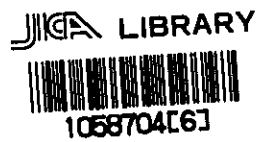


ラオス
タゴン地区パイロット農場設置計画
(別冊)
図面集

国際協力事業団

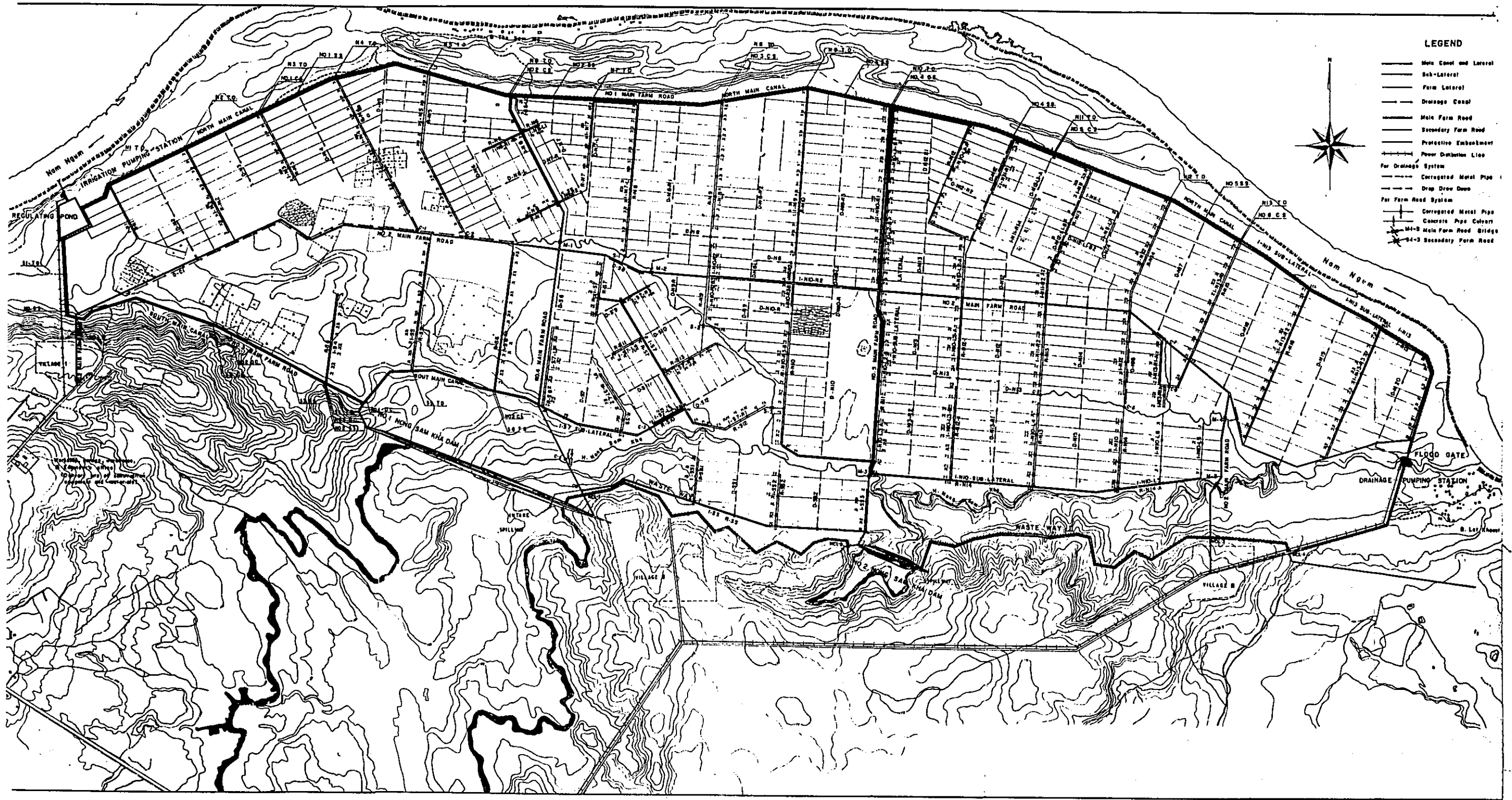


ラオス
タゴン地区パイロット農場設置計画
(別冊)
図面集



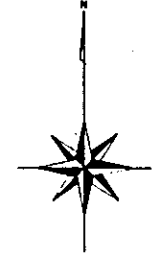
国際協力事業団

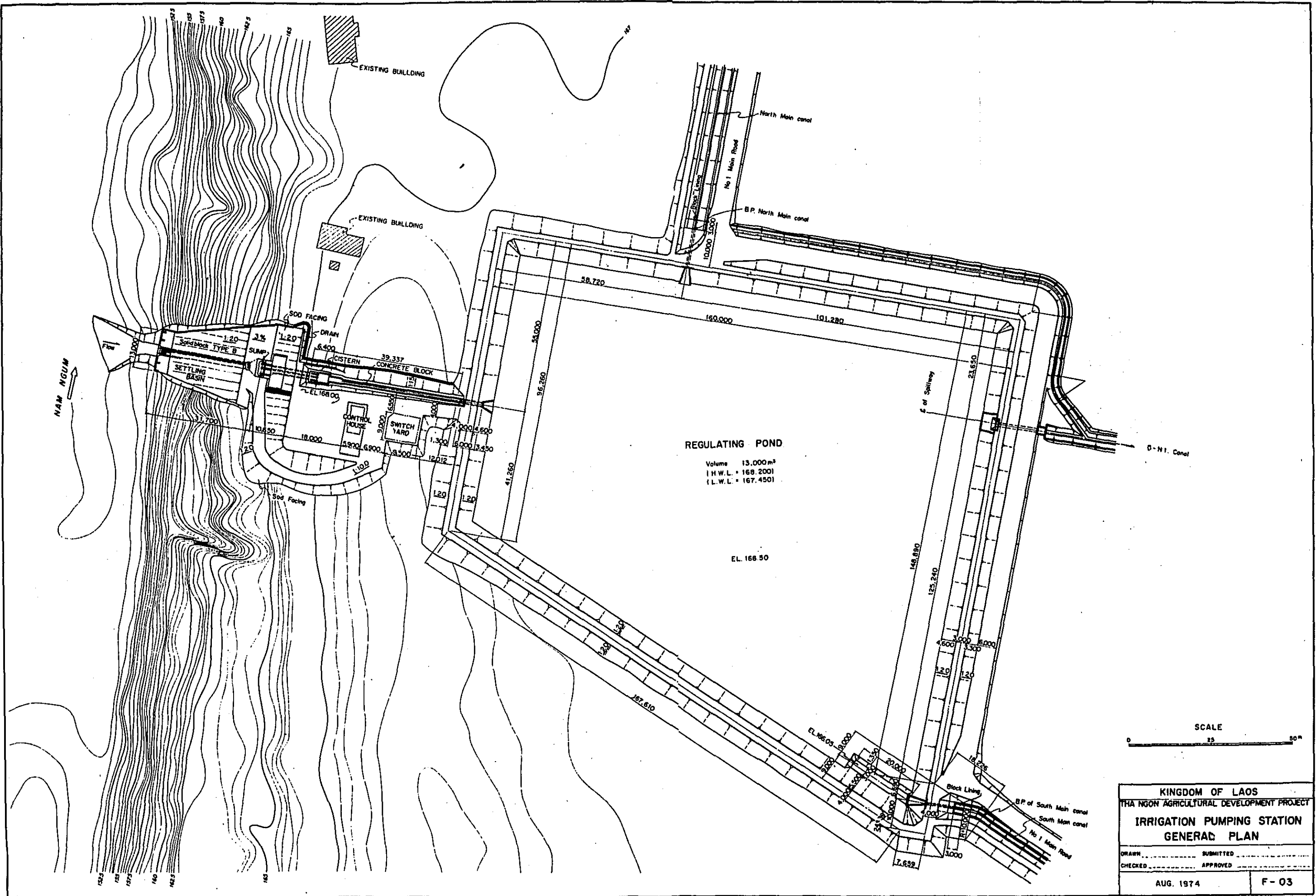
国際協力事業団	
受入 月日 '84. 3. 31	112
登録No. 02611	81.1
	ADT



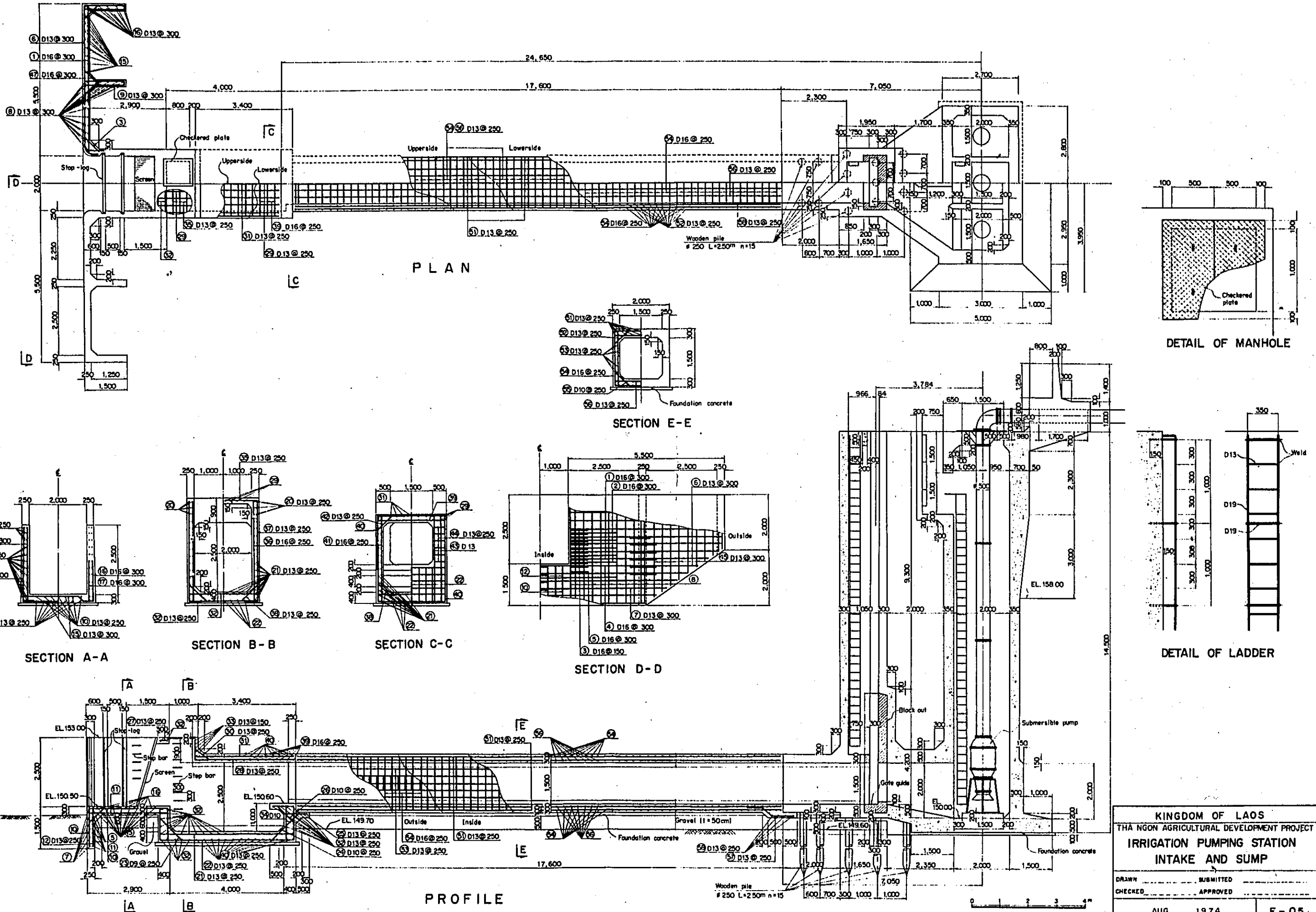
LEGEND

- Main Canal and Lateral
- Sub-Lateral
- Farm Lateral
- Drainage Canal
- Main Farm Road
- Secondary Farm Road
- Protective Embankment
- Power Distribution Line
- For Drainage System
 - Corrugated Metal Pipe
 - Drop Drop Down
- For Farm Road System
 - Corrugated Metal Pipe
 - Concrete Pipe Culvert
 - M-1-3 Main Farm Road Bridge
 - M-2-3 Secondary Farm Road





KINGDOM OF LAOS	
THA NGON AGRICULTURAL DEVELOPMENT PROJECT	
IRRIGATION PUMPING STATION	
GENERAL PLAN	
DRAWN _____	SUBMITTED _____
CHECKED _____	APPROVED _____
AUG. 1974	F-03



PLAN

SECTION E-E

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

PROFILE

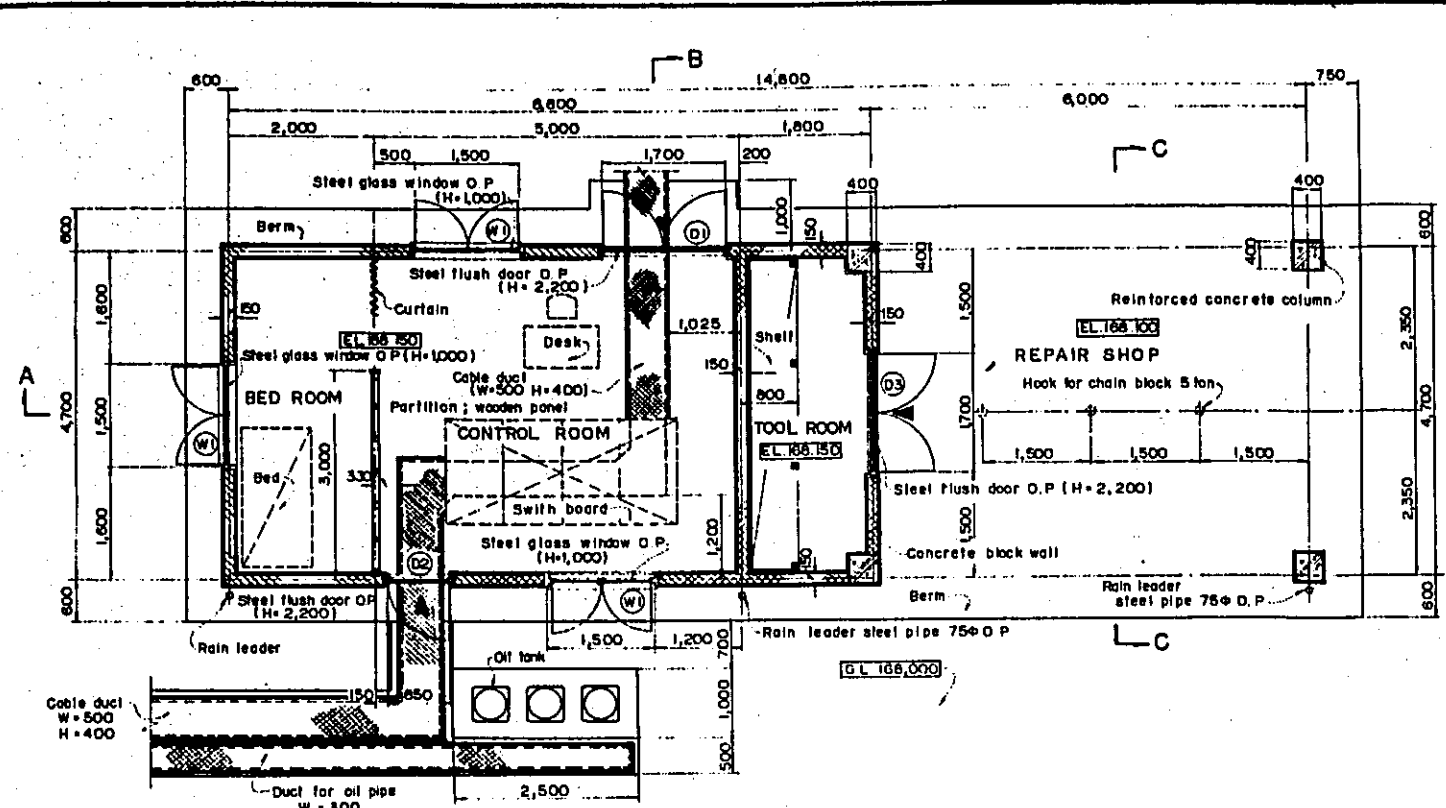
DETAIL OF MANHOLE

DETAIL OF LADDER

KINGDOM OF LAOS
THA NGON AGRICULTURAL DEVELOPMENT PROJECT
IRRIGATION PUMPING STATION
INTAKE AND SUMP

DRAWN _____ SUBMITTED _____
CHECKED _____ APPROVED _____

AUG. 1974 F-05

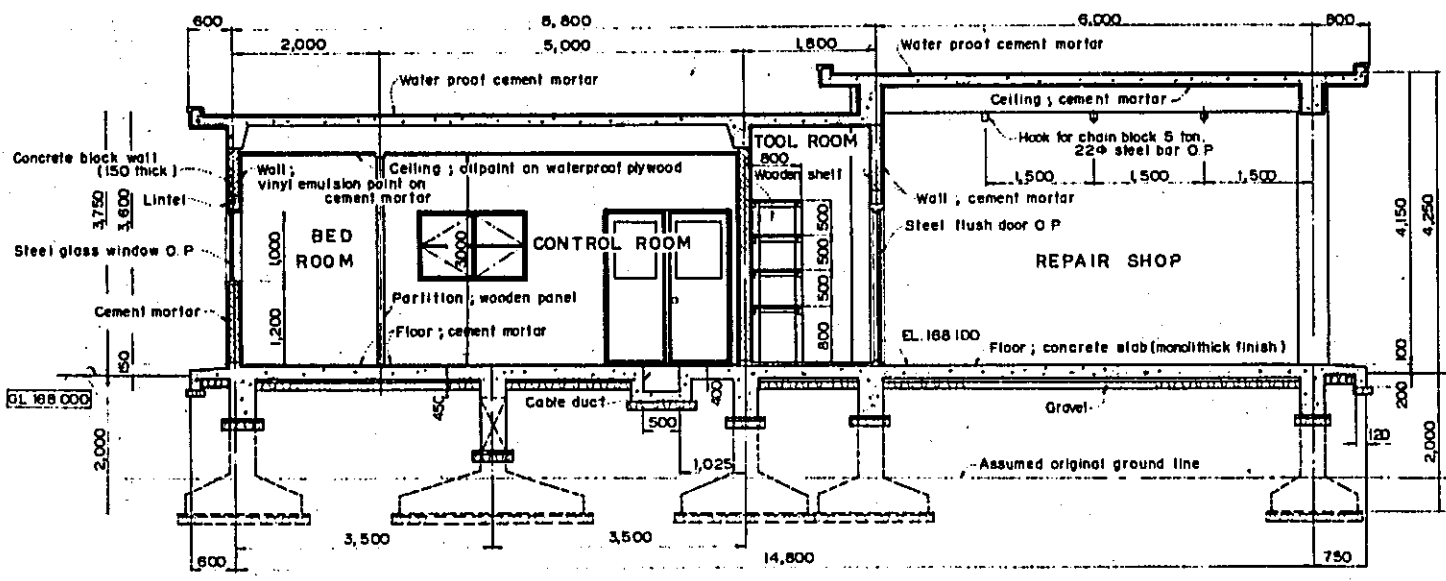


PLAN (Building area 69.56 m²)

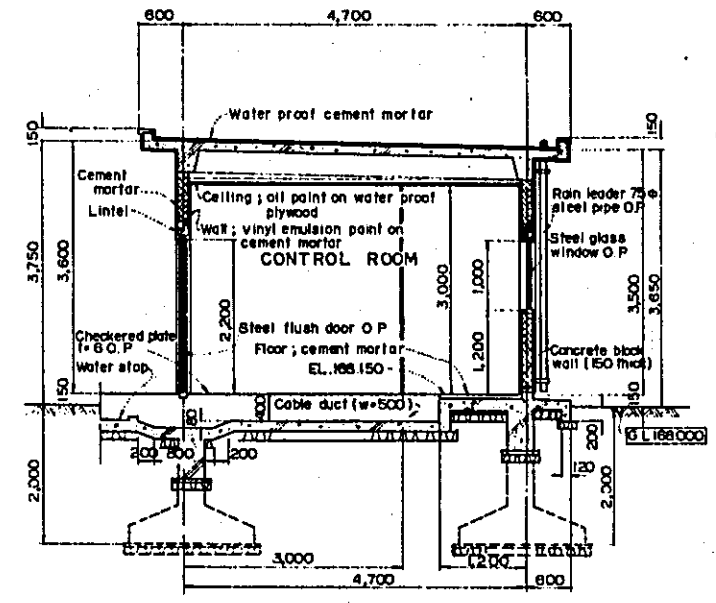
SCHEDULE OF FINISH

EXTERIOR FINISH	
ROOF	Water proof cement mortar
WALL	Cement mortar
WAINSCOT	Cement mortar
BERM	Concrete slab (monolithic finish)

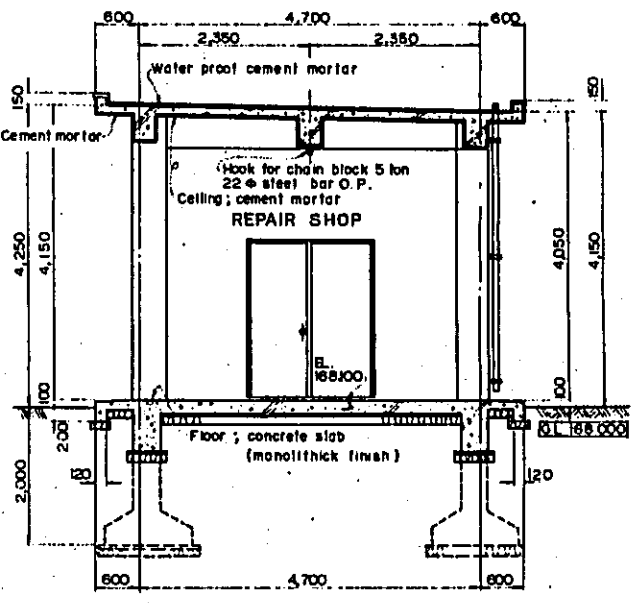
INTERIOR FINISH					
	FLOOR	SKIRTING	WALL	CEILING	REMARKS
CONTROL ROOM	Cement mortar	Cement mortar	Vinyl emulsion paint on cement mortar	Oil paint on waterproof plywood (4mm thick)	
BED ROOM	Cement mortar	Cement mortar	Vinyl emulsion paint on cement mortar	Oil paint on waterproof plywood (4mm thick)	
TOOL ROOM	Cement mortar	Cement mortar	Cement mortar	Cement mortar	Shelf for tools
REPAIR SHOP	Concrete slab (monolithic finish)	Cement mortar	Cement mortar	Cement mortar	Hook for 5 tons chain block



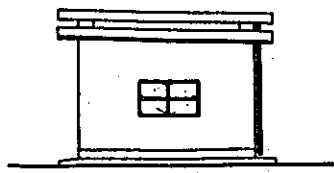
SECTION A-A



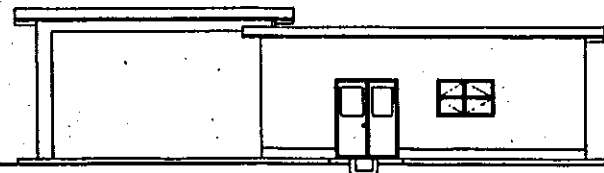
SECTION B-B



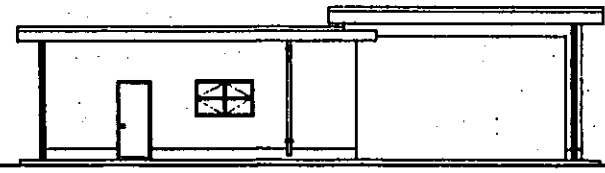
SECTION C-C



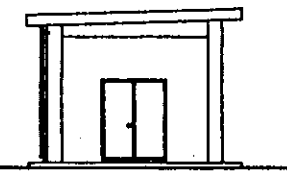
RIGHT SIDE ELEVATION



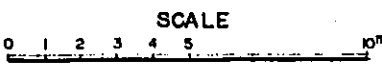
FRONT ELEVATION



REAR ELEVATION



LEFT SIDE ELEVATION



KINGDOM OF LAOS
THA NGON AGRICULTURAL DEVELOPMENT PROJECT
**IRRIGATION PUMPING STATION
CONTROL HOUSE (I)**

DRAWN _____ SUBMITTED _____
CHECKED _____ APPROVED _____

AUG. 1974 F-06

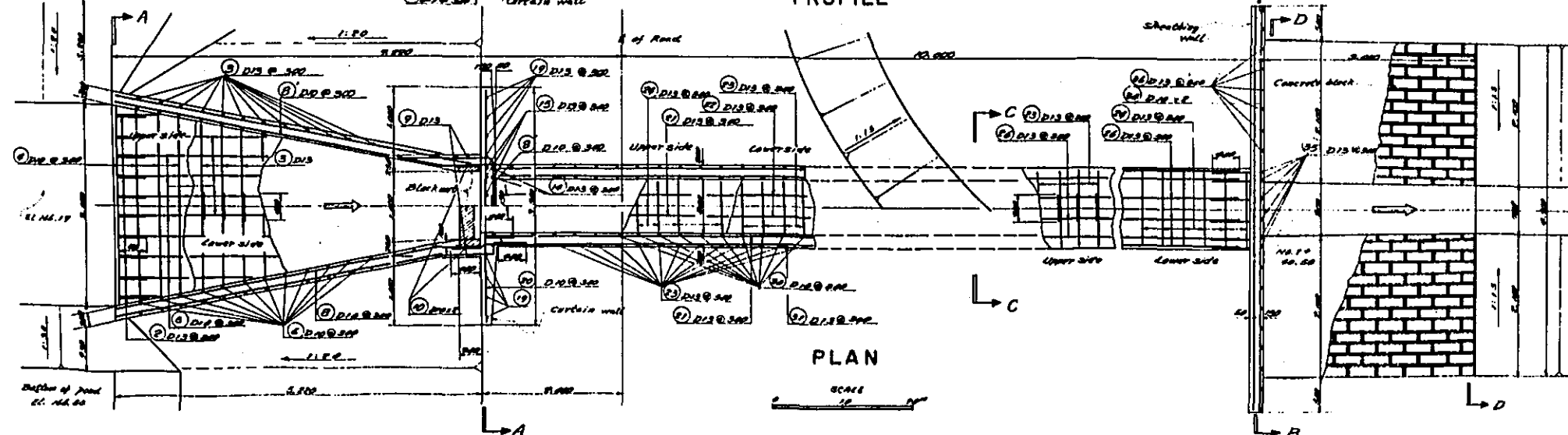
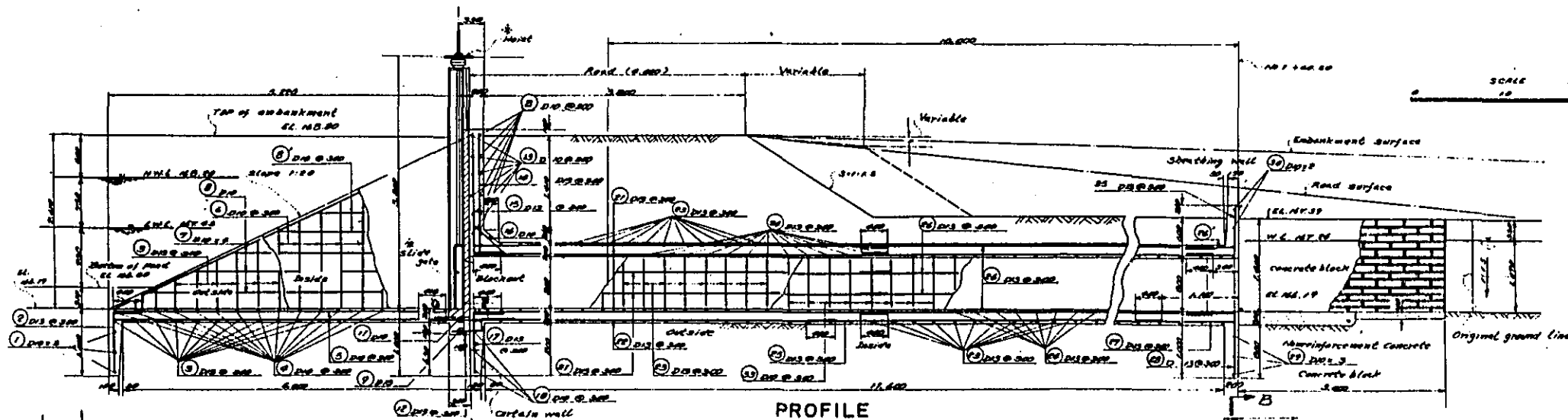
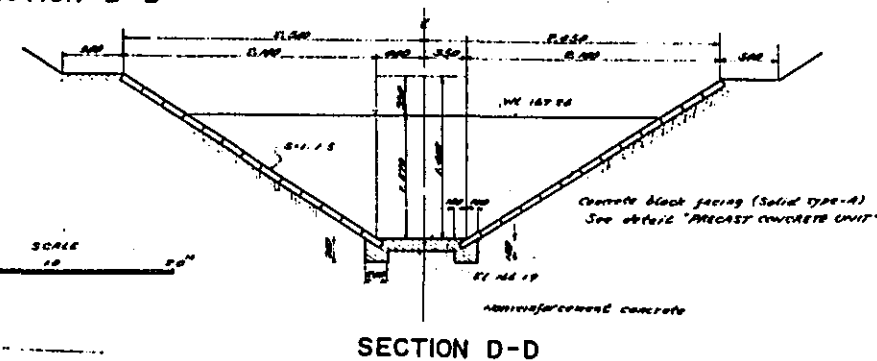
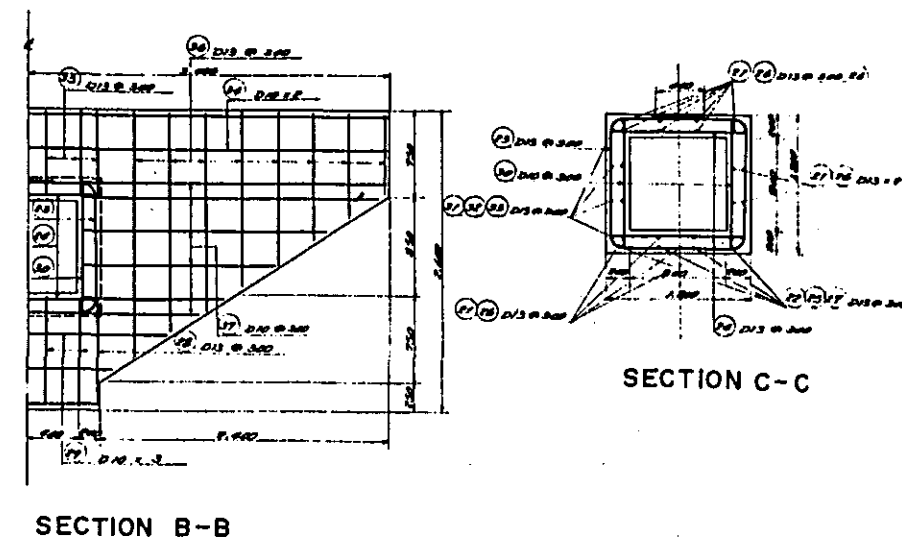
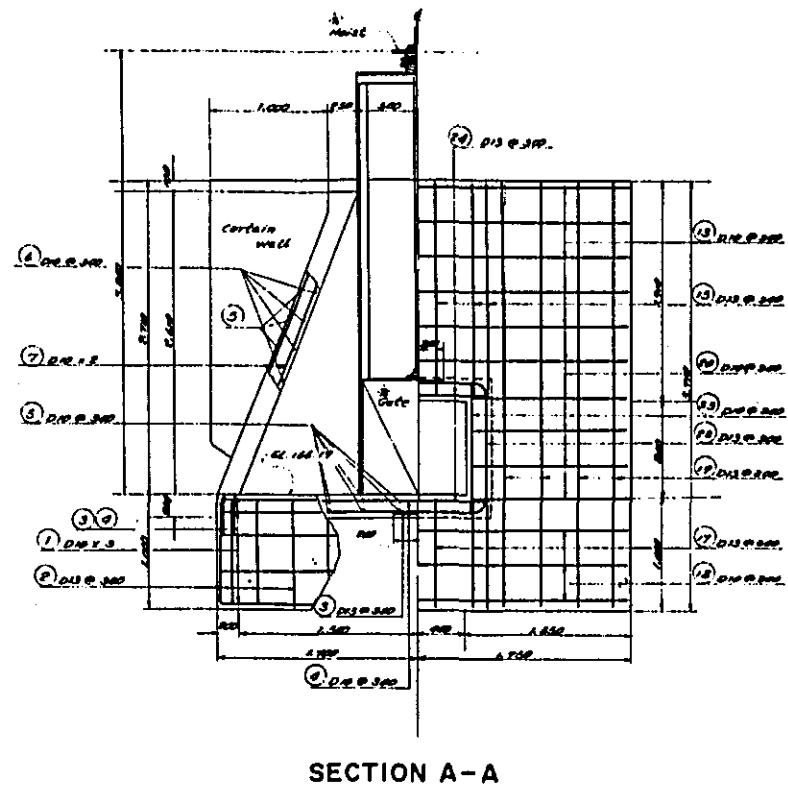
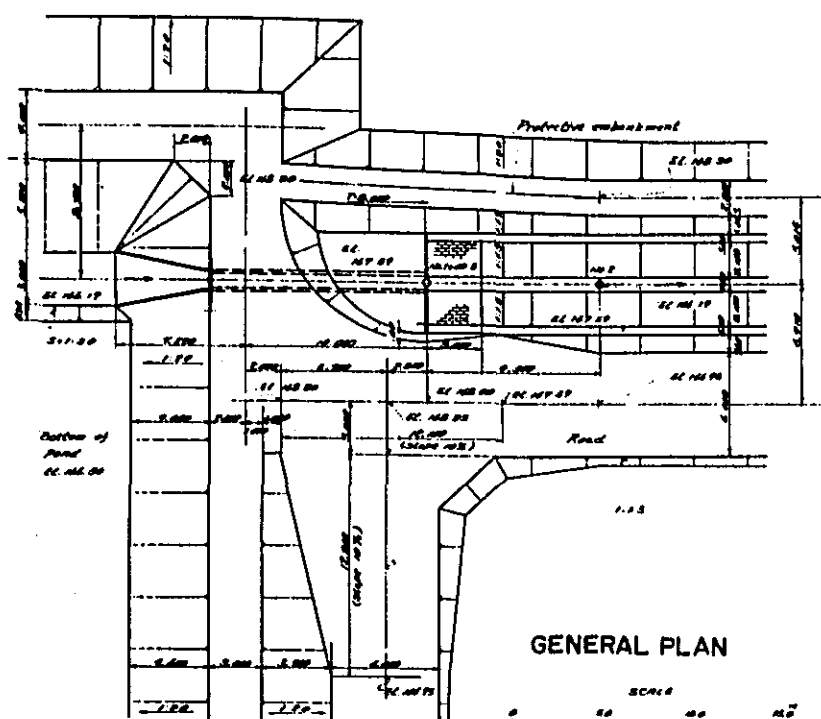


TABLE OF REINFORCEMENT BAR

NO.	D	LENGTH (M)	NOS.	UNIT WEIGHT (KG/M)	WEIGHT (KG)	REMARKS	NO.	D	LENGTH (M)	NOS.	UNIT WEIGHT (KG/M)	WEIGHT (KG)	REMARKS
1	12	3.70	3	0.36	1.28		12	12	3.00	2	0.36	0.72	
2	12	1.20	10	0.36	3.60		12	12	3.00	2	0.36	0.72	
3	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
4	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
5	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
6	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
7	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
8	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
9	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
10	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
11	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
12	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
13	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
14	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
15	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
16	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	
17	12	1.20	10	0.36	3.60		12	12	1.00	2	0.36	0.72	

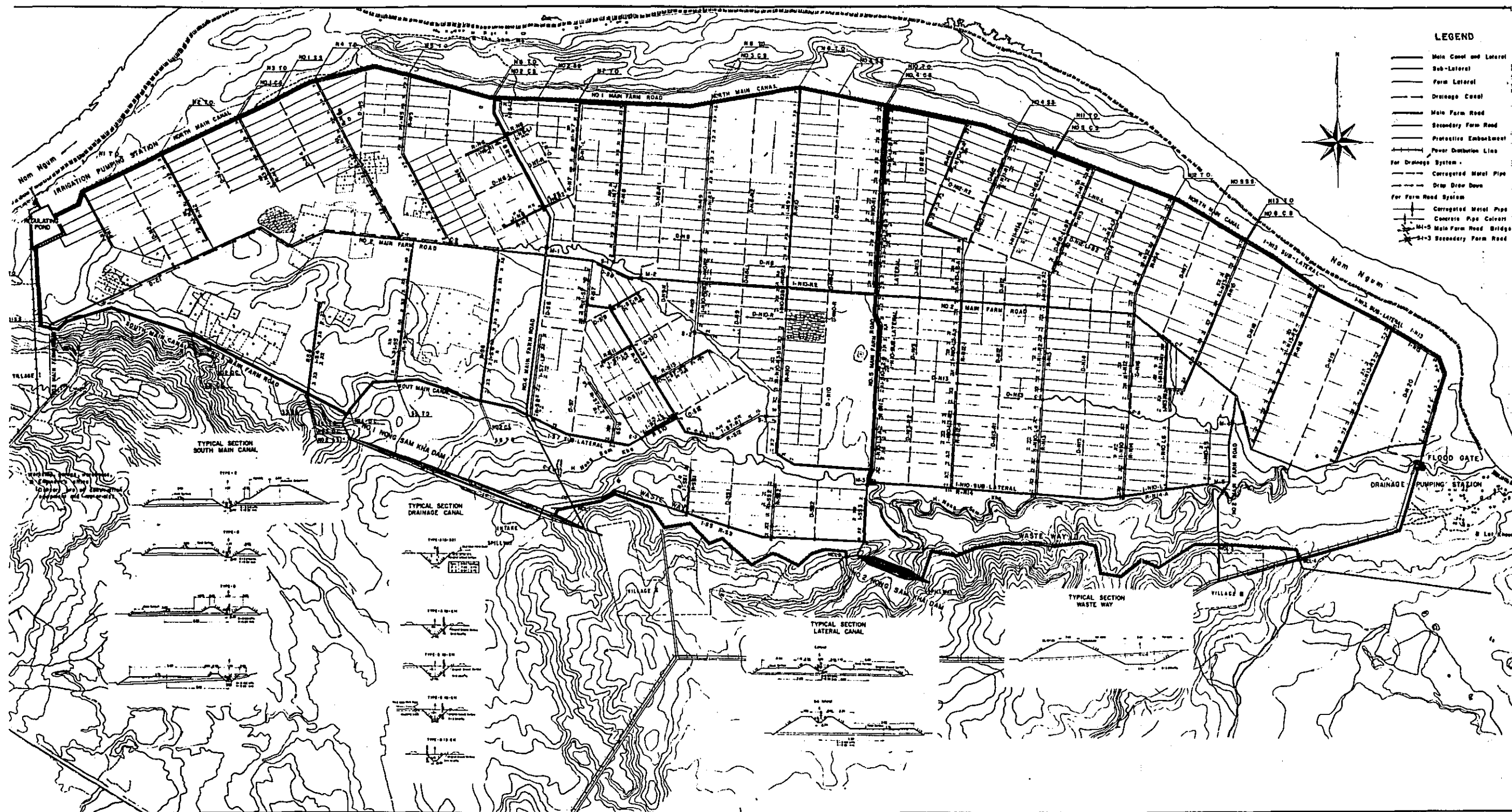
Note: Min. Max. Length

* Supplied and erected by other contractor

KINGDOM OF LAOS
THA NOON AGRICULTURAL DEVELOPMENT PROJECT
IRRIGATION PUMPING STATION
NORTH REGULATOR

DRAWN: _____ SUBMITTED: _____
CHECKED: _____ APPROVED: _____

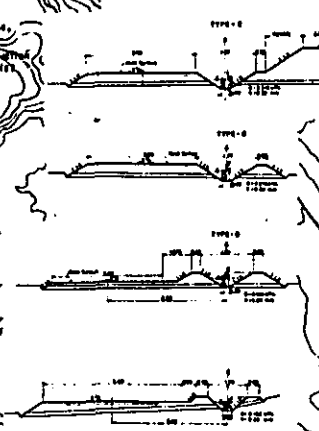
AUG 1974 F-07



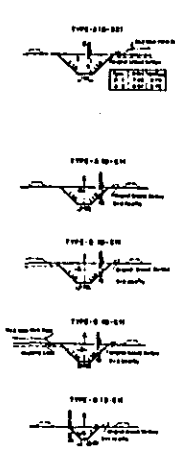
LEGEND

- Main Canal and Lateral
- Sub-Lateral
- Farm Lateral
- Drainage Canal
- Main Farm Road
- Secondary Farm Road
- Protective Embankment
- Power Distribution Line
- For Drainage System:
 - Corrugated Metal Pipe
 - Draw Draw Down
- For Farm Road System:
 - Corrugated Metal Pipe
 - Concrete Pipe Culvert
 - M-5 Main Farm Road Bridge
 - S-3 Secondary Farm Road

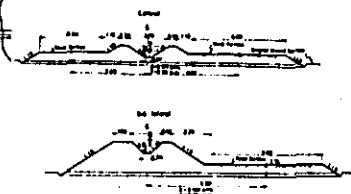
TYPICAL SECTION SOUTH MAIN CANAL



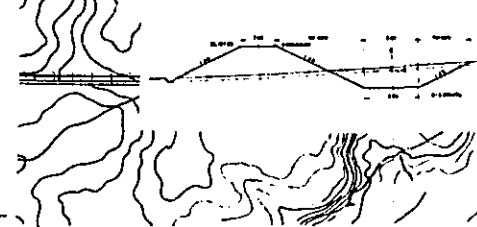
TYPICAL SECTION DRAINAGE CANAL

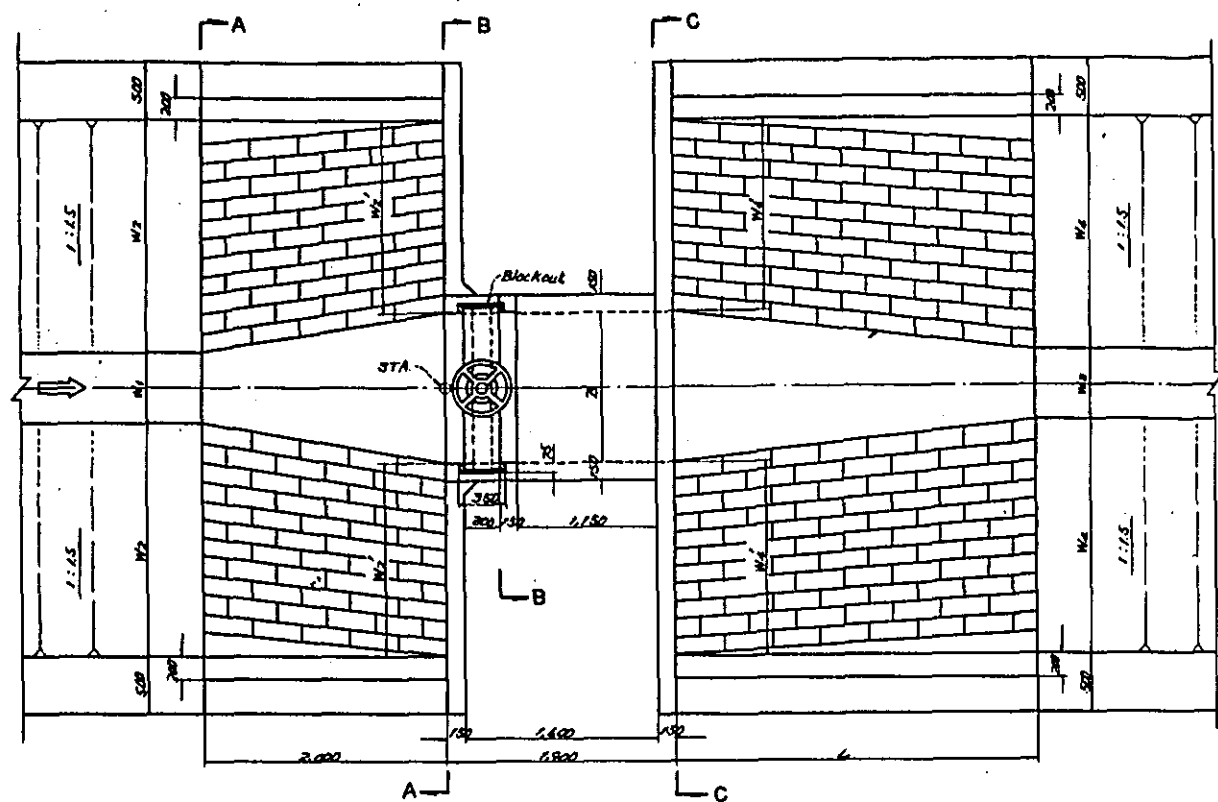


TYPICAL SECTION LATERAL CANAL

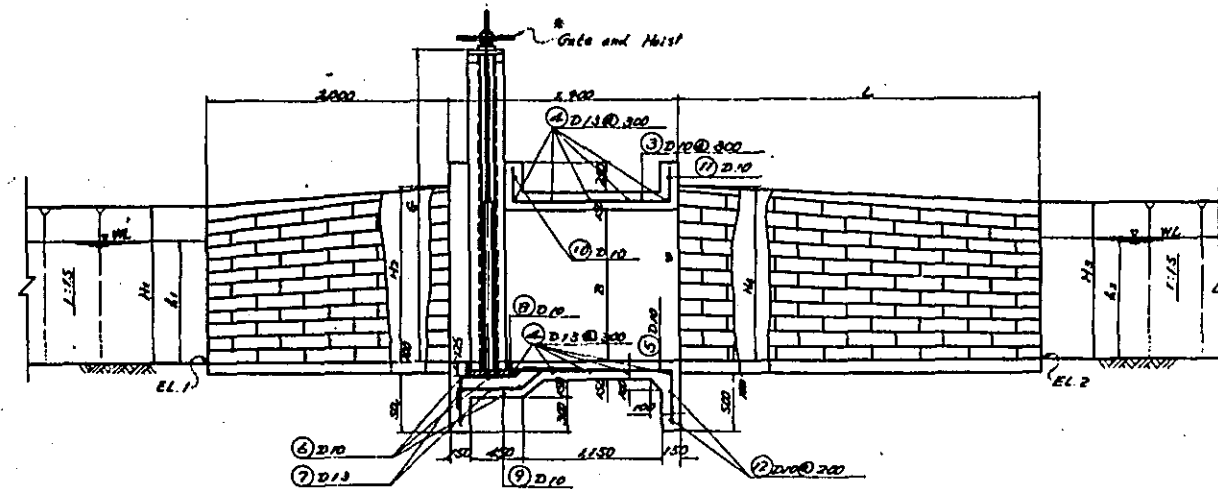


TYPICAL SECTION WASTE WAY

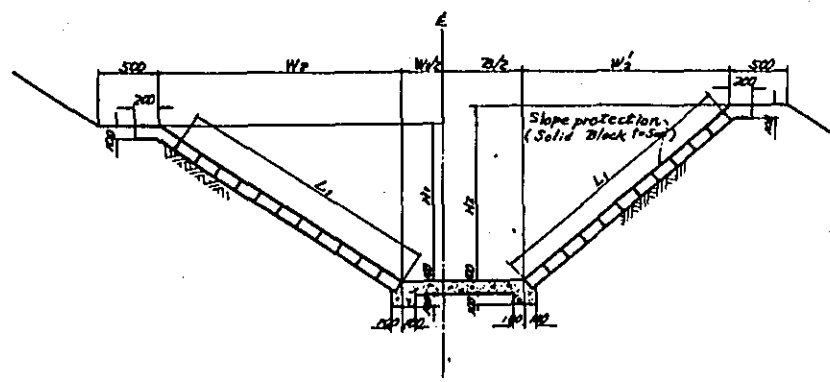




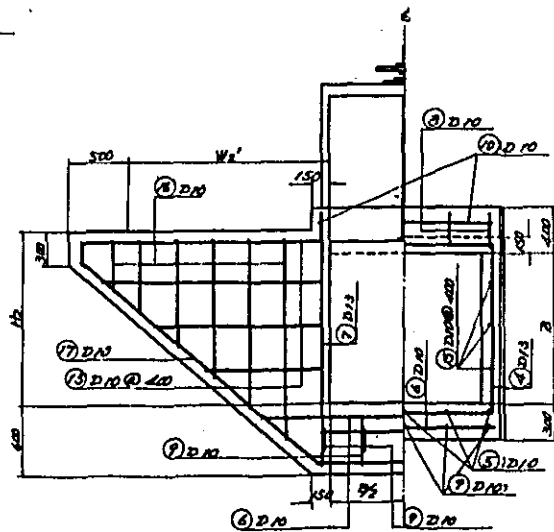
PLAN



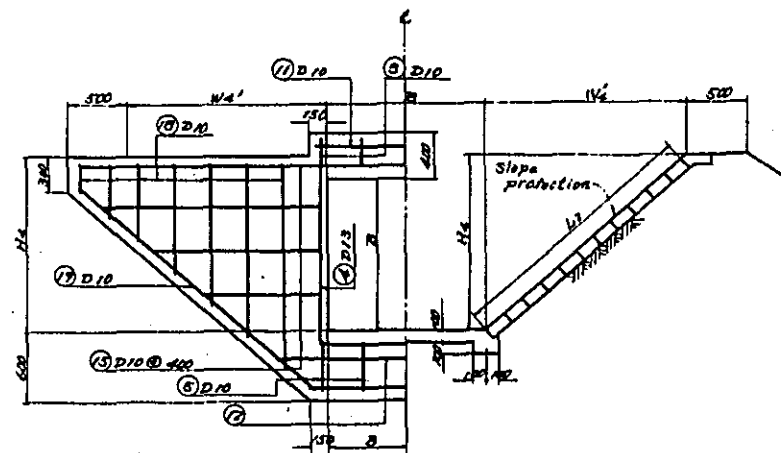
PROFILE



SECTION A-A



SECTION B-B



SECTION C-C

TABLE OF DIMENSION (M)

NO.	STA.	W ₁	W ₂	B	W ₃	W ₄	H ₁	H ₂	H ₃	H ₄	L	W ₁ '	W ₂ '	L ₁	L ₂	Q	EL ₁	EL ₂	H ₁	H ₂
N. No. 1	Nb. 21+45.00	0.60	2.025	1.30	0.60	2.025	1.35	1.45	1.35	1.45	3.00	1.625	1.625	2.20	2.20	2.50	165.74	165.25	1.06	1.04
N. No. 2	Nb. 49+17.15	0.60	2.025	1.20	0.60	2.025	1.35	1.40	1.35	1.40	3.00	1.725	1.725	2.20	2.20	2.50	165.49	165.01	1.00	0.99
N. No. 3	Nb. 67+21.41	0.60	1.875	1.10	0.60	1.875	1.25	1.50	1.25	1.50	3.00	1.625	1.625	2.20	2.20	2.50	165.45	165.47	0.75	0.92
N. No. 4	Nb. 86+25.30	0.60	1.875	0.90	0.60	1.425	1.25	1.30	0.85	1.05	2.00	1.725	1.725	2.20	1.60	2.00	165.20	165.51	0.89	0.63
N. No. 5	Nb. 103+3.00	0.60	1.425	0.70	0.30	1.775	0.95	1.00	0.85	0.90	2.00	1.775	1.625	1.60	1.40	2.00	165.24	165.32	0.65	0.56
S. No. 1	Nb. 32+0.41	0.60	1.425	0.70	0.30	1.775	0.95	1.00	0.85	0.90	2.00	1.775	1.625	1.40	1.40	2.00	165.51	165.51	0.56	0.54

TABLE OF REINFORCEMENT BARS

NO.	D	UNIT WEIGHT	N. NO. 1 G.S.			N. NO. 2 G.S.			N. NO. 3 G.S.			N. NO. 4 G.S.			N. NO. 5 G.S.			S. NO. 1 G.S.		
			L(m)	Nos.	W(kg)	L(m)	Nos.	W(kg)	L(m)	Nos.	W(kg)	L(m)	Nos.	W(kg)	L(m)	Nos.	W(kg)	L(m)	Nos.	W(kg)
3	10	2.560	1.70	5	4.8	1.70	5	4.8	1.70	5	4.8	1.70	5	4.8	1.70	5	4.8	1.70	5	4.8
4	13	0.995	5.00	5	28.9	5.40	5	26.9	5.00	5	24.9	5.80	5	18.9	3.40	5	16.9	3.40	5	16.9
5	10	0.560	1.80	5	5.0	1.80	5	5.0	1.80	5	5.0	1.80	5	3.0	1.80	5	3.0	1.80	5	3.0
6	10	1.45	4	3.2	1.35	4	3.0	1.25	4	2.8	0.95	4	2.1	0.85	4	1.9	0.85	4	1.9	0.85
7	13	0.995	4.80	2	9.6	4.50	2	9.0	4.20	2	8.4	3.90	2	6.6	3.00	2	4.0	3.00	2	6.0
8	10	0.560	1.20	5	3.4	1.20	5	3.4	1.20	5	3.4	1.20	5	2.0	1.20	5	2.0	1.20	5	2.0
9	10	1.20	3	3.4	1.20	5	3.4	1.20	5	3.4	1.20	3	2.0	1.20	3	2.0	1.20	3	2.0	
10	10	2.35	1	1.3	2.25	1	1.3	2.15	1	1.2	1.95	1	1.0	1.75	1	1.0	1.75	1	1.0	1.75
11	10	1.45	1	0.9	1.35	1	0.8	1.25	1	0.7	0.85	1	0.5	0.85	1	0.5	0.85	1	0.5	0.85
12	10	1.85	2	2.1	1.75	2	2.0	1.65	2	1.8	1.35	2	1.5	1.25	2	1.4	1.25	2	1.4	1.25
13	10	4.70	5	13.2	4.70	5	13.2	4.70	5	13.2	4.70	3	7.9	3.90	3	6.4	3.90	3	6.4	3.90
14	10	1.20	12	8.1	1.20	12	8.1	1.20	12	8.1	1.00	10	5.6	0.80	6	2.7	0.80	6	2.7	0.80
17	10	2.70	2	3.0	2.70	2	3.0	2.70	2	3.0	2.00	2	2.2	1.40	2	1.6	1.40	2	1.6	1.40
18	10	1.20	12	8.1	1.20	12	8.1	1.20	12	8.1	1.10	10	6.2	0.80	6	2.7	0.80	6	2.7	0.80
19	10	1.90	2	2.1	2.70	2	3.0	2.70	2	3.0	1.80	2	2.0	1.20	2	1.3	1.20	2	1.3	1.20
TOTAL			D10=18.579 D13=38.579			D10=18.079 D13=35.779			D10=14.079 D13=33.379			D10=26.179 D13=25.579			D10=7.479 D13=22.779			D10=24.479 D13=28.779		

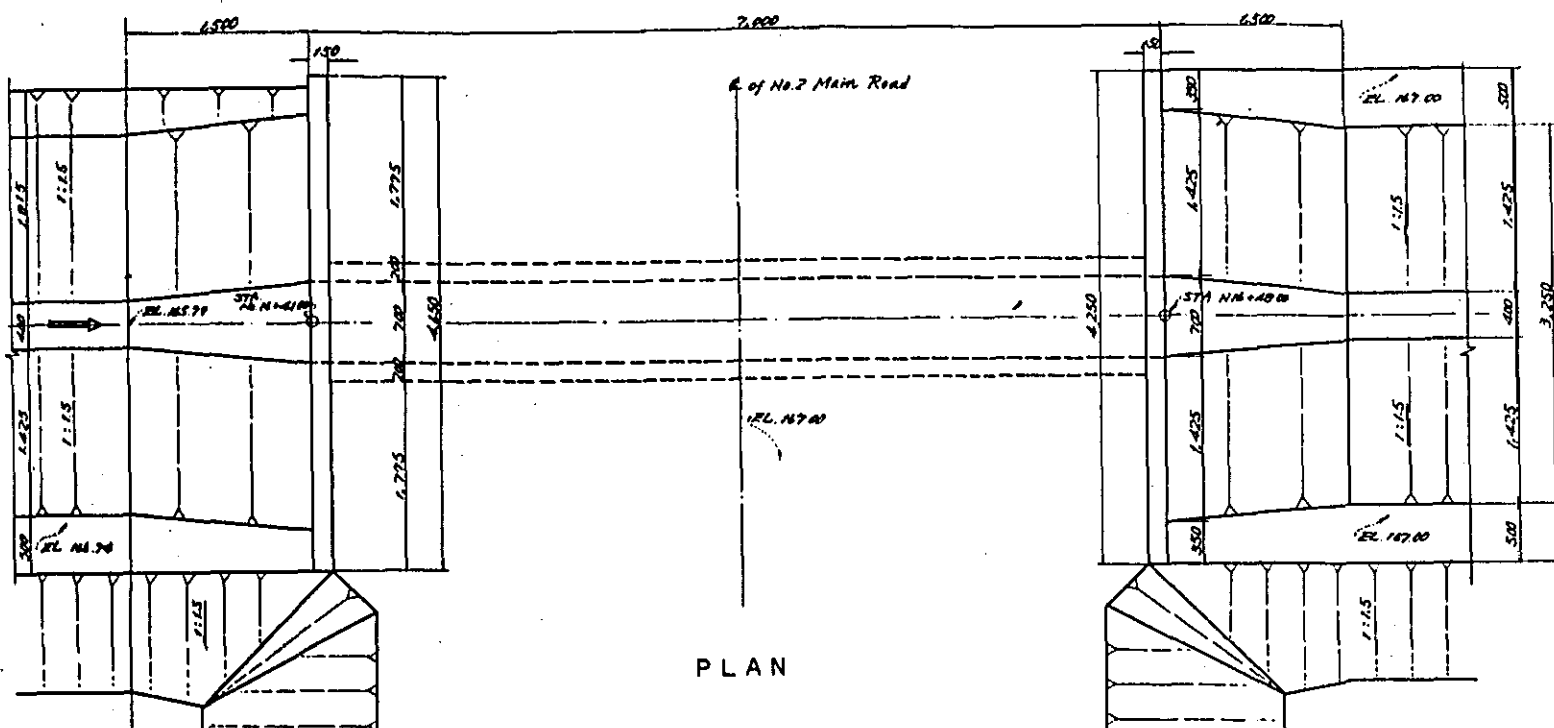
* Supplied and erected by other contractor

KINGDOM OF LAOS
 THA NOON AGRICULTURAL DEVELOPMENT PROJECT
 IRRIGATION CANAL STRUCTURE
 CHECK STRUCTURE

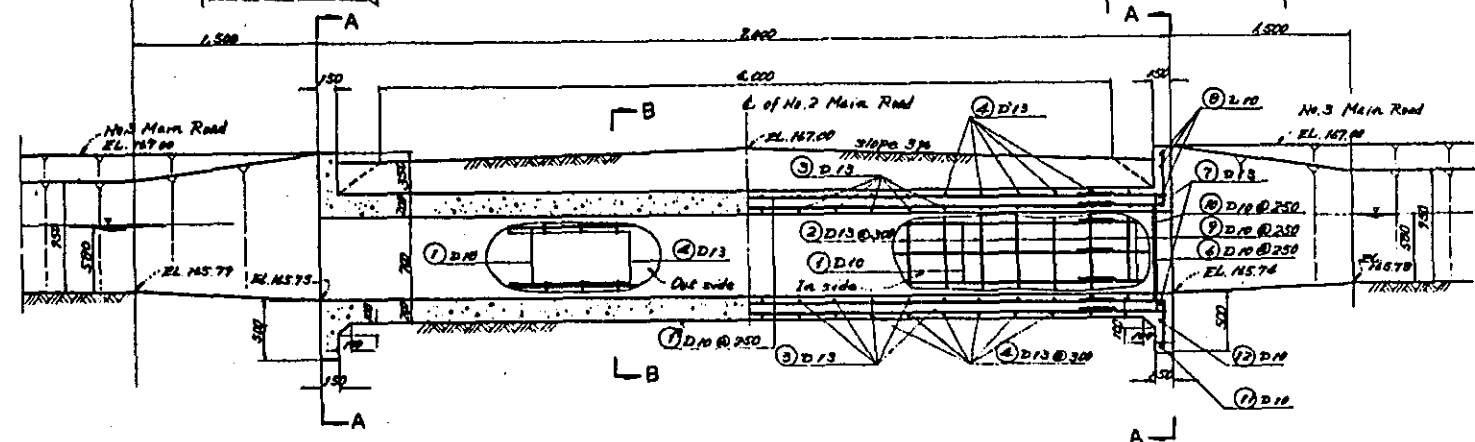
DRAWN _____ SUBMITTED _____
 CHECKED _____ APPROVED _____

AUG. 1974 F-10

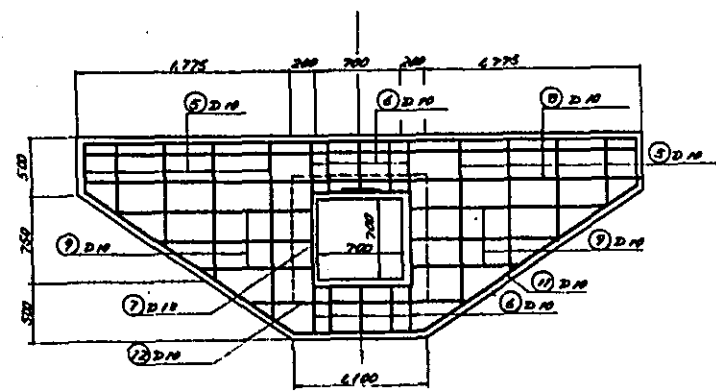
CULVERT



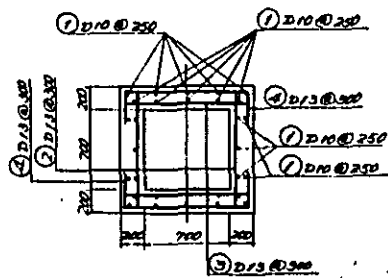
PLAN



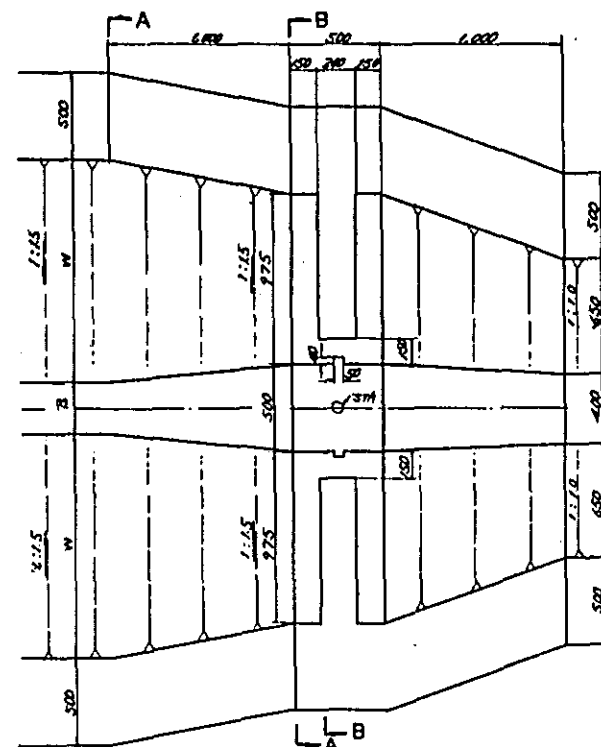
PROFILE



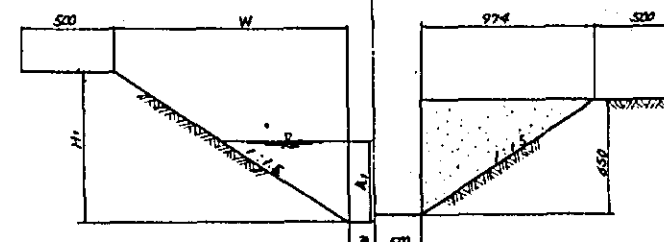
SECTION A-A



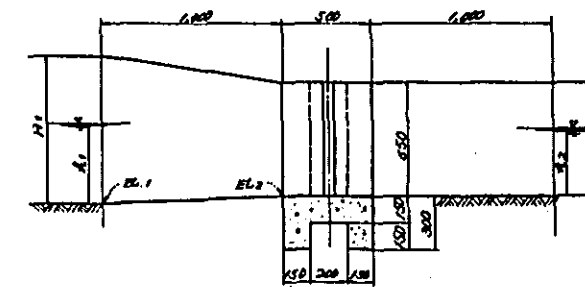
SECTION B-B



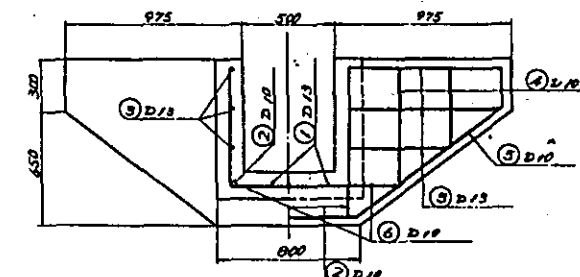
PLAN



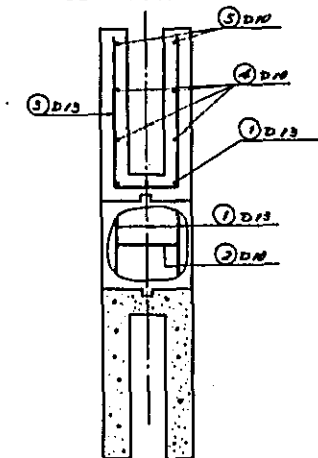
SECTION A-A



PROFILE



SECTION B-B



SECTIONAL PLAN

TABLE OF DIMENSION

	B	H ₁	W	A ₁	A ₂	EL ₁	EL ₂	STA
N. No. 1 C.S.	300	850	1,275	490	500	145.04	145.03	Nh. 12412.00
S. No. 2 C.S.	300	850	1,275	470	490	145.18	145.25	Nh. 5217.01
L. No. 1 C.S.	300	800	1,200	460	420	144.03	144.07	14.10 111.00

TABLE OF REINFORCEMENT BAR (CHECK STRUCTURE)

NO.	D	UNIT WEIGHT	LENGTH	NOS.	WEIGHT	REMARKS
1	13	0.995	1.95	3	5.97	
2	10	0.560	0.70	3	1.18	
3	13	0.995	1.85	4	11.04	
4	10	0.560	0.57	8	2.35	
5	10	0.560	3.30	2	3.70	
6	10	0.560	0.60	4	1.34	
TOTAL					D10=0.809, D13=14.97	= 25.77

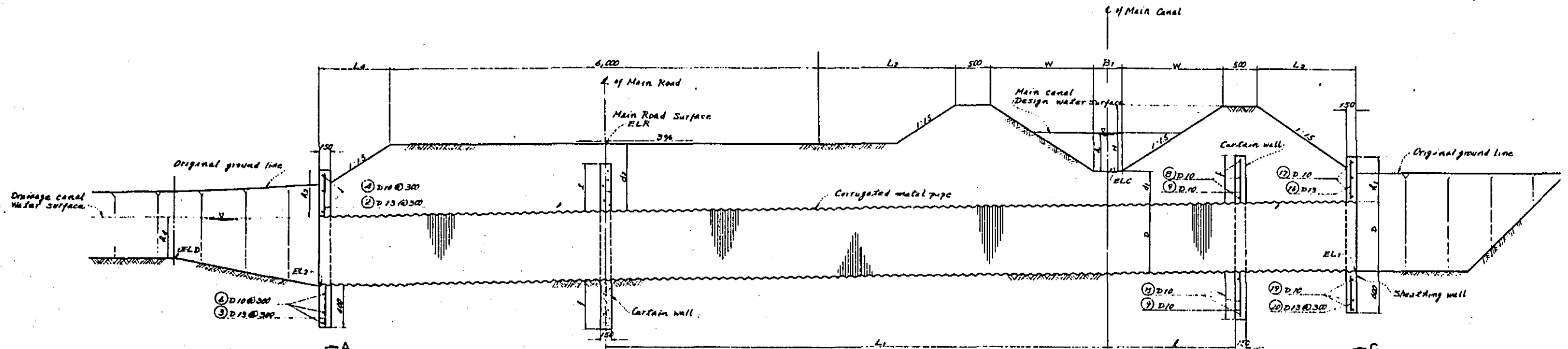
TABLE OF REINFORCEMENT BAR (CULVERT)

NO.	D	UNIT WEIGHT	LENGTH	NOS.	WEIGHT	REMARKS
1	10	0.560	0.80	30	100.80	
2	13	0.995	1.00	44	43.78	
3	13	0.995	1.00	44	43.78	
4	13	0.995	1.60	44	70.85	
5	10	0.560	0.98	20	10.92	
6	10	0.560	1.10	20	12.32	
7	13	0.995	3.50	2	6.97	
8	10	0.560	4.45	6	14.95	
9	10	0.560	2.00	12	10.44	
10	10	0.560	0.70	28	10.78	
11	10	0.560	5.05	2	6.55	
12	10	0.560	1.00	2	20.64	
TOTAL					D10=170.29, D13=144.49	= 354.09

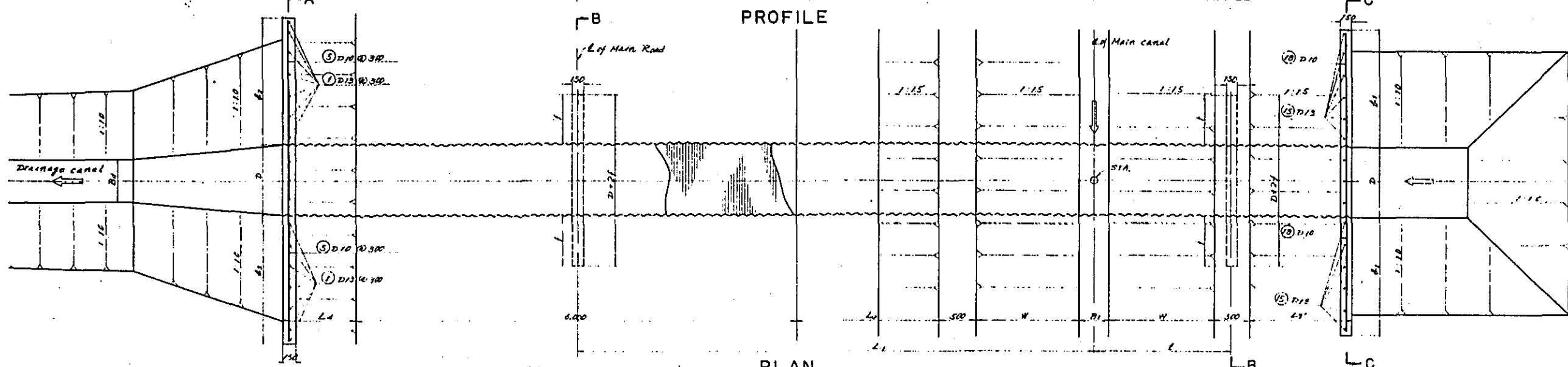
KINGDOM OF LAOS
THA NOON AGRICULTURAL DEVELOPMENT PROJECT
IRRIGATION CANAL STRUCTURE
CULVERT AND CHECK
STRUCTURE

DRAWN _____ SUBMITTED _____
CHECKED _____ APPROVED _____

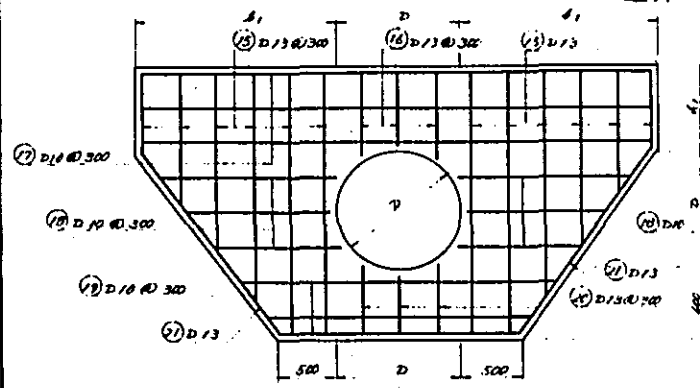
AUG. 1974 F - 11



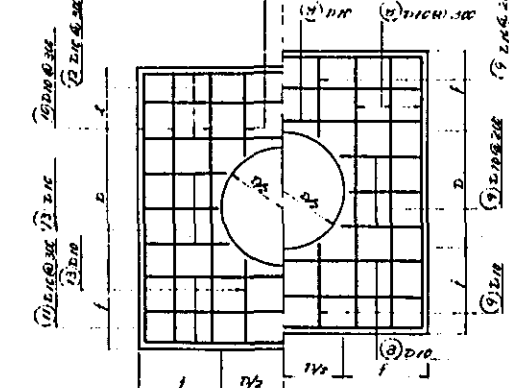
PROFILE



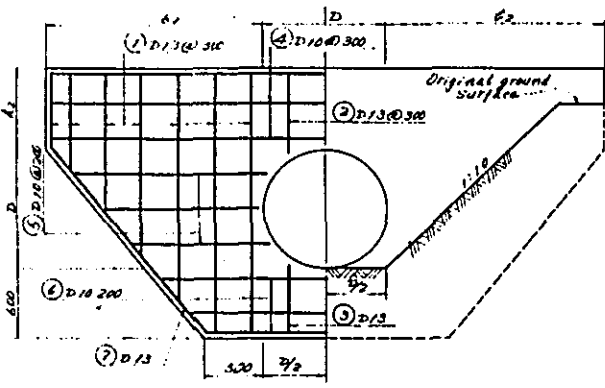
PLAN



SECTION C-C



SECTION B-B



SECTION A-A

NO.	TI	INITIAL	W	H	L	NO. OF	W	L	NO. OF	W	L	NO. OF	W	L
1	1.2	0.995	1.33	1.0	10.70	1.20	1.5	1.71	1.53	2	10.44	1.40	12	16.72
2	1.1	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.18	0.45	1	0.45
3	1.3	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.64	0.50	1	0.50
4	1.0	0.960	1.20	1.0	10.70	1.20	1.5	1.67	1.40	3	1.54	0.40	3	6.85
5	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.16	0.50	2	1.46
6	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.40	3	1.51
7	1.0	0.995	1.25	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.45	2	2.07
8	1.0	0.960	1.20	1.0	10.70	1.20	1.5	1.67	1.40	3	1.52	1.00	12	12.10
9	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.55	2	1.23
10	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.40	3	3.02
11	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.55	3	3.02
12	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.55	3	3.02
13	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.55	3	3.02
14	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.55	3	3.02
15	1.3	0.995	1.23	1.0	10.70	1.20	1.5	1.67	1.40	3	1.02	0.55	1	0.51
16	1.3	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.04	0.45	1	1.02
17	1.0	0.960	1.20	1.0	10.70	1.20	1.5	1.67	1.40	3	1.04	0.40	4	4.10
18	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.04	0.45	2	1.12
19	1.0	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.04	0.45	2	3.12
20	1.3	0.995	1.23	1.0	10.70	1.20	1.5	1.67	1.40	3	1.22	0.50	2	2.52
21	1.3	1.00	1.27	1.0	10.70	1.20	1.5	1.67	1.40	3	1.20	0.50	2	2.49
TOTAL			2.00		157.9		1.75		1.70		117.9		170	20.42

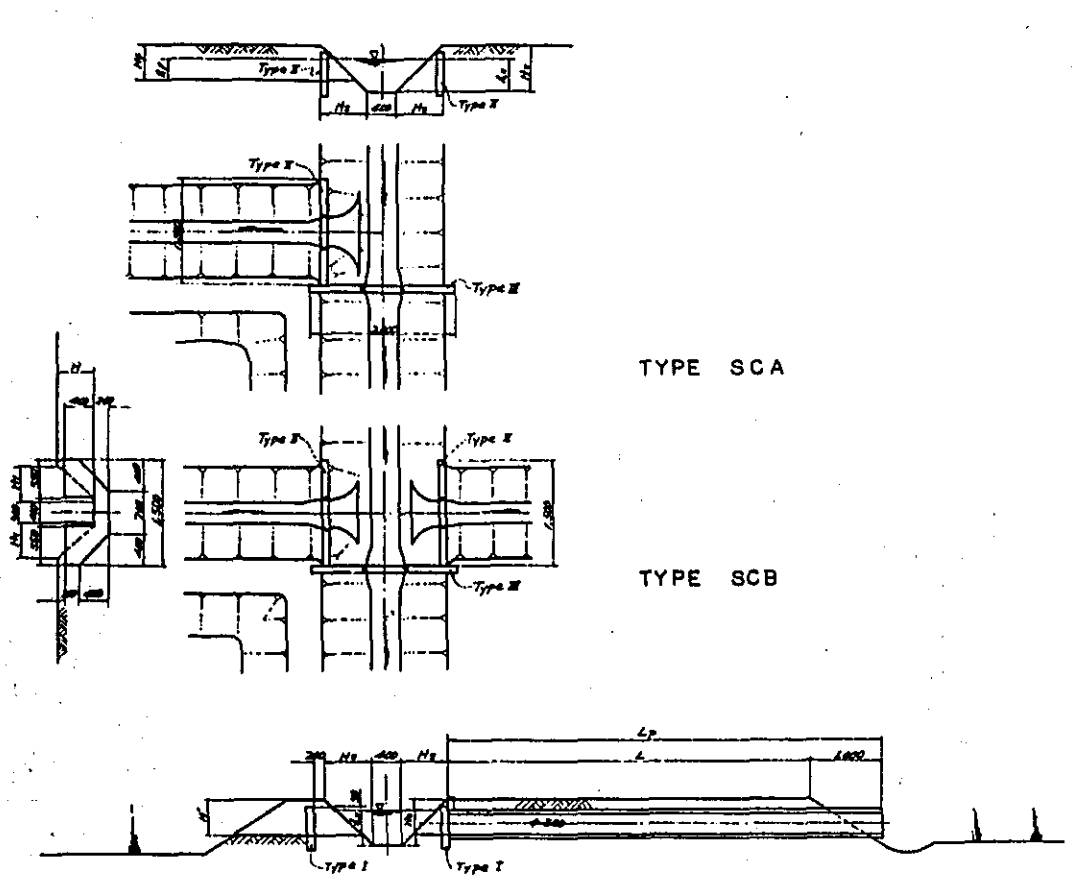
TABLE OF DIMENSION

	H ₁	H	A	W	L ₁	L ₂	L ₃	L ₄	f	ELC	ELF	ELD	EL1	EL2	BL	BL	D	d ₁	d ₂	A ₁	A ₂	d ₁	d ₂	f	e	Drainage canal	Drainage Discharge	STA	
DR-1 DC	0.40	1.75	0.50	1.425	4.50	1.375	0.875	1.00	1.075	MS 70	MS 70	MS 70	MS 70	MS 70	0.40	0.30	1.00	0.50	1.00	1.00	1.00	1.00	1.00	1.00	0.70	0.70	DC-1	0.34	MS 12
DR-2 DC	0.40	1.35	0.50	1.425	2.10	1.075	0.875	1.00	1.075	MS 42	MS 42	MS 42	MS 42	MS 42	0.40	0.40	0.40	0.50	0.70	1.00	1.00	1.00	1.00	0.70	0.70	DC-2	0.22	MS 25+40.00	
DR-3 DC	0.30	0.85	0.50	1.315	0.50	1.575	0.875	1.00	1.075	MS 42	MS 42	MS 42	MS 42	MS 42	0.40	0.40	0.40	0.50	0.70	1.00	1.00	1.00	1.00	0.70	0.70	DC-3	0.09	MS 26+17.20	
DR-4 DC	0.30	1.75	0.50	1.425	6.50	1.375	0.875	1.00	1.075	MS 39	MS 39	MS 39	MS 39	MS 39	0.40	0.40	0.40	0.50	0.70	1.00	1.00	1.00	1.00	0.70	0.70	DC-4	0.20	MS 44	

KINGDOM OF LAOS
 THA MOON AGRICULTURAL DEVELOPMENT PROJECT
 IRRIGATION CANAL STRUCTURE
 DRAINAGE CROSSING

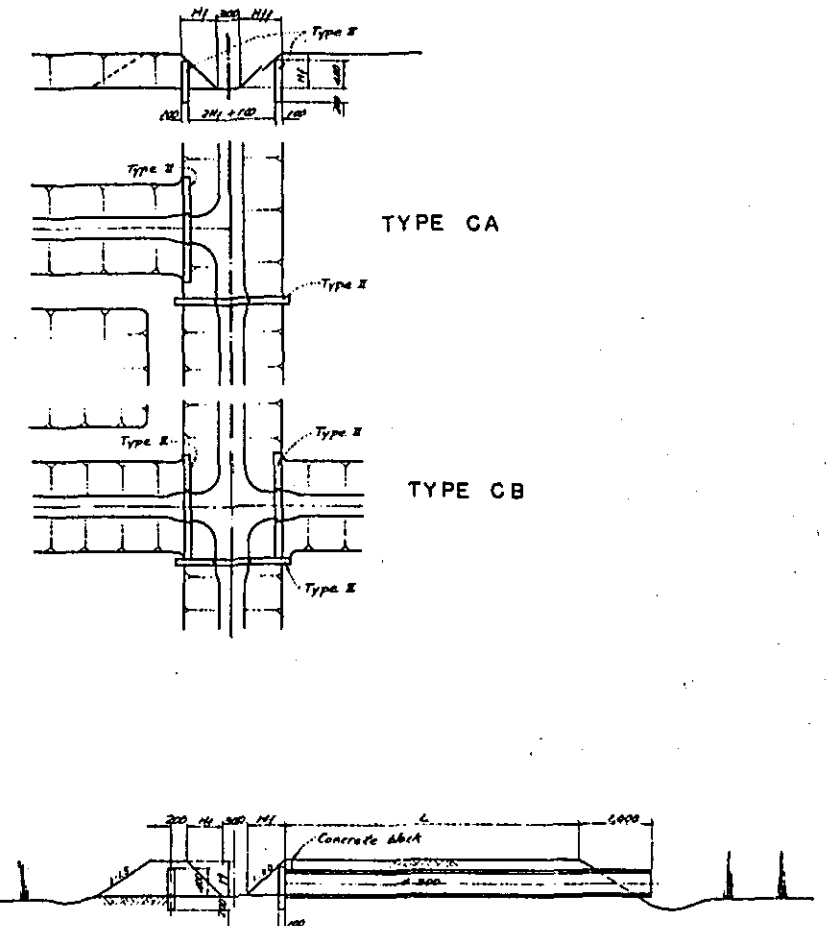
DRAWN: _____ SUBMITTED: _____
 CHECKED: _____ APPROVED: _____

AUG. 1974 F-13



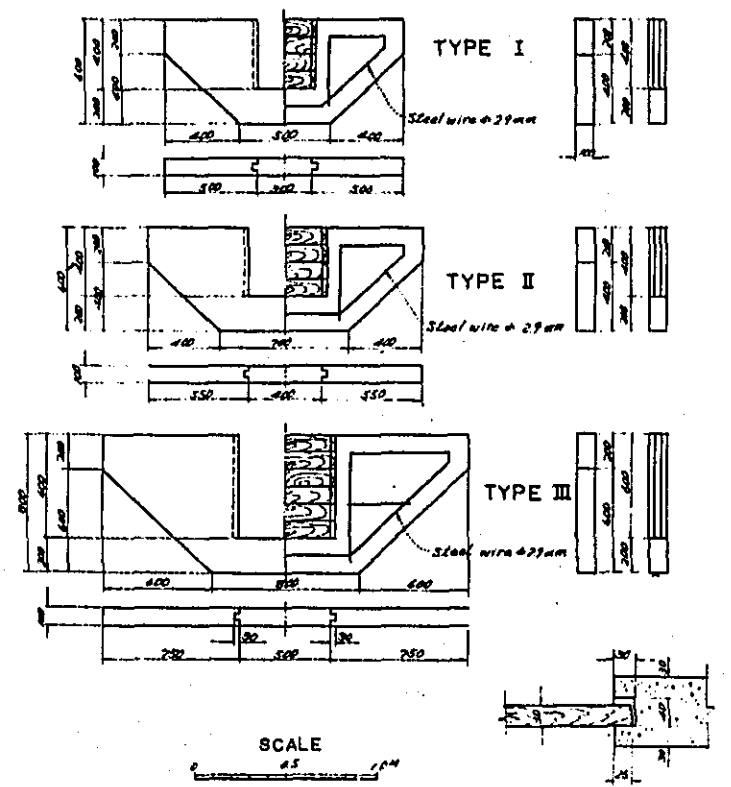
TYPE SCA

TYPE SCB



TYPE CA

TYPE CB

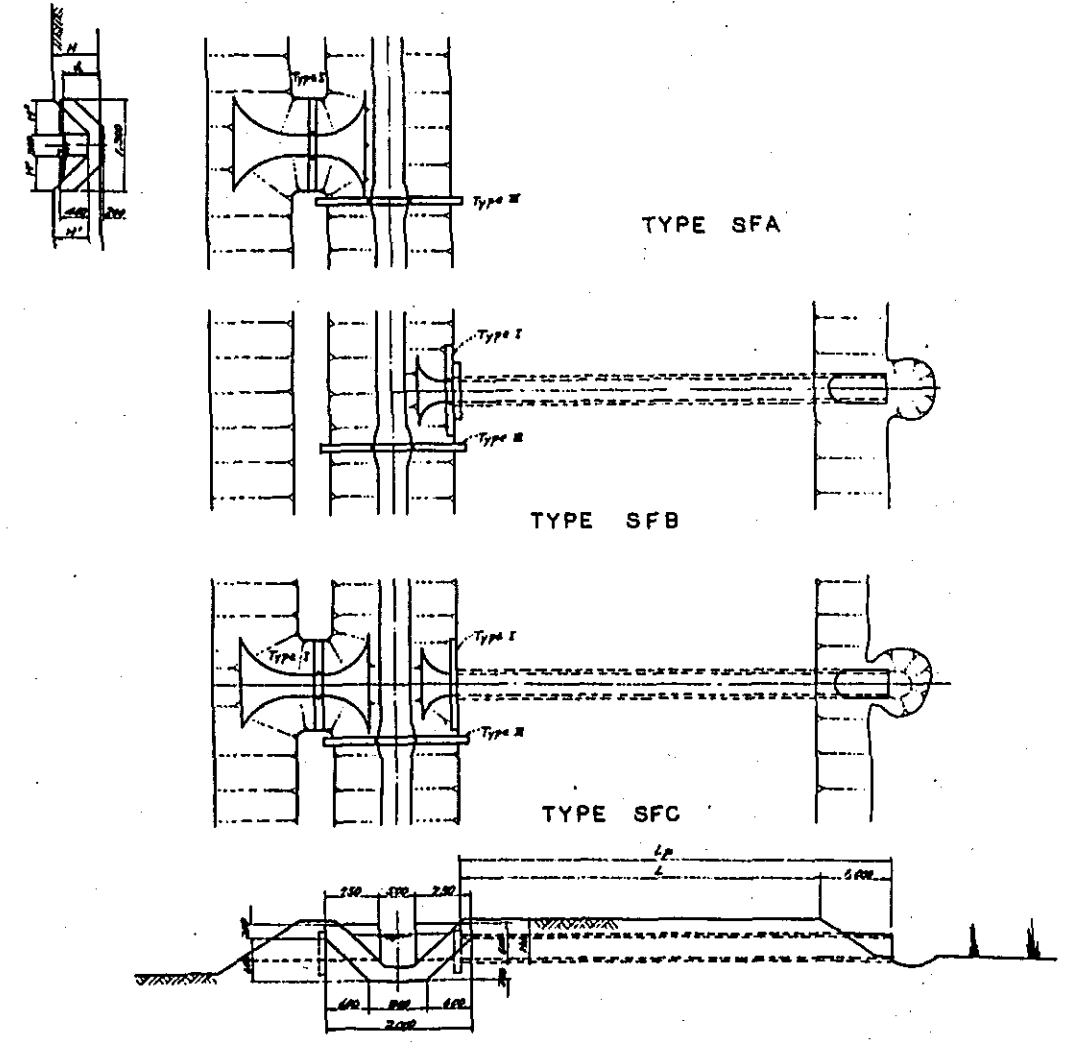


TYPE I

TYPE II

TYPE III

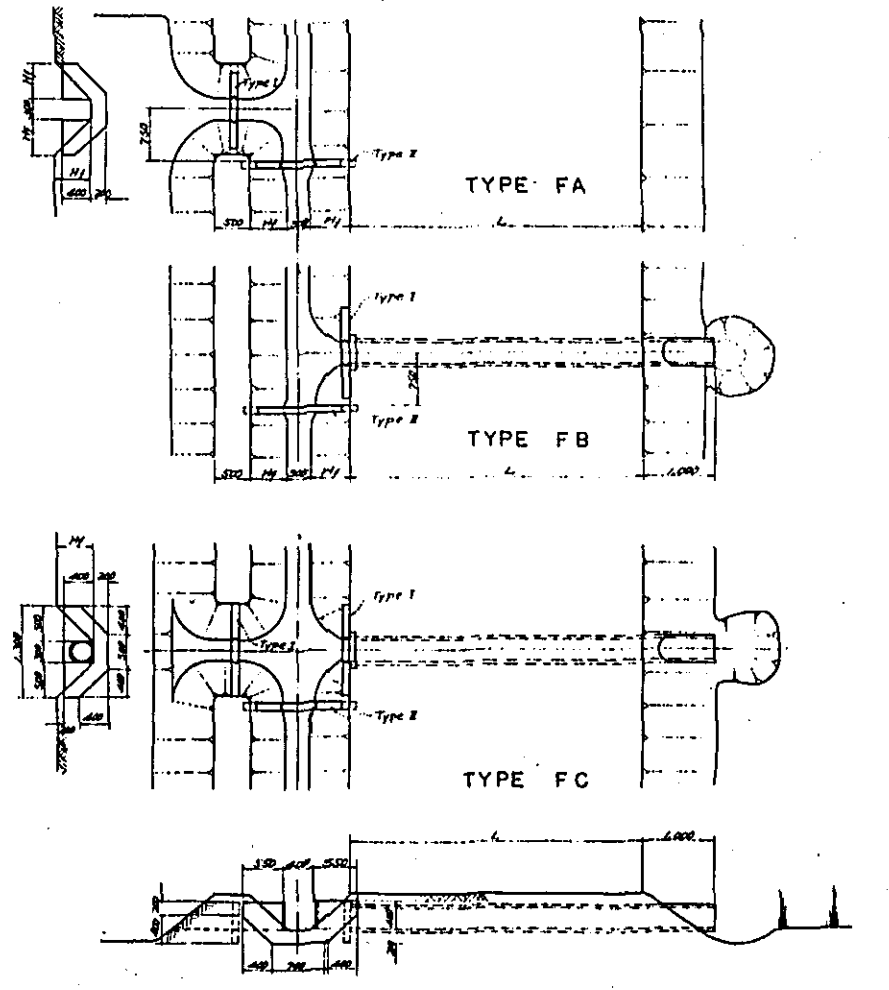
SCALE
0 10 20 30 40m



TYPE SFA

TYPE SFB

TYPE SFC



TYPE FA

TYPE FB

TYPE FC

- HA • Height of sub-lateral or farm lateral (Base wide = 0.400 m)
- ha • Water depth of sub-lateral or farm lateral
- Ht • Height of farm lateral branched off
- ht • Water depth of farm lateral branched off
- H' • Height of farm inlet
- $H_s - h_s + 0.35$ (m)
- L • Width of farm Road
- Lp • Length of precast concrete pipe
- $L + 1.0$ (m)

TYPE	CONCRETE WALL			CONCRETE PIPE
	TYPE I	TYPE II	TYPE III	
SCA	1	1	1	
SCB	1	2	1	
SFA	1	1	1	
SFB	1	1	1	φ 300
SFC	1	1	1	φ 300
CA	1	2	1	
CB	1	2	1	
FA	1	1	1	
FB	1	1	1	φ 300
FC	2	1	1	φ 300

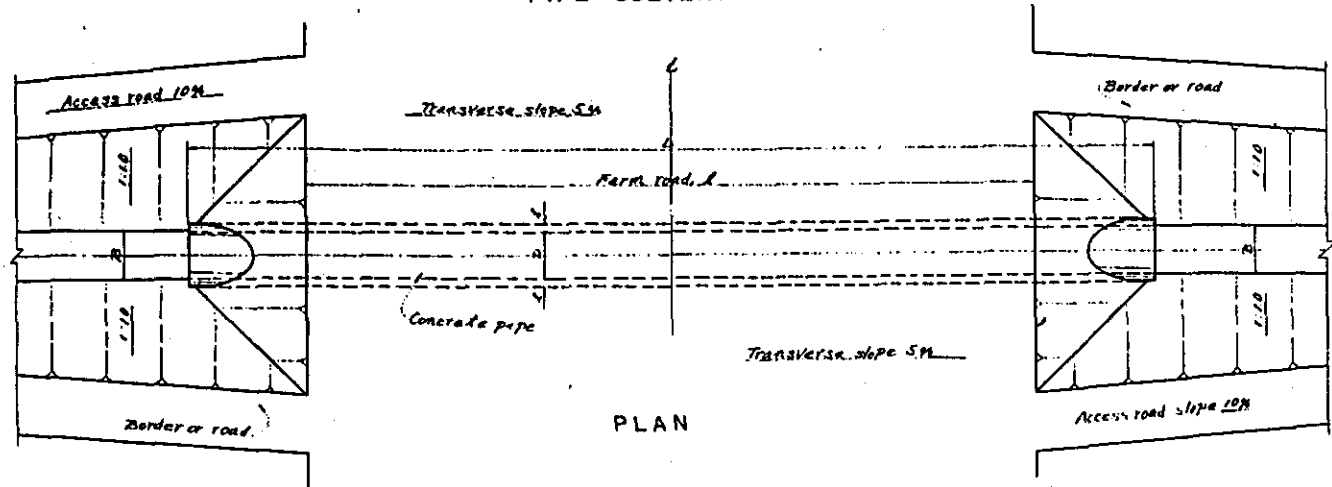
SCALE
0 10 20 30 40m

KINGDOM OF LAOS
THA NGON AGRICULTURAL DEVELOPMENT PROJECT
IRRIGATION CANAL STRUCTURE
DIVISION BOX

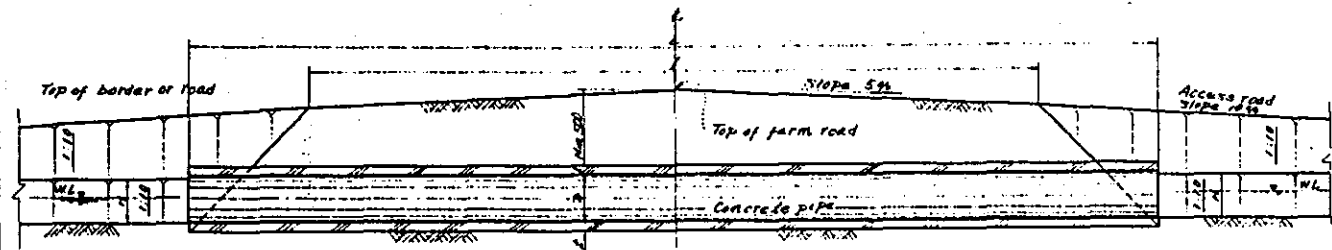
DRAWN _____ SUBMITTED _____
CHECKED _____ APPROVED _____

AUG. 1974 F-14

PIPE CULVERT



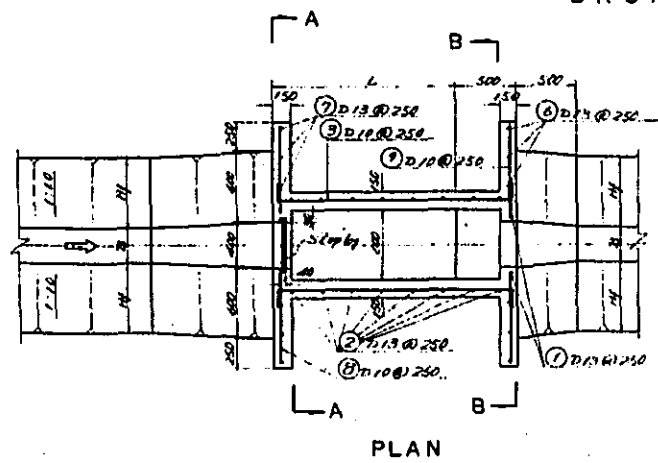
PLAN



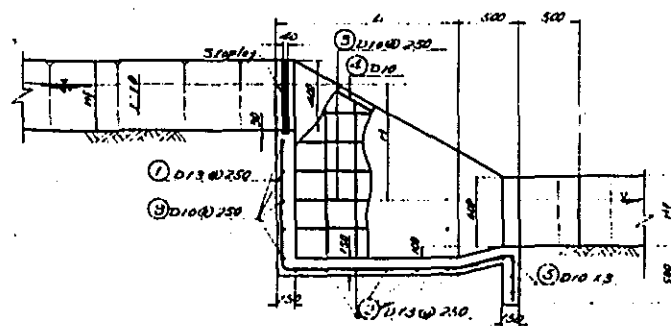
PROFILE

Note: Under main road L=3,000, H=6,000
 Secondary road L=2,000, H=4,000
 Access road L=4,000, H=3,000
 H & B = See DATA No.
 (H = Canal height, B = Canal width)

DROP

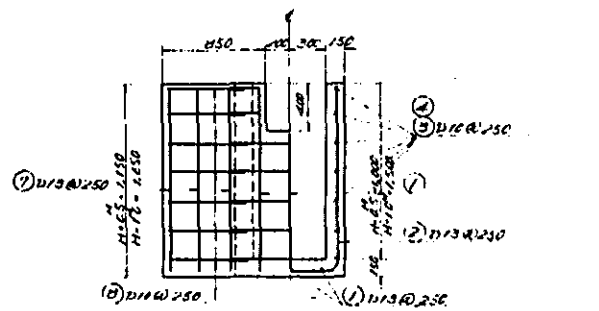


PLAN

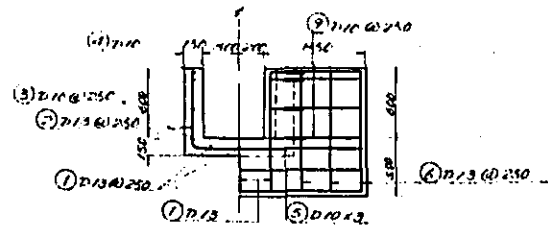


PROFILE

NOTE:
 H = 500, 1,000
 L = 1,000, 1,500
 H & B = See DATA No.
 (H = Canal height, B = Canal width)



SECTION A-A



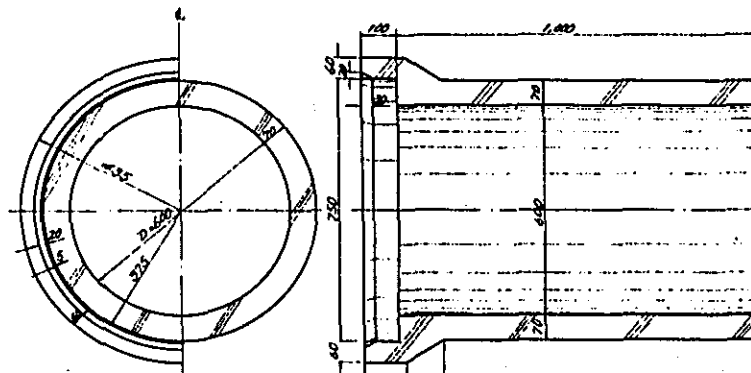
SECTION B-B

TABLE OF REINFORCEMENT BAR

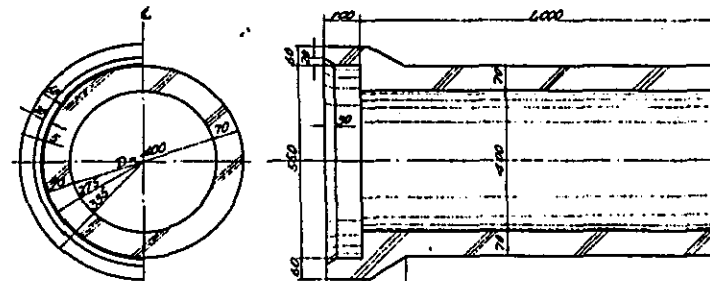
NO.	D	UNIT WEIGHT (kg/m)	H = 1.00 M		H = 0.50 M		REMARKS
			LENGTH (m)	WEIGHT (kg)	LENGTH (m)	WEIGHT (kg)	
1	D13	0.225	10.32	2.3	10.32	2.3	[Diagram of reinforcement layout]
2	"	"	10.28	2.3	10.28	2.3	
3	10	0.28	10.28	2.3	10.28	2.3	
4	"	"	2.48	0.7	2.48	0.7	
5	"	"	2.00	0.4	2.00	0.4	
6	13	0.295	1.00	0.3	1.00	0.3	
7	"	"	1.35	0.4	1.35	0.4	
8	10	0.28	2.00	0.5	2.00	0.5	
9	"	"	0.75	0.2	0.75	0.2	
TOTAL			71.0	16.2	71.0	16.2	

NOTE: (M = Mean length)

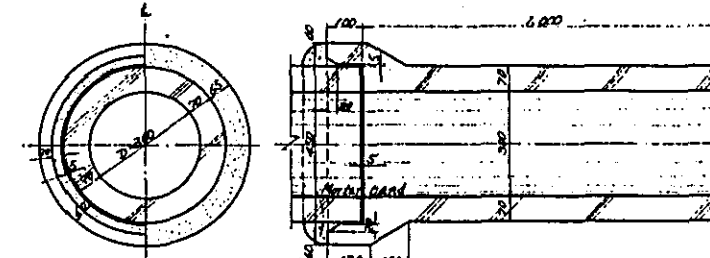
CONCRETE PIPE



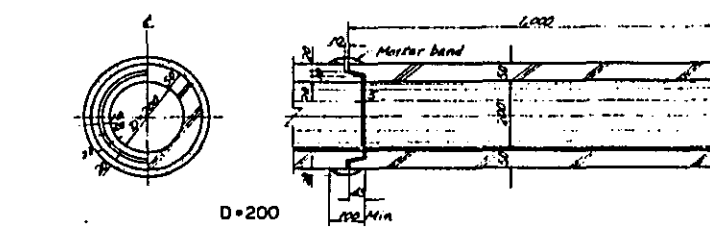
D = 600



D = 400

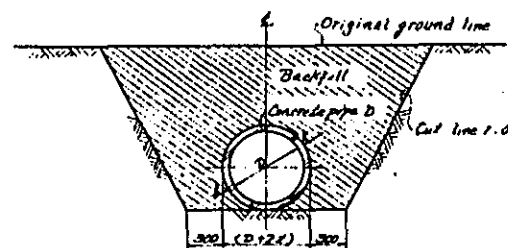


D = 300



D = 200

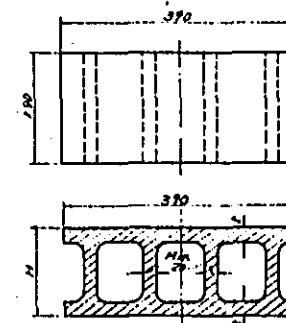
SCALE 0.5



TYPICAL SECTION OF PIPE TRENCH

CONCRETE BLOCK

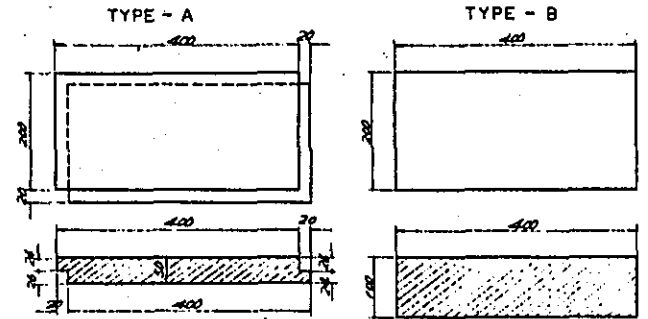
HOLLOW CONCRETE BLOCK



TYPE B DIMENSION

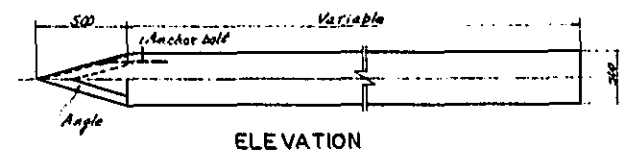
TYPE	H	MIN. J
A	100	20
B	150	25
C	190	25

SOLID CONCRETE BLOCK

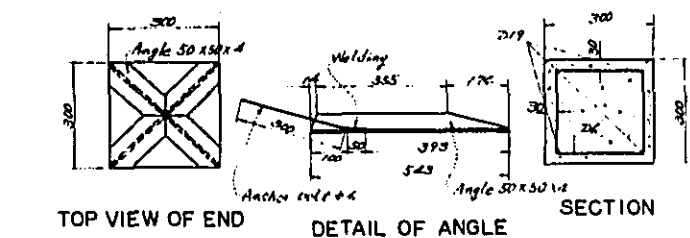


SCALE 0.5M

CONCRETE PILE



ELEVATION



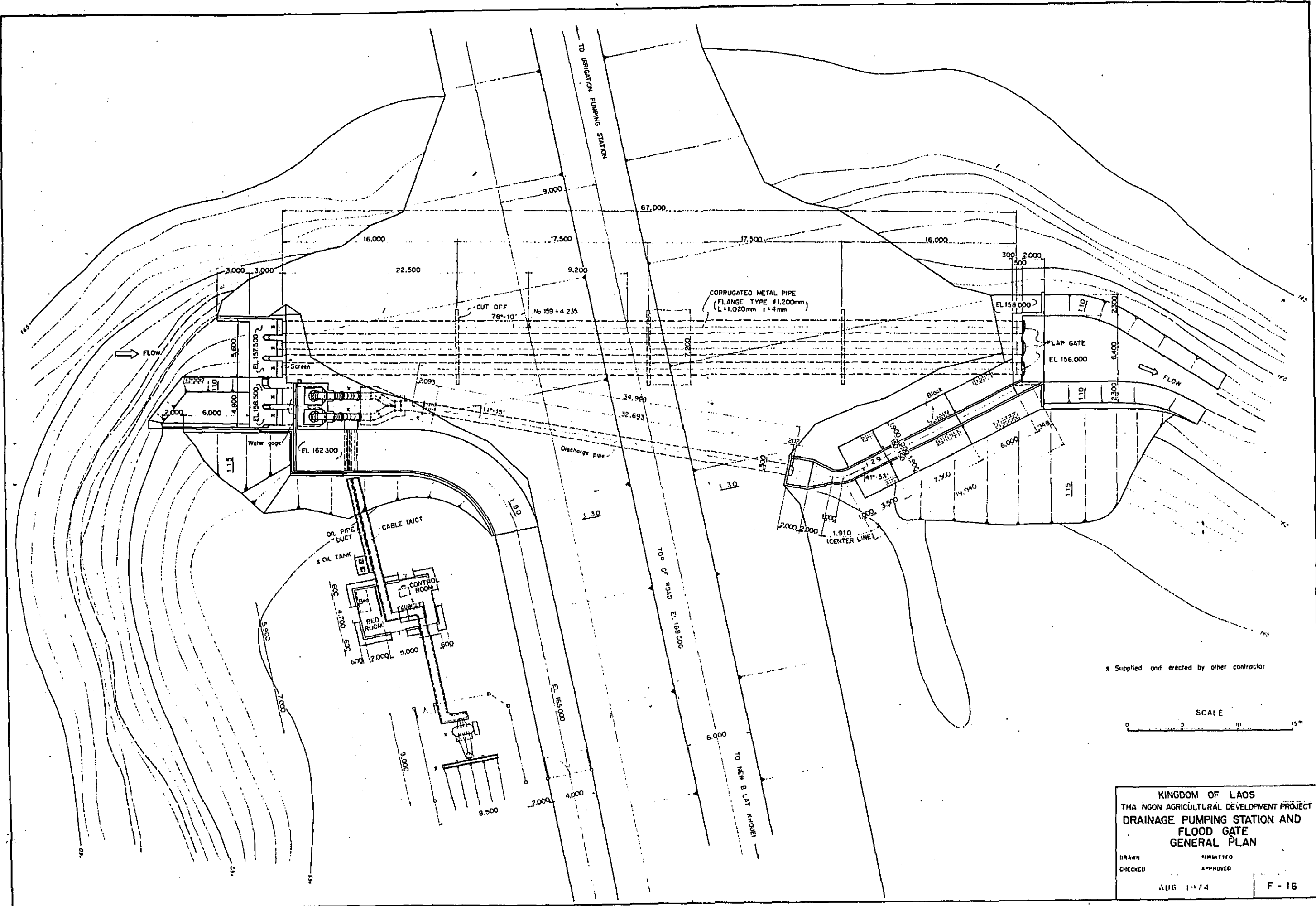
TOP VIEW OF END

DETAIL OF ANGLE

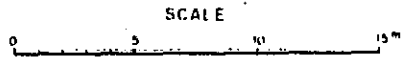
SECTION

SCALE 0.5

KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
**IRRIGATION CANAL STRUCTURE
 PIPE CULVERT, DROP AND
 PRECAST CONCRETE UNIT**
 DRAWN _____ SUBMITTED _____
 CHECKED _____ APPROVED _____
 AUG. 1974 F-15

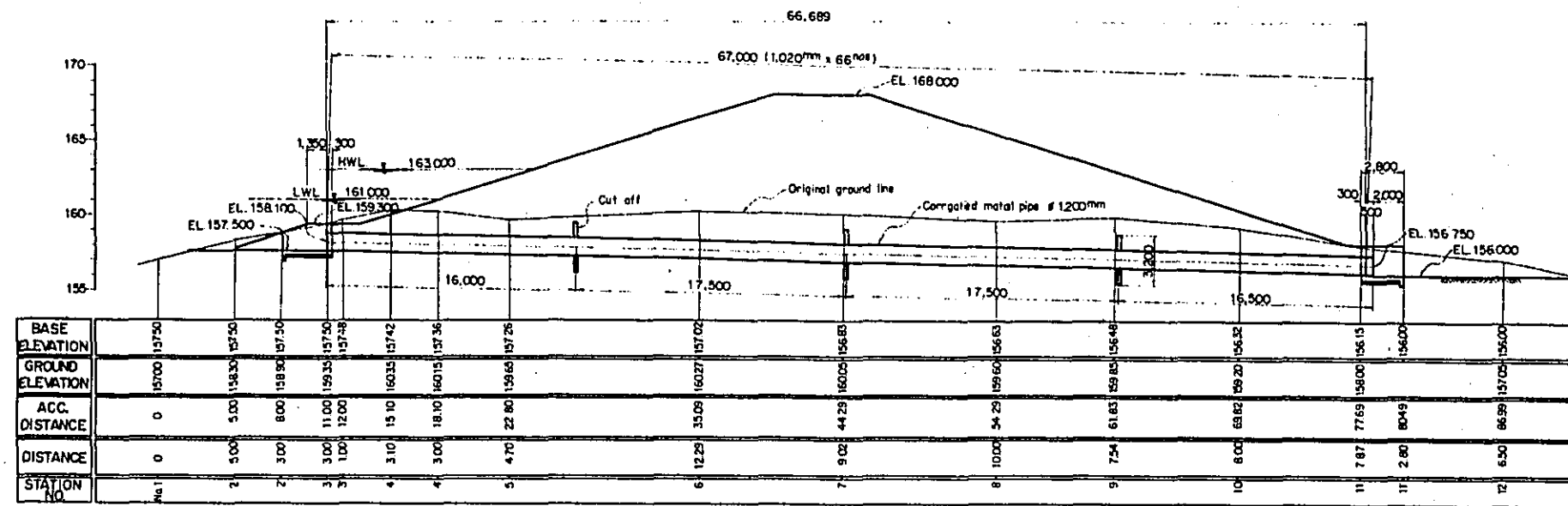


x Supplied and erected by other contractor

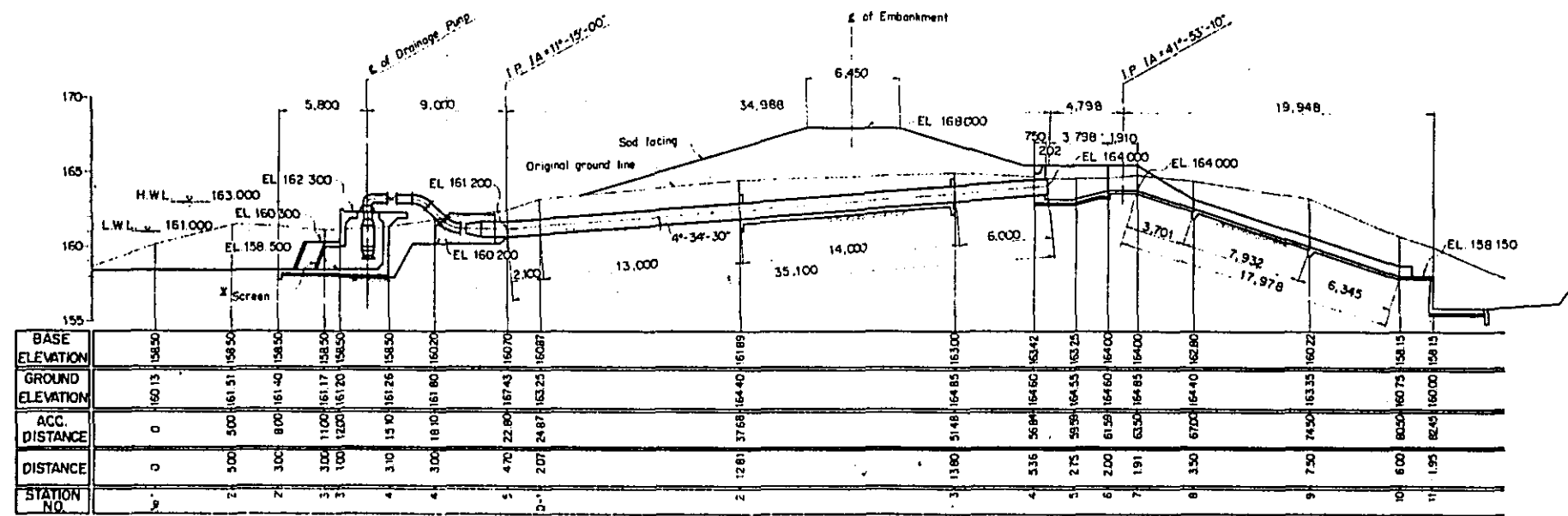


KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
**DRAINAGE PUMPING STATION AND
 FLOOD GATE
 GENERAL PLAN**

DRAWN CHECKED	SUBMITTED APPROVED
AUG 1974	
F - 16	



PROFILE (NATURAL DRAINAGE SECTION)



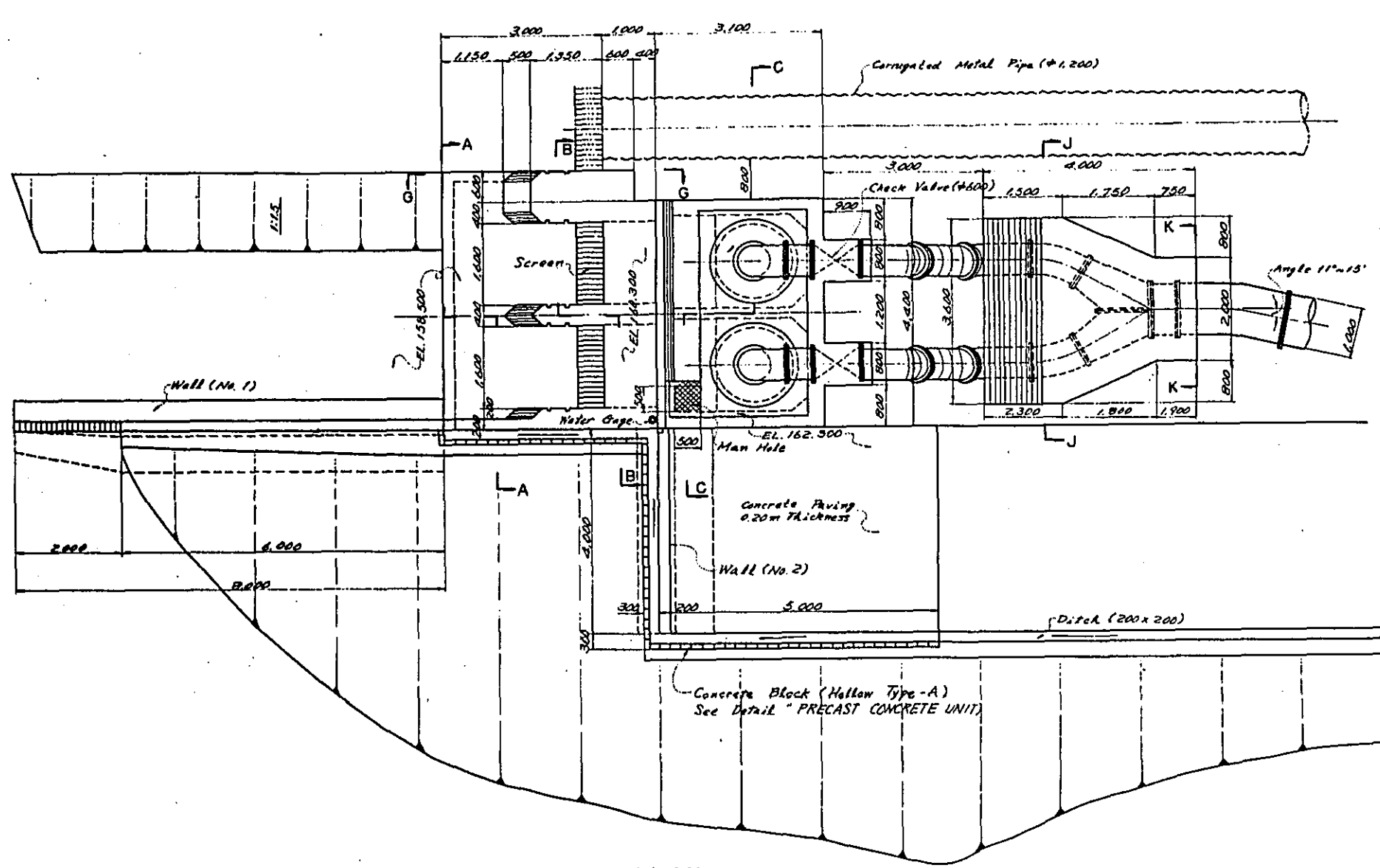
PROFILE (PUMPING DRAINAGE SECTION)

X Supplied and erected by other contractor

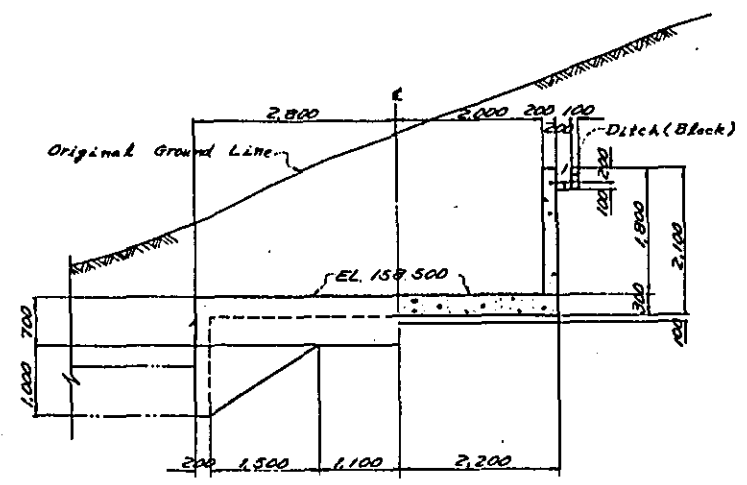
SCALE



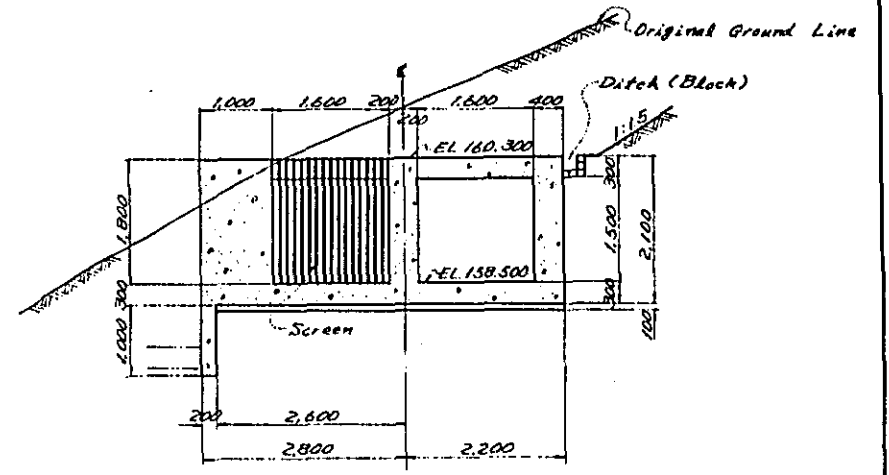
KINGDOM OF LAOS	
THA NGON AGRICULTURAL DEVELOPMENT PROJECT	
DRAINAGE PUMPING STATION AND FLOOD GATE PROFILE	
DRAWN	SUBMITTED
CHECKED	APPROVED
AUG. 1974	F-17



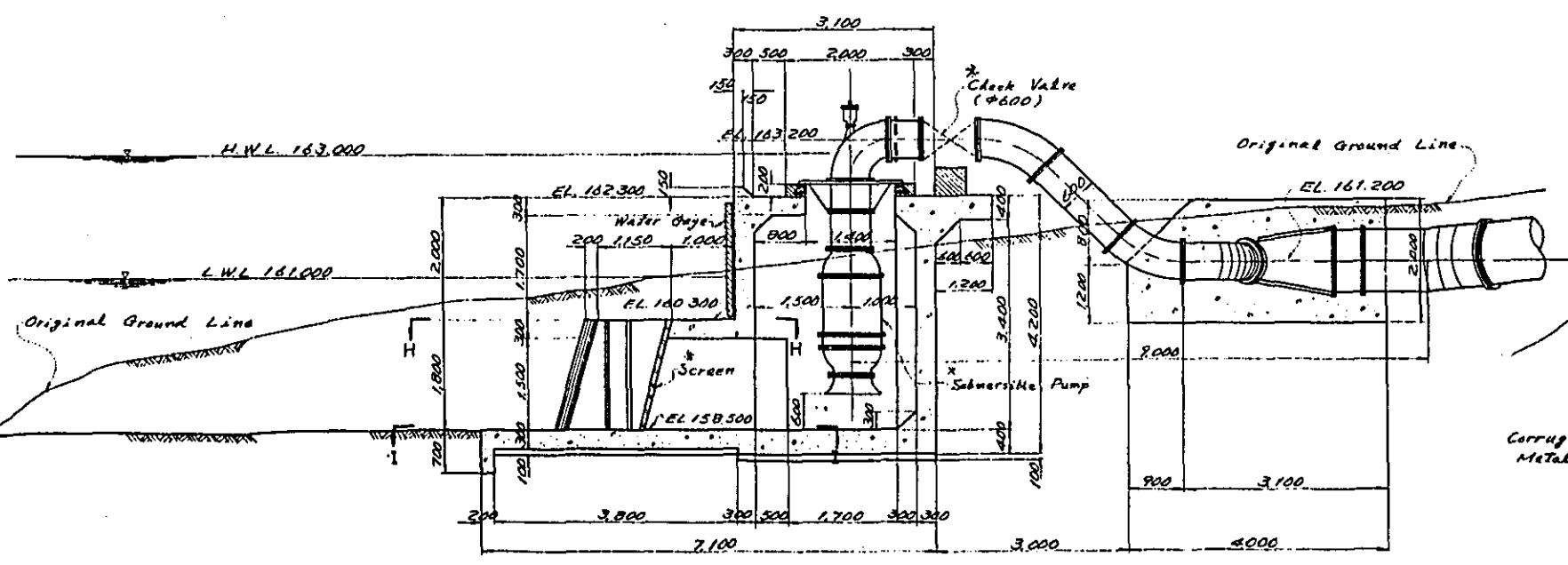
PLAN



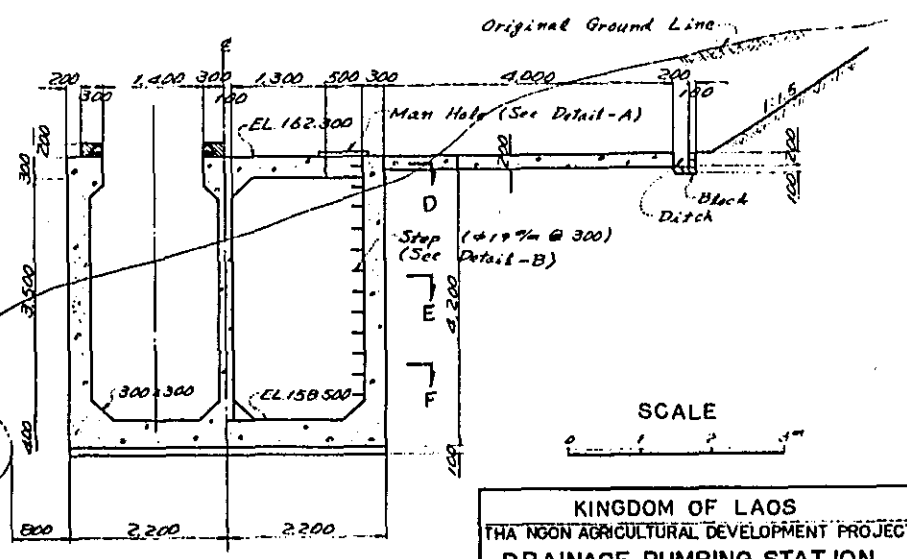
SECTION A-A



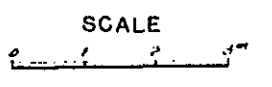
SECTION B-B



PROFILE



SECTION C-C



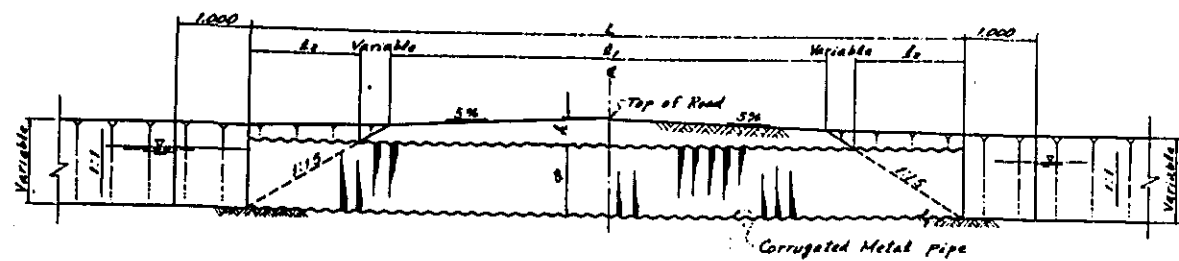
KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
 DRAINAGE PUMPING STATION
 AND FLOOD GATE
 INLET AND SUMP (I)

DRAWN _____ SUBMITTED _____
 CHECKED _____ APPROVED _____

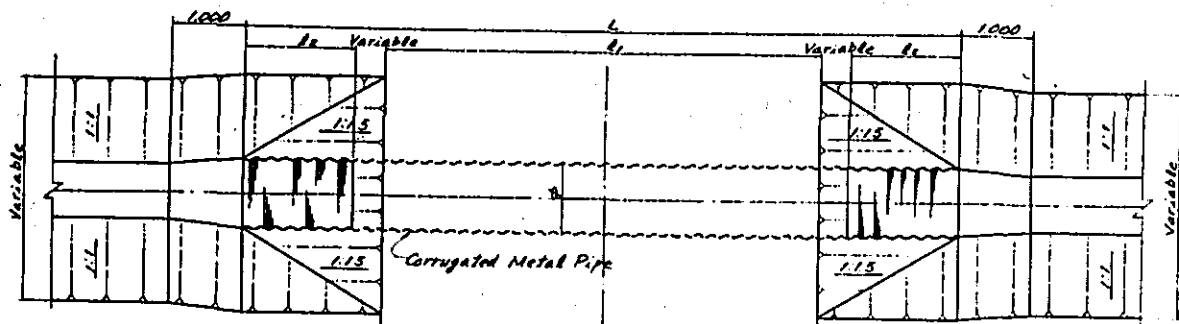
* Supplied and erected by other contractor

AUG. 1974

CULVERT



PROFILE



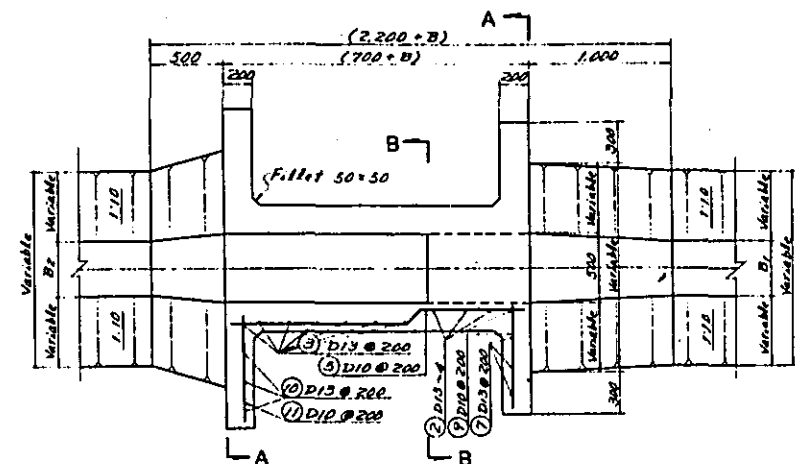
PLAN

Note: A - Minimum A = 0.30 m
 B - 600mm or 800mm
 L - in case of D = 600mm 0.90m
 in case of D = 1000mm 1.50m
 L - in case of B = 600mm D = 600mm (550 + 3A)
 D = 1000mm (670 + 3A)
 in case of B = 800mm D = 600mm (750 + 3A)
 D = 1000mm (870 + 3A)

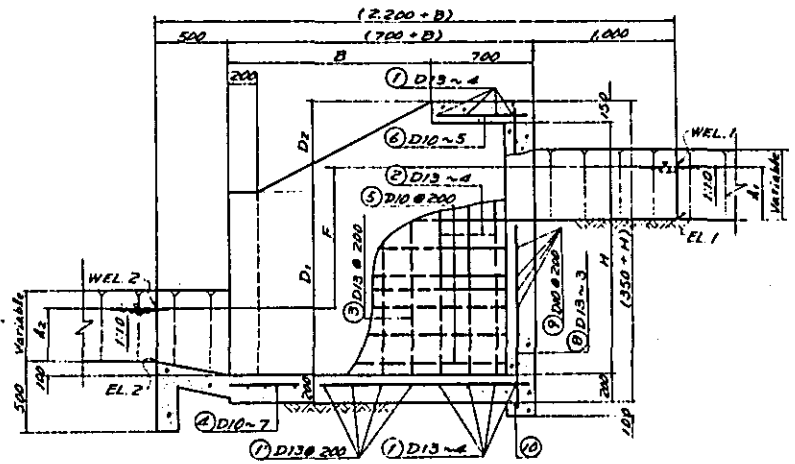
SUMMARY

NO	Canal Number	Q (m³/sec)	Grade I	Pipe φ (m)	Road Name	Road EL (m)	Canal Past EL (m)	Pipe Length (m)	Remarks
NORTH AREA									
1	D-N1-N01	1.216	1/200	1.00	N02 MFR	163.50	163.66	11.75	Pipe length (L) = 0.51 x m Note: 0.51 Unit length m = Nos
2	N2-N01	0.27	1/400	0.60		164.98	162.69	12.75	
3	N7-N01	0.41	1/200	0.60	R-N7	163.78	161.96	7.18	
4	N8-N01	0.87	1/400	0.60	R-N8	163.50	161.24	10.71	
5	N02	0.41	1/100	0.60	M-N10		161.96	0.67	
6	N0-N01	0.21	1/400	0.60		163.30	161.20	10.20	
7	N10-N01	0.74	1/500	1.00	N02 MFR	164.20	161.80	12.75	
8	N02	0.47	1/1000	0.60	R-N12-1	164.40	162.40	10.20	
9	N03	0.07		0.60		164.94	163.97	7.14	
10	N12-R1-N01	0.08			M-N12	164.40	163.25	0.14	
11	R2-N01	0.08				164.90	163.79	7.14	
12	N13-N01	0.53	1/700	1.00		163.10	161.52	0.87	
13	N02	0.17	1/1000	0.60	N02 MFR	164.00	162.60	10.20	
14	N4-N01	0.30	1/200	0.60		164.40	162.30	12.24	
15	N0-N01	0.82	1/400	1.00		164.40	162.01	13.24	
16	N02	0.44	1/100	0.60	R-N14	164.60	162.45	8.47	
17	N03	0.14	1/1000	0.60	R-N16	164.30	163.36	7.65	
18	N10-R1-N01	0.25	1/300		R-N10	164.20	163.00	7.65	
19	R2-N01	0.13	1/1000			164.80	163.36	7.65	
Sub total									109.14 76.50
SOUTH AREA									
20	D-33-N01	1.10	1/250	1.00	N02 MFR	163.70	161.62	12.24	
21	33-L-N01	0.57	1/900	0.60	R-33	164.00	163.22	8.47	
22	34-N01	0.51	1/800	0.60	N02 MFR	163.70	161.62	12.24	
23	35-N01	0.51	1/700	0.60			161.60		
24	36-N01	0.51	1/1000				162.45	6.43	
25	37-N01	0.13	1/1000		R-37		162.05	8.16	
26	38-N01	0.09	1/1000		R-38	162.60	161.40	7.45	
27	31-N01	0.14	1/400			163.40	162.19		
28	D-32-N01	1.25	1/200	1.00	N02 MFR	163.70	161.58	12.24	
29	N02				R-32-1		161.04	4.69	
30	N03	1.216			R-31	164.70	162.40	10.71	
31	32-N01	1.00	1/175	0.60	R-N3	163.40	161.44	10.20	
32	33-N01	0.87	1/400	0.60	N02 MFR		161.55	12.75	
Sub total									67.32 43.73
NONQ SAM KHA AREA									
33	D-331-N01	0.05	1/1000	0.60	R-331	163.50	161.72	7.14	
34	332-N01	0.08				163.70	161.73	7.14	
35	333-N01	0.05				163.40	161.60	7.14	
Sub total									10.71 10.71
Total									176.46 126.32

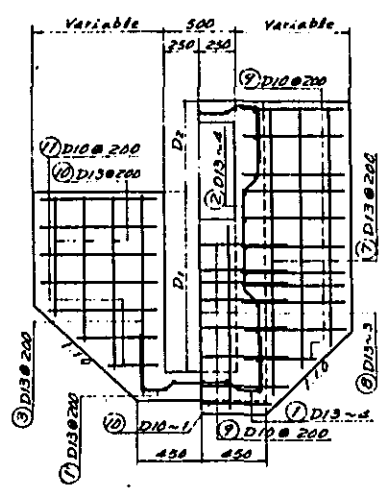
DROP



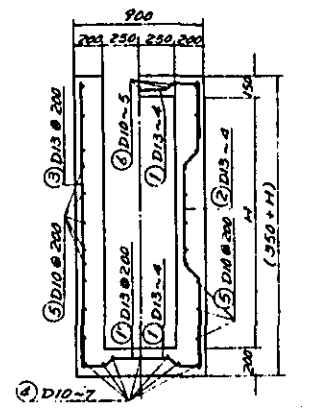
PLAN



PROFILE



SECTION A-A



SECTION B-B

TYPE DIMENSIONS

	B	D1	D2	H
TYPE-I (F=100m)	1,400	1,300	450	1,800
TYPE-II (F=0.30m)	900	1,000	450	1,300

CANAL DIMENSIONS

CANAL NAME	TYPE	D1	A1	WEL 1	EL 1	B2	A2	WEL 2	EL 2
D-N3	F	400	340	165.00	164.66	400	340	164.50	164.16
D-N4	R	400	280	164.73	164.44	400	260	164.23	163.92
D-33	F	400	370	163.48	163.11	400	360	162.99	162.48
D-39	I	400	240	163.20	162.96	400	240	162.20	161.96

TABLE OF REINFORCEMENT BARS

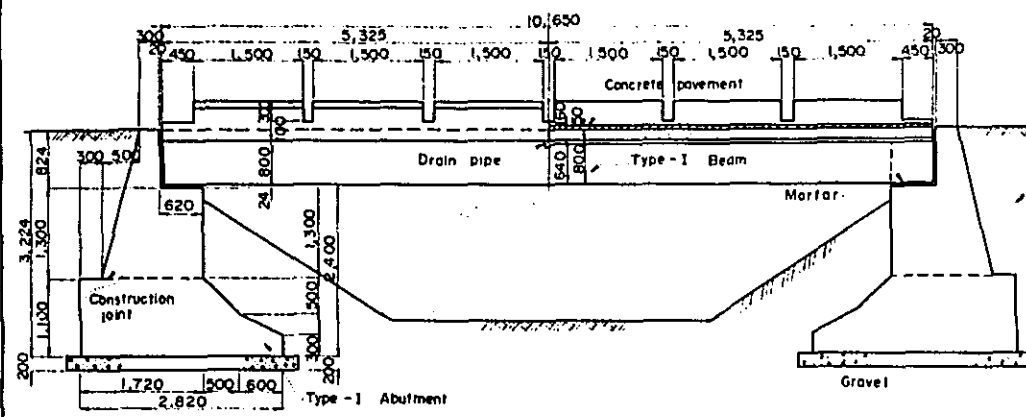
BAR DIA	UNIT WEIGHT	LENGTH	NOS	TOTAL LENGTH	WEIGHT	LENGTH	NOS	TOTAL LENGTH	WEIGHT	REMARKS
TYPE - I										
1	13	0.995	1.62	452	12.96	12.9	1.62	452	12.96	12.9
1'	10	0.617	1.62	7	11.34	11.3	1.62	5	8.10	8.1
2	10	0.617	2.15	422	17.20	17.1	1.65	412	18.20	18.1
3	10	0.617	1.94	752	27.14	27.0	1.64	522	14.40	14.3
4	10	0.56	2.10	7	14.70	14.6	1.60	7	11.20	11.1
5	10	0.56	2.83	112	45.10	45.0	1.55	912	27.90	27.8
6	10	0.56	0.40	5	2.00	1.9	0.40	5	3.00	2.9
7	13	0.995	1.82	352	10.92	10.9	1.32	352	2.92	2.9
8	10	0.617	1.50	3	3.90	3.9	0.80	3	2.40	2.4
9	10	0.56	1.20	7	8.40	8.3	1.20	5	4.00	3.9
10	13	0.995	1.95	352	6.30	6.3	0.75	352	4.50	4.5
11	10	0.56	0.75	72	10.50	10.4	0.75	652	2.00	2.0
TOTAL WEIGHT D13=0749 D10=4384										
TOTAL WEIGHT D13=4334 D10=3204										

KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
**DRAINAGE CANAL
 CULVERT AND DROP**

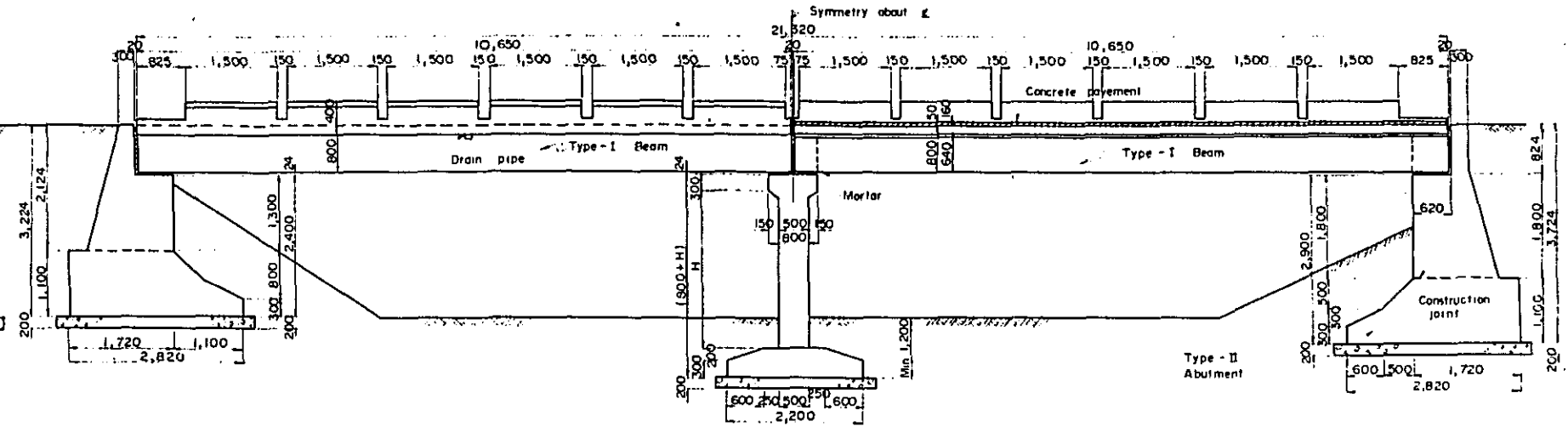
DRAWN _____ SUBMITTED _____
 CHECKED _____ APPROVED _____

AUG. 1974 F-19

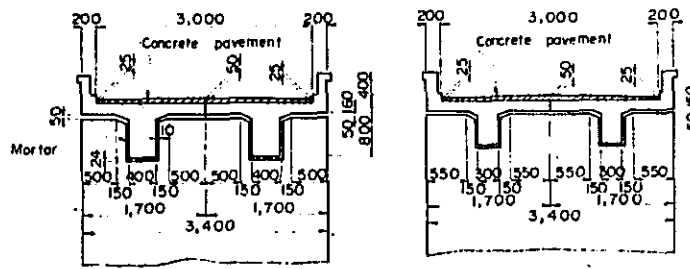
TYPE - A



TYPE - B



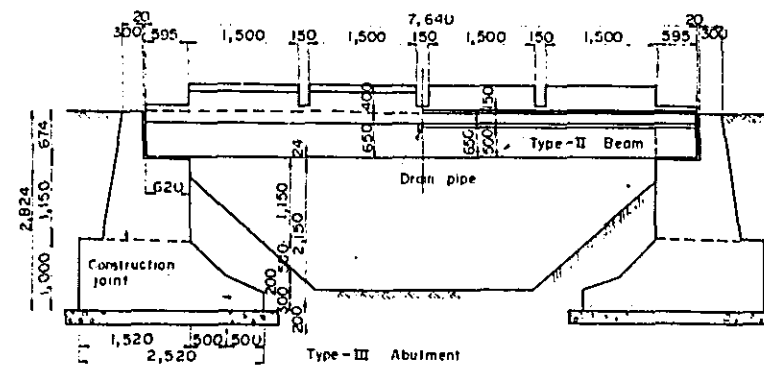
TYPE OF T-BEAM



TYPE - I
(Span 10 m)

TYPE - II
(Span 7 m)

TYPE - C

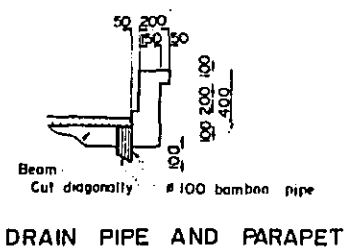
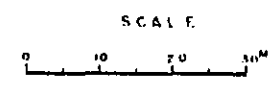
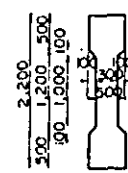
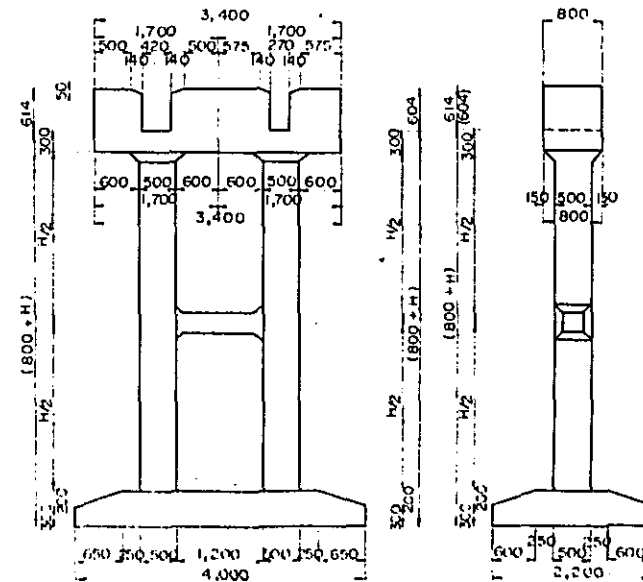


LOCATION AND DIMENSION

Bridge Name	River Bed EL (m)	Road Name	Road EL (m)	Bridge Type	Pier H (m)	Abut Type	Remarks
M - 1	161.60	NO 4 MFR	163.80	A		I	
S - 1	161.40	R - NB	163.60	C		II	
M - 2	161.30	NO 2 MFR	163.50	A		II	
S - 2	160.90	R - NO	163.50	C		II	
S - 3	160.50	R - SC	163.50	C		II	
M - 3	160.00	NO 5 MFR	163.50	B	3.10	I	
M - 4	158.80	NO 2 MFR	164.00	A		I	
M - 5	158.70	NO 2 MFR	163.70	B	4.60	I	

Note Concrete Abutment Type - C I T-Beam, Pier and Wing wall Type - B

PIER

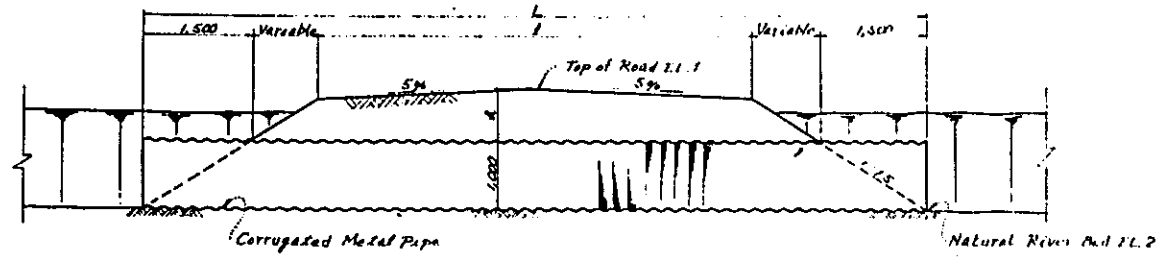


DRAIN PIPE AND PARAPET

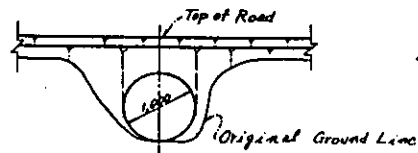
KINGDOM OF LAOS
THA NGON AGRICULTURAL DEVELOPMENT PROJECT
FARM ROAD
CONCRETE BRIDGE (I)

DRAWN: [] CHECKED: [] DESIGNED: [] APPROVED: []
AUG 1974 F - 20

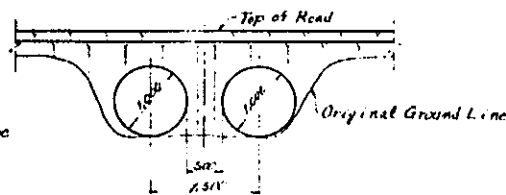
CULVERT (TYPE - A AND B)
(On the Natural River)



PROFILE



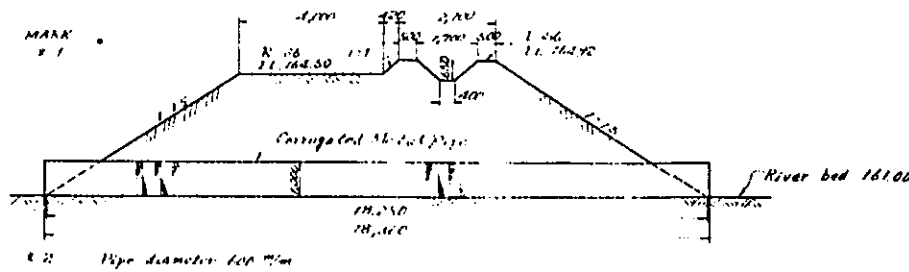
ELEVATION
TYPE-A
(D=0.20 - 2.00 m³/sec)



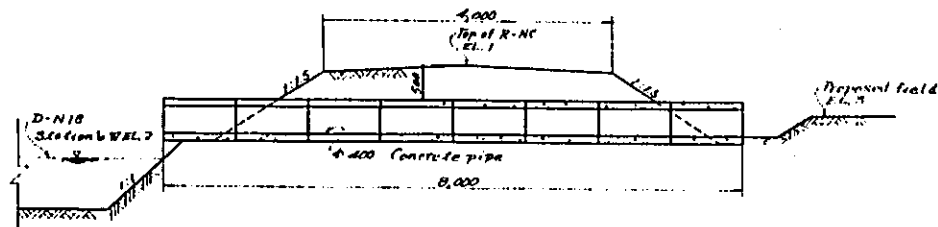
ELEVATION
TYPE-B
(D=2.00 - 3.80 m³/sec)

SUMMARY (TYPE A AND B)

CULVERT NAME	D (m)	TYPE	ROAD NAME	ROAD EL. (m)	RIVER BED EL. (m)	PIPE L. (m)
C-1	2.82	B	R-N4	143.30	142.00	7.65 x 2.2
C-2	3.04	B	R-N5	143.20	141.30	7.65 x 2.2
C-3	0.27	A	R-SB	141.70	141.00	12.24
C-4	0.34	A	R-S4, L-S4	141.00	141.00	18.36
C-5	1.44	A	NO. 11/11	143.00	141.00	11.73
C-6	1.50	A	R-N13	143.50	141.00	11.73
C-7	2.12	B	R-N14	143.40	140.90	11.22 x 2.2
C-8	0.25	A	NA. 2/11/11	143.90	141.00	14.97
C-9	—	A	—	145.50	144.60	8.97



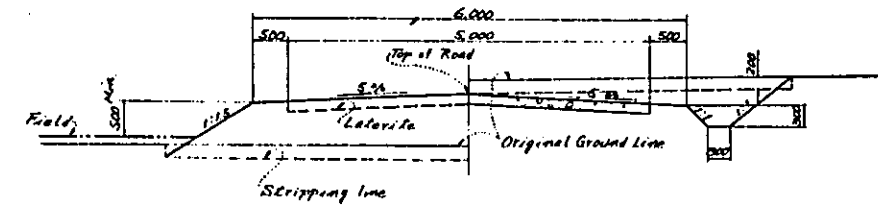
CULVERT (TYPE - C)
(Under the R-NC Secondary farm road)



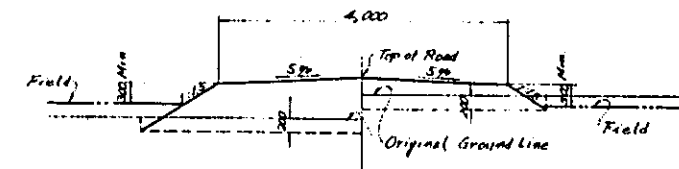
SUMMARY (TYPE C)

Culvert	Road EL.1	D-N13 Drainage Canal Station	WEL.1	Field EL.3
C-10	144.60	No. 11	143.07	144.25
C-11	144.60	No. 12 + 10.00	143.98	144.25
C-12	143.20	No. 13 + 20.00	143.07	144.25

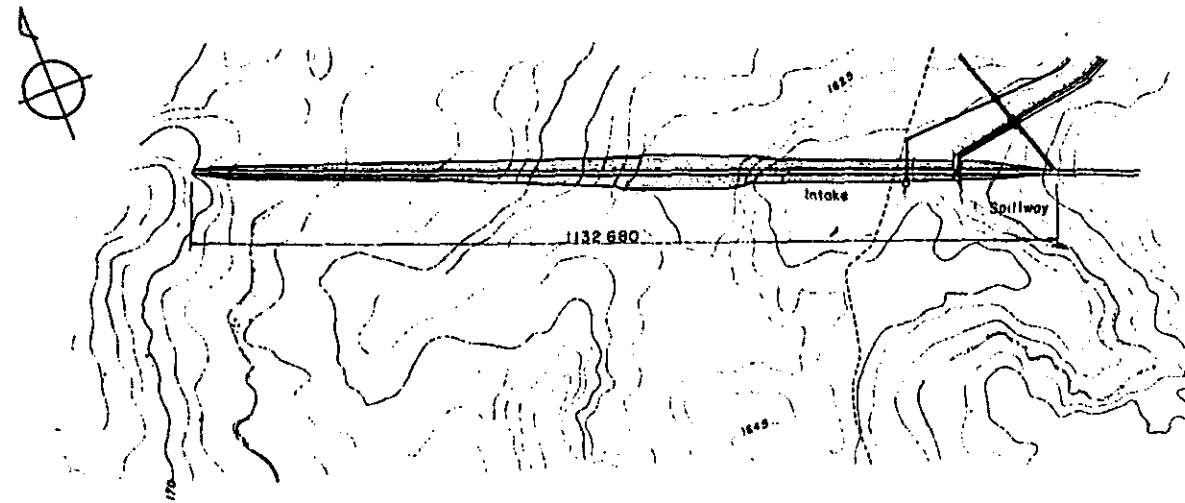
TYPICAL SECTION



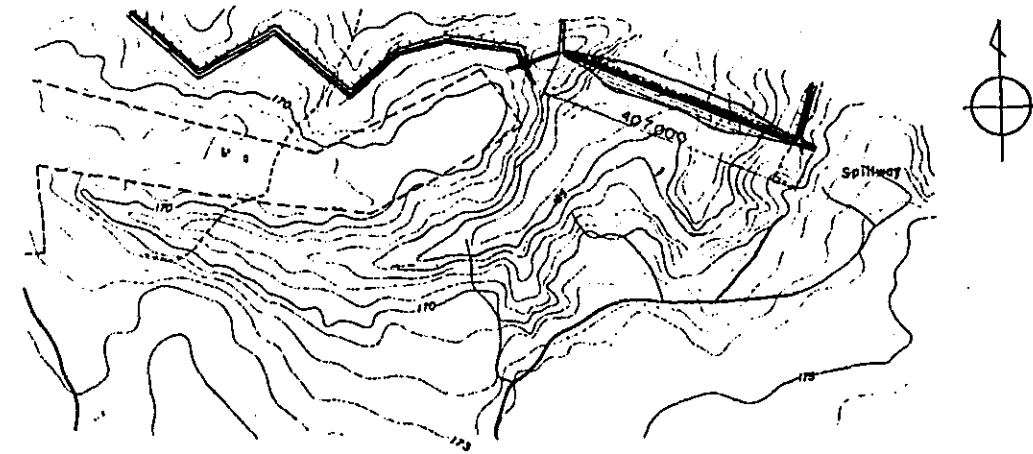
MAIN FARM ROAD



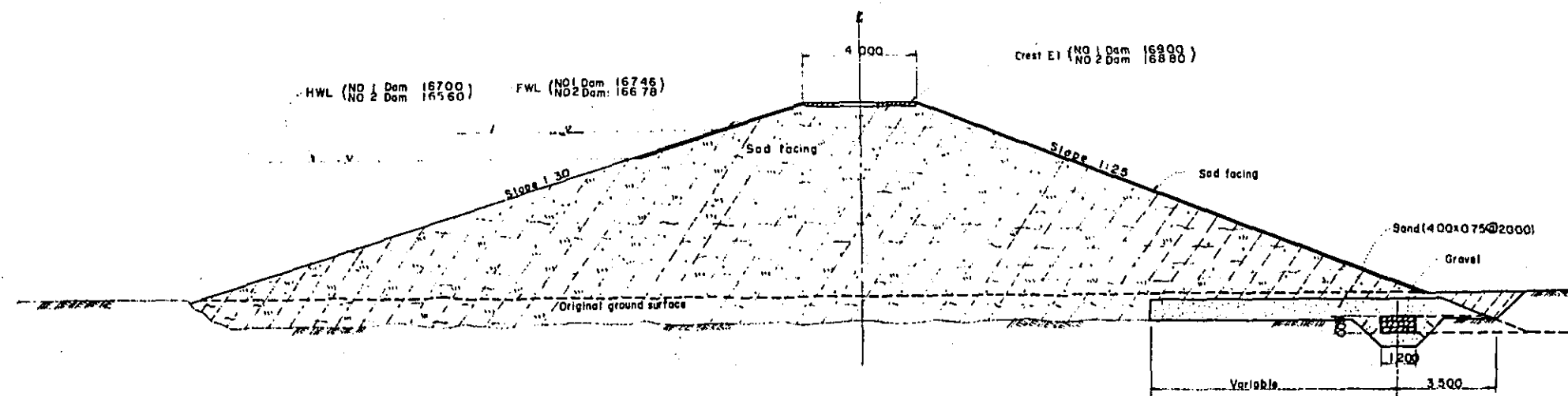
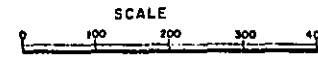
SECONDARY FARM ROAD



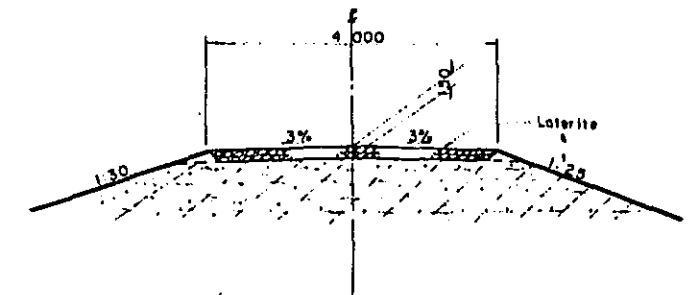
PLAN OF NO. 1 NONG SAM KHA DAM



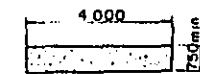
PLAN OF NO. 2 NONG SAM KHA DAM



TYPICAL SECTION OF DAM EMBANKMENT

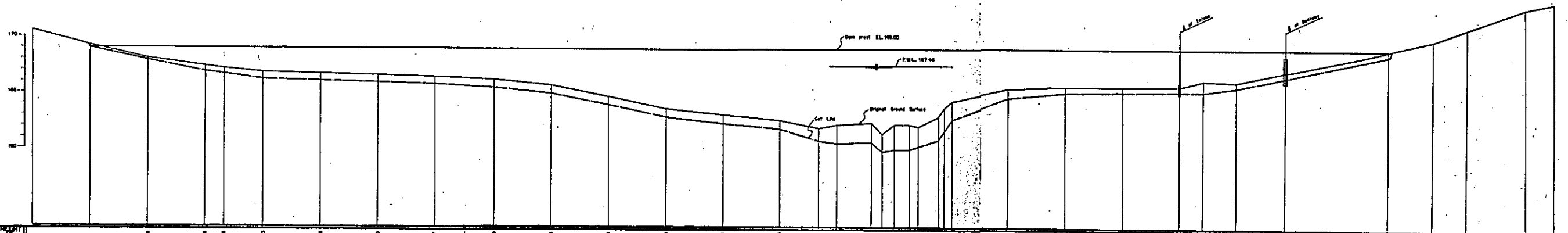
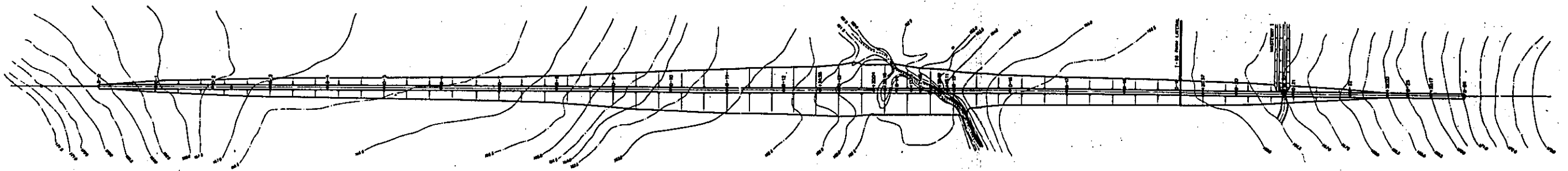


DETAIL OF CREST

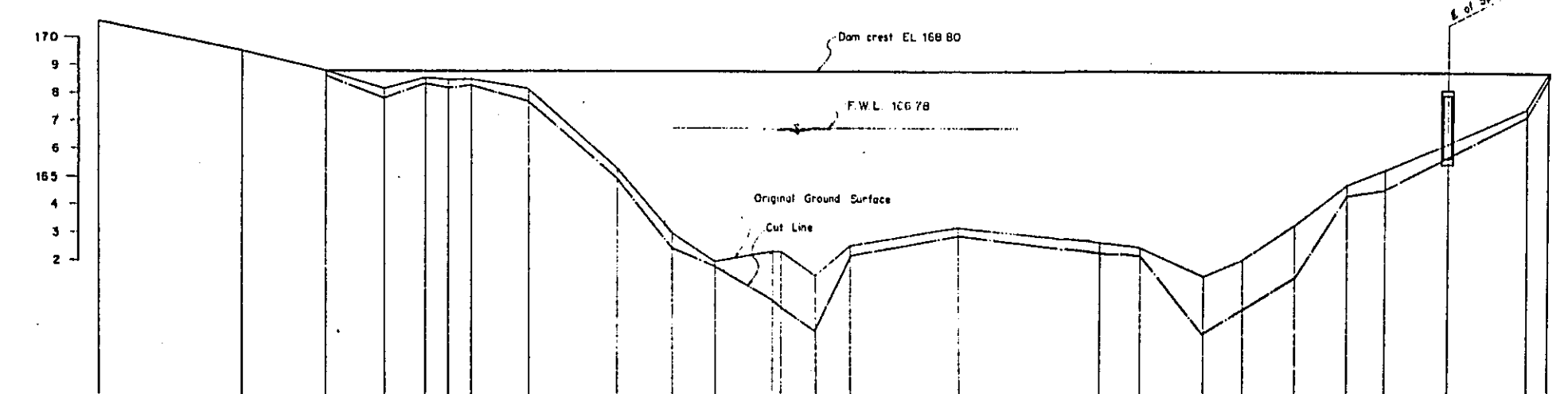
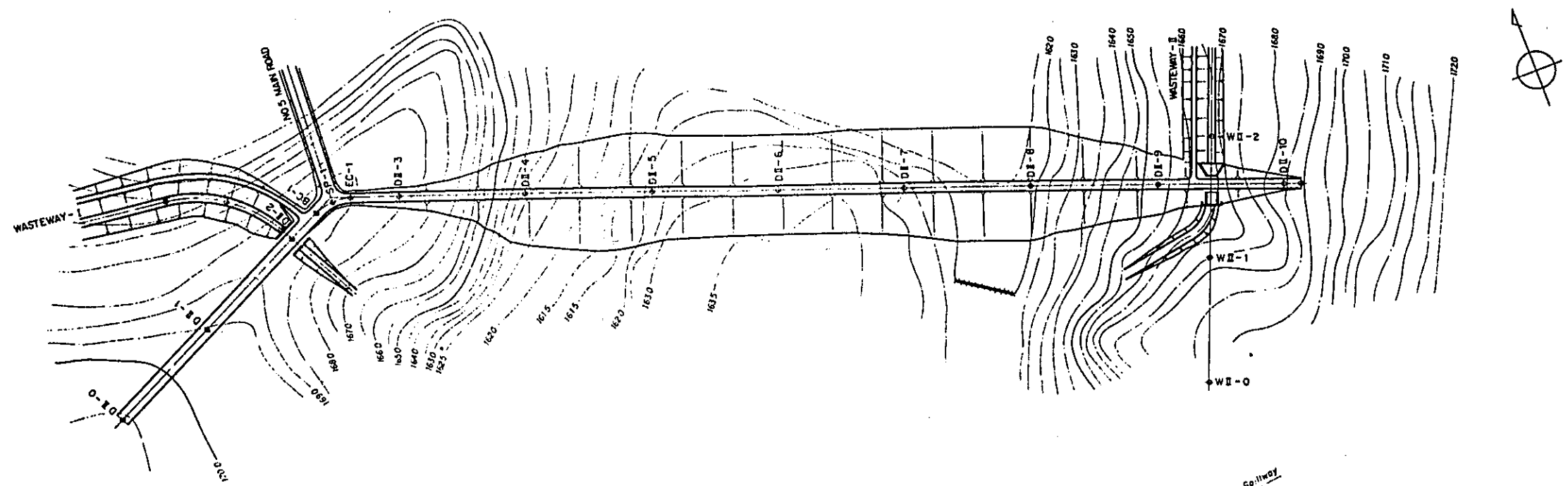


SECTION OF SAND DRAIN

KINGDOM OF LAOS	
THA NGON AGRICULTURAL DEVELOPMENT PROJECT	
NONG SAM KHA DAMS	
GENERAL PLAN	
DRAWN	SUBMITTED
CHECKED	APPROVED
AUG 1974	F-22



STATION	DISTANCE	ACCUMULATED DISTANCE	GRADE ELEVATION	CUTTING		EMBANKMENT	
				HEIGHT OF CUTTING	ELEVATION OF CUT LINE	HEIGHT OF EMBANKMENT	ELEVATION OF CREST
0+00	0.00	0.00	100.00	0.00	100.00	0.00	100.00
0+10	10.00	10.00	101.00	0.00	101.00	0.00	101.00
0+20	20.00	20.00	102.00	0.00	102.00	0.00	102.00
0+30	30.00	30.00	103.00	0.00	103.00	0.00	103.00
0+40	40.00	40.00	104.00	0.00	104.00	0.00	104.00
0+50	50.00	50.00	105.00	0.00	105.00	0.00	105.00
0+60	60.00	60.00	106.00	0.00	106.00	0.00	106.00
0+70	70.00	70.00	107.00	0.00	107.00	0.00	107.00
0+80	80.00	80.00	108.00	0.00	108.00	0.00	108.00
0+90	90.00	90.00	109.00	0.00	109.00	0.00	109.00
1+00	100.00	100.00	110.00	0.00	110.00	0.00	110.00
1+10	110.00	110.00	111.00	0.00	111.00	0.00	111.00
1+20	120.00	120.00	112.00	0.00	112.00	0.00	112.00
1+30	130.00	130.00	113.00	0.00	113.00	0.00	113.00
1+40	140.00	140.00	114.00	0.00	114.00	0.00	114.00
1+50	150.00	150.00	115.00	0.00	115.00	0.00	115.00
1+60	160.00	160.00	116.00	0.00	116.00	0.00	116.00
1+70	170.00	170.00	117.00	0.00	117.00	0.00	117.00
1+80	180.00	180.00	118.00	0.00	118.00	0.00	118.00
1+90	190.00	190.00	119.00	0.00	119.00	0.00	119.00
2+00	200.00	200.00	120.00	0.00	120.00	0.00	120.00
2+10	210.00	210.00	121.00	0.00	121.00	0.00	121.00
2+20	220.00	220.00	122.00	0.00	122.00	0.00	122.00
2+30	230.00	230.00	123.00	0.00	123.00	0.00	123.00
2+40	240.00	240.00	124.00	0.00	124.00	0.00	124.00
2+50	250.00	250.00	125.00	0.00	125.00	0.00	125.00
2+60	260.00	260.00	126.00	0.00	126.00	0.00	126.00
2+70	270.00	270.00	127.00	0.00	127.00	0.00	127.00
2+80	280.00	280.00	128.00	0.00	128.00	0.00	128.00
2+90	290.00	290.00	129.00	0.00	129.00	0.00	129.00
3+00	300.00	300.00	130.00	0.00	130.00	0.00	130.00



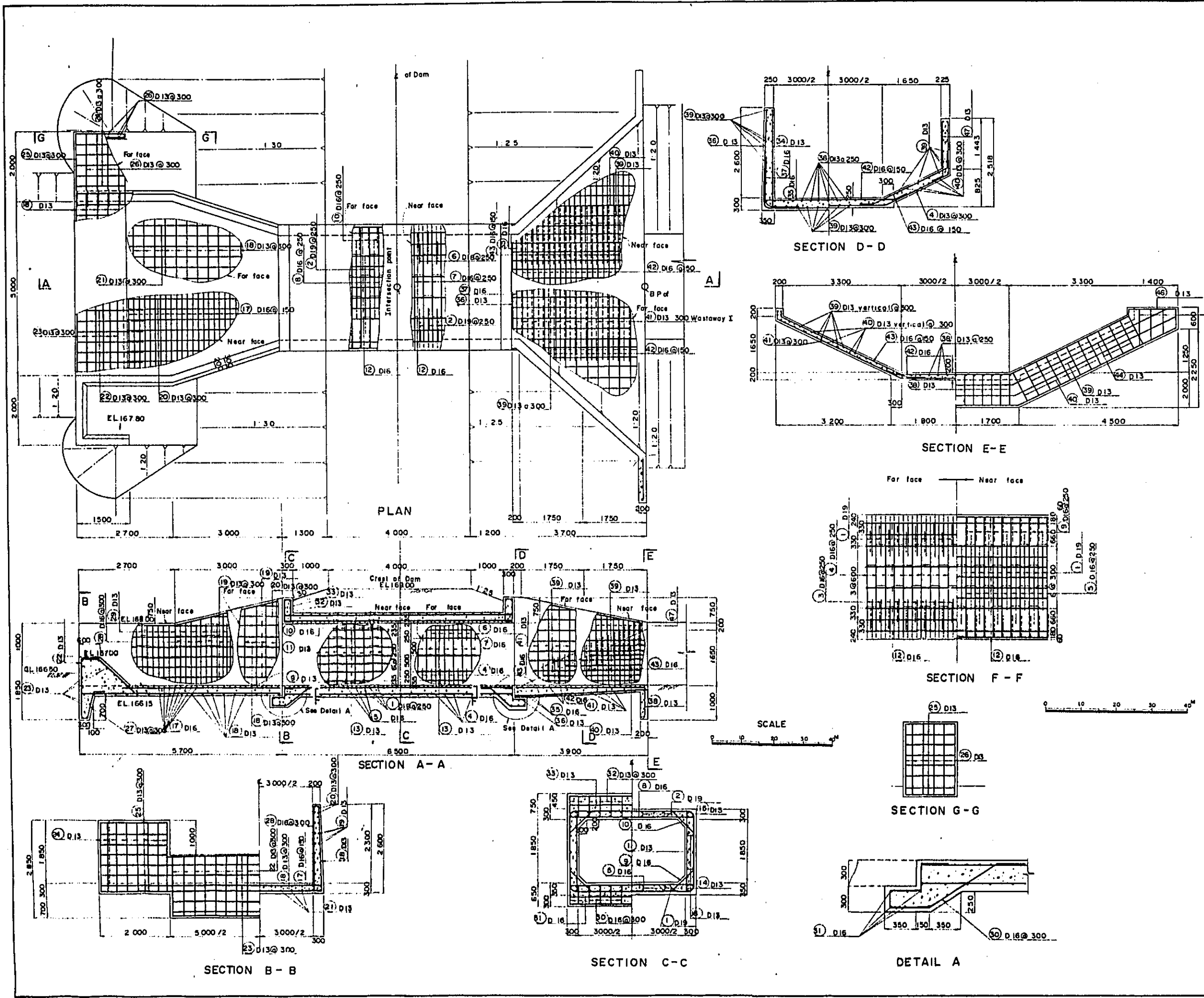
STATION	DISTANCE	ACCUMULATED DISTANCE	GROUND SURFACE ELEVATION	CUTTING		EMBANKMENT	
				ELEVATION OF OUTLINE	HEIGHT OF CUTTING	ELEVATION OF CREST	HEIGHT OF EMBANKMENT
DI-0	0	0	170.56				
DI-1	500	500	169.52	168.60	0.20	168.80	0.20
+2500	2500	7500	168.80	167.84	0.39	168.80	0.96
DI-2	2100	10000	168.23	168.45	0.20	168.80	0.35
BC-1	1414	11414	168.65	168.20	0.20	168.80	0.60
SP-1	829	12243	168.40	168.32	0.20	168.80	0.48
EC-4	829	13072	168.52	167.84	0.31	168.80	0.96
DI-3	1928	15000	168.15	165.05	0.40	168.80	3.75
+3100	3100	18100	165.45	162.55	0.50	168.80	6.25
DI-4	1900	20000	163.05	161.81	0.19	168.80	6.99
+1500	1500	21500	162.00	160.60	1.80	168.80	8.20
+3300	3300	23800	162.40	160.30	2.10	168.80	8.50
DI-5	1200	25000	161.45	159.50	1.95	168.80	9.30
+1200	1200	26200	162.50	162.34	0.16	168.80	6.46
DI-6	3800	30000	163.20	162.93	0.27	168.80	5.87
DI-7	5000	35000	162.65	162.25	0.40	168.80	6.55
+1400	1400	36400	162.50	162.20	0.30	168.80	6.60
+3600	3600	38600	161.45	159.44	2.01	168.80	9.36
DI-8	1400	40000	162.01	160.34	1.67	168.80	8.46
+1800	1800	41800	163.30	161.40	1.90	168.80	7.40
+3600	3600	43600	164.70	164.40	0.30	168.80	4.40
DI-9	1400	45000	165.31	164.63	0.68	168.80	4.17
+2200	2200	47200	166.28	165.71	0.95	168.80	2.52
DI-10	5000	50000	167.52	167.32	0.20	168.80	1.48
+700	700	50700	168.80	168.60	0.20	168.80	0.20

IP-1 CL=16.58
 R=2000 TL=8.80
 LA=47°29'30" SL=1.85

KINGDOM OF LAOS
 THA NONG AGRICULTURAL DEVELOPMENT PROJECT
NONG SAM KHA NO.2 DAM
PLAN AND PROFILE

DRAWN _____ SUBMITTED _____
 CHECKED _____ APPROVED _____

AUG. 1974 F-24

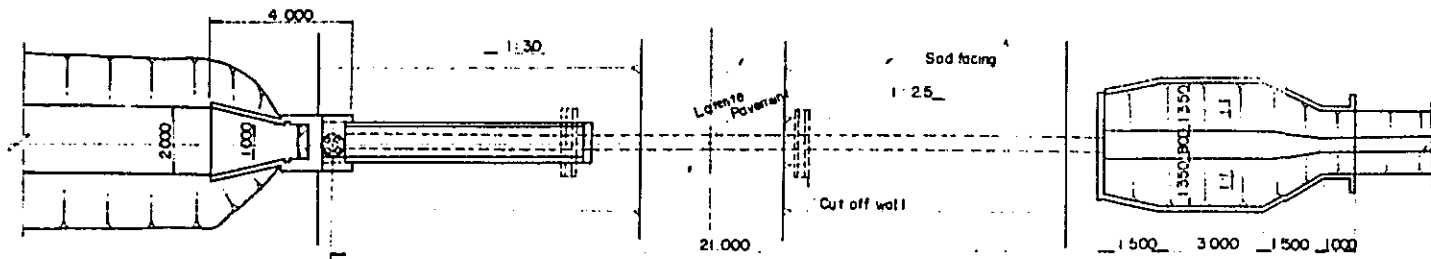


MARK	D	LENGTH	NOS	TOTAL LENGTH	UNIT WEIGHT	WEIGHT	REMARKS
		m		m	kg/m	kg	
1	19	2.85	27	77.0	2.25	173.3	
2	19	2.85	27	77.0	2.25	173.3	
3	16	2.10	54	113.4	1.56	176.9	
4	16	3.00	54	162.0	1.56	252.7	
5	16	3.50	27	94.5	1.56	147.4	
6	16	2.10	54	113.4	1.56	176.9	
7	16	3.00	54	162.0	1.56	252.7	
8	16	3.50	27	94.5	1.56	147.4	
9	13	0.90	54	48.6	0.995	48.4	
10	16	0.85	54	45.9	1.56	71.6	
11	13	2.35	54	128.7	0.995	128.3	
12	16	6.40	19	121.6	1.56	189.7	
13	13	6.40	47	300.8	0.995	299.3	
14	16	0.84	52	43.7	1.56	68.1	
15	16	0.82	52	42.6	1.56	66.5	
16	16	0.33	52	17.2	1.56	26.8	
17	16	4.85	29	140.7	1.56	219.5	
18	13	5.00	19	95.0	0.995	94.5	
19	16	5.80	24	139.2	1.56	217.2	
20	16	1.80	8	14.4	1.56	22.5	
21	16	4.90	21	102.9	1.56	160.5	
22	16	3.80	17	64.6	1.56	101.1	
23	16	5.50	15	82.5	1.56	128.7	
24	16	3.35	10	33.5	1.56	52.3	
25	16	3.40	16	54.4	1.56	84.9	
26	16	4.10	12	49.2	1.56	76.7	
27	16	1.25	17	21.3	1.56	33.3	
28	16	2.45	11	27.0	1.56	41.7	
29	13	2.10	27	56.7	0.995	56.4	
30	16	2.65	26	68.9	1.56	107.5	
31	16	3.50	14	49.0	1.56	76.4	
32	13	1.80	26	46.8	0.995	46.6	
33	16	3.50	8	28.0	1.56	43.7	
34	16	2.85	4	11.4	1.56	17.8	
35	16	3.80	2	7.6	1.56	11.9	
36	13	9.70	1	9.7	0.995	9.7	
37	16	2.30	2	4.6	1.56	7.2	
38	13	4.50	15	67.5	0.995	67.2	
39	16	5.50	36	198.0	1.56	308.9	
40	16	1.85	10	18.5	1.56	28.9	
41	16	11.90	12	142.8	1.56	222.5	
42	16	4.40	23	101.2	1.56	157.9	
43	16	3.40	23	78.2	1.56	122.0	
44	13	7.20	3	21.6	0.995	21.5	
45	16	0.90	6	5.4	1.56	8.4	
46	16	1.80	2	3.6	1.56	5.6	
47	16	1.85	83	153.6	1.56	239.5	
D19 346.6 kg D16 2159.1 kg D13 1875.4 kg Total 4381.1 kg							

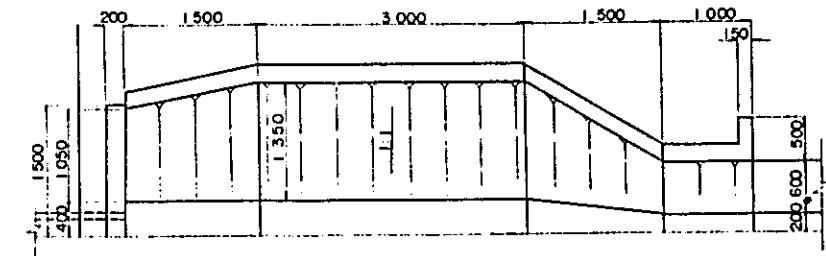
KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
 NONG SAM KHA DAM AND WASTEWAY
 NO. 1 DAM SPILLWAY

DRAWN: _____ SUBMITTED: _____
 CHECKED: _____ APPROVED: _____

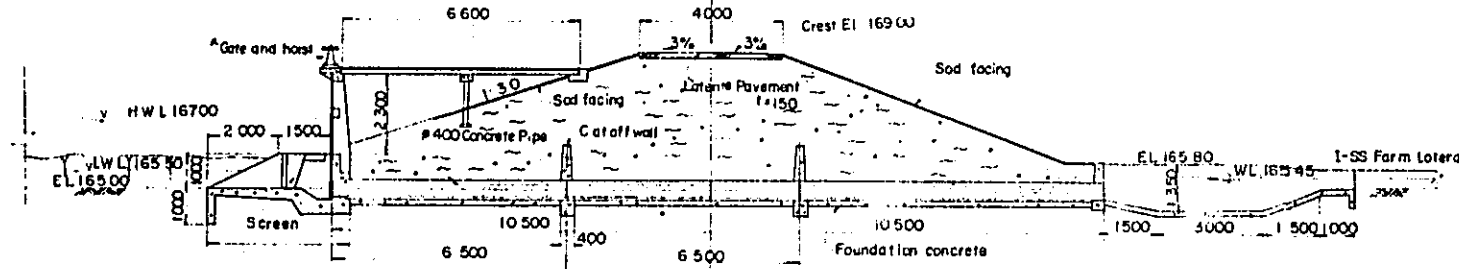
AUG. 1974 F-25



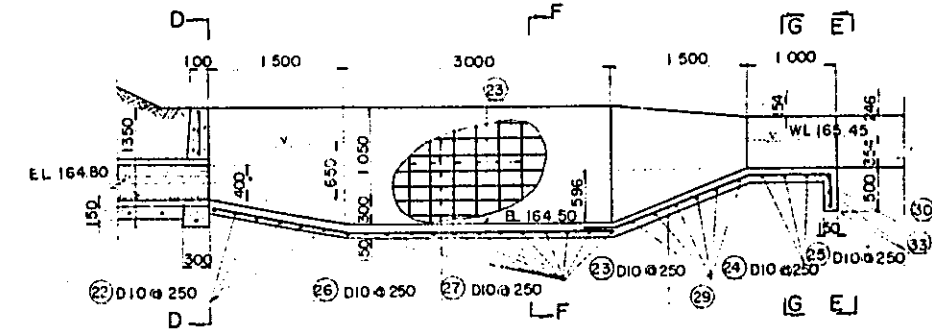
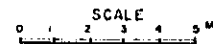
PLAN OF INTAKE STRUCTURE



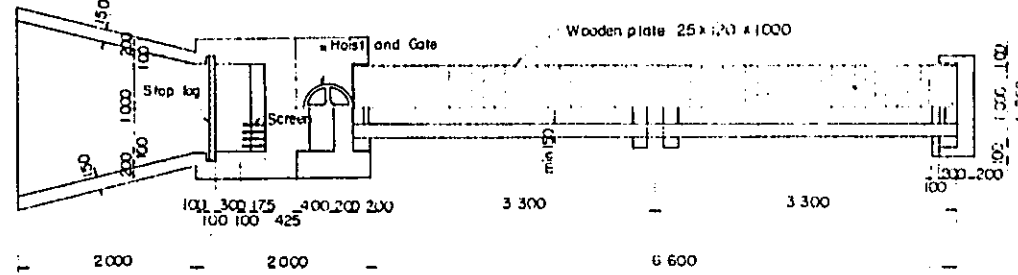
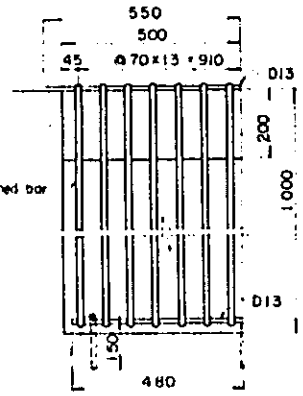
PLAN OF OUTLET



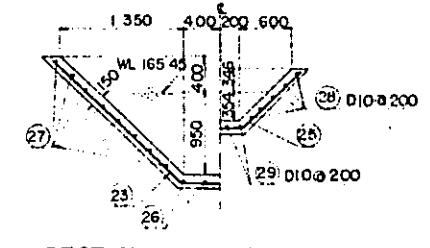
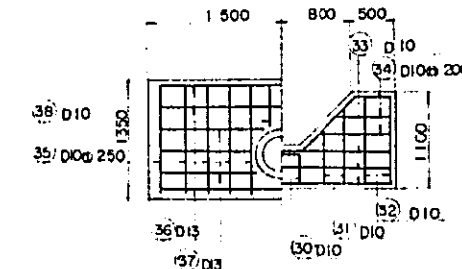
PROFILE



PROFILE



PLAN OF INLET

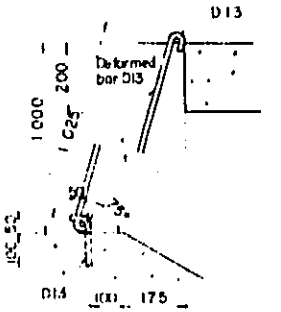


SECTION D-D

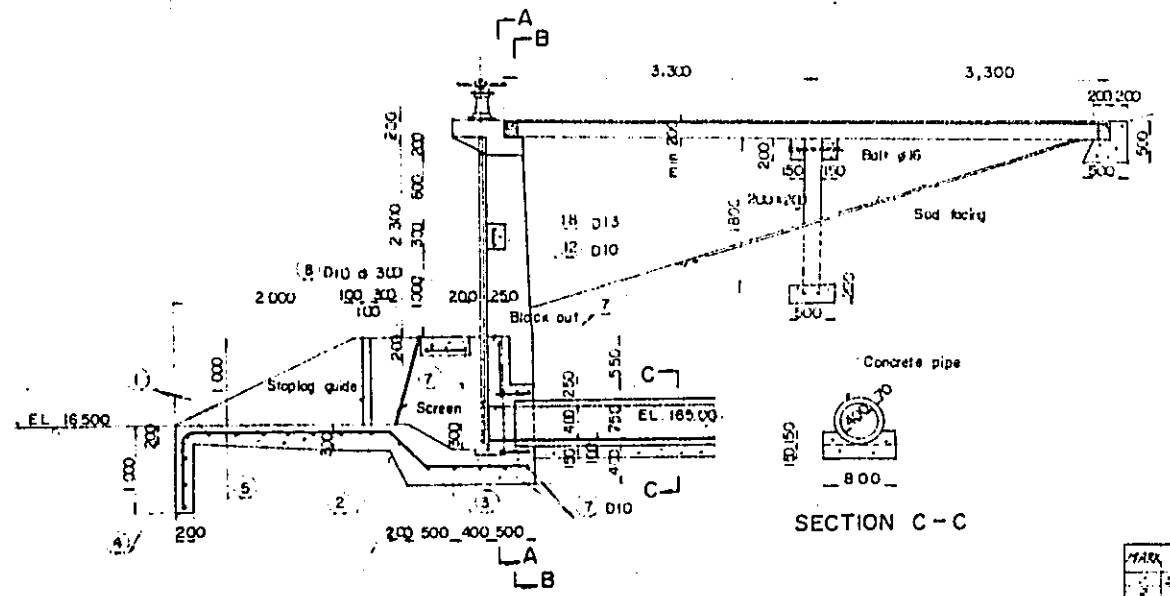
SECTION E-E

SECTION F-F

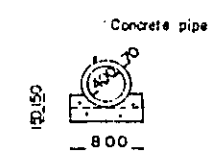
SECTION G-G



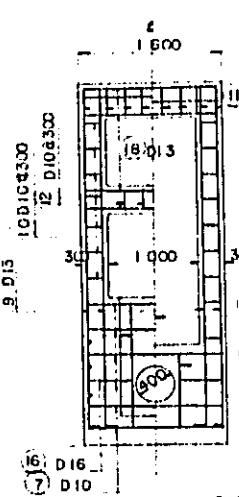
DETAIL OF SCREEN



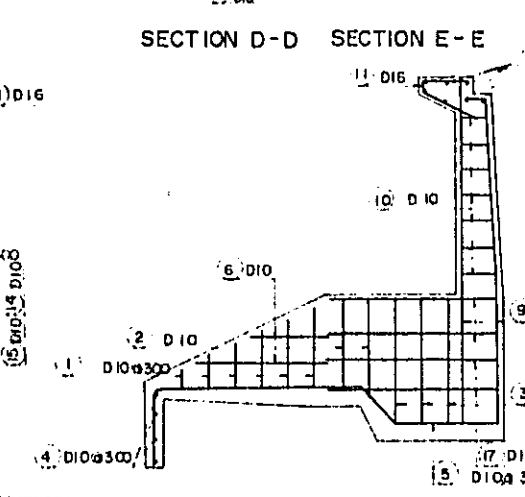
PROFILE



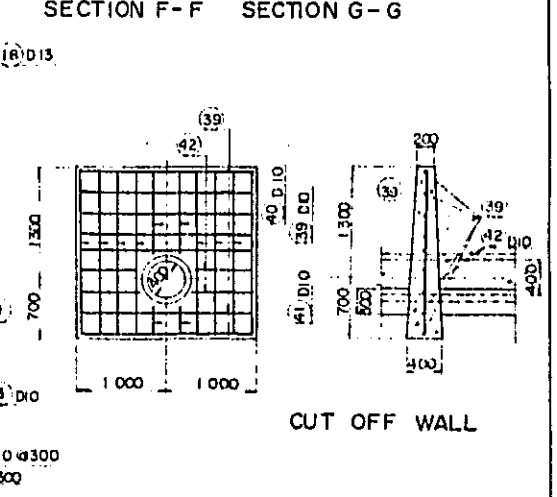
SECTION C-C



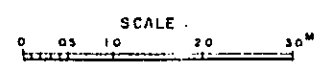
SECTION A-A



SECTION B-B



CUT OFF WALL



* Supplied and erected by other Contractor

TABLE OF REINFORCEMENT BARS

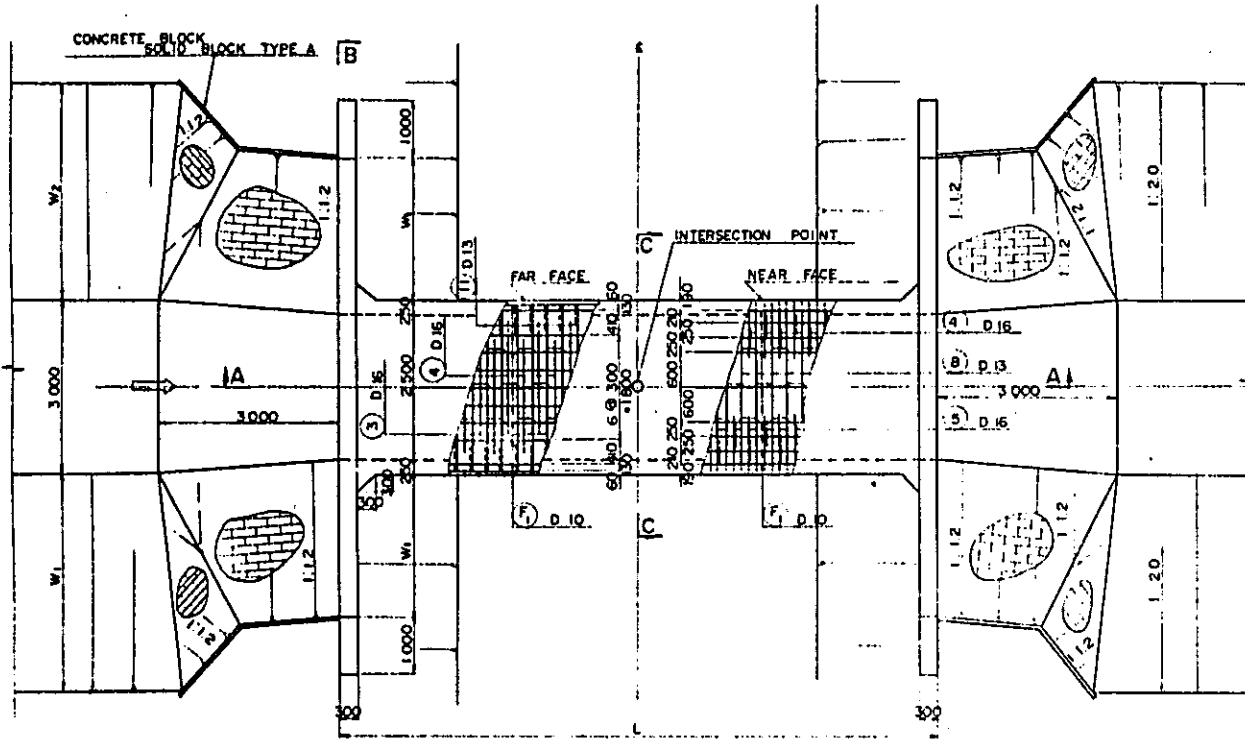
BAR	D	LENGTH	TOTAL WEIGHT	REMARKS	BAR	D	LENGTH	TOTAL WEIGHT	REMARKS
1	D13	1.85	3.60		11	D16	1.00	10.00	
2	D10	1.20	2.40		12	D10	1.00	10.00	
3	D10	1.20	2.40		13	D10	1.00	10.00	
4	D10	1.20	2.40		14	D10	1.00	10.00	
5	D10	1.20	2.40		15	D10	1.00	10.00	
6	D10	1.20	2.40		16	D10	1.00	10.00	
7	D10	1.20	2.40		17	D10	1.00	10.00	
8	D10	1.20	2.40		18	D10	1.00	10.00	
9	D10	1.20	2.40		19	D10	1.00	10.00	
10	D10	1.20	2.40		20	D10	1.00	10.00	
11	D10	1.20	2.40		21	D10	1.00	10.00	
12	D10	1.20	2.40		22	D10	1.00	10.00	
13	D10	1.20	2.40		23	D10	1.00	10.00	
14	D10	1.20	2.40		24	D10	1.00	10.00	
15	D10	1.20	2.40		25	D10	1.00	10.00	
16	D10	1.20	2.40		26	D10	1.00	10.00	
17	D10	1.20	2.40		27	D10	1.00	10.00	
18	D10	1.20	2.40		28	D10	1.00	10.00	
19	D10	1.20	2.40		29	D10	1.00	10.00	
20	D10	1.20	2.40		30	D10	1.00	10.00	
21	D10	1.20	2.40		31	D10	1.00	10.00	
22	D10	1.20	2.40		32	D10	1.00	10.00	
23	D10	1.20	2.40		33	D10	1.00	10.00	
24	D10	1.20	2.40		34	D10	1.00	10.00	
25	D10	1.20	2.40		35	D10	1.00	10.00	
26	D10	1.20	2.40		36	D10	1.00	10.00	
27	D10	1.20	2.40		37	D10	1.00	10.00	
28	D10	1.20	2.40		38	D10	1.00	10.00	
29	D10	1.20	2.40		39	D10	1.00	10.00	
30	D10	1.20	2.40		40	D10	1.00	10.00	
31	D10	1.20	2.40		41	D10	1.00	10.00	
32	D10	1.20	2.40		42	D10	1.00	10.00	
33	D10	1.20	2.40		43	D10	1.00	10.00	
34	D10	1.20	2.40		44	D10	1.00	10.00	
35	D10	1.20	2.40		45	D10	1.00	10.00	
36	D10	1.20	2.40		46	D10	1.00	10.00	
37	D10	1.20	2.40		47	D10	1.00	10.00	
38	D10	1.20	2.40		48	D10	1.00	10.00	
39	D10	1.20	2.40		49	D10	1.00	10.00	
40	D10	1.20	2.40		50	D10	1.00	10.00	
41	D10	1.20	2.40		51	D10	1.00	10.00	
42	D10	1.20	2.40		52	D10	1.00	10.00	
43	D10	1.20	2.40		53	D10	1.00	10.00	
44	D10	1.20	2.40		54	D10	1.00	10.00	
45	D10	1.20	2.40		55	D10	1.00	10.00	
46	D10	1.20	2.40		56	D10	1.00	10.00	
47	D10	1.20	2.40		57	D10	1.00	10.00	
48	D10	1.20	2.40		58	D10	1.00	10.00	
49	D10	1.20	2.40		59	D10	1.00	10.00	
50	D10	1.20	2.40		60	D10	1.00	10.00	
51	D10	1.20	2.40		61	D10	1.00	10.00	
52	D10	1.20	2.40		62	D10	1.00	10.00	
53	D10	1.20	2.40		63	D10	1.00	10.00	
54	D10	1.20	2.40		64	D10	1.00	10.00	
55	D10	1.20	2.40		65	D10	1.00	10.00	
56	D10	1.20	2.40		66	D10	1.00	10.00	
57	D10	1.20	2.40		67	D10	1.00	10.00	
58	D10	1.20	2.40		68	D10	1.00	10.00	
59	D10	1.20	2.40		69	D10	1.00	10.00	
60	D10	1.20	2.40		70	D10	1.00	10.00	
61	D10	1.20	2.40						
62	D10	1.20	2.40						
63	D10	1.20	2.40						
64	D10	1.20	2.40						
65	D10	1.20	2.40						
66	D10	1.20	2.40						
67	D10	1.20	2.40						
68	D10	1.20	2.40						
69	D10	1.20	2.40						
70	D10	1.20	2.40						

Index Total weight 284.977
 284.977
 284.977
 284.977
 284.977
 284.977

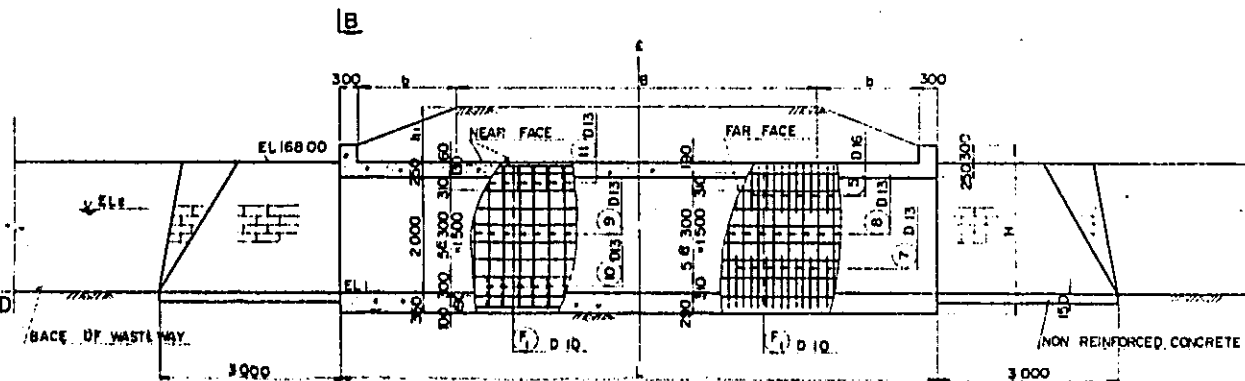
KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
 NONG SAM KHA DAM AND WASTWAY
 NO.1 DAM INTAKE

DRAWN: _____ SUBMITTED: _____
 CHECKED: _____ APPROVED: _____

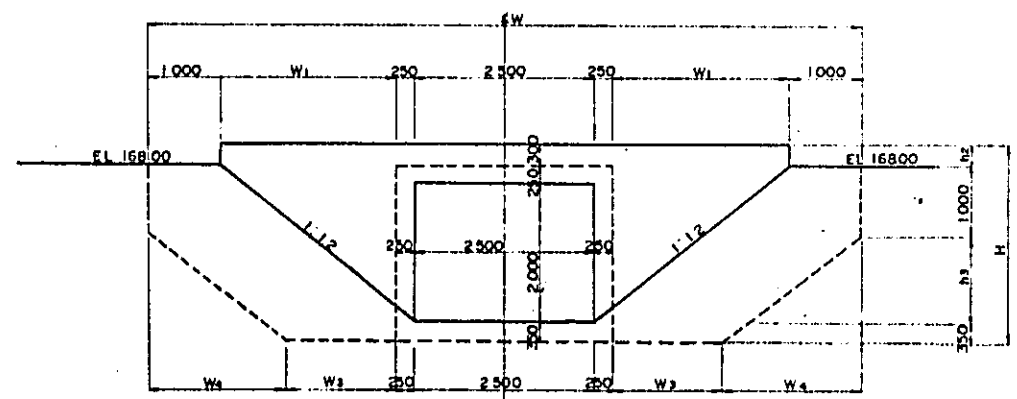
AUG. 1974 F-26



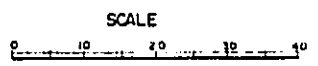
PLAN



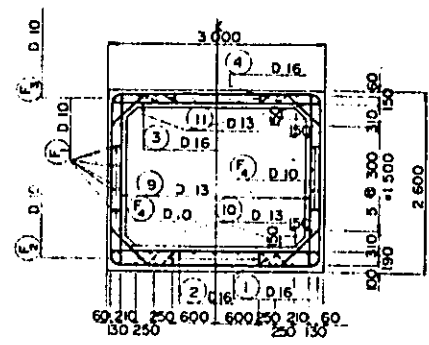
SECTION A - A



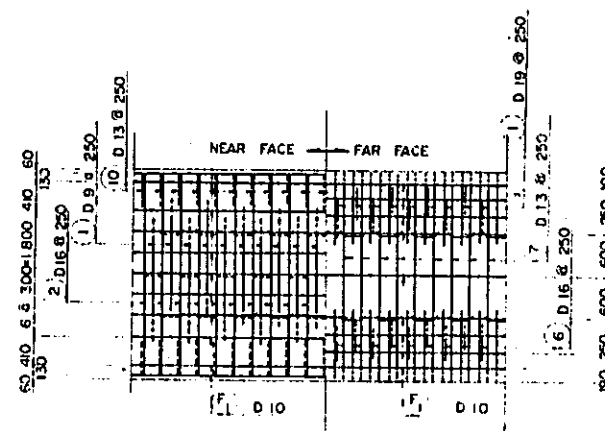
SECTION B - B



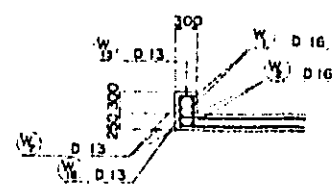
SCALE



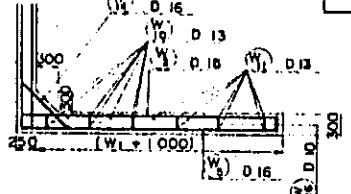
SECTION C - C



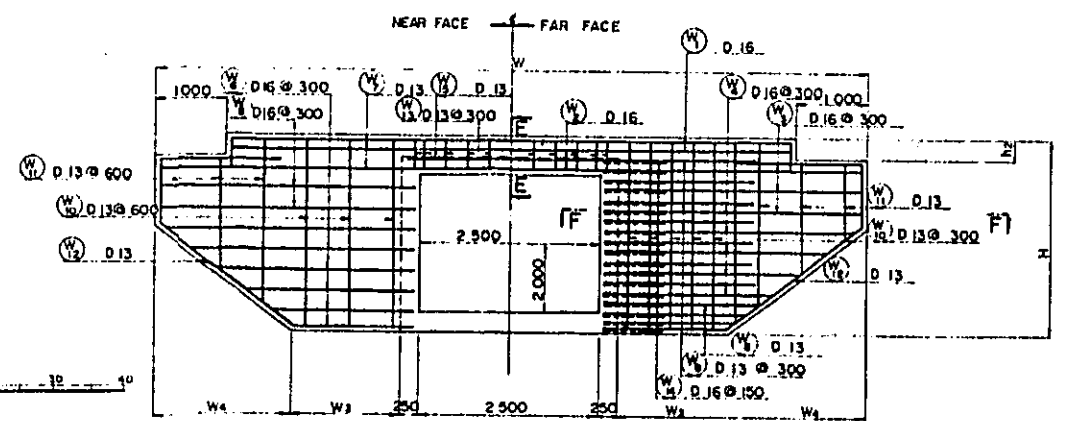
SECTION D - D



SECTION E - E



SECTION F - F



	L	W	H	W ₁	W ₂	W ₃	W ₄	B	b	h ₁	h ₂	h ₃
NO.1 CULVERT	6.00	9.90	2.60	2.70	3.74	1.53	1.92	5.40	0	0	0.30	1.25
NO.2 CULVERT	10.00	10.62	2.90	3.06	4.78	1.53	2.28	6.00	1.70	0.96	0.16	1.55

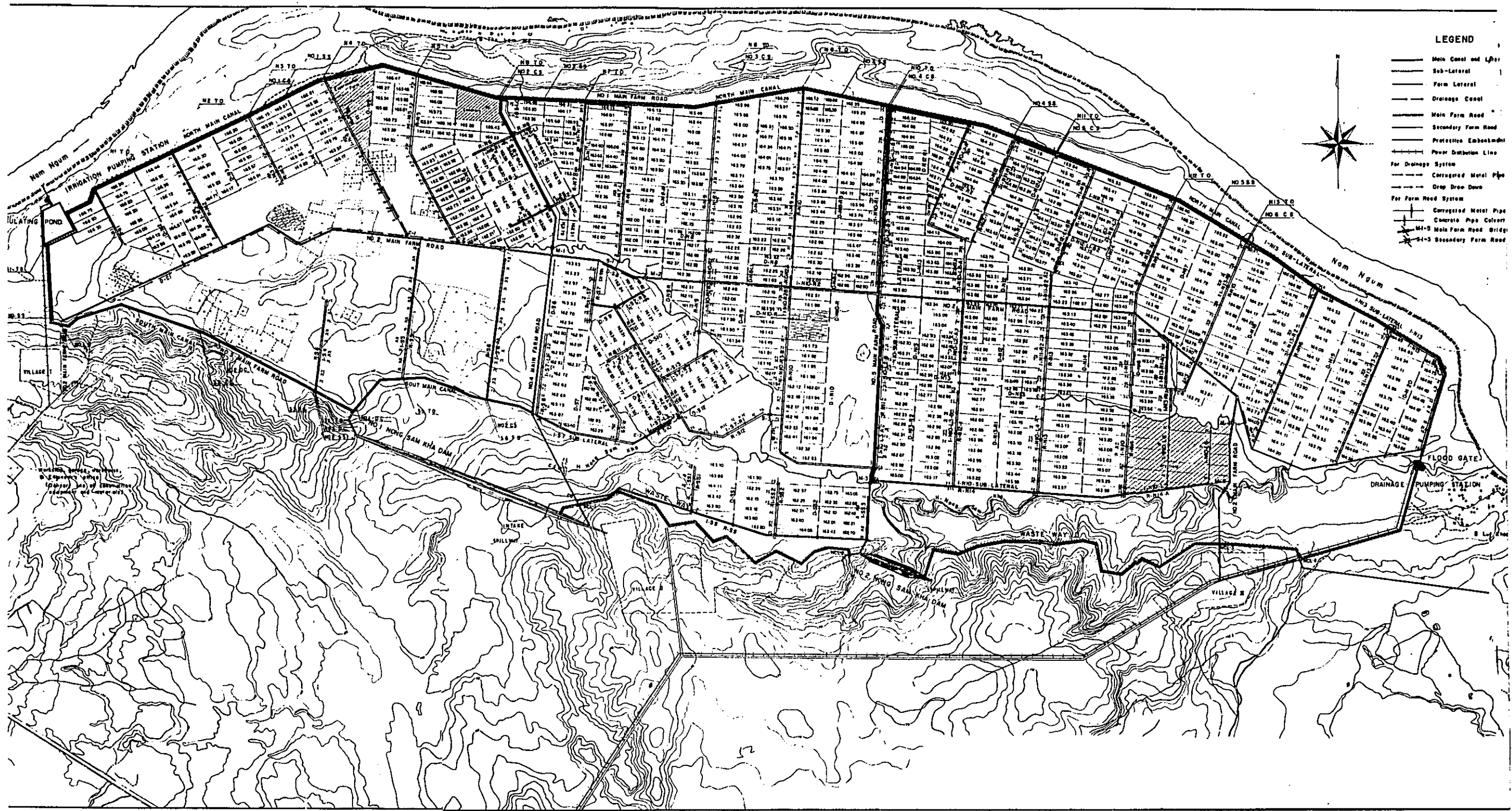
	EL ₁	EL ₂	INTERSECTION POINT
NO.1 CULVERT	165.75	167.13	WI -3+31.58
NO.2 CULVERT	165.61	166.81	WI -34+21.29

NO.	D	UNIT WEIGHT (kg/m)	NO.1 CULVERT		NO.2 CULVERT		REMARKS		
			NOS	LENGTH (m)	NOS	LENGTH (m)			
1	19	2.25	24	2.55	137.70	40	2.55	229.50	
2	16	1.56	24	2.90	108.58	40	2.90	180.96	
3	.	.	24	2.90	108.58	40	2.90	180.96	
4	.	.	24	2.30	88.11	40	2.30	143.92	
5	.	.	48	1.80	134.78	80	1.80	224.64	
6	.	.	48	1.80	134.78	80	1.80	224.64	
7	13	0.995	48	3.00	143.28	80	3.00	238.80	
8	.	.	48	3.00	143.28	80	3.00	238.80	
9	.	.	40	2.45	117.01	80	2.45	195.02	
10	.	.	48	0.75	35.82	80	0.75	59.70	
11	.	.	48	0.65	31.04	80	0.65	51.74	
F 1	10	0.560	64	6.00	213.04	64	10.00	359.40	
F 2	.	.	36	0.84	16.93	60	0.84	28.20	
F 3	.	.	36	0.72	14.52	60	0.72	24.19	
F 4	.	.	48	0.28	7.53	80	0.28	12.54	
W 1	16	1.56	4	7.70	48.42	4	8.48	52.92	
W 2	.	.	4	2.90	18.10	4	2.90	18.10	
W 3	.	.	12	3.56	66.64	12	3.92	73.38	
W 4	.	.	16	2.35	58.41	16	2.50	62.40	
W 5	.	.	8	3.56	44.43	8	3.92	48.82	
W 6	.	.	24	2.15	80.50	28	2.50	100.46	
W 7	13	0.995	6	10.05	60.00	6	10.50	62.69	
W 8	.	.	16	0.95	15.12	16	1.00	15.92	
W 9	.	.	28	2.10	58.51	28	2.10	58.51	
W 10	.	.	20	2.46	48.95	20	2.76	54.92	
W 11	.	.	12	1.72	20.54	16	1.90	30.25	
W 12	.	.	8	5.10	40.60	8	5.30	42.19	
W 13	.	.	22	1.32	28.89	22	1.32	28.89	
W 14	16	1.56	72	1.75	196.56	72	1.75	196.56	
W 15	13	0.995	2	2.90	5.77	2	2.90	5.77	
W 16	10	0.560	56	0.35	10.98	56	0.35	10.98	
TOTAL					2 238 kg			3 255 kg	

KINGDOM OF LAOS
 THA NGON AGRICULTURAL DEVELOPMENT PROJECT
**NONG SAM KHA DAM AND WASTEWAY
 CULVERT (1)**

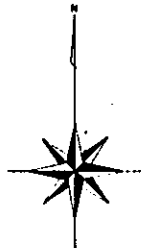
DRAWN: _____ SUBMITTED: _____
 CHECKED: _____ APPROVED: _____

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LEGEND

- Main Canal and Lateral
- Sub-Lateral
- Farm Lateral
- Drainage Canal
- Main Farm Road
- Secondary Farm Road
- Protective Embankment
- Power Distribution Line
- For Drainage System
- Corrugated Metal Pipe
- Drop Down
- For Farm Road System
- Corrugated Metal Pipe
- Concrete Pipe Culvert
- M-3 Main Farm Road Bridge
- S-3 Secondary Farm Road



WORKING DRAWING
 (Project) No. of [unclear]
 (Scale) and [unclear]

FLOOD GATE
 DRAINAGE PUMPING STATION

