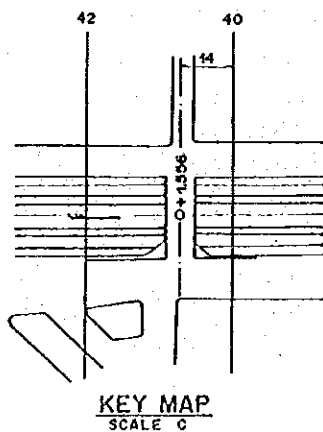
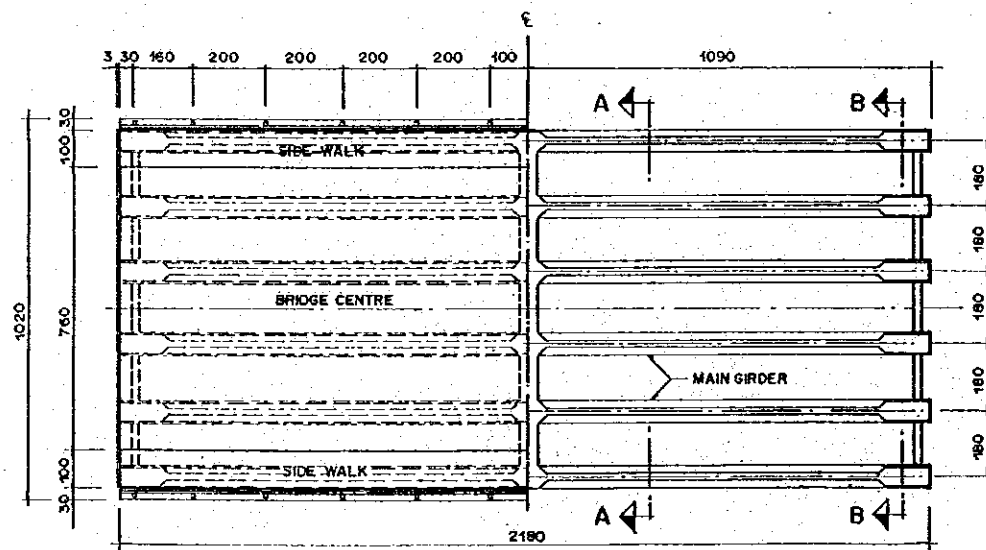
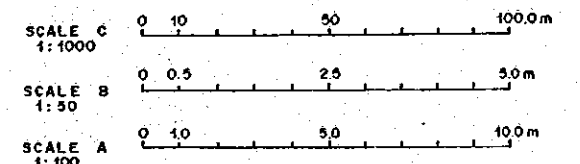
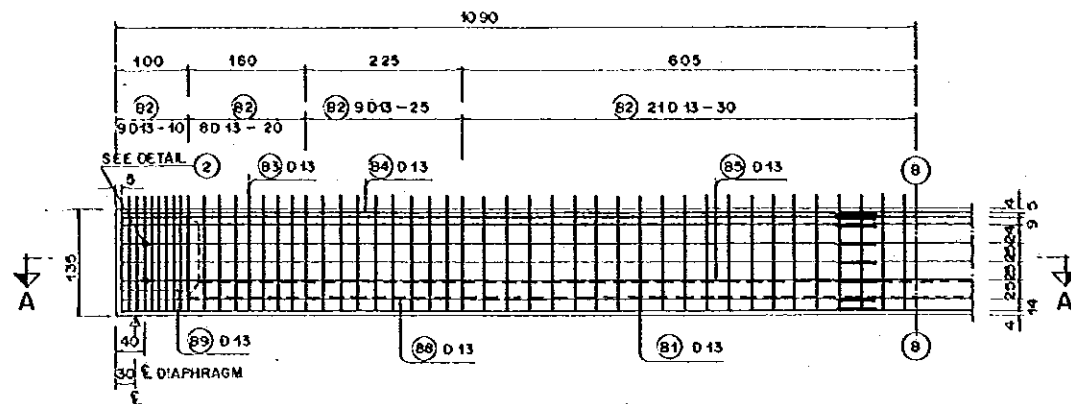


- NOTE :
1. UNIT IN CENTIMETER.
 2. CONCRETE QUALITY FOR MAIN GIRDER AND DIAPHRAGM K-400.
 3. CONCRETE QUALITY FOR SLAB AND SIDE WALK K-250.

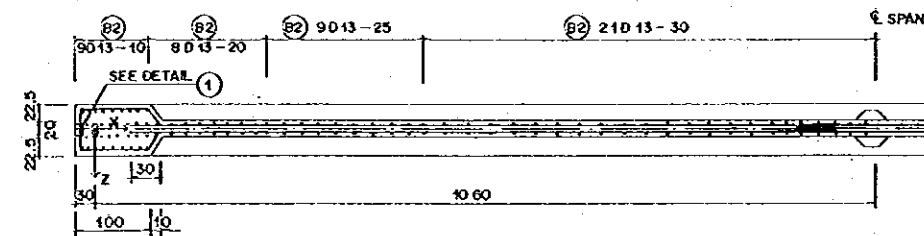


NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

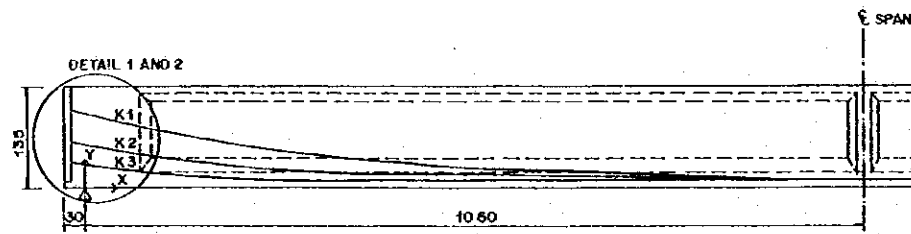
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
PT. ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FABOD INTERNATIONAL INC.		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAWA INTERNATIONAL COOPERATION AGENCY JAWA INTERNATIONAL COOPERATION AGENCY JAWA INTERNATIONAL COOPERATION AGENCY		DISTRICT SEMARANG CITY
ASIN NO. 1 BRIDGE SUPER STRUCTURE DIMENSION OF SUPERSTRUCTURE		DRAWING NO. U-P2-A-BR-1
DEPARTMENT OF PLANNING AND DESIGN PROJECT MANAGER		SHEET NO. 52
DATE		CONTRACT NO.



REINFORCING BAR ARRANGEMENT OF MAIN BEAM
SCALE A



SECTION A-A
SCALE A



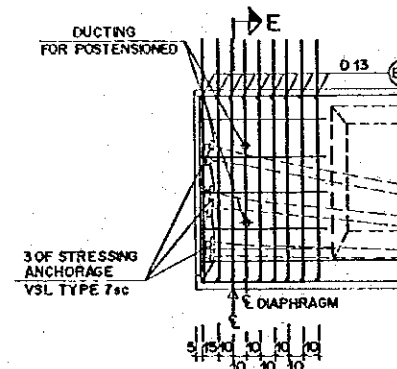
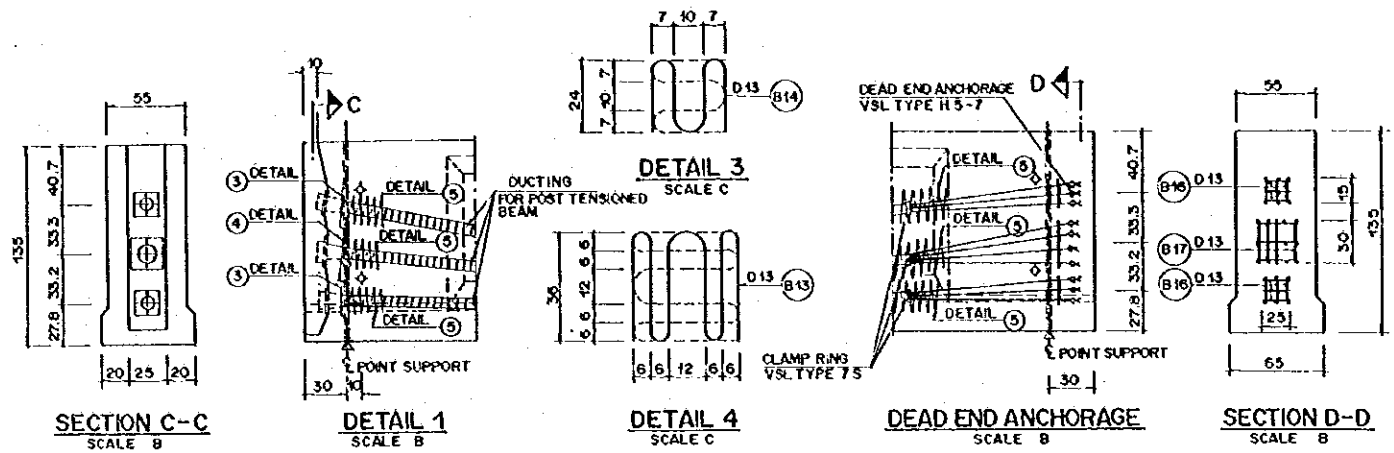
CABLE ELEVATION
SCALE A

	X	0	100	200	300	400	500	600	700	800	900	1000	10.60
CABLE 3 (K3)	Y	27.0	24.0	21.4	19.0	16.9	15.1	13.5	12.2	11.3	10.6	10.1	10.0
	Z	0	2.1	4.0	5.7	7.1	8.4	9.5	10.4	11.1	11.8	11.9	12.0
CABLE 2 (K2)	Y	58.5	50.1	42.5	35.7	29.6	24.4	20.0	16.4	13.6	11.6	10.4	10.0
	Z	0	0	0	0	-3.2	-5.9	-8.1	-9.8	-11.0	-11.8	-12.0	
CABLE 1 (K1)	Y	90.0	76.1	65.6	52.3	42.4	33.8	26.5	20.6	17.7	15.4	10.9	10.0
	Z	0	0	0	0	0	0	0	0	0	0	0	0

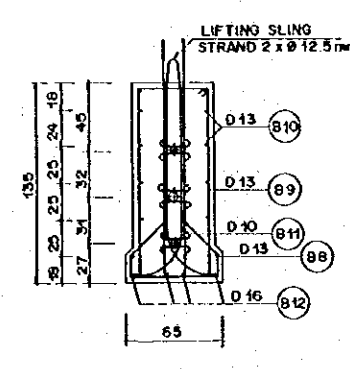
LIST OF CABLE COORDINATE (cm)

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)						TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f					
K3	12.7	7 STRANDS	16244						162.44	0.799	6	769	
K2	12.7	12 STRANDS	27877						278.77	0.799	6	1320	
K1	12.7	7 STRANDS	16295						162.95	0.799	6	771	
TOTAL = 2860 kg													

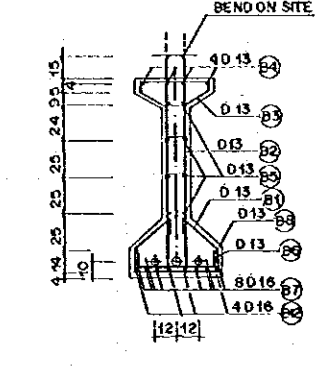
LIST OF PC CABLE OF MAIN GIRDER



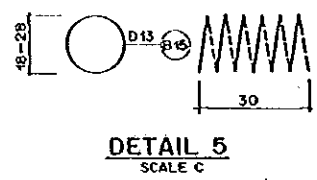
DETAIL 2
SCALE B



SECTION E-E
SCALE B



SECTION B-B
SCALE B

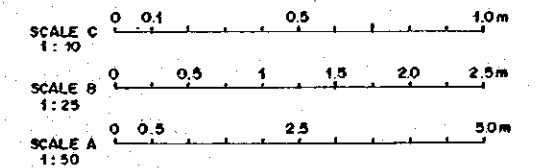


DETAIL 5
SCALE C

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)						TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f					
B1	13	D	57	15	35	10			1.77	1.04	6x94	10392	
B2	13	E	12	166					3.44	1.04	6x94	2016	
B3	13	C	47	4	12	20			1.19	1.04	6x76	564	
B4	13	A	21.70						22.22	1.04	6x4	555	
B5	13	A	20.28						20.60	1.04	6x8	1036	
B6	13	G	55	10					0.75	1.04	6x1	5	
B7	16	A	21.70						22.34	1.58	6x8	1694	
B8	13	A	21.70						22.34	1.04	6x2	279	
B9	13	H	47	127	6.5				3.61	1.04	6x10	406	
B10	13	B	92	23	15				1.30	1.04	6x10	129	
B11	10	F	16	4					0.24	0.617	6x316	281	
B12	16	A	21.70						22.34	1.58	6x4	647	
B13	13	I	6	6	12	36			2.365	1.04	6x1	15	
B14	13	J	7	10	24				0.95	1.04	6x2	12	
B15	13	K	30	18					3.391	1.04	6x8	127	
B16	13	B	15						0.90	1.04	6x2	11	
B17	13	B	30						1.80	1.04	6x1	11	
TOTAL = 9616 kg.													

LIST OF REINFORCING BAR OF MAIN GIRDER

- NOTE:
- CONCRETE COMPRESSION STRENGTH OF:
 - $f_c' = 33.2 \text{ MPa}$ (338.64 kgf)
 - $f_{ct}' = 26.6 \text{ MPa}$ (271.32 kgf)
 - TENSILE STRENGTH OF REINFORCING BAR
 - $f_y = 320 \text{ MPa}$ (3264 kgf)
 - TENDON SPECIFICATION
 - TYPE = 7 SUPER STRANDS
 - DIAMETER = 12.7 mm
 - AREA $A = 100 \text{ mm}^2$
 - MIN TENSILE STRENGTH = 1840 MPa (18768 kgf)
 - MIN BREAKING LOAD = 184 kn.
 - USED = 26 STRANDS
 - K1 = 7 STRANDS
 - K2 = 12 STRANDS
 - K3 = 7 STRANDS
 - EACH STRAND SHALL BE PRESTRESSED TO 150 kn. IMMEDIATELY PRIOR TO LOCK OFF.
 - UNIT IN CENTIMETER EXCEPT FOR DIAMETER OF REINFORCING BAR.
 - CONCRETE QUALITY K-400
 - STEEL QUALITY BJ-32

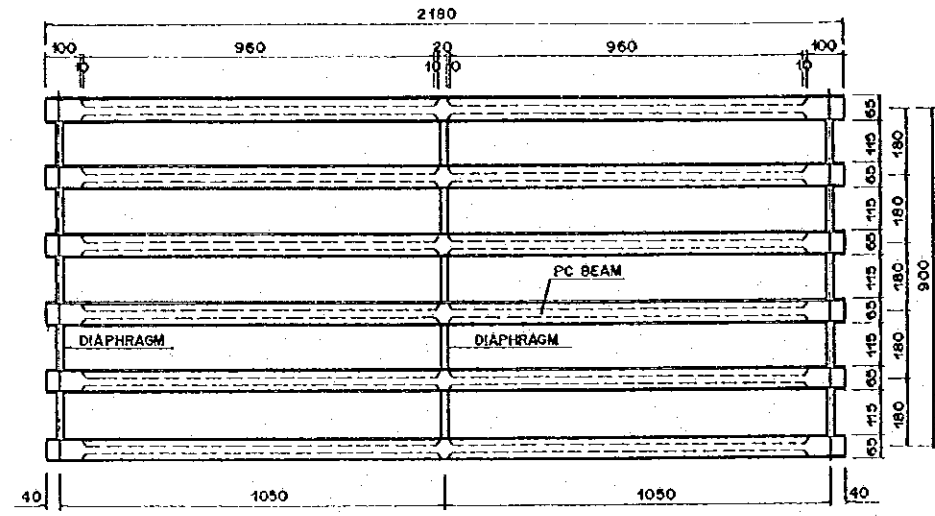


NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

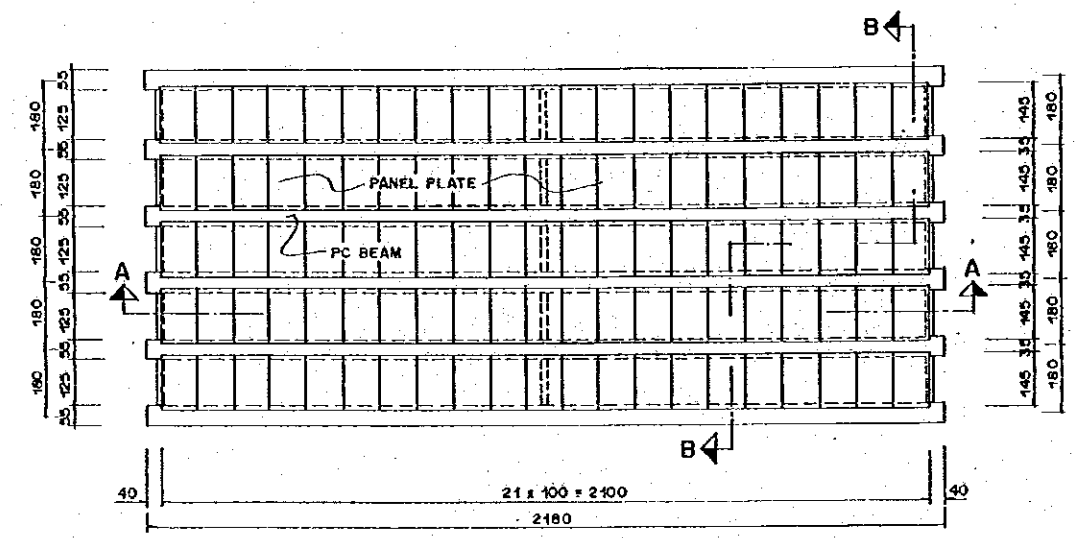
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 JATUNIBELUKA FLOOD CONTROL PROJECT
 COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT
 ASIN NO 1 BRIDGE
 SUPERSTRUCTURE
 CABLE AND REINFORCING BAR ARRANGEMENT OF GIRDER

PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT BY SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO.: U-P2-A-BR-2
 SHEET NO.: 53
 DATE: _____
 CONTRACT NO.: _____

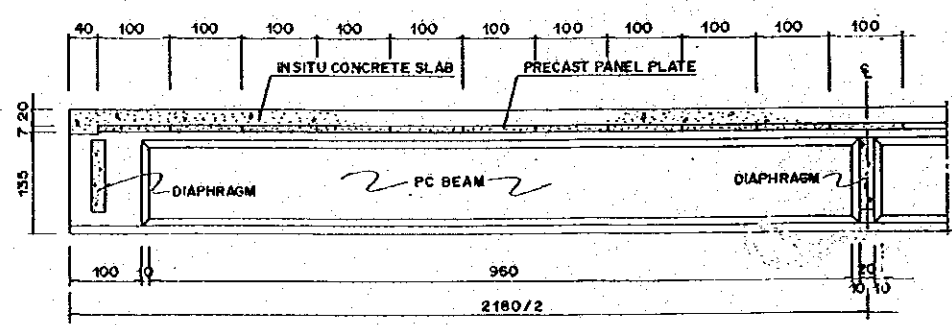
APPROVED: _____
 PROJECT MANAGER



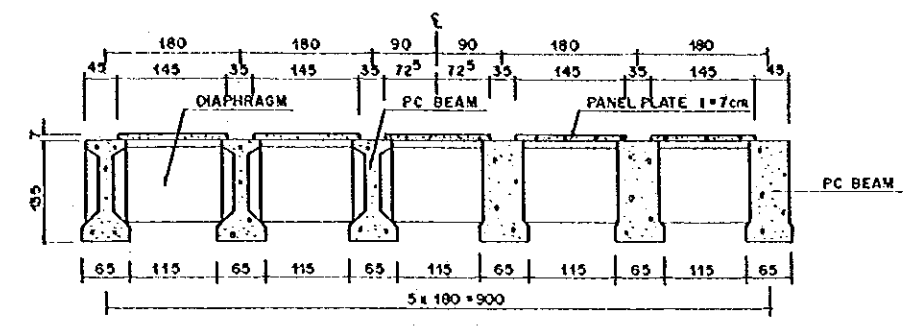
BEAM AND DIAPHRAGM ARRANGEMENT
SCALE A



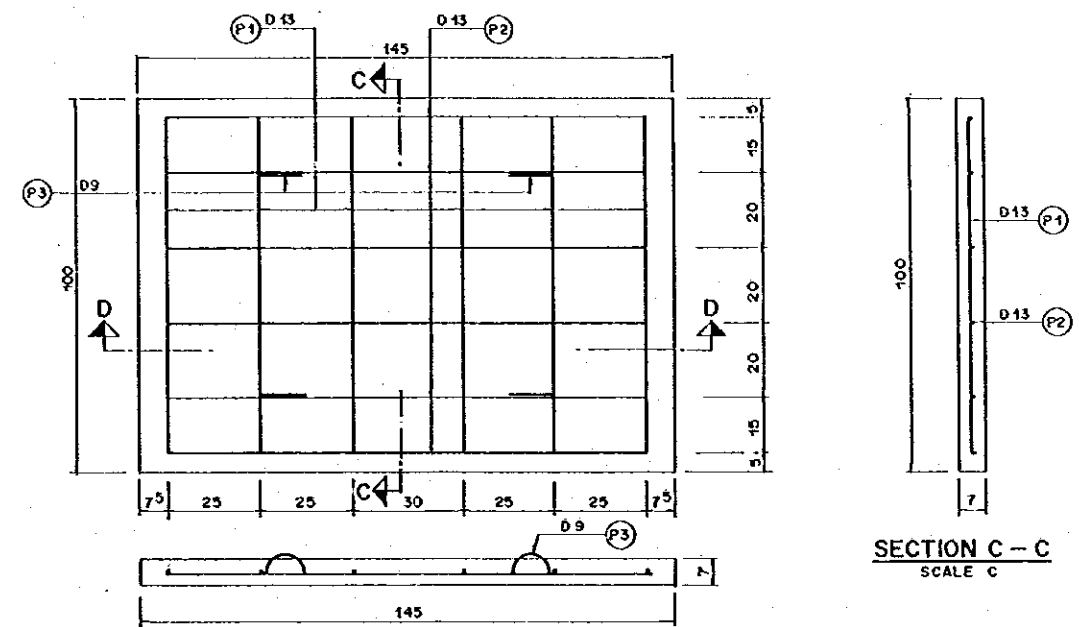
PANEL PLATE ARRANGEMENT
SCALE A



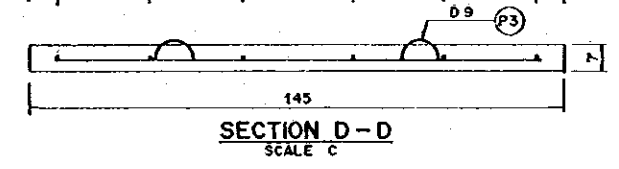
SECTION A-A
SCALE B



SECTION B-B
SCALE B



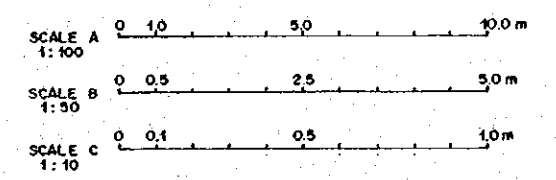
SECTION C-C
SCALE C



SECTION D-D
SCALE C

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)						TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f					
145 x 100 (NUMBER OF PANELS = 105)													
P 1	13	B	90						0.90	1.04	630	590	
P 2	13	B	130						1.30	1.04	630	852	
P 3	9	I	20	10	12				0.40	0.80	420	84	
TOTAL = 1526 kg													

LIST OF REINFORCING BAR OF PANEL PLATE

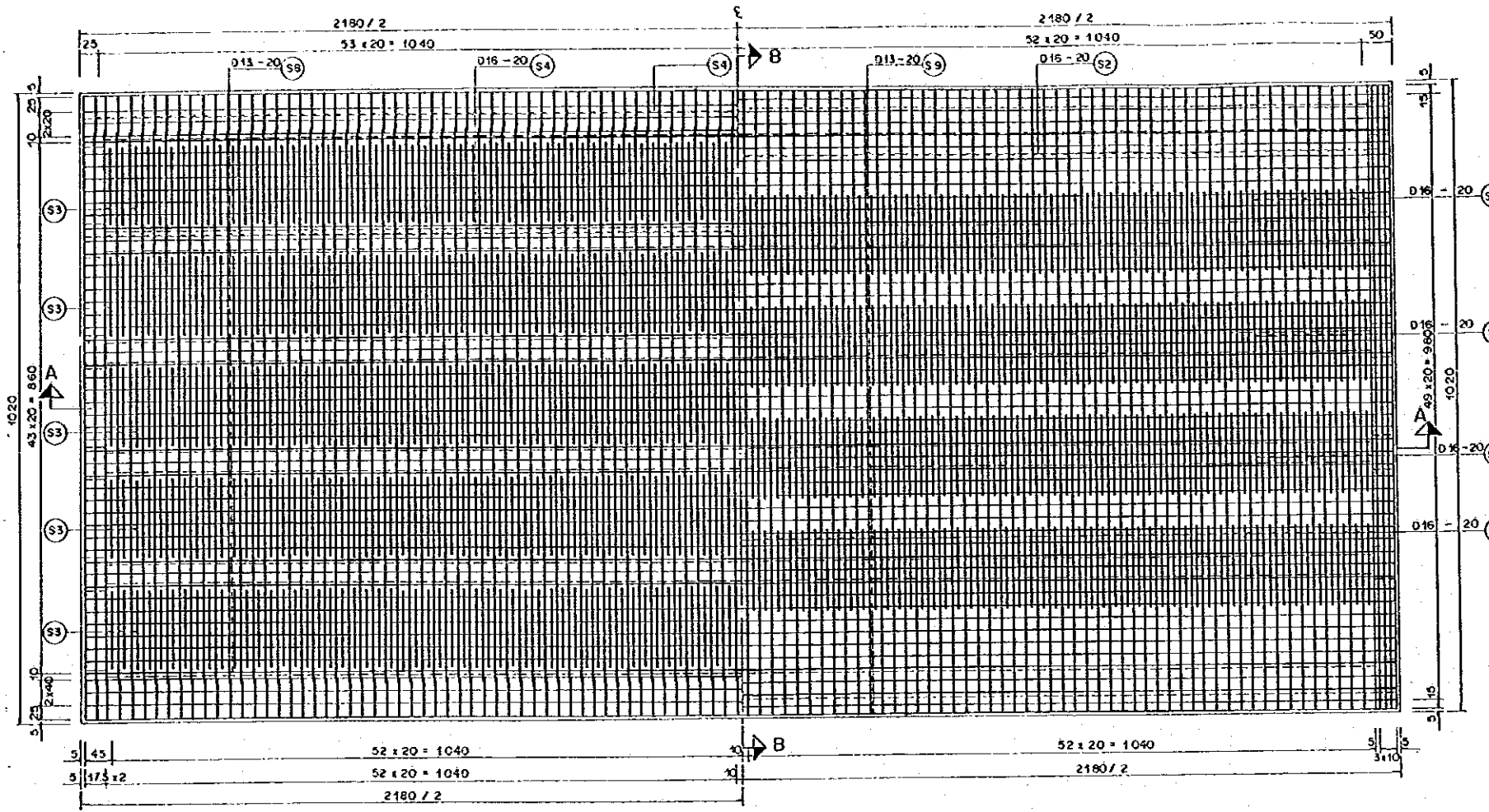


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

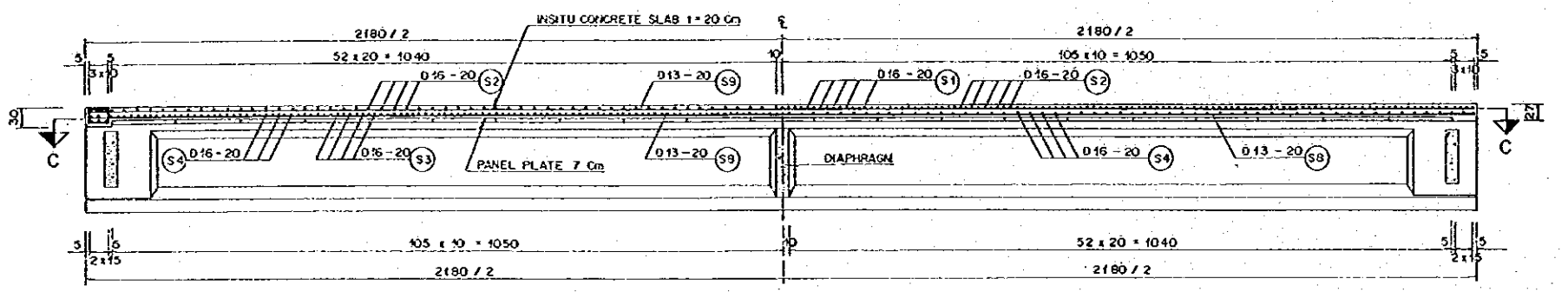
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
JRATUNSELUMA FLOOD CONTROL PROJECT
 COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT
ASIN NO.1 BRIDGE SUPERSTRUCTURE
REINFORCING BAR ARRANGEMENT OF PANEL PLATE

PROVIDER: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN BANGALANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO.: U - P2 - A - BR - 3
 SHEET NO.: 04
 DATE: _____ CONTRACT NO.: _____

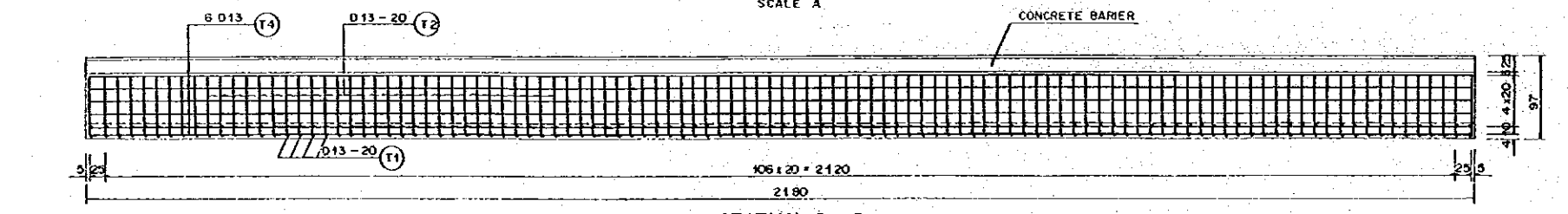
JAPAN INTERNATIONAL COOPERATION AGENCY
 CHI ENGINEERING CO., LTD. (CONSULTANT FOR PACIFIC COASTAL LAND INFRASTRUCTURE AND FINCO INTERNATIONAL INC.)
 DESIGNED: [Signature]
 CHECKED: [Signature]
 APPROVED: [Signature]
 CHIEF OF PLANNING AND DESIGN
 PROJECT MANAGER



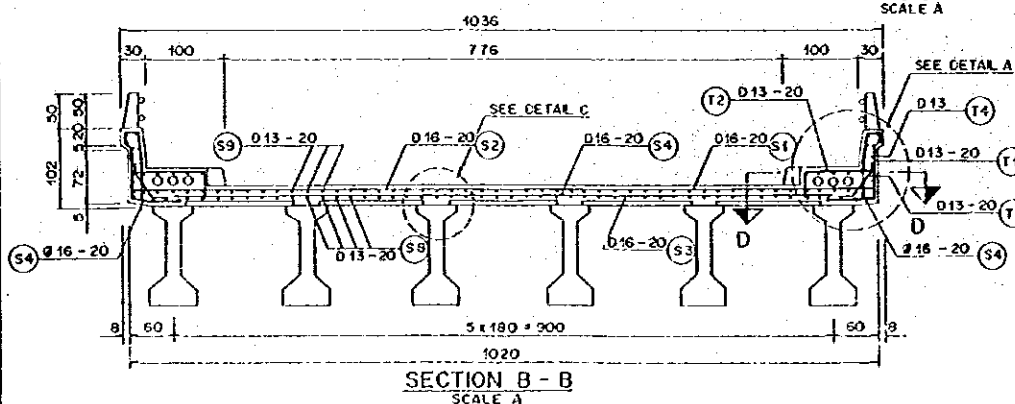
SECTION C - C
SCALE A



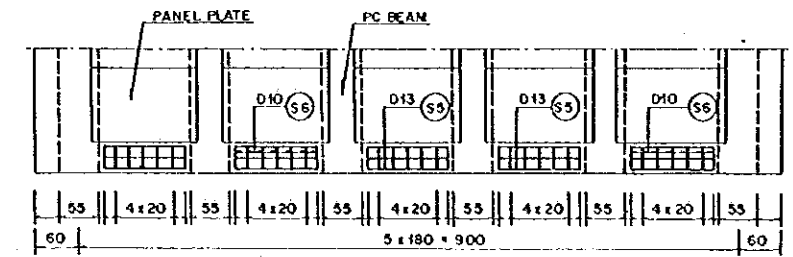
SECTION A - A
SCALE A



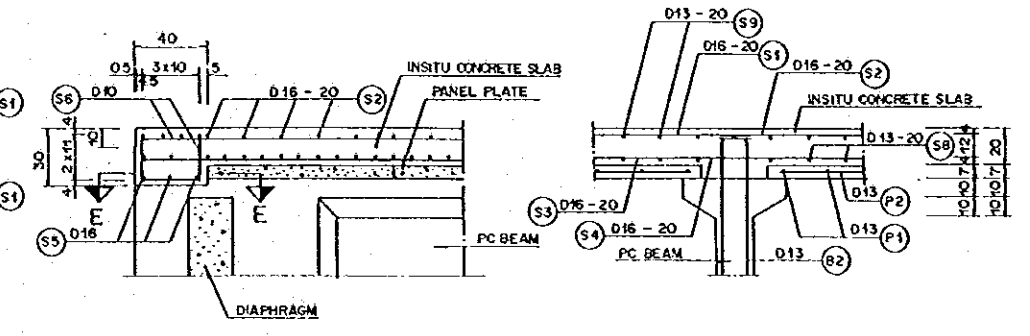
SECTION D - D
SCALE A



SECTION B - B
SCALE A



SECTION E - E
SCALE A

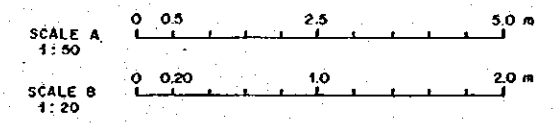


DETAIL C
SCALE B

DETAIL B
SCALE B

REINFORCING BAR NO.	# (mm)	TYPE	BENDING DIMENSION					TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	WEIGHT PER BAR	NUMBER	WEIGHT (kg)	REMARK
			a	b	c	d	e						
S1	D16	B	130					1.30	1.58	2.054	420	863	
S2	D16	B	1013					10.13	1.58	16.005	114	1825	
S3	D16	B	130					1.30	1.58	2.054	525	1078	
S4	D16	B	971	35	32.5	10		11.26	1.58	17.79	110	1956	
S5	D16	B	115					1.15	1.58	1.817	30	55	
S6	D10	C	30	22	5			0.84	0.56	0.4704	70	33	□
S7	D10	D	25	10	5			0.55	0.56	0.308	100	31	□
S8	D13	A	2209					22.09	1.04	22.974	52	1195	
S9	D13	A	2209					22.09	1.04	22.974	52	1195	
TOTAL =											8231	kg	

LIST OF REINFORCING BAR OF DECK SLAB



NO.	DATE	REVISIONS	QUOTED	DESIGNED	APPROVED

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

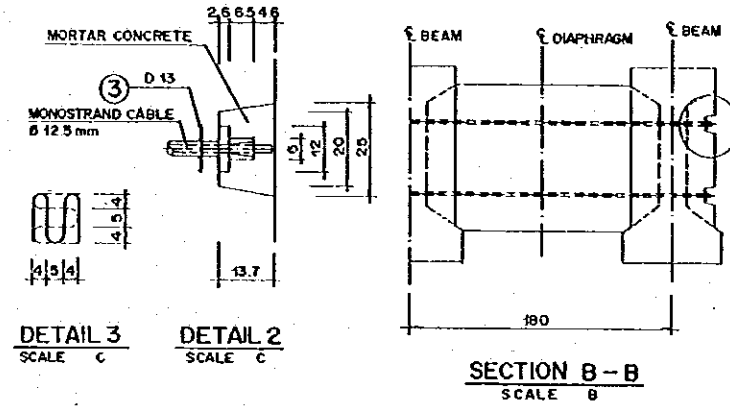
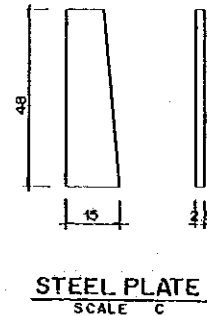
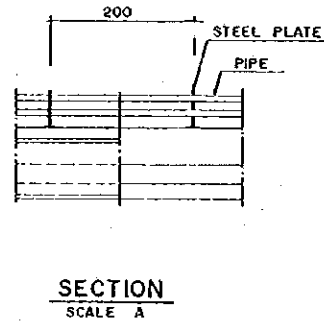
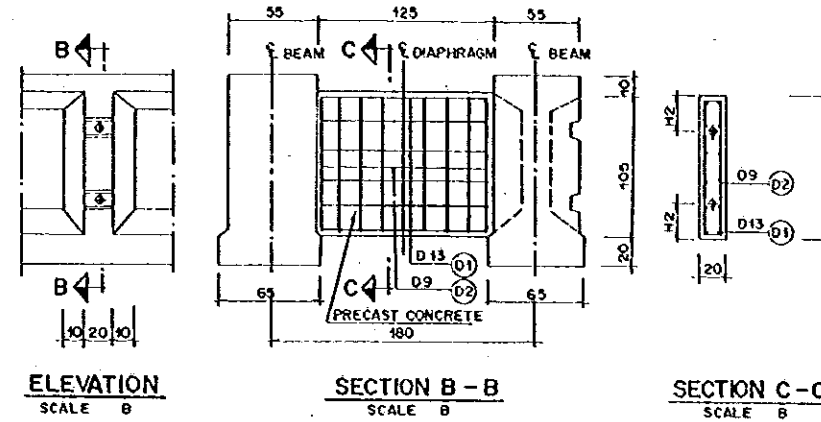
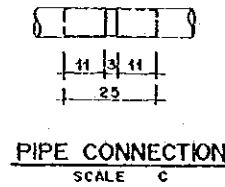
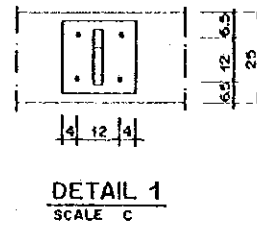
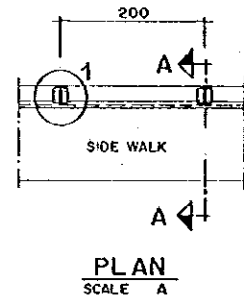
PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. U - P2 - A - 01 - 4
 SHEET NO. 55

BRATURUBUNA FLOOD CONTROL PROJECT
 COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT
 ASIN NO. 1 BRIDGE
 SUPERSTRUCTURE
 REINFORCING BAR ARRANGEMENT OF DECK SLAB

JAPAN INTERNATIONAL COOPERATION AGENCY
 CTS ENGINEERING CO., LTD. IN ASSOCIATION WITH
 PACIFIC CONSULTANTS INTERNATIONAL AND
 PASO INTERNATIONAL INC.

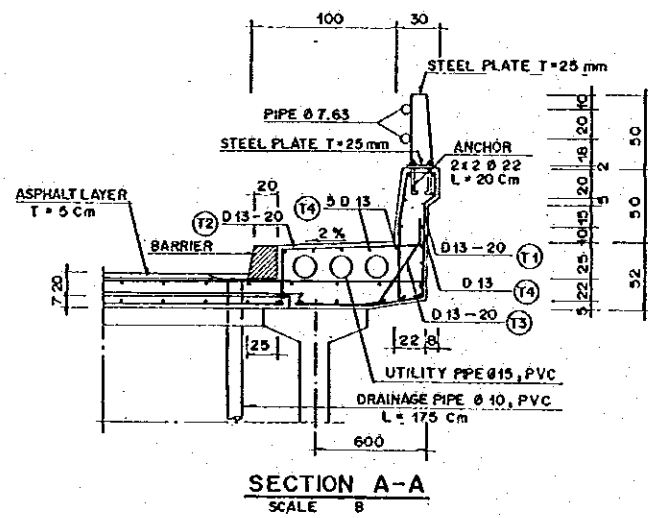
DESIGNED: [Signature]
 CHECKED: [Signature]
 CHIEF OF PLANNING AND DESIGN
 PROJECT MANAGER

DATE: [] [] [] []
 CONTRACT NO. []



DIAPHRAGM DIMENSION

SIZE (mm)	
H 1	980
H 2	200



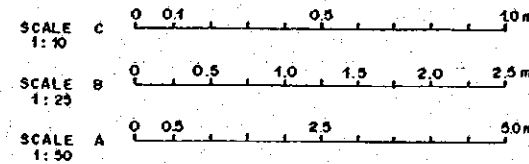
LIST OF REINFORCING BAR OF SIDE WALK

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)							TOTAL LENGTH (m)	UNIT WEIGHT/m (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f						
T 1	13	J	45	35	20	15	10	55	1.93	1.04	2x110	442		
T 2	15	K	35	30	96	65			1.68	1.04	2x110	384		
T 3	13	L	12	40	15				0.67	1.04	2x110	153		
T 4	13	A	22.09						22.09	1.04	2x14	5054		
TOTAL = 6033 kg														

LIST OF REINFORCING BAR OF DIAPHRAGM

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)							TOTAL LENGTH (m)	UNIT WEIGHT/m (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f						
D 1	13	B	107						1.20	1.04	180	225		
D 2	9	H	12	97	45				2.27	0.50	135	153		
TOTAL = 378 kg														

- NOTE :
1. CONCRETE QUALITY OF DIAPHRAGM K-400.
 2. MAXIMUM AGREGATE SIZE 20 mm.
 3. STEEL QUALITY BJ-32.
 4. MINIMUM CONCRETE COVER 20 mm
 5. PIPE AND STEEL PLATE MUST BE GALVANISED.
 6. DIAPHRAGM IS PRECAST CONCRETE.

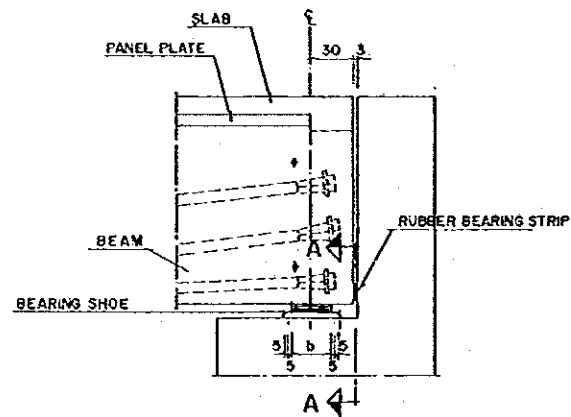


NO.	DATE	REVISIONS	DESIGNED	APPROVED

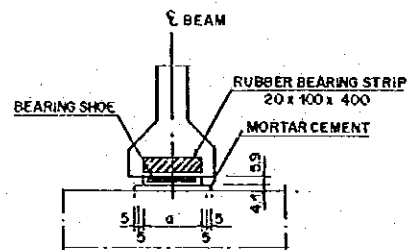
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 SURABAYA FLOOD CONTROL PROJECT
 COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT

ASIN NO. 1 BRIDGE
 SUPERSTRUCTURE
 REINFORCING BAR ARRANGEMENT OF DIAPHRAGM AND SIDE WALK

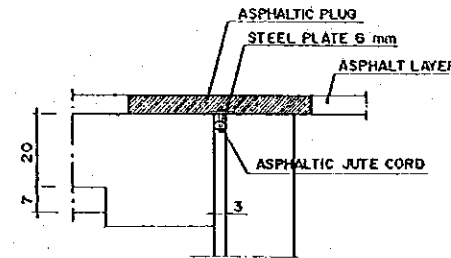
DATE: _____ CONTRACT NO. _____



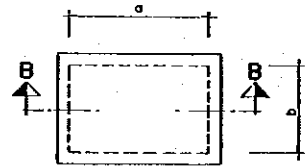
POINT SUPPORT ON ABUTMENT
SCALE A



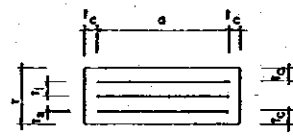
SECTION A-A
SCALE A



DETAIL OF JOINT
SCALE B



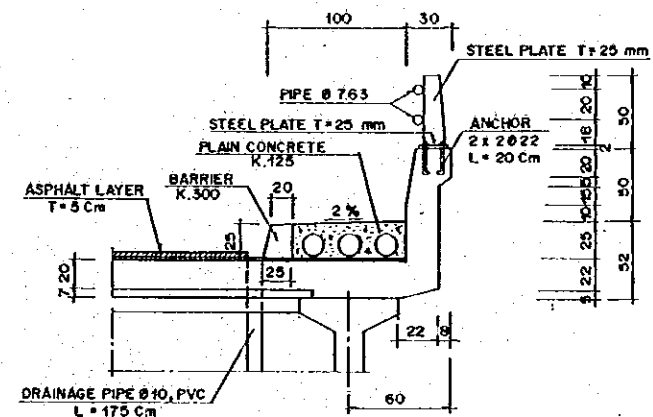
PLAN OF BEARING SHOE
SCALE A



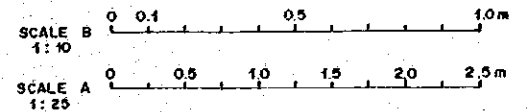
SECTION B-B
SCALE A

SIZE OF BEARING SHOE (mm)

a	b	STEEL PLATE		RUBBER		TOTAL
		n	t _s	t _c	h	
350	280	4	5	6	9	59

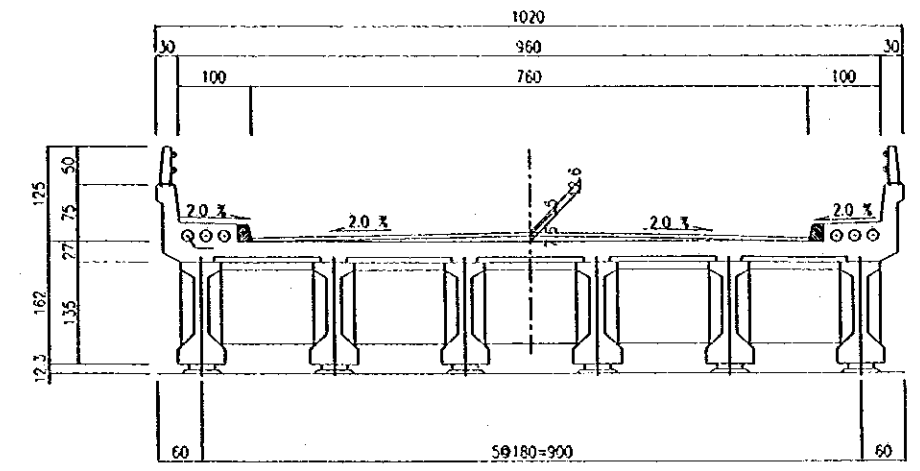
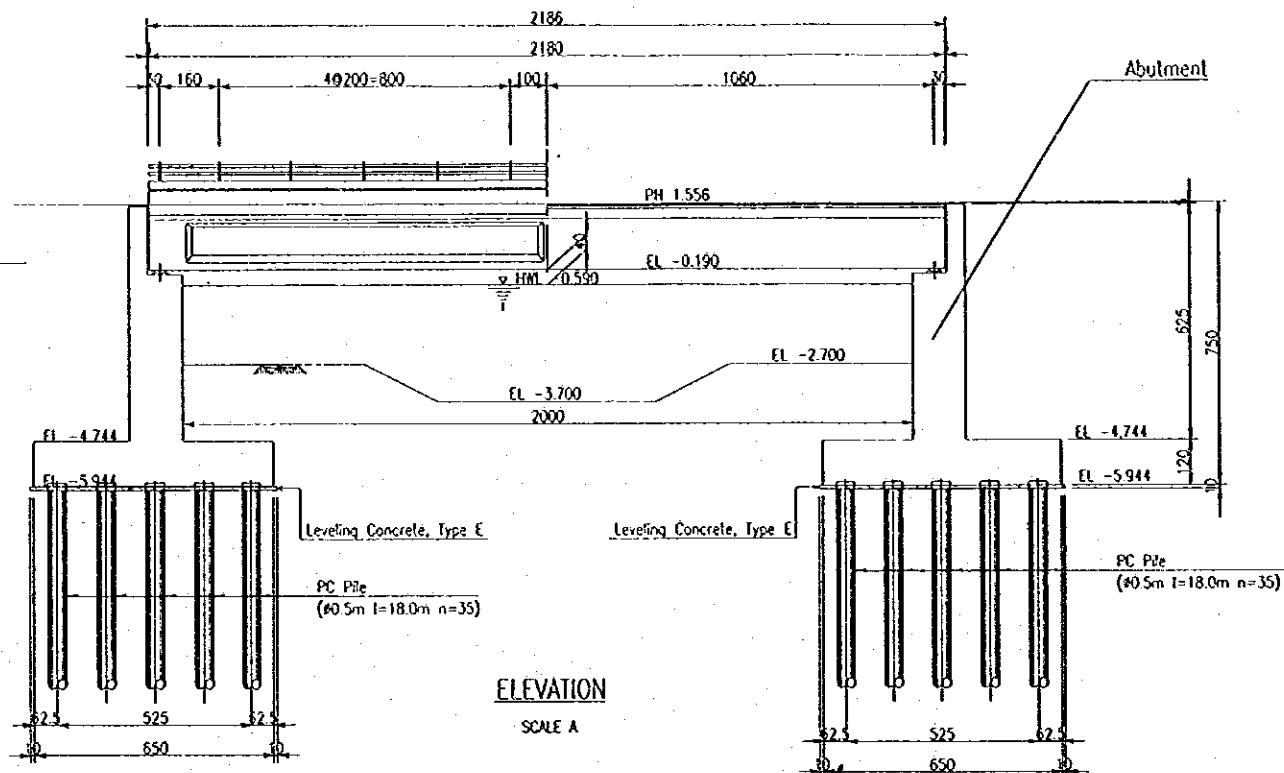
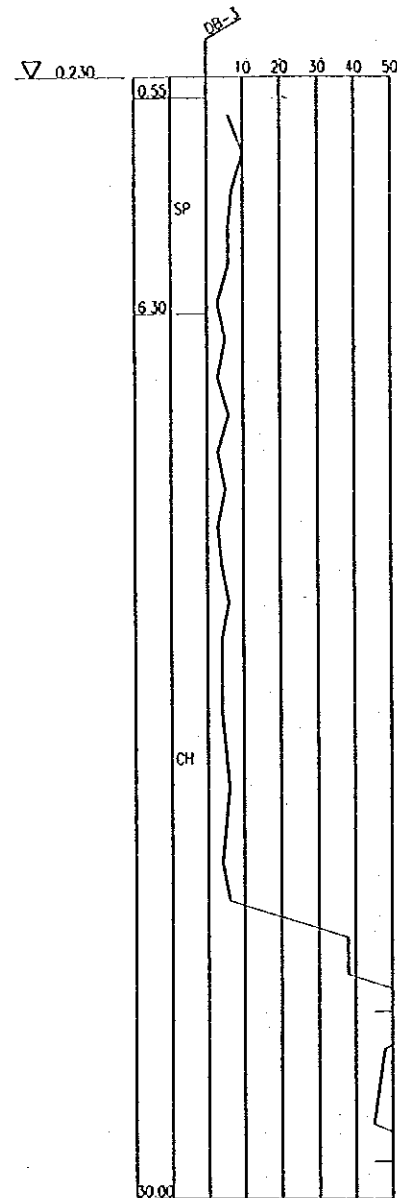


DETAIL OF SIDE WALK
SCALE A

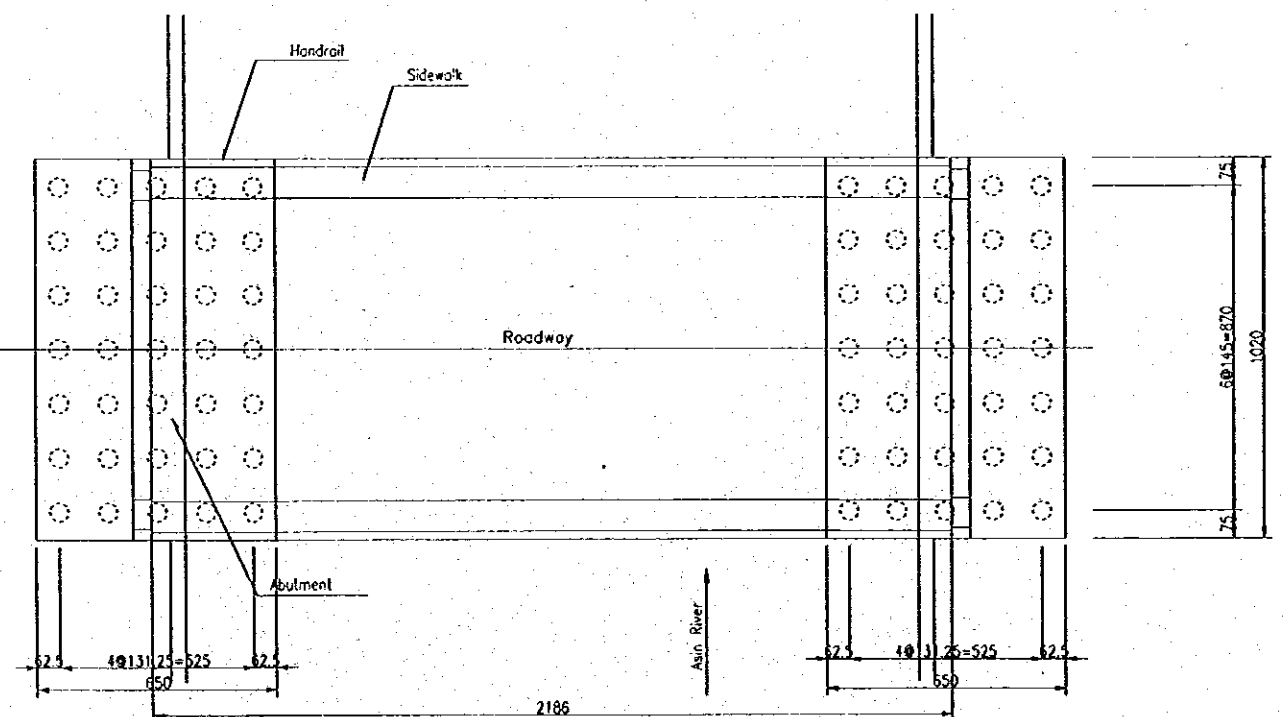


NO.	DATE	REVISIONS	OKKONATED	DESIGNED	APPROVED

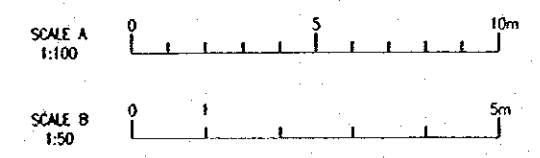
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF URBAN SETTLEMENT		PROVINCE CENTRAL JAVA
JATUNGSILANA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 1 BRIDGE SUPERSTRUCTURE EXPANSION JOIN AND BEARING SHOE		PROJECT NAME FLOOD CONTROL, URBAN 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 PARCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. U-P2-A-81-6 SHEET NO. 67
APPROVED: <i>[Signature]</i> DATE:		CONTRACT NO.



TYPICAL CROSS SECTION
SCALE B



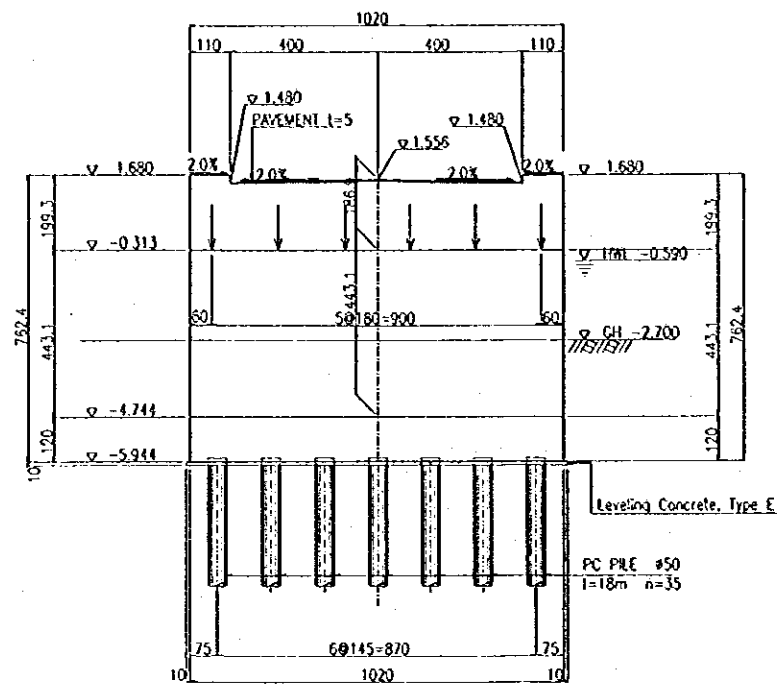
PLAN
SCALE A



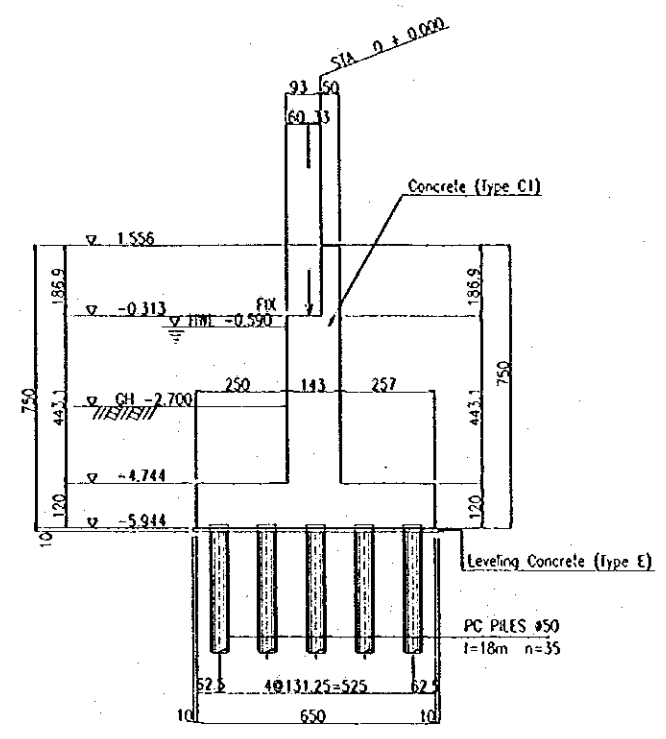
Notes:
1. The dimension in cm
2. The elevation in m
3. Concrete for structure, Type C1

NO.	DATE	REVISION	OPERATED	DESIGNED	APPROVED

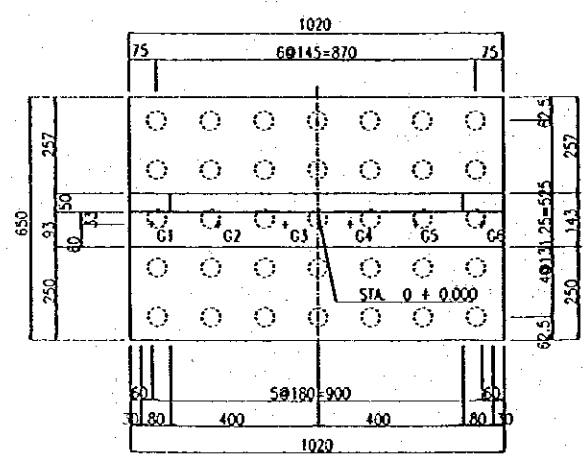
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
IBATUNDEKUNTA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.1 BRIDGE SUB STRUCTURE GENERAL ARRANGEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
SAFAR INTERNATIONAL COOPERATION AGENCY CTA IMPROVING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
APPROVED: _____ CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. U-P2-A-Br-7 SHEET NO. 58 DATE: _____ CONTRACT NO. _____



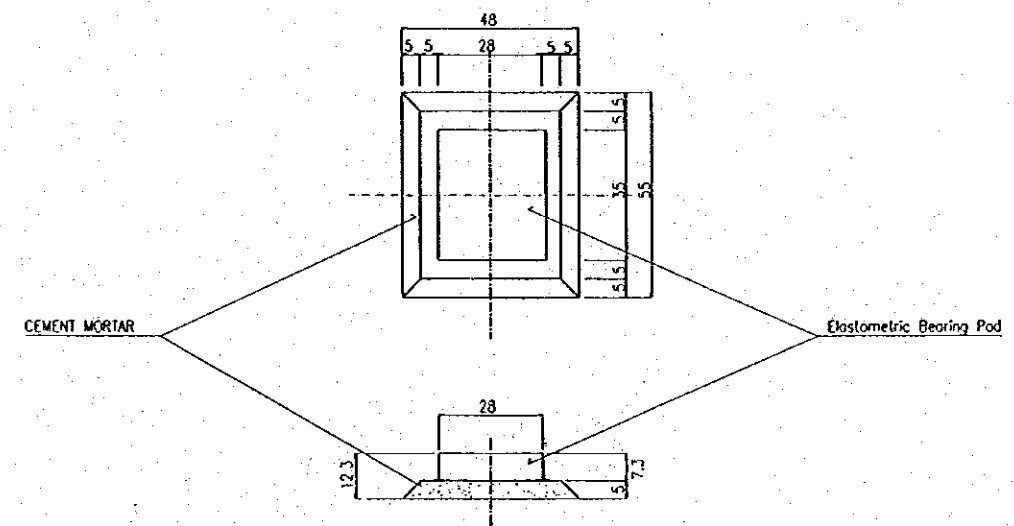
ELEVATION
SCALE A



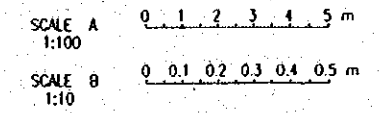
PROFILE
SCALE A



PLAN
SCALE A



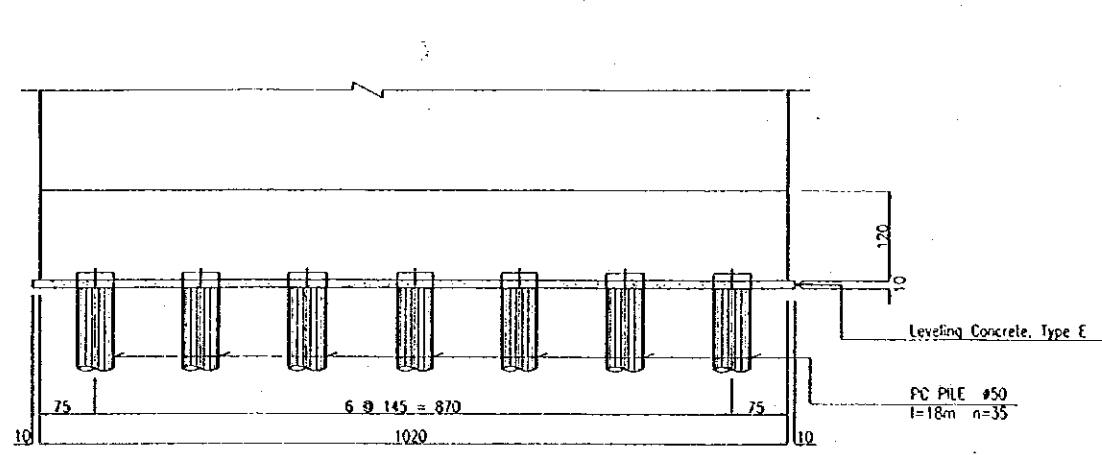
BEARING PAD
SCALE B



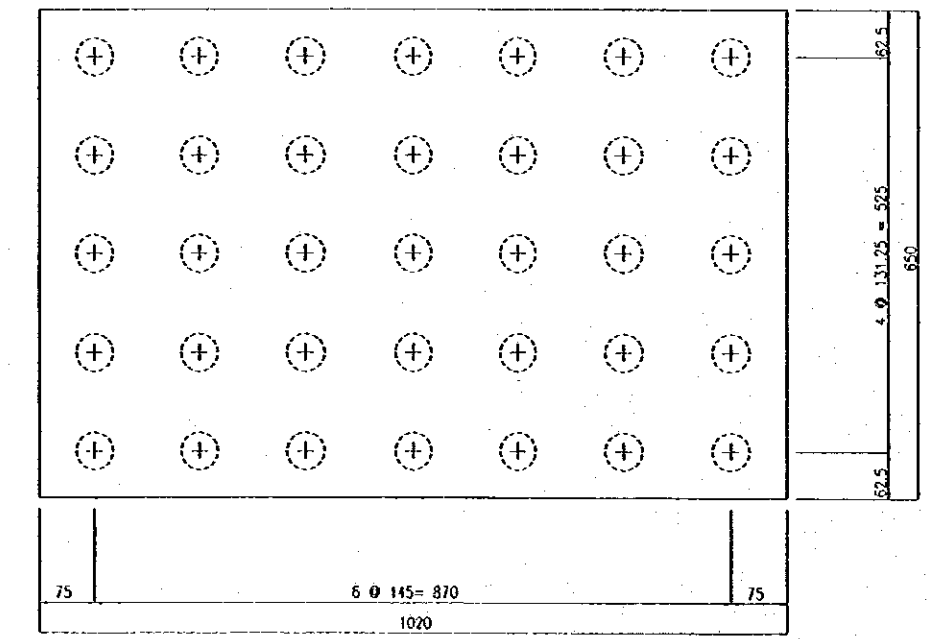
Notes:
1. The dimension in cm
2. The elevation in m
3. Concrete for structure, Type C1

NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

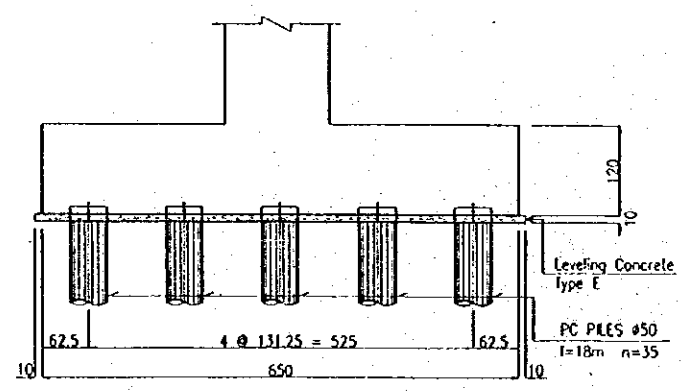
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAYA
PRATUNJUNGA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.1 BRIDGE SUB STRUCTURE DIMENSION OF ARRANGEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SIMARANG IN THE REPUBLIC OF INDONESIA
LAPAR INTERNATIONAL COOPERATION AGENCY CIL, SHONGBANG CO., LTD. MANAGERS FOR PACIFIC COASTAL WATER INTERNATIONAL AND FARCO INTERNATIONAL INC.		DISTRICT SIMARANG CITY
DESIGNED CHECKED CURT OF PLANNING AND DESIGN		DRAWING NO. U-P2-A-Br-8 SHEET NO. 59
APPROVED PROJECT MANAGER		DATE CONTRACT NO.



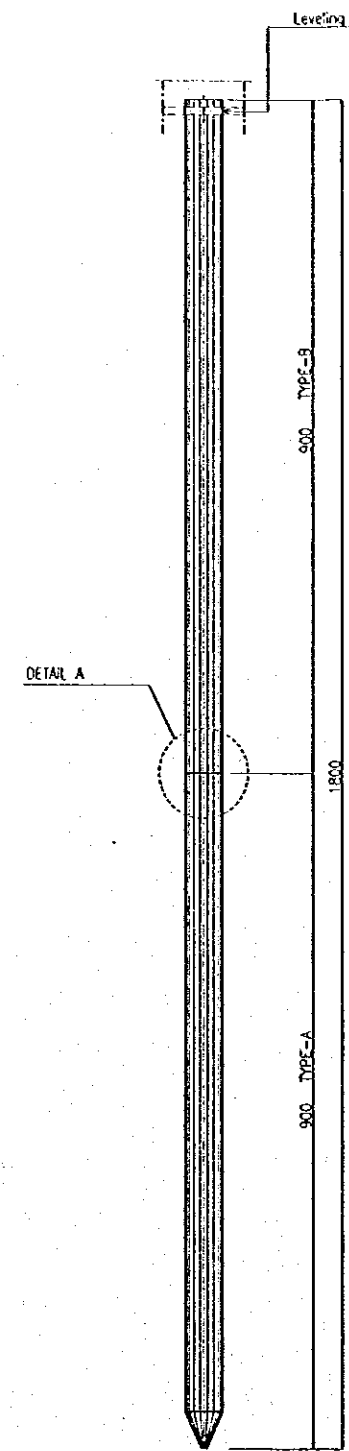
ELEVATION SCALE A



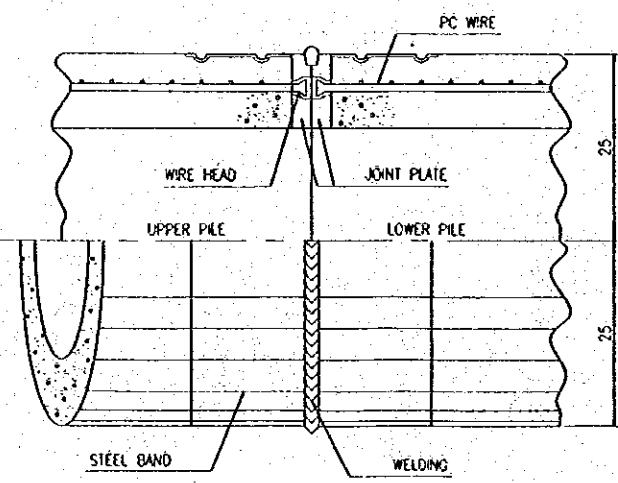
PLAN SCALE A



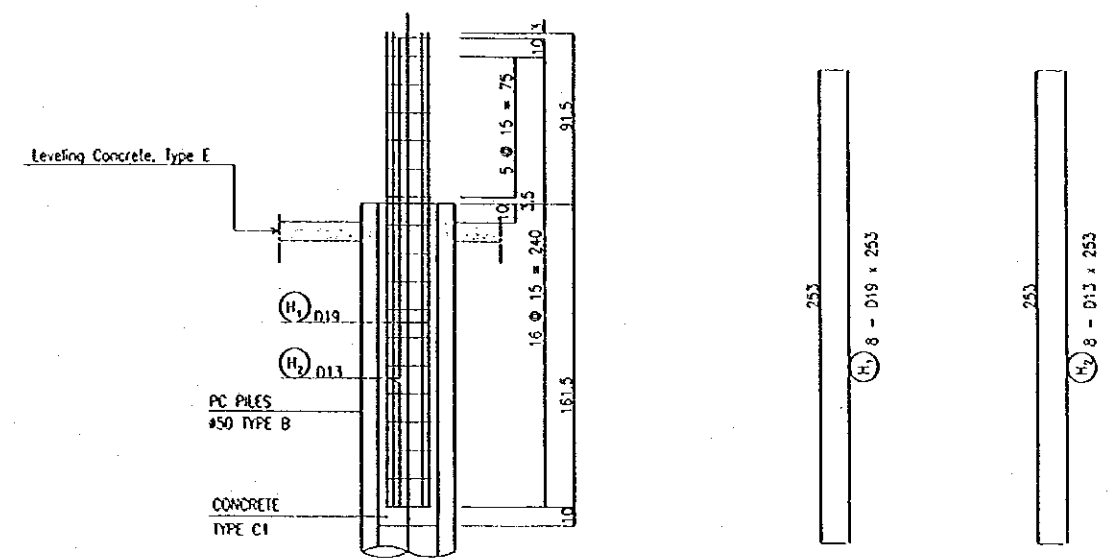
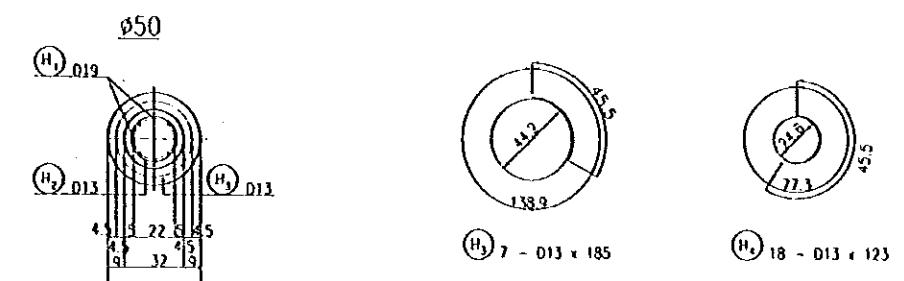
PROFILE SCALE A



DETAIL OF PC PILE SCALE A

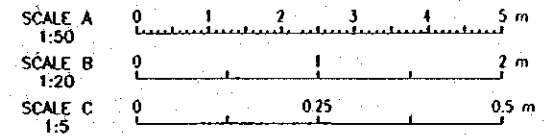


DETAIL A SCALE C



DETAIL OF REINFORCING BAR ARRANGEMENT FOR PILE SCALE B

REF. No.	Ø	LENGTH	NUM.	U.WEIGHT	WEIGHT/BAR	WEIGHT	REMARKS
H 1	D19	253	8	2.23	5.64	51	I
H 2	D13	253	8	1.04	2.63	21	I
H 3	D13	185	7	1.04	1.92	13	O
H 4	D13	123	18	1.04	1.28	23	O
108 kg							
		WEIGHT/PILE	PILES NUM.	WEIGHT/ABUTMENT			
		D19	51 kg	35	1785 kg		
		D13	57 kg	35	1995 kg		
		TOTAL	108 kg		3780 kg		
LOWER	TYPE-A	900					
UPPER	TYPE-B	900					
		1800					
		LENGTH/PILE	PILES NUM.	TOTAL LENGTH/ABUTMENT			
		TYPE-A	9 m	35	315 m		
		TYPE-B	9 m	35	315 m		
		TOTAL	18 m		630 m		



Notes:
 1. The dimension in cm, except for reinforcing bar diameter in mm
 2. Concrete for structure, Type C1

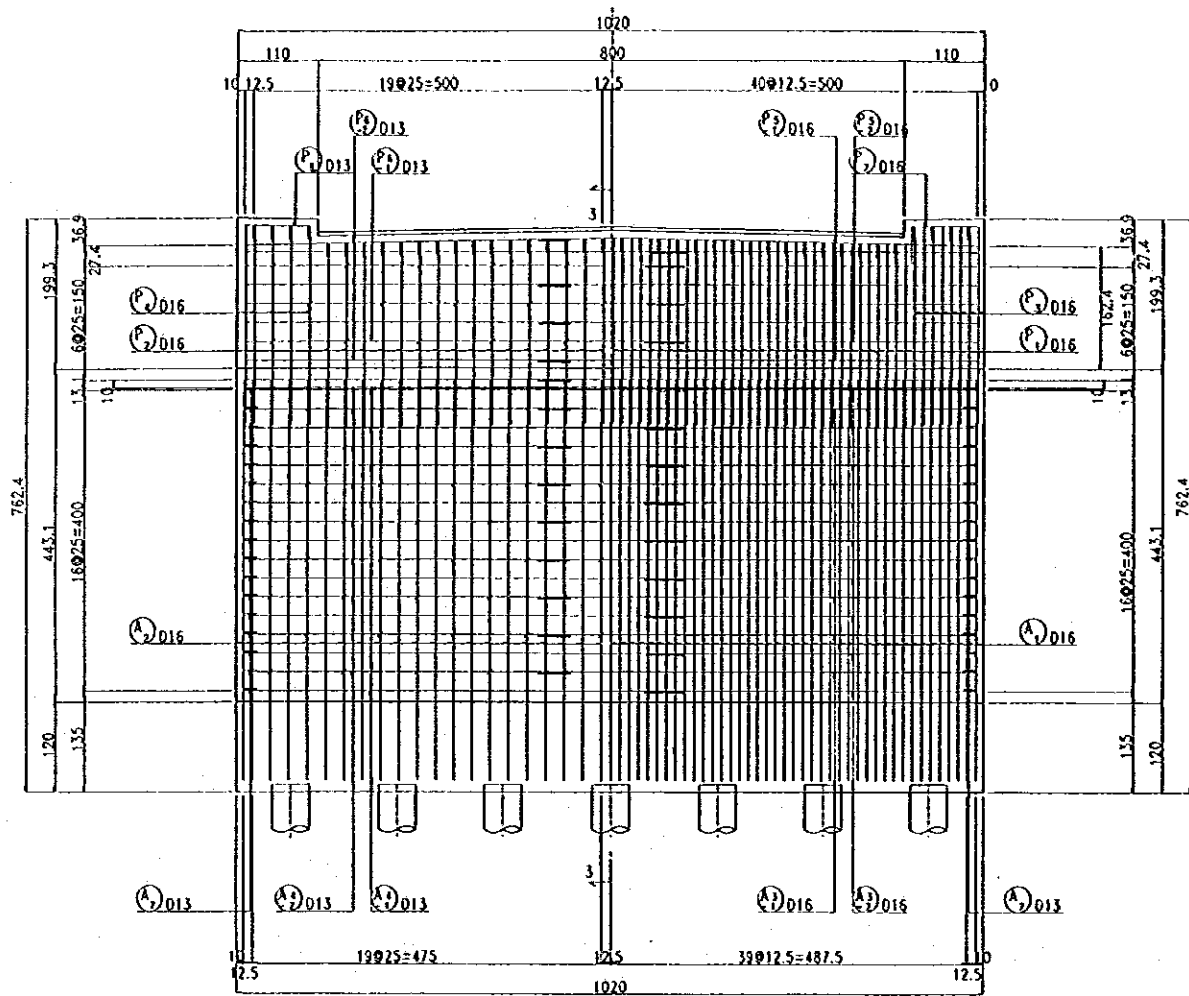
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

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

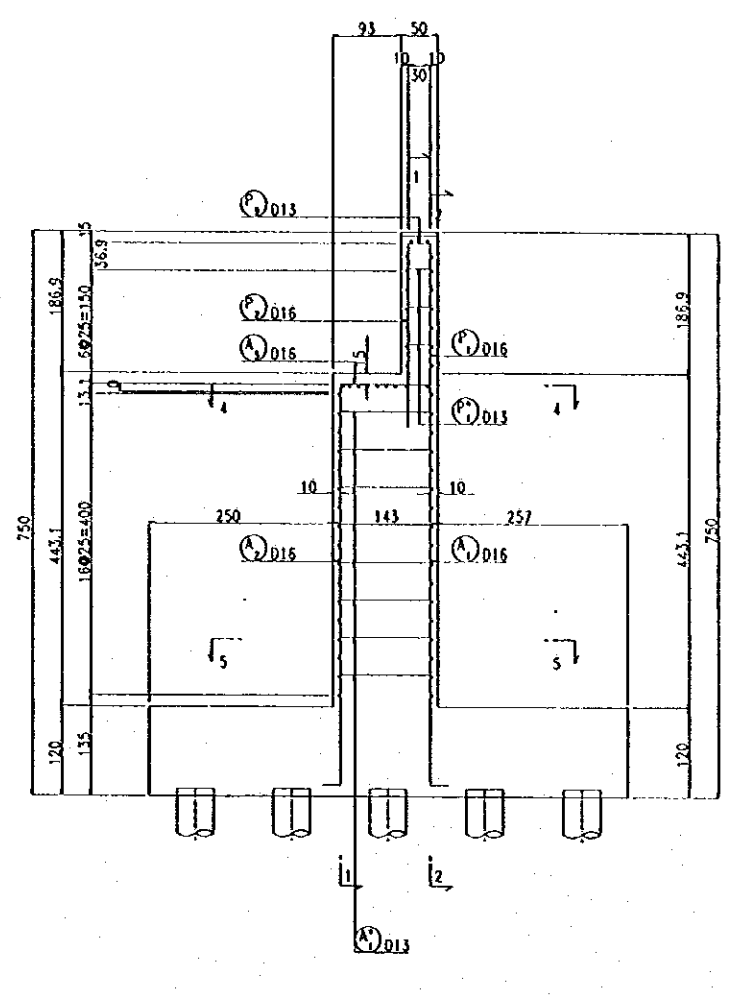
JATUNGLAH FLOOD CONTROL PROJECT
 COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT
 SUBSTRUCTURE
 DIMENSIONS AND REINFORCING BAR ARRANGEMENT OF PC PILES

PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT OF SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. U-P2-A-Br-9
 SHEET NO. 60
 DATE: CONTRACT NO.

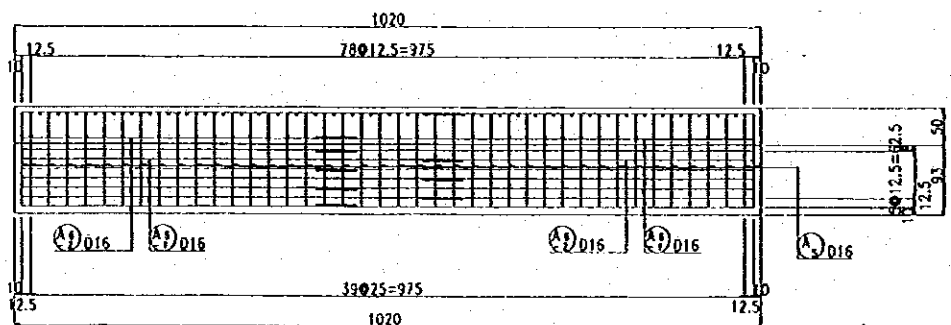
APPROVED: [Signature]
 PROJECT MANAGER



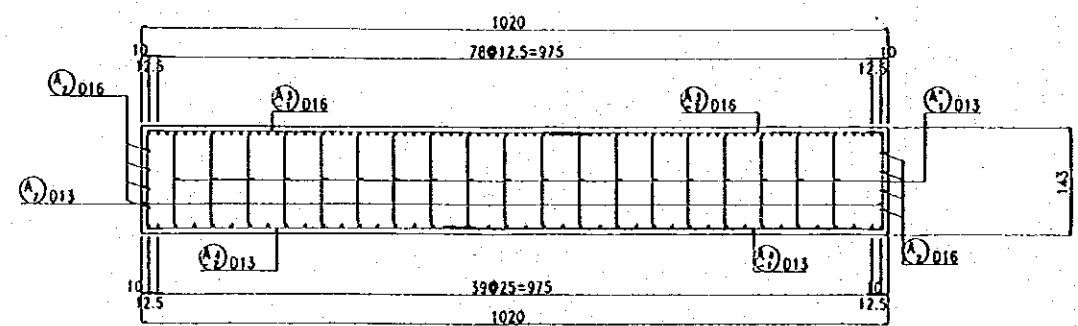
1 - 1



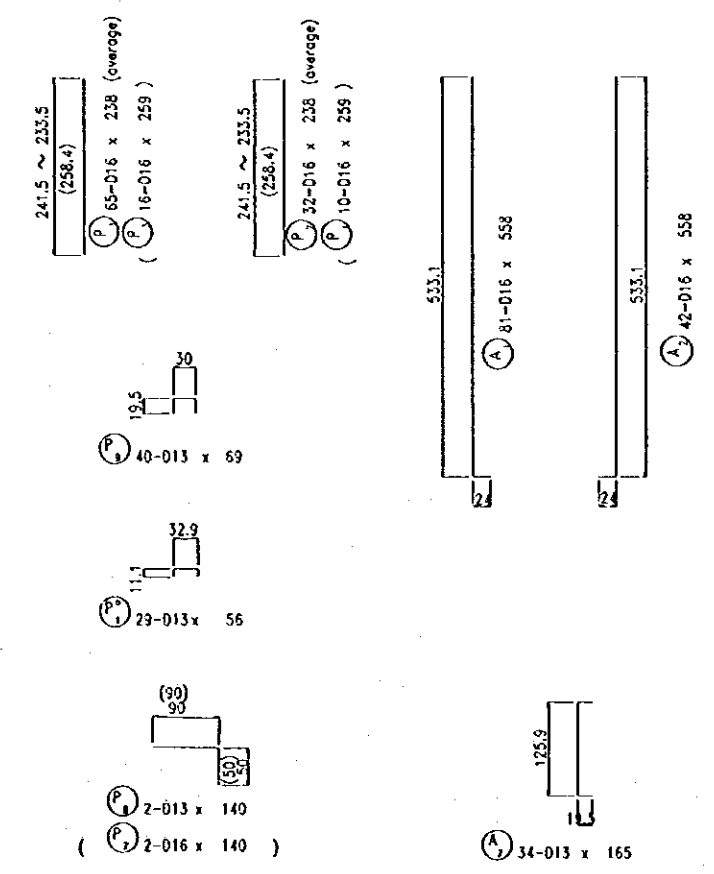
3 - 3



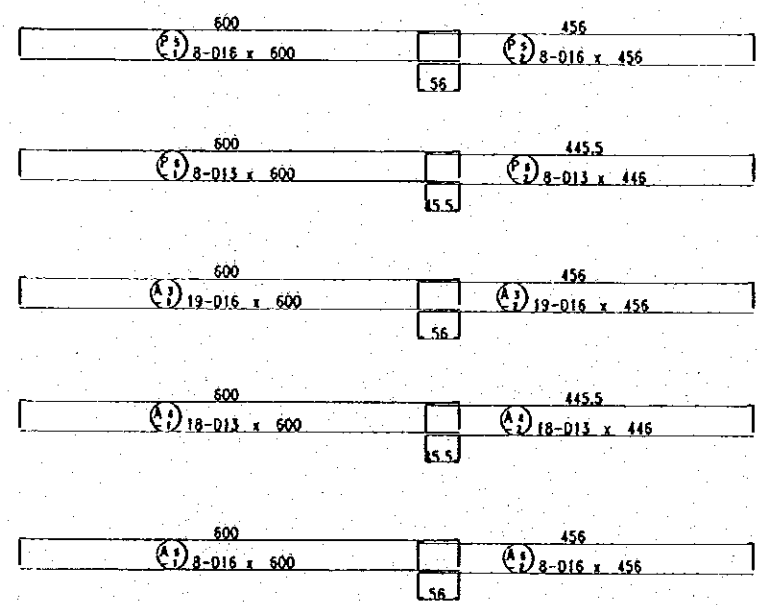
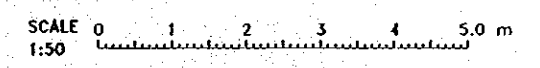
4 - 4



5 - 5



DETAILS OF BEARING SHOES

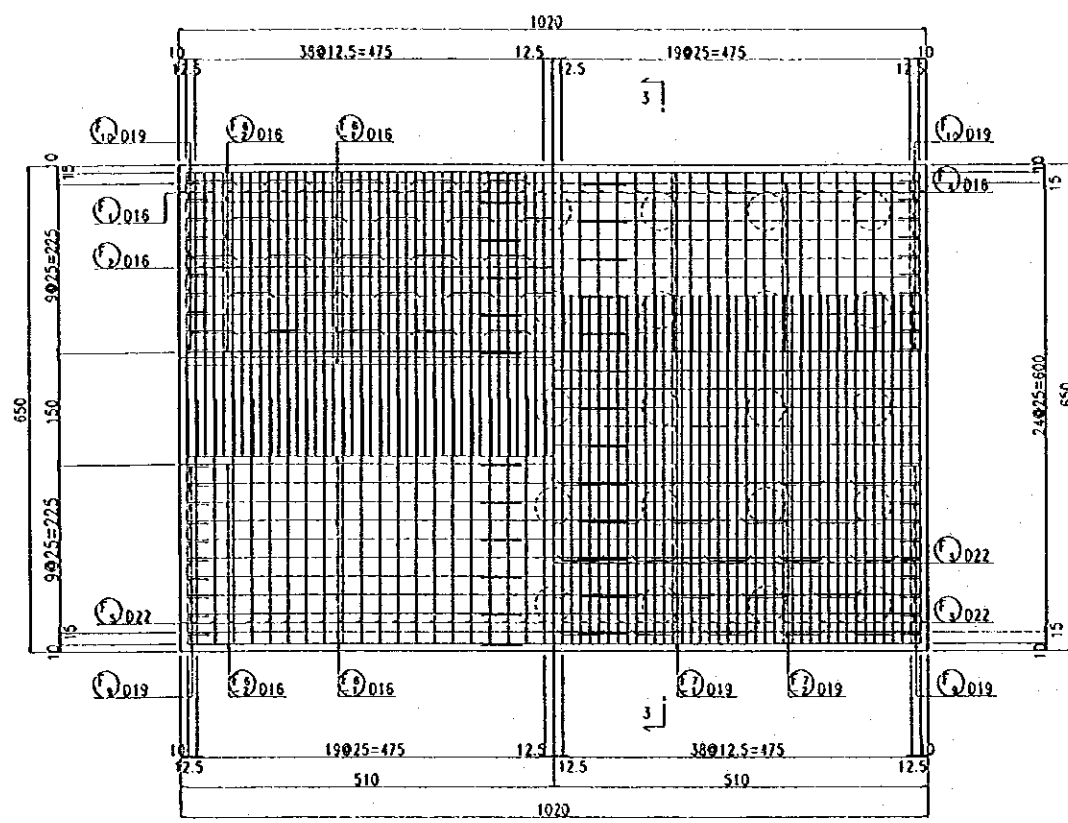


Note : The Dimension in cm, except for Reinforcing bar diameter in mm

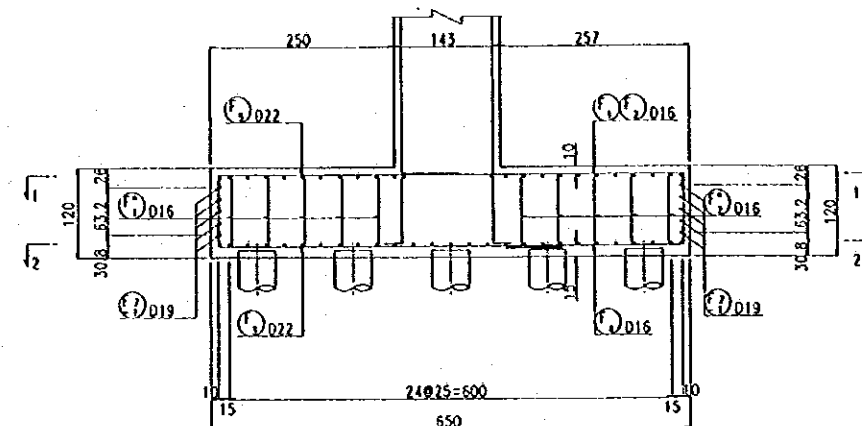
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT BRATUNGSILANA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.1 BRIDGE SUBSTRUCTURE REINFORCING BAR ARRANGEMENT OF ABUTMENT (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. U-P2-A-Br-10 SHEET NO. 61
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN PARTNERSHIP WITH PACIFIC CONSULTANTS INTERNATIONAL AND FAROS INTERNATIONAL INC.	DESIGNED CHECKED DATE _____
APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	CONTRACT NO. _____

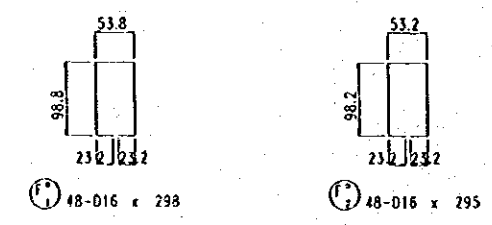
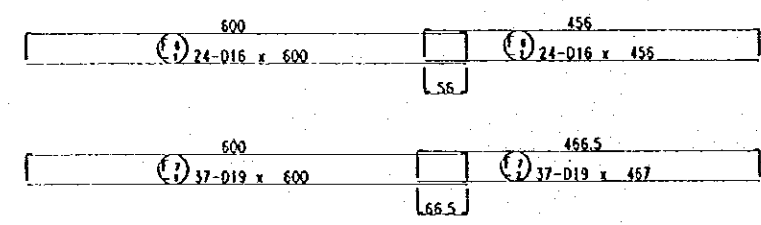
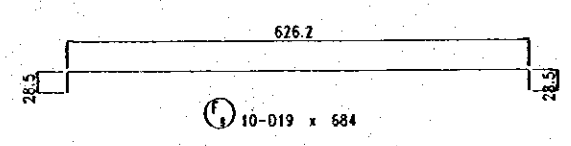
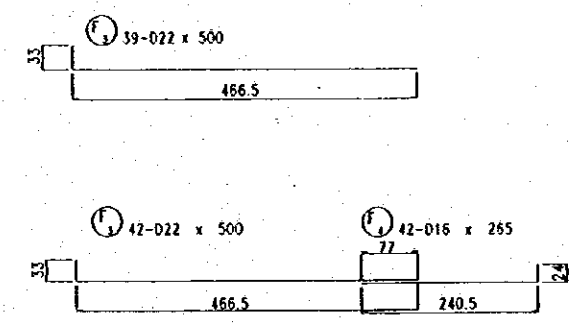
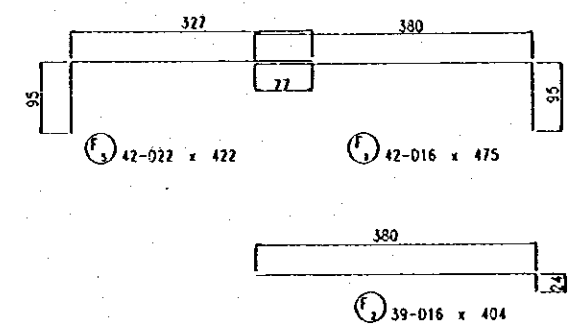
STEEL BAR SHEET



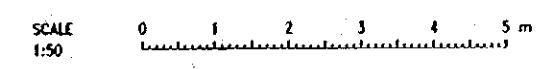
1 - 1 2 - 2



3 - 3



REINF No.	φ (mm)	LENGTH (cm)	NUM.	WEIGHT (kg/m)	WEIGHT/BAR (kg/bar)	WEIGHT (kg)	REMARKS
P 1	D16	238	65	1.580	3.780	245	
P 2	D16	238	32	1.580	3.780	121	
P 3	D16	259	16	1.580	4.092	65	
P 4	D16	259	10	1.580	4.092	41	
P 5-1	D16	600	8	1.580	9.480	76	---
P 5-2	D16	456	8	1.580	7.205	58	---
P 6-1	D13	600	8	1.040	6.240	50	---
P 6-2	D13	445	8	1.040	4.638	37	---
P 7	D16	140	2	1.580	2.212	4	┌
P 8	D13	140	2	1.040	1.456	3	┌
P 9	D13	69	40	1.040	0.718	29	┌
P1	D13	56	29	1.040	0.582	17	┌
A 1	D16	558	81	1.580	8.816	714	
A 2	D16	558	42	1.580	8.816	370	
A 3-1	D16	600	19	1.580	9.480	180	---
A 3-2	D16	456	19	1.580	7.205	137	---
A 4-1	D13	600	18	1.040	6.240	112	---
A 4-2	D13	445	18	1.040	4.638	83	---
A 5	D16	235	42	1.580	3.713	156	┌
A 6-1	D16	600	8	1.580	9.480	76	---
A 6-2	D16	456	8	1.580	7.205	58	---
A 7	D13	165	34	1.040	1.716	58	┌
A'1	D13	149	152	1.040	1.550	236	┌
S 1	D16	98	36	1.580	1.548	56	┌
S 2	D16	83	30	1.580	1.390	42	┌
F 1	D16	475	42	1.580	7.505	315	┌
F 2	D16	404	39	1.580	6.383	249	┌
F 3	D22	500	81	2.980	14.900	1207	┌
F 4	D16	265	42	1.580	4.187	176	┌
F 5	D22	422	42	2.980	12.576	528	┌
F 6-1	D16	600	24	1.580	9.480	228	┌
F 6-2	D16	456	24	1.580	7.205	173	┌
F 7-1	D19	600	37	2.230	13.380	495	┌
F 7-2	D19	467	37	2.230	10.414	385	┌
F 8	D19	684	10	2.230	15.253	153	┌
F 9	D19	148	20	2.230	3.300	66	┌
F 10	D19	149	20	2.230	3.323	66	┌
F1	D16	298	48	1.580	4.708	226	┌
F2	D16	295	48	1.580	4.677	224	┌
				D22	1735	Kg	
				D19	1165	Kg	
				D16	3987	Kg	
				D13	625	Kg	
				TOTAL	7512	Kg	



Note : The Dimension in cm, except for Reinforcing bar diameter in mm

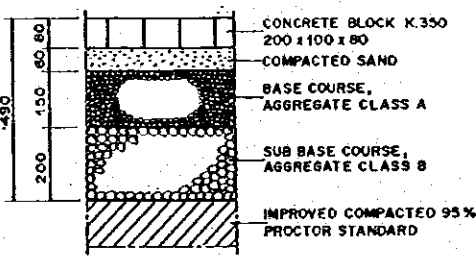
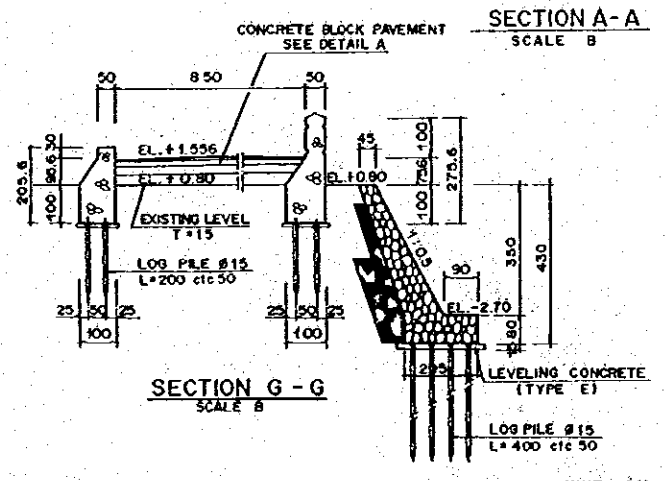
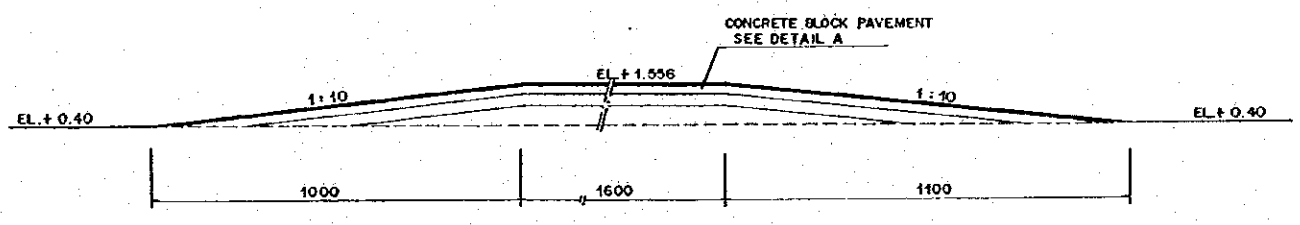
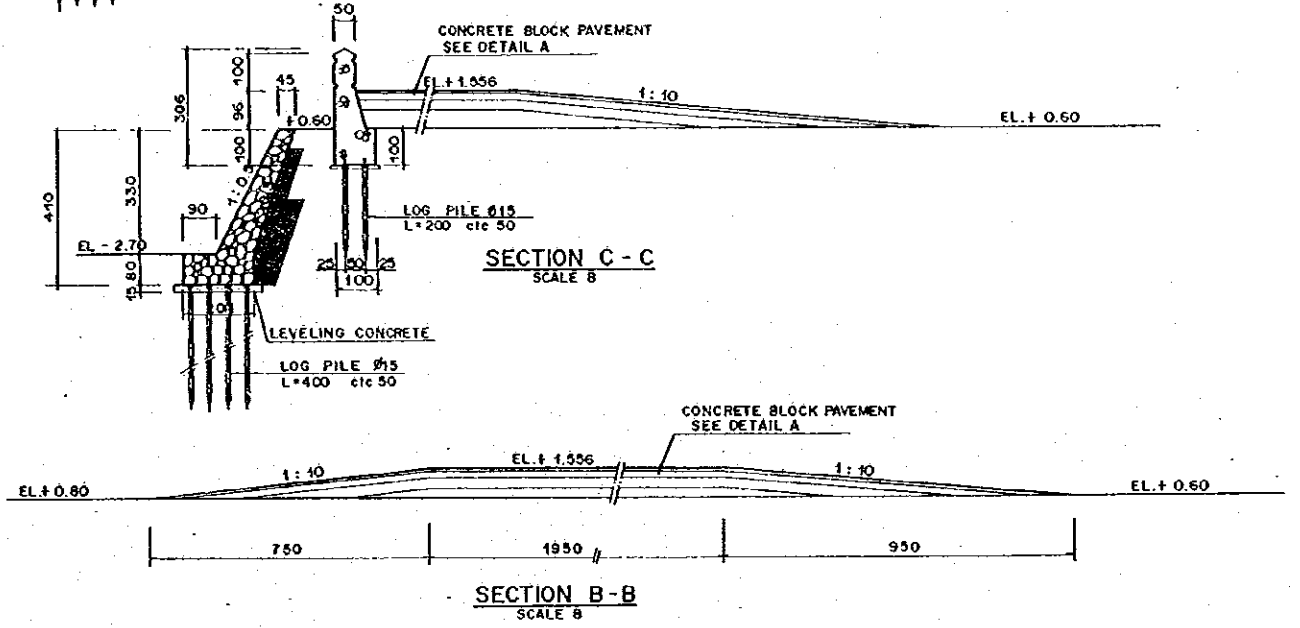
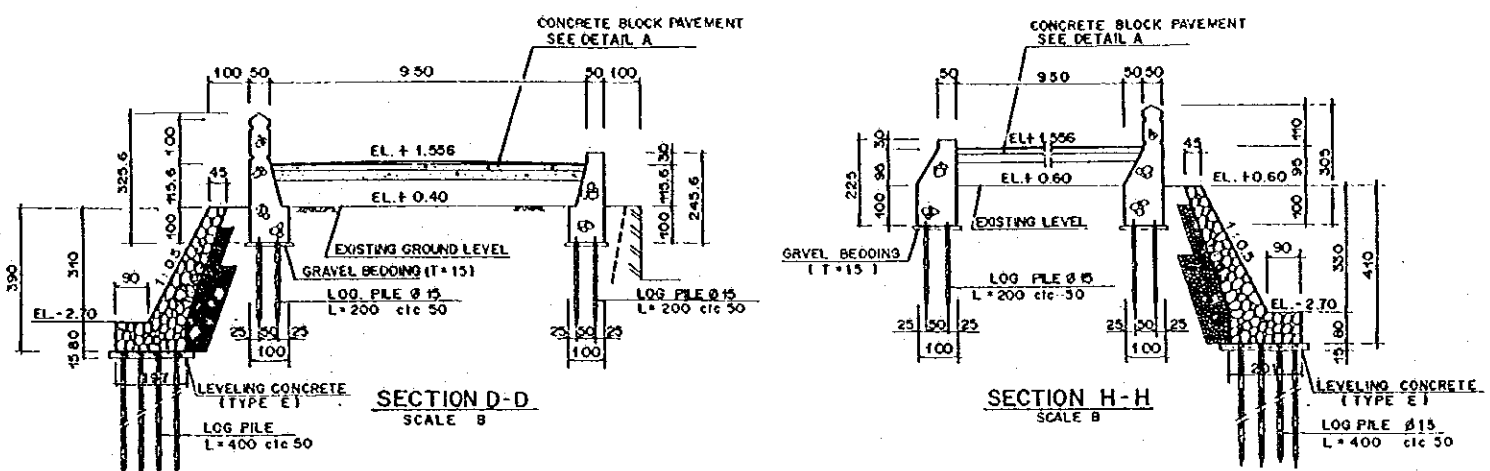
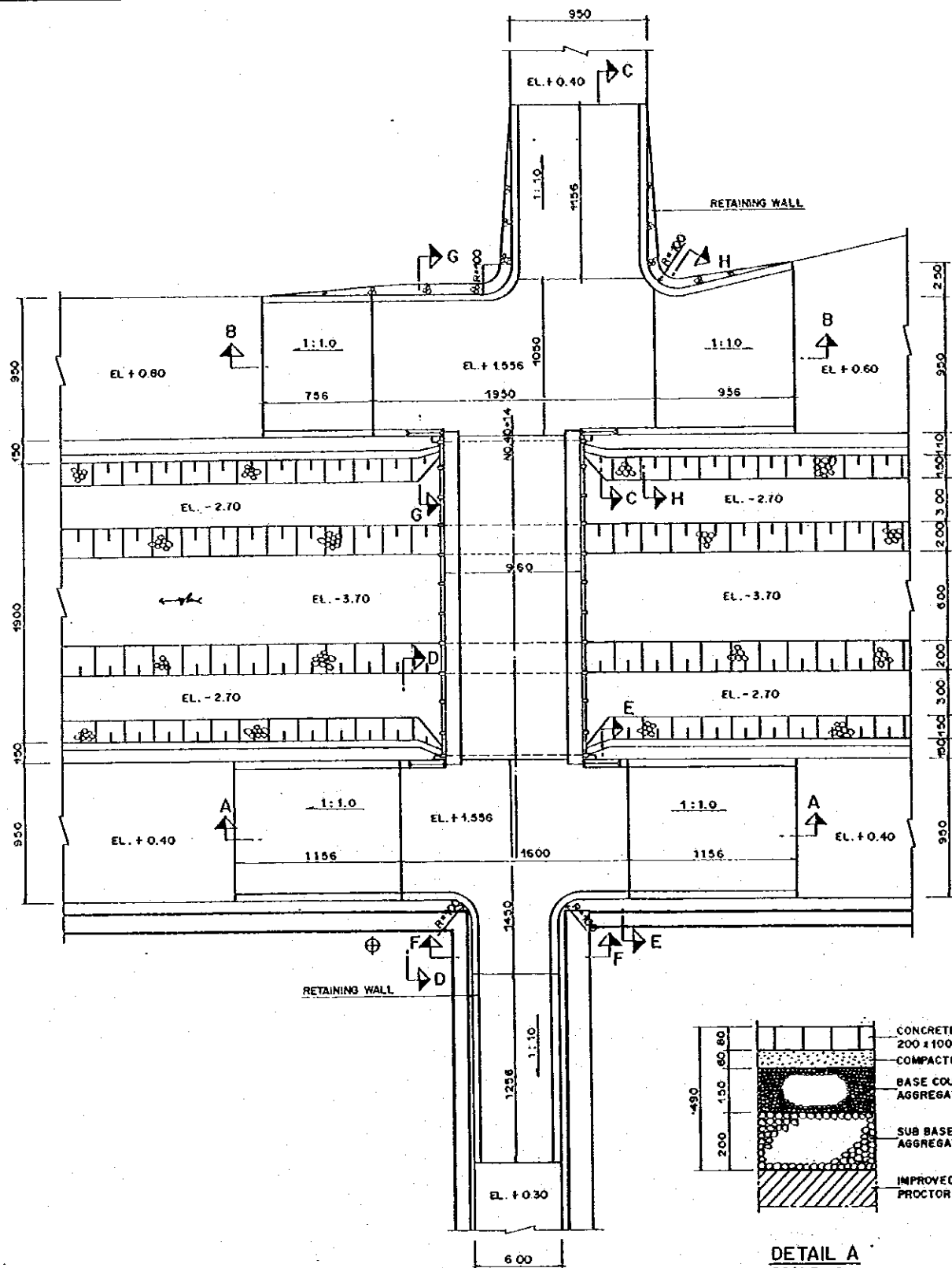
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 RAJAWALUMAJA FLOOD CONTROL PROJECT
 COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT
 ASIN NO.1 BRIDGE
 SUBSTRUCTURE
 REINFORCING BAR ARRANGEMENT OF ABUTMENT (2/)

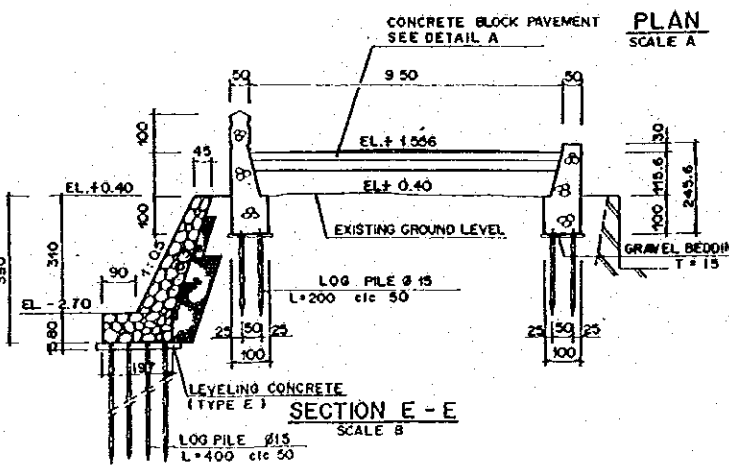
PROVINCE: CENTRAL JAWA
 PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT OF SEMARANG IN THE REPUBLIC OF INDONESIA
 DISTRICT: SEMARANG CITY
 DRAWING NO. U-P2A-BR-11
 SHEET NO. 62

DATE: CONTRACT NO.:

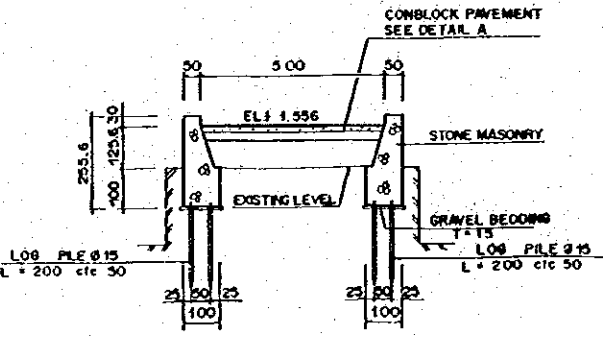
CHEF OF PLANNING AND DESIGN
 PROJECT MANAGER



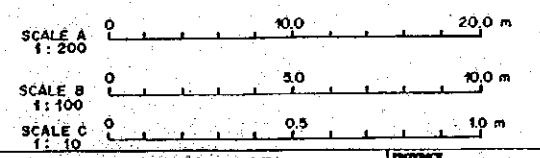
DETAIL A
SCALE C



SECTION E - E
SCALE B

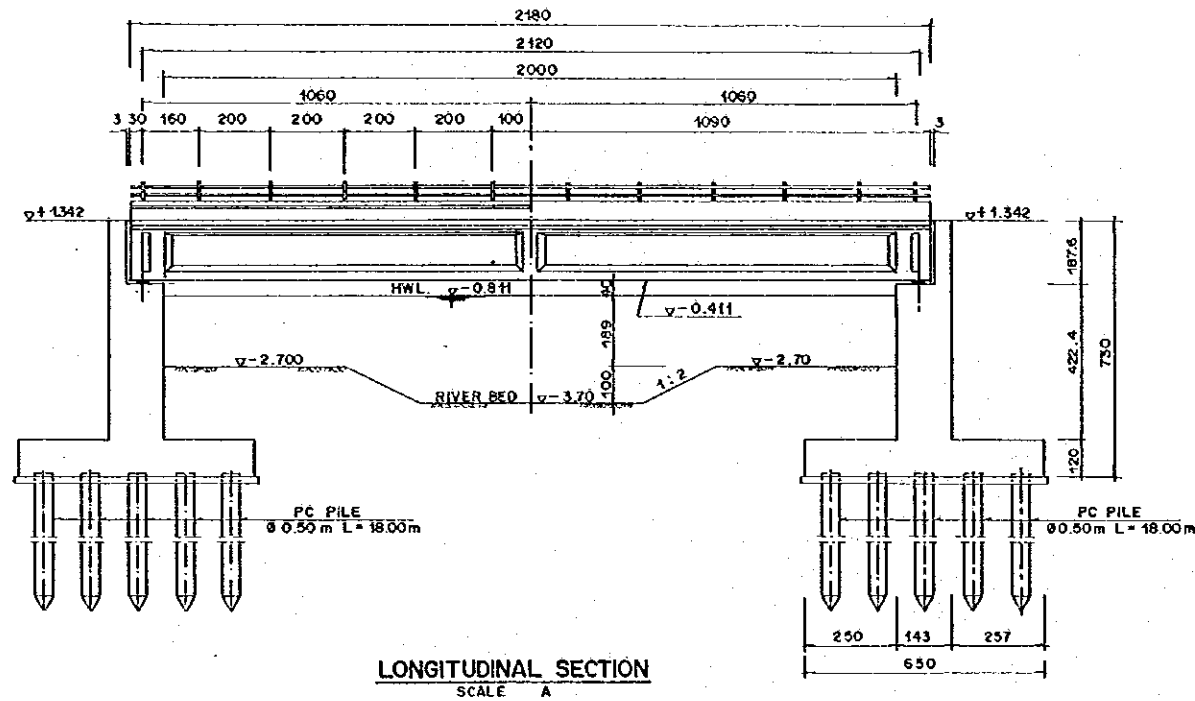


SECTION F - F
SCALE B

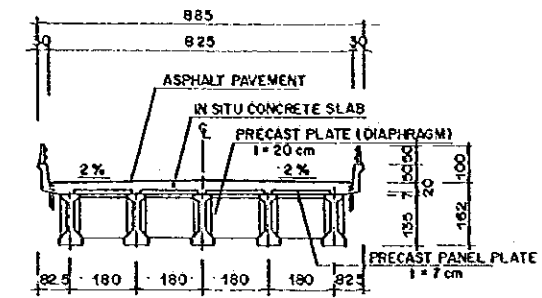


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
RATUNELUMA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 1 BRIDGE APPROACH ROAD		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER SUPPLY DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
LAPAN INTERNATIONAL COOPERATION AGENCY CII ENGINEERING CO., LTD. (AS ASSOCIATE) PACIFIC CONSULTANTS INTERNATIONAL AND FARO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
UNIT: CM		DRAWING NO. U-P2-A-84-12 SHEET NO. 83
CHECKED DATE		CONTRACT NO.

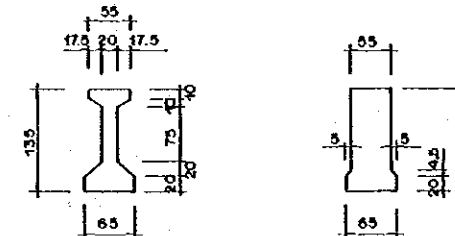
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



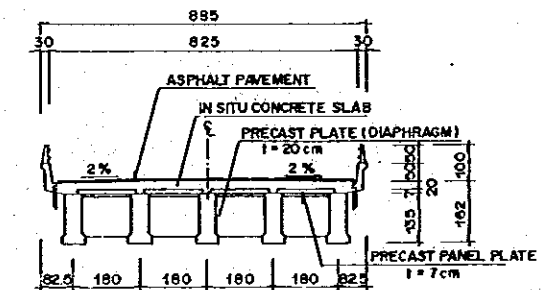
LONGITUDINAL SECTION
SCALE A



SECTION A-A
SCALE A

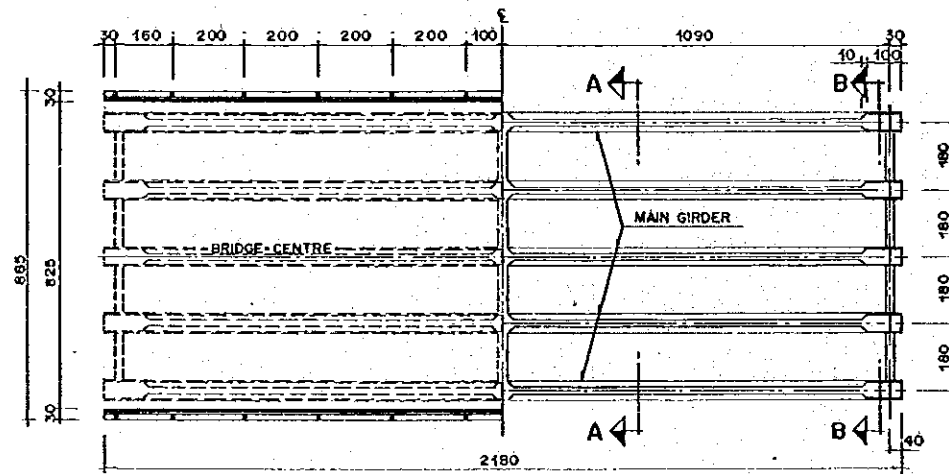
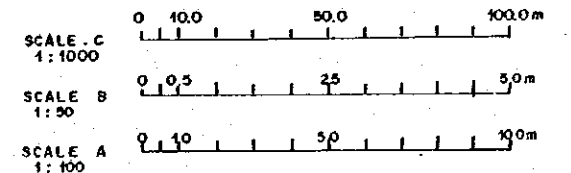


CENTER END
BEAM SECTION
SCALE B

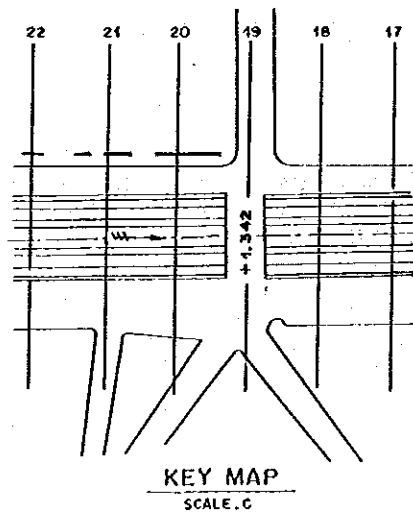


SECTION B-B
SCALE A

- NOTE :
1. UNIT IN CENTIMETER
 2. CONCRETE QUALITY FOR MAIN GIRDER AND DIAPHRAGM K-400.
 3. CONCRETE QUALITY FOR SLAB K-250



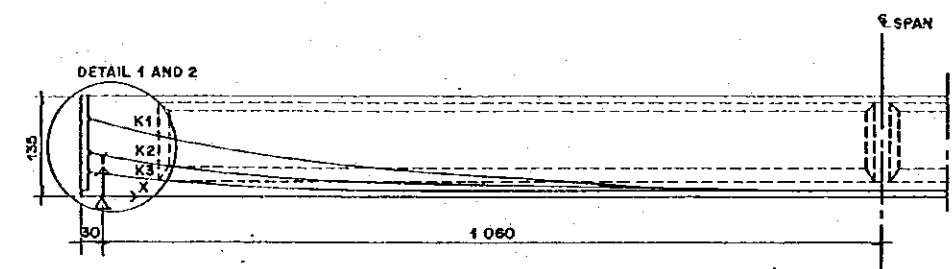
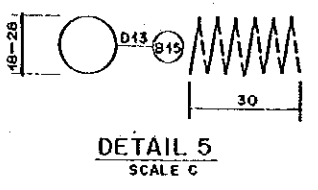
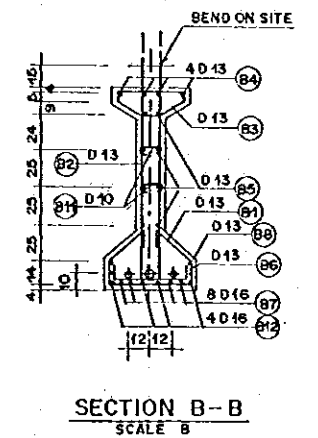
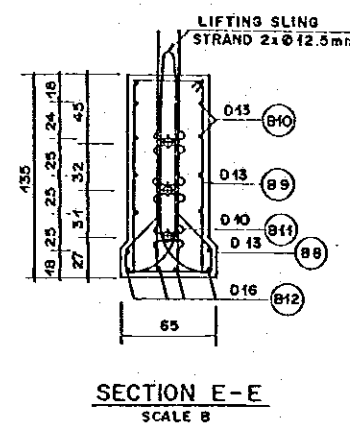
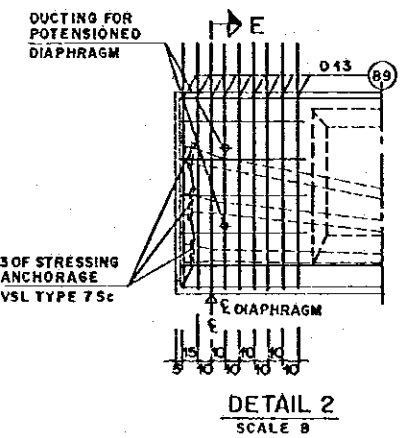
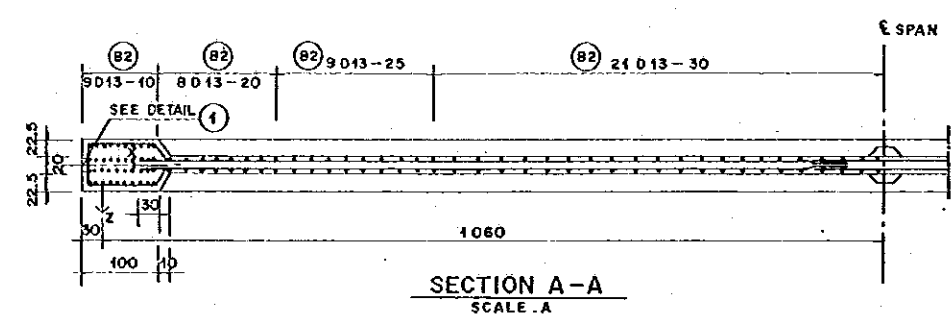
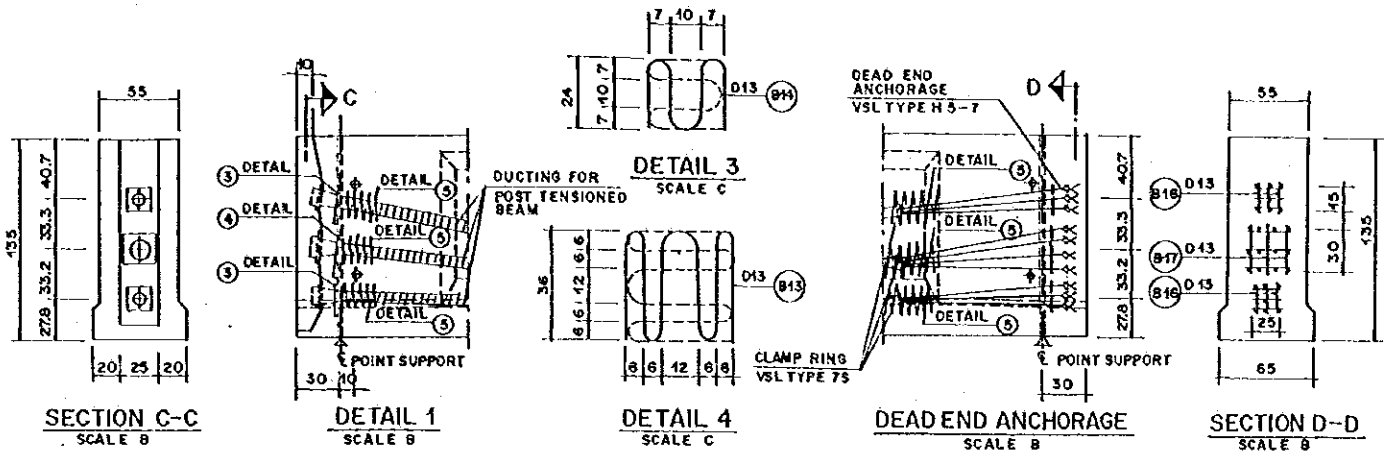
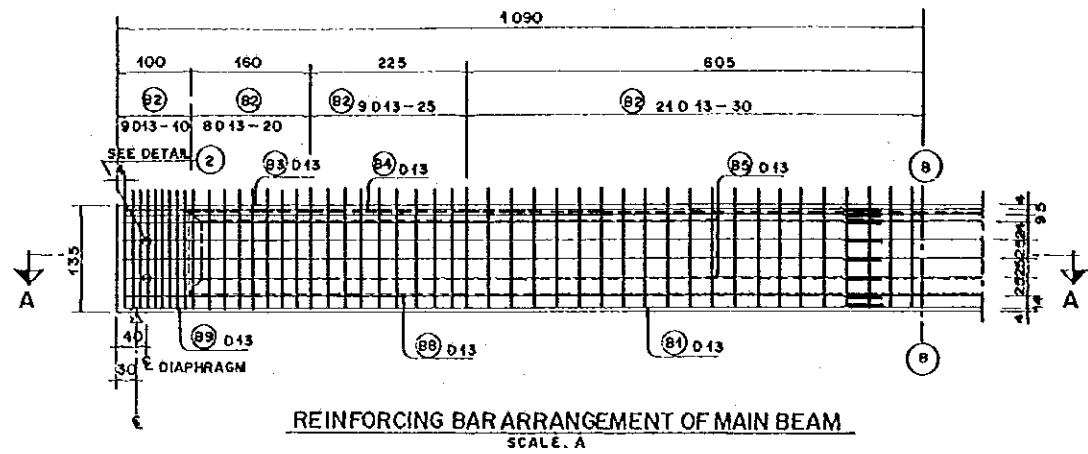
PLAN
SCALE A



KEY MAP
SCALE C

NO.	DATE	REVISIONS	COORDINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DEPARTMENT GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
JATUMULYANA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 2 BRIDGE SUPERSTRUCTURE DIMENSION OF SUPERSTRUCTURE		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG BY THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CII (CHOKKAI) CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL, INC. JASCO INTERNATIONAL, INC.		DISTRICT SEMARANG CITY
DESIGNED CHECKED CRUIZ OF PLANNING AND DESIGN		DRAWING NO. U-PP-A-W-15 SHEET NO. 64
APPROVED PROJECT MANAGER		DATE CONTRACT NO.



	X	0	100	200	300	400	500	600	700	800	900	1000	1060
CABLE 3 (K3)	Y	27.0	24.0	21.4	19.0	16.9	15.1	13.5	12.2	11.3	10.6	10.1	10.0
	Z	0	2.1	4.0	5.7	7.1	8.4	9.5	10.4	11.1	11.6	11.9	12.0
CABLE 2 (K2)	Y	58.5	50.1	24.5	35.7	29.6	24.4	20.0	16.4	13.6	11.6	10.4	10.0
	Z	0	0	0	0	-3.2	-5.9	-8.1	-9.8	-11.0	-11.8	-12.0	
CABLE 1 (K1)	Y	90.0	76.1	63.6	52.3	42.4	33.8	26.5	20.6	17.7	15.4	13.9	10.0
	Z	0	0	0	0	0	0	0	0	0	0	0	0

LIST OF CABLE COORDINATE (Cm)

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (Cm)							TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f						
K3	12.7	STRANDS	16244							162.44	0.789	5	641	
K2	12.7	STRANDS	27877							278.77	0.789	5	1020	
K1	12.7	STRANDS	16296							162.96	0.789	5	643	

TOTAL = 2304 kg

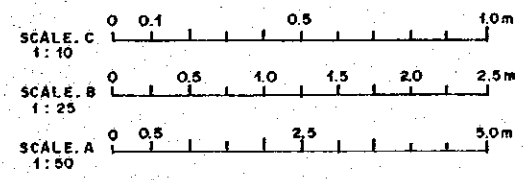
LIST OF PC CABLE OF MAIN GIRDER

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (Cm)							TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f						
B1	13	D	57	15	35	10			1.77	1.04	5x94	565		
B2	13	E	12	166					3.44	1.04	5x94	1682		
B3	13	C	47	4	12	20			1.19	1.04	5x76	470		
B4	13	A	21.70						22.08	1.04	5x4	460		
B5	13	A	20.28						20.67	1.04	5x8	859		
B6	13	Ø	55	10					0.75	1.04	5x1	4		
B7	16	A	21.70						22.18	1.58	5x8	1402		
B8	13	A	21.70						22.34	1.04	Øx2	230		
B9	13	H	47	127	6.5				3.61	1.04	5x18	338		
B10	13	B	92	25					1.30	1.04	5x10	68		
B11	10	F	16	4					0.24	0.647	5x316	234		
B12	16	A	21.70						22.18	1.58	5x4	701		
B13	13	I	6	6	12	36			2.365	1.04	5x1	12		
B14	13	J	7	10	24				0.95	1.04	5x2	8		
B15	13	K	30	16					3.391	1.04	5x6	103		
B16	13	B	15						0.90	1.04	5x2	9		
B17	13	B	30						1.80	1.04	5x1	9		

TOTAL = 7154 kg

LIST OF REINFORCING BAR OF MAIN GIRDER

- NOTE :
- CONCRETE COMPRESSION STRENGTH OF
 - $f_c' = 35.2 \text{ MPa}$
 - $f_{cr} = 22.5 \text{ MPa}$
 - TENSILE STRENGTH OF REINFORCING BAR
 - $f_y = 320 \text{ MPa}$
 - TENDON SPECIFICATION
 - TYPE = 7 SUPER STRANDS
 - DIAMETER = 12.7 mm
 - AREA A = 100 mm
 - MIN TENSILE STRENGTH = 1840 MPa
 - MIN BREAKING LOAD 184 KN
 - USED = 26 STRANDS
 - K1 = 7 STRANDS
 - K2 = 12 STRANDS
 - K3 = 7 STRANDS
 - EACH STRAND SHALL BE PRESTRESSED TO 150 KN IMMEDIATELY PRIOR TO LOCK OFF
 - UNIT IN CENTIMETER EXCEPT FOR DIAMETER OF REINFORCING BAR
 - CONCRETE QUALITY K-400
 - STEEL QUALITY BJ-32



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

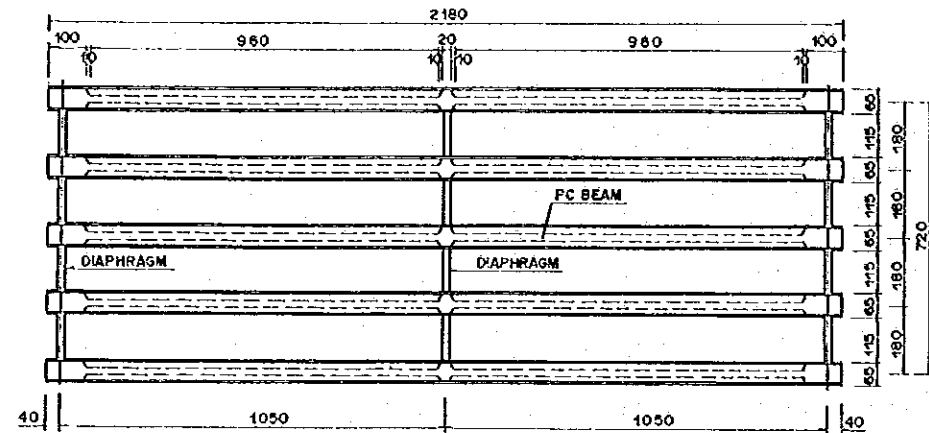
THE REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT
 JATUNSELUNA FLOOD CONTROL PROJECT
 COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT
 ASIN NO. 2 BRIDGE
 SUPERSTRUCTURE
 CABLE AND REINFORCING BAR ARRANGEMENT OF GIRDER

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. U-P2-A-BF-14
 SHEET NO. 65

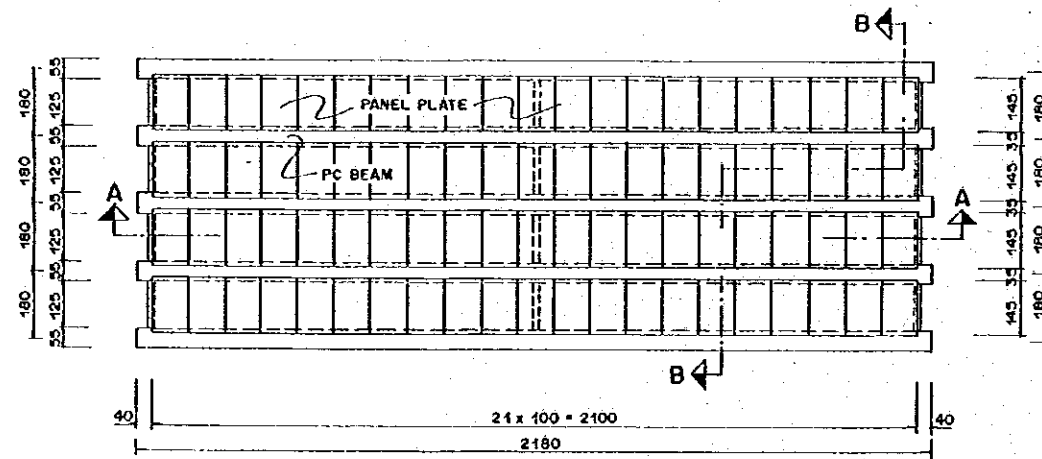
DATE: _____ CONTRACT NO. _____

DESIGNED: _____ CHECKED: _____

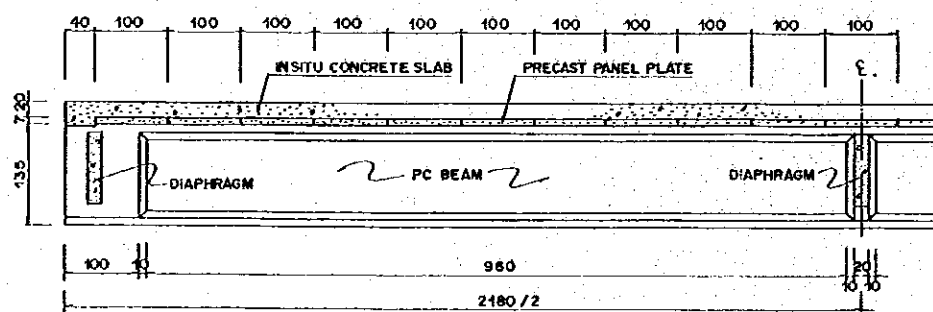
CHIEF OF PLANNING AND DESIGN: _____ PROJECT MANAGER: _____



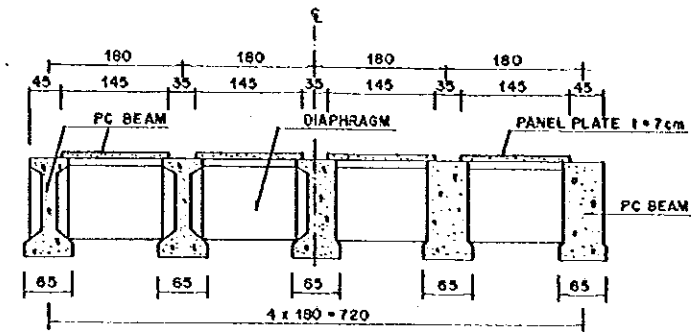
BEAM AND DIAPHRAGM ARRANGEMENT
SCALE A



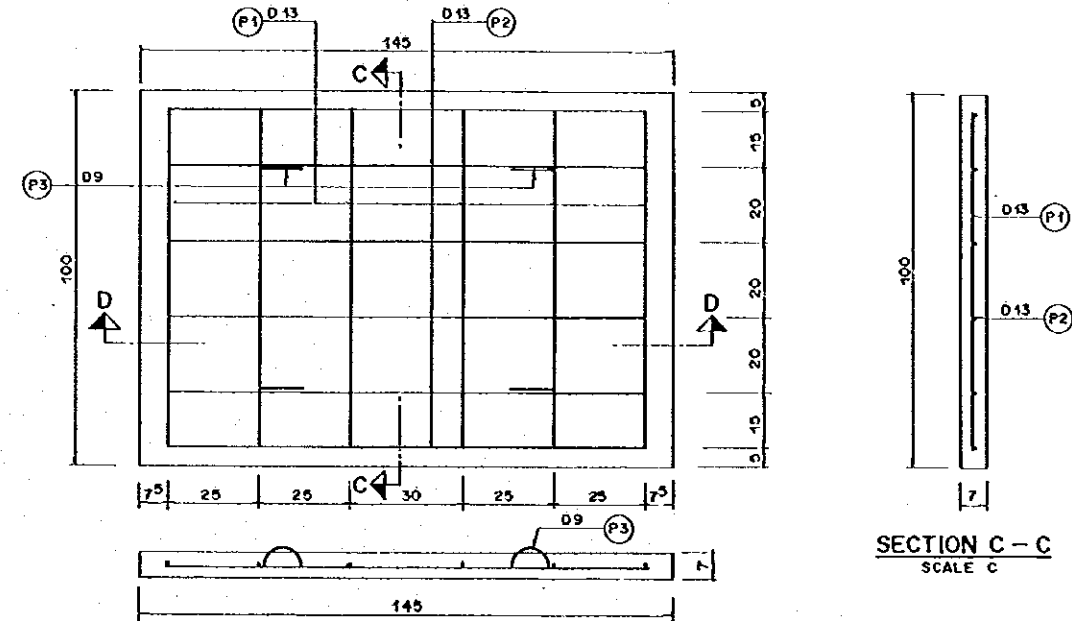
PANEL PLATE ARRANGEMENT
SCALE A



SECTION A-A
SCALE B



SECTION B-B
SCALE B

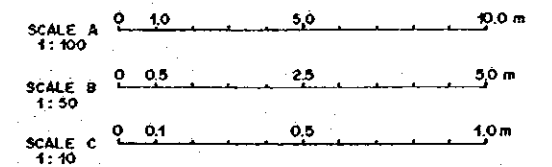


SECTION D-D
SCALE C

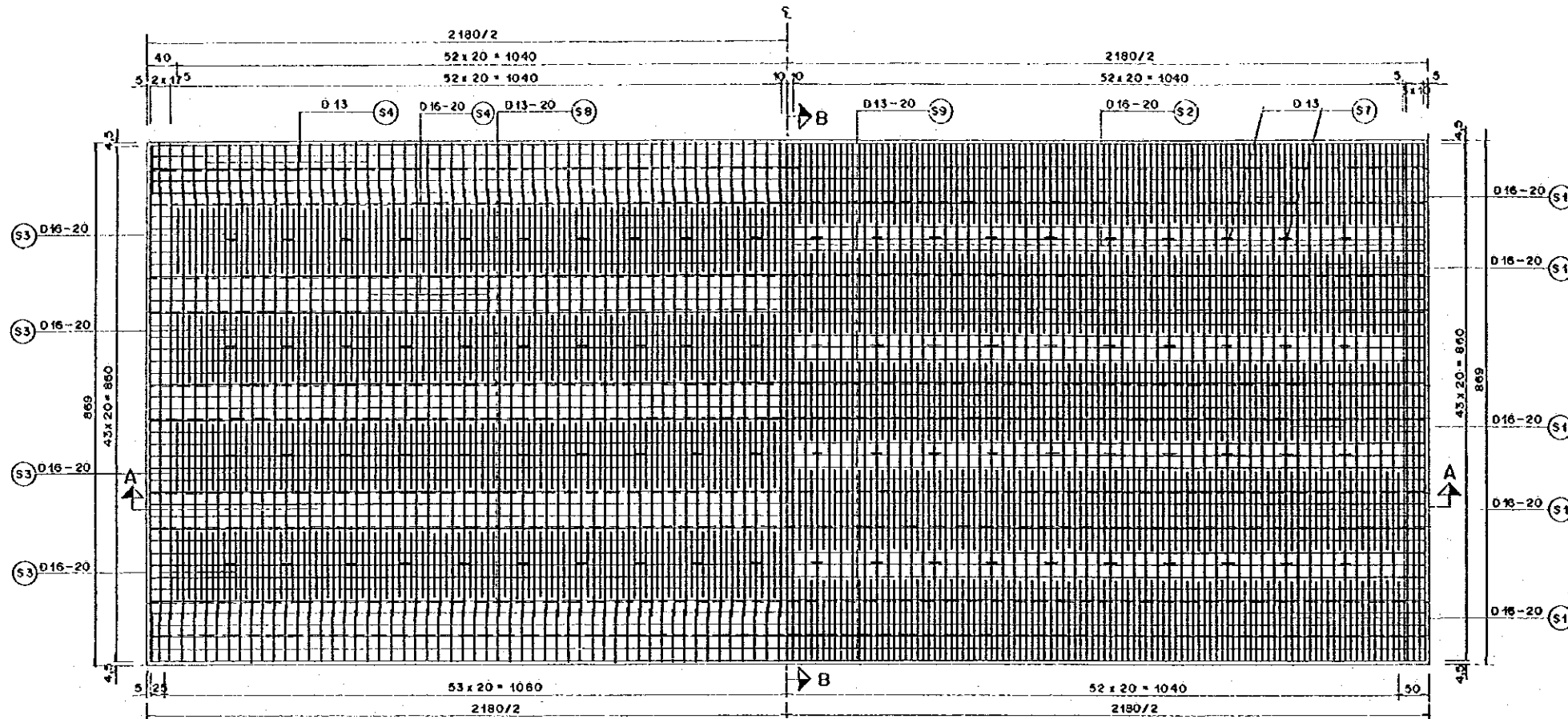
SECTION C-C
SCALE C

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)						TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e	f					
145 x 100 (NUMBER OF PANELS = 84)													
P 1	13	B	90						0.9	1.04	504	472	
P 2	13	B	130						1.30	1.04	504	691	
P 3	9	I	20	10	12				0.42	0.50	336	71	
TOTAL = 1224 kg													

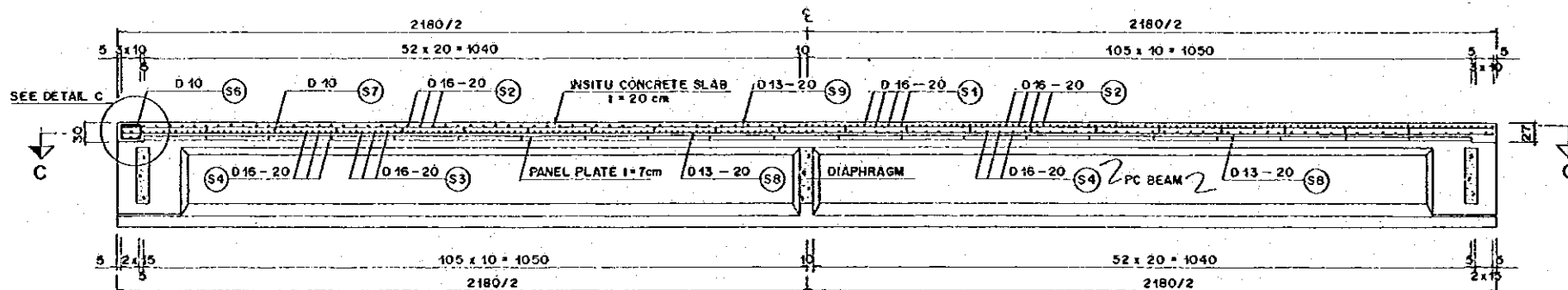
LIST OF REINFORCING BAR OF PANEL PLATE



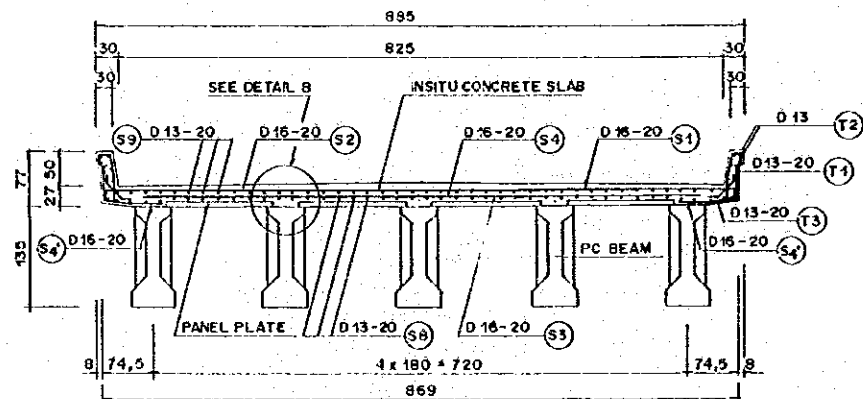
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT			PROVINCE CENTRAL JAVA			
JATUNGLURA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 2 BRIDGE SUPERSTRUCTURE REINFORCING BAR ARRANGEMENT OF PANEL PLATE			PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA			
JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PAKSI INTERNATIONAL INC.			DISTRICT SEMARANG CITY			
DESIGNED CHECKED IN CHARGE OF PLANNING AND DESIGN PROJECT MANAGER			DRAWING NO. U-P2-A-B-18 SHEET NO. 66 DATE CONTRACT NO.			
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED



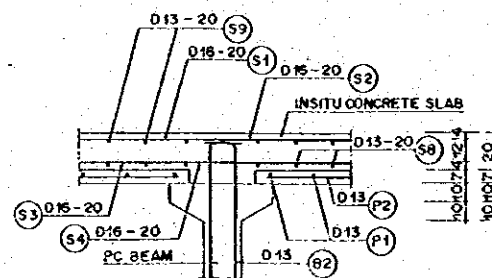
SECTION C-C
SCALE A



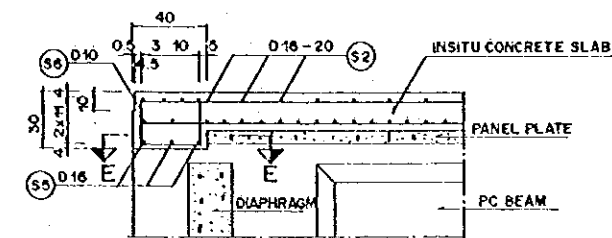
SECTION A-A
SCALE A



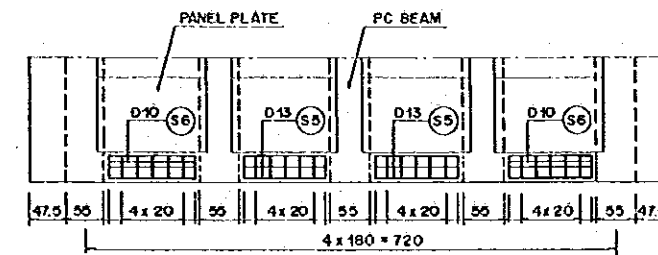
SECTION B-B
SCALE A



DETAIL B
SCALE B



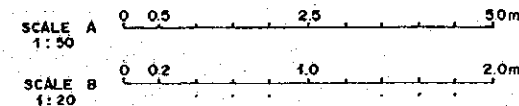
DETAIL C
SCALE B



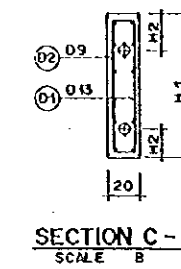
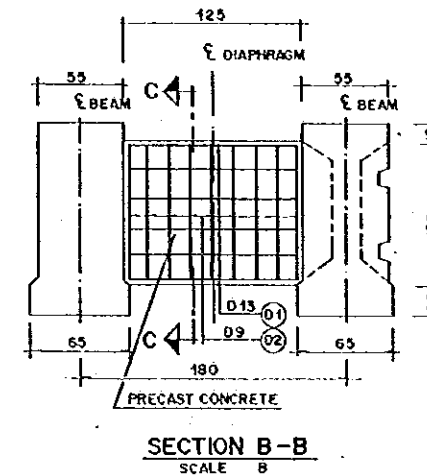
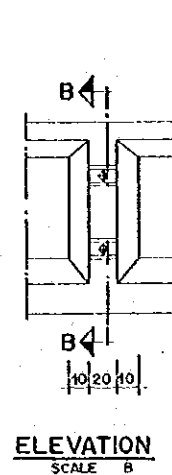
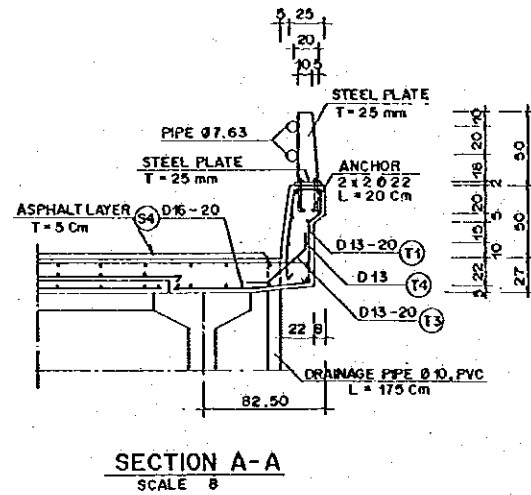
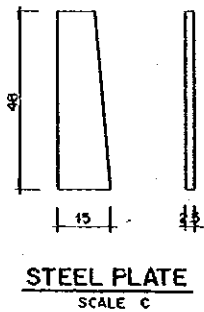
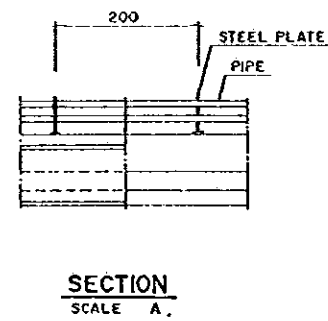
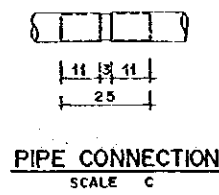
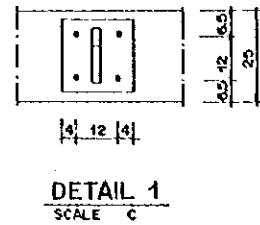
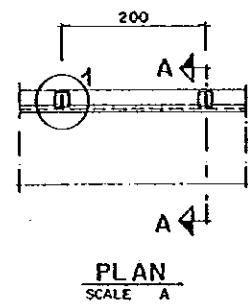
SECTION E-E
SCALE A

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)					TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	WEIGHT PER BAR	NUMBER	WEIGHT (kg)	REMARKS
			a	b	c	d	e						
S1	Ø16	B	130					1.30	1.58	2.054	525	1078	
S2	Ø16	B	1043					10.13	1.58	16.006	114	1825	
S3	Ø16	B	130					1.30	1.58	2.054	420	863	
S4	Ø16	B	775	40	60	10		9.95	1.58	15.721	110	1729	
S5	Ø16	B	115					1.15	1.58	1.817	24	44	
S6	Ø10	C	30	22	5			1.14	0.56	0.638	56	36	
S7	Ø10	D	25	10	5			0.55	0.56	0.308	80	25	
S8	Ø13	A	2170					22.09	1.04	22.97	44	1011	
S9	Ø13	A						22.09	1.04	22.97	44	1011	
TOTAL											7622	kg	

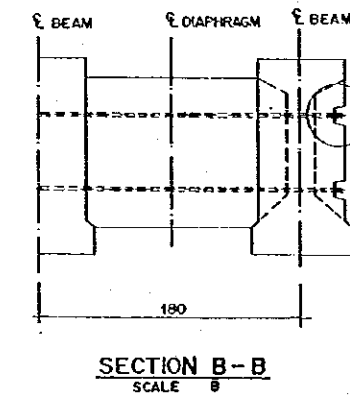
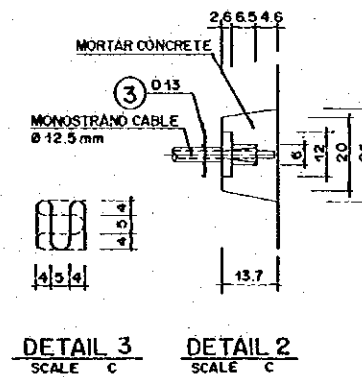
LIST OF REINFORCING BAR OF DECK SLAB



THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA					
JATUNGLARA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 2 BRIDGE SUPERSTRUCTURE REINFORCING BAR ARRANGEMENT OF DECK SLAB		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA					
WJAH INTERNATIONAL COOPERATION AGENCY CITY ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND TAIKO INTERNATIONAL INC.		DISTRICT SEMARANG CITY					
DESIGNED: [Signature] CHECKED: [Signature]		DRAWING NO. U - P2 - A - 87 - 16 SHEET NO. 87					
CHIEF OF PLANNING AND DESIGN		DATE: [] [] [] [] [] [] CONTRACT NO.					
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED	PROJECT MANAGER



DIAPHRAGM DIMENSION	
SIZE (mm)	
H 1	990
H 2	200



LIST OF REINFORCING BAR OF HAND RAIL

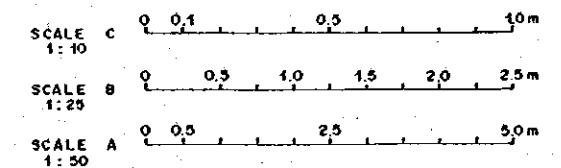
REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)					TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS	
			a	b	c	d	e						f
T 1	13	J	20	35	20	15	10	30	1.30	1.04	2x110	298	
T 2													
T 3	13	L	12	40	15				0.67	1.04	2x110	153	
T 4	13	A	2170						22.09	1.04	2x110	5054	
TOTAL = 5505 kg													

LIST OF REINFORCING BAR OF DIAPHRAGM

REINFORCING BAR NO.	Ø (mm)	TYPE	BENDING DIMENSION (cm)					TOTAL LENGTH (m)	UNIT WEIGHT (kg/m)	NUMBER	WEIGHT (kg)	REMARKS	
			a	b	c	d	e						f
D 1	13	B	107						1.20	1.04	144	190	
D 2	9	H	12	90	45				2.13	0.50	108	110	
TOTAL = 290 kg													

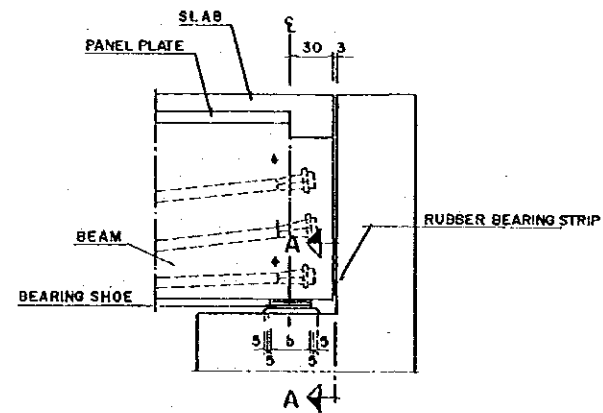
NOTE :

1. CONCRETE QUALITY OF DIAPHRAGM K-400
2. MAXIMUM AGREGATE SIZE 20 mm.
3. STEEL QUALITY BJ-32.
4. MINIMUM CONCRETE COVER 20 mm.
5. PIPE AND STEEL PLATE MUST BE GALVANISED
6. DIAPHRAGM IS PRECAST CONCRETE.

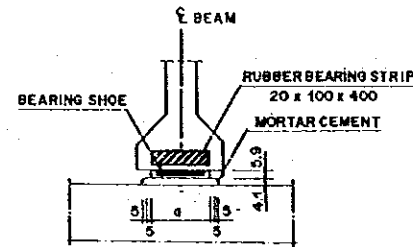


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED	APPROVED

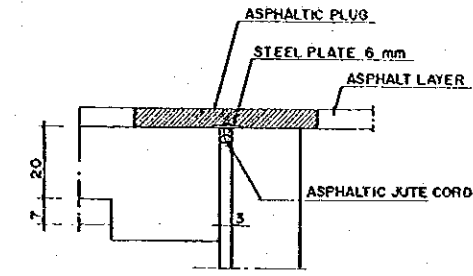
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNSELUNA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.2 BRIDGE SUPERSTRUCTURE REINFORCING BAR ARRANGEMENT OF DIAPHRAGM AND HAND RAIL		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN IRATUNSELUNA IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. U-PE-A-BF-17 SHEET NO. 58
JAPAN INTERNATIONAL COOPERATION AGENCY CTE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL and PISCO INTERNATIONAL INC.	DESIGNED <i>[Signature]</i> CHECKED <i>[Signature]</i>	DATE CONTRACT NO.
OFFICE OF PLANNING AND DESIGN PROJECT MANAGER		



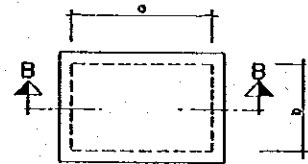
POINT SUPPORT ON ABUTMENT
SCALE A



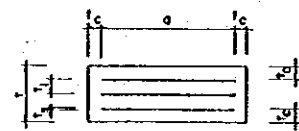
SECTION A-A
SCALE A



DETAIL OF JOINT
SCALE B



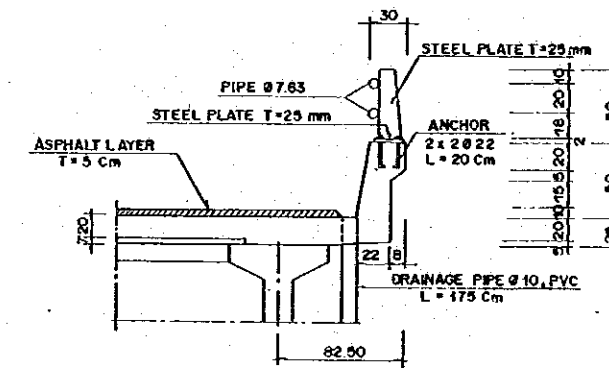
PLAN OF BEARING SHOE
SCALE A



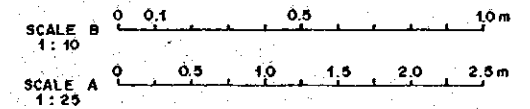
SECTION B-B
SCALE A

SIZE OF BEARING SHOE (mm)

a	b	STEEL PLATE		RUBBER		TOTAL
		a	t _b	t _c	t _l	
350	280	4	5	6	9	59

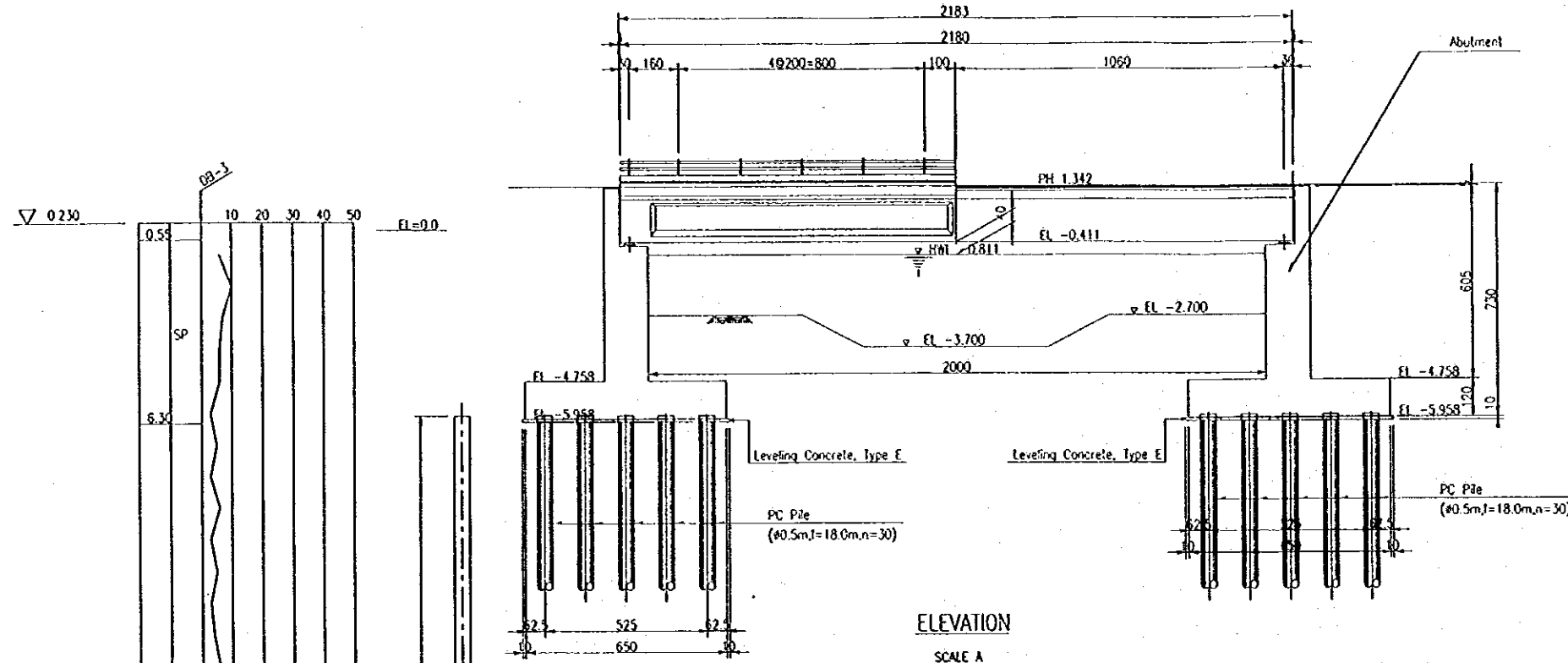


DETAIL OF HAND RAIL
SCALE A

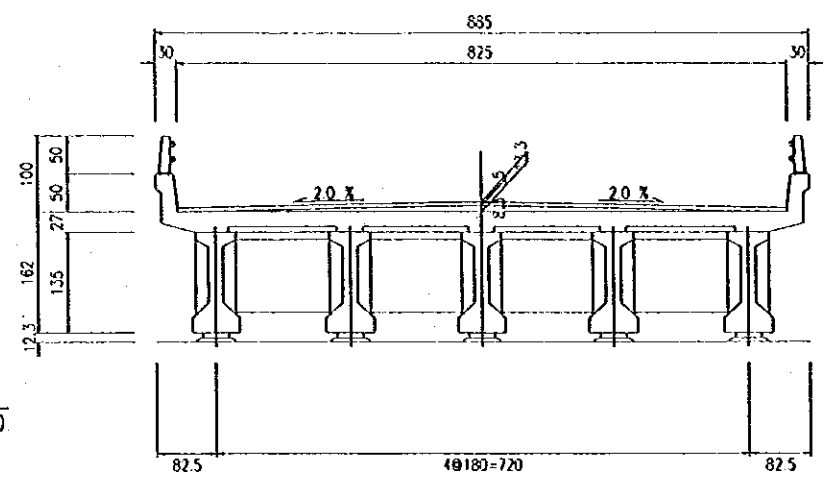


NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

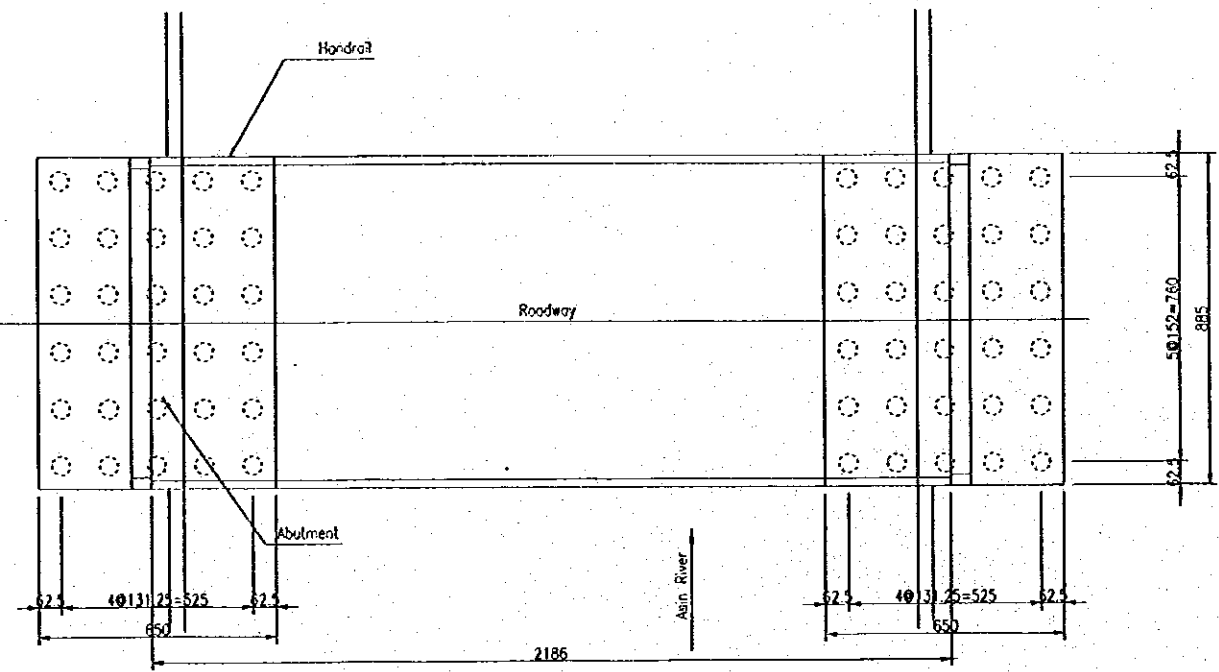
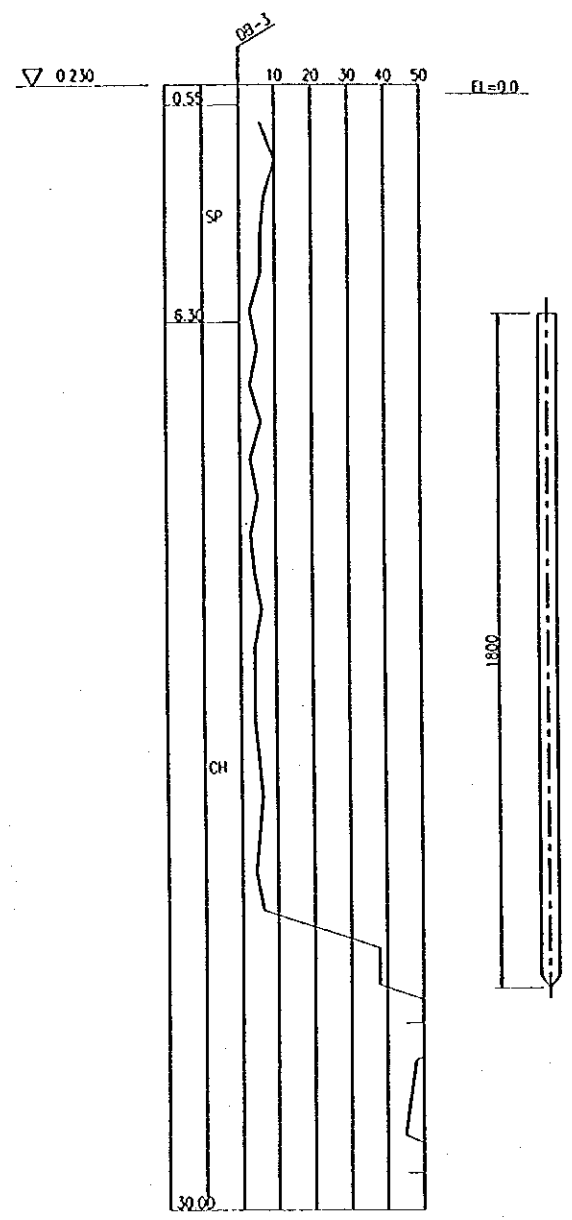
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
JATUNGSILUMA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO. 2 BRIDGE SUPERSTRUCTURE EXPANSION JOINT AND BEARING SHOE		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. U-P2-A-02-10 SHEET NO. 09
DEPARTMENT OF PLANNING AND DESIGN PROJECT MANAGER	CHECKED DATE	CONTRACT NO.



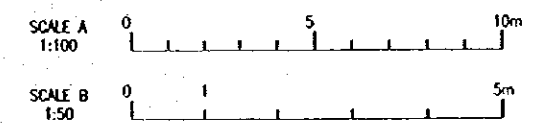
ELEVATION
SCALE A



TYPICAL CROSS SECTION
SCALE B



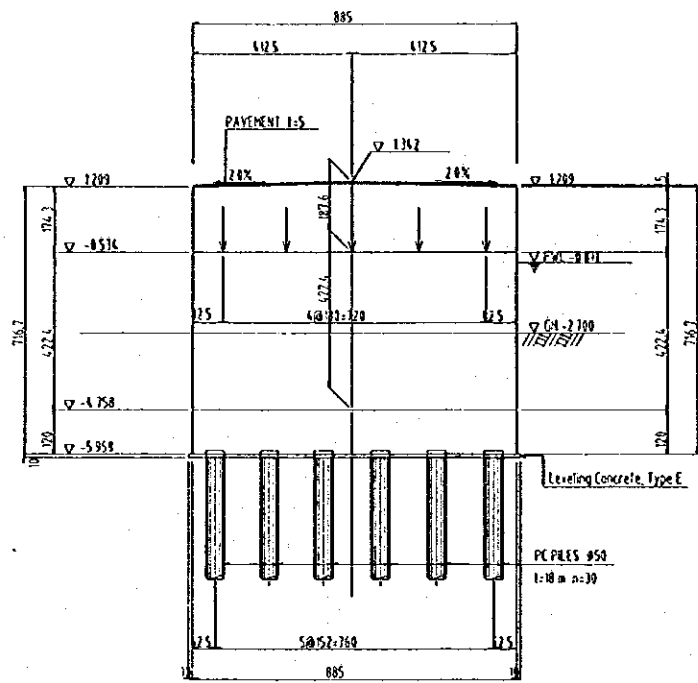
PLAN
SCALE A



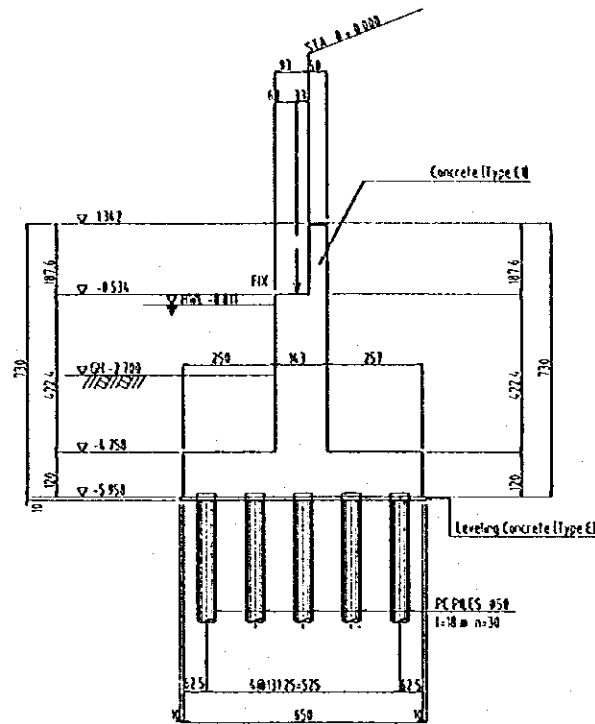
Notes :
1. The dimension in cm
2. The elevation in m
3. Concrete for structure, Type C1

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

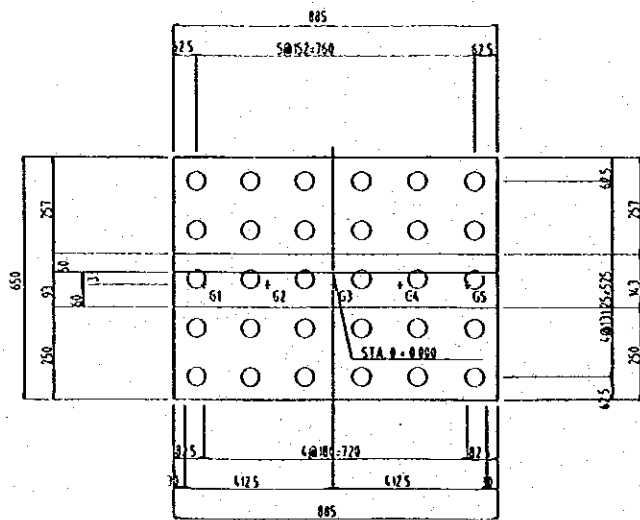
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAWA
IRATUNBULANA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.2 BRIDGE SUBSTRUCTURE GENERAL ARRANGEMENT		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT OF SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. in association with PACIFIC CONSULTANTS INTERNATIONAL AND TAIKO INTERNATIONAL INC.		DRAWING NO. U-P2A-Br-19 SHEET NO. 70
CHECKED <i>[Signature]</i>	DATE	CONTRACT NO.
CHIEF OF PLANNING AND DESIGN		PROJECT MANAGER



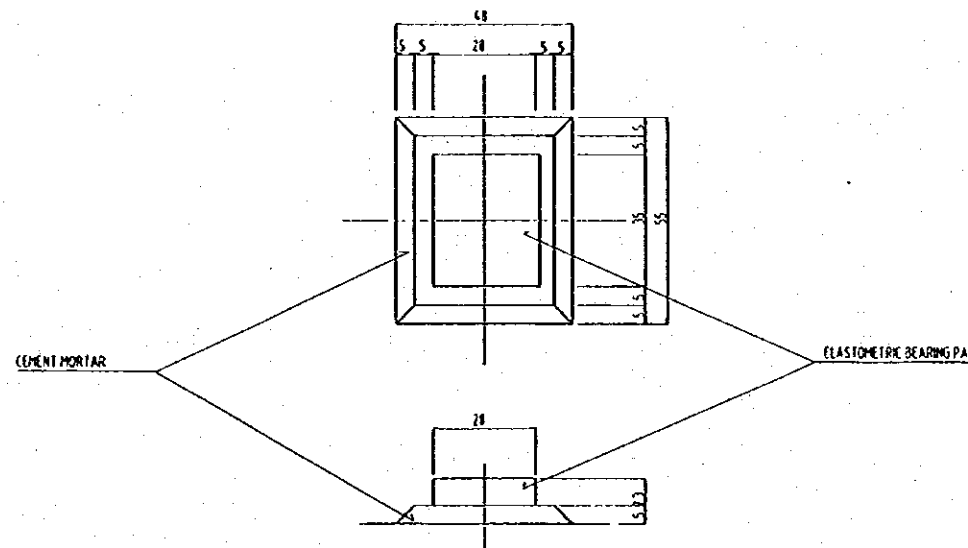
ELEVATION
SCALE A



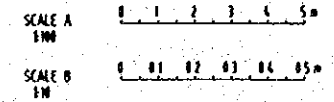
PROFILE
SCALE A



PLAN
SCALE A



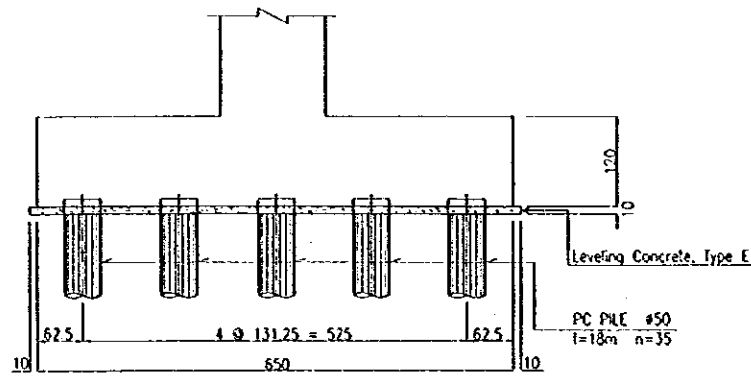
BEARING PAD
SCALE B



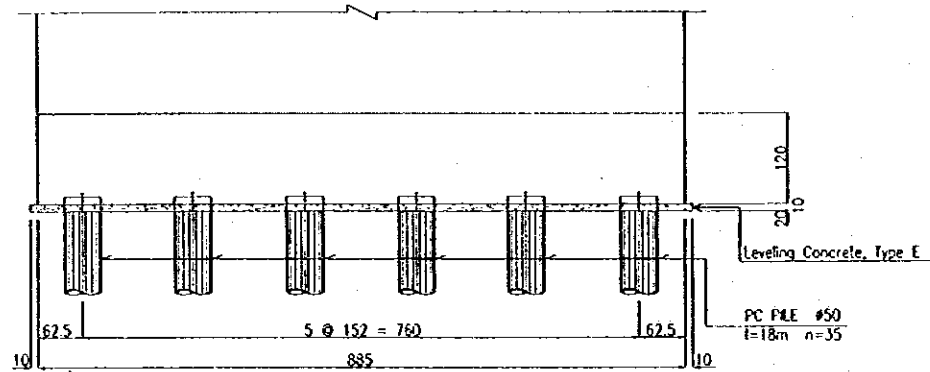
- Notes:
1. The dimension in cm
 2. The elevation in m
 3. Concrete for structure, Type C1

NO.	DATE	REVISIONS	OPERATED	DESIGNED	APPROVED

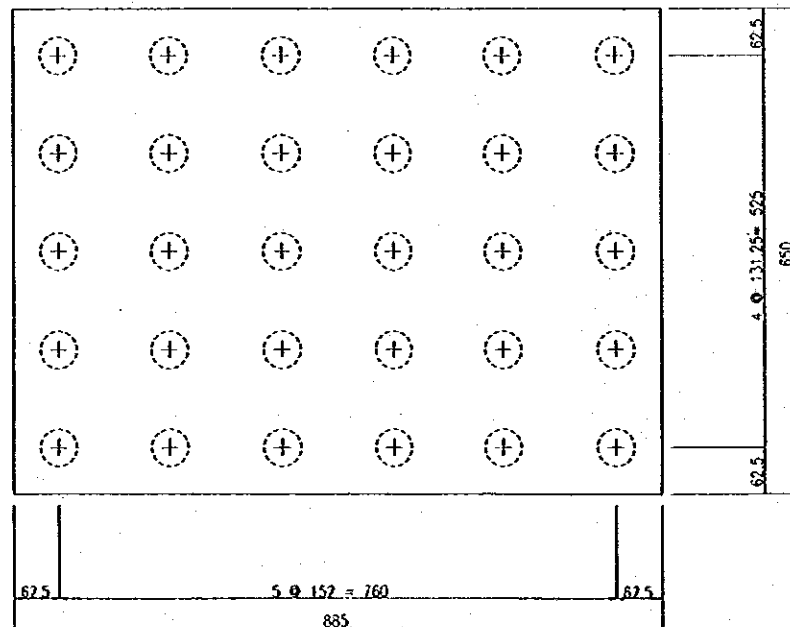
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT RATURUMELUMA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASRN NO.2 BRIDGE SUBSTRUCTURE DIMENSION OF ABUTMENT		PROVINCE CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. U.P2-A-Br-20 SHEET NO. 71 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY JICA ENGINEERING CO. LTD. IN COOPERATION WITH PACIFIC CONSULTING INTERNATIONAL AND JAWA INTERNATIONAL P.C.	DRAWN BY CHECKED PROJECT MANAGER	DATE CONTRACT NO.



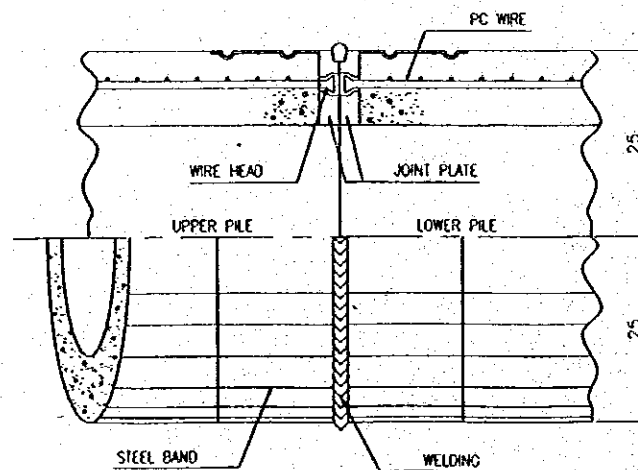
PROFILE
SCALE A



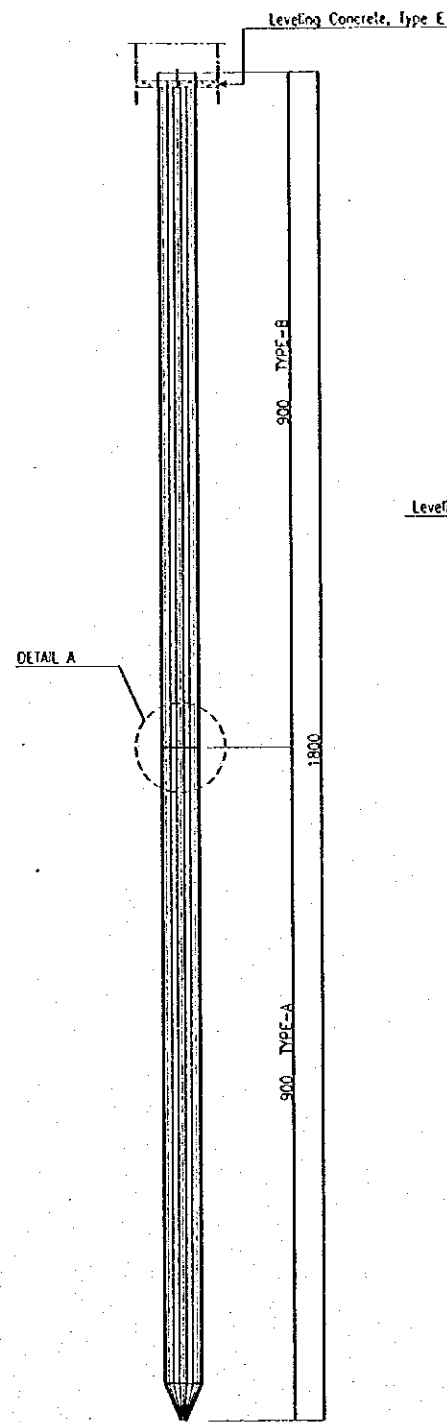
ELEVATION
SCALE A



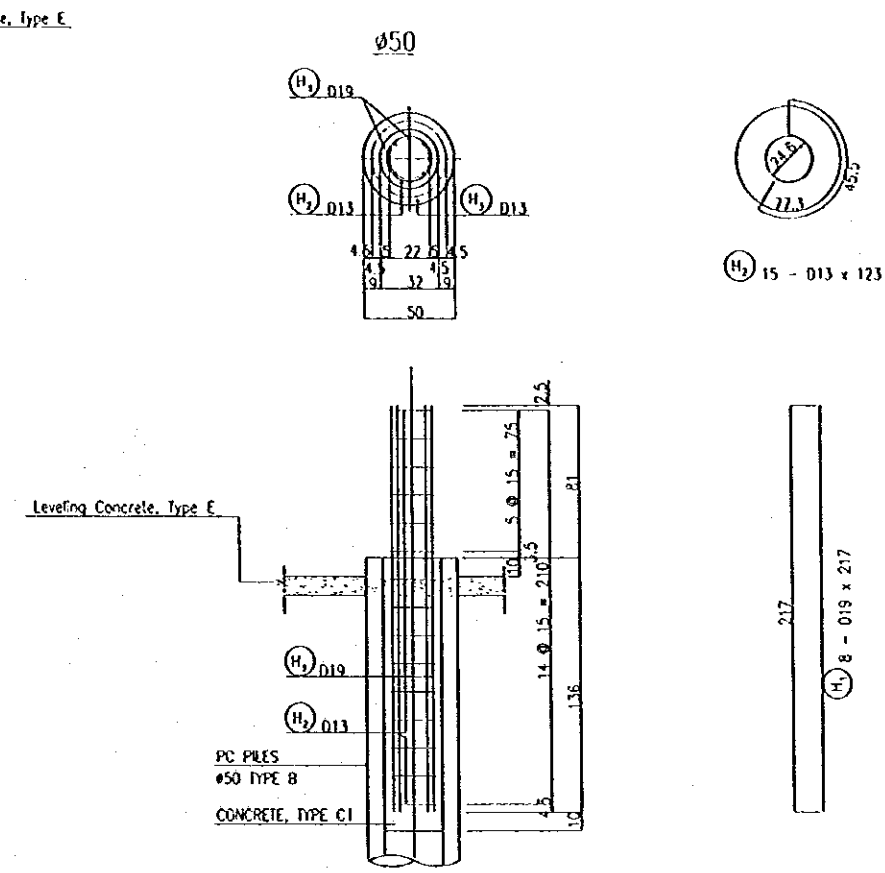
PLAN
SCALE A



DETAIL A
SCALE C

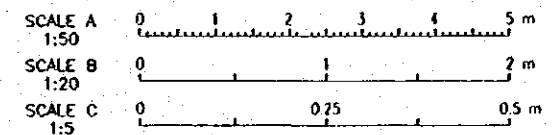


DETAIL OF PC PILE
SCALE A



DETAIL OF REINFORCING BAR ARRANGEMENT FOR PILE
SCALE B

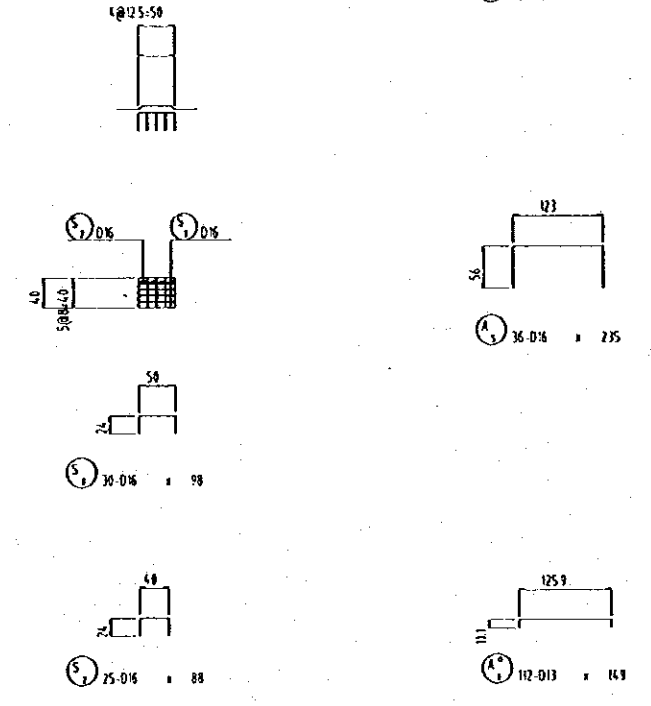
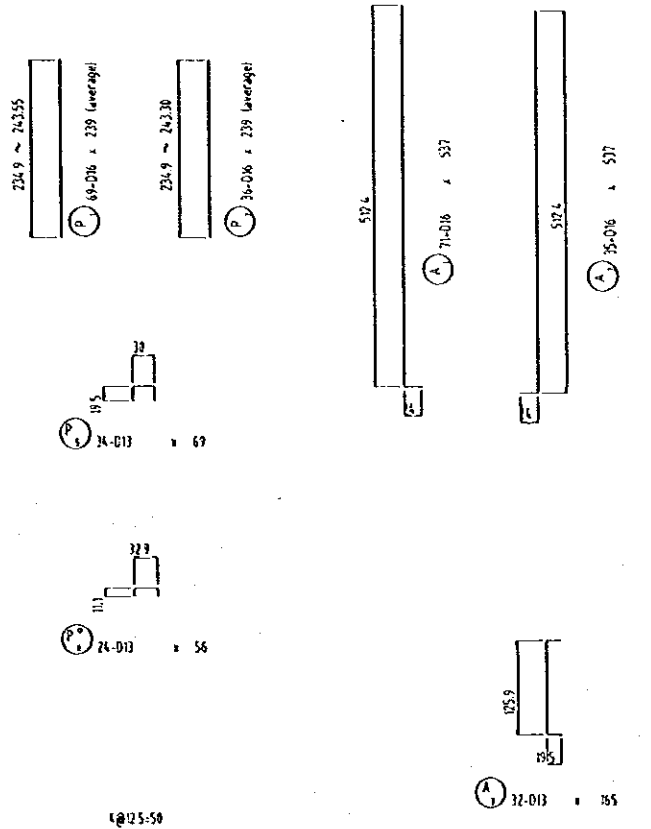
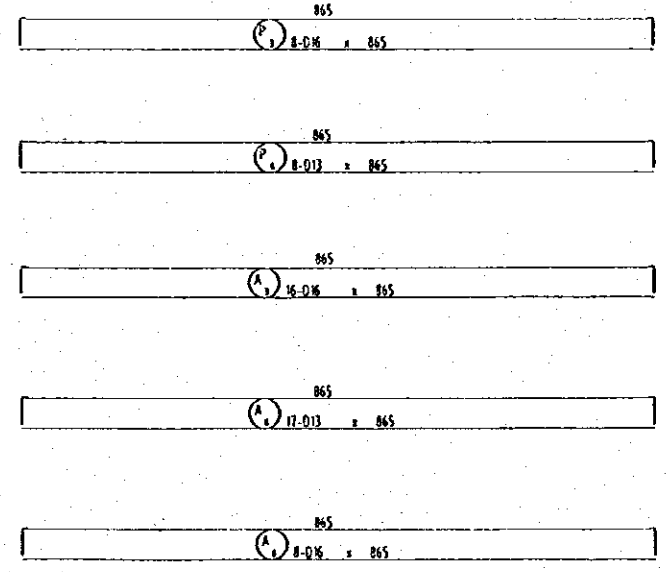
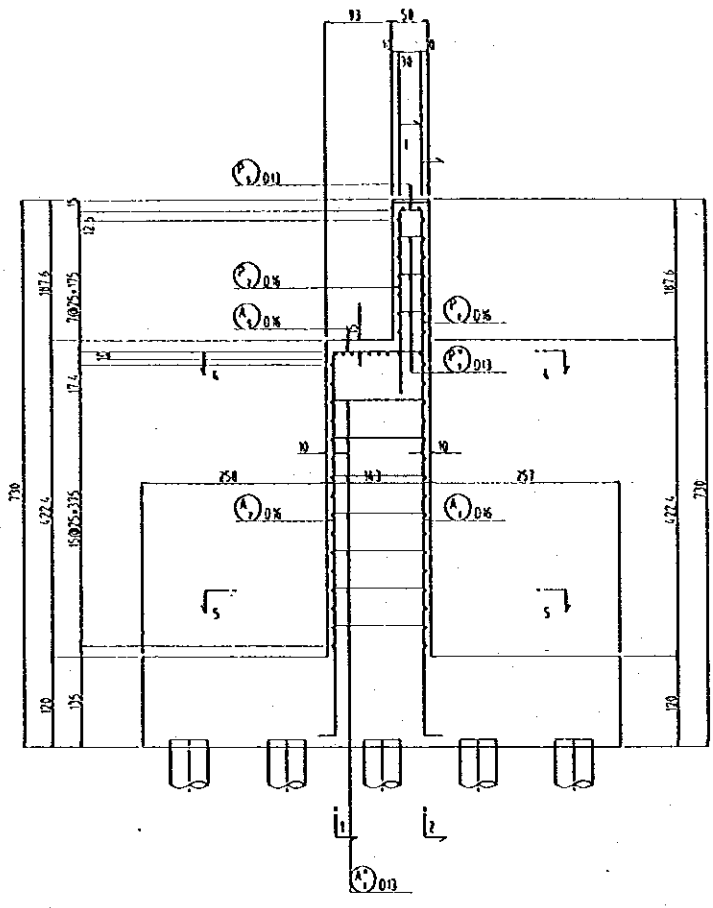
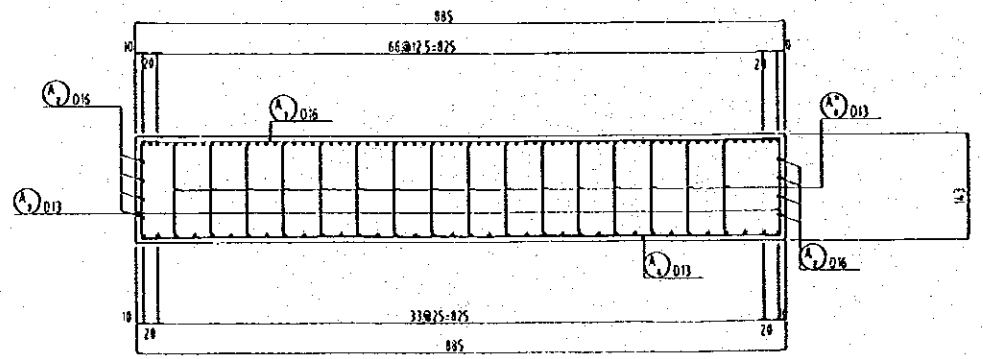
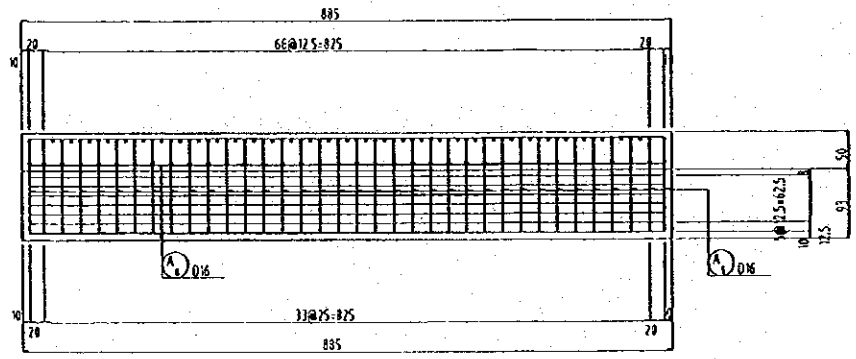
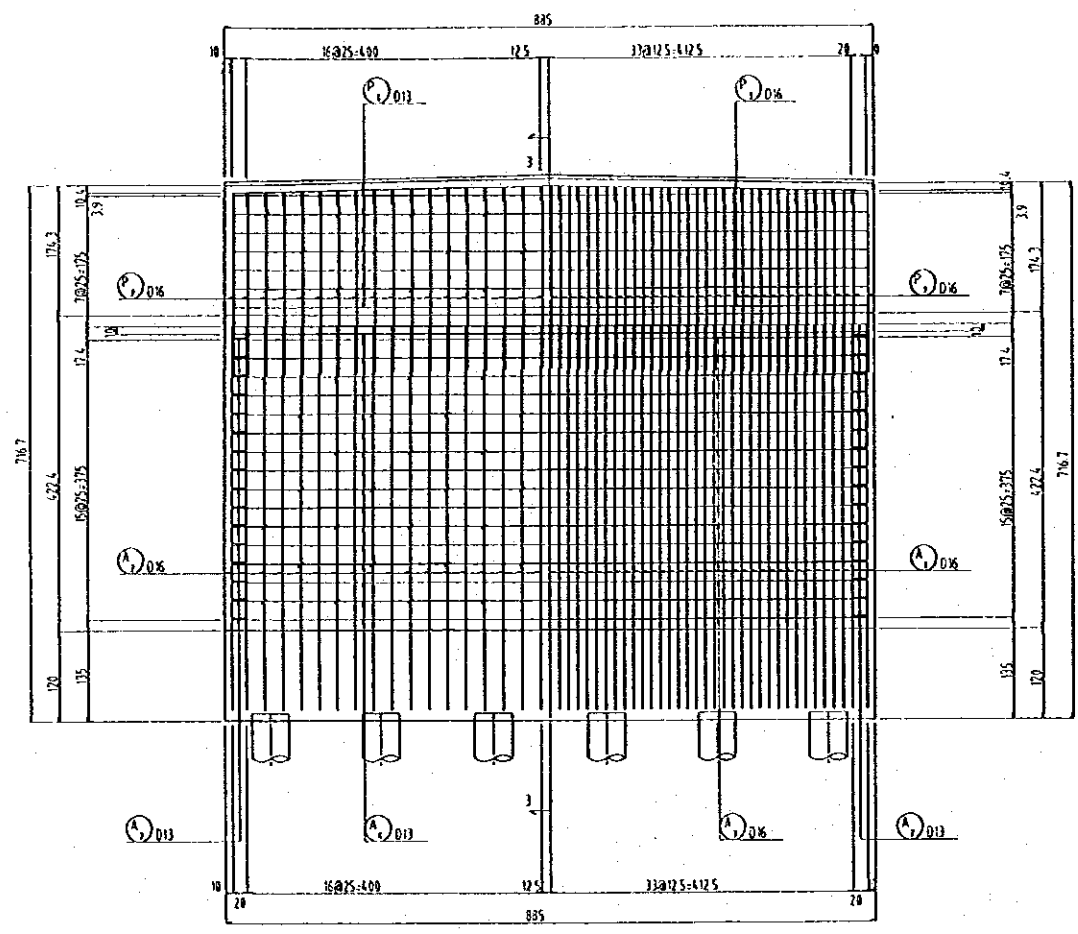
REINF. No.	Ø	LENGTH	NUM.	U.WEIGHT	WEIGHT/BAR	WEIGHT	REMARKS
H 1	D19	217	8	1.58	3.43	28	I
H 2	D13	123	15	1.04	1.28	19	O
						47 kg	
				WEIGHT/PILE	PILES NUM.	WEIGHT/ABUTMENT	
				D16	31 kg	30	930 kg
				D13	48 kg	30	1440 kg
				TOTAL	79 kg		2370 kg
LOWER	TYPE-A	900					
UPPER	TYPE-B	900					
		1800					
				LENGTH/PILE	PILES NUM.	TOTAL LENGTH/ABUTMENT	
				TYPE-A	9 m	30	270 m
				TYPE-B	9 m	30	270 m
				TOTAL	18 m		540 m



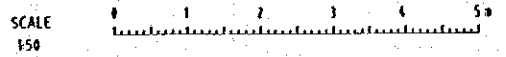
Note : The dimension in cm, except for reinforcing bar diameter in mm

NO.	DATE	REVISIONS	QUOTATION	DESIGN	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROJECT CENTRAL JAVA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT SEMARANG CITY DRAWING NO. U-P2-A-Br-21 SHEET NO. 72 DATE CONTRACT NO.
RIATUNIBELUNA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN NO.1 BRIDGE SUBSTRUCTURE DIMENSIONS AND REINFORCING BAR ARRANGEMENT OF PC PILES		UAFM INTERNATIONAL COOPERATION AGENCY C/O ENGINEERING CO. LTD. IN ASSOCIATION WITH FACOR CONSULTANTS INTERNATIONAL AND FACOD INTERNATIONAL INC.
UNDESIGNED CHECKED PROJECT MANAGER	APPROVED CHIEF OF PLANNING AND DESIGN	DATE



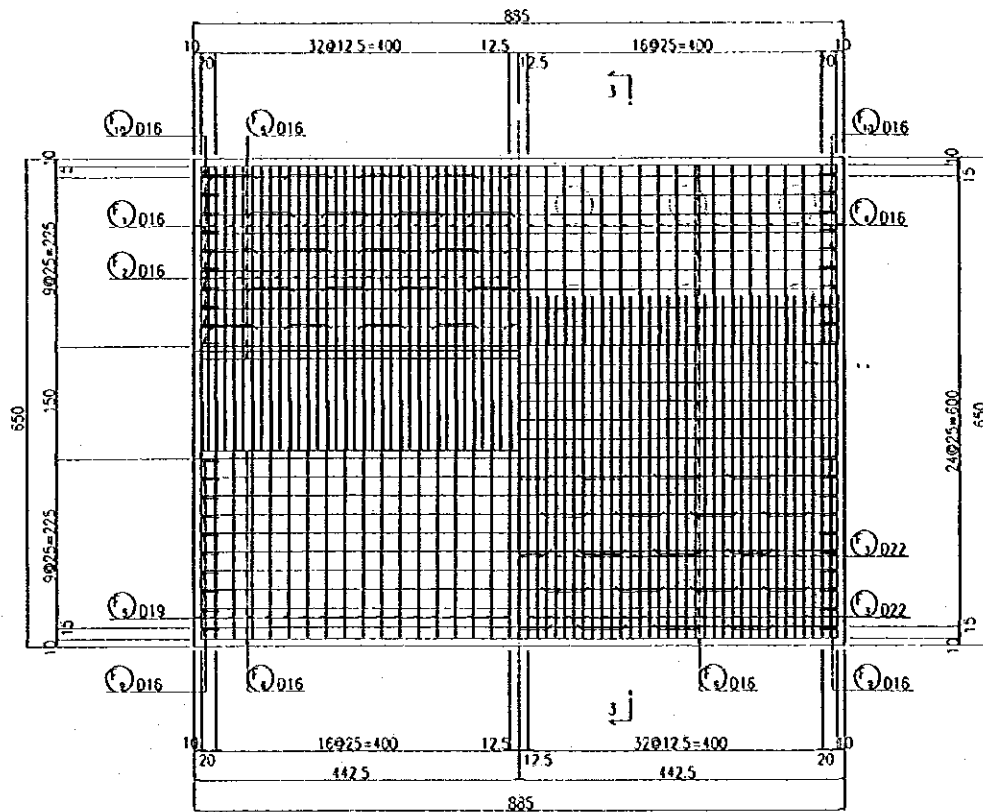
DETAILS OF BEARING SHOES



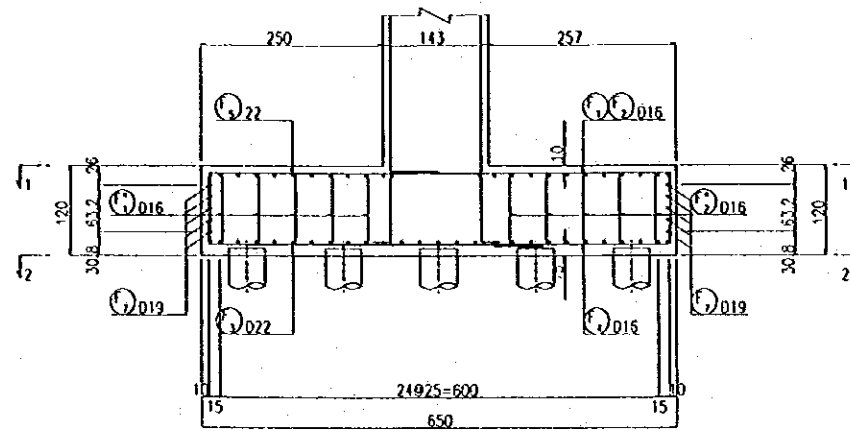
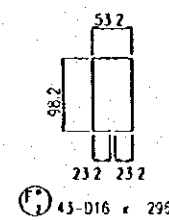
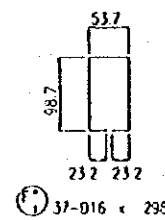
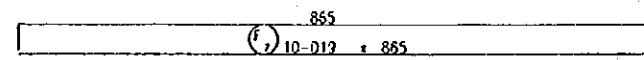
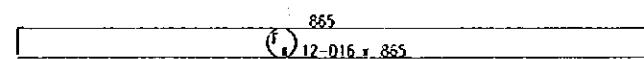
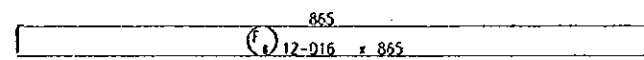
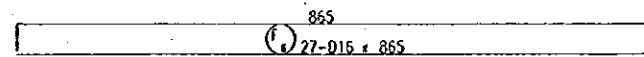
Note: The dimension in cm, except for reinforcing bar diameter in mm

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

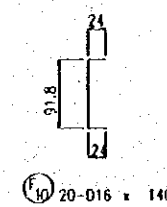
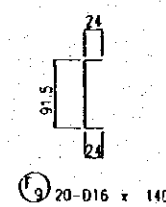
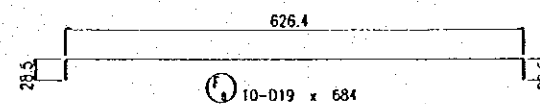
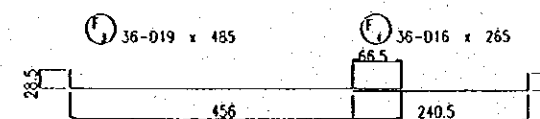
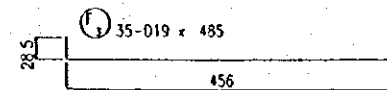
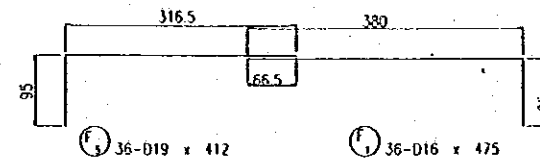
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE: CENTRAL JAVA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER INFRASTRUCTURE DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO: U-P2.A-BI-22 SHEET NO: 73	
RATUNSELUMA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASN NO.2 BRIDGE SUBSTRUCTURE REINFORCING BAR ARRANGEMENT OF ABUTMENT (U)		DATE: CONTRACT NO. DRAWING NO: U-P2.A-BI-22 SHEET NO: 73	
LAYAN INTEGRASIONAL COOPERATION AGENCY PT. ENGINEERING CO. LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FARCO INTERNATIONAL INC.		DESIGNED: CHECKED: DATE: CONTRACT NO.	
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		APPROVED: PROJECT MANAGER	



1 - 1 2 - 2



3 - 3



STEEL BAR SHEET

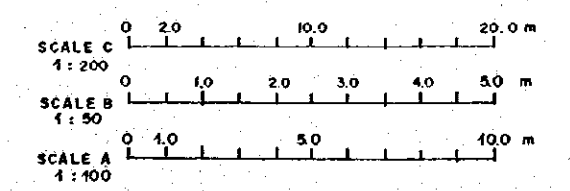
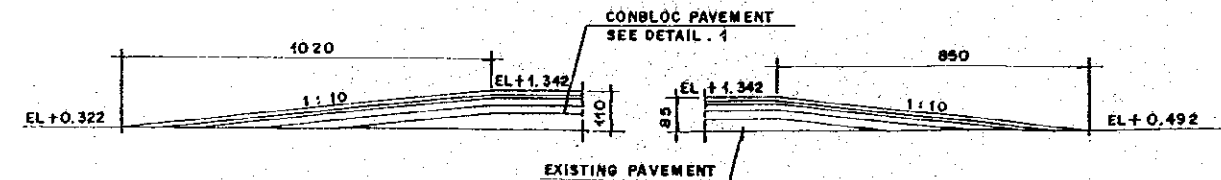
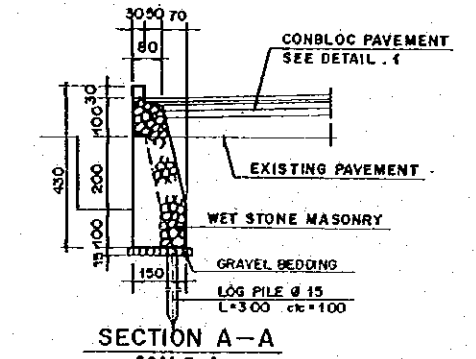
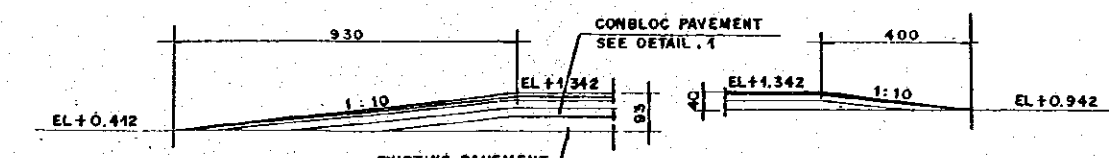
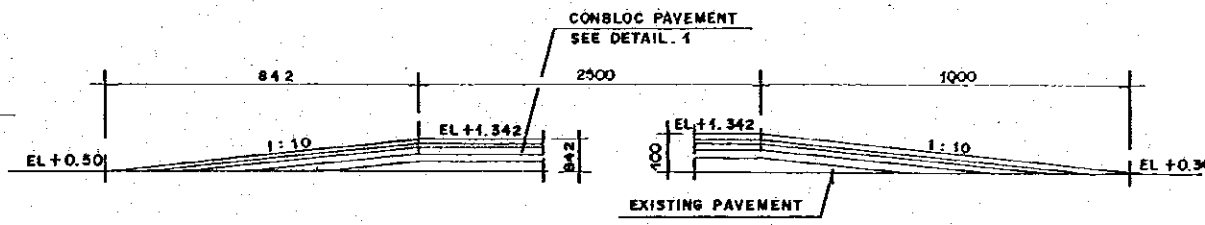
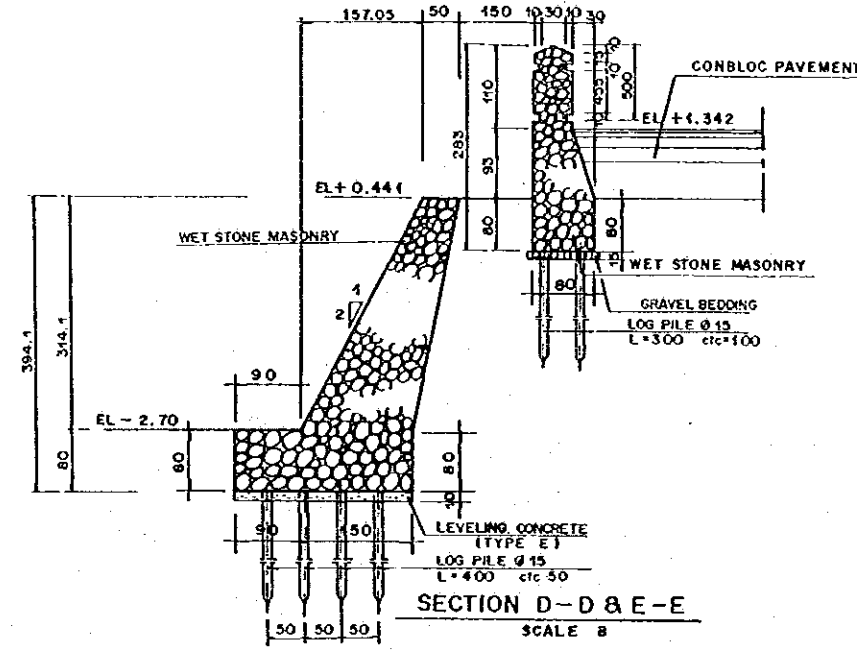
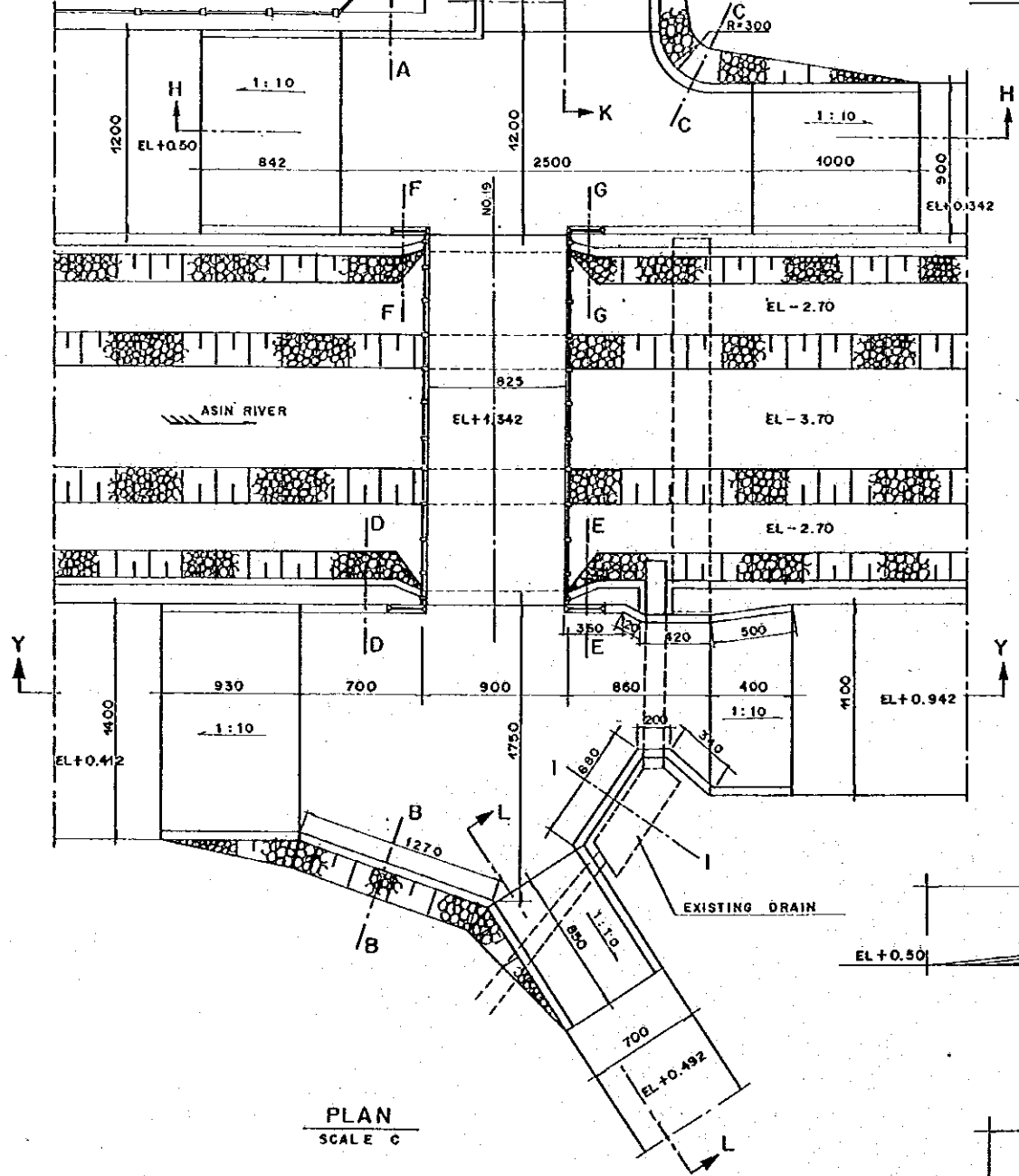
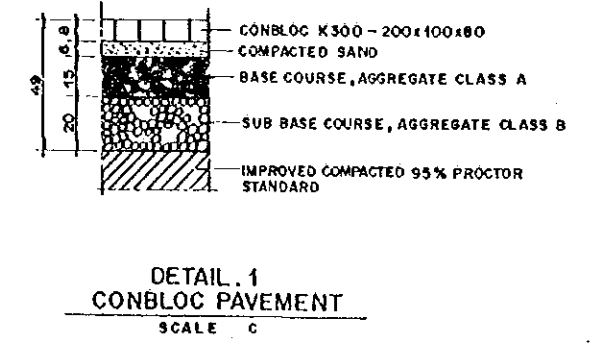
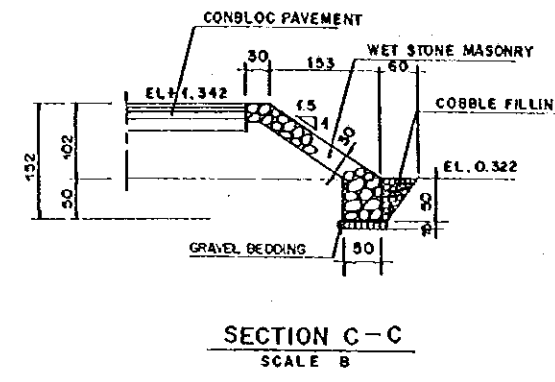
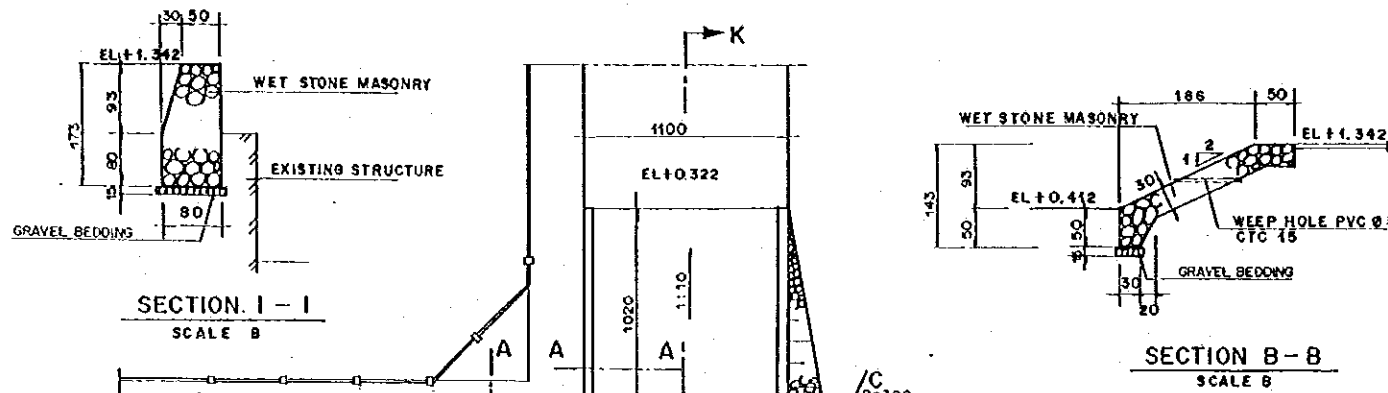
REF No.	# (mm)	LENGTH (cm)	NUM.	U.WEIGHT (kg/m)	WEIGHT/BAR (kg/bar)	WEIGHT (kg)	REMARKS
P 1	016	233	69	1.580	3.776	261	
P 2	016	239	36	1.580	3.776	136	
P 3	016	855	8	1.580	13.667	109	
P 4	013	865	8	1.040	8.995	72	
P 5	013	69	34	1.040	0.718	24	
P 1	013	56	24	1.040	0.582	14	
A 1	016	537	71	1.580	8.485	602	
A 2	016	537	35	1.580	8.485	297	
A 3	016	865	16	1.580	13.667	219	
A 4	013	865	17	1.040	8.995	153	
A 5	016	235	36	1.580	3.713	134	
A 6	016	865	8	1.580	13.667	109	
A 7	013	165	32	1.040	1.716	55	
A 1	013	149	112	1.040	1.550	174	
S 1	016	98	30	1.580	1.548	45	
S 2	016	88	25	1.580	1.390	35	
F 1	016	475	36	1.580	7.505	270	
F 2	016	404	35	1.580	6.383	223	
F 3	022	485	71	2.980	14.453	1026	
F 4	016	255	36	1.580	4.187	151	
F 5	022	412	36	2.980	12.278	442	
F 6	016	865	51	1.580	13.667	697	
F 7	019	865	10	2.230	19.290	193	
F 8	019	684	10	2.230	15.253	153	
F 9	016	140	20	1.580	2.212	44	
F 10	016	140	20	1.580	2.212	44	
F 1	016	298	37	1.580	4.708	174	
F 2	016	296	43	1.580	4.677	201	
	022		1468	Kg			
	019		677	Kg			
	016		3752	Kg			
	013		492	Kg			
	TOTAL		6389	Kg			

SCALE 1:50 0 1 2 3 4 5 m

Note : The dimension in cm, except for reinforcing bar diameter in mm

NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

<p>THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT</p>	PROVINCE	CENTRAL JAVA
	PROJECT NAME	FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT AT
	COMPONENT	URBAN DRAINAGE SYSTEM IMPROVEMENT
	ASIN NO.2 BRIDGE SUBSTRUCTURE	
REINFORCING BAR ARRANGEMENT OF ABUTMENT (2/2)	DISTRICT	SIBARANG CITY
JAPAN INTERNATIONAL COOPERATION AGENCY CIY ENGINEERING CO., LTD. IN ASSOCIATION WITH FALCO CONSULTANTS INTERNATIONAL AND FALCO INTERNATIONAL P.C.	DRAWING NO.	U-P2-A-Br-23
CHIEF OF PLANNING AND DESIGN	SHEET NO.	74
PROJECT MANAGER	DATE	CONTRACT NO.



NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

UNIT: CM

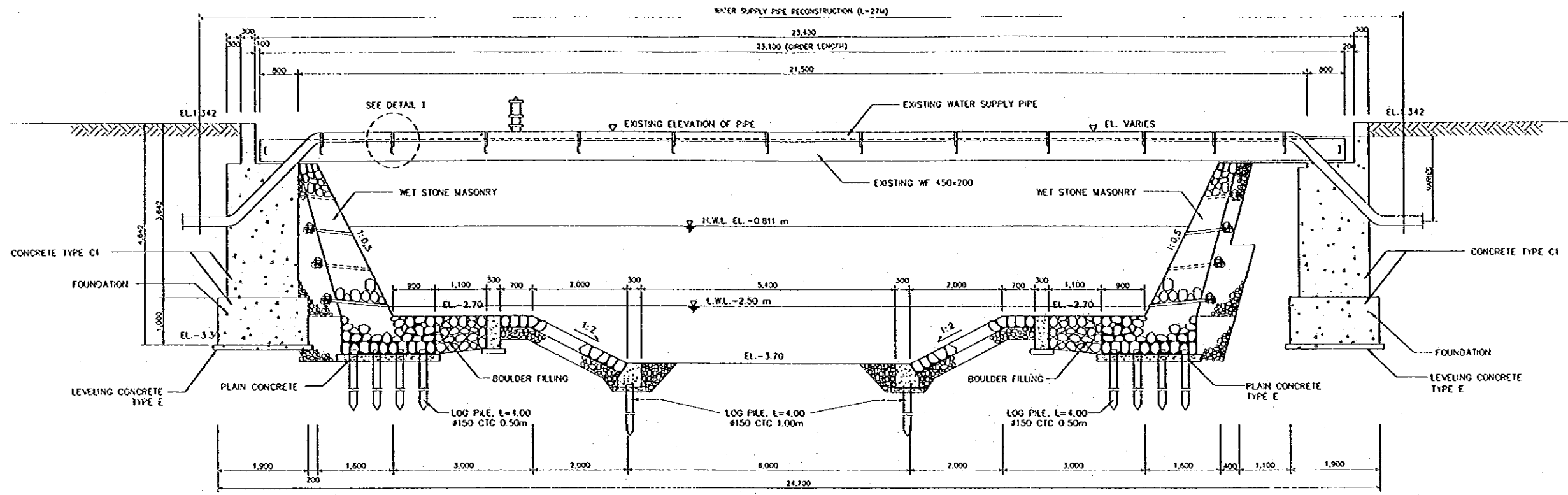
THE REPUBLIC OF INDONESIA
MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT

JATUNGLUVA FLOOD CONTROL PROJECT
COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT
ASIN NO. 2 BRIDGE APPROACH ROAD

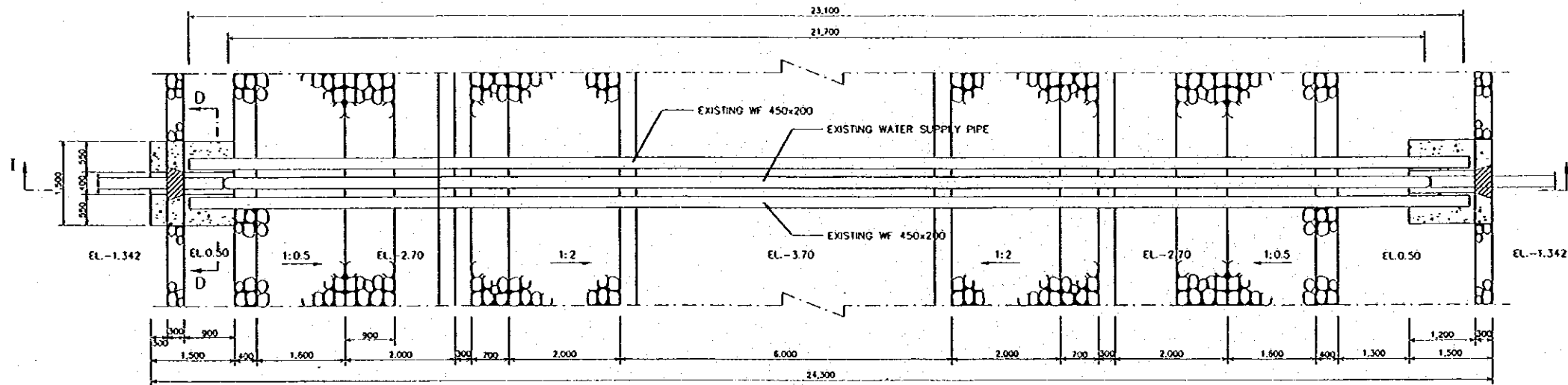
PROVINCE: CENTRAL JAVA
PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
DISTRICT: SEMARANG CITY
DRAWING NO. U-P-8-A-8-24
SHEET NO. 75

JAPAN INTERNATIONAL COOPERATION AGENCY
CTI ENGINEERING CO., LTD. IN ASSOCIATION WITH
PACIFIC CONSULTANTS INTERNATIONAL AND
ZANU INTERNATIONAL INC.

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

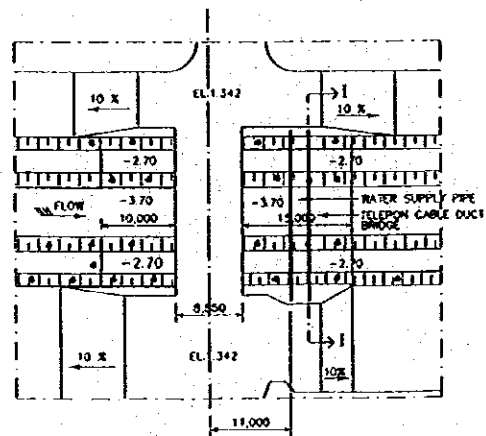


SECTION I-I
SCALE A



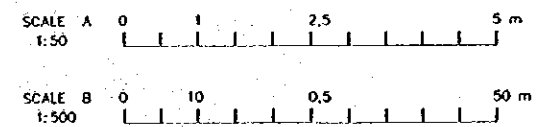
PLAN
SCALE A

ASIN RIVER BRIDGE NO. 2



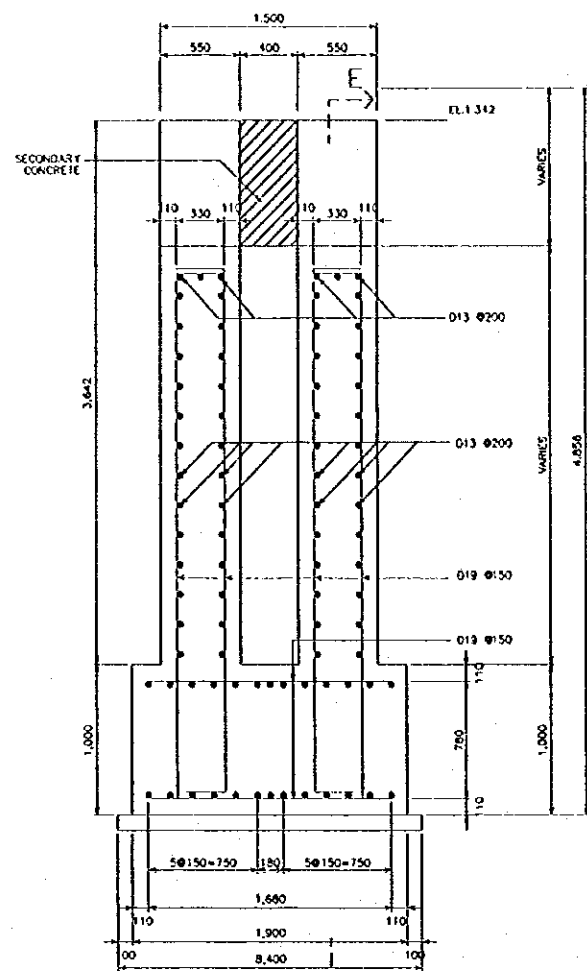
KEY PLAN
SCALE B

NOTE :
GIRDER LENGTH OF WATER SUPPLY PIPE KM 0+813 IS 21,500 M

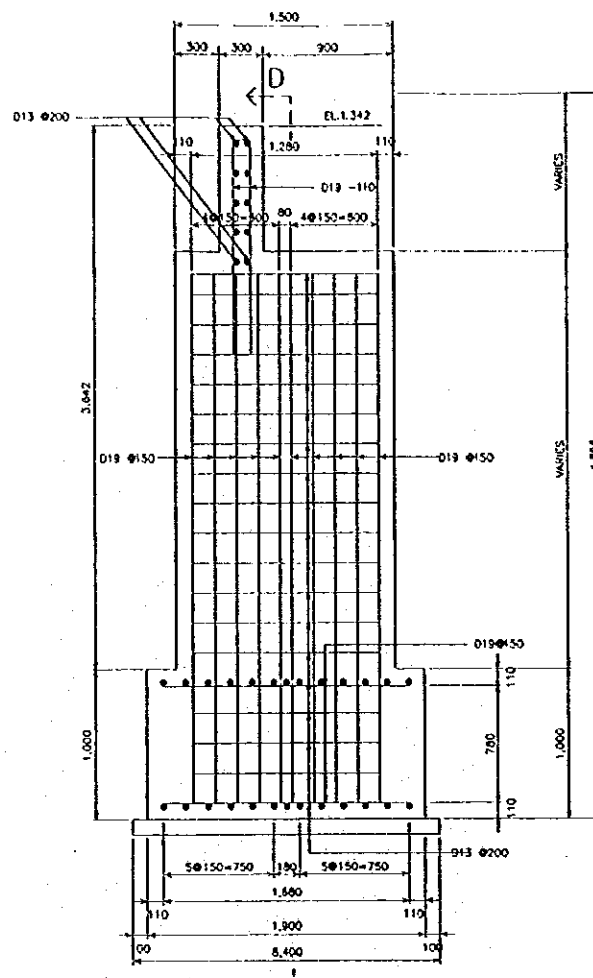


NO.	DATE	REVISIONS	OPERATED	DESIGNED	APPROVED

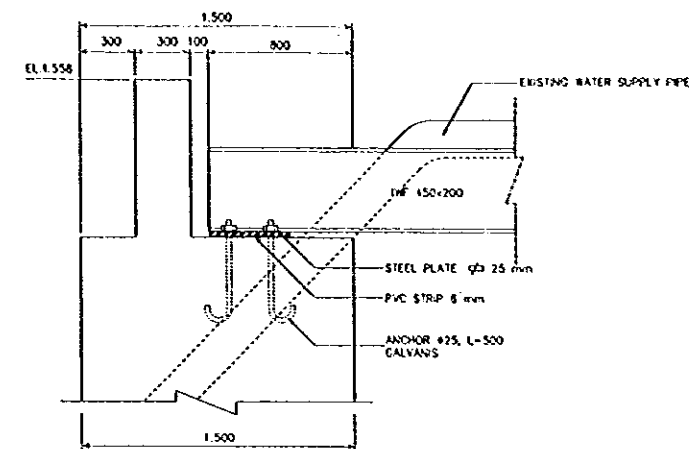
THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT BATUNGLINA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN RIVER WATER SUPPLY PIPE RE-INSTALLATION PLAN AND SECTION		PROVINCE CENTRAL JAYA PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT BY BATUNGLINA IN THE REPUBLIC OF INDONESIA DISTRICT SIBARANG CITY DRAWING NO. U.P2.A.MI-1 SHEET NO. 76 DATE CONTRACT NO.
JAPAN INTERNATIONAL COOPERATION AGENCY CEI ENGINEERING CO., LTD. 1F ANNEX BUILDING PACIFIC COMMERCIAL INTERNATIONAL 4th FLOOR SIBARANG CITY	DESIGNED CHECKED APPROVED CHIEF OF PLANNING AND DESIGN PROJECT MANAGER	[Signature] [Signature]



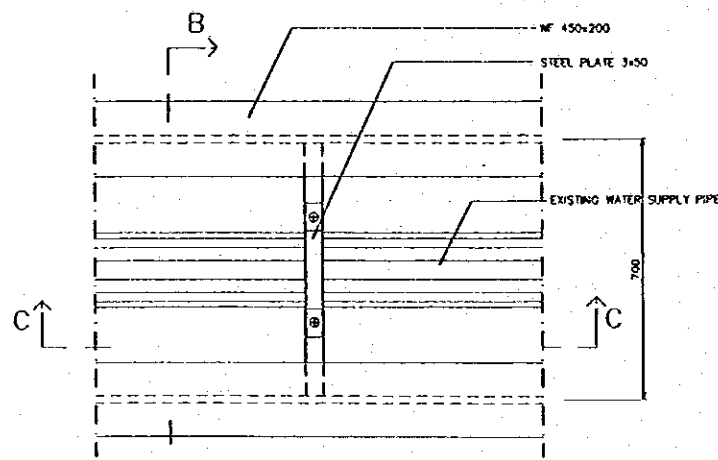
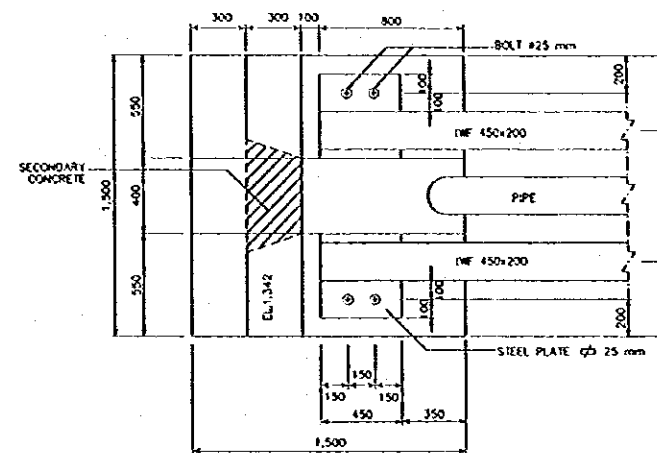
SECTION D-D
SCALE A



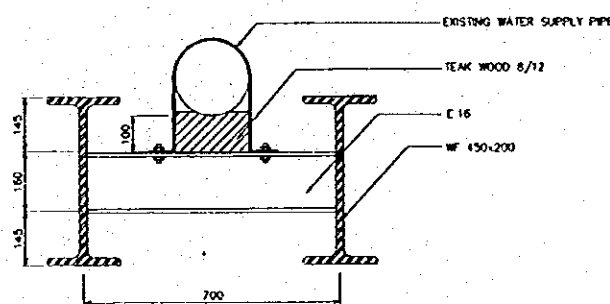
SECTION E-E
SCALE A



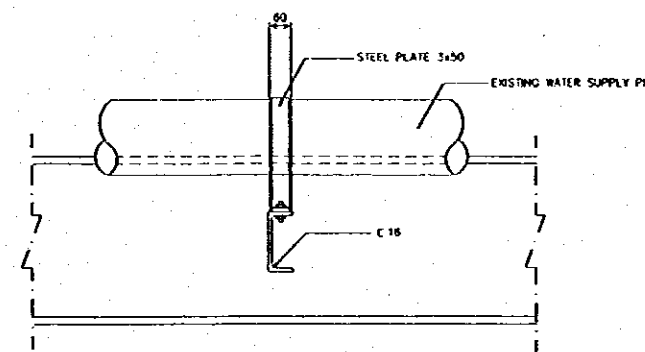
DETAIL OF SUPPORT
SCALE B



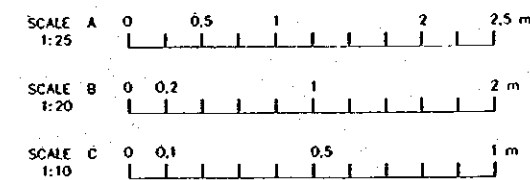
DETAIL I
SCALE C



SECTION B-B
SCALE C

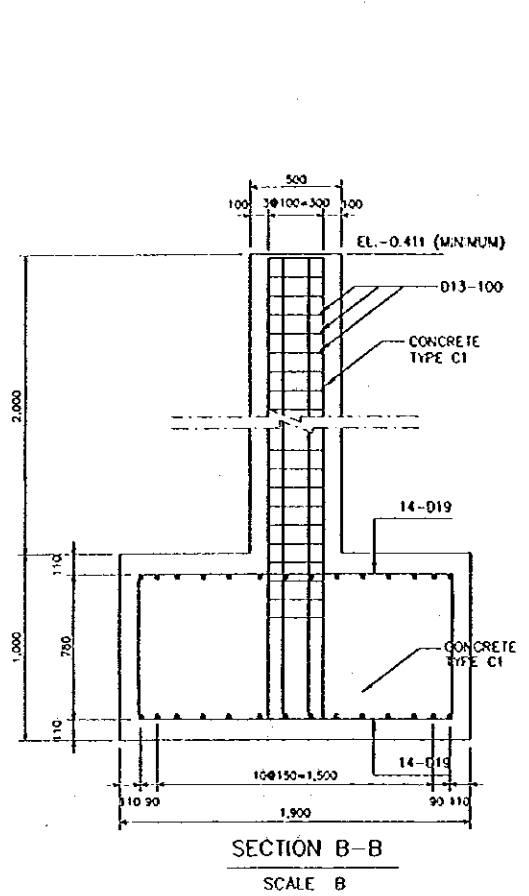


SECTION C-C
SCALE C

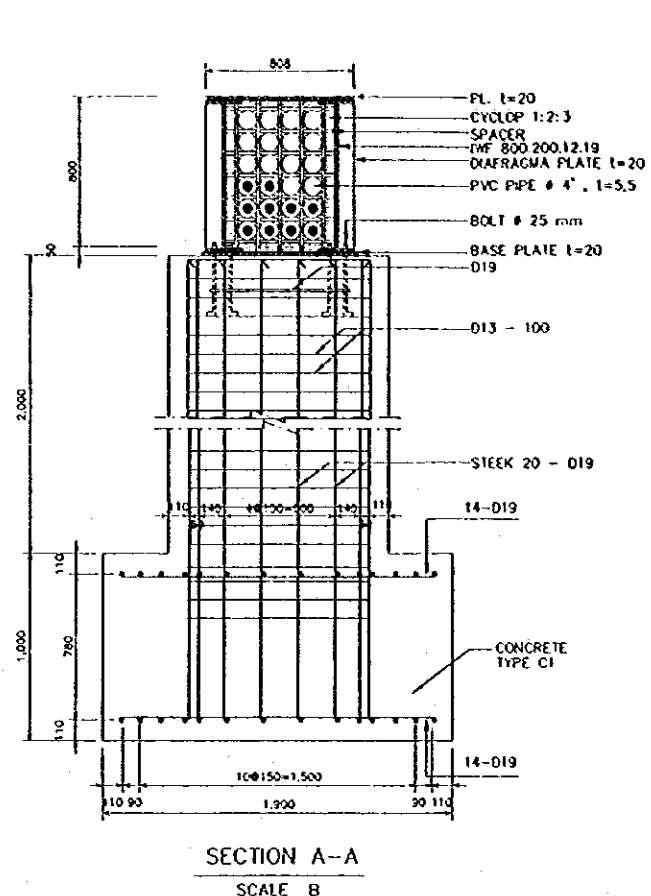


THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT		PROVINCE CENTRAL JAVA
JATUNGSILUMA FLOOD CONTROL PROJECT COMPONENT : URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN BEVER WATER SUPPLY PIPE INSTALLATION DETAILS		PROJECT NAME FLOOD CONTROL, URBAN DRAINAGE AND WATER RESOURCES DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA
JAPAN INTERNATIONAL COOPERATION AGENCY CIE ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND FARCO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CITY OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. U-P2A-MI-2 SHEET NO. 77
DESIGNED CHECKED APPROVED	DATE	CONTRACT NO.

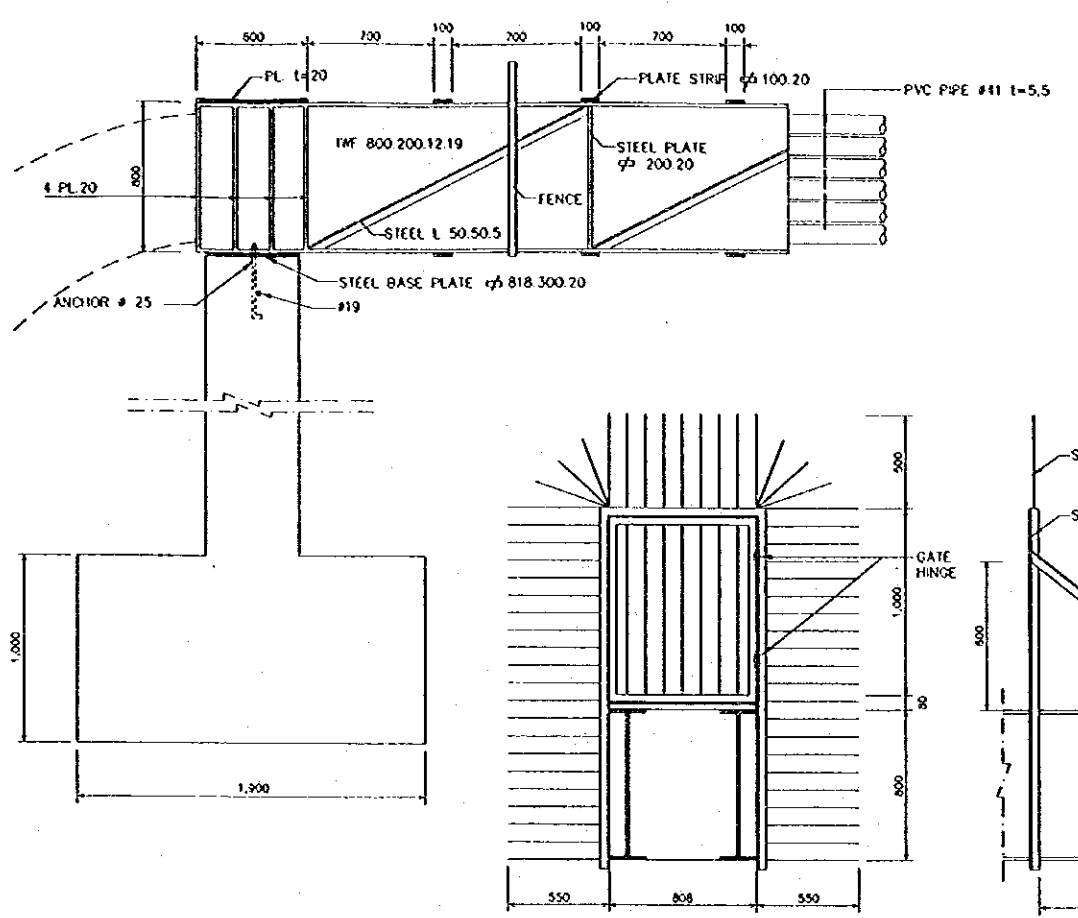
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED



SECTION B-B
SCALE B

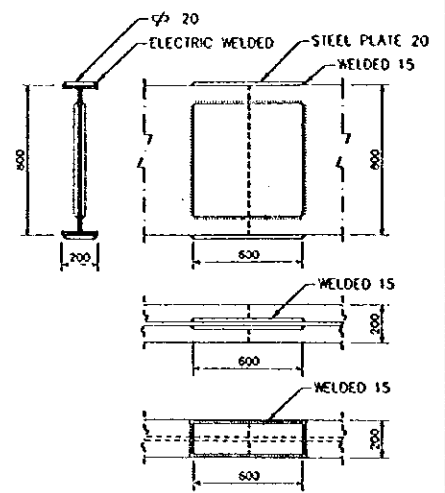


SECTION A-A
SCALE B



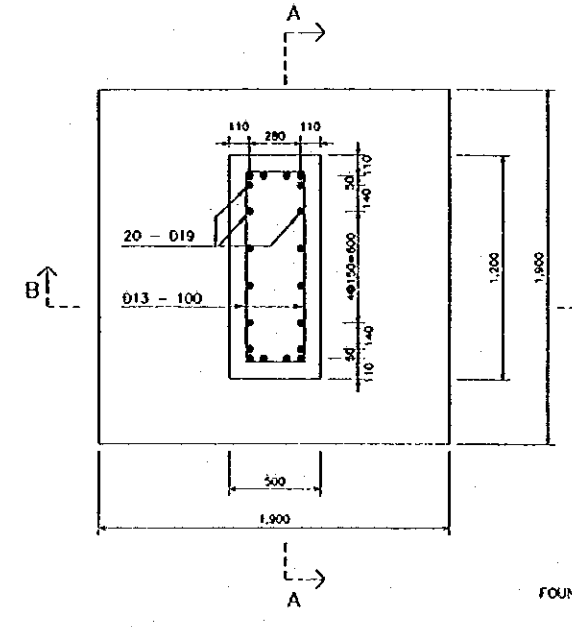
FRONT VIEW
SCALE B

SIDE VIEW
SCALE B

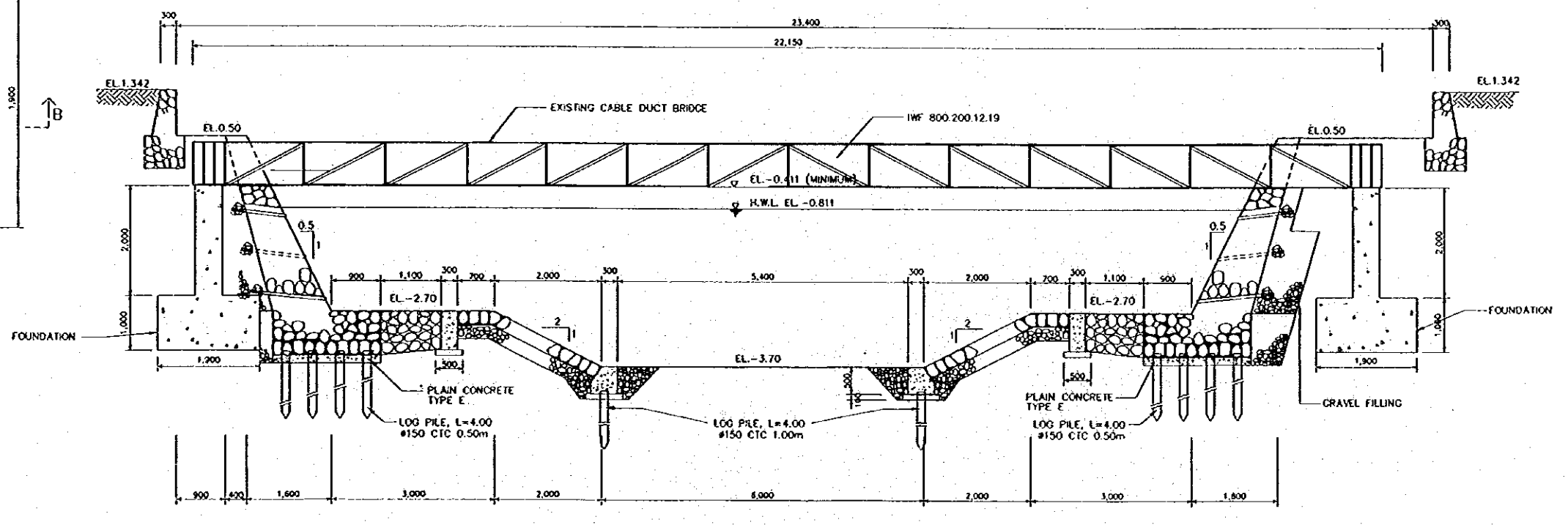


DETAIL OF GIRDER CONNECTION
SCALE B

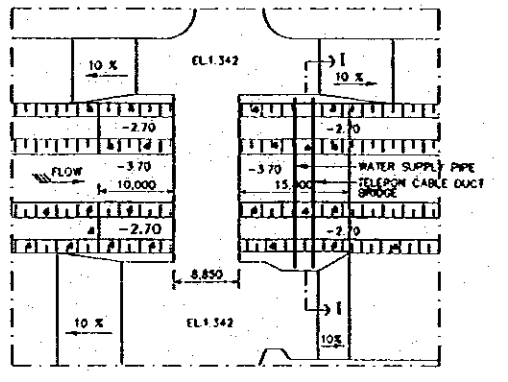
DETAIL OF FENCE
SCALE B



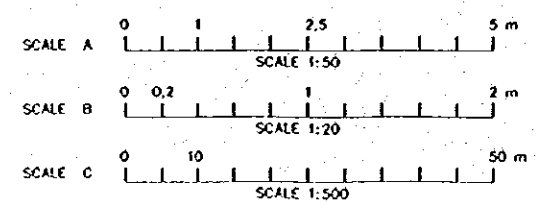
DETAIL OF FOUNDATION
SCALE B



SECTION I-1
SCALE A



KEY PLAN
SCALE C



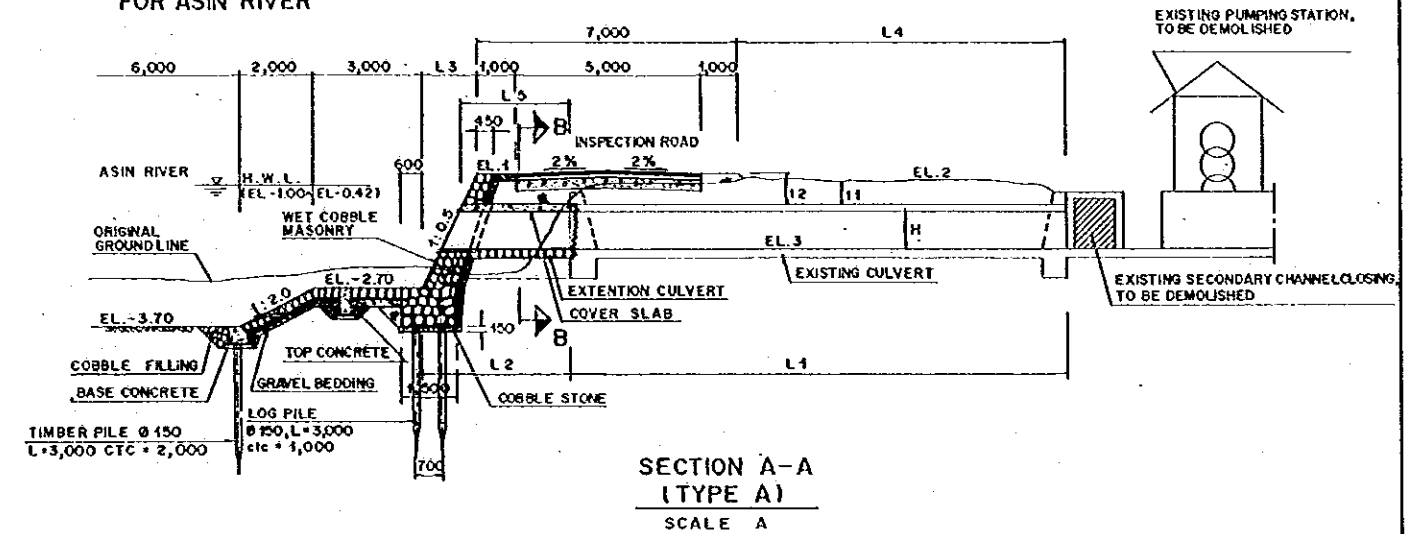
NO.	DATE	REVISIONS	ORIGINATED	DESIGNED	APPROVED

THE REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENTS		PROVINCE CENTRAL JAWA
FRATURSELUKA FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASH RIVER TEL. CABLE DUCT RE-INSTALLATION		PROJECT NAME FLOOD CONTROL, URBAN 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 ZABO INTERNATIONAL INC.		DISTRICT SEMARANG CITY
CHIEF OF PLANNING AND DESIGN PROJECT MANAGER		DRAWING NO. U-P2-A-MI-3 SHEET NO. 78 DATE CONTRACT NO.

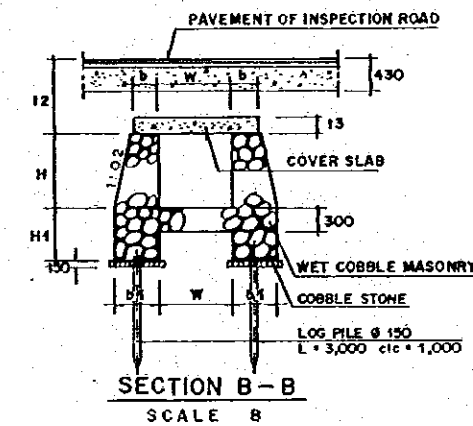
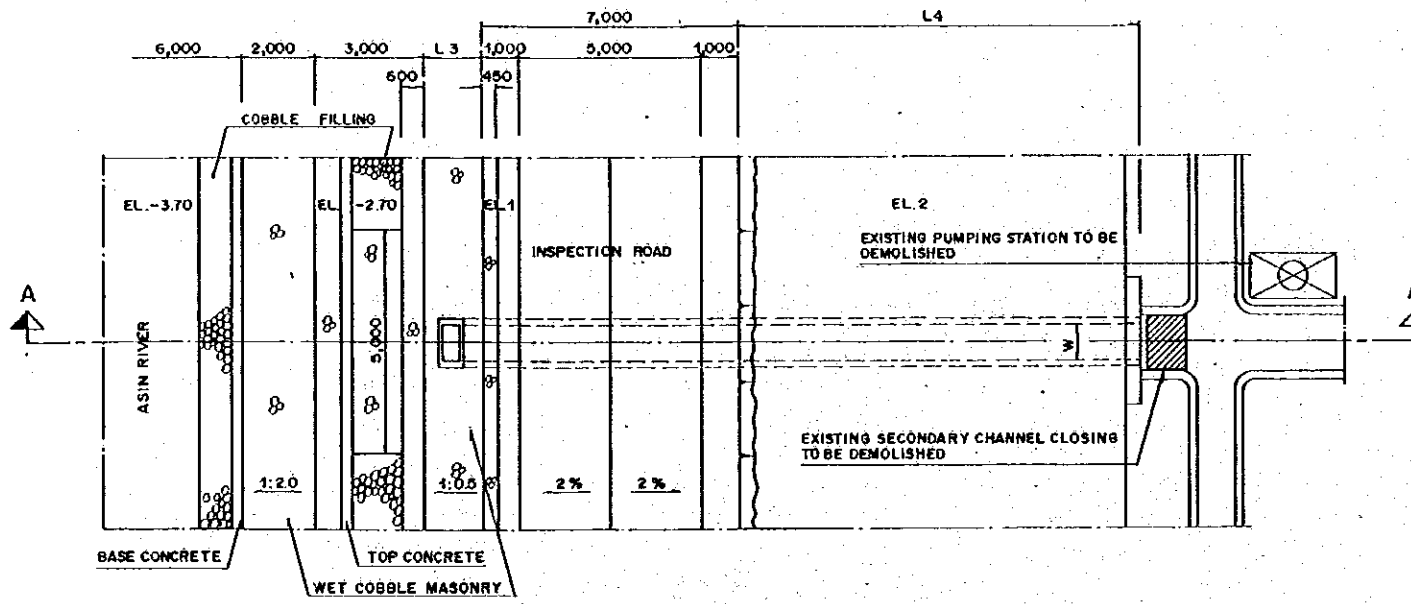
TABLE OF DIMENSIONS FOR SECONDARY CHANNEL OUTLETS IN ASIN RIVER

NO.	NO. OF OUTLET	LOCATION		TYPE	EL. 1 (m)	EL. 2 (m)	EL. 3 (m)	L 1 (mm)	L 2 (mm)	L 3 (mm)	L 4 (mm)	L 5 (mm)	I 1 (mm)	I 2 (mm)	I 3 (mm)	W (mm)	W 1 (mm)	H (mm)	H 1 (mm)	b (mm)	b 1 (mm)	EXISTING PUMPING STATION (SET)	
		NO. OF SECTION	R/L																				
1	BJ.G1	AS.50	L	A	+0.30	+0.19	-2.51	6,300	2,500	1,500	-750	1,900	700	810	430	3,750	5,150	2,000	700	700	1,100		
2	TM.G16	AS.45	L	B	+0.30	+0.32	-0.88	11,000	1,650	1,500	3,150		200	600		700		1,000					
3	TM.G15	AS.41	L	B	+0.60	+0.66	-1.44	11,000	4,100	1,650	1,900		600	1,140		500		900				1	
4	TM.G17	AS.20	L	B	+0.50	+0.54	-2.70	11,500	2,050	1,600	3,500		800	700		2,900		2,500				1	
5	TM.G22	AS.12	L	B	+0.282	+0.24	-1.66	11,000	2,050	1,491	3,000		400	450		3,000		1,500				1	
6	HU.G15	AS.52	R	A	+0.30	+0.23	-0.82	17,000	2,050	1,500	9,500	1,350	900	570	200	600	1,050	550	600	400	500		1
7	HU.G16	AS.43	R	A	+0.60	+0.50	-1.50	15,000	2,900	1,650	7,850	2,200	900	900	300	2,400	3,600	1,200	600	600	840	1	
8	HU.G17	AS.41	R	B	+0.60	+0.67	-0.83	21,000	4,950	1,650	11,500		700	630		1,000		800					1
9	HU.G10	AS.21	R	B	+0.508	+0.59	-0.71	18,000	3,700	1,604	9,250		550	470		1,900		750					1
10	HU.G18	AS.18	R	A	+0.90	+0.94	-0.66	7,000	6,400	1,800	1,450	5,400	600	560	300	2,000	3,100	1,000	600	550	750		1
11	HU.G13	AS.09	R	A	+1.10	+1.20	+0.90	10,000	7,400	1,900	4,850	6,150	200	500	200	600	1,350	600	600	400	500		1

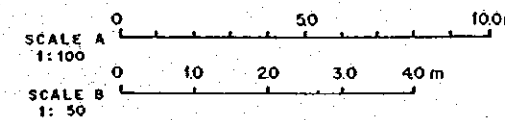
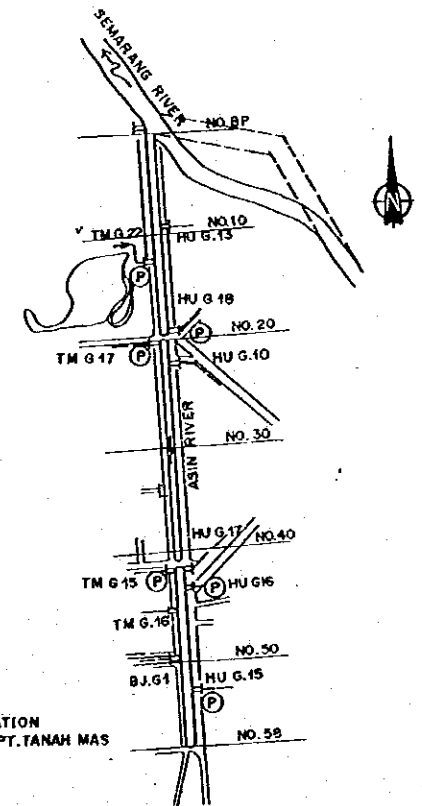
TYPICAL OF SECONDARY CHANNEL OUTLET FOR ASIN RIVER



TYPICAL SECONDARY CHANNEL OUTLET FOR ASIN RIVER



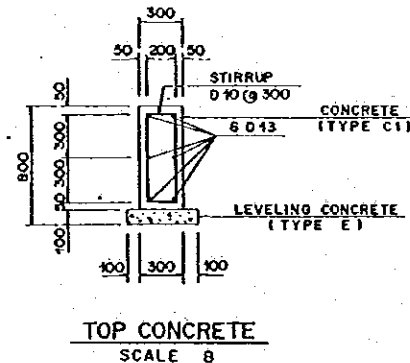
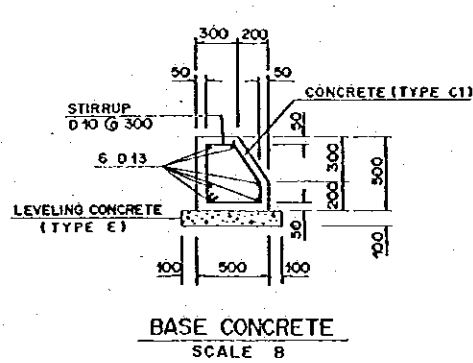
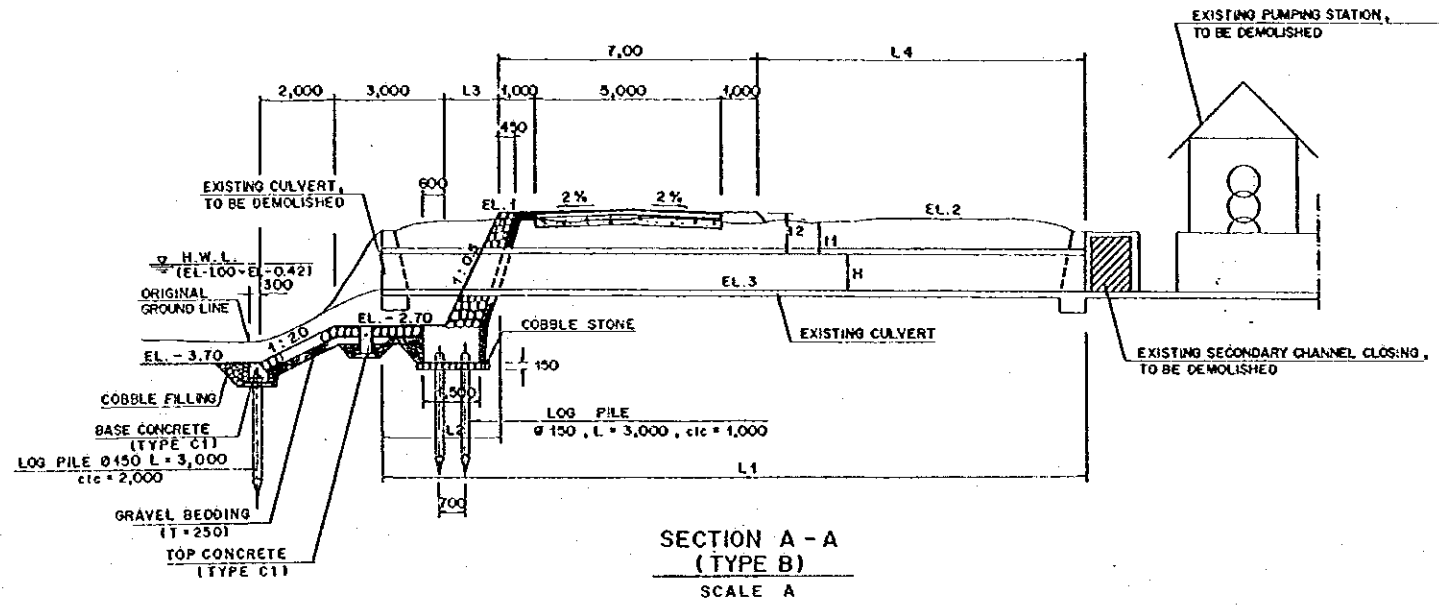
NOTE
 (P) EXISTING PUMPING STATION TO BE DEMOLISHED BY PT. TANAH MAS



LOCATION OF SECONDARY CHANNEL OUTLETS

NO.		DATE		REVISORS		ORIGINATED		DESIGNED		APPROVED		APPROVED		DATE		CONTRACT NO.	
<p>THIS REPUBLIC OF INDONESIA MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF WATER RESOURCE DEVELOPMENT AND DIRECTORATE GENERAL OF HUMAN SETTLEMENT</p> <p>JRATUNDELU FLOOD CONTROL PROJECT COMPONENT: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN RIVER SECONDARY CHANNEL OUTLET RECONSTRUCTION (1/2)</p> <p>JAPAN INTERNATIONAL COOPERATION AGENCY CO. ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PACCO INTERNATIONAL INC.</p> <p>CHEF OF PLANNING AND DESIGN PROJECT MANAGER</p>																	

TYPICAL SECONDARY CHANNEL OUTLET FOR ASIN RIVER



DETAIL OF CULVERT COVER SLAB SCALE B

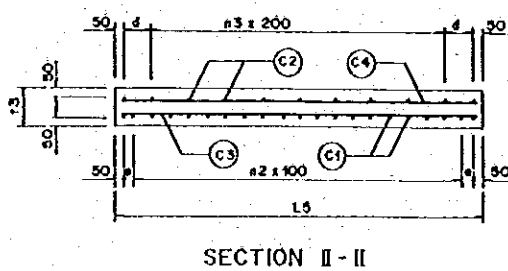
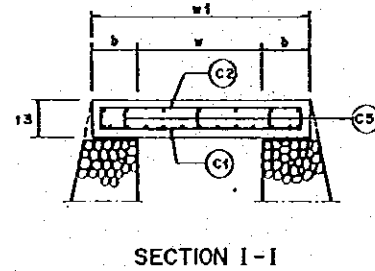
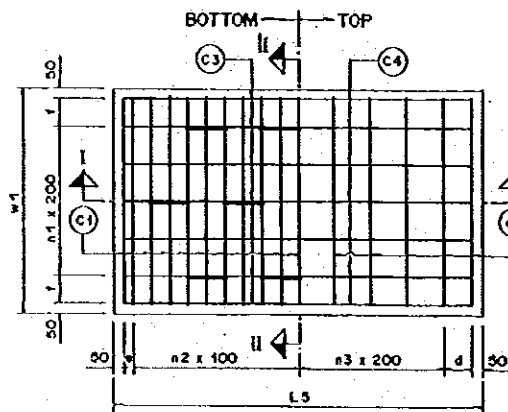
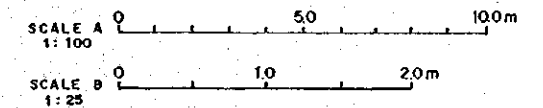


TABLE OF DIMENSIONS OF REINFORCING BAR ARRANGEMENT FOR CULVERT COVER SLAB

NO. OF STRUCTURE	w1 (mm)	L5 (mm)	l3 (mm)	d (mm)	t (mm)	f (mm)	n1	n2	n3	DIAMETER OF REINFORCING BAR (mm)				
										C1	C2	C3	C4	C5
BJ. G1	5,150	1,900	430	-	-	225	24	18	9	19	16	10	10	10
HU. G15	1,050	1,350	200	125	75	125	4	11	5	10	10	10	10	10
HU. G16	3,600	2,200	300	150	-	150	17	21	9	16	13	10	10	10
HU. G18	3,100	5,400	250	150	-	-	15	53	25	16	10	10	10	10
HU. G13	1,350	6,150	200	125	75	125	5	59	29	10	10	10	10	10

BAR BENDING SCHEDULE & BAR WEIGHT

NO. OF OUTLET	TYPE	SHAPE	DIA (mm)	NUMBER	LENGTH (mm)	SHAPE 1			WEIGHT PER METER (kg/m)	WEIGHT PER BAR (kg)	TOTAL WEIGHT (kg)
						L1 (mm)	L2 (mm)	L3 (mm)			
BJ. G1	C1	2	19	21	5,810	50	330	5,050	2.230	12.956	272.082
	C2	1	16	12	5,080	5,082	-	-	1.580	8.026	96.317
	C3	1	10	27	1,820	1,820	-	-	0.617	1.123	30.319
	C4	1	10	27	1,820	1,820	-	-	0.617	1.123	30.319
	C5	2	10	108	1,120	100	350	220	0.617	0.691	74.632
HU. G15	C1	2	10	14	1,250	50	100	950	0.617	0.771	10.798
	C2	2	10	8	970	970	-	-	0.617	0.598	4.788
	C3	1	10	7	1,270	1,270	-	-	0.617	0.784	5.485
	C4	1	10	7	1,270	1,270	-	-	0.617	0.784	5.485
	C5	2	10	11	660	100	120	220	0.617	0.407	4.479
HU. G16	C1	2	16	24	4,000	50	200	3,500	1.580	6.320	151.680
	C2	1	13	12	3,530	3,526	-	-	1.040	3.671	44.054
	C3	1	10	20	2,120	2,120	-	-	0.617	1.308	26.161
	C4	1	10	20	2,120	2,120	-	-	0.617	1.308	26.161
	C5	2	10	89	860	100	220	220	0.617	0.531	47.225
HU. G18	C1	2	16	56	3,400	50	150	3,000	1.580	6.372	300.832
	C2	1	10	28	3,020	3,020	-	-	0.617	1.863	52.174
	C3	1	10	18	5,320	5,320	-	-	0.617	3.282	99.084
	C4	1	10	18	5,320	5,320	-	-	0.617	3.282	99.084
	C5	2	10	198	760	100	170	220	0.617	0.469	92.846
HU. G13	C1	2	10	62	1,550	50	100	1,250	0.617	0.956	59.294
	C2	1	10	32	1,270	1,270	-	-	0.617	0.784	25.075
	C3	1	10	8	6,070	6,070	-	-	0.617	3.745	29.962
	C4	1	10	8	6,070	6,070	-	-	0.617	3.745	29.962
	C5	2	10	73	660	100	120	220	0.617	0.407	29.727



<p>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: URBAN DRAINAGE SYSTEM IMPROVEMENT ASIN RIVER SECONDARY CHANNEL OUTLET RECONSTRUCTION (2/2)</p>						<p>PROVINCE: CENTRAL JAWA PROJECT NAME: FLOOD CONTROL, URBAN DRAINAGE AND FAIR HOUSING DEVELOPMENT IN SEMARANG IN THE REPUBLIC OF INDONESIA DISTRICT: SEMARANG CITY DRAWING NO. U-P2-A-M-8 SHEET NO. 80</p>	
<p>JAPAN INTERNATIONAL COOPERATION AGENCY CITI ENGINEERING CO., LTD. IN ASSOCIATION WITH PACIFIC CONSULTANTS INTERNATIONAL AND PARCO INTERNATIONAL INC.</p>						<p>DATE: _____ CONTRACT NO. _____</p>	
<p>APPROVED: _____ PROJECT MANAGER</p>						<p>DATE: _____</p>	
<p>NO. DATE REVISIONS ORIGINATED DESIGNED APPROVED</p>						<p>DATE: _____</p>	