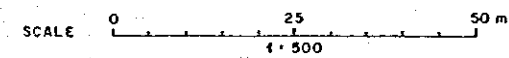


IP.5
 N = 433 903
 E = 9 228 541
 IA = 2° 50' 27"
 R = 2000 m
 TL = 49.591 m
 SL = 0.615 m
 CL = 99.161 m

IP.6
 N = 433 938
 E = 9 228 257
 IA = 2° 40' 34"
 R = 2000 m
 TL = 46.713 m
 SL = 0.545 m
 CL = 93.409 m



LAYOUT PLAN OF RIVERBANK PROTECTION
 SCALE 1:500

NO.	DATE	KEYWORDS	ORIGINATED	DESIGNED	APPROVED	APPROVED

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

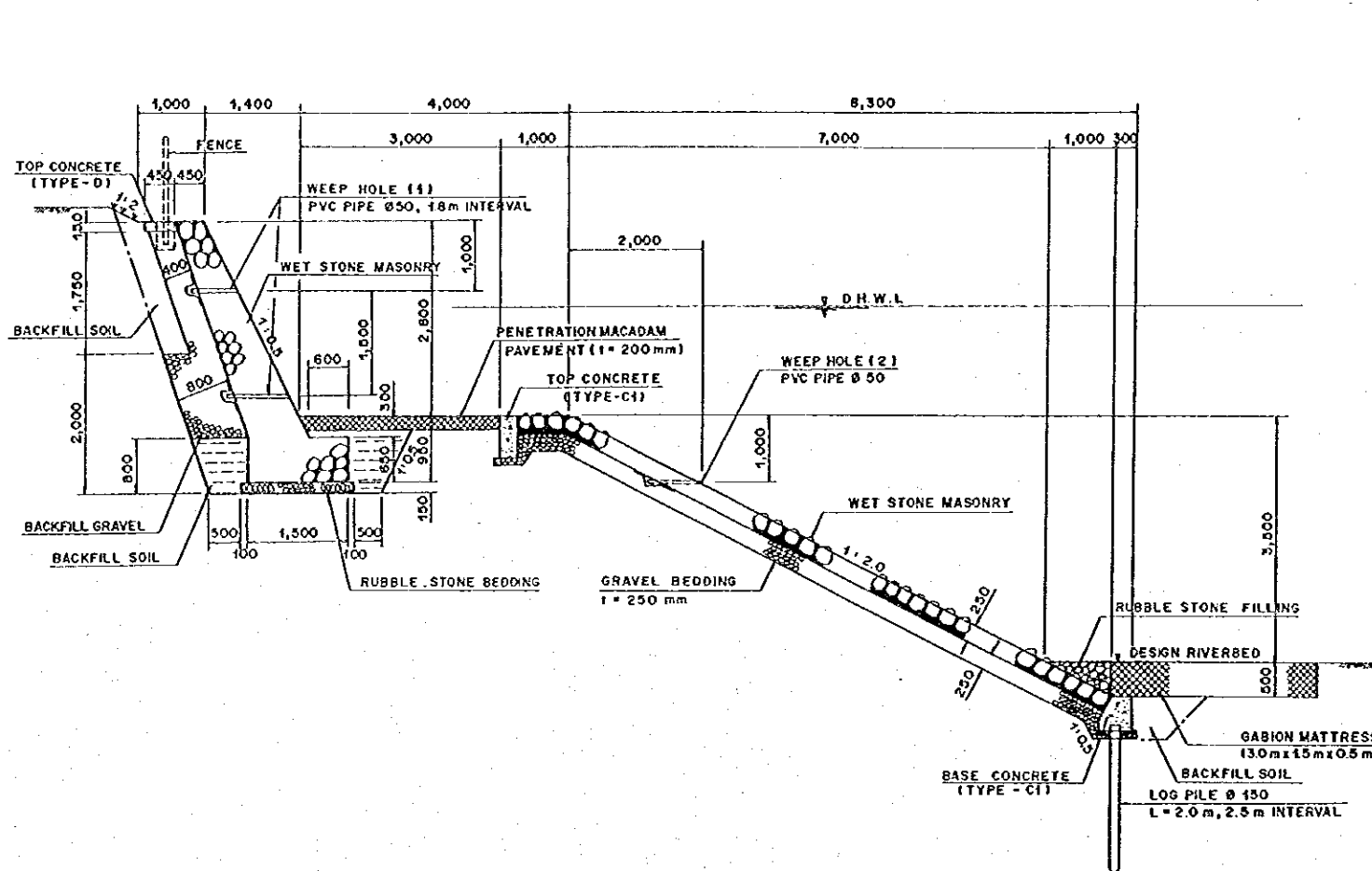
BRATUNGLINGA FLOOD CONTROL PROJECT
 COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
 PROTECTION WORKS FOR RIVERBANK & REVEGETATION
 RIVER SECTION: WF.64 TO WF.75 (RIGHT & LEFT BANK)
 GENERAL LAYOUT PLAN OF RETEMENT AND LEANING WALL

PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO: W3-P1-PA-S1-9
 SHEET NO: 158

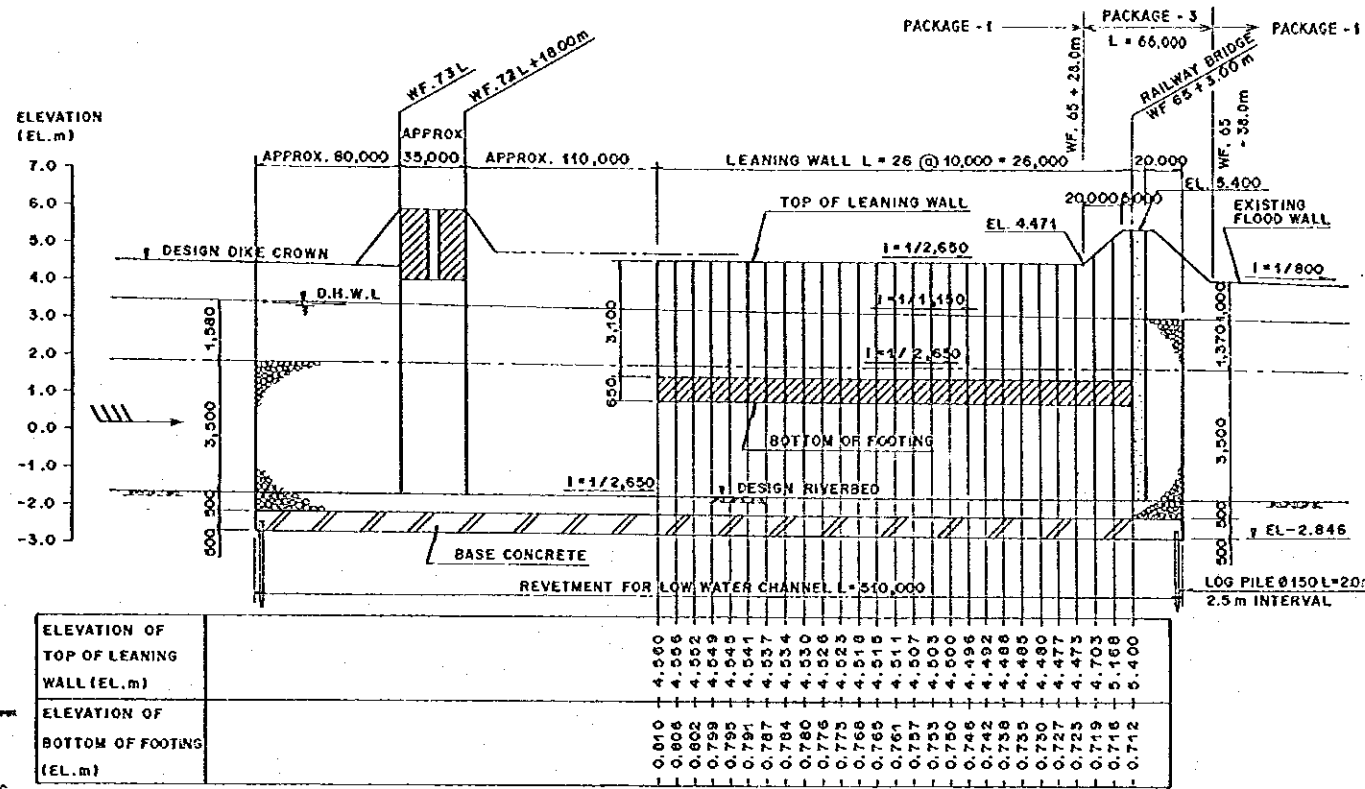
DATE: _____ CONTRACT NO: _____

DESIGNED: _____ CHECKED: _____

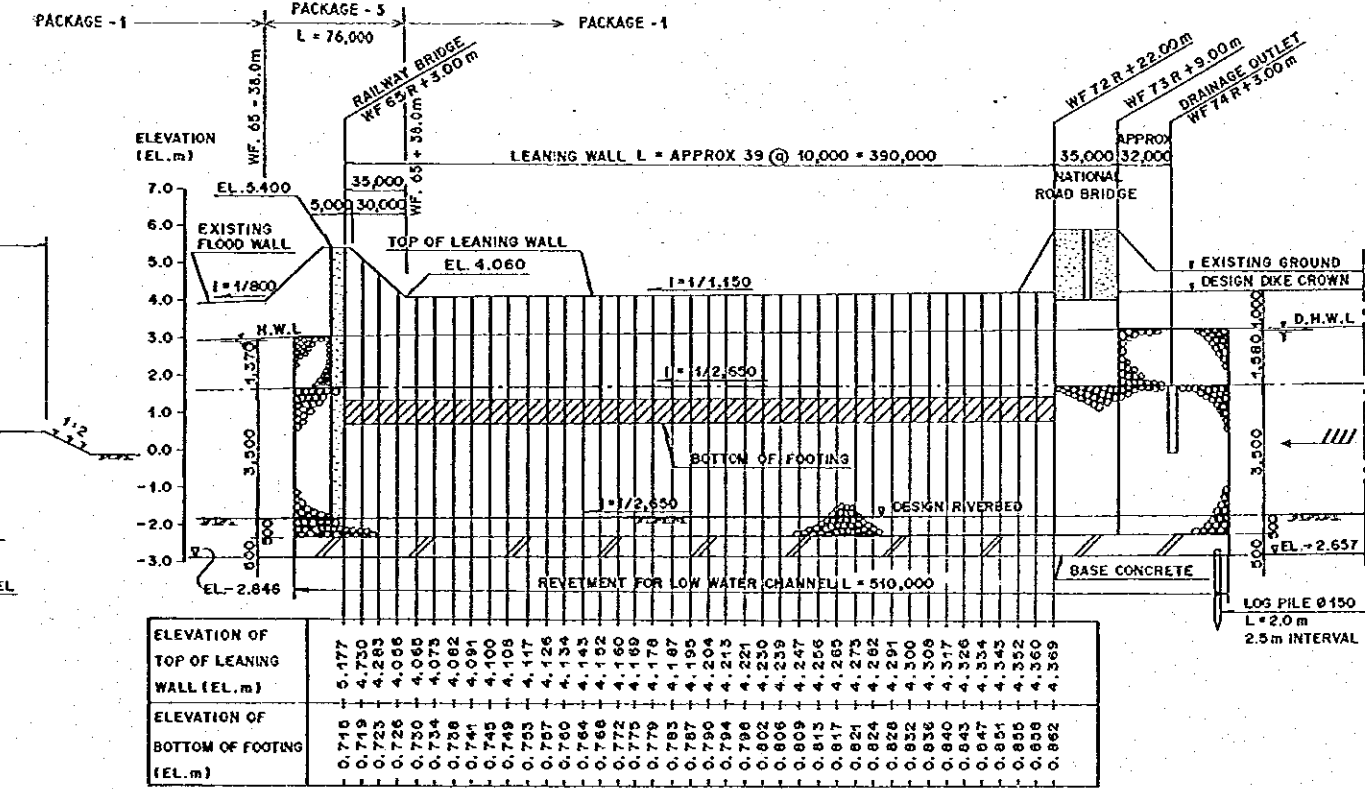
CHIEF OF PLANNING AND DESIGN: _____ PROJECT MANAGER: _____



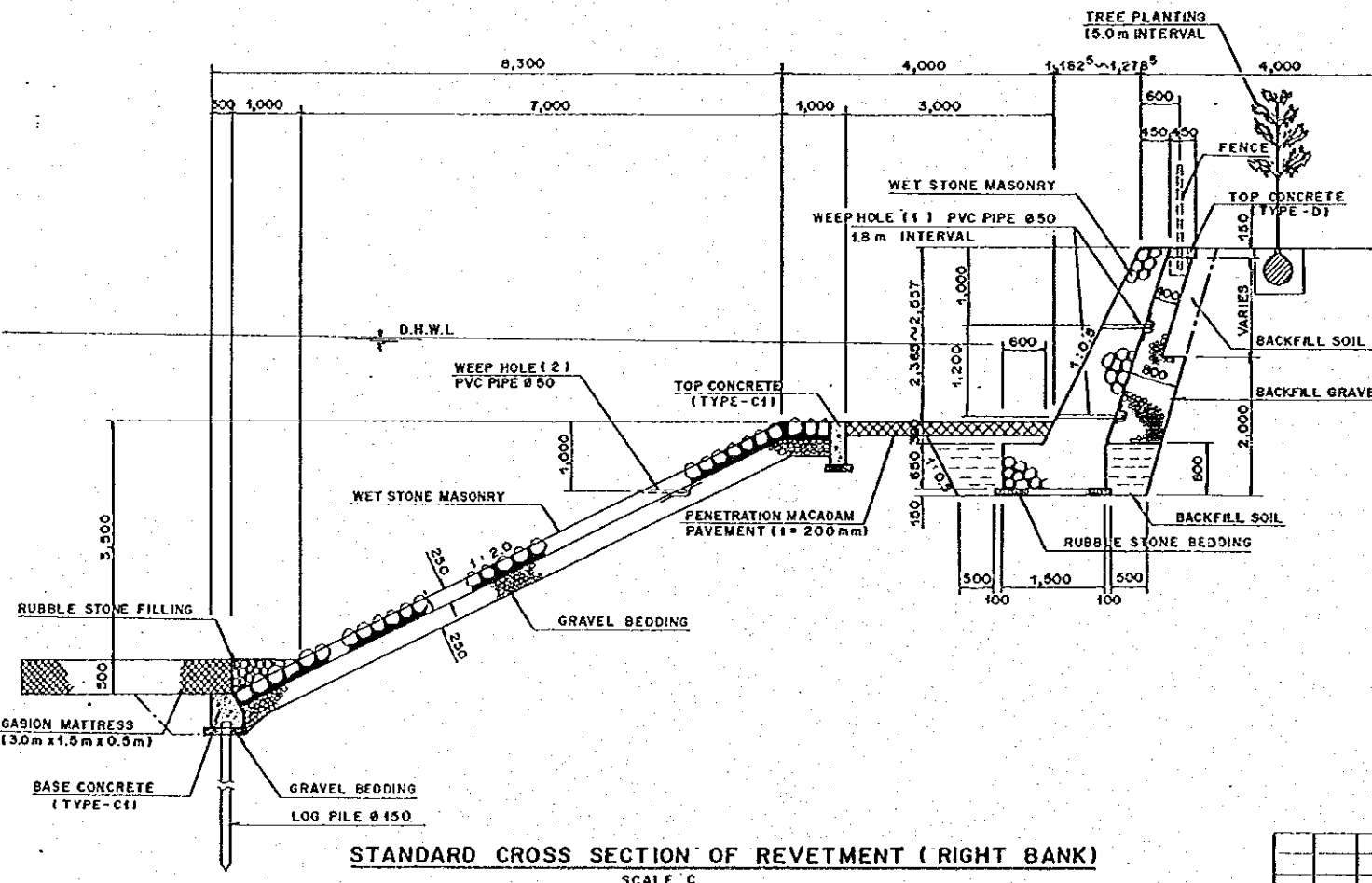
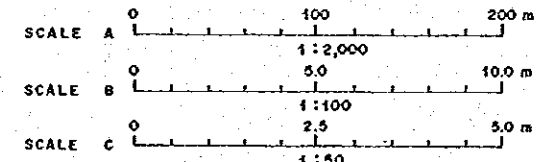
STANDARD CROSS SECTION OF REVETMENT (LEFT BANK)
SCALE C



PROFILE OF REVETMENT (LEFT BANK)
SCALE H=1:2,000, V=1:100



PROFILE OF REVETMENT (RIGHT BANK)
SCALE H=1:2,000, V=1:100

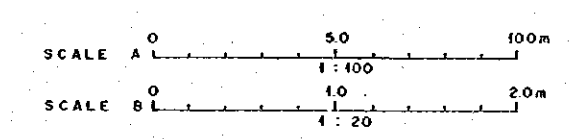
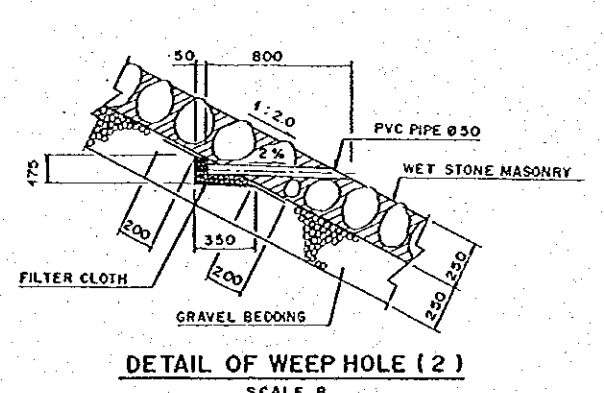
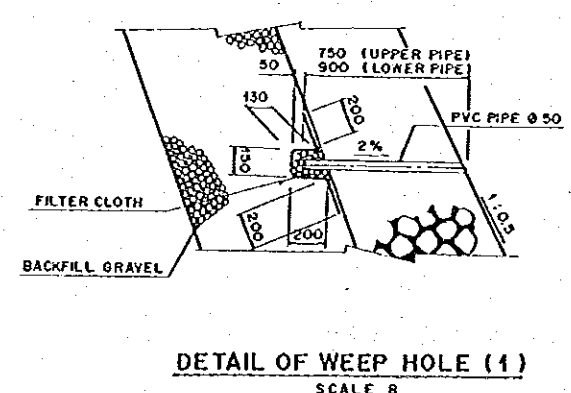
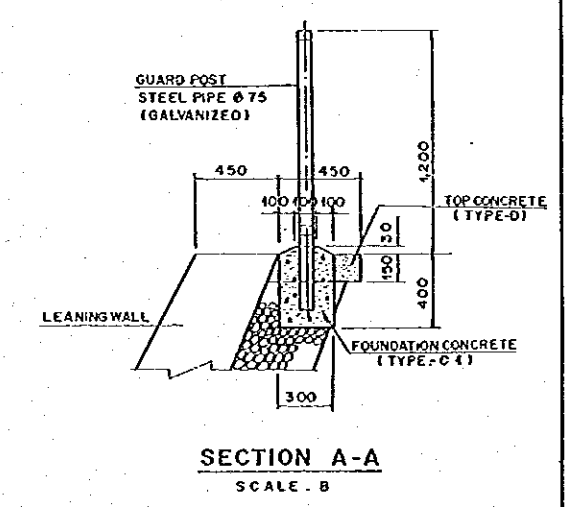
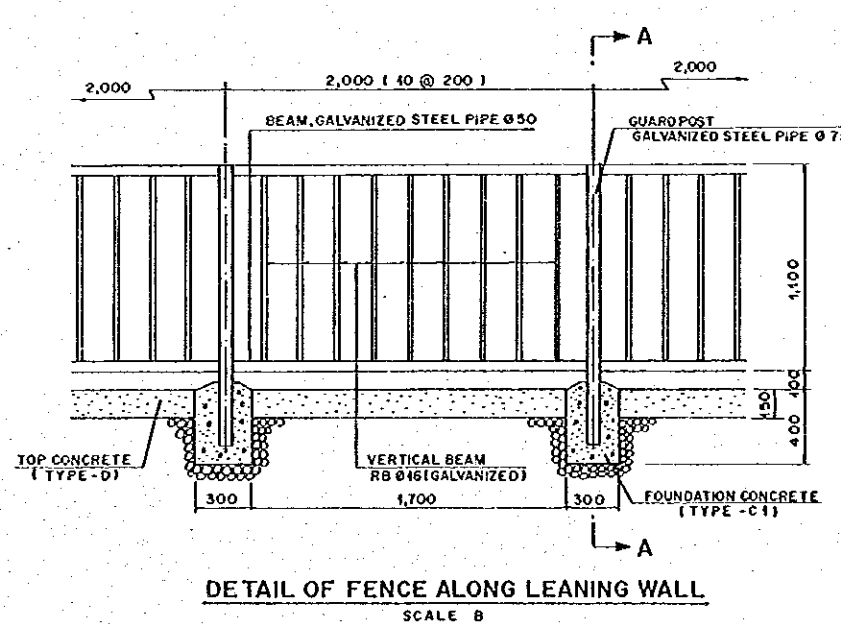
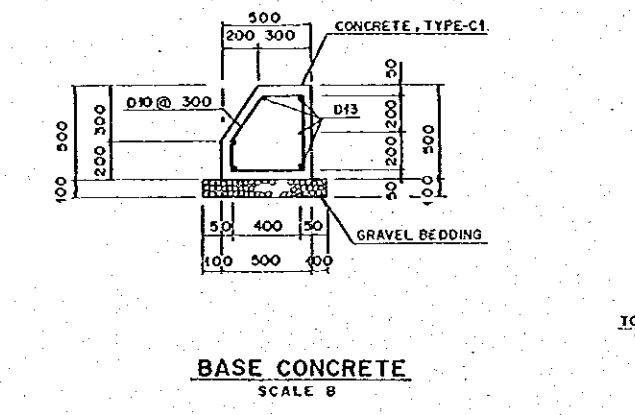
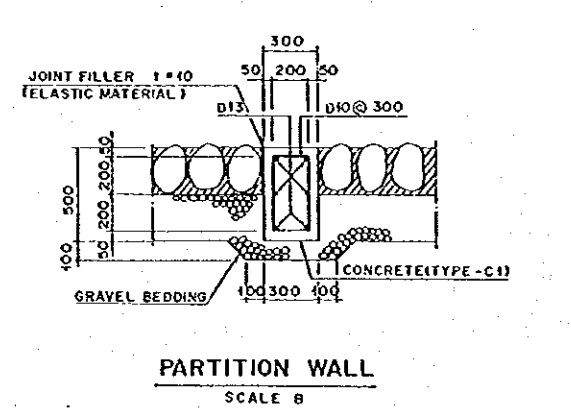
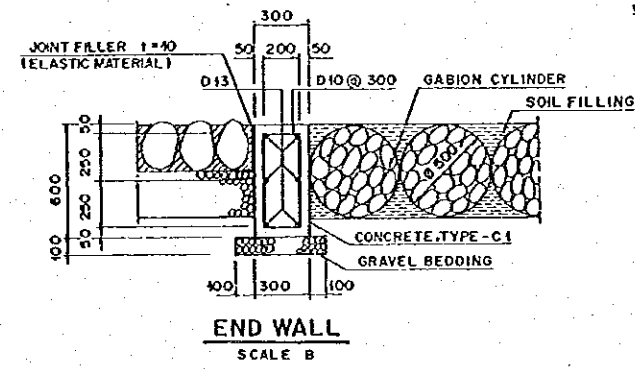
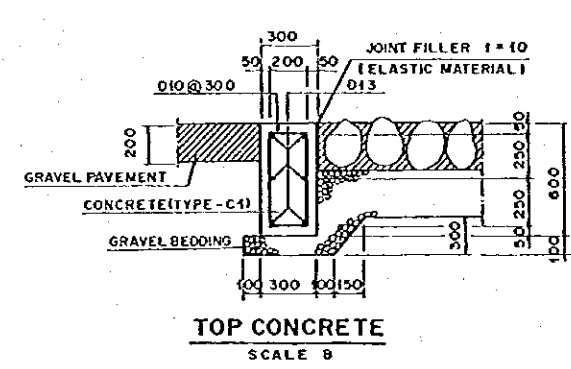
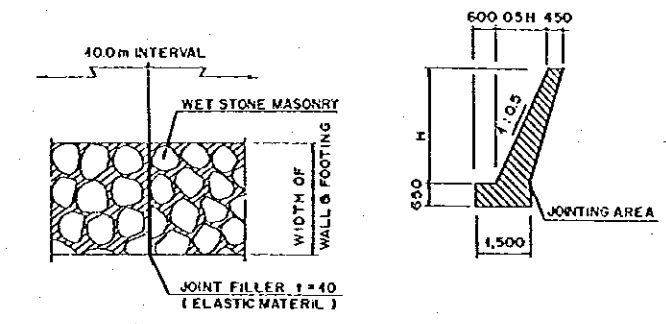
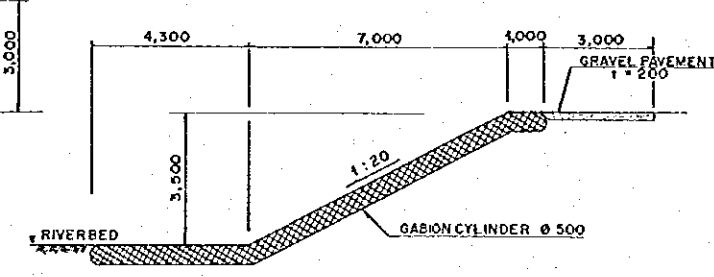
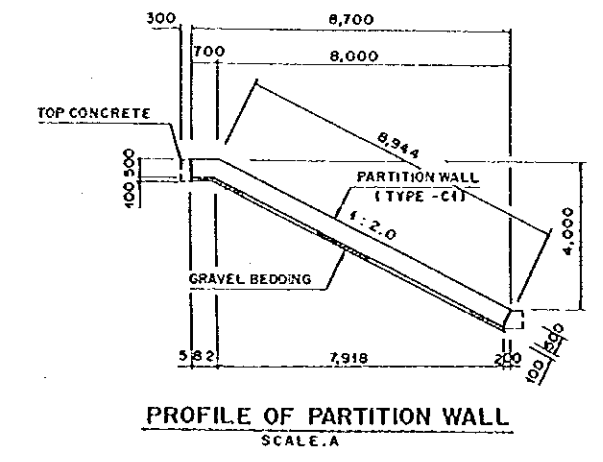
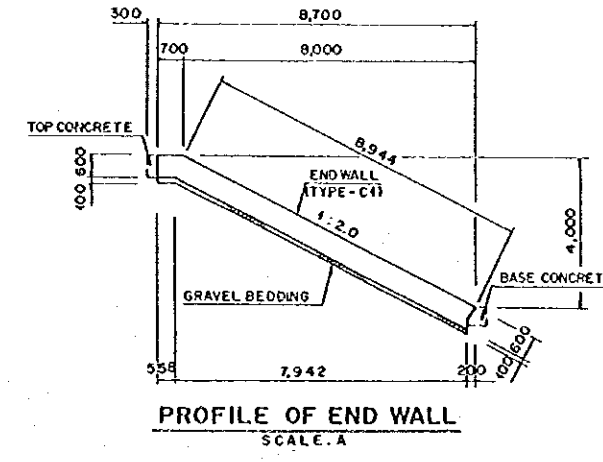
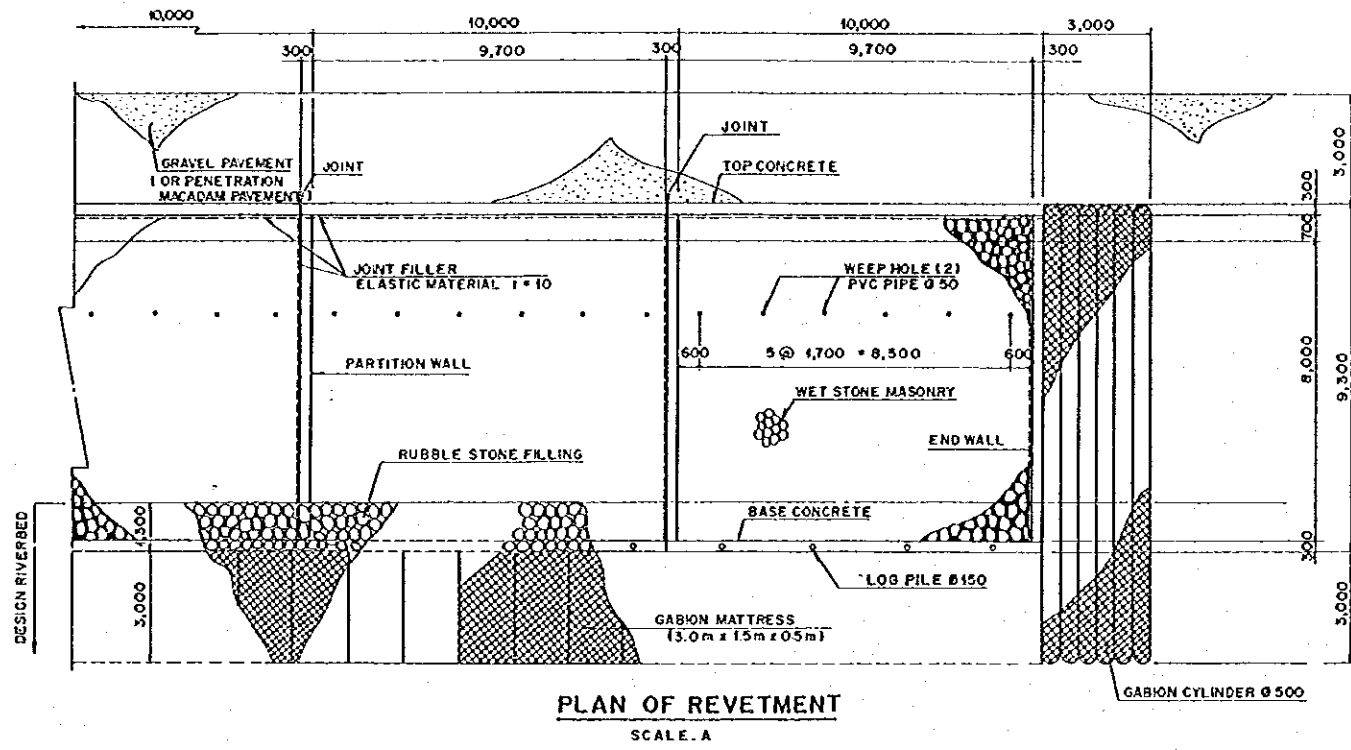


STANDARD CROSS SECTION OF REVETMENT (RIGHT BANK)
SCALE C

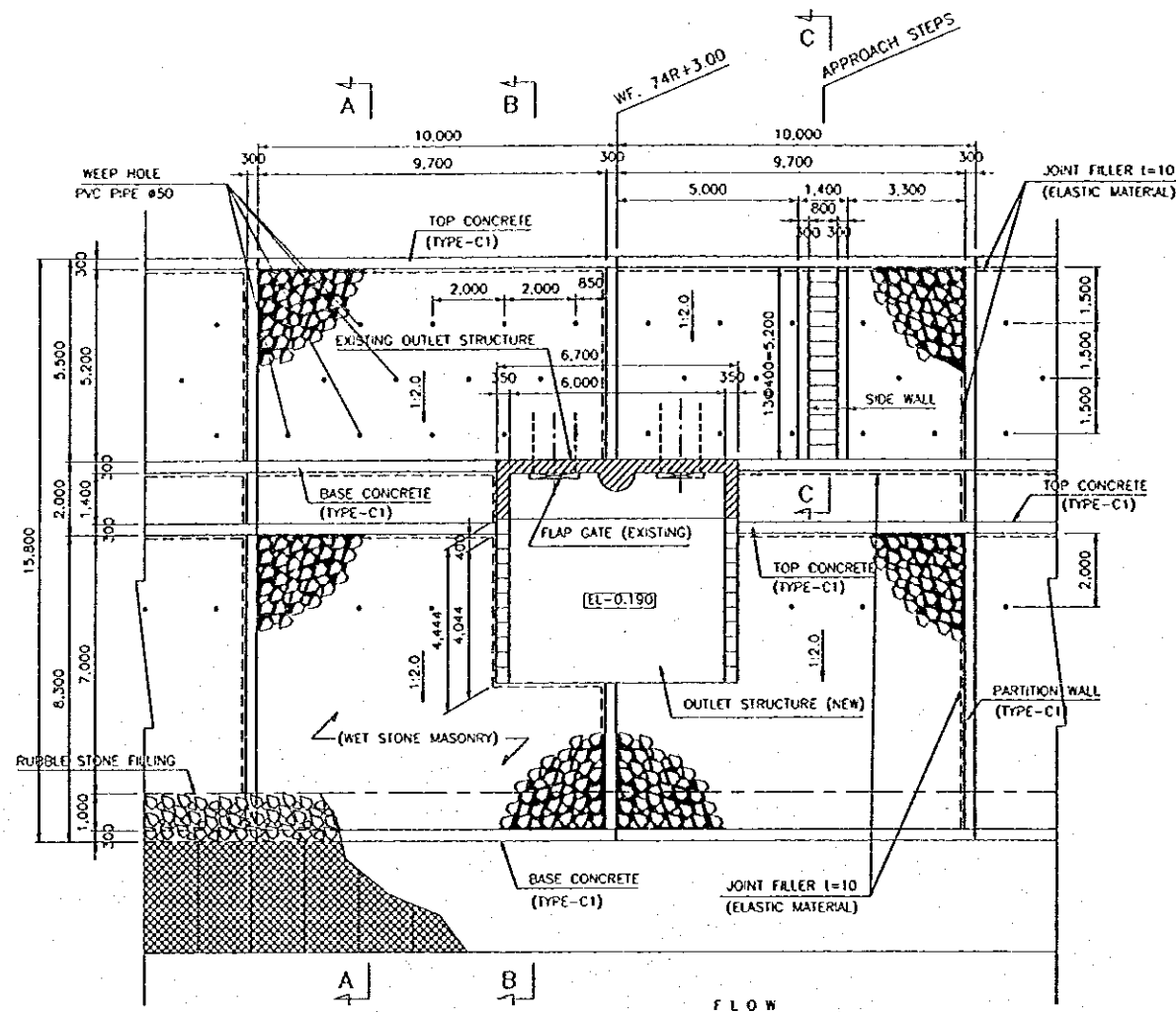
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 JPA TUNSELUNA FLOOD CONTROL PROJECT
 COMPONENT : WEST FLOODWAY / QARANG RIVER IMPROVEMENT
 PROTECTION WORKS FOR RIVERBANK & RIVERBED
 RIVER SECTION: WE 64 TO WE 75 (RIGHT & LEFT BANK)
 STANDARD CROSS SECTION AND PROFILE OF REVETMENT

DESIGNED: [Signature]
 CHECKED: [Signature]
 DATE: [Date]
 CONTRACT NO: [Number]

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

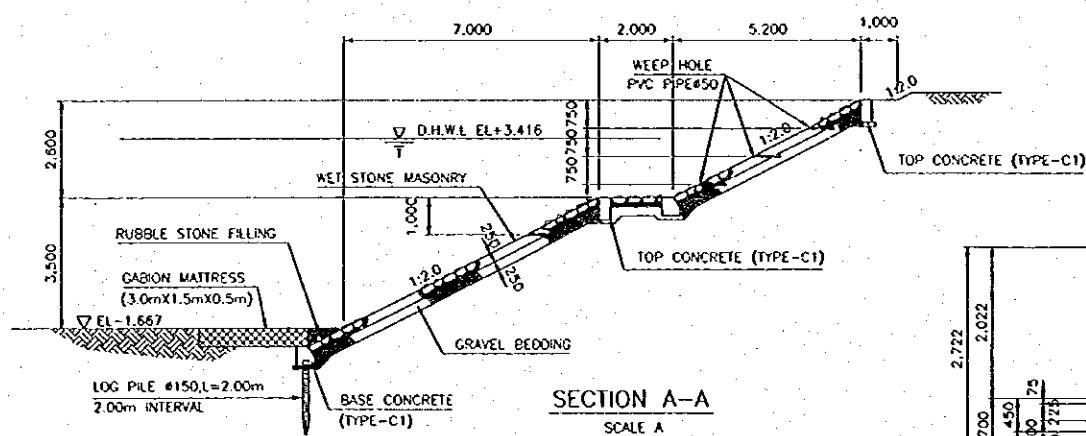


<p>THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT</p>				<p>PROVINCE: CENTRAL JAVA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER SUPPLY DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO. WB-P1-PR-51-11 SHEET NO. 118 DATE: _____ CONTRACT NO. _____</p>	
<p>FRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WF.64 TO WF.75 (RIGHT & LEFT BANK) STRUCTURAL DETAILS OF REVETMENT</p>				<p>DESIGNED: _____ CHECKED: _____ APPROVED: _____</p>	
<p>JAPAN INTERNATIONAL COOPERATION AGENCY CIJ INCORPORATED CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACIFIC INTERNATIONAL, INC.</p>				<p>DESIGNED: _____ CHECKED: _____ APPROVED: _____</p>	
<p>CHIEF OF PLANNING AND DESIGN PROJECT MANAGER</p>				<p>NO. DATE REVISIONS ORIGINATED DESIGNED APPROVED</p>	



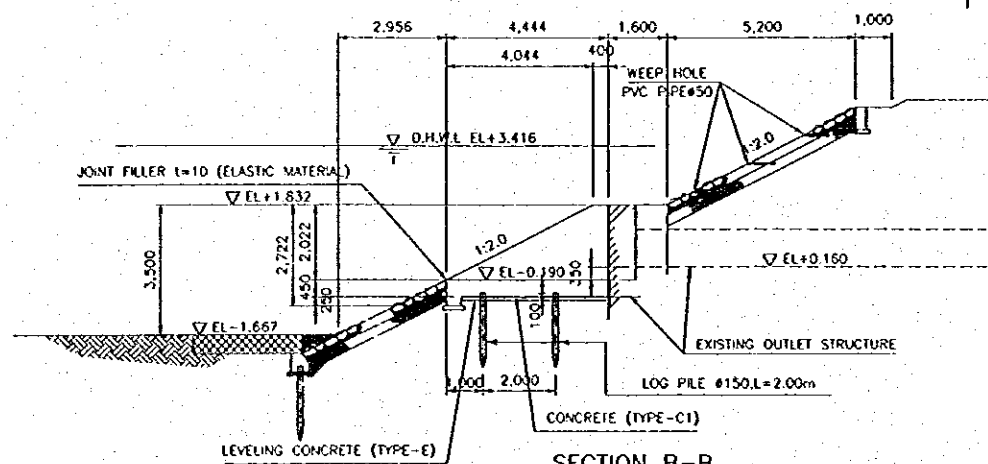
PLAN OF DRAINAGE OUTLET AND REVETMENT

SCALE A



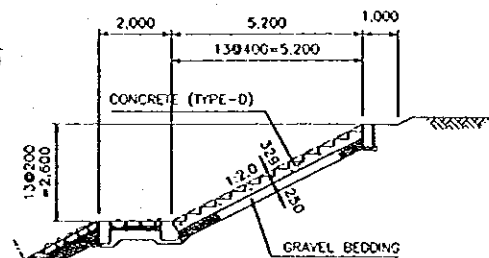
SECTION A-A

SCALE A



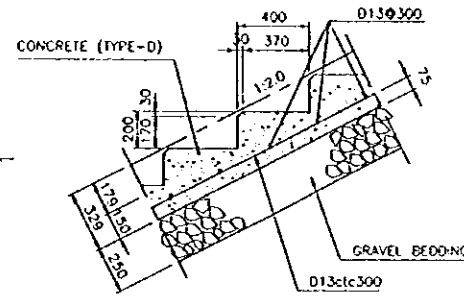
SECTION B-B

SCALE A



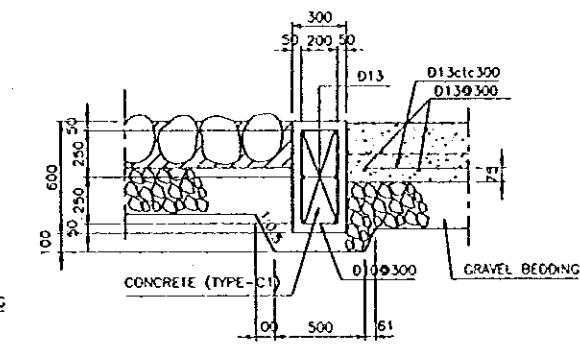
SECTION C-C

SCALE A



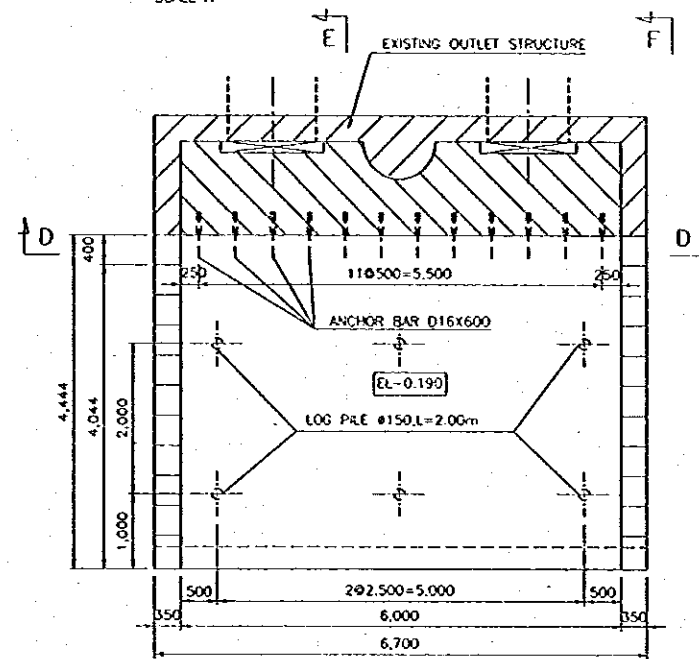
DETAIL OF STEPS

SCALE C



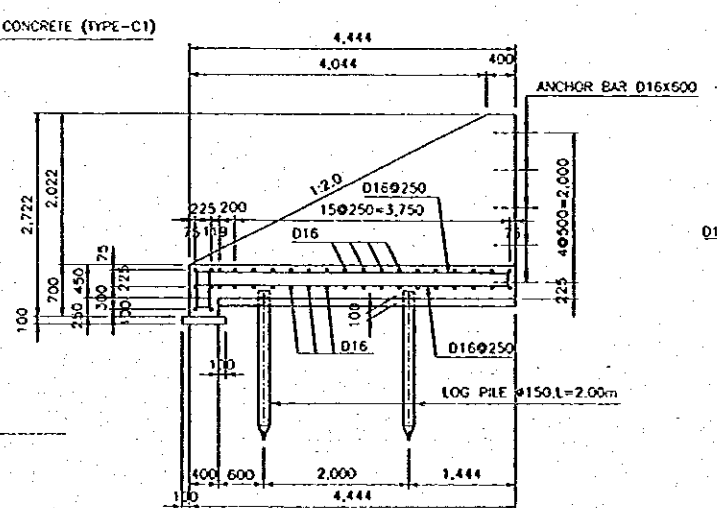
SIDE WALL FOR STEPS

SCALE C



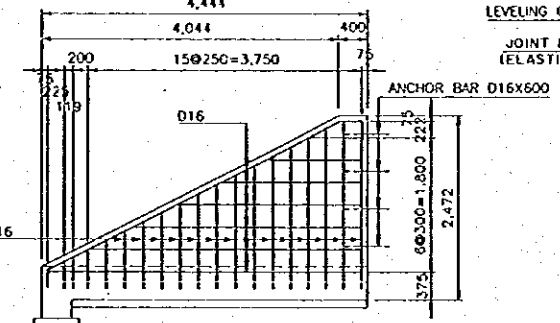
PLAN OF NEW OUTLET STRUCTURE

SCALE B



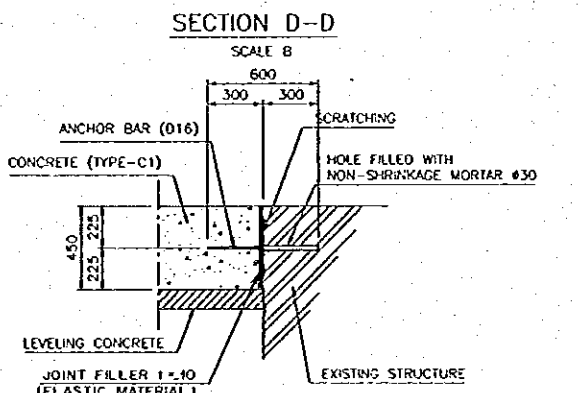
SECTION E-E

SCALE B



SECTION F-F

SCALE B

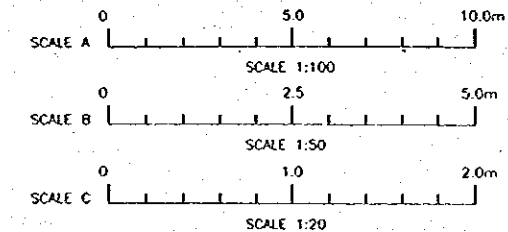


SECTION D-D

SCALE B

DETAIL OF JOINTING

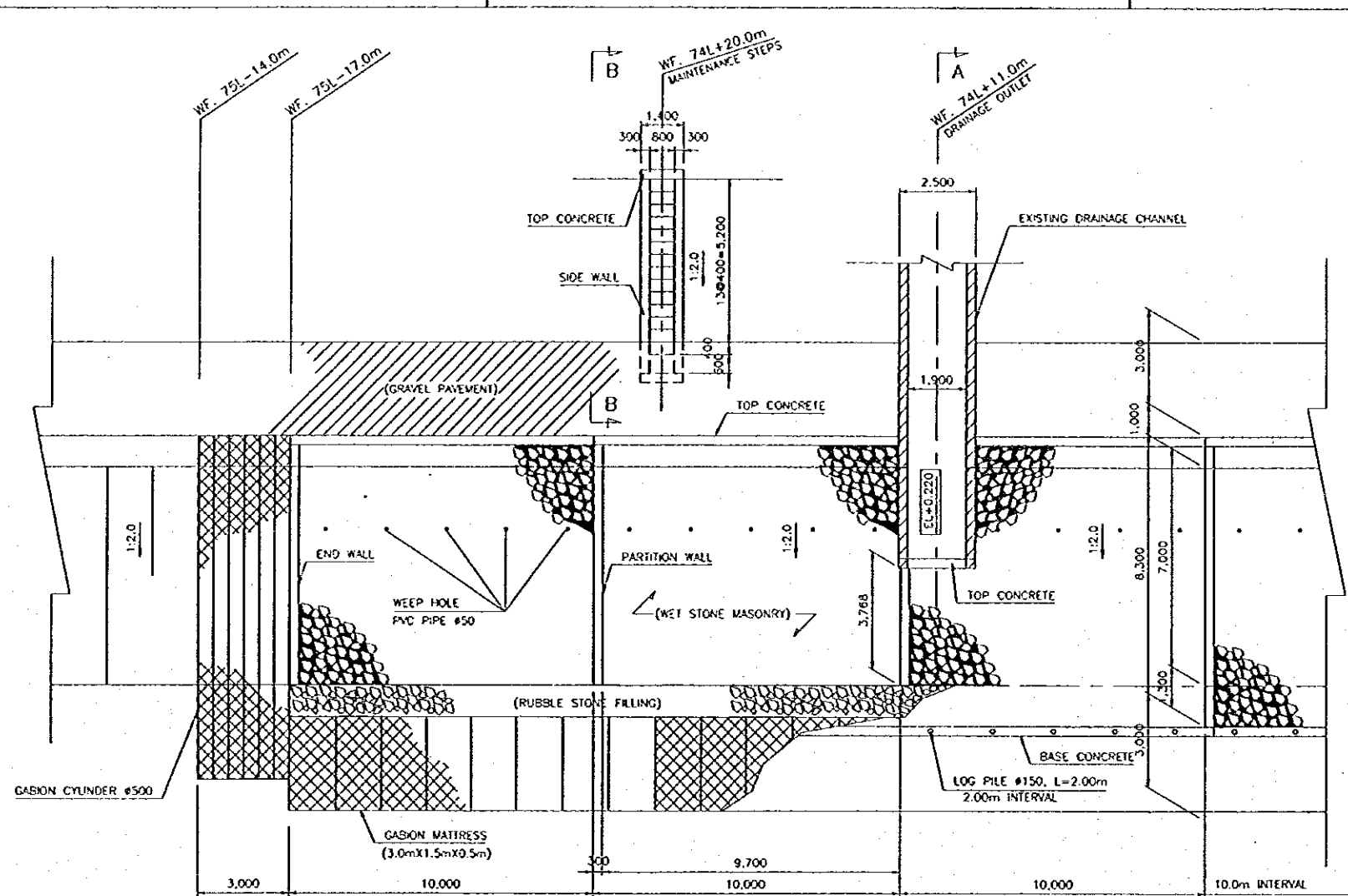
SCALE C



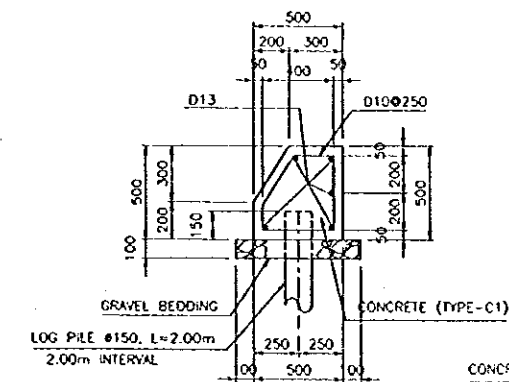
NOTE:
THE EXISTING DRAINAGE OUTLET STRUCTURE IS TENTATIVELY SHOWN ON THIS DRAWINGS. THE CONSTRUCTION DRAWING SHALL BE PREPARED BASED ON THE SITE SURVEY RESULT BY THE CONTRACTOR AND THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

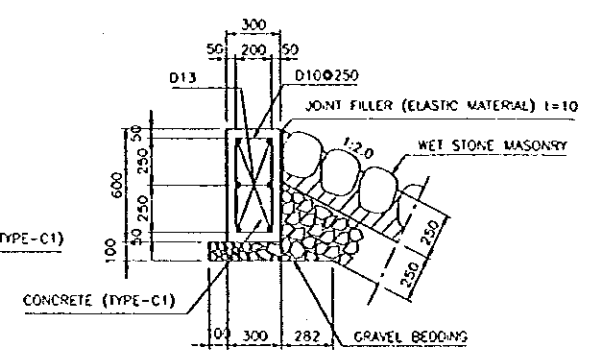
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WF 64 TO WF 73 (RIGHT & LEFT BANK) DRAINAGE OUTLET AND REVETMENT (1/2)		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND KANG INTERNATIONAL INC.		CITY SEMARANG CITY
DESIGNED CHECKED OFFICE OF PLANNING AND DESIGN		DRAWING NO. WS-P1-PR-P1-12 SHEET NO. III
APPROVED PROJECT MANAGER		DATE CONTRACT NO.



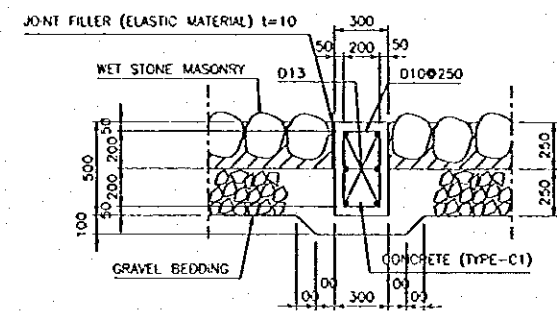
PLAN OF REVETMENT
SCALE A



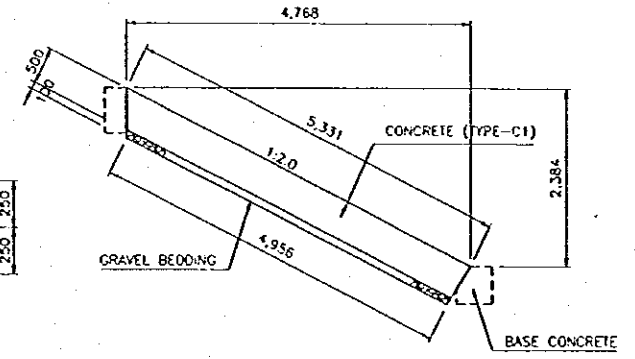
DETAIL OF BASE CONCRETE
SCALE C



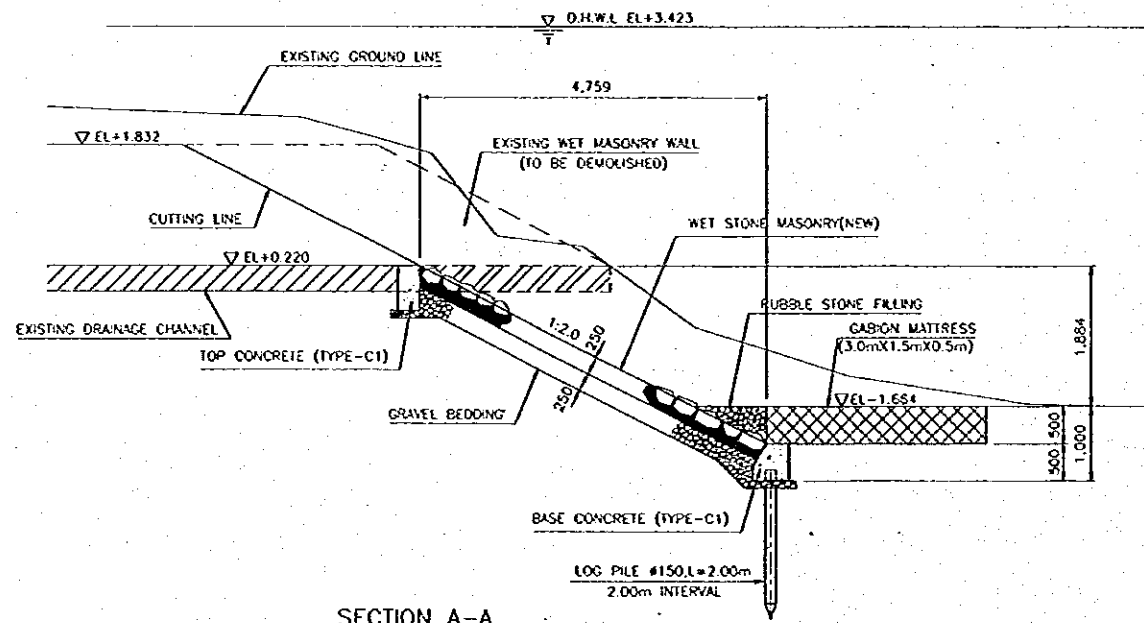
DETAIL OF TOP CONCRETE
SCALE C



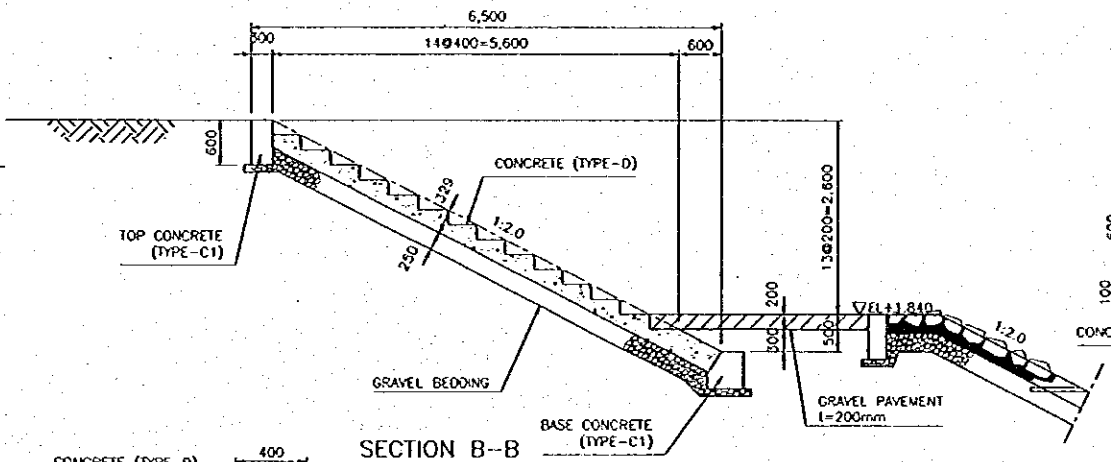
DETAIL OF TOP CONCRETE
SCALE C



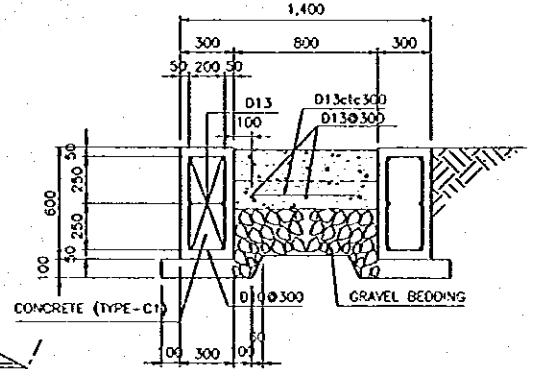
PROFILE OF PARTITION WALL
SCALE B



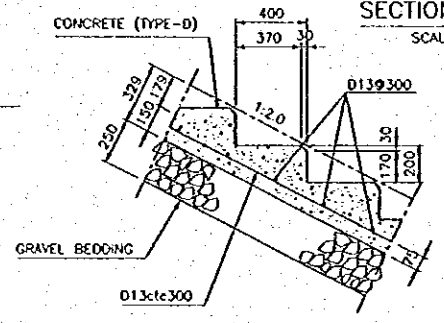
SECTION A-A
SCALE B



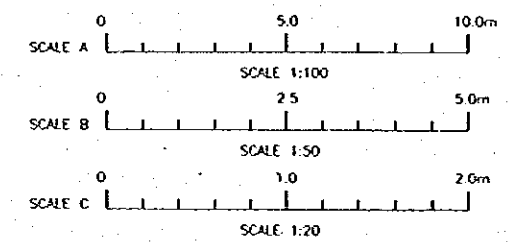
SECTION B-B
SCALE B



DETAIL OF SIDE WALL
SCALE C



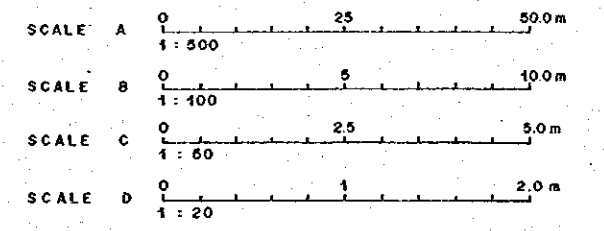
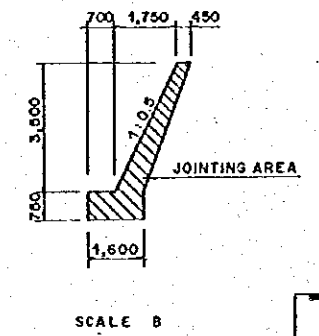
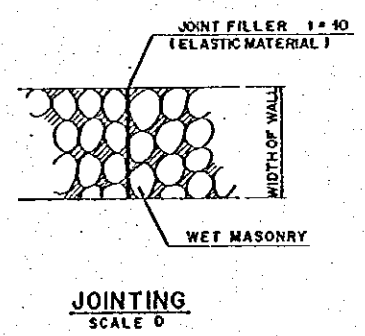
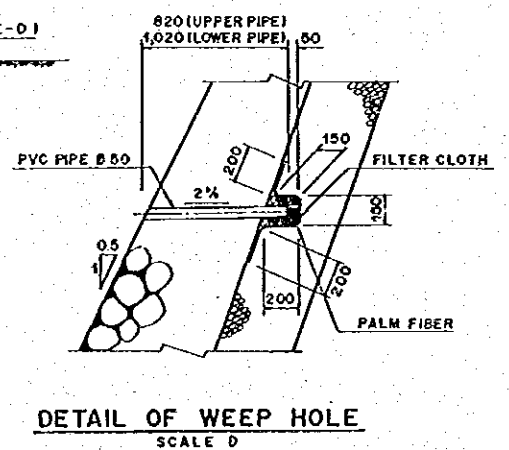
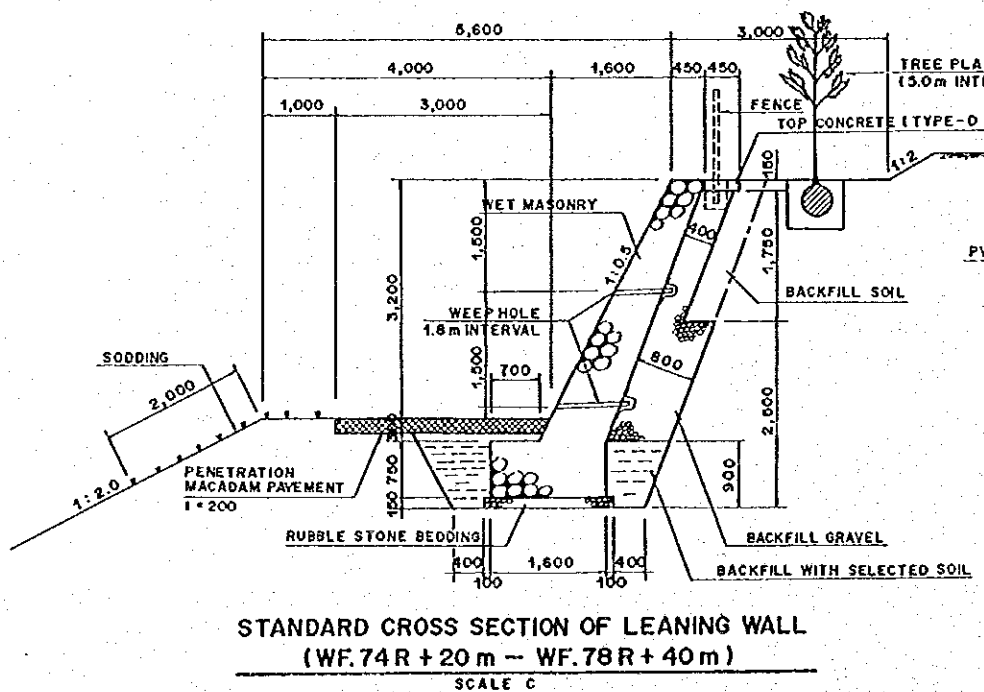
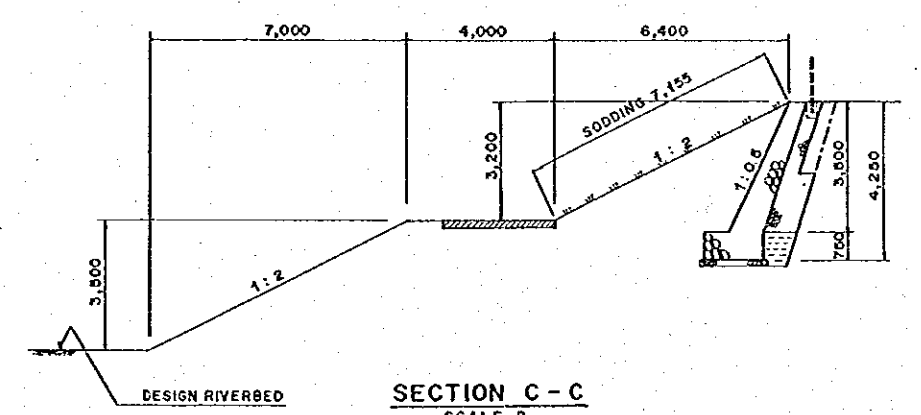
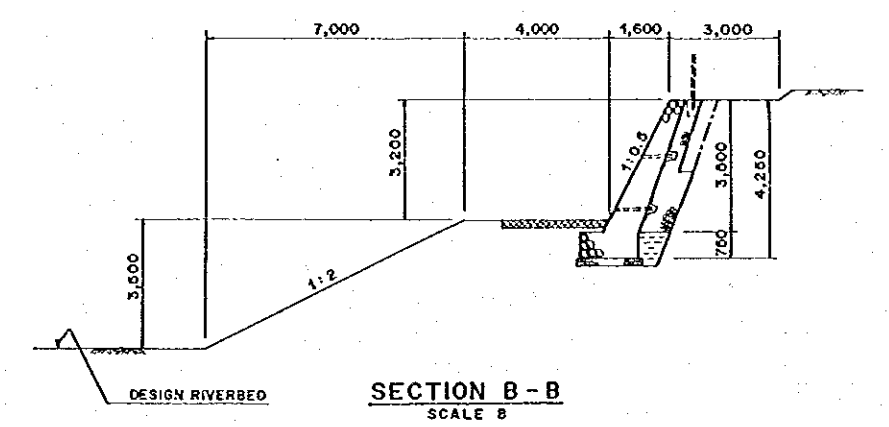
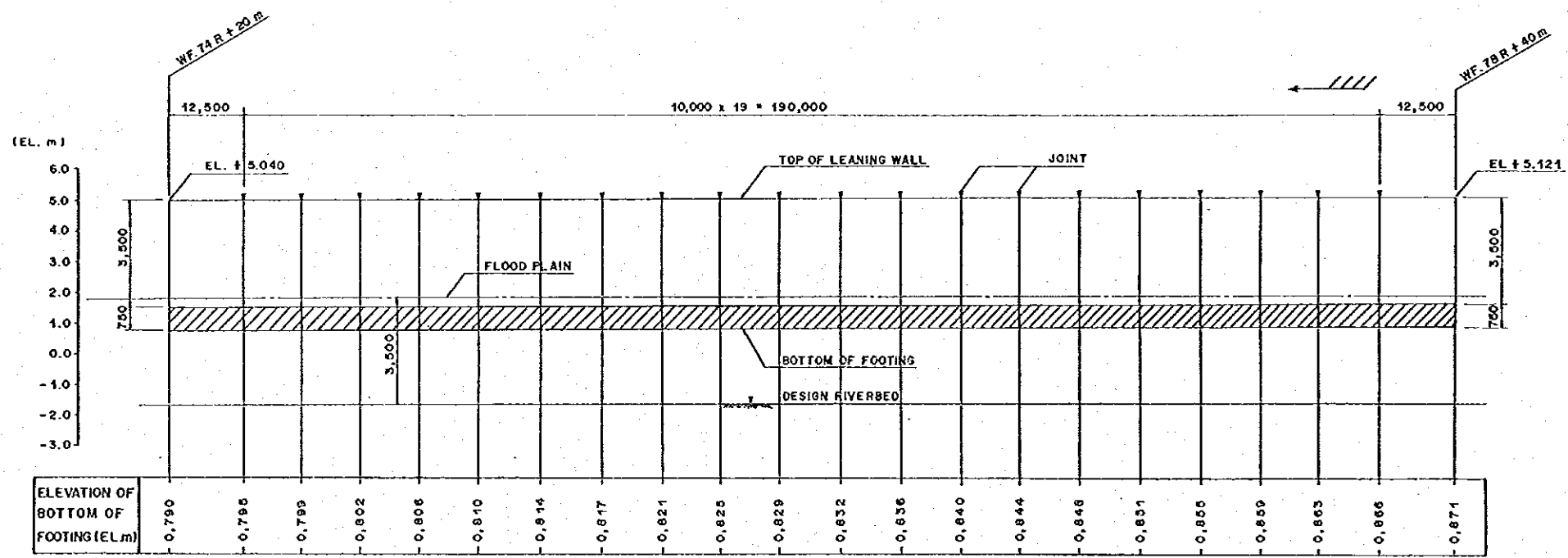
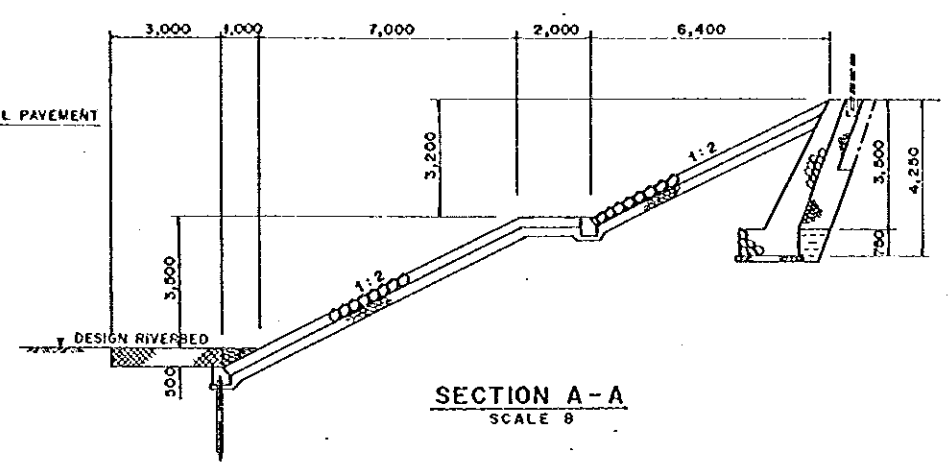
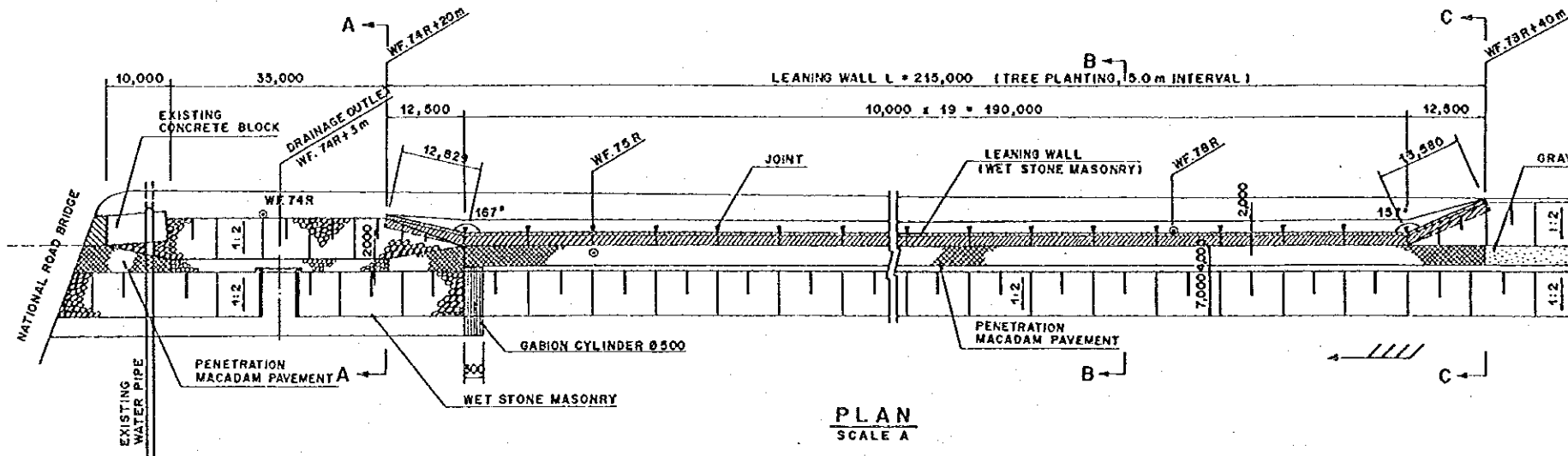
DETAIL OF STEPS
SCALE C



NOTE:
THE POSITION AND SHAPE OF THE EXISTING DRAINAGE CHANNEL IN THE LAYOUT PLAN OF REVETMENT IS TENTATIVE. THE CONTRACTOR SHALL CONFIRM THE POSITION AND SHAPE OF THE EXISTING DRAINAGE STRUCTURE ON THE SITE, AND SHOW THEM IN THE DETAILED CONSTRUCTION DRAWING. THEN, THE DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO. W.S.-P1.-P1-13 SHEET NO. 112 DATE: _____ CONTRACT NO.: _____
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WE 64 TO WE 75 (RIGHT & LEFT BANK DRAINAGE OUTLET AND REVETMENT (2/2))		DESIGNED: _____ CHECKED: _____ PROJECT MANAGER: _____



NO.	DATE	REVISIONS	ORDERED	DESIGNED	APPROVED

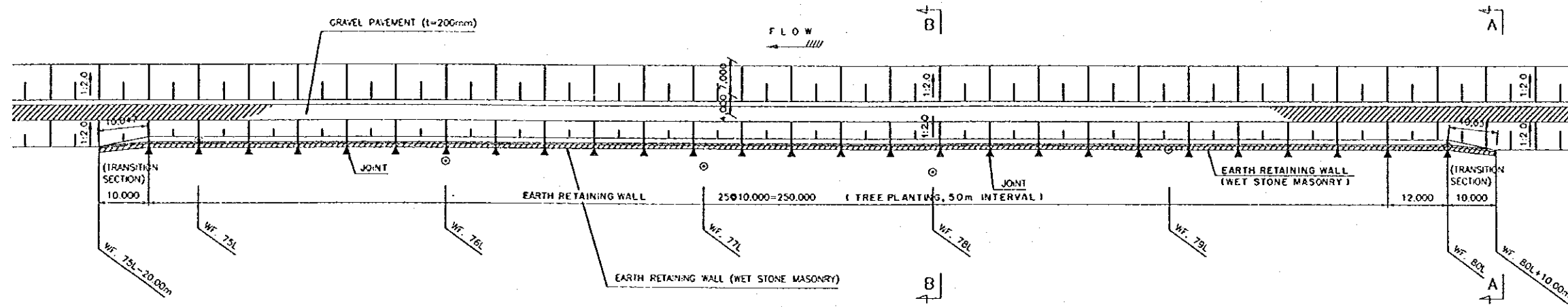
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

PROVINCE: CENTRAL JAVA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER EMPOWERING DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. WG-P1-PR-PI-14
 SHEET NO. 113

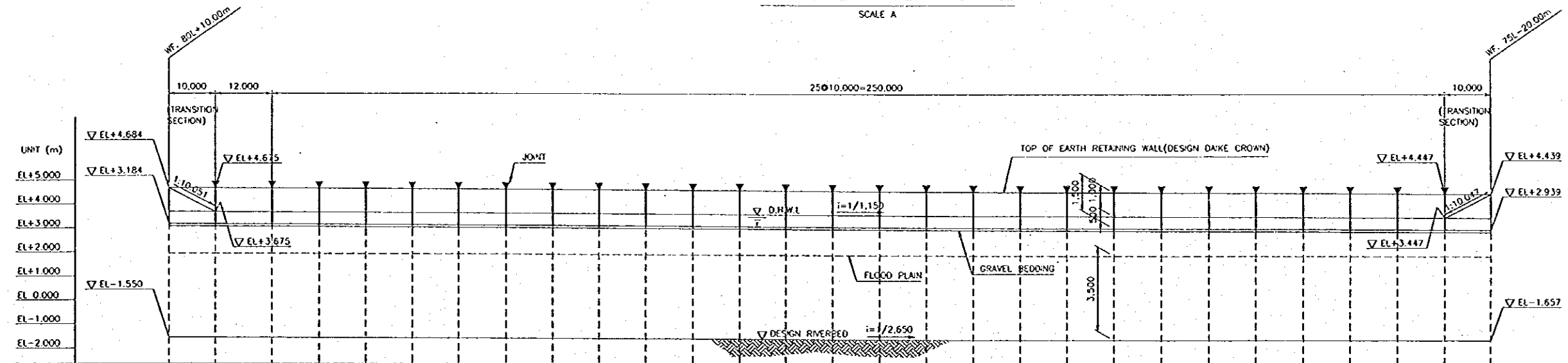
JAPAN INTERNATIONAL COOPERATION AGENCY
 CUI ENGINEERING CO., LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL AND
 PACIFIC ENGINEERING CONSULTANTS

DESIGNED: [Signature]
 CHECKED: [Signature]
 DATE: [Date]
 CONTRACT NO. [Number]

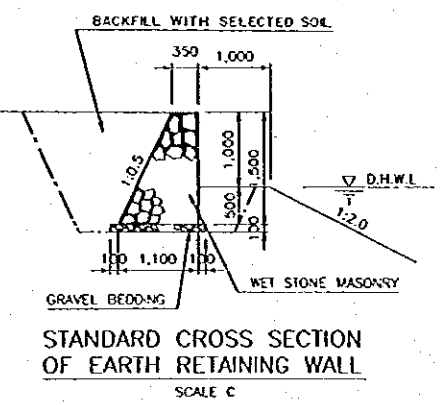
APPROVED: [Signature]
 PROJECT MANAGER



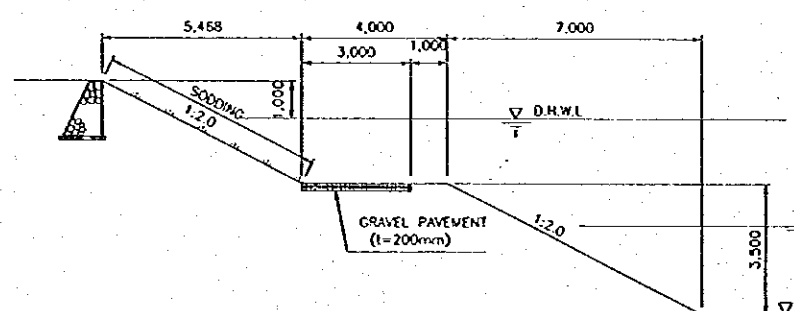
PLAN OF EARTH RETAINING WALL
SCALE A



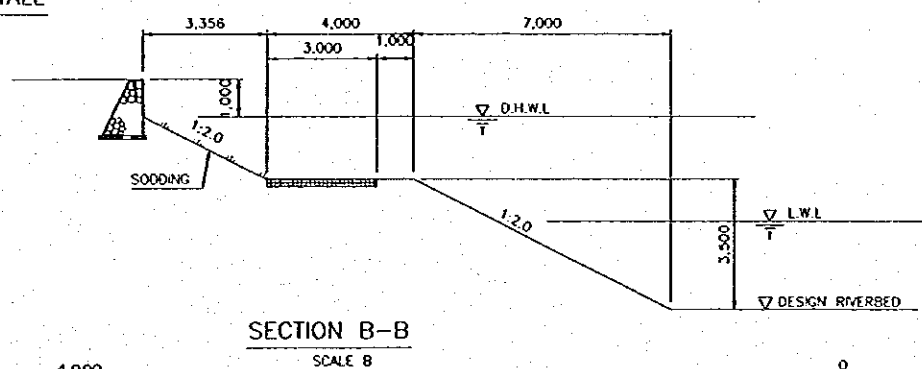
PROFILE OF EARTH RETAINING WALL
SCALE H-A / V-B



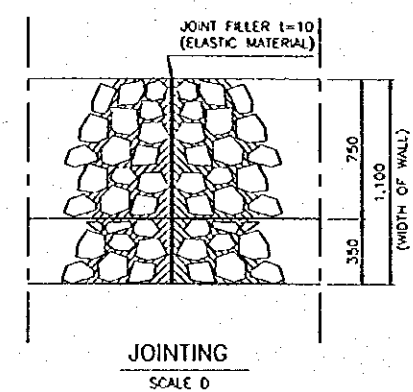
STANDARD CROSS SECTION OF EARTH RETAINING WALL
SCALE C



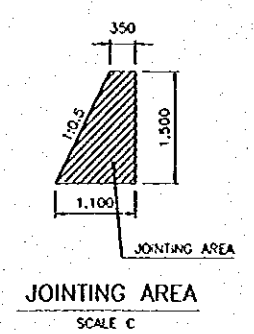
SECTION A-A
SCALE B



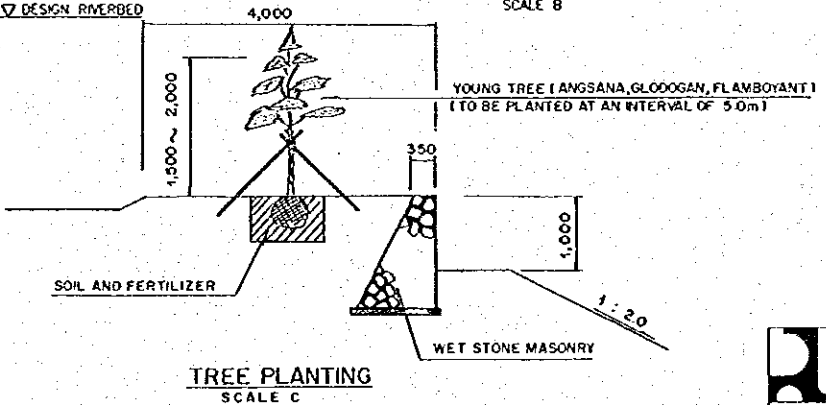
SECTION B-B
SCALE B



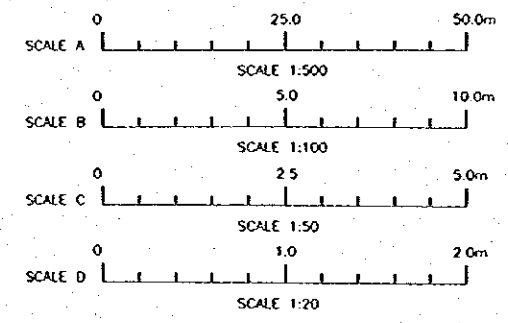
JOINTING
SCALE D



JOINTING AREA
SCALE C

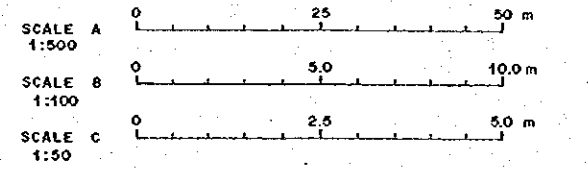
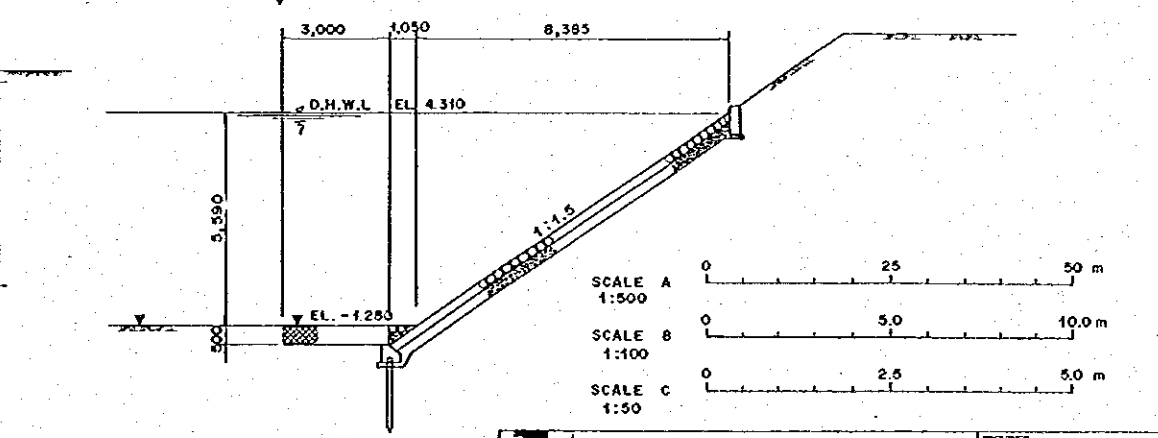
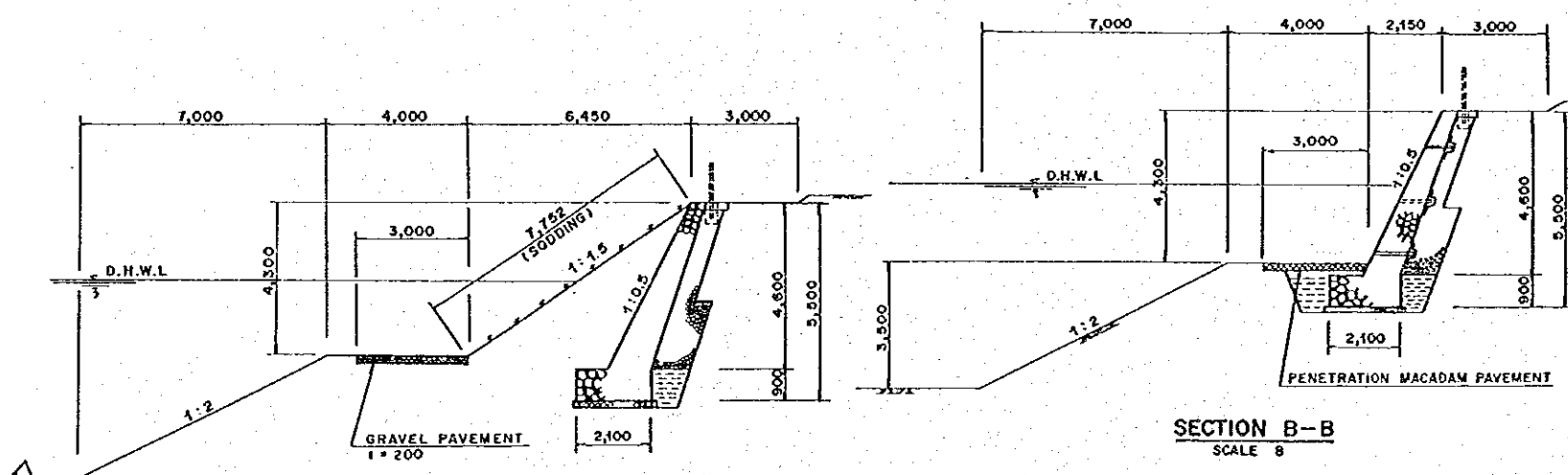
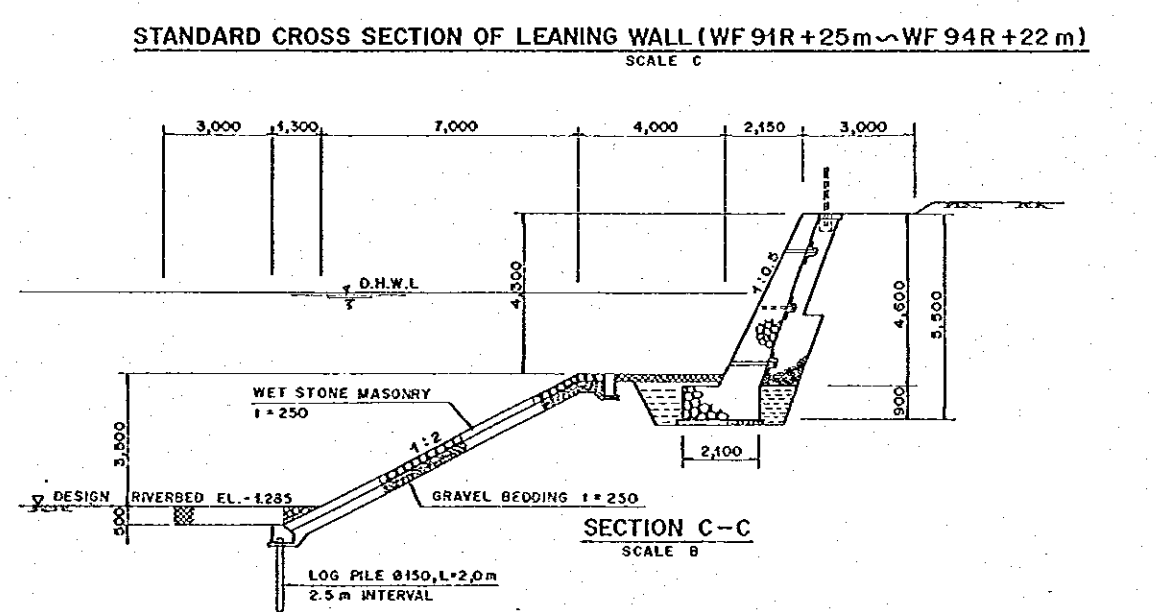
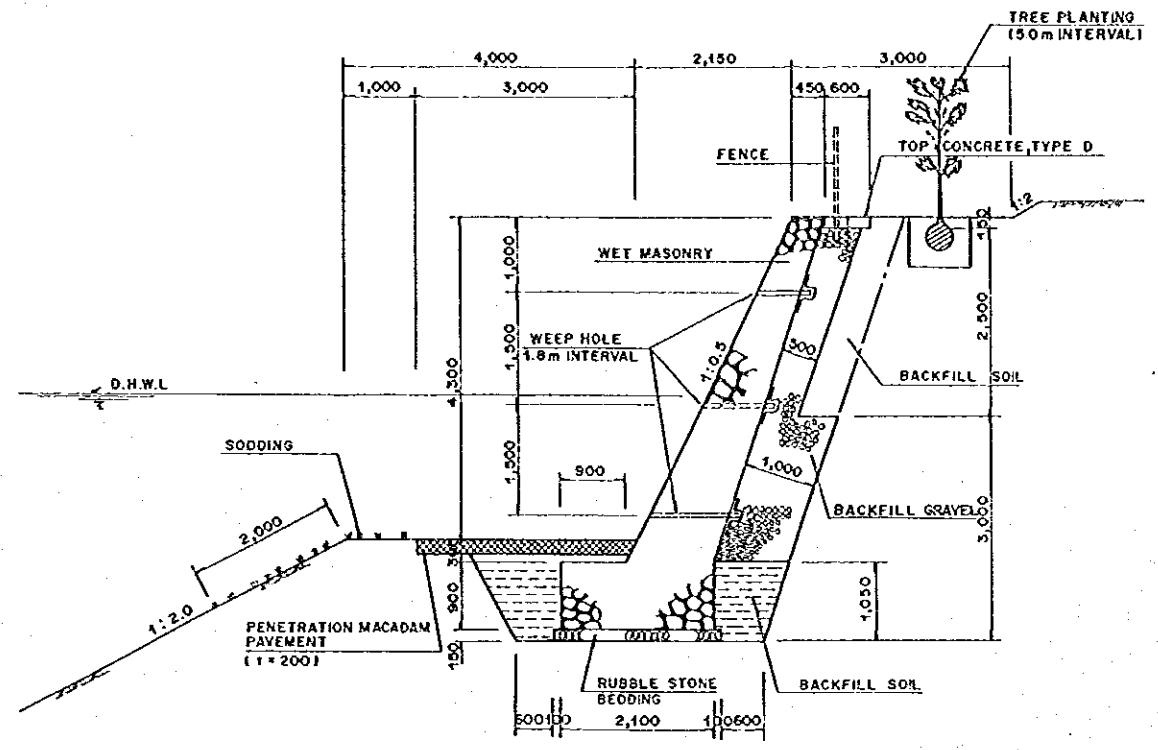
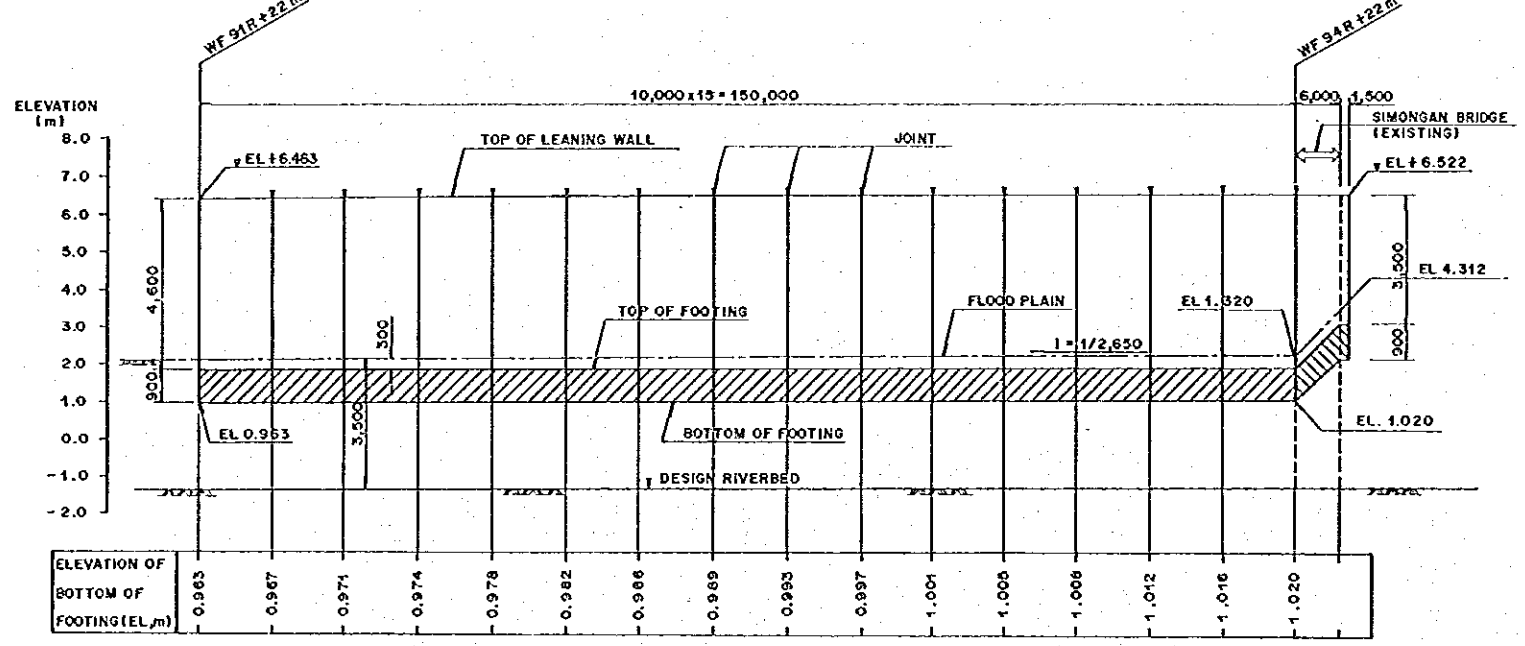
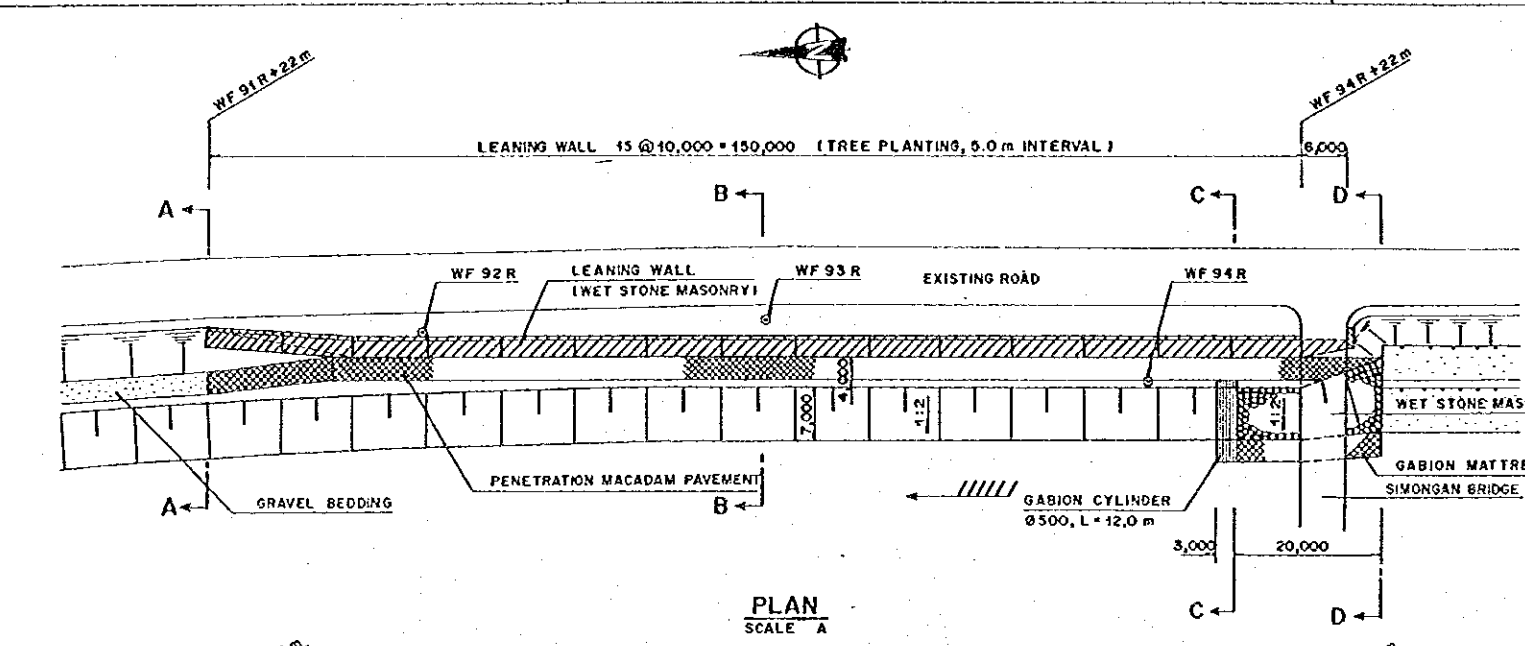


TREE PLANTING
SCALE C



NO.	DATE	REVISION	COORDINATED	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
JRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION : WF. 75L TO WF. 80L (LEFT BANK) PLAN, PROFILE AND CROSS SECTION OF RETAINING WALL		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAWA INTERNATIONAL COOPERATION AGENCY CIE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACIFIC INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CONF. OF PLANNING AND DESIGN		DRAWING NO. WG - P1 - PR - P1 - 15 SHEET NO. 114
APPROVED PROJECT MANAGER		DATE CONTRACT NO.

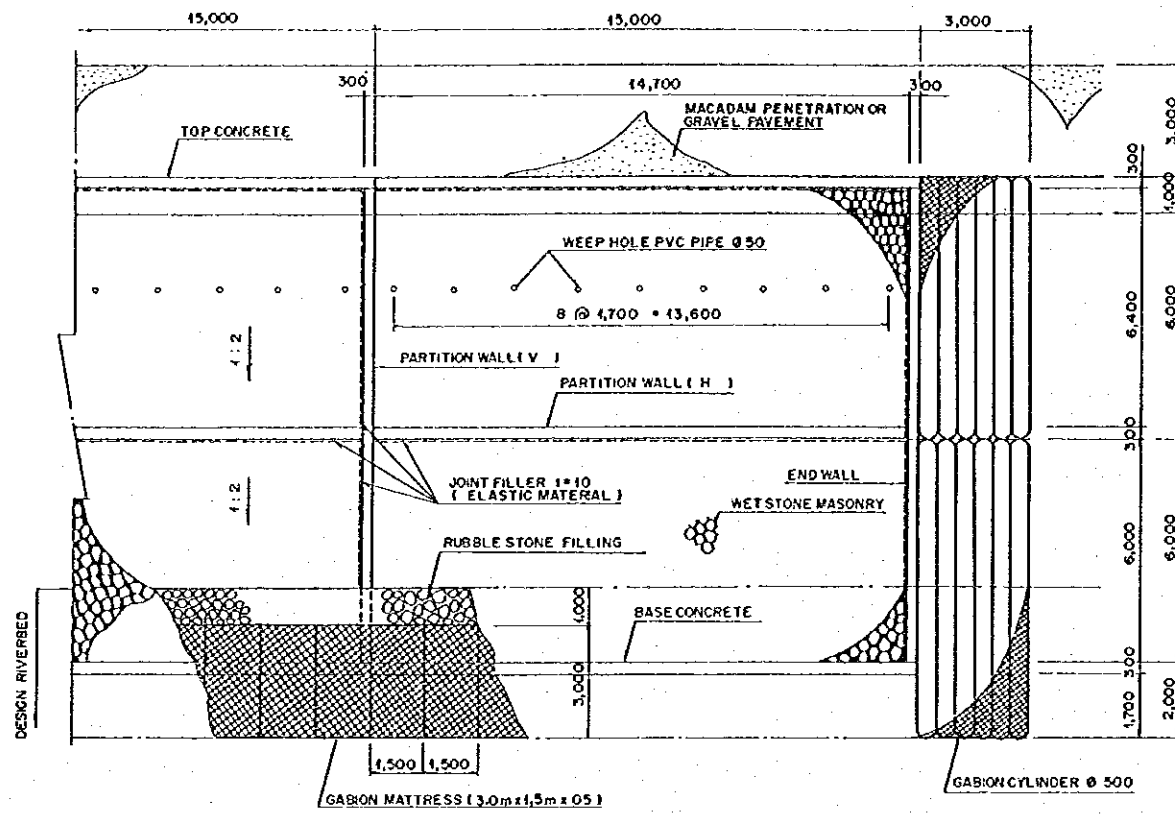


NOTE

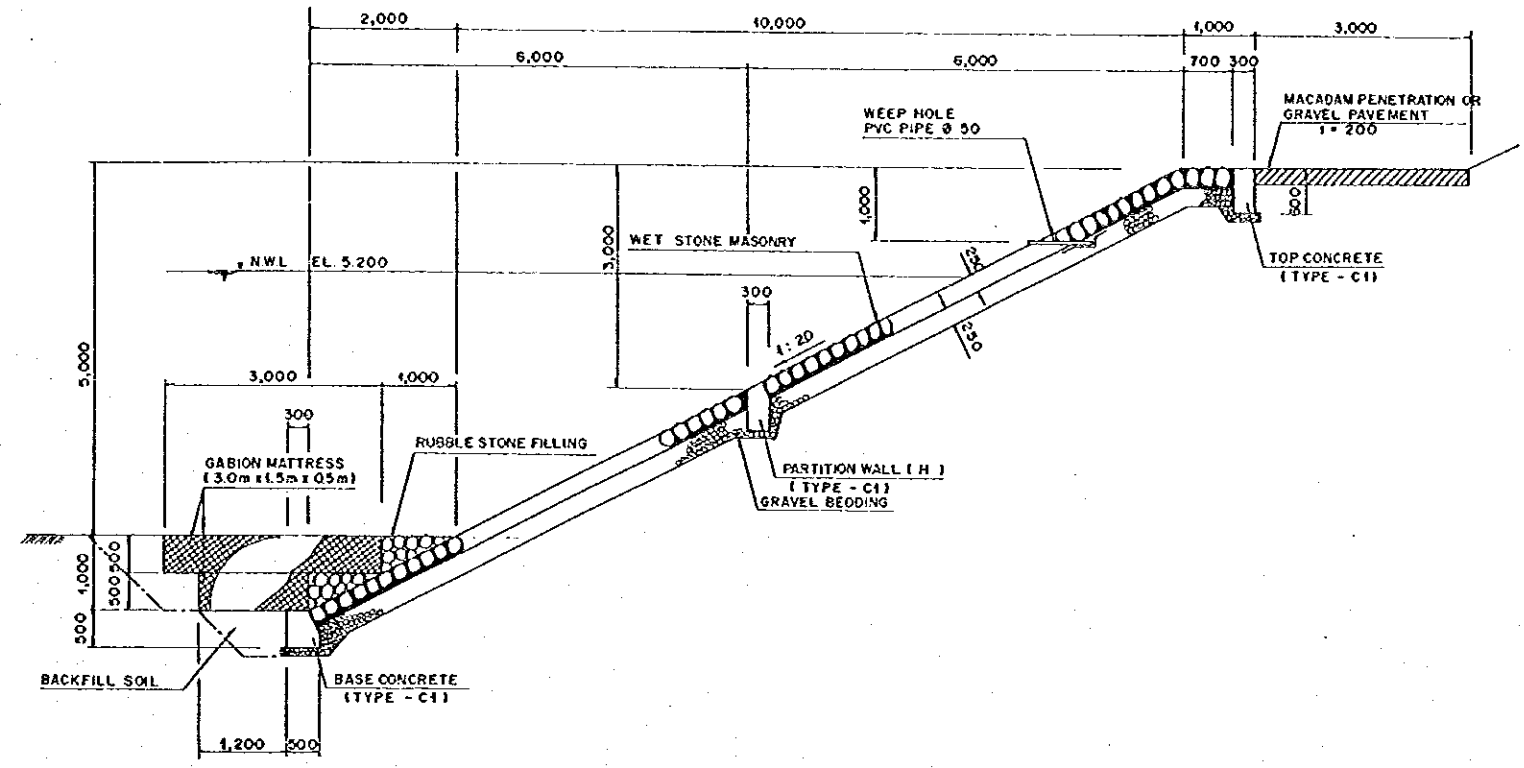
- ARRANGEMENT OF REVETMENT FOR THE TRANSITION SECTION AT THE UPPERMOST END IS TENTATIVE. THE CONTRACTOR SHALL CONFIRM THE SITE CONDITION AND MAKE AN ARRANGEMENT OF REVETMENT TO CONNECT THE EXISTING REVETMENT. THE DRAWING FOR THIS SHALL BE PREPARED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

NO.	DATE	REVISION	ORIGINATED	DESIGNED	APPROVED	APPROVED

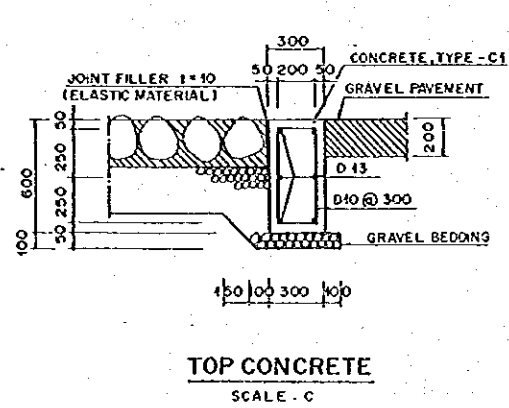
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVIDER CENTRAL LAVA
PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA		DISTRICT SEMARANG CITY
COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION : WF.91R TO WF.94R(RIGHT BANK) PLAN, PROFILE AND CROSS SECTION OF LEANING WALL		DRAWING NO. WS - P1 - PA - P1 - 16 SHEET NO. 115
JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PABCO INTERNATIONAL INC.	DESIGNED CHECKED CHIEF OF PLANNING AND DESIGN	DATE CONTRACTING NO.
PROJECT MANAGER		



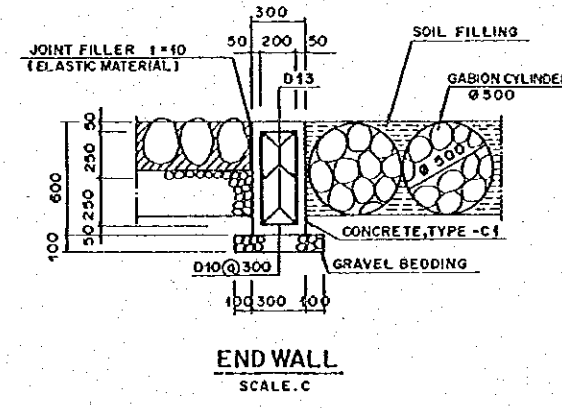
PLAN OF REVETMENT
SCALE A



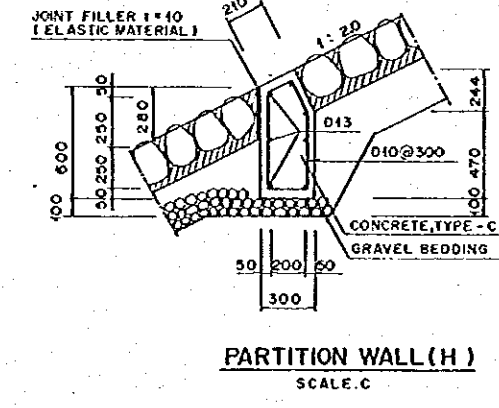
STANDARD CROSS SECTION OF REVETMENT (SLOPE 1:2)
SCALE B



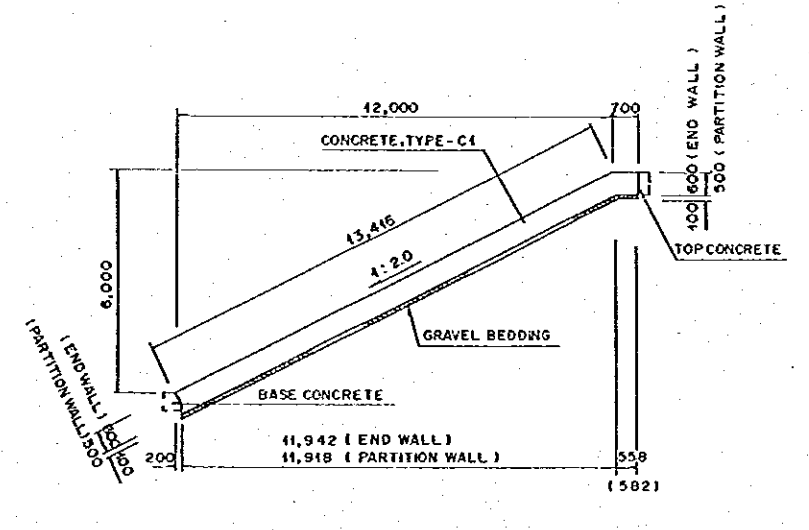
TOP CONCRETE
SCALE C



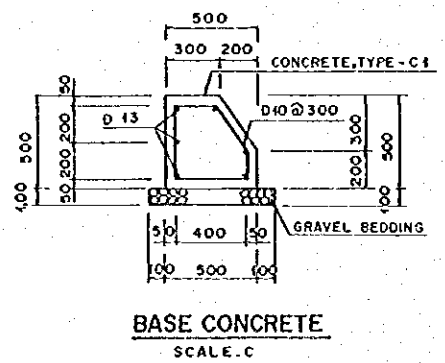
END WALL
SCALE C



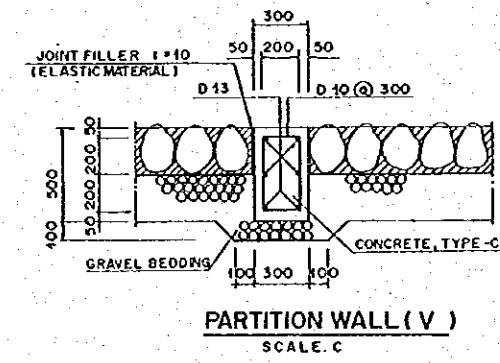
PARTITION WALL (H)
SCALE C



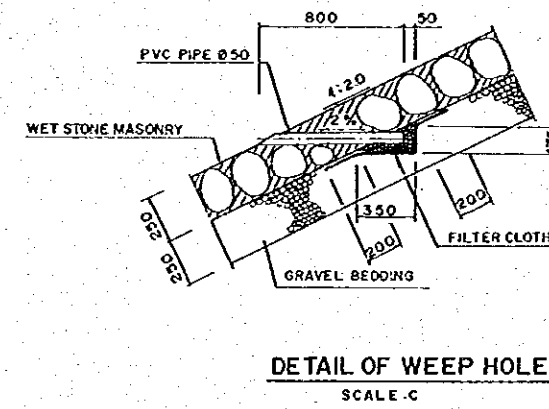
PROFILE OF END WALL & PARTITION WALL
SCALE A



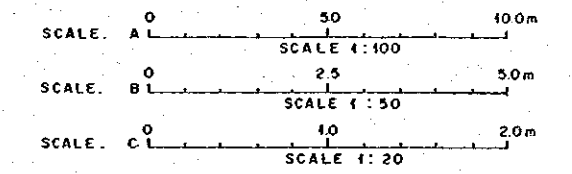
BASE CONCRETE
SCALE C



PARTITION WALL (V)
SCALE C



DETAIL OF WEEP HOLE
SCALE C

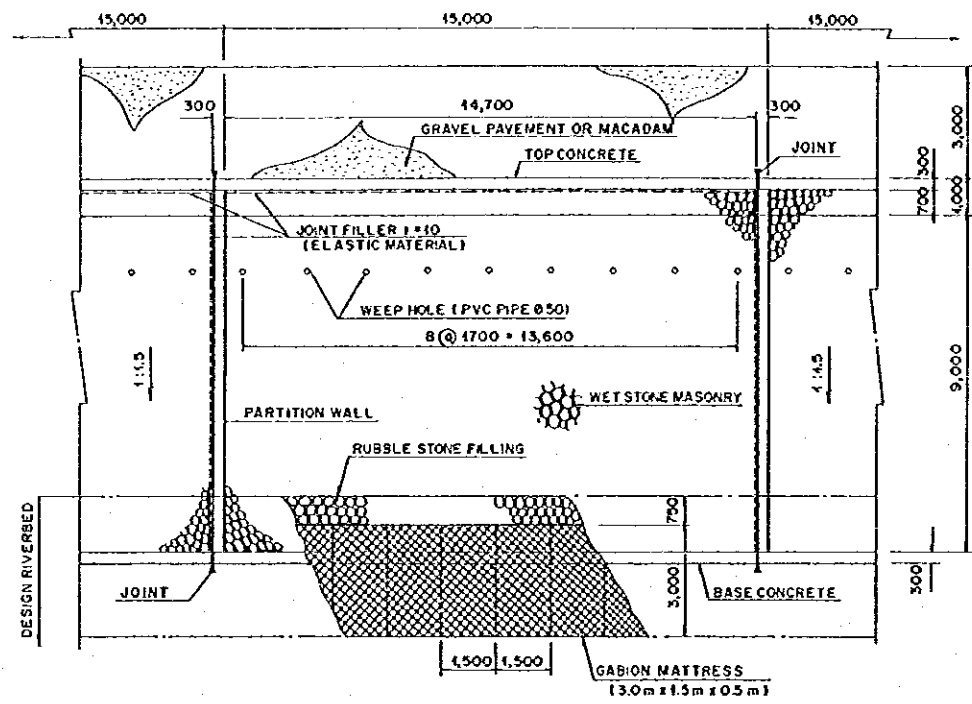


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

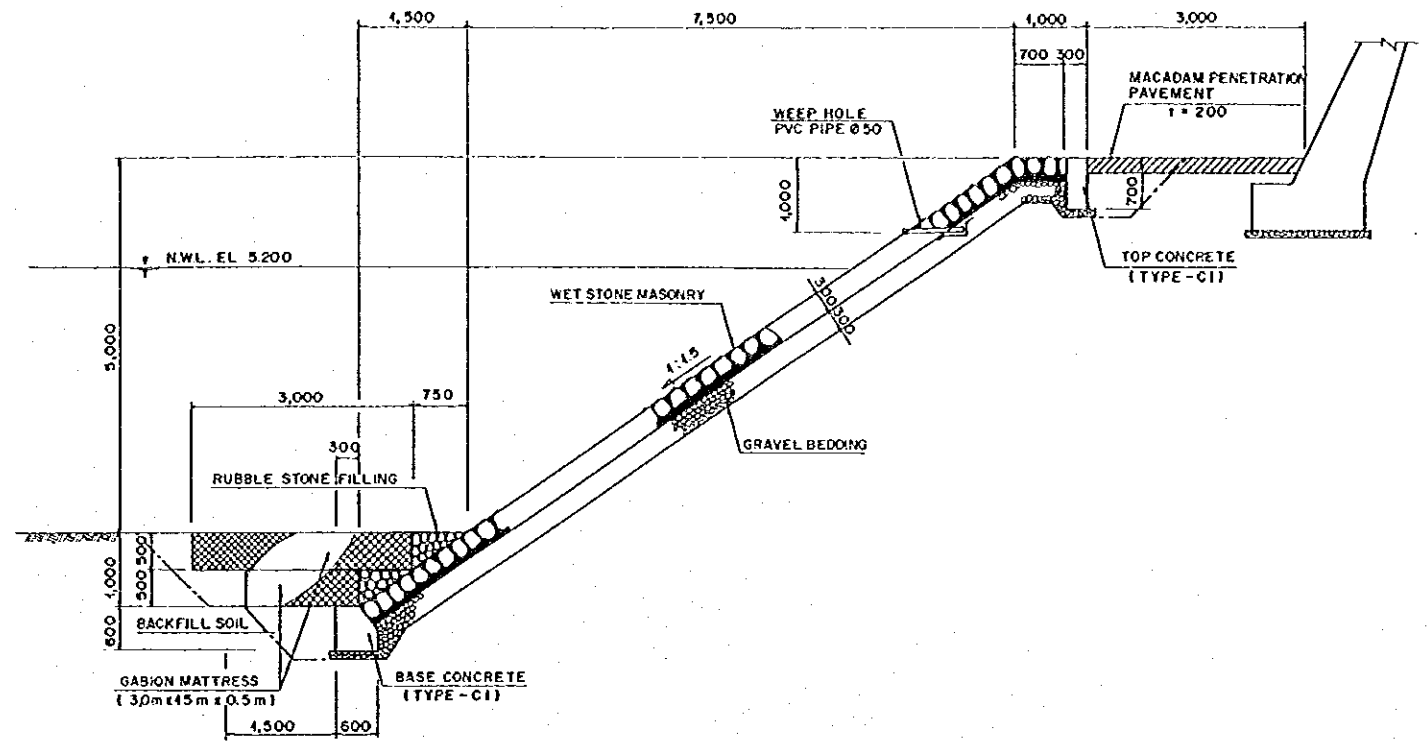
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 BRATUNSELUMA FLOOD CONTROL PROJECT
 COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT
 PROTECTION WORKS FOR RIVERBANK & RIVERBED
 RIVER SECTION: WF.100 TO WF.112 (RIGHT & LEFT BANK)
 STRUCTURAL DETAILS OF REVETMENT (1/2)

DESIGNED	CHECKED	DATE	CONTRACT NO.

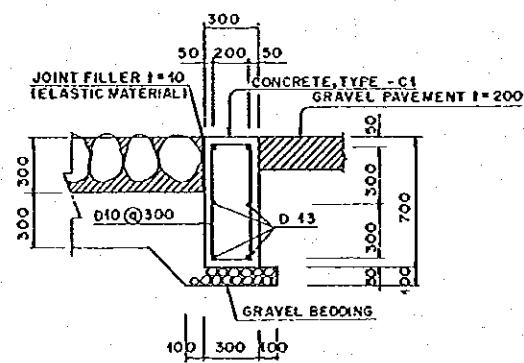
CHIEF OF PLANNING AND DESIGN
 PROJECT MANAGER



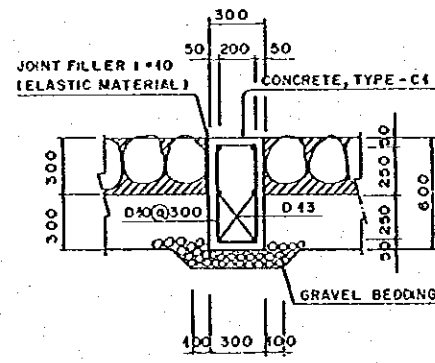
PLAN OF REVETMENT
SCALE. A



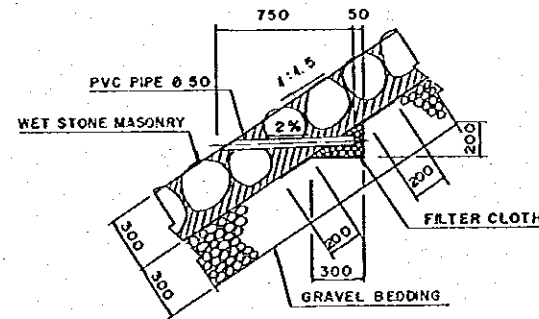
STANDARD CROSS SECTION OF REVETMENT (SLOPE 1:1.5)
SCALE. B



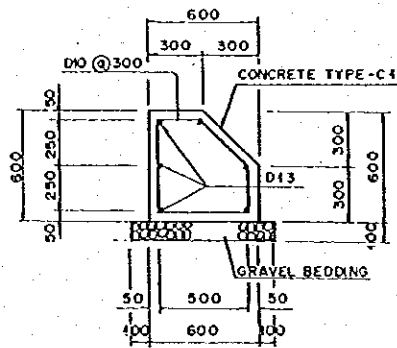
TOP CONCRETE
SCALE. C



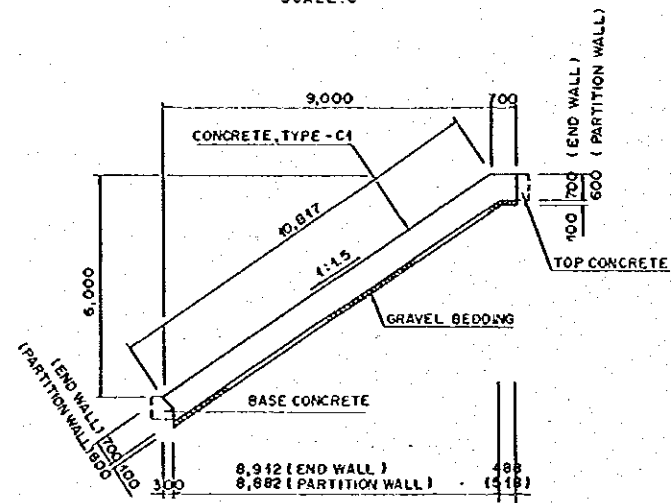
PARTITION WALL
SCALE. C



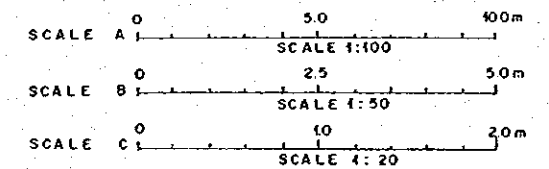
DETAIL OF WEEP HOLE
SCALE. C



BASE CONCRETE
SCALE. C

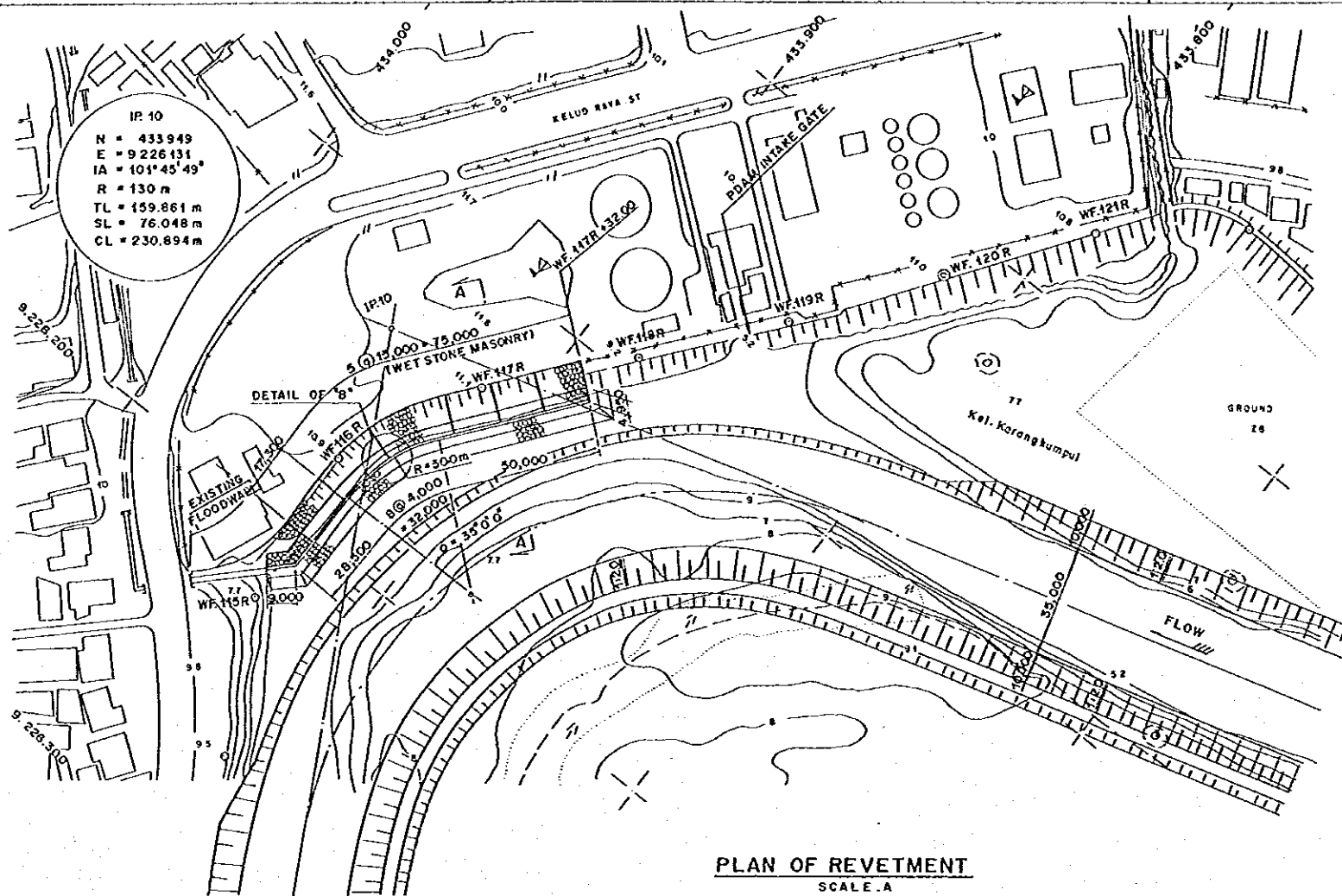


PROFILE OF END WALL & PARTITION WALL
SCALE. A

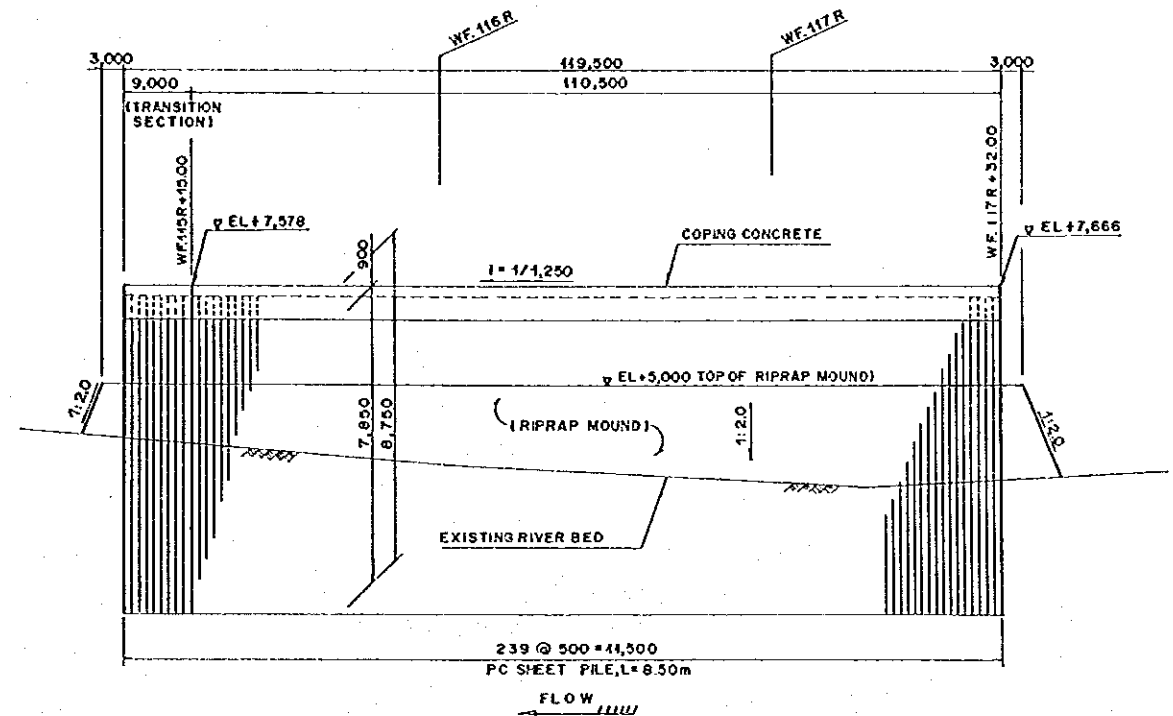


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA		DISTRICT SEMARANG CITY
COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION : WF. 100 TO WF. 112 (RIGHT & LEFT BANK) STRUCTURAL DETAILS OF REVETMENT (2/2)		DRAWING NO. WB-P1-PR-91-11 SHEET NO. 111
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.		DATE CONTRACT NO.
DESIGNED CHECKED APPROVED PROJECT MANAGER		DATE CONTRACT NO.

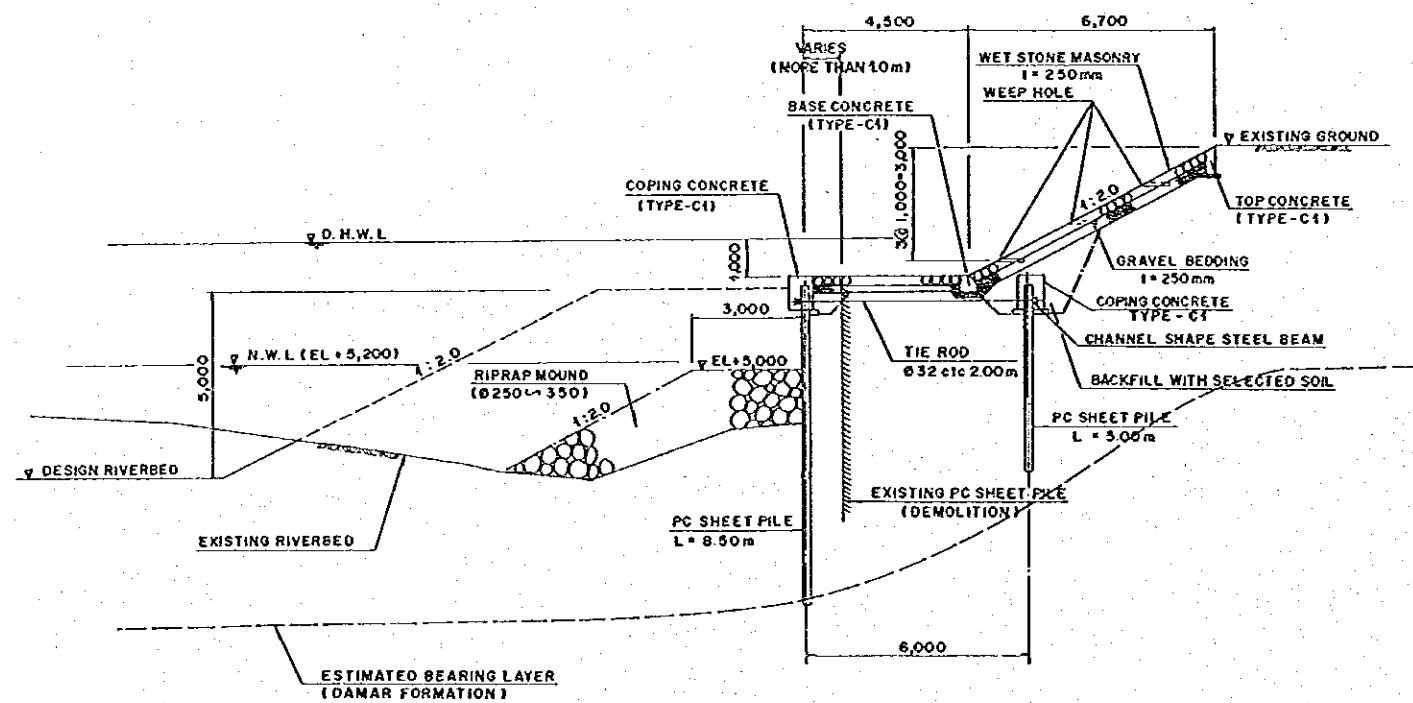
NO.	DATE	REVISIONS	ORIGINATOR	DESIGNED	APPROVED



PLAN OF REVETMENT
SCALE .A

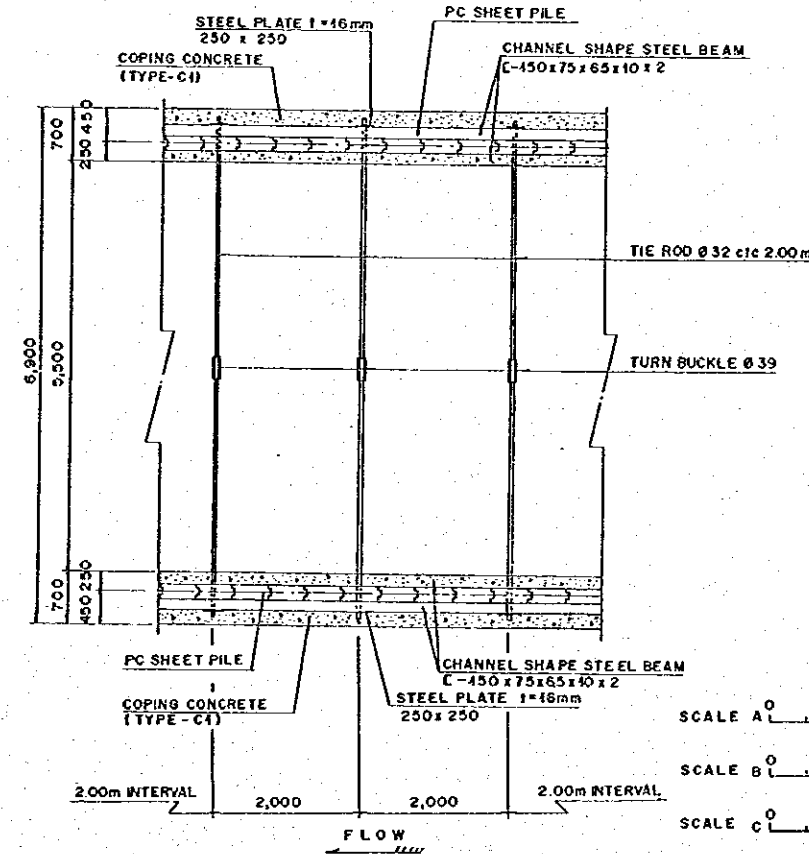


ELEVATION OF PC SHEET PILE
SCALE H = SCALE B / V = SCALE .C

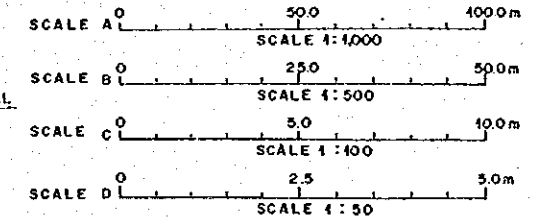


SECTION A-A
SCALE .C

NOTE:
1. THE EXISTING CONCRETE SHEET PILES SHALL BE REMOVED BEFORE THE CONSTRUCTION OF NEW REVETMENT.
2. THE CONSTRUCTOR SHALL CONFIRM THE POSITION OF DAMAR FORMATION BY TEST PILING BEFORE DRIVING THE MAIN PC SHEET PILES, AND SHALL DETERMINE THE LENGTH OF SHEET PILE.
ALL THE DISITIONS MADE BY THE CONTRACTOR NEED AN APPROVAL OF THE ENGINEER.

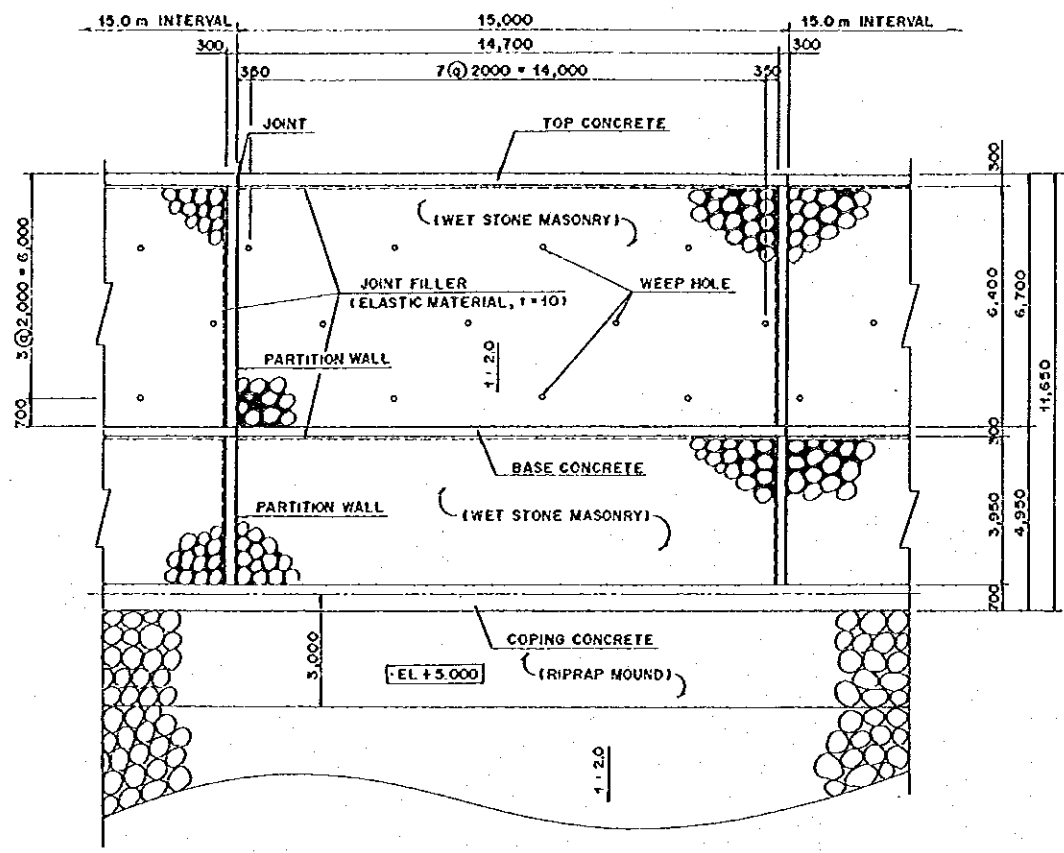


ARRANGEMENT OF TIE ROD
SCALE .D

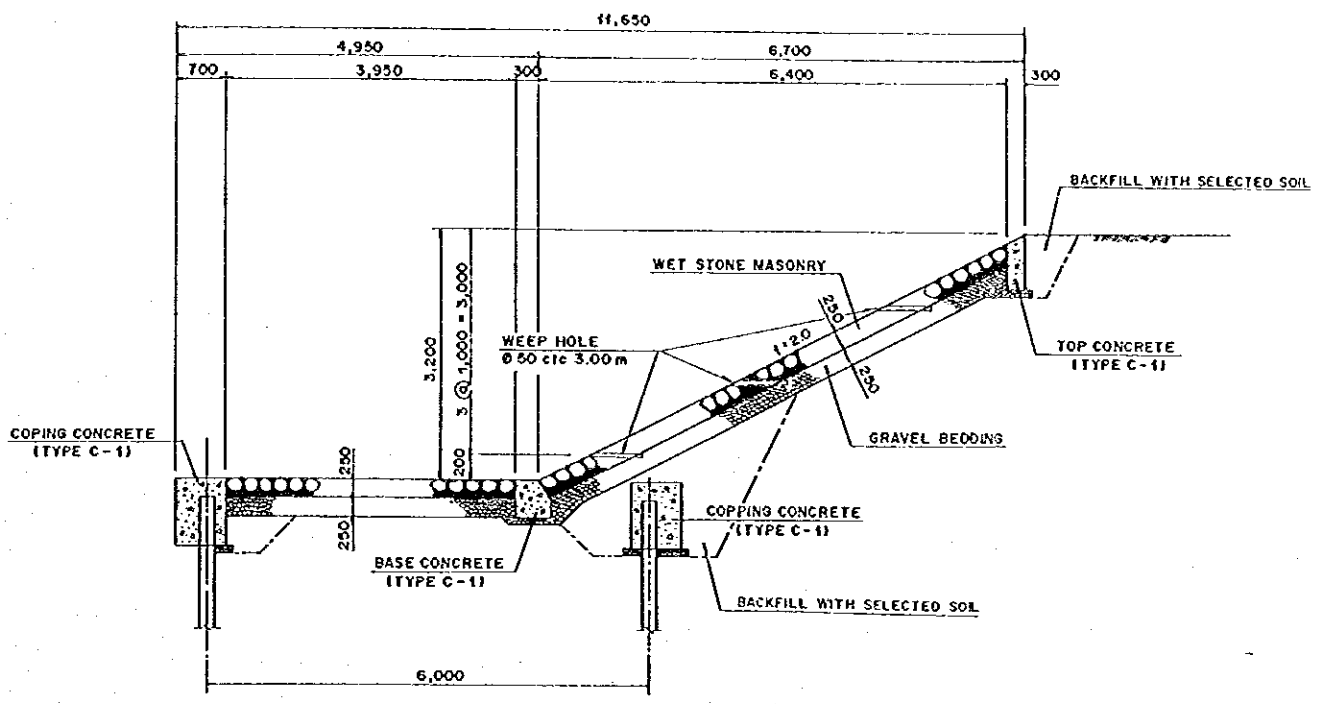


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

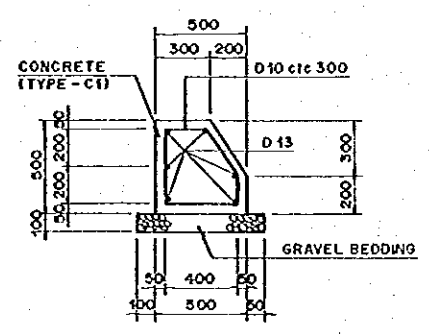
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVIDER CENTRAL JAWA
PRATUNSELJUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION: WF.118R TO WF.118R (RIGHT BANK) PROFILE OF PC SHEET PILE WALL TYPE REVETMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
DRAWING NO. W9 - P1 - PR - P1 - 32 SHEET NO. 111		DATE CONTRACT NO.
DESIGNED: [Signature] CHECKED: [Signature] CLERK OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED: [Signature]



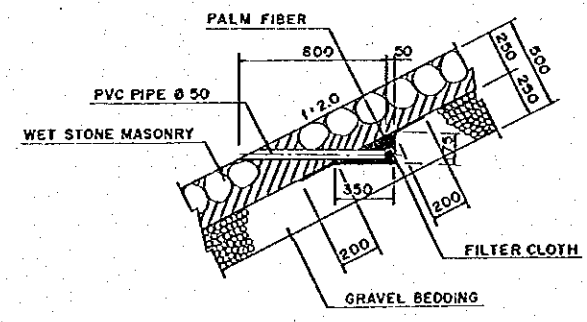
PLAN
SCALE A



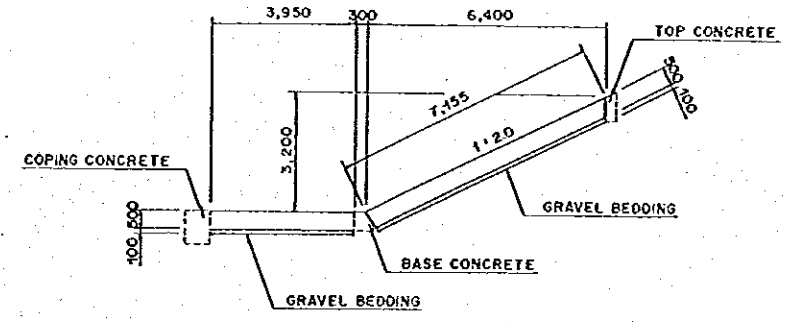
PROFILE OF REVETMENT
SCALE B



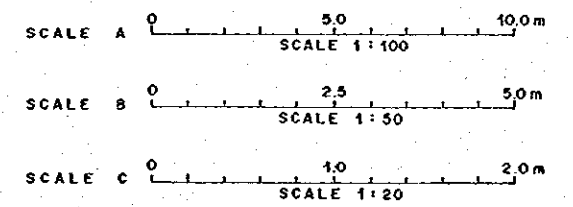
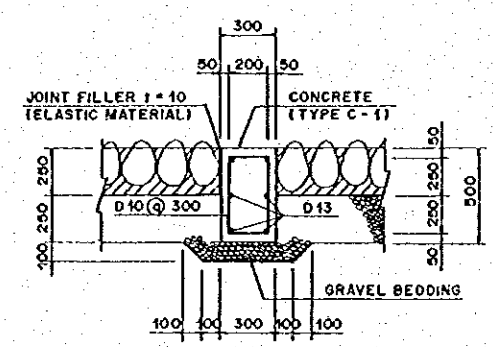
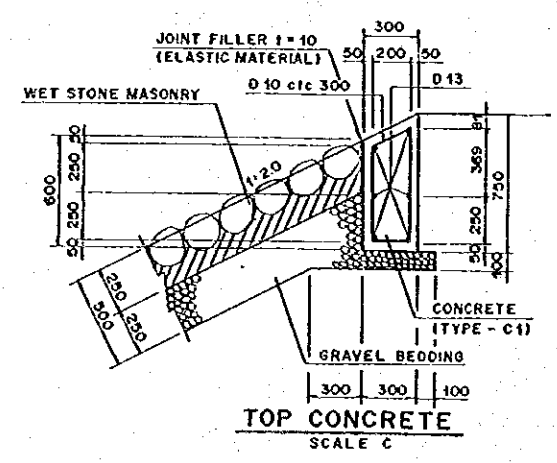
BASE CONCRETE
SCALE C



DETAIL OF WEEP HOLE
SCALE C

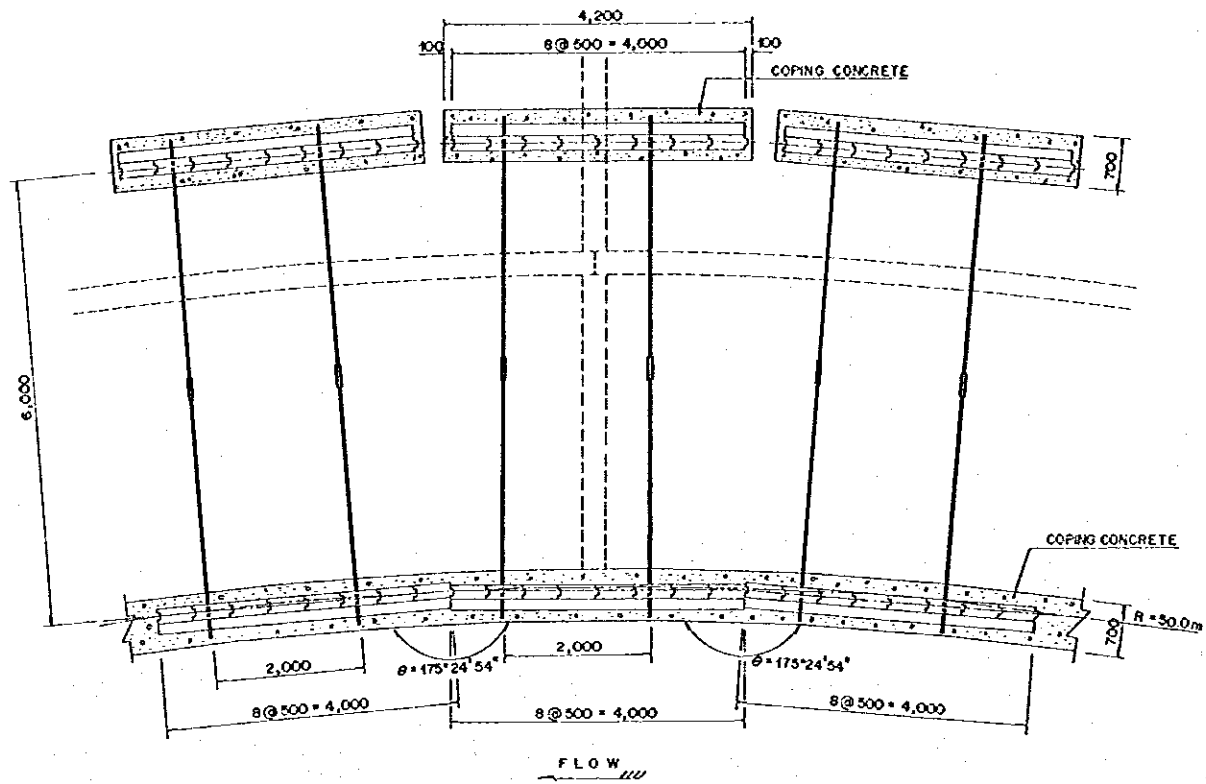


PROFILE OF PARTITION WALL
SCALE A

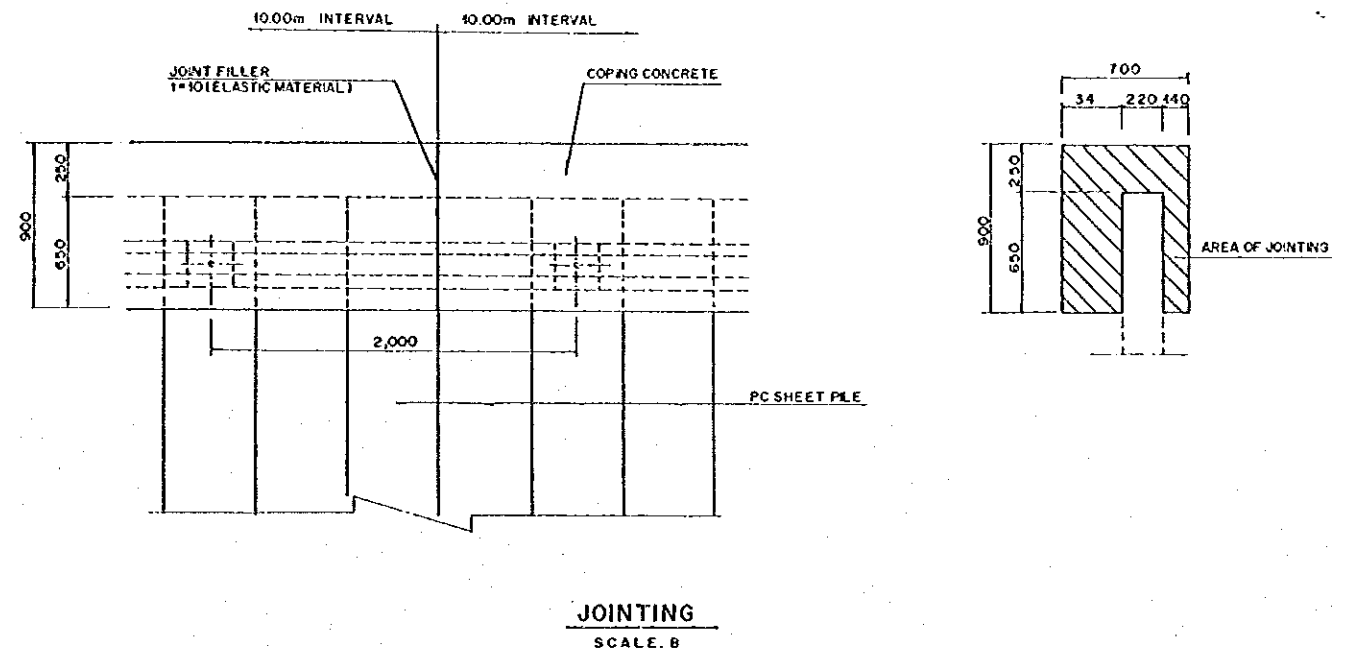


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

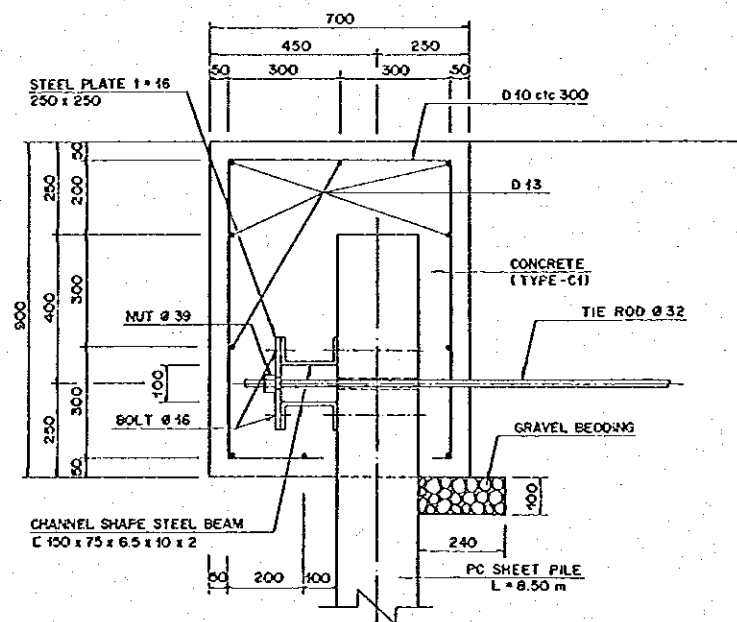
	THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT	PROVIDER CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
	PRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT: WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WF.115R TO WF.118R (RIGHT BANK) STRUCTURAL DETAILS OF REVETMENT	DISTRICT SEMARANG CITY DRAWING NO. W8 - P1 - PR - 24 SHEET NO. 113
	JAPAN INTERNATIONAL COOPERATION AGENCY CID (ENGINEERING CO., LTD.) & ASSOCIATES PVT PACIFIC CONSULTANTS INTERNATIONAL AND PAKO KOTERONTALAN	DESIGNED CHECKED DATE CONTRACT NO.
	CELESTIAL ENGINEERING AND DESIGN PROJECT MANAGER	DATE CONTRACT NO.



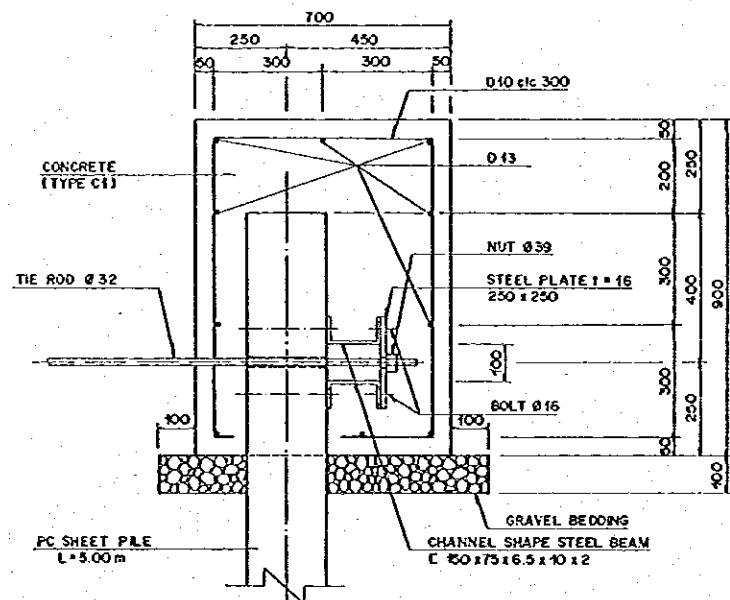
DETAIL OF "B" (ARRANGEMENT OF TIE RODS)
SCALE A



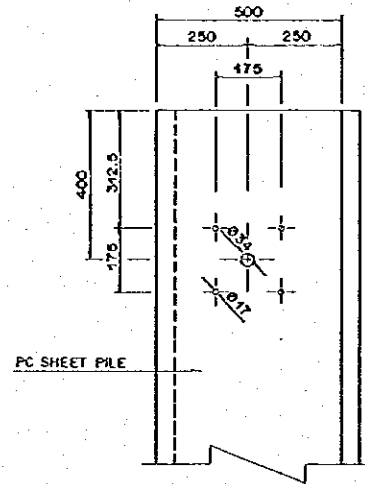
JOINTING
SCALE B



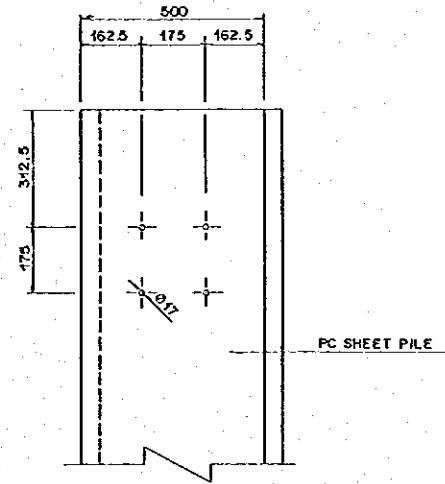
DETAIL OF COPING CONCRETE (RIVER SIDE)
SCALE C



DETAIL OF COPING CONCRETE (LAND SIDE)
SCALE C

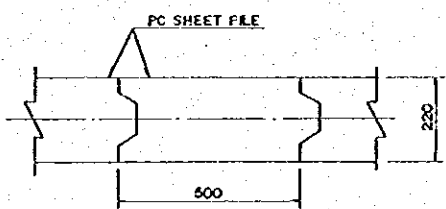


POSITION OF ANCHOR HOLE FOR TIE ROD



POSITION OF ANCHOR HOLE FOR BOLT

POSITION OF JOINTING HOLE
SCALE C



SECTION OF PC SHEET PILE
SCALE C

SCALE A 0 2.5 5.0 m
SCALE 1:50

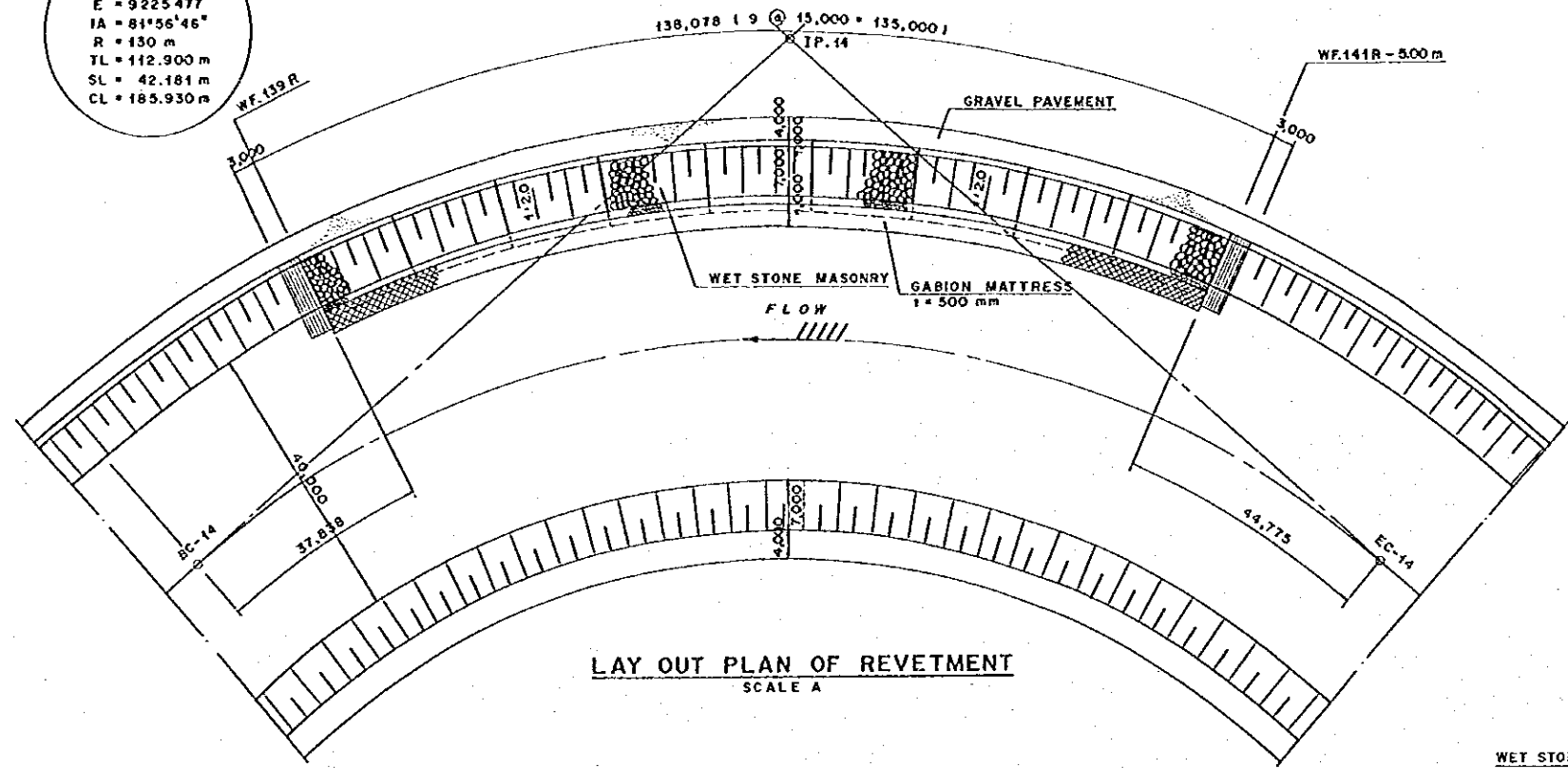
SCALE B 0 10 2.0 m
SCALE 1:20

SCALE C 0 0.5 1.0 m
SCALE 1:10

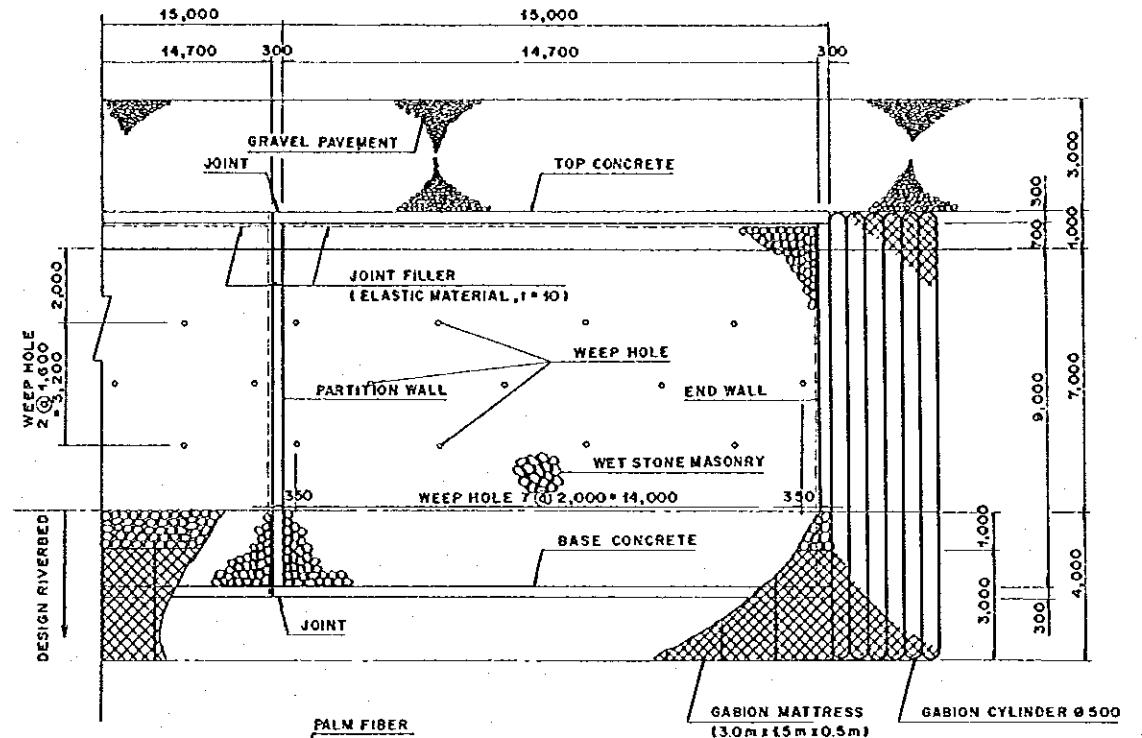
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WF. 115 R TO WF. 118 R (RIGHT BANK) DETAILS OF SHEET PILE CONNECTION		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND JABCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CDR OF PLANNING AND DESIGN		DRAWING NO. WJ-P1-PR-31-23 SHEET NO. 114
APPROVED PROJECT MANAGER		DATE CONTRACT NO.

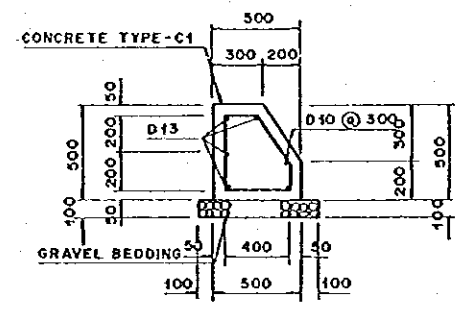
IP. 14
 N = 433.110
 E = 9225.477
 IA = 81°56'46"
 R = 130 m
 TL = 112.900 m
 SL = 42.181 m
 CL = 185.930 m



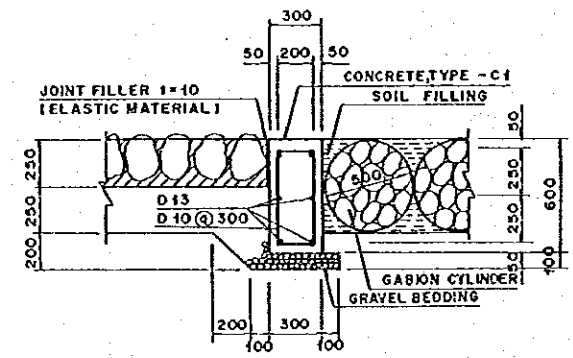
LAY OUT PLAN OF REVETMENT
 SCALE A



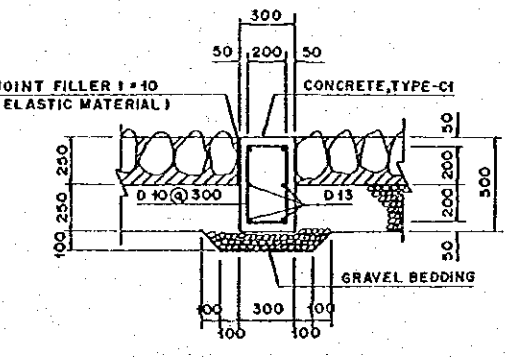
PLAN
 SCALE B



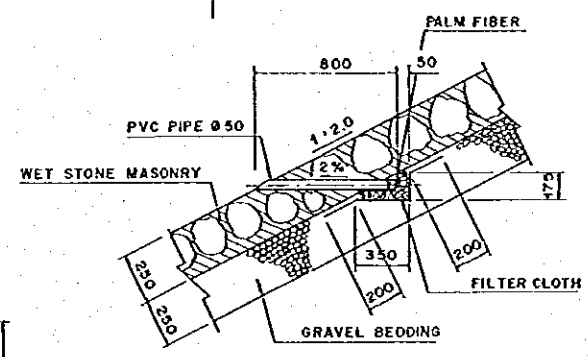
BASE CONCRETE
 SCALE D



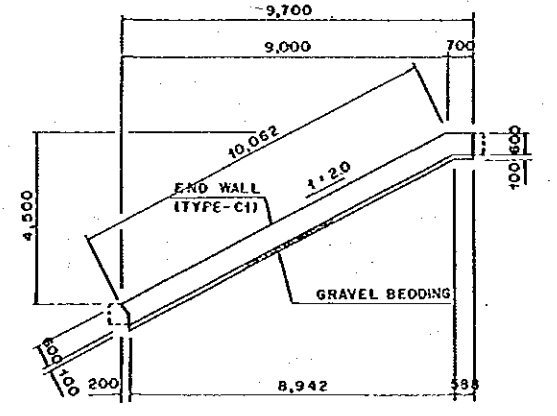
END WALL
 SCALE D



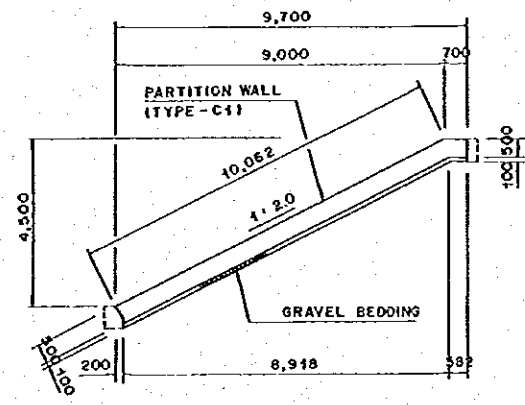
PARTITION WALL
 SCALE D



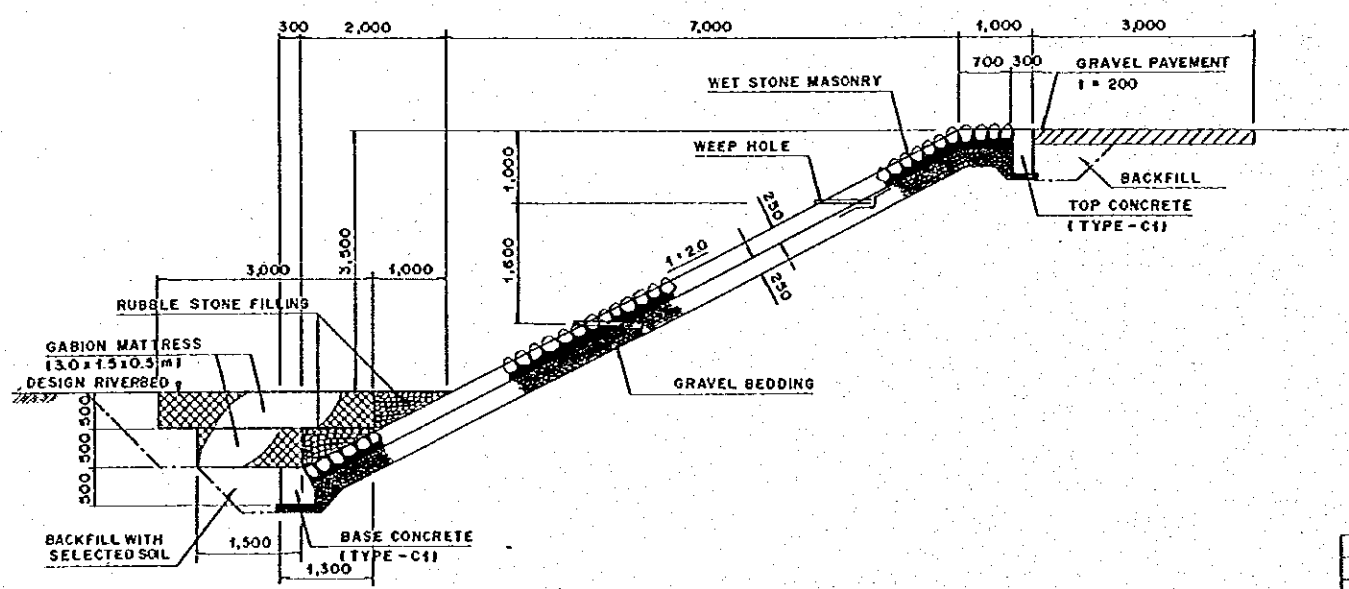
DETAIL OF WEEP HOLE
 SCALE D



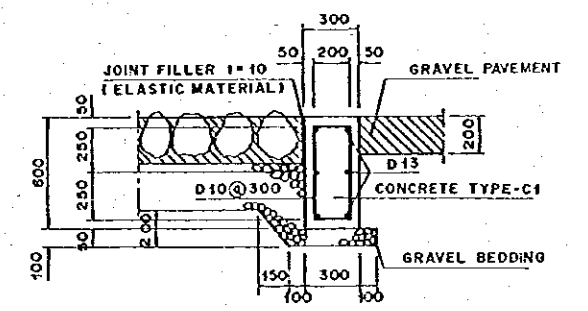
PROFILE OF END WALL
 SCALE B



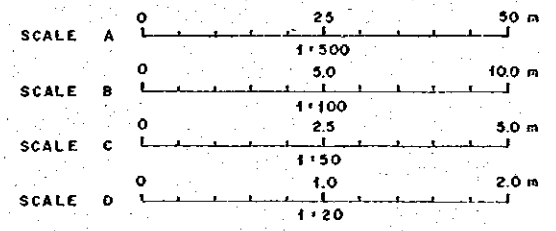
PROFILE OF PARTITION WALL
 SCALE B



TYPICAL CROSS SECTION OF REVETMENT (WF.139R~WF.141R-50m)
 SCALE C



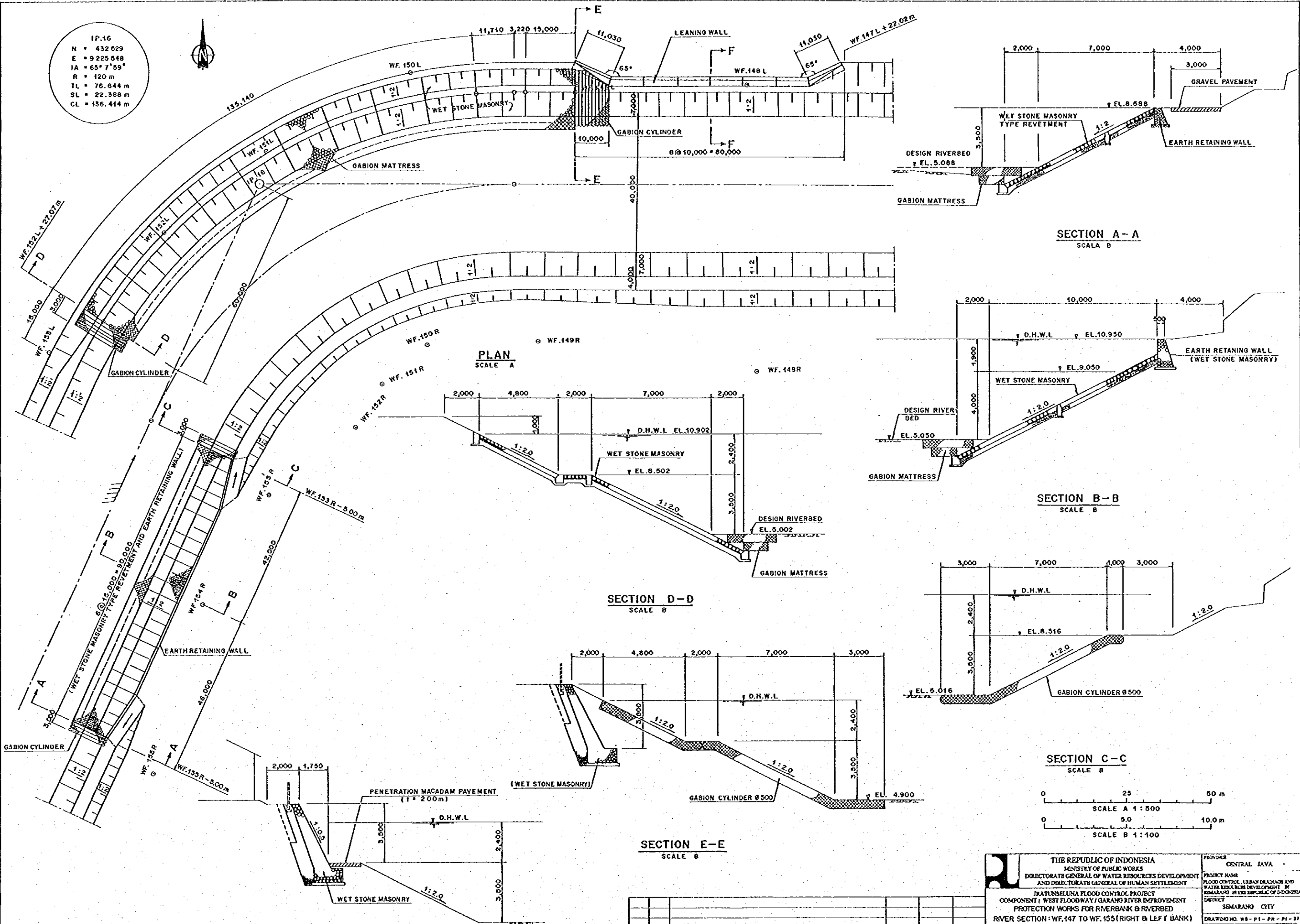
TOP CONCRETE
 SCALE D



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 PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION WF. 139R TO WF. 141R (RIGHT BANK) PLAN AND STRUCTURAL DETAILS OF REVETMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SANKO INTERNATIONAL COOPERATION AGENCY CIVIL ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PANGLOSS INTERNATIONAL INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CRUISE OF PLANNING AND DESIGN		DRAWING NO. WS-P1-PR-S1-24 SHEET NO. 115
APPROVED PROJECT MANAGER		DATE CONTRACT NO.

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

IP.16
 N = 432 029
 E = 9 225 848
 IA = 65° 7' 59"
 R = 120 m
 TL = 76.644 m
 SL = 22.388 m
 CL = 136.414 m



SECTION A-A
SCALE B

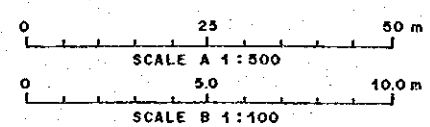
SECTION B-B
SCALE B

SECTION D-D
SCALE B

SECTION C-C
SCALE B

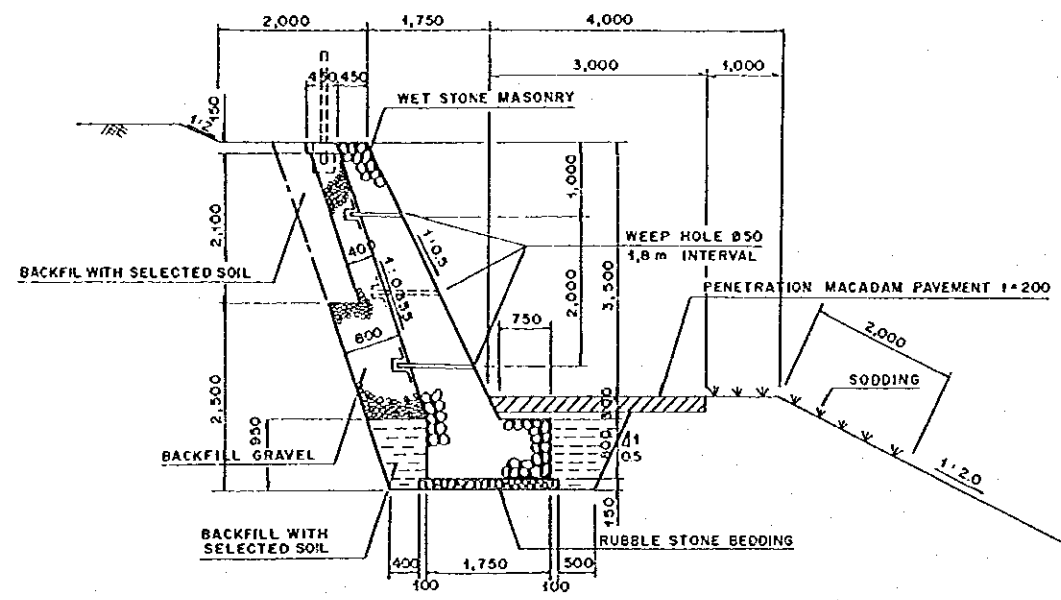
SECTION E-E
SCALE B

SECTION F-F
SCALE B

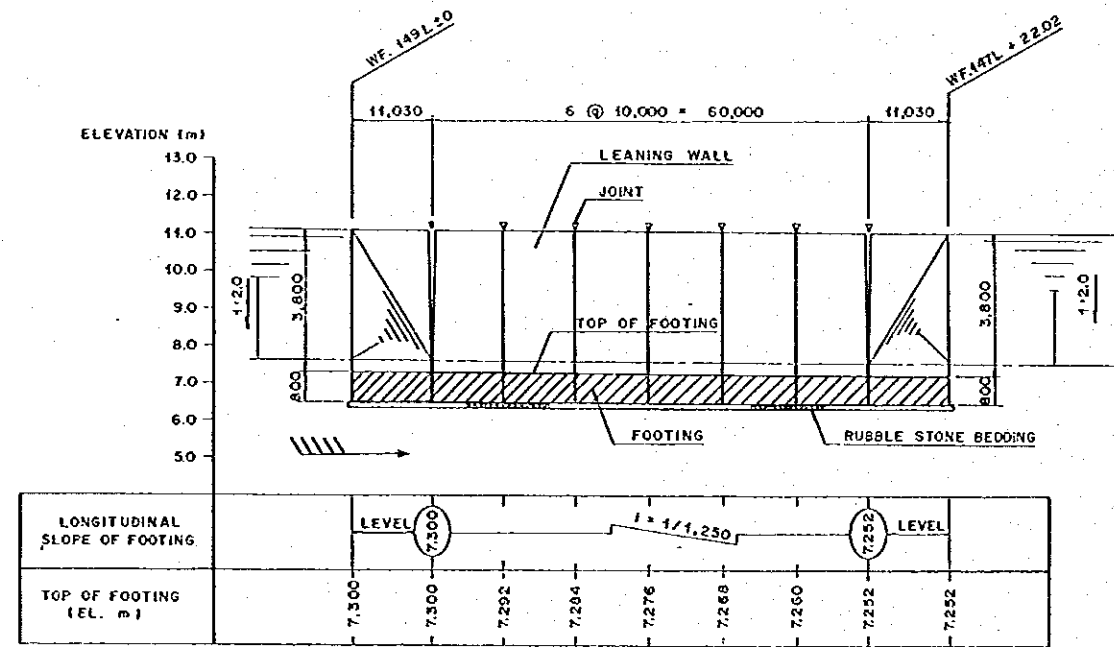


NO.	DATE	REVISIONS	ORIGINATOR	DESIGNED	APPROVED

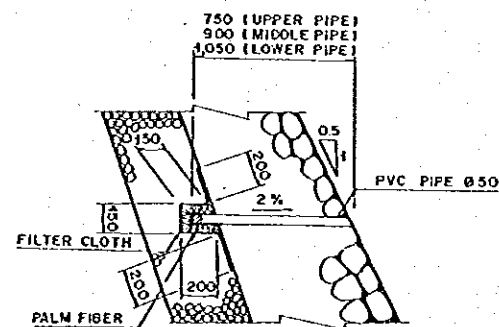
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVIDER CENTRAL JAVA
TRAFINSILUNA FLOOD CONTROL PROJECT COMPONENT : WEST FLOODWAY / GARANG RIVER IMPROVEMENT PROTECTION WORKS FOR RIVERBANK & RIVERBED RIVER SECTION : WF.147 TO WF.155 (RIGHT & LEFT BANK) GENERAL LAYOUT PLAN OF REVELTMENT AND LEANING WALL		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG, IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PANCOR CONSULTANTS INTERNATIONAL INC. PANCOR INTERNATIONAL INC.		DRAWING NO. WB - P1 - PR - P1 - 27 SHEET NO. 114
DESIGNED CHECKED	DATE	CONTRACT NO.
APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		



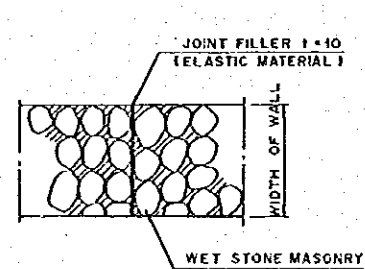
SECTION OF LEANING WALL
SCALE B



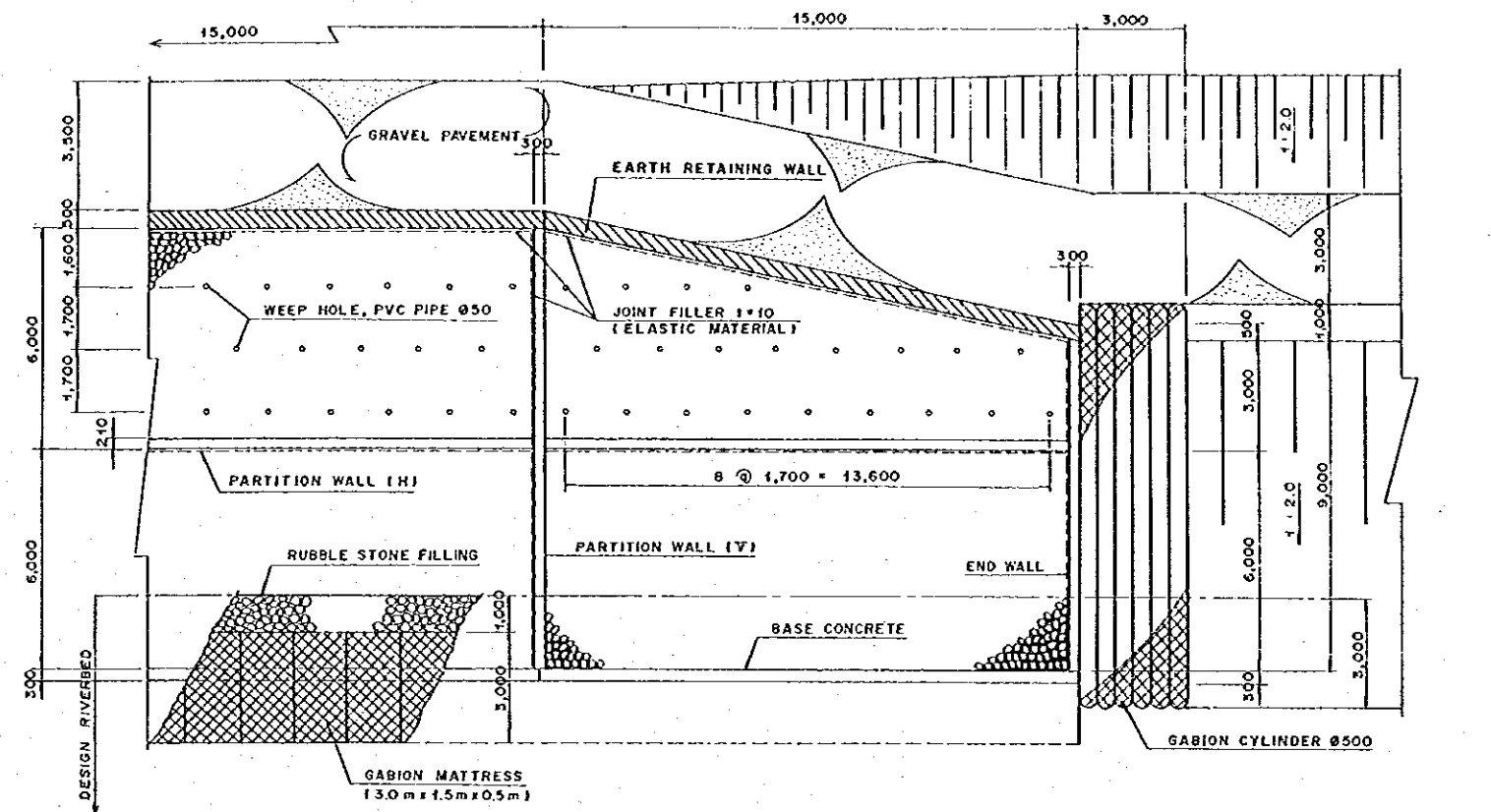
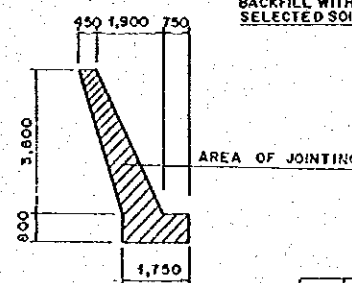
LONGITUDINAL PROFILE OF LEANING WALL
SCALE H = 1:500, V = 1:100



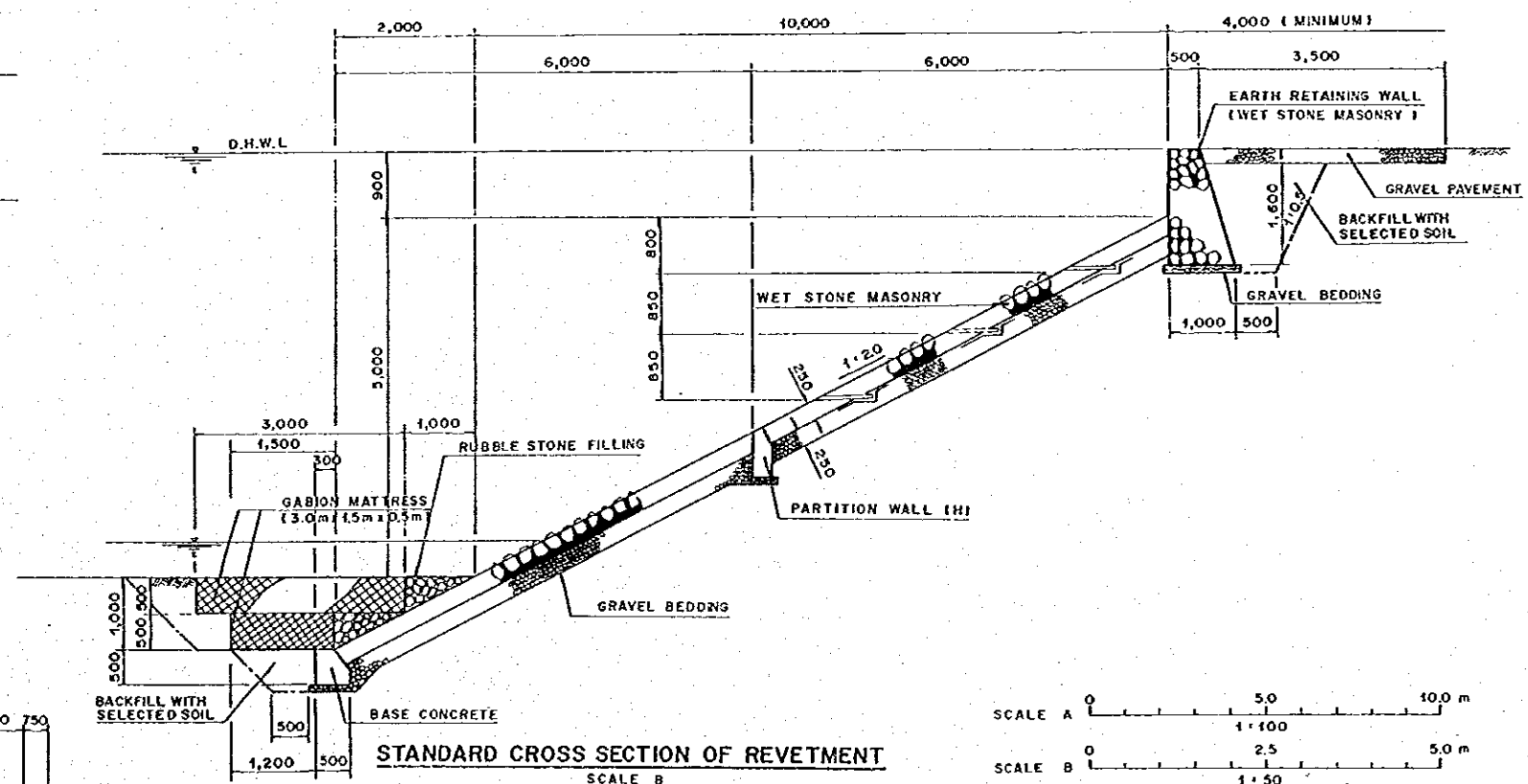
DETAIL OF WEEP HOLE
SCALE C



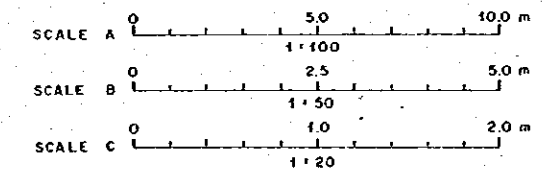
JOINTING
SCALE A



PLAN OF REVETMENT
SCALE A



STANDARD CROSS SECTION OF REVETMENT
SCALE B



THE REPUBLIC OF INDONESIA		PROVIDER	
MINISTRY OF PUBLIC WORKS		CENTRAL JAVA	
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROJECT NAME	
IRATUNSELUNA FLOOD CONTROL PROJECT		FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA	
COMPONENT: WEST FLOODWAY / GARANO RIVER IMPROVEMENT		PROJECT	
PROTECTION WORKS FOR RIVERBANK & RIVERBED		SEMARANG CITY	
RIVER SECTION: WF.147 TO WF.153 (RIGHT & LEFT BANK)		DRAWING NO. WS-P4-PA-51-21	
STRUCTURAL DETAILS OF LEANING WALL (LEFT BANK)		SHEET NO. 117	
JAPAN INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND TAMKO INTERNATIONAL, INC.		DESIGNED	DATE
OFFICE OF PLANNING AND DESIGN		CHECKED	CONTRACT NO.
PROJECT MANAGER			

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED