No.

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS

DIRECTORATE GENERAL OF HIGHWAYS

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROADS IN SOUTH SULAWESI PROVINCE

FINAL REPORT
VOLUME 2-2
PRELIMINARY DESIGN DRAWINGS

MARCH 2008

NIPPON KOEI CO., LTD.
KRI INTERNATIONAL CORP.
ALMEC CORPORATION

INO
JR
07-013

TRANS - SULAWESI ROAD MAMMINASATA SECTION

1. GENERAL

DRAWINGS INDEX - 1
(TRANS - SULAWESI ROAD MAMMINASATA SECTION)

NO	DRAWING TITLE	DRAWING NO	REMARKS
1	**GENERAL**		
1.1	DRAWING INDEX	GE - 01	
1.2	LOCATION MAP	GE - 02	
2	**TYPICAL CROSS SECTIONS**		
2.1	TYPICAL CROSS SECTIONS (1/7)	TC - 01	
2.2	TYPICAL CROSS SECTIONS (2/7)	TC - 02	
2.3	TYPICAL CROSS SECTIONS (3/7)	TC - 03	
2.4	TYPICAL CROSS SECTIONS (4/7)	TC - 04	
2.5	TYPICAL CROSS SECTIONS (5/7)	TC - 05	
2.6	TYPICAL CROSS SECTIONS (6/7)	TC - 06	
2.7	TYPICAL CROSS SECTIONS (7/7)	TC - 07	
3	**ROADWAY - PLAN AND PROFILE**		
3.1	PLAN AND PROFILE (1/34)	PP - 01	
3.2	PLAN AND PROFILE (2/34)	PP - 02	
3.3	PLAN AND PROFILE (3/34)	PP - 03	
3.4	PLAN AND PROFILE (4/34)	PP - 04	
3.5	PLAN AND PROFILE (5/34)	PP - 05	
3.6	PLAN AND PROFILE (6/34)	PP - 06	
3.7	PLAN AND PROFILE (7/34)	PP - 07	
3.8	PLAN AND PROFILE (8/34)	PP - 08	
3.9	PLAN AND PROFILE (9/34)	PP - 09	
3.10	PLAN AND PROFILE (10/34)	PP - 10	
3.11	PLAN AND PROFILE (11/34)	PP - 11	
3.12	PLAN AND PROFILE (12/34)	PP - 12	
3.13	PLAN AND PROFILE (13/34)	PP - 13	
3.14	PLAN AND PROFILE (14/34)	PP - 14	
3.15	PLAN AND PROFILE (15/34)	PP - 15	
3.16	PLAN AND PROFILE (16/34)	PP - 16	
3.17	PLAN AND PROFILE (17/34)	PP - 17	
3.18	PLAN AND PROFILE (18/34)	PP - 18	
3.19	PLAN AND PROFILE (19/34)	PP - 19	
3.20	PLAN AND PROFILE (20/34)	PP - 20	
3.21	PLAN AND PROFILE (21/34)	PP - 21	
3.22	PLAN AND PROFILE (22/34)	PP - 22	
3.23	PLAN AND PROFILE (23/34)	PP - 23	
3.24	PLAN AND PROFILE (24/34)	PP - 24	
3.25	PLAN AND PROFILE (25/34)	PP - 25	
3.26	PLAN AND PROFILE (26/34)	PP - 26	
3.27	PLAN AND PROFILE (27/34)	PP - 27	
3.28	PLAN AND PROFILE (28/34)	PP - 28	
3.29	PLAN AND PROFILE (29/34)	PP - 29	
3.30	PLAN AND PROFILE (30/34)	PP - 30	
3.31	PLAN AND PROFILE (31/34)	PP - 31	
3.32	PLAN AND PROFILE (32/34)	PP - 32	
3.33	PLAN AND PROFILE (33/34)	PP - 33	
3.34	PLAN AND PROFILE (34/34)	PP - 34	
4	**ROADWAY - INTERSECTIONS**		
4.1	TS - 1 END OF SECTION - C / NATIONAL ROAD	IN - 01	
4.2	TS - 2 END OF MIDDLE RING / NATIONAL ROAD	IN - 02	
4.3	TS - 3 TRANS - SULAWESI / HERTASNING	IN - 03	
4.4	TS - 4 TRANS - SULAWESI / ABDULLAH DAENG SIRUA	IN - 04	
4.5	TS - 5 MIDDLE RING / PERINTIS	IN - 05	
5	**BRIDGE**		
5.1	TALLO BRIDGE	BR - 01	
5.2	TALLO BRIDGE (ALTERNATIVE)	BR - 01A	
5.3	JENEBERANG NO. 2 BRIDGE	BR - 02	
5.4	JENEBERANG NO. 2 BRIDGE (ALTERNATIVE)	BR - 02A	
6	**DRAINAGE AND STRUCTURES**		
6.1	DETAILS OF DRAINAGE (1/3)	DR - 01	
6.2	DETAILS OF DRAINAGE (2/3)	DR - 02	
6.3	DETAILS OF DRAINAGE (3/3)	DR - 03	
6.4	DETAIL OF CATCH PIT	DR - 04	
6.5	GENERAL LAYOUT OF SINGLE PIPE CULVERT	DR - 05	
6.6	GENERAL LAYOUT OF DOUBLE PIPE CULVERT	DR - 06	
6.7	INLET/OUTLET OF PIPE CULVERTS	DR - 07	
6.8	PEDESTRIAN BRIDGE - TYPE-A	DR - 08	
6.9	PEDESTRIAN BRIDGE - TYPE-B	DR - 09	
7	**MISCELLANEOUS**		
7.1	TRAFFIC SIGNS	MS - 01	
7.2	DETAIL OF TRAFFIC SIGN	MS - 02	
7.3	STANDARD OF GUARDRAIL	MS - 03	
7.4	STANDARD OF KILOMETER POS AND GUIDE POST	MS - 04	
7.5	MEDIAN, SIDEWALK AND PLANTING ZONE	MS - 05	
7.6	STANDARD OF ELECTRICAL POLE	MS - 06	
7.7	DETAIL FOUNDATION FOR ELECTRICAL POLE	MS - 07	
7.8	TRAFFIC SIGNAL (1/2)	MS - 08	
7.9	TRAFFIC SIGNAL (2/2)	MS - 09	
7.10	SOFT GROUND IMPROVEMENT BY PRE-CAST CONCRETE PILE	MS - 10	
7.11	REINFORCED EARTH WALL	MS - 11	
8	**CONTROL POINT FOR REFERENCE**		
8.1	SURVEY AND PRELIMINARY DESIGN CONTROL POINT DATA FOR REFERENCE 1/2	CP - 01	
8.2	SURVEY AND PRELIMINARY DESIGN CONTROL POINT DATA FOR REFERENCE 2/2	CP - 02	

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : DRAWING INDEX

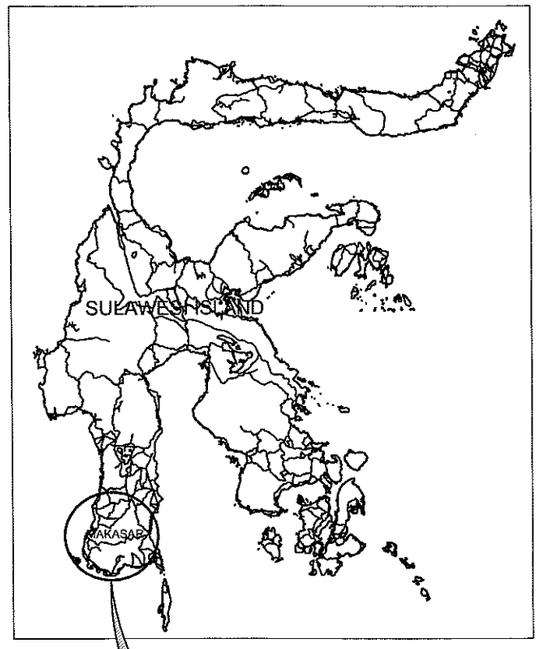
SCALE

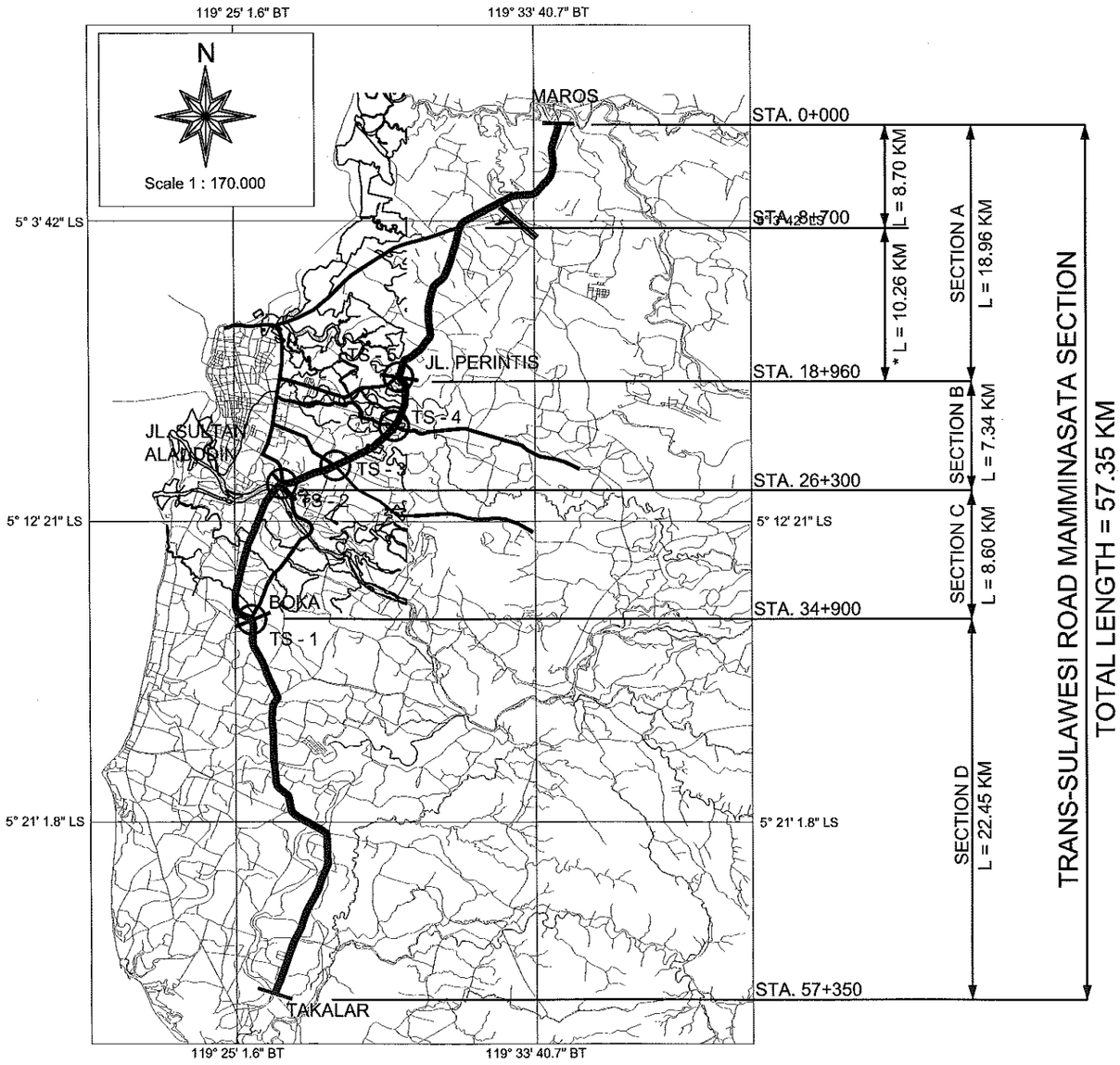
DRAWING NO. GE-01

DATE: MARCH 2008

LOCATION MAP

KEY MAP



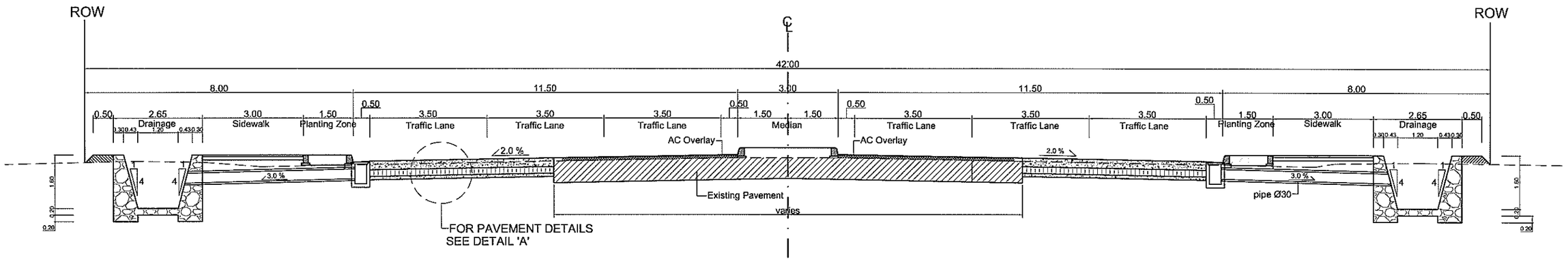


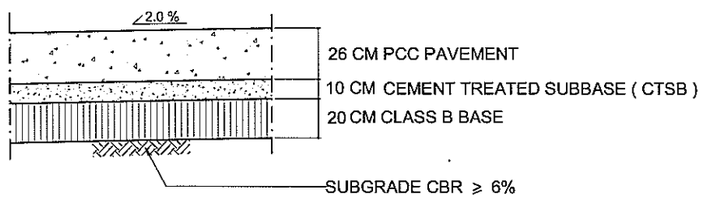
NOTE: * This sub-section will be constructed by APBN by 2010.

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI MAMMINASATA SECTION DRAWING TITLE : LOCATION MAP SCALE = 1 / 170,000	DRAWING NO. GE-02 DATE: MARCH 2008

2. TYPICAL CROSS SECTIONS

TYPICAL CROSS SECTIONS (1/7)
SECTION-A (MAROS - JL. TOL IR. SUTAMI IC)

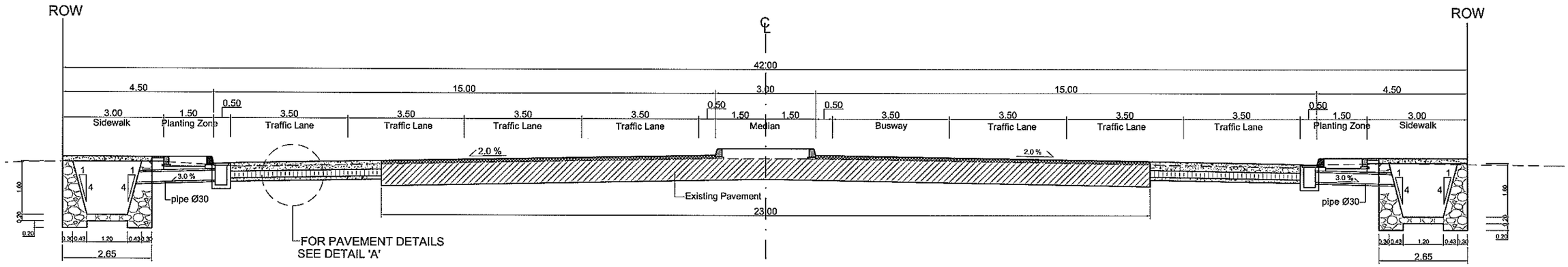


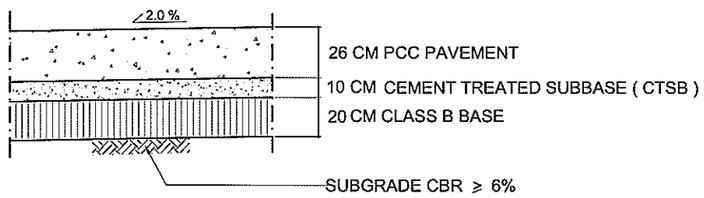


DETAIL A

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTION S (1/7) SCALE = 1 / 125	DRAWING NO. TC-01 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (2/7)
SECTION-A (DAYA - MIDDLE RING ROAD)

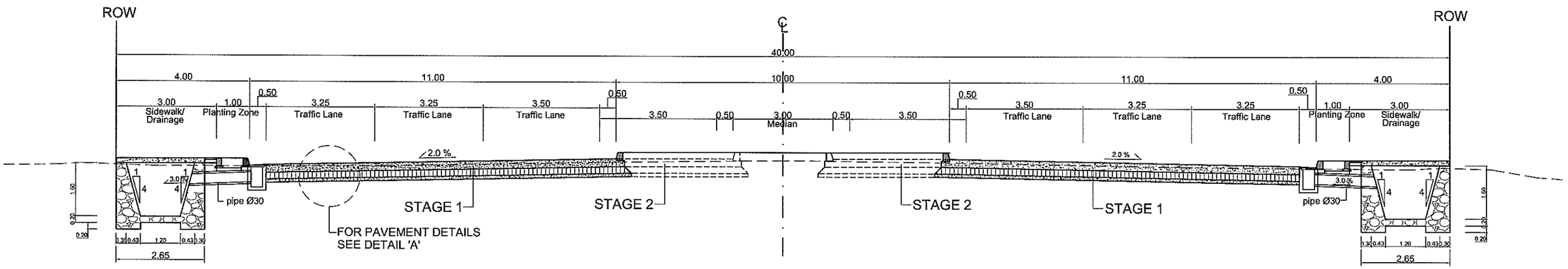


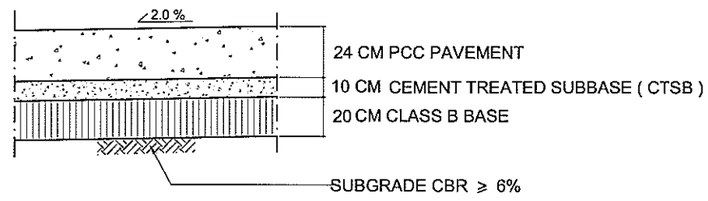


DETAIL A

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS (2/7) SCALE = 1 / 125	DRAWING NO. TC-02 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (3/7)
SECTION-B (MIDDLE RING ROAD)

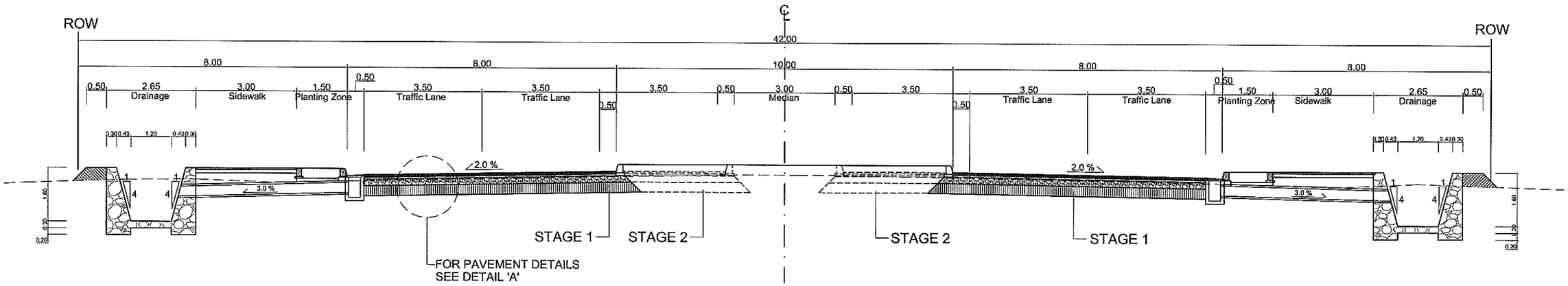


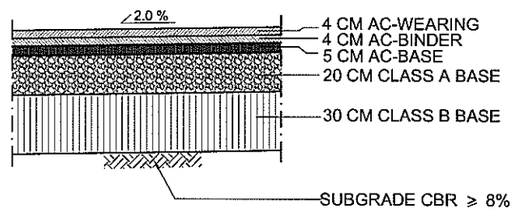


DETAIL A

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS (3/7) SCALE = 1 / 125	DRAWING NO. TC-03 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (4/7)
SECTION-C (MIDDLE RING ROAD ACCESS)



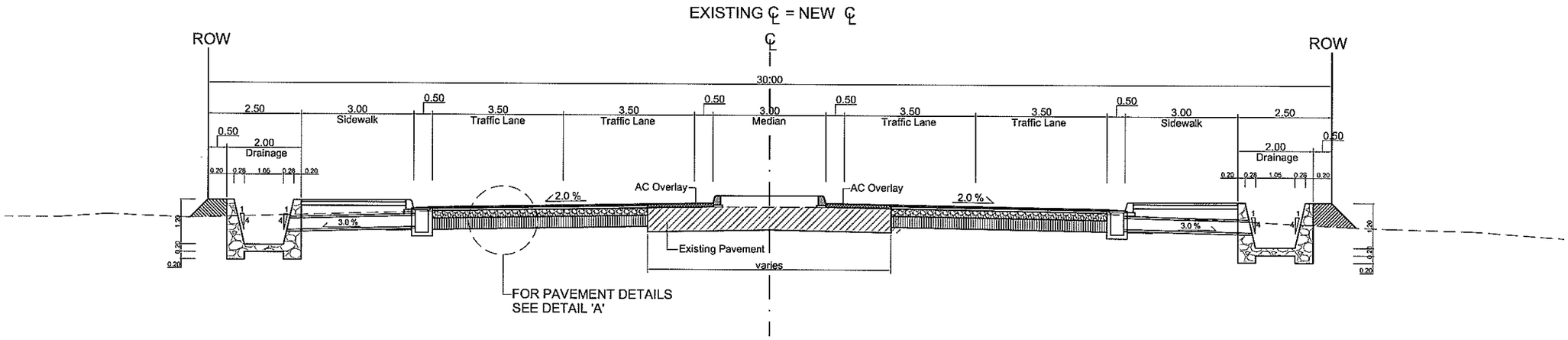


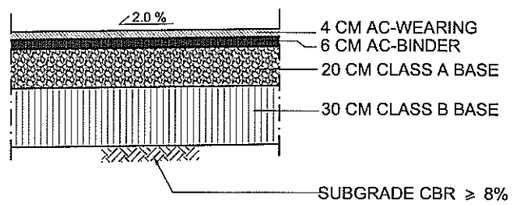
DETAIL A

NOTE : STAGE 2 SHALL BE A RESERVATION FOR FUTURE WIDENING

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS 4/7 SCALE = 1 / 125	DRAWING NO. TC-04 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (5/7)
SECTION-D URBAN AREA

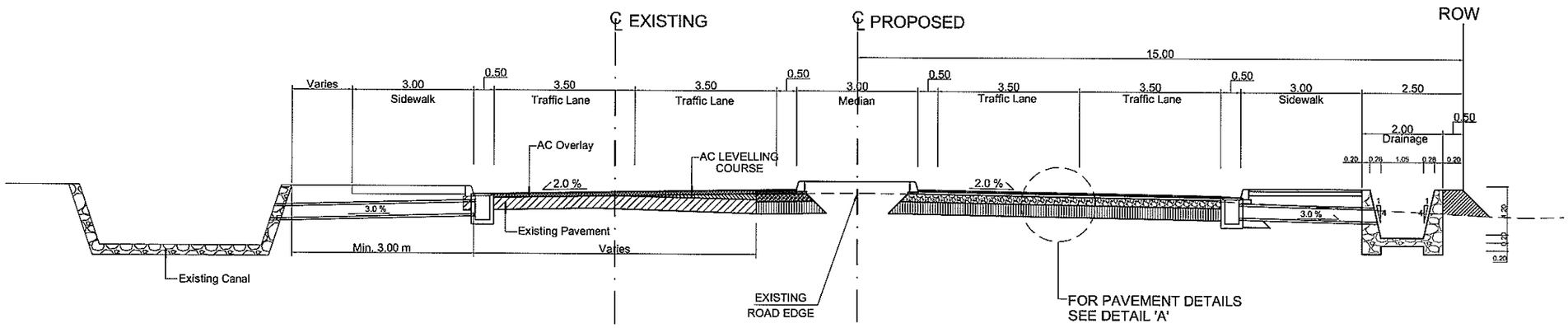


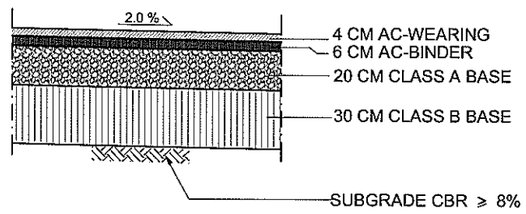


DETAIL A

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS (5/7) SCALE = 1 / 125	DRAWING NO. TC-05 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (6/7)
SECTION-D SEMI-URBAN AREA - A

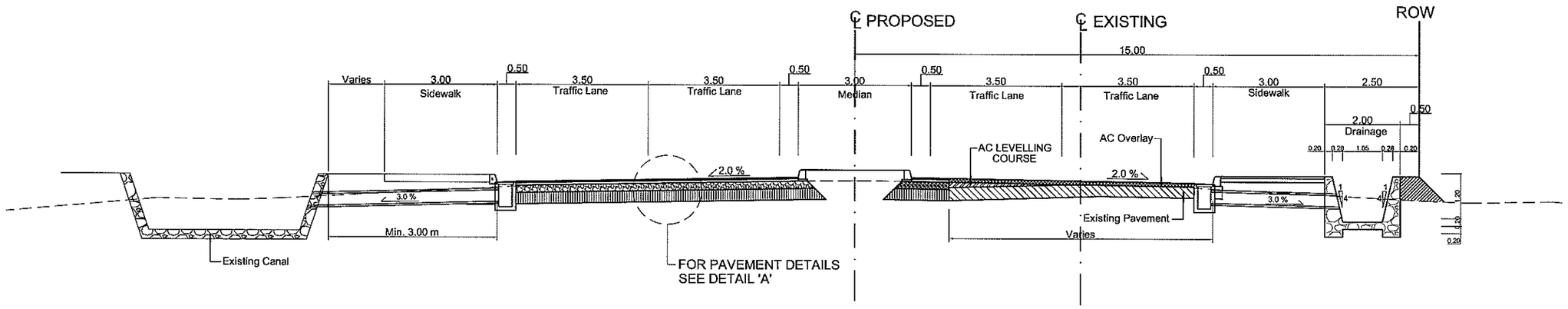


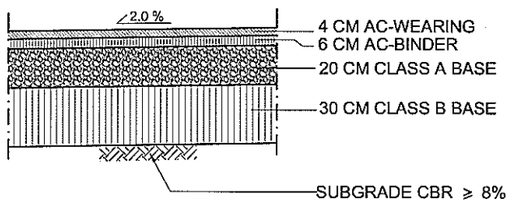


DETAIL A

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. JV KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS (6/7) SCALE = 1 / 125	DRAWING NO. TC-06 DATE: MARCH 2008

TYPICAL CROSS SECTIONS (7/7)
SECTION-D SEMI-URBAN AREA - B

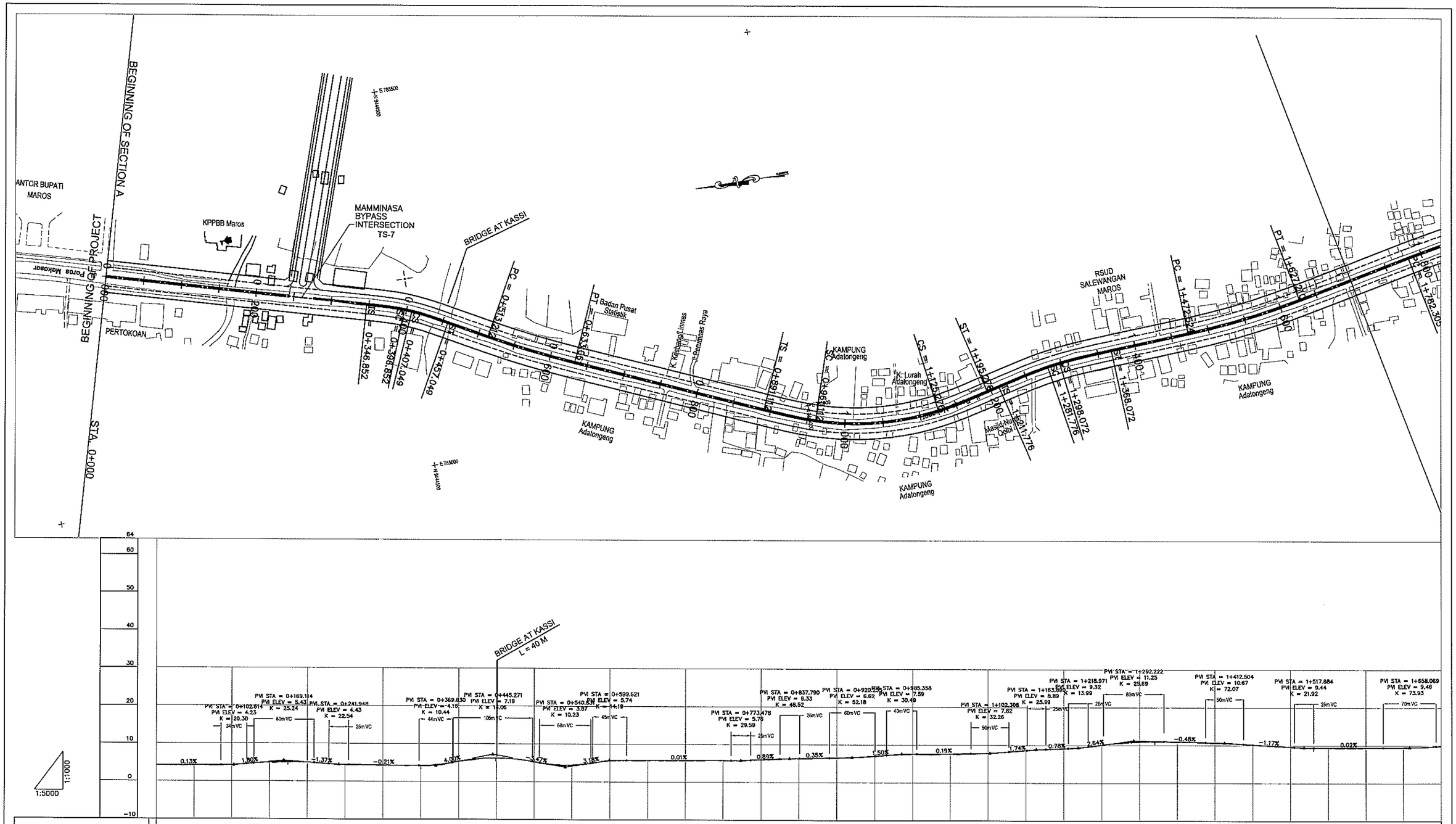




DETAIL A

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TYPICAL CROSS SECTIONS (7/7) SCALE = 1 / 125	DRAWING NO. TC-07 DATE: MARCH 2008

3. ROADWAY - PLAN AND PROFILE



JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

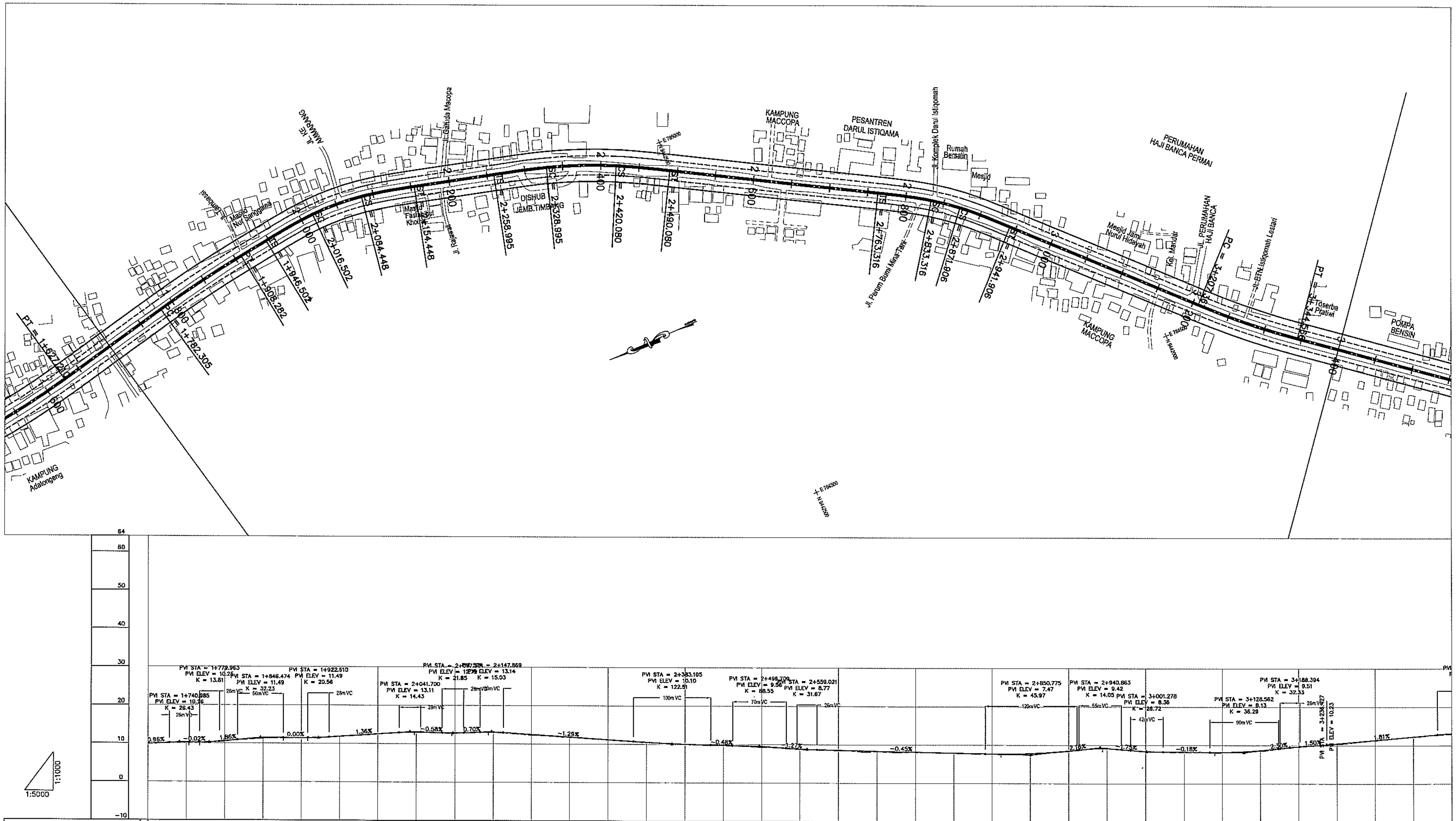
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (1/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-01

DATE: MARCH 2008



STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
1+700	9.865	9.799
1+750	10.255	10.157
1+800	10.624	10.490
1+850	11.380	11.269
1+900	11.489	11.374
1+950	11.862	11.768
2+000	12.543	12.462
2+050	13.052	12.931
2+100	12.837	12.733
2+150	13.062	12.948
2+200	12.470	12.259
2+250	11.824	11.709
2+300	11.178	11.072
2+350	10.543	10.457
2+400	10.068	9.965
2+450	9.785	9.679
2+500	9.464	9.271
2+550	8.890	8.762
2+600	8.590	8.500
2+650	8.367	8.218
2+700	8.144	8.090
2+750	7.921	7.838
2+800	7.707	7.689
2+850	7.857	7.785
2+900	8.550	8.404
2+950	9.141	9.137
3+000	8.458	8.352
3+050	8.276	8.148
3+100	8.223	8.100
3+150	8.705	8.553
3+200	9.685	9.623
3+250	10.475	10.307
3+300	11.379	11.279
3+350	12.282	12.177
3+400	13.114	12.945

HORIZONTAL ALIGNMENT: R=00 — 1+782.305 — R=1500 — 1+908.2821946.502 — R=00 — 2+016.502 — R=350 — 2+084.448 — 2154.448 — R=00 — 2258.995 — 2+328.995 — R=620 — 2+420.080 — 2490.080 — R=00 — 2763.316 — R=380 — 2+833.316 2+871.906 — 2941.906 — R=00 — 3+207.361 — R=1050 — 3+344.566 — R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

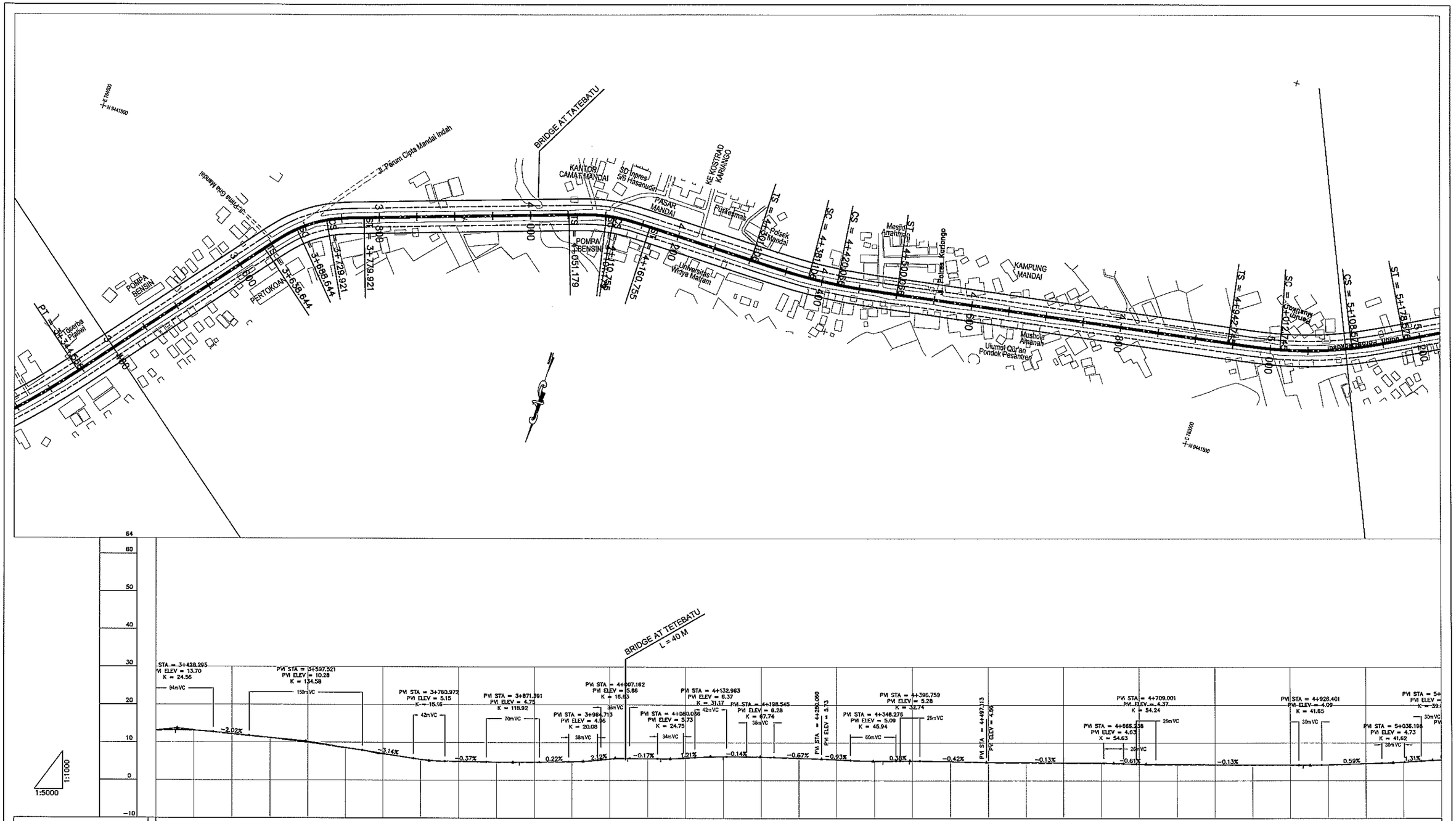
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (2/34)

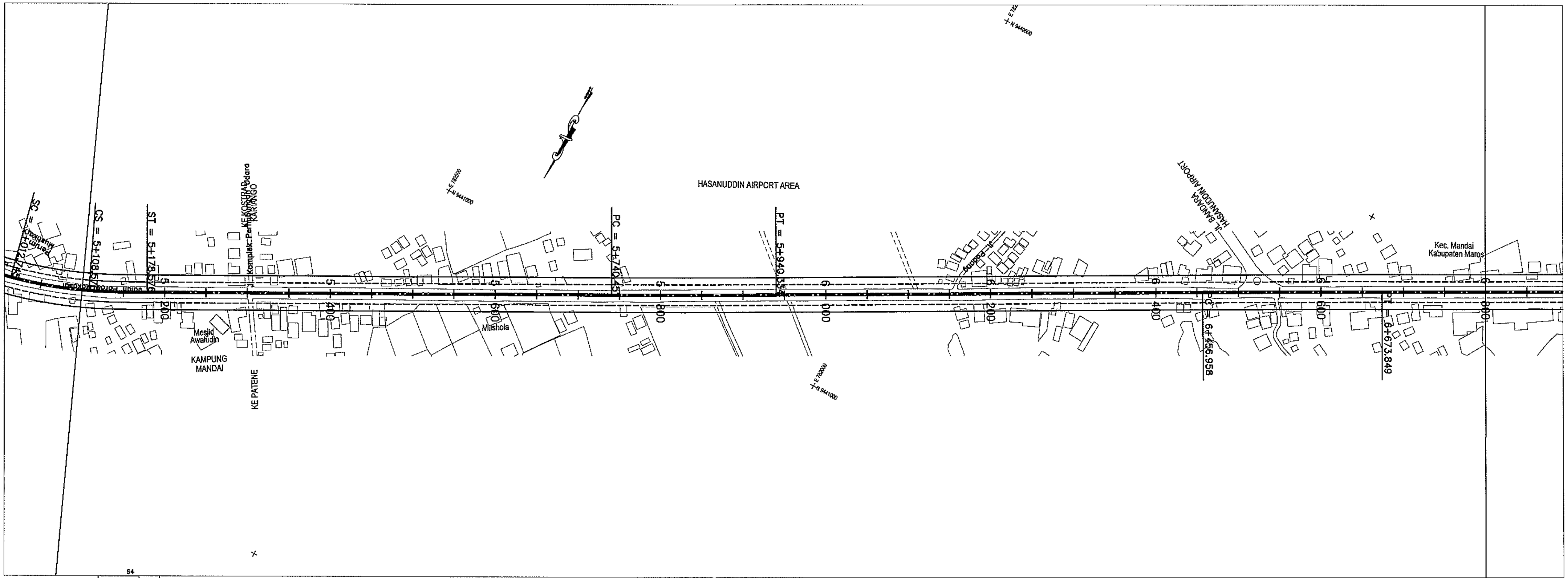
SCALE = 1 / 5,000 H, 1/1,000 V

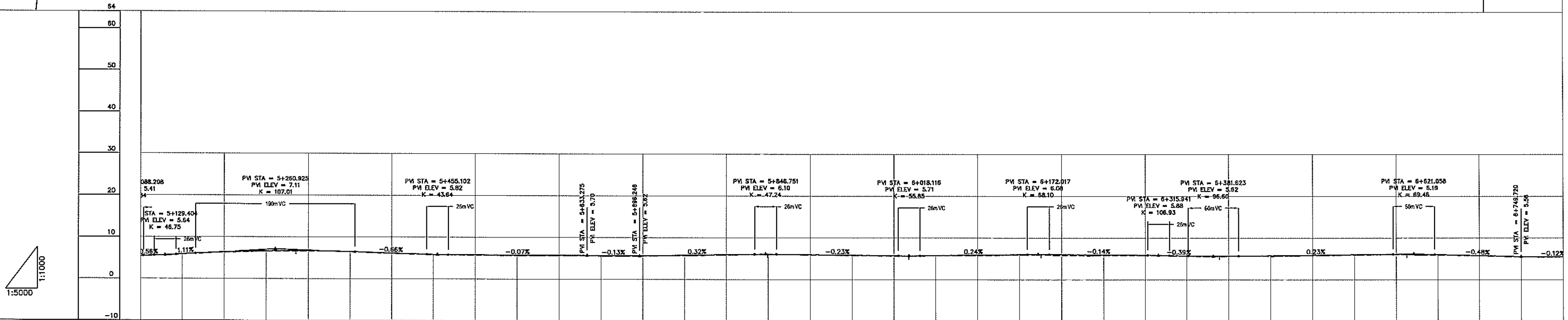
DRAWING NO. PP-02

DATE: MARCH 2008



JAPAN INTERNATIONAL COOPERATION AGENCY	
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	
PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION
	DRAWING TITLE : PLAN AND PROFILE (3/34)
	SCALE = 1 / 5,000 H, 1/1,000 V
	DRAWING NO. PP-03
	DATE: MARCH 2008





STATION	5+100	5+150	5+200	5+250	5+300	5+350	5+400	5+450	5+500
PROPOSED HEIGHT	5.478	5.873	6.375	6.655	6.702	6.515	6.186	5.861	5.790
EXISTING GROUND HEIGHT	5.389	5.805	6.284	6.557	6.607	6.420	6.073	5.756	5.695

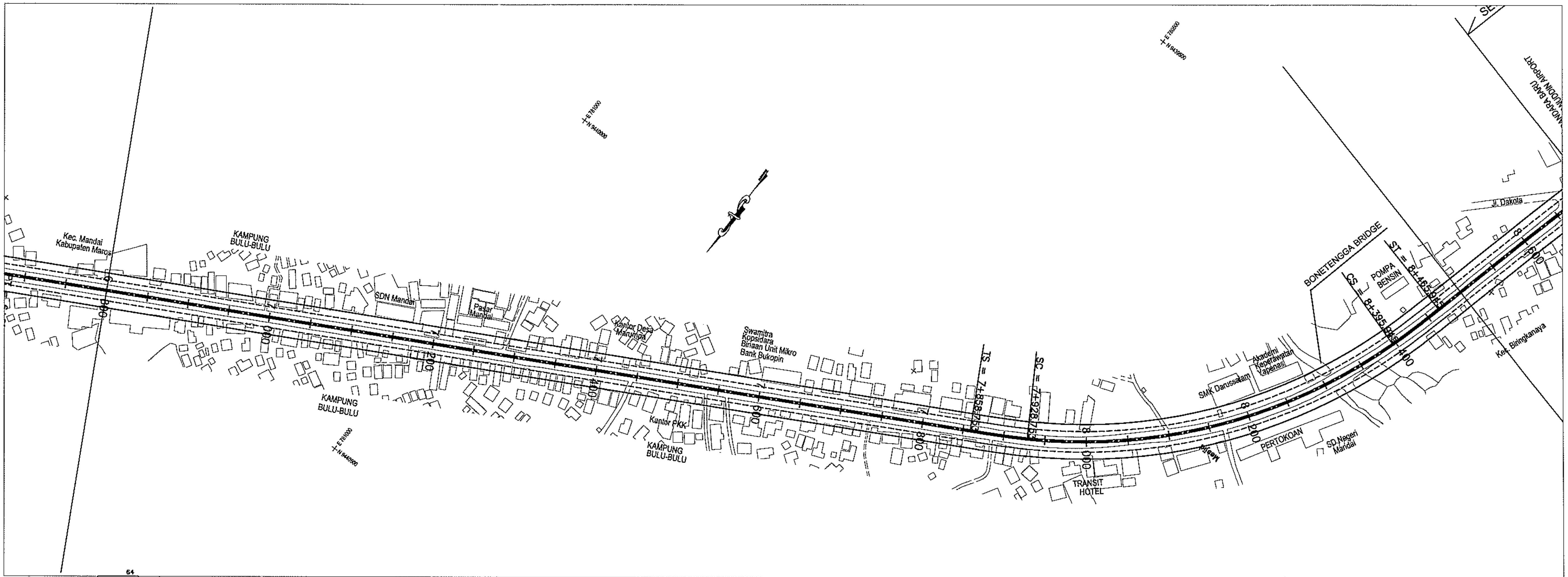
STATION	5+550	5+600	5+650	5+700	5+750	5+800	5+850	5+900	5+950
PROPOSED HEIGHT	5.757	5.723	5.679	5.628	5.790	5.952	6.086	5.983	5.869
EXISTING GROUND HEIGHT	5.643	5.605	5.558	5.565	5.669	5.861	5.923	5.888	5.749

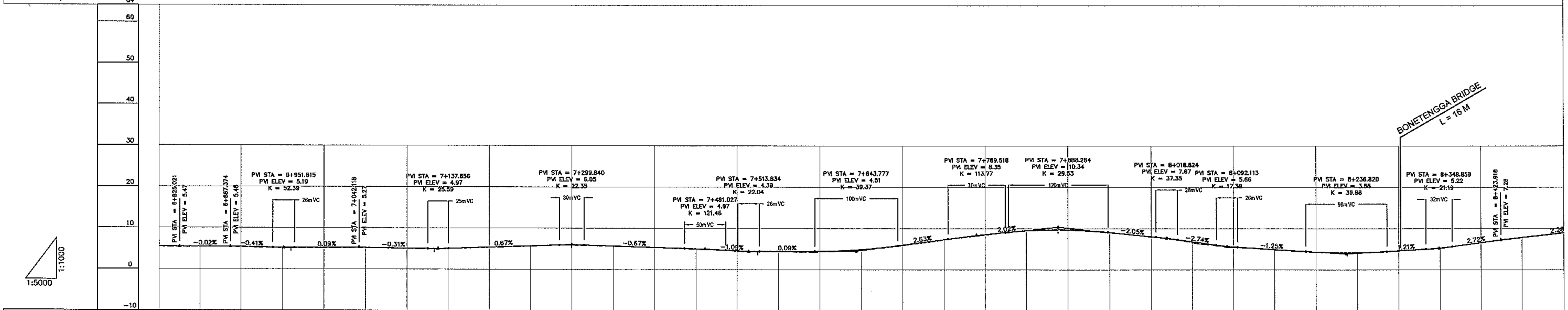
STATION	6+000	6+050	6+100	6+150	6+200	6+250	6+300	6+350	6+400
PROPOSED HEIGHT	5.756	5.791	5.910	6.030	6.042	5.971	5.899	5.745	5.673
EXISTING GROUND HEIGHT	5.650	5.735	5.739	5.931	5.816	5.830	5.780	5.634	5.609

STATION	6+450	6+500	6+550	6+600	6+650	6+700	6+750	6+800
PROPOSED HEIGHT	5.784	5.901	6.018	6.135	6.045	5.803	5.561	5.501
EXISTING GROUND HEIGHT	5.605	5.751	5.891	6.023	5.862	5.703	5.479	5.411

HORIZONTAL ALIGNMENT: R=500 (5+108.576 – 5178.576); R=00; R=20000 (5+740.451 – 5+940.334); R=00; R=30000 (6+456.958 – 6+673.849); R=00

JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	
ROAD NAME TITLE :	TRANS - SULAWESI ROAD MAMMINASATA SECTION
DRAWING TITLE :	PLAN AND PROFILE (4/34)
SCALE =	1 / 5,000 H, 1/1,000 V
DRAWING NO.	PP-04
DATE:	MARCH 2008





STATION	6+800	6+850	6+900	6+950	7+000	7+050	7+100	7+150	7+200	7+250	7+300	7+350
PROPOSED HEIGHT	5.501	5.464	5.403	5.210	5.232	5.244	5.089	5.053	5.387	5.721	6.003	5.715
EXISTING GROUND HEIGHT	5.411	5.335	5.292	5.088	5.130	5.117	4.974	4.979	5.286	5.608	5.871	5.612

STATION	7+400	7+450	7+500	7+550	7+600	7+650	7+700	7+750	7+800	7+850	7+900	7+950
PROPOSED HEIGHT	5.377	5.032	4.542	4.425	4.477	4.920	5.993	7.310	8.535	9.491	9.709	9.081
EXISTING GROUND HEIGHT	5.285	4.907	4.432	4.307	4.301	4.853	5.873	7.211	8.402	9.401	9.597	8.964

STATION	8+000	8+050	8+100	8+150	8+200	8+250	8+300	8+350	8+400	8+450	8+500
PROPOSED HEIGHT	8.058	6.818	5.573	4.942	4.338	4.181	4.626	5.302	6.611	7.850	8.979
EXISTING GROUND HEIGHT	7.936	6.565	5.395	4.808	4.243	4.107	4.546	5.196	6.520	7.762	8.908

HORIZONTAL ALIGNMENT: R=00 — 7858.753 — 7+928.753 — R=650 — 8+395.945 — 8465.945 — R=00

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

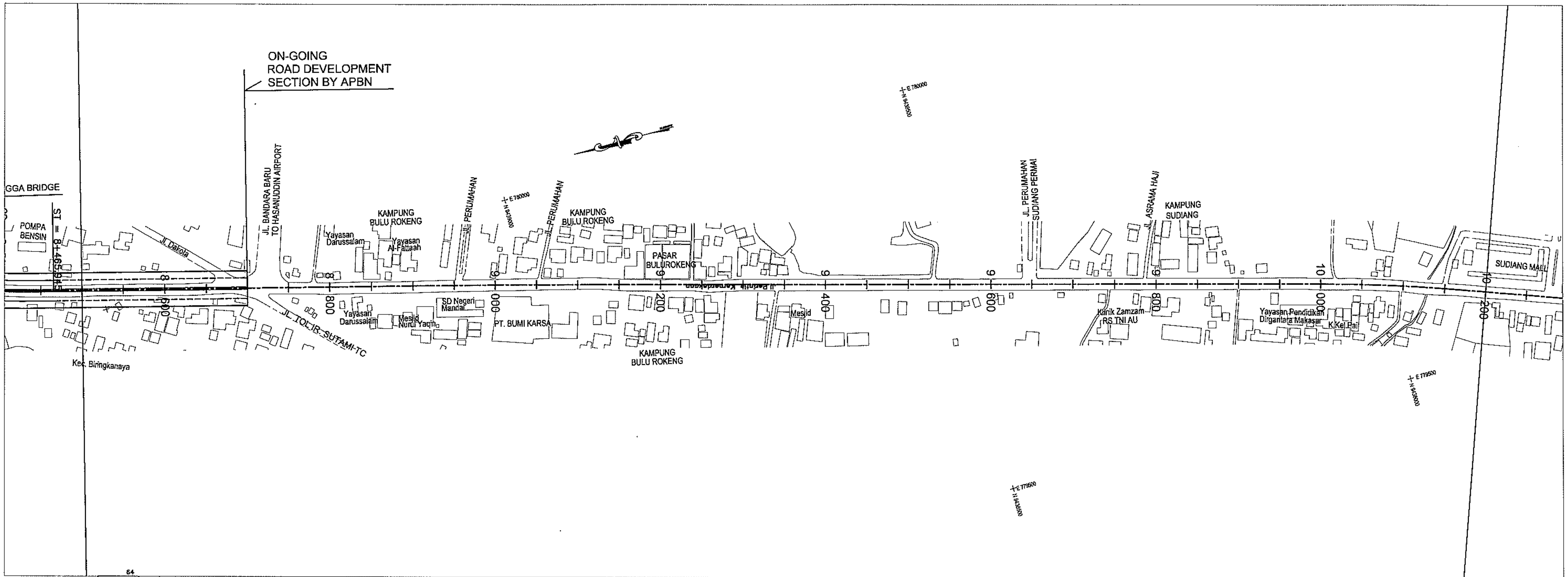
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

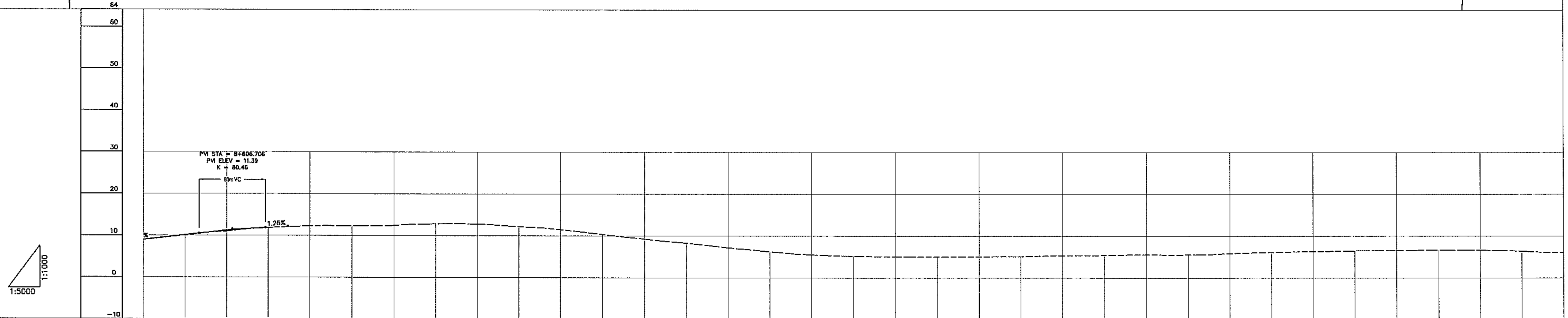
DRAWING TITLE : PLAN AND PROFILE (5/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-05

DATE: MARCH 2008





CONSTRUCTION UNDER APBN 2007-2010

STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
8+500	8.979	8.908
8+550	10.107	9.977
8+600	11.167	10.951
8+650	11.934	11.839
8+700		12.312
8+750		12.304
8+800		12.406
8+850		12.820
8+900		12.770
8+950		12.170
9+000		11.468
9+050		10.316
9+100		9.270
9+150		8.282
9+200		7.197
9+250		6.253
9+300		5.514
9+350		5.202
9+400		5.086
9+450		5.028
9+500		5.072
9+550		5.143
9+600		5.357
9+650		5.427
9+700		5.559
9+750		5.539
9+800		5.867
9+850		6.141
9+900		6.304
9+950		6.497
10+000		6.517
10+050		6.686
10+100		6.635
10+150		6.394
10+200		6.112

HORIZONTAL ALIGNMENT: R=00 — 8+904.673 — R=15000 — 9+124.692 — R=00 — 9+997.117 — R=2000 — 10+157.565 — R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

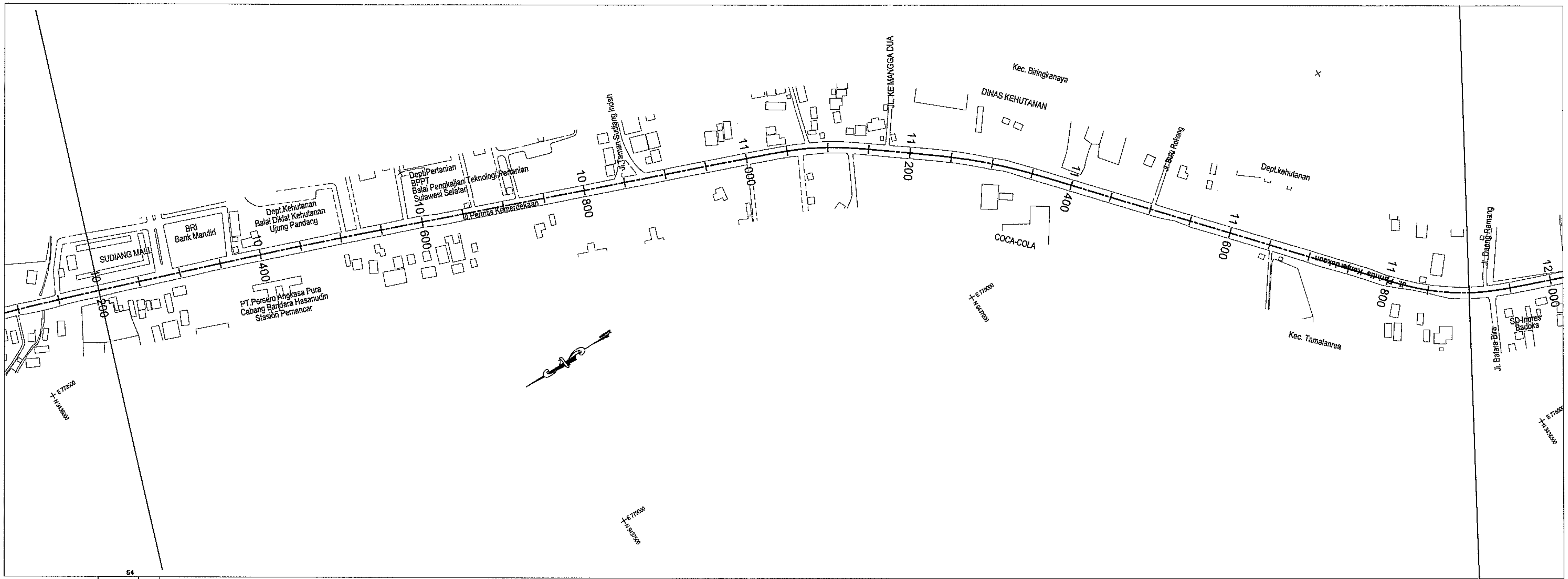
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

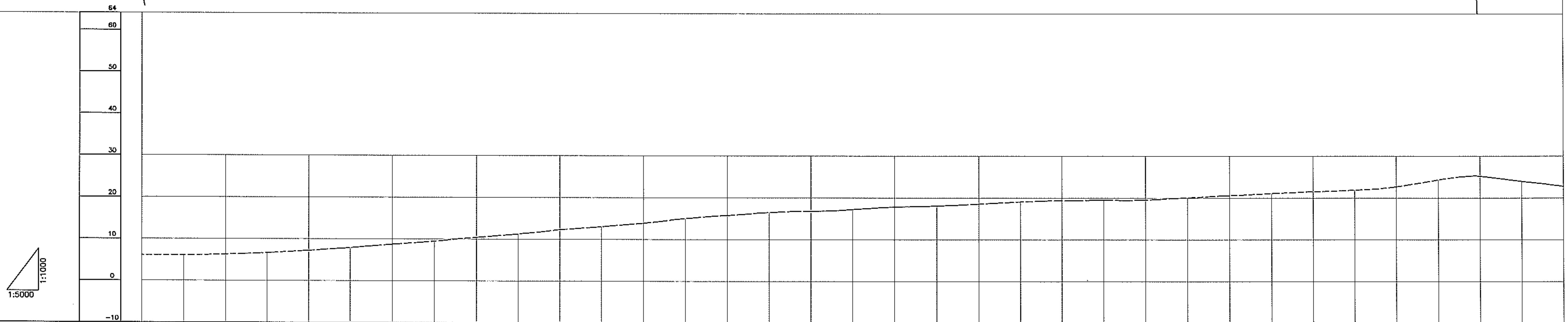
DRAWING TITLE : PLAN AND PROFILE (6/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-06

DATE: MARCH 2008





PROPOSED HEIGHT: CONSTRUCTION UNDER APBN 2007-2010

STATION	EXISTING GROUND HEIGHT
10+200	6.112
10+250	6.073
10+300	6.259
10+350	6.672
10+400	7.212
10+450	7.909
10+500	8.750
10+550	9.482
10+600	10.415
10+650	11.251
10+700	12.279
10+750	13.011
10+800	13.882
10+850	15.009
10+900	15.739
10+950	16.478
11+000	16.784
11+050	17.203
11+100	17.811
11+150	18.071
11+200	18.546
11+250	19.051
11+300	19.364
11+350	19.475
11+400	19.516
11+450	20.052
11+500	20.584
11+550	21.079
11+600	21.521
11+650	21.890
11+700	22.677
11+750	24.335
11+800	25.195
11+850	23.983
11+900	22.789

HORIZONTAL ALIGNMENT: R=00, 10+353.830, R=6000, 10+529.469, R=00, 11007.497, 11+077.497, R=320, 11+099.361, 11159.361, R=00, 11201.043, 11+271.043, R=600, 11+320.461, 11390.461, R=00, 11780.631, 11+850.631, R=260

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

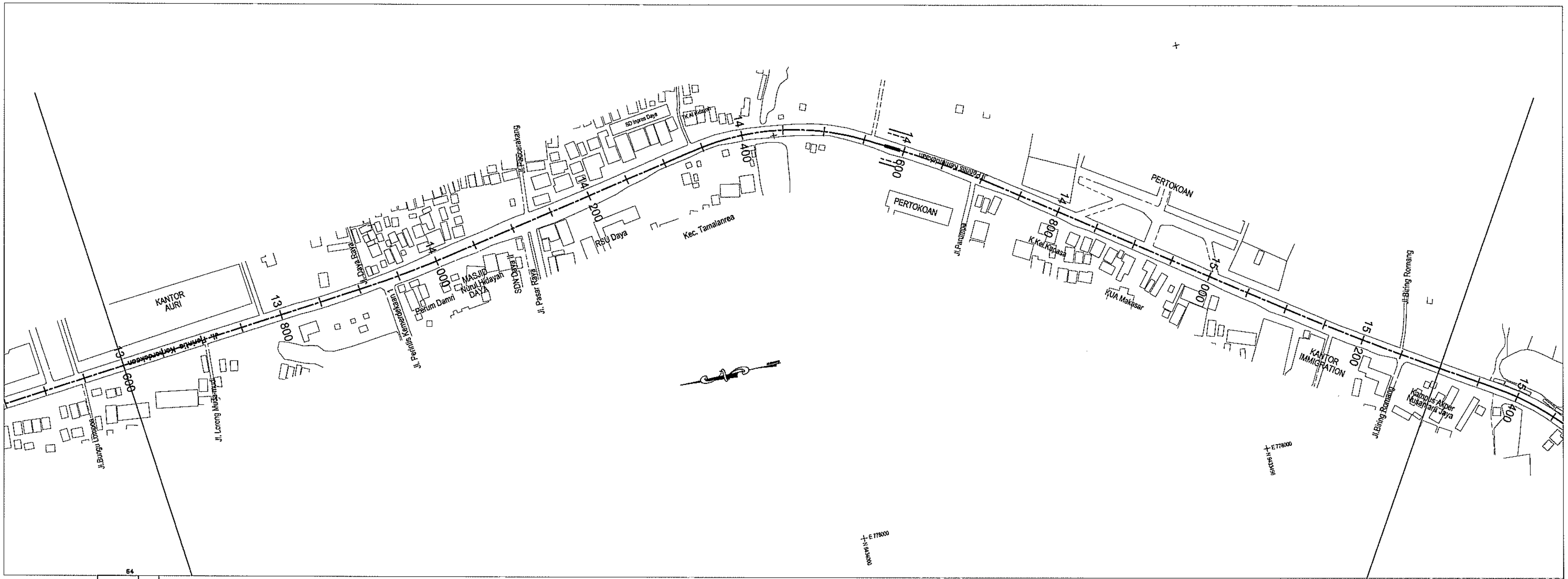
DRAWING TITLE : PLAN AND PROFILE (7/34)

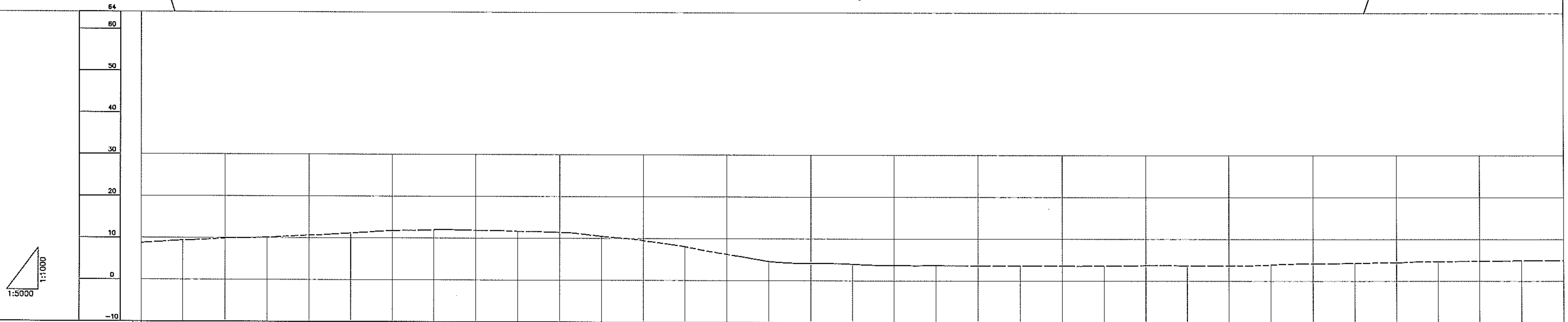
SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-07

DATE: MARCH 2008

JAPAN INTERNATIONAL COOPERATION AGENCY	
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	
PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION
	DRAWING TITLE : PLAN AND PROFILE (8/34)
	SCALE = 1 / 5,000 H, 1/1,000 V
	DRAWING NO. PP-08
	DATE: MARCH 2008





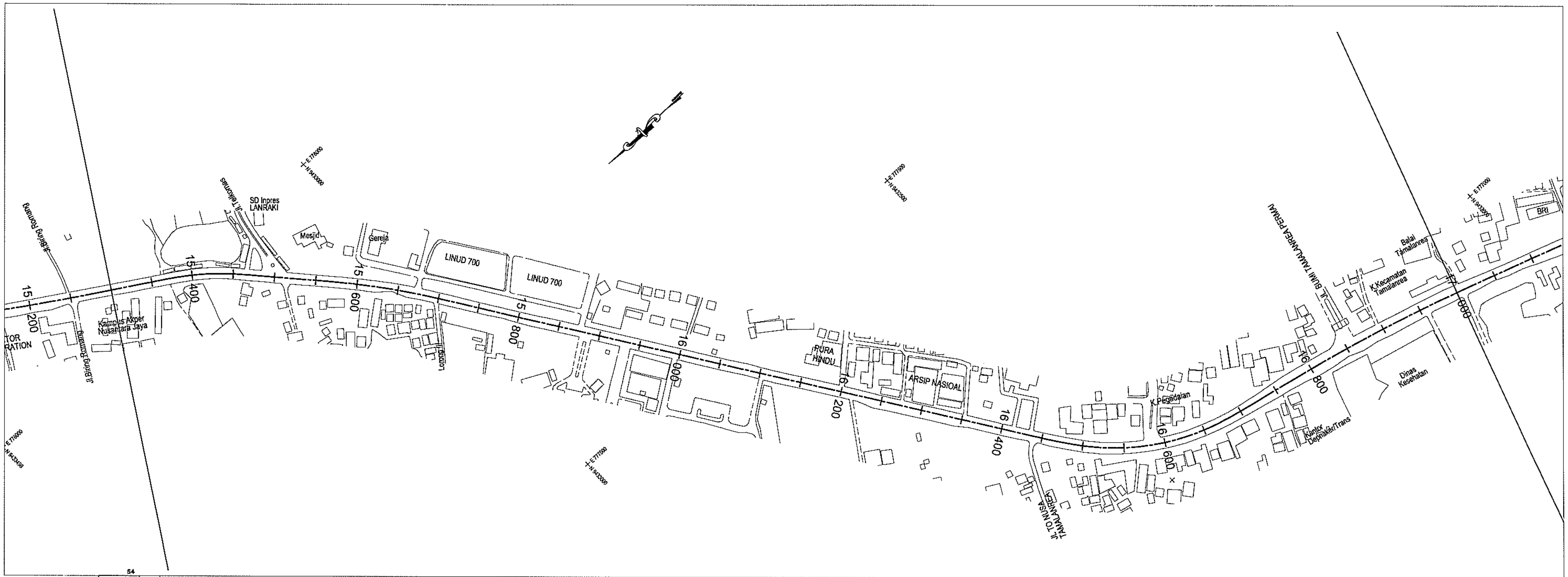
PROPOSED HEIGHT	CONSTRUCTION UNDER APBN 2007-2010

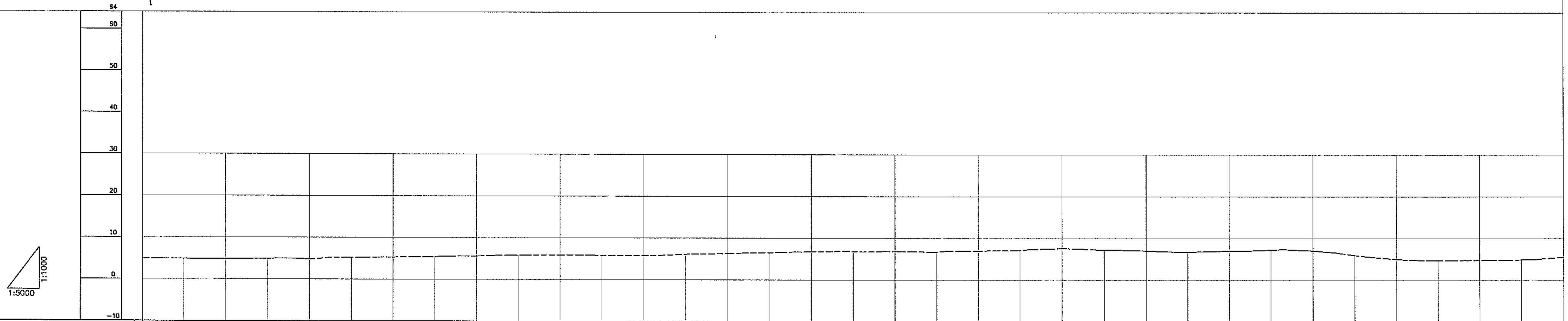
STATION	13+600	13+650	13+700	13+750	13+800	13+850	13+900	13+950	14+000	14+050	14+100	14+150	14+200	14+250	14+300	14+350	14+400	14+450
EXISTING GROUND HEIGHT	8.733	9.345	9.838	10.086	10.603	11.155	11.740	11.929	11.868	11.658	11.389	10.471	9.477	8.072	6.253	4.598	4.159	3.978

STATION	14+500	14+550	14+600	14+650	14+700	14+750	14+800	14+850	14+900	14+950	15+000	15+050	15+100	15+150	15+200	15+250	15+300
EXISTING GROUND HEIGHT	3.682	3.710	3.592	3.657	3.597	3.610	3.734	3.699	3.674	3.879	4.162	4.306	4.466	4.692	4.795	4.926	4.952

HORIZONTAL ALIGNMENT: R=00; 13+899.577; R=1350; 14+023.498; R=00; 14316.783; 14+366.783; R=300; 14+525.791; 14575.7695.071; R=00; R=1000; 14+707.820; R=00; 15+096.810; R=3000; 15+290.337; R=0

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : PLAN AND PROFILE (9/34) SCALE = 1 / 5,000 H, 1/1,000 V	DRAWING NO. PP-09 DATE: MARCH 2008





PROPOSED HEIGHT: CONSTRUCTION UNDER APBN 2007-2010

STATION	EXISTING GROUND HEIGHT
15+300	4.952
15+350	4.876
15+400	4.797
15+450	4.929
15+500	4.788
15+550	5.209
15+600	5.310
15+650	5.439
15+700	5.605
15+750	5.830
15+800	5.883
15+850	5.805
15+900	5.819
15+950	6.094
16+000	6.304
16+050	6.525
16+100	6.760
16+150	6.814
16+200	6.845
16+250	6.735
16+300	6.960
16+350	7.165
16+400	7.556
16+450	7.238
16+500	7.026
16+550	6.777
16+600	6.987
16+650	7.239
16+700	7.022
16+750	5.959
16+800	5.031
16+850	4.722
16+900	4.784
16+950	4.894
17+000	5.476

HORIZONTAL ALIGNMENT: R=00, R=300, R=00, R=900, R=00, R=280, R=00, R=2000

15343.838, 15+403.838, 15+428.449, 15488.449, 15+568.091, 15+699.324, 16440.056, 16+510.056, 16+655.541, 16725.541, 16+777.166

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

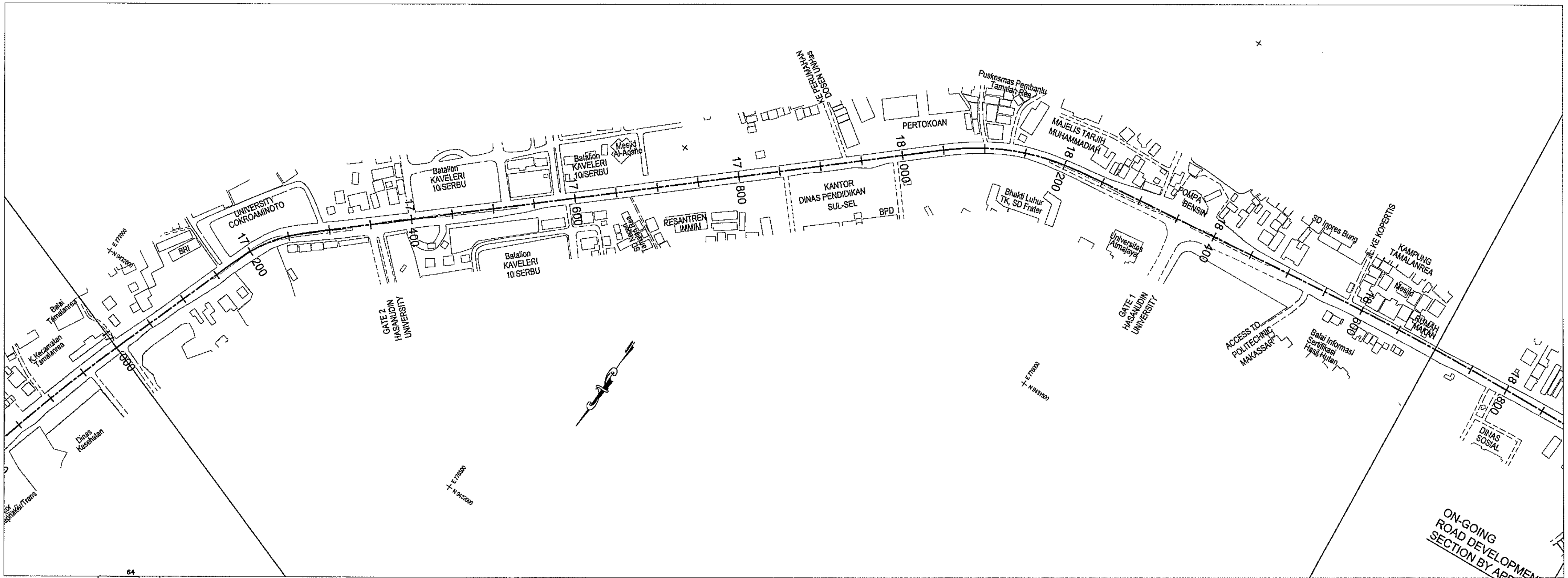
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

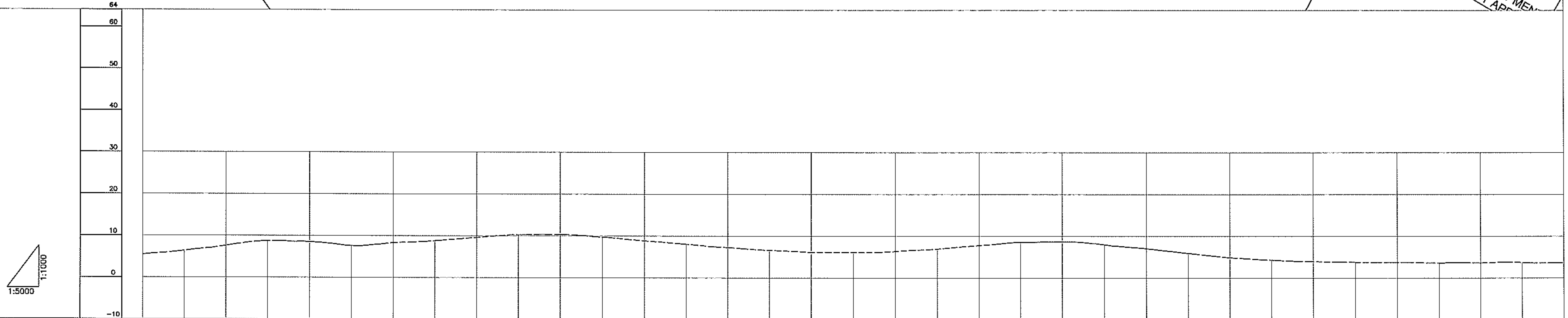
DRAWING TITLE : PLAN AND PROFILE (10/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-1 0

DATE: MARCH 2008





	17+000	17+050	17+100	17+150	17+200	17+250	17+300	17+350	17+400	17+450	17+500	17+550
PROPOSED HEIGHT	CONSTRUCTION UNDER APBN 2007-2010											
EXISTING GROUND HEIGHT	5.476	6.375	7.600	8.718	8.483	7.613	8.324	8.804	9.553	10.241	10.348	9.722
STATION	17+000	17+050	17+100	17+150	17+200	17+250	17+300	17+350	17+400	17+450	17+500	17+550

	17+600	17+650	17+700	17+750	17+800	17+850	17+900	17+950	18+000	18+050	18+100	18+150
EXISTING GROUND HEIGHT	8.822	8.057	7.265	6.619	6.122	6.153	6.364	6.954	7.780	8.529	8.674	7.987
STATION	17+600	17+650	17+700	17+750	17+800	17+850	17+900	17+950	18+000	18+050	18+100	18+150

	18+200	18+250	18+300	18+350	18+400	18+450	18+500	18+550	18+600	18+650	18+700
EXISTING GROUND HEIGHT	7.037	5.928	4.879	4.301	3.956	3.785	3.791	3.626	3.645	3.707	3.612
STATION	18+200	18+250	18+300	18+350	18+400	18+450	18+500	18+550	18+600	18+650	18+700

HORIZONTAL ALIGNMENT: R=2000, 17+012.841, R=00, 17160.277, R=160, 17+210.277, 17+240.380, 17290.380, R=00, 18020.234, 18+090.234, R=280, 18+183.885, 18253.885, R=00, 18+507.755, R=4000

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

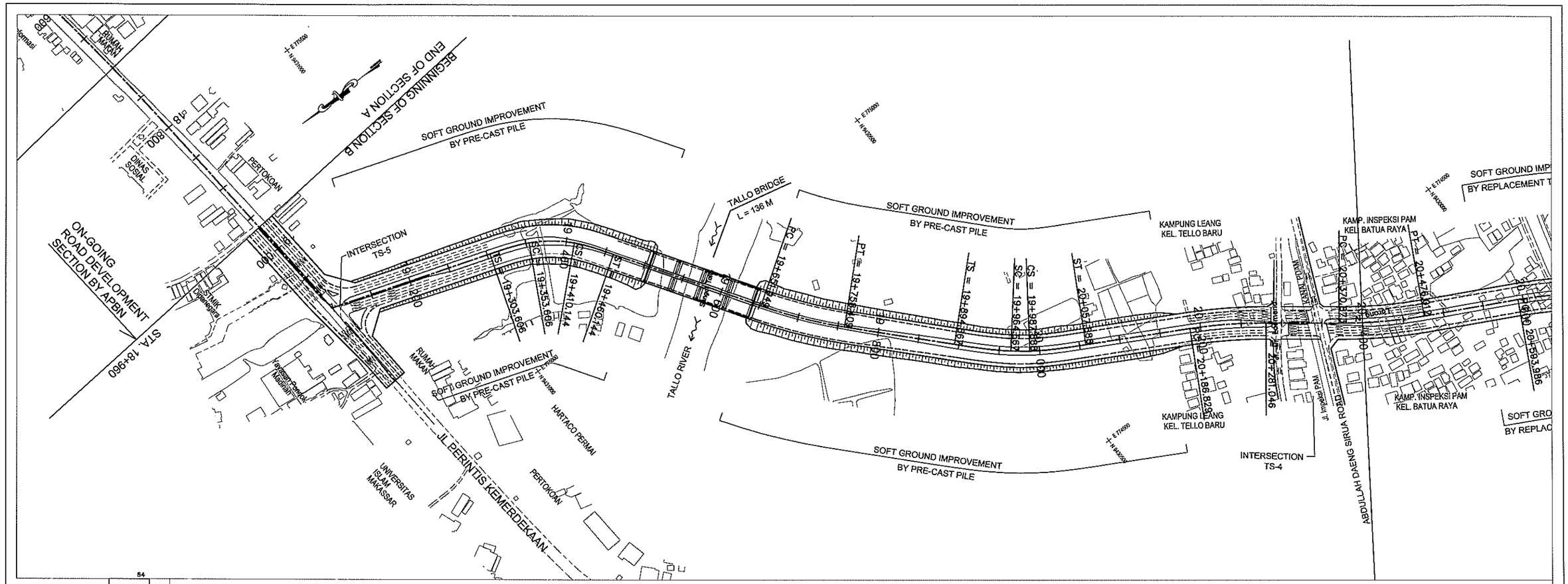
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (11/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-11

DATE: MARCH 2008



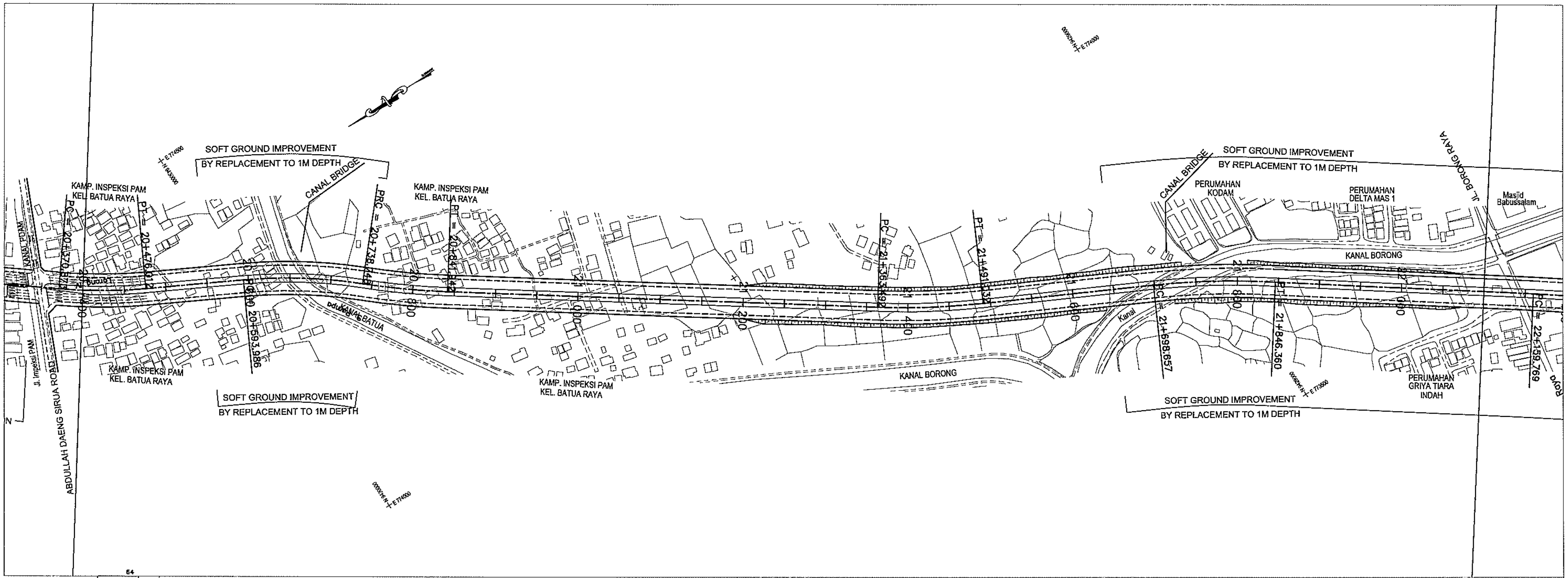
JAPAN INTERNATIONAL COOPERATION AGENCY

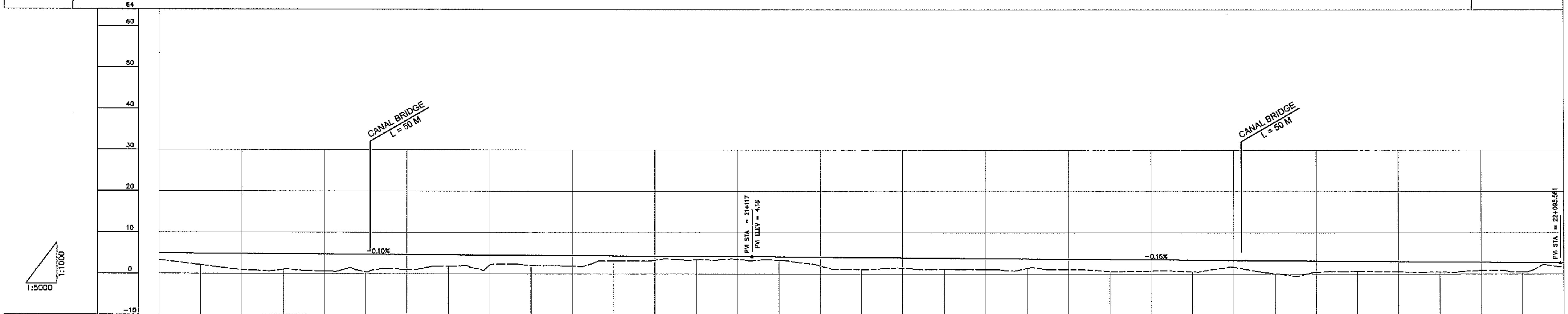
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE :	TRANS - SULAWESI ROAD MAMMINASATA SECTION
DRAWING TITLE :	PLAN AND PROFILE (12/34)
SCALE =	1 / 5,000 H, 1/1,000 V
DRAWING NO.	PP-12
DATE:	MARCH 2008





STATION	20+400	20+450	20+500	20+550	20+600	20+650	20+700	20+750	20+800	20+850	20+900	20+950
PROPOSED HEIGHT	4.901	4.851	4.801	4.751	4.701	4.651	4.601	4.551	4.501	4.451	4.401	4.351
EXISTING GROUND HEIGHT	3.291	2.090	0.950	1.019	0.585	0.415	1.070	1.800	2.112	2.021	1.890	3.166

STATION	21+000	21+050	21+100	21+150	21+200	21+250	21+300	21+350	21+400	21+450	21+500	21+550
PROPOSED HEIGHT	4.301	4.251	4.201	4.134	4.059	3.984	3.909	3.834	3.759	3.684	3.609	3.534
EXISTING GROUND HEIGHT	3.310	3.438	3.531	3.281	1.936	1.100	1.426	1.186	1.099	1.393	1.137	0.631

STATION	21+600	21+650	21+700	21+750	21+800	21+850	21+900	21+950	22+000	22+050	22+100
PROPOSED HEIGHT	3.459	3.384	3.309	3.234	3.159	3.084	3.009	2.934	2.859	2.784	2.718
EXISTING GROUND HEIGHT	0.766	0.557	1.652	0.122	0.435	0.662	0.513	0.460	0.886	0.542	1.747

HORIZONTAL ALIGNMENT: R=600 | 20+476.012 | R=00 | 20+593.985 | R=600 | 20+738.748 | R=900 | 20+841.942 | R=00 | 21+363.492 | R=900 | 21+491.032 | R=00 | 21+698.657 | R=900 | 21+846.360 | R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

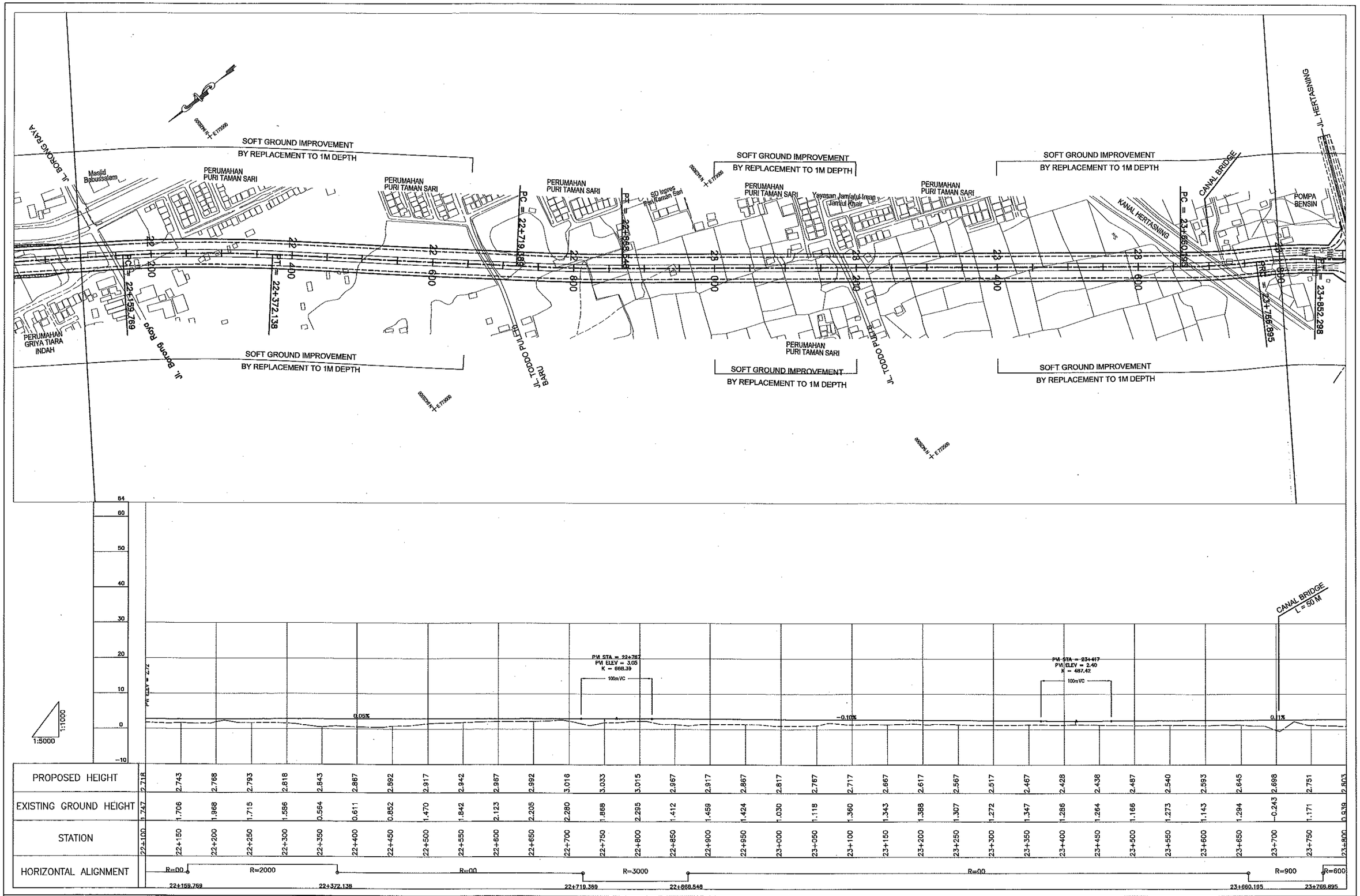
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (13/34)

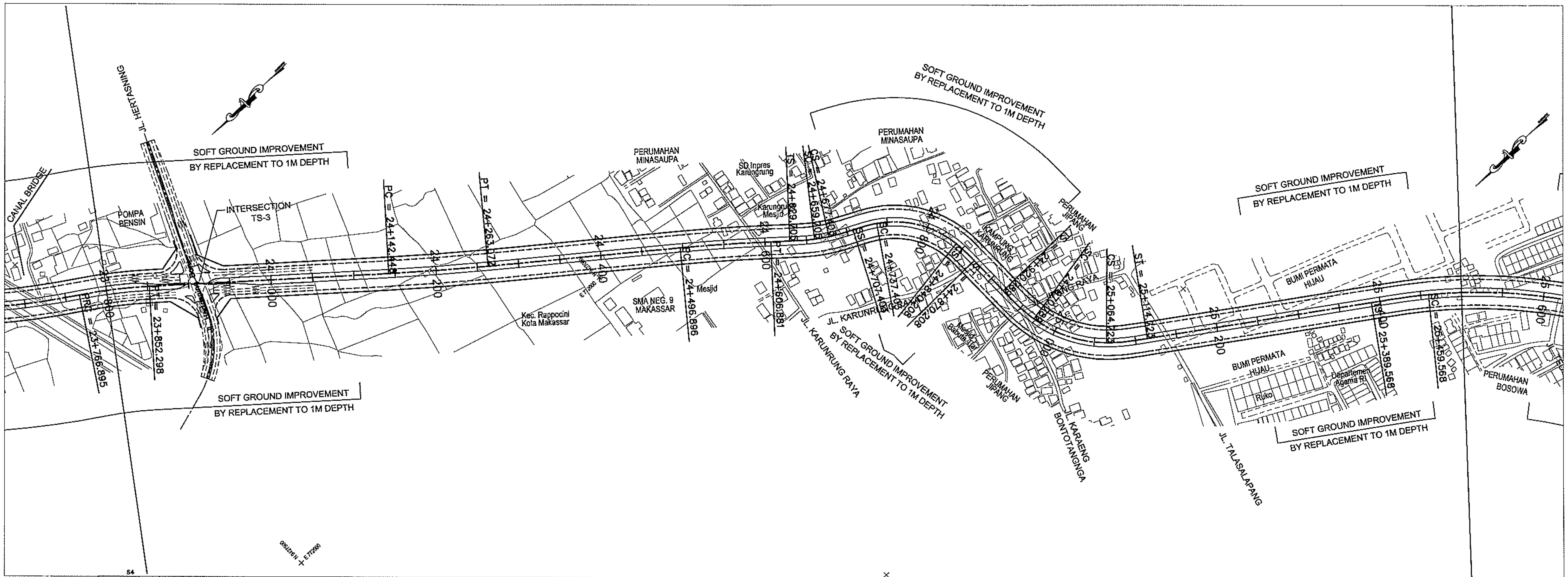
SCALE = 1 / 5,000 H, 1/1,000 V

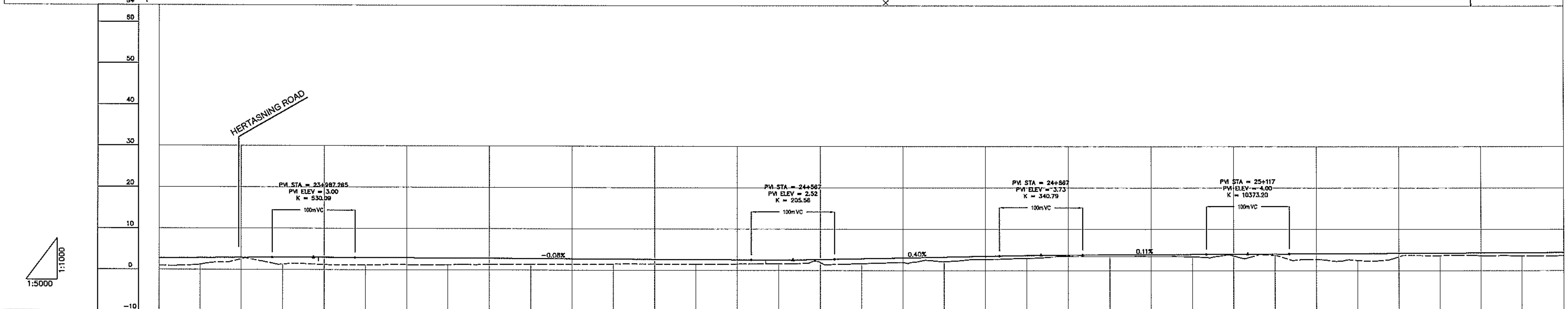
DRAWING NO. PP-1 3

DATE: MARCH 2008



JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : PLAN AND PROFILE (14/34) SCALE = 1 / 5,000 H, 1/1,000 V
	DRAWING NO. PP-1 4 DATE: MARCH 2008





STATION	23+800	23+850	23+900	23+950	24+000	24+050	24+100	24+150	24+200	24+250	24+300	24+350
PROPOSED HEIGHT	2.803	2.856	2.908	2.960	2.977	2.948	2.906	2.865	2.823	2.781	2.739	2.698
EXISTING GROUND HEIGHT	0.939	1.249	2.542	1.317	1.229	1.205	1.250	1.277	1.358	1.397	1.424	1.511

STATION	24+400	24+450	24+500	24+550	24+600	24+650	24+700	24+750	24+800	24+850	24+900	24+950
PROPOSED HEIGHT	2.656	2.614	2.573	2.557	2.657	2.851	3.053	3.254	3.456	3.641	3.758	3.817
EXISTING GROUND HEIGHT	1.513	1.500	1.541	1.636	1.961	1.676	1.963	2.155	2.723	2.967	3.454	3.434

STATION	25+000	25+050	25+100	25+150	25+200	25+250	25+300	25+350	25+400	25+450	25+500
PROPOSED HEIGHT	3.872	3.927	3.981	4.033	4.083	4.133	4.183	4.233	4.283	4.333	4.383
EXISTING GROUND HEIGHT	3.437	3.376	3.557	3.679	2.697	2.467	3.349	3.659	3.579	3.577	3.620

HORIZONTAL ALIGNMENT: R=600 – 23+852.298 – R=00 – 24+142.448 – R=3000 – 24+263.072 – R=00 – 24+496.896 – R=2000 – 24+606.881 – R=00 – 24629.705 – 24+659.705 – R=180 – 24+677.403 – 24707.403 – 24+737.403 – R=120 – 24+840.208 – 24870.208 – R=00 – 24920.789 – 24+970.789 – R=150 – 25+064.723 – 25114.723 – R=00 – 25389.568 – 25+459.568 – R=600

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

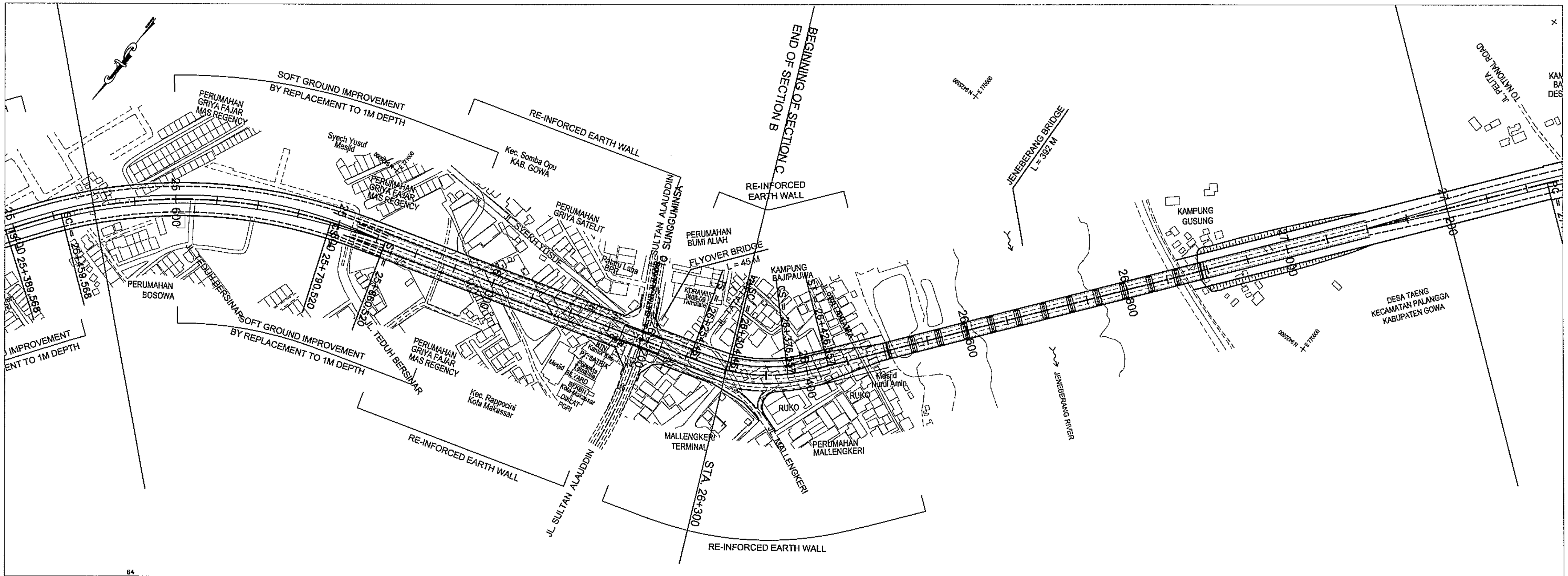
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

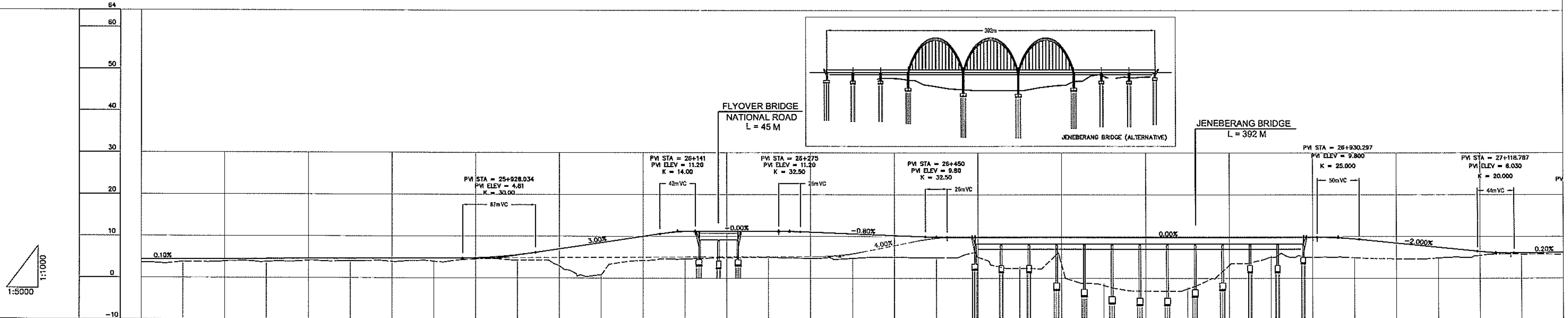
DRAWING TITLE : PLAN AND PROFILE (15/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-15

DATE: MARCH 2008





STATION	25+500	25+550	25+600	25+650	25+700	25+750	25+800	25+850	25+900	25+950	26+000	26+050	26+100	26+150	26+200	26+250	26+300	26+350
PROPOSED HEIGHT	4.383	4.433	4.483	4.533	4.583	4.633	4.683	4.733	4.823	5.547	6.970	8.470	9.970	11.149	11.200	11.200	11.000	10.600
EXISTING GROUND HEIGHT	3.620	3.842	3.923	3.785	4.127	4.036	3.917	3.968	4.548	4.270	2.916	0.848	2.341	3.989	4.921	4.948	4.744	4.748

STATION	26+400	26+450	26+500	26+550	26+600	26+650	26+700	26+750	26+800	26+850	26+900	26+950	27+000	27+050	27+100	27+150	27+200
PROPOSED HEIGHT	10.200	9.826	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.800	9.400	8.406	7.406	6.406	6.093	6.193
EXISTING GROUND HEIGHT	4.991	4.971	5.063	2.405	3.210	-1.696	-2.981	-2.522	3.123	5.000	5.000	4.929	4.667	4.849	5.467	5.777	5.724

HORIZONTAL ALIGNMENT: R=600, 25+790.520, 25880.520, R=00, 26254.461, 26+304.461, R=200, 26+376.557, 26426.557, R=00

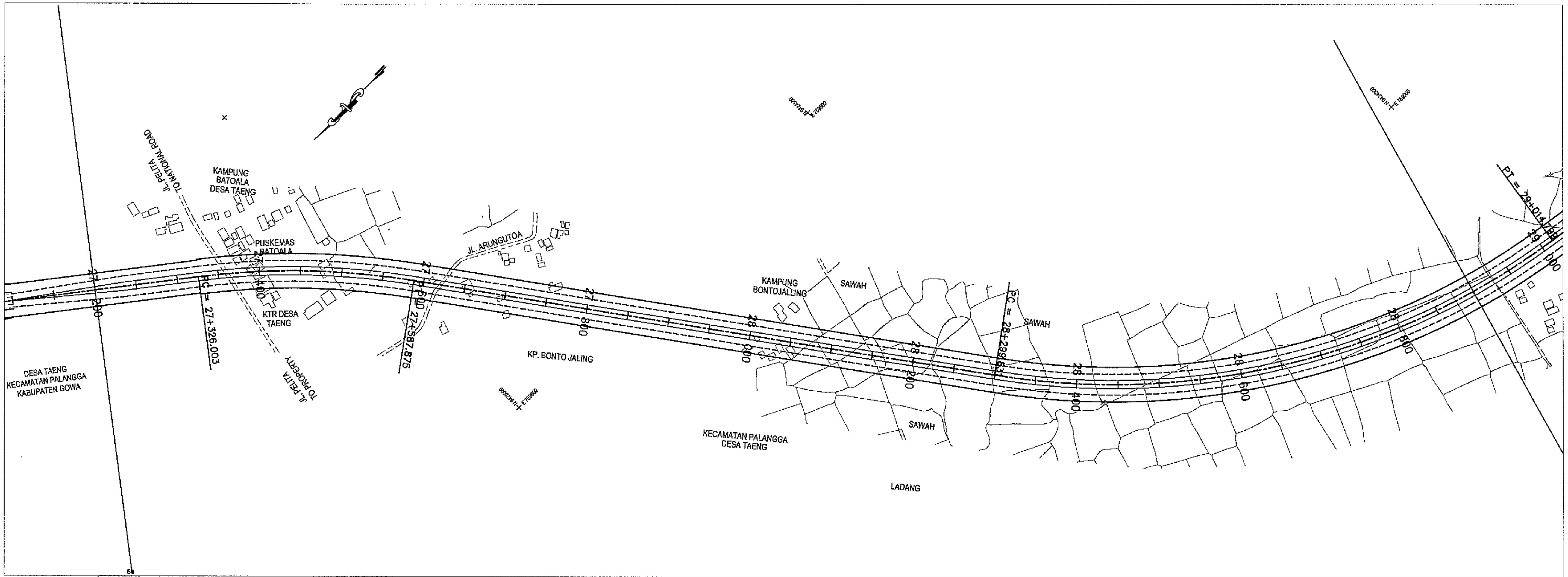
JAPAN INTERNATIONAL COOPERATION AGENCY

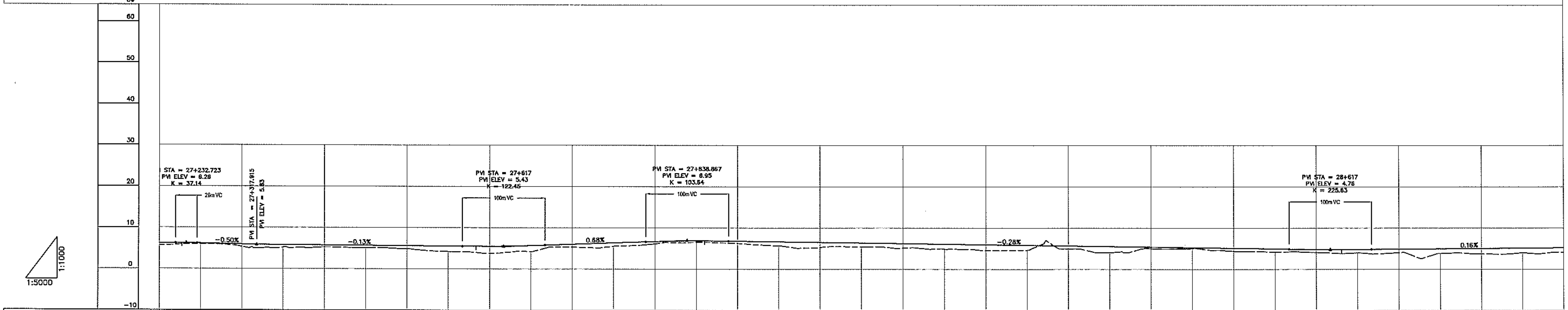
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE :	TRANS - SULAWESI ROAD MAMMINASATA SECTION
DRAWING TITLE :	PLAN AND PROFILE (16/34)
SCALE =	1 / 5,000 H, 1/1,000 V
DRAWING NO.	PP-16
DATE:	MARCH 2008





STATION	27+200	27+250	27+300	27+350	27+400	27+450	27+500	27+550	27+600	27+650	27+700	27+750	27+800	27+850	27+900	27+950	28+000	28+050
PROPOSED HEIGHT	6.193	6.172	5.922	5.789	5.723	5.656	5.589	5.523	5.500	5.671	6.000	6.342	6.678	6.845	6.777	6.636	6.496	6.355
EXISTING GROUND HEIGHT	5.724	5.973	5.348	5.224	5.246	5.063	4.876	4.221	3.821	4.247	5.315	5.519	6.133	6.543	6.243	5.682	5.292	5.433

STATION	28+100	28+150	28+200	28+250	28+300	28+350	28+400	28+450	28+500	28+550	28+600	28+650	28+700	28+750	28+800	28+850	28+900
PROPOSED HEIGHT	6.214	6.073	5.933	5.792	5.651	5.510	5.369	5.229	5.088	4.947	4.830	4.818	4.893	4.973	5.054	5.135	5.216
EXISTING GROUND HEIGHT	5.129	4.911	4.585	4.643	4.966	4.045	5.032	5.056	4.376	4.196	4.084	3.996	4.022	3.828	3.731	4.013	4.176

HORIZONTAL ALIGNMENT: R=00 — 27+326.003 — R=900 — 27+587.875 — R=00 — 28+299.831 — R=900

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

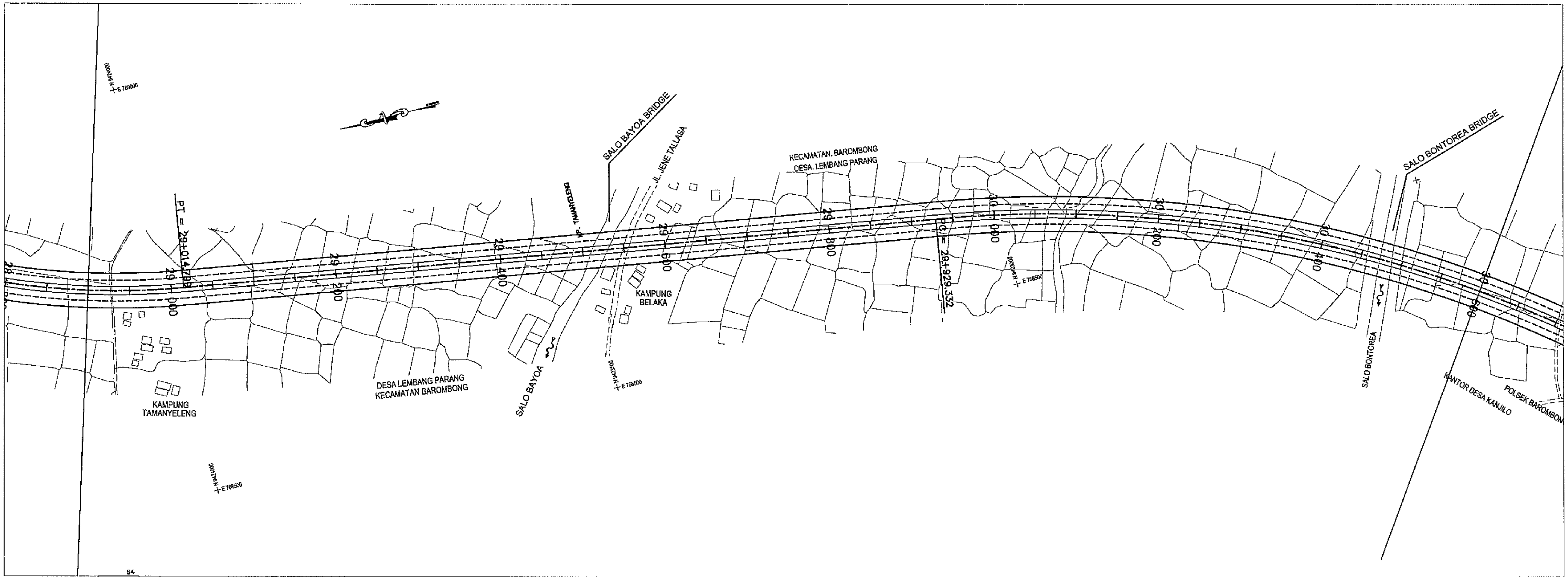
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

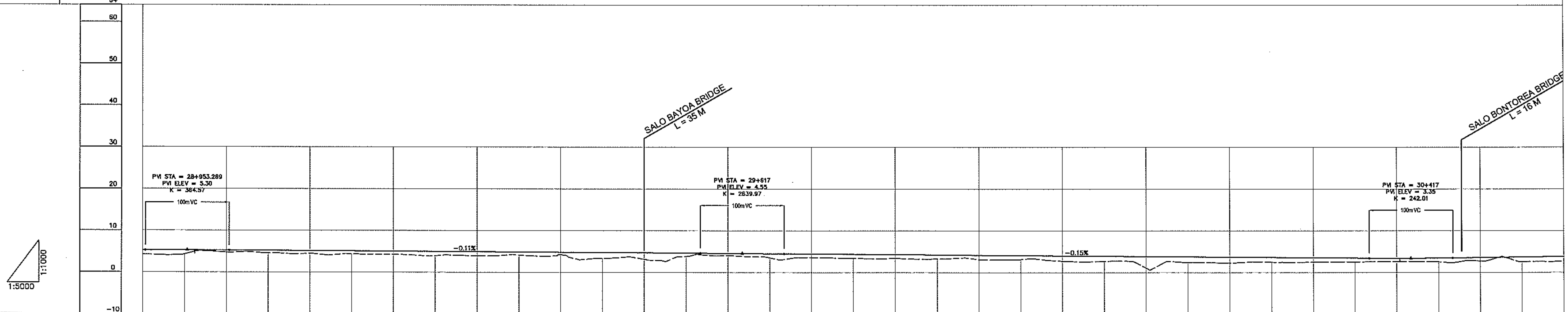
DRAWING TITLE : PLAN AND PROFILE (17/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-1 7

DATE: MARCH 2008





STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
28+900	5.216	4.176
28+950	5.267	4.296
29+000	5.249	4.743
29+050	5.193	4.567
29+100	5.136	4.465
29+150	5.080	4.378
29+200	5.024	4.278
29+250	4.967	3.960
29+300	4.911	3.959
29+350	4.855	4.147
29+400	4.798	4.241
29+450	4.742	3.372
29+500	4.686	3.146
29+550	4.629	3.841
29+600	4.571	4.040
29+650	4.504	3.501
29+700	4.429	3.603
29+750	4.354	3.391
29+800	4.278	3.375
29+850	4.203	3.248
29+900	4.128	3.118
29+950	4.053	3.141
30+000	3.977	2.730
30+050	3.902	2.684
30+100	3.827	1.113
30+150	3.751	2.441
30+200	3.676	2.341
30+250	3.601	2.484
30+300	3.526	2.507
30+350	3.450	2.513
30+400	3.398	2.627
30+450	3.442	2.565
30+500	3.567	2.754
30+550	3.699	2.597
30+600	3.830	2.677

HORIZONTAL ALIGNMENT: R=900 — 29+014.799 — R=00 — 29+929.332 — R=1500

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

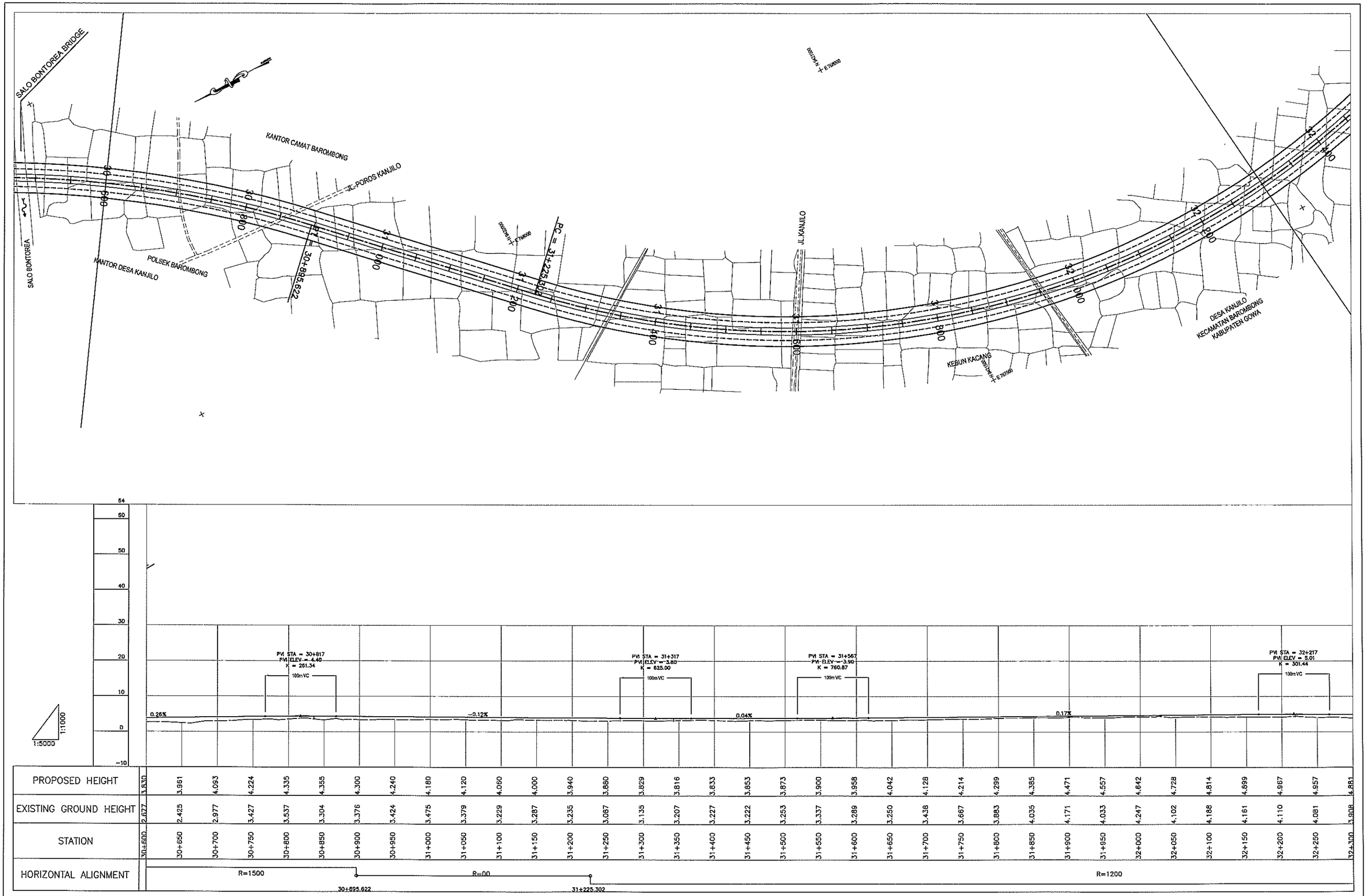
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (18/34)

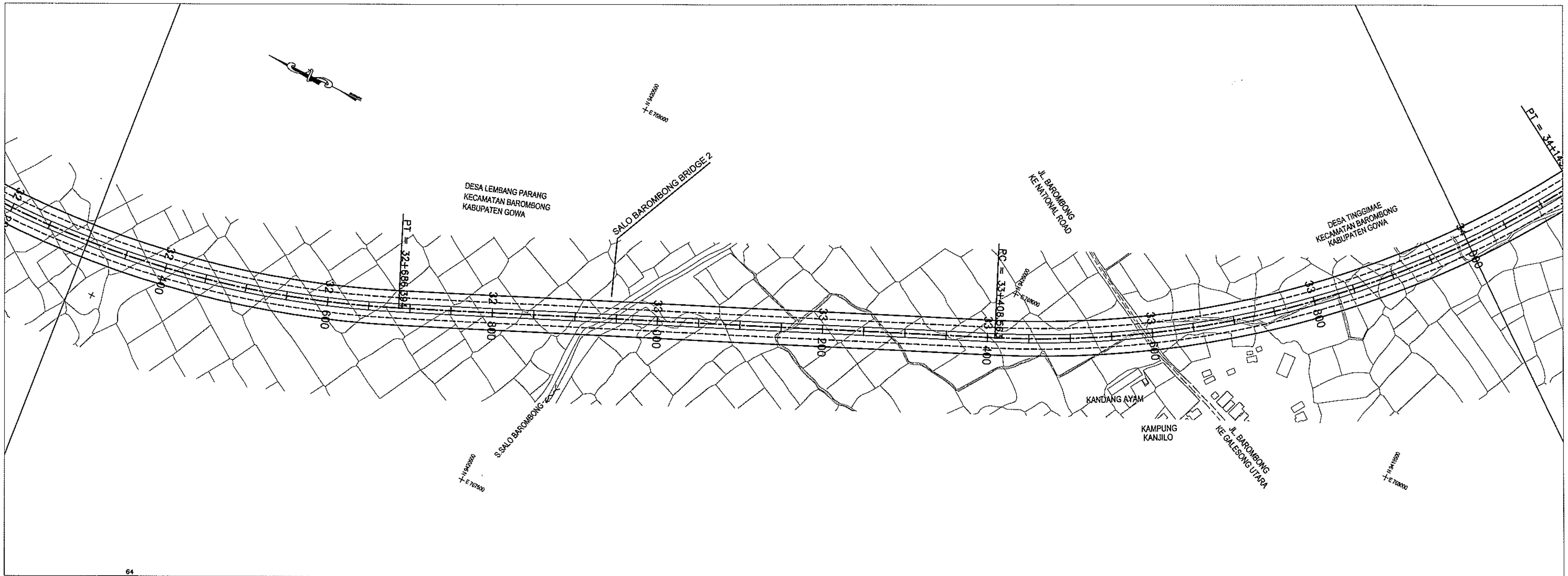
SCALE = 1 / 5,000 H, 1/1,000 V

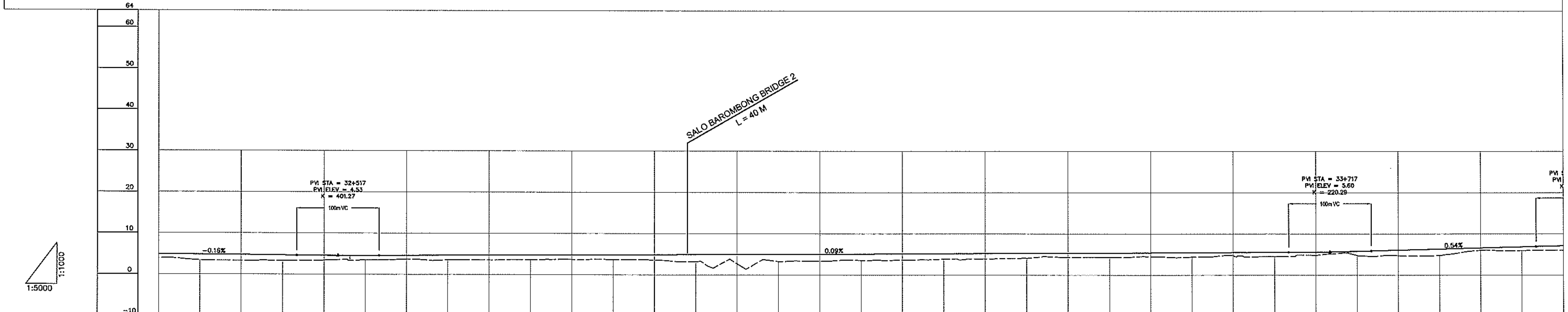
DRAWING NO. PP-18

DATE: MARCH 2008



JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION
	DRAWING TITLE : PLAN AND PROFILE (19/34)
	SCALE = 1 / 5,000 H, 1/1,000 V
	DRAWING NO. PP-19
	DATE: MARCH 2008





	32+300	32+350	32+400	32+450	32+500	32+550	32+600	32+650	32+700	32+750	32+800	32+850
PROPOSED HEIGHT	4.881	4.801	4.721	4.641	4.574	4.566	4.607	4.652	4.696	4.740	4.785	4.829
EXISTING GROUND HEIGHT	3.908	3.419	3.291	3.289	3.413	3.491	3.735	3.537	3.528	3.665	3.688	3.682
STATION	32+300	32+350	32+400	32+450	32+500	32+550	32+600	32+650	32+700	32+750	32+800	32+850

	32+900	32+950	33+000	33+050	33+100	33+150	33+200	33+250	33+300	33+350	33+400	33+450
PROPOSED HEIGHT	4.874	4.918	4.963	5.007	5.052	5.096	5.140	5.185	5.229	5.274	5.318	5.363
EXISTING GROUND HEIGHT	3.573	3.188	2.707	3.242	3.357	3.551	3.628	3.864	3.937	4.083	4.326	4.316
STATION	32+900	32+950	33+000	33+050	33+100	33+150	33+200	33+250	33+300	33+350	33+400	33+450

	33+500	33+550	33+600	33+650	33+700	33+750	33+800	33+850	33+900	33+950	34+000
PROPOSED HEIGHT	5.407	5.452	5.496	5.540	5.610	5.786	6.051	6.322	6.593	6.865	7.110
EXISTING GROUND HEIGHT	4.498	4.391	4.745	4.479	4.807	4.784	4.716	4.798	5.998	5.972	6.059
STATION	33+500	33+550	33+600	33+650	33+700	33+750	33+800	33+850	33+900	33+950	34+000

HORIZONTAL ALIGNMENT: R=1200 | 32+686.394 | R=00 | 33+408.563 | R=1200

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

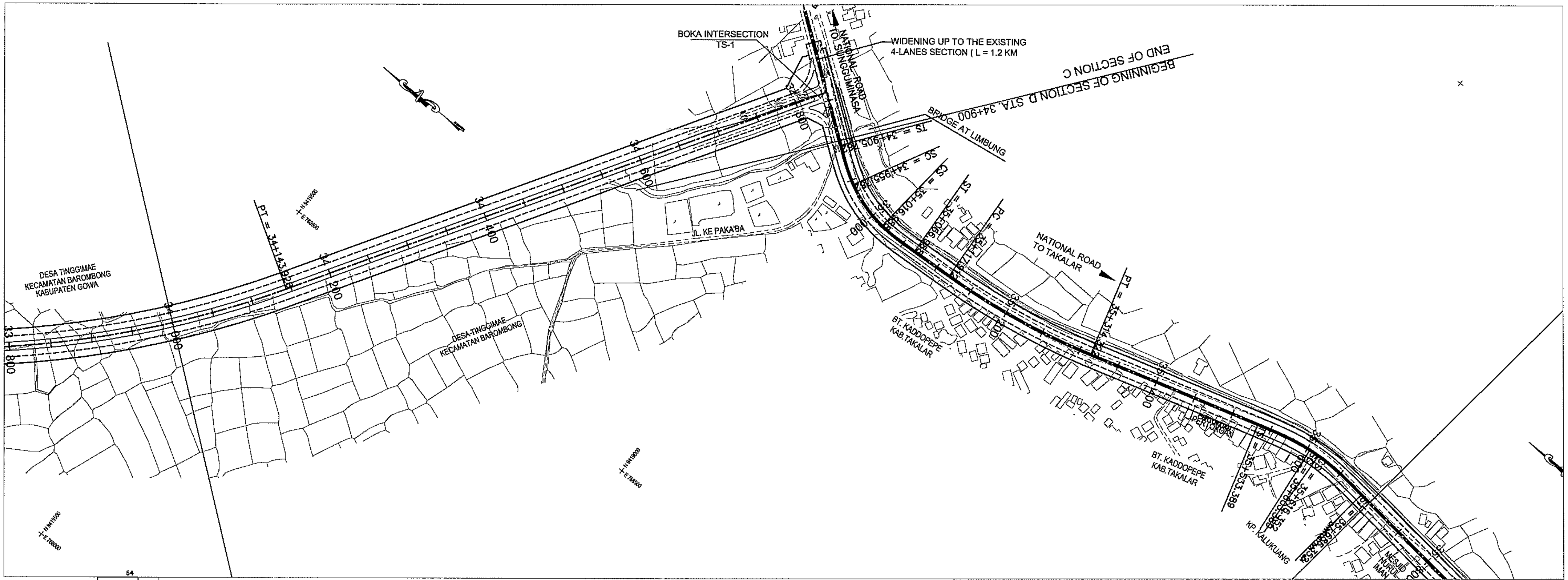
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

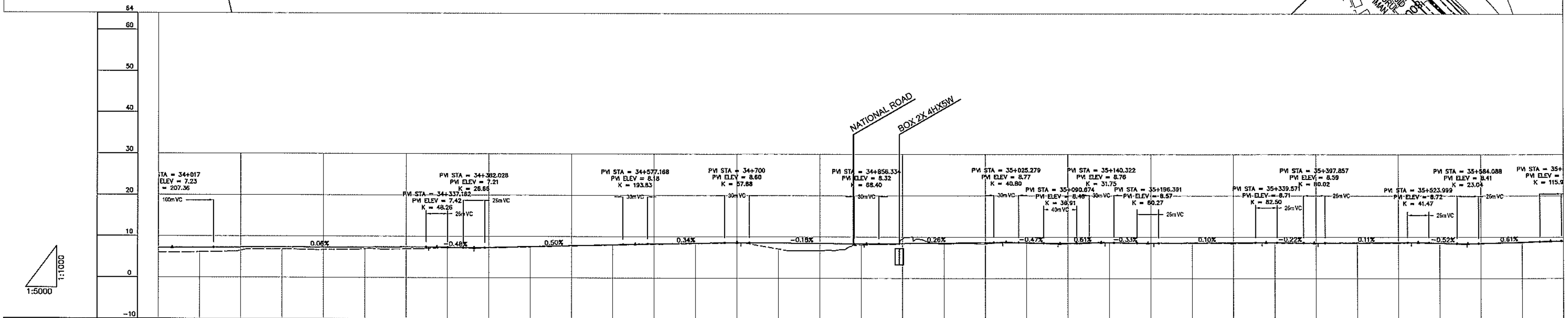
DRAWING TITLE : PLAN AND PROFILE (20/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-20

DATE: MARCH 2008





PROPOSED HEIGHT	7.110	7.242	7.279	7.309	7.339	7.370	7.400	7.361	7.297	7.546	7.794	8.043
EXISTING GROUND HEIGHT	6.059	6.115	6.512	6.870	6.717	6.975	6.959	7.256	7.196	7.446	7.695	7.947
STATION	34+000	34+050	34+100	34+150	34+200	34+250	34+300	34+350	34+400	34+450	34+500	34+550

PROPOSED HEIGHT	8.256	8.427	8.579	8.510	8.422	8.340	8.438	8.569	8.700	8.650	8.530	8.724
EXISTING GROUND HEIGHT	8.156	8.328	8.501	7.043	6.627	8.037	9.535	8.360	8.397	8.554	8.403	8.618
STATION	34+600	34+650	34+700	34+750	34+800	34+850	34+900	34+950	35+000	35+050	35+100	35+150

PROPOSED HEIGHT	8.584	8.626	8.674	8.690	8.596	8.642	8.695	8.586	8.506	8.810	9.079
EXISTING GROUND HEIGHT	8.486	8.557	8.450	8.599	8.480	8.528	8.545	8.490	8.430	8.687	8.993
STATION	35+200	35+250	35+300	35+350	35+400	35+450	35+500	35+550	35+600	35+650	35+700

HORIZONTAL ALIGNMENT: R=1200 — 34+143.928 — R=00 — R=00 — 34905.782 — 34+955.782 — R=160 — 35+016.988 — 35066.988 — R=00 — 35+117.912 — R=900 — 35+314.322 — R=00 — 35533.389 — R=210 — 35+603.389 — 35+616.352 — 35686.352 — R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

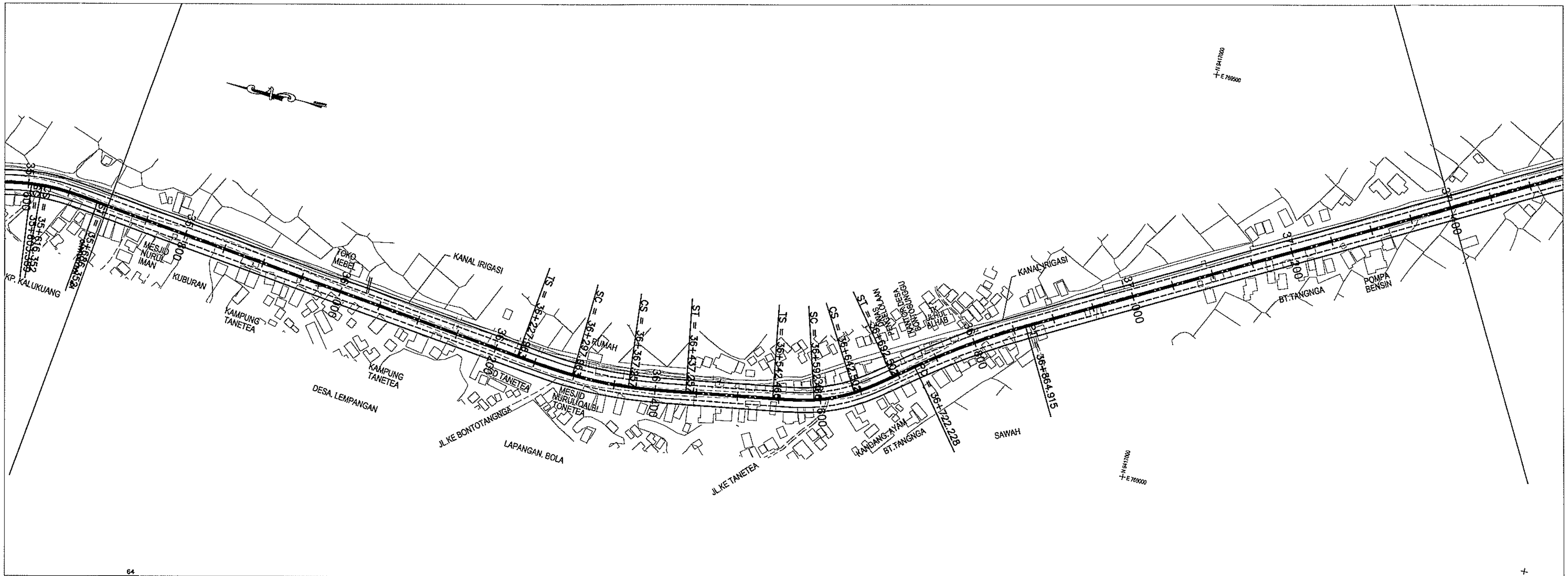
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

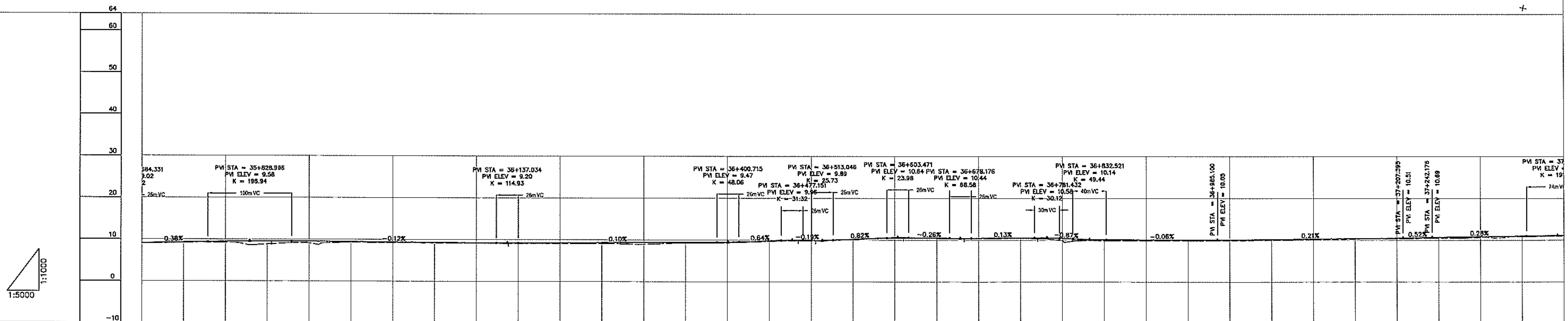
DRAWING TITLE : PLAN AND PROFILE (21/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-21

DATE: MARCH 2008





STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
35+700	9.079	8.993
35+750	9.272	9.168
35+800	9.453	9.179
35+850	9.528	8.824
35+900	9.488	9.074
35+950	9.426	9.330
36+000	9.364	9.184
36+050	9.303	9.150
36+100	9.241	9.127
36+150	9.209	9.103
36+200	9.260	9.070
36+250	9.312	9.080
36+300	9.363	8.956
36+350	9.415	9.244
36+400	9.482	9.344
36+450	9.784	9.660
36+500	9.917	9.817
36+550	10.197	10.130
36+600	10.590	10.508
36+650	10.517	10.419
36+700	10.472	10.356
36+750	10.537	10.410
36+800	10.418	9.931
36+850	10.127	9.874
36+900	10.099	9.915
36+950	10.071	9.838
37+000	10.081	9.878
37+050	10.184	9.979
37+100	10.287	10.131
37+150	10.390	10.276
37+200	10.493	10.326
37+250	10.710	10.546
37+300	10.850	10.693
37+350	10.990	10.853
37+400	11.183	11.037

HORIZONTAL ALIGNMENT: R=00 — 36227.963 — 36+297.963 — R=500 — 36+367.257 — 36437.257 — R=00 — 36542.466 — 36+592.466 — R=200 — 36+642.502 — 36692.502 — R=00 — 36+722.228 — R=900 — 36+864.915 — R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

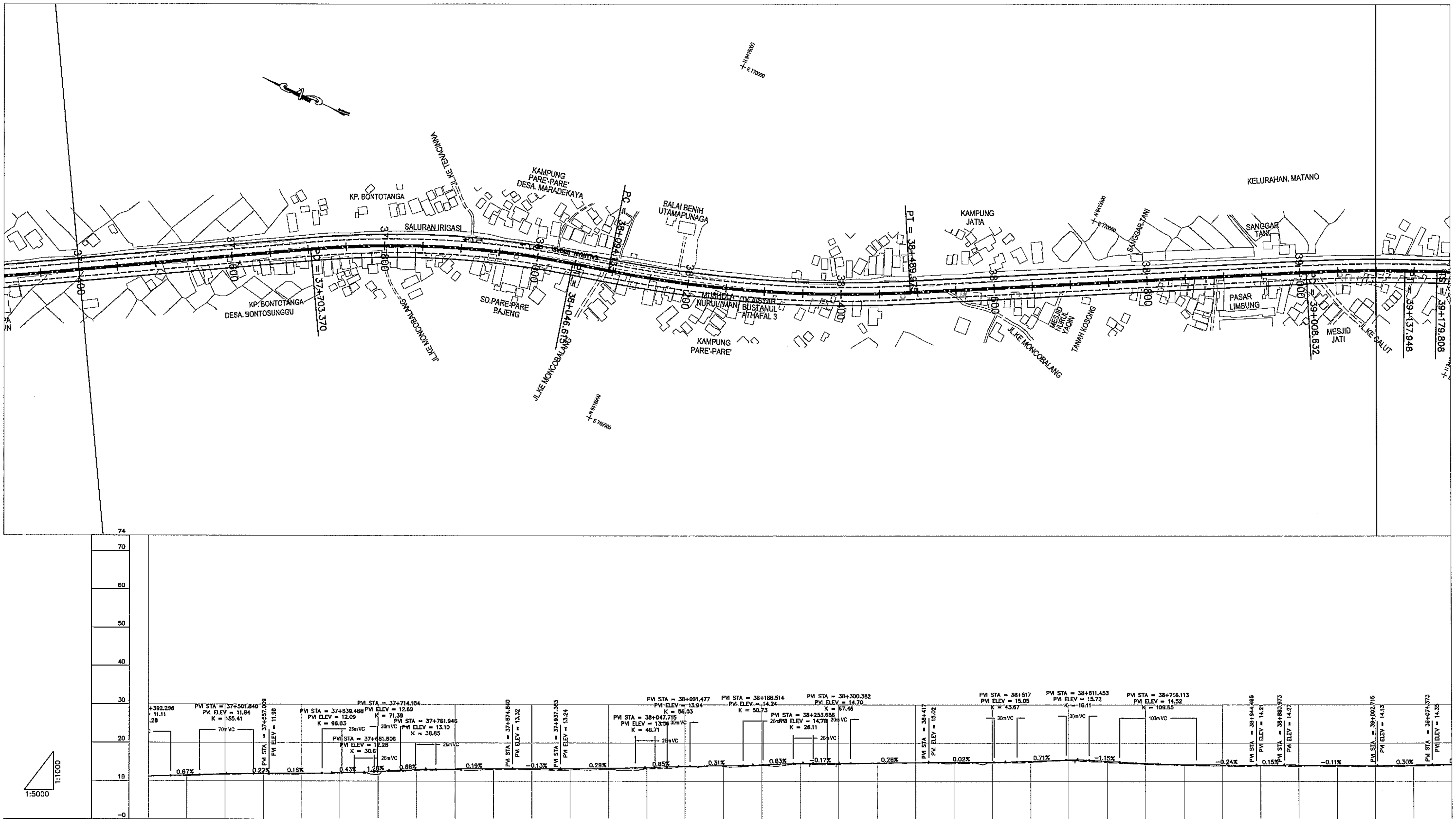
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (22/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-22

DATE: MARCH 2008



STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
37+400	11.183	11.037
37+450	11.494	11.290
37+500	11.792	11.701
37+550	11.945	11.800
37+600	12.030	11.797
37+650	12.140	12.052
37+700	12.510	11.753
37+750	13.000	12.805
37+800	13.177	12.959
37+850	13.274	13.029
37+900	13.289	13.059
37+950	13.279	12.959
38+000	13.425	13.141
38+050	13.597	13.249
38+100	13.960	13.872
38+150	14.121	13.947
38+200	14.337	14.240
38+250	14.733	14.520
38+300	14.718	14.490
38+350	14.838	14.730
38+400	14.976	14.842
38+450	15.031	14.729
38+500	15.044	14.887
38+550	15.283	15.029
38+600	15.635	15.461
38+650	15.277	14.989
38+700	14.754	14.523
38+750	14.448	14.243
38+800	14.317	14.063
38+850	14.220	14.074
38+900	14.247	13.947
38+950	14.192	13.921
39+000	14.137	13.934
39+050	14.274	14.036
39+100	14.466	14.234

HORIZONTAL ALIGNMENT: R=00 — 37+703.370 — R=1200 — 38+046.615 — R=00 — 38+094.133 — R=1600 — 38+489.975 — R=00 — 39+008.632 — R=1800

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

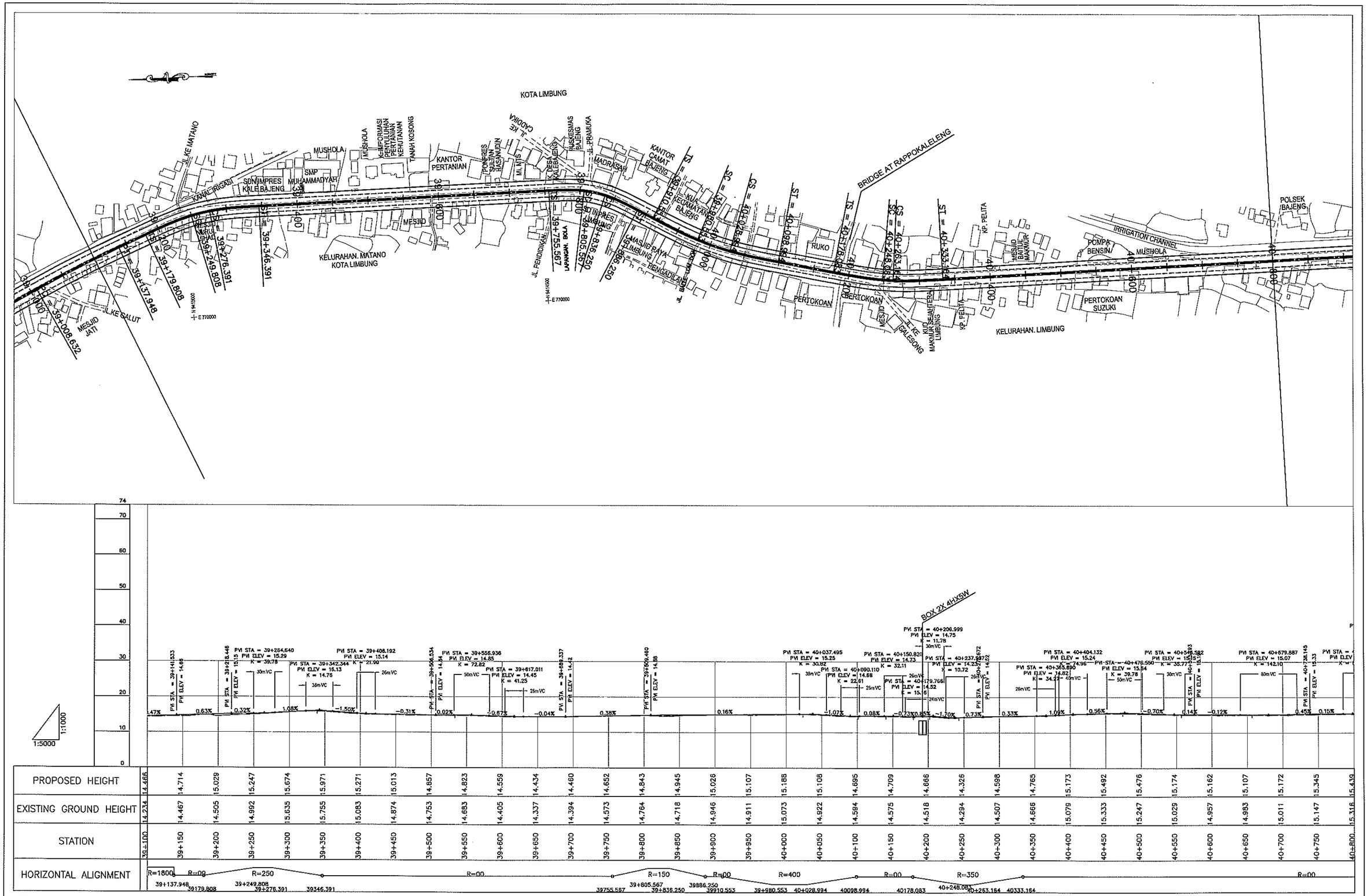
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (23/34)

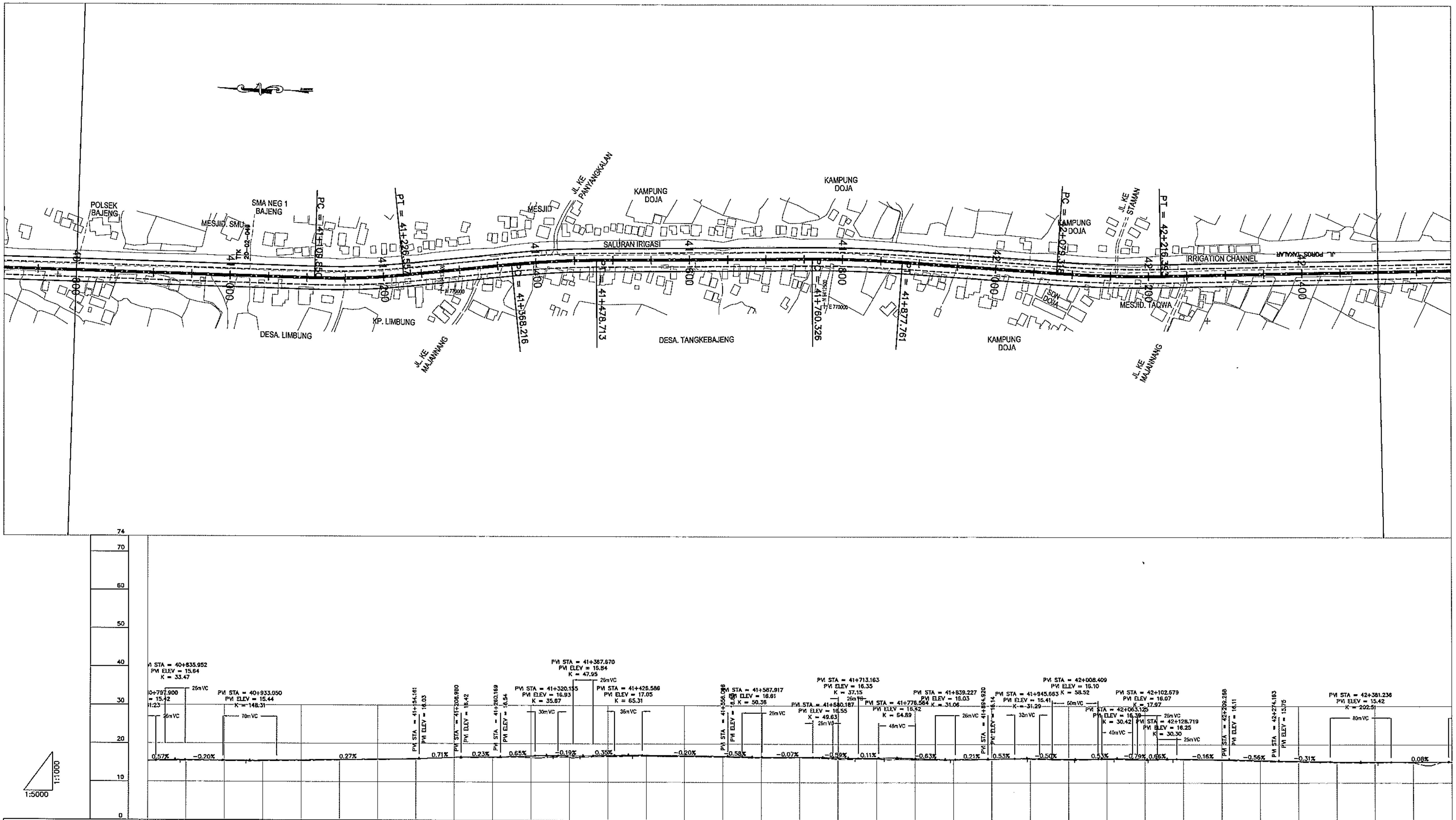
SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-23

DATE: MARCH 2008



JICA	JAPAN INTERNATIONAL COOPERATION AGENCY
NK	NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation
PROJECT TITLE:	THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA
ROAD NAME TITLE :	TRANS - SULAWESI ROAD MAMMINASATA SECTION
DRAWING TITLE :	PLAN AND PROFILE (24/34)
SCALE =	1 / 5,000 H, 1/1,000 V
DRAWING NO.	PP-24
DATE:	MARCH 2008



STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
40+800	15.439	15.316
40+850	15.607	15.419
40+900	15.506	15.356
40+950	15.495	15.344
41+000	15.619	15.467
41+050	15.754	15.656
41+100	15.889	15.750
41+150	16.023	15.932
41+200	16.358	16.365
41+250	16.516	16.396
41+300	16.799	16.388
41+350	16.875	16.472
41+400	16.956	16.684
41+450	17.004	16.790
41+500	16.906	16.711
41+550	16.807	16.597
41+600	16.601	16.423
41+650	16.568	16.490
41+700	16.430	16.104
41+750	16.393	16.127
41+800	16.274	15.977
41+850	16.049	15.943
41+900	16.168	16.131
41+950	16.365	16.214
42+000	16.178	16.054
42+050	16.308	16.192
42+100	16.125	16.005
42+150	16.211	16.091
42+200	16.129	15.936
42+250	15.884	15.681
42+300	15.668	15.506
42+350	15.515	15.349
42+400	15.443	15.312
42+450	15.474	15.297
42+500	15.516	15.401

HORIZONTAL ALIGNMENT: R=00 — 41+109.850 — R=900 — 41+226.557 — R=00 — 41+368.216 — R=1200 — 41+478.713 — R=00 — 41+760.326 — R=1500 — 41+877.761 — R=00 — 42+079.318 — R=1500 — 42+216.393 — R=00

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

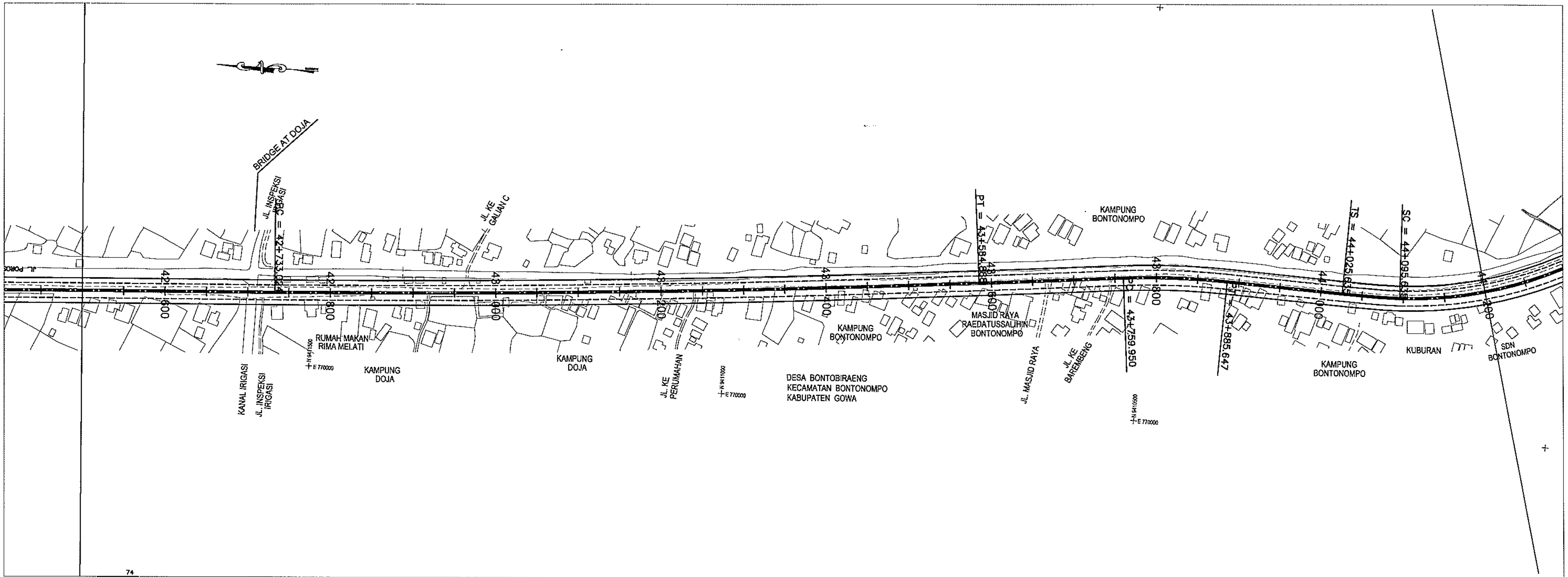
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

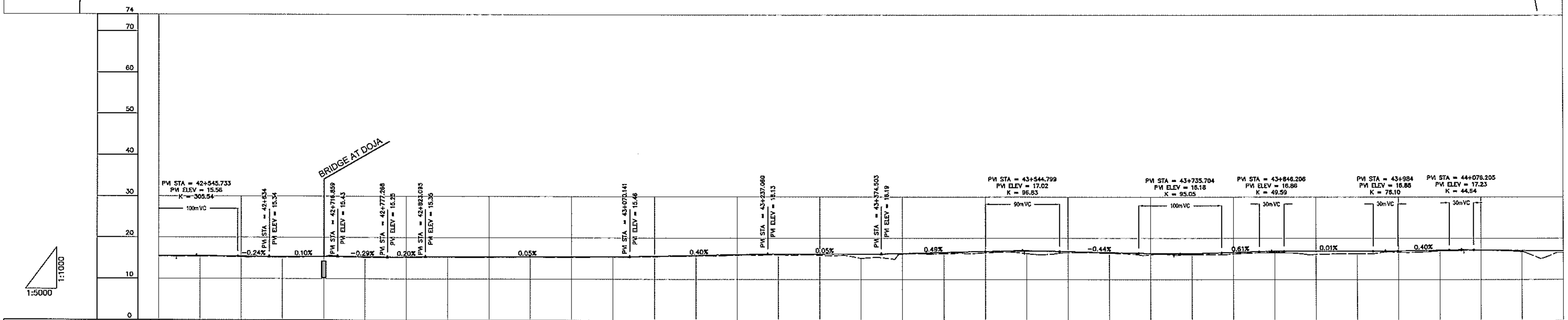
DRAWING TITLE : PLAN AND PROFILE (25/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-25

DATE: MARCH 2008





STATION	42+500	42+550	42+600	42+650	42+700	42+750	42+800	42+850	42+900	42+950	43+000	43+050
PROPOSED HEIGHT	15.516	15.511	15.423	15.357	15.409	15.332	15.299	15.357	15.381	15.404	15.427	15.450
EXISTING GROUND HEIGHT	15.401	15.354	15.207	15.180	15.323	15.168	15.197	15.257	15.224	15.300	15.234	15.341

STATION	43+100	43+150	43+200	43+250	43+300	43+350	43+400	43+450	43+500	43+550	43+600	43+650
PROPOSED HEIGHT	15.579	15.780	15.981	16.136	16.159	16.182	16.317	16.561	16.805	16.919	16.780	16.559
EXISTING GROUND HEIGHT	15.450	15.641	15.849	15.932	15.886	15.140	16.132	16.323	16.465	16.299	16.476	16.407

STATION	43+700	43+750	43+800	43+850	43+900	43+950	44+000	44+050	44+100	44+150	44+200
PROPOSED HEIGHT	16.349	16.335	16.573	16.843	16.858	16.861	16.927	17.127	17.167	17.030	16.894
EXISTING GROUND HEIGHT	16.023	16.028	16.188	16.526	16.095	16.270	16.629	16.931	17.073	16.747	16.490

HORIZONTAL ALIGNMENT: R=00 — 42+733.024 — R=20000 — 43+584.888 — R=00 — 43+759.950 — R=900 — 43+885.647 — R=00 — 44025.635 — 44+095.635 — R=480

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

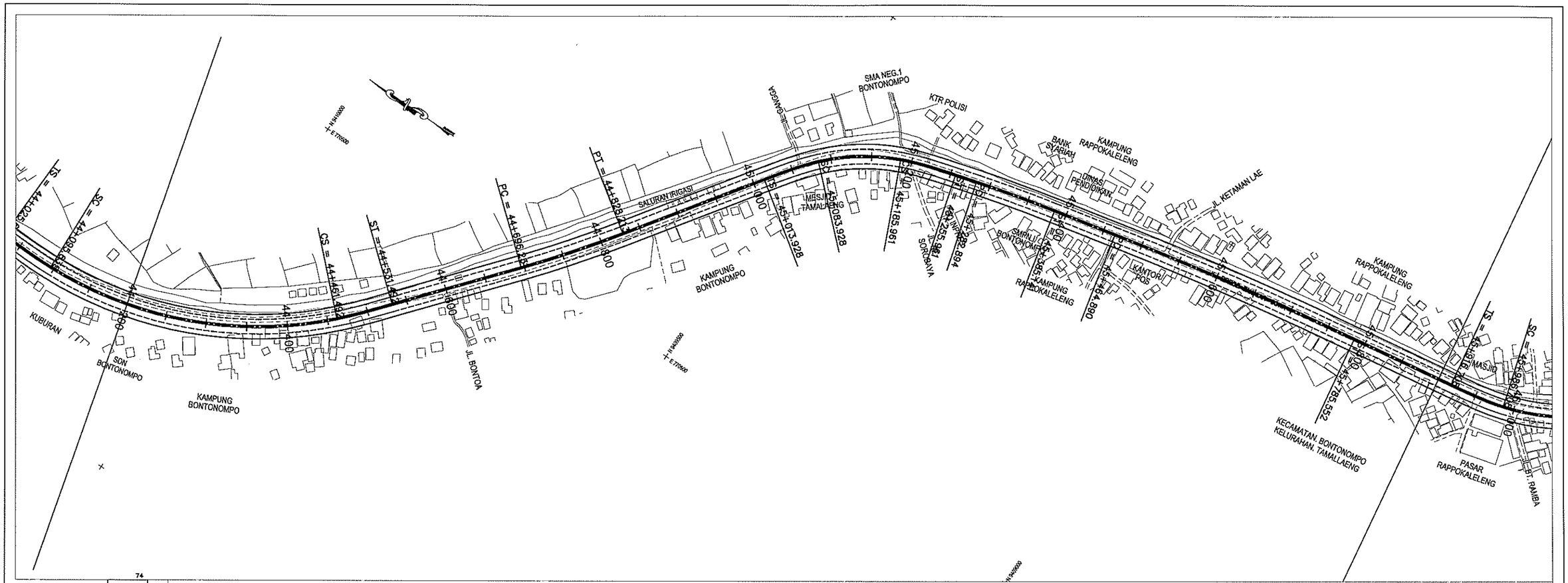
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (26/34)

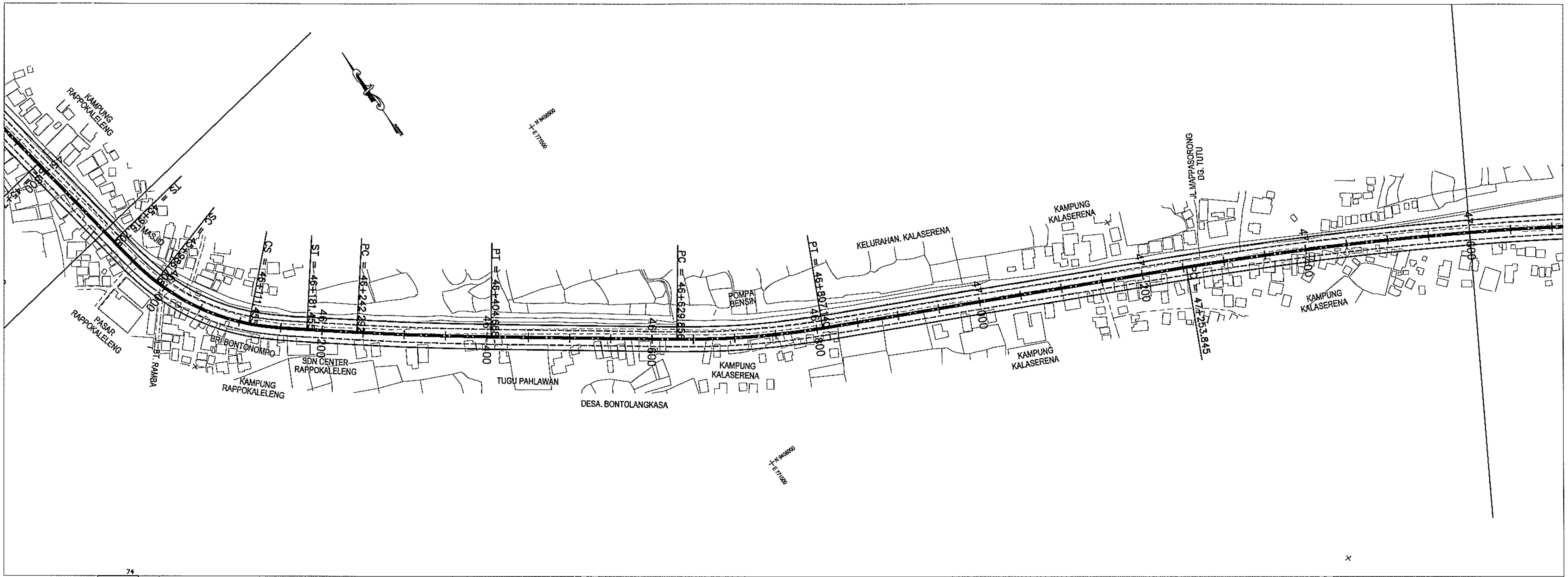
SCALE = 1 / 5,000 H, 1/1,000 V

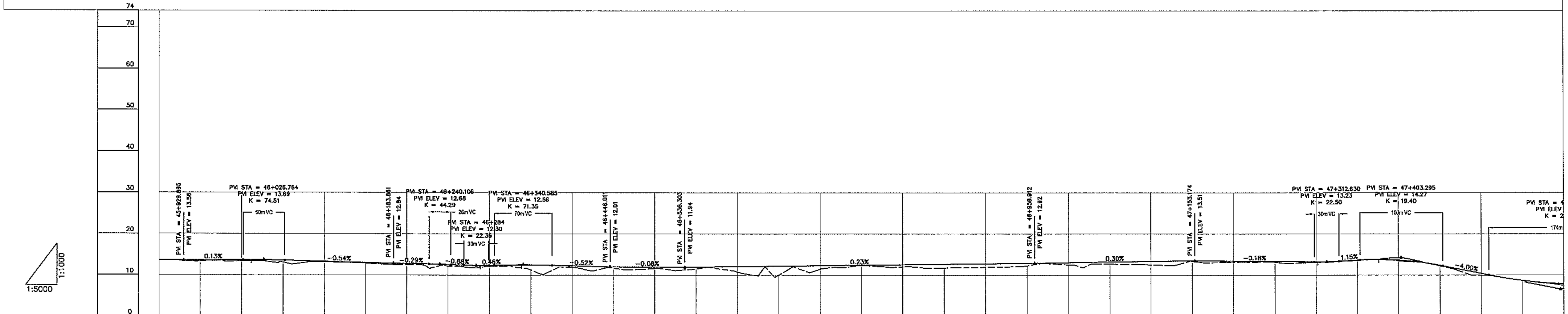
DRAWING NO. PP-26

DATE: MARCH 2008



JAPAN INTERNATIONAL COOPERATION AGENCY	
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	
PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION
	DRAWING TITLE : PLAN AND PROFILE (27/34)
	SCALE = 1 / 5,000 H, 1/1,000 V
	DRAWING NO. PP-27
	DATE: MARCH 2008





STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
45+900	13.624	13.574
45+950	13.591	13.326
46+000	13.657	13.412
46+050	13.567	13.074
46+100	13.297	13.158
46+150	13.028	12.860
46+200	12.798	12.506
46+250	12.593	12.196
46+300	12.370	12.152
46+350	12.463	11.261
46+400	12.250	11.893
46+450	12.009	11.704
46+500	11.967	11.602
46+550	11.968	11.560
46+600	12.085	10.802
46+650	12.201	10.076
46+700	12.318	11.505
46+750	12.434	12.371
46+800	12.550	12.057
46+850	12.667	11.769
46+900	12.783	11.956
46+950	12.900	12.281
47+000	13.045	12.497
47+050	13.197	12.743
47+100	13.349	12.514
47+150	13.501	13.374
47+200	13.426	13.114
47+250	13.337	13.153
47+300	13.249	13.084
47+350	13.657	13.524
47+400	13.672	13.454
47+450	12.401	12.225
47+500	10.404	9.924
47+550	8.709	8.679
47+600	7.911	7.491

HORIZONTAL ALIGNMENT: R=00 (45916.708) – 45+985.708 – R=260 – 46+111.455 – 46181.455 – R=00 – 46+242.292 – R=4000 – 46+404.688 – R=00 – 46+629.856 – R=1000 – 46+807.140 – R=00 – 47+253.845 – R=4000

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

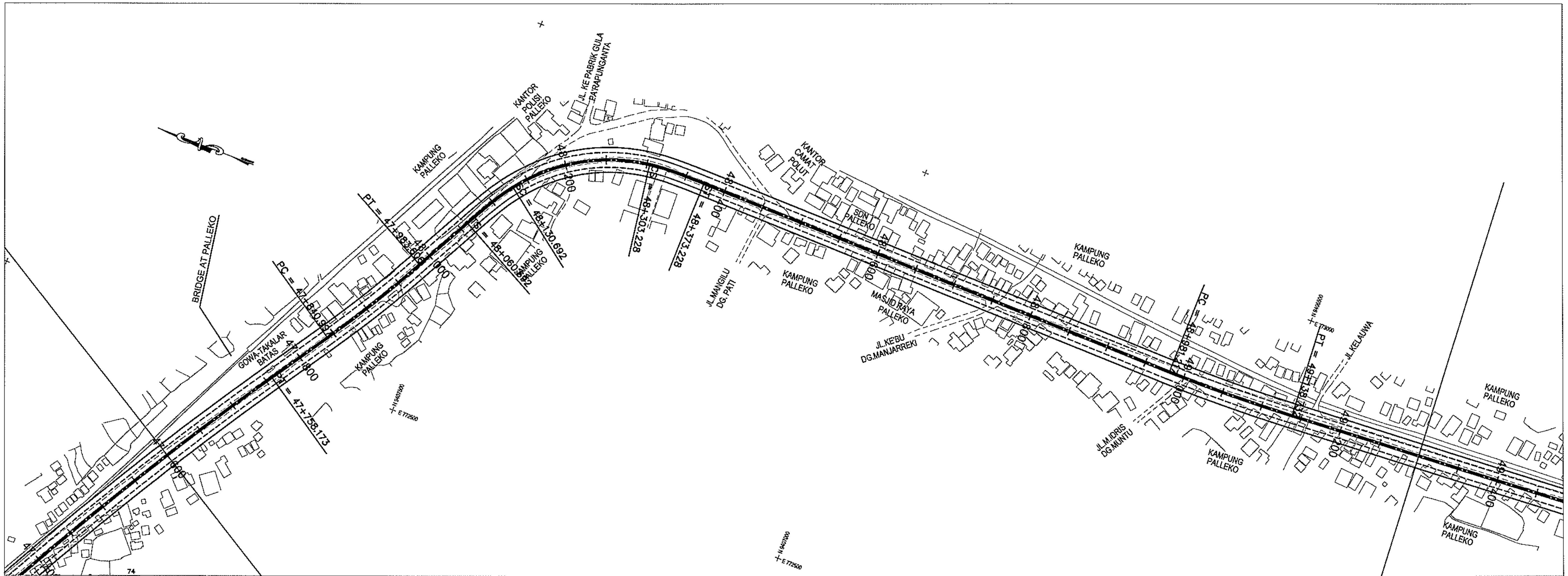
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

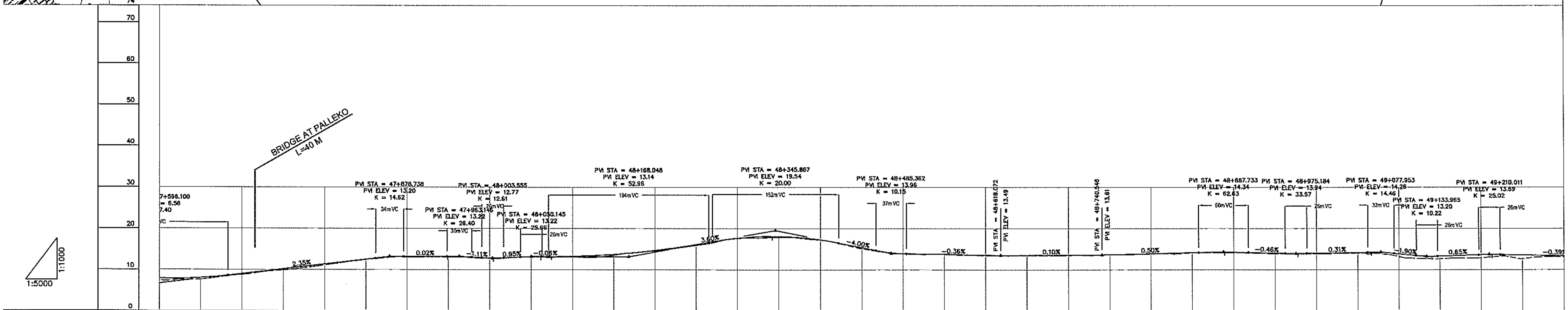
DRAWING TITLE : PLAN AND PROFILE (28/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-28

DATE: MARCH 2008





STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
47+600	7.911	7.491
47+650	8.026	7.619
47+700	9.001	8.778
47+750	10.176	9.901
47+800	11.351	11.096
47+850	12.526	12.422
47+900	13.207	13.048
47+950	13.218	13.057
48+000	12.848	12.762
48+050	13.182	13.108
48+100	13.263	13.073
48+150	13.741	13.532
48+200	14.690	14.553
48+250	16.112	15.869
48+300	17.664	17.585
48+350	18.086	17.900
48+400	17.257	17.221
48+450	15.377	15.108
48+500	13.918	13.853
48+550	13.733	13.841
48+600	13.555	13.481
48+650	13.523	13.476
48+700	13.572	13.453
48+750	13.659	13.634
48+800	13.908	13.817
48+850	14.157	14.103
48+900	14.263	14.117
48+950	14.058	13.858
49+000	14.020	13.857
49+050	14.177	14.040
49+100	13.846	13.180
49+150	13.305	12.657
49+200	13.626	12.902
49+250	13.536	12.633
49+300	13.339	13.078

HORIZONTAL ALIGNMENT: R=4000 — 47+758.173 — R=00 — 47+840.997 — R=1500 — 47+983.606 — R=00 — 48060.692 — 48+130.692 — R=220 — 48+303.228 — 48373.228 — R=00 — 48+981.217 — R=2000 — 49+138.732 — R=00

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

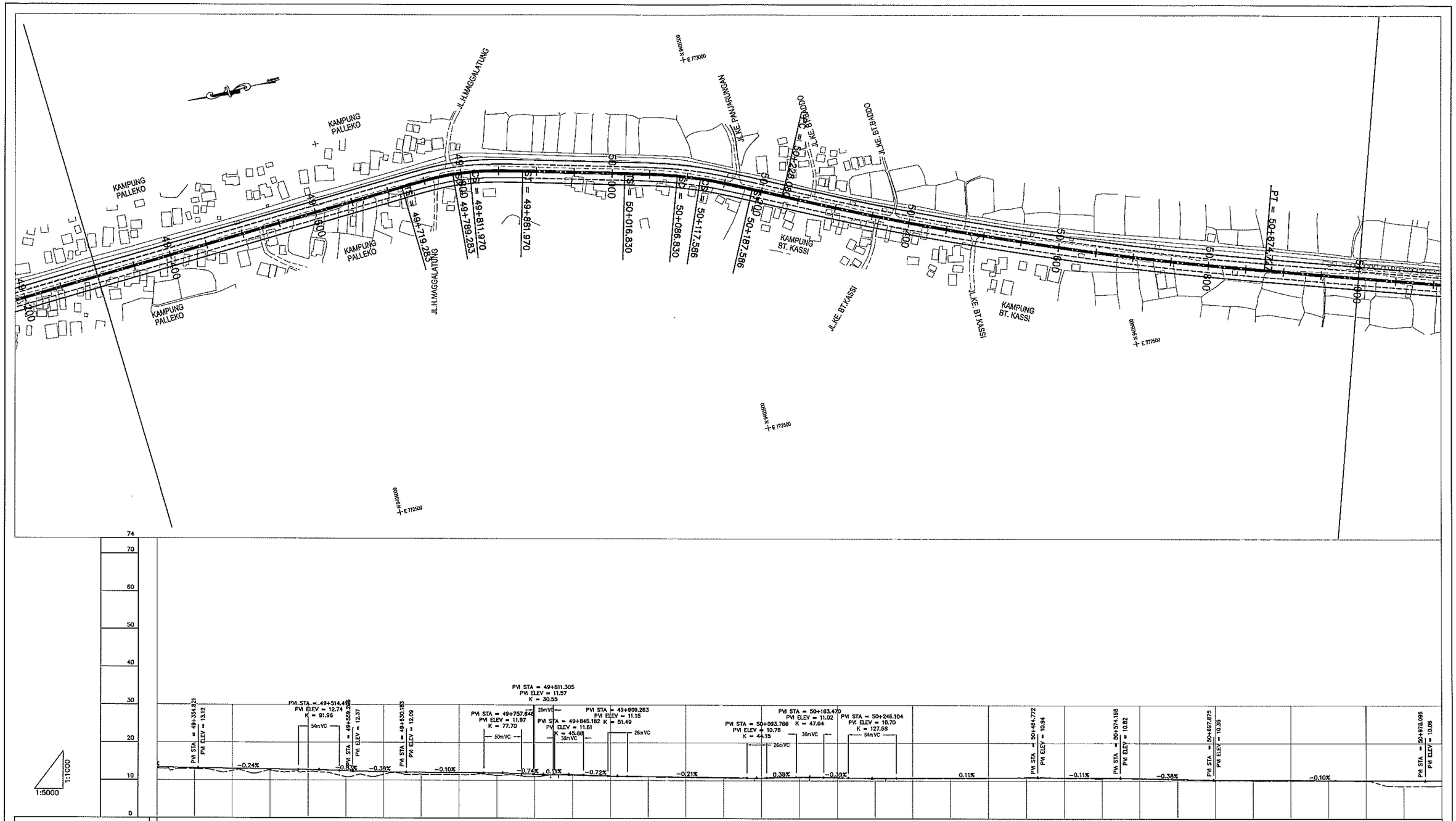
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : PLAN AND PROFILE (29/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-29

DATE: MARCH 2008



JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

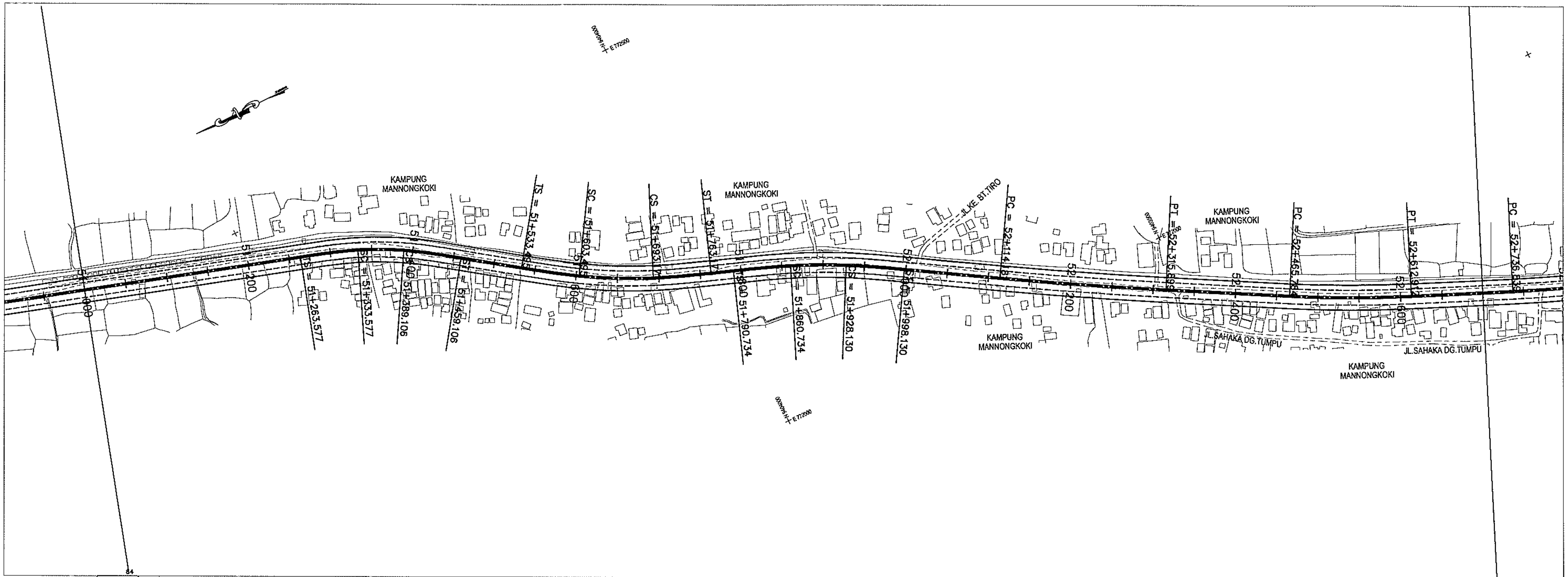
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

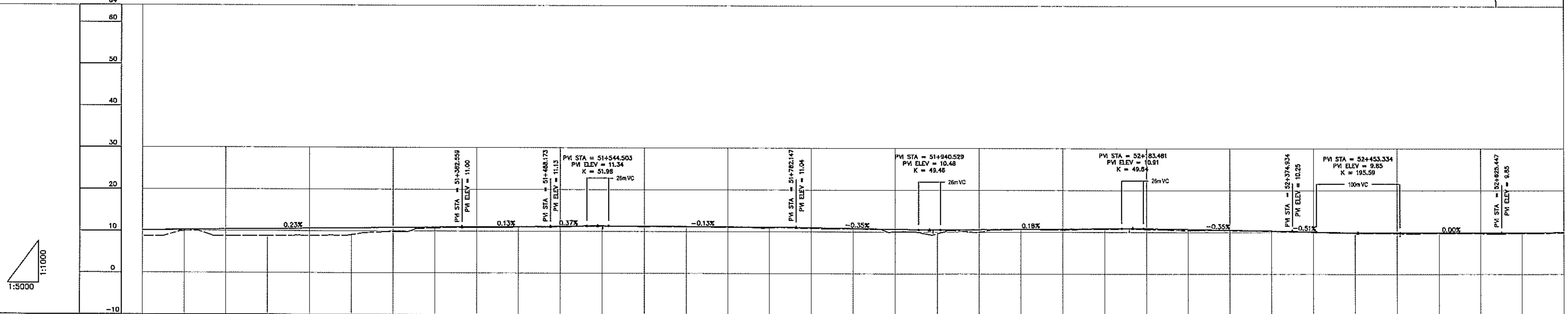
DRAWING TITLE : PLAN AND PROFILE (30/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-30

DATE: MARCH 2008





STATION	51+000	51+050	51+100	51+150	51+200	51+250	51+300	51+350	51+400	51+450	51+500	51+550
PROPOSED HEIGHT	10.129	10.242	10.356	10.469	10.582	10.695	10.808	10.922	11.018	11.082	11.175	11.329
EXISTING GROUND HEIGHT	8.680	9.938	8.805	8.841	8.820	9.096	9.839	10.710	10.850	10.959	11.026	11.243

STATION	51+600	51+650	51+700	51+750	51+800	51+850	51+900	51+950	52+000	52+050	52+100	52+150
PROPOSED HEIGHT	11.270	11.206	11.142	11.079	10.975	10.801	10.626	10.502	10.589	10.678	10.766	10.854
EXISTING GROUND HEIGHT	11.125	11.165	11.006	10.896	10.813	10.749	10.059	9.599	9.982	10.655	10.504	10.705

STATION	52+200	52+250	52+300	52+350	52+400	52+450	52+500	52+550	52+600	52+650	52+700
PROPOSED HEIGHT	10.856	10.683	10.509	10.335	10.121	9.921	9.848	9.848	9.848	9.900	10.007
EXISTING GROUND HEIGHT	10.635	10.415	10.404	10.223	9.999	9.814	9.714	9.734	9.685	9.749	9.887

HORIZONTAL ALIGNMENT: R=00 — 51263.577 — R=400 — 51+333.577, 51+389.106 — 51459.106 — R=00 — 51533.495 — R=600 — 51+603.495, 51+693.171 — 51763.171 — R=00 — 51790.734 — R=700 — 51+860.734, 51+928.130 — 51998.130 — R=00 — 52+114.181 — R=5000 — 52+315.899 — R=00 — 52+465.784 — R=1500 — 52+612.912 — R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

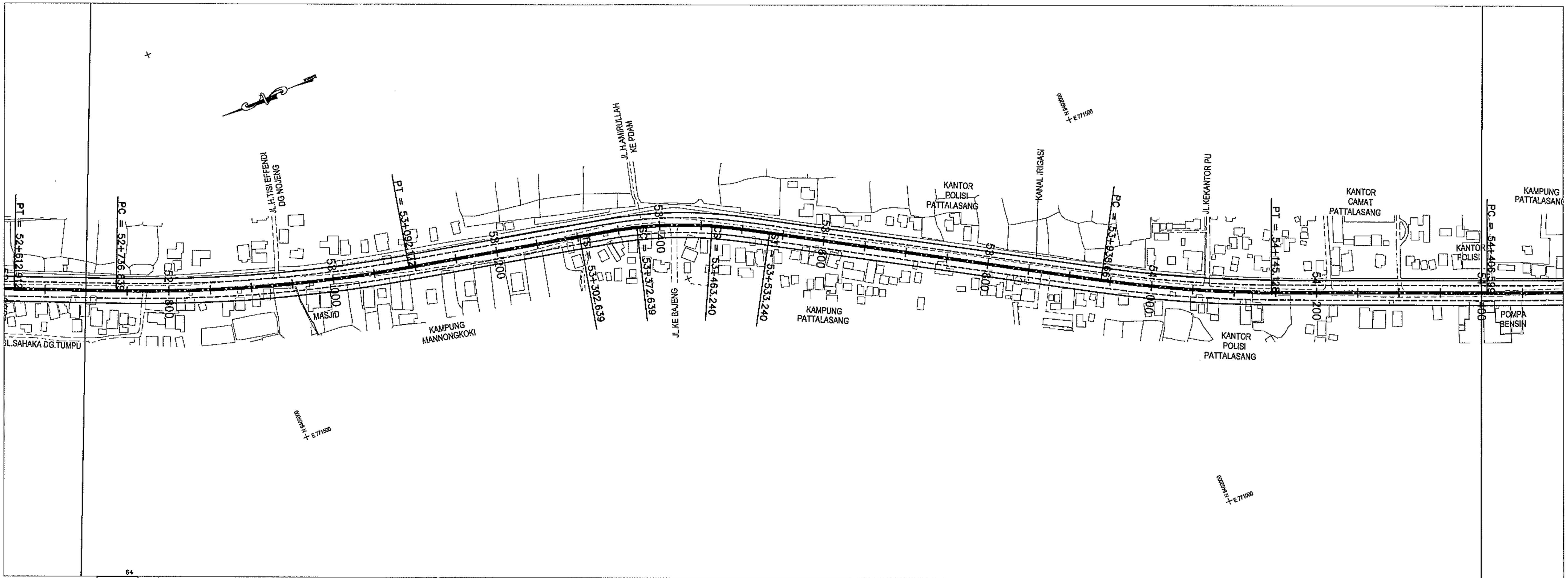
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

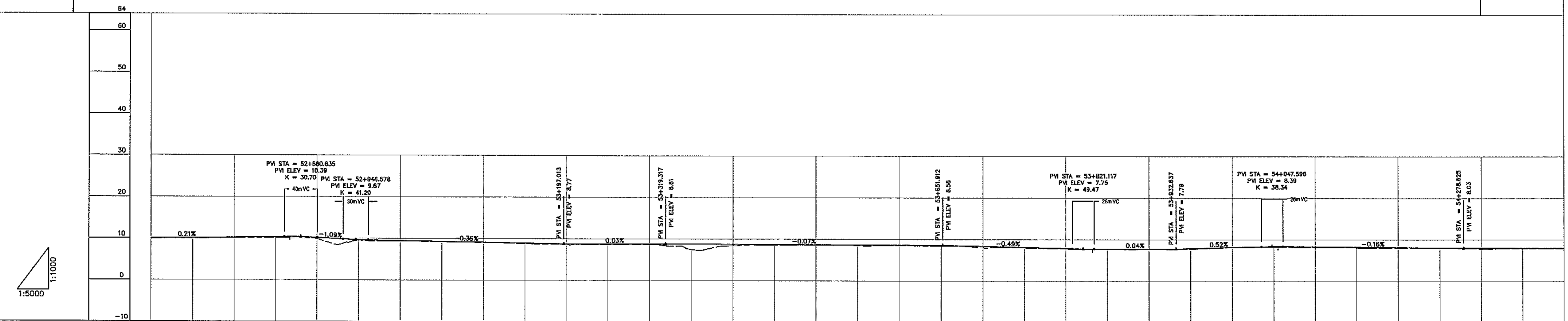
DRAWING TITLE : PLAN AND PROFILE (31/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-31

DATE: MARCH 2008





STATION	PROPOSED HEIGHT	EXISTING GROUND HEIGHT
52+700	10.007	9.887
52+750	10.114	9.988
52+800	10.221	10.138
52+850	10.328	10.173
52+900	10.182	9.876
52+950	9.679	9.530
53+000	9.482	9.367
53+050	9.301	9.216
53+100	9.121	9.004
53+150	8.940	8.770
53+200	8.771	8.668
53+250	8.787	8.646
53+300	8.803	8.647
53+350	8.788	7.475
53+400	8.754	8.398
53+450	8.720	8.577
53+500	8.686	8.628
53+550	8.652	8.506
53+600	8.618	8.541
53+650	8.584	8.419
53+700	8.347	8.023
53+750	8.101	7.980
53+800	7.856	7.743
53+850	7.763	7.667
53+900	7.780	7.781
53+950	7.882	7.730
54+000	8.144	8.108
54+050	8.375	8.267
54+100	8.312	8.101
54+150	8.234	8.079
54+200	8.157	8.039
54+250	8.079	8.026
54+300	8.024	7.785
54+350	7.999	7.897
54+400	7.973	7.908

HORIZONTAL ALIGNMENT

R=00 52+736.839 R=1800 53+092.172 R=00 53302.639 53+372.639 R=500 53+463.240 53533.240 R=00 53+938.661 R=1500 54+145.128 R=00

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

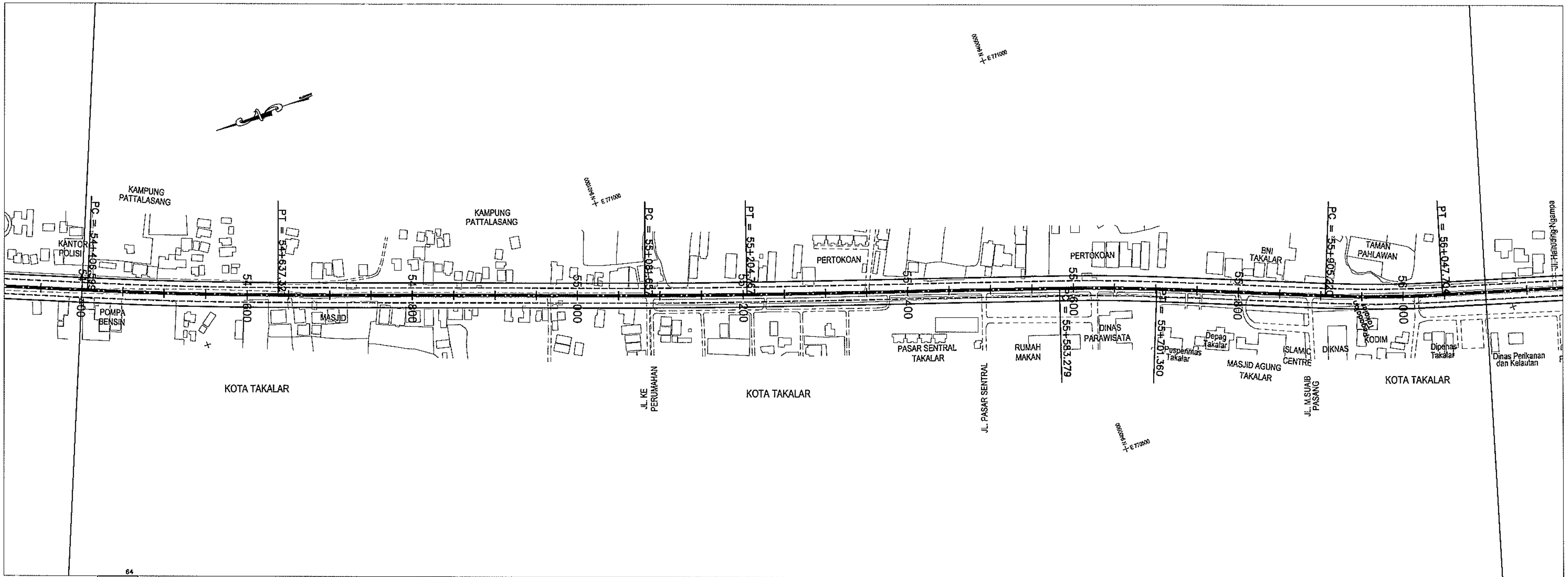
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

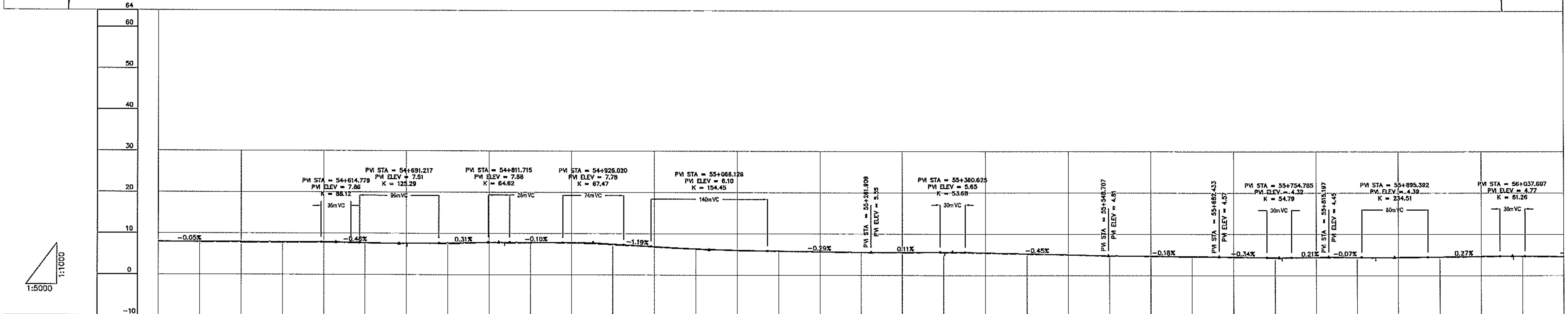
DRAWING TITLE : PLAN AND PROFILE (32/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-32

DATE: MARCH 2008





STATION	54+400	54+450	54+500	54+550	54+600	54+650	54+700	54+750	54+800	54+850	54+900	54+950
PROPOSED HEIGHT	7.973	7.948	7.923	7.897	7.872	7.705	7.602	7.694	7.848	7.848	7.791	7.477
EXISTING GROUND HEIGHT	7.908	7.831	7.720	7.666	7.734	7.596	7.541	7.518	7.768	7.719	7.688	7.286

STATION	55+000	55+050	55+100	55+150	55+200	55+250	55+300	55+350	55+400	55+450	55+500	55+550
PROPOSED HEIGHT	6.894	6.391	6.050	5.865	5.723	5.580	5.587	5.640	5.476	5.251	5.026	4.804
EXISTING GROUND HEIGHT	6.727	6.286	5.920	5.764	5.601	5.474	5.440	5.486	5.359	5.142	4.952	4.704

STATION	55+600	55+650	55+700	55+750	55+800	55+850	55+900	55+950	56+000	56+050	56+100
PROPOSED HEIGHT	4.716	4.627	4.510	4.349	4.417	4.424	4.430	4.537	4.671	4.744	4.634
EXISTING GROUND HEIGHT	4.608	4.481	4.406	4.251	4.326	4.291	4.353	4.431	4.557	4.635	4.525

HORIZONTAL ALIGNMENT

R=00 | 54+406.599 | R=5000 | 54+637.321 | R=00 | 55+081.657 | R=6000 | 55+204.767 | R=00 | 55+583.279 | R=2000 | 55+701.360 | R=00 | 55+905.220 | R=1500 | 56+047.704 | R=00

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

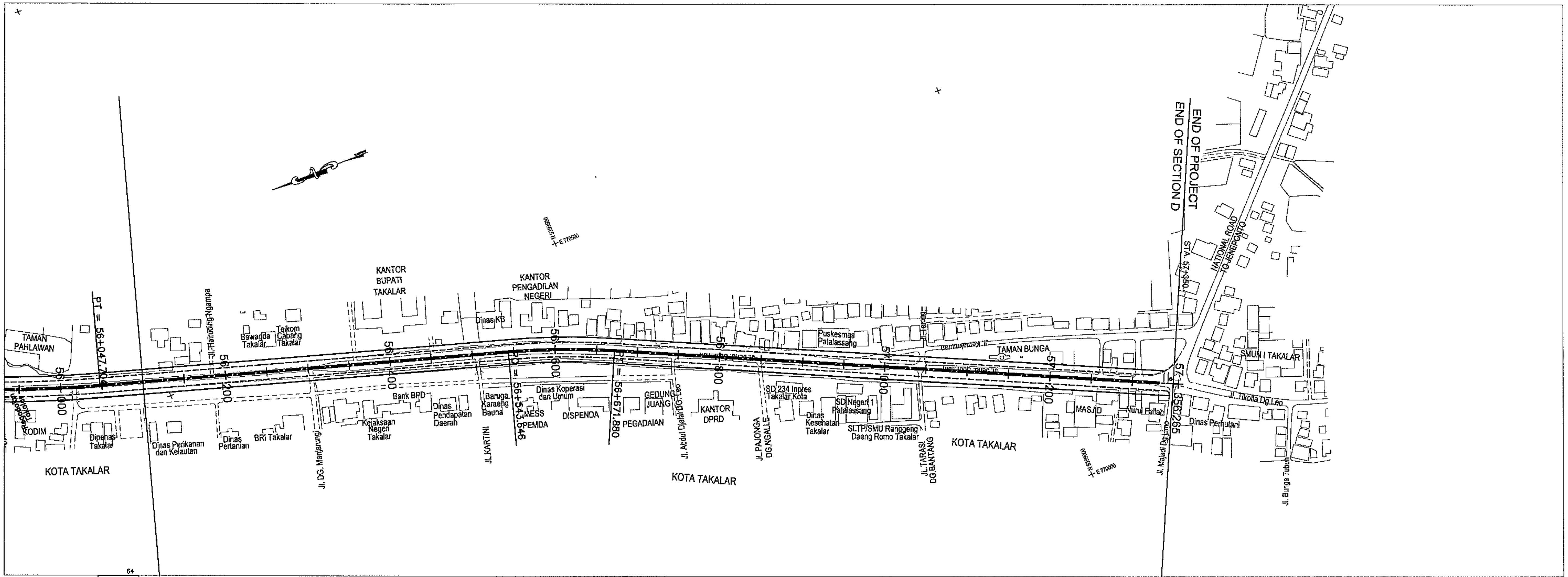
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

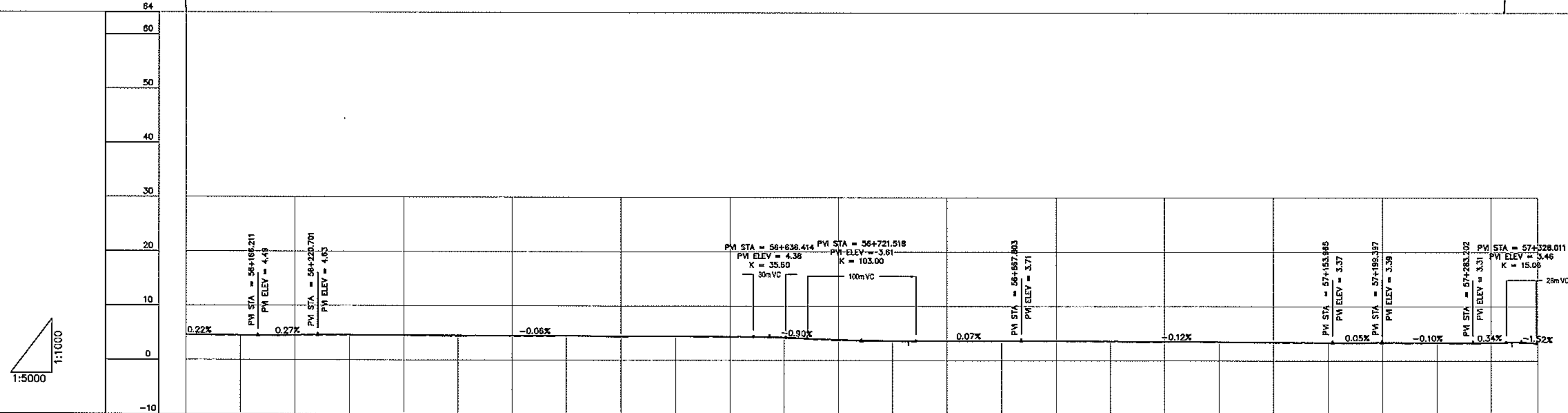
DRAWING TITLE : PLAN AND PROFILE (33/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-33

DATE: MARCH 2008





PROPOSED HEIGHT	4.634	4.523	4.577	4.614	4.584	4.553	4.523	4.492	4.462	4.431	4.401	4.255	3.843
EXISTING GROUND HEIGHT	4.525	4.414	4.459	4.520	4.489	4.366	4.372	4.503	4.327	4.354	4.297	4.125	3.709
STATION	56+100	56+150	56+200	56+250	56+300	56+350	56+400	56+450	56+500	56+550	56+600	56+650	56+700
HORIZONTAL ALIGNMENT	R=00									56+543.646 R=900		56+671.880	

PROPOSED HEIGHT	3.651	3.662	3.695	3.669	3.610	3.551	3.493	3.434	3.375	3.390	3.339	3.363	
EXISTING GROUND HEIGHT	3.550	3.565	3.592	3.594	3.496	3.413	3.394	3.348	3.255	3.311	3.258	3.251	
STATION	56+750	56+800	56+850	56+900	56+950	57+000	57+050	57+100	57+150	57+200	57+250	57+300	57+343
HORIZONTAL ALIGNMENT						R=00							

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

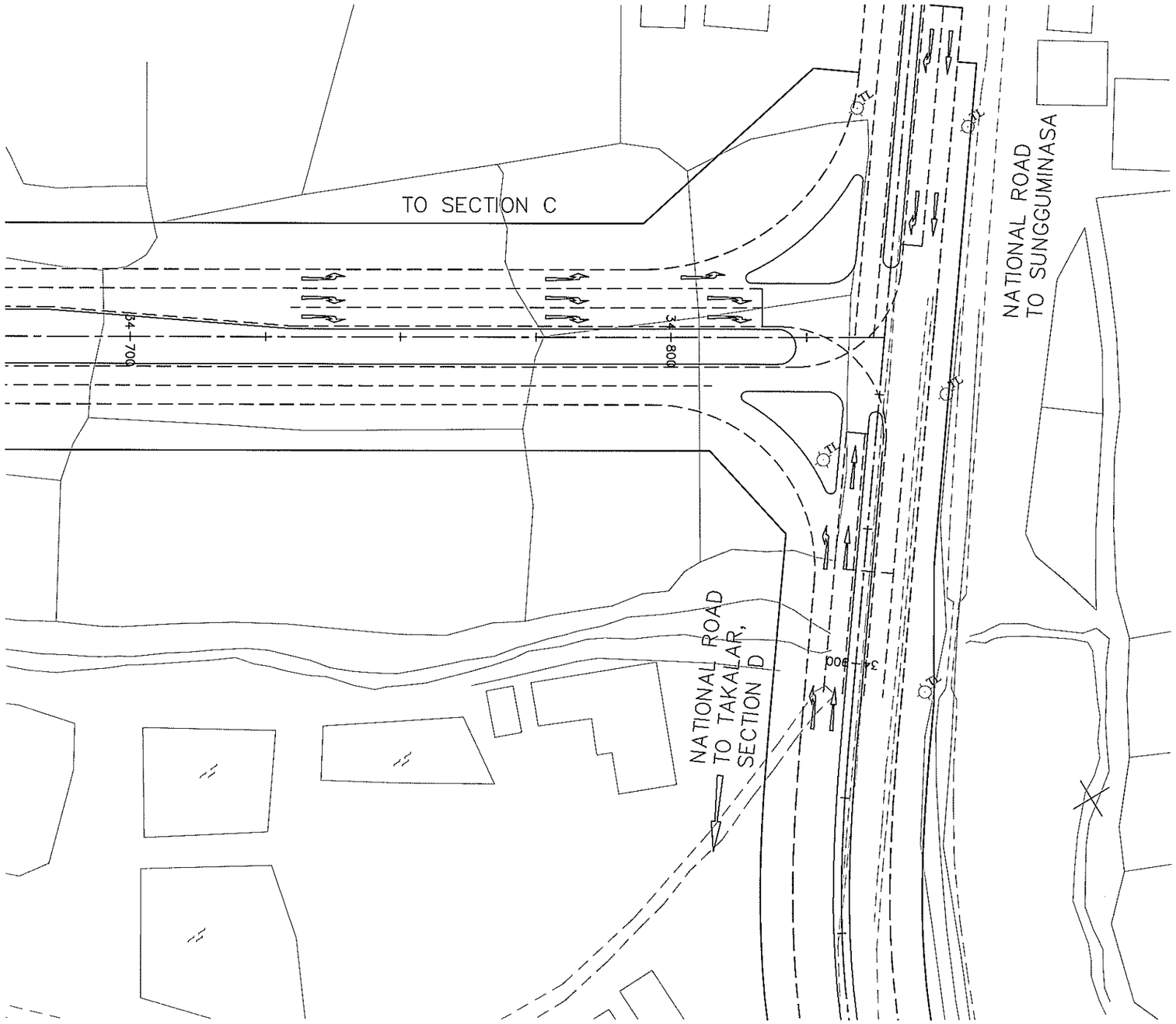
DRAWING TITLE : PLAN AND PROFILE (34/34)

SCALE = 1 / 5,000 H, 1/1,000 V

DRAWING NO. PP-34

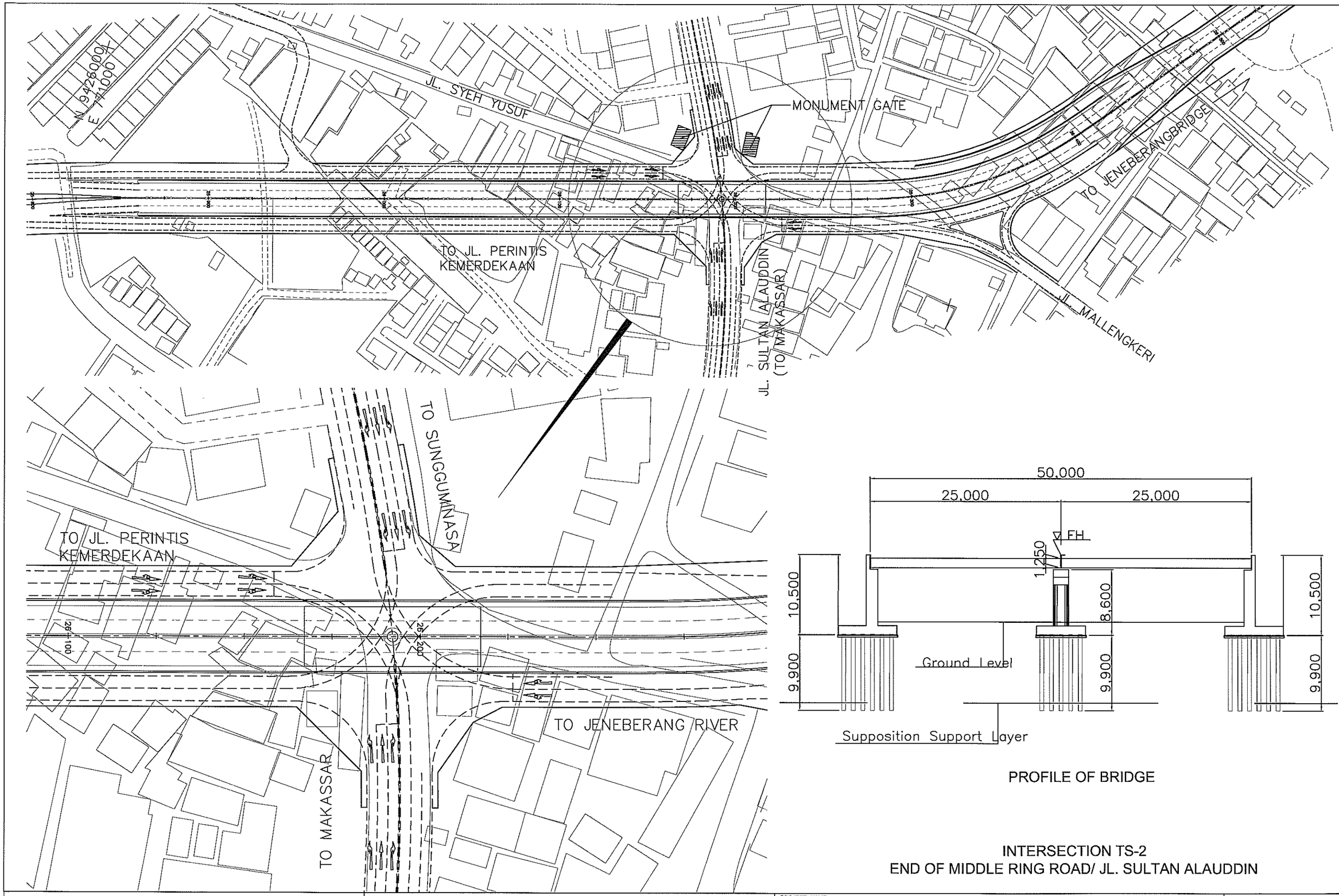
DATE: MARCH 2008

4. ROADWAY - INTERSECTIONS



INTERSECTION TS-1
END OF SECTION-C / NATIONAL ROAD

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	PROJECT NAME : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : INTERSECTION TS-1, END OF SECTION-C / NATIONAL ROAD SCALE = 1 / 1,000	DRAWING NO. IN-01 DATE: MARCH 2008



PROFILE OF BRIDGE

INTERSECTION TS-2
END OF MIDDLE RING ROAD/ JL. SULTAN ALAUDDIN

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

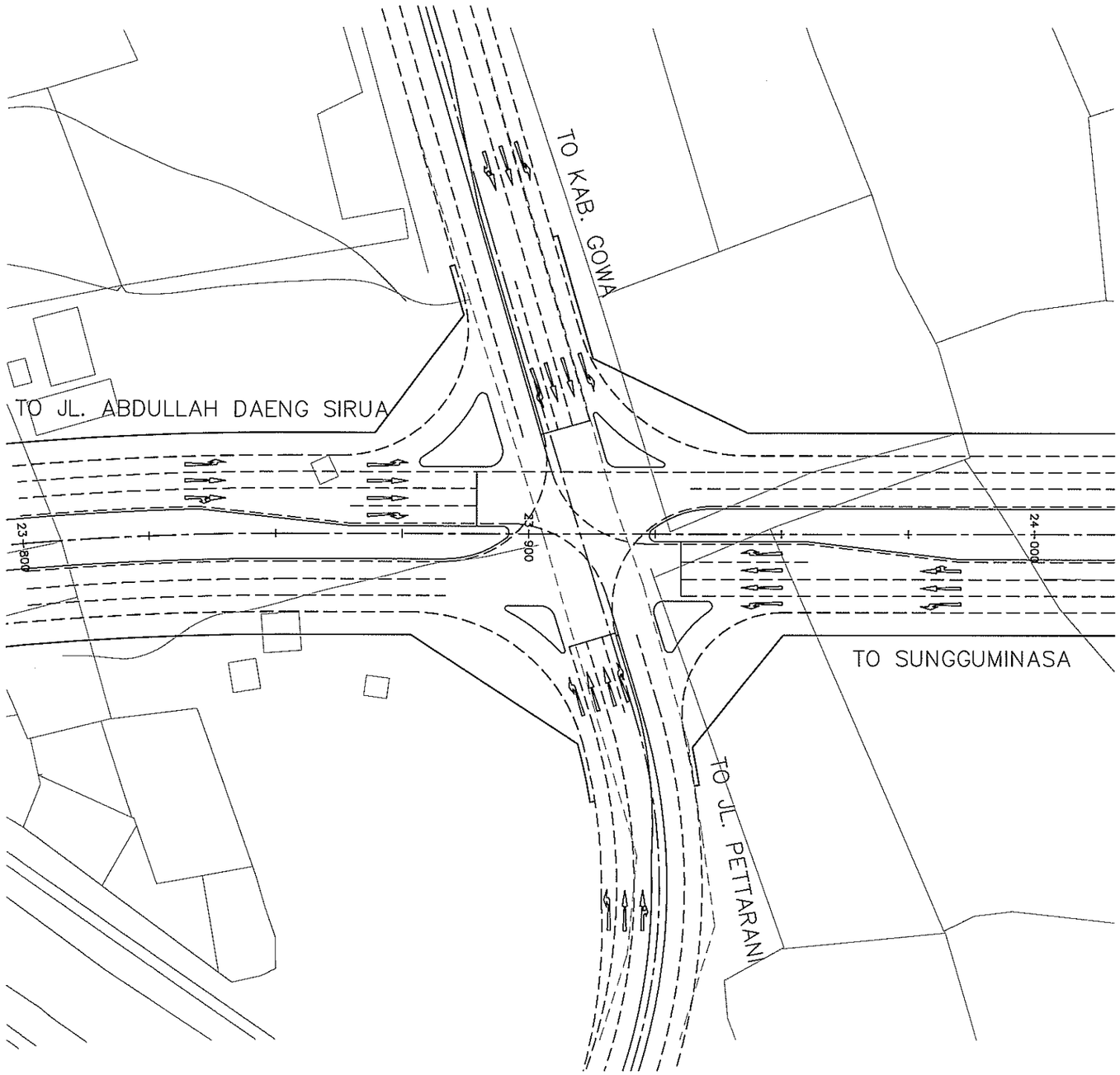
PROJECT NAME : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : INTERSECTION TS-2, END OF MIDDLE RING RING ROAD / JL. SULTAN ALAUDDIN

SCALE = 1 / 2000, 1000

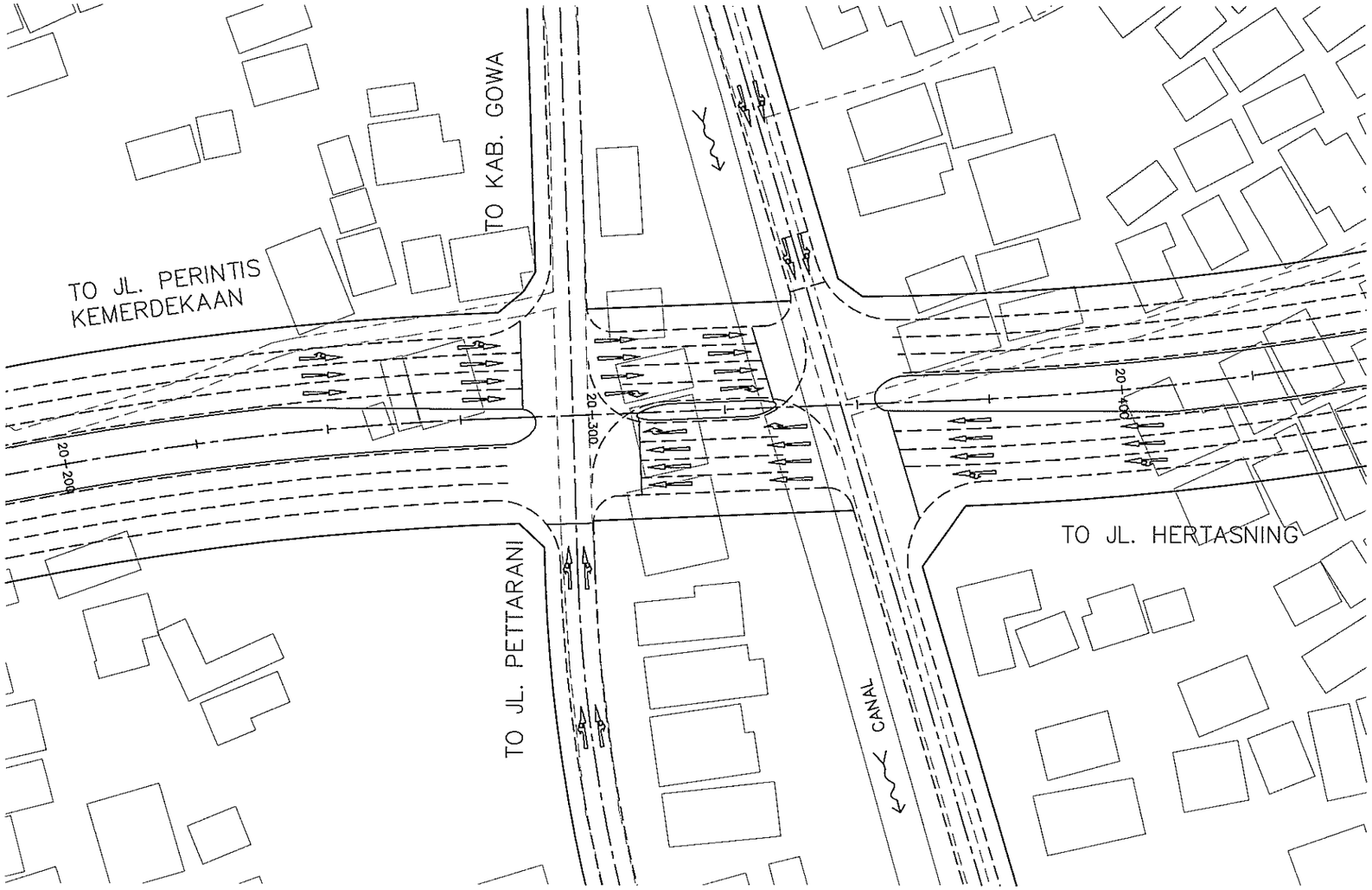
DRAWING NO. IN-02

DATE: MARCH 2008



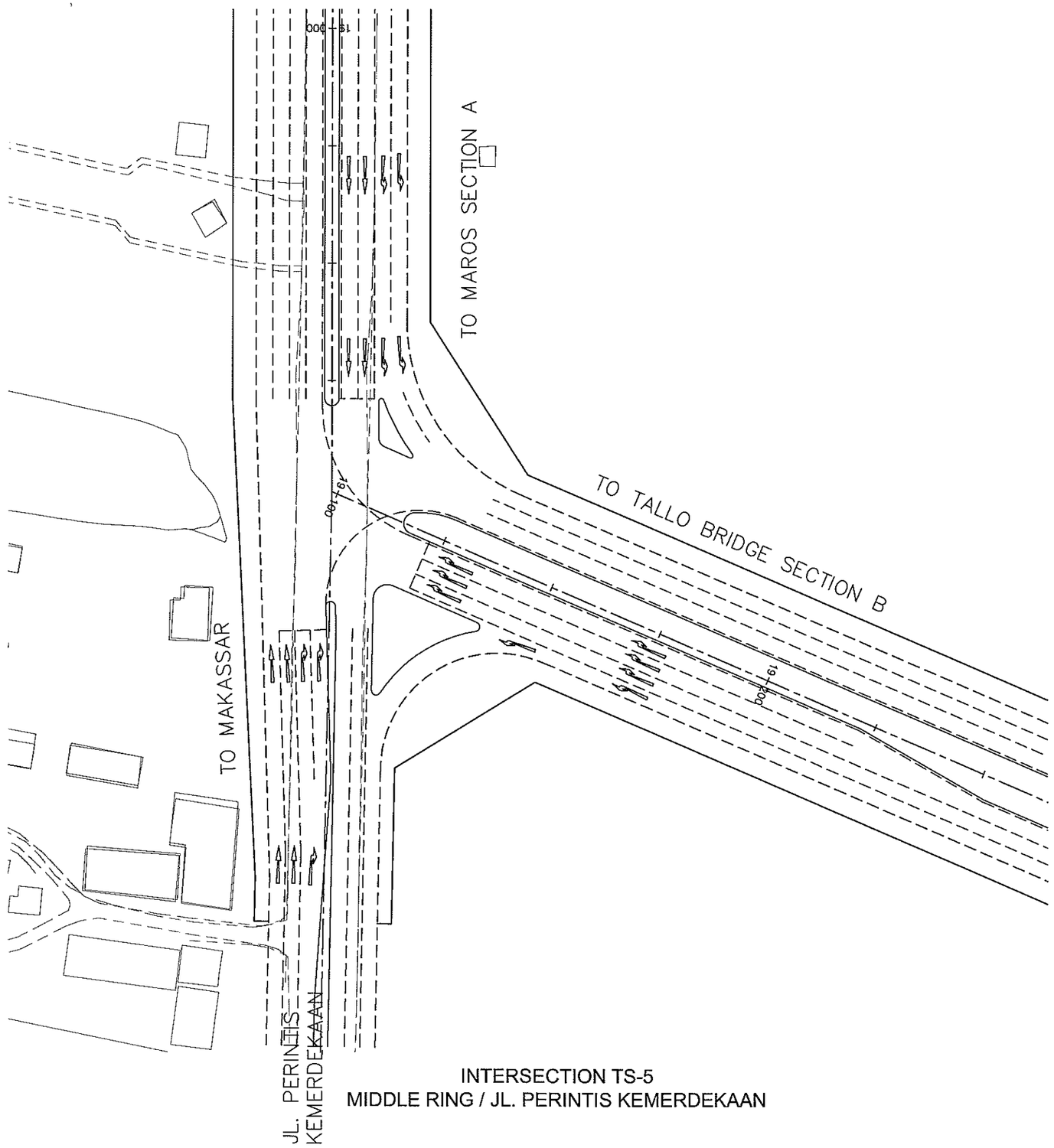
INTERSECTION TS-3
TRANS-SULAWESI / JL. HERTASNING

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	PROJECT NAME : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : INTERSECTION TS-3, TRANS-SULAWESI / JL. HERTASNING SCALE = 1 / 1,000	DRAWING NO. IN-03 DATE: MARCH 2008



INTERSECTION TS-4
TRANS-SULAWESI / JL. ABDULLAH DAENG SIRUA

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	PROJECT NAME : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : INTERSECTION TS-4, TRANS-SULAWESI / JL. ABDULLAH DAENG SIRUA SCALE = 1 / 1,000	DRAWING NO. IN-04 DATE: MARCH 2008

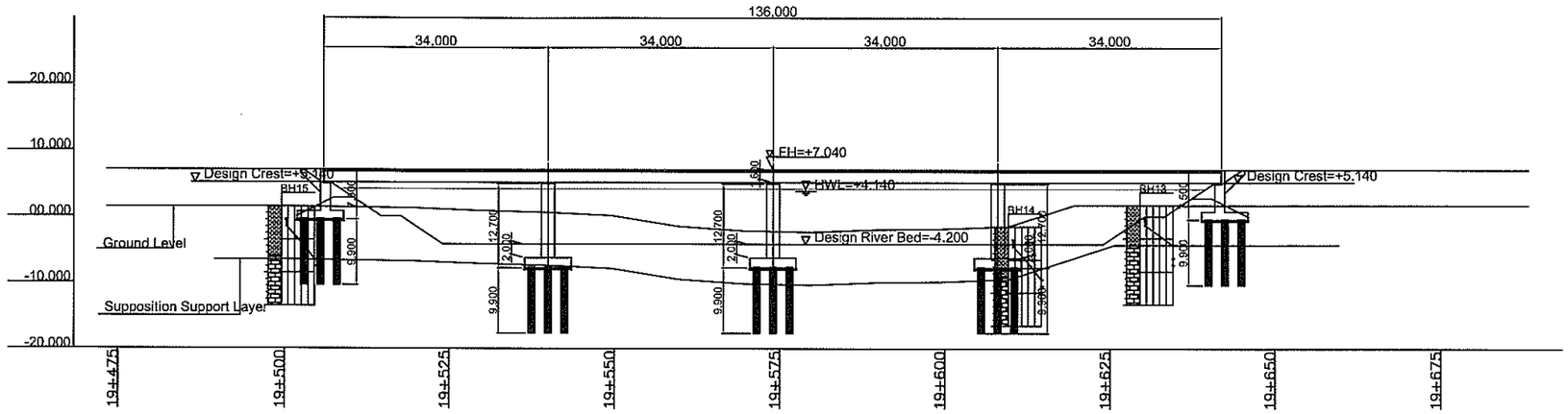


INTERSECTION TS-5
MIDDLE RING / JL. PERINTIS KEMERDEKAAN

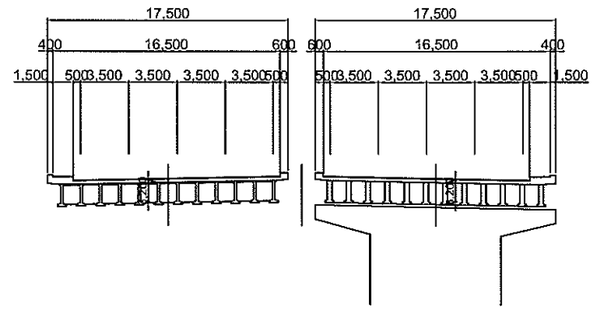
JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	PROJECT NAME : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : INTERSECTION TS-5, MIDDLE RING / JL. PERINTIS SCALE = 1 / 1,000	DRAWING NO. IN-05 DATE: MARCH 2008

5. BRIDGE

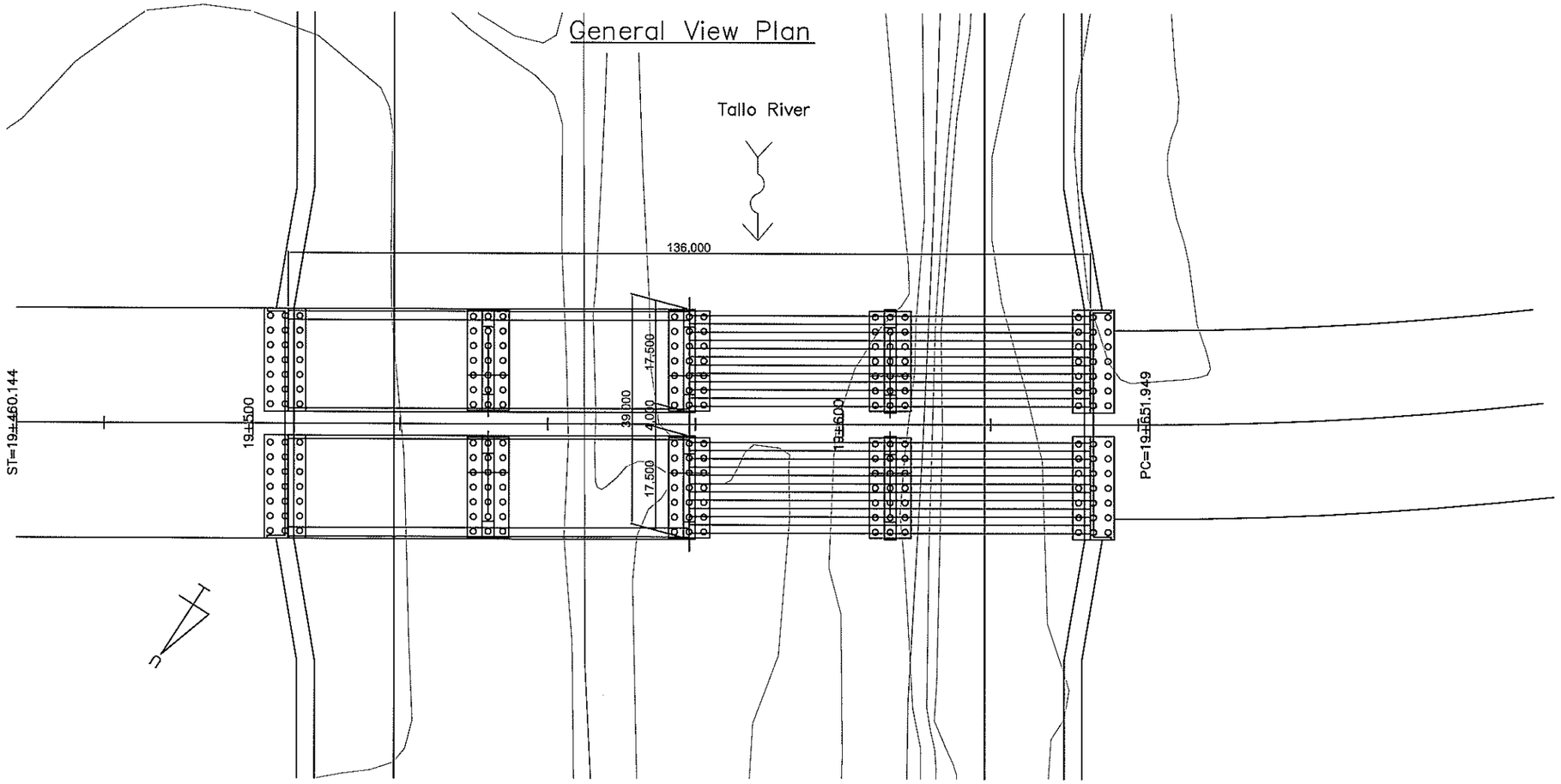
General View Profile



Standard Cross Section

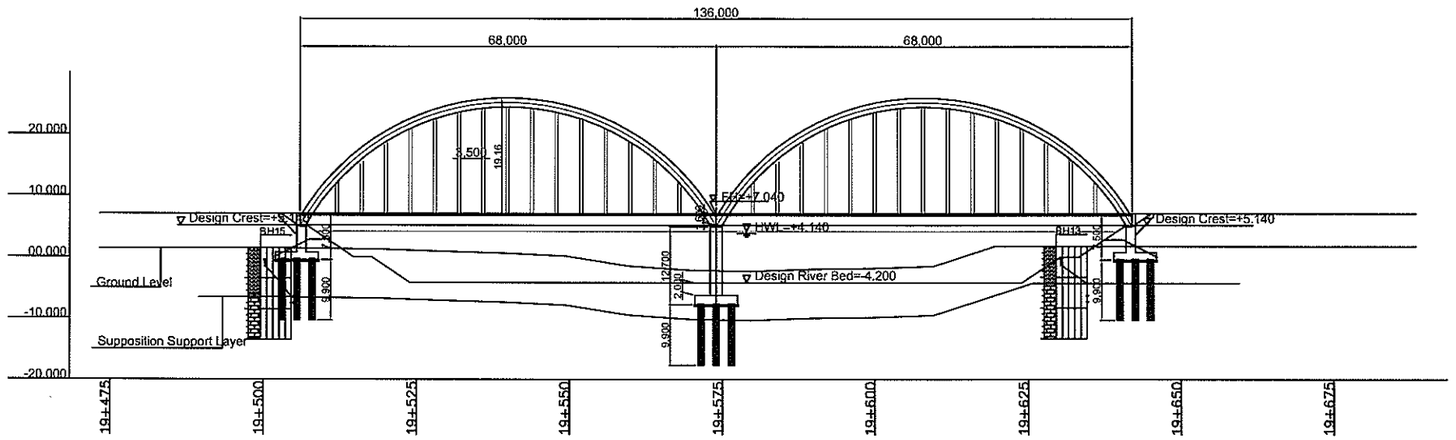


General View Plan

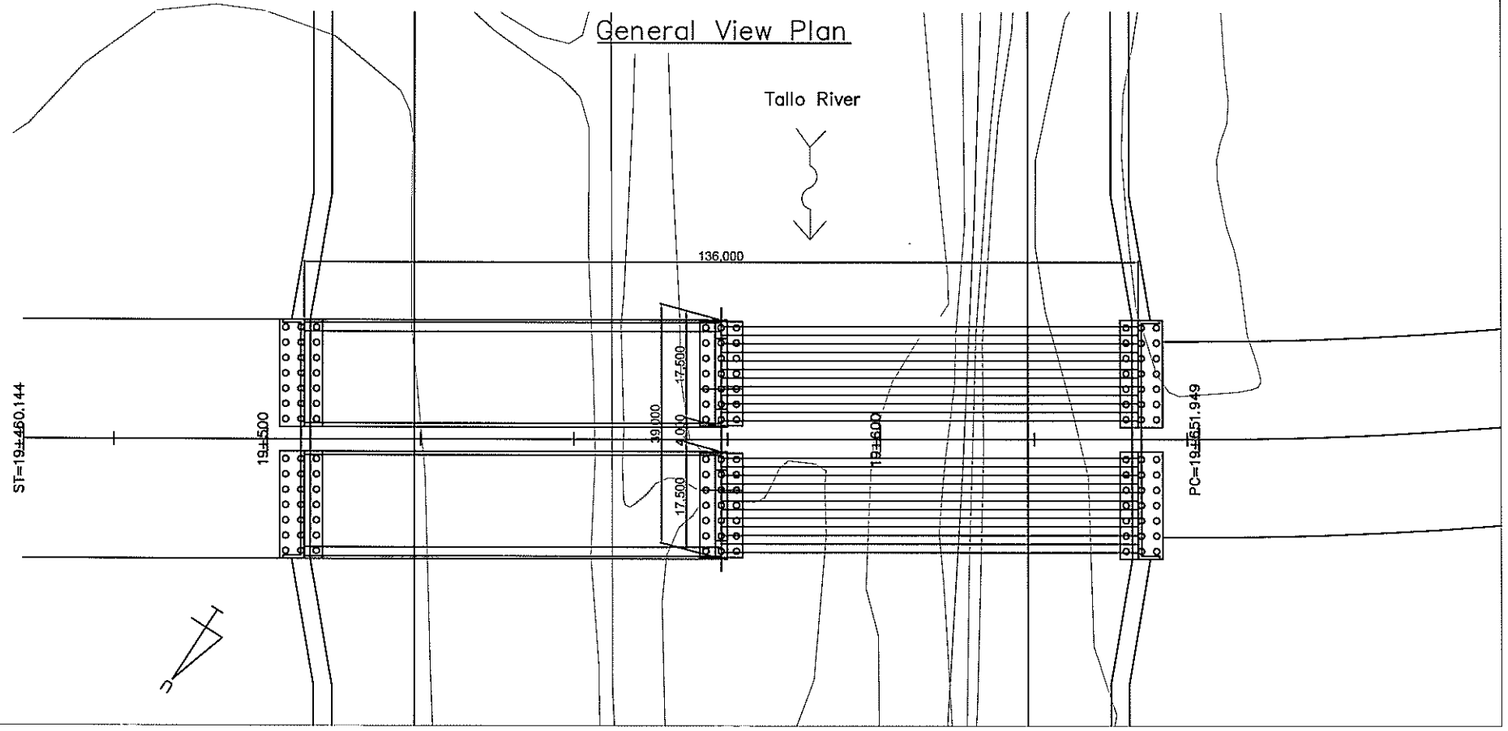


JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : GENERAL VIEW DRAWING - TALLO BRIDGE	DRAWING NO. BR-01 DATE: MARCH 2008

General View Profile



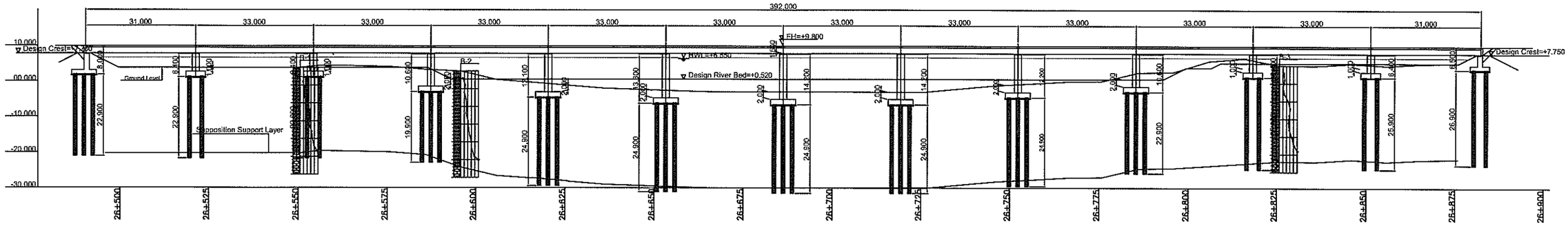
General View Plan



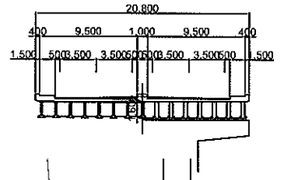
Note : RC Concrete Arch Bridge is shown as alternative of Bridge based on esthetic preference.
However, Construction cost is approximately 200 % higher than PC-I Girder Bridge.
If steel arch is used, its construction cost would be approximately 300% higher than PC-I Girder Bridge.

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : GENERAL VIEW DRAWING - TALLO BRIDGE (ALTERNATIVE) SCALE = 1/1000	DRAWING NO. BR-01A DATE: MARCH 2008

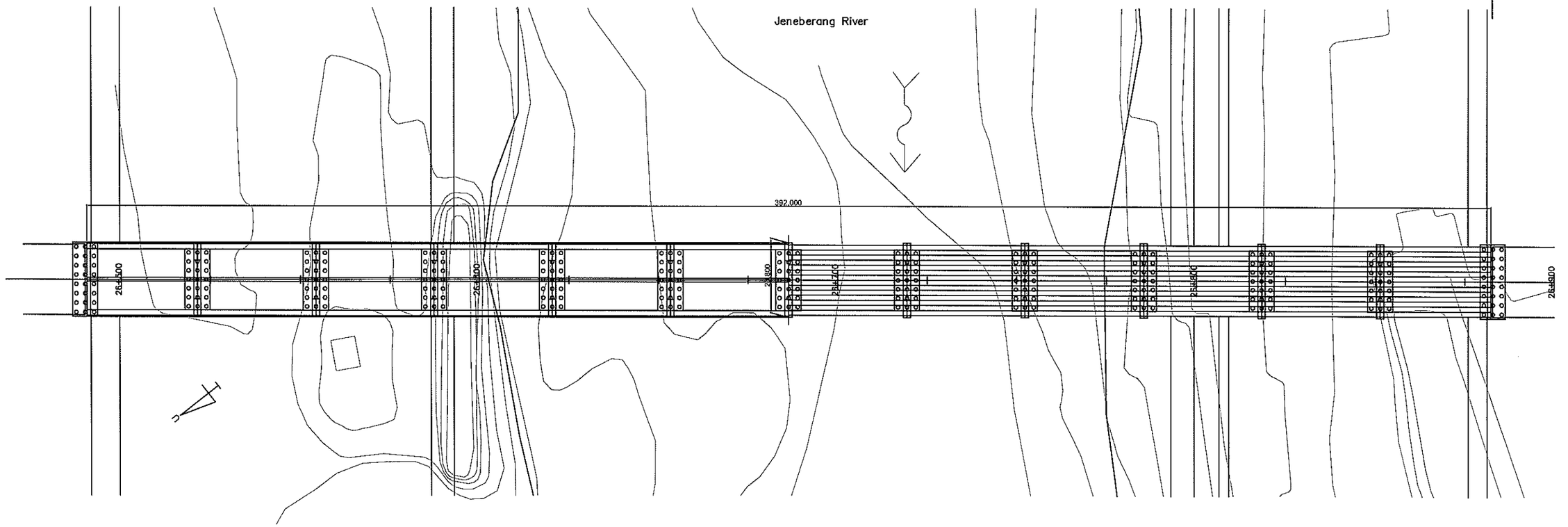
General View Profile



Standard Cross Section

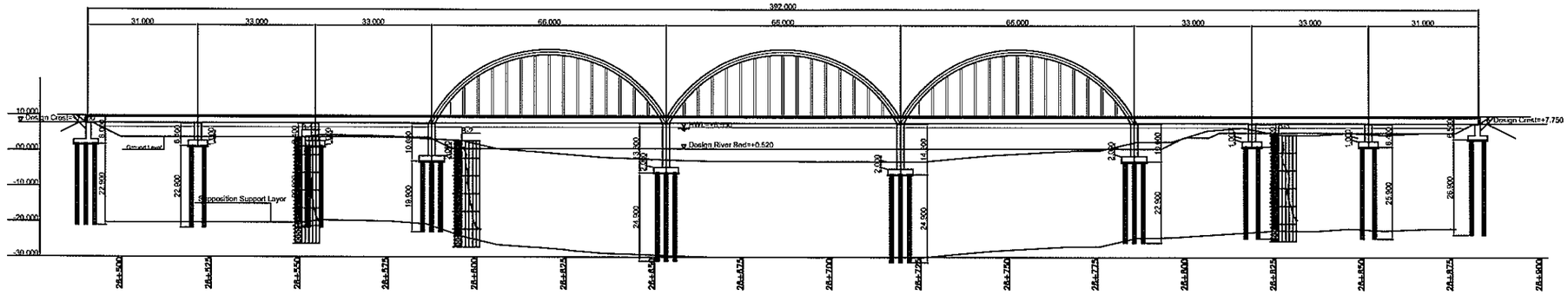


General View Plan

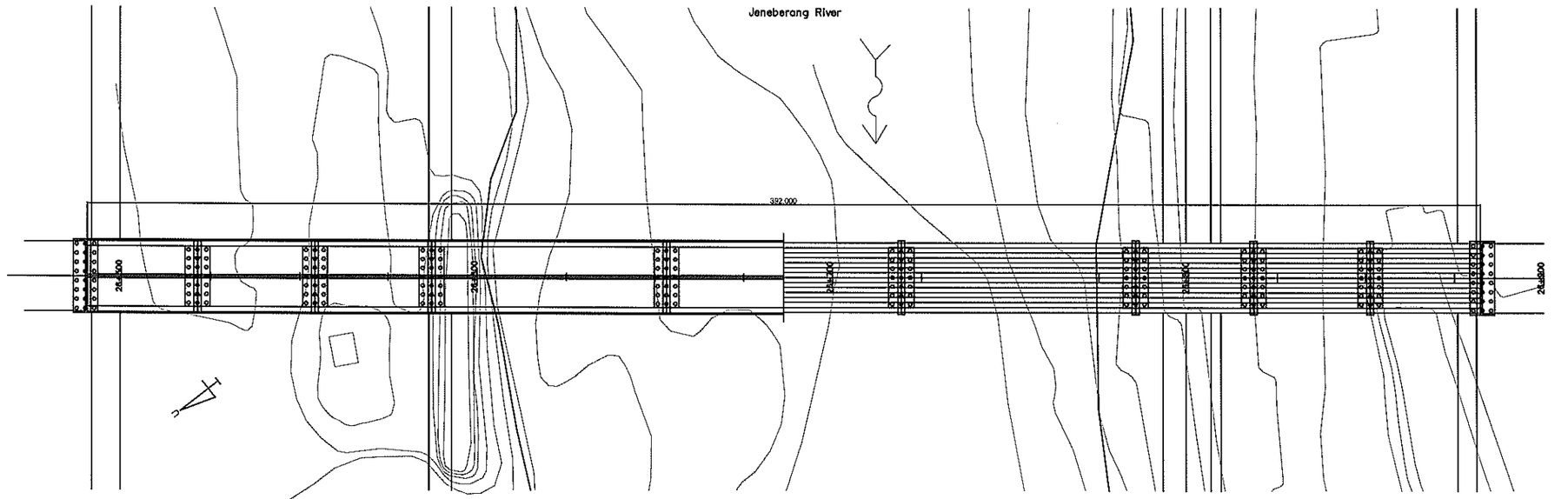


JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. BR-02
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : GENERAL VIEW DRAWING - JENEBERANG NO.2 BRIDGE	DATE: MARCH 2008

General View Profile



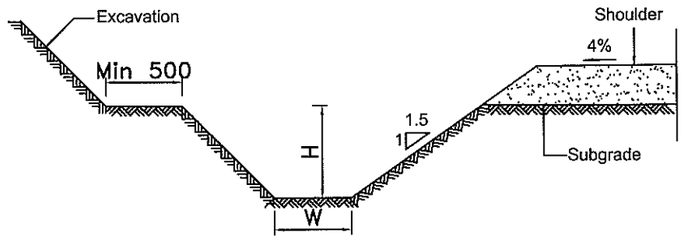
General View Plan



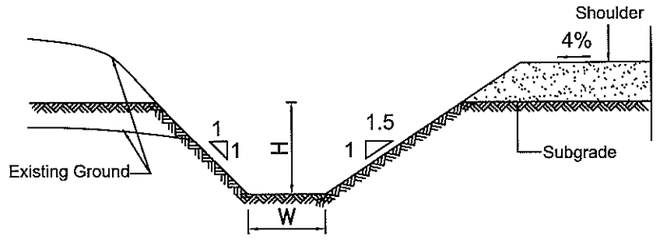
Note : RC Concrete Arch Bridge is shown as alternative of Bridge based on esthetic preference.
However, Construction cost is approximately 200 % higher than PC–I Girder Bridge.
If steel arch is used, its construction cost would be approximately 300% higher than PC–I Girder Bridge.

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : GENERAL VIEW DRAWING - JENEBERANG NO.2 BRIDGE (ALTERNATIVE) SCALE = 1/1500	DRAWING NO. BR-02A DATE: MARCH 2008

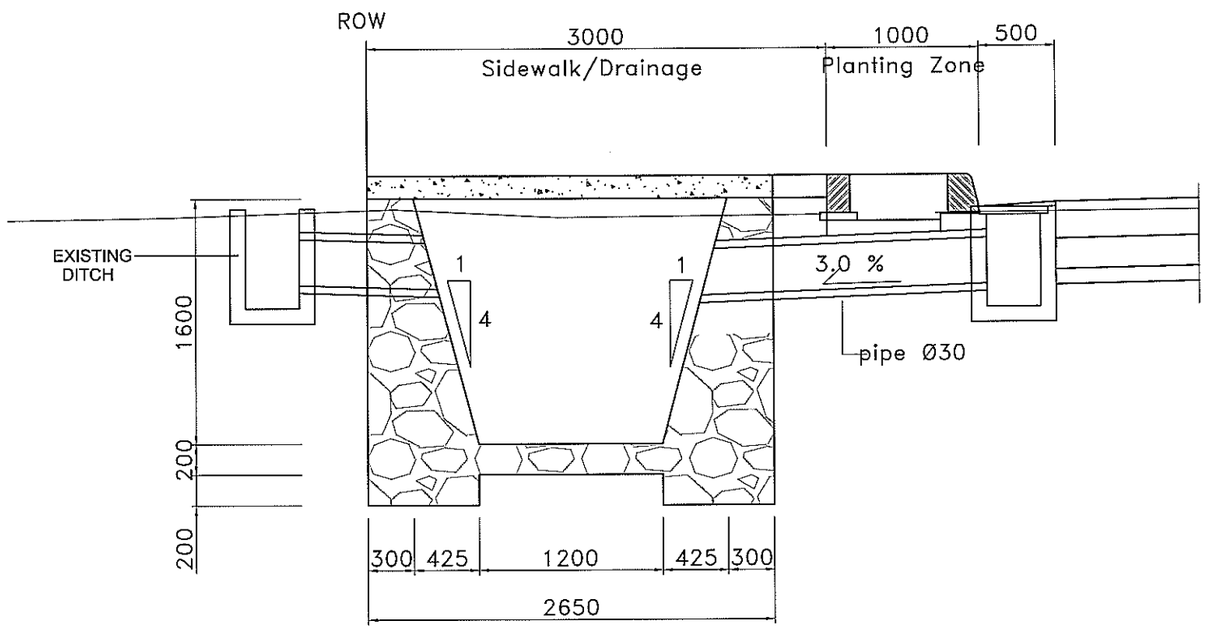
6. DRAINAGE AND STRUCTURES



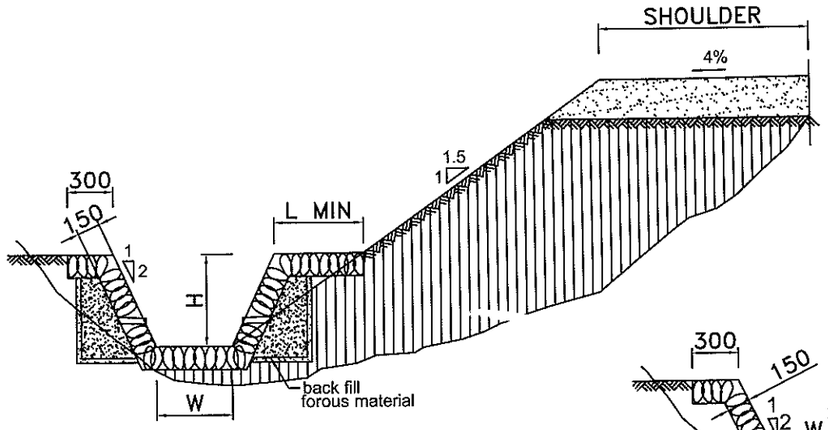
TYPE A1 (SIDE DITCH)



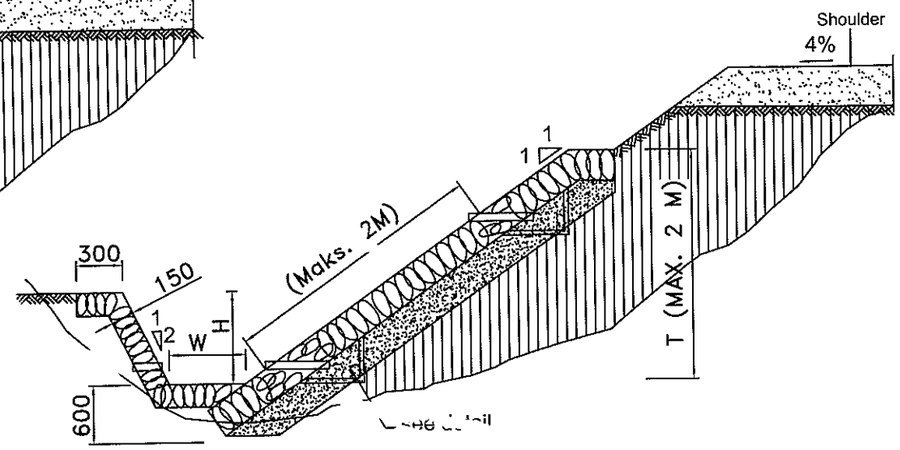
TYPE A2 (SIDE DITCH)



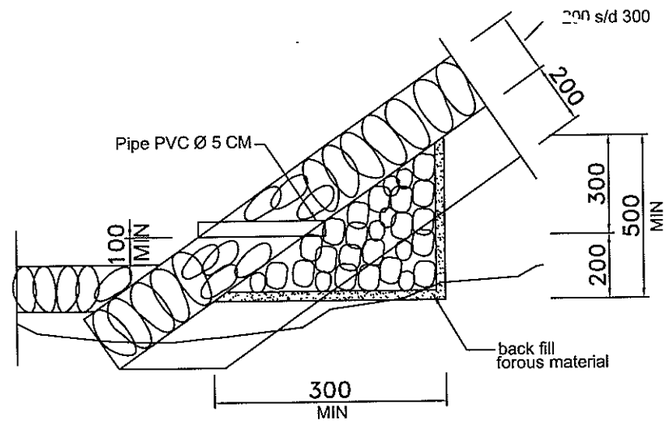
TYPE A3 (SIDE DITCH)



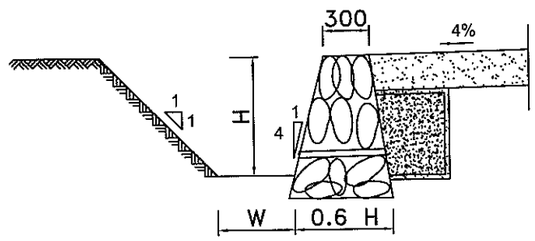
TYPE B
SIDE DTCTH WITH PAVED



TYPE B2
SLOPE PROTECTION

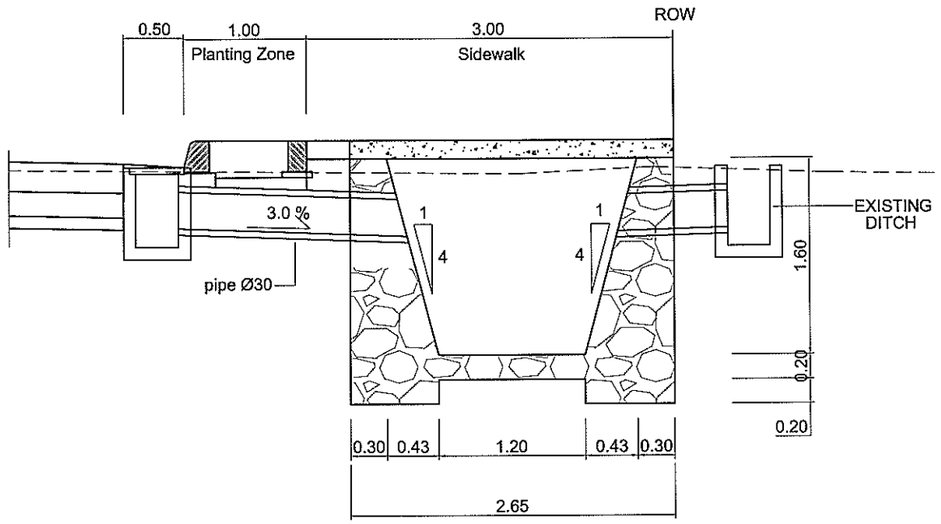


DETAIL FILTER

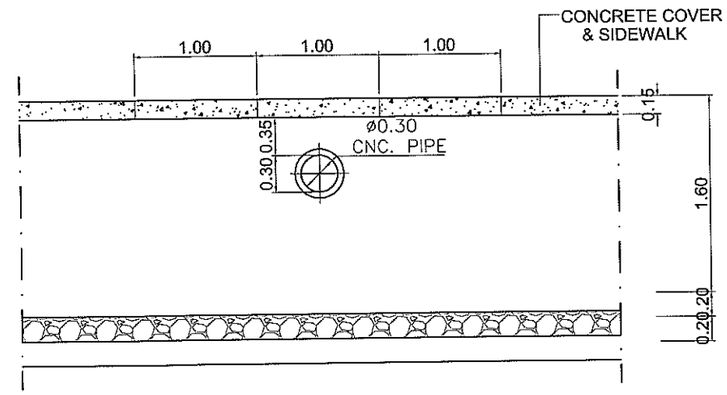


TYPE C1
SIDE DITCH

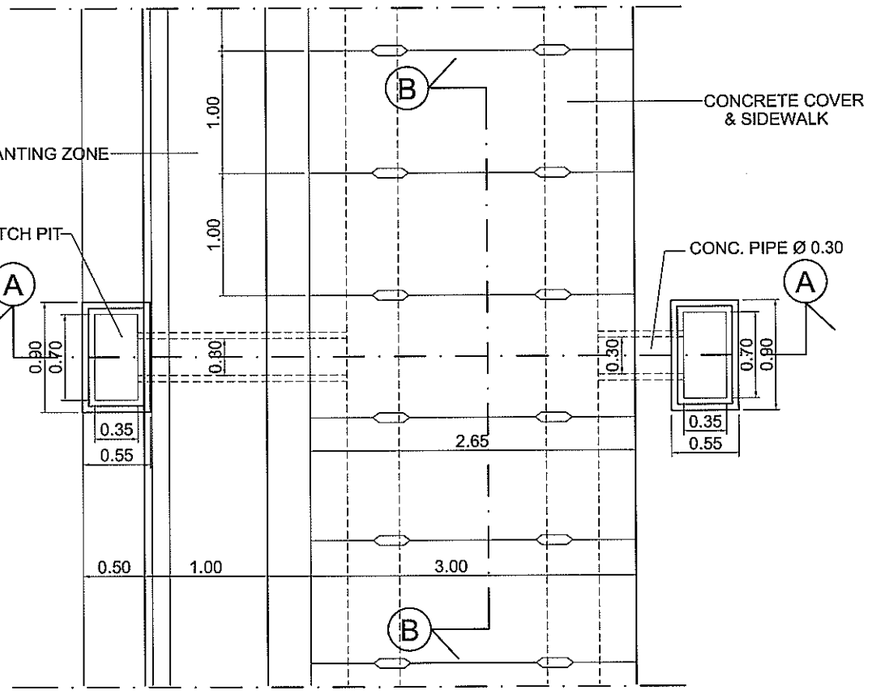
JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : DETAILS OF DRAINAGE (1/3) SCALE = NTS	DRAWING NO. DR-01 DATE: MARCH 2008



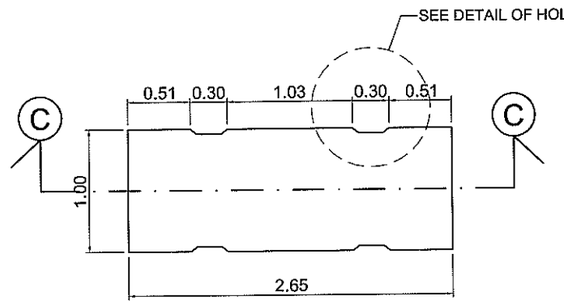
SECTION A-A
scale 1/50



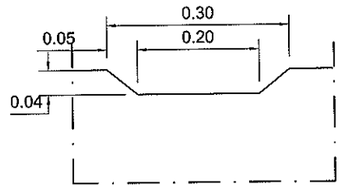
SECTION B-B
scale 1/50



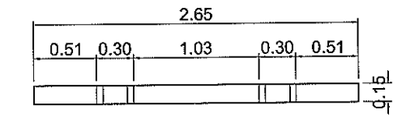
DETAIL OF DRAINAGE
scale 1/50



CONCRETE CAP
scale 1/50

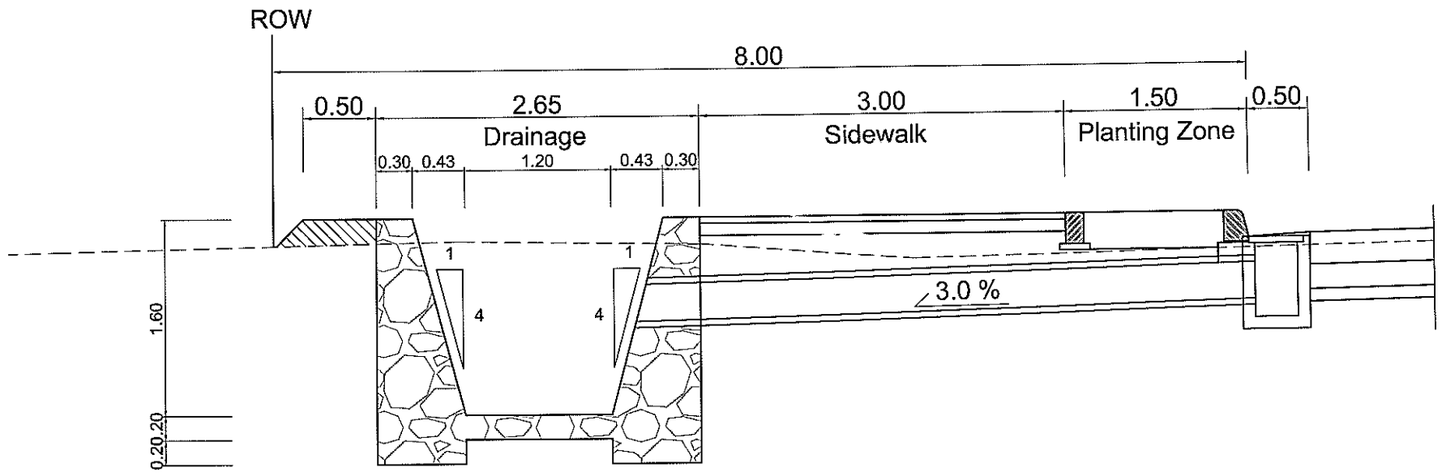


DETAIL OF HOLE
scale 1/10

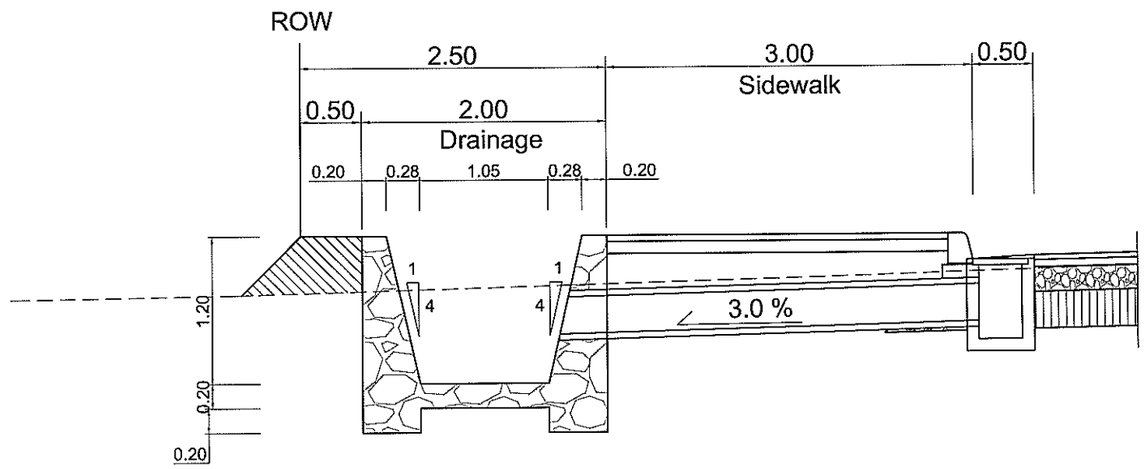


SECTION C-C
scale 1/50

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : DETAILS OF DRAINAGE (2/3) SCALE = 1 / 50	DRAWING NO. DR-02 DATE: MARCH 2008

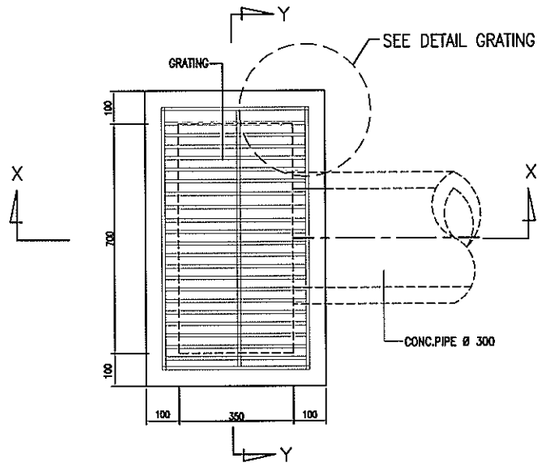


DETAIL DRAINAGE (IN SECTION C)
scale 1/50

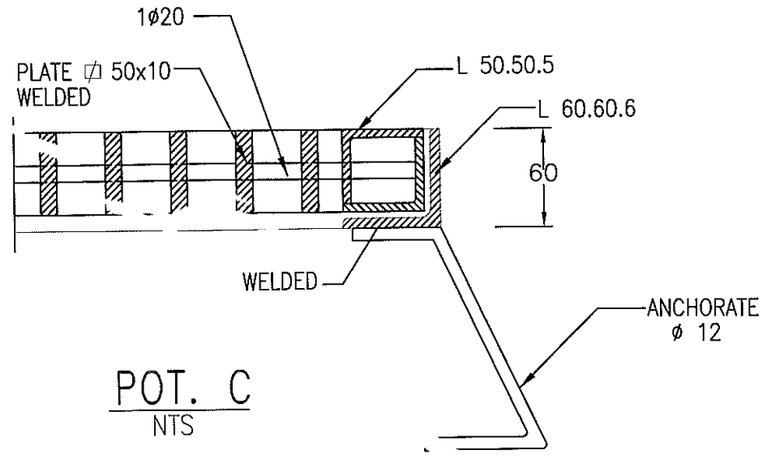


DETAIL DRAINAGE (IN SECTION D)
scale 1/50

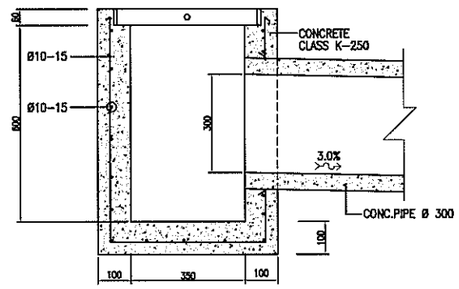
JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : DETAILS OF DRAINAGE (3/3) SCALE = 1 / 50	DRAWING NO. DR-03 DATE: MARCH 2008



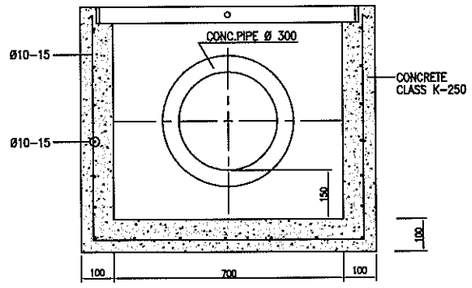
PLAN OF CATCH BASIN
SCALE : 1/20



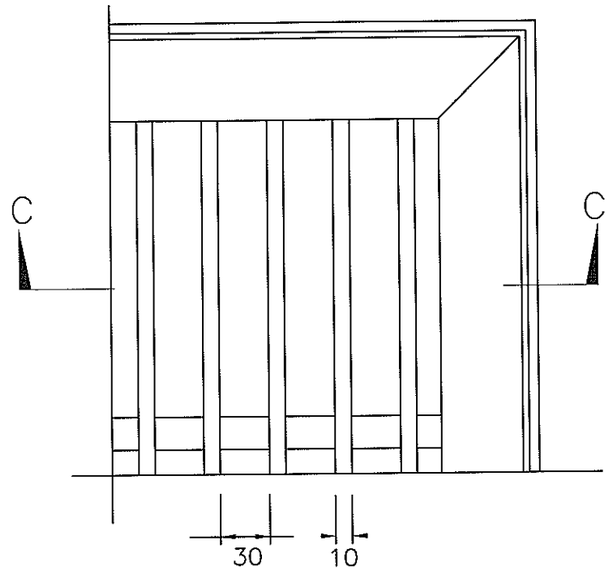
POT. C
NTS



SECTION X-X
SCALE : 1/20



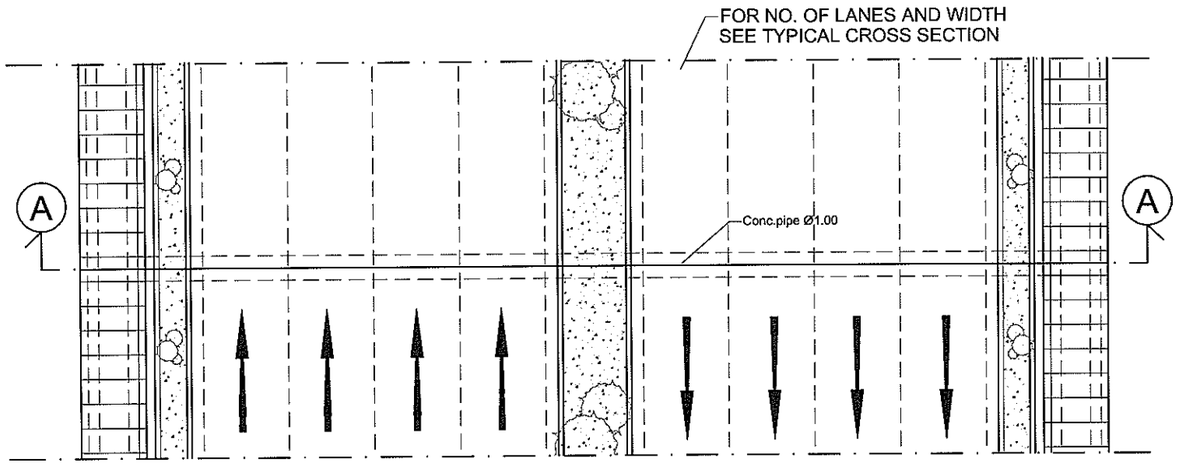
SECTION Y-Y
SCALE : 1/20



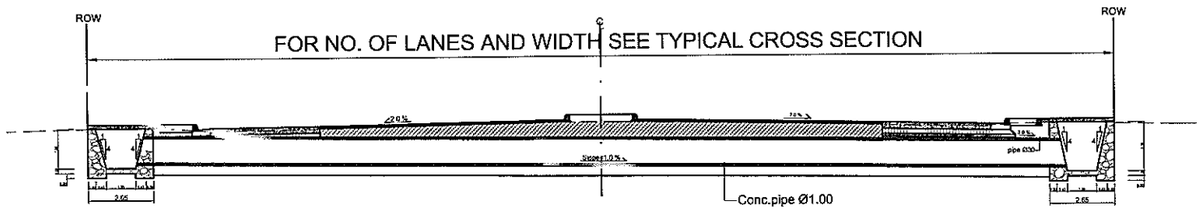
DETAIL OF GRATING
NTS

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : DETAIL OF CATCH PIT SCALE = 1 / 20	DRAWING NO. DR-04 DATE: MARCH 2008

TYPE	DIMENSION (mm)								QUANTITY (per 10 m)			
	D	t	b1	b2	h1	h2	h3	h4	Concrete (m3)	Form (m2)	Foudation (m3)	Pipe (No.)
RC-D300	300	30	600	800	610	280	100	150	1.171	5.600	8.000	5.0
RC-D600	600	50	900	1100	1000	500	150	150	2.576	10.000	11.000	4.1
RC-D1000	1000	82	1450	1650	1564	790	200	200	6.041	15.800	16.500	4.1
RC-D1500	1500	112	2100	2300	2174	1120	250	200	11.710	22.400	23.000	4.2

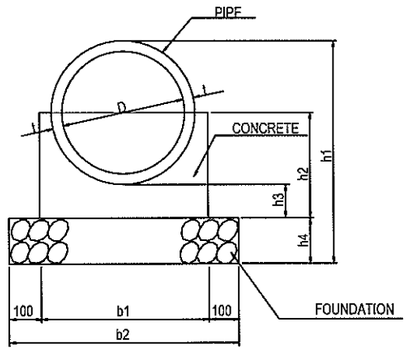


PLAN OF PIPE CULVERT
scale 1/250

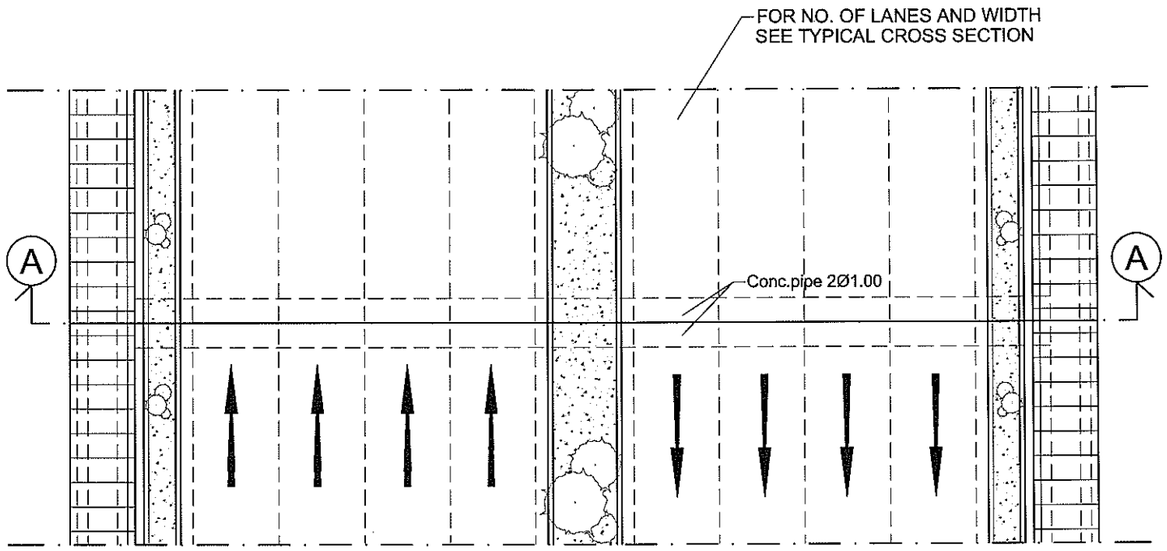


SECTION A-A
scale 1/250

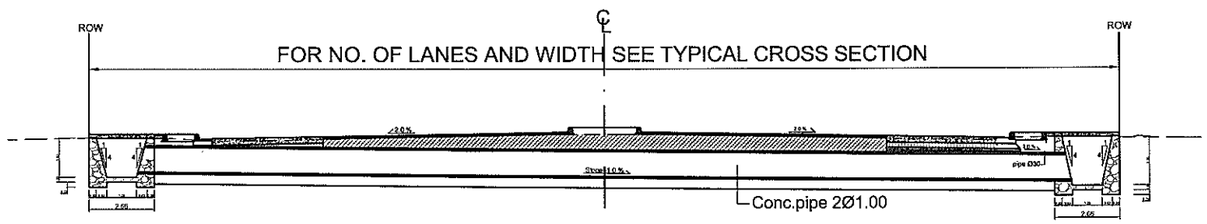
PIPE CULVERT



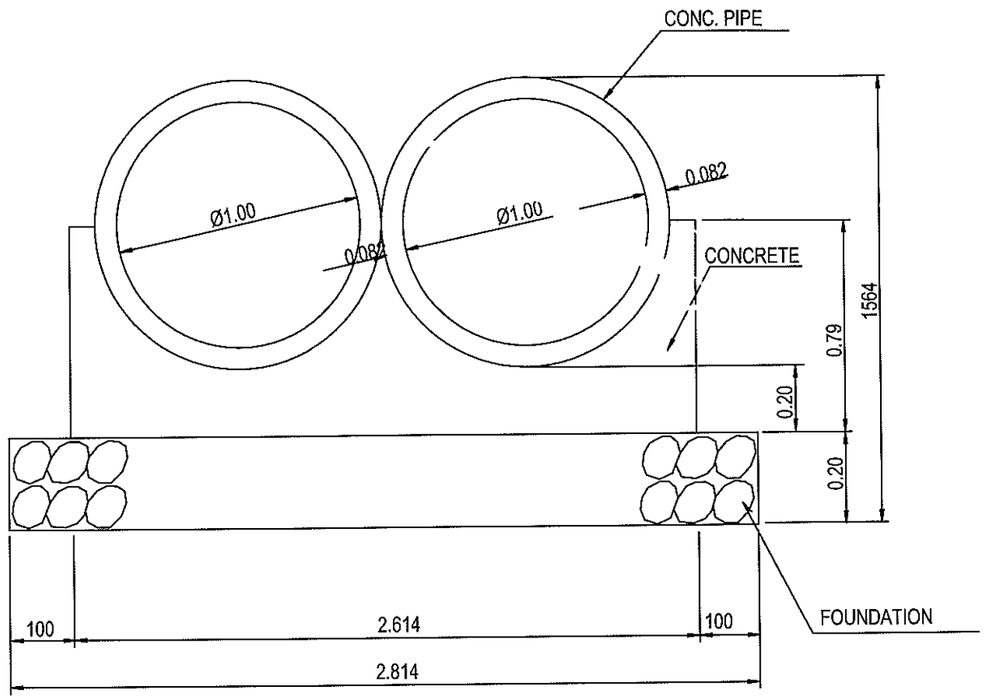
JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. DR-05
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : GENERAL LAYOUT OF SINGLE PIPE CULVERT	
		SCALE = 1 / 250	DATE: MARCH 2008



PLAN OF DOUBLE PIPE CULVERT
scale 1/250



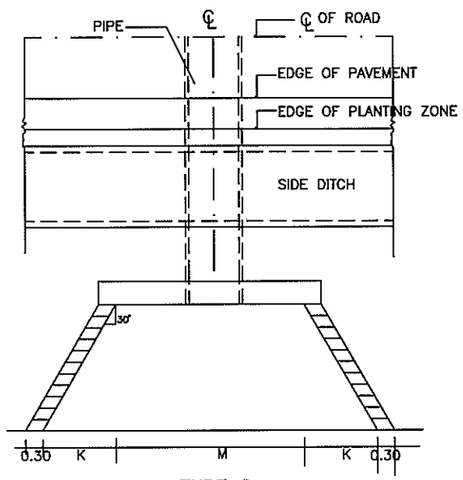
SECTION A-A
scale 1/250



DETAIL OF DOUBLE PIPE CULVERT
scale NTS

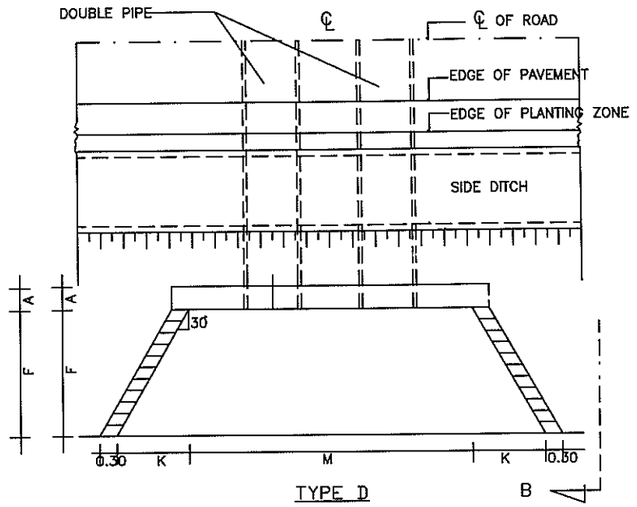
JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. in JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : GENERAL LAYOUT OF DOUBLE PIPE CULVERT SCALE = 1 / 250	DRAWING NO. DR-06 DATE: MARCH 2008

STANDARD INLET/OUTLET FOR PIPE CULVERTS



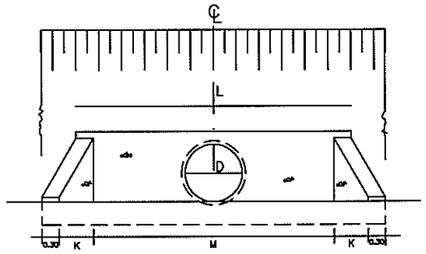
TYPE C

NOT TO SCALE



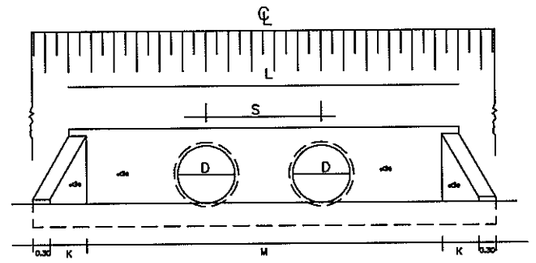
TYPE D

NOT TO SCALE



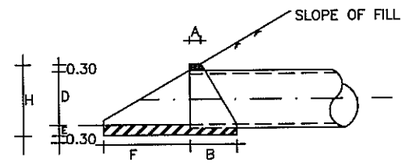
SINGLE PIPE

NOT TO SCALE



DOUBLE PIPE

NOT TO SCALE



SECTION B – B

NOT TO SCALE

(TYPE II)

SINGLE PIPE

DIA	DIMENSION (m)																	
	A	B	E	F			G			H			K			L	M	T
				3/2	2/1	3/1	3/2	2/1	3/1	3/2	2/1	3/1	3/2	2/1	3/1			
0.40	0.23	0.41	0.20	0.43	0.60	1.15	0.29	0.30	0.38	0.99	1.00	1.08	0.25	0.35	0.66	2.30	1.70	0.050
0.50	0.26	0.46	0.25	0.53	0.80	1.45	0.35	0.40	0.46	1.10	1.15	1.23	0.31	0.46	0.84	2.80	2.20	0.055
0.60	0.30	0.53	0.25	0.63	1.00	1.75	0.42	0.50	0.59	1.17	1.25	1.34	0.36	0.58	1.01	3.30	2.70	0.065
0.70	0.33	0.58	0.25	0.83	1.25	2.13	0.55	0.63	0.72	1.30	1.38	1.47	0.47	0.73	1.23	3.90	3.30	0.070
0.80	0.35	0.62	0.25	1.00	1.50	2.50	0.67	0.75	0.84	1.42	1.50	1.59	0.58	0.87	1.45	4.50	3.90	0.075
0.90	0.38	0.67	0.25	1.15	1.70	2.80	0.77	0.85	0.94	1.52	1.50	1.69	0.67	0.96	1.62	4.90	4.50	0.080
1.00	0.42	0.74	0.30	1.30	1.90	3.10	0.87	0.95	1.04	1.67	1.75	1.84	0.75	1.10	1.80	5.40	4.80	0.085
1.20	0.50	0.86	0.30	1.64	2.40	3.90	1.10	1.20	1.30	1.90	2.00	2.10	0.95	1.40	2.30	6.60	5.00	0.100

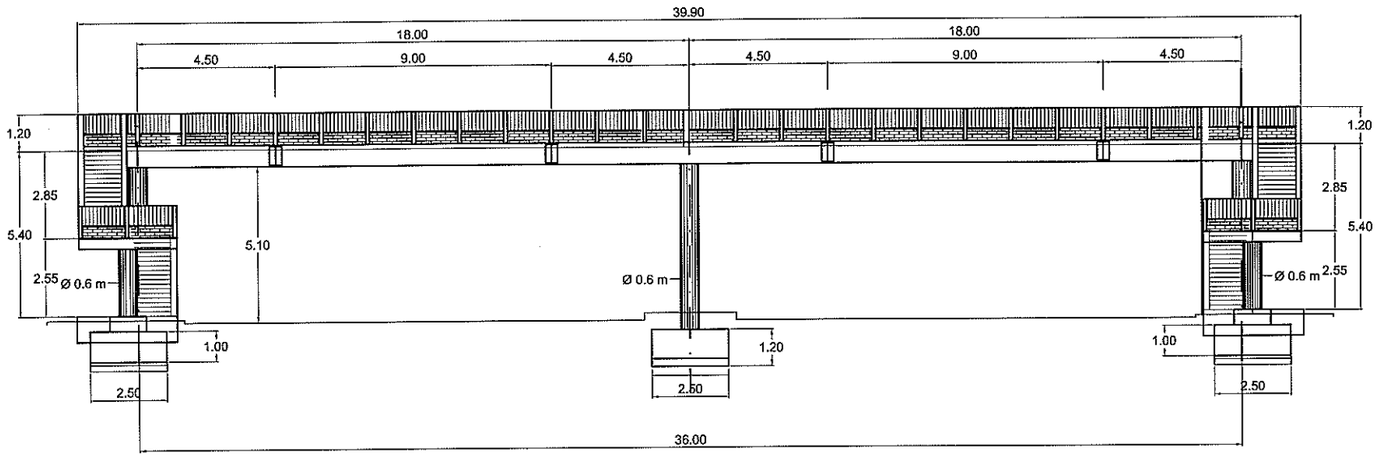
DOUBLE PIPE

DIA	DIMENSION (m)																			
	A	B	E	F			G			H			K			L'	M	S	T
				3/2	2/1	3/1	3/2	2/1	3/1	3/2	2/1	3/1	3/2	2/1	3/1				
0.40	0.23	0.41	0.20	0.43	0.60	1.15	0.29	0.30	0.38	0.99	1.00	1.08	0.25	0.35	0.66	2.30	1.70	0.75	0.050
0.50	0.26	0.46	0.25	0.53	0.80	1.45	0.35	0.40	0.46	1.10	1.15	1.23	0.31	0.46	0.84	2.60	2.20	0.86	0.055
0.60	0.30	0.53	0.25	0.63	1.00	1.75	0.42	0.50	0.59	1.17	1.25	1.34	0.36	0.58	1.01	3.30	2.70	0.96	0.065
0.70	0.33	0.58	0.25	0.83	1.25	2.13	0.55	0.63	0.72	1.30	1.38	1.47	0.47	0.73	1.23	3.90	3.30	1.14	0.070
0.80	0.35	0.62	0.25	1.00	1.50	2.50	0.67	0.75	0.84	1.42	1.50	1.59	0.58	0.87	1.45	4.50	3.90	1.30	0.075
0.90	0.38	0.67	0.25	1.15	1.70	2.80	0.77	0.85	0.94	1.52	1.50	1.69	0.67	0.96	1.62	4.90	4.30	1.40	0.080
1.0	0.42	0.74	0.30	1.30	1.90	3.10	0.87	0.95	1.04	1.67	1.75	1.84	0.75	1.10	1.80	5.40	4.80	1.50	0.085
1.20	0.50	0.86	0.30	1.64	2.40	3.90	1.10	1.20	1.30	1.90	2.00	2.10	0.95	1.40	2.30	6.60	5.00	1.80	0.100

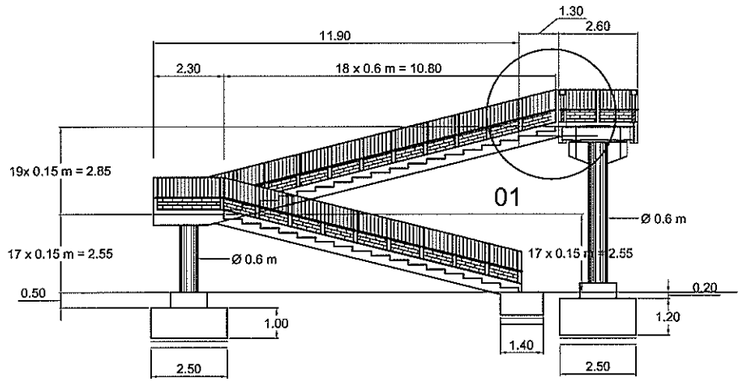
NOTES

1. ALL DETAILS ON THIS SHEET NOT TO SCALE. ALL DIMENSIONS ARE GIVEN IN METERS
2. HEADWALLS SHALL BE CONSTRUCTED OF CLASS K–250 CONCRETE EXCEPT THAT THOSE HOUSING PIPES OF DIA AND LESS MAYBE CONSTRUCTED IN STONE MASONRY.

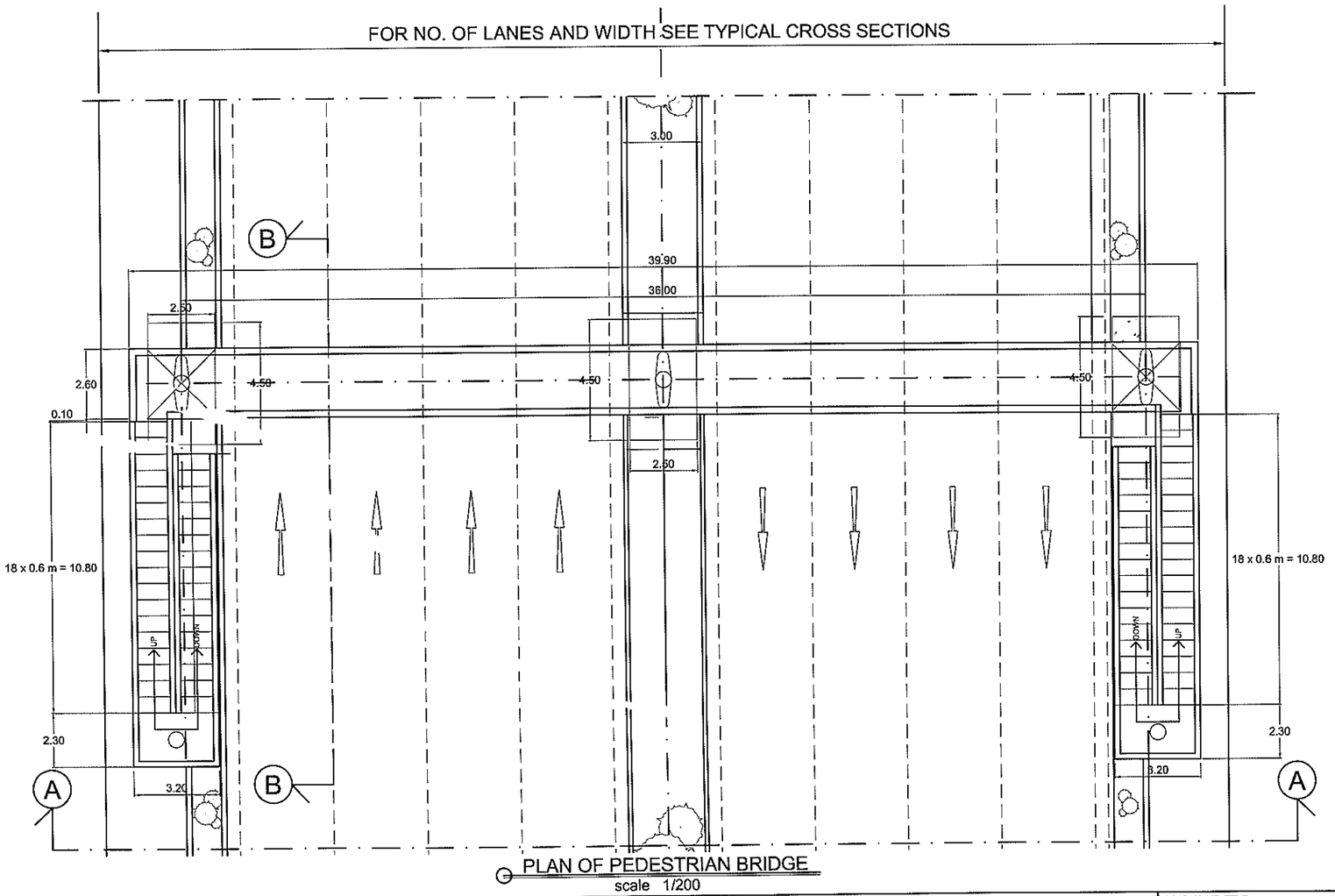
JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. DR - 07
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : INLET/OUTLET OF PIPE CULVERTS	
		SCALE = 1 / 20	DATE:



SECTION A-A
scale 1/200



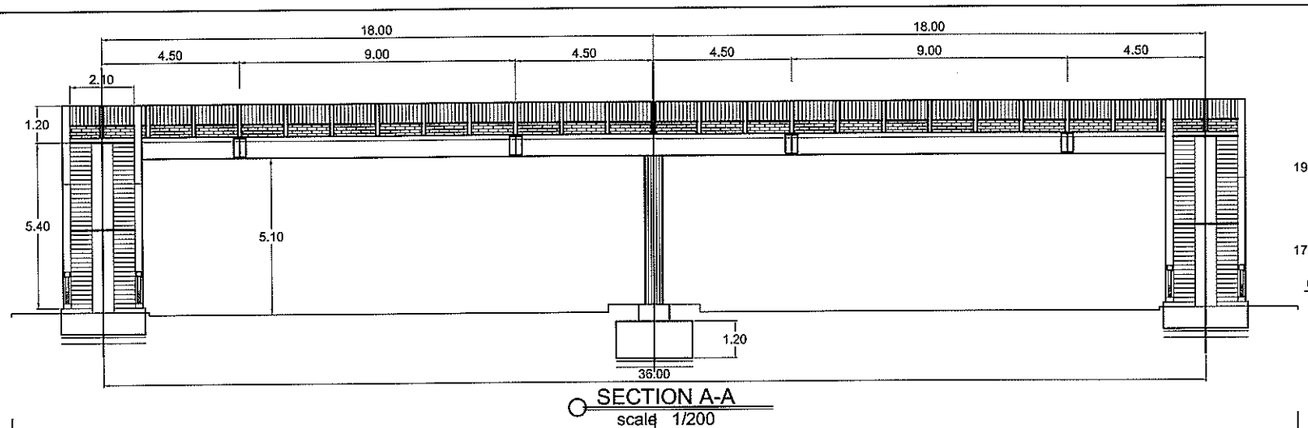
SECTION B-B
scale 1/200



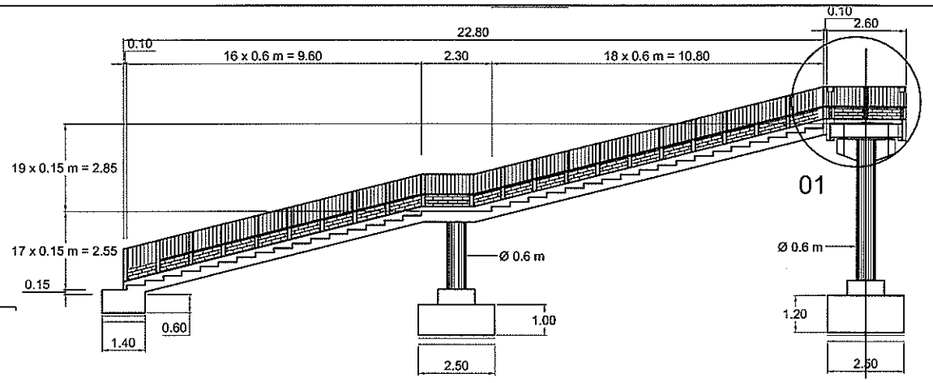
PLAN OF PEDESTRIAN BRIDGE
scale 1/200

DETAIL 01
scale 1/40

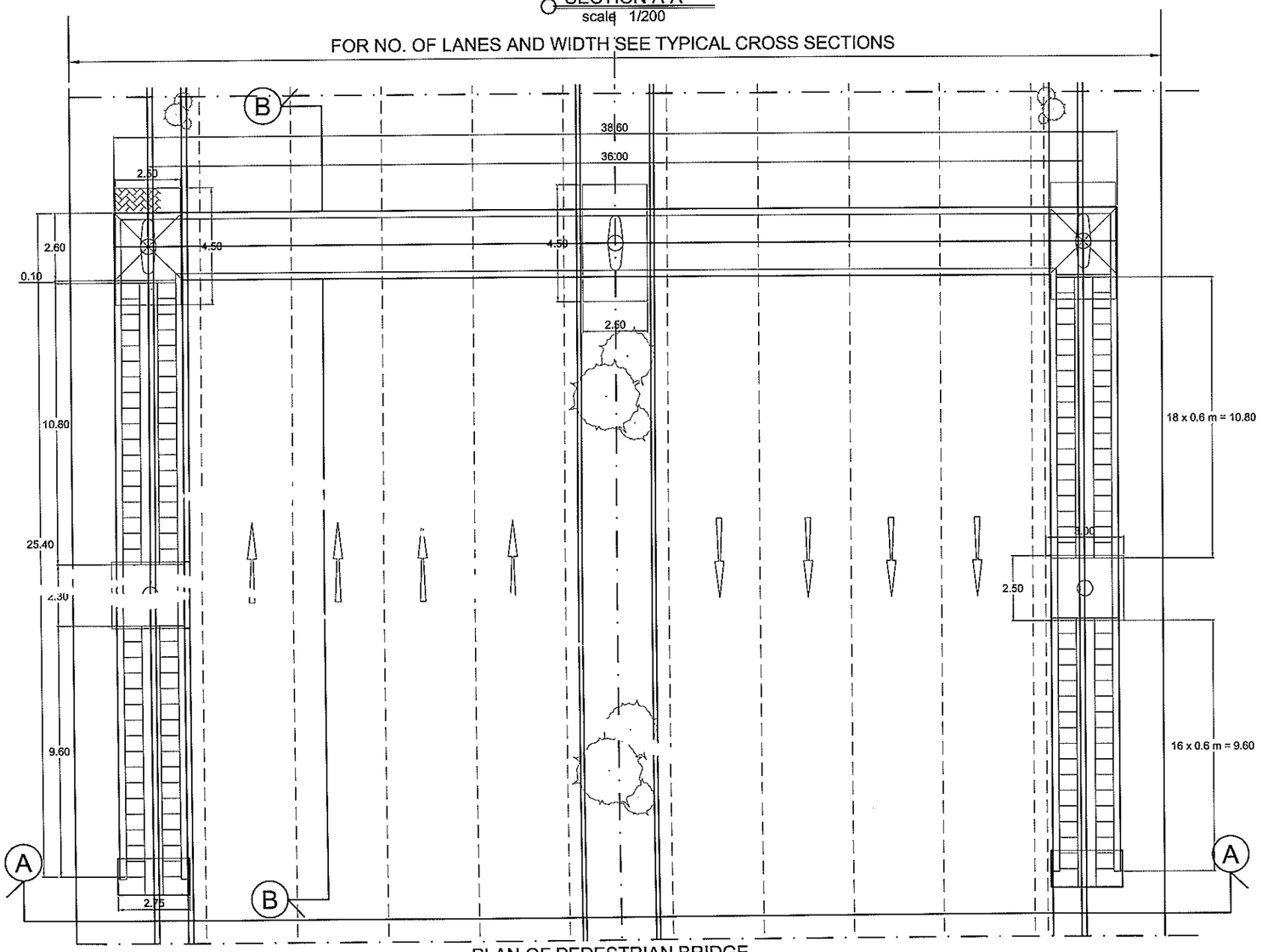
JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : PEDESTRIAN BRIDGE - TYPE A SCALE = 1 / 200 1/40
		DRAWING NO. DR-08 DATE:



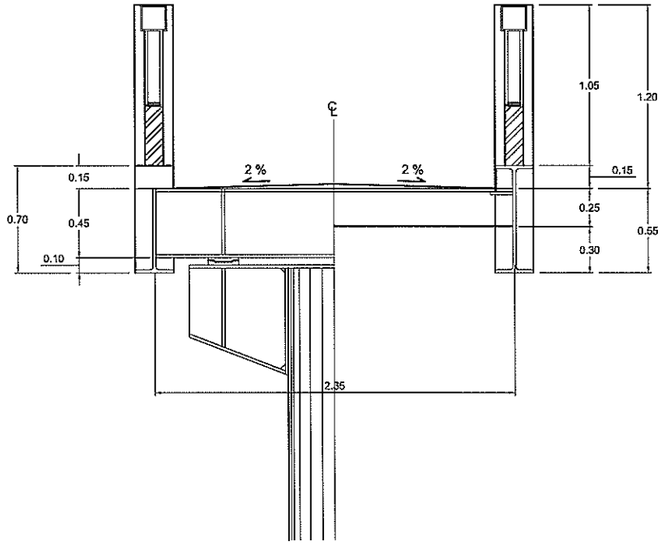
SECTION A-A
scale 1/200



SECTION B-B
scale 1/200



PLAN OF PEDESTRIAN BRIDGE
scale 1/200

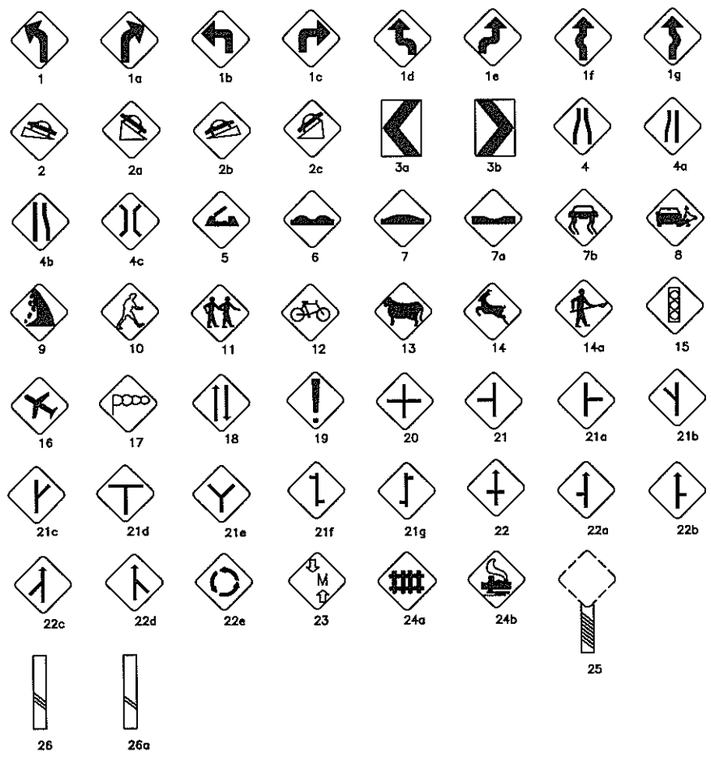


DETAIL 01
scale 1/40

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : PEDESTRIAN BRIDGE - TYPE B SCALE = 1 / 200 1/40	DRAWING NO. DR-09 DATE:

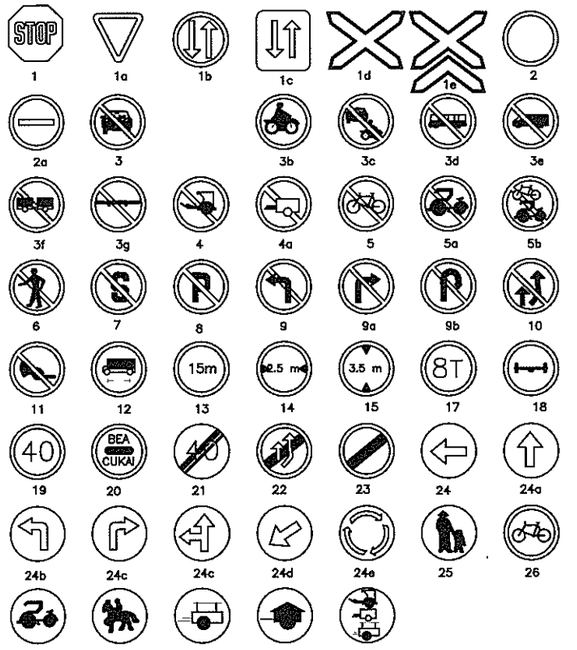
7. MISCELLANEOUS

WARNING SIGN (W)



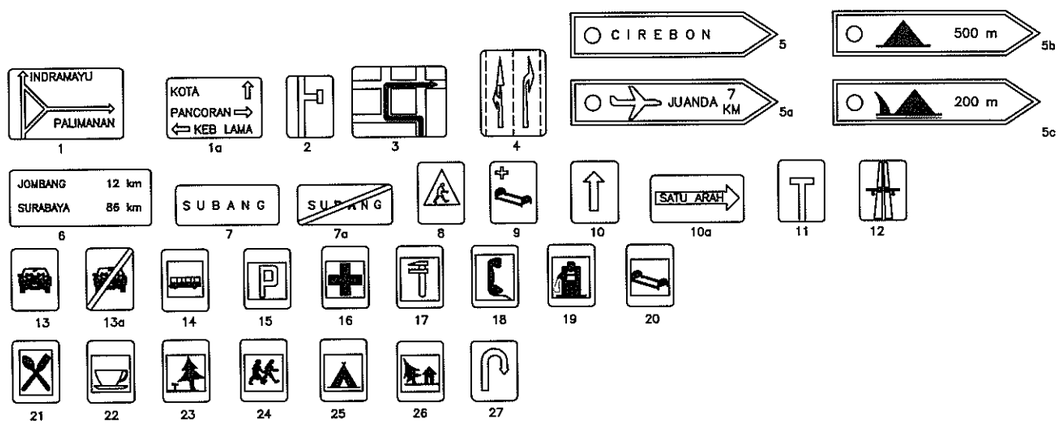
1 Left Bend
1a Right Bend
1b Left Turn
1c Right Turn
1d Double Bend
1e Double Bend
1f Many Bends
1g Many Bends
2 Descent
2a Steep Descent
2b Ascent
2c Steep Ascent
3a Left Turn Guidance
3b Right Turn Guidance
4 Narrower Carriageway
4a Left Narrower
4b Rint Narrower
4c Bridge
5 Swing Bridge
6 Uneven Road
7 Uneven Road
7a Uneven Road
7b Slippery
8 Loose Gravel
9 Falling Rocks
10 Pedestrian Crossing
11 Children
12 Cyclists Crossing
13 Cattle Crossing
14 Animal Crossing
14a Road Works
15 Light Signals
16 Air Field
17 Cross Wind
18 Two – Way Traffic
19 Others Dangers
20 Intersection
21 Intersection
21a Intersection
21b Intersection
21c Intersection
21d Intersection
21e Intersection
21f Intersection
21g Intersection
22 Priority Intersection
22a Priority Intersection
22b Priority Intersection
22c Priority Intersection
22d Priority Intersection
22e Roundabout
23 Railway Level Crossing
24a Railway Crossing With Gate
24 Railway Crossing Without Gate
25 Additional Signs of Aproachesn to Level–Crossing
26 Additional Signs of Aproachesn to Level–Crossing
26a Additional Signs of Aproachesn to Level–Crossing

REGULATION SIGN (R)



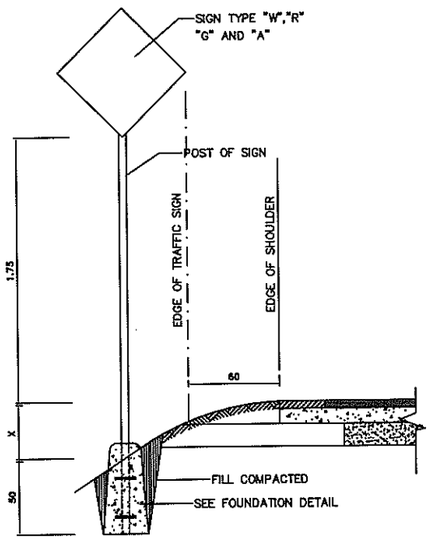
1 Stop
1a Give Way
1b Priority oncoming Traffic
1c Priority Over Oncoming Traffic
1d Immediate Vicinity of Level Crossing
1e Immediate Vicinity of Level Crossing
2 Clossed to All Vehicles in Both Direction
2a No Entry
3 No Entry Passangger Car
3b No Entry fo Motor Cycle
3c No Entry for Vehicle and Motor Cycle
3d No Entry for Bus
3e No Entry Commercial Vehicles
3f No Entry for Trollers
3g No Entry for Articulated Vehicles
4 No Entry for Dokar
4a No Entry for Wagen
5 No Entry for Cycle
5a No Entry for Becak
5b No Entry for Becak and Cycle
6 No Entry For Pedestrian
7 Stopping Prohibited
8 Parking Prohibited
9 No Turn Left
9a No Turn Right
9b No U – Turn
10 No Overtaking
11 Prohibition of the Use Audible Warning Devices
12 No Entry for Vehicles or Combinations Vehicles Escending .....Metres in Length
13 Driving or Vehicles Less Than .....Metres Apart Prohibited
14 No Entry for Vehicle Having an Overall With Excending ....Metres
15 No Entry for Vehicle Having an Overall Heght Excending ....Metres
17 No Entry for Vehicles Excending .....Than Laden Weight
18 No Entry Vehicles Having A Weight Excending....Ton on one Axle
19 Speed Limit
20 Prohibition of Passing Without Stopping
21 End of Speed Limit
22 End Of No Overtaking
23 End Of Prohibition
24 Direction to be Followed
24a Direction to be Followed
24b Direction to be Followed
24c Direction to be Followed
24d Passanger This Side
24e Direction to be Followed Around Roundabout
25 Compulsary Foot – Path
26 Compulsary Cycle
26a Compulsary Becak
27 Compulsary Horseback
28 Compulsary Dokar
28a Compulsary Wagon
28b Compulsary Wagon

GUIDE SIGN (G)



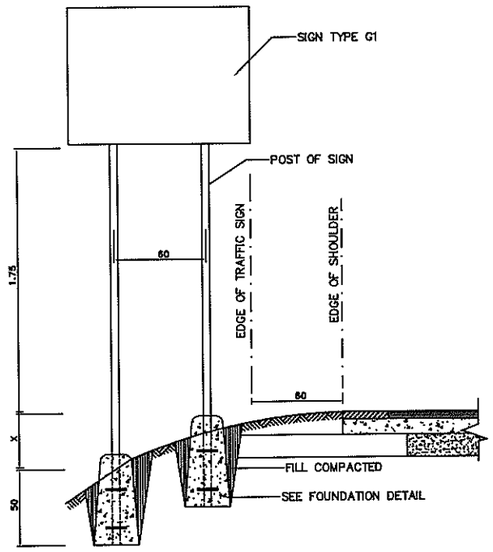
1 Example of Edvances Direction Signs
1a Example of Edvances Direction Signs
2 No Throght Road
3 Example of Edvances Direction Signs for Route to be Followed
4 Example of Signs for Proseiaction at Interaction on Roads With Several Lanes
5 EXample of Signs for Direction Place
5a EXample of Signs for Airfield Direction
5b EXample of Signs for Camping Site
5c EXample of Signs for Youth Hostal
6 Comfirmatory Sign
7 Place Identification Sign
7a End of Place Identification Sign
8 Pedestrian Crossing
9 Hospital Sign
10 One – Way Road
10a One – Way Road
11 Np Throught Road
12 Entry To Tollroad
13 Road of Motor Vehicles
13a End of Road of Motor Vehicles
14 Bus Stop
15 Parking Area
16 First – Aid Station
17 Breakdown Service
18 Telephone
19 Fuel Station
20 Hotel or Motel
21 Restaurant
22 Cafetaria
23 Picnic Site
24 Starting – Point foe Walks
25 Camping Site
26 Youth Hotel
27 U – Turn

JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : TRAFFIC SIGNS SCALE = NTS
		DRAWING NO. MS-01 DATE: MARCH 2008



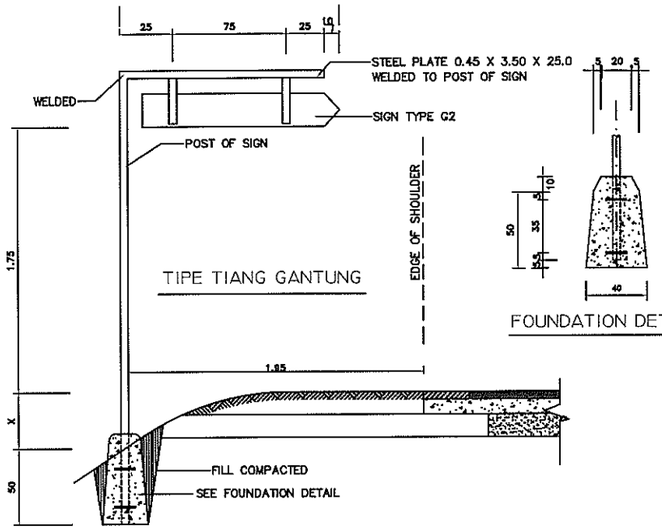
SINGLE PILE TYPE

SCALE 1: 20

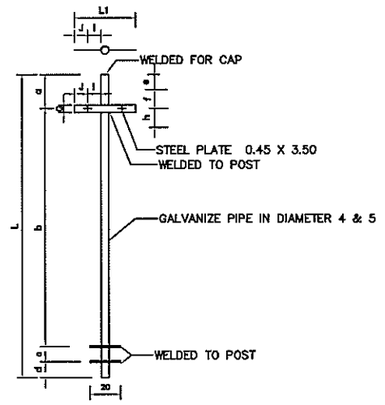


DOUBLE PILE TYPE

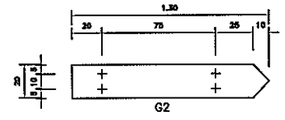
SCALE 1: 20



FOUNDATION DETAIL

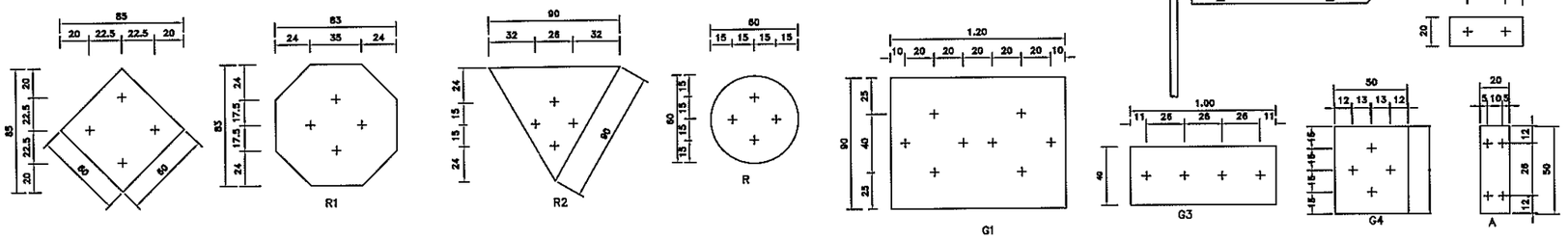


DETAIL AND LENGTH PILE



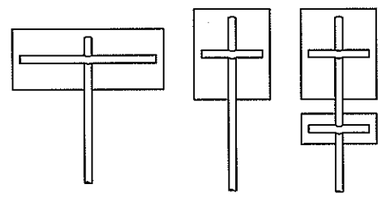
TYPICAL TRAFFIC SIGN

SCALE 1: 20



DIMENSION TRAFFIC SIGN

SCALE 1: 20

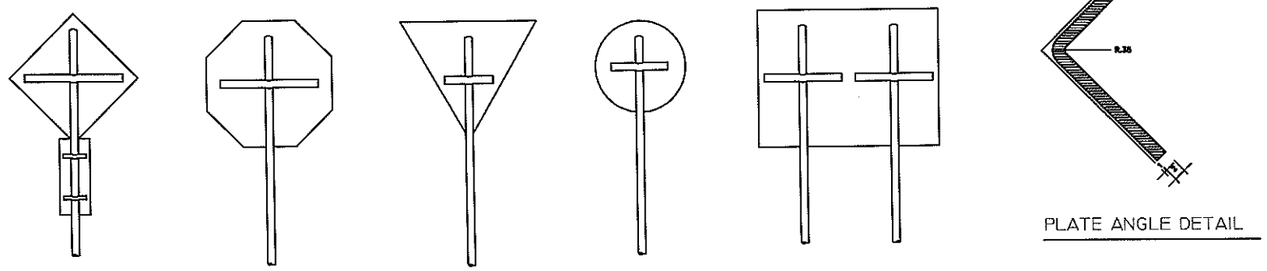


TYPICAL BACK VIEW

SCALE 1: 20

DIMENSION TRAFFIC SIGN

SCALE 1: 20



TYPICAL BACK VIEW

SCALE 1: 20

PLATE ANGLE DETAIL

TYPE	W	R1	R2	R3	G1	G2	G3	G5	A
a	37	37	34	25	40	–	15	25	HOOKED TO POST OF SIGN
b	223+ X	222+ X	209 + X	210 + X	225 + X 225 + X1	–	200 + X	21– + X	
c	20	20	20	20	20	–	20	20	
d	20	20	20	20	20	–	20	20	
e	14.5	19.5	19	10	20	–	15	10	
f	22.5	17.5	15	15	20	–	–	15	
g	5	5	5	5	4	4	4	4	
h	22.5	175	15	15	20	–	–	15	
L	300 + X	299 + X	283 + X	275 + X	303 + X 305 + X1	250 + X 127	255 + X	275 + X	
l	22.5	17.5	13	15	20	–	13	13	
j	5	5	3	5	5	–	26	5	
L1	55	45	32	40	50	–	88	36	

X– VARIES ACCORDED TO CUT & FILL SLOPE
X1= (60 X S) + X

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:

THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

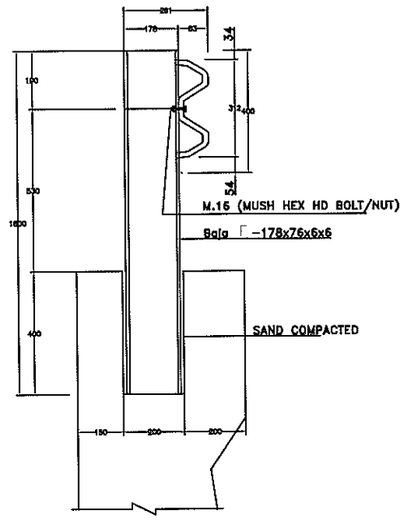
DRAWING TITLE : DETAIL OF TRAFFIC SIGN

SCALE = 1 / 20

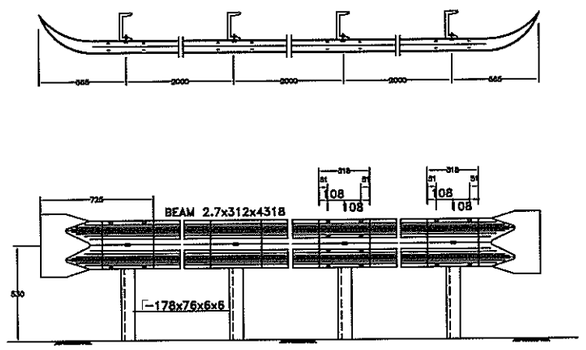
DRAWING NO. MS - 02

DATE: MARCH 2008

GUARDRAIL STANDARD TYPE A

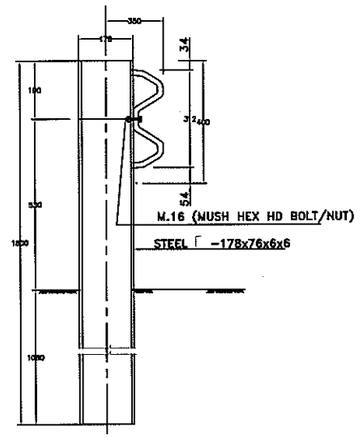


GUARDRAIL POST DETAIL
SCALE : 1:10

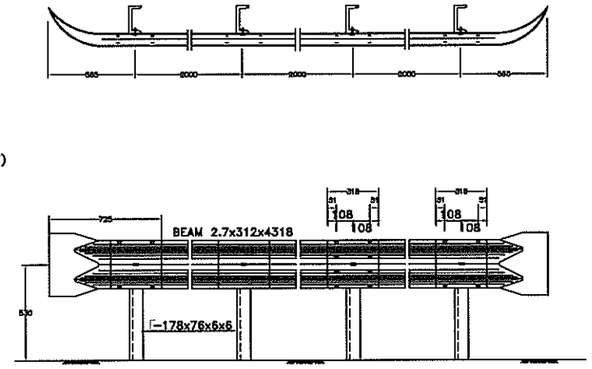


ELEV. AND PROFILE
SCALE : 1:20

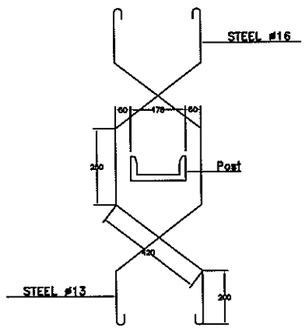
GUARDRAIL STANDARD TYPE B

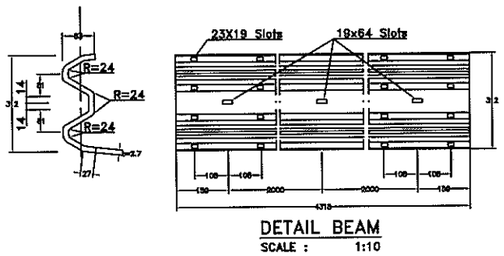


GUARDRAIL POST DETAIL
SCALE : 1:10

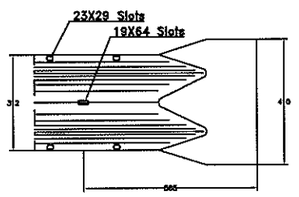


ELEV. AND PROFILE
SCALE : 1:20

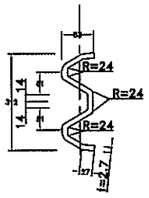


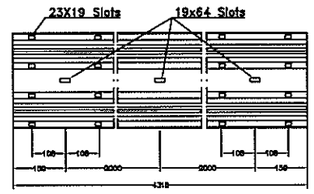


DETAIL BEAM
SCALE : 1:10

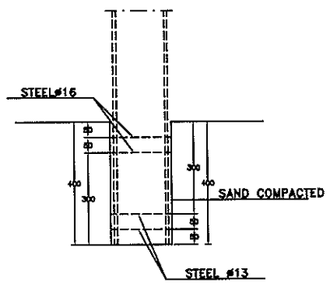


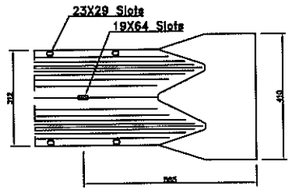
END BEAM DETAIL
SCALE : 1:10

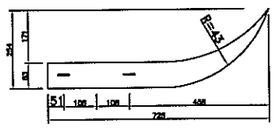




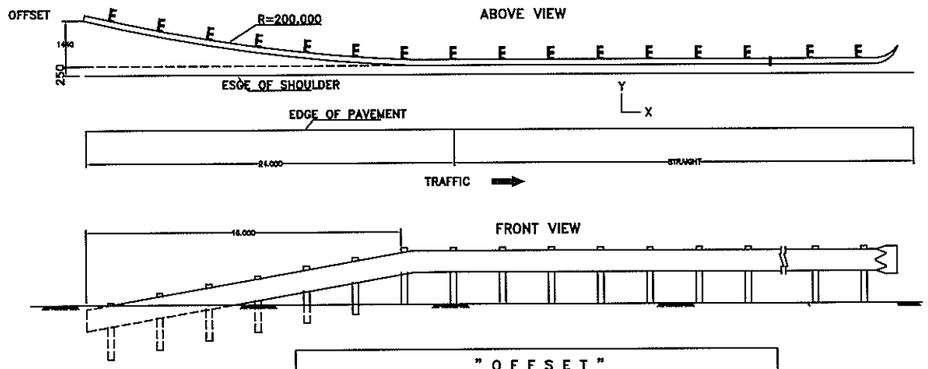
DETAIL BEAM
SKALA : 1:10







END BEAM DETAIL
SCALE : 1:10



" O F F S E T "						
X	4.000	8.000	12.000	16.000	20.000	24.000
Y	0.00	160	360	640	1.000	1.440

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

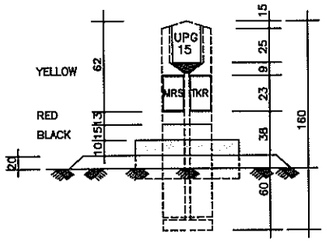
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : STANDARD OF GUARDRAIL

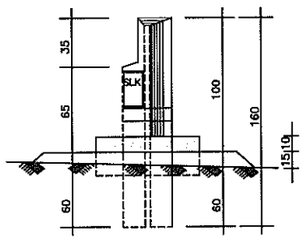
SCALE = 1 / 20

DRAWING NO. MS - 03

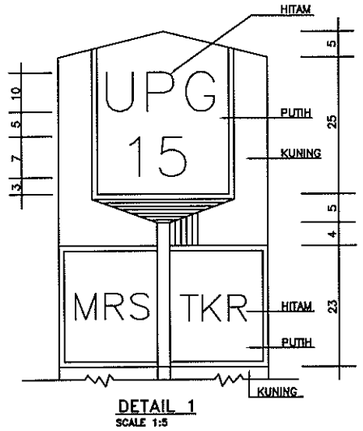
DATE: MARCH 2008



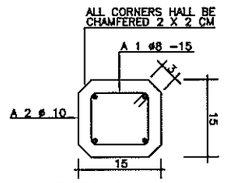
TAMPAK DEPAN



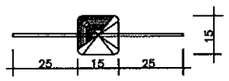
TAMPAK SAMPING



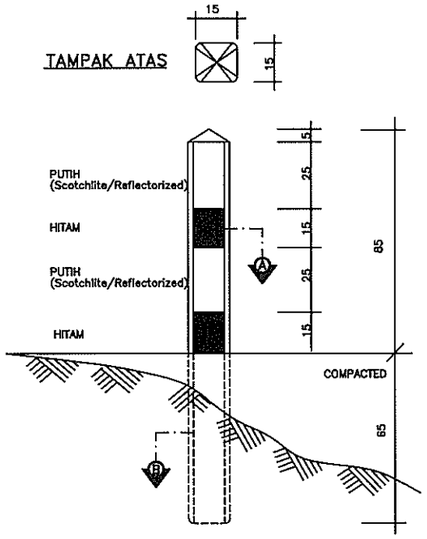
DETAIL 1
SCALE 1:5

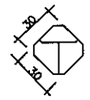


POTONGAN A – A
SKALA 1:5



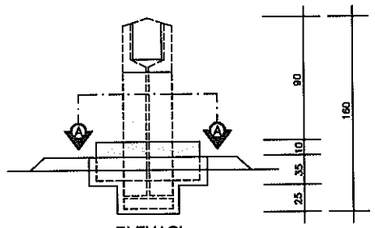
POTONGAN B – B
SKALA 1:5



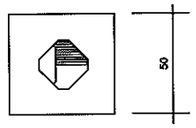


TAMPAK ATAS

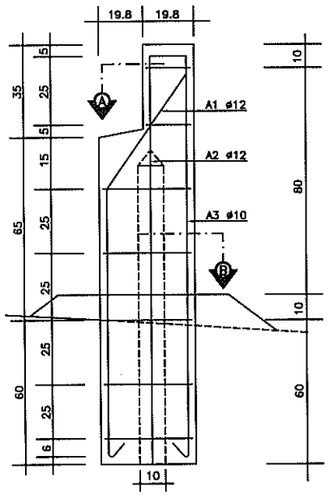
TAMPAK ATAS

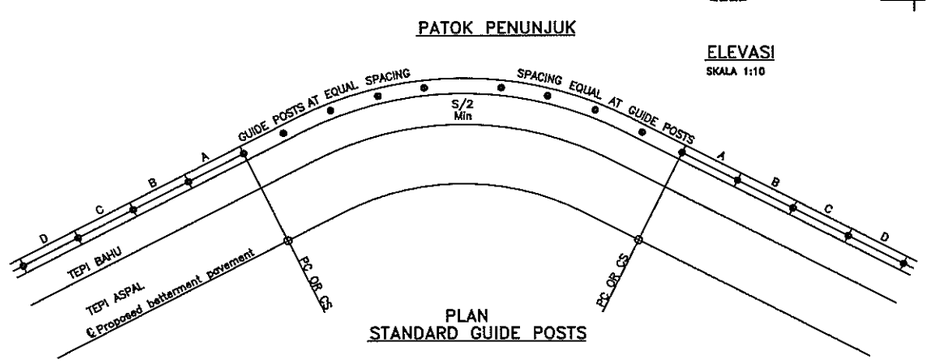


ELEVASI
SKALA :1:20



POTNGAN A – A
SKALA 1:20

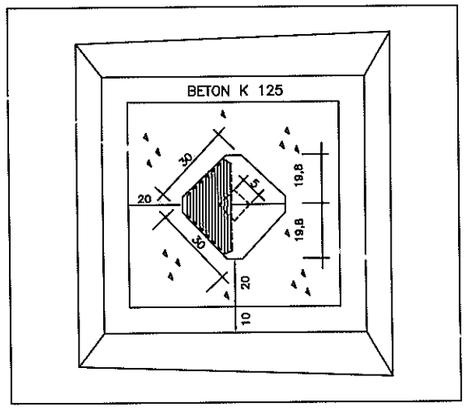




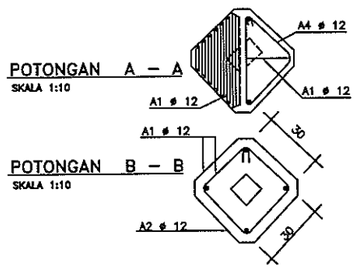
PATOK PENUNJUK

ELEVASI
SKALA 1:10

PLAN
STANDARD GUIDE POSTS



DENAH STANDAR PATOK KILOMETER
SKALA 1:10



POTONGAN A – A
SKALA 1:10

POTONGAN B – B
SKALA 1:10

CATATAN

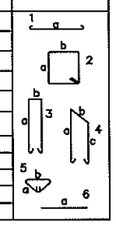
1. JARAK PATOK PENUNJUK PATOK DITUNJUKAN PADA TABEL A
2. LOKASI PATOK PENUNJUK DITUNJUKAN DIATAS

PEMBESIAN PATOK KILOMETER

NO.	TYPE	DIMENSION a	b	c	d	LENGTH (m)	QUANTITY (fa)	TOT LENGTH kg/m	UNIT WEIGHT (kg/m)	TOT WEIGHT (kg)	REMARKS
A1	4 12	152	57	106		3.38	1	3.38	0.848	2.866	
A2	3 12	152	35	152		3.62	1	3.62	0.848	3.070	
A3	2 10	25	25	25	25	1.25	5	6.15	0.617	3.794	
A4	5 12	35	25	25		1.08	2	2.16	0.848	1.832	
									TOTAL	11.562	

PEMBESIAN PATOK PENUNJUK

A1	2	8	12	12	12	12	0.71	8	5.68	0.395	2.243
A2	1	10	140				1.58	4	6.32	0.617	3.900
A3	6	12	60				0.60		0.60	0.848	0.509
										TOTAL	6.652



TABEL A
JARAK PATOK PENUNJUK

RADIUS–CURVE	JARAK–METER S	A	B	C
180 – 200	15	20	25	30
100 – 180	14	20	25	10
120 – 150	13	15	20	25
90 – 120	12	15	20	25
60 – 90	10	15	20	20
30 – 60	8	10	20	20
30a – 30	6	10	15	15

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

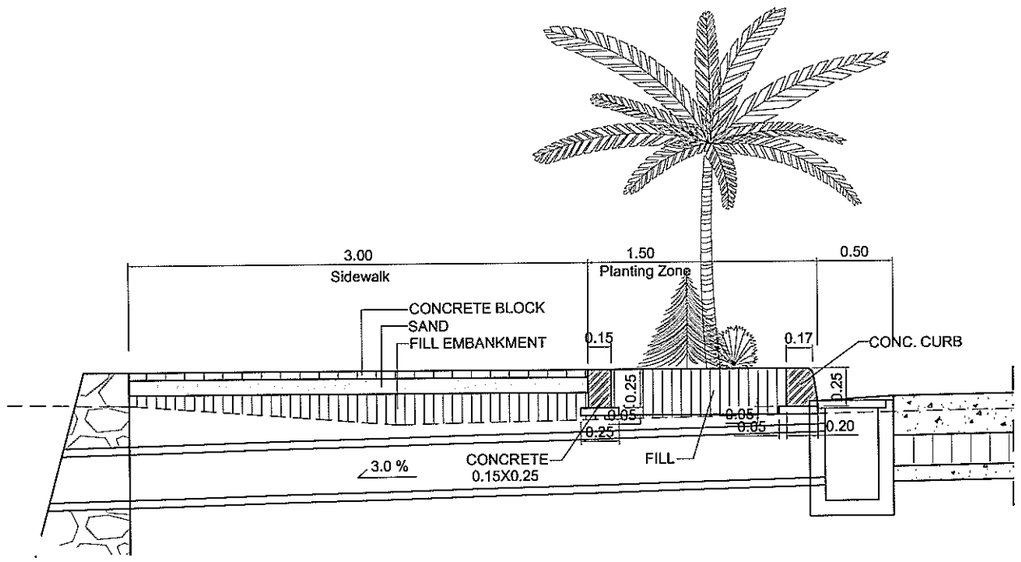
ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION

DRAWING TITLE : STANDARD OF KILO METER POST AND GUIDE POST

SCALE = 1 / 20

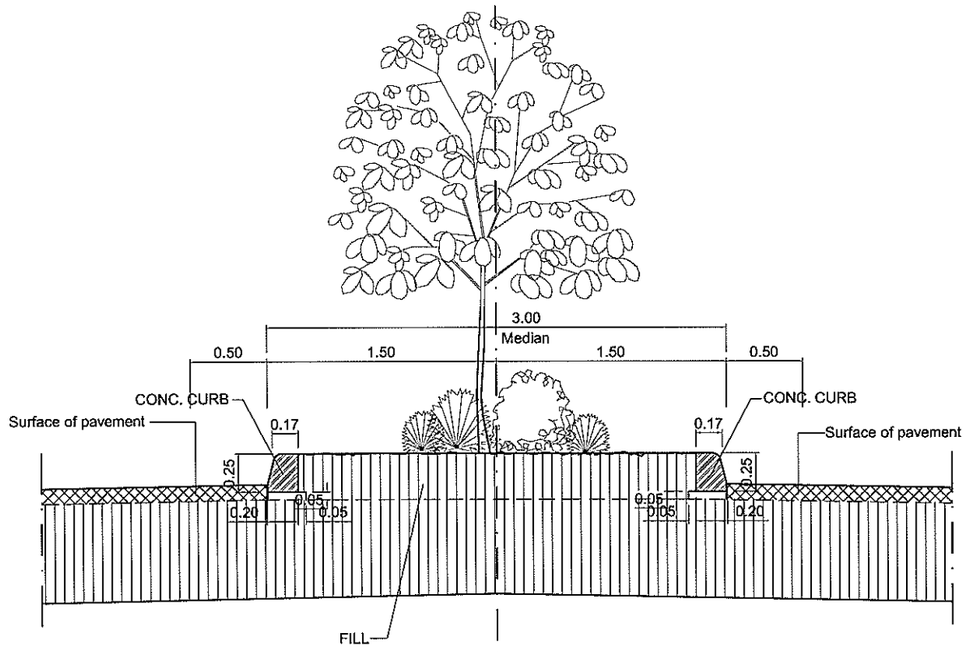
DRAWING NO. MS - 04

DATE: MARCH 2008



SIDE WALK AND PLANTING ZONE

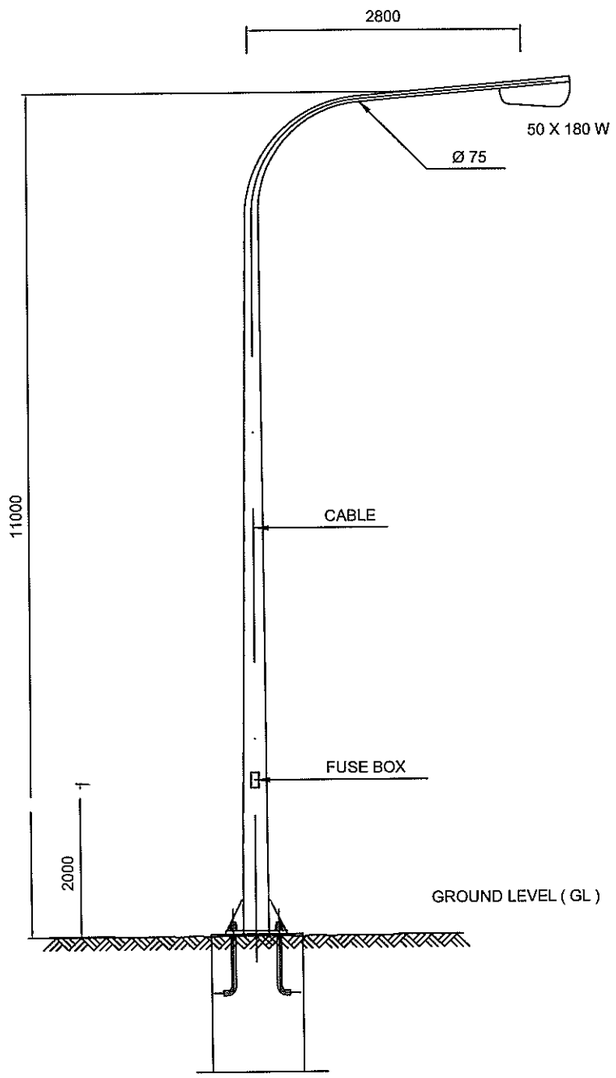
scale 1/40



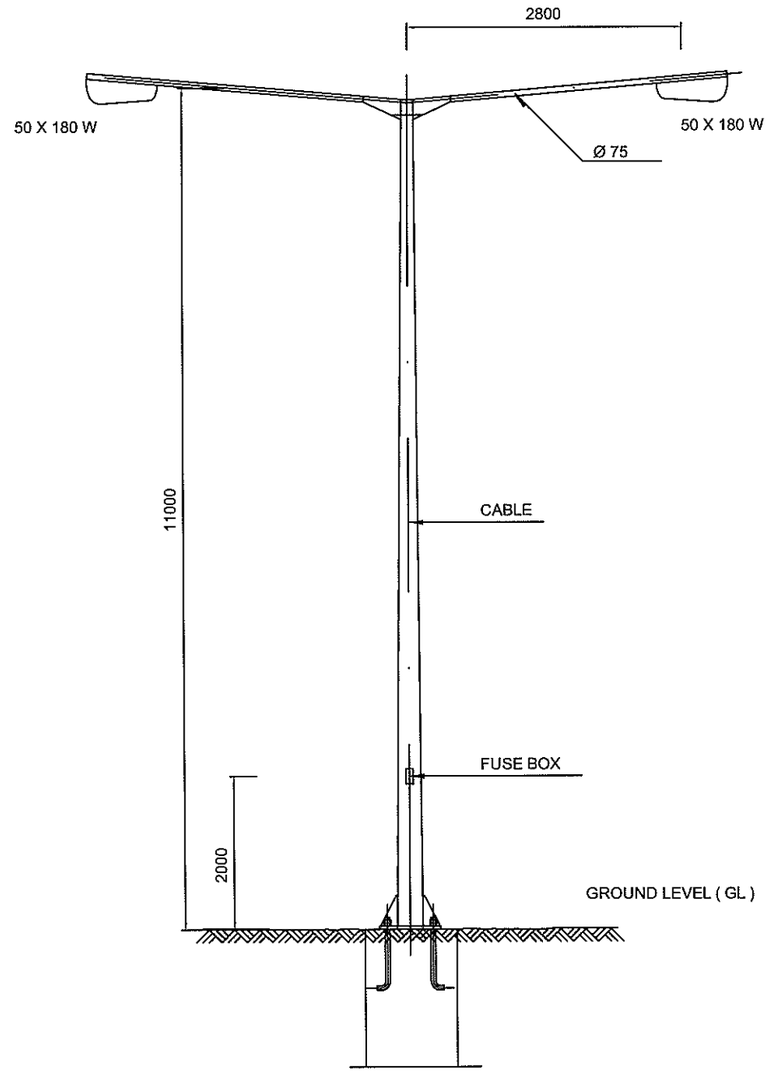
MEDIAN TYPE - 1

scale 1/40

JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. MS-05
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : MEDIAN, SIDEWALK & PLANTING ZONE	
		SCALE = 1 / 40	DATE: MARCH 2008

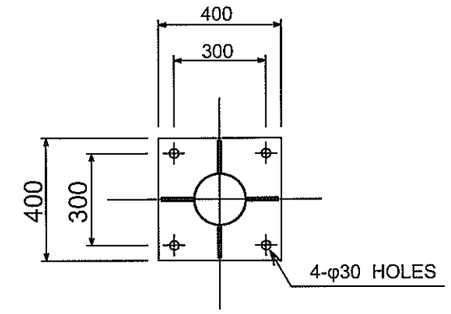


NOTE
STREET LIGHTING TYPE -A (1) & (2)
A(1) WITH FONDATION
A(2) WITHOUT FOUNDATION



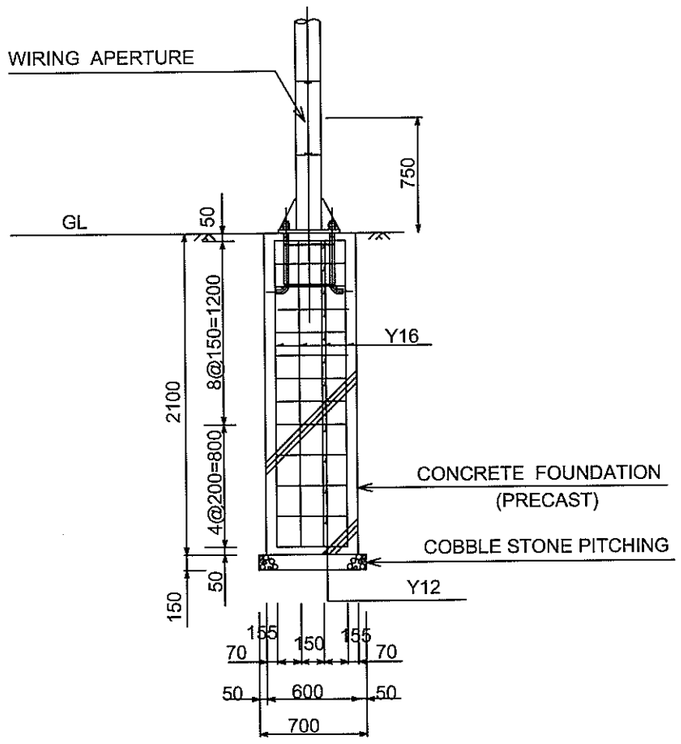
NOTE
STREET LIGHTING TYPE -B (1) & (2)
A(1) WITH FONDATION
A(2) WITHOUT FOUNDATION

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : STANDARD OF ELECTRICAL POLES SCALE = 1 / 50	DRAWING NO. MS - 06 DATE: MARCH 2008



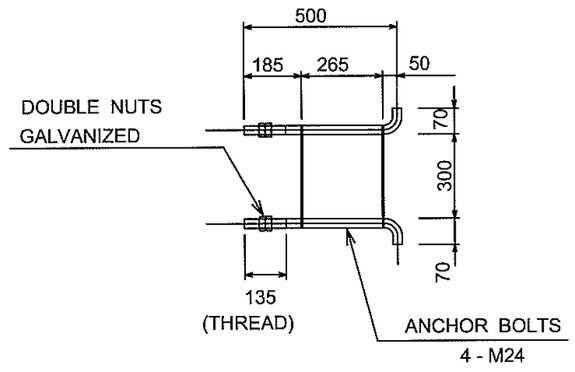
DETAIL OF BASE PLATE

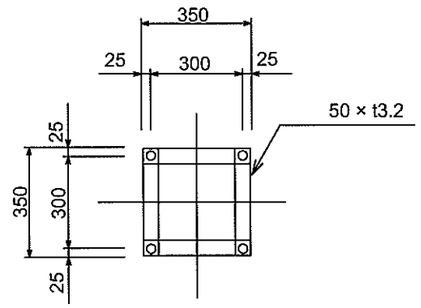
SCALE=1/40



STANDALONE POLE

SCALE=1/80

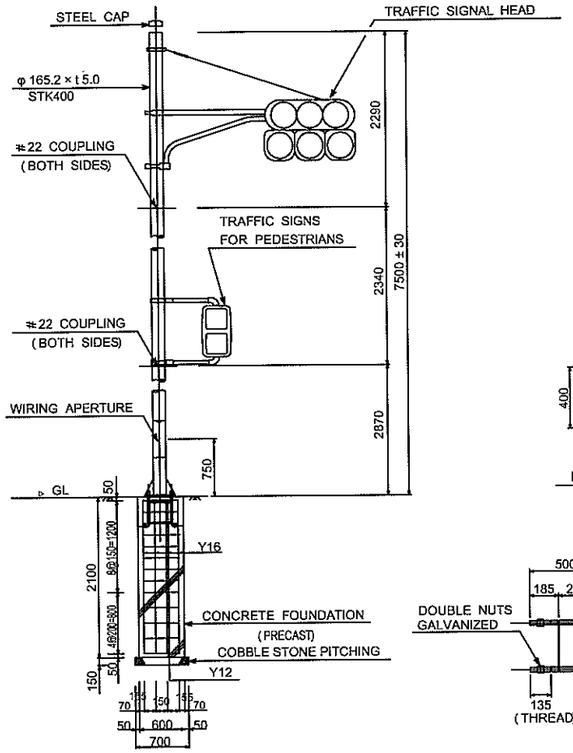




ANCHOR BOLTS FOR BASE PLATE

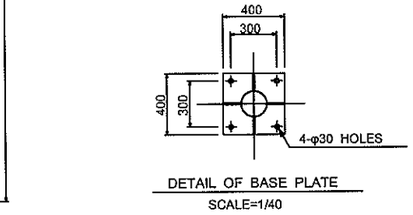
SCALE=1/40

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : DETAIL FOUNDATION FOR ELECTRICAL POLES SCALE = 1 / 80 1/40	DRAWING NO. MS - 07 DATE: MARCH 2008



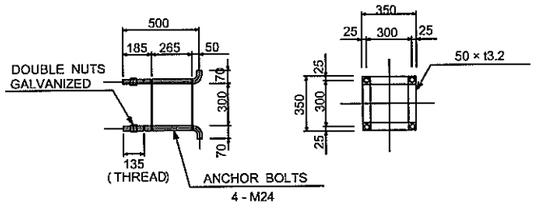
STANDALONE POLE

SCALE=1/80



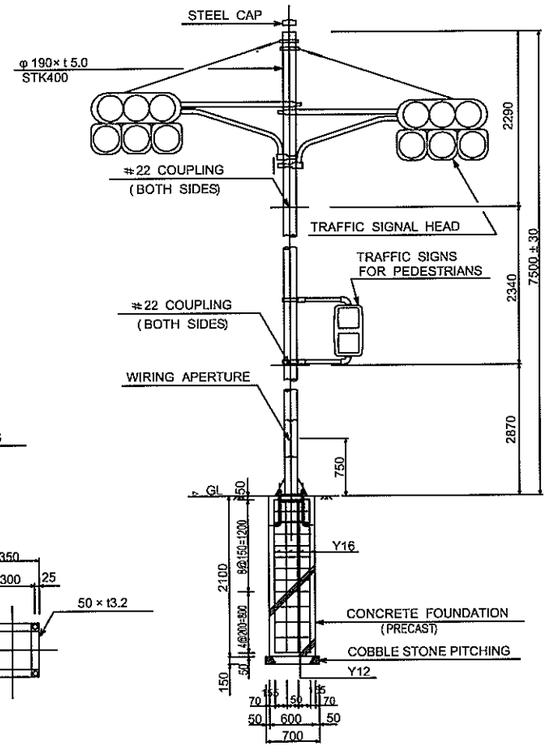
DETAIL OF BASE PLATE

SCALE=1/40



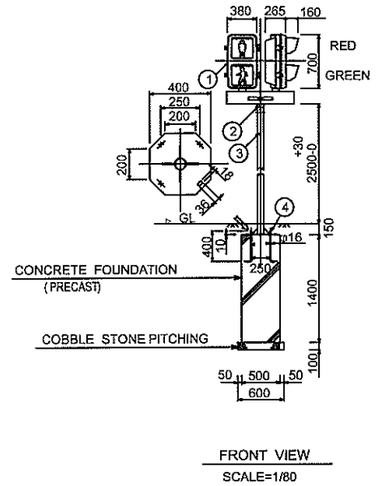
ANCHOR BOLTS FOR BASE PLATE

SCALE=1/40



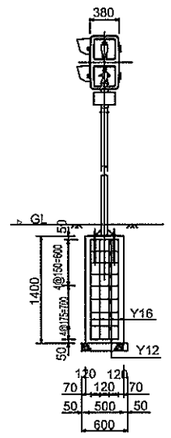
STANDALONE POLE

SCALE=1/80



FRONT VIEW

SCALE=1/80



SIDE VIEW

SCALE=1/80

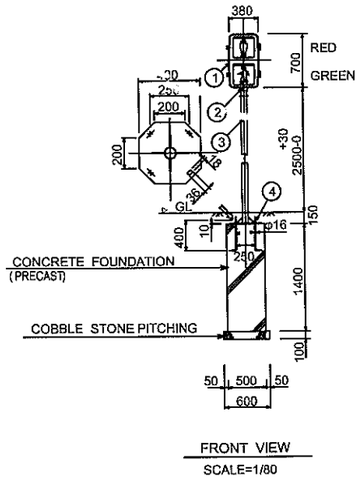
Inside of hood Defrosted N1.5

NOTE 1 : Colors of painting : Munsell 2.5pb7/2 for both outer and inner surfaces of Signal Lights.

2 : The Standalone Pole is zinc - plated by hot dipping.

NO.	PART	MATERIAL	QTY	REMARKS
4	ANCHOR BOLTS	SS41	4	WITH SPRINGS
				FLAT WASHERS
				AND NUTS
3	STANDALONE POLE	STK41	1	φ76.3 T2.8
2	FLANGE	FC20	1	
1	LIGHTS		2 SET	

PEDESTAL SIGNAL , TWIN TYPE



FRONT VIEW

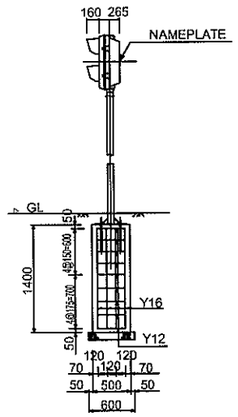
SCALE=1/80

Inside of hood Defrosted N1.5

NOTE 1 : Colors of painting : Munsell 2.5pb7/2 for both outer and inner surfaces of Signal Lights.

2 : The Standalone Pole is zinc - plated by hot dipping.

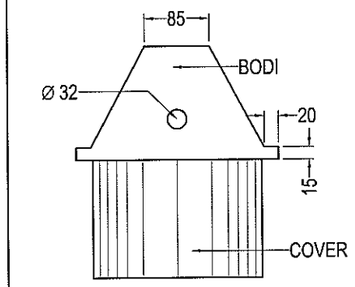
NO.	PART	MATERIAL	QTY	REMARKS
4	ANCHOR BOLTS	SS41	4	WITH SPRINGS
				FLAT WASHERS
				AND NUTS
3	STANDALONE POLE	STK41	1	φ76.3 T2.8
2	FLANGE	FC20	1	
1	LIGHTS		1 SET	



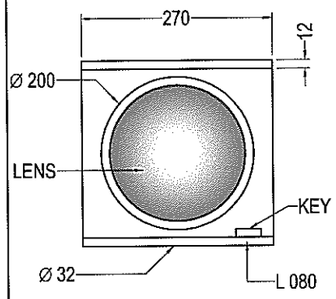
SIDE VIEW

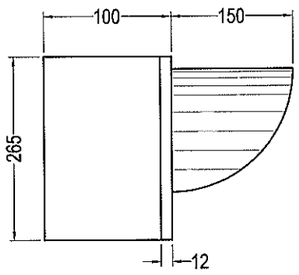
SCALE=1/80

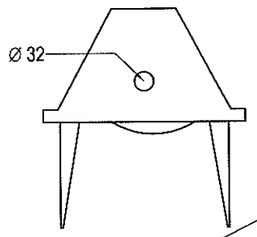
JICA	JAPAN INTERNATIONAL COOPERATION AGENCY
NK	NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation
PROJECT TITLE:	THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA
ROAD NAME TITLE :	TRANS - SULAWESI ROAD MAMMINASATA SECTION
DRAWING TITLE :	TRAFFIC SIGNAL (1/2)
SCALE =	1 / 40 1/80
DRAWING NO.	MS-8
DATE:	MARCH 2008



LAMP BOX
NOT TO SCALE

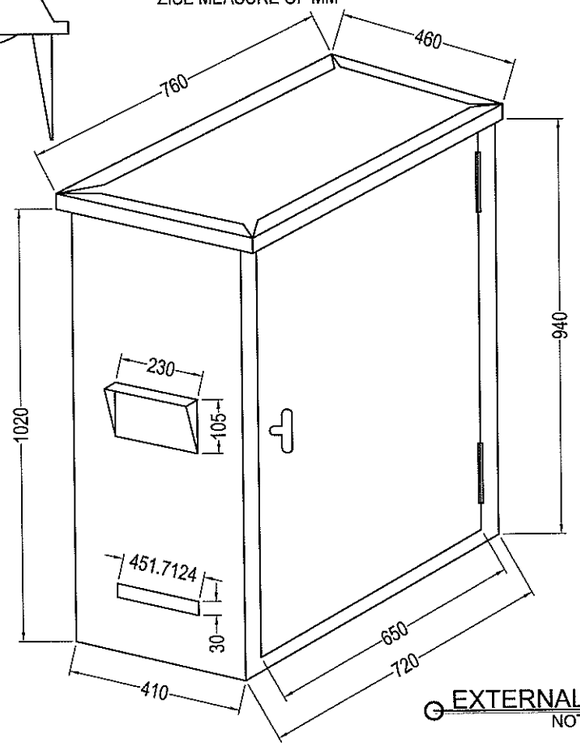




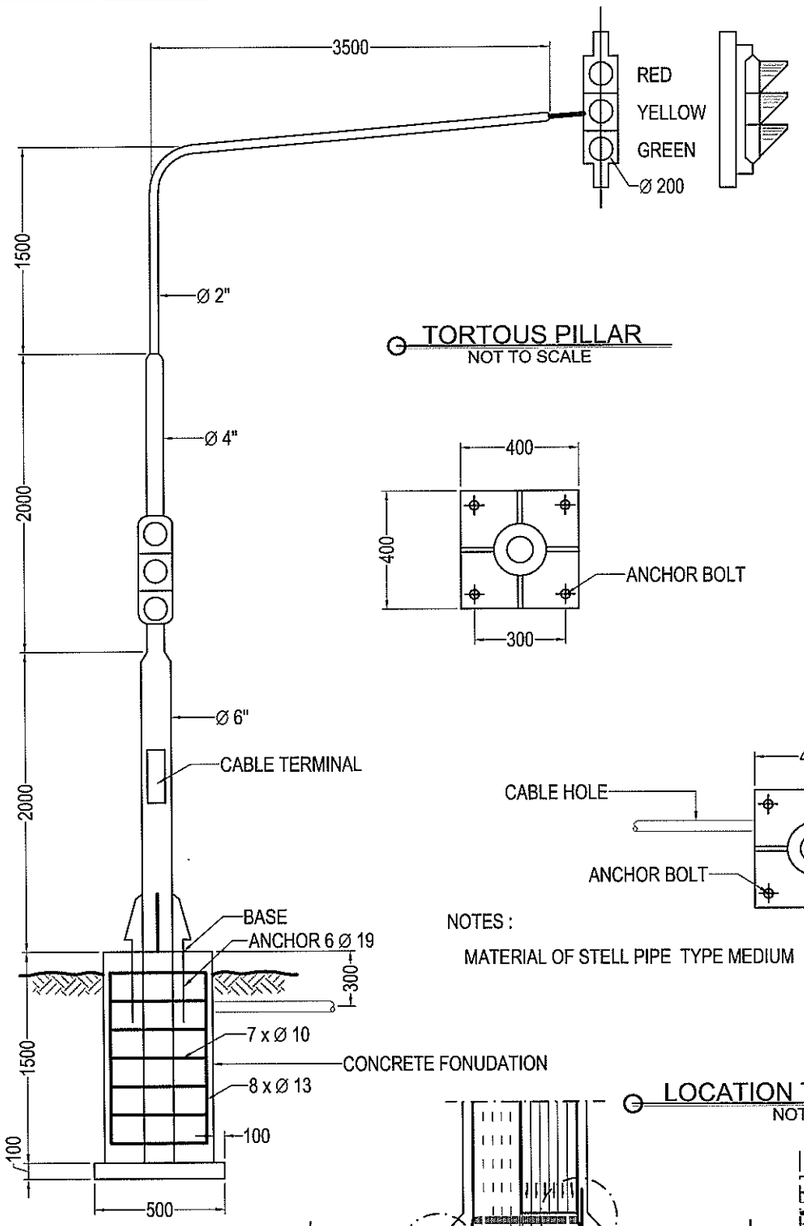


NOTES :

MATERIAL OF ALUMUNIUM PLAT
ZISE MEASURE OF MM



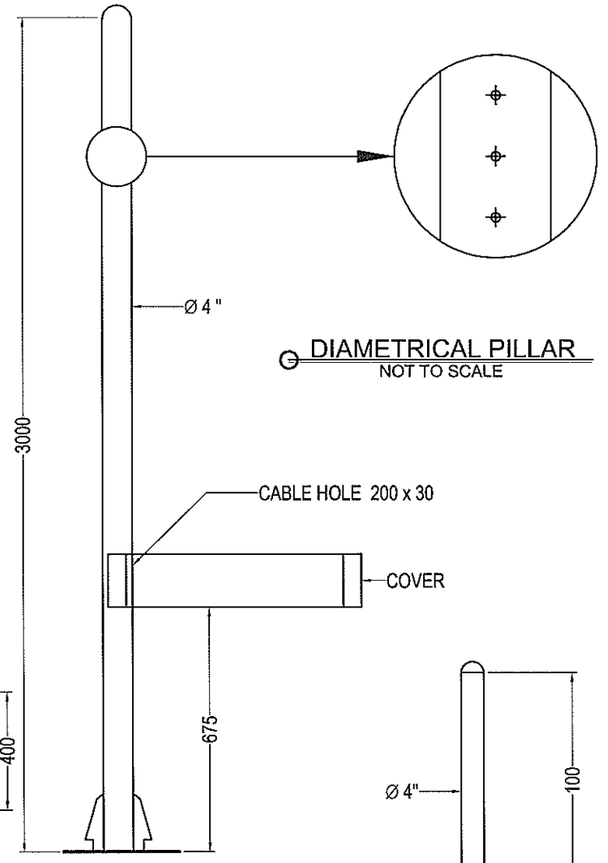
EXTERNAL BOX CONTROL
NOT TO SCALE



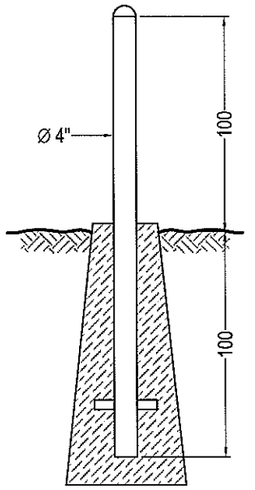
TORTOUS PILLAR
NOT TO SCALE

NOTES :

MATERIAL OF STELL PIPE TYPE MEDIUM

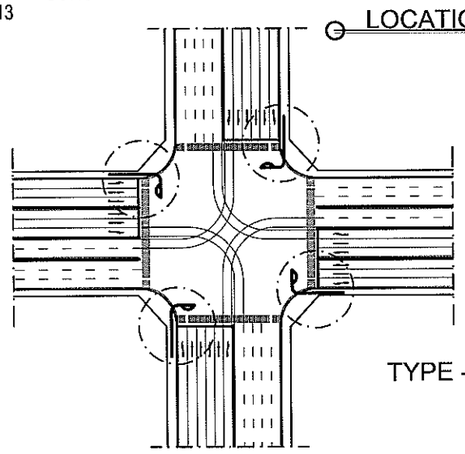


DIAMETRICAL PILLAR
NOT TO SCALE

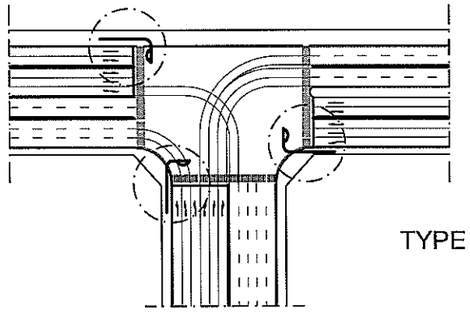


GUARD POLE
NOT TO SCALE

LOCATION TRAFFIC SIGNAL
NOT TO SCALE

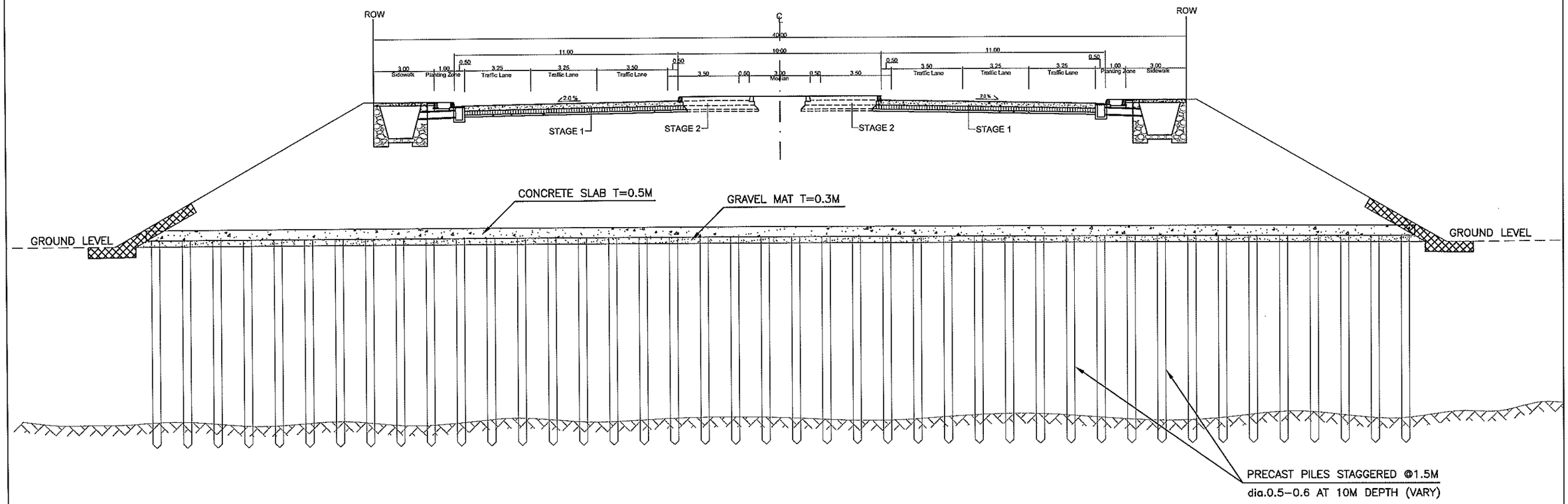


TYPE - 1



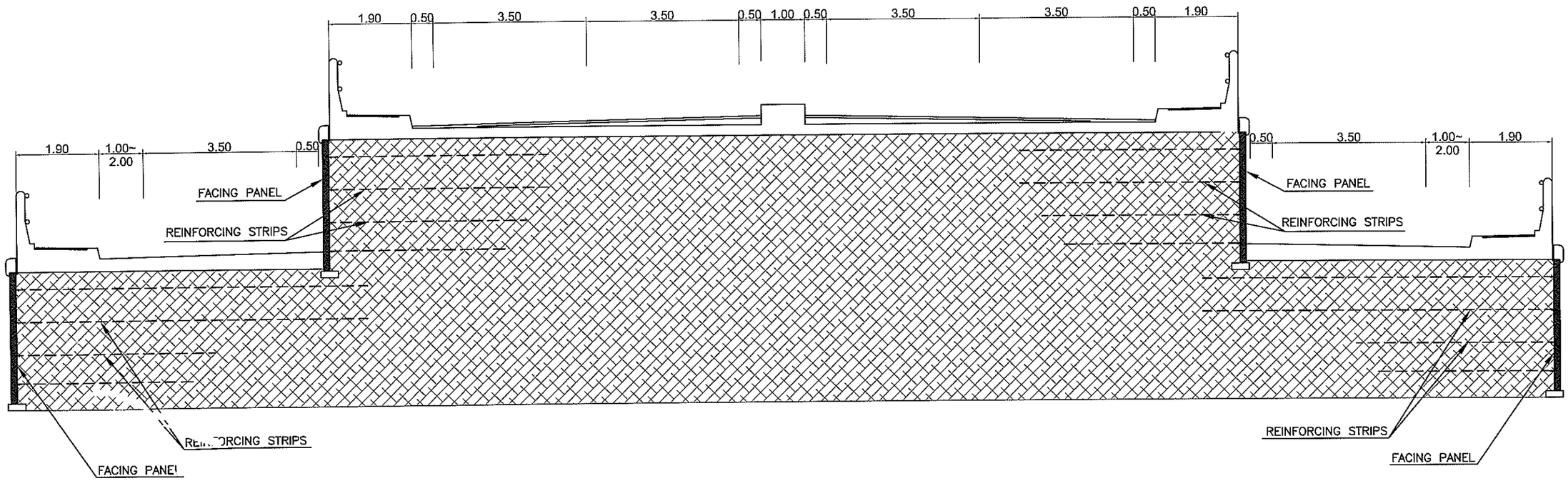
TYPE - 2

JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. MS-09
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : TRAFFIC SIGNAL (2/2)	
		SCALE = 1 / 40 1/80	DATE: MARCH 2008



SOFT GROUND IMPROVEMENT BY PRE–CAST CONCRETE PILE AND RC SLAB
IN MIDDLE RING TALLO BRIDGE APPROACH

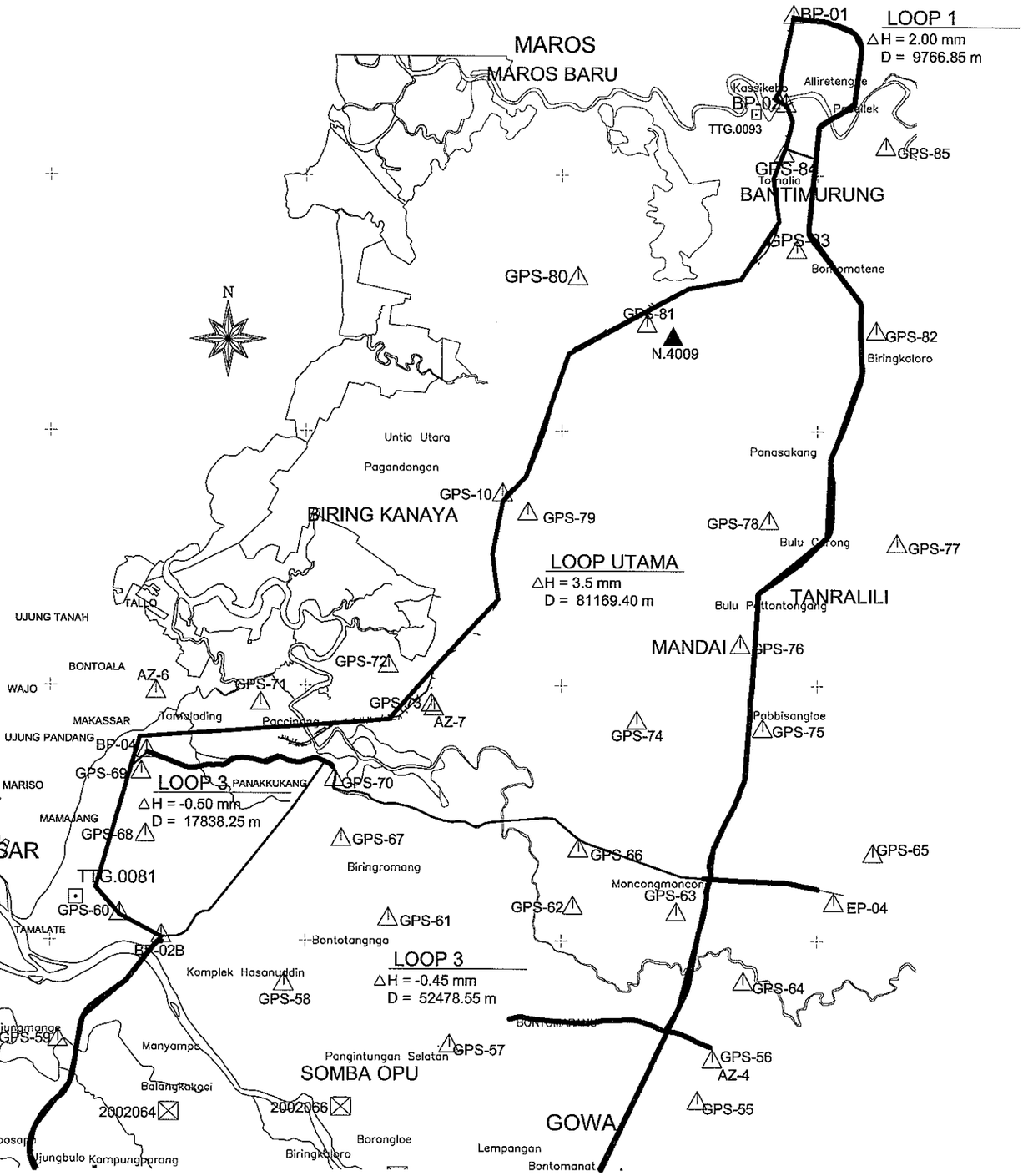
JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION DRAWING TITLE : SOFT GROUND IMPROVEMENT BY PRE-CAST CONCRETE PILE SCALE = 1 / 1000	DRAWING NO. MS-10 DATE: MARCH 2008



REINFORCED EARTH WALL
AT APPROACH OF FLYOVER BRIDGE IN INTERSECTION TS-2

JICA JAPAN INTERNATIONAL COOPERATION AGENCY	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI ROAD MAMMINASATA SECTION	DRAWING NO. MS-11
NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation		DRAWING TITLE : REINFORCED EARTH WALL	
		SCALE = 1 / 1000	DATE: MARCH 2008

8. CONTROL POINT FOR REFERENCE



SURVEY AND PRELIMINARY DESIGN
CONTROL POINT DATA FOR REFERENCE

CONTROL POINT DATA FOR REFERENCE

No.	No. Point	NORTH	EAST	ELVATION
		Y (meter)	X (meter)	(meter)
1	AZ-1	9,398,845.057	770,062.148	55.688
2	AZ-2	9,407,881.966	772,987.202	66.915
3	AZ-3	9,418,159.815	764,238.120	55.050
4	AZ-4	9,423,055.927	783,568.893	68.164
5	AZ-6	9,431,823.206	770,493.620	56.194
6	AZ-7	9,431,433.325	777,022.161	59.451
7	BP-01	9,447,718.226	785,432.051	57.081
8	BP-01B	9,418,707.306	764,392.690	55.098
9	BP-02	9,445,644.201	785,263.074	59.447
10	BP-02A	9,419,111.093	769,040.660	61.345
11	BP-02B	9,426,071.983	770,625.987	57.768
12	BP-04	9,430,426.768	770,275.301	56.463
13	EP-04	9,426,841.935	786,396.003	87.148
14	GPS-10	9,436,481.871	778,620.115	75.722
15	GPS-41	9,398,139.212	770,736.886	54.933
16	GPS-42	9,398,834.178	769,478.035	55.854
17	GPS-43	9,401,725.905	771,880.621	59.513
18	GPS-43A	9,402,849.794	770,732.663	60.536
19	GPS-44	9,404,836.804	772,130.396	62.941
20	GPS-44A	9,404,625.437	772,877.680	62.079
21	GPS-45	9,407,216.644	774,195.401	67.166
22	GPS-46	9,407,826.205	772,898.846	66.781
23	GPS-46A	9,407,303.333	772,343.290	66.304
24	GPS-47	9,408,160.683	770,065.490	64.451
25	GPS-48	9,409,848.091	770,987.595	68.132
26	GPS-49	9,412,355.684	769,333.151	67.529
27	GPS-49A	9,412,037.151	770,749.702	69.555
28	GPS-50	9,416,104.719	770,366.487	64.768
29	GPS-50A	9,416,130.916	769,173.758	64.881
30	GPS-51	9,418,510.500	769,813.534	60.706
31	GPS-51A	9,418,077.414	767,745.158	59.292
32	GPS-52	9,418,126.822	764,355.448	55.044
33	GPS-52A	9,419,433.336	764,483.334	55.931

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation

PROJECT TITLE:
THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA

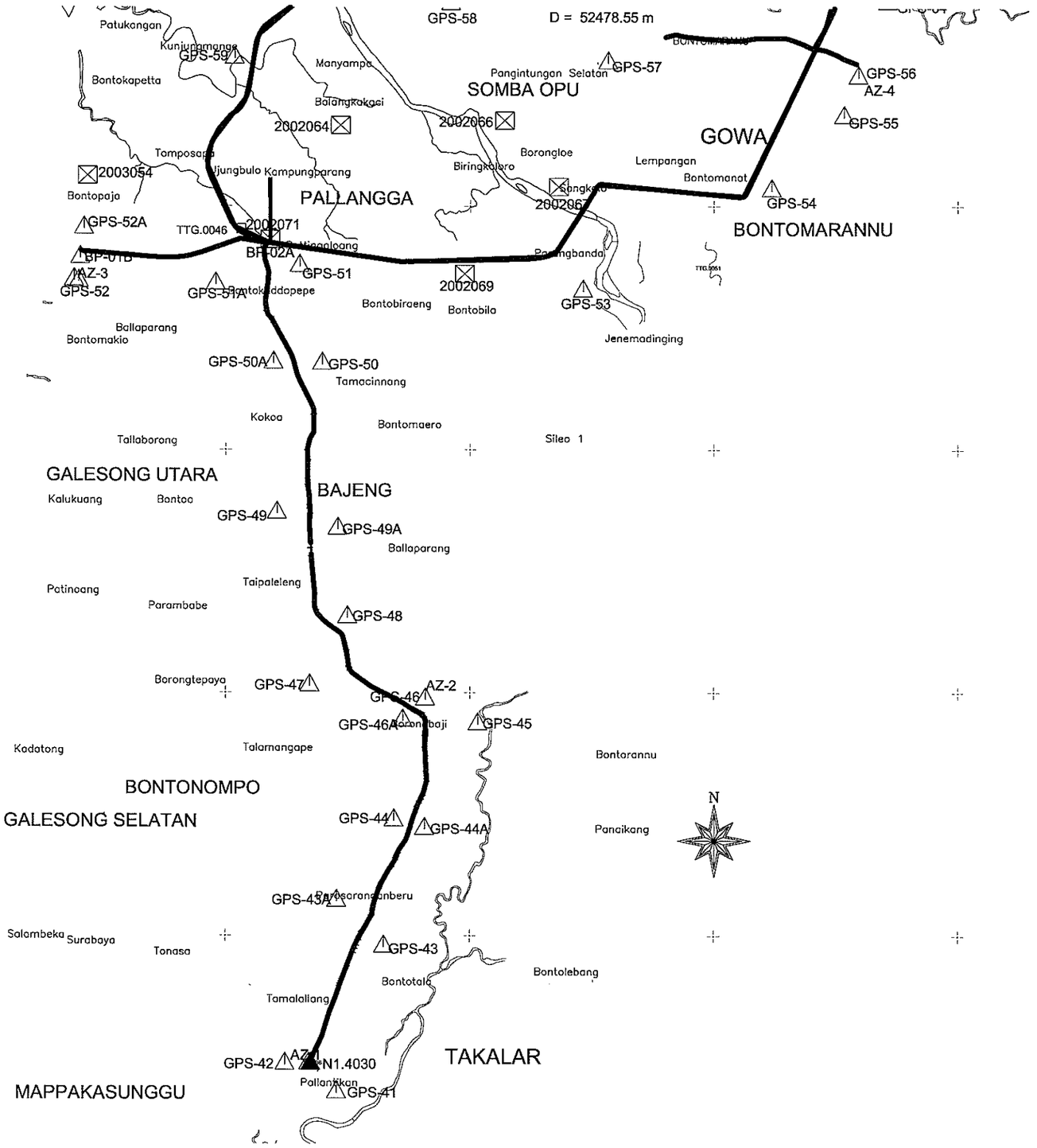
ROAD NAME TITLE : TRANS - SULAWESI MAMMINASATA SECTION

DRAWING TITLE : SURVEY AND PRELIMINARY DESIGN
CONTROL POINT DATA FOR REFERENCE

SCALE =

DRAWING NO. CP-01

DATE: MARCH 2008



CONTROL POINT DATA FOR REFERENCE

34	GPS-53	9,417,903.992	776,788.022	69.272
35	GPS-54	9,420,386.458	781,426.566	64.767
36	GPS-55	9,422,189.351	783,204.379	76.249
37	GPS-56	9,423,168.036	783,557.306	65.600
38	GPS-57	9,423,515.008	777,390.254	67.596
39	GPS-58	9,424,957.981	773,505.711	59.500
40	GPS-59	9,423,627.683	768,199.745	56.520
41	GPS-60	9,426,590.711	769,638.802	56.816
42	GPS-61	9,426,487.776	775,942.121	57.524
43	GPS-62	9,426,766.376	780,273.220	58.078
44	GPS-63	9,426,616.811	782,695.470	61.995
45	GPS-64	9,424,986.700	784,279.147	61.812
46	GPS-65	9,428,001.138	787,312.438	79.808
47	GPS-66	9,428,106.319	780,402.165	59.979
48	GPS-67	9,428,353.068	774,841.413	56.206
49	GPS-68	9,428,448.379	770,251.948	56.584
50	GPS-69	9,429,924.219	770,145.551	55.651
51	GPS-70	9,429,764.887	774,680.939	58.278
52	GPS-71	9,431,558.177	772,951.691	54.542
53	GPS-72	9,432,441.723	775,947.011	60.329
54	GPS-73	9,431,530.224	776,955.355	60.882
55	GPS-74	9,431,117.692	781,764.001	61.509
56	GPS-75	9,430,937.822	784,730.045	97.096
57	GPS-76	9,432,914.864	784,205.074	77.693
58	GPS-77	9,435,294.570	787,871.402	74.213
59	GPS-78	9,435,834.148	784,883.687	63.748
60	GPS-79	9,436,035.744	779,216.505	69.070
61	GPS-80	9,441,574.338	780,379.020	68.125
62	GPS-81	9,440,465.853	781,997.640	60.389
63	GPS-82	9,440,292.142	787,388.197	61.517
64	GPS-83	9,442,209.022	785,525.227	59.253
65	GPS-84	9,444,471.124	785,226.904	59.276
66	GPS-85	9,444,626.230	787,610.947	59.851

NOTE : These control points were established for preparation of topographs maps used for Preliminary design of the F/s roads. Therefore, these needs to be verified for actual use either for land acquisition or detailed design.

SURVEY AND PRELIMINARY DESIGN
CONTROL POINT DATA FOR REFERENCE

JICA JAPAN INTERNATIONAL COOPERATION AGENCY NIPPON KOEI CO., LTD. IN JOINT VENTURE WITH KRI INTERNATIONAL Corporation ALMEC ALMEC Corporation	PROJECT TITLE: THE STUDY ON ARTERIAL ROAD NETWORK DEVELOPMENT PLAN FOR SULAWESI ISLAND AND FEASIBILITY STUDY ON PRIORITY ARTERIAL ROAD IN SOUTH SULAWESI PROVINCE IN INDONESIA	ROAD NAME TITLE : TRANS - SULAWESI MAMMINASATA SECTION DRAWING TITLE : SURVEY AND PRELIMINARY DESIGN CONTROL POINT DATA FOR REFERENCE SCALE =	DRAWING NO. CP-02 DATE: MARCH 2008