

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA  
MINISTRY OF TRANSPORT AND HIGHWAYS  
ROAD DEVELOPMENT AUTHORITY (RDA)

社会開発調査部報告書

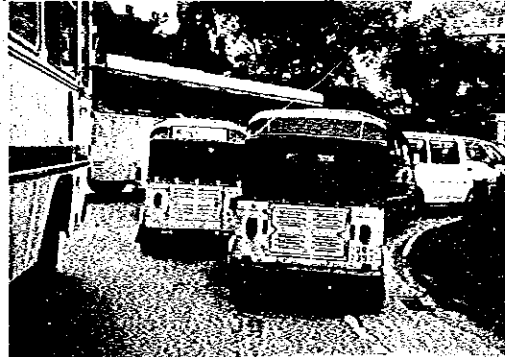
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# THE STUDY ON THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO

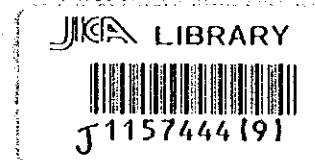
## FINAL REPORT



VOLUME 4 OF 5



## PRELIMINARY DRAWINGS



FEBRUARY 2000

ORIENTAL CONSULTANTS COMPANY LIMITED

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**THE STUDY ON  
THE OUTER CIRCULAR HIGHWAY  
TO THE CITY OF COLOMBO**

**FINAL REPORT**

**VOLUME 4 OF 5**

**PRELIMINARY DRAWINGS**

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ORIENTAL CONSULTANTS COMPANY LIMITED



1157444 (9)

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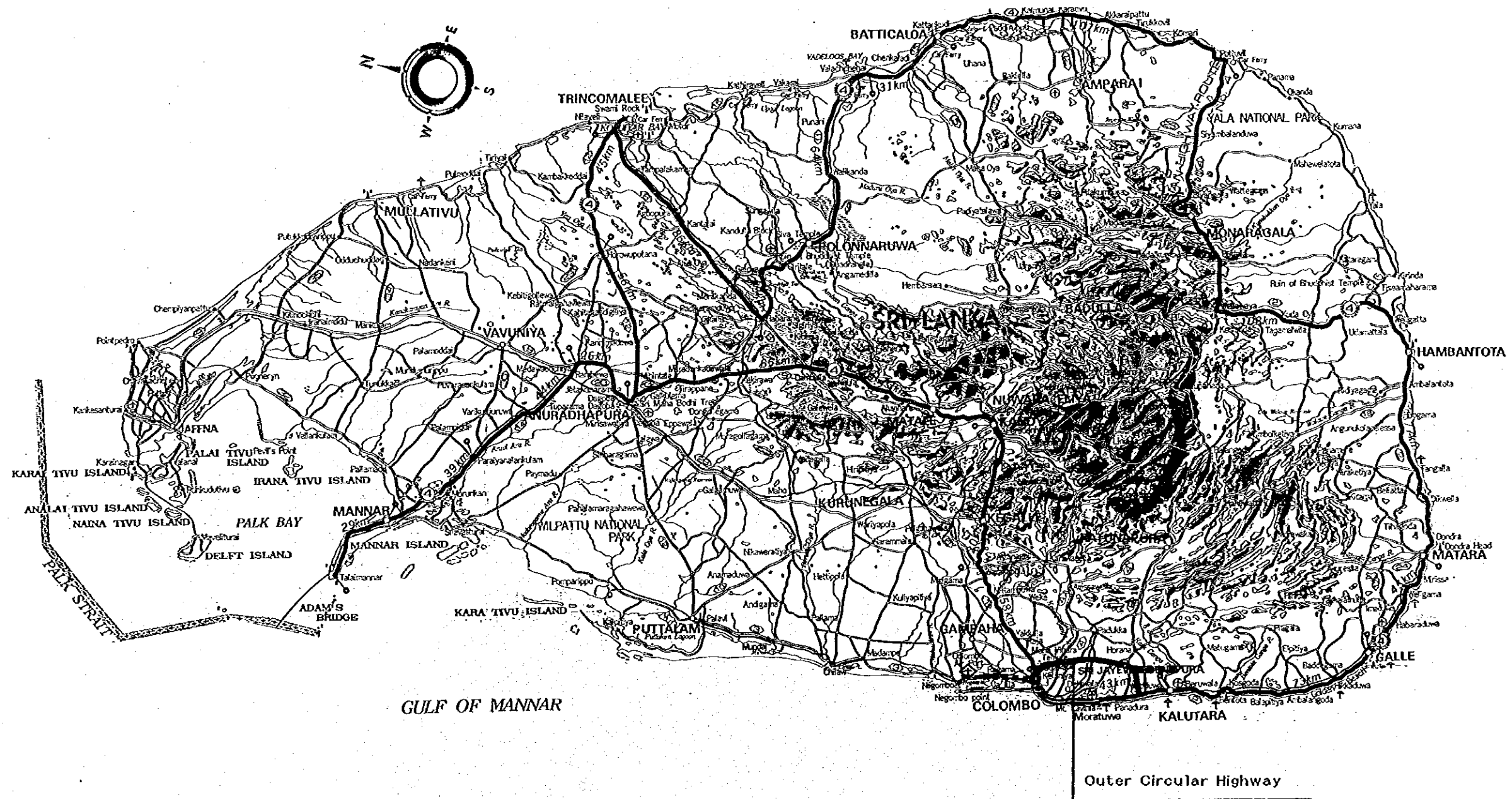
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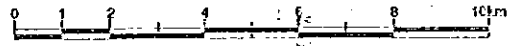
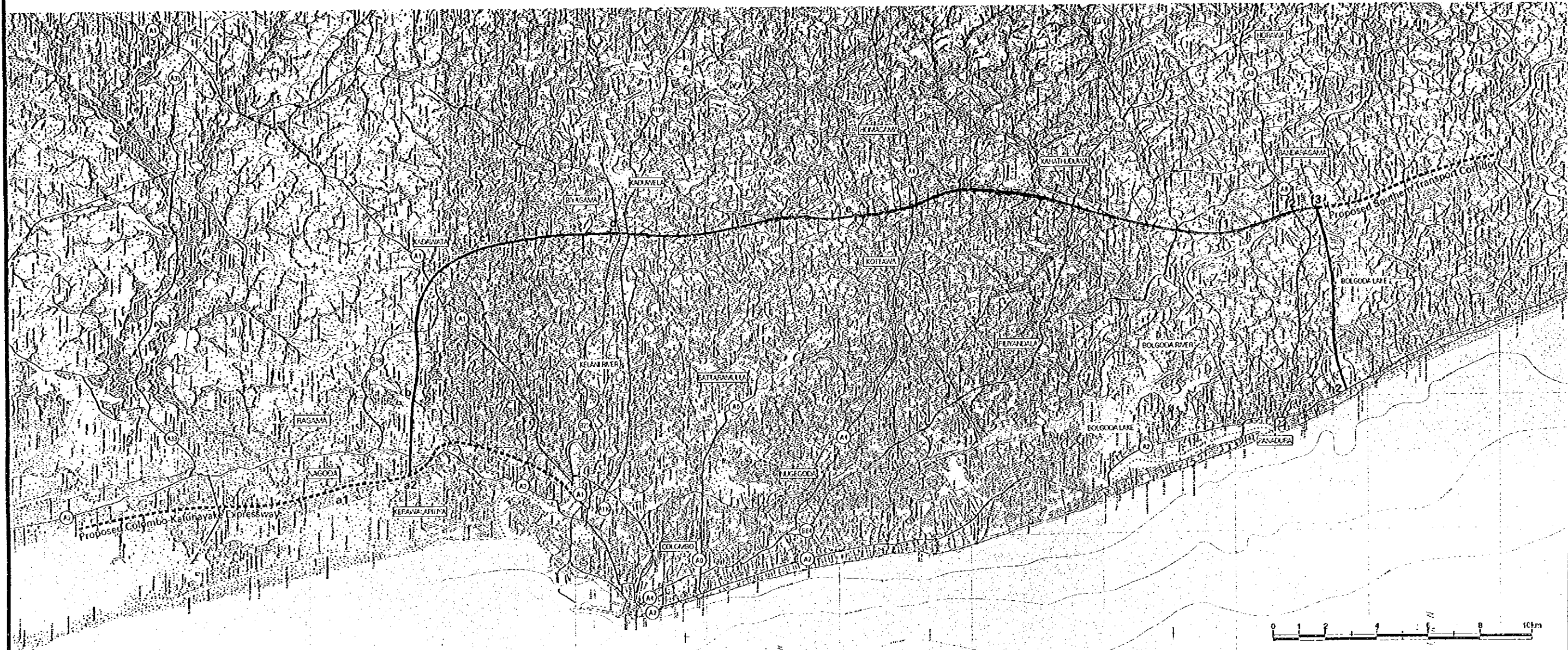
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# ***I. Location Map***

# LOCATION MAP FOR THE OUTER CIRCULAR HIGHWAY



<p>JAPAN INTERNATIONAL COOPERATION AGENCY THE STUDY ON THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO</p>	
<p>LOCATION MAP FOR THE OUTER CIRCULAR HIGHWAY</p>	
<p>ORIENTAL CONSULTANTS CO. LTD.</p>	
	<p>February - 2000</p>
<p>Sheet No:</p>	



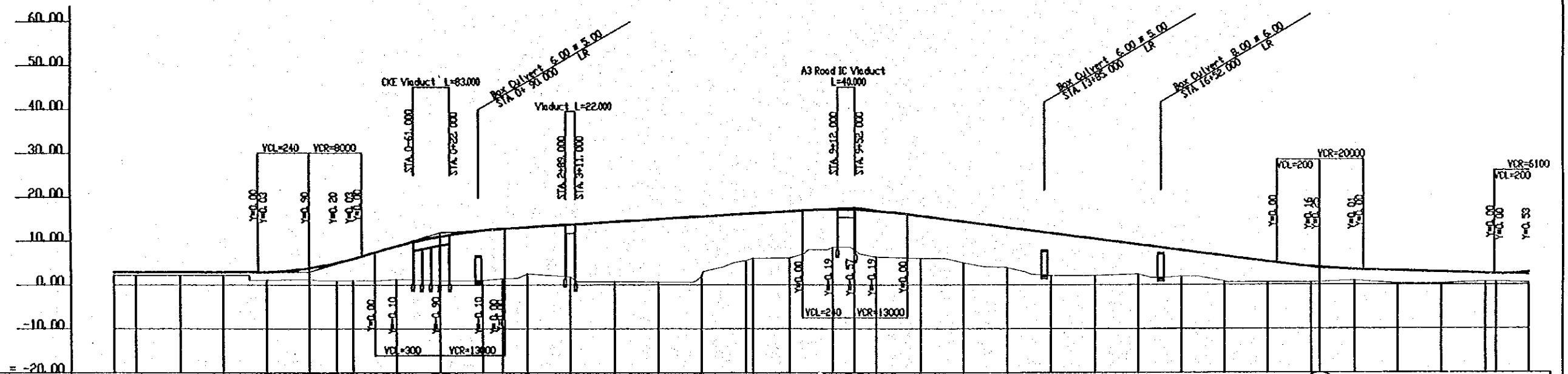
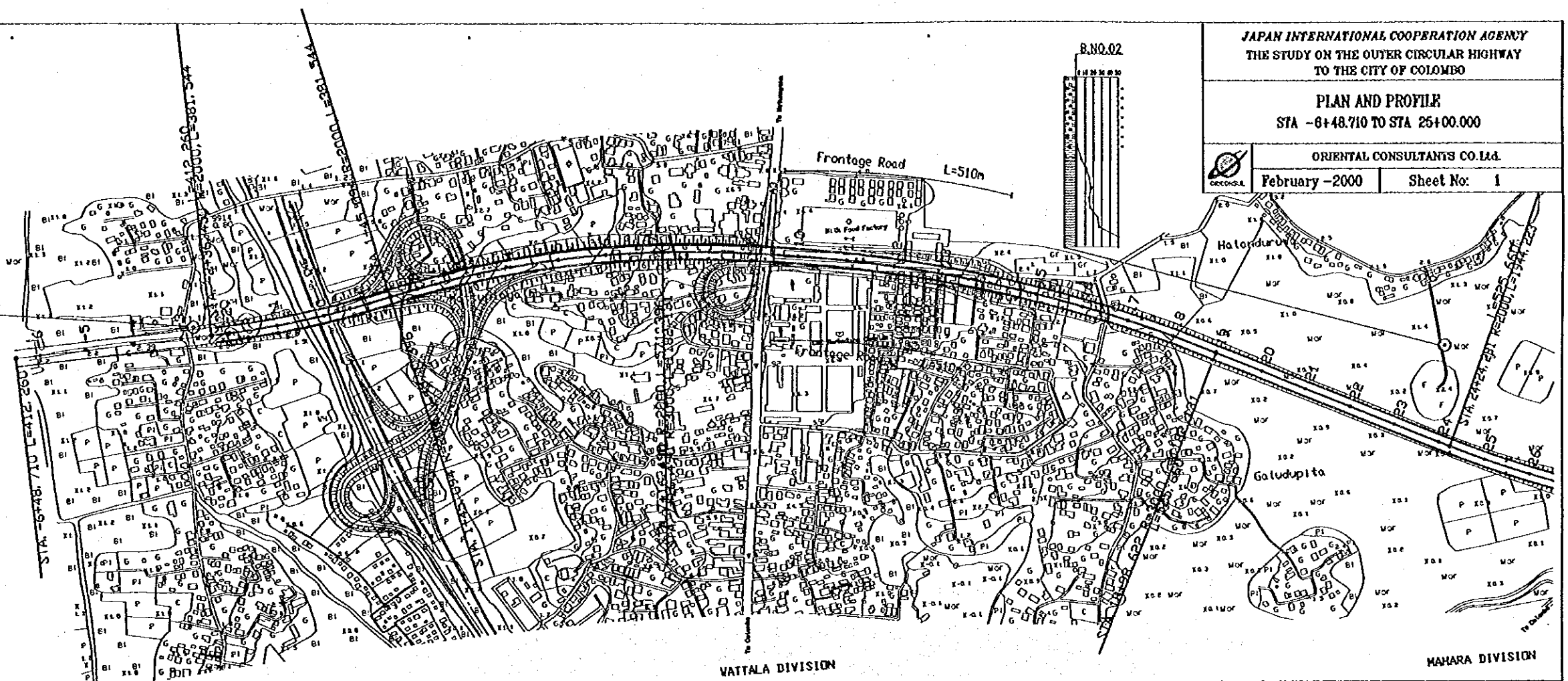
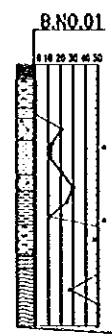
JICA  
 THE STUDY ON THE OUTER CIRCULAR HIGHWAY  
 TO THE CITY OF COLOMBO  
**MOST APPROPRIATE  
 HIGHWAY ALIGNMENT**  
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## ***II. Preliminary Design for the Outer Circular Highway***



# ***1. Road***

# ***(1) PLAN AND PROFILE***



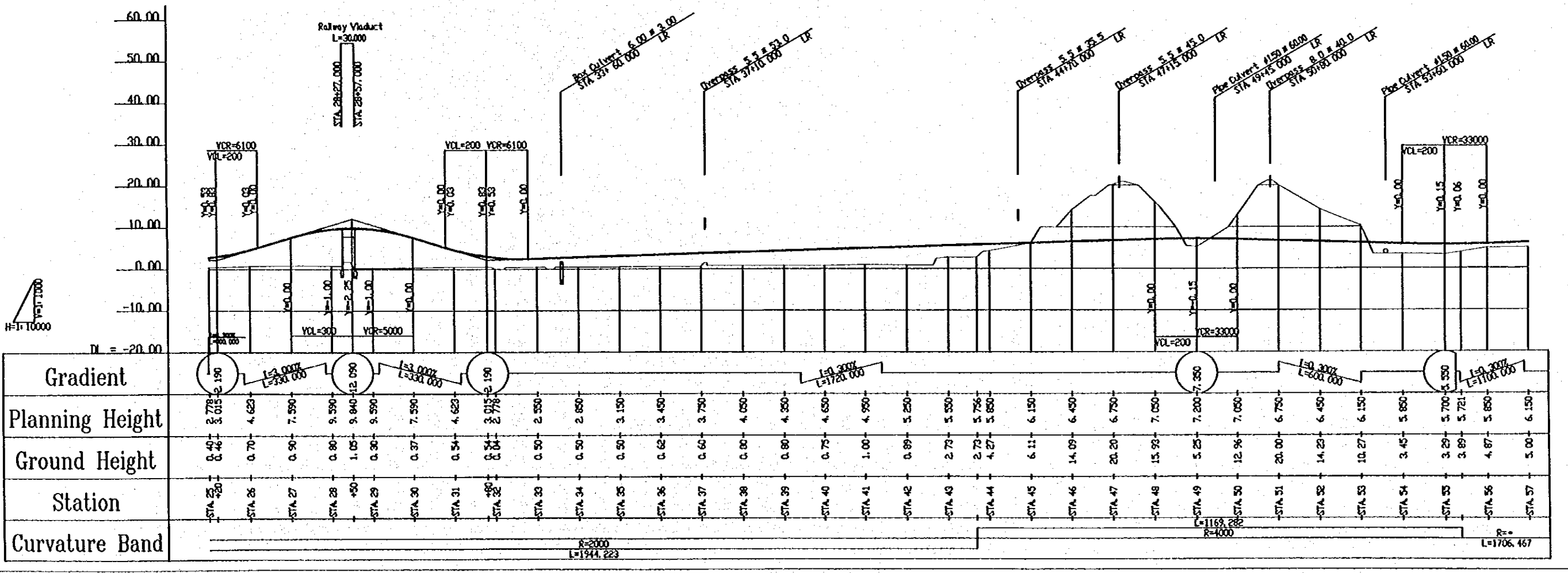
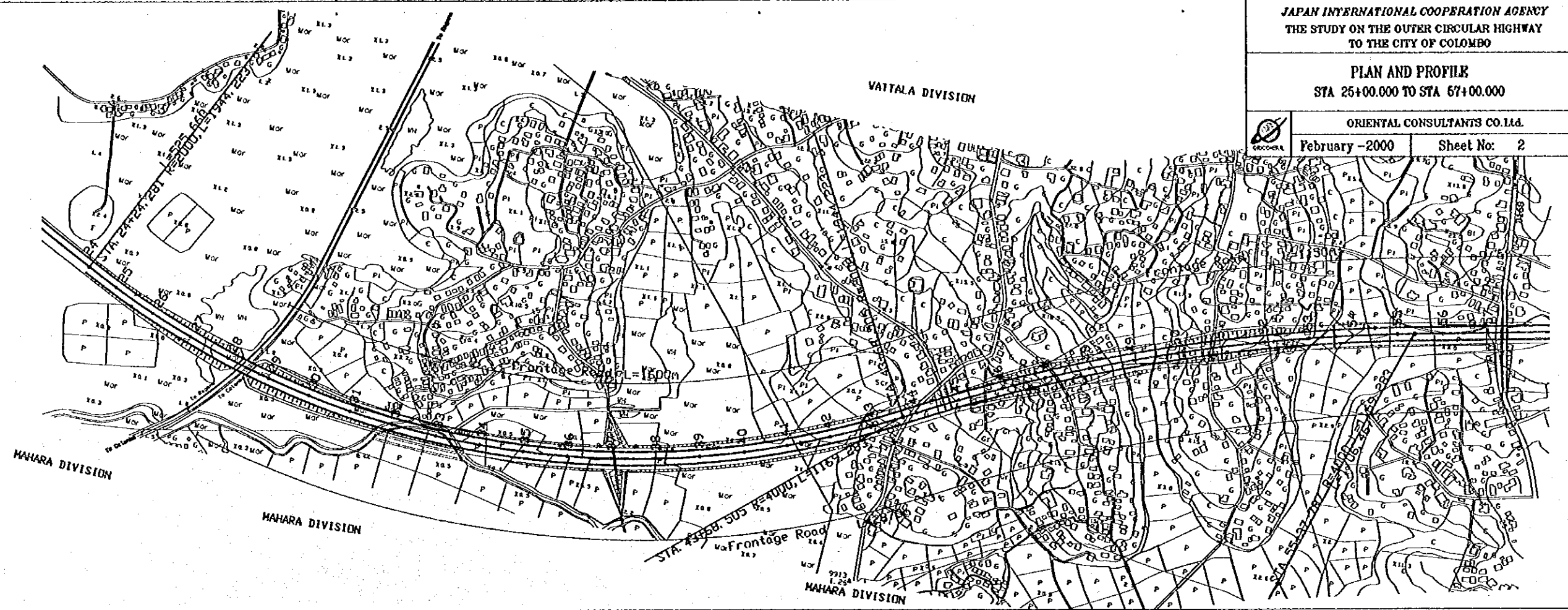
Gradient	1:0.0007 L=10000.000		1:3.0007 L=300.000		1:0.6007 L=950.000		1:1.0007 L=1070.000		1:0.3007 L=300.000																																																								
Planning Height	2.900	2.900	2.900	2.900	2.925	3.800	3.006	3.925	8.800	11.000	11.900	12.400	12.770	13.100	13.700	14.300	14.900	15.500	16.100	16.700	17.106	17.030	17.600	16.756	15.650	14.350	13.050	11.750	10.450	9.150	7.850	6.550	5.250	3.950	2.650	1.350	2.850	2.550	2.475	2.778																									
Ground Height	2.20	2.20	2.20	2.20	1.10	1.20	1.00	1.00	1.25	1.00	1.00	1.41	12.770	2.50	13.100	1.80	13.700	0.70	14.300	0.60	14.900	2.00	15.500	2.80	16.100	6.10	16.700	8.30	17.106	7.91	17.030	6.30	16.756	6.00	15.650	5.00	14.350	3.90	13.050	2.10	11.750	2.10	10.450	2.40	9.150	1.90	7.850	0.79	6.550	0.60	5.250	0.52	3.950	0.90	2.650	0.25	1.350	0.25	2.850	0.70	2.550	0.70	2.475	0.40	2.778
Station	-STA-7	-STA-6	-STA-5	-STA-4	-STA-3	-STA-2	-STA-1	-STA-0	-STA-1	-STA-2	-STA-3	-STA-4	-STA-5	-STA-6	-STA-7	-STA-8	-STA-9	+0	-STA-10	-STA-11	-STA-12	-STA-13	-STA-14	-STA-15	-STA-16	-STA-17	-STA-18	-STA-19	-STA-20	-STA-21	-STA-22	-STA-23	-STA-24	-STA-25																															
Curvature Band	R=571.396 L=514.839		R=2000 L=381.544		R=2000		R=3000 L=1122.131		R=525.660		R=2000 L=1944.223																																																						

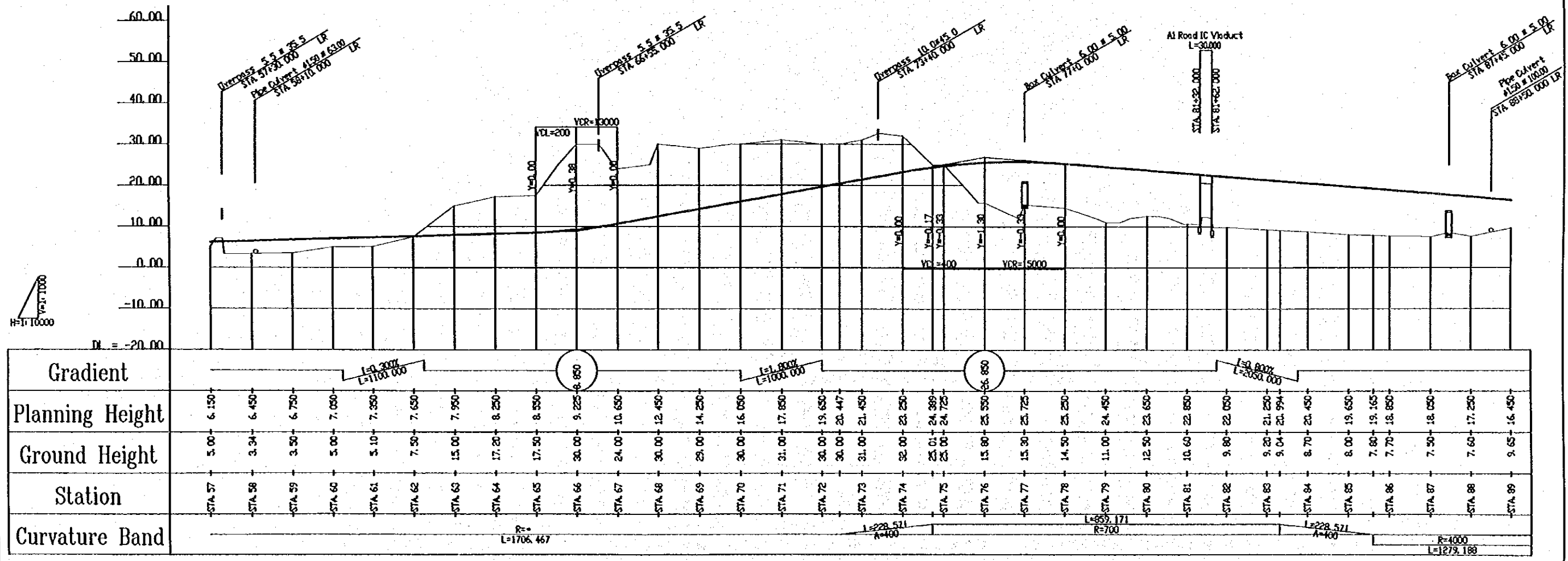
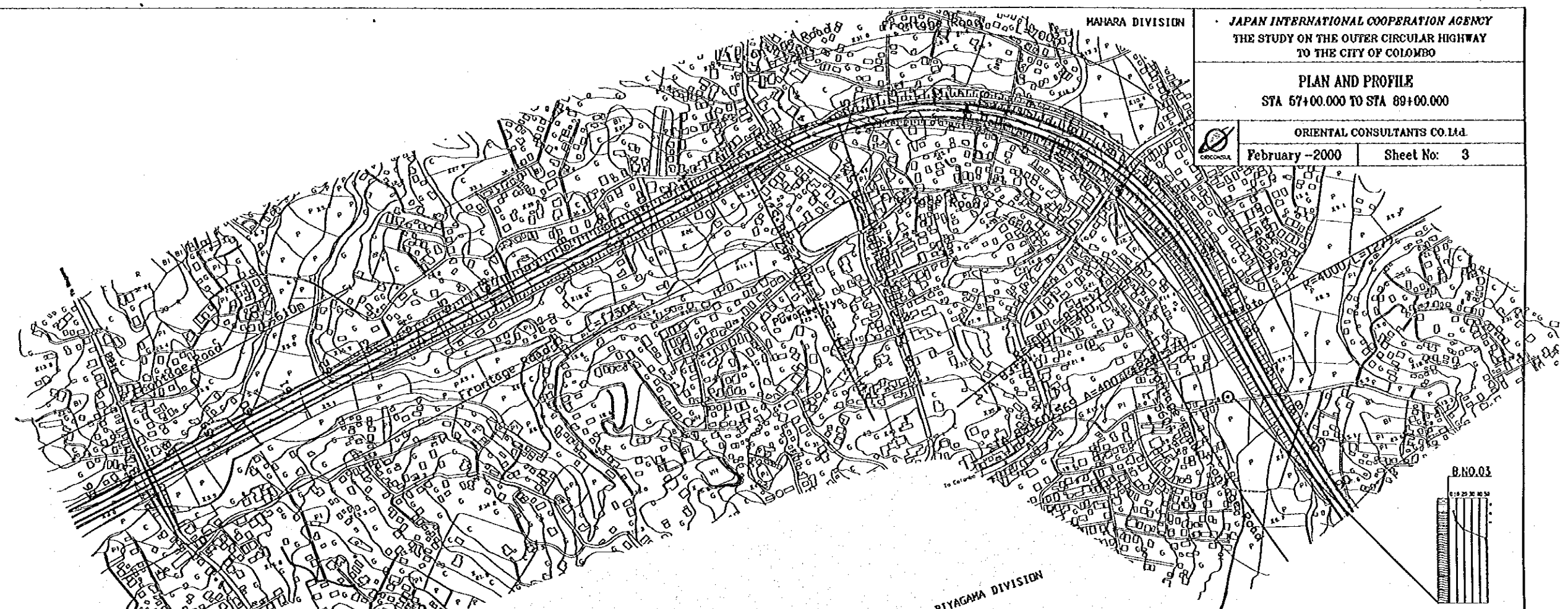
PLAN AND PROFILE  
STA 25+00.000 TO STA 57+00.000

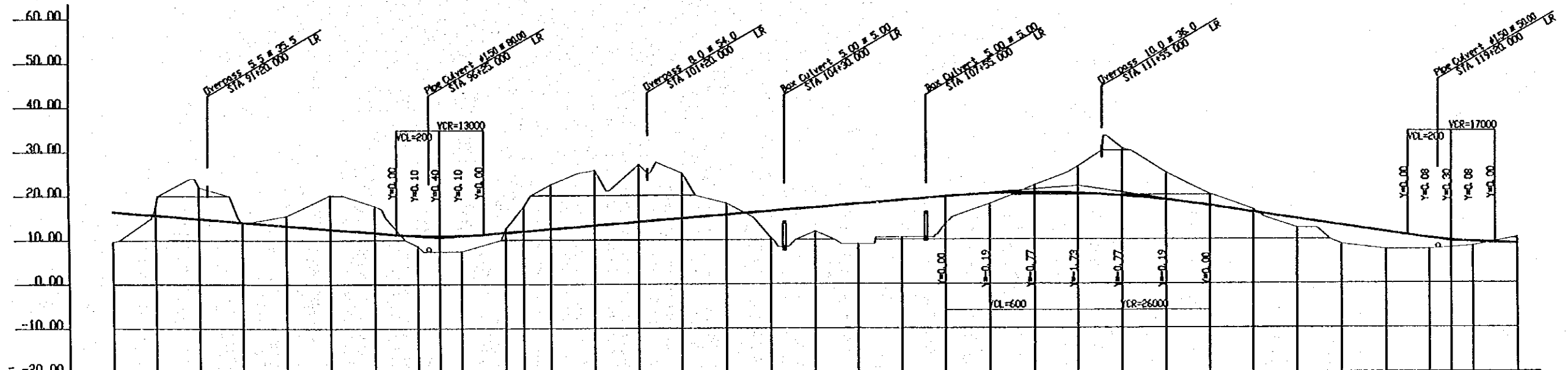
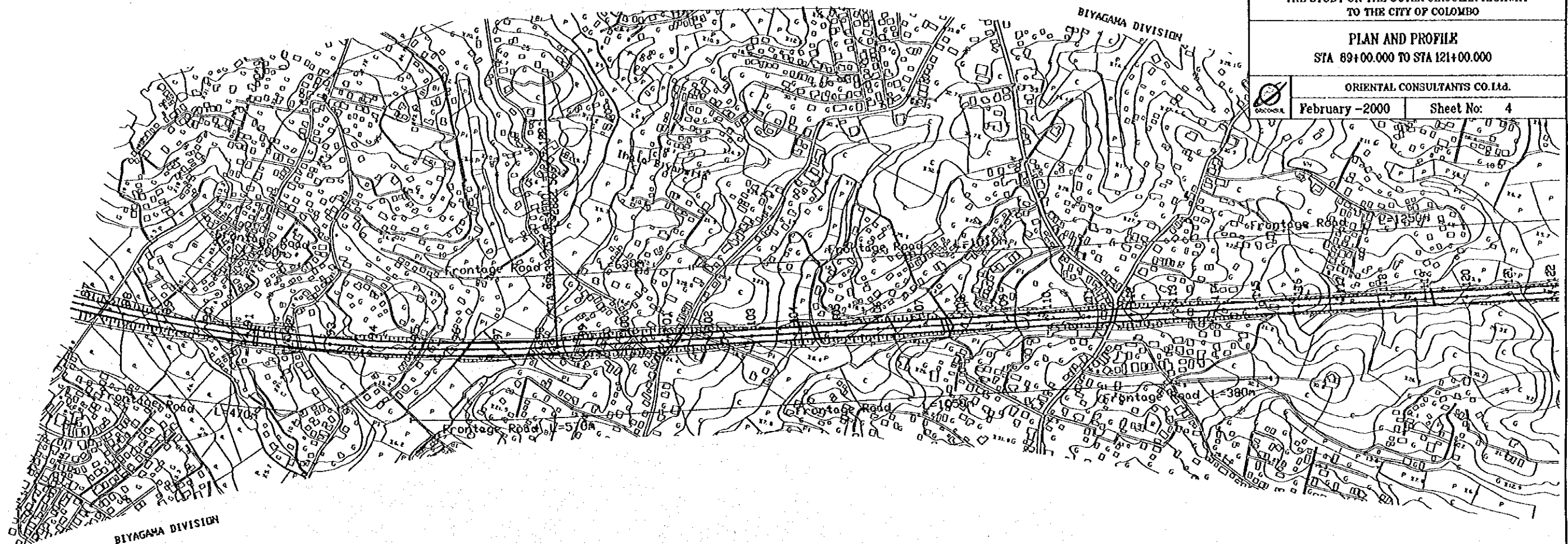
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Sheet No: 2

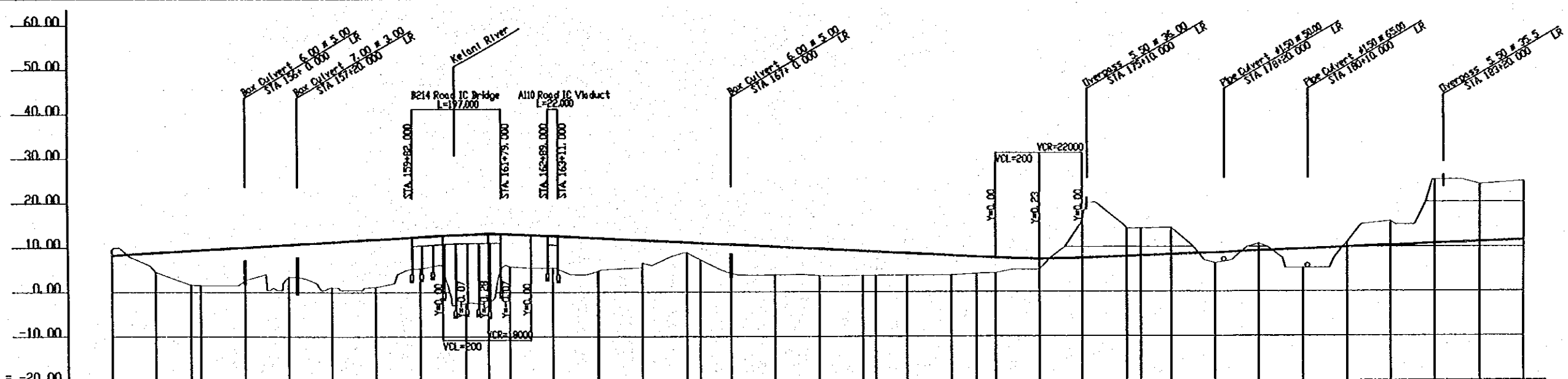
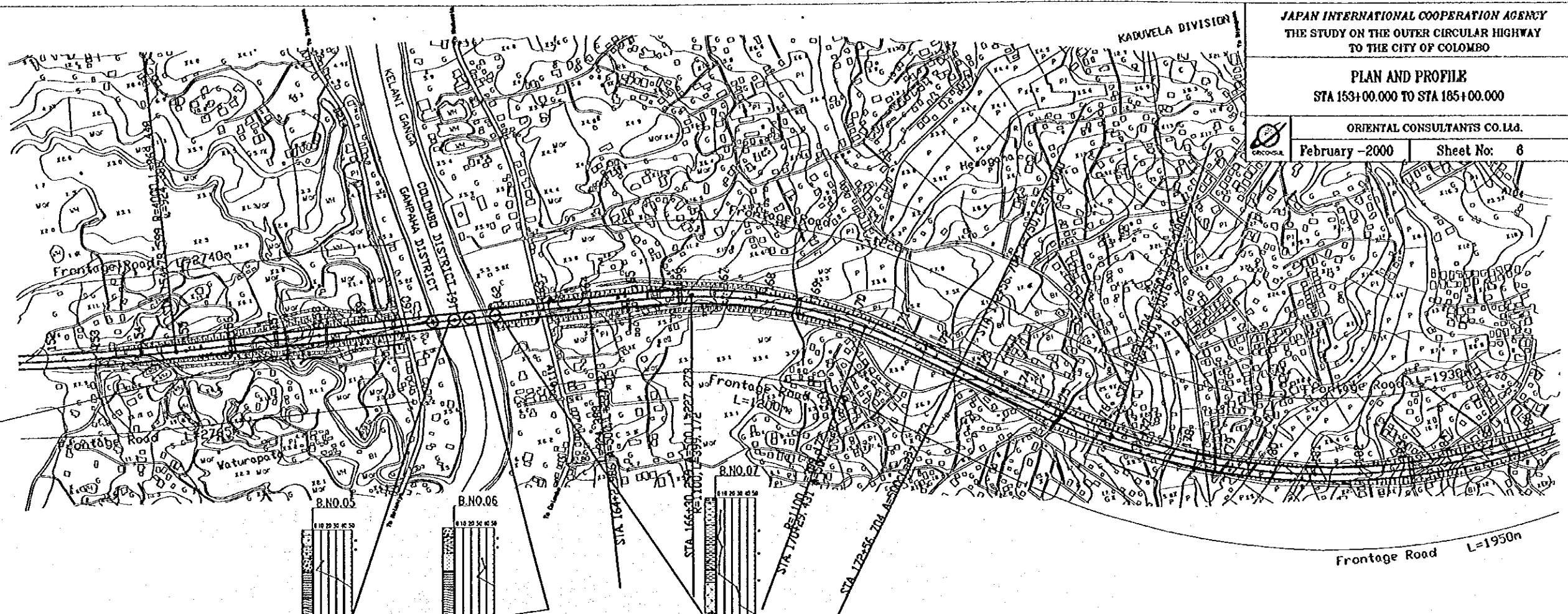






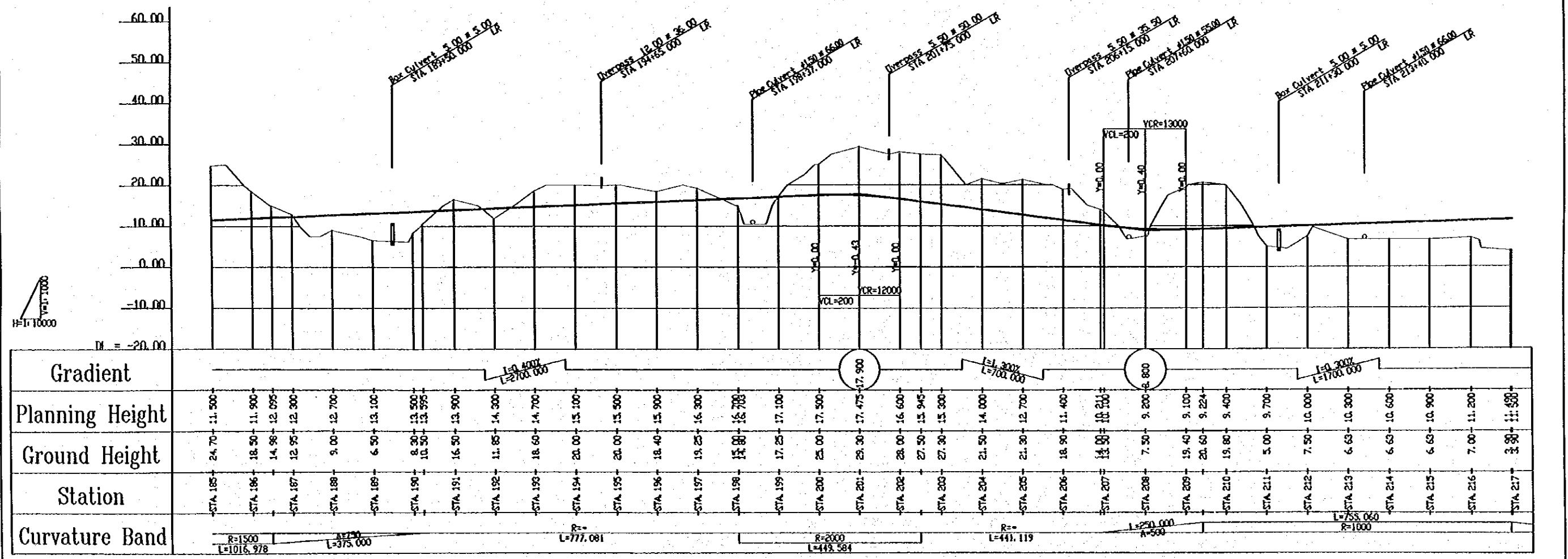
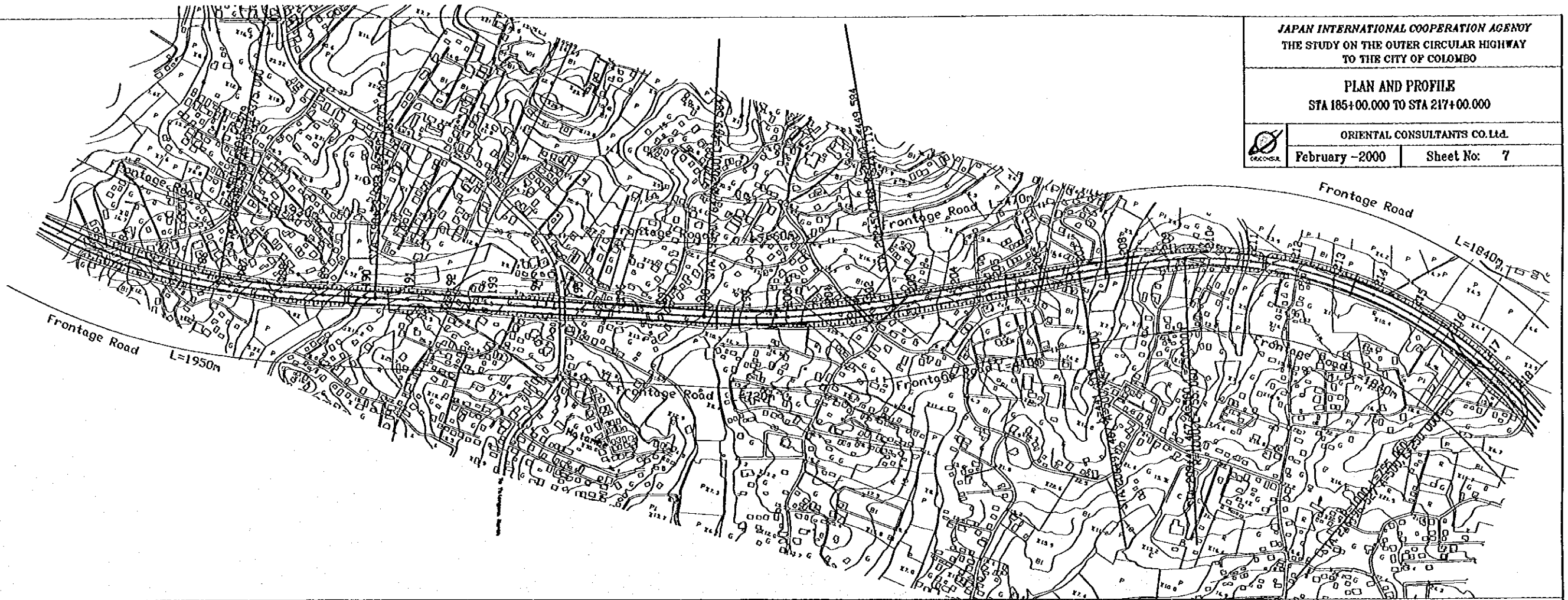
Gradient	-0.80% L=200.000		+0.45% L=145.000		-0.80% L=145.000		-1.50% L=350.000		+0.30% L=170.000																										
Planning Height	16.450	15.650	14.850	14.050	13.250	12.450	11.650	10.850	10.050	9.250	8.450	7.650	6.850	6.050	5.250	4.450	3.650	2.850	2.050	1.250	0.450														
Ground Height	9.65	17.50	22.00	13.80	15.50	20.20	17.70	8.60	7.40	7.40	12.50	17.50	22.50	25.70	27.00	25.00	18.20	10.30	11.85	9.00	10.50	13.35	18.00	22.20	26.40	30.50	25.00	16.70	12.50	8.80	7.60	7.95	8.30	10.25	
Station	STA 89	STA 90	STA 91	STA 92	STA 93	STA 94	STA 95	STA 96	+30	STA 97	STA 98	STA 99	STA 100	STA 101	STA 102	STA 103	STA 104	STA 105	STA 106	STA 107	STA 108	STA 109	STA 110	STA 111	STA 112	STA 113	STA 114	STA 115	STA 116	STA 117	STA 118	STA 119	+50	STA 120	STA 121
Curvature Band	R=4000 L=1279.188																				R=1000 L=2882.566														

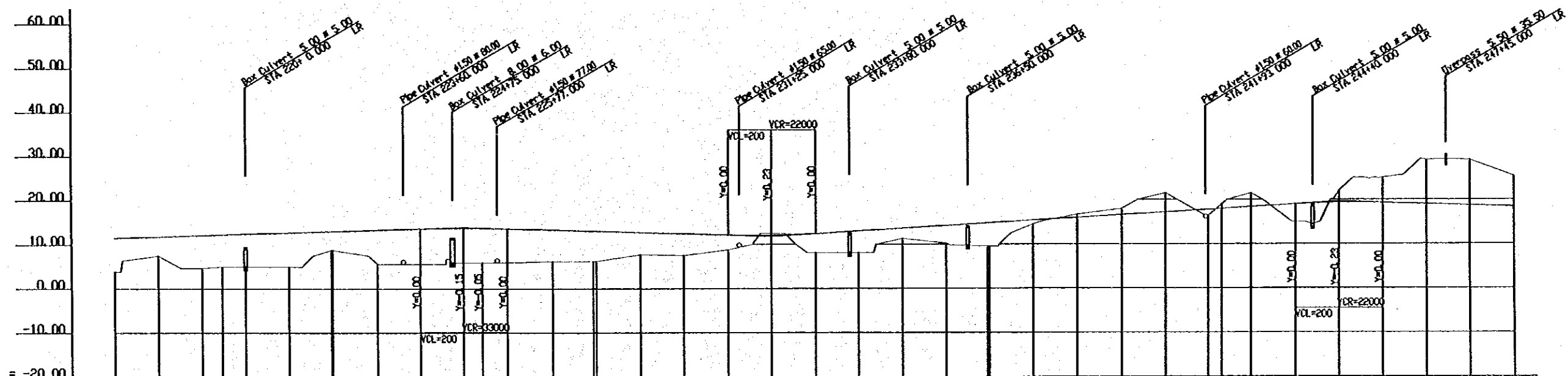
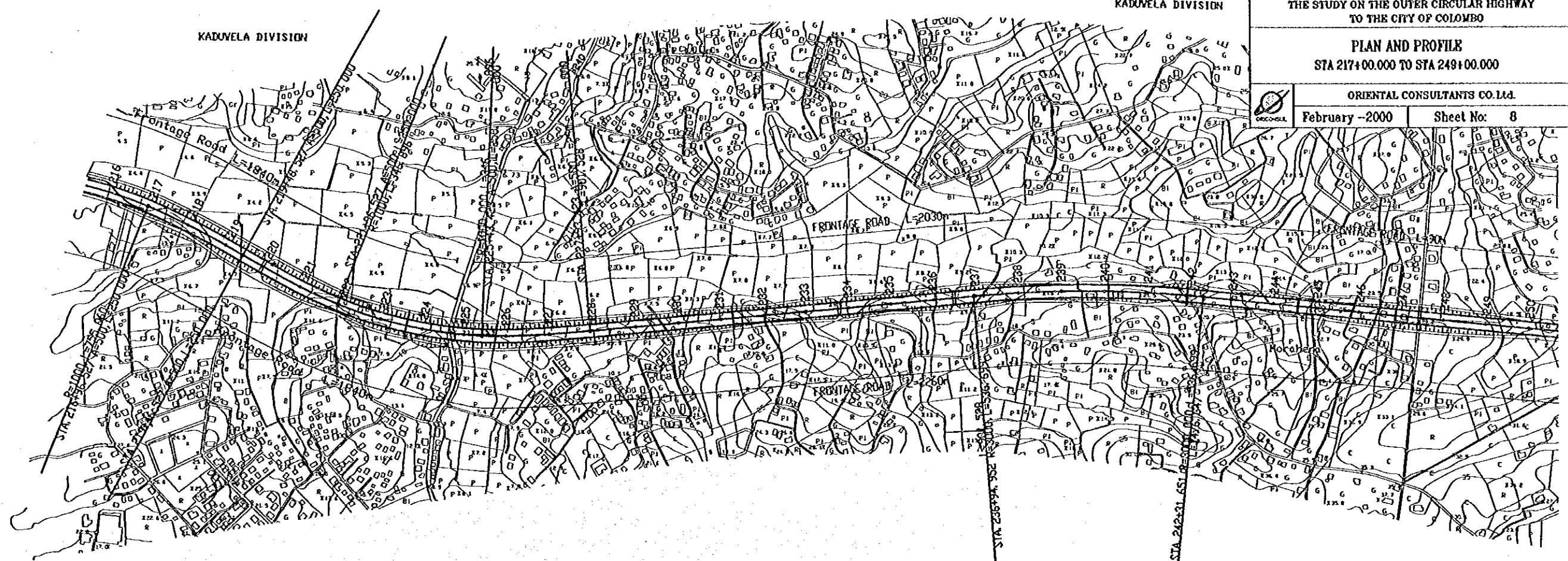




Gradient	L=0.600% L=1250.000		L=0.500% L=1250.000		L=0.400% L=2700.000	
Planning Height	8.250	8.850	9.322	9.450	10.050	11.250
Ground Height	9.50	4.50	1.50	9.450	2.70	10.050
Station	STA 153	STA 154	STA 155	STA 156	STA 157	STA 158
Curvature Band	R=4000 L=863.448		R=1100 L=924.387		R=1500 L=1016.978	



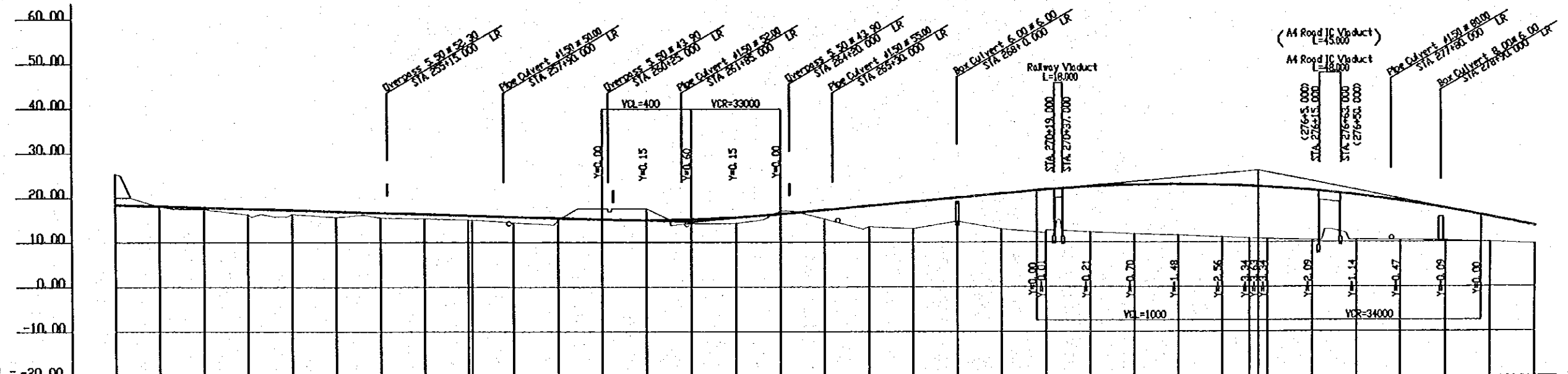
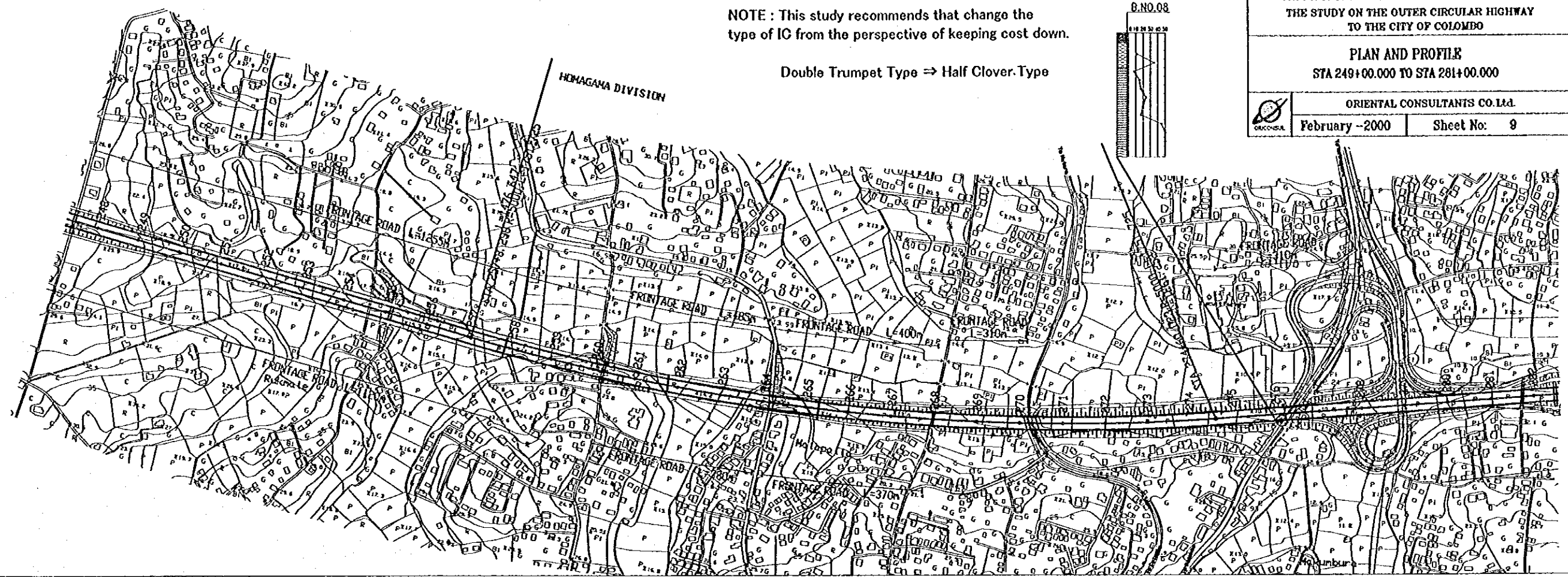
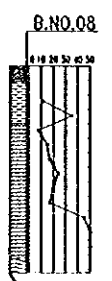




Gradient																																			
Planning Height	3.90	7.50	4.70	5.00	5.00	8.75	5.60	5.60	5.90	5.90	5.90	6.20	6.20	7.70	7.50	8.75	12.50	8.10	8.10	11.25	10.20	8.50	14.50	16.70	18.00	21.50	16.40	18.99	21.50	15.00	22.10	25.00	25.00	26.00	26.30
Ground Height	3.90	7.50	4.70	5.00	5.00	8.75	5.60	5.60	5.90	5.90	5.90	6.20	6.20	7.70	7.50	8.75	12.50	8.10	8.10	11.25	10.20	8.50	14.50	16.70	18.00	21.50	16.40	18.99	21.50	15.00	22.10	25.00	25.00	26.00	26.30
Station	STA 217	STA 218	STA 219	STA 220	STA 221	STA 222	STA 223	STA 224	STA 225	STA 226	STA 227	STA 228	STA 229	STA 230	STA 231	STA 232	STA 233	STA 234	STA 235	STA 236	STA 237	STA 238	STA 239	STA 240	STA 241	STA 242	STA 243	STA 244	STA 245	STA 246	STA 247	STA 248	STA 249		
Curvature Band																																			

NOTE : This study recommends that change the type of IC from the perspective of keeping cost down.

Double Trumpet Type → Half Clover.Type



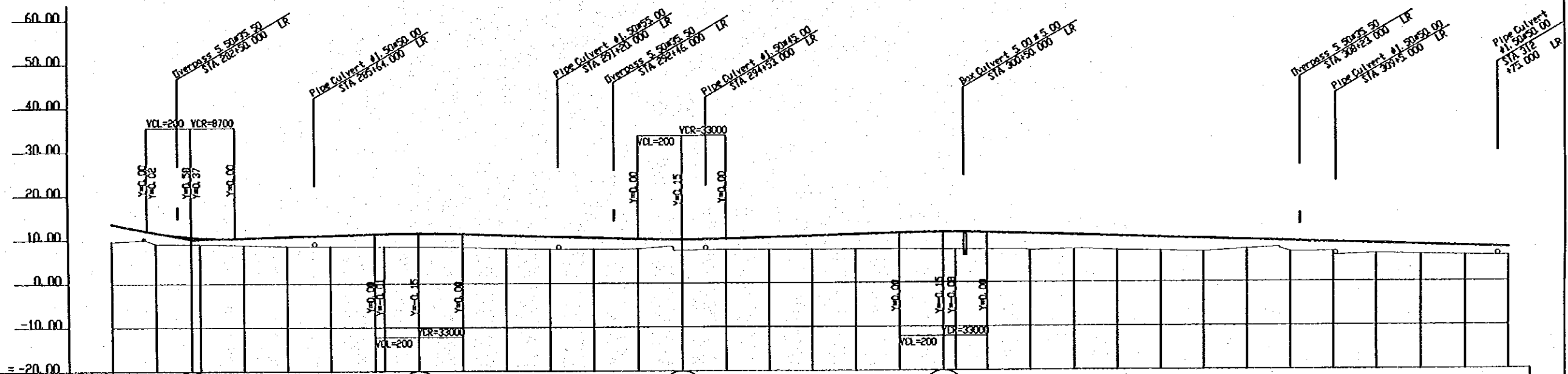
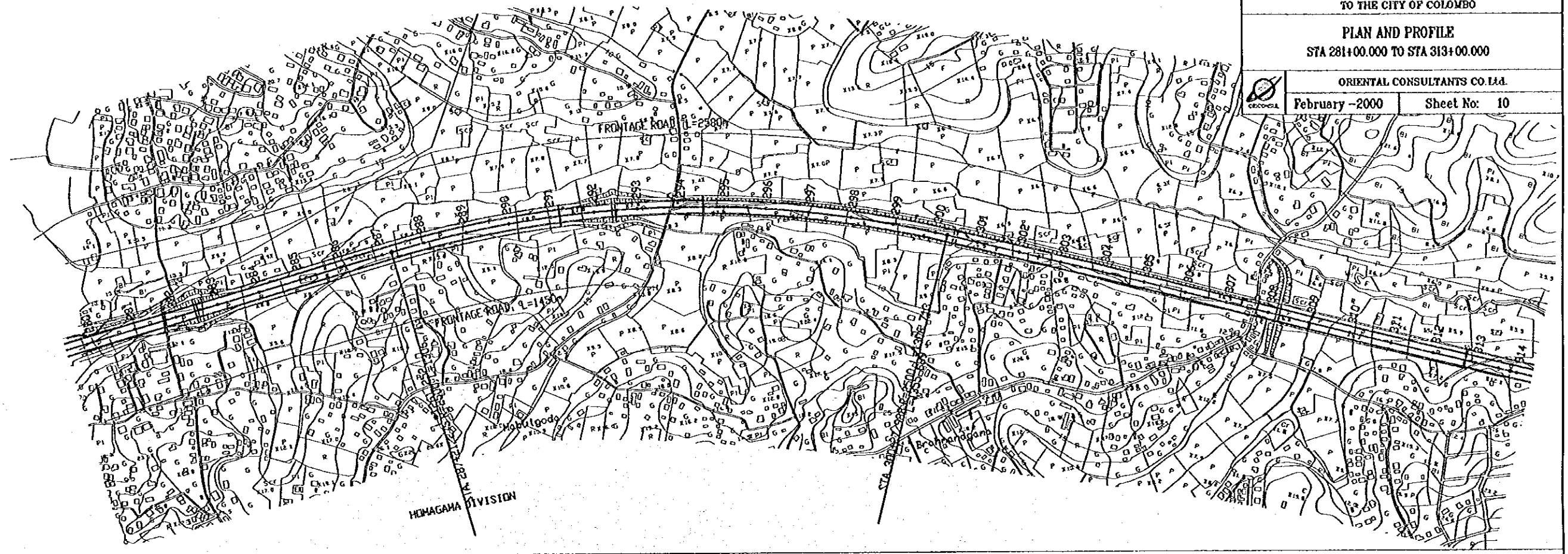
Gradient	R=3000 L=1703.600										R=5000 L=1751.725										R=5000 L=1261.252												
Planning Height	18.400	18.100	17.800	17.500	17.200	16.900	16.600	16.300	16.000	15.700	15.400	15.100	14.800	14.500	14.200	13.900	13.600	13.300	13.000	12.700	12.400	12.100	11.800	11.500	11.200	10.900	10.600	10.300	10.000	9.700	9.400	9.100	
Ground Height	25.30	18.00	17.40	16.20	16.30	15.60	15.50	15.30	15.30	14.40	15.00	17.50	17.50	14.20	14.20	17.00	13.40	13.00	14.60	12.90	12.00	12.22	11.80	11.50	11.10	10.86	10.78	10.75	10.40	10.50	10.00	9.60	
Station	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281
Curvature Band	R=3000 L=1703.600										R=5000 L=1751.725										R=5000 L=1261.252												

PLAN AND PROFILE  
STA 281+00.000 TO STA 313+00.000

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Sheet No. 10



Gradient	Planning Height	Ground Height	Station	Curvature Band
$L=2.000$ $L=300.000$	9.60 - 12.620	9.60 - 12.620	-STA 281	R: L=1261.252
	9.10 - 11.643	9.10 - 11.643	-STA 282	
	9.02 - 10.575 9.00 - 10.448	9.02 - 10.575 9.00 - 10.448	-STA 283	R: L=336.712
	8.80 - 10.380	8.80 - 10.380	-STA 284	
	8.50 - 10.680	8.50 - 10.680	-STA 285	R: L=336.712
	8.50 - 10.980	8.50 - 10.980	-STA 286	
	8.40 - 11.280 8.40 - 11.337	8.40 - 11.280 8.40 - 11.337	-STA 287	R: L=336.712
	8.40 - 11.430 - 11.590	8.40 - 11.430 - 11.590	-STA 288	
	8.30 - 11.280	8.30 - 11.280	-STA 289	R: L=336.712
	8.00 - 10.980	8.00 - 10.980	-STA 290	
	7.80 - 10.680	7.80 - 10.680	-STA 291	R: L=336.712
	7.80 - 10.380	7.80 - 10.380	-STA 292	
	7.80 - 10.080	7.80 - 10.080	-STA 293	R: L=336.712
	7.50 - 9.930 - 9.780	7.50 - 9.930 - 9.780	-STA 294	
	7.60 - 10.080	7.60 - 10.080	-STA 295	R: L=336.712
	7.60 - 10.380	7.60 - 10.380	-STA 296	
	7.60 - 10.680	7.60 - 10.680	-STA 297	R: L=336.712
	7.60 - 10.980	7.60 - 10.980	-STA 298	
	7.60 - 11.280	7.60 - 11.280	-STA 299	R: L=336.712
	7.50 - 11.430 - 11.580 7.50 - 11.418	7.50 - 11.430 - 11.580 7.50 - 11.418	-STA 300	
	7.50 - 11.280	7.50 - 11.280	-STA 301	R: L=336.712
	7.20 - 10.980	7.20 - 10.980	-STA 302	
	7.50 - 10.680	7.50 - 10.680	-STA 303	R: L=336.712
	7.20 - 10.380	7.20 - 10.380	-STA 304	
	7.00 - 10.080	7.00 - 10.080	-STA 305	R: L=336.712
	6.80 - 9.780	6.80 - 9.780	-STA 306	
	7.50 - 9.480	7.50 - 9.480	-STA 307	R: L=336.712
	6.80 - 9.180	6.80 - 9.180	-STA 308	
	6.80 - 8.880	6.80 - 8.880	-STA 309	R: L=336.712
	6.30 - 8.580	6.30 - 8.580	-STA 310	
	6.10 - 8.280	6.10 - 8.280	-STA 311	R: L=336.712
	5.90 - 7.980	5.90 - 7.980	-STA 312	
	5.80 - 7.680	5.80 - 7.680	-STA 313	R: L=336.712