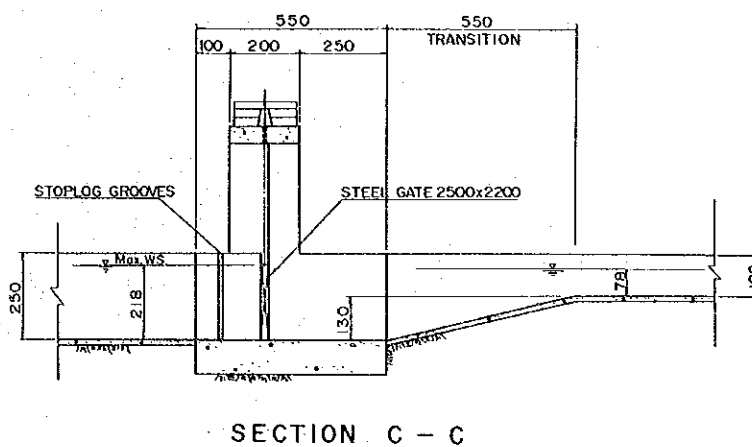
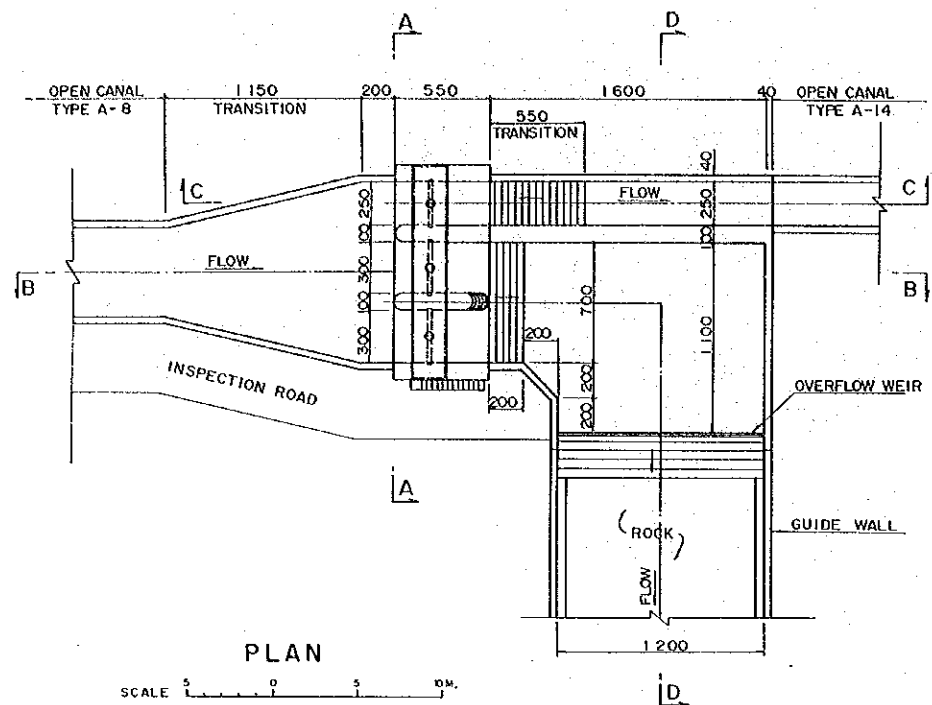
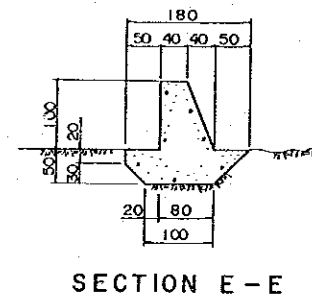
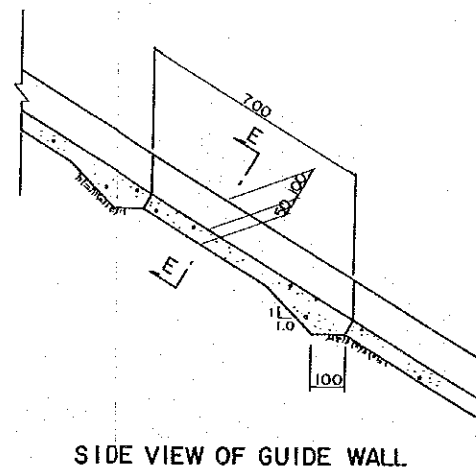
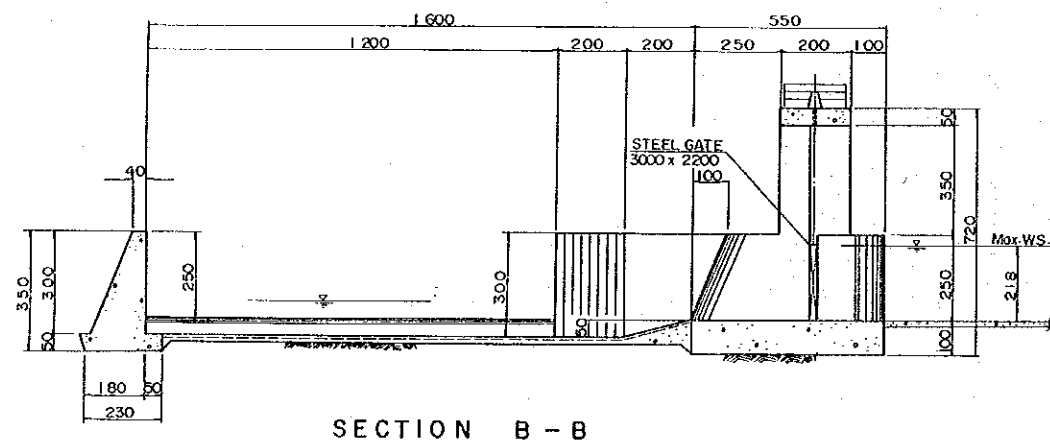
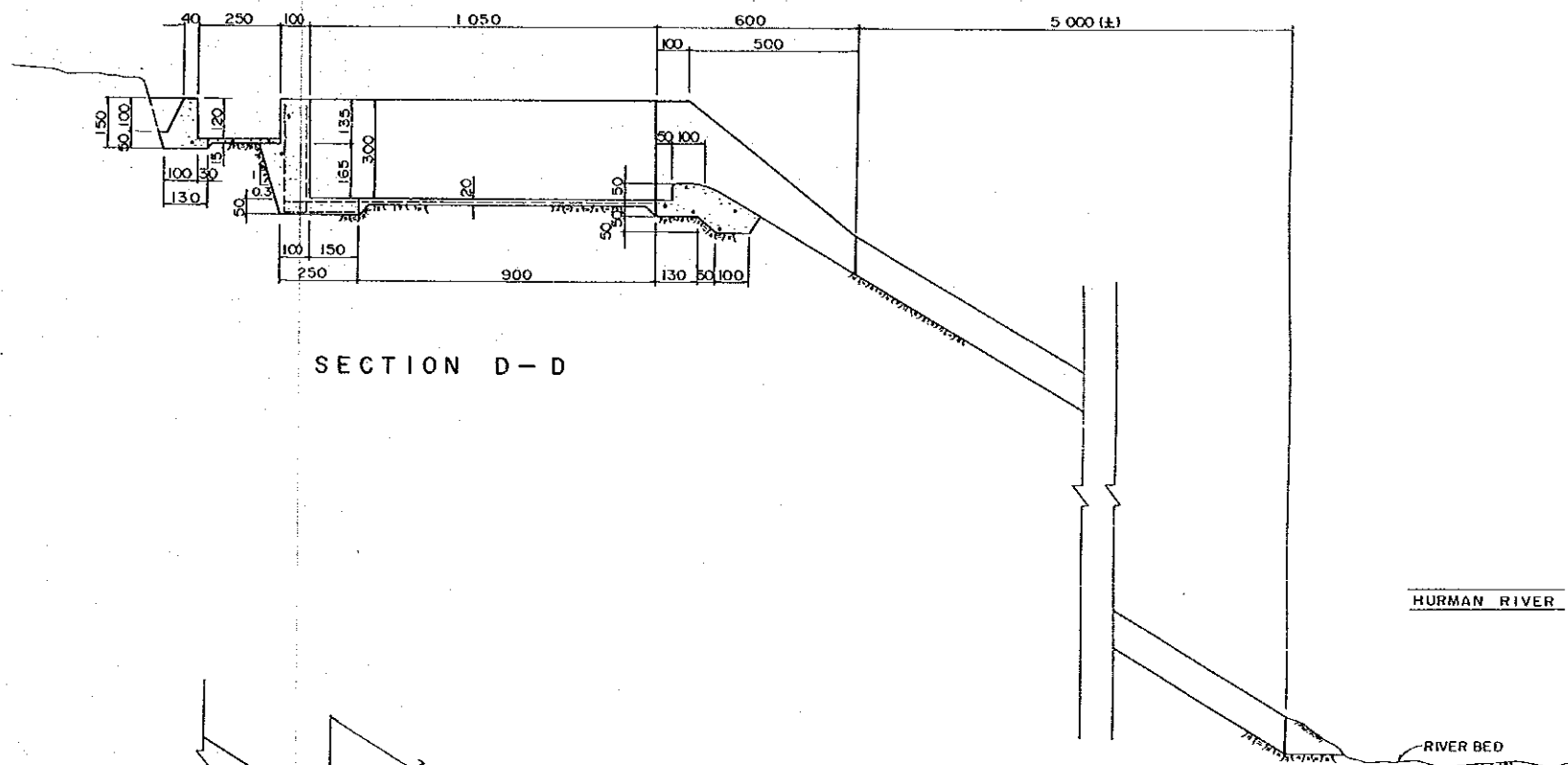
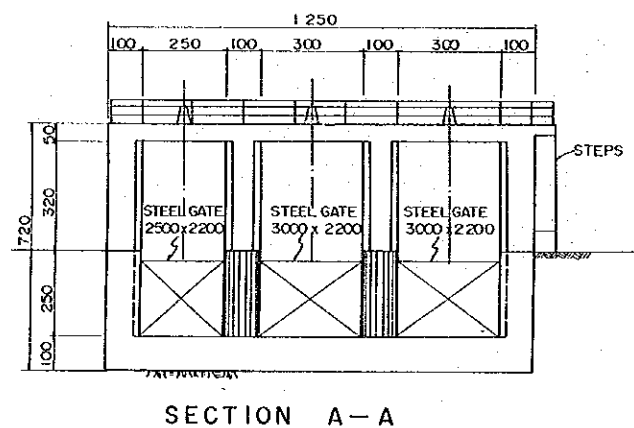
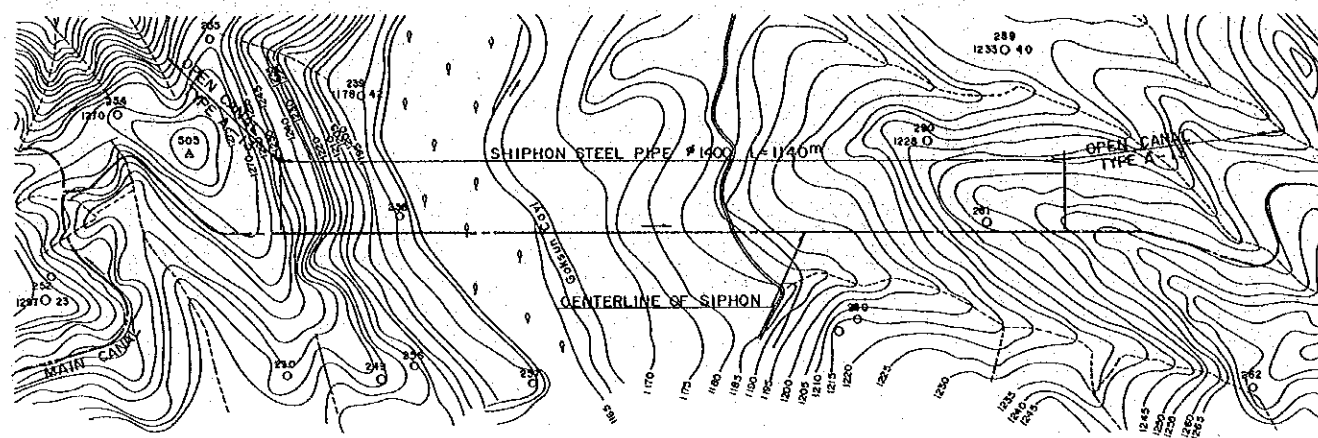


SCALE
1 0 1 2 3 4 5 M.
EXCEPT AS NOTED



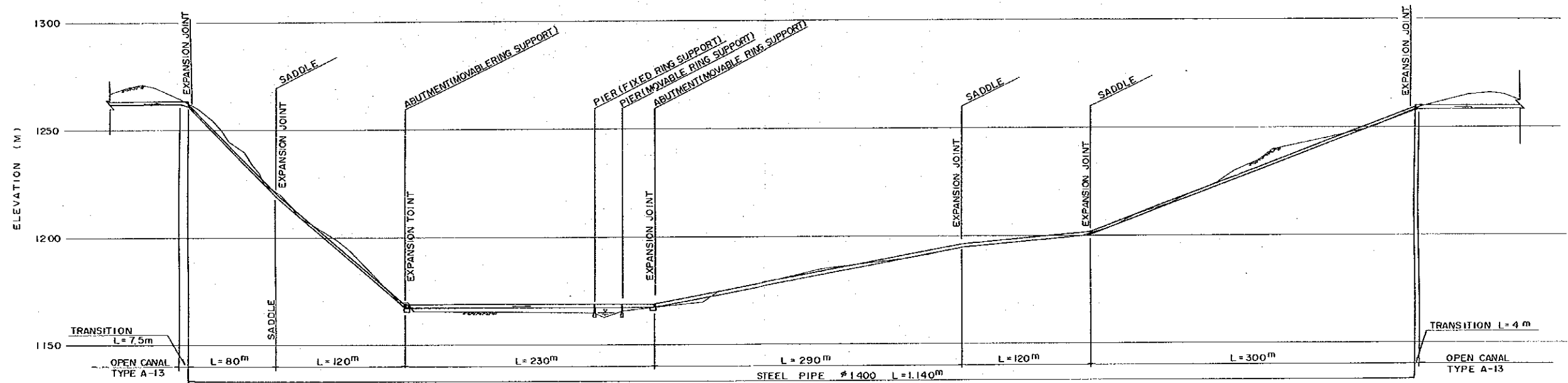
SCALE 0 1 2 3 4 5 M.
EXCEPT AS NOTED



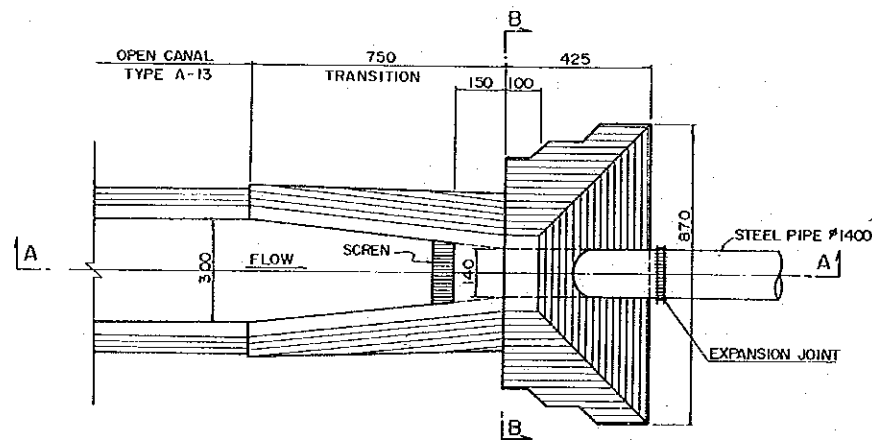


PLAN
SCALE 1:2000

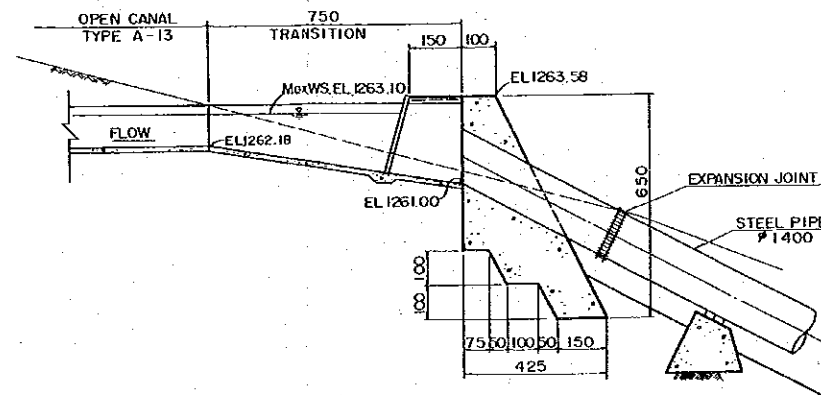
SCALE 1:2000
EXCEPT AS NOTED



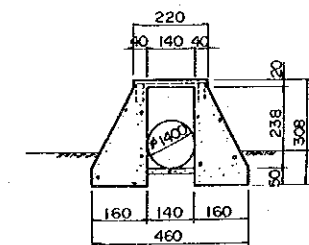
PROFILE OF SIPHON



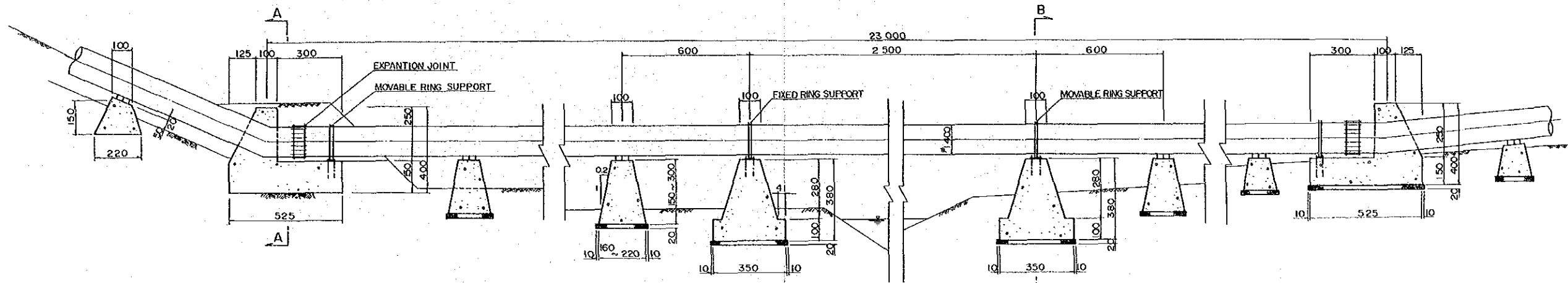
PLAN OF TRANSITION (UPSTREAM PORTION OF SIPHON)



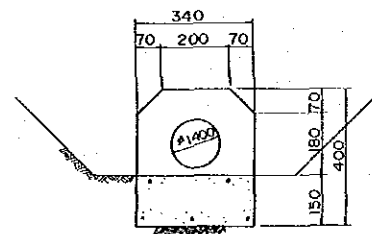
SECTION A - A



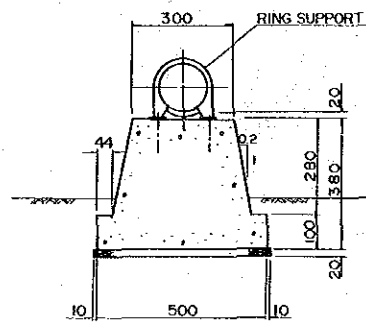
SECTION B - B



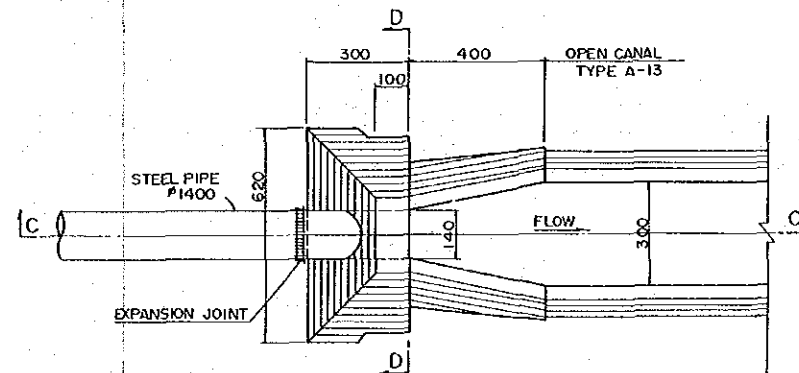
PROFILE OF SIPHON



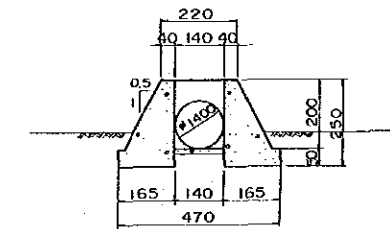
SECTION A - A



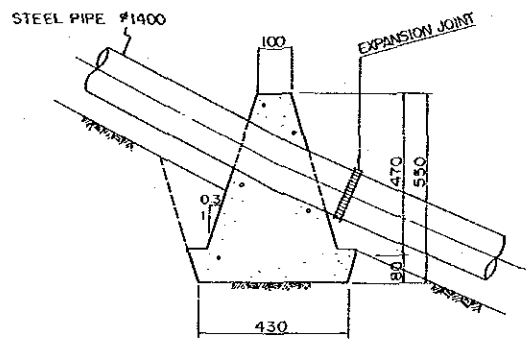
SECTION B - B



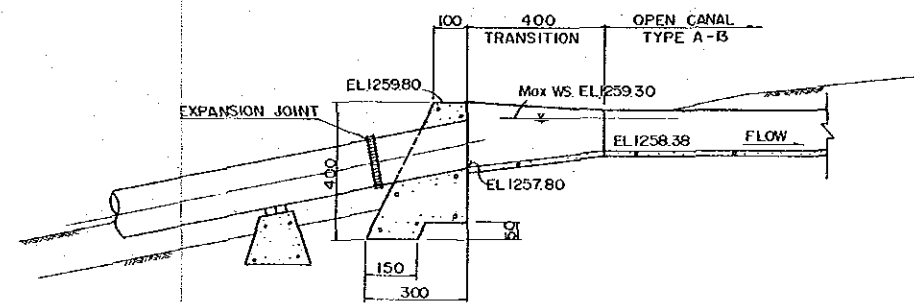
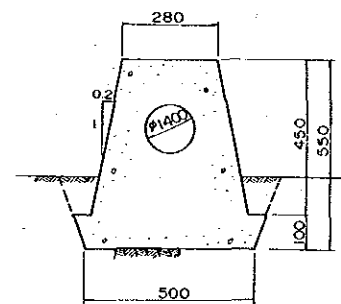
PLAN OF TRANSITION
(DOWNSTREAM PORTION SIPHON)



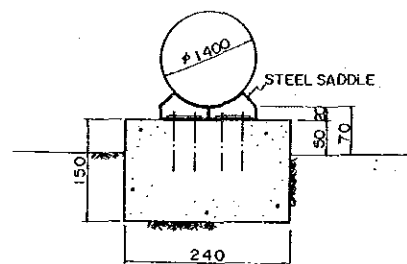
SECTION D - D



DETAILS OF SADDLE



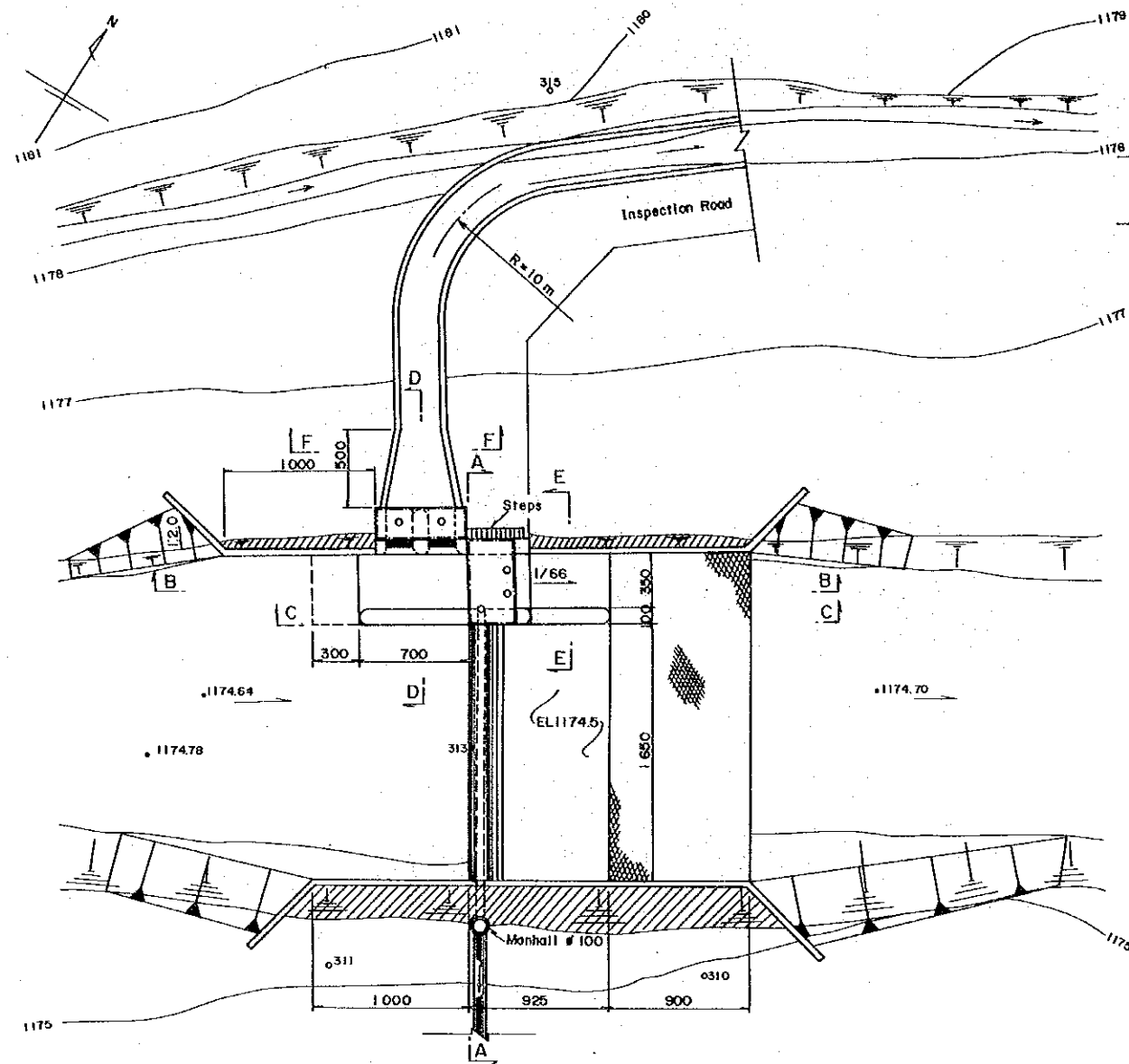
SECTION C - C



CROSS-SECTION OF SADDLE

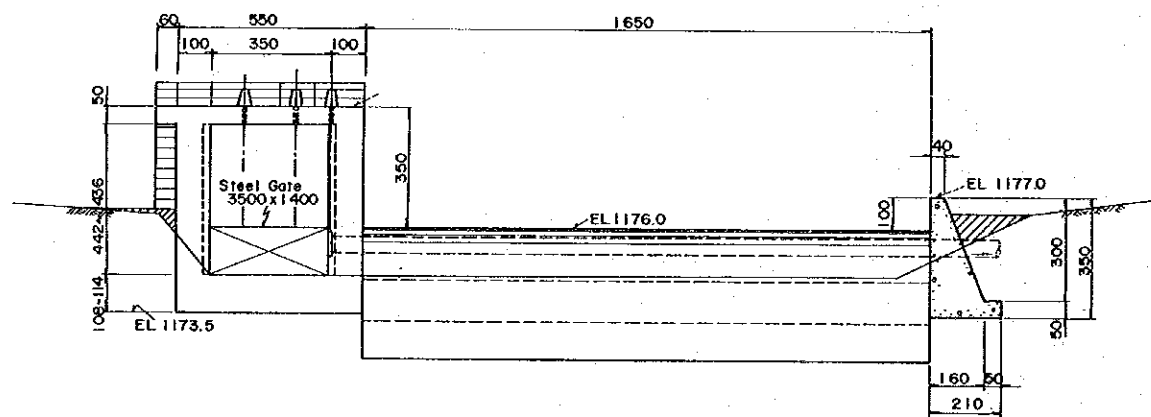
SCALE 1:100

SCALE 1:100 EXCEPT AS NOTED

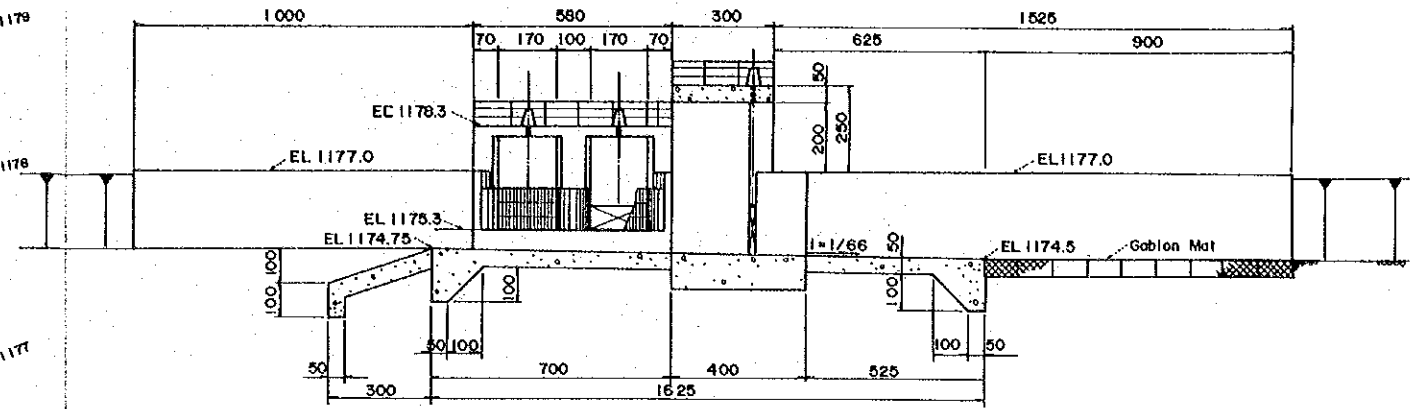


PLAN

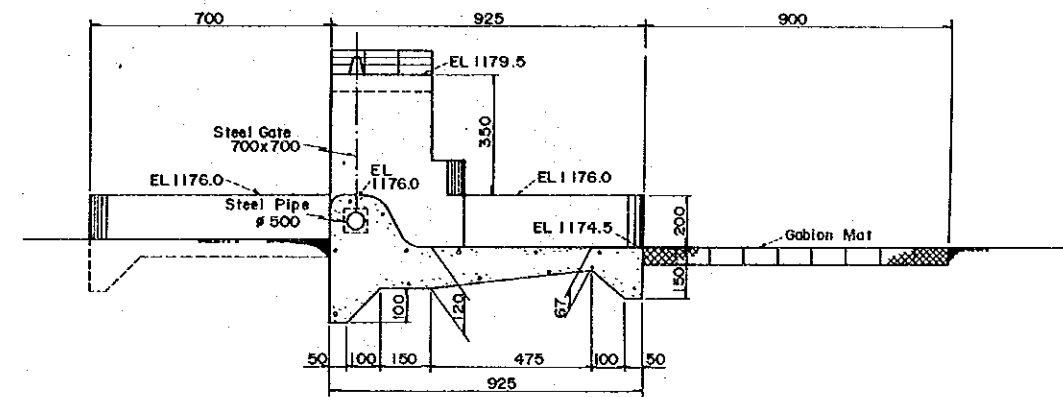
SCALE 0 5 10m



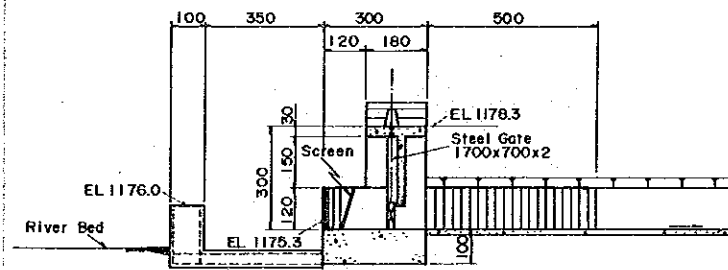
SECTION A-A



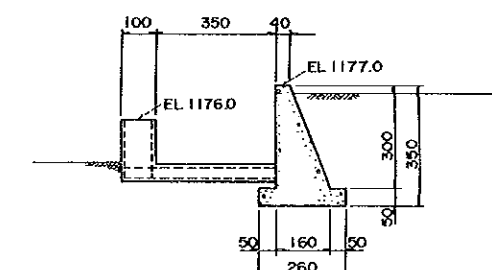
SECTION B-B



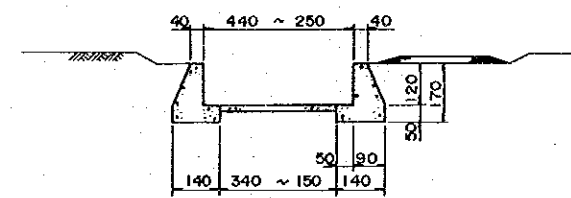
SECTION C-C



SECTION D-D

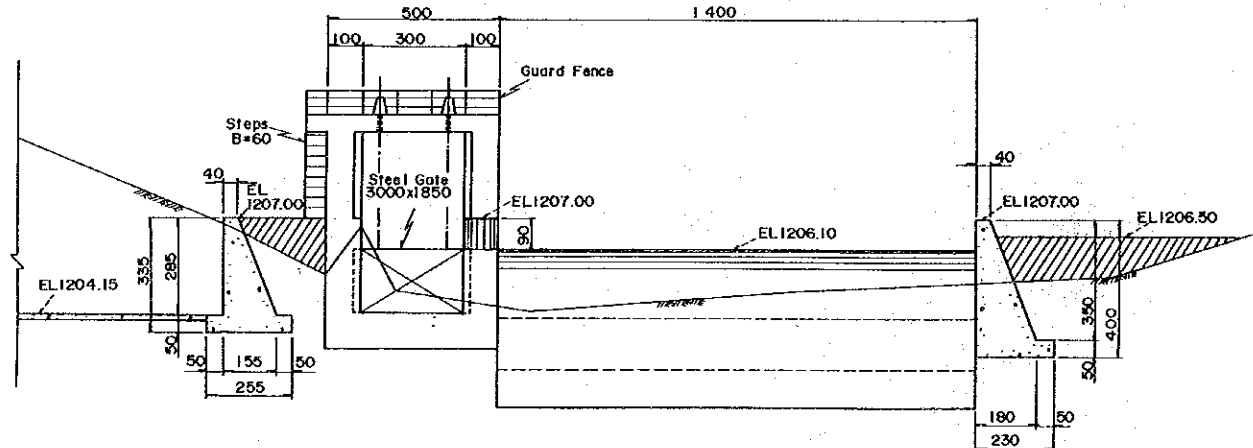
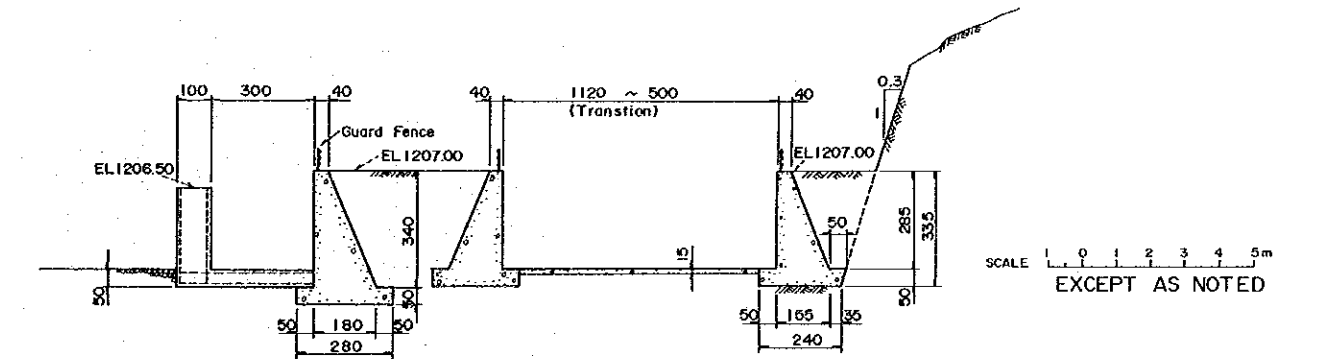
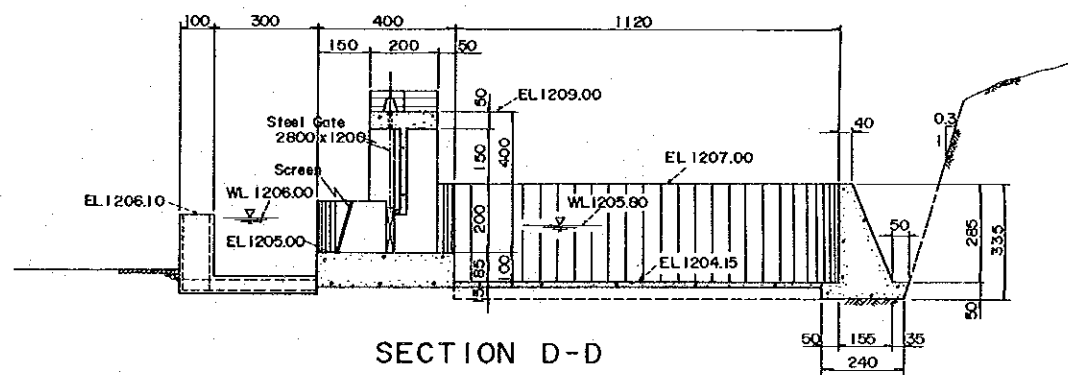
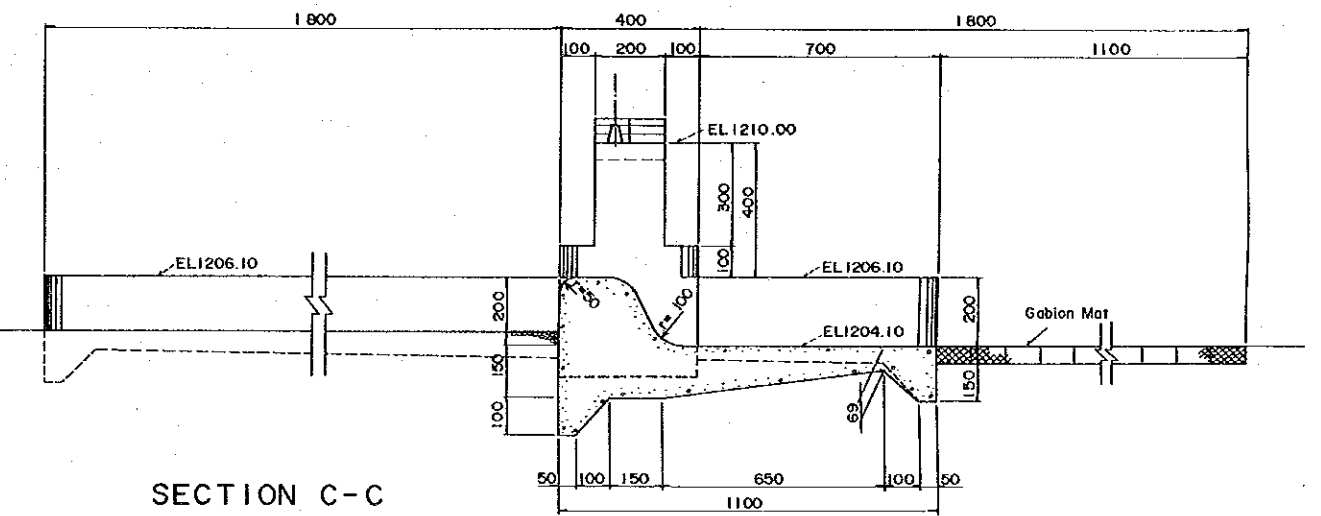
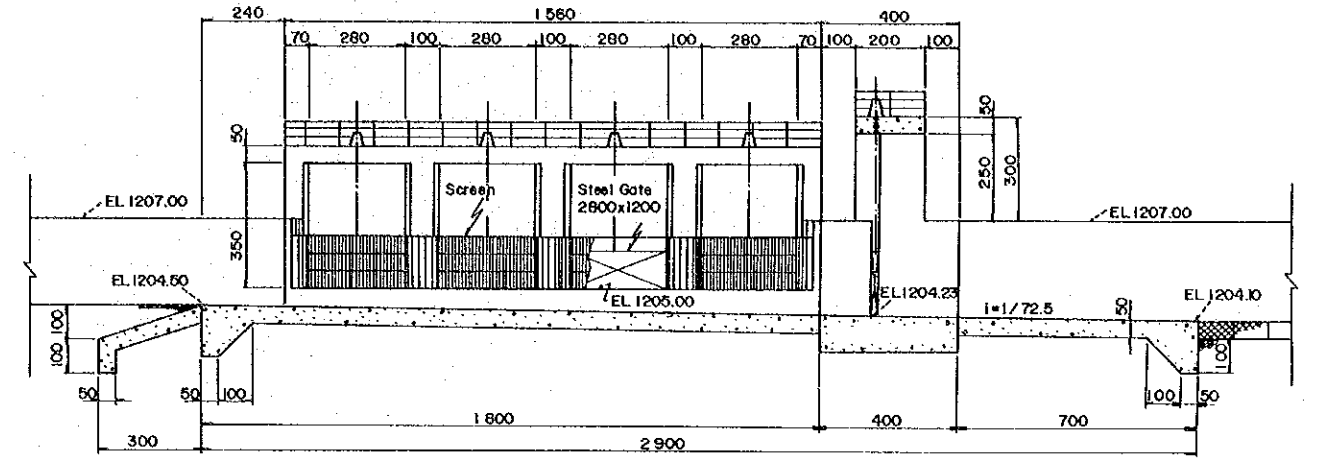
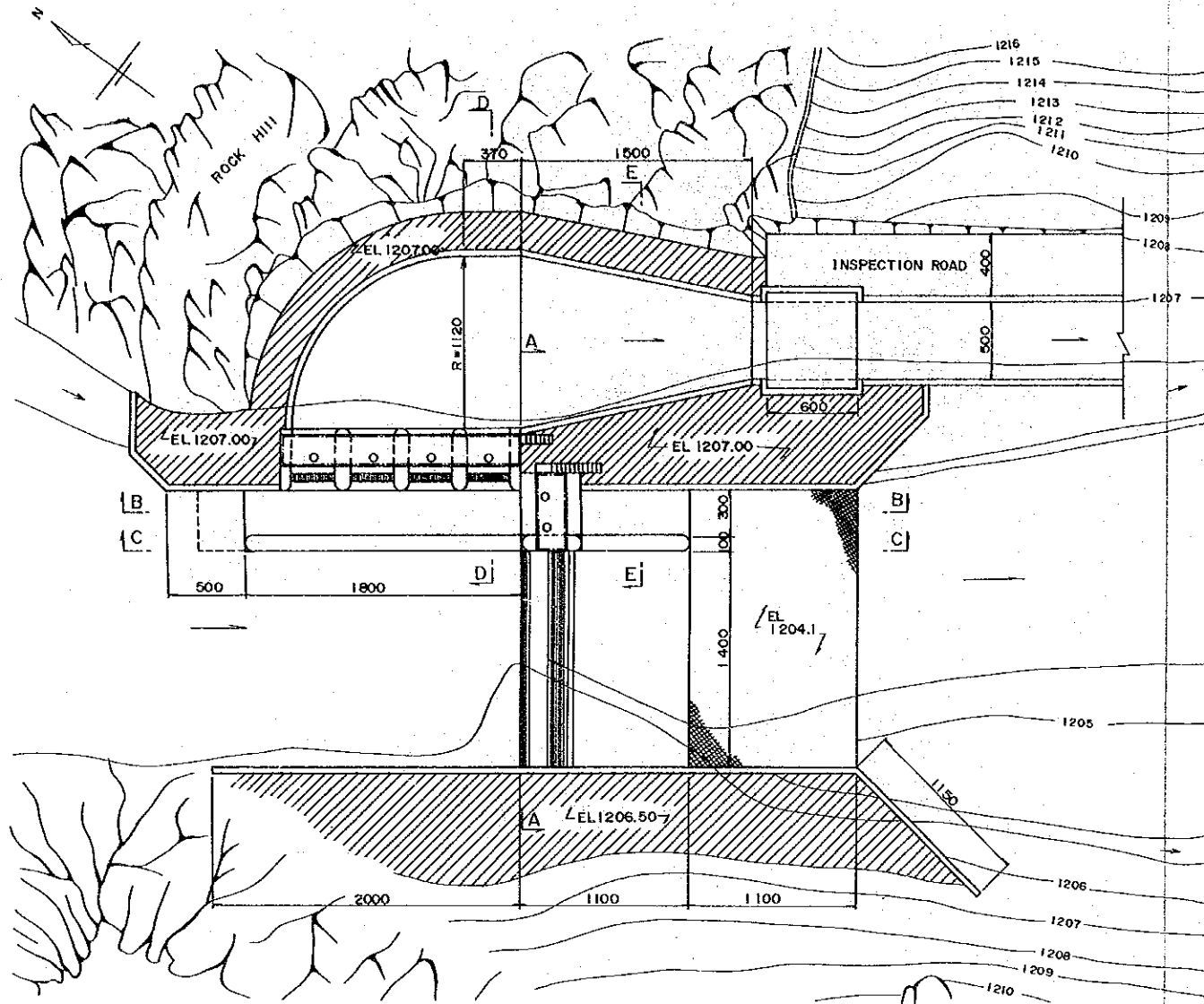


SECTION E-E

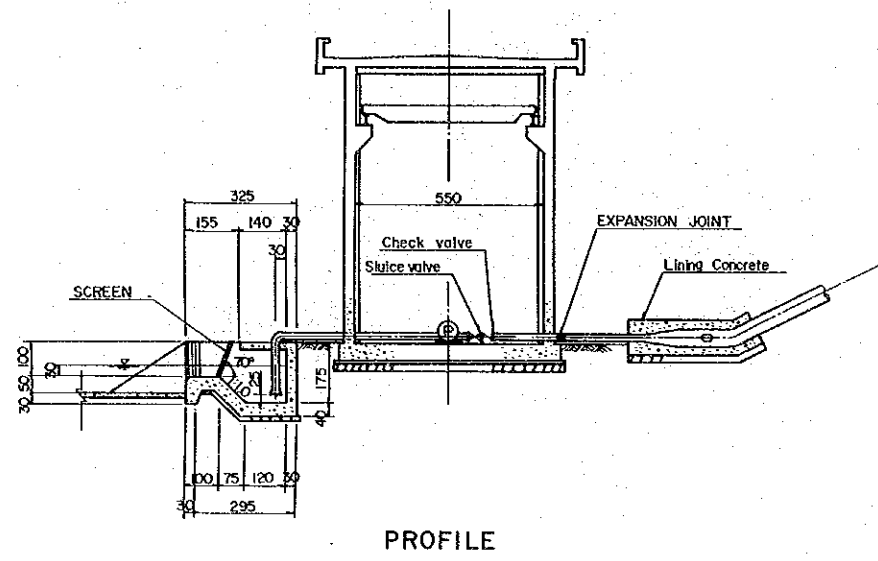


SECTION F-F

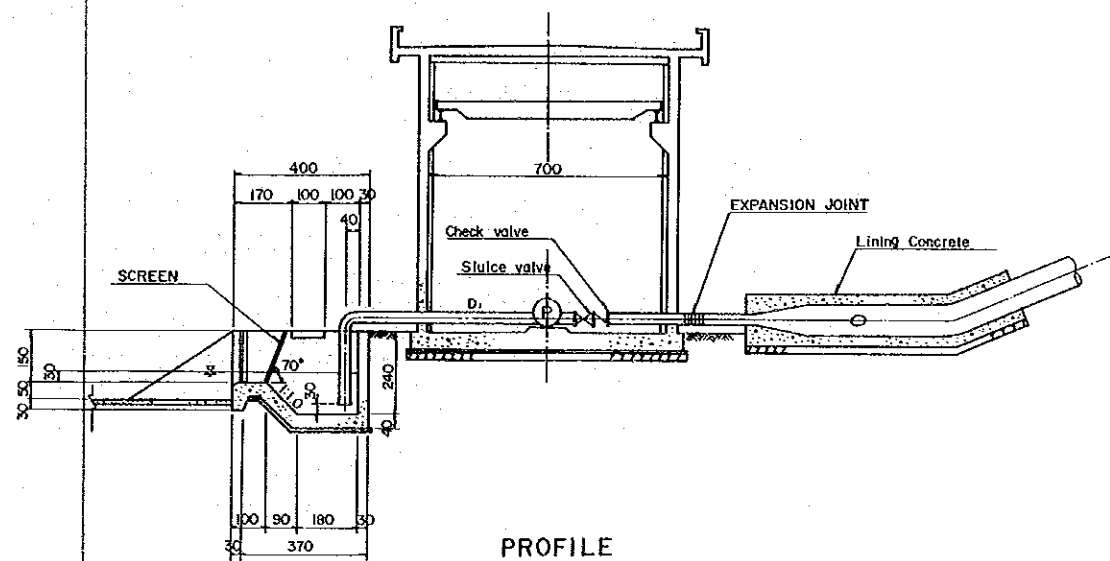
SCALE 0 1 2 3 4 5m
EXCEPT AS NOTED



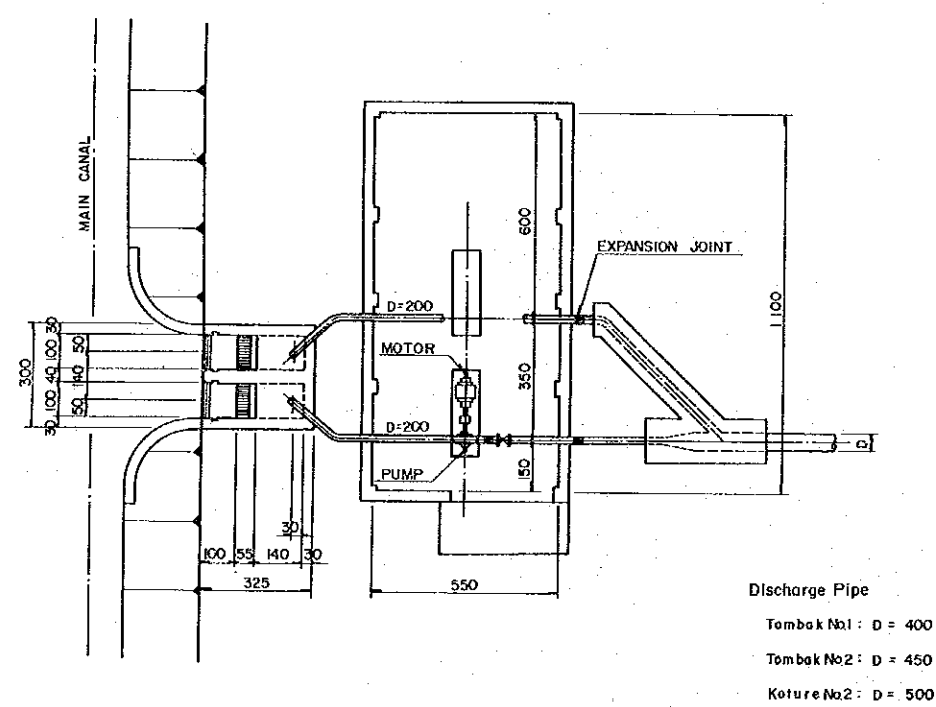
SCALE 1:500 EXCEPT AS NOTED



PROFILE

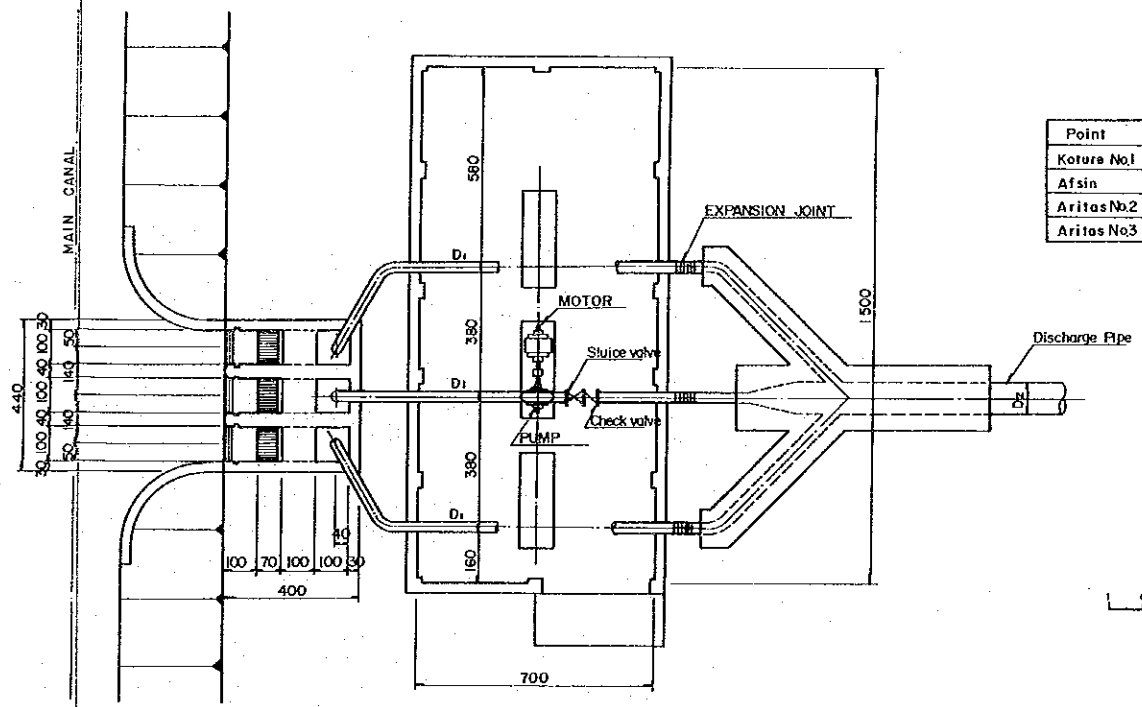


PROFILE



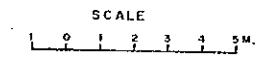
PLAN OF TYPE A

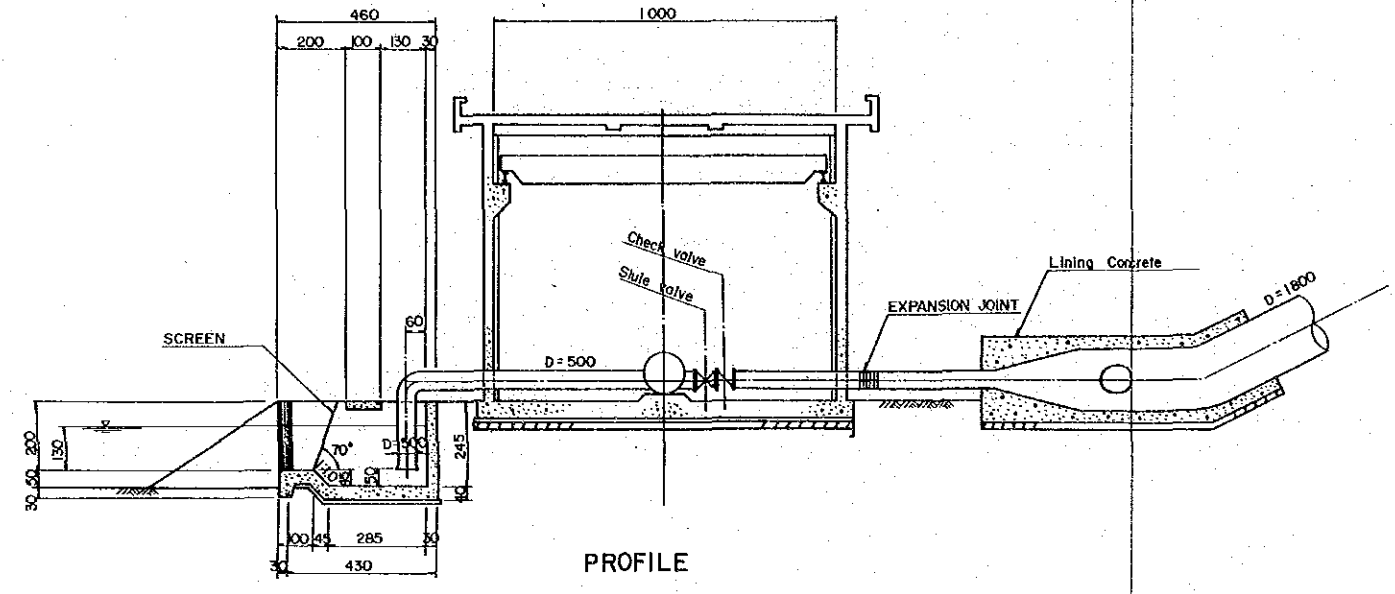
Discharge Pipe
 Tombak No1 : D = 400
 Tombak No2 : D = 450
 Koture No2 : D = 500



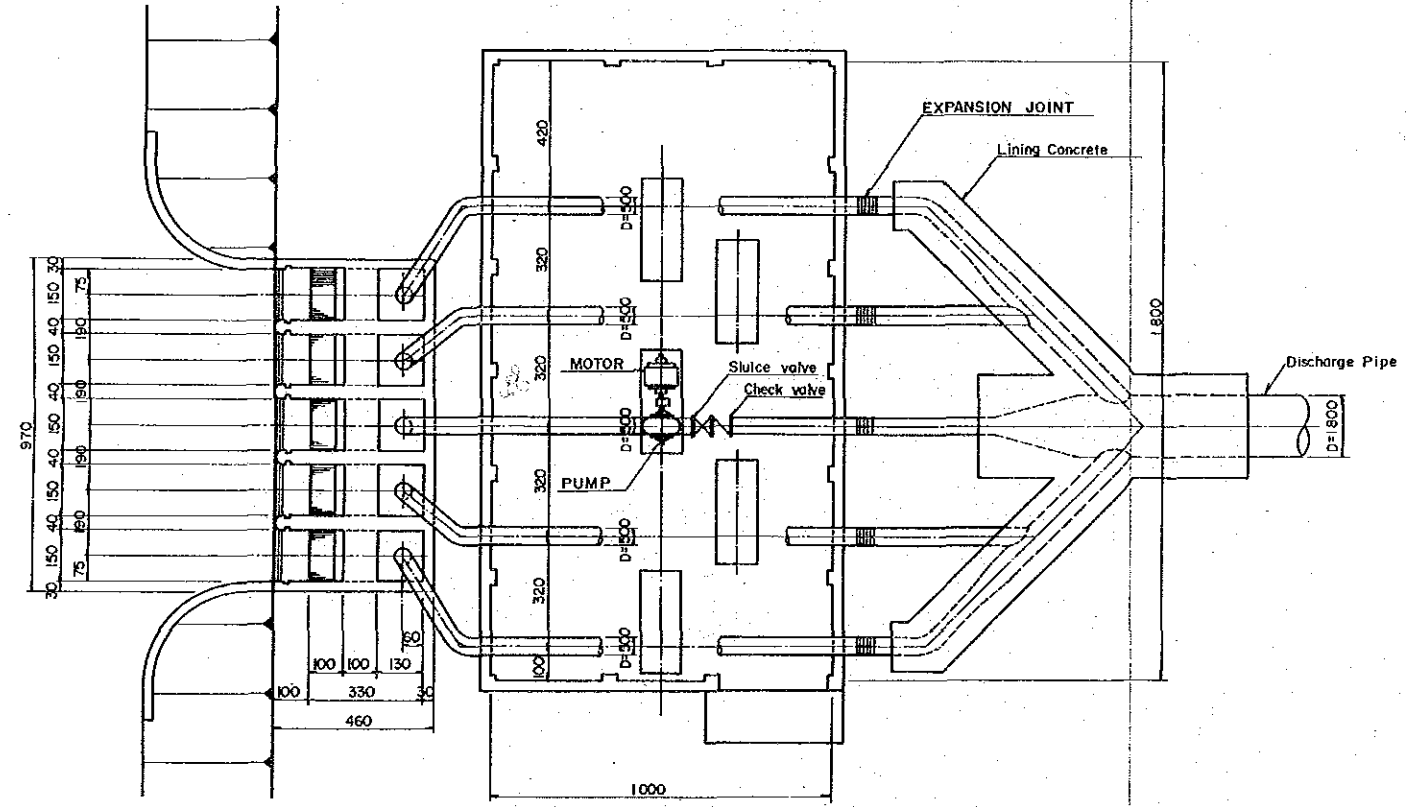
PLAN OF TYPE B

Point	D ₁	D ₂
Koture No.1	300	900
Afsin	250	700
Aritas No.2	250	700
Aritas No.3	300	800

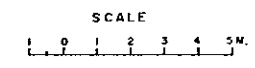


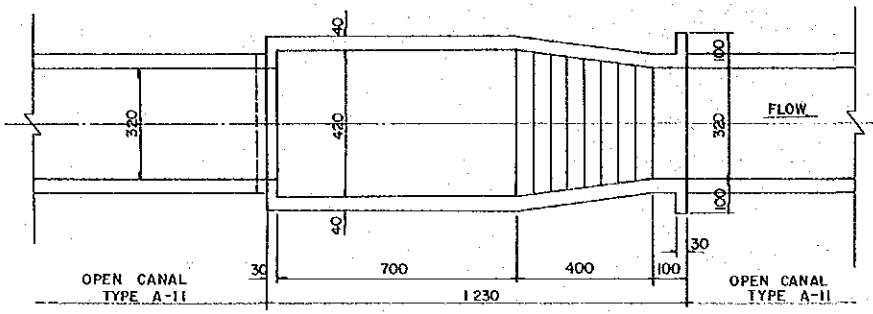


PROFILE

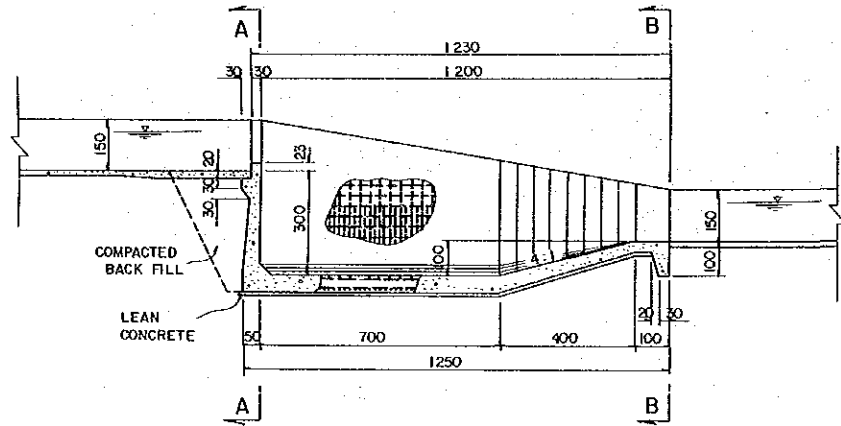


PLAN OF TYPE C (ARITAS, No. 1)

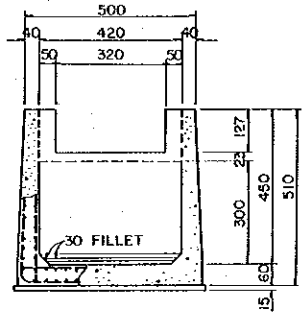




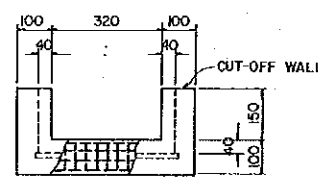
PLAN OF DROP



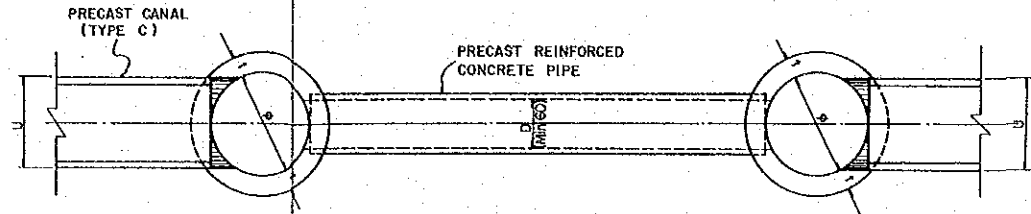
PROFILE



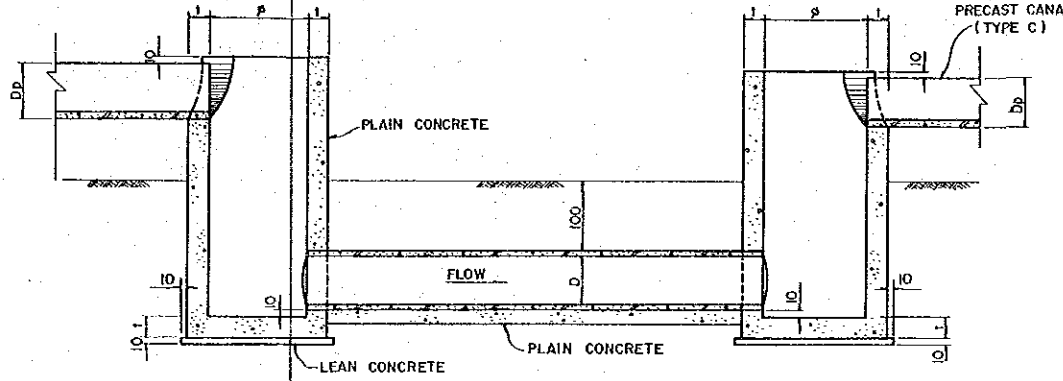
SECTION A-A



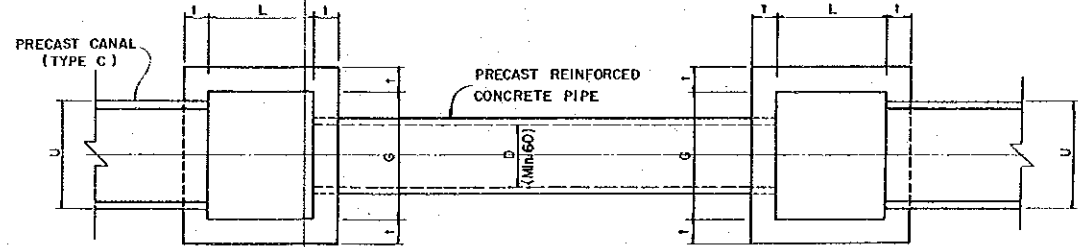
SECTION B-B



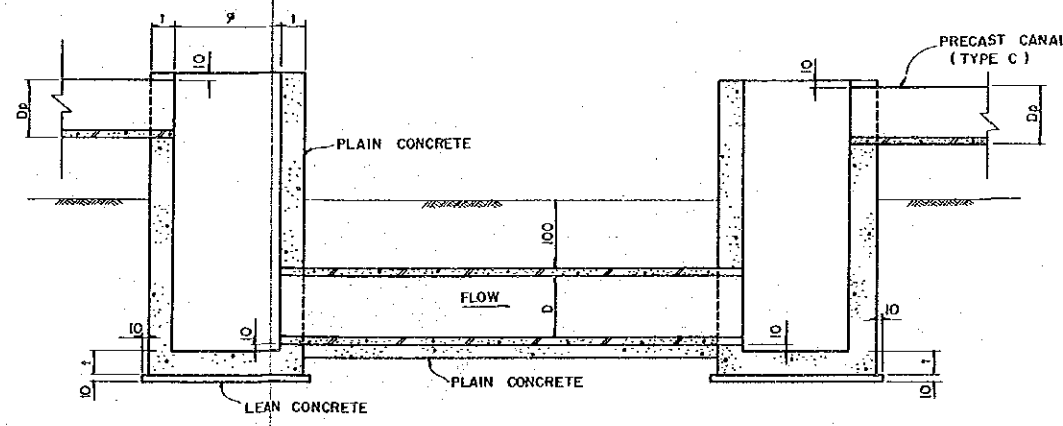
PLAN OF SMALL SIPHON (CIRCULAR TYPE)



PROFILE



PLAN OF SMALL SIPHON (RECTANGULAR TYPE)

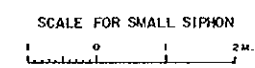
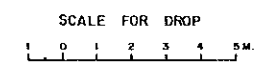


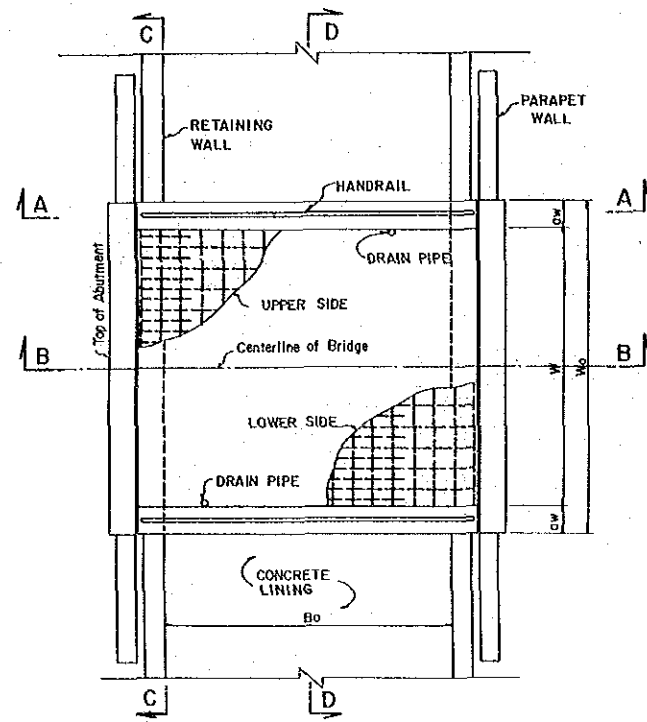
PROFILE

DIMENSIONS

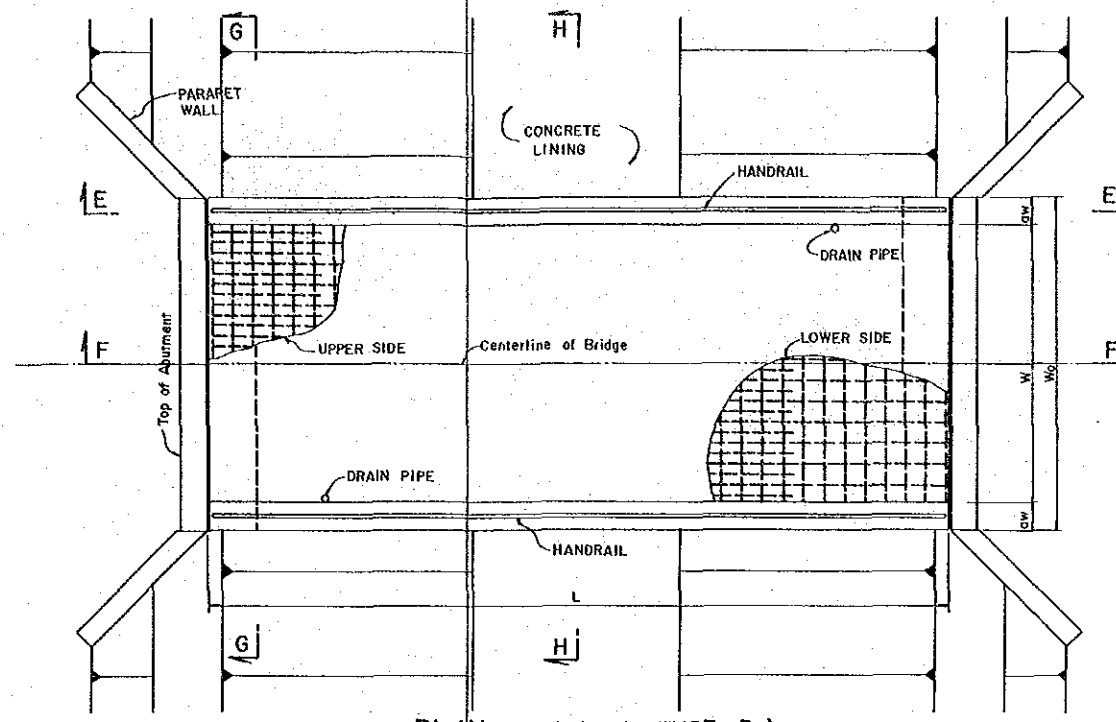
CANAL TYPE	U	Dp	φ or G x L	t	D *
C - 230	61.46	59.82	φ 100	20	60
C - 315	77.02	63.82	φ 100	20	60
C - 450	101.22	68.57	φ 120	25	60
C - 600	128.66	71.65	φ 150	30	70
C - 800	154.72	82.86	185 x 160	30	80
C - 1000	171.56	92.78	200 x 160	35	90

NOTE: * Dimensions of D in the above Table are typical ones. Final decision of each diameter should be made based on hydraulic calculations.

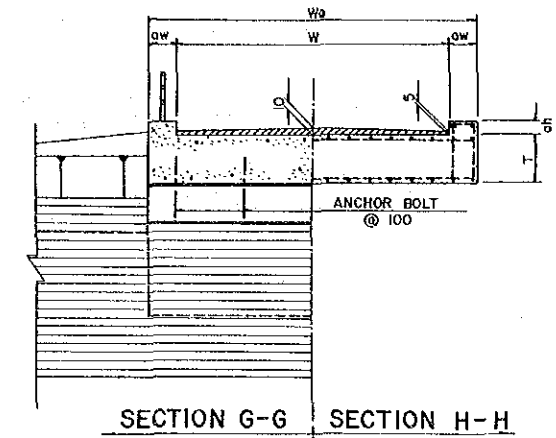




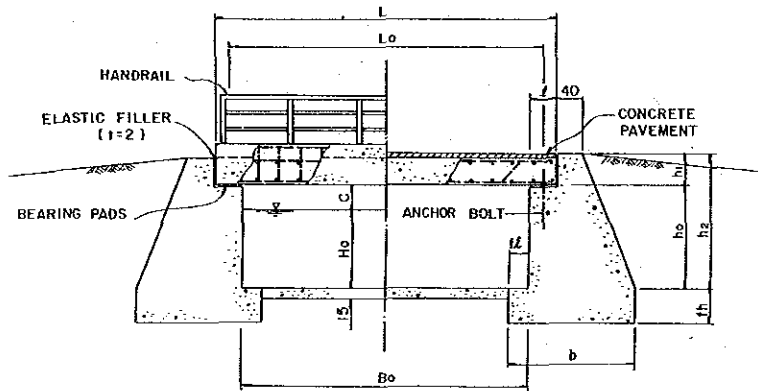
PLAN (CANAL TYPE A)



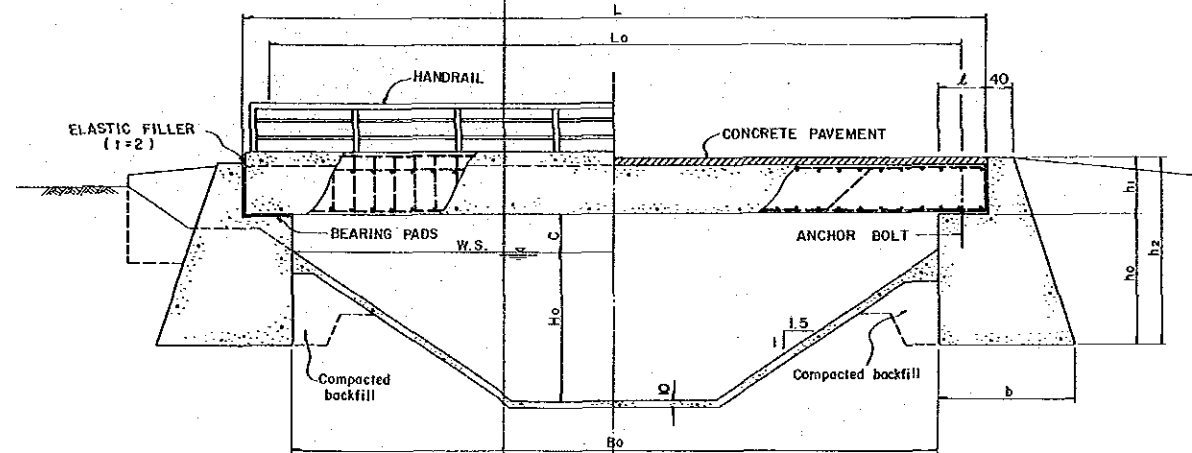
PLAN (CANAL TYPE B)



NOTE; Dimension of Abutment $d_w \times d_h$
 For effective width 4.0m; 40 x 20
 " " 6.0m; 60 x 30



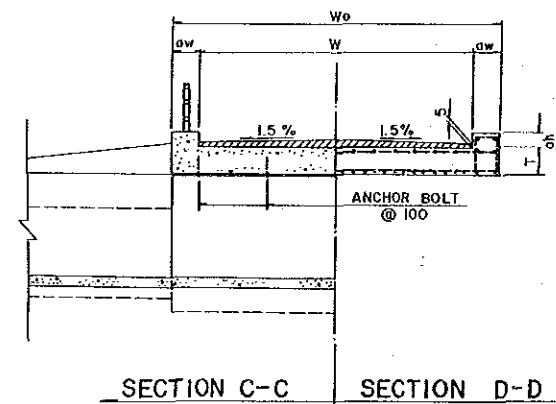
SECTION A-A SECTION B-B



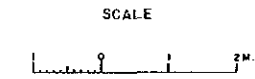
SECTION E-E SECTION F-F

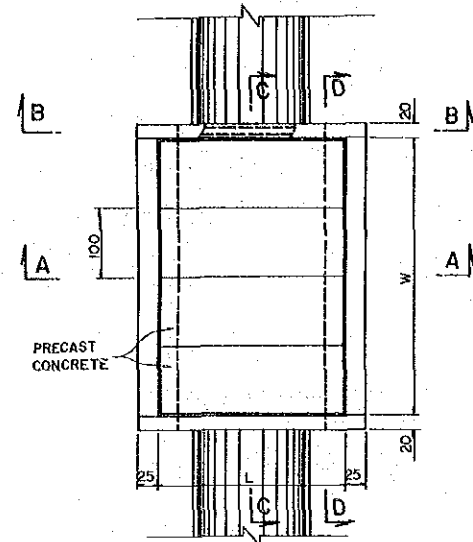
DIMENSIONS

DIMENSION	CANAL TYPE	A-3	A-4	A-10	A-11	B-2	B-6	B-7	B-9	B-12	B-13	B-14	B-15
[DESIGN PARAMETER]													
DESIGN WATER DEPTH	H _o	208	214	16	113	218	214	223	170	130	109	103	76
CLEARANCE	C	62	56	34	37	62	56	57	50	40	31	37	34
CANAL WIDTH	B _o	950	850	420	320	1310	950	870	730	490	430	410	330
SPAN LENGTH	L _o	1020	920	60	355	1400	1020	935	785	535	470	450	365
[SUPERSTRUCTURE]													
TOTAL LENGTH	L	1090	990	500	390	1490	1090	1000	840	580	510	490	400
SLAB THICKNESS	T	70	70	40	35	90	70	65	55	45	40	40	35
EFFECTIVE WIDTH	W	1080	1080	400 or 600									
TOTAL WIDTH	W _o	1200	1200	480 or 720									
[ABUTMENT]													
	f	70	70	40	35	90	70	65	55	45	40	40	35
	h _o	270	270	50	150	200	190	200	160	130	100	110	90
	h ₁	75~83	75~83	45~50	40~45	95~100	75~80	70~75	60~65	50~55	45~50	45~50	40~45
	h ₂	345~353	345~353	195~200	190~195	295~300	265~270	270~275	220~225	180~185	145~150	155~160	130~135
	b	300	300	150	220	200	200	170	140	110	120	100	100
	f ₁	50	50	30	30	—	—	—	—	—	—	—	—
	f _h	70	70	50	50	—	—	—	—	—	—	—	—
ANCHOR BOLT : Dia. (mm) x Length (cm)		φ32x130	φ32x130	φ22x70	φ22x60	φ32x150	φ32x130	φ32x130	φ29x110	φ25x90	φ22x70	φ22x70	φ22x60

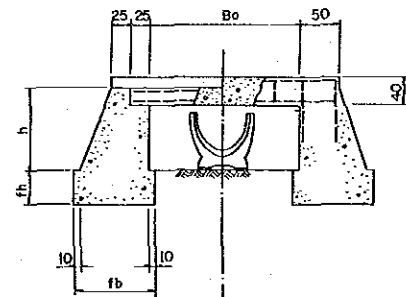


SECTION C-C SECTION D-D

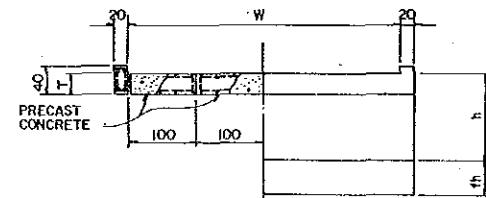




PLAN OF BRIGE
(CANAL TYPE C)



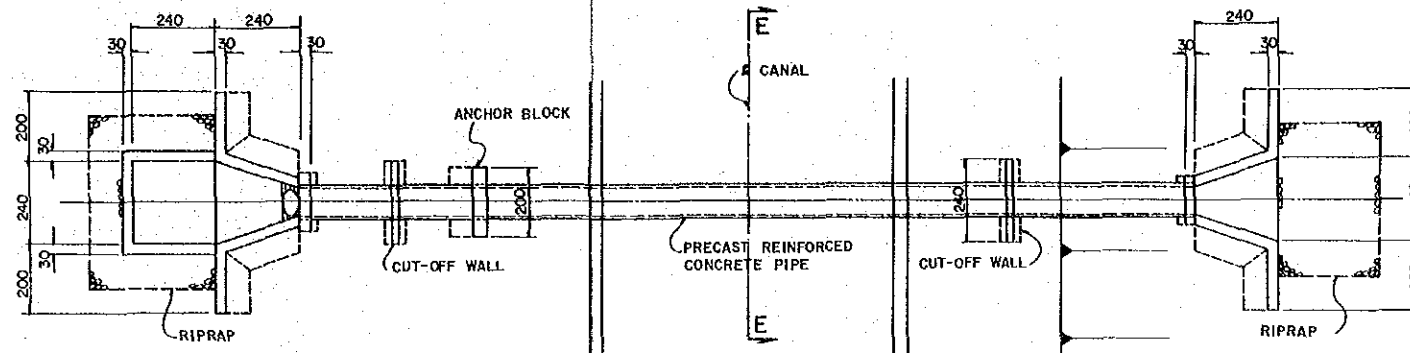
SECTION A-A SECTION B-B



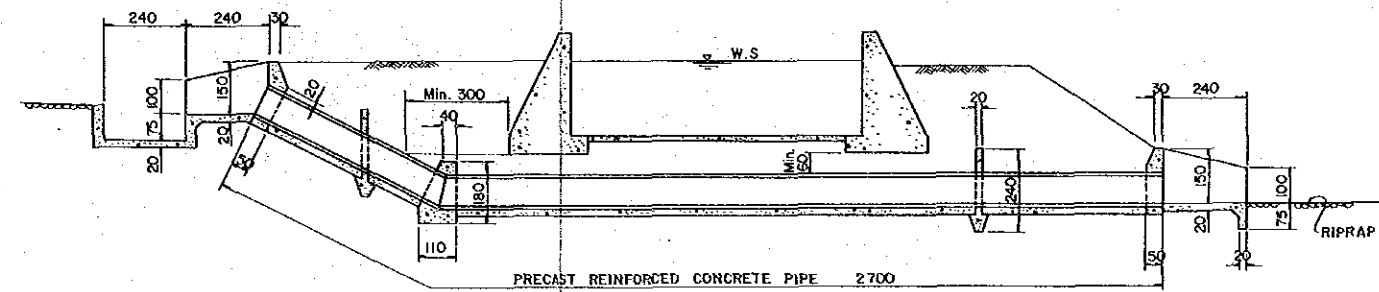
SECTION C-C SECTION D-D

DIMENSIONS

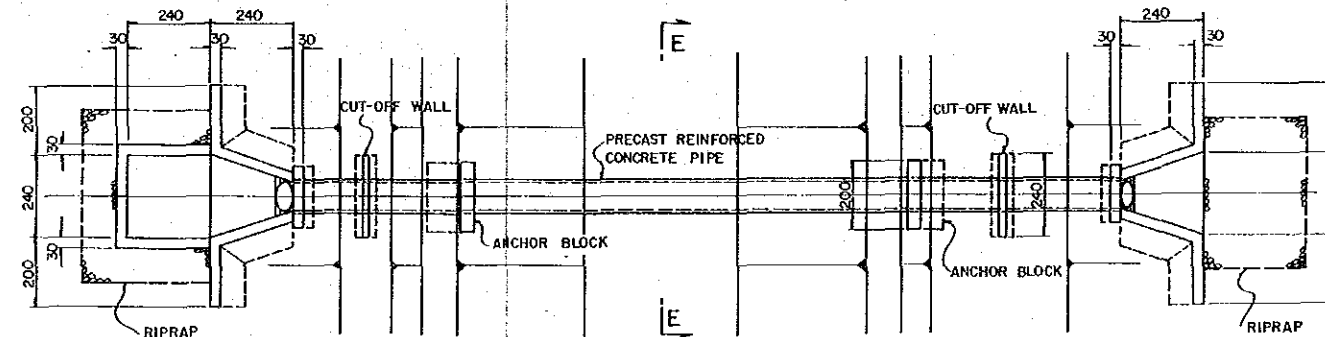
ITEM	CANAL TYPE	C-1000	C-800	C-600	C-400
[PRECAST SLAB]					
LENGTH	L	270	250	230	200
THICKNESS	T	25	20	20	20
[IN-SITE CONCRETE STRUCTURE]					
EFFECTIVE WIDTH	W	400 or 600			
CANAL WIDTH	B ₀	220	200	180	150
	h	130	120	120	100
	fh	50	50	50	50
	fb	120	120	120	100



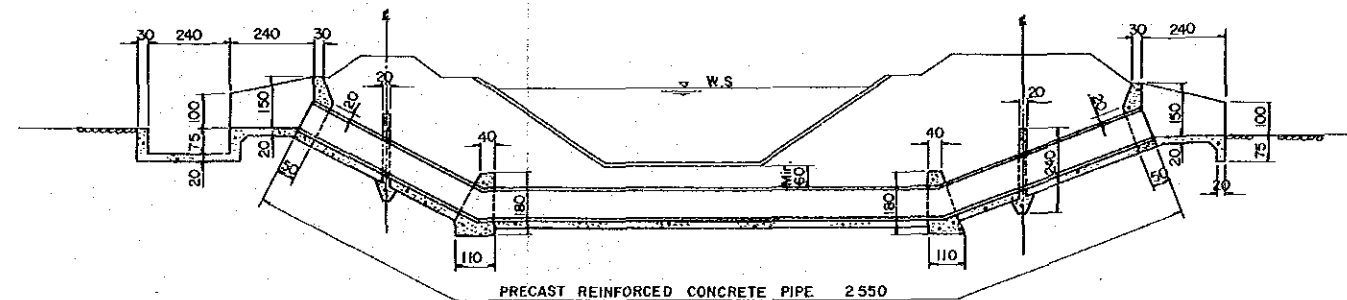
PLAN OF CROSS-DRAIN (CANAL TYPE A)



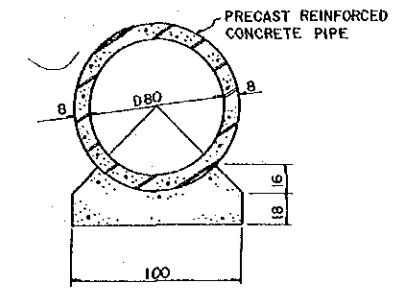
PROFILE



PLAN OF CROSS-DRAIN (CANAL TYPE B)



PROFILE



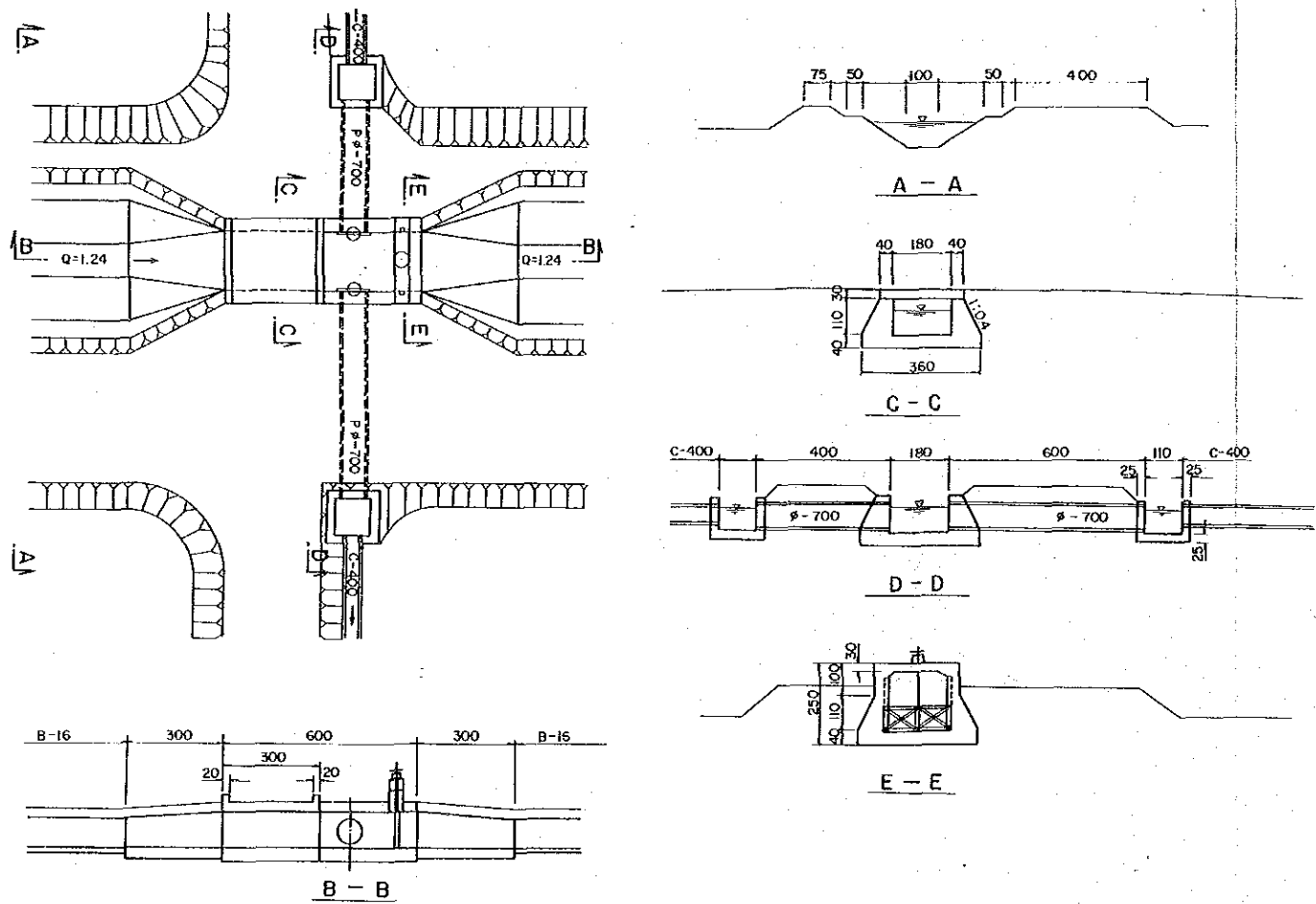
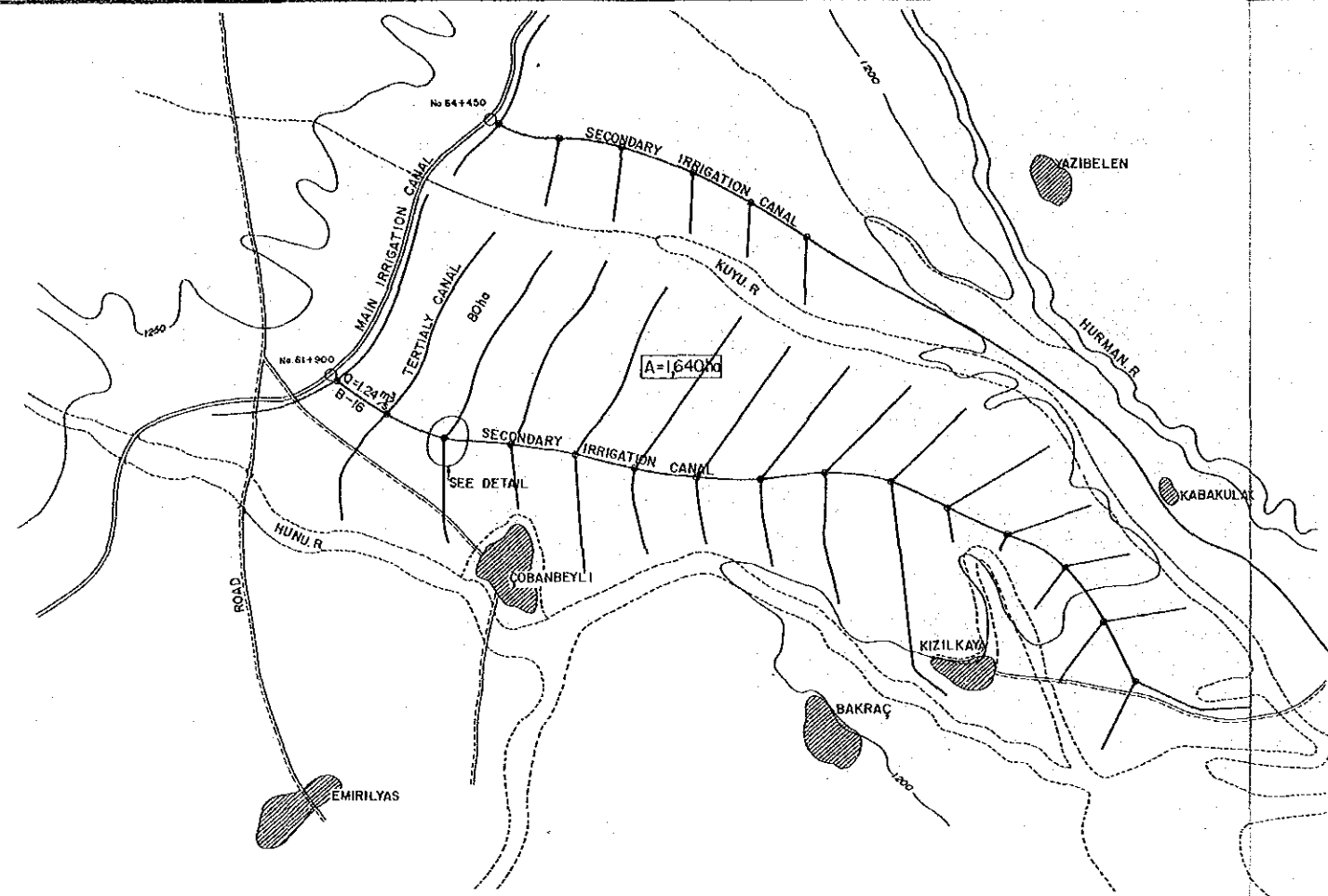
SECTION E-E

SCALE
0 0.5 1 M.

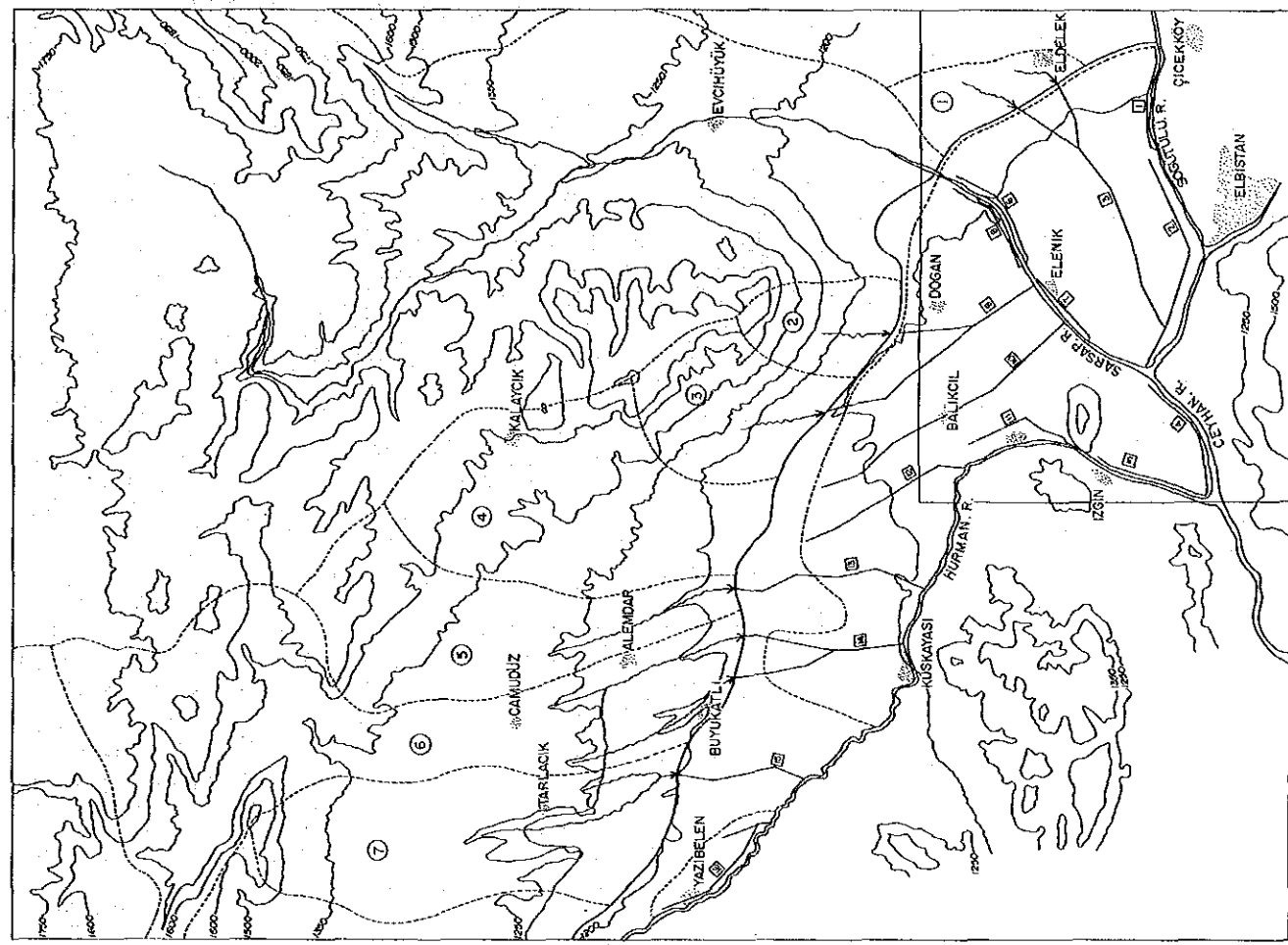
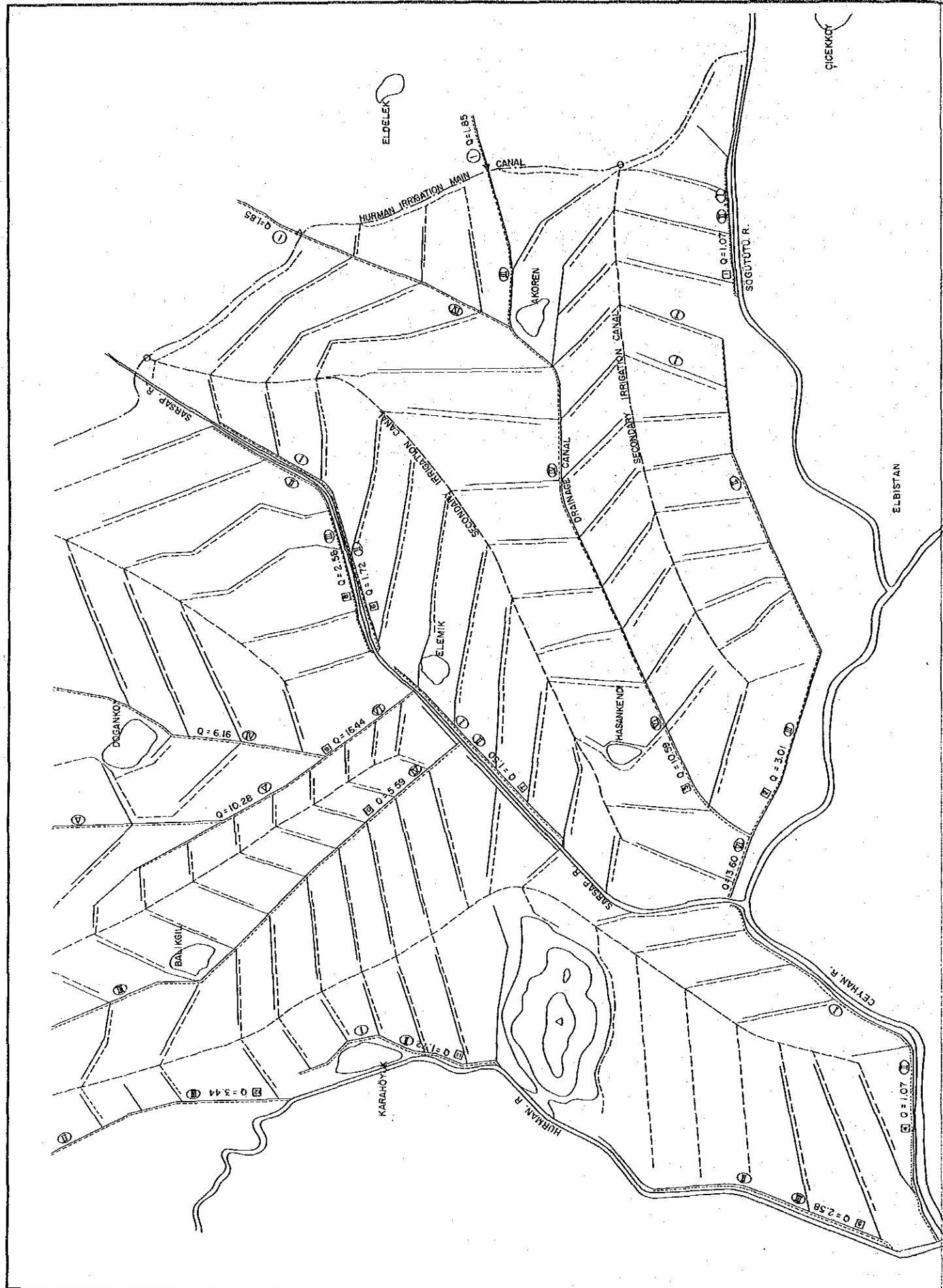
SCALE FOR BRIDGE
0 1 2 3 4 5 M.

SCALE FOR CROSS-DRAIN
0 1 2 3 4 5 M.

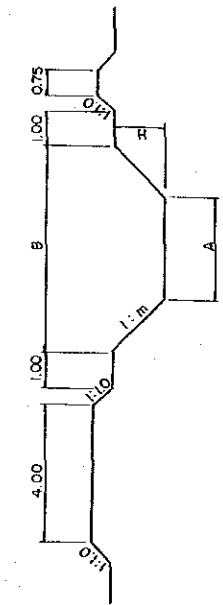
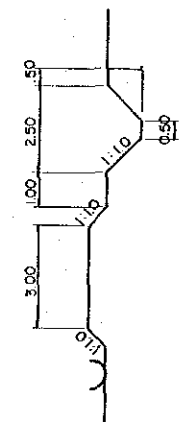
EXCEPT AS NOTED



TYPICAL ON-FARM CANAL



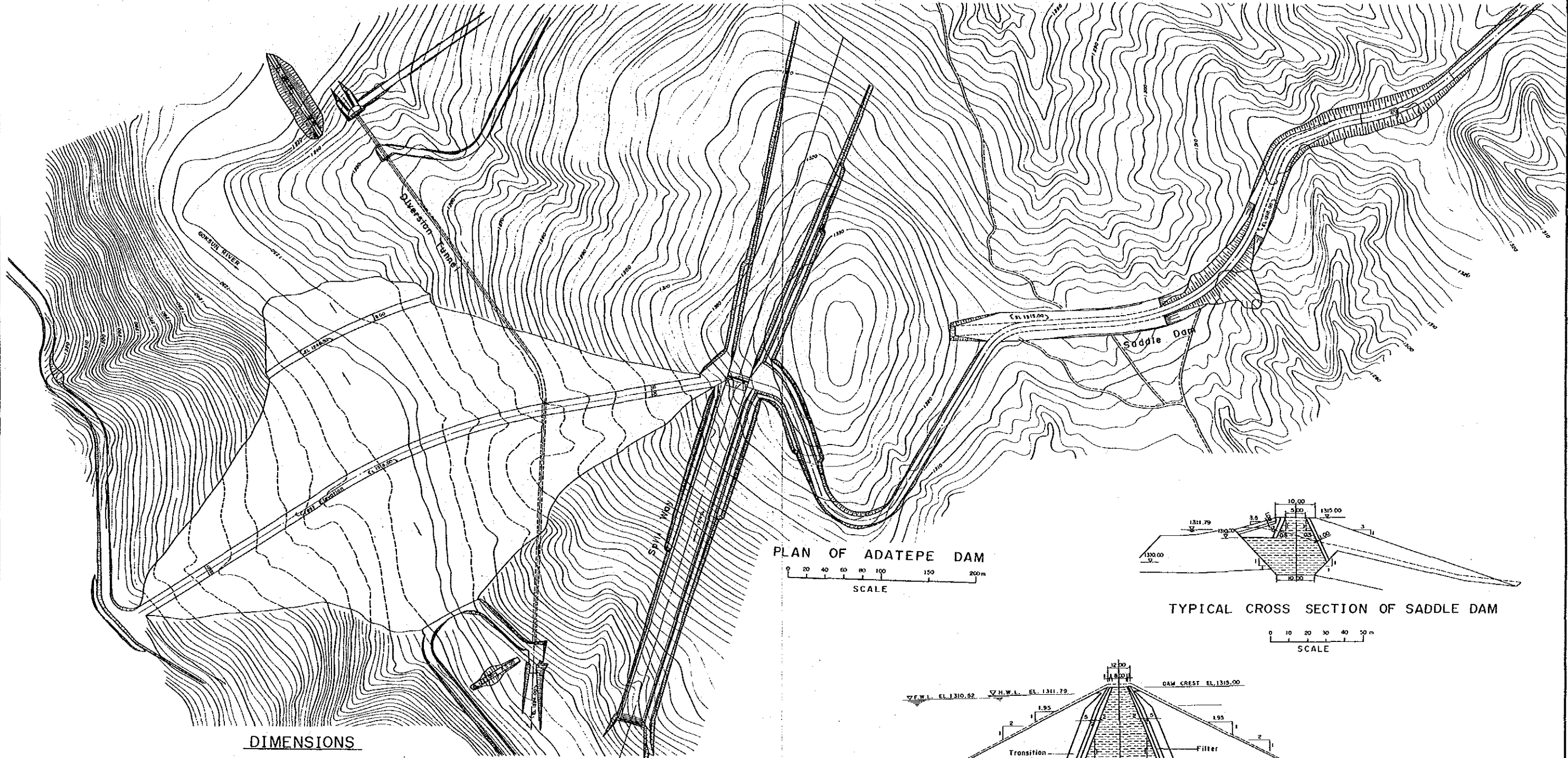
TYPE	A	B	H	m	Q
I	0.50	2.50	1.00	1.0	1.8
II	1.00	3.00	1.00	1.0	1.7
III	1.50	4.40	1.20	1.2	3.0
IV	2.50	7.00	1.50	1.5	7.0
V	3.50	8.30	1.60	1.5	9.0
VI	6.00	11.40	1.80	1.5	16.0
VII	9.00	14.40	1.80	1.5	21.0



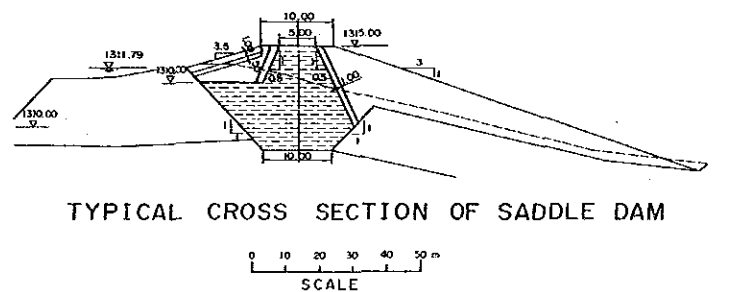
LEGEND

- No. of DEAINAGE CANAL
- TYPE OF DRAINAGE CANAL
- DRAIN DITCH
- DRAINAGE CANAL
- - - SECONDARY OR TERTIARY IRRIGATION CANAL
- MAIN IRRIGATION CANAL
- ① No. of CATCHMANT AREA

TYPICAL DRAINAGE CANAL



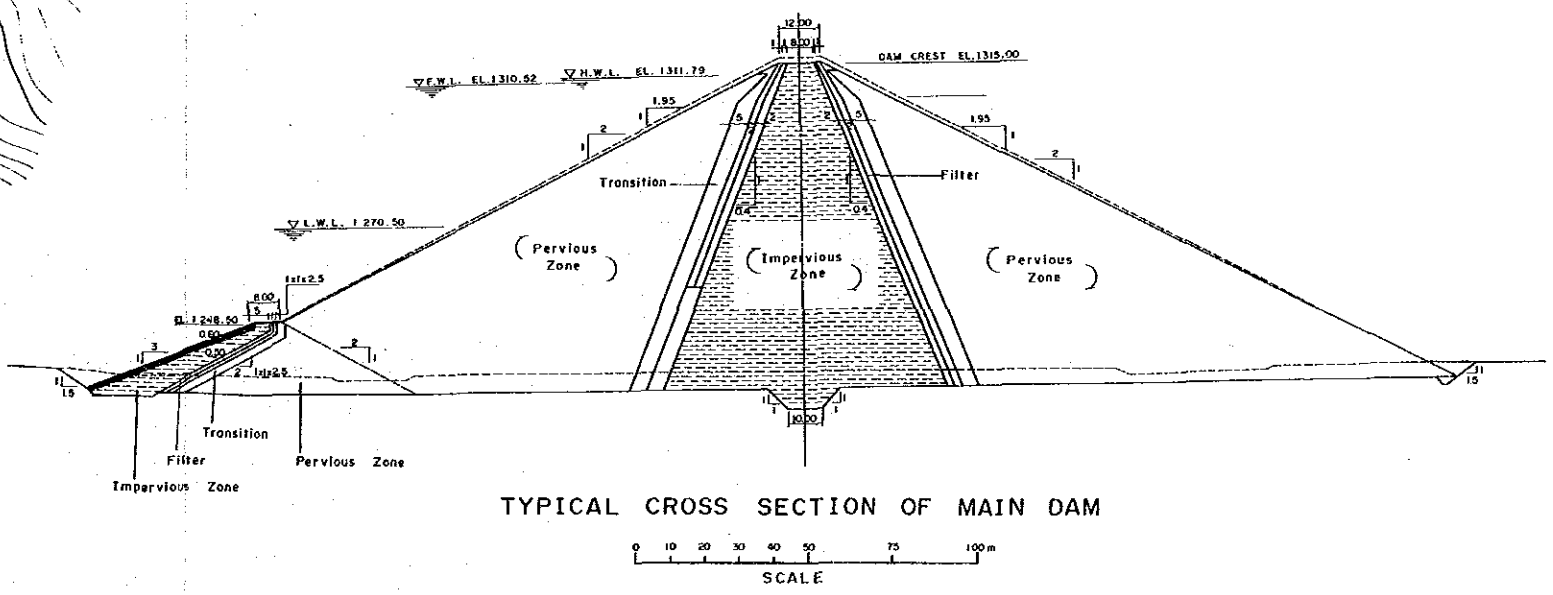
PLAN OF ADATEPE DAM
SCALE 0 20 40 60 80 100 150 200m



TYPICAL CROSS SECTION OF SADDLE DAM
SCALE 0 10 20 30 40 50m

DIMENSIONS

RESERVOIR		SADDLE DAM	
Lowest Water Level	1,270.50 m	Dam Type	Zone Type
Full Water Level	1,310.52 m	Crest Elevation	1,312.00 m
Highest Water Level	1,311.79 m	Crest Length	504.00 m
Dead Water Capacity	76.7 x 10 ³ m ³	Crest Width	10.00 m
Effective Capacity	423.3 x 10 ³ m ³	Dam Volume	114,400 m ³
Flood Control Capacity	19.3 x 10 ³ m ³	SPILLWAY	
Total Capacity	500.0 x 10 ³ m ³	Type	Shute Type, Radial Gate x 2
DAM		Design Flood Stage	992 m ³ /sec.
Dam Type	Center Cored Rock Fill Type	Length of Connecting Cannal	371.08 m
Crest Elevation	1,315.00 m	Type of Energy Dissipator	Ski Jump Type
Crest Length	651.00 m	DIVERSION TUNNEL	
Crest Width	12.00 m	Design Discharge	55.00 m ³ /sec.
Dam Hight	89.00 m	(g)	3.00 m
Dam Volume	4,684.957 m ³	Length	637.50 m
		Incline	0.007059



TYPICAL CROSS SECTION OF MAIN DAM
SCALE 0 10 20 30 40 50 75 100m

JICA