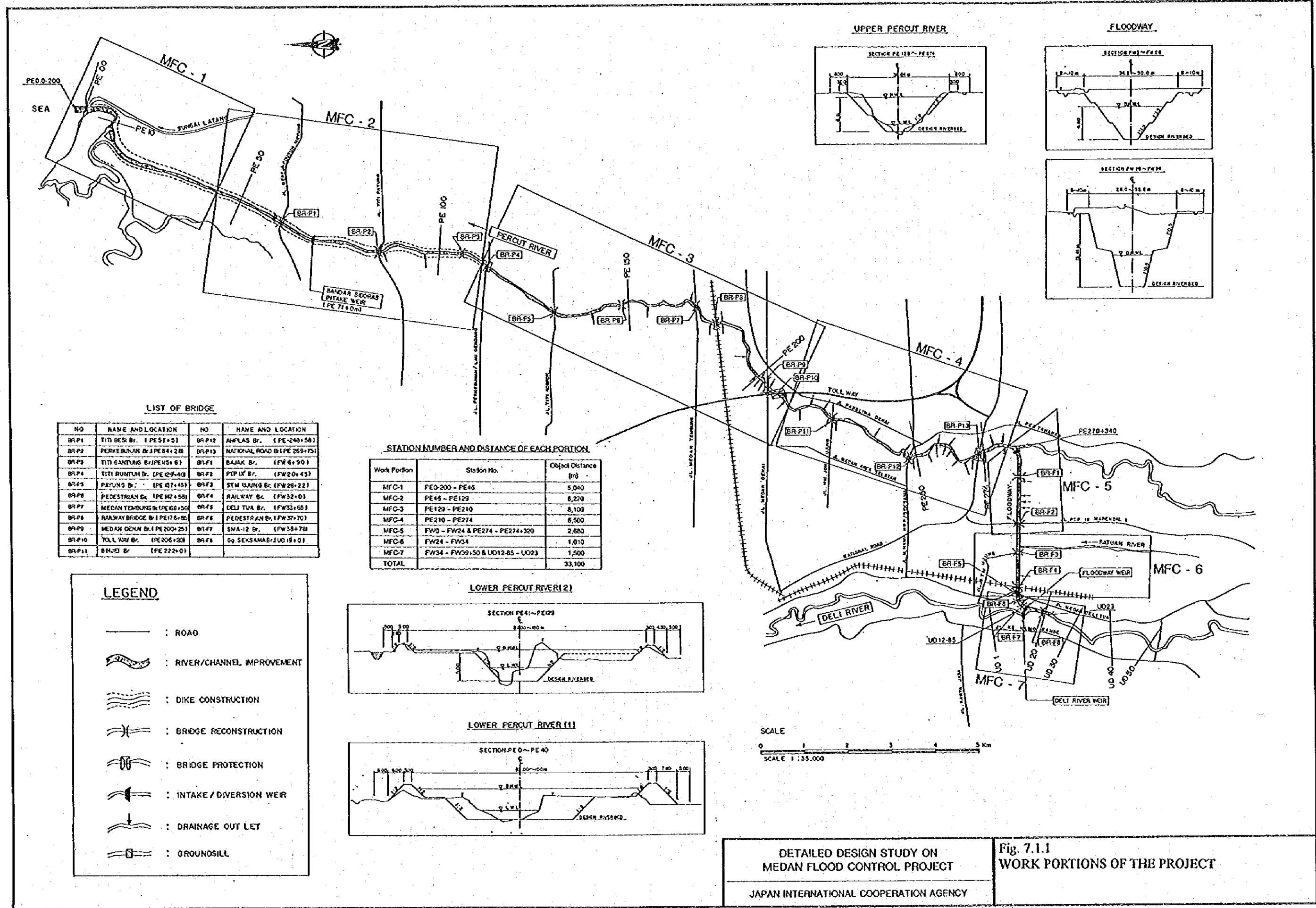


FIGURES

CHAPTER 7

CONSTRUCTION PLAN AND COST ESTIMATE



LIST OF BRIDGE

NO	NAME AND LOCATION	NO	NAME AND LOCATION
BR-P1	TITI BES BR. (PE 57+51)	BR-P12	AMPILAS BR. (PE 240+58)
BR-P2	PERKEMBUNAN BR. (PE 84+28)	BR-P13	NATIONAL ROAD BR. (PE 259+75)
BR-P3	TITI GANTANG BR. (PE 43+6)	BR-F1	BAJAK BR. (FW 6+90)
BR-P4	TITI RUNTUN BR. (PE 29+40)	BR-F2	PITULU BR. (FW 20+43)
BR-F5	PAYUNG BR. (PE 127+45)	BR-F3	STM UJUNG BR. (FW 28+22)
BR-F6	PEDESTRIAN BR. (PE 147+58)	BR-F4	RAILWAY BR. (FW 32+0)
BR-P7	MEDAN TEMBUNG BR. (PE 168+50)	BR-F5	DELI TUA BR. (FW 33+68)
BR-P8	RAILWAY BRIDGE BR. (PE 176+80)	BR-F6	PEDESTRIAN BR. (FW 37+70)
BR-P9	MEDAN DENAI BR. (PE 200+25)	BR-F7	SMA-12 BR. (FW 38+78)
BR-P10	TOLL WAY BR. (PE 206+20)	BR-F8	Dg SEKAMBAH (UD 18+0)
BR-P11	BNJEL BR. (PE 222+0)		

STATION NUMBER AND DISTANCE OF EACH PORTION

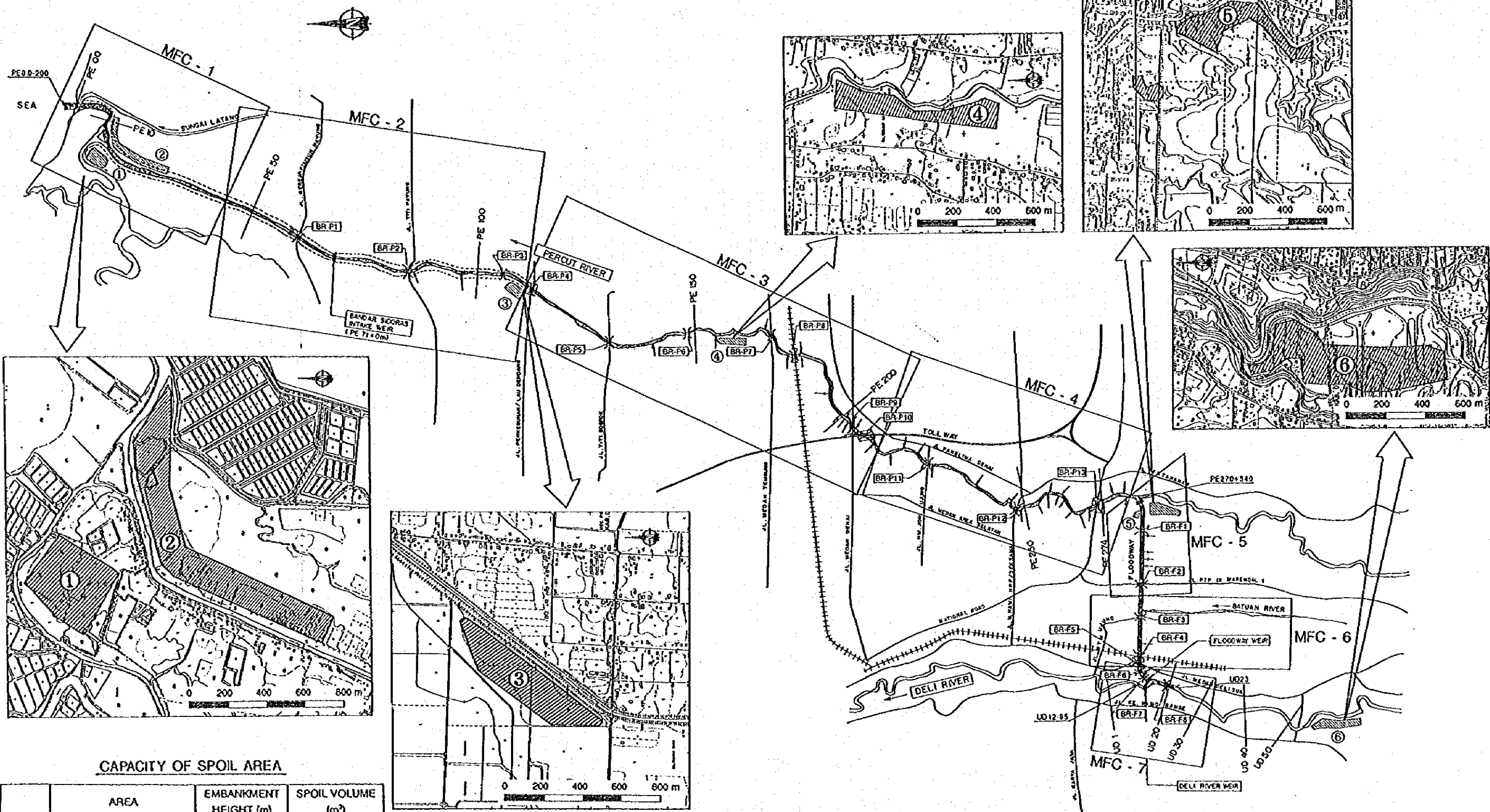
Work Portion	Station No.	Object Distance (m)
MFC-1	PE0-200 - PE46	5,040
MFC-2	PE46 - PE129	8,270
MFC-3	PE129 - PE210	8,100
MFC-4	PE210 - PE274	6,500
MFC-5	FW0 - FW24 & PE274 - PE274+320	2,680
MFC-6	FW24 - FW34	1,010
MFC-7	FW34 - FW39+50 & UD12-85 - UD23	1,500
TOTAL		33,100

LEGEND

- : ROAD
- : RIVER/CHANNEL IMPROVEMENT
- : DIKE CONSTRUCTION
- : BRIDGE RECONSTRUCTION
- : BRIDGE PROTECTION
- : INTAKE / DIVERSION WEIR
- : DRAINAGE OUT LET
- : GROUNDSILL

DETAILED DESIGN STUDY ON
MEDAN FLOOD CONTROL PROJECT
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Fig. 7.1.1
WORK PORTIONS OF THE PROJECT



CAPACITY OF SPOIL AREA

	AREA	EMBANKMENT HEIGHT (m)	SPOIL VOLUME (m ³)
①	300 X 400 = 12 ha	1.5	180,000
②	150 X 1,600 = 27 ha	2.0	540,000
③	200 X 600 = 12 ha	2.0	240,000
④	150 X 500 = 7.5 ha	3.0	225,000
⑤	300 X 500 = 15 ha	3.0	450,000
⑥	200 X 1,000 = 20 ha	2-4	600,000
TOTAL	93.5 ha		2,435,000

LEGEND

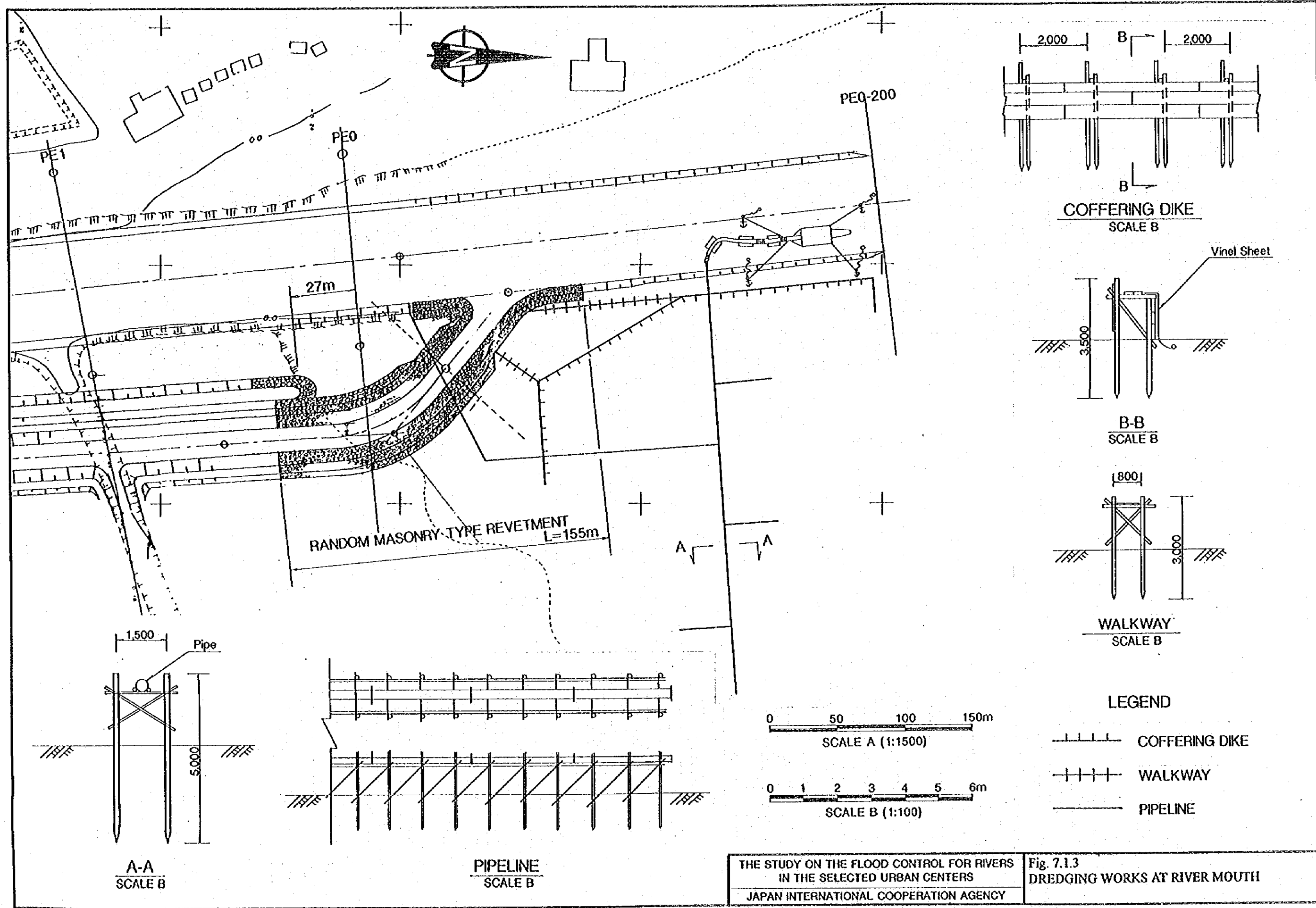
- : ROAD
- : RIVER/CHANNEL IMPROVEMENT
- : SPOIL AREA

SCALE
0 1 2 3 4 5 Km
SCALE 1 : 55,000

DETAILED DESIGN STUDY ON
MEDAN FLOOD CONTROL PROJECT

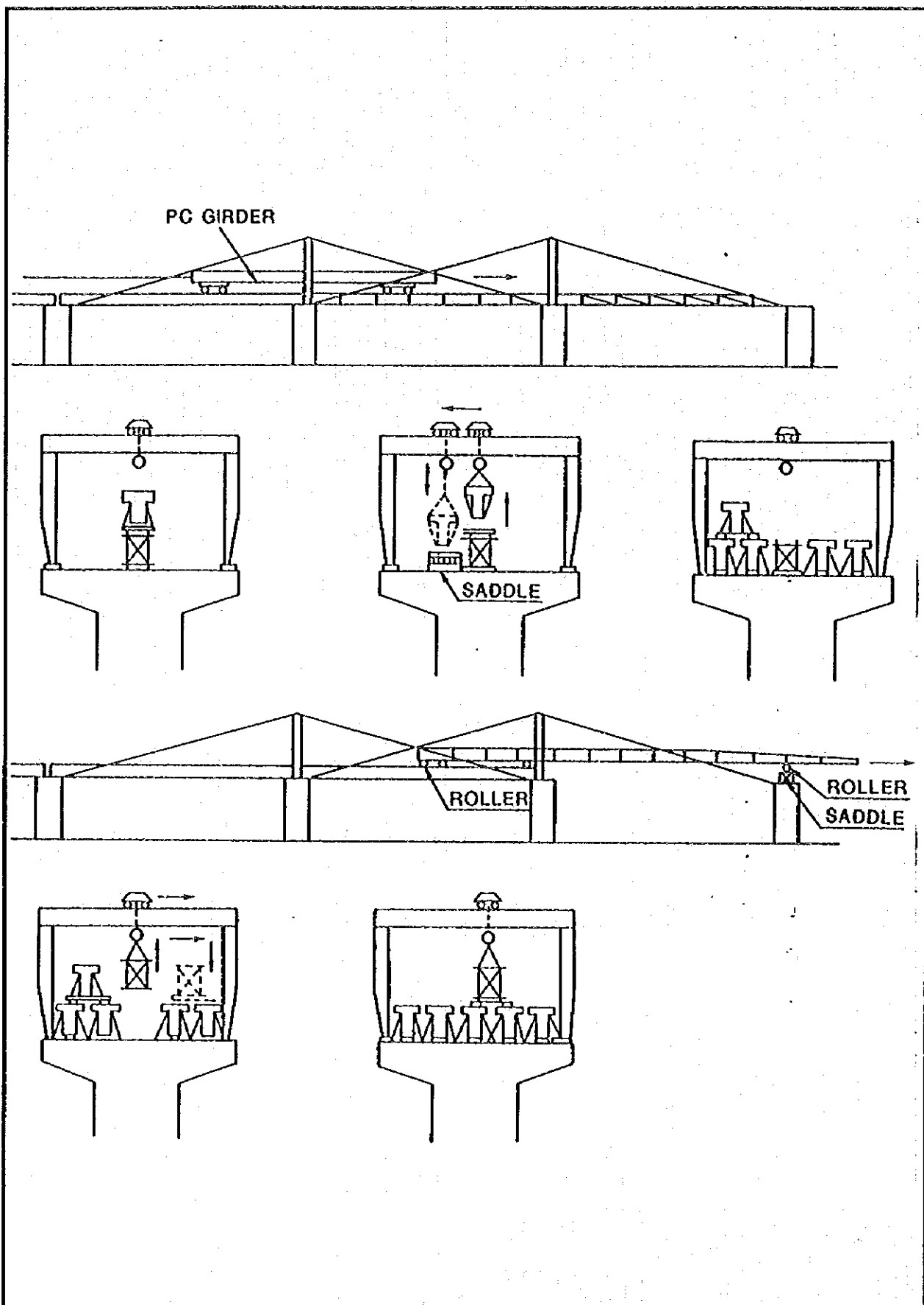
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Fig. 7.1.2
PROPOSED SPOIL AREA



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
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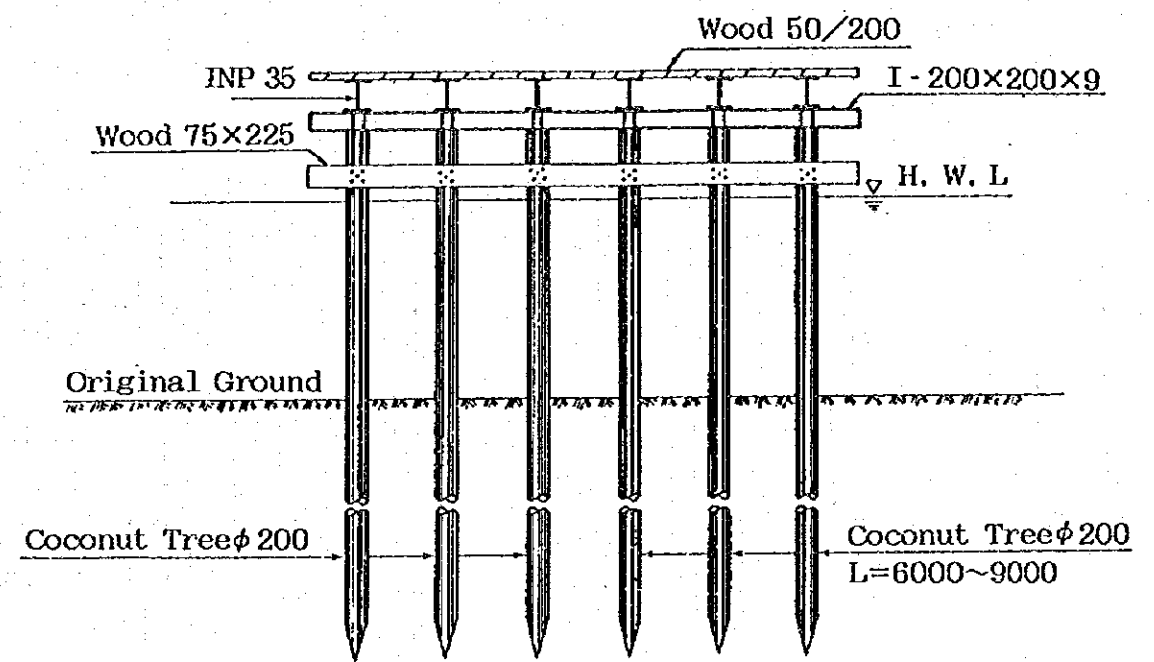
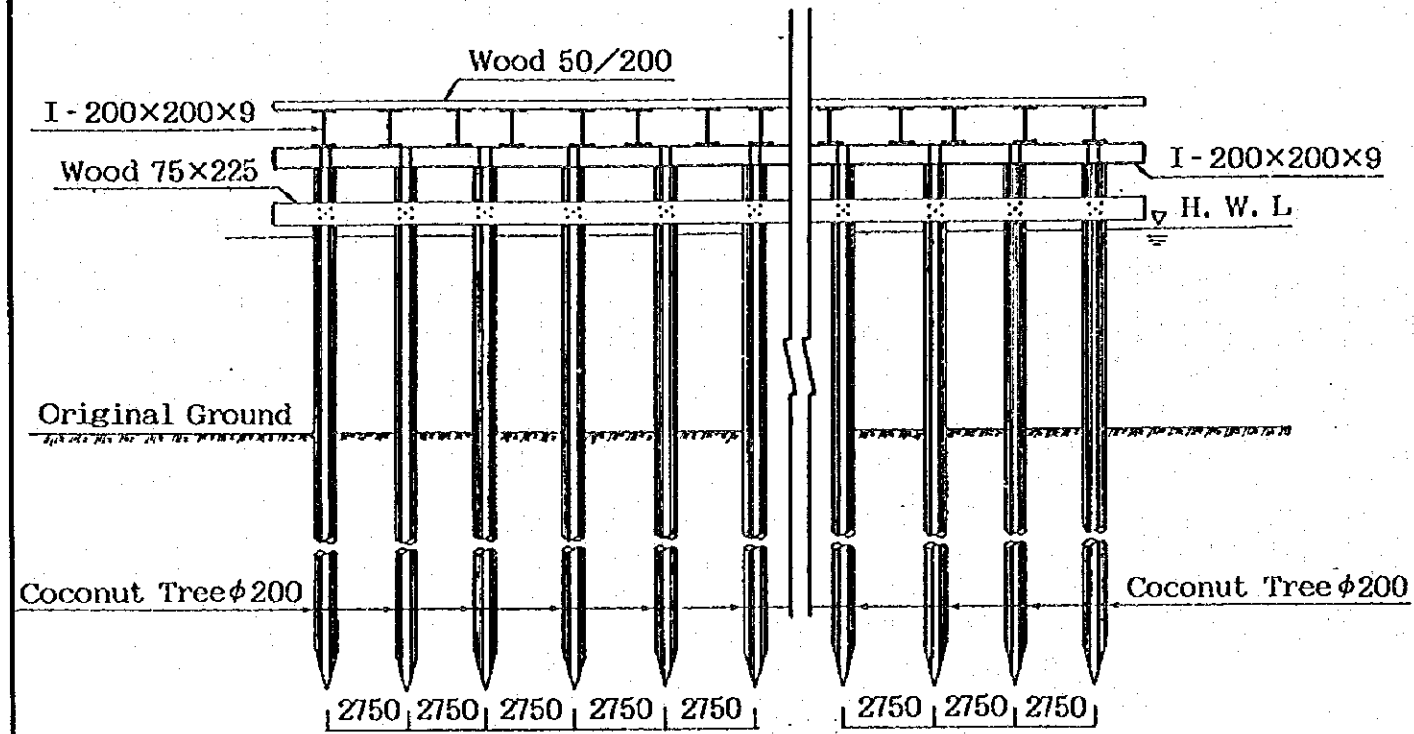
Fig. 7.1.3
 DREDGING WORKS AT RIVER MOUTH



DETAILED DESIGN STUDY ON
MEDAN FLOOD CONTROL PROJECT

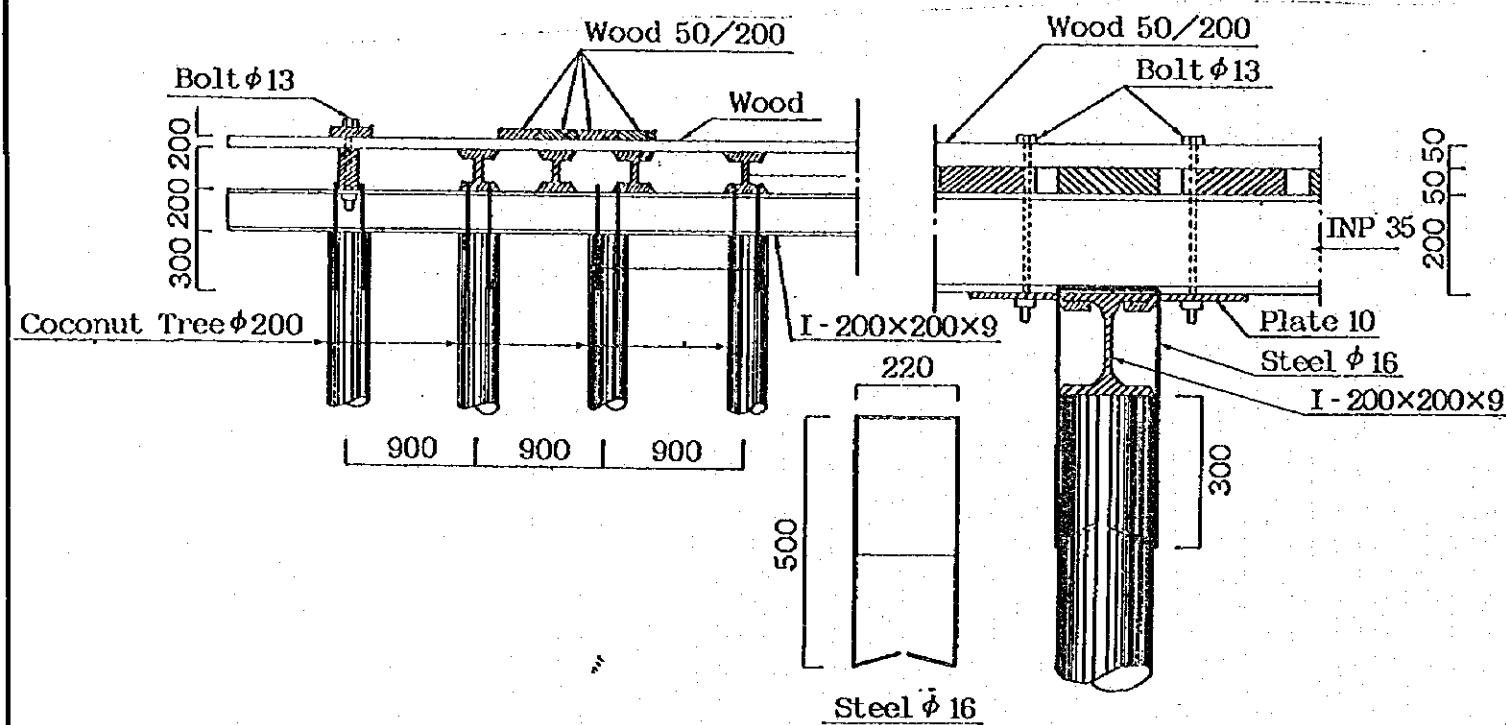
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Fig. 7.1.4
INSTALLATION OF BRIDGE GIRDER BY
PATROL CRANE

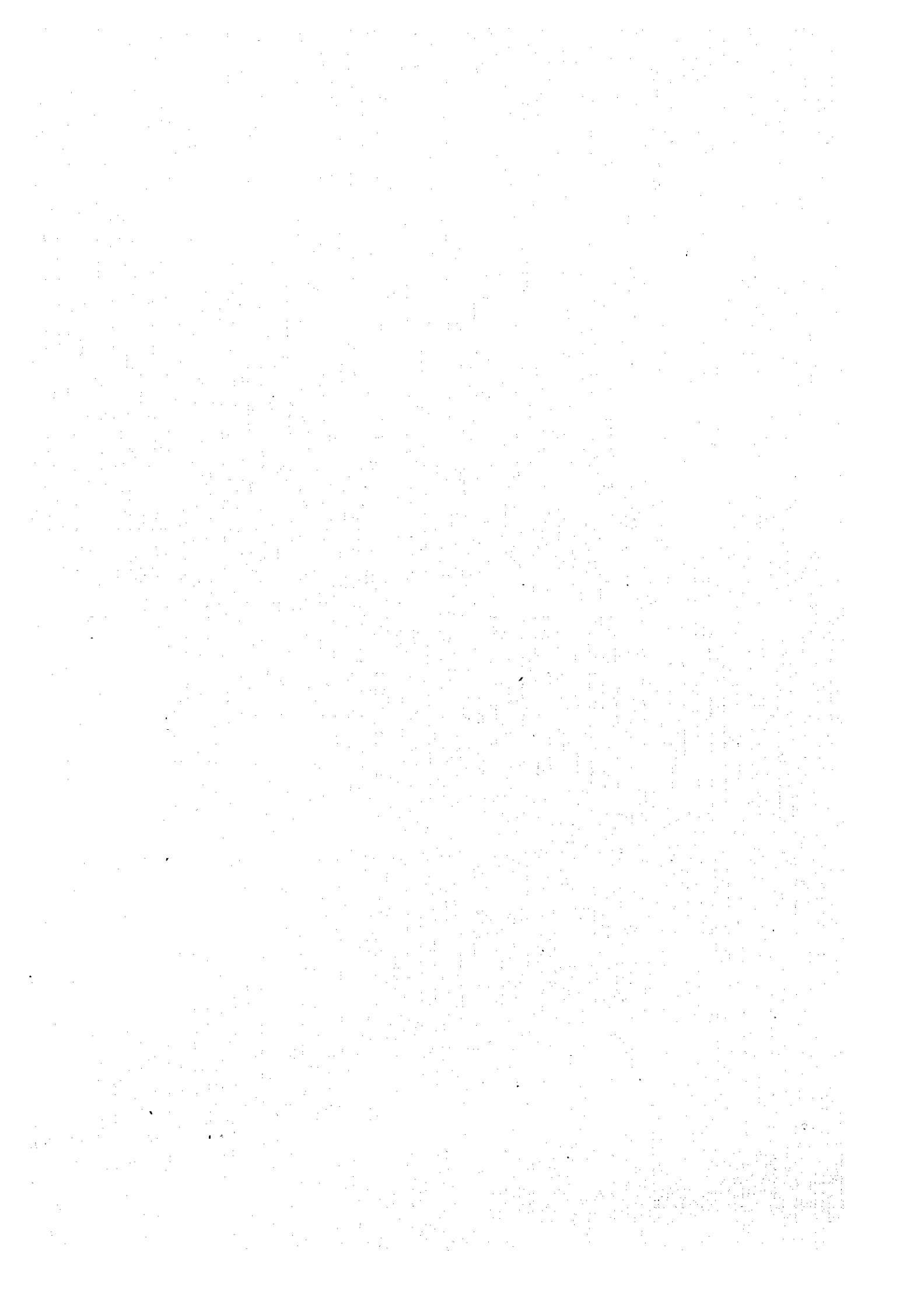


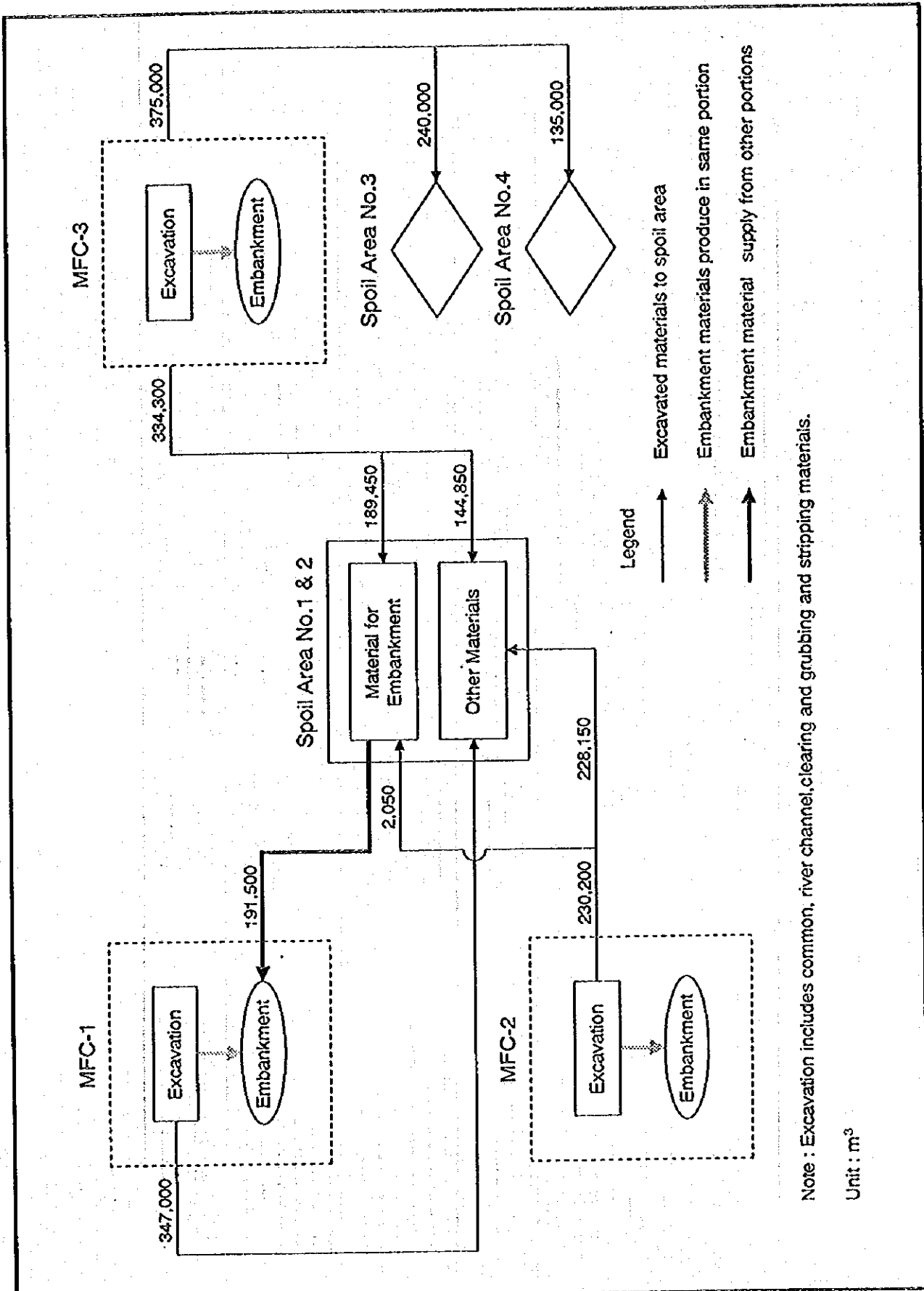
PLAN

SECTION



<p>DETAILED DESIGN STUDY ON MEDAN FLOOD CONTROL PROJECT</p> <p>JAPAN INTERNATIONAL COOPERATION AGENCY</p>	<p>Fig. 7.1.5 TYPICAL TEMPORARY BRIDGE</p>
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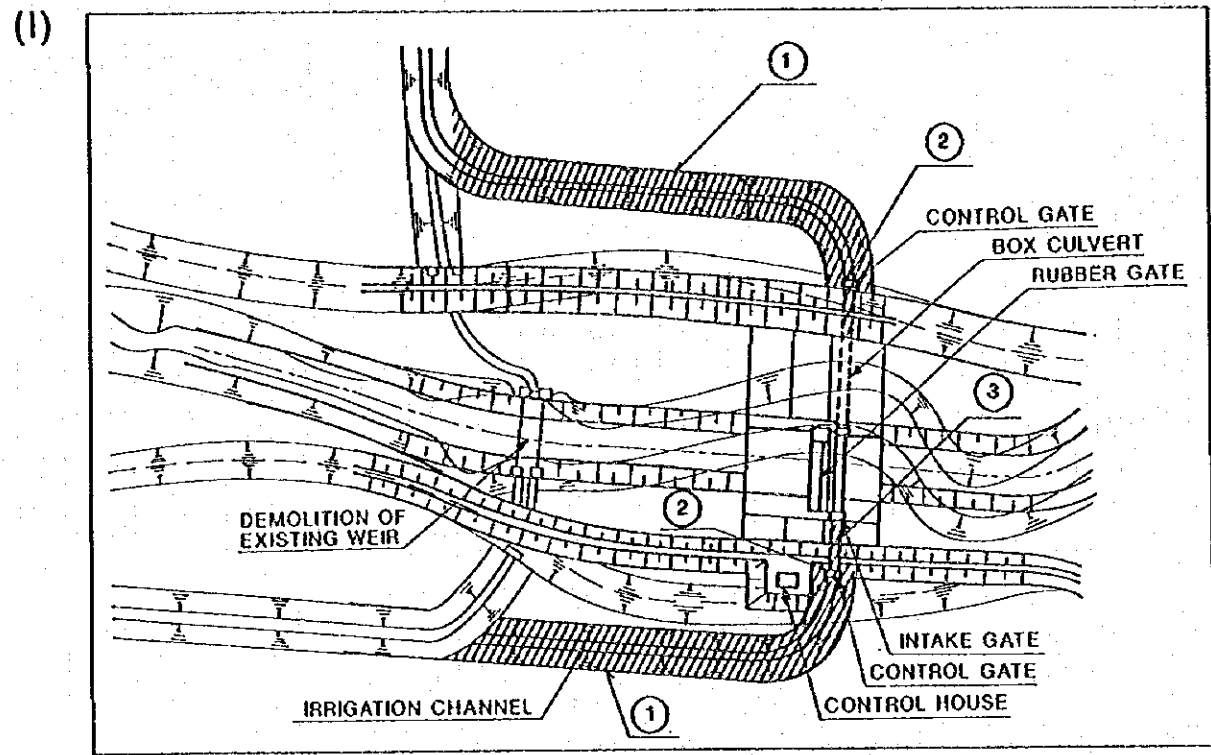




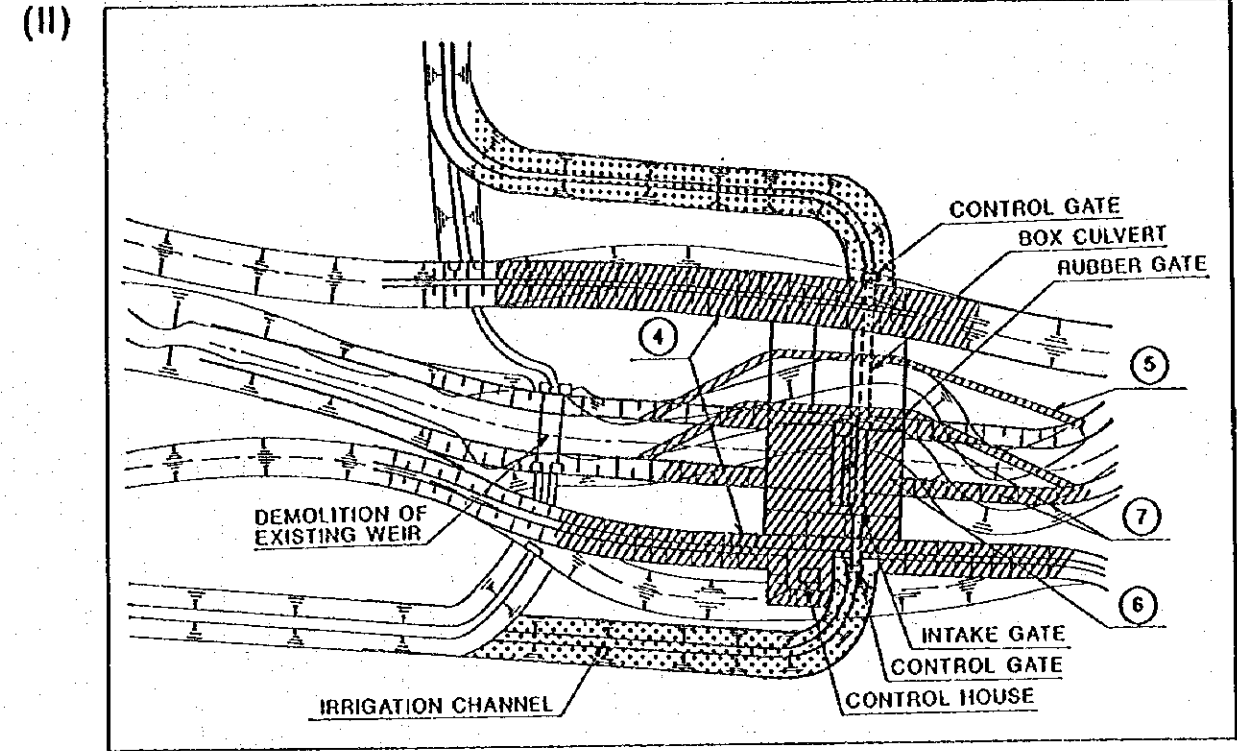
Note : Excavation includes common, river channel, clearing and grubbing and stripping materials.

Unit : m³

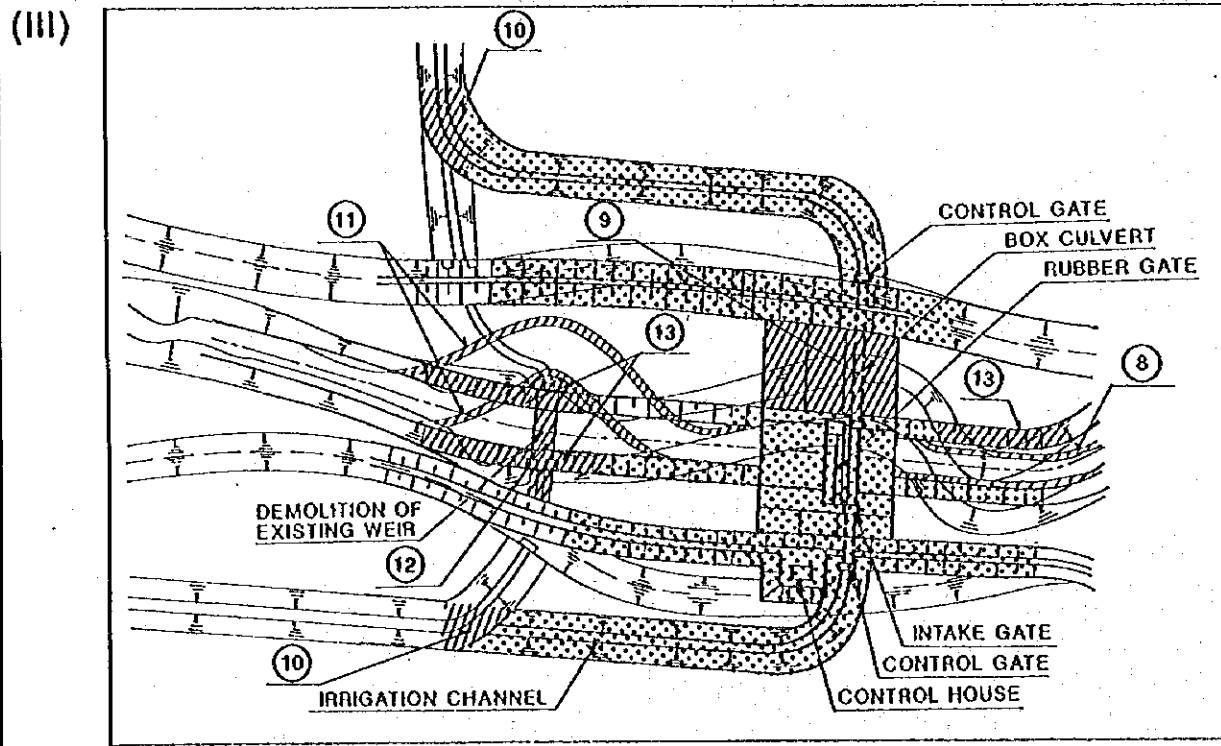
Fig. 7.1.6 SOIL BALANCE FOR EMBANKMENT WORKS



- ① CONSTRUCTION OF NEW IRRIGATION CHANNEL
- ② INSTALL THE IRRIGATION GATE
- ③ CONSTRUCTION OF BOX CULVERT (LEFT SIDE)



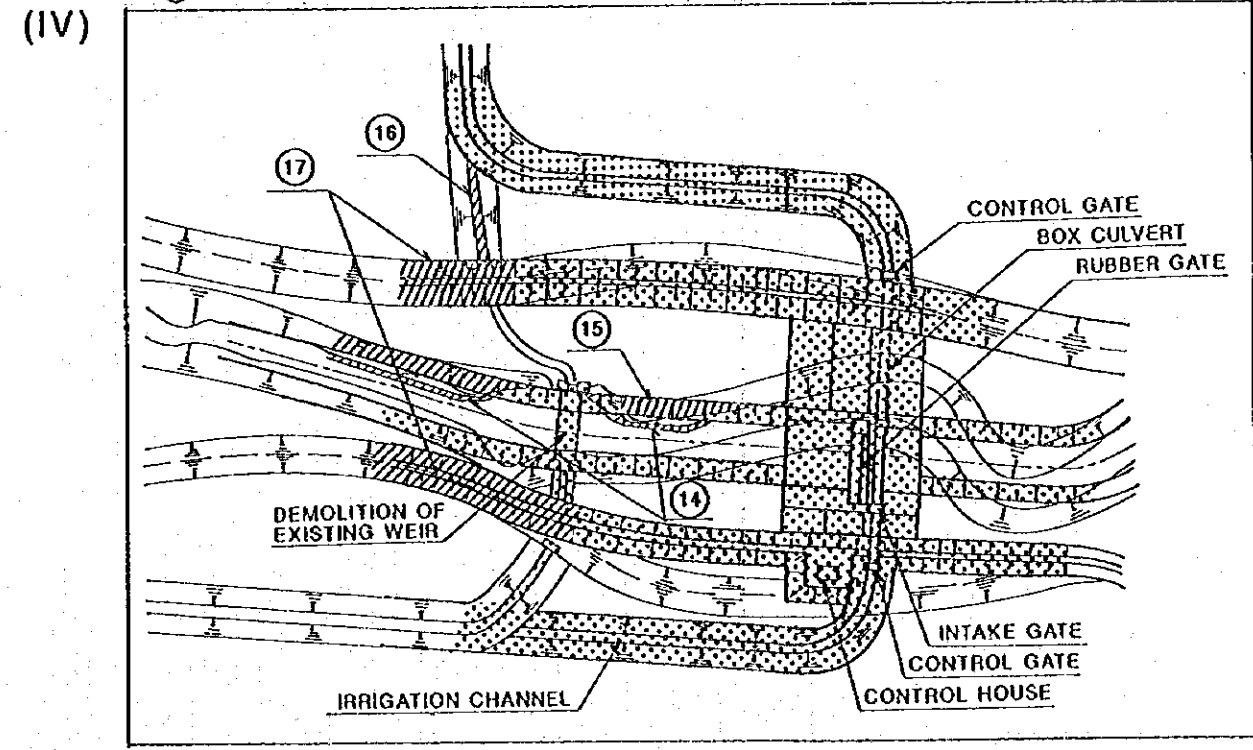
- ④ EMBANKMENT DIKE
- ⑤ DIVERSION OF RIVER CHANNEL
- ⑥ CONSTRUCTION RUBBER DAM, CONTROL GATE AND HOUSE
- ⑦ CONSTRUCTION LOW WATER CHANNEL



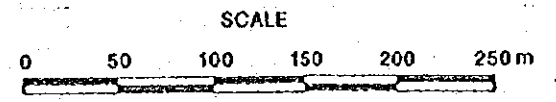
- ⑧ DIVERD RIVER CHANNEL (ONLY UPSTREAM)
- ⑨ CONSTRUCTION OF BOX CULVERT (RIGHT SIDE)
- ⑩ CONNECTED IRRIGATION CHANNEL
- ⑪ DIVERD RIVER CHANNEL (DOWNSTREAM)
- ⑫ DEMOLITION OF EXISTING WEIR, GATE
- ⑬ CONSTRUCTION OF LOW WATER CHANNEL

LEGEND

	UNDER CONSTRUCTION
	FINISH CONSTRUCTION



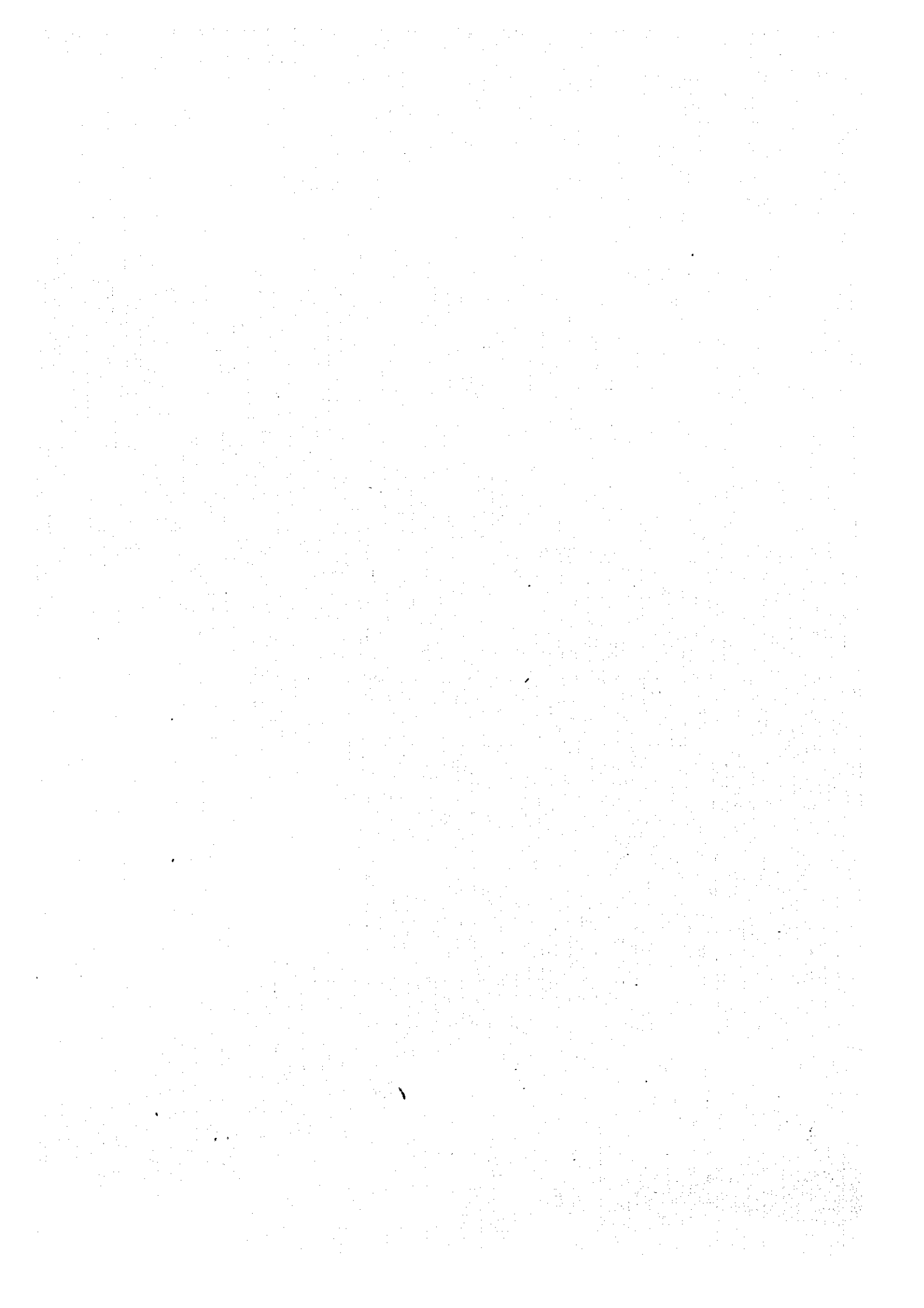
- ⑭ DIVERD RIVER CHANNEL
- ⑮ CONSTRUCTION OF LOW WATER CHANNEL
- ⑯ DEMOLITION OF EXISTING STRUCTURE
- ⑰ EMBANKMENT OF NEW DIKE



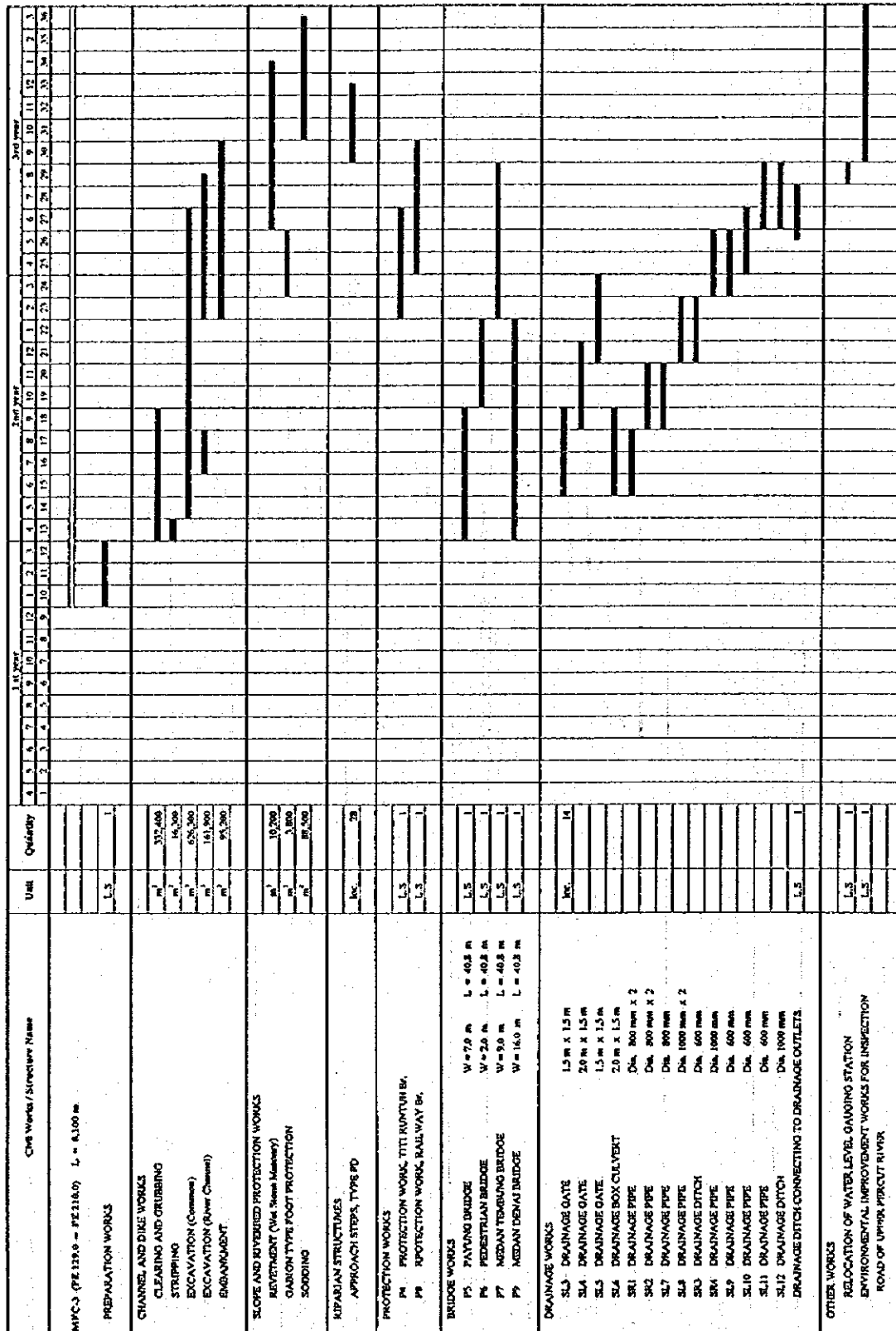
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Fig. 7.1.8
CONSTRUCTION PROCEDURE FOR
INTAKE WEIR



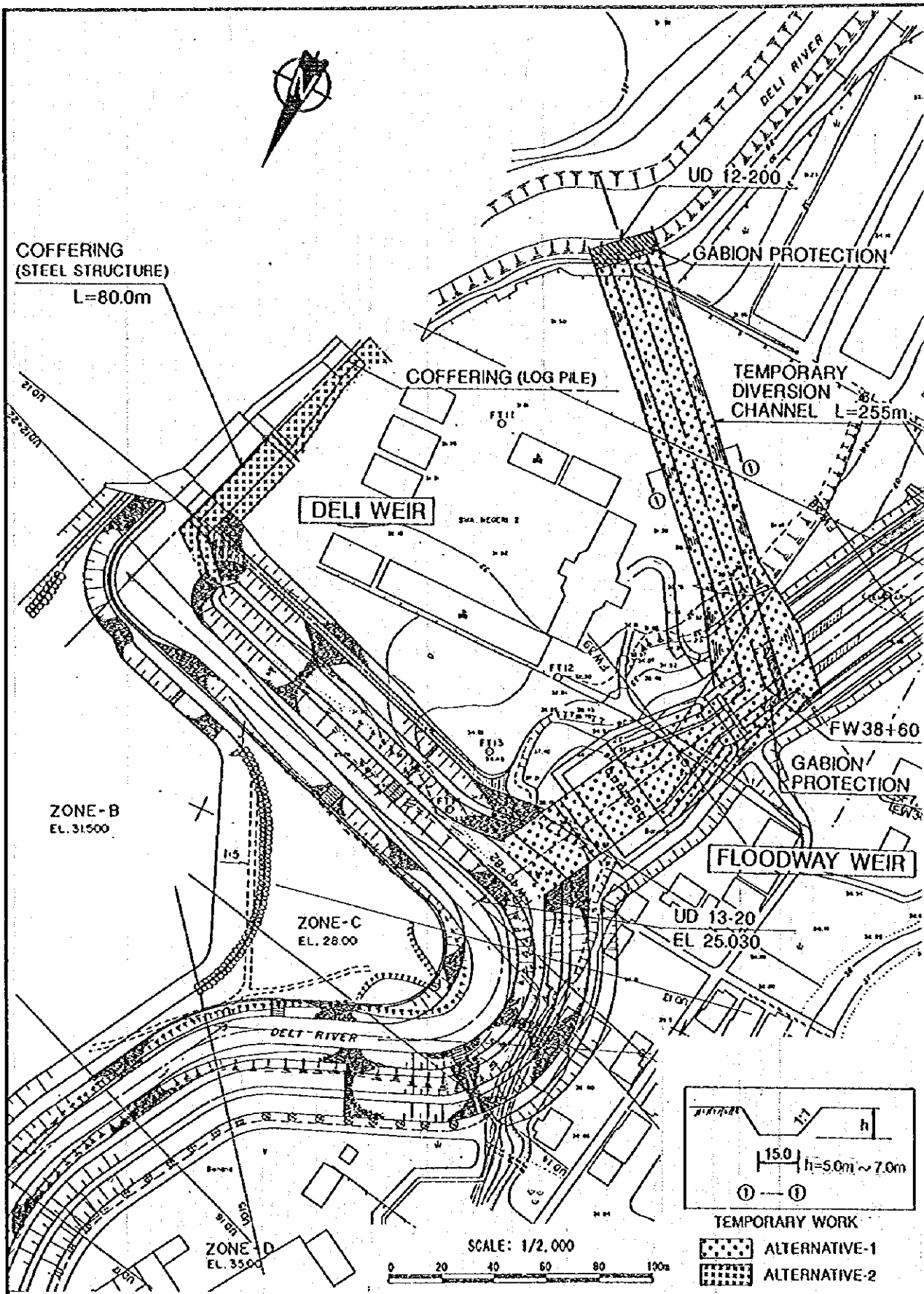
CONSTRUCTION SCHEDULE FOR MFC - 3 (PE 129.0 ~ PE 210.0)



DETAILED DESIGN STUDY ON MEDAN FLOOD CONTROL PROJECT

Fig. 7.1.10 CONSTRUCTION SCHEDULE FOR MFC-3

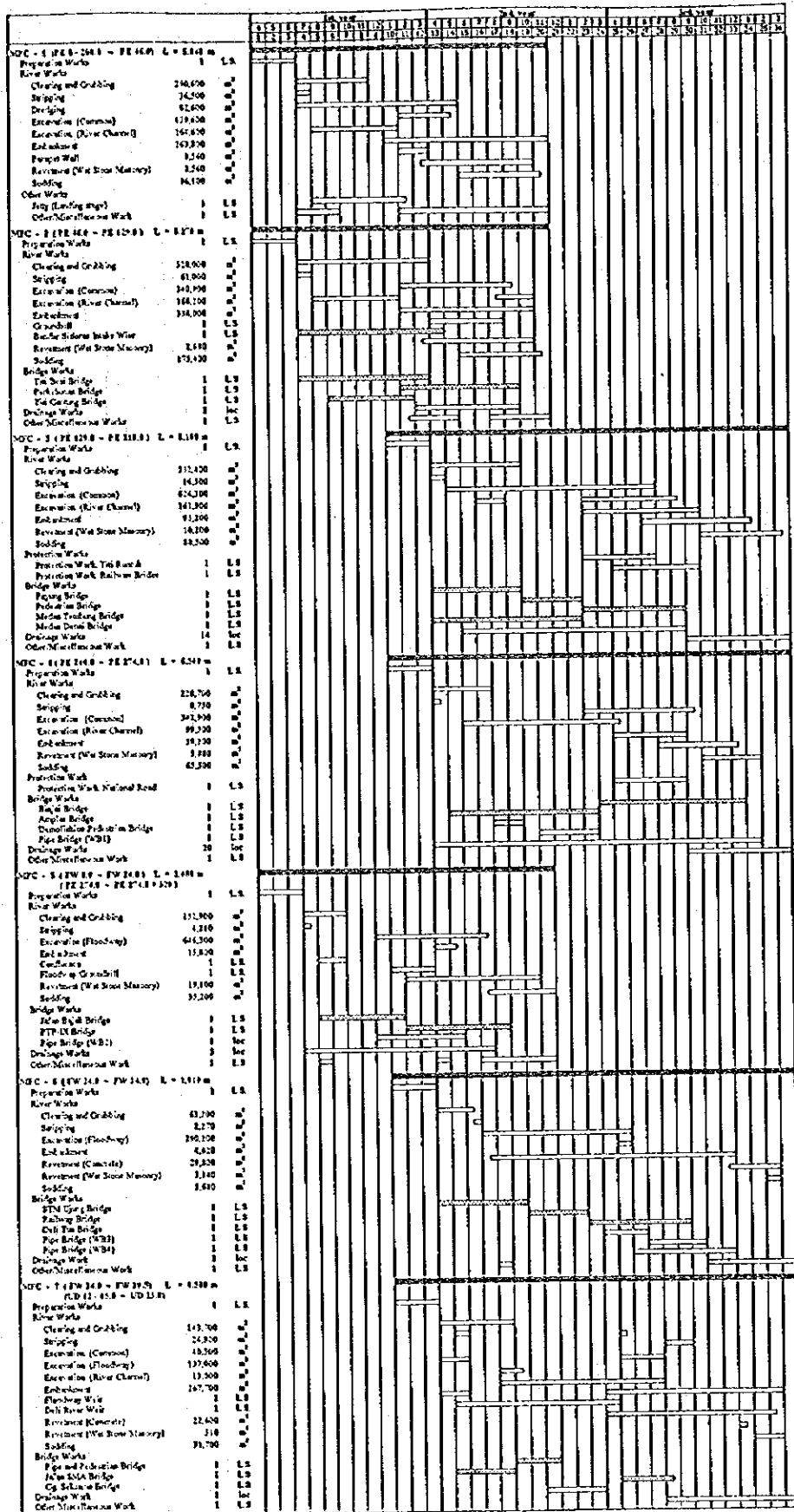
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DETAILED DESIGN STUDY ON
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Fig. 7.14
CONSTRUCTION PROCEDURE FOR
DIVERSION WEIR



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Fig. 7.1.16
OVERALL SCHEDULE FOR MEDAN FLOOD
CONTROL PROJECT