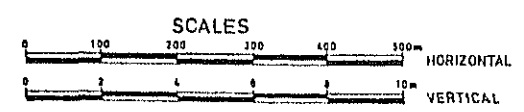
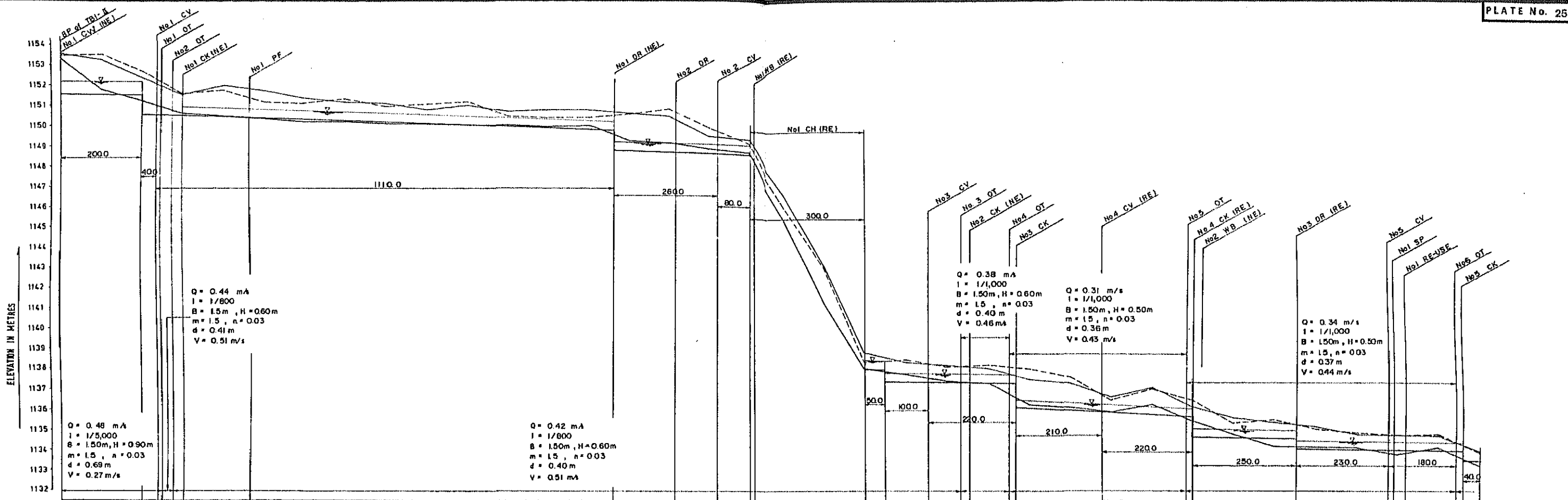


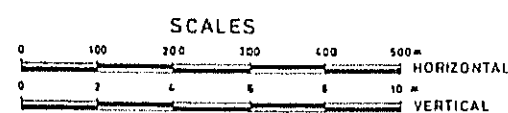
STATION No.	EXISTING CONDITION				PROPOSED CONDITION				
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
BP	1196.40	1196.40	1194.00	0.00	1194.00	1194.00	1194.00	1194.00	1194.00
1	94.93	94.93	94.32	100.00	94.32	94.32	94.32	94.32	94.76
2	95.30	95.07	94.01	200.00	95.07	95.07	95.07	95.07	95.74
3	95.13	95.03	93.59	300.00	95.03	95.03	95.03	95.03	95.74
4	92.83	93.14	91.70	400.00	93.14	93.14	93.14	93.14	93.74
5	92.67	92.92	91.65	500.00	92.92	92.92	92.92	92.92	92.74
6	92.63	92.92	91.61	600.00	92.92	92.92	92.92	92.92	92.74
7	92.78	93.18	91.90	700.00	93.18	93.18	93.18	93.18	93.74
7.24	92.53	92.40	90.86	724.90	92.40	92.40	92.40	92.40	93.74
7.44	92.06	92.30	90.74	744.50	92.30	92.30	92.30	92.30	93.74
8	90.77	91.21	89.13	833.00	91.21	91.21	91.21	91.21	93.74
9	89.30	89.56	88.39	900.00	89.56	89.56	89.56	89.56	93.74
10	89.19	89.45	88.23	1000.00	89.45	89.45	89.45	89.45	93.74
11	88.45	88.73	88.02	1100.00	88.73	88.73	88.73	88.73	93.74
12	88.46	88.50	87.75	1200.00	88.50	88.50	88.50	88.50	93.74
13	88.08	88.42	87.15	1300.00	88.42	88.42	88.42	88.42	93.74
13.29	87.95	88.23	86.92	1329.00	88.23	88.23	88.23	88.23	93.74
13.52	87.81	88.13	86.83	1352.00	88.13	88.13	88.13	88.13	93.74
14	87.54	87.52	86.82	1400.00	87.52	87.52	87.52	87.52	93.74
15	87.91	87.91	86.85	1500.00	87.91	87.91	87.91	87.91	93.74
15	87.58	87.75	86.62	1600.00	87.75	87.75	87.75	87.75	93.74
17	86.72	87.23	85.87	1700.00	87.23	87.23	87.23	87.23	93.74
18	86.50	86.46	85.39	1800.00	86.46	86.46	86.46	86.46	93.74
19	86.34	86.01	85.14	1900.00	86.01	86.01	86.01	86.01	93.74
20	85.87	86.05	85.07	2000.00	86.05	86.05	86.05	86.05	93.74
21	85.63	85.33	85.09	2100.00	85.33	85.33	85.33	85.33	93.74
21.50	85.58	85.72	85.00	2150.00	85.72	85.72	85.72	85.72	93.74
21.80	85.39	85.51	84.58	2180.00	85.51	85.51	85.51	85.51	93.74
22	85.57	85.62	84.58	2200.00	85.62	85.62	85.62	85.62	93.74
23	85.57	85.40	84.33	2300.00	85.40	85.40	85.40	85.40	93.74
24	85.98	85.10	84.08	2400.00	85.10	85.10	85.10	85.10	93.74
25	84.70	84.79	83.76	2500.00	84.79	84.79	84.79	84.79	93.74
26	84.50	84.52	83.71	2600.00	84.52	84.52	84.52	84.52	93.74
27	84.35	84.44	83.59	2700.00	84.44	84.44	84.44	84.44	93.74
28	84.17	84.16	83.42	2800.00	84.16	84.16	84.16	84.16	93.74
29	84.21	84.16	83.34	2900.00	84.16	84.16	84.16	84.16	93.74
30	83.97	83.77	83.04	3000.00	83.77	83.77	83.77	83.77	93.74
31	83.66	83.20	82.88	3100.00	83.20	83.20	83.20	83.20	93.74
32	83.76	83.82	82.85	3200.00	83.82	83.82	83.82	83.82	93.74
33	83.79	83.77	82.89	3300.00	83.77	83.77	83.77	83.77	93.74
34	83.61	83.76	82.68	3400.00	83.76	83.76	83.76	83.76	93.74
EP	1183.95	1183.36	1182.50	3456.00	1183.36	1183.36	1183.36	1183.36	1183.36



REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-I**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
 3011

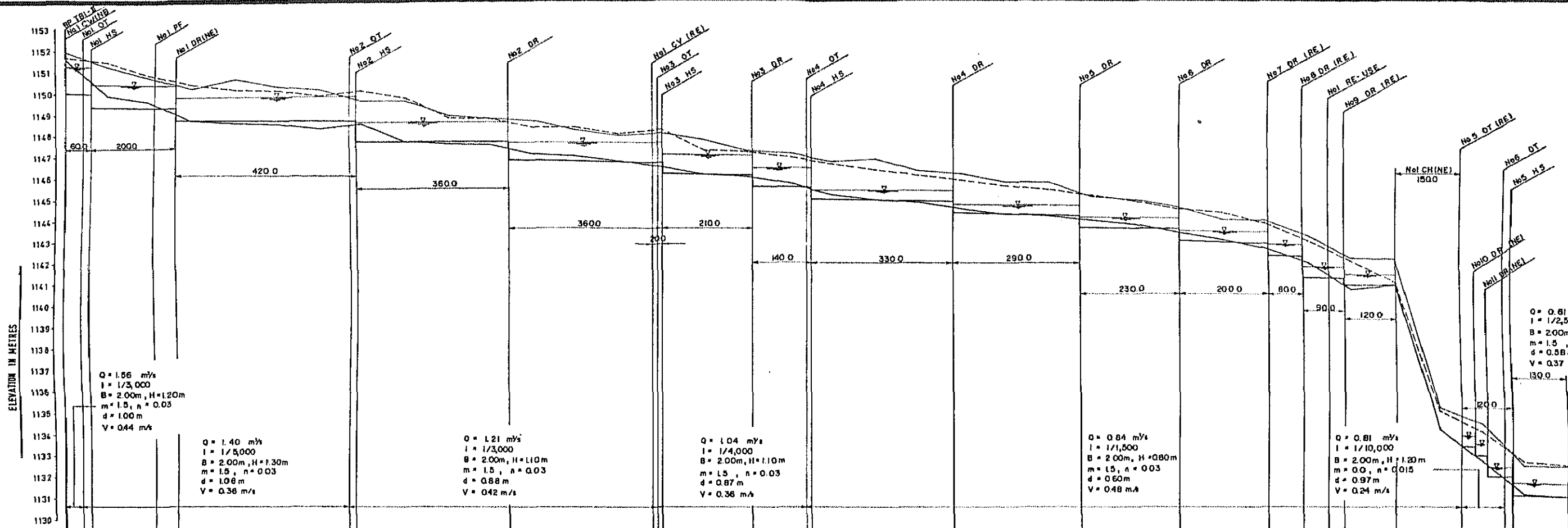


STATION No.	P. PROPOSED CONDITION				EXISTING CONDITION			
	EMBANKMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	REDUCED DISTANCE
BP	1152.00	1152.19	1151.50	1153.42	1153.48	1153.27	0.00	0.00
1				53.48	53.24	51.72	100.00	100.00
2				52.65	52.36	51.21	200.00	200.00
3				51.55	51.49	50.56	300.00	300.00
4				51.68	51.95	50.40	400.00	400.00
5				51.10	51.67	50.27	500.00	500.00
6				51.01	51.30	50.11	600.00	600.00
7				51.23	51.10	50.08	700.00	700.00
8				50.85	51.01	49.99	800.00	800.00
9				50.97	50.71	50.00	900.00	900.00
10				51.12	50.92	49.95	1000.00	1000.00
11				50.38	50.62	49.95	1100.00	1100.00
12				50.27	50.70	49.86	1200.00	1200.00
13				50.31	50.69	49.96	1300.00	1300.00
14				50.50	50.55	49.18	1400.00	1400.00
15				50.75	50.35	49.09	1500.00	1500.00
16				49.83	49.42	48.81	1600.00	1600.00
17				49.05	49.27	48.68	1700.00	1700.00
18				46.02	46.63	45.40	1800.00	1800.00
19				42.88	43.06	41.21	1900.00	1900.00
20				38.29	38.77	38.00	2000.00	2000.00
21				38.43	38.31	37.72	2100.00	2100.00
22				38.09	38.14	37.38	2200.00	2200.00
23				38.16	37.97	37.28	2300.00	2300.00
24				37.97	37.47	36.23	2400.00	2400.00
25				37.59	37.20	36.11	2500.00	2500.00
26				36.42	36.58	35.85	2600.00	2600.00
27				37.02	37.02	36.26	2700.00	2700.00
28				35.45	35.13	35.24	2800.00	2800.00
29				35.31	35.58	34.73	2900.00	2900.00
30				35.07	35.34	34.18	3000.00	3000.00
31				35.03	35.17	34.17	3100.00	3100.00
32				34.82	34.78	34.15	3200.00	3200.00
33				34.72	34.73	33.79	3300.00	3300.00
34				34.79	34.70	34.13	3400.00	3400.00
35				1133.88	1133.95	1133.25	3500.00	3500.00

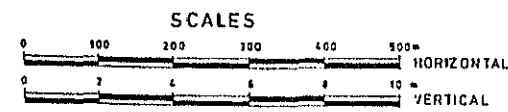


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 PROFILE OF THIBA BRANCH CANAL-II (1/2)  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
 3012

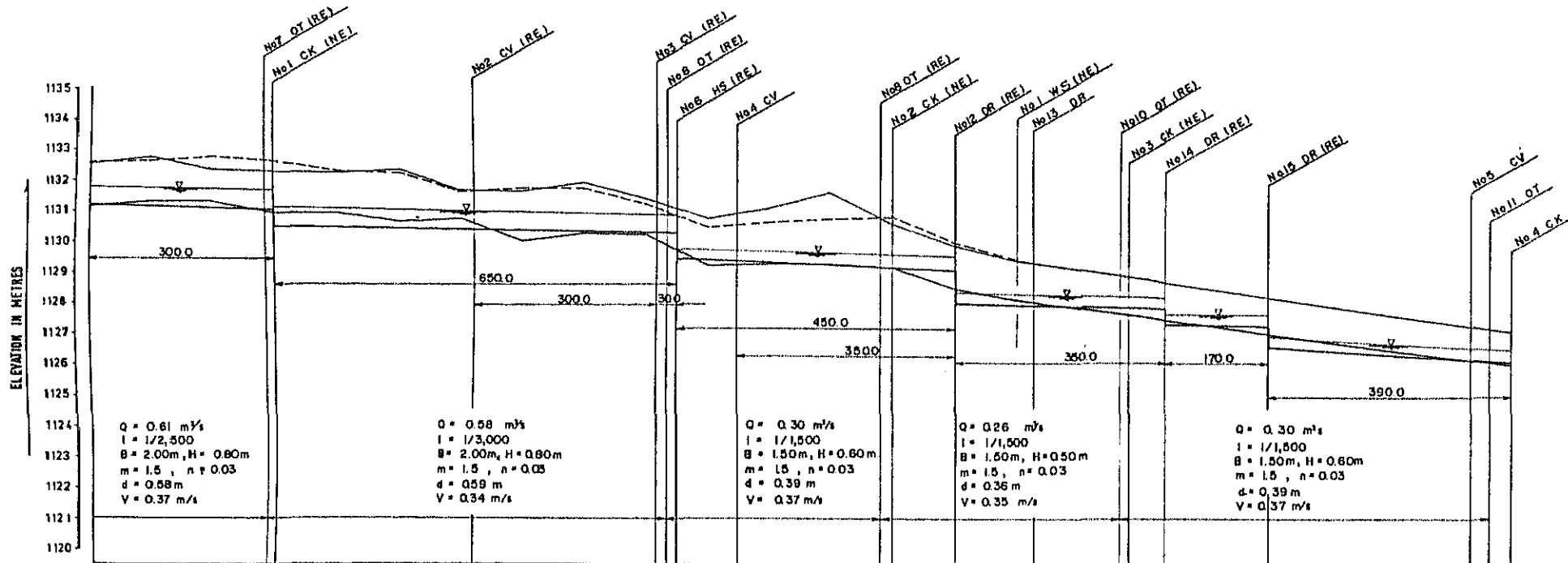




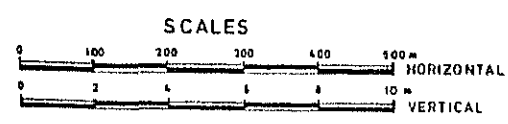
STATION No.	EXISTING CONDITION				PROPOSED CONDITION			
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	LEFT BANK ELEVATION	RIGHT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
BP	0.00	0.00	1151.52	1151.89	1151.89	1150.03	1151.23	1151.23
1	100.00	100.00	49.84	51.21	51.46	1150.02	51.10	51.32
2	200.00	200.00	49.53	50.70	50.82	1149.98	50.46	50.68
3	300.00	300.00	49.64	50.17	50.34	1149.99	50.39	50.61
4	400.00	400.00	48.49	50.61	50.07		49.88	50.11
5	500.00	500.00	48.44	50.21	50.03			
6	600.00	600.00	48.20	50.03	49.76			
7	700.00	700.00	48.43	49.49	49.97	1148.73	49.61	49.83
8	800.00	800.00	47.57	49.49	49.62	1147.75	48.61	48.83
9	900.00	900.00	47.48	48.81	48.73			
10	1000.00	1000.00	47.45	48.67	48.66			
11	1100.00	1100.00	47.03	48.55	48.23	1147.61	47.91	48.13
12	1200.00	1200.00	46.92	48.11	48.26	1146.61	47.91	48.13
13	1300.00	1300.00	46.68	47.87	47.95			
14	1400.00	1400.00	46.45	48.03	48.18	1145.70	47.80	48.02
15	1500.00	1500.00	46.11	47.71	47.23	1145.63	47.80	48.02
16	1600.00	1600.00	45.97	47.18	47.15	1145.63	46.73	46.95
17	1700.00	1700.00	45.70	47.08	46.83			
18	1800.00	1800.00	45.16	46.68	46.55	1145.60	46.50	46.72
19	1900.00	1900.00	44.89	46.81	46.32	1145.10	45.70	45.92
20	2000.00	2000.00	44.82	46.25	46.03			
21	2100.00	2100.00	44.48	46.12	45.84	1144.88	45.48	45.70
22	2200.00	2200.00	44.25	45.73	45.56	1144.38	44.98	45.20
23	2300.00	2300.00	44.19	45.74	45.40			
24	2400.00	2400.00	44.00	45.12	45.16	1144.19	44.79	45.01
25	2500.00	2500.00	43.80	44.83	44.90	1143.69	44.29	44.51
26	2600.00	2600.00	43.36	44.59	44.51	1143.54	44.14	44.36
27	2700.00	2700.00	43.07	44.03	44.36	1143.04	43.64	43.86
28	2800.00	2800.00	42.67	43.88	43.84	1142.91	43.51	43.73
29	2900.00	2900.00	41.99	43.24	43.01	1142.41	43.01	43.23
30	3000.00	3000.00	40.73	42.22	42.07	1142.36	42.66	42.88
31	3100.00	3100.00	40.57	42.21	41.07	1141.96	42.16	42.38
32	3200.00	3200.00	36.25	35.24	35.12			
33	3300.00	3300.00	32.75	34.07	34.10	1141.87	34.81	35.03
34	3400.00	3400.00	31.18	32.50	32.68	1141.88	34.18	34.40
35	3500.00	3500.00	1131.11	1132.56	1132.56	1131.12	1131.12	1131.12



REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-III (1/2)**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
 3014



STATION No.	EXISTING CONDITION		PROPOSED CONDITION	
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	EMBANKMENT ELEVATION	WATER SURFACE ELEVATION
35	1132.56	1131.11	1131.81	1131.60
36	32.60	31.25	31.31	31.10
37	32.70	31.27		
38	32.25	30.90		
39	32.21	30.89		
40	32.18	30.63		
41	31.58	30.66		
42	31.64	29.96		
43	31.66	30.19		
44	31.15	30.18		
45	30.40	29.16		
46	30.53	29.19		
47	30.64	29.18		
48	30.73	29.12		
49	29.91	28.39		
50	1129.38	1128.04		
51	30.64	29.18		
52	30.73	29.12		
53	29.91	28.39		
54	27.75	27.04		
55	27.25	26.54		
56	26.70	26.70		
57	26.59	26.59		
58	1126.89	1126.80		



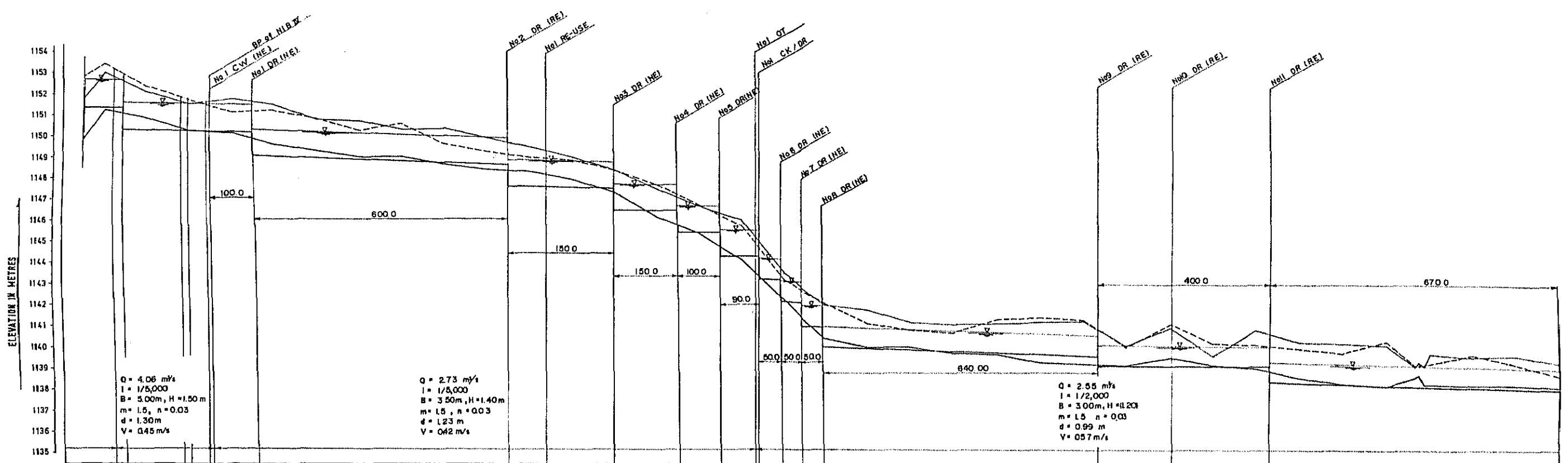
REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

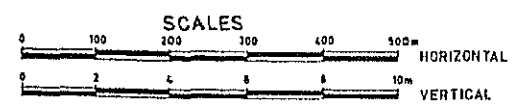
TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-III (2/2)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3015**



STATION No.	EXISTING CONDITION				PROPOSED CONDITION				
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	REDUCED DISTANCE	CURVE	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
BP	114.9	1151.82	1152.84	51.10	12049.90		1153.00	1152.82	1153.00
121	51.20	53.01	53.38	100.00	12100.00		1151.42	1152.82	52.72
122	50.82	52.06	52.32	100.00	12200.00		1150.00	51.30	51.40
123	50.22	51.44	51.65	100.00	12300.00		1149.93	51.16	51.33
124	50.10	51.59	51.84	100.00	12400.00		1148.93	50.16	50.33
125	49.53	51.41	51.11	100.00	12500.00		1148.93	49.76	49.93
126	49.17	50.79	50.81	100.00	12600.00		1147.36	48.59	48.76
127	48.93	50.60	50.16	100.00	12700.00		1146.36	47.59	47.76
128	48.93	50.19	49.48	100.00	12800.00		1146.33	47.56	47.73
129	48.54	50.25	49.52	100.00	12900.00		1145.35	46.56	46.73
130	48.30	49.79	49.15	100.00	13000.00		1145.26	46.49	46.66
131	48.21	49.35	48.86	100.00	13100.00		1144.20	45.49	45.66
132	47.84	48.90	48.74	100.00	13200.00		1144.20	44.49	44.66
133	47.26	48.30	48.30	100.00	13300.00		1143.20	44.19	44.40
134	46.11	47.41	47.58	100.00	13400.00		1143.18	44.17	44.38
135	45.34	46.82	46.87	100.00	13500.00		1142.18	43.17	43.38
136	44.10	45.92	45.87	100.00	13600.00		1141.16	42.15	42.36
137	42.20	43.48	43.17	100.00	13700.00		1141.14	42.13	42.34
138	40.41	41.95	42.03	100.00	13800.00		1140.14	41.13	41.34
139	39.87	41.74	41.11	100.00	13900.00		1139.82	40.81	41.02
140	39.98	41.15	40.80	100.00	14000.00		1139.82	40.31	40.52
141	39.70	41.05	40.64	100.00	14100.00		1138.82	40.31	40.52
142	39.64	41.09	41.28	100.00	14200.00		1138.09	40.31	40.52
143	39.26	41.15	41.35	100.00	14300.00		1138.09	40.31	40.52
144	39.23	41.21	41.25	100.00	14400.00		1138.09	40.31	40.52
145	39.13	41.04	40.97	100.00	14500.00		1138.09	40.31	40.52
146	39.51	40.93	41.07	100.00	14600.00		1138.09	40.31	40.52
147	39.16	39.54	40.16	100.00	14700.00		1138.09	40.31	40.52
148	39.01	40.77	40.98	100.00	14800.00		1138.09	40.31	40.52
149	38.55	40.23	39.89	100.00	14900.00		1138.09	40.31	40.52
150	38.28	40.14	39.69	100.00	15000.00		1138.09	40.31	40.52
151	38.15	40.11	40.25	100.00	15100.00		1138.09	40.31	40.52
151.67	38.60	39.10	39.13	8.00	15167.00		1138.09	40.31	40.52
152	38.23	39.65	39.18	12.00	15200.00		1138.09	40.31	40.52
153	38.22	39.53	39.61	100.00	15300.00		1138.09	40.31	40.52
154	38.18	39.61	39.17	100.00	15400.00		1138.09	40.31	40.52
155	1138.12	1139.26	1138.66	100.00	15500.00		1138.09	40.31	40.52



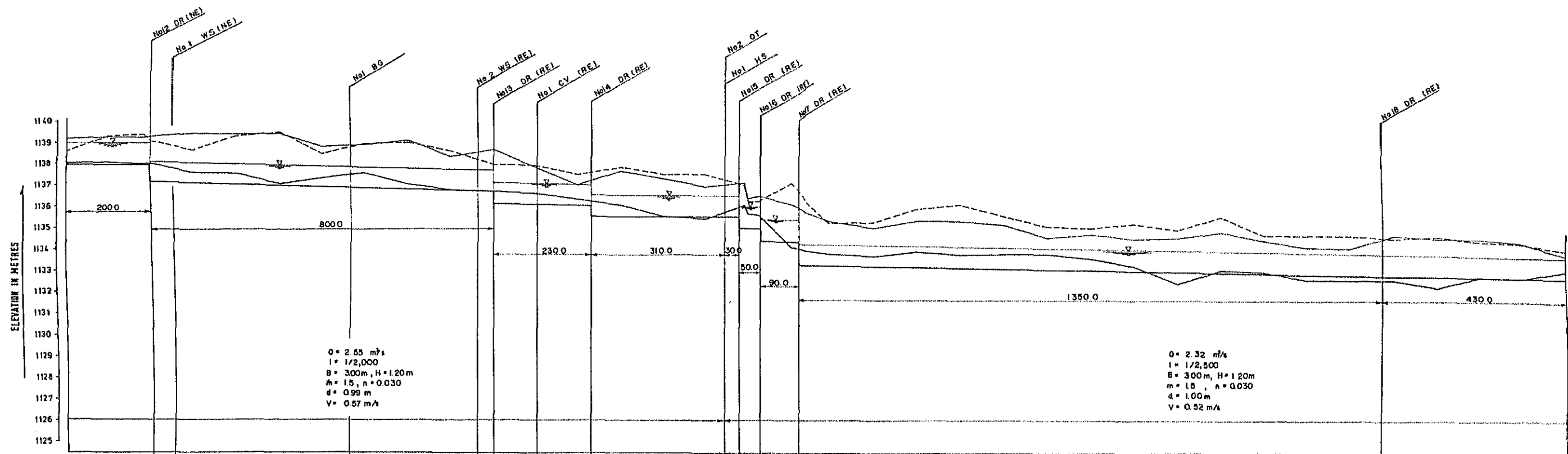
REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
DEVELOPMENT PROJECT

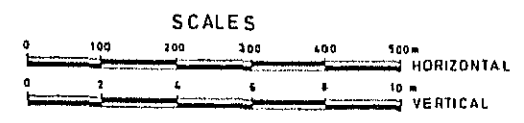
TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-IV (1/5)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
TOKYO JAPAN

DWG. No.  
**3016**



STATION No.	EXISTING CONDITION				PROPOSED CONDITION		
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	LEFT BANK ELEVATION	RIGHT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION
155	100.00	15500.00	1138.12	1139.26	1138.66	1137.79	1138.98
156	85.20	15600.00	38.13	39.32	38.34	1136.78	1138.23
156.85		15685.20	38.01	39.23	38.42		
157	100.00	15700.00	38.06	39.32	38.11	1137.09	1138.06
158	100.00	15800.00	37.63	39.45	38.64		
159	100.00	15900.00	37.57	39.38	39.31		
160	100.00	16000.00	37.07	39.44	39.47		
161	100.00	16100.00	37.36	38.80	38.45		
162	100.00	16200.00	37.56	38.90	38.55		
163	100.00	16300.00	37.05	39.03	38.99		
164	100.00	16400.00	36.79	38.34	38.62		
165	100.00	16500.00	36.69	38.65	37.94	1136.59	1136.89
166	100.00	16600.00	36.58	37.82	37.90	1136.19	1136.39
167	100.00	16700.00		36.99	37.47		
168	100.00	16800.00	36.04	37.66	37.83		
169	100.00	16900.00	35.53	37.28	37.49		
170	100.00	17000.00	35.38	36.89	37.49		
170.89	89.00	17089.00	36.04	37.11	36.96	1135.42	1135.62
171	74.00	17100.00	35.65	36.32	36.37	1134.92	1135.12
171.24	72.00	17124.00	35.61	36.46	36.19	1134.90	1135.10
172	76.00	17200.00	34.11	36.07	37.07	1134.50	1134.70
173	100.00	17300.00		33.77	35.29	1134.46	1134.66
174	100.00	17400.00		33.65	35.01		
175	100.00	17500.00		33.91	35.34		
176	100.00	17600.00		33.75	35.33		
177	100.00	17700.00		33.78	35.14		
178	100.00	17800.00		33.81	34.56		
179	100.00	17900.00		33.58	34.69		
180	100.00	18000.00		33.25	34.50		
181	100.00	18100.00		32.34	34.53		
182	100.00	18200.00		33.05	34.79		
183	100.00	18300.00		32.95	34.37		
184	100.00	18400.00		32.62	34.11		
185	100.00	18500.00		32.57	34.07		
186	100.00	18600.00		32.58	34.65		
187	100.00	18700.00		32.23	34.56		
188	100.00	18800.00		32.76	34.56		
189	100.00	18900.00		32.69	34.42		
190	100.00	19000.00	1133.08	1133.03	1134.04	1132.79	1133.99

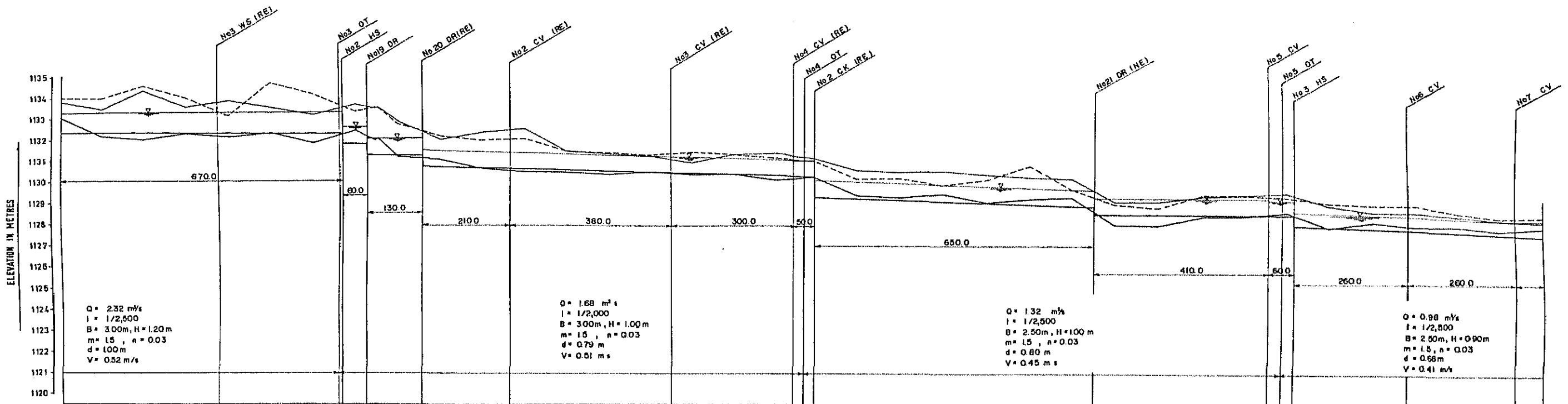


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-IV (2/5)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3017**



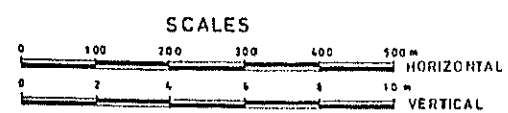
Q = 2.32 m<sup>3</sup>/s  
 I = 1/2,500  
 B = 3.00m, H = 1.20m  
 m = 1.5, n = 0.03  
 d = 1.00m  
 V = 0.52 m/s

Q = 1.68 m<sup>3</sup>/s  
 I = 1/2,000  
 B = 3.00m, H = 1.00m  
 m = 1.5, n = 0.03  
 d = 0.79 m  
 V = 0.51 m/s

Q = 1.32 m<sup>3</sup>/s  
 I = 1/2,500  
 B = 2.50m, H = 1.00m  
 m = 1.5, n = 0.03  
 d = 0.80 m  
 V = 0.45 m/s

Q = 0.98 m<sup>3</sup>/s  
 I = 1/2,500  
 B = 2.00m, H = 0.90m  
 m = 1.5, n = 0.03  
 d = 0.66m  
 V = 0.41 m/s

STATION No.	EXISTING CONDITION				PROPOSED CONDITION			
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
190	1134.04	1133.85	1133.08	100.00	19000.00	1132.25	33.35	33.55
191	34.01	33.48	32.21	100.00	19100.00	1131.65	32.64	32.65
192	34.61	34.35	32.05	100.00	19200.00	1131.82	32.81	32.82
193	34.03	33.61	32.36	100.00	19300.00	1131.82	32.81	32.82
194	33.22	32.92	32.20	100.00	19400.00	1131.05	32.05	32.05
195	34.75	33.57	32.37	100.00	19500.00	1131.05	32.05	32.05
196	34.21	33.23	31.91	100.00	19600.00	1130.76	31.55	31.76
197	33.37	33.75	32.51	100.00	19700.00	1130.66	31.45	31.66
197.46	33.60	33.56	32.04	6.00	19746.00	1130.56	31.35	31.56
197.51	33.63	33.62	32.13	4.30	19751.30	1130.56	31.35	31.56
198	32.78	32.93	31.23	100.00	19800.00	1130.56	31.35	31.56
199	32.21	32.05	31.11	100.00	19900.00	1130.56	31.35	31.56
200	32.03	32.42	30.68	100.00	20000.00	1130.56	31.35	31.56
201	32.11	32.57	30.52	100.00	20100.00	1130.56	31.35	31.56
202	31.49	31.47	30.49	100.00	20200.00	1130.56	31.35	31.56
203	31.43	31.37	30.41	100.00	20400.00	1130.56	31.35	31.56
204	31.29	31.25	30.48	100.00	20400.00	1130.56	31.35	31.56
205	31.44	30.95	30.37	100.00	20500.00	1130.56	31.35	31.56
206	31.35	31.35	30.42	100.00	20600.00	1130.56	31.35	31.56
207	31.18	31.34	30.13	100.00	20700.00	1130.56	31.35	31.56
208	31.08	31.18	30.30	100.00	20800.00	1130.56	31.35	31.56
209	30.72	30.59	29.38	100.00	20900.00	1130.56	31.35	31.56
210	30.18	30.50	29.32	100.00	21000.00	1130.56	31.35	31.56
211	29.90	30.55	29.51	100.00	21100.00	1130.56	31.35	31.56
212	30.15	30.40	29.11	100.00	21200.00	1130.56	31.35	31.56
213	29.81	30.26	29.24	100.00	21300.00	1130.56	31.35	31.56
214	29.68	30.18	29.30	100.00	21400.00	1130.56	31.35	31.56
215	29.48	29.60	28.53	100.00	21500.00	1130.56	31.35	31.56
216	29.29	29.55	28.47	100.00	21600.00	1130.56	31.35	31.56
217	29.40	29.36	28.42	100.00	21700.00	1130.56	31.35	31.56
218	29.41	29.43	28.41	100.00	21800.00	1130.56	31.35	31.56
219	29.28	29.45	28.61	100.00	21900.00	1130.56	31.35	31.56
220	29.05	28.94	27.58	100.00	22000.00	1130.56	31.35	31.56
221	28.56	28.62	28.15	100.00	22100.00	1130.56	31.35	31.56
222	28.97	28.61	27.94	100.00	22200.00	1130.56	31.35	31.56
223	28.65	28.51	28.01	100.00	22300.00	1130.56	31.35	31.56
224	28.40	28.32	27.79	100.00	22400.00	1130.56	31.35	31.56
225	1128.43	1128.28	1127.94	100.00	22500.00	1130.56	31.35	31.56



REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD

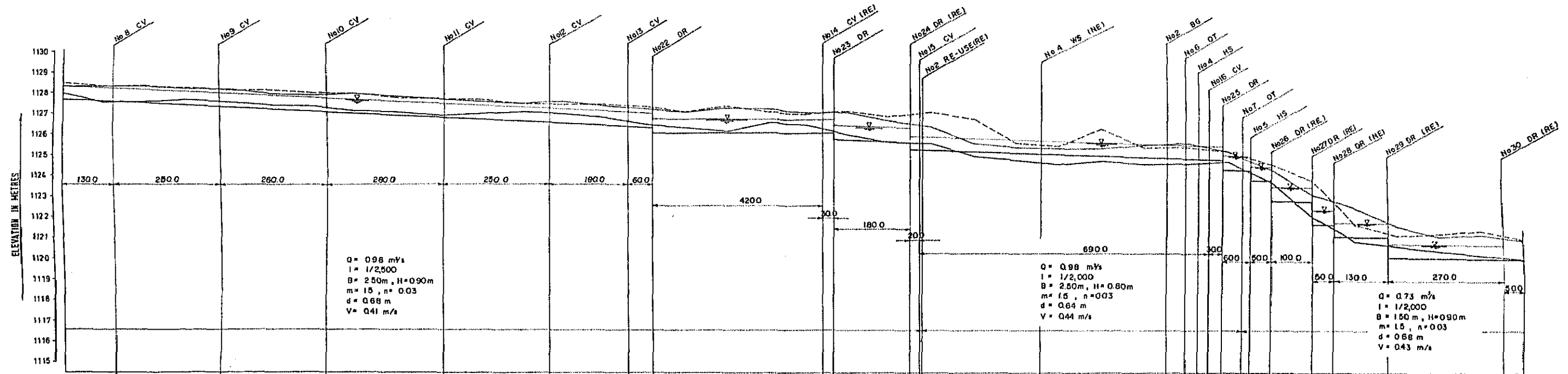
THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-IV (3/5)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
 3018



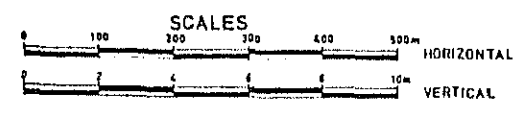


Q = 0.98 m<sup>3</sup>/s  
 I = 1/2,500  
 B = 2.50m, H = 0.90m  
 m = 1.5, n = 0.03  
 d = 0.68 m  
 V = 0.41 m/s

Q = 0.98 m<sup>3</sup>/s  
 I = 1/2,000  
 B = 2.60m, H = 0.80m  
 m = 1.5, n = 0.03  
 d = 0.64 m  
 V = 0.44 m/s

Q = 0.73 m<sup>3</sup>/s  
 I = 1/2,000  
 B = 1.50m, H = 0.90m  
 m = 1.5, n = 0.03  
 d = 0.68 m  
 V = 0.43 m/s

STATION No.	EXISTING CONDITION				PROPOSED CONDITION		
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
225	100.00	22500.00	1127.94	1128.26	1127.55	1128.24	1128.46
226	100.00	22600.00	27.50	28.27	1127.46	28.14	28.36
227	100.00	22700.00	27.52	28.26	1127.36	28.04	28.50
228	100.00	22800.00	27.60	28.15	1127.26	27.94	28.16
229	100.00	22900.00	27.52	28.12	1127.16	27.84	28.06
230	100.00	23000.00	27.34	27.87	1127.06	27.74	27.96
231	100.00	23100.00	27.28	27.87	1126.95	27.63	27.85
232	100.00	23200.00	27.05	27.91	1126.85	27.53	27.75
233	100.00	23300.00	27.01	27.78	1126.75	27.43	27.65
234	100.00	23400.00	26.86	27.85	1126.65	27.33	27.55
235	100.00	23500.00	26.93	27.52	1126.55	27.23	27.45
236	100.00	23600.00	27.02	27.39	1126.45	27.13	27.35
237	100.00	23700.00	26.92	27.43	1126.35	27.03	27.25
238	100.00	23800.00	26.73	27.27	1126.25	26.93	27.15
239	100.00	23900.00	25.41	27.16	1126.15	26.83	27.05
240	100.00	24000.00	26.25	27.01	1126.05	26.73	26.95
241	100.00	24100.00	26.06	27.19	1125.95	26.63	26.85
242	100.00	24200.00	26.52	27.16	1125.85	26.53	26.75
243	100.00	24300.00	26.40	26.97	1125.75	26.43	26.65
244	100.00	24400.00	25.83	26.97	1125.65	26.33	26.55
245	100.00	24500.00	25.56	26.57	1125.55	26.23	26.45
246	100.00	24600.00	25.52	26.31	1125.45	26.13	26.35
247	100.00	24700.00	24.91	25.47	1125.35	26.03	26.25
248	100.00	24800.00	24.70	25.31	1125.25	25.93	26.15
249	100.00	24900.00	24.52	25.26	1125.15	25.83	26.05
250	100.00	25000.00	24.63	25.26	1125.05	25.73	25.95
251	100.00	25100.00	24.49	25.41	1124.95	25.63	25.85
252	100.00	25200.00	24.51	25.47	1124.85	25.53	25.75
253	100.00	25300.00	24.62	25.10	1124.75	25.43	25.65
254	100.00	25400.00	23.55	24.23	1124.65	25.33	25.55
255	100.00	25500.00	21.56	23.00	1124.55	25.23	25.45
256	100.00	25600.00	20.29	22.40	1124.45	25.13	25.35
257	100.00	25700.00	20.54	21.52	1124.35	25.03	25.25
258	100.00	25800.00	20.26	21.04	1124.25	24.93	25.15
259	100.00	25900.00	20.16	21.15	1124.15	24.83	25.05
260	100.00	26000.00	11.95	120.98	1124.05	24.73	24.95

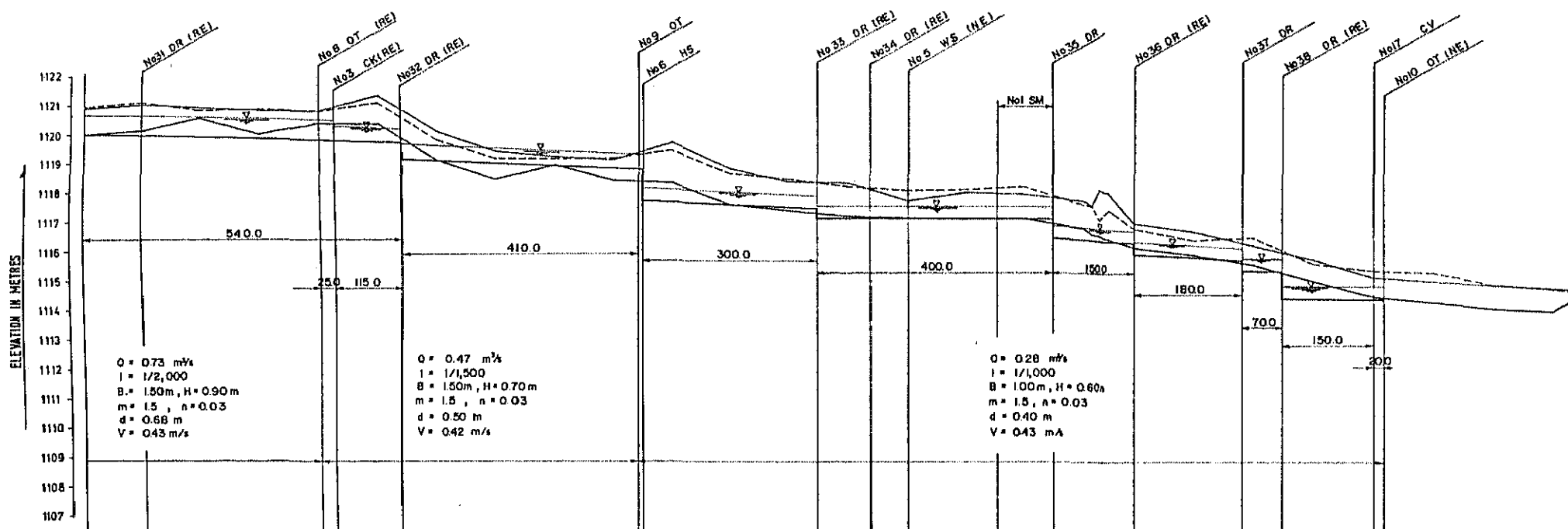


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

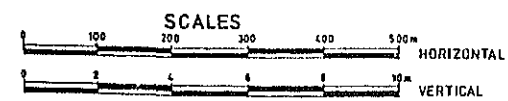
TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-IV (4/5)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3019**

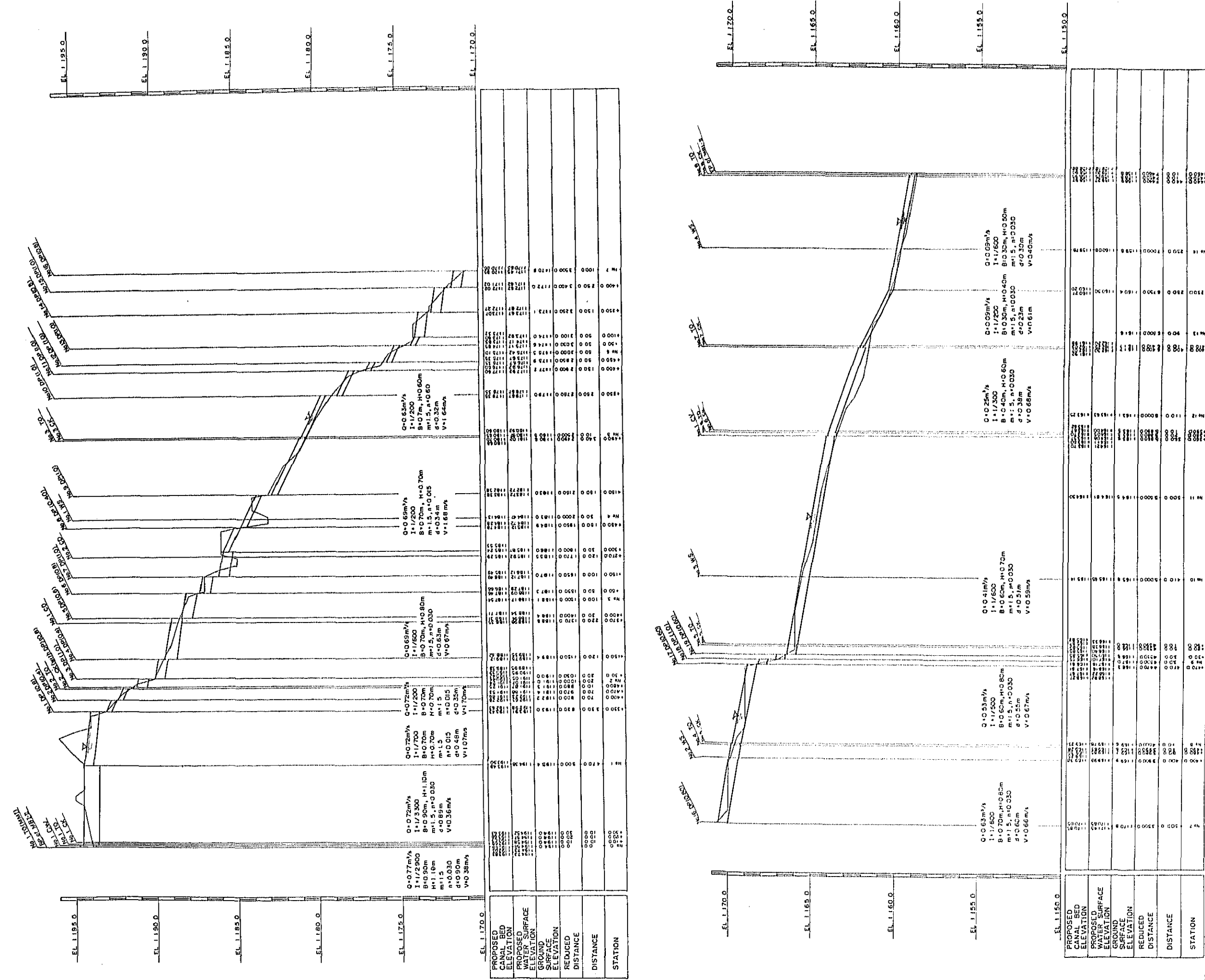


STATION	EXISTING CONDITION				PROPOSED CONDITION		
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	EMBARMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION
260	1120.94	1120.89	1119.95	100.00	20.34	20.32	11.19.64
261	21.08	20.99	20.13	100.00	20.32	20.17	11.19.62
262	20.75	20.85	20.55	100.00	20.27	20.12	11.19.57
263	20.85	20.82	20.01	100.00	20.28	20.06	11.19.49
264	21.01	20.77	20.35	100.00	19.78	19.36	11.19.08
265	21.05	21.30	20.36	100.00	19.81	19.58	11.18.81
266	19.81	20.11	19.11	100.00	18.41	18.21	11.17.81
267	19.13	19.37	18.46	100.00	18.33	18.21	11.17.81
268	19.15	19.21	18.94	100.00	17.57	17.57	11.17.11
269	19.13	19.09	18.41	100.00	18.61	18.61	11.17.11
270	19.42	19.70	18.33	100.00	18.43	18.43	11.16.71
271	18.61	18.60	17.57	100.00	16.61	16.61	11.16.21
272	18.43	18.35	17.36	100.00	16.77	16.77	11.15.81
273	18.17	18.33	17.18	100.00	16.06	16.06	11.15.66
274	18.03	17.73	17.13	100.00	16.37	16.37	11.15.08
275	18.11	17.99	17.11	100.00	16.43	16.43	11.15.01
276	18.21	17.94	17.13	100.00	15.60	15.60	11.14.31
277	17.61	17.71	16.60	100.00	15.36	15.36	11.14.04
278	17.35	17.35	16.26	100.00	15.30	15.30	11.14.04
279	16.77	16.94	15.15	100.00	14.87	14.87	11.14.04
280	16.37	16.67	15.49	100.00	14.74	14.74	11.14.04
281	16.43	16.23	15.58	100.00	14.74	14.74	11.14.04
282	15.60	15.75	15.03	100.00	14.74	14.74	11.14.04
283	15.36	15.15	14.47	100.00	14.74	14.74	11.14.04
284	15.30	15.02	14.31	100.00	14.74	14.74	11.14.04
285	14.87	14.85	14.12	100.00	14.74	14.74	11.14.04
EP	14.74	14.74	14.01	31.55	14.74	14.74	11.14.04

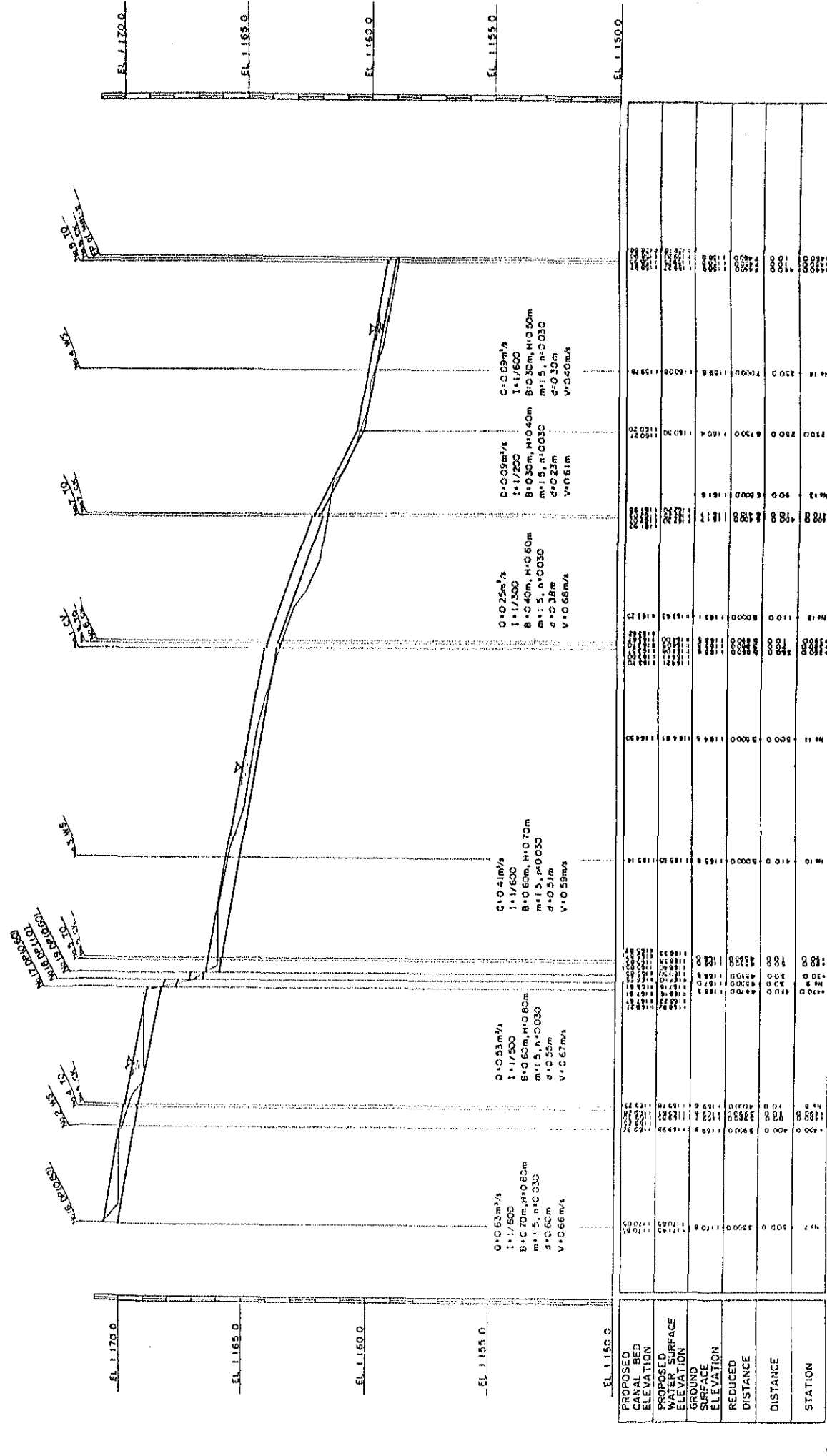


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH CANAL-IV (5/5)**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
**3020**





PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1170.0	1170.0	1170.0	0.00	0.00	0+000
1170.0	1170.0	1170.0	0.00	0.00	0+050
1170.0	1170.0	1170.0	0.00	0.00	0+100
1170.0	1170.0	1170.0	0.00	0.00	0+150
1170.0	1170.0	1170.0	0.00	0.00	0+200
1170.0	1170.0	1170.0	0.00	0.00	0+250
1170.0	1170.0	1170.0	0.00	0.00	0+300
1170.0	1170.0	1170.0	0.00	0.00	0+350
1170.0	1170.0	1170.0	0.00	0.00	0+400
1170.0	1170.0	1170.0	0.00	0.00	0+450
1170.0	1170.0	1170.0	0.00	0.00	0+500
1170.0	1170.0	1170.0	0.00	0.00	0+550
1170.0	1170.0	1170.0	0.00	0.00	0+600
1170.0	1170.0	1170.0	0.00	0.00	0+650
1170.0	1170.0	1170.0	0.00	0.00	0+700
1170.0	1170.0	1170.0	0.00	0.00	0+750
1170.0	1170.0	1170.0	0.00	0.00	0+800
1170.0	1170.0	1170.0	0.00	0.00	0+850
1170.0	1170.0	1170.0	0.00	0.00	0+900



PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1150.0	1150.0	1150.0	0.00	0.00	0+000
1150.0	1150.0	1150.0	0.00	0.00	0+050
1150.0	1150.0	1150.0	0.00	0.00	0+100
1150.0	1150.0	1150.0	0.00	0.00	0+150
1150.0	1150.0	1150.0	0.00	0.00	0+200
1150.0	1150.0	1150.0	0.00	0.00	0+250
1150.0	1150.0	1150.0	0.00	0.00	0+300
1150.0	1150.0	1150.0	0.00	0.00	0+350
1150.0	1150.0	1150.0	0.00	0.00	0+400
1150.0	1150.0	1150.0	0.00	0.00	0+450
1150.0	1150.0	1150.0	0.00	0.00	0+500
1150.0	1150.0	1150.0	0.00	0.00	0+550
1150.0	1150.0	1150.0	0.00	0.00	0+600
1150.0	1150.0	1150.0	0.00	0.00	0+650
1150.0	1150.0	1150.0	0.00	0.00	0+700
1150.0	1150.0	1150.0	0.00	0.00	0+750
1150.0	1150.0	1150.0	0.00	0.00	0+800
1150.0	1150.0	1150.0	0.00	0.00	0+850
1150.0	1150.0	1150.0	0.00	0.00	0+900

REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

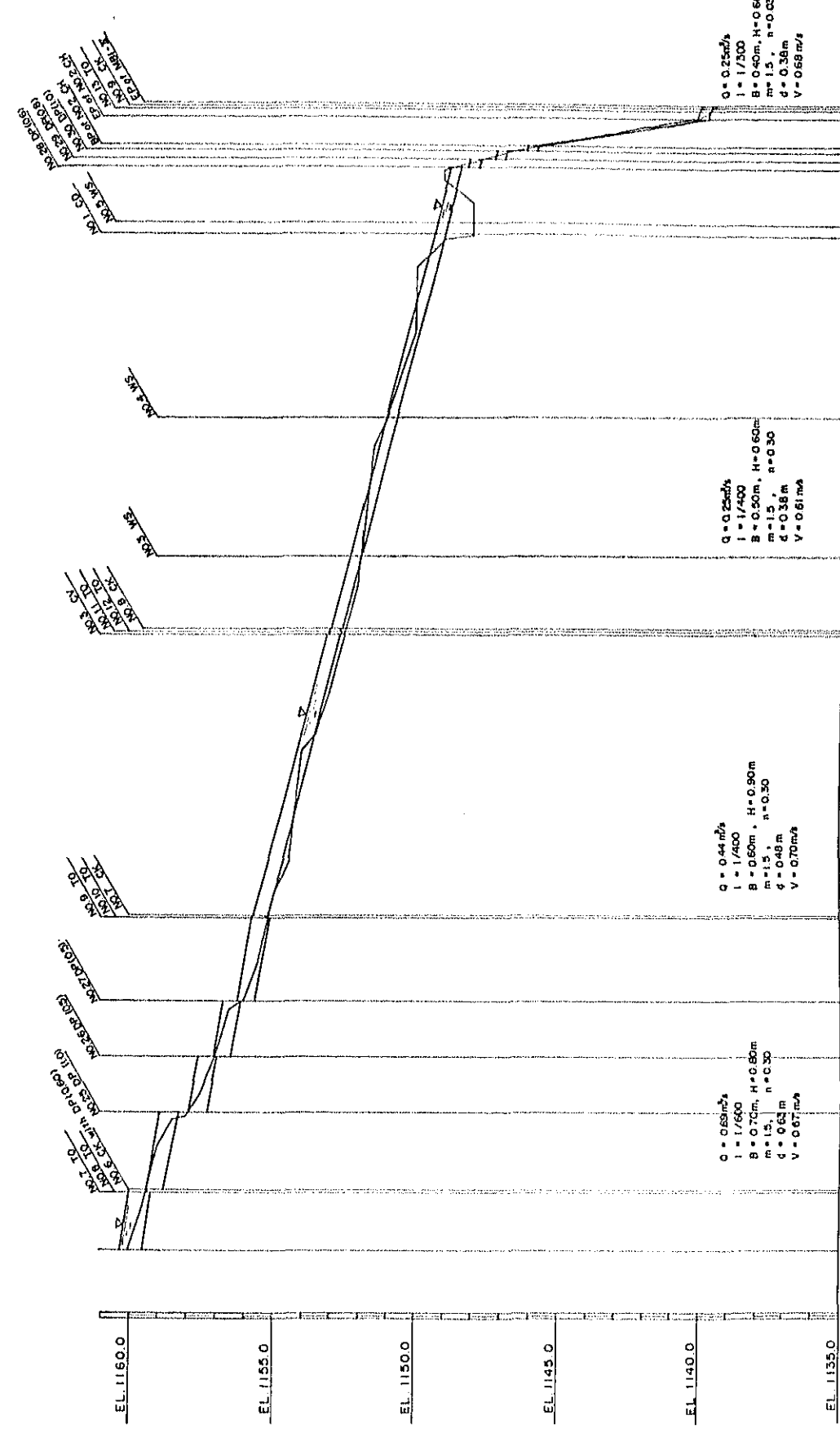
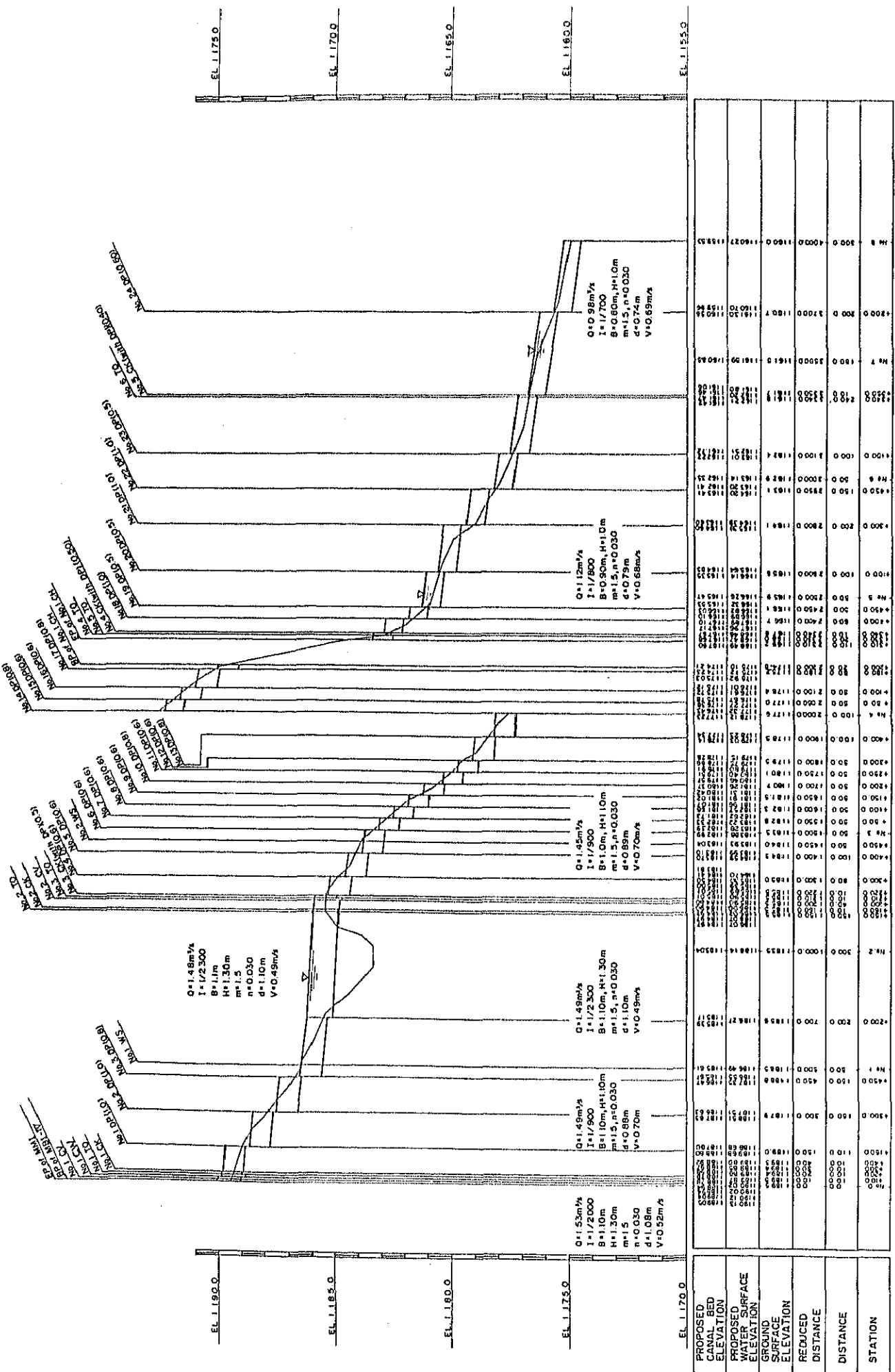
THE MWEA IRRIGATION  
DEVELOPMENT PROJECT

TITLE OF DRAWING  
PROFILE OF MUTITHI BRANCH CANAL-II

JAPAN INTERNATIONAL COOPERATION AGENCY  
TOKYO JAPAN

DWG. No.  
3022





PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1190.0	1190.0	1190.0	0.00	0.00	1190+00
1185.0	1185.0	1185.0	0.00	0.00	1185+00
1180.0	1180.0	1180.0	0.00	0.00	1180+00
1175.0	1175.0	1175.0	0.00	0.00	1175+00
1170.0	1170.0	1170.0	0.00	0.00	1170+00
1165.0	1165.0	1165.0	0.00	0.00	1165+00
1160.0	1160.0	1160.0	0.00	0.00	1160+00
1155.0	1155.0	1155.0	0.00	0.00	1155+00

PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1160.0	1160.0	1160.0	0.00	0.00	1160+00
1155.0	1155.0	1155.0	0.00	0.00	1155+00
1150.0	1150.0	1150.0	0.00	0.00	1150+00
1145.0	1145.0	1145.0	0.00	0.00	1145+00
1140.0	1140.0	1140.0	0.00	0.00	1140+00
1135.0	1135.0	1135.0	0.00	0.00	1135+00

REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

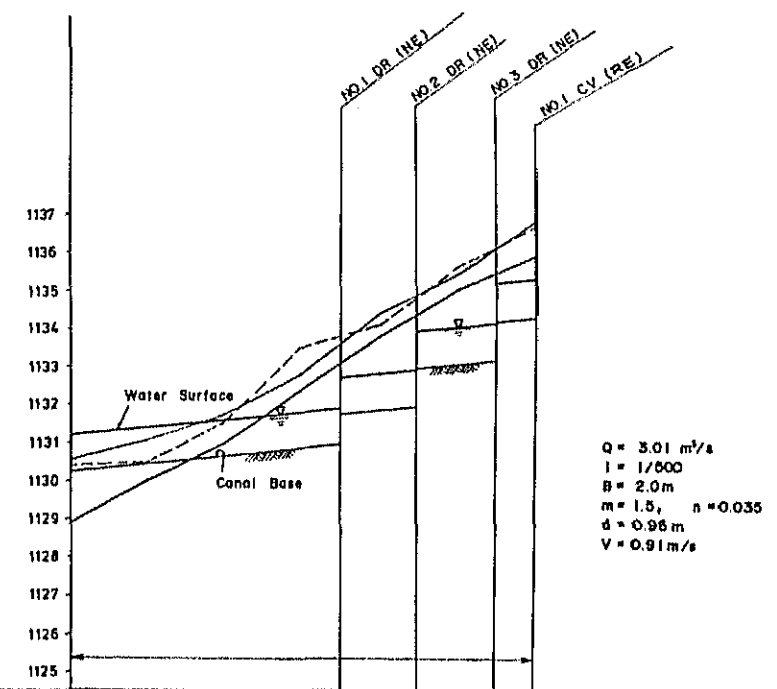
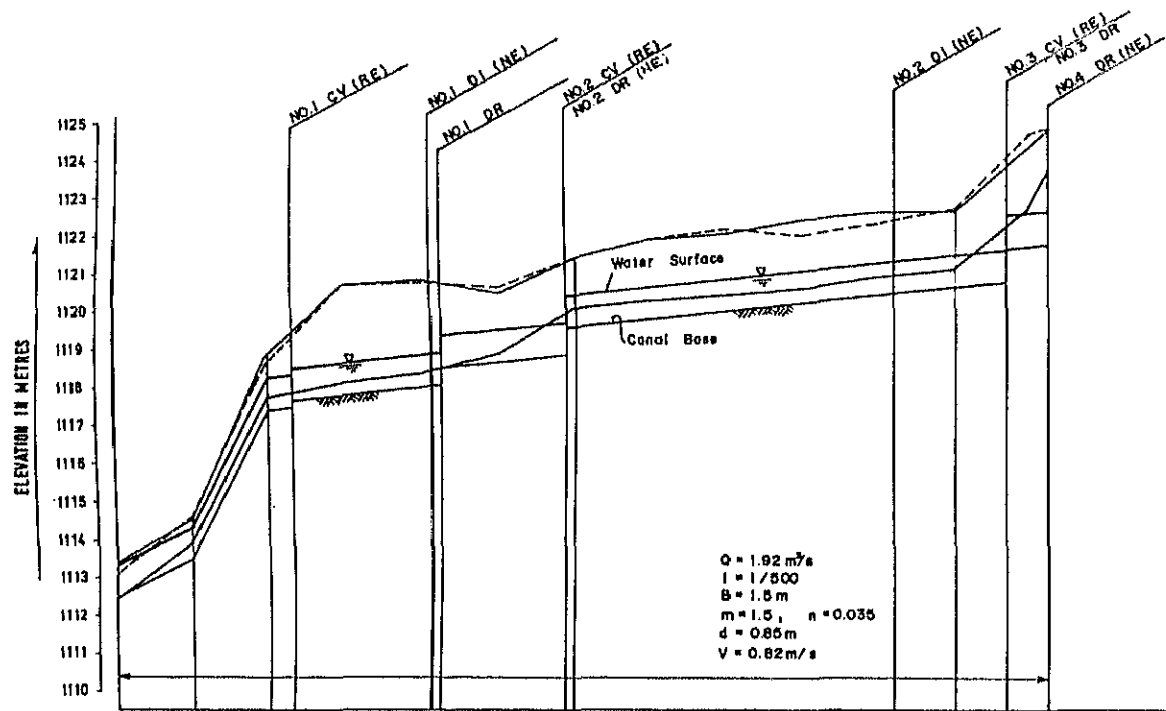
THE MWEA IRRIGATION  
DEVELOPMENT PROJECT

TITLE OF DRAWING  
**PROFILE OF MUTITHI BRANCH CANAL-IV**

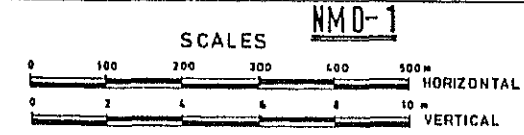
JAPAN INTERNATIONAL COOPERATION AGENCY  
TOKYO JAPAN

DWG. No.  
3024





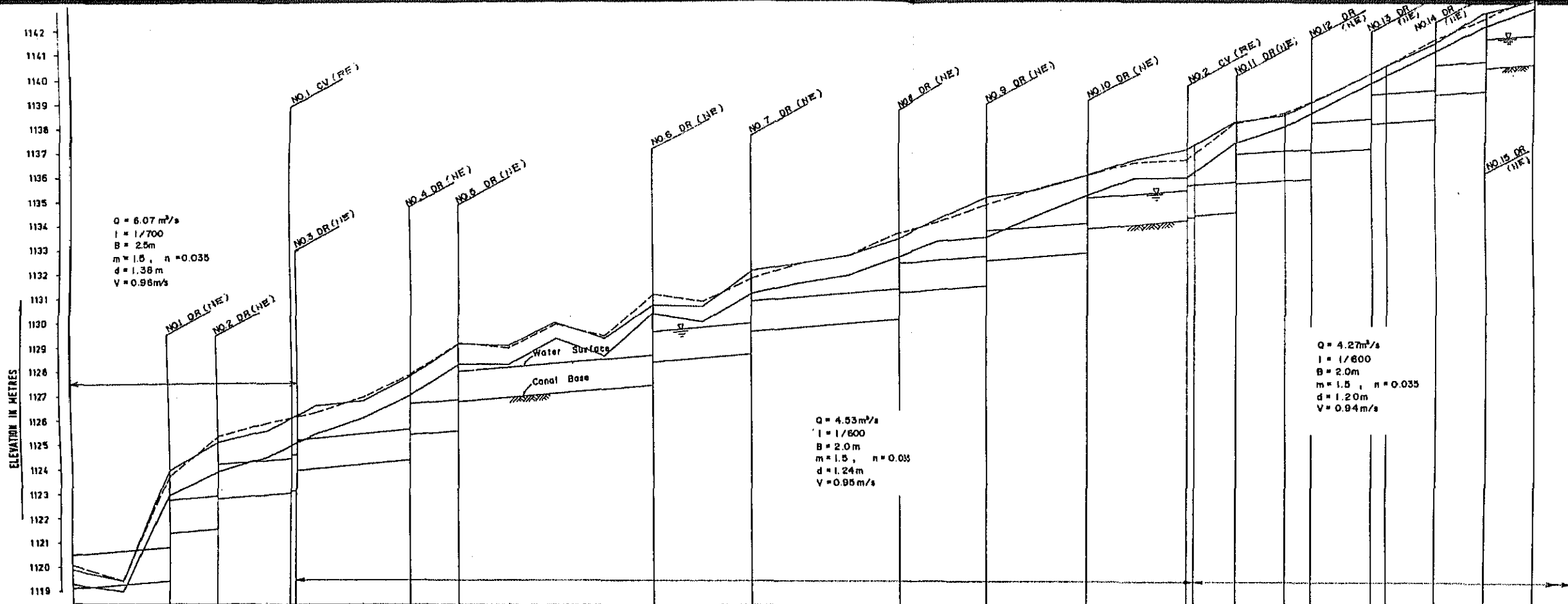
STATION No.	PROPOSED CONDITION				EXISTING CONDITION			
	EMBAKMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION		RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE
BP		13.30	12.45		1113.05	1113.32	1112.38	0.00
1		14.30	13.45		14.56	14.45	13.85	100.00
2		18.20	17.35		18.54	18.75	17.68	200.00
3		18.25	17.41		20.61	20.61	18.04	300.00
4		18.41	17.56		20.61	20.74	18.31	400.00
5		18.75	17.90		20.69	20.69	18.31	500.00
6		18.82	18.07		21.29	21.29	18.82	600.00
7		19.64	18.79		21.82	21.82	20.21	700.00
8		20.36	19.51		22.06	21.95	20.34	800.00
9		21.20	20.40		22.17	22.50	20.48	900.00
10		21.25	20.40		22.56	22.56	20.81	1000.00
11		21.36	20.51		22.56	22.56	20.81	1100.00
12		21.95	20.70		24.50	24.24	22.66	1170.00
EP		22.56	21.71		25.72	25.72	22.66	1225.72
BP		31.45	30.25		1126.86	1130.53	1130.40	0.00
1		31.21	31.21		30.47	31.05	30.00	100.00
2		31.50	31.50		31.50	31.68	30.96	200.00
3		32.15	32.15		32.15	32.80	32.34	300.00
4		32.95	32.95		34.03	34.36	33.73	400.00
5		33.15	33.15		35.60	35.38	34.95	500.00
EP		35.45	35.45		35.63	35.63	35.63	600.00



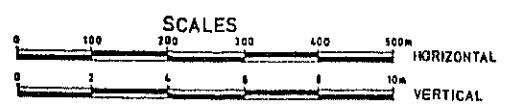
NMD-3

REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF NYAMINDI MAIN DRAIN-I,III**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
 3026





STATION No.	EXISTING CONDITION		PROPOSED CONDITION	
	DISTANCE	REDUCED DISTANCE	EMBAKMENT ELEVATION	WATER SURFACE ELEVATION
1	100.00	100.00	1120.04	1120.30
2	200.00	200.00	1120.44	1120.73
3	300.00	300.00	1120.75	1121.09
4	400.00	400.00	1121.00	1121.31
5	500.00	500.00	1121.16	1121.45
6	600.00	600.00	1121.25	1121.55
7	700.00	700.00	1121.32	1121.63
8	800.00	800.00	1121.37	1121.67
9	900.00	900.00	1121.40	1121.71
10	1000.00	1000.00	1121.42	1121.75
11	1100.00	1100.00	1121.43	1121.78
12	1200.00	1200.00	1121.44	1121.81
13	1300.00	1300.00	1121.45	1121.83
14	1400.00	1400.00	1121.46	1121.85
15	1500.00	1500.00	1121.47	1121.87
16	1600.00	1600.00	1121.48	1121.89
17	1700.00	1700.00	1121.49	1121.91
18	1800.00	1800.00	1121.50	1121.93
19	1900.00	1900.00	1121.51	1121.95
20	2000.00	2000.00	1121.52	1121.97
21	2100.00	2100.00	1121.53	1121.99
22	2200.00	2200.00	1121.54	1122.01
23	2300.00	2300.00	1121.55	1122.03
24	2400.00	2400.00	1121.56	1122.05
25	2500.00	2500.00	1121.57	1122.07
26	2600.00	2600.00	1121.58	1122.09
27	2700.00	2700.00	1121.59	1122.11
28	2800.00	2800.00	1121.60	1122.13
29	2900.00	2900.00	1121.61	1122.15
30	3000.00	3000.00	1121.62	1122.17



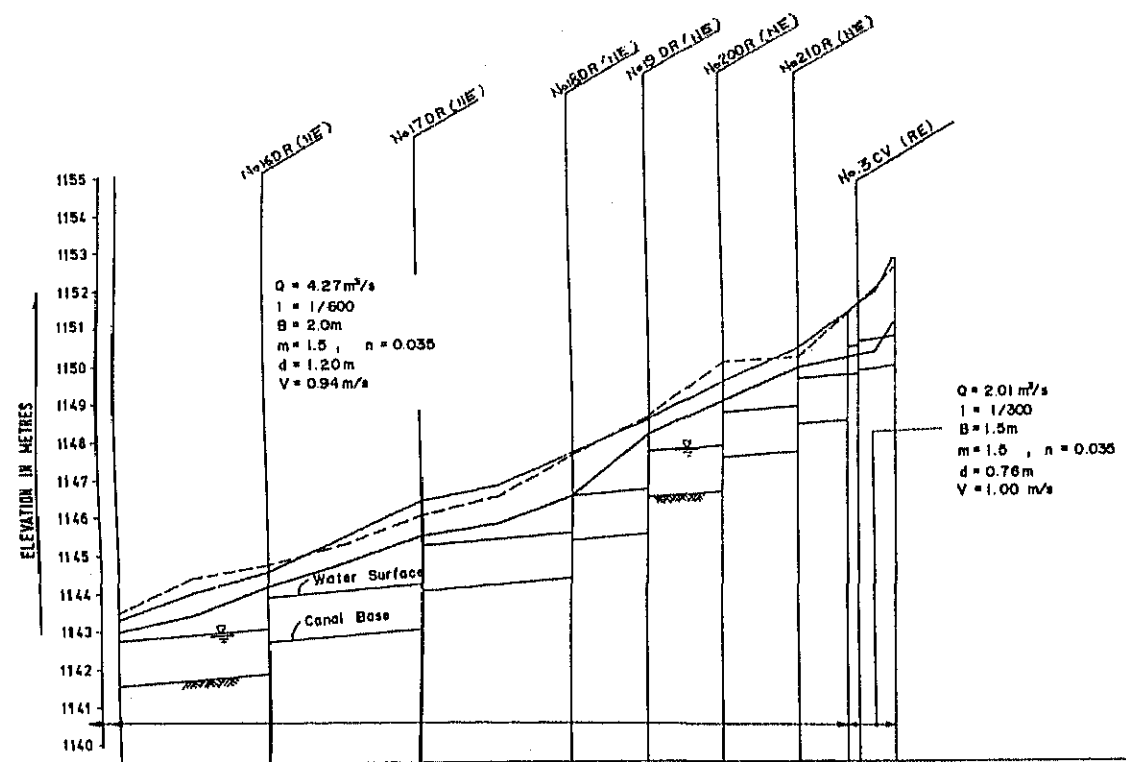
REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

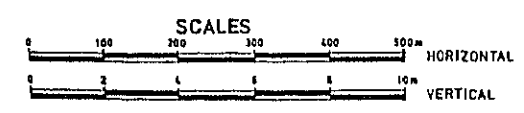
TITLE OF DRAWING  
**PROFILE OF NYAMINDI MAIN DRAIN-II (1/2)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3027**



EXISTING CONDITION	PROPOSED CONDITION										
	EMBARPMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	REDUCED DISTANCE	STATION No.	CURVE	
	42.68	43.01 43.81	41.76	44.75	44.42	43.43	100.00	3000.00	30		
		44.14 45.14	41.81 42.61	45.04	45.28	44.16	100.00	3200.00	32		
			42.94 43.94	46.39	46.51	44.81	100.00	3300.00	33		
			44.27 45.27	47.57	47.51	45.50	100.00	3400.00	34		
			45.47 46.47	48.51	48.51	45.78	100.00	3500.00	35		
			46.64 47.64	49.51	49.51	46.50	100.00	3600.00	36		
			47.81 48.81	50.03	50.03	48.10	100.00	3700.00	37		
			48.78 49.78	50.12	50.12	49.01	100.00	3800.00	38		
			49.58 50.58	51.88	51.88	49.85	100.00	3900.00	39		
			49.58 50.58	51.88	51.88	50.23	100.00	3950.00	40		
			49.83 50.83	51.88	51.88	50.23	100.00	4000.00	EP		
			49.83 50.83	51.88	51.88	51.52.71	20.40	4020.40			



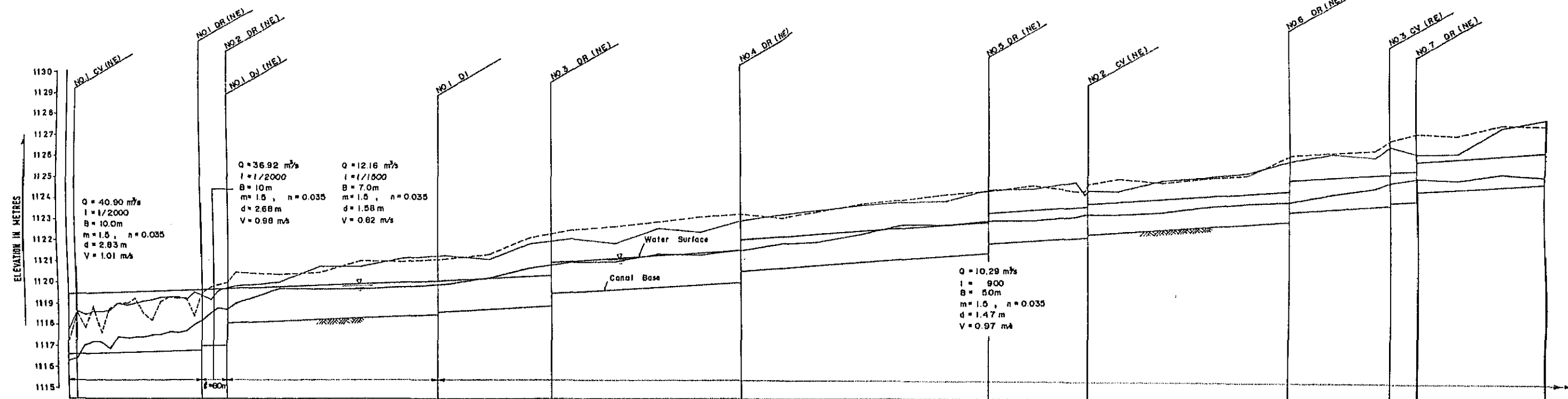
REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
DEVELOPMENT PROJECT

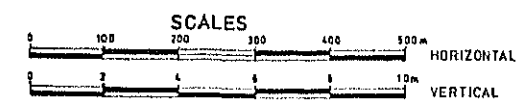
TITLE OF DRAWING  
PROFILE OF NYAMINDI MAIN DRAIN-II (2/2)

JAPAN INTERNATIONAL COOPERATION AGENCY  
TOKYO JAPAN

DWG. No.  
3028

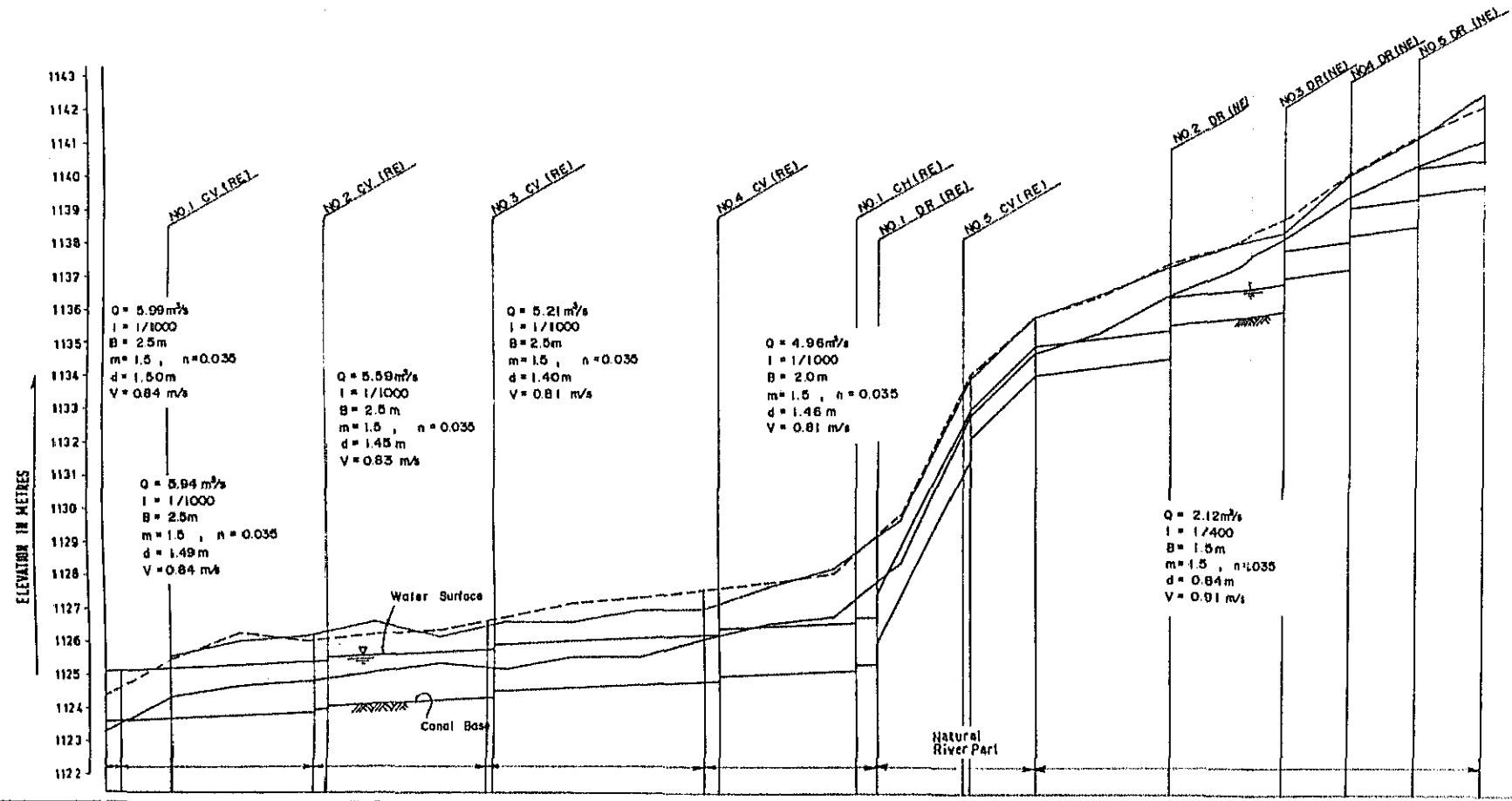


STATION No.	EXISTING CONDITION		PROPOSED CONDITION	
	REDUCED DISTANCE	DISTANCE	CANAL BASE ELEVATION	WATER SURFACE ELEVATION
BP	0.00	1117.25	1116.30	1119.43
0.20	20.00	1117.25	1116.30	
0.40	40.00	1117.25	1116.30	
0.60	60.00	1117.25	1116.30	
0.80	80.00	1117.25	1116.30	
1.00	100.00	1117.25	1116.30	
1.20	120.00	1117.25	1116.30	
1.40	140.00	1117.25	1116.30	
1.60	160.00	1117.25	1116.30	
1.80	180.00	1117.25	1116.30	
2.00	200.00	1117.25	1116.30	
2.20	220.00	1117.25	1116.30	
2.40	240.00	1117.25	1116.30	
2.60	260.00	1117.25	1116.30	
2.80	280.00	1117.25	1116.30	
3.00	300.00	1117.25	1116.30	
3.20	320.00	1117.25	1116.30	
3.40	340.00	1117.25	1116.30	
3.60	360.00	1117.25	1116.30	
3.80	380.00	1117.25	1116.30	
4.00	400.00	1117.25	1116.30	
5	500.00	19.70	20.03	20.38
6	600.00	19.66	20.72	20.45
7	700.00	19.65	20.71	21.00
8	800.00	19.75	21.10	20.95
9	880.00	19.88	21.22	21.07
10	1000.00	20.19	21.04	21.30
11	1100.00	20.56	21.82	22.09
12	1200.00	20.92	22.03	22.44
13	1300.00	20.93	21.78	22.60
14	1400.00	21.30	22.48	22.82
15	1500.00	21.26	22.29	23.06
16	1600.00	21.52	22.87	23.19
17	1700.00	21.81	23.15	22.99
18	1800.00	21.92	23.33	23.35
19	1900.00	22.25	23.63	23.70
20	2000.00	22.69	23.75	23.87
21	2100.00	22.68	23.83	24.13
22	2200.00	22.87	24.36	24.33
23	2300.00	22.87	24.41	24.54
24	2400.00	23.06	24.75	24.27
24.21	2421.80	23.19	24.15	24.31
24.29	2429.00	23.19	24.30	24.65
25	2500.00	23.23	24.30	24.91
26	2600.00	23.32	24.77	24.88
27	2700.00	23.54	24.96	24.88
28	2800.00	23.76	25.21	25.10
29	2900.00	23.83	25.74	26.01
30	3000.00	24.20	26.09	26.13
31	3100.00	24.49	25.97	26.30
31.38	3138.00	24.81	26.50	26.79
32	3200.00	24.98	26.17	27.16
33	3300.00	24.96	27.20	27.04
34	3400.00	25.24	27.43	27.66
35	3500.00	1125.11	1127.83	1127.50

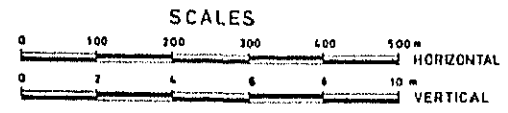


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF THIBA MAIN DRAIN-I (1/2)**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
 3029





STATION No.	PROPOSED CONDITION				EXISTING CONDITION			
	EMBANKMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION		RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE
BP		1125.10 1125.12	1123.60 1123.63		1124.41		1123.31	0.00
1					25.50		24.35	100.00
2					26.32		24.72	200.00
3		1125.41 1125.43 1125.58	1123.92 1123.96 1124.15		26.06		24.85	300.00 310.00
4					26.29		25.13	400.00
5					26.42		25.38	500.00
6					26.81		25.22	570.00 600.00
7					27.18		25.60	700.00
8					27.38		25.55	800.00
9					27.53		26.13	900.00 920.00
10					27.54		26.61	1000.00
11					28.12		26.81	1100.00
12					29.91		28.46	1150.00 1160.00 1200.00
13					34.04		32.85	1290.00 1300.00
14					35.77		34.71	1400.00
15					36.42		35.34	1500.00
16					37.42		36.46	1600.00
17					38.05		37.27	1700.00
18					38.43		38.24	1800.00
19					40.17		39.47	1900.00
20					41.30		40.37	2000.00
EP					1142.24		1141.22	2100.00

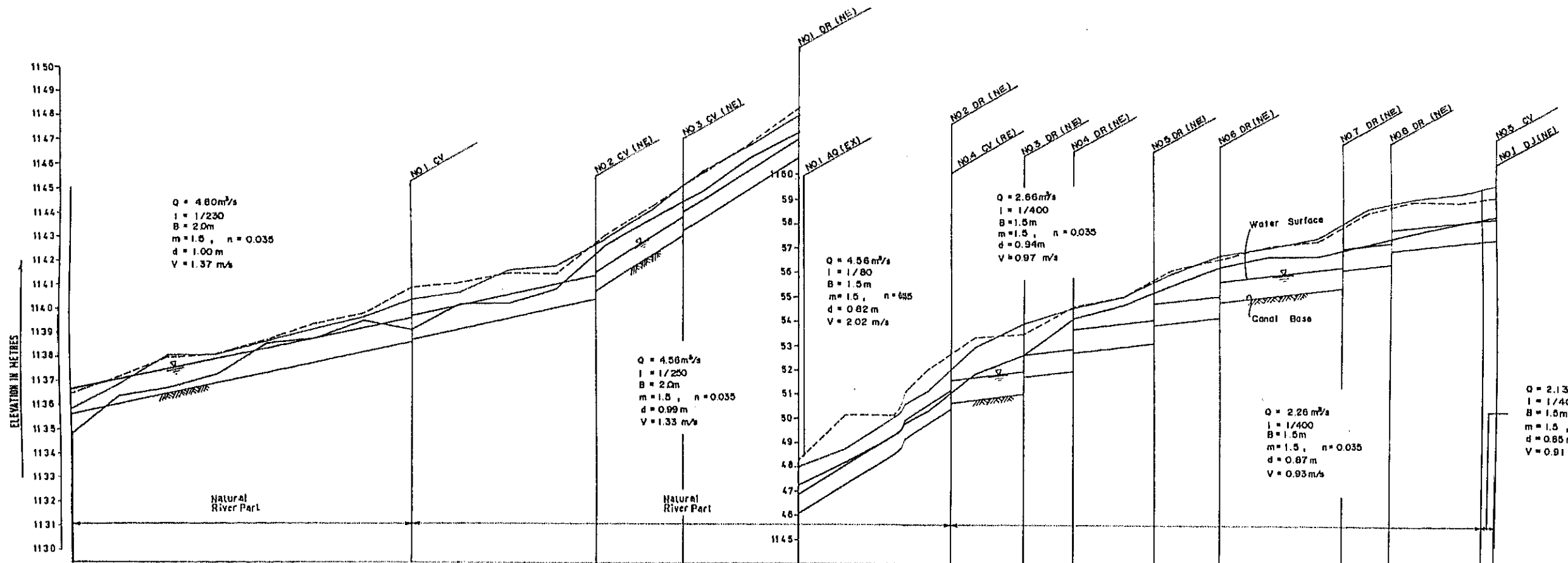


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

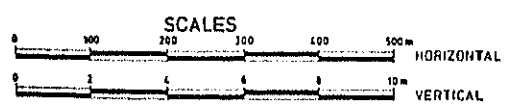
TITLE OF DRAWING  
 PROFILE OF THIBA MAIN DRAIN-II

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
 3031



STATION No.	EXISTING CONDITION		PROPOSED CONDITION	
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	WATER SURFACE ELEVATION
IBP	0.00	0.00	35.65	36.65
1	100.00	100.00	36.41	37.21
2	200.00	200.00	36.72	37.99
3	300.00	300.00	37.32	38.14
4	400.00	400.00	38.58	38.72
5	500.00	500.00	38.76	39.40
6	600.00	600.00	39.51	39.74
7	700.00	700.00	39.15	40.92
8	800.00	800.00	40.21	41.05
9	900.00	900.00	40.23	41.48
10	1000.00	1000.00	40.83	41.45
11	1080.00	1080.00	42.60	43.01
12	1200.00	1200.00	43.73	44.23
13	1260.00	1260.00	44.84	45.57
14	1400.00	1400.00	46.24	46.84
15	1500.00	1500.00	47.28	48.33
16	1600.00	1600.00	48.19	50.15
17	1700.00	1700.00	49.35	50.17
18	1800.00	1800.00	50.36	52.07
19	1850.00	1850.00	51.87	52.43
20	2000.00	2000.00	52.65	53.49
21	2100.00	2100.00	54.16	54.64
22	2200.00	2200.00	54.72	55.07
23	2270.00	2270.00	55.54	56.17
24	2400.00	2400.00	56.35	56.64
25	2500.00	2500.00	56.77	57.19
26	2600.00	2600.00	56.80	57.41
27	2700.00	2700.00	57.31	58.61
28	2800.00	2800.00	57.78	59.12
29	2900.00	2900.00	58.25	59.09
EP	2940.00	2940.00	57.54	58.41
	2967.72	2967.72	57.63	58.48



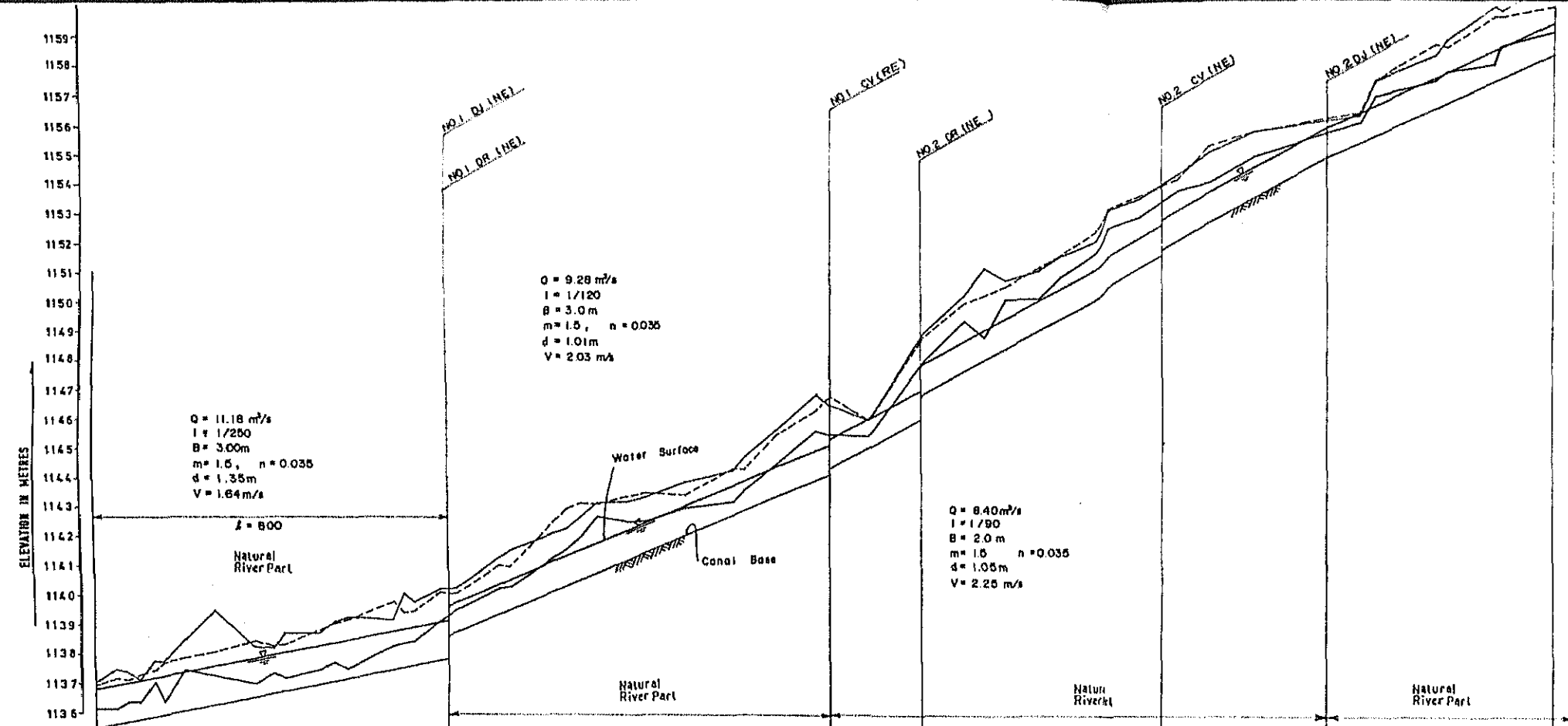
REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

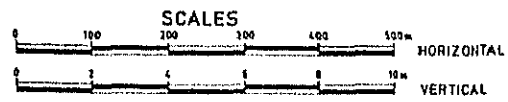
TITLE OF DRAWING  
**PROFILE OF THIBA MAIN DRAIN-III**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3032**



STATION No.	PROPOSED CONDITION				EXISTING CONDITION			
	EMBAKMENT ELEVATION	WATER SURFACE ELEVATION	CANAL BASE ELEVATION		RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	
0		1136.60	1135.3		1137.00	1137.00	1136.15	
1					1137.15	1137.15	1136.15	
2					1137.15	1137.15	1136.15	
3		1137.80	1136.50		1137.45	1137.45	1136.38	
4					1137.45	1137.45	1136.38	
5					1137.45	1137.45	1136.38	
6					1137.45	1137.45	1136.38	
7					1137.45	1137.45	1136.38	
8					1137.45	1137.45	1136.38	
9					1137.45	1137.45	1136.38	
10					1137.45	1137.45	1136.38	
11					1137.45	1137.45	1136.38	
12					1137.45	1137.45	1136.38	
13					1137.45	1137.45	1136.38	
14					1137.45	1137.45	1136.38	
15					1137.45	1137.45	1136.38	
16					1137.45	1137.45	1136.38	
17					1137.45	1137.45	1136.38	
18					1137.45	1137.45	1136.38	
19					1137.45	1137.45	1136.38	
20					1137.45	1137.45	1136.38	
21					1137.45	1137.45	1136.38	
22					1137.45	1137.45	1136.38	
23					1137.45	1137.45	1136.38	
24					1137.45	1137.45	1136.38	
25					1137.45	1137.45	1136.38	

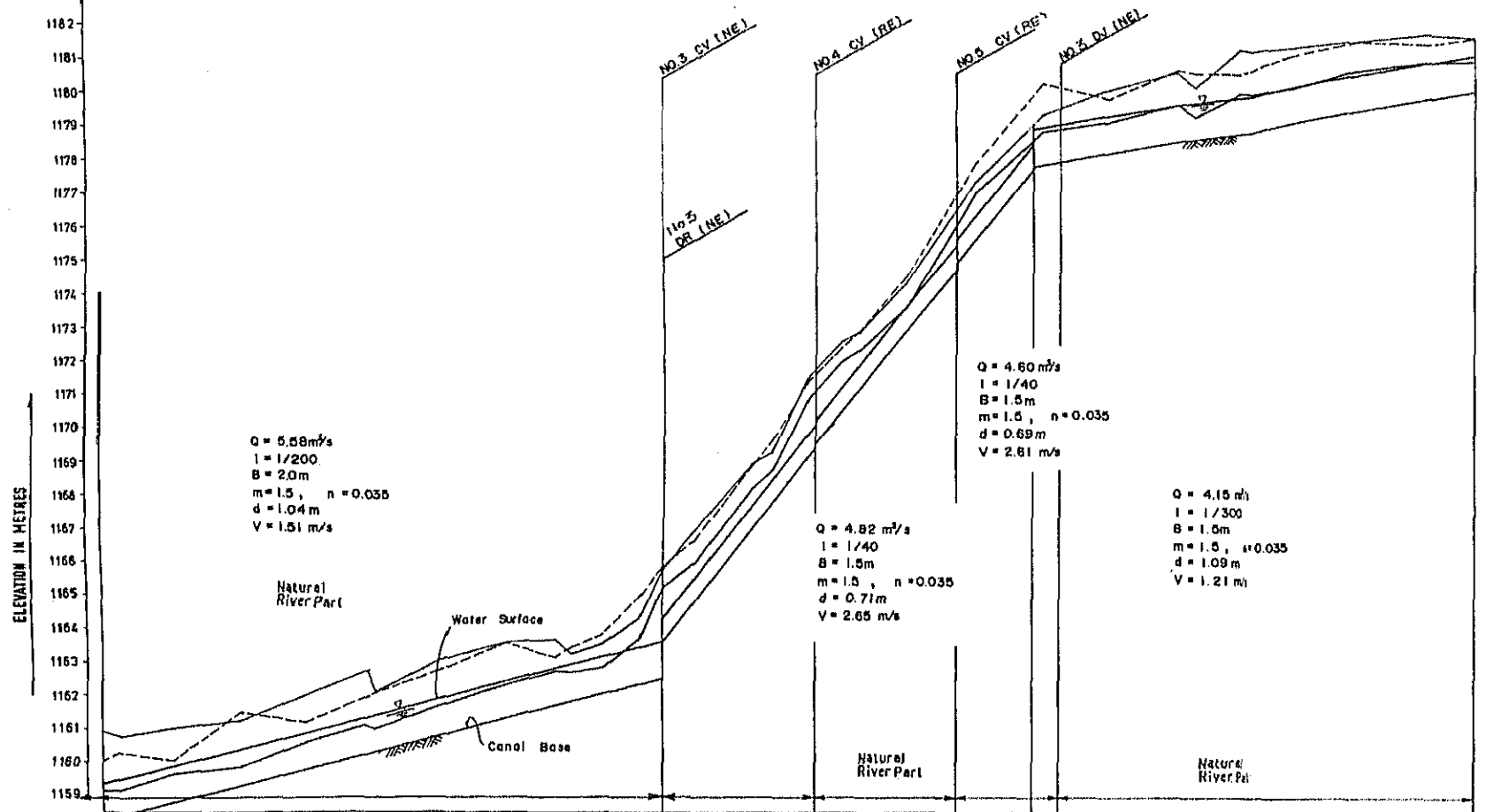


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

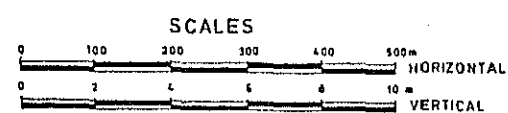
TITLE OF DRAWING  
 PROFILE OF THIBA MAIN DRAIN-IV (1/2)

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
 3033



STATION No.	EXISTING CONDITION				PROPOSED CONDITION				
	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	DISTANCE	RIGHT BANK ELEVATION	LEFT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION
25	1160.06	1160.92	1159.36	0.00	1160.06	1160.92	1159.36	1159.36	
25.31	60.27	60.76	59.17	79.00	60.27	60.76	59.17		
26	60.05	60.99	59.85	100.00	60.05	60.99	59.85		
27	61.49	61.26	59.86	100.00	61.49	61.26	59.86		
28	61.22	62.03	60.62	100.00	61.22	62.03	60.62		
28.89	61.95	62.74	61.10	89.00	61.95	62.74	61.10		
29	62.10	62.11	60.97	100.00	62.10	62.11	60.97		
30	62.74	63.05	61.64	100.00	62.74	63.05	61.64		
31	63.54	63.54	62.27	100.00	63.54	63.54	62.27		
31.75	63.09	63.62	62.68	75.60	63.09	63.62	62.68		
32	63.38	63.22	62.64	54.00	63.38	63.22	62.64		
32.46	63.79	63.51	62.78	54.00	63.79	63.51	62.78		
33	64.93	64.24	63.67	51.30	64.93	64.24	63.67		
33.31	65.78	65.67	65.16	82.80	65.78	65.67	65.16		
33.82	66.87	66.87	65.89	53.40	66.87	66.87	65.89		
34.65	68.78	68.85	68.11	34.80	68.78	68.85	68.11		
35	69.50	69.23	68.71	53.40	69.50	69.23	68.71		
35.53	71.35	71.42	70.78	45.60	71.35	71.42	70.78		
36	72.31	72.45	71.84	70.00	72.31	72.45	71.84		
36.3	72.81	72.78	72.24	100.00	72.81	72.78	72.24		
37	74.43	74.26	73.53	100.00	74.43	74.26	73.53		
38	77.75	77.18	76.91	100.00	77.75	77.18	76.91		
39	80.47	80.17	78.57	100.00	80.47	80.17	78.57		
40	80.43	80.01	79.86	100.00	80.43	80.01	79.86		
41	80.47	80.34	79.96	100.00	80.47	80.34	79.96		
41.79	80.43	80.01	79.13	100.00	80.43	80.01	79.13		
42	80.45	80.45	79.88	100.00	80.45	80.45	79.88		
43	80.99	80.99	80.03	100.00	80.99	80.99	80.03		
44	81.37	81.37	80.51	100.00	81.37	81.37	80.51		
45	81.24	81.61	80.76	100.00	81.24	81.61	80.76		
45.56	81.46	81.49	80.78	56.00	81.46	81.49	80.78		



REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

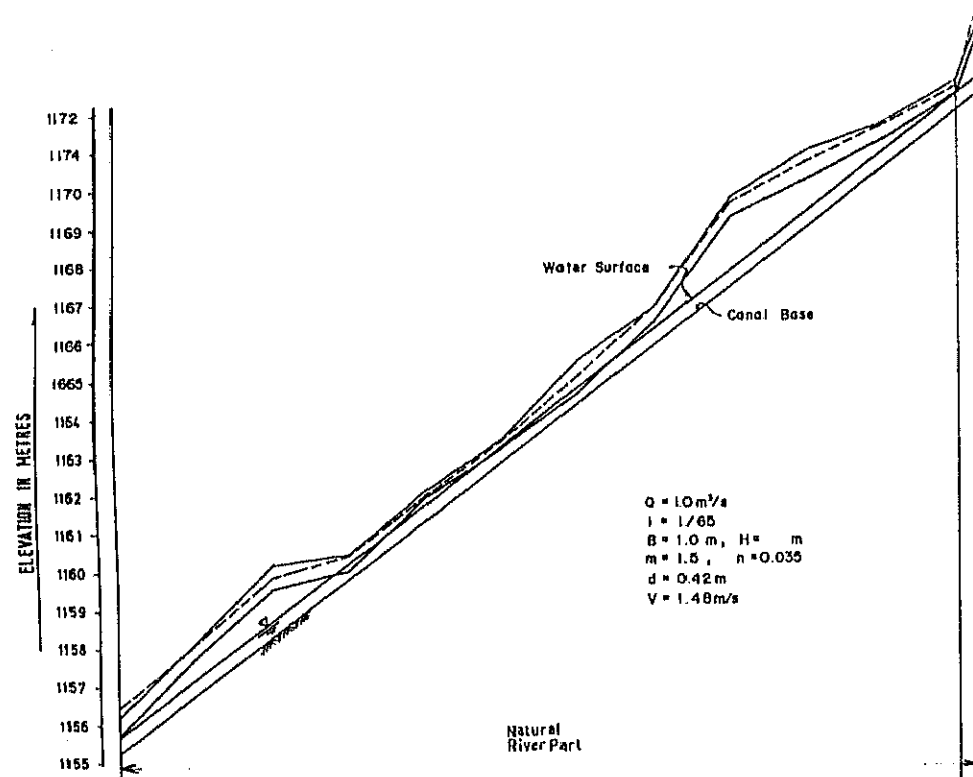
TITLE OF DRAWING  
**PROFILE OF THIBA MAIN DRAIN-IV (2/2)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

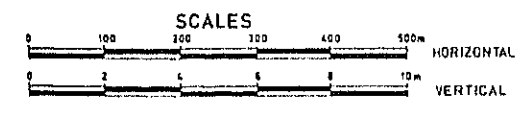
DWG. No.  
 3034



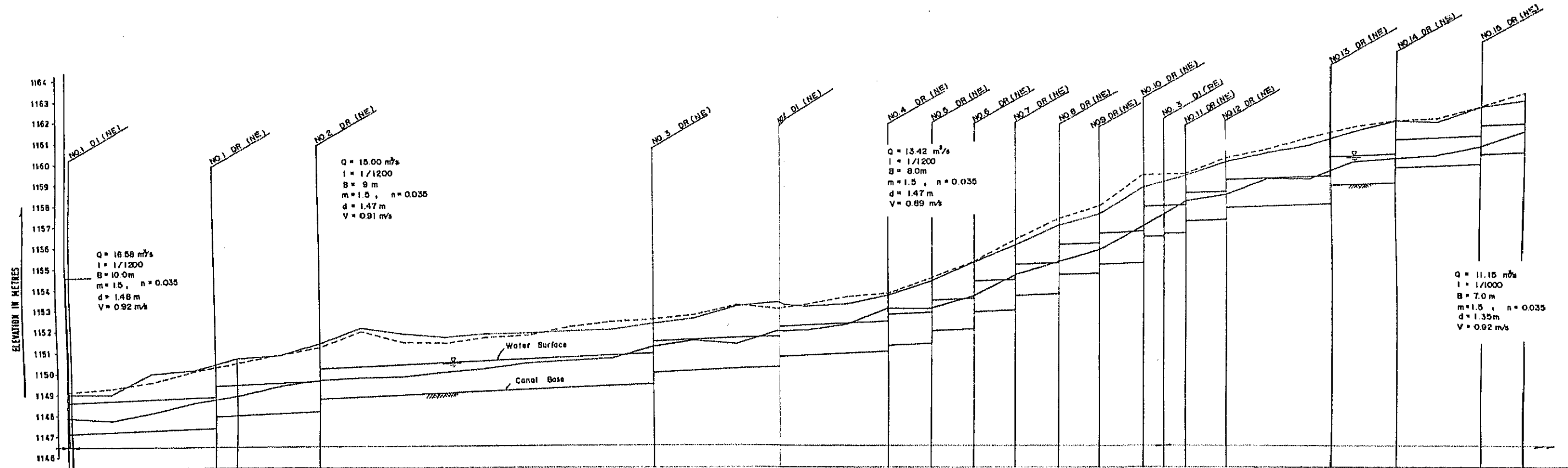




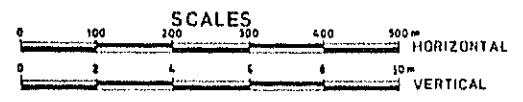
PROPOSED CONDITION	PROPOSED CONDITION													
	EMBANKMENT ELEVATION													
WATER SURFACE ELEVATION	55.70	57.24	58.78	60.32	61.85	63.39	64.93	66.47	68.01	69.55	71.08	72.62	73.12	
CANAL BASE ELEVATION	1153.28		58.36					66.05				1172.70		
EXISTING CONDITION	RIGHT BANK ELEVATION	1156.45	58.10	59.85	60.47	62.02	63.43	65.15	66.95	69.65	70.69	72.63	1172.95	
	LEFT BANK ELEVATION	1156.25	58.13	60.17	60.43	62.14	63.48	65.54	66.95	69.78	71.00	72.83	1174.22	
	CANAL BASE ELEVATION	1155.74	57.78	59.57	60.07	62.00	63.27	64.70	66.56	69.29	70.26	71.29	72.47	1173.94
	DISTANCE	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	32.50	
	REDUCED DISTANCE	0.00	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00	900.00	1000.00	1100.00	1132.50
STATION No.	BP	1	2	3	4	5	6	7	8	9	10	11	EP	
CURVE														



REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF THIBA BRANCH DRAIN-IV-1**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN  
 DWG. No.  
**3036**



STATION No.	EXISTING CONDITION					PROPOSED CONDITION				
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	LEFT BANK ELEVATION	RIGHT BANK ELEVATION	CANAL BASE ELEVATION	WATER SURFACE ELEVATION	EMBANKMENT ELEVATION		
BP	0.00	0.00	1147.91	1149.03	1149.14	47.12	48.60			
1	100.00	100.00	47.78	49.01	49.32	47.23	48.73			
2	200.00	200.00	48.15	50.01	49.58	47.35	48.92			
3	300.00	300.00	48.62	50.17	50.14	47.43	48.90			
4	350.00	350.00	48.95	50.74	50.51	47.97	49.44			
5	400.00	400.00	49.39	50.88	50.90	48.10	49.57			
6	500.00	500.00	49.70	51.45	51.28	48.18	49.65			
7	600.00	600.00	49.78	52.17	52.00	48.96	50.33			
8	800.00	800.00	49.85	51.87	51.50	48.95	50.52			
9	900.00	900.00	50.06	51.70	51.45	49.07	50.50			
10	1000.00	1000.00	50.21	51.56	51.69	49.11	50.58			
11	1100.00	1100.00	50.49	51.90	51.81	49.20	50.67			
12	1200.00	1200.00	50.60	52.01	52.23	49.28	50.75			
13	1300.00	1300.00	50.69	52.04	52.45	49.36	50.83			
14	1400.00	1400.00	51.26	52.36	52.53	49.45	50.92			
15	1500.00	1500.00	51.54	52.60	52.75	50.03	51.50			
16	1600.00	1600.00	51.36	53.15	53.20	50.12	51.59			
17	1700.00	1700.00	51.98	53.34	53.08	50.90	51.94			
18	1800.00	1800.00	52.06	53.22	53.30	50.79	52.26			
19	1900.00	1900.00	52.36	53.29	53.66	50.87	52.34			
20	2000.00	2000.00	53.16	53.70	53.82	50.95	52.42			
21	2100.00	2100.00	53.06	54.36	54.52	51.53	52.80			
22	2200.00	2200.00	53.66	55.25	55.27	52.81	54.28			
23	2300.00	2300.00	54.65	56.05	56.35	52.89	54.56			
24	2400.00	2400.00	55.27	57.00	57.32	53.36	55.14			
25	2500.00	2500.00	55.95	57.56	57.96	54.65	56.12			
26	2600.00	2600.00	56.95	58.79	59.41	55.13	56.60			
27	2700.00	2700.00	58.15	59.37	59.43	56.45	57.78			
28	2800.00	2800.00	58.48	60.05	60.29	57.18	58.53			
29	2900.00	2900.00	59.27	60.51	60.71	57.90	59.23			
30	3000.00	3000.00	59.27	60.86	61.29	57.88	59.23			
31	3100.00	3100.00	60.11	61.53	61.81	58.23	59.78			
32	3200.00	3200.00	60.25	62.06	62.05	58.98	60.33			
33	3300.00	3300.00	60.38	62.01	62.17	59.78	61.15			
34	3400.00	3400.00	60.83	62.70	62.71	59.88	61.23			
35	3500.00	3500.00	1161.53	1163.38	1163.38	60.48	61.83			

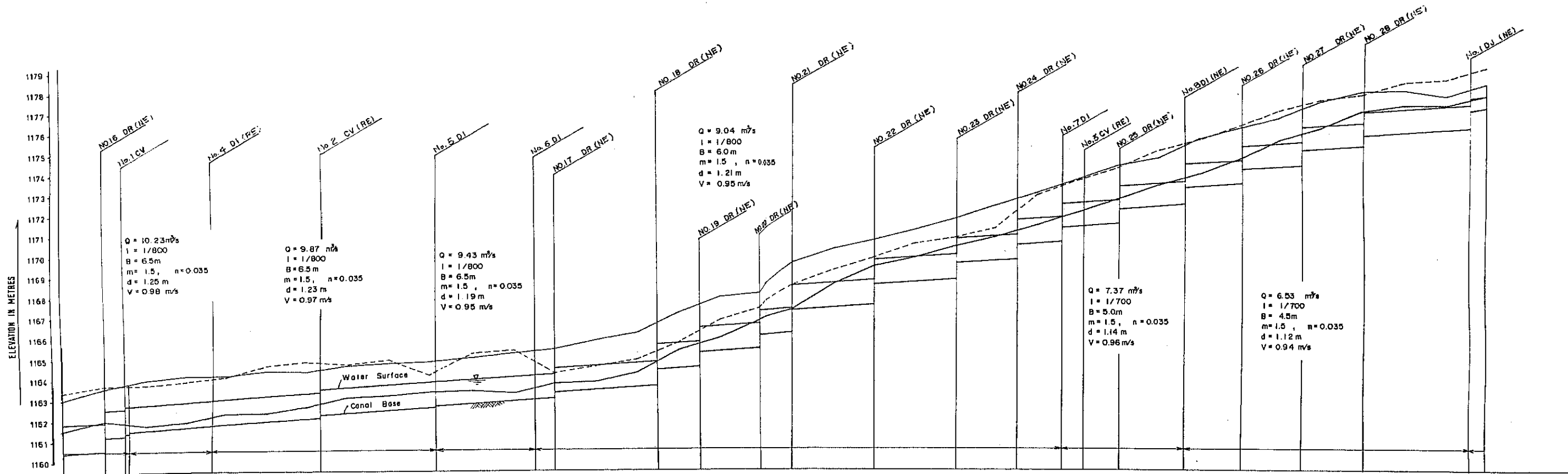


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

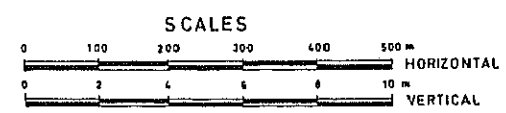
TITLE OF DRAWING  
**PROFILE OF KIRUARA MAIN DRAIN (1/3)**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
**3037**



STATION No.	EXISTING CONDITION		PROPOSED CONDITION		
	DISTANCE	REDUCED DISTANCE	CANAL BASE ELEVATION	LEFT BANK ELEVATION	RIGHT BANK ELEVATION
35	100.00	3500.00	61.83	1163.03	1163.36
36	100.00	3600.00	60.56	63.62	63.76
37	100.00	3700.00	61.54	64.02	63.76
38	100.00	3800.00	62.92	64.21	63.95
39	100.00	3900.00	61.82	64.21	64.11
40	100.00	4000.00	63.22	64.40	64.65
41	100.00	4100.00	62.65	64.35	64.83
42	100.00	4200.00	63.10	64.64	64.71
43	100.00	4300.00	63.22	64.77	64.94
44	100.00	4400.00	63.37	64.84	64.18
45	100.00	4500.00	63.43	65.04	65.23
46	100.00	4600.00	63.27	65.25	65.38
47	100.00	4700.00	63.78	65.40	64.25
48	100.00	4800.00	63.79	65.82	64.55
49	100.00	4900.00	64.25	66.21	64.89
50	100.00	4950.00	63.04	65.33	65.69
51	100.00	5000.00	63.07	67.13	65.69
52	100.00	5050.00	63.13	65.40	64.25
53	100.00	5100.00	63.43	65.96	66.79
54	100.00	5200.00	64.65	66.80	67.40
55	100.00	5300.00	65.25	67.30	68.48
56	100.00	5400.00	66.17	68.55	70.28
57	100.00	5500.00	67.17	69.67	71.14
58	100.00	5600.00	68.67	70.34	71.69
59	100.00	5700.00	69.47	70.78	72.26
60	100.00	5800.00	69.88	71.38	72.85
61	100.00	5900.00	70.68	71.99	73.45
62	100.00	6000.00	70.81	72.66	74.31
63	100.00	6100.00	70.87	73.35	74.68
64	100.00	6200.00	71.57	73.87	75.05
65	100.00	6300.00	71.63	74.56	75.62
66	100.00	6400.00	71.77	75.16	76.18
67	100.00	6500.00	72.37	75.57	76.64
68	100.00	6600.00	72.43	76.16	77.03
69	100.00	6700.00	72.59	76.98	77.96
70	100.00	6800.00	72.74	77.29	78.35
71	100.00	6900.00	73.44	77.31	77.75
72	100.00	7000.00	73.58	77.75	78.56
73	100.00	7100.00	73.59	77.96	77.96
74	100.00	7200.00	73.67	78.02	78.35
75	100.00	7300.00	73.67	78.02	78.35
76	100.00	7400.00	73.67	78.02	78.35
77	100.00	7500.00	73.67	78.02	78.35
78	100.00	7600.00	73.67	78.02	78.35
79	100.00	7700.00	73.67	78.02	78.35
80	100.00	7800.00	73.67	78.02	78.35
81	100.00	7900.00	73.67	78.02	78.35
82	100.00	8000.00	73.67	78.02	78.35
83	100.00	8100.00	73.67	78.02	78.35
84	100.00	8200.00	73.67	78.02	78.35
85	100.00	8300.00	73.67	78.02	78.35
86	100.00	8400.00	73.67	78.02	78.35
87	100.00	8500.00	73.67	78.02	78.35
88	100.00	8600.00	73.67	78.02	78.35
89	100.00	8700.00	73.67	78.02	78.35
90	100.00	8800.00	73.67	78.02	78.35
91	100.00	8900.00	73.67	78.02	78.35
92	100.00	9000.00	73.67	78.02	78.35
93	100.00	9100.00	73.67	78.02	78.35
94	100.00	9200.00	73.67	78.02	78.35
95	100.00	9300.00	73.67	78.02	78.35
96	100.00	9400.00	73.67	78.02	78.35
97	100.00	9500.00	73.67	78.02	78.35
98	100.00	9600.00	73.67	78.02	78.35
99	100.00	9700.00	73.67	78.02	78.35
100	100.00	9800.00	73.67	78.02	78.35

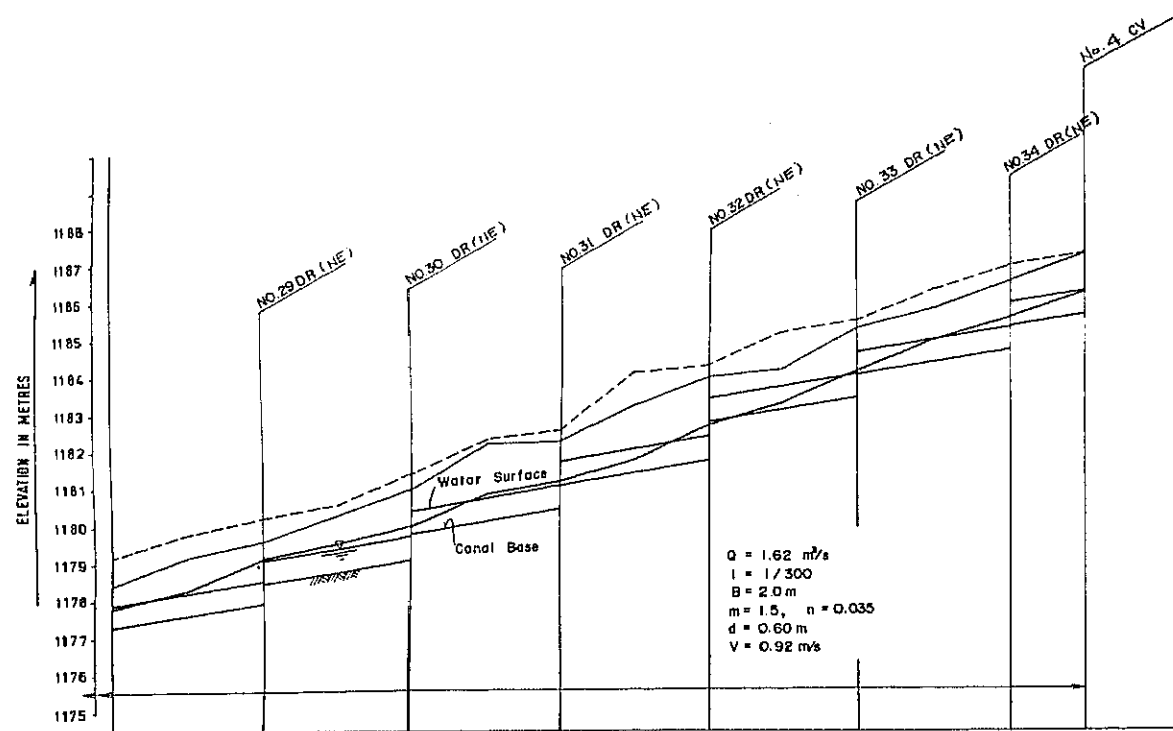


REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

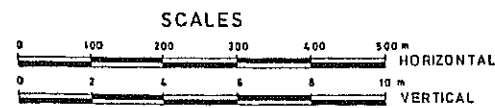
TITLE OF DRAWING  
 PROFILE OF KIRUARA MAIN DRAIN (2/3)

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

DWG. No.  
 3038



EXISTING CONDITION	PROPOSED CONDITION																					
	STATION No.	70	71	72	73	74	75	76	77	78	79	80	81	82	83							
EMBANKMENT ELEVATION																						
WATER SURFACE ELEVATION		77.79	78.12	78.46	78.86	79.29	79.67	80.32	80.65	80.99	81.59	81.92	82.24	83.24	83.57	83.91	84.51	84.84	85.18	85.88	86.21	
CANAL BASE ELEVATION		77.19		77.96	78.36		79.02	79.72		80.39	80.99		81.64	82.24		83.31	83.91		84.58	85.18	85.88	86.21
RIGHT BANK ELEVATION		1179.15	79.60	80.23	80.57	81.42	82.31	82.75	83.06	84.21	85.11	85.43	86.26	86.44	86.88	87.22	1187.23					
LEFT BANK ELEVATION		1178.37	79.15	79.59	80.30	81.02	82.20	82.75	83.16	84.88	85.21	85.73	86.26	86.44	86.88	87.22	1187.23					
CANAL BASE ELEVATION		1177.79	78.27	79.12	79.55	79.97	80.85	81.15	81.67	82.57	83.19	84.06	84.89	85.47	85.88	86.21	1186.16					
DISTANCE		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00						
REDUCED DISTANCE		7000.00	7100.00	7200.00	7300.00	7400.00	7500.00	7600.00	7700.00	7800.00	7900.00	8000.00	8100.00	8200.00	8300.00							
STATION No.		70	71	72	73	74	75	76	77	78	79	80	81	82	83							
CURVE																						



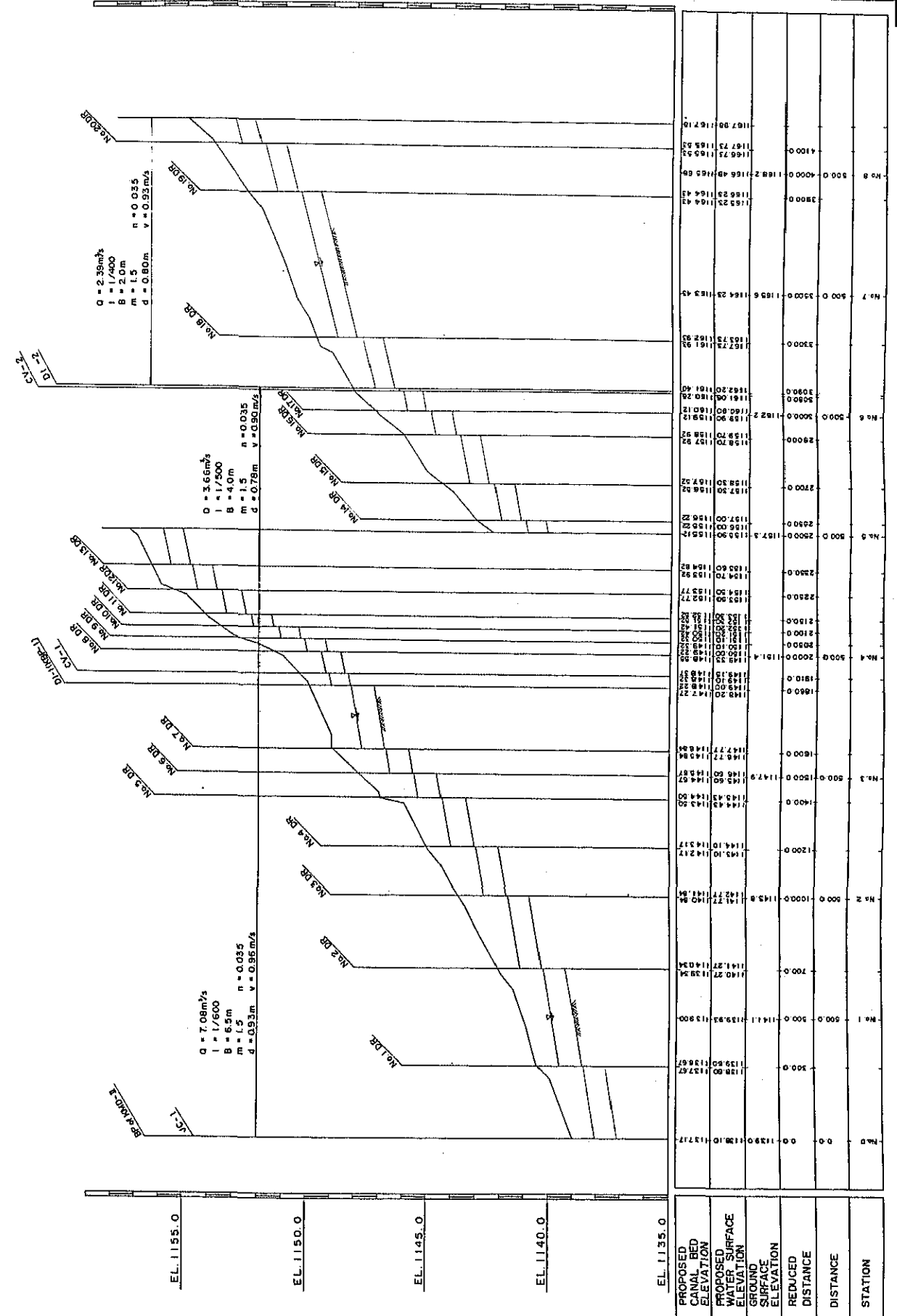
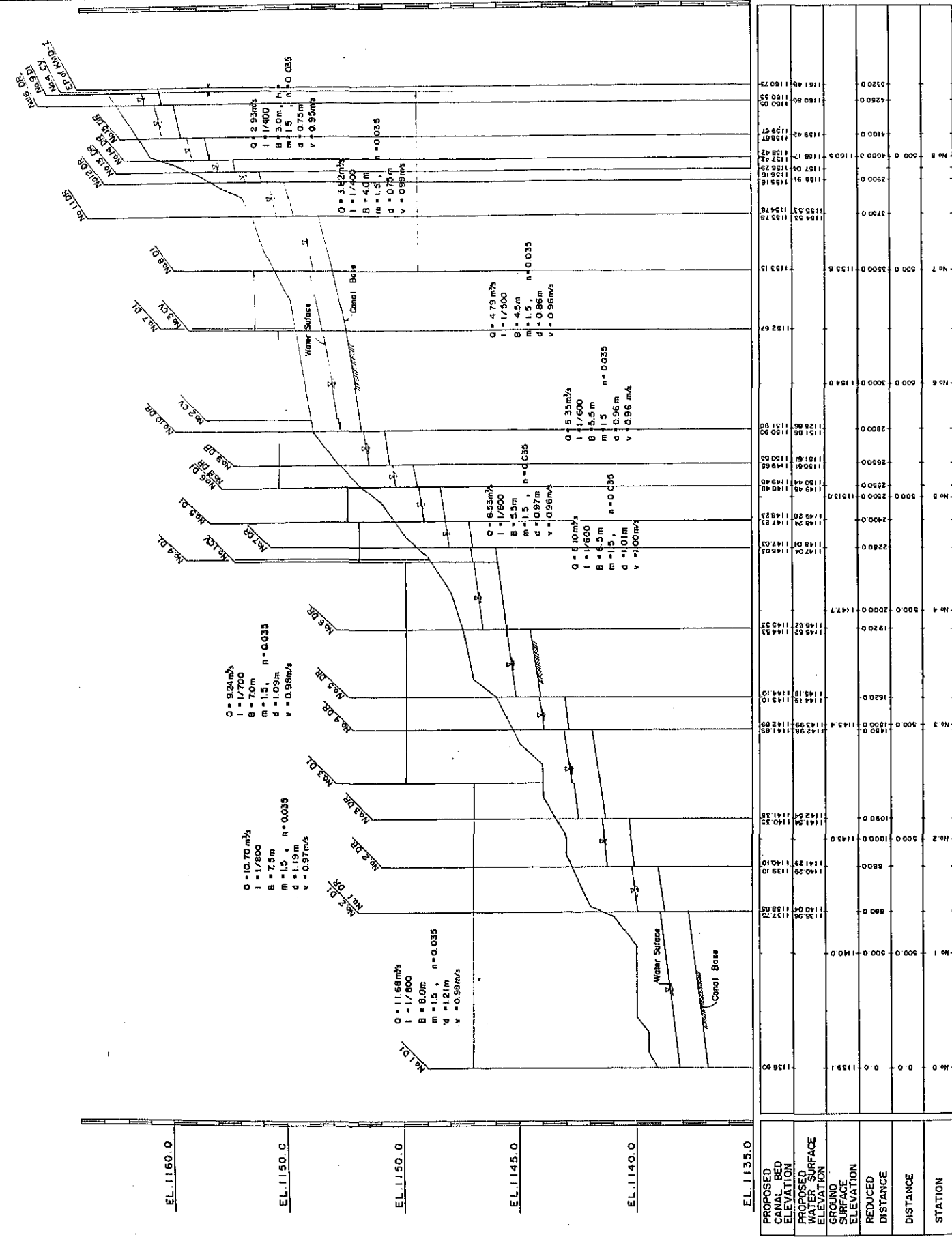
REPUBLIC OF KENYA  
NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
DEVELOPMENT PROJECT

TITLE OF DRAWING  
PROFILE OF KIRUARA MAIN DRAIN (3/3)

JAPAN INTERNATIONAL COOPERATION AGENCY  
TOKYO JAPAN

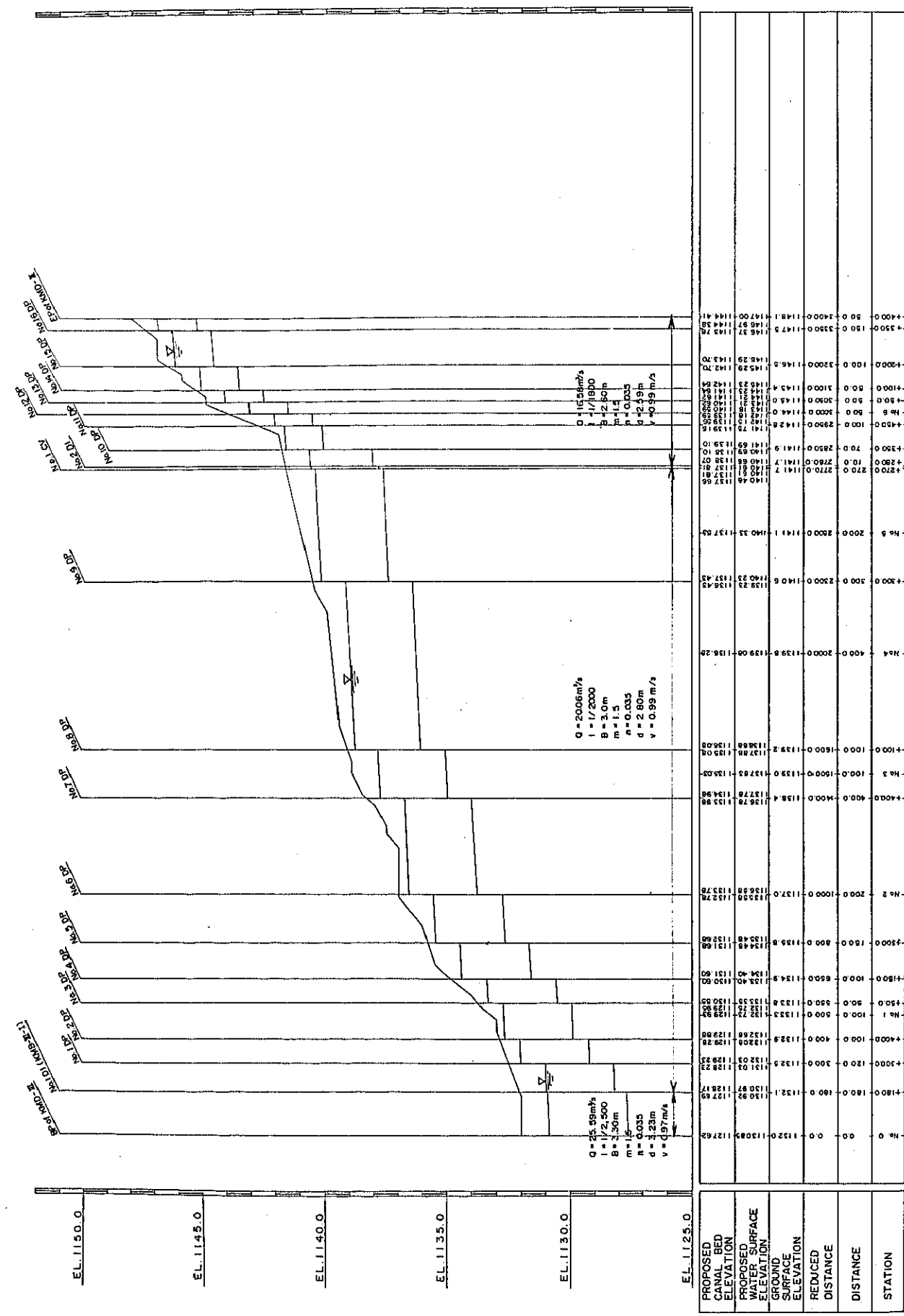
DWG. No.  
3039



PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1138.90	1139.1	1140.75	1.85	0	No. 0
1139.0	1139.1	1140.75	1.75	800	No. 1
1140.0	1140.0	1141.10	1.10	800	No. 2
1141.0	1141.0	1141.35	0.35	1000	No. 3
1142.0	1142.0	1142.50	1.50	1200	No. 4
1143.0	1143.0	1143.25	0.75	1400	No. 5
1144.0	1144.0	1144.50	0.50	1600	No. 6
1145.0	1145.0	1145.25	0.75	1800	No. 7
1146.0	1146.0	1146.50	0.50	2000	No. 8

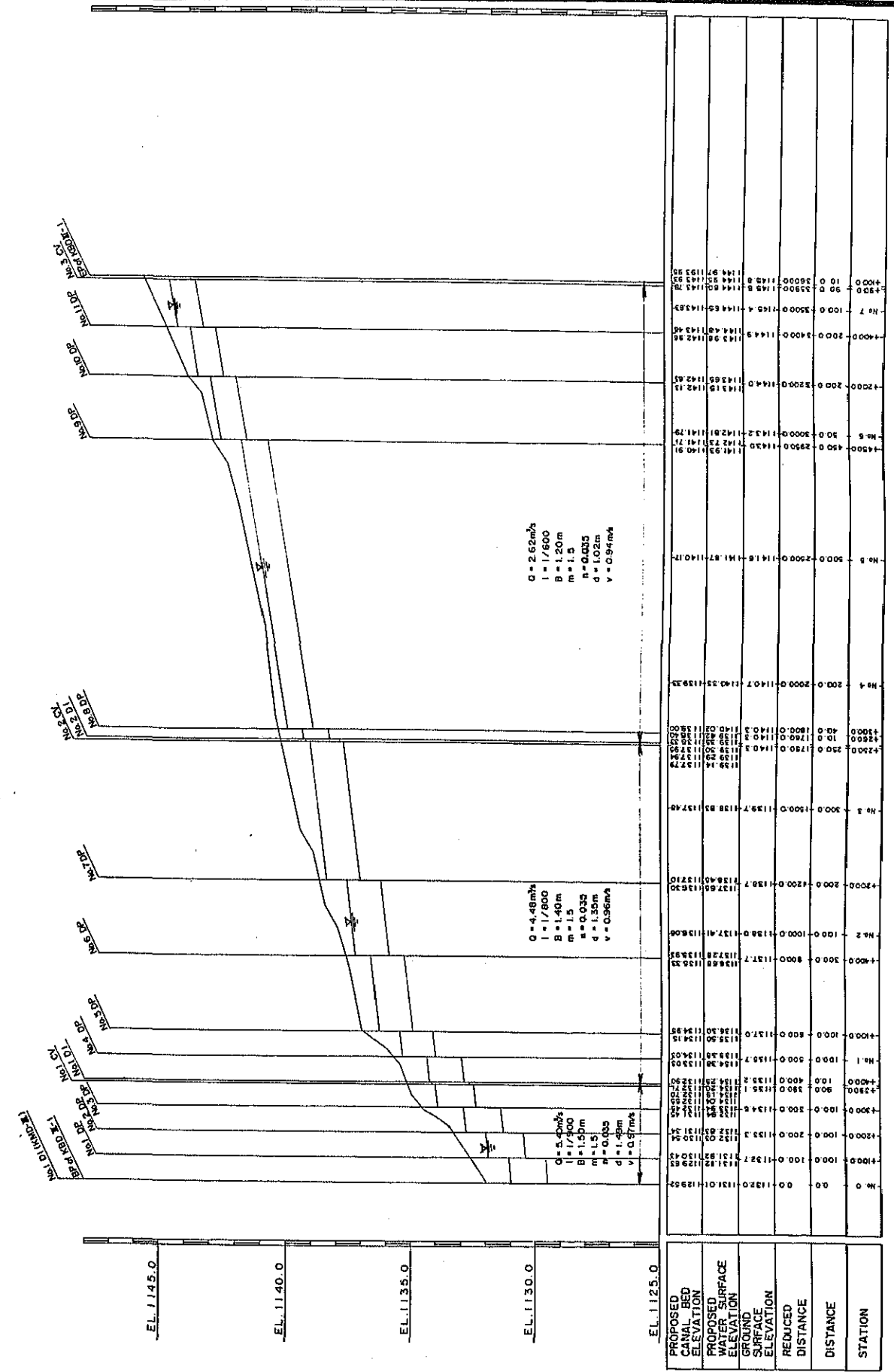
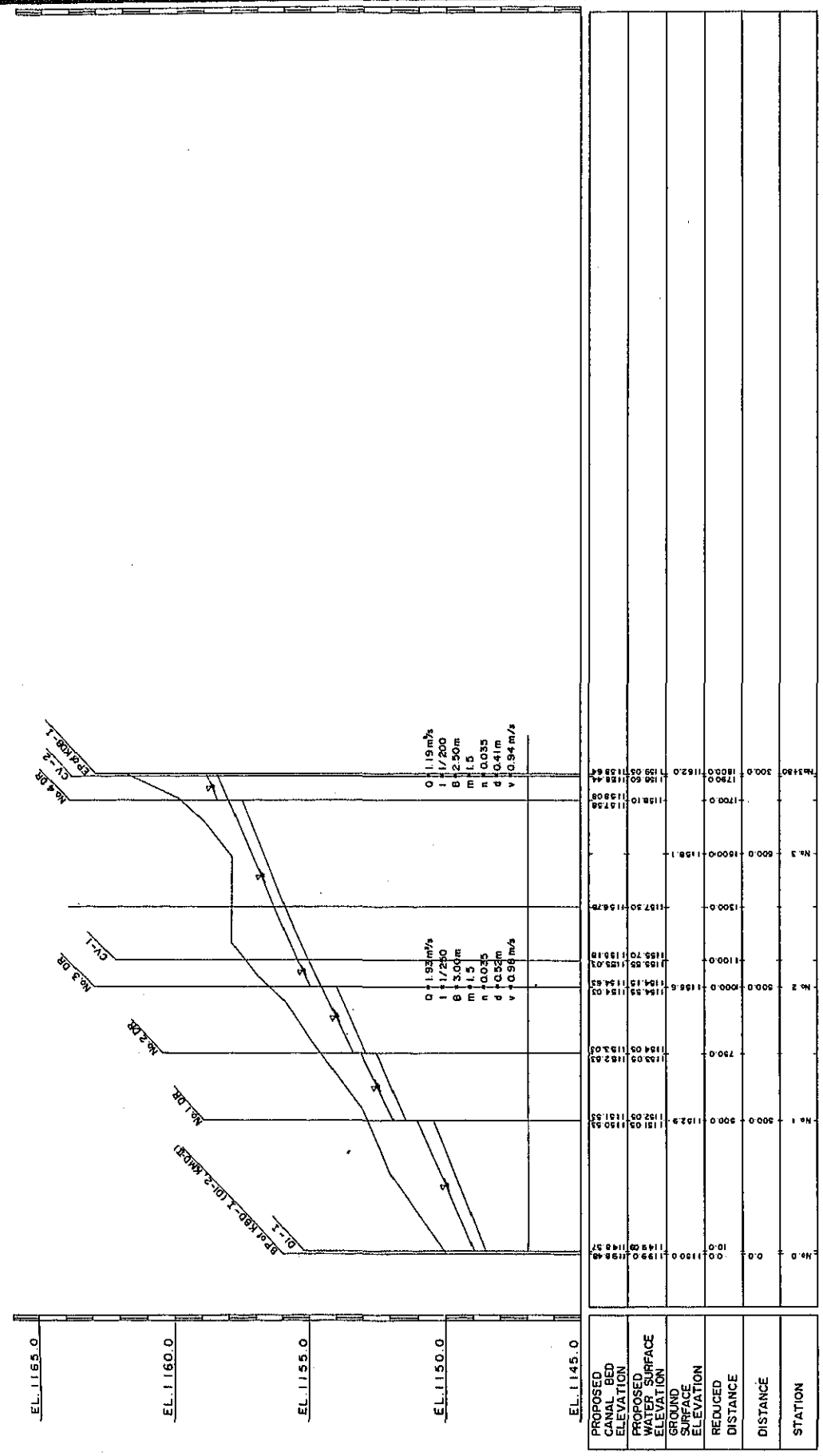
PROPOSED CANAL BED ELEVATION	PROPOSED WATER SURFACE ELEVATION	GROUND SURFACE ELEVATION	REDUCED DISTANCE	DISTANCE	STATION
1137.7	1138.0	1139.10	1.40	0	No. 0
1138.0	1138.0	1139.10	1.10	500	No. 1
1139.0	1139.0	1140.10	1.10	1000	No. 2
1140.0	1140.0	1141.10	1.10	1500	No. 3
1141.0	1141.0	1142.10	1.10	2000	No. 4
1142.0	1142.0	1143.10	1.10	2500	No. 5
1143.0	1143.0	1144.10	1.10	3000	No. 6
1144.0	1144.0	1145.10	1.10	3500	No. 7
1145.0	1145.0	1146.10	1.10	4000	No. 8

REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD  
 THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**PROFILE OF KIRUARA MAIN DRAIN-I, II**  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN



STATION	DISTANCE	REDUCED DISTANCE	GROUND SURFACE ELEVATION	PROPOSED WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION
0+000	0.0	0.0	1127.62	1132.0	1132.0
0+100	100.0	100.0	1128.53	1132.5	1132.5
0+200	200.0	200.0	1129.28	1132.8	1132.8
0+300	300.0	300.0	1129.88	1133.0	1133.0
0+400	400.0	400.0	1130.28	1133.2	1133.2
0+500	500.0	500.0	1130.53	1133.3	1133.3
0+600	600.0	600.0	1130.68	1133.3	1133.3
0+700	700.0	700.0	1130.78	1133.3	1133.3
0+800	800.0	800.0	1130.83	1133.3	1133.3
0+900	900.0	900.0	1130.88	1133.3	1133.3
1+000	1000.0	1000.0	1130.93	1133.3	1133.3
1+100	1100.0	1100.0	1130.98	1133.3	1133.3
1+200	1200.0	1200.0	1131.03	1133.3	1133.3
1+300	1300.0	1300.0	1131.08	1133.3	1133.3
1+400	1400.0	1400.0	1131.13	1133.3	1133.3
1+500	1500.0	1500.0	1131.18	1133.3	1133.3
1+600	1600.0	1600.0	1131.23	1133.3	1133.3
1+700	1700.0	1700.0	1131.28	1133.3	1133.3
1+800	1800.0	1800.0	1131.33	1133.3	1133.3
1+900	1900.0	1900.0	1131.38	1133.3	1133.3
2+000	2000.0	2000.0	1131.43	1133.3	1133.3
2+100	2100.0	2100.0	1131.48	1133.3	1133.3
2+200	2200.0	2200.0	1131.53	1133.3	1133.3
2+300	2300.0	2300.0	1131.58	1133.3	1133.3
2+400	2400.0	2400.0	1131.63	1133.3	1133.3
2+500	2500.0	2500.0	1131.68	1133.3	1133.3
2+600	2600.0	2600.0	1131.73	1133.3	1133.3
2+700	2700.0	2700.0	1131.78	1133.3	1133.3
2+800	2800.0	2800.0	1131.83	1133.3	1133.3
2+900	2900.0	2900.0	1131.88	1133.3	1133.3
3+000	3000.0	3000.0	1131.93	1133.3	1133.3
3+100	3100.0	3100.0	1131.98	1133.3	1133.3
3+200	3200.0	3200.0	1132.03	1133.3	1133.3
3+300	3300.0	3300.0	1132.08	1133.3	1133.3
3+400	3400.0	3400.0	1132.13	1133.3	1133.3
3+500	3500.0	3500.0	1132.18	1133.3	1133.3
3+600	3600.0	3600.0	1132.23	1133.3	1133.3
3+700	3700.0	3700.0	1132.28	1133.3	1133.3
3+800	3800.0	3800.0	1132.33	1133.3	1133.3
3+900	3900.0	3900.0	1132.38	1133.3	1133.3
4+000	4000.0	4000.0	1132.43	1133.3	1133.3
4+100	4100.0	4100.0	1132.48	1133.3	1133.3
4+200	4200.0	4200.0	1132.53	1133.3	1133.3
4+300	4300.0	4300.0	1132.58	1133.3	1133.3
4+400	4400.0	4400.0	1132.63	1133.3	1133.3
4+500	4500.0	4500.0	1132.68	1133.3	1133.3
4+600	4600.0	4600.0	1132.73	1133.3	1133.3
4+700	4700.0	4700.0	1132.78	1133.3	1133.3
4+800	4800.0	4800.0	1132.83	1133.3	1133.3
4+900	4900.0	4900.0	1132.88	1133.3	1133.3
5+000	5000.0	5000.0	1132.93	1133.3	1133.3
5+100	5100.0	5100.0	1132.98	1133.3	1133.3
5+200	5200.0	5200.0	1133.03	1133.3	1133.3
5+300	5300.0	5300.0	1133.08	1133.3	1133.3
5+400	5400.0	5400.0	1133.13	1133.3	1133.3
5+500	5500.0	5500.0	1133.18	1133.3	1133.3
5+600	5600.0	5600.0	1133.23	1133.3	1133.3
5+700	5700.0	5700.0	1133.28	1133.3	1133.3
5+800	5800.0	5800.0	1133.33	1133.3	1133.3
5+900	5900.0	5900.0	1133.38	1133.3	1133.3
6+000	6000.0	6000.0	1133.43	1133.3	1133.3
6+100	6100.0	6100.0	1133.48	1133.3	1133.3
6+200	6200.0	6200.0	1133.53	1133.3	1133.3
6+300	6300.0	6300.0	1133.58	1133.3	1133.3
6+400	6400.0	6400.0	1133.63	1133.3	1133.3
6+500	6500.0	6500.0	1133.68	1133.3	1133.3
6+600	6600.0	6600.0	1133.73	1133.3	1133.3
6+700	6700.0	6700.0	1133.78	1133.3	1133.3
6+800	6800.0	6800.0	1133.83	1133.3	1133.3
6+900	6900.0	6900.0	1133.88	1133.3	1133.3
7+000	7000.0	7000.0	1133.93	1133.3	1133.3
7+100	7100.0	7100.0	1133.98	1133.3	1133.3
7+200	7200.0	7200.0	1134.03	1133.3	1133.3
7+300	7300.0	7300.0	1134.08	1133.3	1133.3
7+400	7400.0	7400.0	1134.13	1133.3	1133.3
7+500	7500.0	7500.0	1134.18	1133.3	1133.3
7+600	7600.0	7600.0	1134.23	1133.3	1133.3
7+700	7700.0	7700.0	1134.28	1133.3	1133.3
7+800	7800.0	7800.0	1134.33	1133.3	1133.3
7+900	7900.0	7900.0	1134.38	1133.3	1133.3
8+000	8000.0	8000.0	1134.43	1133.3	1133.3
8+100	8100.0	8100.0	1134.48	1133.3	1133.3
8+200	8200.0	8200.0	1134.53	1133.3	1133.3
8+300	8300.0	8300.0	1134.58	1133.3	1133.3
8+400	8400.0	8400.0	1134.63	1133.3	1133.3
8+500	8500.0	8500.0	1134.68	1133.3	1133.3
8+600	8600.0	8600.0	1134.73	1133.3	1133.3
8+700	8700.0	8700.0	1134.78	1133.3	1133.3
8+800	8800.0	8800.0	1134.83	1133.3	1133.3
8+900	8900.0	8900.0	1134.88	1133.3	1133.3
9+000	9000.0	9000.0	1134.93	1133.3	1133.3
9+100	9100.0	9100.0	1134.98	1133.3	1133.3
9+200	9200.0	9200.0	1135.03	1133.3	1133.3
9+300	9300.0	9300.0	1135.08	1133.3	1133.3
9+400	9400.0	9400.0	1135.13	1133.3	1133.3
9+500	9500.0	9500.0	1135.18	1133.3	1133.3
9+600	9600.0	9600.0	1135.23	1133.3	1133.3
9+700	9700.0	9700.0	1135.28	1133.3	1133.3
9+800	9800.0	9800.0	1135.33	1133.3	1133.3
9+900	9900.0	9900.0	1135.38	1133.3	1133.3
10+000	10000.0	10000.0	1135.43	1133.3	1133.3

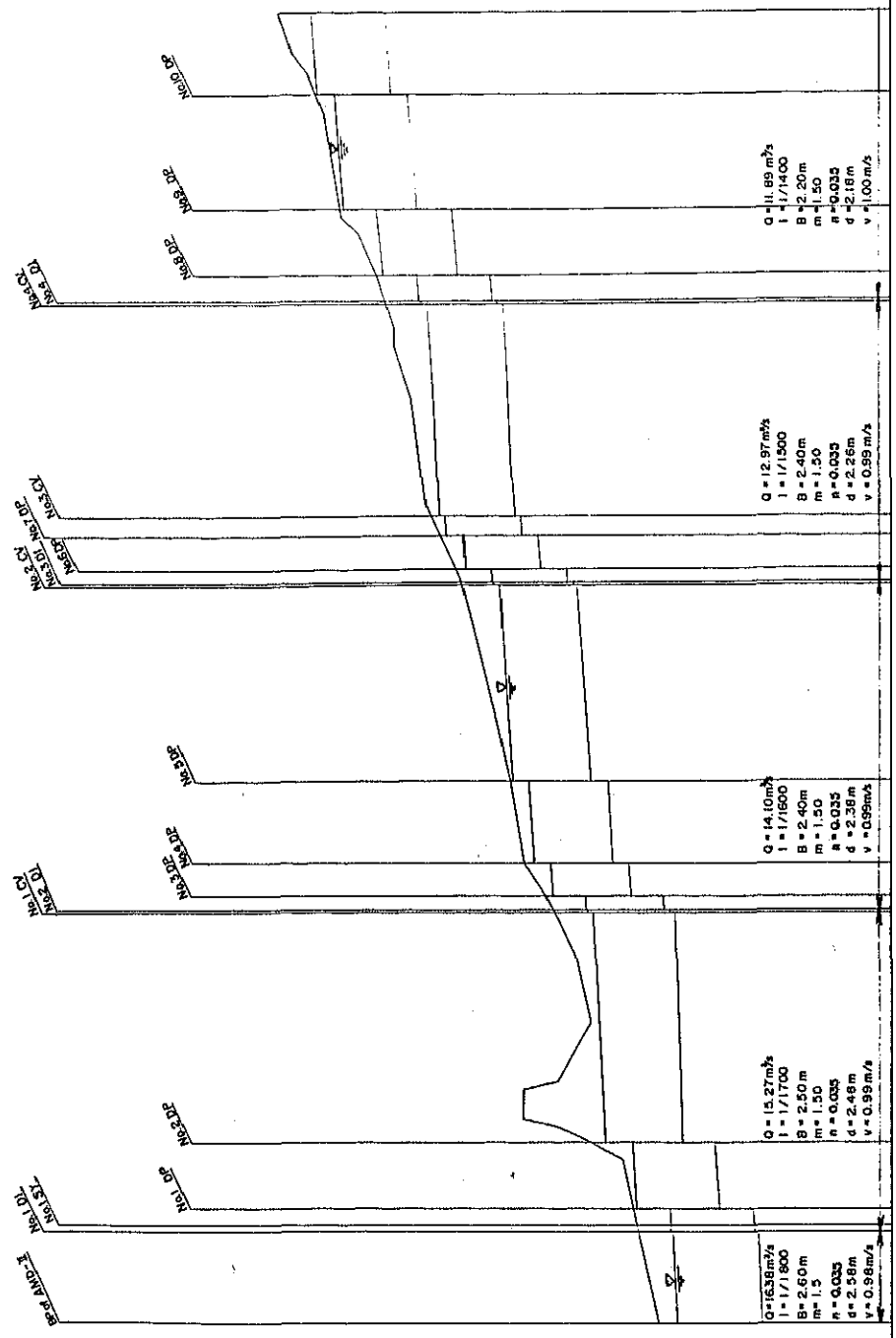
REPUBLIC OF KENYA NATIONAL IRRIGATION BOARD	
THE MWEA IRRIGATION DEVELOPMENT PROJECT	
TITLE OF DRAWING <b>PROFILE OF KIRUARA MAIN DRAIN-III</b>	
JAPAN INTERNATIONAL COOPERATION AGENCY TOKYO JAPAN	DWG. No. <b>3041</b>



REPUBLIC OF KENYA NATIONAL IRRIGATION BOARD	
THE MWEA IRRIGATION DEVELOPMENT PROJECT	
TITLE OF DRAWING PROFILE OF KIRUARA BRANCH DRAIN-II-1, III-1	
JAPAN INTERNATIONAL COOPERATION AGENCY TOKYO JAPAN	DWG. No. 3042







EL. 1165.0  
 EL. 1160.0  
 EL. 1150.0  
 EL. 1150.0  
 EL. 1145.0

STATION	DISTANCE	REDUCED SURFACE ELEVATION	GROUND SURFACE ELEVATION	PROPOSED WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION
Sta. 0	0.0	1145.0	1145.0	1145.0	1145.0
Sta. 1	20.0	1145.0	1145.0	1145.0	1145.0
Sta. 2	40.0	1145.0	1145.0	1145.0	1145.0
Sta. 3	60.0	1145.0	1145.0	1145.0	1145.0
Sta. 4	80.0	1145.0	1145.0	1145.0	1145.0
Sta. 5	100.0	1145.0	1145.0	1145.0	1145.0
Sta. 6	120.0	1145.0	1145.0	1145.0	1145.0
Sta. 7	140.0	1145.0	1145.0	1145.0	1145.0
Sta. 8	160.0	1145.0	1145.0	1145.0	1145.0
Sta. 9	180.0	1145.0	1145.0	1145.0	1145.0
Sta. 10	200.0	1145.0	1145.0	1145.0	1145.0
Sta. 11	220.0	1145.0	1145.0	1145.0	1145.0
Sta. 12	240.0	1145.0	1145.0	1145.0	1145.0
Sta. 13	260.0	1145.0	1145.0	1145.0	1145.0
Sta. 14	280.0	1145.0	1145.0	1145.0	1145.0
Sta. 15	300.0	1145.0	1145.0	1145.0	1145.0
Sta. 16	320.0	1145.0	1145.0	1145.0	1145.0
Sta. 17	340.0	1145.0	1145.0	1145.0	1145.0
Sta. 18	360.0	1145.0	1145.0	1145.0	1145.0
Sta. 19	380.0	1145.0	1145.0	1145.0	1145.0
Sta. 20	400.0	1145.0	1145.0	1145.0	1145.0

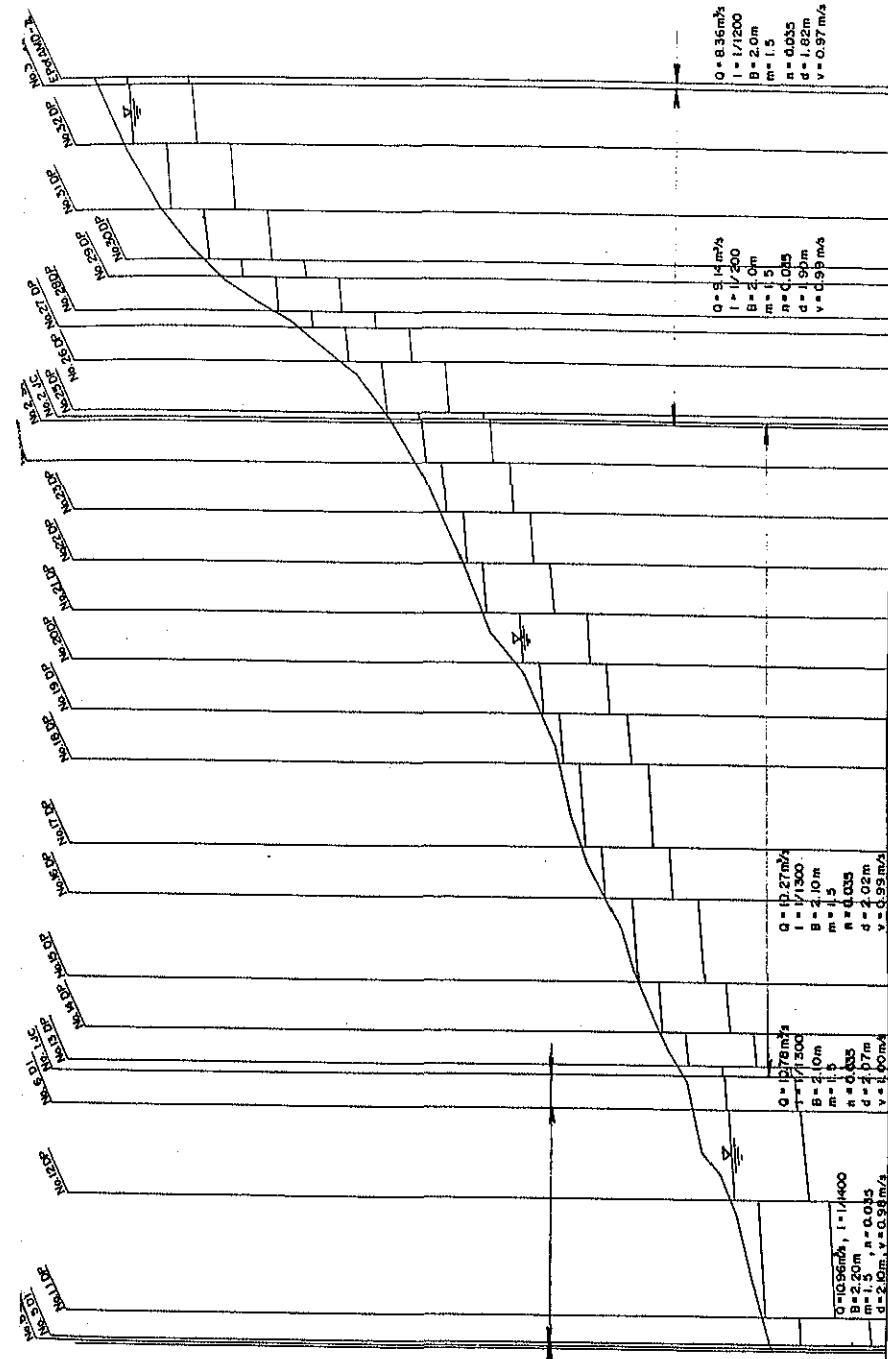
Q = 16.36 m<sup>3</sup>/s  
 I = 1/1800  
 B = 2.60 m  
 m = 1.5  
 n = 0.035  
 d = 2.58 m  
 v = 0.98 m/s

Q = 15.27 m<sup>3</sup>/s  
 I = 1/1700  
 B = 2.50 m  
 m = 1.5  
 n = 0.035  
 d = 2.48 m  
 v = 0.99 m/s

Q = 14.10 m<sup>3</sup>/s  
 I = 1/1600  
 B = 2.40 m  
 m = 1.5  
 n = 0.035  
 d = 2.38 m  
 v = 0.99 m/s

Q = 12.97 m<sup>3</sup>/s  
 I = 1/1500  
 B = 2.40 m  
 m = 1.5  
 n = 0.035  
 d = 2.26 m  
 v = 0.99 m/s

Q = 11.89 m<sup>3</sup>/s  
 I = 1/1400  
 B = 2.20 m  
 m = 1.5  
 n = 0.035  
 d = 2.16 m  
 v = 1.00 m/s



EL. 1185.0  
 EL. 1180.0  
 EL. 1175.0  
 EL. 1170.0  
 EL. 1165.0  
 EL. 1160.0

STATION	DISTANCE	REDUCED SURFACE ELEVATION	GROUND SURFACE ELEVATION	PROPOSED WATER SURFACE ELEVATION	PROPOSED CANAL BED ELEVATION
Sta. 0	0.0	1160.0	1160.0	1160.0	1160.0
Sta. 1	20.0	1160.0	1160.0	1160.0	1160.0
Sta. 2	40.0	1160.0	1160.0	1160.0	1160.0
Sta. 3	60.0	1160.0	1160.0	1160.0	1160.0
Sta. 4	80.0	1160.0	1160.0	1160.0	1160.0
Sta. 5	100.0	1160.0	1160.0	1160.0	1160.0
Sta. 6	120.0	1160.0	1160.0	1160.0	1160.0
Sta. 7	140.0	1160.0	1160.0	1160.0	1160.0
Sta. 8	160.0	1160.0	1160.0	1160.0	1160.0
Sta. 9	180.0	1160.0	1160.0	1160.0	1160.0
Sta. 10	200.0	1160.0	1160.0	1160.0	1160.0
Sta. 11	220.0	1160.0	1160.0	1160.0	1160.0
Sta. 12	240.0	1160.0	1160.0	1160.0	1160.0
Sta. 13	260.0	1160.0	1160.0	1160.0	1160.0
Sta. 14	280.0	1160.0	1160.0	1160.0	1160.0
Sta. 15	300.0	1160.0	1160.0	1160.0	1160.0
Sta. 16	320.0	1160.0	1160.0	1160.0	1160.0
Sta. 17	340.0	1160.0	1160.0	1160.0	1160.0
Sta. 18	360.0	1160.0	1160.0	1160.0	1160.0
Sta. 19	380.0	1160.0	1160.0	1160.0	1160.0
Sta. 20	400.0	1160.0	1160.0	1160.0	1160.0

Q = 10.96 m<sup>3</sup>/s  
 I = 1/1400  
 B = 2.20 m  
 m = 1.5  
 n = 0.035  
 d = 2.02 m  
 v = 0.99 m/s

Q = 10.27 m<sup>3</sup>/s  
 I = 1/1300  
 B = 2.10 m  
 m = 1.5  
 n = 0.035  
 d = 1.97 m  
 v = 0.99 m/s

Q = 9.14 m<sup>3</sup>/s  
 I = 1/1200  
 B = 2.0 m  
 m = 1.5  
 n = 0.035  
 d = 1.93 m  
 v = 0.97 m/s

Q = 8.36 m<sup>3</sup>/s  
 I = 1/1200  
 B = 2.0 m  
 m = 1.5  
 n = 0.035  
 d = 1.82 m  
 v = 0.97 m/s

REPUBLIC OF KENYA  
 NATIONAL IRRIGATION BOARD

THE MWEA IRRIGATION  
 DEVELOPMENT PROJECT

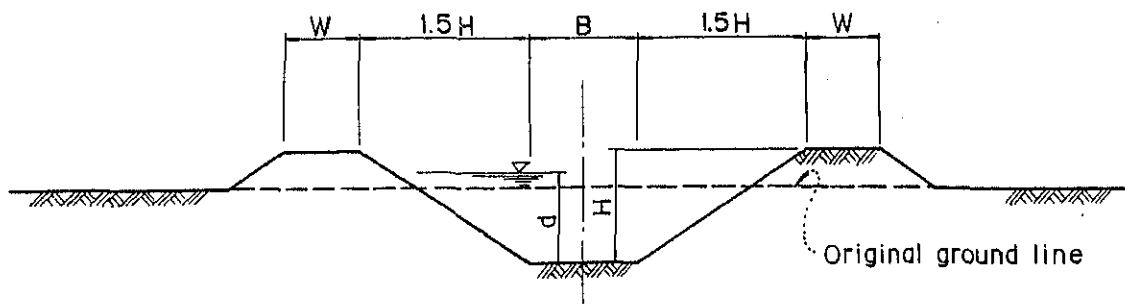
TITLE OF DRAWING  
**PROFILE OF TANA MAIN DRAIN-II**

JAPAN INTERNATIONAL COOPERATION AGENCY  
 TOKYO JAPAN

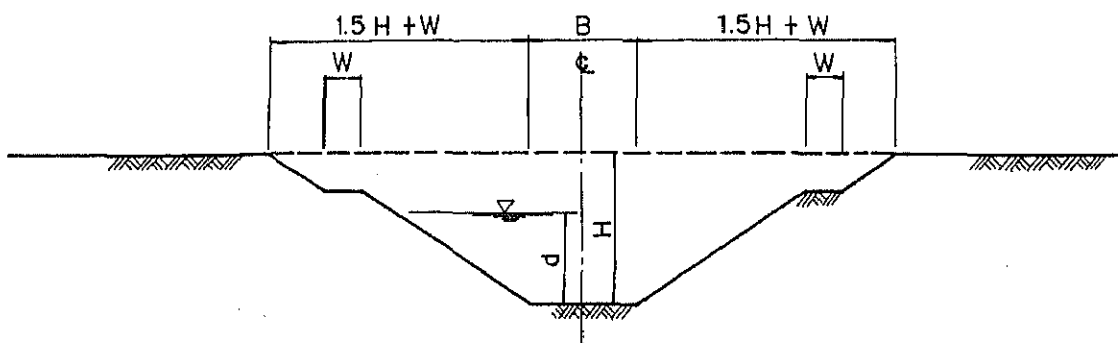
DWG. No.  
**3044**

IRRIGATION CANAL

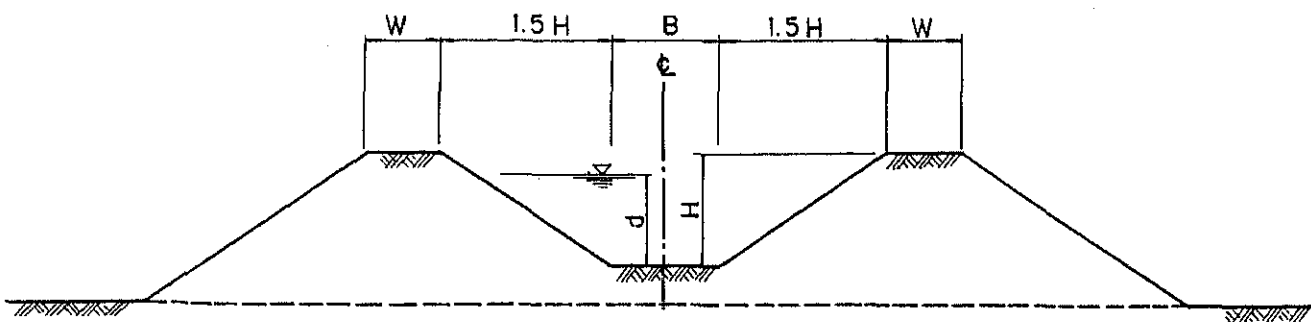
TYPE-A



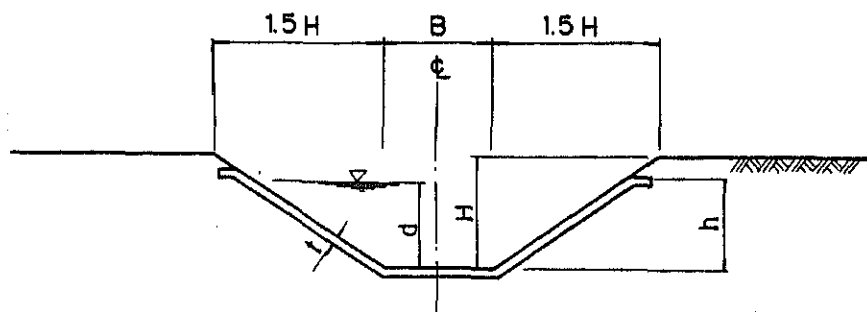
TYPE-B



TYPE-C

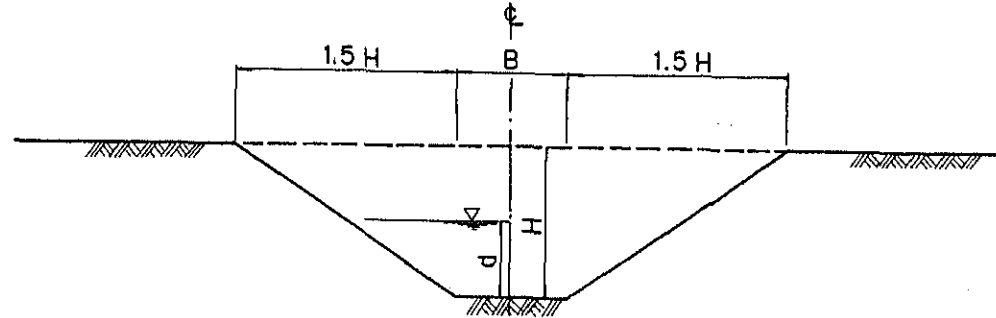


CONCRETE LINING CANAL

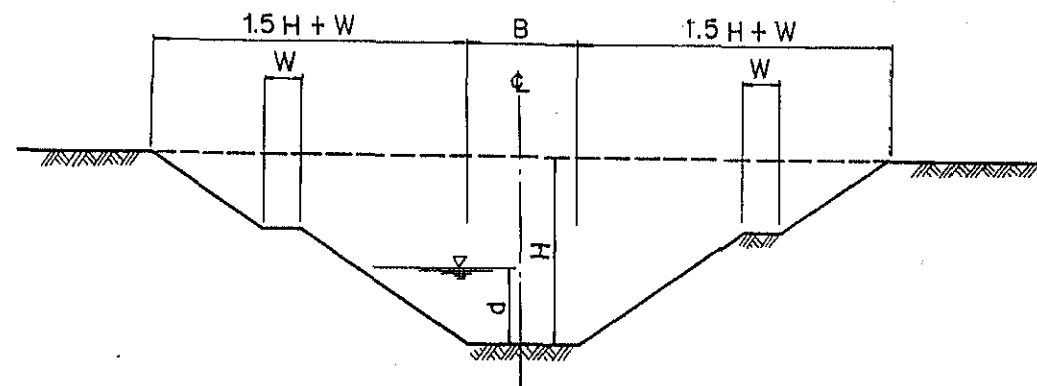


DRAINAGE CANAL

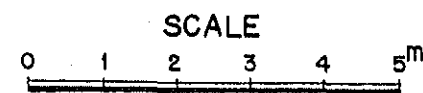
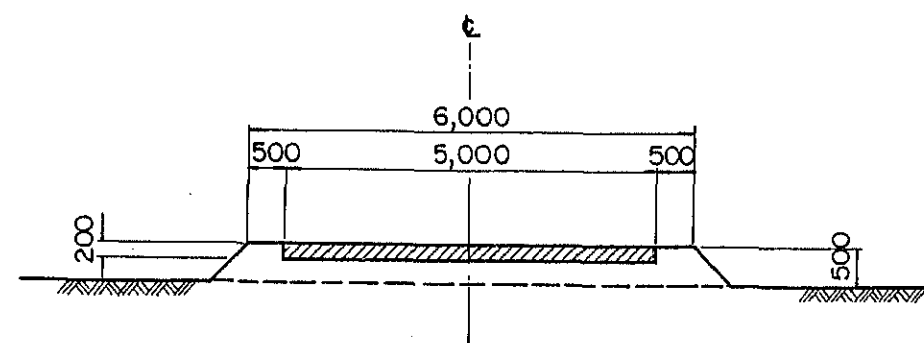
TYPE-A



TYPE-B



FARM ROAD



REPUBLIC OF KENYA NATIONAL IRRIGATION BOARD	
THE MWEA IRRIGATION DEVELOPMENT PROJECT	
TITLE OF DRAWING TYPICAL SECTION OF IRRIGATION AND DRAINAGE CANAL, AND FARM ROAD	
JAPAN INTERNATIONAL COOPERATION AGENCY TOKYO JAPAN	DWG. No. 3045