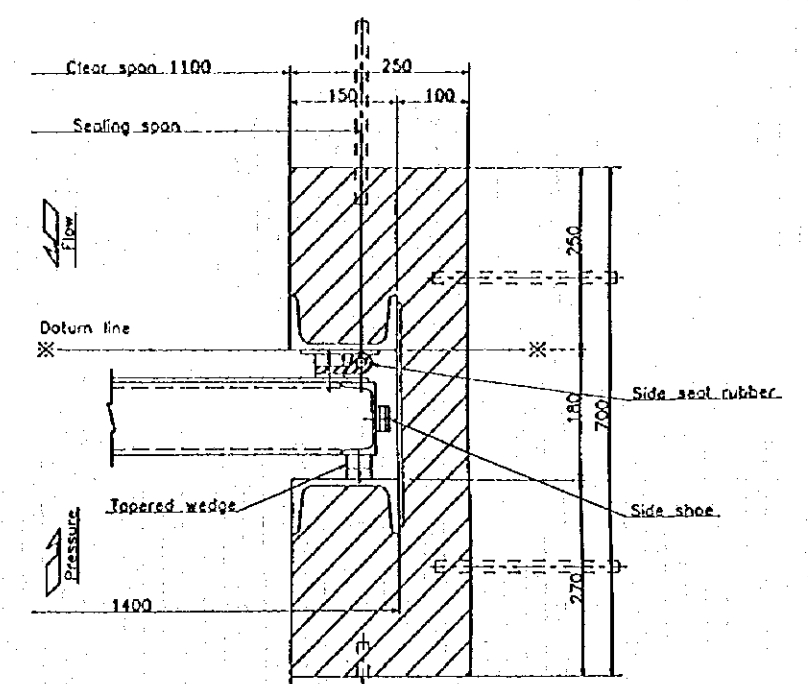
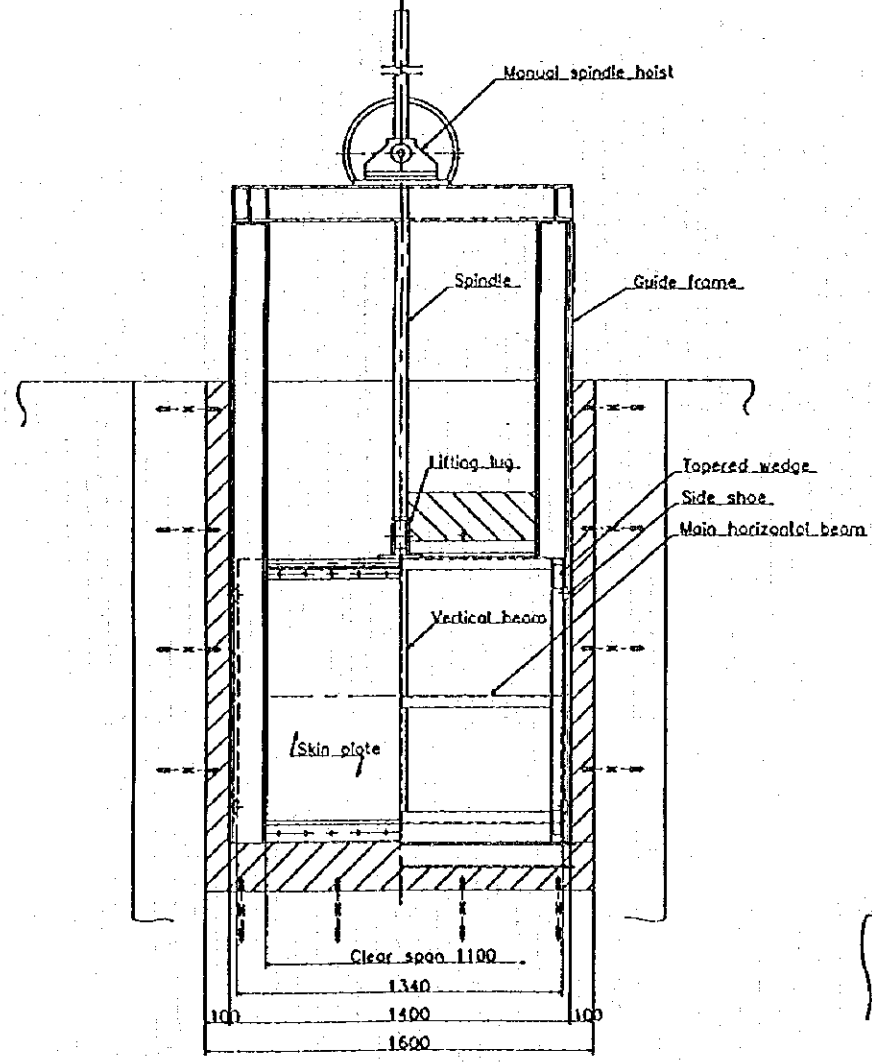


PLAN SCALE A

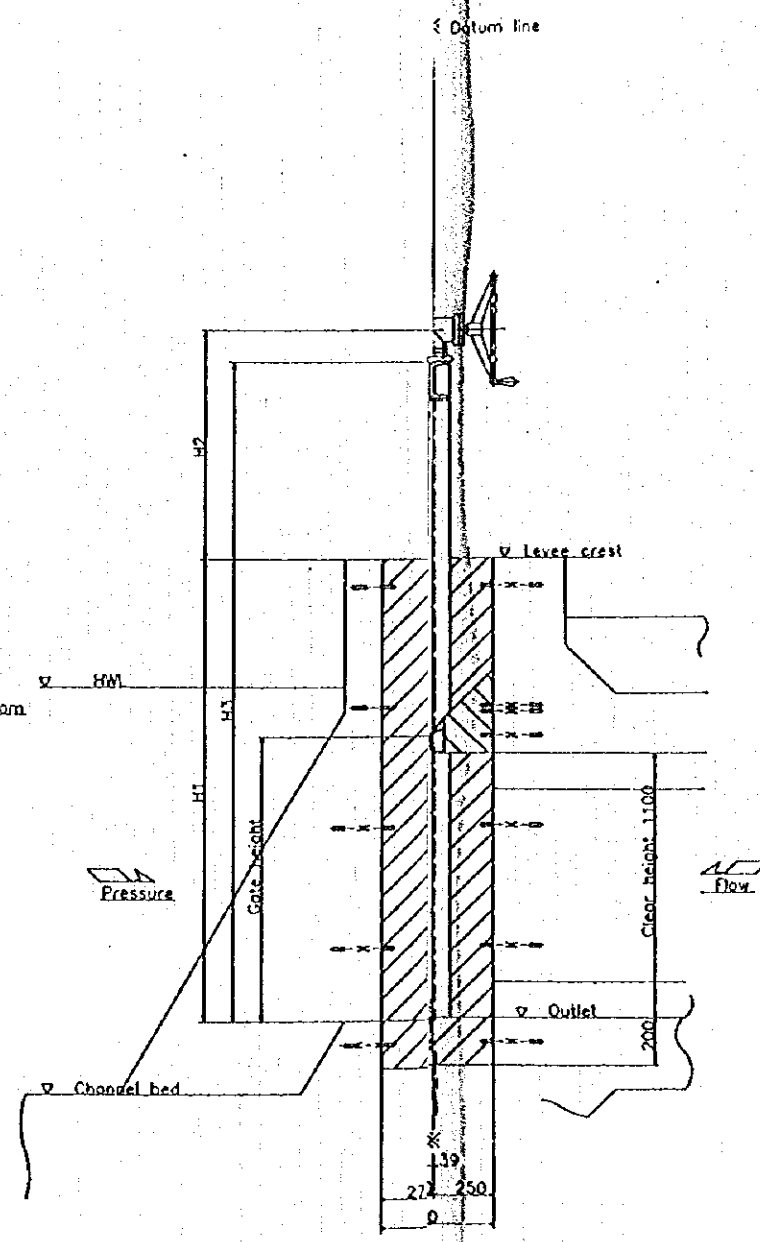
Conduit		No.	Levee type	Qty	EL. (m)			H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)				HWL	Levee crest	Outlet			
1.1	1.1	SKM-2L	R(II)	1	0.798	1.327	-0.587	1.914	0.948	2.730



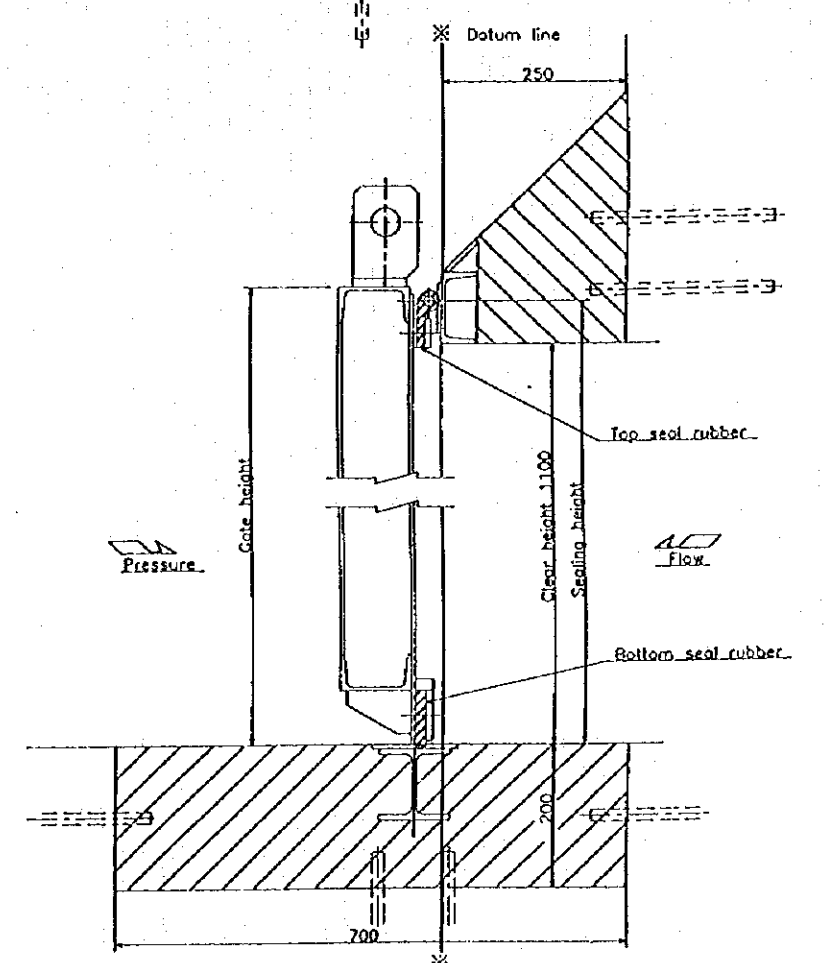
DETAIL OF SIDE SLOT SCALE B



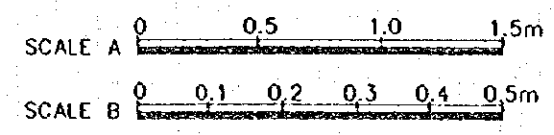
ELEVATION SCALE A



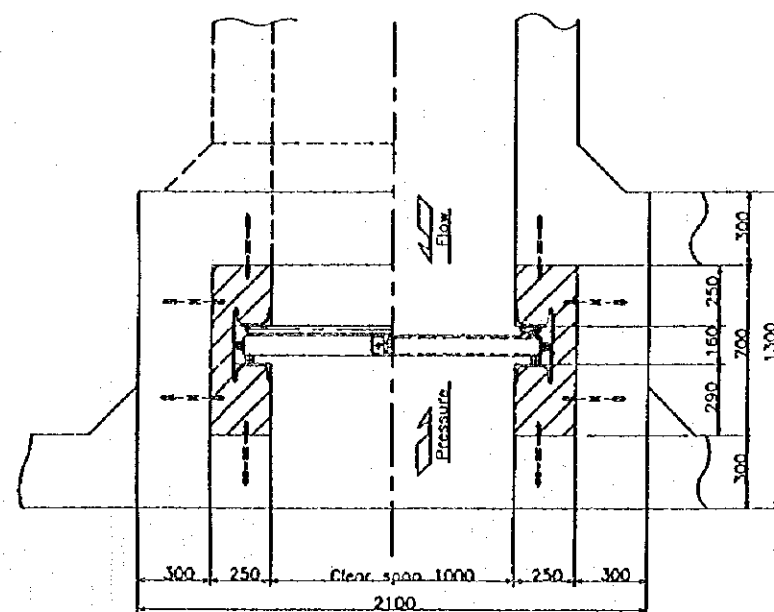
FILE SCALE A



DETAIL OF TOP AND BOTTOM SLOT SCALE B

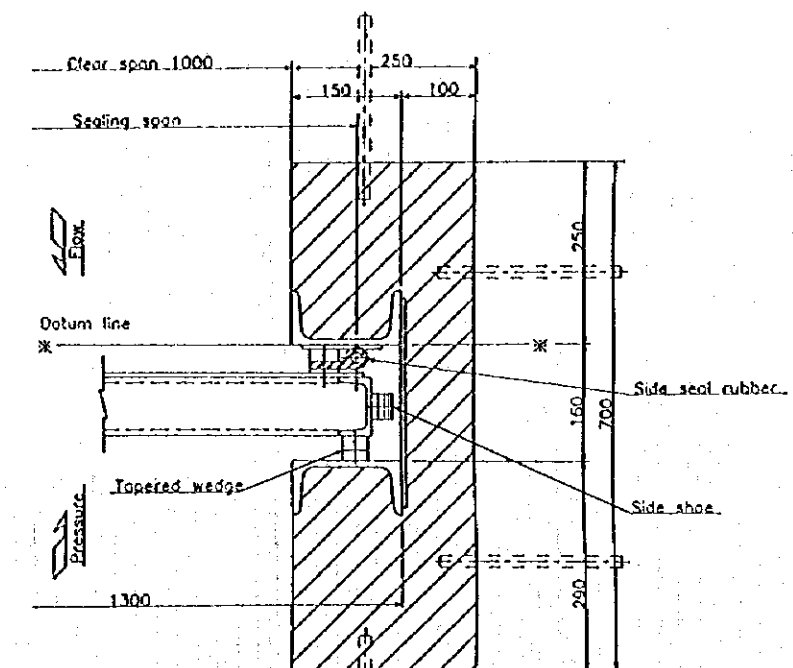


PREPARED	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SUDE GATE GENERAL ARRANGEMENT 1.1mx1.1m Levee Type R(II)	APPROVED
CHECKED		DWG NO. J-30-20-011	DATE
SUBMITTED			
DATE			
REFERENCE	0-		

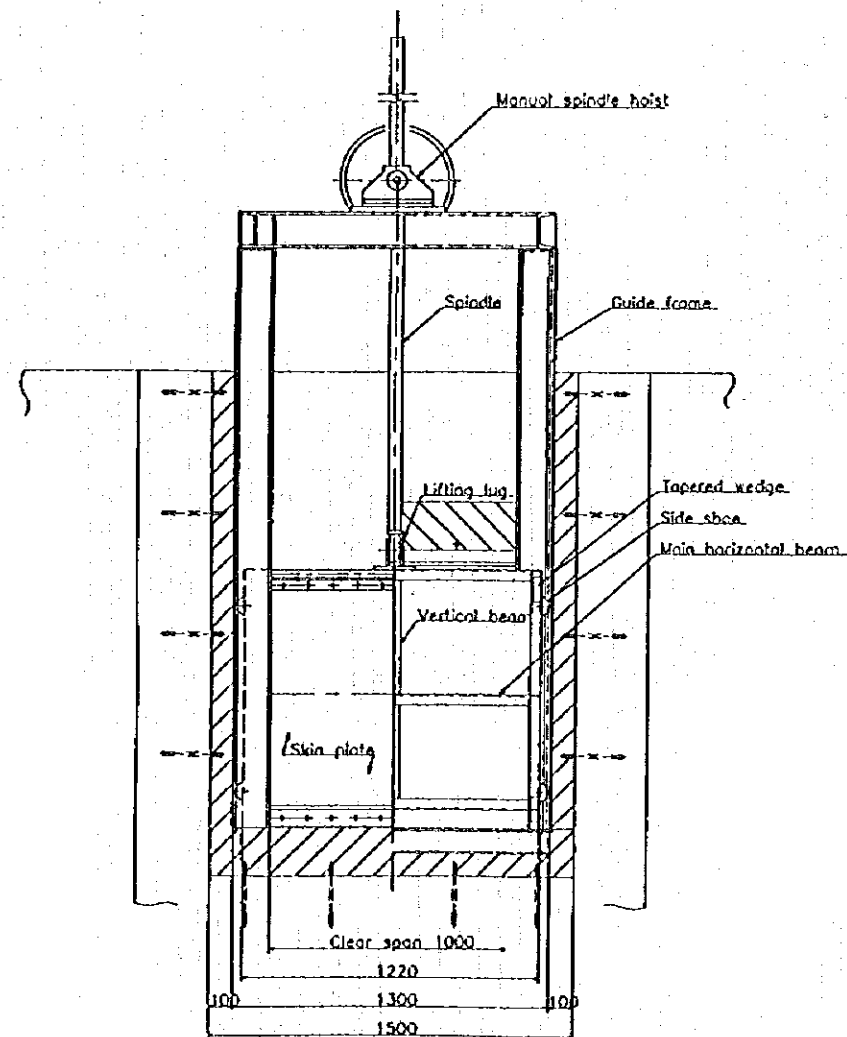


PLAN SCALE A

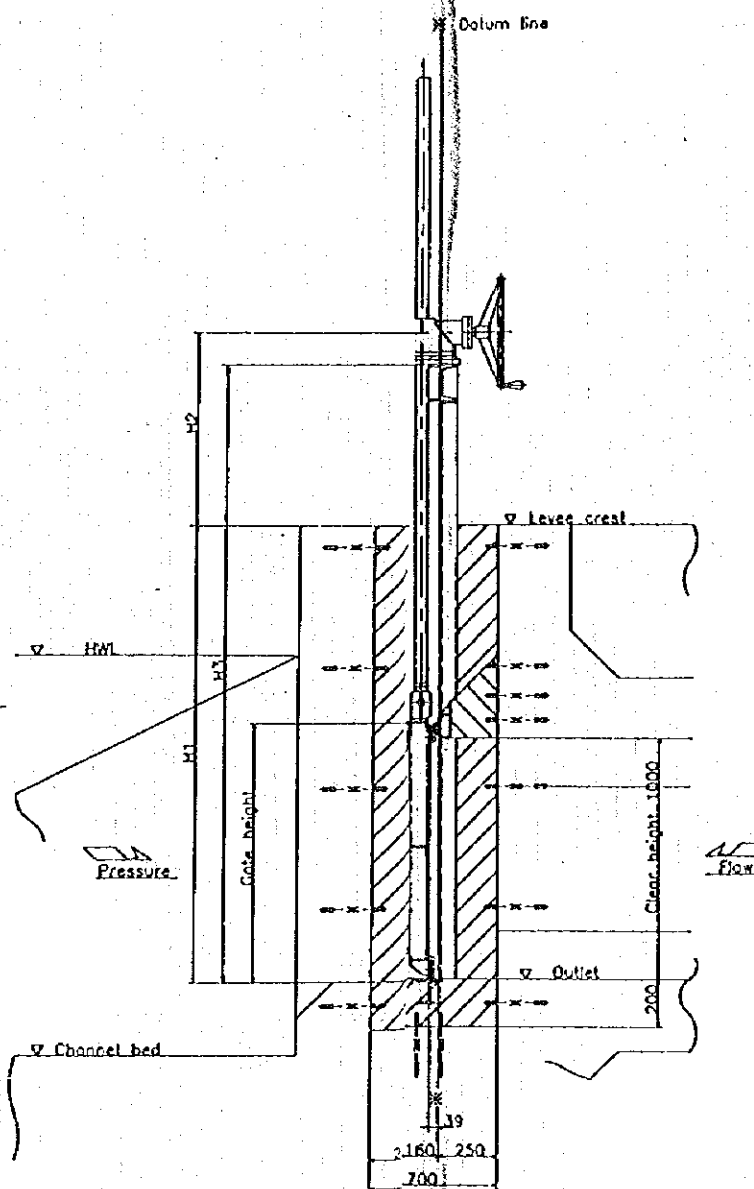
Conduit		No.	Levee type	Q <sub>1</sub> (m <sup>3</sup> /s)	EL (m)			H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)				Channel bed	HWL	Levee crest			
1.0	1.0	SKM-SL	L(E)	1 0.678	0.974	1.511	-0.378	1.889	0.803	2.560
		SKM-BL	L(E)	1 0.141	1.323	1.911	0.159	1.752	0.900	2.520
		SCM-SL	L(E)	1 0.221	1.799	2.153	0.078	2.075	0.807	2.750
		SCM-SL	L(E)	1 0.094	2.030	2.414	0.594	1.820	0.802	2.490
		SCM-4R	L(E)	1 0.091	2.030	2.414	0.394	2.020	0.802	2.690
		SCM-SR	L(E)	1 0.268	2.137	2.550	0.568	1.982	0.800	2.650



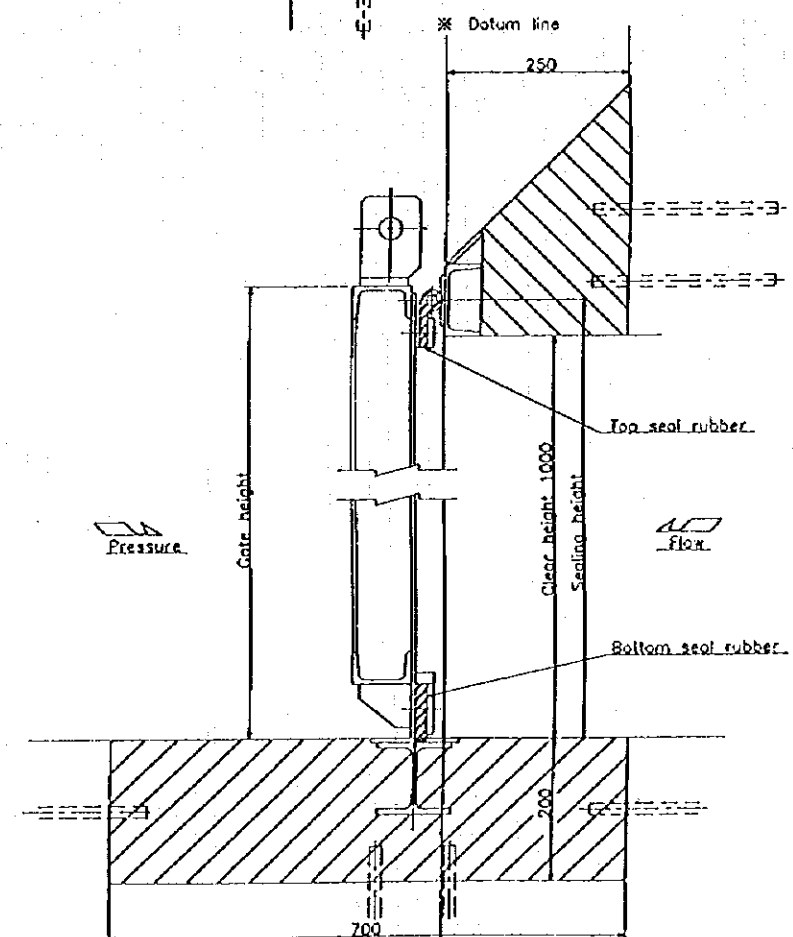
DETAIL OF SIDE SLOT SCALE B



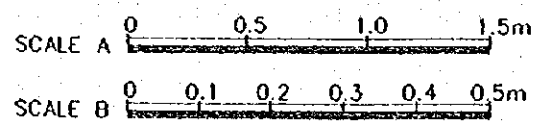
ELEVATION SCALE A



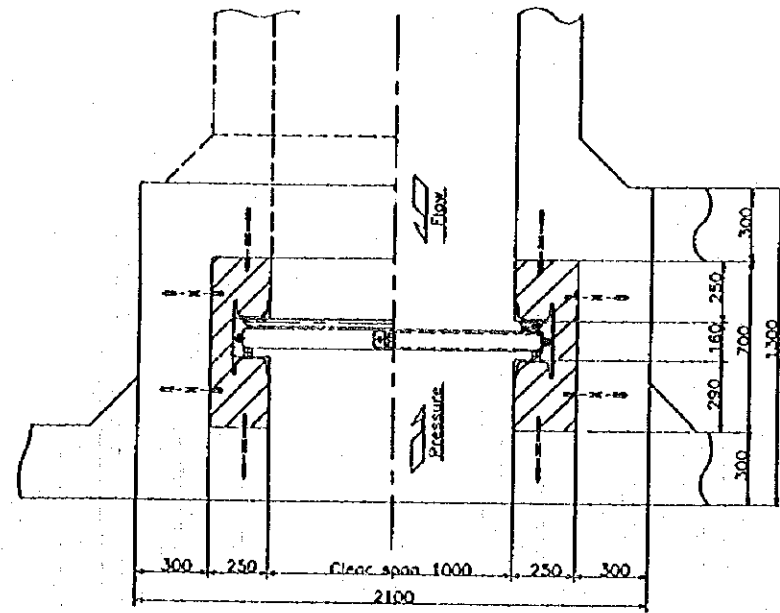
PROFILE SCALE A



DETAIL OF TOP AND BOTTOM SLOT SCALE B

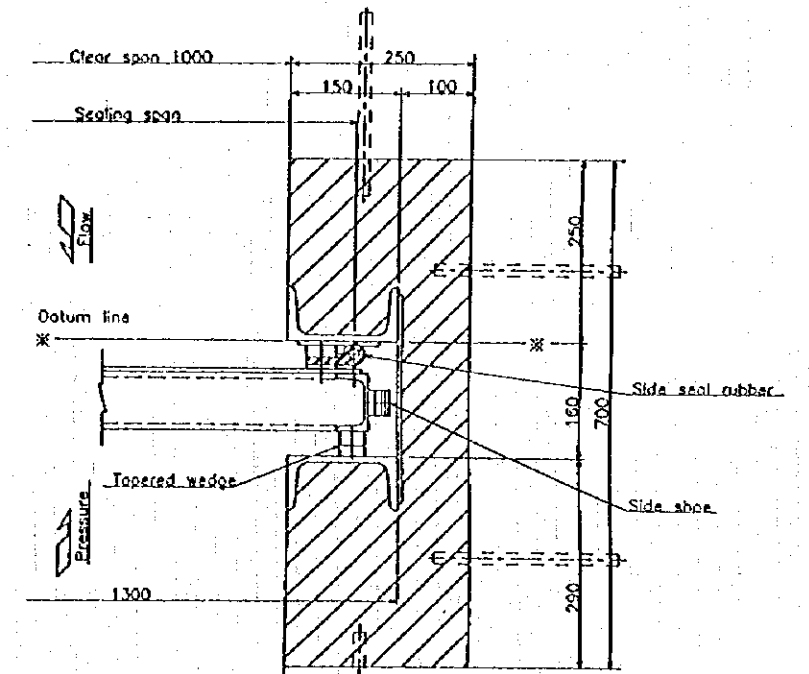


PREPARED		MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SLIDE GATE, GENERAL ARRANGEMENT 1.0m x 1.0m Levee Type L(E)	APPROVED
CHECKED			DWG NO.	DATE
SUBMITTED			J-30-20-012	
DATE				
REFERENCE	NO.			

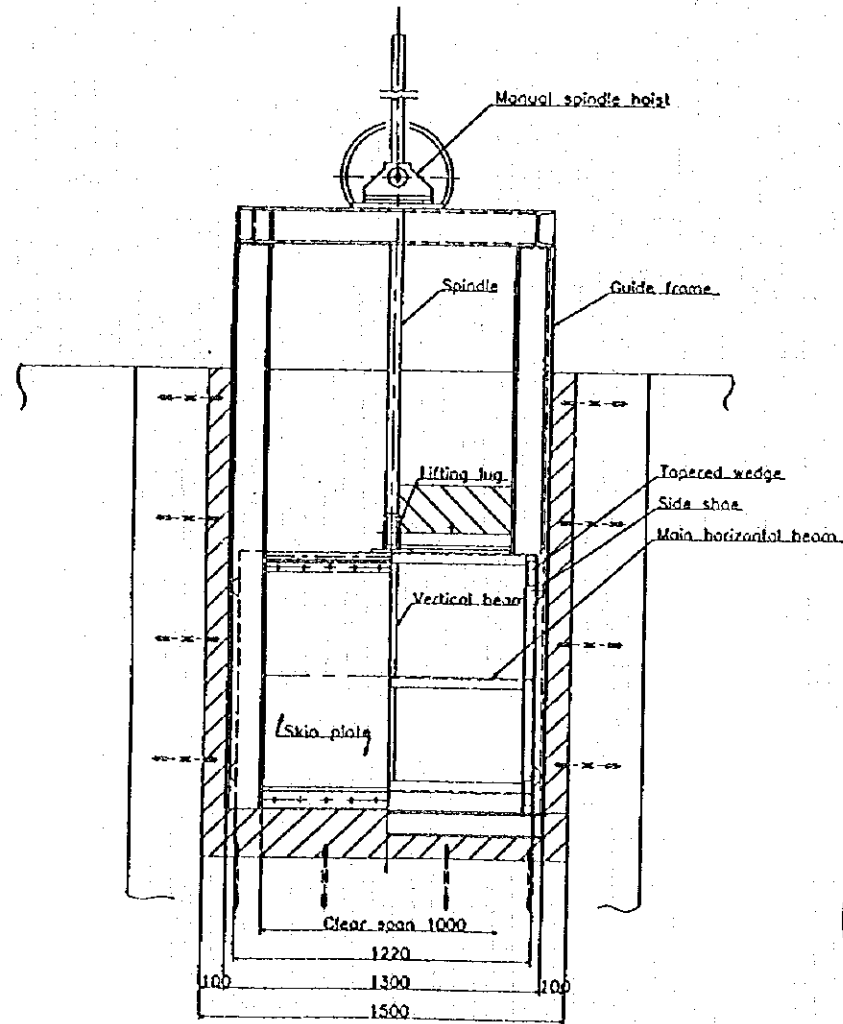


PLAN SCALE A

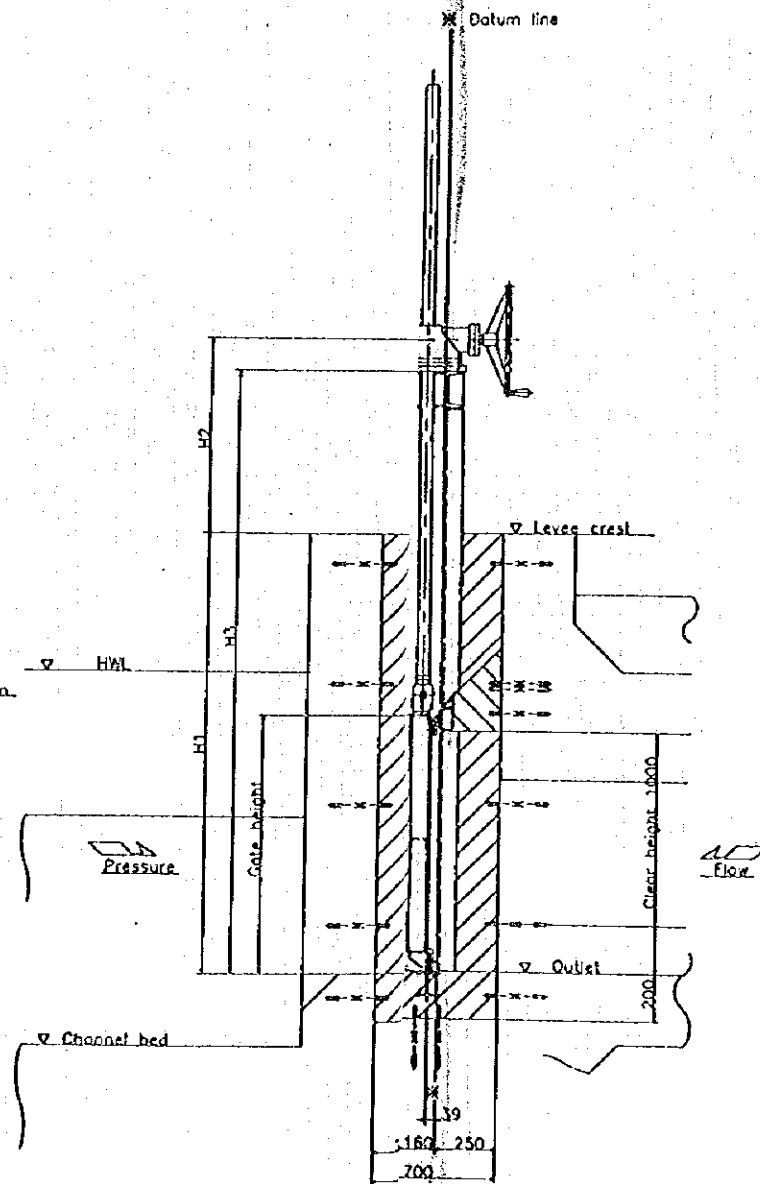
Conduit		No.	Levee type	EL (m)			H1 (m)	H2 (m)	H3 (m)	
Width (m)	Height (m)			Channel bed	HWL	Levee crest				Outlet
1.0	1.0	SKM-6L	L(P)	-0.451	1.037	1.672	-0.151	1.823	0.800	2.500
		SCM-3R	L(P)	-0.037	1.920	2.311	0.263	2.048	0.804	2.720



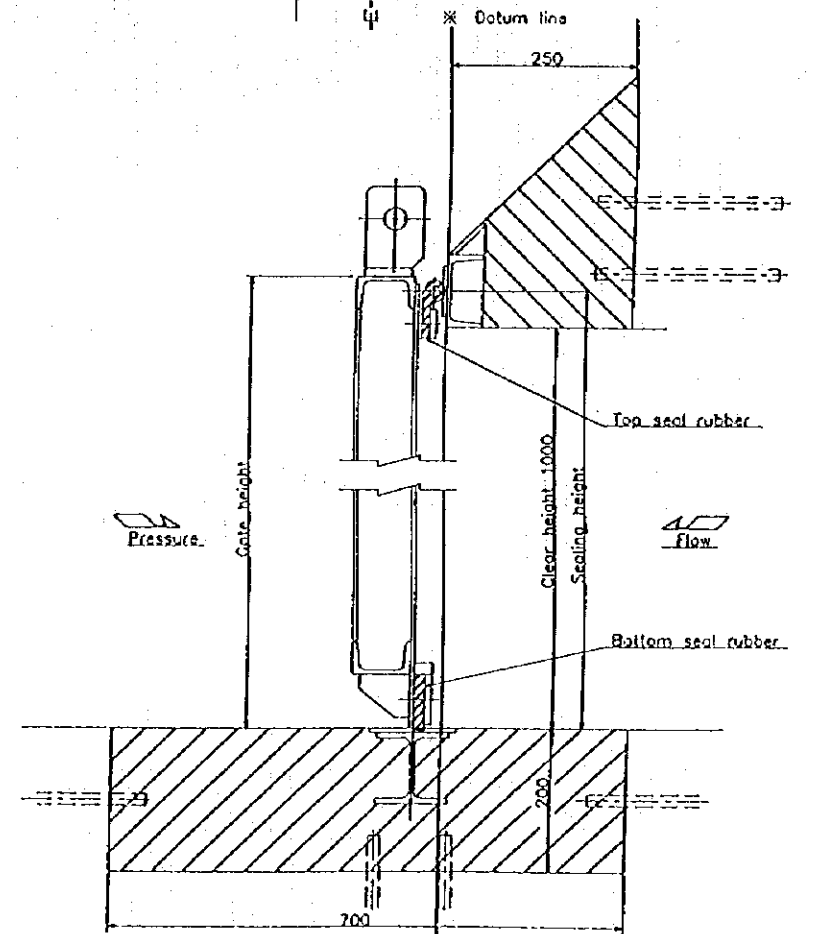
DETAIL OF SIDE SLOT SCALE B



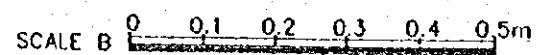
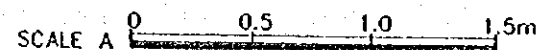
ELEVATION SCALE A



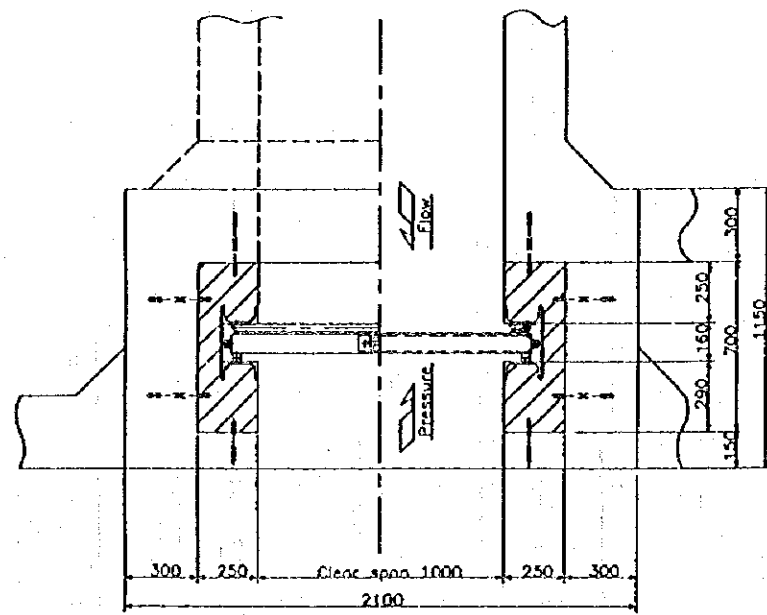
PROFILE SCALE A



DETAIL OF TOP AND BOTTOM SLOT SCALE B

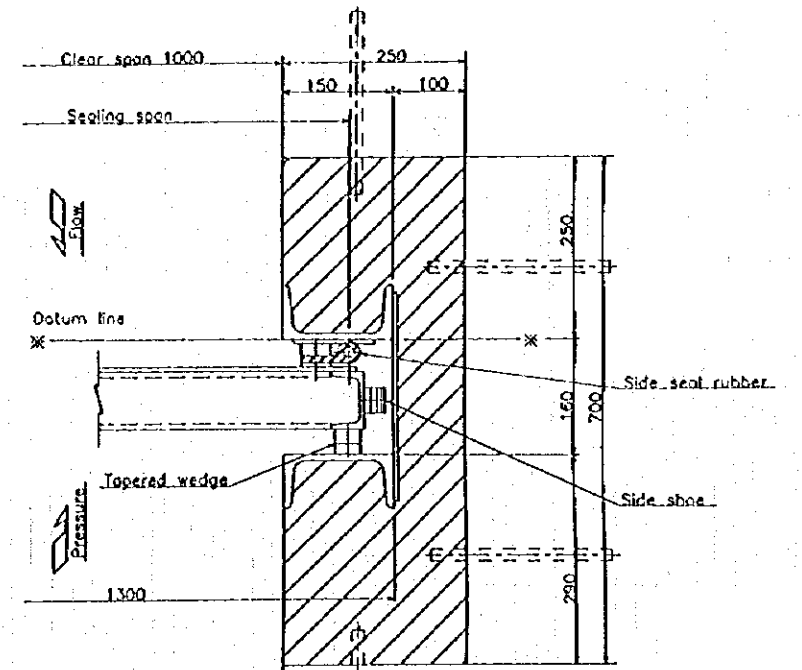


PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SLIDE GATE, GENERAL ARRANGEMENT 1.0m x 1.0m Levee type L(P)	APPROVED
CHECKED.....		DWG NO. J-50-20-013	DATE
SUBMITTED.....			
DATE.....			
REFERENCE NO.			

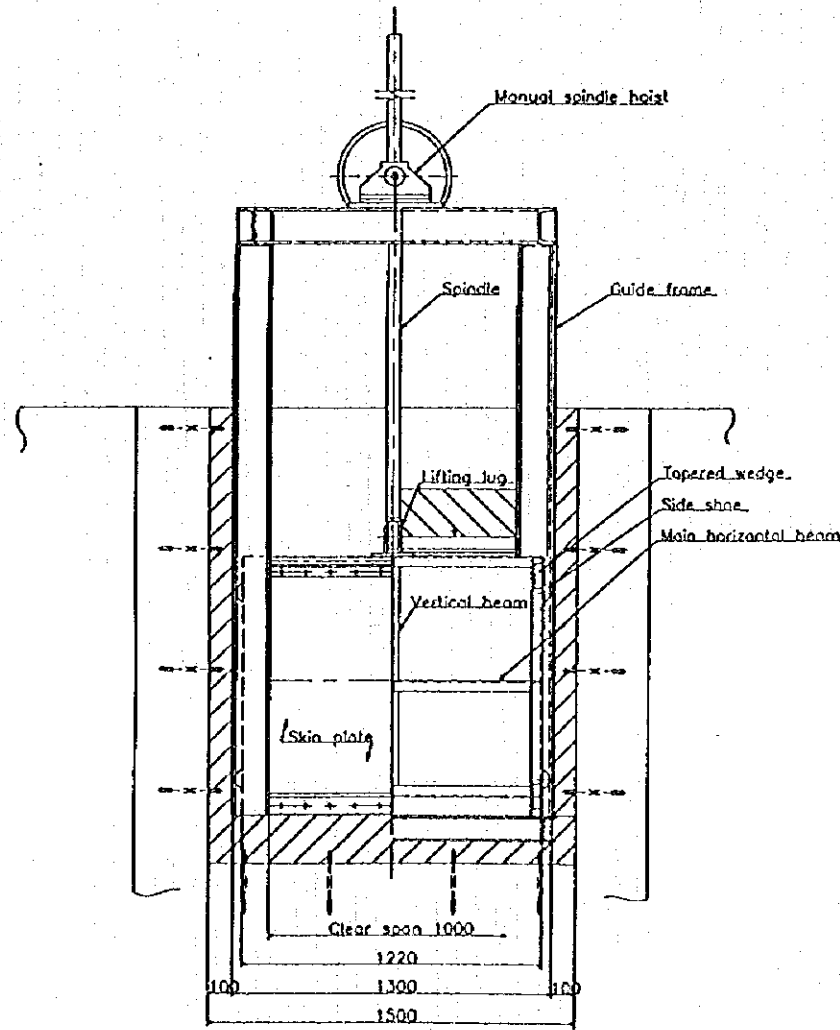


PLAN SCALE A

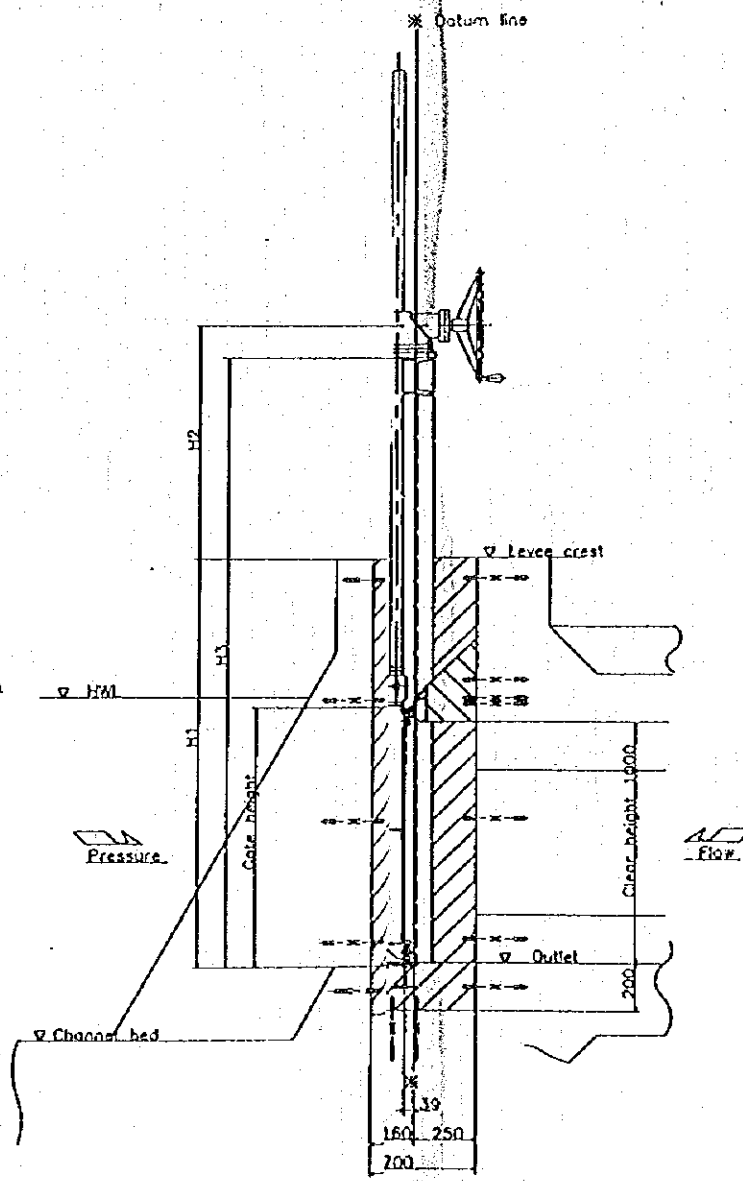
Conduit		No.	Levee type	Q <sub>10</sub> (m <sup>3</sup> /s)	EL. (m)			H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)				HWL	Levee crest	Outlet			
1.0	1.0	SKM-7R	R(I)	148	1.561	2.134	0.448	1.686	0.966	2.520
		SCM-2L	R(II)	204	3.039	3.447	1.137	2.310	0.802	2.980



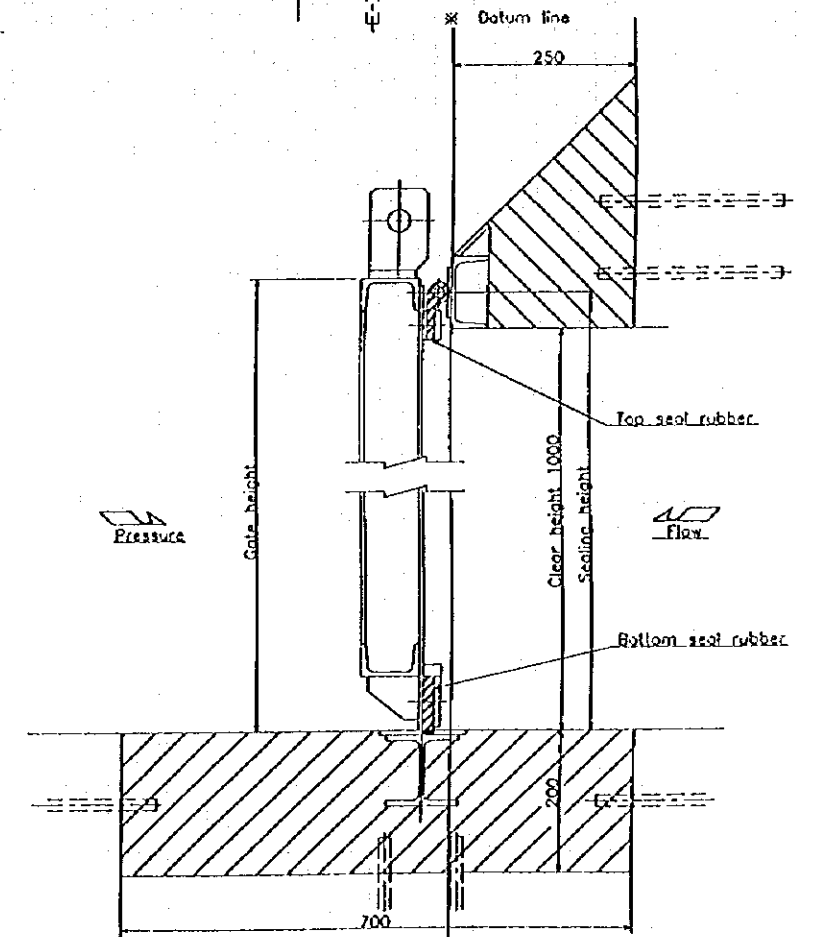
DETAIL OF SIDE SLOT SCALE B



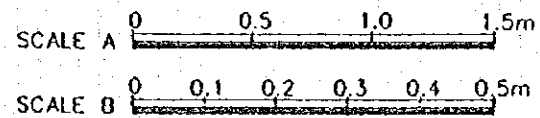
ELEVATION SCALE A



PROFILE SCALE A



DETAIL OF TOP AND BOTTOM SLOT SCALE B

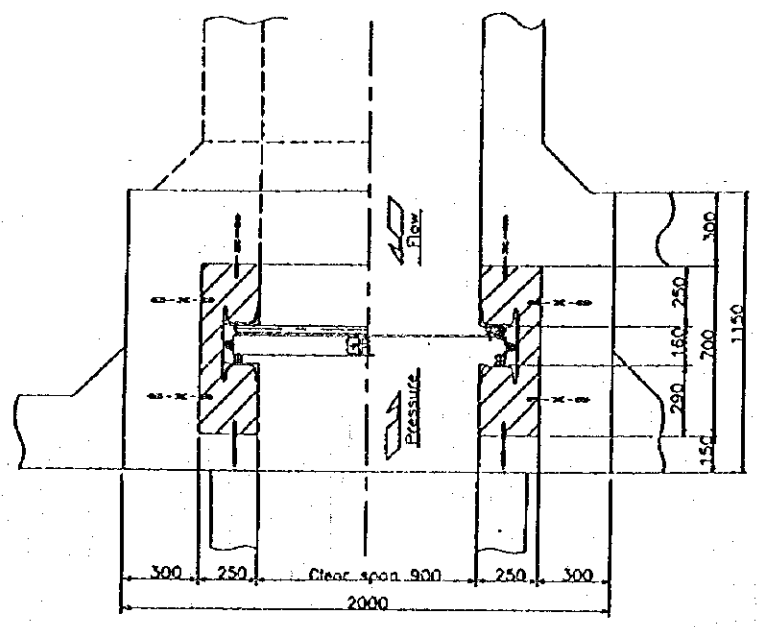


PREPARED	.....
CHECKED	.....
SUBMITTED	.....
DATE	.....
REFERENCE	NO. ....

MINISTRY OF PUBLIC WORK  
 DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  
 JAPAN INTERNATIONAL COOPERATION AGENCY  
 THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT  
 IN  
 THE CITY OF JAKARTA

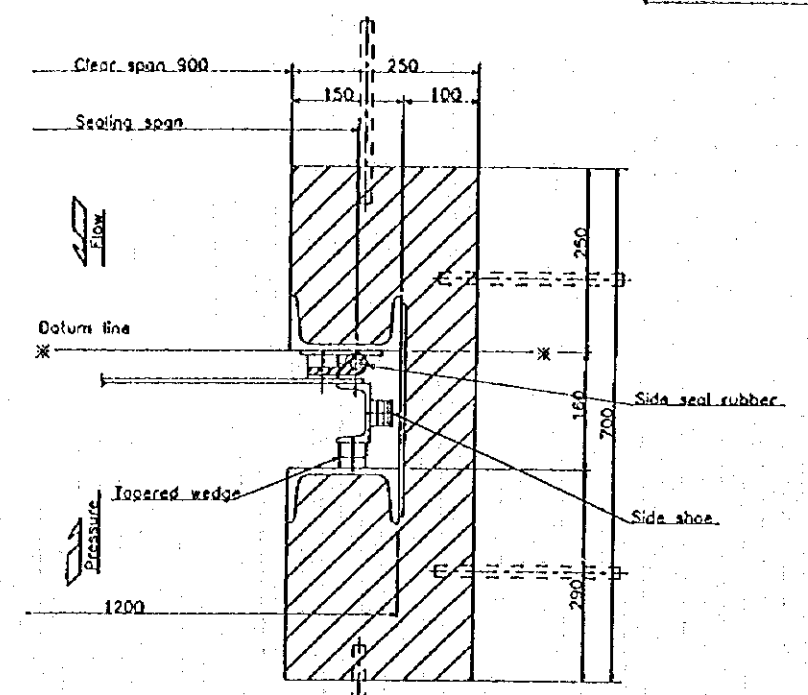
TITLE OF DRAWING  
 DRAINAGE FACILITIES  
 SLIDE GATE, GENERAL ARRANGEMENT  
 1.0m x 1.0m Levee Type R(II)  
 DWG NO. J-30-20-015

APPROVED  
 DATE

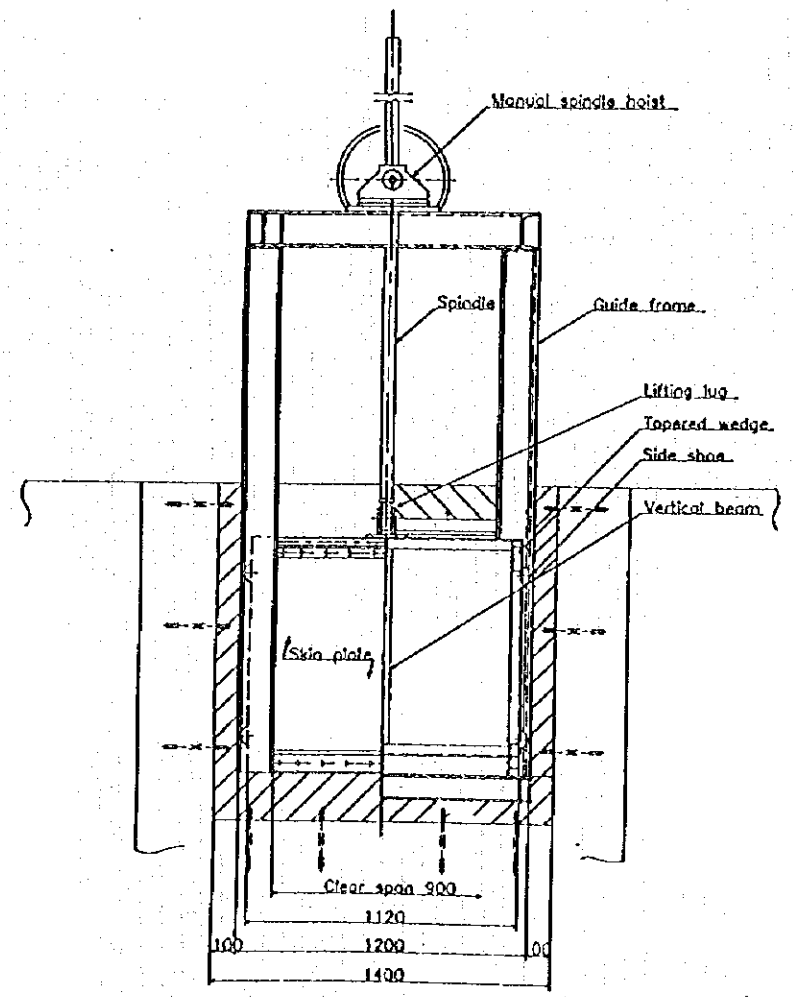


PLAN SCALE A

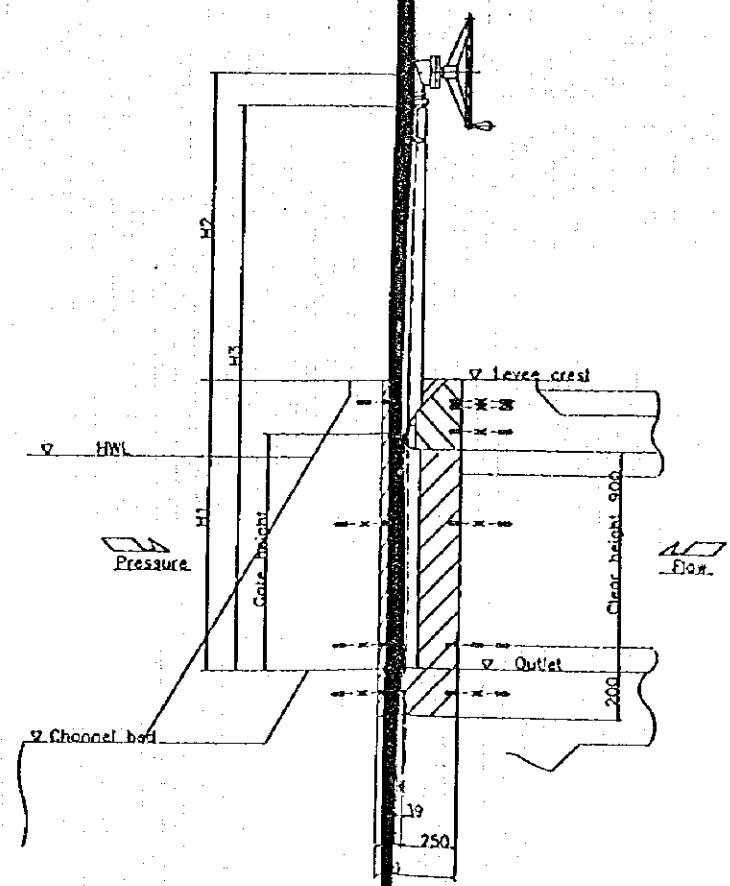
Conduit		No.	Levee type	EL (m)				H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)			Channel bed	HWL	Levee crest	Outlet			
0.9	0.9	SKE-2R	R(I)	152	2.328	2.441	1.452	1.189	1.263	2.320
		SCM-8L	R(I)	517	2.254	2.689	0.847	1.842	0.800	2.510



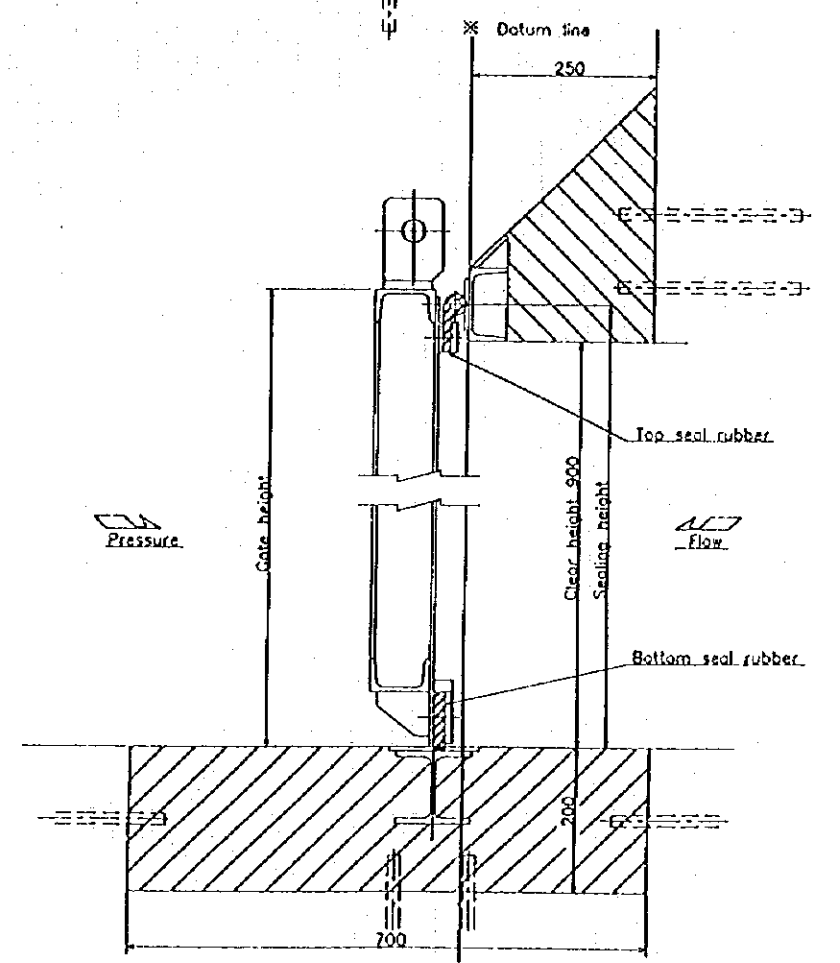
DETAIL OF SIDE SLOT SCALE B



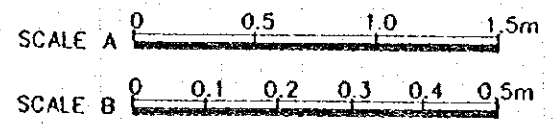
ELEVATION SCALE A



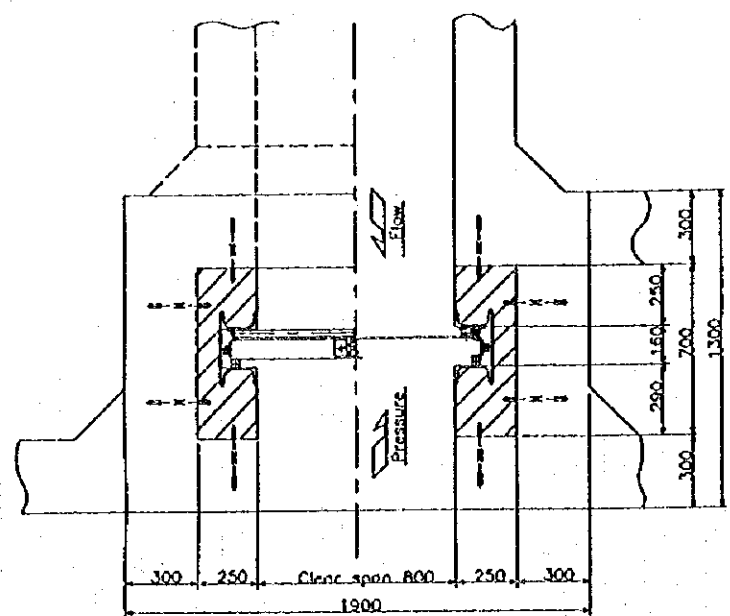
FILE SCALE A



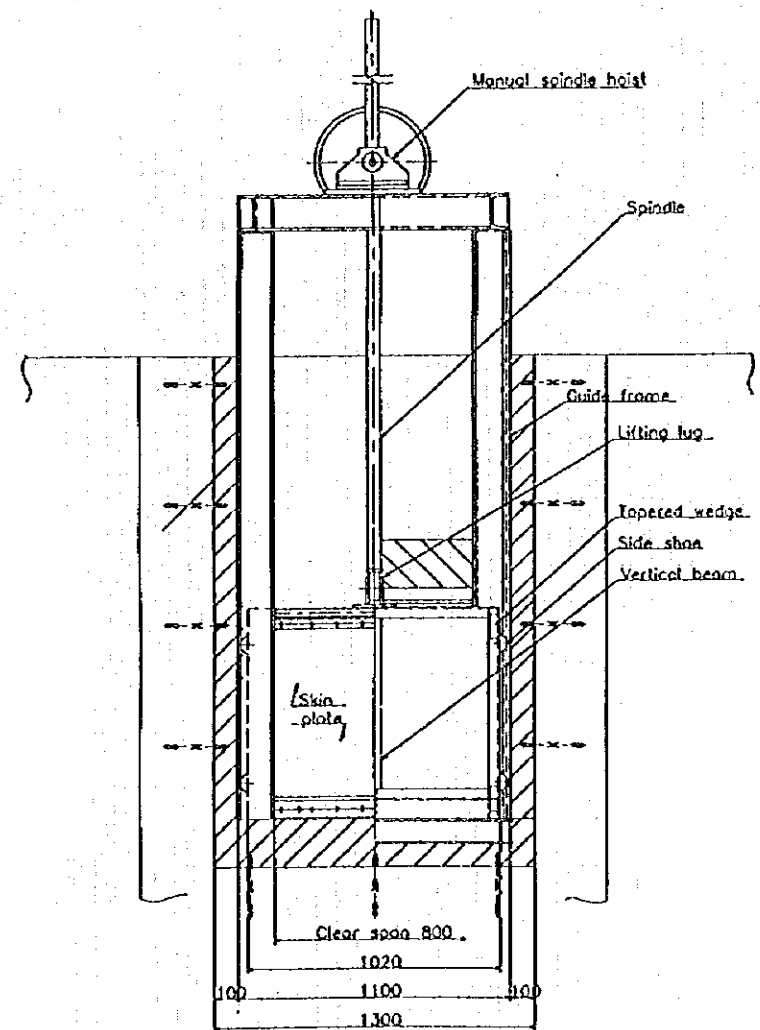
DETAIL OF TOP AND BOTTOM SLOT SCALE B



REFERENCE	PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SLIDE GATE, GENERAL ARRANGEMENT 0.9m x 0.9m Levee Type R(I)	APPROVED
	CHECKED.....		OWG NO.	DATE
	SUBMITTED.....		J-30-20-016	
	DATE.....			

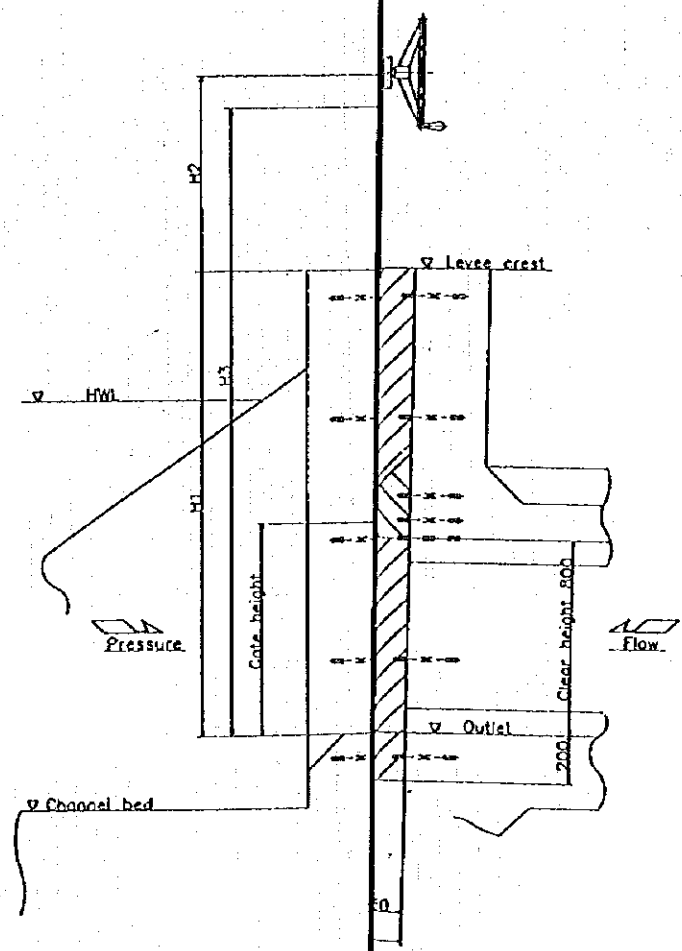


PLAN SCALE A

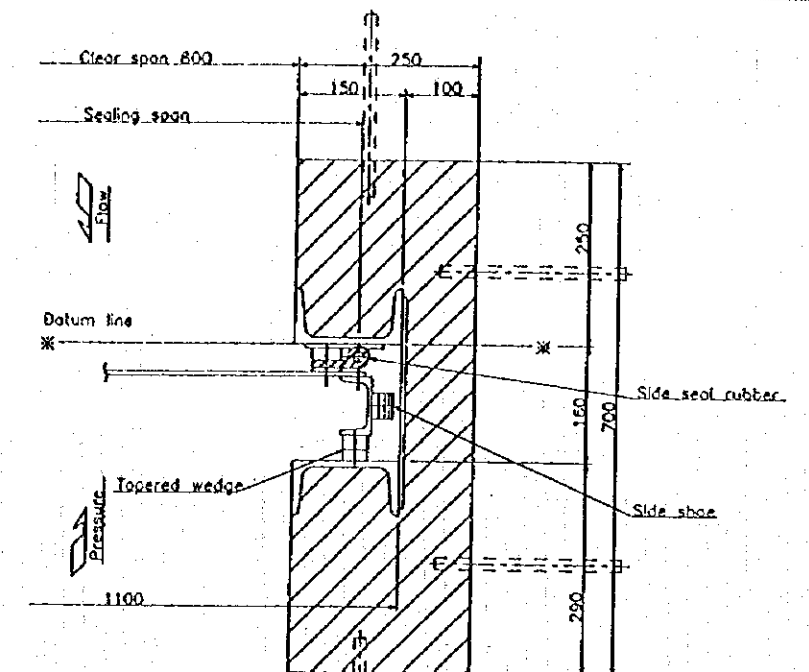


ELEVATION SCALE A

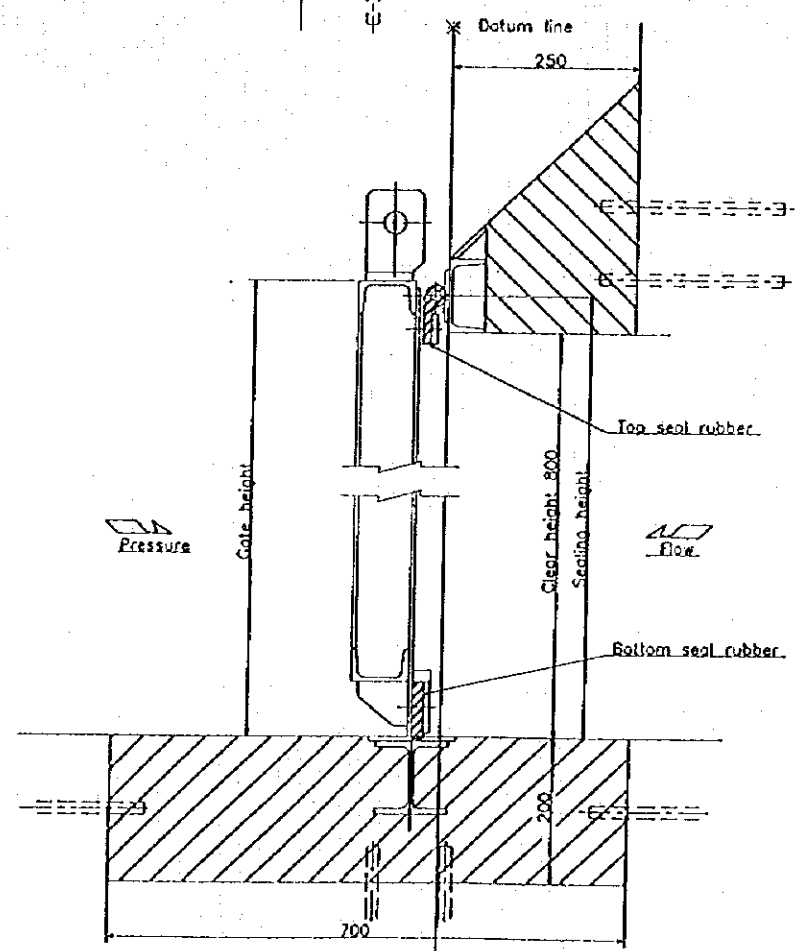
Conduit		No.	Levee type	EL (m)			H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)			HWL	Levee crest	Outlet			
0.8	0.8	SKM-4L	L(E)	0.948	1.477	-0.436	1.913	0.809	2.590



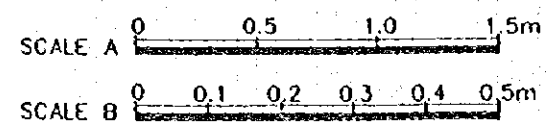
SCALE A



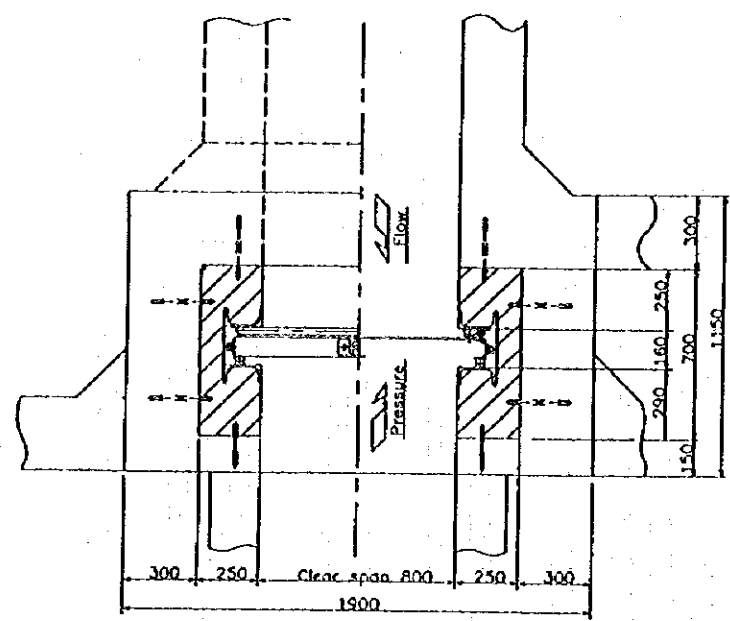
DETAIL OF SIDE SLOT SCALE B



DETAIL OF TOP AND BOTTOM SLOT SCALE B



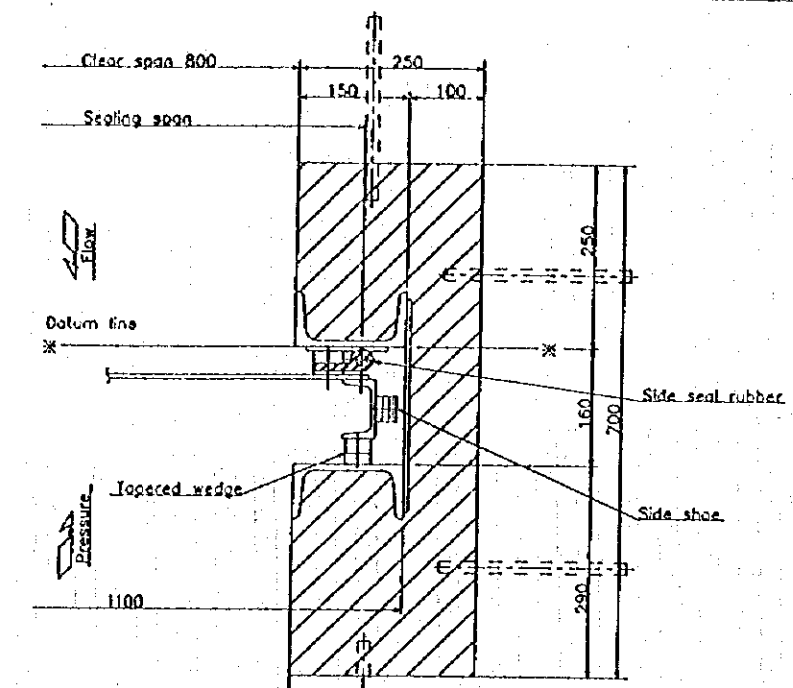
PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SLIDE GATE - GENERAL ARRANGEMENT 0.8m x 0.8m Levee Type L(E)	APPROVED
CHECKED.....		DWG NO.	DATE
SUBMITTED.....		J-30-20-017	
DATE.....			
REFERENCE			



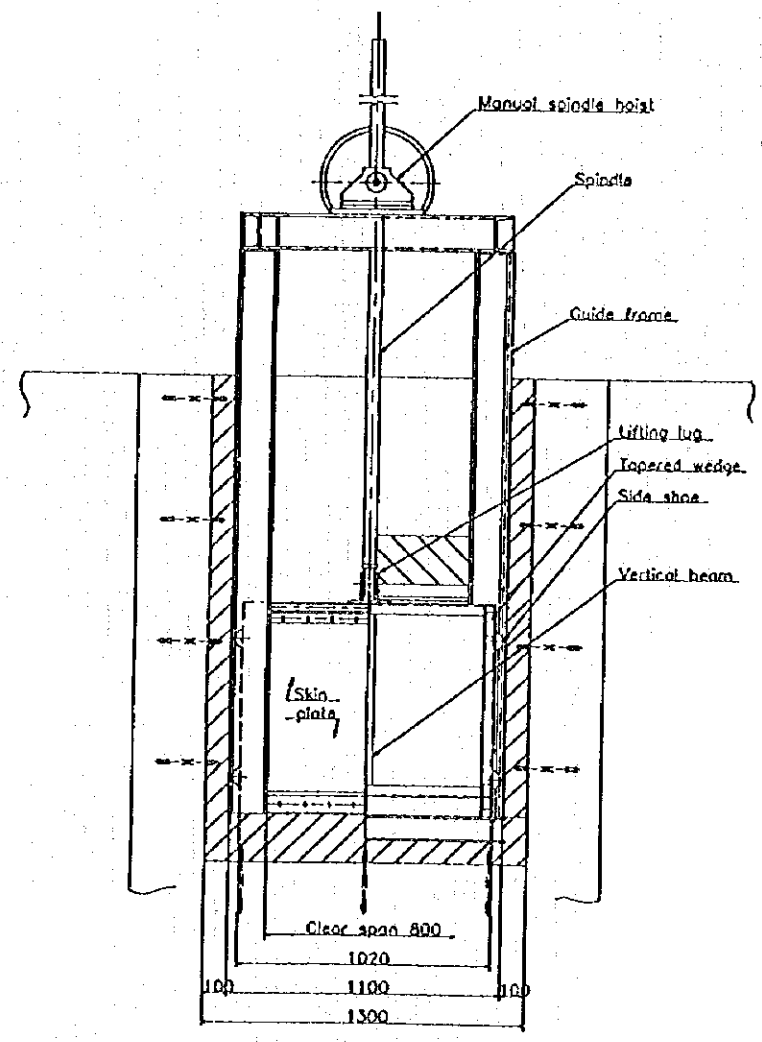
PLAN SCALE A

Conduit	Width (m)	Height (m)	No.	Levee type	El. (m)			H1 (m)	H2 (m)	H3 (m)
					HWL	Levee crest	Outlet			
	0.8	0.8	SKM-4R	R(I)	1.155	1.739	-0.065	1.804	0.808	2.460
	0.8	0.8	SKE-4L	R(I)	2.328	2.641	1.452	1.189	1.193	2.120
	0.8	0.8	SCW-7R	R(I)	2.257	2.692	0.853	1.839	0.807	2.510
	0.8	0.8	SGM-1L	R(I)	2.930	3.343	1.689	1.654	0.808	2.330
	0.8	0.8	SKM-5R	R(I)	1.280	1.868	0.101	1.767	0.805	2.440
	0.8	0.8	SKM-6R	R(I)	1.455	2.039	0.325	1.714	0.818	2.400
	0.8	0.8	SKE-1L	R(I)	1.425	1.970	0.523	1.447	0.805	2.120
	0.8	0.8	SKE-1R	R(I)	2.225	2.538	1.335	1.203	0.809	1.880
	0.8	0.8	STM-1L	R(I)	0.478	0.903	-0.607	1.510	0.802	2.180
	0.8	0.8	STM-1R	R(I)	0.478	0.903	-0.607	1.510	0.802	2.180
	0.8	0.8	SGM-3L	R(I)	3.115	3.519	1.883	1.635	0.805	2.310
	0.8	0.8	SGM-1R	R(I)	2.609	3.019	1.532	1.487	0.805	2.160
	0.8	0.8	SCW-2R	R(I)	2.930	3.343	1.689	1.654	0.808	2.330

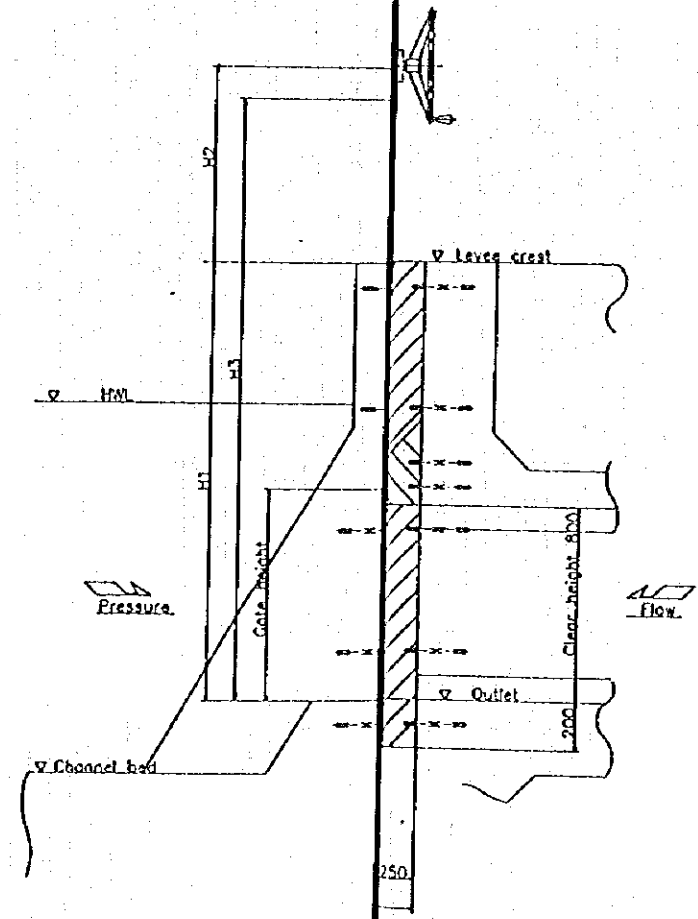
Datum line



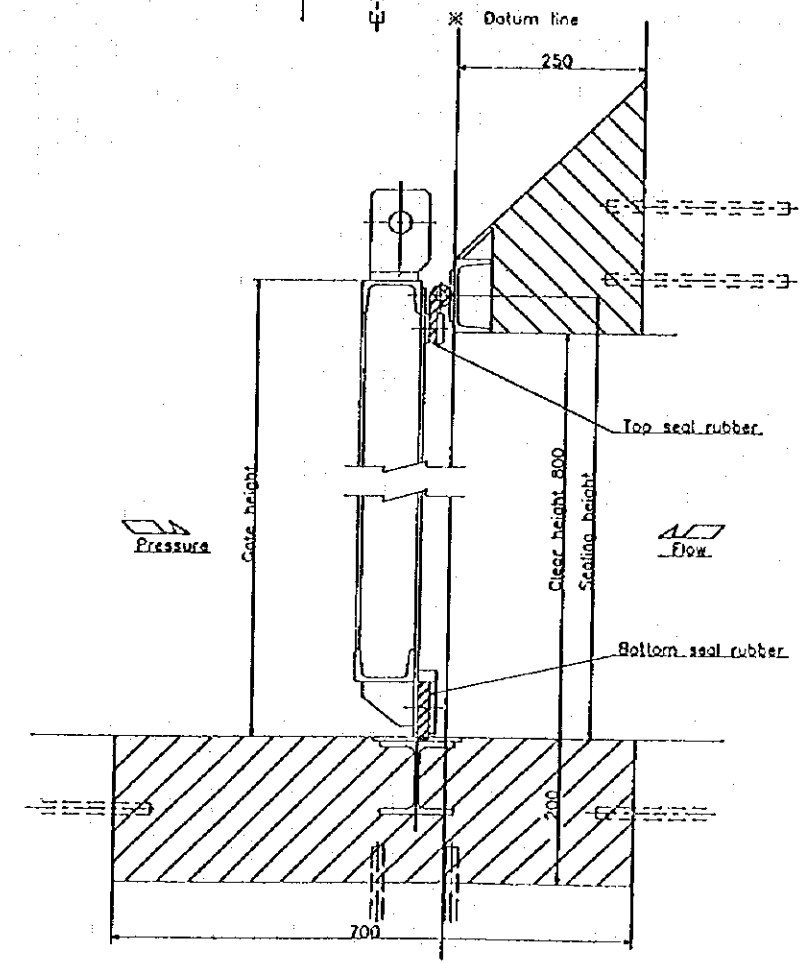
DETAIL OF SIDE SLOT SCALE B



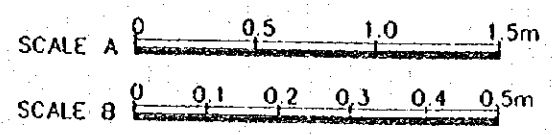
ELEVATION SCALE A



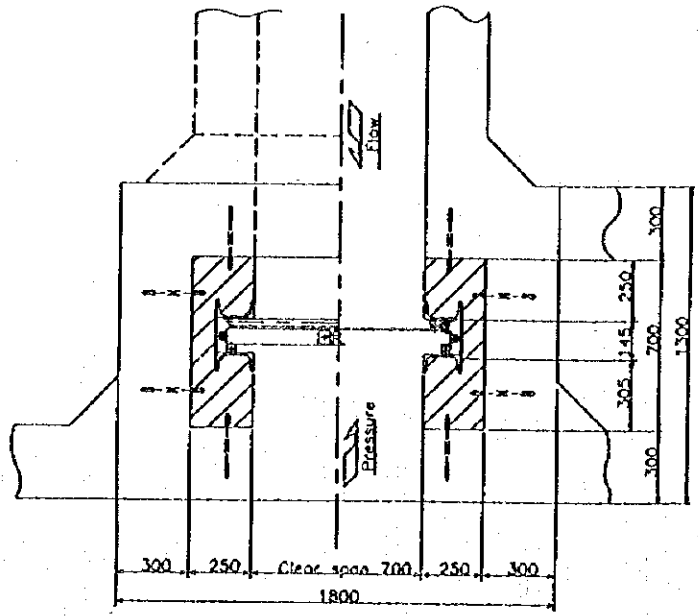
SCALE A



DETAIL OF TOP AND BOTTOM SLOT SCALE B

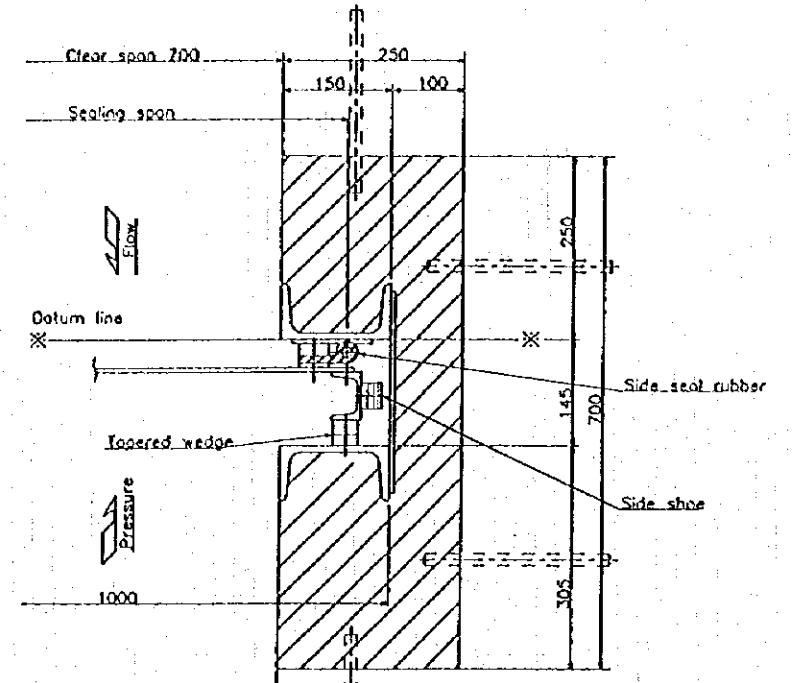


PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES SLUICE GATE, GENERAL ARRANGEMENT 0.8m x 0.8m Levee Type R(I), R(II)	APPROVED
CHECKED.....		DWG NO.	DATE
SUBMITTED.....		J-30-20-019	
DATE.....			
REFERENCE.....			

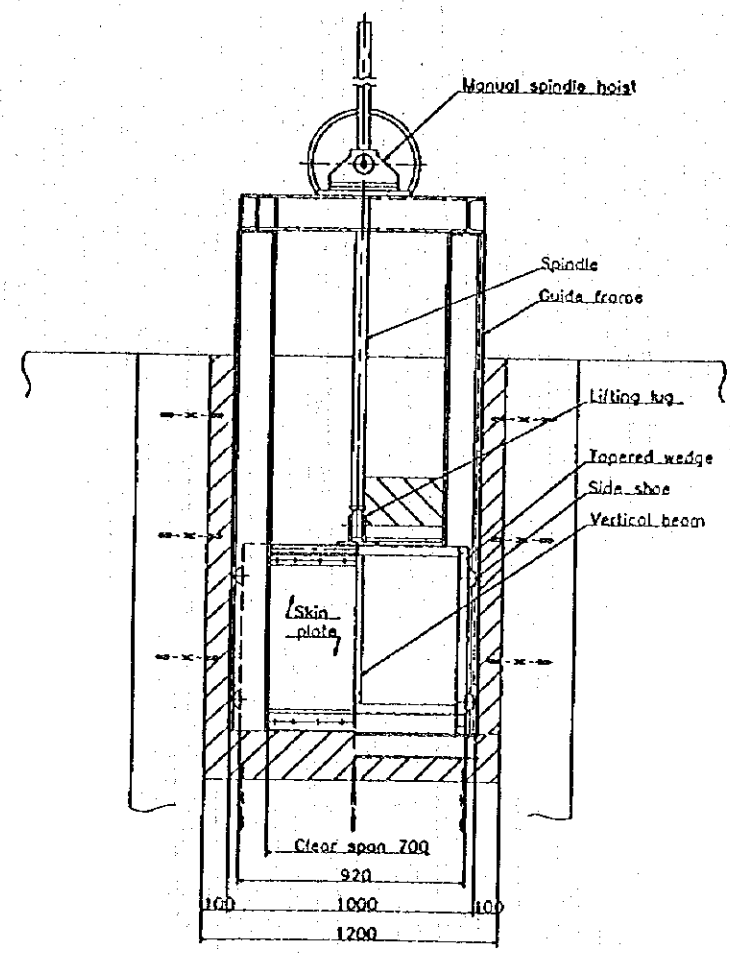


PLAN SCALE A

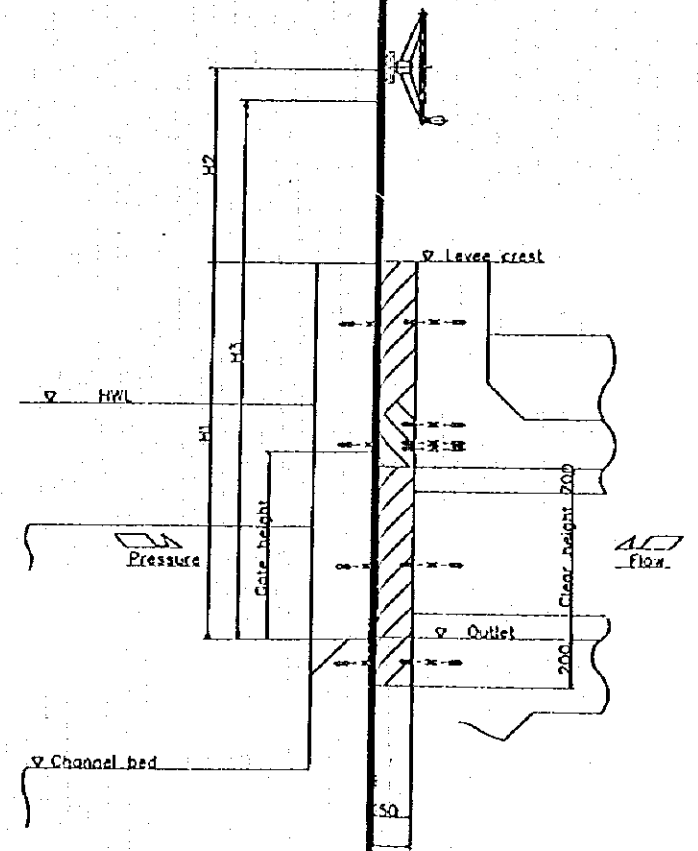
Conduit		No.	Levee type	EL (m)			H1 (m)	H2 (m)	H3 (m)
Width (m)	Height (m)			HWL	Levee crest	Outlet			
0.7	0.7	SKM-7L	L(P)	1.207	1.794	0.243	1.551	0.801	2.220



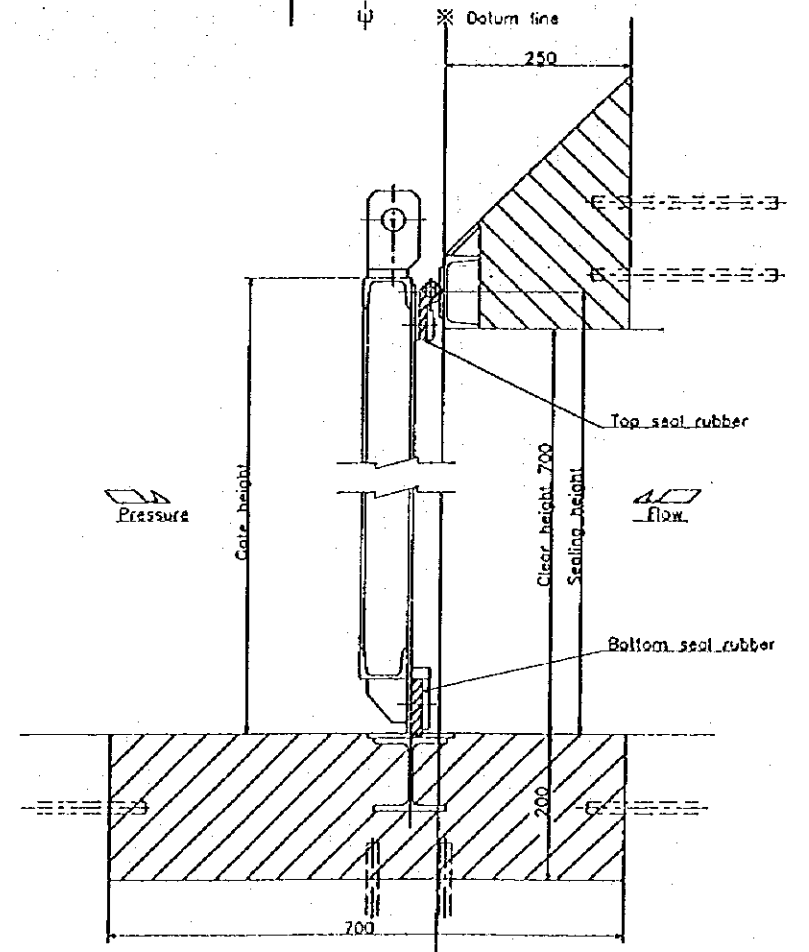
DETAIL OF SIDE SLOT SCALE B



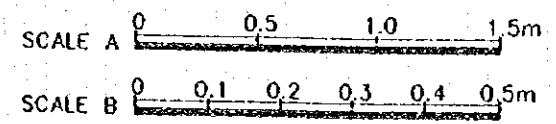
ELEVATION SCALE A



SCALE A

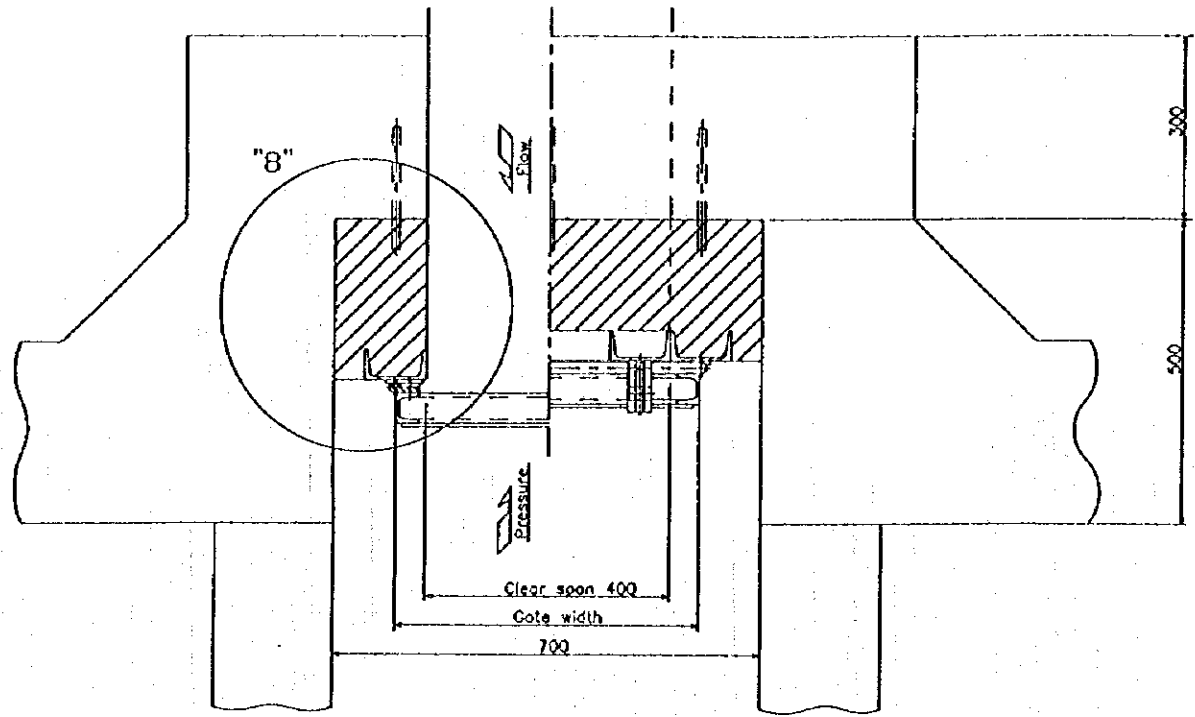


DETAIL OF TOP AND BOTTOM SLOT SCALE B

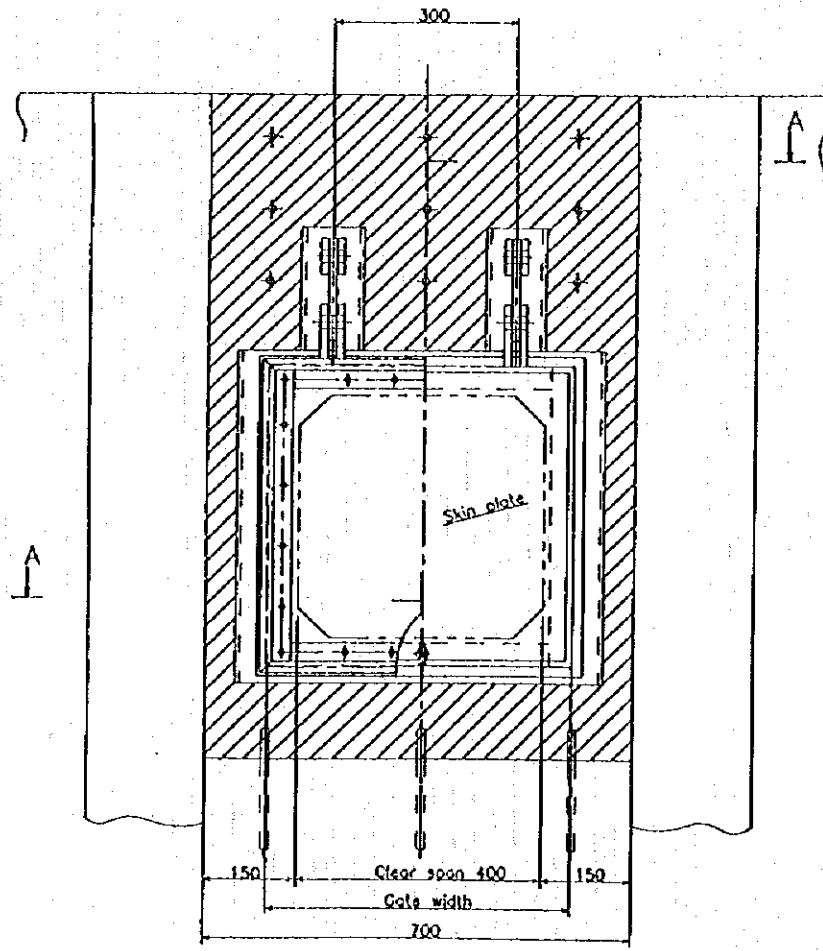


REFERENCE	PREPARED .....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED
	CHECKED .....		DRAINAGE FACILITIES SLIDE GATE, GENERAL ARRANGEMENT 0.7m x 0.7m Levee Type L(P)	
	SUBMITTED .....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO.	DATE
	DATE .....		J-30-20-020	



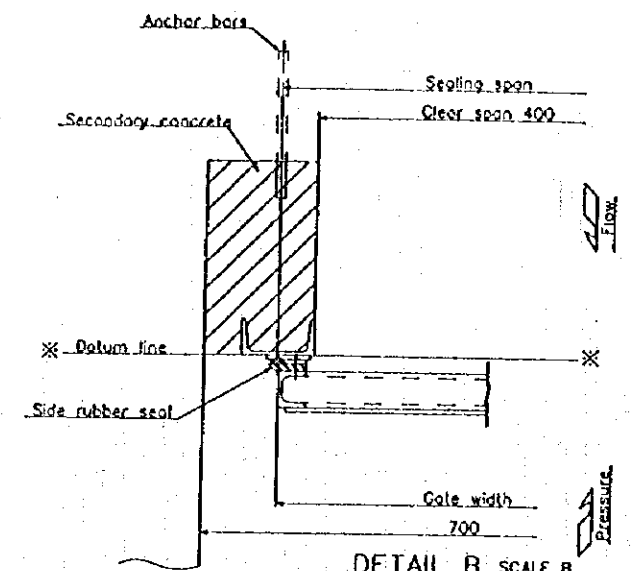


SECTION A-A SCALE A

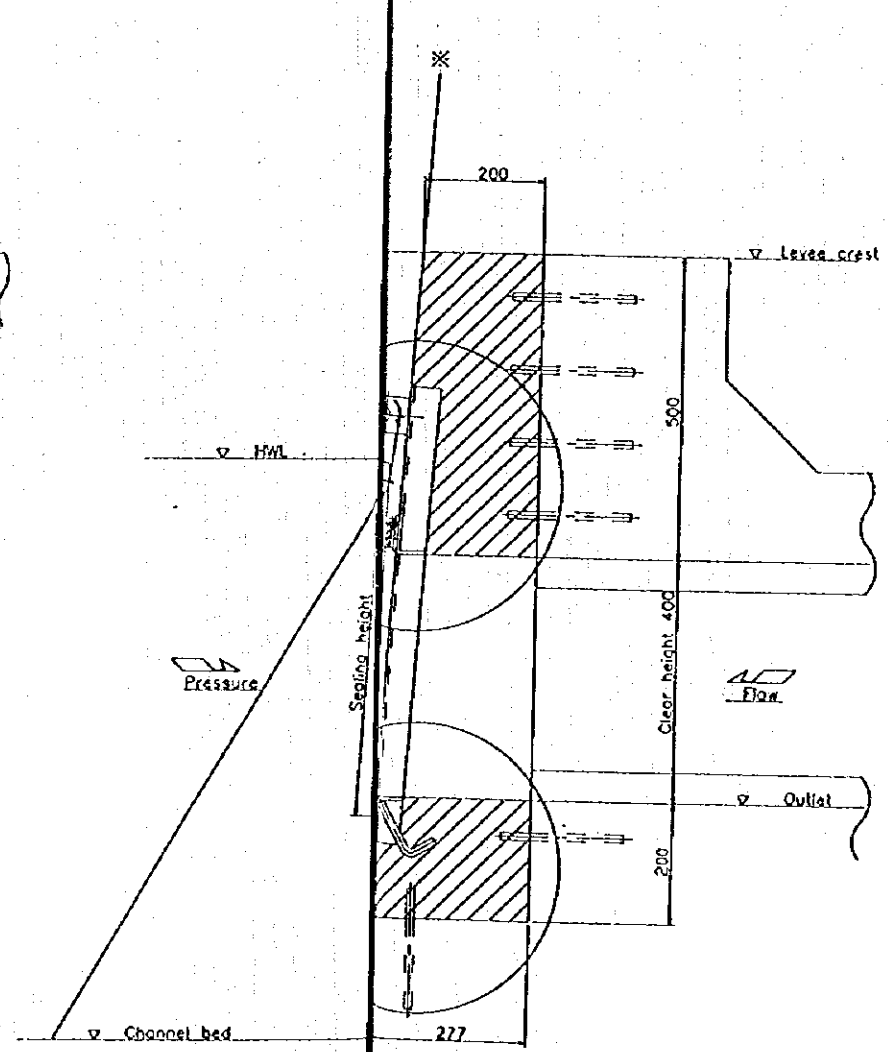


ELEVATION SCALE A

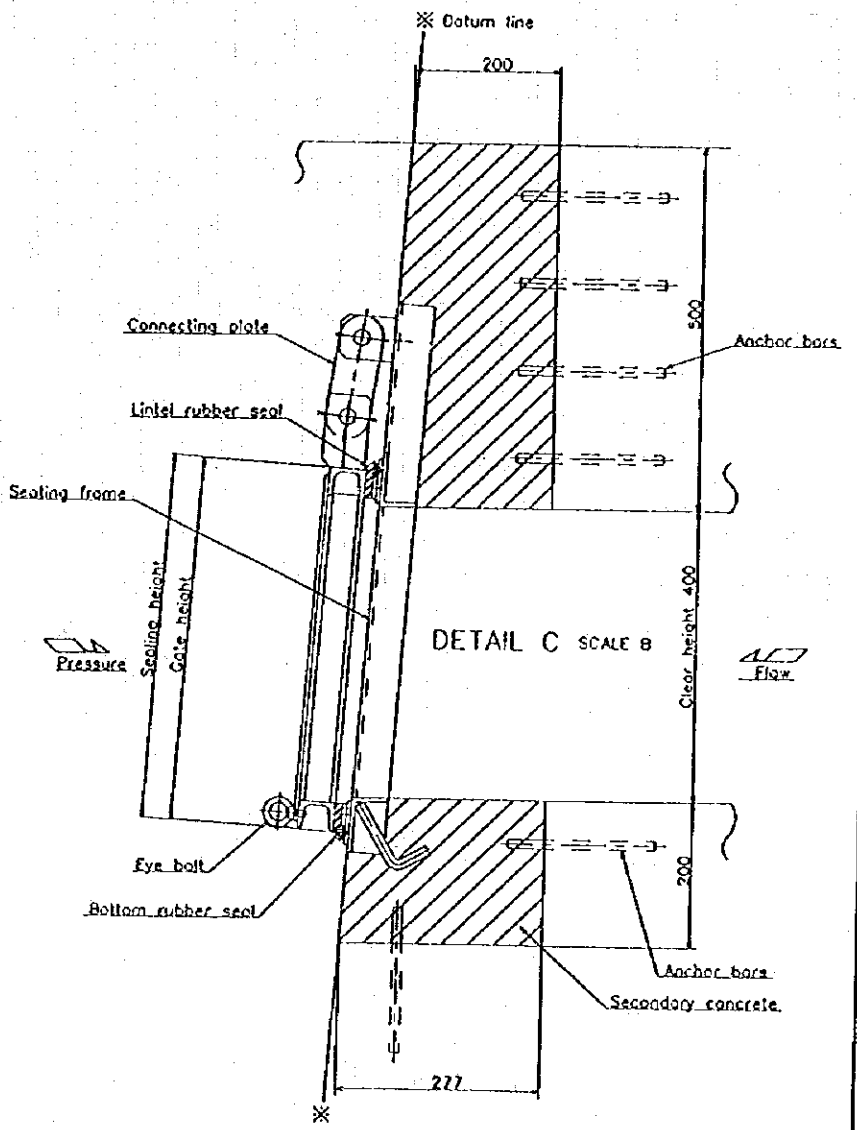
No.	Levee type	Q'ty	EL (m)		
			HWL	Levee crest	Outlet
SKE-2L	R(II)	1	1.836	2.174	1.274
SKE-3L	R(II)	1	1.916	2.242	1.342



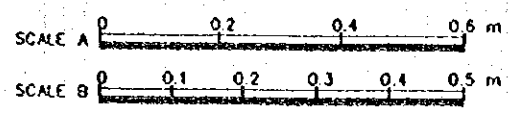
DETAIL B SCALE B



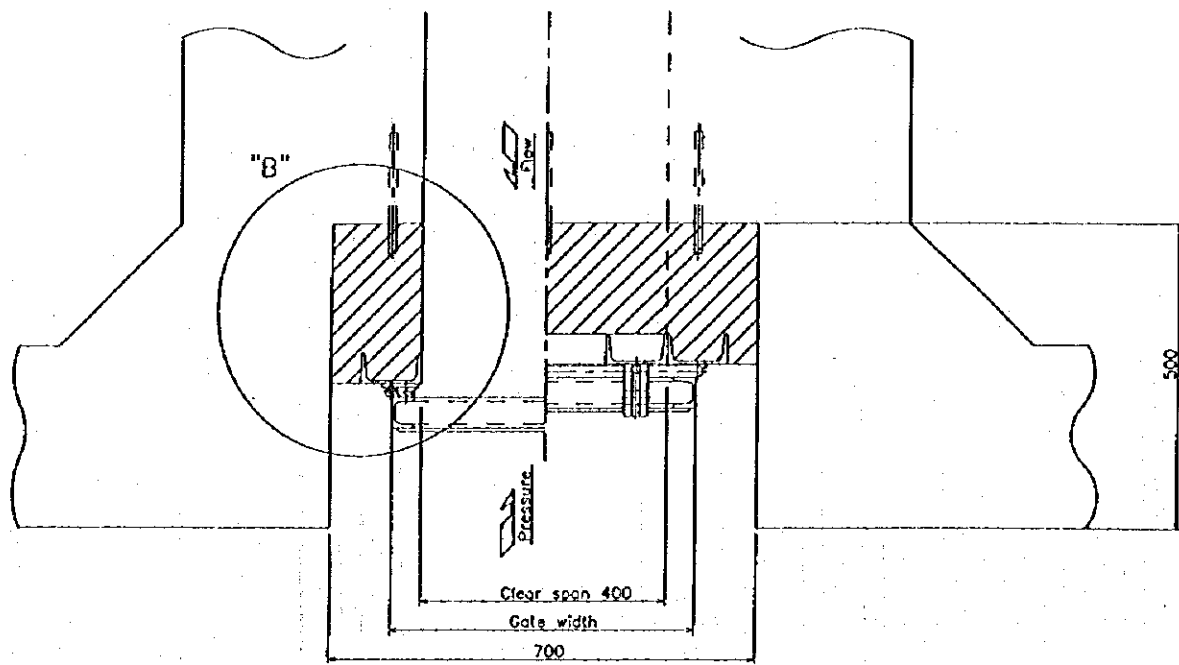
PROFILE SCALE A



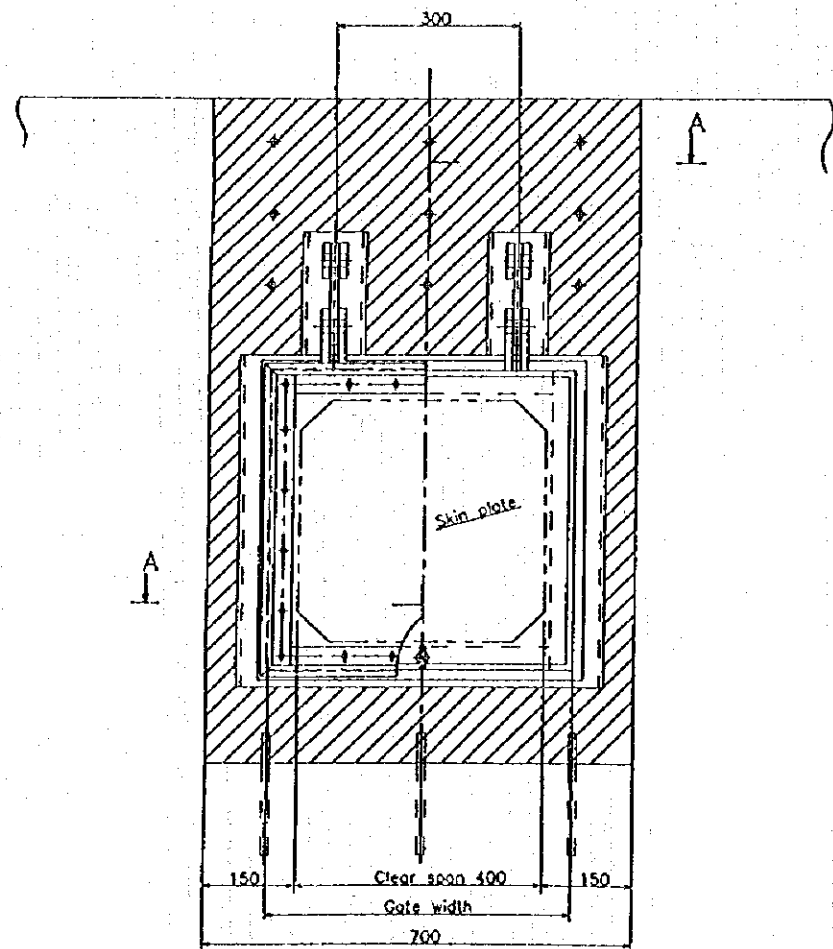
DETAIL C SCALE B



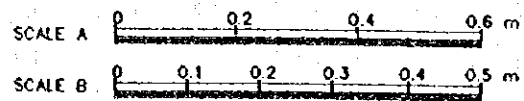
PREPARED .....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES FLAP GATE, GENERAL ARRANGEMENT 0.4m x 0.4m Levee Type R(II)	APPROVED
CHECKED .....		DWG NO.	DATE
SUBMITTED .....		J-30-20-021	
DATE .....			
REFERENCE .....			



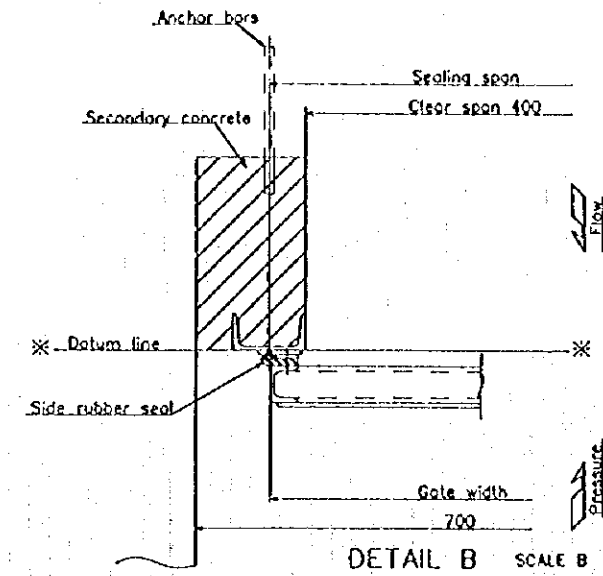
SECTION A-A SCALE A



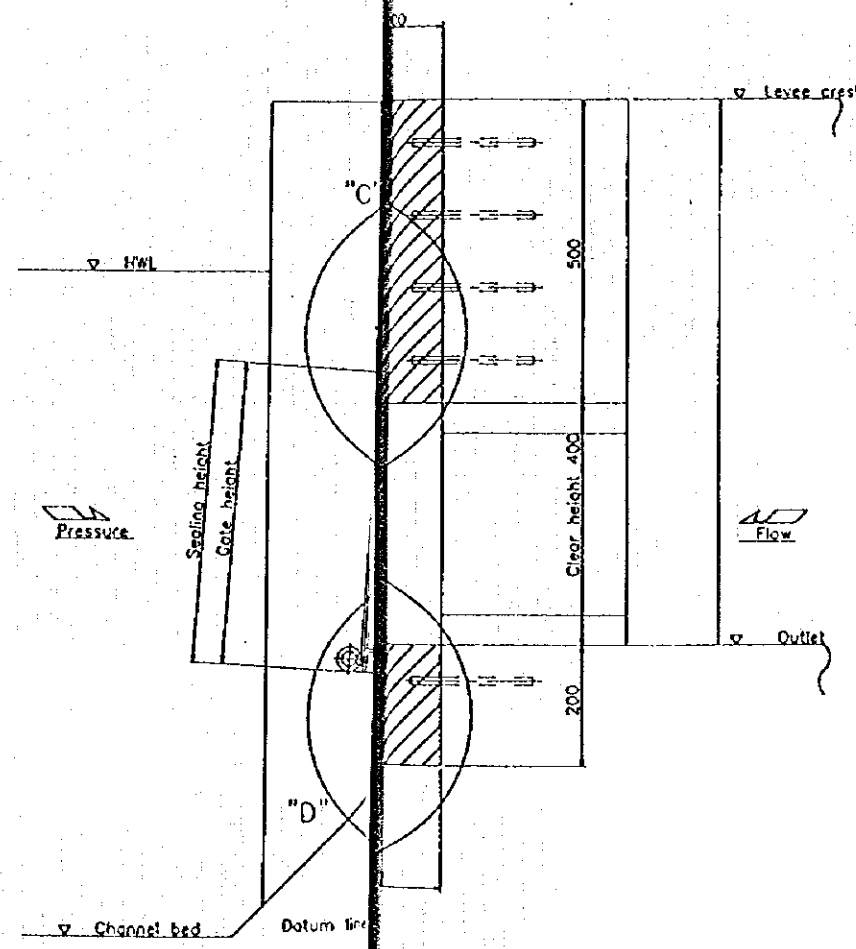
ELEVATION SCALE A



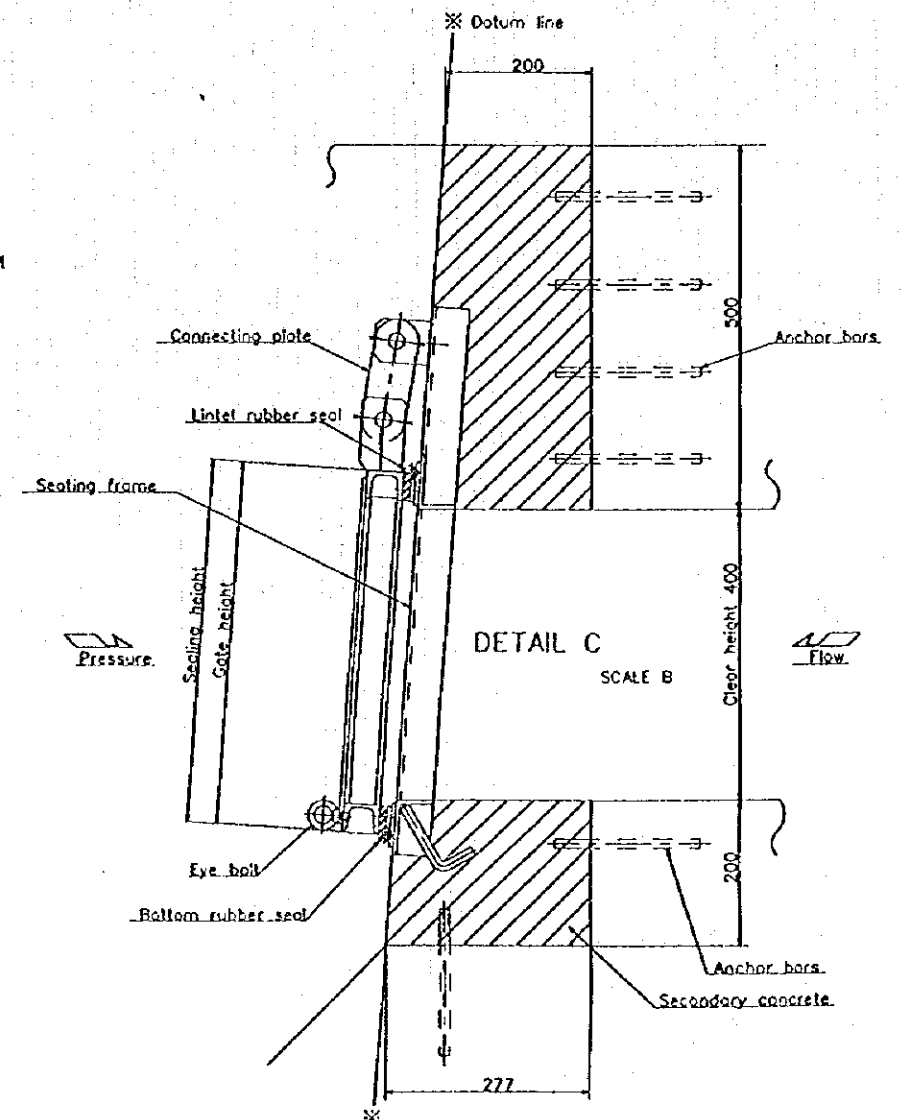
No.	Levee type	Q'ty	EL (m)		
			HWL	Levee crest	Outlet
SKE-5L	C(D)	1	2.645	2.925	2.025
SKE-3R	C(D)	1	2.649	2.925	2.025
STM-2R	C(L)	1	0.500	0.926	-0.290



DETAIL B SCALE B



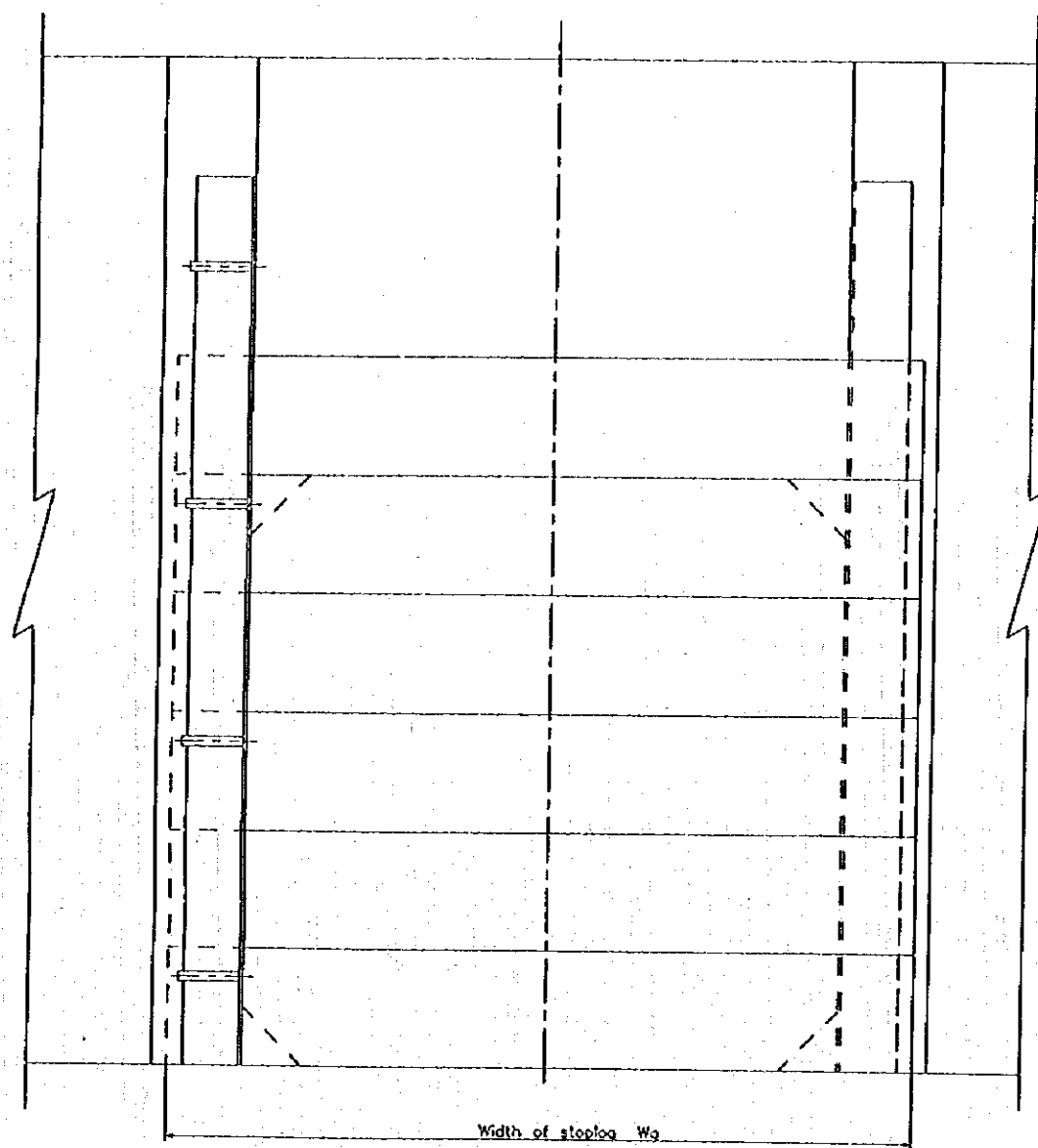
PROFILE SCALE A



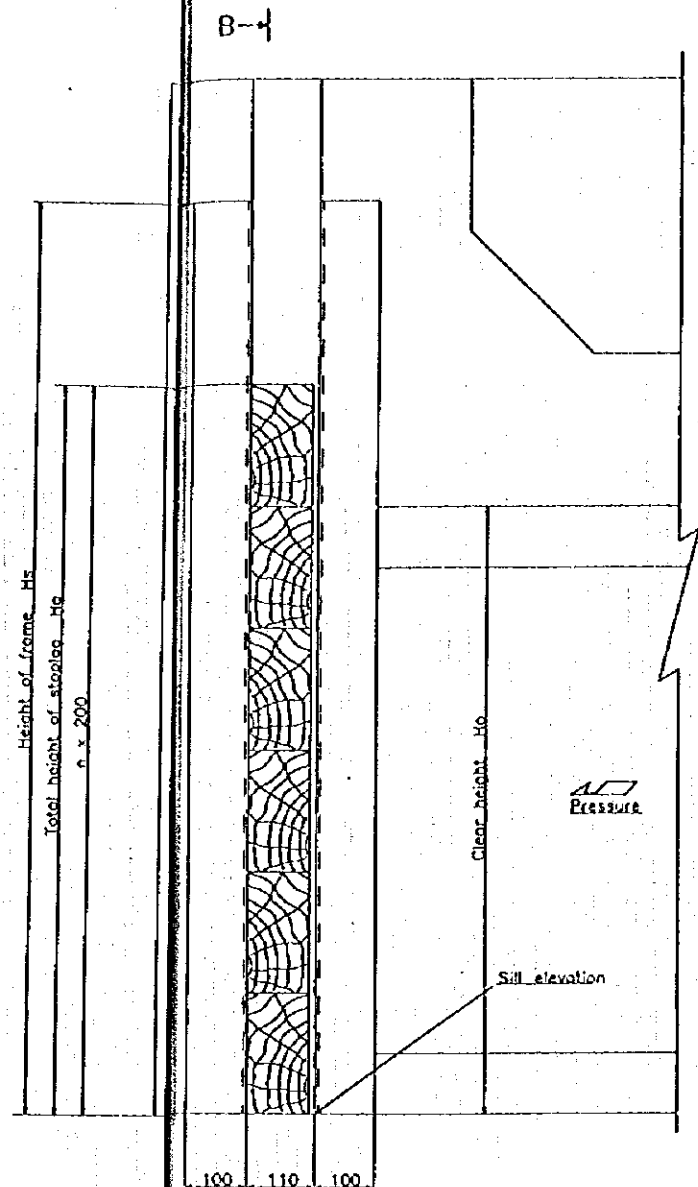
DETAIL C SCALE B

DETAIL D SCALE B

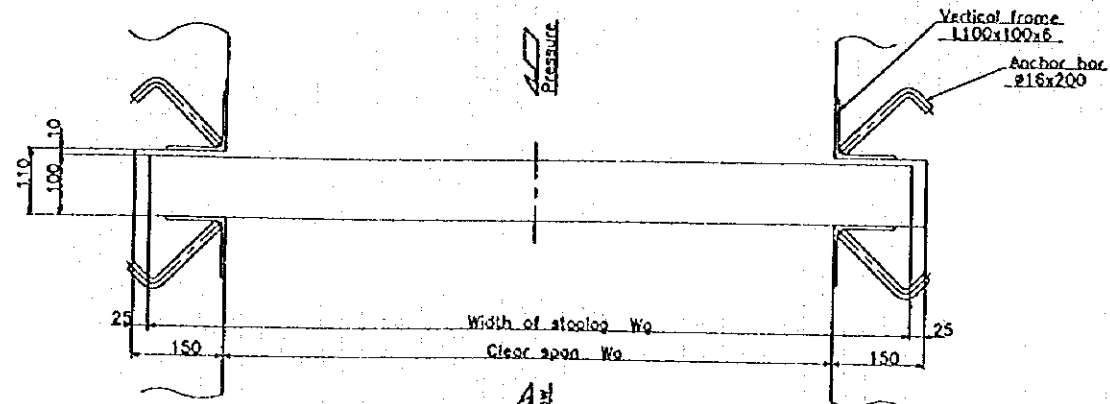
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	CHECKED .....		DWG NO.	DATE
	SUBMITTED .....		J-30-20-022	
	DATE .....			



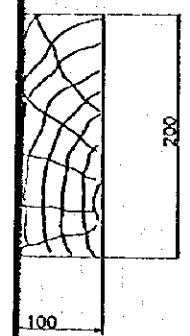
SECTION A-A SECTION B-B  
ELEVATION SCALE A



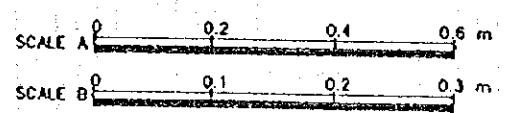
B-B  
PROFILE SCALE A



PLAN SCALE A

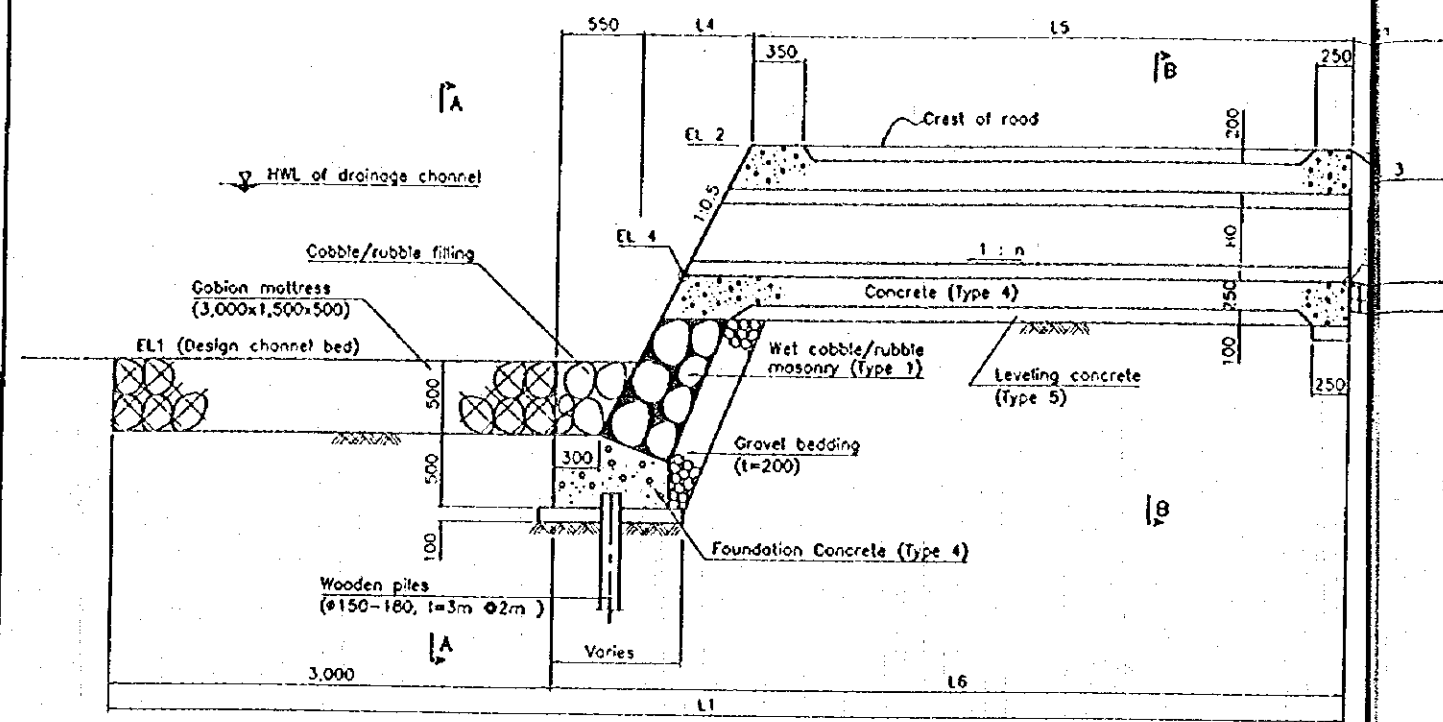


DETAIL OF STOPLOG SCALE B

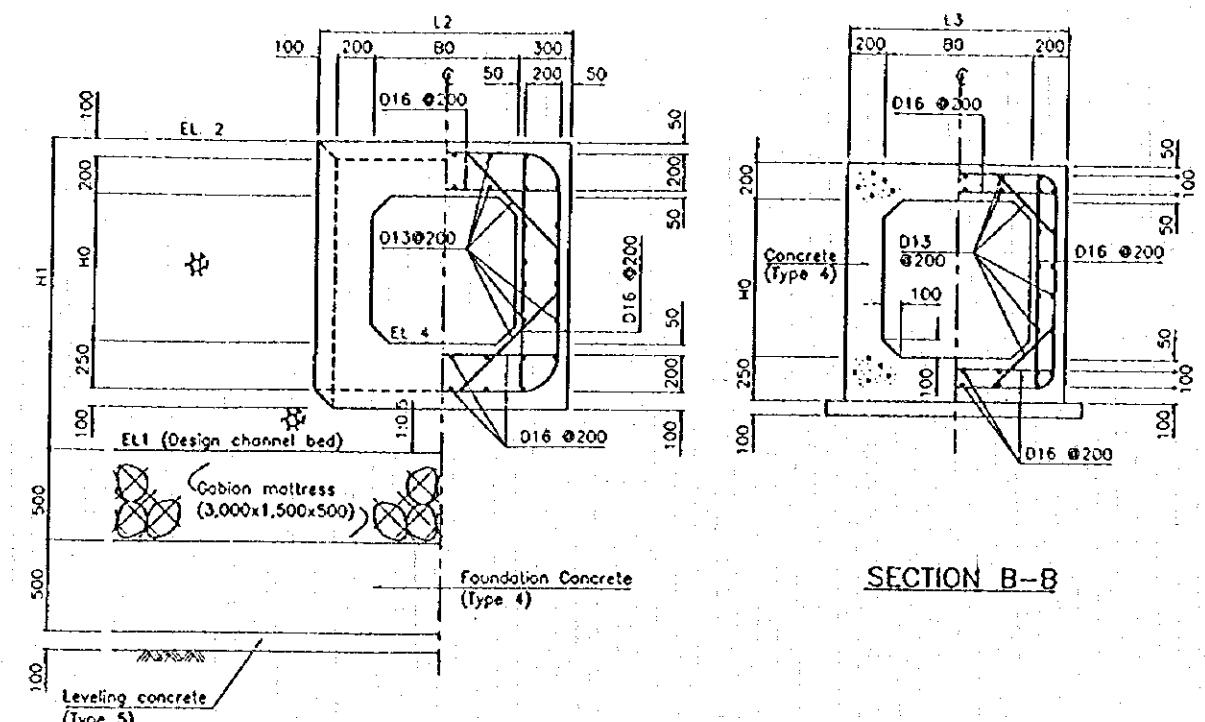


Stuice way No.	Opening		Stuice Hs (m)	Stoplog		n	Quantity Set(pcs)
	W0 (m)	H0 (m)		Wg (m)	Hg (m)		
SKM-1L	1.2	1.2	1.70	1.45	1.40	7	1(7)
SKM-2L	1.1	1.1	1.50	1.35	1.20	6	1(6)
SKM-3L	1.5	1.3	1.70	1.75	1.40	7	1(7)
SKM-4L	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKM-5L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SKM-6L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SKM-7L	0.7	0.7	1.10	0.85	0.80	4	1(4)
SKM-8L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SKM-1R	1.1	1.1	1.50	1.35	1.20	6	1(6)
SKM-2R	1.2	1.2	1.70	1.45	1.40	7	1(7)
SKM-3R	1.3	1.3	1.70	1.55	1.40	7	1(7)
SKM-4R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKM-5R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKM-6R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKM-7R	1.0	1.0	1.50	1.25	1.20	6	1(6)
SKE-1L	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKE-2L	0.4	0.4	0.90	0.65	0.60	3	1(3)
SKE-3L	0.4	0.4	0.90	0.65	0.60	3	1(3)
SKE-4L	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKE-5L	0.4	0.4	0.90	0.65	0.60	3	1(3)
SKE-1R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SKE-2R	0.9	0.9	1.30	1.15	1.00	5	1(5)
SKE-3R	0.4	0.4	0.90	0.65	0.60	3	1(3)
STM-1L	0.8	0.8	1.30	1.05	1.00	5	1(5)
STM-2L	1.0	1.0	1.50	1.25	1.20	6	1(6)
STM-3L	0.8	0.8	1.30	1.05	1.00	5	1(5)
STM-4L	1.0	1.0	1.50	1.25	1.20	6	1(6)
STM-1R	0.8	0.8	1.30	1.05	1.00	5	1(5)
STM-2R	0.4	0.4	0.90	0.65	0.60	3	1(3)
STM-3R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SNM-1R	1.1	1.1	1.50	1.35	1.20	6	1(6)
SCM-1L	1.3	1.3	1.70	1.55	1.40	7	1(7)
SCM-2L	1.2	1.2	1.70	1.45	1.40	7	1(7)
SCM-3L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SCM-4L	1.1	1.1	1.50	1.35	1.20	6	1(6)
SCM-5L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SCM-6L	1.1	1.1	1.50	1.35	1.20	6	1(6)
SCM-7L	1.1	1.1	1.50	1.35	1.20	6	1(6)
SCM-8L	0.9	0.9	1.30	1.15	1.00	5	1(5)
SCM-1R	1.2	1.2	1.70	1.45	1.40	7	1(7)
SCM-2R	1.2	1.2	1.70	1.45	1.40	7	1(7)
SCM-3R	1.0	1.0	1.50	1.25	1.20	6	1(6)
SCM-4R	1.0	1.0	1.50	1.25	1.20	6	1(6)
SCM-5R	1.0	1.0	1.50	1.25	1.20	6	1(6)
SCM-6R	1.1	1.1	1.50	1.35	1.20	6	1(6)
SCM-7R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SGM-1L	0.8	0.8	1.30	1.05	1.00	5	1(5)
SGM-2L	1.0	1.0	1.50	1.25	1.20	6	1(6)
SGM-3L	0.8	0.8	1.30	1.05	1.00	5	1(5)
SGM-1R	0.8	0.8	1.30	1.05	1.00	5	1(5)
SGM-2R	0.8	0.8	1.30	1.05	1.00	5	1(5)

PREPARED .....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING DRAINAGE FACILITIES TIMBER STOPLOG GENERAL ARRANGEMENT CLEAR SPAN 1.5m, 1.3m, 1.2m, 1.1m, 1.0m, 0.9m, 0.8m, 0.7m, 0.4m	APPROVED
CHECKED .....		DWG NO.	DATE
SUBMITTED .....		J-30-20-024	
DATE .....			
REFERENCE			

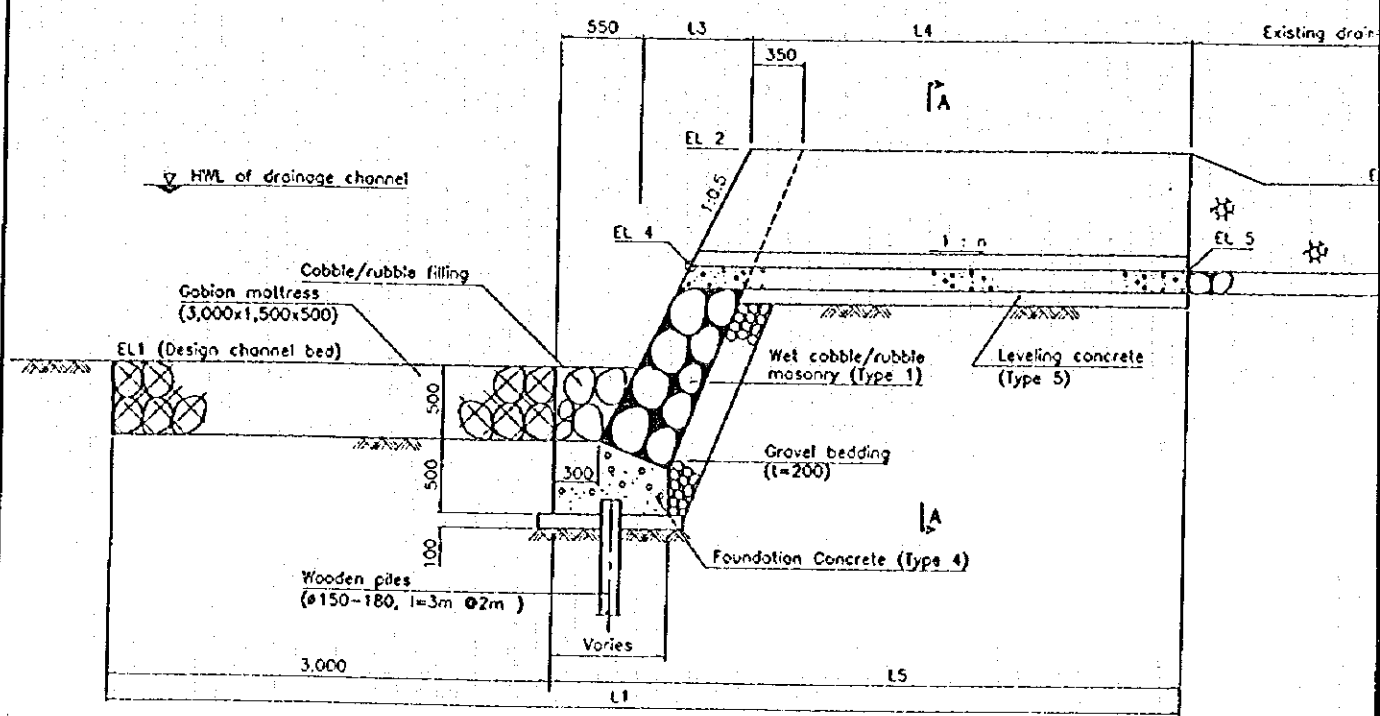


PLAN

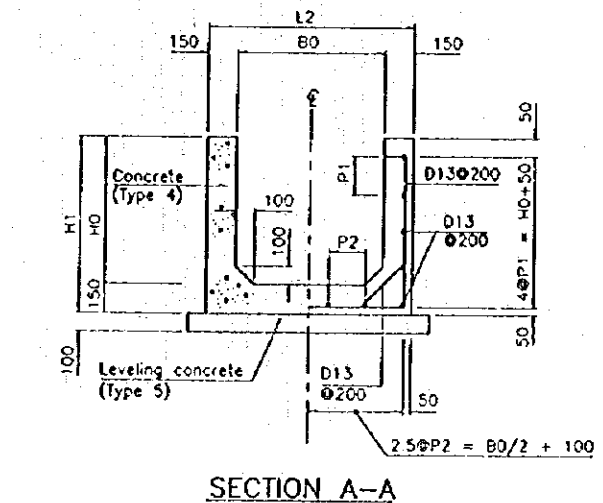


SECTION A-A

SECTION B-B



PLAN



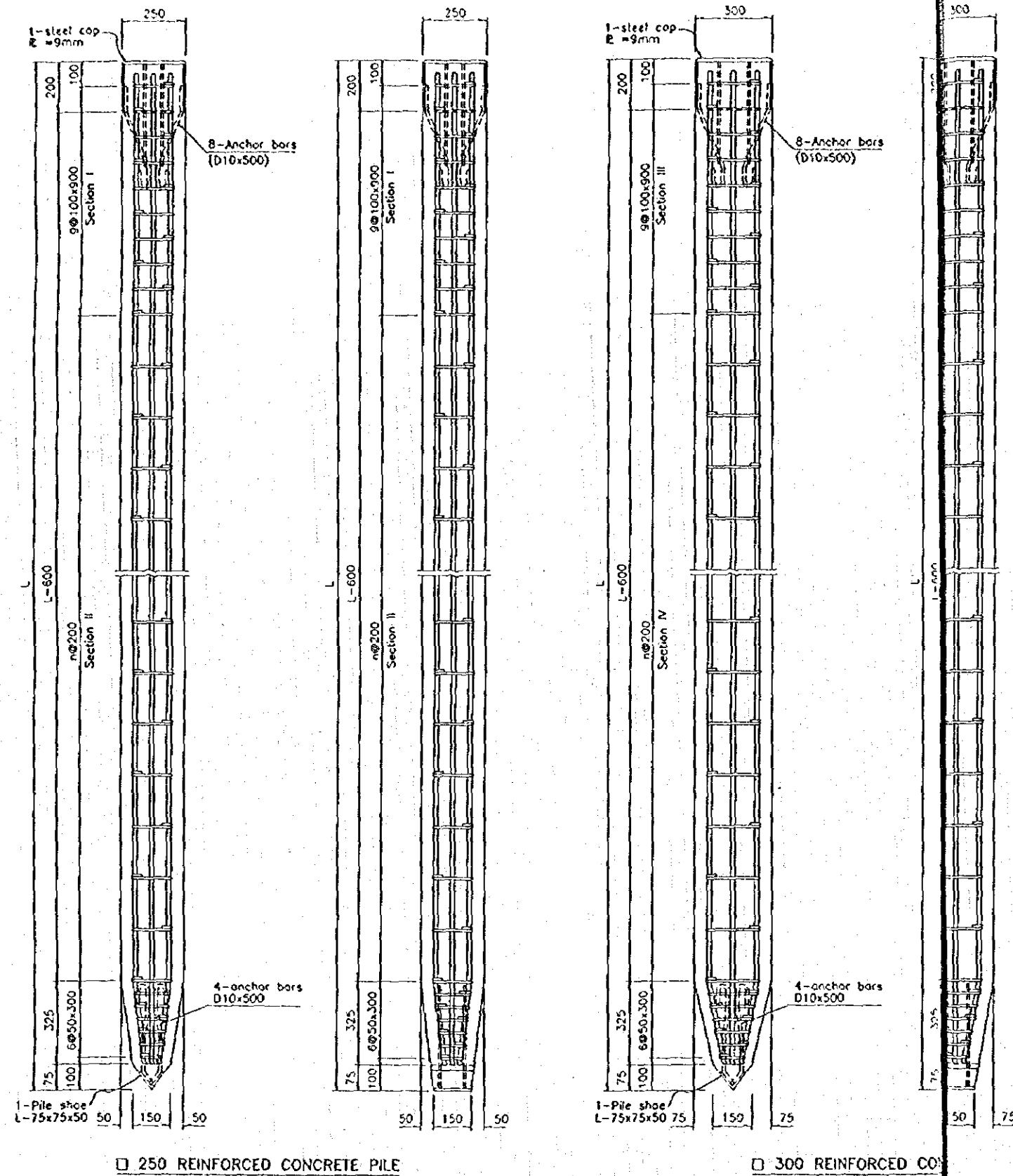
SECTION A-A

DIMENSION TABLE

SULVERTS (REVETMENT TYPE II SITES)																			
Left/Right	No.	Location*1	HWL (m)	EL1 (m)	EL2 (m)	EL3 (m)	EL4 (m)	EL5 (m)	EL6 (m)	L1 (m)	L2 (m)	L3 (m)	L4 (m)	L5 (m)	L6 (m)	n	B0 (m)	H0 (m)	H1 (m)
1) Kamal drainage channel (Branch)																			
Left	DKZ-1L	KE15-8m	1.982	0.783	2.229	1.9	1.391	1.517	2.417	11.418	1.200	1.000	0.788	7.100	8.418	80	0.8	0.8	1.538
Right	CKZ-1R	KE11-5m	1.425	0.223	1.970	1.4	0.883	0.959	2.059	11.524	1.400	1.200	0.874	7.100	8.524	80	0.8	0.8	1.747
RAIN-DITCHES (REVETMENT TYPE II SITES)																			
Left/Right	No.	Location*1	HWL (m)	EL1 (m)	EL2 (m)	EL3 (m)	EL4 (m)	EL5 (m)	EL6 (m)	L1 (m)	L2 (m)	L3 (m)	L4 (m)	L5 (m)	L6 (m)	n	B0 (m)	H0 (m)	H1 (m)
1) Kamal drainage channel (Branch)																			
Left	DKZ-1L	KE12-54m	2.141	0.933	2.449	2.1	1.844	1.887	-	7.308	1.100	0.758	3.000	4.308	-	80	0.8	0.8	0.950
Right	DKZ-2L	KE21-37m	2.206	1.011	2.517	2.2	1.912	1.934	-	5.303	0.900	0.750	1.000	2.303	-	80	0.8	0.8	0.750
2) Cade/Bor drainage channel																			
Left	DCM-2R	GM06-13m	2.702	1.140	3.117	2.8	2.310	2.334	-	5.639	0.900	0.988	1.000	2.539	-	80	0.8	0.8	0.650

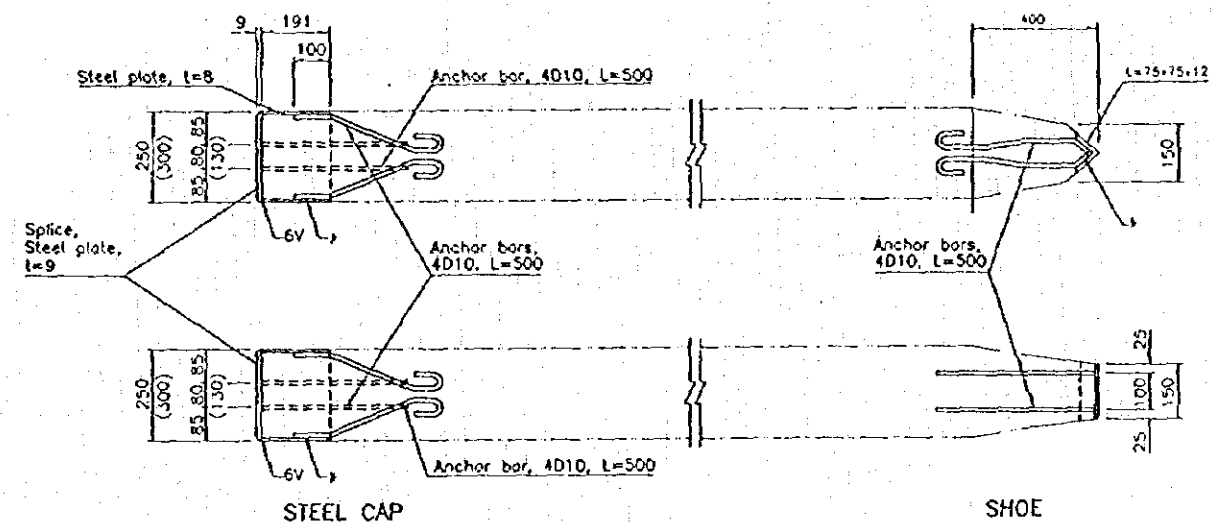
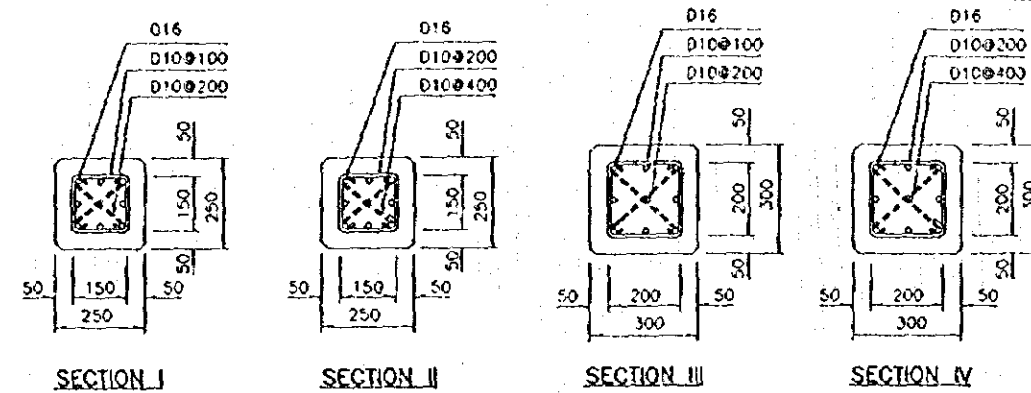
\*Based on cross section No. in topographic survey

PREPARED.....	MINISTRY OF PUBLIC WORK DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED
CHECKED.....		DRAINAGE FACILITIES, DRAINAGE CANAL	
SUBMITTED.....		DWG NO.	DATE
REFERENCE		J-30-30-101	



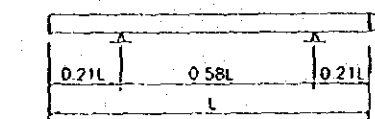
□ 250 REINFORCED CONCRETE PILE

□ 300 REINFORCED CONCRETE PILE

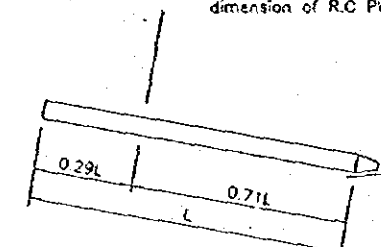


DETAILS OF STEEL CAP AND SHOE FOR REINFORCED CONCRETE PILE (250x250 AND 300x300)

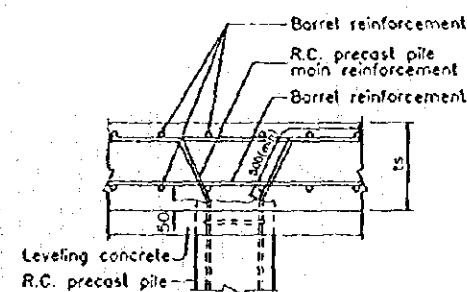
Note: Figures in parentheses show dimension of R.C. Pile (300x300)



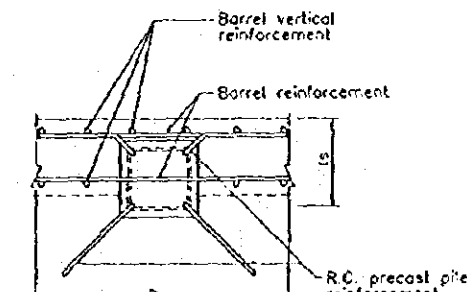
SUPPORTING POINTS FOR TRANSPORTATION & STAKING



SUPPORTING POINTS FOR INSTALLATION



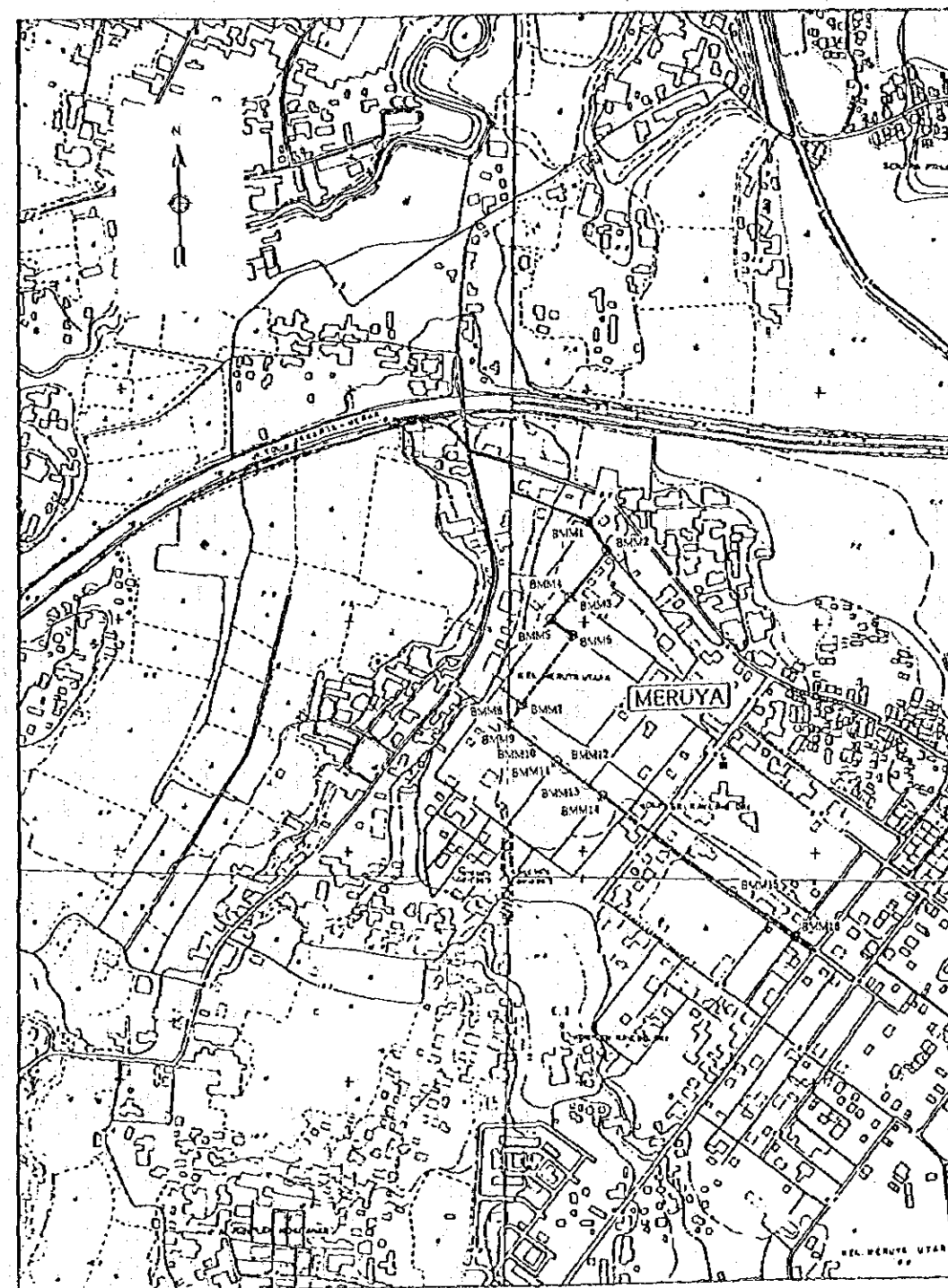
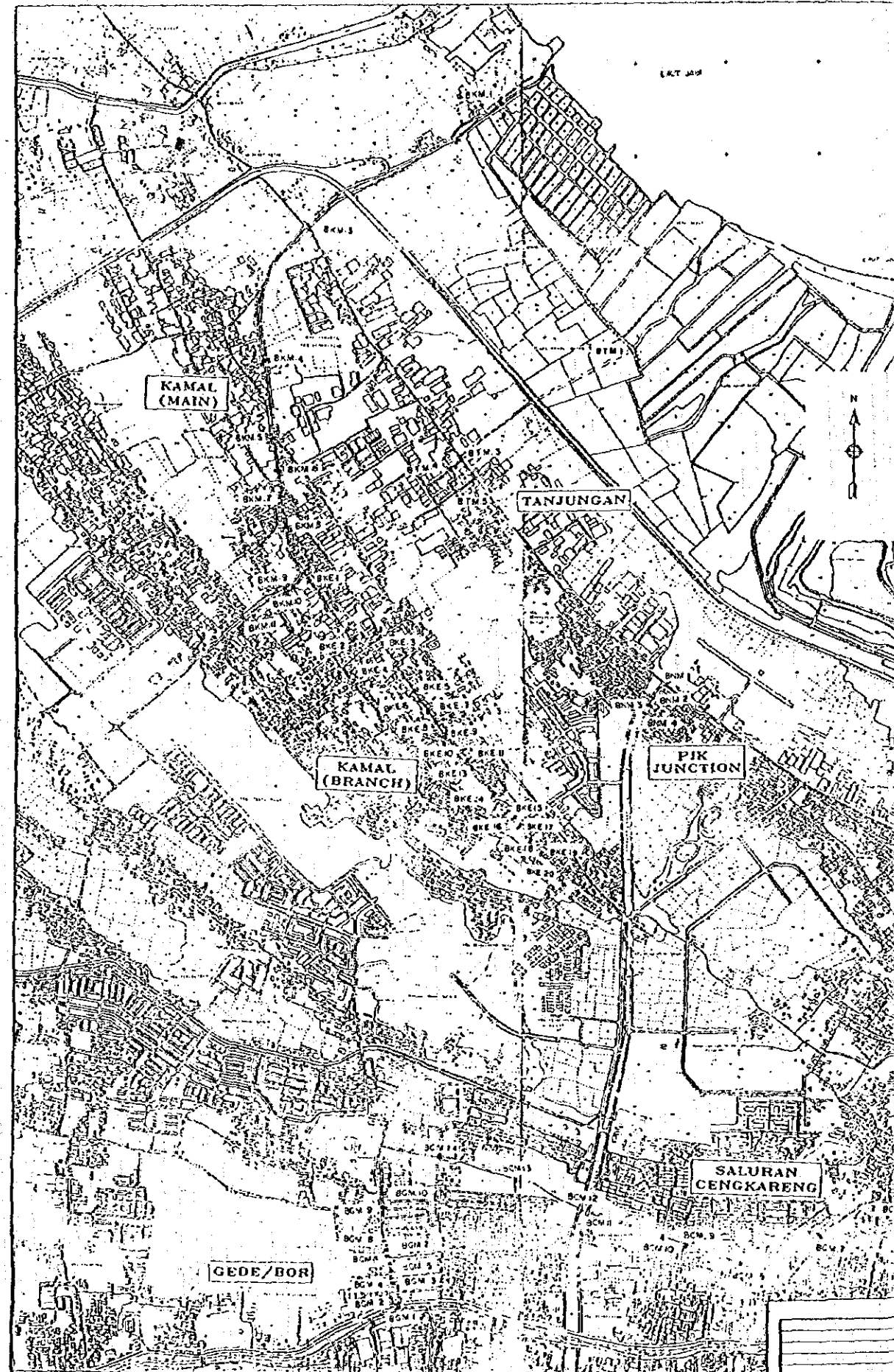
CROSS SECTION



PLAN

R.C. PILE - BOTTOM SLAB CONNECTION

REFERENCE	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED	
	CHECKED.....		DRAINAGE FACILITIES, MISCELLANEOUS DETAILS		
	SUBMITTED.....		DWG NO.		DATE
	DATE.....		J-50-40-001		



REFERENCE

PREPARED.....  
 CHECKED.....  
 SUBMITTED.....  
 DATE.....

MINISTRY OF PUBLIC WORKS  
 DIRECTORATE GENERAL OF HUMAN SETTLEMENTS

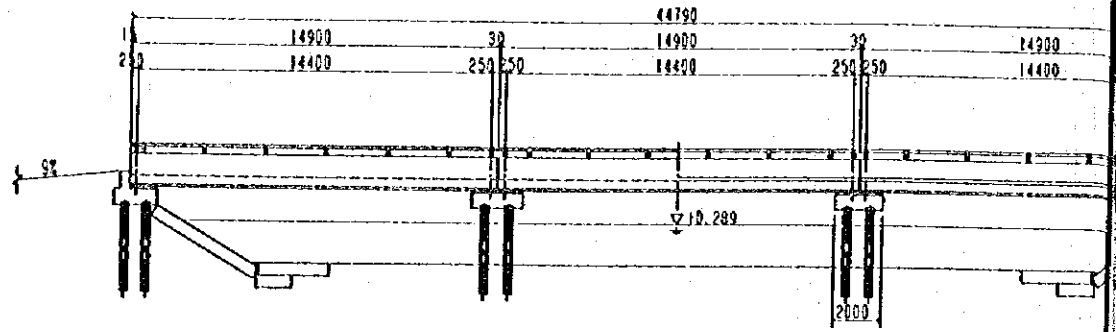
JAPAN INTERNATIONAL COOPERATION AGENCY  
 THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT  
 IN  
 THE CITY OF JAKARTA

TITLE OF DRAWING  
 LOCATION MAP OF BRIDGES

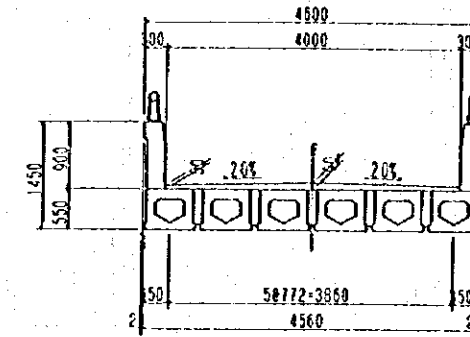
DWG NO  
 J - 60 - 00 - 001

APPROVED  
 DATE

SIDE VIEW SCALE A



CROSS SECTION SCALE B



QUADANT	PROPOSED HEIGHT	GROUND HEIGHT	ACCUMULATED DISTANCE	SHORT DISTANCE	STATION	PLANE CURVE
1	0.910	0.730	35.536	15.256		
2	2.283	1.930	22.360	0.230		
3	2.287		22.130	14.063		
4			7.465	7.465		
5			0.000	0.000		
6			7.465	7.465		
7			35.536	15.256		
8			30.792	15.256		

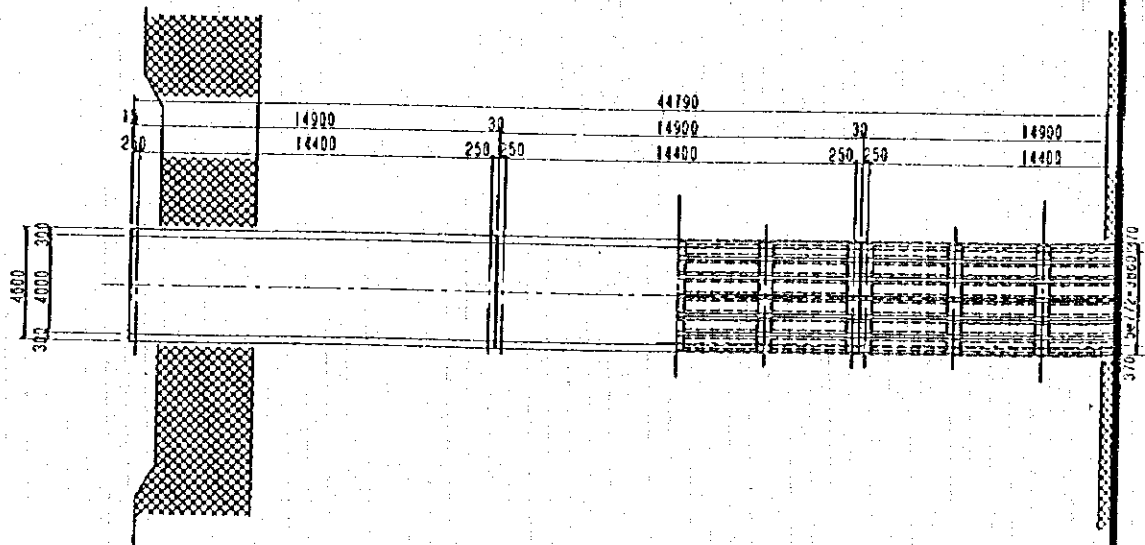
DESIGN CONDITION

BRIDGE NAME	BKM(KM2)
LIVE LOAD	BM 70
GIRDER LENGTH	14.90 m
SPAN LENGTH	14.40 m
WIDTH	4.60 m
BRIDGE ANGLE	90°

REACTION

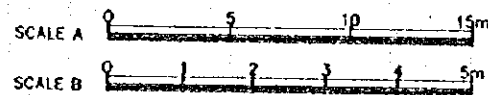
	ABUTMENT(II)	PIER(II)
DEAD LOAD	49.0	96.0
LIVE LOAD	20.0	20.0
TOTAL	69.0	116.0

PLAN SCALE A



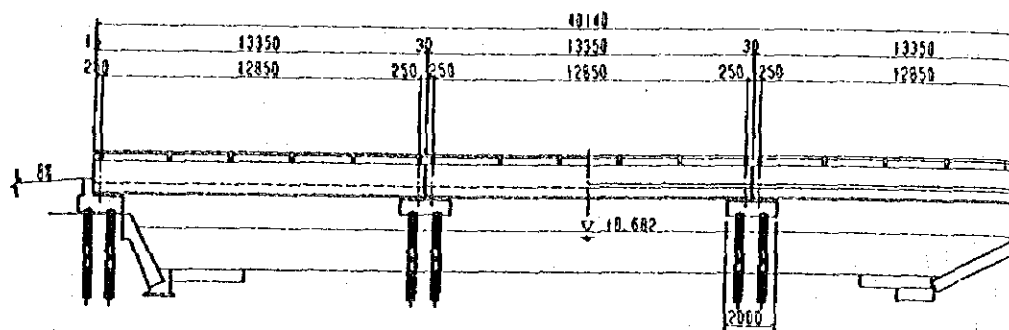
MATERIAL TABLE

KIND OF MATER.	NUMBER	UNIT	VOLUME	DESCRIPTION
CONCRETE	18	m <sup>3</sup>	13.9	BM70-07
FORM		m <sup>2</sup>	19.5	
ROADWAY PAVEMENT		m <sup>2</sup>	162.0	
SUB-CONCRETE		m <sup>3</sup>	---	
SIDE WALK SIDE BLOCK		m	---	
FILLING MORTAR		m <sup>3</sup>	---	
CONCRETE	18.3	m <sup>3</sup>	18.3	
FORM	150.5	m <sup>2</sup>	150.5	
RE-BAR	0.662	tf	0.662	
STEEL-RAILING	81.0	m	81.0	
DRAINAGE	12		12	
EXPANSION	18.4	m	18.4	
PC-TENDON	73		73	
LENGTH	4.440	m	4.440	
TOTAL LENGTH	346.320	m	346.320	
TOTAL WEIGHT	0.572	tf	0.572	
SHEATH	86.6	m	86.6	
GROUT	346.3	m	346.3	

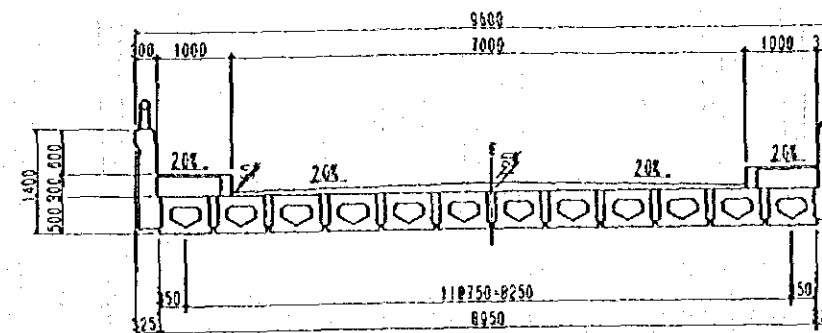


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	FILE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKM(KM2)	
SUBMITTED.....		DWG NO.	
DATE.....		J-70-10-101	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5%		1.5%		1.5%		1.5%	
PROPOSED HEIGHT	0.813		0.843		0.843		0.843	
GROUND HEIGHT	1.780		1.780		1.780		1.780	
ACQUILATED DISTANCE	79.005		79.005		79.005		79.005	
SHORT DISTANCE	28.740		30.500		49.115		49.115	
STATION	0.250		13.115		20.053		29.050	
PLANE CURVE	R=		R=		R=		R=	

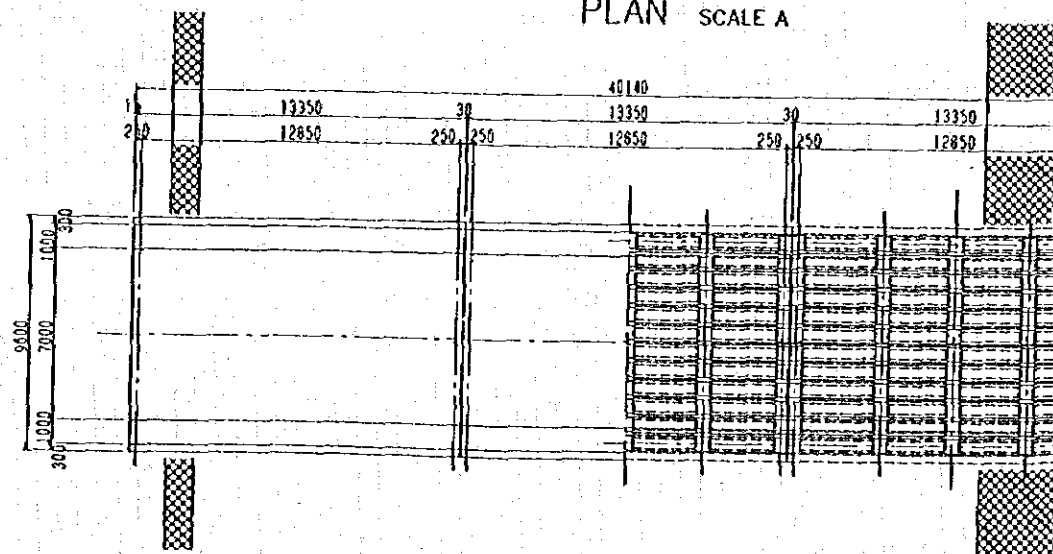
DESIGN CONDITION

BRIDGE NAME	BKMS(KM11-1)
LIVE LOAD	BM 70
GIRDER LENGTH	13.35 m
SPAN LENGTH	12.85 m
WIDTH	9.60 m
BRIDGE ANGLE	90°

REACTION

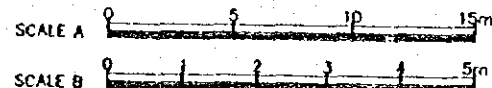
	ABUTMENT(I)	PIER(II)
DEAD LOAD	87.7	175.4
LIVE LOAD	40.0	40.0
TOTAL	131.8	225.6

PLAN SCALE A



MATERIAL TABLE

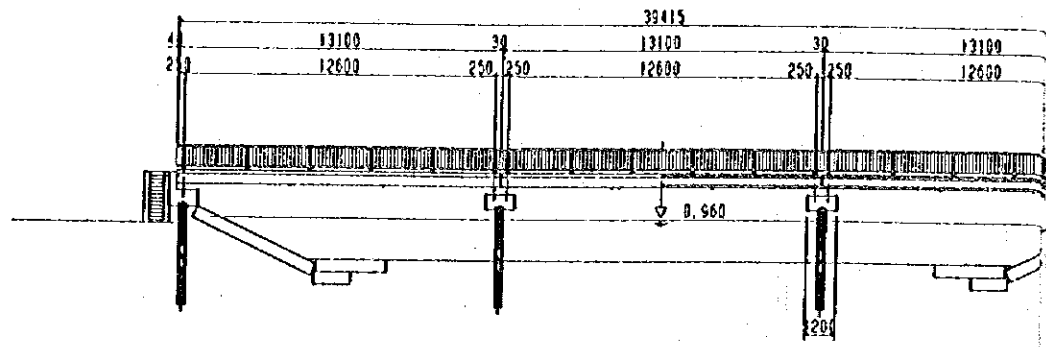
KIND OF MATERIAL	UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	36	BM70-06
CONCRETE	DESIGN STRENGTH	21.4	
FORMING	FORM	29.9	
MISCEL-LANEOUS	ROADWAY	PAVEMENT	259.4
		PAVEMENT	58.5
	SIDE WALK	SUB-CONCRETE	15.8
		SIDE BLOCK	74.1
		FILLING MORTAR	0.778
	GUARD RAIL	CONCRETE	26.4
		FORM	191.7
		RE-BAR	1.247
		STEEL-RAILING	74.1
	DRAINAGE	NUMBER	12
EXPANSION	m	38.4	
CROSS GIRDER	NUMBER	78	
	LENGTH	m	8.830
	TOTAL LENGTH	m	688.740
	TOTAL WEIGHT	tl	1.139
	SHEATH	m	171.5
GROUT	m	683.7	



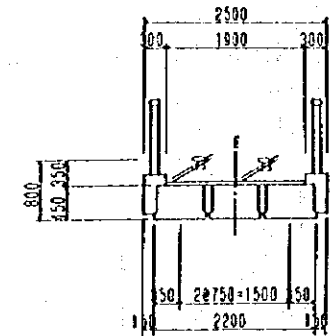
PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKMS(KM11-1)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO	DATE
DATE.....		J-70-10-102	



SIDE VIEW SCALE A

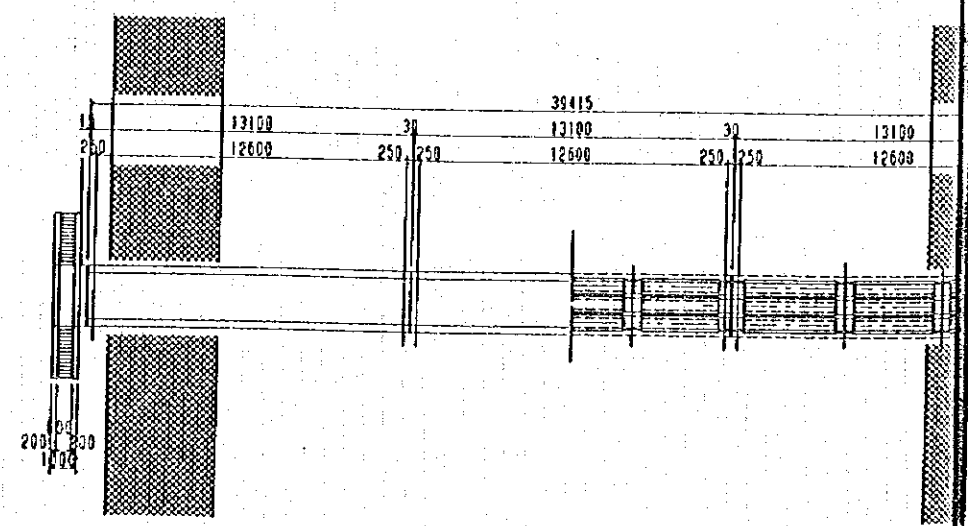


CROSS SECTION SCALE B



GRADIENT	1.5% $\frac{1.5}{10000}$		1.5% $\frac{1.5}{10000}$		1.5% $\frac{1.5}{10000}$	
PROPOSED	0.676	2.898	2.900	0.714	2.900	0.676
GROUND	0.678	1.000	0.714	0.000	0.714	0.678
ACROSS-LANE DISTANCE	39.605	12.600	0.565	0.000	0.565	39.605
SPAN DISTANCE	21.300	0.565	0.565	0.000	0.565	21.300
STATION	R=					

PLAN SCALE A



DESIGN CONDITION

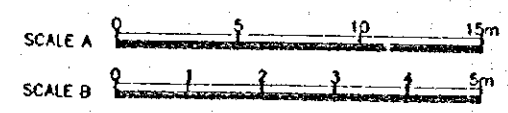
BRIDGE NAME	BKM4(KM15)
LIVE LOAD	HUMAN/ANIMALS
ORDER LENGTH	13.10 m
SPAN LENGTH	12.60 m
WIDTH	2.50 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	20.1	40.2
LIVE LOAD	4.0	8.1
TOTAL	24.1	48.3

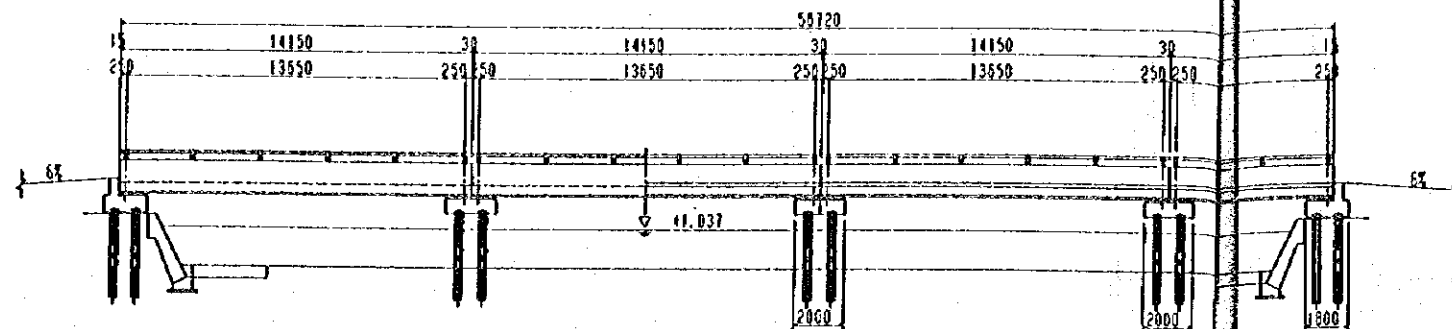
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN ORDER	NUMBER	no	9	PB-04
	CONCRETE DESIGN STRENGTH	m <sup>3</sup>	3.4	
FORMING	FORM	m <sup>2</sup>	5.3	
	ROADWAY PAVEMENT	m <sup>2</sup>	69.3	
MISCELLANEOUS	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>2</sup>	---	
	SIDE WALK	m	---	
	SIDE BLOCK	m	---	
	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	12.6	
	FORM	m <sup>2</sup>	91.7	
	RE-BAR	tf	0.594	
	STEEL-RAILING	m	72.9	
	DRAINAGE	NUMBER	8	
EXPANSION	NUMBER	m	10.0	
	NUMBER		36	
CROSS ORDER	PC-TENDON	m	2.080	
	TOTAL LENGTH	m	74.880	
	TOTAL WEIGHT	tf	0.124	
	SHEATH	m <sup>2</sup>	14.4	
CROUT	m	74.9		

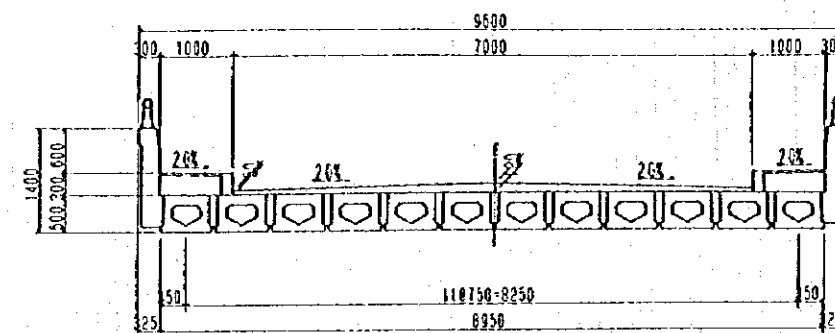


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED	
CHECKED.....		GENERAL PLAN OF BRIDGE BKM4(KM15)		
SUBMITTED.....		DWG NO		DATE
DATE.....		J-70-10-103		
REFERENCE				

SIDE VIEW SCALE A



CROSS SECTION SCALE B



PROPOSED HEIGHT	GROUND HEIGHT	ACCUMULATED DISTANCE	SHORT DISTANCE	STATION	PLANE CURVE
1.150	1.890	85.045	26.740		
3.050	1.390	30.900	30.360		
		28.345	0.290		
		28.095	13.615		
		14.180	14.180		
		0.000	0.000		R=∞
		-0.481	0.000		
		+3.202	13.915		
			0.250		
			28.345		
			30.500		
			26.740		

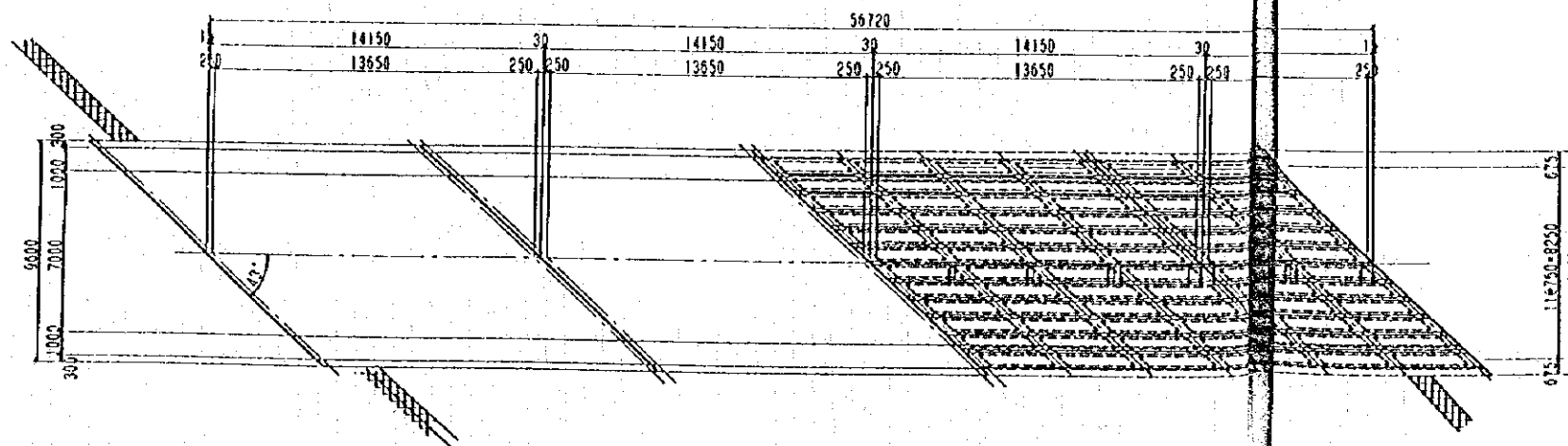
DESIGN CONDITION

BRIDGE NAME	BKMS(KM17-2)
LIVE LOAD	EM 70
GIRDER LENGTH	14.15 m
SPAN LENGTH	13.65 m
WIDTH	9.60 m
BRIDGE ANGLE	4.3°

REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	87.7	186.3
LIVE LOAD	40.0	40.0
TOTAL	131.8	226.3

PLAN SCALE A



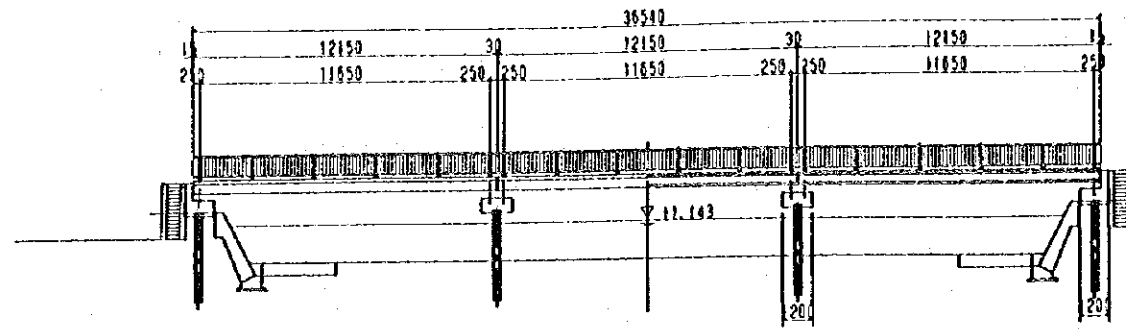
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION	
MAIN GIRDER	CONCRETE	no	36	BM70-06	
	DESIGN STRENGTH	m <sup>2</sup>	30.2		
FORMING	FORM	m <sup>2</sup>	42.2		
	ROADWAY	PAVEMENT	m <sup>2</sup>		366.6
MISCELLANEOUS		PAVEMENT	m <sup>2</sup>		62.7
		SUB-CONCRETE	m <sup>2</sup>		22.3
		SIDE BLOCK	m		104.7
		FILLING MORTAR	m <sup>3</sup>		1.10
		CONCRETE	m <sup>3</sup>		37.3
		FORM	m <sup>2</sup>		270.9
		RE-BAR	tf	1.760	
GUARD RAIL		STEEL-RAILING	m	104.7	
	DRAINAGE	NUMBER	16		
	EXPANSION	m	38.4		
CROSS GIRDER		NUMBER	104		
	PC-TENDON	LENGTH	m	8.830	
		TOTAL LENGTH	m	918.3	
		TOTAL WEIGHT	tf	1.520	
		SHEATH	m	228.8	
	GROUT	m	918.3		

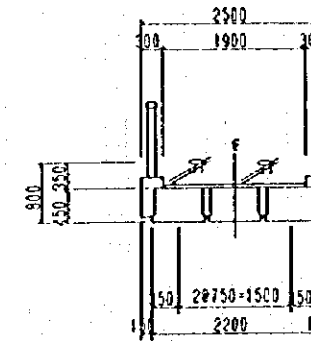


PREPARED.....	MINISTRY OF PUBLIC WORKS	TITLE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKMS(KM17-2)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	J-70-10-104	
REFERENCE	IN THE CITY OF JAKARTA		

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% 18.000		1.5% 18.000		1.5% 18.000		1.5% 18.000		1.5% 18.000	
PROPOSED PROFILE	1.500		2.888		3.199		2.888		1.500	
GROUND HEIGHT	1.800		1.900		-0.481		1.300		2.120	
ACCUMULATED DISTANCE	75.55		18.888		0.000		18.888		75.555	
SHORT DISTANCE	26.740		9.375		0.000		9.375		26.740	
STATION	30.500		39.875		39.875		49.250		58.625	
PLANE CURVE	R=∞									

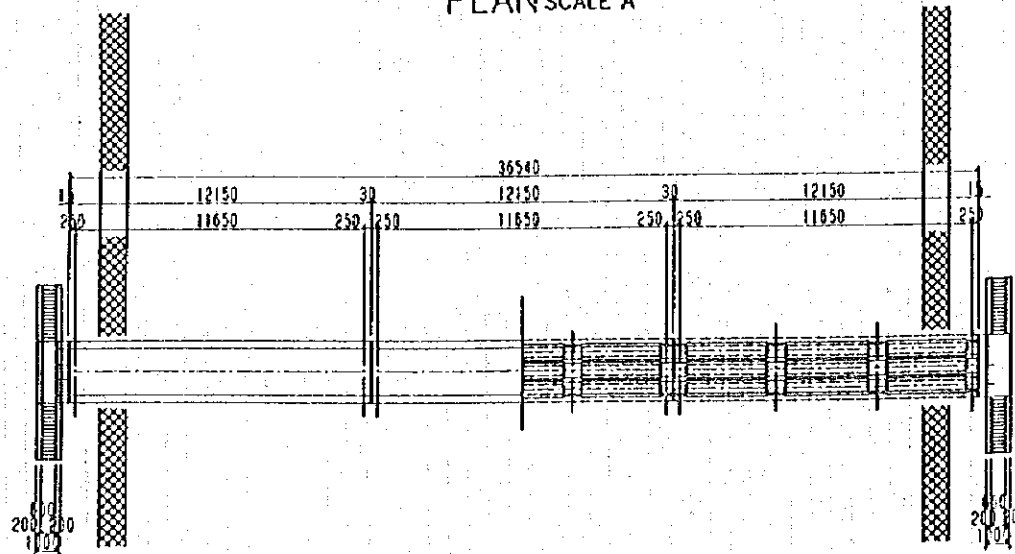
DESIGN CONDITION

BRIDGE NAME	BKM6(KM19)
LIVE LOAD	HUMAN/ANIMALS
GIRDER LENGTH	12.15 m
SPAN LENGTH	11.65 m
WIDTH	2.50 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT(II)	PIER(II)
DEAD LOAD	20.1	40.2
LIVE LOAD	4.0	8.1
TOTAL	24.1	48.3

PLAN SCALE A



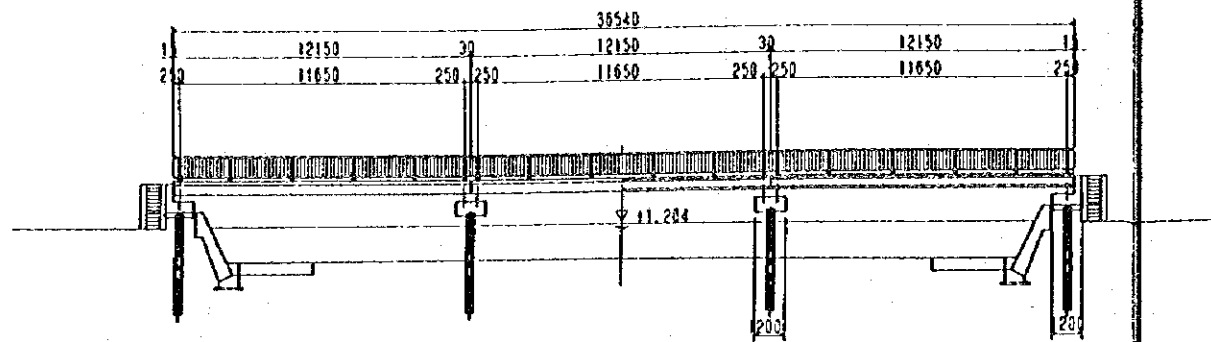
MATERIAL TABLE

KIND OF MATERIAL	NUMBER	UNIT	VOLUME	DESCRIPTION	
MAIN GIRDER	9	no	9	PB-04	
FORMING	CONCRETE	DESIGN STRENGTH	m <sup>3</sup>		3.4
	FORM		m <sup>2</sup>		5.3
	ROADWAY	PAVEMENT	m <sup>2</sup>		69.3
MISCELLANEOUS	SIDE WALK	PAVEMENT	m <sup>2</sup>		---
		SUB-CONCRETE	m <sup>2</sup>		---
	GUARD RAIL	SIDE BLOCK	m		---
		FILLING MORTAR	m <sup>3</sup>		---
CROSS GIRDER	CONCRETE		m <sup>3</sup>		12.6
	FORM		m <sup>2</sup>		91.7
	RE-BAR	tf	0.594		
	STEEL-RAILING	m	72.9		
	DRAINAGE	NUMBER	8		
	EXPANSION	m	10.0		
	NUMBER		36		
	LENGTH	m	2.080		
	TOTAL LENGTH	m	74.880		
	TOTAL WEIGHT	tf	0.124		
	SHEATH	m	14.4		
	GROUT	m	74.9		

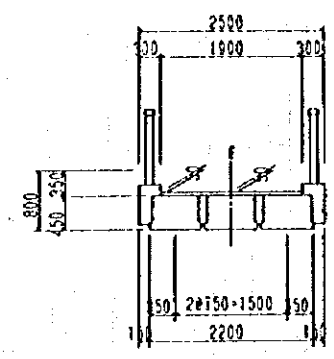


REFERENCE	Dwg NO	PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED
		CHECKED.....		GENERAL PLAN OF BRIDGE BKM6(KM19)	
		SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	DWG NO	DATE
		DATE.....		J-70-10-105	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% 18.000		1.5% 18.000		1.5% 18.000		SR=4.500	
PROPOSED HEIGHT	2.087	3.033	3.190	3.033	2.087			
GROUND HEIGHT	1.990	1.390	0.401	1.390	2.120			
ACCUMULATED DISTANCE	75.555	48.815	18.835	0.090	0.000	0.000	0.000	0.000
SHORT DISTANCE	26.740	30.360	0.000	0.000	0.000	0.000	0.000	0.000
STATION								
PLANE CURVE	R=∞							

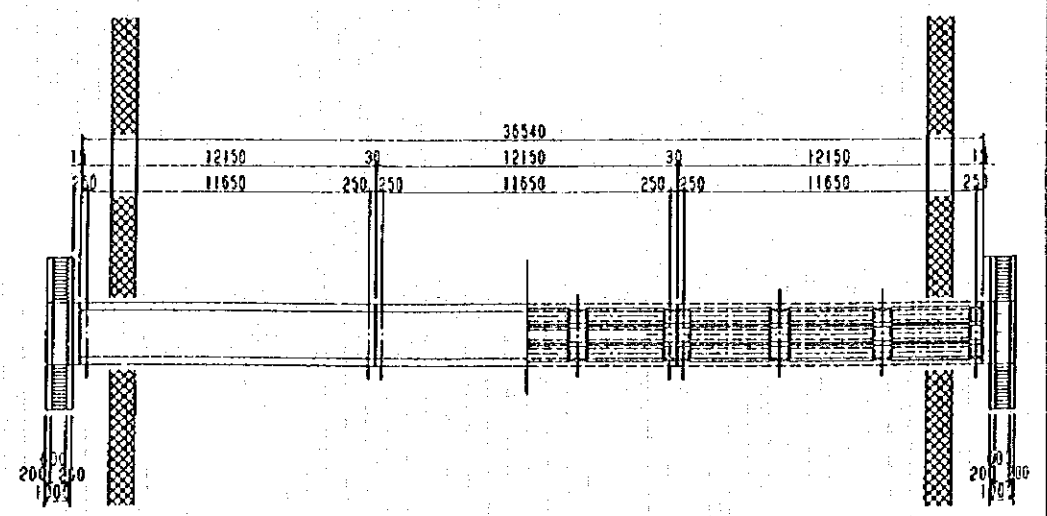
DESIGN CONDITION

BRIDGE NAME	BKM7(KM20)
LIVE LOAD	HUMAN/ANIMALS
GIRDER LENGTH	12.15 m
SPAN LENGTH	11.65 m
WIDTH	2.50 m
BRIDGE ANGLE	90°

REACTION

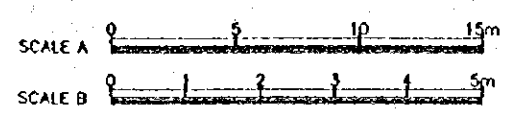
	ABUTMENT(I)	PIER(I)
DEAD LOAD	20.1	40.2
LIVE LOAD	4.0	8.1
TOTAL	24.1	48.3

PLAN SCALE A



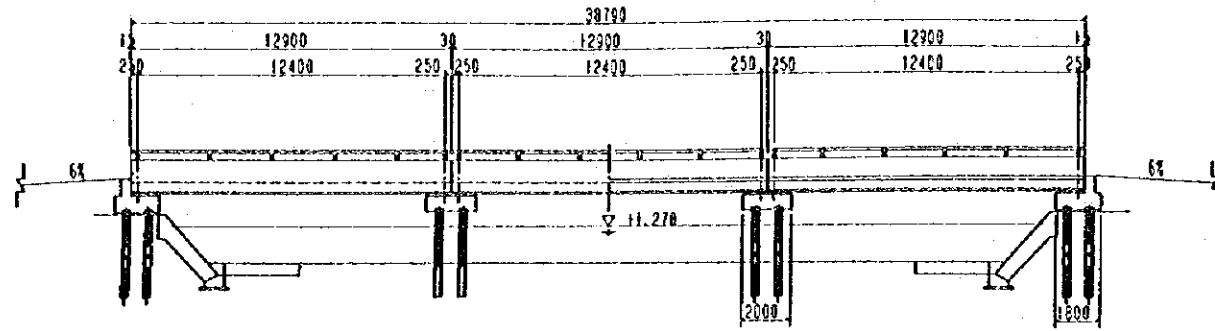
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	9	PB-04
	CONCRETE	m <sup>3</sup>	3.4	
FORMING	FORM	m <sup>2</sup>	5.3	
	ROADWAY	m <sup>2</sup>	69.3	
MISCEL-LANEOUS	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>2</sup>	---	
	SIDE WALK	m	---	
	SIDE BLOCK	m	---	
	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	12.6	
GUARD RAIL	FORM	m <sup>2</sup>	91.7	
	RE-BAR	lt	0.594	
	STEEL-RAILING	m	72.9	
DRAINAGE	NUMBER		8	
EXPANSION	m		10.0	
CROSS GIRDER	NUMBER		36	
	LENGTH	m	2.080	
	TOTAL LENGTH	m	74.880	
	TOTAL WEIGHT	lt	0.124	
	SHEATH	m	14.4	
GROUT	m		74.9	

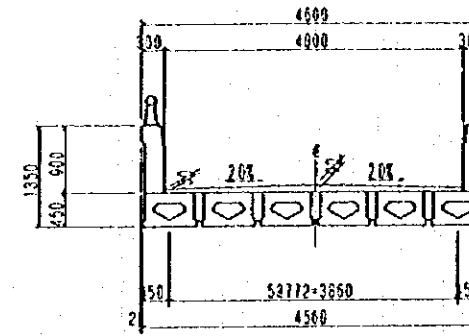


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKM7(KM20)	
SUBMITTED.....		DWG NO.	DATE
DATE.....		J-70-10-108	
REFERENCE		DN NO.	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	VOL=57.300m		VOL=35.760		VOL=57.300m	
PROJECTED HEIGHT	12.789	2.162	11.278	2.102	1.332	
GROUND HEIGHT	2.240	2.210	+0.008	2.210	1.930	
ACCUMULATED DISTANCE	76.840	49.940	0.000	19.380	49.940	76.880
SHORT DISTANCE	26.740	30.500	0.465	12.885	30.500	26.740
STATION						
SCALE	R=0					

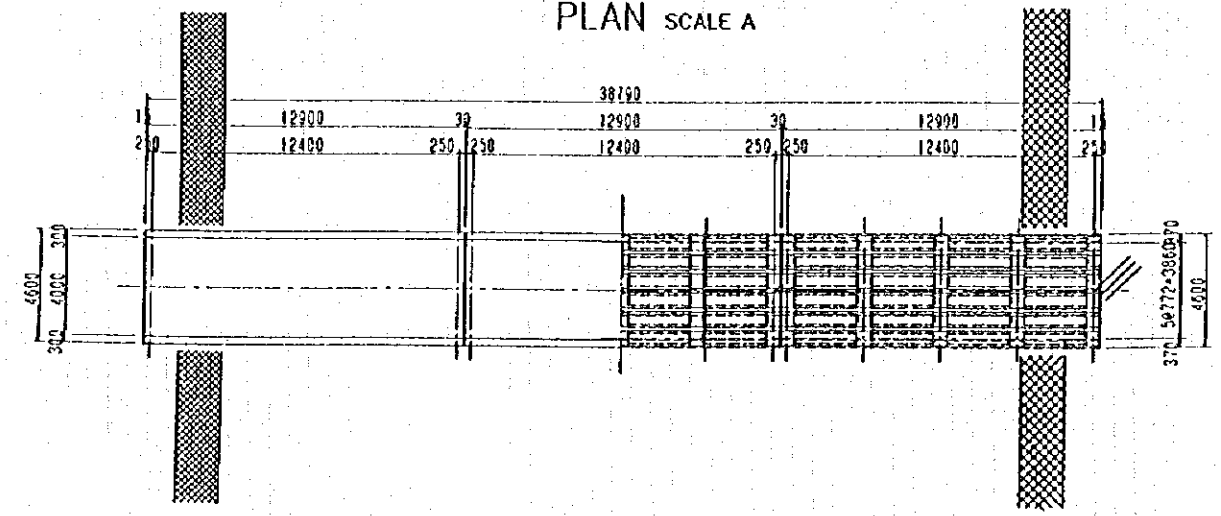
DESIGN CONDITION

BRIDGE NAME	BKM8(KM21-2)
LIVE LOAD	BM 70
GIRDER LENGTH	11.90 m
SPAN LENGTH	11.40 m
WIDTH	4.60 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	39.3	78.5
LIVE LOAD	20.0	20.0
TOTAL	59.3	98.5

PLAN SCALE A



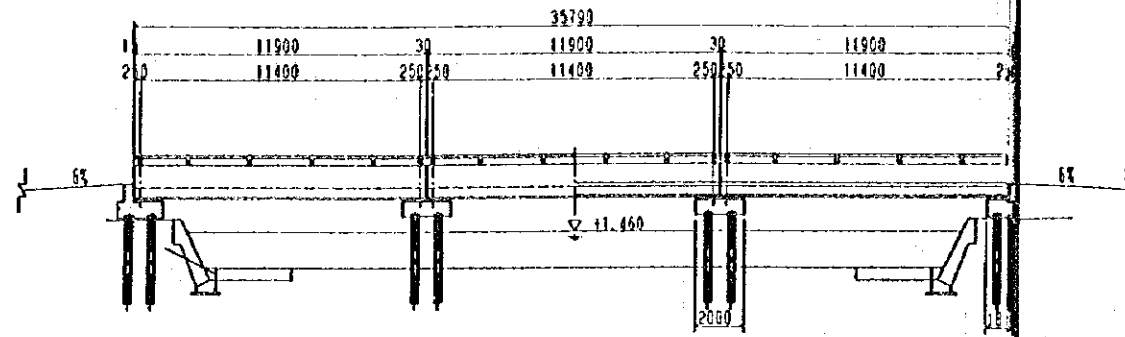
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	18	BM70-05
	CONCRETE DESIGN STRENGTH	m <sup>3</sup>	10.6	
FORMING	FORM	m <sup>2</sup>	18.6	
	ROADWAY PAVEMENT	m <sup>2</sup>	154.8	
MISCELLANEOUS	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>2</sup>	---	
	SIDE WALK SIDE BLOCK	m	---	
	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	17.5	
	FORM	m <sup>2</sup>	144.1	
	RE-BAR	tt	0.82	
STEEL-RAILING	m	77.39		
DRAINAGE	NUMBER		8	
EXPANSION	m		18.4	
CROSS GIRDER	NUMBER		78	
	LENGTH	m	4.440	
	TOTAL LENGTH	m	345.320	
	TOTAL WEIGHT	tt	0.572	
	SHEATH	m	86.6	
CROUT	m	345.3		

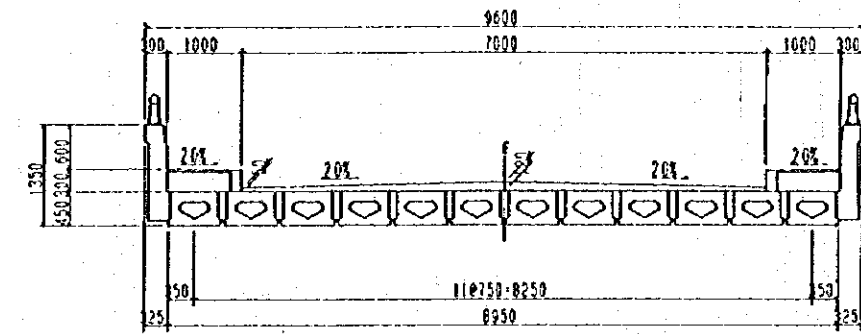


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	FILE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKM8(KM21-2)	
SUBMITTED.....		DWG NO	
DATE.....		J-70-10-107	
REFERENCE	DWG NO	THE CITY OF JAKARTA	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% R=17.630		-1.5% R=17.630		1.5% R=17.630	
PROPOSED HEIGHT	+2.780		+3.370		+1.532	
GROUND RELIEF	2.240		2.210		1.930	
ACCUMULATED DISTANCES	75.180	46.440	7.880	5.905	0.000	23.843
SHORT DISTANCE	26.740	30.560	0.250	5.905	0.000	30.500
STATION			11.605	17.630		75.180
PLANE CURVE	R=∞					

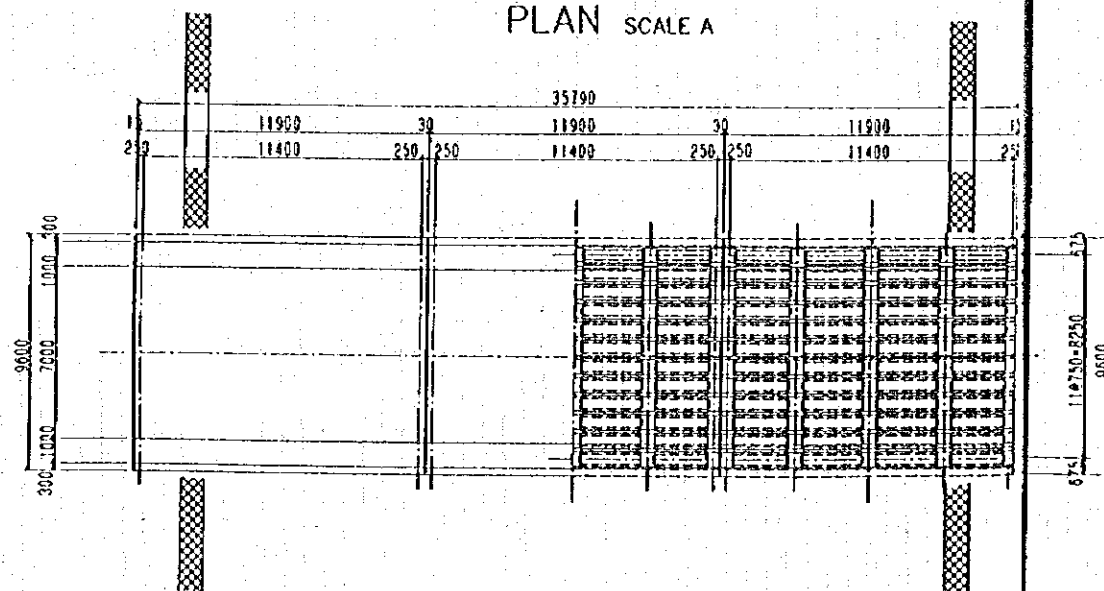
DESIGN CONDITION

BRIDGE NAME	BKM10(KM22-4)
LIVE LOAD	BM 70
ORDER LENGTH	11.90 m
SPAN LENGTH	11.40 m
WIDTH	9.60 m
BRIDGE ANGLE	90°

REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	80.3	160.6
LIVE LOAD	40.0	40.0
TOTAL	120.3	204.2

PLAN SCALE A



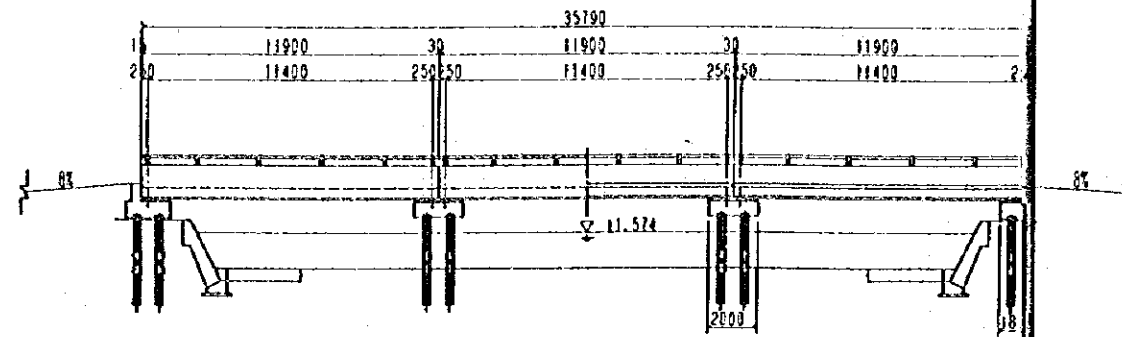
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	36	BM70-05
	CONCRETE DESIGN STRENGTH	m <sup>3</sup>	18.3	
FORMING	FORM	m <sup>2</sup>	28.6	ROADWAY PAVEMENT
	ROADWAY PAVEMENT	m <sup>2</sup>	249.9	
MISCELLANEOUS	PAVEMENT	m <sup>2</sup>	56.4	SIDE WALK
	SUB-CONCRETE	m <sup>3</sup>	15.2	
	SIDE BLOCK	m	71.4	GUARD RAIL
	FILLING MORTAR	m <sup>3</sup>	0.750	
	CONCRETE	m <sup>3</sup>	24.4	
FORM	m <sup>2</sup>	181.1	DRAINAGE	
RE-BAR	tf	1.150		
STEEL-RAILING	m	71.4	EXPANSION	
NUMBER	m	12		
CROSS GIRDER	NUMBER	m	38.4	PC-TENDON
	LENGTH	m	78	
	TOTAL LENGTH	m	8.830	SHEATH
	TOTAL WEIGHT	tf	688.740	
	GROUT	m	1.138	
	m	171.6		
	m	688.7		

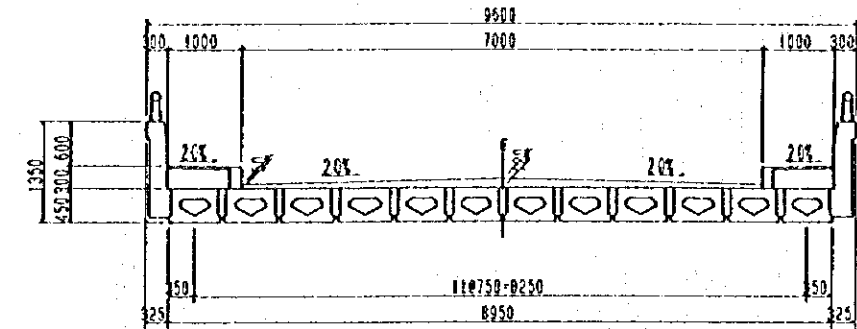


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKM10(KM22-4)	
SUBMITTED.....		DWG NO	
DATE.....		J-70-10-108	
REFERENCE	DWG NO		

SIDE VIEW SCALE A



CROSS SECTION SCALE B



FOOTING	1.5% 17.630		1.5% 17.630		VOL=57.300m	
PROPOSED HEIGHT	3.720	3.853	3.720	1.882	0.278	
GROUND HEIGHT	1.000	2.700	2.280			
ACCUMULATED DISTANCE		17.880	5.905	0.000	48.440	75.180
SPACE DISTANCE	0.250	11.665	5.905	0.000	30.560	26.740
STATION						
CURVE	R=∞					

DESIGN CONDITION

BRIDGE NAME	BKMH(KM23-2)
LIVE LOAD	8M 7C
ORDER LENGTH	11.90 m
SPAN LENGTH	11.40 m
WIDTH	9.60 m
BRIDGE ANGLE	90°

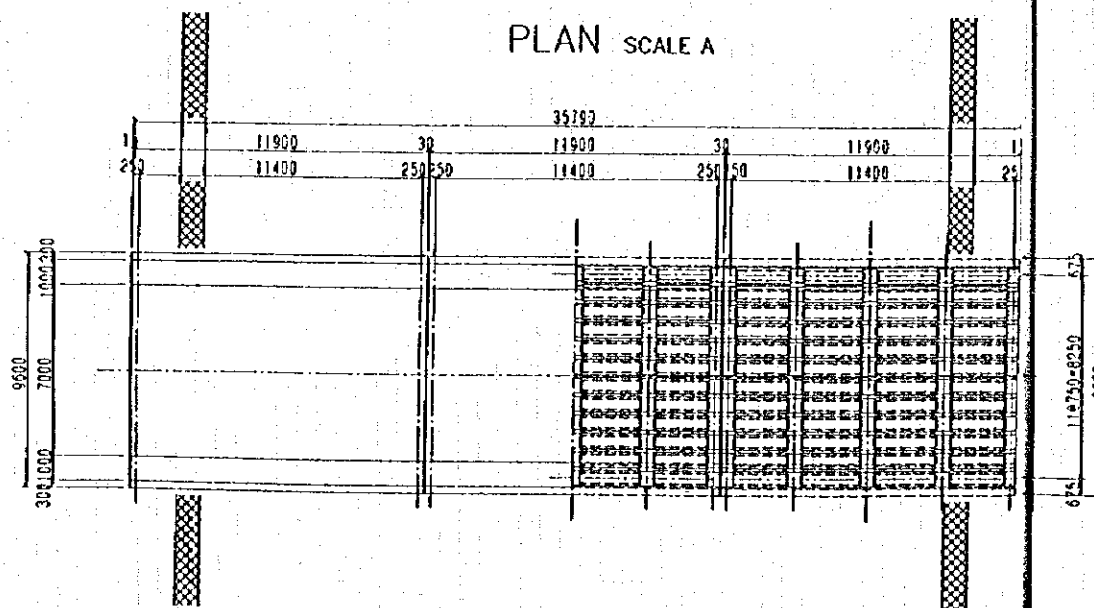
REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	80.3	160.6
LIVE LOAD	40.0	40.0
TOTAL	120.3	204.2

MATERIAL TABLE

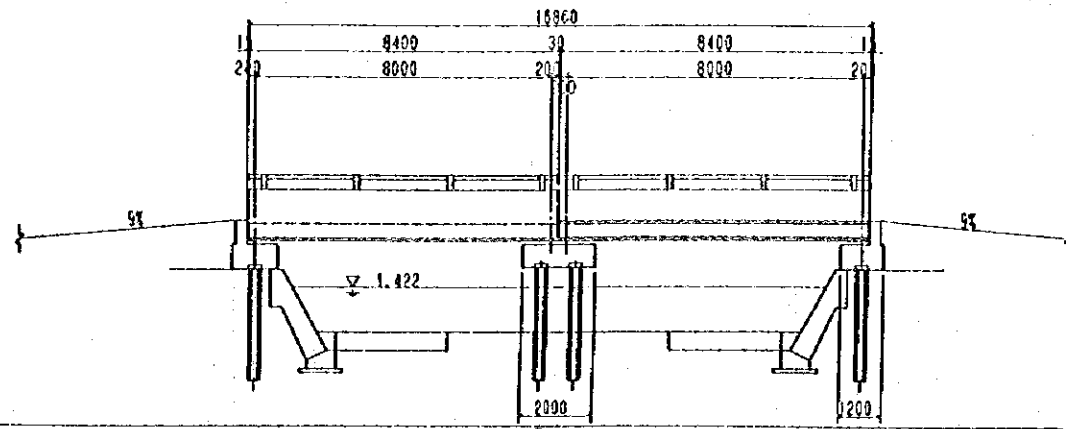
KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	36	8M70-05
	DESIGN STRENGTH	m	18.3	
FORMING	CONCRETE	m <sup>3</sup>	28.6	
	FORM	m <sup>2</sup>	249.9	
MISCEL-LANEOUS	ROADWAY	PAVEMENT	m <sup>2</sup>	56.4
	SIDE WALK	PAVEMENT	m <sup>2</sup>	15.2
		SUB-CONCRETE	m <sup>3</sup>	71.4
		SIDE BLOCK	m	0.750
	GUARD RAIL	CONCRETE	m <sup>3</sup>	24.4
		FORM	m <sup>2</sup>	181.1
		RE-BAR	tf	1.150
	DRAINAGE	STEEL-RAILING	m	71.4
		NUMBER		12
	EXPANSION	NUMBER		38.4
NUMBER			78	
CROSS GIRDER	PC-TENDON	NUMBER	8.830	
	LENGTH	m	688.740	
	TOTAL LENGTH	m	1.138	
	TOTAL WEIGHT	tf	171.6	
SHEATH	m	688.7		
GROUT	m			

PLAN SCALE A

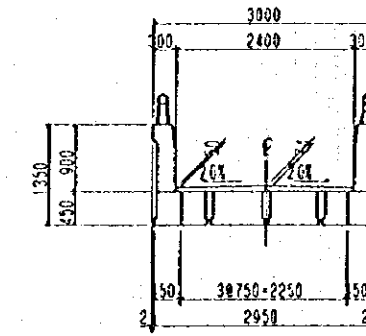


PREPARED.....	MINISTRY OF PUBLIC WORKS	TITLE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKMH(KM23-2)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	J-70-10-109	
REFERENCE	IN THE CITY OF JAKARTA		

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADE	1.5% 8.210		1.5% 8.210	1.5% 8.210	1.5% 8.210	
PROPOSED HEIGHT		1.840	(2.338) 3.178 3.182 (2.342)	1.410	(2.342) 3.182 3.178 (2.338)	1.840
GROUND HEIGHT	1.410		1.410	+0.221	0.000	1.410
ACCUMULATED DISTANCE	47.127	27.771	8.413 8.215	0.000	8.215 8.413	47.771
SHORT DISTANCE	19.356	19.356	0.200 8.215	0.000	8.215 0.200	19.356
STATION						
PLANE CURVE	R=∞					

Note: Figures in ( ) are applicable to the initial stage construction

DESIGN CONDITION

BRIDGE NAME	BKE1(KE-1)
LIVE LOAD	BM 70
GIRDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	3.00 m
BRIDGE ANGLE	90°

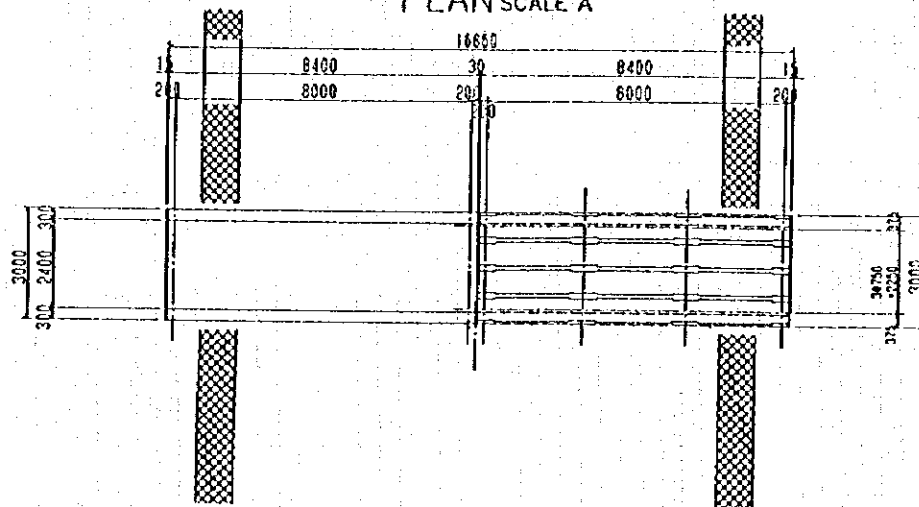
REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	22.0	44.0
LIVE LOAD	20.0	20.0
TOTAL	42.0	64.0

MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	8	BM70-02
FORMING	CONCRETE	m <sup>3</sup>	2.5	
	FORM	m <sup>2</sup>	4.2	
ROADWAY	PAVEMENT	m <sup>2</sup>	40.3	
	PAVEMENT	m <sup>2</sup>	---	
SIDE WALK	SUB-CONCRETE	m <sup>3</sup>	---	
	SIDE BLOCK	m	---	
MISCELLANEOUS	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	7.7	
GUARD RAIL	FORM	m <sup>2</sup>	63.1	
	RE-BAR	tf	0.361	
DRAINAGE	STEEL-RAILING	m	33.6	
	NUMBER		8	
EXPANSION	NUMBER	m	9.0	
	NUMBER		24	
CROSS GIRDER	PC-TENDON	m	2.830	
	TOTAL LENGTH	m	67.920	
	TOTAL WEIGHT	tf	0.112	
SHEATH	NUMBER	m	14.4	
	GROUT	m	67.9	

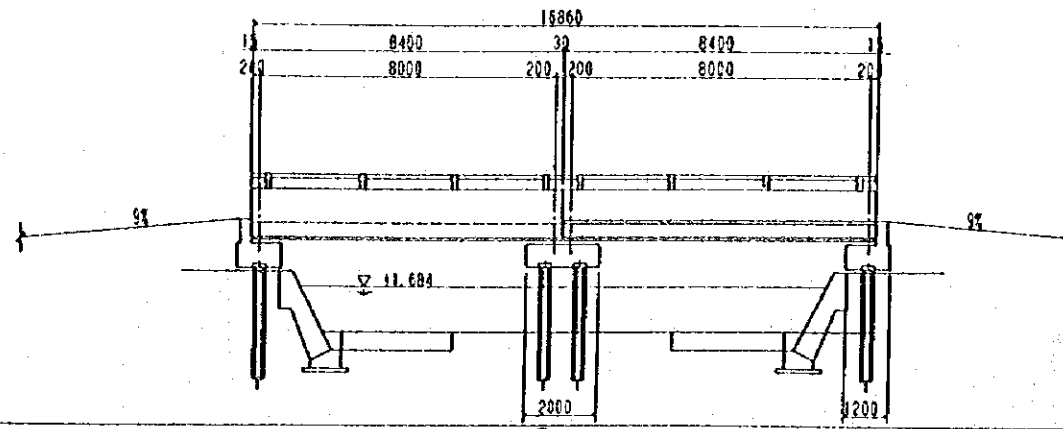
PLAN SCALE A



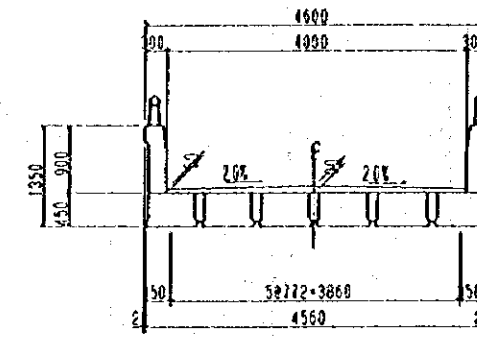
PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	FILE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKE1(KE-1)	
SUBMITTED.....		DWG NO	DATE
DATE.....		J-70-10-201	
REFERENCE	DWG NO		



SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT				
PROPOSED HEIGHT	2.400	(2.000) 3.450 (2.610)	2.510 (2.670)	(2.610) 3.450 (2.000)
GROUND HEIGHT	2.150	2.300	+0.457	2.100
ACCUMULATED DISTANCE	22.082	8.212	0.000	8.213
SHORT DISTANCE	13.867	8.205	0.000	8.200
STATION				
PLANE CURVE	R=∞			

Note: Figures in ( ) are applicable to the initial stage construction

DESIGN CONDITION

BRIDGE NAME	BKE2(KE-2)
LIVE LOAD	BM 70
GIRDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	4.60 m
BRIDGE ANGLE	90°

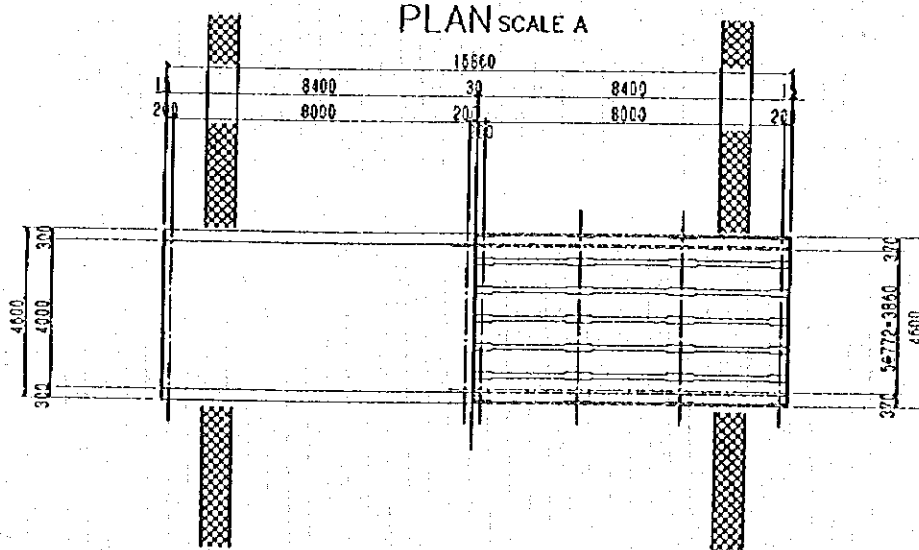
REACTION

	ABUTMENT(I)	PIER(I)
DEAD LOAD	30.8	61.6
LIVE LOAD	20.0	20.0
TOTAL	50.8	81.6

MATERIAL TABLE

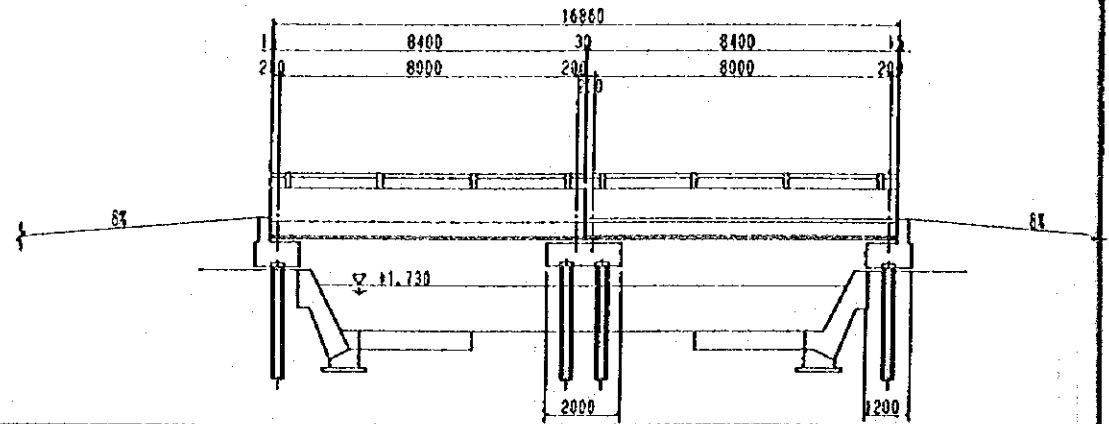
KIND OF MATERIAL	UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	12
FORMING	CONCRETE	DESIGN STRENGTH	m <sup>3</sup> 4.8
	FORM		m <sup>2</sup> 9.0
MISCELLANEOUS	ROADWAY	PAVEMENT	m <sup>2</sup> 67.2
		PAVEMENT	m <sup>2</sup> ---
	SIDE WALK	SUB-CONCRETE	m <sup>2</sup> ---
		SIDE BLOCK	m
		FILLING MORTAR	m <sup>3</sup> ---
GUARD RAIL	CONCRETE	m <sup>3</sup> 7.6	
	FORM	m <sup>2</sup> 63.1	
	RE-BAR	tf	0.358
	STEEL-RAILING	m	33.6
DRAINAGE	NUMBER		8
EXPANSION		m	13.8
CROSS GIRDER		NUMBER	24
	PC-TENDON	LENGTH	m 4.440
		TOTAL LENGTH	m 106.560
		TOTAL WEIGHT	tf 0.175
	SHEATH	m	25.6
	GROUT	m	106.6

PLAN SCALE A

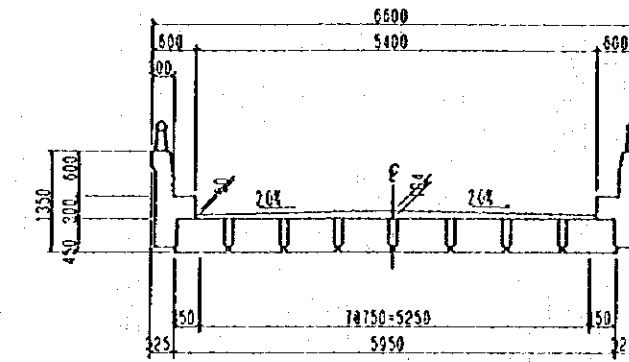


PREPARED.....	MINISTRY OF PUBLIC WORKS	FILE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKE2(KE2)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO.	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	J-70-10-202	
REFERENCE	DA: 00	IN THE CITY OF JAKARTA	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% 8.215		1.5% 8.215		1.5% 8.215		1.5% 8.215	
PROPOSED HEIGHT	2.330	(2.709) 3.258 (2.713)	2.160	(2.610) 3.159 (2.770)	2.330	(2.713) 3.258 (2.709)	2.330	(2.713) 3.258 (2.709)
GROUND HEIGHT	1.890	2.160	0.000	0.548	2.250	2.250	2.160	2.160
ACCUMULATED DISTANCE	35.822	8.213	0.000	8.213	25.822	8.213	25.822	8.213
SHORT DISTANCE	17.407	8.213	0.000	8.213	17.407	8.213	17.407	8.213
STATION								
PLANE CURVE	R=∞							

Note: Figures in ( ) are applicable to the initial stage construction

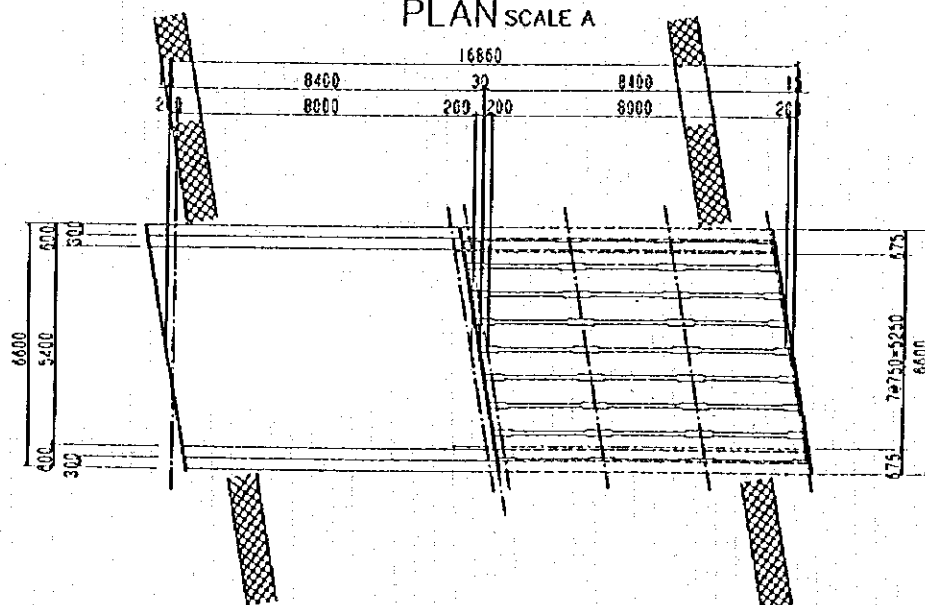
DESIGN CONDITION REACTION

BRIDGE NAME	BKE3(KE3-2)	REACTION	
		ABUTMENT(1)	PIER(1)
LIVE LOAD	BM 70	39.0	78.0
GIRDER LENGTH	8.40 m	40.0	40.0
SPAN LENGTH	8.00 m		
WIDTH	6.60 m		
BRIDGE ANGLE	80°		
TOTAL		79.0	118.0

MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	16	BM70-02
	DESIGN STRENGTH	m <sup>3</sup>	5.7	
FORMING	CONCRETE	m <sup>3</sup>	9.7	
	FORM	m <sup>2</sup>	90.7	
MISCELLANEOUS	ROADWAY PAVEMENT	m <sup>2</sup>	---	
	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>3</sup>	---	
	SIDE WALK SIDE BLOCK	m	---	
	SIDE WALK FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	14.5	
	GUARD RAIL FORM	m <sup>2</sup>	86.7	
	GUARD RAIL RE-BAR	lf	0.684	
	GUARD RAIL STEEL-RAILING	m	33.6	
	DRAINAGE	NUMBER	8	
EXPANSION	m	19.8		
CROSS GIRDER	NUMBER	24		
	LENGTH	m		5.830
	TOTAL LENGTH	m		139.920
	TOTAL WEIGHT	lf		0.231
	SHEATH	m		33.6
CROUT	m	139.9		

PLAN SCALE A

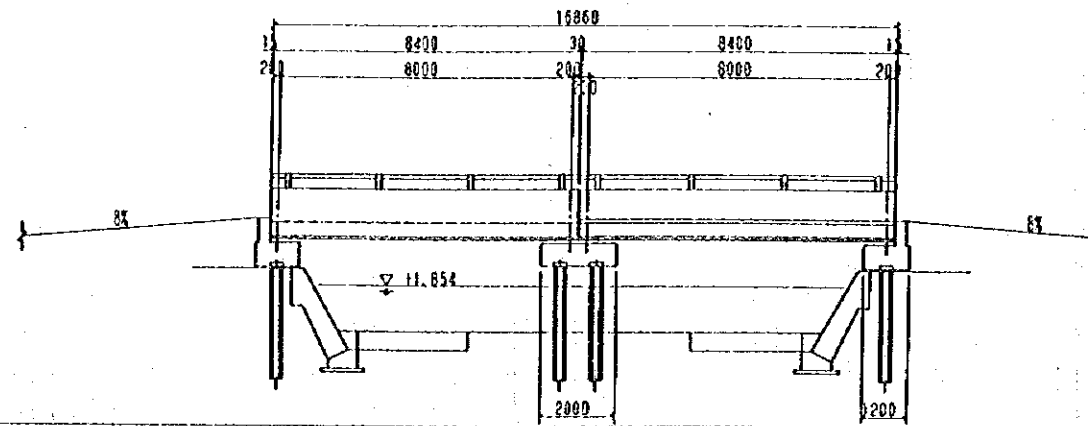


SCALE A 0 2 4 6 8 10m

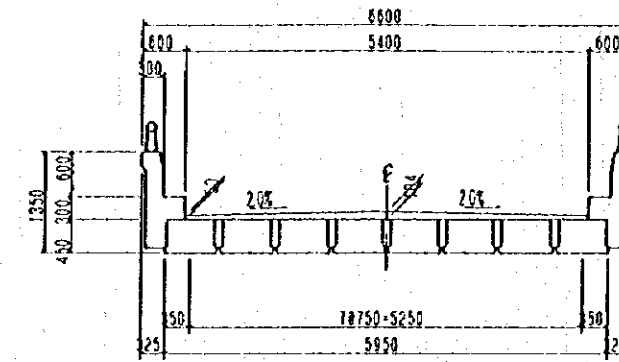
SCALE B 0 1 2 3 4 5m

PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED	
CHECKED.....		GENERAL PLAN OF BRIDGE BKE3(KE3-2)		
SUBMITTED.....		DWG NO.		DATE
DATE.....		J-70-10-203		
REFERENCE	DWG NO.			
	JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA			

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	1.5% 8.215		1.5% 8.215		1.5% 8.215	
PROPOSED HEIGHT	+1.990		+1.990		+1.990	
GROUND HEIGHT	2.070		2.070		2.250	
ACCUMULATED DISTANCE	8.215		8.215		31.278	
SHORT DISTANCE	0.000		0.000		22.863	
STATION						
PLANE CURVE	R=∞		R=∞		R=∞	

Note: Figures in ( ) are applicable to the initial stage construction.

DESIGN CONDITION

BRIDGE NAME	BKE4(KE4)
LIVE LOAD	BM 70
GIRDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	6.60 m
BRIDGE ANGLE	90°

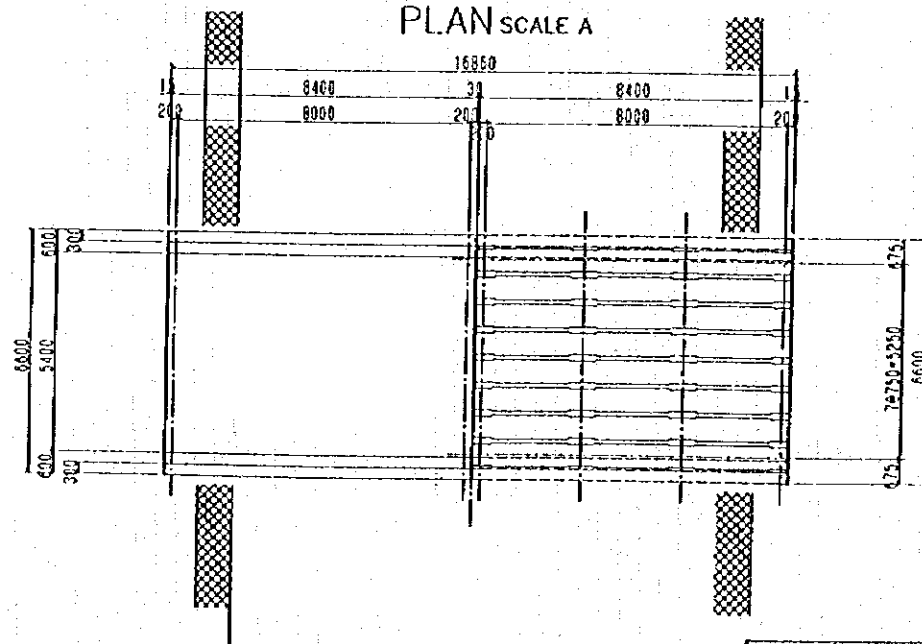
REACTION

	ABUTMENT(II)	PIER(II)
DEAD LOAD	39.0	78.0
LIVE LOAD	40.0	40.0
TOTAL	79.0	118.0

MATERIAL TABLE

KIND OF MATERIAL	UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	16	BM70-02
FORMING	CONCRETE DESIGN STRENGTH	5.7	
	FORM	9.7	
	ROADWAY PAVEMENT	90.7	
	PAVEMENT	---	
	SUB-CONCRETE	---	
MISCELLANEOUS	SIDE WALK SIDE BLOCK	m	
	FILLING MORTAR	---	
	CONCRETE	14.5	
	FORM	86.7	
	RE-BAR	0.684	
	STEEL-RAILING	33.6	
	DRAINAGE NUMBER	8	
	EXPANSION	19.8	
	NUMBER	24	
	LENGTH	5.830	
	TOTAL LENGTH	139.920	
	TOTAL WEIGHT	0.231	
	SHEATH	33.6	
	GROUT	139.9	

PLAN SCALE A

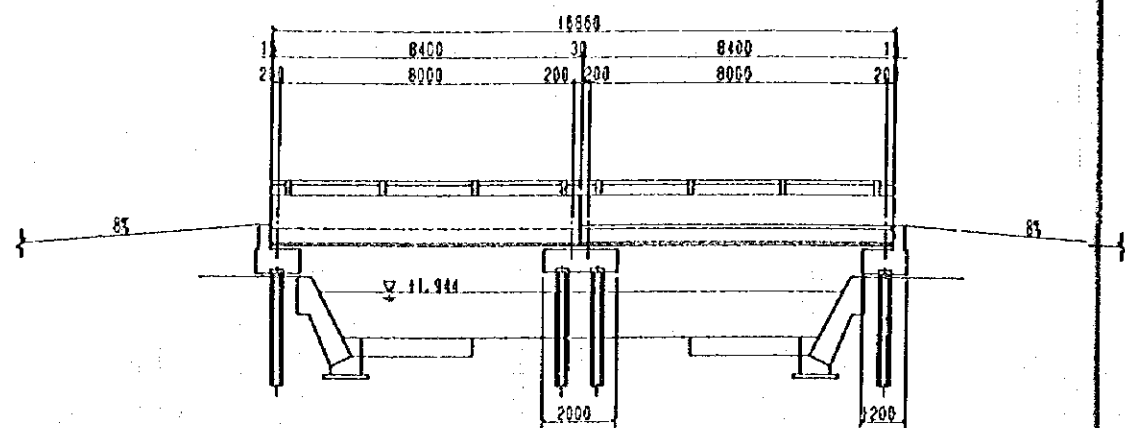


SCALE A: 0 2 4 6 8 10m

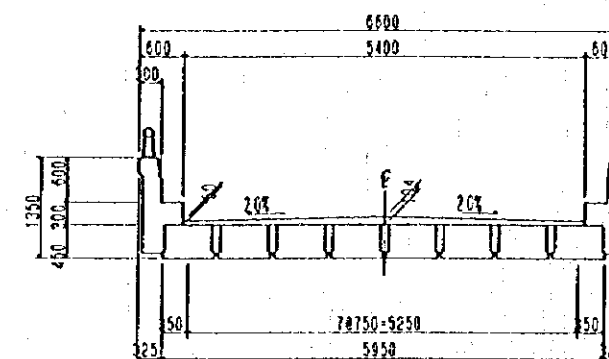
SCALE B: 0 2 3 4 5m

PREPARED.....	MINISTRY OF PUBLIC WORKS	TITLE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKE4(KE4)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	J-70-10-204	
REFERENCE	DRAWING		

SIDE VIEW SCALE A



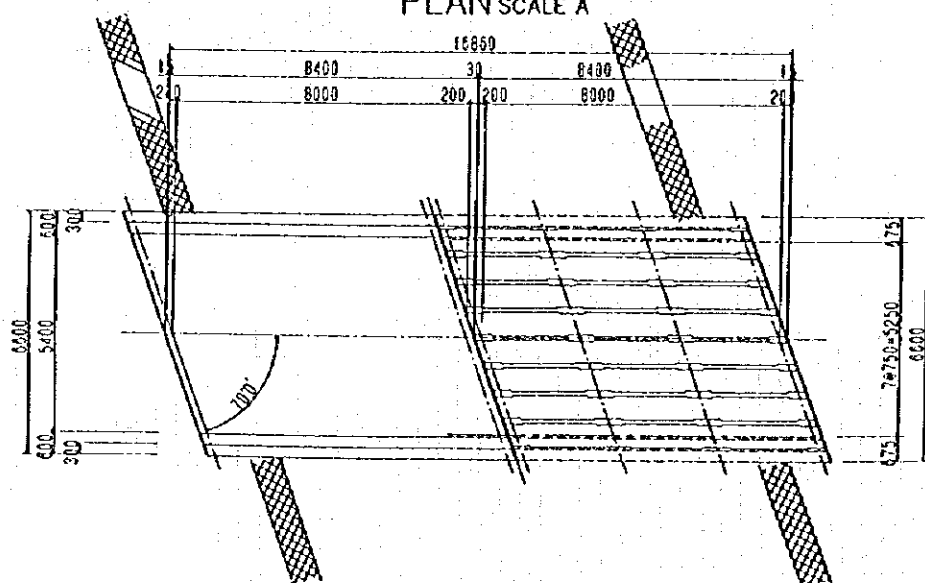
CROSS SECTION SCALE B



GRADIENT	S <sub>TL</sub> =12.113		1.5% 8.215		1.5% 8.215		1.5% 8.215		S <sub>TL</sub> =23.113	
PROPOSED HEIGHT	2.000		(2.894) 3.734 (2.894)		3.800 (2.960)		(2.894) 3.734 (2.894)		2.000	
GROUND HEIGHT	1.950		1.950		+0.730		1.950		1.950	
ACROSS-LAID DISTANCE			8.215		0.000		8.215		31.520	
SHORT DISTANCE			8.215		0.000		8.215		23.113	
STATION										
PLANE CURVE	R=∞									

Note: Figures in ( ) are applicable to the initial stage construction

PLAN SCALE A



DESIGN CONDITION

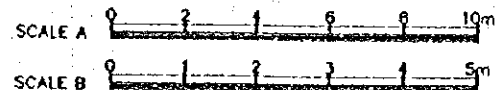
BRIDGE NAME	BKES(KES)
LIVE LOAD	BM 70
GIRDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	6.60 m
BRIDGE ANGLE	70°

REACTION

	ABUTMENT(LI)	PIER(LI)
DEAD LOAD	39.0	78.0
LIVE LOAD	40.0	40.0
TOTAL	79.0	118.0

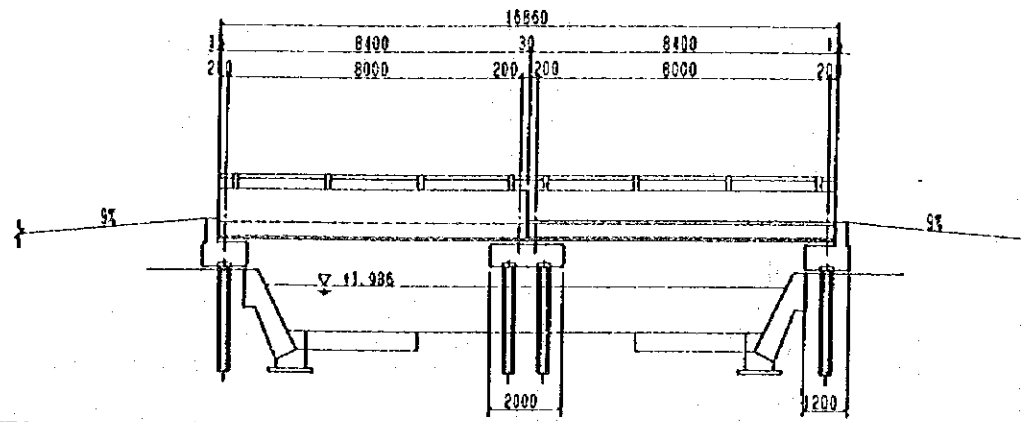
MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN GIRDER	NUMBER	no	16	BM70-02
FORMING	CONCRETE	m <sup>3</sup>	5.7	
	FORM	m <sup>2</sup>	9.7	
ROADWAY	PAVEMENT	m <sup>2</sup>	90.7	
	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>2</sup>	---	
	SIDE WALK	m	---	
MISCEL-LANEOUS	SIDE BLOCK	m	---	
	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	14.5	
GUARD RAIL	FORM	m <sup>2</sup>	86.7	
	RE-BAR	lf	0.684	
	STEEL-RAILING	m	33.6	
DRAINAGE	NUMBER		8	
EXPANSION	m		19.8	
CROSS GIRDER	NUMBER		24	
	LENGTH	m	5.830	
	TOTAL LENGTH	m	139.920	
	TOTAL WEIGHT	lf	0.231	
	SHEATH	m	33.6	
GROUT	m		139.9	



PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKES(KES)	
SUBMITTED.....		DWG NO	
DATE.....		J-70-10-205	
REFERENCE	DWG	THE CITY OF JAKARTA	

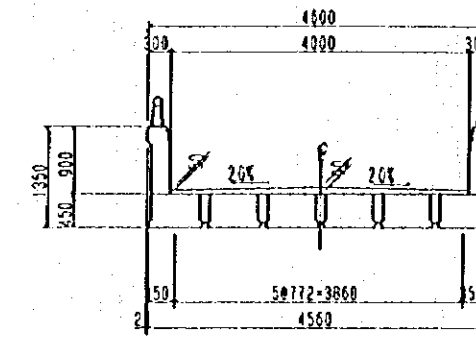
SIDE VIEW SCALE A



GRADIENT	ST=25.158		1.5% 8.215		1.5% 8.215		1.5% 8.215		ST=29.148	
PROPOSED PROFILE	2.103		2.152		(2.928) 3.768 (2.928)		3.830 (2.900)		2.103	
GROUND HEIGHT	1.920		1.910		1.910		1.772		1.970	
ACQUANT-RELATED DISTANCE	28.903		28.415		8.215		0.000		28.903	
SPANT DISTANCE	0.548		20.000		8.215		0.000		0.548	
STATION										
BEAVE										

Note: Figures in [ ] are applicable to the initial stage construction

CROSS SECTION SCALE B



DESIGN CONDITION

BRIDGE NAME	BKE6(KE6)
LIVE LOAD	BM 70
ORDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	4.60 m
BRIDGE ANGLE	90°

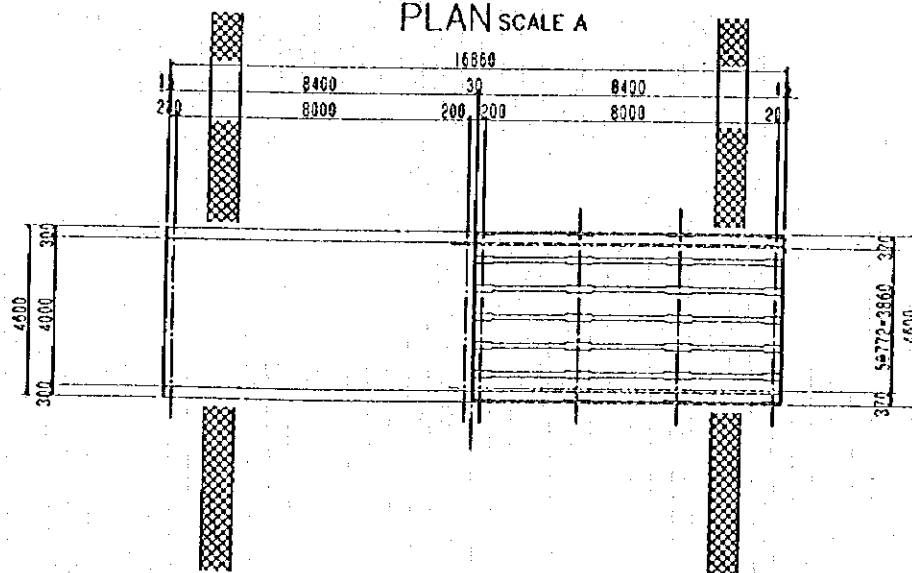
REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	30.8	61.6
LIVE LOAD	20.0	20.0
TOTAL	50.8	81.6

MATERIAL TABLE

KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN ORDER	NUMBER	no	12	BM70-02
	CONCRETE DESIGN STRENGTH	m <sup>3</sup>	4.8	
FORMING	FORM	m <sup>2</sup>	9.0	
	ROADWAY PAVEMENT	m <sup>2</sup>	67.2	
MISCEL-LANEOUS	PAVEMENT	m <sup>2</sup>	---	
	SUB-CONCRETE	m <sup>3</sup>	---	
	SIDE WALK SIDE BLOCK	m	---	
	FILLING MORTAR	m <sup>3</sup>	---	
	CONCRETE	m <sup>3</sup>	7.6	
	FORM	m <sup>2</sup>	63.1	
GUARD RAIL	RE-BAR	tf	0.358	
	STEEL-RAILING	m	33.6	
	DRAINAGE	NUMBER	8	
EXPANSION	NUMBER	m	13.8	
	LENGTH	m	24	
CROSS ORDER	PC-TENDON	m	4.440	
	TOTAL LENGTH	m	106.560	
	TOTAL WEIGHT	tf	0.176	
SHEATH	m	26.6		
GROUT	m	106.6		

PLAN SCALE A

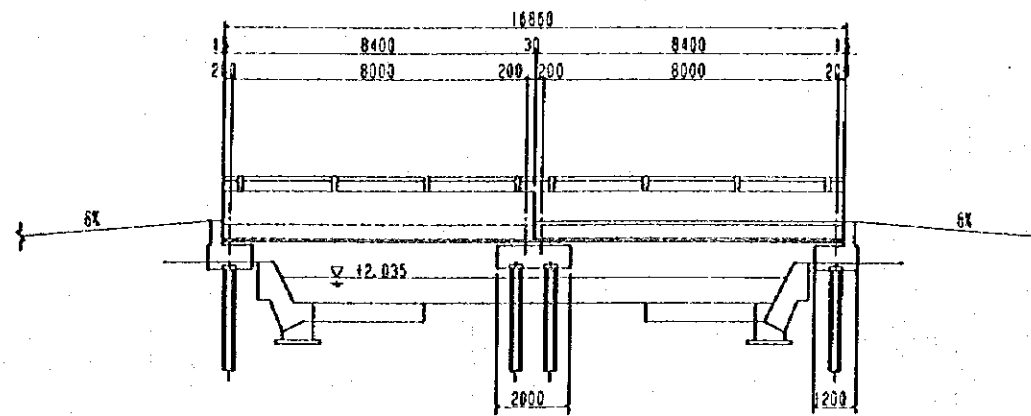


SCALE A 0 2 4 6 8 10m

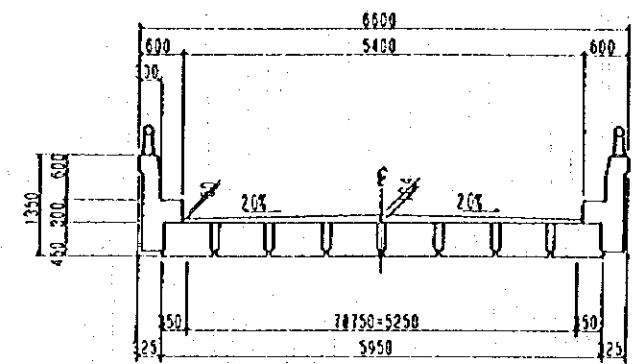
SCALE B 0 1 2 3 4 5m

PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKE6(KE6)	
SUBMITTED.....		DWG NO	DATE
DATE.....		J-70-10-208	

SIDE VIEW SCALE A



CROSS SECTION SCALE B



GRADIENT	SR=251.58		1.5% 8.215		1.5% 8.215		1.5% 8.215		SR=251.58	
PROPOSED HEIGHT	1.990	2.001	(2.987)	(2.987)	(3.980)	(3.980)	(2.991)	(2.991)	2.001	1.990
GROUND HEIGHT	1.820		2.010		+0.004	(3.050)	2.010			2.020
ACCUMULATED DISTANCE	33.553	33.415	8.215		0.000		8.215		33.415	33.553
STATION DISTANCE	0.138	25.000	8.215		0.000		8.215		25.000	0.138
STATION										
PLANE										

Note: Figures in ( ) are applicable to the initial stage construction.

DESIGN CONDITION

BRIDGE NAME	BKE7(KE7)
LIVE LOAD	BM 70
GIRDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	6.60 m
BRIDGE ANGLE	90°

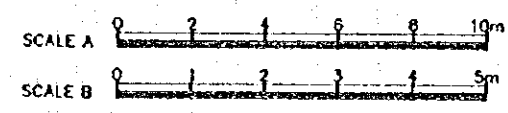
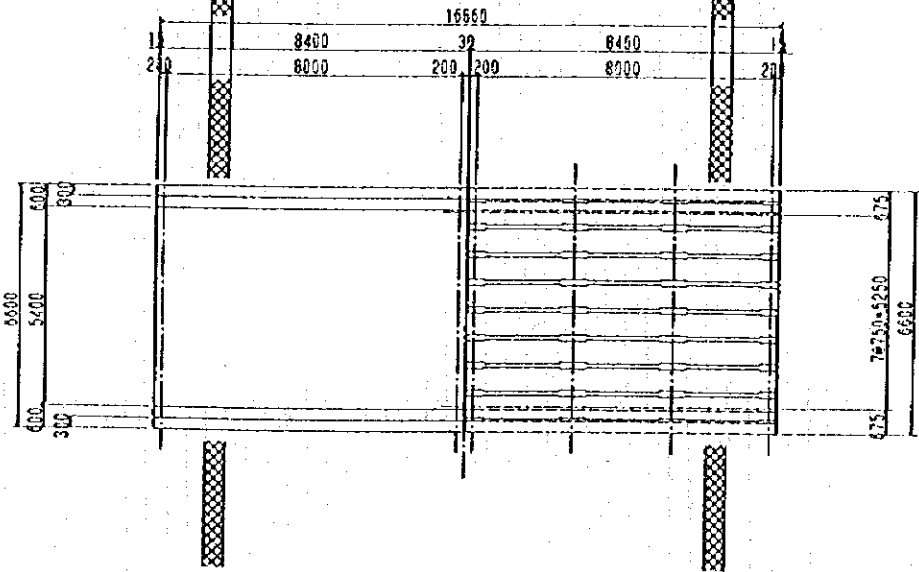
REACTION

	ABUTMENT (I)	PIER (II)
DEAD LOAD	39.0	78.0
LIVE LOAD	40.0	40.0
TOTAL	79.0	118.0

MATERIAL TABLE

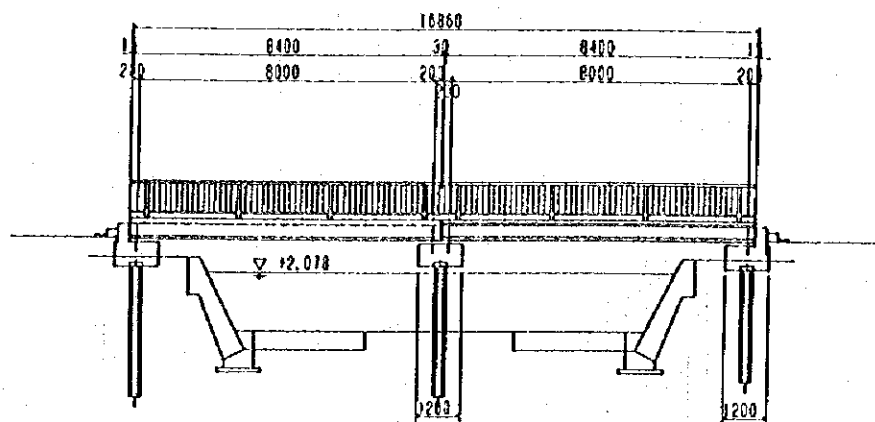
KIND OF MATERIAL		UNIT	VOLUME	DESCRIPTION
MAIN ORDER		NUMBER	no	16
FORMING	CONCRETE	DESIGN STRENGTH	m <sup>3</sup>	5.7
	FORM		m <sup>2</sup>	9.7
MISCELLANEOUS	ROADWAY	PAVEMENT	m <sup>2</sup>	90.7
	SIDE WALK	PAVEMENT	m <sup>2</sup>	---
		SUB-CONCRETE	m <sup>3</sup>	---
		SIDE BLOCK	m	---
		FILLING MORTAR	m <sup>3</sup>	---
GUARD RAIL	CONCRETE	m <sup>3</sup>	14.5	
	FORM	m <sup>2</sup>	86.7	
	RE-BAR	tf	0.684	
	STEEL-RAILING	m	33.6	
DRAINAGE	NUMBER		8	
EXPANSION		m	19.8	
CROSS GIRDER	PC-TENDON	NUMBER		24
		LENGTH	m	5.830
		TOTAL LENGTH	m	139.920
		TOTAL WEIGHT	tf	0.231
SHEATH		m	33.6	
GROUT		m	139.9	

PLAN SCALE A

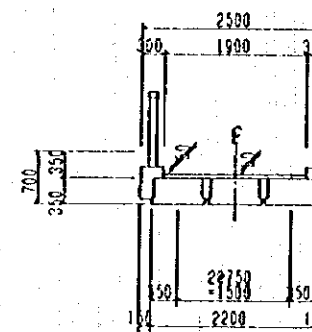


PREPARED.....	MINISTRY OF PUBLIC WORKS DIRECTORATE GENERAL OF HUMAN SETTLEMENTS  JAPAN INTERNATIONAL COOPERATION AGENCY THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT IN THE CITY OF JAKARTA	TITLE OF DRAWING	APPROVED
CHECKED.....		GENERAL PLAN OF BRIDGE BKE7(KE7)	
SUBMITTED.....		DWG NO.	DATE
DATE.....		J-70-10-207	
REFERENCE	0/10		

SIDE VIEW SCALE A



CROSS SECTION SCALE B



PLANE CURVE	STATION	START DISTANCE	ACROSS-DISTANCE	GROUND HEIGHT	PROPOSED PROFILE	GRADIENT
		3.700	12.115	1.080	0.397	1.5% 8.215
		0.200 8.215	8.415 8.215	2.030	3.724	1.5% 8.215
		0.000	0.000	0.888 3.783	3.783	1.5% 8.215
		8.866	8.215	2.030	3.724	1.5% 8.215
		3.700	12.115		3.351	SR 0

DESIGN CONDITION

BRIDGE NAME	BKE8(KE-9)
LIVE LOAD	HUMAN/ANIMALS
ORDER LENGTH	8.40 m
SPAN LENGTH	8.00 m
WIDTH	2.50 m
BRIDGE ANGLE	90°

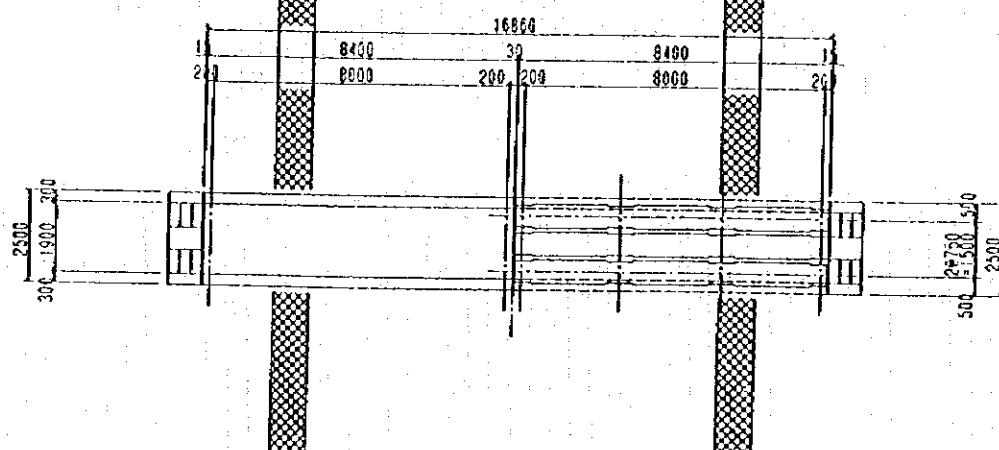
REACTION

	ABUTMENT(I)	PIER(II)
DEAD LOAD	11.3	22.6
LIVE LOAD	2.8	5.6
TOTAL	14.1	28.2

MATERIAL TABLE

KIND OF MATERIAL	UNIT	VOLUME	DESCRIPTION
MAIN ORDER	NUMBER	no	6
FORMING	CONCRETE	DESIGN STRENGTH	m <sup>3</sup> 1.2
	FORM		m <sup>2</sup> 2.7
	ROADWAY	PAVEMENT	m <sup>2</sup> 31.9
		PAVEMENT	m <sup>2</sup> ---
MISCEL-LANEOUS	SIDE WALK	SUB-CONCRETE	m <sup>2</sup> ---
		SIDE BLOCK	m ---
		FILLING MORTAR	m <sup>3</sup> ---
		CONCRETE	m <sup>3</sup> 5.2
	GUARD RAIL	FORM	m <sup>2</sup> 39.2
		RE-BAR	tf 0.245
		STEEL-RAILING	m 33.6
	DRAINAGE	NUMBER	4
	EXPANSION	m	7.5
		NUMBER	24
CROSS ORDER	PC-TENDON	LENGTH	m 2080
		TOTAL LENGTH	m 49920
		TOTAL WEIGHT	tf 0.082
	SHEATH	m	9.6
	GROUT	m	49.9

PLAN SCALE A



PREPARED.....	MINISTRY OF PUBLIC WORKS	TITLE OF DRAWING	APPROVED
CHECKED.....	DIRECTORATE GENERAL OF HUMAN SETTLEMENTS	GENERAL PLAN OF BRIDGE BKE8(KE9)	
SUBMITTED.....	JAPAN INTERNATIONAL COOPERATION AGENCY	DWG NO	DATE
DATE.....	THE DETAILED DESIGN FOR URBAN DRAINAGE PROJECT	J-70-10-208	
REFERENCE	D.NO		