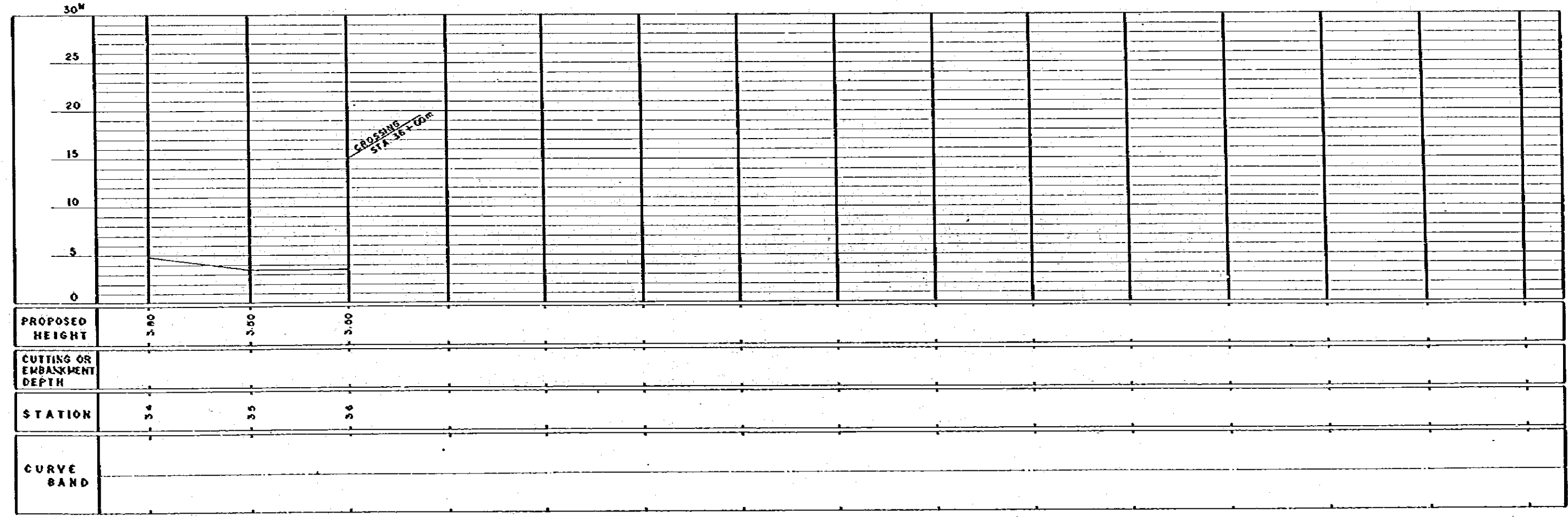
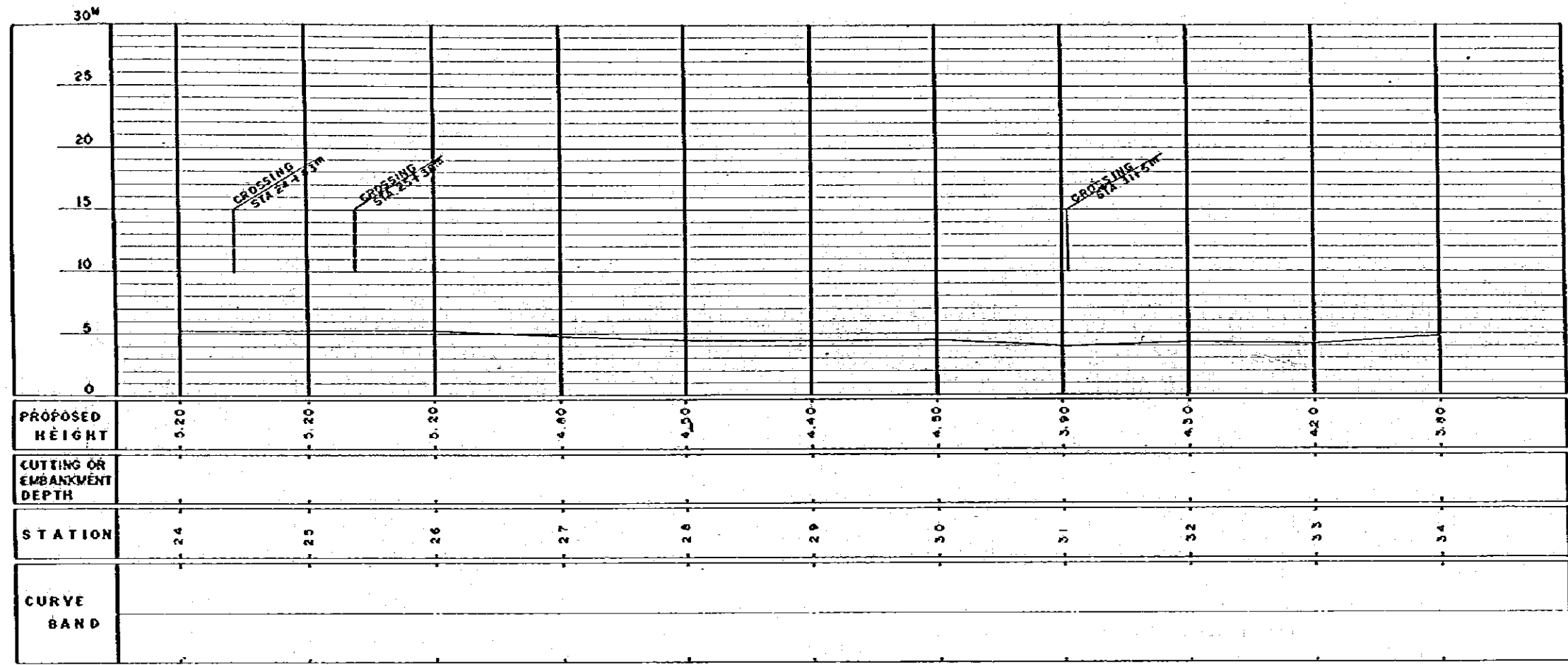
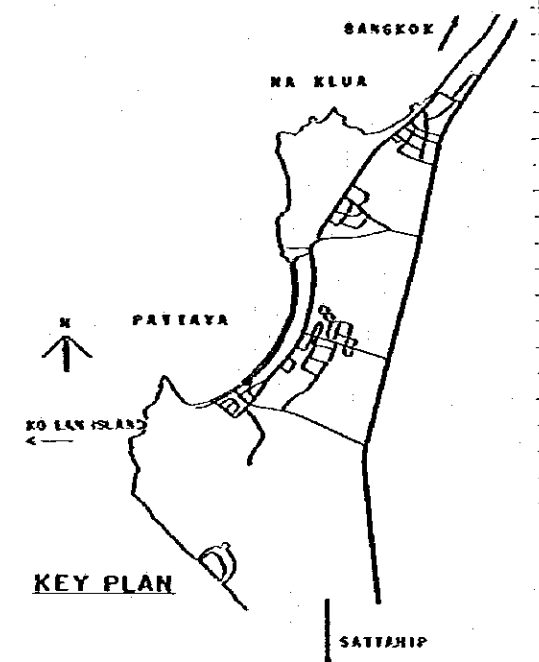
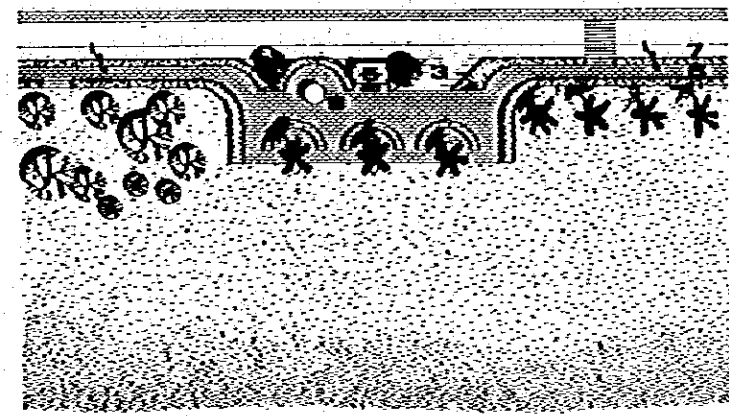
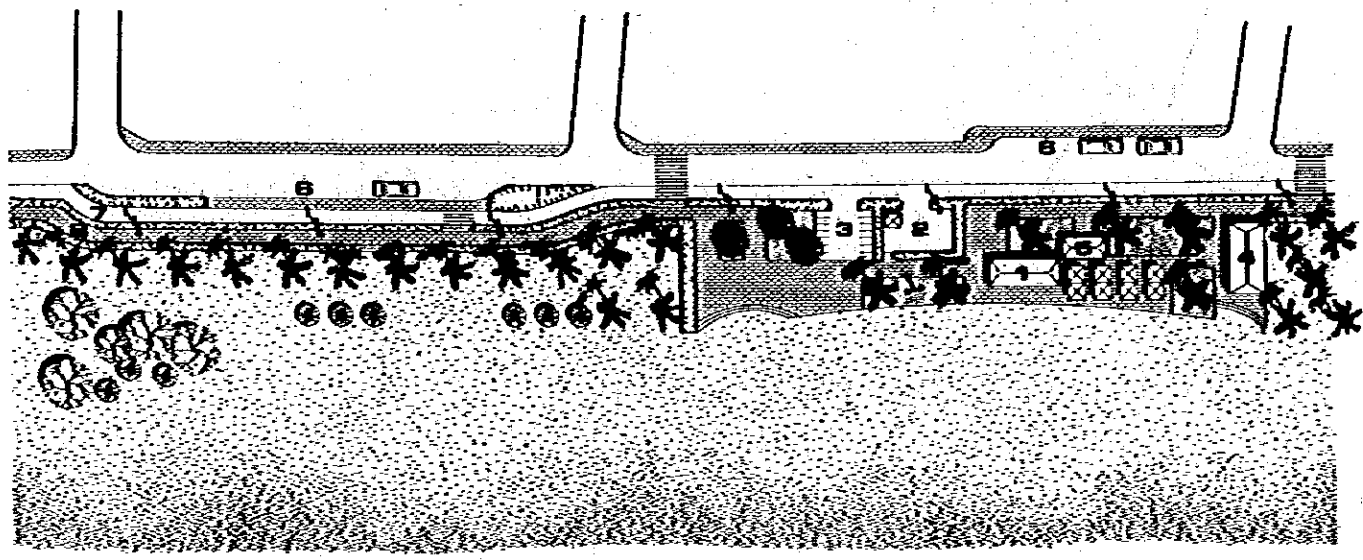


KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1
 SYSTEM: ROAD AND STREET
 PROFILE OF BEACH PROMNADE IMPROVEMENT (2)
 DATE: 1978
 SCALE: H:1:4000, V:1:400
DWG. NO. R-052 62/134
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.

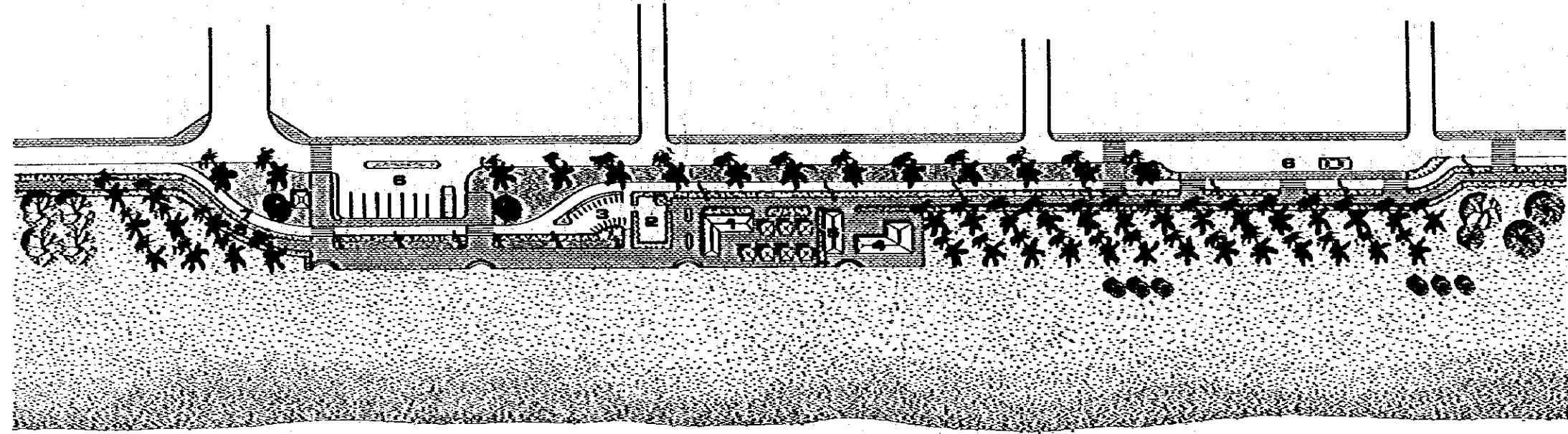
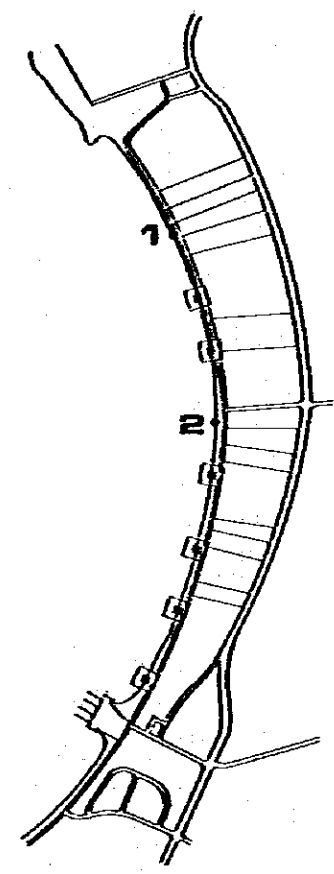


KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1
 SYSTEM: ROAD AND STREET
 PLAN OF BEACH SIDE PARK
 DATE: 1978
 SCALE: 53 / 134
DWG. NO. R-053
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



1. SERVICE PARK

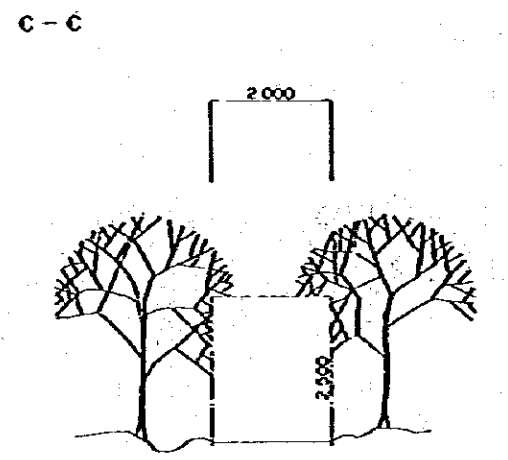
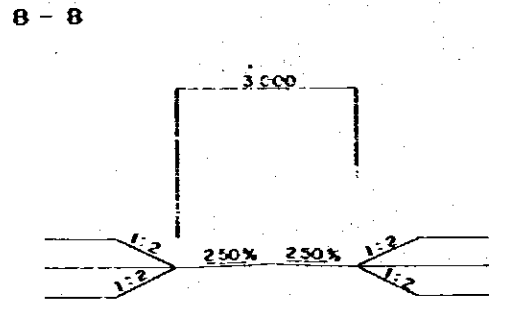
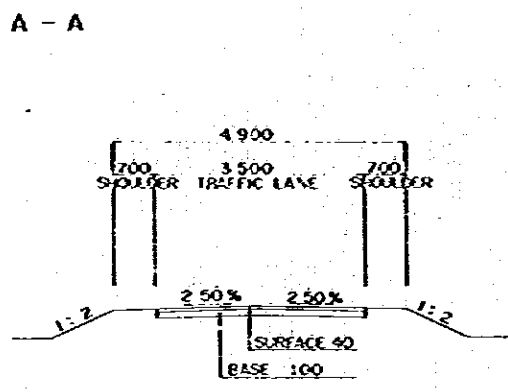
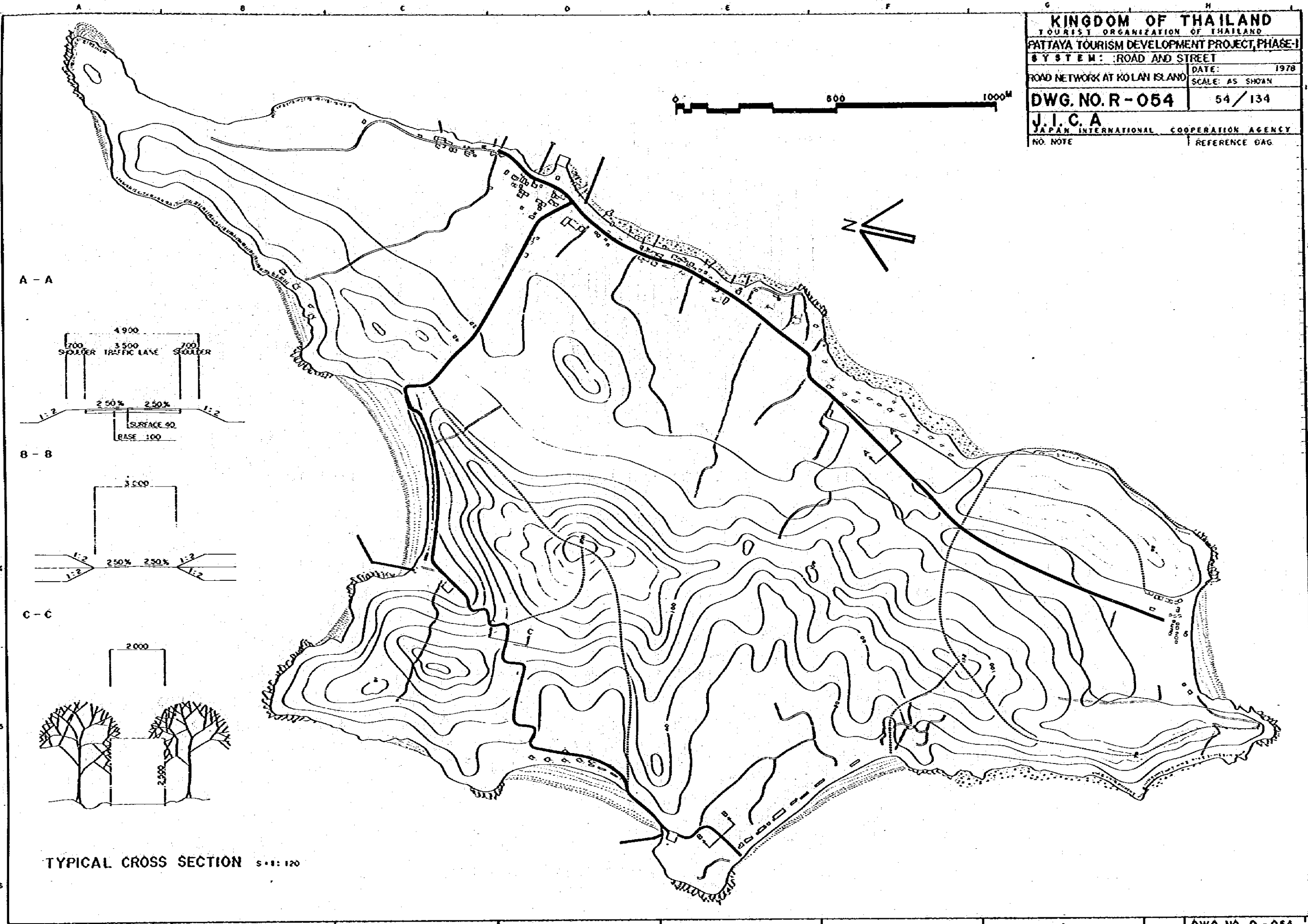
□ SATELLITE PARK



2. SERVICE PARK

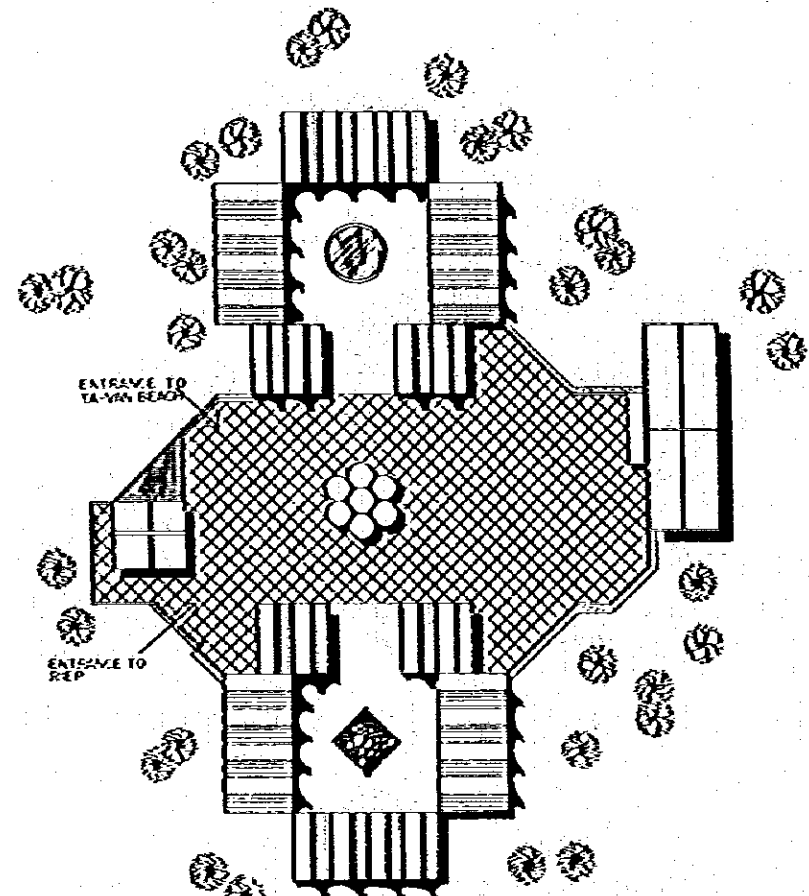
- LEGEND**
- 1 SNACK BAR
 - 2 BICYCLE RENTING
 - 3 BICYCLE PARKING
 - 4 SERVICE FACILITIES
 - 5 PUBLIC TOILET
 - 6 TAXI PICK UP STATION
 - 7 BICYCLE WAY
 - 8 PEDESTRIAN WAY
 - 9 VENDING

KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: ROAD AND STREET	
ROAD NETWORK AT KO LAN ISLAND	DATE: 1978
	SCALE: AS SHOWN
DWG. NO. R-054	54 / 134
J. I. C. A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DAG

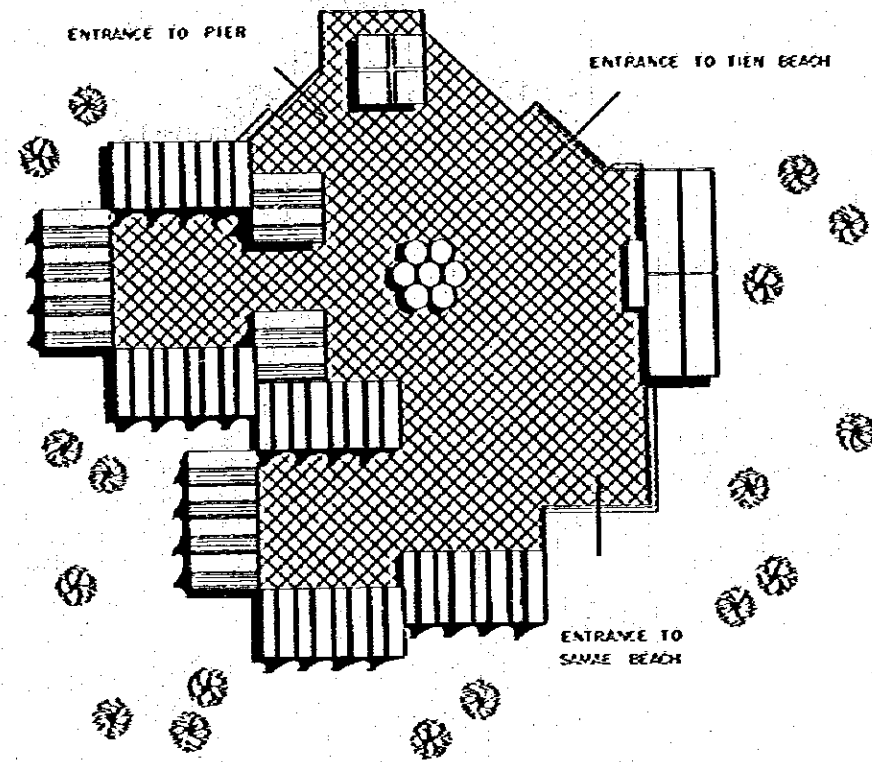


TYPICAL CROSS SECTION S:V: 1:20

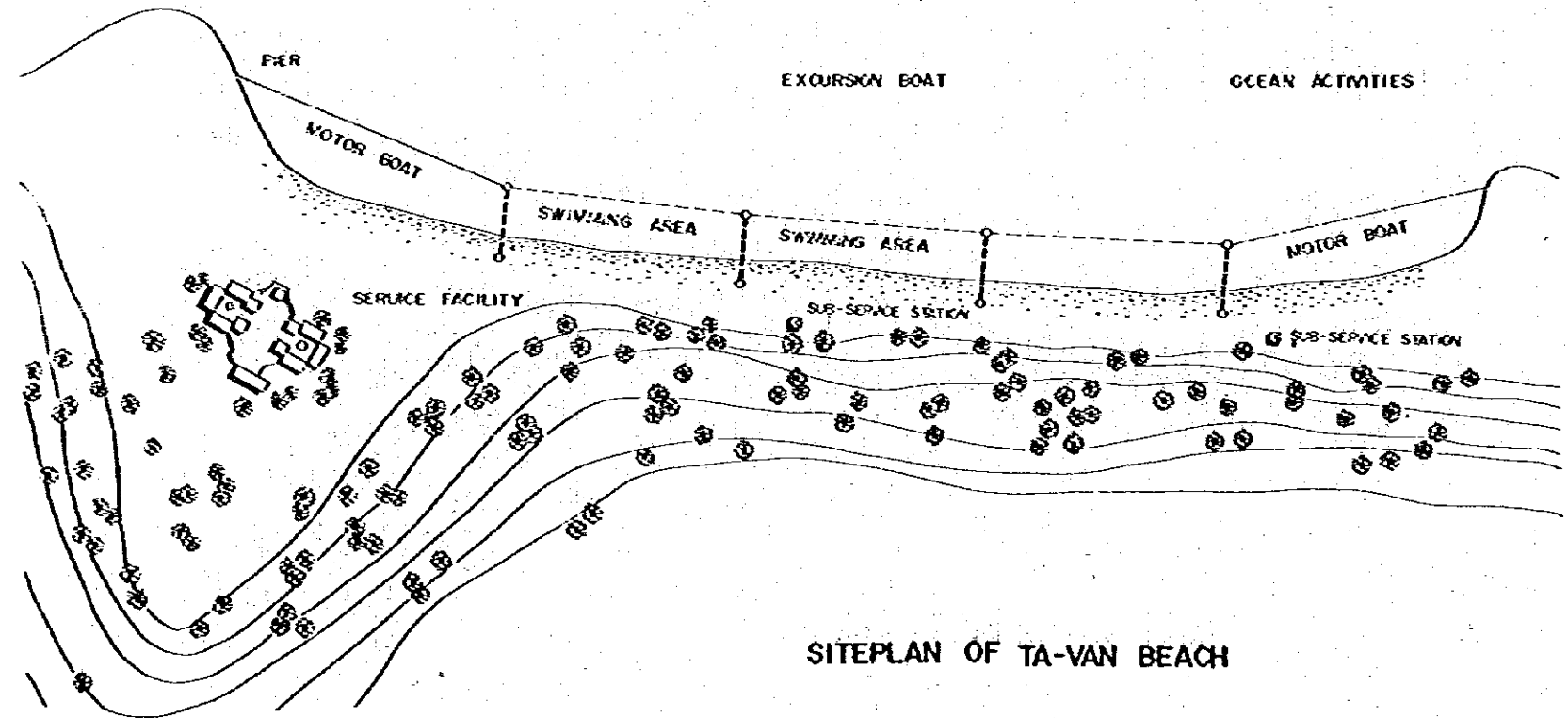
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1	
SYSTEM: ROAD AND STREET	
BEACH SERVICE FACILITY AT KO LAN ISLAND	DATE: 1978
DWG. NO. R-055	SCALE: 55 / 134
J. I. C. A.	REFERENCE CWS
NO. NOTE	



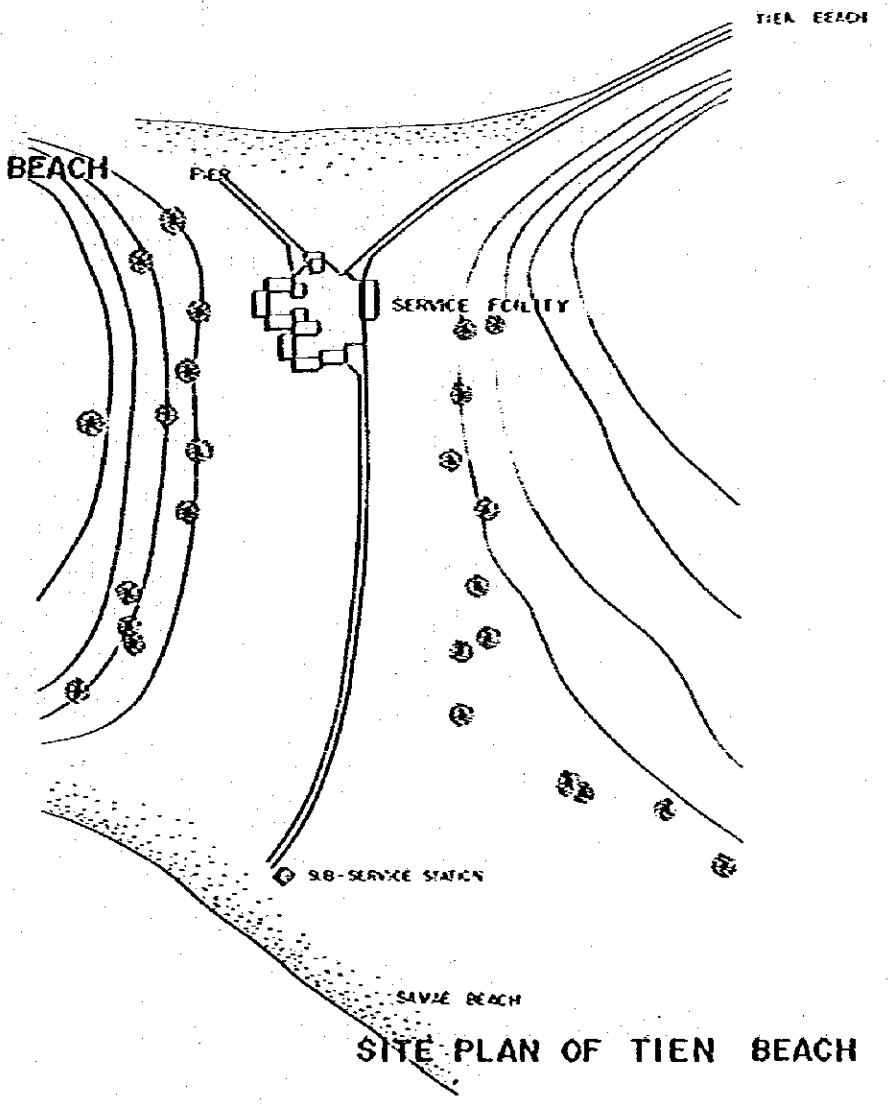
SERVICE FACILITY LAYOUT PLAN OF TA-VAN BEACH



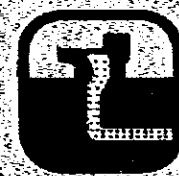
SERVICE FACILITY LAYOUT PLAN OF TIEN BEACH



SITEPLAN OF TA-VAN BEACH



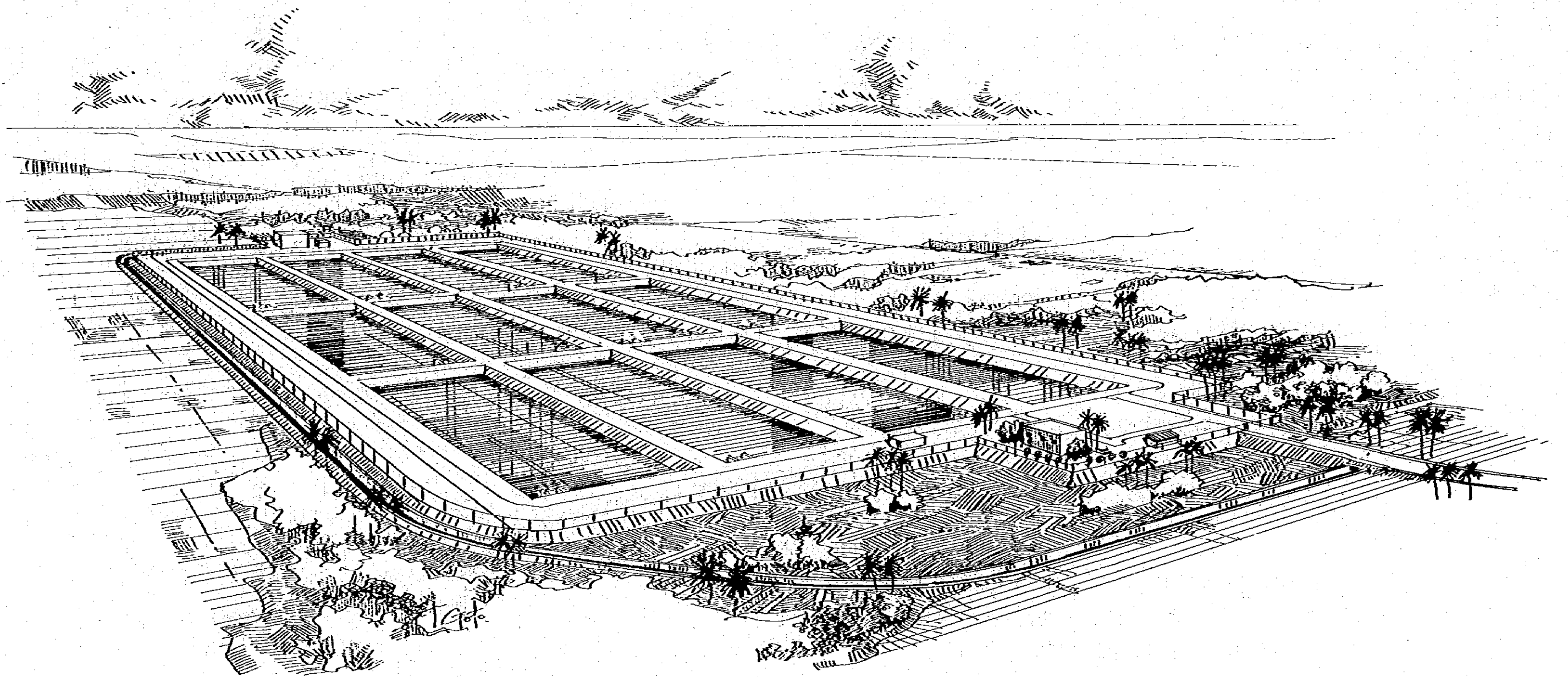
SITE PLAN OF TIEN BEACH



SEWERAGE SYSTEM

SEWERAGE SYSTEM

SE-001	GENERAL PLAN	SE-020	SEWER PIPE LONGITUDINAL PROFILE (5)
002	NA KLUA SEWAGE TREATMENT PLANT PLAN	021	SEWER PIPE LONGITUDINAL PROFILE (6)
003	CHART OF THE WATER FLOW NA KLUA SEWAGE TREATMENT PLANT	022	SEWER PIPE LONGITUDINAL PROFILE (7)
004	TYPICAL CROSS SECTION NA KLUA SEWAGE TREATMENT PLANT	023	SEWER PIPE LONGITUDINAL PROFILE (8)
005	PLAN OF PUMPING HOUSE NA KLUA SEWAGE TREATMENT PLANT	024	SEWER PIPE LONGITUDINAL PROFILE (9)
006	PLAN OF OFFICE & CONTROL HOUSE NA KLUA SEWAGE TREATMENT PLANT	025	SEWER PIPE LONGITUDINAL PROFILE (10)
007	PATTAYA SEWAGE TREATMENT PLANT PLAN	026	SEWER PIPE LONGITUDINAL PROFILE (11)
008	CHART OF THE WATER FLOW PATTAYA SEWAGE TREATMENT PLANT	027	SEWER PIPE LONGITUDINAL PROFILE (12)
009	TYPICAL CROSS SECTION PATTAYA SEWAGE TREATMENT PLANT	028	SEWER PIPE LONGITUDINAL PROFILE (13)
010	PLAN OF OFFICE & CONTROL HOUSE PATTAYA SEWAGE TREATMENT PLANT	029	SEWER PIPE LONGITUDINAL PROFILE (14)
011	PLAN OF DIVIDING WELL AND OUTFLOW	030	SEWER PIPE LONGITUDINAL PROFILE (15)
012	PLAN OF STERILIZATION & PUMPING HOUSE	031	SEWER PIPE LONGITUDINAL PROFILE (16)
013	PLAN OF LIFT STATION	032	SEWER PIPE LONGITUDINAL PROFILE (17)
014	PLAN OF LATERAL & MANHOLE	033	SEWER PIPE LONGITUDINAL PROFILE (18)
015	SEWER PIPE-LINE PLAN	034	SEWER PIPE LONGITUDINAL PROFILE (19)
016	SEWER PIPE LONGITUDINAL PROFILE (1)	035	SEWER PIPE LONGITUDINAL PROFILE (20)
017	SEWER PIPE LONGITUDINAL PROFILE (2)	036	SEWER PIPE LONGITUDINAL PROFILE (21)
018	SEWER PIPE LONGITUDINAL PROFILE (3)	037	SEWER PIPE LONGITUDINAL PROFILE (22)
019	SEWER PIPE LONGITUDINAL PROFILE (4)	038	SEWER PIPE LONGITUDINAL PROFILE (23)
		039	DISCHARGING DITCH PLAN & LONGITUDINAL PROFILE (1)
		040	DISCHARGING DITCH PLAN & LONGITUDINAL PROFILE (2)

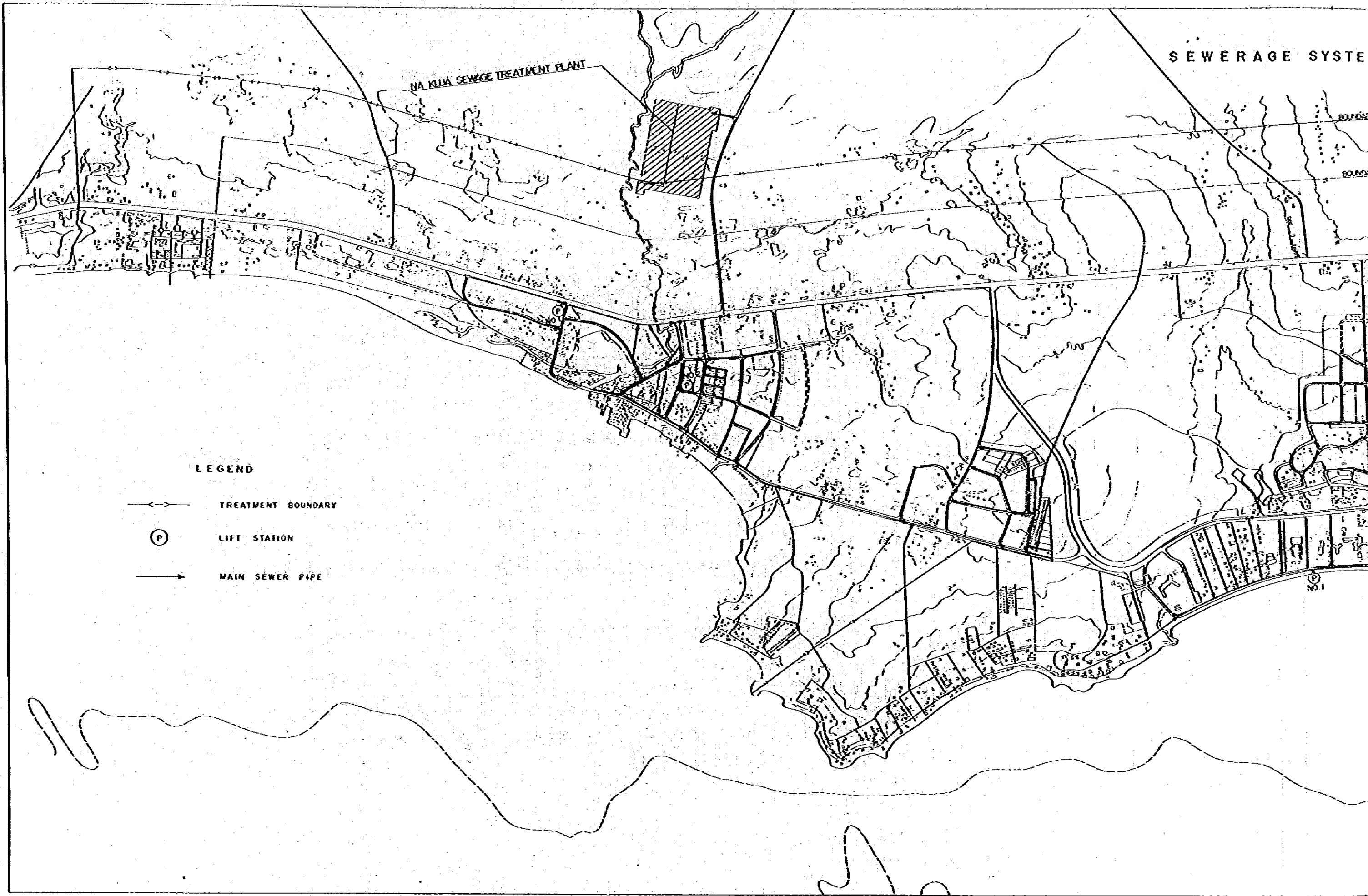


SEWERAGE SYSTEM

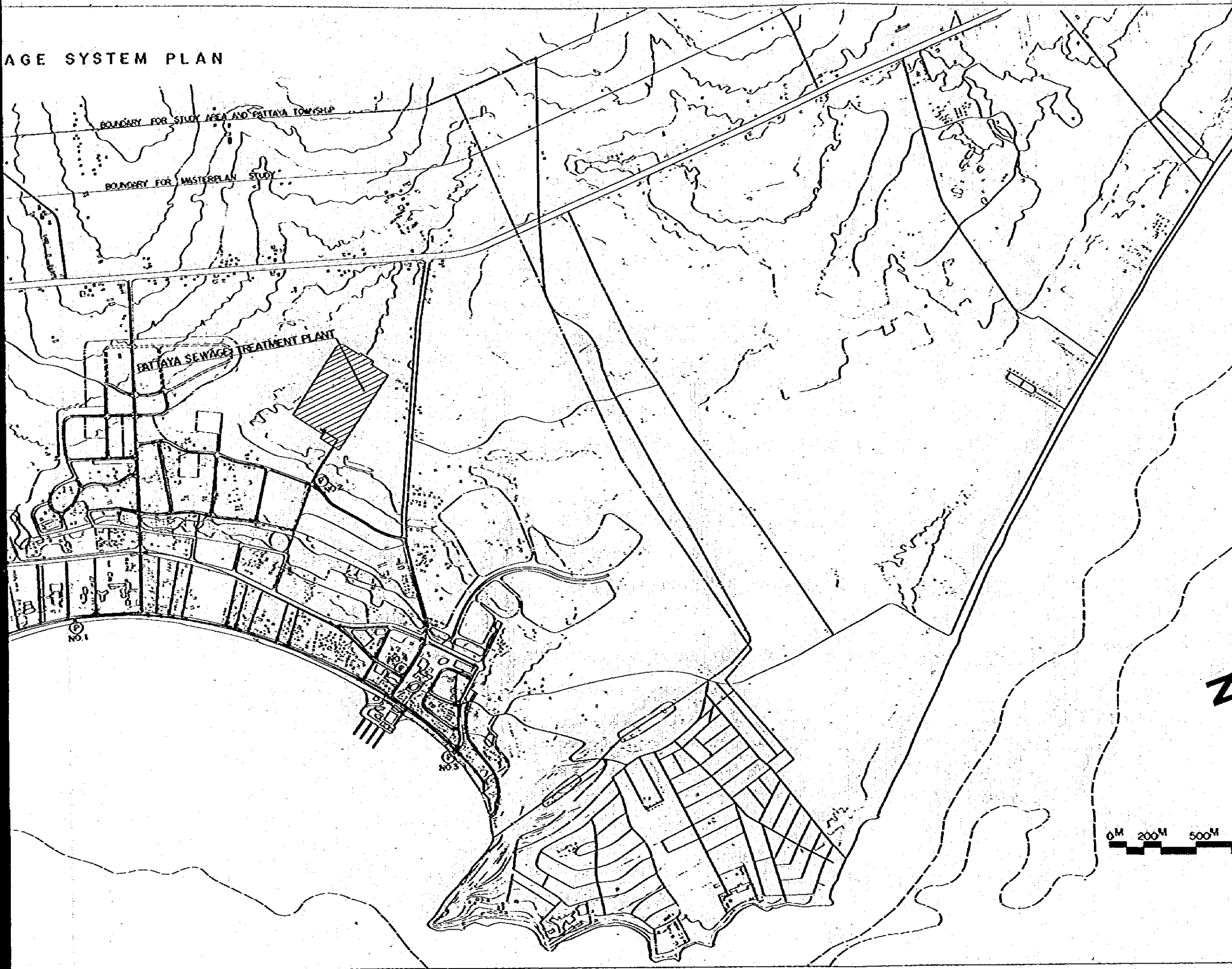
NA KUA SEWAGE TREATMENT PLANT

LEGEND

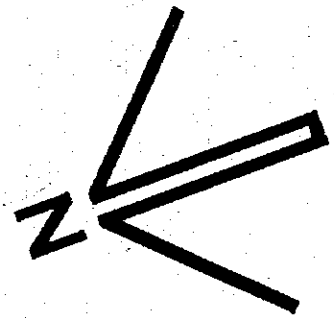
- ↔ TREATMENT BOUNDARY
- (P) LIFT STATION
- MAIN SEWER PIPE



AGE SYSTEM PLAN



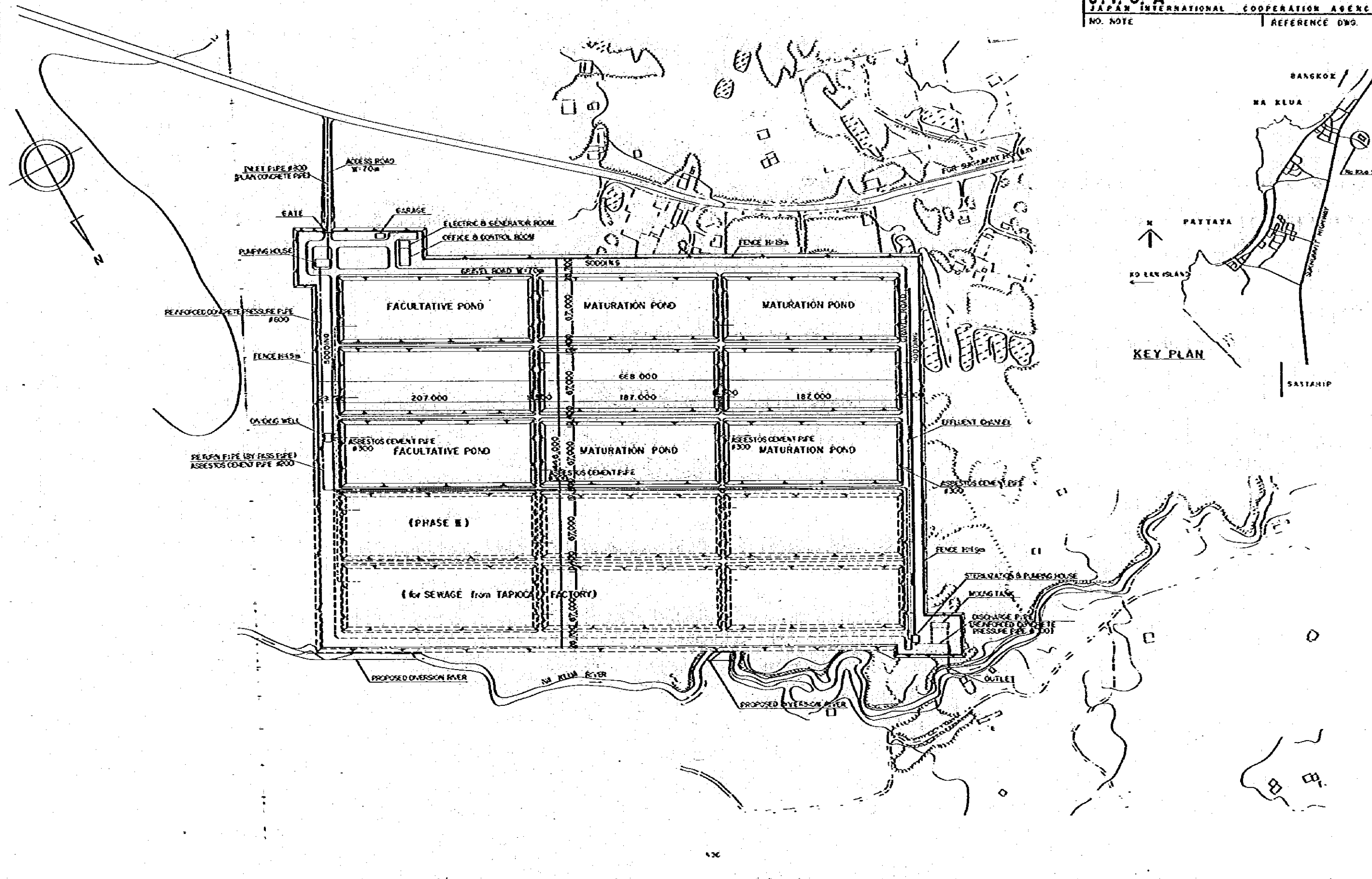
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
GENERAL PLAN	DATE: 1978
	SCALE: 1:20,000
DWG. NO. SE-001	56/134
J.I.C.A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG
Elevation shown on the Drawings are based on the Datum Line of Low Water Level, Otherwise Mentioned.	



NA KLUA SEWAGE TREATMENT PLANT SCALE 1:4,000

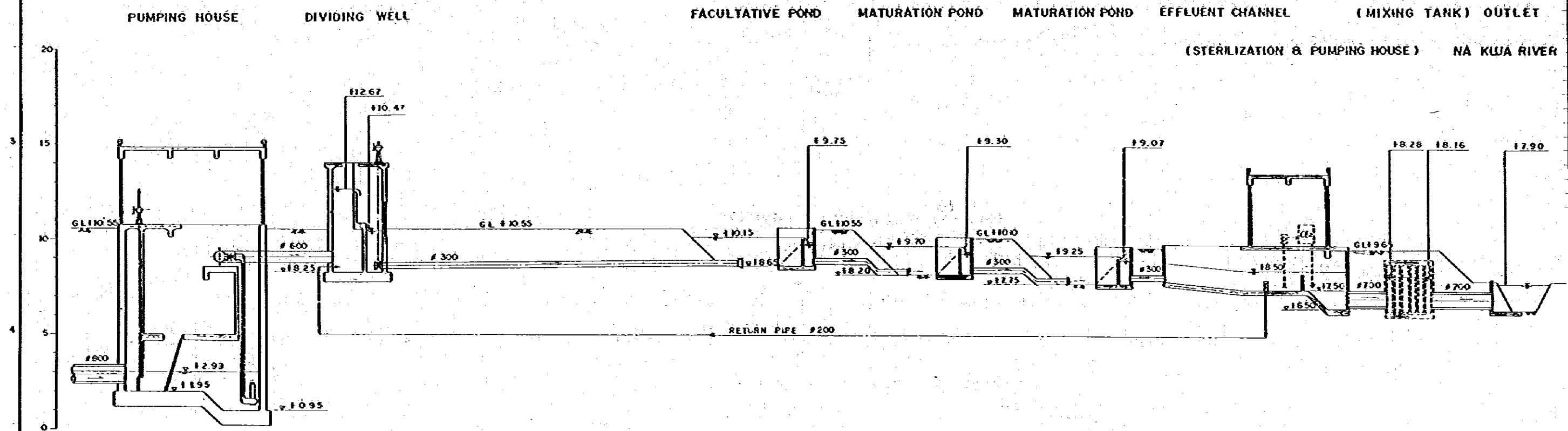
PLAN

KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
NA KLUA SEWAGE TREATMENT PLANT PLAN	DATE: 1978
	SCALE: 1:4,000
DWG. NO. SE-002	57/134
J.I.C.A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

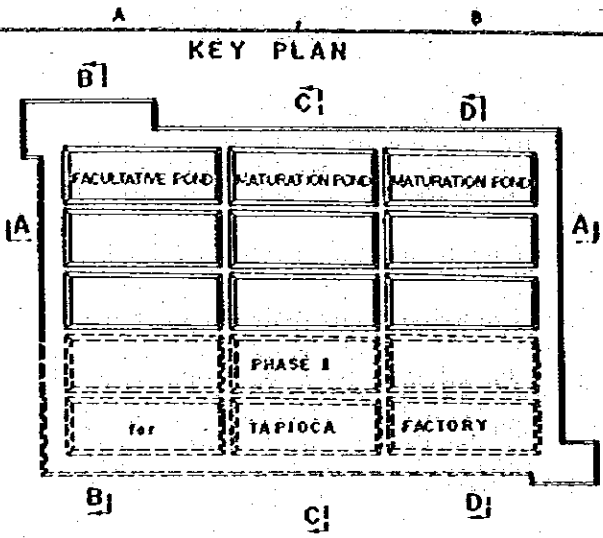


KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE I	
SYSTEM: SEWERAGE	
CHART OF THE WATER FLOW	DATE: 1978
NA KLUA SEWAGE TREATMENT PLANT	SCALE: NO-SCALE
DWG. NO. SE-003	58/134
J.I.C.A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

CHART OF THE WATER FLOW
NA KLUA SEWAGE TREATMENT PLANT



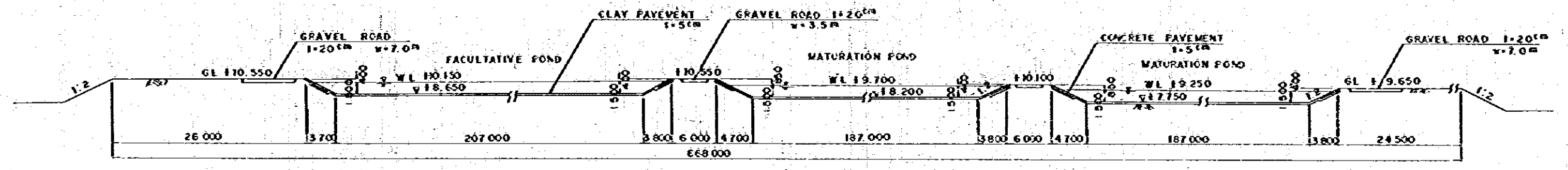
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
TYPICAL CROSS SECTION NA KLUA SEWAGE TREATMENT PLANT	DATE: 1978
DWG. NO. SE-004	SCALE: NO-SCALE 59/134
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.



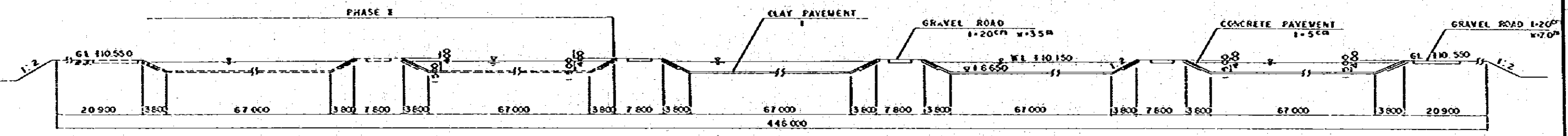
NA KLUA SEWAGE TREATMENT PLANT TYPICAL CROSS SECTION

LEGEND
I : THICKNESS
W : WIDTH

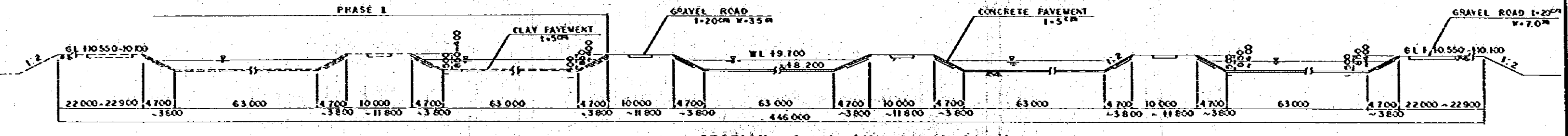
SECTION A - A



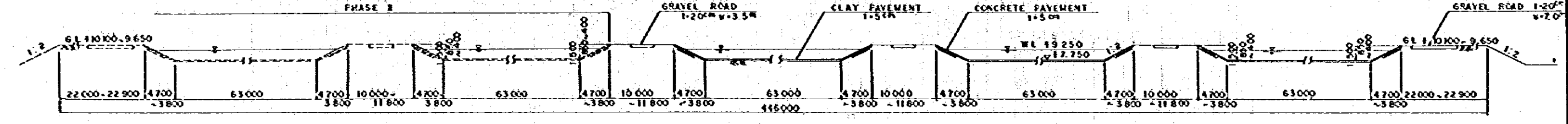
SECTION B - B (FACULTATIVE POND)



SECTION C - C (MATURATION POND)



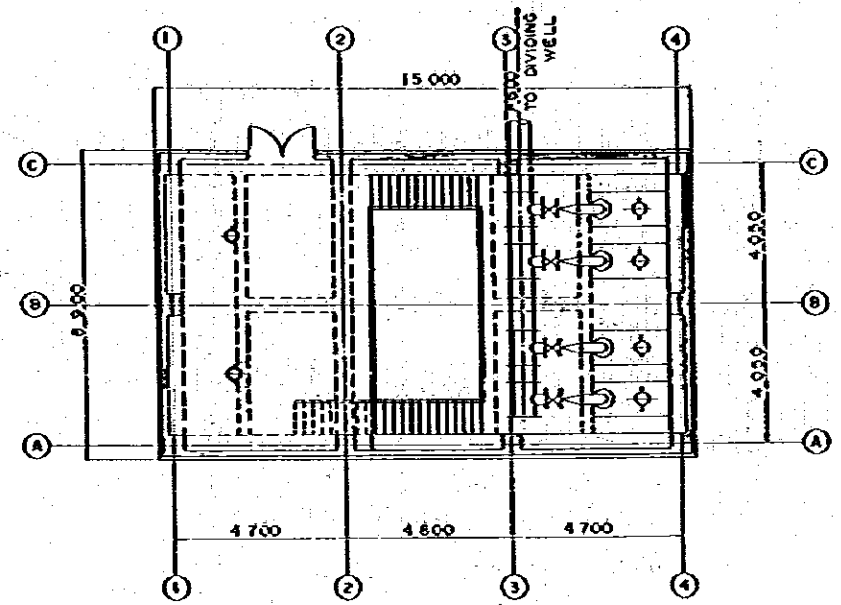
SECTION D - D (MATURATION POND)



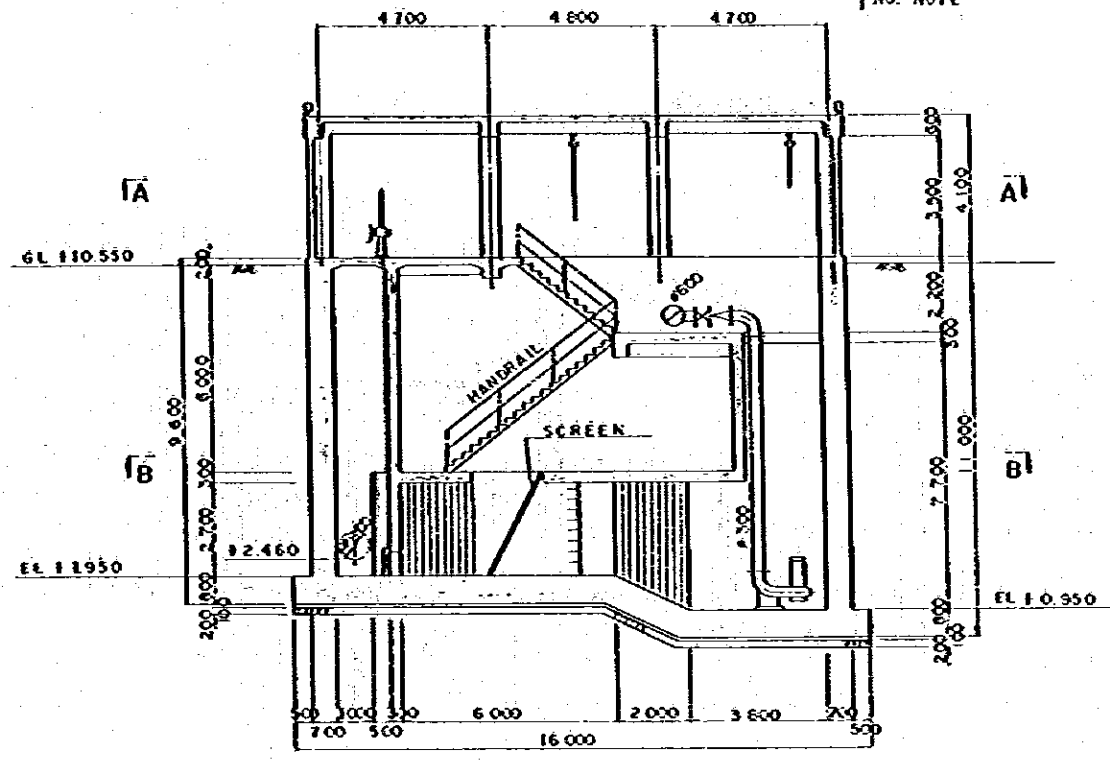
PUMPING HOUSE (NA KLUA SEWAGE TREATMENT PLANT) SCALE 1:200

KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
PLAN OF PUMPING HOUSE	DATE: 1978
NA KLUA SEWAGE TREATMENT PLANT	SCALE: 1:200
DWG. NO. SE-005	60 / 134
J. I. C. A	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

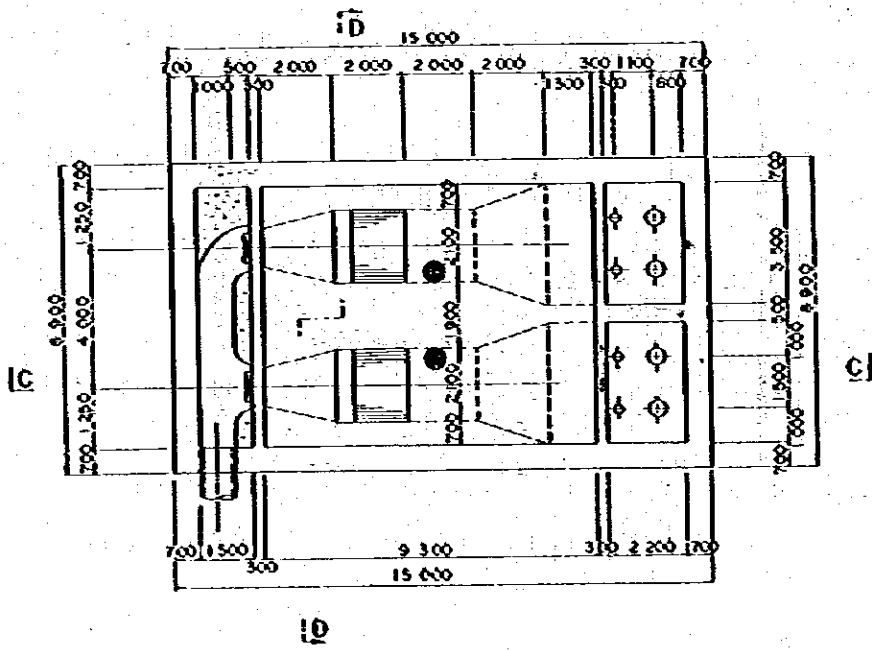
SECTION A - A



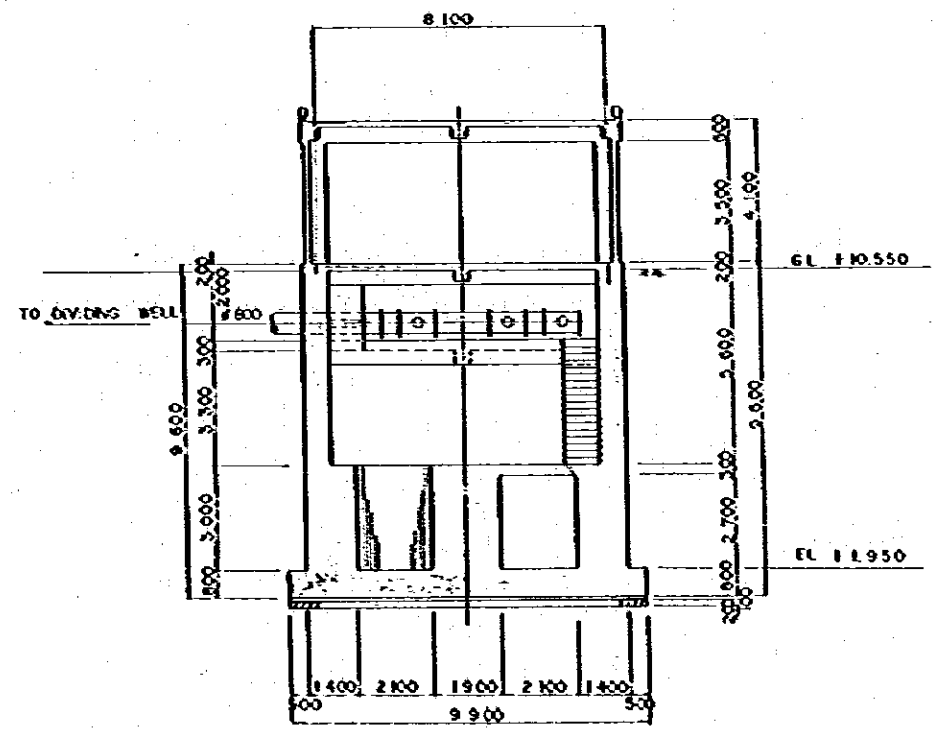
SECTION C-C



SECTION B - B



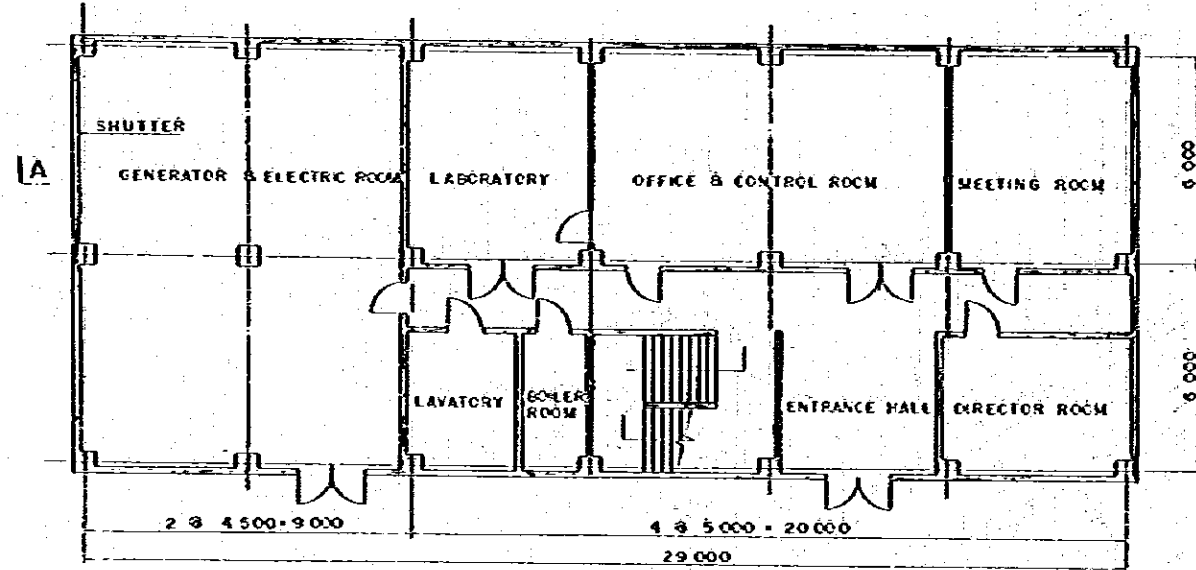
SECTION D - D



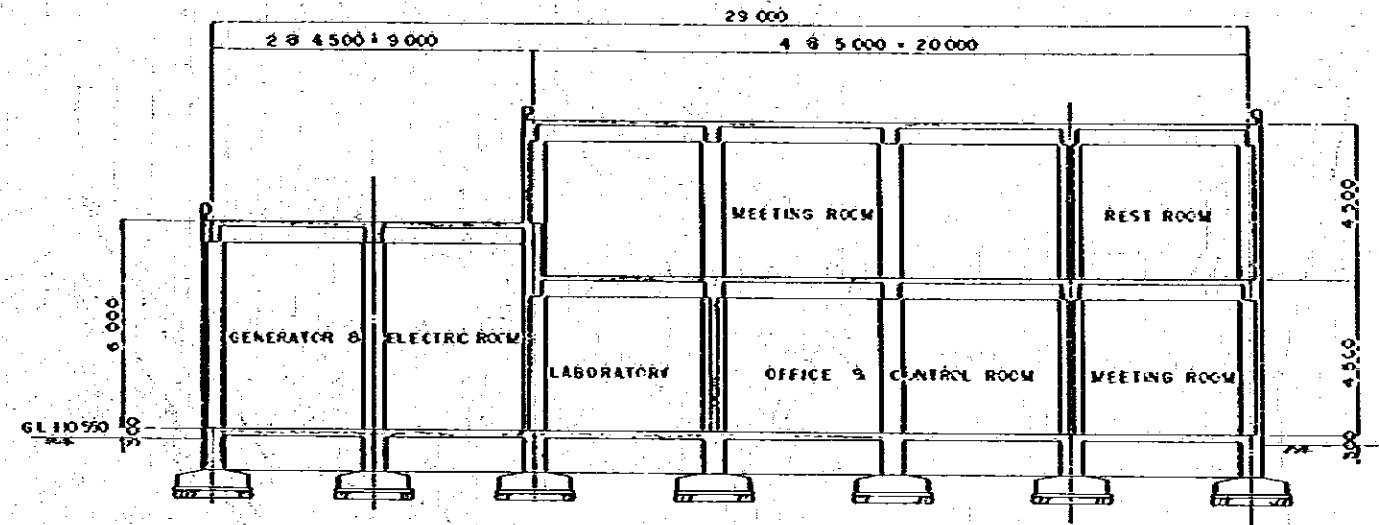
OFFICE & CONTROL HOUSE
 NA KLUA SEWAGE TREATMENT PLANT SCALE 1:200

KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
PLAN OF OFFICE & CONTROL HOUSE	DATE: 1978
NA KLUA SEWAGE TREATMENT PLANT	SCALE: 1:200
DWG. NO. SE-006	61 / 134
J. I. C. A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG

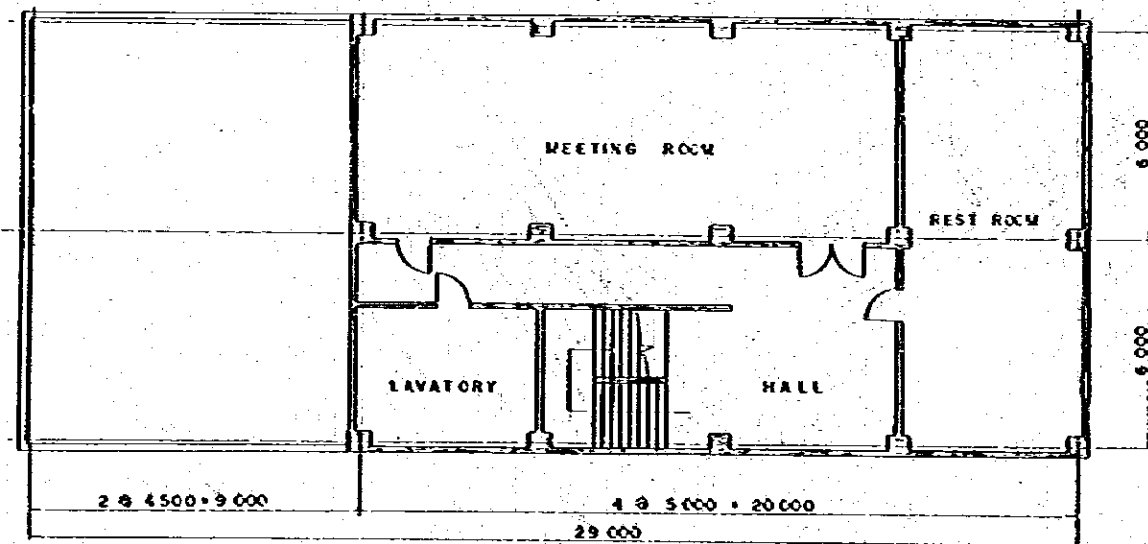
FIRST FLOOR PLAN



SECTION A-A

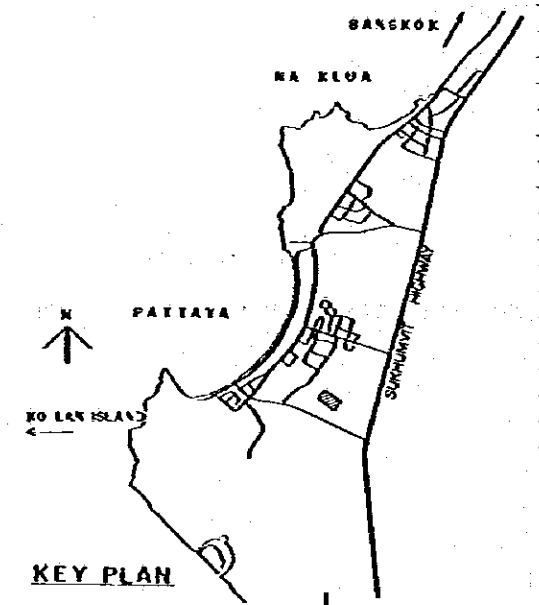
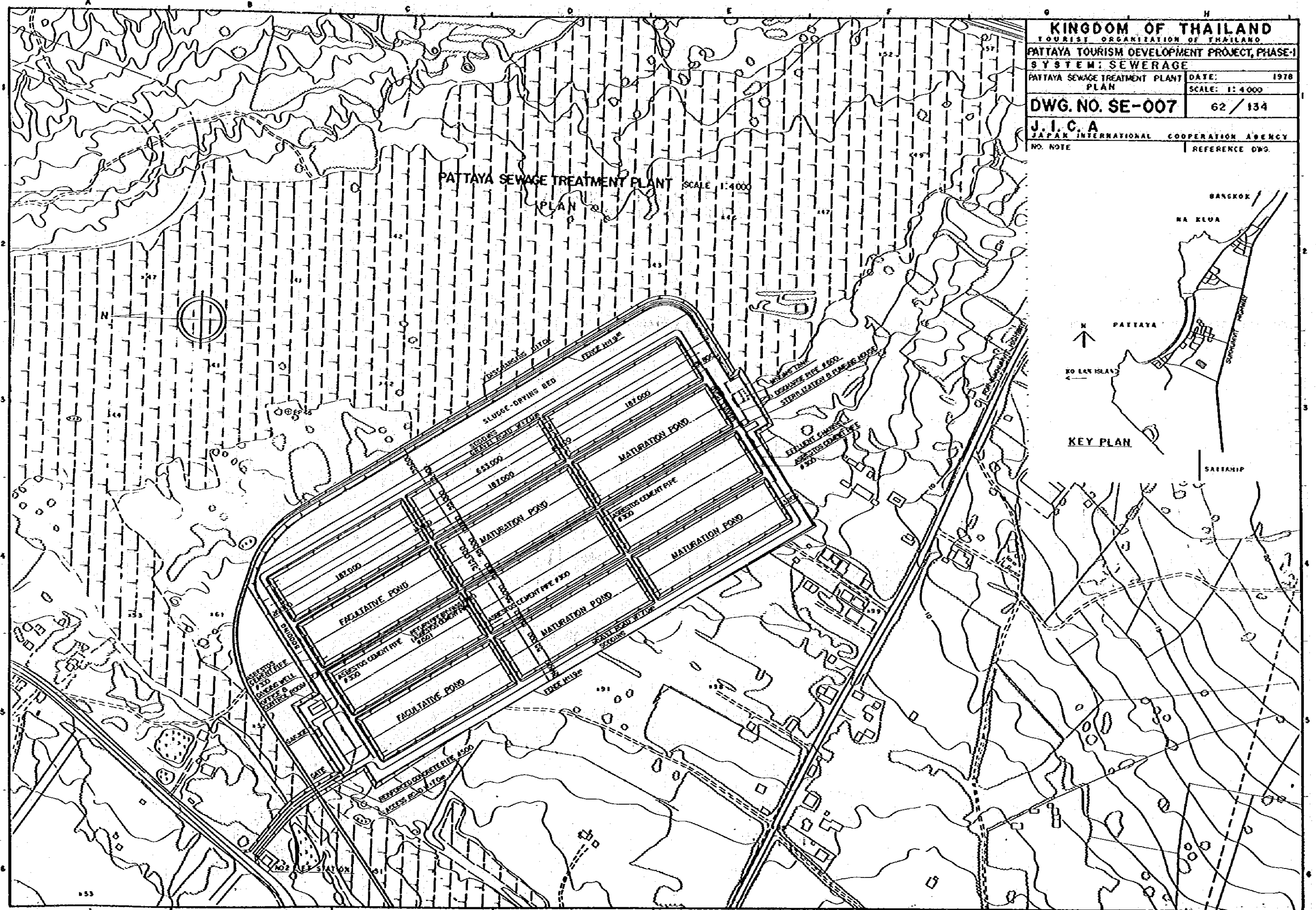


SECOND FLOOR PLAN



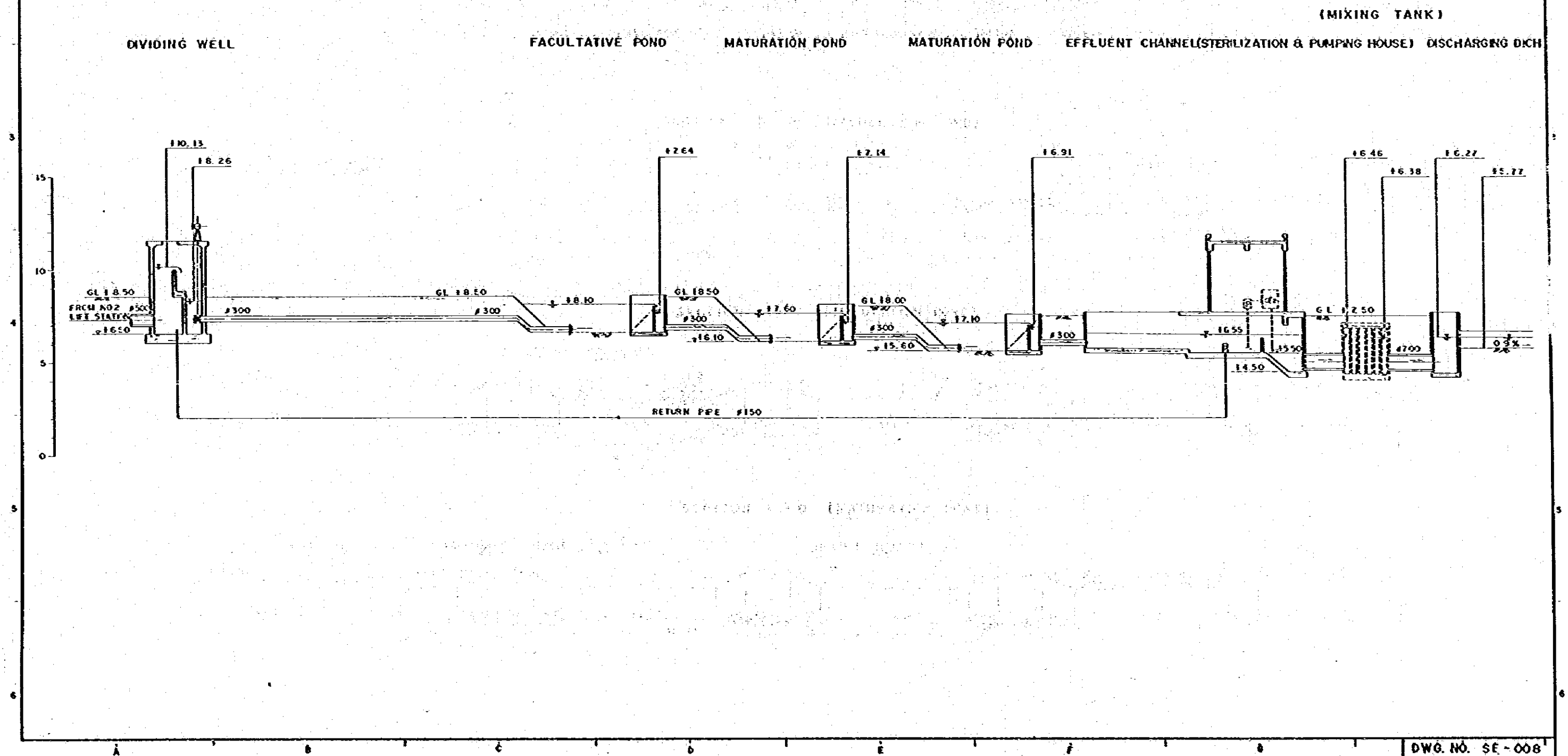
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
PATTAYA SEWAGE TREATMENT PLANT PLAN	DATE: 1978
	SCALE: 1:4000
DWG. NO. SE-007	62 / 134
J. I. C. A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

PATTAYA SEWAGE TREATMENT PLANT PLAN SCALE 1:4000

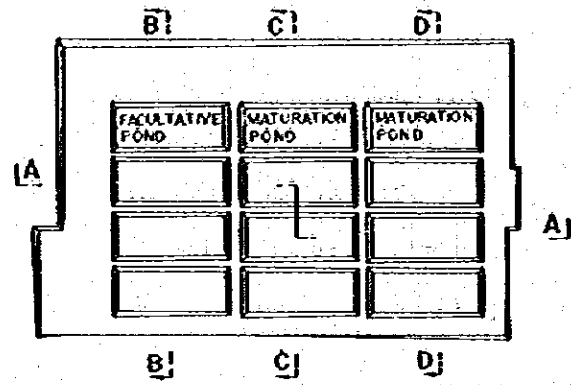


KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
CHART OF THE WATER FLOW	DATE: 1978
PATTAYA SEWAGE TREATMENT PLANT	SCALE: NO-SCALE
DWG. NO. SE-008	63/134
J. I. C. A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

CHART OF THE WATER FLOW
PATTAYA SEWAGE TREATMENT PLANT



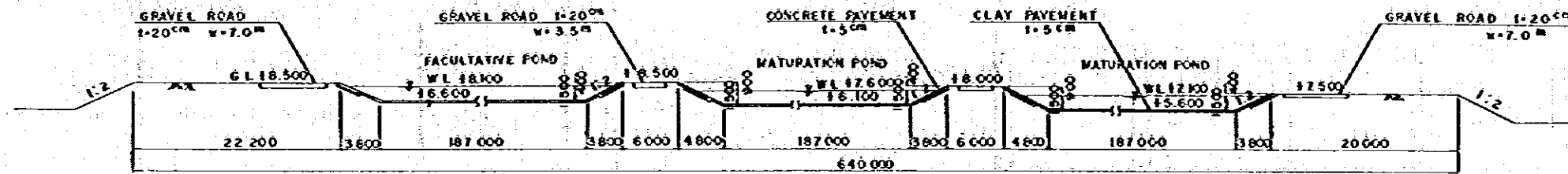
KEY PLAN



PATTAYA SEWAGE TREATMENT PLANT
TYPICAL CROSS SECTION

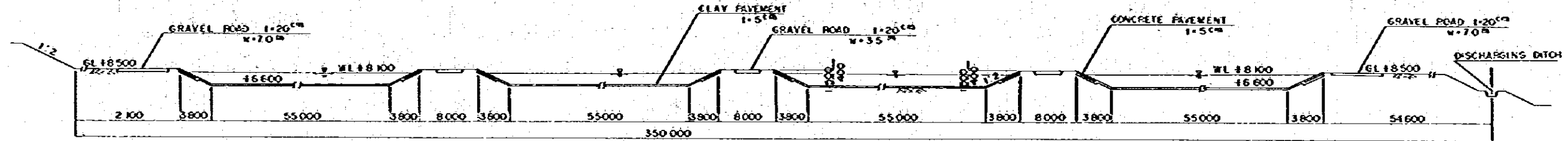
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
TYPICAL CROSS SECTION	DATE: 1978
PATTAYA SEWAGE TREATMENT PLANT	SCALE: NO - SCALE
DWG. NO. SE-009	64/134
J.I.C.A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

SECTION A - A

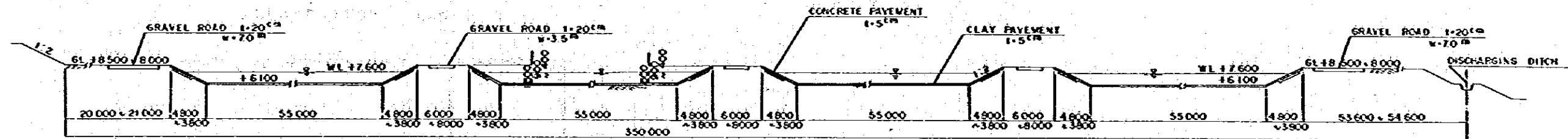


LEGEND
I : THICKNESS
W : WIDTH

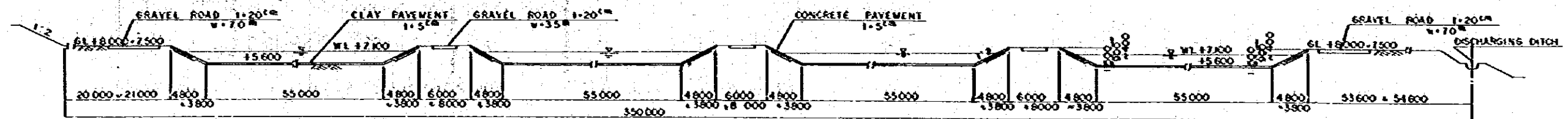
SECTION B - B (FACULTATIVE POND)



SECTION C - C (MATURATION POND)



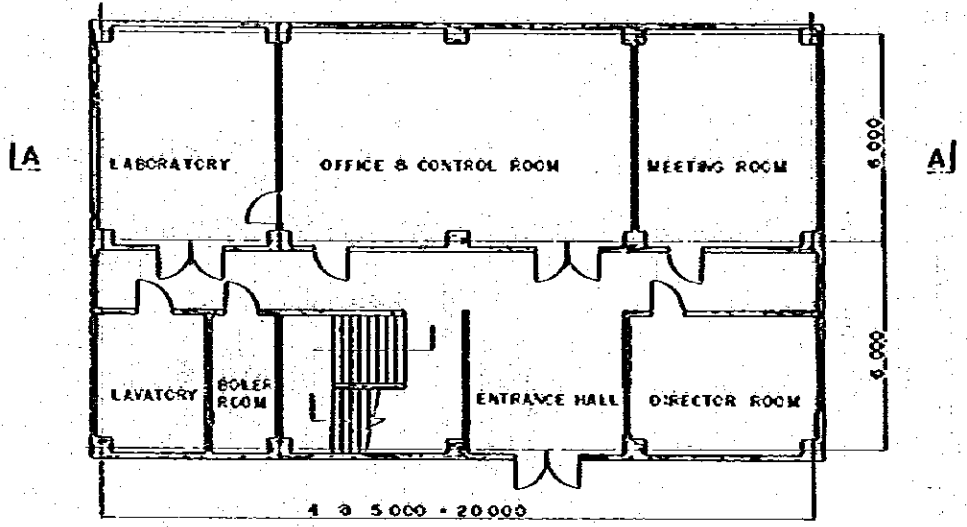
SECTION D - D (MATURATION POND)



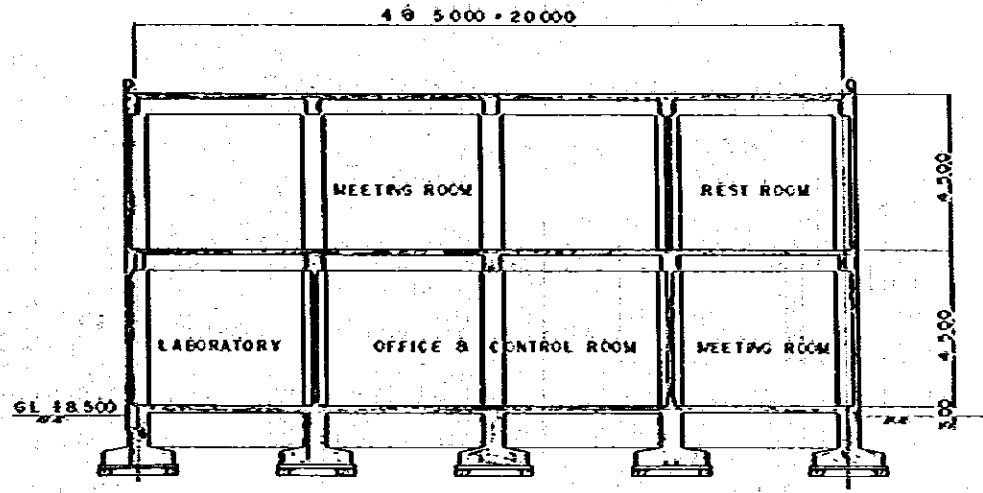
KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1	
SYSTEM: SEWERAGE	
PLAN OF OFFICE & CONTROL HOUSE	DATE: 1978
PATTAYA SEWAGE TREATMENT PLANT	SCALE: 1 : 200
DWG. NO. SE-010	65 / 134
J. I. C. A.	
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

OFFICE & CONTROL HOUSE
PATTAYA SEWAGE TREATMENT PLANT SCALE 1:200

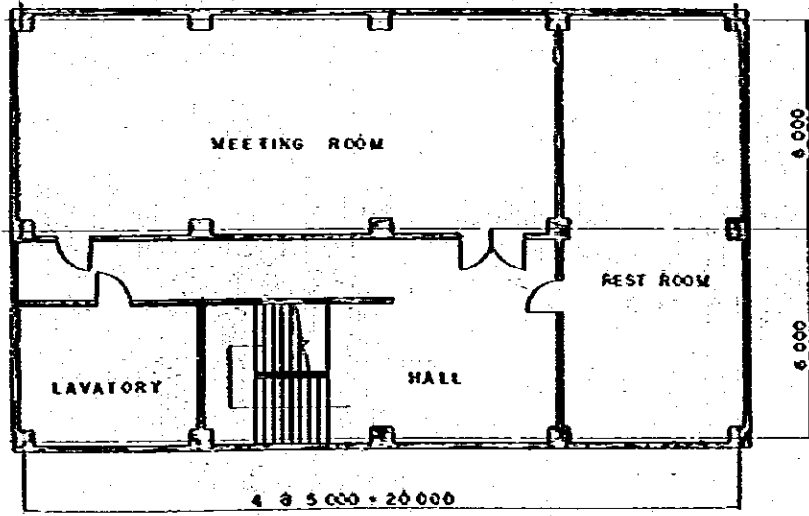
FIRST FLOOR PLAN



SECTION A-A



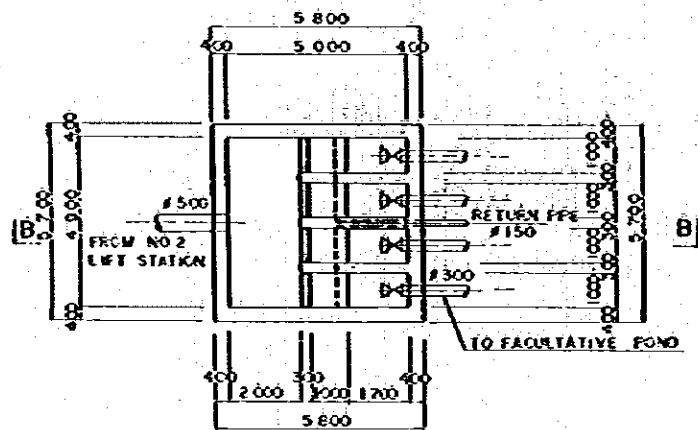
SECOND FLOOR PLAN



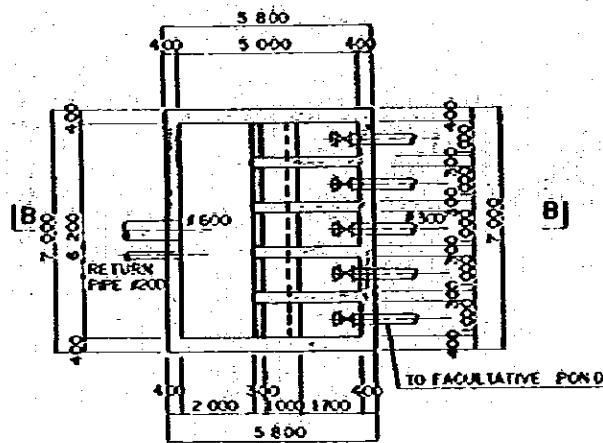
**DIVIDING WELL
 (PATTAYA SEWAGE TREATMENT PLAN)**
 SCALE 1:200

**DIVIDING WELL
 (NA KLUA SEWAGE TREATMENT PLAN)**
 SCALE 1:200

SECTION A-A

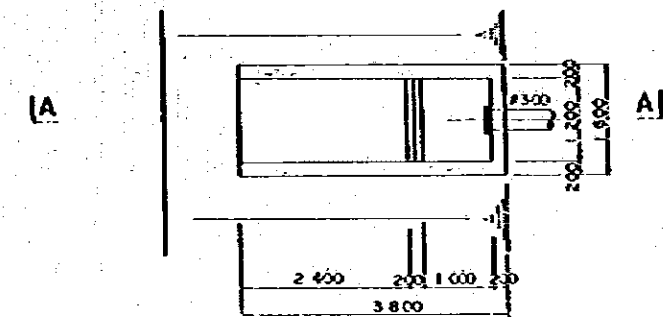


SECTION A-A

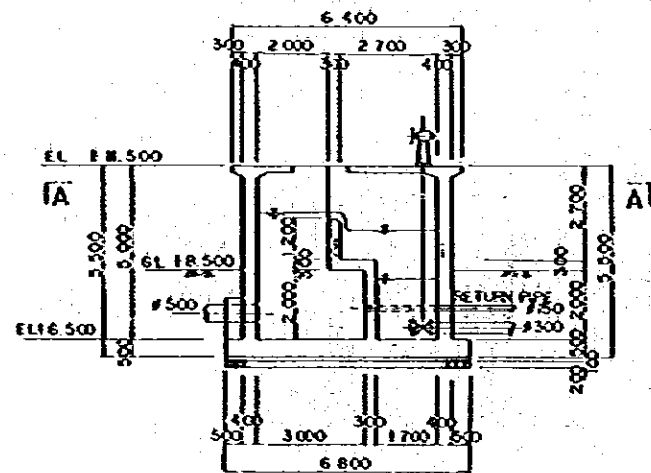


OUTFLOW OF EACH POND SCALE 1:100

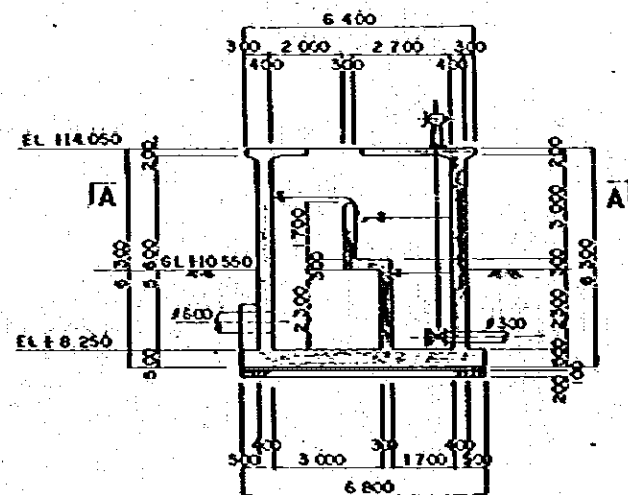
PLAN



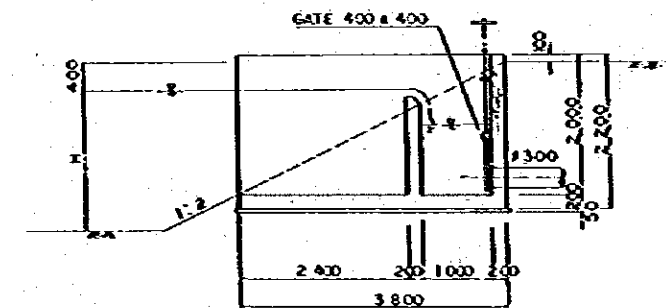
SECTION B-B



SECTION B-B



SECTION A-A

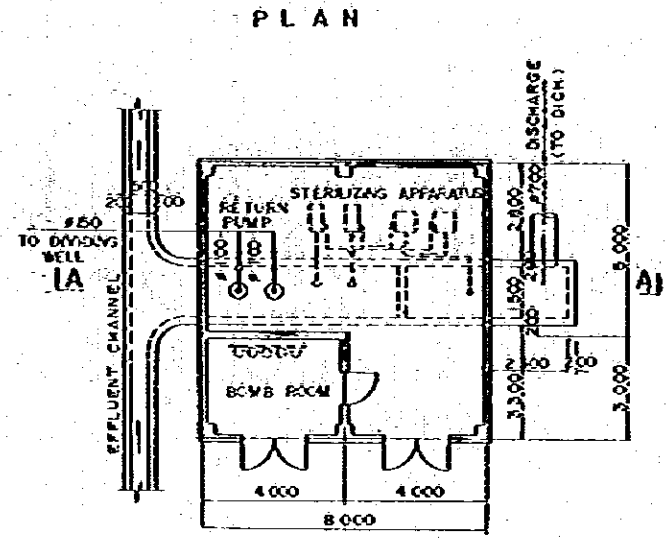


NOTE

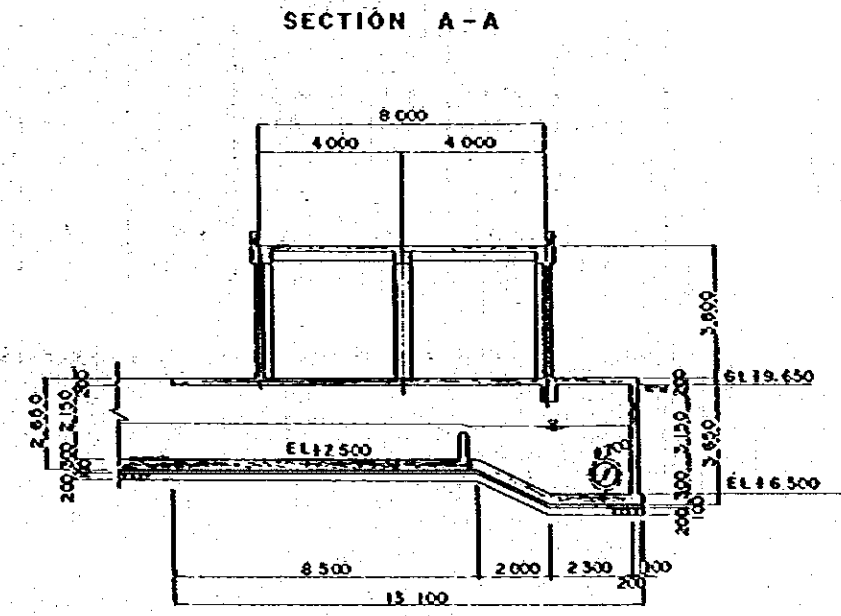
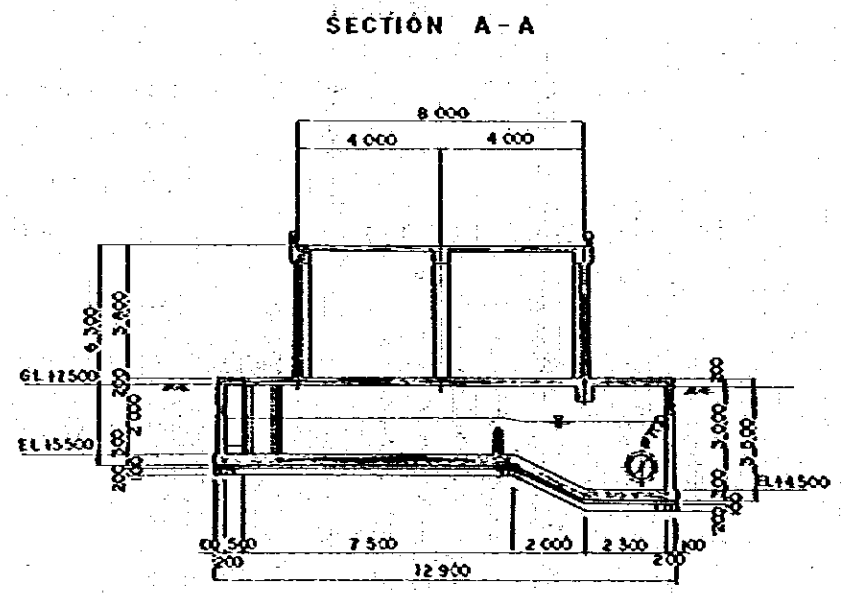
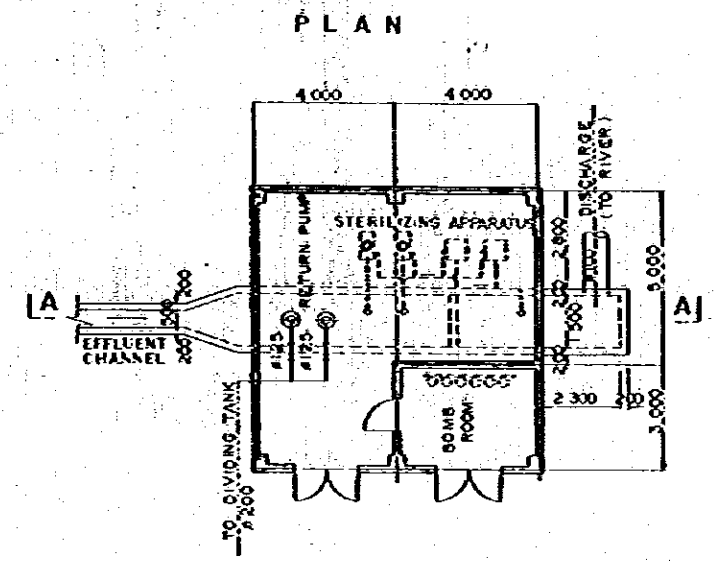
NAME OF POND	H
FACULTATIVE POND	1.500
MATURATION POND	1.500

KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
PLAN OF STERILIZATION & PUMPING HOUSE	DATE: 1978
DWG. NO. SE-012	SCALE: 1:200
J.I.C.A.	67/134
JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.

STERILIZATION & PUMPING HOUSE
(PATTAYA SEWAGE TREATMENT PLANT)
SCALE 1:200



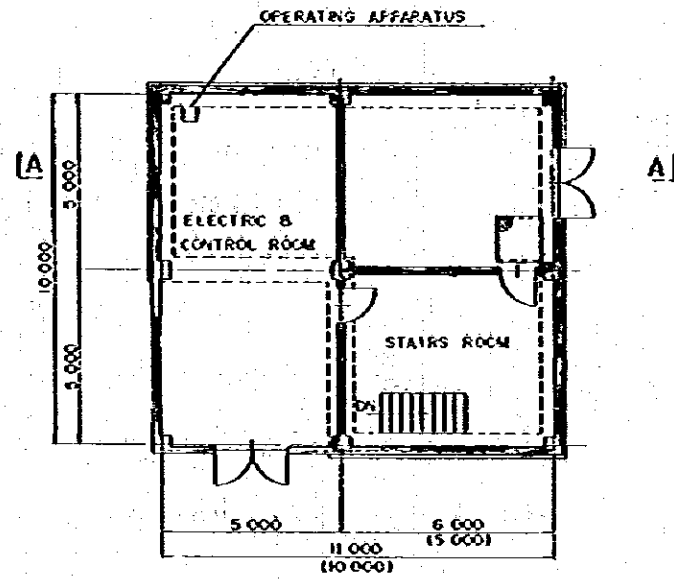
STERILIZATION & PUMPING HOUSE
(NA KLUA SEWAGE TREATMENT PLANT)
SCALE 1:200



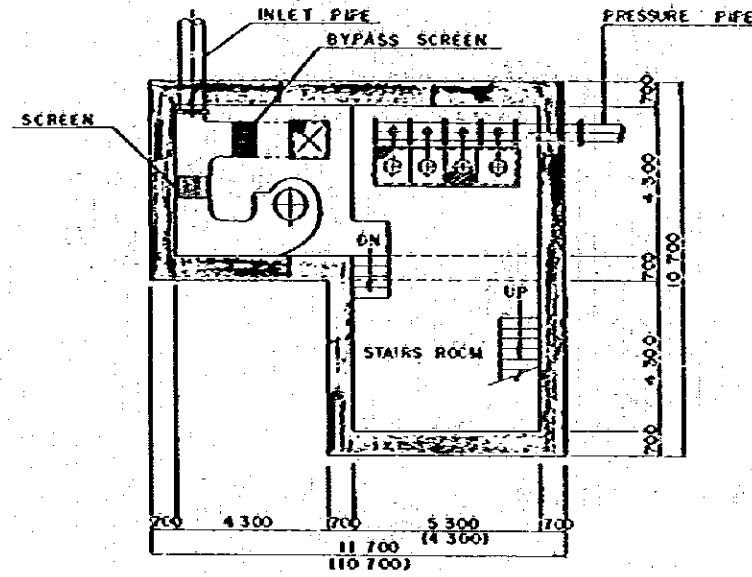
LIFT STATION

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE I
 SYSTEM: SEWERAGE
PLAN OF LIFT STATION DATE: 1978
 SCALE: 1:200, 1:400
DWG. NO. SE-013 68 / 134
J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG

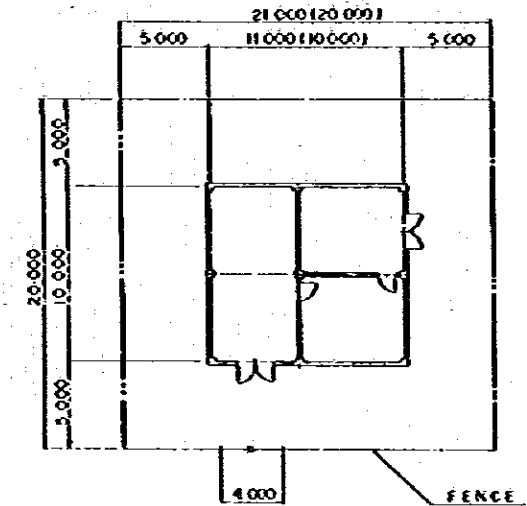
PLAN SCALE 1:200



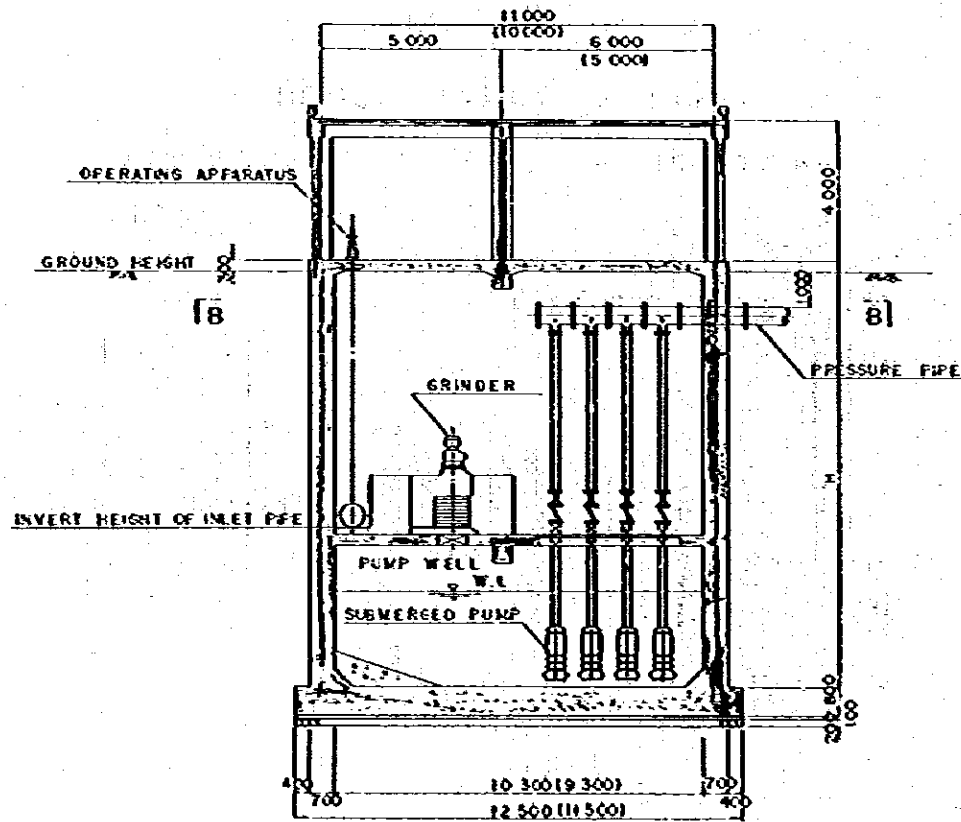
SECTION B-B SCALE 1:200



PLAN SCALE 1:400



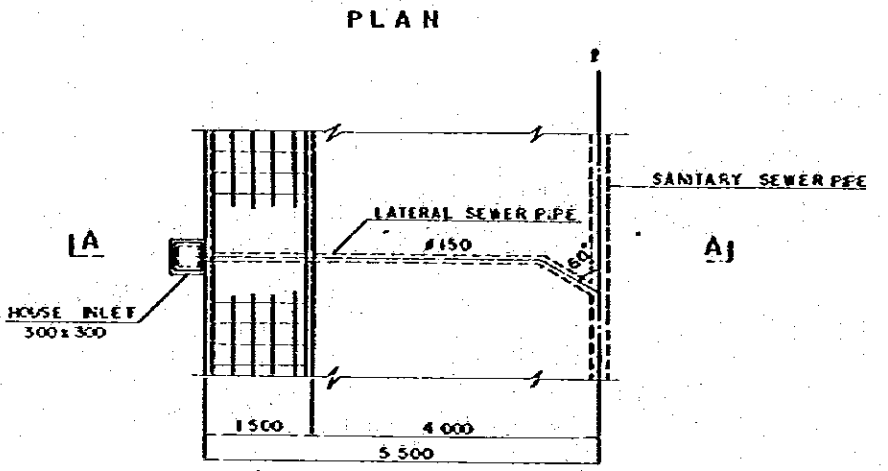
SECTION A-A SCALE 1:200



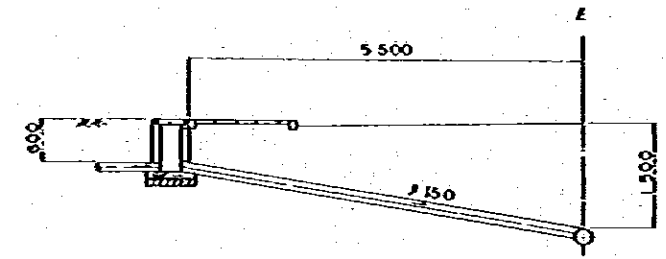
NAME OF LIFT STATION ITEM	NA KLU A		PATTAYA			
	NO. 1	NO. 2	NO. 1	NO. 2	NO. 3	NO. 4
GROUND HEIGHT (m)	15.70	13.88	13.00	17.61	13.50	15.00
DIAMETER OF INLET PIPE (mm)	4500	4500	4500	4700	4250	4400
INVERT HEIGHT OF INLET PIPE (m)	-2.52	-1.27	-0.66	10.30	10.49	-0.21
DIAMETER OF PRESSURE PIPE (mm)	4250	4500	4300	4500	4150	4250
NUMBER OF PUMPS (no.)	3	3	2	4	2	2
H (m)	12.00	10.00	7.50	12.00	7.00	9.00

(1) SHOWS DIMENSION OF NO. 2 LIFT STATION IN PATTAYA

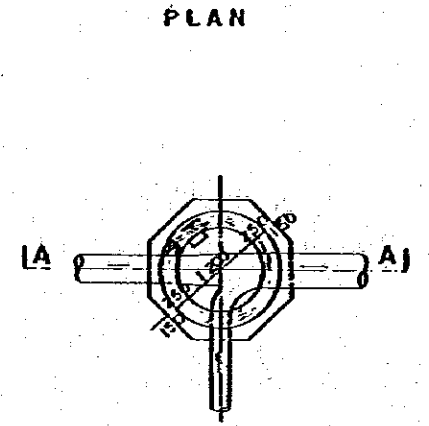
LATERAL SCALE 1:100



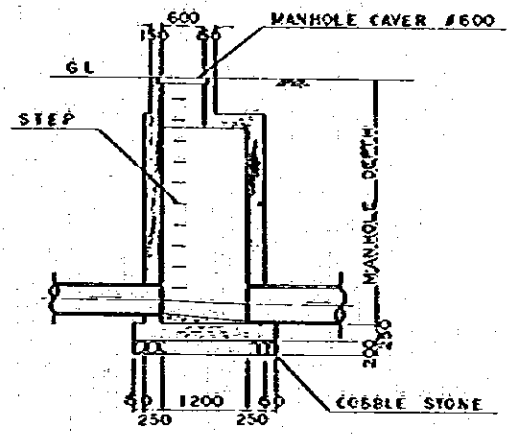
SECTION A-A



MANHOLE SCALE 1:100

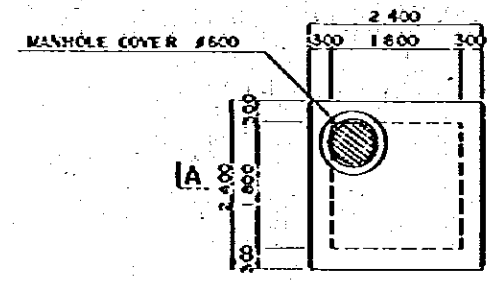


SECTION A-A

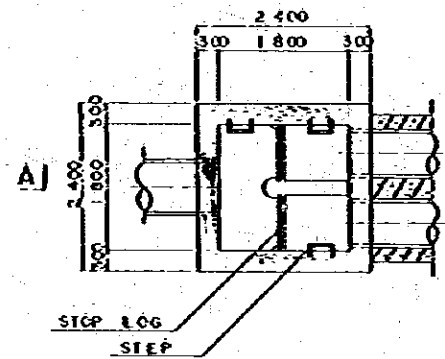


SIPHON MANHOLE SCALE 1:100

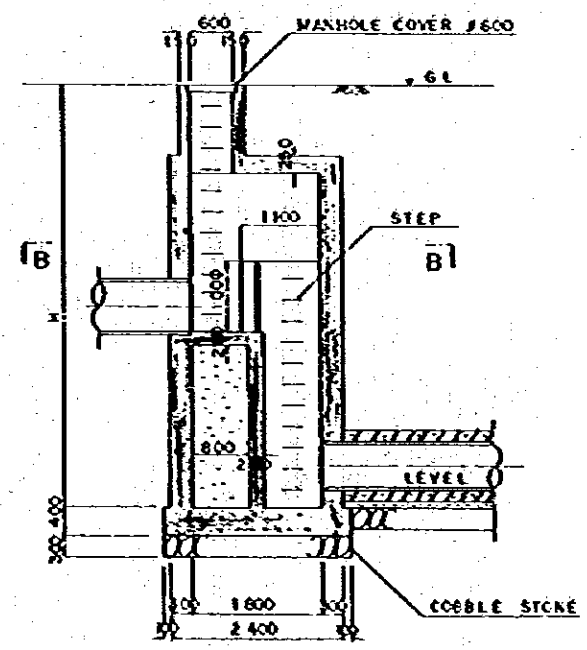
PLAN



SECTION B-B

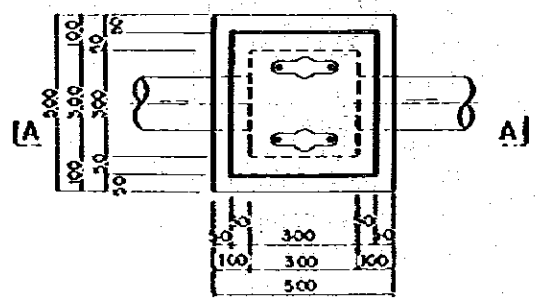


SECTION A-A

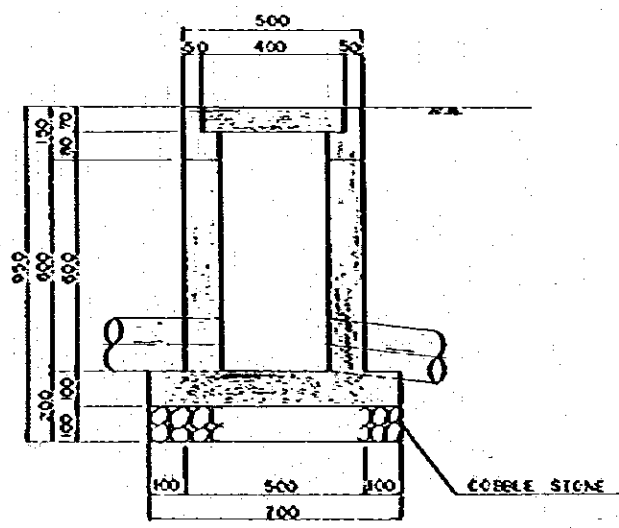


HOUSE INLET SCALE 1:20

PLAN



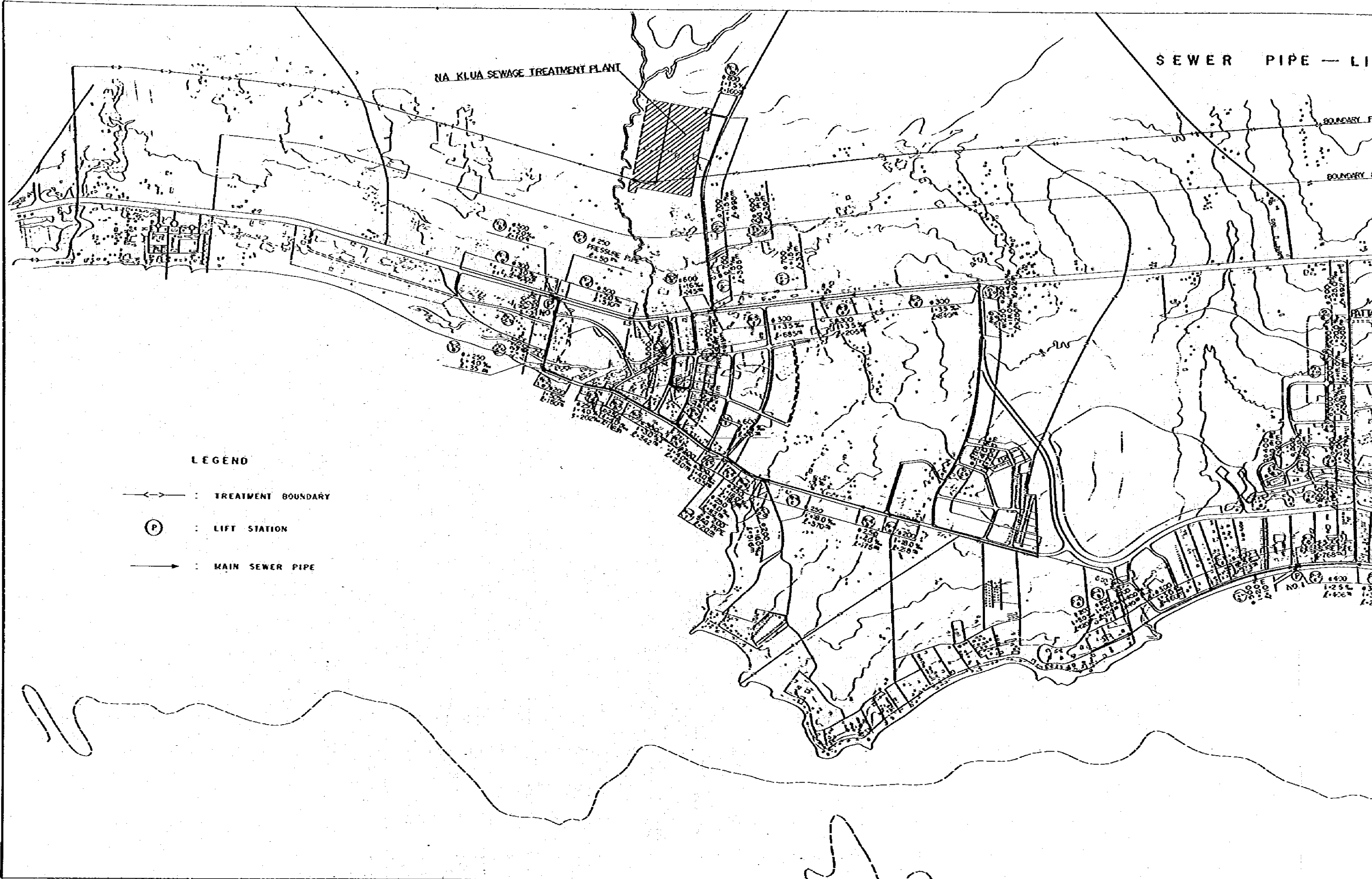
SECTION A-A



NOMINAL DIAMETER	INVERT HEIGHT		PROPOSED GH		MANHOLE DEPTH			
	UPPER	SAG PEE DOWN	UPPER	DOWN				
ø 700	2.660	ø 700	4.89	1.80	4.64	7.90	7.82	6.40
ø 250	2.020	ø 300	2.06	-0.19	1.81	3.43	3.37	4.00
ø 500	2.400	ø 500	4.51	2.30	4.26	6.18	5.94	4.20
ø 400	2.930	ø 400	3.01	1.65	2.81	5.25	5.00	3.90

NA KLUA SEWAGE TREATMENT PLANT

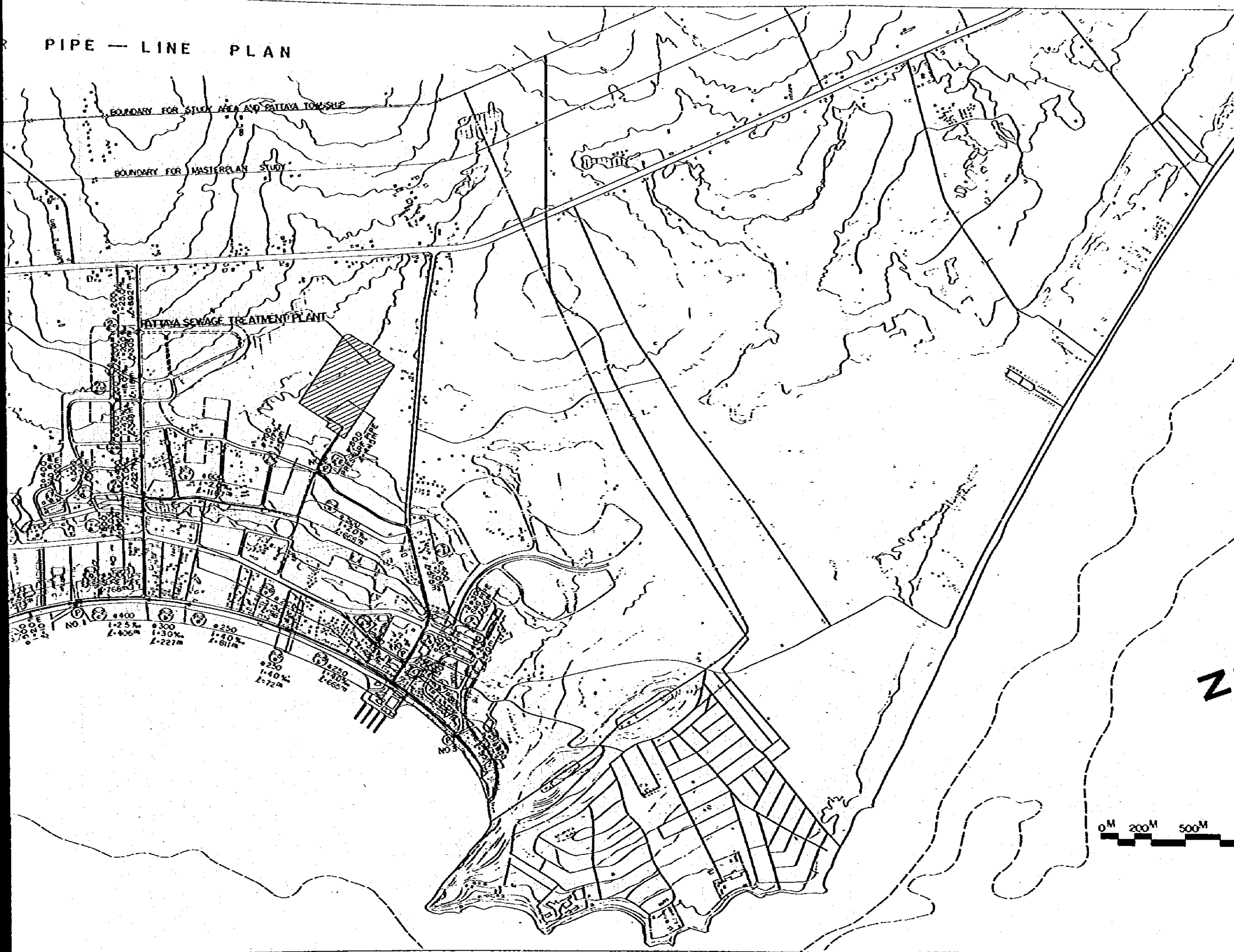
SEWER PIPE — LI



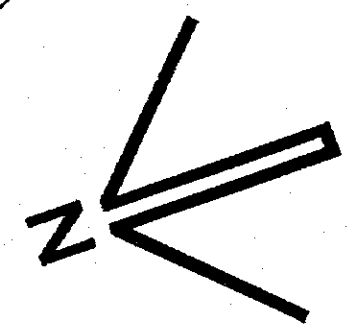
LEGEND

- > : TREATMENT BOUNDARY
- (P) : LIFT STATION
- > : MAIN SEWER PIPE

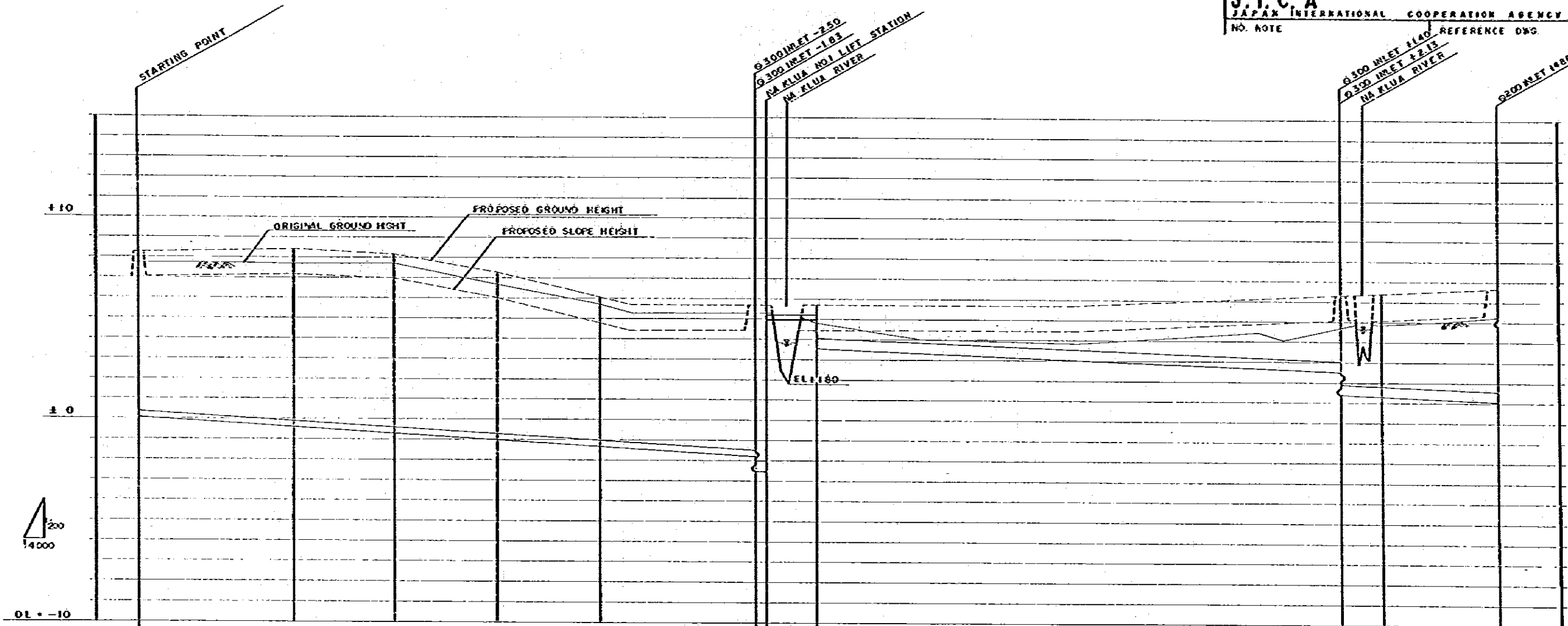
PIPE - LINE PLAN



KINGDOM OF THAILAND	
TOURIST ORGANIZATION OF THAILAND	
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I	
SYSTEM: SEWERAGE	
SEWER PIPE-LINE PLAN	DATE: 1978
DWG. NO. SE-015	SCALE: 1:20,000
J.I.C.A.	70/134
JAPAN INTERNATIONAL COOPERATION AGENCY	REFERENCE 086
NO NOTE	



KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
 PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE
 LONGITUDINAL PROFILE (1)
 DWG. NO. SE-016
 DATE: 1978
 SCALE: H:V:1:4000, V:1:200
 71/134
 J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE



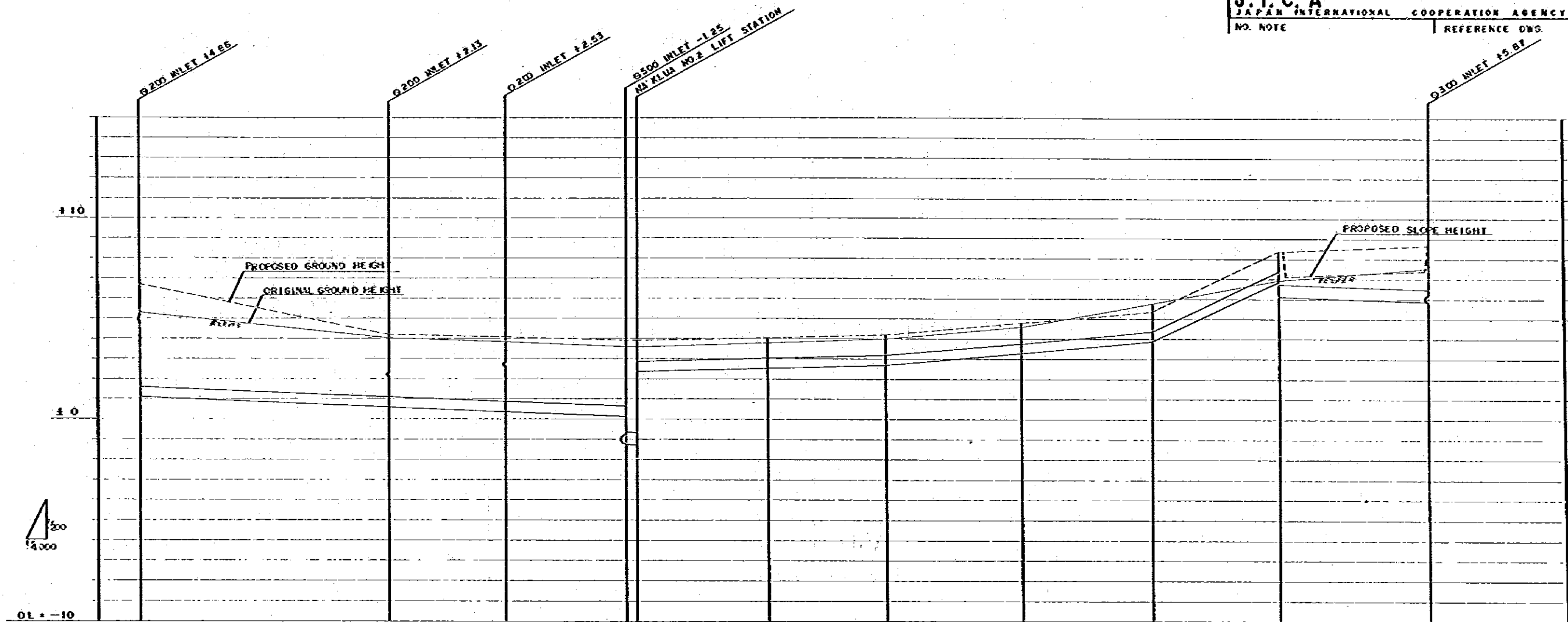
(N-1) 0.300 1-3.0% 2-600m
 (N-2) 0.300 1-2.0% 1-50m
 (N-3) 0.300 1-2.0% 2-510m
 (N-4) 0.500 1-2.0% 1-622m

NOTE: (1) SHOWS PROPOSED SLOPE HEIGHT

EARTH COVERING	7.00 (8.56)	6.50 (7.26)	6.00 (7.34)	7.04 (6.74)	7.07 (5.95)	5.70 (5.70)	5.30 (5.30)	4.80 (4.80)	3.30 (3.30)	1.44 (1.44)	3.30 (3.30)	4.88 (4.88)	4.90 (4.90)	5.29 (5.29)
INVERT HEIGHT	0.05	-0.40	-0.70	-1.00	-1.30	-1.70	-2.10	-2.50	-2.90	-3.30	-3.70	-4.10	-4.50	-4.90
PROPOSED GROUND HEIGHT	7.05 (7.05)	6.10 (6.10)	5.30 (5.30)	6.74 (6.74)	6.65 (6.65)	4.00 (4.00)	3.20 (3.20)	2.70 (2.70)	2.20 (2.20)	1.70 (1.70)	1.20 (1.20)	0.70 (0.70)	0.20 (0.20)	-0.30 (-0.30)
ORIGINAL GROUND HEIGHT	7.70	7.70	7.60	6.66	5.70	5.30	5.30	4.80	4.80	4.80	4.80	4.88	4.90	5.29
ACCUMULATED DISTANCE	0	150	250	350	450	600	610	660	660	660	660	1170	1210	1320
DISTANCE	0	150	100	100	100	150	10	50	50	50	50	510	40	110

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1
SYSTEM: SEWERAGE

SEWER PIPE	DATE: 1978
LONGITUDINAL PROFILE (2)	SCALE: H-1:4000 V-1:200
DWG. NO. SE-017	72/134
J.I.C.A. JAPAN INTERNATIONAL COOPERATION AGENCY	
NO. NOTE	REFERENCE DWG.



(N-1)
 0.500
 1-20%
 2.622m

(N-1)
 0.500
 1-16%
 2.112m

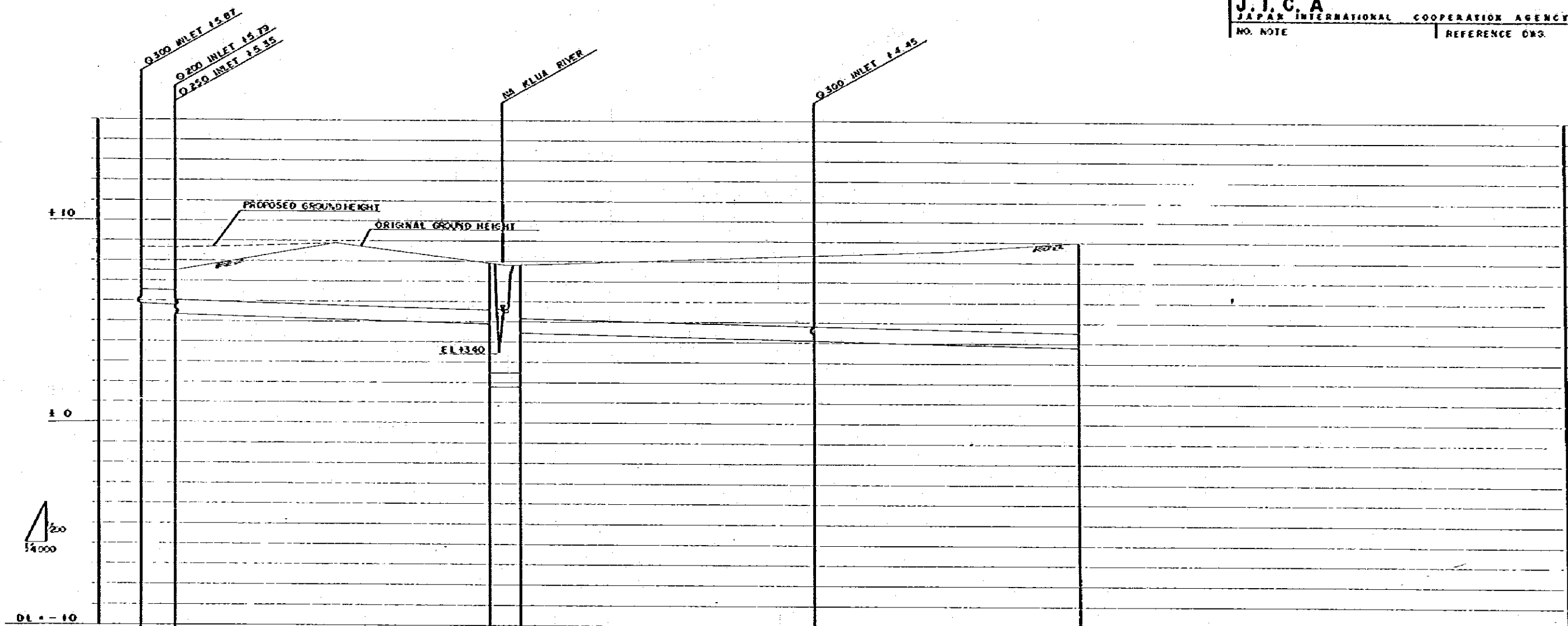
(N-1)
 0.500
 1-16%
 2.619m

(N-1)
 0.600
 1-16%
 2.145m

NOTE: SHOWS PROPOSED SLOPE HEIGHT

EARTH COVERING	3.10 (0.98)	3.08	3.15	2.22 2.38 2.40	1.00	1.00	1.00	1.00	1.00 1.04 (0.40)	1.00 (0.50)
INVERT HEIGHT	1.10	0.62	0.39	0.15 0.27 0.29	2.54	2.70	3.28	3.86	6.72	5.88
PROPOSED GROUND HEIGHT	4.70 (0.44)	4.20	4.04	3.88 3.88	4.04	4.20	4.78	5.36	6.76 (0.12)	6.01 (0.41)
ORIGINAL GROUND HEIGHT	5.29	4.00	3.75	3.58 3.58	3.75	4.00	4.58	5.80	6.90	7.50
ACCUMULATED DISTANCE	1320	1562	1676	1792 1802	1928	2042	2175	2298	2421	2560
DISTANCE	110	242	114	116 10	126	114	151	125	123	145

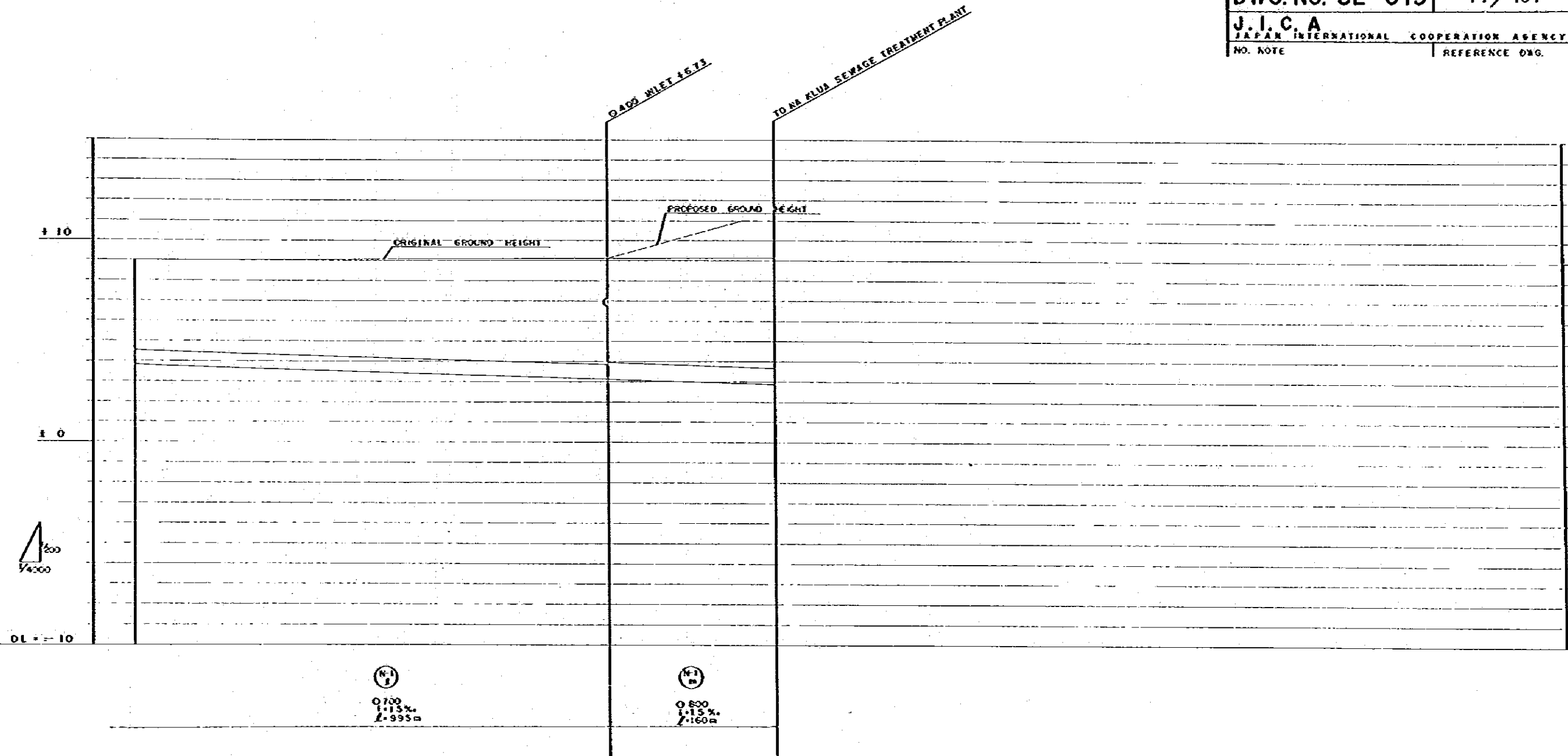
KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
 PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (3) DATE: 1978
 SCALE: H: 1:4000 V: 1:200
 DWG. NO. SE-018 73/134
 J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



NOTE: 1 SHOWS PROPOSED SLOPE HEIGHT

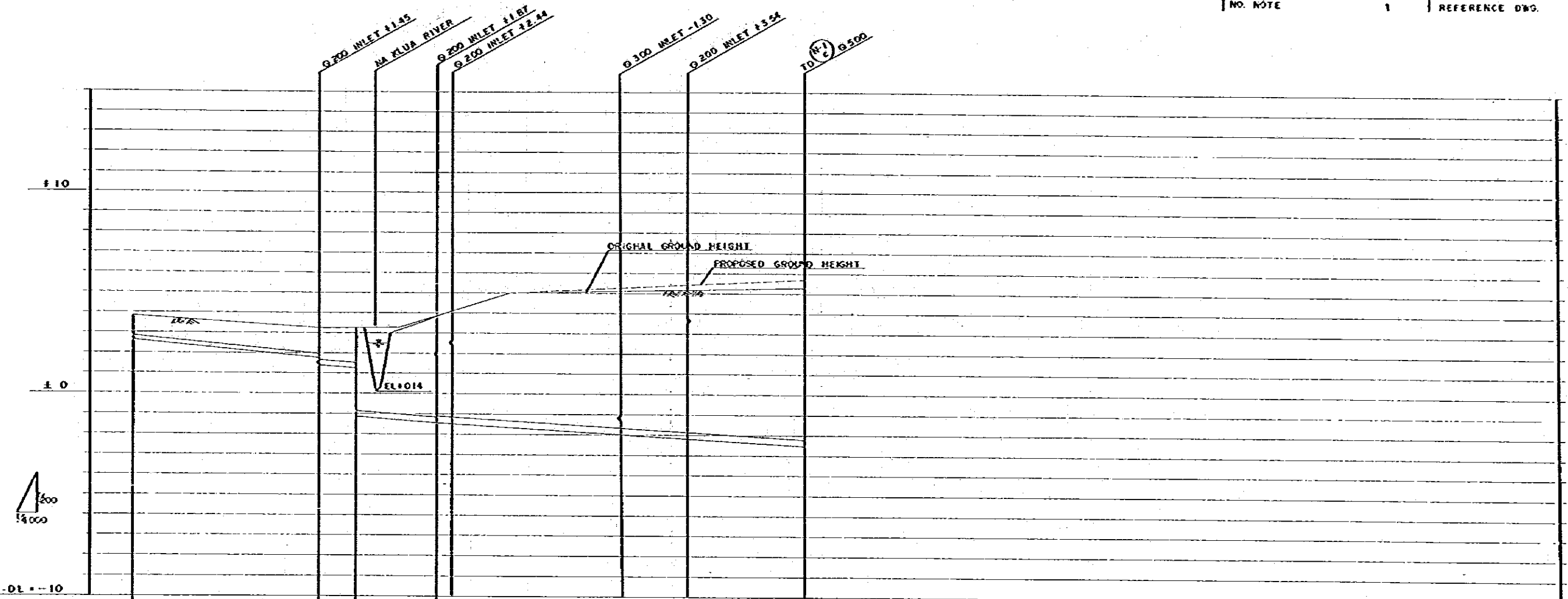
EARTH COVERING	1.7 (0.07)	2.12 2.80	2.71 2.50	5.42 2.48	3.59	4.47
INVERT HEIGHT	5.80	5.65 5.55	4.80	1.80 4.64	4.21	3.83
PROPOSED GROUND HEIGHT	6.65 (7.41)	8.65	7.90	7.82	8.30	9.00
ORIGINAL GROUND HEIGHT	7.50	7.50	7.90	7.82	8.30	9.00
ACCUMULATED DISTANCE	2.566	2.999	2.904	2.934	3.219	3.474
DISTANCE	145	35	305	30	285	255

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE
 SEWER PIPE DATE: 1978
 LONGITUDINAL PROFILE (4) SCALE: H=1:4000 V=1:200
DWG. NO. SE-019 74/134
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



EARTH COVERING	4.47	5.25 5.15	7.29
INVERT HEIGHT	3.83	3.15	2.91
PROPOSED GROUND HEIGHT	9.00	9.10	11.00
ORIGINAL GROUND HEIGHT	9.00	9.10	9.10
ACCUMULATED DISTANCE	3.474	3.920	4.089
DISTANCE	255	455	160

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1
SYSTEM: SEWERAGE
 SEWER PIPE DATE: 1978
 LONGITUDINAL PROFILE (5) SCALE: H:1:4000 V:1:200
DWG. NO. SE-020 75/134
J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE 1 REFERENCE DWG.

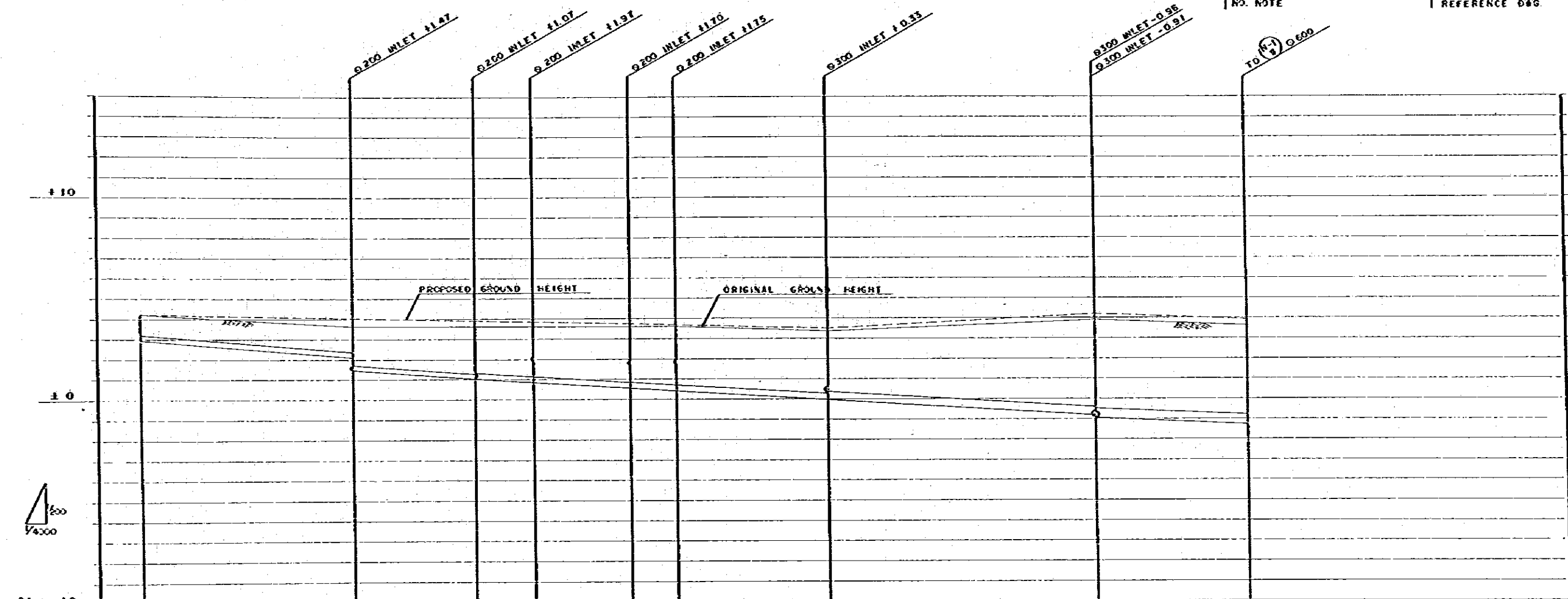


EARTH COVERING	1.00	1.29 1.53	1.70 4.12	1.04 3.00 3.23	6.94	7.31	7.90
INVERT HEIGHT	2.64	1.74 1.45	1.31 -1.11	-1.43 -1.48	-1.26	-2.15	-2.50
PROPOSED GROUND HEIGHT	3.04	3.23	3.26	3.88 4.11	5.28	5.46	5.70
ORIGINAL GROUND HEIGHT	3.84	3.23	3.26	3.88 4.11	5.09	5.16	5.30
ACCUMULATED DISTANCE	0	1.90	2.15	2.95 3.10	4.73	5.36	6.50
DISTANCE	0	1.90	35	40 15	165	65	114

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE

SEWER PIPE	DATE: 1978
LONGITUDINAL PROFILE (6)	SCALE: H=1:4000 V=1:200
DWG. NO. SE-021	76/134

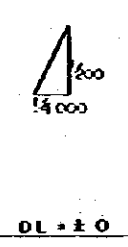
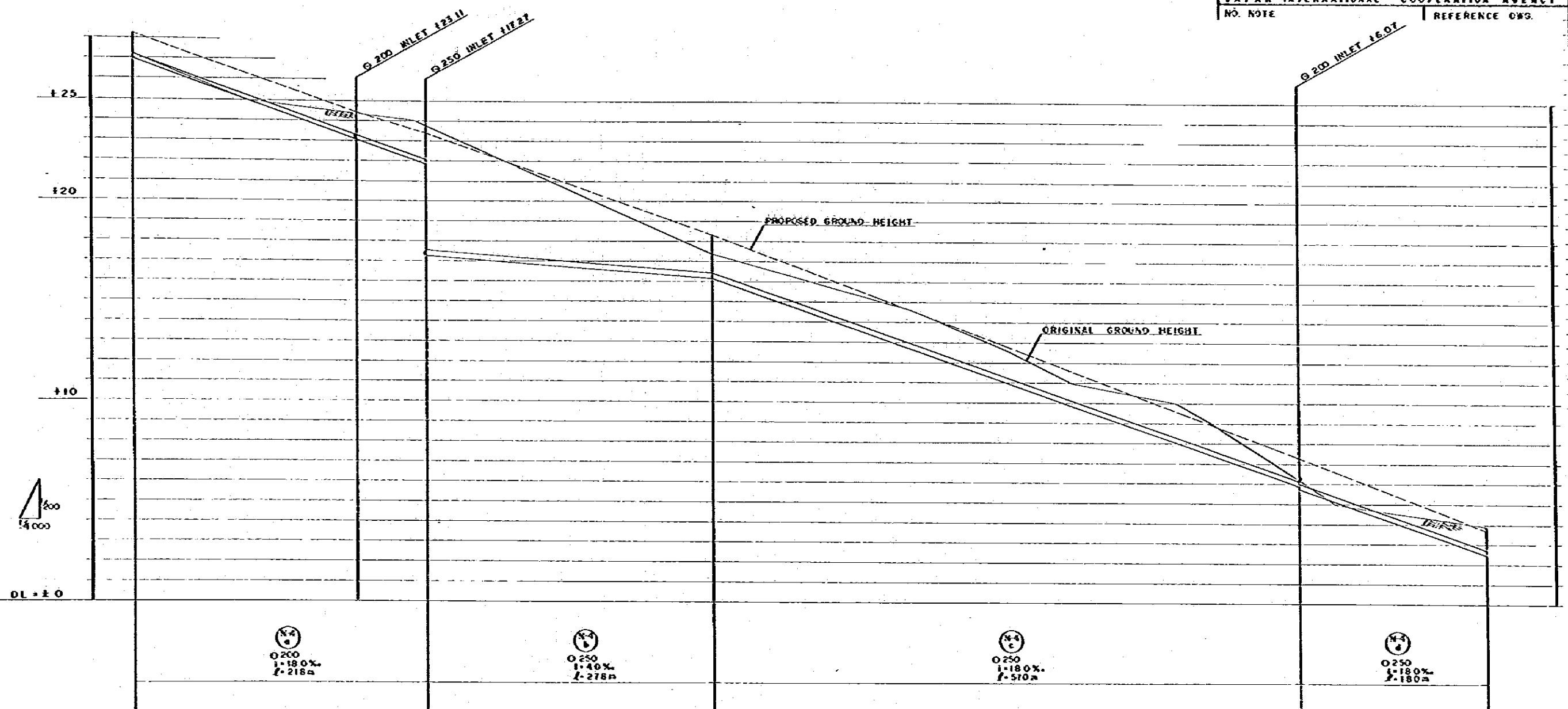
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE | REFERENCE 046



	 0250 I=40% L=202m	 0250 I=40% L=118m	 0300 I=30% L=342m	 0400 I=30% L=261m	 0500 I=20% L=147m			
EARTH COVERING	1.00	1.87 2.53	2.65 2.60	2.70	2.67 2.65	2.92	4.55 4.03	4.63
INVERT HEIGHT	2.94	2.13 1.47	1.00	0.83	0.55 0.42	-0.03	-0.81 -0.66	-1.25
PROPOSED GROUND HEIGHT	4.19	4.09	3.90	3.65	3.72 3.67	3.49	4.17	3.88
ORIGINAL GROUND HEIGHT	4.19	3.60	3.60	3.58	3.62 3.62	3.54	3.67	3.58
ACCUMULATED DISTANCE	0	202	320	377	470 515	662	925	1070
DISTANCE	0	202	118	57	92 46	147	261	147

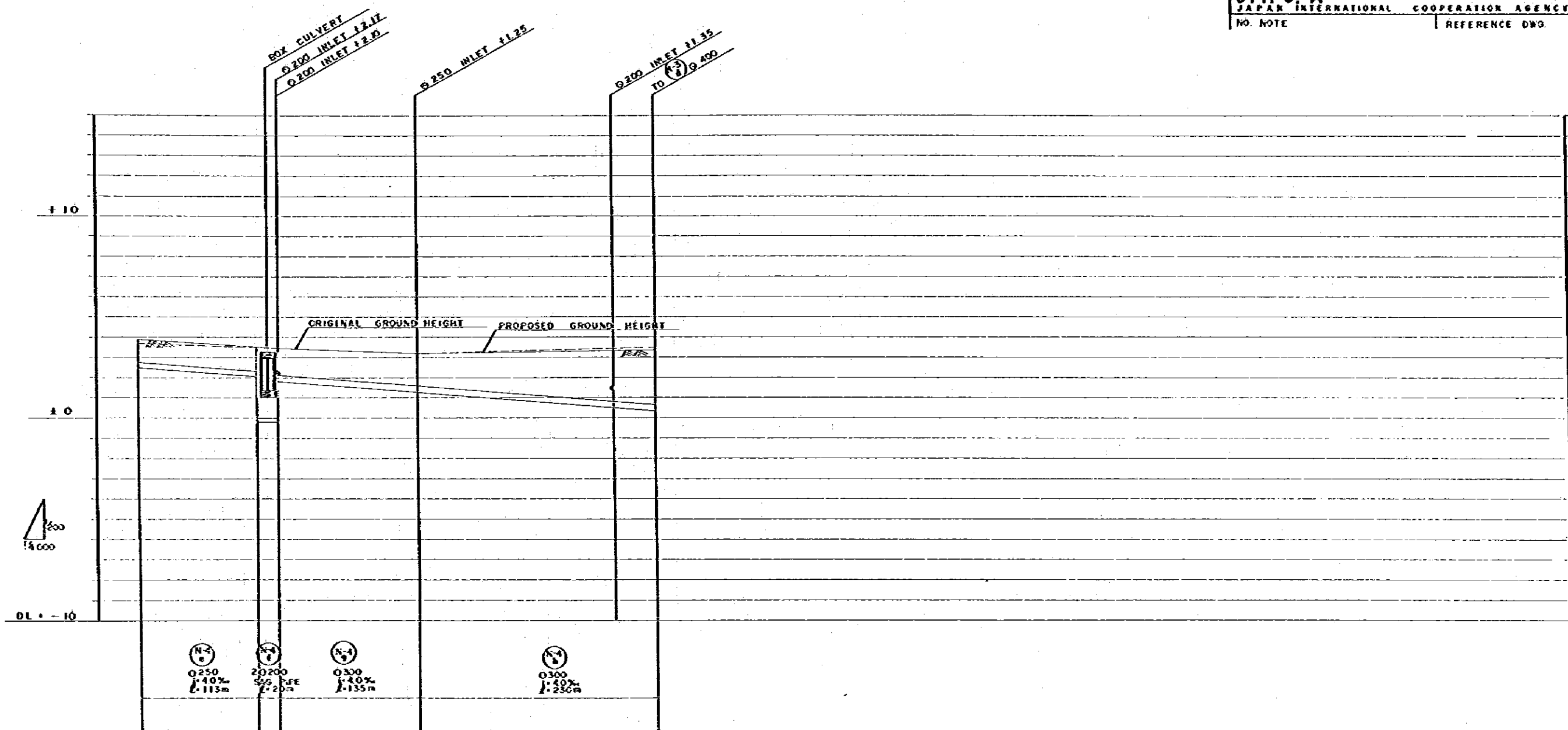
KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (7)
 DWG. NO. SE-022
 J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY

DATE: 1978
 SCALE: H-1:4000 V-1:200
 77/134
 REFERENCE OWS.



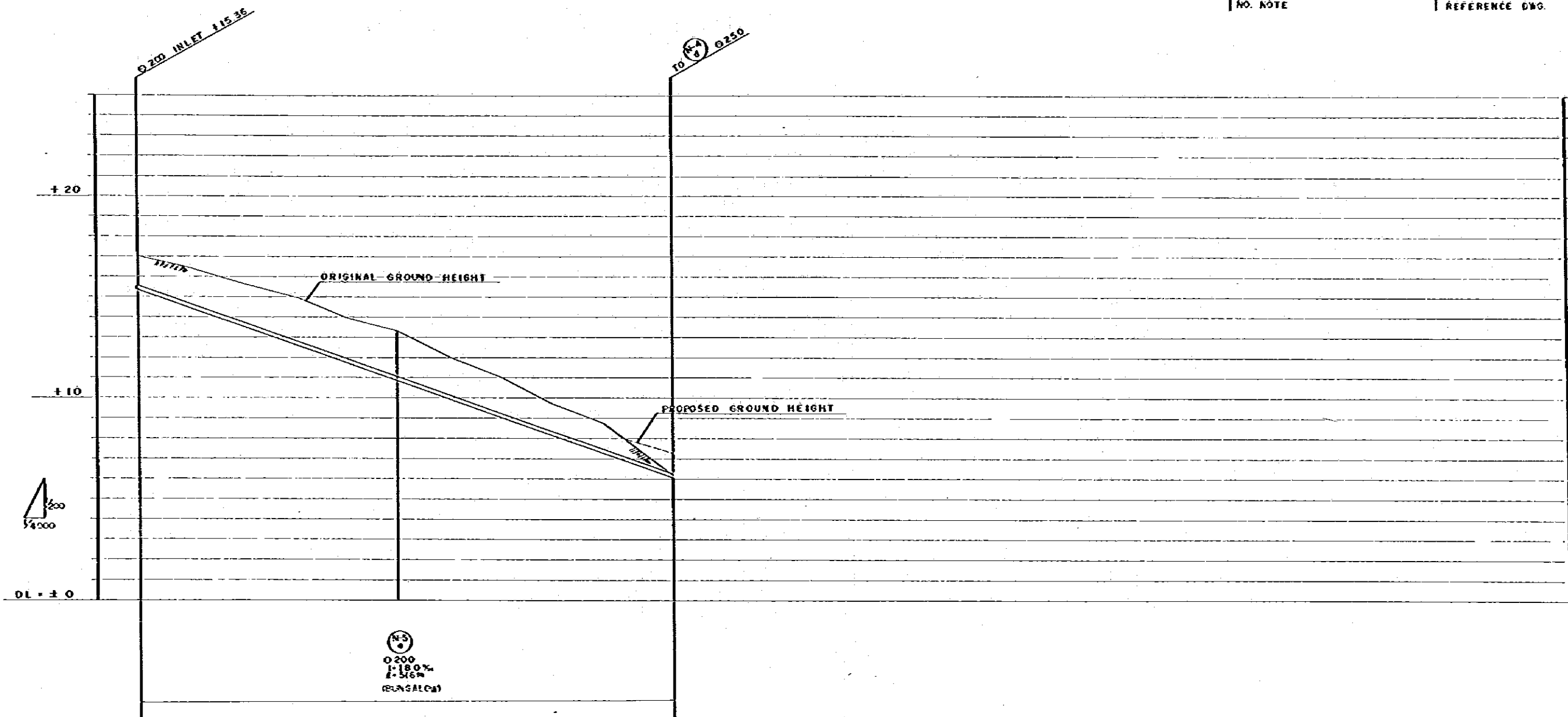
EARTH COVERING	1.00	1.14	1.34	1.97	1.55	1.00
INVERT HEIGHT	27.00	25.07	24.95	16.15	5.75	2.51
PROPOSED GROUND HEIGHT	26.20	24.41	23.42	18.37	7.29	3.76
ORIGINAL GROUND HEIGHT	27.20	24.31	23.67	17.30	6.19	3.92
ACCUMULATED DISTANCE	0	218	285	563	1133	1313
DISTANCE	0	218	67	278	570	180

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE I
SYSTEM: SEWERAGE
 SEWER PIPE DATE: 1978
 LONGITUDINAL PROFILE (8) SCALE: H-1:4000, V-1:200
DWG. NO. SE-023 78/134
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



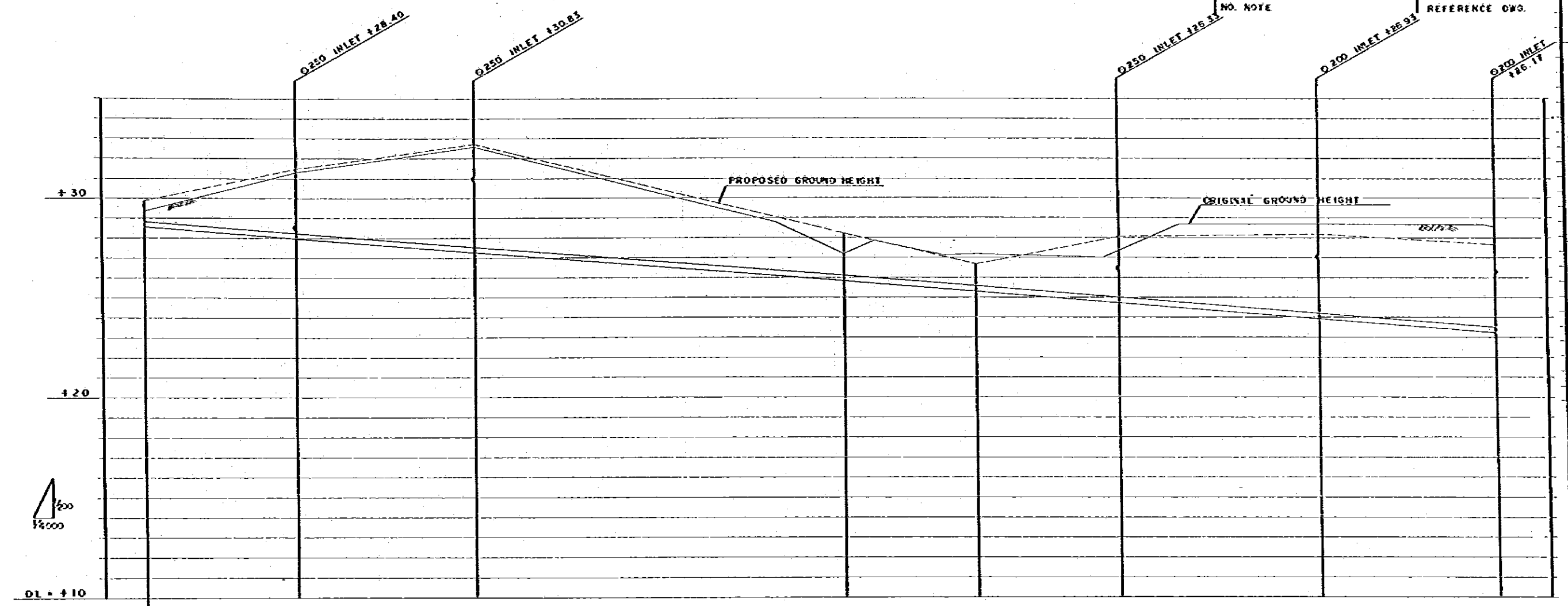
EARTH COVERING	1.00	1.17 1.42 3.42 3.26 1.26	1.04 1.04	2.05 2.05	2.06 2.06
INVERT HEIGHT	2.51	2.04 2.015 2.015 1.81	1.27 1.25	0.49 0.49	0.55 0.55
PROPOSED GROUND HEIGHT	3.76	3.43 3.43 3.37	3.21 3.21	3.44 3.44	3.49 3.49
ORIGINAL GROUND HEIGHT	3.92	3.48 3.48 3.40	3.21 3.21	3.52 3.52	3.54 3.54
ACCUMULATED DISTANCE	135	1420 1446	1581	1771	1811
DISTANCE	100	112 20	135	190	40

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE DATE: 1978
 LONGITUDINAL PROFILE (9) SCALE: H:1:4000 V:1:200
DWG. NO. SE-024 79/134
J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



EARTH COVERING	1.46	2.34	1.02
INVERT HEIGHT	15.36	10.86	6.07
PROPOSED GROUND HEIGHT	17.00	13.40	7.20
ORIGINAL GROUND HEIGHT	17.00	13.40	6.19
ACCUMULATED DISTANCE	0	250	516
DISTANCE	0	250	266

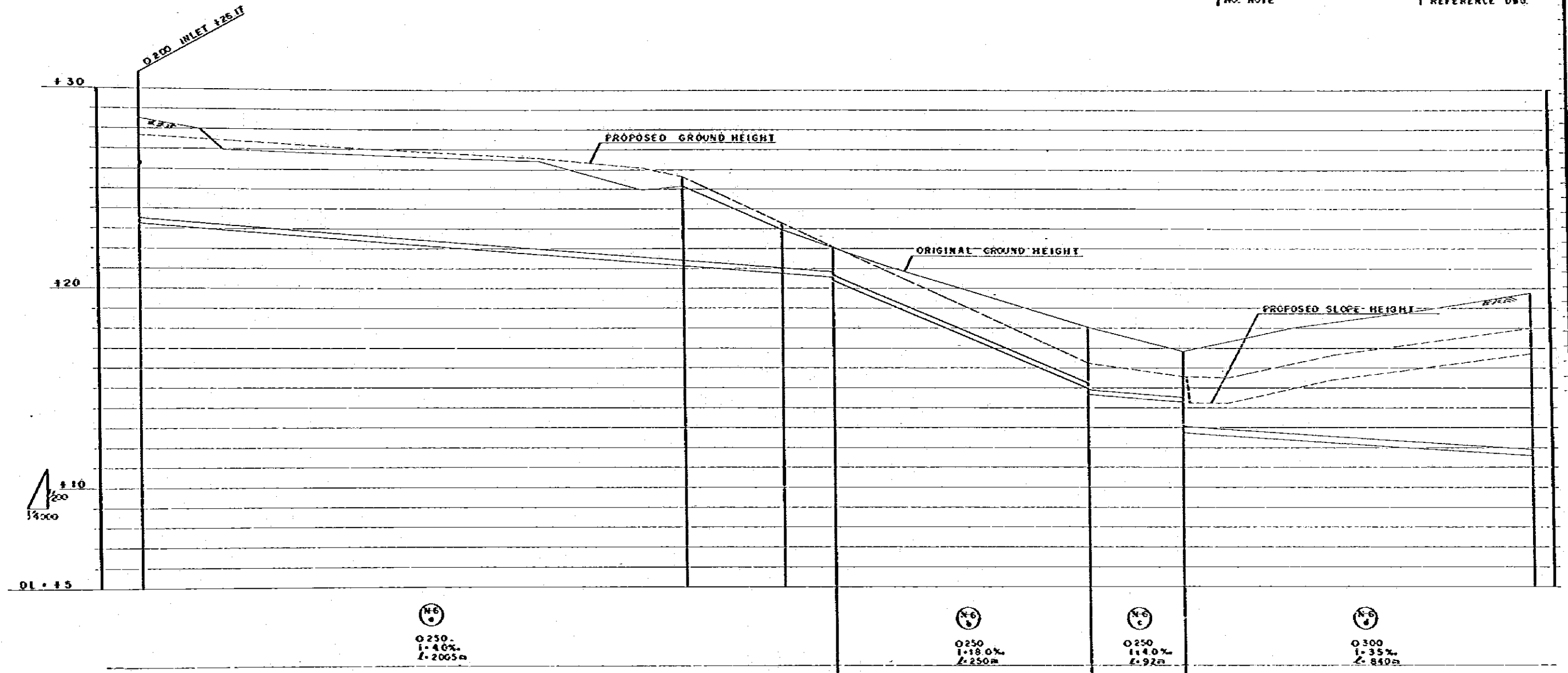
KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (10)
 DATE: 1978
 SCALE: H:1:400 V:1:200
DWG. NO. SE-025 80/134
J. I. C. A
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



EARTH COVERING	1.00	3.12	5.19	2.11	1.12	3.04	3.99	4.17
INVERT HEIGHT	28.60	28.01	27.50	25.84	24.32	24.75	23.94	23.26
PROPOSED GROUND HEIGHT	29.85	31.47	32.74	26.20	26.69	28.04	28.20	27.68
ORIGINAL GROUND HEIGHT	29.35	31.32	32.84	27.20	27.19	27.59	26.70	26.98
ACCUMULATED DISTANCE	0	147	323	687	817	958	1154	1328
DISTANCE	0	147	176	364	130	141	194	174

DWG. NO. SE-025

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (II) DATE: 1978
 SCALE: H=1:4000 V=1:200
DWG. NO. SE-026 81/134
J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



NOTE: (1) SHOWS PROPOSED SLOPE HEIGHT

EARTH COVERING	4.17		4.26	2.37	1.32 1.88		1.00 1.31	1.00 2.44 (1.24)	4.11 (4.87)
INVERT HEIGHT	23.26		21.14	20.74	20.34 20.36		14.84 14.67	14.31 12.76	11.50
PROPOSED GROUND HEIGHT	27.68		23.65	23.56	22.11		16.23	12.55 (12.55)	16.00 (16.76)
ORIGINAL GROUND HEIGHT	24.96		25.15	23.06	22.10		18.00	16.06	19.08
ACCUMULATED DISTANCE	174		529	908	2005		2200	2347	2887
DISTANCE	174		355	457	1000		1200	1347	340

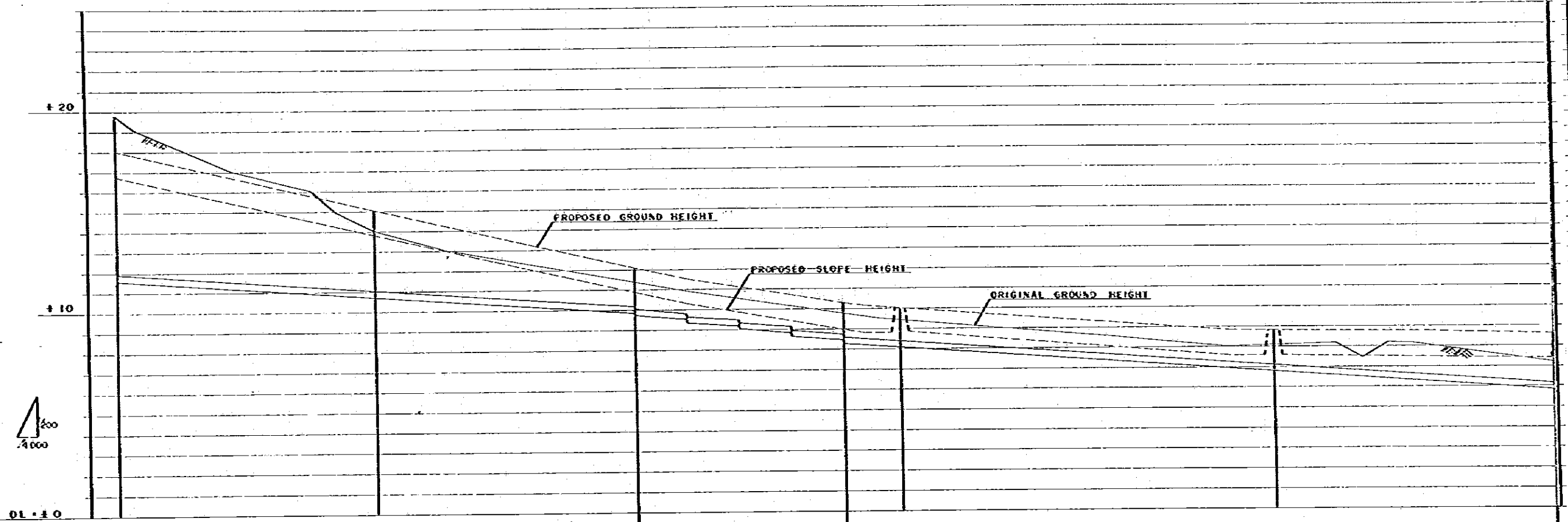
KINGDOM OF THAILAND
TOURIST ORGANIZATION OF THAILAND

PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE

SEWER PIPE LONGITUDINAL PROFILE (12)	DATE: 1978
	SCALE: H:1:4000 V:1:200
DWG. NO. SE-027	82 / 134

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

NO. NOTE REFERENCE DWG.



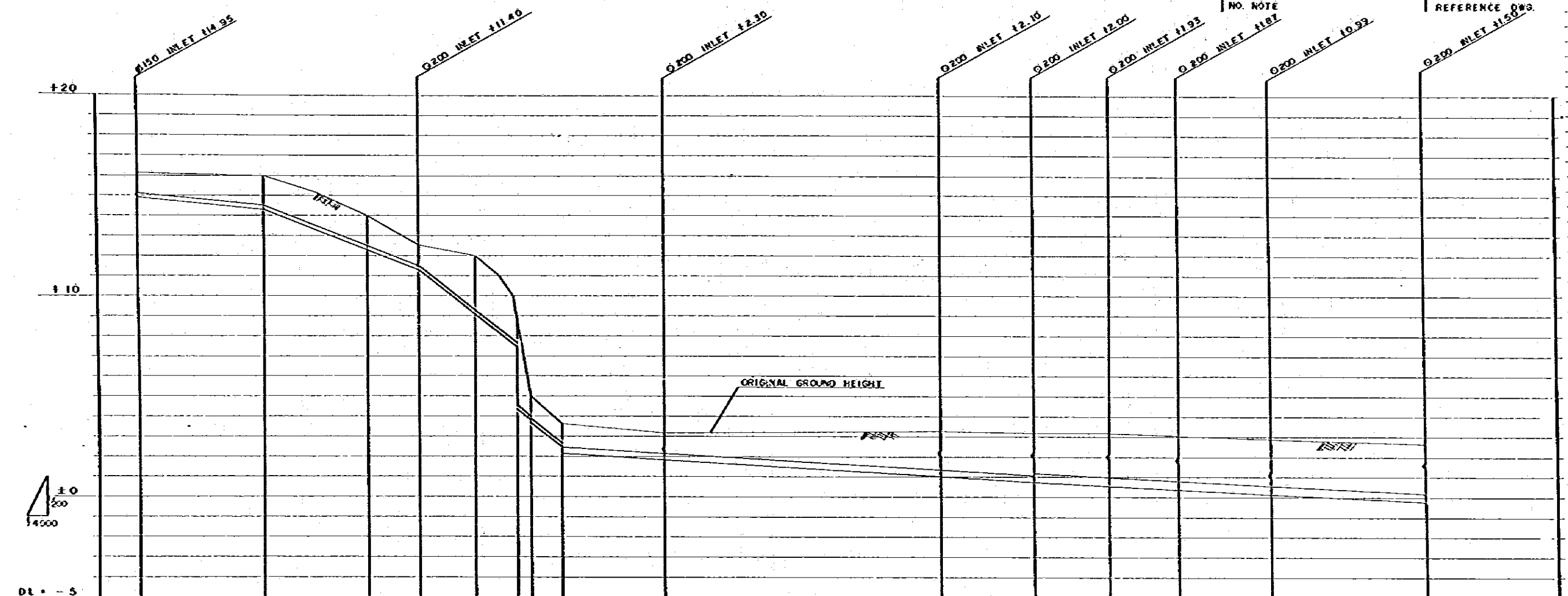
⊙
N.6
0.300
1.35%
L. 610m

⊙
N.6
0.300
1.35%
L. 205m

⊙
N.6
0.300
1.35%
L. 655m

NOTE: 1 SHOWS PROPOSED SLOPE HEIGHT

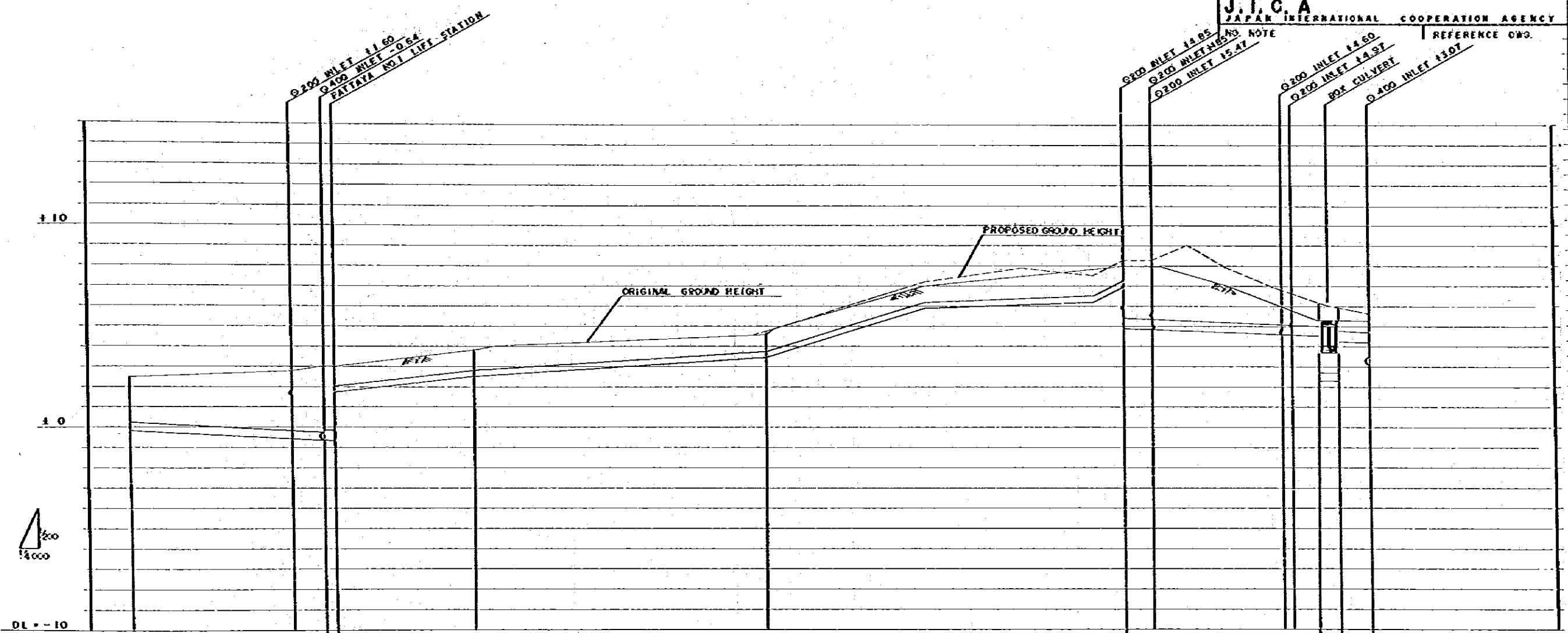
EARTH COVERING	6.11 (4.87)	2.04 (2.80)	0.25 (0.22) (0.82)	0.25 (0.22) (0.80)	1.95 (0.41)	0.73 (0.23)	2.25 (0.24)
INVERT HEIGHT	11.59	10.71	9.84 9.74	9.44 9.27	8.08	6.82	5.87 5.87
PROPOSED GROUND HEIGHT	17.70 (6.79)	13.05 (3.61)	12.10 (2.66)	10.31 (9.07)	10.05 (6.79)	9.44 (7.80)	8.45 (7.24)
ORIGINAL GROUND HEIGHT	19.88	14.00	11.37	9.73	9.42	8.10	7.25
ACCUMULATED DISTANCE	2.687	2.937	3.187	3.392	3.447	3.607	4.077
DISTANCE	340	250	250	200	55	360	270



(P-1) O 200 L=50% L=120m
 (P-2) O 200 L=200% L=150m
 (P-3) O 200 L=400% L=140m
 (P-4) O 300 L=30% L=466m
 (P-5) O 400 L=25% L=513m

EARTH COVERING	1.00	1.50	1.50	1.00	2.70	1.04	1.14	1.10	1.90	1.00	1.93	2.11	2.01	2.19	2.23	2.00	2.47
INVERT HEIGHT	14.90	14.30	12.30	11.30	9.10	7.45	4.76	3.70	2.20	1.90	1.07	0.79	0.61	0.44	0.20	-0.17	2.47
PROPOSED GROUND HEIGHT	16.10	16.00	14.00	12.50	12.00	8.70	5.00	3.70	3.20	3.20	3.30	3.20	3.20	3.07	2.90	2.70	2.70
ORIGINAL GROUND HEIGHT	16.10	16.00	14.00	12.50	12.00	8.70	5.00	3.70	3.20	3.20	3.30	3.20	3.20	3.07	2.90	2.70	2.70
ACCUMULATED DISTANCE	0	120	220	270	325	366	360	410	910	795	876	900	1018	1115	1295	1295	1295
DISTANCE	0	120	100	50	55	41	14	30	100	275	91	74	68	90	150	150	150

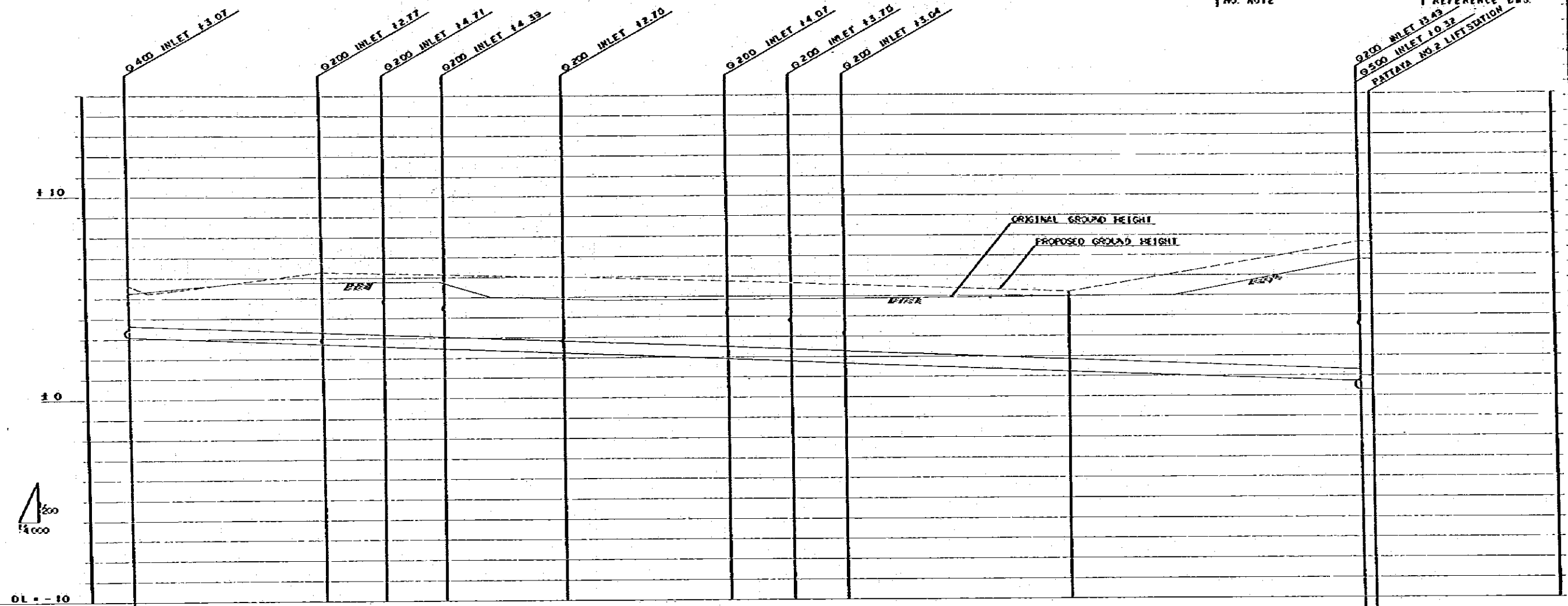
KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
 FATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (14)
 DWG. NO. SE-029
 DATE: 1978
 SCALE: H=1:4000 V=1:200
 84/134
 J.I.C.A.
 JAPAN INTERNATIONAL COOPERATION AGENCY



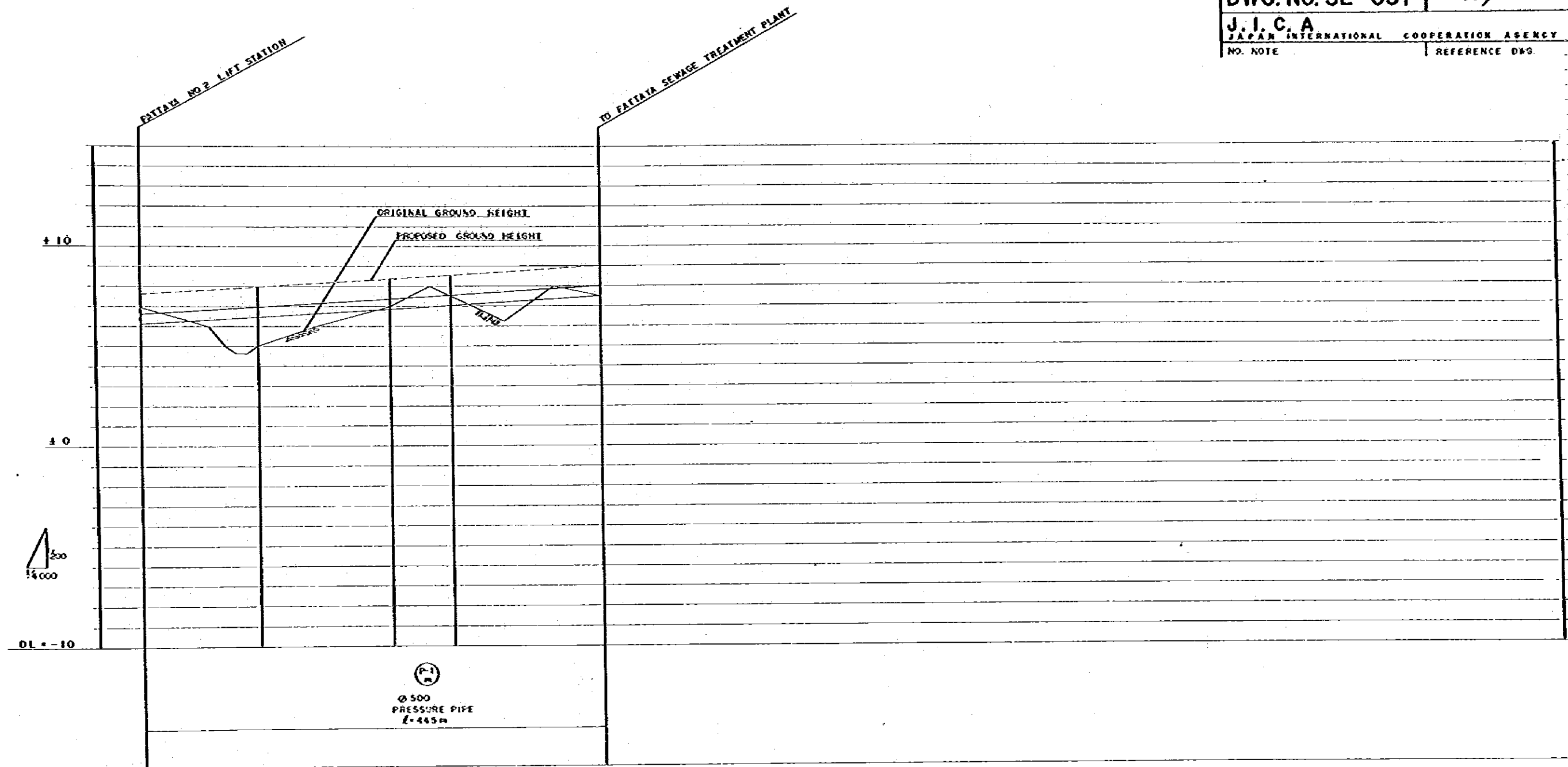
(P-1)
 Ø 400
 I = 2.5%
 L = 575m
 (P-1)
 Ø 500
 I = 2.0%
 L = 10m
 (P-1)
 Ø 300
 PRESSURE PIPE
 L = 765m
 (P-1)
 Ø 500
 I = 2.0%
 L = 196m
 (P-1)
 Ø 400 Ø 500
 SAF PIPE I = 2.0%
 L = 20m L = 30m

EARTH COVERING	2.47	2.96	2.24 2.24 2.24 1.00	1.00	1.00	1.00	2.88	2.91	1.85	1.85	1.58	1.18	0.80	1.92
INVERT HEIGHT	4.17	4.56	4.64 4.64 4.64	4.50	4.44	4.96	4.90	4.85	4.60	4.58	4.50	4.28	4.07	3.57
PROPOSED GROUND HEIGHT	2.70	2.80	3.00 3.00 3.00	3.80	4.74	6.56	6.56	6.25	6.70	6.58	6.18	5.94	5.55	
ORIGINAL GROUND HEIGHT	2.70	2.80	3.00 3.00 3.00	3.60	4.59	7.95	7.95	7.06	5.92	5.76	5.30	5.30	5.24	
ACCUMULATED DISTANCE	1265	1410	1445 1455	1995	1875	2235	2235	2269	2373	2364	2418	2438	2468	
DISTANCE	150	155	51 10	134	282	347	27		124 11	34	20	20	30	

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (15)
 DATE: 1978
 SCALE: H:1:4000 V:1:200
DWG. NO. SE-030 85/134
J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



EARTH COVERING	0.00 1.92		2.94		3.02		3.11		3.15		3.25		3.26		3.34		3.34		3.34
INVERT HEIGHT	4.20 3.07		2.70		2.08		2.47		2.23		1.91		1.79		1.68		1.26		0.56
PROPOSED GROUND HEIGHT	5.59		6.24		6.20		6.18		5.98		5.74		5.65		5.54		5.20		7.61
ORIGINAL GROUND HEIGHT	6.24		5.80		5.80		5.85		4.86		4.85		4.80		4.00		4.95		6.91
ACCUMULATED DISTANCE	2.468		2.653		2.711		2.769		2.890		3.047		3.109		3.161		3.372		3.655
DISTANCE	30		1.85		58		58		121		157		62		52		271		275



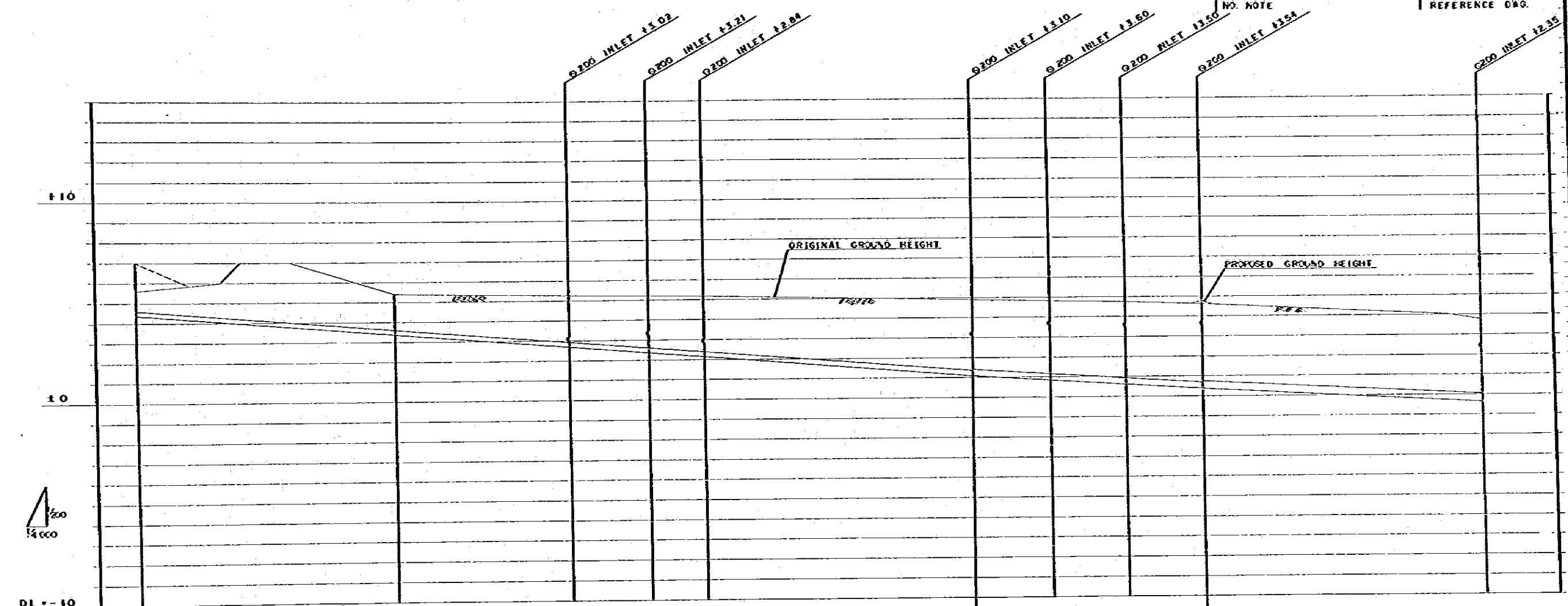
EARTH COVERING	6.61 1.00	1.00	1.00	1.00	1.00
INVERT HEIGHT	6.30 6.11	6.46	6.66	7.04	7.50
PROPOSED GROUND HEIGHT	7.61	7.96	8.36	8.54	9.00
ORIGINAL GROUND HEIGHT	6.91	5.00	7.00	7.50	7.50
ACCUMULATED DISTANCE	3.665	3.777	3.907	3.944	4.110
DISTANCE	10	112	128	59	146

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (17)
DWG. NO. SE-032
 J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY

DATE: 1978
 SCALE: H=1:4000 V=1:200

87/134

NO. NOTE | REFERENCE DWG.



⊙
 P-2
 0.250
 1.40%
 2.81m

⊙
 P-2
 0.300
 1.30%
 2.27m

⊙
 P-2
 0.400
 1.25%
 2.405m

EARTH COVERING	2.40	1.80	2.55	2.60	2.80	3.37	3.60	3.78	4.06	3.75
INVERT HEIGHT	4.35	5.35	2.87	2.55	2.15	1.06	0.85	0.62	0.38	0.35
PROPOSED GROUND HEIGHT	7.00	5.40	5.25	5.20	5.16	4.90	4.80	4.70	4.74	5.80
ORIGINAL GROUND HEIGHT	5.60	5.40	5.20	5.20	5.16	4.90	4.80	4.70	4.59	5.80
ACCUMULATED DISTANCE	0	248	418	496	600	811	887	961	1036	1320
DISTANCE	0	248	170	78	54	201	76	74	77	282

DWG. NO. SE-032

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
 PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-I
 SYSTEM: SEWERAGE
 SEWER PIPE DATE: 1978
 LONGITUDINAL PROFILE (18) SCALE: H:1/400 V:1/200
DWG. NO. SE-033 88/134
J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



(P-2)
 O 400
 I-25%
 L-406M

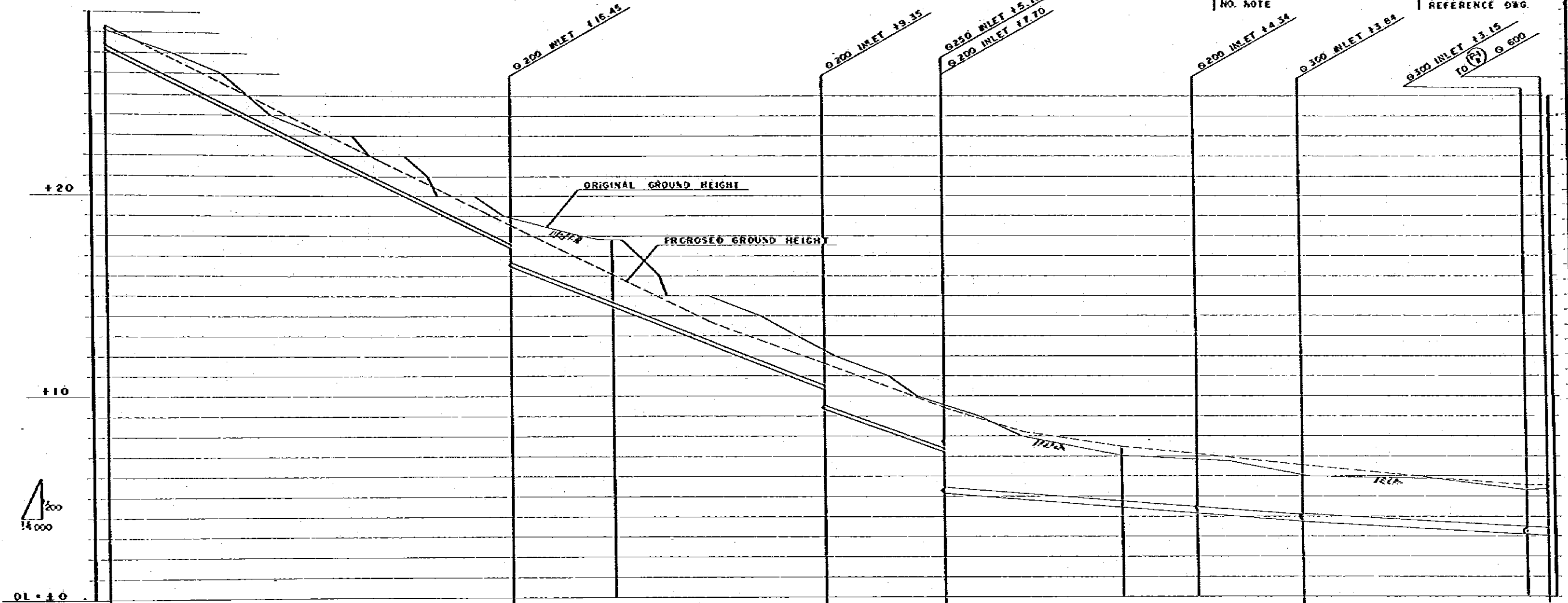
EARTH COVERING	3.75	3.24
INVERT HEIGHT	0.55	0.64
PROPOSED GROUND HEIGHT	3.80	3.00
ORIGINAL GROUND HEIGHT	3.60	3.00
ACCUMULATED DISTANCE	1.520	1.464
DISTANCE	262	124

DWG. NO. SE-033

KINGDOM OF THAILAND
 TOURIST ORGANIZATION OF THAILAND
 PATTAYA TOURISM DEVELOPMENT PROJECT, PHASE-1
 SYSTEM: SEWERAGE
 SEWER PIPE LONGITUDINAL PROFILE (19)
 DWG. NO. SE-034

DATE: 1978
 SCALE: H:1: 4000 V:1: 200
 89/134

J. I. C. A.
 JAPAN INTERNATIONAL COOPERATION AGENCY
 NO. NOTE REFERENCE DWG.



P-3 a
 Ø 200
 1-25.0%
 L-392m
 P-3 b
 Ø 200
 1-200%
 L-305m
 P-3 c
 Ø 200
 1-180%
 L-118m
 P-3 d
 Ø 300
 1-40%
 L-346m
 P-3 e
 Ø 400
 1-30%
 L-237m

EARTH COVERING	1.00		1.00	1.41		2.07	2.01	2.72	2.62	2.49	2.03
INVERT HEIGHT	27.16		17.25 18.25	14.45		10.35 9.35	7.22 5.16	4.49	4.20	3.76 3.26	3.13 3.07
PROPOSED GROUND HEIGHT	28.34		18.36	16.06		11.62	9.45	7.01	7.12	6.57 5.56	5.56 5.59
ORIGINAL GROUND HEIGHT	28.10		18.01	17.81		12.50	9.60	7.06	6.84	6.10 5.36	5.36 5.42
ACCUMULATED DISTANCE	0		392	492		697	815	987	1059	1163	1380
DISTANCE	0		392	100		205	116	172	72	104	217

DWG. NO. SE-034