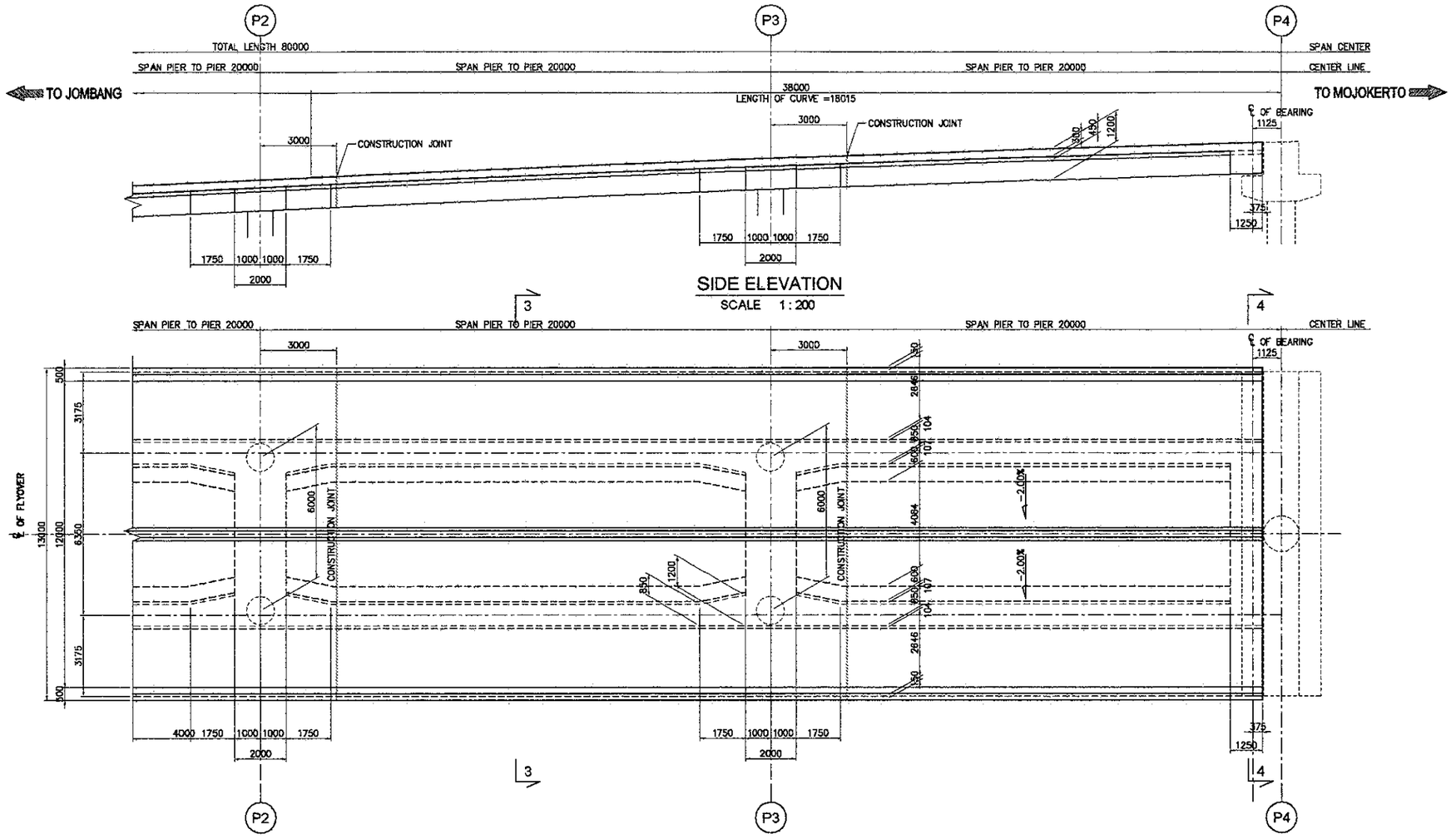
NOTES :

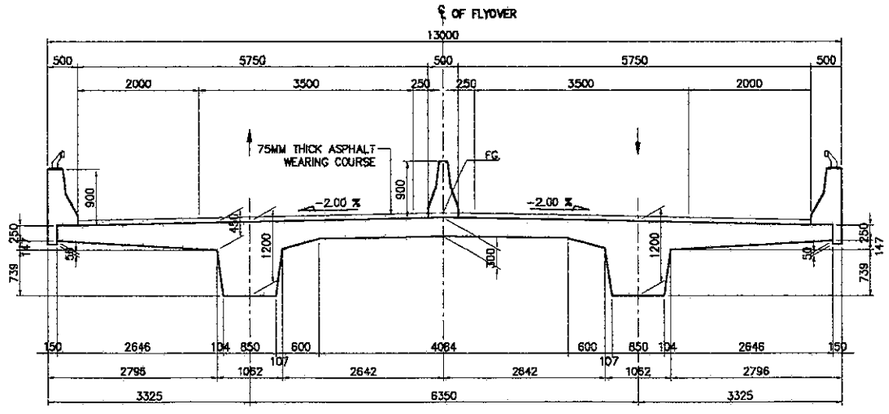
1. All dimension are in mm unless noted otherwise.
2. Concrete Girder and Slab fc'= 35 MPa.
3. All Reinforcing steel shall be BJTD 40 or ASTM A615 Grade 60 deformed bars.
4. The Contractor shall be responsible to carry out the following before Construction :
   a) Verification of all elevations and dimensions,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



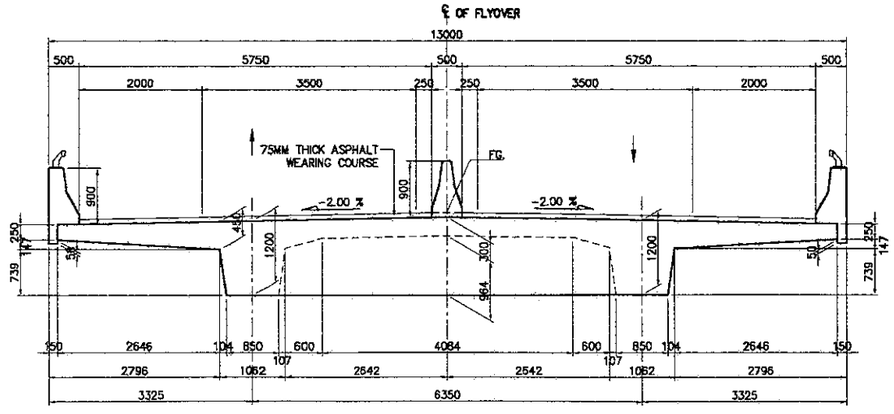
KEY PLAN

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 :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 200 1 : 100 FULL SIZE A3	DIMENSION PLAN OF PC SUPERSTRUCTURE P2 - P4	PCL-004
	Sign		Sign		Sign		APPROVED BY: Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400				SHEET NO : 04 / 21
	Date		Date		Date						





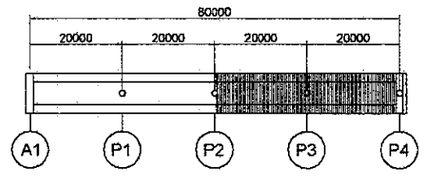
SECTION 3-3
SCALE 1 : 100



SECTION 4-4
SCALE 1 : 100

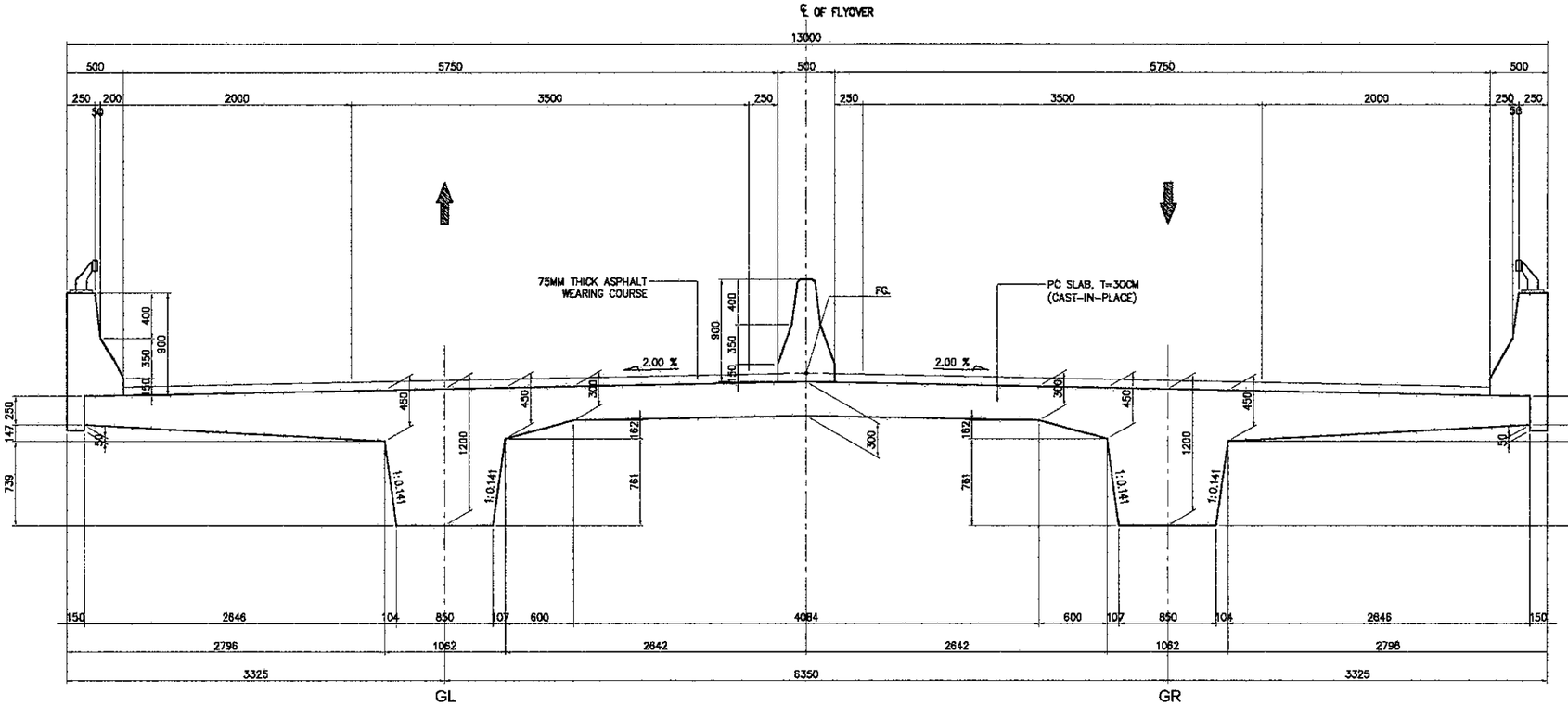
NOTES :

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 :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI			DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 50	TYPICAL CROSS SECTION A1 - P4	PCL-005
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc				SHEET NO :
	Date		Date		Date			NIP. : 110038400		FULL SIZE A3		05 / 21



INFORMATION OF PC SUPERSTUCTURE

	A1	P1	P2	P3	P4'
FG.	37.798	38.718	39.638	40.468	41.048
Super Elev. GL	-2.000%	-2.000%	-2.000%	-2.000%	-0.113%
Super Elev. GR	-2.000%	-2.000%	-2.000%	-2.000%	-2.000%
Top Slab Girder GL	37.660	38.580	39.500	40.329	40.969
Top Slab Girder GR	37.660	38.580	39.500	40.329	40.910
Bottom GL	35.985	37.305	38.225	39.054	39.694
Bottom GR	35.985	37.305	38.225	39.054	39.635
Station	0+343.000	0+363.000	0+383.000	0+403.000	0+421.875

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 (Sign) — NIP. : 110038400 (Date)

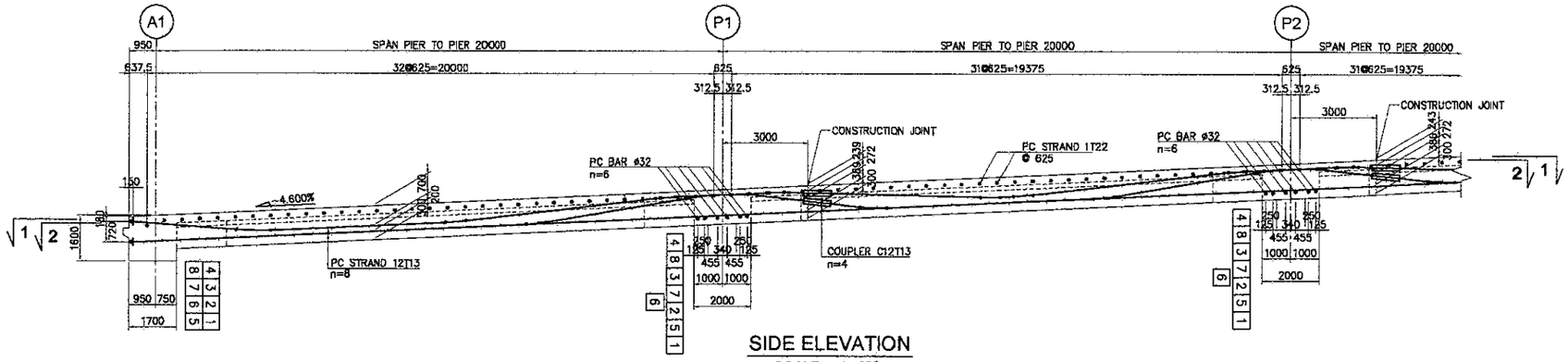
PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
PETERONGAN FLYOVER - CONTRACT PACKAGE 3
(PETERONGAN - TANGGULANGIN)
EAST JAVA PROVINCE

SCALE : 1 : 200, 1 : 100 — FULL SIZE A3

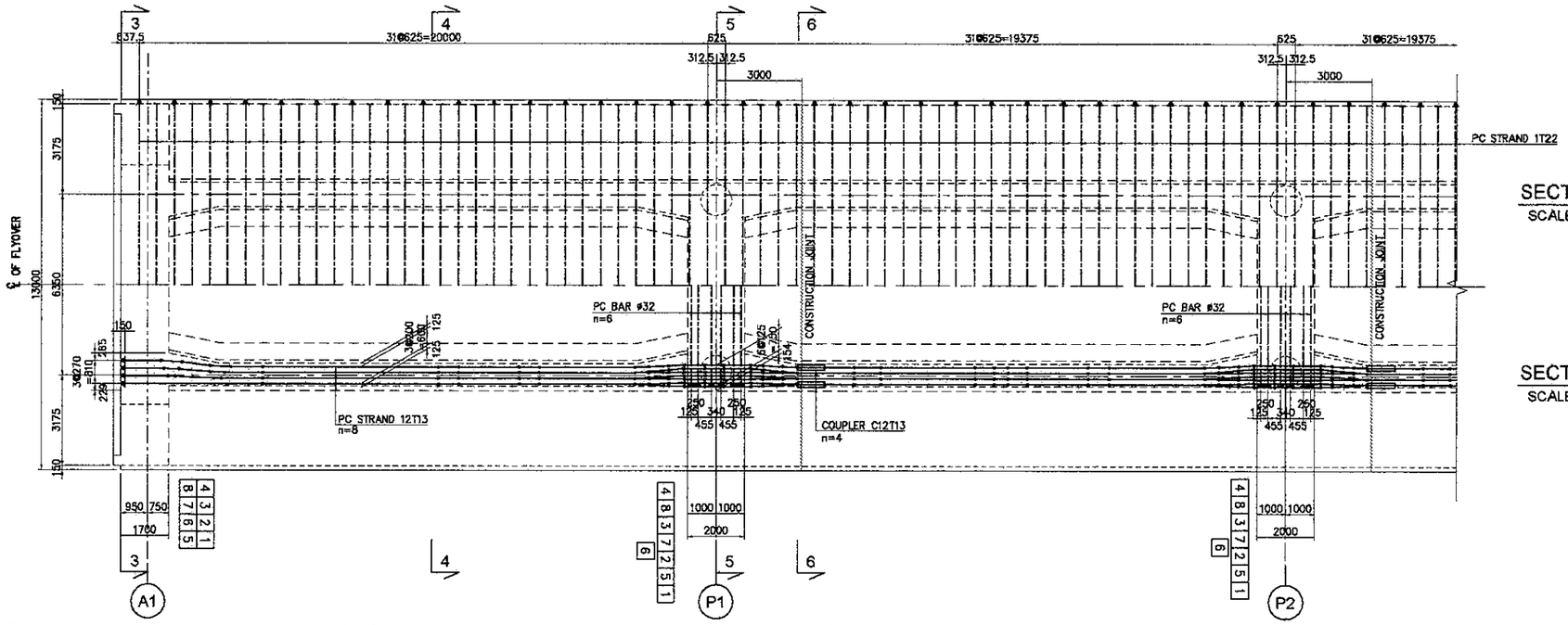
DRAWING TITLE : ARRANGEMENT OF PC CABLES A1-P2

DRAWING NO : PCL-006

SHEET NO : 06 / 21



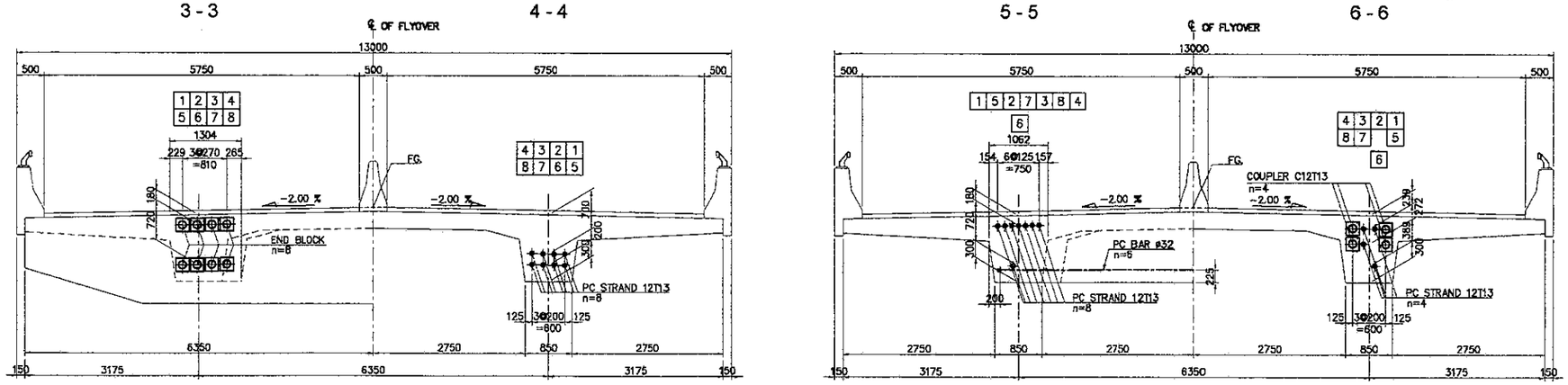
SIDE ELEVATION
SCALE 1 : 200



SECTION 1-1
SCALE 1 : 200

SECTION 2-2
SCALE 1 : 200

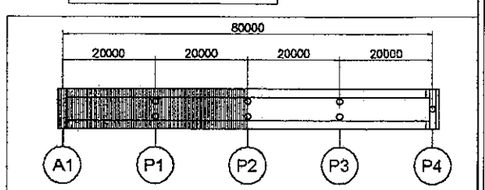
3 - 3 4 - 4 5 - 5 6 - 6



CROSS SECTION
SCALE 1 :100

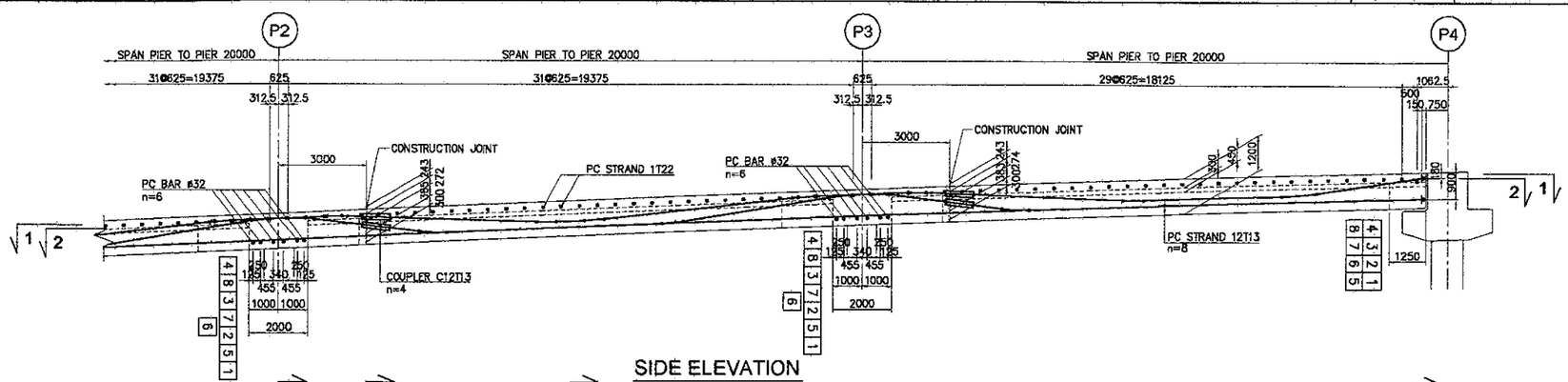
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND).
   . Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

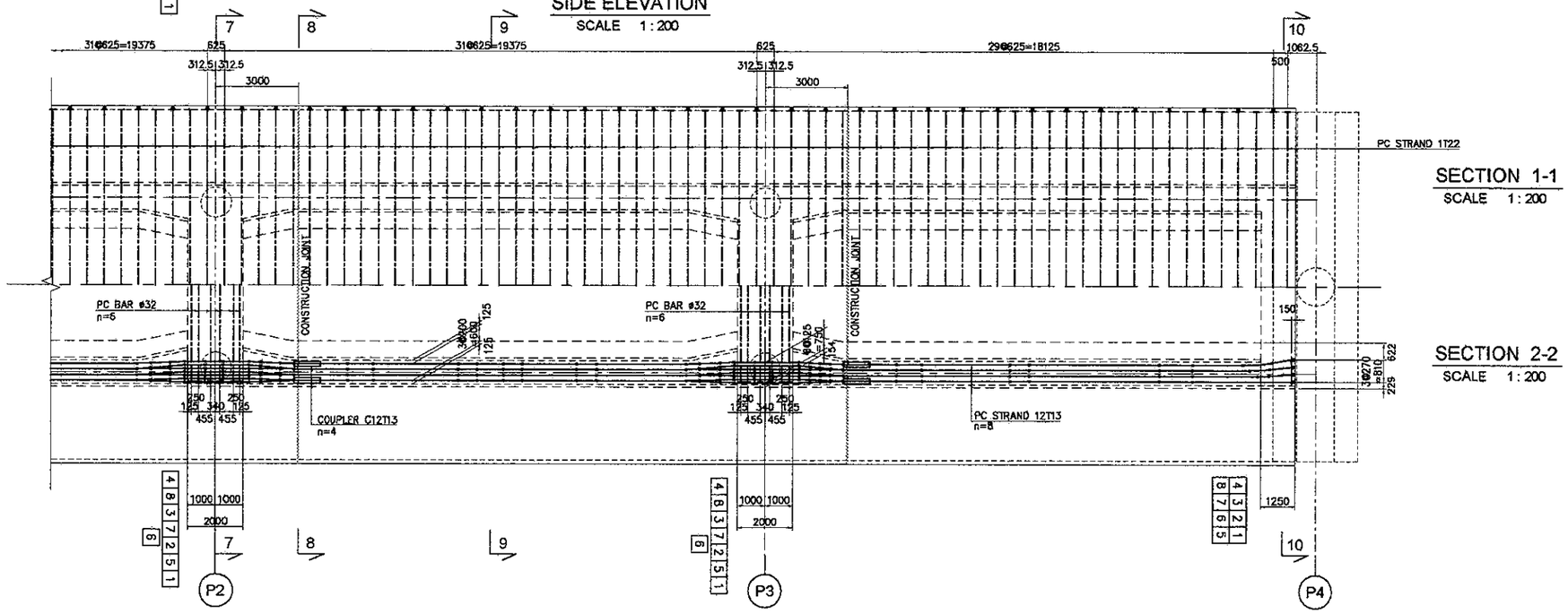


KEY PLAN

JICA JAPAN INTERNATIONAL COOPERATION AGENCY 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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES P2-P4	DRAWING NO : PCL-007 SHEET NO : 07 / 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		



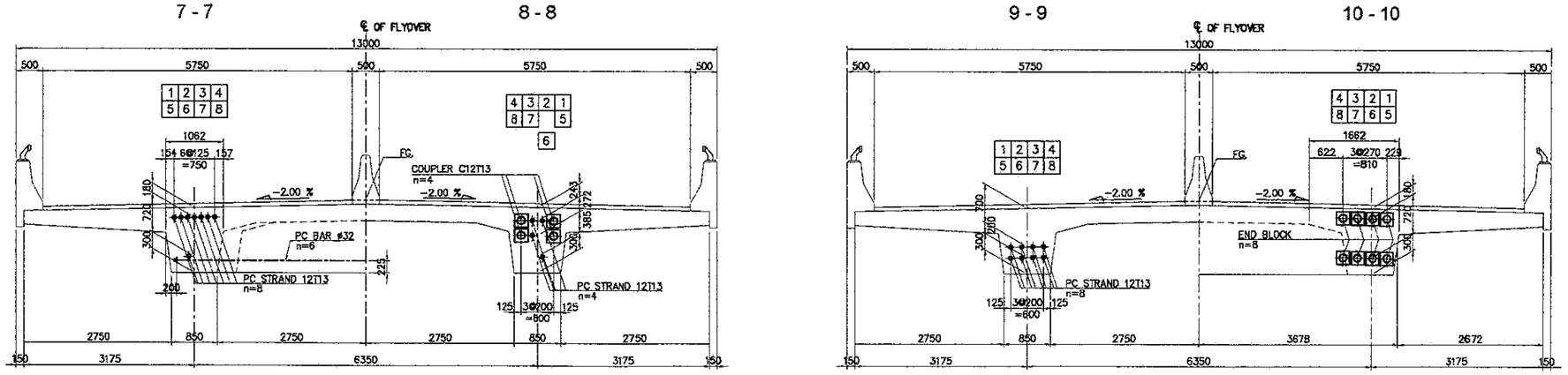
SIDE ELEVATION
SCALE 1 : 200



SECTION 1-1
SCALE 1 : 200

SECTION 2-2
SCALE 1 : 200

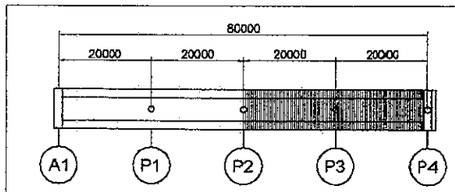
7 - 7 8 - 8 9 - 9 10 - 10



CROSS SECTION
SCALE : 1 : 100

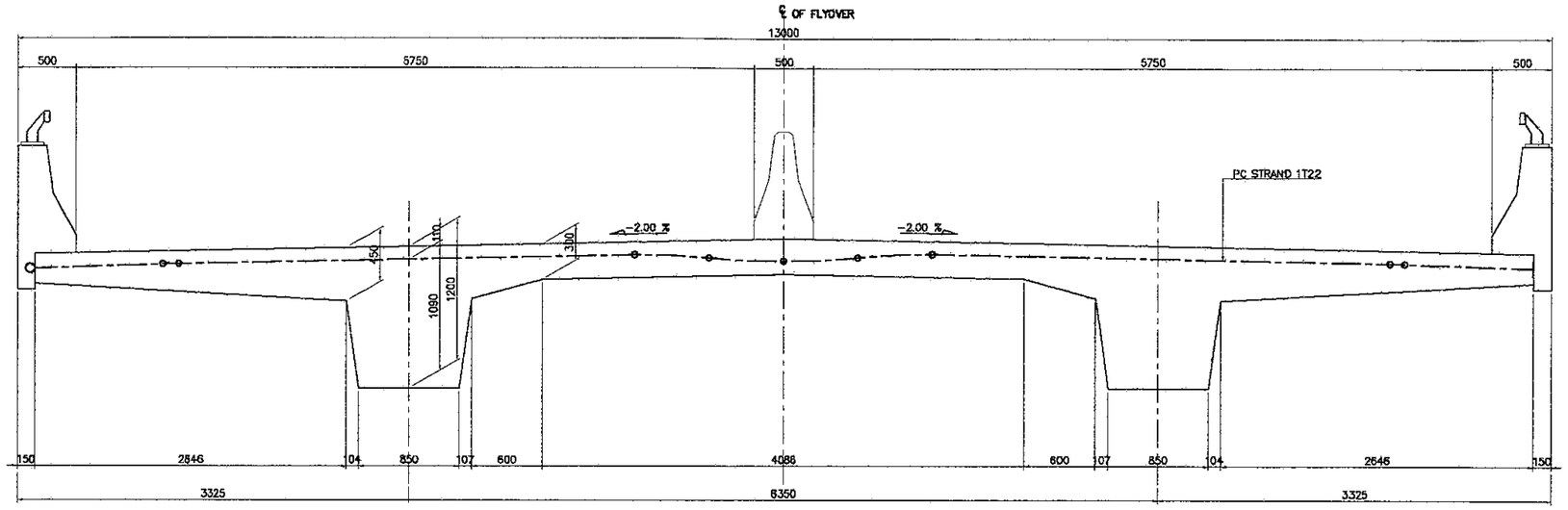
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND).
. Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

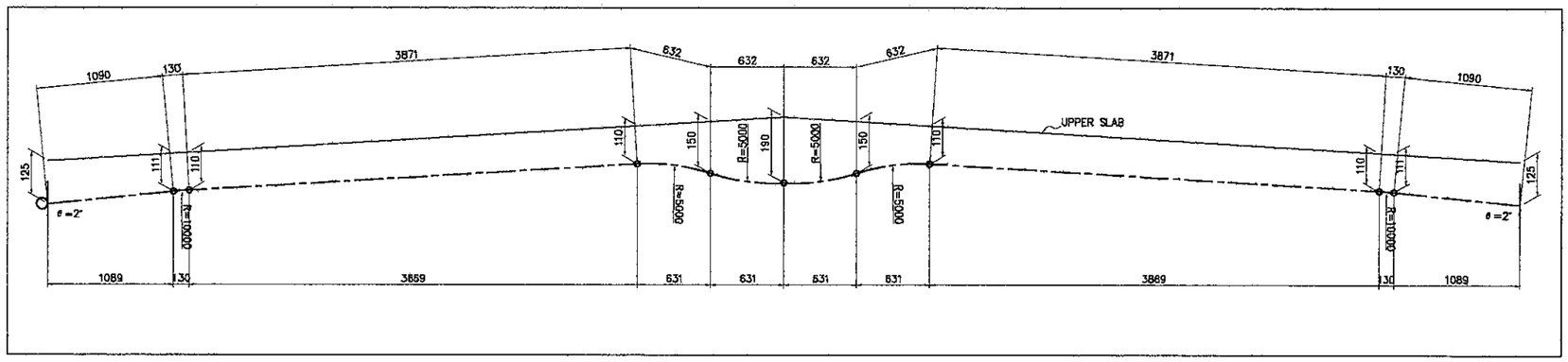


KEY PLAN

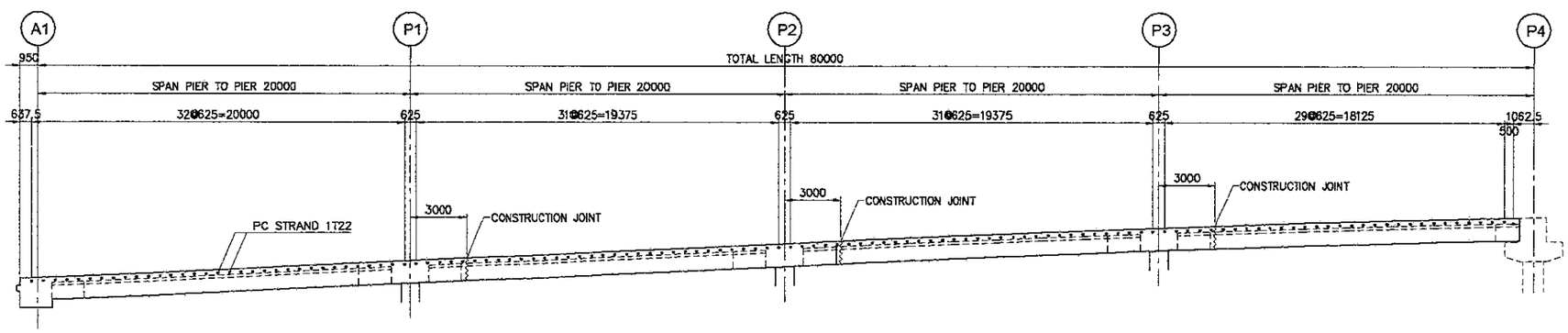
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	Name H. HONDA Sign Date	CHECKED BY	Name T. OKUMURA Sign Date	SUBMITTED BY	Name M. KIUCHI Sign Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY Ir. HERRY VAZA M.Eng.Sc NIP. : 110038400 Sign Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 50 1 : 300 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES A1-P4	DRAWING NO : PCL-008 SHEET NO : 08 / 21



TRANVERSAL PC CABLE
SCALE 1 : 50



PC CABLE PROFILE



LONGITUDINAL PC CABLE ARRANGEMENT
SCALE 1 : 300

TABEL OF PC TENDONS

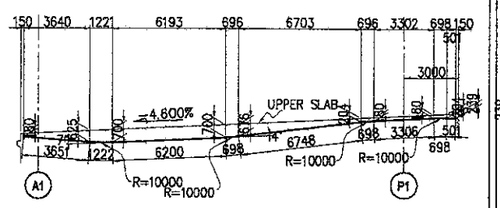
Length (m)	Nos.	Unit Weight (kg/m)	Weight / 1 nos (kg)	Weight (kg)	Remarks
12.710	128	2.482	31.55	4,037.92	Stressing Anchorage One Side Staggered
TOTAL LENGTH (L) =			1,626.88	m	
TOTAL WEIGHT (W) =			4,037.92	kg	

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

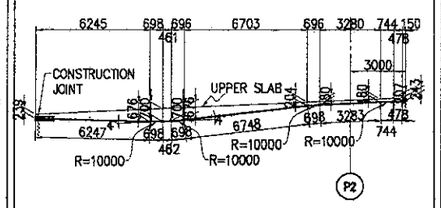
⊣ Stressing Anchorage
⊢ Dead End Anchorage

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : – FULL SIZE A3	DRAWING TITLE : PC CABLES SCHEDULE P1 - P4	DRAWING NO : PCL-009 SHEET NO : 09 / 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				

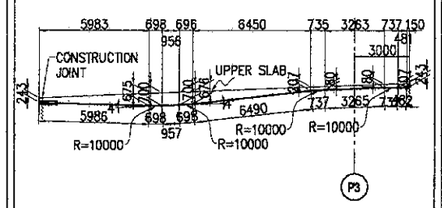
CONSTRUCTION SECTION NO.1 (C1 & C4)



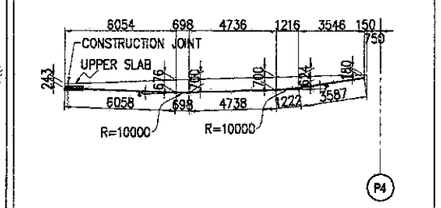
CONSTRUCTION SECTION NO.2 (C1 & C4)



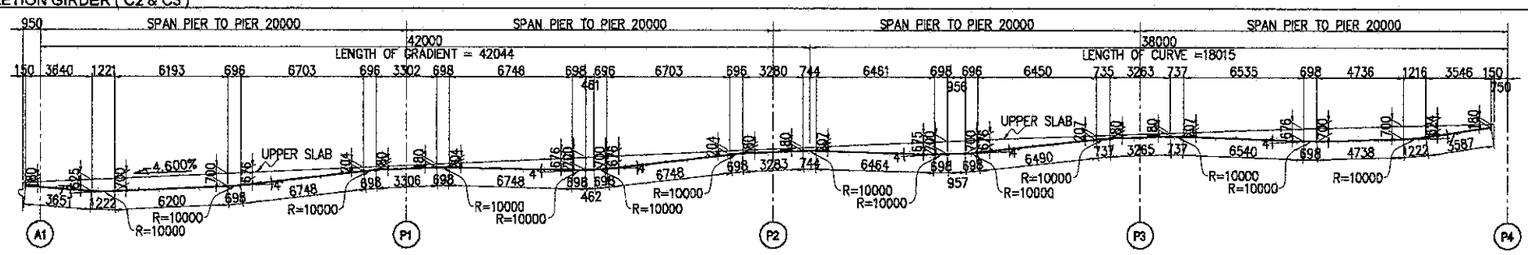
CONSTRUCTION SECTION NO.3 (C1 & C4)



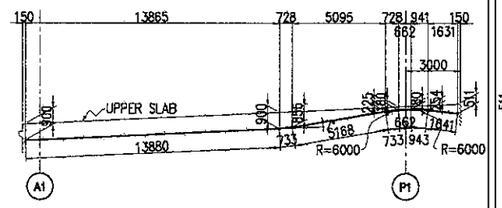
CONSTRUCTION SECTION NO.4 (C1 & C4)



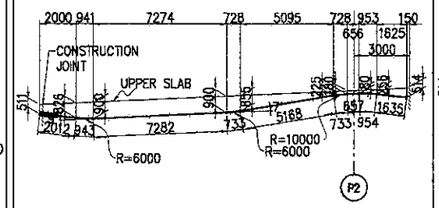
AFTER COMPLETION GIRDER (C2 & C3)



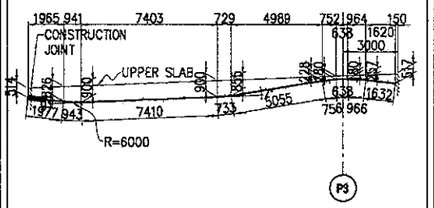
CONSTRUCTION SECTION NO.1 (C5 & C8)



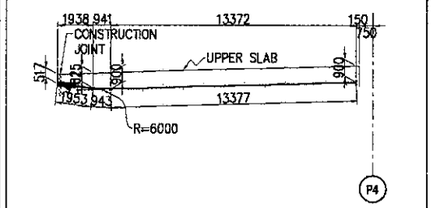
CONSTRUCTION SECTION NO.2 (C5 & C8)



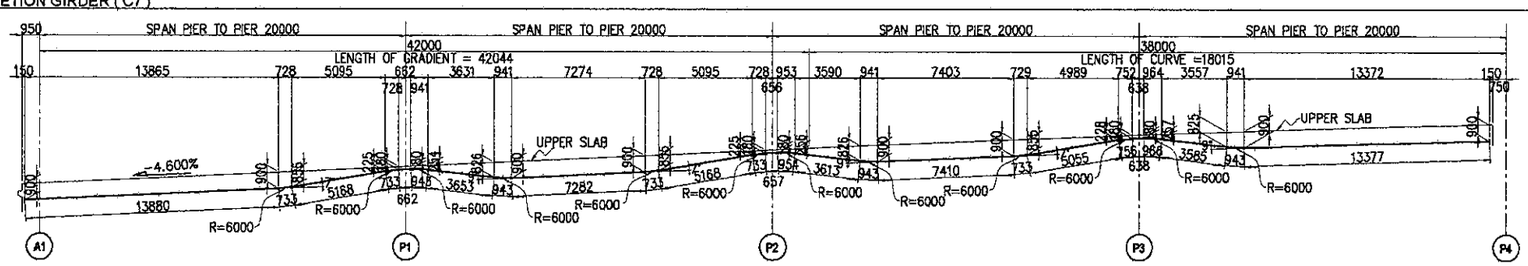
CONSTRUCTION SECTION NO.3 (C5 & C8)



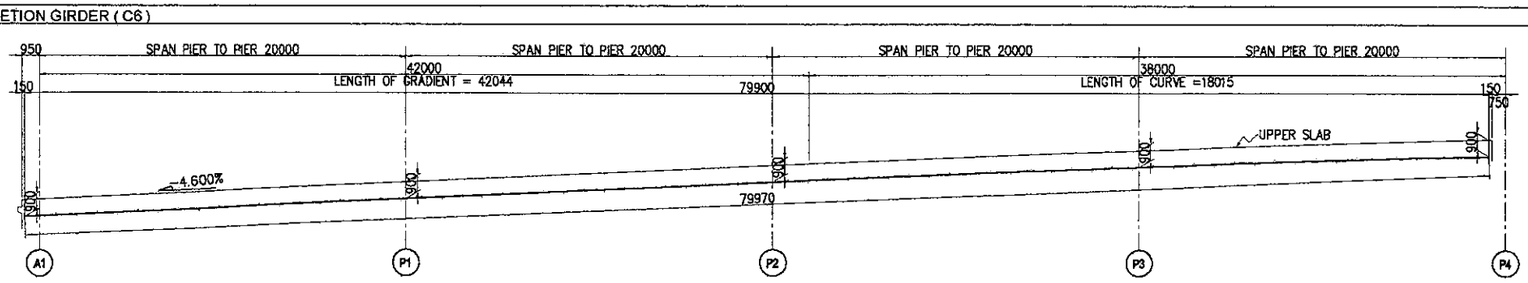
CONSTRUCTION SECTION NO.4 (C5 & C8)



AFTER COMPLETION GIRDER (C7)



AFTER COMPLETION GIRDER (C6)



PC CABLES SCHEDULE A1 - P4

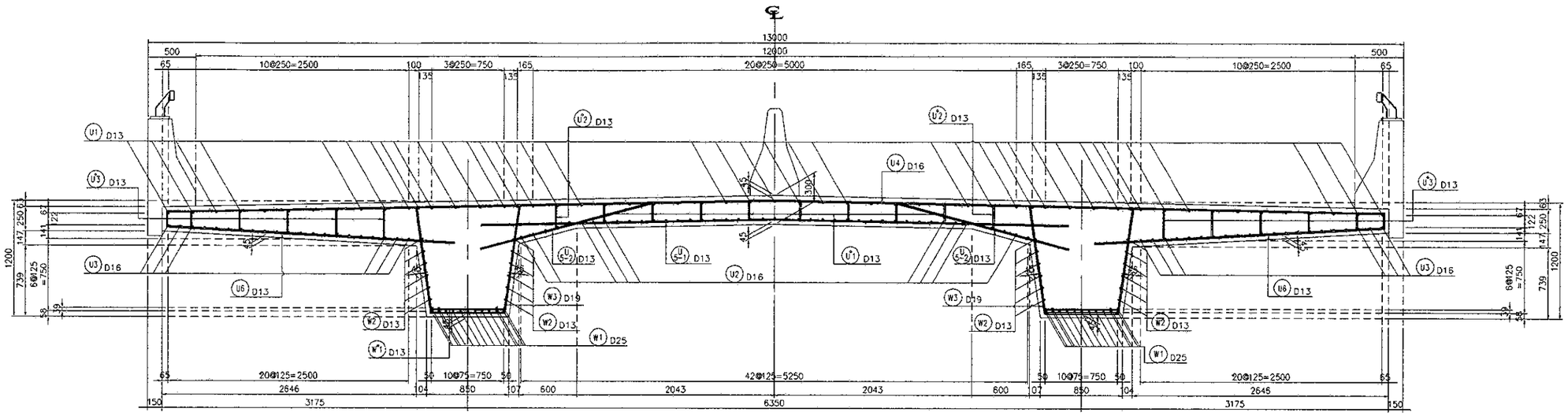
SCALE : NON

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

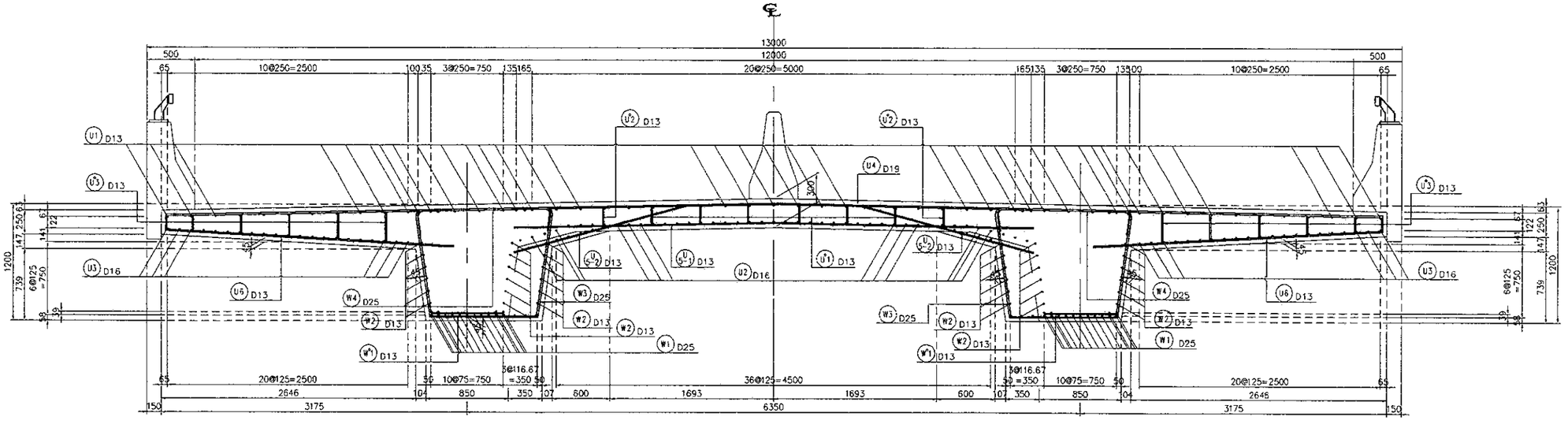
Stressing Anchorage
Dead End Anchorage

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 :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 50	TYPICAL DETAIL OF CROSS SECTION REINFORCEMENT A1 - P4	PCL-010
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign				SHEET NO :
	Date	Date	Date	NIP. : 110038400 Date		FULL SIZE A3		10 / 21



SECTION AT MID SPAN

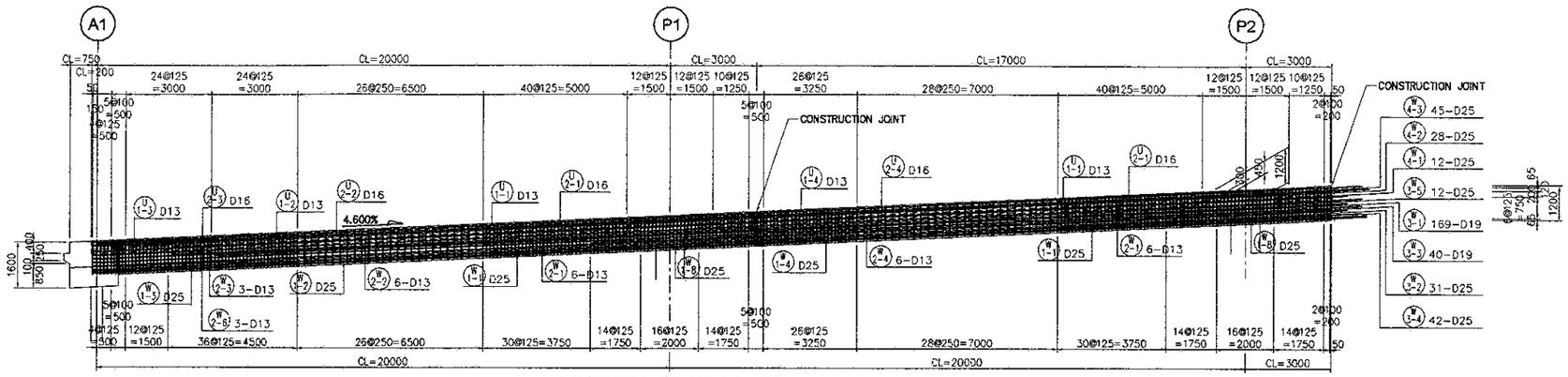
SCALE 1:50



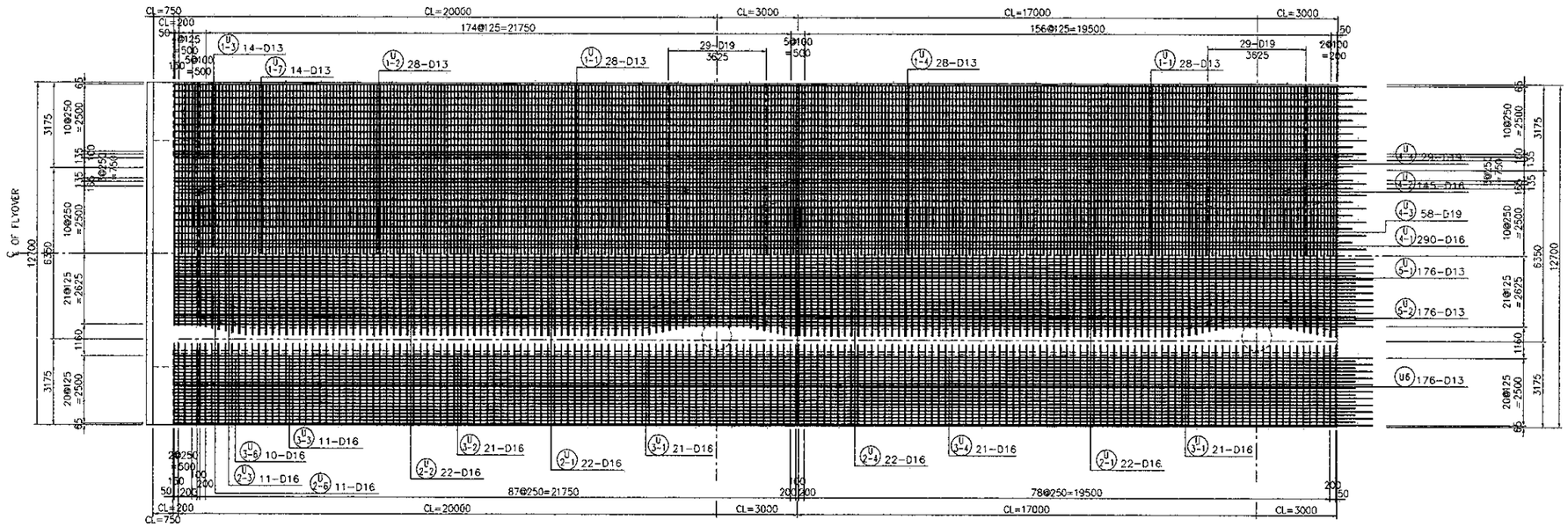
SECTION AT PIER

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		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 200	ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER A1 - P2	PCL-011
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc				SHEET NO :
	Date	Date	Date	NIP. : 110038400 Sign / Date		FULL SIZE A3		11 / 21

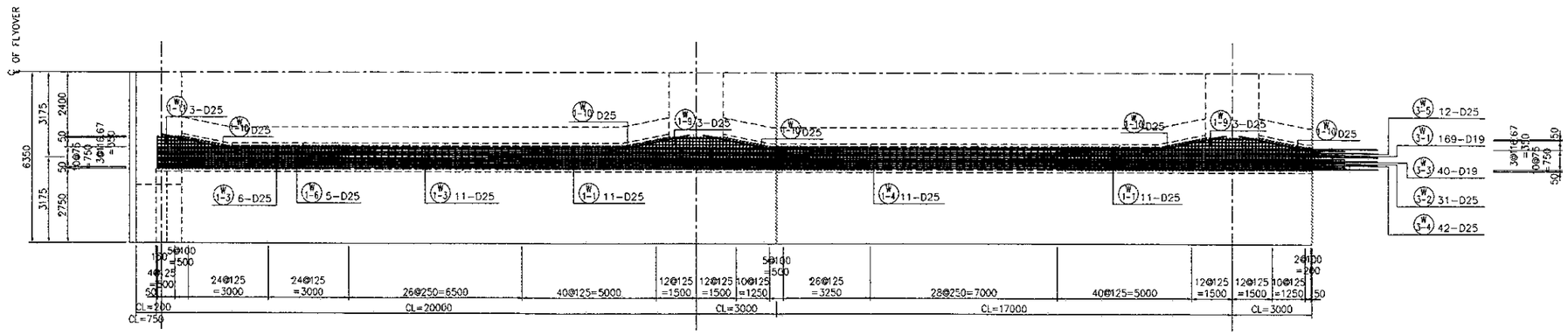


SECTION SPAN A1 - P2
SCALE : 1 : 200



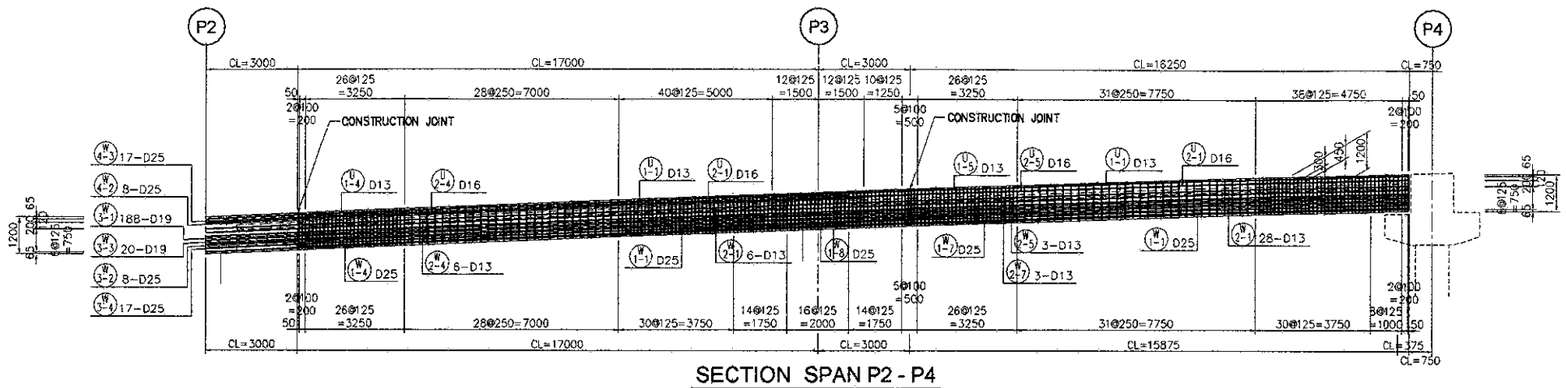
SECTION TOP SLAB
SCALE : 1 : 200

SECTION BOTTOM SLAB
SCALE : 1 : 200

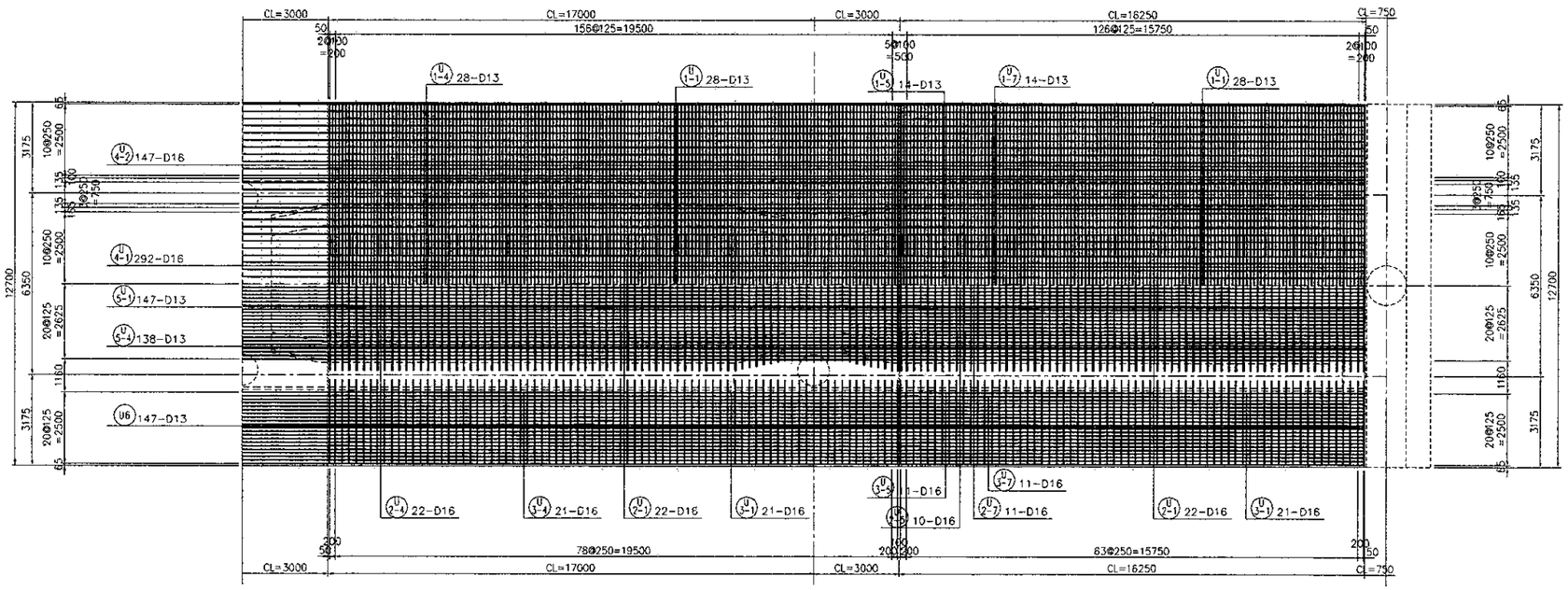


SECTION BOTTOM GIRDER
SCALE : 1 : 200

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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI			1 : 200	ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER P2 - P4	PCL-012
	Sign		Sign		Sign		APPROVED BY Ir. HERRY VAZA M,Eng.Sc		FULL SIZE A3		SHEET NO : 12 / 21
	Date		Date		Date		NIP. : 110038400 Sign / Date				

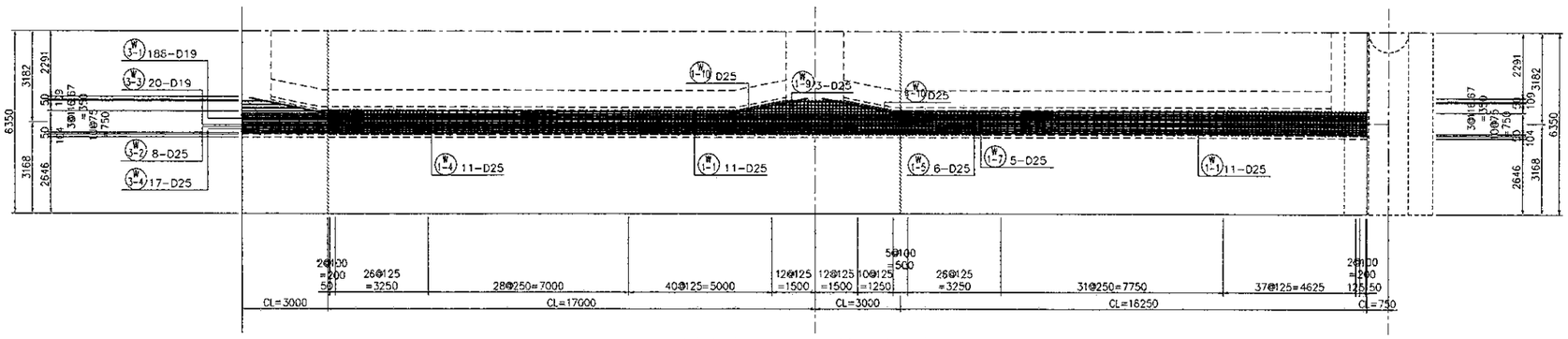


SECTION SPAN P2 - P4
SCALE : 1 : 200



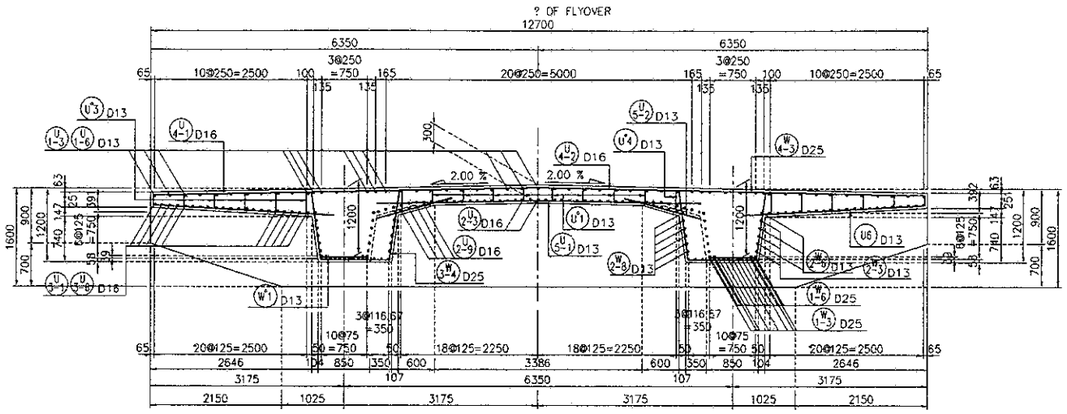
SECTION TOP SLAB
SCALE : 1 : 200

SECTION BOTTOM SLAB
SCALE : 1 : 200



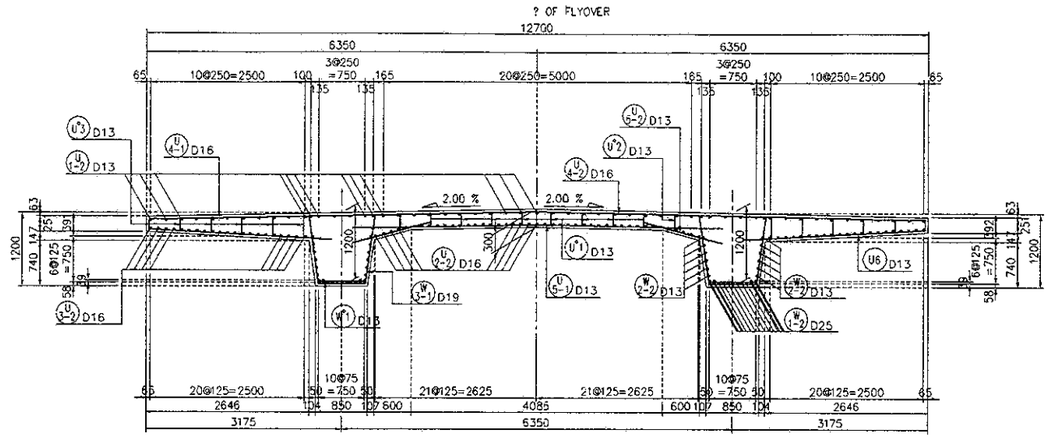
SECTION BOTTOM GIRDER
SCALE : 1 : 200

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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 100 FULL SIZE A3	ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER A1-P4 (1 OF 2)	PCL-013 SHEET NO : 13 / 21
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign NIP. : 110038400 Date				
	Date	Date	Date					



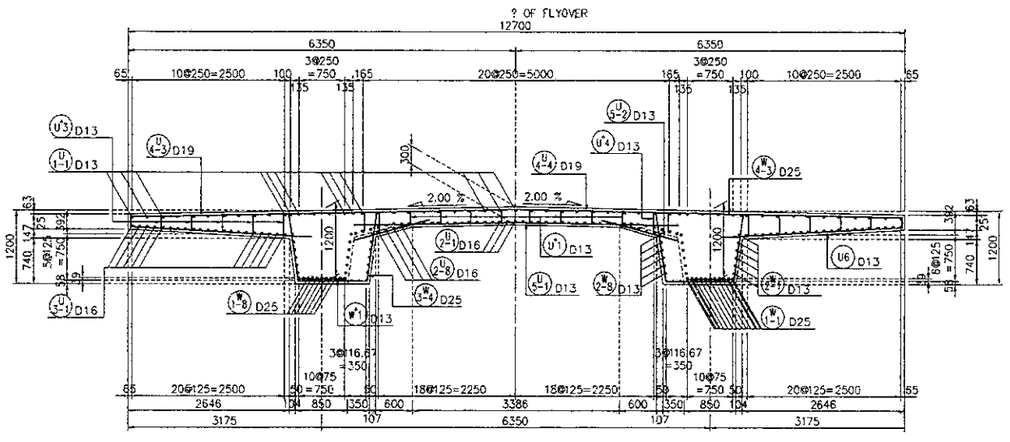
SECTION AT A1

SCALE : 1 : 100



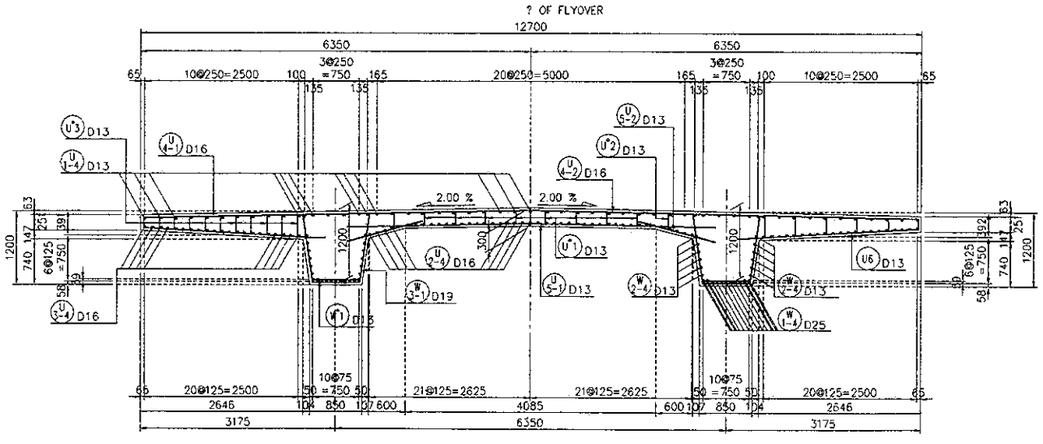
SECTION AT MID SPAN A1~P1

SCALE : 1 : 100



SECTION AT P1

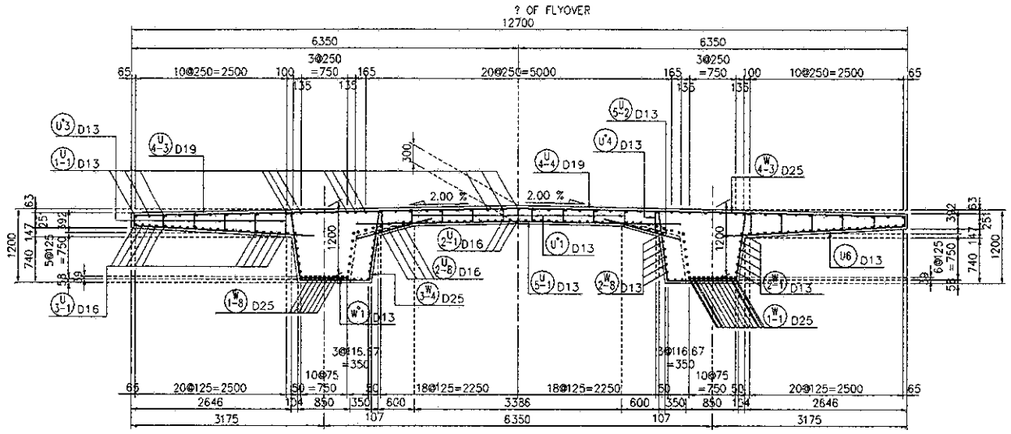
SCALE : 1 : 100



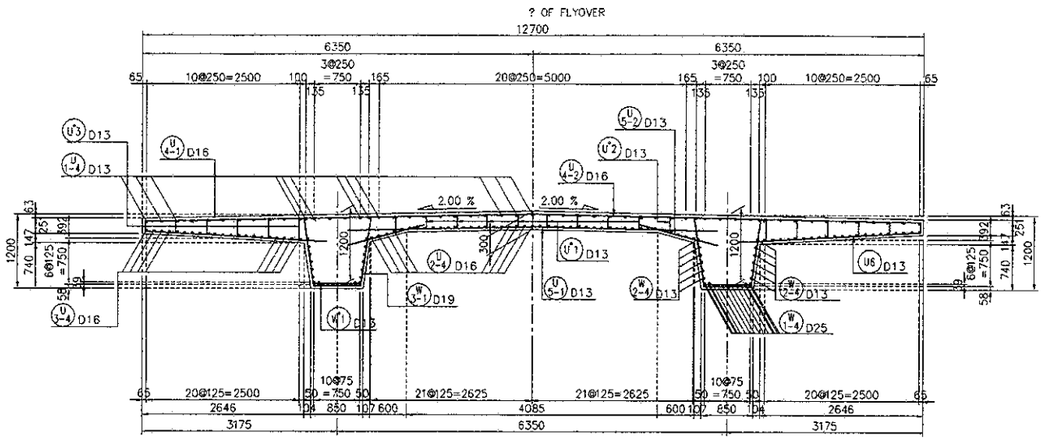
SECTION AT MID SPAN P1~P2

SCALE : 1 : 100

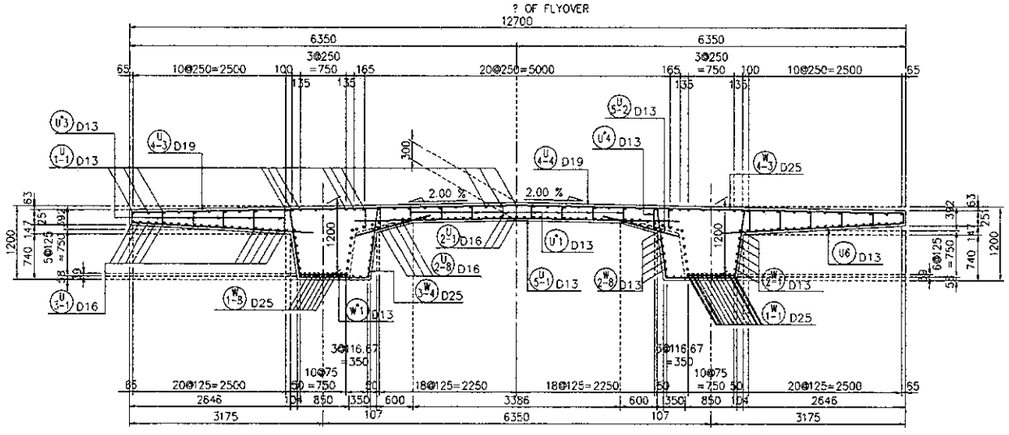
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 100	ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER A1-P4 (2 OF 2)	PCL-014
	Sign		Sign		Sign		APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign				SHEET NO :
	Date		Date		Date		NIP. : 110038400 Date		FULL SIZE A3		14 / 21



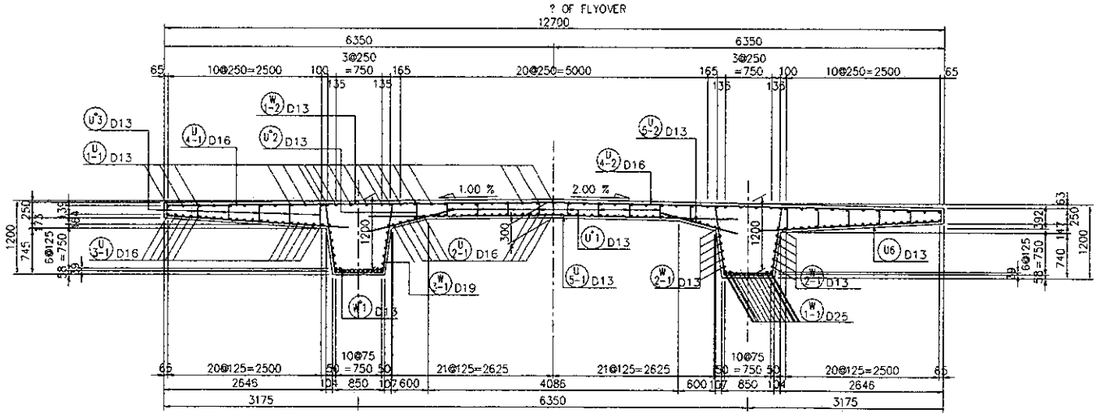
SECTION AT P2
SCALE : 1 : 100



SECTION AT MID SPAN P2~P3
SCALE : 1 : 100

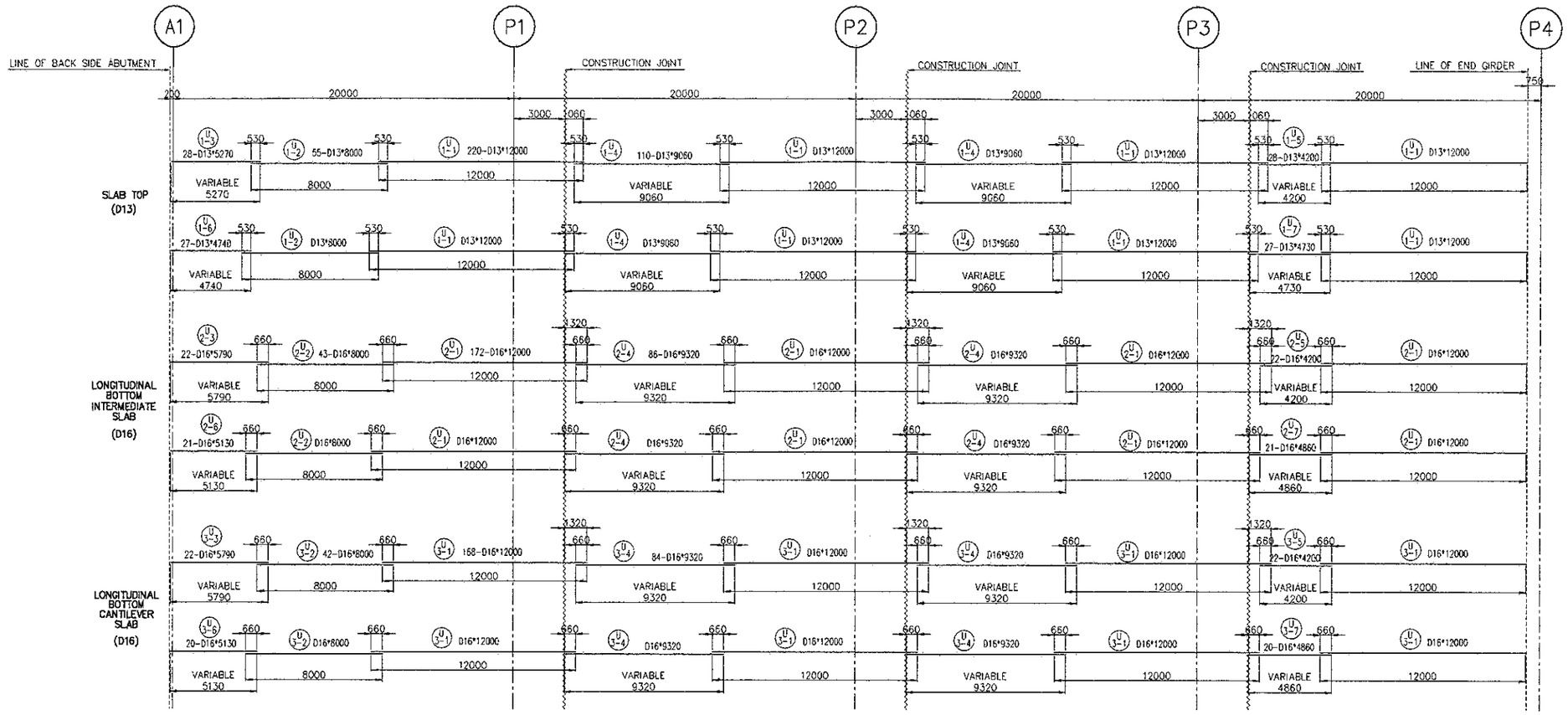


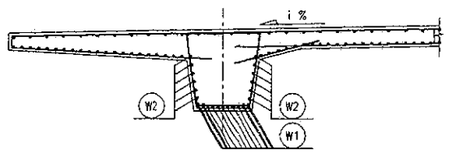
SECTION AT P3
SCALE : 1 : 100



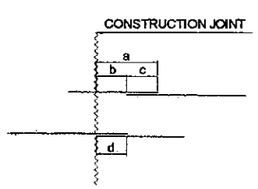
SECTION AT MID SPAN P3~P4
SCALE : 1 : 100

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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 300 FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER A1 - P4 (1 OF 3)	DRAWING NO : PCL-015 SHEET NO : 15 / 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			



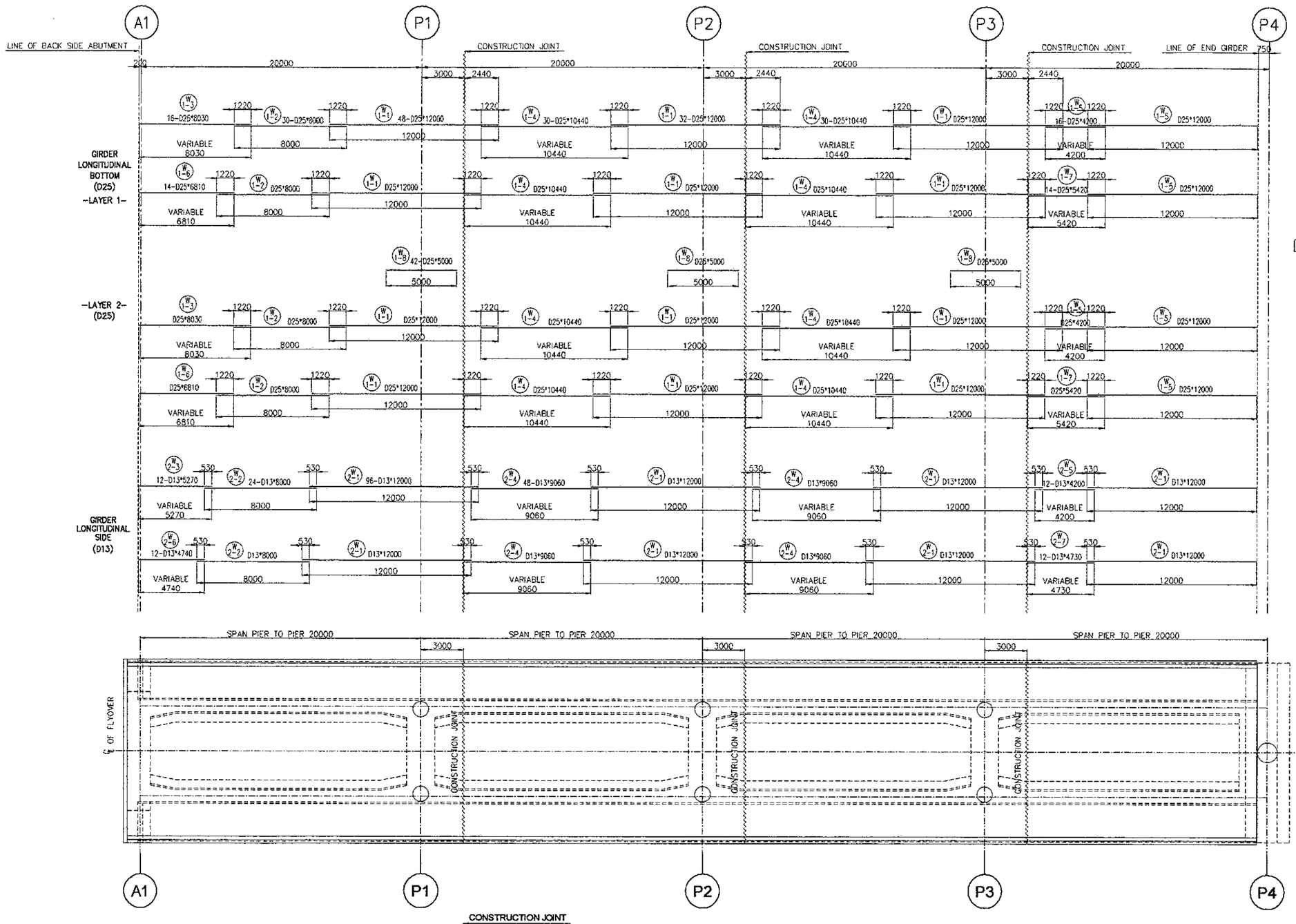


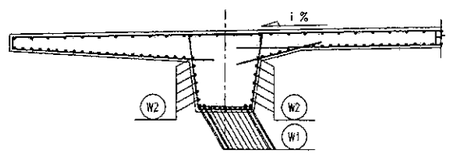
	a	b	c	d
D 13	1060	530	530	530
D 16	1320	660	660	660



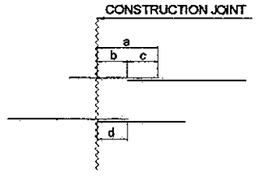
	MAIN REBARS										STIRRUP						
	θ≤90° R=3d	θ>90° R=5.5d	θ= 45°		θ= 60°		θ= 90°		θ= 135°		R=2.5d	θ= 45°		θ= 60°		θ= 90°	
			α	AL	α	AL	α	AL	α	AL		α	AL	α	AL	α	AL
D 13	39	71.5	92	96	82	83	61	47	98	3	32.5	77	80	68	45	51	14
D 16	48	88	113	118	100	86	75	21	89	4	40	94	99	84	55	63	17

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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 300 FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER A1 - P4 (2 OF 3)	DRAWING NO : PCL-016 SHEET NO : 16 / 21





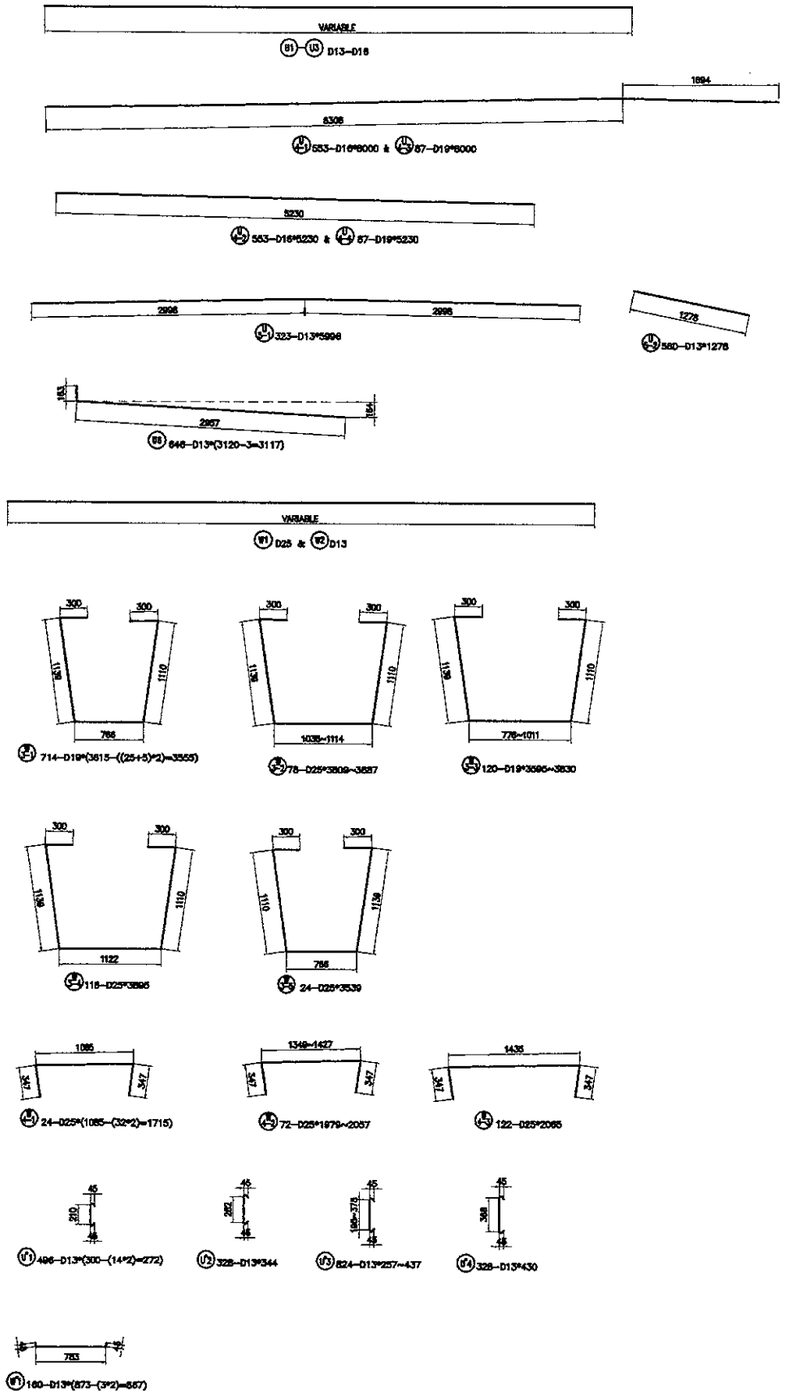
	a	b	c	d
D 13	1060	530	530	530
D 19	1560	780	780	780
D 25	2440	1220	1220	1220



	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°	
			α	Δl	α	Δl	α	Δl	α	Δl		α	Δl	α	Δl	α	Δl
D 13	39	71.5	92	66	82	53	61	17	55	3	32.5	77	80	66	45	61	14
D 19	57	104.5	134	141	118	78	89	25	82	5	47.5	112	117	96	66	75	20
D 25	75	137.5	117	185	157	103	116	32	108	6	62.5*	177	185	157	103	118	32

* R=4d

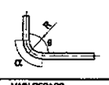
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : NTS FULL SIZE A3	DRAWING TITLE : REINFORCEMENT SCHEDULE FOR PC GIRDER A1 - P4 (3 OF 3)	DRAWING NO : PCL-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 - 1	13	12000	220	1.04	12.48	2746		
U 1 - 2	13	8000	55	1.04	8.32	458		
U 1 - 3	13	5270	26	1.04	5.48	153		varies length
U 1 - 4	13	9060	110	1.04	9.42	1036		varies length
U 1 - 5	13	4200	29	1.04	4.37	122		varies length
U 1 - 6	13	4740	27	1.04	4.93	133		varies length
U 1 - 7	13	4730	27	1.04	4.92	133		varies length
U 2 - 1	16	12000	172	1.58	18.96	3261		
U 2 - 2	16	8000	43	1.58	12.64	544		
U 2 - 3	16	5790	22	1.58	9.15	201		varies length
U 2 - 4	16	9320	88	1.58	14.73	1296		varies length
U 2 - 5	16	4200	22	1.58	6.64	146		varies length
U 2 - 6	16	5130	21	1.58	8.11	170		varies length
U 2 - 7	16	4860	21	1.58	7.68	161		varies length
U 2 - 8	16	3164	24	1.58	5.00	120		varies length
U 2 - 9	16	1582	8	1.58	2.50	20		varies length
U 3 - 1	16	12000	169	1.58	18.96	3185		
U 3 - 2	16	8000	42	1.58	12.64	531		
U 3 - 3	16	5790	22	1.58	9.15	201		varies length
U 3 - 4	16	9320	84	1.58	14.73	1237		varies length
U 3 - 5	16	4200	22	1.58	6.64	146		varies length
U 3 - 6	16	5130	20	1.58	8.11	162		varies length
U 3 - 7	16	4860	20	1.58	7.68	154		varies length
U 4 - 1	16	8000	553	1.58	12.64	6990		
U 4 - 2	16	5230	553	1.58	8.26	4570		
U 4 - 3	19	8000	87	2.23	17.84	1552		
U 4 - 4	19	5230	87	2.23	11.66	1015		
U 5 - 1	13	5996	323	1.04	6.24	2014		
U 5 - 2	13	1278	580	1.04	1.33	771		
U 6	13	3117	646	1.04	3.24	2094		
U' 1	13	272	496	1.04	0.28	140		
U' 2	13	344	328	1.04	0.36	117		varies length
U' 3	13	347	824	1.04	0.36	297		varies length
U' 4	13	430	328	1.04	0.45	147		varies length
SUB TOTAL - 1						35094		

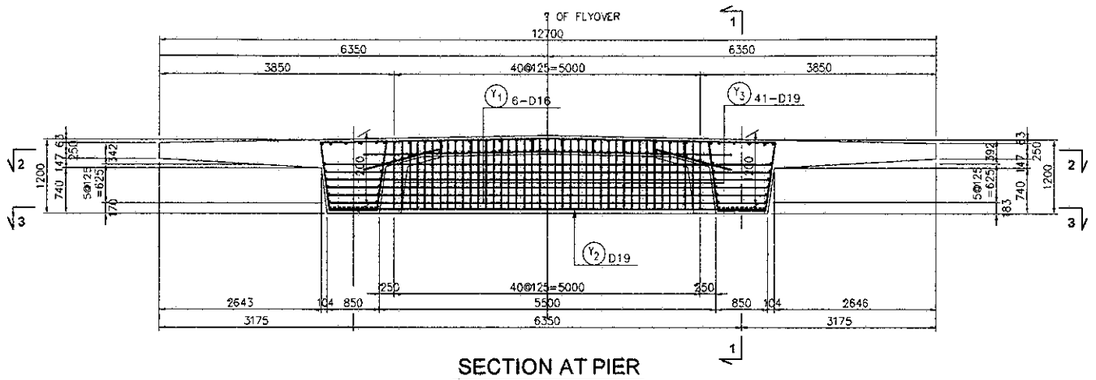
REBAR NAME	DIA. (mm)	LENGTH (mm)	NOS.	UNIT WEIGHT (kg/m')	WEIGHT (kg)	TOTAL WEIGHT (kg)	DIAGRAM	REMARKS
W 1 - 1	25	12000	120	3.85	46.20	5544		
W 1 - 2	25	8000	30	3.85	30.80	924		
W 1 - 3	25	9030	16	3.85	30.92	495		varies length
W 1 - 4	25	10440	60	3.85	40.19	2412		varies length
W 1 - 5	25	4200	16	3.85	16.17	259		varies length
W 1 - 6	25	6810	14	3.85	26.22	367		varies length
W 1 - 7	25	5420	14	3.85	20.87	292		varies length
W 1 - 8	25	5000	42	3.85	19.25	809		varies length
W 1 - 9	25	2830	16	3.85	10.90	196		varies length
W 1 - 10	25	3275	14	3.85	12.61	177		varies length
W 1 - 11	25	1315	6	3.85	5.06	30		varies length
W 2 - 1	13	12000	96	1.04	12.48	1196		
W 2 - 2	13	8000	24	1.04	8.32	200		
W 2 - 3	13	5270	12	1.04	5.48	66		varies length
W 2 - 4	13	9060	48	1.04	9.42	452		varies length
W 2 - 5	13	4200	12	1.04	4.37	52		varies length
W 2 - 6	13	4740	12	1.04	4.93	59		varies length
W 2 - 7	13	4730	12	1.04	4.92	59		varies length
W 2 - 8	13	3185	30	1.04	3.31	99		varies length
W 2 - 9	13	1593	10	1.04	1.66	17		varies length
W 3 - 1	19	3556	714	2.23	7.93	5660		
W 3 - 2	25	3946	78	3.85	14.91	1155		varies length
W 3 - 3	19	3683	120	2.23	8.21	986		varies length
W 3 - 4	25	3895	118	3.85	15.00	1769		
W 3 - 5	25	3539	24	3.85	13.63	327		
W 4 - 1	25	1715	24	3.85	6.60	158		
W 4 - 2	25	2018	72	3.85	7.77	559		varies length
W 4 - 3	25	2065	122	3.85	7.95	970		
W' 1	13	867	160	1.04	0.90	144		
SUB TOTAL - 2						25435		
TOTAL WEIGHT A1 - P4						61430		



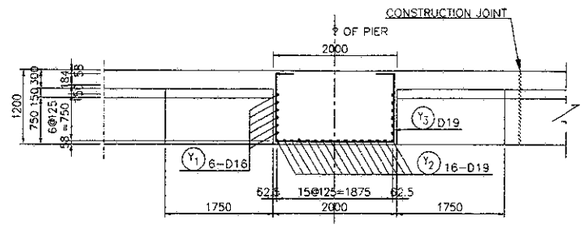
	MAIN REBARS										STIRRUP							
	θ≤90° R=3d	θ>90° R=5.5d	θ=45° α	θ=45° Δl	θ=60° α	θ=60° Δl	θ=90° α	θ=90° Δl	θ=135° α	θ=135° Δl	R=2.5d	θ=45° α	θ=45° Δl	θ=60° α	θ=60° Δl	θ=90° α	θ=90° Δl
D 13	39	71.5	92	66	82	53	81	17	59	3	32.5	77	80	66	45	51	14
D 16	48	88	113	119	100	85	75	21	69	4	40	94	99	84	56	63	17
D 19	57	104.5	134	141	119	78	89	25	82	5	47.5	112	117	99	66	75	20
D 25	78	137.5	177	185	157	103	118	32	108	6	75*	177	185	157	103	118	32

*R=3d

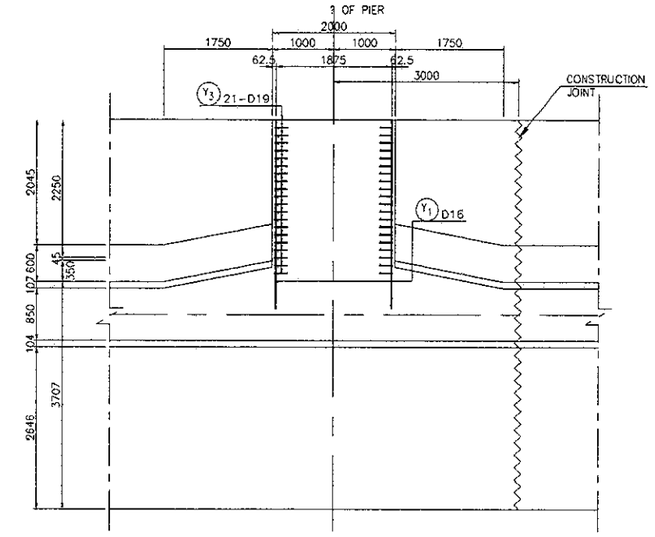
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 100 1 : 500 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS P1, P2,P3	DRAWING NO : PCL-018 SHEET NO : 18 / 21



SECTION AT PIER
SCALE : 1 :100



SECTION 1 - 1
SCALE : 1 : 100

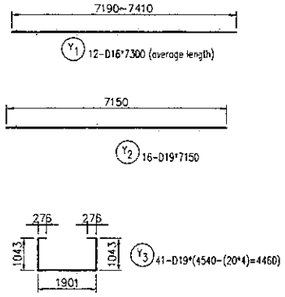


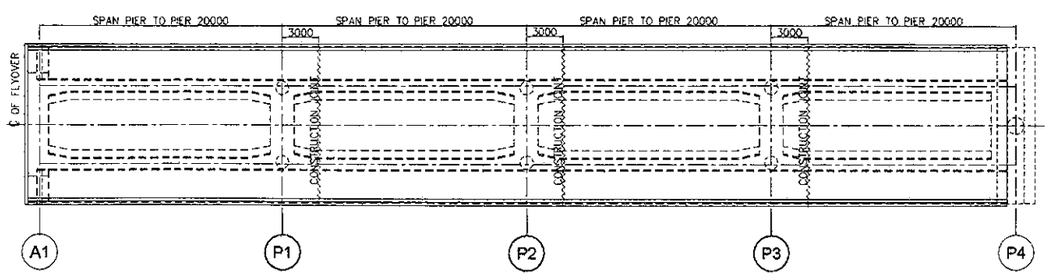
SECTION 2 - 2
SCALE : 1 : 100

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	7300				7.30	12	1.58	138	—
2	D19	A	7150				7.15	16	2.23	255	—
3	D19	B	1901	1043	276		4.46	41	2.23	408	□
									D19	663	
									D16	138	
									TOTAL (per 1 pier)	801	
PIER LOCATION							A1 - P4 (P1, P2,P3)				
REBAR WEIGHT TOTAL							801 x 3 = 2403 kg				

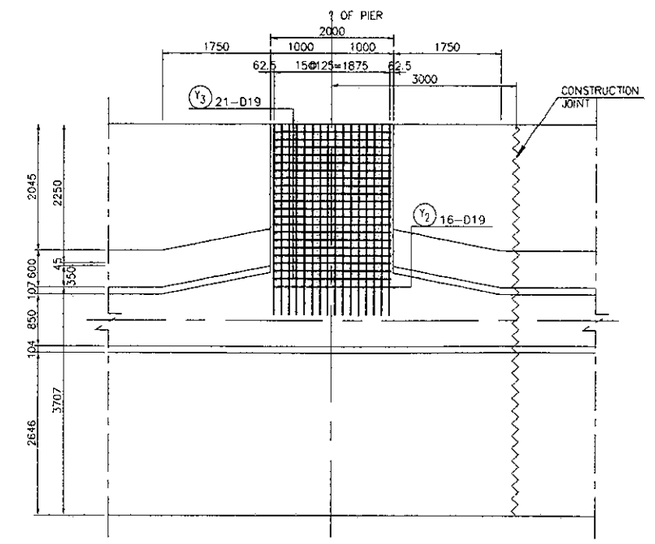
STIRRUP

	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



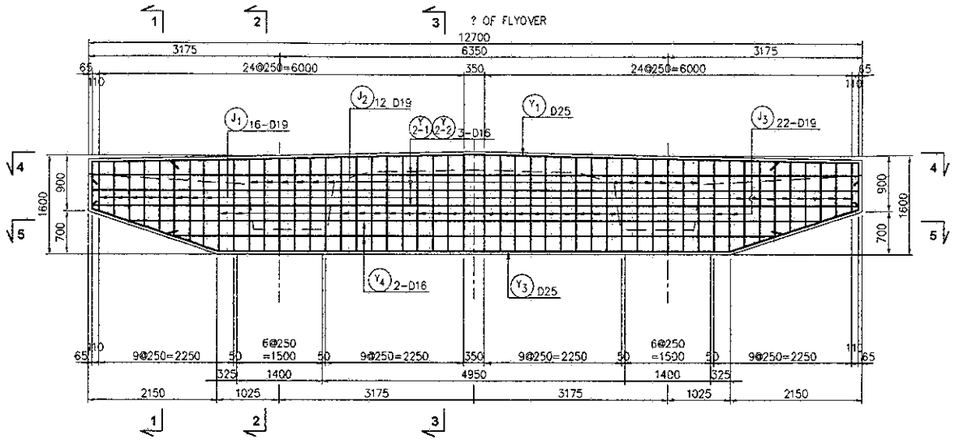


KEY PLAN
SCALE : 1 : 500

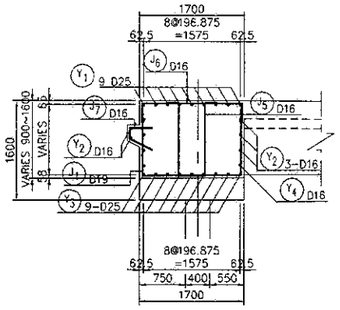


SECTION 3 - 3
SCALE : 1 : 100

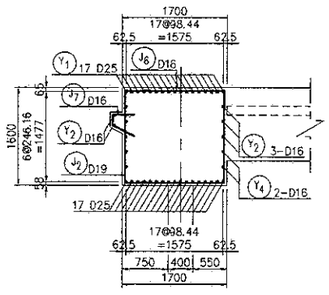
JAPAN INTERNATIONAL COOPERATION AGENCY / KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA / MINISTRY OF PUBLIC WORKS / DIRECTORATE GENERAL OF HIGHWAYS; APPROVED BY Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT / PETERONGAN FLYOVER - CONTRACT PACKAGE 3 / (PETERONGAN - TANGGULANGIN) / EAST JAVA PROVINCE	SCALE : 1 : 100; FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS A1	DRAWING NO : PCL-019; SHEET NO : 19 / 21



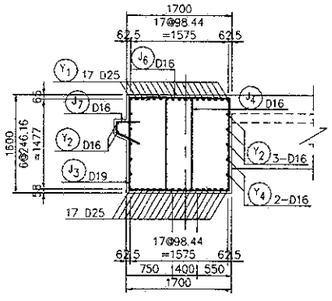
SECTION AT ABUTMENT
SCALE : 1 :100



SECTION 1 - 1
SCALE : 1 : 100

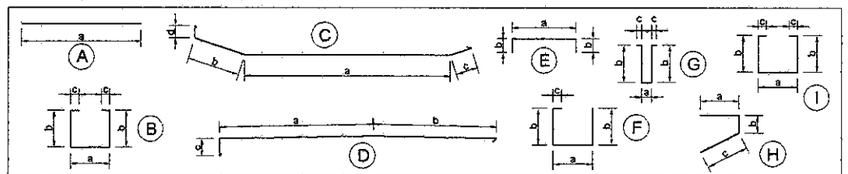


SECTION 2 - 2
SCALE : 1 : 100

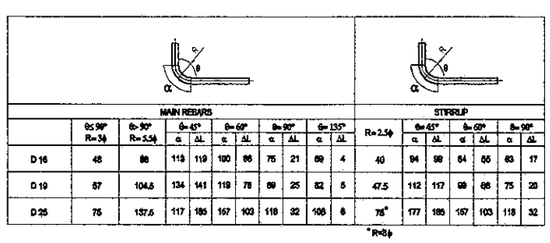


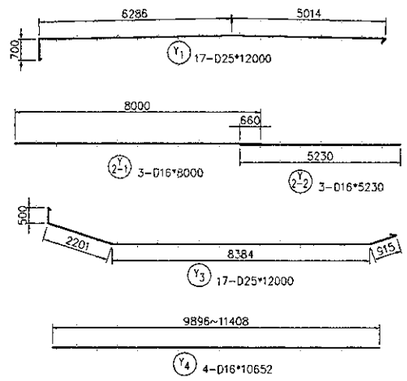
SECTION 3 - 3
SCALE : 1 : 100

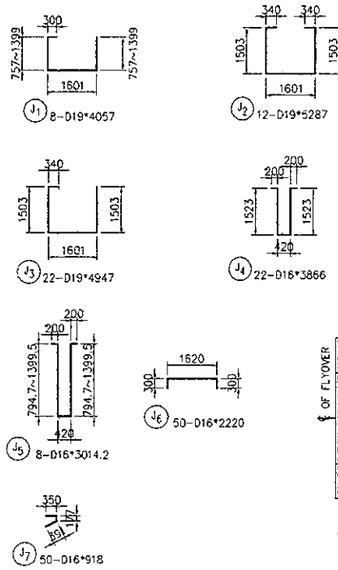
BAR BENDING ABUTMENT

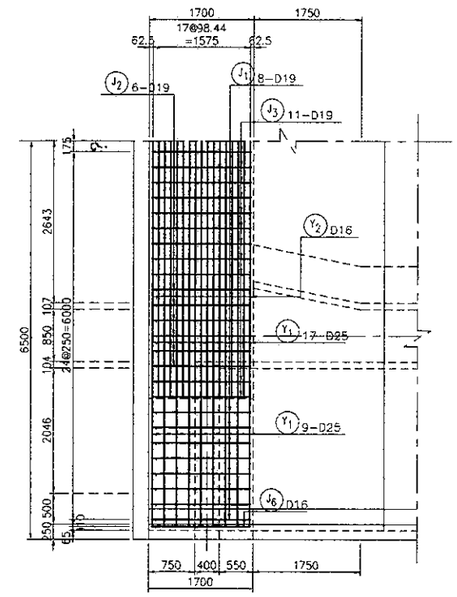


REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	e	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
A 1												
J 1	D19	F	1601	1078	300			4.57	8	2.23	82	
2	D19	I	1601	1503	340			5.287	12	2.23	141	
3	D19	F	1601	1503	340			4.947	22	2.23	243	
4	D16	G	420	1523	200			3.866	22	1.58	134	
5	D16	G	420	1097.1	200			3.0142	8	1.58	38	
6	D16	E	1620	300				2.22	50	1.58	175	
7	D16	H	350	177	391			0.918	50	1.58	73	
Y 1	D25	D	6286	5014	700			12	17	3.85	785	
2-1	D16	A	8000					8	3	1.58	38	
2-2	D16	A	5230					5.23	3	1.58	25	
3	D25	C	8384	2201	915	500		12	17	3.85	785	
4	D16	A	10652					10.652	4	1.58	67	
										D25	1570	
										D19	466	
										D16	550	
									REBAR WEIGHT TOTAL		2586 kg	

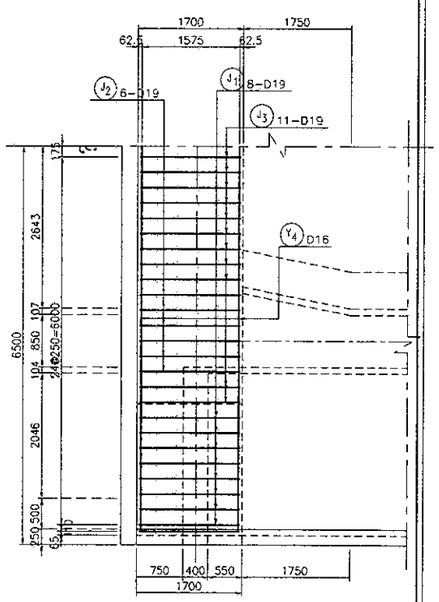




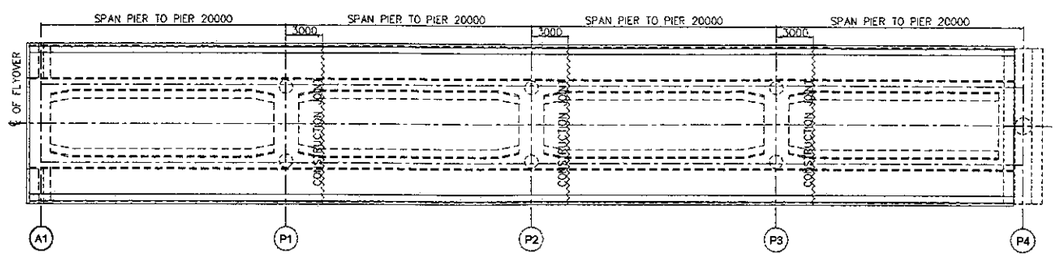




SECTION 4 - 4
SCALE : 1 : 100

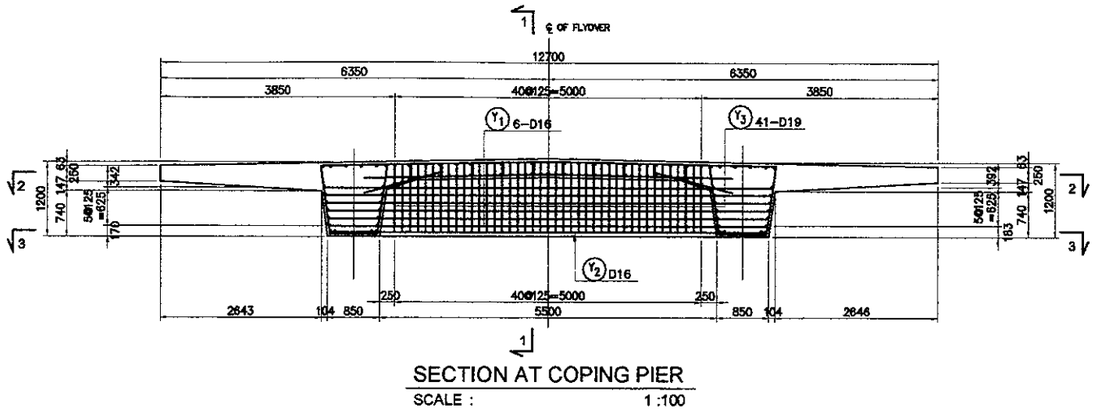


SECTION 5 - 5
SCALE : 1 : 100

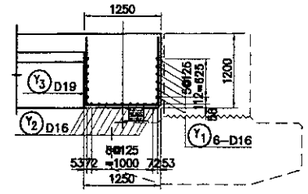


KEY PLAN
SCALE : 1 : 500

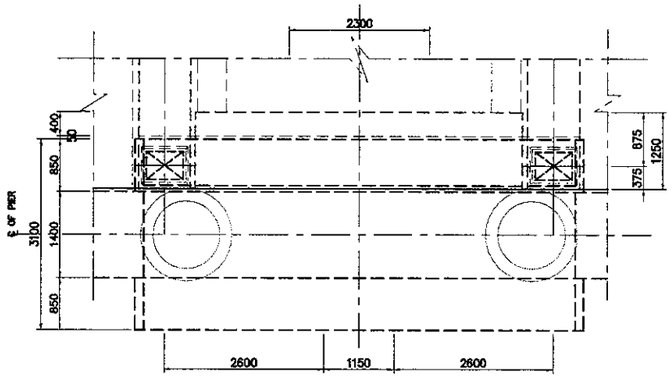
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY	CHECKED BY	SUBMITTED BY	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 100 1 : 500 FULL SIZE A3	ARRANGEMENT OF REINFORCEMENT FOR CROSS BEAMS P4	PCL-020 SHEET NO : 20 / 21
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400 Sign Date				
	Date	Date	Date					



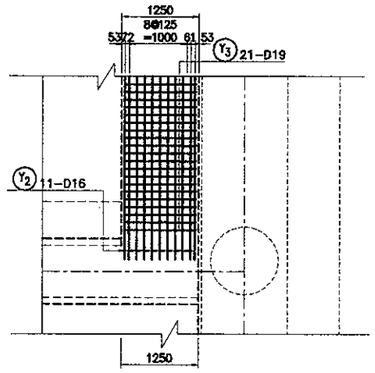
SECTION AT COPING PIER
SCALE : 1 :100



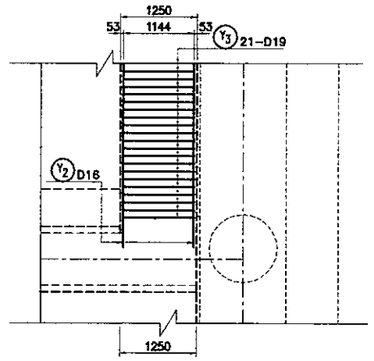
SECTION 1 - 1
SCALE : 1 : 100



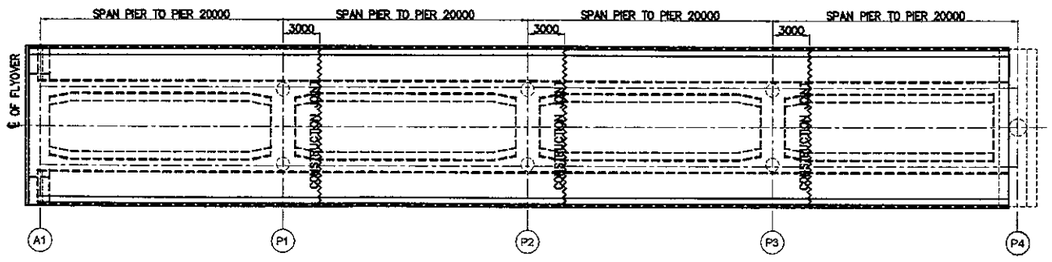
SECTION
SCALE : 1 :100



SECTION 2 - 2
SCALE : 1 : 100

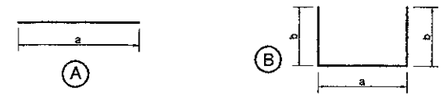


SECTION 3 - 3
SCALE : 1 : 100



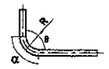
KEY PLAN
SCALE : 1 : 500

BAR BENDING

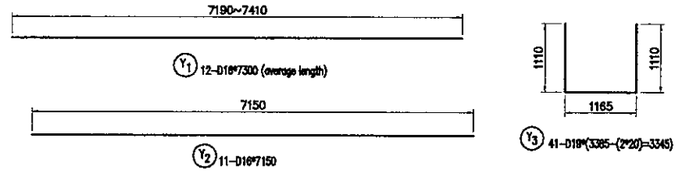


REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
PIER											
Y 1	D16	A	7300				7.3	12	1.58	138	—
2	D16	A	7150				7.15	11	1.58	124	—
3	D19	B	1165	1110			3.345	41	2.23	306	⊔
									D19	306	
									D16	262	
									REBAR WEIGHT TOTAL		568 kg

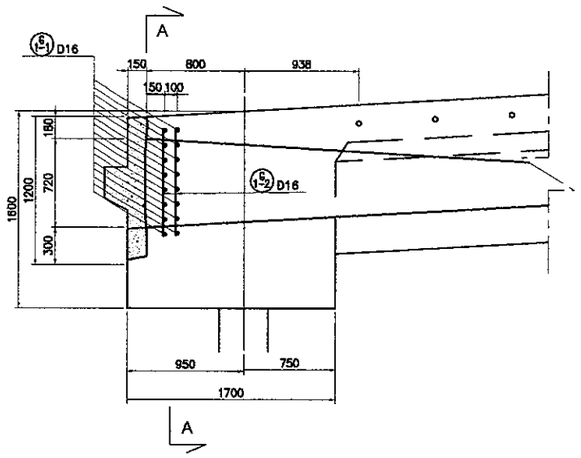
STIRRUP



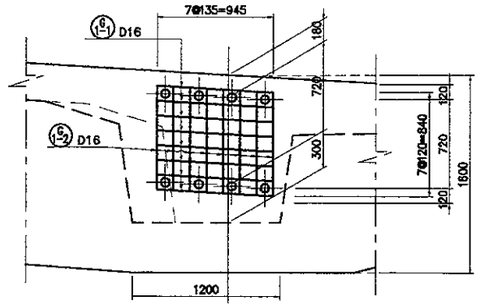
	R= 2.5ϕ	θ= 45° α	θ= 45° ΔL	θ= 60° α	θ= 60° ΔL	θ= 90° α	θ= 90° ΔL
D16	40	94	99	84	55	63	17
D19	47.5	112	117	99	66	75	20



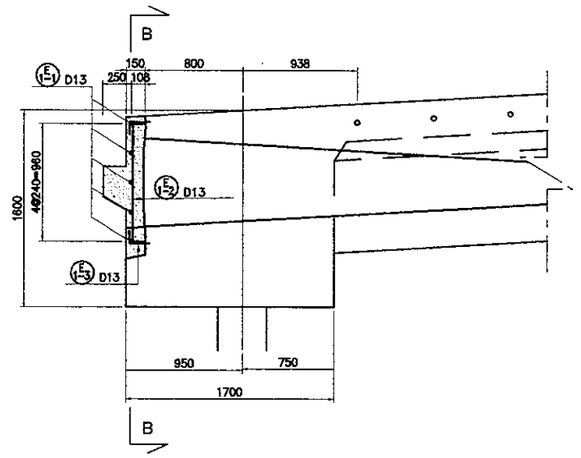
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: Name H. HONDA; Sign; Date	CHECKED BY: Name T. OKUMURA; Sign; Date	SUBMITTED BY: Name M. KIUCHI; Sign; Date	REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS APPROVED BY: Ir. HERRY VAZA M,Eng.Sc; NIP. : 110038400; Sign; Date	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 50 1 : 500 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR ANCHORAGE A1 - P4	DRAWING NO : PCL-021 SHEET NO : 21 / 21



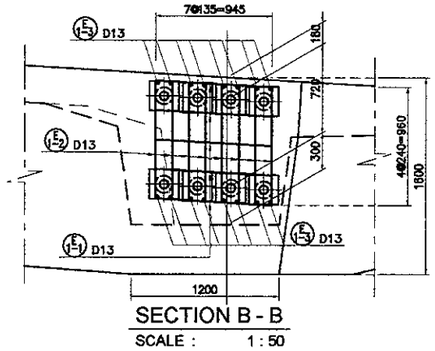
SECTION END ANCHORAGE
SCALE : 1 : 50



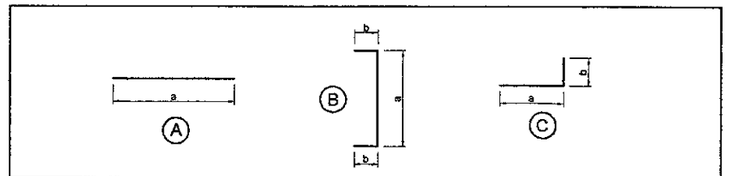
SECTION A - A
SCALE : 1 : 50



SECTION END ANCHORAGE
SCALE : 1 : 50

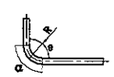


SECTION B - B
SCALE : 1 : 50

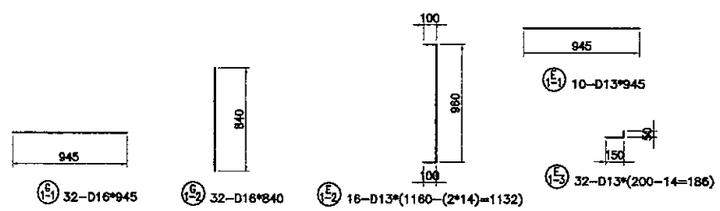


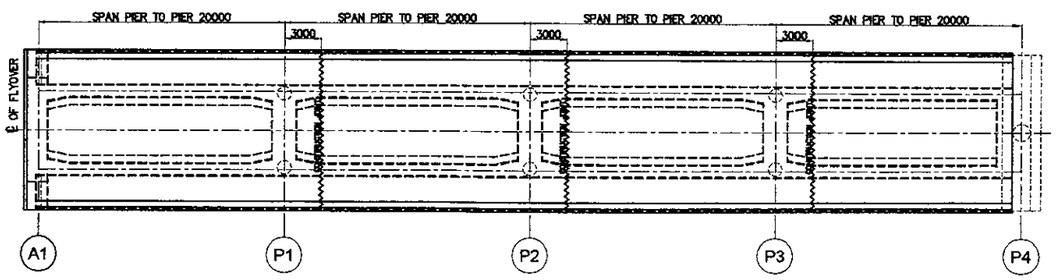
REINF NO.	ϕ (mm)	TYPE	BENDING DIMENSION (mm) a	b	c	d	TOTAL LENGTH (m)	NUMBER	UNIT WEIGHT (kg/m)	WEIGHT (kg)	REMARK
E 1-1	D13	A	945				0.945	10	1.04	16	—
E 1-2	D13	B	960	100			1.132	16	1.04	12	⌊
E 1-3	D13	C	150	50			0.186	32	1.04	6	⌊
G 1-1	D16	A	945				0.945	32	1.58	48	—
G 1-2	D16	A	840				0.84	32	1.58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

STIRRUP



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





KEY PLAN
SCALE : 1 : 500

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

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF HIGHWAYS

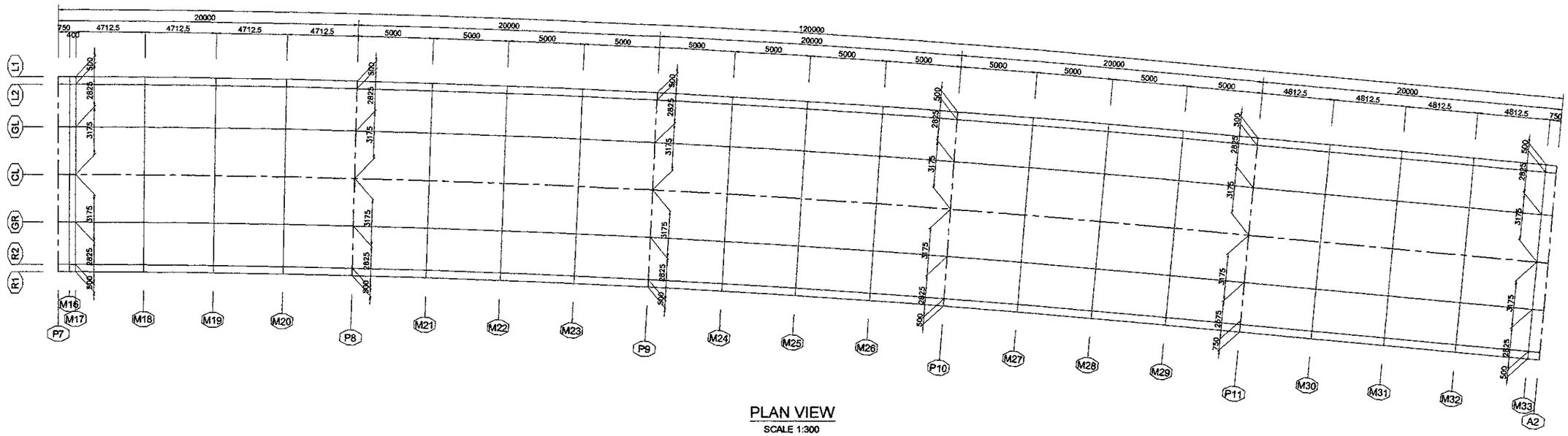
APPROVED BY: Ir. HERRY VAZA M,Eng.Sc (NIP. : 110038400) — Sign: — Date:

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
PETERONGAN FLYOVER - CONTRACT PACKAGE 3
(PETERONGAN - TANGGULANGIN)
EAST JAVA PROVINCE

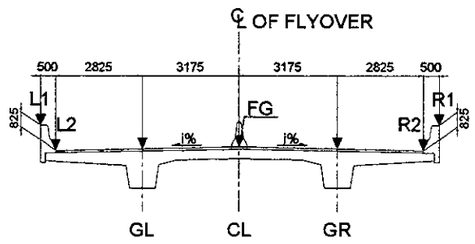
SCALE : 1 : 300 / 1 : 200 — FULL SIZE A3

DRAWING TITLE :
COORDINATES AND ELEVATION FOR PC GIRDER

DRAWING NO : PCR-001
SHEET NO : 01 / 20



PLAN VIEW
SCALE 1:300



SECTION VIEW
SCALE 1:200

LIST OF COORDINATES

LABEL \ STA		P7	M16	M17	M18	M19	M20	P8	M21	M22	M23	P9	M24	M25	M26	P10	M27	M28	M29	P11	M30	M31	M32	M33	A2
		0+505.0000	0+505.7500	0+506.1500	0+510.8625	0+515.5750	0+520.2875	0+525.0000	0+530.0000	0+535.0000	0+540.0000	0+545.0000	0+550.0000	0+555.0000	0+560.0000	0+565.0000	0+570.0000	0+575.0000	0+580.0000	0+585.0000	0+589.8125	0+594.6250	0+599.4375	0+604.2500	0+605.0000
L1	E	641413.3819	641414.0280	641414.3725	641418.4229	641422.4587	641426.4796	641430.4855	641434.7193	641438.9360	641443.1353	641447.3170	641451.4811	641455.6274	641459.7557	641463.8658	641467.9576	641472.0309	641476.0768	641480.0950	641483.9625	641487.8300	641491.6975	641495.5650	641496.1677
	N	9166225.8938	9166225.5012	9166225.2915	9166222.8088	9166220.3023	9166217.7720	9166215.2181	9166212.4827	9166209.7208	9166206.9327	9166204.1183	9166201.2779	9166198.4115	9166195.5192	9166192.6012	9166189.6576	9166186.6884	9166183.7020	9166180.7264	9166177.8624	9166174.9984	9166172.1343	9166169.2703	9166168.8240
	Z	42.2170	42.2012	42.1927	42.0855	41.9659	41.8340	41.6897	41.5230	41.3425	41.1550	40.9675	40.7800	40.5925	40.4050	40.2175	40.0300	39.8425	39.6528	39.4578	39.2701	39.0825	38.8961	38.7156	38.6875
L2	E	641413.1224	641413.7682	641414.1125	641418.1604	641422.1936	641426.2121	641430.2155	641434.4467	641438.6607	641442.8574	641447.0368	641451.1981	641455.3418	641459.4675	641463.5751	641467.6643	641471.7351	641475.7793	641479.7974	641483.6649	641487.5324	641491.3999	641495.2674	641495.8701
	N	9166225.4663	9166225.0740	9166224.8645	9166222.3833	9166219.8783	9166217.3496	9166214.7973	9166212.0636	9166209.3034	9166206.5170	9166203.7044	9166200.8657	9166198.0011	9166195.1106	9166192.1944	9166189.2526	9166186.2853	9166183.3002	9166180.3246	9166177.4606	9166174.5965	9166171.7325	9166168.8685	9166168.4221
	Z	41.3920	41.3762	41.3677	41.2605	41.1408	41.0090	40.8647	40.6980	40.5175	40.3300	40.1425	39.9550	39.7675	39.5800	39.3925	39.2050	39.0175	38.8278	38.6328	38.4451	38.2575	38.0711	37.8906	37.8625
GL	E	641411.6567	641412.3002	641412.6432	641416.6770	641420.6961	641424.7004	641428.6899	641432.9062	641437.1055	641441.2874	641445.4520	641449.5989	641453.7281	641457.8393	641461.9325	641466.0074	641470.0639	641474.0980	641478.1162	641481.9837	641485.8512	641489.7187	641493.5862	641494.1889
	N	9166223.0513	9166222.6604	9166222.4516	9166219.9791	9166217.4829	9166214.9631	9166212.4197	9166209.6956	9166206.9451	9166204.1684	9166201.3657	9166198.5369	9166195.6823	9166192.8020	9166189.8960	9166186.9645	9166184.0076	9166181.0300	9166178.0543	9166175.1903	9166172.3263	9166169.4623	9166166.5982	9166166.1519
	Z	41.3214	41.3056	41.2971	41.1899	41.0703	40.9384	40.7941	40.6274	40.4469	40.2594	40.0719	39.8844	39.6969	39.5094	39.3219	39.1344	38.9469	38.7582	38.5667	38.3824	38.1982	38.0146	37.8341	37.8060
CL	E	641410.0093	641410.6503	641410.9920	641415.0098	641419.0130	641423.0015	641426.9752	641431.1749	641435.3575	641439.5229	641443.6710	641447.8016	641451.9144	641456.0094	641460.0864	641464.1452	641468.1857	641472.2085	641476.2267	641480.0942	641483.9617	641487.8292	641491.6967	641492.2994
	N	9166220.3371	9166219.9477	9166219.7398	9166217.2771	9166214.7907	9166212.2809	9166209.7476	9166207.0341	9166204.2945	9166201.5289	9166198.7372	9166195.9196	9166193.0763	9166190.2074	9166187.3129	9166184.3930	9166181.4478	9166178.4784	9166175.5028	9166172.6388	9166169.7747	9166166.9107	9166164.0467	9166163.6003
	Z	41.2420	41.2262	41.2177	41.1105	40.9909	40.8590	40.7147	40.5480	40.3675	40.1800	39.9925	39.8050	39.6175	39.4300	39.2425	39.0550	38.8675	38.6800	38.4925	38.3120	38.1316	37.9511	37.7706	37.7425
GR	E	641408.3620	641409.0004	641409.3408	641413.3426	641417.3300	641421.3026	641425.2605	641429.4435	641433.6096	641437.7585	641441.8901	641446.0042	641450.1008	641454.1795	641458.2403	641462.2830	641466.3075	641470.3190	641474.3372	641478.2047	641482.0722	641485.9397	641489.8071	641490.4099
	N	9166217.6229	9166217.2350	9166217.0279	9166214.5750	9166212.0985	9166209.5986	9166207.0754	9166204.3727	9166201.6440	9166198.8893	9166196.1087	9166193.3023	9166190.4703	9166187.6128	9166184.7298	9166181.8214	9166178.8879	9166175.9269	9166172.9513	9166170.0872	9166167.2232	9166164.3592	9166161.4951	9166161.0488
	Z	41.1626	41.1468	41.1383	41.0311	40.9115	40.7796	40.6353	40.4686	40.2881	40.1006	39.9131	39.7256	39.5381	39.3506	39.1631	38.9756	38.7881	38.6018	38.4183	38.2416	38.0650	37.8876	37.7071	37.6790
R2	E	641406.8963	641407.5324	641407.8715	641411.8592	641415.8324	641419.7910	641423.7349	641427.9030	641432.0543	641436.1885	641440.3055	641444.4050	641448.4870	641452.5513	641456.5977	641460.6261	641464.6363	641468.6378	641472.6560	641476.5234	641480.3909	641484.2584	641488.1259	641488.7286
	N	9166215.2079	9166214.8214	9166214.6150	9166212.1708	9166209.7031	9166207.2121	9166204.6978	9166202.0047	9166199.2857	9166196.5407	9166193.7700	9166190.9736	9166188.1516	9166185.3042	9166182.4314	9166179.5334	9166176.6102	9166173.6565	9166170.6810	9166167.8170	9166164.9529	9166162.0889	9166159.2249	9166158.7785
	Z	41.0920	41.0762	41.0677	40.9605	40.8409	40.7090	40.5647	40.3980	40.2175	40.0300	39.8425	39.6550	39.4675	39.2800	39.0925	38.9050	38.7175	38.5322	38.3522	38.1789	38.0057	37.8311	37.6506	37.6225
R1	E	641406.6368	641407.2726	641407.6115	641411.5967	641415.5674	641419.5235	641423.4648	641427.6304	641431.7790	641435.9106	641440.0250	641444.1220	641448.2014	641452.2631	641456.3070	641460.3329	641464.3405	641468.3402	641472.3584	641476.2259	641480.0934	641483.9609	641487.8284	641488.4311
	N	9166214.7805	9166214.3942	9166214.1880	9166211.7453	9166209.2792	9166206.7897	9166204.2770	9166201.5856	9166198.8683	9166196.1250	9166193.3560	9166190.5614	9166187.7412	9166184.8956	9166182.0248	9166179.1284	9166176.2071	9166173.2548	9166170.2792	9166167.4151	9166164.5511	9166161.6871	9166158.8231	9166158.3767
	Z	41.9170	41.9012	41.8927	41.7855	41.6659	41.5340	41.3897	41.2230	41.0425	40.8550	40.6675	40.4800	40.2925	40.1050	39.9175	39.7300	39.5425	39.3572	39.1772	39.0039	38.8307	38.6561	38.4756	38.4475

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

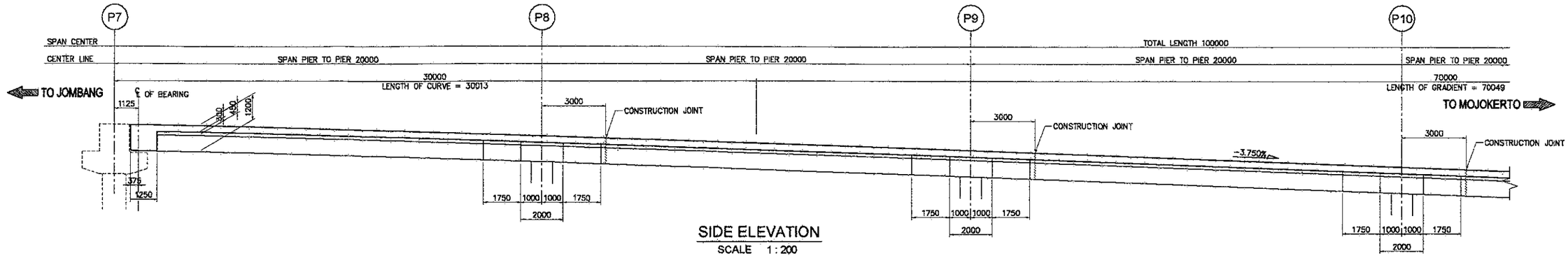
APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign	
	NIP. : 11003840D	Date	

PROJECT AND LOCATION :
DETAILED DESIGN STUDY OF
NORTH JAVA CORRIDOR FLYOVER PROJECT
PETERONGAN FLYOVER - CONTRACT PACKAGE 3
(PETERONGAN - TANGGULANGIN)
EAST JAVA PROVINCE

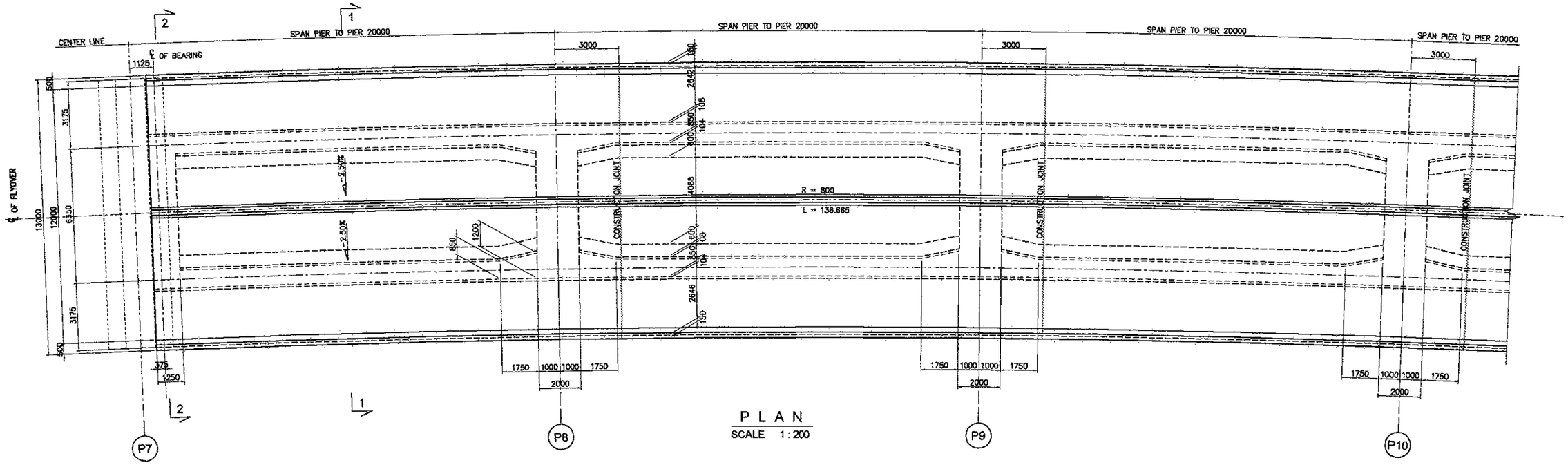
SCALE :
1 : 200
1 : 100
FULL SIZE A3

DRAWING TITLE :
DIMENSION PLAN OF PC SUPERSTRUCTURE P7 - P10

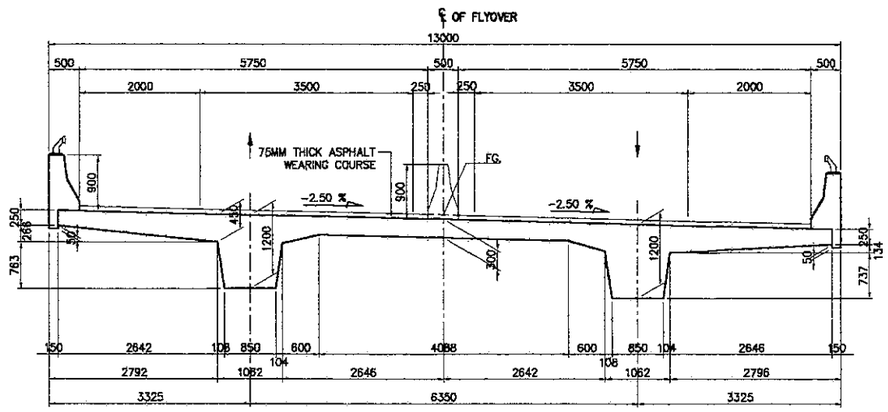
DRAWING NO : PCR-002
SHEET NO : 02 / 20



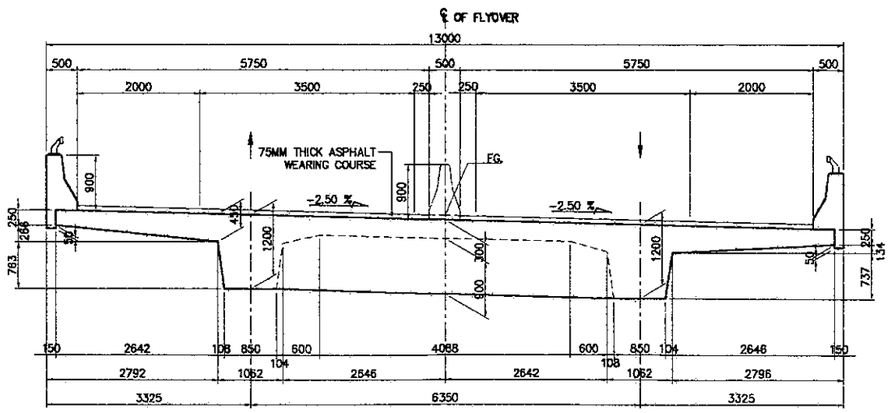
SIDE ELEVATION
SCALE 1 : 200



PLAN
SCALE 1 : 200

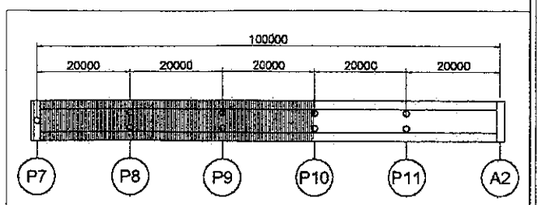


SECTION 3-3
SCALE 1 : 100



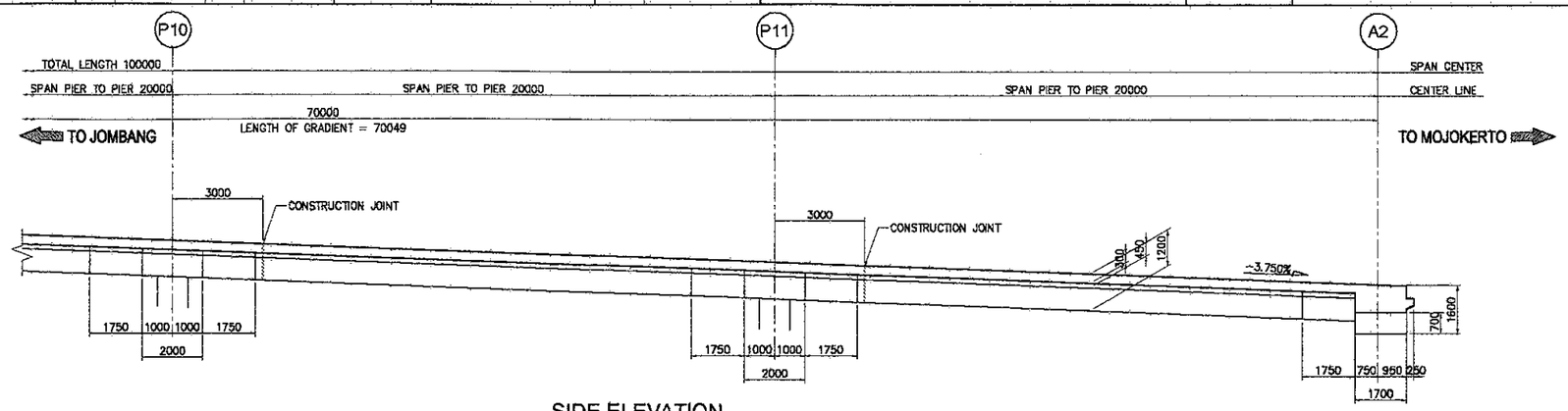
SECTION 4-4
SCALE 1 : 100

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.

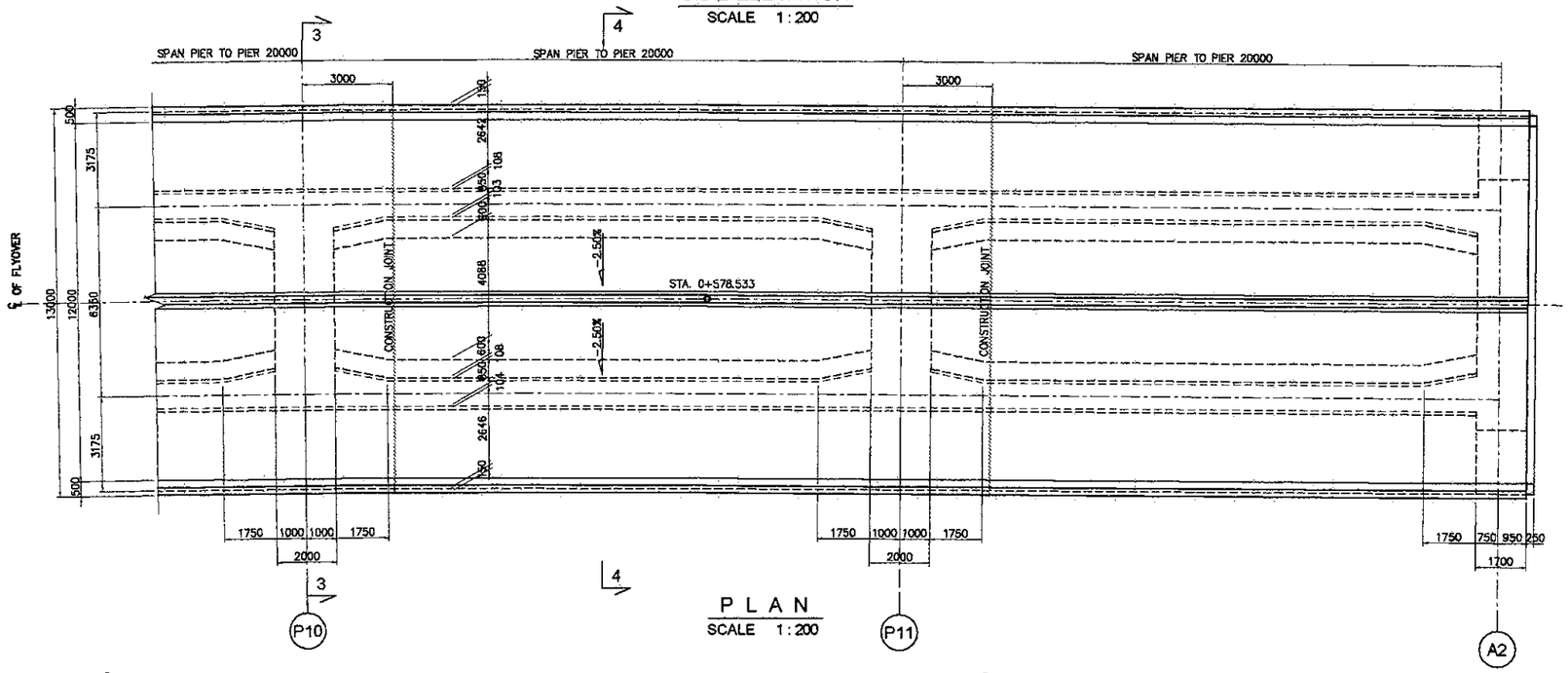


KEY PLAN

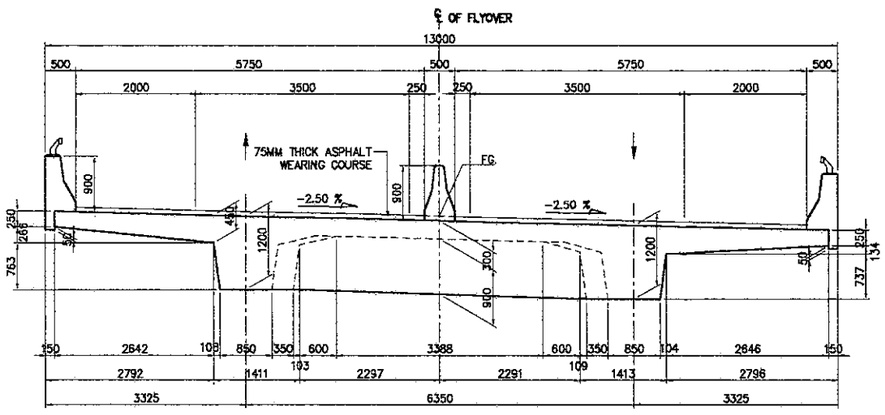
JICA JAPAN INTERNATIONAL COOPERATION AGENCY KEI KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS		PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : DIMENSION PLAN OF PC SUPERSTRUCTURE P10 - A2	DRAWING NO : PCR-003 SHEET NO : 03 / 20
	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		



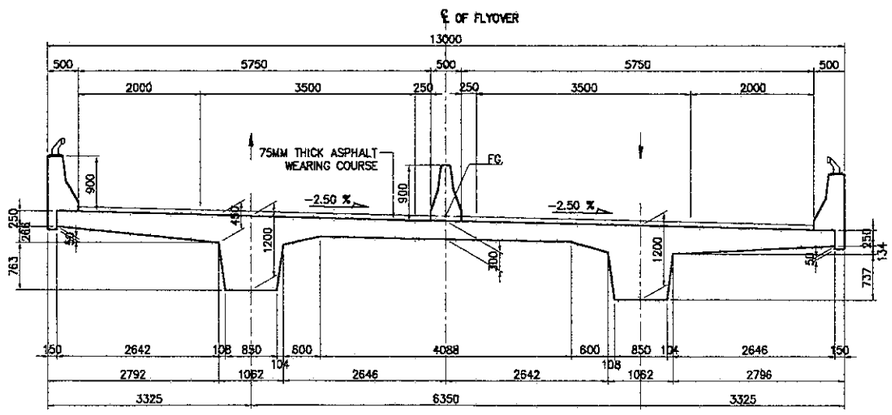
SIDE ELEVATION
SCALE 1 : 200



PLAN
SCALE 1 : 200



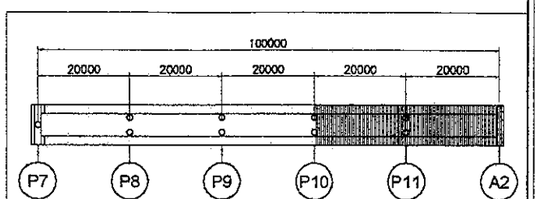
SECTION 3-3
SCALE 1 : 100



SECTION 4-4
SCALE 1 : 100

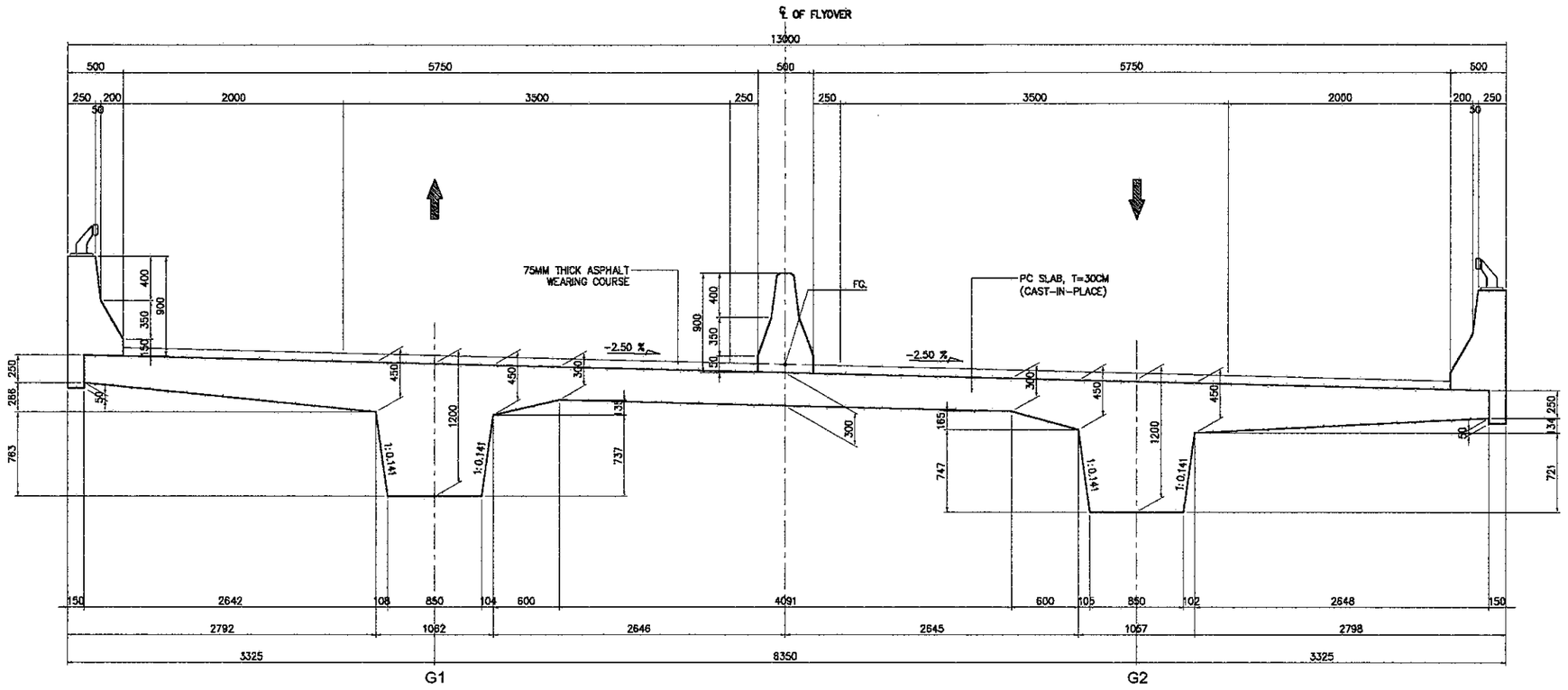
NOTES :

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 :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name H. HONDA	Name T. OKUMURA	Name M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 50 FULL SIZE A3	TYPICAL CROSS SECTION P7 - A2	PCR-004 SHEET NO : 04 / 20
	Sign	Sign	Sign	APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign				
	Date	Date	Date	NIP. : 11003840D Date				



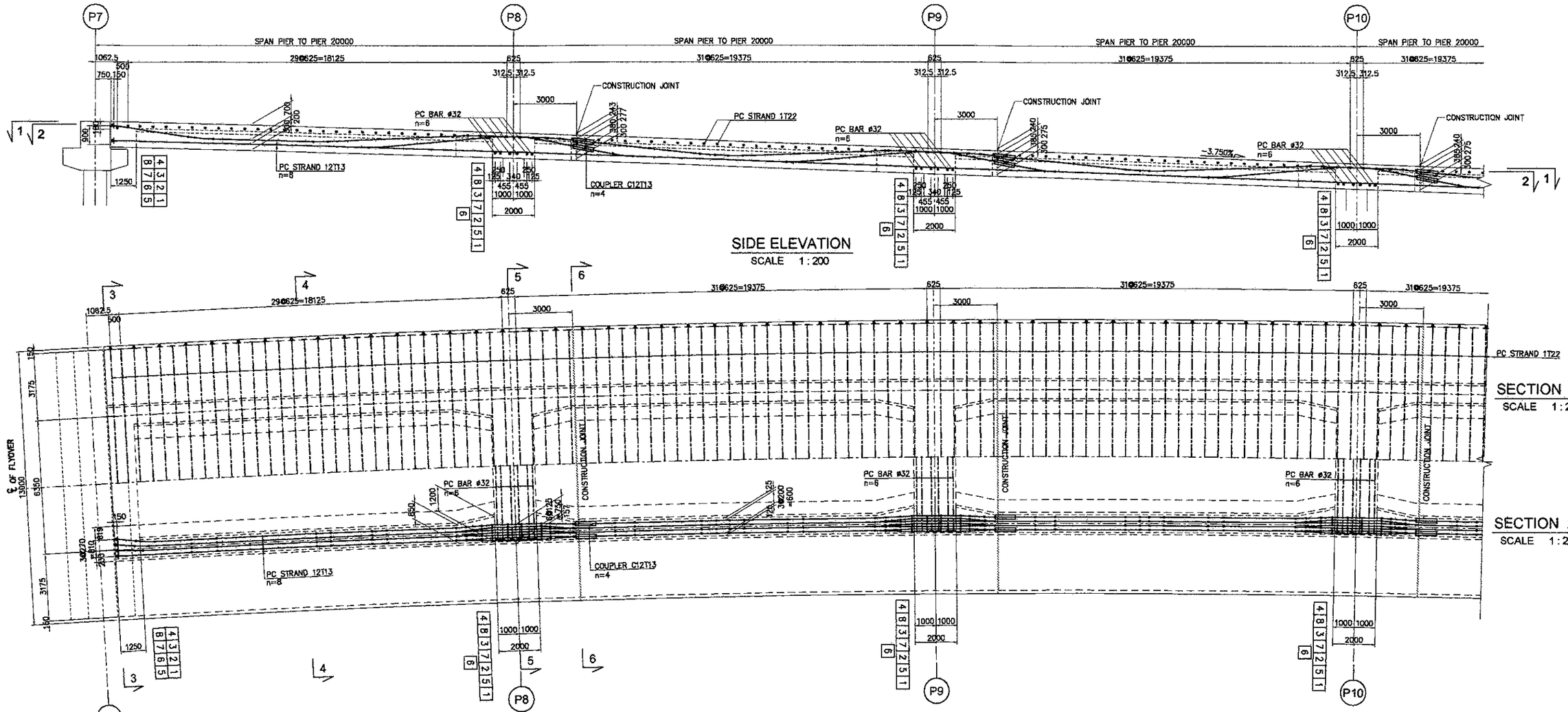
INFORMATION OF PC SUPERSTUCTURE

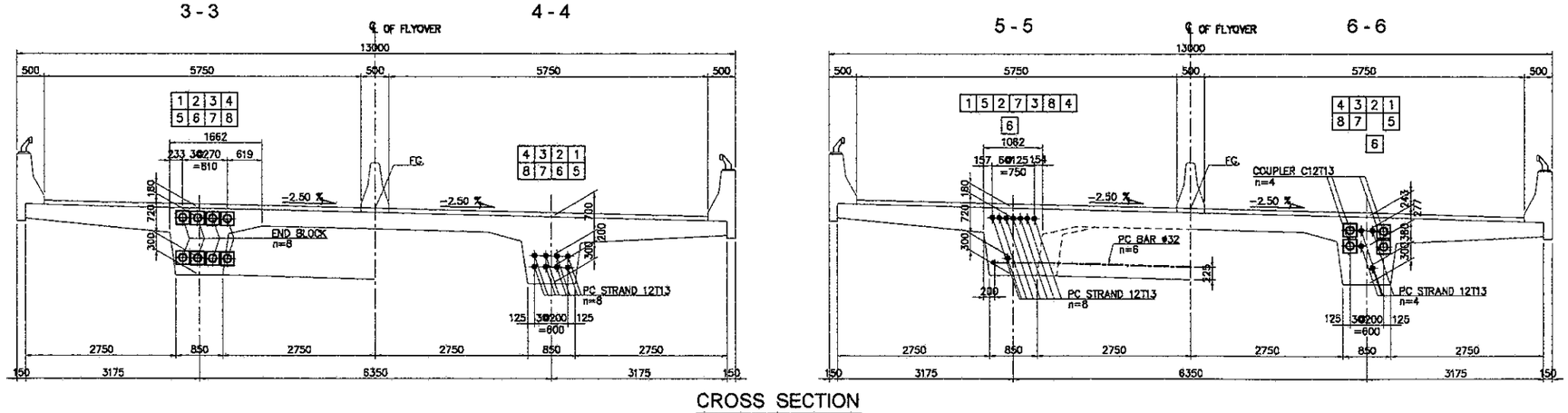
	P7	P8	P9	P10	P11	A2
FG.	41.218	40.715	39.993	39.243	38.493	37.743
Super Elev. GL	2.500%	2.500%	2.500%	2.500%	2.338%	2.000%
Super Elev. GR	-2.500%	-2.500%	-2.500%	-2.500%	-2.338%	-2.000%
Top Slab Girder GL	41.222	40.719	39.997	39.247	38.492	37.731
Top Slab Girder GR	41.064	40.560	39.838	39.088	38.343	37.604
Bottom GL	39.547	39.444	38.722	37.972	37.217	36.456
Bottom GR	39.389	39.285	38.563	37.813	37.068	36.329
Station	0+506.125	0+525.000	0+545.000	0+565.000	0+585.000	0+605.000

TYPICAL CROSS SECTION
(Span Length = 20 M)

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 : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES P7-P10	DRAWING NO : PCR-005 SHEET NO : 05 / 20
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign		
	Date		Date		Date			NIP. : 110038400	Date		

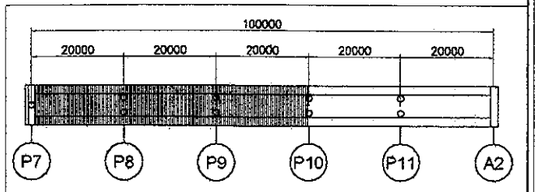




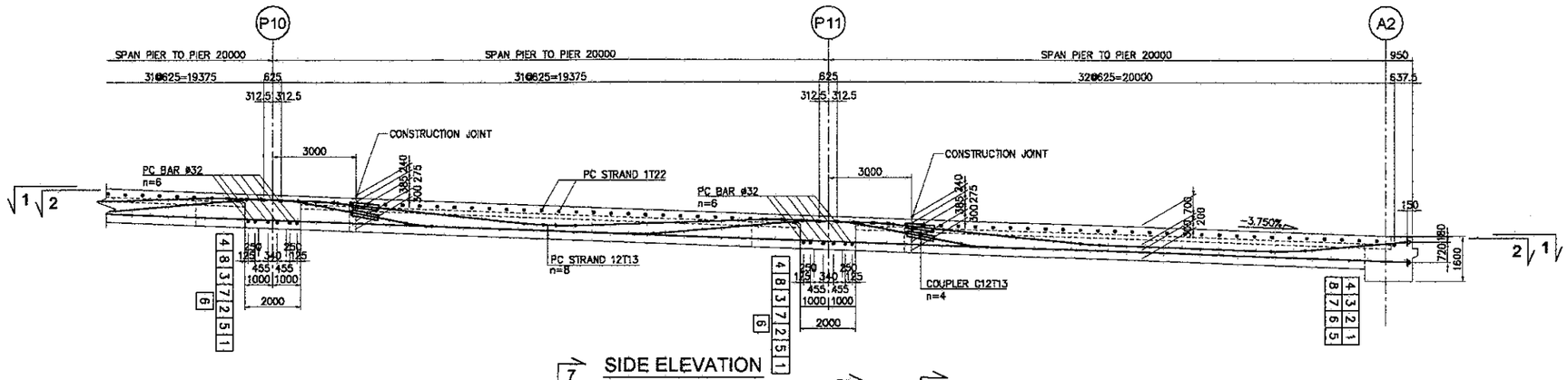
NOTES :

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.

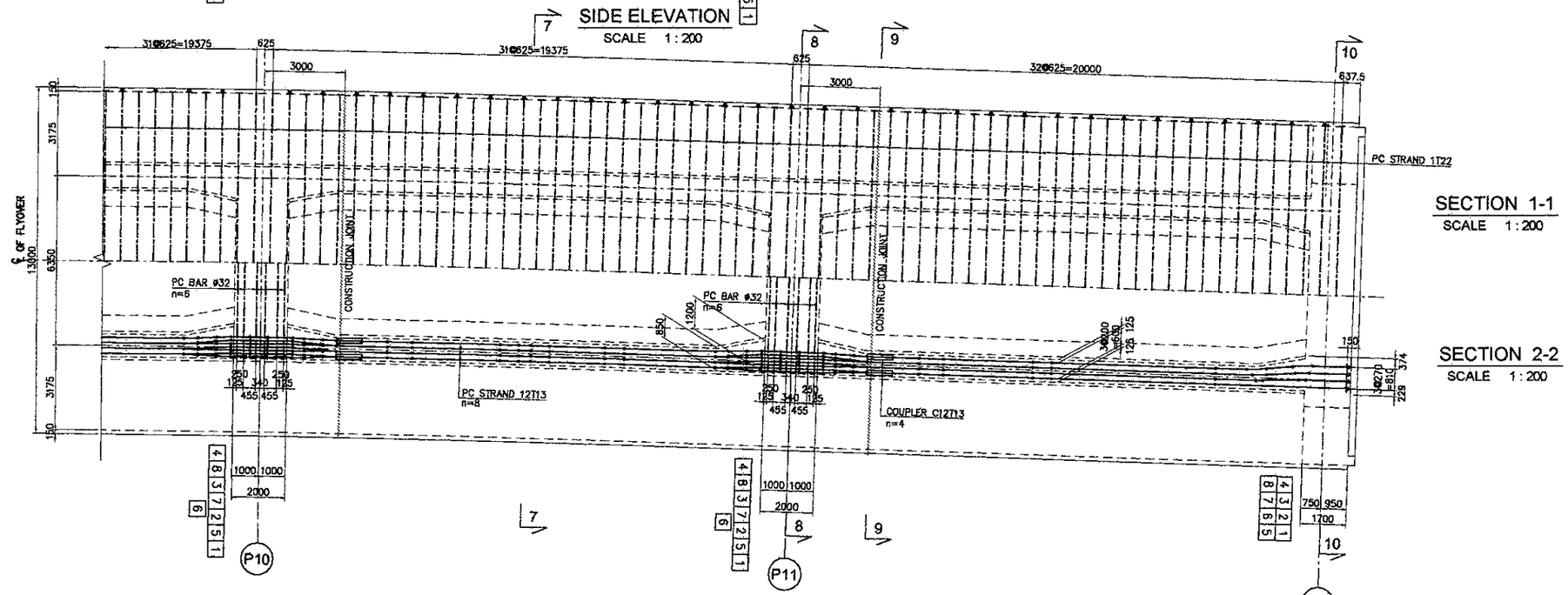
Stressing Anchorage
Dead End Anchorage



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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 1 : 100 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF PC CABLES P10-A2	DRAWING NO : PCR-006 SHEET NO : 06 / 20
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign		
	Date		Date		Date			NIP. : 110038400	Date		

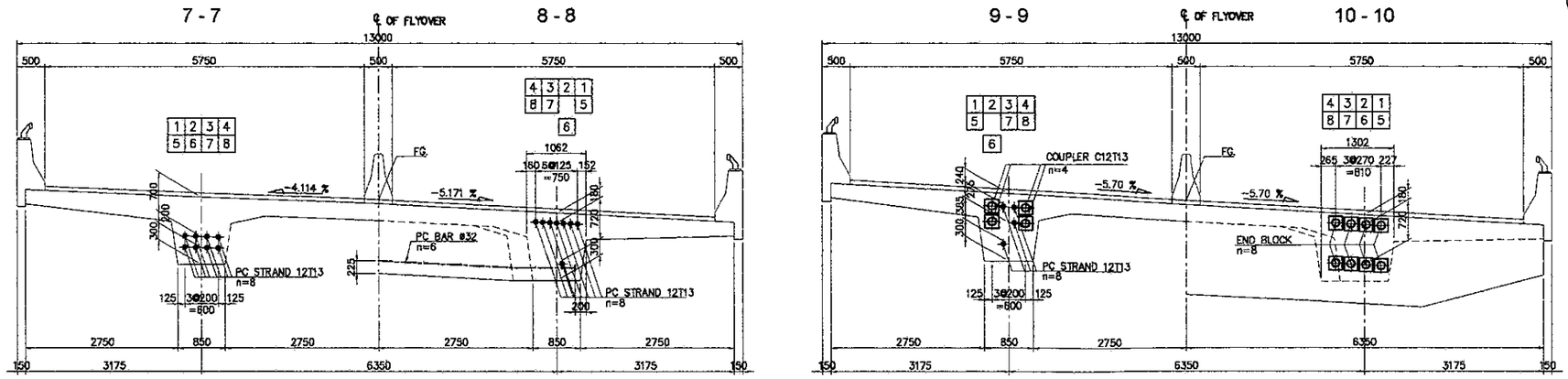


SIDE ELEVATION
SCALE 1 : 200



SECTION 1-1
SCALE 1 : 200

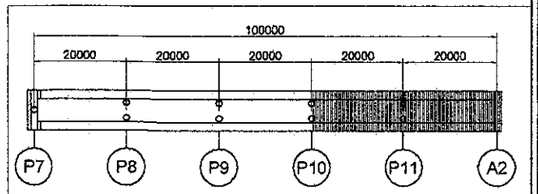
SECTION 2-2
SCALE 1 : 200



CROSS SECTION
SCALE 1 : 100

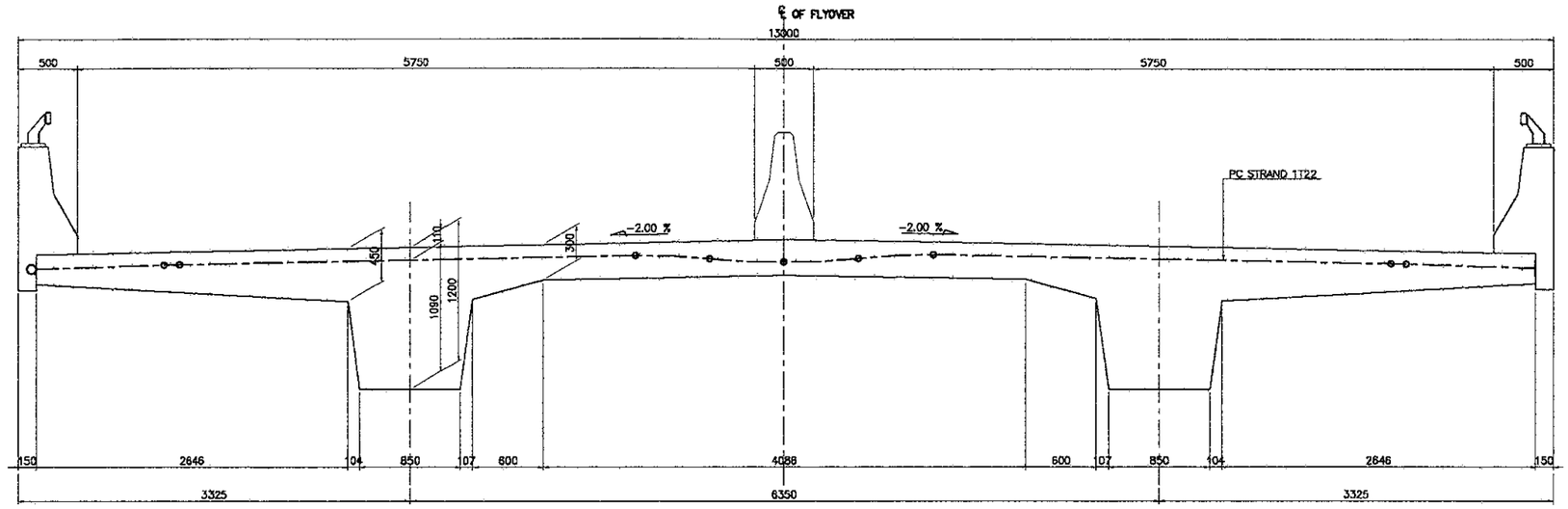
NOTES :
1. All dimension are in mm unless noted otherwise.
2. Prestressing Tendon Shall be 12T13 (7 WIRE STRAND). Nominal Diameter 12.7mm.
3. Shows Bending Point Of Prestressing Cable.

Stressing Anchorage
Dead End Anchorage

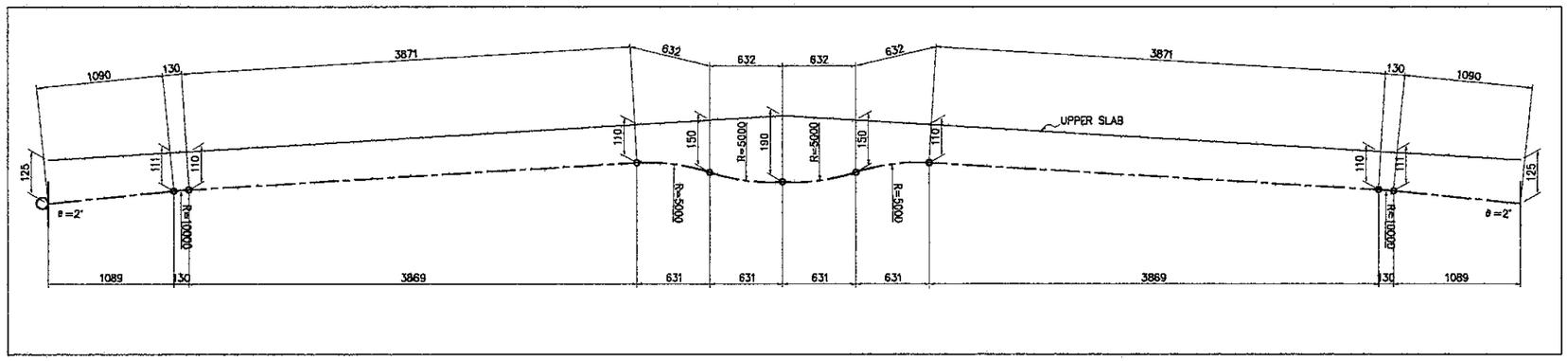


KEY PLAN

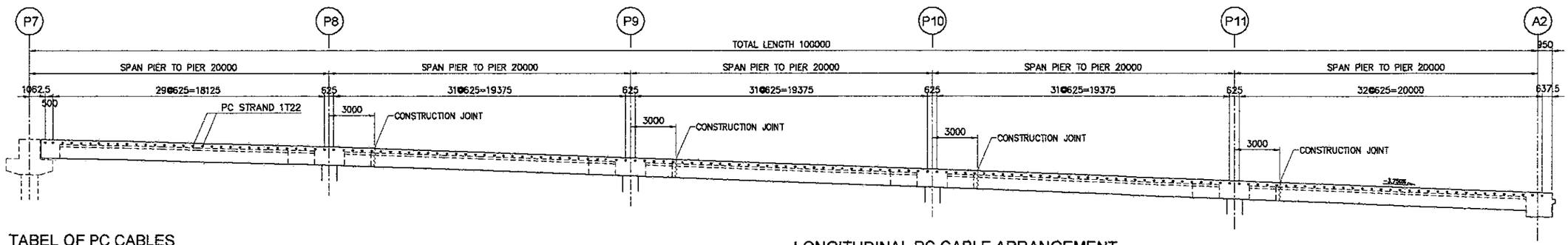
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY		CHECKED BY		SUBMITTED BY		REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HIGHWAYS	PROJECT AND LOCATION : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 50 1 : 300 FULL SIZE A3	DRAWING TITLE : PC CABLES SCHEDULE P7-A2	DRAWING NO : PCR-007 SHEET NO : 07 / 20
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY	Ir. HERRY VAZA M,Eng.Sc	Sign		
	Date		Date		Date			NIP. : 110038400	Date		



TRANVERSAL PC CABLE
SCALE 1 : 50



PC CABLE PROFILE



LONGITUDINAL PC CABLE ARRANGEMENT
SCALE 1 : 300

TABEL OF PC CABLES

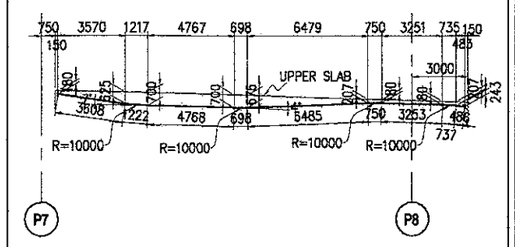
Length (m)	Nos.	Unit Weight (kg/m)	Weight / 1 nos (kg)	Weight (kg)	Remarks
12.710	160	2.482	31.55	5,047.40	Stressing Anchorage One Side Staggered
TOTAL LENGTH (L) =			2,033.60	m	
TOTAL WEIGHT (W) =			5,047.40	kg	

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

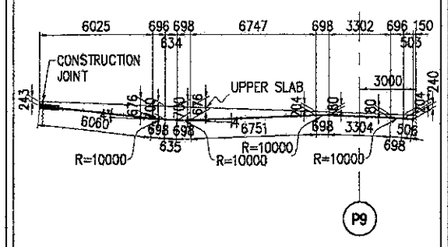
⊣ Stressing Anchorage
⊢ Dead End Anchorage

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	DESIGNED BY: 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 PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : – FULL SIZE A3	DRAWING TITLE : PC CABLES SCHEDULE P7 - A2	DRAWING NO : PCR-008 SHEET NO : 08 / 20

CONSTRUCTION SECTION NO.1 (C1 & C4)



CONSTRUCTION SECTION NO.2 (C1 & C4)



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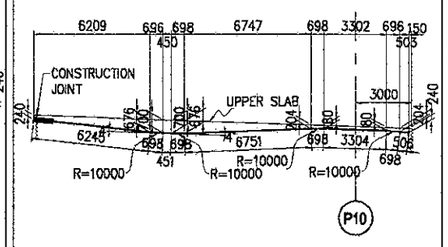
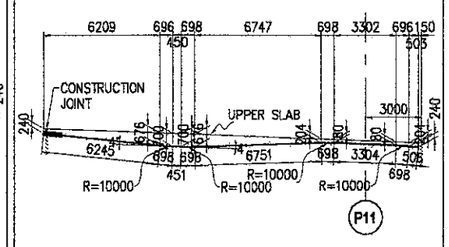
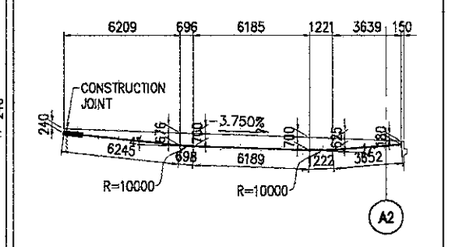


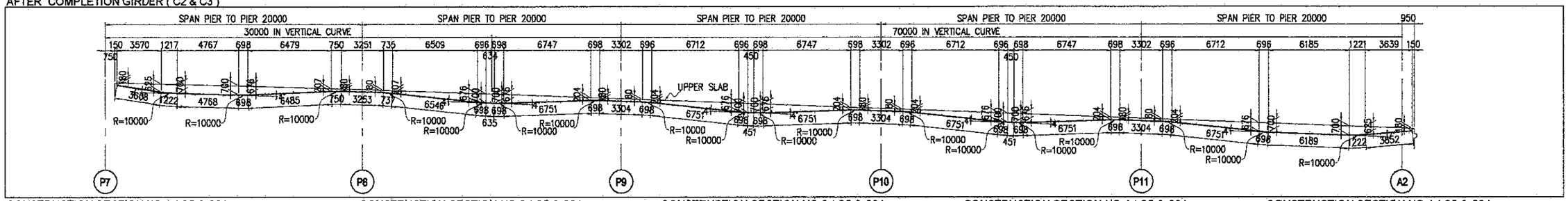
CONSTRUCTION SECTION NO.4 (C1 & C4)



CONSTRUCTION SECTION NO.4 (C1 & C4)



AFTER COMPLETION GIRDER (C2 & C3)



CONSTRUCTION SECTION NO.1 (C5 & C8)

CONSTRUCTION SECTION NO.2 (C5 & C8)

CONSTRUCTION SECTION NO.3 (C5 & C8)

CONSTRUCTION SECTION NO.4 (C5 & C8)

CONSTRUCTION SECTION NO.4 (C5 & C8)

AFTER COMPLETION GIRDER (C7)

AFTER COMPLETION GIRDER (C6)

PC CABLES SCHEDULE P7 - A2

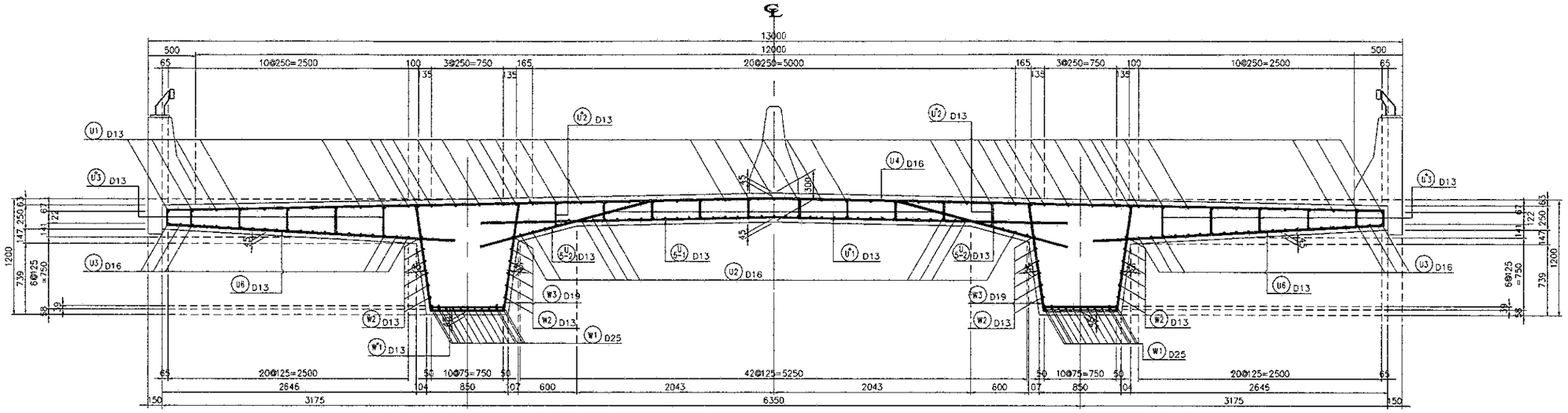
SCALE : NON

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

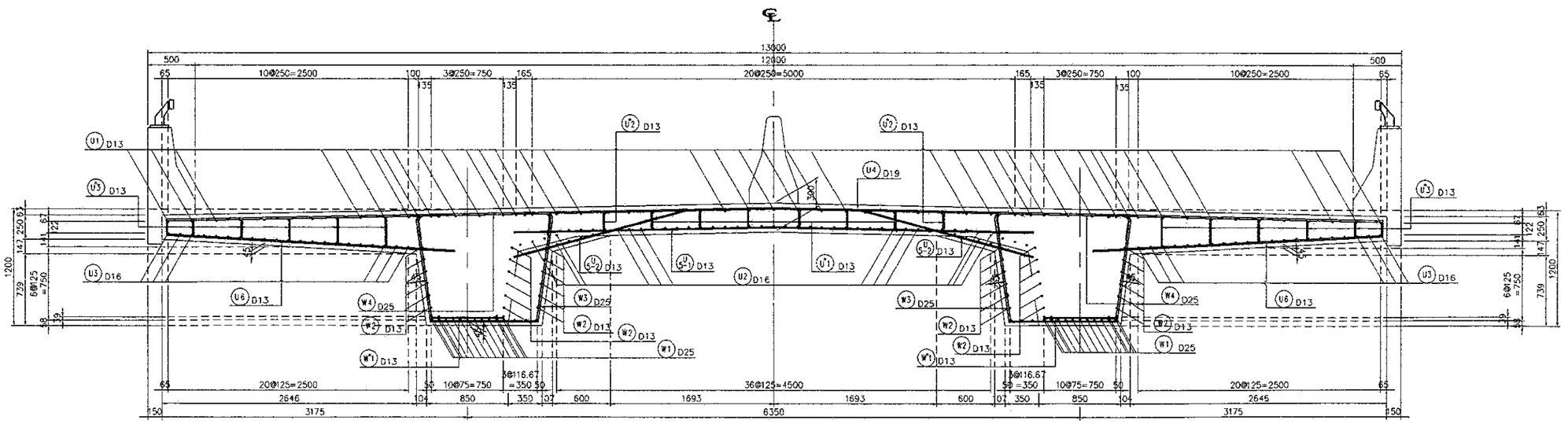
Stressing Anchorage
Dead End Anchorage

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 :	SCALE :	DRAWING TITLE :	DRAWING NO :
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI		DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	1 : 50	TYPICAL DETAIL OF CROSS SECTION REINFORCEMENT P7-A2	PCR-009
	Sign		Sign		Sign		APPROVED BY Ir. HERRY VAZA M,Eng.Sc Sign NIP. : 110038400 Date		FULL SIZE A3		SHEET NO : 09 / 20
	Date		Date		Date						



SECTION AT MID SPAN

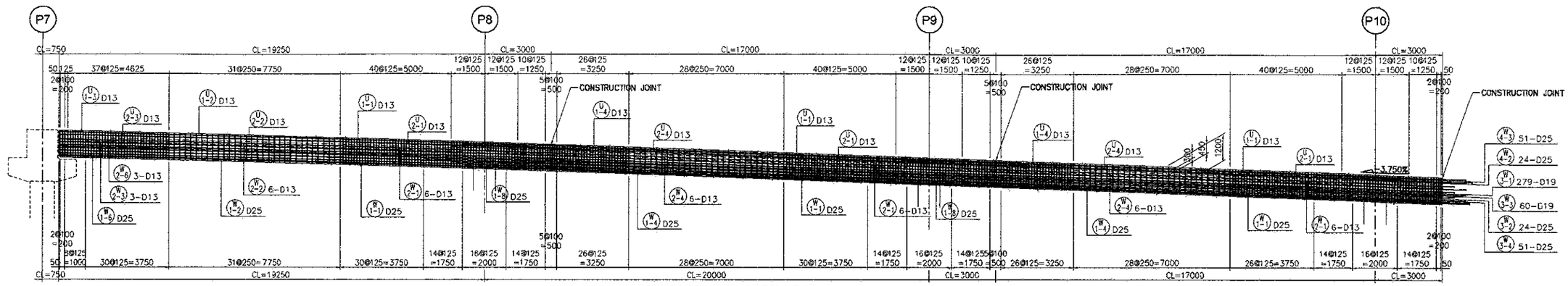
SCALE 1:50



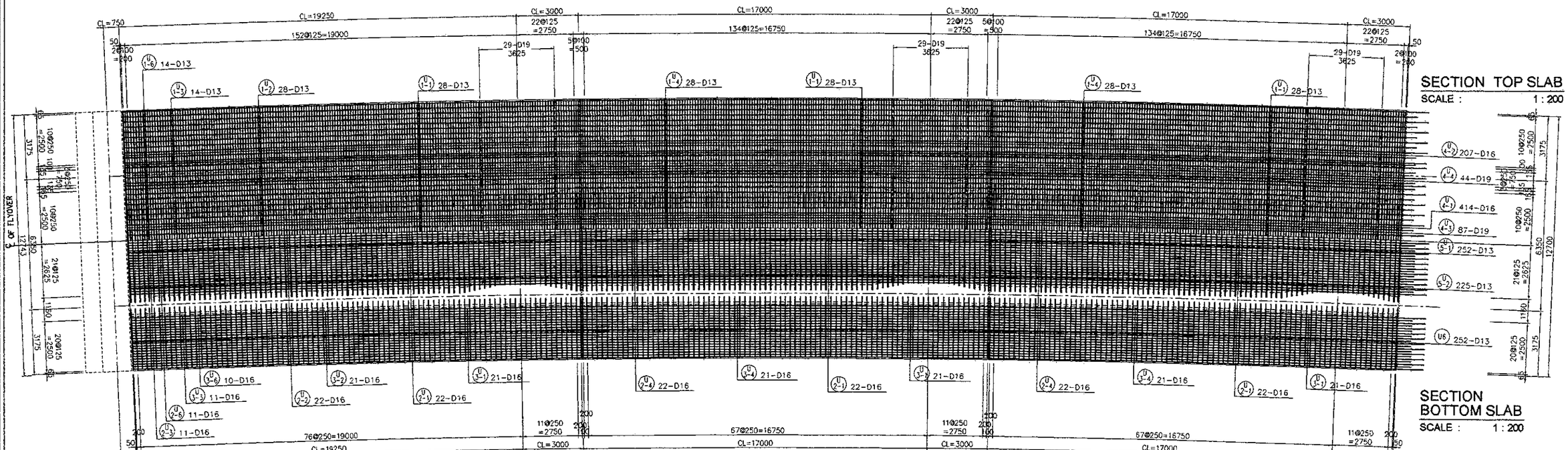
SECTION AT PIER

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 : DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT PETERONGAN FLYOVER - CONTRACT PACKAGE 3 (PETERONGAN - TANGGULANGIN) EAST JAVA PROVINCE	SCALE : 1 : 200 FULL SIZE A3	DRAWING TITLE : ARRANGEMENT OF REINFORCEMENT FOR PC GIRDER P7 - P10	DRAWING NO : PCR-010 SHEET NO : 10 / 20
	Name	H. HONDA	Name	T. OKUMURA	Name	M. KIUCHI					
	Sign		Sign		Sign		APPROVED BY Ir. HERRY VAZA M,Eng.Sc NIP. : 110038400	Sign Date			
	Date		Date		Date						

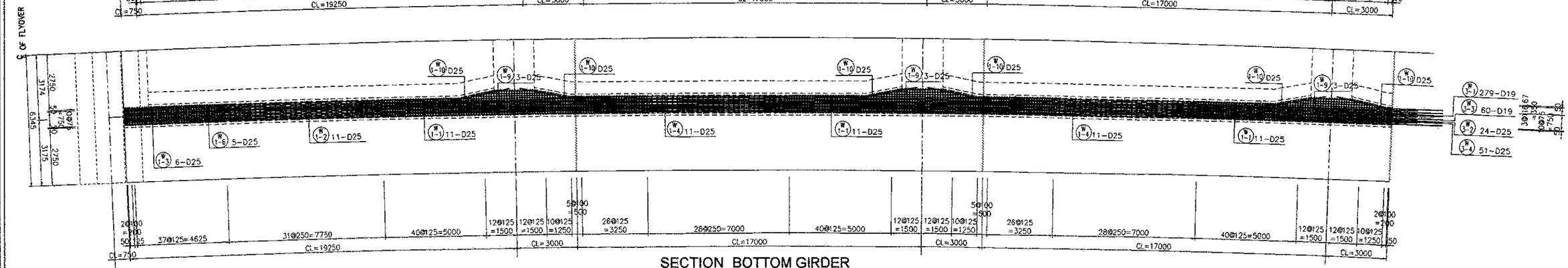


SECTION SPAN P7 - P10
SCALE : 1 : 200



SECTION TOP SLAB
SCALE : 1 : 200

SECTION BOTTOM SLAB
SCALE : 1 : 200



SECTION BOTTOM GIRDER
SCALE : 1 : 200