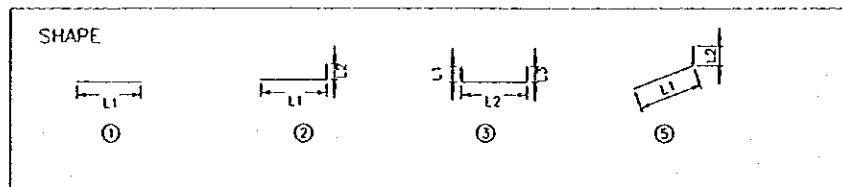


BAR BENDING SCHEDULE



BAR WEIGHT

TYPE	SHAPE	DA	NUMBER	LENGTH (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	R (mm)	TYPE	DA (mm)	LENGTH (mm)	NUMBER	WEIGHT PER "M" (kg)	WEIGHT PER "BAR" (kg)	WEIGHT (kg)	SHAPE
W - 3R																		
W1	2	22	31	8,610	8,231	382					W1	22	8,610	31	3.04	26.17	811.41	
W2	4	29	31	8,770	8,260	506					W2	29	8,770	31	5.19	45.52	1,411.01	
W3	4	29	28	5,240	4,735	506					W3	29	5,240	28	5.19	27.20	761.48	
W4	1	16	35	7,320	7,320						W4	16	7,320	35	1.56	11.42	399.67	
W5	1	16	30	7,320	7,320						W5	16	7,320	30	1.56	11.42	342.58	
W6	3	16	31	820	278	266	278				W6	16	820	31	1.56	1.28	39.66	
F1	1	16	62	790	790						F1	16	790	62	1.56	1.23	76.41	
F2	1	16	4	7,320	7,320						F2	16	7,320	4	1.56	11.42	45.68	
S1	2	25	59	6,740	436	6,303					S1	25	6,740	59	3.98	26.83	1,582.69	
S2	3	19	59	7,660	332	1,019	6,307				S2	19	7,660	59	2.25	17.24	1,016.87	
S3	1	16	22	7,320	7,320						S3	16	7,320	22	1.56	11.42	251.22	
S4	1	16	26	7,320	7,320						S4	16	7,320	26	1.56	11.42	296.90	
TOTAL																	7,035.55	
W - 4R																		
W1	2	22	49	8,610	8,231	382					W1	22	8,610	49	3.04	26.17	1,282.55	
W2	4	29	49	8,770	8,260	506					W2	29	8,770	49	5.19	45.52	2,230.30	
W3	4	29	46	5,240	4,735	506					W3	29	5,240	46	5.19	27.20	1,251.00	
W4	1	16	35	11,820	11,820						W4	16	11,820	35	1.56	18.44	645.37	
W5	1	16	30	11,820	11,820						W5	16	11,820	30	1.56	18.44	553.18	
W6	3	16	49	820	278	266	278				W6	16	820	49	1.56	1.28	62.68	
F1	1	16	98	790	790						F1	16	790	98	1.56	1.23	120.78	
F2	1	16	4	11,820	11,820						F2	16	11,820	4	1.56	18.44	73.76	
S1	2	25	95	6,740	436	6,303					S1	25	6,740	95	3.98	26.83	2,548.39	
S2	3	19	95	7,660	332	1,019	6,307				S2	19	7,660	95	2.25	17.24	1,637.33	
S3	1	16	22	11,820	11,820						S3	16	11,820	22	1.56	18.44	406.66	
S4	1	16	26	11,820	11,820						S4	16	11,820	26	1.56	18.44	479.42	
TOTAL																	11,290.40	
W - 5R																		
W1	2	16	37	5,010	4,735	278					W1	16	5,010	37	1.56	7.82	289.18	
W2	4	16	37	5,000	4,748	278					W2	16	5,000	37	1.56	7.85	290.33	
W3	4	16	34	3,060	2,782	278					W3	16	3,060	34	1.56	4.77	162.30	
W4	1	16	20	8,820	8,820						W4	16	8,820	20	1.56	13.76	275.18	
W5	1	16	17	8,820	8,820						W5	16	8,820	17	1.56	13.76	233.91	
W6	3	13	37	720	228	265	228				W6	13	720	37	1.04	0.75	27.71	
S1	2	16	71	4,580	278	4,310					S1	16	4,580	71	1.56	7.16	508.39	
S2	3	16	37	5,210	278	625	4,310				S2	16	5,210	37	1.56	8.13	300.72	
S3	1	16	16	8,820	8,820						S3	16	8,820	16	1.56	13.76	220.15	
S4	1	16	18	8,820	8,820						S4	16	8,820	18	1.56	13.76	247.67	
TOTAL																	2,555.53	

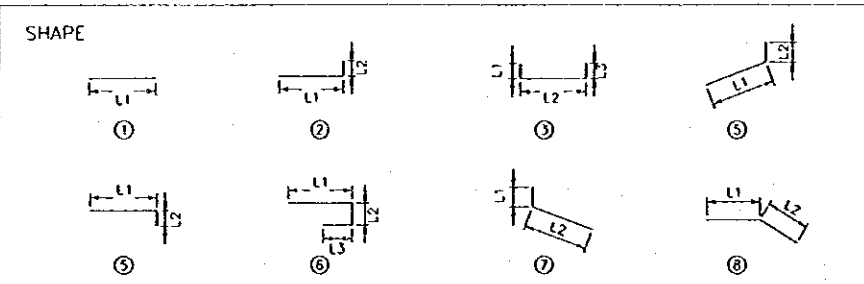
BAR BENDING DETAIL

DA	a	b	L1-b-a/2	R
D13	66	156	139	42
D16	75	193	210.5	48
D19	94	235	283	60
D22	104	272	324	66
D25	122	305	357	78
D29	141	346	419.5	90
D32	151	385	460.5	96

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSEJUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT APPROACH WALLS ON RIGHT AND LEFT BANKS REINFORCING BAR ARRANGEMENT FOR UPSTREAM APPROACH WALL (6/7)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
CIVIL ENGINEERING CONSULTANTS PT. BANGUNAN DAN KONSTRUKSI PACIFIC CONSULTANTS INTERNATIONAL, INC. PAKED, INDONESIA		DISTRICT SEMARANG CITY
DESIGNED: [Signature] CHECKED: [Signature]		DRAWING NO. W2-P2-AW-R4-09 SHEET NO. 97
GROUP OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.

BAR BENDING SCHEDULE



BAR WEIGHT

	W - 5L											W - 6L & W - 7L										
	TYPE	SHAPE	DA	NUMBER	LENGTH (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	L5 (mm)	R (mm)	TYPE	DA	LENGTH (mm)	NUMBER	WEIGHT PER 'M' (kg)	WEIGHT PER 'BAR' (kg)	WEIGHT (kg)	SHAPE			
	W1	2	16	31	5,010	4,735	278					W1	16	5,010	31	1.56	7.82	242.28				
	W2	4	16	31	5,030	4,748	278					W2	16	5,030	31	1.56	7.85	243.25				
	W3	4	16	28	3,060	2,782	278					W3	16	3,060	28	1.56	4.77	133.06				
	W4	1	16	20	7,320	7,320						W4	16	7,320	20	1.56	11.42	228.38				
	W5	1	16	17	7,320	7,320						W5	16	7,320	17	1.56	11.42	194.13				
	W6	3	13	31	720	228	265	228				W6	13	720	31	1.04	0.75	23.21				
	S1	2	16	59	4,590	278	4,310					S1	16	4,590	59	1.56	7.16	422.46				
	S2	3	16	31	5,210	278	625	4,310				S2	16	5,210	31	1.56	8.13	251.96				
	S3	1	16	16	7,320	7,320						S3	16	7,320	16	1.56	11.42	182.71				
	S4	1	16	18	7,320	7,320						S4	16	7,320	18	1.56	11.42	205.55				
																		2,127.59				
	W1	5	13	13	3,940	avg 3,711	228					W1	13	3,940	13	1.04	4.10	53.27				
	W2	7	16	13	3,960	avg 3,712	278					W2	16	3,960	13	1.56	6.22	80.92				
	W2a	7	16	12	2,750	2,476	278					W2a	16	2,750	12	1.56	4.29	51.43				
	W3	1	13	12	2,920	2,920						W3	13	2,920	12	1.04	3.04	36.44				
	W3a	1	13	5	1,460	avg 1,460						W3a	13	1,460	5	1.04	1.52	7.59				
	W3b	1	13	1	3,270	3,265						W3b	13	3,270	1	1.04	3.40	3.40				
	W4	1	13	11	2,920	2,920						W4	13	2,920	11	1.04	3.04	33.40				
	W4a	1	13	5	1,460	avg 1,460						W4a	13	1,460	5	1.04	1.52	7.59				
	W4b	1	13	1	3,270	3,265						W4b	13	3,270	1	1.04	3.40	3.40				
	W5	6	13	44	610	228	152	228				W5	13	610	44	1.04	0.63	27.91				
	W6	5	13	31	3,160	2,906	228					W6	13	3,160	31	1.04	3.29	101.88				
	W7	5	16	31	3,210	2,935	278					W7	16	3,210	31	1.56	5.01	155.24				
	W8	8	13	13	7,150	2,077	5,077					W8	13	7,150	13	1.04	7.44	96.67				
	W9	8	13	12	7,090	2,031	5,031					W9	13	7,090	12	1.04	7.34	88.11				
	S1	5	16	25	3,090	278	2,810					S1	16	3,090	25	1.56	4.82	120.51				
	S2	6	13	13	3,320	228	277	2,811				S2	13	3,320	13	1.04	3.45	44.89				
	S3	1	13	11	2,920	2,920						S3	13	2,920	11	1.04	3.04	33.40				
	S4	1	13	13	2,920	2,920						S4	13	2,920	13	1.04	3.04	39.48				
	S5	5	16	30	2,290	278	2,010					S5	16	2,290	30	1.56	3.57	107.17				
	S6	6	13	30	2,370	228	127	2,011				S6	13	2,370	30	1.04	2.46	73.94				
	S7	8	13	8	6,740	avg 1,870	avg 4,870					S7	13	6,740	8	1.04	7.01	56.08				
	S8	8	13	9	6,670	avg 1,837	avg 4,837					S8	13	6,670	9	1.04	6.94	62.43				
																		1,285.21				

BAR BENDING DETAIL

	DA	a	b	L1+b/2	R
	D13	66	156	189	42
	D16	75	193	230.5	48
	D19	94	236	283	60
	D22	104	272	324	66
	D25	122	306	367	78
	D29	141	349	419.5	90
	D32	151	385	460.5	96

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

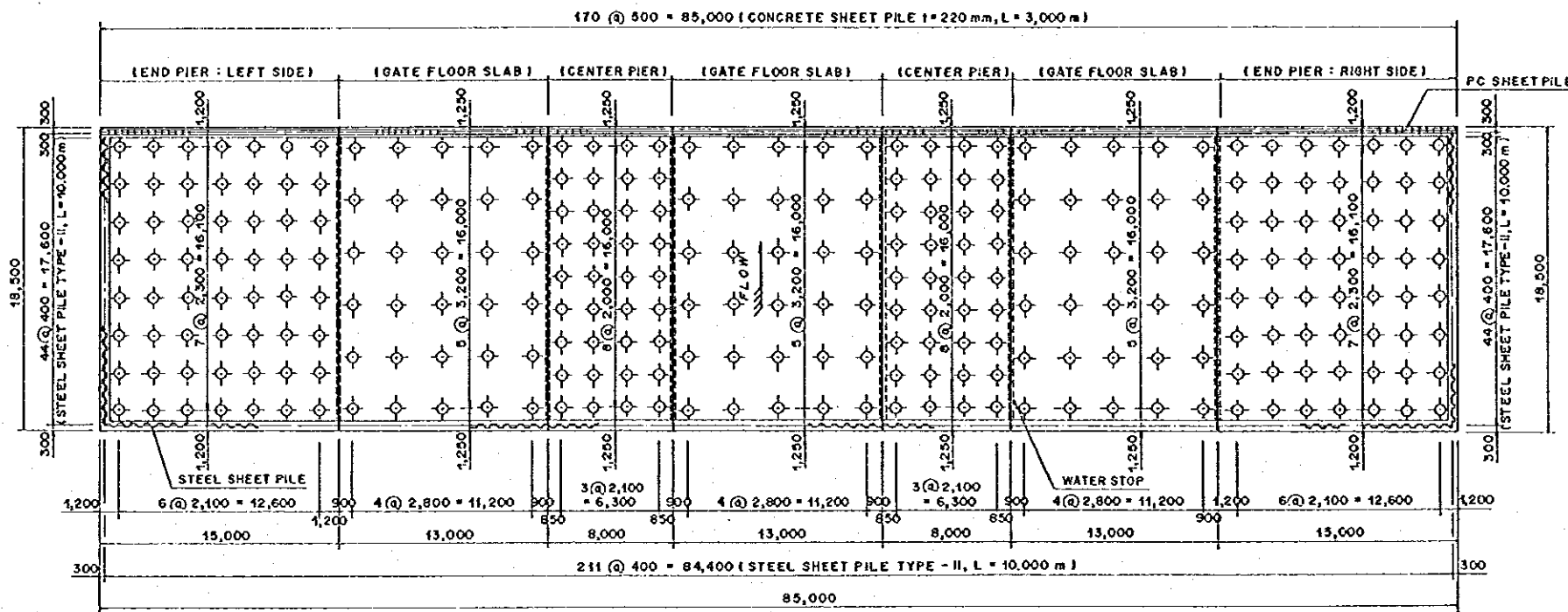
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. W6-P2-3W-R6-20
 SHEET NO. 95
 DATE: _____ CONTRACT NO. _____

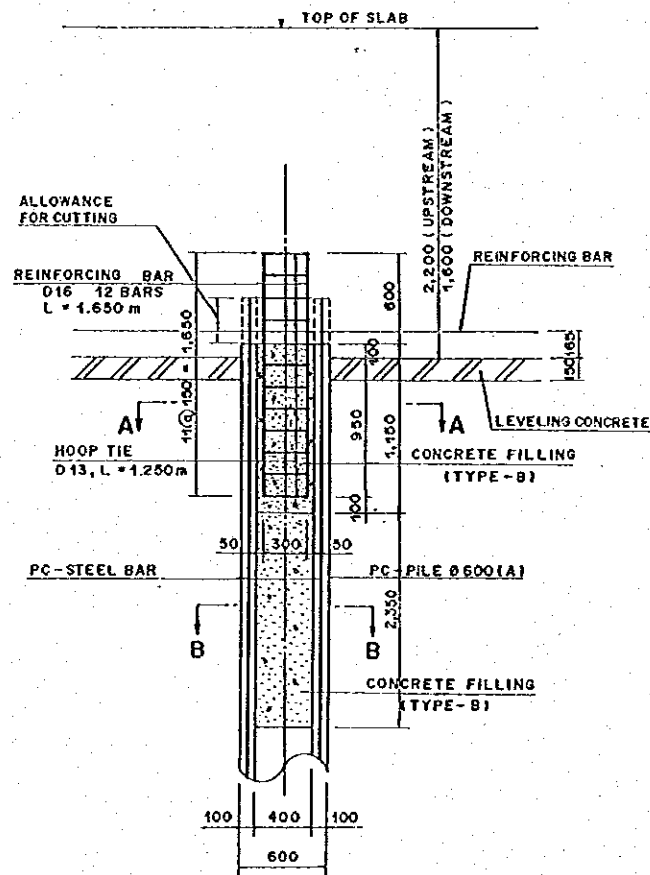
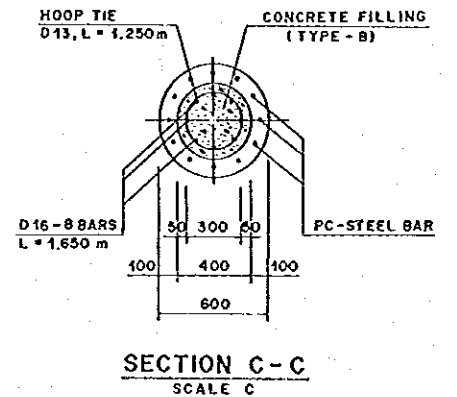
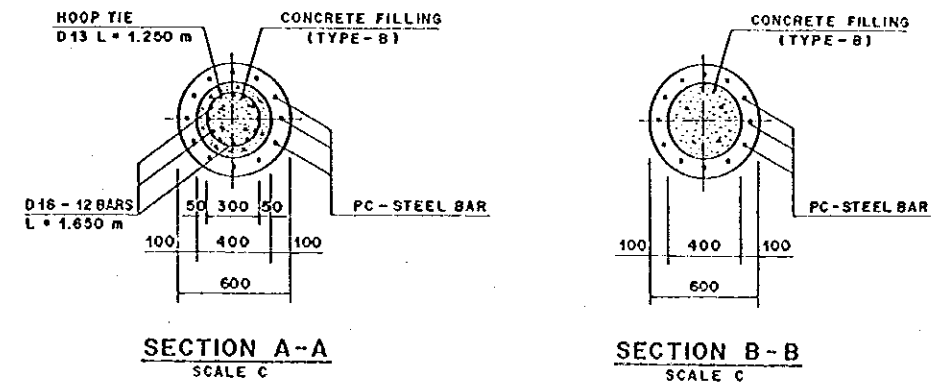
IRATUNSIJANA FLOOD CONTROL PROJECT
 COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
 APPROACH WALLS ON RIGHT AND LEFT BANKS
 REINFORCING BAR ARRANGEMENT
 FOR UPSTREAM APPROACH WALL (7/7)

LAYAN TEKNIK DAN KONSULTASI
 PT. INGENIERS CO., LTD. 100000000
 PACIFIC CONSULTANTS INTERNATIONAL
 (PACIFIC CONSULTANTS)

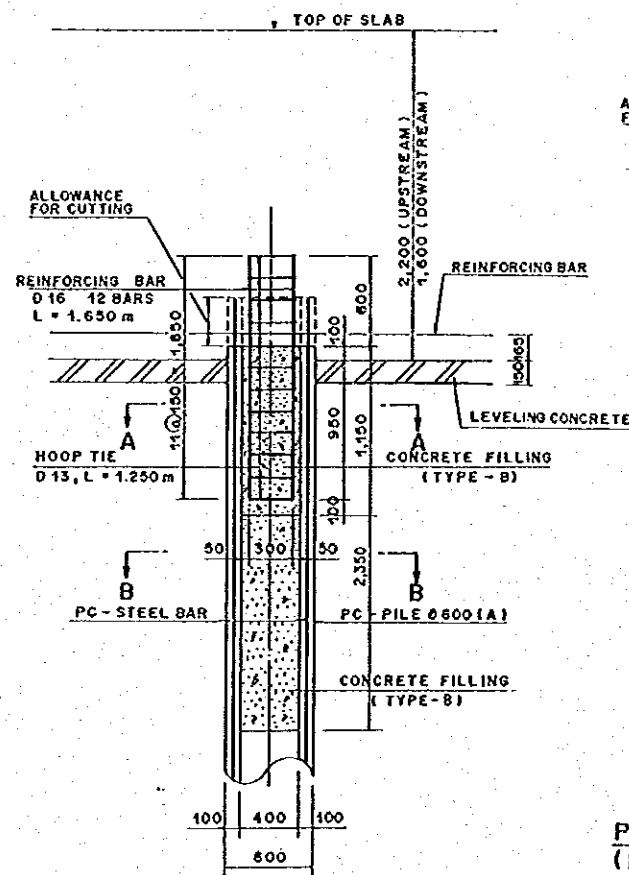
DESIGNED: [Signature]
 CHECKED: [Signature]
 COORDINATOR AND DESIGNER: [Signature]
 PROJECT MANAGER: [Signature]



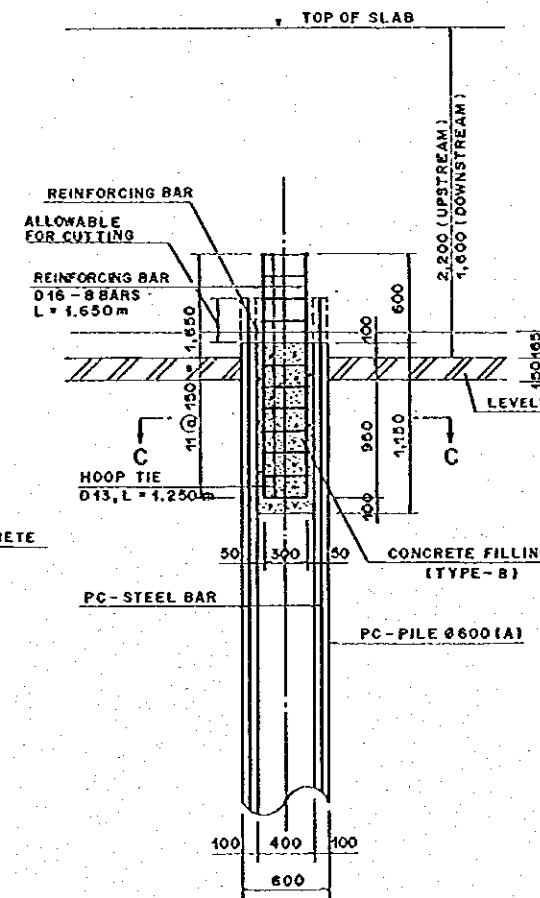
PILE ARRANGEMENT OF MAIN BODY
SCALE A



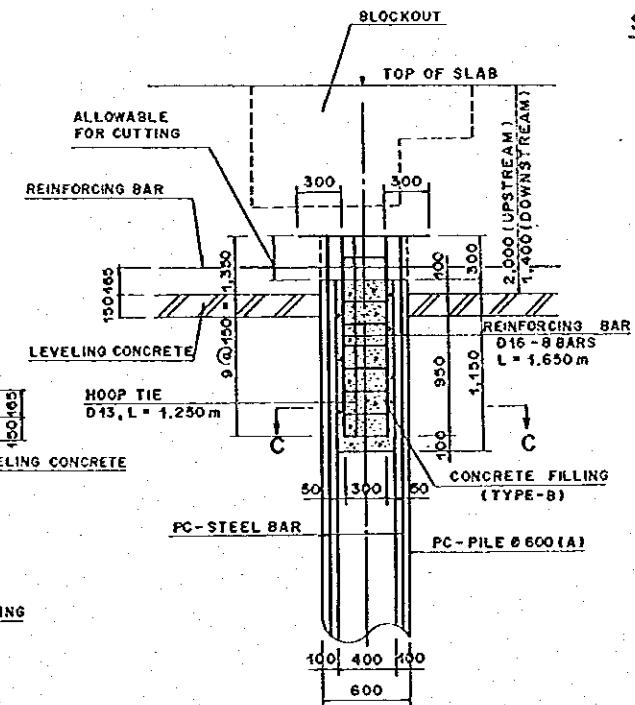
PILE HEAD TREATMENT (END PIER : LEFT SIDE)
(RIGID CONNECTION) SCALE B



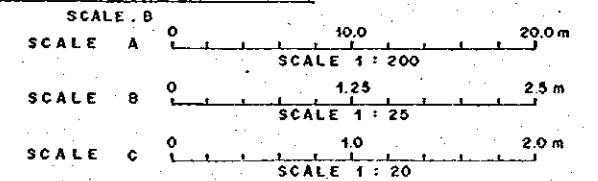
PILE HEAD TREATMENT (END PIER : RIGHT SIDE)
(RIGID CONNECTION) SCALE B



PILE HEAD TREATMENT (CENTER PIER)
(RIGID CONNECTION) SCALE B

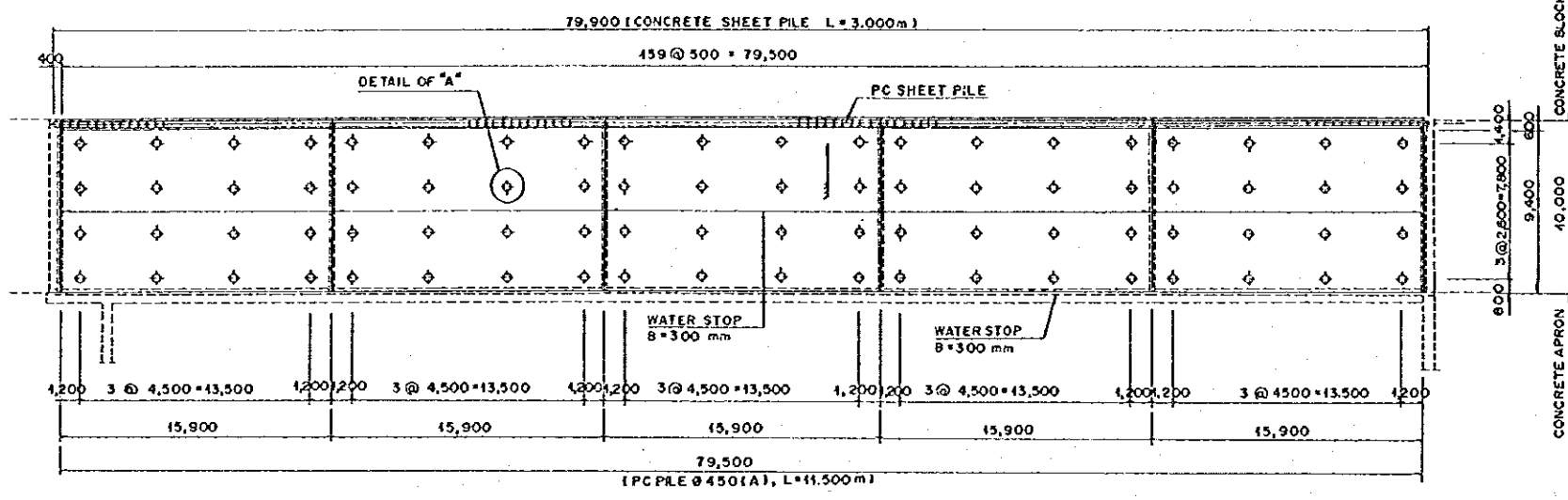


PILE HEAD TREATMENT (GATE FLOOR SLAB)
(RIGID CONNECTION) SCALE B

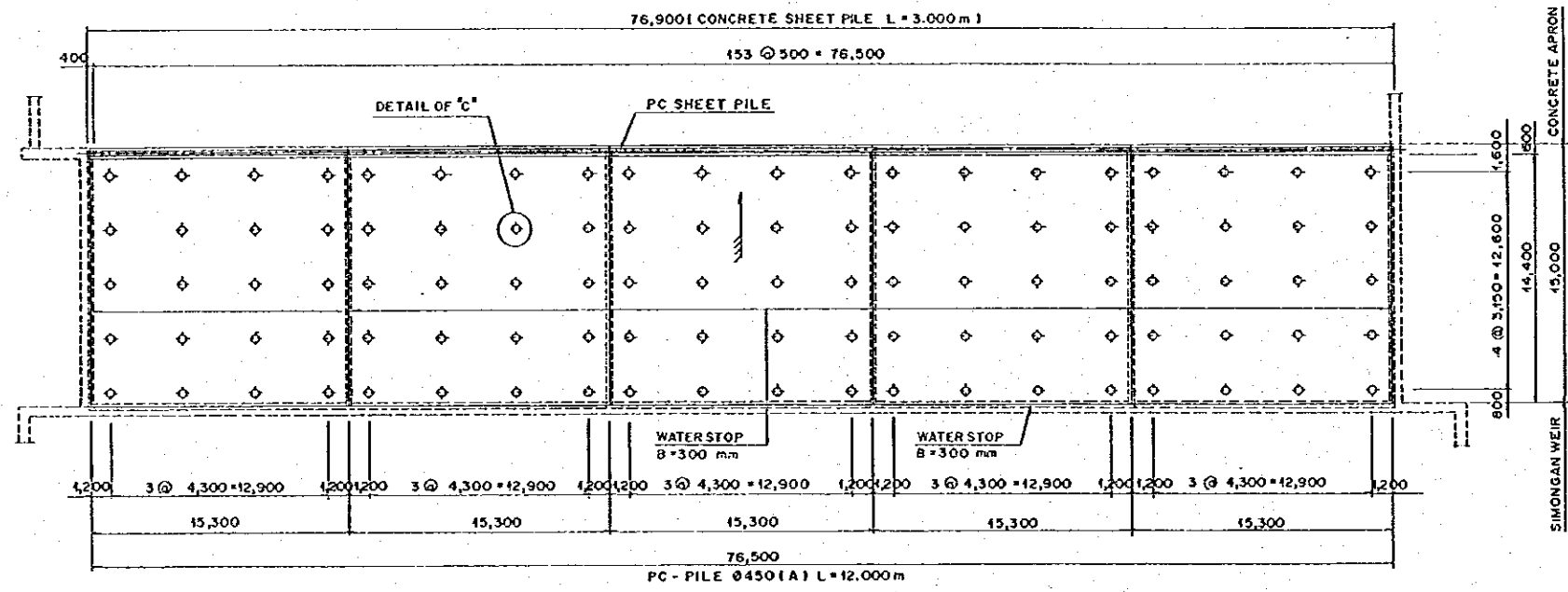


NO.	DATE	REVISIONS	ORGANIZED	DESIGNED	APPROVED

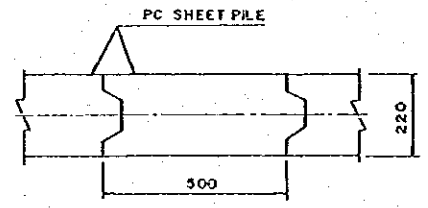
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROJECT CENTRAL JAWA
PROJECT NAME FLOOD CONTROL, UNBAW DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA		DISTRICT SEMARANG CITY
COMPONENT : WEST FLOODWAY / GARANO RIVER IMPROVEMENT FOUNDATION PILES PILE ARRANGEMENT AND DETAILS FOR WEIR PIER & GATE FLOOR SLAB		DRAWING NO. W-PP-2-PP-51-4 SHEET NO. 99
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JAWA INTERNATIONAL PSC.		DATE CONTRACT NO.
DISKORNO CHIEF OF PLANNING AND DESIGN		PROJECT MANAGER



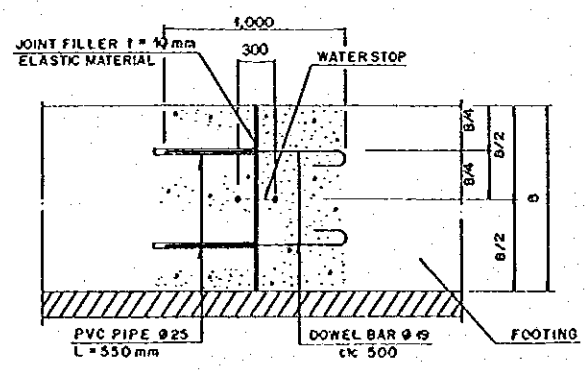
PILE ARRANGEMENT OF CONCRETE APRON (TOP ELEVATION EL +0.400)
SCALE A



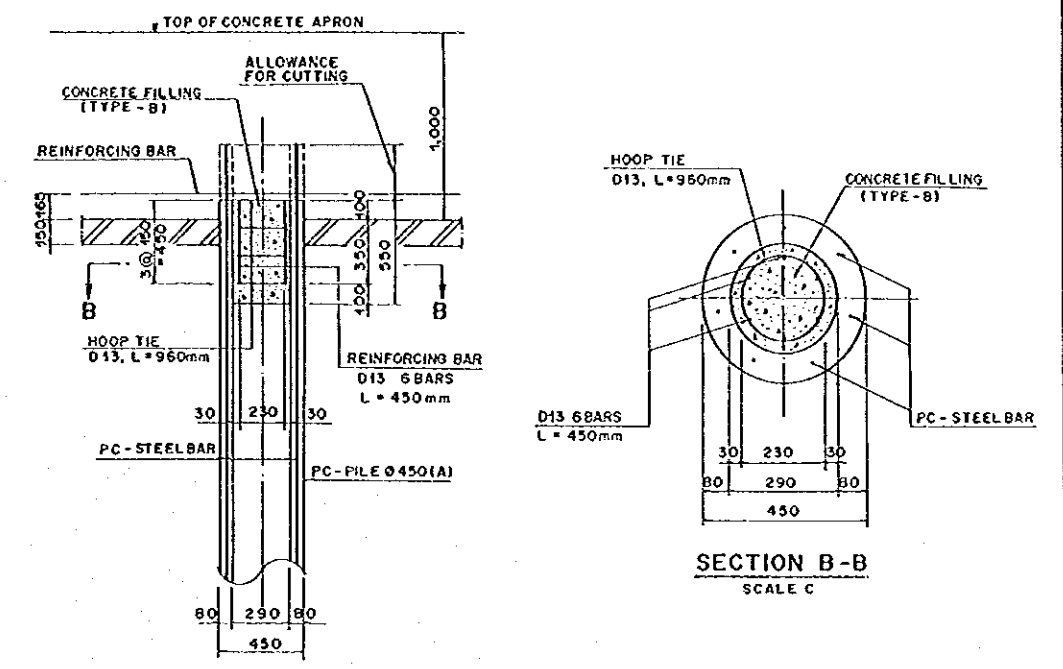
PILE ARRANGEMENT OF CONCRETE APRON (TOP ELEVATION EL +0.900)
SCALE A



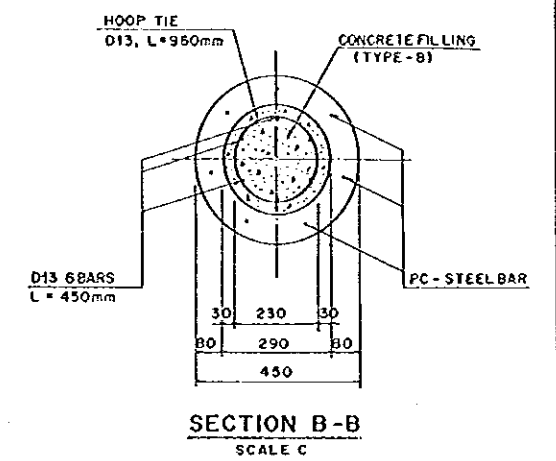
SECTION OF PC SHEET PILE
SCALE C



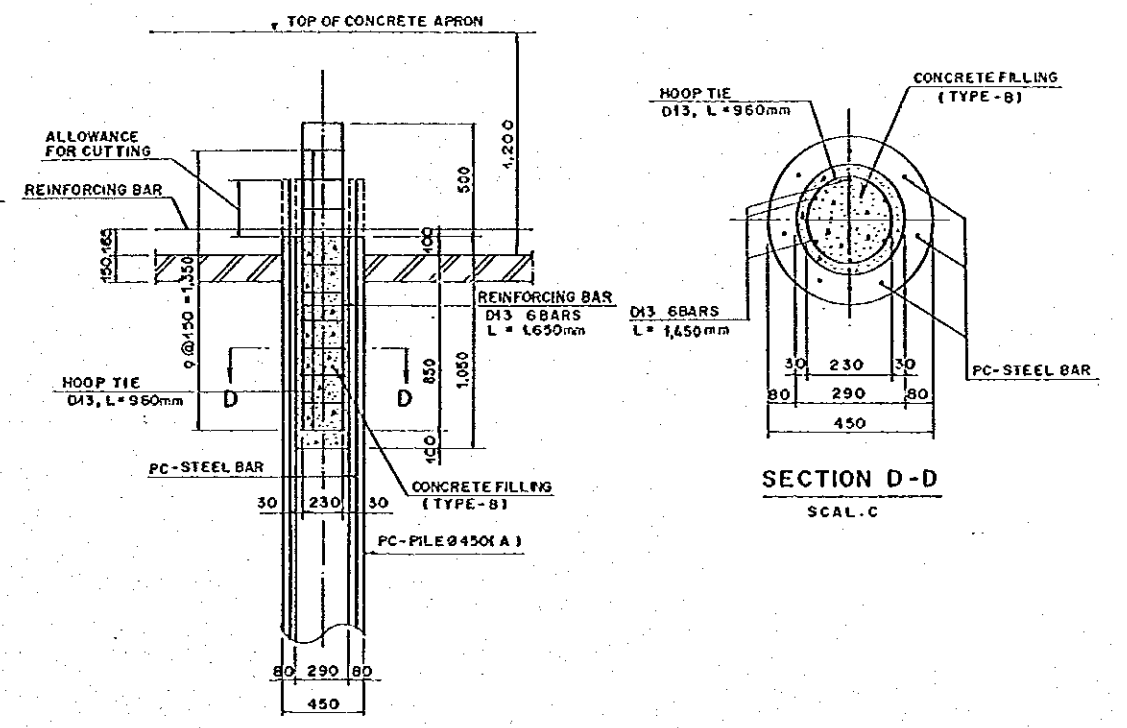
JOINTING
SCALE B



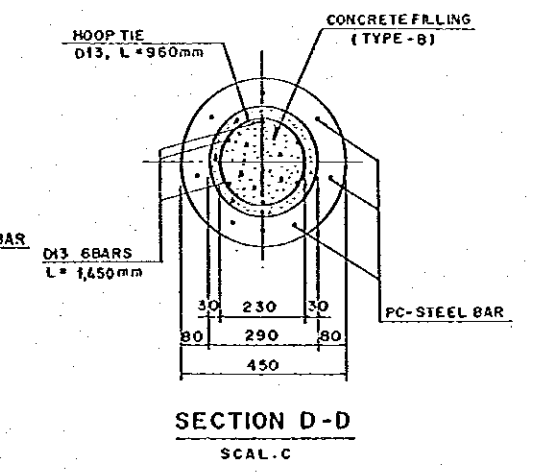
DETAIL OF "A" (PILE HEAD TREATMENT)
SCALE B



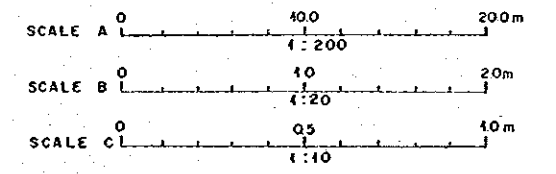
SECTION B-B
SCALE C



DETAIL OF "C" (PILE HEAD TREATMENT)
SCALE B



SECTION D-D
SCALE C



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

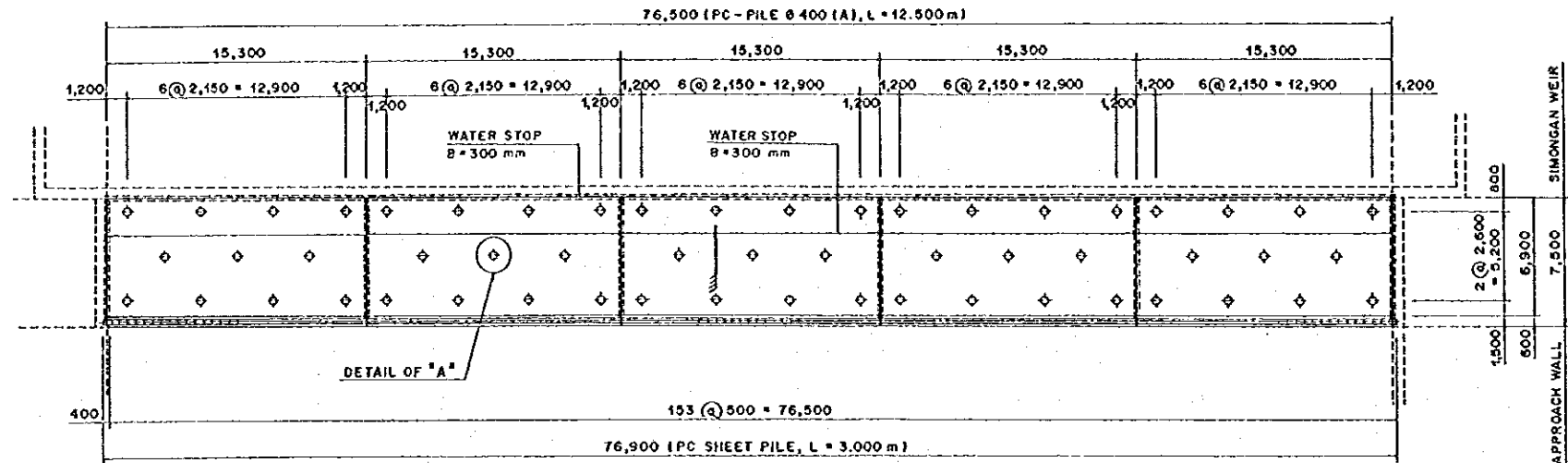
THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

JRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
FOUNDATION PILES
PILE ARRANGEMENT AND DETAILS
FOR CONCRETE APRON (1/2)

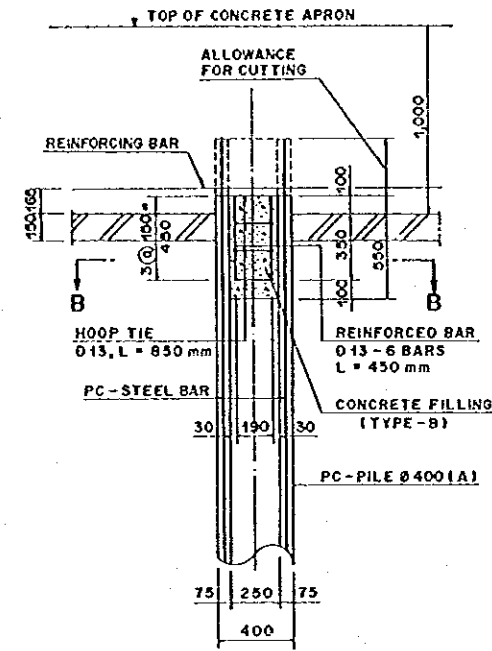
PROVINCE: CENTRAL JAWA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. WS-P2-PP-31-2
SHEET NO. 190

DATE: _____ CONTRACT NO.: _____

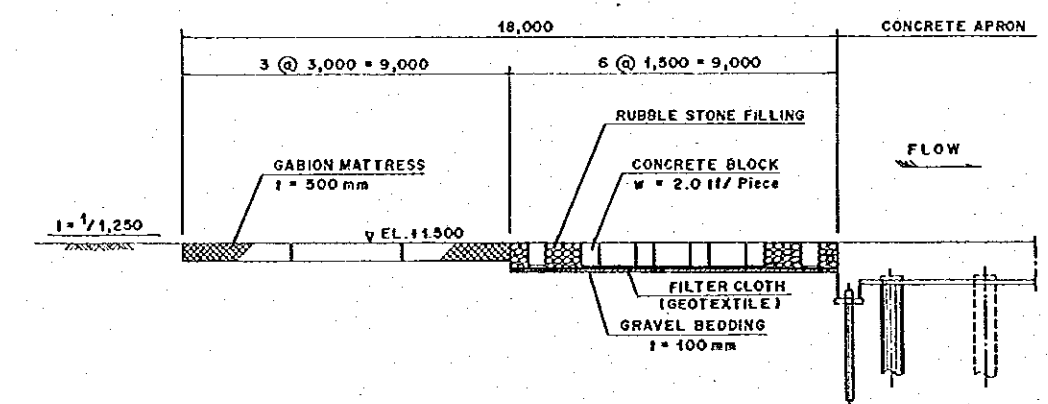
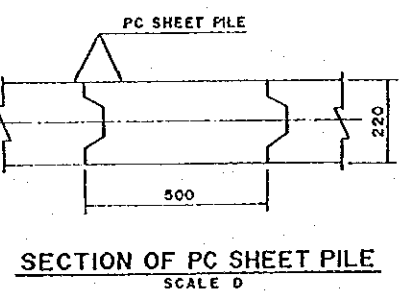
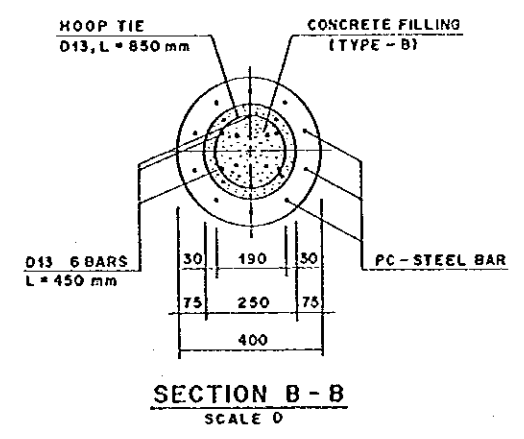
DESIGNED: _____ CHECKED: _____ DATE: _____
CRISP OF PLANNING AND DESIGN PROJECT MANAGER



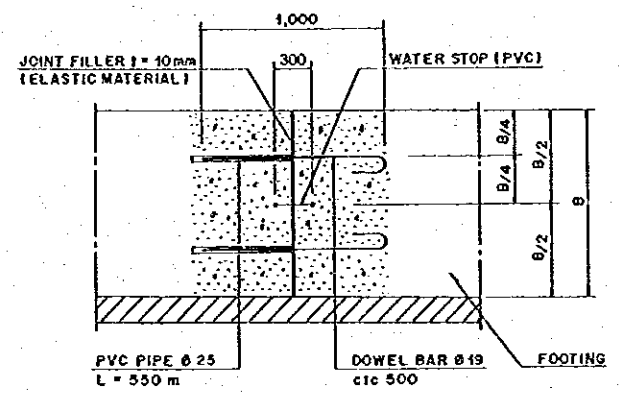
PILE ARRANGEMENT OF CONCRETE APRON
(TOP OF ELEVATION: EL + 1.500)
SCALE A



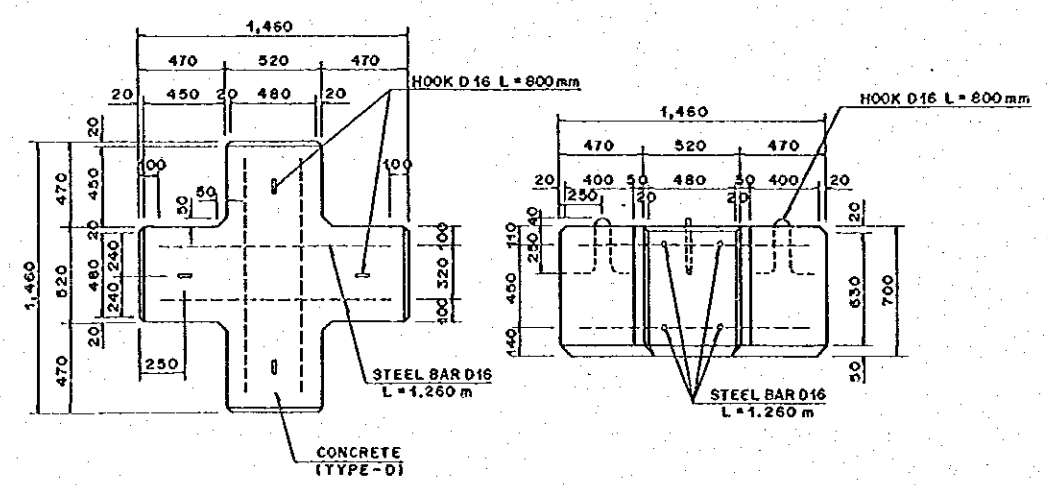
DETAIL OF "A"
(PILE HEAD TREATMENT)
SCALE C



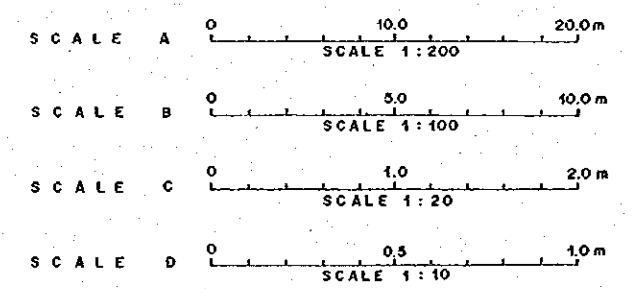
PROFILE OF RIVERBED PROTECTION (UPSTREAM)
SCALE B



JOINTING
SCALE C

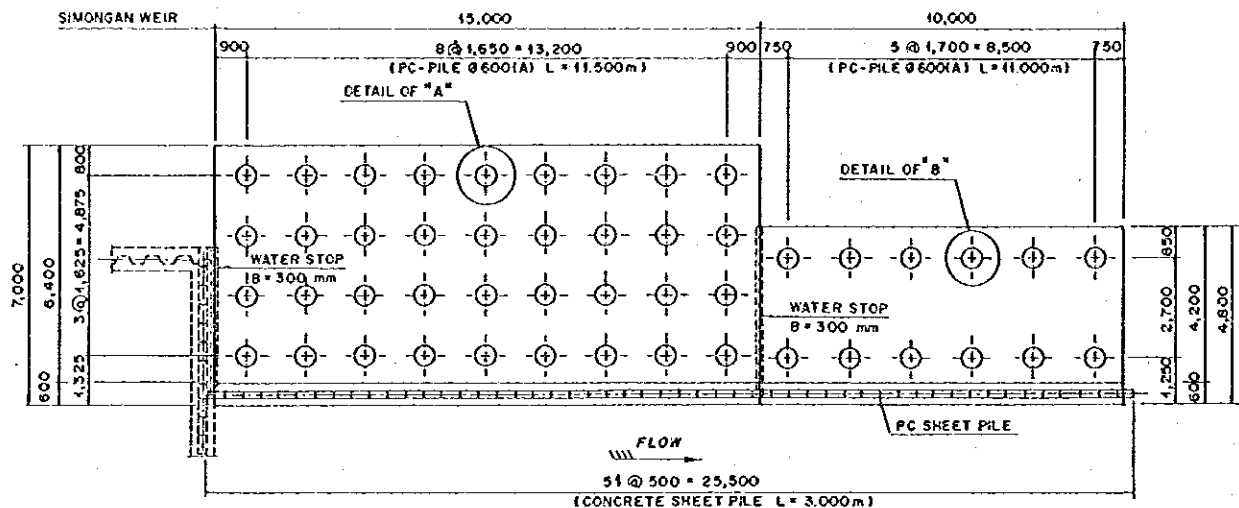


DETAIL OF CONCRETE BLOC (w=2.0m)
SCALE C

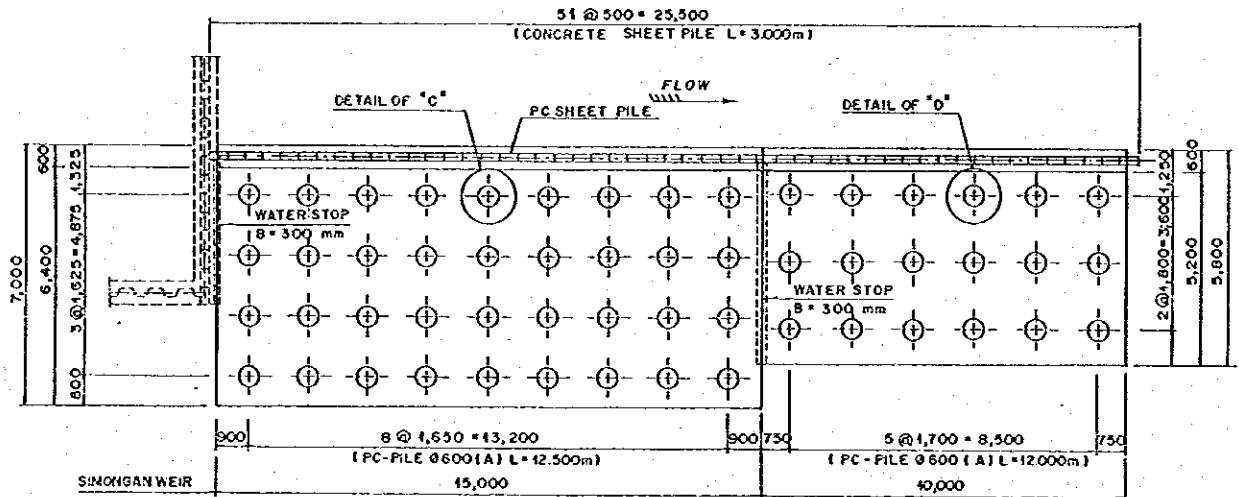


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

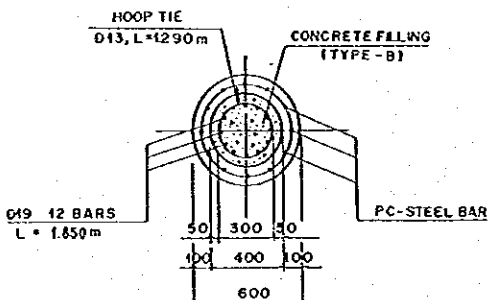
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE: CENTRAL JAWA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA CONTRACT: SEMARANG CITY DRAWING NO. WS-P2-PP-51-5 SHEET NO. 101
BRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY/GARANG RIVER IMPROVEMENT FOUNDATION PILES PILE ARRANGEMENT AND DETAILS FOR CONCRETE APRON (2/2)		DESIGNED: [Signature] CHECKED: [Signature] DATE: [Date] CONTRACT NO.: [Number]
GUYAN INTERNATIONAL CORPORATION AGENT C.T. ENGINEERING CO., LTD. & ASSOCIATES PACIFIC CONSULTANTS INTERNATIONAL AND T&P INTERNATIONAL INC.		CHIEF OF PLANNING AND DESIGN PROJECT MANAGER



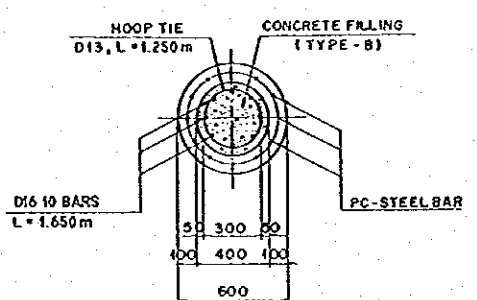
PILE ARRANGEMENT OF APPROACH WALL (LEFT SIDE)
SCALE A



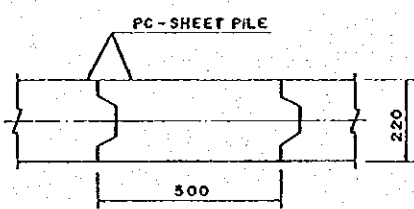
PILE ARRANGEMENT OF APPROACH WALL (RIGHT SIDE)
SCALE A



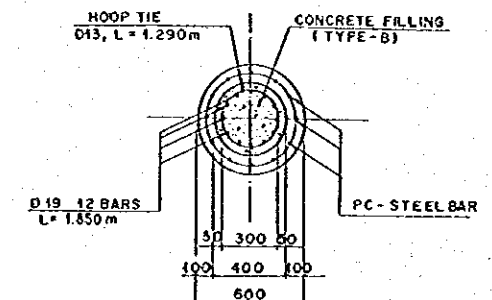
SECTION E-E
SCALE C



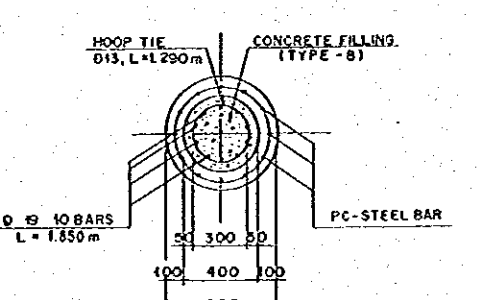
SECTION F-F
SCALE C



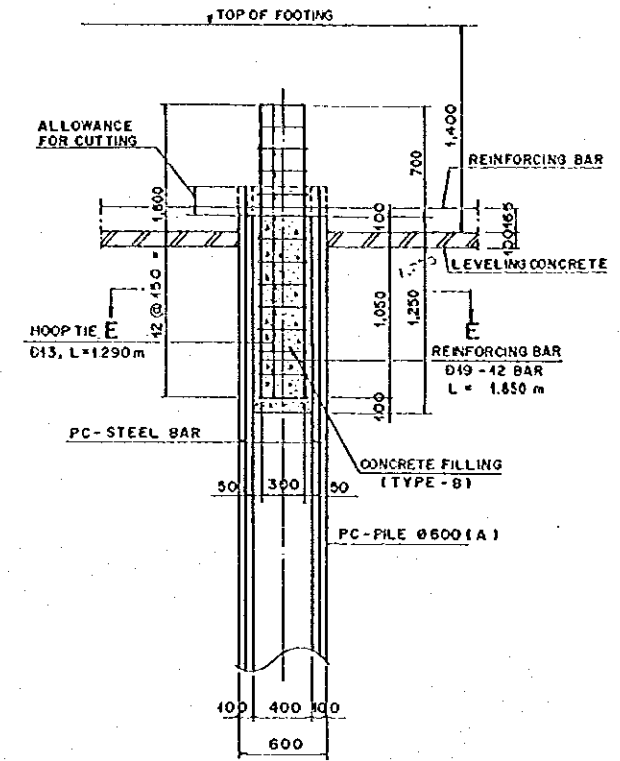
SECTION OF PC SHEET PILE
SCALE D



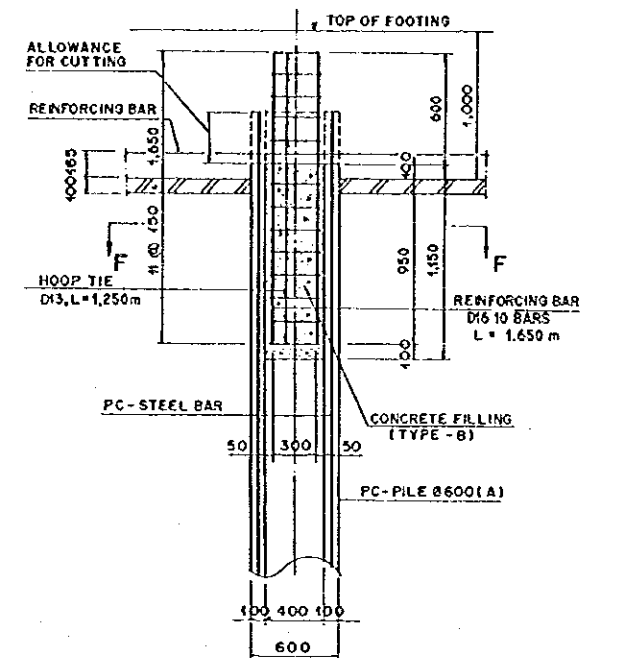
SECTION G-G
SCALE C



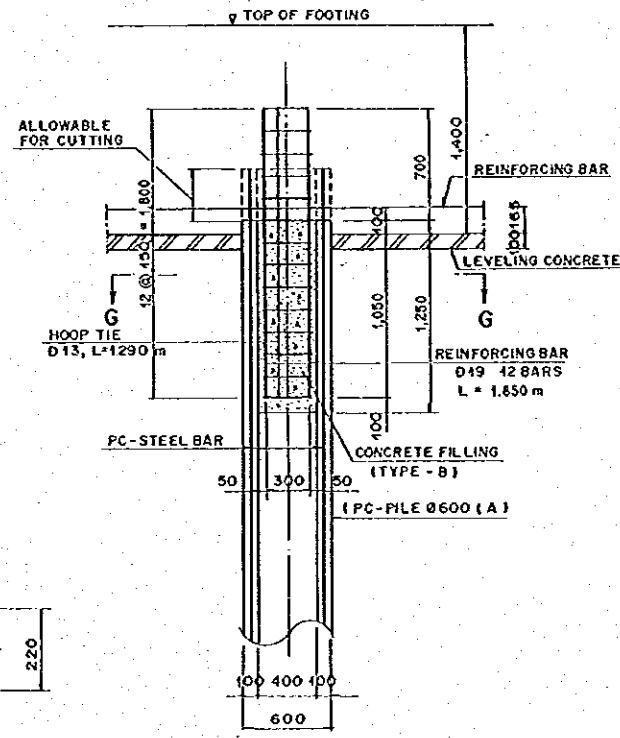
SECTION H-H
SCALE C



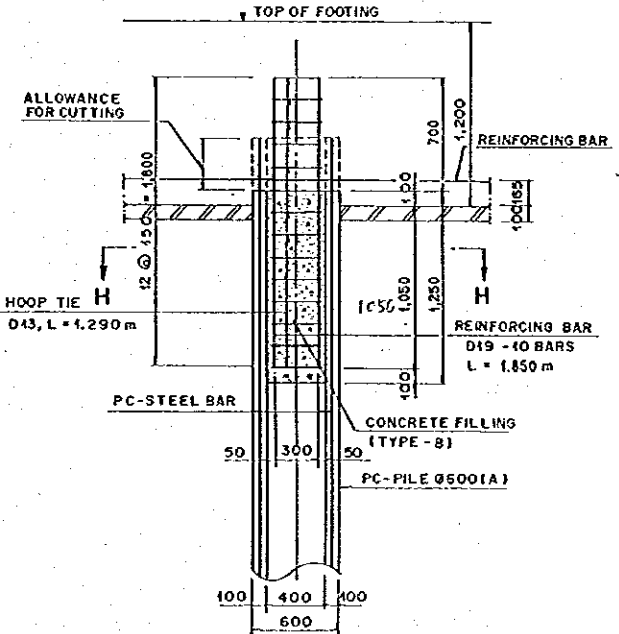
DETAIL OF "A" (PILE HEAD TREATMENT)
SCALE B



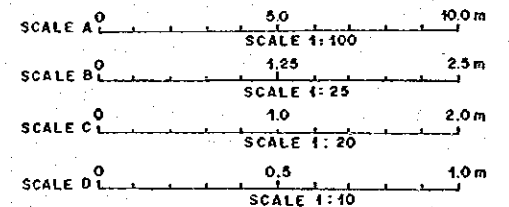
DETAIL OF B (PILE HEAD TREATMENT)
SCALE B



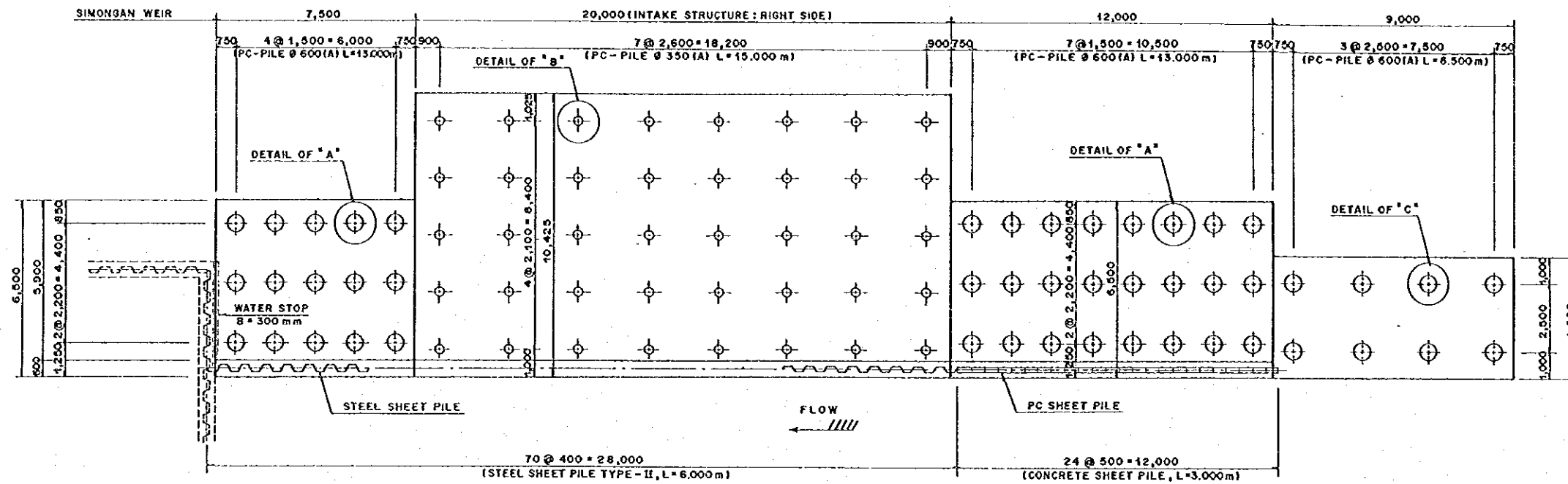
DETAIL OF "C" (PILE HEAD TREATMENT)
SCALE B



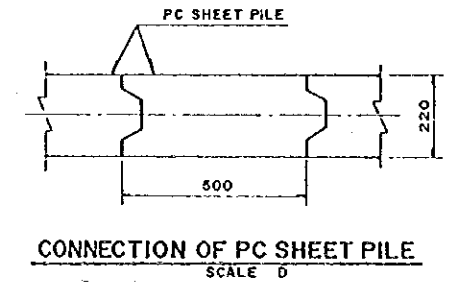
DETAIL OF "D" (PILE HEAD TREATMENT)
SCALE B



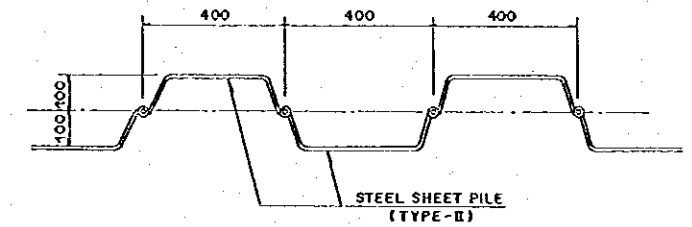
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY/GARANG RIVER IMPROVEMENT FOUNDATION PILES PILE ARRANGEMENT AND DETAILS FOR APPROACH WALL (1/3)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DESIGNED: [Signature] CHECKED: [Signature]		DRAFTER SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CIE ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND YAMCO INTERNATIONAL INC.		DRAWING NO. W-02-PP-51-4 SHEET NO. 101
CHIEF OF PLANNING AND DESIGN		DATE CONTRACT NO.
NO.	DATE	REVISIONS
		ORIGINATED
		DESIGNED
		APPROVED



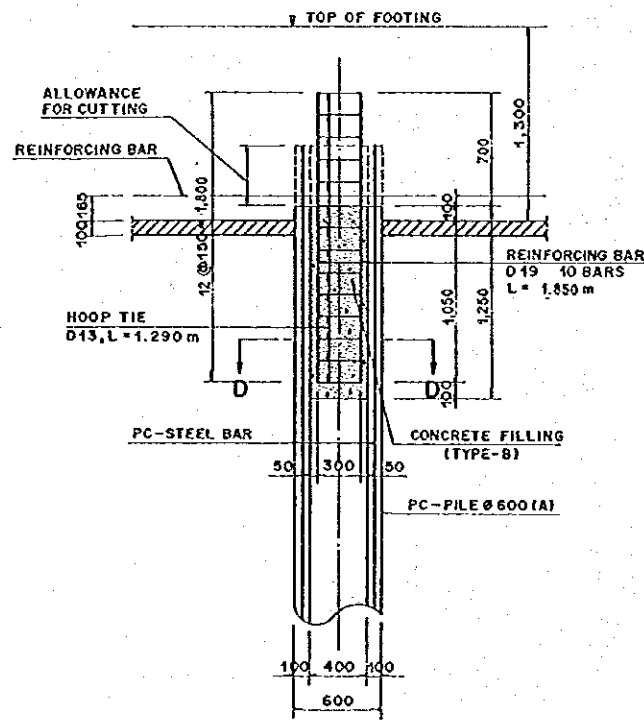
PILE ARRANGEMENT OF APPROACH WALL (RIGHT SIDE)
SCALE A



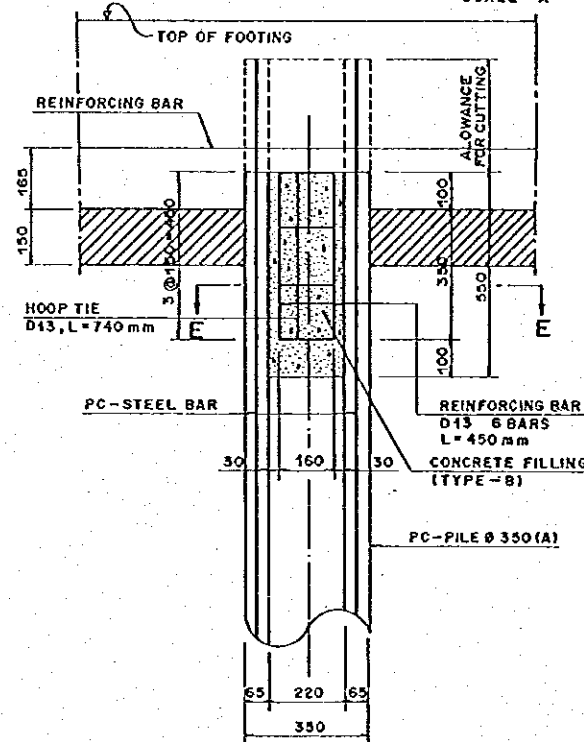
CONNECTION OF PC SHEET PILE
SCALE D



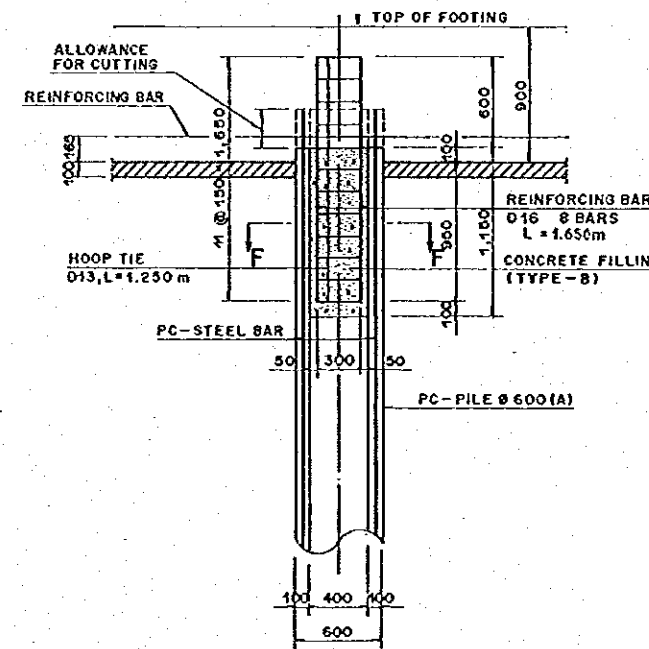
CONNECTION OF STEEL SHEET PILE
SCALE D



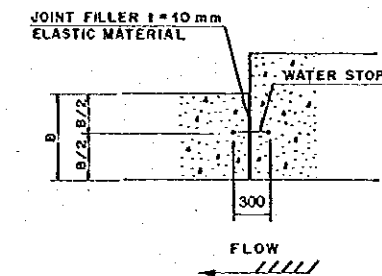
DETAIL OF 'A' (PILE HEAD TREATMENT)
(RIGID CONNECTION) SCALE B



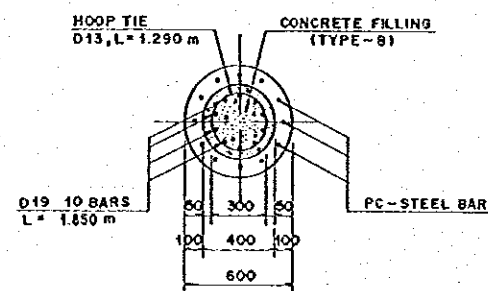
DETAIL OF 'B' (PILE HEAD TREATMENT)
(NON-RIGID CONNECTION) SCALE D



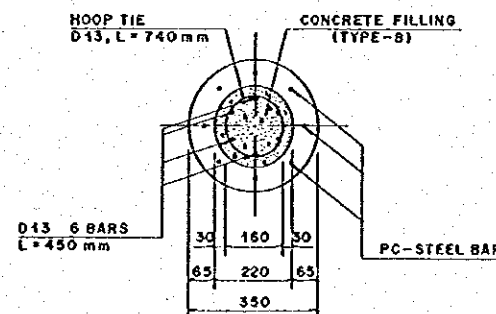
DETAIL OF 'C' (PILE HEAD TREATMENT)
(RIGID CONNECTION) SCALE B



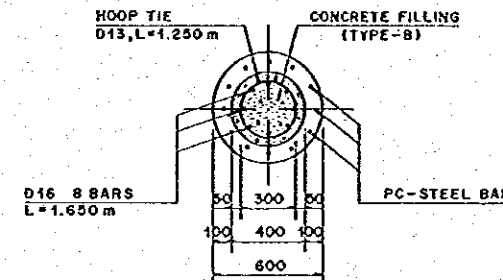
DETAIL OF JOINT
SCALE C



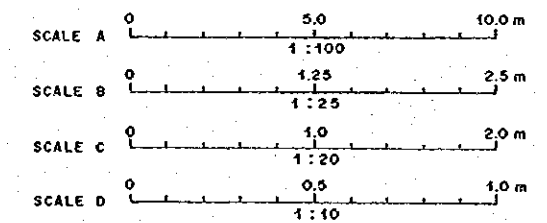
SECTION D-D
SCALE C



SECTION E-E
SCALE D

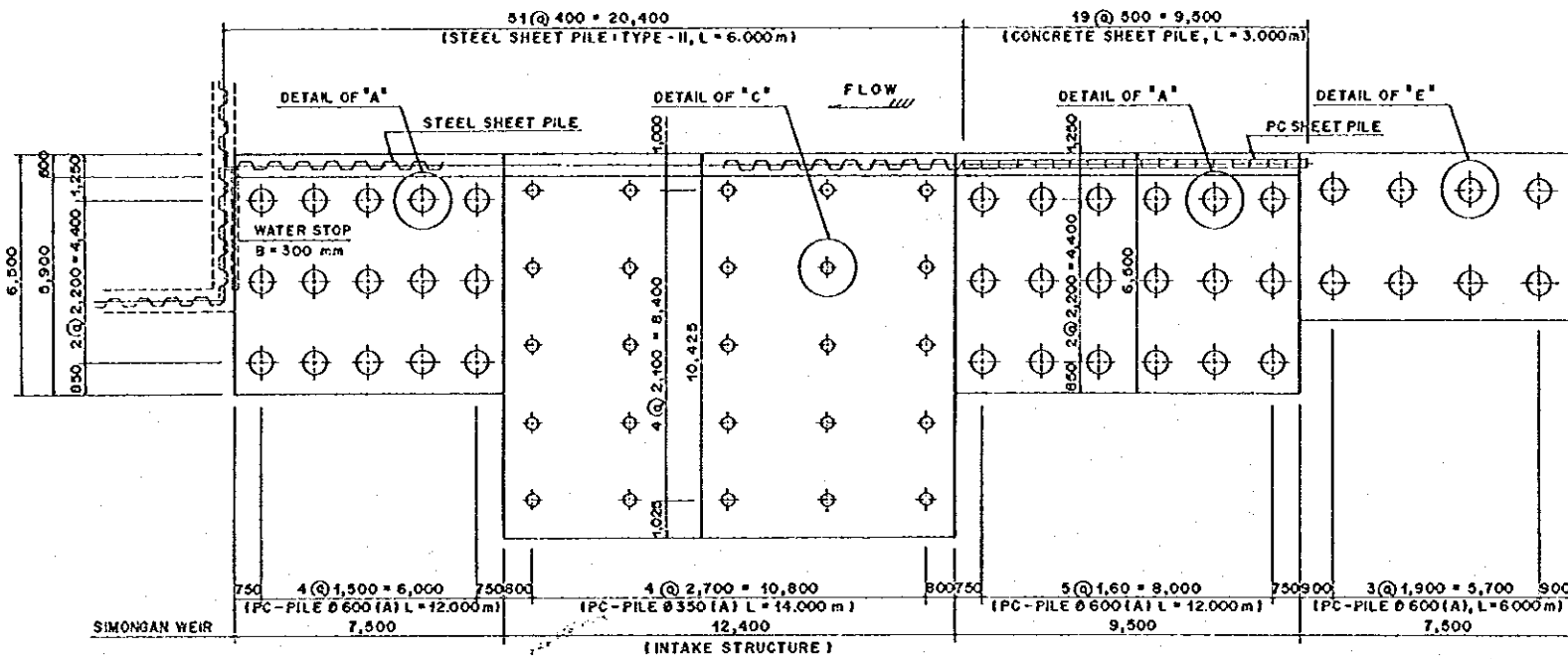


SECTION F-F
SCALE C

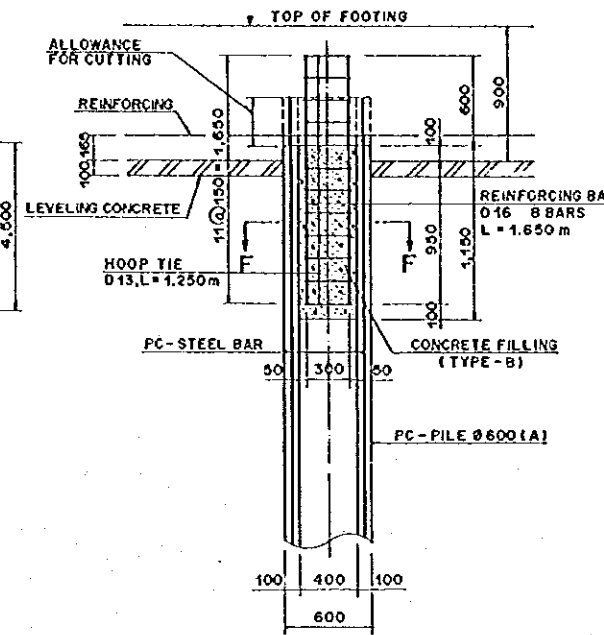


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

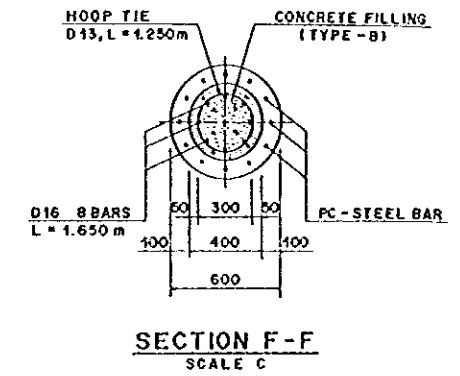
	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
	JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT FOUNDATION PILES PILE ARRANGEMENT AND DETAILS FOR APPROACH WALL (2/3)		PROJECT NAME ULSAR DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PANGLOSS INTERNATIONAL INC.		DISTRICT SEMARANG CITY
	CHIEF OF PLANNING AND DESIGN		DRAWING NO. WI-P&FP-SI-6 SHEET NO. 103
DESIGNED CHECKED APPROVED	PROJECT MANAGER	DATE	CONTRACT NO.



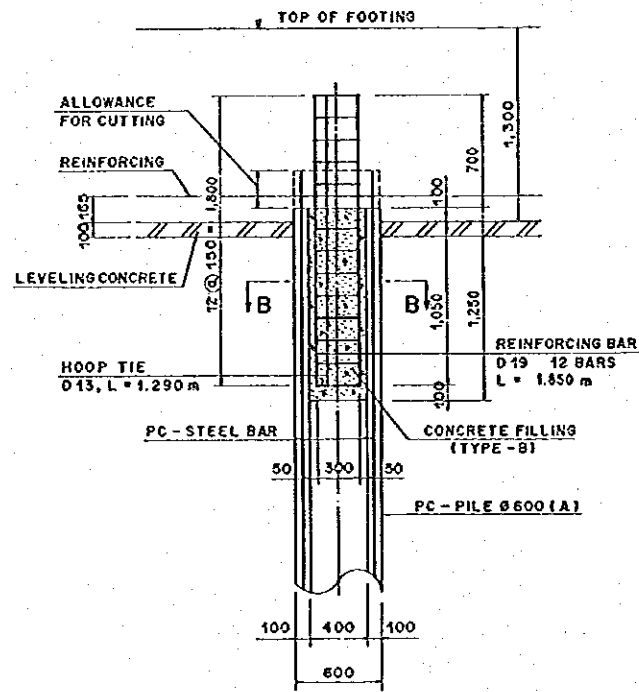
PILE ARRANGEMENT OF APPROACH WALL (LEFT SIDE)
SCALE A



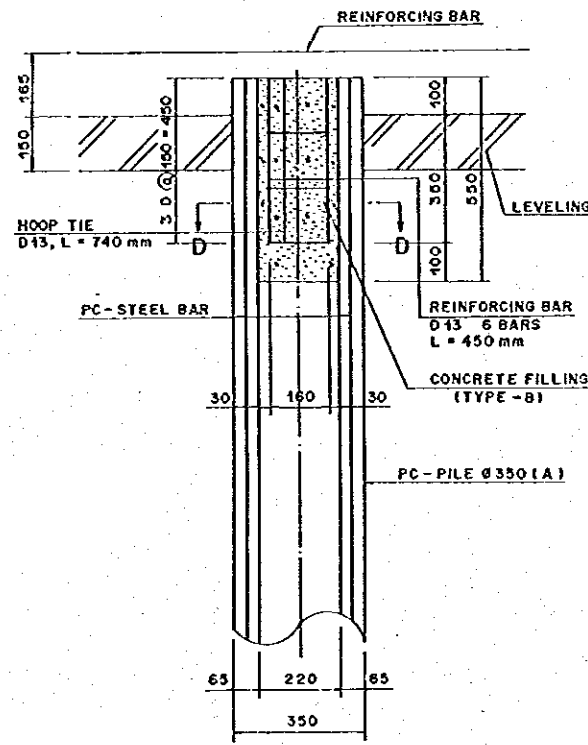
DETAIL OF 'E'
(PILE HEAD TREATMENT)
(RIGID CONNECTION) SCALE B



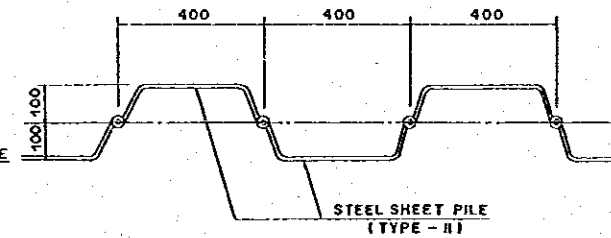
SECTION F-F
SCALE C



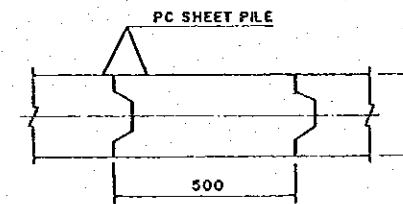
DETAIL OF 'A'
(PILE HEAD TREATMENT)
(RIGID CONNECTION) SCALE B



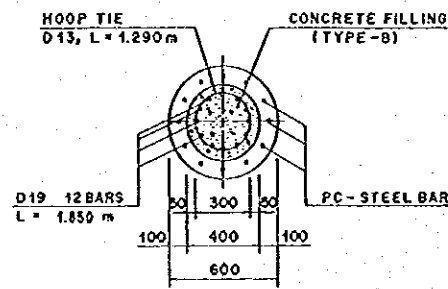
DETAIL OF 'C'
(PILE HEAD TREATMENT)
(NON-RIGID CONNECTION) SCALE D



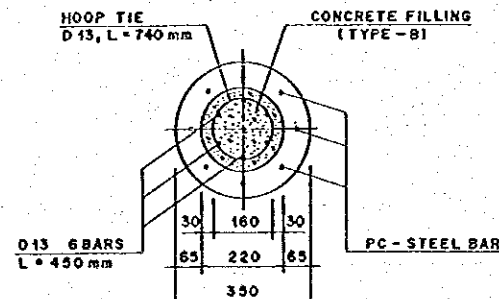
CONNECTION OF STEEL SHEET PILE
SCALE D



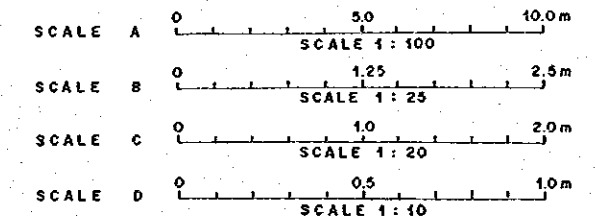
CONNECTION OF PC SHEET PILE
SCALE D



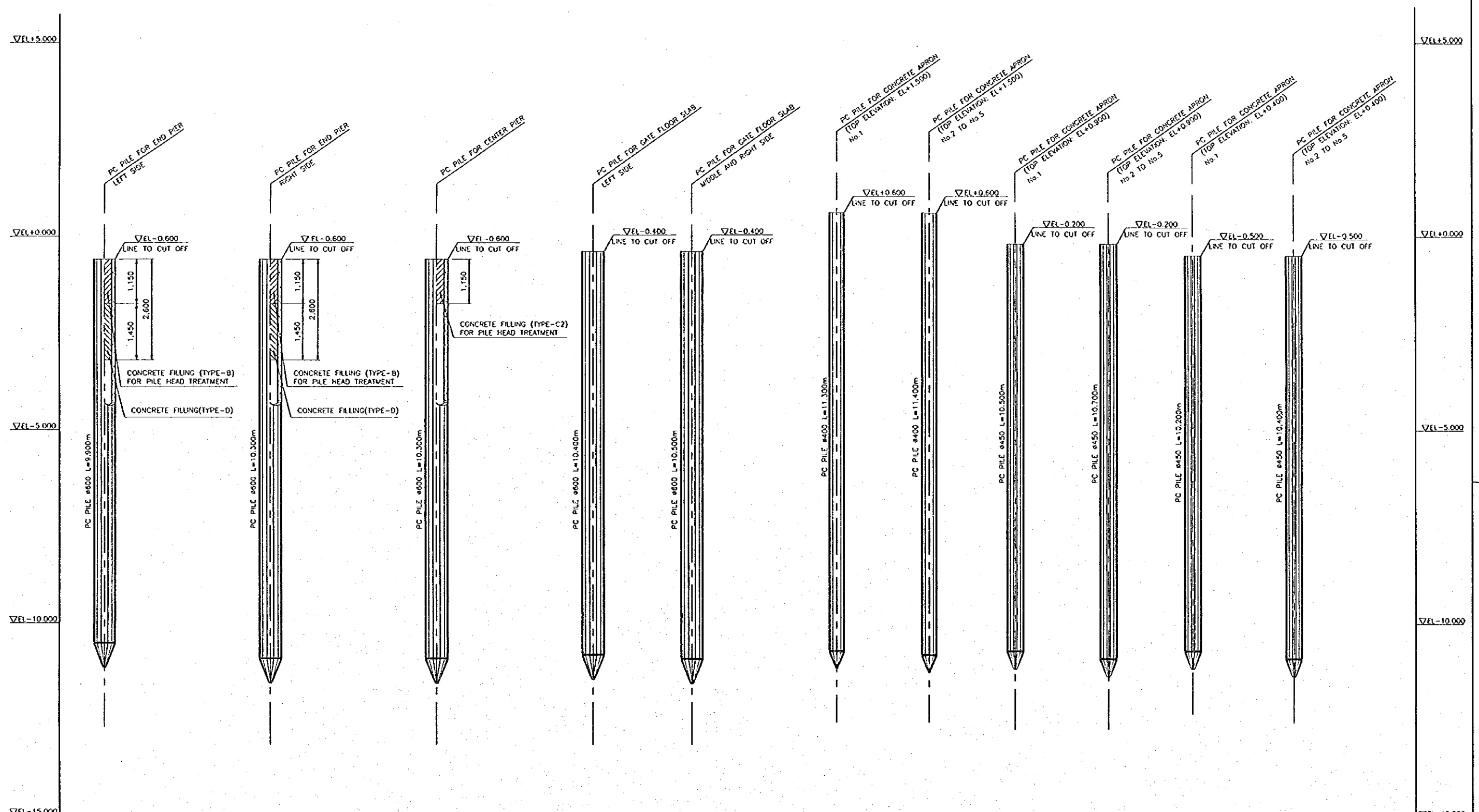
SECTION B-B
SCALE C



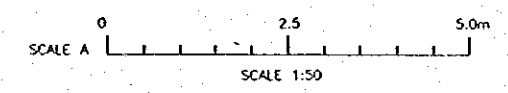
SECTION D-D
SCALE D



THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT				PROJECT CENTRAL JAVA	
JATUNGSALANA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT FOUNDATION PILES FOR APPROACH WALL (3/3)				PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT OF SEMARANG IN THE REPUBLIC OF INDONESIA	
JAPAN INTERNATIONAL COOPERATION AGENCY CPI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACIFIC CONSULTANTS LOCAL INC.				DISTRICT SEMARANG CITY	
DESIGNED CHECKED				DRAWING NO. W8-P2-PP-51-B SHEET NO. 154	
NO. DATE REVISIONS ORIGINATED DESIGNED APPROVED				DATE CONTRACT NO.	
APPROVED				PROJECT MANAGER	

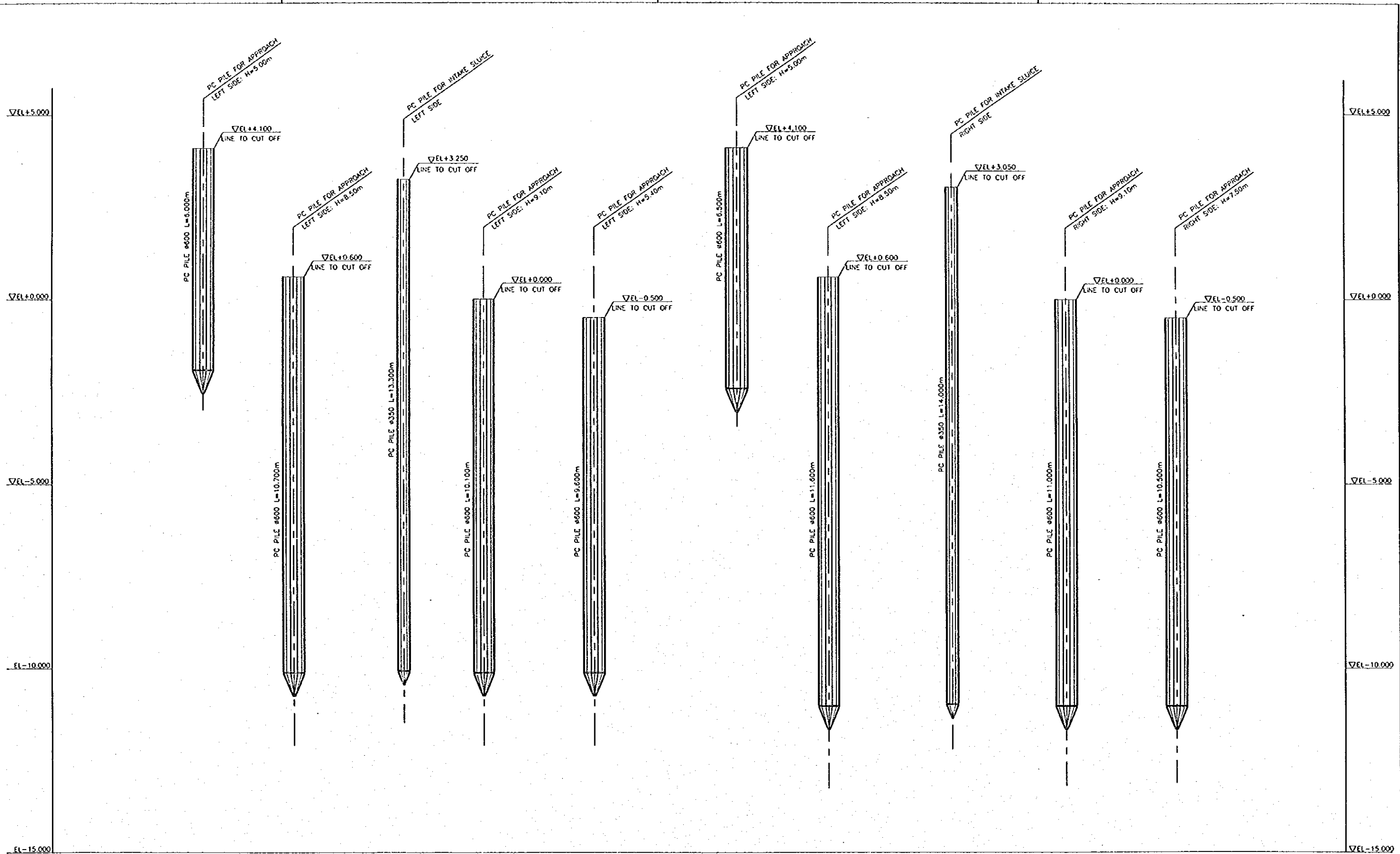


NOTE:
 1. PILE LENGTH SHOWN ON THE DRAWING IS TENTATIVE.
 THE CONTRACTOR SHALL DETERMINE THE LENGTH OF PILE BY TEST PILING.
 2. PILE HEAD TREATMENT OF FIX TYPE IS USED FOR END PIER, CENTER PIER, GATE FLOOR SLAB AND CONCRETE APRON(TOP ELEVATION:EL+0.900).
 PILE HEAD TREATMENT OF HINGE TYPE IS USED FOR CONCRETE APRON.

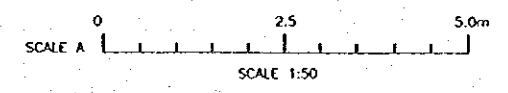


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT	PROVINCE CENTRAL JAWA
	JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT	PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	FOUNDATION PILES DIMENSION OF FOUNDATION PILES (1/2)	DISTRICT SEMARANG CITY
	JAPAN INTERNATIONAL COOPERATION AGENCY CIL INFORSTRONG CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PANGLOSS INTERNATIONAL PSC	DRAWING NO. W8-P2-PP-51-7 SHEET NO. 105
DESIGNED CHECKED CDR OF PLANNING AND DESIGN	DATE CONTRACT NO.	PROJECT MANAGER

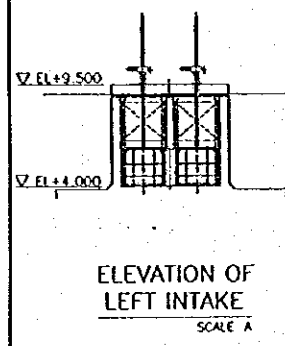
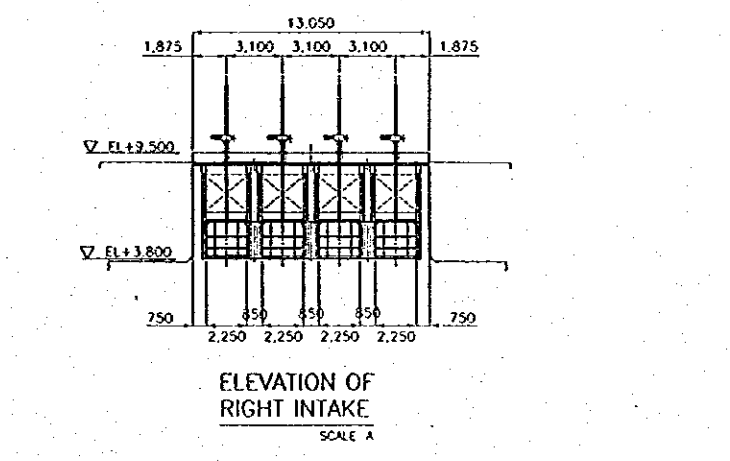
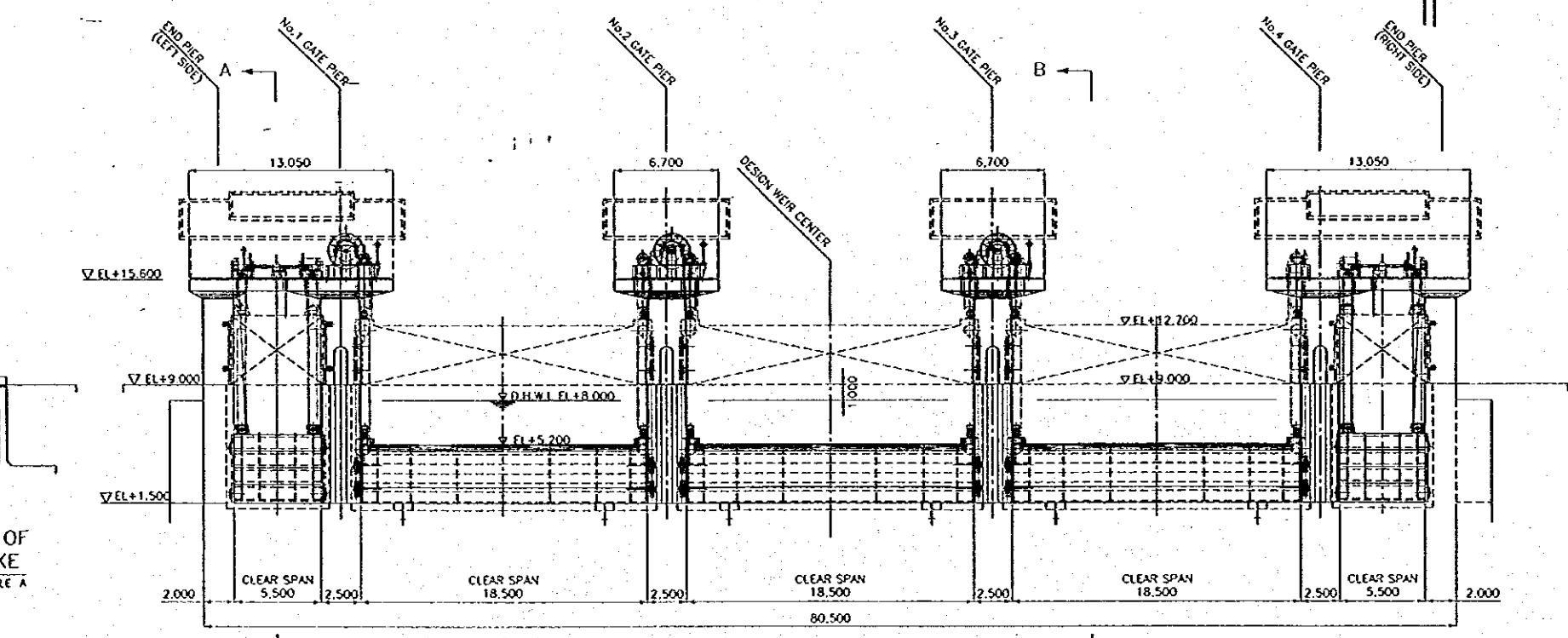
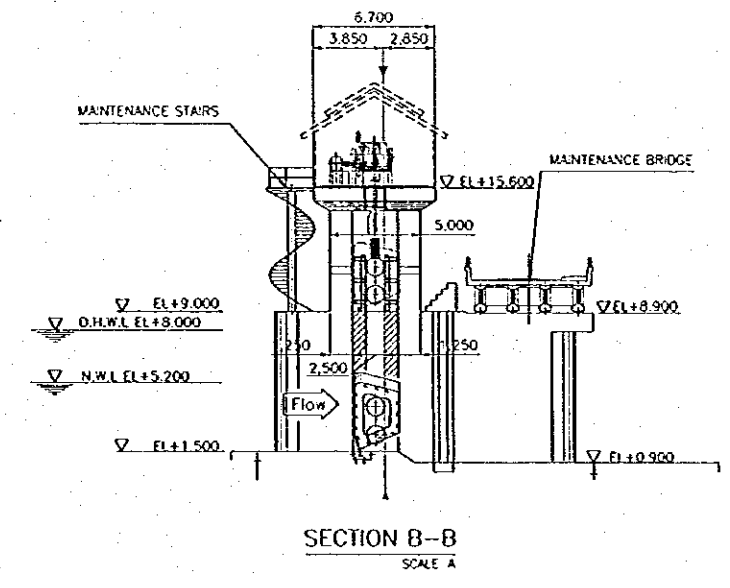
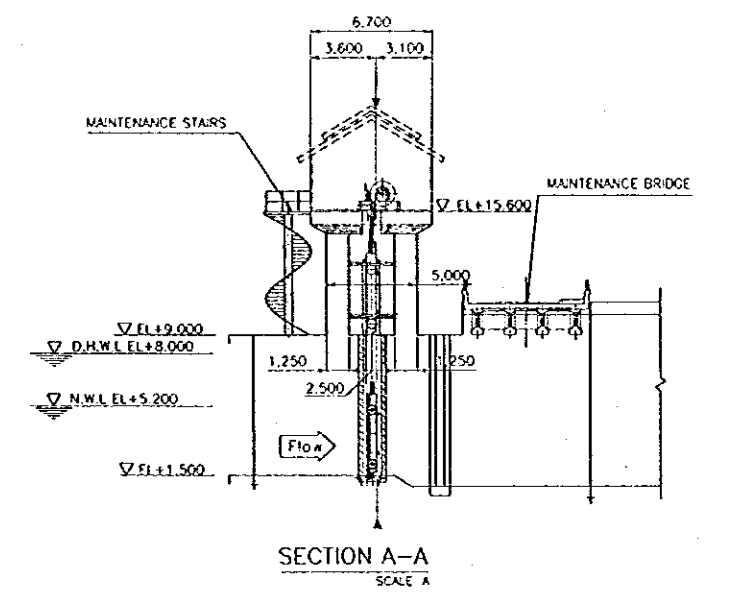
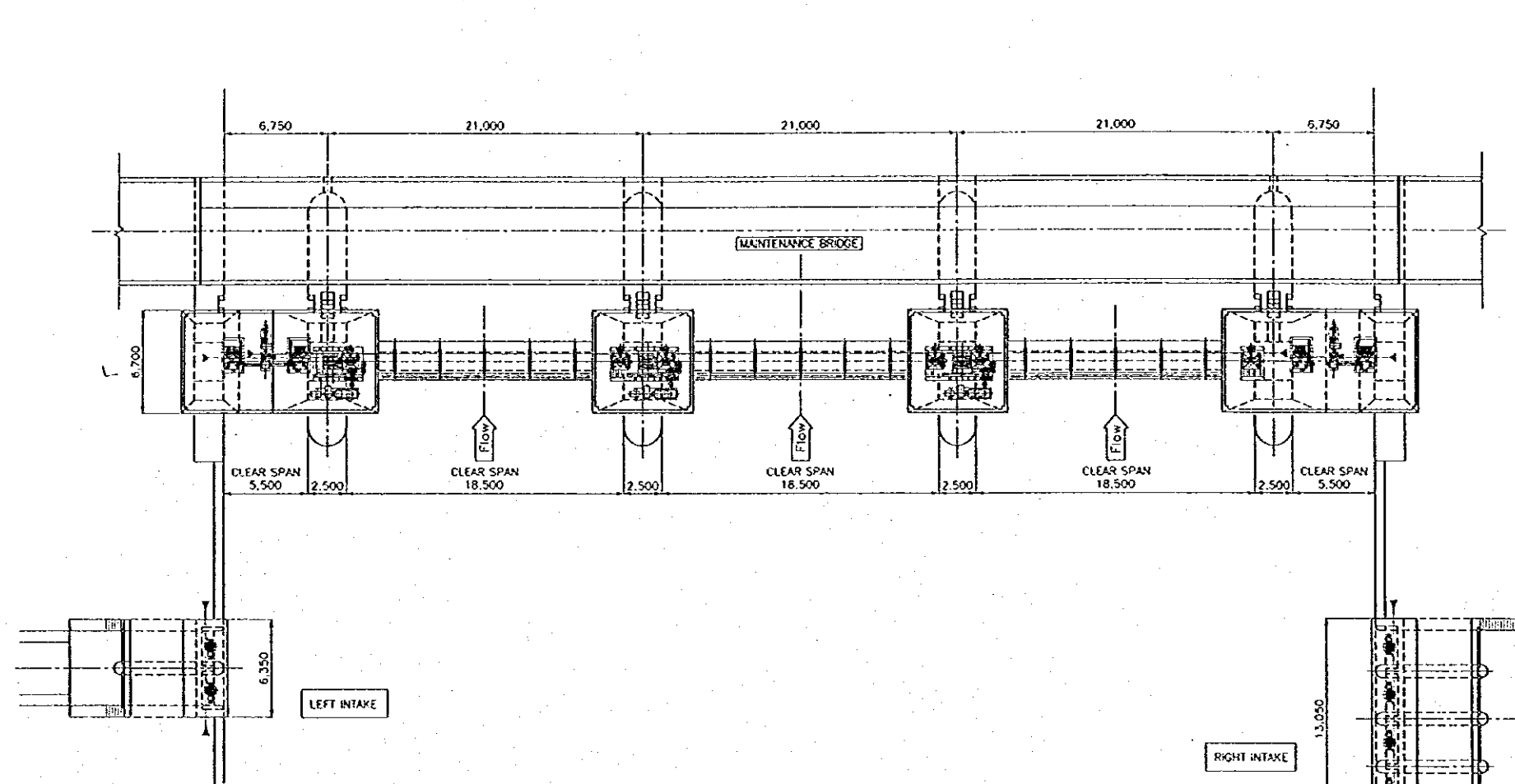


NOTE:
 1. PILE LENGTH SHOWN ON THE DRAWING IS TENTATIVE. THE CONTRACTOR SHALL DETERMINE THE LENGTH OF PILE BY TEST PILING.
 2. PILE HEAD TREATMENT OF FIX TYPE IS USED FOR APPROACH WALL. PILE HEAD TREATMENT OF HINGE TYPE IS USED FOR INTAKE SLUICE.

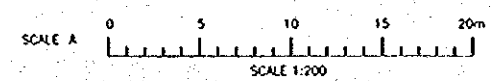


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROJECT CENTRAL JAVA
JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANO RIVER IMPROVEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
FOUNDATION PILES DIMENSION OF FOUNDATION PILES (2/2)		DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL (PACIFIC CONSULTANTS TERASA) P.T.S.		DRAWING NO. W6-P2-PP-51-B SHEET NO. 106
DESIGNED <i>[Signature]</i>	CHECKED <i>[Signature]</i>	DATE CONTRACT NO.
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		

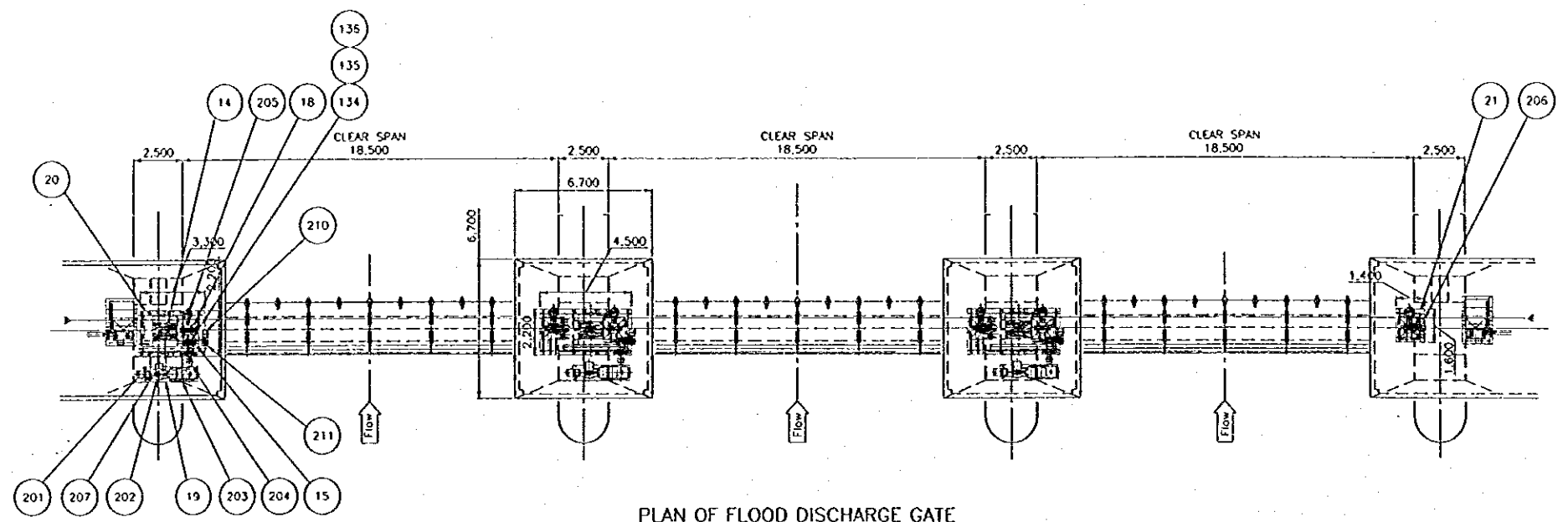


REMARKS
 MARK "—<—>" SHOWS STANDARD LINE
 FOR INSTALLATION



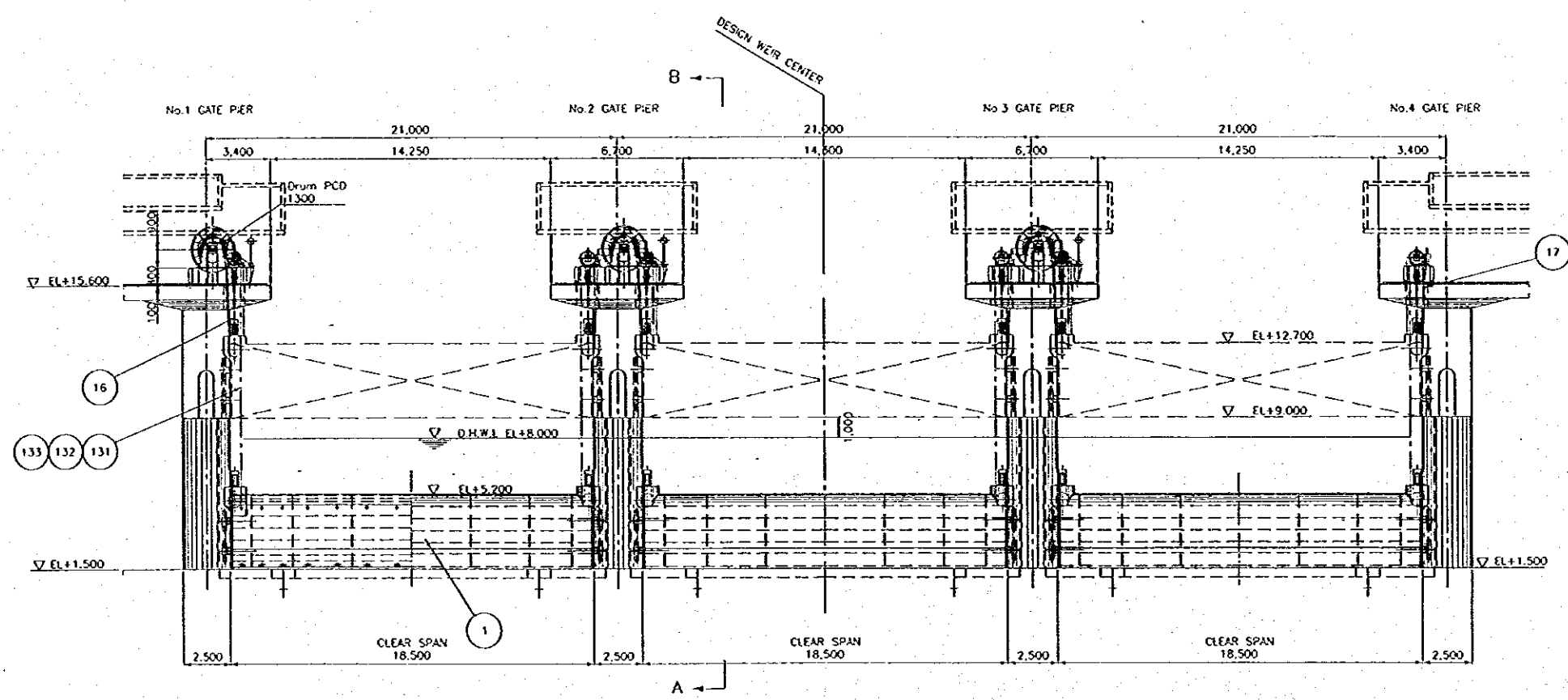
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

THIS REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT GATE, GUIDEWAY AND HOIST		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
GENERAL PLAN, PROFILE & UPSTREAM ELEVATION OF GATE		DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL, INC.		DRAWING NO. W2-P2-64-M-1 SHEET NO. 187
CHIEF OF PLANNING AND DESIGN		DATE CONTRACT NO.
PROJECT MANAGER		DESIGNED CHECKED DATE

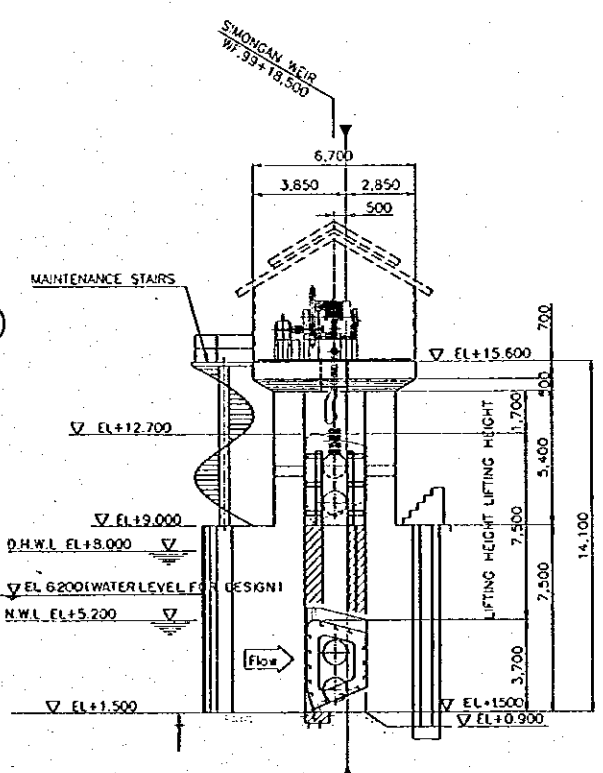


PLAN OF FLOOD DISCHARGE GATE
SCALE A

DESIGN CONDITIONS OF GATE	
TYPE OF GATE	STEEL SHELL TYPE ROLLER GATE
NUMBER OF GATE	3 GATES
CLEAR SPAN	18.500 m
GATE LEAF HEIGHT	3.700 m
DESIGN WATER LEVEL OF RIVER CHANNEL	UPSTREAM EL.+8.000
	DOWNSTREAM EL.+4.520
OPERATING WATER LEVEL (DESIGN WATER LEVEL FOR GATE)	UPSTREAM EL.+6.200
	DOWNSTREAM EL.+1.500
SEAL SYSTEM	BOTTOM AND BOTH SIDES OF GATE
OPERATING SYSTEM	ONE MOTOR ONE DRUM TYPE

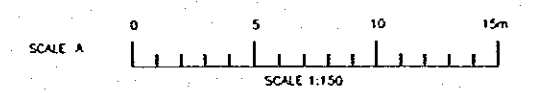


ELEVATION OF FLOOD DISCHARGE GATE
SCALE A



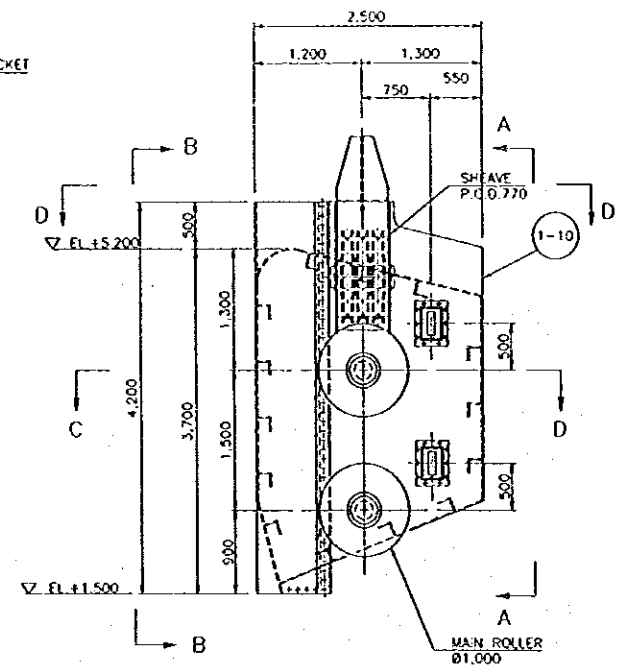
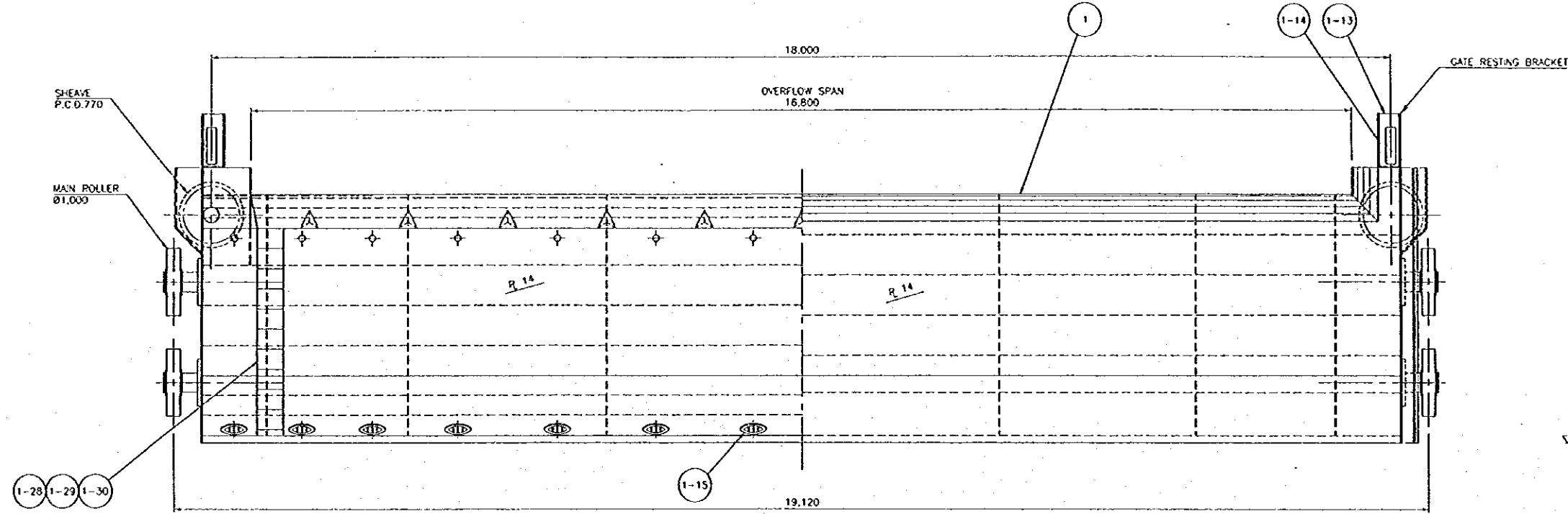
SECTION A-A
SCALE A

REMARKS
MARK "▶" "◀" SHOWS STANDARD LINE FOR INSTALLATION



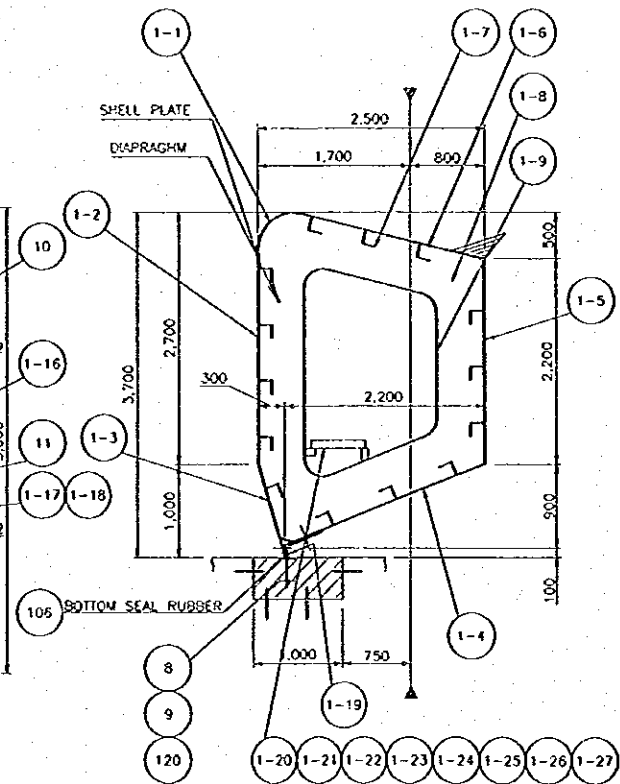
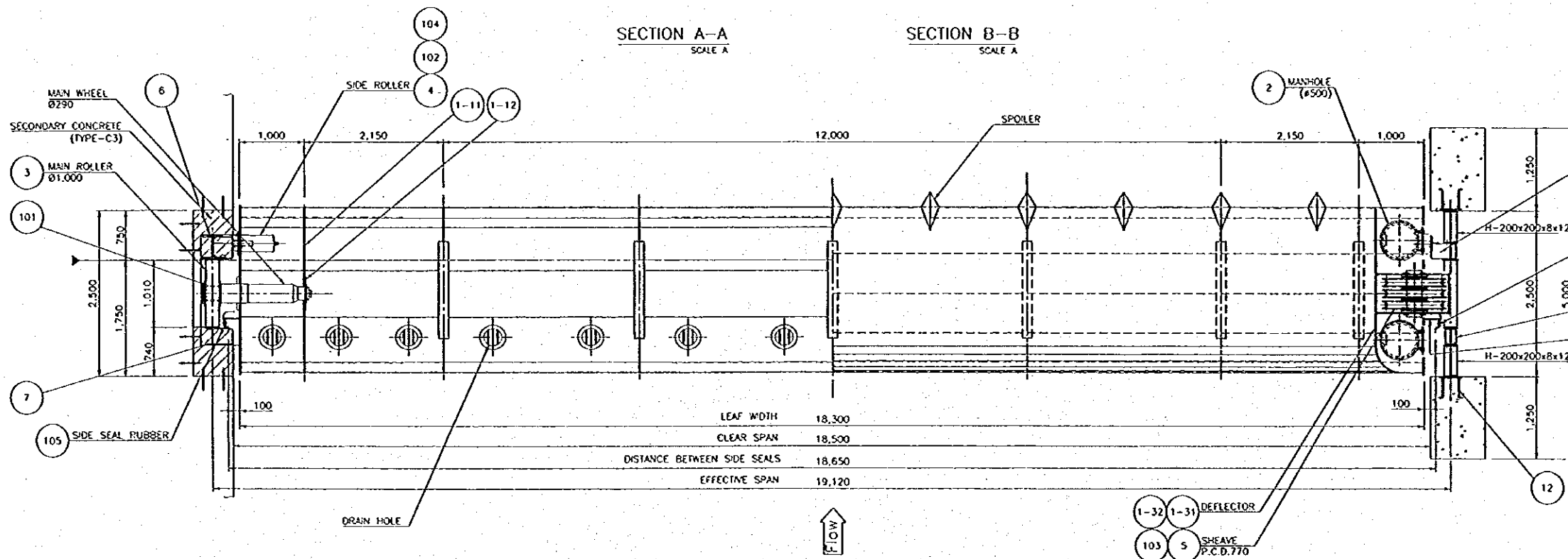
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST PLAN AND ELEVATION OF FLOOD DISCHARGE GATE		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
DRAWING NO. WS-P2-6A-Me-2 SHEET NO. 164		DATE CONTRACT NO.
SAFARI INTERNATIONAL COOPERATION AGENCY C/O BROMBERG CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PUSCO INTERNATIONAL INC. CITY OF MANHATTAN AND DESIGN PROJECT MANAGER		DESIGNED CHECKED APPROVED



SECTION A-A
SCALE A

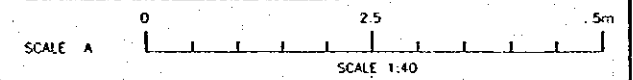
SECTION B-B
SCALE A



SECTION C-C
SCALE A

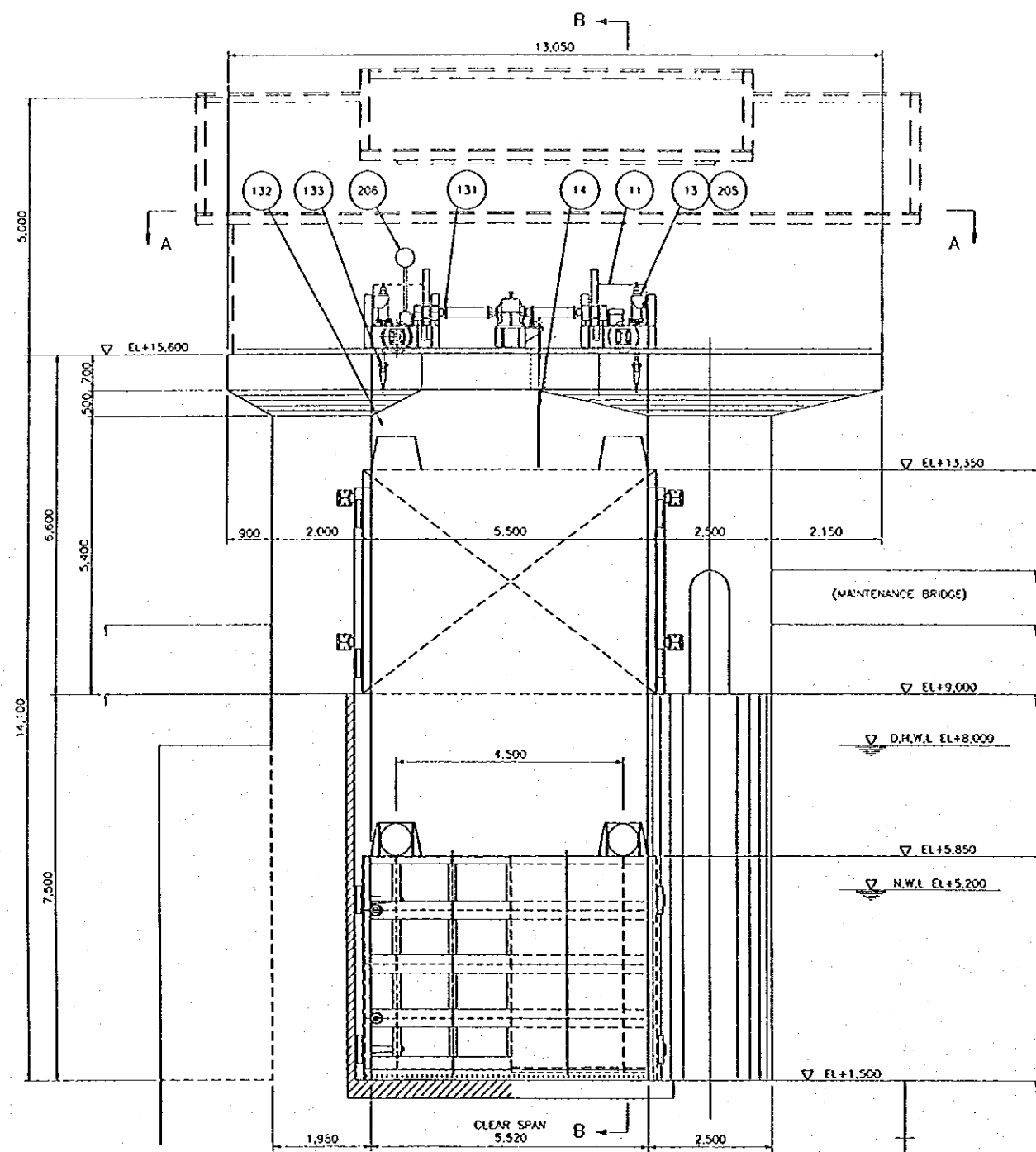
SECTION D-D
SCALE A

REMARKS
MARK "P-4" SHOWS STANDARD LINE
FOR INSTALLATION

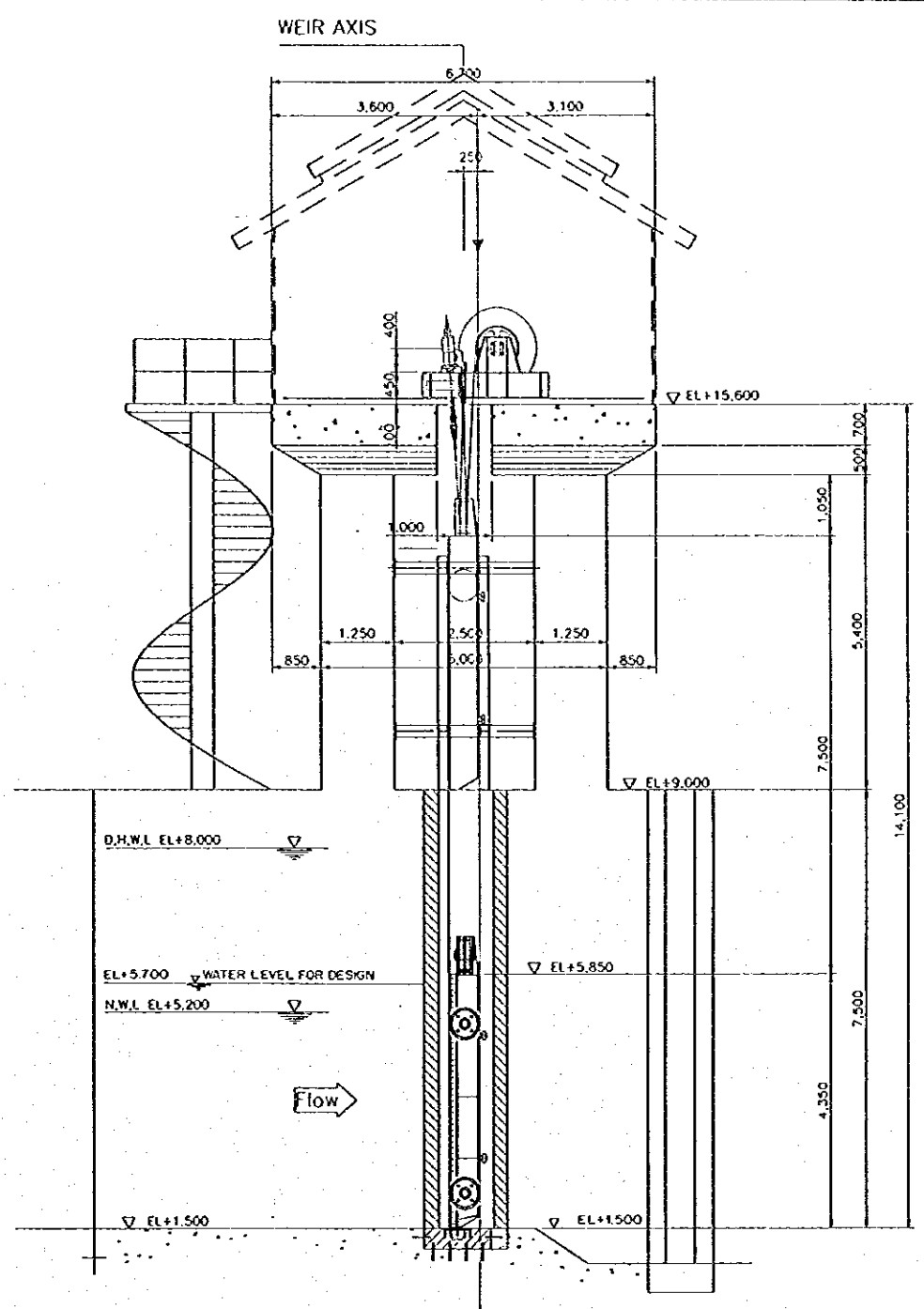


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

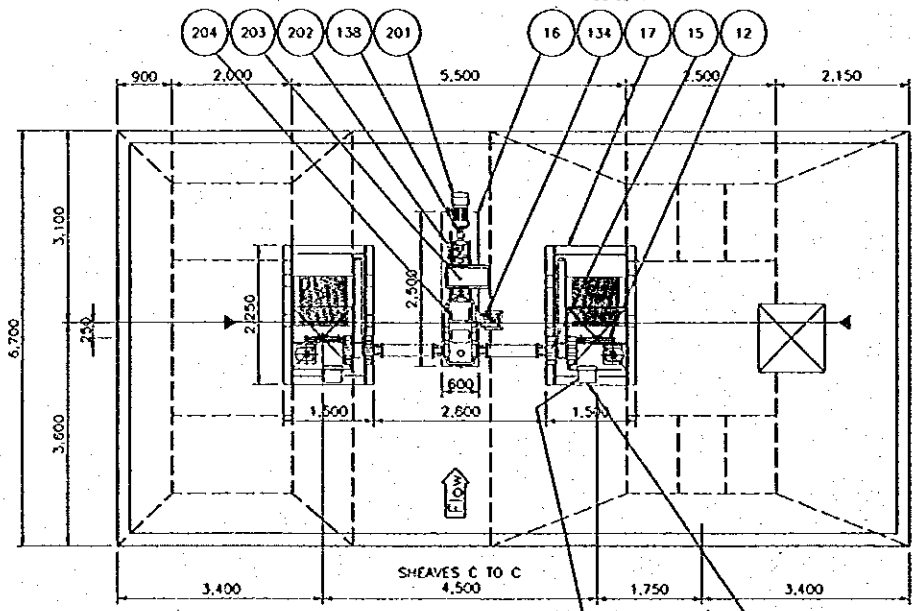
	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT	PROVINCE CENTRAL JAVA
	PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT	PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
	GATE, GUIDE FRAME AND HOIST DETAILS OF FLOOD DISCHARGE GATE	DISTRICT SEMARANG CITY
	JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND YAMCO INTERNATIONAL INC.	DRAWING NO. W3-P2-GA-M1-3 SHEET NO. 109
DESIGNED CHECKED	DATE CONTRACTING NO.	CHIEF OF PLANNING AND DESIGN PROJECT MANAGER



ELEVATION OF END PIER
SCALE A



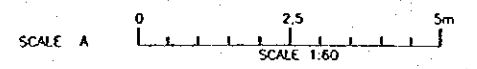
SECTION B-B
SCALE A



SECTION A-A
SCALE A

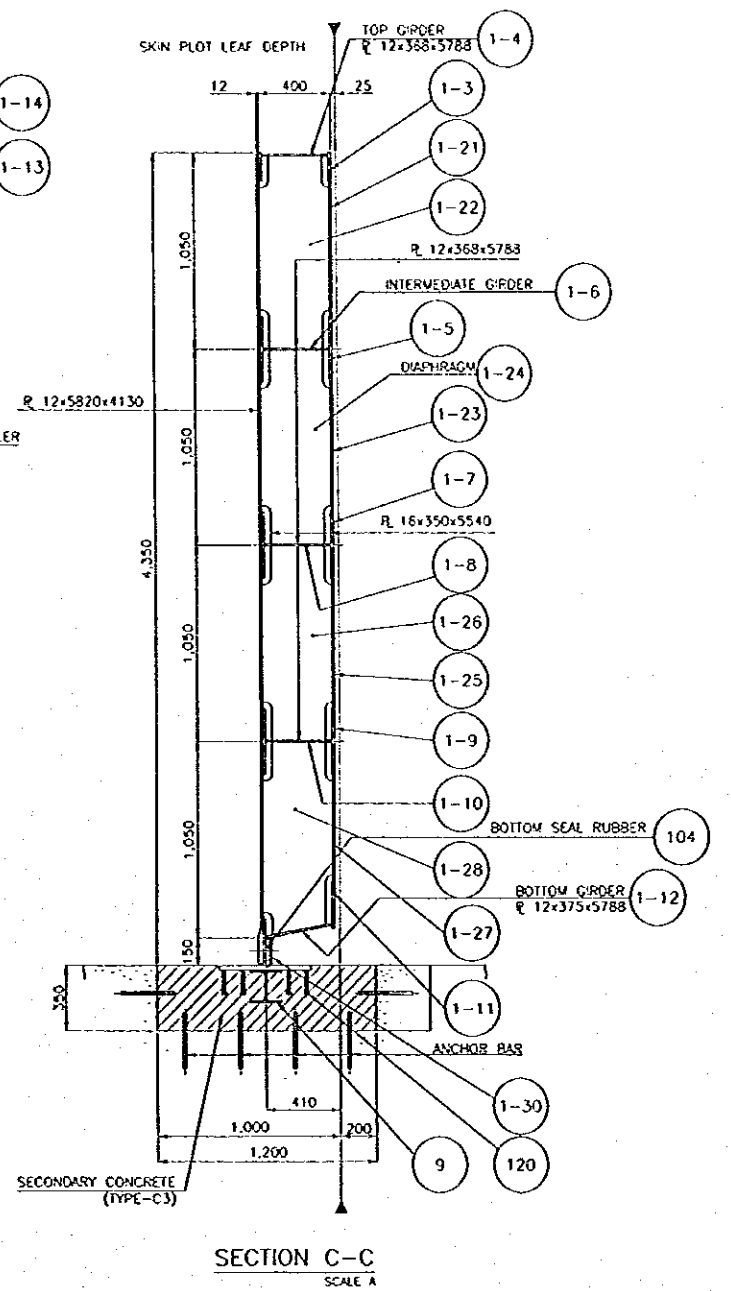
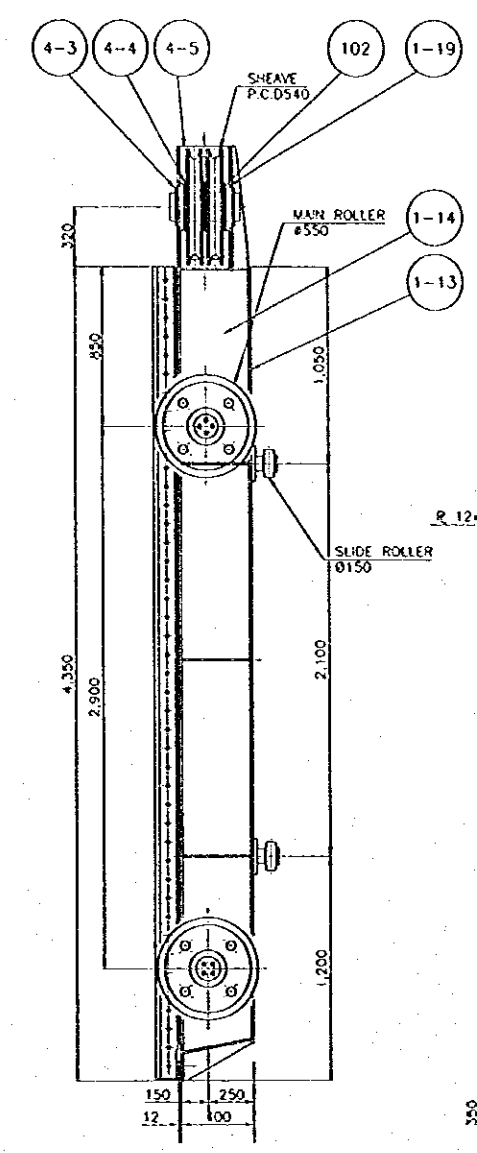
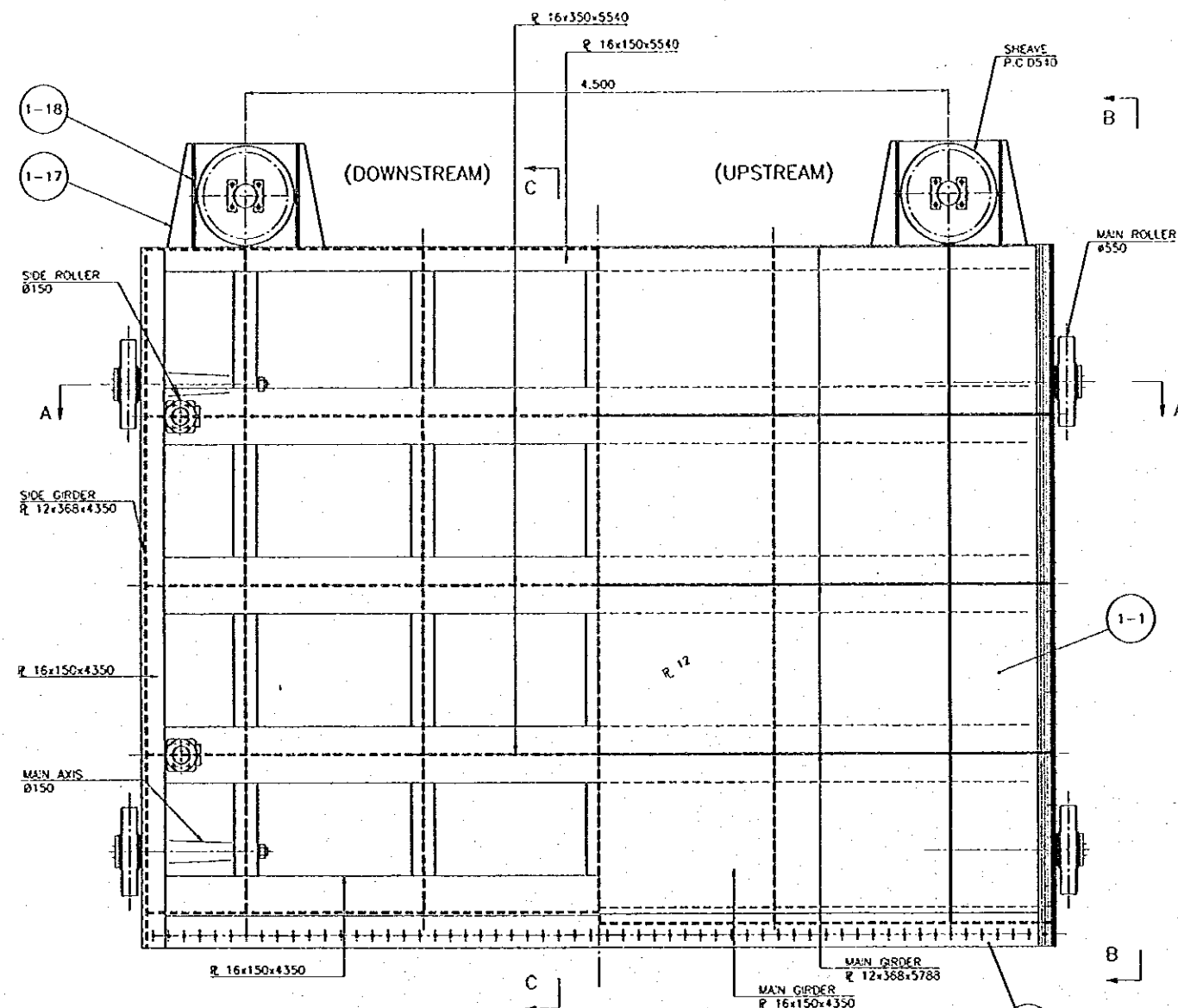
DESIGN CONDITIONS OF GATE	
TYPE OF GATE	STEEL GIRDER TYPE ROLLER GATE
NUMBER OF GATE	2 GATES
CLEAR SPAN	5.500 m
GATE LEAF HEIGHT	4.350 m
DESIGN WATER LEVEL OR RIVER CHANNEL	UPSTREAM EL+8.000
	DOWNSTREAM EL+4.520
OPERATING WATER LEVEL (DESIGN WATER LEVEL FOR GATE)	UPSTREAM EL+5.700
	DOWNSTREAM EL+1.500
SEAL SYSTEM	UPSTREAM EL+2.500
	DOWNSTREAM EL+1.500
OPERATING SYSTEM	BOTTOM AND BOTH SIDES OF GATE
	ONE MOTOR TWO DRUM TYPE

REMARKS
MARK "←" SHOWS STANDARD LINE FOR INSTALLATION THIS DRAWING SHOWS LEFT SIDE OF RIVER OPPOSITE SIDE IS SYMMETRY.



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

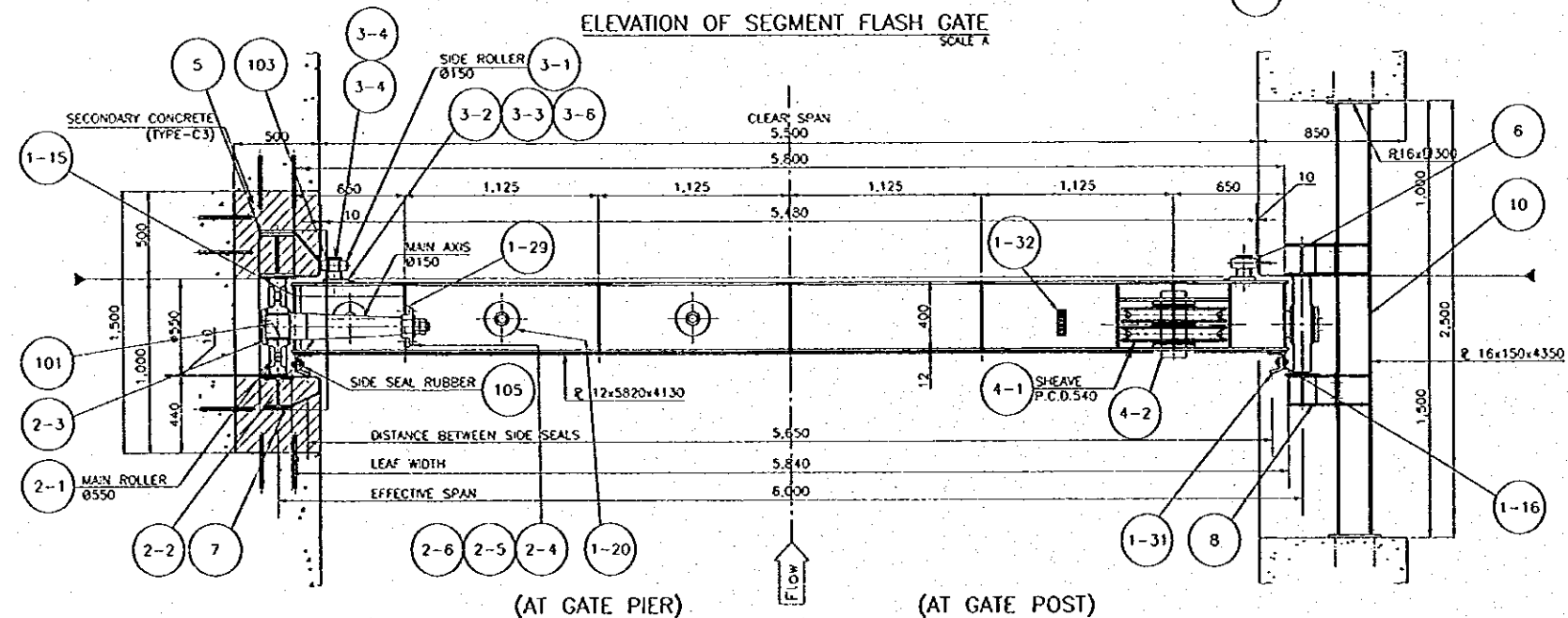
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST PLAN AND ELEVATION OF SEDIMENT FLUSH GATE		PROJECT: CENTRAL JAWA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO: WB-P2-0A-M4-4 SHEET NO: 111
JAPAN INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.	DESIGNED: [Signature] CHECKED: [Signature]	DATE: [Date] CONTRACT NO.: [Number]
CEEB OF PLANNING AND DESIGN PROJECT MANAGER: [Signature]		



ELEVATION OF SEGMENT FLASH GATE
SCALE A

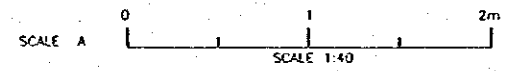
SECTION B-B
SCALE A

SECTION C-C
SCALE A



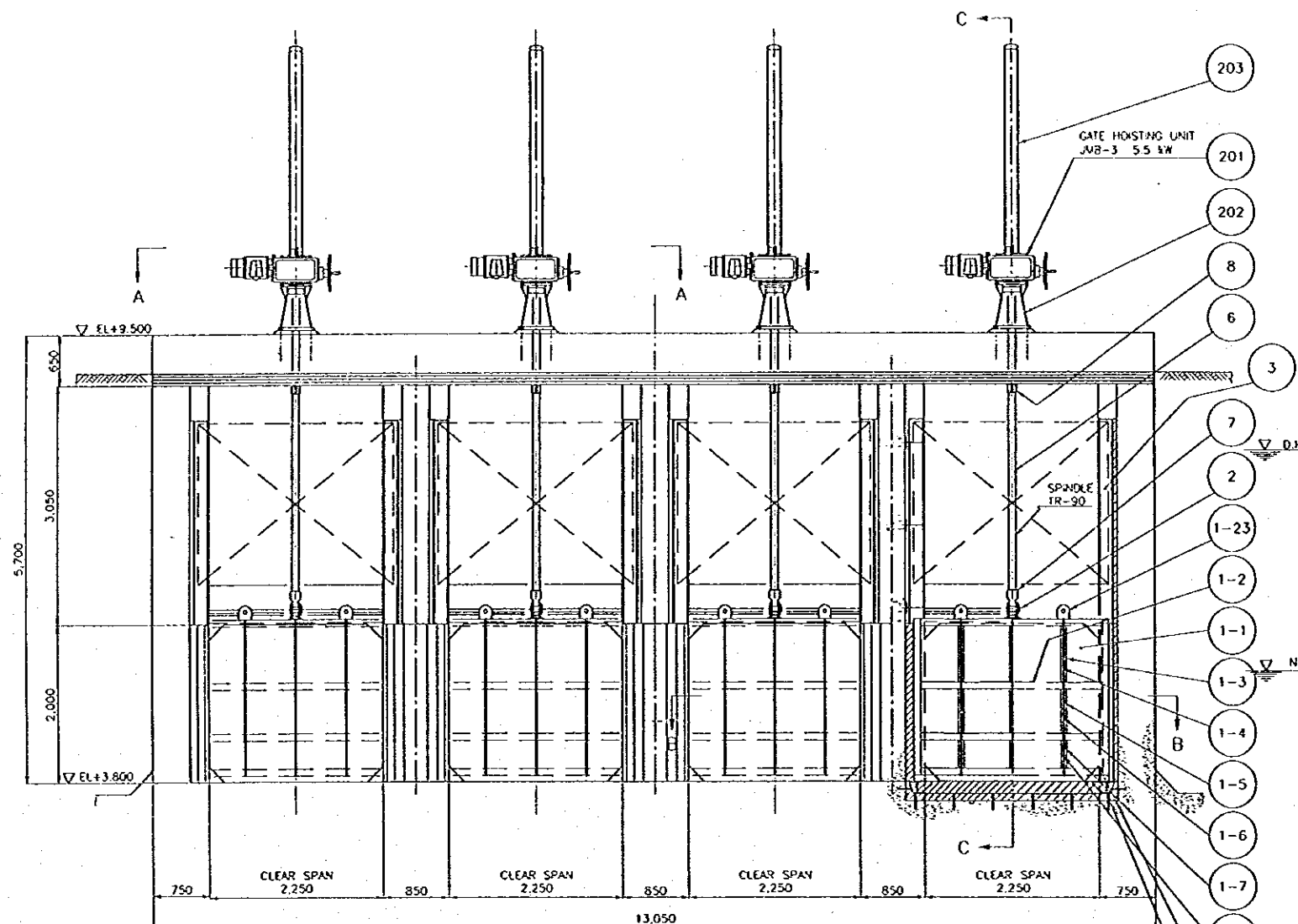
SECTION A-A
SCALE A

REMARKS
MARK "←" SHOWS STANDARD LINE
FOR INSTALLATION

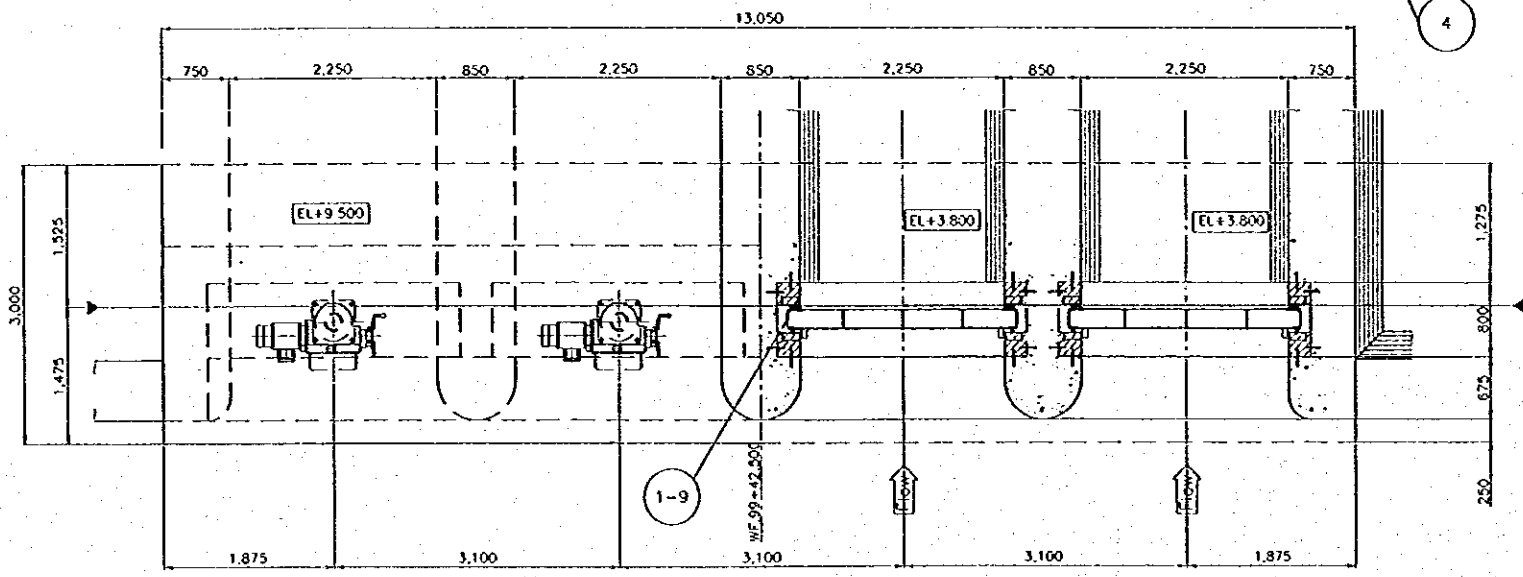


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST DETAILS OF SEDIMENT FLASH GATE		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. W0-P2-04-M-5 SHEET NO. 111
DESIGNED CHECKED PROJECT MANAGER	DATE CONTRACT NO.	APPROVED

NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

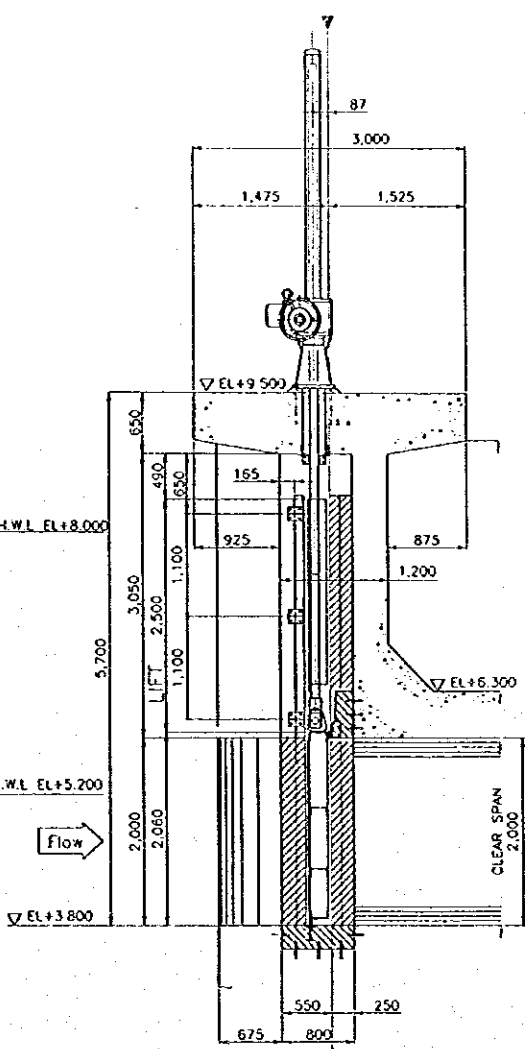


ELEVATION OF INTAKE STRUCTURE
SCALE A

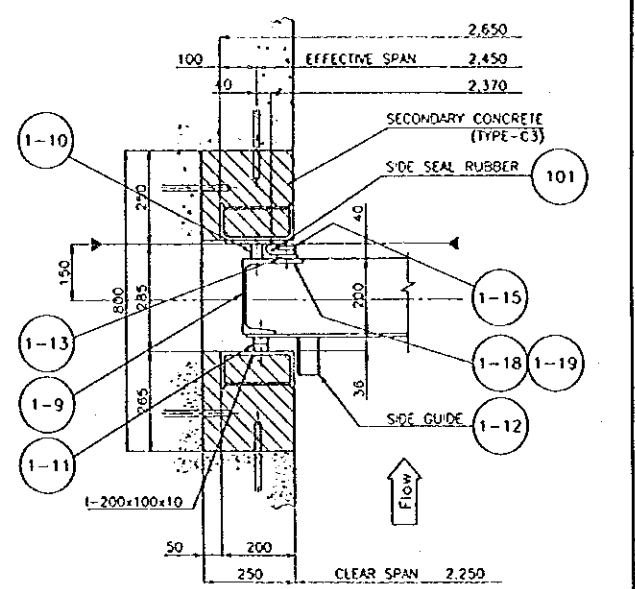


SECTION A-A
SCALE A

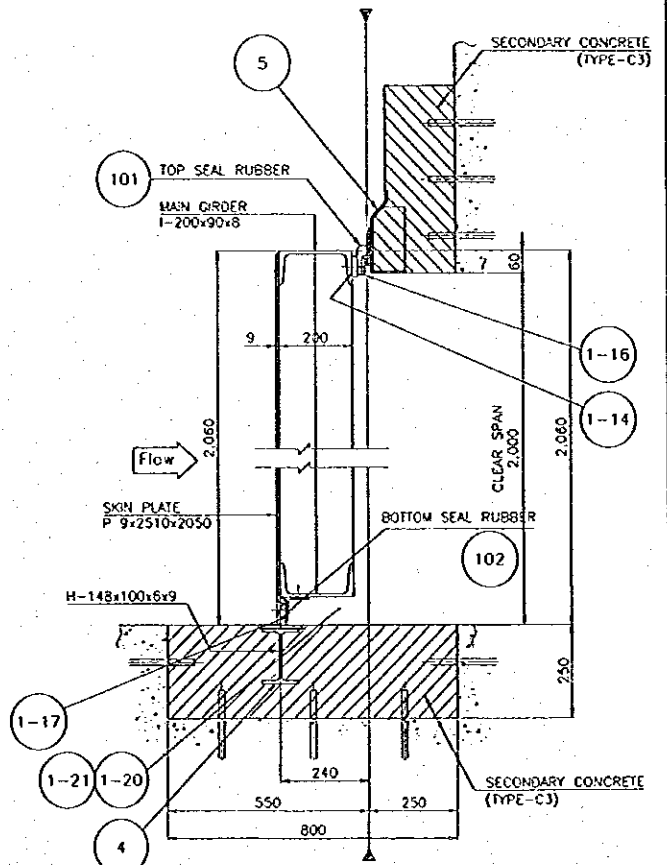
SECTION B-B
SCALE A



SECTION C-C
SCALE A

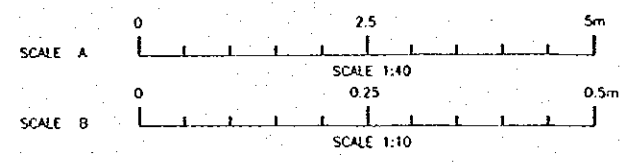


DETAIL OF SIDE SEAL
SCALE B



DETAIL OF TOP & BOTTOM SEAL
SCALE B

DESIGN CONDITIONS OF GATE	
TYPE OF GATE	STEEL SLIDE GATE
NUMBER OF GATE	4 GATES
CLEAR SPAN	2.250 m
CLEAR HEIGHT	2.000 m
DESIGN WATER LEVEL	UPSTREAM EL+8.000 DOWNSTREAM EL+6.200
OPERATING WATER LEVEL	WATER LEVEL AT GATE OPENING EL+6.200 WATER LEVEL AT GATE OPENING EL+5.840
SEAL SYSTEM	BOTTOM AND BOTH SIDES OF GATE
OPERATING SYSTEM	ONE MOTOR ONE DRUM TYPE

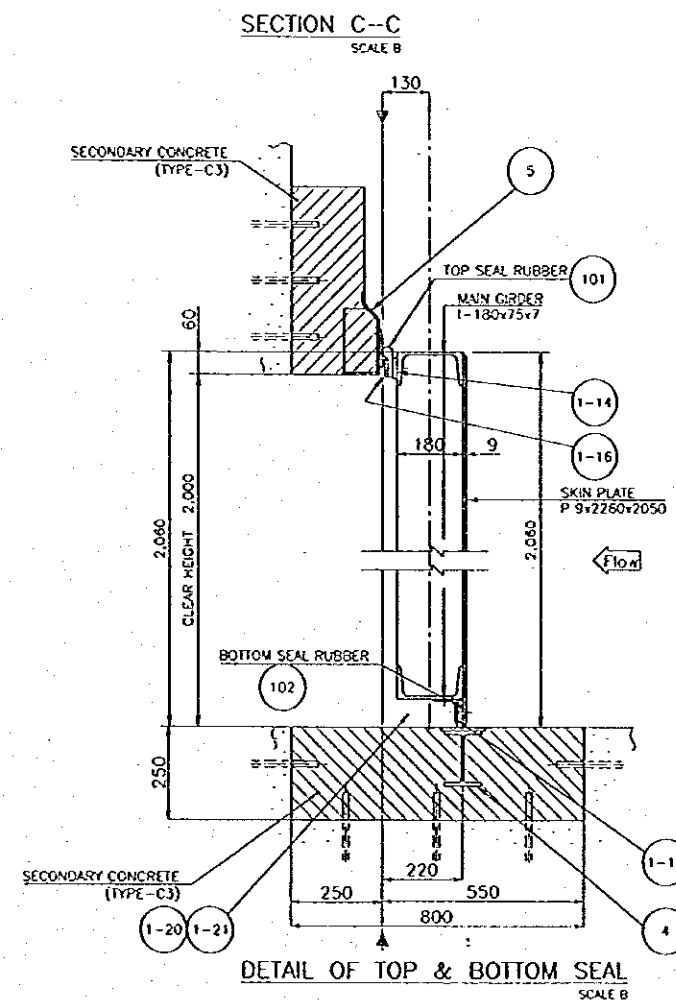
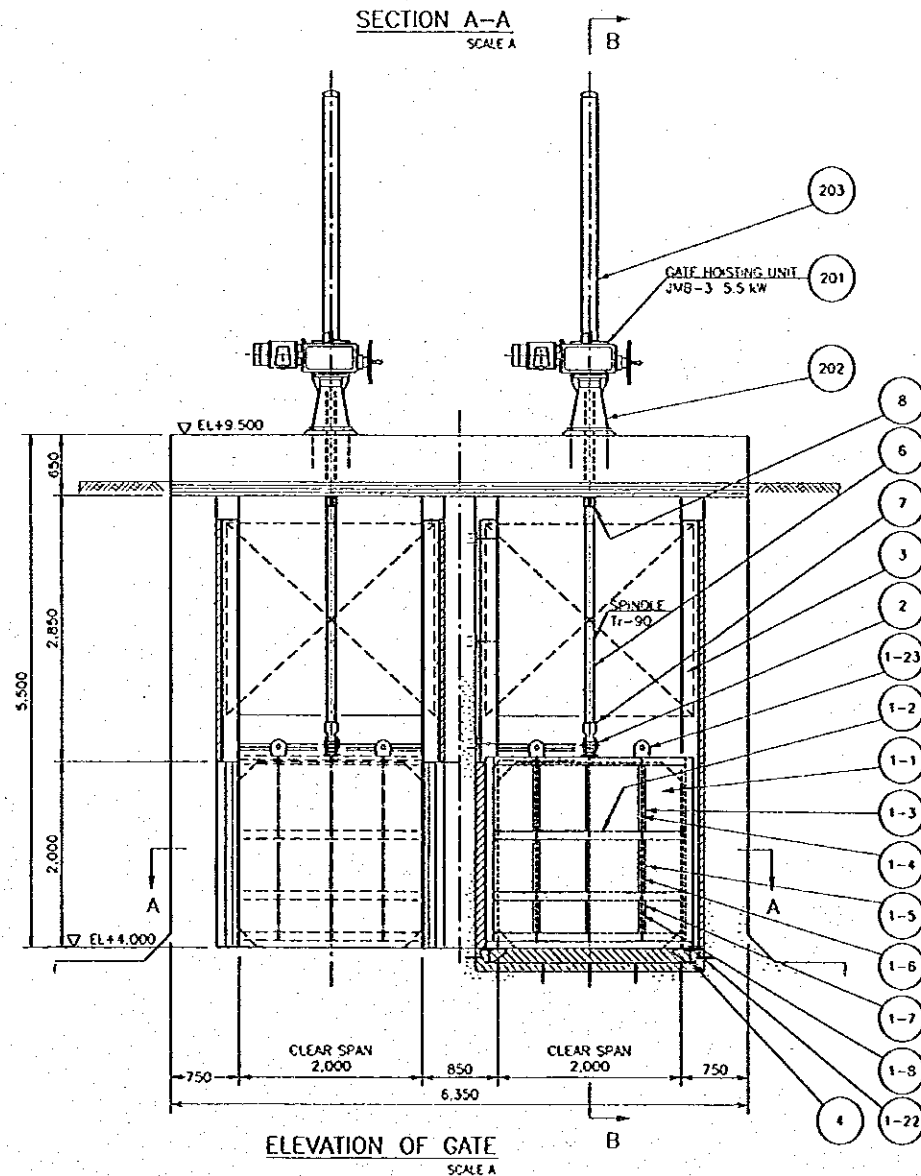
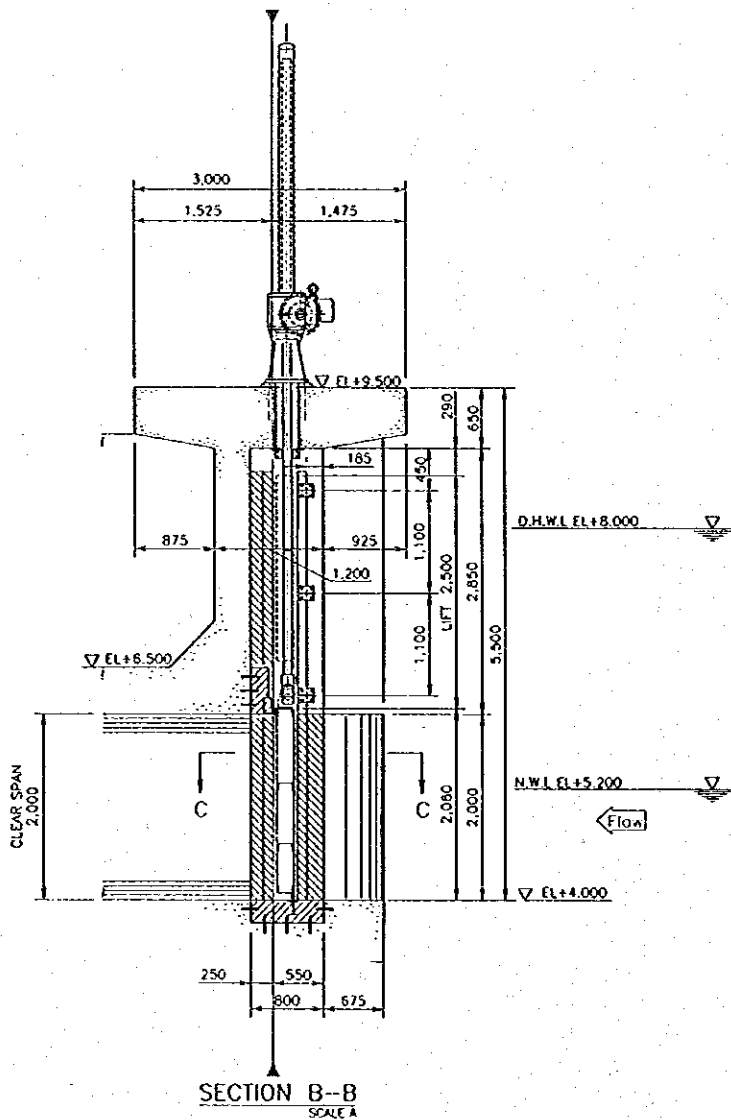
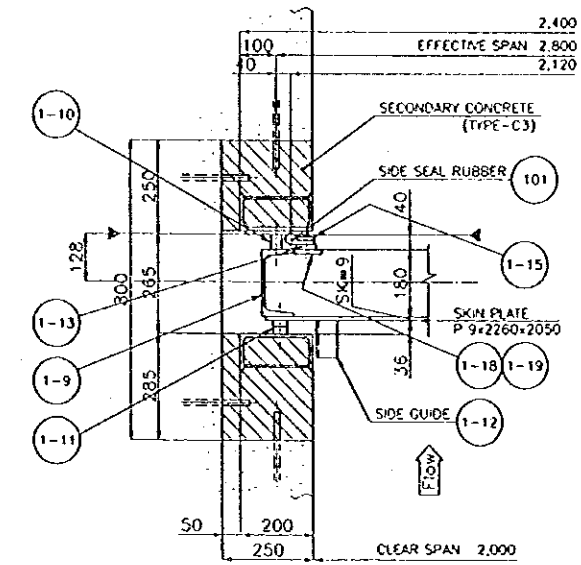
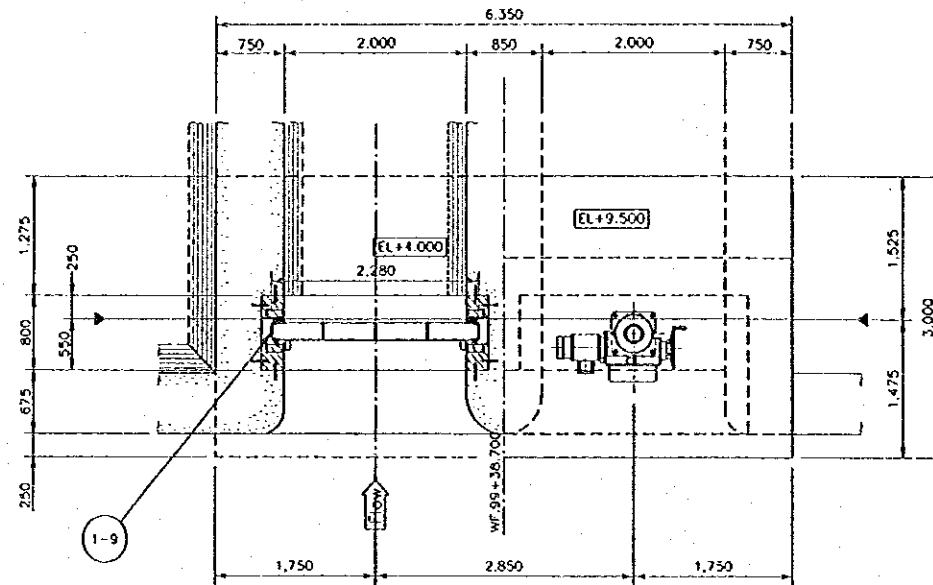


REMARKS
MARK → ← SHOWS STANDARD LINE FOR
INSTALLATION.

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT JATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST DETAILS OF SLIDE GATE (RIGHT BANK)		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN BANGALUO IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. WS - P2 - 6A - M4 - 6 SHEET NO. 112
SAFARI INTERNATIONAL COOPERATION AGENCY CIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PAKO INTERNATIONAL INC.	DESIGNED CHECKED CRISP OF PLANNING AND DESIGN PROJECT MANAGER	DATE CONTRACT NO.

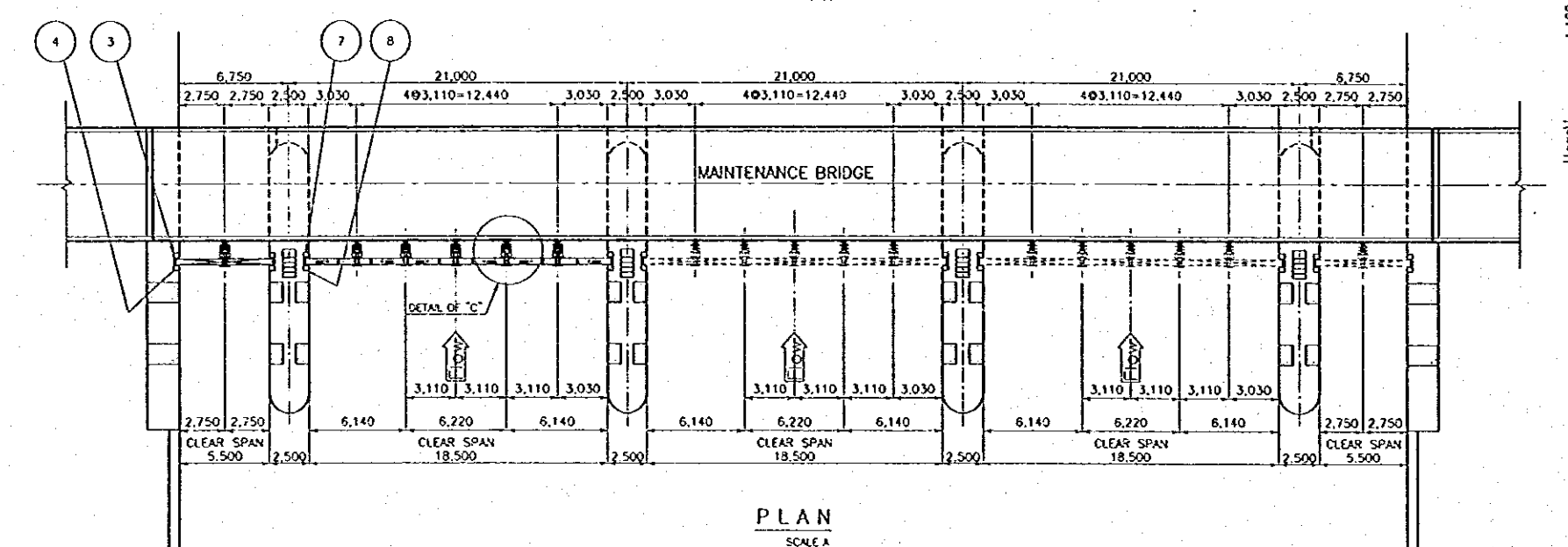
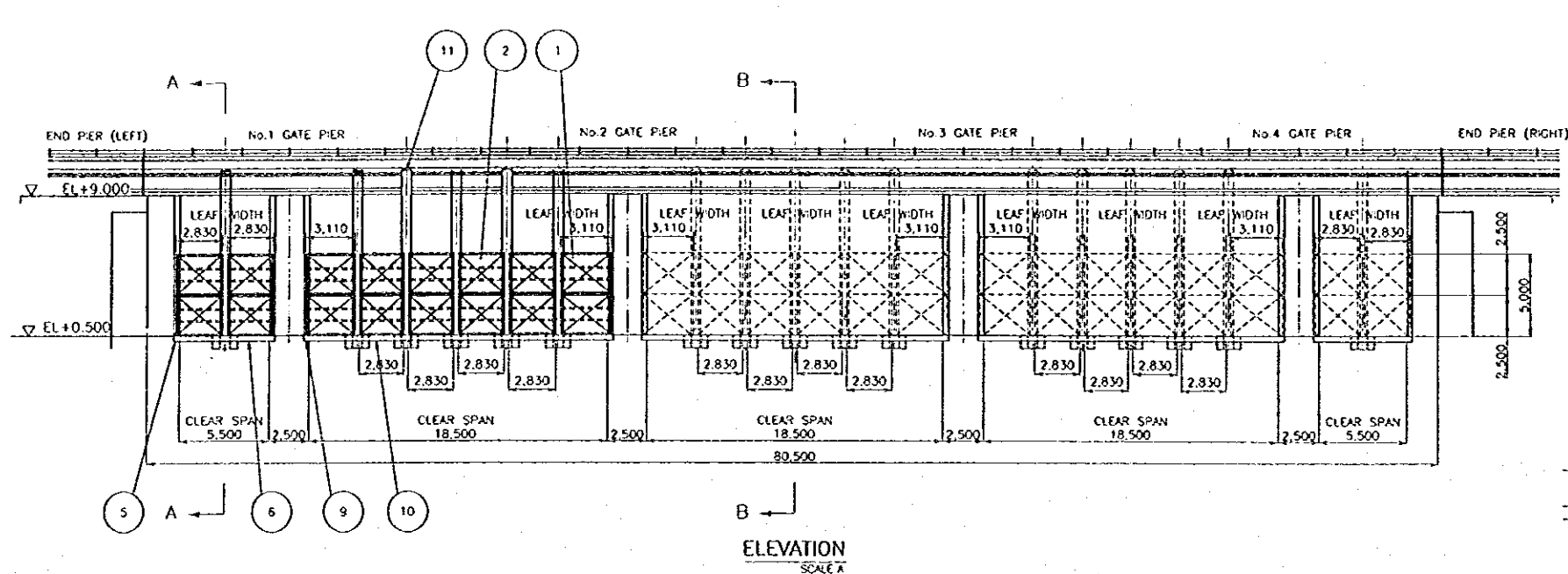
DESIGN CONDITIONS OF GATE	
TYPE OF GATE	STEEL SLIDE GATE
NUMBER OF GATE	4 GATES
CLEAR SPAN	2.250 m
CLEAR HEIGHT	2.000 m
DESIGN WATER LEVEL	HIGH WATER LEVEL EL+8.000
OPERATING WATER LEVEL	WATER LEVEL AT GATE OPENING EL+6.200
	WATER LEVEL AT GATE OPENING EL+5.840
SEAL SYSTEM	BOTTOM AND BOTH SIDES OF GATE
OPERATING SYSTEM	ONE MOTOR ONE DRUM TYPE



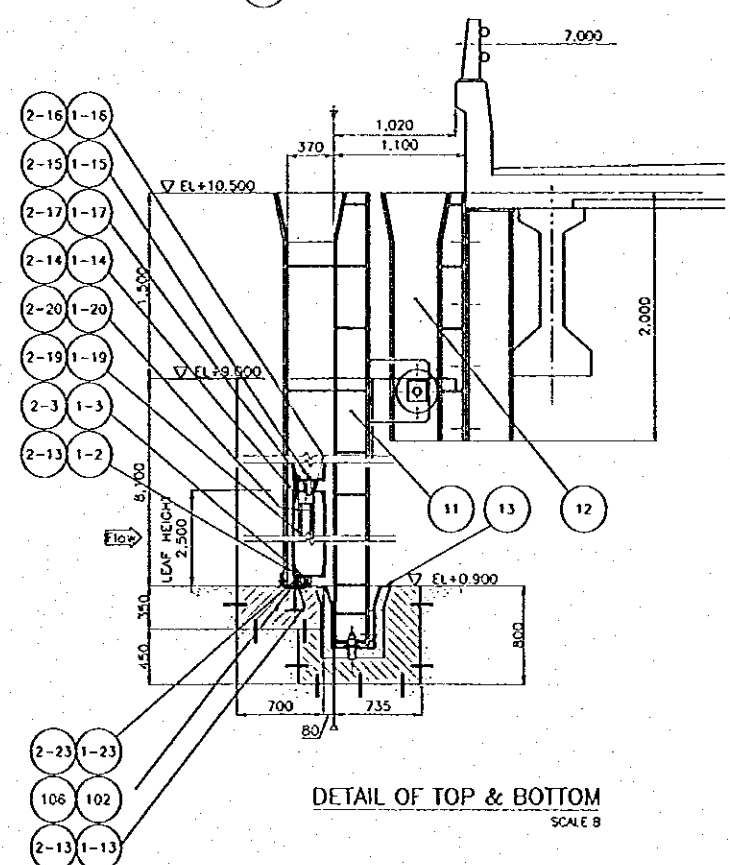
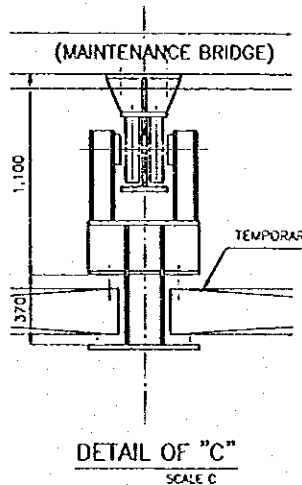
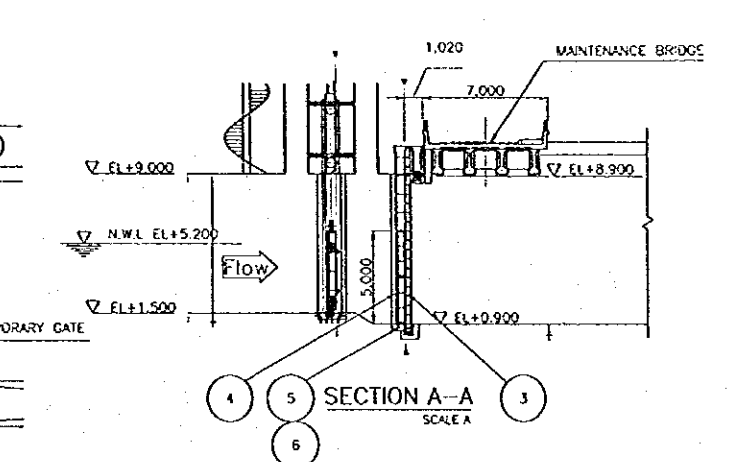
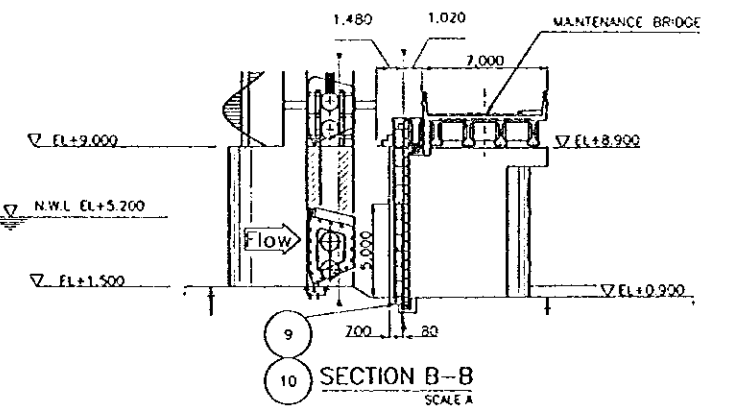
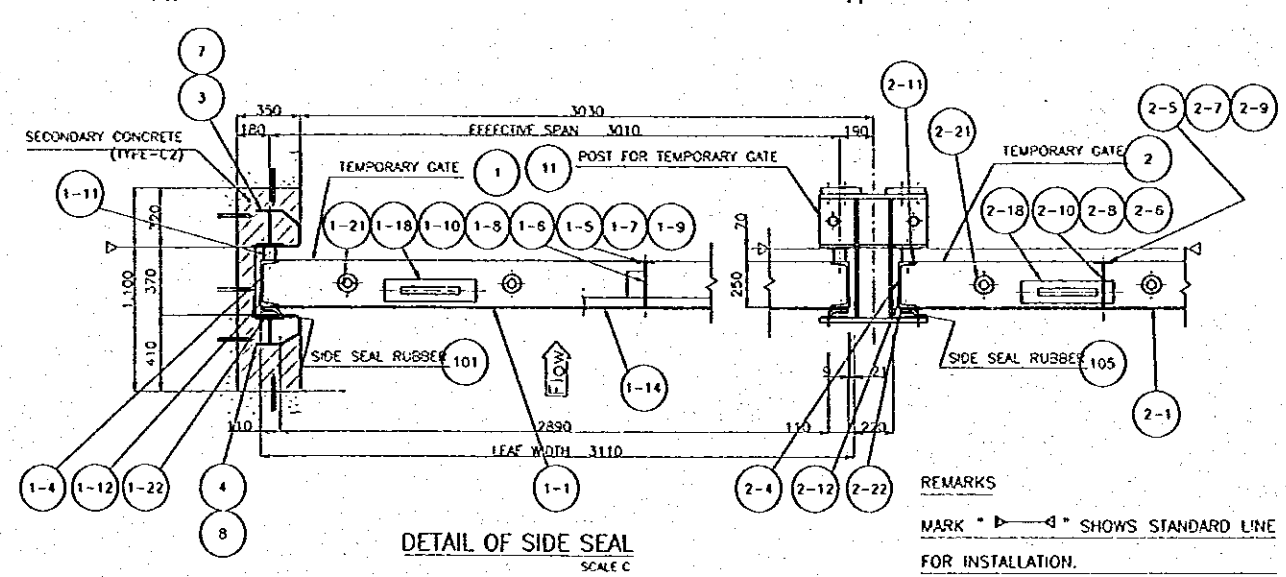
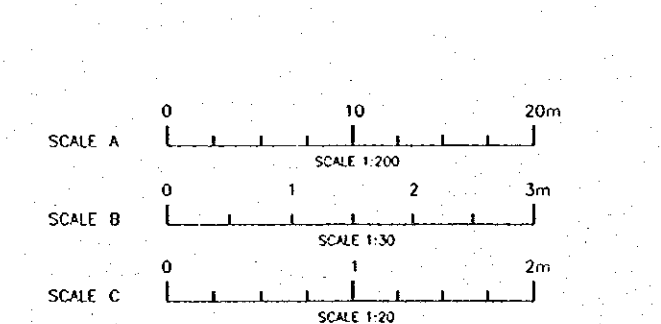
REMARKS
 MARK * SHOWS STANDARD LINE FOR INSTALLATION

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT	PROVINCE CENTRAL JAVA
	IRATUNSELLINA FLOOD CONTROL PROJECT COMPONENT 1: WEST FLOODWAY / GARANG RIVER IMPROVEMENT	PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG BY THE REPUBLIC OF INDONESIA
	GATE, GUIDE FRAME AND HOIST DETAILS OF SLIDE GATE (LEFT GATE)	DISTRICT SEMARANG CITY
	DRAWING NO. W8-P2-8A-M1-7 SHEET NO. 113	DATE CONTRACT NO.
SUKAR INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL and TABSO INTERNATIONAL INC.	DESIGNED CHECKED	DATE CONTRACT NO.
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	APPROVED	DATE CONTRACT NO.



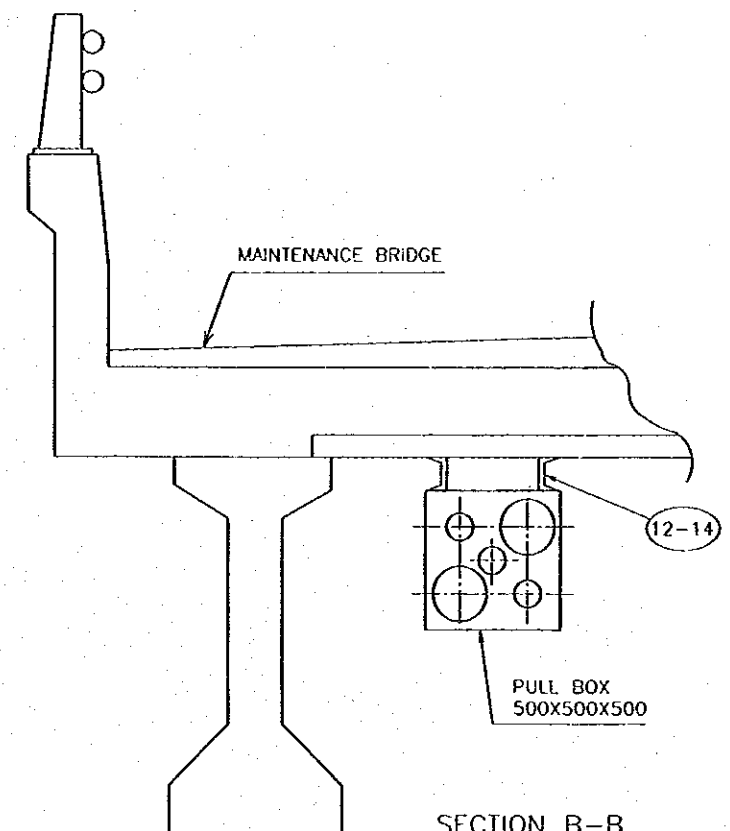
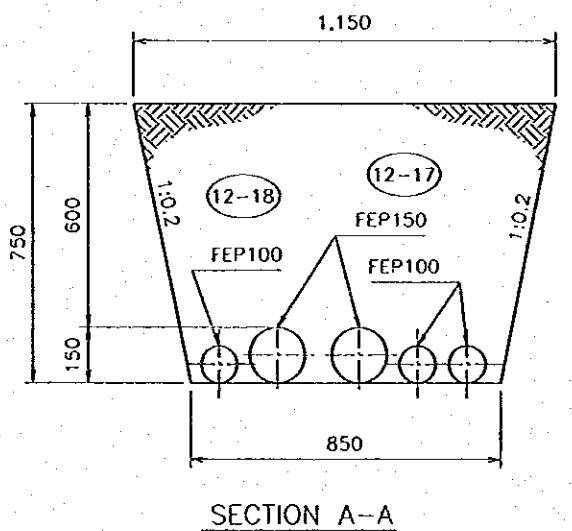
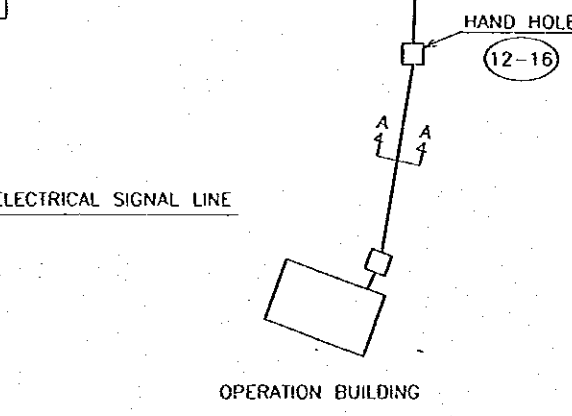
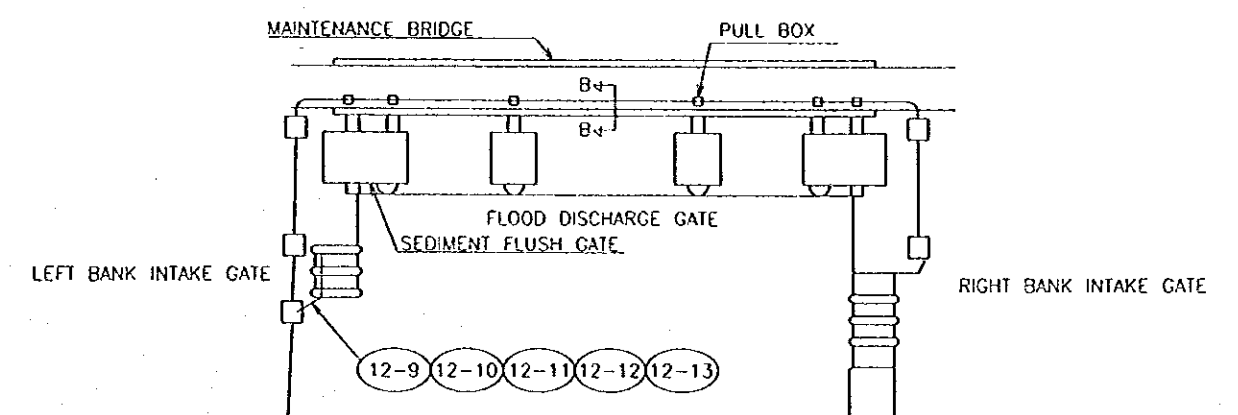
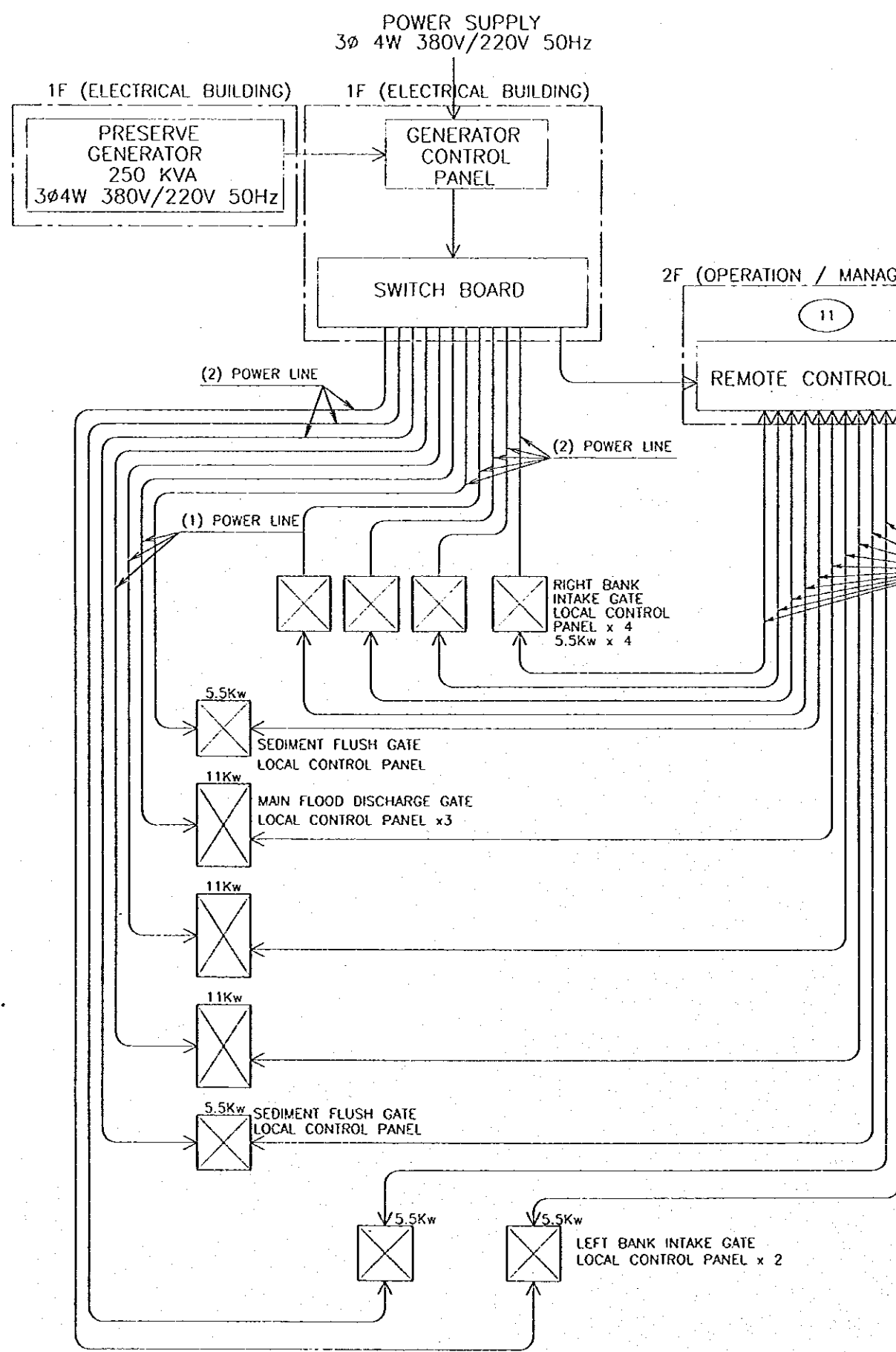
DESIGN CONDITIONS OF GATE	
TYPE OF GATE	STEEL SLIDE GATE
NUMBER OF GATE	12 GATES
CLEAR SPAN	5.500 m 18.500 m
CLEAR HEIGHT	2.500 m
DESIGN WATER DEPTH	4.300 m
FREE BOARD OF TEMPORARY GATE	0.700 m
SEAL SYSTEM	BOTTOM AND BOTH SIDES OF GATE
OPERATING SYSTEM	TRUCK CRANE



REMARKS
 MARK "▲" SHOWS STANDARD LINE
 FOR INSTALLATION.

NO	DATE	REVISIONS	PREPARED	DESIGNED	APPROVED

	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT	PROVINCE: CENTRAL JAVA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	BRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT	DISTRICT: SEMARANG CITY DRAWING NO: WB-P2-04M-3 SHEET NO: 114
	JAPAN INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.	DESIGNED: [Signature] CHECKED: [Signature] DATE: [Blank] CONTRACT NO: [Blank]
	CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	

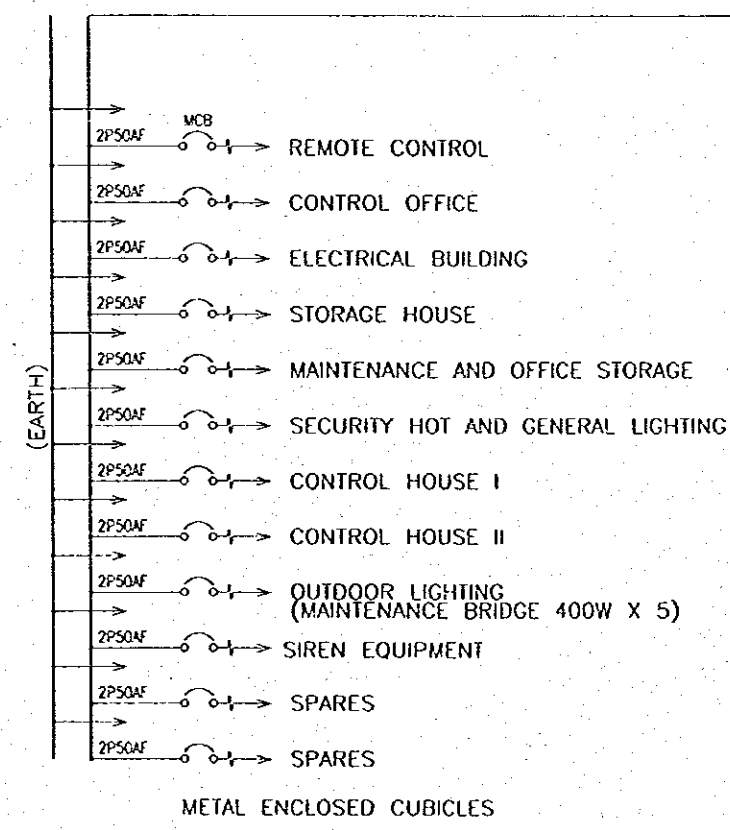
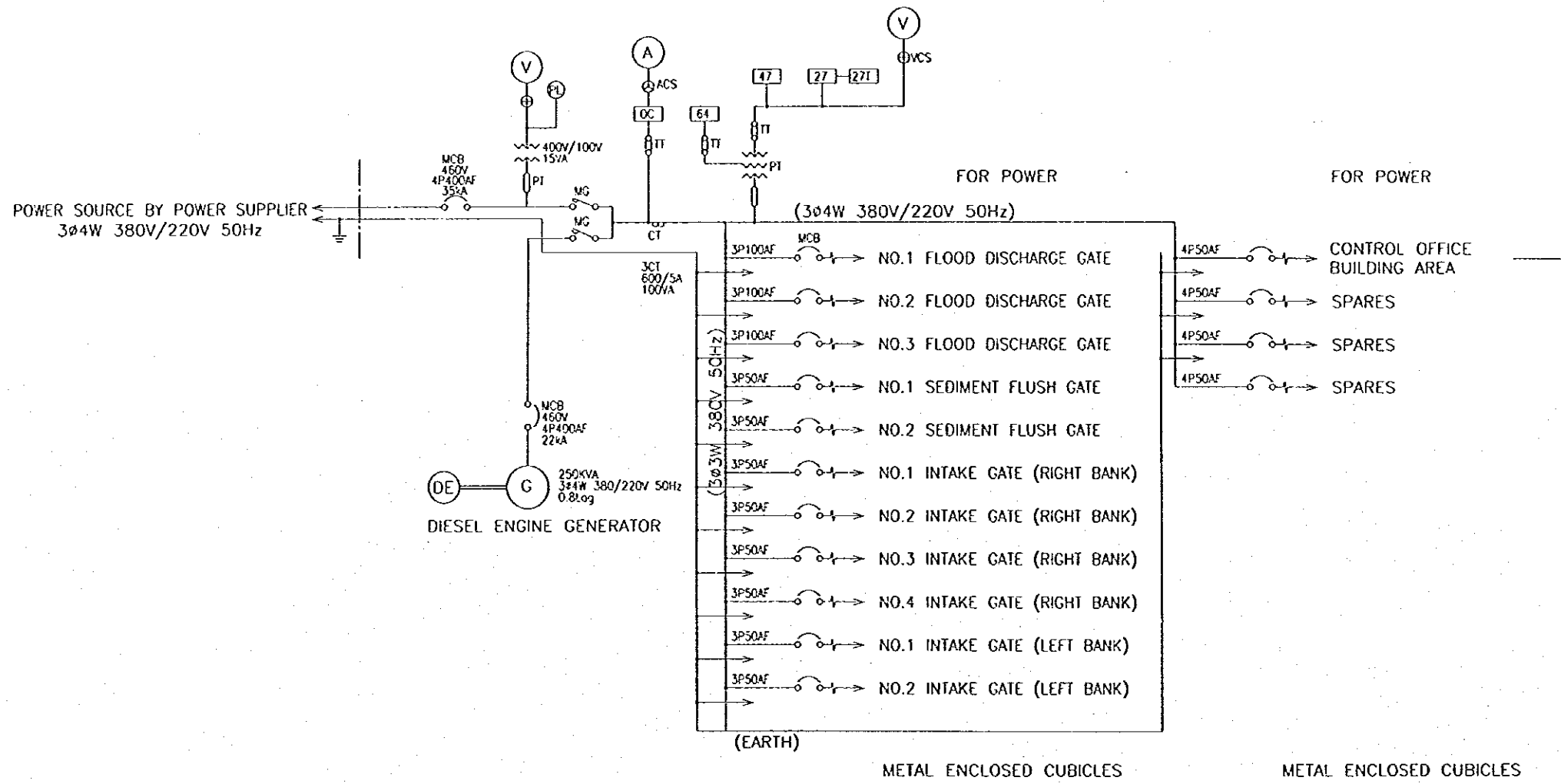


CABLE LIST

CABLE	TYPE	
(1)	CV3C-140- 1V14D	12-4 12-7 12-8
(2)	CV3C-80- 1V8D	12-2 12-3 12-8
(3)	CW30C-2D CW3C-3.5D CWS3C-2D	12-5 12-1 12-6 12-8

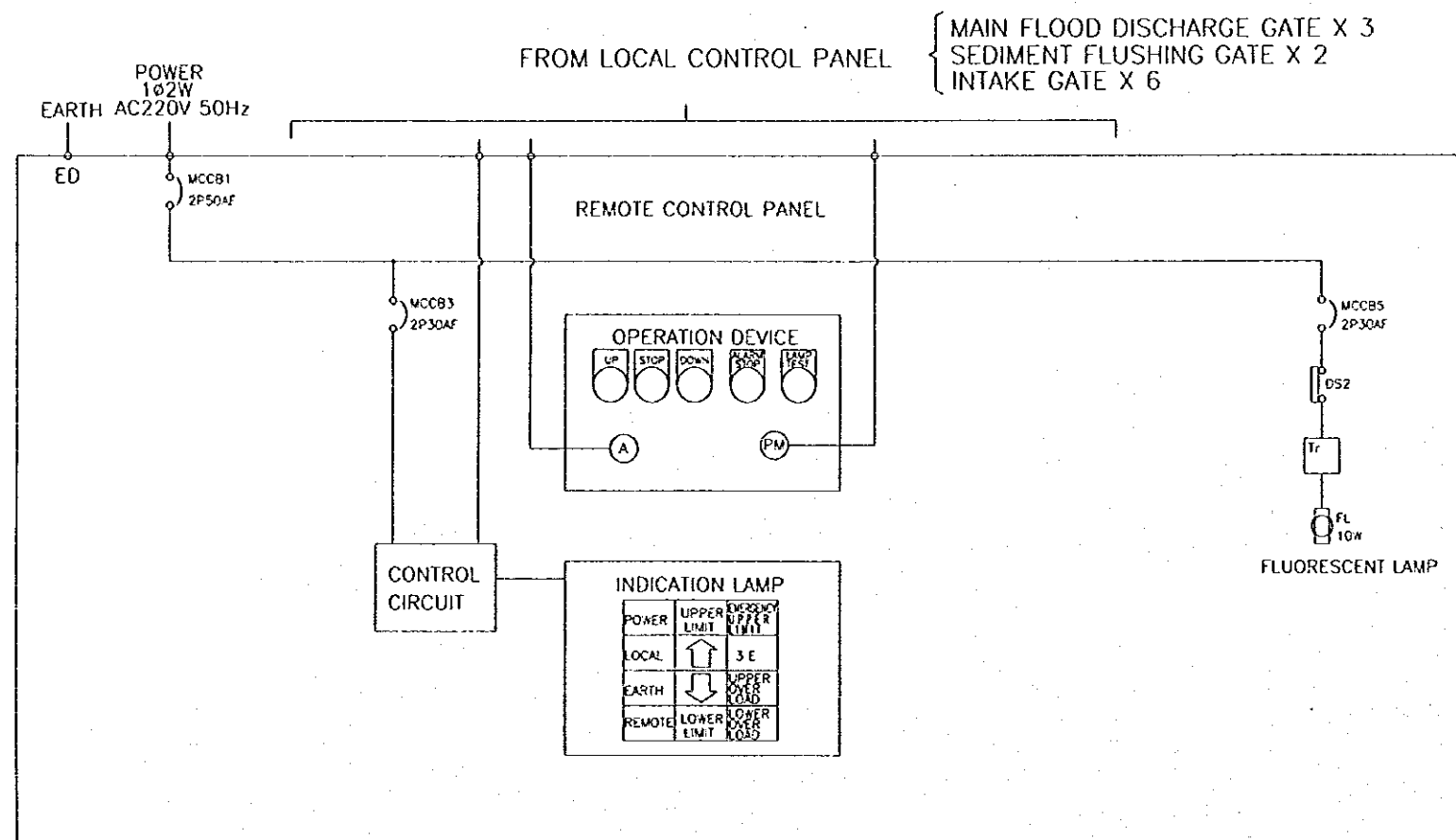
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT RATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY GARANO RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST DIAGRAM OF OVERALL GATE CONTROL SYSTEM		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. WB-P-CAE-1 SHEET NO. 115
JAPAN INTERNATIONAL COOPERATION AGENCY CIE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL, INC. PACICO INTERNATIONAL, INC.	DESIGNED CHECKED	DATE PROJECT MANAGER

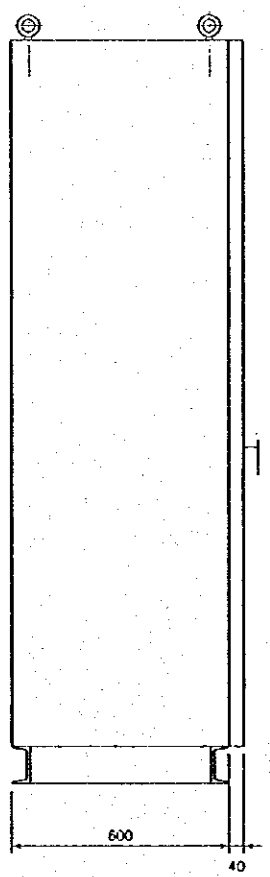
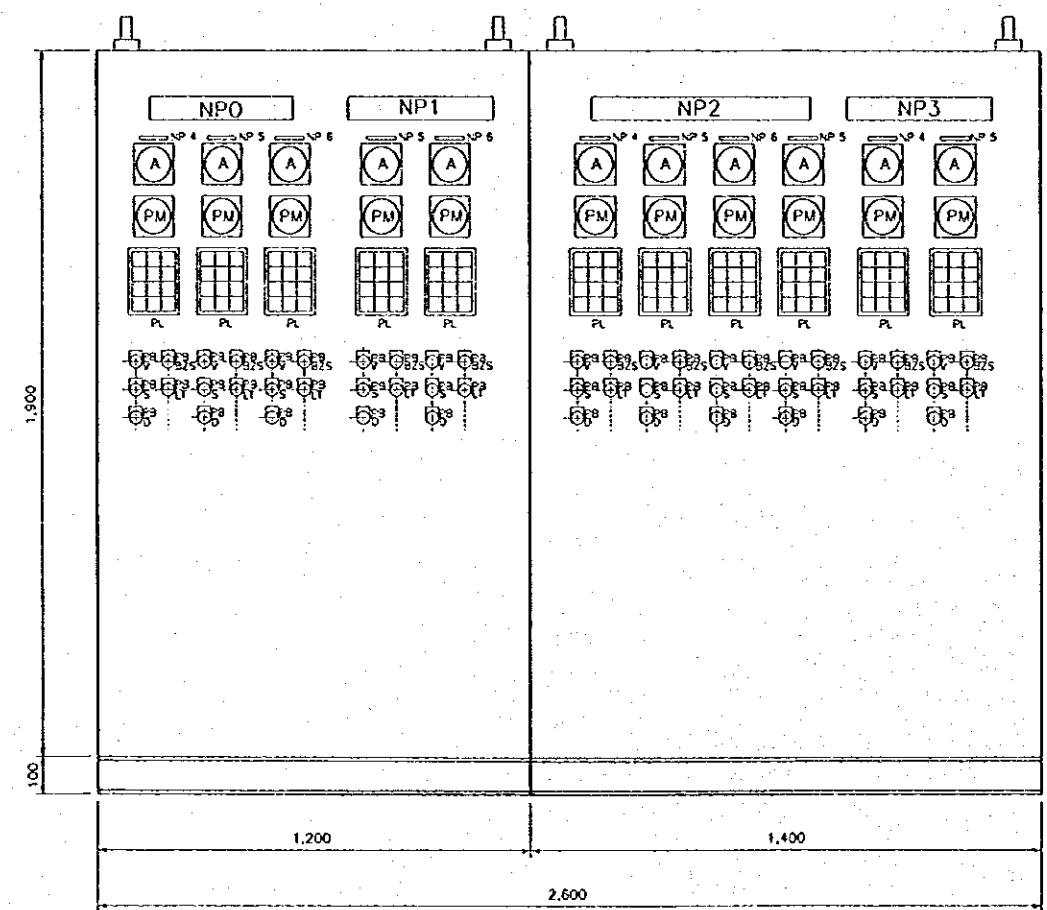


NO	DATE	REVISIONS	ORGANIZED	DESIGNED	APPROVED

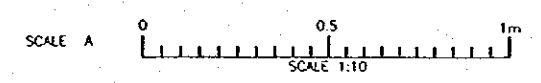
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SINGLE LINE DIAGRAM OF WEIR ELECTRICAL EQUIPMENT		DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY OTE ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL JPB PASCO INTERNATIONAL P.C.		DRAWING NO. WPG-P2-GA-05-1
DESIGNED <i>[Signature]</i>	CHECKED <i>[Signature]</i>	SHEET NO. 116 DATE CONTRACT NO.
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		



SYMBOL	PARTS NAME	Q'TY	REFERENCE
NP 0	NAME PLATE	1	LETTER TO BE INDICATED MAIN FLOOD DISCHARGE GATE
NP 1	"	1	" SEDIMENT FLUSHING GATE
NP 2	"	1	" RIGHT INTAKE GATE
NP 3	"	1	" LEFT INTAKE GATE
NP 4	"	4	" NO.1
NP 5	"	4	" NO.2
NP 6	"	2	" NO.3
NP 7	"	1	" NO.4
PM	POSITION MATER	1	110 D
A	AMMETER	1	CLASS 1.5 1100 0~15/1~45A
PBU	PUSH BUTTON	1	LETTER TO BE INDICATED UP
PBS	"	1	" STOP
PBD	"	1	" DOWN
PBBZS	"	1	" ALARM STOP
PBLT	"	1	" LAMP TEST
PL	INDICATION LAMP	1	3 x 4



COLOR OUT SIDE
IN SIDE



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

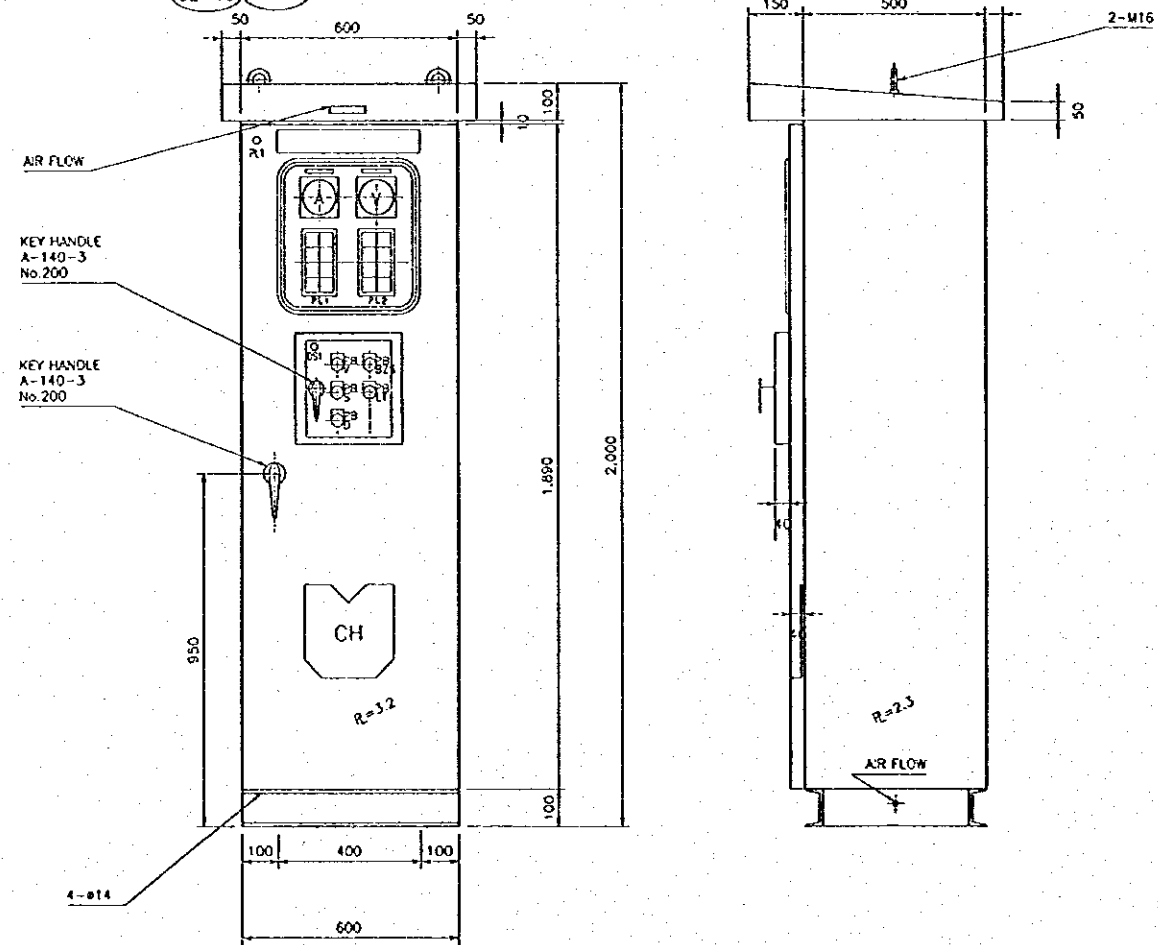
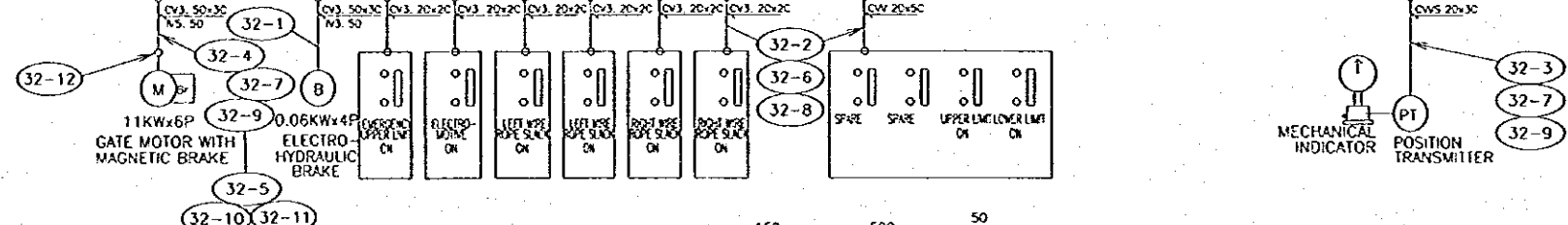
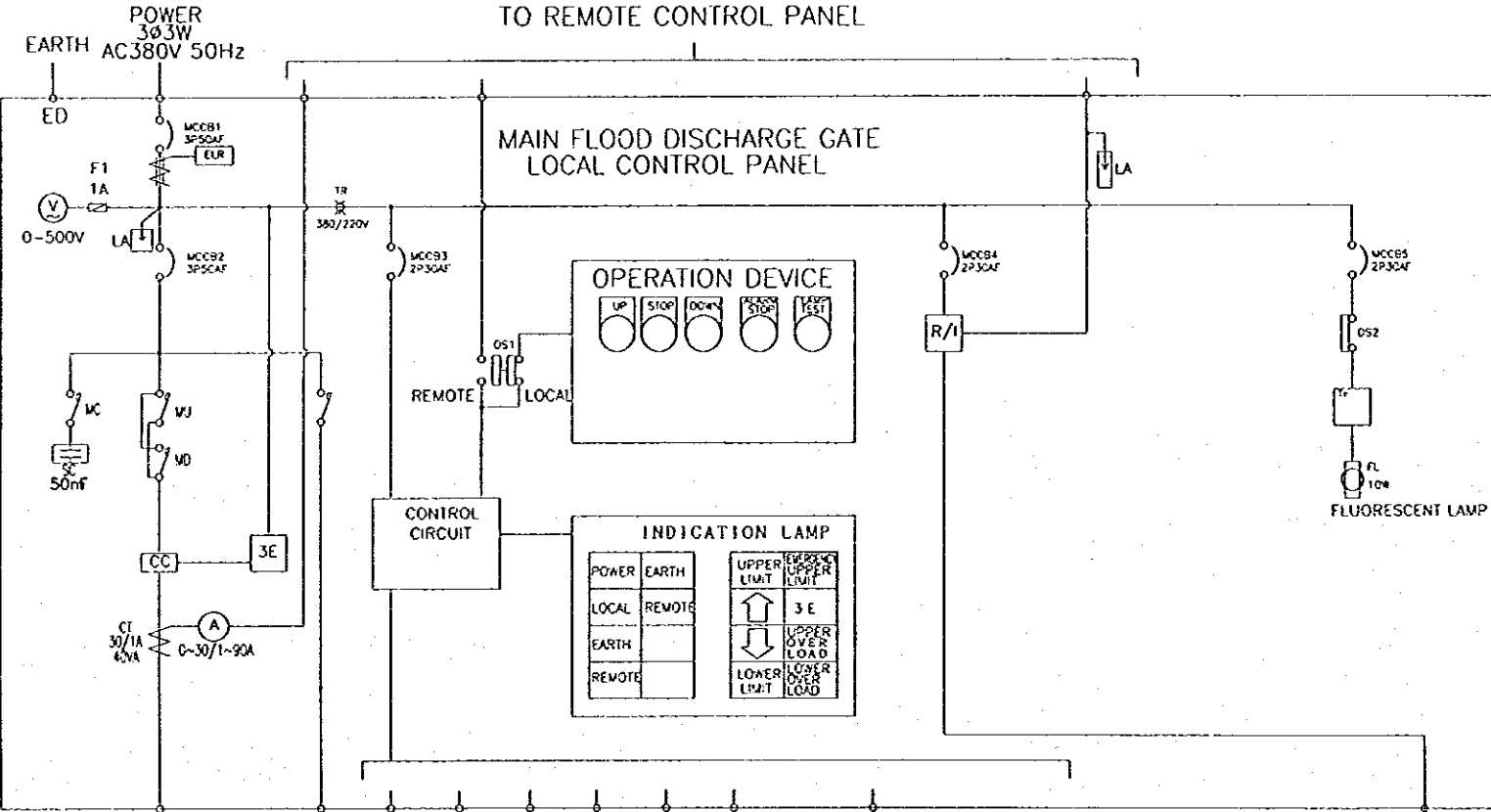
THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

PROVINCE: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URUN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO.: W00-P2-GA-E1-3
SHEET NO.: 117

JRATUNSELUNA FLOOD CONTROL PROJECT
COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT
GATE, GUIDE FRAME AND HOIST
DIAGRAM OF REMOTE GATE CONTROL SYSTEM

DESIGNED: [Signature]
CHECKED: [Signature]
APPROVED: [Signature]

CHIEF OF PLANNING AND DESIGN
PROJECT MANAGER



SYMBOL	PARTS NAME	Q'TY	REFERENCE
NP 0	NAME PLATE	1	LETTER TO BE INDICATED MAIN FLOOD DISCHARGE GATE
NP 1	"	1	" VOLTMETER
NP 2	"	1	" AMMETER
V	VOLTMETER	1	CLASS 1.5 1100 0~500 V
A	AMMETER	1	CLASS 1.5 1100 0~30/1~90A
PBU	PUSH BUTTON	1	LETTER TO BE INDICATED UP
PBS	"	1	" STOP
PBD	"	1	" DOWN
PBBZS	"	1	" ALARM STOP
PBLT	"	1	" LAMP TEST
PL 1	INDICATION LAMP	1	2 x 4
PL 2	"	1	2 x 4
DS 1	DOOR SWITCH	1	REMOTE~LOCAL
DS 2	"	1	FLUORESCENT LAMP

COLOR OUT SIDE
IN SIDE

SCALE A 0 0.5 1m
SCALE 1:10

THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

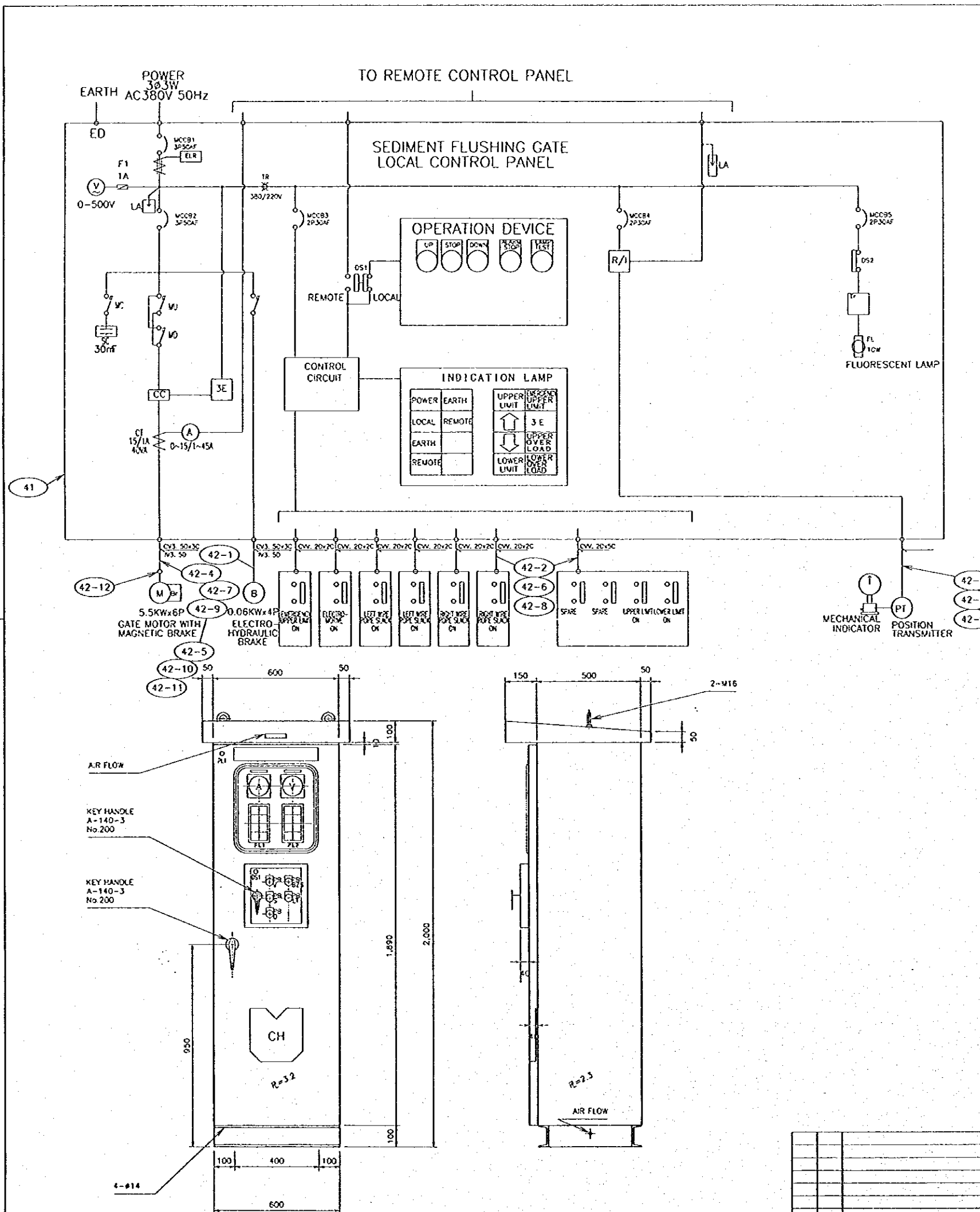
PROVINCE: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO: YG-210-A-474
SHEET NO: III

JAPAN INTERNATIONAL COOPERATION AGENCY
CIE ENGINEERING CO. LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL AND
PASCO INTERNATIONAL ETC.

DESIGNED: [Signature]
CHECKED: [Signature]

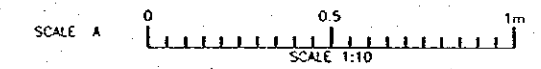
CHIEF OF PLANNING AND DESIGN
PROJECT MANAGER

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

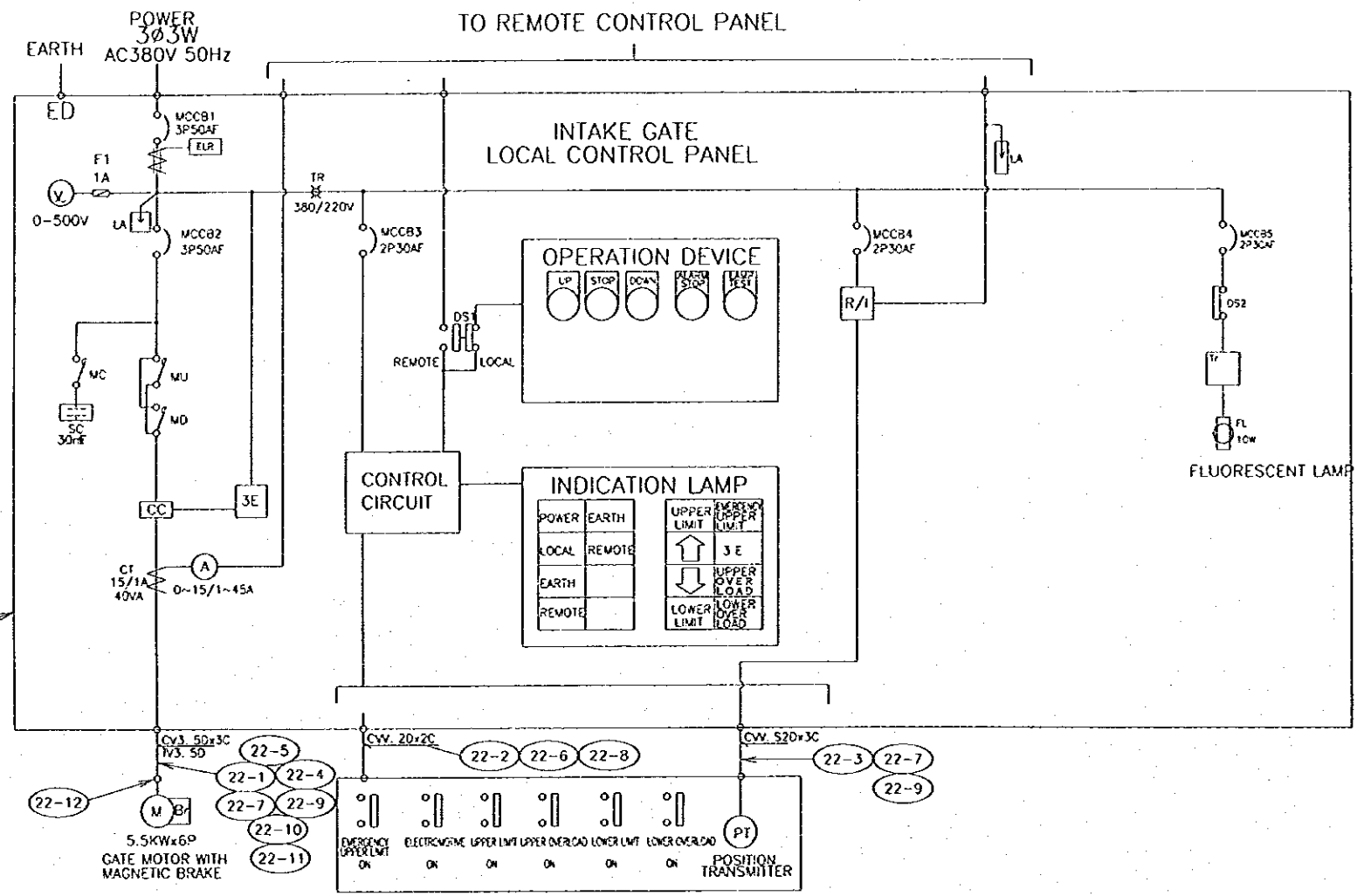


SYMBOL	PARTS NAME	Q'TY	REFERENCE
NP 0	NAME PLATE	1	LETTER TO BE INDICATED SEDIMENT FLUSHING GATE
NP 1	"	1	" VOLTMETER
NP 2	"	1	" AMMETER
V	VOLTMETER	1 1	CLASS 1.5 110D 0~500 V
A	AMMETER	1 1	CLASS 1.5 110D 0~15/1~45A
PBU	PUSH BUTTON	1 1	LETTER TO BE INDICATED UP
PBS	"	1 1	" STOP
PBD	"	1 1	" DOWN
PBBZS	"	1 1	" ALARM STOP
PBLT	"	1 1	" LAMP TEST
PL 1	INDICATION LAMP	1	2 x 4
PL 2	"	1	2 x 4
DS 1	DOOR SWITCH	1	REMOTE~LOCAL
DS 2	"	1	FLUORESCENT LAMP

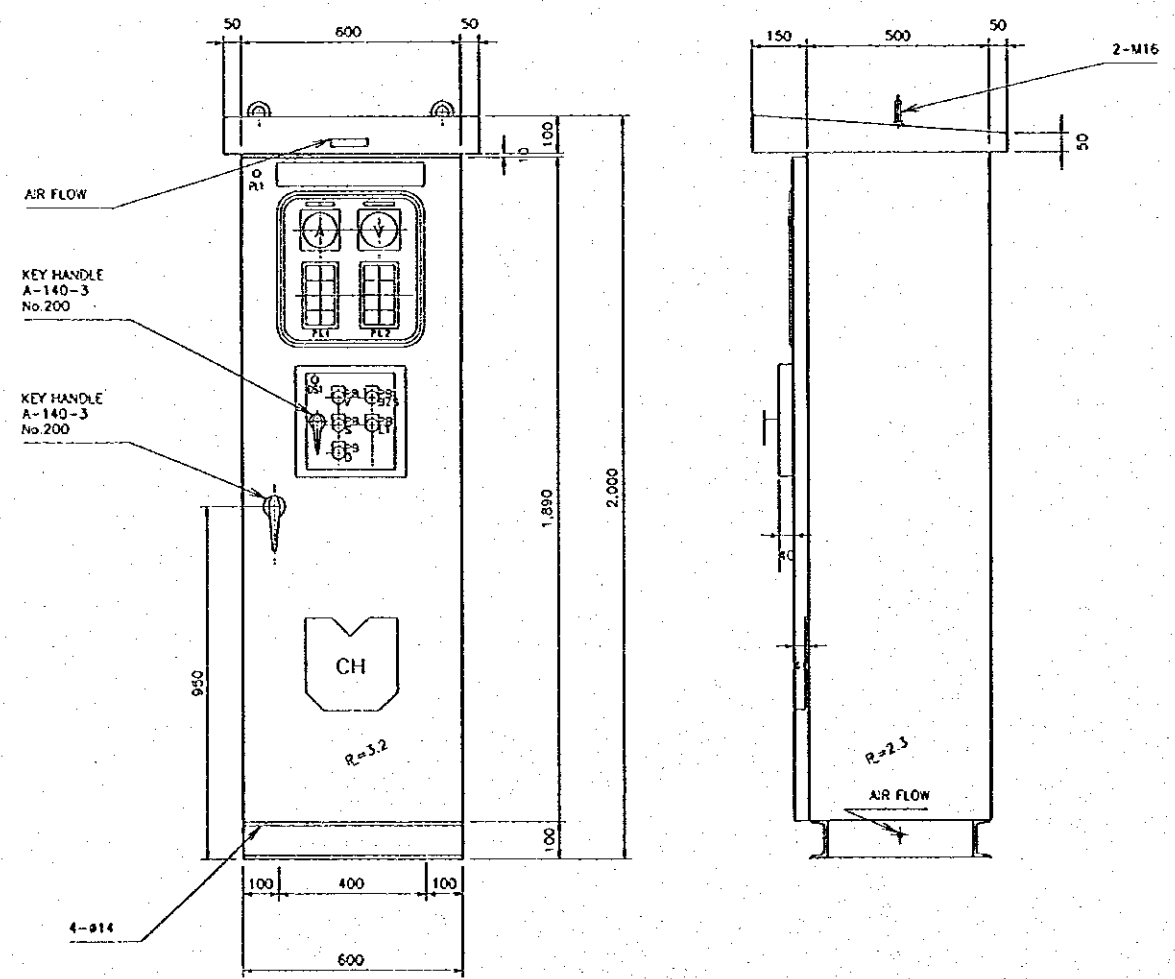
COLOR OUT SIDE
IN SIDE



THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANO RIVER IMPROVEMENT GATE, GUIDE FRAME AND HOIST DIAGRAM OF LOCAL GATE CONTROL SYSTEM (2/3)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO MW-P2-GA-B15 SHEET NO 111
LOYAN INTERNATIONAL COOPERATION PROJECT CITI ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PABO INTERNATIONAL INC.	DESIGNED CHECKED	DATE CONTRACT NO
NO. DATE REVISIONS	ORIGINATED DESIGNED APPROVED	APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER



SYMBOL	PARTS NAME	Q'TY	REFERENCE
NP 0	NAME PLATE	1	LETTER TO BE INDICATED INTAKE GATE
NP 1	"	1	" VOLTMETER
NP 2	"	1	" AMMETER
V	VOLTMETER	1	CLASS 1.5 1100 0~500 V
A	AMMETER	1	CLASS 1.5 1100 0~15/1~45A
PBU	PUSH BUTTON	1	LETTER TO BE INDICATED UP
PBS	"	1	" STOP
PBD	"	1	" DOWN
PBBZS	"	1	" ALARM STOP
PBLT	"	1	" LAMP TEST
PL 1	INDICATION LAMP	1	2 x 4
PL 2	"	1	2 x 4
DS 1	DOOR SWITCH	1	REMOTE~LOCAL
DS 2	"	1	FLUORESCENT LAMP



COLOR OUT SIDE
IN SIDE

SCALE A 0 0.5 1m
SCALE 1:10

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
BRATUNJELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA
GATE, GUIDE FRAME AND HOIST DIAGRAM OF LOCAL GATE CONTROL SYSTEM (3/3)		DISTRICT SEMARANG CITY
TAPAN INTERNATIONAL CORPORATION AGENCY CTE ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FALCO INTERNATIONAL INC.		DRAWING NO W0-P2-GA-B14
DESIGNED CHECKED		SHEET NO. 120
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DATE CONTRACT NO.

NO	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED