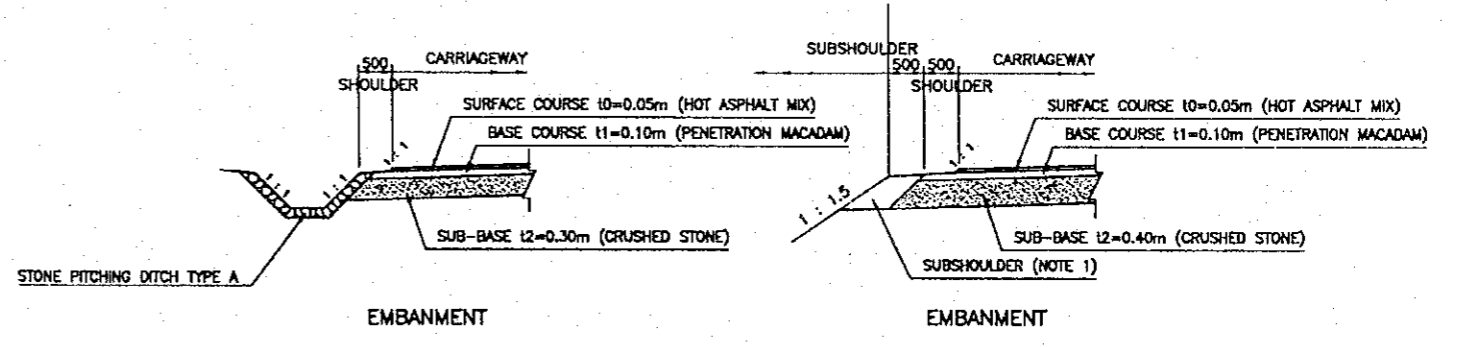
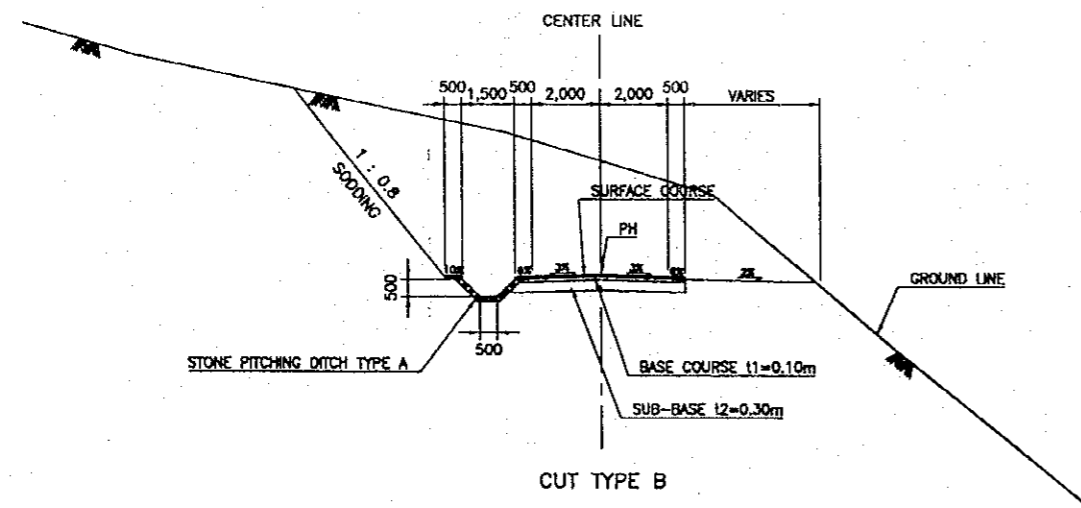
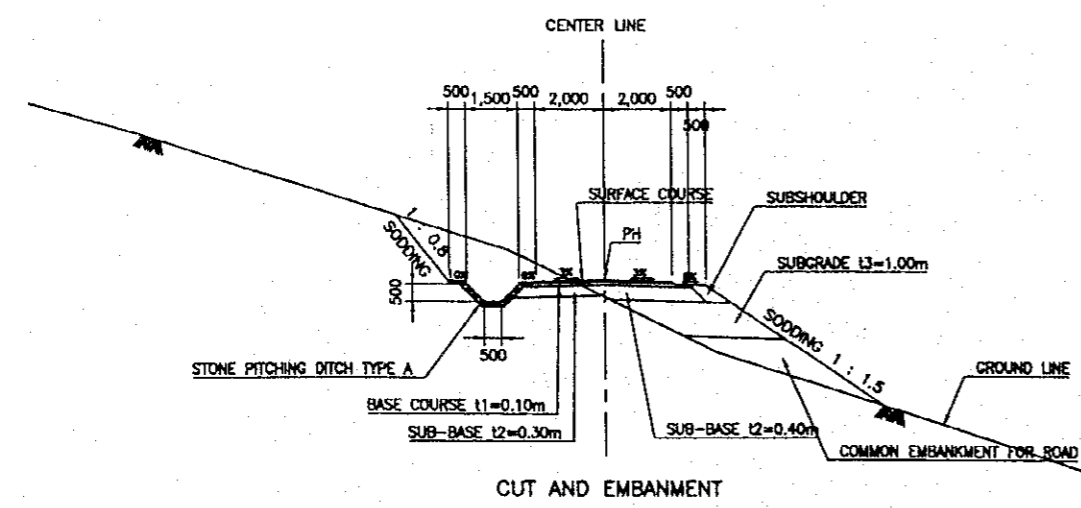


TYPICAL CROSS SECTION
SCALE A

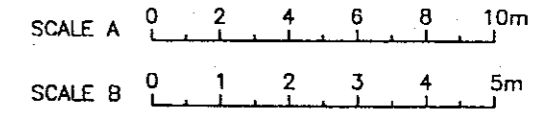


DETAIL OF PAVEMENT STRUCTURE
SCALE B



TYPICAL CROSS SECTION
SCALE A

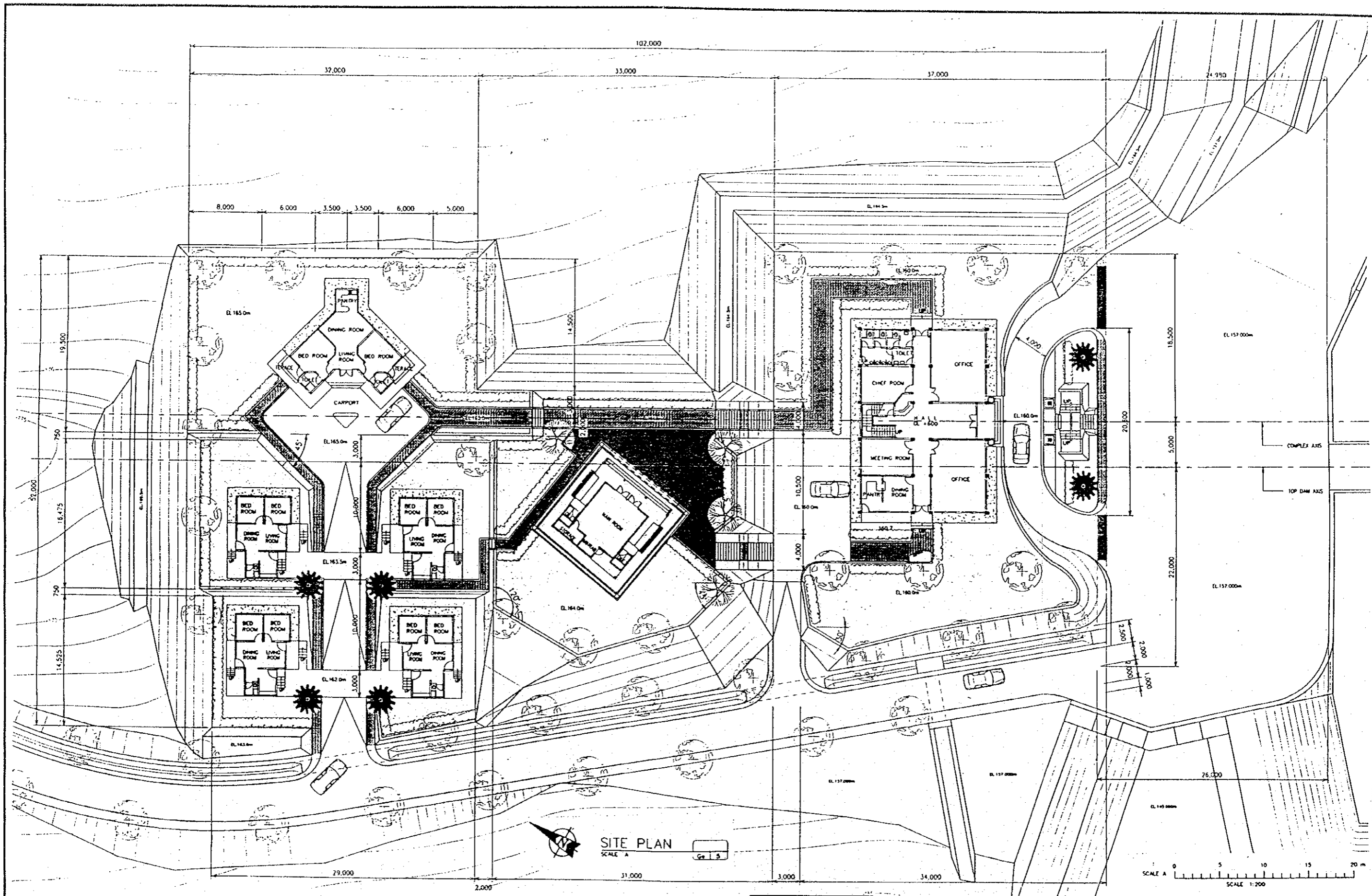
- NOTES
1. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
 2. SUBSHOULDER SHALL BE MADE OF SAME MATERIAL WITH SUBGRADE.



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

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Fig. 7.8.2
TYPICAL CROSS SECTION OF ACCESS ROAD



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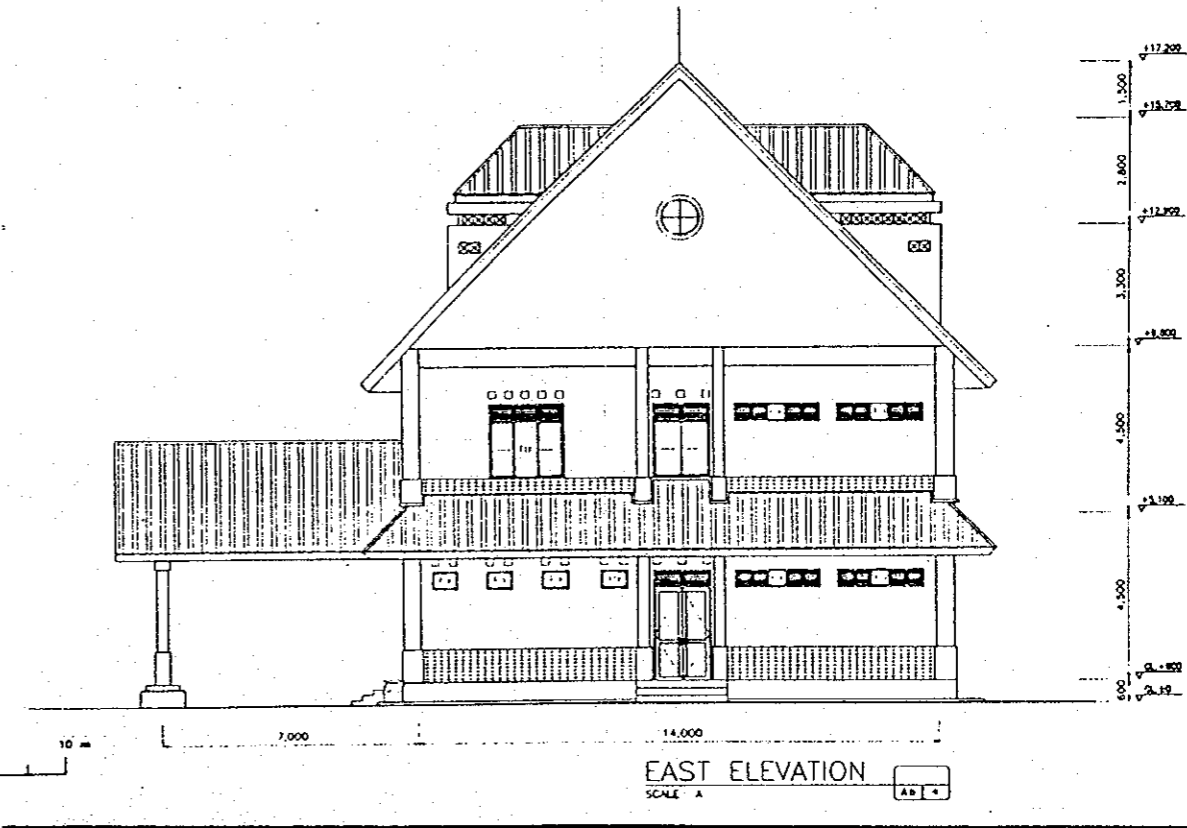
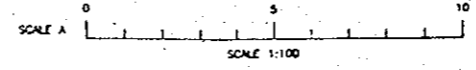
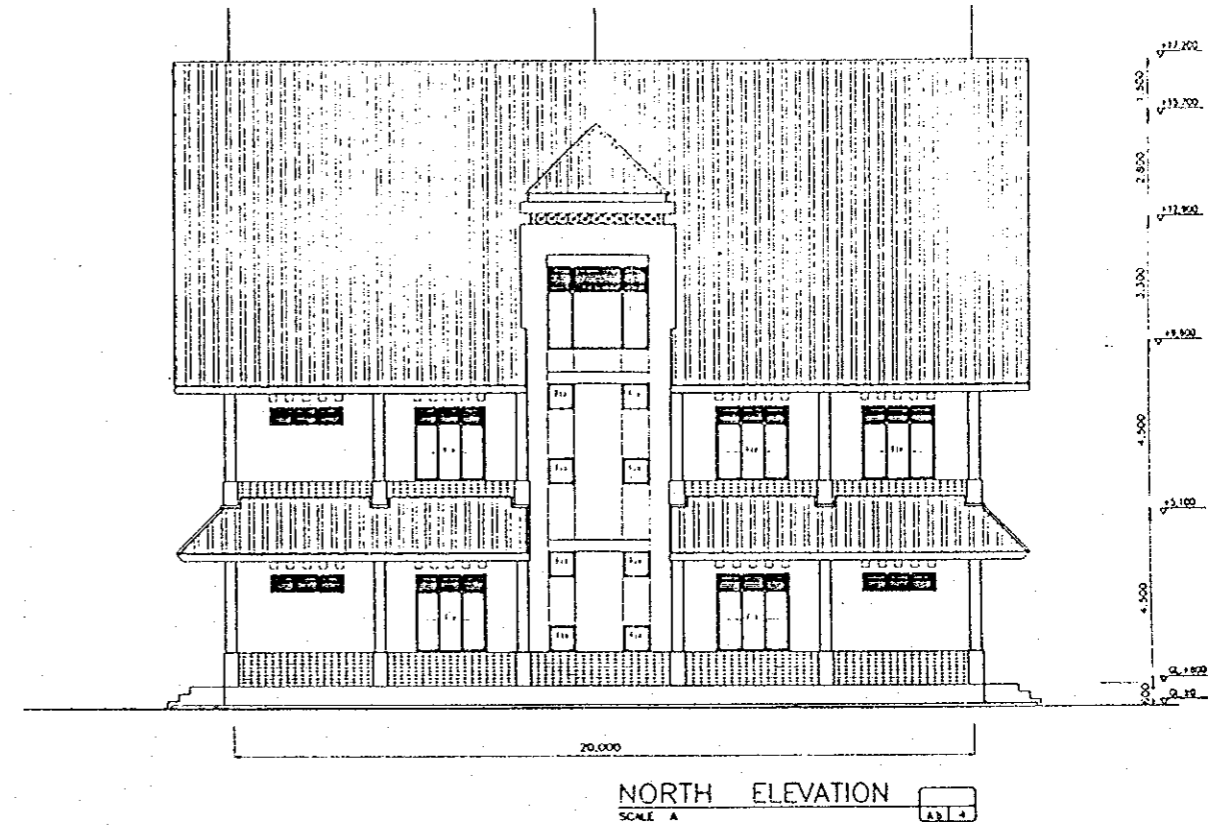
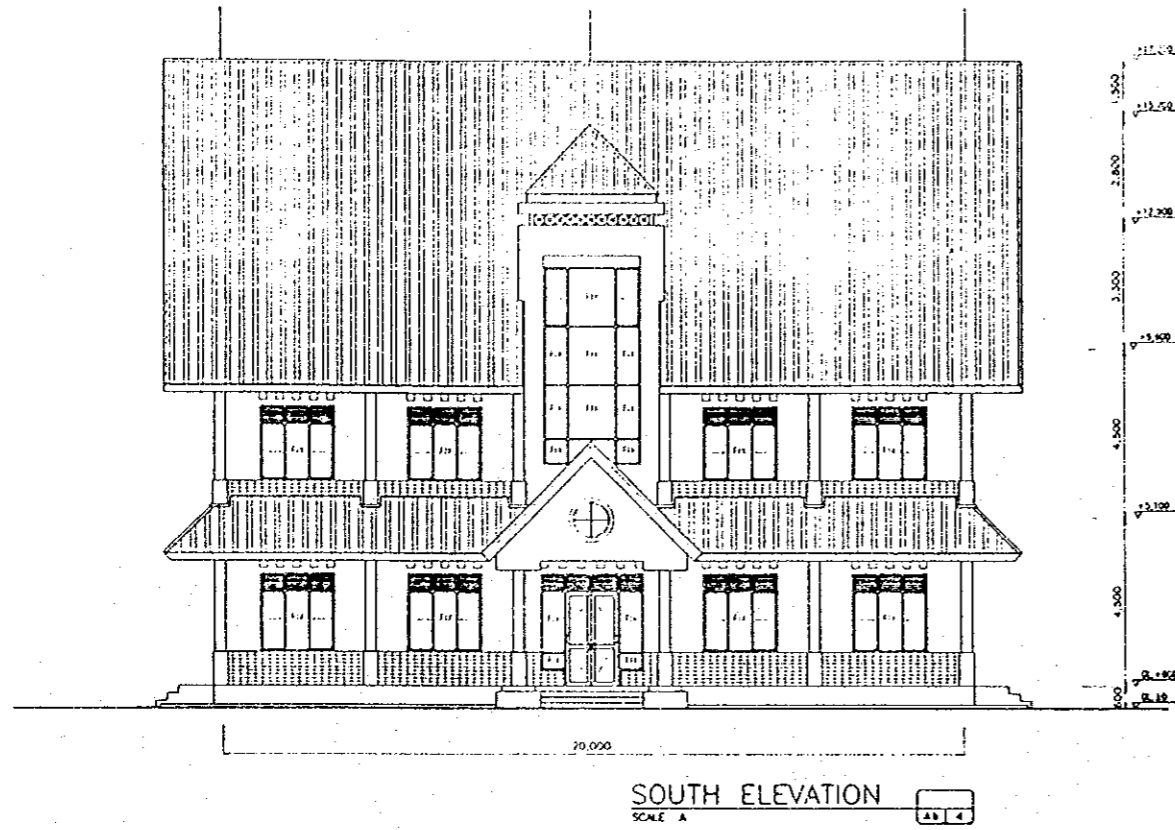
Fig. 7.9.1
SITE PLAN OF DAM MANAGEMENT COMPLEX

FLOOR AREA TABLE

ADMINISTRATION BUILDING, 1st. FLOOR				ADMINISTRATION BUILDING, 2nd. FLOOR				ADMINISTRATION BUILDING, 3rd. FLOOR								
CODE		FLOOR AREA		CODE		FLOOR AREA		CODE		FLOOR AREA						
1	H	HALL	4,000x8,000	36,000 M ²	1	O	HALL	4,000x4,000	16,000 M ²	1	W	WATCHING ROOM	9,000x4,000	36,000 M ²		
2	O	OFFICE	2(5,000x8,000)	96,000 M ²	2	O1	OFFICE 1	2(4,000x8,000)	144,000 M ²	2	St	STAIRS ROOM	4,000x4,000	16,000 M ²		
3	Ch	CHEF ROOM	8,000x4,000	24,000 M ²	3	O2	OFFICE 2	8,000x4,000	24,000 M ²							
4	G	GUEST ROOM	6,000x4,000	24,000 M ²	4	Co	CORRIDOR	2(7,300x2,000)	29,200 M ²							
5	Kd	KITCHEN, DINING	6,000x4,000	24,000 M ²	5	L	LAVATORY	8,000x4,000	24,000 M ²							
6	L	LAVATORY	8,000x4,000	24,000 M ²	6	St	STAIRS ROOM	4,000x4,000	16,000 M ²							
7	St	STAIRS ROOM	4,000x4,000	16,000 M ²												
8	Co	CORRIDOR	2(7,300x2,000)	29,200 M ²												
9	Ch	CANOPY	(8,000x4,000)/3	10,670 M ²												
10	Te	TERRACE	[(2,000x2,700)+(2,000x2,700)+(6,000x1,000)]/3	4,940 M ²												
TOTAL			±288,810 M ²		TOTAL			±253,200 M ²		TOTAL			±52,000 M ²			
TOTAL BUILDING AREA ±594,010 M ²																
STAFF HOUSE 1 (GUEST HOUSE)				STAFF HOUSE 2-4				MUSHOLLA								
CODE		FLOOR AREA		CODE		FLOOR AREA		CODE		FLOOR AREA						
1	B	BED ROOM	(8,800x4,500)+(4,000x4,500)+2(1,200x2,000)	63,750 M ²	1	B	BED ROOM	2(3,000x3,000)	18,000 M ²	1	M	MAIN ROOM	(6,000x6,000)+(2,000x1,500)	39,000 M ²		
2	D	DINING ROOM			2	D	DINING ROOM	(3,000x3,000)+(1,500x1,500)	11,250 M ²	2	T	TOILET	2(2,000x1,500)	6,000 M ²		
3	L	LIVING ROOM			3	L	LIVING ROOM	3,000x2,500	7,500 M ²	3	W	WASH ROOM	2(3,500x2,000)	14,000 M ²		
4	T	TOILET			4	T	TOILET	1,500x1,500	2,250 M ²	4	St	STORAGE	(2,000x1,500)+(1,500x1,000)	4,500 M ²		
5	P	PANTRY	2,500x2,500	6,250 M ²	5	K	KITCHEN	2,000x3,000	6,000 M ²	5	Te	TERRACE	[(2,100x8,000)+(1,000x1,500)+(1,000x1,500)+(2,000x1,500)+(1,500x1,000)]/3	8,800 M ²		
6	Te	TERRACE	[2(2,500x1,200)+(2,500x2,000)+(1,500x1,500)]/3	4,416 M ²	6	Te	TERRACE	[(3,000x1,500)+(4,200x900)+(2,700x900)+(1,800x900)]/3	4,110 M ²							
TOTAL			±74,416 M ²		TOTAL (4 UNIT)			±196,440 M ²		TOTAL			±72,300 M ²			
GRAND TOTAL			±937,166 M ²													

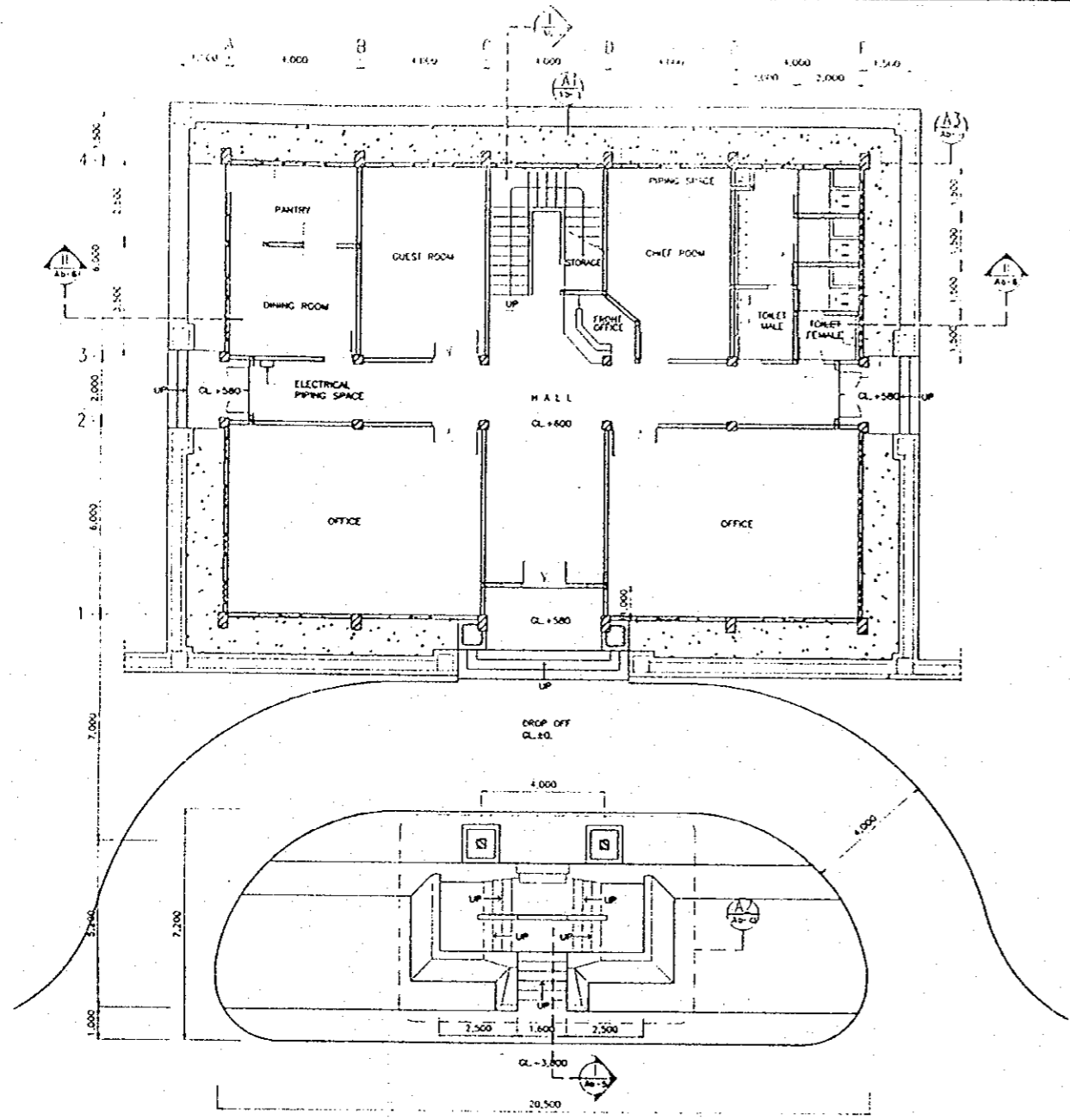
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 7.9.2
FLOOR AREA TABLE OF DAM MANAGEMENT COMPLEX

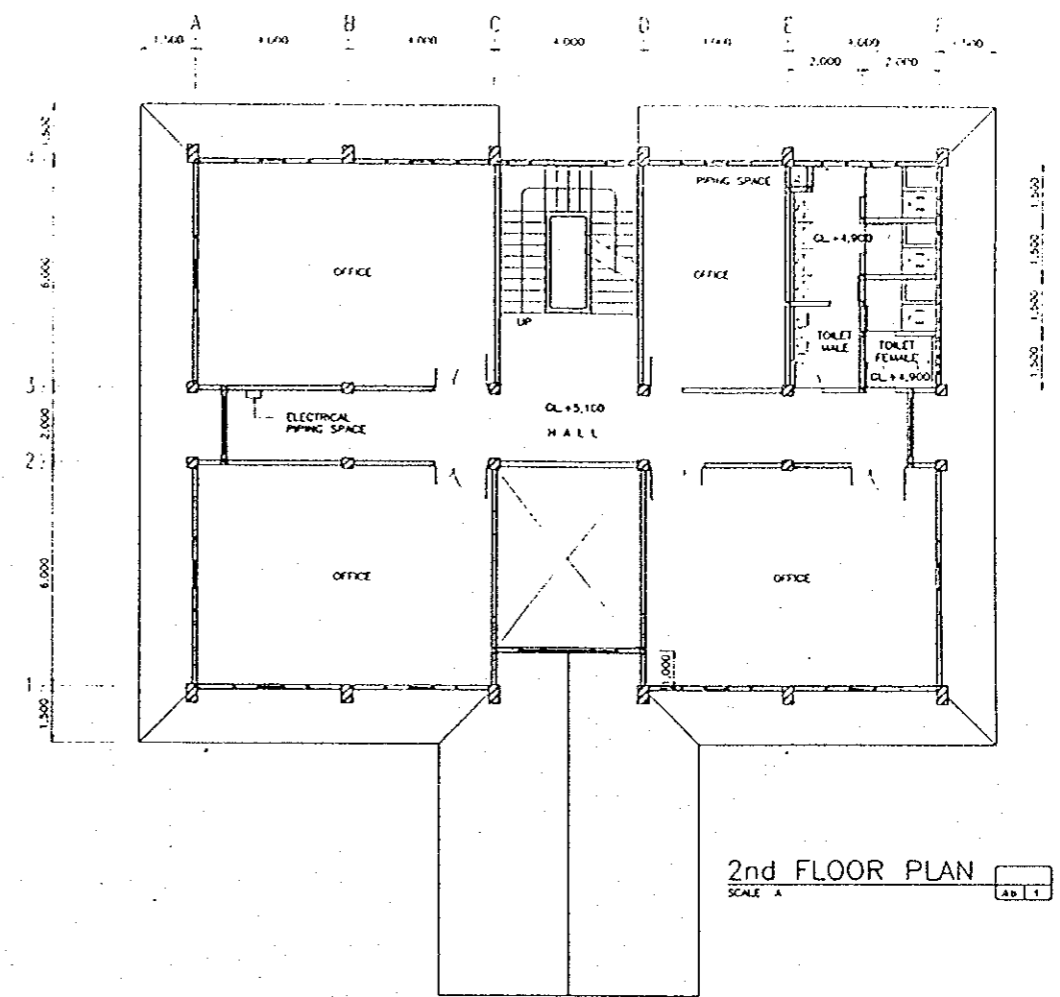


THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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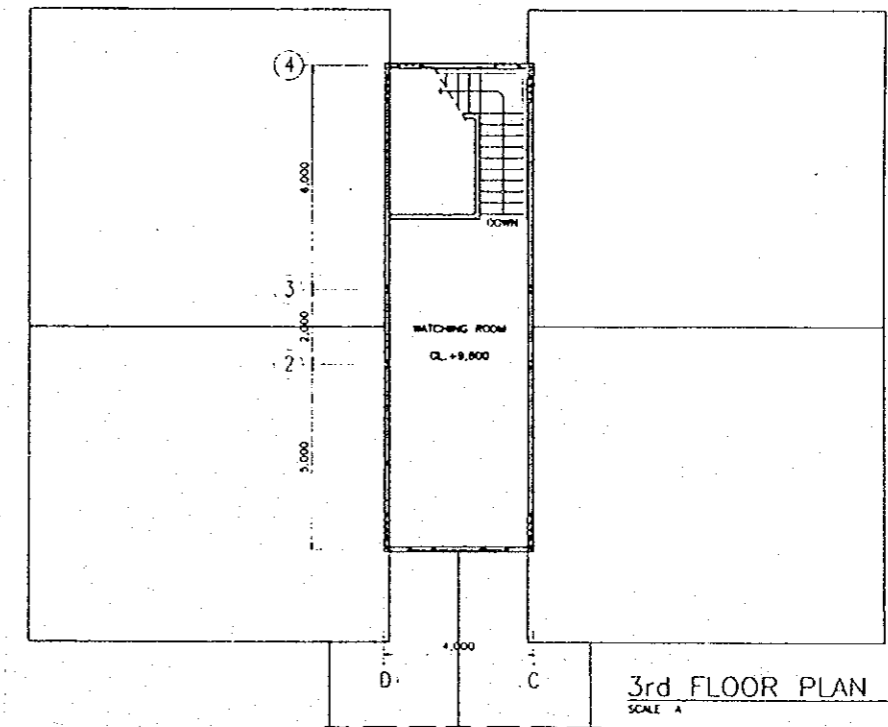
Fig. 7.9.3
 ELEVATION OF DAM ADMINISTRATION BUILDING



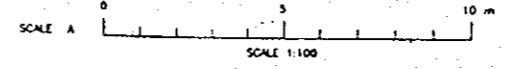
1st FLOOR PLAN
SCALE A



2nd FLOOR PLAN
SCALE A

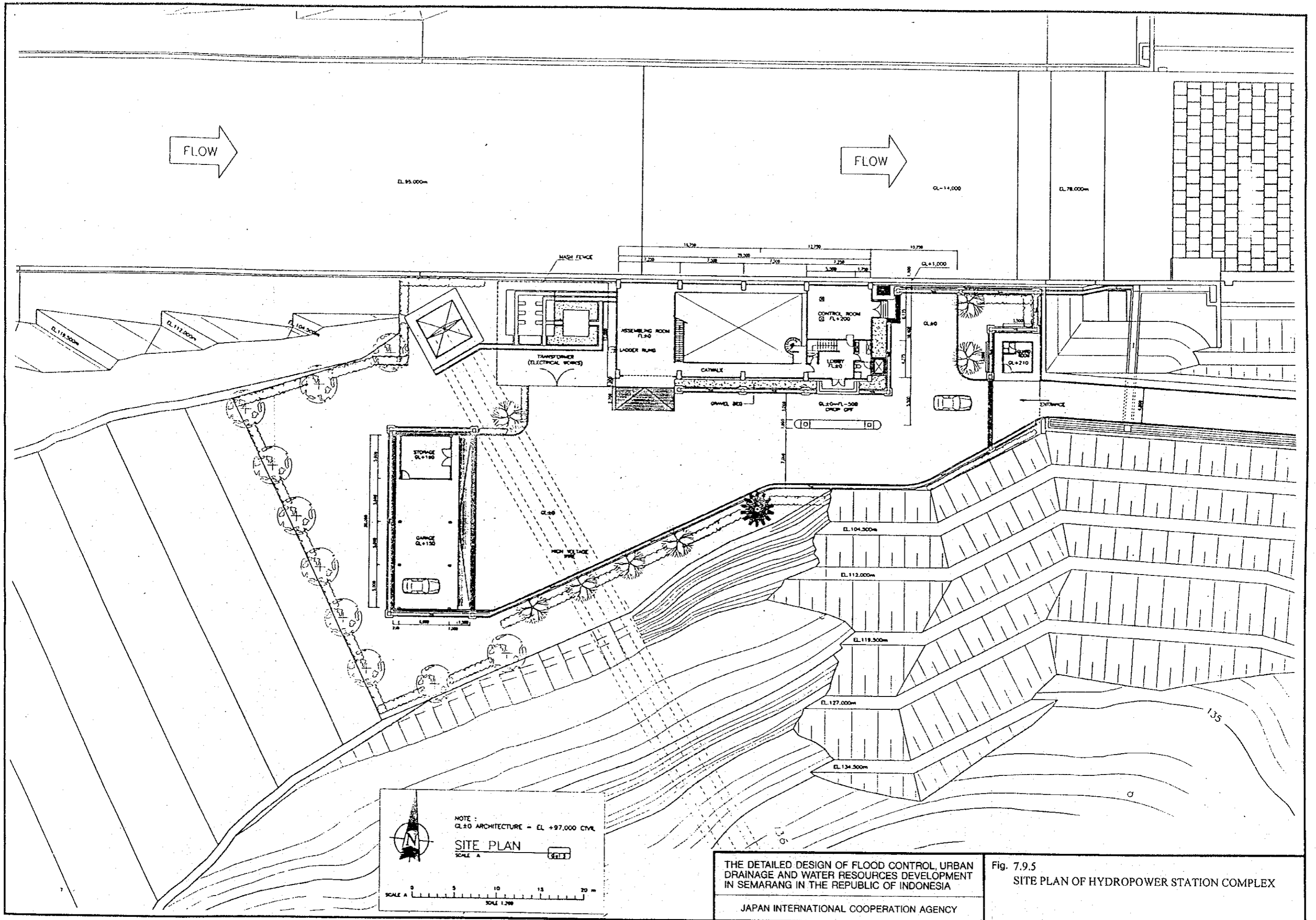


3rd FLOOR PLAN
SCALE A



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 7.9.4
FLOOR PLAN OF DAM ADMINISTRATION BUILDING



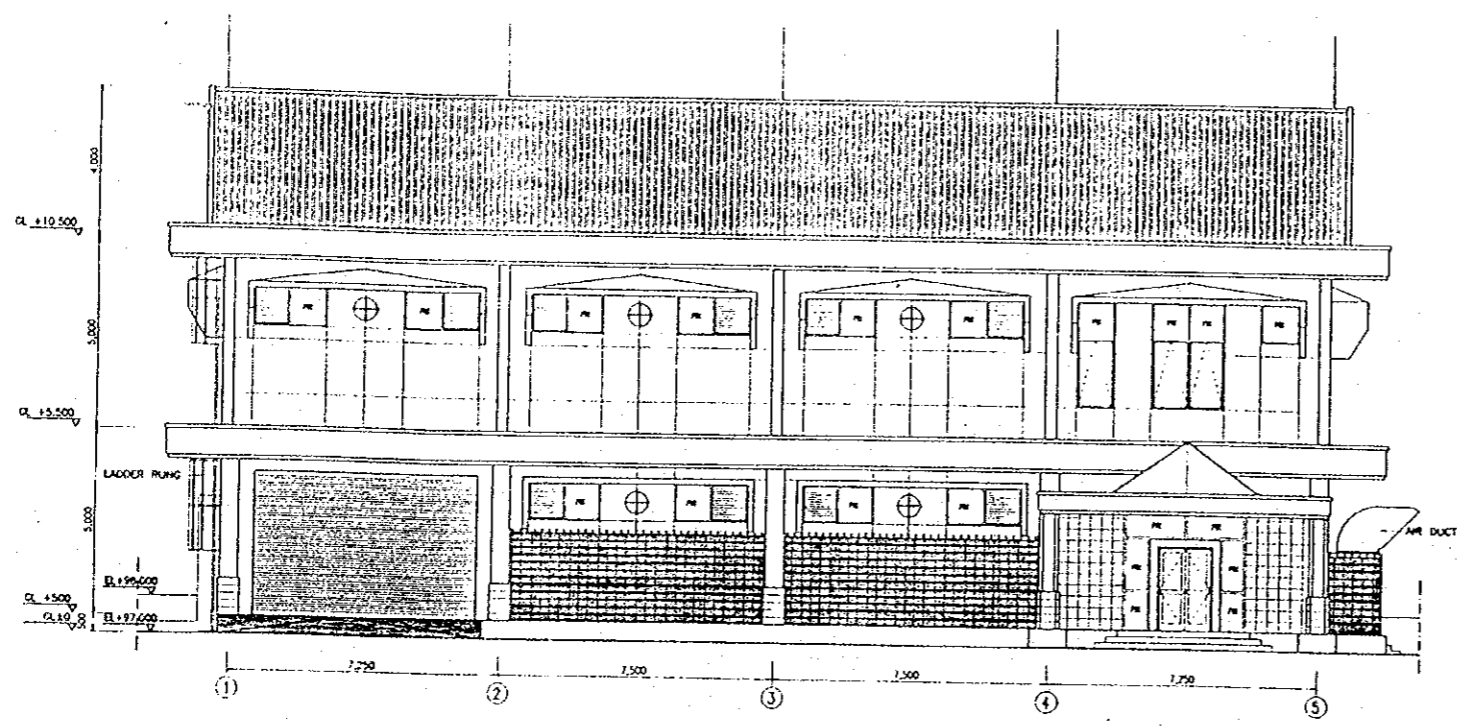
THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 7.9.5
 SITE PLAN OF HYDROPOWER STATION COMPLEX

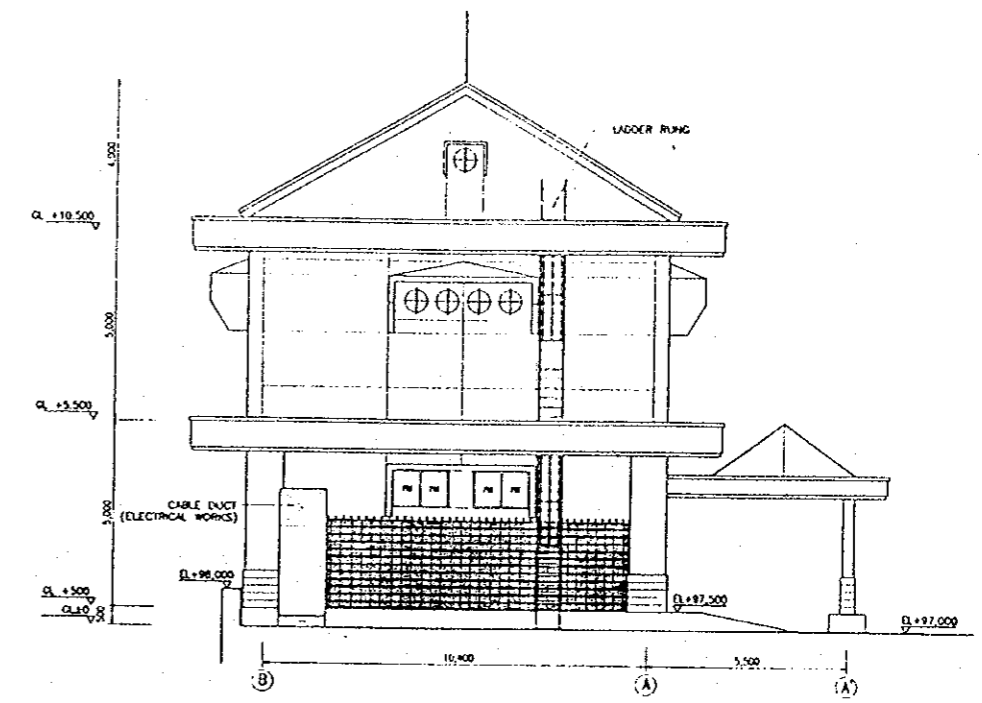
FLOOR AREA TABLE

HYDROPOWER STATION BUILDING, 1st. FLOOR				HYDROPOWER STATION BUILDING, 2nd FLOOR				GARAGE				GUARD HOUSE							
CODE		FLOOR AREA		CODE		FLOOR AREA		CODE		FLOOR AREA		CODE		FLOOR AREA					
1	EST	ENTRANCE STAIRS	$(500 \times 1,500 \times 2) + (3,500 \times 600 \times 1) + (2,000 \times 1,250)$	6,460 M ²	1	CO	CONTROL OFFICE	$(1,200 \times 1,600) + (4,000 \times 2,900) + (6,500 \times 7,500)$	62,270 M ²	1	ST	STORAGE	5,000 x 6,000	30,000 M ²	1	GR	GUARD ROOM	3,500 x 3,500	12,250 M ²
2	T*	TERRACE	$(1,100 \times 3,500 \times 1) + (1,000 \times 2,000)$	5,850 M ²	2	DP	DINING ROOM + PANTRY	4,500 x 2,000	9,000 M ²	2	RU	RAMP	20,000 x 1,500	30,000 M ²	2	T	TOILET	1,350 x 1,500	2,025 M ²
3	L	LOBBY	$(1,850 \times 1,350) + (3,500 \times 3) + (1,800 \times 1,500)$	16,007.5 M ²	3	OSI	OFFICE STAIRS	$(1,350 \times 3,150) + (1,350 \times 3,600)$	9,110 M ²	3	C	GARAGE	$(6,000 \times 15,000) + (880 \times 20,000) + (1,000 \times 20,000)$	123,600 M ²					
4	Lr	LOCKER ROOM	2,500 x 2,000	5,000 M ²															
5	T	TOILET	2,000 x 2,000	4,000 M ²															
6	CR	CONTROL ROOM	7,500 x 6,225	46,888 M ²															
7	Cw	CATWALK	$(1,750 \times 15,700) + (1,150 \times 15,700)$	45,530 M ²															
8	AR	ASSEMBLING ROOM	15,700 x 6,900	108,330 M ²															
9	AT*	ASSEMBLING TERRACE	1,200 x 7,000	8,400 M ²															
10	ST	STORAGE	2,780 x 1,350	3,753 M ²															
11	OSI	OFFICE STAIRS	$(2 \times 3,500 \times 1,200) + (2,000 \times 1,200)$	11,040 M ²															
12	C	CANOPY	$(7,250 \times 3) + (1,500 \times 2,45 \times 2)$	29,100 M ²															
13	R	RAMP UP	2,700 x 7,000	18,900 M ²															
1 st. FLOOR TOTAL				±309,260 M²	2 nd. FLOOR TOTAL				±80,380 M²	TOTAL				±183,600 M²	TOTAL				±14,275 M²
TOTAL				±389,640 M²	TOTAL				±183,600 M²	TOTAL				±14,275 M²					

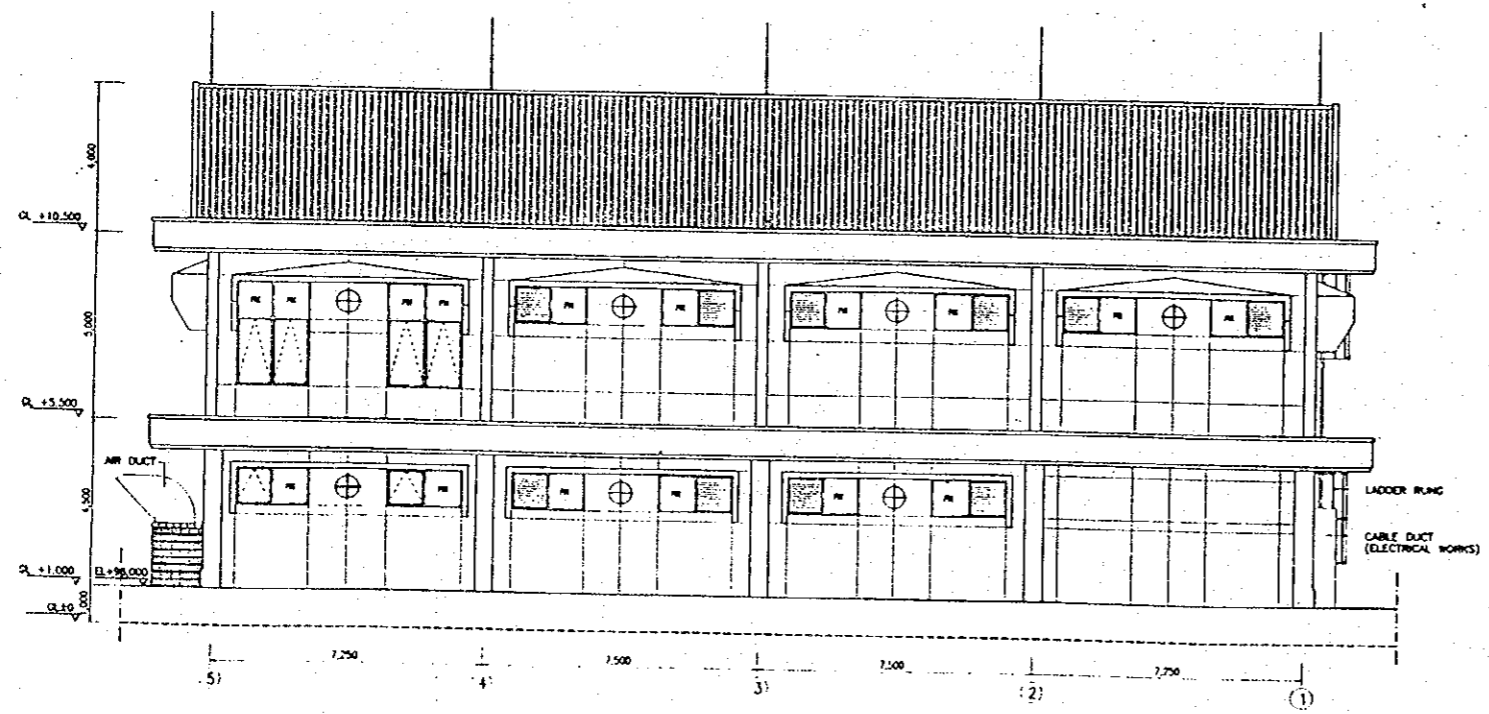
GRAND TOTAL ±587,515 M²



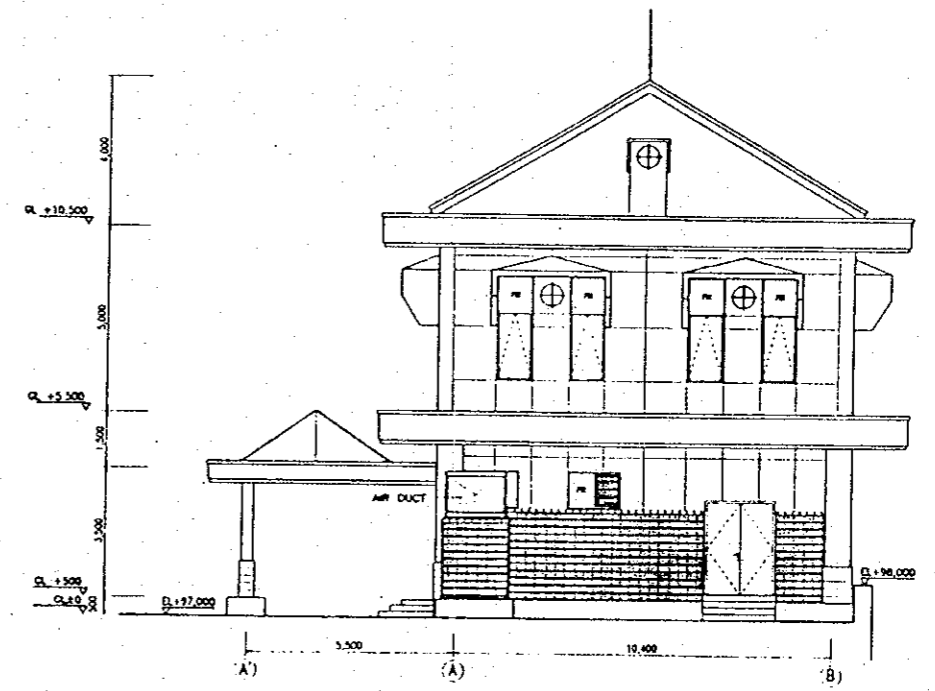
SOUTH ELEVATION
SCALE A



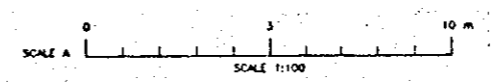
WEST ELEVATION
SCALE A



NORTH ELEVATION
SCALE A

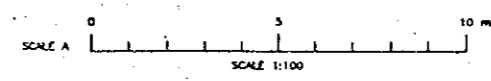
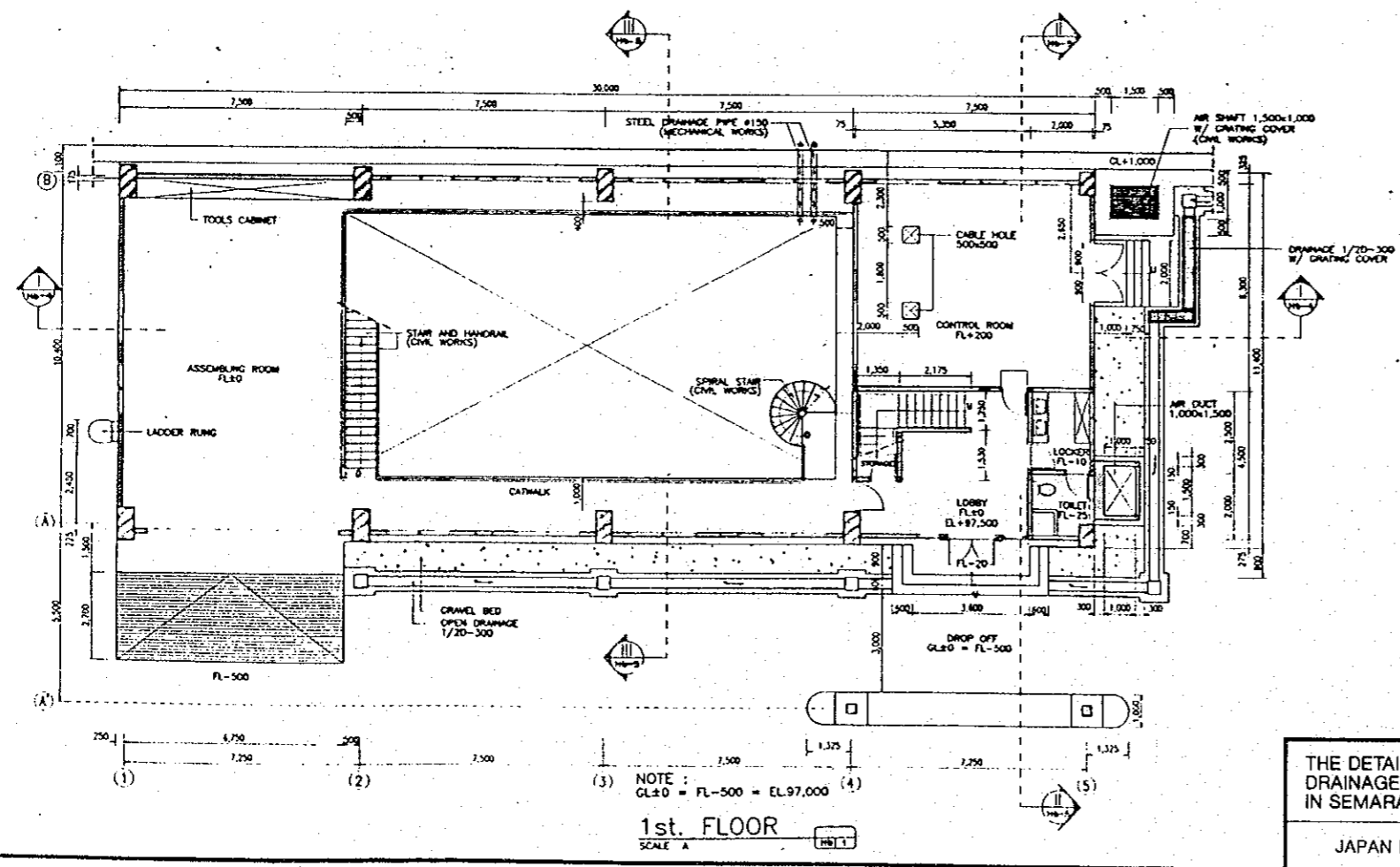
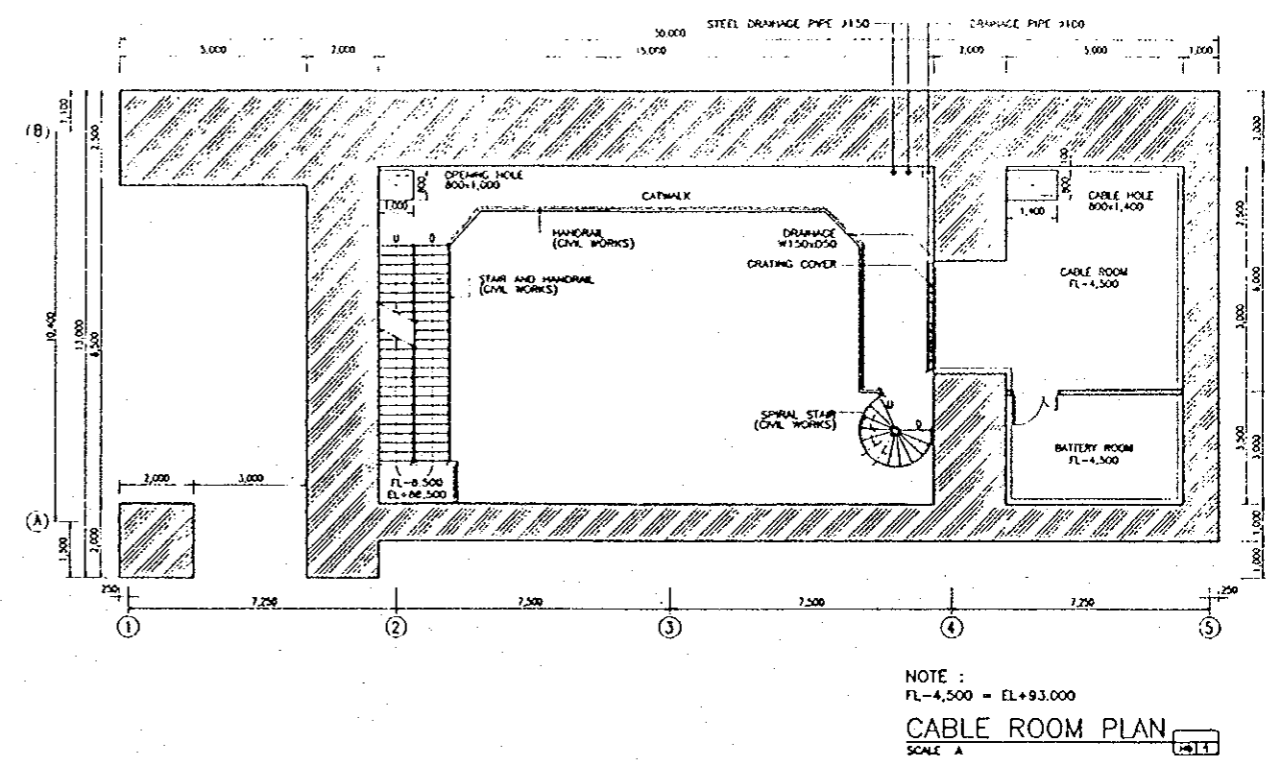
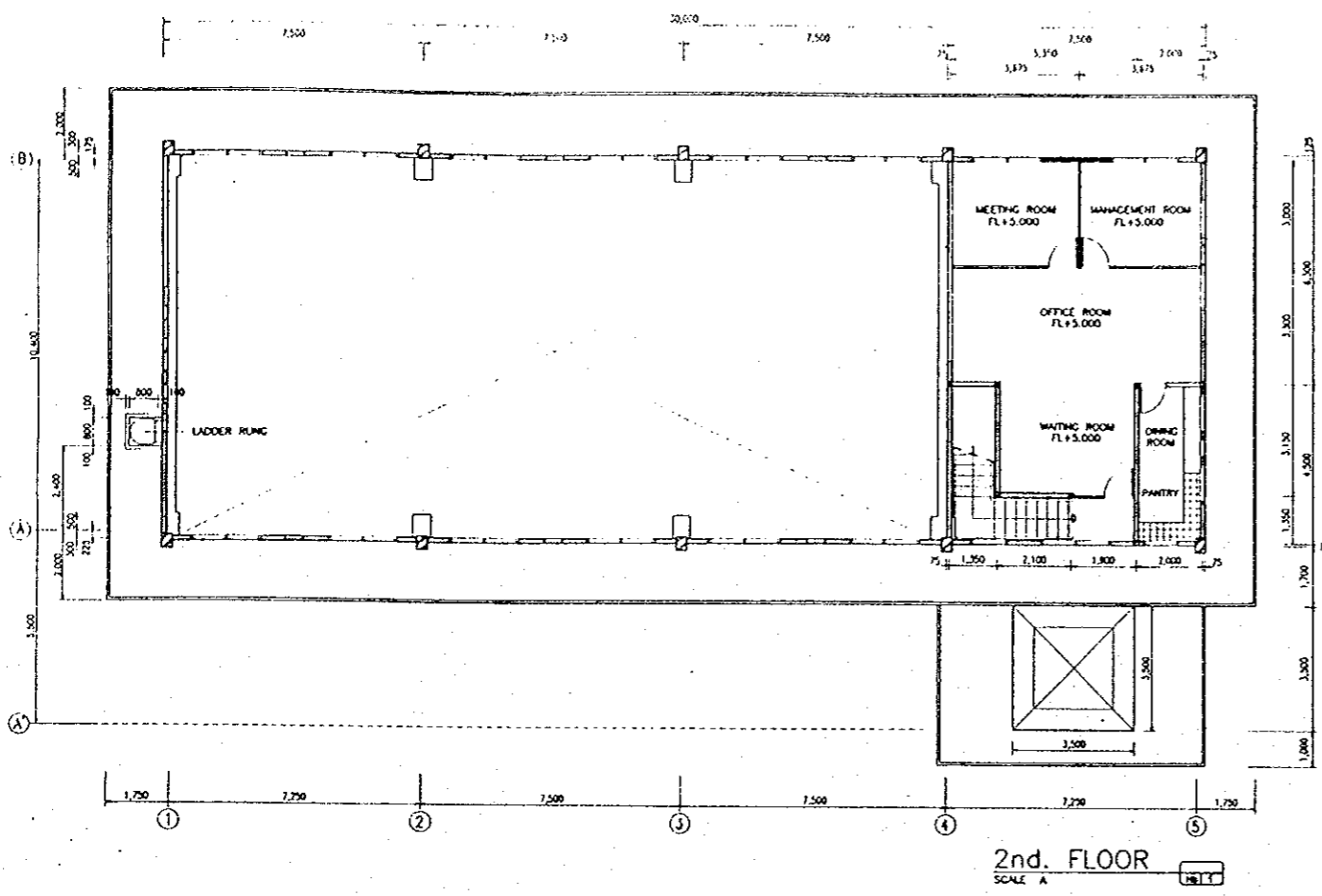


EAST ELEVATION
SCALE A



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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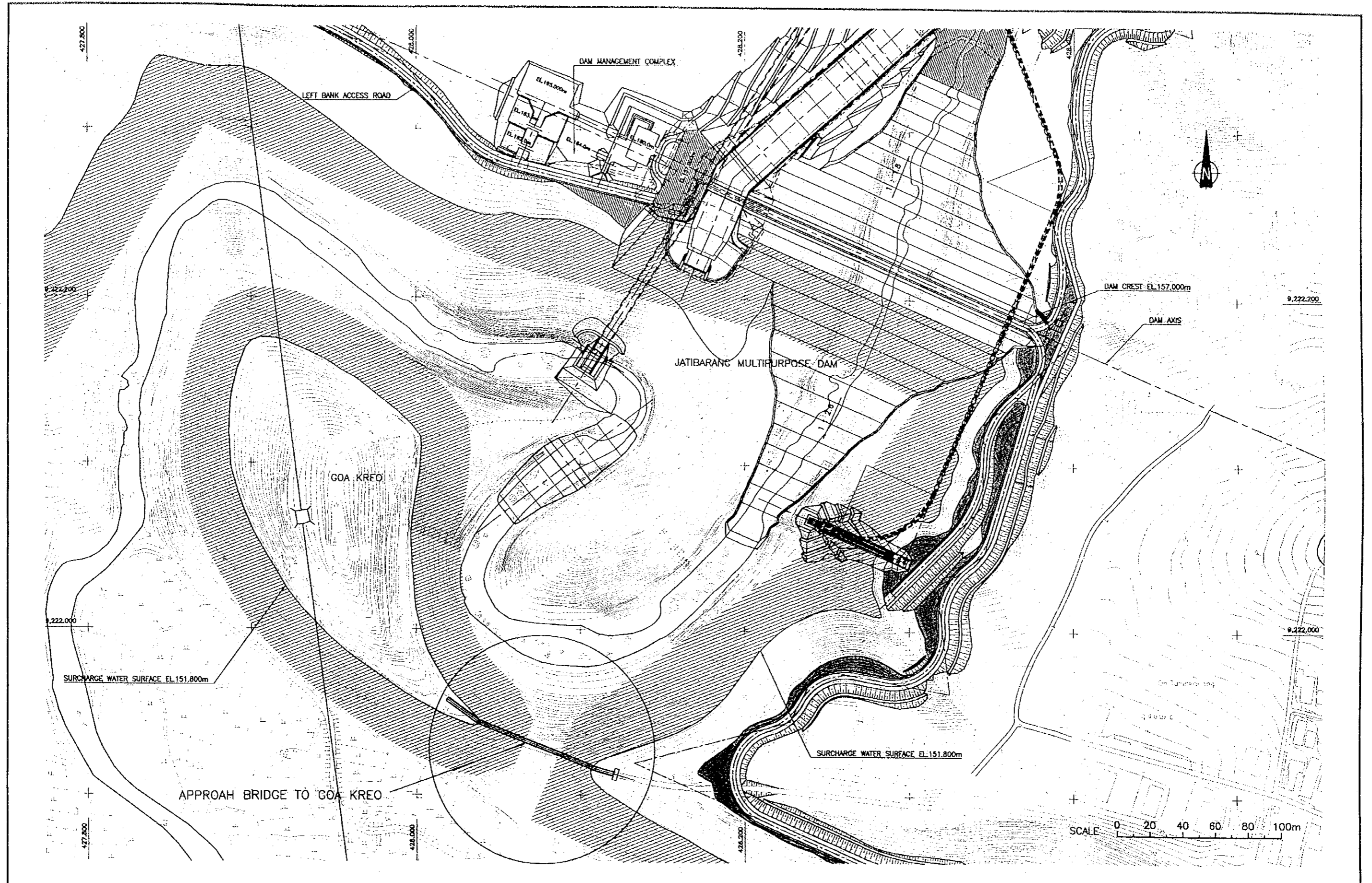
Fig. 7.9.7
ELEVATION OF HYDROPOWER STATION BUILDING



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

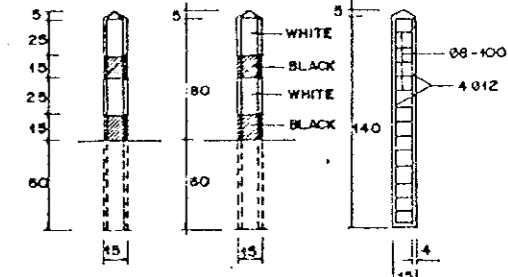
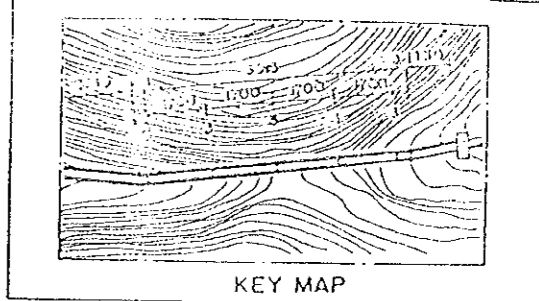
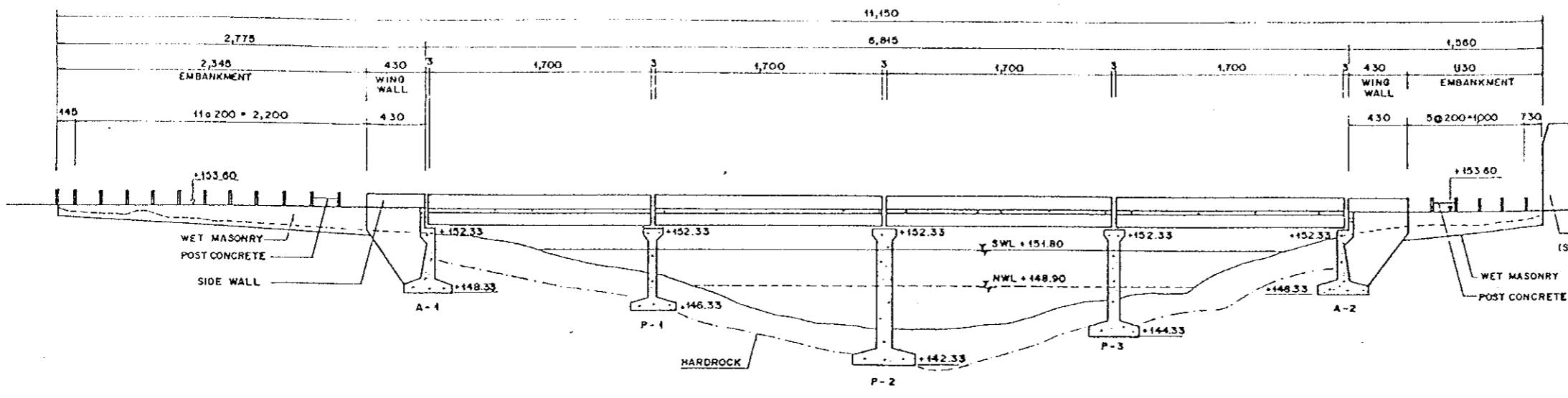
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Fig. 7.9.8
FLOOR PLAN OF HYDROPOWER STATION BUILDING

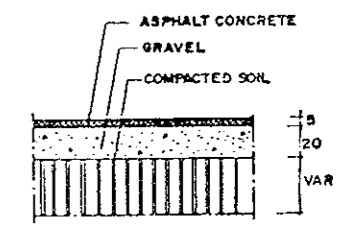
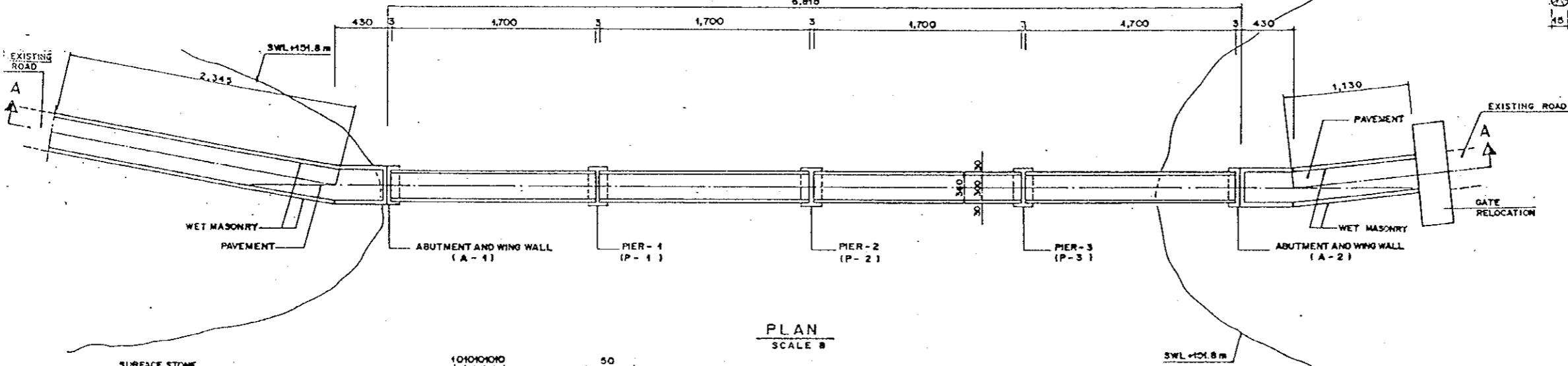


THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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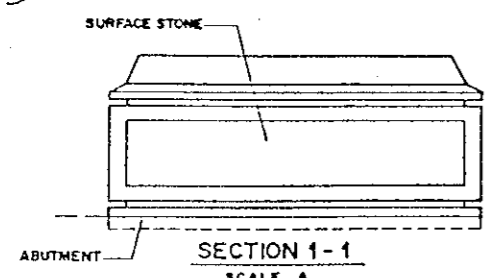
Fig. 7.10.1
 LOCATION OF APPROACH BRIDGE TO GOA KREO CAVE



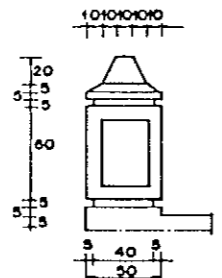
DETAIL OF POST CONCRETE
SCALE A



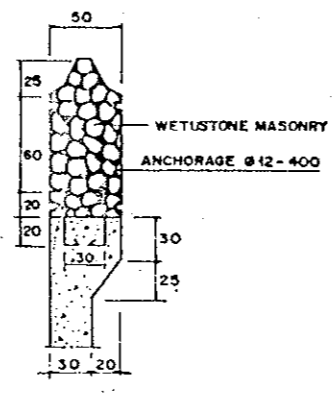
DETAIL OF PAVEMENT
SCALE A



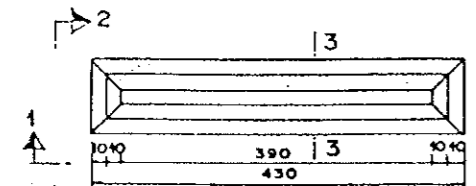
SECTION 1-1
SCALE A



SECTION 2-2
SCALE A



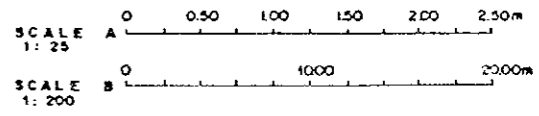
SECTION 3-3
SCALE A



PLAN
SCALE A

DETAIL OF SIDE WALL

- NOTE
- 1 UNIT IN CENTIMETER
 - 2 CONCRETE QUALITY K.225
 - 3 STEEL QUALITY U.24
 - 4 CONCRETE COVER MINIMUM 40mm
 - 5 MAXIMUM AGREGATE 40mm



THE DETAILED DESIGN OF FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
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Fig. 7.10.2
PLAN AND PROFILE OF APPROACH BRIDGE TO GOA KREO CAVE