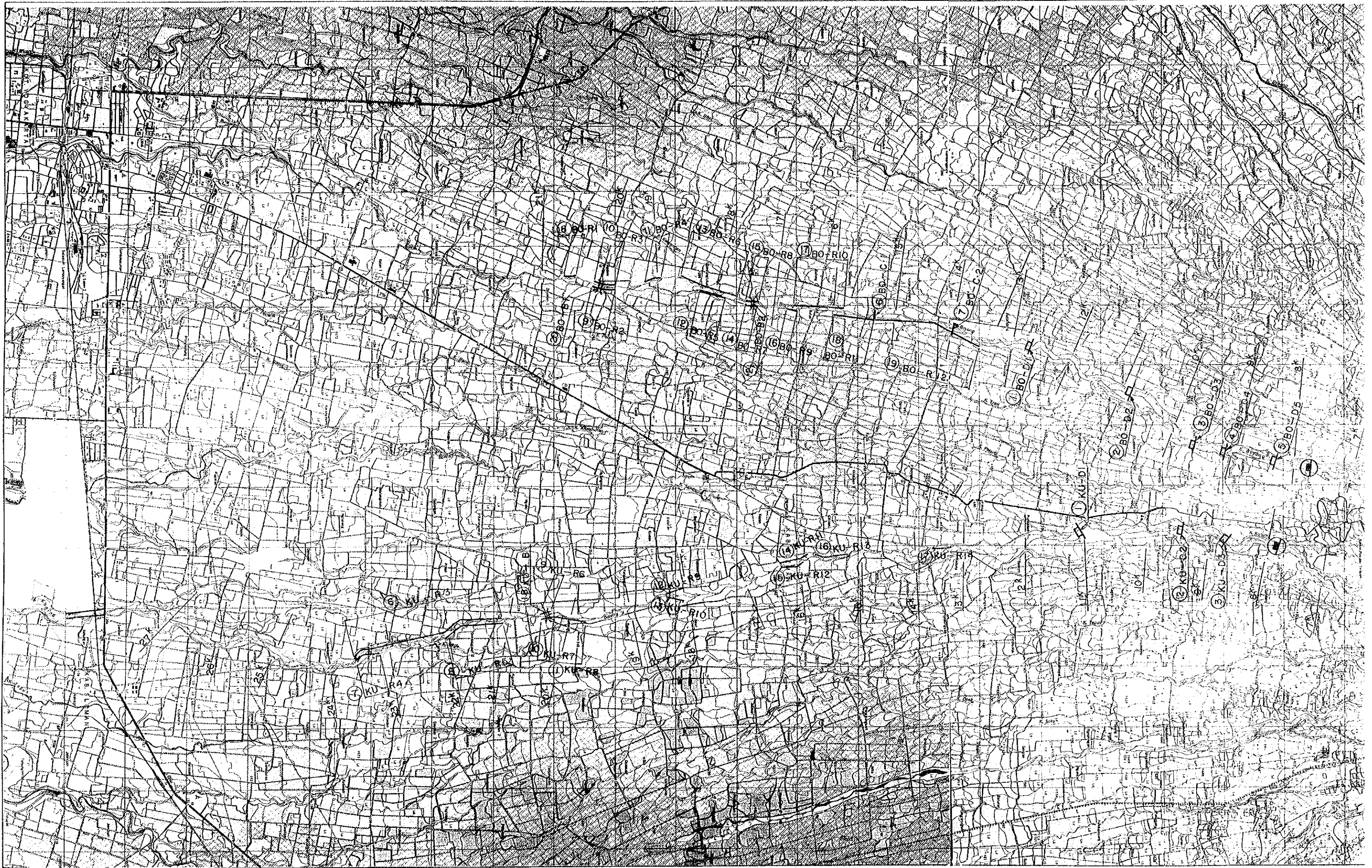
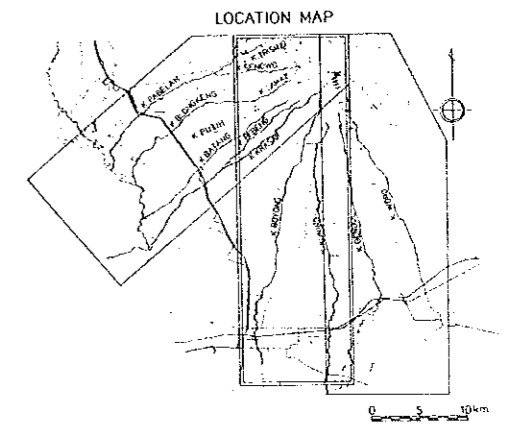
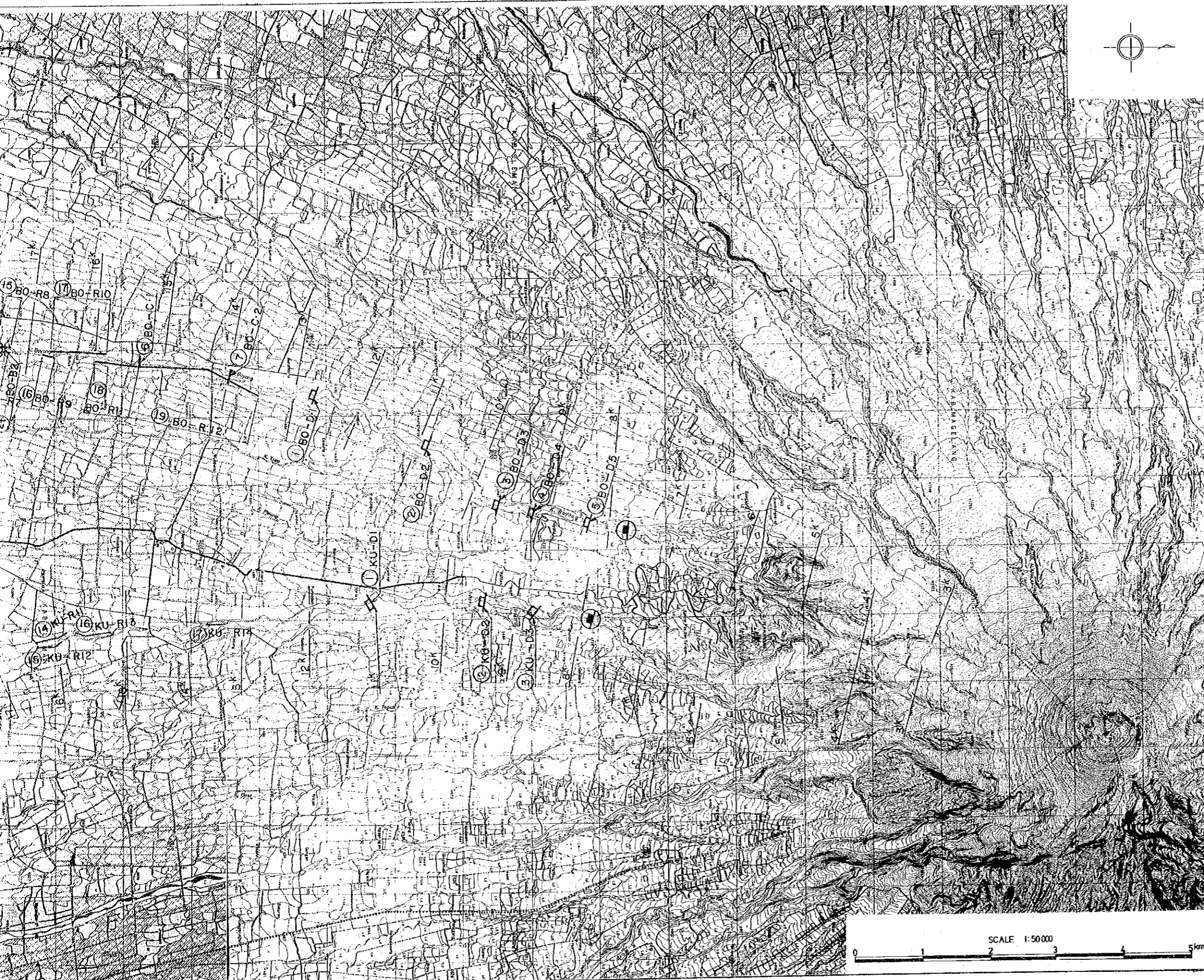


- LEGEND**
- CHECK DAM
 - PROPOSED CHECK DAM
 - PROPOSED CONSOLIDATION DAM
 - REVETMENT
 - PROPOSED REVETMENT

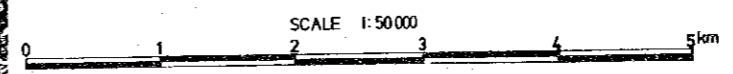
REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI	
MAP OF SABO FACILITIES LOCATION PLAN (2)	DATE MARECH.1980
1: K. WORD 2: K. GENDOL	SCALE 1:50 000
DWG. NO. 03	3/24
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY	



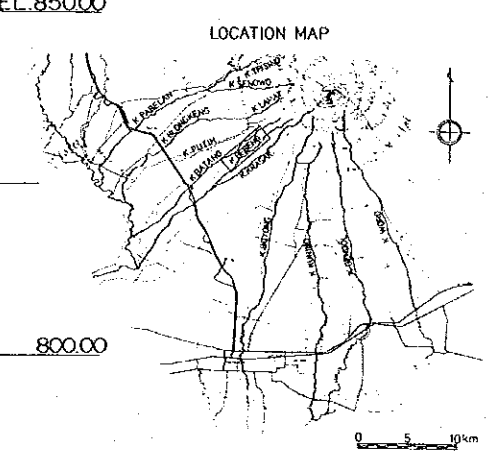
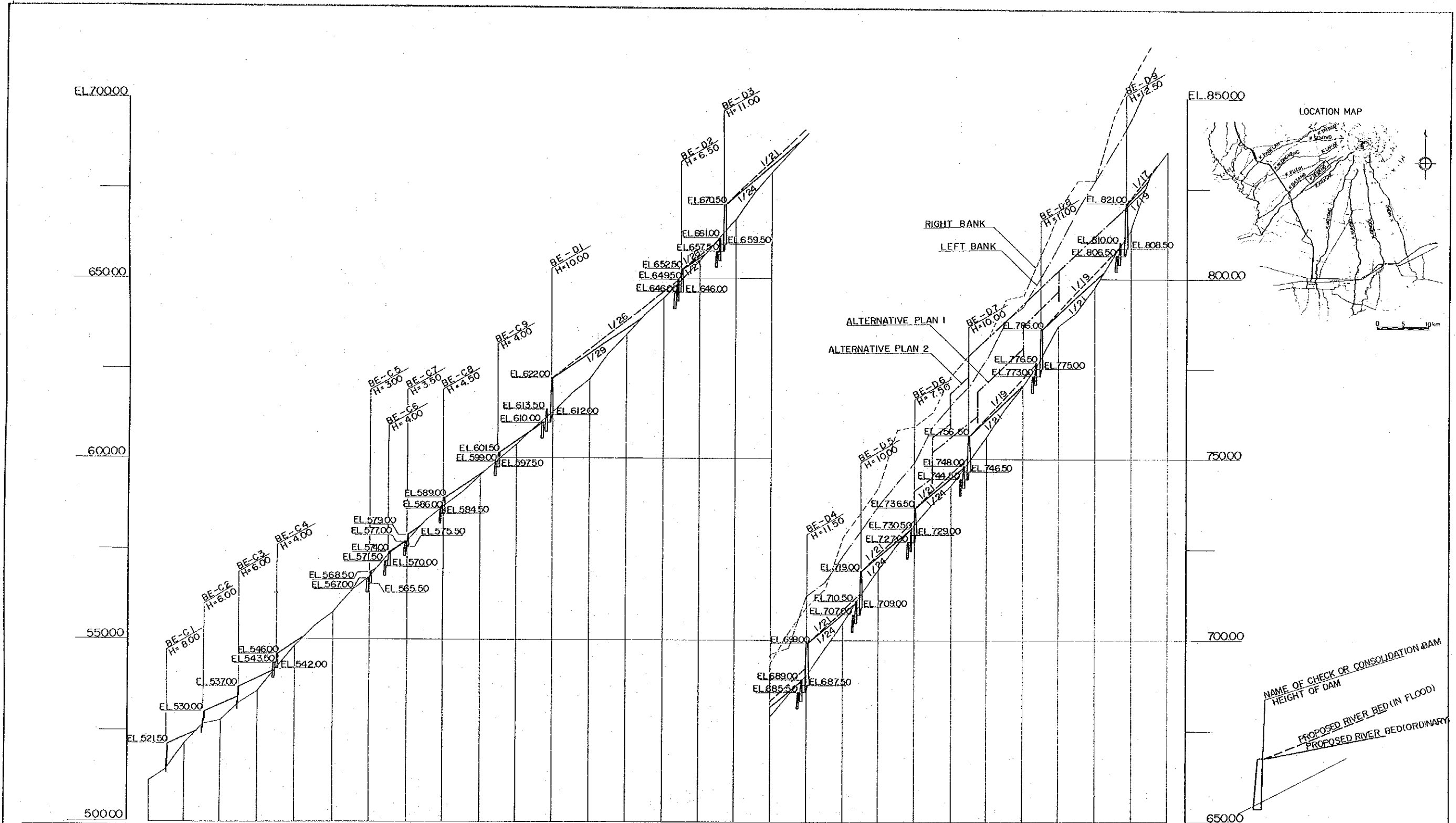


LEGEND

- CHECK DAM
- PROPOSED CHECK DAM
- PROPOSED CONSOLIDATION DAM
- REVETMENT
- PROPOSED REVETMENT
- PROPOSED GROIN
- PROPOSED TRAINING LEVEE
- REBUILDING BRIDGE



REPUBLIC OF INDONESIA		
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI		
MAP OF SABO FACILITIES LOCATION PLAN (3)	DATE MARECH.1980	SCALE 1:50000
DWG. NO. 04	4/24	
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY		



DISTANCE FROM THE SUMMIT OF G. MERAPI	12K 11K 10K 9K 8K																																										
GRADIENT OF ORIGINAL RIVER BED	1:1/22.3 1:900																																										
LOWEST RIVER BED HEIGHT	511.30	514.80	531.60	526.90	529.00	532.60	536.00	562.10	548.40	557.70	567.30	573.40	577.20	588.70	593.50	598.70	603.70	612.00	612.80	622.00	631.60	641.50	649.40	651.00	662.92	665.45	673.50	680.25	704.60	712.95	718.50	731.80	742.30	748.25	756.15	770.40	777.90	786.83	797.90	811.69	814.30	835.50	
ACCUMULATED DISTANCE	0	100	200	300	400	500	600	700	800	1000	1200	1300	1400	1600	1800	1900	2000	2190	2320	2400	2600	2800	2900	3000	3140	3200	3400	3600	3800	3900	4000	4200	4400	4500	4600	4800	4900	5000	5200	5370	5400	5600	
DISTANCE	0	100	100	100	100	100	100	100	100	200	200	100	100	200	200	100	100	190	10	200	200	200	100	100	140	80	200	200	100	100	100	200	200	100	100	200	100	100	200	170	30	200	
STATION	12.80	12.70	12.60	12.50	12.40	12.30	12.20	12.10	12.00	11.80	11.60	11.90	11.40	11.20	11.00	10.90	10.80	10.61	10.60	10.40	10.20	10.00	9.80	9.60	9.88	9.80	9.40	9.20	8.80	8.80	8.80	8.80	8.20	8.40	8.30	8.20	8.00	7.90	7.90	7.80	7.43	7.40	7.20

REPUBLIC OF INDONESIA

MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI

GENERAL LONGITUDINAL PROFILE OF K. BEBENG

DATE: MARECH.1980

SCALE: V=1:1000, H=1:20000

DWG. NO. 05

J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY

5/24

EL. 75000

70000

65000

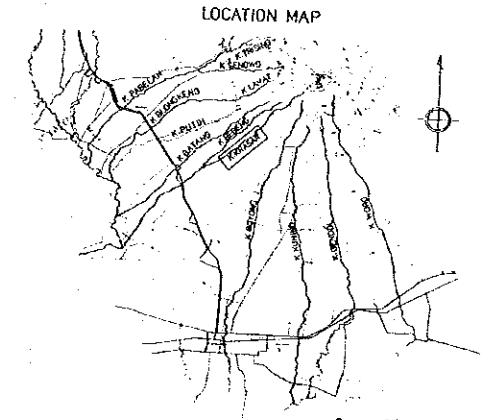
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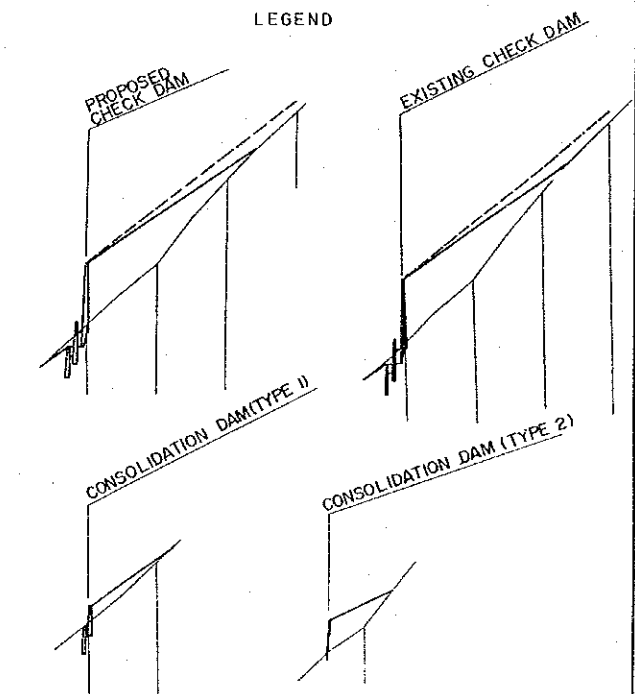
MAIN RIVER

RIGHT BRANCH RIVER 2.

RIGHT BRANCH RIVER 1.



LEGEND



NAME OF CHECK OR CONSOLIDATION DAM
HEIGHT OF DAM
PROPOSED RIVER BED (IN FLOOD)
PROPOSED RIVER BED (ORDINARY)

DISTANCE FROM THE SUMMIT OF G. MERAPI	11K	10K	9K	8K	7K	6K	5K	4K	3K	2K	1K	0K																					
GRADIENT OF ORIGINAL RIVER BED																																	
LOWEST RIVER BED HEIGHT	560.80	570.40	573.40	586.80	597.60	603.20	620.00	625.65	640.00	650.10	655.25	673.00	676.20	688.55	701.00	713.10	726.05	750.10	765.25	771.00	773.70	781.20	792.40	797.00	809.20	820.00	829.65	837.80	844.70	865.00			
CUMULATED DISTANCE	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2150	2200	2400	2500	2800	3000	3000	3200	3350	3400	3600	3800	4000	4000	4200	4400	4600	4800	5000	5000		
DISTANCE	0	200	200	200	200	200	200	200	200	200	200	150	50	200	200	200	200	200	200	200	50	200	200	200	200	200	200	200	200	200	200	200	
STATION	11.20	11.00	10.80	10.60	10.40	10.20	10.00	9.80	9.60	9.40	9.20	9.05	9.00	8.80	8.60	8.40	8.20	8.00	7.80	7.60	7.40	7.20	7.00	6.80	6.60	6.40	6.20	6.00	5.80	5.60	5.40	5.20	5.00

REPUBLIC OF INDONESIA
 MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI
 GENERAL LONGITUDINAL PROFILE OF K. KRASAK
 DATE: MARCH 1980
 SCALE: V=1:1000, H=1:20000
 DWG. NO.06
 J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY

EL. 650.00

EL. 800.00

600.00

750.00

550.00

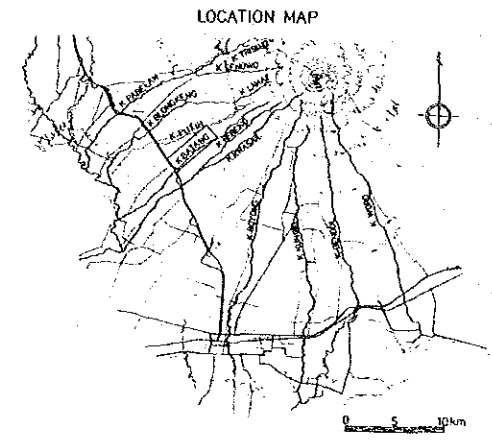
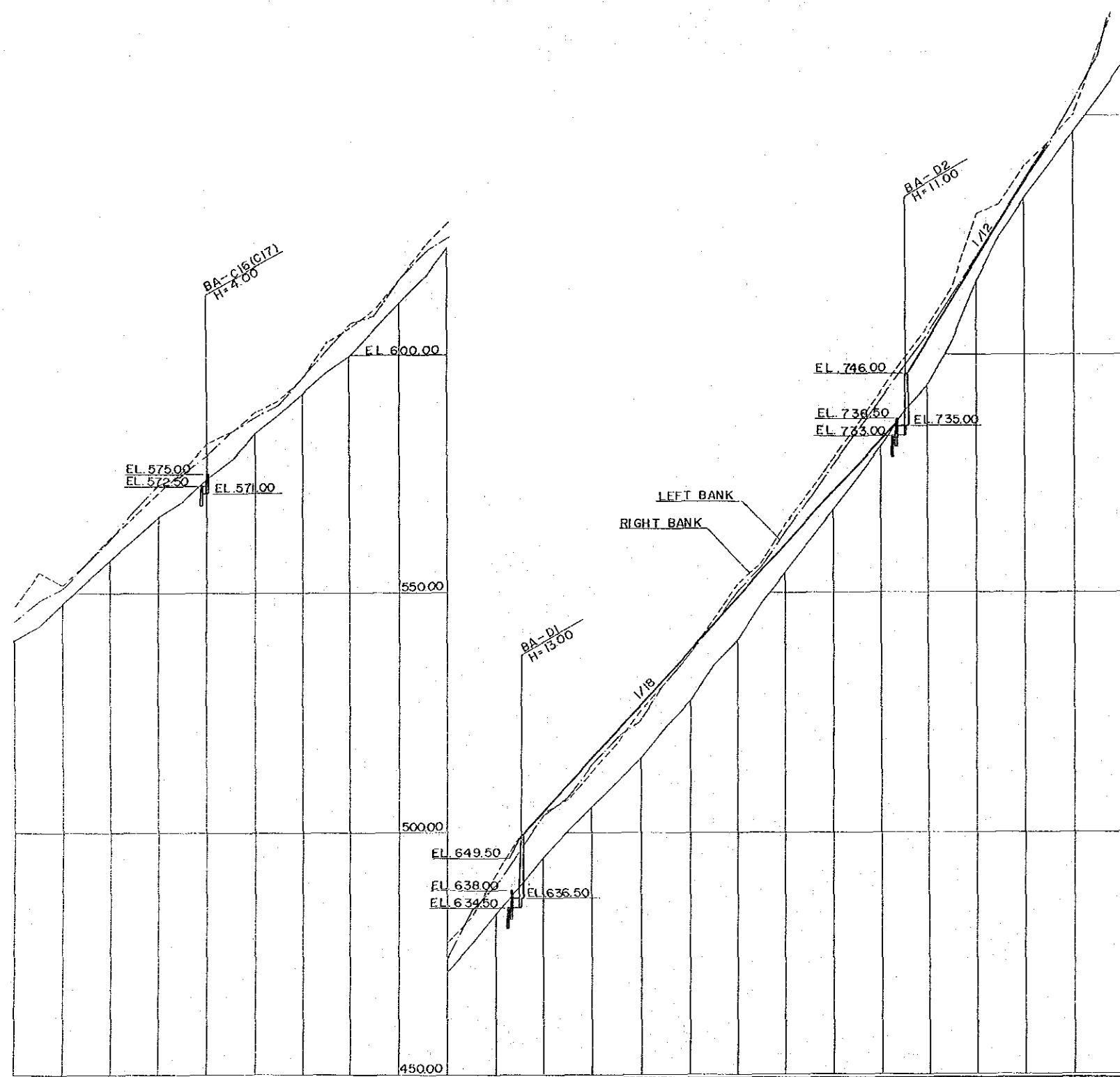
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500.00

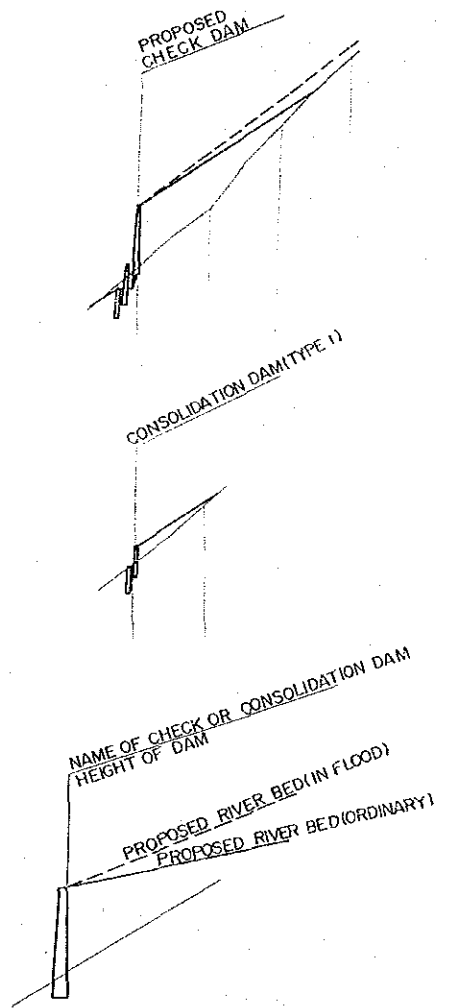
650.00

450.00

600.00



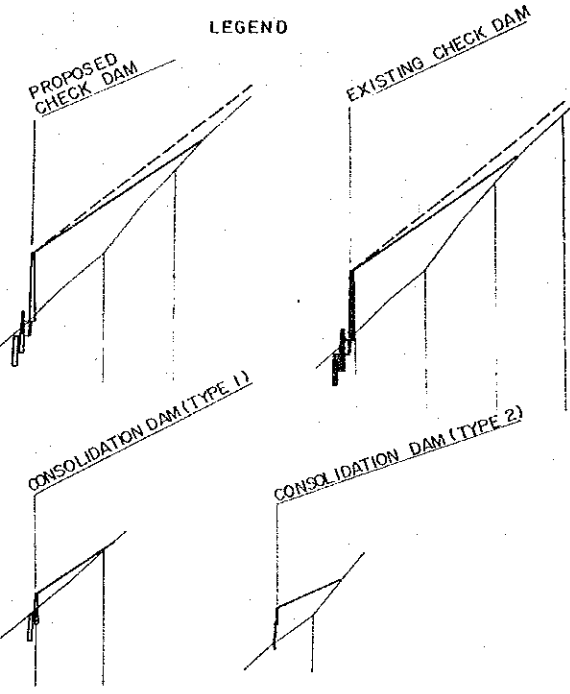
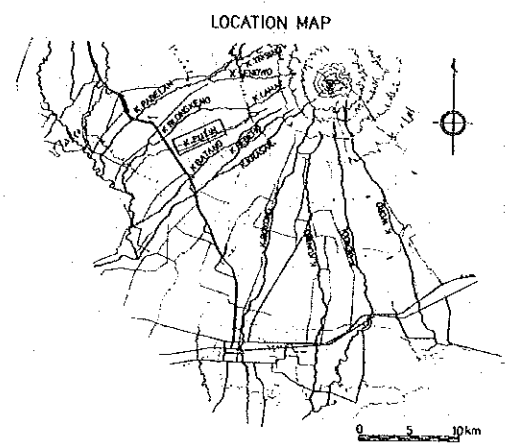
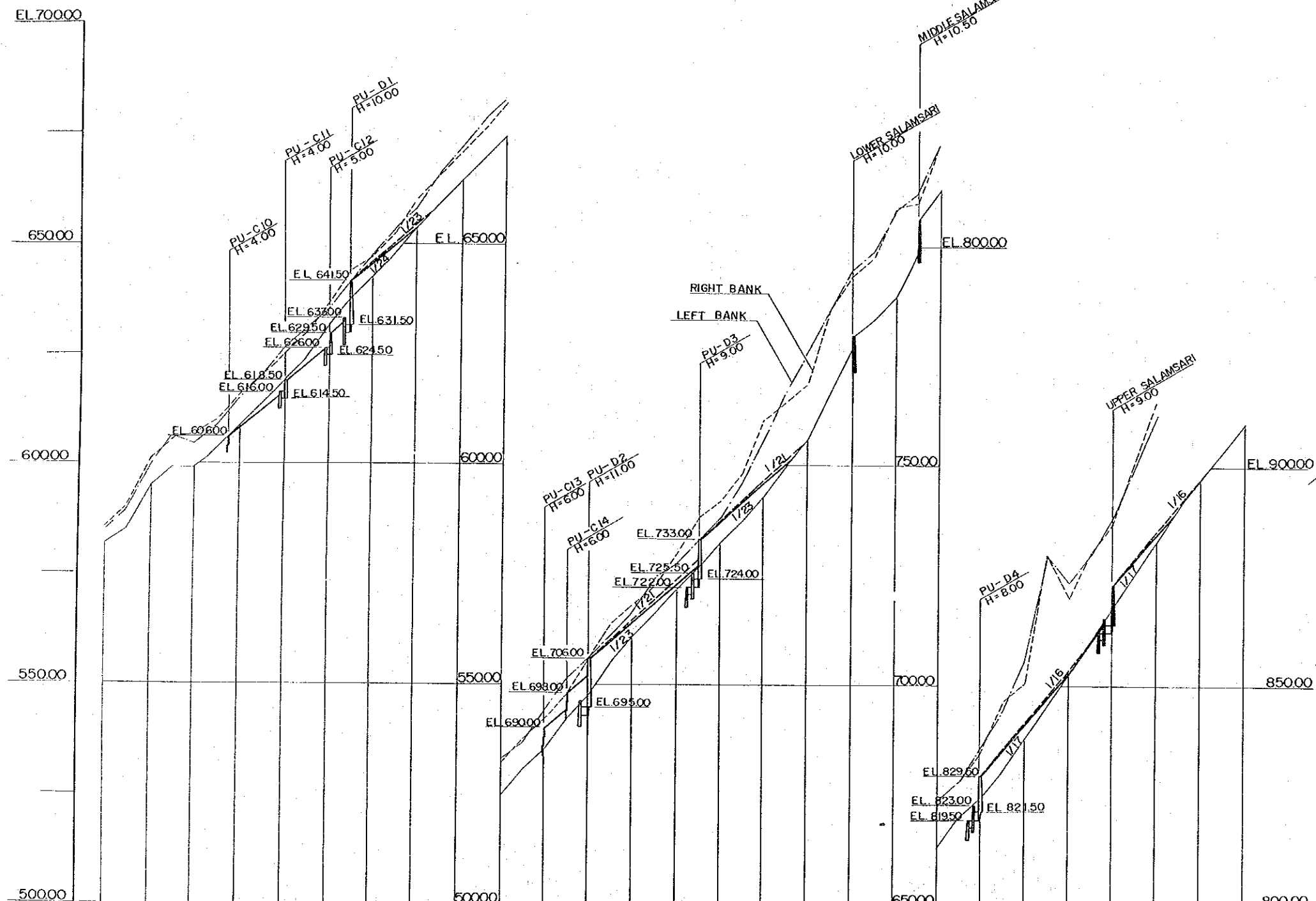
LEGEND



DISTANCE FROM THE SUMMIT OF G. MERAPI	12K																		11K																		10K																		9K																	
GRADIENT OF ORIGINAL RIVER BED	$\frac{1}{2} = \frac{1}{232}$																		$\frac{1}{2} = \frac{1}{500}$																		$\frac{1}{2} = \frac{1}{300}$																		$\frac{1}{2} = \frac{1}{100}$																	
LOWEST RIVER BED HEIGHT	540.50	548.20	557.20	566.20	574.35	583.30	591.65	599.60	610.30	622.15	633.60	645.10	655.90	665.50	677.20	689.80	714.90	717.20	730.80	743.05	765.30	782.65	796.10	812.60																																																
ACCUMULATED DISTANCE	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600																																																
DISTANCE	0	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200																																																
STATION	12+4	12+2	12+0	11+8	11+6	11+4	11+2	11+0	10+8	10+6	10+4	10+2	10+0	9+8	9+6	9+4	9+2	9+0	8+8	8+6	8+4	8+2	8+0	7+8																																																

REMARK THIS PROFILE WAS MADE BY JICA IN 1977.

REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI	
GENERAL LONGITUDINAL PROFILE OF K. BATANG	DATE MARCH.1980
DWG. NO. 07	SCALE V=1:1000 H=1:20000
J.I.C.A.	7/26
JAPAN INTERNATIONAL COOPERATION AGENCY	



NAME OF CHECK OR CONSOLIDATION DAM
 HEIGHT OF DAM
 PROPOSED RIVER BED (IN FLOOD)
 PROPOSED RIVER BED (ORDINARY)

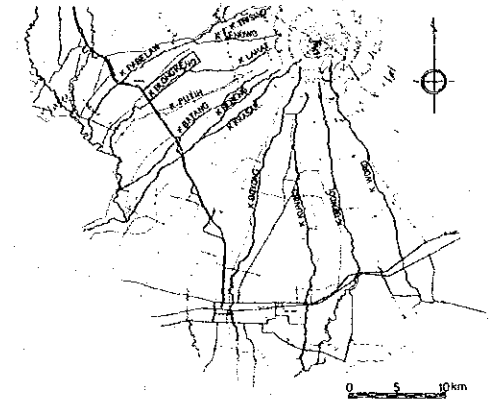
REMARK
 THIS PROFILE WAS MADE BY JICA IN 1977.

DISTANCE FROM THE SUMMIT OF G. MERAPI	0	200	400	550	600	800	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2700	2800	3000	3200	3400	3600	3700	3800	4000	4200	4400	4600	4800	5000	5200		
GRADIENT OF ORIGINAL RIVER BED	$L=1/18.1$ $Z=1/100$										$L=1/17.0$ $Z=1/100$										$L=1/12A$ $Z=1/200$												
LOWEST RIVER BED HEIGHT	581.70	585.10	589.00	606.05	608.40	619.00	631.60	637.90	642.50	653.80	664.40	674.85	685.15	692.15	697.35	710.70	721.90	726.90	732.80	743.25	756.20	778.50	788.60	798.05	808.00	806.70	824.00	837.50	852.00	867.00	882.50	897.00	909.50
ACCUMULATED DISTANCE	0	200	400	550	600	800	1000	1100	1200	1400	1600	1800	2000	2100	2200	2400	2600	2700	2800	3000	3200	3400	3600	3700	3800	4000	4200	4400	4600	4800	5000	5200	
DISTANCE	0	200	200	150	50	200	200	100	100	200	200	200	200	100	200	200	200	100	200	200	200	200	100	100	200	200	200	200	200	200	200	200	
STATION	11.6	11.4	11.2	11.2	11.2	10.8	10.6	10.6	10.4	10.2	10.0	9.8	9.6	9.6	9.4	9.2	9.0	9.0	8.8	8.6	8.4	8.2	8.0	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	

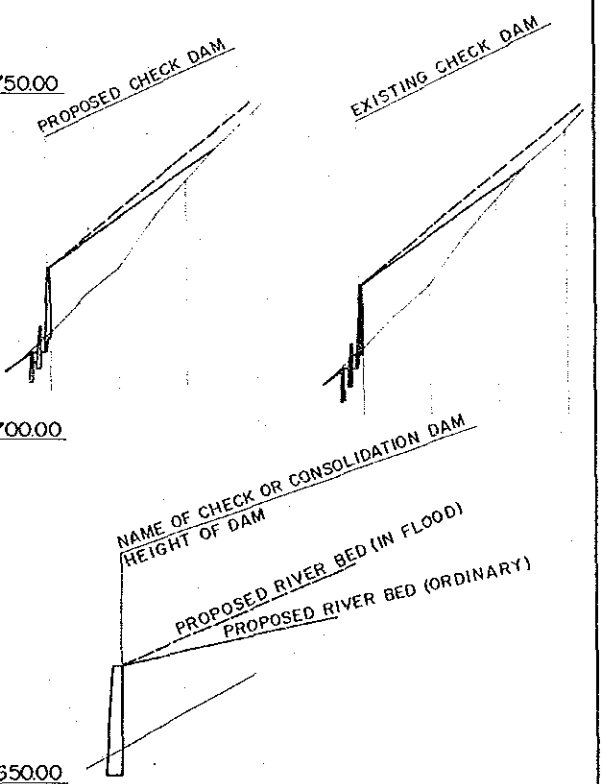
REPUBLIC OF INDONESIA
 MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI

GENERAL LONGITUDINAL	DATE	MARECH.1980
PROFILE OF K. PUTIH	SCALE	V=1:1000 H=1:20000
DWG. NO. 08	8/26	
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY		

LOCATION MAP



LEGEND



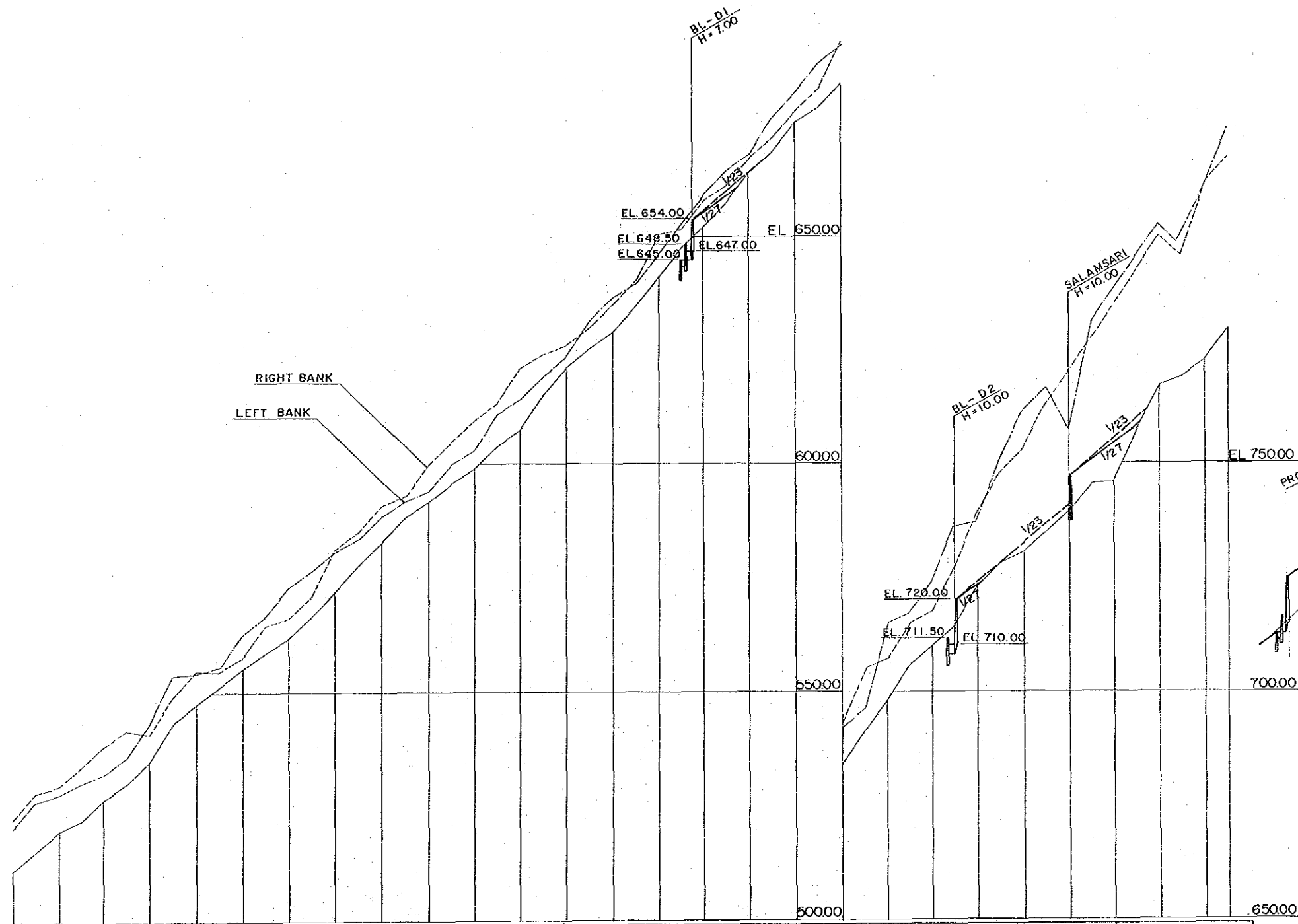
EL 700.00

650.00

600.00

550.00

500.00



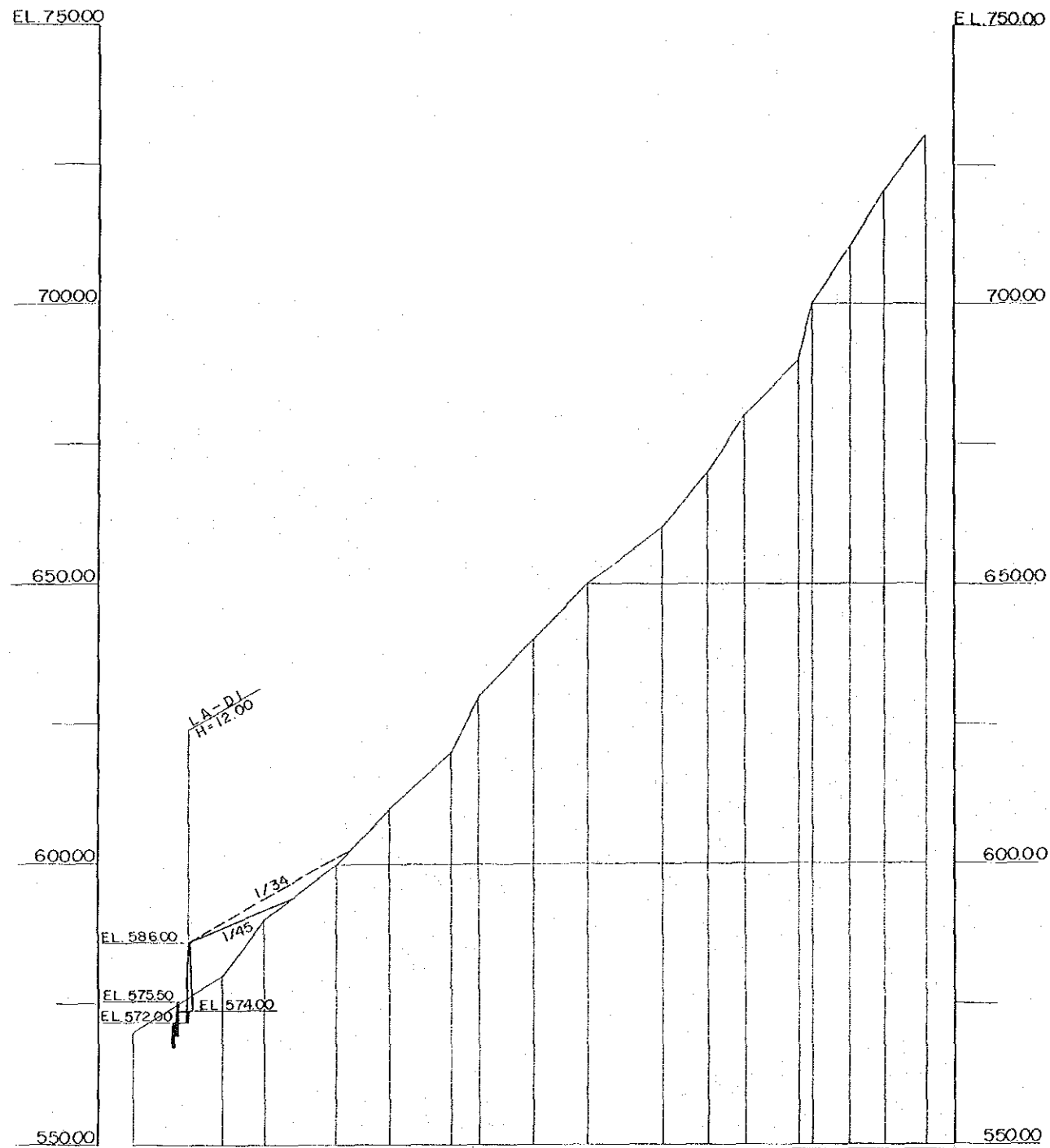
DISTANCE FROM THE SUMMIT OF G. MERAPI	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400					
GRADIENT OF ORIGINAL RIVER BED																																	
LOWEST RIVER BED HEIGHT	511.60	520.25	527.20	535.40	547.75	555.45	561.90	572.00	582.70	591.60	595.65	598.90	607.20	621.15	625.40	629.20	641.20	649.95	652.40	664.00	675.05	683.80	697.80	709.30	713.05	722.80	730.75	739.45	745.60	766.80	772.80	779.40	
ACCUMULATED DISTANCE	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	5400					
DISTANCE	0	200	200	200	200	200	200	200	200	200	100	100	200	200	100	100	200	100	200	200	200	200	200	200	200	200	200	200	200				
STATION	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2	11.0	+1.0	10.8	10.6	10.4	+1.0	10.2	10.0	+1.0	9.8	9.6	+1.0	9.4	9.2	9.0	8.8	+1.0	8.6	8.4	8.2	8.0	7.8	7.6	7.5

REPUBLIC OF INDONESIA

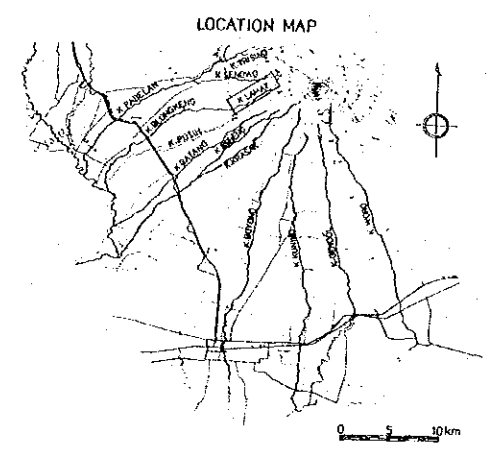
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI

GENERAL LONGITUDINAL	DATE	MARECH.1980
PROFILE OF K. BLONGKENG	SCALE	V = 1:1000 H = 1:20000
DWG. NO. 09		9/24

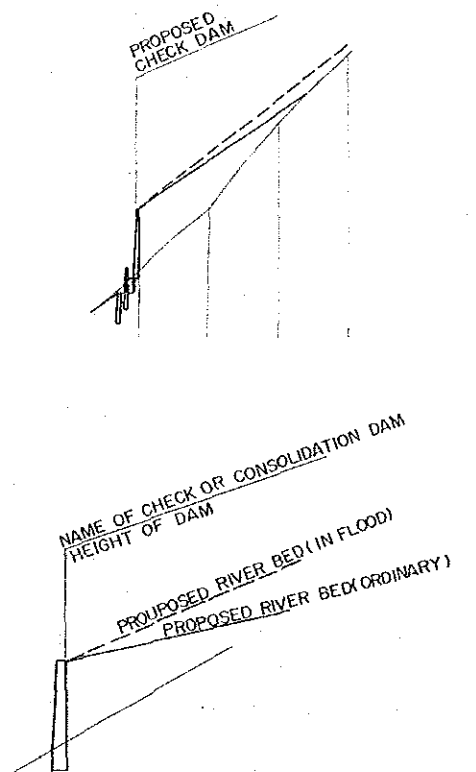
J.I.C.A.
JAPAN INTERNATIONAL COOPERATION AGENCY



GRADIENT OF PROPOSED RIVER BED	1:2K																		
GRADIENT OF ORIGINAL RIVER BED	1:11K																		
LOWEST RIVER BED HEIGHT	0	570.00	576.00	580.00	586.00	600.00	610.00	620.00	630.00	640.00	650.00	660.00	670.00	680.00	690.00	700.00	710.00	720.00	
ACCUMULATED DISTANCE	0	200	320	470	720	900	1120	1220	1530	1940	2400	2860	3340	3840	4360	4900	5460	6040	
DISTANCE	0	200	120	150	250	180	220	100	190	190	260	160	200	130	180	80	130	120	150
STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19



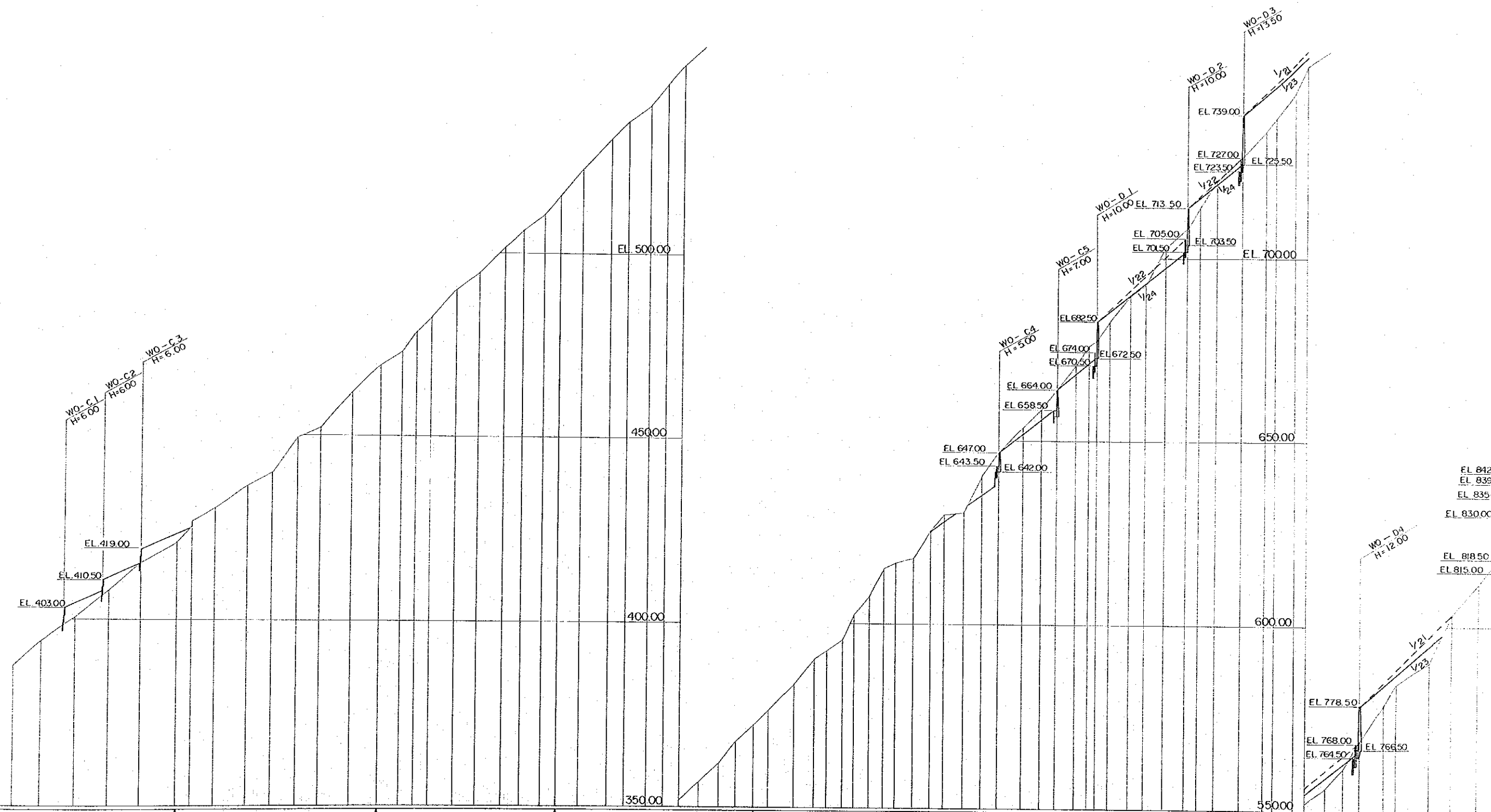
LEGEND



REMARK
THIS PROFILE WAS MADE BY JAPANESE STUDY TEAM IN 1979.

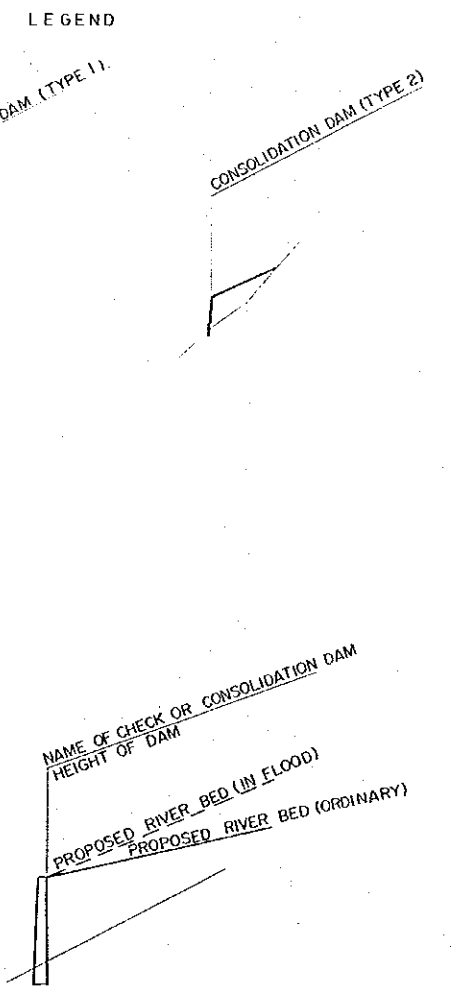
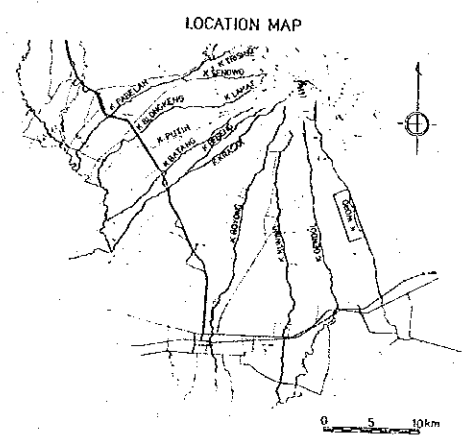
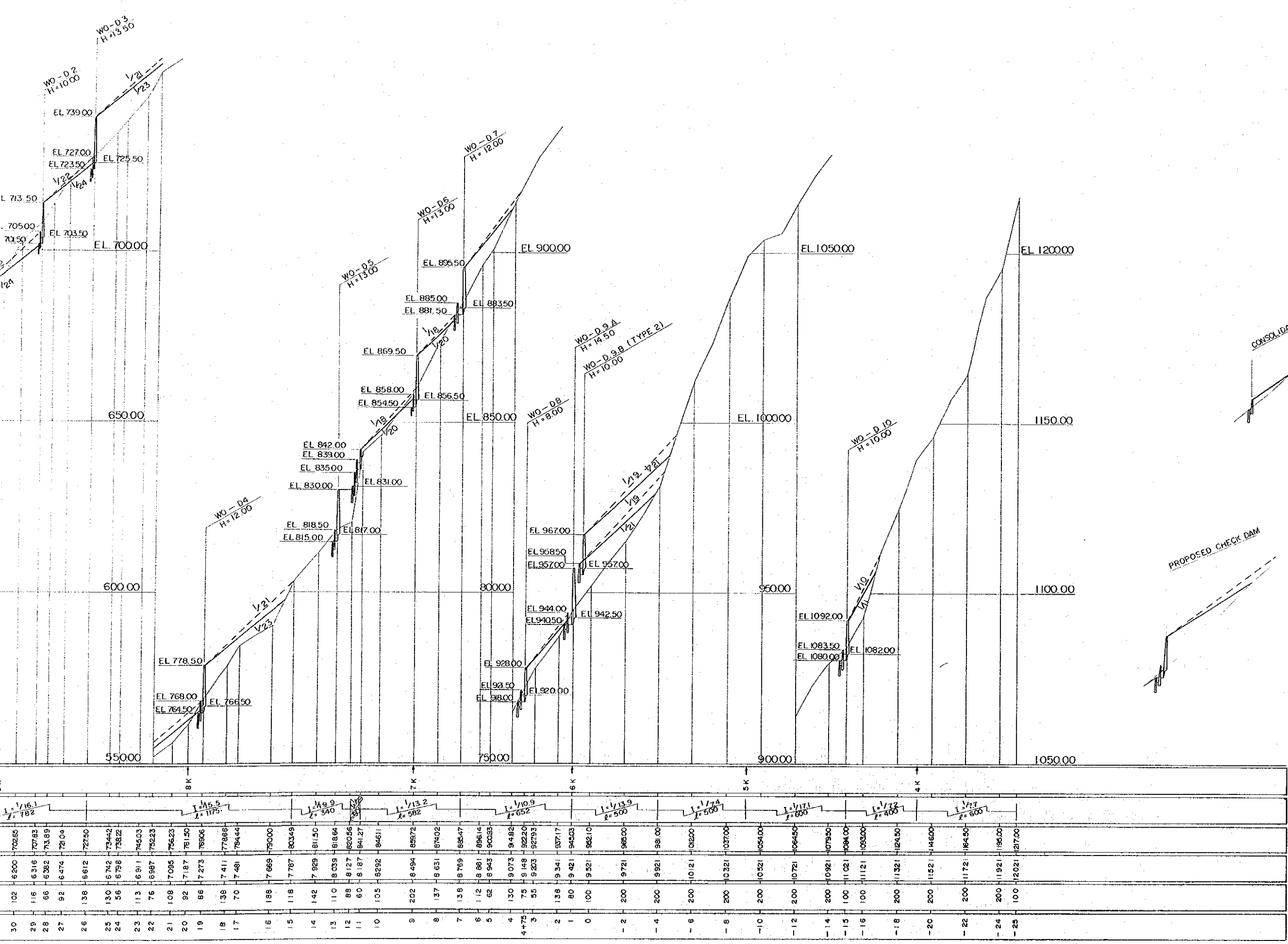
REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI	
GENERAL LONGITUDINAL PROFILE OF K. LAMAT	DATE MARCH 1980
	SCALE V = F:1000 H = 1:20000
DWG. NO. 10	10/24
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY	

EL 550.00
500.00
450.00
400.00
350.00



STATION	DISTANCE	ACCUMULATED DISTANCE	LOWEST RIVER BED HEIGHT	GRADIENT OF ORIGINAL RIVER BED	GRADIENT OF PROPOSED RIVER BED
P. 66	0	0	387.5		
85	140	140	394.07		
85+30	130	270	398.30		
86	54	324	403.34		
86+46	146	470	405.40		
87	30	500	407.60		
82	170	670	415.10		
81	188	858	420.53	$L = \frac{1}{1652}$	
DAM	78	936	425.0		
80	124	1060	430.12		
79	172	1232	436.01		
78	136	1368	439.60		
77	134	1502	449.59		
76	123	1625	453.03		
75	166	1791	461.80		
74	150	1941	469.11		
73	116	2057	472.91		
72	78	2135	478.30		
71	80	2215	482.37		
70	138	2353	490.00		
69	122	2475	494.36		
68	137	2612	501.73	$L = \frac{1}{197}$	
67	100	2712	506.04		
66	112	2824	510.50		
65	66	2890	513.90		
64	125	3015	523.09		
63	154	3169	531.20		
62	92	3261	536.09		
61	124	3385	540.45		
60	94	3479	546.19		
59	86	3565	551.72		
58	104	3669	556.46		
57	108	3777	561.50		
56	90	3867	567.63		
55	98	3965	572.11		
54	76	4041	576.34		
53	140	4203	583.30		
52	110	4313	590.28		
51	68	4381	596.61		
50	84	4465	595.64	$L = \frac{1}{1722}$	
49	62	4527	602.50		
48	80	4607	607.02		
47	78	4685	615.03		
46	62	4747	616.50		
45	98	4845	617.68		
44	94	4939	625.51		
43	72	5011	628.96		
42	108	5119	630.19		
41	98	5217	640.40		
40	90	5307	646.63		
39	126	5433	653.51		
38	100	5533	659.89		
37	80	5613	664.04	$L = \frac{1}{1170}$	
36	104	5717	670.64		
35	71	5788	675.05		
34	42	5830	677.48		
33	70	5900	682.93		
32	110	6010	688.70		
31	88	6098	692.80		
30	102	6200	702.85	$L = \frac{1}{782}$	
29	116	6316	707.83		
28	66	6382	713.69		
27	92	6474	721.04		
26	138	6612	727.50		
25	130	6742	734.42		
24	56	6798	738.22		
23	113	6911	745.03		
22	76	6987	752.23		
21	108	7095	756.23		
20	92	7187	761.50		
19	86	7273	769.06		
18	138	7411	778.66	$L = \frac{1}{115}$	
17	70	7481	784.44		
16	188	7669	790.00		
15	118	7787	803.49		
14	142	7929	811.50	$L = \frac{1}{340}$	

EL 842.00
EL 839.00
EL 835.00
EL 830.00
EL 818.50
EL 815.00



REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT MERAPI	
GENERAL LONGITUDINAL PROFILE OF K.WORO	DATE MARECH. 1980
DWG. NO. II	SCALE V=1:1000 H=1:20000
J.T.C. A JAPAN INTERNATIONAL COOPERATION AGENCY	11/24

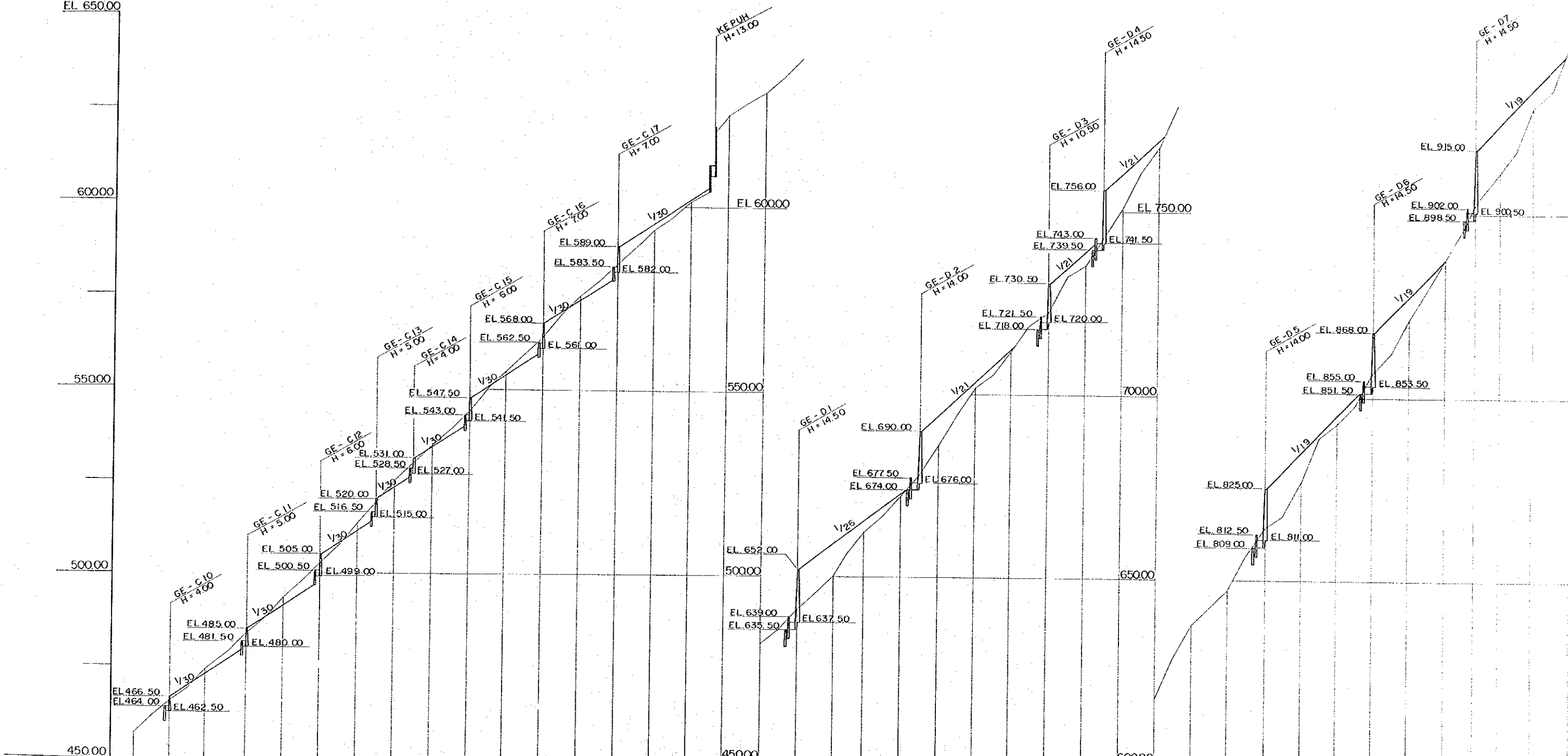
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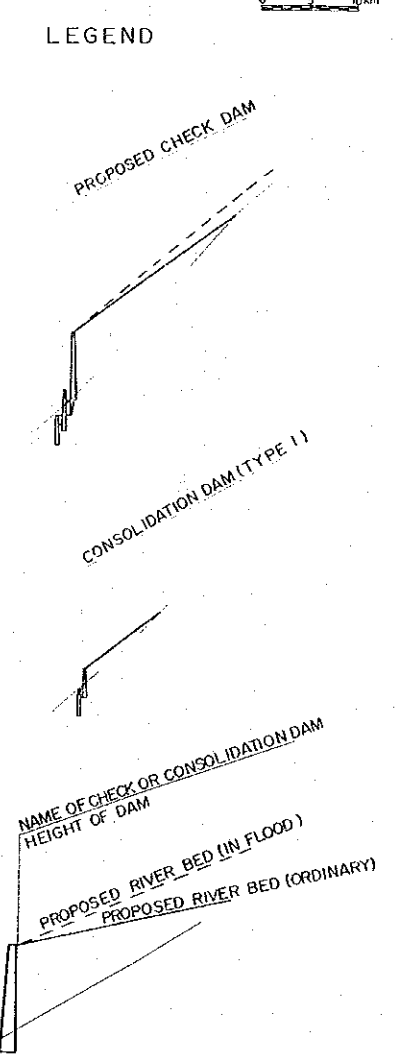
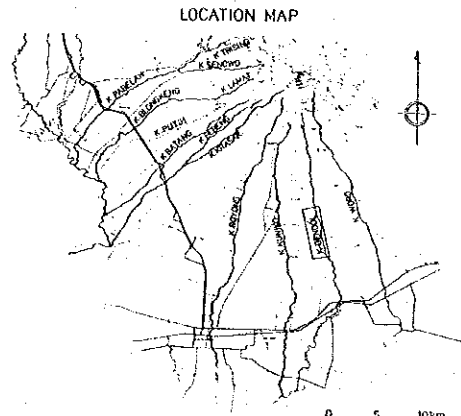
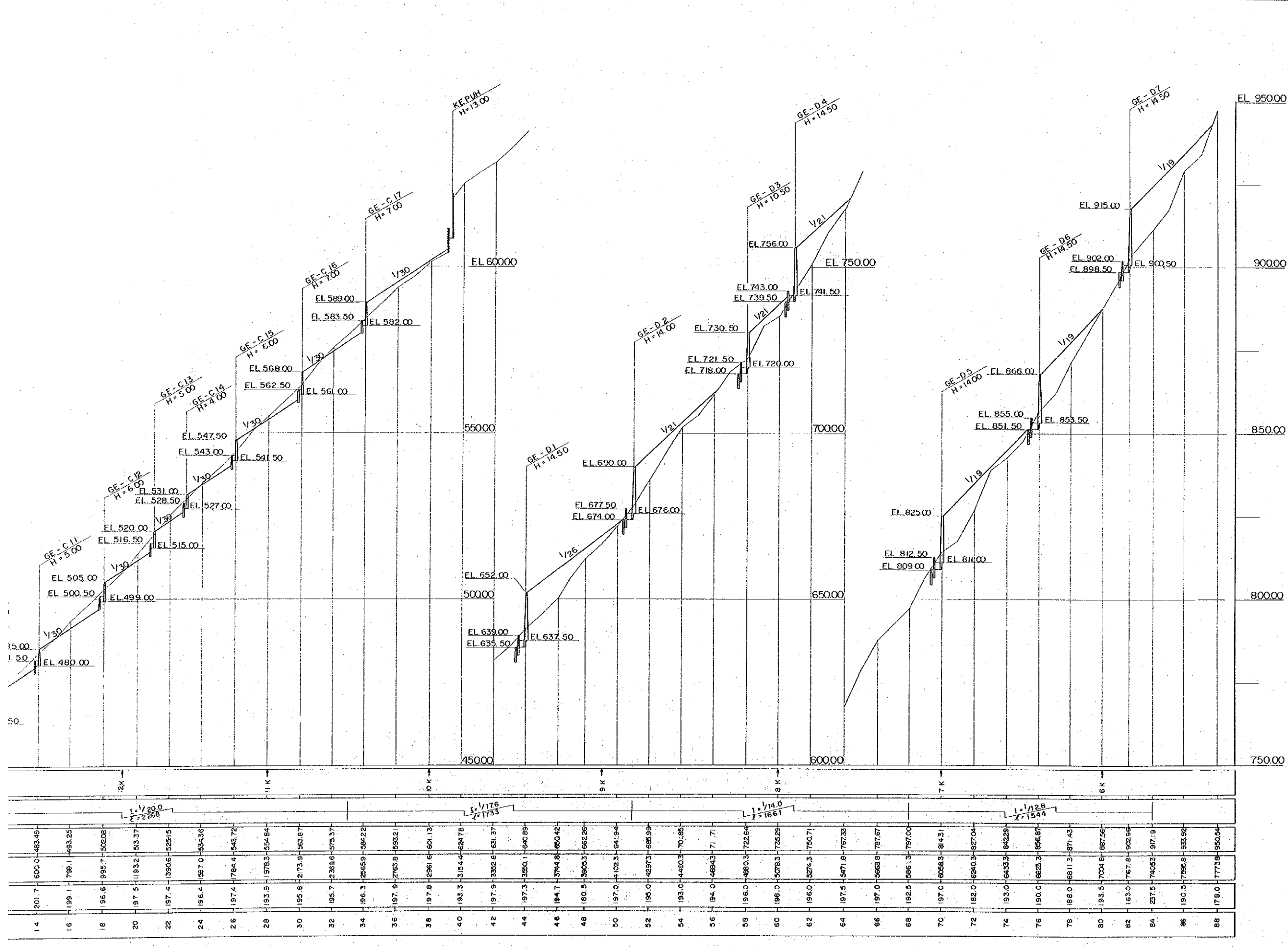
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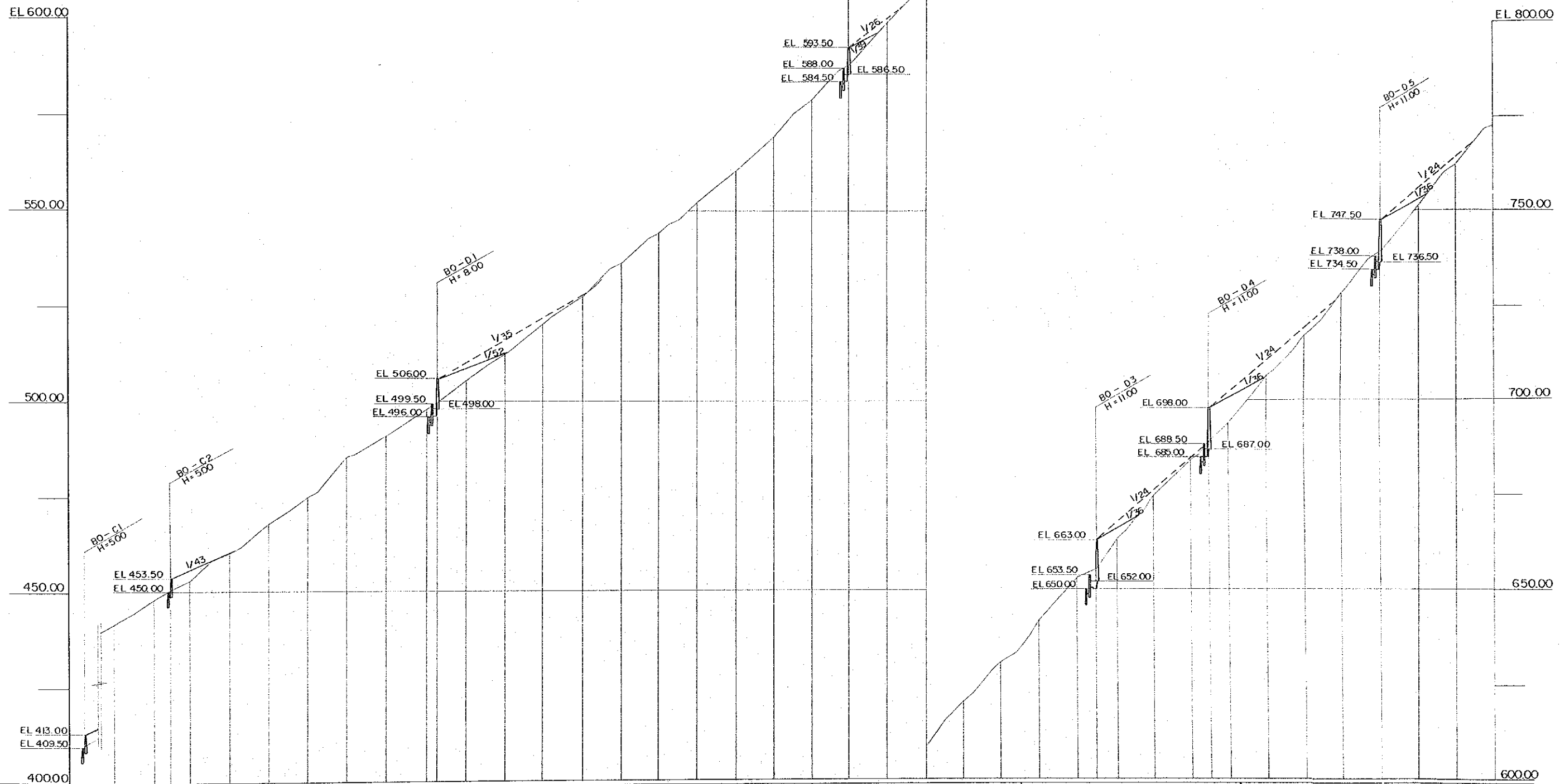
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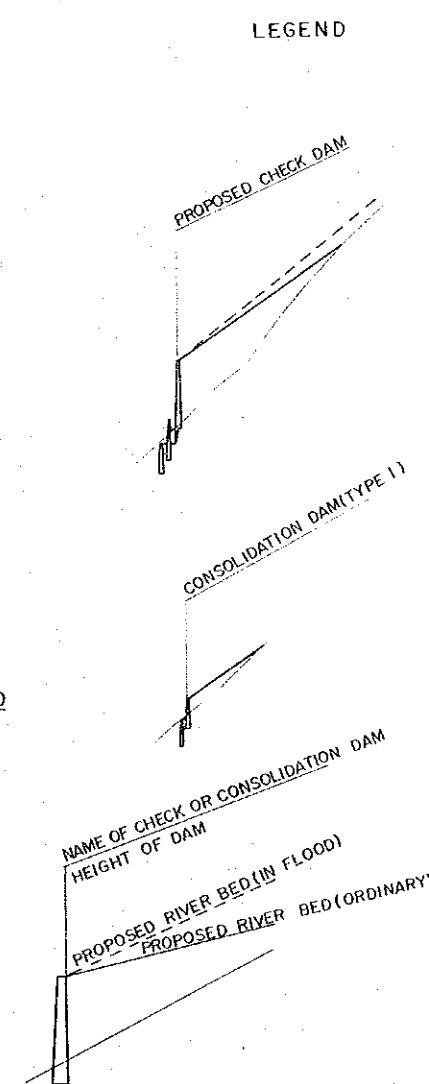
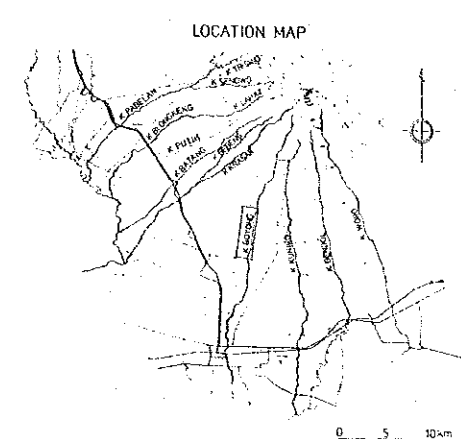
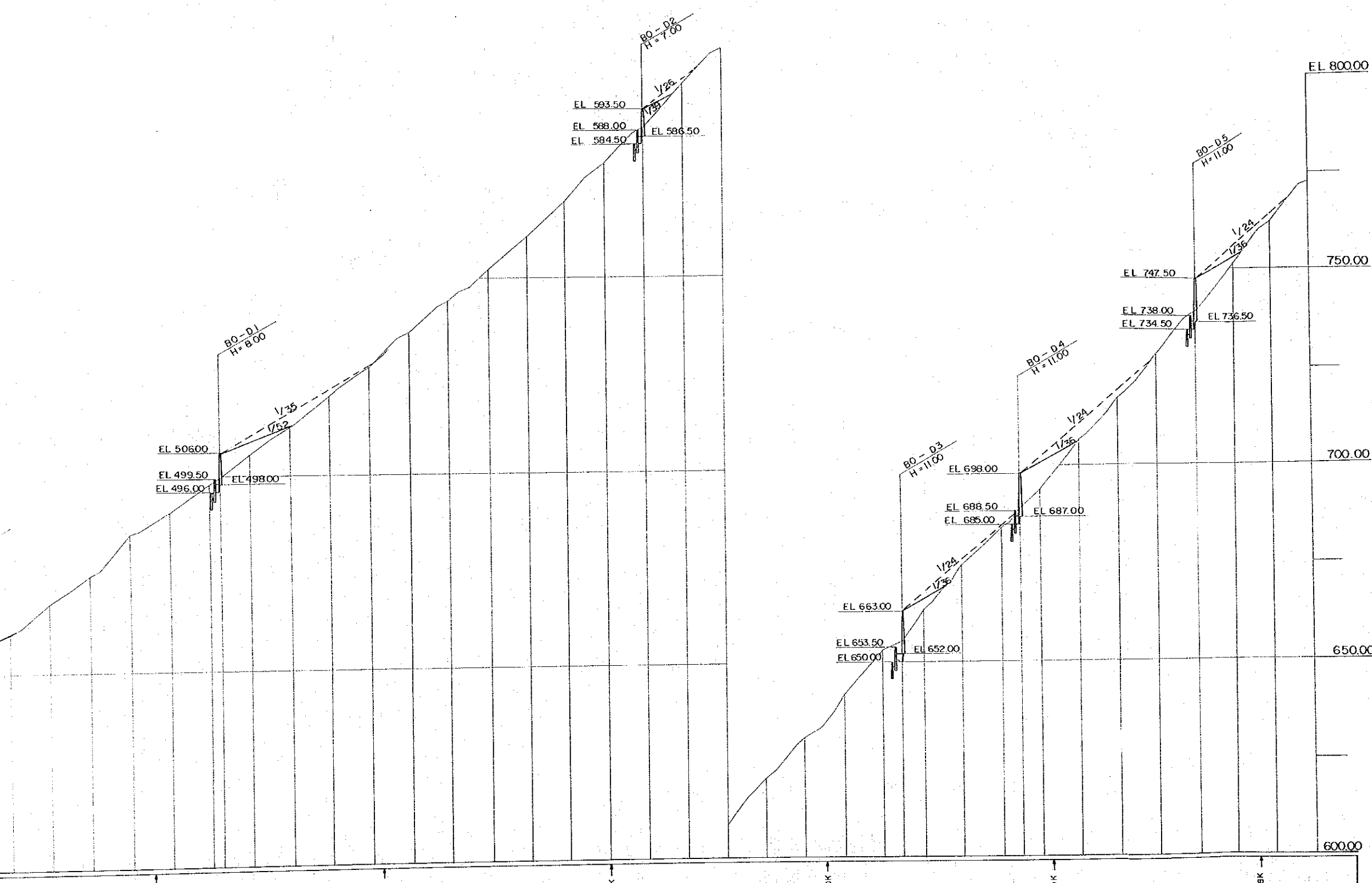
DISTANCE FROM THE SUMMIT OF G. MERAPI	GRADIENT OF ORIGINAL RIVERBED	LOWEST RIVER BED HEIGHT	ACCUMULATED DISTANCE	DISTANCE	STATION
13 K		456.95	0	0	8
		466.60	199.3	199.3	10
		473.97	398.3	199.0	12
		483.49	600.0	201.7	14
		493.25	799.1	199.1	16
		502.09	995.7	196.6	18
	$I = 1/20.0$ $Z = 2.268$	513.37	1193.2	197.5	20
		525.15	1390.6	197.4	22
		534.36	1587.7	196.4	24
		543.72	1784.4	197.4	26
		554.84	1978.2	193.5	28
		563.87	2173.9	195.6	30
		573.37	2369.6	195.7	32
		582.22	2565.9	196.3	34
		593.21	2763.8	197.9	36
		601.13	2961.6	197.8	38
		624.78	3154.4	193.3	40
	$I = 1/17.5$ $Z = 1.733$	631.37	3352.8	197.9	42
		640.89	3550.1	197.3	44
		650.42	3744.8	194.7	46
		662.28	3935.3	160.5	48
		664.94	4128.3	197.0	50
		685.99	4323.3	195.0	52
		701.85	4490.3	193.0	54
		711.71	4684.3	194.0	56
		722.64	4860.3	196.0	58
	$I = 1/14.0$ $Z = 1.661$	735.29	5078.3	198.0	60
		750.71	5274.3	196.0	62
		767.33	5471.6	197.5	64
		787.67	5668.8	197.0	66
		797.00	5861.3	192.5	68
		814.31	6088.3	197.0	70
		827.04	6240.3	182.0	72
		842.29	6433.3	193.0	74
		856.87	6623.3	190.0	76
	$I = 1/12.8$ $Z = 1.544$	871.43	6811.3	188.0	78
		887.56	7004.8	193.5	80
		902.96	7204.8	163.0	82
		917.19	7405.3	237.5	84
		933.92	7596.8	190.5	86
		950.54	7773.6	178.0	88



REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI	
GENERAL LONGITUDINAL PROFILE OF K. GENDOL	DATE: MARCH 1980
DWG. NO. 12	SCALE: V=1:1000, H=1:20000
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY	12/24

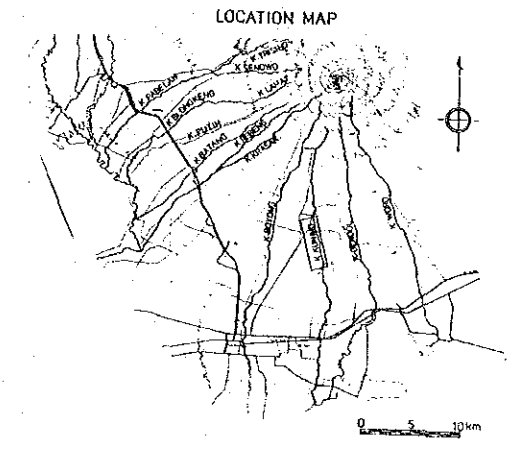


STATION	DISTANCE	ACCUMULATED DISTANCE	LOWEST RIVER BED HEIGHT	GRADIENT OF ORIGINAL RIVER BED	DISTANCE FROM THE SUMMIT OF G. MERAPI
P 1	1100	1100	410.00		40000
P 0	0	0	441.98		
P 5	206	206	448.14	$L=1/32.5$ $Z=637$	
P 6	81	287	450.92		
P 10	100	387	453.15		
P 14	200	587	460.29		
P 18	200	787	468.17		
P 22	200	987	475.27		
P 26	196	1183	483.98		
			484.51		
P 30	200	1383	491.09		
P 34	200	1583	496.01		
P 35	50	1633	498.77		
P 38	150	1783	500.85		
P 42	200	1983	512.51		
P 46	200	2183	520.40		
P 50	200	2383	527.82		
P 54	200	2583	536.68		
P 58	200	2783	544.99		
P 62	200	2983	552.14		
P 66	200	3183	560.90		
P 70	200	3383	569.80		
P 74	200	3583	579.71		
P 78	200	3783	589.94		
P 82	200	3983	599.87		
P 86	200	4183	608.94		
P 90	200	4383	620.49		
P 94	200	4583	630.82		
P 98	200	4783	641.82		
P 102	200	4983	653.21		
P 104	100	5083	665.17		
P 106	110	5193	683.05		
P 110	200	5393	674.90		
P 114	200	5593	684.44		
P 116	100	5693	689.17		
P 117	100	5793	684.09		
P 121	200	5993	705.68		
P 125	200	6193	717.08		
P 129	200	6393	728.04		
P 133	200	6593	739.29		
P 137	200	6793	750.78		
P 141	200	6993	761.77		
P 145	200	7193	772.11		

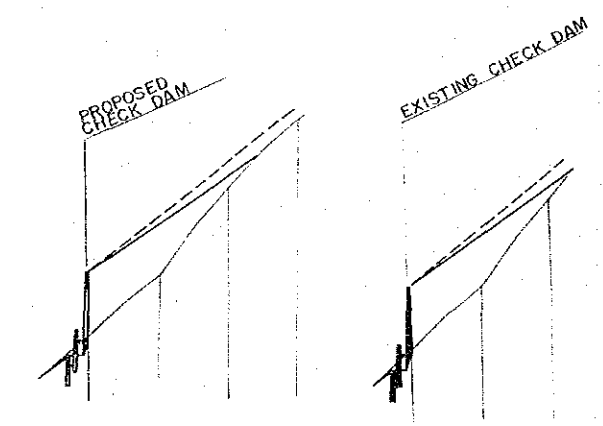


P 14	200	587	46029	$L=1/247$ $Z=546$
P 18	200	787	46817	
P 22	200	987	47527	
P 26	196	1183	48251	
P 30	200	1383	49109	$L=1/316$ $Z=450$
P 34	200	1583	49801	
P 35	50	1633	49877	
P 38	150	1783	50695	
P 42	200	1983	51281	
P 46	200	2183	52040	
P 50	200	2383	52782	$L=1/259$ $Z=1250$
P 54	200	2583	53668	
P 58	200	2783	54459	
P 62	200	2983	55214	
P 66	200	3183	56090	
P 70	200	3383	56980	
P 74	200	3583	57971	
P 78	200	3783	58994	
P 82	200	3983	59957	
P 86	200	4183	60994	
P 90	200	4383	62049	$L=1/196$ $Z=1300$
P 94	200	4583	63082	
P 98	200	4783	64182	
P 102	200	4983	65321	
P 104	100	5083	65617	
P 106	110	5193	66306	
P 110	200	5393	67490	
P 114	200	5593	68444	
P 117	100	5693	68917	
P 121	200	5893	69409	
P 125	200	6193	71708	
P 129	200	6393	72804	
P 133	200	6593	73923	
P 137	200	6793	75078	
P 141	200	6993	76177	
P 145	200	7193	77211	

REPUBLIC OF INDONESIA	
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI	
GENERAL LONGITUDINAL PROFILE OF K. BOYONG	DATE MARECH.1980
DWG. NO. 13	SCALE V=1:1000 H=1:20000
J.I.C.A JAPAN INTERNATIONAL COOPERATION AGENCY	13/24

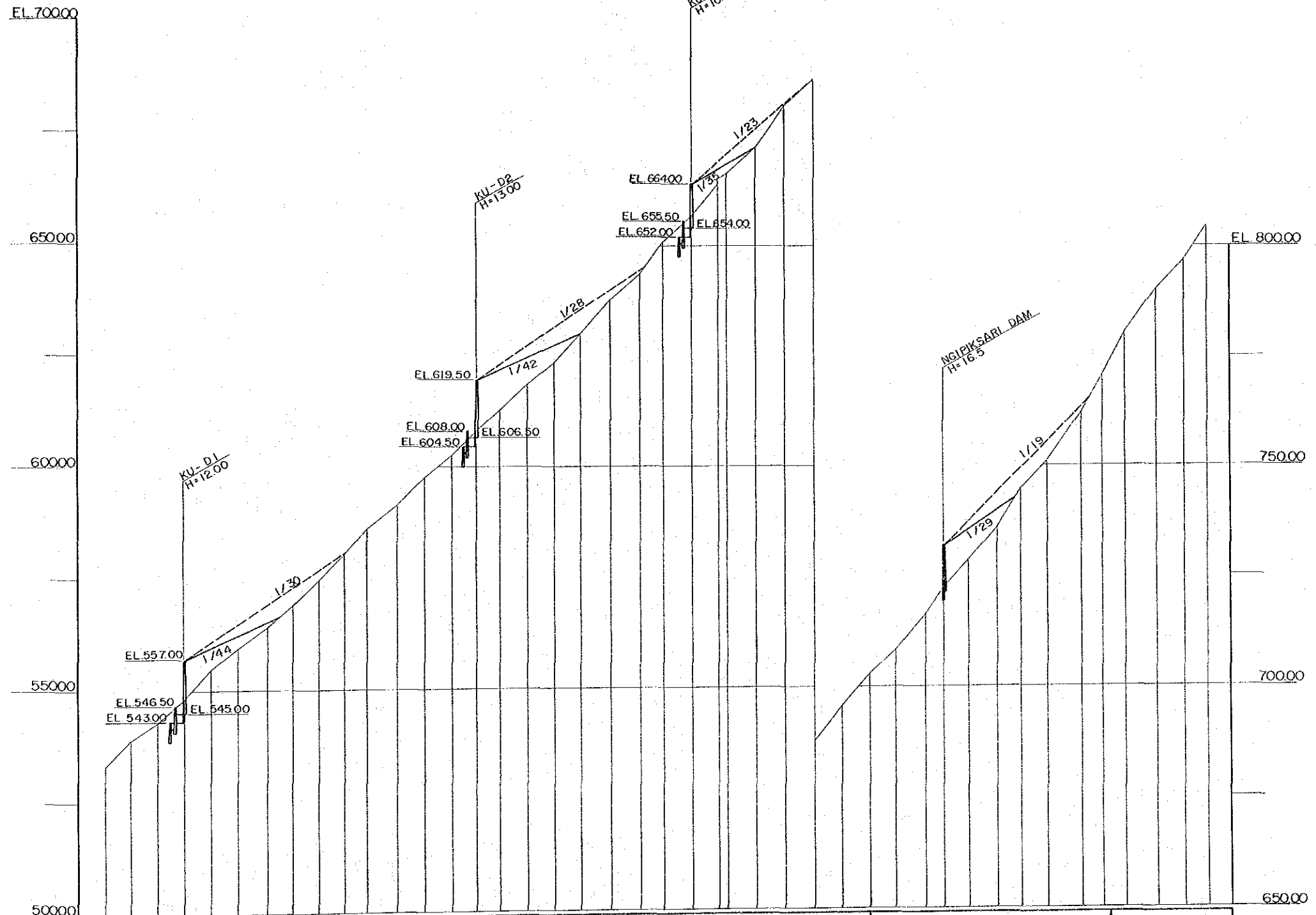


LEGEND



NAME OF CHECK OR CONSOLIDATION DAM
 HEIGHT OF DAM
 PROPOSED RIVER BED (IN FLOOD)
 PROPOSED RIVER BED (ORDINARY)

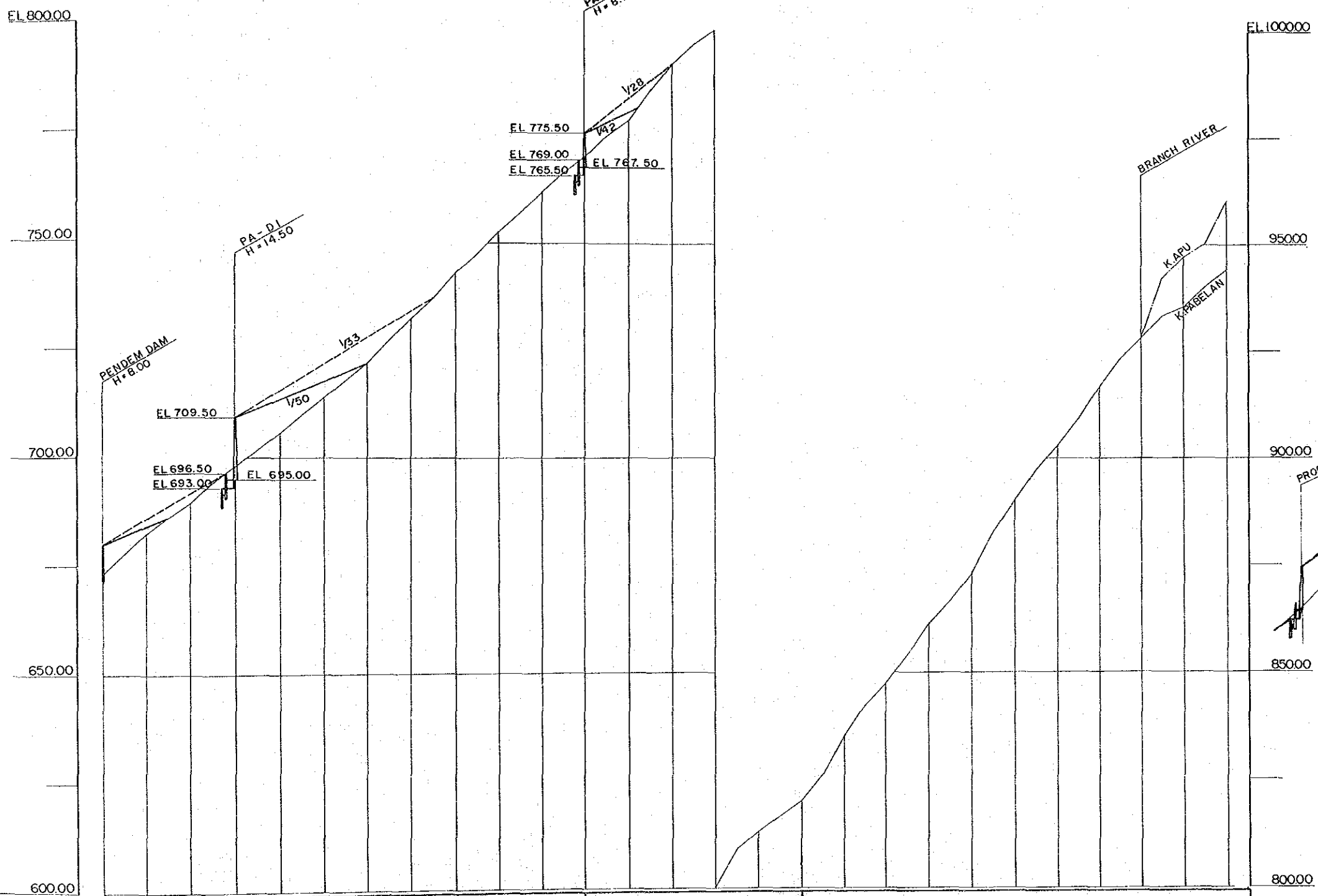
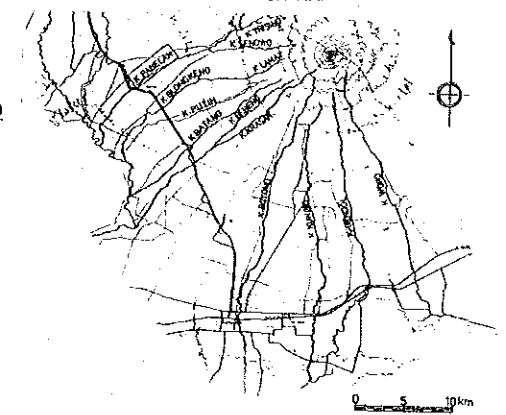
REMARK
 THIS PROFILE WAS MADE BY MERAPI OFFICE IN 1976.



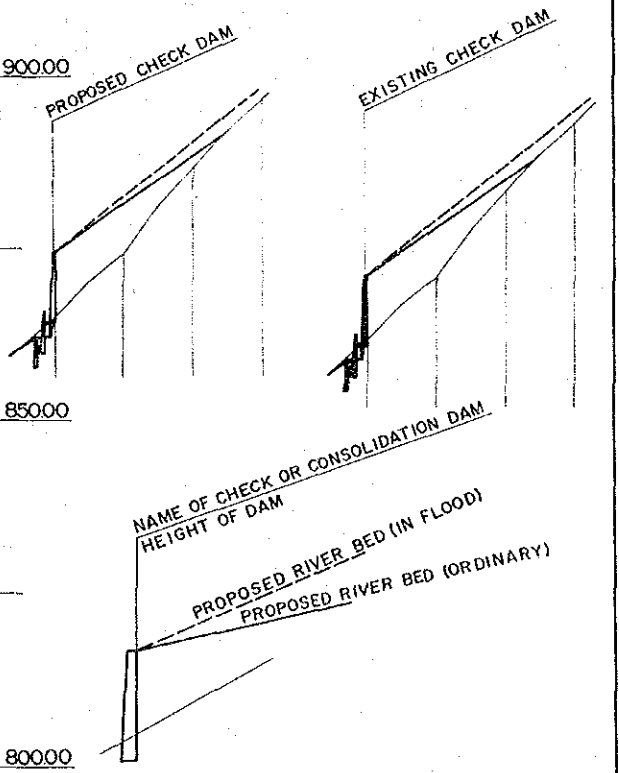
STATION	DISTANCE	ACCUMULATED DISTANCE	LOWEST RIVER BED HEIGHT	GRADIENT OF ORIGINAL RIVER BED	GRADIENT OF PROPOSED RIVER BED
31	0	0	533.15		
30	11.6	11.6	539.06		
29	16.6	23.2	542.87		
28	23.0	35.2	548.44		
27	18.2	47.4	554.75		
26	11.4	58.8	559.46		
25	29.8	71.6	564.17		
24	13.2	83.8	568.98		
23	16.9	94.7	574.88		
22	15.4	106.5	580.96		
21	10.6	118.7	586.15		
20	34.6	130.3	591.45		
19	21.1	142.4	597.77		
18	11.0	153.4	602.57		
17	10.4	163.8	608.05		
16	08.6	172.4	612.67		
15	12.8	185.0	618.60		
14	22.4	207.4	623.33		
13	17.4	224.8	629.95		
12	13.2	237.0	637.75		
11	12.7	238.4	643.32		
10	06.2	249.0	650.63		
9	28.4	261.0	656.63		
8	12.8	271.8	660.06		
7	12.6	280.2	672.16		
6	13.4	303.6	681.77		
5	13.1	317.2	687.80		
4	11.3	328.4	695.43		
3	12.8	341.2	702.80		
2	11.4	352.3	708.22		
1	13.0	366.4	716.11		
468.5	8.8	375.0	722.09		
10 TA	11.0	386.0	728.93		
9A	12.4	398.4	733.85		
8A	10.8	409.0	744.79		
7A	11.2	420.5	750.86		
6A	19.3	435.8	761.77		
5A	9.5	445.4	770.52		
4A	10.6	453.8	780.11		
3A	14.8	470.3	790.00		
2A	12.1	482.2	796.41		
1A	10.4	492.6	804.39		

REPUBLIC OF INDONESIA		
MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI		
GENERAL LONGITUDINAL PROFILE OF K. KUNING	DATE	MARECH.1980
	SCALE	V=1:1000 H=1:2000
DWG. NO. 14		14/26
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY		

LOCATION MAP



LEGEND

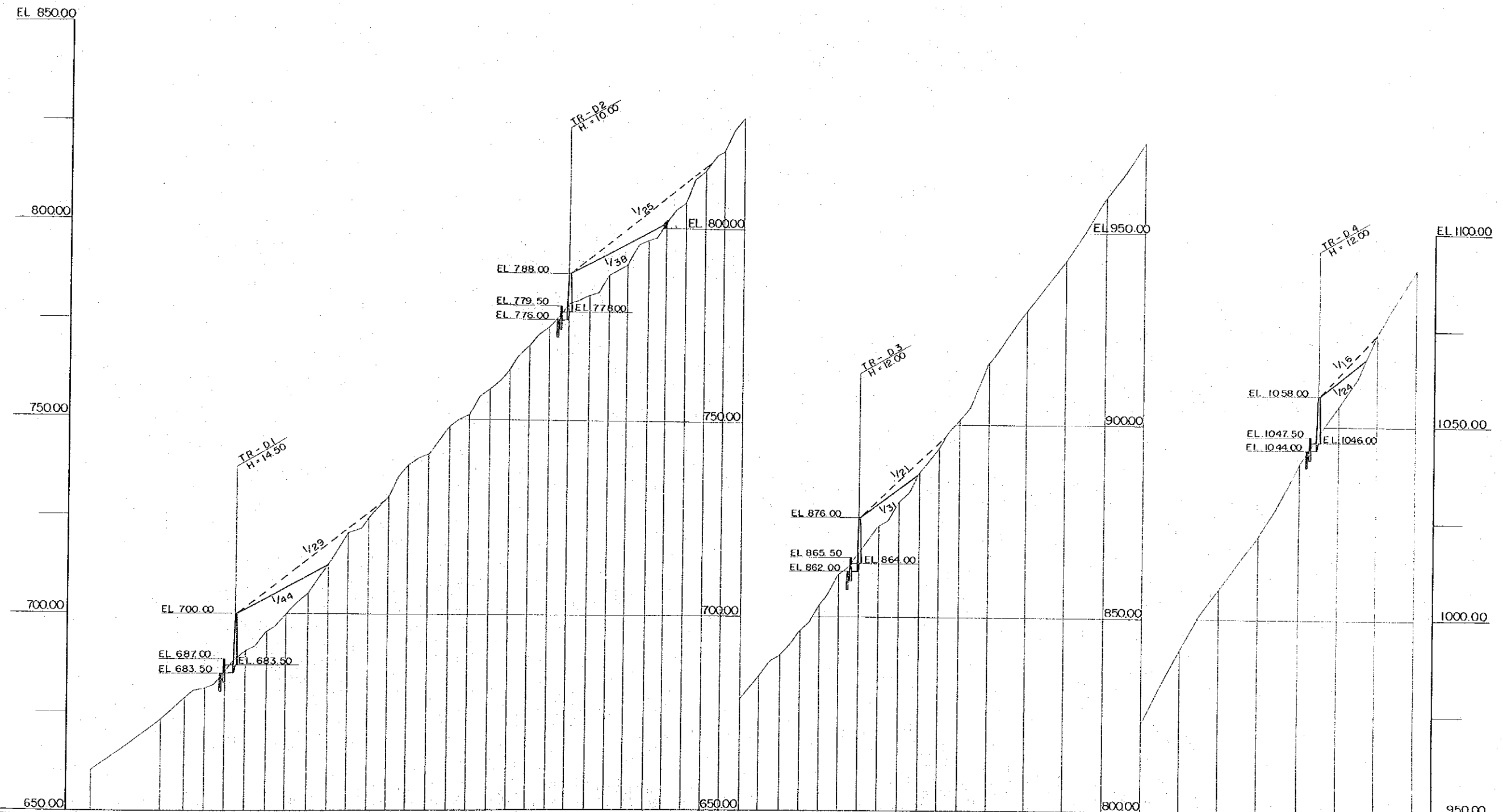


DISTANCE FROM THE SUMMIT OF G. MERAPI	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	
GRADIENT OF ORIGINAL RIVER BED	1: 1/24.7 E: 1200		1: 1/12.1 E: 1200		1: 1/19.2 E: 1200		1: 1/13.3 E: 1100																					
LOWEST RIVER BED HEIGHT	673.50	682.50	690.50	695.00	705.50	714.00	722.00	732.50	743.00	753.00	762.50	770.00	779.00	792.00	800.00	813.00	820.00	835.00	841.50	861.50	873.00	890.00	903.00	916.50	928.00	935.00	944.00	
ACCUMULATED DISTANCE	0	200	400	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	4200	4400	4600	4800	5000	5200	
DISTANCE	0	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	
STATION	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	

REPUBLIC OF INDONESIA

MASTER PLAN FOR LAND EROSION AND VOLCANIC DEBRIS CONTROL IN THE AREA OF MT. MERAPI

GENERAL LONGITUDINAL PROFILE OF K PABELAN	DATE	MARECH 1980
	SCALE	V 1:1000 H 1:2000
DWG. NO. 15		15/24
J. I. C. A. JAPAN INTERNATIONAL COOPERATION AGENCY		



DISTANCE FROM THE SUMMIT OF G. MERAPI	11 K	10 K	9 K	8 K	7 K	6 K		
GRADIENT OF ORIGINAL RIVER BED	$i = \frac{V}{220} = \frac{1}{614}$		$i = \frac{V}{188} = \frac{1}{1898}$		$i = \frac{V}{154} = \frac{1}{1526}$		$i = \frac{V}{120} = \frac{1}{1400}$	
LOWEST RIVER BED HEIGHT	673.24	678.20	681.07	683.30	690.78	695.90	699.86	703.08
ACCUMULATED DISTANCE	0	116	216	316	414	518	614	724
DISTANCE	0	100	100	100	100	100	100	100
STATION	82	80	78	76	74	72	70	68