

FIGURES

53



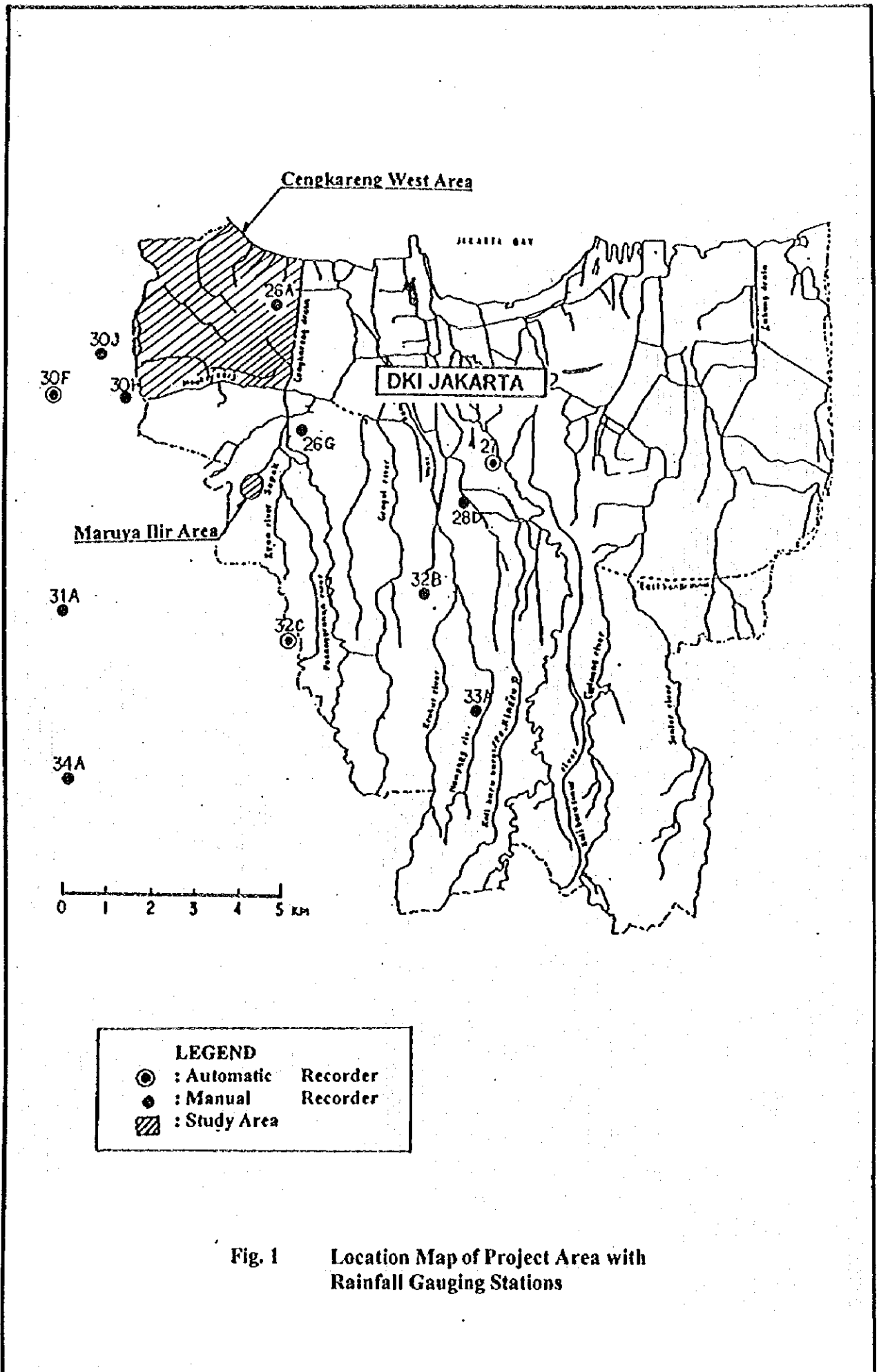
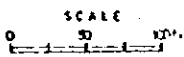
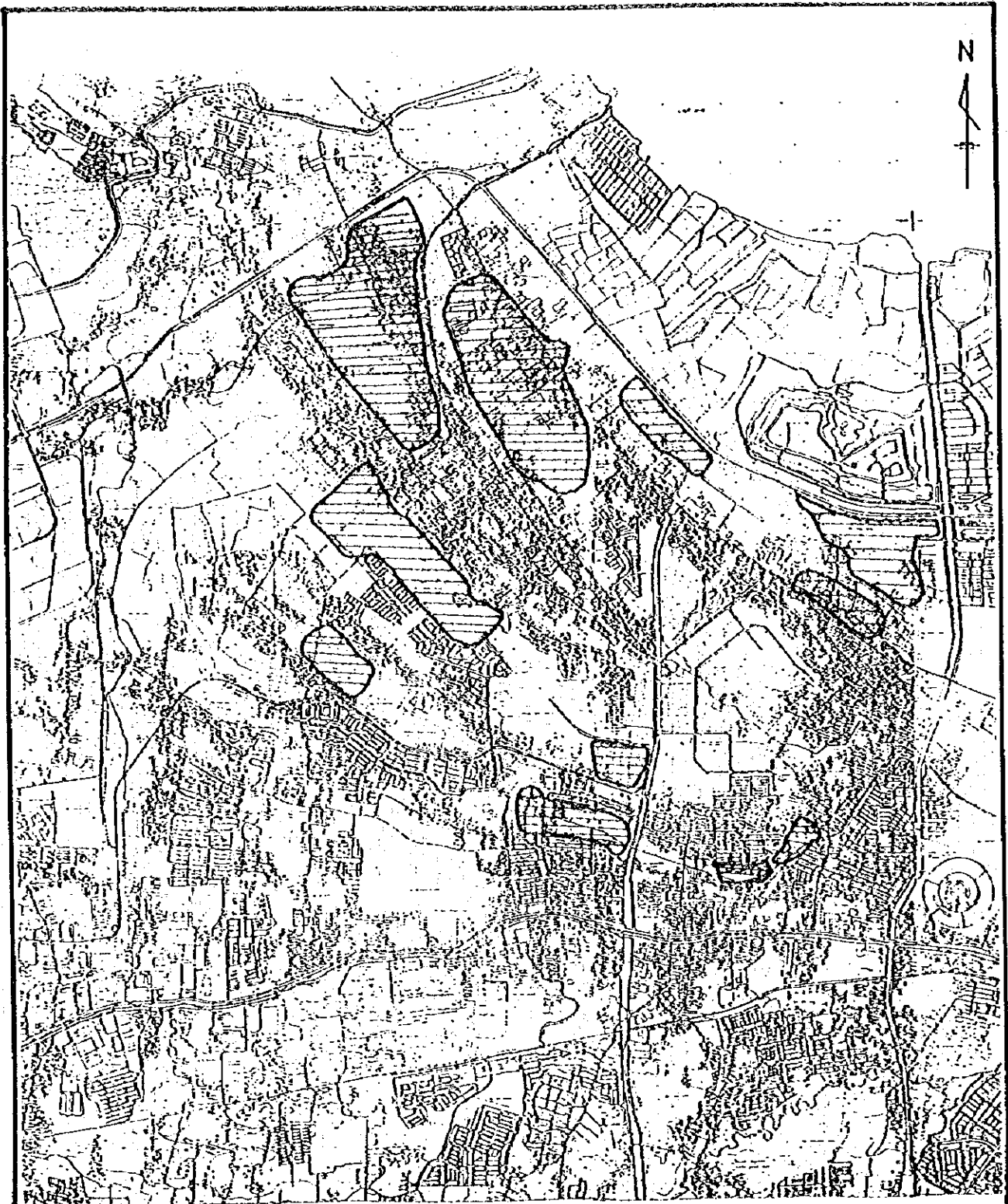


Fig. 1 Location Map of Project Area with Rainfall Gauging Stations



 Inundation Area

Fig. 2 Habitual Inundation Map in Cengkareng West Area

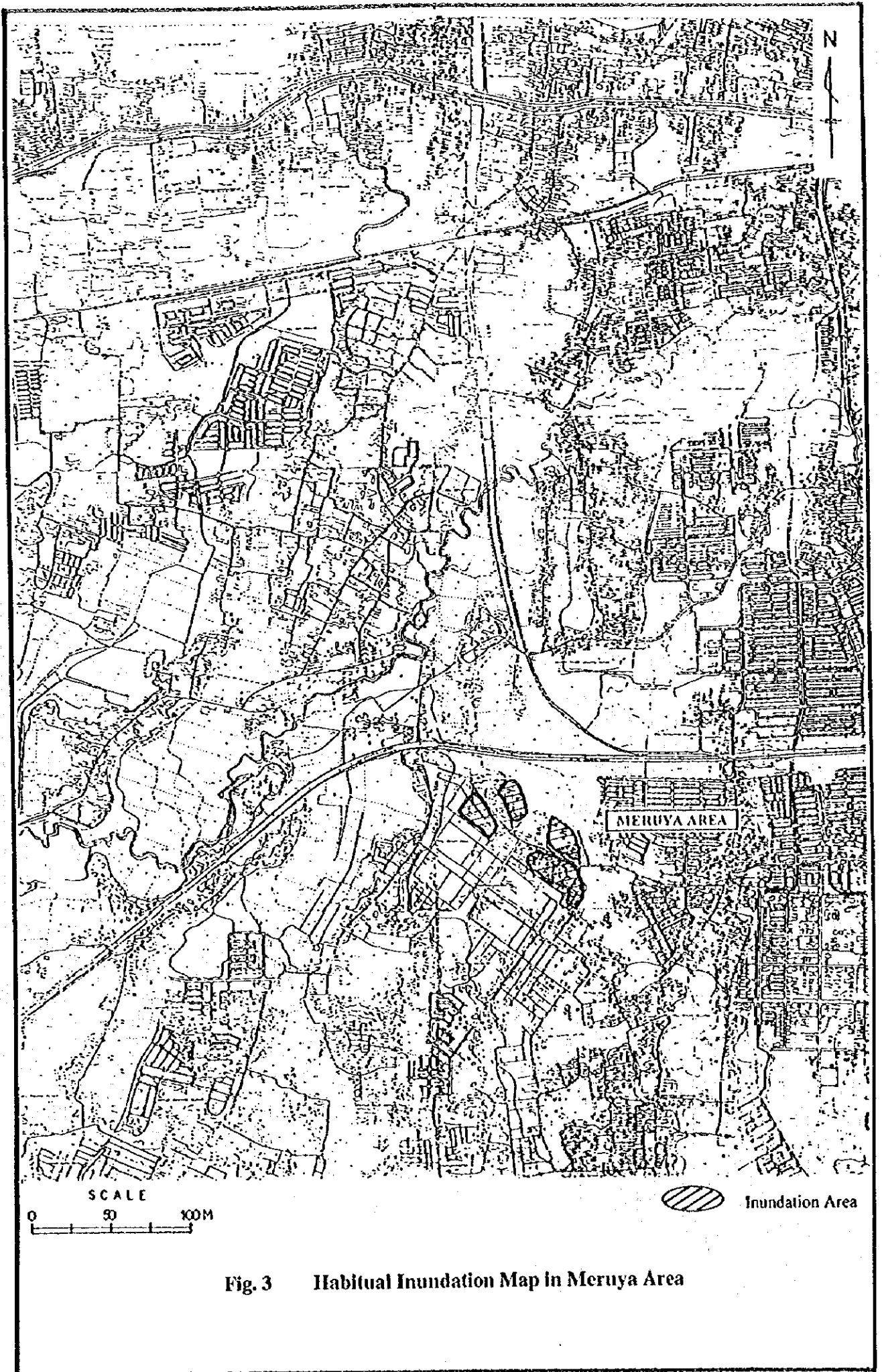


Fig. 3 Habitual Inundation Map in Meruya Area

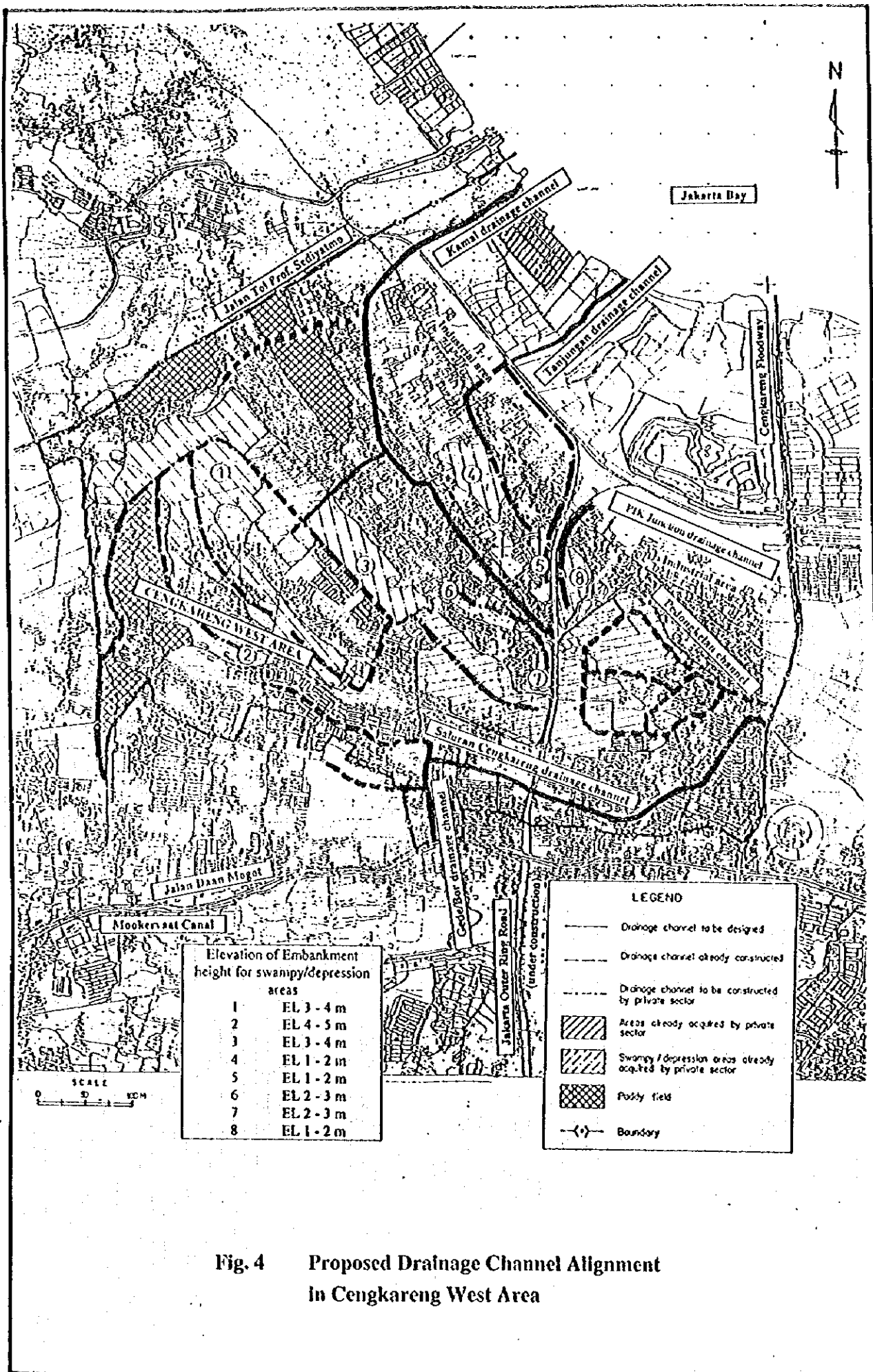


Fig. 4 Proposed Drainage Channel Alignment in Cengkareng West Area

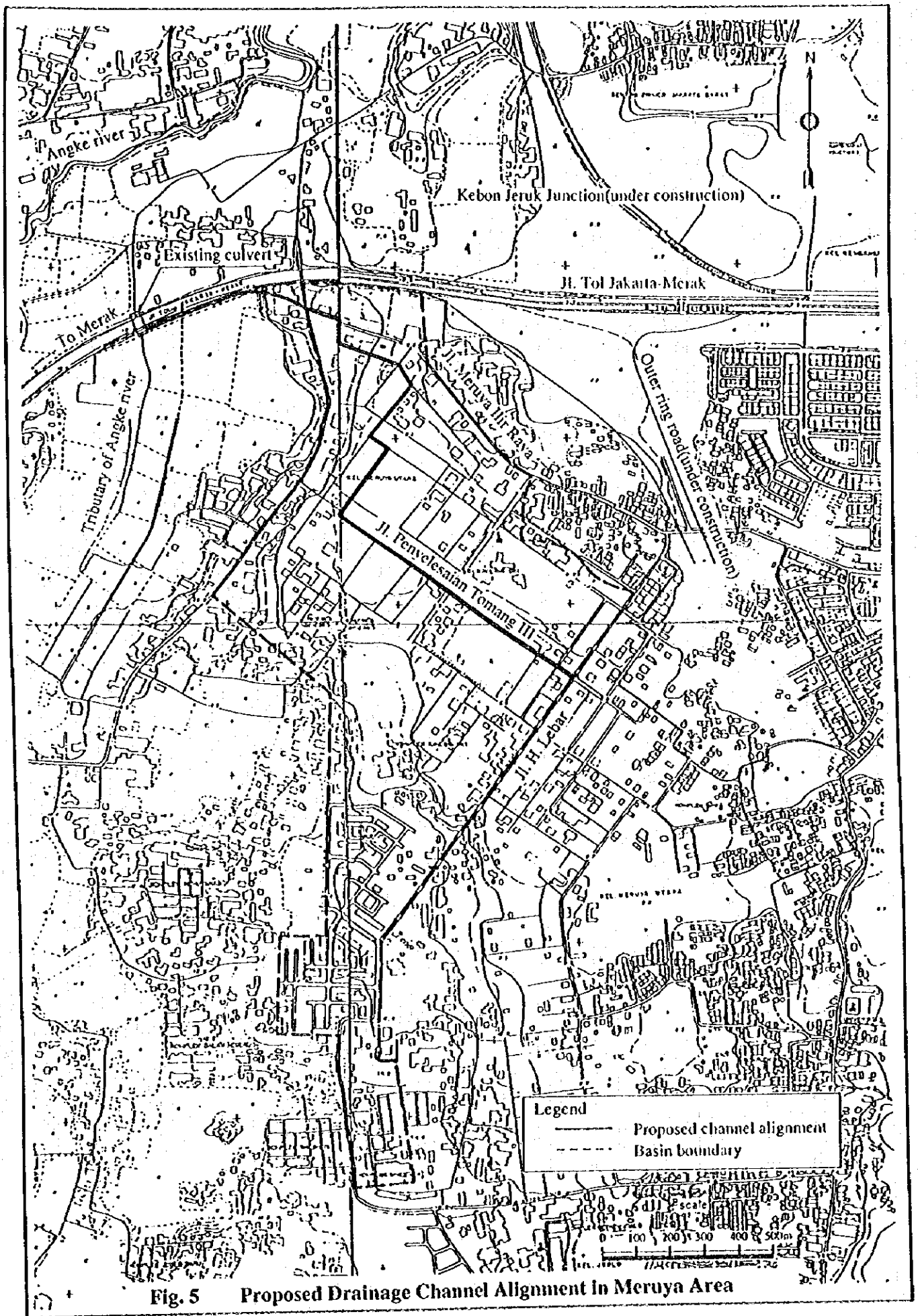


Fig. 5 Proposed Drainage Channel Alignment in Meruya Area

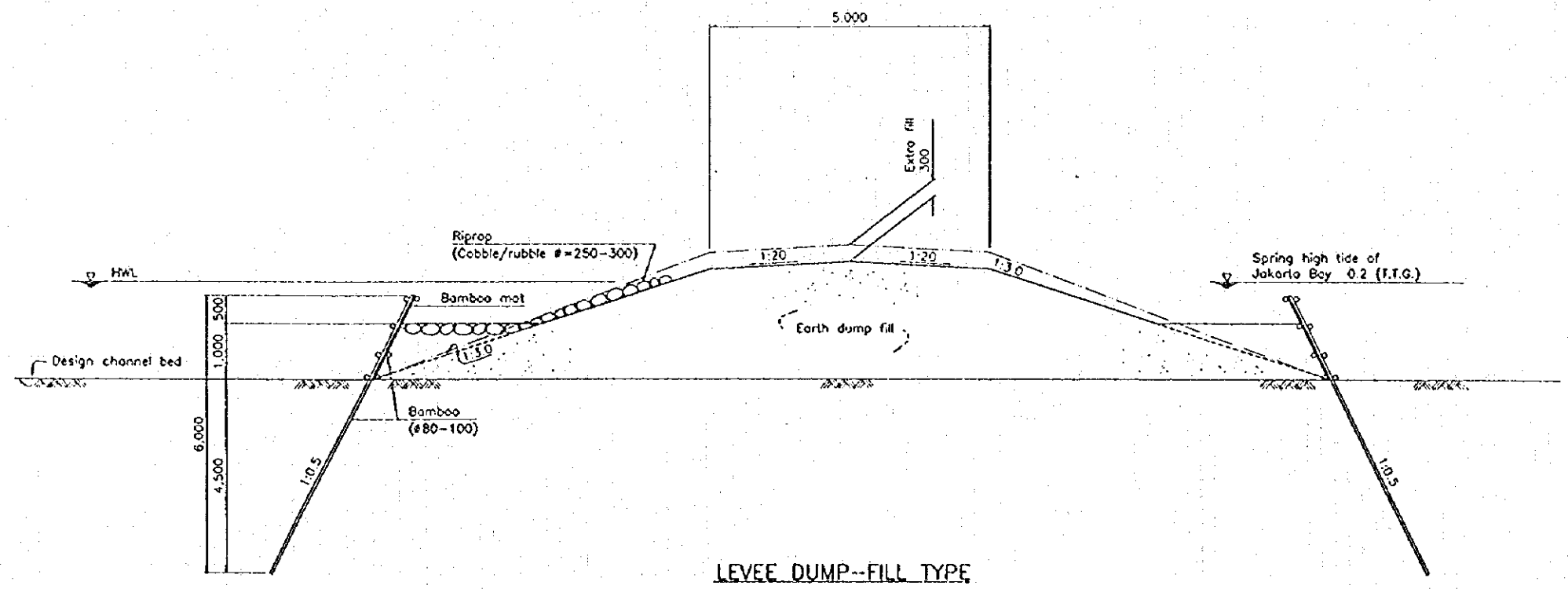
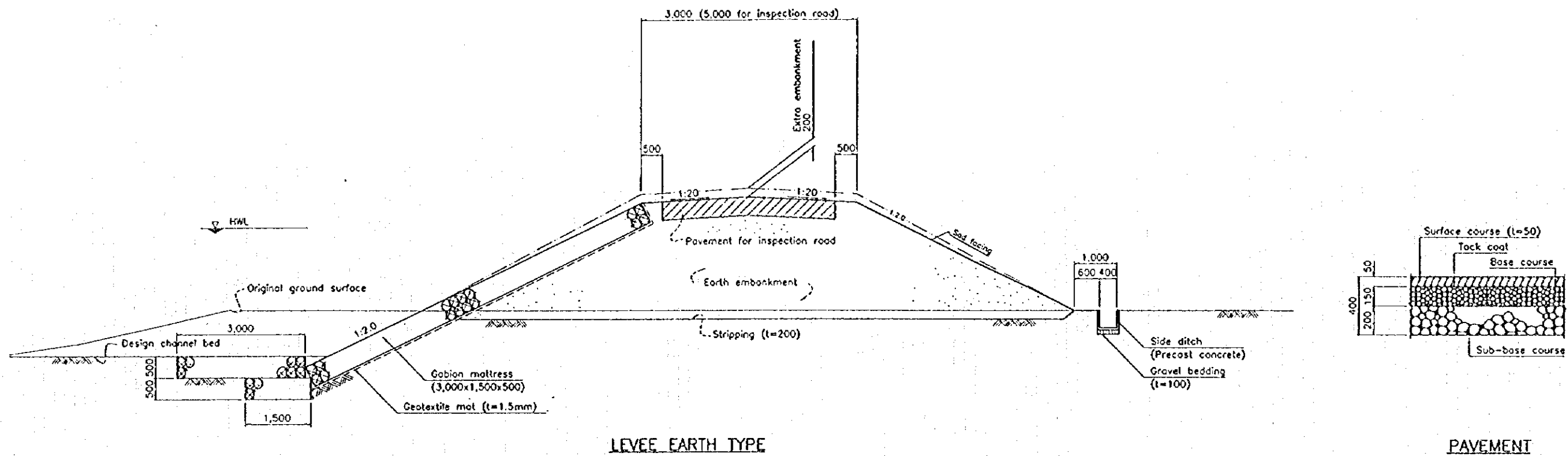
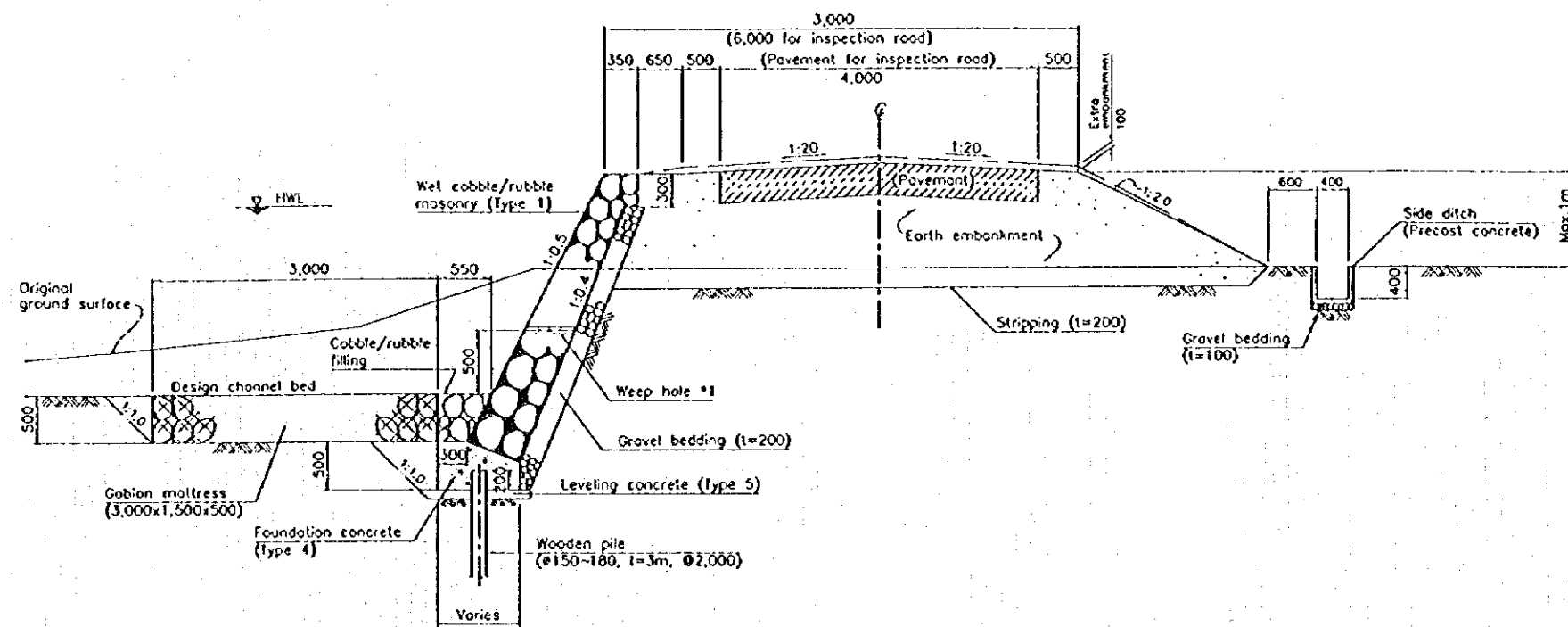
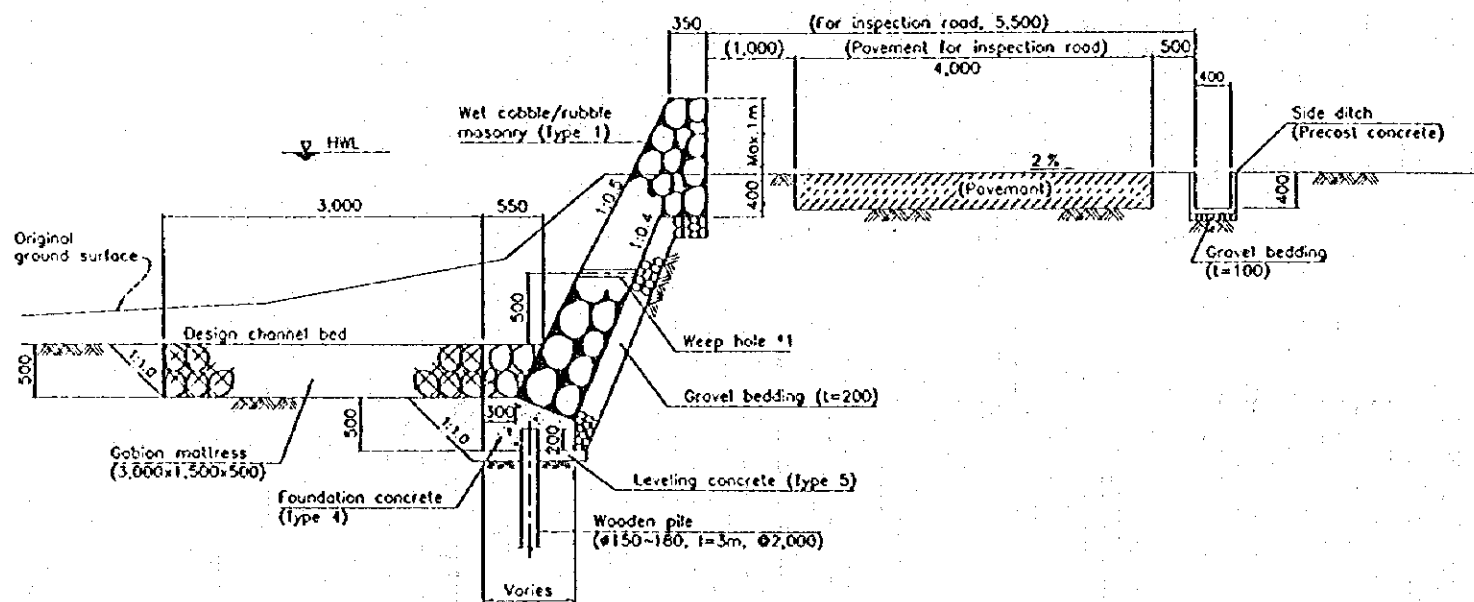


Fig. 6 Typical Sections of Levee

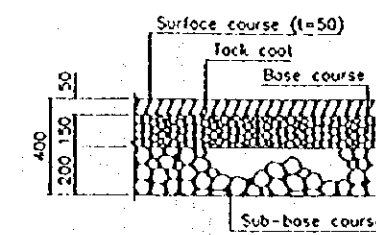
		PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED	
		CHECKED.....		CHANNEL STRUCTURES, LEVEE, TYPICAL CROSS SECTIONS		
		SUBMITTED.....		OWG NO.		DATE
REFERENCE	OWG NO.	DATE.....		J-20-10-001		
			JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA			



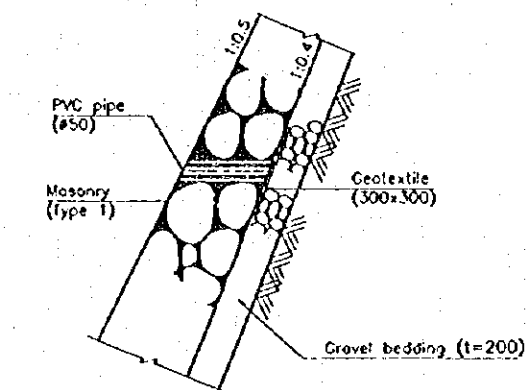
TYPE I



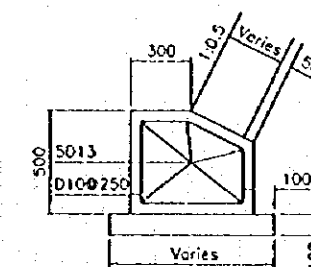
TYPE II



PAVEMENT



WEEP HOLE

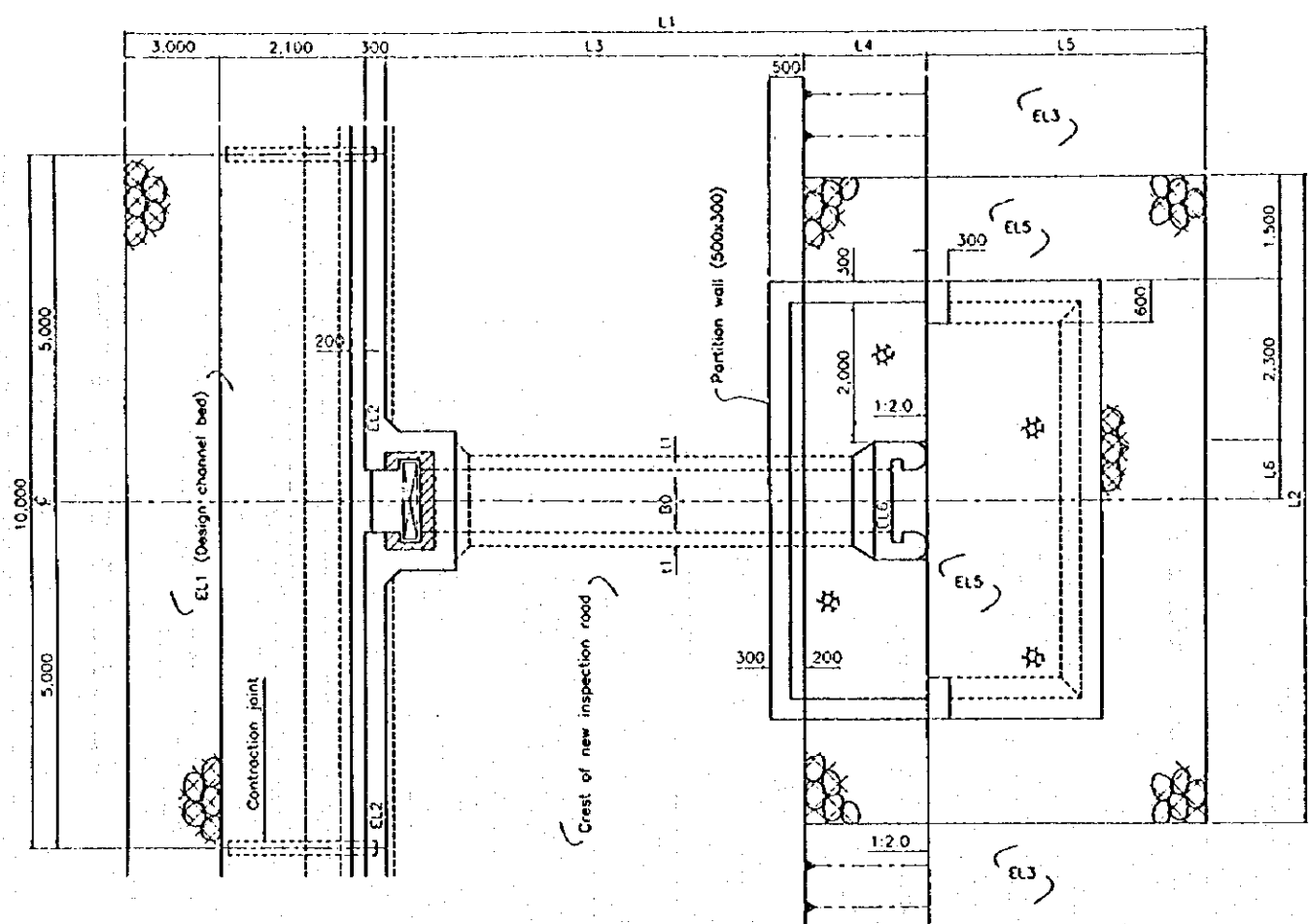


FOUNDATION CONCRETE

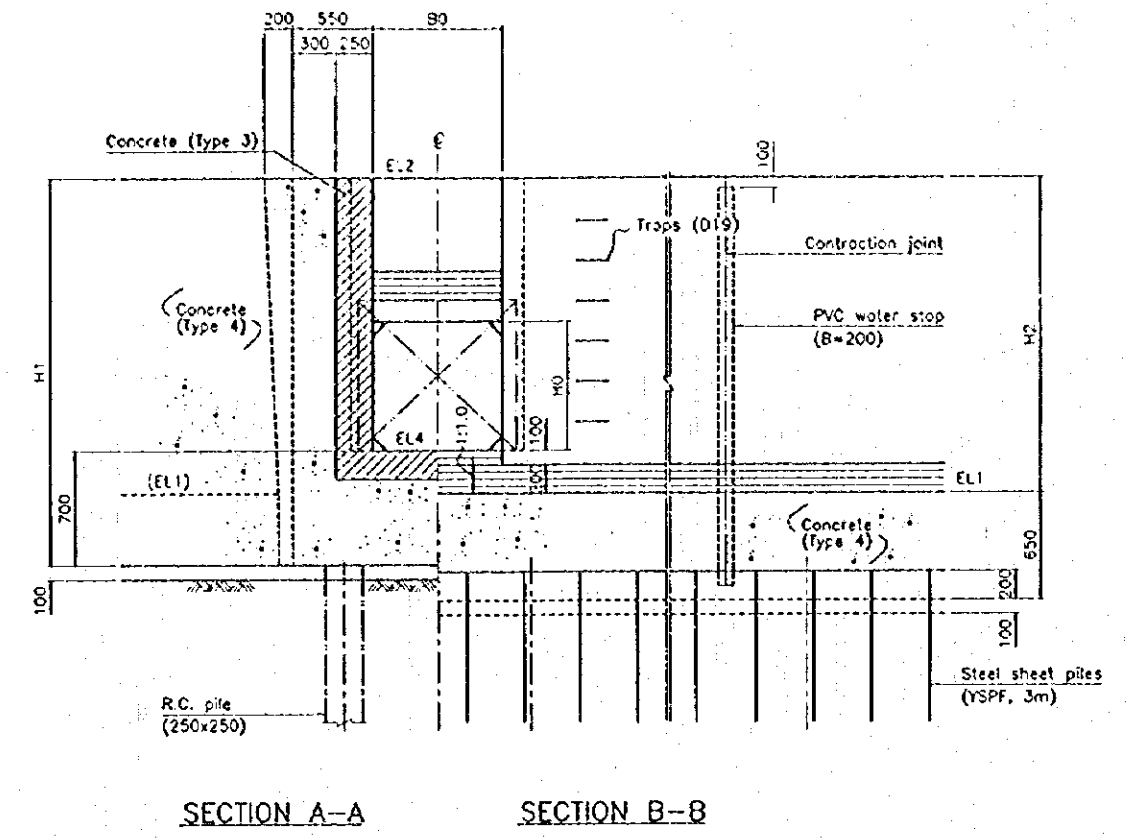
Fig. 8 Typical Sections of Revetment

NOTE :
*1 One weep hole shall be provided every 4m² of the masonry surface.

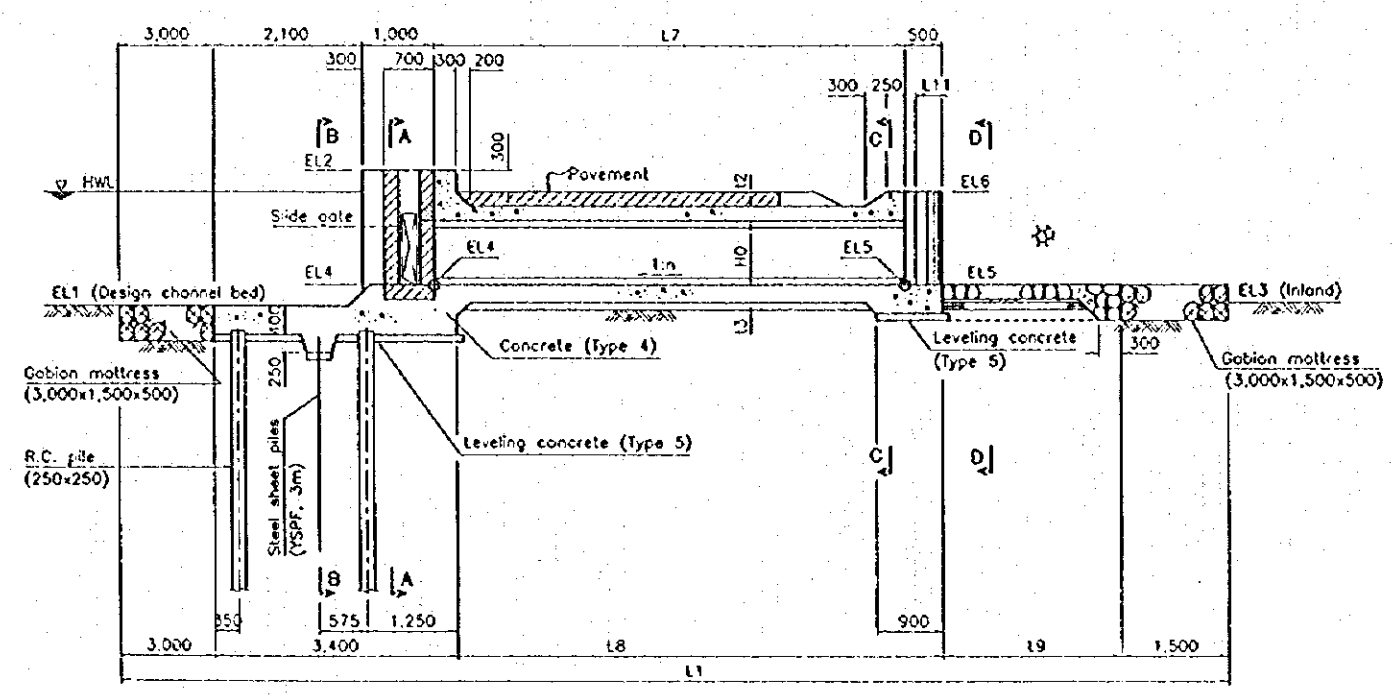
PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING CHANNEL STRUCTURES, REVETMENT TYPICAL CROSS SECTIONS	APPROVED
CHECKED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO. J-20-30-001	DATE
SUBMITTED.....			
REFERENCE	DWG NO.		



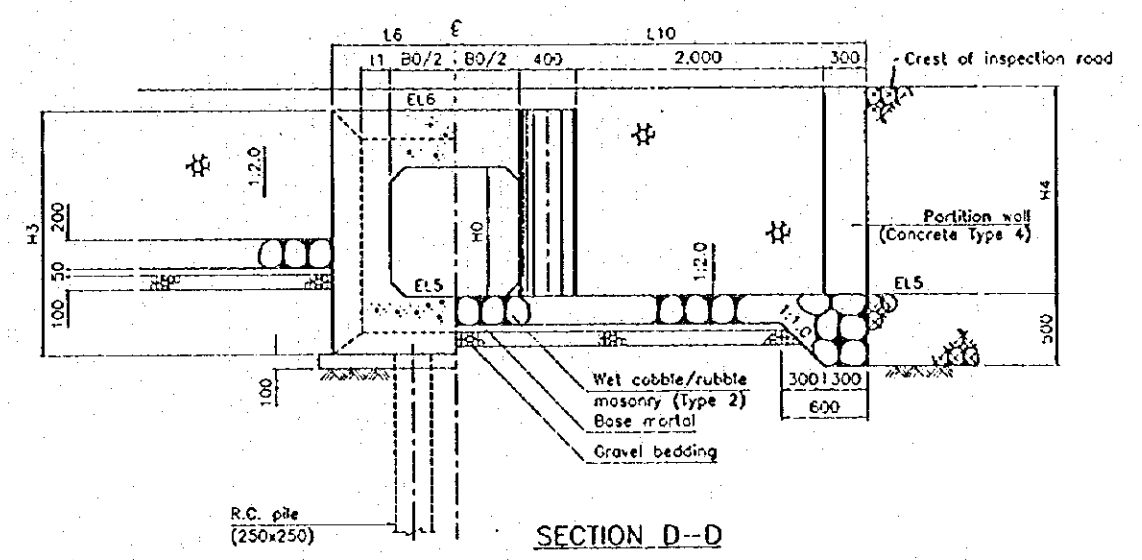
PLAN



SECTION A-A SECTION B-B

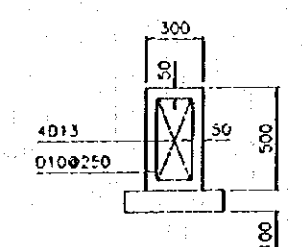


PROFILE

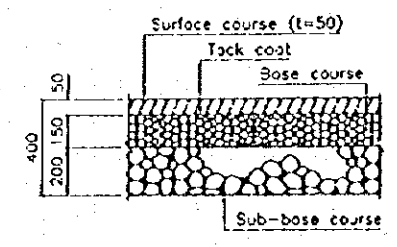


SECTION C-C

SECTION D-D



PARTITION WALL



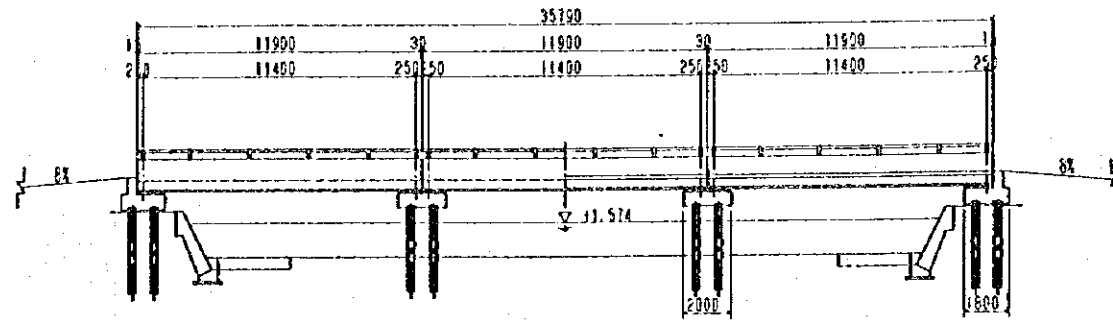
PAVEMENT

Fig. 9 Typical Sections of Sluiceway

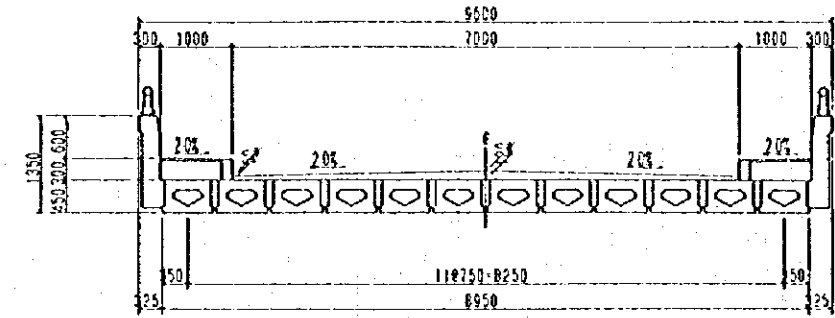
NOTE :
- For the specific dimensions, see the drawings titled "DRAINAGE FACILITIES, SLUICWAY, DIMENSION TABLES".

PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING DRAINAGE FACILITIES, SLUICWAY, CONCRETE L-TYPE WALL SITE (1/4)	APPROVED
CHECKED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	DWG NO. J-30-10-113	DATE
SUBMITTED.....	THE CITY OF JAKARTA		
REFERENCE	DWG NO.		

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADE	1.5% 17.630		-1.5% 17.630		1.5% 17.630		1.5% 17.630	
PROPOSED HEIGHT	3.720	3.720	3.853	3.720	3.720	1.802	0.278	
GROUND HEIGHT	1.000	2.760	10.154	2.760	2.760	2.280		
ACQUITTANCE DISTANCE		17.880	5.005	0.000	5.005	17.880	46.440	75.180
SPRINKLING DISTANCE		0.285	5.005	0.000	5.005	0.250	30.500	26.740
STATION								
PLANE CURVE	R=∞							

DESIGN CONDITION

BRIDGE NAME	BKM11(KM23-2)
LIVE LOAD	BM 70
ORDER LENGTH	1190 m
SPAN LENGTH	1140 m
WIDTH	960 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT (II)	PIER (I)
DEAD LOAD	80.3	160.6
LIVE LOAD	40.0	40.0
TOTAL	120.3	204.2

MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	CONCRETE	no	36	BM70-05
	FORM	m ²	28.6	
ROADWAY	PAVEMENT	m ²	249.9	
	PAVEMENT	m ²	56.4	
MISCELLANEOUS	SUB-CONCRETE	m ²	15.2	
	SIDE BLOCK	m	71.4	
	FILLING MORTAR	m ²	0.750	
GUARD RAIL	CONCRETE	m ²	24.4	
	FORM	m ²	181.1	
	RE-BAR	lf	1.150	
DRAINAGE	STEEL-RAILING	m	71.4	
	NUMBER		12	
EXPANSION	NUMBER	m	38.4	
	NUMBER		78	
CROSS GIRDER	PC-TENDON	m	8830	
	TOTAL LENGTH	m	688.740	
	TOTAL WEIGHT	lf	1.138	
SHEATH	NUMBER	m	171.6	
	GROUT	m	688.7	

PLAN SCALE A

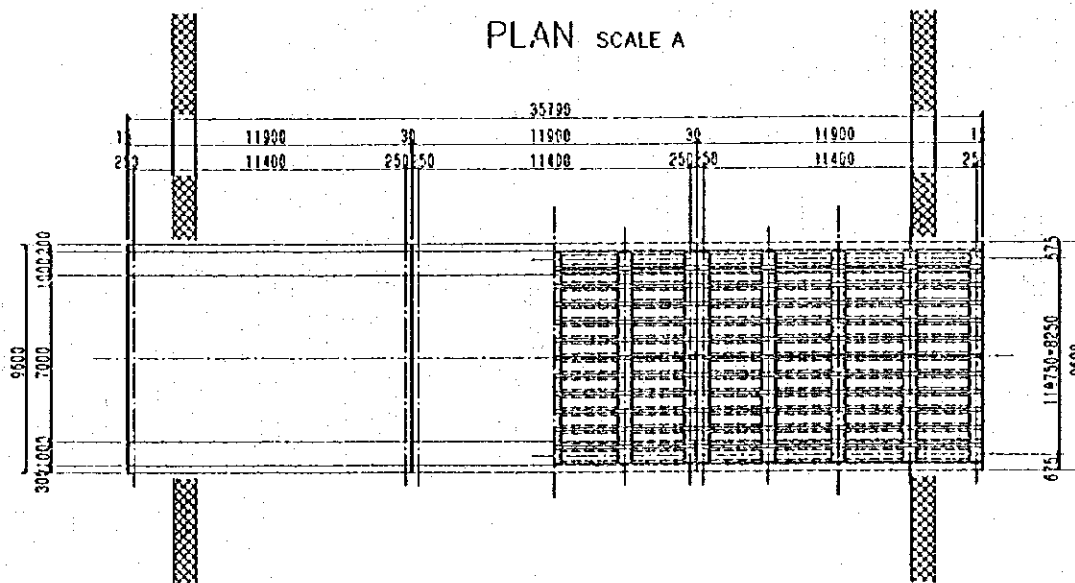
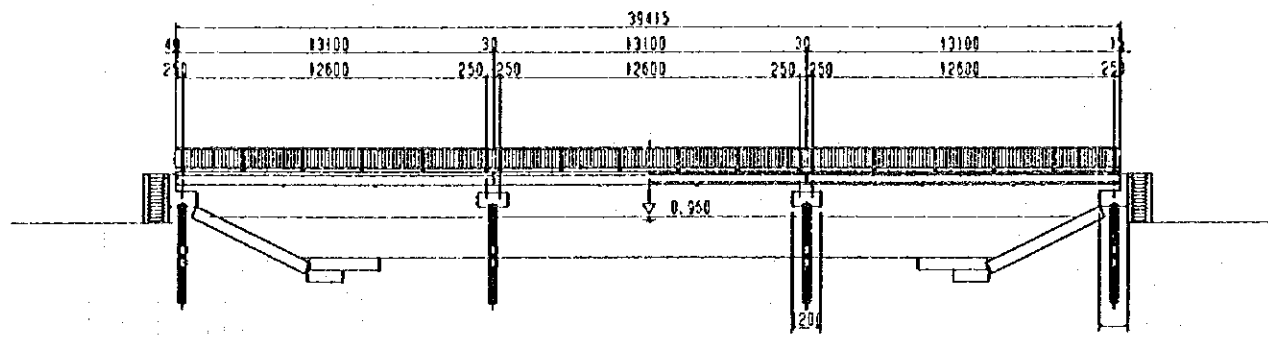


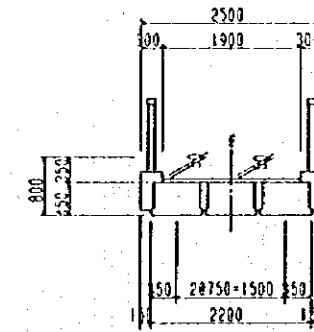
Fig. 10 Typical Sections of Road Bridge

PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED	
CHECKED.....		GENERAL PLAN OF BRIDGE BKM11(KM23-2)		
SUBMITTED.....		JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO.	DATE
DATE.....			J-70-10-109	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% 18000		1.5% R/L=37110		1.5% 18000	
PROPOSED POINT	0.876	2.892	2.892	2.960	2.810	2.806
EXISTING POINT	0.878	1.000	0.714	1.000	1.000	0.750
ACCUMULATED DISTANCE	39.603	19.430	6.565	0.000	19.430	16.600
STATION	2+300	2+883	3+548	3+548	4+500	4+735
STATION						

DESIGN CONDITION

BRIDGE NAME	BKM4(KM15)
LIVE LOAD	HUMAN/ANIMALS
GRIDER LENGTH	13.10 m
SPAN LENGTH	12.60 m
WIDTH	2.50 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT(LI)	PIER(LI)
DEAD LOAD	20.1	40.2
LIVE LOAD	4.0	8.1
TOTAL	24.1	48.3

MATERIAL TABLE

KIND OF MATERIAL	NUMBER	UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	9	no		PB-04
CONCRETE	DESIGN STRENGTH	m ³	3.4	
FORMING	FORM	m ²	5.3	
MISCELLANEOUS	ROADWAY	PAVEMENT	m ²	69.3
	SIDE WALK	PAVEMENT	m ²	---
		SUB-CONCRETE	m ²	---
		SIDE BLOCK	m	---
	GUARD RAIL	FILLING MORTAR	m ³	---
		CONCRETE	m ³	12.6
	EXPANSION	FORM	m ²	91.7
RE-BAR		LI	0.594	
STEEL-RAILING		m	72.9	
CROSS GIRDER	DRAINAGE	NUMBER	8	
	PC-TENDON	NUMBER	36	
		LENGTH	m	2.680
		TOTAL LENGTH	m	74.880
	SHEATH	m	14.4	
	GROUT	m	74.9	

PLAN SCALE A

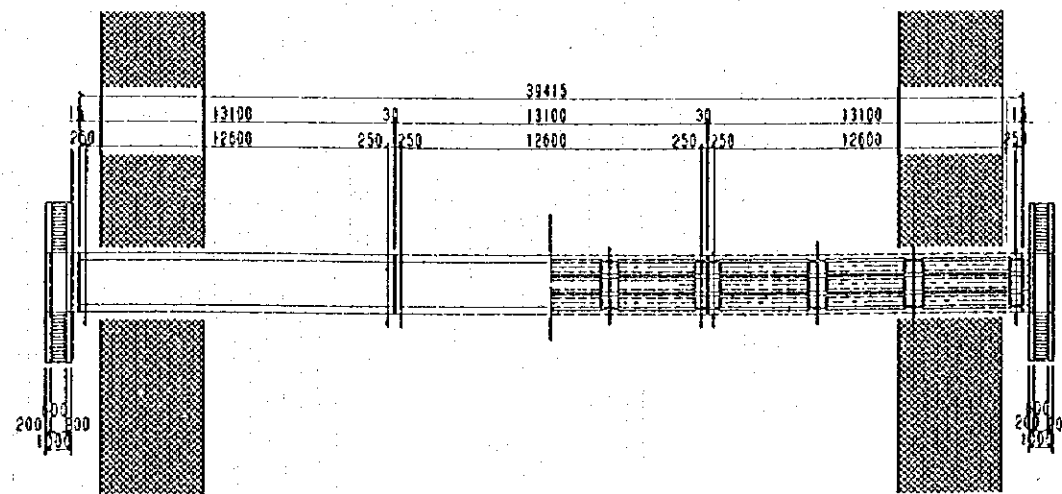
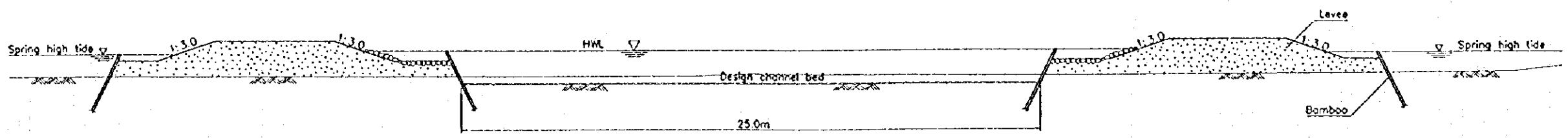
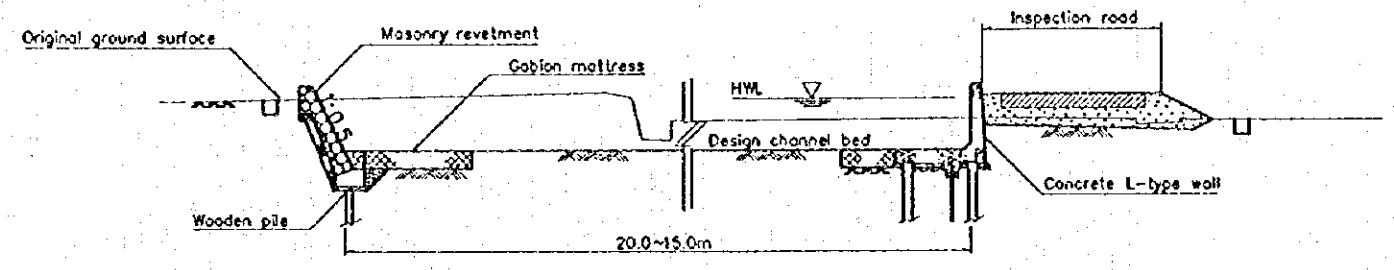


Fig. 11 Typical Sections of Pedestrian Bridge

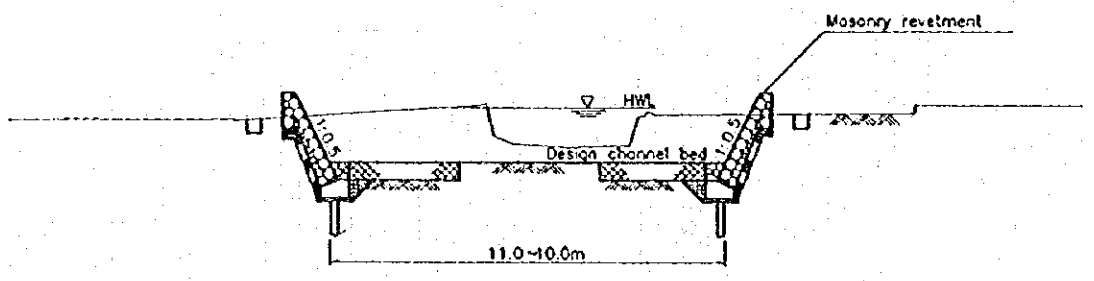
PREPARED.....	MINISTRY OF PUBLIC WORKS	TITLE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKM4(KM15)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO.	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	J-70-10-103	
REFERENCE	DWG NO.		



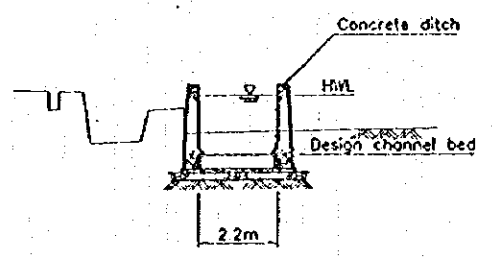
(a) Downstream of Jl. Tol Prof. Sedyotmo



(b) Downstream of Jl. Tol Prof. Sedyotmo
(3) Tanjung Drainage Channel

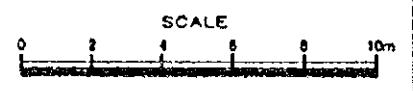


(4) Gede/Bor Drainage Channel

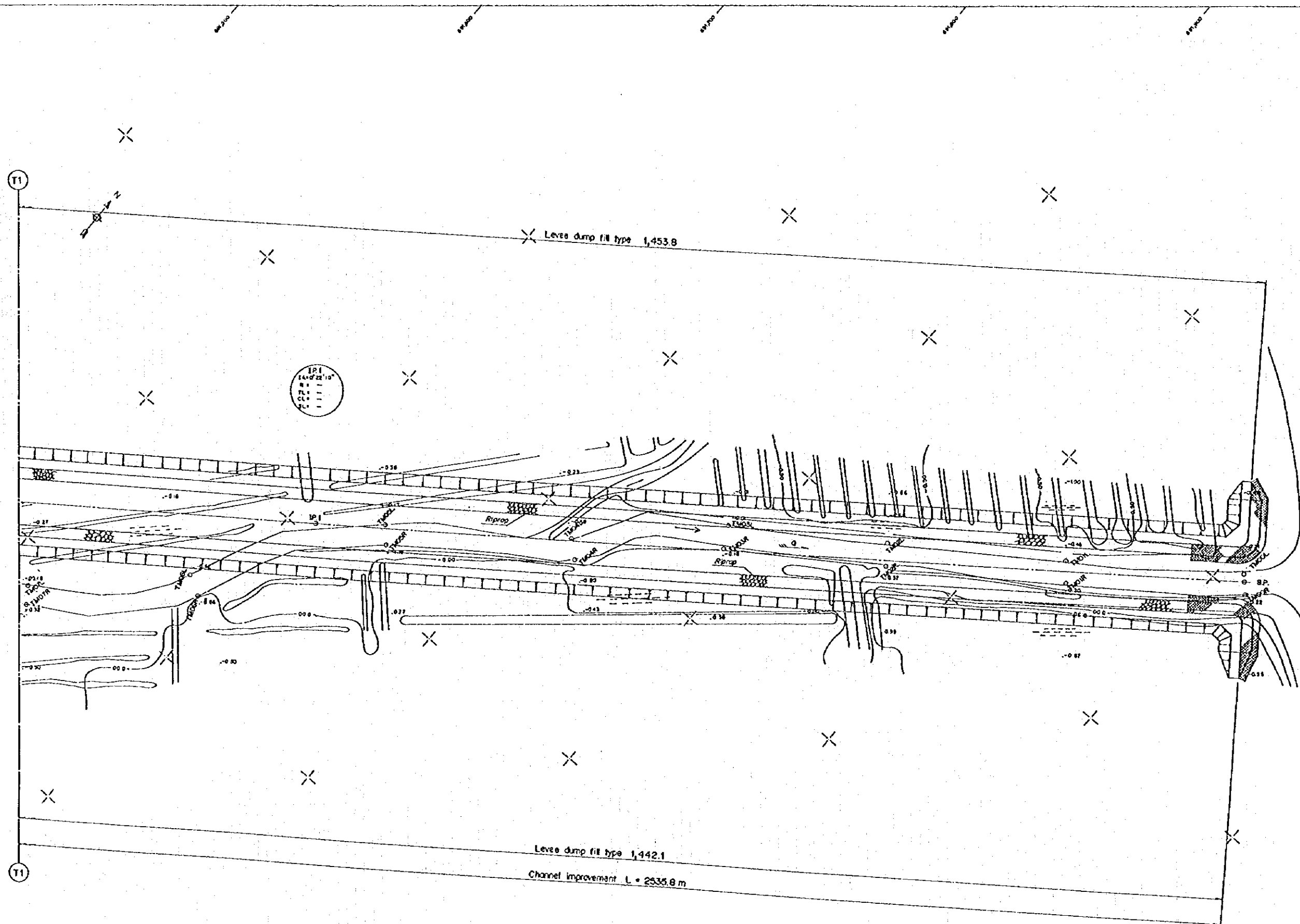


(5) PIK Junction Drainage Channel

Fig. 12 Typical Cross Sections of Tanjung and PIK Junction Drainage Channels

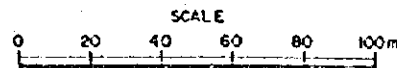
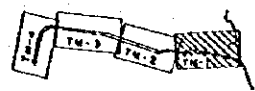


REFERENCE	DWG NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, TYPICAL CROSS SECTION (2/3)	APPROVED
		CHECKED.....		DWG NO.	DATE
		SUBMITTED.....		J-10-30-002	
		DATE.....			



JAKARTA BAY

Fig. 13 Plan of Tanjung Drainage Channel (I)



REFERENCE	DWG NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED
		CHECKED.....		DRAINAGE CHANNEL, PLAN, TANJUNGAN DRAINAGE CHANNEL (1/4)	
		SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT BY THE CITY OF JAKARTA	DWG NO.	DATE
		DATE.....		J-10-10-301	

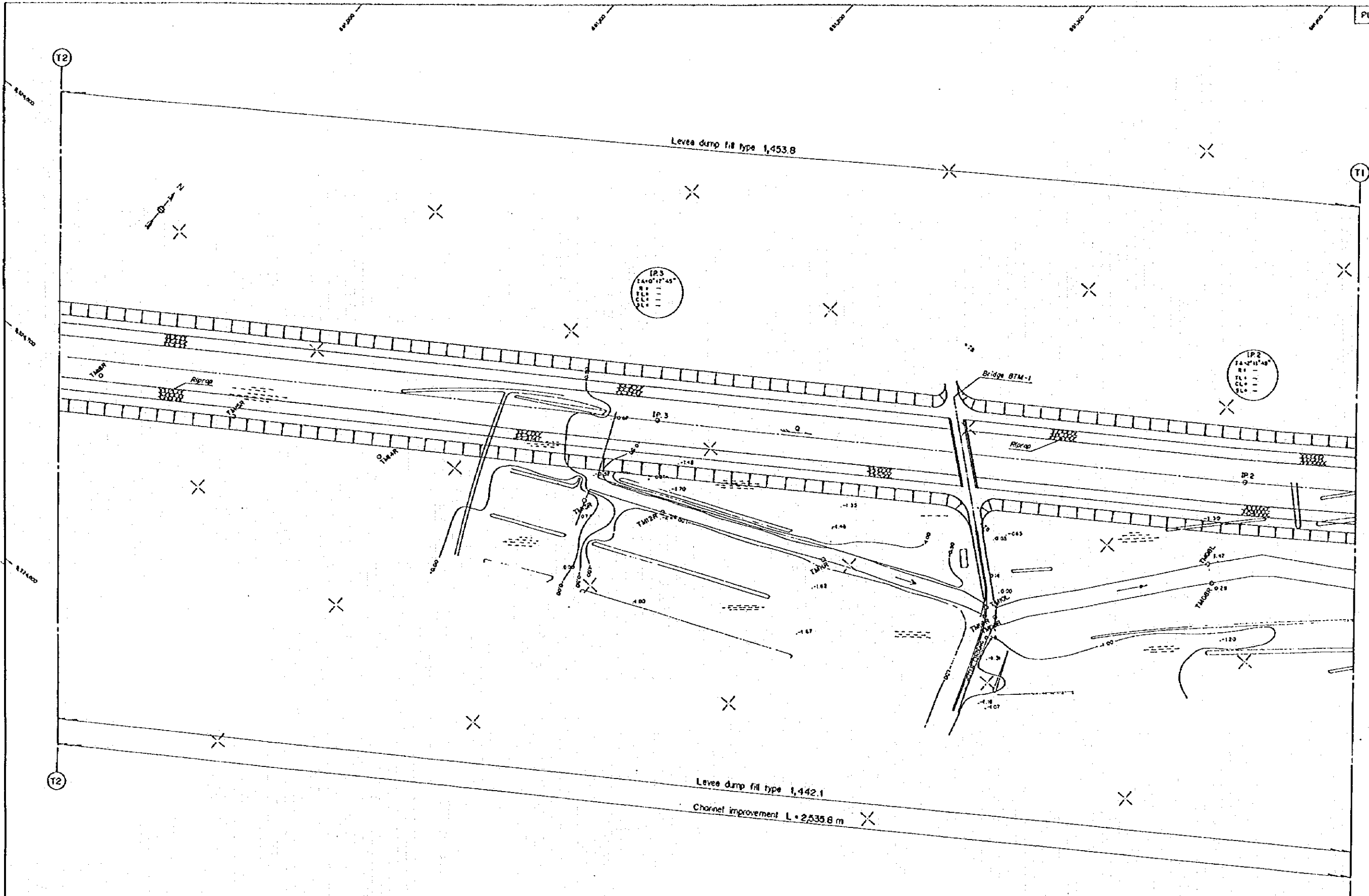
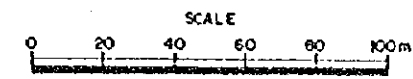


Fig. 14 Plan of Tanjung Drainage Channel (2)



REFERENCE	DWG NO.	DATE	PREPARED..... CHECKED..... SUBMITTED..... DATE.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, TANJUNGAN DRAINAGE CHANNEL (2A) DWG NO. J - 10 - 10 - 302	APPROVED DATE
-----------	---------	------	--	---	--	--------------------------

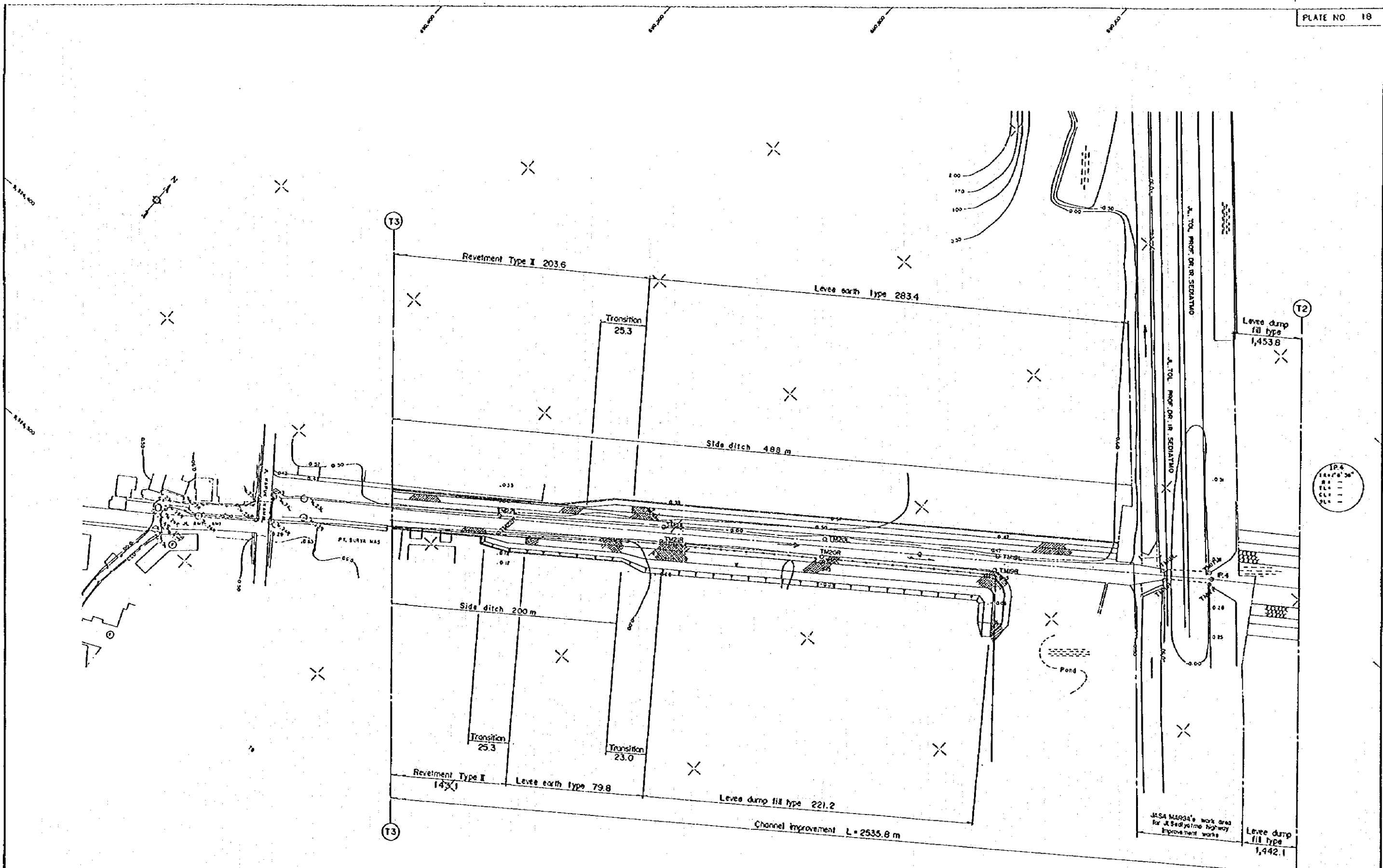
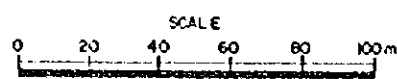
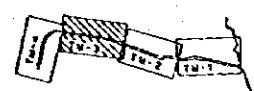


Fig. 15 Plan of Tanjung Drainage Channel (3)



PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, TANJUNGAN DRAINAGE CHANNEL (3/4)	APPROVED
CHECKED.....		DWG NO.	DATE
SUBMITTED.....		J-10-10-303	
DATE.....			
REFERENCE	DWG NO.		

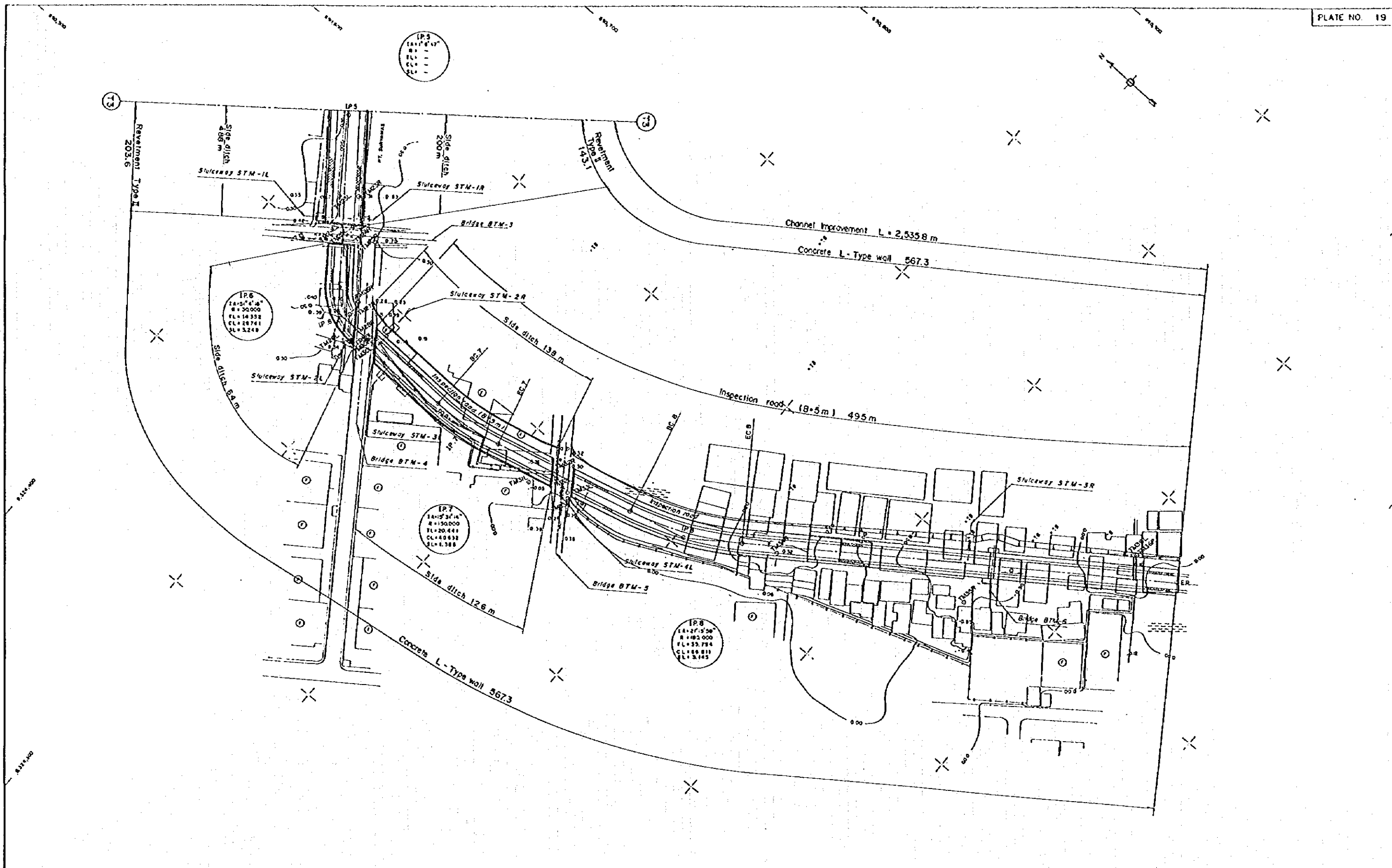
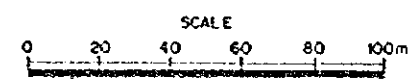
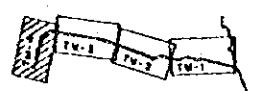


Fig. 16 Plan of Tanjungan Drainage Channel (4)



REFERENCE	DWG NO.	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT BY THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, TANJUNGAN DRAINAGE CHANNEL (4/4)	APPROVED
		CHECKED.....		DWG NO.	DATE
		SUBMITTED.....		J-10-10-304	
		DATE.....			

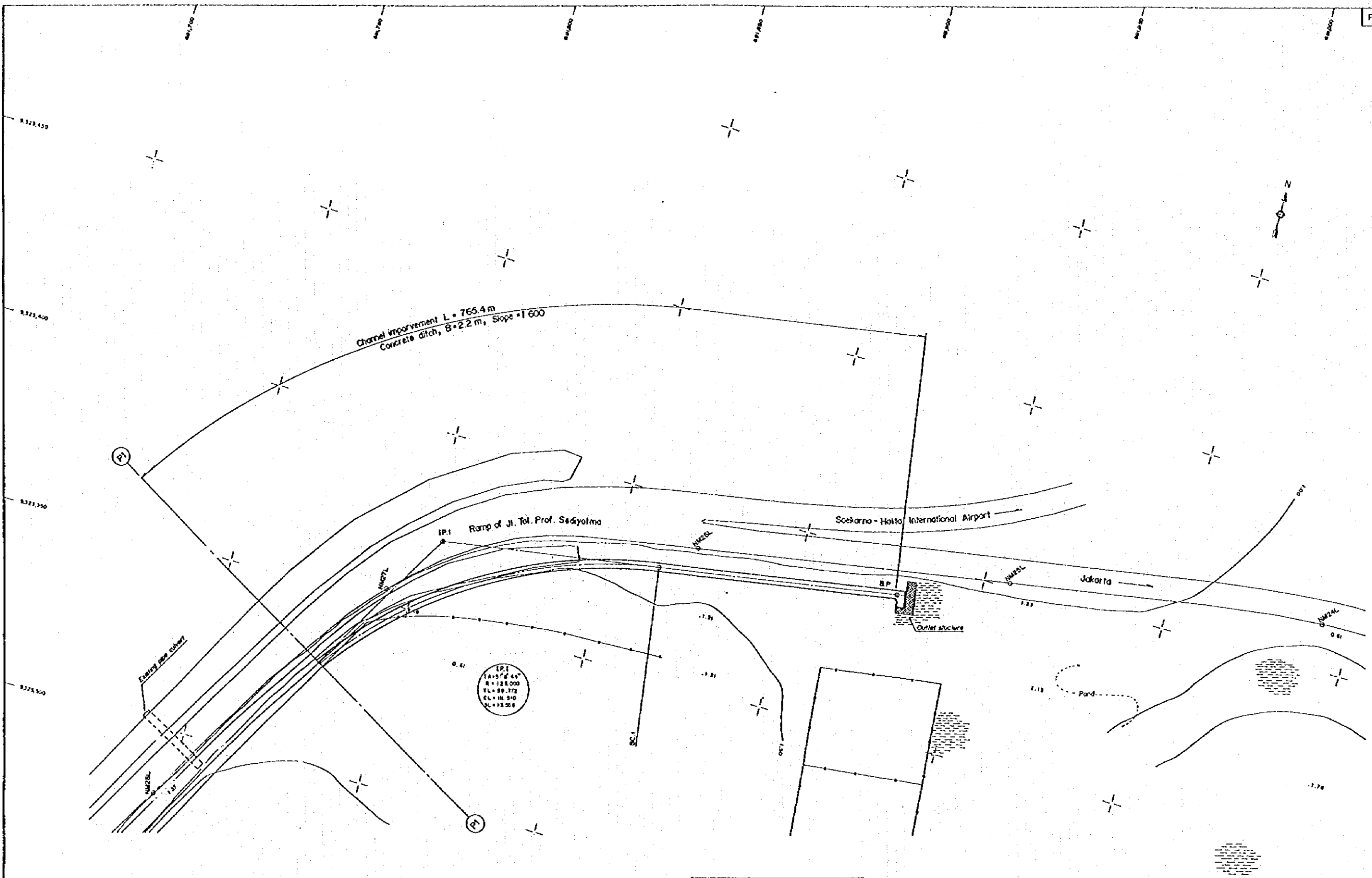
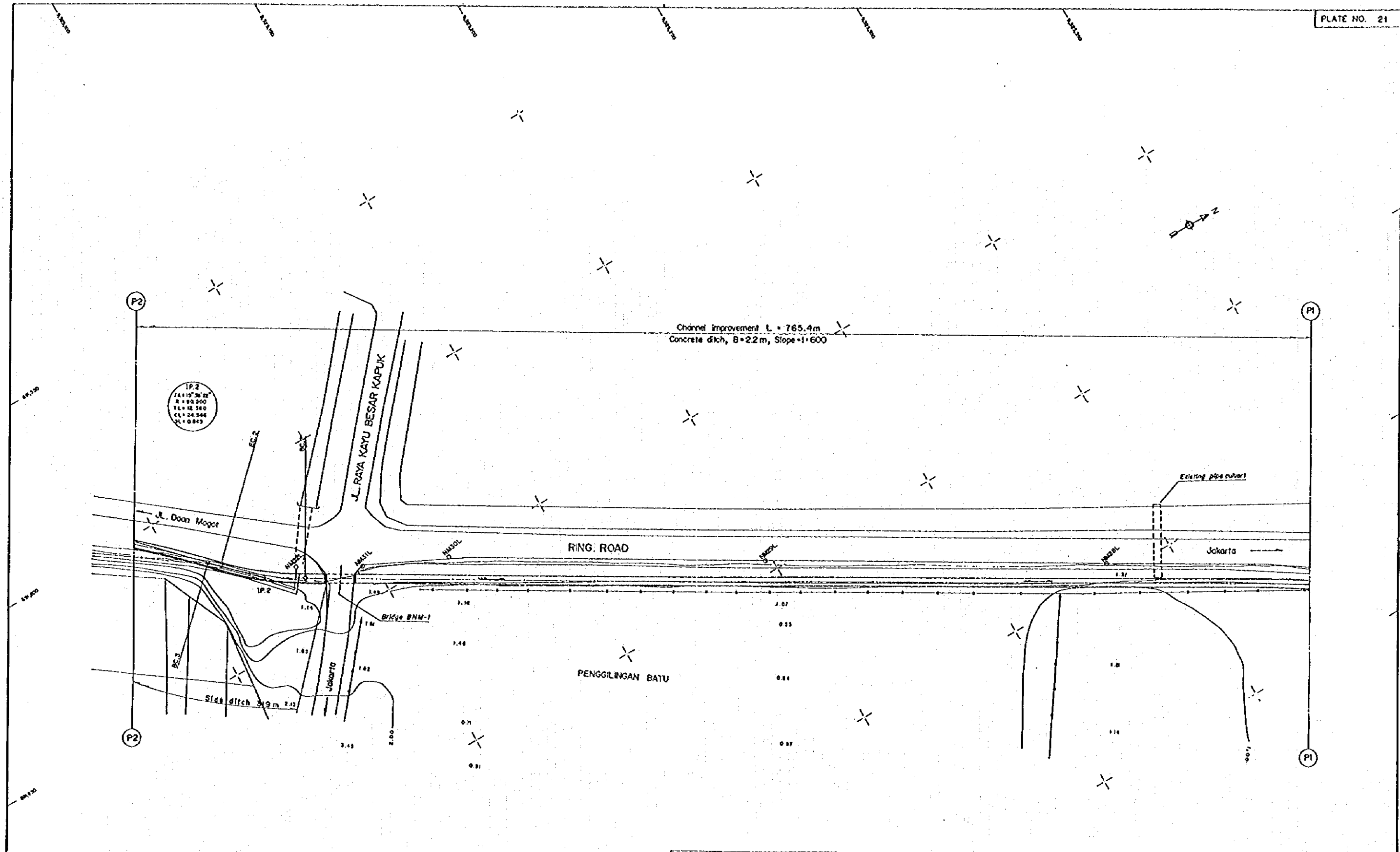


Fig. 17 Plan of PIK Junction Drainage Channel (I)

IP. No.	Coordinate	
	N	E
BP	9,323,389.8	69,928.5
IP.1	9,323,370.8	69,804.8

REFERENCE	DWG NO.	DATE	PREPARED..... CHECKED..... SUBMITTED..... DATE.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, PIK JUNCTION DRAINAGE CHANNEL (1/3) DWG NO. J-10-10-401	APPROVED DATE
-----------	---------	------	--	---	--	--------------------------



IP.2
 24 11' 30" 22"
 R = 99.900
 TL = 2.500
 CL = 24.546
 SL = 0.843

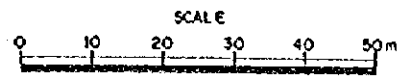
Channel improvement L = 765.4m
 Concrete ditch, B=2.2m, Slope=1:600

RING ROAD

PENGILINGAN BATU

Existing pipe culvert

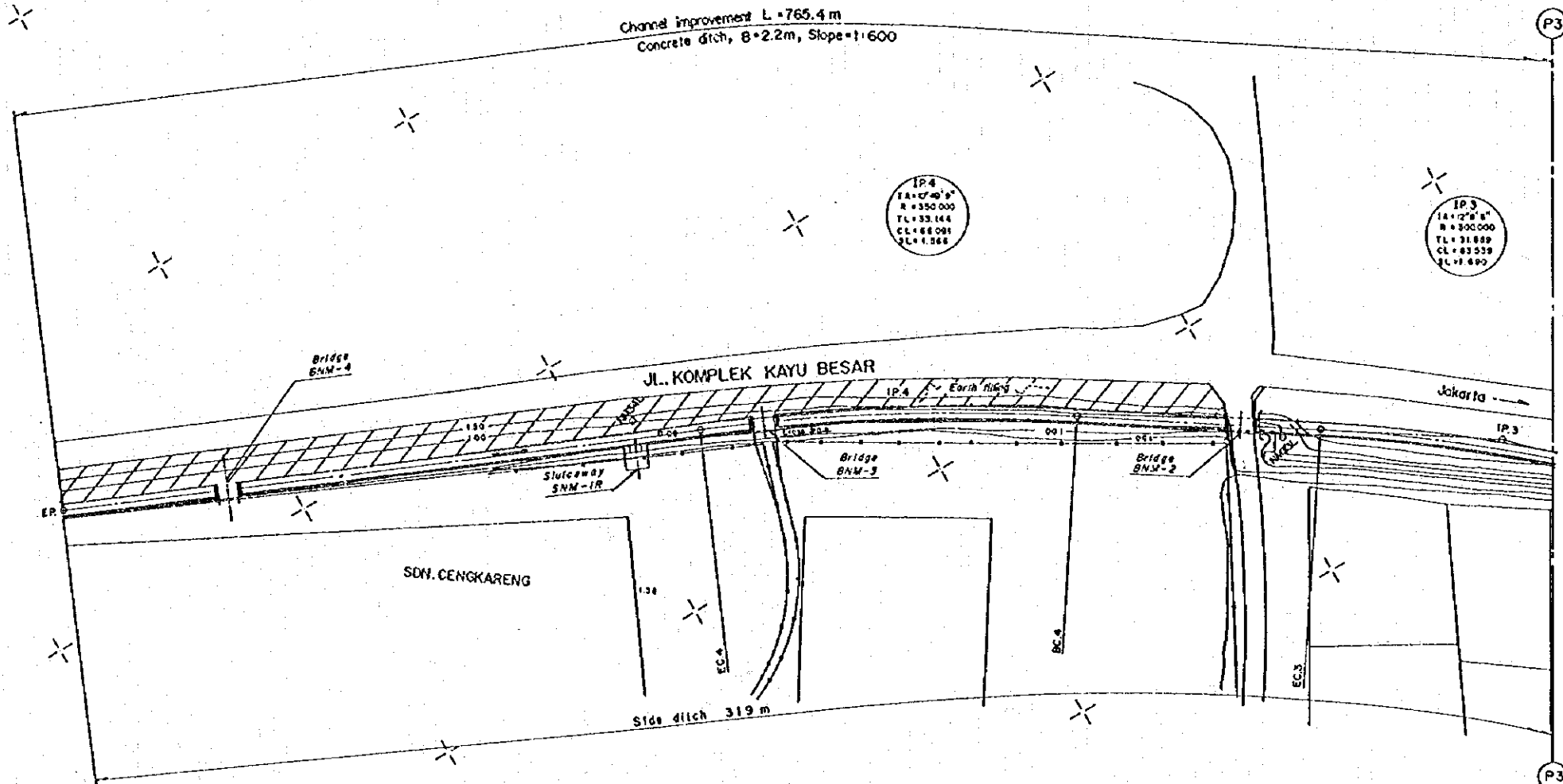
Jakarta



IP. No.	Coordinate	
	N	E
IP.2	9,523,070.4	621,429.7

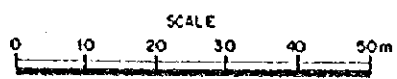
Fig. 18 Plan of PIK Junction Drainage Channel (2)

PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, PIK JUNCTION DRAINAGE CHANNEL (2/3)	APPROVED
CHECKED.....		DWG NO. J-10-10-402	DATE
SUBMITTED.....			
DATE.....			
REFERENCE	DWG NO.		



IP. No.	Coordinate	
	N	E
IP.3	9,323,036.8	69,595.1
IP.4	9,322,947.9	69,535.8
E.P.	9,322,813.4	69,478.8

Fig. 19 Plan of PIK Junction Drainage Channel (3)



REFERENCE	DWG NO.	DATE	PREPARED CHECKED SUBMITTED DATE	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE CHANNEL, PLAN, PIK JUNCTION DRAINAGE CHANNEL (3/3) DWG NO. J-10-10-403	APPROVED DATE
-----------	---------	------	--	---	--	--------------------------

Fig. 10.2 Overall Implementation Schedule

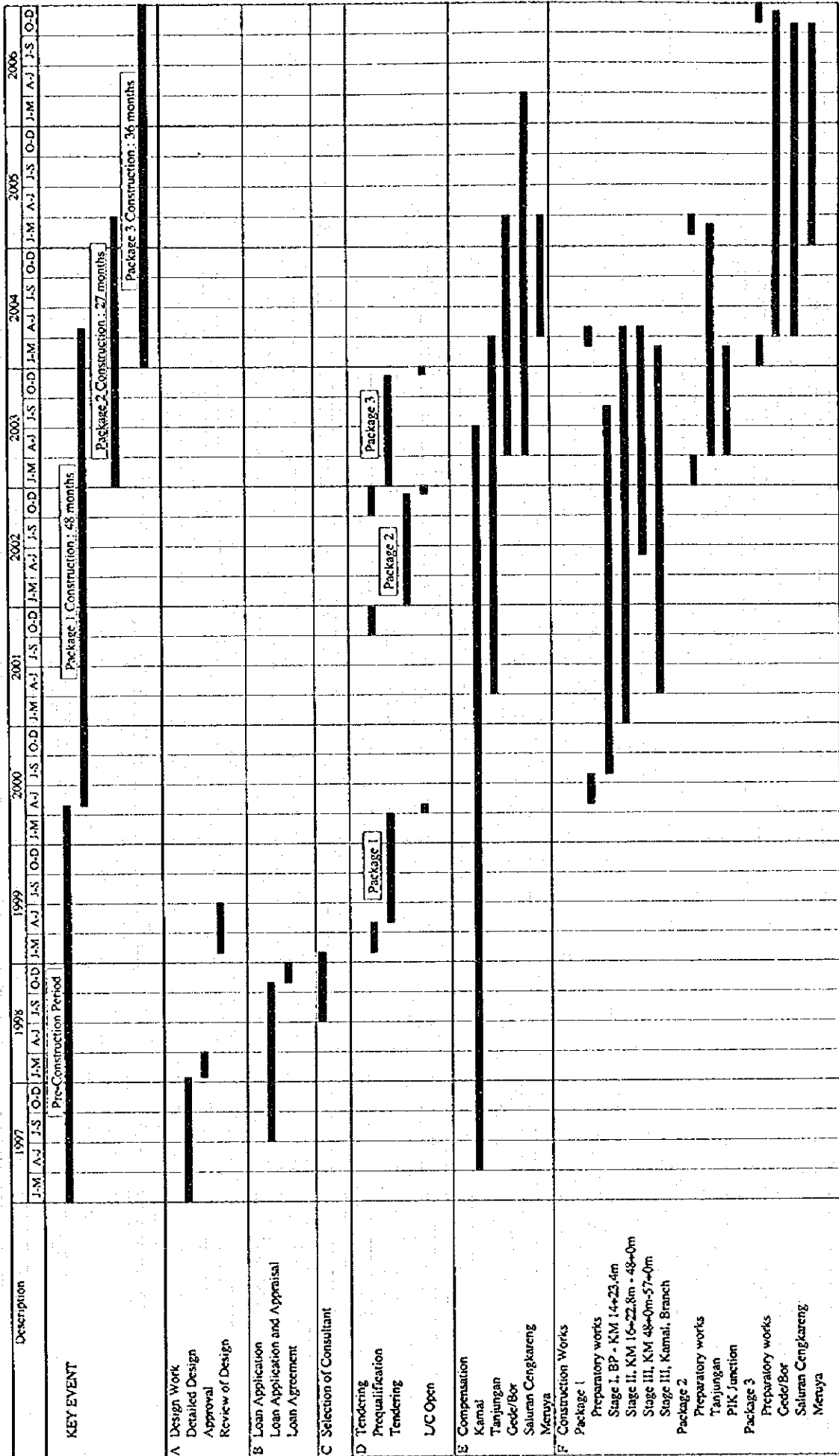


Fig. 20 Project Implementation Schedule







