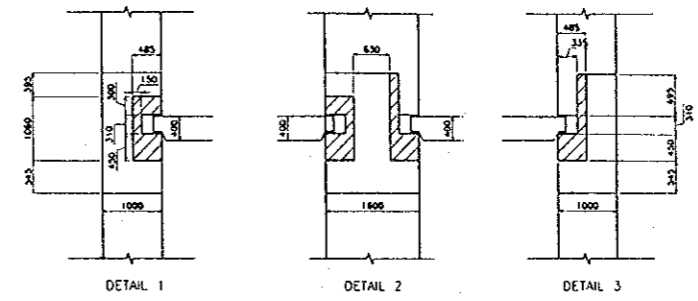
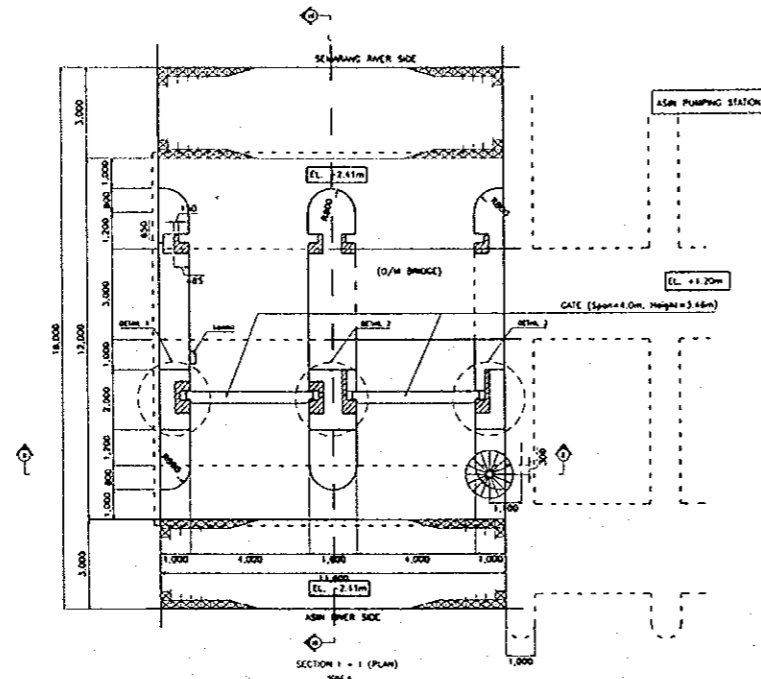
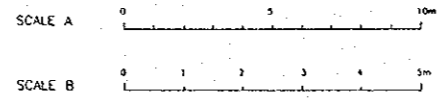
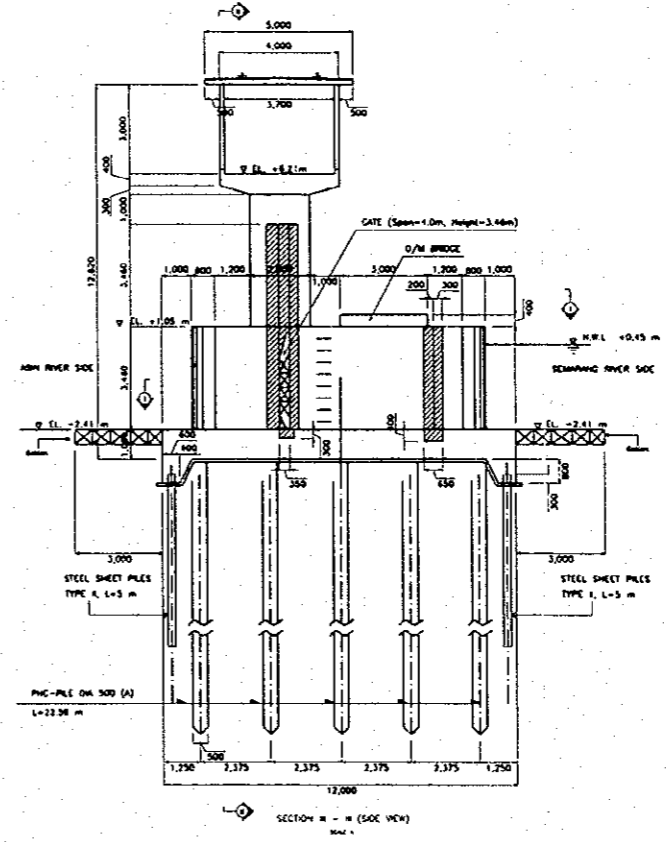
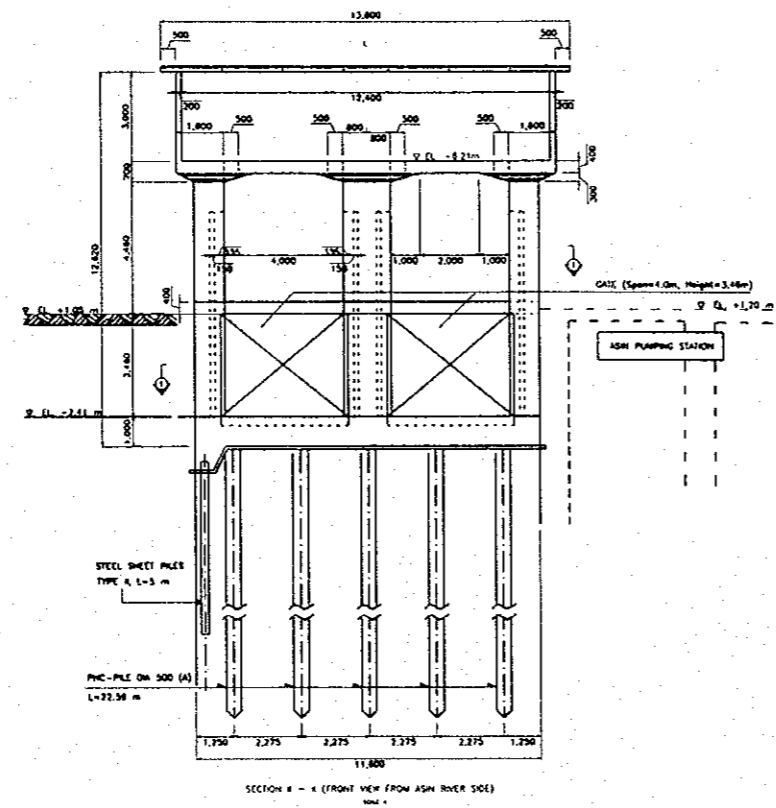


<p>THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA</p>	<p>Fig. 6.3.33</p>	<p>STAFF HOUSE</p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY</p>		

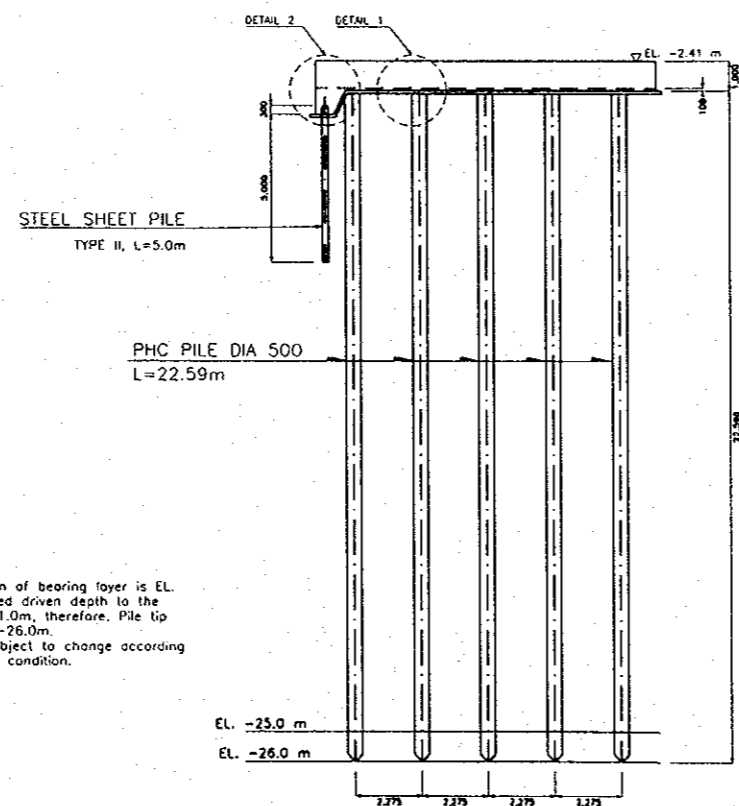
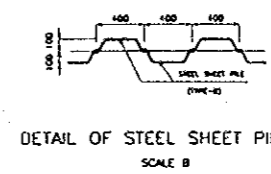
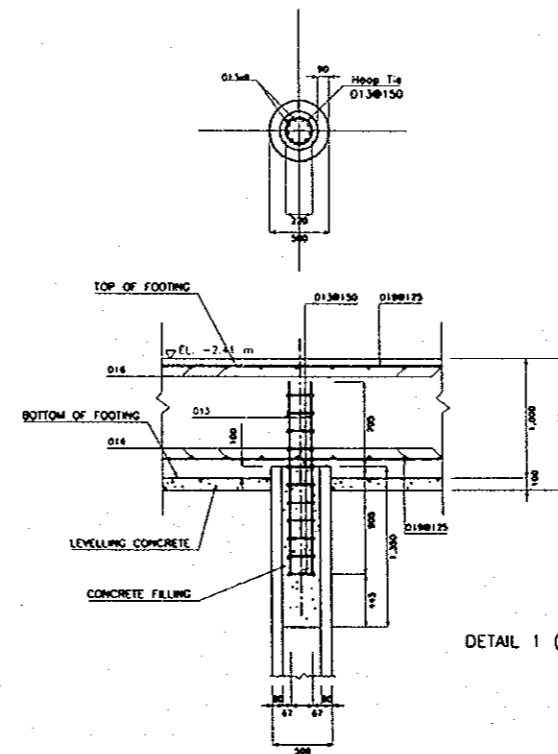
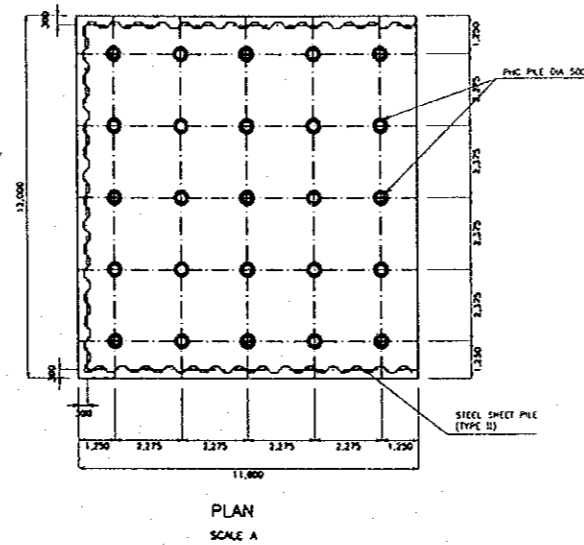


DETAIL OF SECONDARY CONCRETE (Column)
SCALE 9



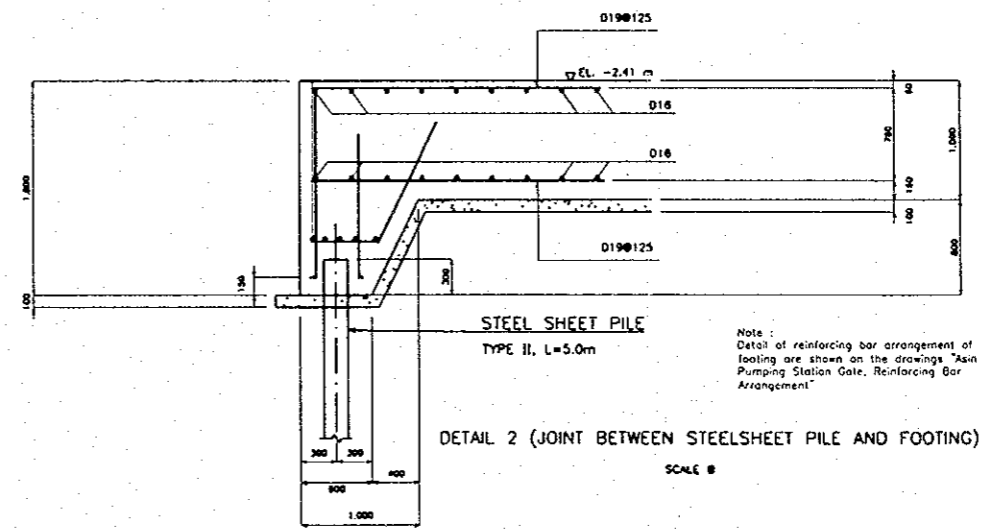
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3.34
ASIN PUMPING STATION GATE



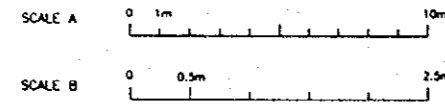
Note:
 1. Assumed elevation of bearing layer is EL. -25.0 m. Required driven depth to the bearing layer is 1.0m, therefore, Pile tip elevation is EL. -26.0m.
 2. Pile Length is subject to change according to the geological condition.

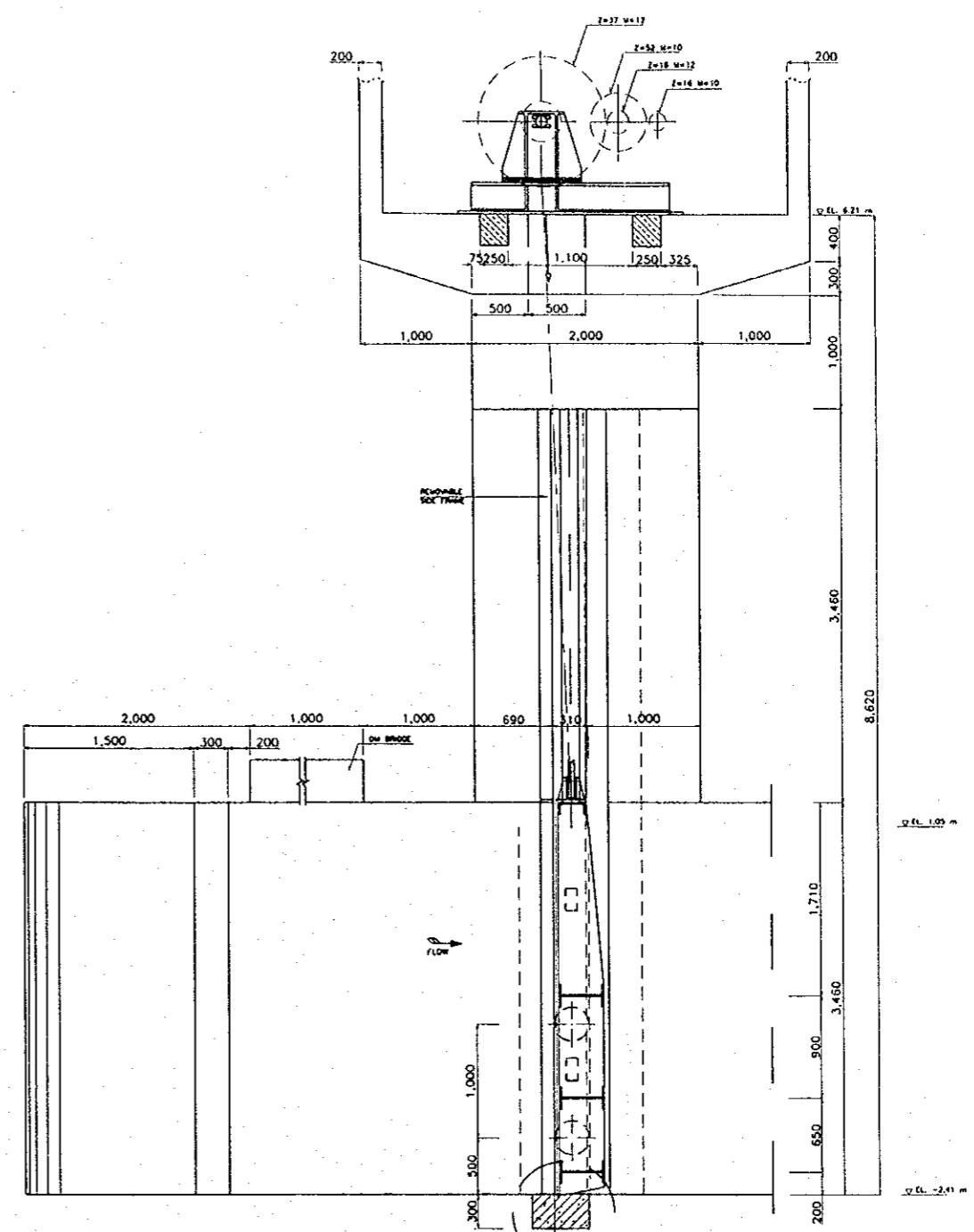
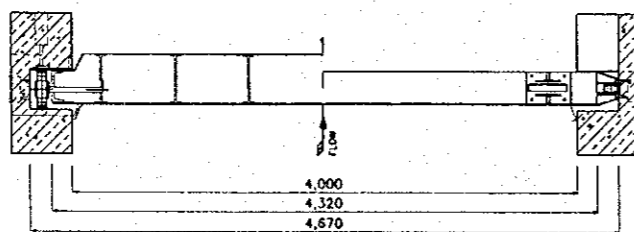
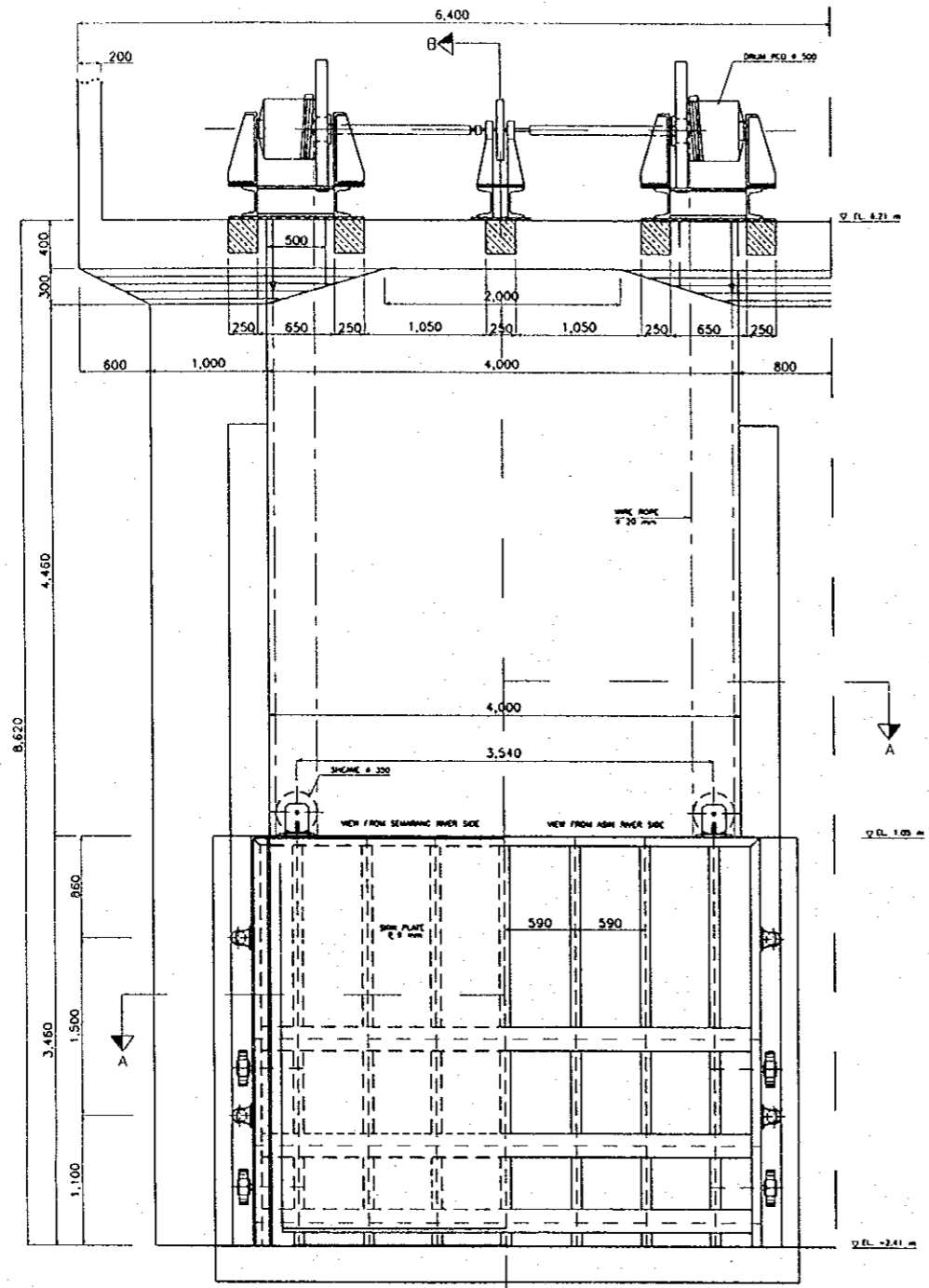
DETAIL 1 (PHC PILE TOP TREATMENT)
SCALE B



Note:
 Detail of reinforcing bar arrangement of footing are shown on the drawings "Asin Pumping Station Gate, Reinforcing Bar Arrangement".

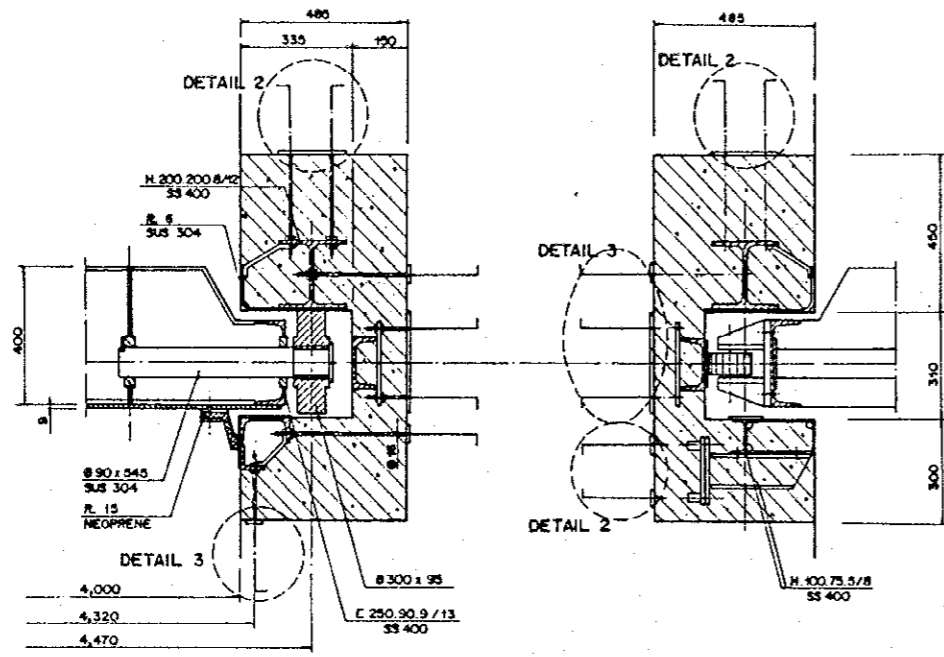
DETAIL 2 (JOINT BETWEEN STEEL SHEET PILE AND FOOTING)
SCALE B





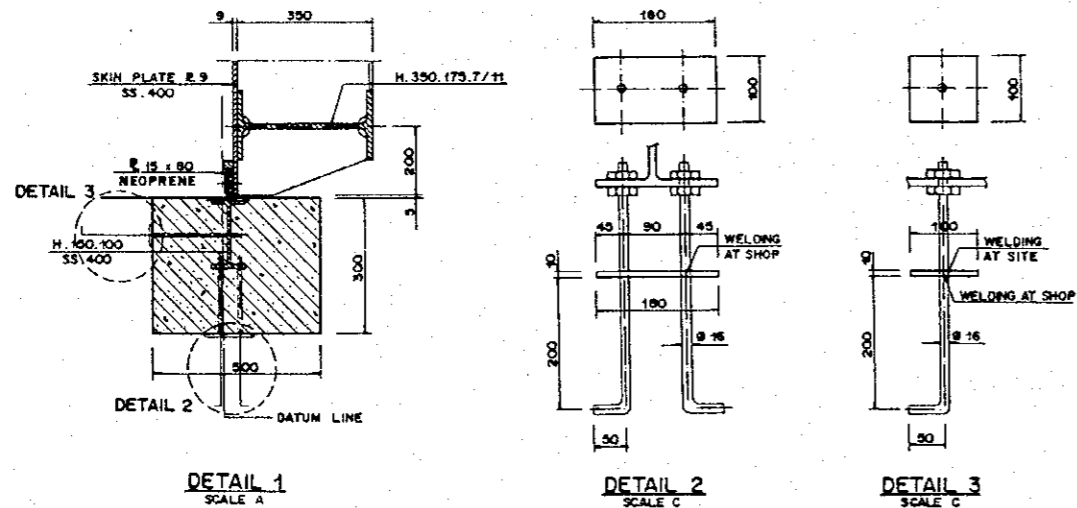
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3.36
GENERAL STRUCTURE OF ASIN PUMPING STATION GATE



SECTION C-C SECTION D-D

DETAIL OF GUIDE FRAME
SCALE A

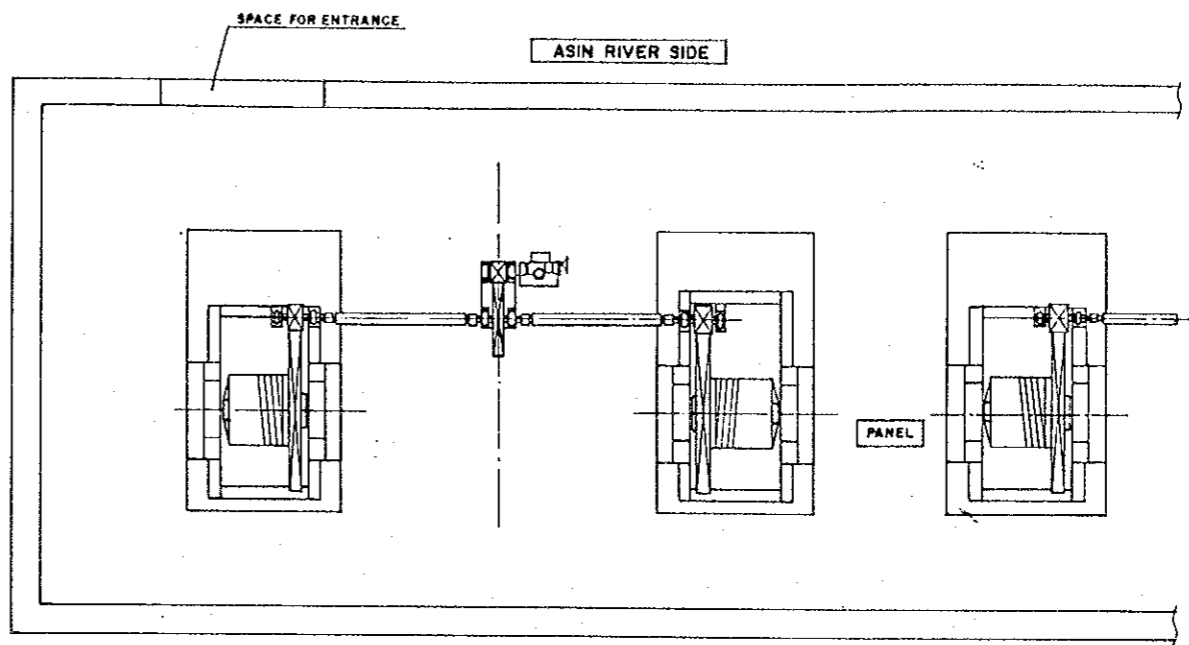


DETAIL 1
SCALE A

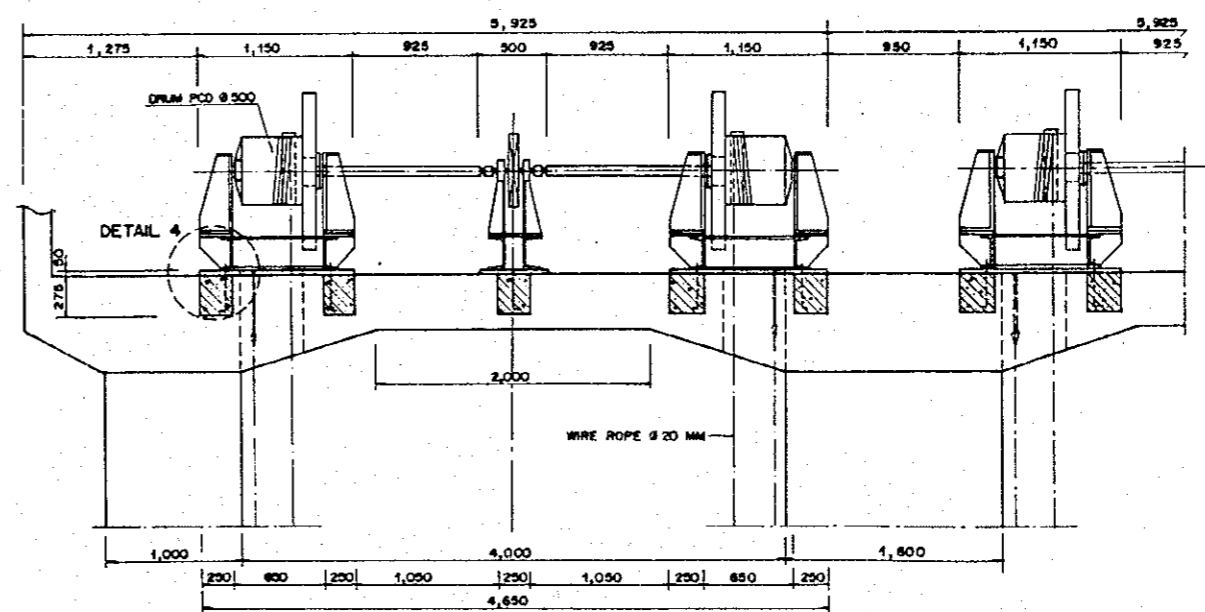
DETAIL 2
SCALE C

DETAIL 3
SCALE C

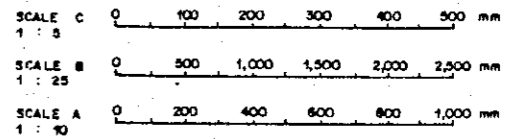
DETAIL 4
SCALE C



PLAN OF HOIST
SCALE B

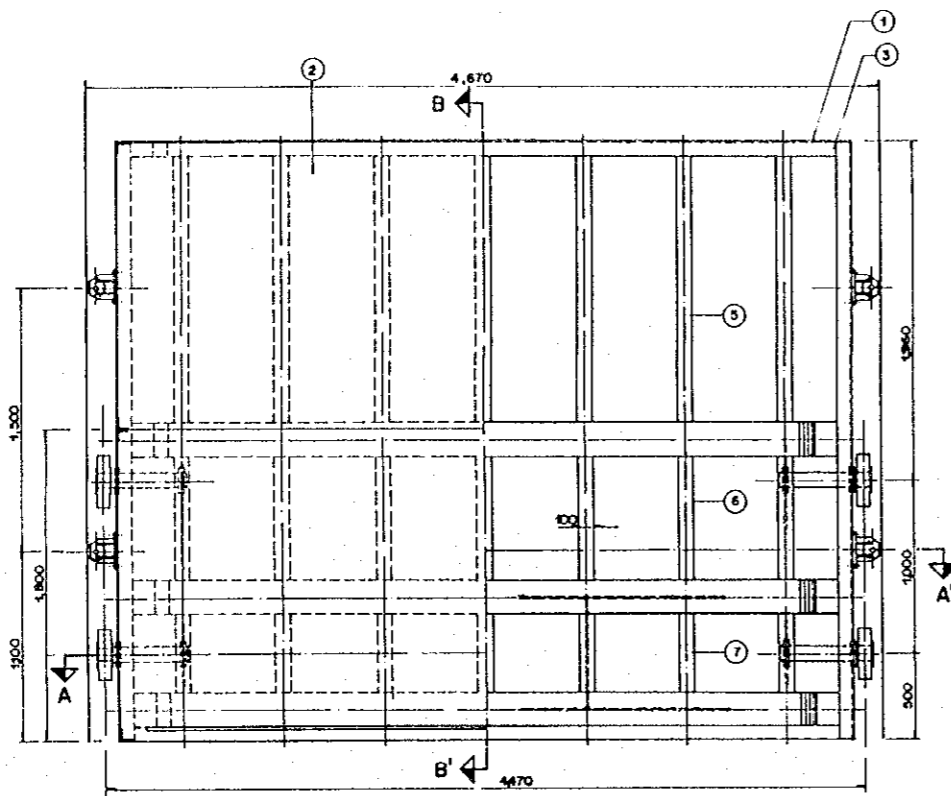


ELEVATION OF HOIST
SCALE B

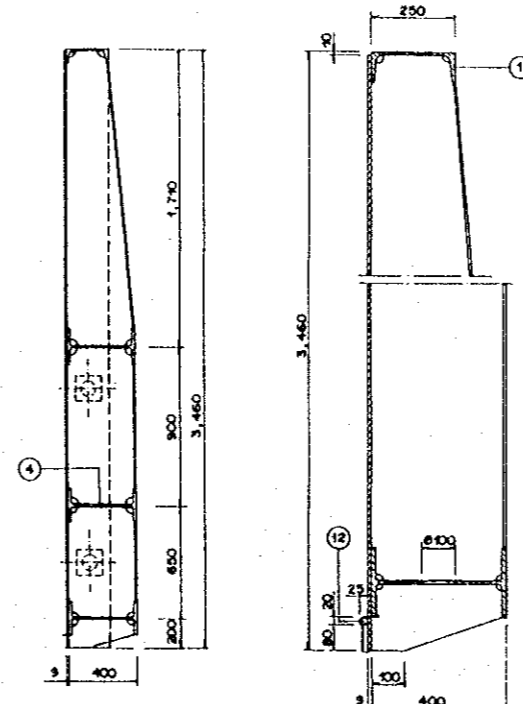


THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3 37 (1/2)
DETAIL OF GUIDE FRAME / LAYOUT OF HOIST



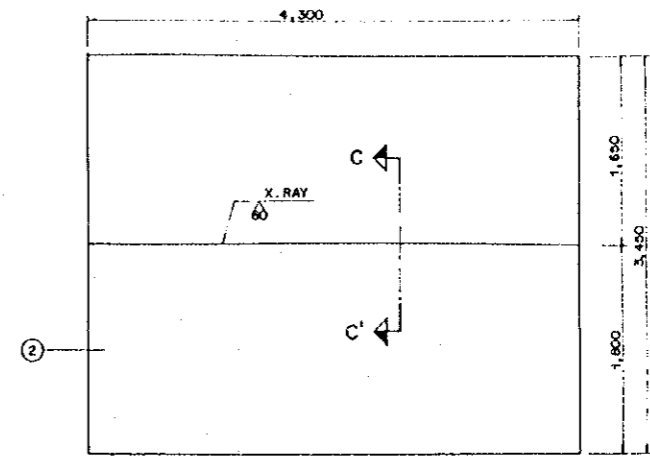
ELEVATION OF GATE LEAF
SCALE A



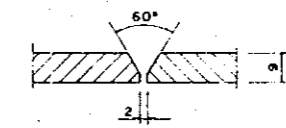
(SCALE A)

(SCALE B)

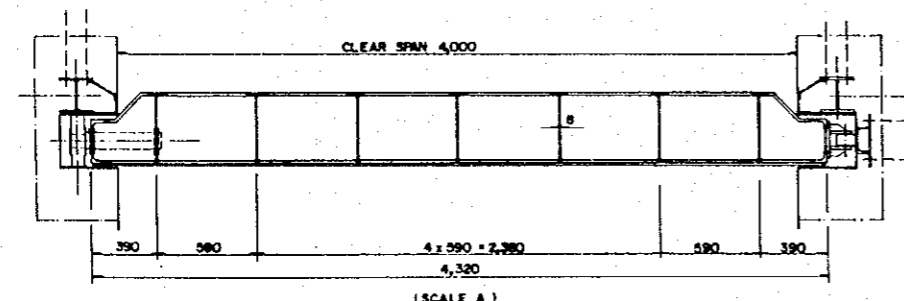
SECTION OF GATE LEAF
B - B



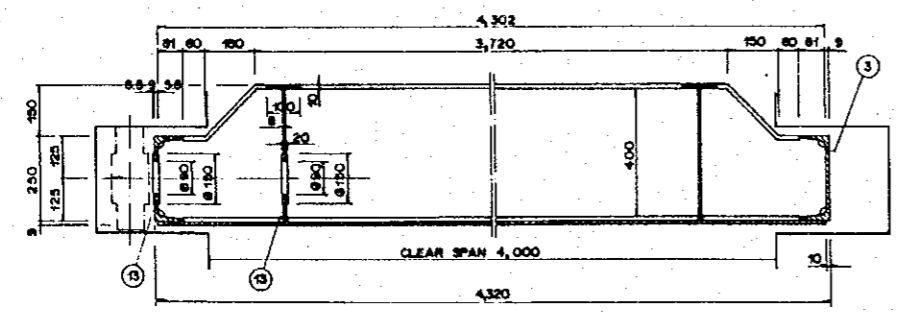
SKIN PLATE



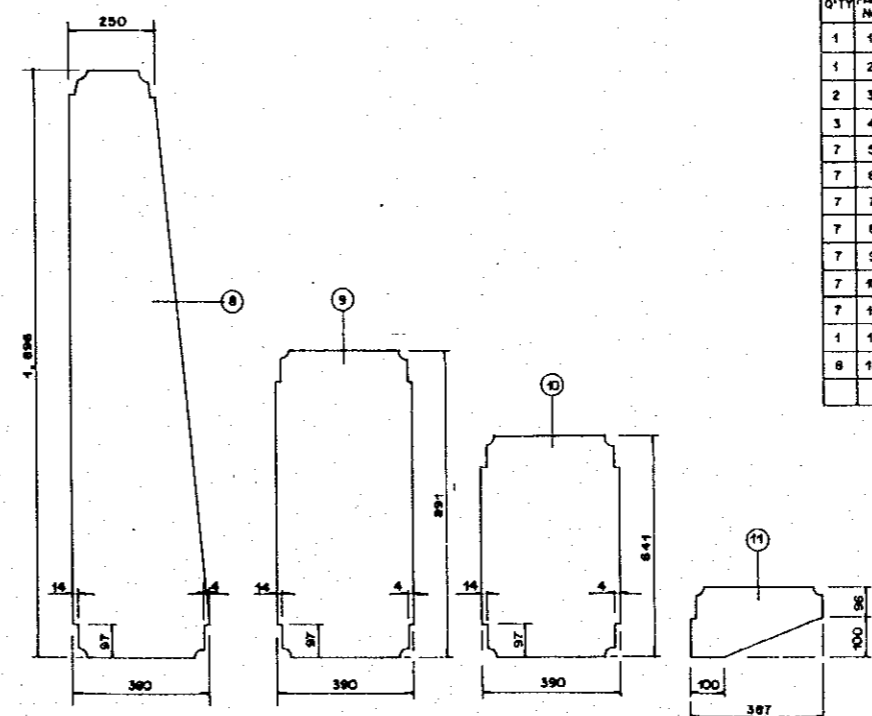
SECTION C - C'
SCALE B



(SCALE A)

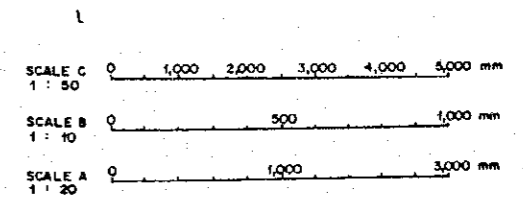


SECTION OF GATE LEAF
A - A



DIMENSION OF GIRDERS
SCALE B

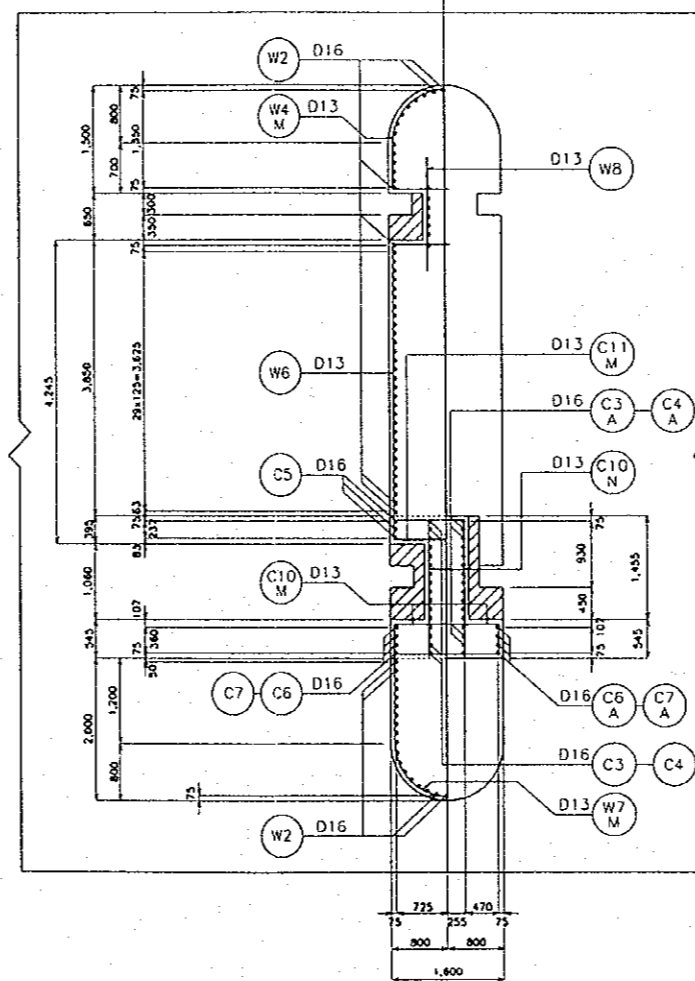
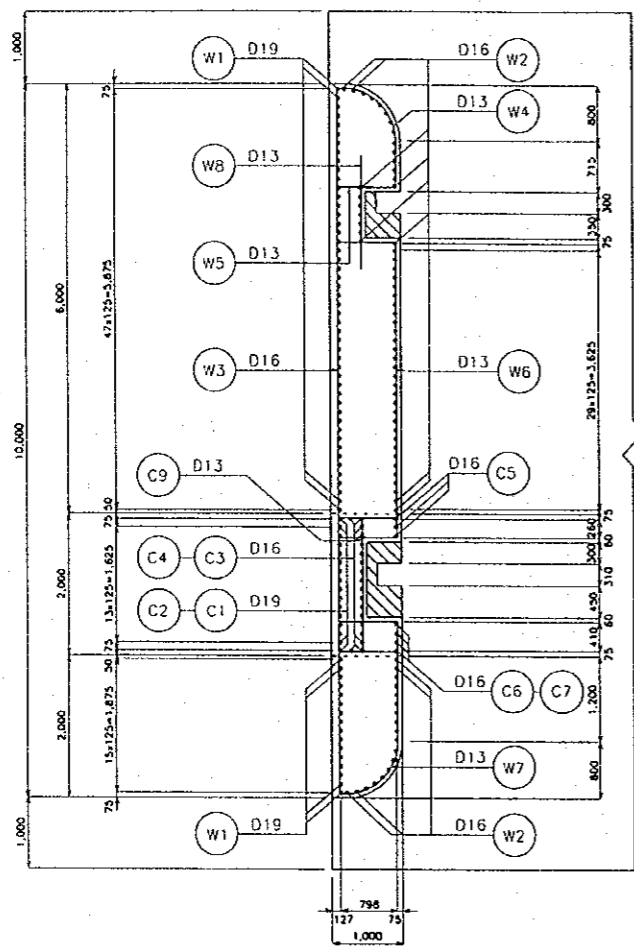
Q-TY	PART No.	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT (Kg)	REMARKS
1	1	HORIZONTAL BEAM	SS 400	C 250		
1	2	SKIN PLATE	SS 400	R. 9		
2	3	VERTICAL BEAM	SS 400	C 250		
3	4	HORIZONTAL BEAM	SS 400	H 400.200		
7	5	VERTICAL GIRDER	SS 400	R. 10		
7	6	VERTICAL GIRDER	SS 400	R. 10		
7	7	VERTICAL GIRDER	SS 400	R. 10		
7	8	VERTICAL GIRDER	SS 400	R. 8		
7	9	VERTICAL GIRDER	SS 400	R. 8		
7	10	VERTICAL GIRDER	SS 400	R. 8		
7	11	VERTICAL GIRDER	SS 400	R. 8		
1	12	STOPPER	SS 400	R. 200 x 25		
8	13	REINFORCEMENT	SS 400	# 100 x 20		



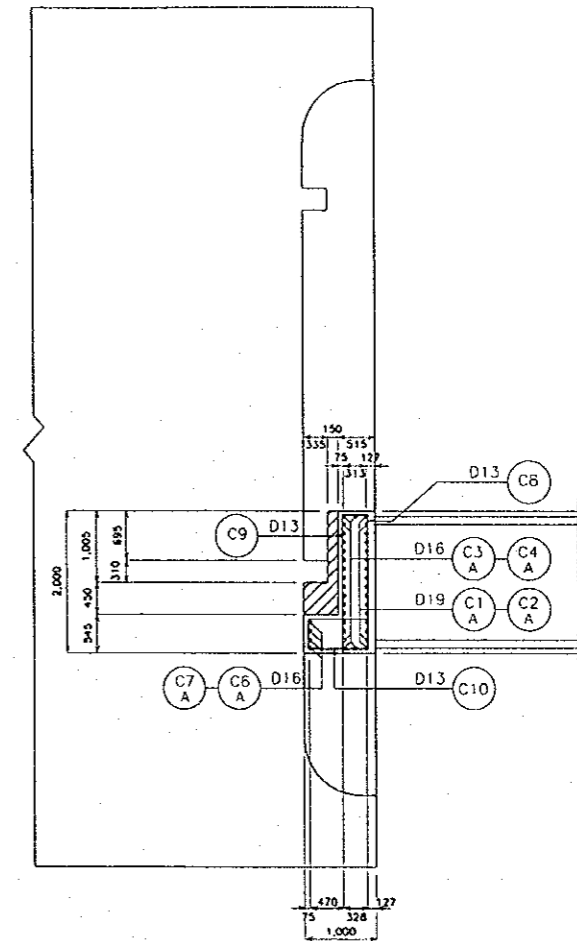
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3.37 (2/2)

GATE LEAF



SECTION C-C
SCALE A

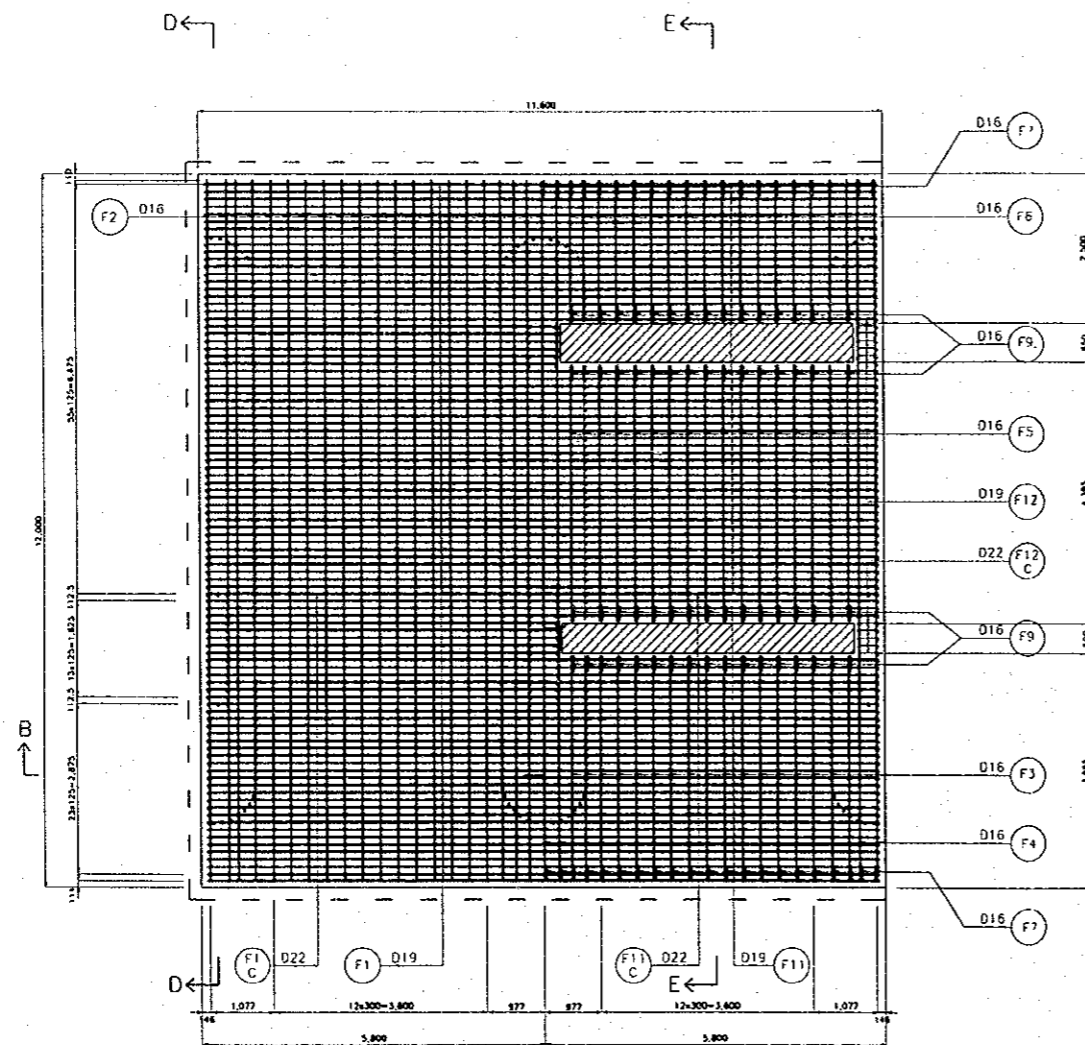


Note:
This drawing only shows the reinforcing Bar Arrangements for left side pier/column. However, same Reinforcing Bar Arrangements are applied for right side pier/column.

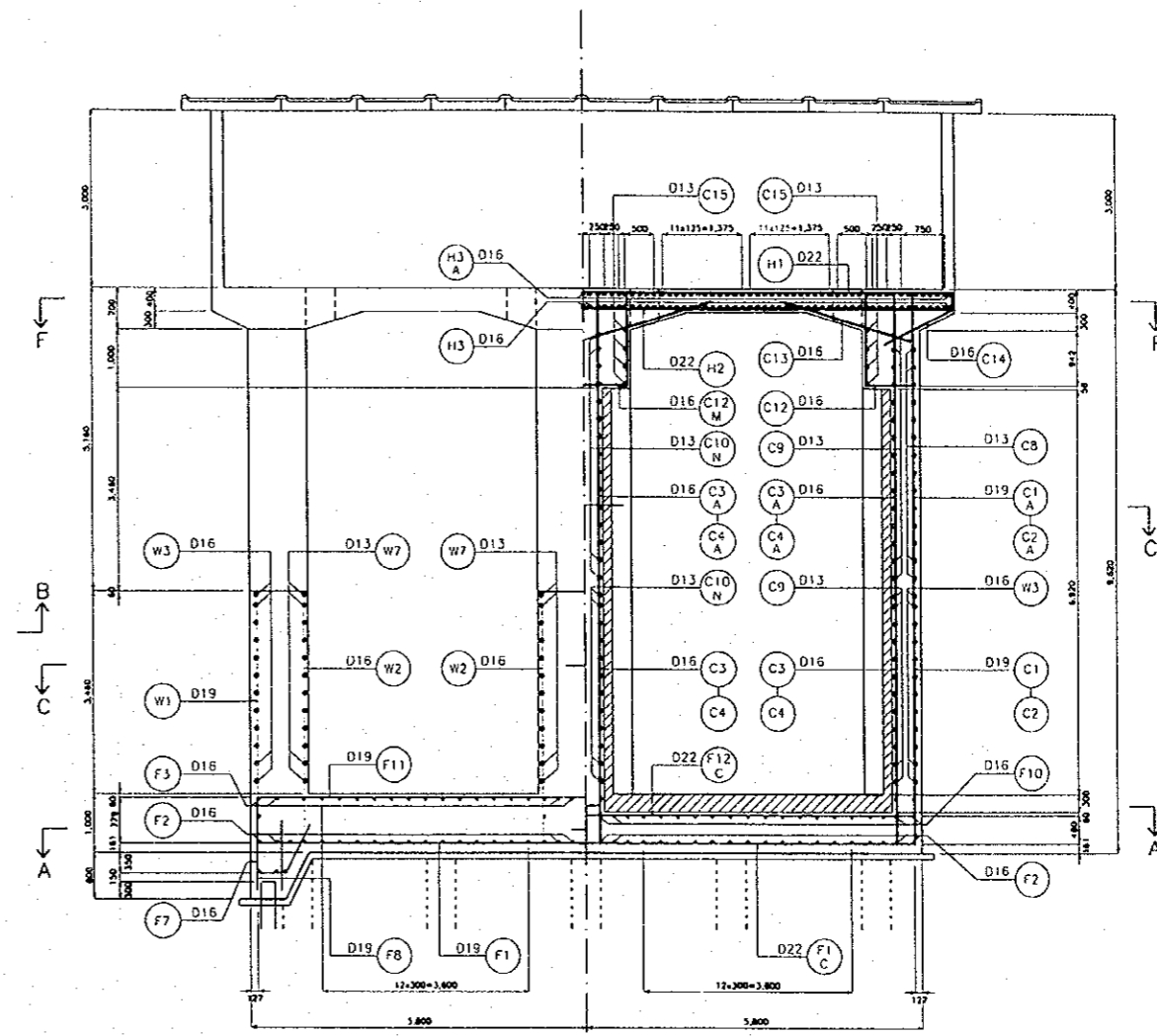
SCALE A

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3.38 (1/3)
REINFORCING BAR ARRANGEMENT OF PIERS AND FOUNDATION (1/3)

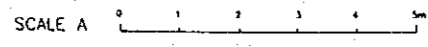


PLAN
SECTION A-A
SCALE A

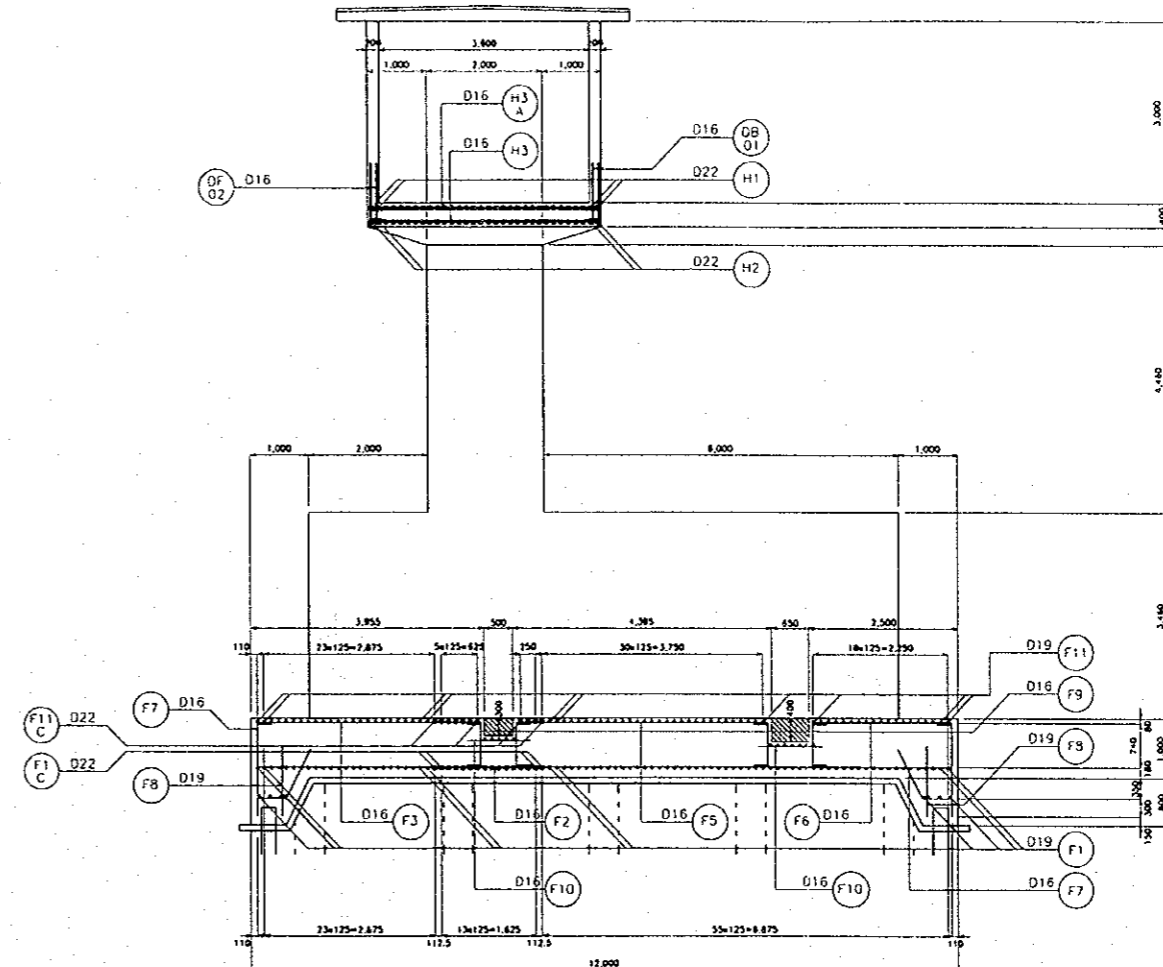
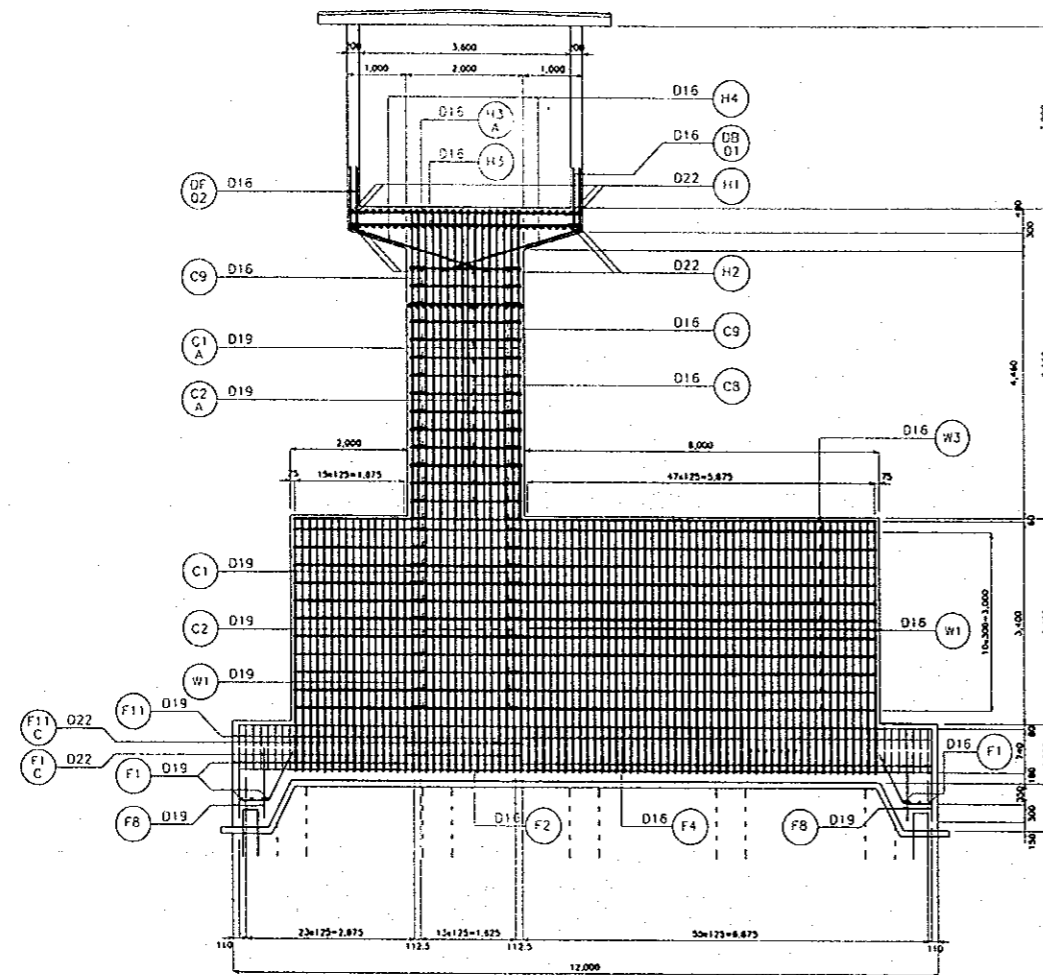


SECTION B-B
SCALE A

Note:
This drawing only shows the reinforcing bar
arrangements one side per column.
However, some reinforcing bar arrangements are
indicated for another side per column.

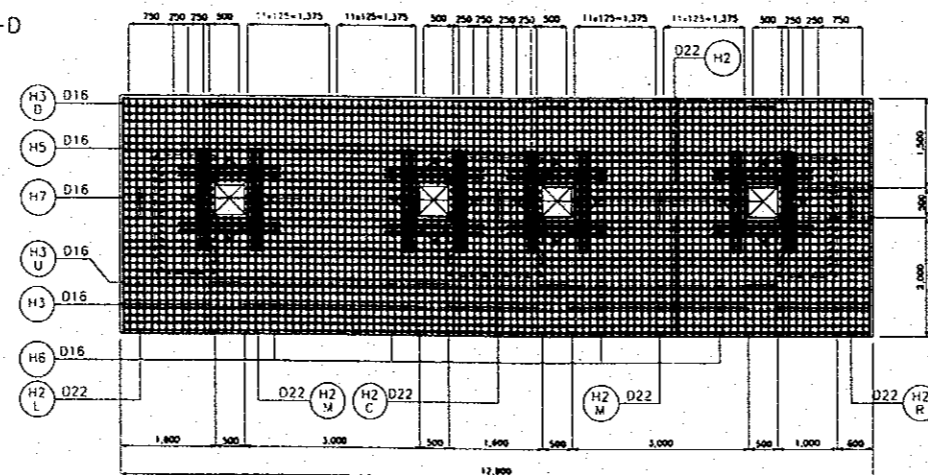


<p>THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA</p>	<p>Fig. 6.3.38 (2/3) REINFORCING BAR ARRANGEMENT OF PIERS AND FOUNDATION (2/3)</p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY</p>	



SECTION D-D
SCALE A

SECTION E-E
SCALE A

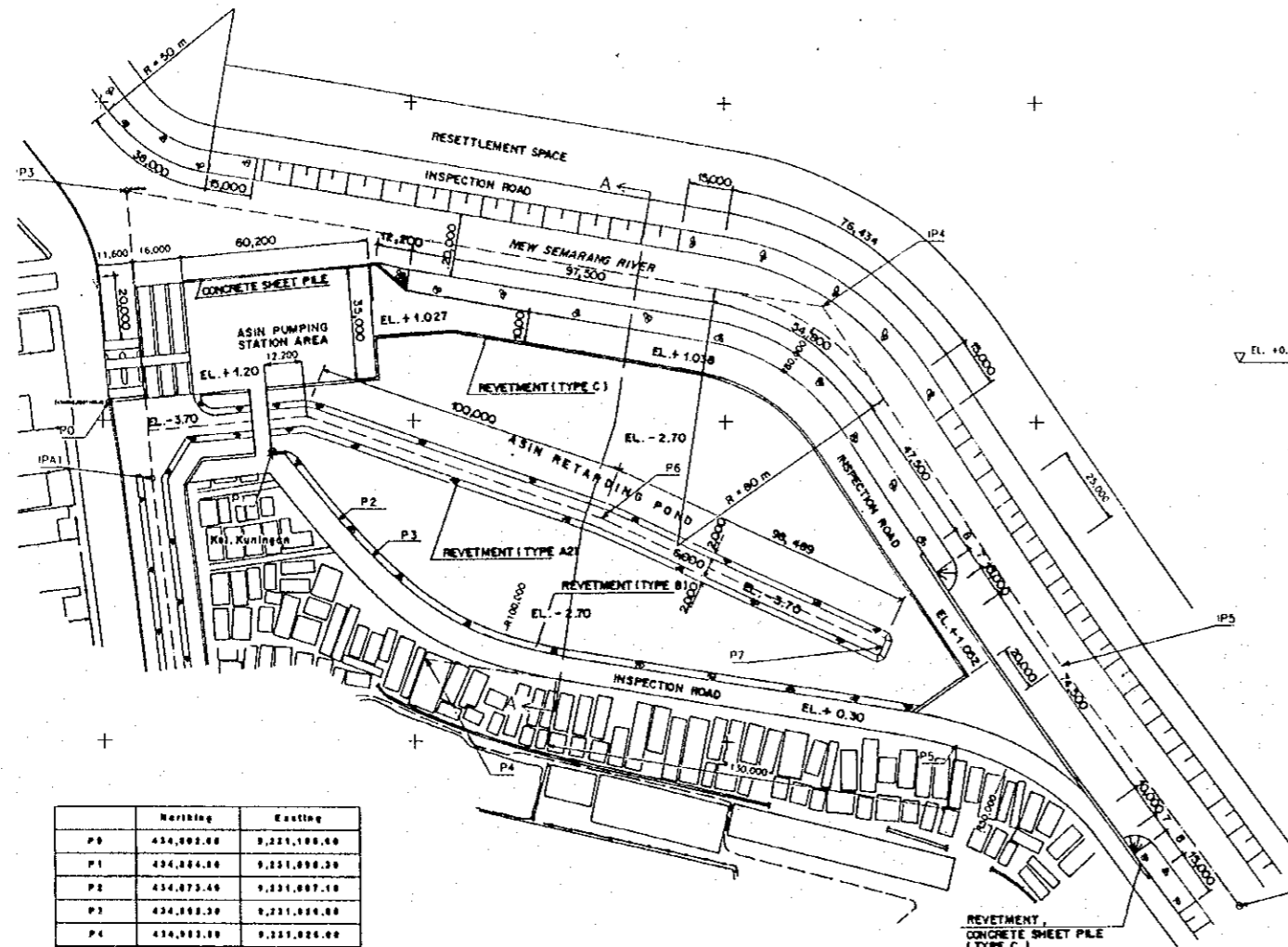


SECTION F-F
SCALE A

SCALE A 0 1 2 3 4 5

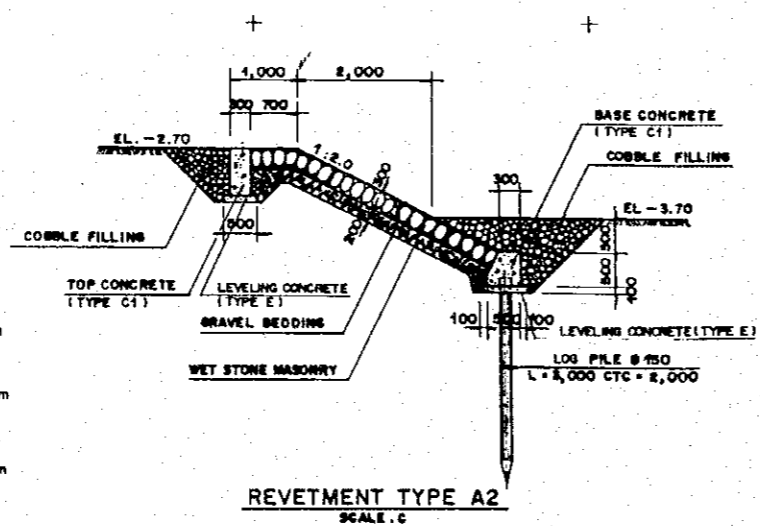
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.3.38 (3/3)
REINFORCING BAR ARRANGEMENT OF PIERS AND FOUNDATION (3/3)

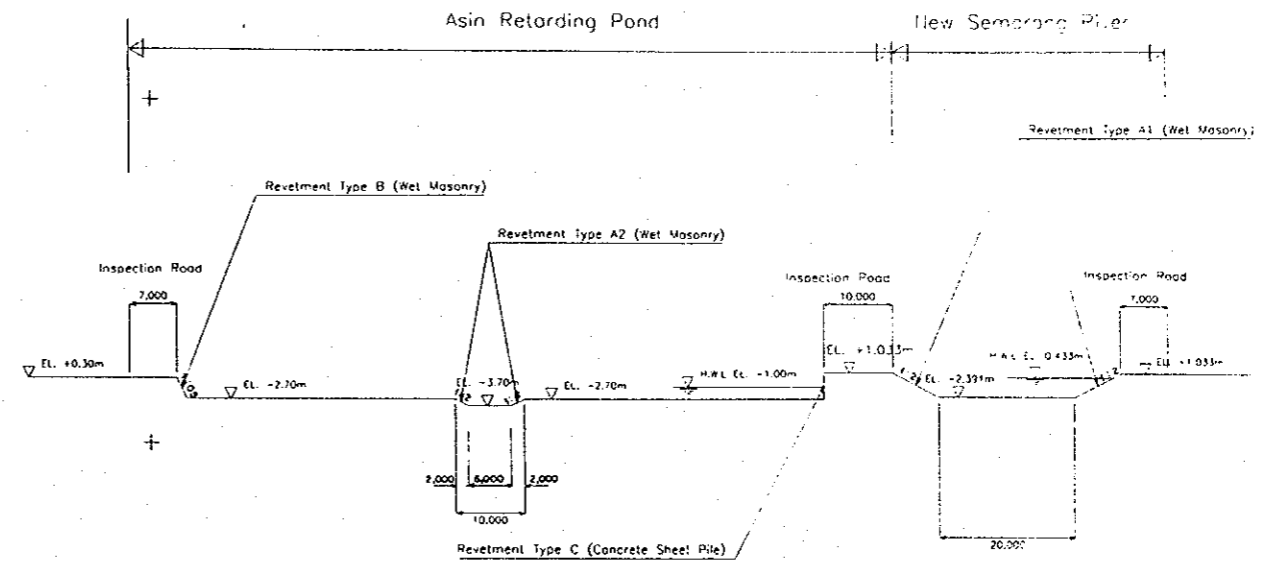


	Existing	Existing
P0	434,892.00	9,231,199.00
P1	434,884.00	9,231,098.30
P2	434,873.00	9,231,087.10
P3	434,862.00	9,231,076.00
P4	434,853.00	9,231,065.00
P5	434,844.00	9,231,054.00
P6	434,835.00	9,231,043.00
P7	434,826.00	9,231,032.00
IP3	434,808.00	9,231,172.00
IP4	434,821.00	9,231,120.00
IP5	434,197.00	9,231,024.00
IP6	434,163.00	9,231,048.00
IP-A1	434,814.00	9,231,041.00

PLAN
SCALE A

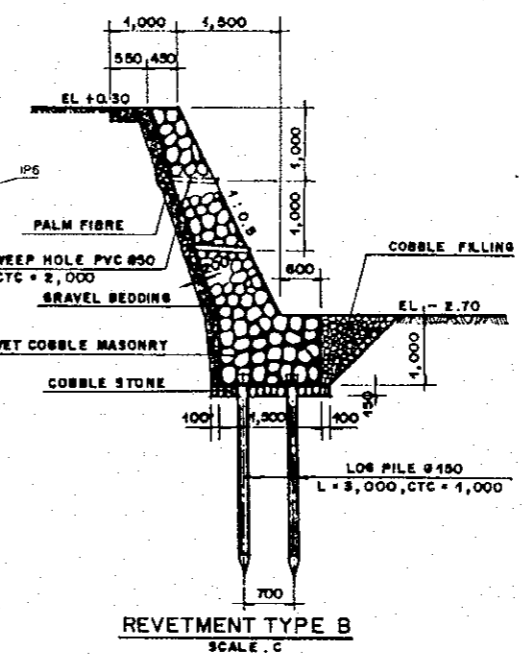


REVETMENT TYPE A2
SCALE C

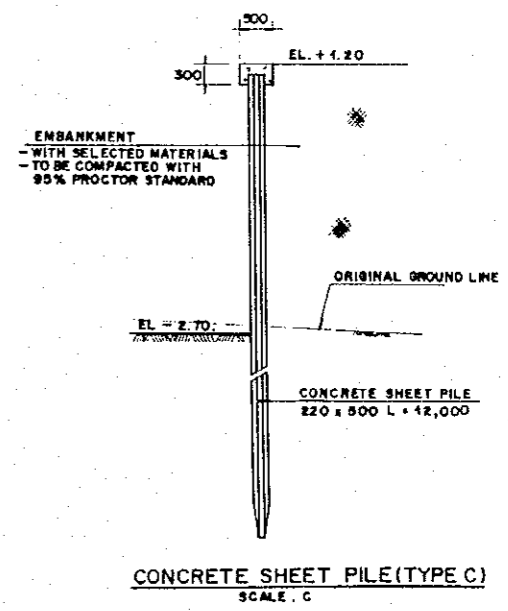


SECTION A-A
SCALE B

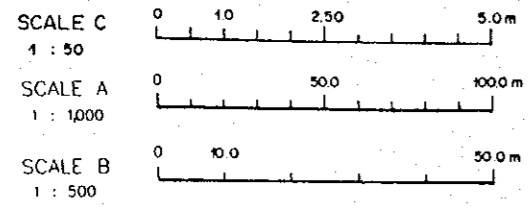
Note: Details of revetments are shown on the drawings 'ASIN RIVER, REVETMENT' and 'SEMARANG RIVER, REVETMENT'.



REVETMENT TYPE B
SCALE C

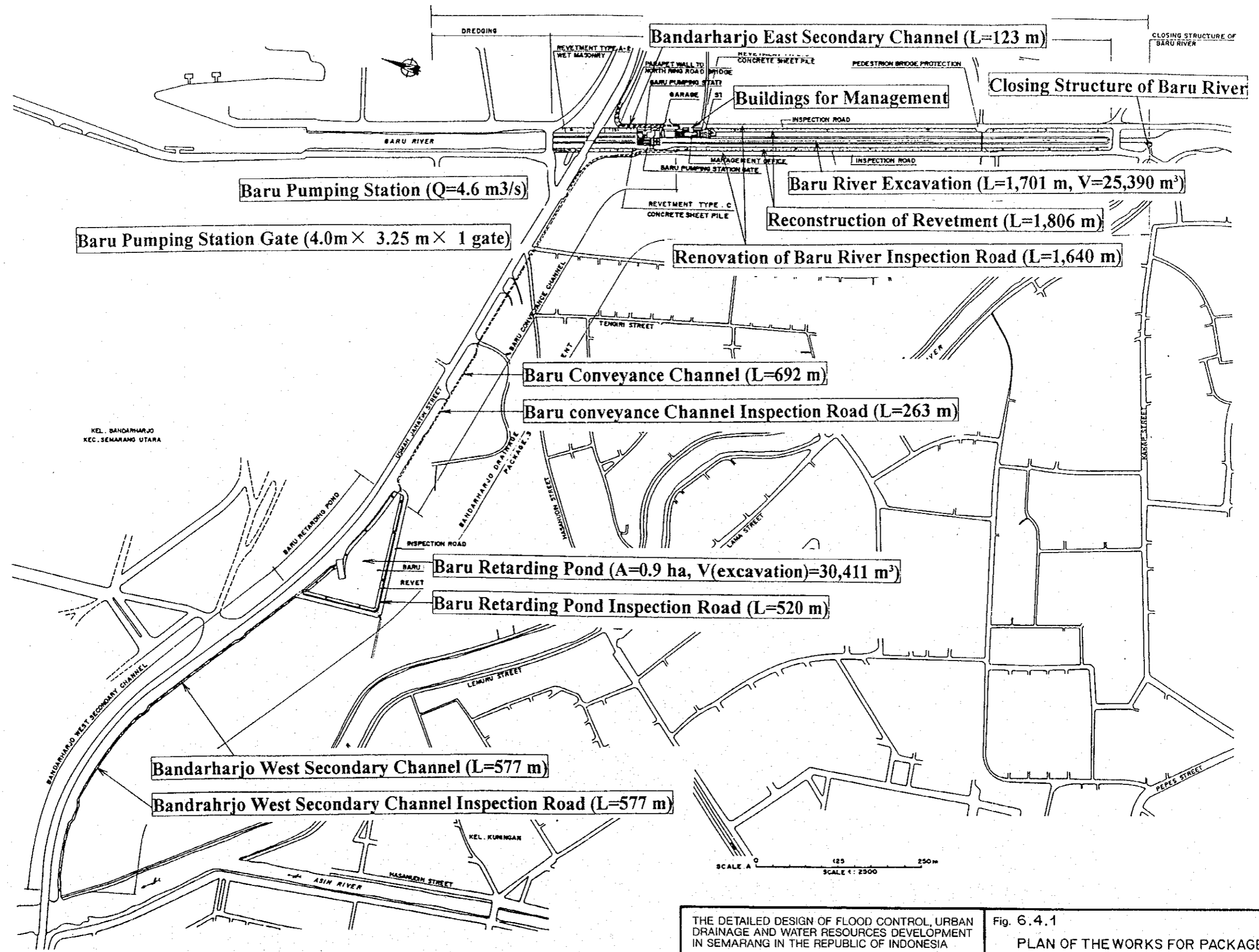


CONCRETE SHEET PILE (TYPE C)
SCALE C



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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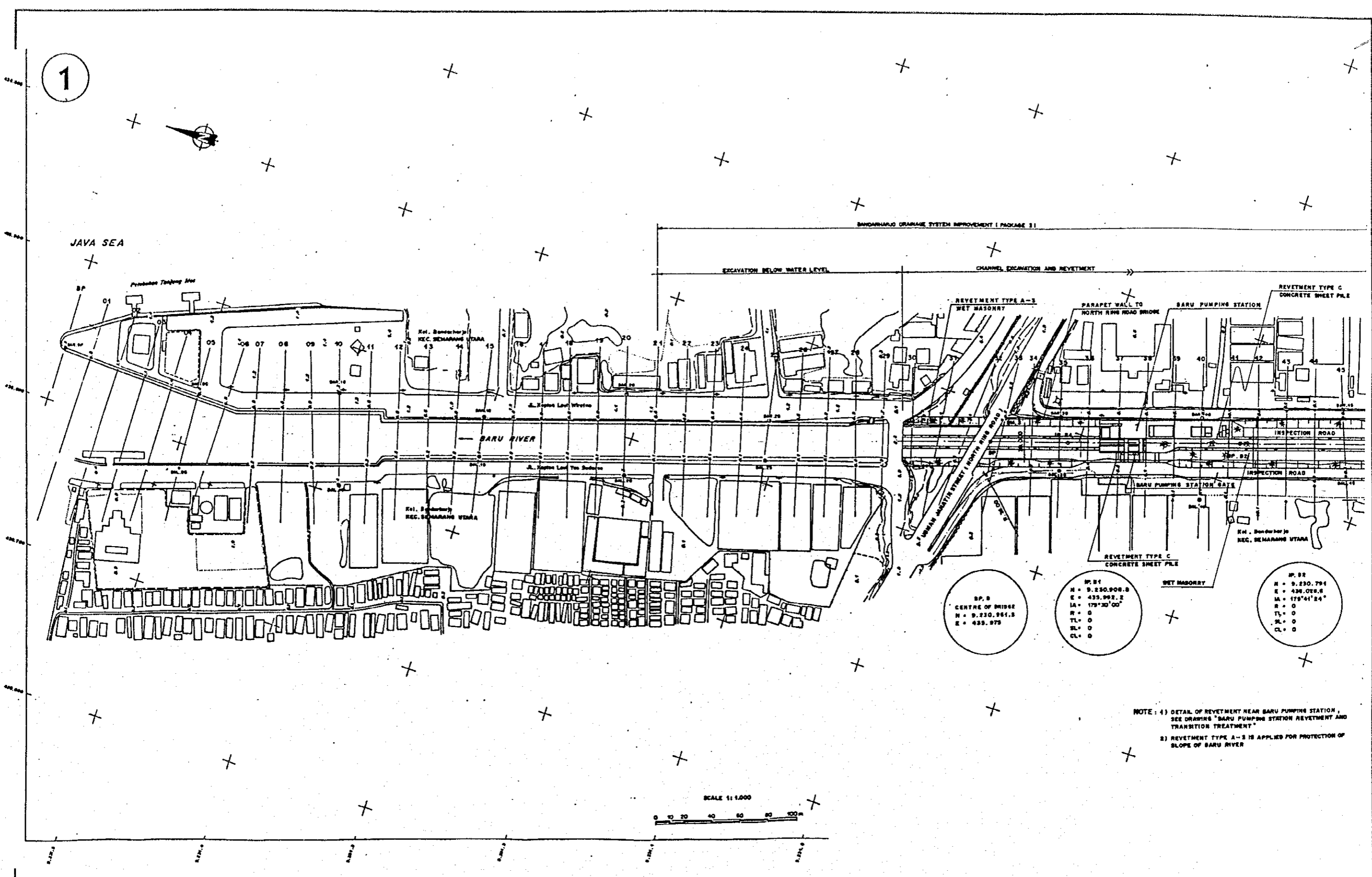
Fig. 6.3.39
PLAN AND SECTION OF ASIN RETARDING POND



KEL. BANDARHARJO
KEC. SEMARANG UTARA

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.1
PLAN OF THE WORKS FOR PACKAGE - 3
(BANDARHARJO DRAINAGE SYSTEM IMPROVEMENT)



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

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Fig. 6.4.2 (1/2)

BARU RIVER PLAN (1/2)

2

BANDARHARJUNG DRAINAGE SYSTEM IMPROVEMENT (PACKAGE 3)

SP. 9
N = 9.230.237.2
E = 426.203

REVETMENT TYPE C
CONCRETE SHEET PILE

PEDESTRIAN BRIDGE PROTECTION

CHANNEL EXCAVATION AND REVETMENT

CLOSING STRUCTURE OF BARU RIVER

Kel. Bunderharju
KEC. SEMARANG UTARA

Kel. Bunderharju
KEC. SEMARANG UTARA

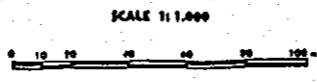
WET MASONRY
IP. 2
N = 9.230.794
E = 426.029.9
A = 179°44'24"

REVETMENT TYPE A-3
WET MASONRY

IP. 3
CENTRE OF BRIDGE

NOTE: REVETMENT TYPE A-3 IS APPLIED FOR PROTECTION OF SLOPE OF BARU RIVER

NAME	NORTHING	EASTING	ELEVATION	NAME	NORTHING	EASTING	ELEVATION
BAL40	9.230.807.027	426.282.704	-0.021	BAR40	9.230.812.803	426.026.412	-0.212
BAL50	9.230.820.460	426.040.140	-0.080	BAR50	9.230.813.149	426.070.818	-0.152
BAL60	9.230.828.453	426.187.059	0.152	BAR60	9.230.841.532	426.152.749	0.242
BAL70	9.230.840.842	426.186.993	0.102	BAR70	9.230.848.472	426.111.525	-0.219
BAL80	9.230.883.119	426.220.935	0.664	BAR80	9.230.190.122	426.225.069	0.619

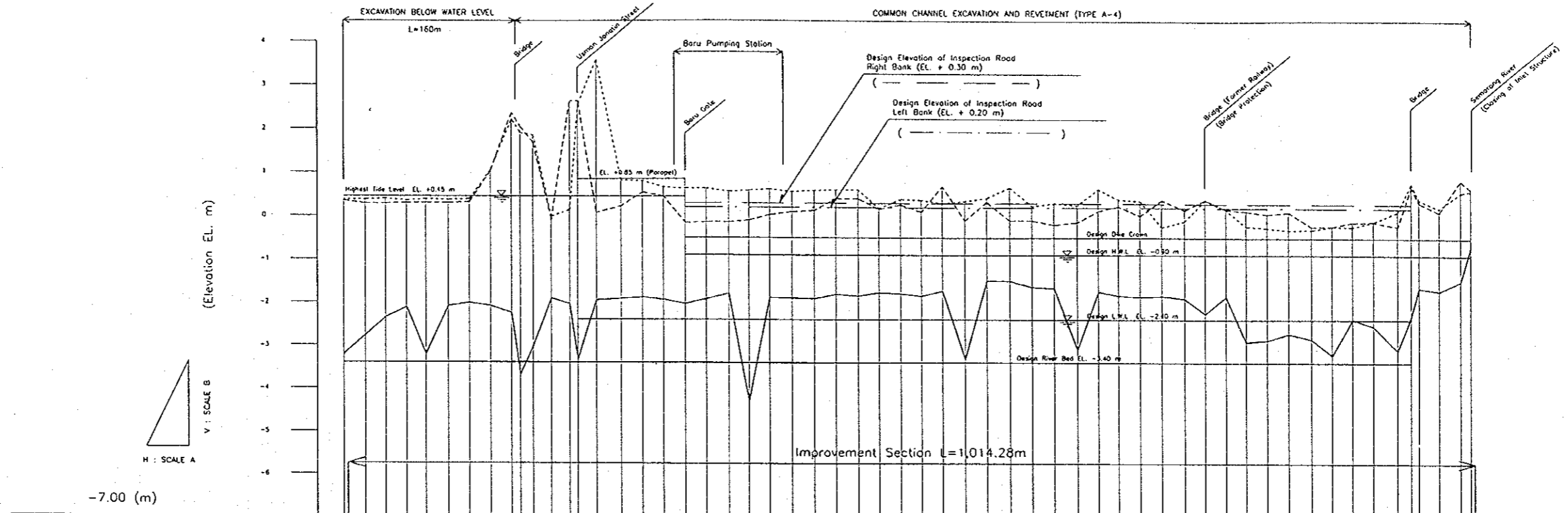


THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

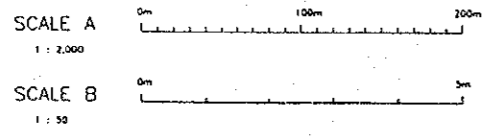
Fig. 6.4.2 (2/2)

BARU RIVER PLAN (2/2)

JAPAN INTERNATIONAL COOPERATION AGENCY



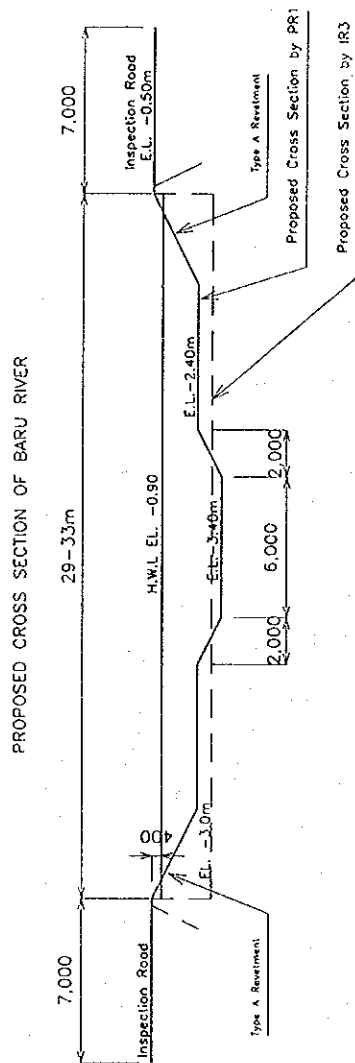
GRADIENT OF DESIGN RIVER BED		
DESIGN ELEVATION (EL. m)	DIKE CROWN	-0.500 to -0.500
	HIGH WATER LEVEL (H.W.L.)	0.450 to 0.450
	LOW WATER LEVEL (L.W.L.)	-2.400 to -2.400
	HIGH WATER CHANNEL BED	-2.400 to -2.400
	RIVER BED	-3.400 to -3.400
EXISTING ELEVATION (EL. m)	RIGHT BANK	0.370 to 0.620
	LEFT BANK	0.340 to 0.660
	RIVER BED	-3.210 to -3.400
DISTANCE (m)	ACCUMULATED	0.00 to 1070.88
	PARTIAL	20.790 to 9.724
STATION NO. (BA-)		21 to BUKP



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

Fig. 6.4.3
BARU RIVER LONGITUDINAL PROFILE

JAPAN INTERNATIONAL COOPERATION AGENCY



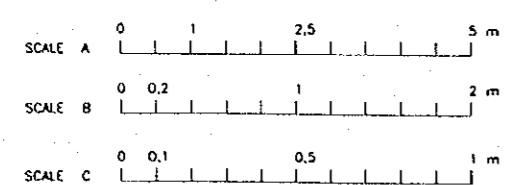
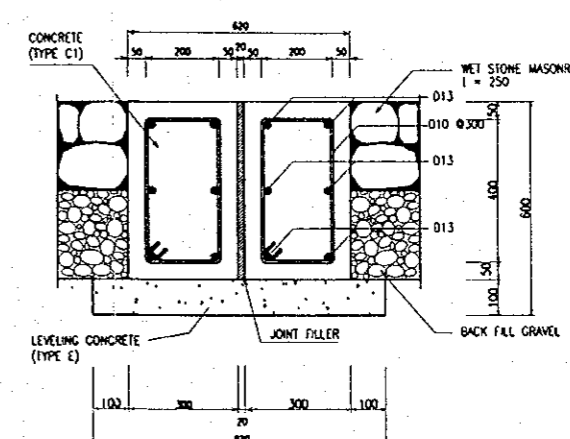
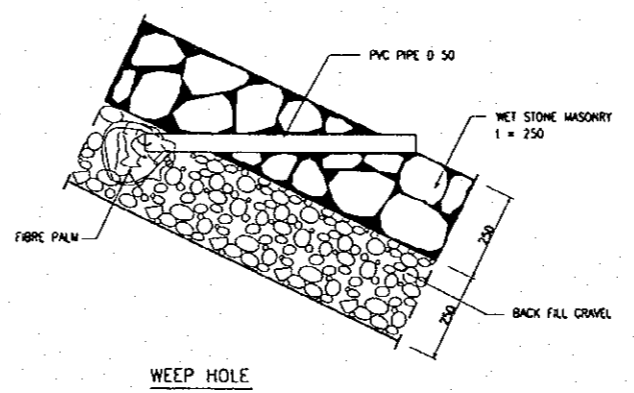
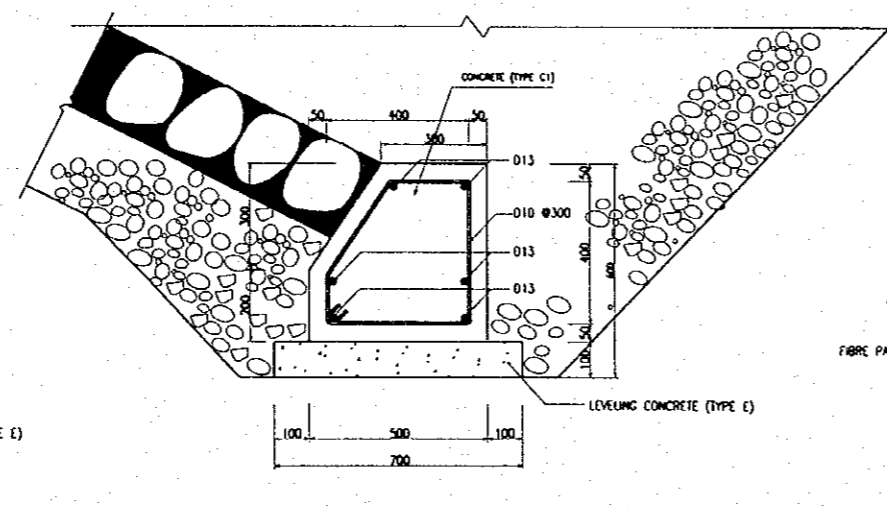
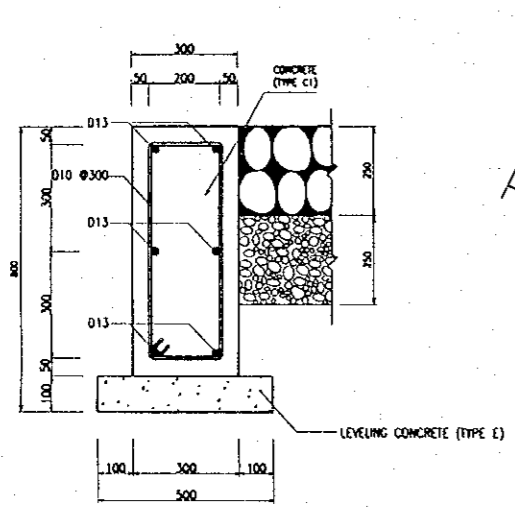
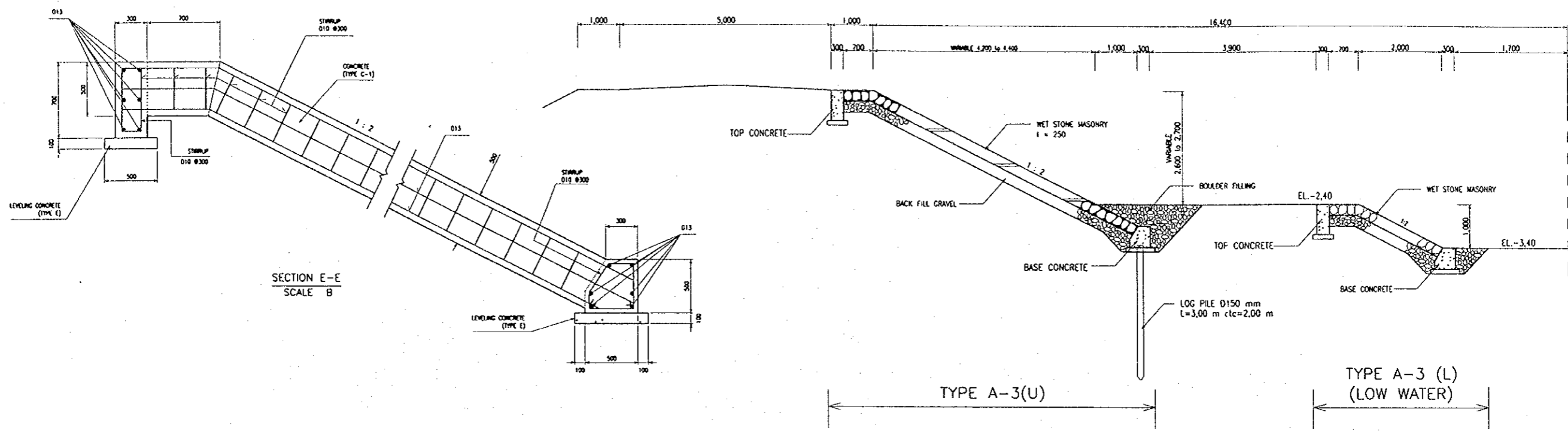
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.4.4

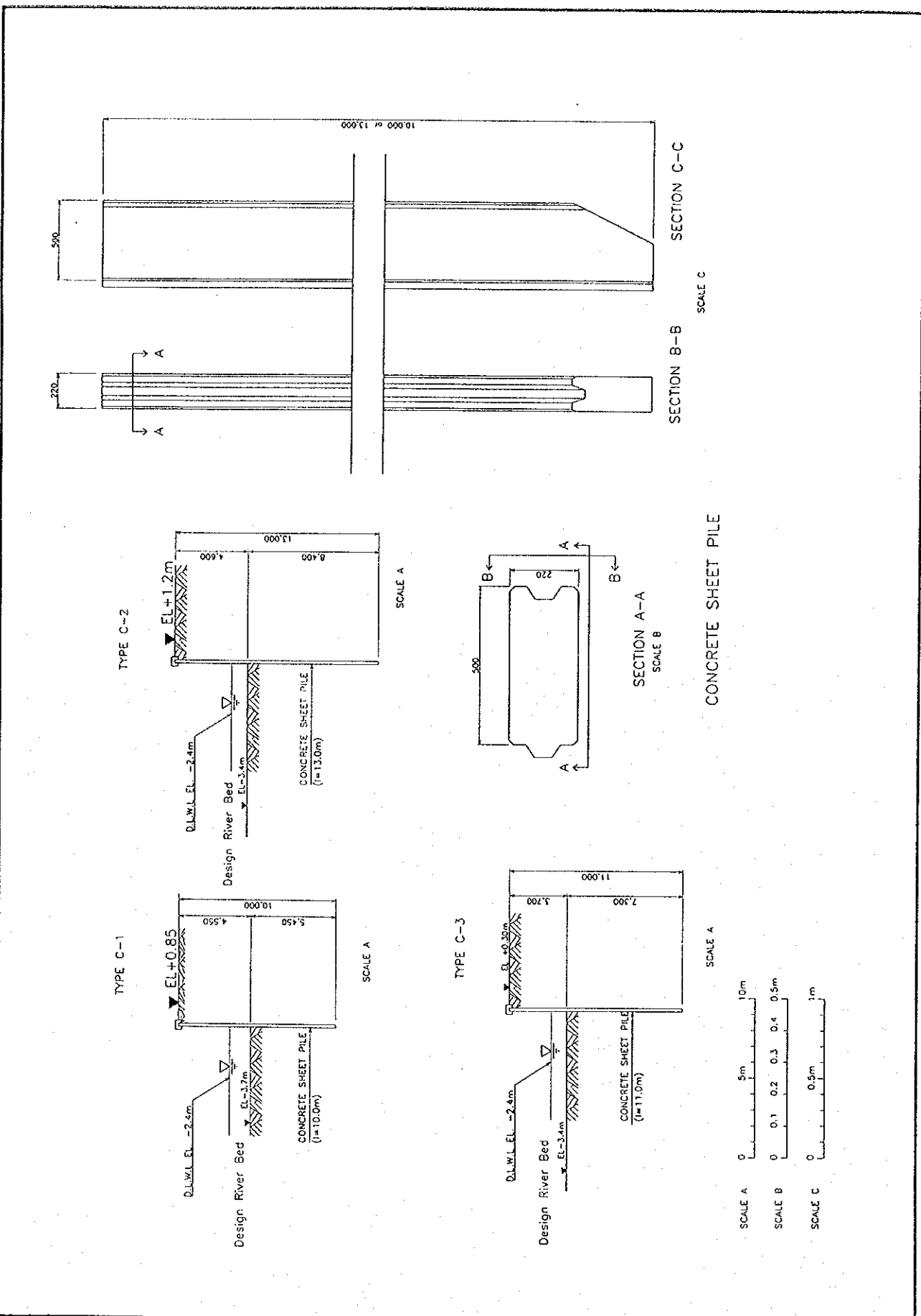
BARU RIVER CROSS SECTION





THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 6.4.5
 BARU RIVER REVETMENT (INCLINED TYPE)



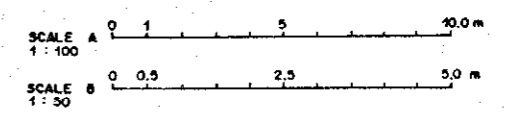
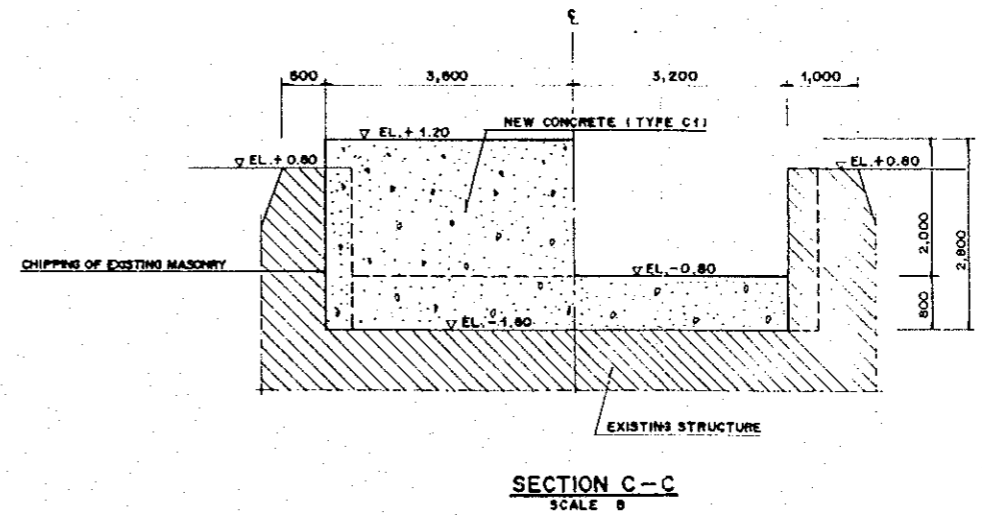
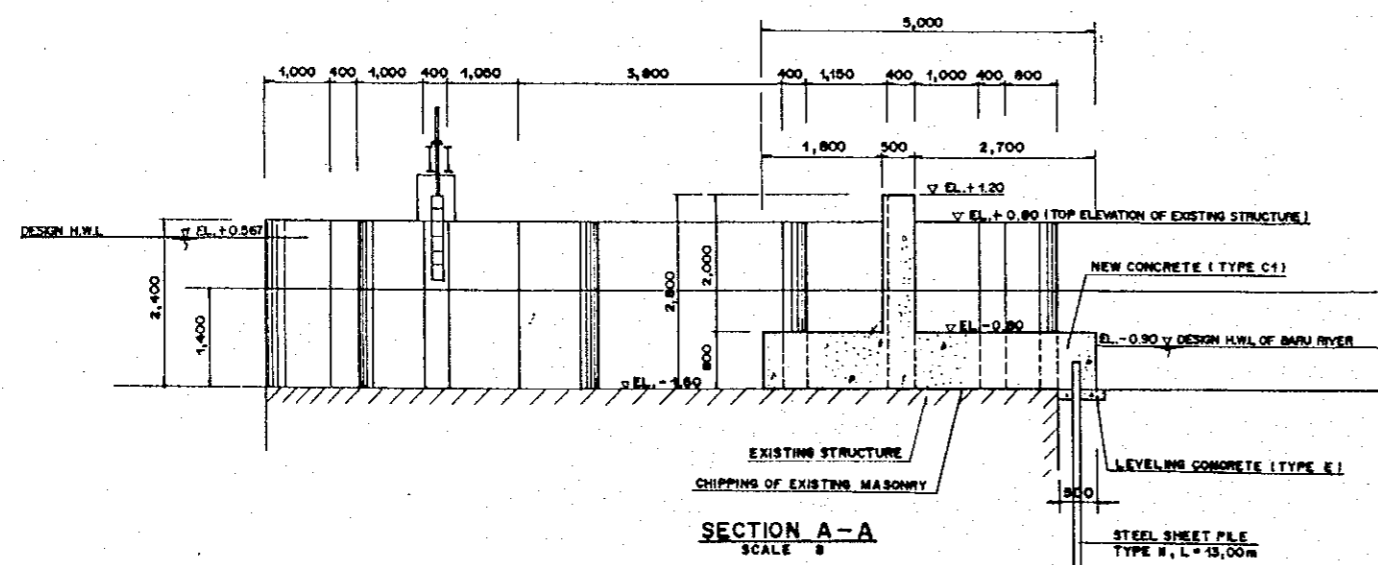
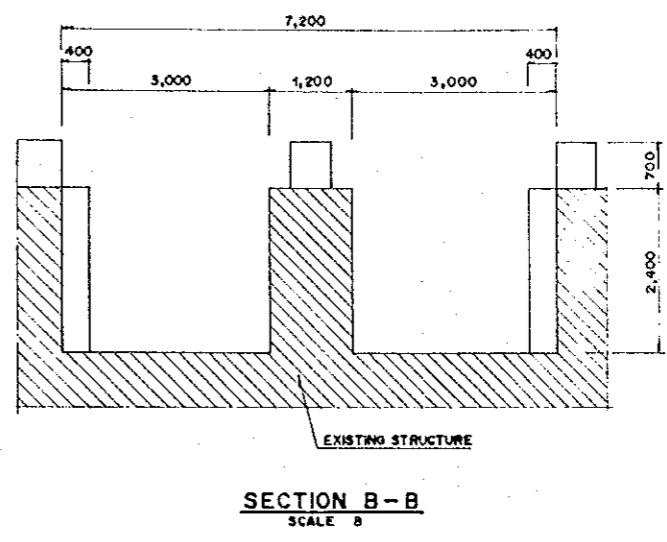
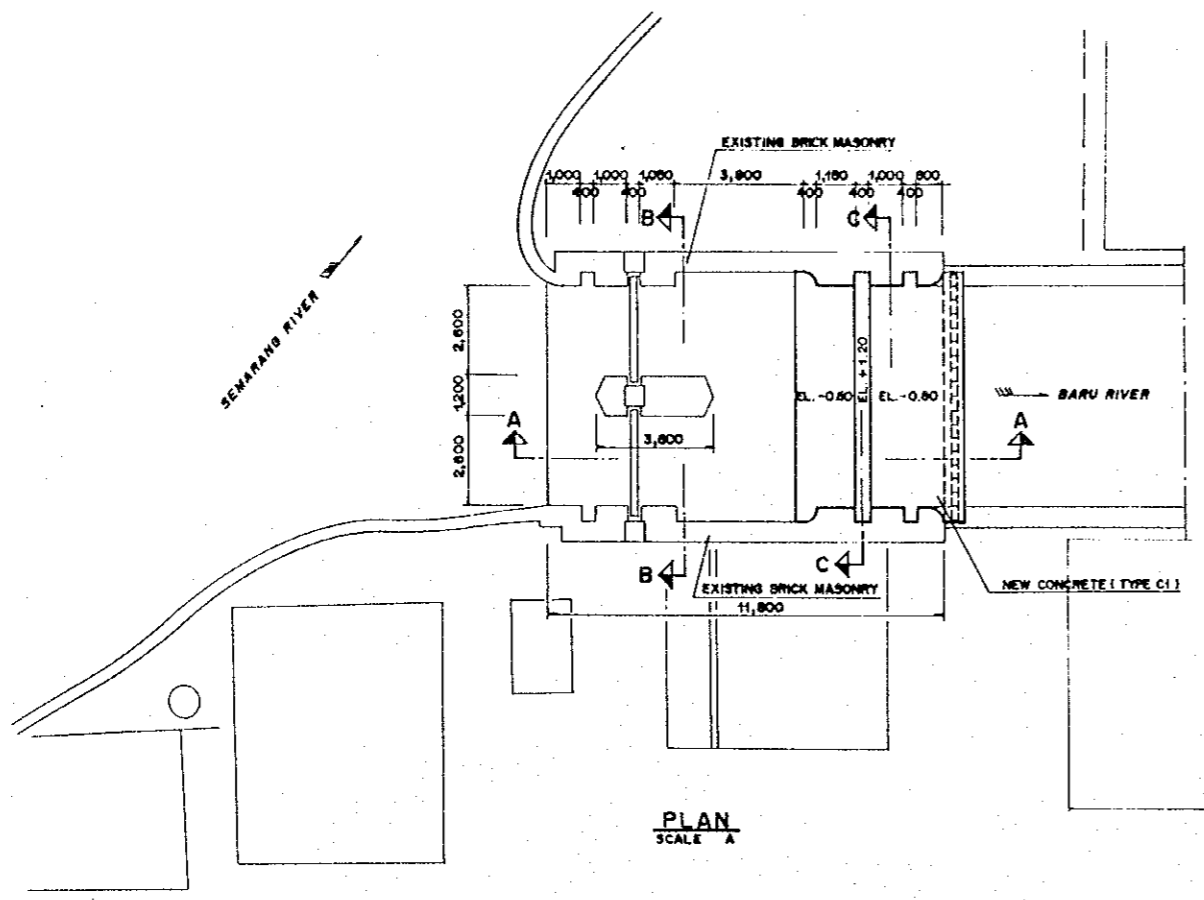
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

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Fig. 6.4.6

BARU RIVER REVETMENT (CONCRETE SHEET PILE)

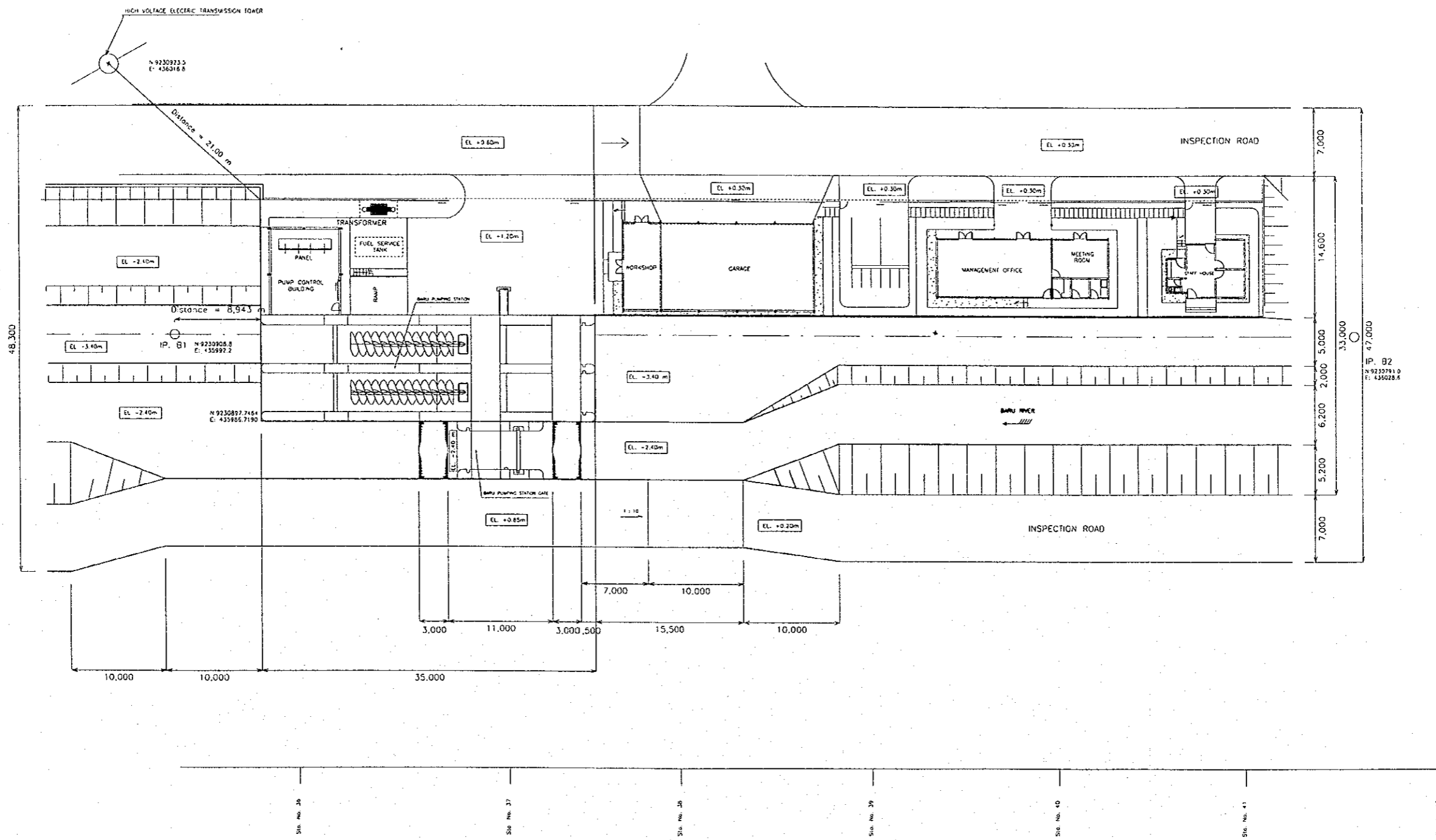
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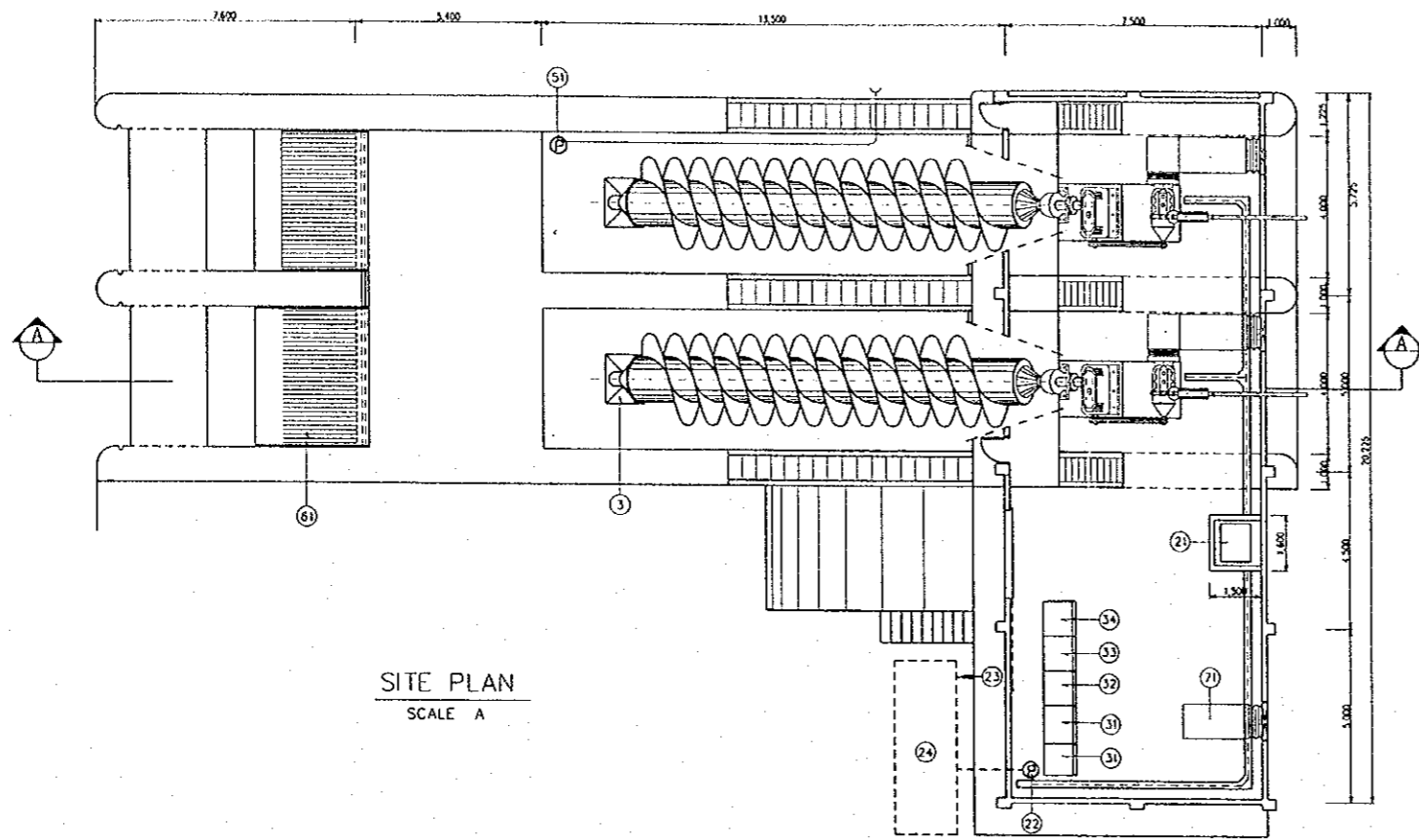
Fig. 6.4.7
BARU RIVER CLOSING STRUCTURE



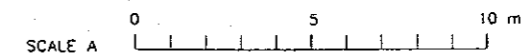
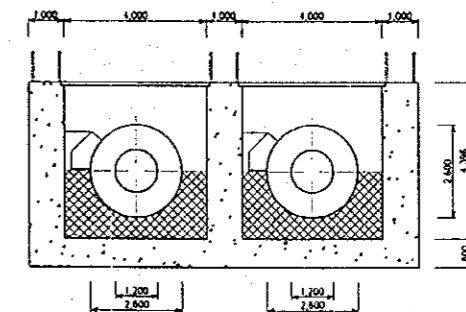
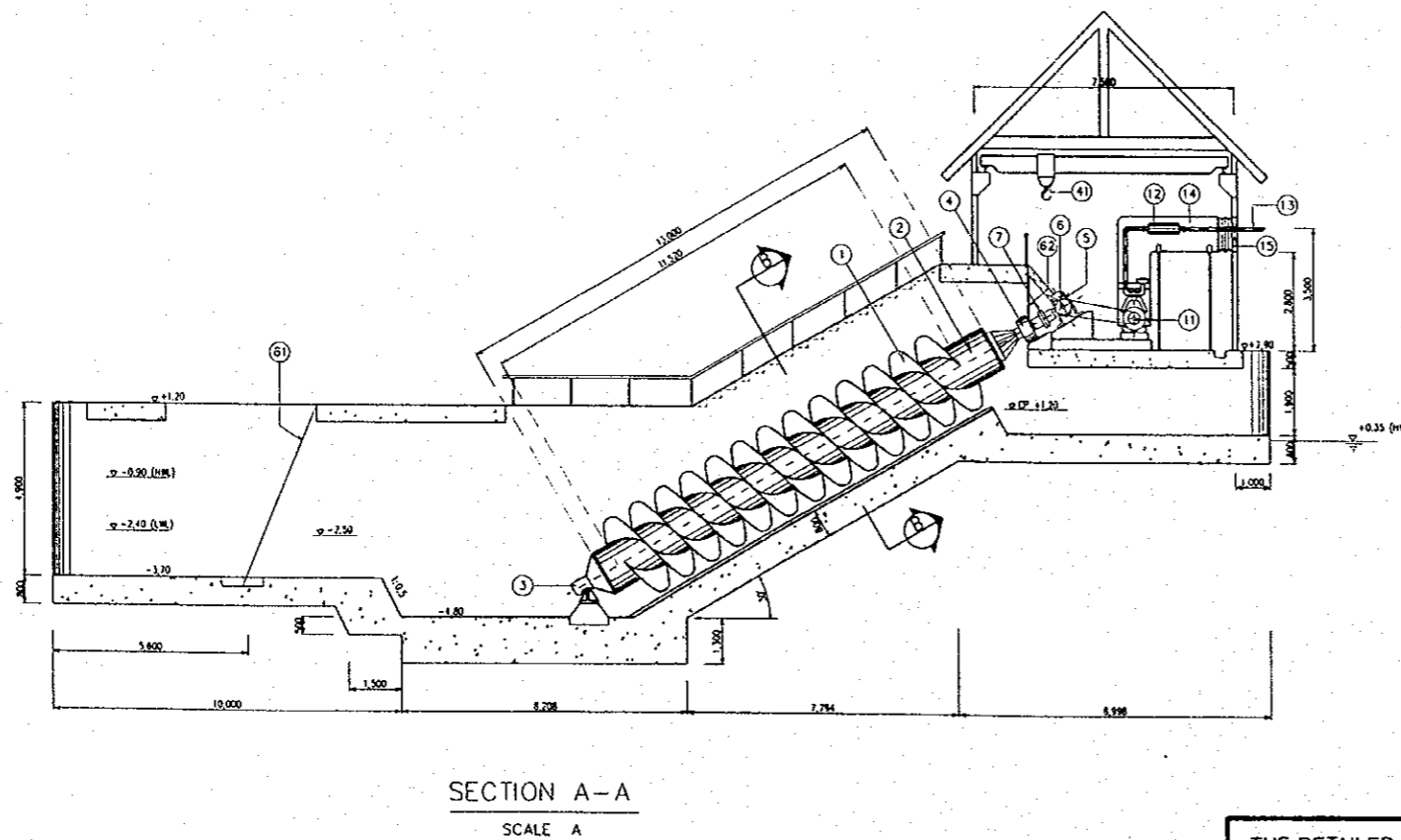
SCALE 1:100
 0M 5M 10M

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.8
 LAYOUT OF BARU PUMPING STATION

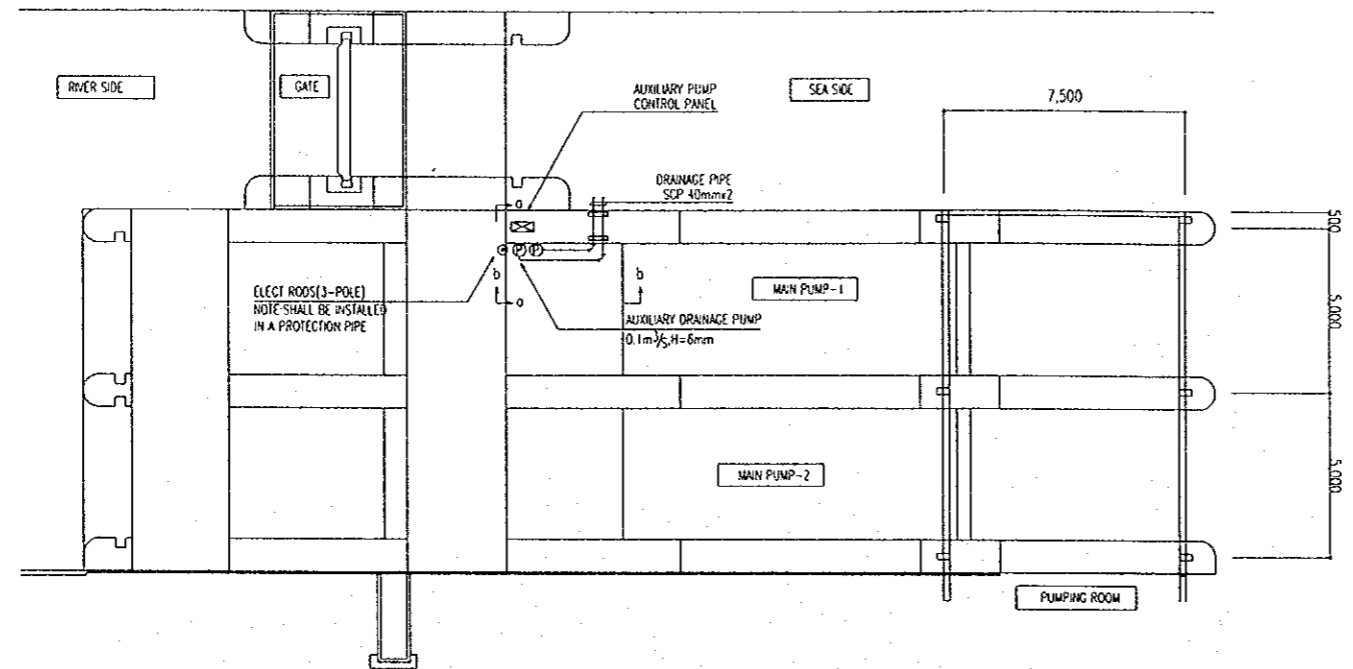


NO	DESCRIPTION	REMARKS	UNIT
1	Flight of screw pump	Diameter : 2,600 mm, Capacity 2.4 m ³ /s	2
2	Center tube of screw pump		2
3	Lower bearing		2
4	Upper bearing		2
5	Gear box	Gear ratio 900 rpm/26.5 rpm	2
6	V-Belt & Pulley	Pulley, 500 mm diameter, 3 Planes	6&2
7	Coupling		2
11	Diesel engine	270 hp, 1,800 rpm Radiator cooled type	2
12	Muffler		2
13	Exhaust pipe		2
14	Ducting & Flexible Connector		2
15	Louwer	By architectural work	2
21	Fuel service tank	2,000 liter	1
22	Fuel transfer pump		1
23	Fuel intake connection plug		1
24	Fuel storage tank	10,000 liter, underground	1
31	kWh meter & distribution panel	For PLN'S Transformer & Generator Unit	1
32	Motor control panel		1
33	Water level indication & Alarm panel		1
34	Batteries charger & Panel	For diesel engine starting	1
41	Manual operated hoist	2 ton	1
51	Auxiliary drainage pump	Submersible type capacity : 0.1 m ³ /s	1
61	Screen	Pitch 200 mm	2
62	Splash plate	2.3 mm Galvanized steel plate, Fixed after alignment	2
71	Generator Unit	30.0 kVA	1



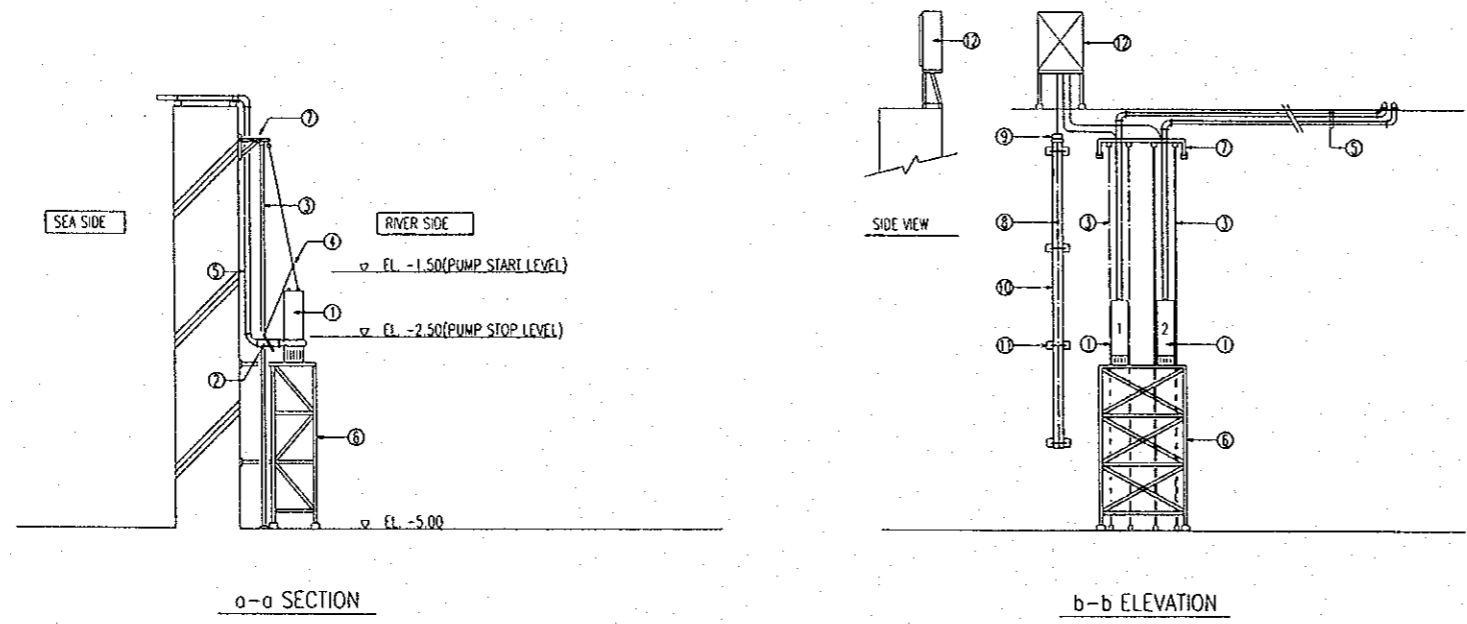
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.9
MECHANICAL LAYOUT OF BARU PUMPING STATION



AUXILIARY DRAINAGE PLAN S=1:100

①	SUBMERSIBLE MOTOR DRAINAGE PUMP (WITH SLIDING TYPE SELF CONNECTION FLANGE)	CAPACITY : 0.1m ³ /H, HEAD: 6m, MOTOR 1.3kW
②	SLIDING TYPE FLANGE	CONNECTED AND SEALED BY WEIGHT OF THE PUMP
③	GUIDE PIPES	TO SLIDING THE PUMP
④	CHAIN	TO LIFT UP AND DOWN THE PUMP
⑤	DRAINAGE PIPE	SCP 40mm
⑥	MOUNTING PLATFORM	
⑦	FIXING STRUCTURE	TO GUIDE PIPES
⑧	ELECT-ROD (SUS 5mm φ)	J-RODS, WITH SEPARATING DEVICES
⑨	ELECT-ROD HOLDER	WITH CABLE CONNECTION TERMINALS
⑩	PROTECTION PIPE	FOR ELECT-RODS, PVC 250mm
⑪	FIXING DEVICES	FOR PROTECTION PIPE
⑫	CONTROL PANEL	METALLIC CABINET IP 65

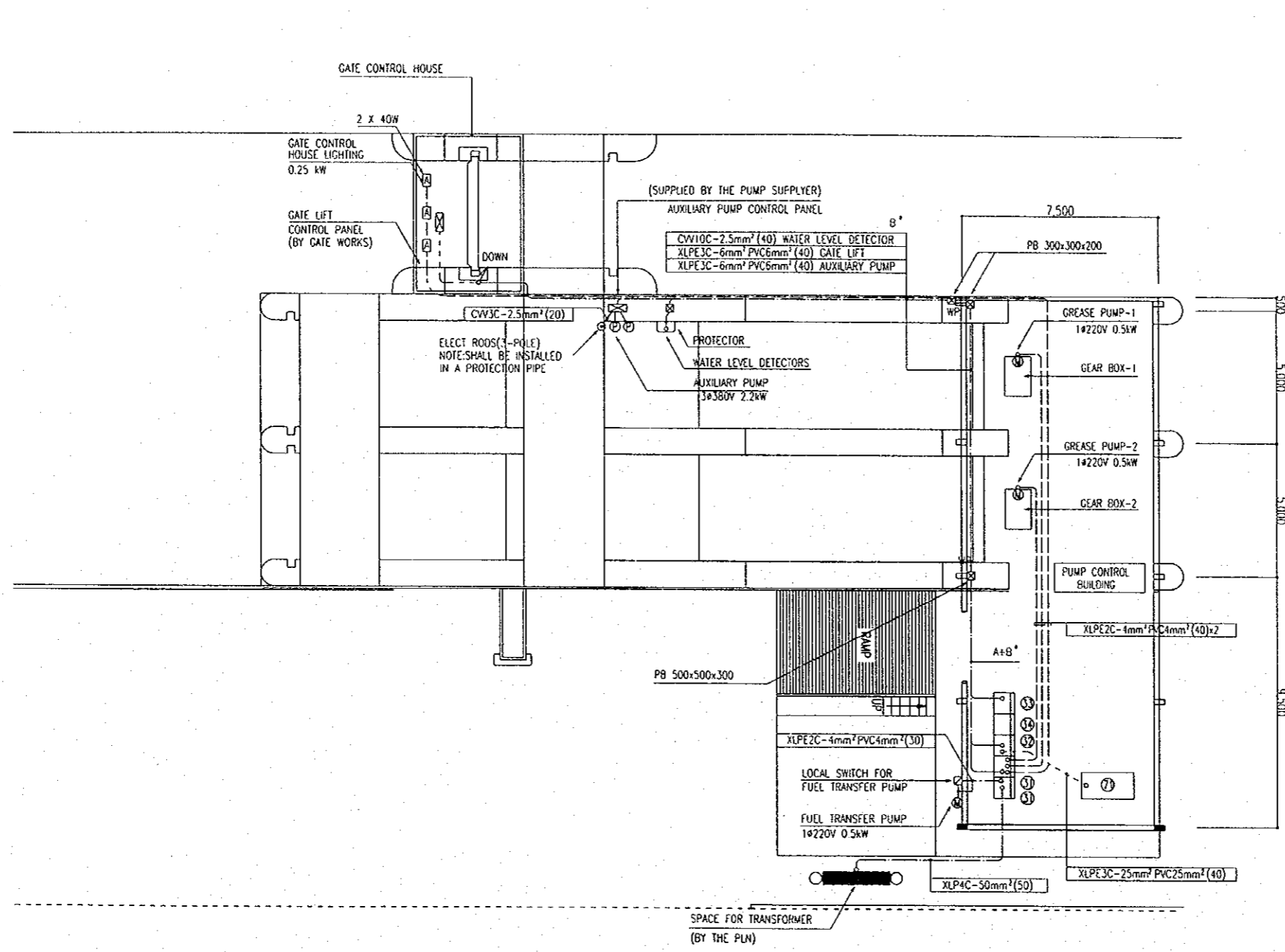


AUXILIARY DRAINAGE PUMP INSTALLATION S=1:50
(FOR REFERENCE)

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.10

AUXILIARY PUMP

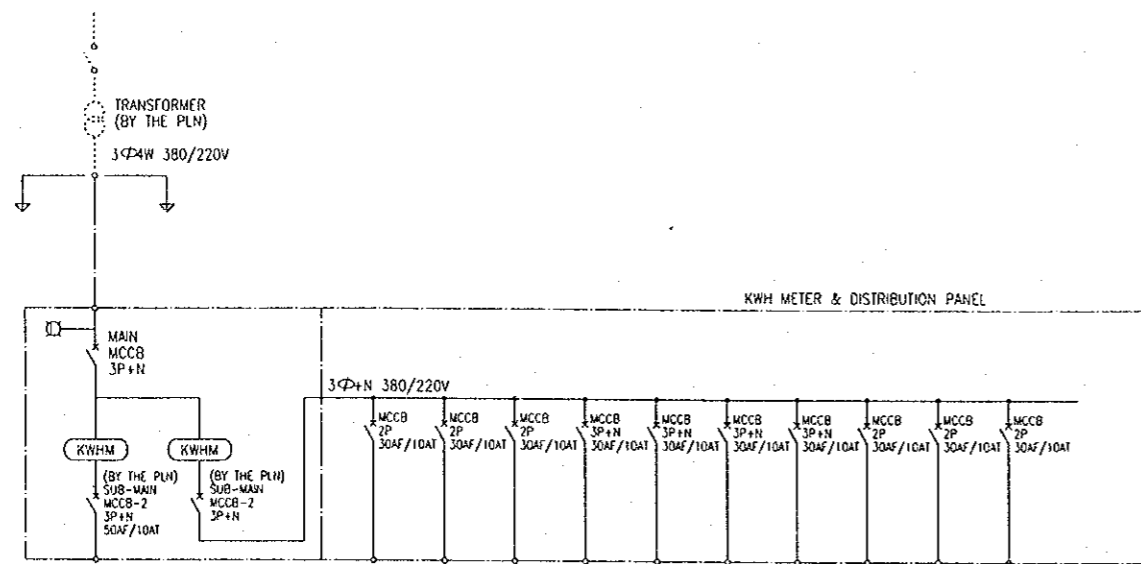


①	KWh METER & DISTRIBUTION PANEL
②	MOTOR CONTROL PANEL
③	WATER LEVEL INDICATION & ALARM PANEL
④	BATTERY CHARGER PANEL
⑤	GENERATOR UNIT 3ø380V 25kW
PB	PULL BOX
WP	WATER PROOFING TYPE

ELECTRICAL WIRING PLAN S=1:100

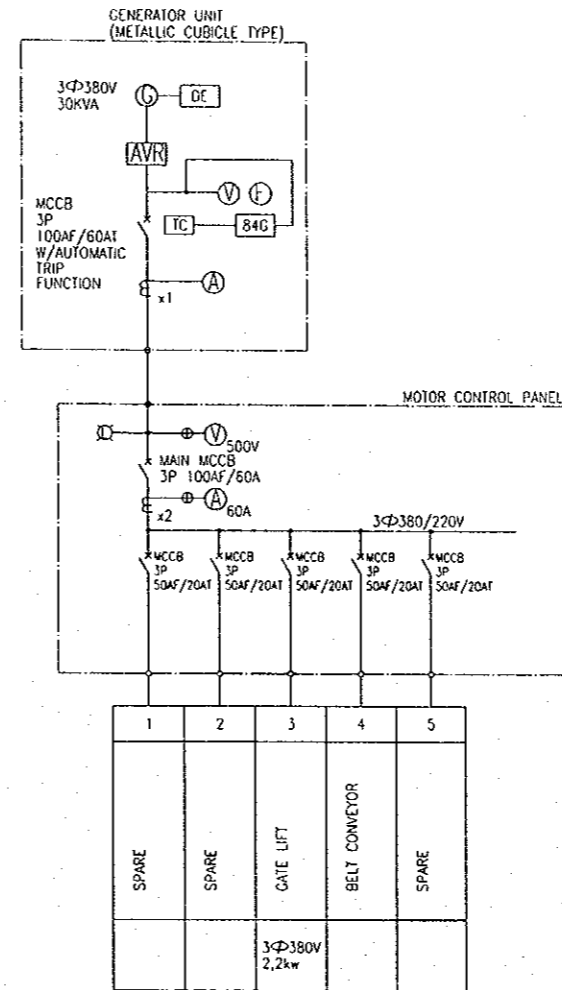
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.11
 ELECTRICAL WIRING PLAN



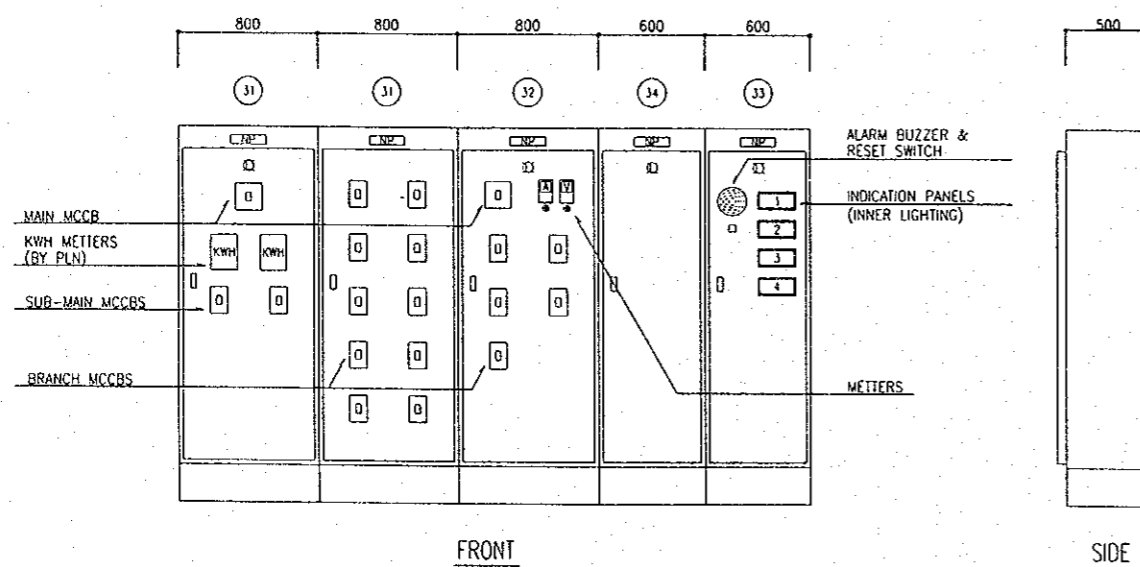
21	1	2	3	4	5	6	7	8	9	10
3Φ4W 380/220V	1Φ2W 220V 0.5KW	1Φ2W 220V 0.5KW	3 ΦW 380V 2.2KW	1Φ2W 380V/220V	3Φ4W 380V/220V	3Φ4W 380V/220V	1Φ2W 220V 1.5KW	1Φ2W 220V 2.0KW	1Φ2W 220V 0.5KW	1Φ2W 220V 0.5KW
STAY HOUSE	MAIN PUMP-1 (GREASE PUMP)	MAIN PUMP-2 (GREASE PUMP)	AUXILIARY PUMP CONTROL PANEL	PUMP HOUSE LIGHT DISTRIBUTION PANEL	OFFICE	WORKSHOP & GARAGE	GENERATOR UNIT (BATTERY CHARGE)	BATTERY CHARGER	WATER LEVEL INDICATION & ALARM PANEL	FUEL TRANSFER PUMP

SINGLE LINE DIAGRAM FOR
KWH METER & DISTRIBUTION PANEL



SINGLE LINE DIAGRAM FOR
GENERATING POWER SUPPLY

Ⓜ	GENERATOR 3-PHASE 380V AC, 4-POLE 1500 rpm DIESEL ENGINE DRIVEN TYPE 25KVA, POWER FACTOR 80%
DE	DIESEL ENGINE PADIATOR COOLING TYPE 1500rpm CELL MOTOR STARTING (DC12V) BATTERY SELF CONTAINED
AVR	AUTOMATIC VOLTAGE REGULATOR
TC	TRIP COIL
V	VOLT METER
F	FREQUENCY METER
A	AM-METER
•	PHASE CHANGE OVER SWITCH
84G	GROUNDING VOLTAGE RELAY
CT	CURRENT TRANSFORMER
IL	INDICATION LAMP
MCCB	MOLDED CASE CIRCUIT BREAKER 600V CLASS.
KWHM	WATT HOUR METER (SUPPLIED BY THE PLN)



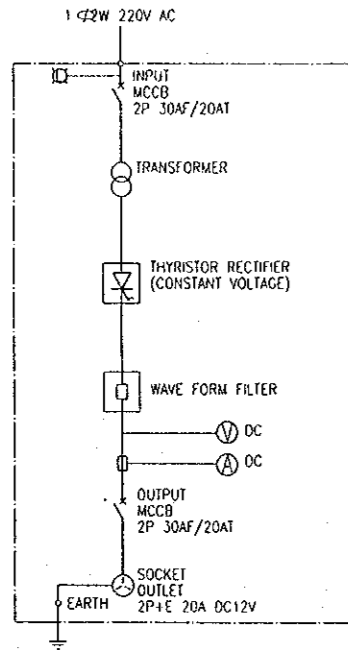
PANEL FIGURE (FOR REFERENCE)

31	KWH METER & DISTRIBUTION PANEL
32	MOTOR CONTROL PANEL
33	WATER LEVEL INDICATION & ALARM PANEL
34	BATTERY CHARGER PANEL

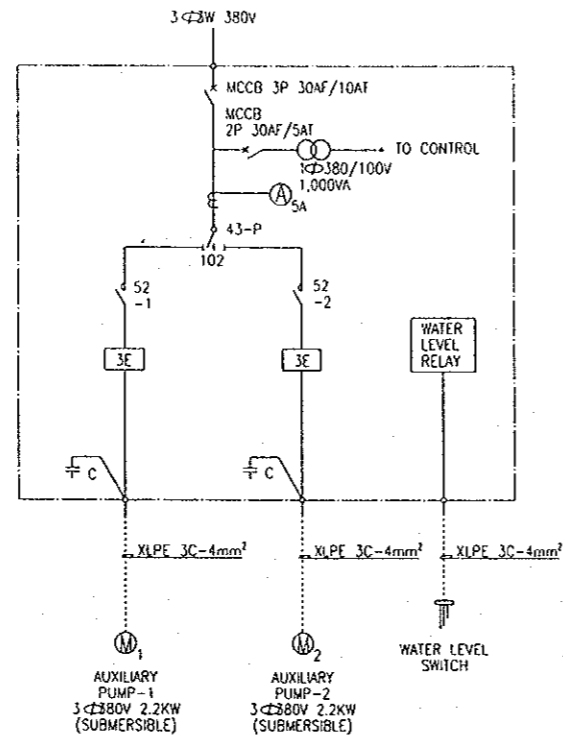
1	HIGH WATER LEVEL
2	PUMP START
3	PUMP STOP
4	LOW WATER LEVEL

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN
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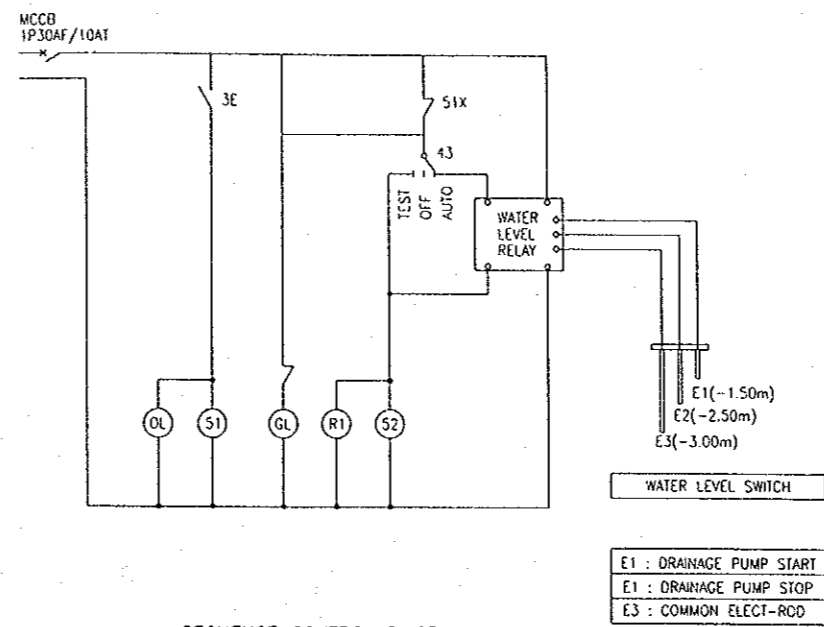
Fig. 6.4.12
POWER SUPPLY AND CONTROL SYSTEM DIAGRAM (1/2)



SINGLE LINE DIAGRAM FOR BATTERY CHARGER



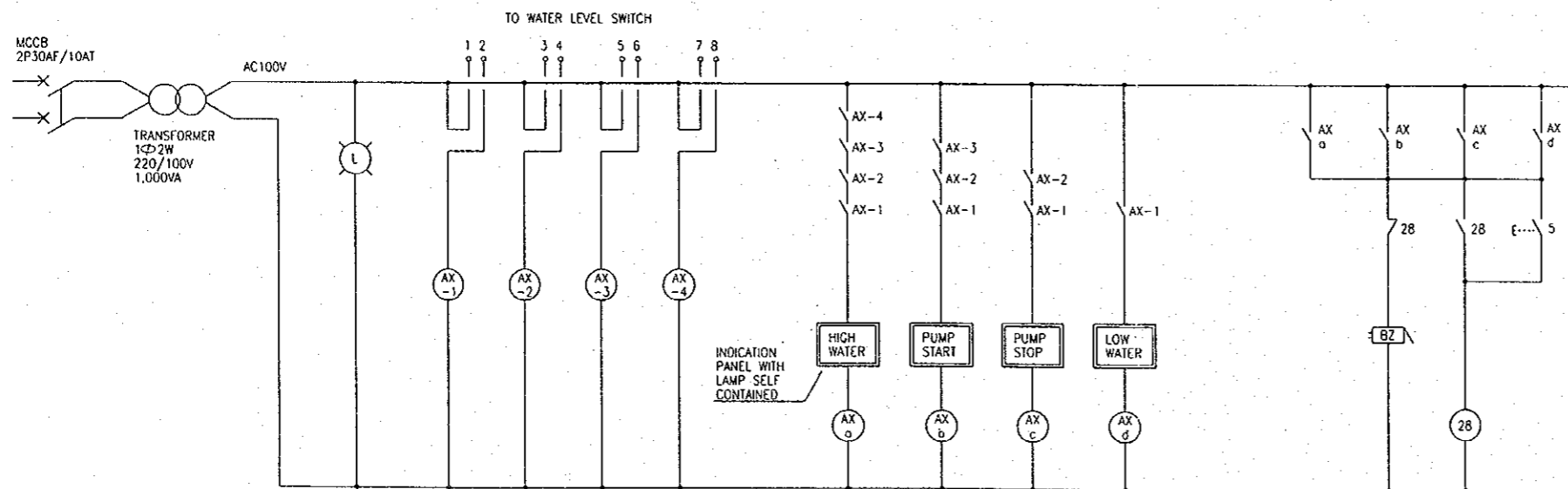
SINGLE LINE DIAGRAM FOR AUXILIARY PUMPS



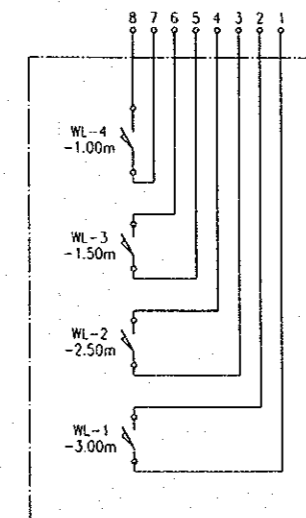
SEQUENCE CONTROL DIAGRAM FOR AUXILIARY PUMPS

3E	3-ELEMENT RELAY (OVER LOAD, NEGATIVE PHASE, OPENPHASE)
43	CHANGE-OVER-SWITCH
51	OVER CURRENT RELAY
52	MAGNETIC CONTACTOR
2B	ALARM RELAY
5	BOZZER STOP/RESET SWITCH
MCCB	MOLDED CASE CIRCUIT BREAKER
AF/AT	FRAME AMPER/TRIP AMPER RATE
F	FUSE
C	STATIC CONDENSOR
A	AM-METER
L	INDICATION LAMP
BZ	ALARM BOZZER
AX	AUXILIARY RELAY

E1 : DRAINAGE PUMP START
E1 : DRAINAGE PUMP STOP
E3 : COMMON ELECT-RCD



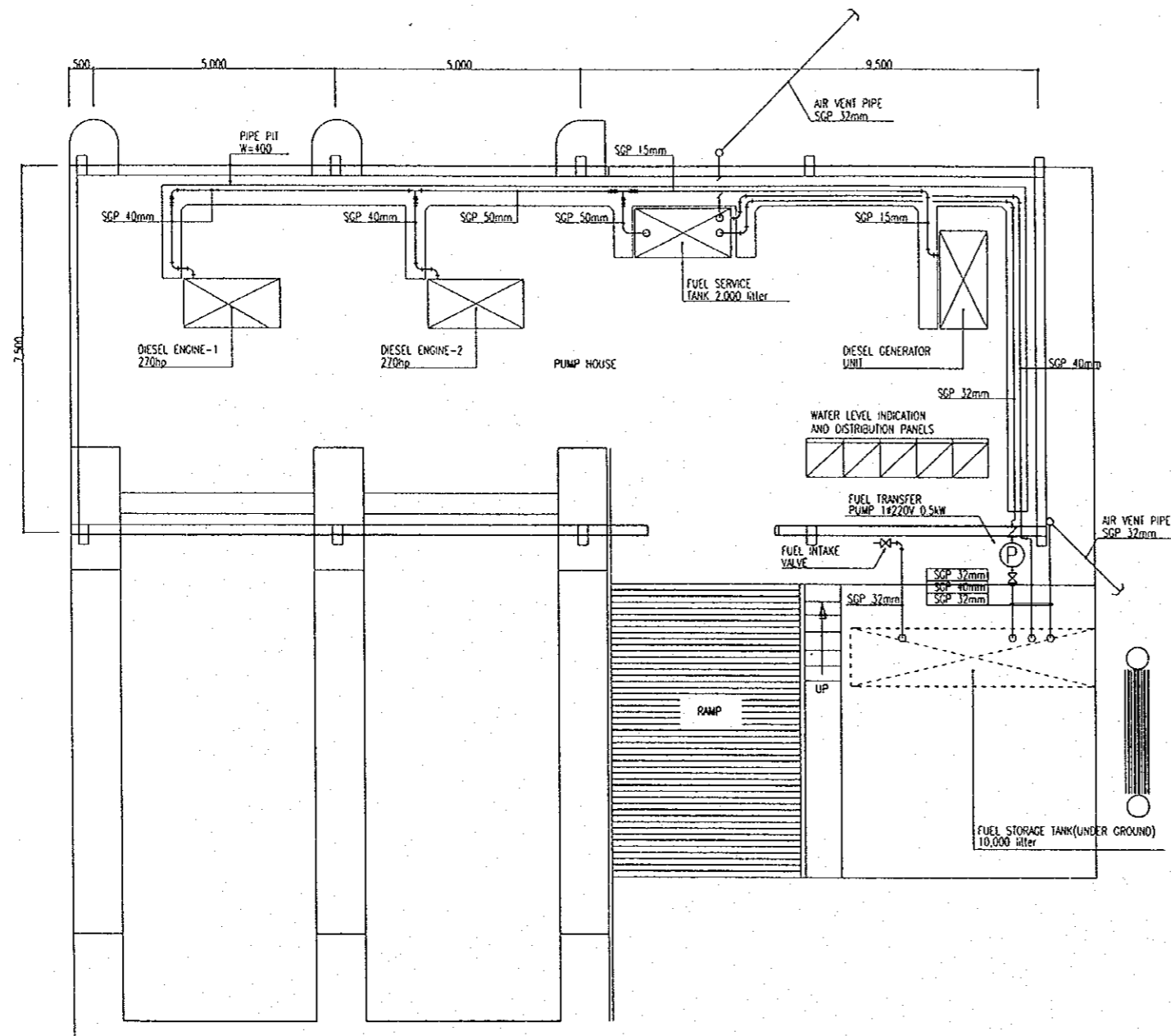
SEQUENCE CONTROL DIAGRAM FOR WATER LEVEL INDICATION & ALARM PANEL



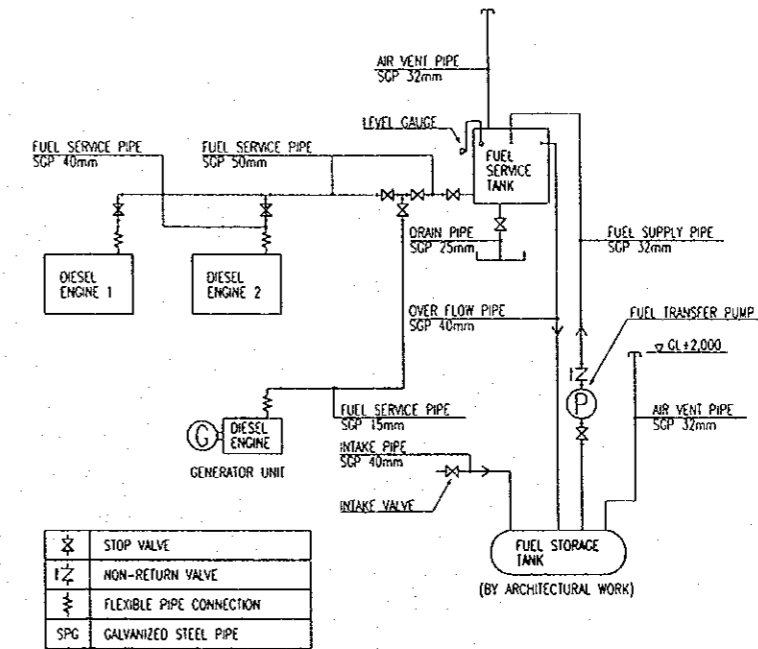
WATER LEVEL SWITCHES

THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.13
POWER SUPPLY AND CONTROL SYSTEM DIAGRAM (2/2)

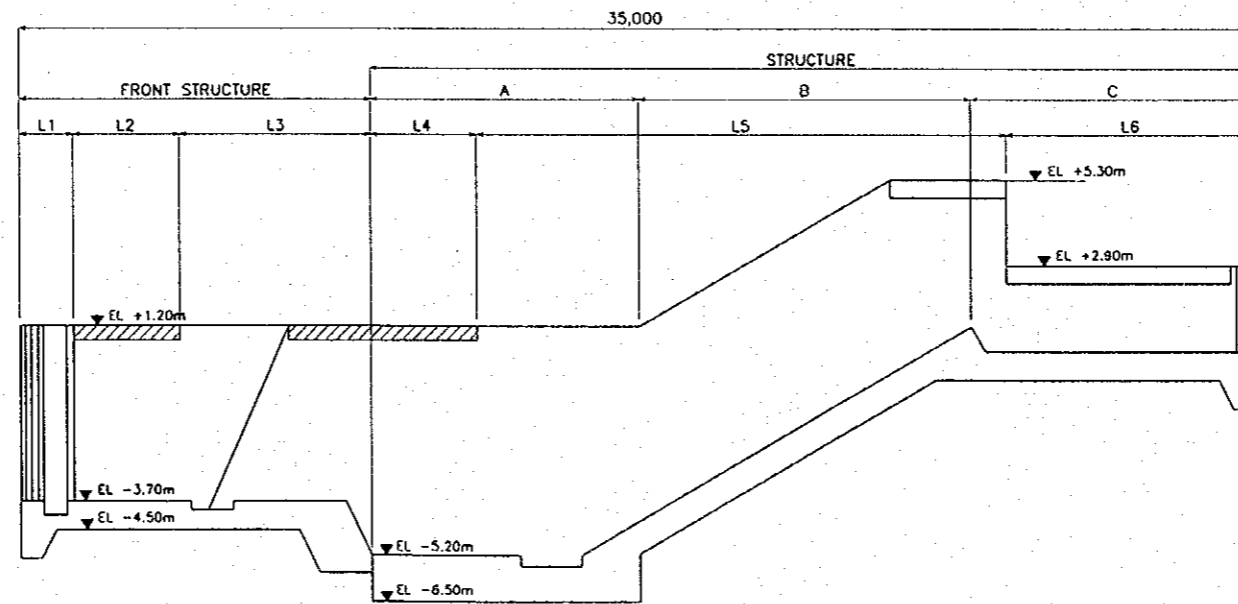
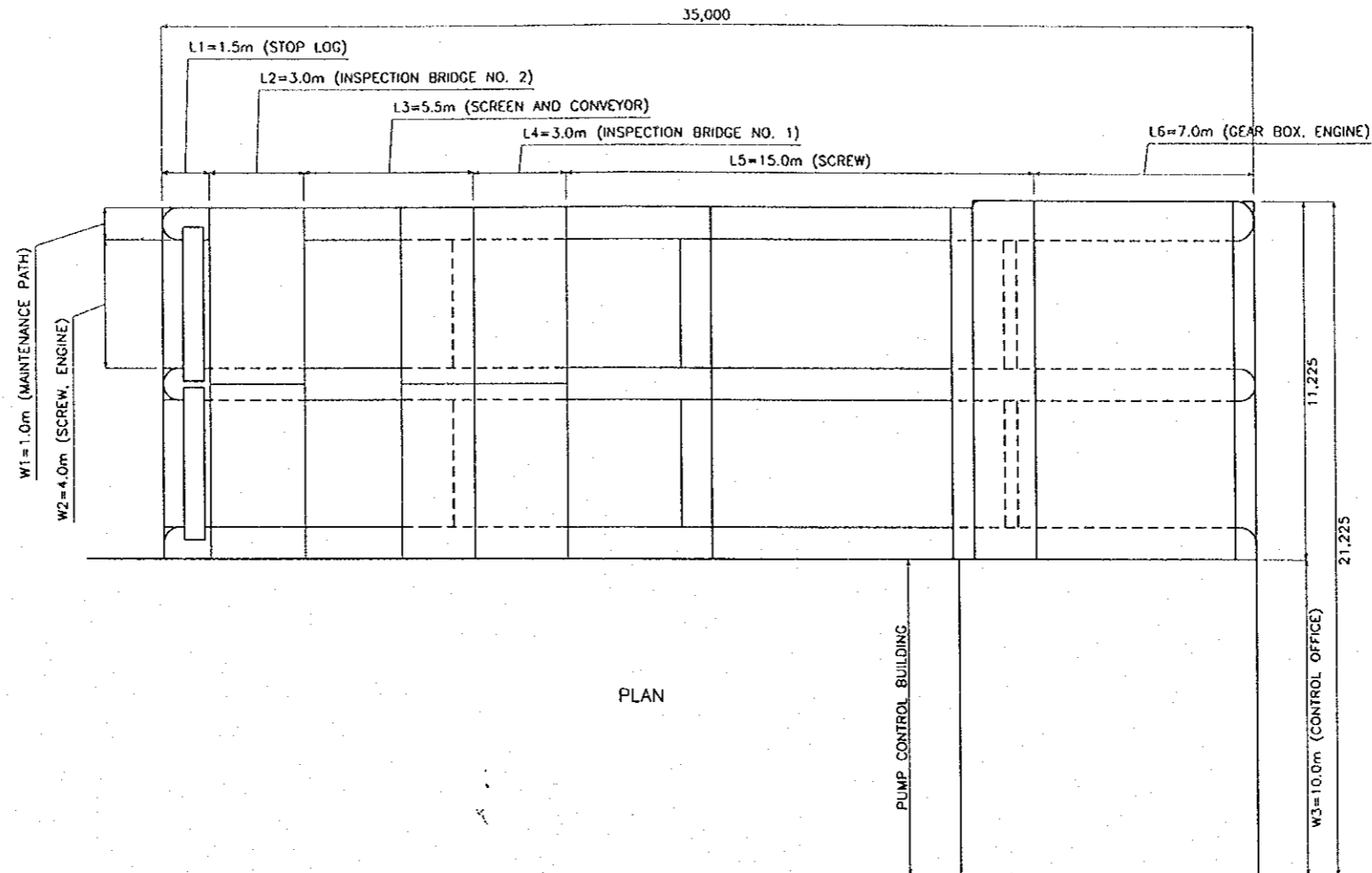


FUEL SUPPLY PIPING PLAN S=1:50



FUEL SUPPLY PIPING DIAGRAM

	STOP VALVE
	NON-RETURN VALVE
	FLEXIBLE PIPE CONNECTION
SPG	GALVANIZED STEEL PIPE



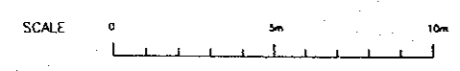
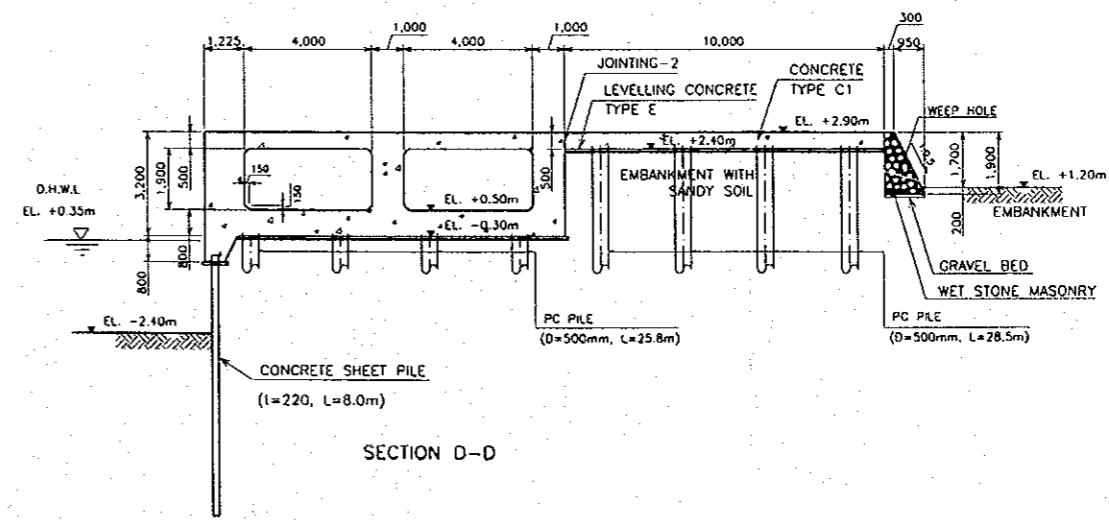
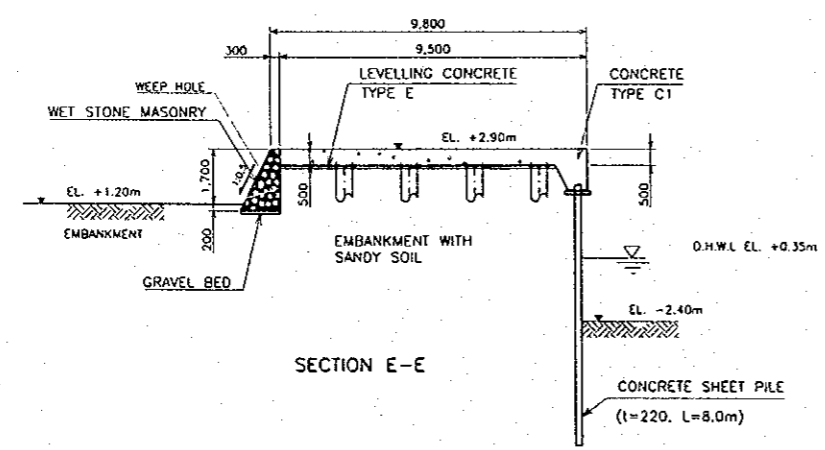
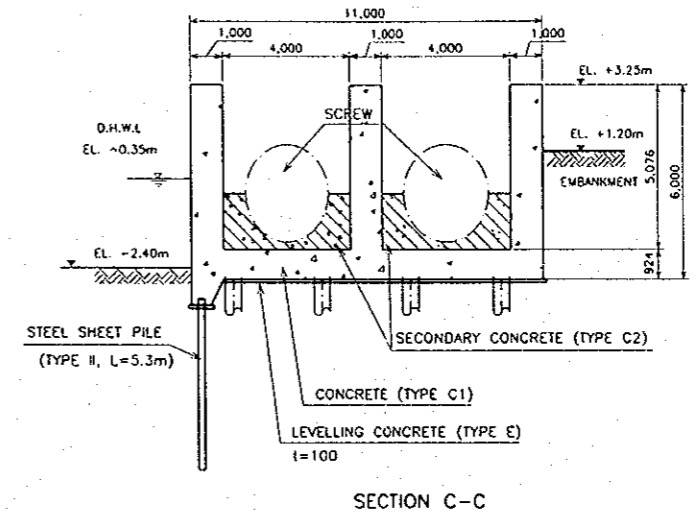
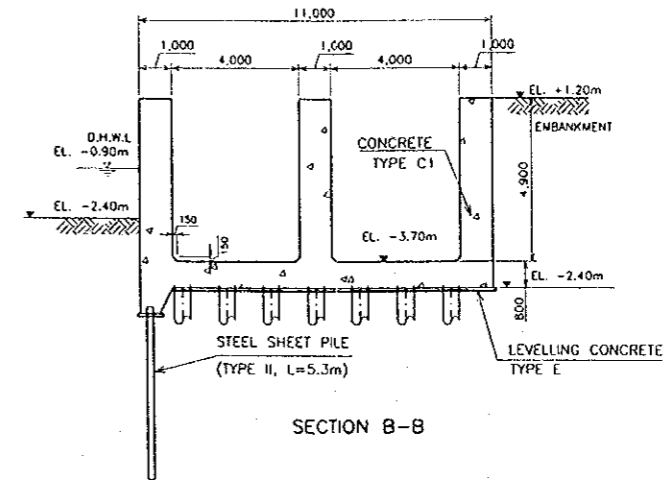
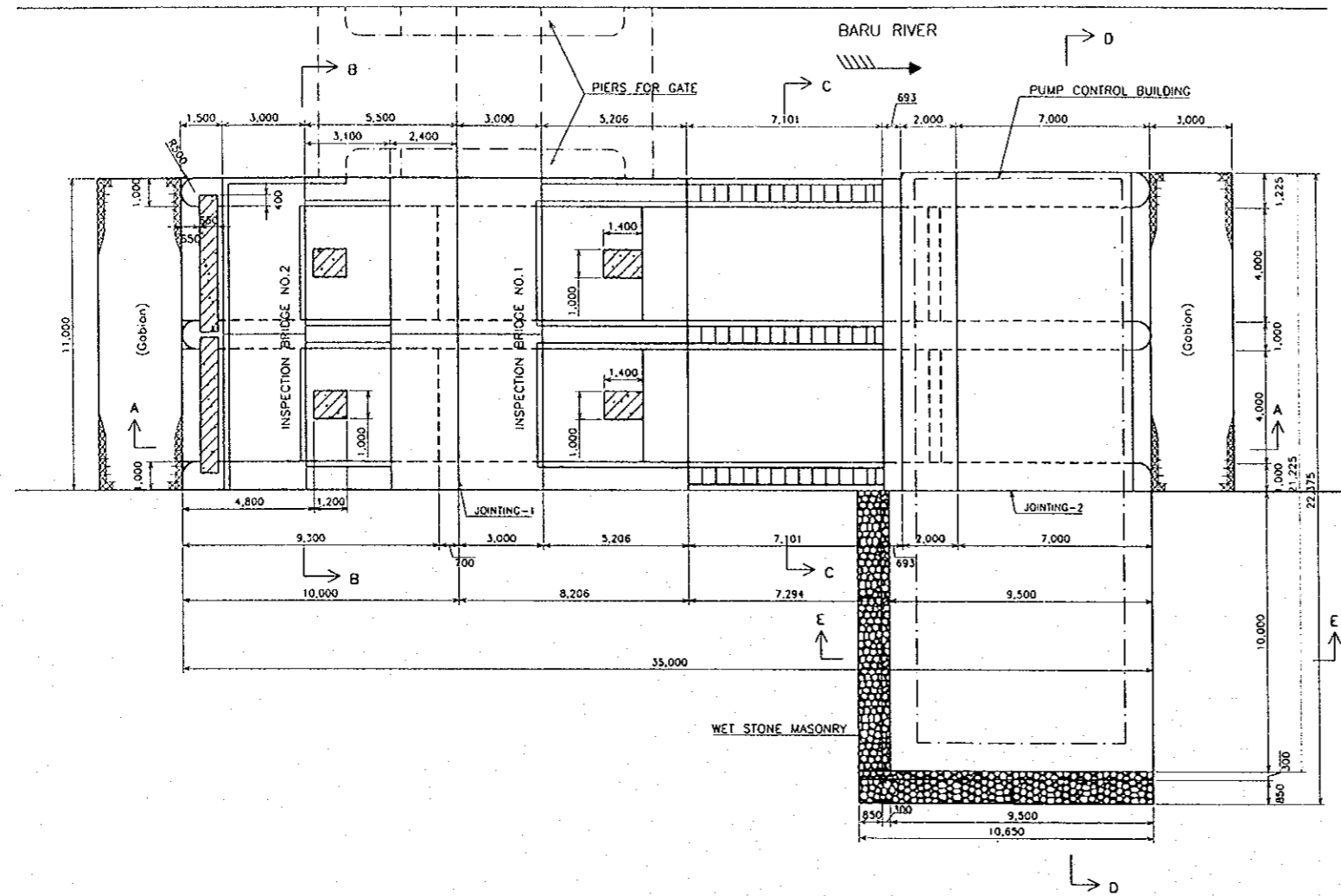
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THE DETAILED DESIGN OF FLOOD CONTROL, URBAN
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Fig. 6.4.15

SCHEMATIC LAYOUT OF PUMPING STATION

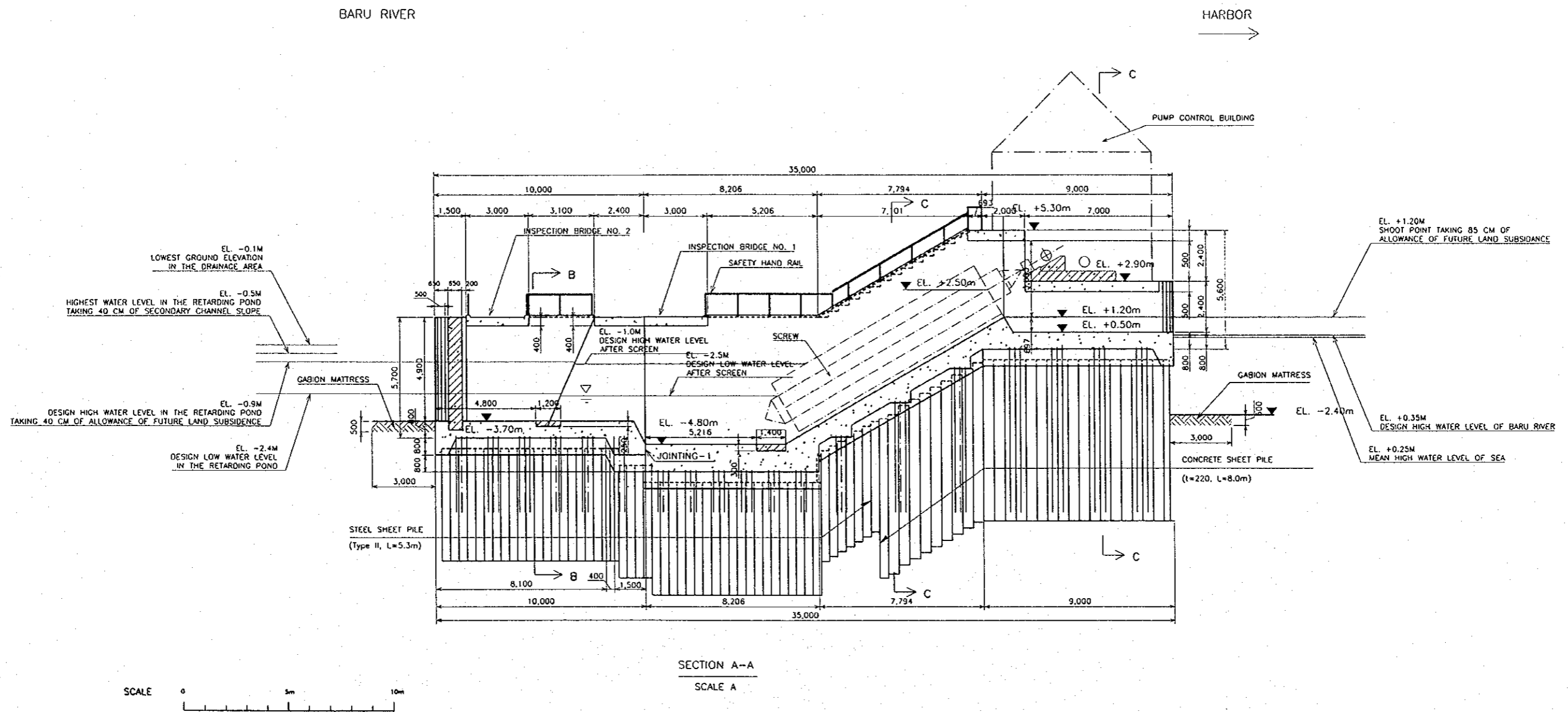


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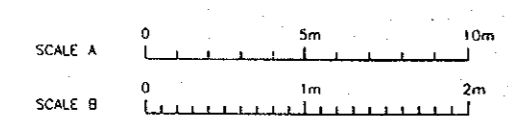
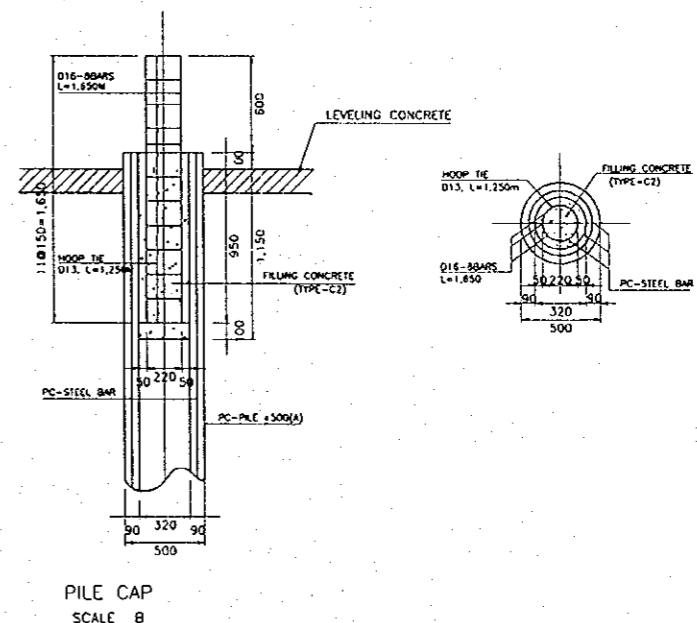
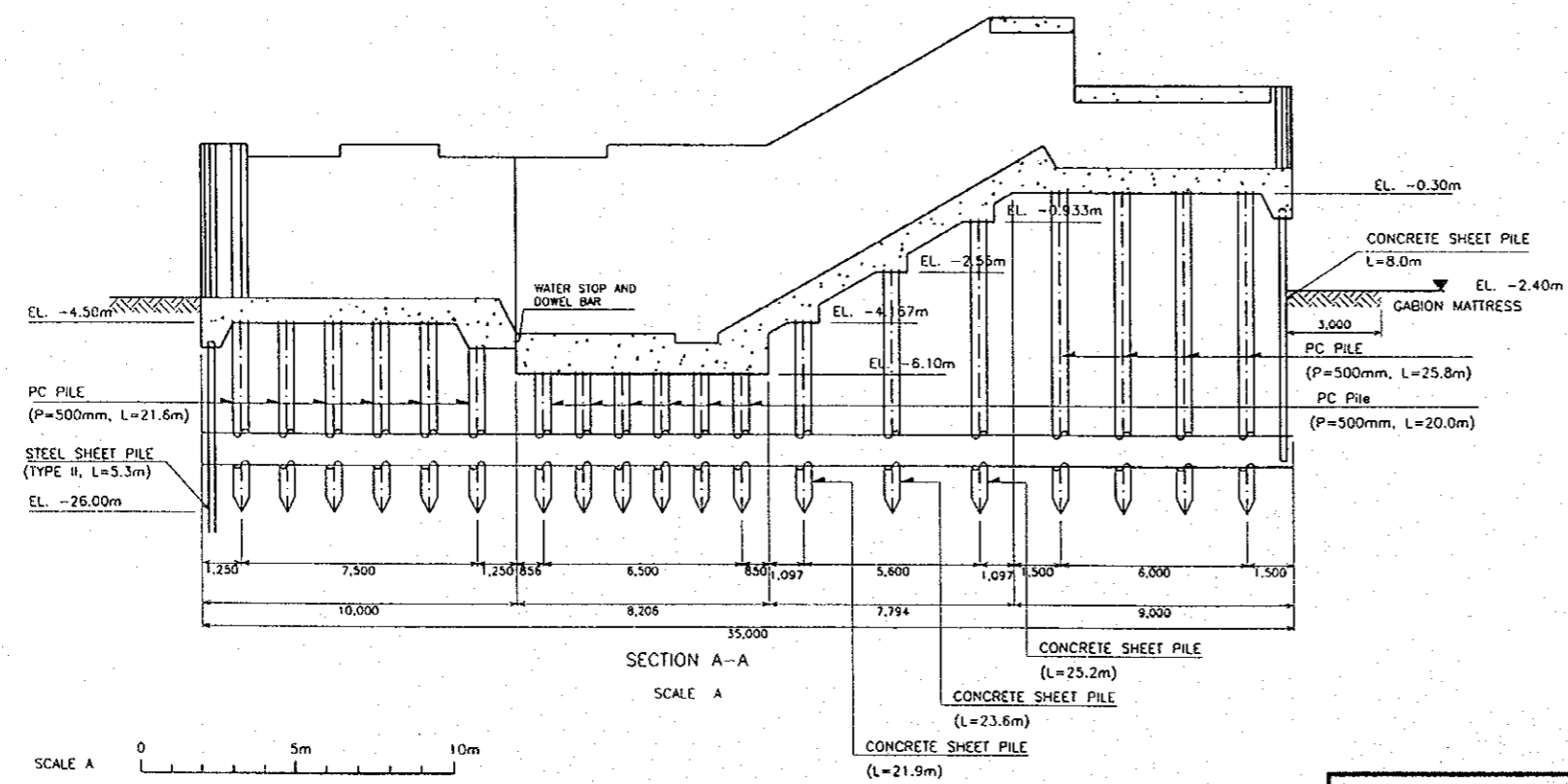
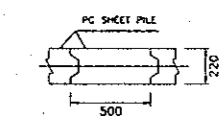
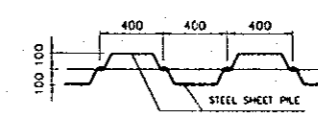
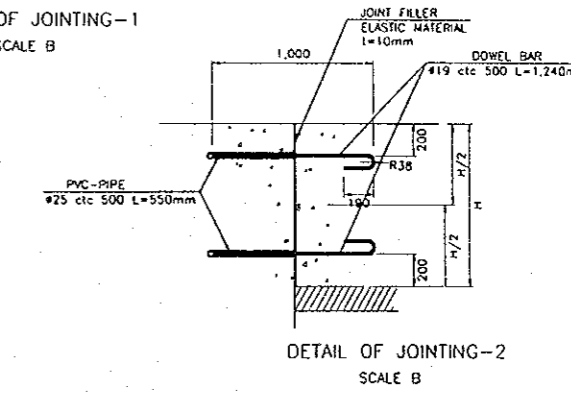
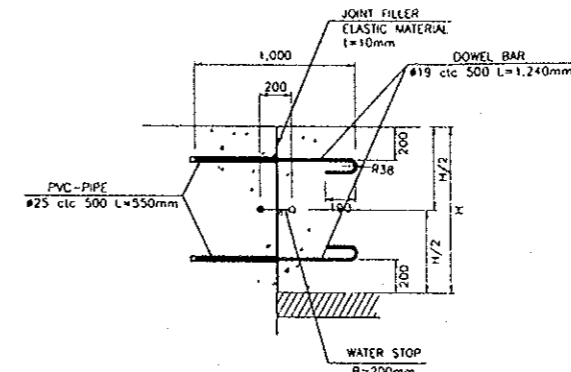
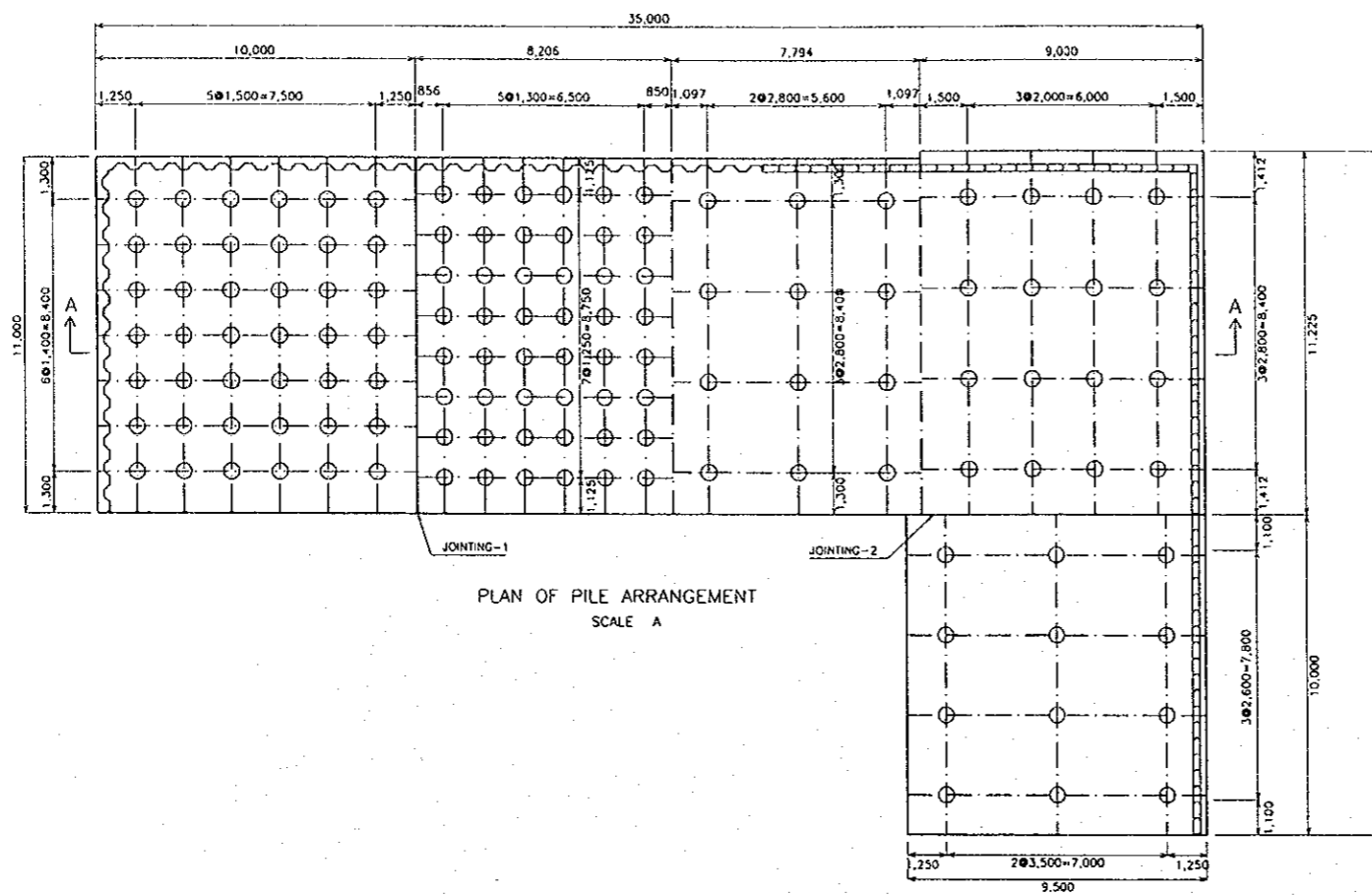
Fig. 6.4.16 (1/2)

BARU PUMPING STATION (1/2)



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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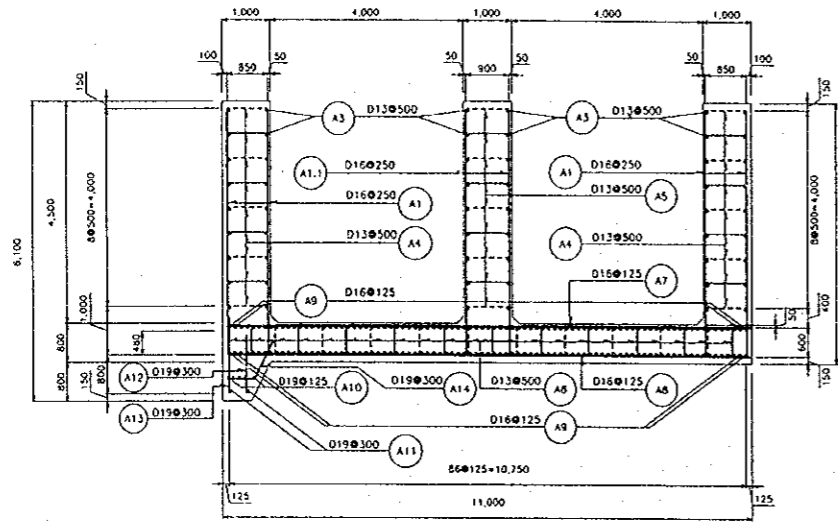
Fig. 6.4.16 (2/2)
 BARU PUMPING STATION (2/2)



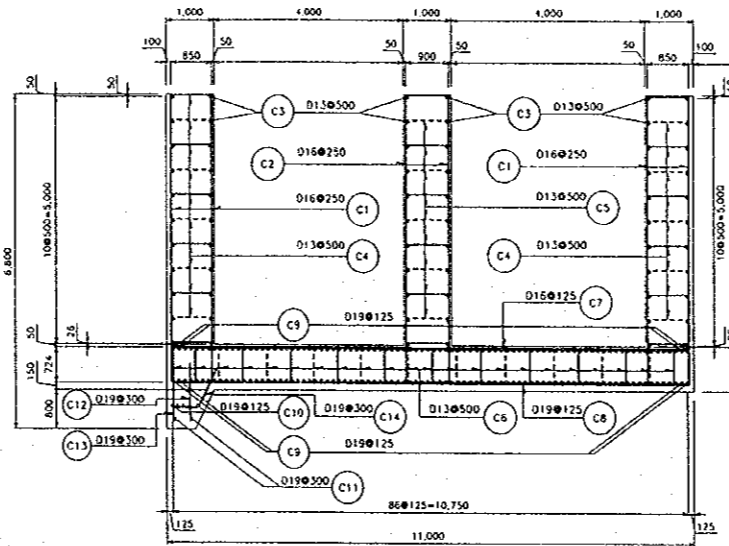
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA

Fig. 6.4.17
BARU PUMPING STATION PILE FOUNDATION

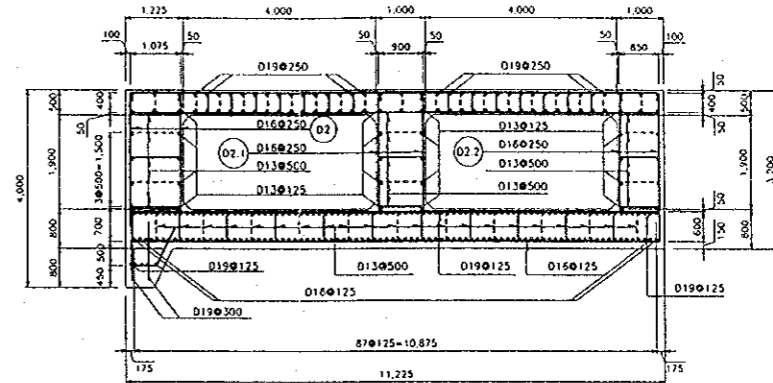
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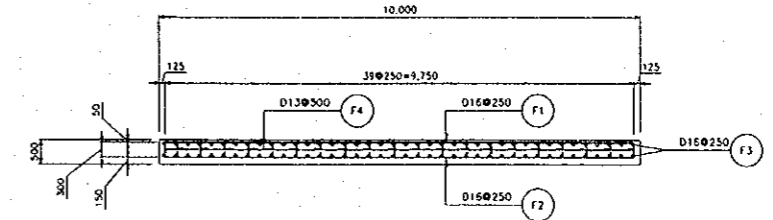
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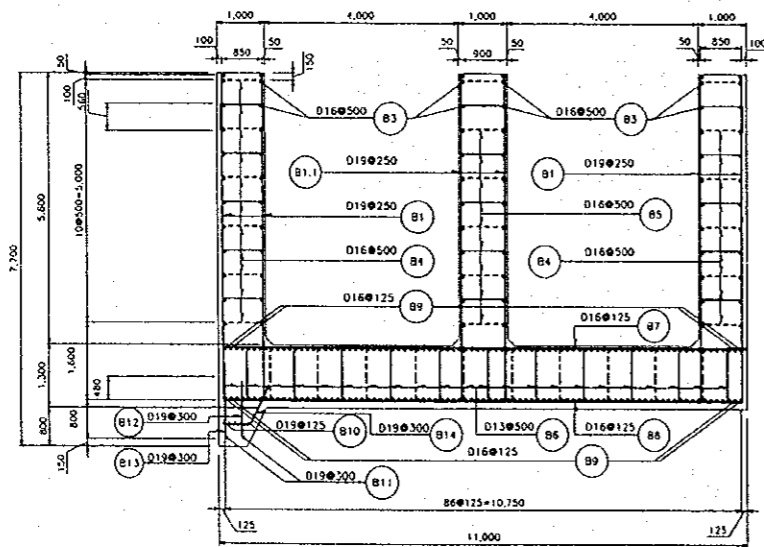
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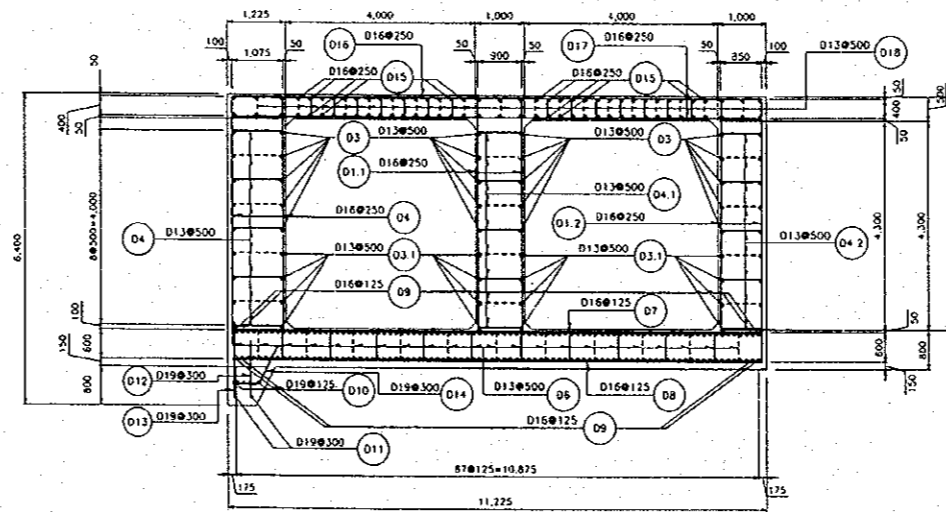
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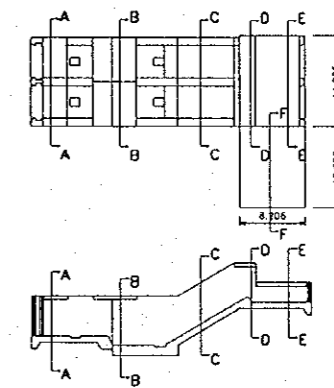
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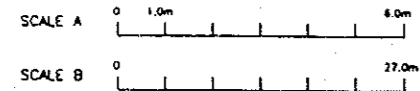
SECTION B-B
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SECTION D-D
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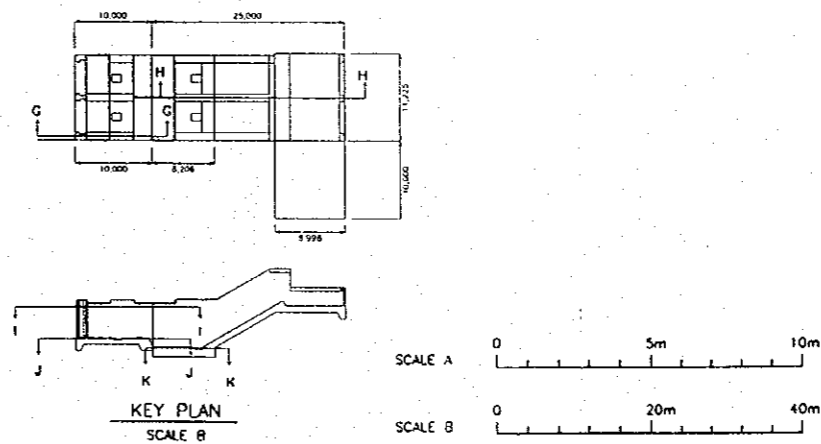
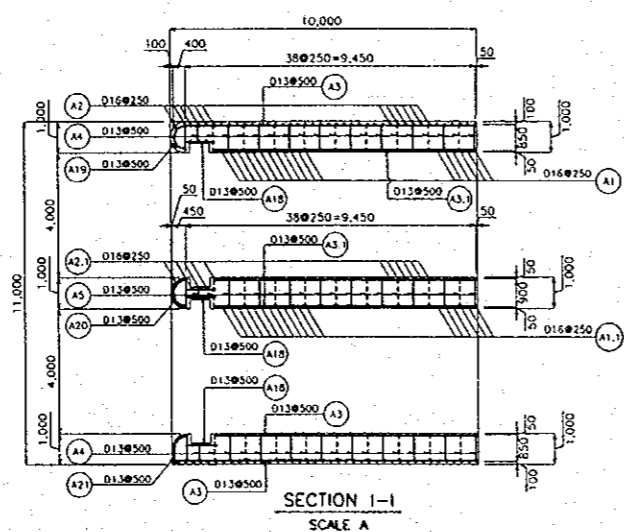
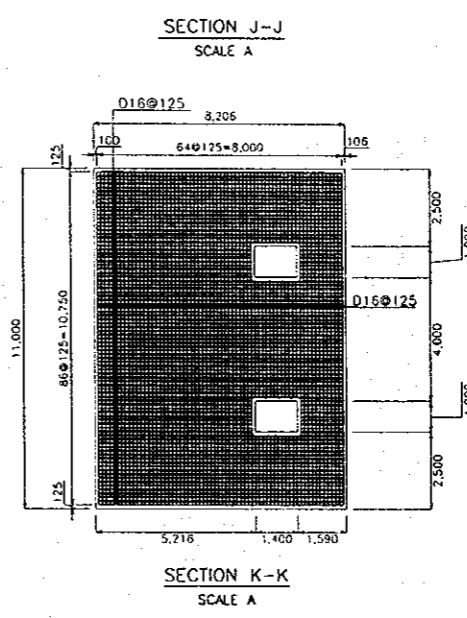
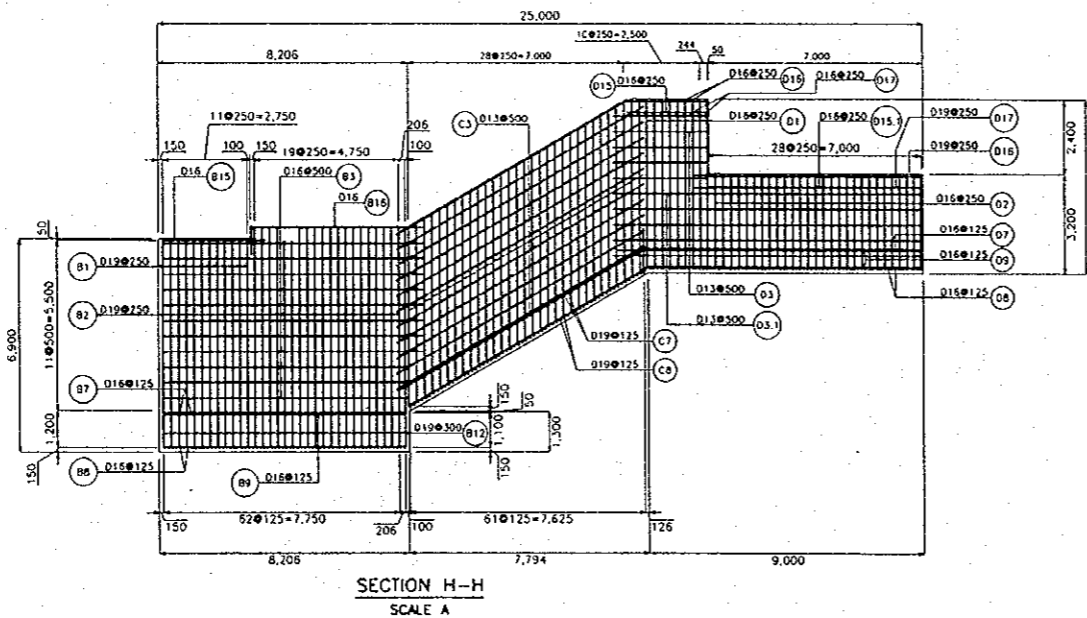
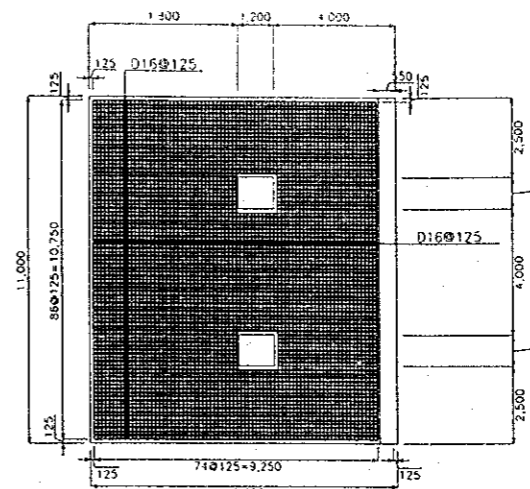
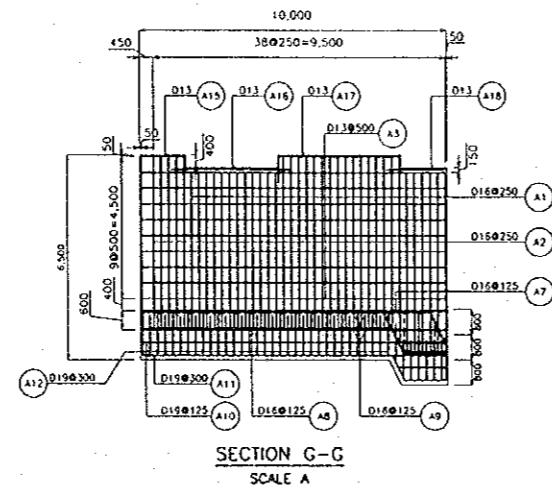


KEY PLAN
SCALE B



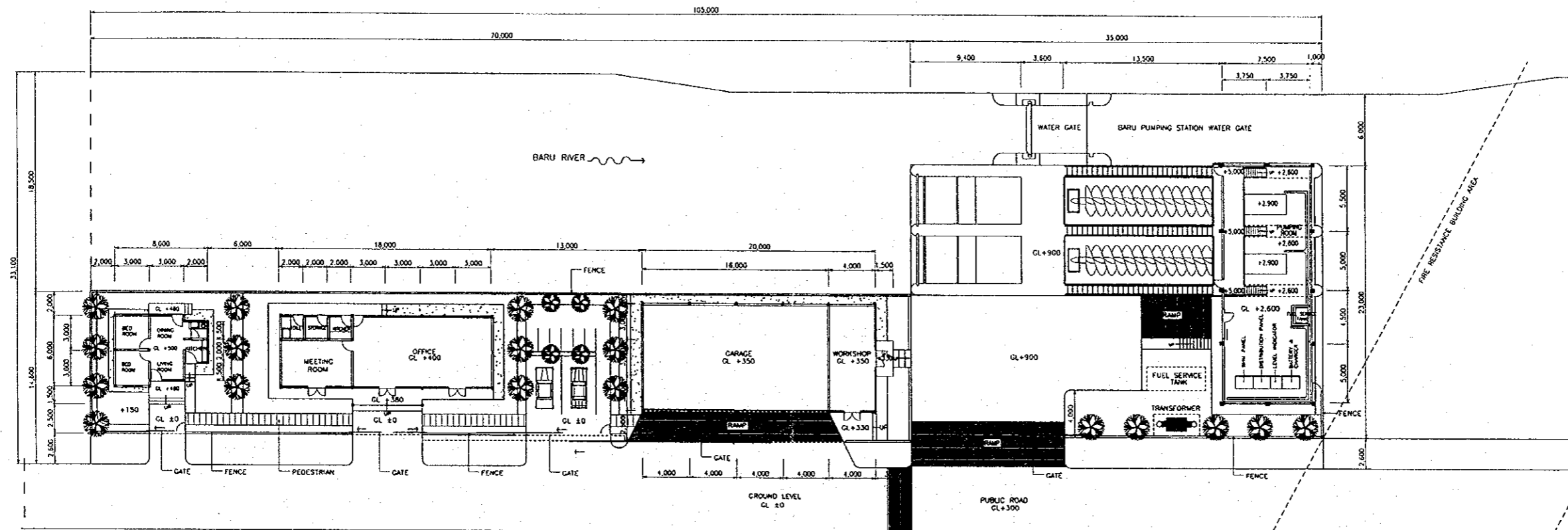
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Fig. 6.4.18 (1/2)
BARU PUMPING STATION REINFORCING
ARRANGEMENT(1/2)



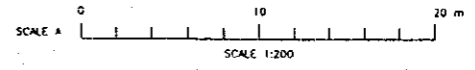
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.18 (2/2)
 BARU PUMPING STATION REINFORCING ARRANGEMENT (2/2)



NOTES :
 GL +600 ARCHITECTURE LEVEL = GL +1,200 CIVIL LEVEL

SITE PLAN
 SCALE A



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 6.4.19
 LAYOUT OF BARU PUMPING STATION COMPLEX