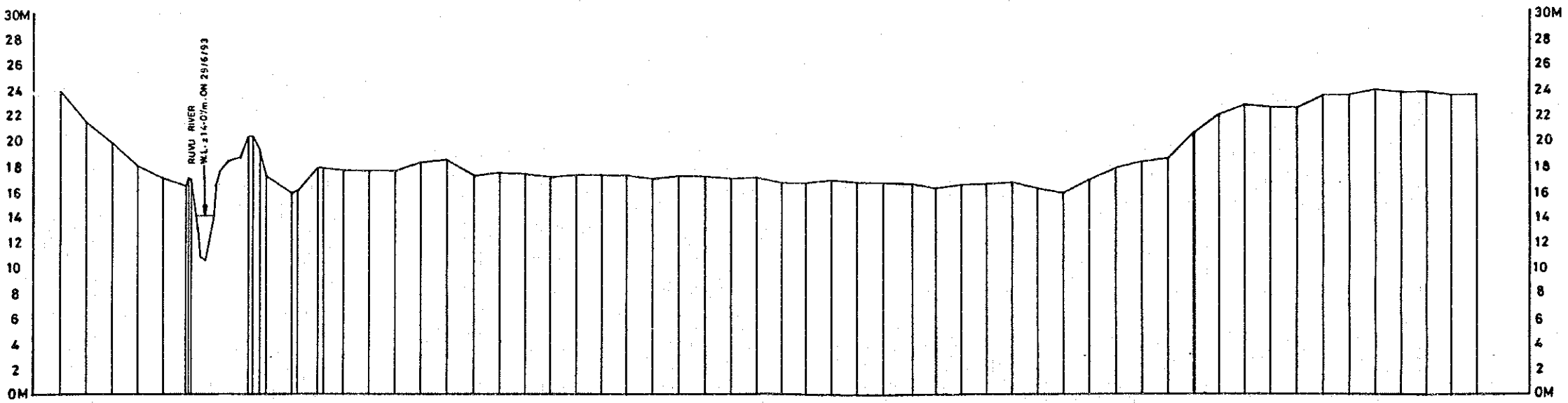


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
16.44	0.0	
17.02	8	W. PEG
16.90	9.4	
18.24	8.7	
14.15	12.1	
13.94	12.5	
12.73	16.0	
11.78	18.0	
10.76	22.0	
10.73	28.0	
10.51	32.0	
11.60	36.5	
12.31	41.0	
12.62	44.7	
12.45	48.5	
14.07	50.5	
14.35	51.5	
16.91	52.5	
17.55	60.2	
18.48	78.2	
18.97	100.8	
20.25	116.8	TAR (1-P.C.) CROSS SECTION CORNER



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
23.01	388	
21.44	208	
18.72	190	
18.05	100	
17.02	90	
16.44	84	
17.02	80	
16.90	76	W. PEG
14.15	114	
13.94	118	
12.73	127.5	TAR (1-P.C.)
11.78	150	
10.76	190	
10.73	220	TRACK
10.51	261	
11.60	306	
12.31	350	
12.62	400	
12.45	458	
14.07	500	MAIN WATER PIPE TO DAR ES SALAAM
14.35	556	
16.91	608	
17.55	658	
18.24	700	
18.97	750	
19.71	800	
20.25	850	
20.76	900	
21.48	940	
21.48	990	
18.02	1038	
17.16	1088	
16.91	1100	
16.85	1150	
18.42	1200	
18.76	1268	
18.98	1306	
18.46	1356	
18.05	1400	
15.05	1450	
15.48	1500	
16.05	1558	
16.72	1600	
16.15	1658	
15.91	1700	
16.71	1758	
17.71	1800	
18.32	1850	
18.55	1900	
20.43	1958	
20.54	2000	
21.91	2058	
22.77	2098	
22.54	2168	
22.54	2236	
22.18	2200	
23.51	2250	
23.90	2300	
23.81	2350	
23.74	2400	
23.57	2450	
23.61	2500	
23.62	2500	

SCALE: HORIZONTAL 1:5,000
VERTICAL 1:200

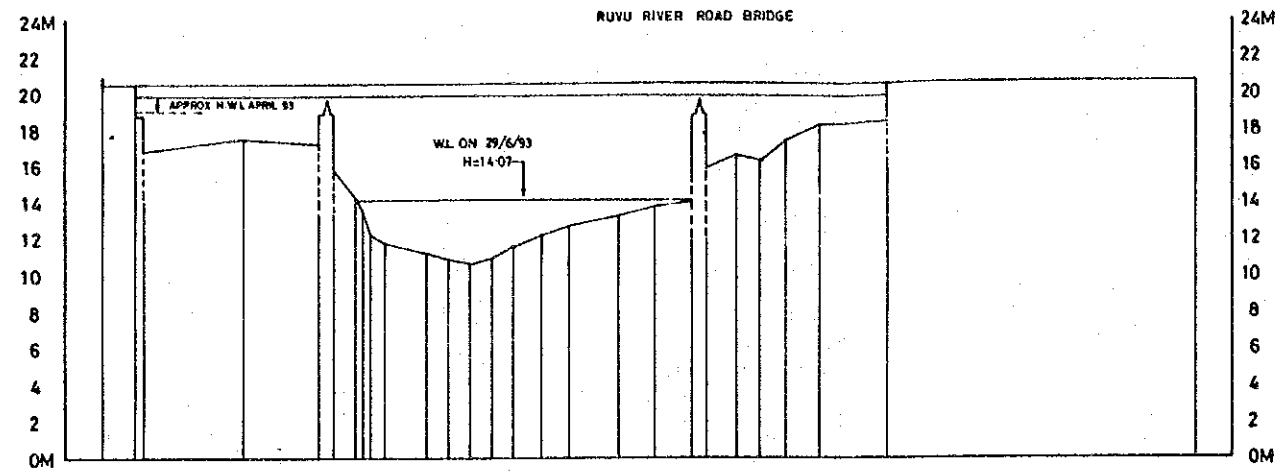
THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVU RIVER BASIN

RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No. 7A (7A/25)

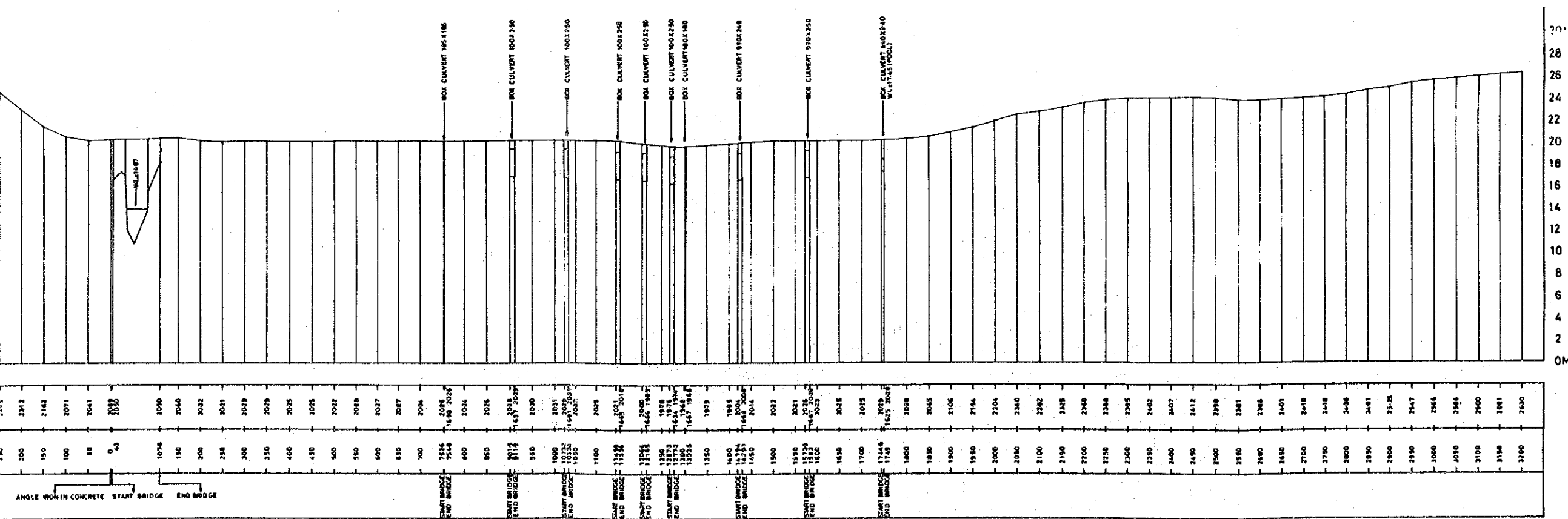
SCALE Hst: 5000 Vst: 200
Hst: 500 Vst: 1:200

JUNE 1993 JICA

SECTION No 7B
(ALONG DARESSALAAM --MOROGORO ROAD)

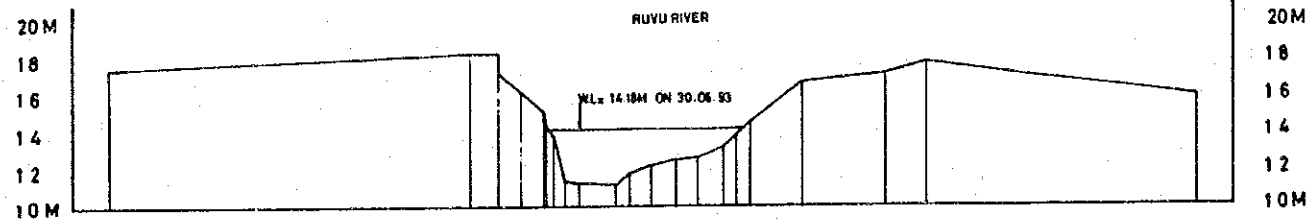


GROUND HEIGHT	2060	2055	2042	1783	1768	1575	1418	1352	1172	1116	1083	1065	1048	1163	1218	1268	1322	1346	1395	1500	1675	1635	1738	1822	1925	2049		
ACCUMULATED DISTANCE	0	55	19	296	316	324	332	345	365	44	47	50	53	56	60	64	71	76	81	83	87	90	93	96	1078	130		
REMARKS	T.M. SINGLE PIER H = 20.99																											

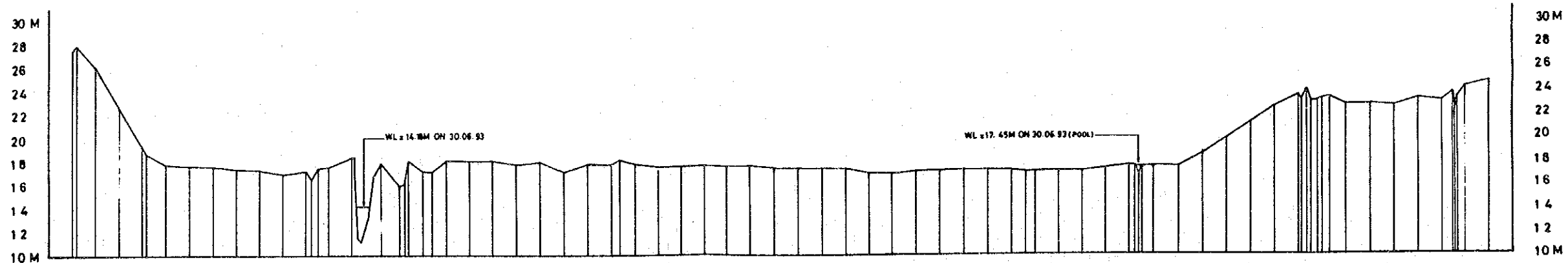


SCALE: HORIZONTAL 1:5000
VERTICAL 1:200

THE STUDY ON WATER RESOURCES DEVELOPMENT IN THE RUVU RIVER BASIN		
RIVER	CROSS SECTION	
IN THE LOWER	REACH	
SECTION No 7B		(7B ₂)
SCALE	H=1:5000	V=1:200
	H=1:500	V=1:200



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
17.47	0	
18.32	4.8	WOOD PEG
17.33	4.8	
16.29	4.8	
15.04	10.7	
15.04	10.7	
14.28	10.7	
13.26	15.0	
11.24	30.0	
11.84	32.0	
12.24	35.0	
12.54	38.5	
13.04	31.5	
12.94	35.0	
12.84	36.7	
14.02	38.8	
16.96	45.7	
15.17	51.8	
17.86	62.7	BM (P.C)
15.88	100.0	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
27.4	0	
26.4	26.4	
23.8	300	
19.33	450	
18.70	450	
17.79	400	
17.53	350	
17.54	300	
17.28	258	
17.24	200	
15.88	150	
17.22	100	
15.23	50	
17.47	0	
18.32	0	WOOD PEG
17.86	62.7	BM (P.C)
15.98	100	
15.04	111	
14.28	128	
13.16	158	
12.78	178	
12.54	200	
12.04	210	
12.04	230	
12.04	250	
12.74	260	
12.18	300	
12.02	350	
12.02	400	
12.02	450	
12.02	500	
12.02	550	
12.02	600	
12.02	650	
12.02	700	
12.02	750	
12.02	800	
12.02	850	
12.02	900	
12.02	950	
12.02	1000	
12.02	1050	
12.02	1100	
12.02	1150	
12.02	1200	
12.02	1250	
12.02	1300	
12.02	1350	
12.02	1400	
12.02	1450	
12.02	1500	
12.02	1550	
12.02	1600	
12.02	1650	
12.02	1700	
12.02	1750	
12.02	1800	
12.02	1850	
12.02	1900	
12.02	1950	
12.02	2000	
12.02	2050	
12.02	2100	
12.02	2150	
12.02	2200	
12.02	2250	
12.02	2300	
12.02	2350	
12.02	2400	
12.02	2450	
12.02	2500	
12.02	2550	
12.02	2600	
12.02	2650	
12.02	2700	
12.02	2750	
12.02	2800	
12.02	2850	
12.02	2900	
12.02	2950	
12.02	3000	

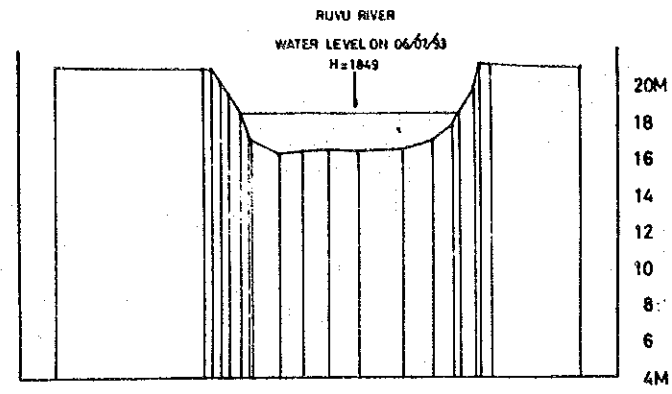
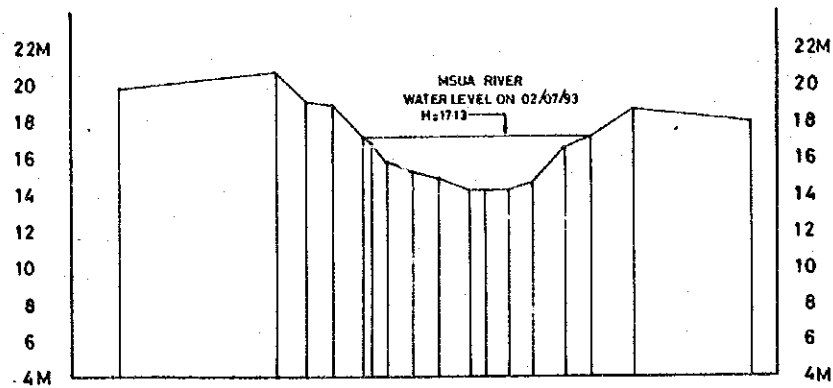
THE STUDY ON WATER RESOURCES
 DEVELOPMENT IN THE RUVU RIVER BASIN

 RIVER CROSS SECTION
 IN THE LOWER REACH
 SECTION No. 8 (S₂₅)

 H=1: 5000 V=200
 SCALE H=1: 500 V=200

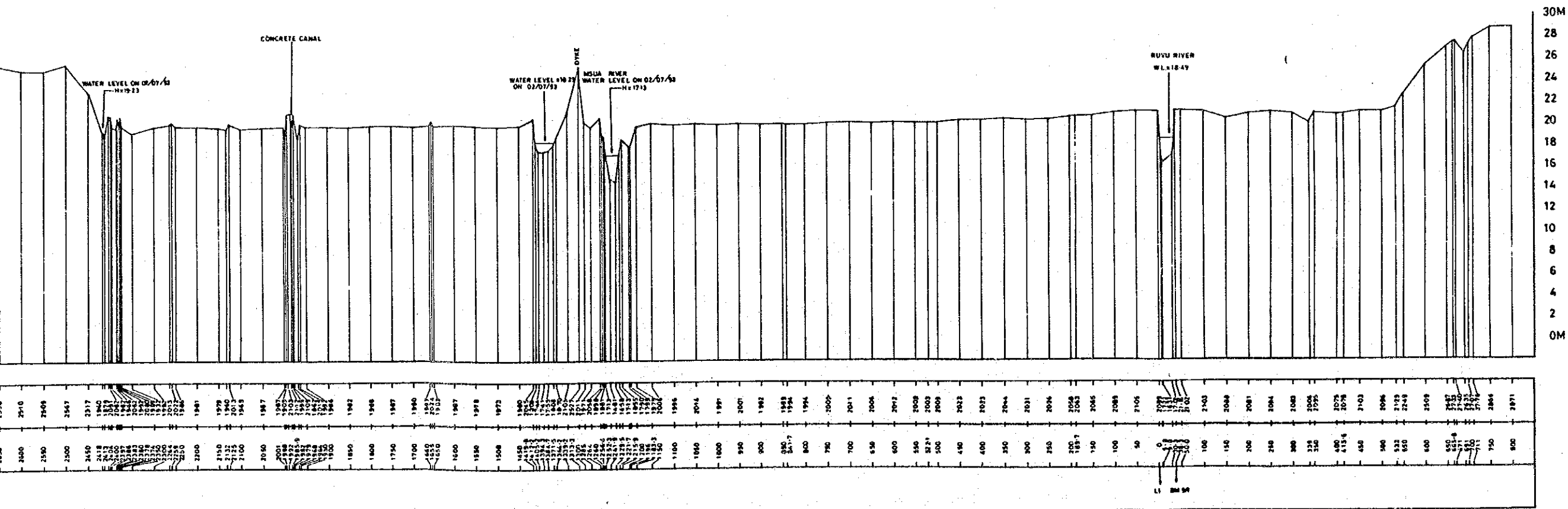
 JUNE 93 JICA

HORIZONTAL 1: 5000
 SCALE VERTICAL 1: 200



GROUND HEIGHT	1977	2060	1889	1881	1713	1583	1524	1481	1448	1417	1421	1236	1658	1647	1713	1865	1700
ACCUMULATED DISTANCE	1285	1764	1260	1264	1261	1249	1245	1249	1249	1250	1250	1250	1250	1250	1250	1250	1250
REMARKS																	

GROUND HEIGHT	2105	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2088	2102
ACCUMULATED DISTANCE	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
REMARKS																		



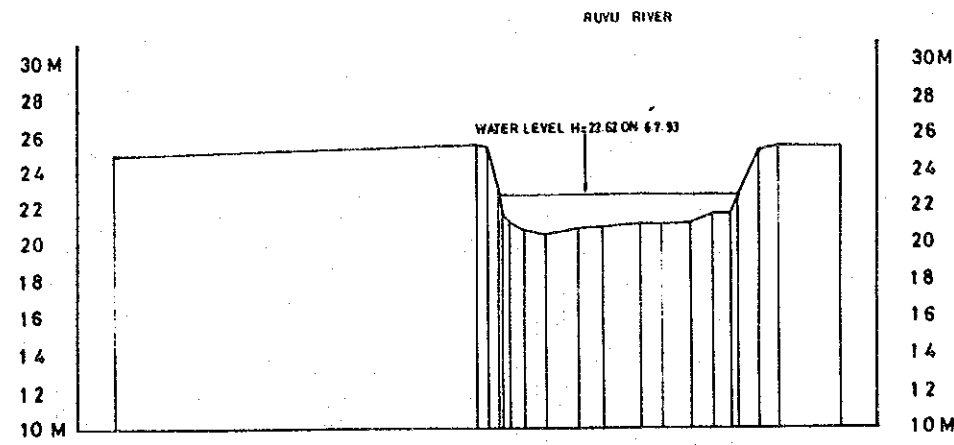
SCALE: HORIZONTAL 1:5000
VERTICAL 1:200

THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUJU RIVER BASIN

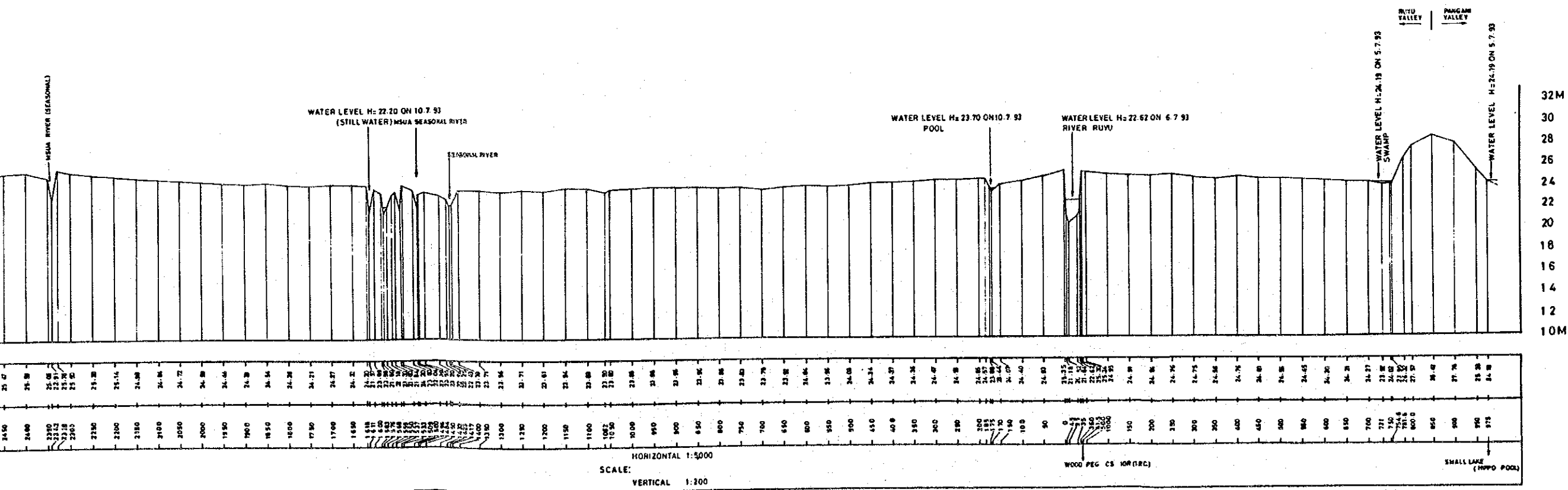
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No.9 (9.5)

H_v: 5000 V_v: 200
SCALE H_h: 500 V_h: 200

JULY 1993 JICA



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
34.43	0	
28.85	14	WOOD PEG
28.80	17.5	
26.87	25.5	
26.88	28.8	
21.14	29.6	
21.58	32.8	
21.64	35.0	
21.60	37.2	
25.11	40.9	
25.12	43.5	CS 10M (PC)
25.24	50.0	



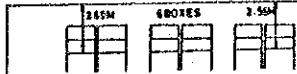
HORIZONTAL 1:5000
SCALE: VERTICAL 1:200

THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUYU RIVER BASIN

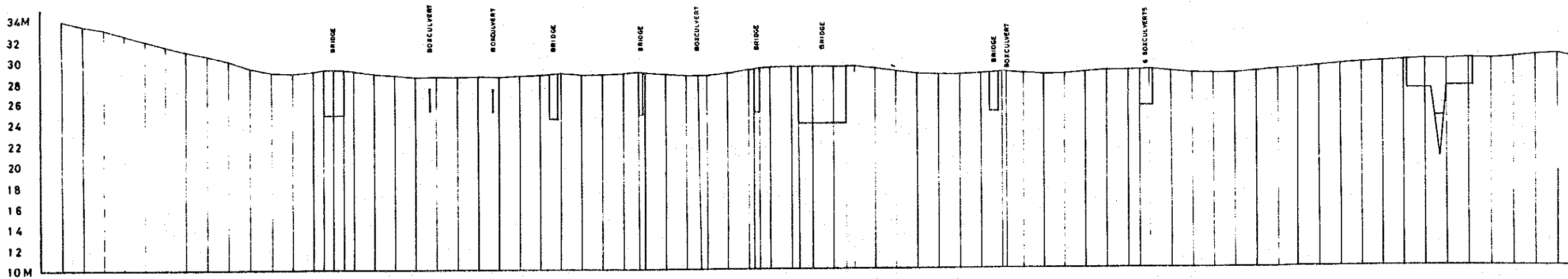
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No 10 (10-25)

SCALE H=1:5000 V=1:200
H=1:500 V=1:200

30 M
28
26
24
22
20
18
16
14
12
10 M

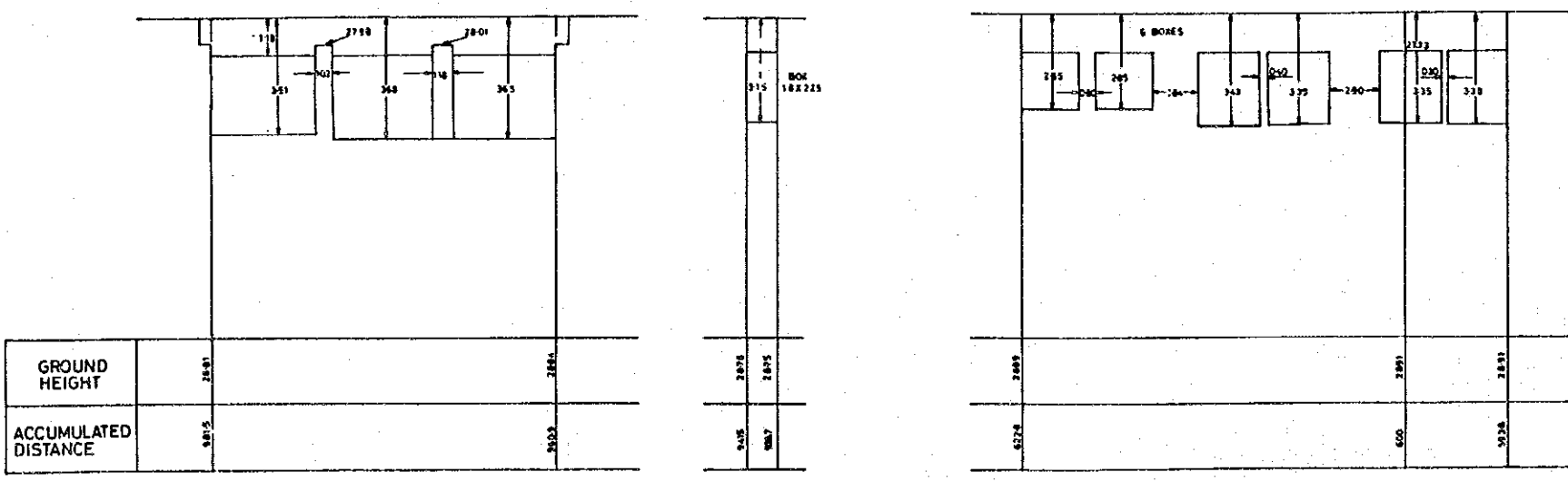
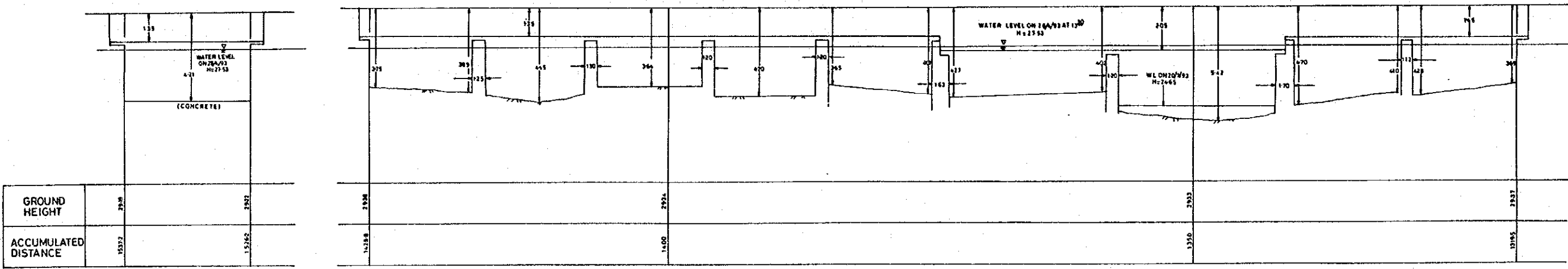
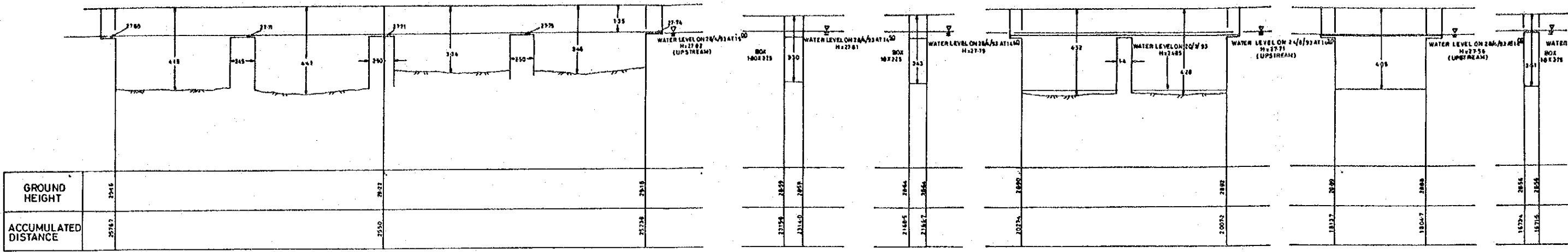


GROUND HEIGHT	28.87
ACCUMULATED DISTANCE	0
REMARKS	

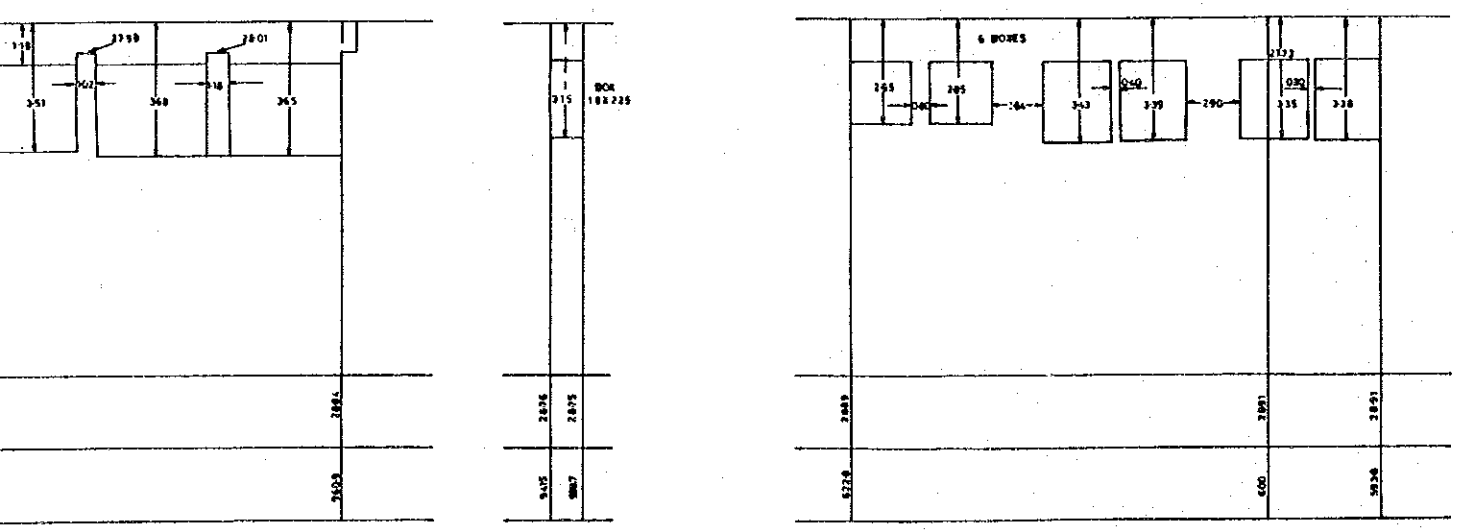
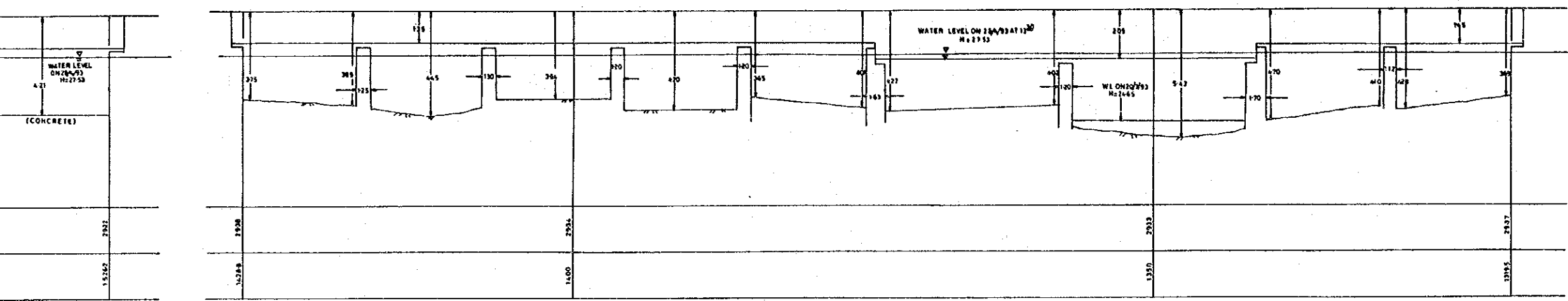
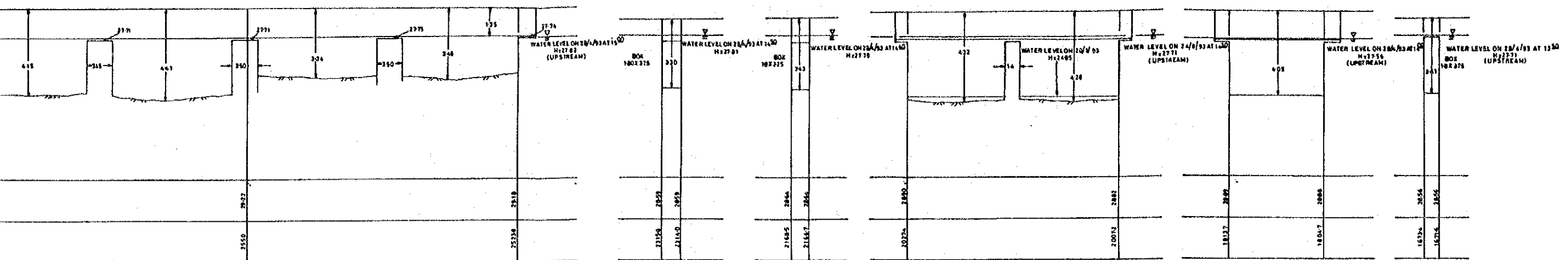


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
33.91	200	GROUND HEIGHTS REFER TO TOP OF NORTHERN RAIL
33.40	210	
32.91	220	
32.48	230	
31.96	240	
31.42	250	
30.95	260	
30.51	270	
30.04	280	
29.28	290	
28.98	300	
28.85	310	
28.02	320	
27.16	330	
26.21	340	
25.14	350	
23.96	360	
22.72	370	
21.37	380	
20.07	390	
18.95	400	
18.00	410	
17.22	420	
16.59	430	
16.14	440	
15.80	450	
15.50	460	
15.22	470	
15.00	480	
14.80	490	
14.60	500	
14.40	510	
14.20	520	
14.00	530	
13.80	540	
13.60	550	
13.50	560	
13.40	570	
13.30	580	
13.20	590	
13.10	600	
13.00	610	
12.90	620	
12.80	630	
12.70	640	
12.60	650	
12.50	660	
12.40	670	
12.30	680	
12.20	690	
12.10	700	
12.00	710	
11.90	720	
11.80	730	
11.70	740	
11.60	750	
11.50	760	
11.40	770	
11.30	780	
11.20	790	
11.10	800	
11.00	810	
10.90	820	
10.80	830	
10.70	840	
10.60	850	
10.50	860	
10.40	870	
10.30	880	
10.20	890	
10.10	900	
10.00	910	
9.90	920	
9.80	930	
9.70	940	
9.60	950	
9.50	960	
9.40	970	
9.30	980	
9.20	990	
9.10	1000	

SCALE HORIZONTAL 1:5000
VERTICAL 1:200



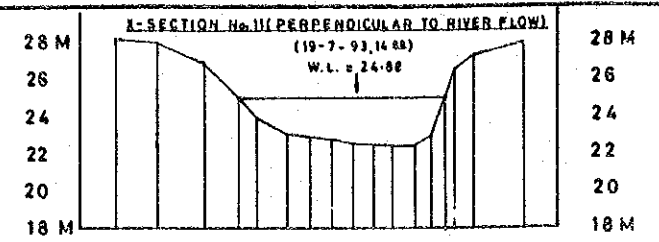
SCALE HORIZONTAL 1:200
VERTICAL 1:100



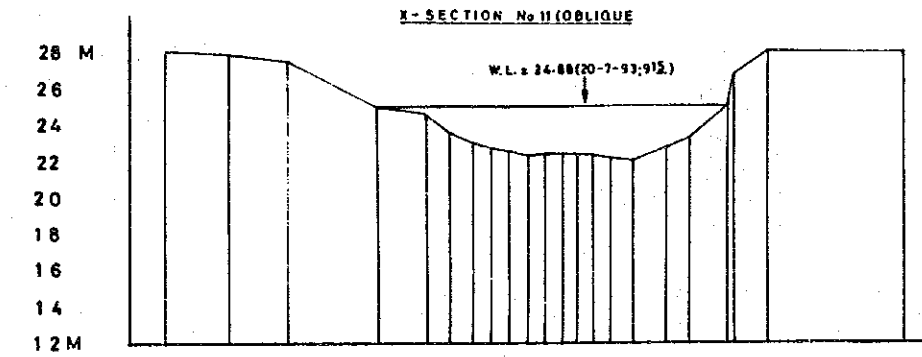
SCALE: HORIZONTAL 1:200
VERTICAL 1:100

THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVURNER BASIN
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No 10B (10B-15)
SCALE: HORIZONTAL 1:200
VERTICAL 1:100

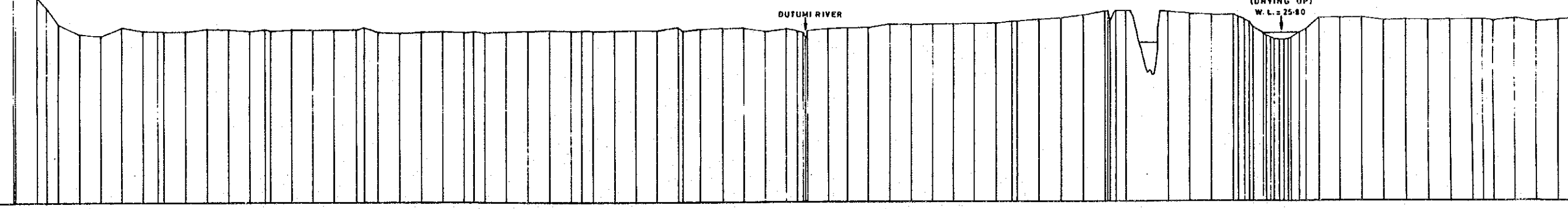
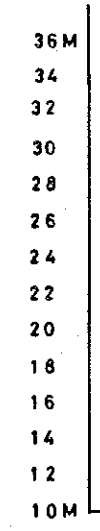
APRIL 1993 JICA



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
27.98	0.0	
27.93	5.3	
26.58	15.4	
24.88	17.0	
23.79	19.1	
22.98	23.5	
22.79	25.1	
22.88	26.4	
22.41	28.2	
22.21	30.1	
22.32	32.0	
22.38	33.0	
22.38	34.0	
22.38	35.0	
22.38	36.0	
22.38	37.0	
22.38	38.0	
22.38	39.0	
22.38	40.0	
22.38	41.0	
22.38	42.0	
22.38	43.0	
22.38	44.0	
22.38	45.0	
22.38	46.0	
22.38	47.0	
22.38	48.0	
22.38	49.0	
22.38	50.0	
22.38	51.0	
22.38	52.0	
22.38	53.0	
22.38	54.0	
22.38	55.0	
22.38	56.0	
22.38	57.0	
22.38	58.0	
22.38	59.0	
22.38	60.0	
22.38	61.0	
22.38	62.0	
22.38	63.0	
22.38	64.0	
22.38	65.0	
22.38	66.0	
22.38	67.0	
22.38	68.0	
22.38	69.0	
22.38	70.0	
22.38	71.0	
22.38	72.0	
22.38	73.0	
22.38	74.0	
22.38	75.0	
22.38	76.0	
22.38	77.0	
22.38	78.0	
22.38	79.0	
22.38	80.0	
22.38	81.0	
22.38	82.0	
22.38	83.0	
22.38	84.0	
22.38	85.0	
22.38	86.0	
22.38	87.0	
22.38	88.0	
22.38	89.0	
22.38	90.0	
22.38	91.0	
22.38	92.0	
22.38	93.0	
22.38	94.0	
22.38	95.0	
22.38	96.0	
22.38	97.0	
22.38	98.0	
22.38	99.0	
22.38	100.0	

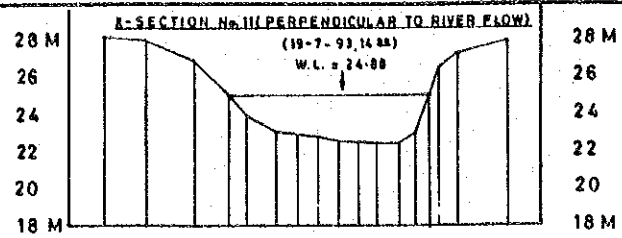


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
27.98	0.0	
27.93	6.9	
27.43	17.0	
24.88	28.1	
24.57	32.6	
23.92	36.9	
23.88	42.0	
22.64	47.0	
22.45	49.7	
22.20	51.0	
22.27	53.0	
22.38	54.4	
22.30	56.4	
22.33	58.4	
22.13	60.7	
21.97	63.7	
21.78	68.0	
21.78	71.2	
21.78	74.7	
21.78	77.7	
21.78	81.7	
21.78	85.7	
21.78	89.7	
21.78	93.7	
21.78	97.7	
21.78	101.7	

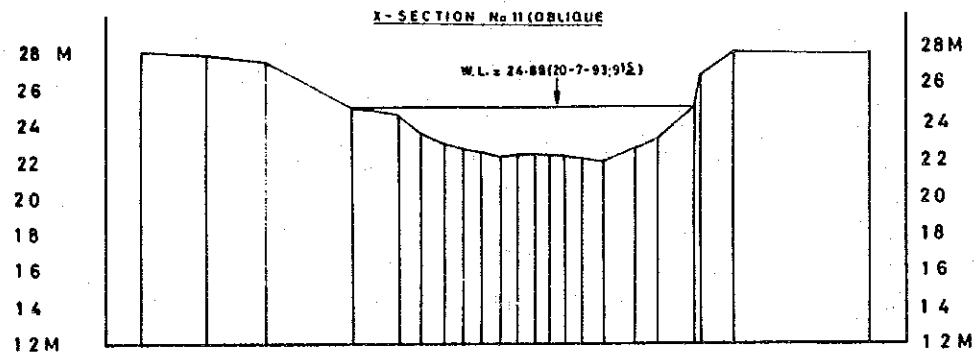


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
31.72	24.85	
31.35	26.00	
28.43	28.95	
28.41	29.25	
26.87	33.88	
25.86	34.50	
25.73	34.60	
25.68	35.50	
25.18	39.88	
25.18	41.55	
25.15	42.50	
25.19	43.88	
25.40	45.18	
25.33	46.88	
25.11	49.50	
25.11	51.08	
25.09	52.50	
25.09	54.88	
25.09	56.88	
25.09	58.88	
25.09	60.88	
25.09	62.88	
25.09	64.88	
25.09	66.88	
25.09	68.88	
25.09	70.88	
25.09	72.88	
25.09	74.88	
25.09	76.88	
25.09	78.88	
25.09	80.88	
25.09	82.88	
25.09	84.88	
25.09	86.88	
25.09	88.88	
25.09	90.88	
25.09	92.88	
25.09	94.88	
25.09	96.88	
25.09	98.88	
25.09	100.88	

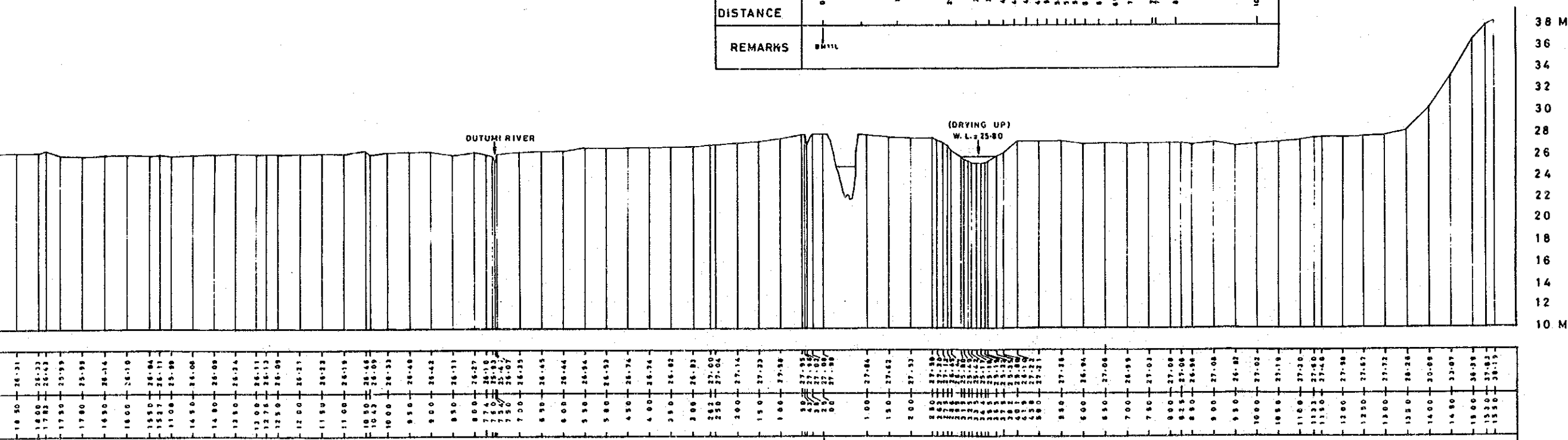
SCALE HORIZONTAL 1:5000
VERTICAL 1:200



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
27.98	0.0	
27.43	5.9	
26.35	12.4	
24.88	17.0	
23.79	19.7	
22.99	22.5	
22.77	25.1	
22.66	27.2	
22.41	29.3	
22.32	31.1	
22.27	32.7	
22.21	34.0	
22.21	35.0	
22.21	35.9	
22.21	36.7	
22.21	37.4	
22.21	38.1	
22.21	38.8	
22.21	39.5	
22.21	40.2	
22.21	40.9	
22.21	41.6	
22.21	42.3	
22.21	43.0	
22.21	43.7	
22.21	44.4	
22.21	45.1	
22.21	45.8	
22.21	46.5	
22.21	47.2	
22.21	47.9	
22.21	48.6	
22.21	49.3	
22.21	50.0	
22.21	50.7	
22.21	51.4	
22.21	52.1	
22.21	52.8	
22.21	53.5	
22.21	54.2	
22.21	54.9	
22.21	55.6	
22.21	56.3	
22.21	57.0	
22.21	57.7	
22.21	58.4	
22.21	59.1	
22.21	59.8	
22.21	60.5	
22.21	61.2	
22.21	61.9	
22.21	62.6	
22.21	63.3	
22.21	64.0	
22.21	64.7	
22.21	65.4	
22.21	66.1	
22.21	66.8	
22.21	67.5	
22.21	68.2	
22.21	68.9	
22.21	69.6	
22.21	70.3	
22.21	71.0	
22.21	71.7	
22.21	72.4	
22.21	73.1	
22.21	73.8	
22.21	74.5	
22.21	75.2	
22.21	75.9	
22.21	76.6	
22.21	77.3	
22.21	78.0	
22.21	78.7	
22.21	79.4	
22.21	80.1	
22.21	80.8	
22.21	81.5	
22.21	82.2	
22.21	82.9	
22.21	83.6	
22.21	84.3	
22.21	85.0	
22.21	85.7	
22.21	86.4	
22.21	87.1	
22.21	87.8	
22.21	88.5	
22.21	89.2	
22.21	89.9	
22.21	90.6	
22.21	91.3	
22.21	92.0	
22.21	92.7	
22.21	93.4	
22.21	94.1	
22.21	94.8	
22.21	95.5	
22.21	96.2	
22.21	96.9	
22.21	97.6	
22.21	98.3	
22.21	99.0	
22.21	99.7	
22.21	100.4	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
27.98	0.0	
27.43	6.9	
27.43	17.0	
26.35	22.1	
24.88	25.4	
24.88	26.2	
23.79	28.9	
22.99	42.0	
22.66	44.3	
22.41	47.0	
22.32	49.7	
22.27	51.0	
22.21	52.4	
22.21	53.4	
22.21	54.4	
22.21	55.4	
22.21	56.4	
22.21	57.4	
22.21	58.4	
22.21	59.4	
22.21	60.4	
22.21	61.4	
22.21	62.4	
22.21	63.4	
22.21	64.4	
22.21	65.4	
22.21	66.4	
22.21	67.4	
22.21	68.4	
22.21	69.4	
22.21	70.4	
22.21	71.4	
22.21	72.4	
22.21	73.4	
22.21	74.4	
22.21	75.4	
22.21	76.4	
22.21	77.4	
22.21	78.4	
22.21	79.4	
22.21	80.4	
22.21	81.4	
22.21	82.4	
22.21	83.4	
22.21	84.4	
22.21	85.4	
22.21	86.4	
22.21	87.4	
22.21	88.4	
22.21	89.4	
22.21	90.4	
22.21	91.4	
22.21	92.4	
22.21	93.4	
22.21	94.4	
22.21	95.4	
22.21	96.4	
22.21	97.4	
22.21	98.4	
22.21	99.4	
22.21	100.4	



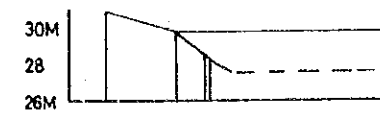
SCALE HORIZONTAL 1:5000
VERTICAL 1:200

THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVU RIVER BASIN

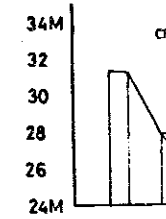
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No. II (11/25)

SCALE H:1:5000 V:1:200
H:1:500 V:1:200

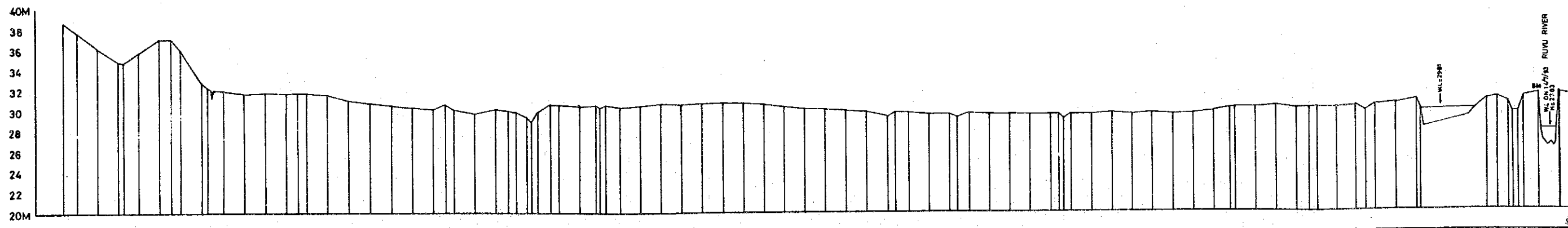
JULY 1993 JICA



GROUND HEIGHT	30.82	29.81	28.82	29.82
ACCUMULATED DISTANCE	300	280	265	285
REMARKS				



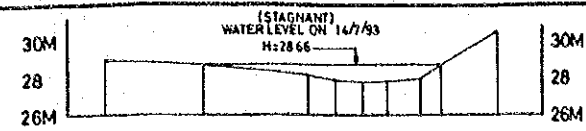
GROUND HEIGHT	31.28	31.26	27.86
ACCUMULATED DISTANCE	0	25	45
REMARKS			



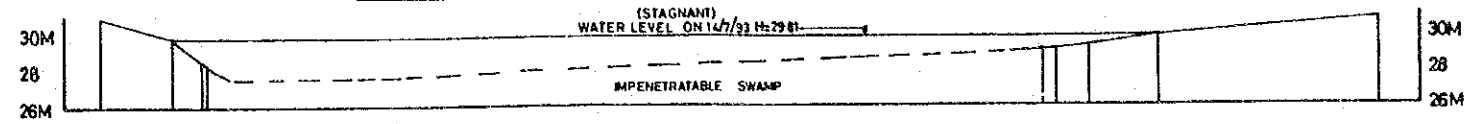
GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
38.73	350	
37.62	350	
36.13	350	
34.81	350	
34.72	350	
33.76	350	
32.06	350	
31.85	350	
31.50	350	
31.22	350	
31.06	350	
30.85	350	
30.52	350	
30.29	350	
30.08	350	
29.82	350	
29.59	350	
29.32	350	
29.08	350	
28.79	350	
28.50	350	
28.25	350	
28.00	350	
27.75	350	
27.50	350	
27.25	350	
27.00	350	
26.75	350	
26.50	350	
26.25	350	
26.00	350	
25.75	350	
25.50	350	
25.25	350	
25.00	350	
24.75	350	
24.50	350	
24.25	350	
24.00	350	
23.75	350	
23.50	350	
23.25	350	
23.00	350	
22.75	350	
22.50	350	
22.25	350	
22.00	350	
21.75	350	
21.50	350	
21.25	350	
21.00	350	
20.75	350	
20.50	350	
20.25	350	
20.00	350	
19.75	350	
19.50	350	
19.25	350	
19.00	350	
18.75	350	
18.50	350	
18.25	350	
18.00	350	
17.75	350	
17.50	350	
17.25	350	
17.00	350	
16.75	350	
16.50	350	
16.25	350	
16.00	350	
15.75	350	
15.50	350	
15.25	350	
15.00	350	
14.75	350	
14.50	350	
14.25	350	
14.00	350	
13.75	350	
13.50	350	
13.25	350	
13.00	350	
12.75	350	
12.50	350	
12.25	350	
12.00	350	
11.75	350	
11.50	350	
11.25	350	
11.00	350	
10.75	350	
10.50	350	
10.25	350	
10.00	350	
9.75	350	
9.50	350	
9.25	350	
9.00	350	
8.75	350	
8.50	350	
8.25	350	
8.00	350	
7.75	350	
7.50	350	
7.25	350	
7.00	350	
6.75	350	
6.50	350	
6.25	350	
6.00	350	
5.75	350	
5.50	350	
5.25	350	
5.00	350	
4.75	350	
4.50	350	
4.25	350	
4.00	350	
3.75	350	
3.50	350	
3.25	350	
3.00	350	
2.75	350	
2.50	350	
2.25	350	
2.00	350	
1.75	350	
1.50	350	
1.25	350	
1.00	350	
0.75	350	
0.50	350	
0.25	350	
0.00	350	
30.90	125	
30.77	100	
30.64	75	
30.51	50	
30.38	25	
30.25	0	
30.12	15	
30.00	0	
29.87	15	
29.74	30	
29.61	45	

SCALE HORIZONTAL 1:500
VERTICAL 1:200

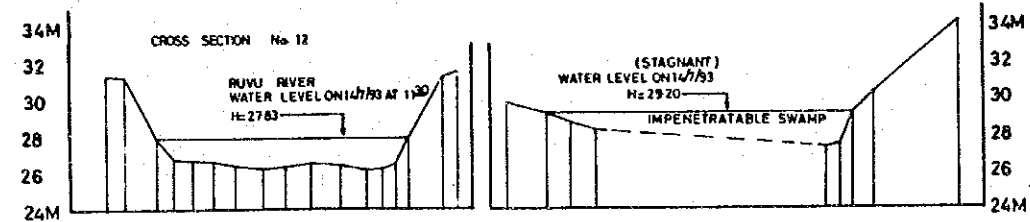
BM 12L (IPC)



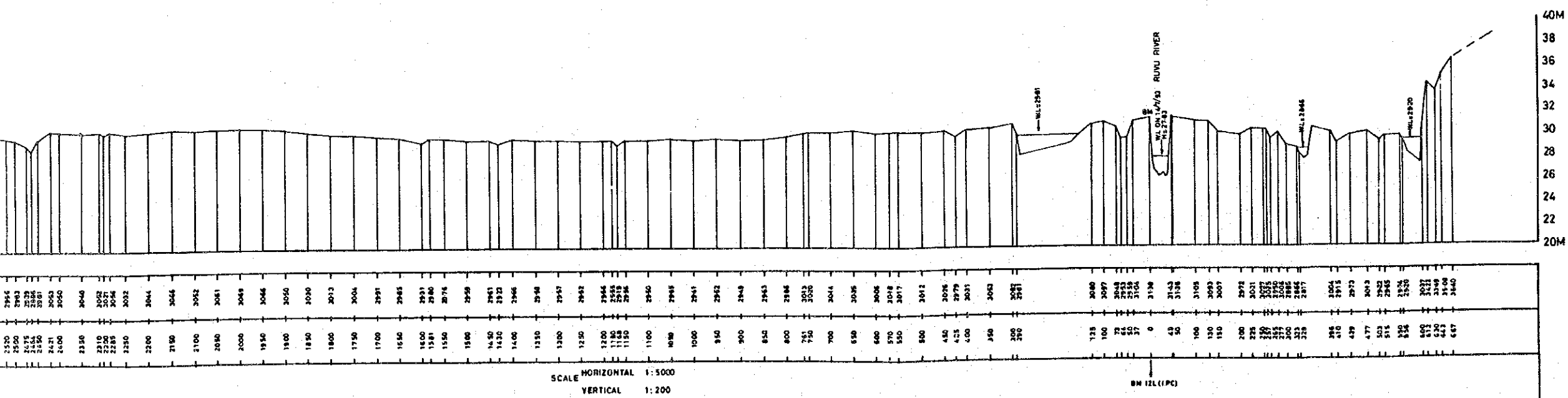
GROUND HEIGHT	2865	2866	2867	2788	2775	2780	2787	2866	3048
ACCUMULATED DISTANCE	300	313.4	328.2	332	335.8	338.1	342.6	344.3	353.8
REMARKS									



GROUND HEIGHT	3082	2981	2875	2875		2910	2913	2981	3048
ACCUMULATED DISTANCE	300	330	385	385		1730	1847	1863	123.4
REMARKS									

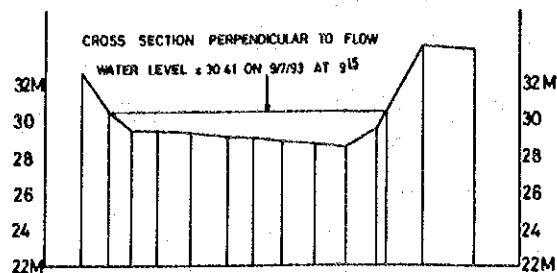


GROUND HEIGHT	3138	3126	2740	2625	2646	2625	2616	2629	2642	2640	2642	2728	2742	2815	2817	3422
ACCUMULATED DISTANCE	0	25	58	92	115	148	178	204	244	280	321	555	555	554	6002	6117
REMARKS																

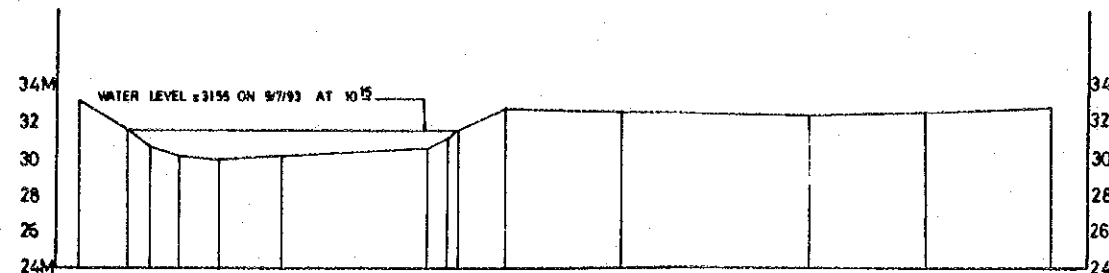


SCALE HORIZONTAL 1:5000
VERTICAL 1:200

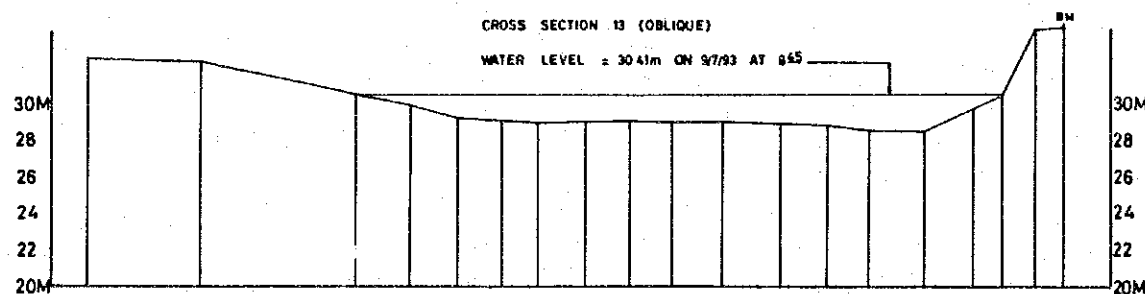
THE STUDY ON WATER RESOURCES	
DEVELOPMENT IN THE RUVU RIVER BASIN	
RIVER CROSS SECTION	
IN THE LOWER REACH	
SECTION No.12 (12 ₂₅)	
SCALE H=1:5000 V=1:200	H=1:500 V=1:200



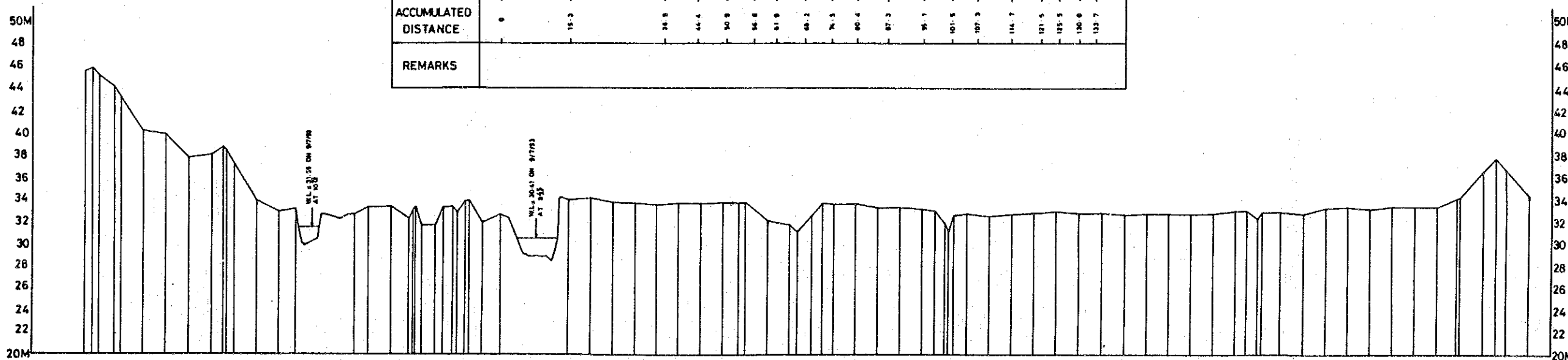
GROUND HEIGHT	32.51	31.7	30.41	29.48	28.42	26.75	25.05	23.02	21.81	20.72	19.45	18.49	17.41	16.02	14.82
ACCUMULATED DISTANCE	0	3.7	6.7	10.4	14.9	19.7	23.2	27.4	31.8	36.1	40.5	44.7	48.6	52.6	56.8
REMARKS															



GROUND HEIGHT	33.12	31.97	30.64	29.86	29.06	28.04	26.44	24.94	23.22	21.54	20.44	19.24	18.04	16.84	15.64
ACCUMULATED DISTANCE	62.0	65.3	68.2	70.8	73.2	75.4	77.4	79.2	80.8	82.2	83.4	84.4	85.2	85.8	86.4
REMARKS															



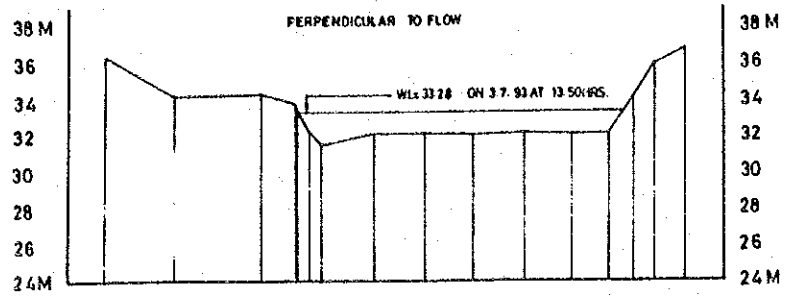
GROUND HEIGHT	32.51	32.75	30.41	29.86	29.19	28.03	26.93	25.85	24.85	23.93	23.01	22.00	21.06	20.12	19.18
ACCUMULATED DISTANCE	0	15.3	30.8	44.4	56.8	67.8	76.5	83.1	88.7	93.4	97.2	100.1	102.1	103.3	103.7
REMARKS															



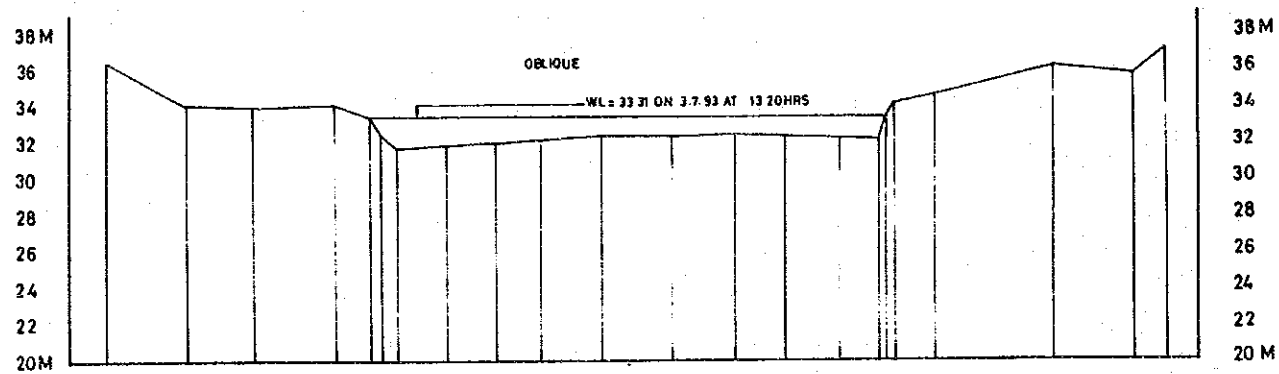
GROUND HEIGHT	45.44	45.25	45.17	44.97	43.34	42.34	40.80	39.42	38.05	36.72	35.34	34.02	32.75	31.54	30.41	29.48	28.42	27.41	26.72	25.72	24.82	24.02	23.22	22.42	21.62	20.82	20.02	19.22	18.42	17.62	16.82	16.02	15.22	14.42	13.62	12.82	12.02	11.22	10.42	9.62	8.82	8.02	7.22	6.42	5.62	4.82	4.02	3.22	2.42	1.62	0.82	0.02																																																
ACCUMULATED DISTANCE	0	3.7	6.7	10.4	14.9	19.7	23.2	27.4	31.8	36.1	40.5	44.7	48.6	52.6	56.8	60.8	64.5	67.8	70.8	73.2	75.4	77.4	79.2	80.8	82.2	83.4	84.4	85.2	85.8	86.4	86.8	87.2	87.6	88.0	88.4	88.8	89.2	89.6	90.0	90.4	90.8	91.2	91.6	92.0	92.4	92.8	93.2	93.6	94.0	94.4	94.8	95.2	95.6	96.0	96.4	96.8	97.2	97.6	98.0	98.4	98.8	99.2	99.6	100.0																																				
REMARKS																																																																																																				

SCALE: HORIZONTAL 1:500
VERTICAL 1:200

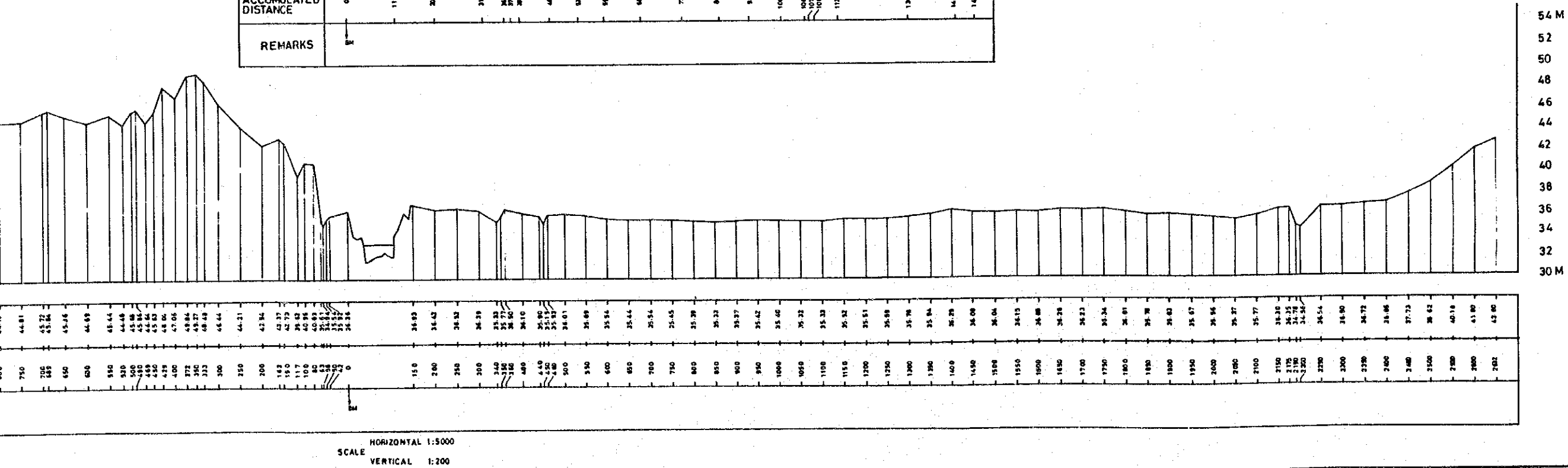
THE STUDY
DEVELOPMENT
RIVER
IN THE
SECT
H=1:500
SCALE
H=1:500



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
36.36	0	
34.79	9.4	
34.26	215	
33.71	240	
33.28	250	
32.87	267	
32.08	436	
32.02	505	
32.14	574	
32.07	642	
32.06	693	
32.24	710	
32.95	755	
34.75	787	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
36.36	0	
34.00	112	
33.89	203	
33.99	313	
33.25	325	
32.71	336	
31.71	467	
31.87	535	
32.05	599	
32.25	681	
32.22	774	
32.33	868	
32.26	934	
32.17	1007	
32.14	1068	
32.22	1073	
34.07	1084	
34.30	1128	
36.18	1308	
35.65	1412	
36.92	1484	



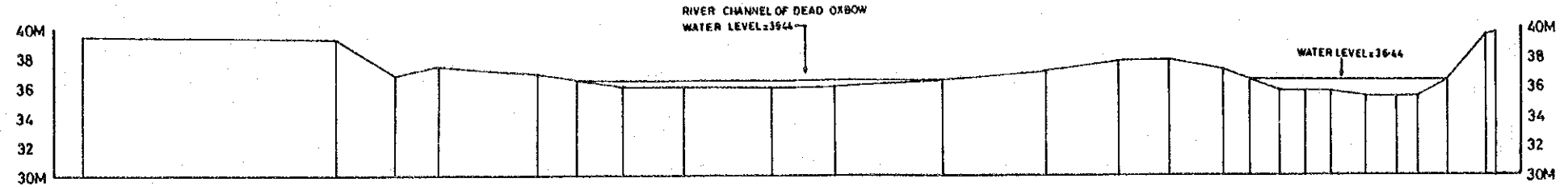
HORIZONTAL 1:5000
SCALE VERTICAL 1:200

THE STUDY ON WATER RESOURCES DEVELOPMENT IN THE RUVU RIVER BASIN

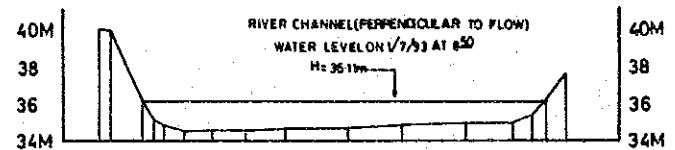
RIVER CROSS SECTION IN THE LOWER REACH SECTION No 14 (14₂₅)

SCALE H: 1:5000 V: 1:200
H: 1:500 V: 1:200

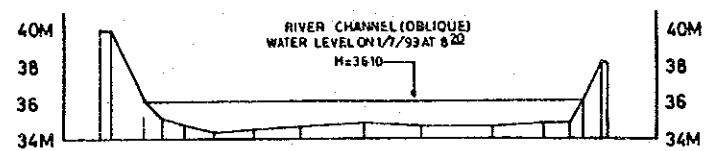
JULY 1993 JICA



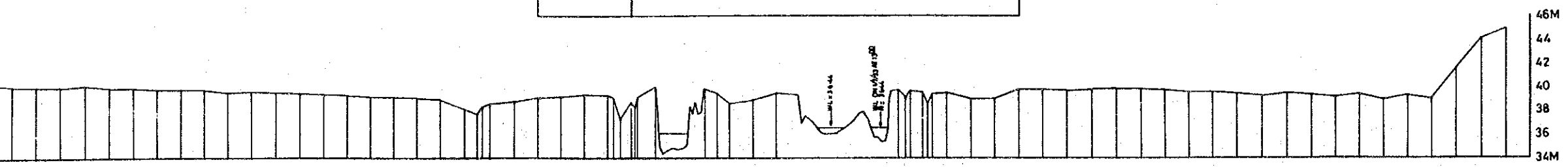
GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
3994	0	
3928	792	
3806	3016	
3764	3092	
3697	3256	
3644	3328	
3609	3400	
3595	3500	
3600	3644	
3603	3715	
3642	3893	
3510	4117	
3772		
3781	41	
3715	4394	
3644	4443	
3658	4504	
3683	4538	
3684	4581	
3628	464	
3628	4882	
3637	5128	
3641	4779	
3642	4842	
3642	4879	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
3993	0	
3885	15	
3612	27	
3610	55	
3640	82	
3647	112	
3647	148	
3649	196	
3642	251	
3648	337	
3682	411	
3689	482	
3697	538	
3697	602	
3714	627	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
3992	0	
3885	15	
3610	58	
3611	82	
3674	112	
3637	151	
3683	205	
3645	272	
3686	356	
3671	434	
3676	528	
3690	597	
3695	622	
3670	650	
3678	683	
3678	718	



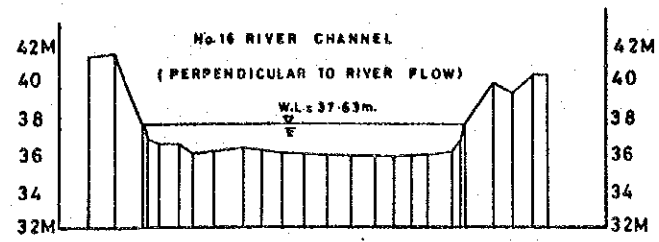
GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
4008	0	
3953	1300	
3958	1350	
4013	1400	
3931	1450	
3983	1500	
3974	1550	
3971	1600	
3970	1650	
3944	1700	
3928	1750	
3944	1800	
3942	1850	
3935	1900	
3925	1950	
3914	2000	
3905	2050	
3905	2100	
3884	2150	
3803	2200	
3770	2250	
3855	2300	
388	2350	
3878	2400	
3900	2450	
3917	2500	
3926	2550	
3912	2600	
3947	2650	
3960	2700	
3897	2750	
3944	2800	
3970	2850	
3962	2900	
3940	2950	
3945	3000	
3940	3050	
3941	3100	
3988	3150	
3954	3200	
3973	3250	
3973	3300	
3961	3350	
3973	3400	
3979	3450	
3978	3500	
3970	3550	
3951	3600	
3987	3650	
3993	3700	
3916	3750	
3945	3800	
3944	3850	
3946	3900	
3937	3950	
3923	4000	
3923	4050	
3995	4100	
4151	4150	
4431	4200	
4481	4250	

SCALE: HORIZONTAL 1:5000 VERTICAL 1:200

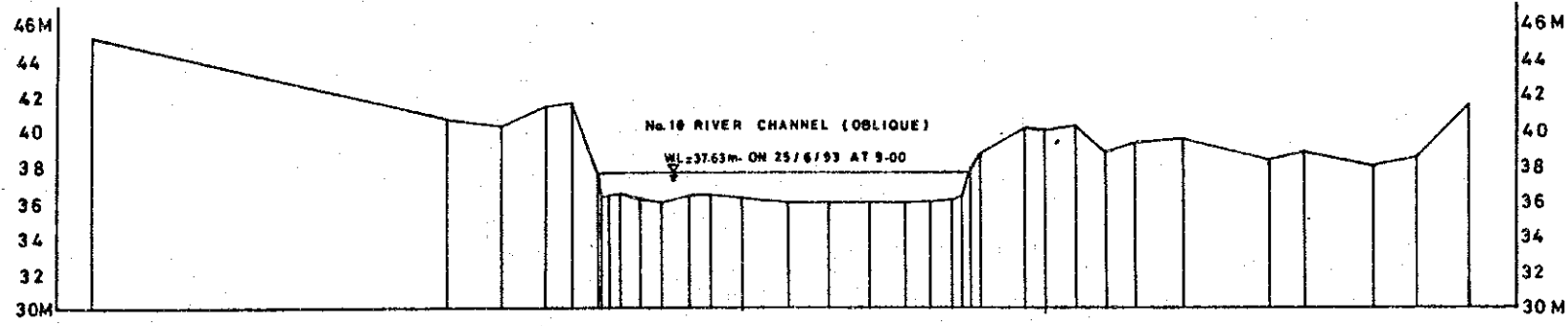
THE STUDY ON WATER RESOURCES DEVELOPMENT IN THE RUWU RIVER BASIN

RIVER CROSS SECTION IN THE LOWER REACH SECTION No 15 (15/25)

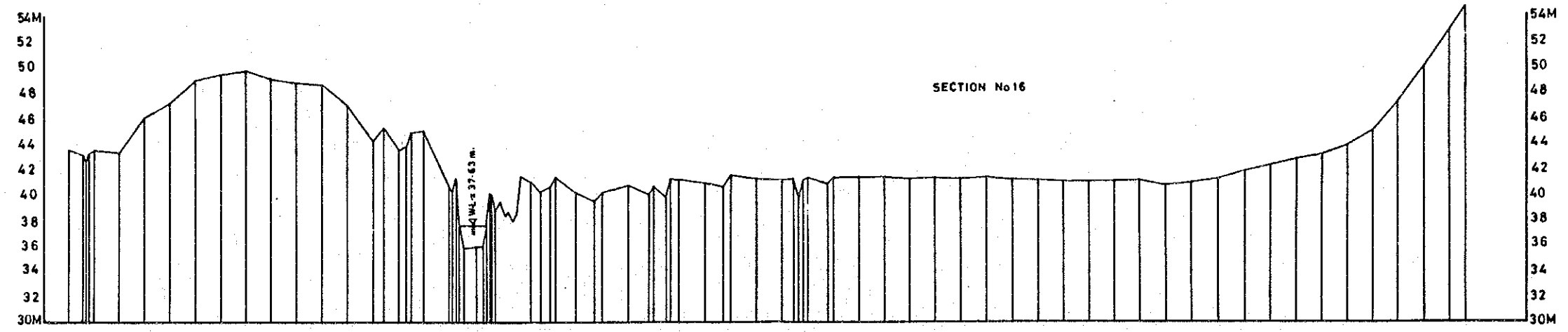
SCALE H=1:5000 V=1:200 H=1:500 V=1:200



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
41.58	63.9	
41.56	67.4	
41.54	71.0	
41.52	74.5	
41.50	78.0	
41.48	81.5	
41.46	85.0	
41.44	88.5	
41.42	92.0	
41.40	95.5	
41.38	99.0	
41.36	102.5	
41.34	106.0	
41.32	109.5	
41.30	113.0	
41.28	116.5	
41.26	120.0	
41.24	123.5	
41.22	127.0	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
45.07	0	BM
40.82	55.0	
40.72	58.0	
41.35	65.0	
41.51	67.0	
41.53	70.0	
41.55	73.0	
41.57	76.0	
41.59	79.0	
41.61	82.0	
41.63	85.0	
41.65	88.0	
41.67	91.0	
41.69	94.0	
41.71	97.0	
41.73	100.0	
41.75	103.0	
41.77	106.0	
41.79	109.0	
41.81	112.0	
41.83	115.0	
41.85	118.0	
41.87	121.0	
41.89	124.0	
41.91	127.0	



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
43.35	0	BM
43.33	100	
43.31	200	
43.29	300	
43.27	400	
43.25	500	
43.23	600	
43.21	700	
43.19	800	
43.17	900	
43.15	1000	
43.13	1100	
43.11	1200	
43.09	1300	
43.07	1400	
43.05	1500	
43.03	1600	
43.01	1700	
42.99	1800	
42.97	1900	
42.95	2000	
42.93	2100	
42.91	2200	
42.89	2300	
42.87	2400	
42.85	2500	
42.83	2600	
42.81	2700	
42.79	2800	
42.77	2900	
42.75	3000	
42.73	3100	
42.71	3200	
42.69	3300	
42.67	3400	
42.65	3500	
42.63	3600	
42.61	3700	
42.59	3800	
42.57	3900	
42.55	4000	
42.53	4100	
42.51	4200	
42.49	4300	
42.47	4400	
42.45	4500	
42.43	4600	
42.41	4700	
42.39	4800	
42.37	4900	
42.35	5000	

SCALE: HORIZONTAL 1:5000
VERTICAL 1:200

THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVU RIVER BASIN

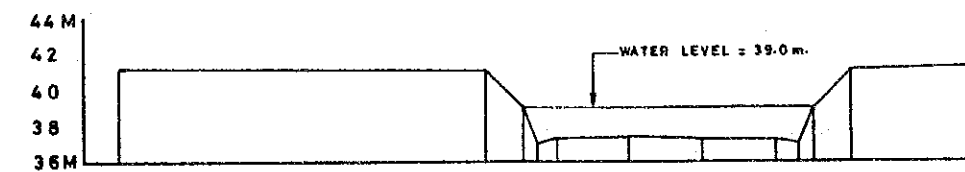
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No 16 (1625)

SCALE: H=1:5000 V=1:200
H=1:500 V=1:200

JUNE 1993 JICA

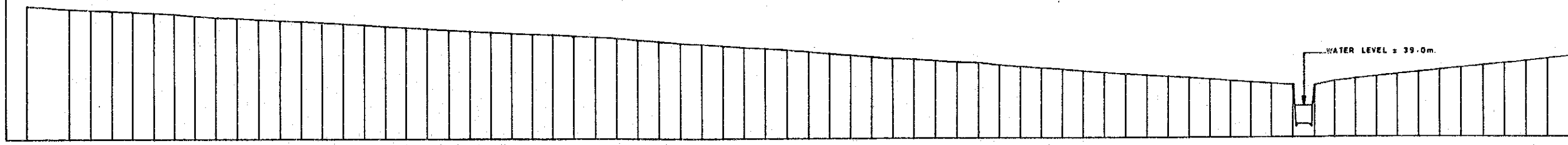
CROSS - SECTION 17

RIVER CHANNEL SCALE: HORIZONTAL = 1:500
VERTICAL = 1:200



GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
41.10	0	
39.00	5.0	
37.00	7.6	
37.30	10.0	
37.30	30.0	
37.60	30.0	
37.20	60.0	
37.00	63.6	
37.00	65.0	
41.00	90.0	

62 M
60
58
56
54
52
50
48
46
44
42
40
38
36 M

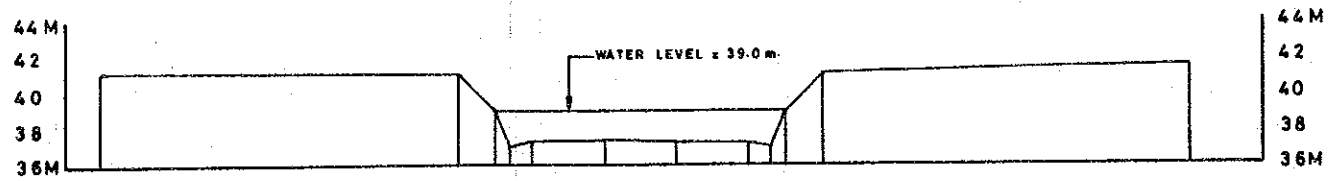


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
45.18	3000.0	
45.76	3050.0	
45.58	3100.0	
45.45	3150.0	
45.30	3200.0	
45.20	3250.0	
45.18	3300.0	
45.00	3350.0	
45.00	3400.0	
45.00	3450.0	
45.00	3500.0	
45.00	3550.0	
45.00	3600.0	
45.00	3650.0	
45.00	3700.0	
45.00	3750.0	
45.00	3800.0	
45.00	3850.0	
45.00	3900.0	
45.00	3950.0	
45.00	4000.0	
45.00	4050.0	
45.00	4100.0	
45.00	4150.0	
45.00	4200.0	
45.00	4250.0	
45.00	4300.0	
45.00	4350.0	
45.00	4400.0	
45.00	4450.0	
45.00	4500.0	
45.00	4550.0	
45.00	4600.0	
45.00	4650.0	
45.00	4700.0	
45.00	4750.0	
45.00	4800.0	
45.00	4850.0	
45.00	4900.0	
45.00	4950.0	
45.00	5000.0	
45.00	5050.0	
45.00	5100.0	
45.00	5150.0	
45.00	5200.0	
45.00	5250.0	
45.00	5300.0	
45.00	5350.0	
45.00	5400.0	
45.00	5450.0	
45.00	5500.0	
45.00	5550.0	
45.00	5600.0	
45.00	5650.0	
45.00	5700.0	
45.00	5750.0	
45.00	5800.0	
45.00	5850.0	
45.00	5900.0	
45.00	5950.0	
45.00	6000.0	
45.00	6050.0	
45.00	6100.0	
45.00	6150.0	
45.00	6200.0	
45.00	6250.0	
45.00	6300.0	
45.00	6350.0	
45.00	6400.0	
45.00	6450.0	
45.00	6500.0	
45.00	6550.0	
45.00	6600.0	
45.00	6650.0	
45.00	6700.0	
45.00	6750.0	
45.00	6800.0	
45.00	6850.0	
45.00	6900.0	
45.00	6950.0	
45.00	7000.0	
45.00	7050.0	
45.00	7100.0	
45.00	7150.0	
45.00	7200.0	
45.00	7250.0	
45.00	7300.0	
45.00	7350.0	
45.00	7400.0	
45.00	7450.0	
45.00	7500.0	
45.00	7550.0	
45.00	7600.0	
45.00	7650.0	
45.00	7700.0	
45.00	7750.0	
45.00	7800.0	
45.00	7850.0	
45.00	7900.0	
45.00	7950.0	
45.00	8000.0	
45.00	8050.0	
45.00	8100.0	
45.00	8150.0	
45.00	8200.0	
45.00	8250.0	
45.00	8300.0	
45.00	8350.0	
45.00	8400.0	
45.00	8450.0	
45.00	8500.0	
45.00	8550.0	
45.00	8600.0	
45.00	8650.0	
45.00	8700.0	
45.00	8750.0	
45.00	8800.0	
45.00	8850.0	
45.00	8900.0	
45.00	8950.0	
45.00	9000.0	
45.00	9050.0	
45.00	9100.0	
45.00	9150.0	
45.00	9200.0	
45.00	9250.0	
45.00	9300.0	
45.00	9350.0	
45.00	9400.0	
45.00	9450.0	
45.00	9500.0	
45.00	9550.0	
45.00	9600.0	
45.00	9650.0	
45.00	9700.0	
45.00	9750.0	
45.00	9800.0	
45.00	9850.0	
45.00	9900.0	
45.00	9950.0	
45.00	10000.0	

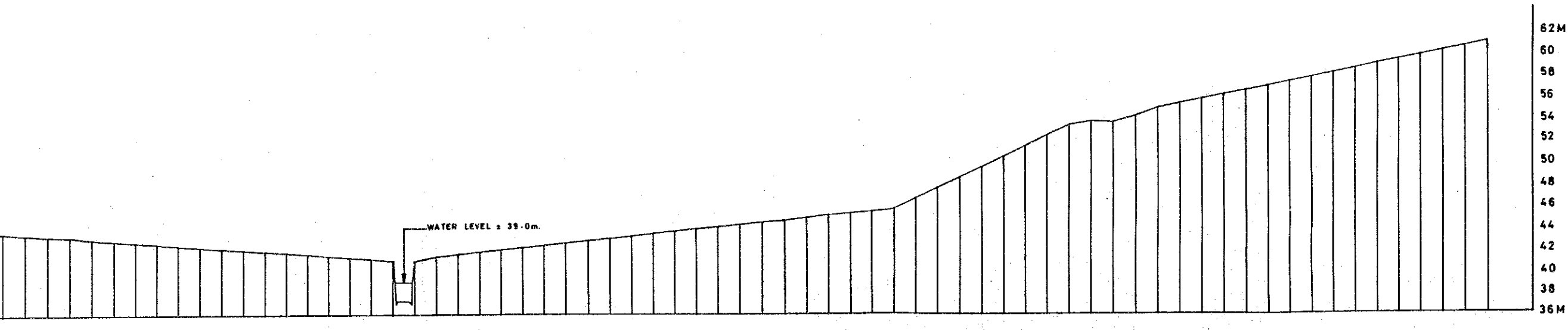
SCALE: HORIZONTAL = 1:5000
VERTICAL = 1:200

CROSS - SECTION 17

RIVER CHANNEL SCALE: HORIZONTAL = 1:500
VERTICAL = 1:200



GROUND HEIGHT	41.16	41.00	39.90	37.30	37.30	39.80	41.00	41.46
ACCUMULATED DISTANCE	0.0	0	5.0	7.0	10.0	20.0	30.0	40.0
REMARKS								



43.60	43.40	43.30	43.10	43.00	43.90	43.70	42.90	42.48	42.30	42.18	42.00	41.92	41.78	41.68	41.48	41.30	41.10	41.00	41.00	41.48	41.80	41.80	41.80	42.00	42.28	42.48	42.80	43.20	43.30	43.50	43.70	43.90	44.10	44.30	44.58	44.78	44.90	45.18	45.30	45.90	46.30	46.80	47.88	48.80	49.80	50.80	51.40	51.48	51.48	53.28	53.70	53.80	54.10	54.90	55.70	56.18	56.50	56.90	57.30	57.70	58.18	58.50	58.90	59.38	59.78	60.18	60.50	60.90
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

SCALE: HORIZONTAL = 1:5000
VERTICAL = 1:200

THE STUDY ON WATER RESOURCES DEVELOPMENT IN THE RUVU RIVER BASIN

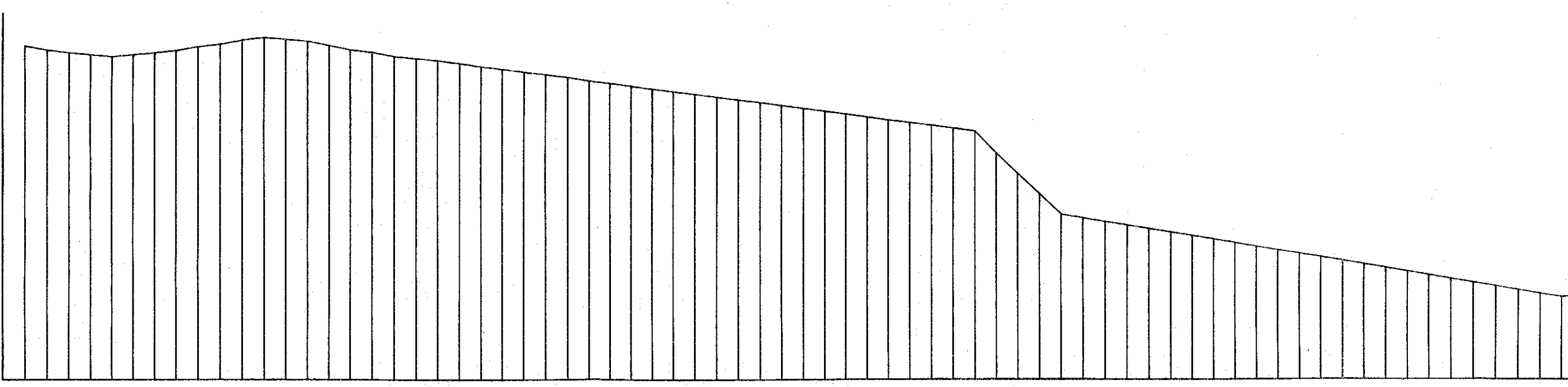
RIVER CROSS SECTION IN THE LOWER REACH SECTION No. 17

SCALE: H=1:5000 V=1:200
H=1:500 V=1:200

50M
48
46
44
42
40
38M

GROUND HEIGHT	45.3
ACCUMULATED DISTANCE	50.0
REMARKS	

72M
70
68
66
64
62
60
58
56
54
52
50
48
46
44
42
40
38M

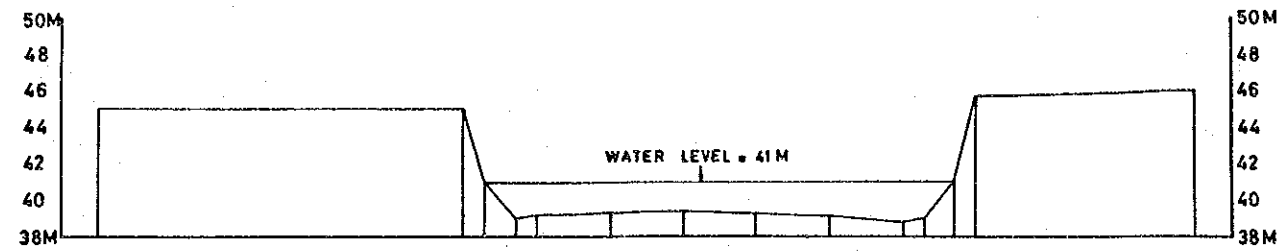


GROUND HEIGHT	ACCUMULATED DISTANCE	REMARKS
68.5	4000.0	
68.4	3950.0	
68.4	3900.0	
68.3	3850.0	
68.3	3800.0	
68.3	3750.0	
68.4	3700.0	
68.5	3650.0	
68.6	3600.0	
68.7	3550.0	
68.8	3500.0	
68.9	3450.0	
69.0	3400.0	
69.0	3350.0	
69.0	3300.0	
69.0	3250.0	
69.0	3200.0	
69.0	3150.0	
69.0	3100.0	
69.0	3050.0	
69.0	3000.0	
69.0	2950.0	
69.0	2900.0	
69.0	2850.0	
69.0	2800.0	
69.0	2750.0	
69.0	2700.0	
69.0	2650.0	
69.0	2600.0	
69.0	2550.0	
69.0	2500.0	
69.0	2450.0	
69.0	2400.0	
69.0	2350.0	
69.0	2300.0	
69.0	2250.0	
69.0	2200.0	
69.0	2150.0	
69.0	2100.0	
69.0	2050.0	
69.0	2000.0	
69.0	1950.0	
69.0	1900.0	
69.0	1850.0	
69.0	1800.0	
69.0	1750.0	
69.0	1700.0	
69.0	1650.0	
69.0	1600.0	
69.0	1550.0	
69.0	1500.0	
69.0	1450.0	
69.0	1400.0	
69.0	1350.0	
69.0	1300.0	
69.0	1250.0	
69.0	1200.0	
69.0	1150.0	
69.0	1100.0	
69.0	1050.0	
69.0	1000.0	
69.0	950.0	
69.0	900.0	
69.0	850.0	
69.0	800.0	
69.0	750.0	
69.0	700.0	
69.0	650.0	
69.0	600.0	
69.0	550.0	
69.0	500.0	
69.0	450.0	
69.0	400.0	
69.0	350.0	
69.0	300.0	
69.0	250.0	
69.0	200.0	
69.0	150.0	
69.0	100.0	
69.0	50.0	

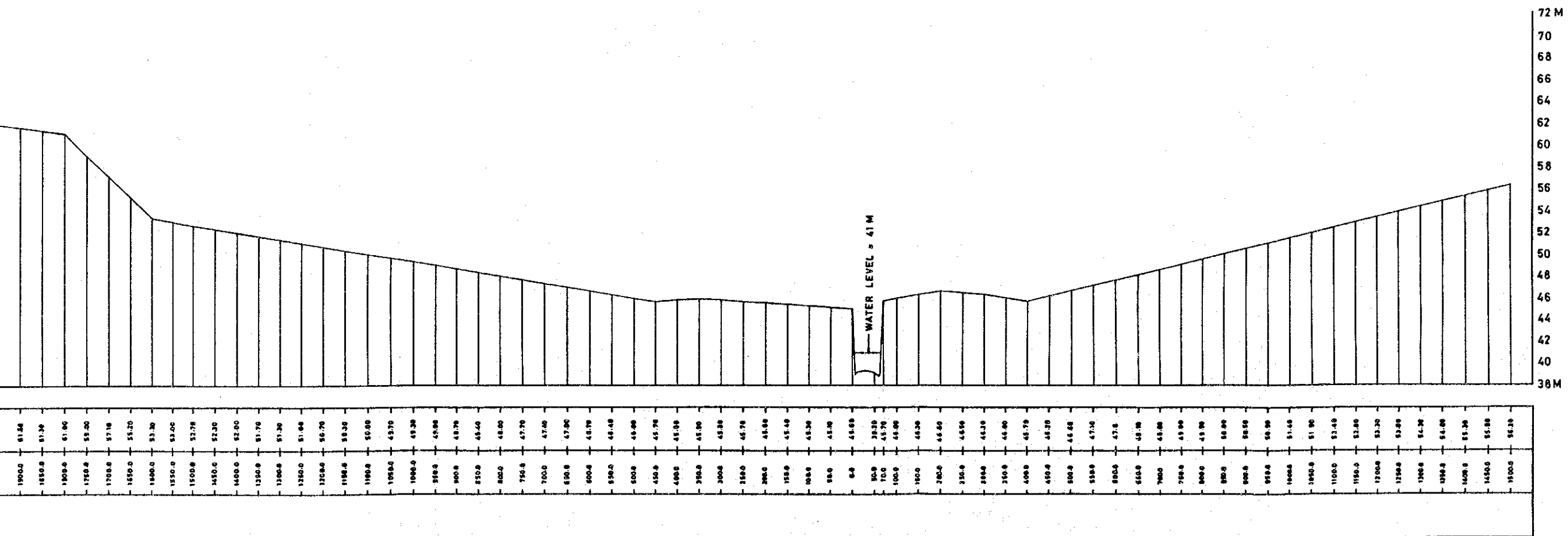
HORIZONTAL 1:5000
SCALE VERTICAL 1:200

No. 18 RIVERCHANNEL

SCALE HORIZONTAL 1:500
VERTICAL 1:200



GROUND HEIGHT	45.10	45.00	44.80	44.60	44.40	44.20	44.00	43.80	43.60	43.40	43.20	43.00	42.80	42.60	42.40	42.20	42.00	41.80	41.60	41.40	41.20	41.00	40.80	40.60	40.40	40.20	40.00	39.80	39.60	39.40	39.20	39.00	38.80	38.60	38.40	38.20	38.00		
ACCUMULATED DISTANCE	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0	36.0	37.0	38.0
REMARKS																																							



SCALE HORIZONTAL 1:5000
VERTICAL 1:200

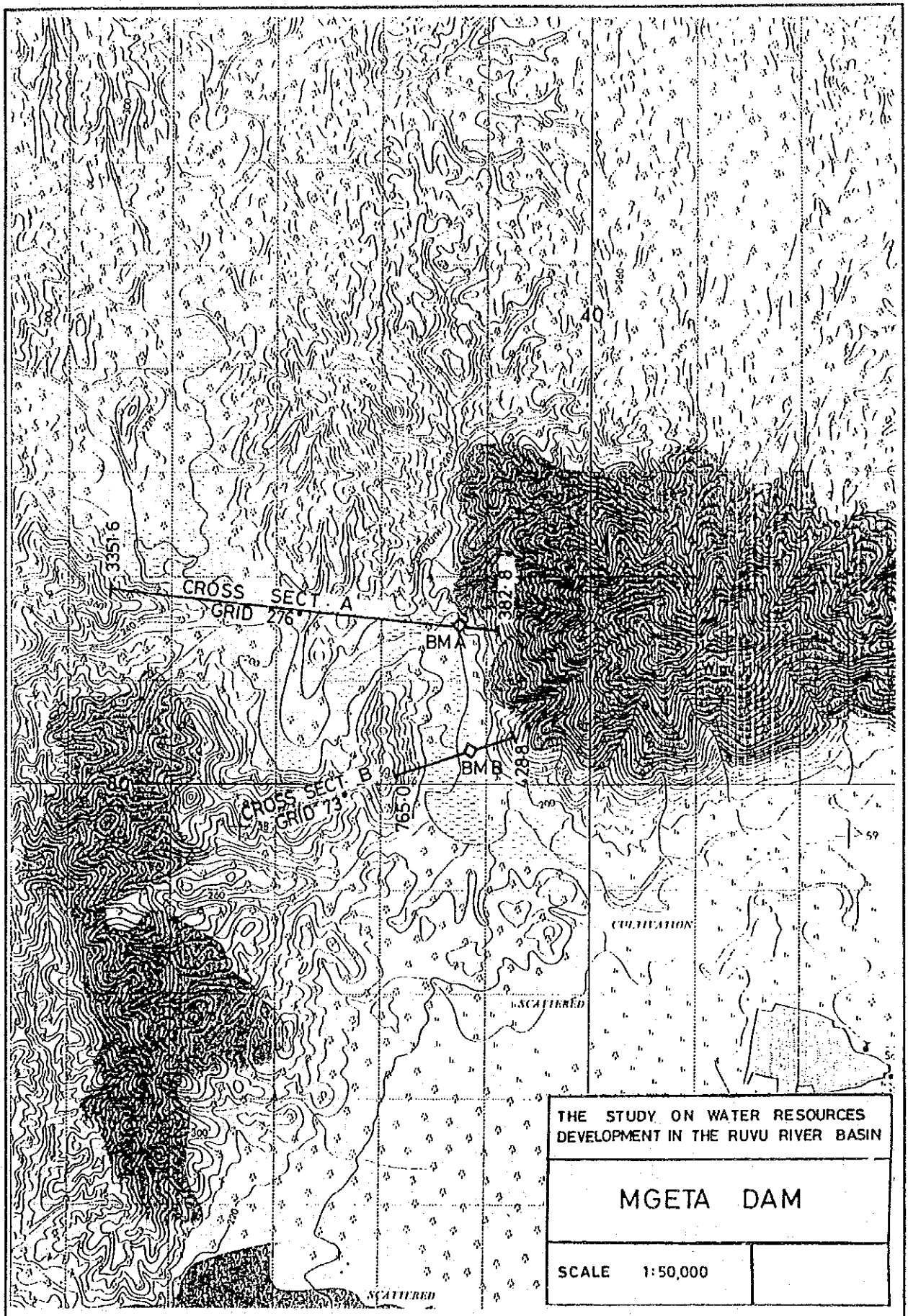
THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVU RIVER BASIN

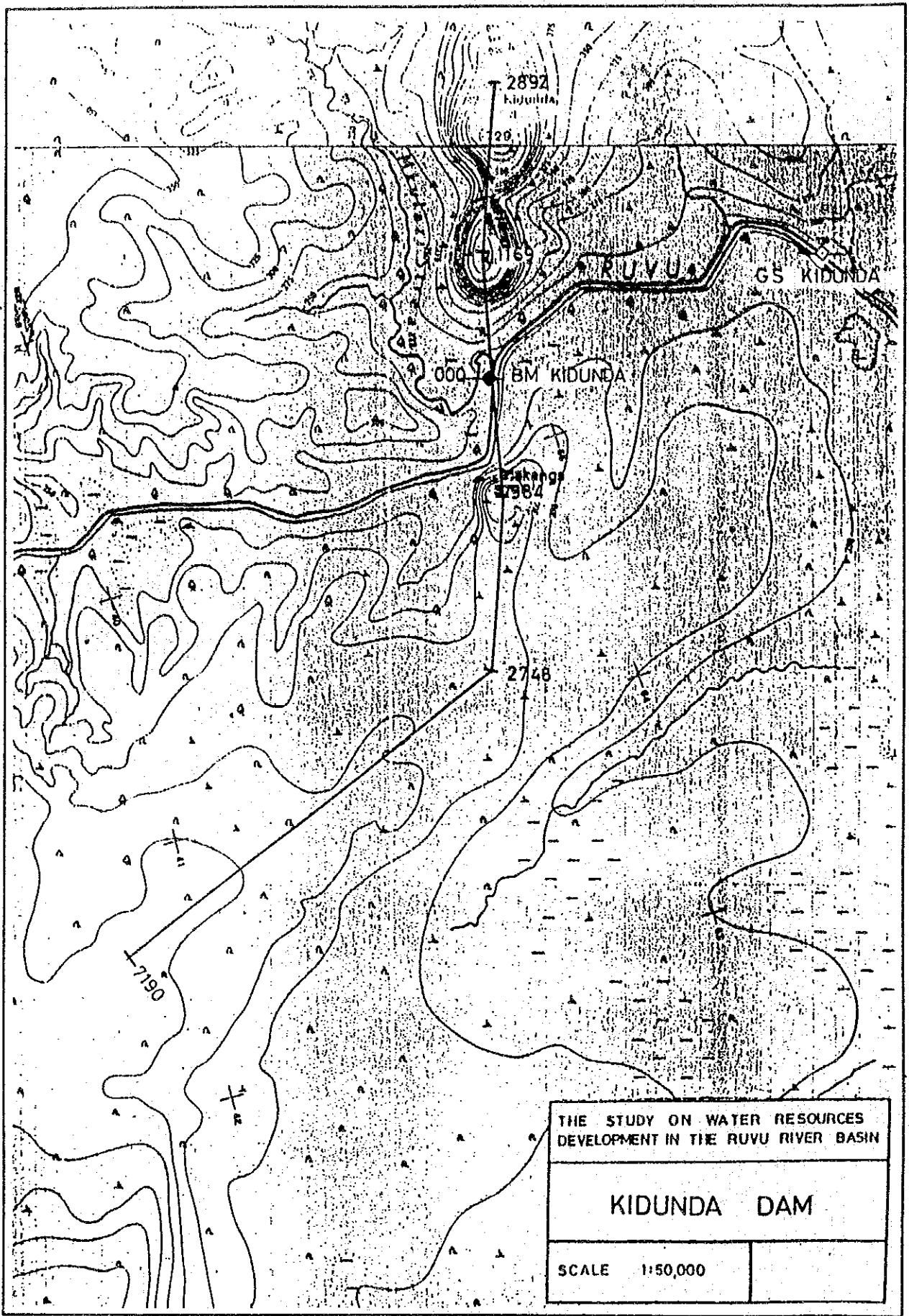
RIVER CROSS SECTION
IN THE LOWER REACH
SECTION No.18

SCALE H=1:5000 V=1:200
H=1:500 V=1:200

TOPOGRAPHIC DATA

2. DAM SITES





THE STUDY ON WATER RESOURCES
DEVELOPMENT IN THE RUVU RIVER BASIN

KIDUNDA DAM

SCALE 1:50,000

