

PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

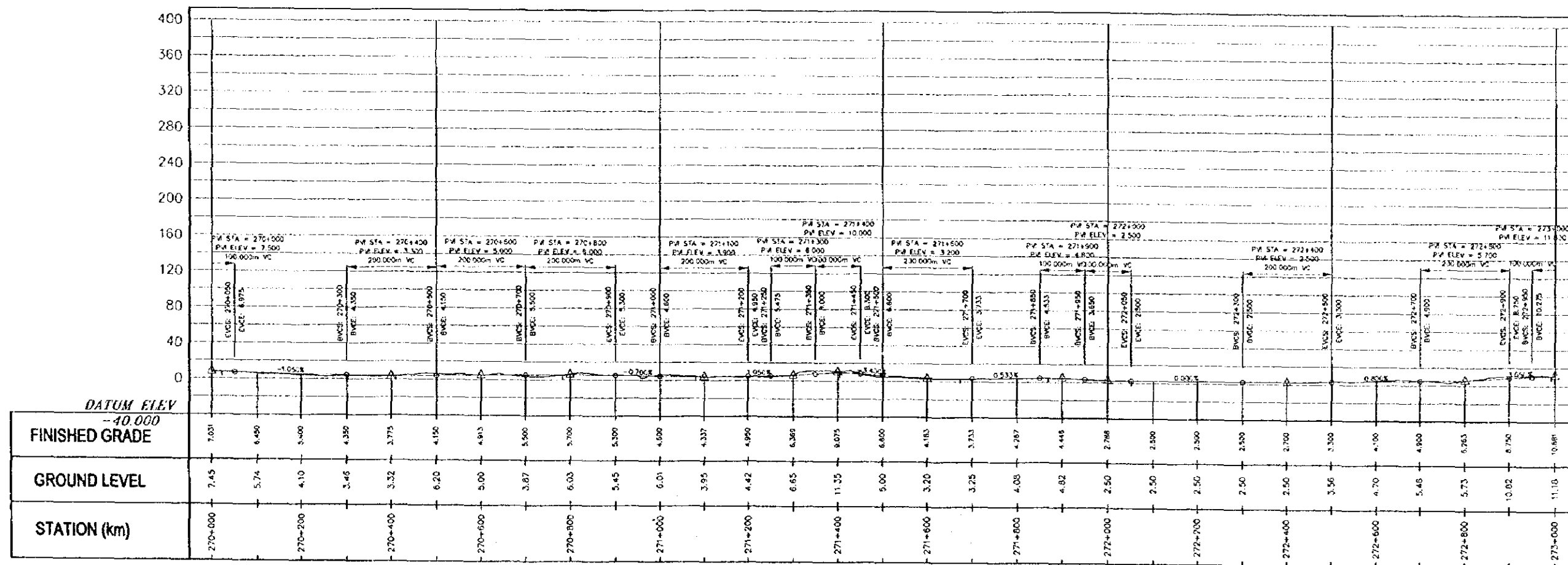
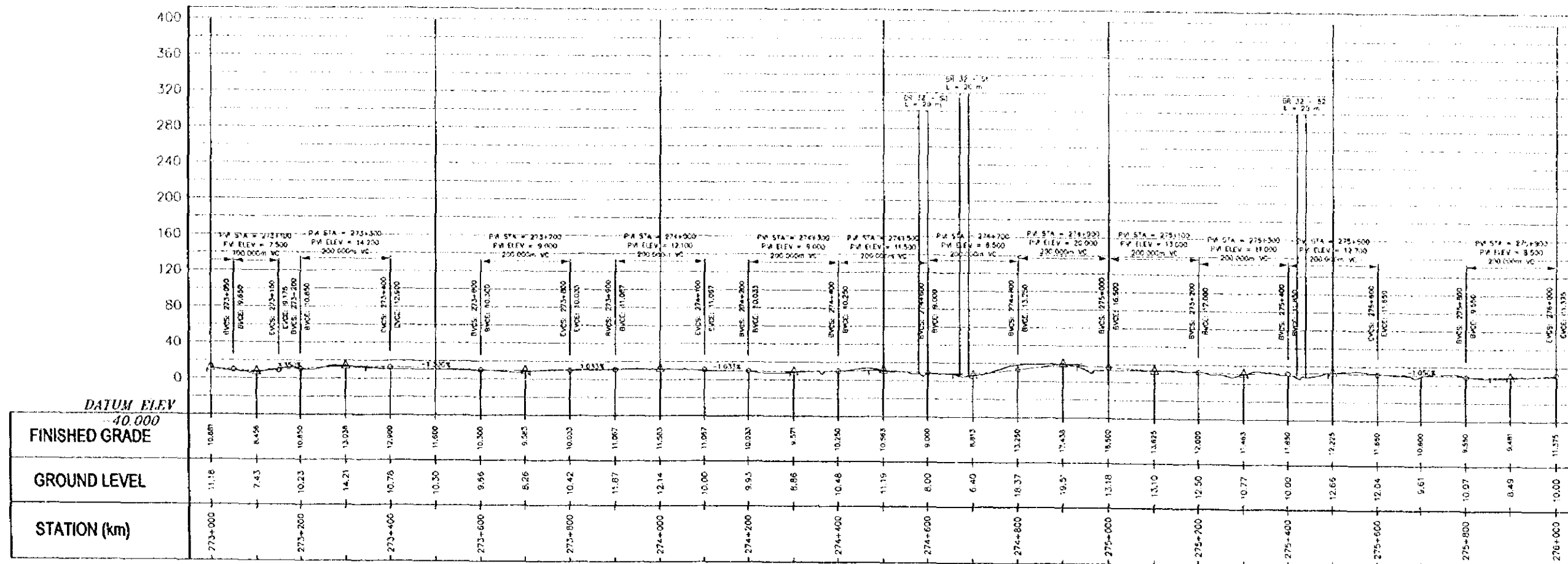
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

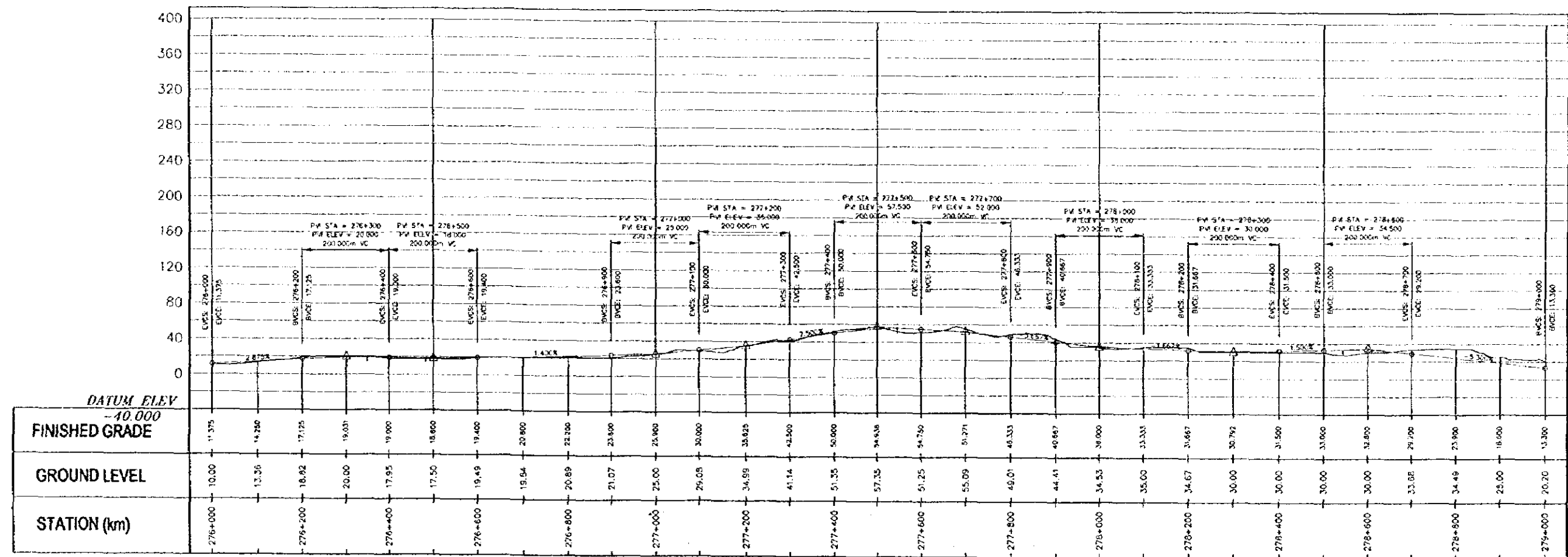
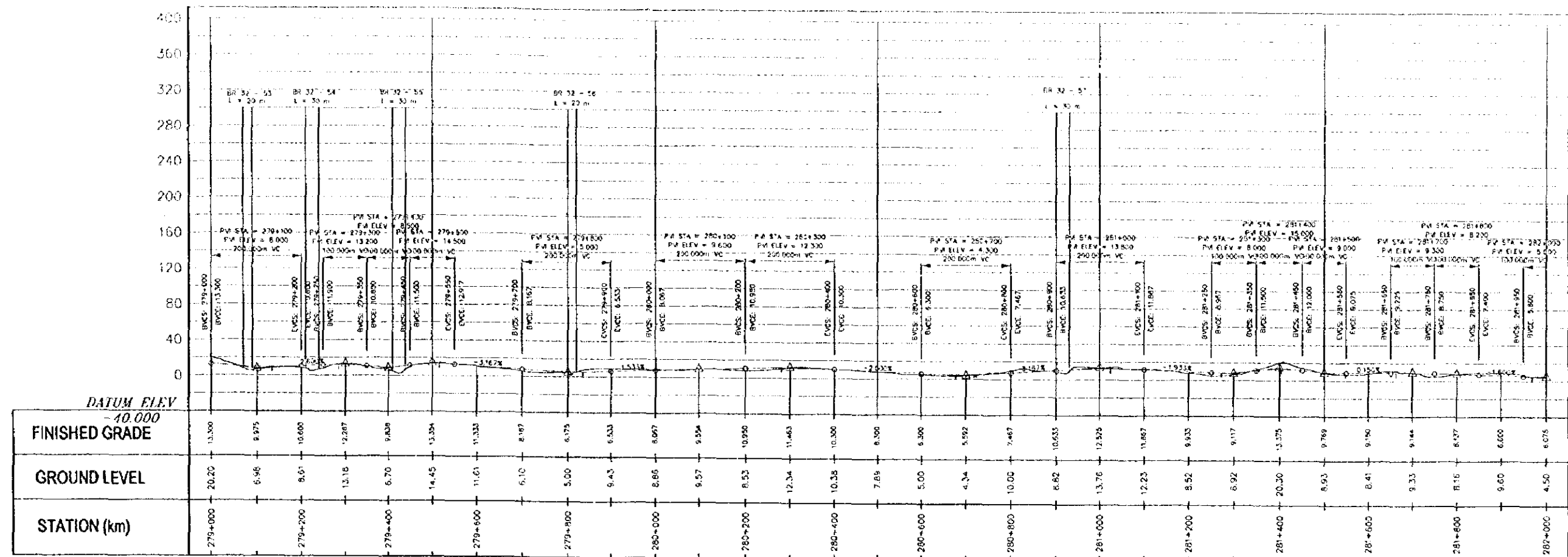
PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE: PROFILE (45)
(264+000 - 270+000)

SCALE:
H=1:10000
V=1:5000

SHEET NO.
118





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JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
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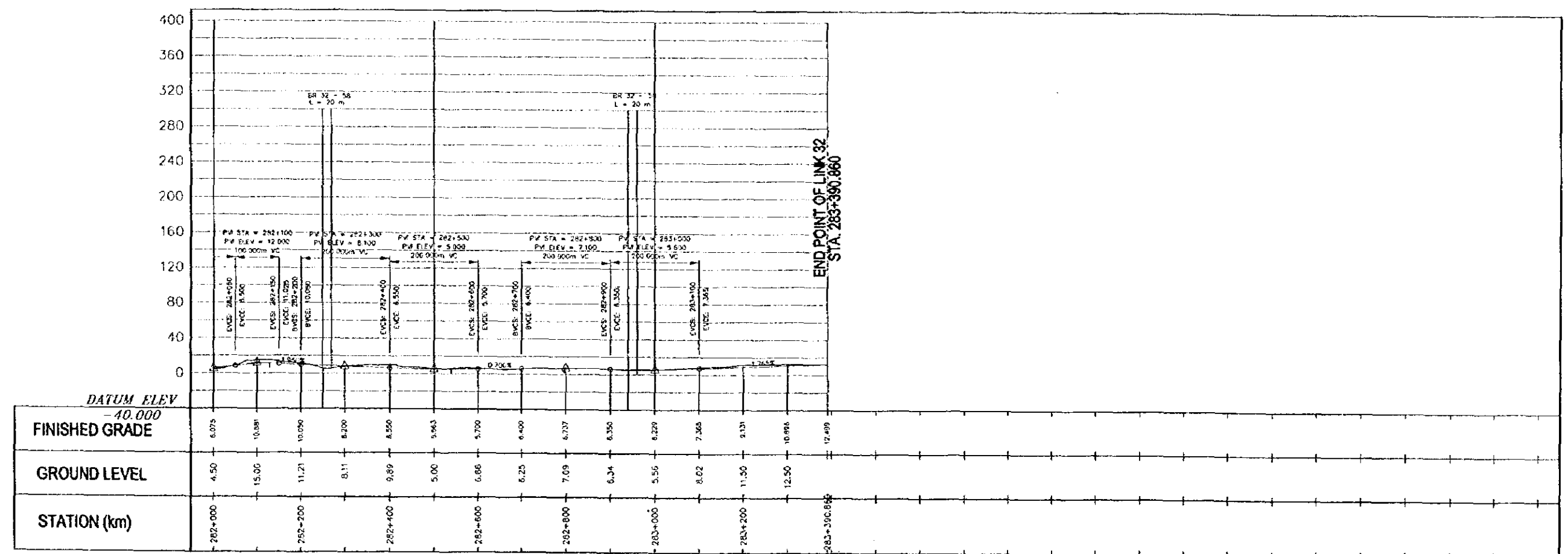
PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE:

PROFILE (47)
(276+000 - 282+000)

SCALE:
H = 1:10000
V = 1:5000

SHEET NO.
120



PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

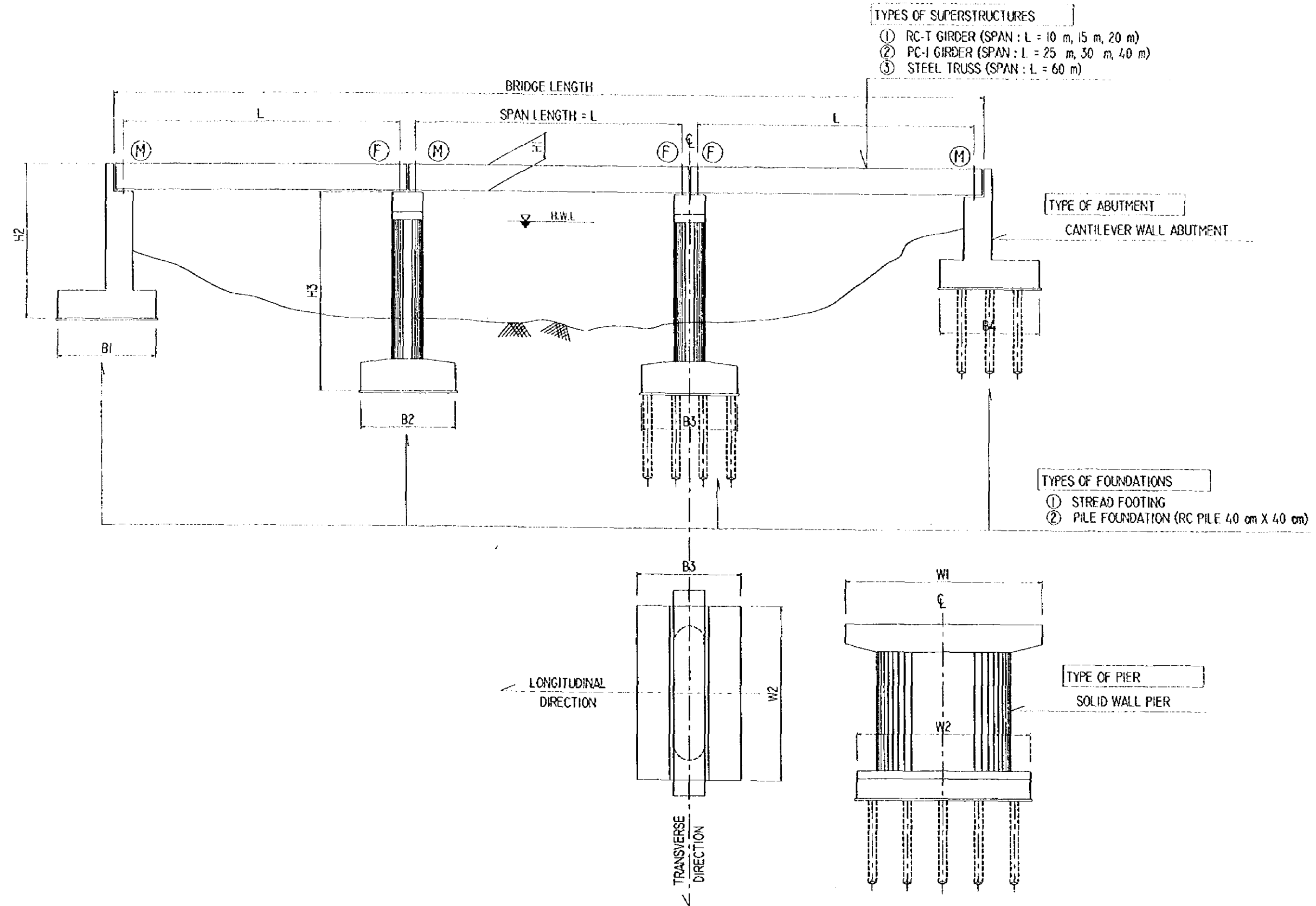
PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE: PROFILE (48)
(282+000 - 283+390.860)

SCALE:
H = 1 : 10000
V = 1 : 5000

SHEET NO.
121

GENERAL DESCRIPTION OF PROPOSED BRIDGES

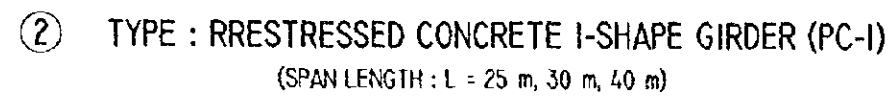


① TYPE : REINFORCED CONCRETE T-SHAPE GIRDER (RC-T)
(SPAN LENGTH : L = 10 m, 15 m, 20 m)

GIRDER DEPTH : H

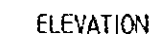
CROSS SECTION (S= 1 : 100)

TYPE B : WITHOUT SIDEWALK



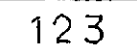
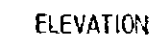
CROSS SECTION (S= 1 : 100)

TYPE B : WITHOUT SIDEWALK



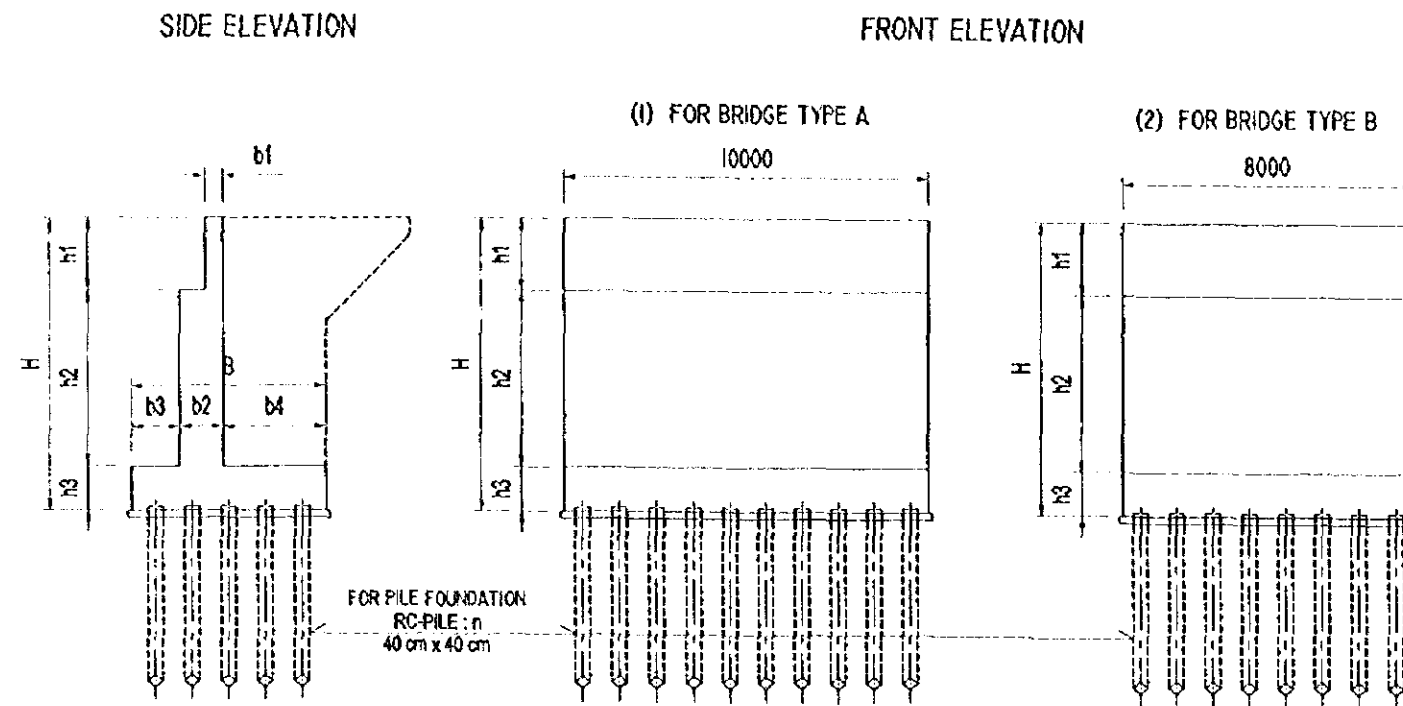
③ TYPE : STEEL TRUSS (ST)
(SPAN LENGTH : L = 60 m)

CROSS SECTION (S= 1 : 100)



STANDARD DESIGN OF SUBSTRUCTURES

ABUTMENTS (CANTILEVER ABUTMENT)



DIMENSION TABLE OF ABUTMENTS

(1) SPREAD FOOTING

Span (m)	Bearing Condition	H (m)	h1 (m)	h2 (m)	h3 (m)	B (m)	b1 (m)	b2 (m)	b3 (m)	b4 (m)
20	M.F	6.00	1.38	3.62	1.00	4.00	0.40	1.20	1.00	1.80
	H	8.00	1.38	5.42	1.20	5.00	0.40	1.20	1.00	2.80
	F	8.00	1.38	5.42	1.20	5.50	0.40	1.20	1.00	3.30
	M	6.00	1.98	3.02	1.00	4.00	0.50	1.20	1.00	1.80
30	F	6.00	1.98	3.02	1.00	4.50	0.50	1.20	1.00	2.30
	H	8.00	1.98	4.82	1.20	5.50	0.50	1.20	1.30	3.00
	F	8.00	1.98	4.82	1.20	6.50	0.50	1.20	1.30	4.00

(2) PILE FOUNDATION (RC-PILE 40 cm x 40 cm)

Span (m)	Bearing Condition	H (m)	h1 (m)	h2 (m)	h3 (m)	B (m)	b1 (m)	b2 (m)	b3 (m)	b4 (m)	Pile n
15	M.F	6.00	1.03	3.97	1.00	4.00	0.40	1.20	1.00	1.80	15
	H	8.00	1.03	5.77	1.20	4.00	0.40	1.20	1.00	1.80	16
20	M.F	6.00	1.38	3.62	1.00	4.00	0.40	1.20	1.00	1.80	18
	H	8.00	1.38	5.42	1.20	4.00	0.40	1.20	1.00	1.80	18
25	M.F	6.00	1.68	3.32	1.00	4.00	0.50	1.20	1.00	1.80	20
	H	8.00	1.68	5.12	1.20	4.00	0.50	1.20	1.00	1.80	20
30	M.F	6.00	1.98	3.02	1.00	5.00	0.50	1.20	1.30	2.50	22
	H	8.00	1.98	4.82	1.20	5.00	0.50	1.20	1.30	2.50	22
40	M.F	6.00	2.53	2.47	1.00	5.00	0.50	1.50	1.30	2.20	25
	H	8.00	2.53	4.27	1.20	5.00	0.50	1.50	1.30	2.20	25

DIMENSION TABLE OF PIERS

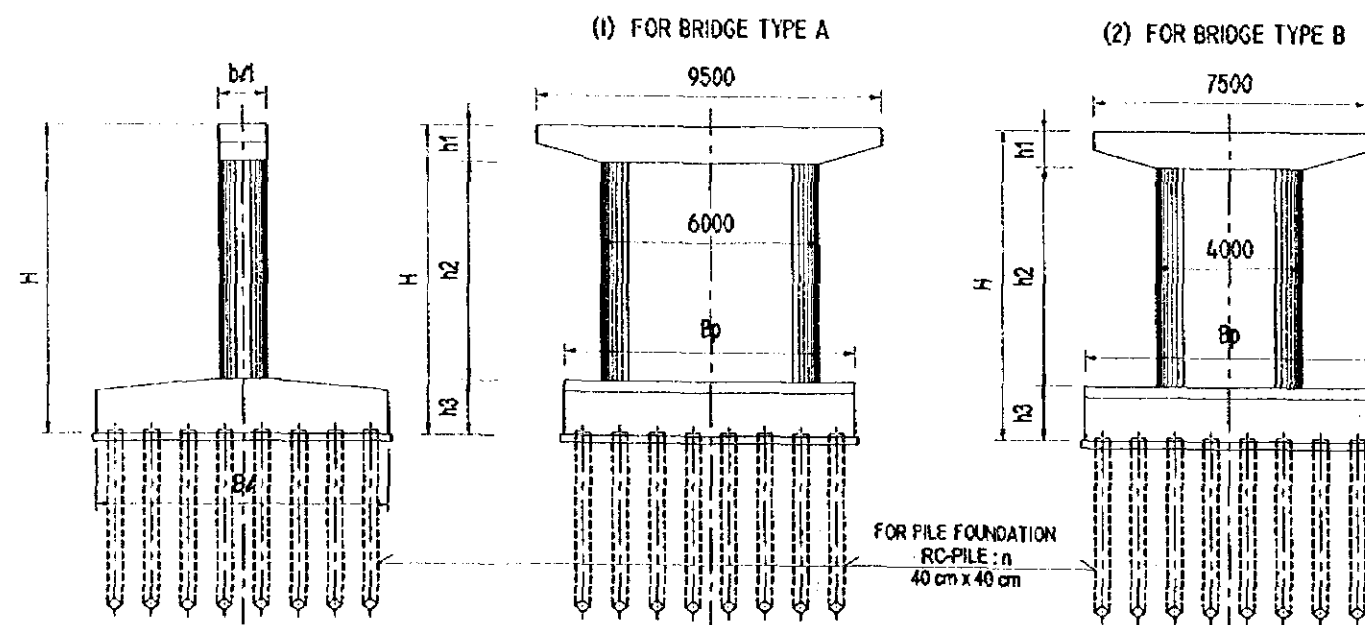
(1) SPREAD FOOTING

Span (m)	Bearing Condition	H (m)	h1 (m)	h2 (m)	h3 (m)	Bp (m)	Bf (m)	Bu (m)
20	M.F	8.00	1.00	5.80	1.20	8.00	5.00	1.50
	FF	8.00	1.00	5.80	1.20	8.00	5.50	1.50
	M.F	12.00	1.00	9.80	1.20	8.00	5.50	1.50
	FF	12.00	1.00	9.80	1.20	8.00	7.00	1.50
30	M.F	12.00	1.00	9.80	1.20	8.00	6.50	1.50
	FF	12.00	1.00	9.80	1.20	8.00	8.50	1.50

(2) PILE FOUNDATION (RC-PILE 40 cm x 40 cm)

Span (m)	Bearing Condition	H (m)	h1 (m)	h2 (m)	h3 (m)	Bp (m)	Bf (m)	Bu (m)	Pile n	Remarks
20	M.F	8.00	1.00	5.80	1.20	8.00	5.00	1.50	18	
	FF	8.00	1.00	5.80	1.20	8.00	6.00	1.50	22	
	M.F	12.00	1.00	9.50	1.50	8.00	6.00	1.50	18	
	FF	12.00	1.00	9.50	1.50	8.00	6.50	1.50	22	
	M.F	16.00	1.00	13.50	1.50	8.00	8.00	2.00	25	
	FF	16.00	1.00	13.50	1.50	8.00	8.00	2.00	28	
30	M.F	8.00	1.00	5.80	1.20	8.00	6.00	1.50	22	
	FF	8.00	1.00	5.80	1.20	8.00	6.00	1.50	28	
	M.F	12.00	1.00	9.50	1.50	8.00	6.00	1.50	26	
	FF	12.00	1.00	9.50	1.50	8.00	6.00	1.50	30	
	M.F	16.00	1.00	13.50	1.50	8.00	8.00	2.00	31	
	FF	16.00	1.00	13.50	1.50	8.00	10.00	2.00	35	
40	M.F	12.00	1.00	9.50	1.50	8.00	6.50	1.50	20	8R22-29
	FF	12.00	1.00	9.50	1.50	8.00	8.00	1.50	22	8R22-29

PIERS (SOLID WALL PIER)



LIST OF PROPOSED BRIDGES (1)

(1) LINK 16

Bridge No.	Location	Length	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Types of Foundations	Sub-structures																Boring Data
								Abutments								Piers								
								FIX				MOVE				FIX+FIX				MOVE+FIX				
Nos.	ha(m)	Pile La(m)	Nos.	Nos.	ha(m)	Pile La(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.									
BR 16 - 1	2 + 115	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	24	18	1	6	24	18	-	-	-	-	-	-	-	58.59	
BR 16 - 2	3 + 300	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	24	16	1	6	24	16	-	-	-	-	-	-	-	58.59	
BR 16 - 3	3 + 930	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	24	20	1	6	24	20	-	-	-	-	-	-	-	58.59	
BR 16 - 4	4 + 760	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	24	18	1	6	24	18	-	-	-	-	-	-	-	59.59	
BR 16 - 5	5 + 375	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	24	20	1	6	24	20	-	-	-	-	-	-	-	59.59	
BR 16 - 6	6 + 100	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	24	18	1	6	24	18	-	-	-	-	-	-	-	58.59	
BR 16 - 7	6 + 790	25.0	1	1 @ 25.0	9.6	RC-T	Pile	1	6	24	18	1	6	24	18	-	-	-	-	-	-	-	58.59	
BR 16 - 8	7 + 0	45.0	1	1 @ 45.0	6.0	Steel Truss	Pile	RETAIN EXISTING																58.59
BR 16 - 9	7 + 600	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	24	18	1	6	24	18	-	-	-	-	-	-	-	58.59	
BR 16 - 10	7 + 640	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	24	20	1	6	24	20	-	-	-	-	-	-	-	58.59	
BR 16 - 11	7 + 785	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	24	20	1	6	24	20	-	-	-	-	-	-	-	58.59	
BR 16 - 12	10 + 970	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	24	22	1	6	24	22	-	-	-	-	-	-	-	56.57	
BR 16 - 13	11 + 630	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	24	16	1	6	24	16	-	-	-	-	-	-	-	58.57	
BR 16 - 14	15 + 475	25.0	1	1 @ 25.0	9.6	RC-T	Pile	RETAIN EXISTING																54.55
BR 16 - 15	16 + 0	40.0	1	1 @ 40.0	6.0	Steel Truss	Pile	RETAIN EXISTING																54.55
BR 16 - 16	16 + 490	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	24	14	1	6	24	14	-	-	-	-	-	-	-	54.55	
BR 16 - 17	17 + 620	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	26	16	1	6	26	16	-	-	-	-	-	-	-	52.53	
BR 16 - 18	18 + 590	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	26	20	1	6	26	20	-	-	-	-	-	-	-	52.53	
BR 16 - 19	20 + 530	55.0	1	1 @ 55.0	6.0	Steel Truss	Pile	RETAIN EXISTING																50.51
BR 16 - 20	22 + 290	25.0	1	1 @ 25.0	9.6	PC-I	Pile	1	6	26	20	1	6	26	20	-	-	-	-	-	-	-	50.51	
BR 16 - 21	22 + 830	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	26	16	1	6	26	16	-	-	-	-	-	-	-	50.51	
BR 16 - 22	27 + 885	30.0	1	1 @ 30.0	9.6	RC-T	Pile	1	6	10	22	1	6	10	22	-	-	-	-	-	-	-	48.49	
BR 16 - 23	29 + 250	30.0	1	1 @ 30.0	9.6	RC-T	Pile	1	6	12	22	1	6	12	22	-	-	-	-	-	-	-	46.47	
BR 16 - 24	29 + 525	45.0	1	1 @ 45.0	6.0	Steel Truss	Pile	RETAIN EXISTING																46.47
BR 16 - 25	31 + 280	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	46.47	
BR 16 - 26	35 + 420	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	46.47	

(2)-1 LINK 22 (1)

Bridge No.	Location			Length (m)	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Type of Foundation	Sub-structures																Boring Data
										Abutments								Piers								
	FIX									MOVE				FIX+FIX				MOVE+FIX								
	Nos.	ha(m)	Pile La(m)							Nos.	Nos.	ha(m)	Pile La(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.				
BR 22 - 1	36 +	485	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	12	22	1	6	12	22	-	-	-	-	-	-	-	-	46.47	
BR 22 - 2	36 +	850	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 3	37 +	20	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	6	12	18	1	12	12	22	-	-	-	-	46.47	
BR 22 - 4	37 +	650	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	12	16	1	6	12	16	-	-	-	-	-	-	-	-	46.47	
BR 22 - 5	39 +	20	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 6	39 +	280	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	10	12	18	1	10	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 7	40 +	370	40.0	2	2 @ 20.0	7.6	RC-T	Pile	-	-	-	-	2	8	12	18	1	12	12	22	-	-	-	-	46.47	
BR 22 - 8	40 +	760	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	8	12	18	1	8	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 9	40 +	950	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	8	12	18	1	8	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 10	41 +	530	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	12	16	1	6	12	16	-	-	-	-	-	-	-	-	46.47	
BR 22 - 11	41 +	960	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	8	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 12	42 +	650	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	8	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 13	43 +	770	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 14	44 +	470	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 15	46 +	260	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	10	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 16	46 +	800	60.0	3	3 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	8	12	18	1	12	12	22	1	12	12	18	46.47	
BR 22 - 17	47 +	540	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 18	48 +	80	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	8	12	18	1	10	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 19	48 +	370	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	8	12	18	1	8	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 20	48 +	840	40.0	1	1 @ 40.0	7.6	PC-I	Pile	1	6	12	25	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 21	49 +	880	60.0	3	3 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	10	12	18	1	12	12	22	1	12	12	18	46.47	
BR 22 - 22	50 +	340	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	8	12	18	1	10	12	22	-	-	-	-	46.47	
BR 22 - 23	50 +	740	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	12	16	1	6	12	16	-	-	-	-	-	-	-	-	46.47	
BR 22 - 24	50 +	960	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 25	51 +	440	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	10	12	18	1	10	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 26	52 +	150	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	10	12	18	1	10	12	18	-	-	-	-	-	-	-	-	46.47	
BR 22 - 27	53 +	0	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	23	14	1	6	23	14	-	-	-	-	-	-	-	-	44.45	
BR 22 - 28	54 +	125	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	23	18	1	6	23	18	-	-	-	-	-	-	-	-	44.45	
BR 22 - 29	56 +	530	120.0	3	3 @ 40.0	9.6	PC-I	Pile	-	-	-	-	2	10	23	22	1	12	23	23	1	12	23	20	44.45	
BR 22 - 30	57 +	215	40.0	1	1 @ 40.0	9.6	PC-I	Pile	1	6	23	20	1	6	23	20	-	-	-	-	-	-	-	-	44.45	

LIST OF PROPOSED BRIDGES (2)

(2)-2 LINK 22 (2)

Bridge No	Location		Length (m)	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Type of Foundation	Sub-structures																Boring Data
									Abutments								Piers								
	FIX								MOVE				FIX+FIX				MOVE+FIX								
	Nos.	ha(m)							Pile La(m)		Nos.	ha(m)	Pile La(m)		Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.				
BR 22 - 31	58 + 70	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	23	14	1	6	23	14	-	-	-	-	-	-	44.45			
BR 22 - 32	59 + 160	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	6	23	14	1	8	23	16	-	-	44.45			
BR 22 - 33	60 + 100	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	23	14	1	6	23	14	-	-	-	-	-	-	44.45			
BR 22 - 34	62 + 970	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	14	16	1	6	14	16	-	-	-	-	-	-	42.43			
BR 22 - 35	64 + 160	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	14	16	1	6	14	16	-	-	-	-	-	-	42.43			
BR 22 - 36	65 + 570	60.0	2	2 @ 30.0	9.6	PC-I	Pile	-	-	-	-	2	6	14	22	1	8	14	28	-	-	42.43			
BR 22 - 37	68 + 20	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	14	16	1	6	14	16	-	-	-	-	-	-	42.43			
BR 22 - 38	68 + 430	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	14	16	1	6	14	16	-	-	-	-	-	-	42.43			
BR 22 - 39	70 + 590	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	14	18	1	6	14	18	-	-	-	-	-	-	42.43			
BR 22 - 40	71 + 990	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	14	22	1	6	14	22	-	-	-	-	-	-	42.43			
BR 22 - 41	74 + 30	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	16	24	1	6	16	24	-	-	-	-	-	-	42.43			
BR 22 - 42	75 + 530	60.0	2	2 @ 30.0	9.6	PC-I	Pile	-	-	-	-	2	6	16	24	1	8	16	30	-	-	40.41			
BR 22 - 43	76 + 420	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 44	77 + 925	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	16	24	1	6	16	24	-	-	-	-	-	-	40.41			
BR 22 - 45	78 + 240	60.0	2	2 @ 30.0	9.6	PC-I	Pile	-	-	-	-	2	6	16	24	1	8	16	30	-	-	40.41			
BR 22 - 46	78 + 920	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	16	20	1	6	16	20	-	-	-	-	-	-	40.41			
BR 22 - 47	80 + 80	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	16	20	1	6	16	20	-	-	-	-	-	-	40.41			
BR 22 - 48	81 + 150	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 49	81 + 360	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 50	81 + 390	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 51	81 + 630	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	16	24	1	6	16	24	-	-	-	-	-	-	40.41			
BR 22 - 52	83 + 345	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 53	83 + 620	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	16	20	1	8	16	20	-	-	-	-	-	-	40.41			
BR 22 - 54	84 + 670	15.0	1	1 @ 15.0	7.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 55	85 + 310	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	16	20	1	6	16	20	-	-	-	-	-	-	40.41			
BR 22 - 56	86 + 650	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	16	20	1	6	16	20	-	-	-	-	-	-	40.41			
BR 22 - 57	87 + 640	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	16	20	1	6	16	20	-	-	-	-	-	-	40.41			
BR 22 - 58	87 + 800	15.0	1	1 @ 15.0	7.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 59	88 + 750	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	16	24	1	6	16	24	-	-	-	-	-	-	40.41			
BR 22 - 60	89 + 480	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	16	18	1	6	16	18	-	-	-	-	-	-	40.41			
BR 22 - 61	90 + 575	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	22	1	6	15	22	-	-	-	-	-	-	38.39			
BR 22 - 62	90 + 840	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	15	16	1	6	15	16	-	-	-	-	-	-	38.39			
BR 22 - 63	90 + 980	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	15	16	1	6	15	16	-	-	-	-	-	-	38.39			
BR 22 - 64	91 + 250	15.0	1	1 @ 15.0	9.6	RC-T	Pile	1	6	15	16	1	6	15	16	-	-	-	-	-	-	38.39			
BR 22 - 65	92 + 200	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	6	15	18	1	8	15	22	-	-	38.39			
BR 22 - 66	92 + 490	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.39			
BR 22 - 67	93 + 760	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.39			
BR 22 - 68	95 + 25	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	22	1	6	15	22	-	-	-	-	-	-	38.39			
BR 22 - 69	95 + 970	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.39			
BR 22 - 70	96 + 850	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	6	15	18	1	8	15	22	-	-	38.39			
BR 22 - 71	97 + 440	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.39			
BR 22 - 72	97 + 520	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	10	15	18	1	10	15	18	-	-	-	-	-	-	38.39			
BR 22 - 73	97 + 840	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	10	15	18	1	10	15	18	-	-	-	-	-	-	36.37			
BR 22 - 74	98 + 270	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	36.37			
BR 22 - 75	98 + 450	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	10	15	18	-	-	-	-	-	-	36.37			
BR 22 - 76	98 + 860	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	36.37			
BR 22 - 77	99 + 150	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	10	15	18	1	10	15	18	-	-	-	-	-	-	36.37			
BR 22 - 78	99 + 685	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	22	1	6	15	22	-	-	-	-	-	-	36.37			
BR 22 - 79	101 + 40	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	10	15	22	1	10	15	22	-	-	-	-	-	-	36.37			
BR 22 - 80	102 + 260	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	10	15	22	1	10	15	22	-	-	-	-	-	-	36.37			
BR 22 - 81	102 + 775	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	12	15	22	1	12	15	22	-	-	-	-	-	-	36.37			
BR 22 - 82	103 + 535	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	8	15	22	1	10	15	22	-	-	-	-	-	-	36.37			
BR 22 - 83	103 + 670	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	36.37			
BR 22 - 84	103 + 720	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	15	18	1	8	15	18	-	-	-	-	-	-	36.37			
BR 22 - 85	104 + 440	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	36.37			
BR 22 - 86	105 + 515	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	8	15	22	1	8	15	22	-	-	-	-	-	-	36.37			
BR 22 - 87	108 + 685	90.0	3	3 @ 30.0	7.6	PC-I	Pile	-	-	-	-	2	10	15	22	1	12	15	30	1	12	15	26	38.37	
BR 22 - 88	109 + 835	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	15	22	1	10	15	22	-	-	-	-	-	-	38.37			
BR 22 - 89	114 + 360	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	15	22	1	8	15	22	-	-	-	-	-	-	38.37			
BR 22 - 90	118 + 560	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.37			
BR 22 - 91	118 + 600	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	18	1	6	15	18	-	-	-	-	-	-	38.37			
BR 22 - 92A	121 + 240	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	22	1	6	15	22	-	-	-	-	-	-	38.37			
BR 22 - 92B	121 + 930	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	10	15															

LIST OF PROPOSED BRIDGES (3)

(2)-2 LINK 22 (3)

Bridge No.	Location		Length (m)	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Sub-structures																Boring Data
								Type of Foundation	Abutments								Piers							
	FIX								MOVE				FIX+FIX				MOVE+FIX							
	Nos.	ha(m)							Pile la(m)		Nos.	ha(m)	Pile La(m)	Nos.	Nos.	hp(m)	Pile/ 1 pier lp(m)	Nos.	Nos.	hp(m)	Pile/ 1 pier lp(m)	Nos.		
BR 22 - 93	122 + 25	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	22	1	8	15	22	-	-	-	-	-	-	-	-	36,37
BR 22 - 94	122 + 535	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	8	15	22	1	8	15	22	-	-	-	-	-	-	-	-	36,37
BR 22 - 95	122 + 760	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	15	18	1	8	15	18	-	-	-	-	-	-	-	-	36,37
BR 22 - 96	122 + 950	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	15	18	1	8	15	18	-	-	-	-	-	-	-	-	36,37
BR 22 - 97	123 + 200	90.0	3	3 @ 30.0	9.6	PC-I	Pile	-	-	-	-	2	6	15	22	1	8	15	28	1	8	15	22	34,35
BR 22 - 98	126 + 810	60.0	3	3 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	6	15	18	1	8	15	22	1	8	15	18	34,35
BR 22 - 99	128 + 200	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	15	-	1	6	15	18	-	-	-	-	-	-	-	-	34,35
BR 22 - 100	128 + 990	60.0	3	3 @ 20.0	7.6	RC-T	Pile	-	-	-	-	2	8	15	18	1	8	15	22	1	8	15	18	34,35
BR 22 - 101	131 + 450	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	15	-	-	-	-	-	-	-	-	-	32,33
BR 22 - 102	132 + 0	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	15	-	-	-	-	-	-	-	-	-	32,33
BR 22 - 103	135 + 680	60.0	2	2 @ 30.0	7.6	PC-I	Spread	-	-	-	-	2	8	15	-	1	12	-	-	-	-	-	-	32,33
BR 22 - 104	135 + 810	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	15	-	-	-	-	-	-	-	-	-	32,33
BR 22 - 105	139 + 340	60.0	3	3 @ 20.0	7.6	RC-T	Spread	-	-	-	-	2	8	15	-	1	12	-	-	1	12	-	-	32,33

(3) LINK 33

Bridge No.	Location		Length (m)	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Types of Foundations	Sub-structures																Boring Data
									Abutments								Piers								
	FIX								MOVE				FIX+FIX				MOVE+FIX								
	Nos.	ha(m)							Pile La(m)	Nos.	Nos.	ha(m)	Pile La(m)	Nos.	Nos.	hp(m)	Pile/ 1 pier Lp(m)	Nos.	Nos.	hp(m)	Pile/ 1 pier Lp(m)	Nos.			
BR 33 - 1	147 + 50	40.0	2	2 @ 20.0	7.6	RC-T	Spread	-	-	-	-	2	8	-	-	1	12	-	-	-	-	-	-	32,33	
BR 33 - 2	151 + 400	60.0	3	3 @ 20.0	7.6	RC-T	Spread	-	-	-	-	2	8	-	-	1	12	-	-	12	8	-	-	30,31	
BR 33 - 3A	158 + 710	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	30,31	
BR 33 - 3B	159 + 750	30.0	1	1 @ 30.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	30,31	
BR 33 - 4	165 + 100	40.0	2	2 @ 20.0	9.6	RC-T	Spread	-	-	-	-	2	8	-	-	1	12	-	-	-	-	-	-	28	
BR 33 - 5	173 + 280	40.0	2	2 @ 20.0	9.6	RC-T	Spread	-	-	-	-	2	8	-	-	1	12	-	-	-	-	-	-	27B	
BR 33 - 6	173 + 600	120.0	3	30+60+30	9.6	PC+ST+PC	Spread	-	-	-	-	2	10	-	-	1	16	-	-	1	16	-	-	27B	
BR 33 - 7	175 + 80	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	27B	
BR 33 - 8	177 + 370	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	27B	
BR 33 - 9	180 + 710	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	20B	
BR 33 - 10	183 + 60	120.0	2	2 @ 60.0	9.6	Steel Truss	Pile	-	-	-	-	2	6	17	20	1	20	17	30	-	-	-	-	20B	
BR 33 - 11	183 + 710	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	20B	
BR 33 - 12	184 + 160	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	20B	
BR 33 - 13	185 + 790	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	16	1	6	13	16	-	-	-	-	-	-	-	-	19,20	
BR 33 - 14	187 + 510	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	16	1	6	13	16	-	-	-	-	-	-	-	-	19,20	
BR 33 - 15	189 + 100	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	16	1	6	12	16	-	-	-	-	-	-	-	-	18	
BR 33 - 16	191 + 490	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	20	16	1	8	20	16	-	-	-	-	-	-	-	-	16,17	
BR 33 - 17	192 + 170	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	20	16	1	6	20	16	-	-	-	-	-	-	-	-	15	
BR 33 - 18	194 + 350	20.0	1	1 @ 20.0	9.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	14	
BR 33 - 19	195 + 760	30.0	1	1 @ 30.0	7.6	PC-I	Spread	1	10	-	-	1	10	-	-	-	-	-	-	-	-	-	-	14	
BR 33 - 20	196 + 835	30.0	1	1 @ 30.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	14	
BR 33 - 21	197 + 620	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	8	-	-	1	8	-	-	-	-	-	-	-	-	-	-	13	
BR 33 - 22	198 + 360	20.0	1	1 @ 20.0	9.6	RC-T	Spread	1	10	-	-	1	10	-	-	-	-	-	-	-	-	-	-	13	
BR 33 - 23	198 + 520	60.0	3	3 @ 20.0	9.6	RC-T	Spread	-	-	-	-	2	10	-	-	1	16	-	-	1	16	-	-	13	
BR 33 - 24	199 + 340	20.0	1	1 @ 20.0	9.6	RC-T	Spread	1	8	-	-	1	10	-	-	-	-	-	-	-	-	-	-	13	
BR 33 - 25	200 + 35	30.0	1	1 @ 30.0	9.6	RC-T	Spread	1	10	-	-	1	10	-	-	-	-	-	-	-	-	-	-	13	
BR 33 - 26	200 + 35	30.0	1	1 @ 30.0	9.6	PC-I	Spread	1	10	-	-	1	10	-	-	-	-	-	-	-	-	-	-	13	
BR 33 - 27	201 + 800	120.0	2	2 @ 60.0	6.0	Steel Truss	Pile	RETAIN EXISTING																	

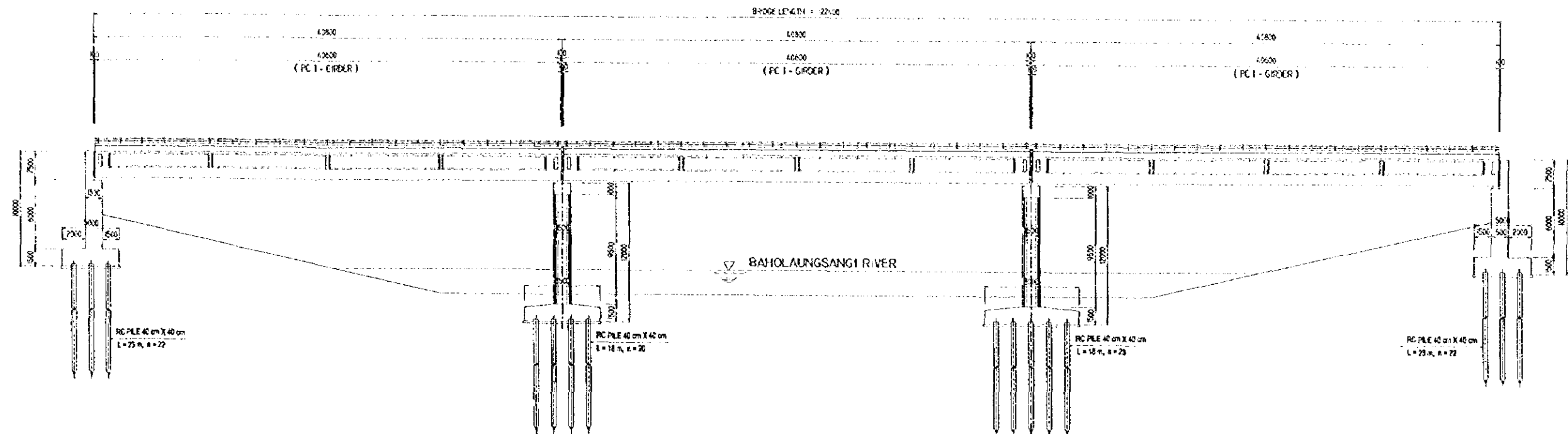
LIST OF PROPOSED BRIDGES (4)

(4) LINK 32

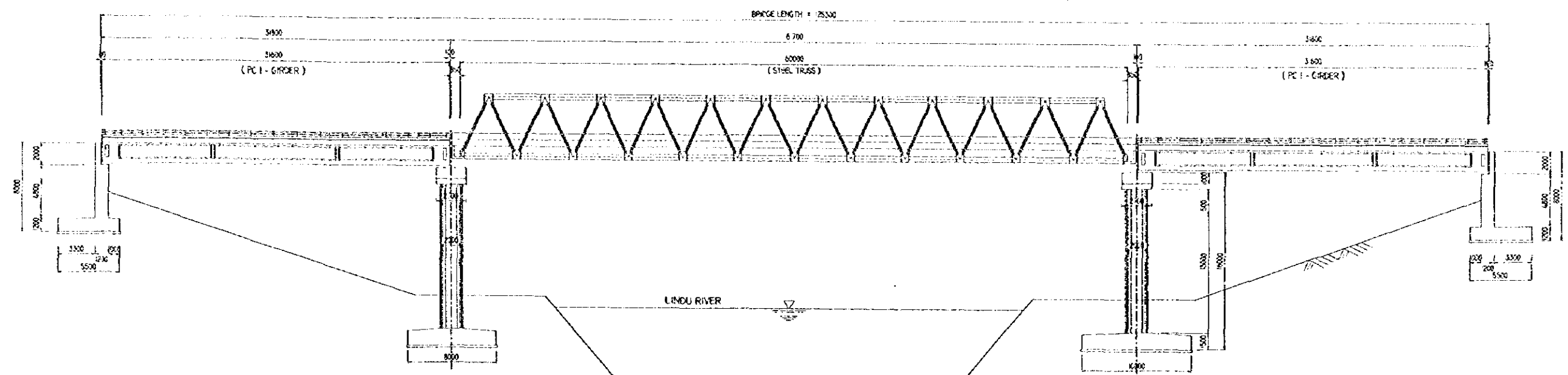
Bridge No.	Location		Length (m)	Nos. of Span	Span Arrangement	Bridge Width (m)	Types of Super-structures	Types of Foundations	Sub-structures																Boring Data
	Abutments								Piers																
	FIX								MOVE				FIX+FIX				MOVE+FIX								
Nos.	ha(m)	Pile La(m)	Nos.	Nos.	ha(m)	Pile La(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.	Nos.	hp(m)	Pier 1 pier Lp(m)	Nos.										
BR 32 - 1	203 + 800	20.0	1	1 @ 20.0	9.6	RC-T	Spread	1	6	-	-	1	6	-	-	-	-	-	-	-	-	-	13		
BR 32 - 2	205 + 720	60.0	3	3 @ 20.0	7.6	RC-T	Pile	-	-	-	-	2	10	12	18	1	16	12	28	1	16	12	25	12	
BR 32 - 3	206 + 455	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	10	12	22	1	10	12	22	-	-	-	-	-	-	-	-	12	
BR 32 - 4	207 + 360	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	12	
BR 32 - 5	207 + 760	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	12	
BR 32 - 6	210 + 590	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	12	18	1	6	12	18	-	-	-	-	-	-	-	-	12	
BR 32 - 7A	212 + 570	20.0	1	1 @ 20.0	9.6	PC-I	Pile	1	6	17	18	1	6	17	18	-	-	-	-	-	-	-	-	12	
BR 32 - 7B	213 + 585	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	17	22	1	6	17	22	-	-	-	-	-	-	-	-	10,11	
BR 32 - 8	214 + 700	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	18	1	6	17	18	-	-	-	-	-	-	-	-	10,11	
BR 32 - 9	215 + 20	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	18	1	6	17	18	-	-	-	-	-	-	-	-	10,11	
BR 32 - 10	216 + 100	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	18	1	6	17	18	-	-	-	-	-	-	-	-	10,11	
BR 32 - 11	217 + 380	20.0	1	1 @ 20.0	9.6	RC-T	Spread	1	6	-	-	1	8	-	-	-	-	-	-	-	-	-	-	9	
BR 32 - 12	218 + 920	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	10	-	-	1	6	-	-	-	-	-	-	-	-	-	-	9	
BR 32 - 13	220 + 335	30.0	1	1 @ 30.0	7.6	PC-I	Spread	1	6	-	-	1	10	-	-	-	-	-	-	-	-	-	-	9	
BR 32 - 14	220 + 860	20.0	1	1 @ 20.0	7.6	RC-T	Spread	1	6	-	-	1	6	-	-	-	-	-	-	-	-	-	-	9	
BR 32 - 15	221 + 405	30.0	1	1 @ 30.0	7.6	PC-I	Spread	1	6	-	-	1	8	-	-	-	-	-	-	-	-	-	-	9	
BR 32 - 16	225 + 115	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	8	15	22	1	8	15	22	-	-	-	-	-	-	-	-	8	
BR 32 - 17	226 + 335	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	7	22	1	6	7	22	-	-	-	-	-	-	-	-	6,7	
BR 32 - 18	227 + 535	30.0	1	1 @ 30.0	6.0	Steel Truss	Pile	-	-	-	-	-	-	-	-	RETAIN EXISTING								6,7	
BR 32 - 19	229 + 640	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	7	18	1	6	7	18	-	-	-	-	-	-	-	-	6,7	
BR 32 - 20	230 + 550	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	7	18	1	6	7	18	-	-	-	-	-	-	-	-	6,7	
BR 32 - 21	230 + 750	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	7	18	1	6	7	18	-	-	-	-	-	-	-	-	6,7	
BR 32 - 22	232 + 800	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	7	18	1	6	7	18	-	-	-	-	-	-	-	-	6,7	
BR 32 - 23	233 + 350	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	7	18	1	6	7	18	-	-	-	-	-	-	-	-	6,7	
BR 32 - 24	235 + 485	30.0	1	1 @ 30.0	6.0	Steel Truss	Pile	-	-	-	-	-	-	-	-	RETAIN EXISTING								5	
BR 32 - 25	236 + 680	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	11	16	1	8	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 26	236 + 930	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	11	16	1	8	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 27	237 + 660	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	11	16	1	6	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 28	239 + 120	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	11	16	1	6	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 29	239 + 890	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	11	16	1	6	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 30	240 + 400	40.0	2	2 @ 20.0	9.6	RC-T	Pile	-	-	-	-	2	8	11	16	1	12	11	20	-	-	-	-	5	
BR 32 - 31	241 + 170	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	11	16	1	10	11	16	-	-	-	-	-	-	-	-	5	
BR 32 - 32	243 + 20	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	18	1	8	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 33	243 + 365	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	13	22	1	6	13	22	-	-	-	-	-	-	-	-	3,4	
BR 32 - 34	246 + 50	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	13	18	1	6	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 35	246 + 230	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	13	18	1	6	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 36	248 + 490	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	18	1	6	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 37	248 + 670	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	18	1	6	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 38	249 + 345	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	13	22	1	8	13	22	-	-	-	-	-	-	-	-	3,4	
BR 32 - 39	250 + 745	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	13	22	1	6	13	22	-	-	-	-	-	-	-	-	3,4	
BR 32 - 40	251 + 520	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	13	18	1	6	13	18	-	-	-	-	-	-	-	-	3,4	
BR 32 - 41	254 + 50	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	15	20	1	6	15	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 42	255 + 270	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	17	20	1	6	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 43	256 + 390	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	17	16	1	8	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 44	262 + 685	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	6	17	20	1	6	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 45	263 + 385	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	10	17	20	1	10	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 46	263 + 630	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 47	263 + 820	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 48	264 + 920	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 49	269 + 510	45.0	1	1 @ 45.0	6.0	Steel Truss	Pile	-	-	-	-	-	-	-	-	RETAIN EXISTING								1,2	
BR 32 - 50	274 + 590	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 51	274 + 680	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 52	275 + 430	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	8	17	16	1	8	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 53	279 + 80	20.0	1	1 @ 20.0	7.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 54	279 + 225	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	8	17	20	1	8	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 55	279 + 425	30.0	1	1 @ 30.0	7.6	PC-I	Pile	1	8	17	20	1	8	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 56	279 + 810	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 57	280 + 915	30.0	1	1 @ 30.0	9.6	PC-I	Pile	1	6	17	20	1	6	17	20	-	-	-	-	-	-	-	-	1,2	
BR 32 - 58	282 + 260	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	8	17	16	1	8	17	16	-	-	-	-	-	-	-	-	1,2	
BR 32 - 59	282 + 550	20.0	1	1 @ 20.0	9.6	RC-T	Pile	1	6	17	16	1	6	17	16	-	-	-	-	-	-	-	-	1,2	

GENERAL VIEWS OF LONG SPAN BRIDGES (I)

(1) GENERAL VIEW OF BR 22-29 (STA. 56+530)

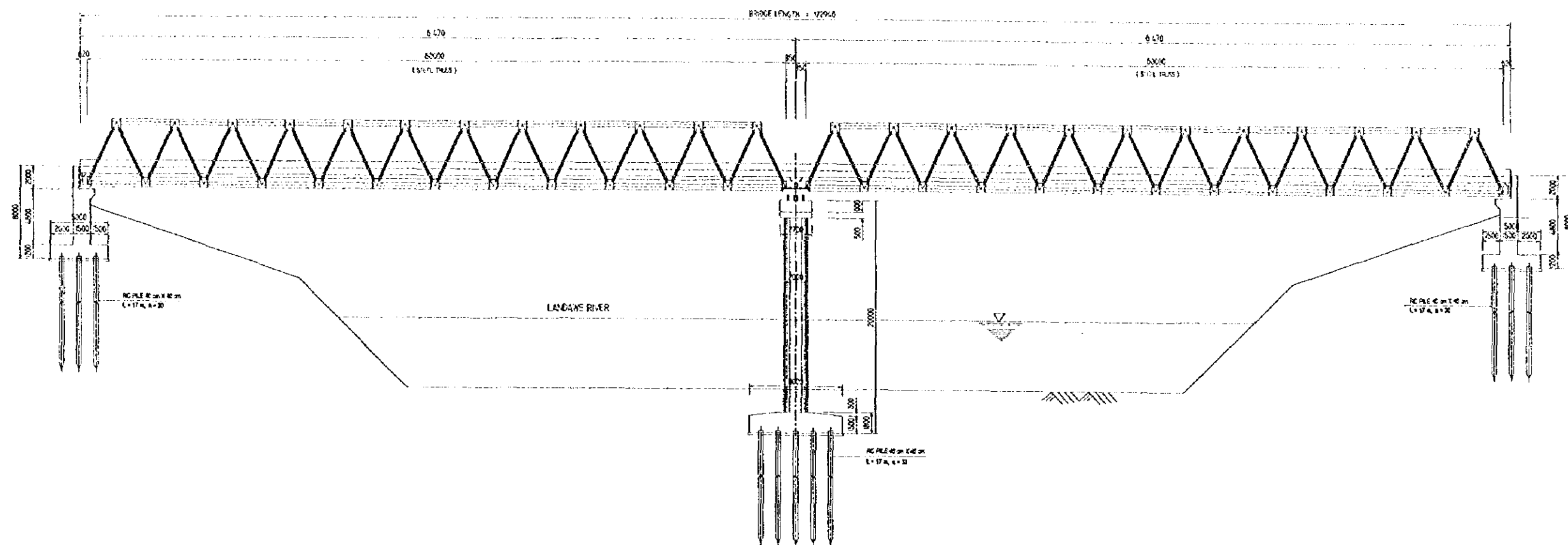


(2) GENERAL VIEW OF BR 33-6 (STA. 173+600)

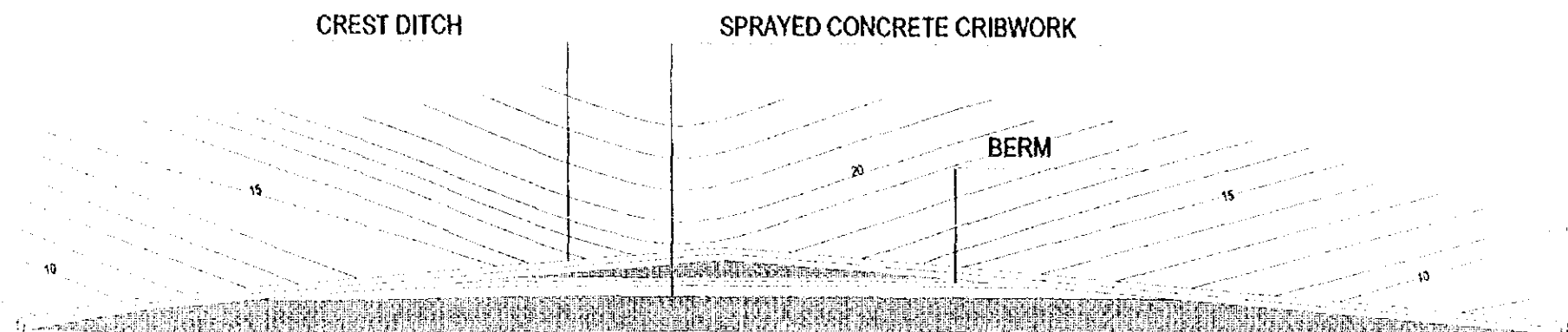


GENERAL VIEWS OF LONG SPAN BRIDGES (2)

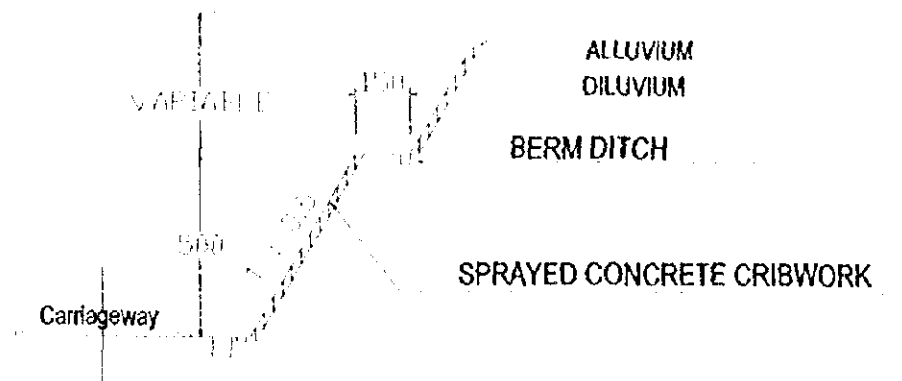
(3) GENERAL VIEW OF BR 33-10 (STA. 183+060)



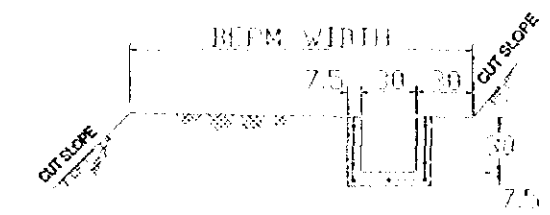
PROJECT: ROAD NETWORK STUDY IN CENTRAL AND SOUTH-EAST SULAWESI	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	PACIFIC CONSULTANTS INTERNATIONAL YACHIYO ENGINEERING Co., Ltd.	DRAWING TITLE: GENERAL VIEWS OF LONG SPAN BRIDGES (2)	SCALE: 1:400	SHEET NO.
	DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA) MINISTRY OF PUBLIC WORKS				130



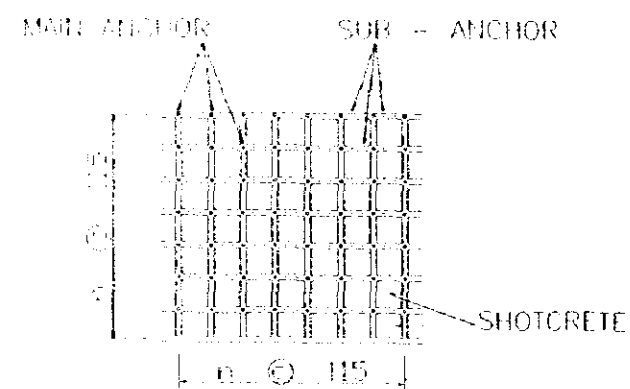
PLAN
SCALE 1:500



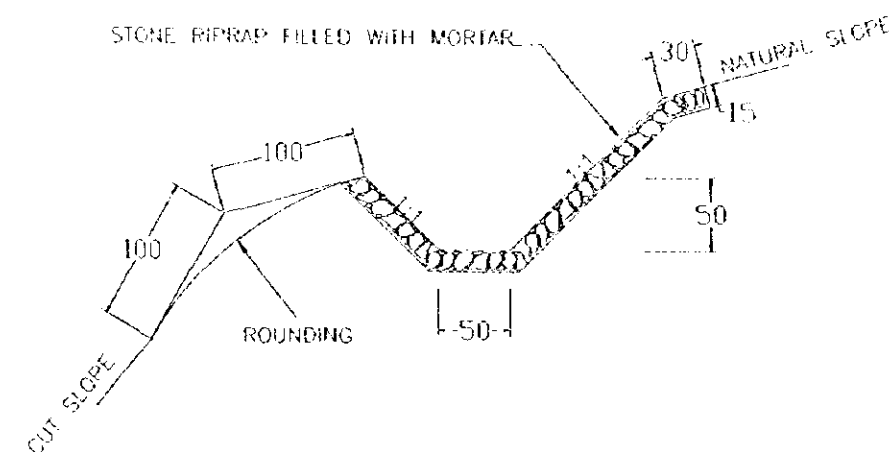
CROSS SECTION
SCALE 1:100



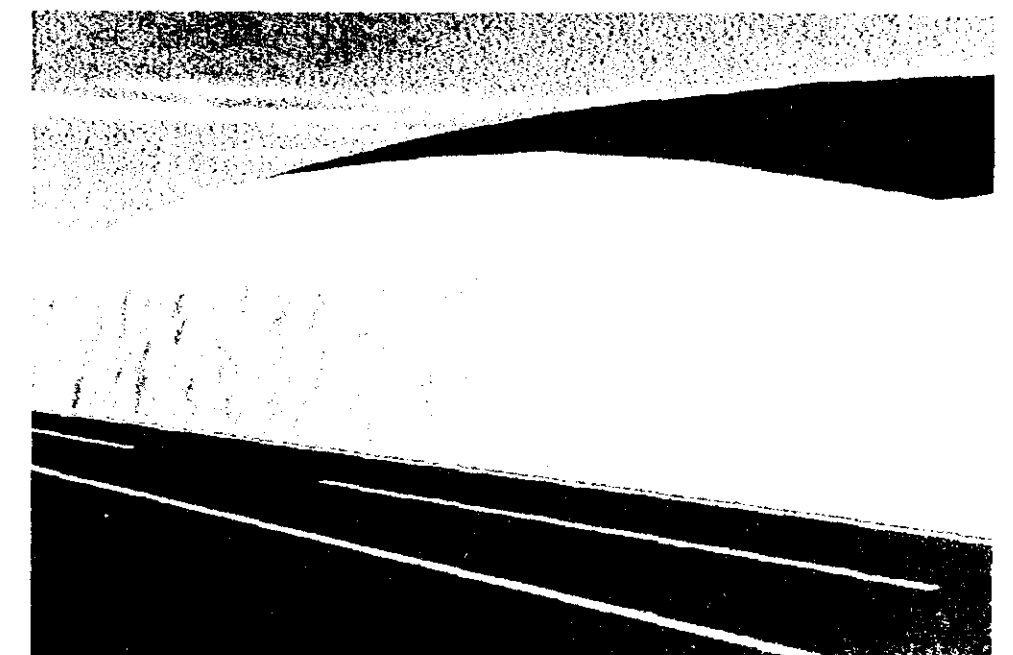
BERM DITCH
SCALE 1:40



DETAIL



CREST DITCH
SCALE 1:50



PERSPECTIVE VIEW

PROJECT : ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

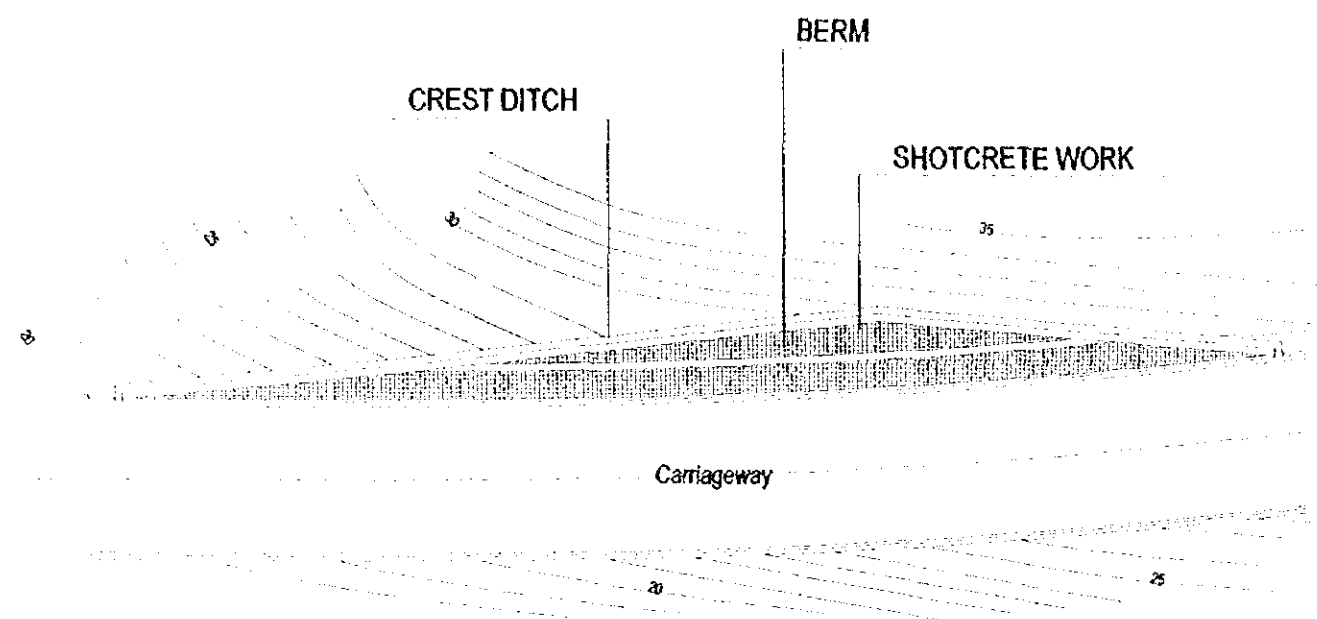
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINAMARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

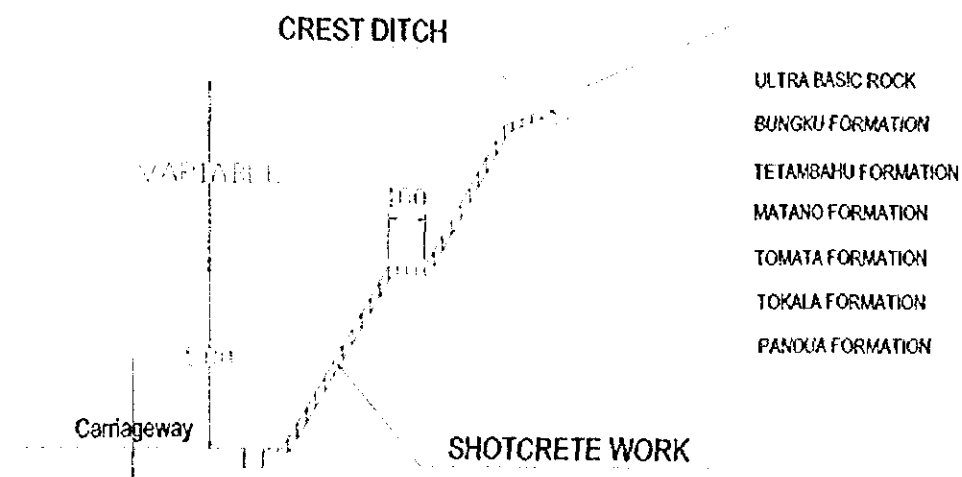
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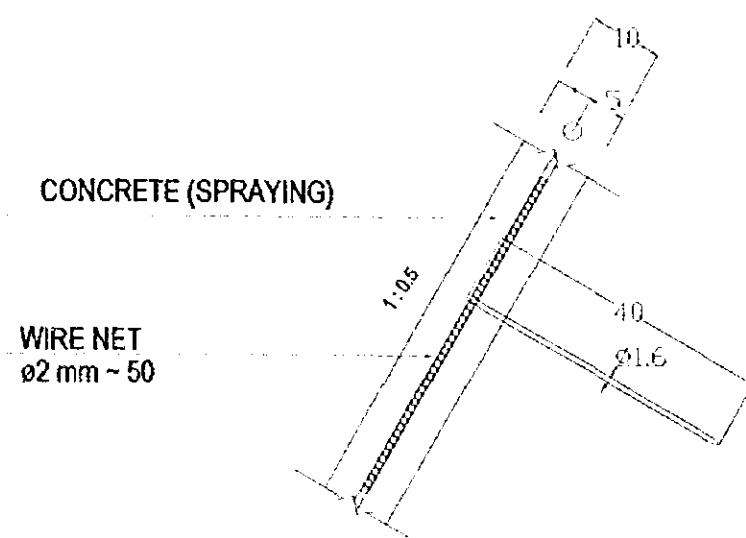
SHEET NO.
131



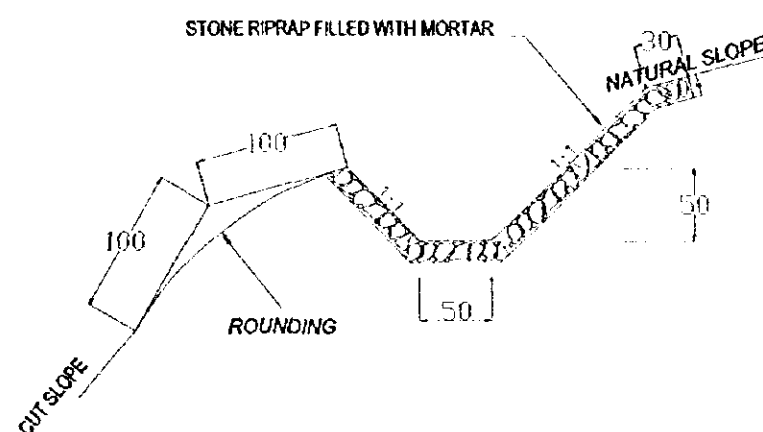
PLAN
SCALE 1:500



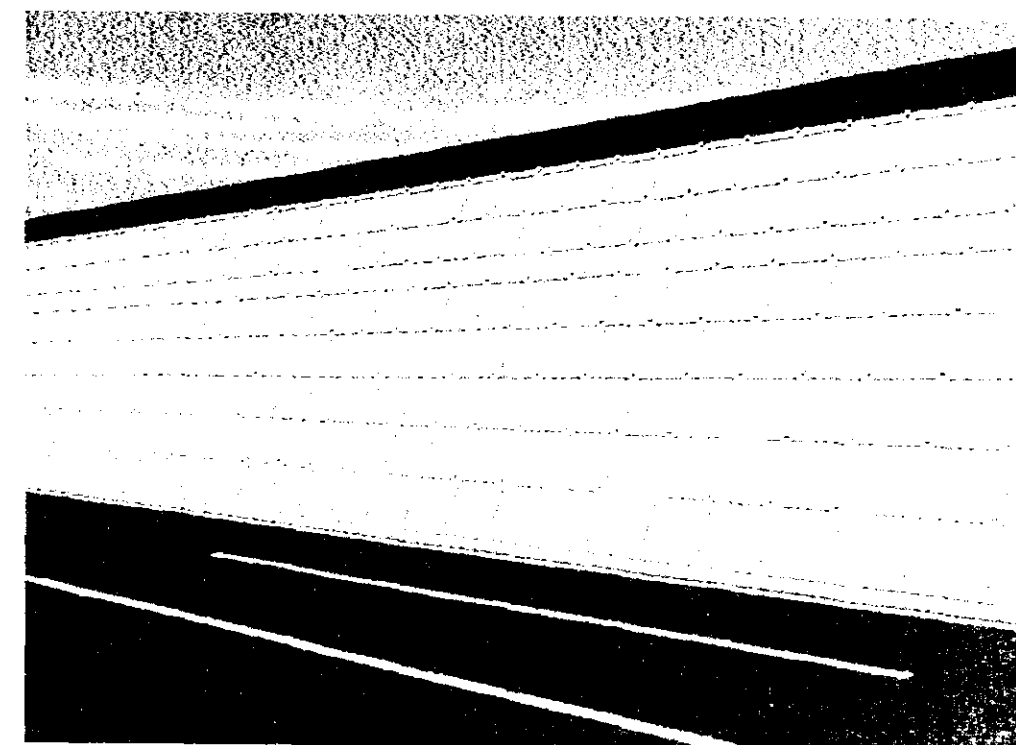
CROSS SECTION
SCALE 1:200



SHOTCRETE WORK
SCALE 1:10



CREST DITCH
SCALE 1:50



PERSPECTIVE VIEW

PROJECT : ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINAMARGA)
MINISTRY OF PUBLIC WORKS

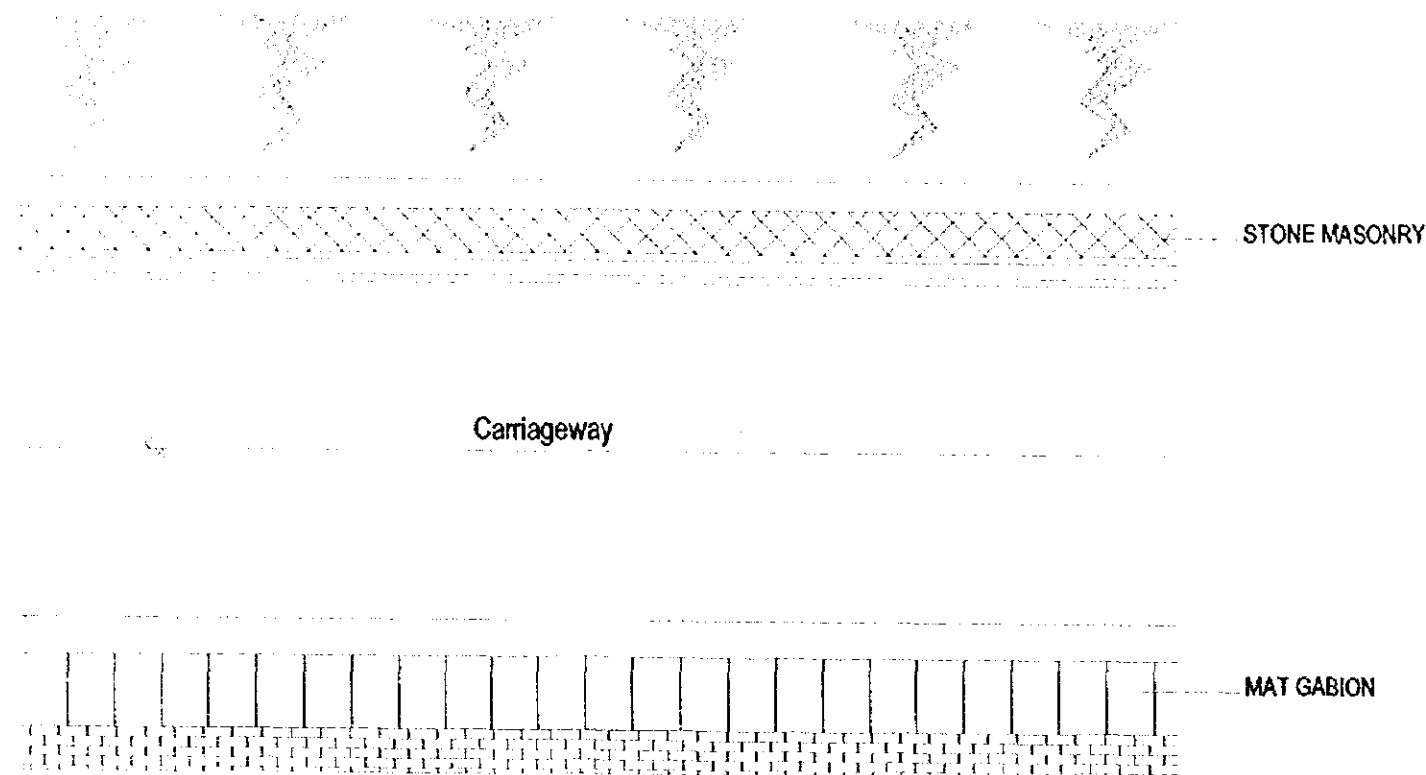
PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE :
SHOTCRETE WORK

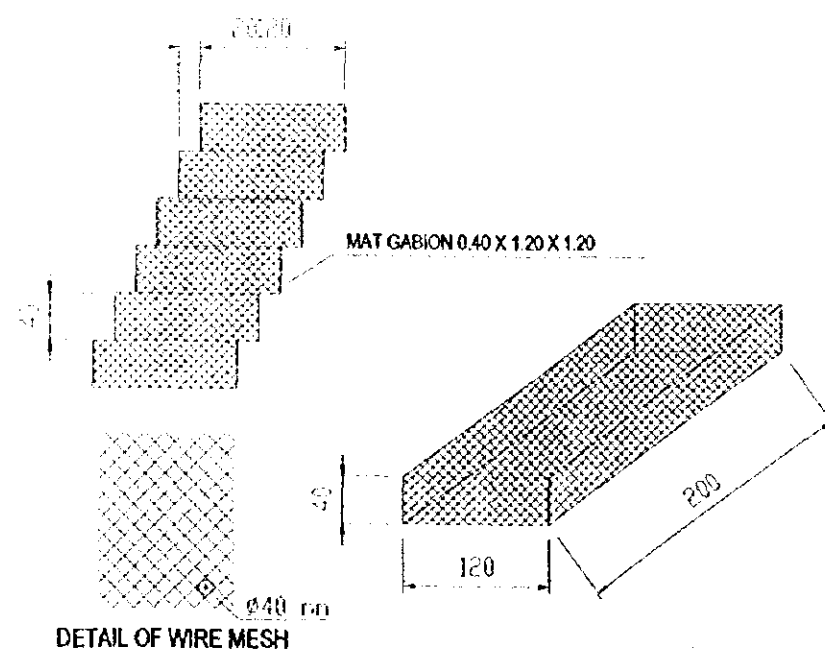
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SHEET NO.
132

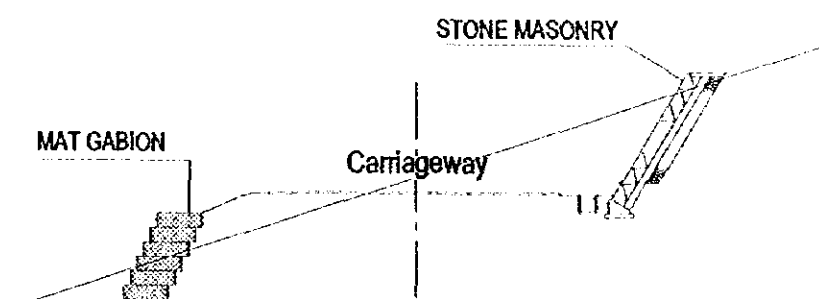
PLAN
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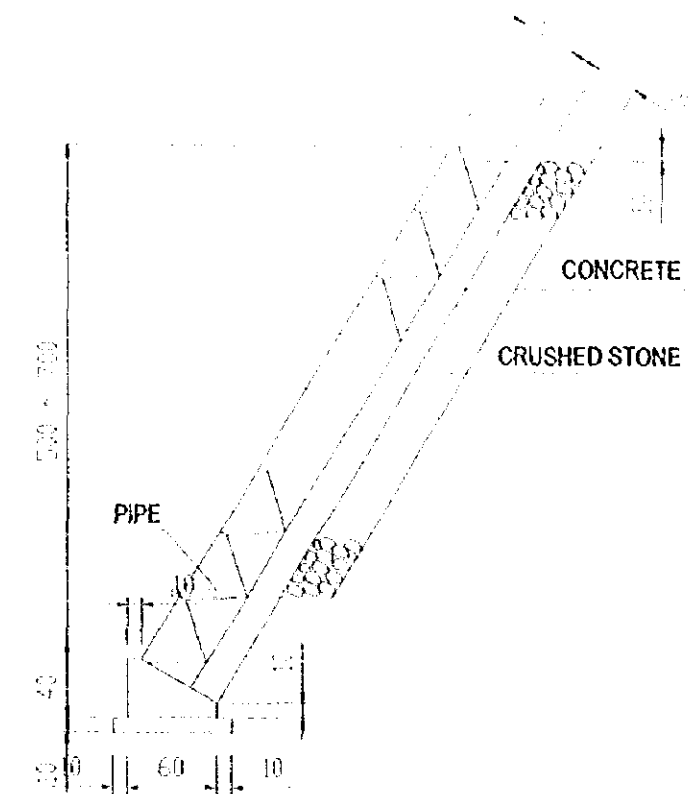
MAT GABION RETAINING WALL
SCALE 1 : 60



CROSS SECTION
SCALE 1 : 200



STONE MASONRY
SCALE 1 : 200



PERSPECTIVE VIEW

PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

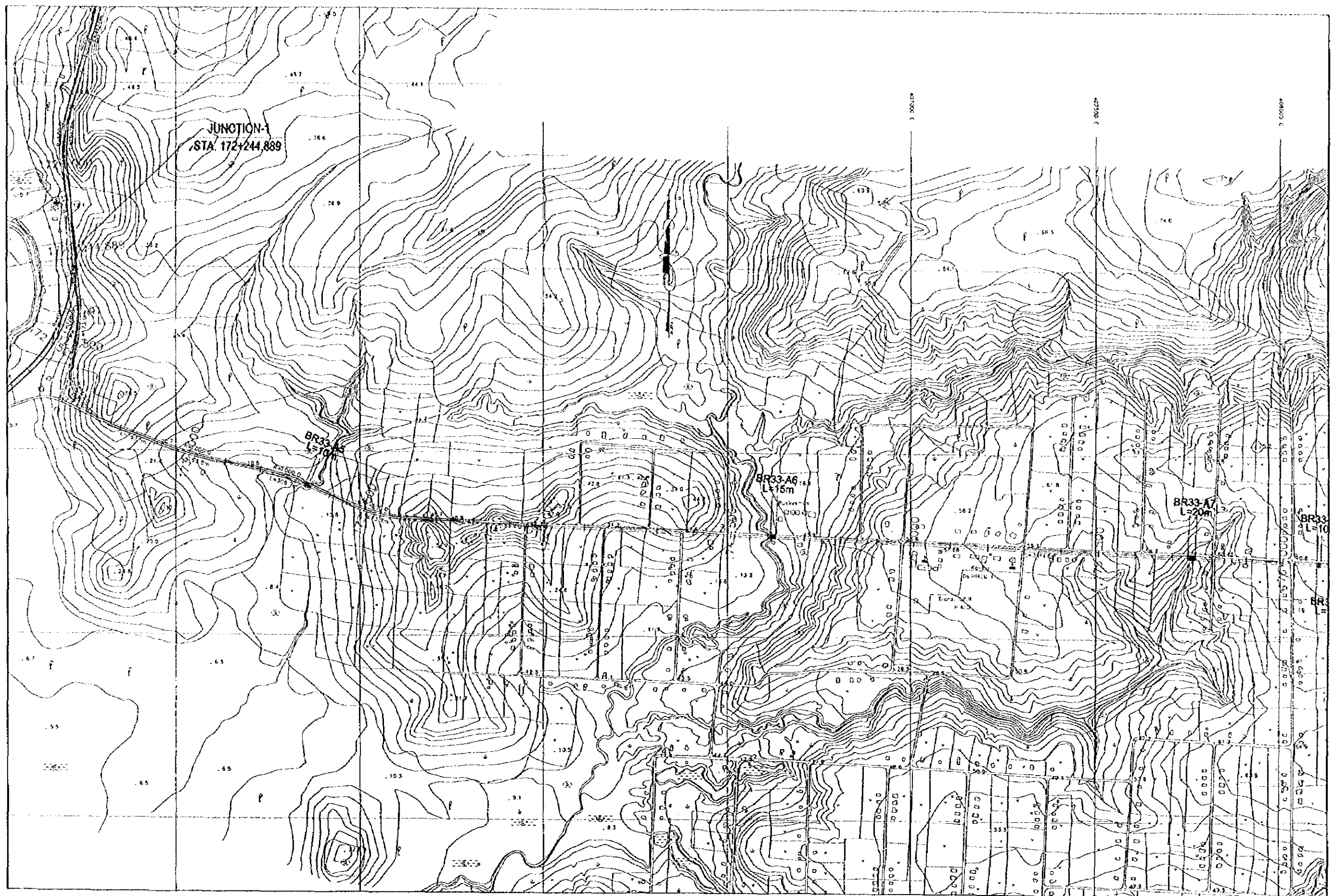
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE:
MAT GABION RETAINING WALL

SCALE:
VARIABLE

SHEET NO.
133



PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

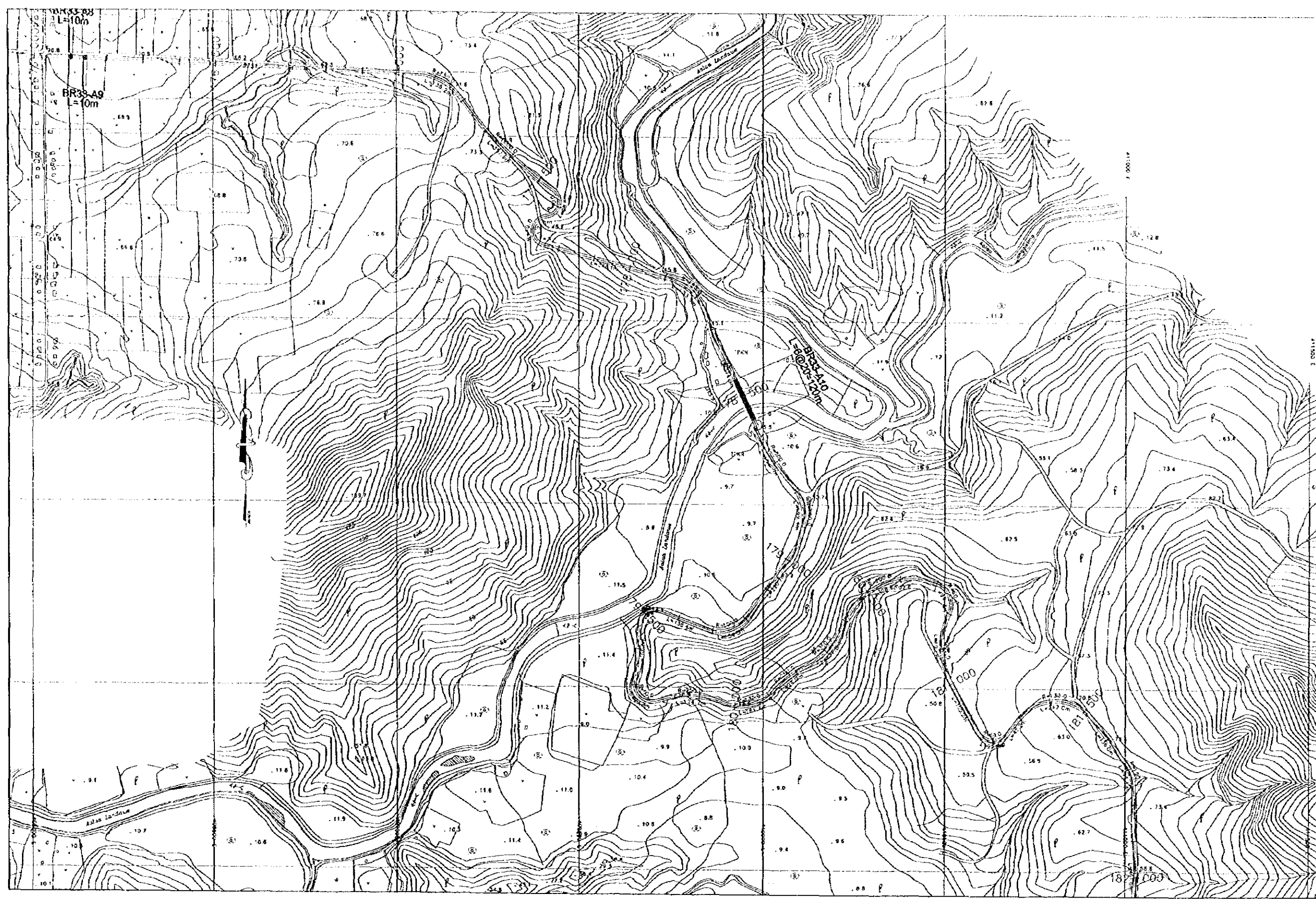
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

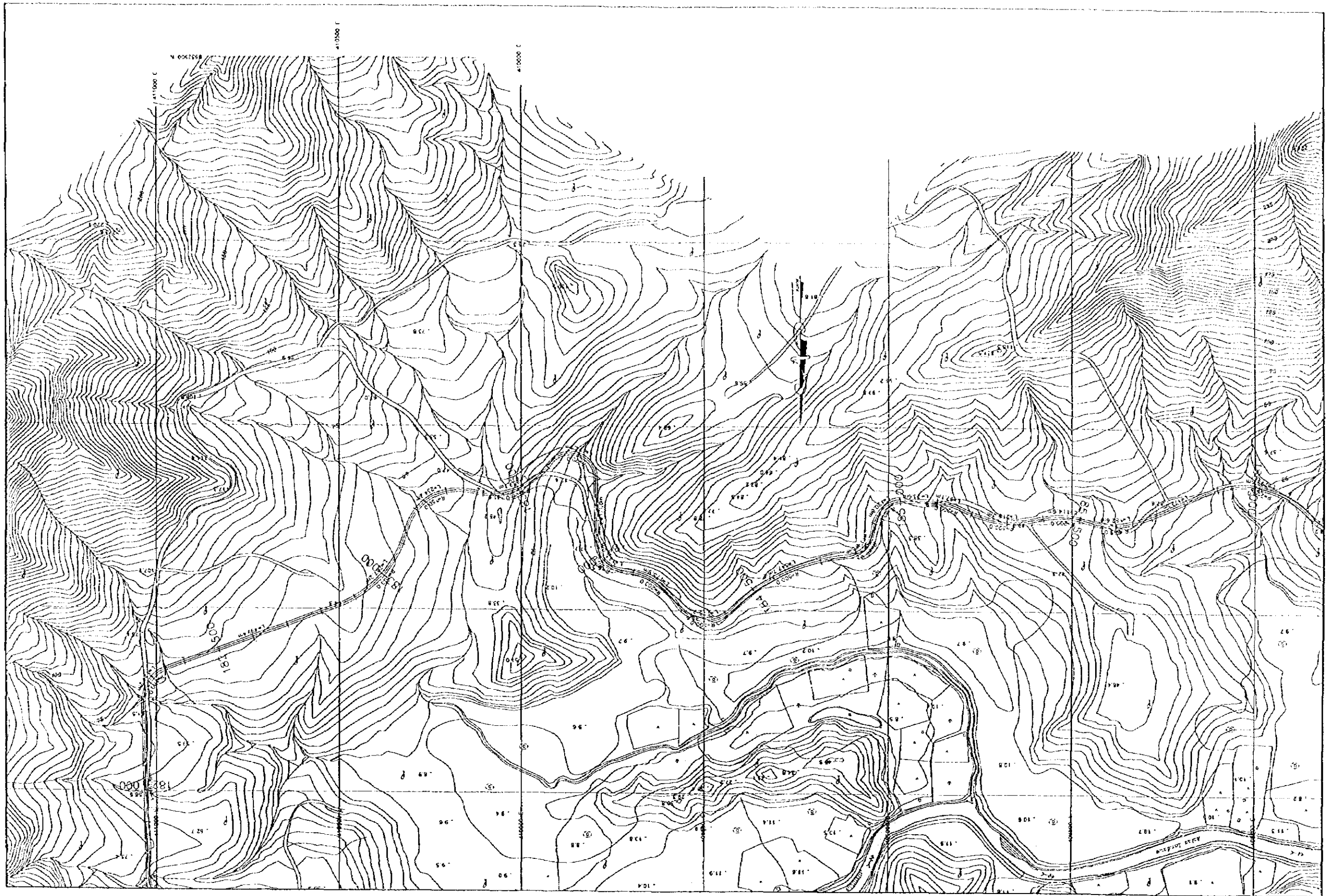
DRAWING TITLE: PLAN (ALT-1)
(172+244.889 - 176+000)

SCALE:
1:10000

SHEET NO.
134



PROJECT: ROAD NETWORK STUDY IN CENTRAL AND SOUTH-EAST SULAWESI	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA) MINISTRY OF PUBLIC WORKS	PACIFIC CONSULTANTS INTERNATIONAL YACHIYO ENGINEERING Co., Ltd.	DRAWING TITLE: PLAN (ALT-2) (176+000 - 182+000)	SCALE: 1: 10000	SHEET NO. 135
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PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE: PLAN (ALT-3)
(182+000 - 186+000)

SCALE:
1: 10000

SHEET NO.
136



PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

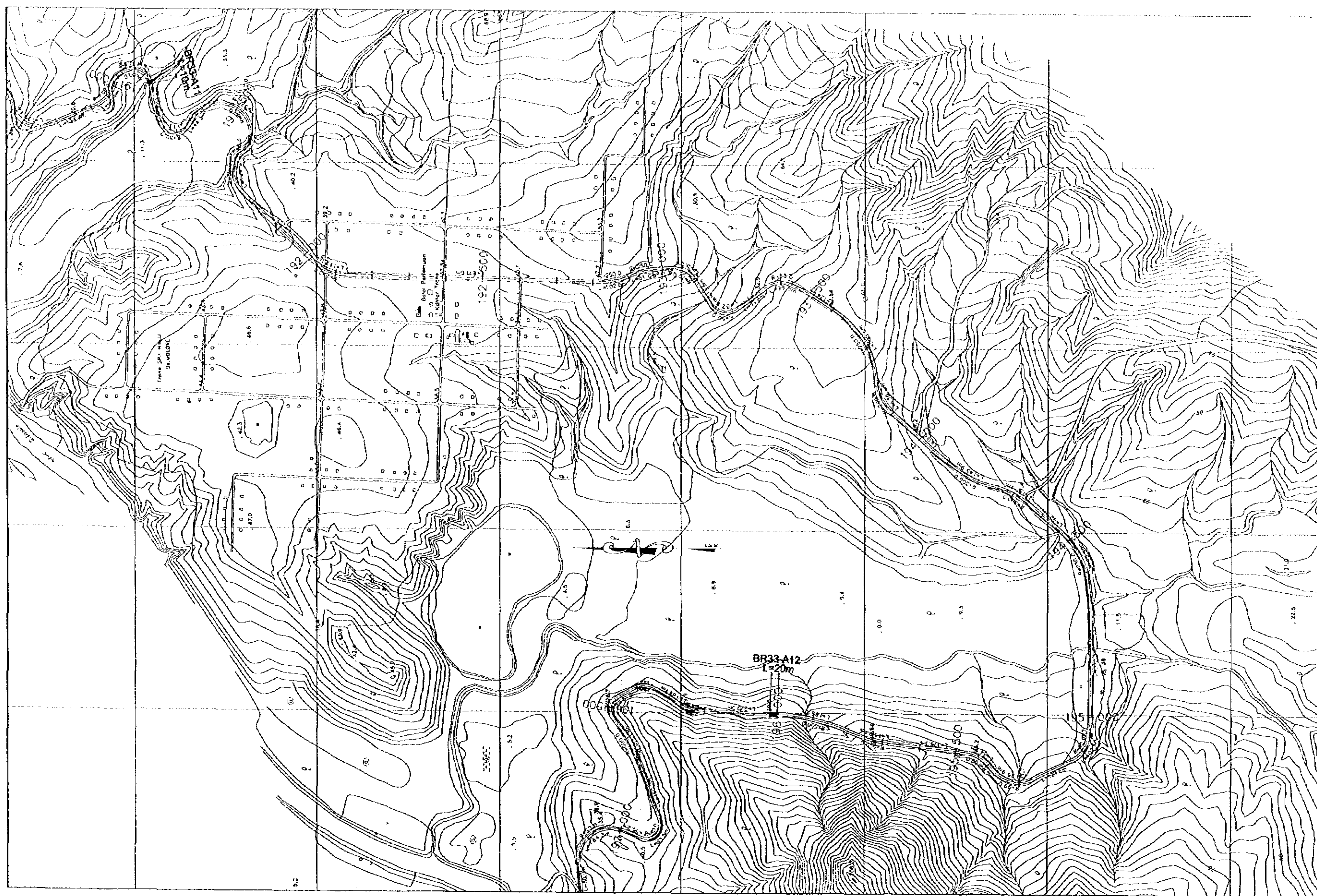
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE: PLAN (ALT-4)
(186+000 - 191+000)

SCALE:
1: 10000

SHEET NO.
137



PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

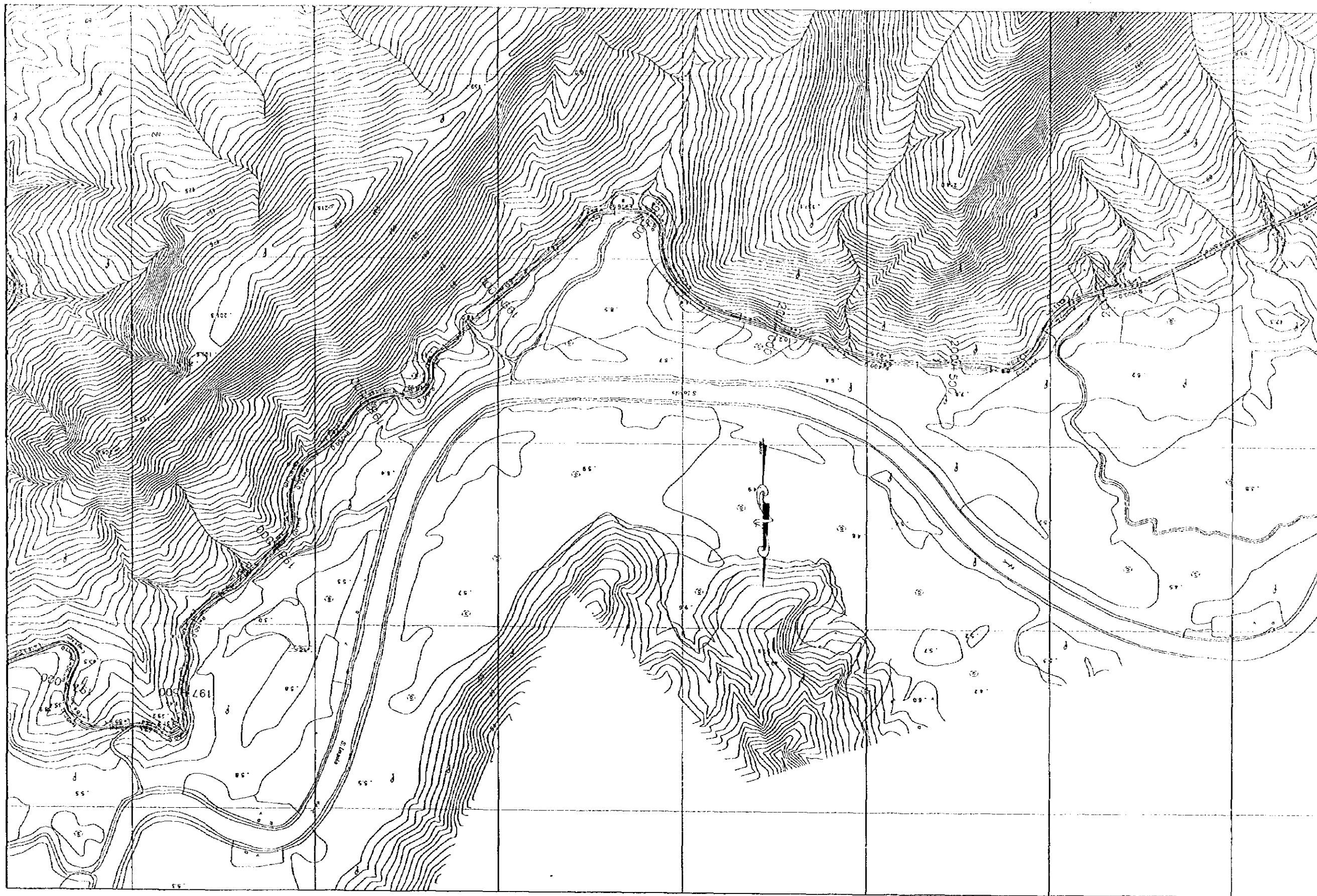
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE: PLAN (ALT-5)
(191+000 - 197+000)

SCALE:
1:10000

SHEET NO.
138



PROJECT: ROAD NETWORK STUDY
IN CENTRAL AND SOUTH-EAST SULAWESI

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
DIRECTORATE GENERAL OF HIGHWAYS (BINA MARGA)
MINISTRY OF PUBLIC WORKS

PACIFIC CONSULTANTS INTERNATIONAL
YACHIYO ENGINEERING Co., Ltd.

DRAWING TITLE:

PLAN (ALT-6)
(197+000 - 201+500)

SCALE:
1:10000

SHEET NO.
139