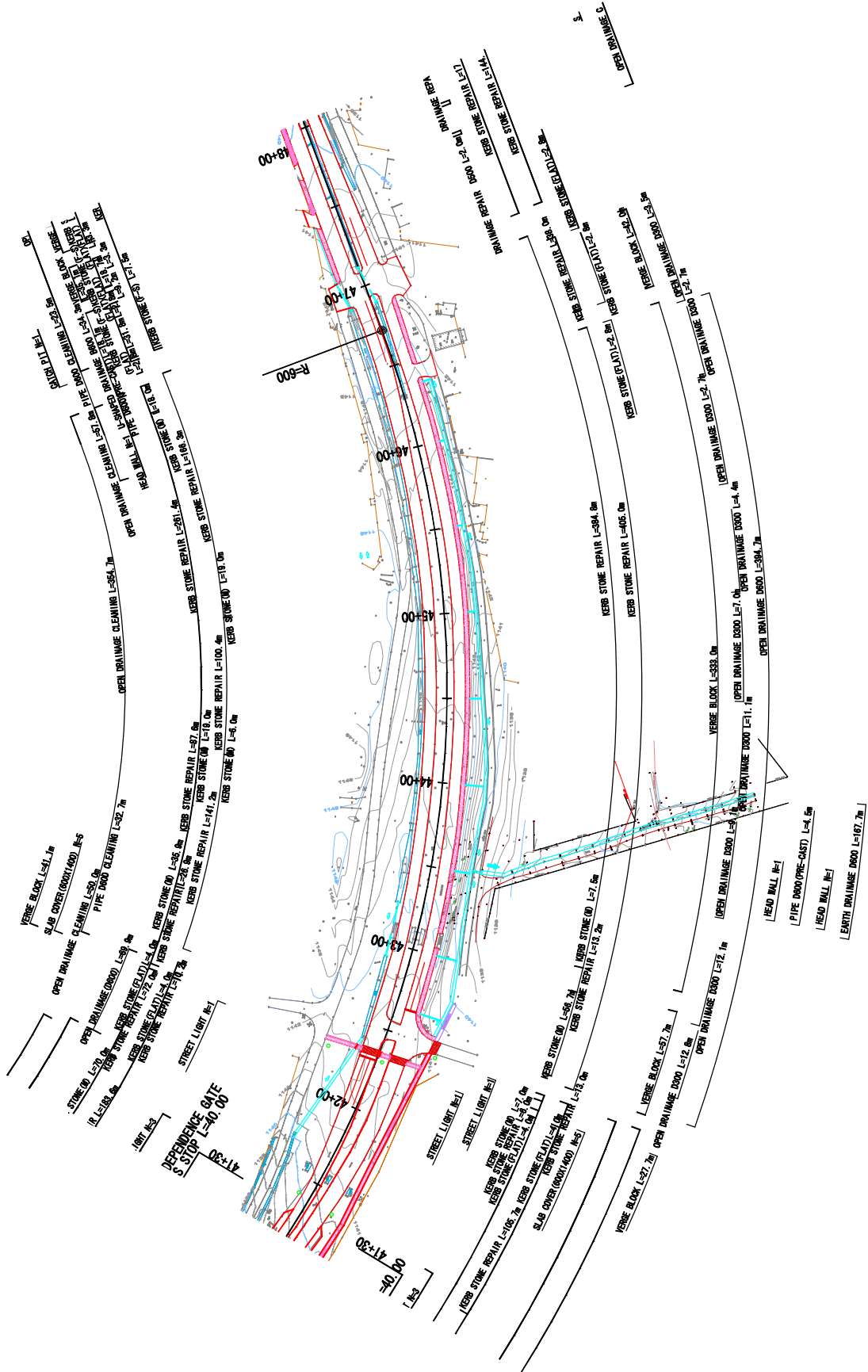
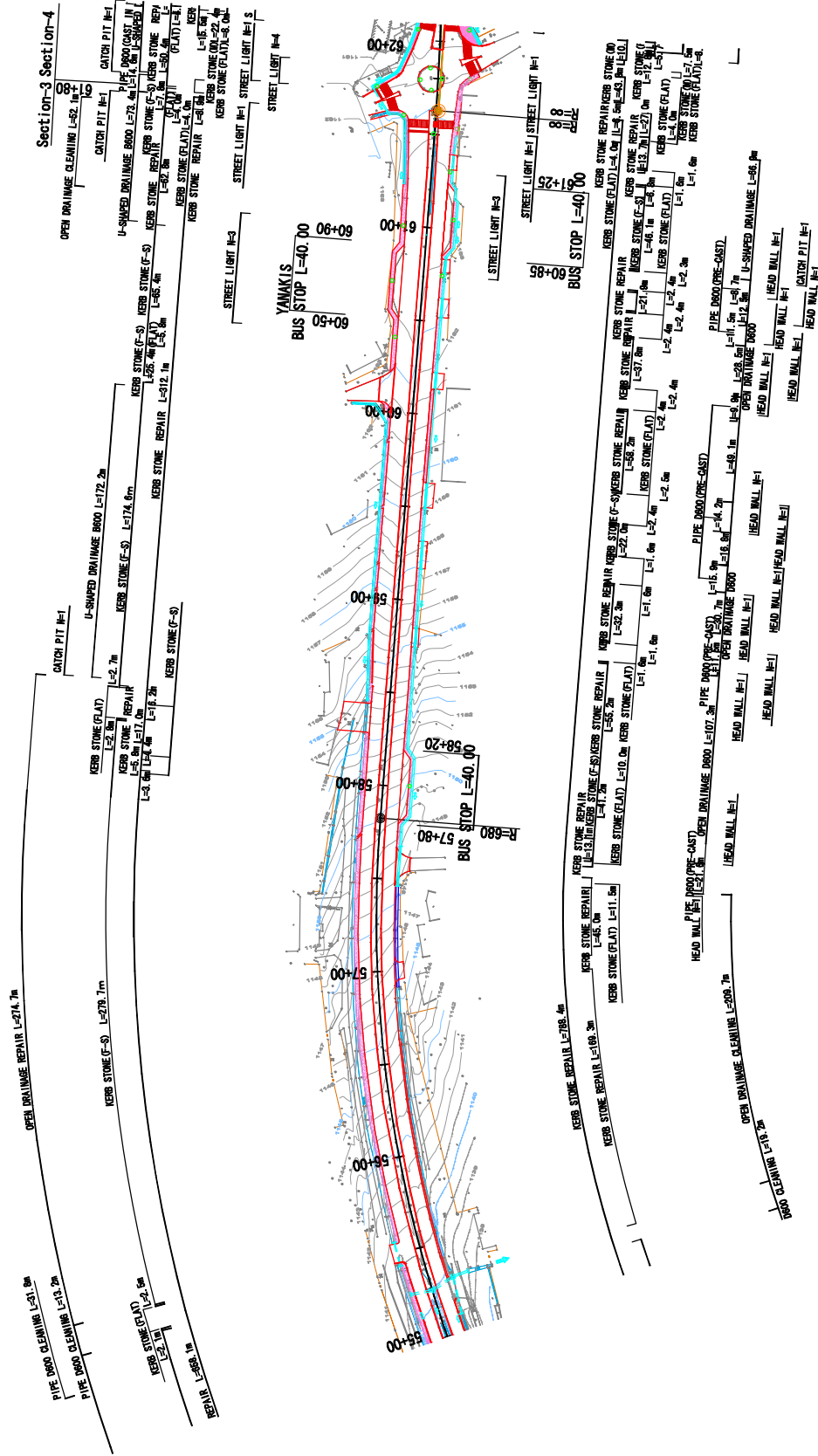


PLAN (2)
S=1:2500
(CHIMBERE HIGHWAY AND LIVINGSTONE AVENUE)



BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE:	Drawing No. P L - 2
			PLAN (2/7) (STA. 41+00~48+00)	
			DATE	

PLAN (4)
S=1:2500
(CHIPIMBERE HIGHWAY AND LIVINGSTONE AVENUE)

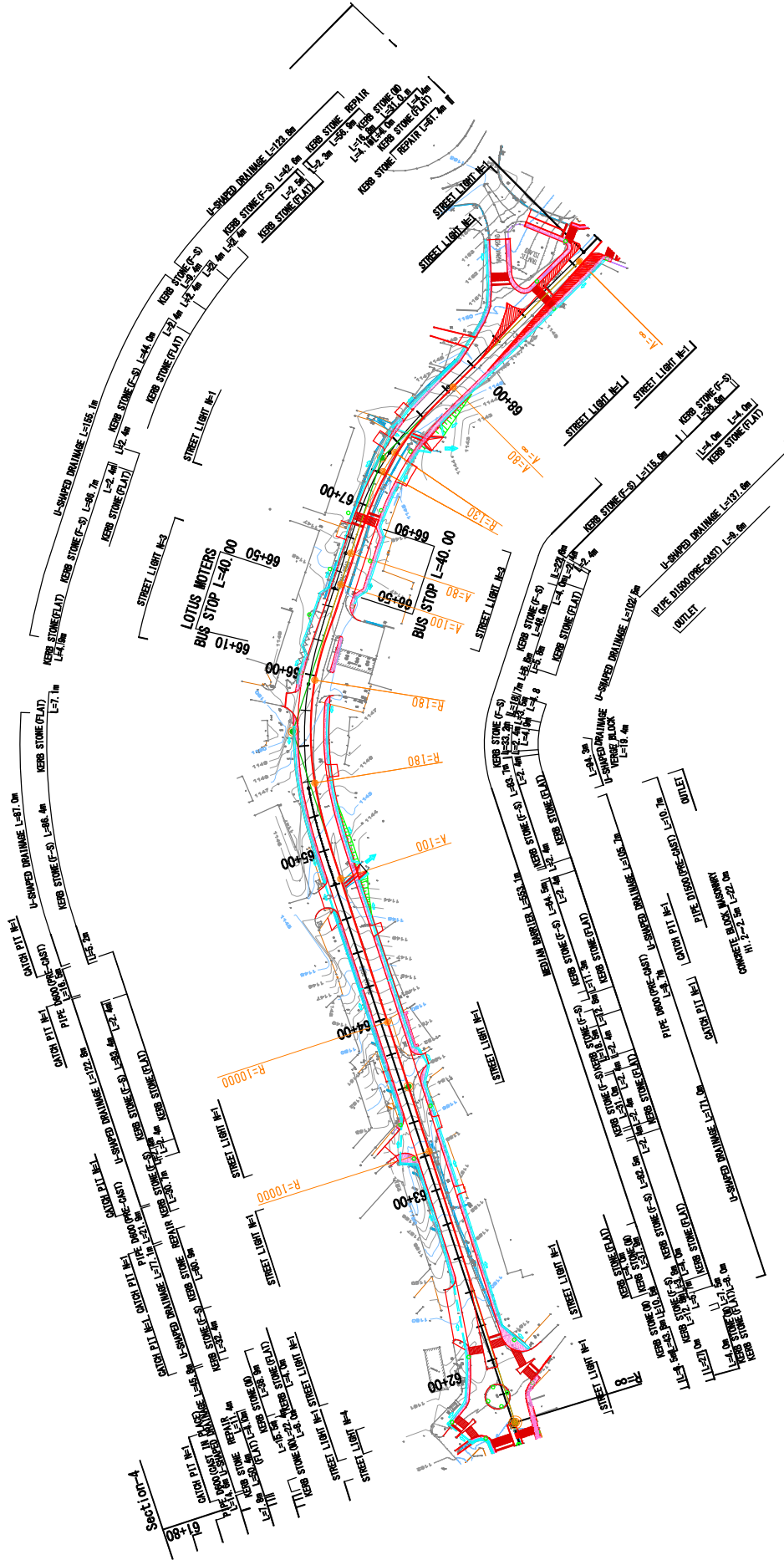


BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE:	PLM (4/7) (STA. 55+00~62+00)	Drawing No. P L - 4
					SCALE S=1:2500
				DATE	

PLAN (5)

S=1:2500

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)



BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

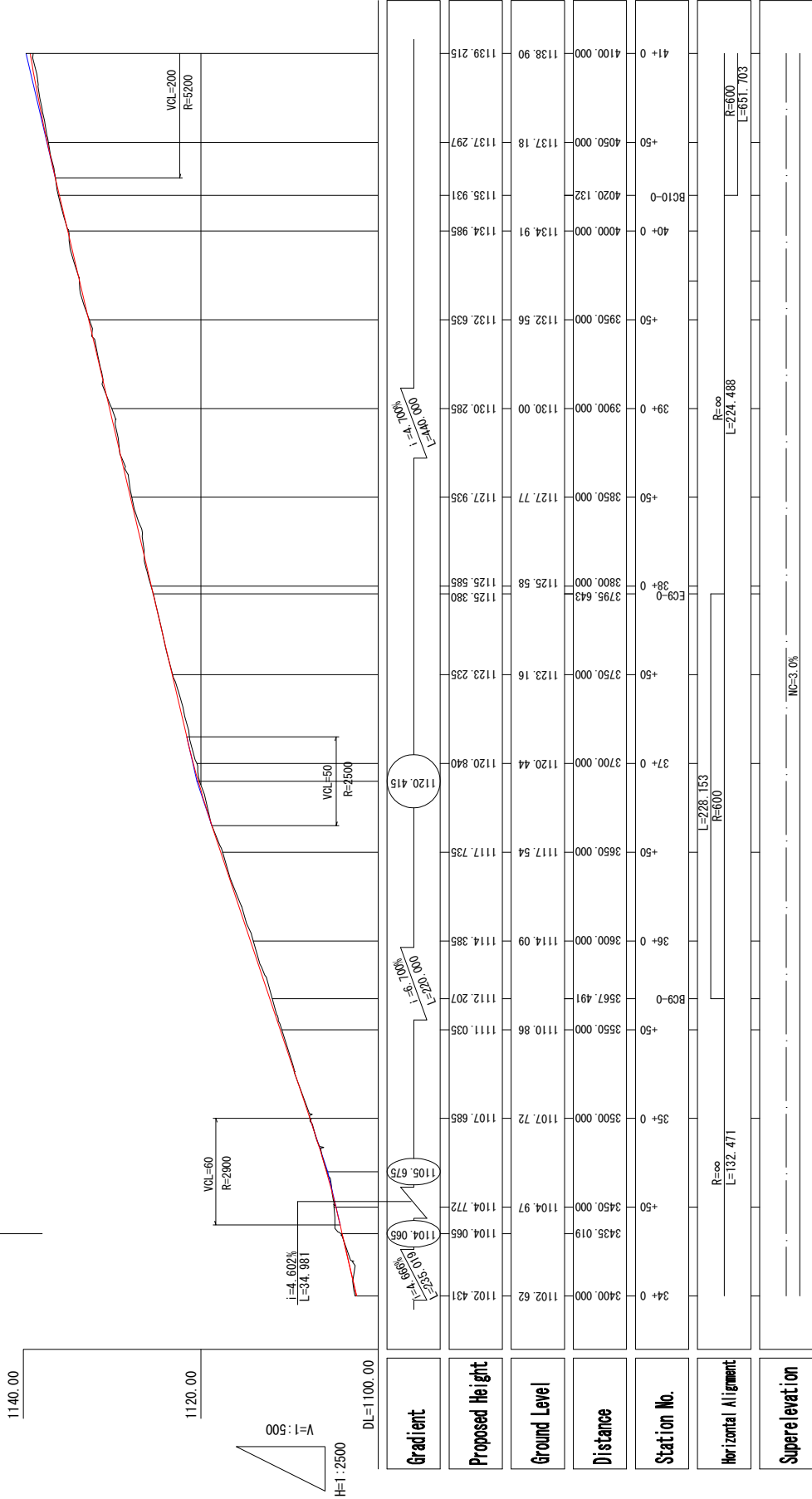
PLAN (5/7)
(STA. 62+00~69+00)

Drawing No.	P L - 5
SCALE	S=1:2500
DATE	

PROFILE (1)

(CHIPEMBE HIGHWAY AND LIVINGSTONE AVENUE)

CH/INTL/RA
NO. 34+35

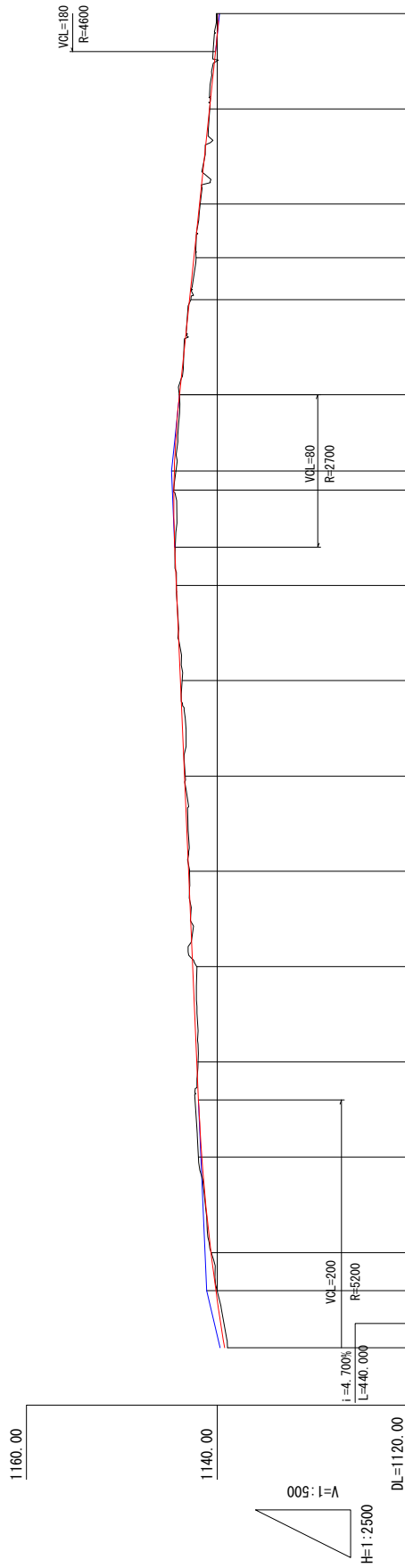


Gradient	Proposed Height	Ground Level	Distance	Station No.	Horizontal Alignment	Superelevation
1120.415	1120.44	1117.735	3700.000	37+0	R=∞ L=228.153	
1123.235	1123.16	1123.235	3750.000	38+0	R=∞ L=224.488	
1125.585	1125.58	1125.585	3800.000	39+0	R=∞ L=224.488	
1127.77	1127.77	1127.935	3850.000	40+0	R=∞ L=224.488	
1130.00	1130.00	1130.285	3900.000	41+0	R=∞ L=224.488	
1132.56	1132.56	1132.635	3950.000	42+0	R=∞ L=224.488	
1134.91	1134.91	1134.985	4000.000	43+0	R=∞ L=224.488	
1137.18	1137.18	1137.297	4050.000	44+0	R=∞ L=224.488	
1138.90	1138.90	1139.215	4100.000	45+0	R=∞ L=224.488	
1140.065	1104.065	1104.065	3435.019	34+0	R=∞ L=132.471	
1104.065	1104.065	1104.772	3450.000	35+0	R=∞ L=132.471	
1104.065	1104.065	1107.885	3500.000	36+0	R=∞ L=132.471	
1104.065	1111.035	1111.035	3550.000	37+0	R=∞ L=132.471	
1104.065	1112.207	1114.385	3600.000	38+0	R=∞ L=132.471	
1104.065	1114.385	1114.385	3650.000	39+0	R=∞ L=132.471	
1104.065	1117.735	1117.735	3700.000	40+0	R=∞ L=132.471	
1104.065	1120.44	1120.44	3750.000	41+0	R=∞ L=132.471	
1104.065	1123.16	1123.16	3800.000	42+0	R=∞ L=132.471	
1104.065	1125.58	1125.58	3850.000	43+0	R=∞ L=132.471	
1104.065	1127.77	1127.77	3900.000	44+0	R=∞ L=132.471	
1104.065	1130.00	1130.00	3950.000	45+0	R=∞ L=132.471	
1104.065	1132.56	1132.56	4000.000	46+0	R=∞ L=132.471	
1104.065	1134.91	1134.91	4050.000	47+0	R=∞ L=132.471	
1104.065	1137.18	1137.18	4100.000	48+0	R=∞ L=132.471	
1104.065	1138.90	1138.90	4150.000	49+0	R=∞ L=132.471	

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: PROFILE (1/7) (STA. 34+00~41+00)	Drawing No. P R - 1
				SCALE H=1:2500 V=1:500
				DATE

PROFILE (2)

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)



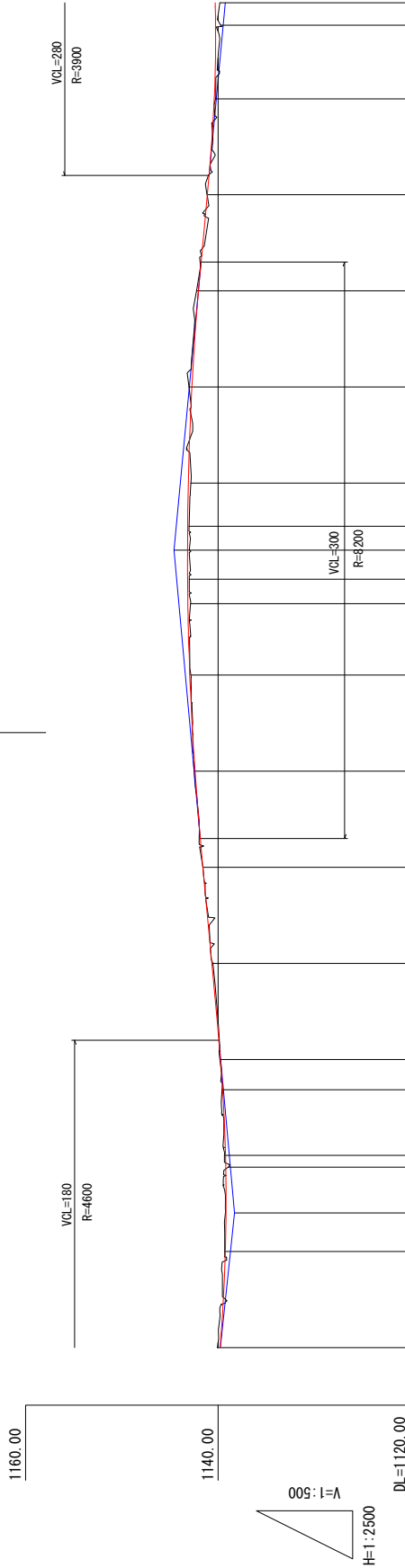
Gradient	Proposed Height	Ground Level	Distance	Station No.	Horizontal Alignment	Superelevation
	1141.095	1139.215	1138.90	41+0		
		1140.653	1140.000	+50		
		1141.611	1142.02	42+0		
		1142.127	1142.000	+50		
		1142.557	1142.15	43+0		
		1142.987	1142.89	+50		
		1143.417	1143.36	44+0		
		1143.847	1143.68	+50		
		1144.277	1144.27	45+0		
		1144.540	1144.56	+50		
		1144.793	1144.76	46+0		
		1143.953	1143.97	+50		
		1142.903	1142.76	47+0		
		1142.444	1141.83	EC10-0		
		1141.853	1141.78	47+0		
		1140.803	1140.79	+50		
		1139.797	1140.08	48+0		

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	Drawing No. P R - 2 SCALE H:1:2500 V:1:500 DATE
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PROFILE (3)

(CHIPIMBERE HIGHWAY AND LIVINGSTONE AVENUE)

Meas. Cont. RA
NO. 51+20



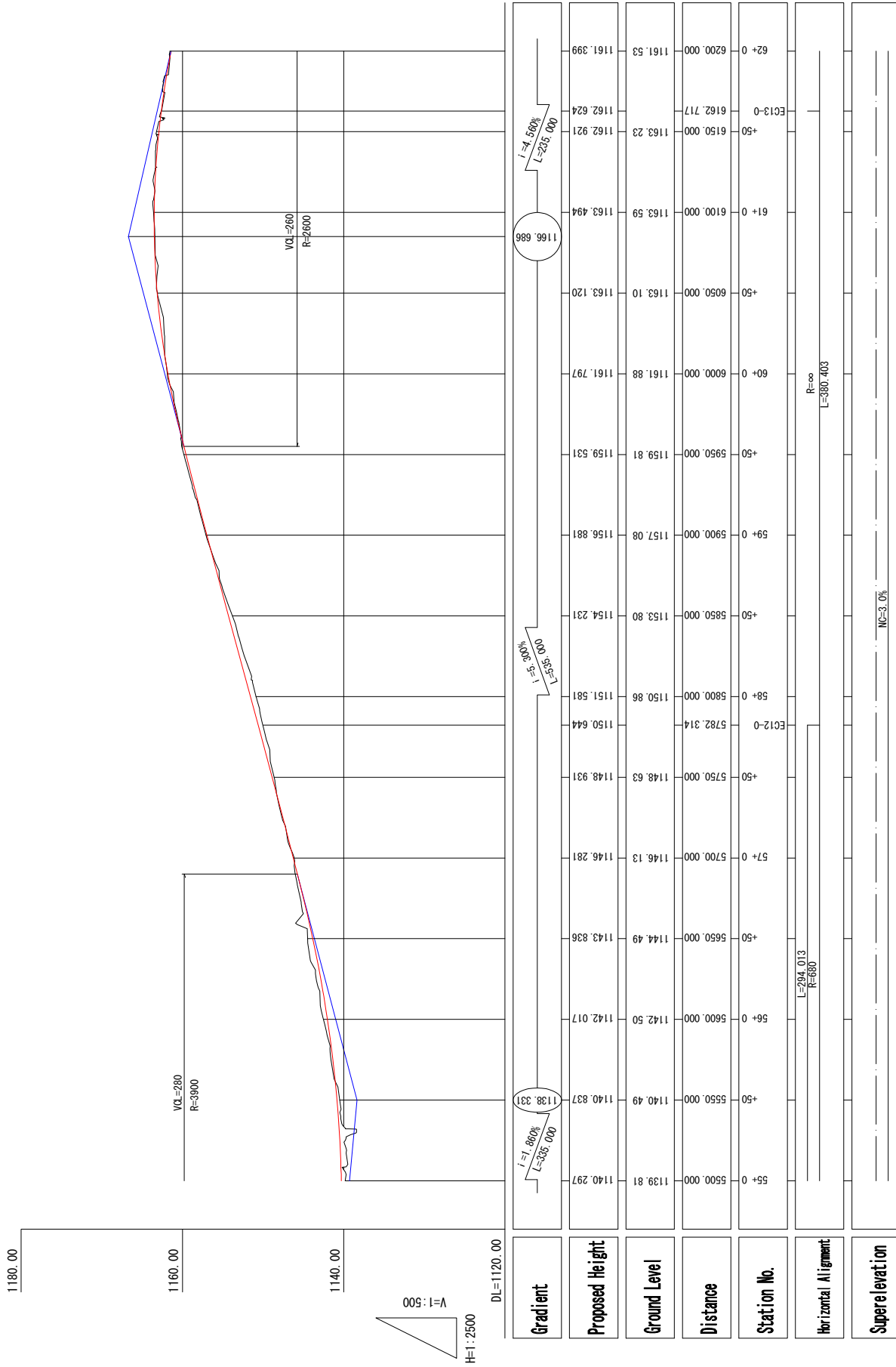
Gradient	Proposed Height	Ground Level	Distance	Station No.	Horizontal Alignment	Superelevation
0.00%	1139.237	1139.237	1139.31	48+0	R=∞ L=222.032	
0.00%	1139.193	1139.193	1139.35	KA1-1		
0.00%	1139.221	1139.221	1139.49	49+0	A=110 L=46-333	
0.00%	1139.523	1139.523	4934.201	KE1-1		
0.00%	1139.750	1139.82	4950.000	50+0		
0.00%	1140.649	1140.55	5000.000	51+0	R=300 L=282-389	
0.00%	1141.559	1141.58	5050.000	52+0		
0.00%	1143.171	1142.99	5200.000	KE1-2	A=110 L=46-333	
0.00%	1143.170	1143.170	5227.523	KA1-2		
0.00%	1143.100	1142.83	5250.000	53+0		
0.00%	1142.722	1143.03	5300.000	54+0		
0.00%	1142.037	1142.22	5350.000	55+0	R=∞ L=260.719	
0.00%	1141.121	1141.15	5400.000	56+0		
0.00%	1140.396	1140.26	5450.000	57+0		
0.00%	1140.263	1140.297	5488.301	BC12-0		
0.00%	5500.000	5500.000	5500.000	58+0		

NC=3.0%

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE:	PROF ILE (3/7) (STA. 48+00'55+00)	Drawing No. P R - 3
				SCALE H=1:2500 V=1:500	DATE

PROFILE (4)

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

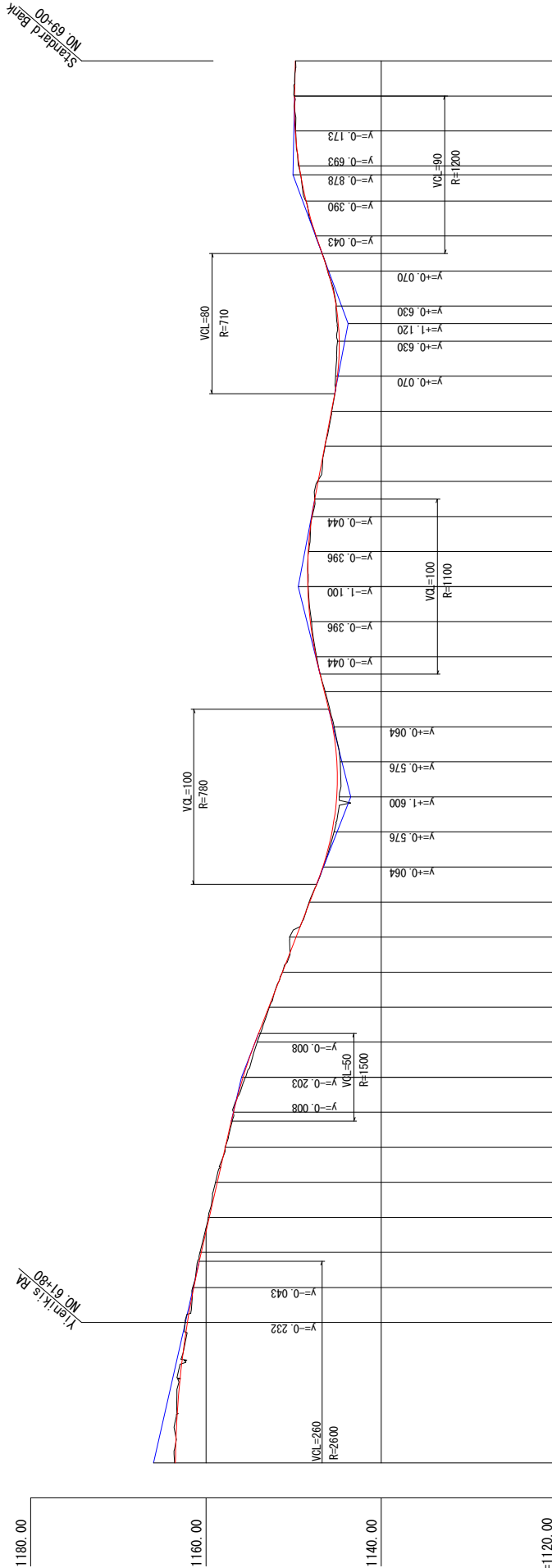


Gradient	Proposed Height	Ground Level	Distance	Station No.	Horizontal Alignment	Superelevation
0.00% L=380.403 I=1	1140.297	1139.81	5500.000	55+0	L=294.013 R=680	NC=3.0%
	1140.837	1140.49	5550.000	+50		
	1142.017	1142.50	5600.000	56+0		
	1143.836	1144.49	5650.000	+50		
	1146.281	1146.13	5700.000	57+0		
	1148.931	1148.63	5750.000	+50	R=∞ L=380.403	
	1150.644	1150.86	5800.000	58+0		
	1154.231	1153.80	5850.000	+50		
	1156.881	1157.08	5900.000	59+0		
	1159.531	1159.81	5950.000	+50		
	1161.797	1161.88	6000.000	60+0	R=∞ L=380.403	
	1163.120	1163.10	6050.000	+50		
	1163.494	1163.59	6100.000	61+0		
	1162.921	1163.23	6150.000	+50		
	1162.624	1162.717	6162.717	EC13-0		
	1161.399	1161.53	6200.000	62+0		

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE:	PROFILE (4/7) (STA. 55+00~62+00)	Drawing No. P R - 4 SCALE H=1:2500 V=1:500 DATE
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PROFILE (5)

(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)



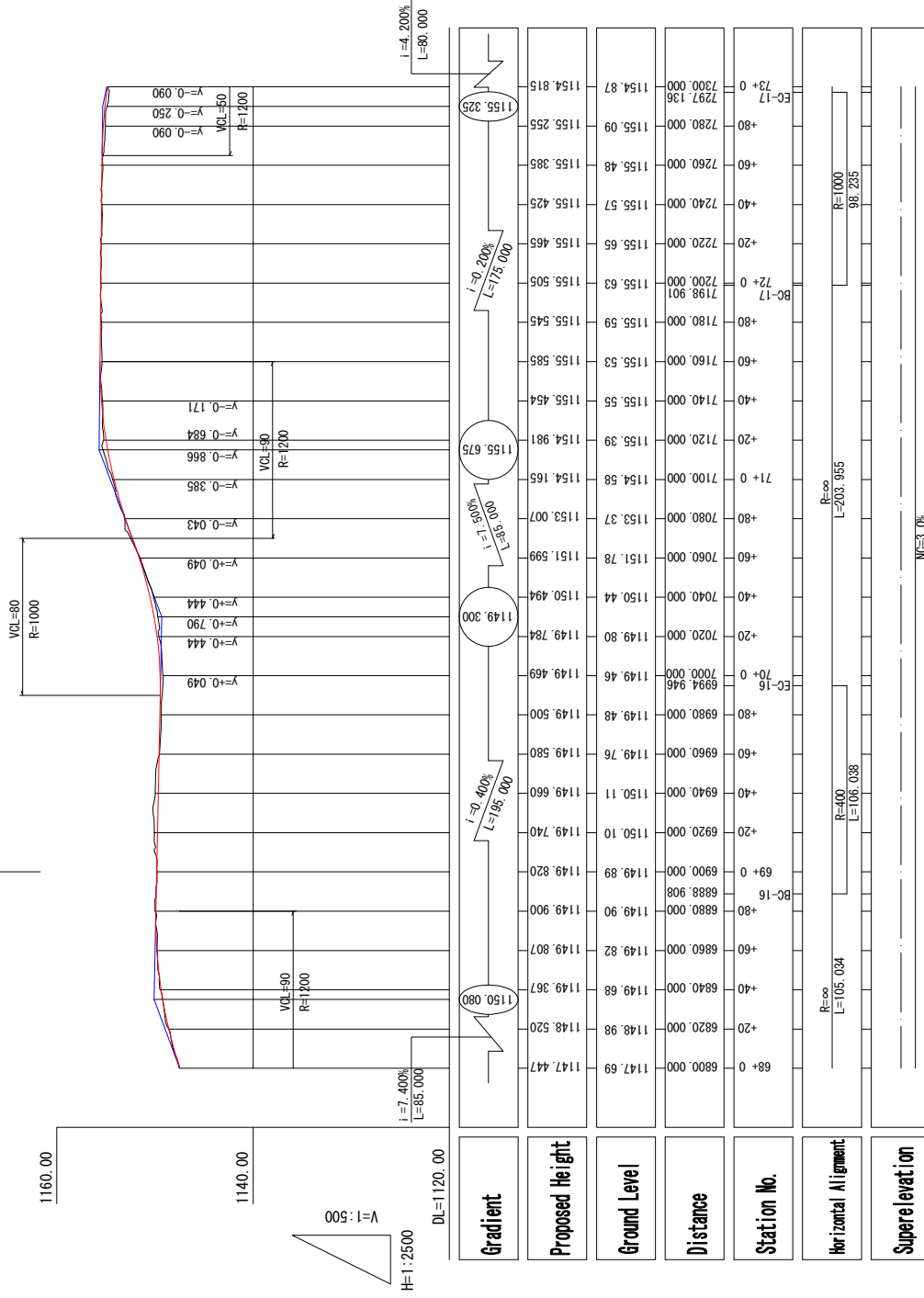
Gradient	Proposed Height	Ground Level	Distance	Station No.	Horizontal Alignment	Superelevation
0.00%	1162.122	1162.122	6162.717	61+0	EC13-0	3.0%
0.00%	1161.399	1161.399	6200.000	62+0		
0.00%	1160.530	1160.530	6220.000	62+20		
0.00%	1159.618	1159.922	6240.000	62+40		
0.00%	1158.706	1158.972	6260.000	62+60		
0.00%	1157.794	1157.862	6280.000	62+80		
0.00%	1156.874	1156.742	6300.000	63+0	BC13-1	
0.00%	1155.957	1155.622	6320.000	63+20		
0.00%	1154.402	1154.312	6340.000	63+40		
0.00%	1152.850	1152.850	6360.000	63+60		
0.00%	1151.290	1151.352	6380.000	63+80	EC13-1	
0.00%	1149.730	1149.730	6400.000	64+0		
0.00%	1148.170	1148.352	6420.000	64+20		
0.00%	1146.610	1146.610	6440.000	64+40		
0.00%	1145.050	1145.050	6460.000	64+60	KA14-1	
0.00%	1143.490	1143.490	6480.000	64+80		
0.00%	1141.930	1141.930	6500.000	65+0		
0.00%	1140.370	1140.370	6520.000	65+20		
0.00%	1138.810	1138.810	6540.000	65+40	KE14-1	
0.00%	1137.250	1137.250	6560.000	65+60		
0.00%	1135.690	1135.690	6580.000	65+80	KA14-2	
0.00%	1134.130	1134.130	6600.000	66+0		
0.00%	1132.570	1132.570	6620.000	66+20	KA14-2	
0.00%	1131.010	1131.010	6640.000	66+40		
0.00%	1129.450	1129.450	6660.000	66+60	KA15-1	
0.00%	1127.890	1127.890	6680.000	66+80		
0.00%	1126.330	1126.330	6700.000	67+0	KA15-1	
0.00%	1124.770	1124.770	6720.000	67+20		
0.00%	1123.210	1123.210	6740.000	67+40	KA15-2	
0.00%	1121.650	1121.650	6760.000	67+60		
0.00%	1120.090	1120.090	6780.000	67+80	KA15-2	
0.00%	1118.530	1118.530	6800.000	68+0		
0.00%	1116.970	1116.970	6820.000	68+20		
0.00%	1115.410	1115.410	6840.000	68+40		
0.00%	1113.850	1113.850	6860.000	68+60		
0.00%	1112.290	1112.290	6880.000	68+80	BC-16	
0.00%	1110.730	1110.730	6900.000	69+0		

Drawing No.	P R - 5
	H=1:2500 V=1:500
SCALE	DATE
TITLE:	
THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	

PROFILE (6)

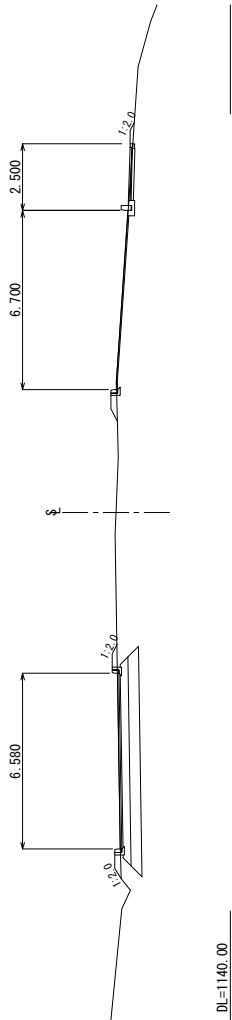
(CHIPEMBERE HIGHWAY AND LIVINGSTONE AVENUE)

Standard Bank
NO: 69+00



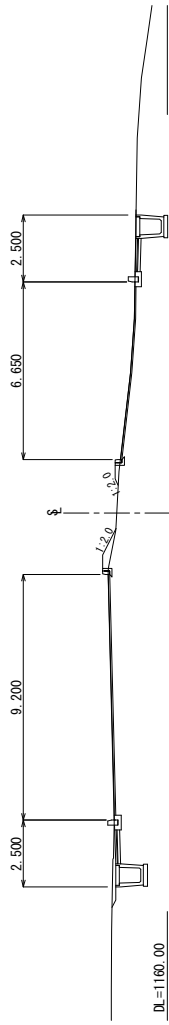
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: PROFILE (6/7) (STA. 68+00+73+00)	Drawing No. P R - 6
				SCALE H=1:2500 V=1:500
				DATE

STA. 45+00
GH=1144.27
PH=



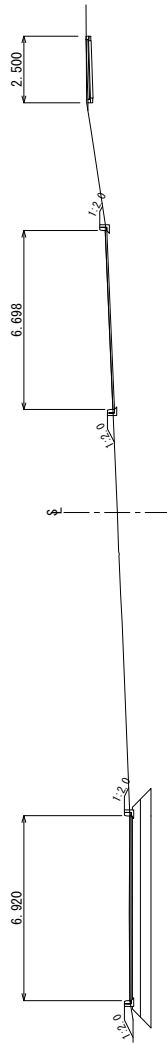
DL=1140.00

STA. 60+00
GH=1161.88
PH=



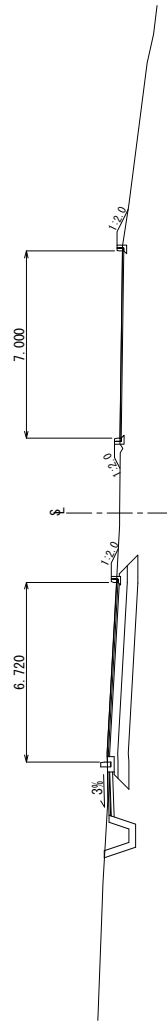
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STA. 40+00
GH=1134.91
PH=



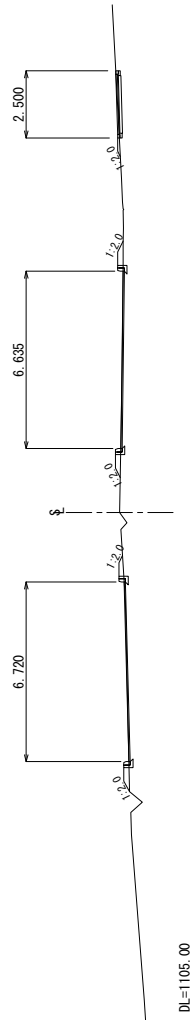
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STA. 55+00
GH=1138.81
PH=



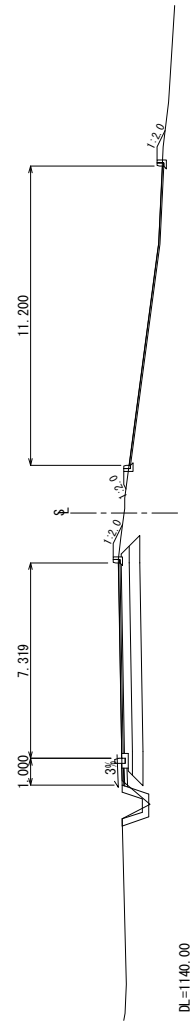
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STA. 35+00
GH=1107.72
PH=



DL=1105.00

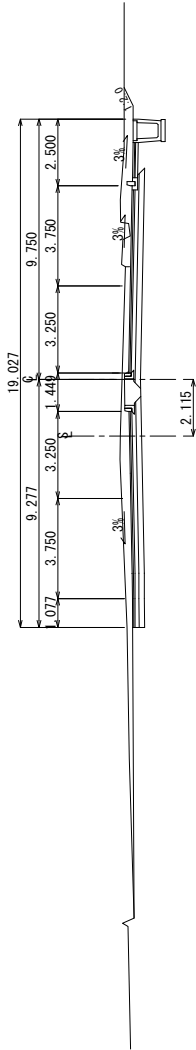
STA. 53+40
GH=1142.56
PH=



DL=1140.00

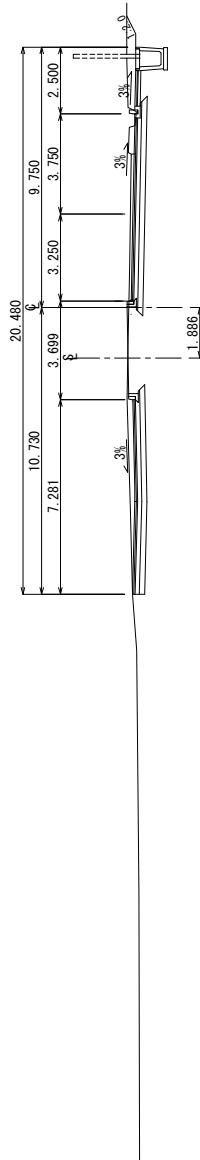
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.35+00~60+00)	Drawing No. C S - 1
				SCALE S=1:200
DATE				

STA. 62+40
 GH=1159.32
 PH=1159.618



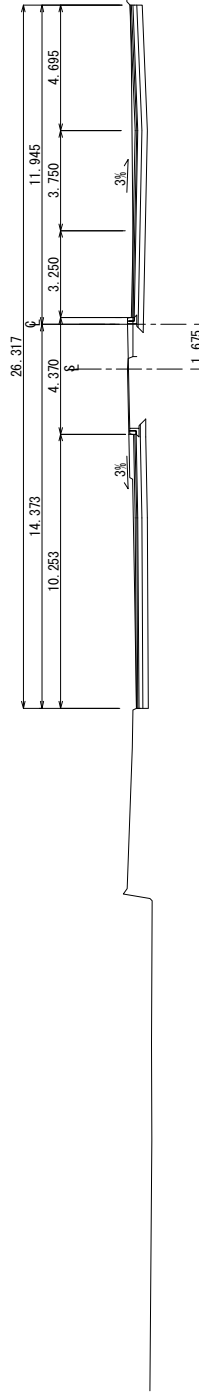
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STA. 62+20
 GH=1160.66
 PH=1160.530



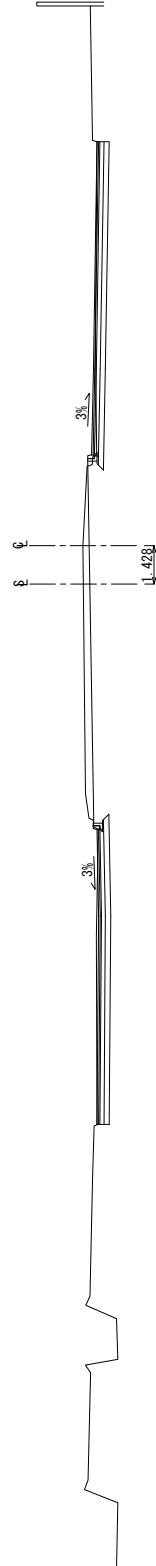
DL=1158.00

STA. 62+00
 GH=1161.56
 PH=1161.399



DL=1158.00

STA. 61+80
 GH=1162.41
 PH=1162.122



DL=1158.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

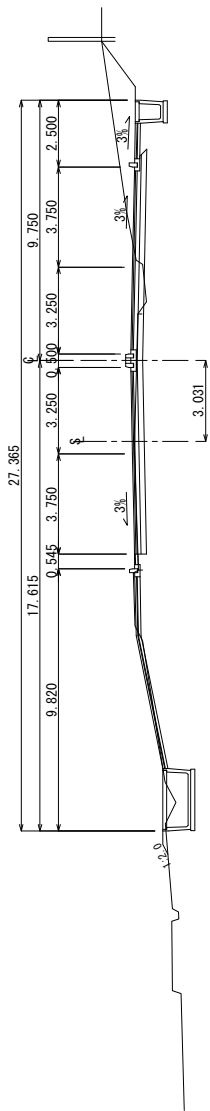
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA. 61+80-62+40)

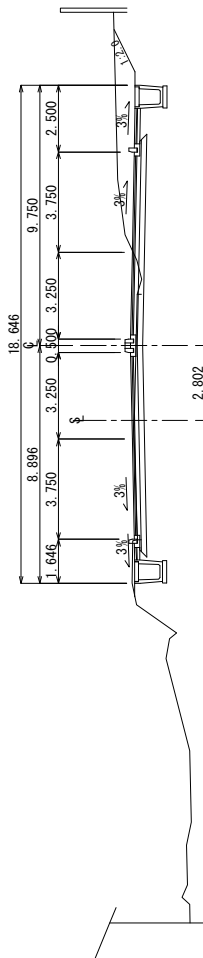
Drawing No.	C S - 2
SCALE	S=1:200
DATE	

STA. 63+20
 GH=1155.62
 PH=1155.767



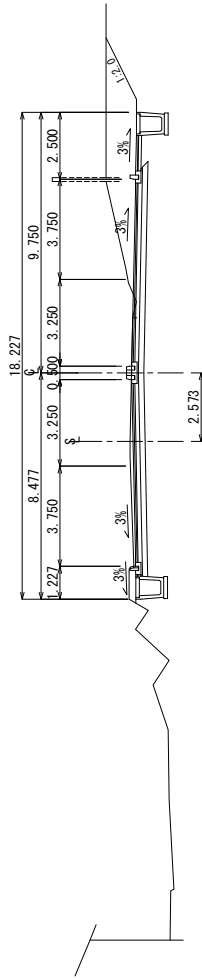
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STA. 63+00
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 PH=1156.874



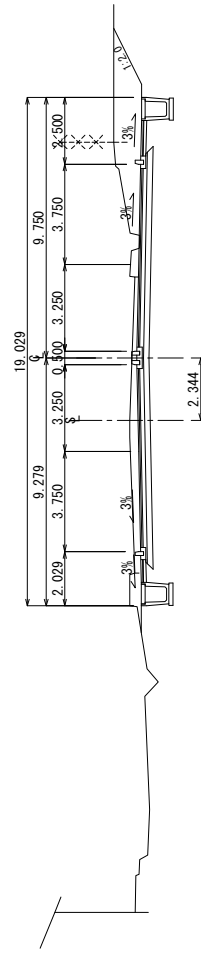
DL=1152.00

STA. 62+80
 GH=1157.86
 PH=1157.794



DL=1155.00

STA. 62+60
 GH=1158.97
 PH=1158.706



DL=1155.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

CROSS SECTION
 (STA. 62+60--63+20)

Drawing No.

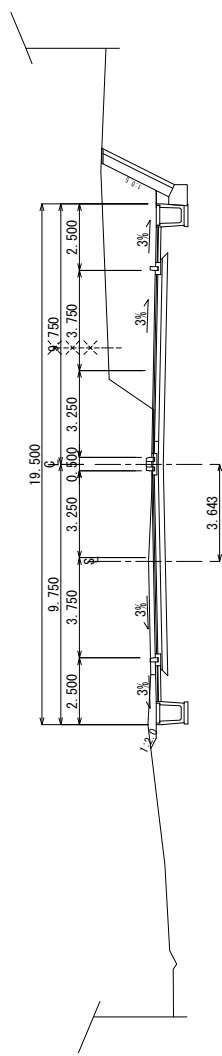
C S - 3

SCALE

S=1:200

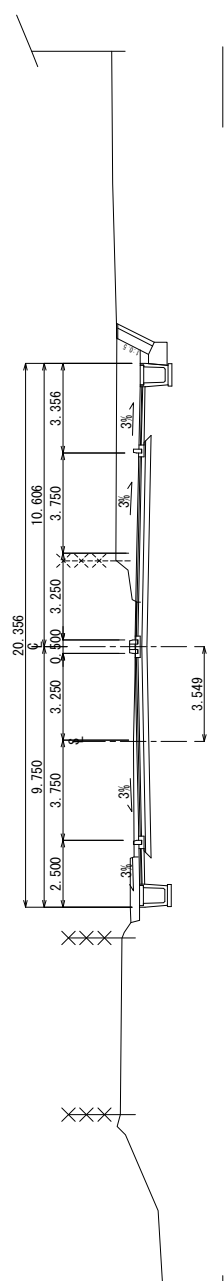
DATE

STA. 64+00
 GHI=143.34
 PHI=148.730



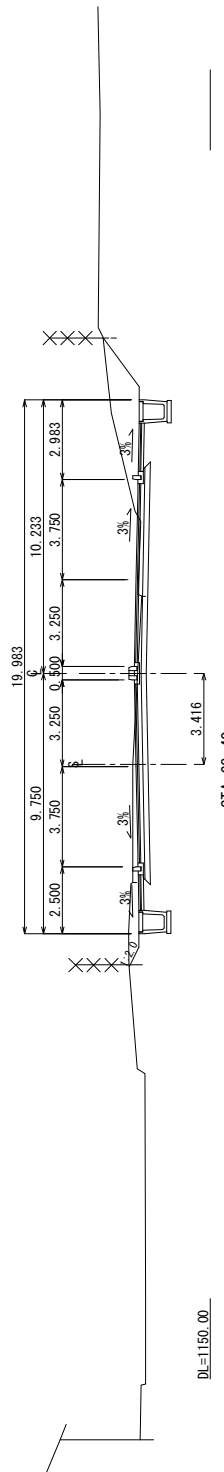
DI=1146.00

STA. 63+80
 GHI=151.35
 PHI=151.290



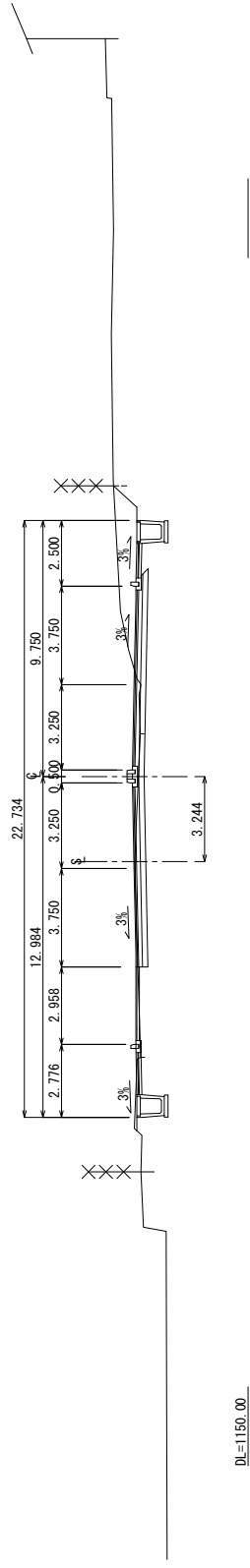
DI=1148.00

STA. 63+60
 GHI=152.90
 PHI=152.850



DI=1150.00

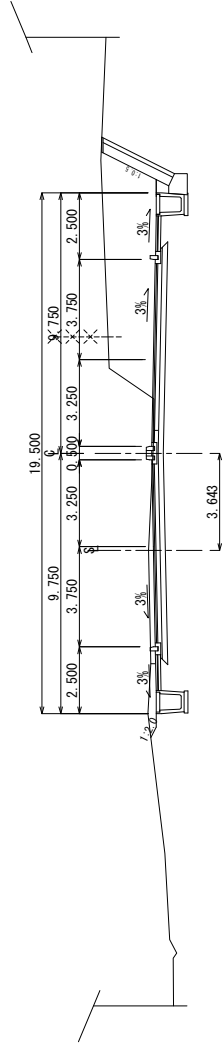
STA. 63+40
 GHI=154.31
 PHI=154.402



DI=1150.00

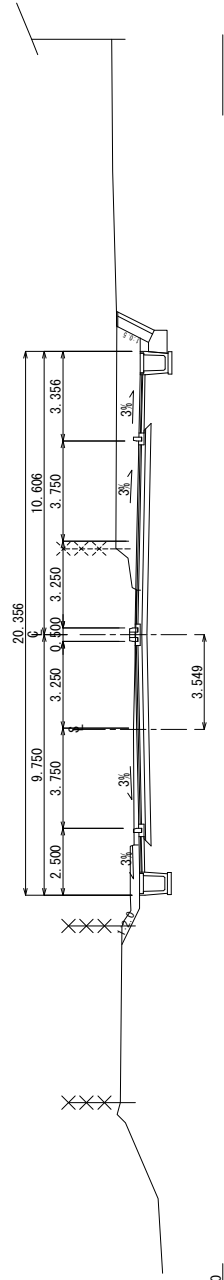
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.63+40-64+00)	Drawing No. C S - 4
				SCALE S=1:200
DATE				

STA. 64+00
 GHI=143.34
 PHI=148.730



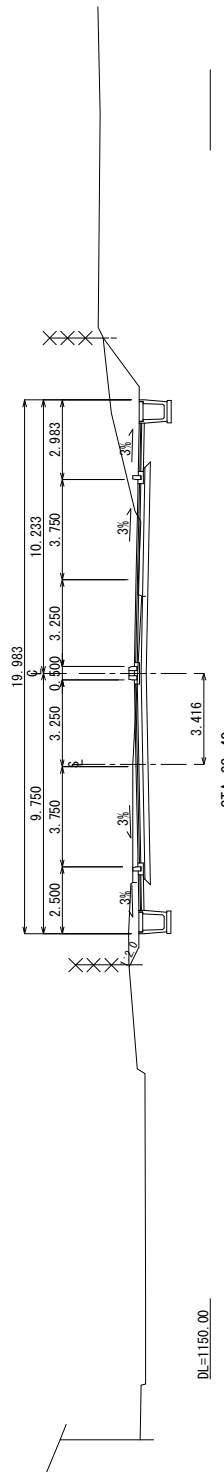
DI=1146.00

STA. 63+80
 GHI=151.35
 PHI=151.290



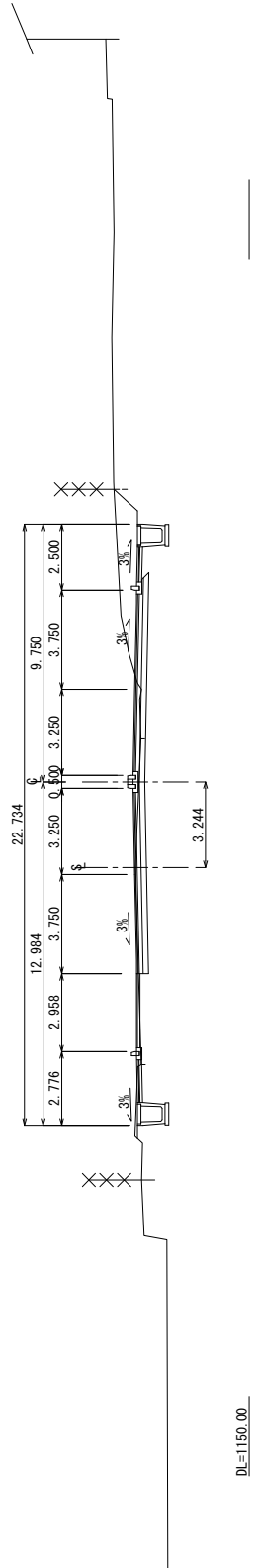
DI=1148.00

STA. 63+60
 GHI=152.90
 PHI=152.850



DI=1150.00

STA. 63+40
 GHI=154.31
 PHI=154.402



DI=1150.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

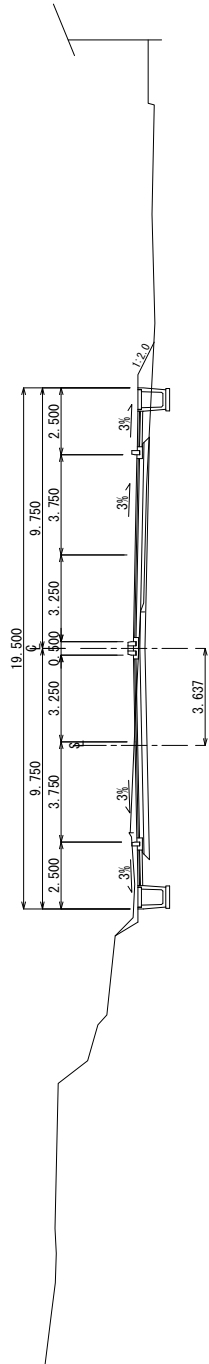
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

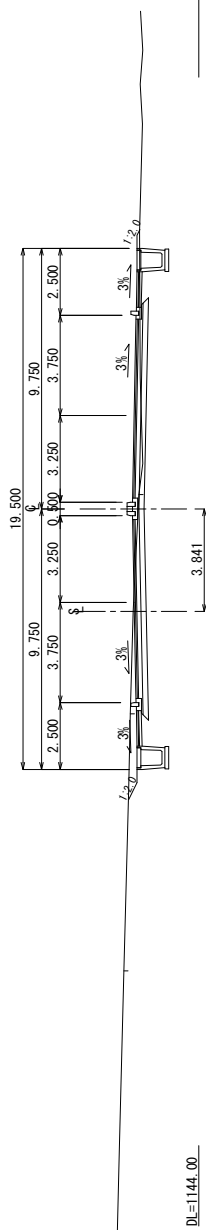
TITLE:
 CROSS SECTION
 (STA.63+40-64+00)

Drawing No. C S - 4
 SCALE S=1:200
 DATE

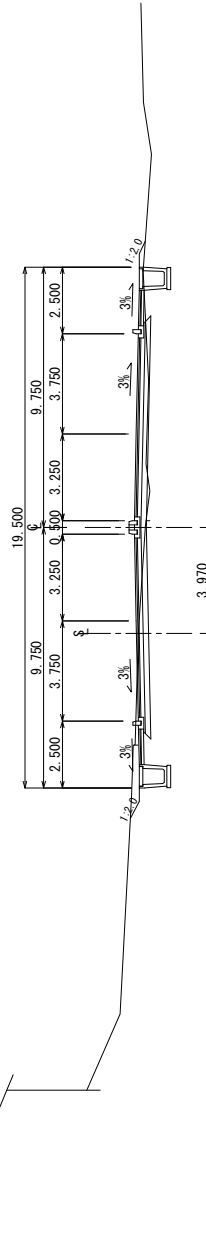
STA. 65+00
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 PHI=147.446



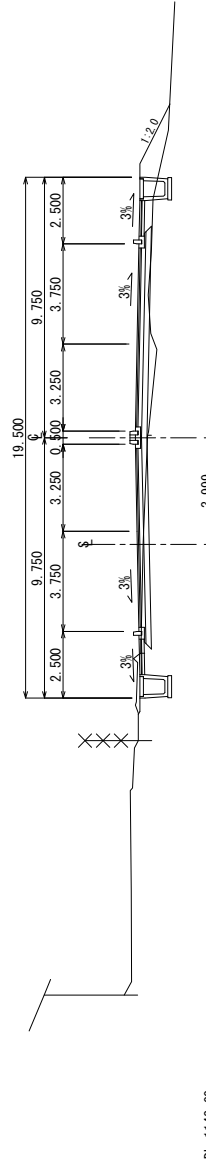
STA. 65+40
 GHI=146.45
 PHI=146.490



STA. 65+20
 GHI=145.40
 PHI=145.554



STA. 65+00
 GHI=144.77
 PHI=145.066



BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

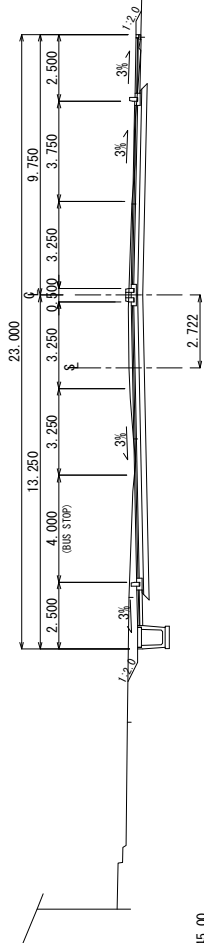
TITLE:
 CROSS SECTION
 (STA.65+00~65+60)

Drawing No. C S - 6

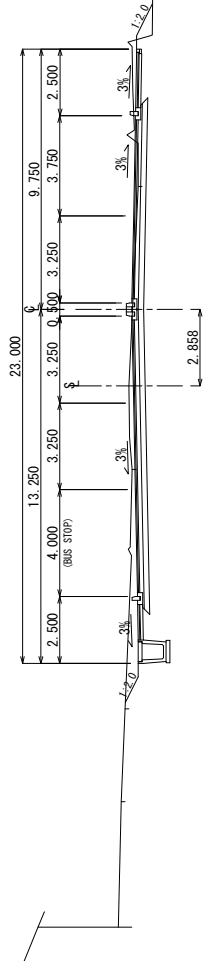
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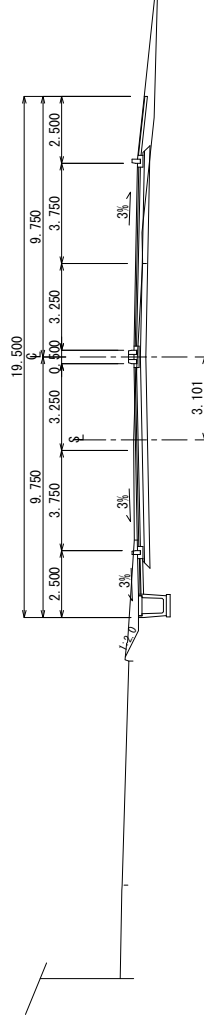
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 GE=1148.01
 PE=1147.926



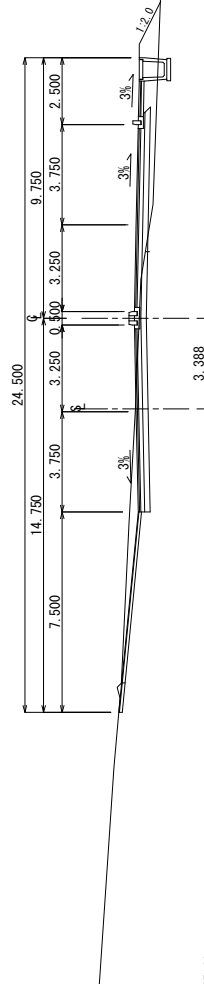
STA. 66+20
 GE=1148.43
 PE=1148.334



STA. 66+00
 GE=1148.39
 PE=1148.390



STA. 65+80
 GE=1148.05
 PE=1148.094



BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA.65+80-66+40)

Drawing No.

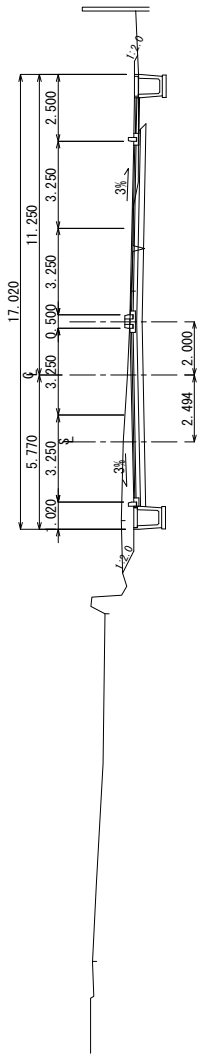
C S - 7

SCALE

S=1:200

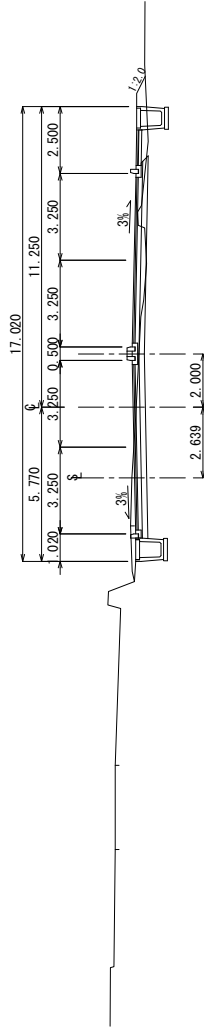
DATE

STA. 67+20
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 PH=1145.000



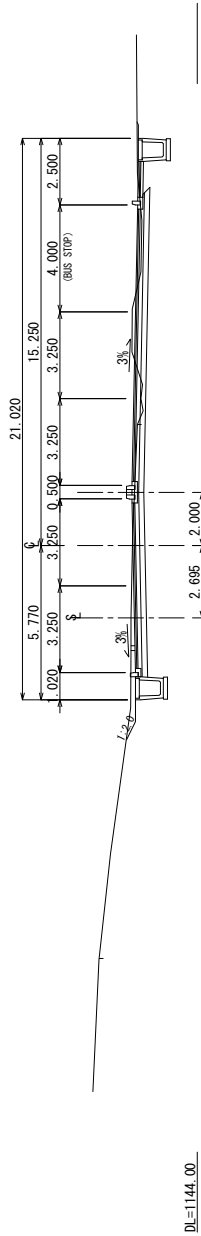
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STA. 67+00
 GH=1145.70
 PH=1145.690



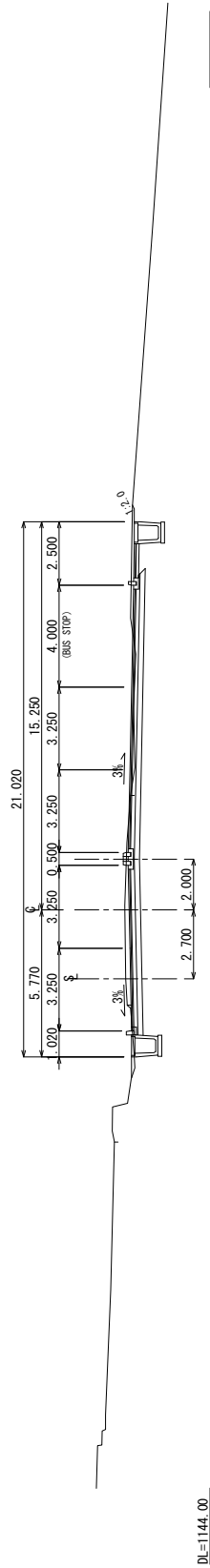
DL=1142.00

STA. 66+80
 GH=1146.49
 PH=1146.450



DL=1144.00

STA. 66+60
 GH=1147.30
 PH=1147.210



DL=1144.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

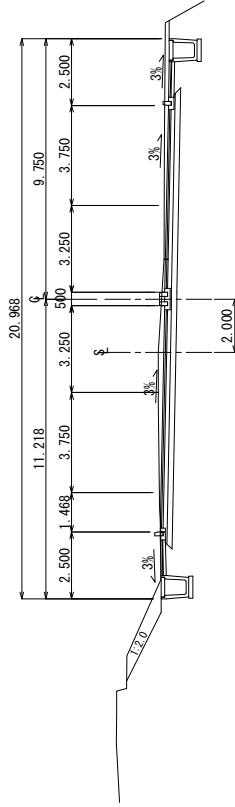
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA.66+60-67+20)

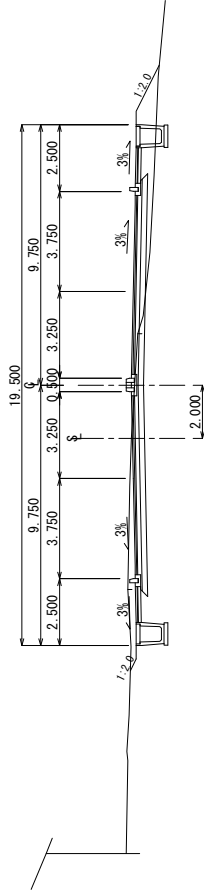
Drawing No. C S - 8
 SCALE S=1:200
 DATE

STA. 68+00
 GH=147.89
 PH=147.447



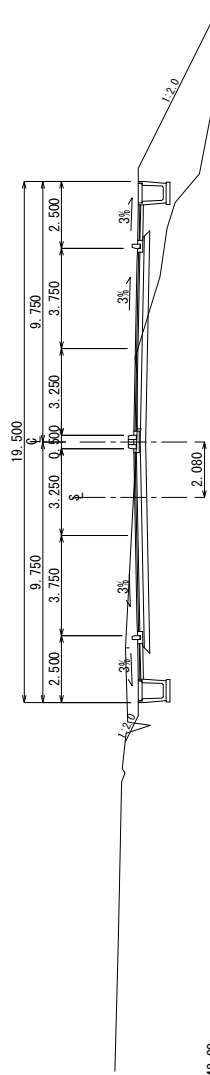
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STA. 67+80
 GH=146.23
 PH=146.080



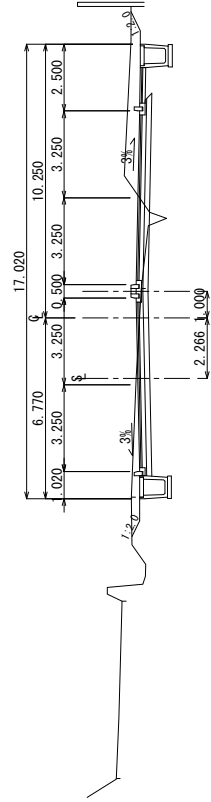
DL=1145.00

STA. 67+60
 GH=145.21
 PH=145.160



DL=1142.00

STA. 67+40
 GH=143.10
 PH=144.800



DL=1142.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

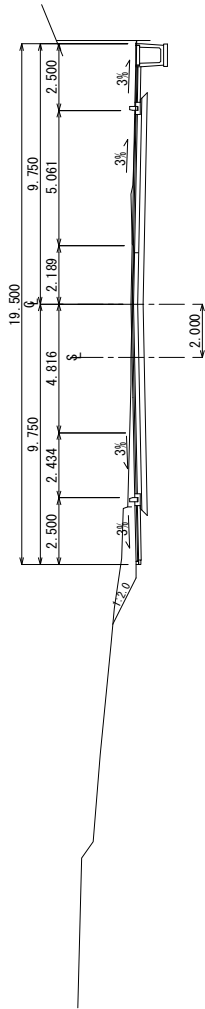
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA.67+40~68+00)

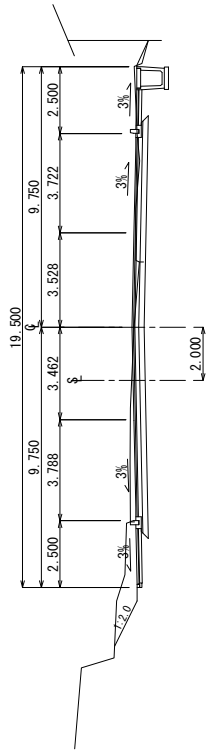
Drawing No.	C S - 9
SCALE	S=1:200
DATE	

STA. 68+80
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 PHI=1148.900



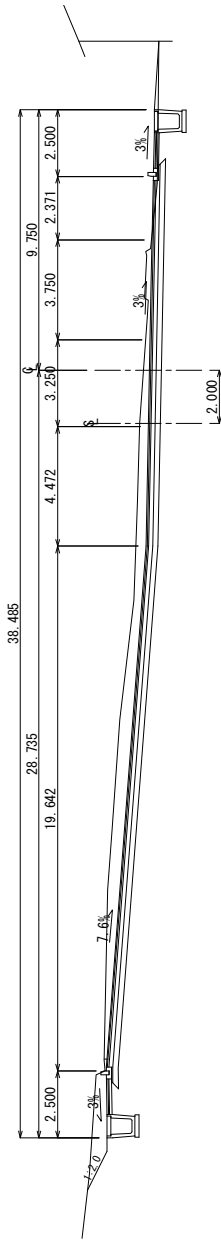
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STA. 68+60
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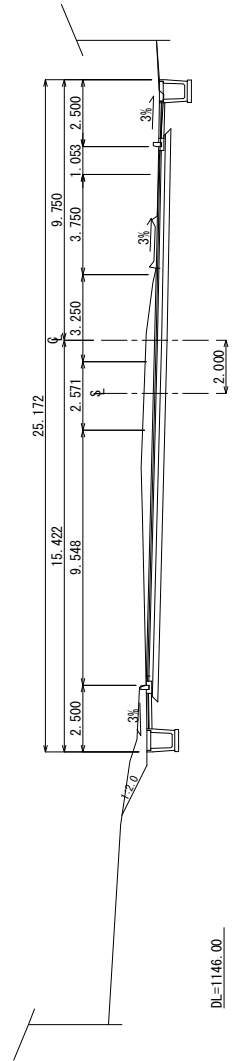
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 PHI=1148.367



DI=1146.00

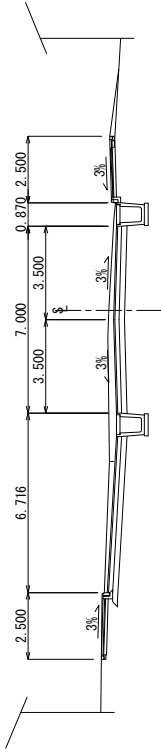
STA. 68+20
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 PHI=1148.580



DI=1146.00

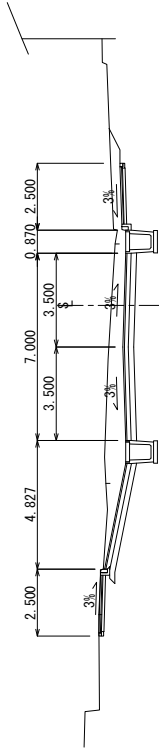
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.68+20-68+80)	Drawing No.	C S - 10
				SCALE	S=1:200
				DATE	

STA. 69+60
 GHI=143.76
 PHI=149.580



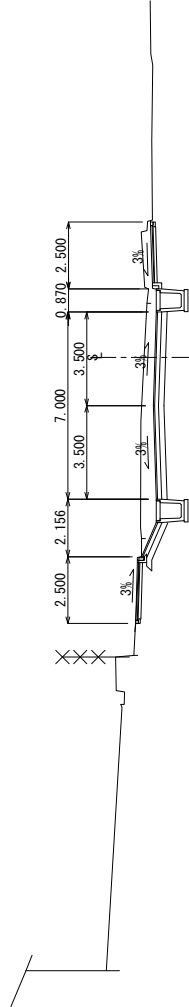
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STA. 69+40
 GHI=150.11
 PHI=149.660



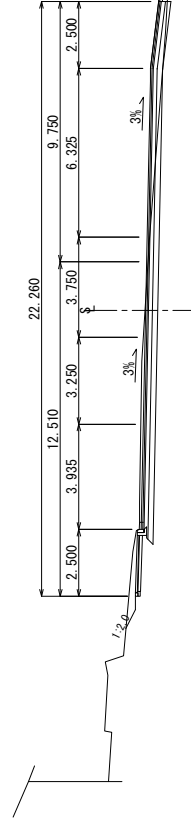
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STA. 69+20
 GHI=150.10
 PHI=149.740



DL=1146.00

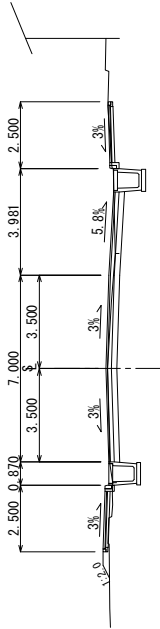
STA. 69+00
 GHI=149.89
 PHI=149.820



DL=1146.00

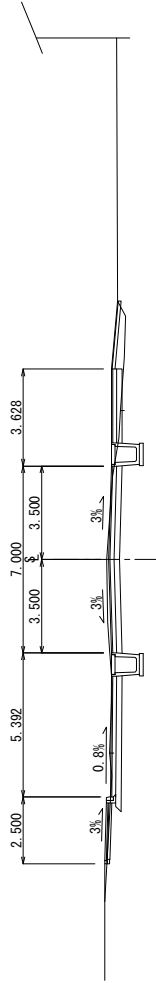
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.69+00--69+60)	Drawing No.	C S - 11
				SCALE	S=1:200
				DATE	

STA. 70+40
 GF=1150.44
 PH=1150.494



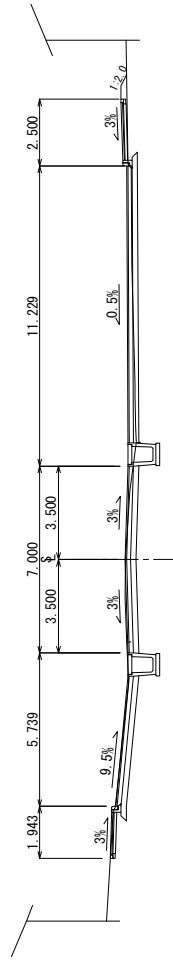
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STA. 70+20
 GF=1149.80
 PH=1149.784



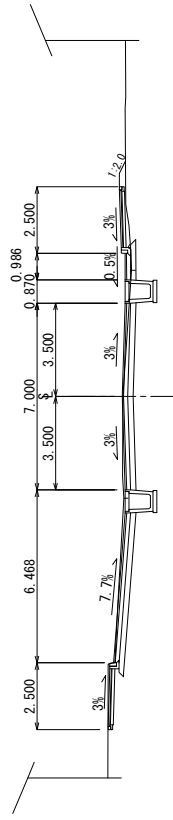
DL=1146.00

STA. 70+00
 GF=1149.46
 PH=1149.469



DL=1146.00

STA. 69+80
 GF=1149.48
 PH=1149.500



DL=1146.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA.69+80-70+40)

Drawing No.

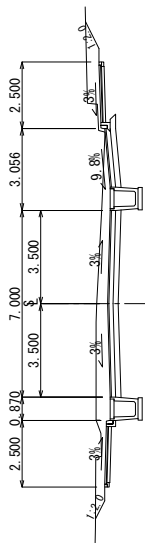
SCALE

DATE

C S - 12

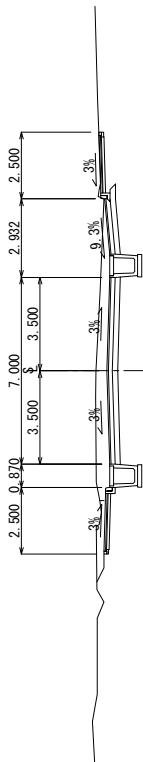
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 PH=1154.961



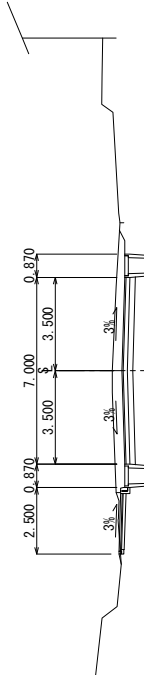
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STA. 71+00
 GH=1154.58
 PH=1154.165



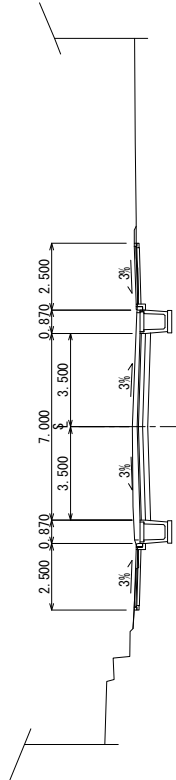
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STA. 70+80
 GH=1153.37
 PH=1153.007



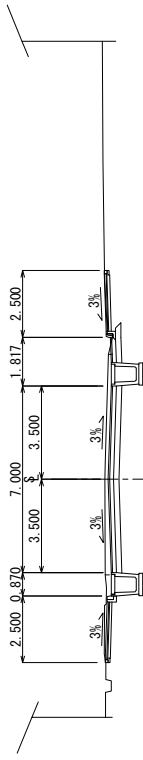
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STA. 70+60
 GH=1151.78
 PH=1151.589



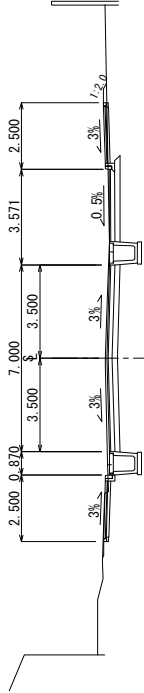
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 PH=1155.306



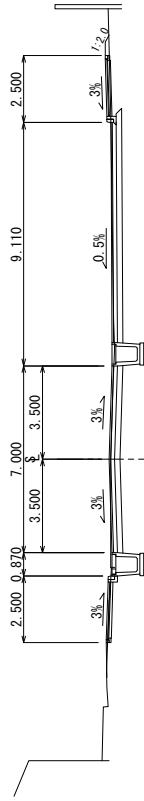
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STA. 71+80
 GH=1155.59
 PH=1155.546



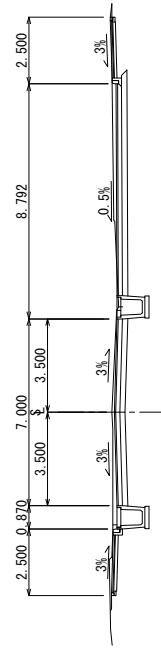
DL=1153.00

STA. 71+60
 GH=1155.53
 PH=1155.585



DL=1153.00

STA. 71+40
 GH=1155.35
 PH=1155.454



DL=1153.00

BLANTYRE CITY ASSEMBLY
 THE REPUBLIC OF MALAWI

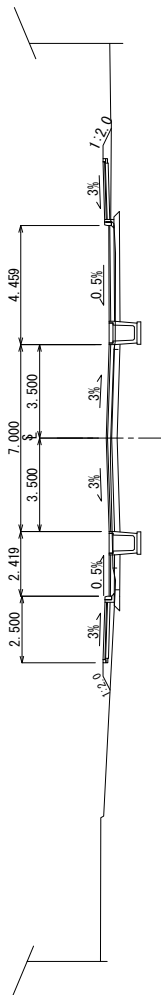
JAPAN INTERNATIONAL
 COOPERATION AGENCY
 KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
 ON THE PROJECT FOR THE IMPROVEMENT
 OF BLANTYRE CITY ROADS
 IN
 THE REPUBLIC OF MALAWI

TITLE:
 CROSS SECTION
 (STA.70+60-72+00)

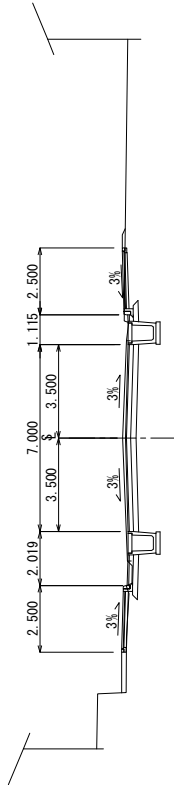
Drawing No.	C S - 13
SCALE	S=1:200
DATE	

STA. 72+60
PH=1152.285



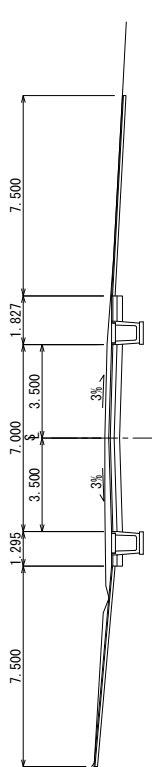
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STA. 72+60
PH=1152.385



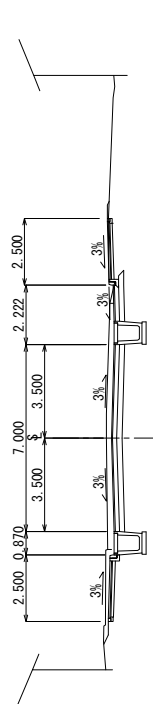
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STA. 72+40
PH=1152.425



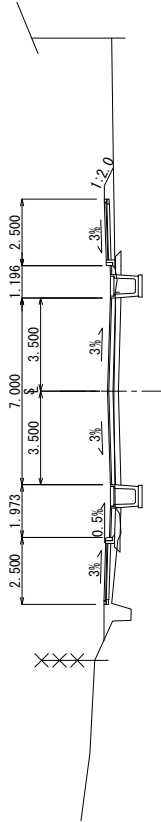
DL=1152.00

STA. 72+20
PH=1152.465



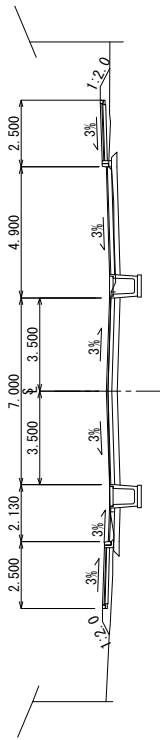
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STA. 73+60
PH=1152.866



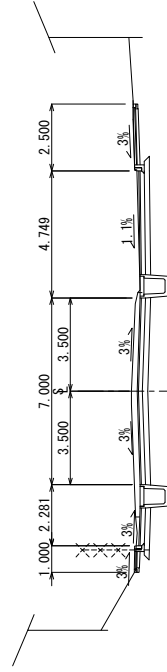
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STA. 73+40
PH=1152.225



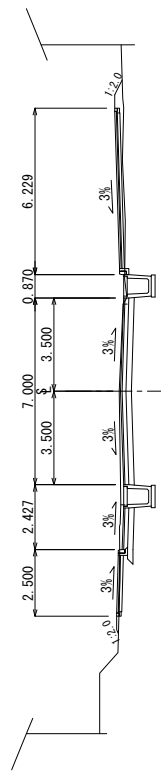
DL=1150.00

STA. 73+20
PH=1152.066



DL=1152.00

STA. 73+00
PH=1152.87
PH=1154.815



DL=1152.00

BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

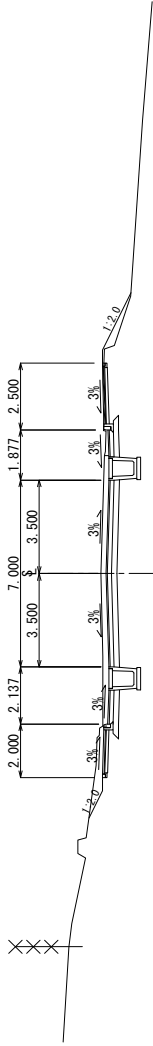
CROSS SECTION
(STA.72+00-73+60)

Drawing No. C S - 14

SCALE S=1:200

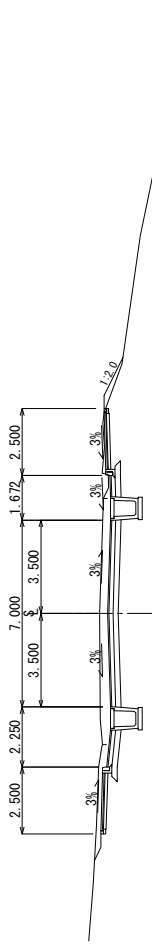
DATE

STA. 74+40
PIE=153.85



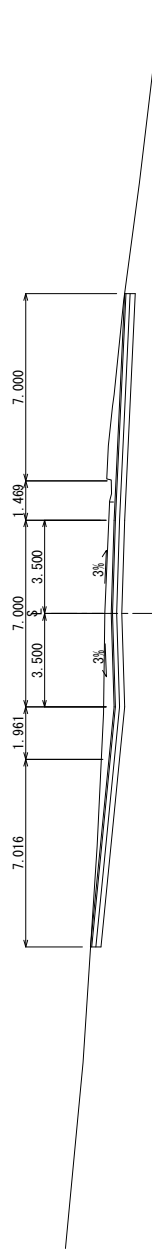
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STA. 74+20
PIE=153.48



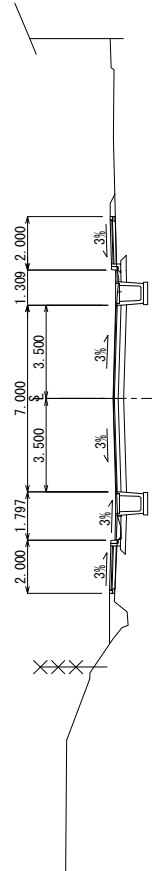
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STA. 74+00
PIE=152.84



DL=1150.00

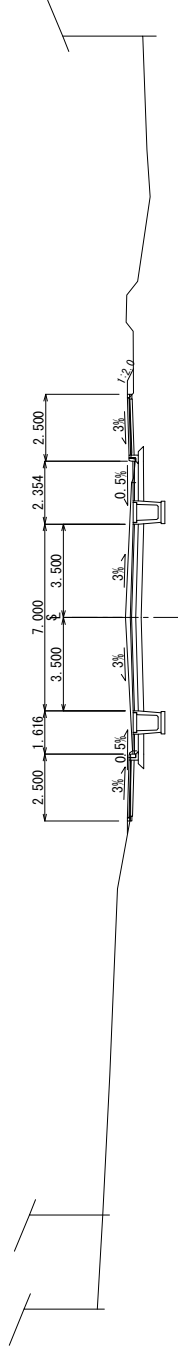
STA. 73+80
PIE=152.43



DL=1150.00

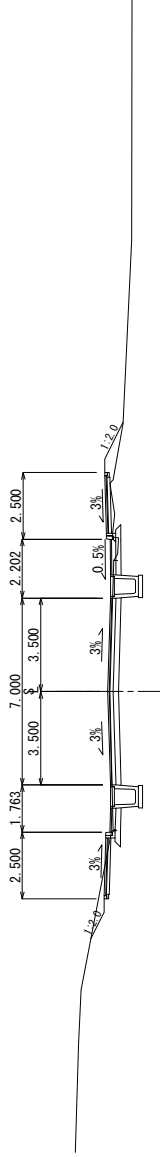
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.73+80-74+40)	Drawing No.	C S - 15
				SCALE	S=1:200
				DATE	

STA. 75+20
 GHI=158.860
 PHI=154.860



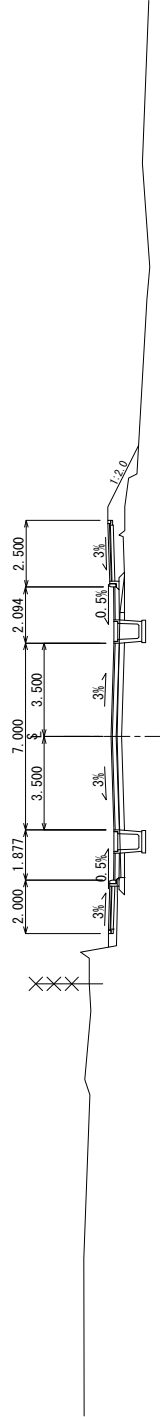
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STA. 75+00
 GHI=158.520
 PHI=154.820



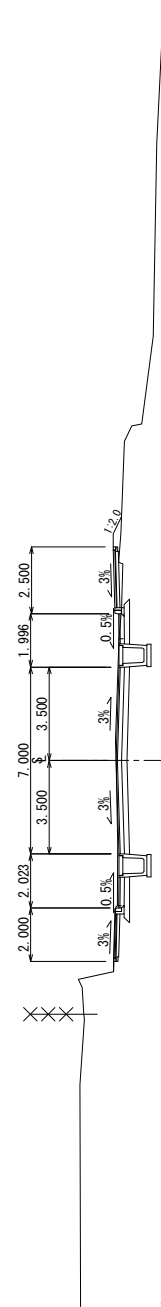
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STA. 74+80
 GHI=154.819
 PHI=154.819



DL=1152.00

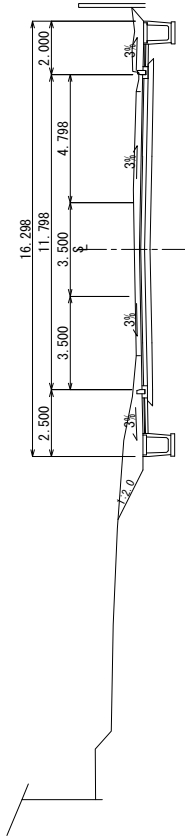
STA. 74+60
 GHI=154.17
 PHI=154.161



DL=1152.00

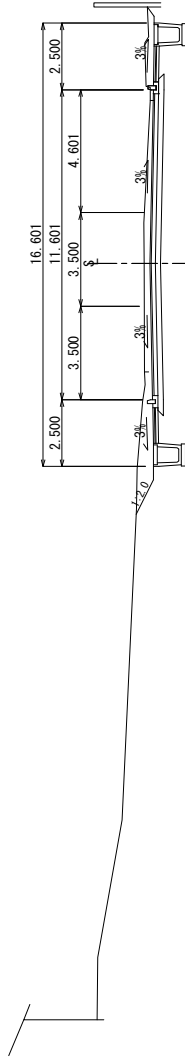
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA.74+60~75+20)	Drawing No. C S - 16
				SCALE S=1:200
				DATE

STA. 76+00
 GHI=180.886
 PH=180.886



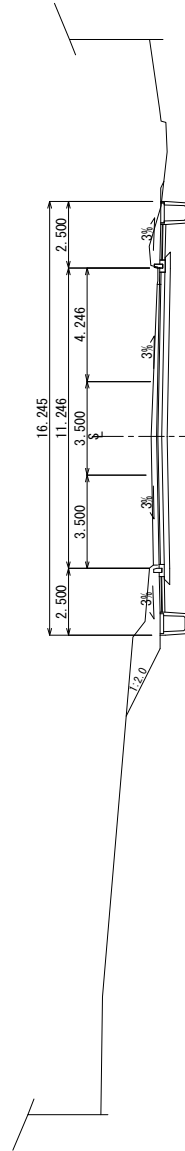
DL=1158.00

STA. 75+80
 GHI=180.315
 PH=180.940



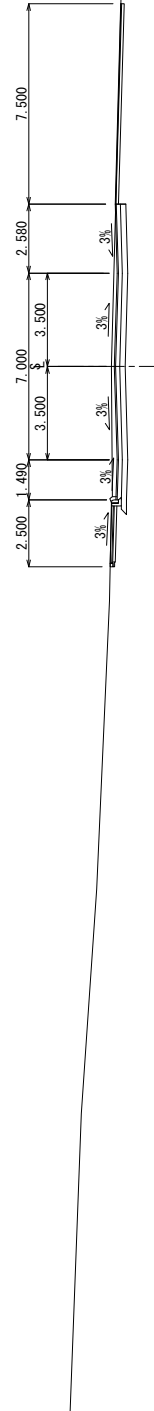
DL=1158.00

STA. 75+60
 GHI=158.078
 PH=158.078



DL=1156.00

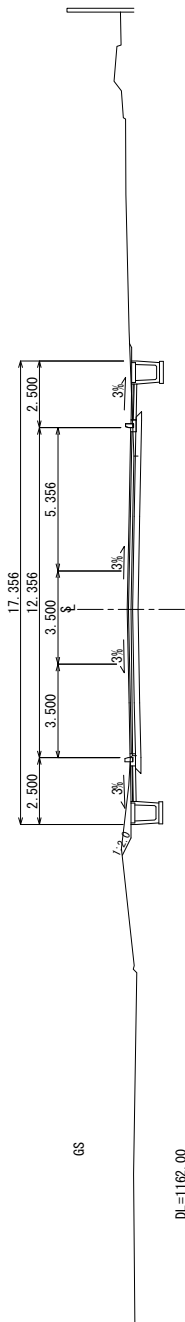
STA. 75+40
 GHI=158.05
 PH=157.942



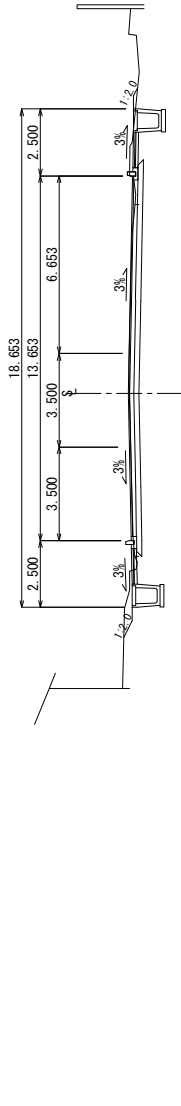
DL=1155.00

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA. 75+40~76+00)	Drawing No. C S - 17
				SCALE S=1:200
				DATE

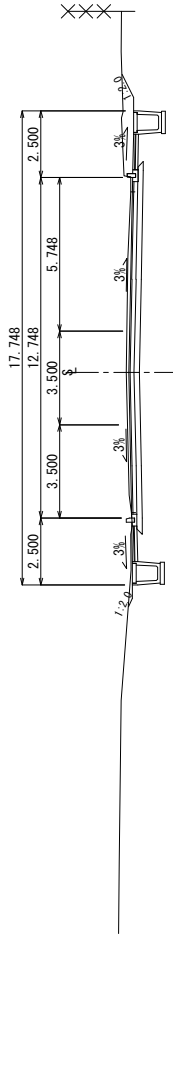
STA. 76+80
PI=181.284



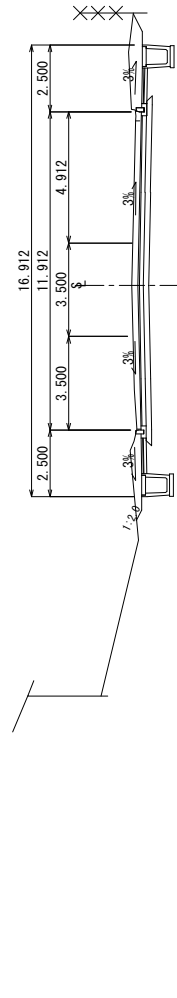
STA. 76+60
PI=183.534



STA. 76+40
PI=182.73



STA. 76+20
PI=181.97



BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

THE PREPARATORY SURVEY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

TITLE:
CROSS SECTION
(STA. 76+20-76+80)

Drawing No.

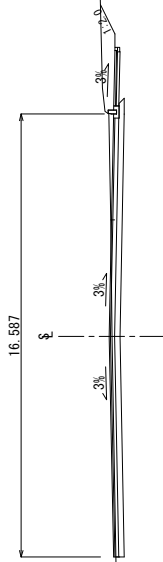
C S - 18

SCALE

S=1:200

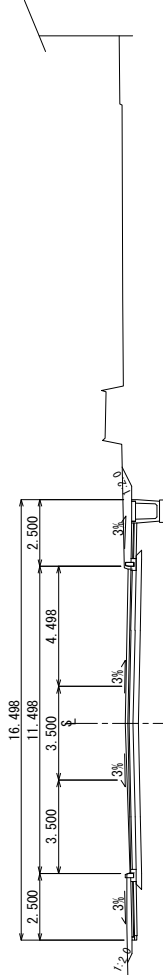
DATE

STA. 77+60
PIE=168.39



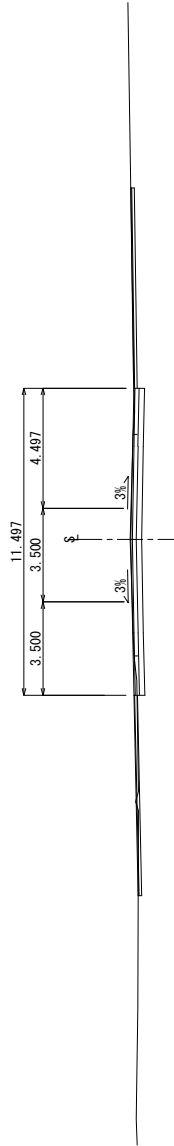
DL=1162.00

STA. 77+40
PIE=168.367



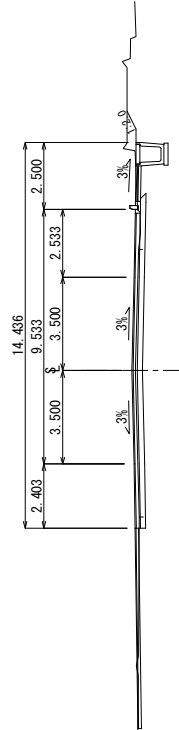
DL=1162.00

STA. 77+20
PIE=168.200



DL=1162.00

STA. 77+00
PIE=164.841



DL=1162.00

BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

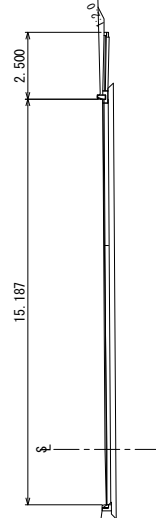
THE PREPARATORY SURVEY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

TITLE:
CROSS SECTION
(STA.77+00-77+60)

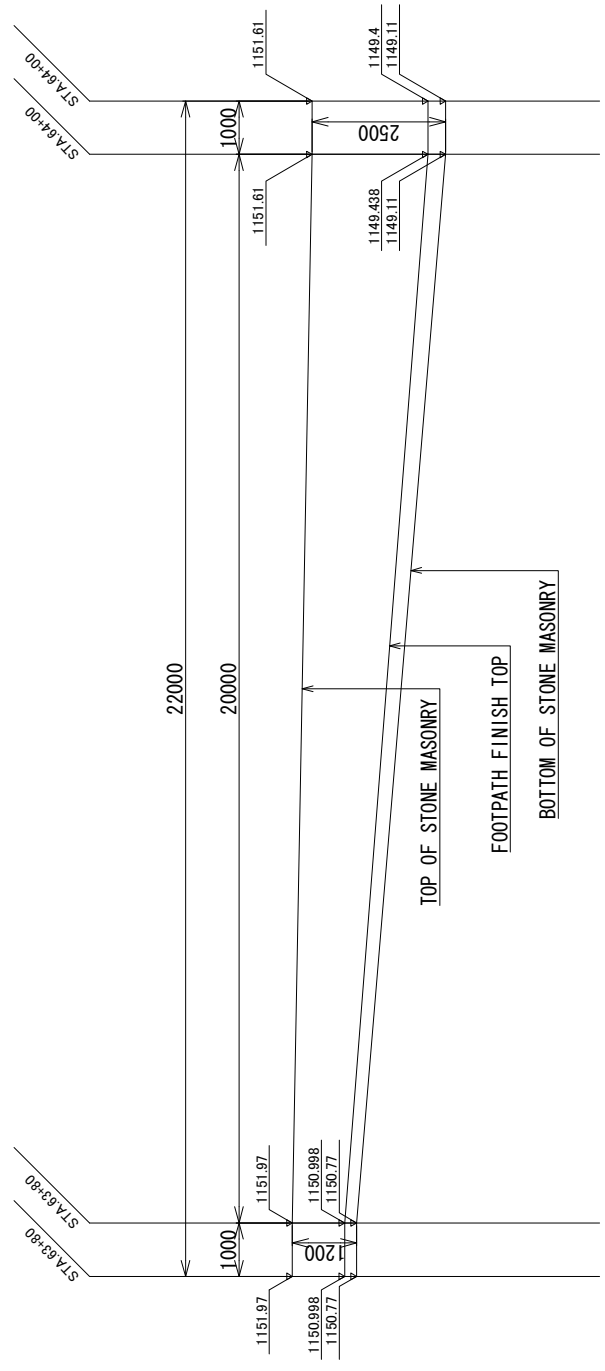
Drawing No.	C S - 19
SCALE	S=1:200
DATE	

EP STA. 77+88.353
PI=165.640

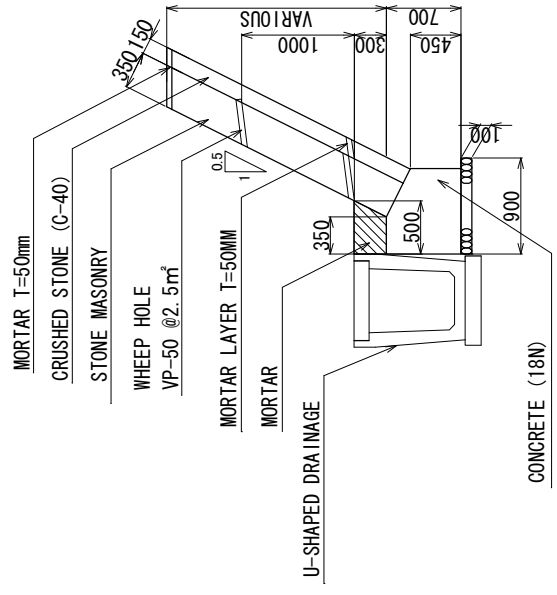
STA. 77+80
PI=165.591



BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: CROSS SECTION (STA. 77+80-EP)	
			Drawing No.	C S - 20
			SCALE	S=1:200
			DATE	



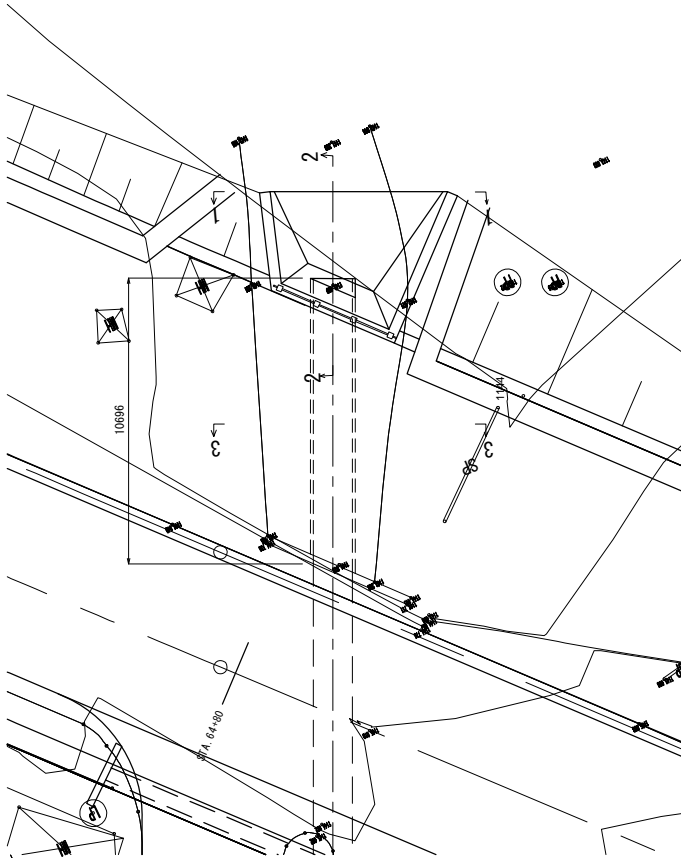
FRONT VIEW 1 : 100



SECTION 1 : 50

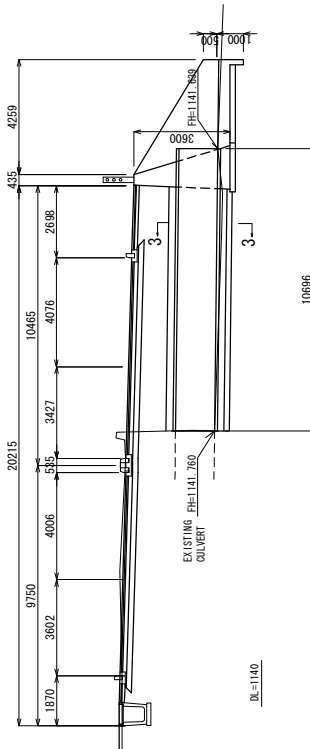
STONE MASONRY

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE BASIC DESIGN STUDY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE :	RUBBLE WORK	Drawing No.	C M - 1
					SCALE	AS SHOWN
					DATE	



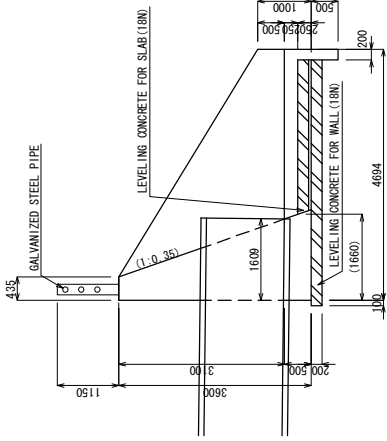
PLAN

S=1:200



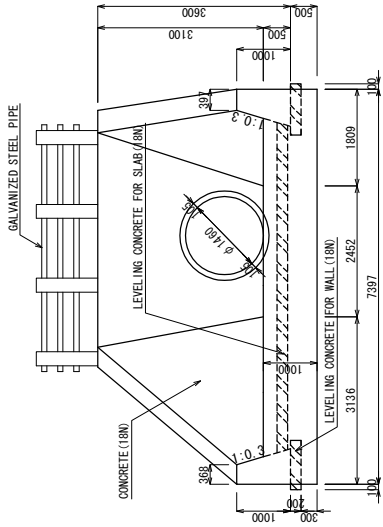
SECTION

S=1:200



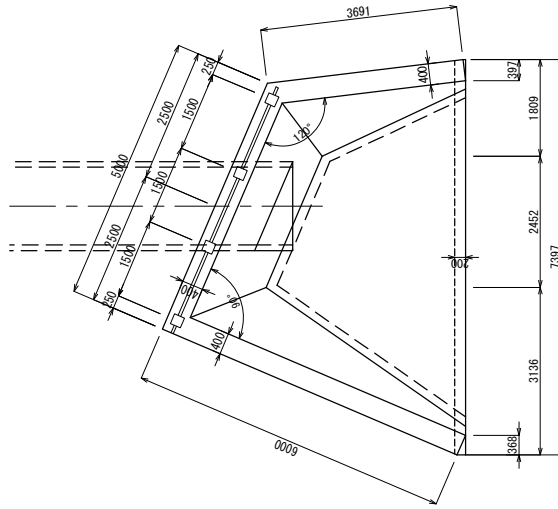
SECTION 2-2

S=1:100



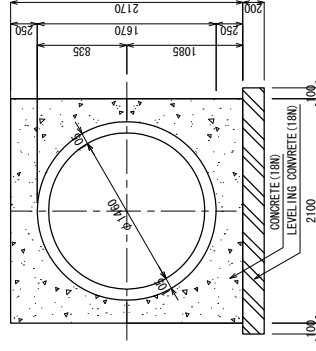
SECTION 1-1

S=1:100



SECTION 3-3

S=1:50



DETAIL OF PLAN S=1:100

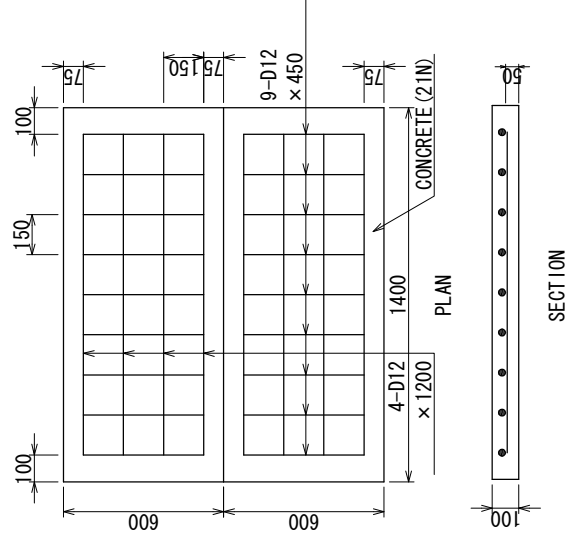
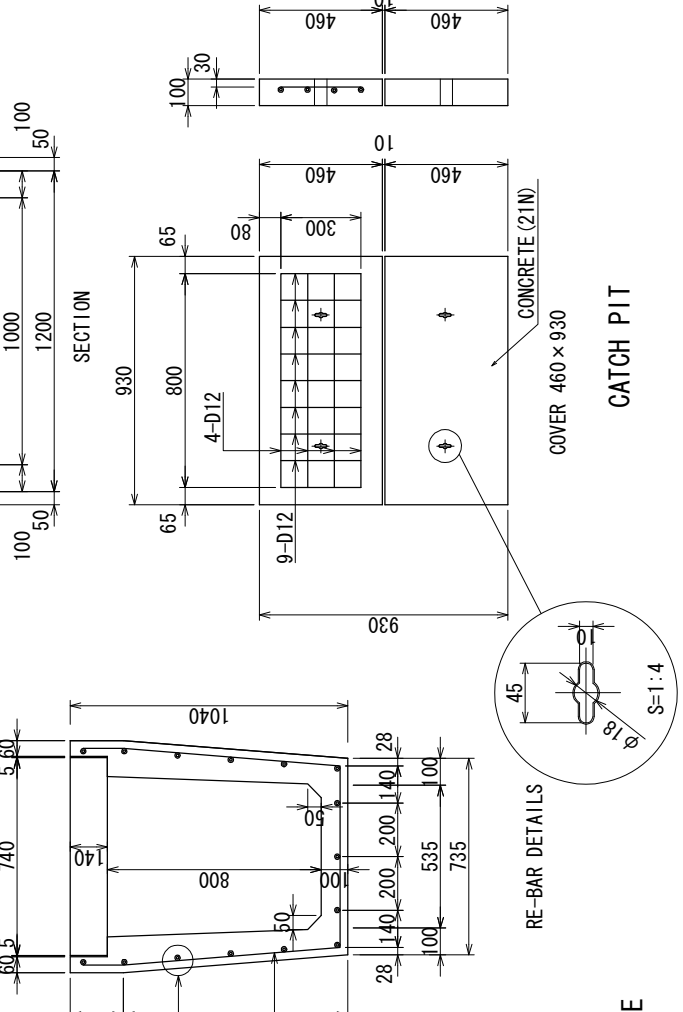
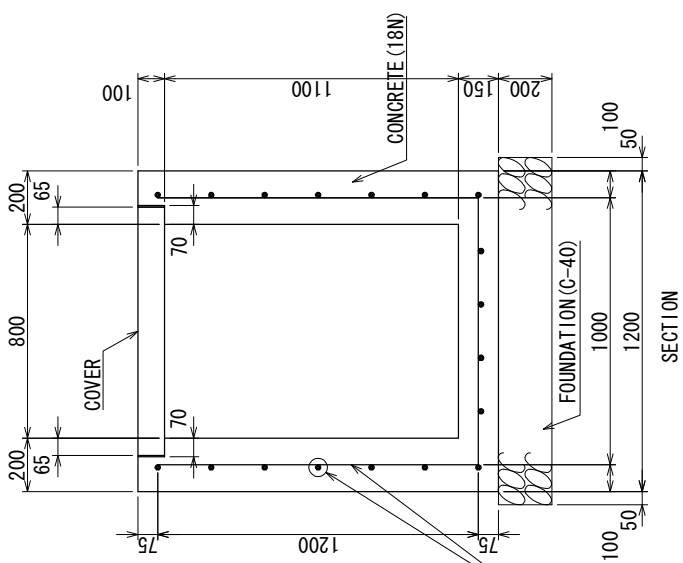
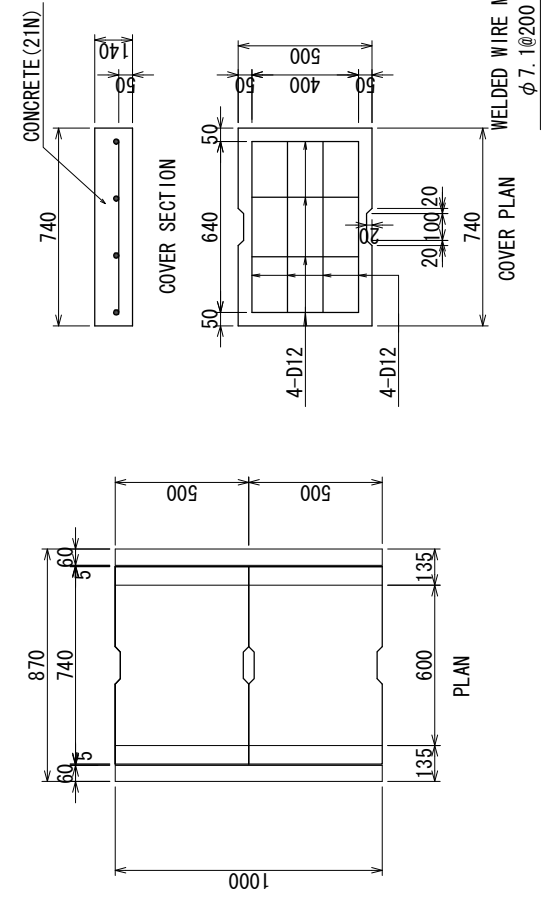
BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

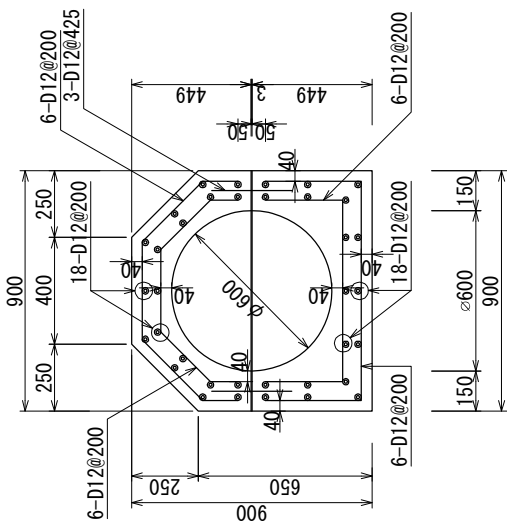
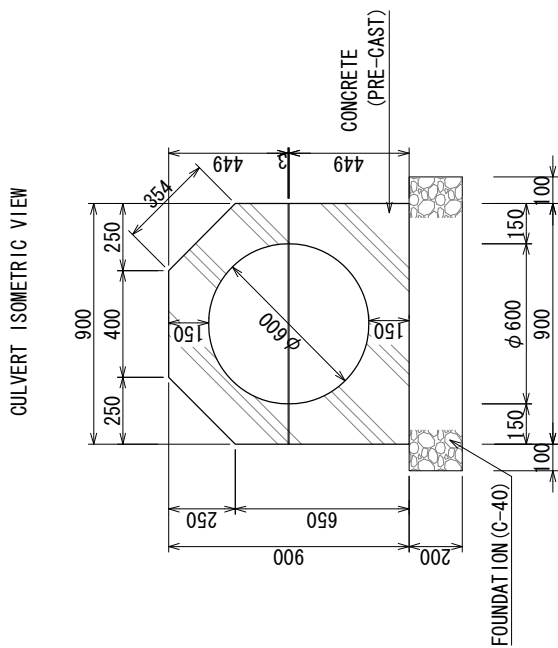
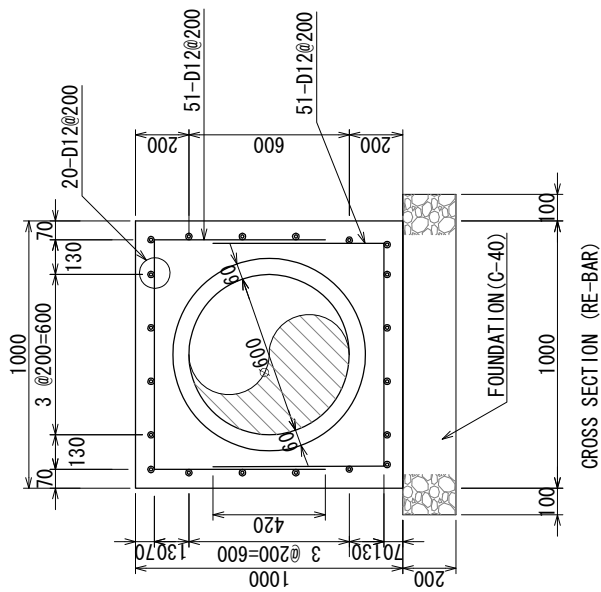
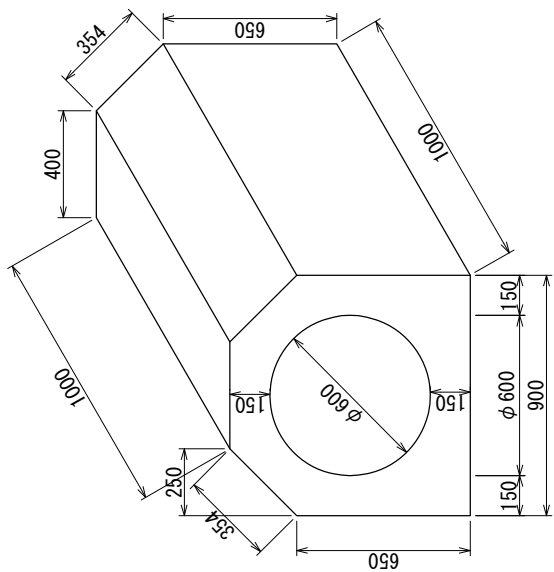
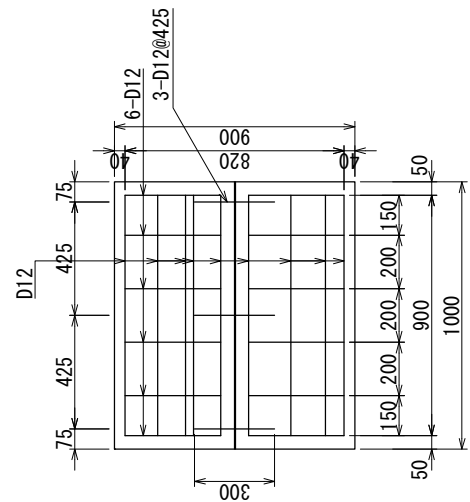
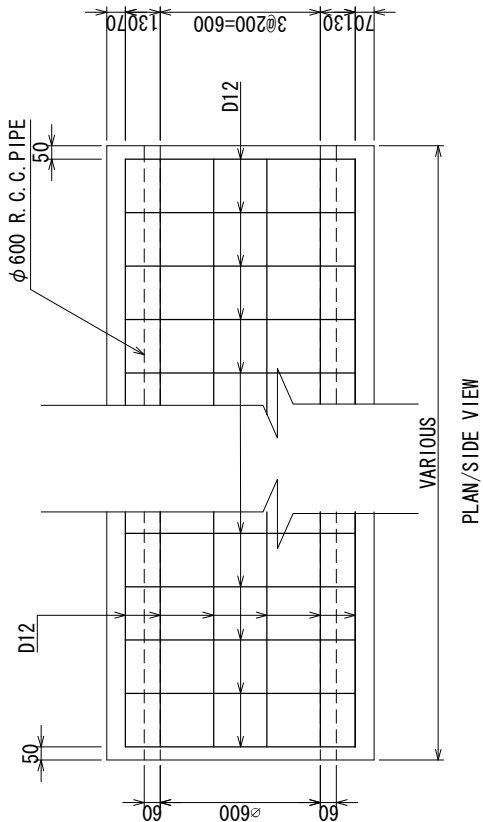
THE PREPARATORY SURVEY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

TITLE:
CROSS DRAINAGE (1)
(PIPE CULVERT)
(STA64+70)

Drawing No.	C D - 1
SCALE	AS SHOWN
DATE	



BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE BASIC DESIGN STUDY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE : DRAINAGE (1/3)	D R - 1
				Drawing No.
			SCALE	S:1:20
			DATE	



D600 PIPE CULVERT (CAST IN PLACE)

D600 PIPE CULVERT (PRE-CAST)

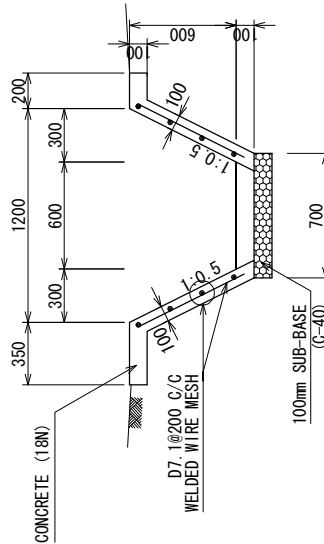
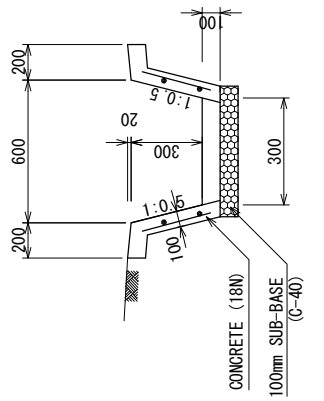
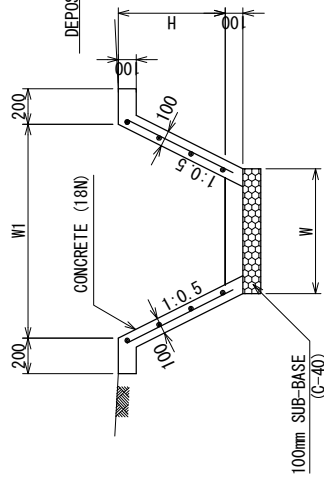
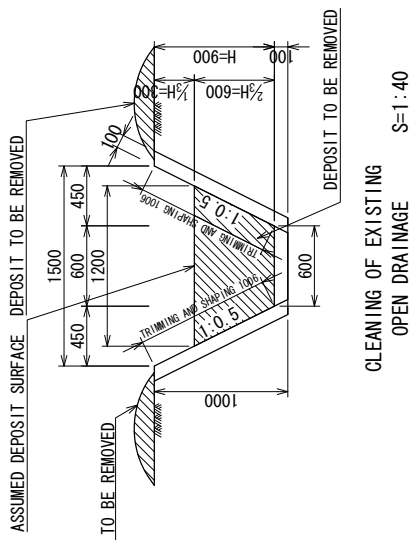
BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

THE BASIC DESIGN STUDY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

TITLE :
DRAINAGE (2/3)

Drawing No. D R - 2
SCALE S=1:20
DATE

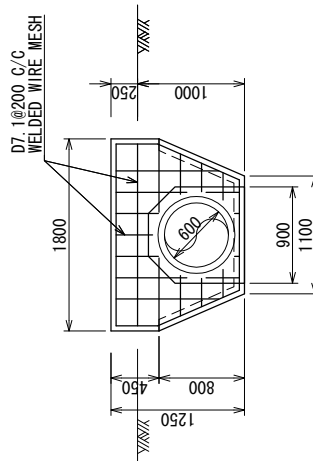


DRAINAGE REPAIR

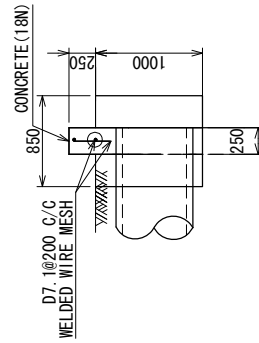
OPEN DRAINAGE D300

OPEN DRAINAGE D600

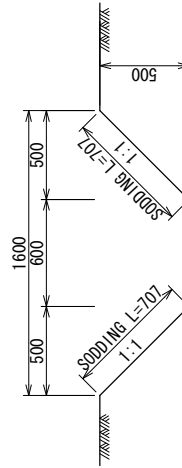
OPEN DRAINAGE S=1:30



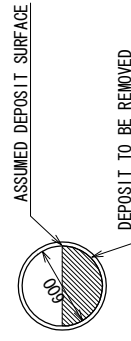
HEAD WALL ELEVATION WITH RE-BAR



HEAD WALL SECTION



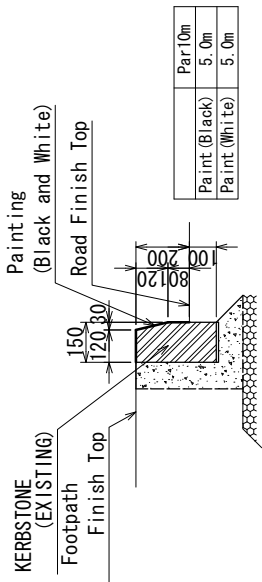
EARTH DRAINAGE S=1:30



CLEANING OF EXISTING PIPE CULVERT S=1:40

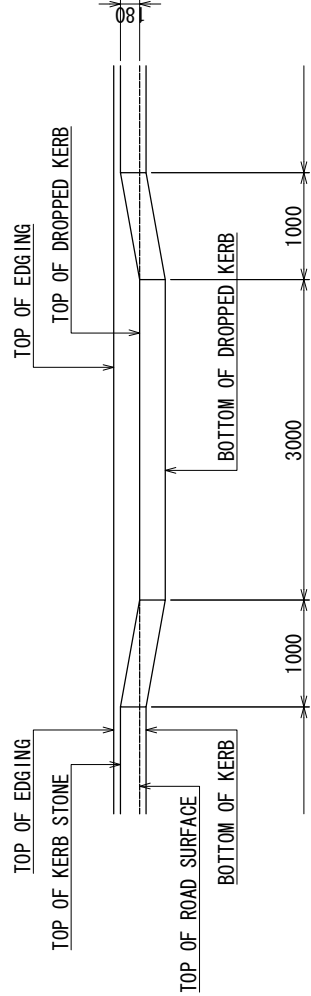
HEAD WALL S=1:50

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE BASIC DESIGN STUDY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE : DRAINAGE (3/3)	Drawing No.	D R - 3
				SCALE	AS SHOWN
				DATE	



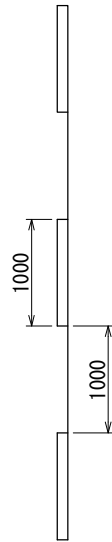
SECTION S=1:20

KERB STONE REPAIR (KERB-M)



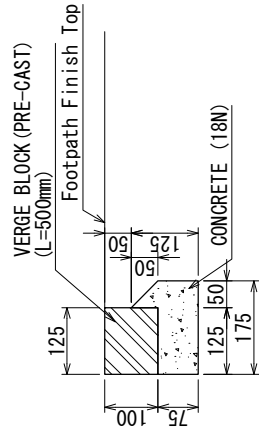
FRONT VIEW S=1:50

DROPED KERB DETAIL FOR PEDESTRAIN CROSSING (KERB STONE (FLAT))



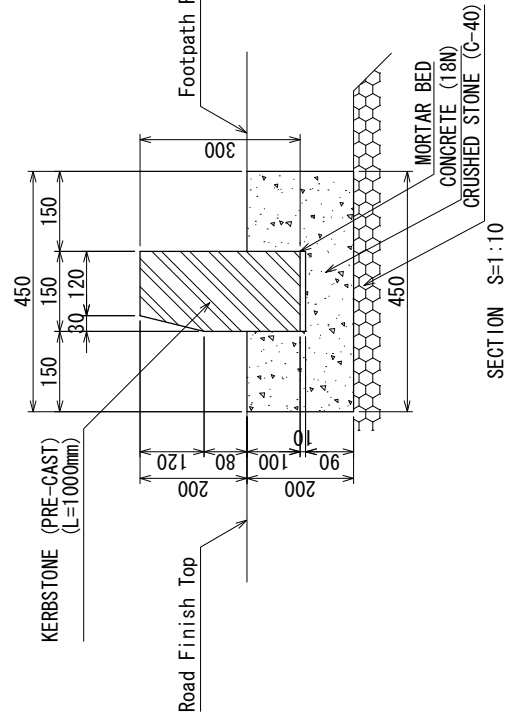
PLAN S=1:50

STAGGERED TYPE (KERB F-S)



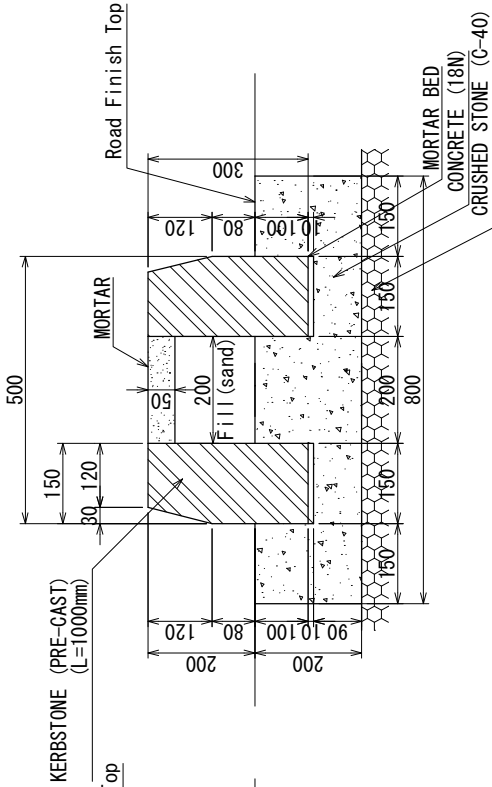
SECTION S=1:10

VERGE BLOCK



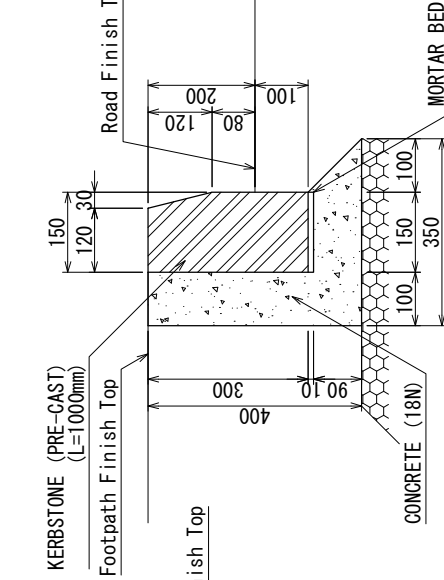
SECTION S=1:10

FLAT TYPE KERB STONE (KERB F-S, FLAT)



SECTION S=1:10

MOUNT TYPE KERB STONE (KERB-M)



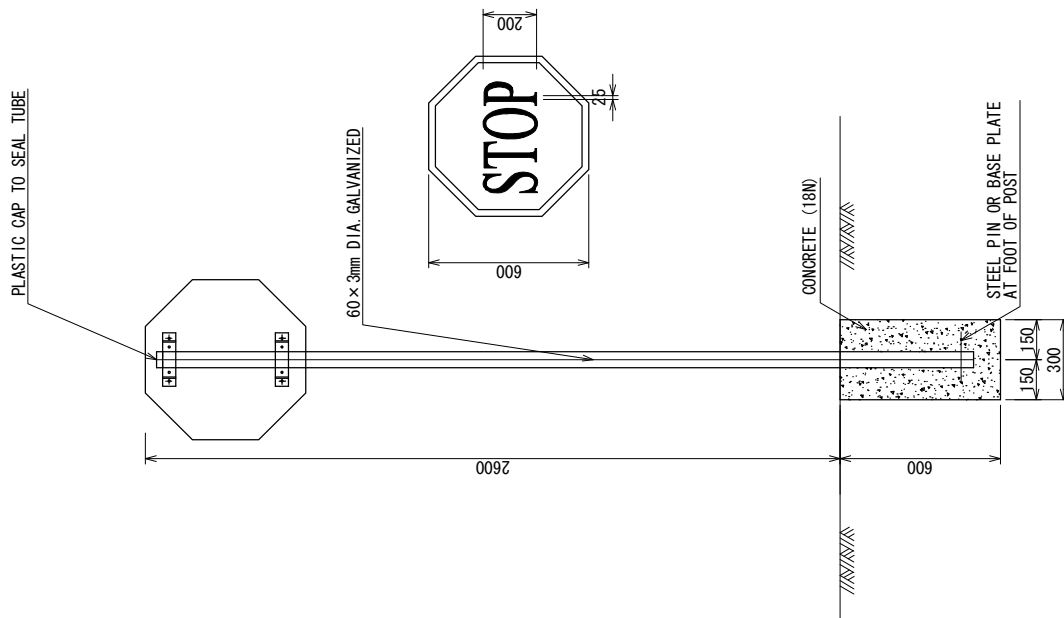
SECTION S=1:10

MEDIAN BARRIER

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE BASIC DESIGN STUDY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE :	
			KERB STONE , MEDIAN BARRIER VERGE BLOCK	M - 1
Drawing No.			SCALE	AS SHOWN
DATE				

NEW REGULATORY & WARNING SIGN SCHEDULE

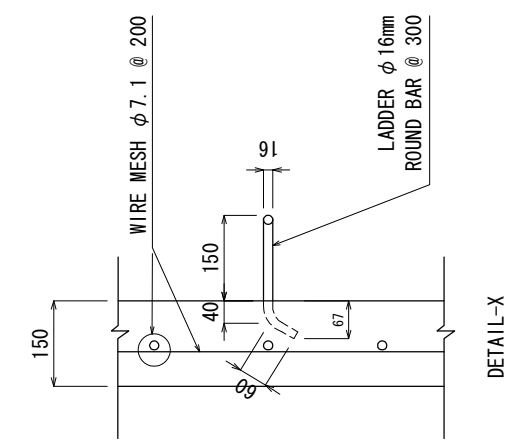
MARK	STOP SIGN	SPECIAL SPEED LIMIT (60) (50)	GIVE WAY	ROUNDBABOUT	BUS STOP
SIGN TYPE					
SIZE	600	600	900	900	400 x 260
	STA. 42+20 (C) STA. 42+60 (C) STA. 46+90 (C) STA. 47+10 (C) STA. 50+00 (C) STA. 75+30 (R)	STA. 34+60 (L) STA. 61+85 (L) STA. 50+10 (R) STA. 68+00 (R) STA. 51+45 (L) STA. 68+40 (L) STA. 61+50 (R) STA. 76+60 (R)	STA. 34+54 (L) STA. 34+60 (R) STA. 51+00 (L) STA. 51+60 (R) STA. 61+50 (L) STA. 61+80 (L) STA. 69+10 (R) STA. 77+40 (L) STA. 77+60 (R)	STA. 35+20 (R) STA. 50+60 (L) STA. 61+10 (L) STA. 77+25 (L)	STA. 41+20 (L) STA. 41+20 (R) STA. 48+70 (R) STA. 49+20 (L) STA. 53+40 (L) STA. 58+00 (R) STA. 60+70 (L) STA. 61+05 (R) STA. 66+30 (L) STA. 66+70 (R)
MARK	PEDESTRIAN CROSSING	TRAFFIC LIGHTS	NO ENTRY	ONE-WAY ROAD	DIRECTION TO BE FOLLOWED
SIGN TYPE					
SIZE	900	900	800	600 x 350	800
	STA. 34+49 (L) STA. 61+95 (L) STA. 34+80 (R) STA. 62+40 (R) STA. 41+93 (R) STA. 66+00 (L) STA. 43+00 (R) STA. 67+40 (R) STA. 48+50 (L) STA. 68+00 (L) STA. 49+40 (R) STA. 68+80 (R) STA. 50+06 (L) STA. 68+90 (L) STA. 50+90 (R) STA. 69+50 (R) STA. 51+50 (L) STA. 76+80 (L) STA. 51+60 (L) STA. 54+00 (R) STA. 60+40 (L)	STA. 69+50 (R) STA. 77+25 (R)	STA. 42+20 (C) STA. 42+60 (C) STA. 46+90 (C) STA. 47+10 (C) STA. 50+80 (C)	STA. 69+00 (L) STA. 73+93 (L)	STA. 46+37 (R) STA. 68+80 (L) STA. 47+54 (L) STA. 74+10 (L) STA. 57+50 (R) STA. 60+30 (L) STA. 63+45 (L) STA. 63+65 (R) STA. 64+85 (L) STA. 65+87 (R) STA. 65+90 (L) STA. 68+15 (L) STA. 68+90 (R)



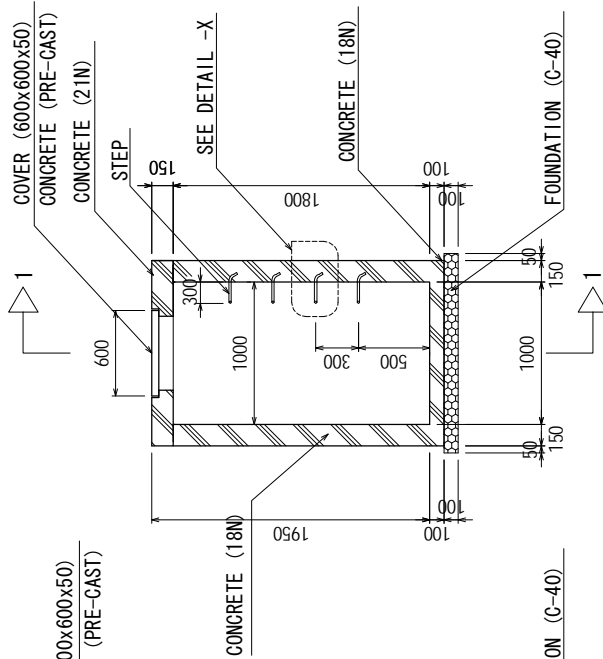
SIGN POST SETTING DETAILS

NOTES:
REFER TO "THE SATCC ROAD TRAFFIC SIGNS MANUAL".

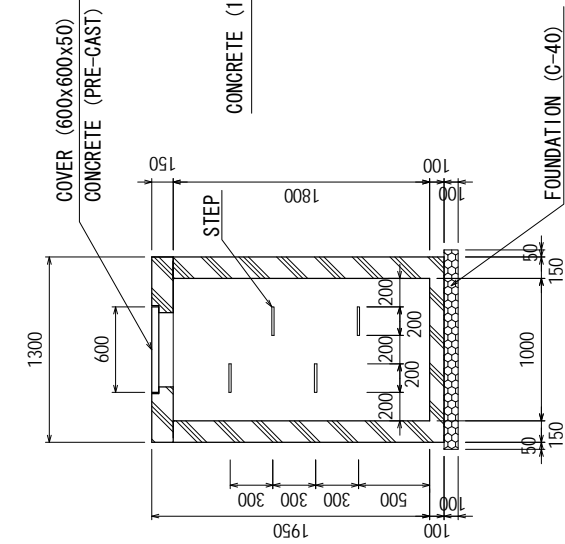
BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE BASIC DESIGN STUDY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE : TRAFFIC SIGN	Drawing No.	M - 2
				SCALE	S=1:20
				DATE	



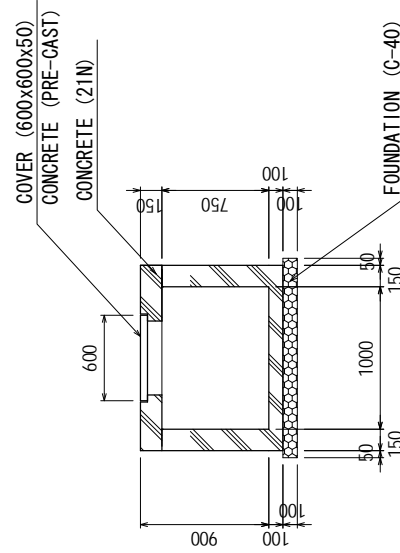
DETAIL-X



HAND HOLE DETAIL SECTION S = 1:37.5

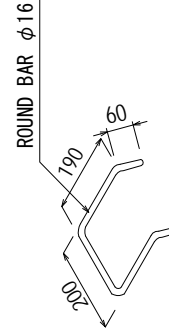


SECTION 1-1 S = 1:37.5

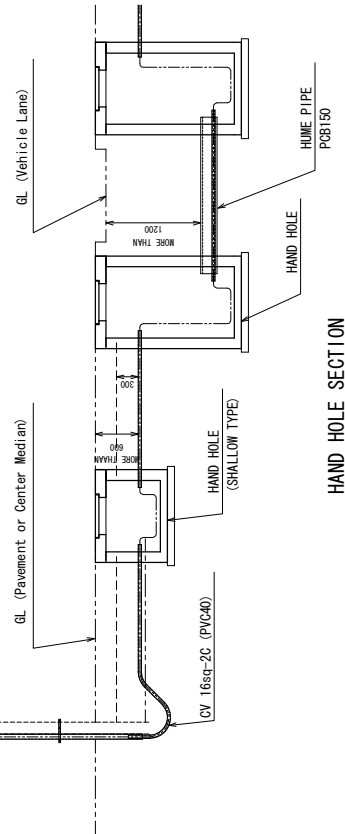


HAND HOLE DETAIL SECTION

SHALLOW TYPE S = 1:37.5



LADDER DETAIL



HAND HOLE SECTION

S = 1:75

COMMERCIAL POWER SUPPLY
230VAC 50Hz

EXISTING POWER POLE

STEEL CONDUIT
G70

GL (Pavement or Center Median)

GL (Vehicle Lane)

CV 16sq-2C (PVC40)

HAND HOLE
(SHALLOW TYPE)

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

HAND HOLE

BLANTYRE CITY ASSEMBLY
THE REPUBLIC OF MALAWI

JAPAN INTERNATIONAL
COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

THE BASIC DESIGN STUDY
ON THE PROJECT FOR THE IMPROVEMENT
OF BLANTYRE CITY ROADS
IN
THE REPUBLIC OF MALAWI

HAND HOLE
FOR STREET LIGHT

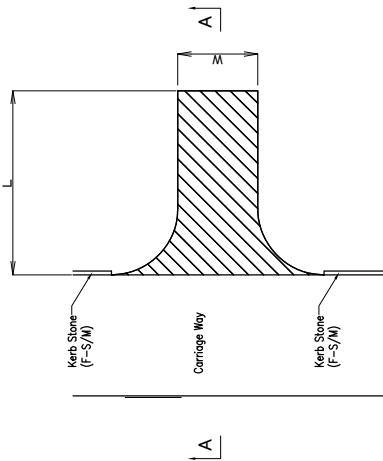
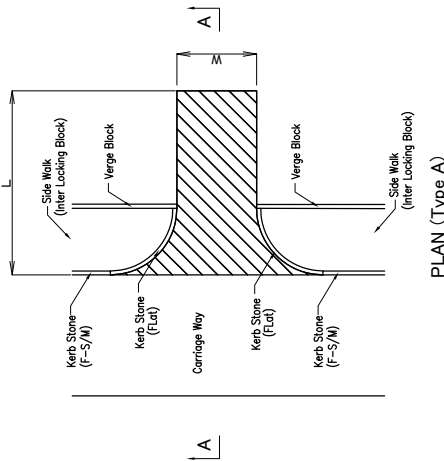
TITLE :

Drawing No. M - 5

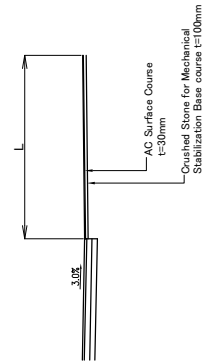
SCALE AS SHOWN

DATE

SCHEDULED LIST OF ACCESS WAY



PLAN (Type B)



SECTION-3			SECTION-4			SECTION-5		
LOCATION	TYPE	AREA(m ²)	LOCATION	TYPE	AREA(m ²)	LOCATION	TYPE	AREA(m ²)
L STA47+00	A	148.27	L STA62+30	A	227.19	L STA69+30	A	32.31
L STA47+50	A	60.55	L STA63+30	A	183.77	L STA69+50	A	15.35
L STA47+80	A	21.78	L STA63+70	A	22.48	L STA70+20	A	32.86
L STA48+30	A	42.43	L STA64+60	A	49.80	L STA71+00	A	183.97
L STA50+00	A	50.46	L STA64+70	A	88.35	L STA72+30	A	60.12
L STA51+00	A	30.19	L STA65+80	A	90.01	L STA73+00	A	140.44
L STA51+20	A	69.49	L STA66+80	A	55.30	L STA73+50	A	32.35
L STA51+40	A	178.62	L STA67+30	A	55.80	L STA74+00	A	72.38
L STA52+10	A	21.94	L STA67+50	A	49.79	L STA74+20	A	146.54
L STA55+50	A	57.81	L STA68+00	A	45.53	L STA74+80	A	28.58
L STA58+30	A	243.22	L STA62+90	A	24.20	L STA75+00	A	64.12
L STA60+10	A	119.83	L STA63+40	A	27.14	L STA75+20	A	57.86
R STA42+50	A	219.33	R STA63+70	A	73.08	L STA75+40	A	49.25
R STA46+40	A	121.03	R STA64+50	A	35.52	L STA75+80	A	16.73
R STA47+00	A	261.40	R STA65+40	A	44.92	L STA76+00	A	62.16
R STA50+00	B	60.39	R STA66+00	A	31.96	L STA76+40	A	108.56
R STA50+50	B	26.22	R STA66+40	A	20.44	L STA76+70	A	70.49
R STA52+70	B	60.70	R STA67+30	A	83.19	R STA69+00	A	88.64
R STA52+90	B	114.24				R STA69+30	A	27.57
R STA57+00	B	48.95				R STA69+70	A	108.56
R STA57+60	A	85.78				R STA70+20	A	23.74
R STA58+80	A	36.61				R STA72+00	A	173.26
R STA59+30	A	67.07				R STA72+30	A	84.61
R STA59+60	A	82.71				R STA74+00	A	34.00
R STA60+20	A	56.72				R STA74+10	A	17.78
R STA60+60	A	59.38				R STA74+90	A	25.92
R STA60+80	A	33.60				R STA75+40	A	83.13
R STA61+40	A	33.18				R STA76+70	A	52.10
						R STA76+80	A	37.25
						R STA77+20	A	35.50

Notes:

1. Type A has a sidewalk at one side.
2. Concerning 'L' and 'W', refer to the plan.

BLANTYRE CITY ASSEMBLY THE REPUBLIC OF MALAWI	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	THE PREPARATORY SURVEY ON THE PROJECT FOR THE IMPROVEMENT OF BLANTYRE CITY ROADS IN THE REPUBLIC OF MALAWI	TITLE: ACCESS WAY		Drawing No. A W - 1
			SCALE	DATE	AS SHOWN