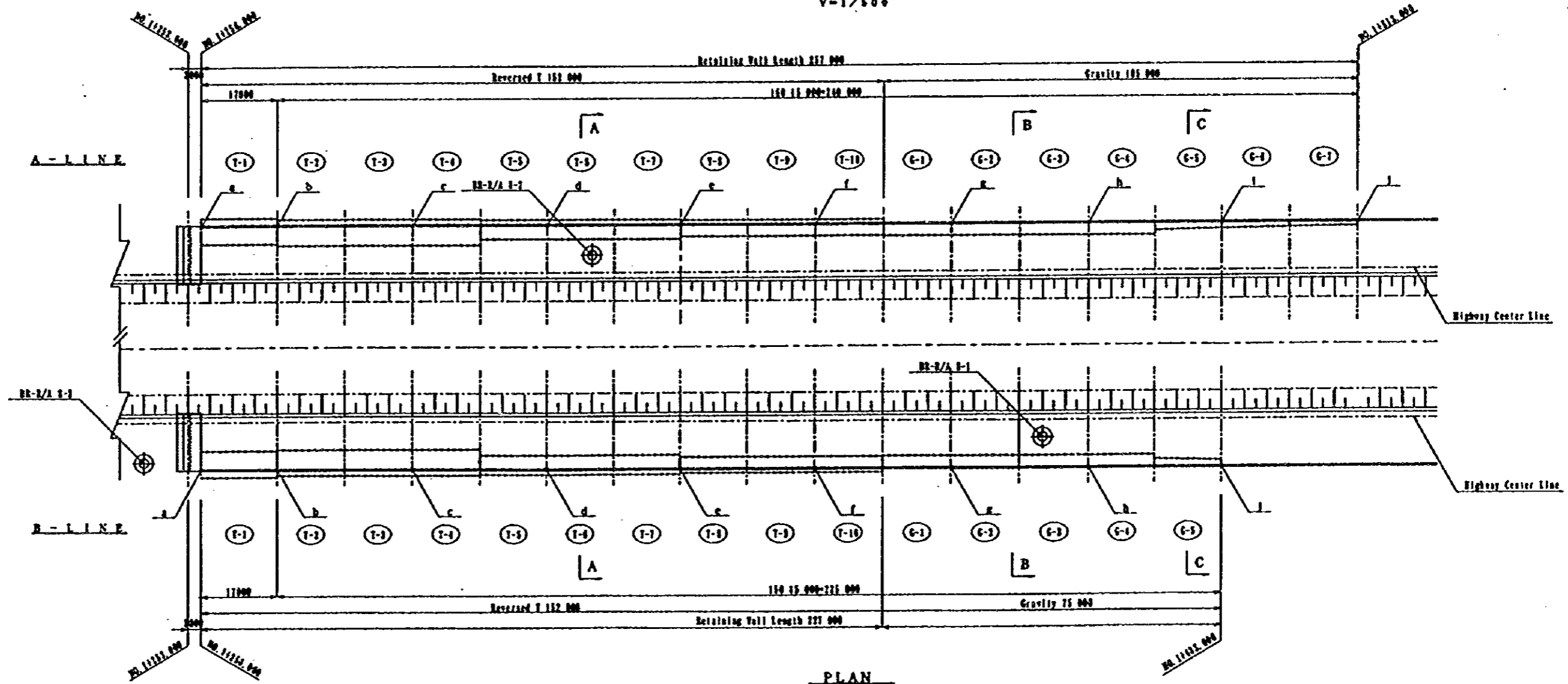
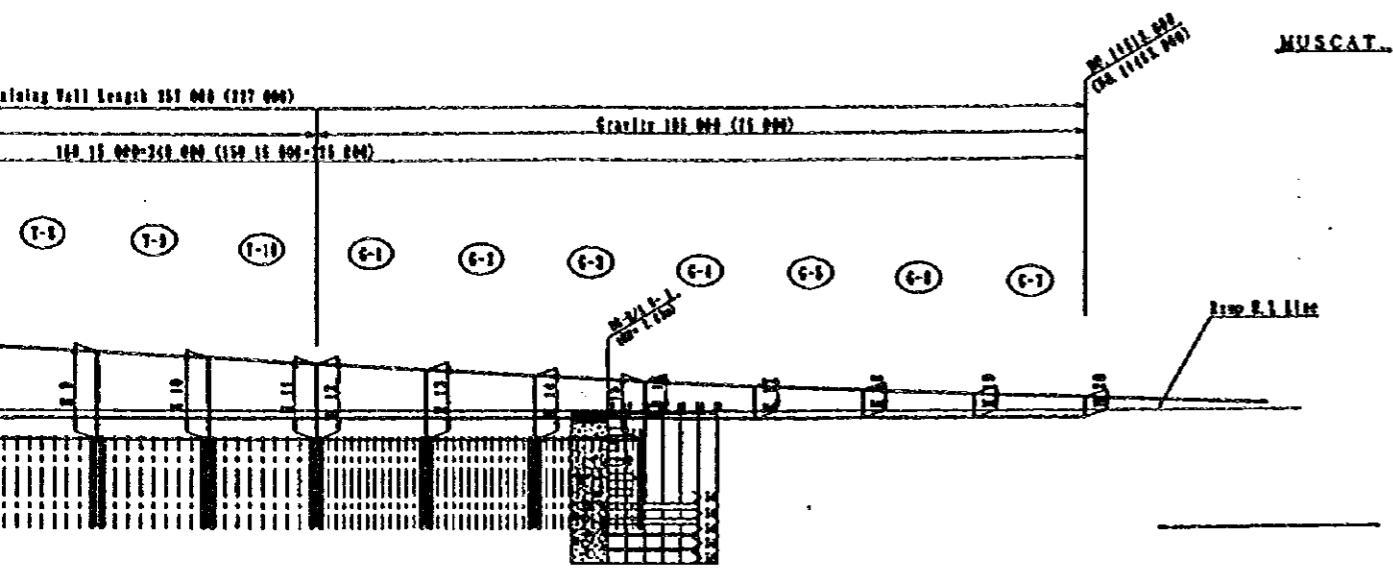


SIDE VIEW
H=1/1000
V=1/500

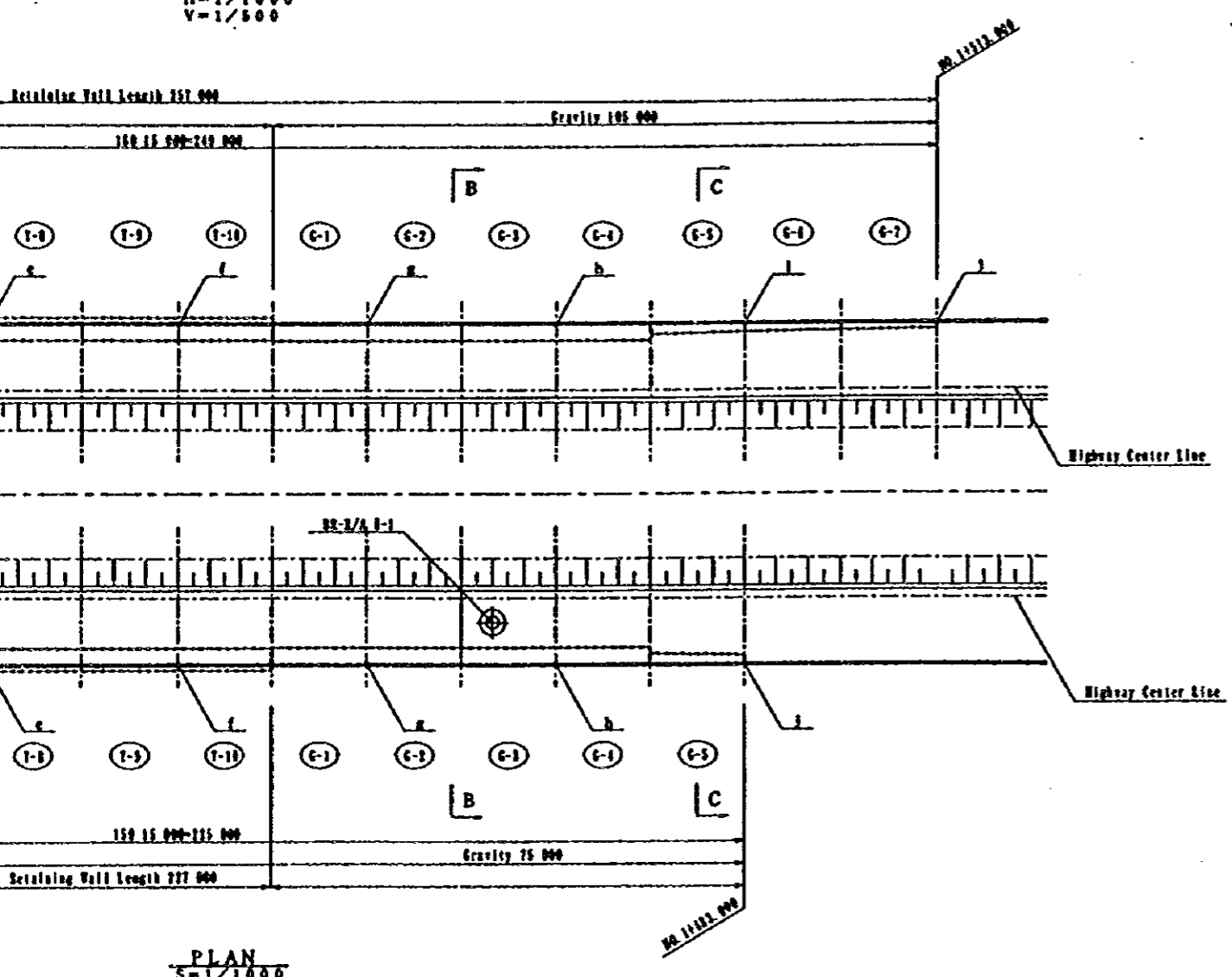


NOTES:

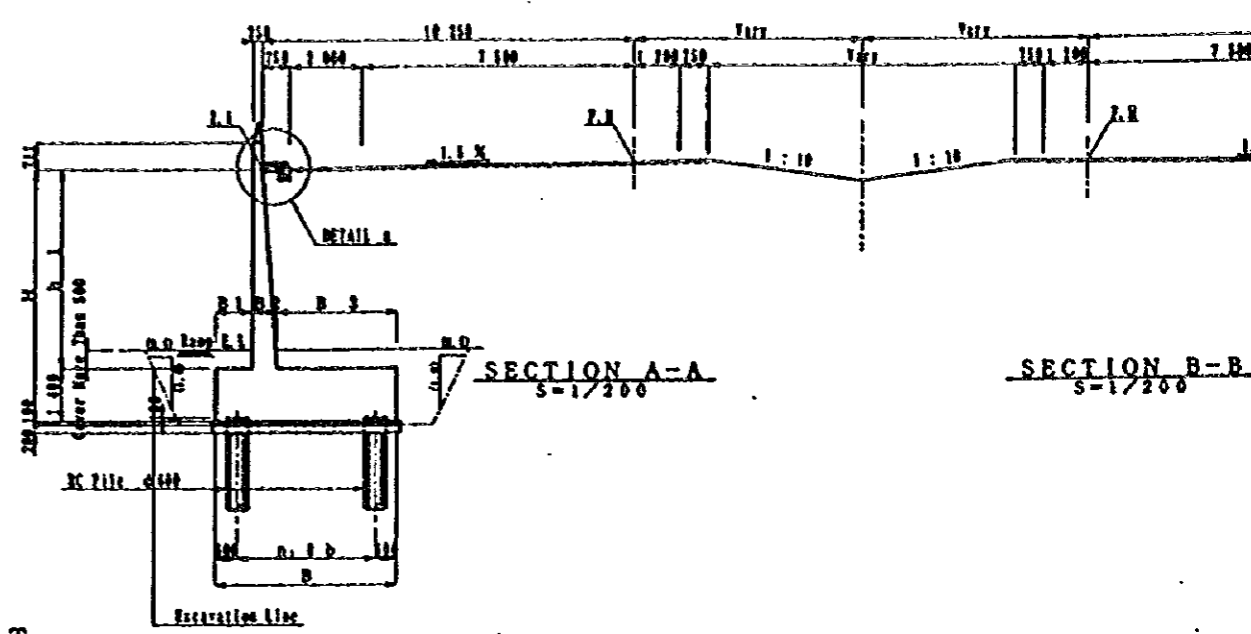
65



SIDE VIEW
H=1/1000
V=1/500



PLAN
S=1/1000



Reversed T

MARK TYPE	H	h 1	B	B 1	B 2	B 3
A L I N E	T-1	11-8 132	6 732	6 700	1 500	826 3 374
	T-2	1-7 865	8 465			803 3 397
	T-3	1-7 598	6 198	6 700	1 200	789 3 711
	T-4	4-7 331	5 931			766 3 734
	T-5	1-7 018	5 618			744 3 756
	T-6	4-6 707	5 307	4 200	1 000	718 3 782
	T-7	1-6 350	4 950			702 2 498
	T-8	1-5 993	4 593			677 2 523
	T-9	1-5 591	4 191	3 500	800	648 2 552
	T-10	11-4 753	3 353			619 2 581
B L I N E	T-1	11-8 132	6 732	6 700	1 500	826 3 374
	T-2	1-7 865	8 465			803 3 397
	T-3	1-7 598	6 198	6 700	1 200	789 3 711
	T-4	4-7 331	5 931			766 3 734
	T-5	1-7 018	5 618			744 3 756
	T-6	4-6 707	5 307	4 200	1 000	718 3 782
	T-7	1-6 350	4 950			702 2 498
	T-8	1-5 993	4 593			677 2 523
	T-9	1-5 591	4 191	3 500	800	648 2 552
	T-10	11-4 753	3 353			619 2 581

Gravity (Pile Foundation)

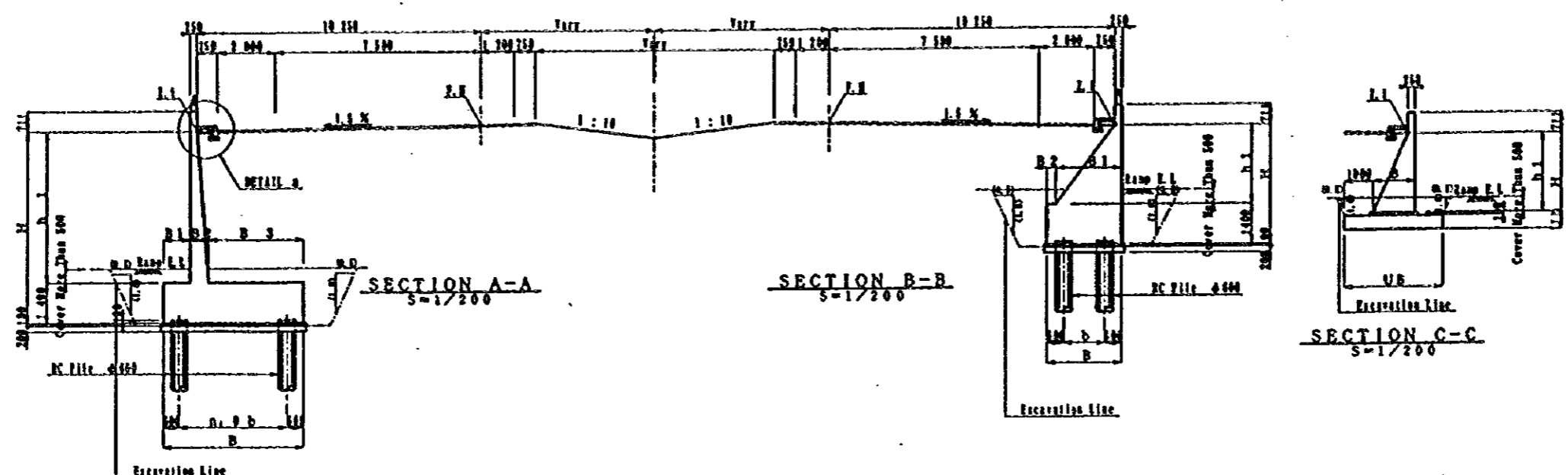
MARK TYPE	H	h 1	B	B 1	B 2
A L I N E	G-1	11-4 753	3 353	2 800	2 158
	G-2	11-4 317	2 917		1 910
	G-3	11-3 937	2 537		1 694
	G-4	11-3 557	2 157		1 477
B L I N E	G-1	11-4 753	3 353	2 800	2 158
	G-2	11-4 317	2 917		1 910
	G-3	11-3 937	2 537		1 694
	G-4	11-3 557	2 157		1 477

Gravity (Spread Foundation)

MARK TYPE	H	B	U h	U B
A L I N E	G-5	11-1 852	1 361	1 500
	G-6	11-1 547	1 178	
	G-7	11-1 317	1 040	
B L I N E	G-5	11-1 852	1 361	1 500
	G-6	11-1 547	1 040	

List Of Foundation

Reversed T	A - LINE					Reversed T	B - LINE				
	n. of	w.	n. of	n	L (m)		n. of	w.	n. of	n	
T 1	3 0 1 500	725	9 0 1 700	40	6 000	T 1	3 0 1 500	725	9 0 1 700	40	
T 2 ~ T 4	3 0 1 500	600	9 0 1 725	40		T 2 ~ T 4	3 0 1 500	600	9 0 1 725	36	
T 5 ~ T 7	2 0 1 500	675	7 0 1 950	24		T 5 ~ T 7	2 0 1 500	675	7 0 1 950	24	
T 8 ~ T 10	1 0 2 300	600	8 0 1 725	18		T 8 ~ T 10	1 0 2 300	600	8 0 1 725	18	
Gravity	1 0 1 500	640	1 4 0 980	15	6 000	Gravity	1 0 1 500	600	1 4 0 980	15	



Reversed T

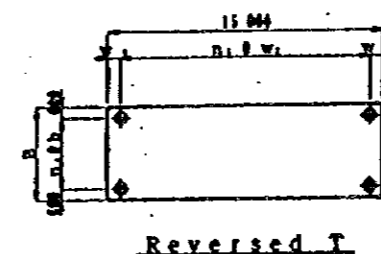
MARK TYPE	H	h 1	B	B 1	B 2	B 3	
A I L I N E	T-1	81-8 132	6 732	5 700	1 500	826	3 374
	T-2	1-7 866	6 466			803	3 397
	T-3	3-7 598	6 198	5 700	1 200	789	3 711
	T-4	4-7 331	5 931			766	3 734
	T-5	5-7 018	5 618			744	3 756
	T-6	6-6 707	5 307	4 200	1 000	718	3 782
	T-7	7-6 350	4 950			702	2 498
	T-8	8-6 003	4 603			677	2 523
	T-9	9-5 591	4 191	3 500	800	648	2 552
	T-10	10-5 189	3 789			619	2 581
B I L I N E	T-1	81-8 132	6 732	5 700	1 500	826	3 374
	T-2	1-7 866	6 466			803	3 397
	T-3	3-7 598	6 198	5 700	1 200	789	3 711
	T-4	4-7 331	5 931			766	3 734
	T-5	5-7 018	5 618			744	3 756
	T-6	6-6 707	5 307	4 200	1 000	718	3 782
	T-7	7-6 350	4 950			702	2 498
	T-8	8-6 003	4 603			677	2 523
	T-9	9-5 591	4 191	3 500	800	648	2 552
	T-10	10-5 189	3 789			619	2 581

Gravity (Pile Foundation)

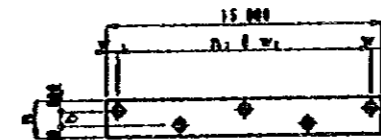
MARK TYPE	H	h 1	B	B 1	B 2	
A I L I N E	G-1	81-4 753	3 353	2 800	2 158	642
	G-2	10-4 317	2 917		1 910	690
	G-3	14-3 937	2 537		1 694	1 106
	G-4	15-3 557	2 157		1 477	1 323
B I L I N E	G-1	81-4 753	3 353	2 800	2 158	642
	G-2	10-4 317	2 917		1 910	690
	G-3	14-3 937	2 537		1 694	1 106
	G-4	15-3 557	2 157		1 477	1 323

Gravity (Spread Foundation)

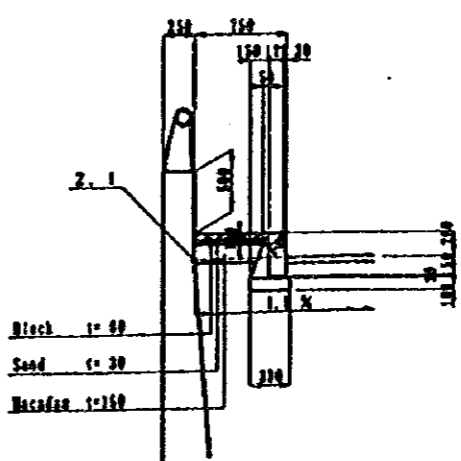
MARK TYPE	H	B	U h	U B	
A I L I N E	G-1	81-1 852	1 361	1 500	3 361
	G-2	10-1 547	1 178		3 178
	G-3	15-1 317	1 040		3 040
	G-4	16-1 087	902		2 902
B I L I N E	G-1	81-1 852	1 361	1 500	3 361
	G-2	16-1 547	1 040		3 040



Reversed T



Gravity



DETAIL A
S=1/60

List Of Foundation

A - LINE						B - LINE					
Reversed T	n. fb	w.	n. lw.	n	L (m)	Reversed T	n. fb	w.	n. lw.	n	L (m)
T 1	3 @ 1 500	725	9 @ 1 700	40	6 000	T 1	3 @ 1 500	725	9 @ 1 700	40	6 000
T 2 ~ T 4	3 @ 1 500	600	9 @ 1 725	40		T 2 ~ T 4	3 @ 1 500	600	9 @ 1 725	36	
T 5 ~ T 7	2 @ 1 500	675	7 @ 1 950	24		T 5 ~ T 7	2 @ 1 500	675	7 @ 1 950	24	
T 8 ~ T 10	1 @ 2 300	600	8 @ 1 725	18		T 8 ~ T 10	1 @ 2 300	600	8 @ 1 725	18	
Gravity	1 @ 2 600	640	14 @ 980	15	6 000	Gravity	1 @ 2 600	640	14 @ 980	15	6 000

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL PUKUYAMA CONSULTANTS INTERNATIONAL	CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	TITLE :	R/A-8. AL KHABURAH GENERAL VIEW FOR WALL (2)-1
	DATE	DWG NO. W-20

Point		a	b	c	d	e	f	g	h	i	j
A L I N E	N	+2650901.95521	+2650885.88830	+2650861.78793	+2650837.68756	+2650813.58720	+2650789.48683	+2650765.38646	+2650741.28609	+2650717.18573	+2650693.08536
	E	+ 509369.93450	+ 509381.84476	+ 509399.71016	+ 509417.57555	+ 509435.44094	+ 509453.30634	+ 509471.17173	+ 509489.03712	+ 509506.90252	+ 509524.76791
	Z	14.571	14.265	13.731	13.107	12.393	11.589	10.717	9.957	9.347	8.887
B L I N E	N	+2650882.36300	+2650866.29609	+2650842.19572	+2650818.09535	+2650793.99498	+2650769.89461	+2650745.79425	+2650721.69388	+2650697.59351	
	E	+ 509343.50435	+ 509355.41461	+ 509373.28000	+ 509391.14540	+ 509409.01079	+ 509426.87618	+ 509444.74157	+ 509462.60697	+ 509480.47236	
	Z	14.571	14.265	13.731	13.107	12.393	11.589	10.717	9.952	9.332	

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FRUTAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

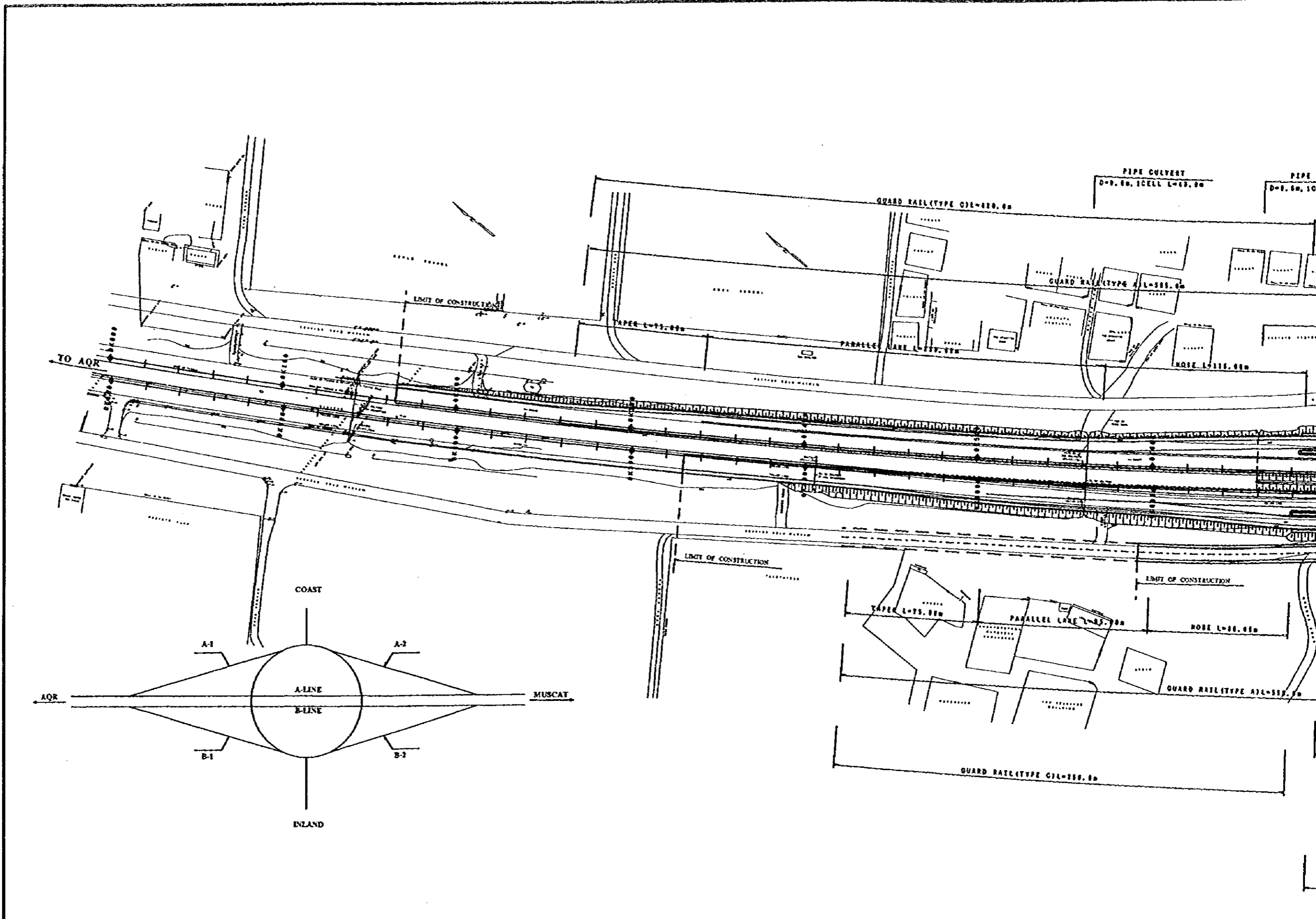
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE : R/A-8, AL KHABURAH GENERAL VIEW FOR WALL (2)-2

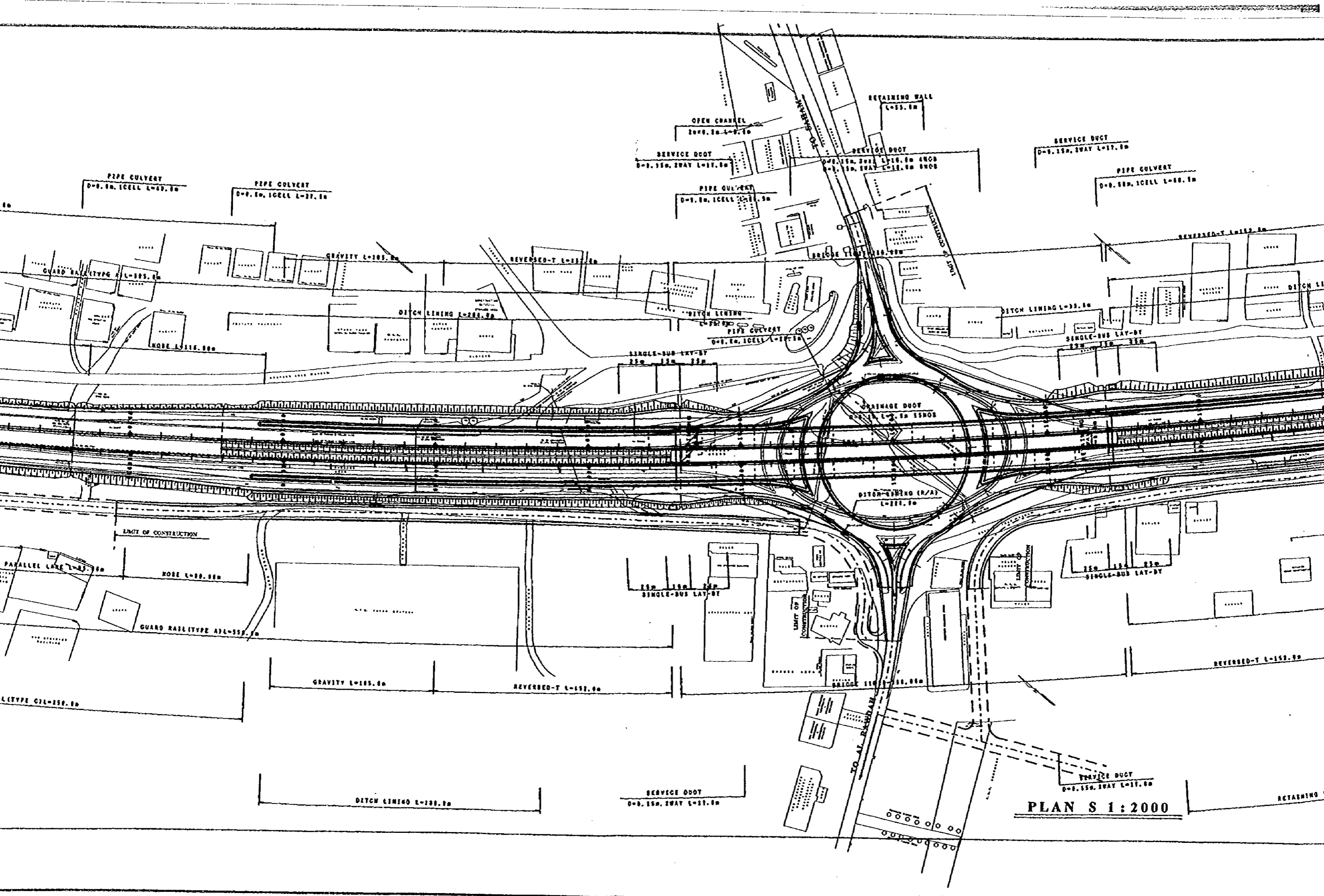
DATE

DWG NO. W-21

Sabam
FLYOVER



NOTES:



PLAN S 1:2000

RETAINING

SERVICE DUCT
D=0.150. SWAY L=17.00

SERVICE DUCT
D=0.150. SWAY L=17.00

DITCH LINING L=100.00

REVERSED-T L=100.00

GRAVITY L=105.00

REVERSED-T L=100.00

SINGLE-BUS LAY-BY

LIMIT OF CONSTRUCTION

SINGLE-BUS LAY-BY

GUARD RAILTYPE A1L-100.00

ROBE L=80.00

LIMIT OF CONSTRUCTION

TO AL. ROAD

DRAINAGE DUCT
L=2.50 15000

DITCH LINING (R/A)
L=100.00

SINGLE-BUS LAY-BY

DITCH LINING L=30.00

PIPE CULVERT
D=0.150. ICELL L=10.00

SINGLE-BUS LAY-BY

DITCH LINING L=200.00

REVERSED-T L=111.00

GRAVITY L=103.00

PIPE CULVERT
D=0.150. ICELL L=27.00

PIPE CULVERT
D=0.150. ICELL L=27.00

PIPE CULVERT
D=0.150. ICELL L=20.00

SERVICE DUCT
D=0.150. SWAY L=17.00

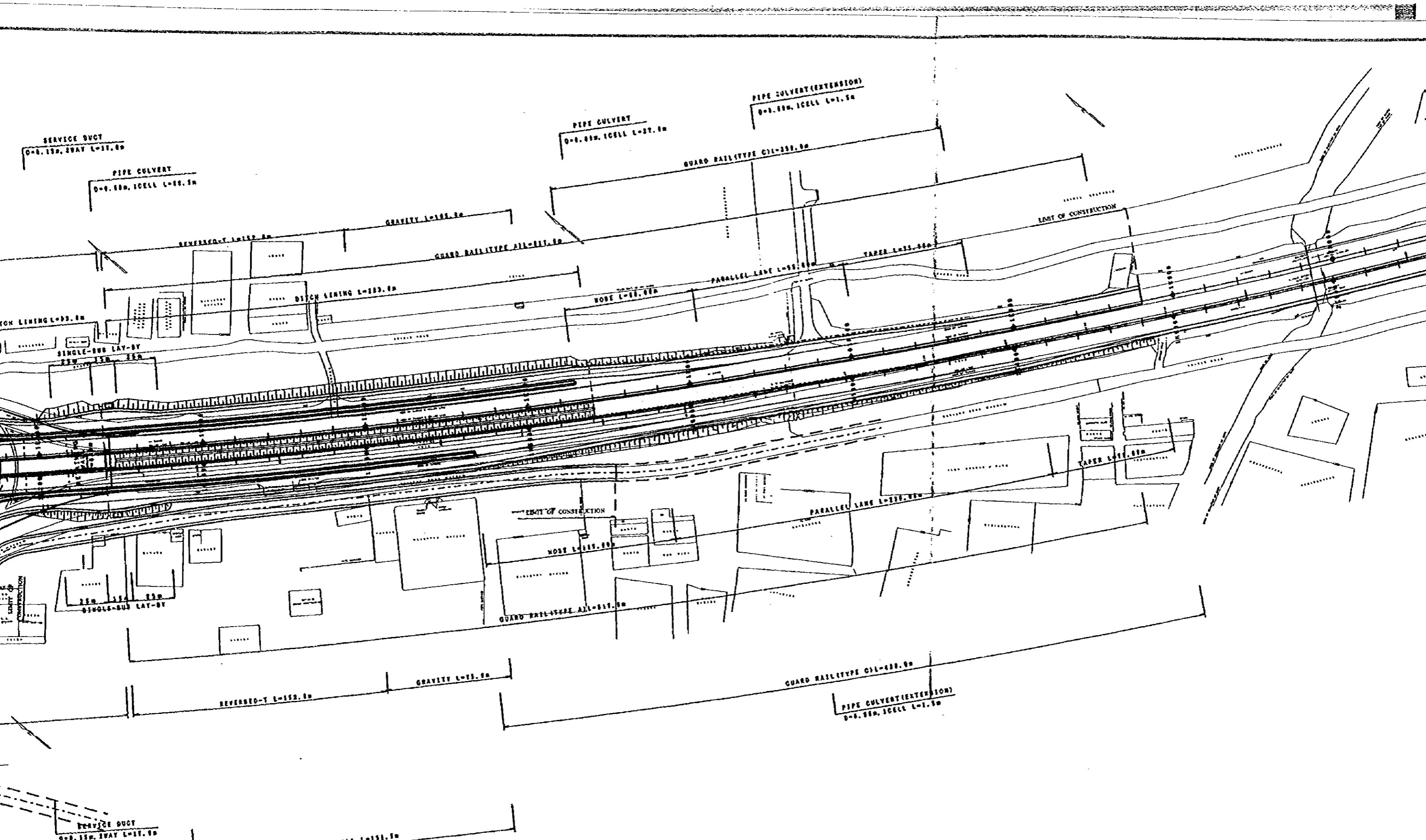
RETAINING WALL
L=10.00

OPEN CHANNEL
1000.00 L=0.00

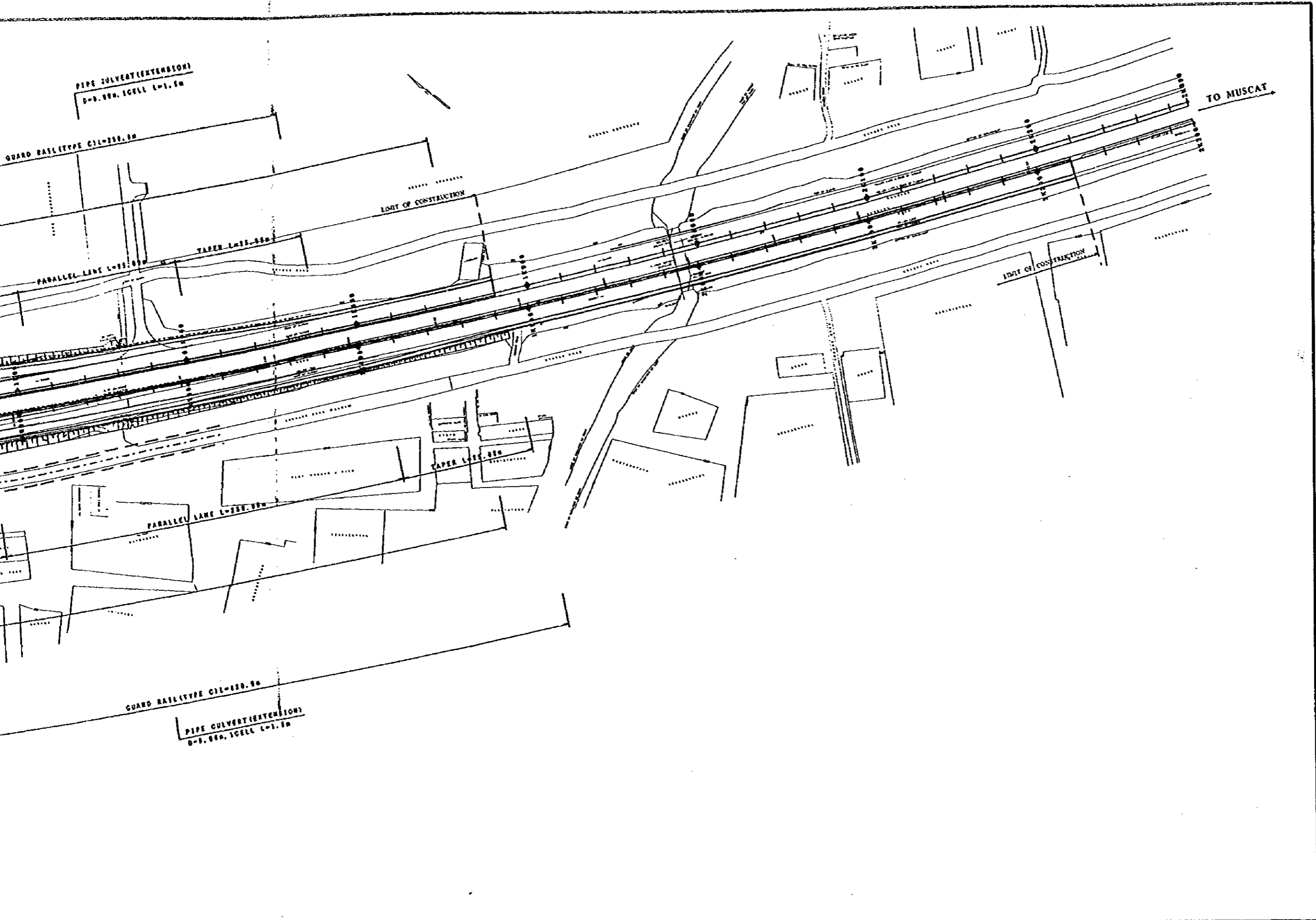
SERVICE DUCT
D=0.150. SWAY L=17.00

PIPE CULVERT
D=0.150. ICELL L=10.00

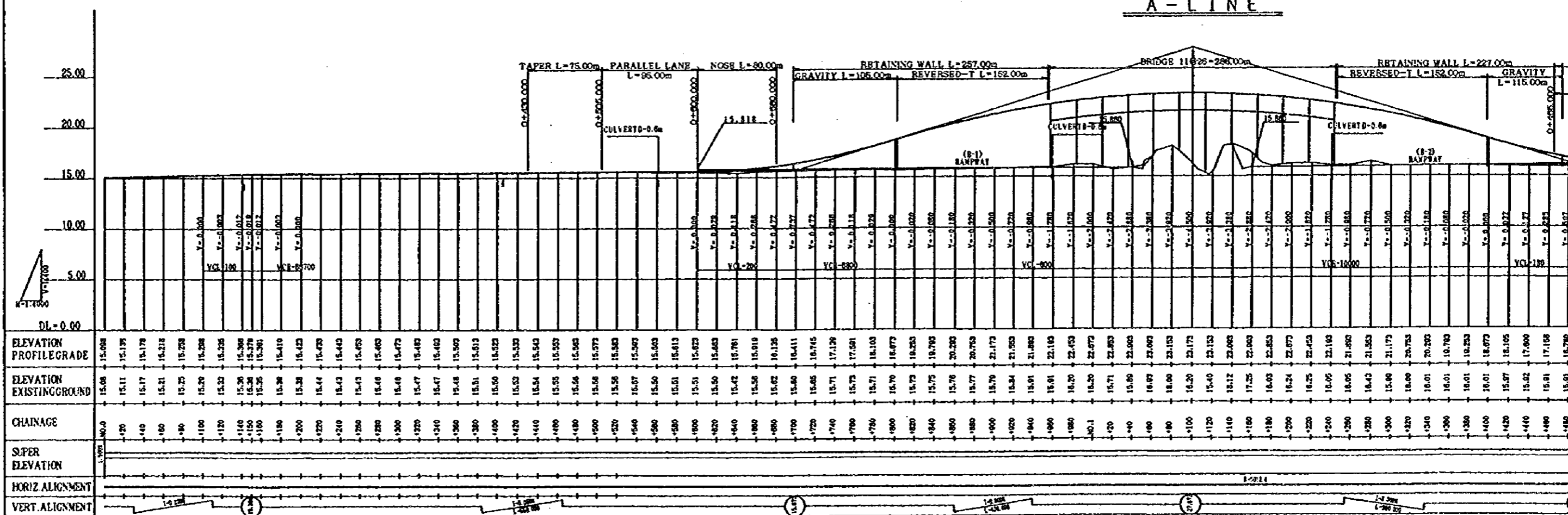
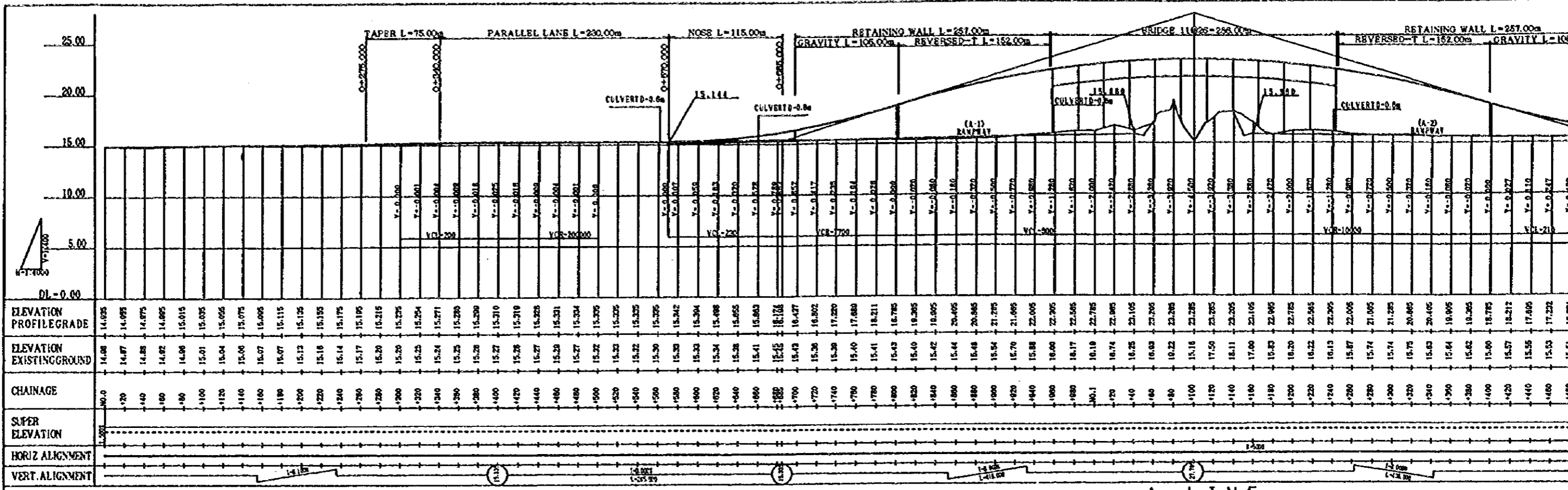
SERVICE DUCT
D=0.150. SWAY L=17.00



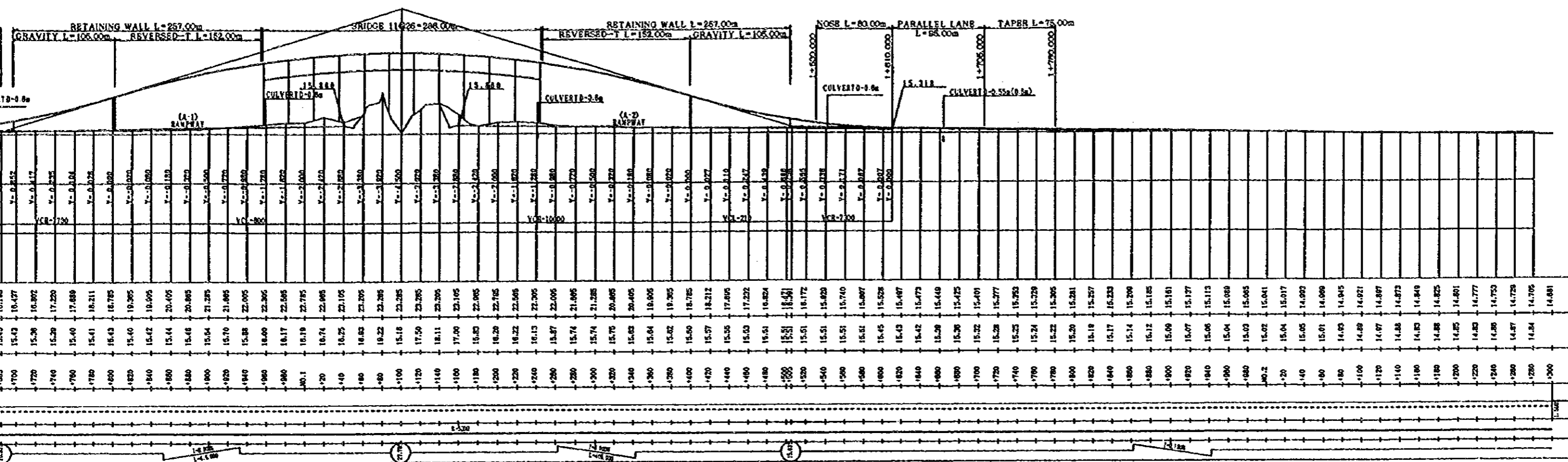
PLAN S 1:2000



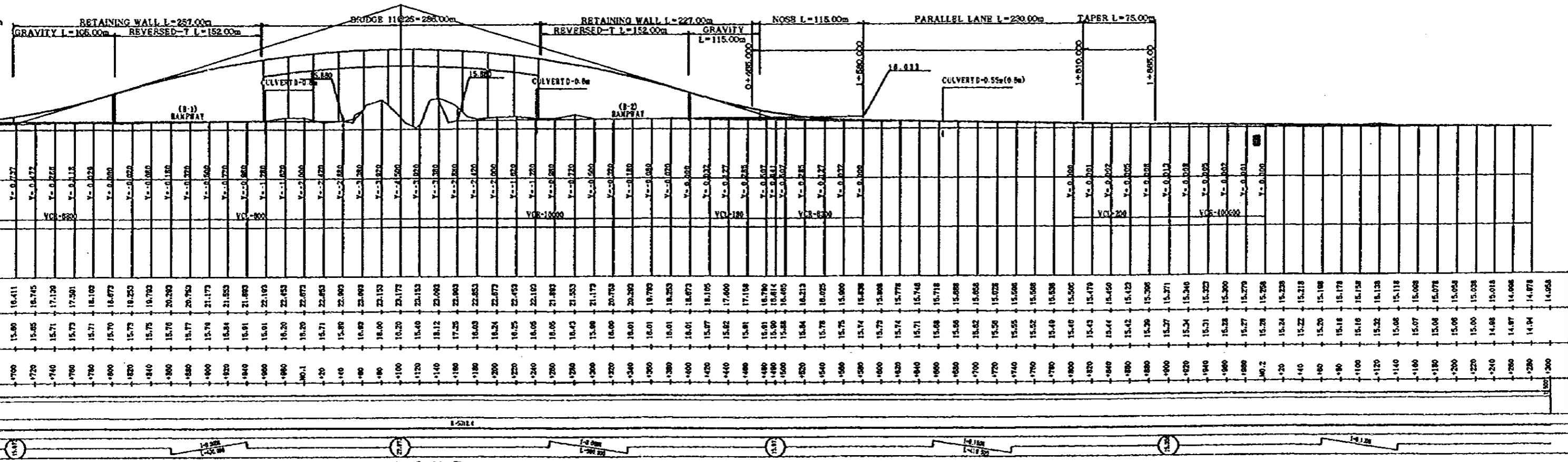
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL	CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS	
	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY	
	TITLE RA/10 SAHAM PLAN	DWGNO. R-3
	DATE	



NOTES:

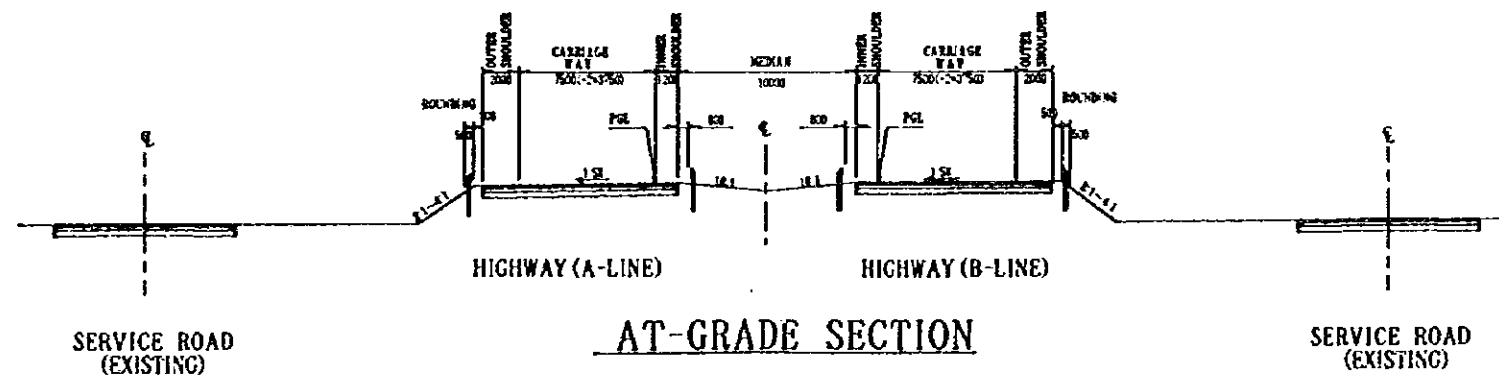
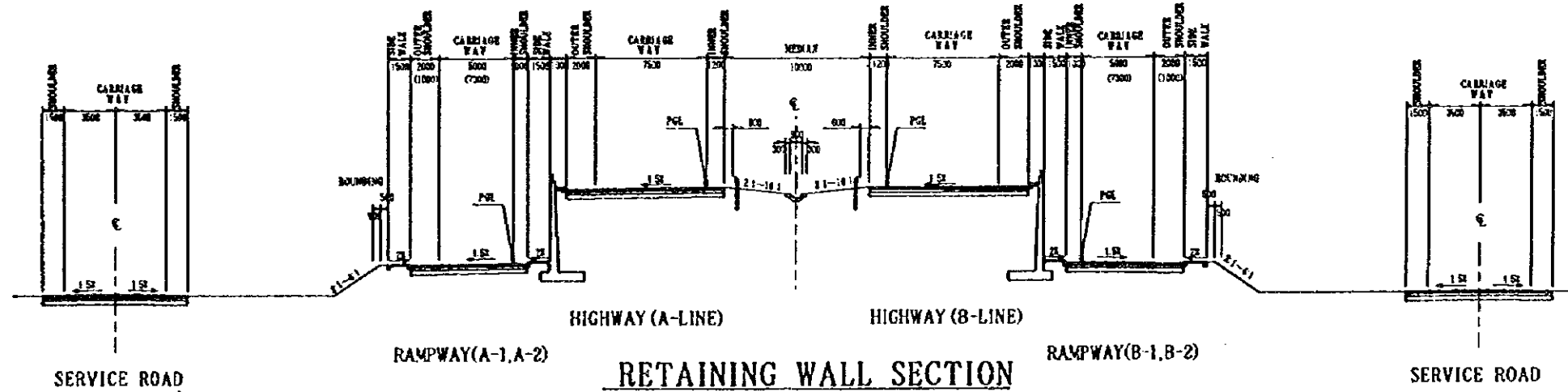
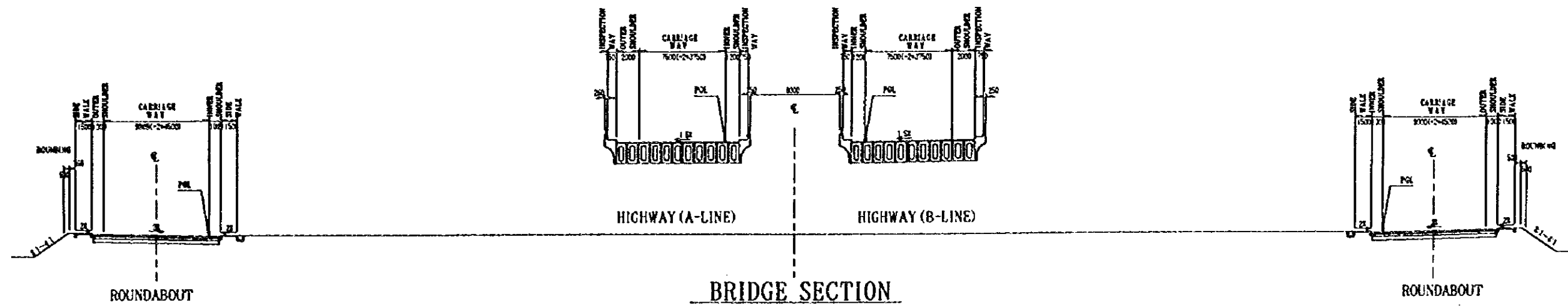


A-LINE



B-LINE

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	TITLE RA/10 SAHAM PROFILE-HIGHWAY
DATE	DWGNO. R-4

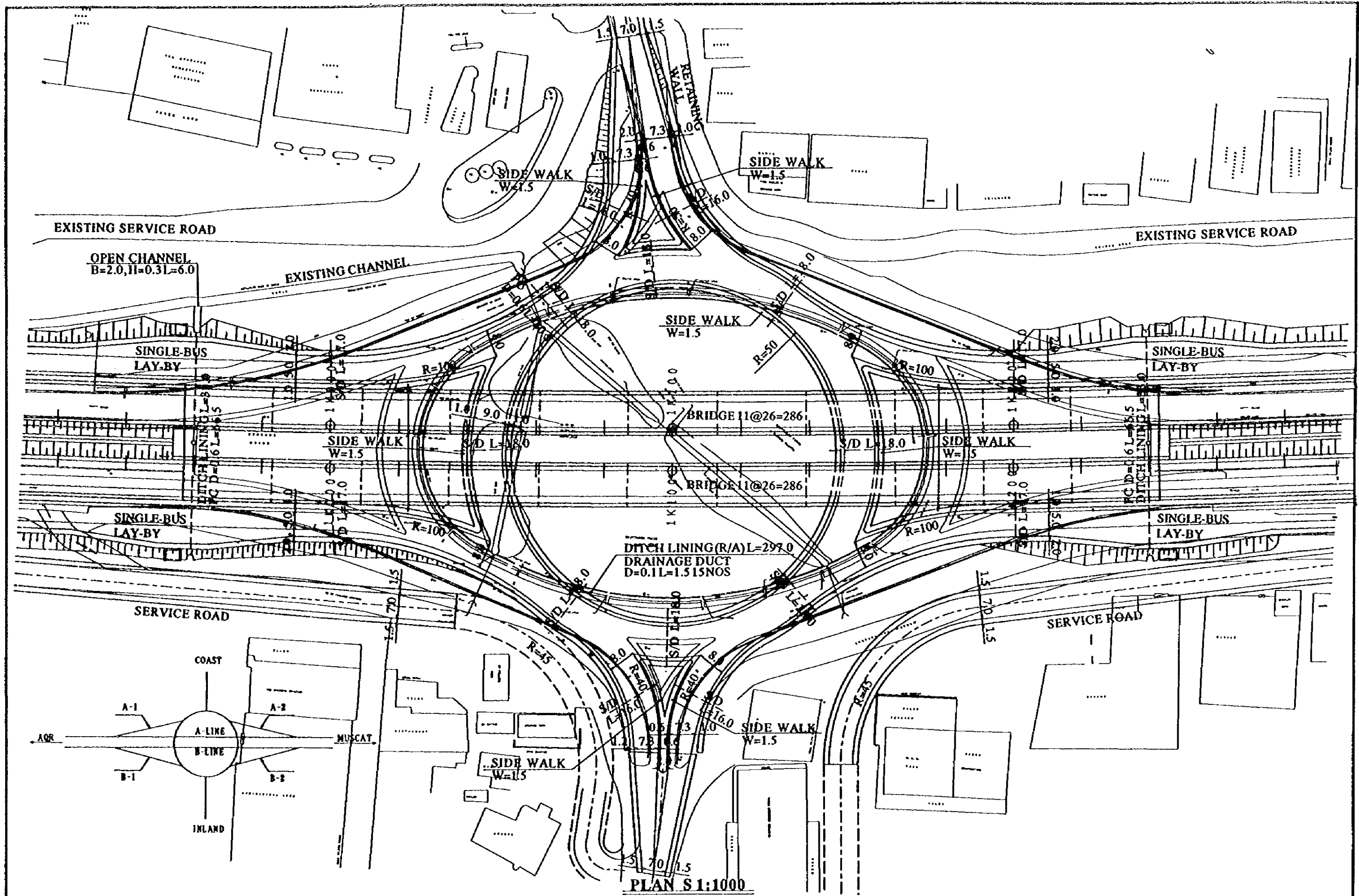


NOTES:

- (1) SCALE 1:400, DIMENSIONS IN MILLIMETER.
- (2) NUMBERS INSIDE BRACKETS ARE DIMENSIONS OF MUSCAT-SIDER RAMPWAY.
- (3) THE TRADITIONAL STRETCH FOR WIDTH AND CROSS FALL ADJUSTMENT SHOULD BE PROVIDED AT THE BEGINNING AND THE END.

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 JICA STUDY TEAM
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 FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
 PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
 TITLE: RA/10 SAHAM TYPICAL CROSS SECTION
 DATE: _____ DWG NO.: R-5



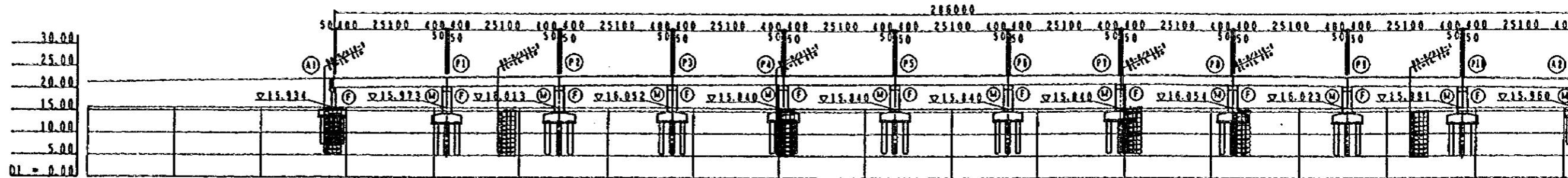
PLAN S 1:1000

- NOTES:
- (1) ALL DIMENSIONS ARE IN METER.
 - (2) S/D INDICATES SERVICE DUCT (D=0.15m, 2WAY)
 - (3) PC AND BC REPRESENTS PIPE CULVERT AND BOX CULVERT RESPECTIVELY.

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FUKUYAMA CONSULTANTS INTERNATIONAL

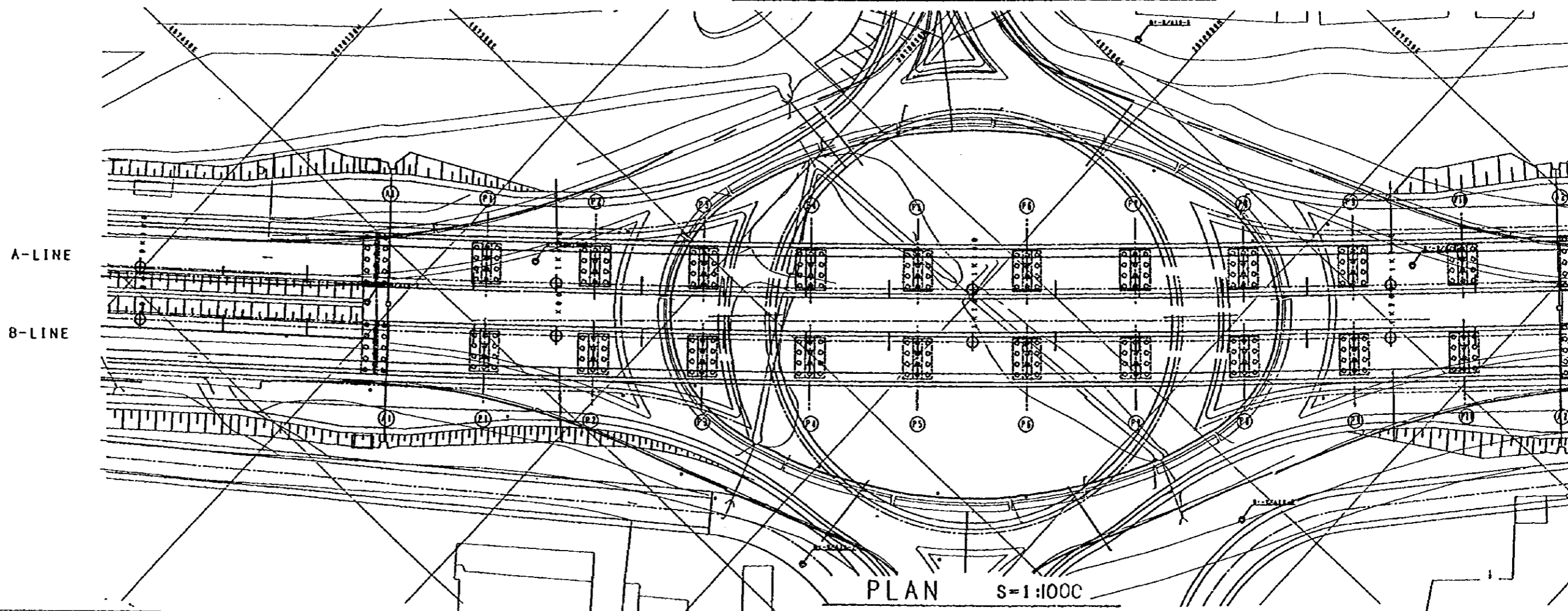
CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE: RA/10 SAHAM DETAILED PLAN
DATE: _____ DWG NO.: R-6

GENERAL VIEW RA/10 SA



ELEVATION PROFILE GRADE	ELEVATION EXISTING GROUND	CHAINAGE	SUPER ELEV	HORIZ. ALIGNMENT	VERT. ALIGNMENT
21.665	15.70	+920			
22.005	15.38	+940			
22.283	15.30	+957			
22.305	16.00	+960			
22.565	16.17	+980			
22.601	16.17	+983			
22.785	16.19	+1001			
22.871	16.18	+1009			
22.965	15.74	+1020			
23.074	15.35	+1035			
23.105	16.25	+1040			
23.205	16.93	+1060			
23.289	17.50	+1061			
23.265	18.22	+1080			
23.277	15.75	+1087			
23.285	15.16	+1100			
23.277	17.50	+1113			
23.265	17.50	+1120			
23.209	18.10	+1139			
23.205	18.11	+1140			
23.105	17.00	+1160			
23.074	16.50	+1165			
22.965	15.83	+1180			
22.871	16.16	+1191			
22.785	16.20	+1200			
22.501	16.17	+1217			
22.565	16.22	+1220			
22.305	16.13	+1240			

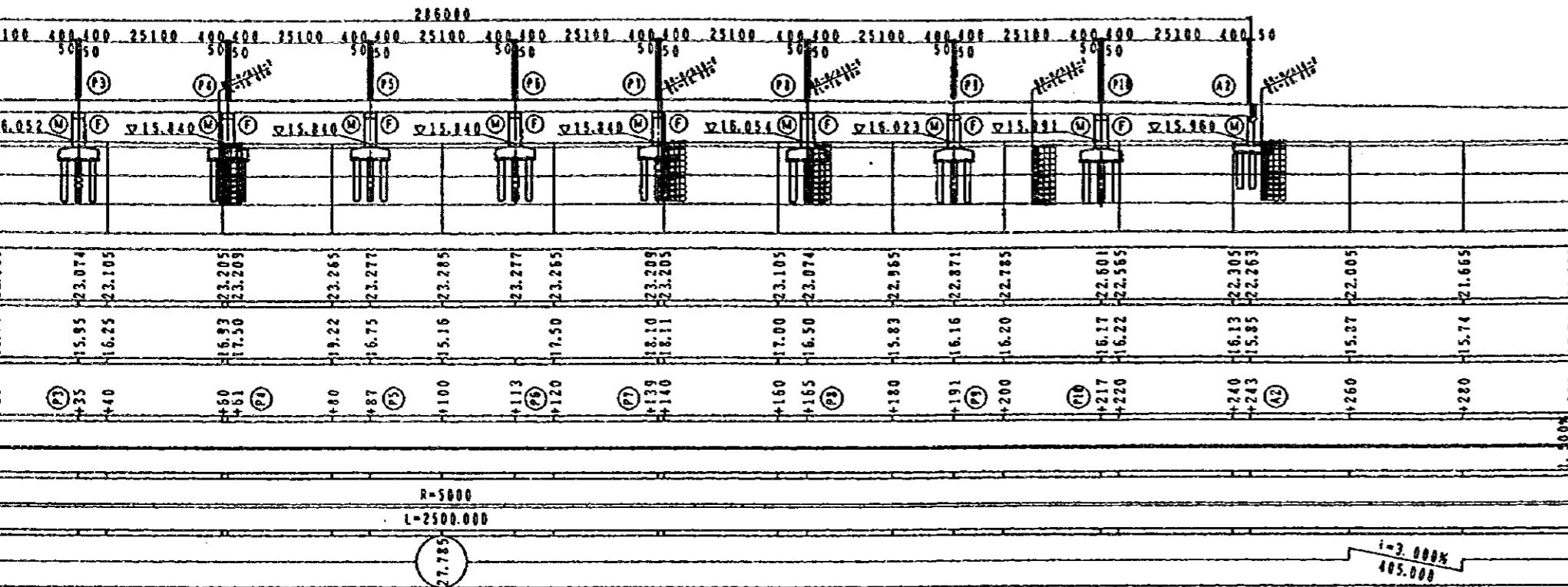
PROFILE (A-LINE) S=1:1000



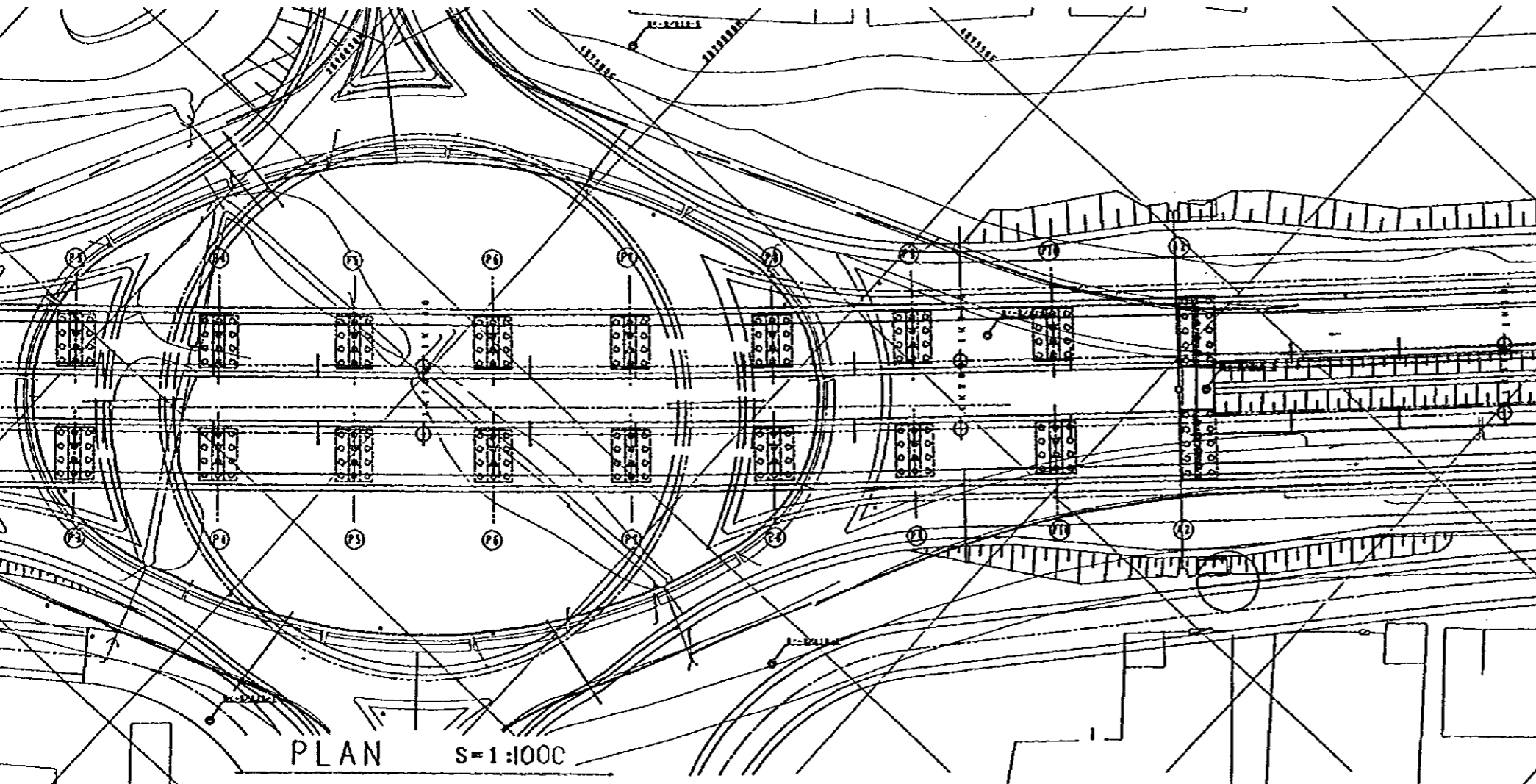
PLAN S=1:1000

NOTES:

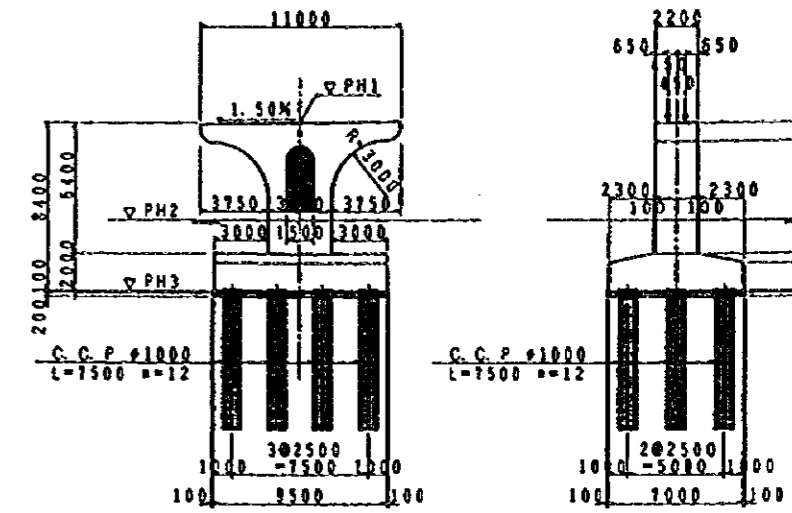
GENERAL VIEW RA/10 SAHAM (A-LINE)



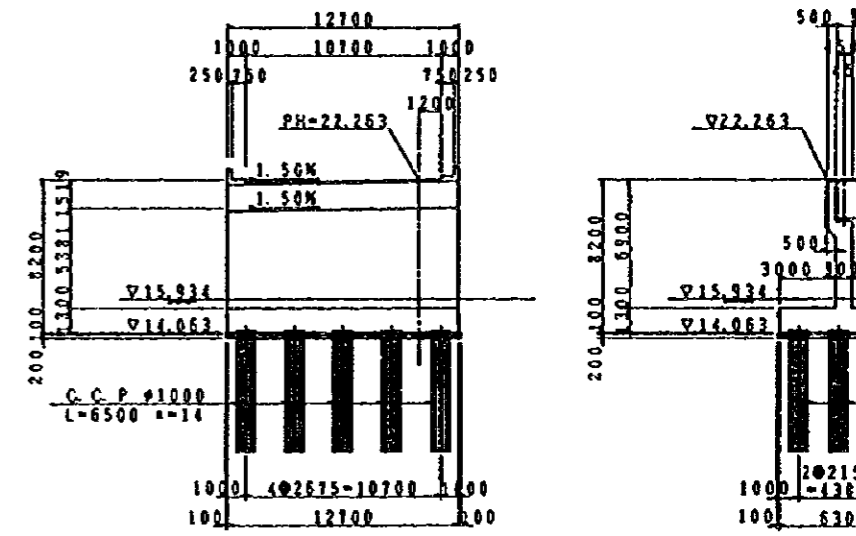
PROFILE (A-LINE) S=1:1000



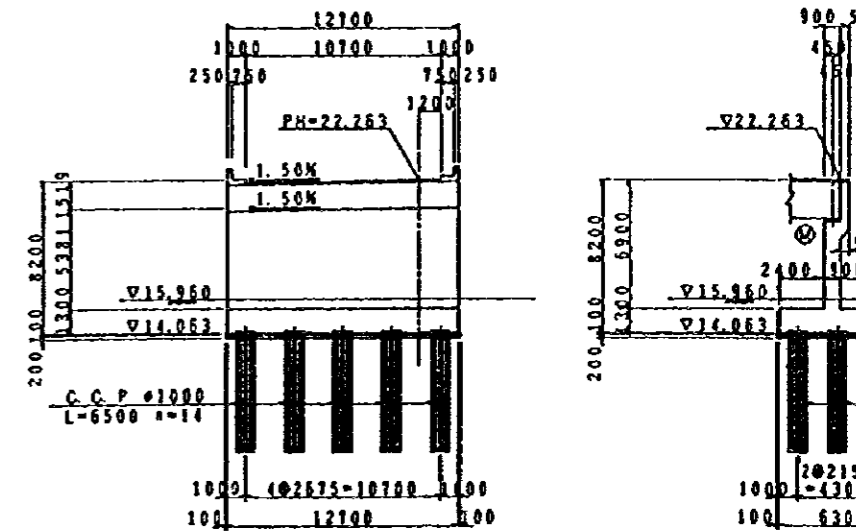
PLAN S=1:1000



SECTION OF PIERS S=1:400

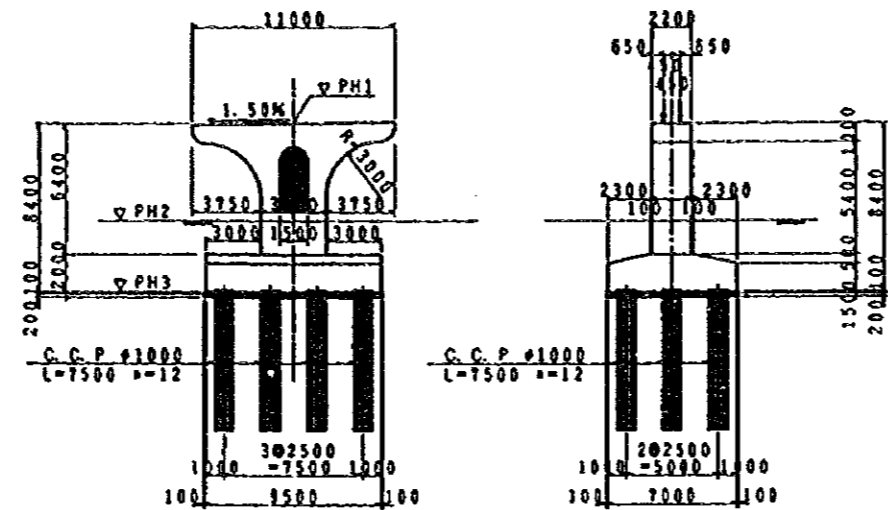
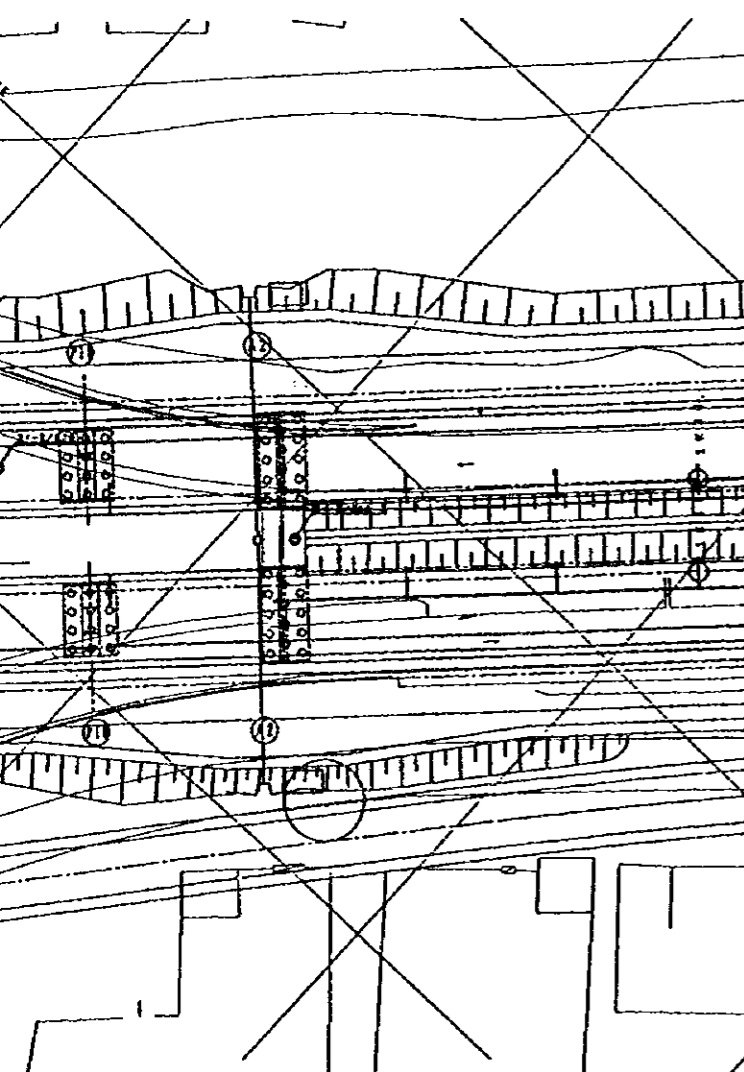
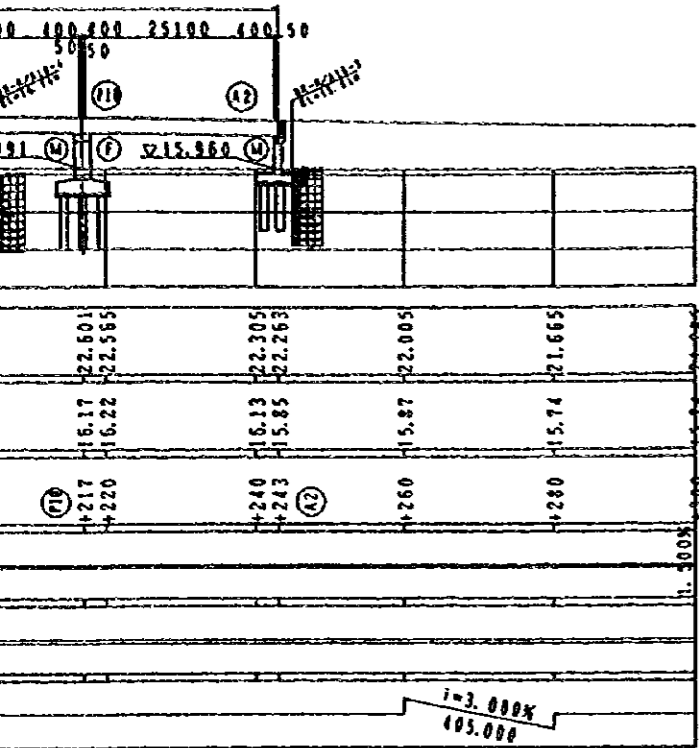


SECTION OF A1 ABUTMENT S=1:400

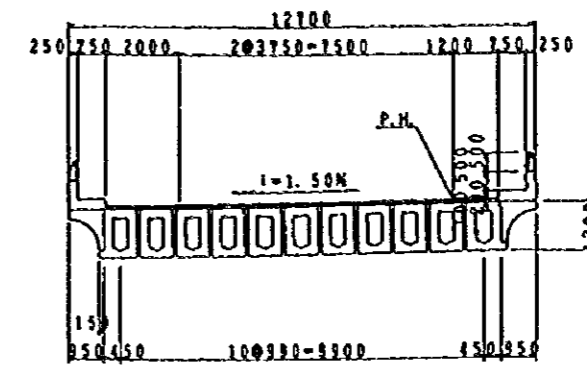


SECTION OF A2 ABUTMENT S=1:400

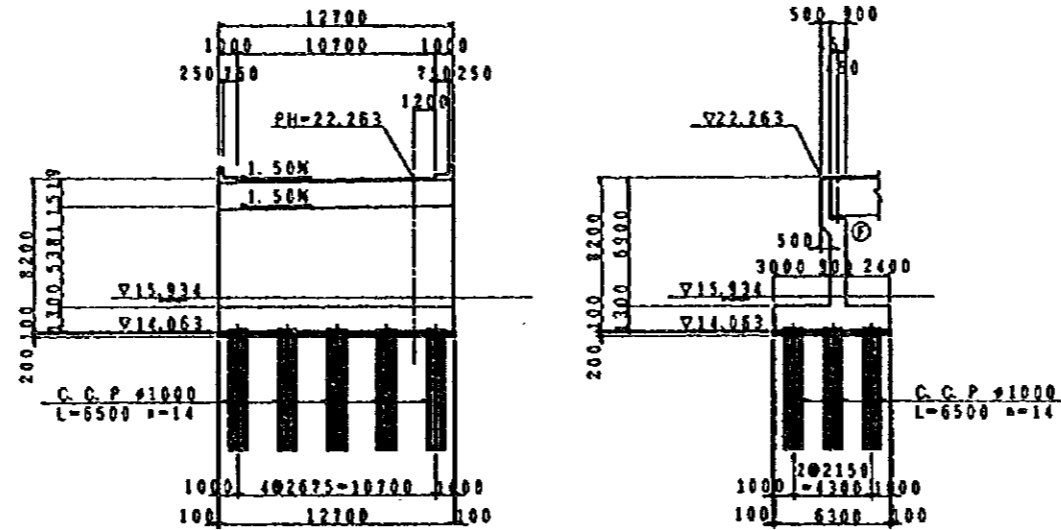
RA/10 SAHAM (A-LINE)



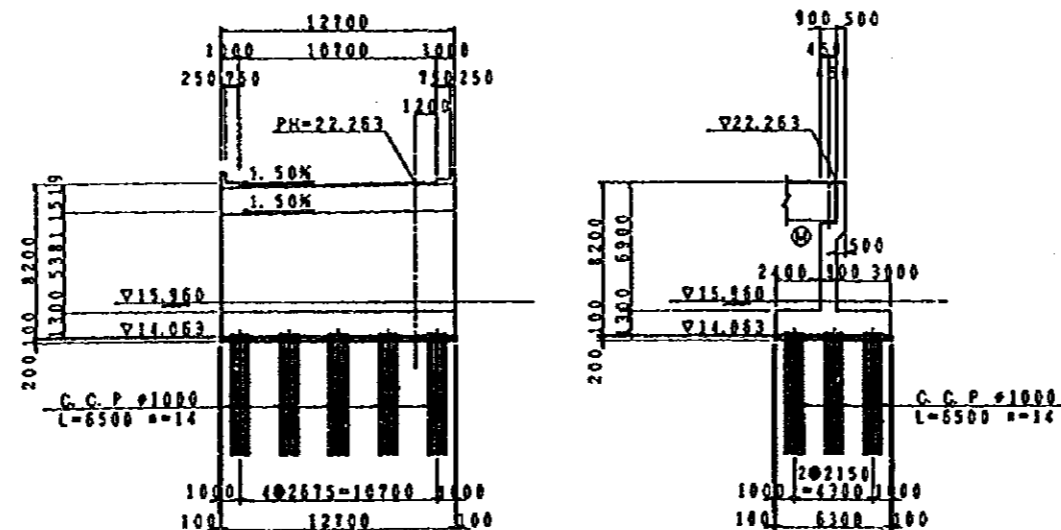
SECTION OF PIERS S=1:400



SECTION OF PC BOX GIRDER S=1:200



SECTION OF A1 ABUTMENT S=1:400



SECTION OF A2 ABUTMENT S=1:400

LIST OF PIER ELEVATION

	PH1	PH2	PH3
P1	21.003	15.973	12.603
P2	21.274	16.013	12.874
P3	21.477	16.052	13.077
P4	21.612	15.840	13.212
P5	21.679	15.840	13.279
P6	21.679	15.840	13.279
P7	21.612	15.840	13.212
P8	21.477	16.054	13.077
P9	21.274	16.023	12.874
P10	21.003	15.991	12.603

JAPAN INTERNATIONAL COOPERATION AGENCY
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JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

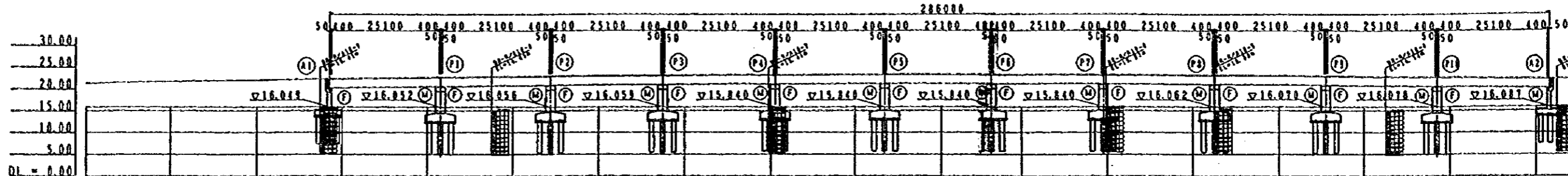
CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE: GENERAL VIEW RA/10 SAHAM (A-LINE)

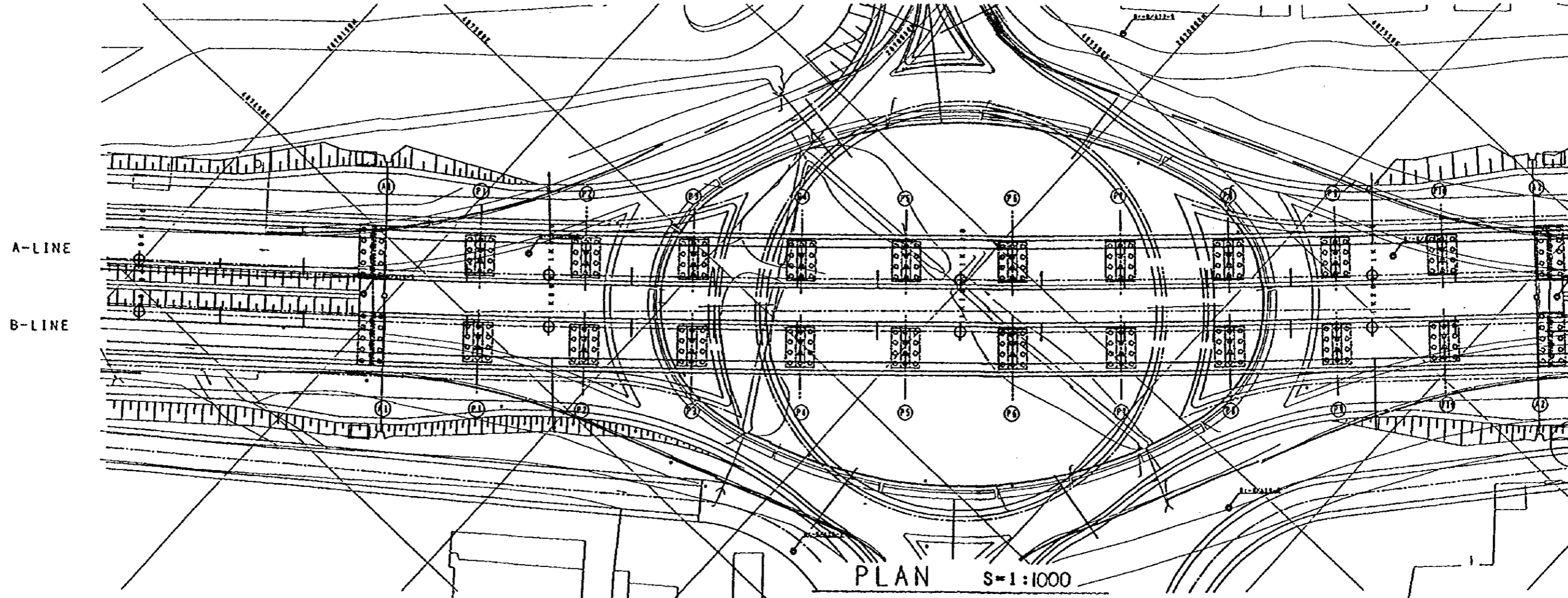
DATE: _____ DWGNO. B-1

GENERAL VIEW RA/10 SA



ELEVATION PROFILE GRADE	21.553	21.893	22.151	22.453	22.673	22.759	22.853	22.962	22.993	23.093	23.153	23.165	23.173	23.165	23.153	23.097	23.053	22.993	22.962	22.853	22.759	22.673	22.489	22.151		
ELEVATION EXISTING GROUND	15.84	15.91	15.91	16.20	16.20	16.10	15.71	15.90	15.89	16.93	17.25	18.00	17.50	16.20	15.50	18.00	16.12	17.25	16.60	16.03	16.10	16.24	16.30	16.05	16.00	
CHAINAGE	920	940	957	980	983	1001	1019	1035	1040	1060	1087	1100	1113	1120	1138	1140	1160	1165	1180	1191	1200	1217	1220	1240	1243	
SUPER ELEV																										
HORIZ. ALIGNMENT	R=5012 L=2500.000																									
VERT. ALIGNMENT	1+3.00% L=100.000																									

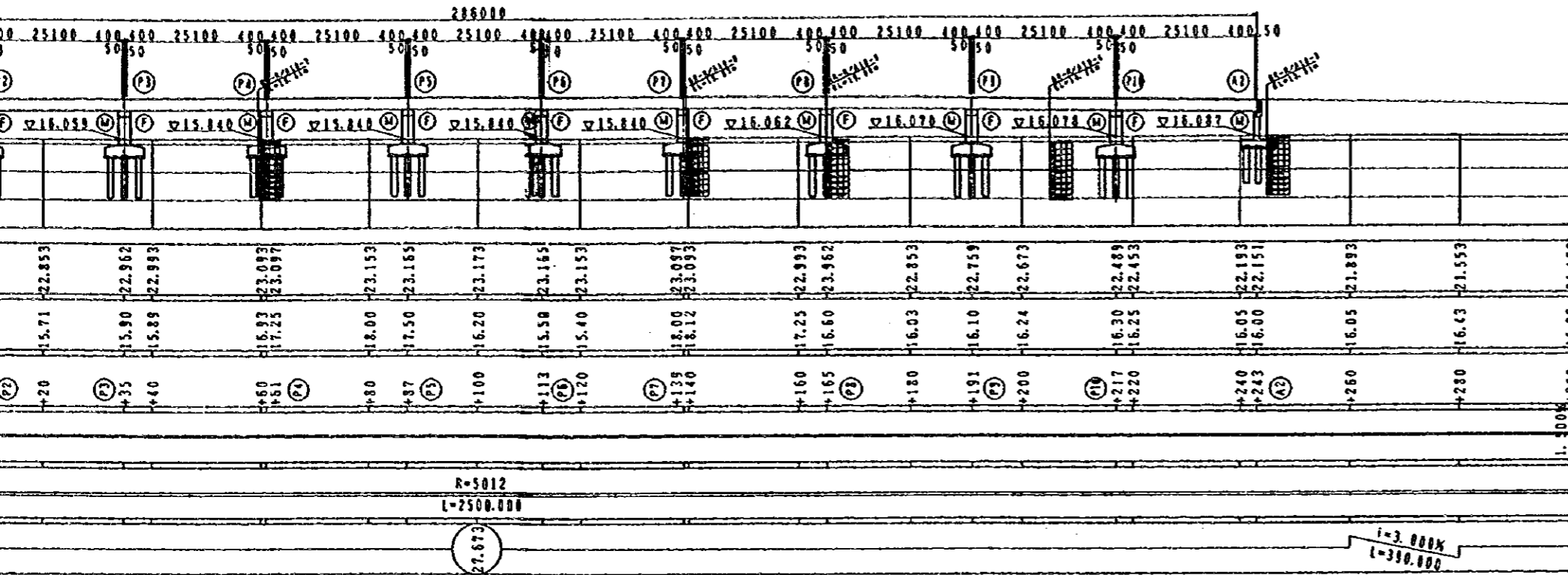
PROFILE (B-LINE) S=1:1000



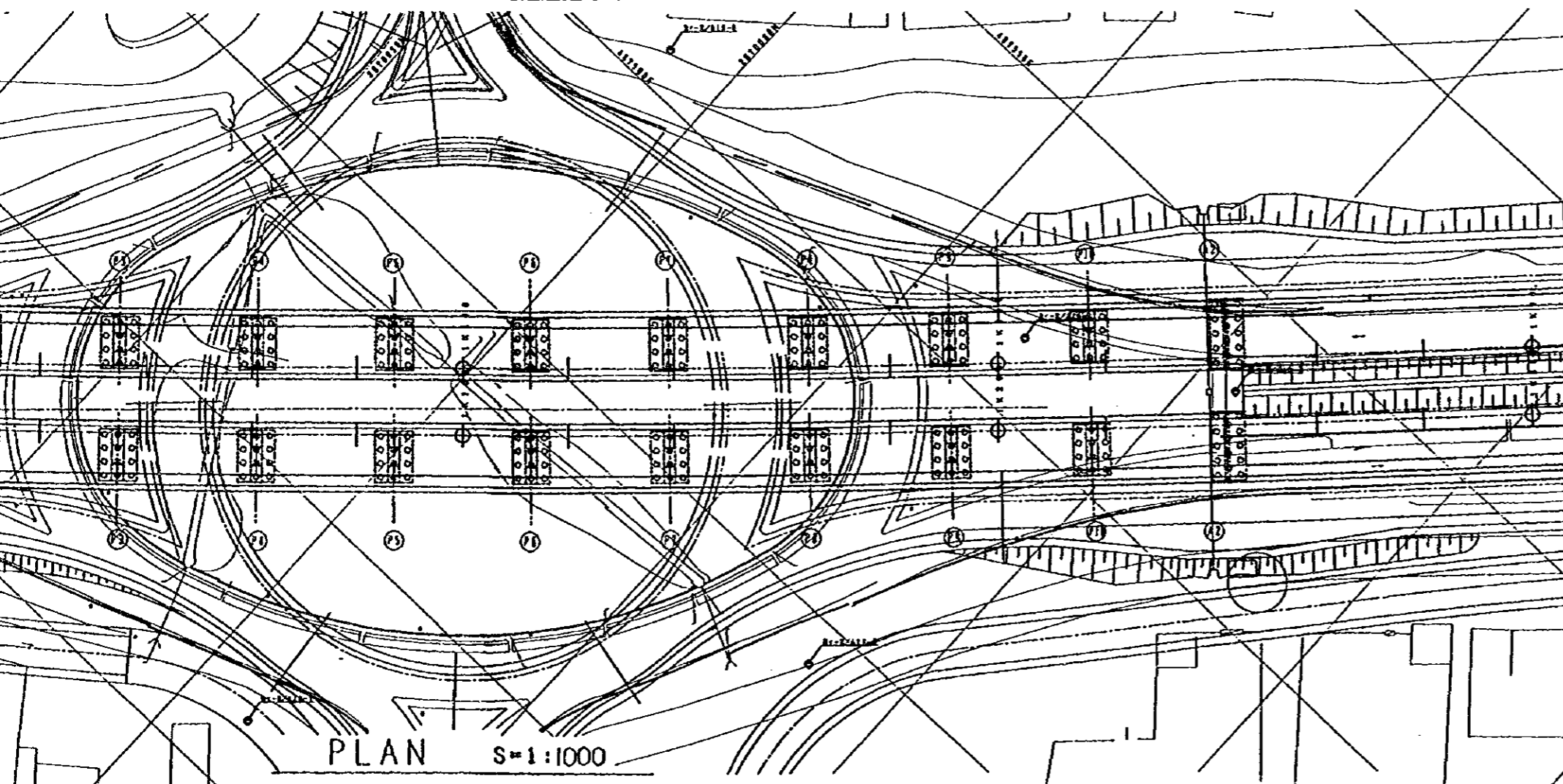
PLAN S=1:1000

NOTES:

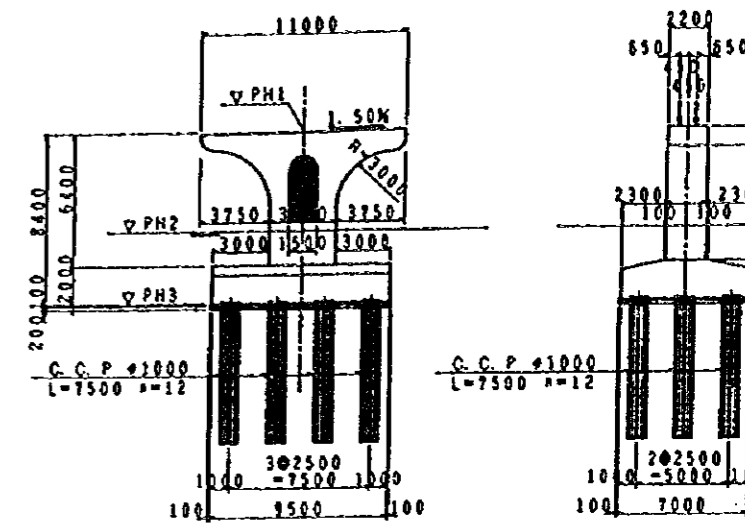
GENERAL VIEW RA/10 SAHAM (B-LINE)



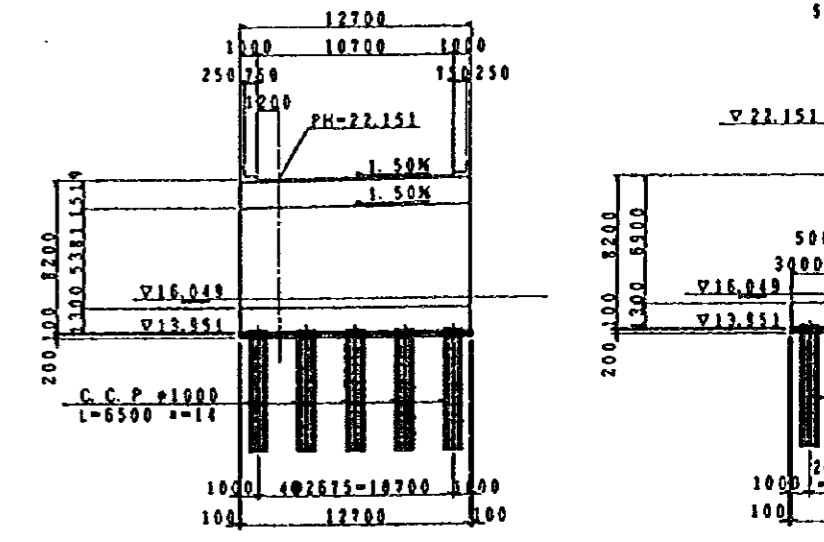
PROFILE (B-LINE) S=1:1000



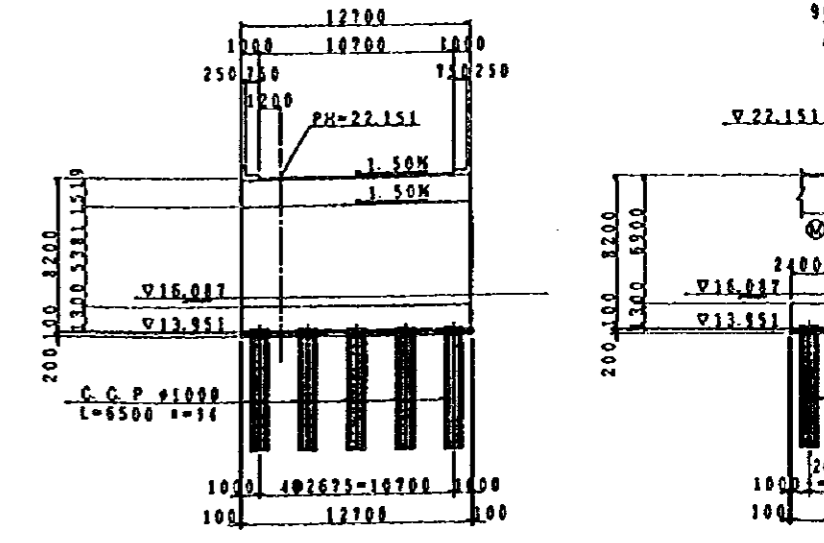
PLAN S=1:1000



SECTION OF PIERS S=1:400

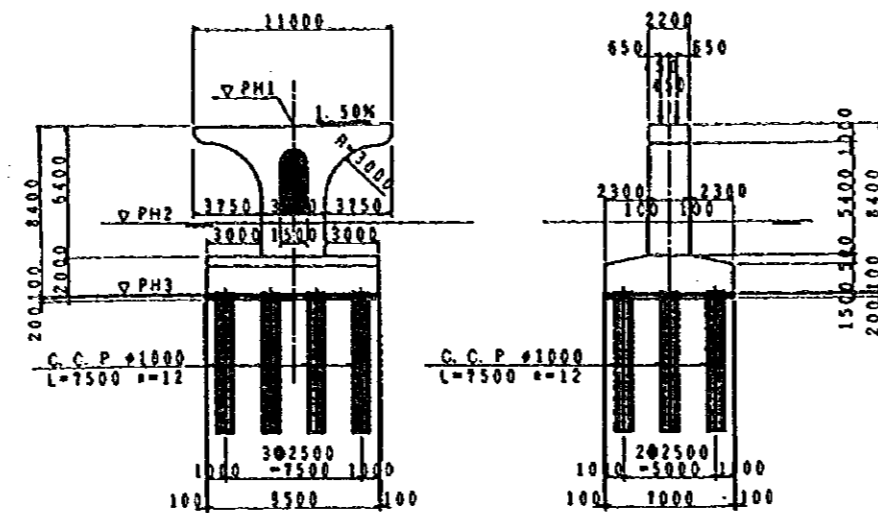
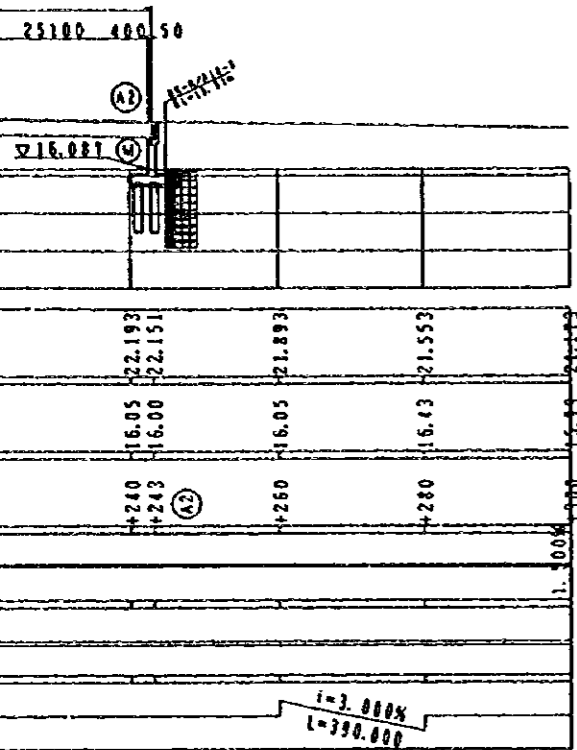


SECTION OF A1 ABUTMENT S=1:400

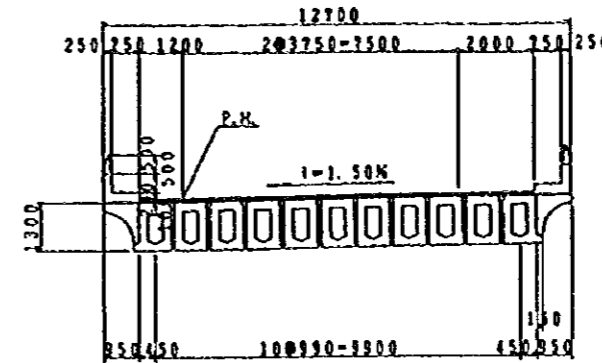


SECTION OF A2 ABUTMENT S=1:400

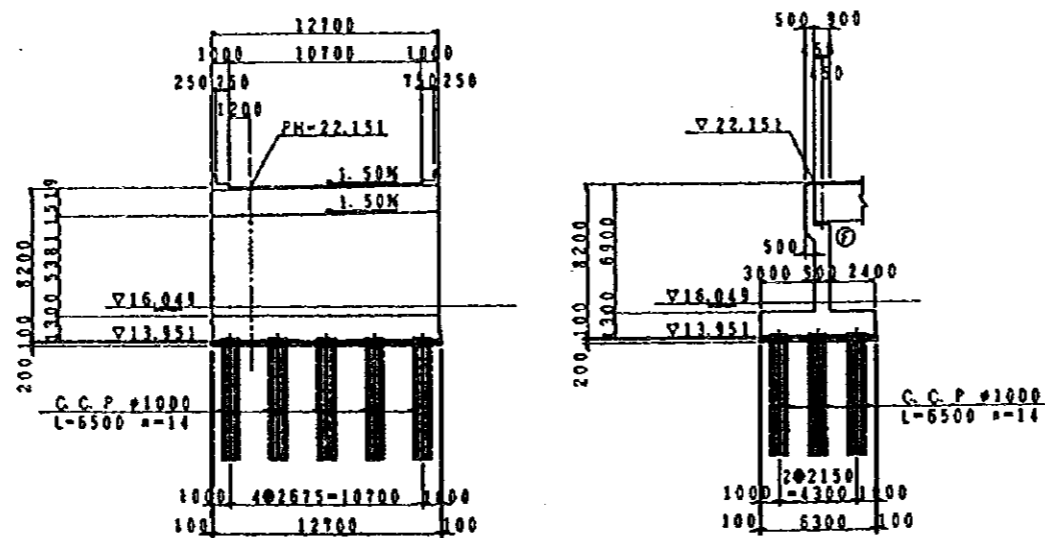
10 SAHAM (B-LINE)



SECTION OF PIERS S=1:400



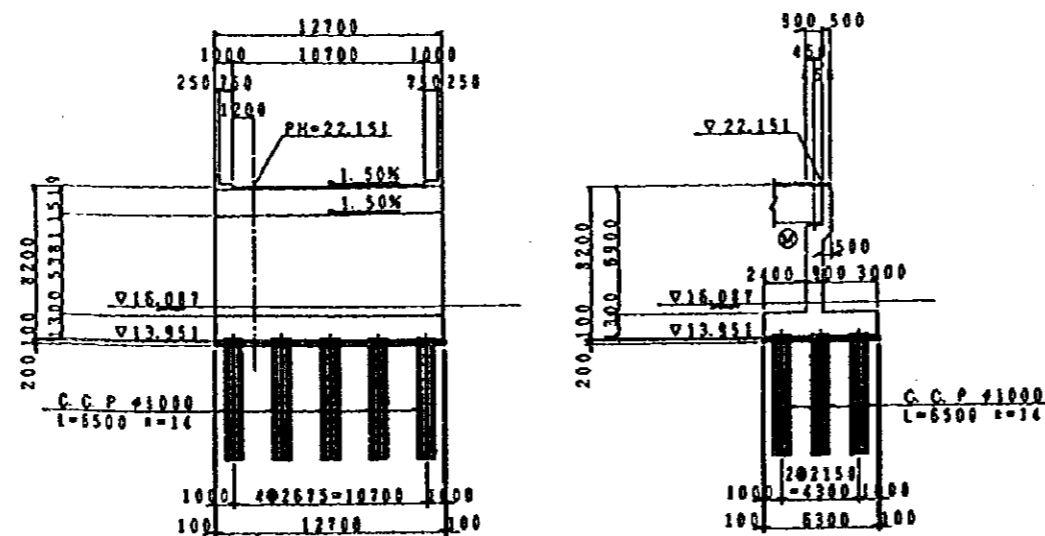
SECTION OF PC BOX GIRDER S=1:200



SECTION OF A1 ABUTMENT S=1:400

LIST OF PIER ELEVATION

	PH1	PH2	PH3
P1	21.016	16.052	12.616
P2	21.286	16.056	12.886
P3	21.489	16.059	13.089
P4	21.624	15.840	13.224
P5	21.692	15.840	13.292
P6	21.692	15.840	13.292
P7	21.624	15.840	13.224
P8	21.489	16.062	13.089
P9	21.286	16.070	12.886
P10	21.016	16.078	12.616

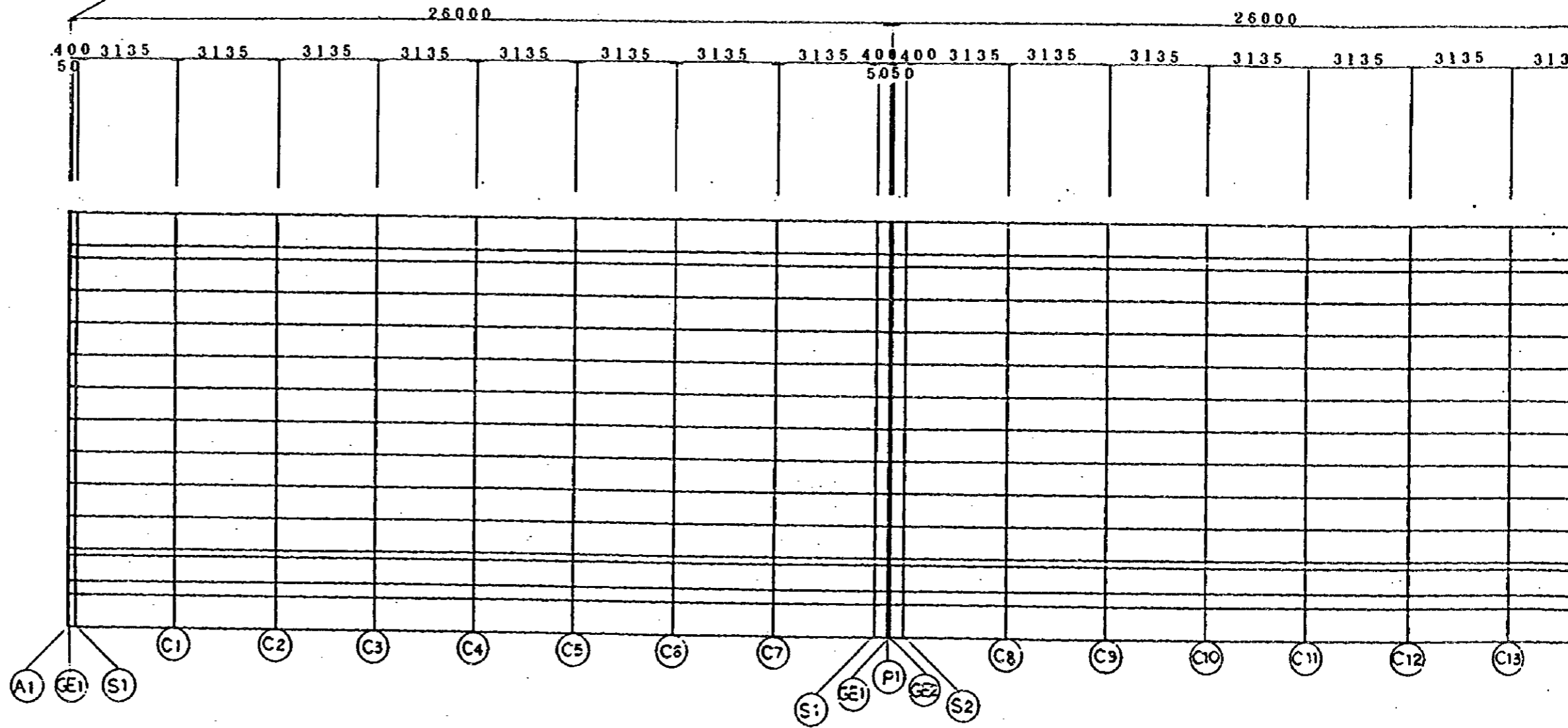


SECTION OF A2 ABUTMENT S=1:400

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE: GENERAL VIEW RA/10 SAHAM(B-LINE)
DATE: _____ DWGNO. B-2

STA NO. 0+957.000



NOTES:

26000

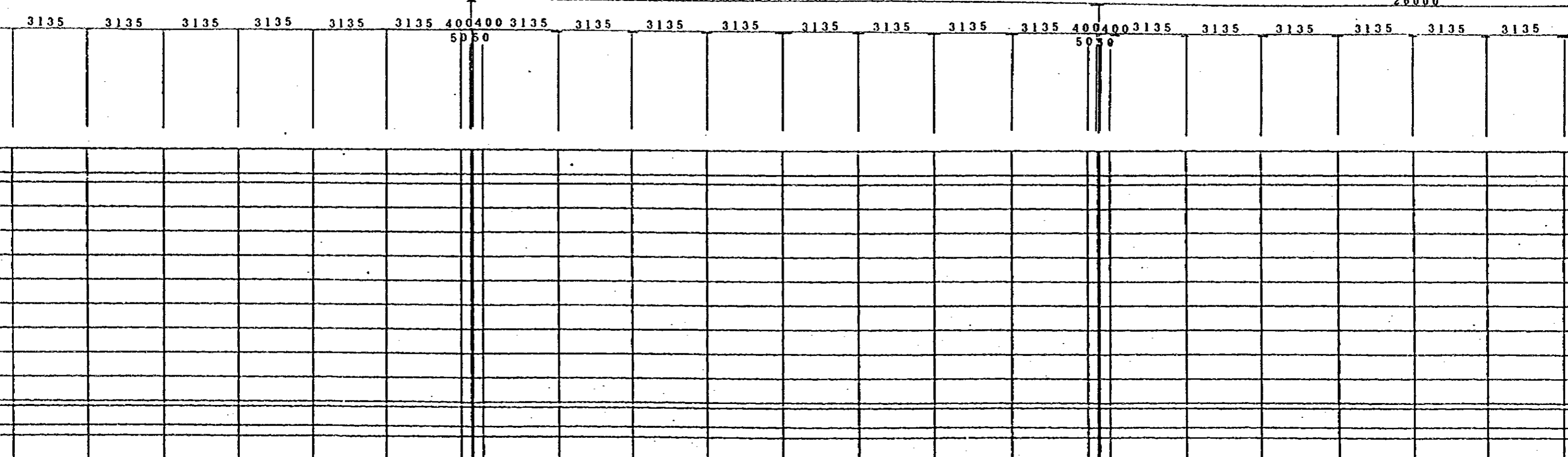
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26000

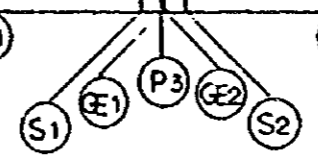
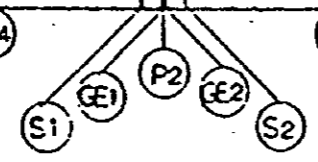
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5050

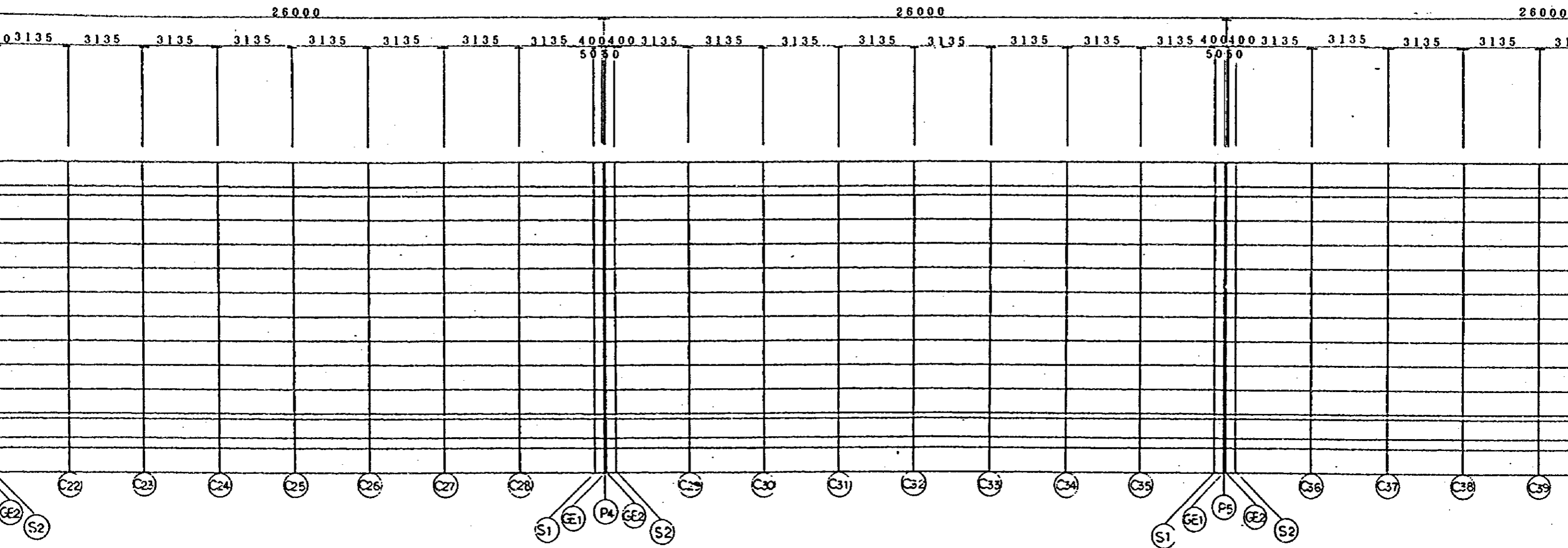
5050



(C9) (C10) (C11) (C12) (C13) (C14) (C15) (C16) (C17) (C18) (C19) (C20) (C21) (C22) (C23) (C24) (C25) (C26) (C27)

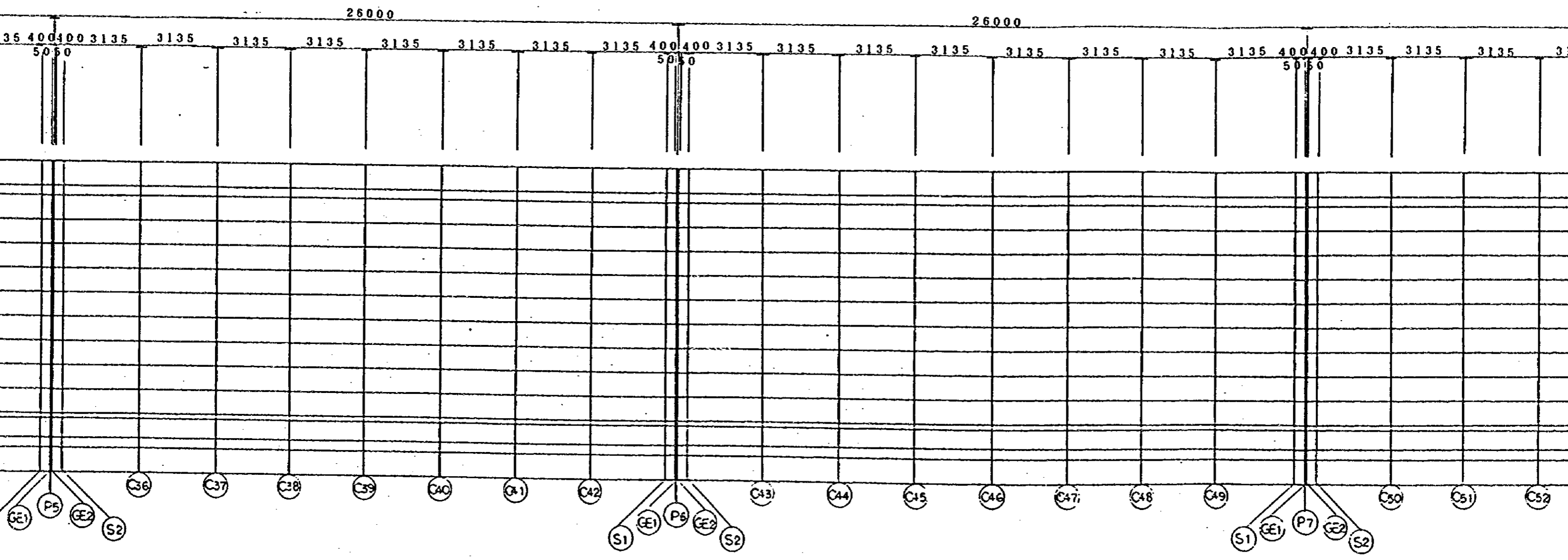


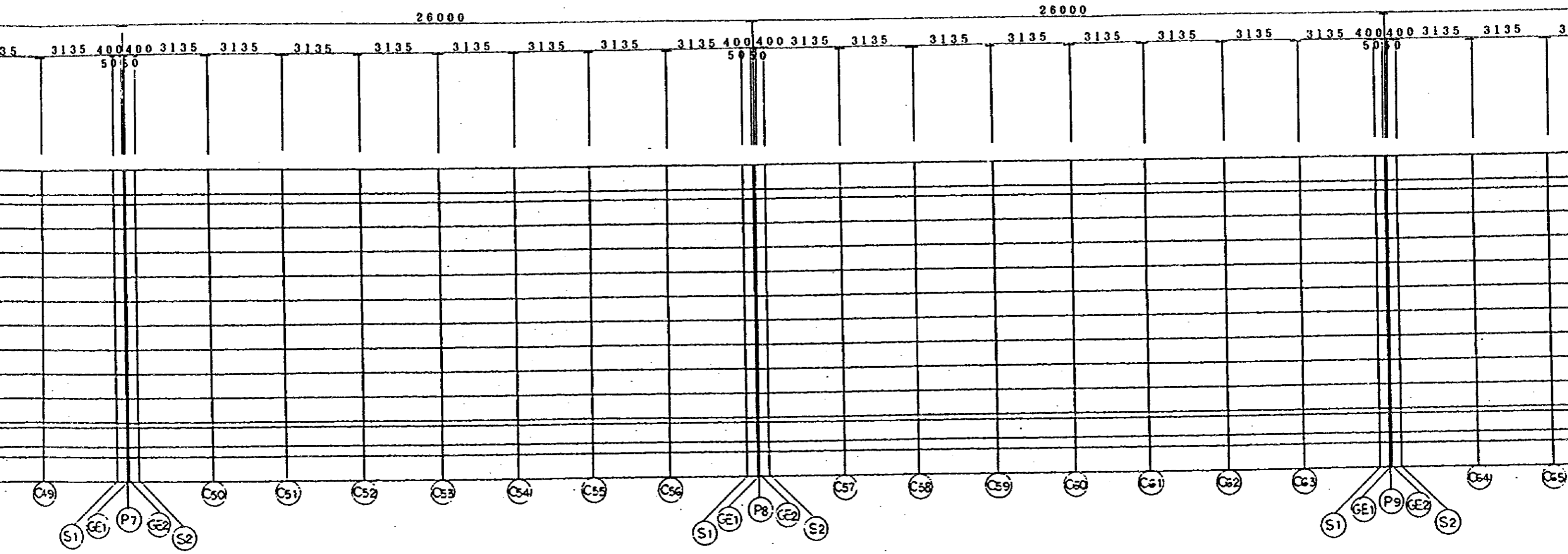
RA/10-SAHARA
A-LINE



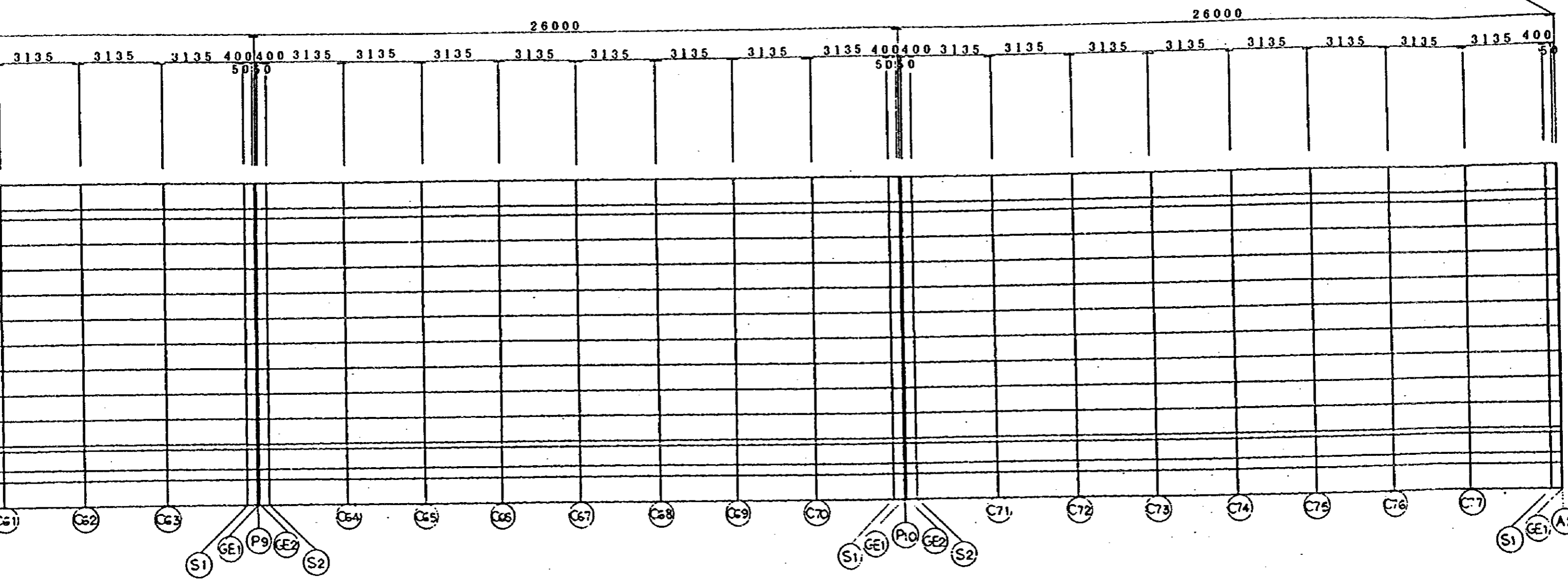
RA/10-SAHAM

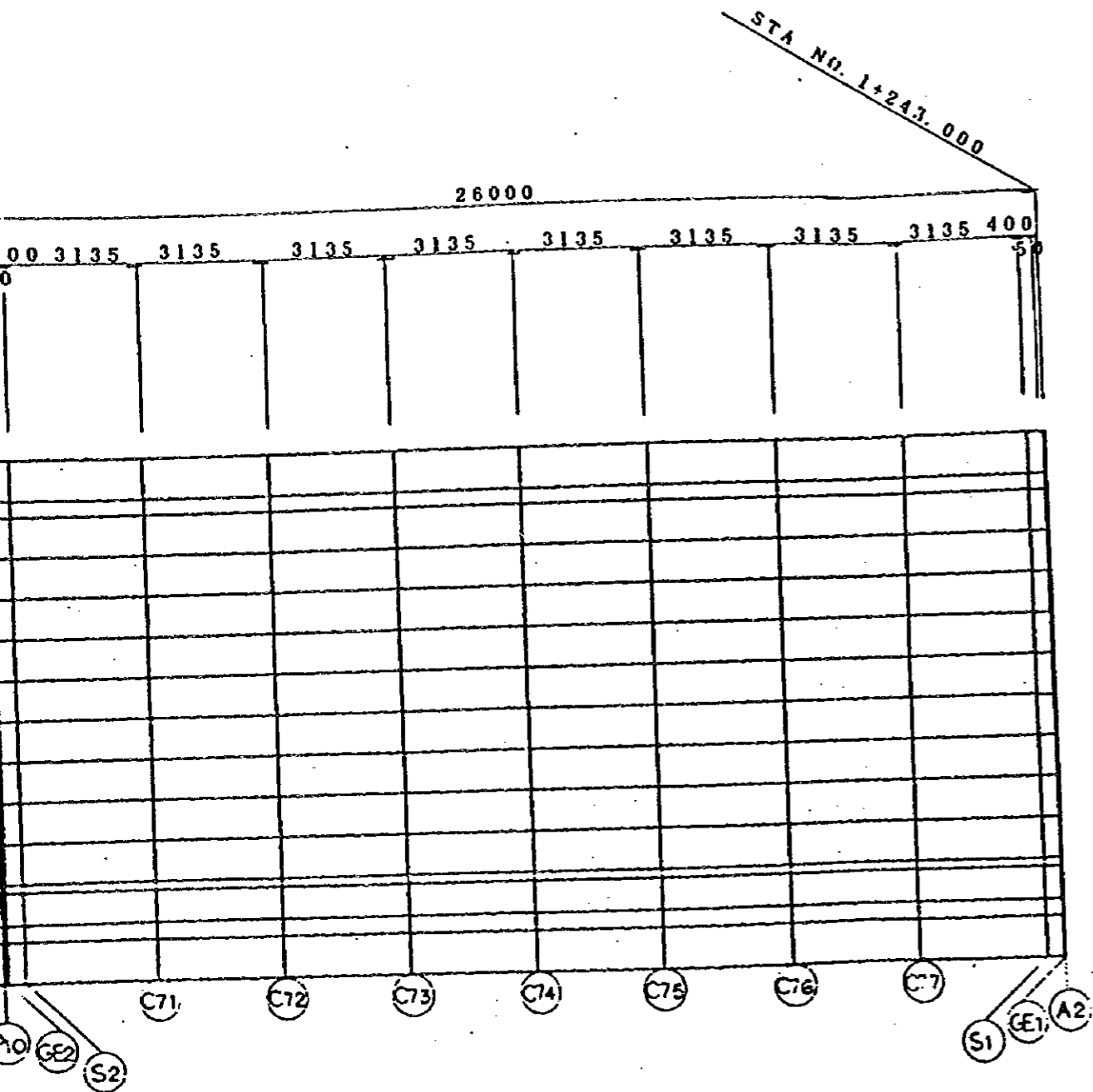
A-LINE



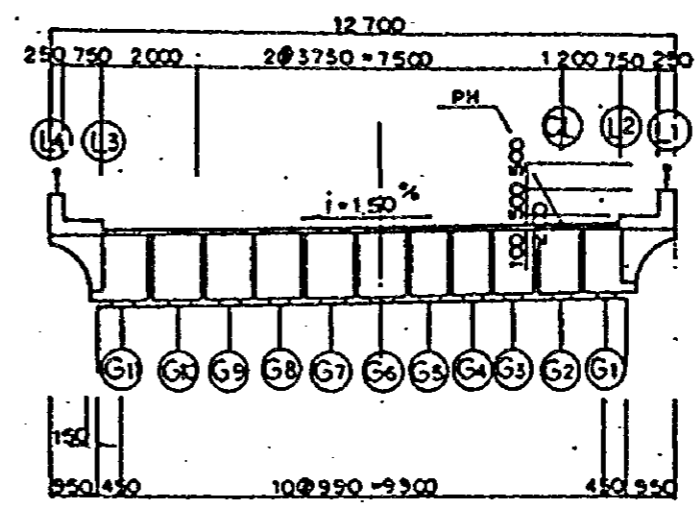


STA NO. 1+243.000





A - L I N E



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL	CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	TITLE: FRAMING PLAN RA10 AT A-LINE DATE: _____ DWGNO. B-3

SAHAM(A)

SECTION		A1	A1-GE1	A1-S1	C4	P1-S1	P1-GE1	P1	P1-GE2	P1-S2	C11	P2-S1	P2-GE1	
STATION		0 + 957.0000	0 + 957.0500	0 + 957.4500	0 + 970.0000	0 + 982.5500	0 + 982.9500	0 + 983.0000	0 + 983.0500	0 + 983.4500	0 + 998.0000	1 + 8.5500	1 + 8.9500	1 +
L4	X	0.1816	0.2316	0.6314	13.1495	25.6683	26.0682	26.1182	26.1682	26.5681	39.0877	51.608	52.008	
	Y	6.3474	6.3459	6.3345	5.9932	5.6834	5.674	5.6729	5.6717	5.6623	5.3862	5.1414	5.1342	
	Z	22.005	22.0058	22.0115	22.1825	22.3378	22.3425	22.343	22.3436	22.3483	22.4867	22.6093	22.613	
L3	X	0.153	0.203	0.6028	13.1235	25.6449	26.0448	26.0948	26.1448	26.5447	39.0669	51.5898	51.9898	
	Y	5.3478	5.3463	5.3349	4.9936	4.6837	4.6743	4.6731	4.672	4.6626	4.3864	4.1416	4.1343	
	Z	22.12	22.1208	22.1265	22.2975	22.4528	22.4575	22.4581	22.4586	22.4633	22.6017	22.7243	22.728	
G6(PIER CENTER)	X	0	0.05	0.4499	12.9848	25.5198	25.9196	25.9696	26.0196	26.4195	38.956	51.4925	51.8924	
	Y	0	-0.0013	-0.0117	-0.3377	-0.6637	-0.6741	-0.6754	-0.6764	-0.6848	-0.9456	-1.2063	-1.2147	
	Z	22.2003	22.201	22.2067	22.3775	22.533	22.5377	22.5383	22.5389	22.5435	22.6817	22.8048	22.8082	
CL	X	-0.1187	-0.0687	0.3312	12.8765	25.4226	25.8225	25.8725	25.9225	26.3224	38.8694	51.4169	51.8169	
	Y	-4.1484	-4.1498	-4.1612	-4.5032	-4.8137	-4.8231	-4.8243	-4.8254	-4.8348	-5.1115	-5.3568	-5.3641	
	Z	22.2625	22.2633	22.269	22.44	22.5953	22.6	22.6005	22.6011	22.6058	22.7442	22.8668	22.8705	
L2	X	-0.153	-0.103	0.2968	12.8453	25.3946	25.7945	25.8444	25.8944	26.2943	38.8444	51.3951	51.795	
	Y	-5.3479	-5.3493	-5.3607	-5.7028	-6.0134	-6.0228	-6.0239	-6.0251	-6.0344	-6.3113	-6.5568	-6.5639	
	Z	22.2805	22.2813	22.287	22.458	22.6133	22.618	22.6185	22.6191	22.6238	22.7622	22.8848	22.8885	
L1	X	-0.1816	-0.1316	0.2682	12.8193	25.3712	25.7711	25.821	25.871	26.2709	38.8236	51.3769	51.7768	
	Y	-6.3475	-6.3489	-6.3603	-6.7025	-7.0131	-7.0225	-7.0237	-7.0248	-7.0342	-7.3111	-7.5564	-7.5637	
	Z	22.1955	22.1963	22.202	22.373	22.5283	22.533	22.5335	22.5341	22.5388	22.6772	22.7998	22.8035	

NOTES:

P1	P1-GE2	P1-S2	C11	P2-S1	P2-GE1	P2	P2-GE2	P2-S2	C18	P3-S1	P3-GE1	P3	P3-GE2	P3-S2	C25	P4-S1	P4-GE1	P4	P4-GE2	P4-S2
983.0000	0 + 983.0500	0 + 983.4500	0 + 996.0000	1 + 8.5500	1 + 8.9500	1 + 9.0000	1 + 9.0500	1 + 9.4500	1 + 22.0000	1 + 34.5500	1 + 34.9500	1 + 35.0000	1 + 35.0500	1 + 35.4500	1 + 48.0000	1 + 60.5500	1 + 60.9500	1 + 61.0000	1 + 61.0500	1 + 61.4500
26.1182	26.1682	26.5681	39.0877	51.608	52.008	52.058	52.1079	52.5079	65.0288	77.5502	77.9502	78.0002	78.0502	78.4501	90.972	103.4942	103.8941	103.9441	103.9941	104.3941
5.6729	5.6717	5.6623	5.3862	5.1414	5.1342	5.1332	5.1323	5.1251	4.914	4.7344	4.7292	4.7285	4.7279	4.7227	4.5767	4.4622	4.4591	4.4587	4.4583	4.4552
22.343	22.3436	22.3483	22.4867	22.6093	22.613	22.6134	22.6139	22.6175	22.7233	22.8133	22.8159	22.8162	22.8166	22.8192	22.8923	22.9497	22.9513	22.9514	22.9516	22.9532
26.0948	26.1448	26.5447	39.0669	51.5898	51.9898	52.0398	52.0898	52.4897	65.0132	77.5372	77.9372	77.9872	78.0372	78.4371	90.9616	103.4864	103.8863	103.9363	103.9863	104.3863
4.6731	4.672	4.6626	4.3864	4.1416	4.1343	4.1334	4.1325	4.1252	3.9141	3.7345	3.7293	3.7286	3.728	3.7228	3.5768	3.4623	3.4591	3.4587	3.4583	3.4552
22.4581	22.4586	22.4633	22.6017	22.7243	22.728	22.7285	22.7289	22.7325	22.8383	22.9283	22.9309	22.9312	22.9316	22.9342	23.0073	23.0647	23.0663	23.0664	23.0666	23.0682
25.9696	26.0196	26.4195	38.956	51.4925	51.8924	51.9424	51.9924	52.3923	64.93	77.4677	77.8676	77.9176	77.9676	78.3676	90.9061	103.4446	103.8446	103.8946	103.9446	104.3446
-0.6754	-0.6764	-0.6848	-0.9456	-1.2063	-1.2147	-1.2157	-1.2165	-1.2227	-1.4183	-1.6139	-1.6202	-1.6209	-1.6215	-1.6256	-1.756	-1.8864	-1.8906	-1.8911	-1.8914	-1.8935
22.5383	22.5389	22.5435	22.6817	22.8046	22.8082	22.8087	22.8092	22.8128	22.9183	23.0085	23.0112	23.0115	23.0118	23.0144	23.0873	23.1449	23.1465	23.1467	23.1469	23.1484
25.8725	25.9225	26.3224	38.8694	51.4169	51.8169	51.8669	51.9169	52.3168	64.865	77.4137	77.8137	77.8637	77.9137	78.3136	90.8628	103.4123	103.8122	103.8622	103.9122	104.3122
-4.8243	-4.8254	-4.8348	-5.1115	-5.3568	-5.3641	-5.365	-5.3659	-5.3732	-5.5847	-5.7647	-5.7699	-5.7706	-5.7712	-5.7764	-5.9227	-6.0375	-6.0406	-6.041	-6.0414	-6.0445
22.6005	22.6011	22.6058	22.7442	22.8668	22.8705	22.8709	22.8714	22.875	22.9808	23.0708	23.0734	23.0737	23.0741	23.0767	23.1498	23.2072	23.2088	23.209	23.2091	23.2107
25.8444	25.8944	26.2943	38.8444	51.3951	51.795	51.845	51.895	52.295	64.8463	77.3981	77.7981	77.8481	77.8981	78.298	90.8503	103.4029	103.8029	103.8529	103.9029	104.3029
-6.0239	-6.0251	-6.0344	-6.3113	-6.5566	-6.5639	-6.5648	-6.5657	-6.573	-6.7846	-6.9646	-6.9698	-6.9705	-6.9711	-6.9763	-7.1226	-7.2374	-7.2406	-7.2409	-7.2413	-7.2444
22.6185	22.6191	22.6238	22.7622	22.8848	22.8885	22.8889	22.8894	22.893	22.9988	23.0888	23.0914	23.0917	23.0921	23.0947	23.1678	23.2252	23.2268	23.2269	23.2271	23.2287
25.821	25.871	26.2709	38.8236	51.3769	51.7768	51.8268	51.8768	52.2768	64.8307	77.3851	77.7851	77.8351	77.8851	78.285	90.8399	103.3951	103.7951	103.8451	103.8951	104.2951
-7.0237	-7.0248	-7.0342	-7.3111	-7.5564	-7.5637	-7.5647	-7.5656	-7.5728	-7.7844	-7.9645	-7.9698	-7.9704	-7.9711	-7.9762	-8.1226	-8.2374	-8.2405	-8.2409	-8.2413	-8.2444
22.5335	22.5341	22.5388	22.6772	22.7998	22.8035	22.804	22.8044	22.808	22.9138	23.0038	23.0064	23.0068	23.0071	23.0097	23.0828	23.1402	23.1418	23.1419	23.1421	23.1437

FRAMING PLAN AT RA/10 SAHAM (A-LINE)

C25	P4-S1	P4-GE1	P4	P4-GE2	P4-S2	C32	P5-S1	P5-GE1	P5	P5-GE2	P5-S2	C39	P6-S1	P6-GE1	P6	P6-GE2	P6-S2	C46	P7-S1	P7-GE1
1 + 48.0000	1 + 60.5500	1 + 60.9500	1 + 61.0000	1 + 61.0500	1 + 61.4500	1 + 74.0000	1 + 86.5500	1 + 86.9500	1 + 87.0000	1 + 87.0500	1 + 87.4500	1 + 100.0000	1 + 112.5500	1 + 112.9500	1 + 113.0000	1 + 113.0500	1 + 113.4500	1 + 126.0000	1 + 138.5500	1 + 138.9500
90.972	103.4942	103.8941	103.9441	103.9941	104.3941	116.9166	129.4392	129.8392	129.8892	129.9392	130.3392	142.8618	155.3845	155.7845	155.8345	155.8845	156.2845	168.8071	181.3296	181.729
4.5767	4.4622	4.4591	4.4587	4.4583	4.4552	4.3744	4.325	4.3239	4.3238	4.3237	4.3226	4.3069	4.3226	4.3237	4.3238	4.3239	4.325	4.3744	4.4552	4.458
22.8923	22.9497	22.9513	22.9514	22.9516	22.9532	22.9937	23.0185	23.019	23.019	23.0191	23.0196	23.0275	23.0196	23.0191	23.019	23.019	23.0185	22.9937	22.9532	22.951
90.9616	103.4864	103.8863	103.9363	103.9863	104.3863	116.9114	129.4366	129.8366	129.8866	129.9366	130.3366	142.8618	155.3871	155.7871	155.8371	155.8871	156.2871	168.8123	181.3374	181.737
3.5768	3.4623	3.4591	3.4587	3.4583	3.4552	3.3744	3.325	3.3239	3.3238	3.3237	3.3226	3.3069	3.3226	3.3237	3.3238	3.3239	3.325	3.3744	3.4553	3.458
23.0073	23.0647	23.0663	23.0664	23.0666	23.0682	23.1087	23.1335	23.134	23.1341	23.1341	23.1346	23.1425	23.1346	23.1341	23.1341	23.134	23.1335	23.1087	23.0682	23.066
90.9061	103.4446	103.8446	103.8946	103.9446	104.3446	116.8836	129.4227	129.8227	129.8727	129.9227	130.3227	142.8619	155.401	155.801	155.851	155.901	156.301	168.8401	181.3791	181.779
-1.756	-1.8864	-1.8906	-1.8911	-1.8914	-1.8935	-1.9587	-2.0239	-2.0259	-2.0262	-2.0262	-2.0262	-2.0262	-2.0262	-2.0262	-2.0262	-2.0259	-2.0238	-1.9586	-1.8934	-1.891
23.0873	23.1449	23.1465	23.1467	23.1469	23.1484	23.1887	23.2137	23.2142	23.2143	23.2144	23.2149	23.2225	23.2149	23.2144	23.2143	23.2142	23.2137	23.1887	23.1484	23.146
90.8628	103.4123	103.8122	103.8622	103.9122	104.3122	116.862	129.4119	129.8119	129.8619	129.9119	130.3119	142.8619	155.4118	155.8118	155.8618	155.9118	156.3118	168.8617	181.4115	181.811
-5.9227	-6.0375	-6.0406	-6.041	-6.0414	-6.0445	-6.1255	-6.175	-6.176	-6.1762	-6.1763	-6.1773	-6.1931	-6.1773	-6.1763	-6.1762	-6.176	-6.175	-6.1255	-6.0445	-6.041
23.1498	23.2072	23.2088	23.209	23.2091	23.2107	23.2512	23.276	23.2765	23.2765	23.2766	23.2771	23.285	23.2771	23.2766	23.2766	23.2765	23.276	23.2512	23.2107	23.209
90.8503	103.4029	103.8029	103.8529	103.9029	104.3029	116.8557	129.4087	129.8087	129.8587	129.9087	130.3087	142.8619	155.415	155.815	155.865	155.915	156.315	168.868	181.4208	181.820
-7.1226	-7.2374	-7.2406	-7.2409	-7.2413	-7.2444	-7.3255	-7.375	-7.376	-7.3762	-7.3763	-7.3773	-7.3931	-7.3773	-7.3763	-7.3762	-7.376	-7.375	-7.3254	-7.2444	-7.241
23.1678	23.2252	23.2268	23.2269	23.2271	23.2287	23.2692	23.294	23.2945	23.2945	23.2946	23.2951	23.303	23.2951	23.2946	23.2945	23.2945	23.294	23.2692	23.2287	23.227
90.8399	103.3951	103.7951	103.8451	103.8951	104.2951	116.8505	129.4061	129.8061	129.8561	129.9061	130.3061	142.8619	155.4176	155.8176	155.8676	155.9176	156.3176	168.8732	181.4286	181.828
-8.1226	-8.2374	-8.2405	-8.2409	-8.2413	-8.2444	-8.3255	-8.375	-8.376	-8.3762	-8.3763	-8.3773	-8.3931	-8.3773	-8.3763	-8.3762	-8.376	-8.375	-8.3254	-8.2444	-8.241
23.0828	23.1402	23.1418	23.1419	23.1421	23.1437	23.1842	23.209	23.2095	23.2096	23.2096	23.2101	23.218	23.2101	23.2096	23.2096	23.2095	23.209	23.1842	23.1437	23.142

GE2	P6-S2	C46	P7-S1	P7-GE1	P7	P7-GE2	P7-S2	C53	P8-S1	P8-GE1	P8	P8-GE2	P8-S2	C60	P9-S1	P9-GE1	P9	P9-GE2	P9-S2	C67	P
13.0500	1 + 113.4500	1 + 126.0000	1 + 138.5500	1 + 138.9500	1 + 139.0000	1 + 139.0500	1 + 139.4500	1 + 152.0000	1 + 164.5500	1 + 164.9500	1 + 165.0000	1 + 165.0500	1 + 165.4500	1 + 178.0000	1 + 190.5500	1 + 190.9500	1 + 191.0000	1 + 191.0500	1 + 191.4500	1 + 204.0000	1 +
5.8845	156.2845	168.8071	181.3296	181.7296	181.7795	181.8295	182.2295	194.7517	207.2736	207.6735	207.7235	207.7735	208.1735	220.6949	233.2158	233.6157	233.6657	233.7157	234.1157	246.636	
4.3239	4.325	4.3744	4.4552	4.4583	4.4587	4.4591	4.4622	4.5768	4.7227	4.7279	4.7286	4.7292	4.7344	4.9141	5.1251	5.1324	5.1333	5.1342	5.1415	5.3862	
23.019	23.0185	22.9937	22.9532	22.9516	22.9514	22.9513	22.9497	22.8923	22.8192	22.8166	22.8162	22.8158	22.8133	22.7233	22.6175	22.6139	22.6135	22.613	22.6093	22.4867	
5.8871	156.2871	168.8123	181.3374	181.7374	181.7874	181.8373	182.2373	194.7621	207.2866	207.6865	207.7365	207.7865	208.1865	220.7105	233.234	233.6339	233.6839	233.7339	234.1339	246.6568	
3.3239	3.325	3.3744	3.4553	3.4584	3.4587	3.4591	3.4623	3.5768	3.7228	3.728	3.7286	3.7293	3.7345	3.9142	4.1253	4.1325	4.1335	4.1344	4.1417	4.3865	
23.134	23.1335	23.1087	23.0682	23.0666	23.0665	23.0663	23.0647	23.0073	22.9342	22.9316	22.9312	22.9309	22.9283	22.8383	22.7325	22.7289	22.7285	22.728	22.7243	22.6017	
55.901	156.301	168.8401	181.3791	181.7791	181.8291	181.8791	182.2791	194.8176	207.3561	207.7561	207.8061	207.8561	208.256	220.7937	233.3313	233.7313	233.7813	233.8313	234.2312	246.7677	
2.0259	-2.0238	-1.9586	-1.8934	-1.8913	-1.8911	-1.8906	-1.8864	-1.756	-1.6256	-1.6214	-1.6209	-1.6201	-1.6139	-1.4183	-1.2227	-1.2164	-1.2157	-1.2146	-1.2063	-0.9455	
3.2142	23.2137	23.1887	23.1484	23.1469	23.1467	23.1465	23.1449	23.0873	23.0144	23.0118	23.0115	23.0112	23.0085	22.9183	22.8128	22.8092	22.8087	22.8082	22.8046	22.6817	
5.9118	156.3118	168.8617	181.4115	181.8115	181.8615	181.9115	182.3114	194.8609	207.4101	207.81	207.86	207.91	208.31	220.8587	233.4069	233.8068	233.8568	233.9068	234.3067	246.8544	
-6.176	-6.175	-6.1255	-6.0445	-6.0414	-6.041	-6.0406	-6.0374	-5.9227	-5.7764	-5.7712	-5.7706	-5.7699	-5.7647	-5.5847	-5.3731	-5.3659	-5.365	-5.3641	-5.3568	-5.1115	
3.2765	23.276	23.2512	23.2107	23.2091	23.209	23.2088	23.2072	23.1498	23.0767	23.0741	23.0737	23.0734	23.0708	22.9808	22.875	22.8714	22.871	22.8705	22.8668	22.7442	
55.915	156.315	168.868	181.4208	181.8208	181.8708	181.9208	182.3208	194.8734	207.4257	207.8256	207.8756	207.9256	208.3256	220.8774	233.4287	233.8287	233.8787	233.9287	234.3286	246.8793	
-7.376	-7.375	-7.3254	-7.2444	-7.2413	-7.2409	-7.2405	-7.2374	-7.1226	-6.9763	-6.9711	-6.9705	-6.9698	-6.9646	-6.7845	-6.5729	-6.5657	-6.5648	-6.5639	-6.5566	-6.3112	
3.2945	23.294	23.2692	23.2287	23.2271	23.2269	23.2268	23.2252	23.1678	23.0947	23.0921	23.0917	23.0914	23.0888	22.9988	22.893	22.8894	22.889	22.8885	22.8848	22.7622	
5.9176	156.3176	168.8732	181.4286	181.8286	181.8786	181.9286	182.3286	194.8838	207.4387	207.8386	207.8886	207.9386	208.3386	220.893	233.4469	233.8469	233.8969	233.9469	234.3468	246.9001	
-8.376	-8.375	-8.3254	-8.2444	-8.2413	-8.2409	-8.2405	-8.2374	-8.1225	-7.9762	-7.971	-7.9704	-7.9697	-7.9645	-7.7844	-7.5728	-7.5655	-7.5646	-7.5637	-7.5564	-7.311	
3.2095	23.209	23.1842	23.1437	23.1421	23.1419	23.1418	23.1402	23.0828	23.0097	23.0071	23.0067	23.0064	23.0038	22.9138	22.808	22.8044	22.804	22.8035	22.7998	22.6772	

	P8-S2	C60	P9-S1	P9-GE1	P9	P9-GE2	P9-S2	C67	P10-S1	P10-GE1	P10	P10-GE2	P10-S2	C74	A2-S1	A2-GE1	A2
0500	1 + 165.4500	1 + 178.0000	1 + 190.5500	1 + 190.9500	1 + 191.0000	1 + 191.0500	1 + 191.4500	1 + 204.0000	1 + 216.5500	1 + 216.9500	1 + 217.0000	1 + 217.0500	1 + 217.4500	1 + 230.0000	1 + 242.5500	1 + 242.9500	1 + 243.0000
735	208.1735	220.6949	233.2158	233.6157	233.6657	233.7157	234.1157	246.636	259.1556	259.5555	259.6055	259.6555	260.0554	272.5742	285.0923	285.4921	285.5421
7292	4.7344	4.9141	5.1251	5.1324	5.1333	5.1342	5.1415	5.3862	5.6624	5.6718	5.6729	5.6741	5.6835	5.9933	6.3346	6.346	6.3474
159	22.8133	22.7233	22.6175	22.6139	22.6135	22.613	22.6093	22.4867	22.3483	22.3436	22.3431	22.3425	22.3378	22.1825	22.0115	22.0058	22.005
865	208.1865	220.7105	233.234	233.6339	233.6839	233.7339	234.1339	246.6568	259.179	259.5789	259.6289	259.6789	260.0788	272.6002	285.1209	285.5207	285.5707
7293	3.7345	3.9142	4.1253	4.1325	4.1335	4.1344	4.1417	4.3865	4.6627	4.672	4.6732	4.6744	4.6837	4.9937	5.335	5.3464	5.3478
309	22.9283	22.8383	22.7325	22.7289	22.7285	22.728	22.7243	22.6017	22.4633	22.4586	22.4581	22.4575	22.4528	22.2975	22.1265	22.1208	22.1201
3561	208.256	220.7937	233.3313	233.7313	233.7813	233.8313	234.2312	246.7677	259.3042	259.7041	259.7541	259.8041	260.2039	272.7389	285.2738	285.6737	285.7237
5201	-1.6139	-1.4183	-1.2227	-1.2164	-1.2157	-1.2146	-1.2063	-0.9455	-0.6847	-0.6764	-0.6753	-0.674	-0.6636	-0.3377	-0.0117	-0.0013	0
112	23.0085	22.9183	22.8128	22.8092	22.8087	22.8082	22.8046	22.6817	22.5435	22.5389	22.5383	22.5377	22.533	22.3775	22.2067	22.201	22.2003
791	208.31	220.8587	233.4069	233.8068	233.8568	233.9068	234.3067	246.8544	259.4013	259.8012	259.8512	259.9012	260.301	272.8472	285.3925	285.7924	285.8424
7699	-5.7647	-5.5847	-5.3731	-5.3659	-5.365	-5.3641	-5.3568	-5.1115	-4.8347	-4.8254	-4.8242	-4.823	-4.8137	-4.5031	-4.1611	-4.1497	-4.1483
734	23.0708	22.9808	22.875	22.8714	22.871	22.8705	22.8668	22.7442	22.6058	22.6011	22.6006	22.6	22.5953	22.44	22.269	22.2633	22.2625
9256	208.3256	220.8774	233.4287	233.8287	233.8787	233.9287	234.3286	246.8793	259.4294	259.8293	259.8792	259.9292	260.3291	272.8784	285.4269	285.8267	285.8767
8698	-6.9646	-6.7845	-6.5729	-6.5657	-6.5648	-6.5639	-6.5566	-6.3112	-6.0344	-6.025	-6.0239	-6.0227	-6.0133	-5.7027	-5.3606	-5.3492	-5.3478
914	23.0888	22.9988	22.893	22.8894	22.889	22.8885	22.8848	22.7622	22.6238	22.6191	22.6185	22.618	22.6133	22.458	22.287	22.2813	22.2805
9386	208.3386	220.893	233.4469	233.8469	233.8969	233.9469	234.3468	246.9001	259.4528	259.8527	259.9026	259.9526	260.3525	272.9044	285.4554	285.8553	285.9053
9697	-7.9645	-7.7844	-7.5728	-7.5655	-7.5646	-7.5637	-7.5564	-7.311	-7.0341	-7.0248	-7.0236	-7.0224	-7.013	-6.7024	-6.3602	-6.3488	-6.3474
0064	23.0038	22.9138	22.808	22.8044	22.804	22.8035	22.7998	22.6772	22.5388	22.5341	22.5336	22.533	22.5283	22.373	22.202	22.1963	22.1956

	P10-S1	P10-GE1	P10	P10-GE2	P10-S2	G74	A2-S1	A2-GE1	A2
000	1 + 216.5500	1 + 216.9500	1 + 217.0000	1 + 217.0500	1 + 217.4500	1 + 230.0000	1 + 242.5500	1 + 242.9500	1 + 243.0000
38	259.1556	259.5555	259.6055	259.6555	260.0554	272.5742	285.0923	285.4921	285.5421
62	5.6624	5.6718	5.6729	5.6741	5.6835	5.9933	6.3346	6.346	6.3474
67	22.3483	22.3436	22.3431	22.3425	22.3378	22.1825	22.0115	22.0058	22.005
68	259.179	259.5789	259.6289	259.6789	260.0788	272.6002	285.1209	285.5207	285.5707
65	4.6627	4.672	4.6732	4.6744	4.6837	4.9937	5.335	5.3464	5.3478
17	22.4633	22.4586	22.4581	22.4575	22.4528	22.2975	22.1265	22.1208	22.1201
77	259.3042	259.7041	259.7541	259.8041	260.2039	272.7389	285.2738	285.6737	285.7237
55	-0.6847	-0.6764	-0.6753	-0.674	-0.6636	-0.3377	-0.0117	-0.0013	0
17	22.5435	22.5389	22.5383	22.5377	22.533	22.3775	22.2067	22.201	22.2003
44	259.4013	259.8012	259.8512	259.9012	260.301	272.8472	285.3925	285.7924	285.8424
115	-4.8347	-4.8254	-4.8242	-4.823	-4.8137	-4.5031	-4.1611	-4.1497	-4.1483
42	22.6058	22.6011	22.6006	22.6	22.5953	22.44	22.269	22.2633	22.2625
793	259.4294	259.8293	259.8792	259.9292	260.3291	272.8784	285.4269	285.8267	285.8767
112	-6.0344	-6.025	-6.0239	-6.0227	-6.0133	-5.7027	-5.3606	-5.3492	-5.3478
622	22.6238	22.6191	22.6185	22.618	22.6133	22.458	22.287	22.2813	22.2805
001	259.4528	259.8527	259.9026	259.9526	260.3525	272.9044	285.4554	285.8553	285.9053
311	-7.0341	-7.0248	-7.0236	-7.0224	-7.013	-6.7024	-6.3602	-6.3488	-6.3474
772	22.5388	22.5341	22.5336	22.533	22.5283	22.373	22.202	22.1963	22.1956

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT: B/D ON ROAD DEVELOPMENT PROJECT ON BATHANG HIGHWAY

TITLE CO-ORDINATE LIST RA10 AT A-LINE

DATE

FIG. NO.

B-4