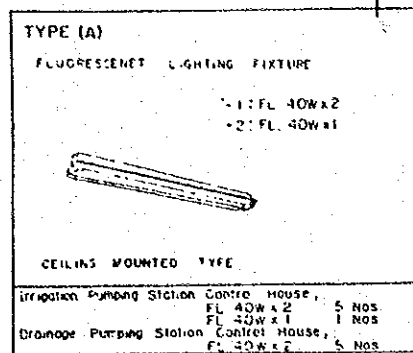


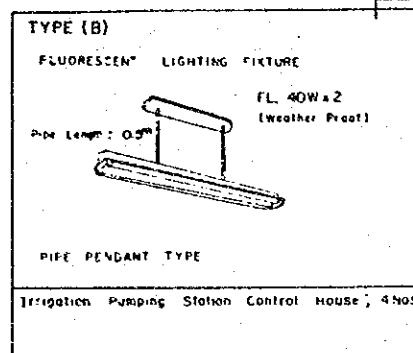
GENERAL PLAN

Lighting fixture for housing shall be renew.

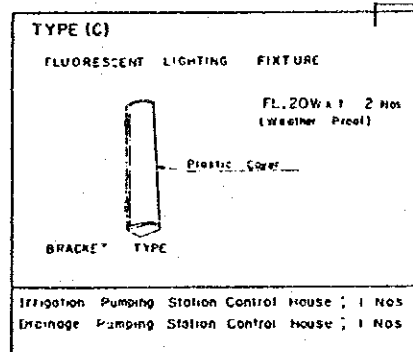
LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
IRRIGATION PUMP STATION OPERATION HOUSE (3/3)		
Date	Drawing No.	1006
JAPAN INTERNATIONAL COOPERATION AGENCY		



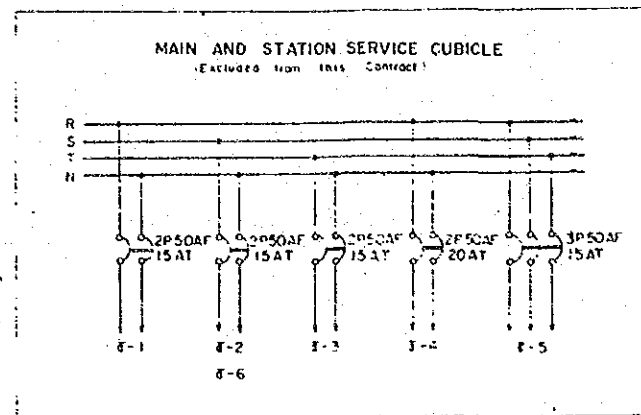
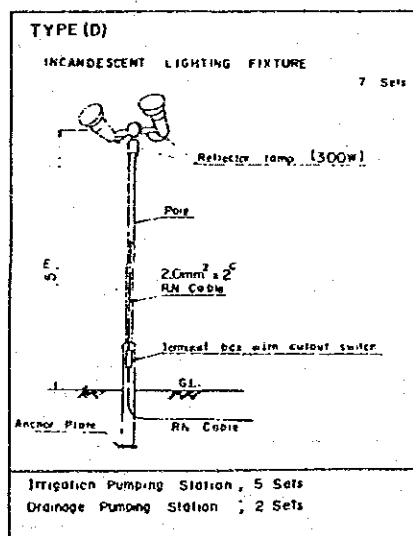
Renew as same type.



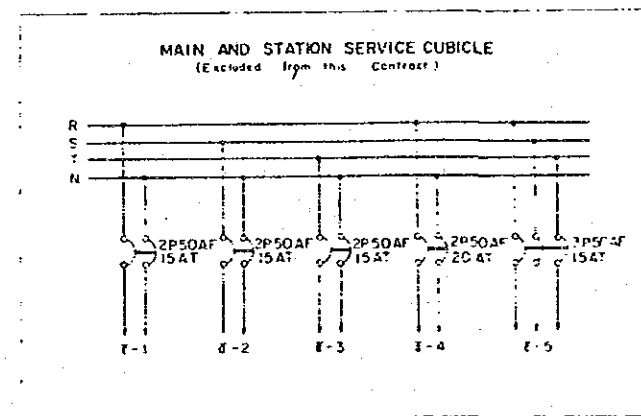
Renew as same type.



Renew as same type.



IRRIGATION PUMPING STATION



DRAINAGE PUMPING STATION

SYMBOL	DESCRIPTION
	Fluorescent lighting fixture with two lamps.
	Fluorescent lighting fixture with one lamp.
	Bracket type fluorescent lighting fixture (vertical mounting).
	Reflector type incandescent lighting fixture.
	Convenience outlet, 15A, 2-pin wall mounted (weather proof type).
	Duplicate convenience outlet, 15A, 2-pin wall mounting.
	Tumbler switch, 10A, 1-way (weather proof type).
	Safety switch, 3P, 15A, 380V (weather proof type).
	Concealed piping in the ceiling or wall.
	Concealed piping in the floor.
	Under ground cable or cable duct, (RN cable).

MOUNTING HEIGHT

Mounting height is as follows, unless otherwise noted on the drawing.

- (1) Convenience outlet (wall mounted type) : 30 cm above the floor to the top
- (2) Safety switch : 140 cm above the floor to the top
- (3) Tumbler switch : 120 cm above the floor to the top
- (4) Bracket light : 250 cm above the floor to the top

NOTE :

- (1) All conduits shall be of rigid steel.
- (2) Conduit and wire shall be 16mm² and 16mm, 2-wire respectively, unless otherwise noted on the drawings.
- (3) RN cable shall be 600V, 2.0mm², 2-core, rubber insulated, chloroprene sheathed cable unless otherwise noted on the drawings.
- (4) Rated voltage of lighting fixtures shall be 220 V, 50Hz, single phase.

LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND
RURAL DEVELOPMENT PROJECT

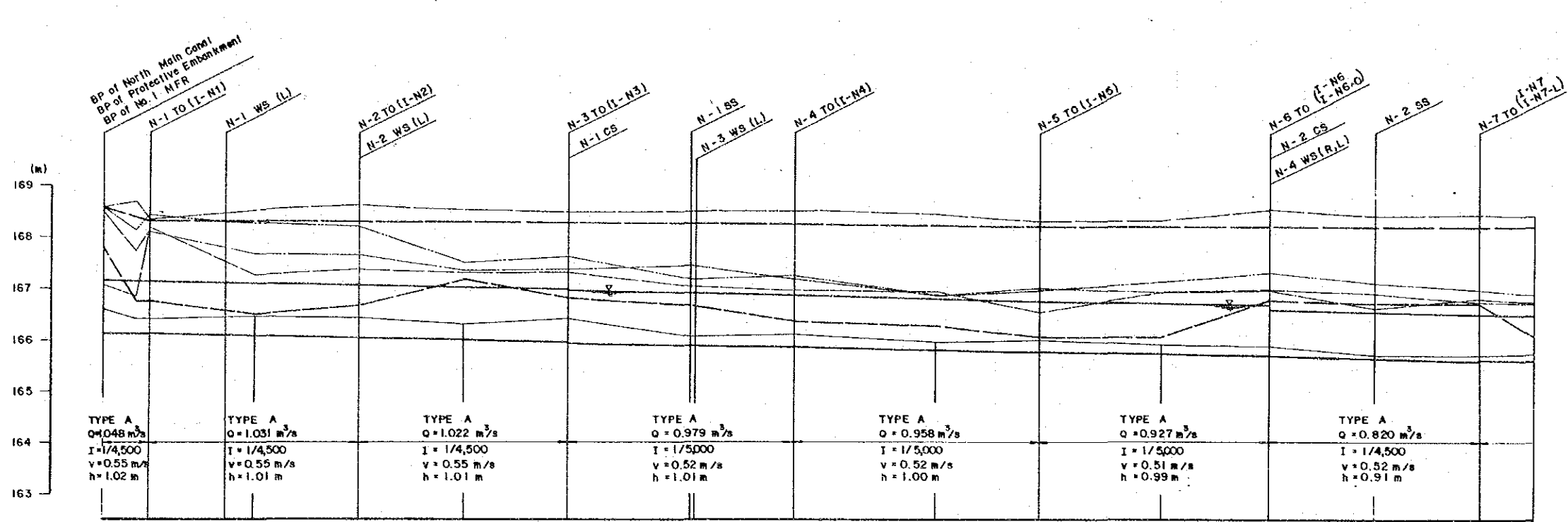
TITLE OF DRAWING

PUMP STATIONS
LIGHTING FIXTURE

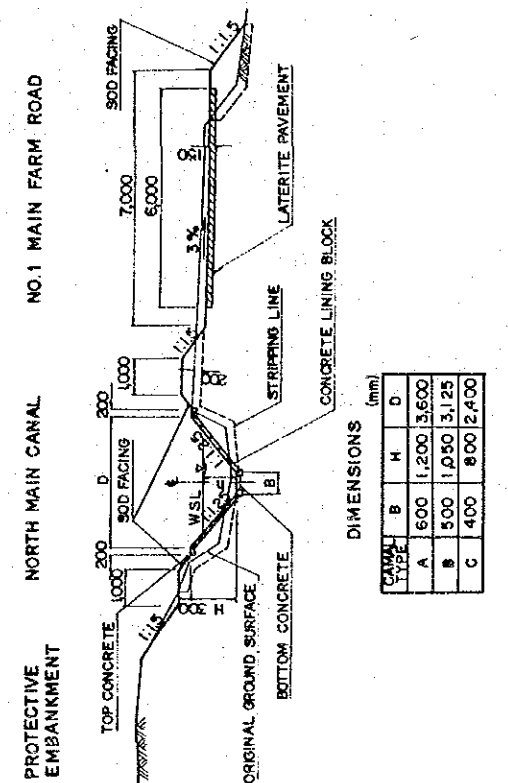
Date Drawing No. 1007

JAPAN INTERNATIONAL COOPERATION AGENCY

NOTE : 1) 10 NOS. OF FOOT PATH BRIDGE SHALL BE PROVIDED ON NORTH MAIN CANAL.
 2) EXISTING PROTECTIVE EMBANKMENT AND ROAD WILL NOT BE CUT IF THEIR ELEVATIONS ARE HIGHER THAN THE PROPOSED ONES.



STATION NO.	PROPOSED ELEVATION (m)				GROUND SURFACE ELEVATION (m)				ACCUMULATED DISTANCE	DISTANCE	CURVE
	PROTECTIVE EMBANKMENT	ROAD	CANAL WATER SURFACE	CANAL BASE	PROTECTIVE EMBANKMENT	ROAD	CANAL LEFT BANK	CANAL RIGHT BANK			
0	168.57	167.80	167.16	166.14	168.53	167.04	168.46	168.56	0.00	0.00	
1	168.30	166.75	167.15	166.13	168.58	166.82	167.72	168.14	65.30	65.30	1A=12°25'
2	168.30	166.75	167.14	166.13	168.58	166.82	168.10	168.42	89.80	24.50	
+150.20									240.00	150.20	
3	168.29	166.57	167.11	166.10	168.46	167.50	167.78	168.30	299.80	54.80	
4	168.28	166.65	167.05	166.04	168.60	167.35	167.64	168.19	502.60	207.80	
5	168.27	167.15	167.01	166.00	168.50	167.29	167.32	167.48	707.60	205.00	
6	168.26	166.80	166.96	165.95	168.45	167.30	167.35	167.60	910.40	202.80	
7	168.25	166.65	166.89	165.88	168.47	167.02	167.43	167.16	1160.40	249.00	IP1 1A=12°25'
8	168.24	166.35	166.85	165.85	168.50	166.95	167.16	167.24	1353.80	193.40	IP2 1A=30°35'
9	168.22	166.25	166.79	165.79	168.44	166.94	166.87	166.86	1633.70	279.90	
10	168.21	166.05	166.75	165.76	168.30	166.54	167.00	166.96	1839.20	205.50	
11	168.20	166.05	166.70	165.71	168.30	166.94	166.91	167.12	2081.50	242.30	
12	168.19	166.75	166.67	165.68	168.52	166.96	166.96	167.30	2286.50	205.00	1A=11°50' 1P3
13	168.18	166.70	166.60	165.64	168.39	166.90	166.88	167.10	2482.50	206.00	
14	168.17	166.70	166.50	165.59	168.71	166.74	166.80	166.98	2695.30	202.80	
104.70	168.17	166.65	166.47	165.59	168.41	166.72	166.73	166.88	2800.00	104.70	



LEGEND

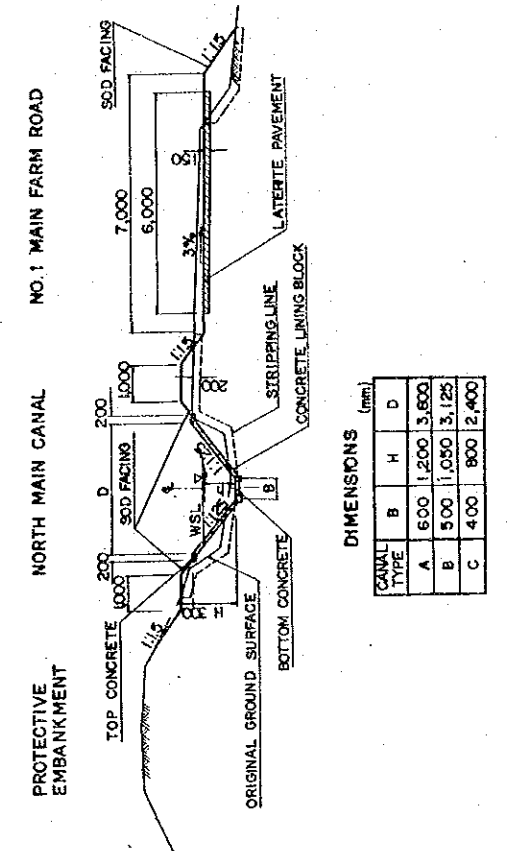
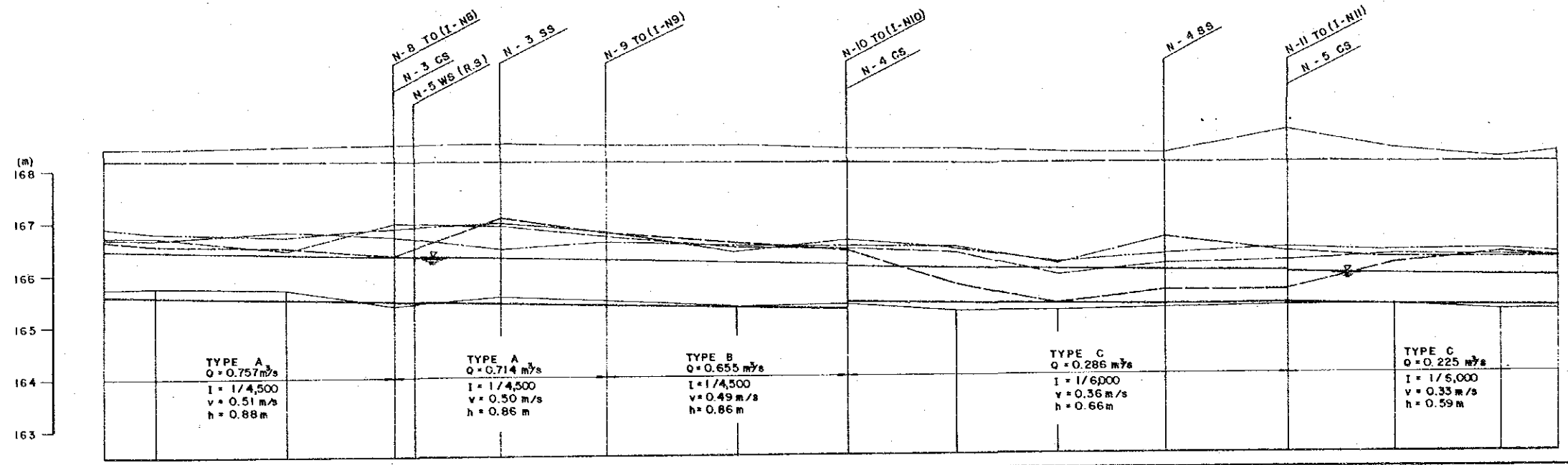
- PROPOSED PROTECTIVE EMBANKMENT
- ROAD SURFACE
- WATER SURFACE
- CANAL BASE
- EXISTING PROTECTIVE EMBANKMENT
- LEFT BANK OF CANAL
- RIGHT BANK
- ROAD SURFACE
- CANAL BASE
- N-1 TO (I-N1) NAME OF TURNOUT (BRANCH CANAL)
- N-3 CS CHECK STRUCTURE
- N-2 SS SIDE SPILLWAY
- N-3 WS(L) WASHING STEP

SCALE
0 100 200 300 400 500M

LAO PEOPLE'S DEMOCRATIC REPUBLIC
 THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT
 TITLE OF DRAWING
NORTH MAIN CANAL PROFILE (1/3)
 Date _____ Drawing No. 2001
 JAPAN INTERNATIONAL COOPERATION AGENCY

NOTE : 1) 10 NOS. OF FOOT PATH BRIDGE SHALL BE PROVIDED ON NORTH MAIN CANAL.

2) EXISTING PROTECTIVE EMBANKMENT AND ROAD WILL NOT BE CUT IF THEIR ELEVATIONS ARE HIGHER THAN THE PROPOSED ONES.



STATION NO.	PROPOSED ELEVATION				GROUND SURFACE ELEVATION				ACCUMULATED DISTANCE	DISTANCE	CURVE	
	PROTECTIVE EMBANKMENT	ROAD	WATER SURFACE	CANAL BASE	PROTECTIVE EMBANKMENT	ROAD	BASE	LEFT BANK				RIGHT BANK
14.70	168.17	166.65	166.47	165.59	168.41	166.72	165.72	166.73	166.88	2,800.00	104.70	
15	168.16	166.55	166.45	165.57	168.40	166.71	165.74	166.66	166.78	2,902.00	102.00	
16	168.15	166.50	166.40	165.52	168.45	166.45	165.69	166.80	166.70	3,152.10	250.10	
17	168.14	166.35	166.35	165.47	168.45	166.95	165.35	166.70	166.95	3,358.70	206.60	
17+40.00	168.14	166.29	166.32	165.46	168.45	166.94	165.39	166.65	166.87	3,398.70	40.00	
18	168.13	167.05	166.28	165.42	168.46	166.90	165.54	166.45	166.94	3,564.70	166.00	
19	168.12	166.75	166.24	165.38	168.44	166.68	165.45	166.58	166.75	3,770.80	205.90	
20	168.11	166.55	166.18	165.32	168.41	166.48	165.31	166.50	166.36	4,021.50	250.90	
21	168.09	166.40	166.12	165.28	168.35	166.43	165.36	166.48	166.59	4,230.60	208.10	
22	168.08	165.75	166.07	165.41	168.34	166.35	165.22	166.47	166.43	4,438.70	208.10	
23	168.07	165.35	166.03	165.37	168.26	165.92	165.22	166.12	166.15	4,636.30	197.60	
24	168.06	165.60	166.00	165.34	168.22	166.11	165.25	166.61	166.27	4,841.70	205.40	
25	168.05	165.50	165.95	165.30	168.68	166.17	165.30	166.33	166.40	5,079.50	237.80	
26	168.04	166.10	165.91	165.32	168.30	166.27	165.30	166.21	166.33	5,286.20	206.70	
27	168.03	166.30	165.87	165.28	168.12	166.25	165.20	166.20	166.35	5,491.20	205.00	
+108.80	168.03	166.20	165.85	165.26	168.24	166.20	165.20	166.19	166.29	5,600.00	108.80	

LEGEND

- PROPOSED PROTECTIVE EMBANKMENT
- ROAD SURFACE
- WATER SURFACE
- CANAL BASE
- EXISTING PROTECTIVE EMBANKMENT
- LEFT BANK OF CANAL
- RIGHT
- ROAD SURFACE
- CANAL BASE
- N-1 TO (I-N1) NAME OF TURNOUT (BRANCH CANAL)
- N-3 CS CHECK STRUCTURE
- N-2 SS SIDE SPILLWAY
- N-3 WS(L) WASHING STEP

SCALE

0 100 200 300 400 500M

LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

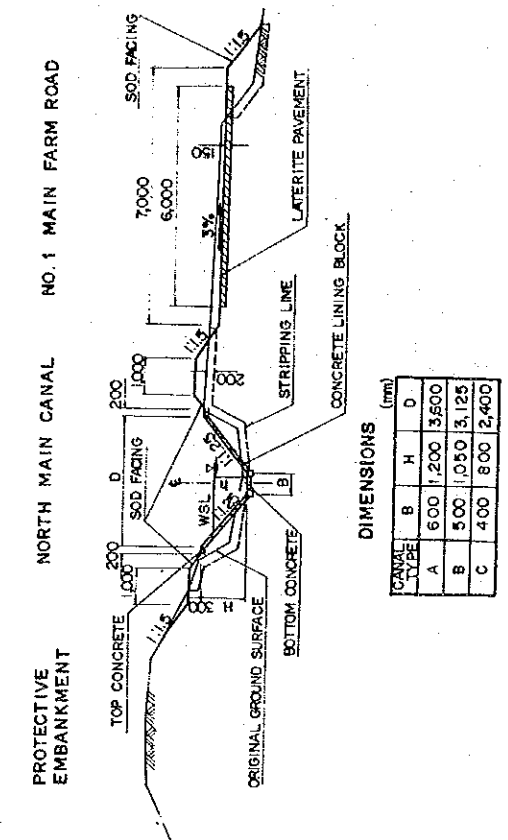
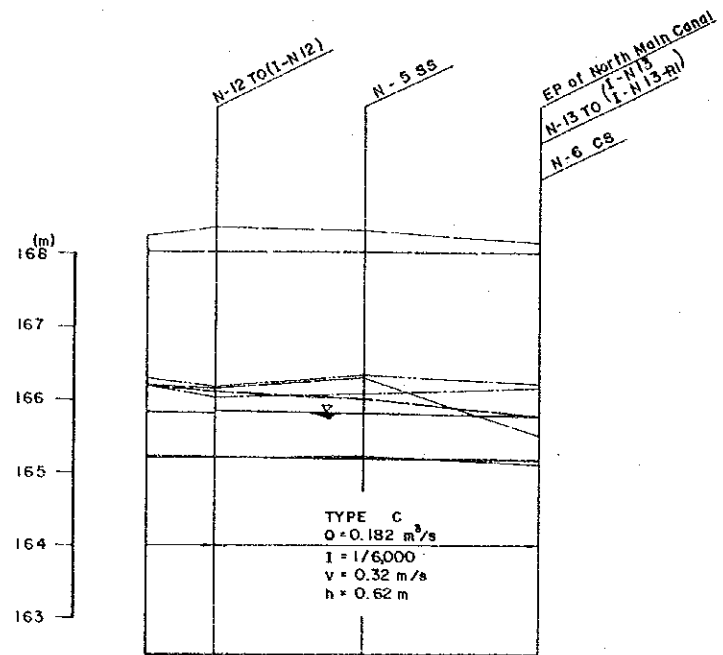
TITLE OF DRAWING

NORTH MAIN CANAL PROFILE (2/3)

Date _____ Drawing No. 2002

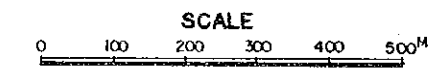
JAPAN INTERNATIONAL COOPERATION AGENCY

- NOTE : 1) 10 NOS. OF FOOT PATH BRIDGE SHALL BE PROVIDED ON NORTH MAIN CANAL.
- 2) EXISTING PROTECTIVE EMBANKMENT AND ROAD WILL NOT BE CUT IF THEIR ELEVATIONS ARE HIGHER THAN THE PROPOSED ONES.



PROPOSED ELEVATION	PROPOSED ELEVATION				
	PROTECTIVE EMBANKMENT	ROAD	WATER SURFACE	BASE	
	168.03	166.20	165.85	165.26	
		166.10	165.84	165.22	
		166.00	165.61	165.19	
		165.75	165.77	165.15	
GROUND SURFACE ELEVATION	PROTECTIVE EMBANKMENT	168.24	168.35	168.31	168.14
	ROAD	166.20	166.15	166.30	165.49
	CANAL				
	BASE	165.20	165.20	165.21	165.10
	LEFT BANK	166.19	166.04	166.07	166.15
RIGHT BANK	166.29	166.18	166.32	166.20	
ACCUMULATED DISTANCE	5,800.00	5,894.00	5,900.00	6,139.40	
DISTANCE	108.80	94.00	206.20	239.20	
STATION NO.	+108.80	28	29	EP	
CURVE					

- LEGEND**
- PROPOSED PROTECTIVE EMBANKMENT
 - - - ROAD SURFACE
 - WATER SURFACE
 - CANAL BASE
 - EXISTING PROTECTIVE EMBANKMENT
 - LEFT BANK OF CANAL
 - RIGHT
 - ROAD SURFACE
 - CANAL BASE
 - N-1 TO (I-N1) NAME OF TURNOUT (BRANCH CANAL)
 - N-3 CS CHECK STRUCTURE
 - N-2 SS SIDE SPILLWAY
 - N-3 WS(L) WASHING STEP



LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING

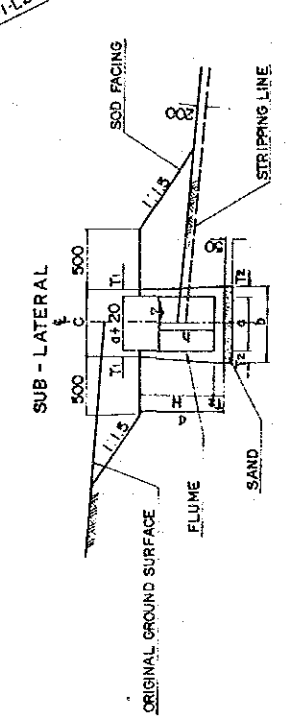
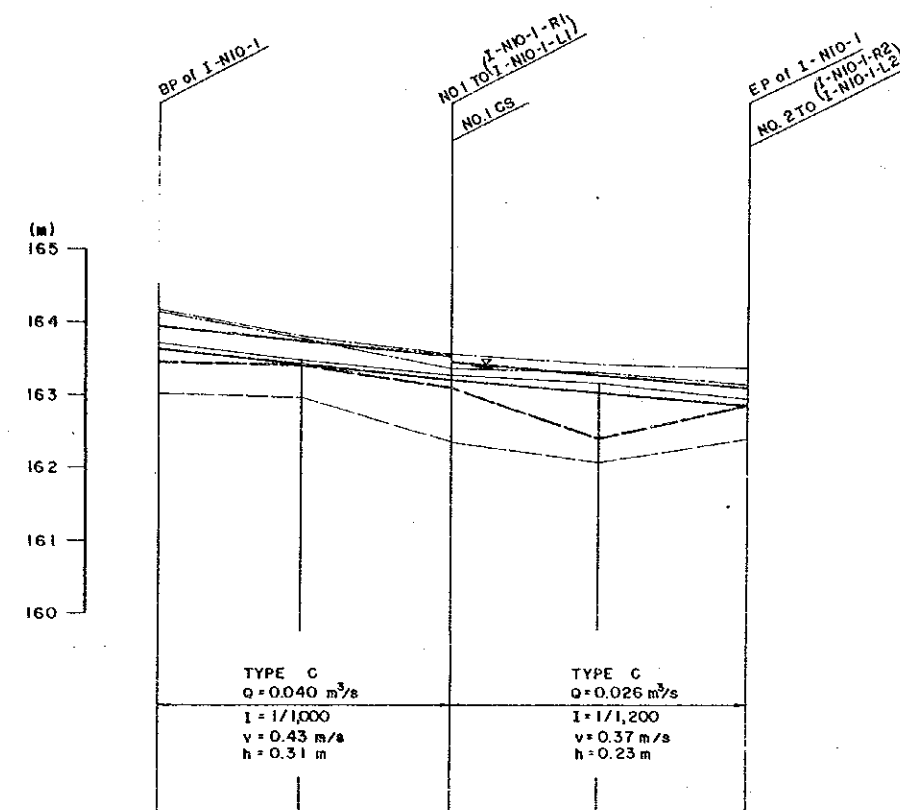
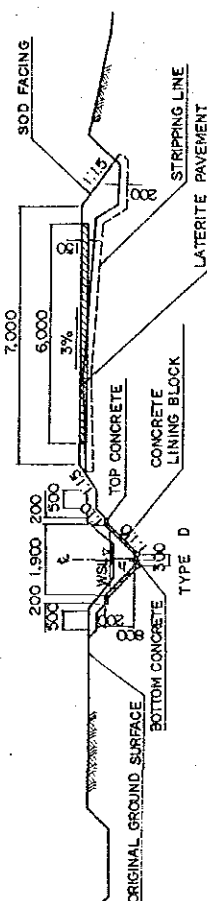
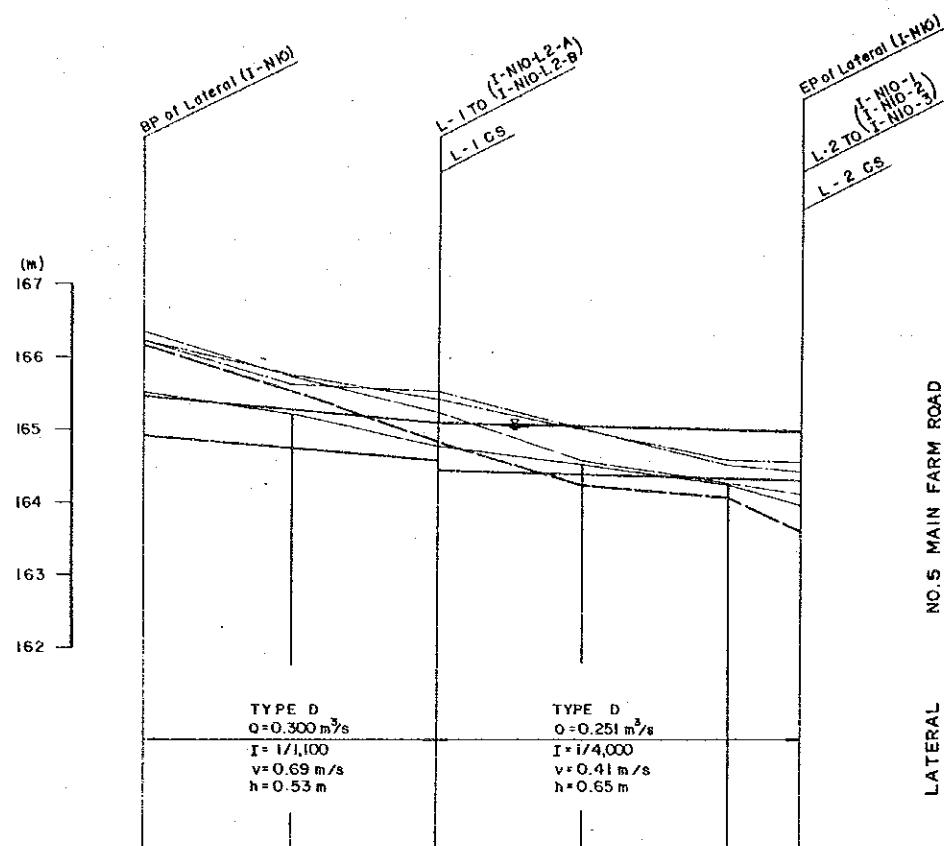
NORTH MAIN CANAL

PROFILE (3/3)

Date _____ Drawing No. 2003

JAPAN INTERNATIONAL COOPERATION AGENCY

NOTE: EXISTING ROAD WILL NOT BE CUT IF ITS ELEVATION IS HIGHER THAN THE PROPOSED ONE.



NOTE: MORTAR SHALL BE USED FOR JOINT (THICKNESS=6mm).

TYPE	DIMENSION				UNIT LENGTH
	H	b	c	d	
A	900	500	660	990	70
B	750	400	540	820	60
C	500	300	420	560	50

PROPOSED ELEVATION	ROAD					
	ROAD	166.15	165.50	164.80	164.21	164.05
CANAL	WATER SURFACE					
	WATER SURFACE	165.45	165.26	165.08	164.96	164.93
BASE	164.92	164.73	164.55	164.36	164.28	
			164.41	164.31	164.28	
GROUND SURFACE ELEVATION	ROAD					
	ROAD	166.32	165.70	165.22	164.55	164.10
	CANAL	BASE	165.50	165.18	164.80	164.51
		LEFT BANK	166.20	165.61	165.50	164.95
RIGHT BANK		166.20	165.72	165.40	164.95	
ACCUMULATED DISTANCE	0.00	206.70	408.80	611.70	815.00	
DISTANCE	0.00	206.70	202.10	202.90	203.30	
STATION NO.	BP	1	2	3	4	
CURVE	—					

PROPOSED ELEVATION	ROAD					
	ROAD	163.45	163.40	163.10	162.40	162.85
CANAL	WATER SURFACE					
	WATER SURFACE	163.93	163.73	163.52	163.27	163.10
BASE	163.62	163.42	163.21	163.04	162.87	
			163.34	163.04	162.87	
GROUND SURFACE ELEVATION	ROAD					
	ROAD	163.00	162.95	162.35	162.05	162.40
	CANAL	BASE	163.70	163.45	163.25	163.16
		LEFT BANK	164.15	163.79	163.55	163.40
RIGHT BANK		164.10	163.75	163.35	163.30	
ACCUMULATED DISTANCE	0.00	201.70	407.00	611.40	815.10	
DISTANCE	0.00	201.70	203.30	204.40	203.70	
STATION NO.	BP	1	2	3	EP	
CURVE	—					

LEGEND

- PROPOSED ROAD SURFACE
- - - WATER SURFACE
- - - CANAL BASE
- - - EXISTING LEFT BANK OF CANAL
- - - RIGHT
- - - ROAD SURFACE
- - - CANAL BASE

(LATERAL CANAL)
 L-1 TO (I-NIO-1) NAME OF TURNOUT (BRANCH CANAL)
 L-2 CS CHECK STRUCTURE

(SUB-LATERAL CANAL)
 NO.1 TO (I-NIO-1-RI) NAME OF TURNOUT (BRANCH CANAL)
 NO.1 CS CHECK STRUCTURE

SCALE
 0 100 200 300 400 500M

LAO PEOPLE'S DEMOCRATIC REPUBLIC

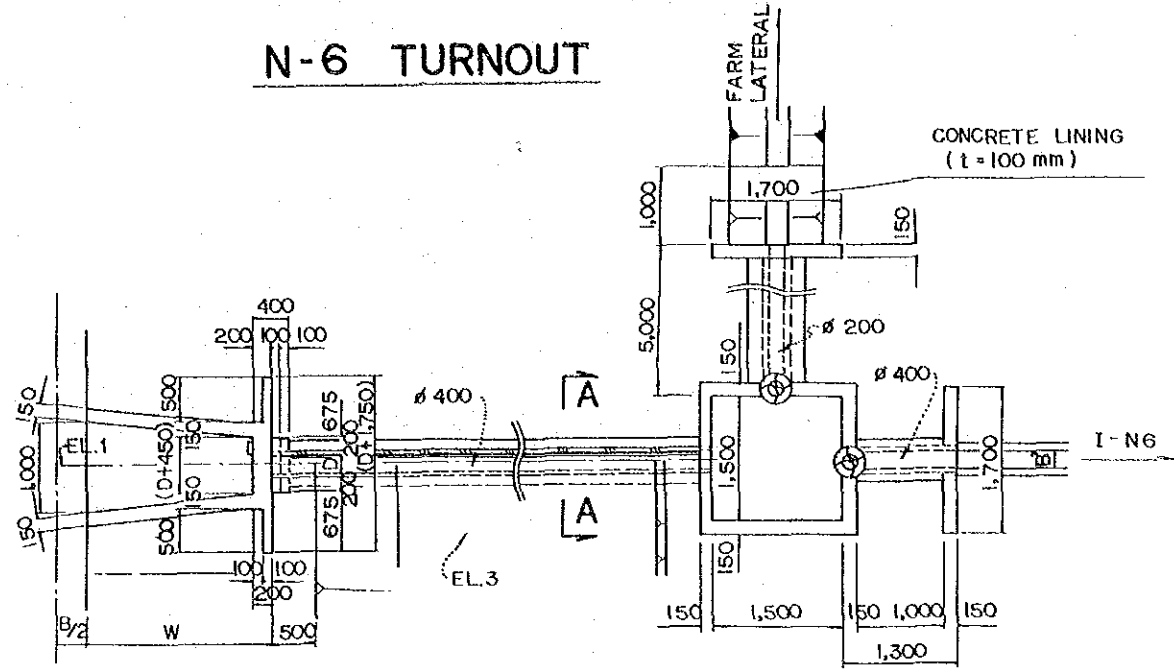
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
LATERAL AND SUB-LATERAL PROFILE

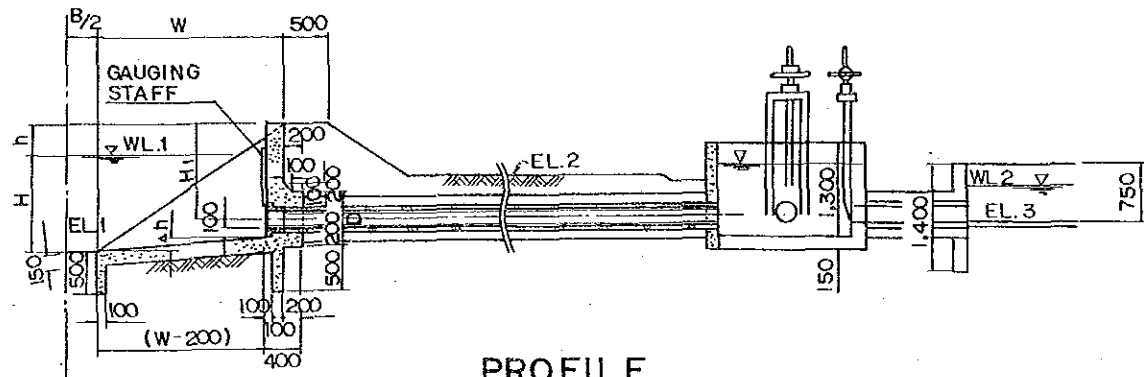
Date _____ Drawing No. 2004

JAPAN INTERNATIONAL COOPERATION AGENCY

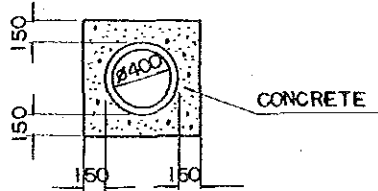
N-6 TURNOUT



PLAN
SCALE : A

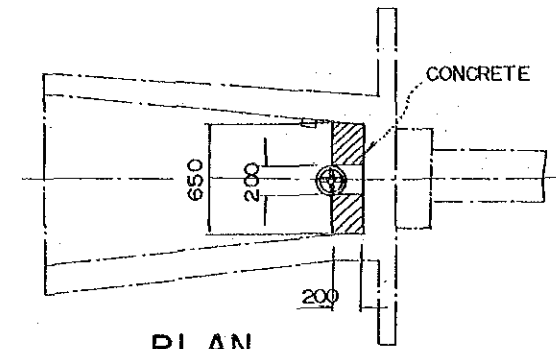


PROFILE
SCALE : A

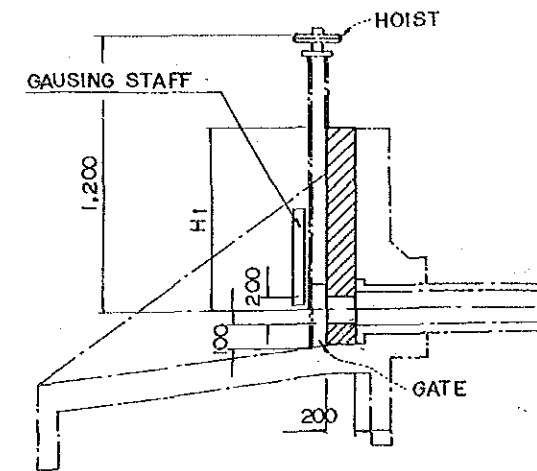


SECTION A-A
SCALE : B

INLET OF TO.N-1, N-2, N-3



PLAN
SCALE : B

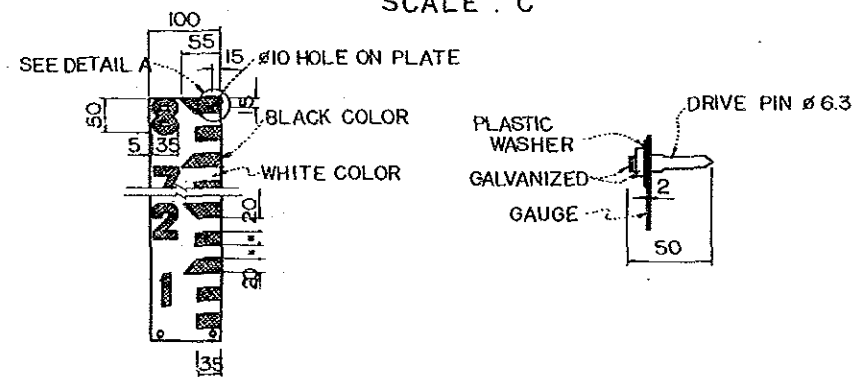


PROFILE
SCALE : B

TO NAME	HI
N - 1	720
N - 2	740
N - 3	680

GAUGING STAFF

SCALE : C



SCALE : A 0 1,000 2,000 3,000mm

SCALE : B 0 500 1,000 1,500mm

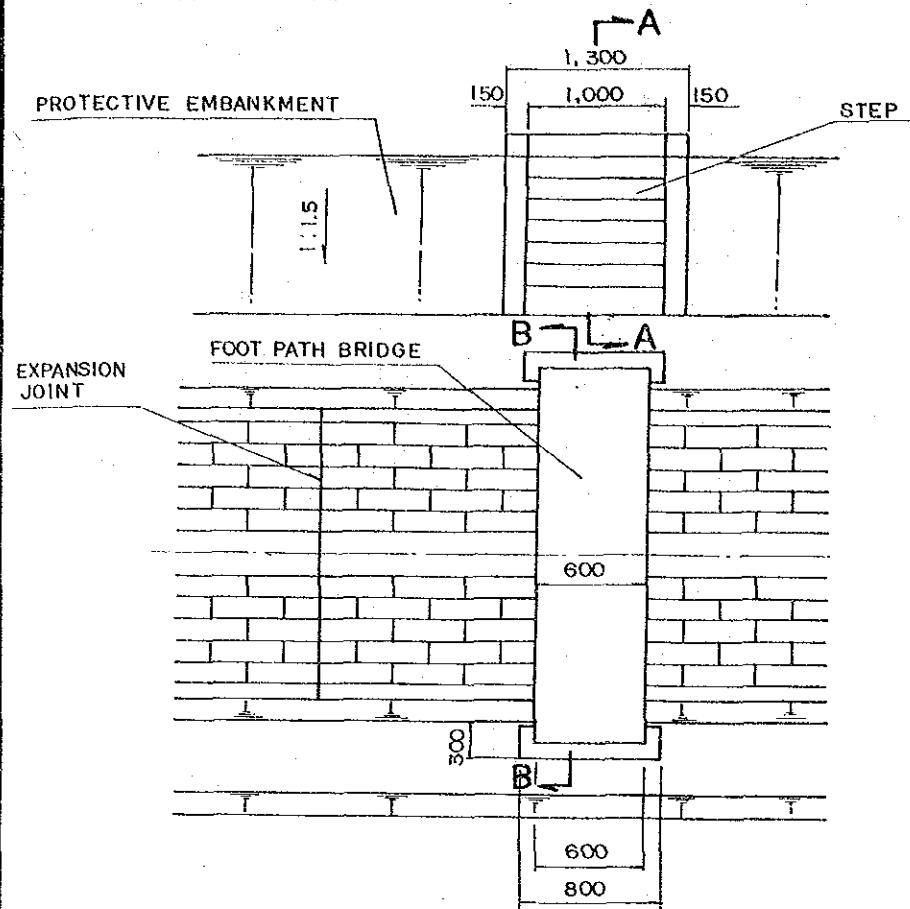
SCALE : C 0 100 200 300mm

DIMENSION OF TURNOUT (mm)

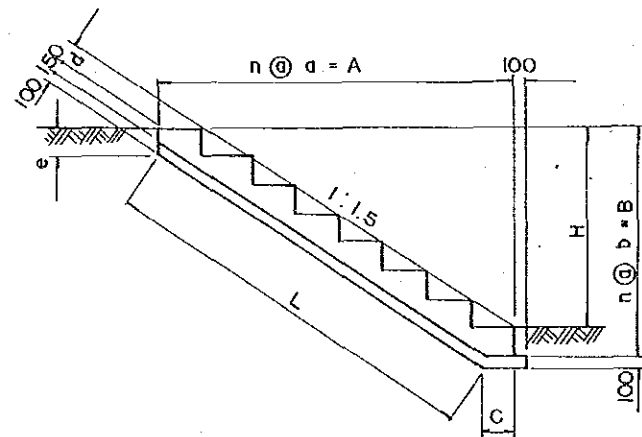
NO.	D	EL 1	EL 2	EL 3	EL 4	WL 1	WL 2	H	h	W	HI	H2	Δ H	Δ h	B'	W'	l1	l2	a	d	t	PIPE L
N - 6	400	165.68	166.80	166.14	-	166.67	166.47	990	260	2,000	490	-	-	480	400	-	-	-	-	-	-	9,000
L - 2 (R)	300	164.28	166.15	163.62	163.28	164.93	163.73	650	150	1,130	550	850	1,000	0	300	500	1,000	1,000	1,000	340	100	9,000

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING NORTH MAIN CANAL TURNOUT/GAUGING STAFF		
Date	Drawing No.	3001
JAPAN INTERNATIONAL COOPERATION AGENCY		

FOOT PATH BRIDGE & STEP



PLAN

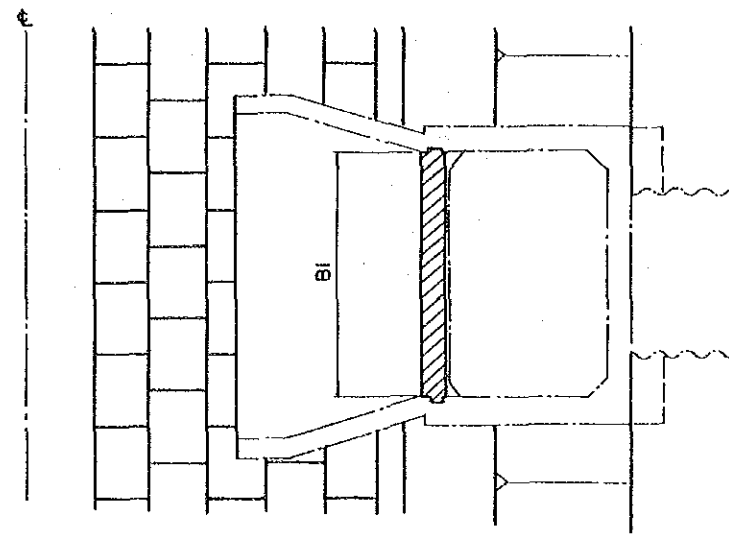


SECTION A-A

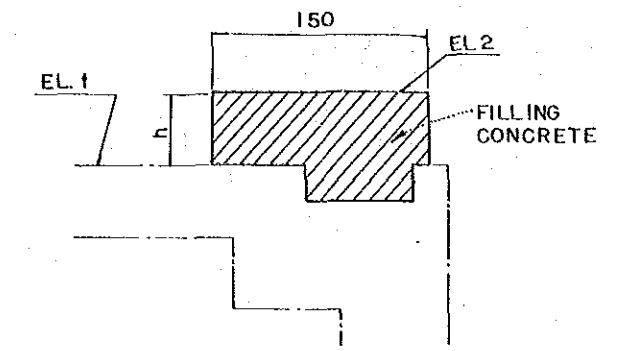
DIMENSION OF STEP FOR FOOTPATH (mm)

TYPE	H	n	A	B	a	b	c	d	e	L
I	1,200	5	2,100	1,500	420	300	162	244	208	2,329
II	1,500	6	2,550	1,800	425	300	162	245	208	2,870

SIDE SPILLWAY



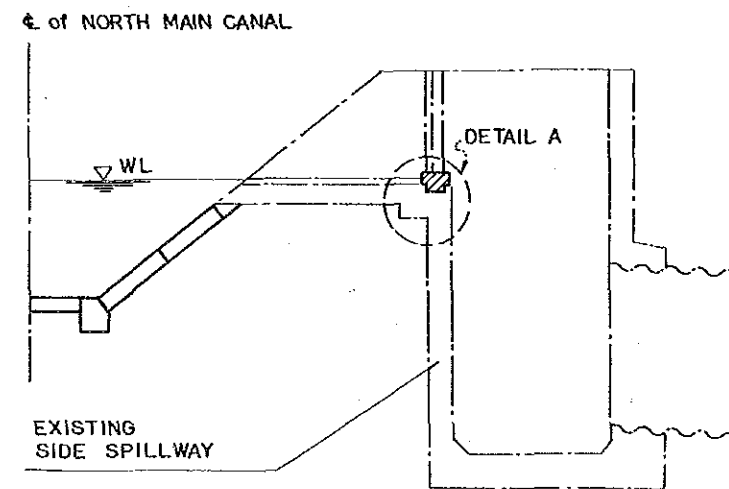
PLAN



DETAIL A

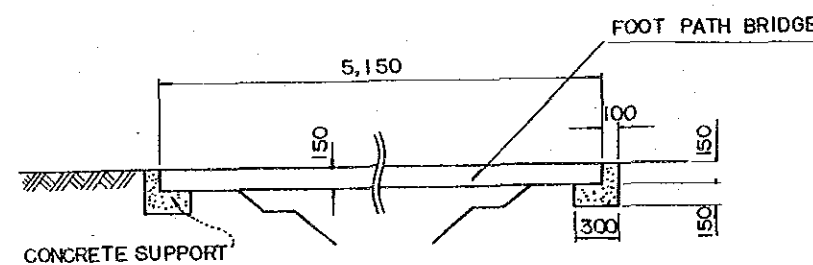
DIMENSION OF SIDE SPILLWAY (mm)

NO.	WL	B1	EL.1	EL.2	h
N-1	166.89	1,500	166.60	166.94	340
N-2	166.55	1,500	166.32	166.60	280
N-3	166.35	1,500	166.18	166.40	220
N-4	166.00	1,000	165.89	166.05	160
N-5	165.81	1,000	165.68	166.86	180



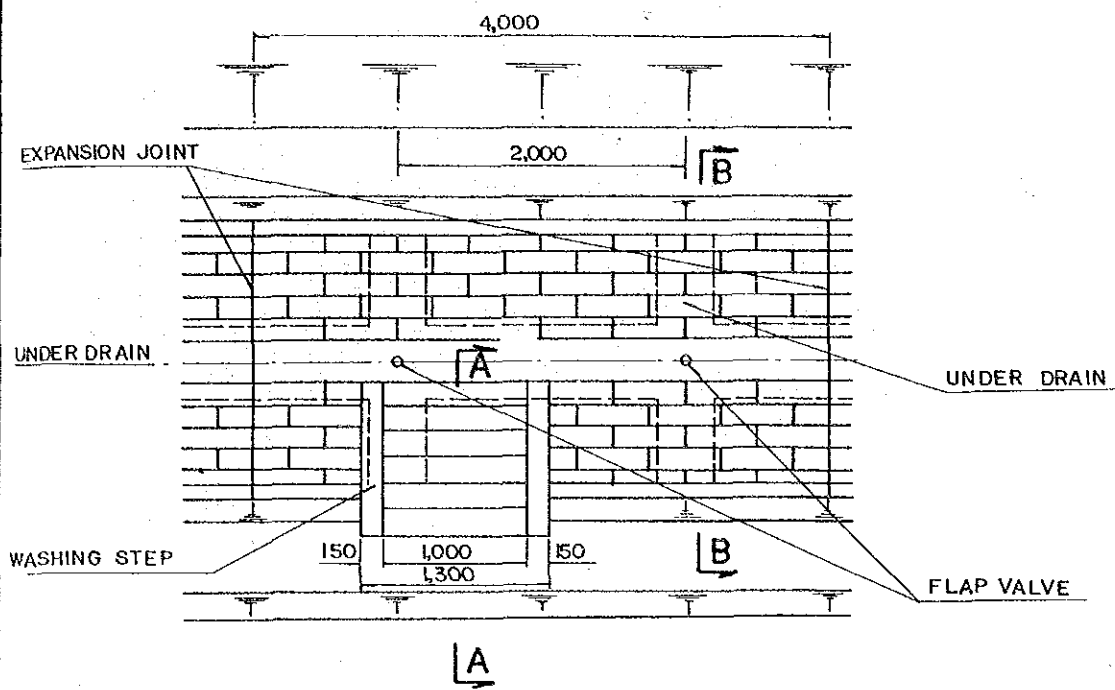
PROFILE

SCALE 0 500 1,000 1,500 mm

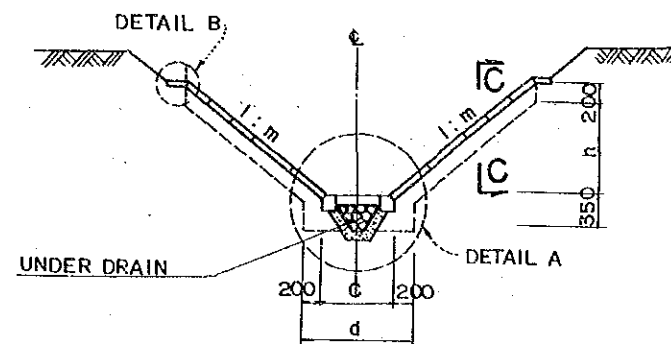


SECTION B-B

LAO PEOPLE'S DEMOCRATIC REPUBLIC
 THA NGON REHABILITATION AND
 RURAL DEVELOPMENT PROJECT
 TITLE OF DRAWING
**NORTH MAIN CANAL
 FOOT PATH BRIDGE AND SIDE
 SPILLWAY**
 Date _____ Drawing No. 3002
 JAPAN INTERNATIONAL COOPERATION AGENCY



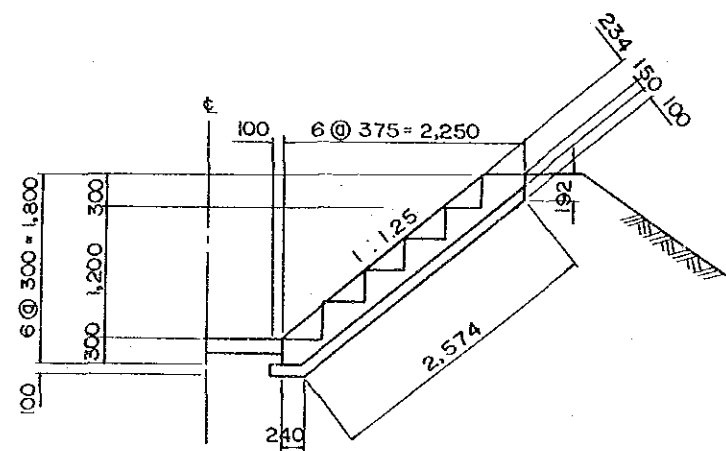
PLAN
SCALE : A



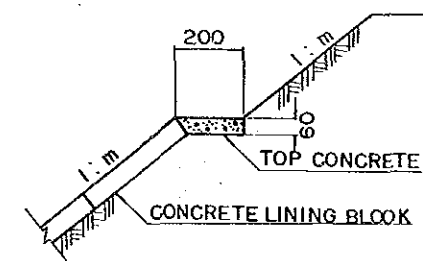
SECTION B-B
SCALE : B

DIMENSION OF UNDERDRAIN

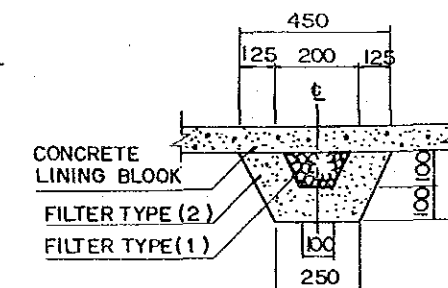
CANAL TYPE	m	a	b	c	d	e	h
A	1.25	600	420	720	1,120	90	1,000
B	1.25	500	320	620	1,020	90	800
C	1.25	400	220	520	920	90	650
D	1.00	300	150	450	850	75	550



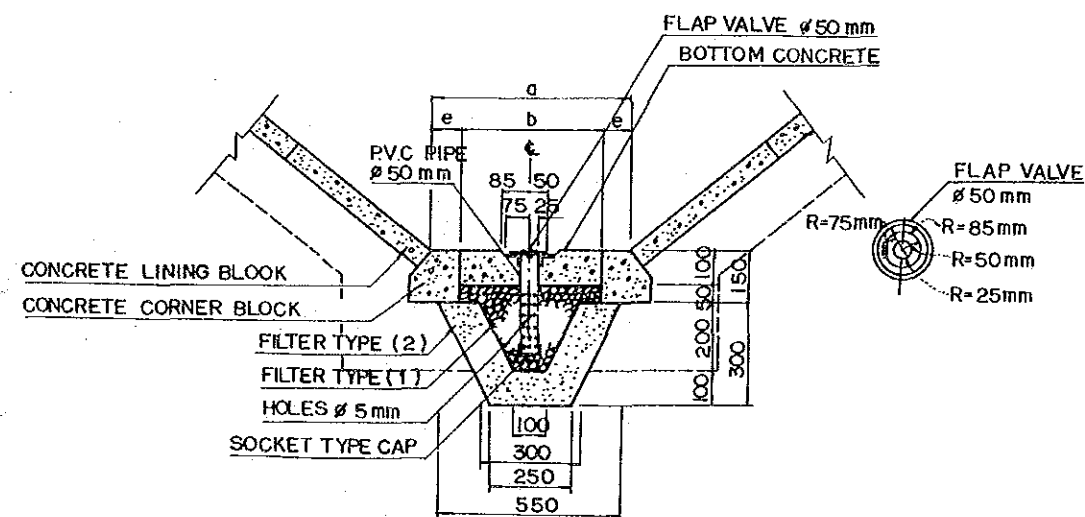
SECTION A-A
SCALE : A



DETAIL B
SCALE : B

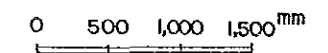


SECTION C-C
SCALE : B

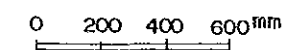


DETAIL A
SCALE : B

SCALE : A



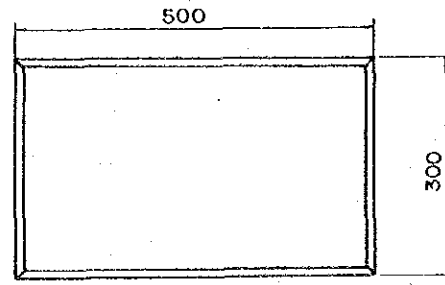
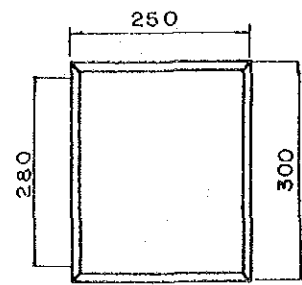
SCALE : B



LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING NORTH MAIN CANAL AND LATERAL		
CANAL LINING AND WASHING STEP		
Date	Drawing No.	3003
JAPAN INTERNATIONAL COOPERATION AGENCY		

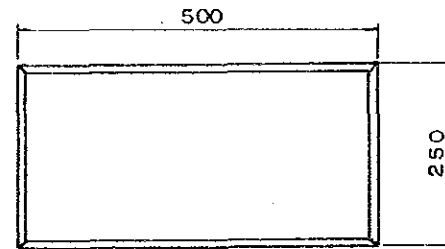
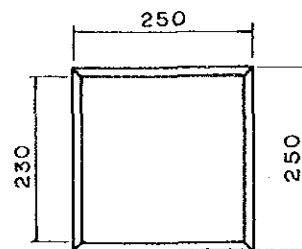
CONCRETE LINING BLOCK

SCALE : A



TYPE A-1

TYPE A-2

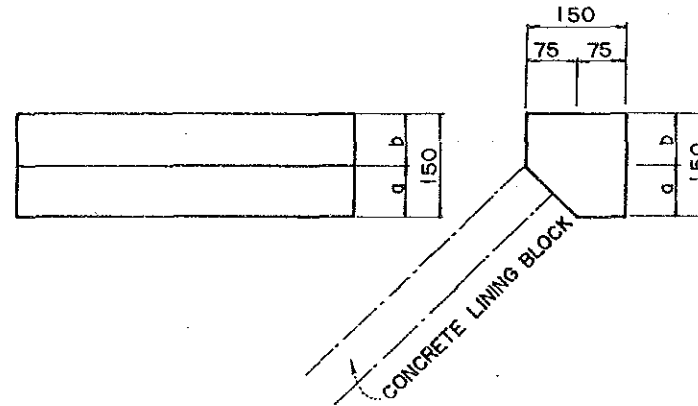
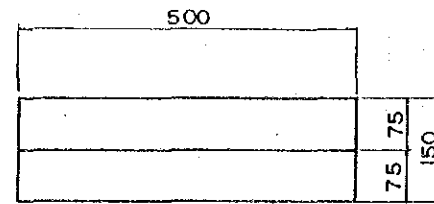


TYPE B-1

TYPE B-2

CONCRETE CORNER BLOCK

SCALE : A

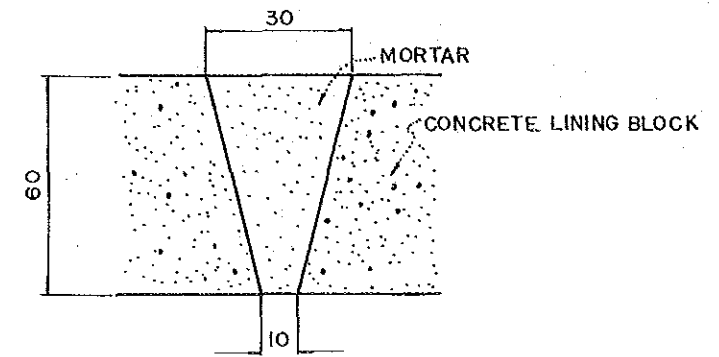


DIMENSION

TYPE	a	b
C-1	60	90
C-2	75	75

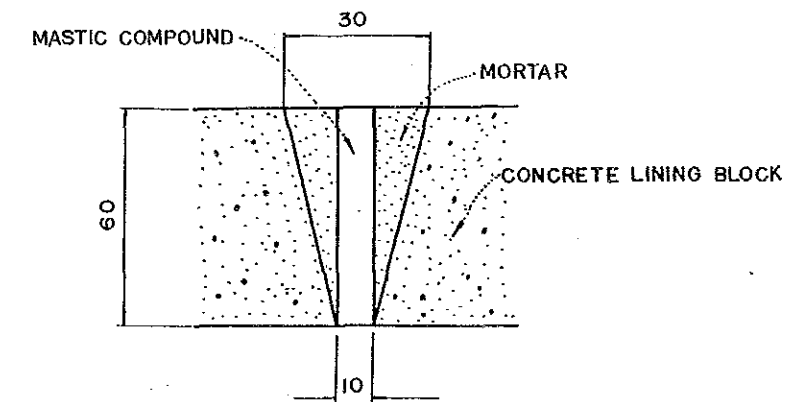
JOINT

SCALE : B



EXPANSION JOINT

SCALE : B



SCALE : A 0 100 200 300mm

SCALE : B 0 20 40 60mm

REQUIRED NOS OF BLOCKS

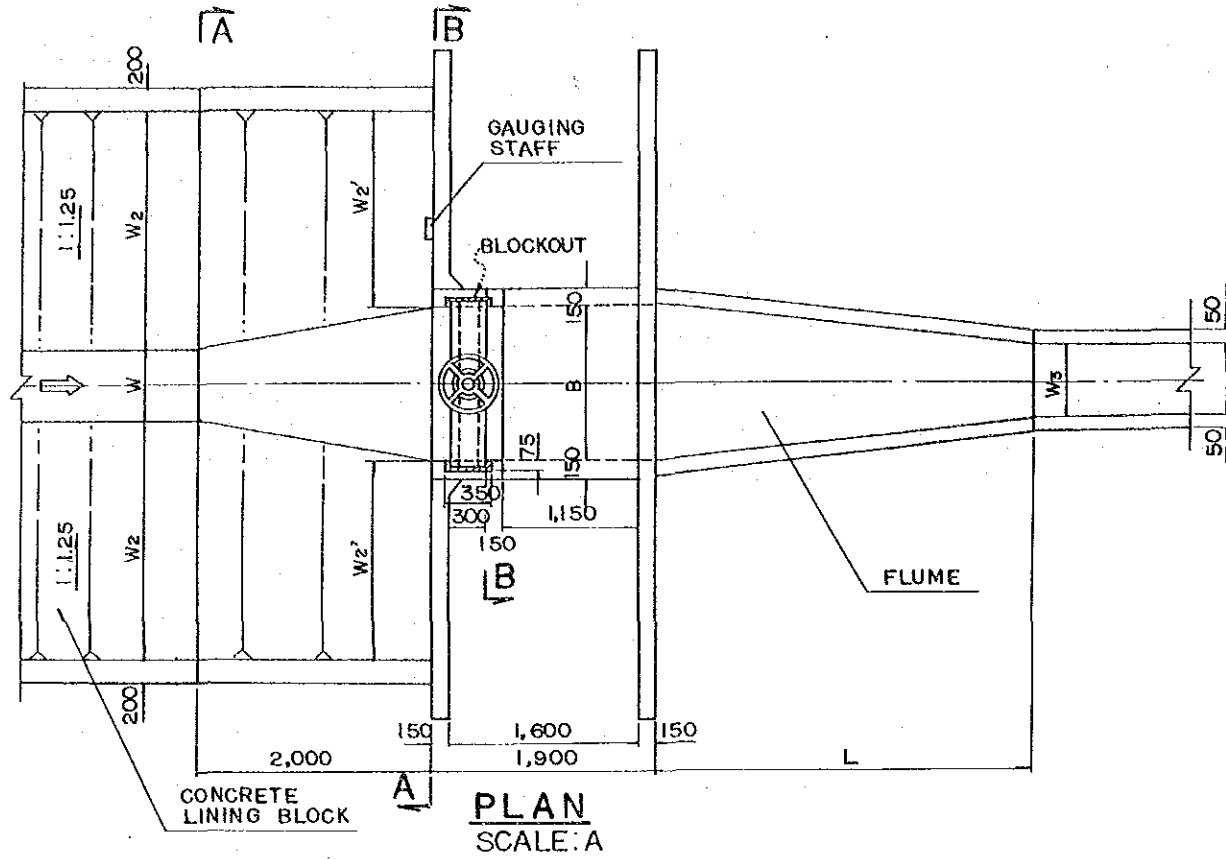
PER 4 METERS

CANAL TYPE	CANAL HEIGHT	SLOPE LENGTH	PC LINING BLOCK				PC CORNAR BLOCK	
			A-1	A-2	B-1	B-2	C-1	C-2
A	1,200	1,920	8	76	4	14	16	
B	1,050	1,680	8	76			16	
C	800	1,280	4	46	4	14	16	
D	800	1,131	4	14	4	46		16

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING NORTH MAIN CANAL AND LATELAL CONCRETE BLOCK AND JOINT FOR CANAL LINING		
Date	Drawing No.	3004
JAPAN INTERNATIONAL COOPERATION AGENCY		

N-6 CHECK STRUCTURE

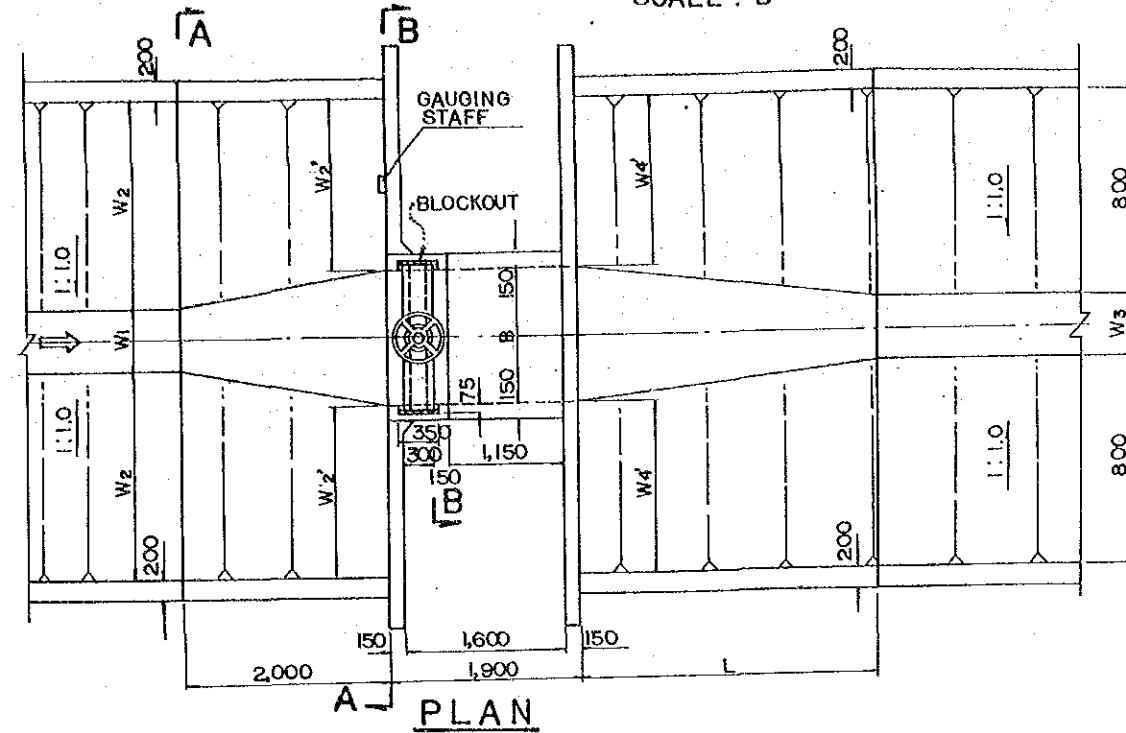
SCALE : A



PLAN
SCALE : A

L-1 CHECK STRUCTURE

SCALE : B

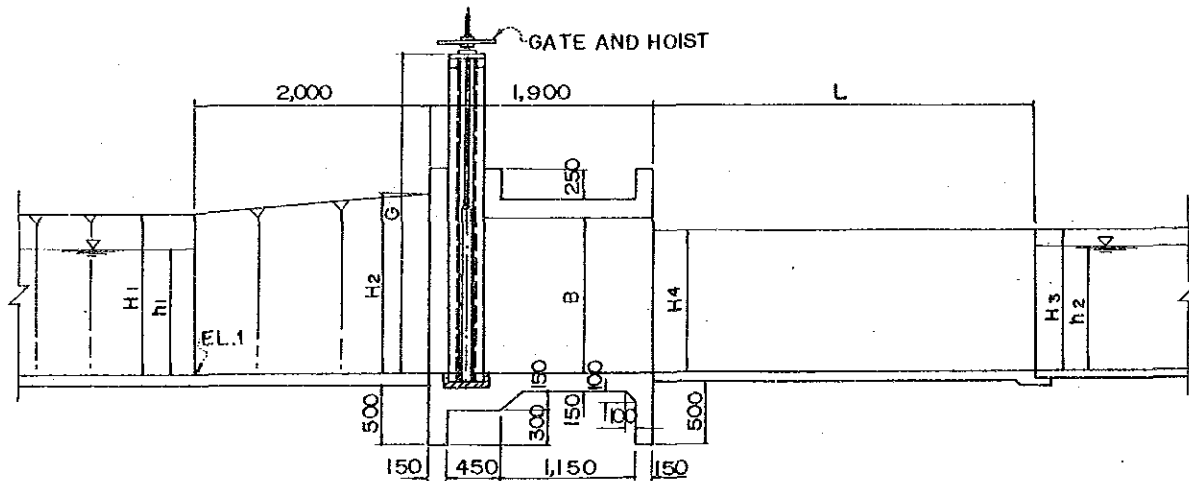


PLAN

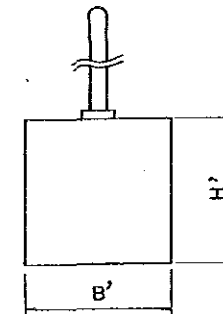
TABLE OF DIMENSION

(mm)

NO.	W ₁	W ₂	B	W ₃	H ₁	H ₂	H ₃	H ₄	L	W ₂ '	W ₄ '	L ₁	G	EL ₁	EL ₂	h ₁	h ₂
N-6	400	1,000	700	500	800	1,000	900	900	2,000	1,250	-	1,280	2,000	165.15	165.22	620	520
L-1	300	800	700	300	800	1,000	800	900	2,000	1,000	900	1,130	2,000	164.55	164.41	530	650



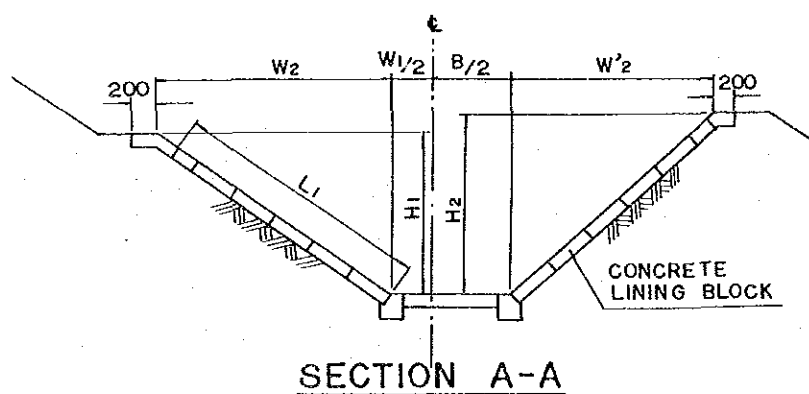
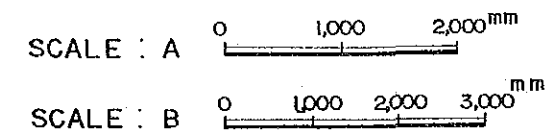
PROFILE
SCALE : A



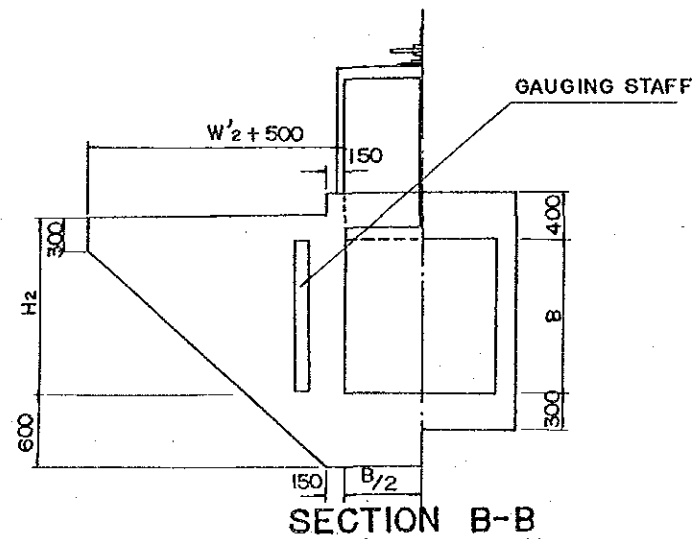
(mm)

NO.	B'	H'
N-4	800	1,000
N-5	700	700
N-6	700	700
L-1	700	700

DIMENSION OF CHECK GATE



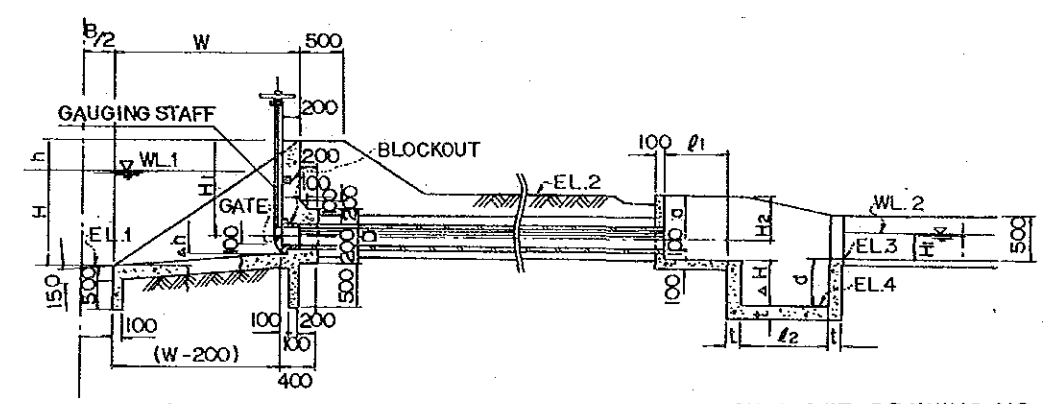
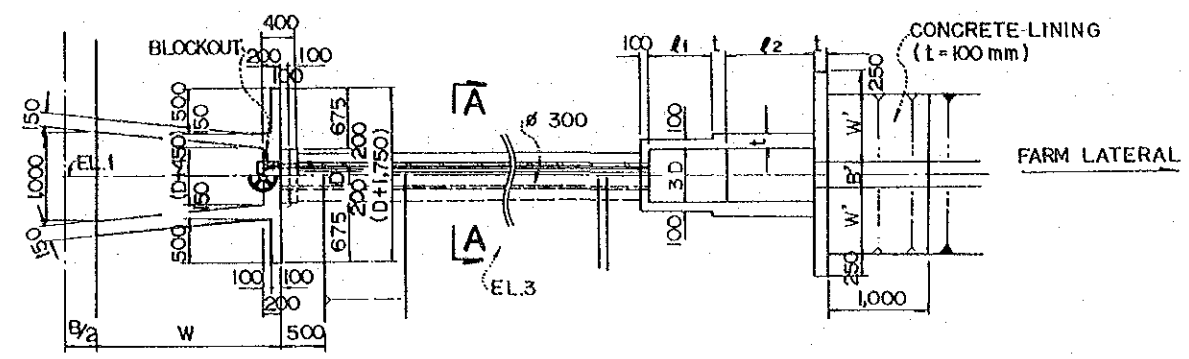
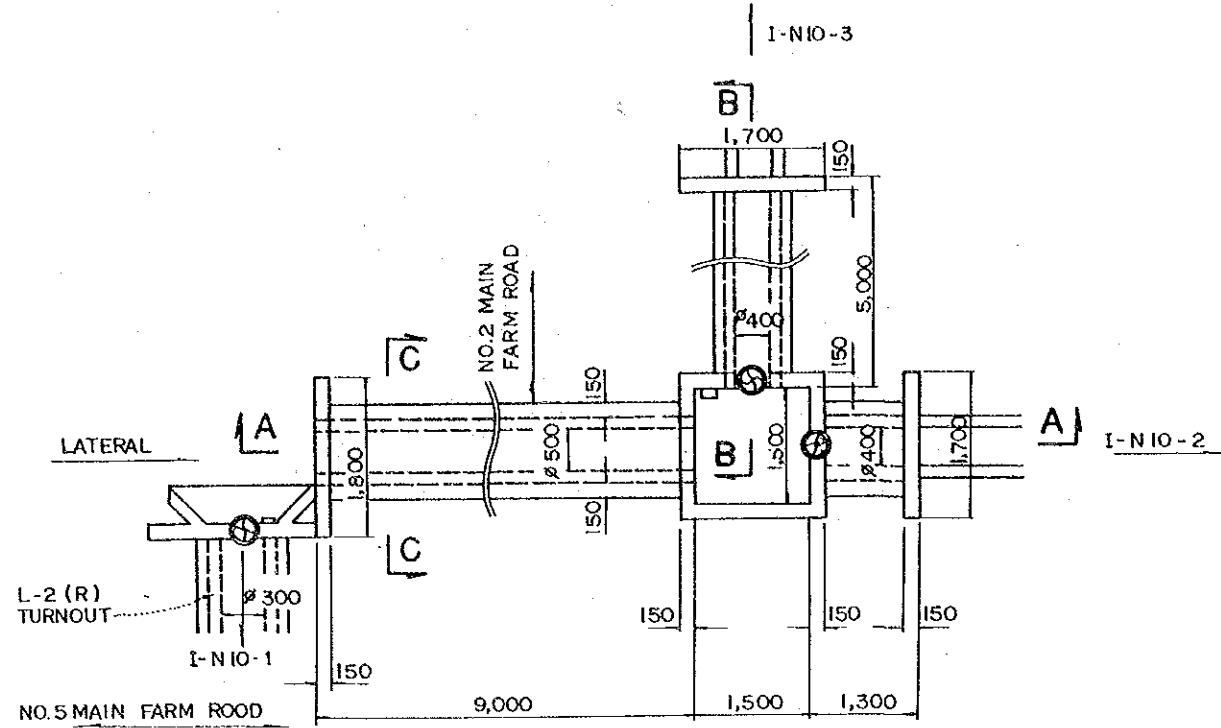
SECTION A-A



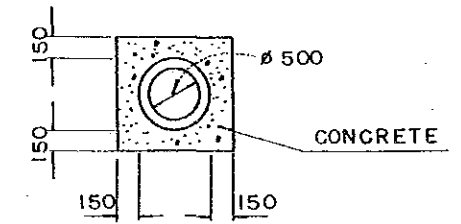
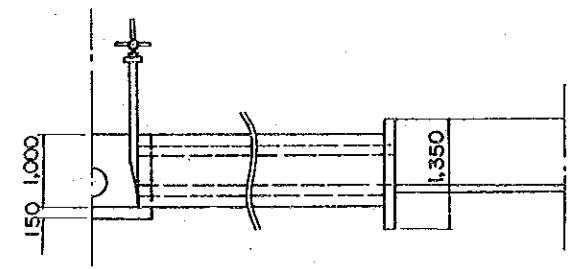
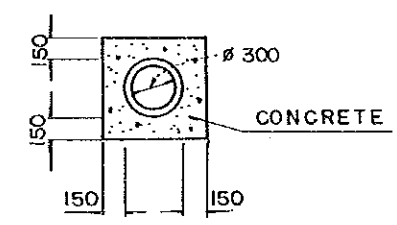
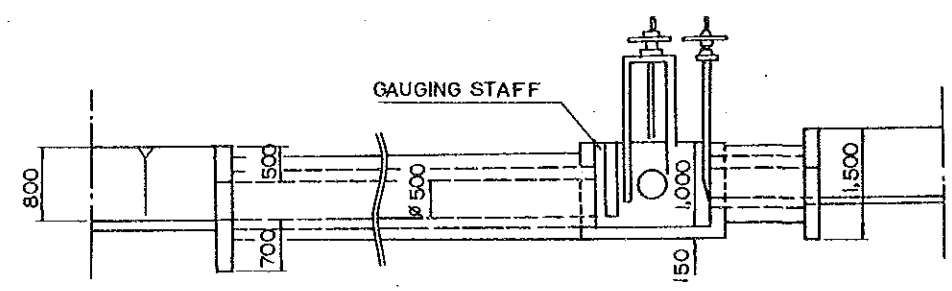
SECTION B-B

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING NORTH MAIN CANAL AND LATERAL CHECK STRUCTURE		
Date	Drawing No.	3005
JAPAN INTERNATIONAL COOPERATION AGENCY		

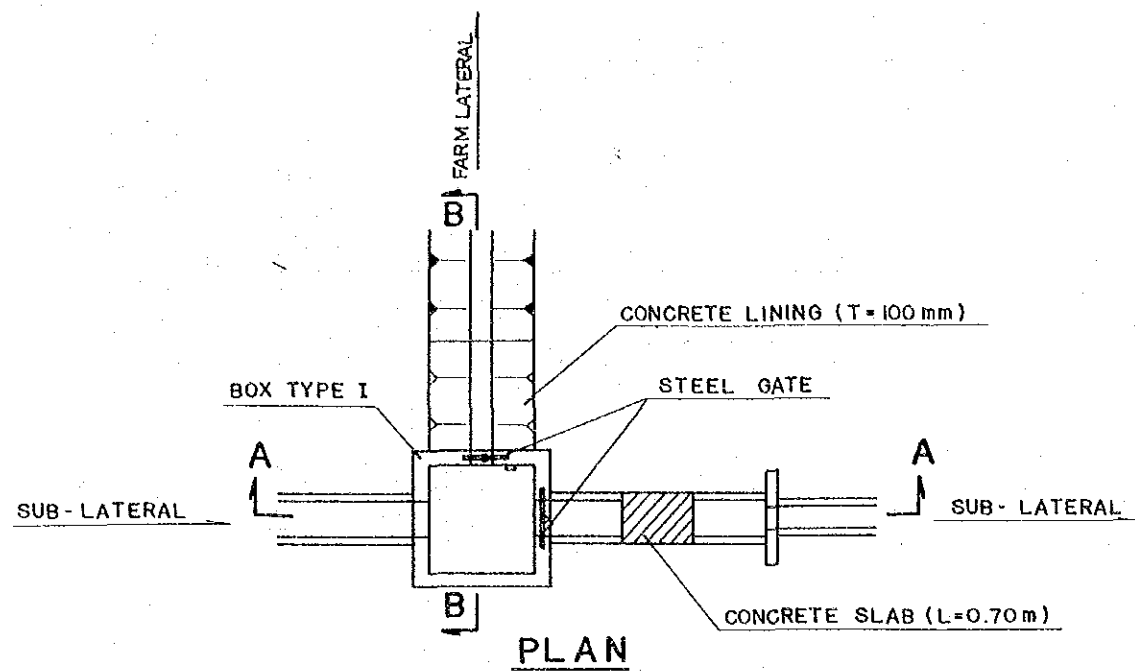
L-2 (R) TURN OUT



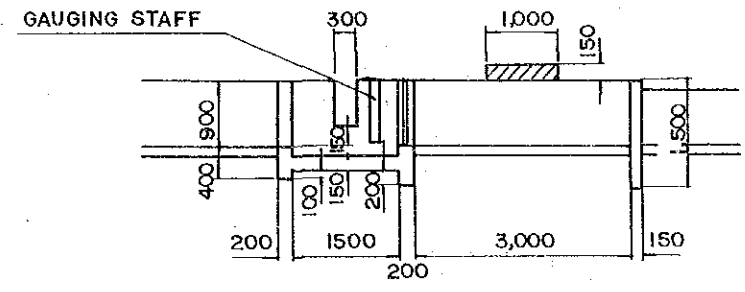
NOTE : SEE DRAWING NO. FOR DIMENSIONS.



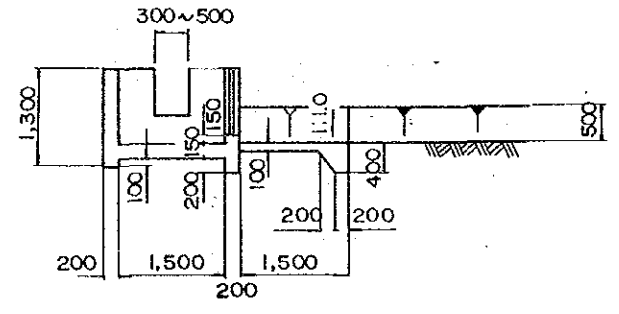
LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
LATERAL L-2 TURNOUT		
Date	Drawing No.	3006
JAPAN INTERNATIONAL COOPERATION AGENCY		



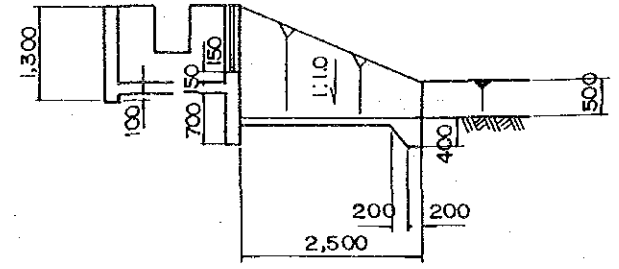
PLAN



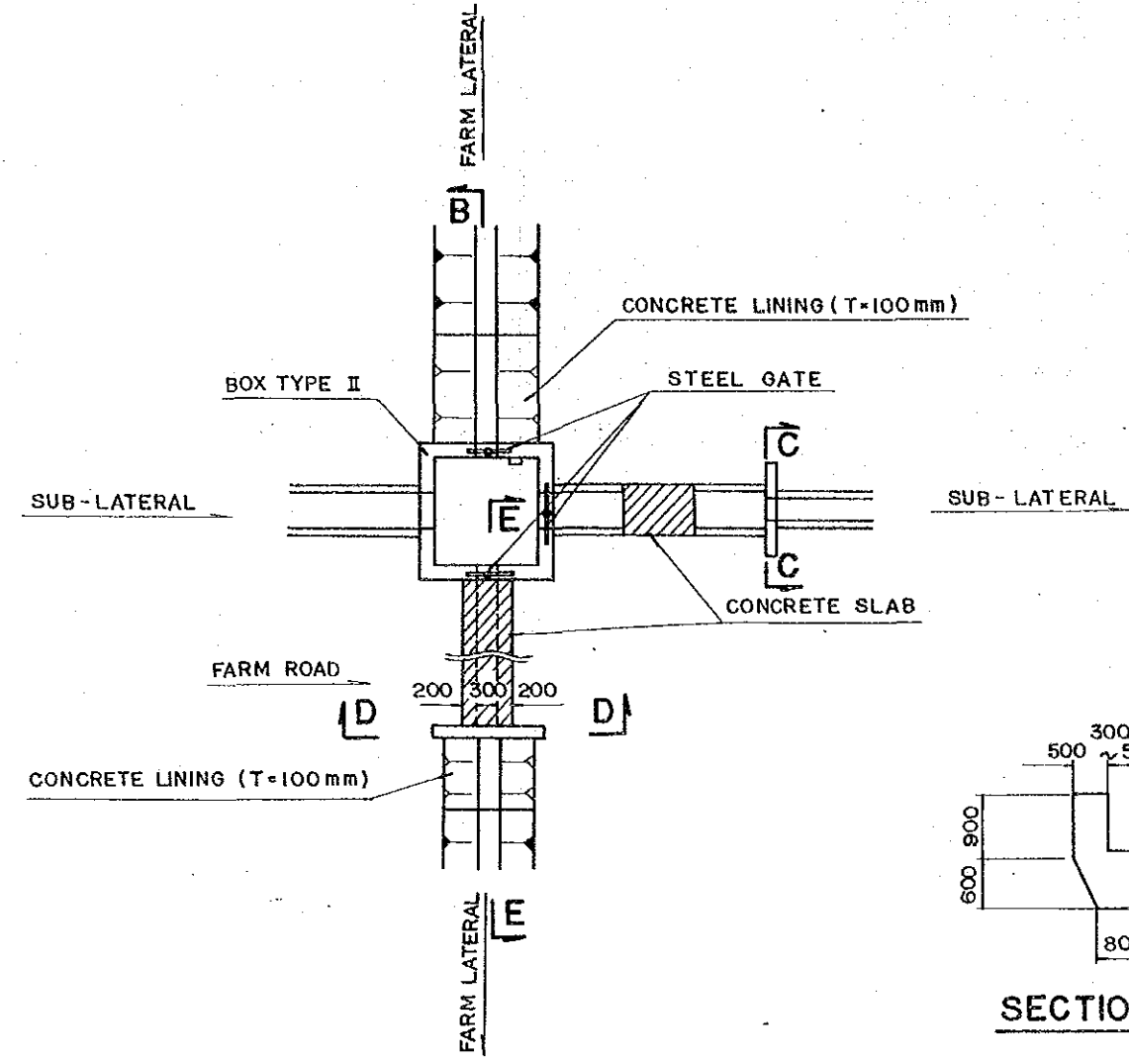
SECTION A-A



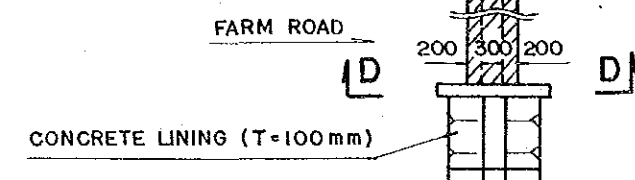
SECTION B-B
TYPE a



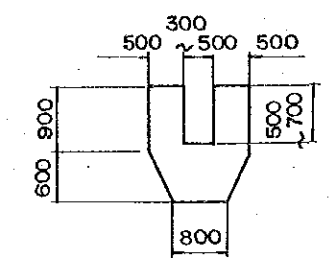
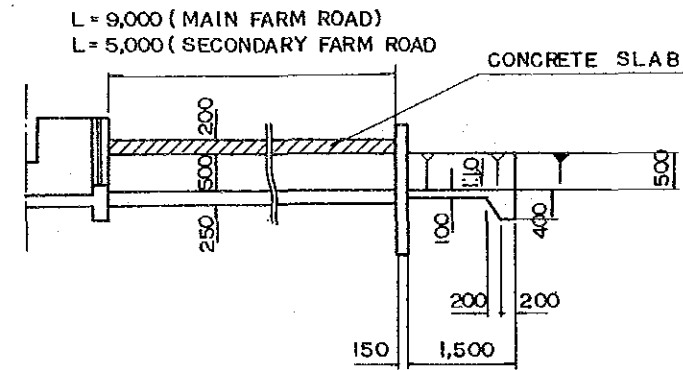
SECTION B-B
TYPE b



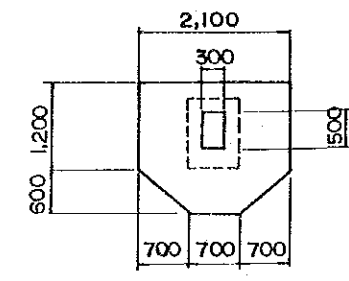
PLAN



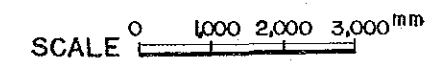
SECTION E-E



SECTION C-C

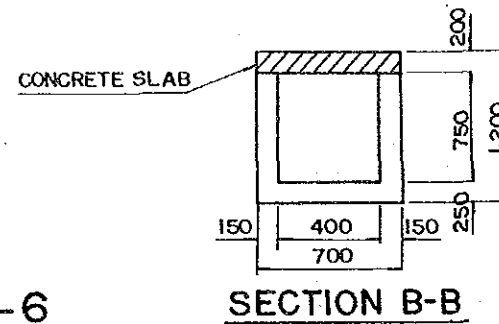
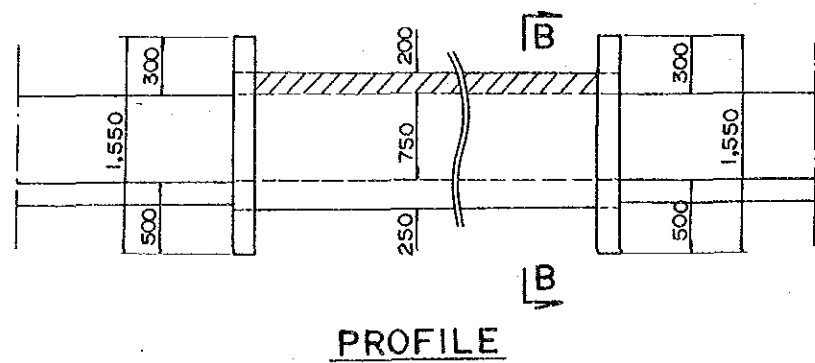
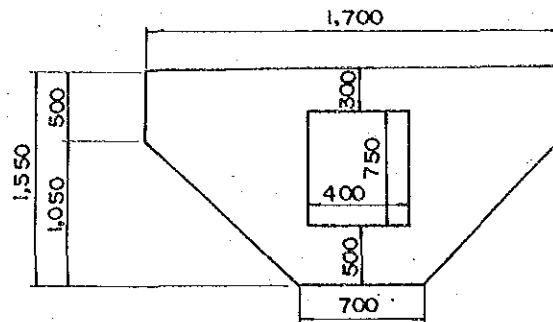
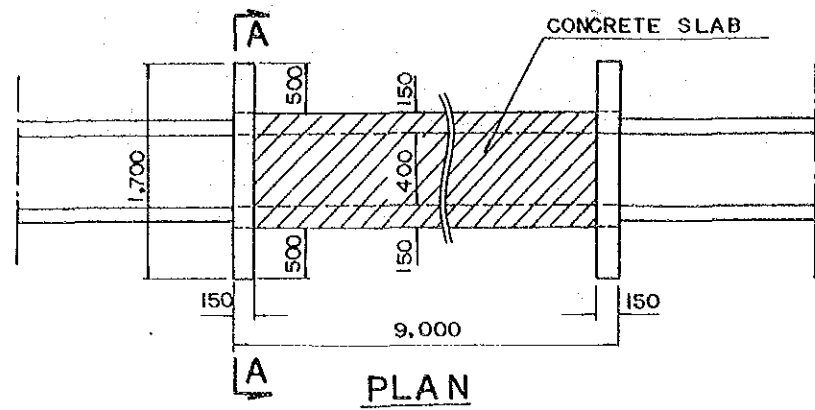


SECTION D-D

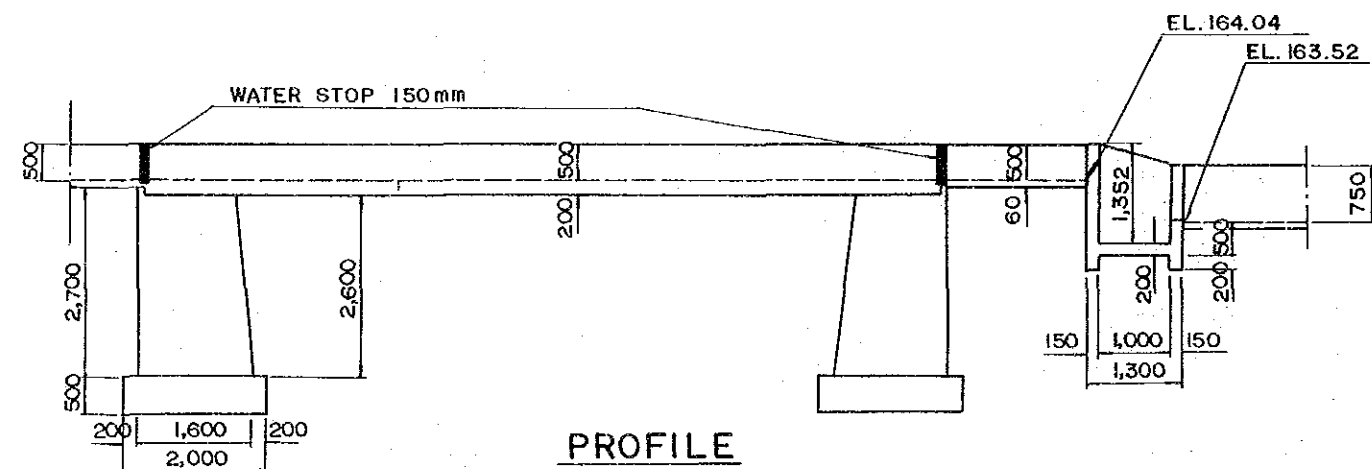
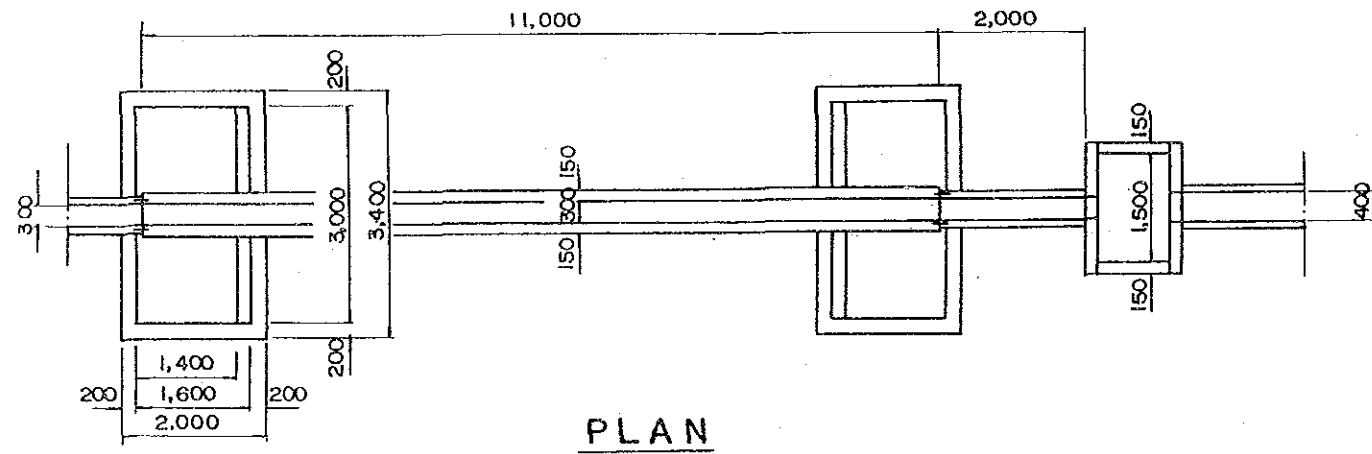


LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING SUB-LATERAL TURNOUT AND CHECK STRUCTURE		
Date	Drawing No.	3007
JAPAN INTERNATIONAL COOPERATION AGENCY		

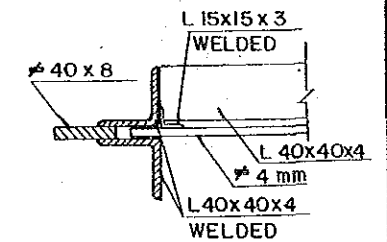
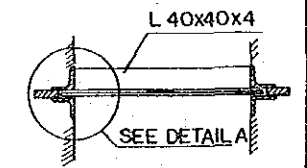
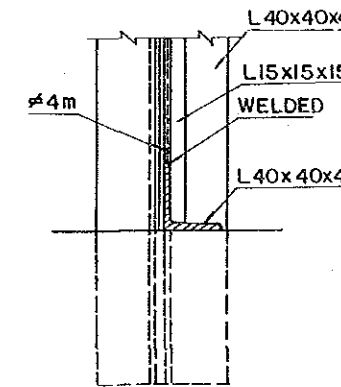
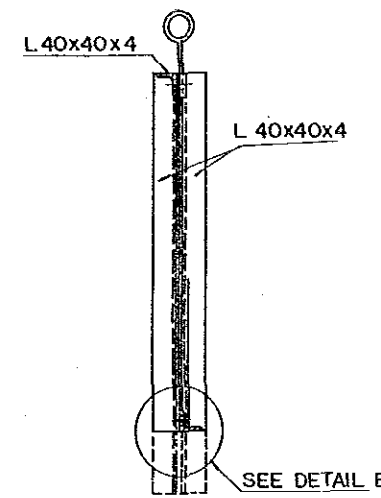
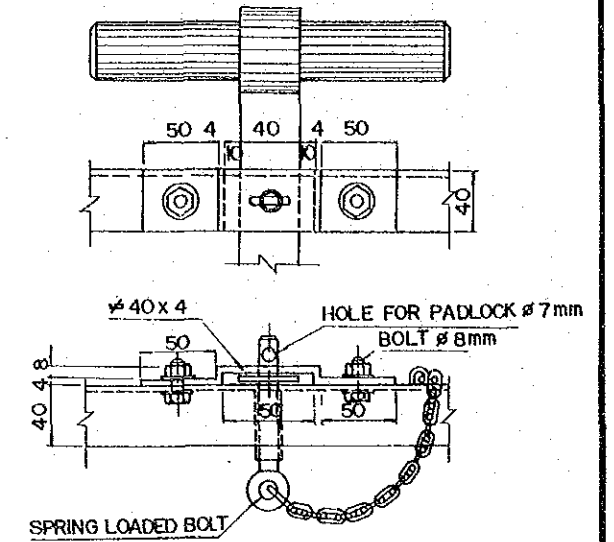
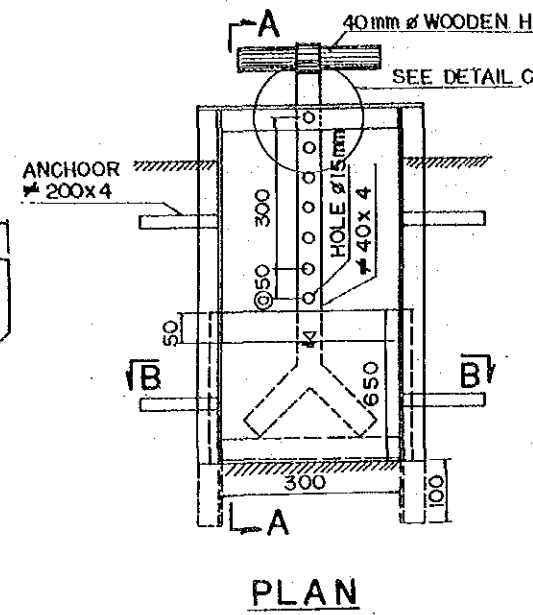
CULVERT ON SUB-LATERAL
SCALE: A



AQUEDUCT ON IN-6
SCALE: B



STEEL GATE



SCALE: D

SCALE: C

SCALE: C

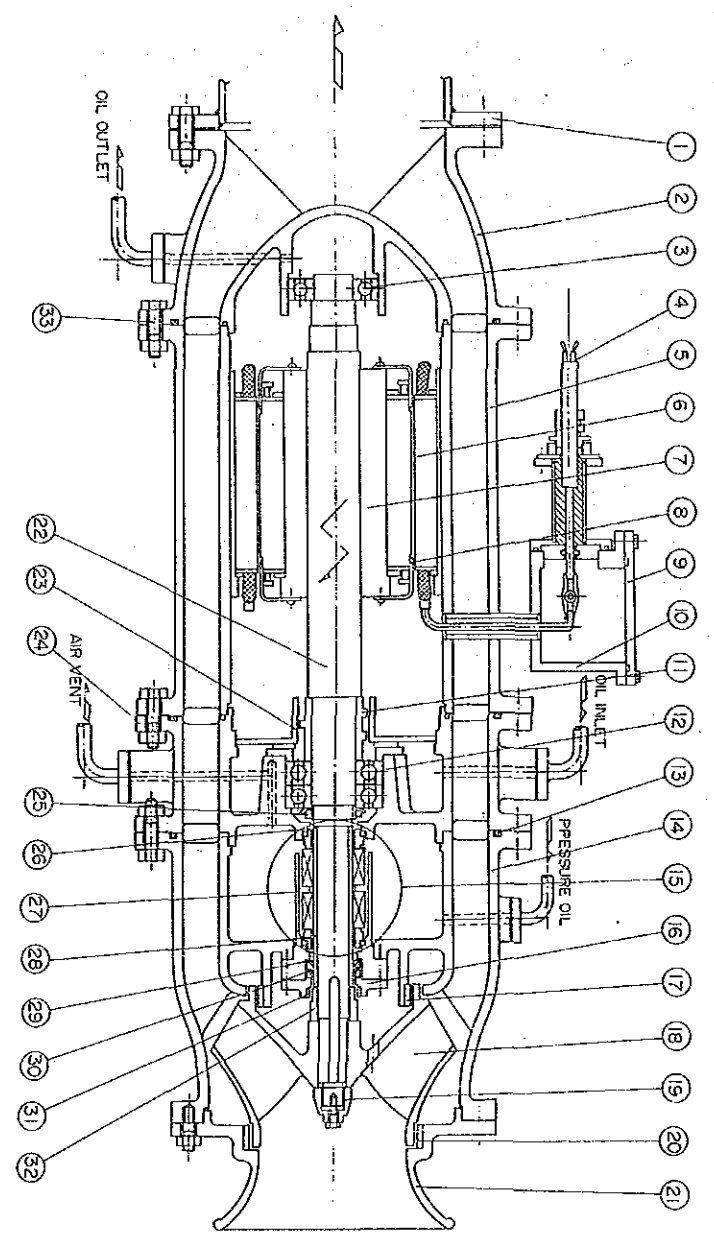
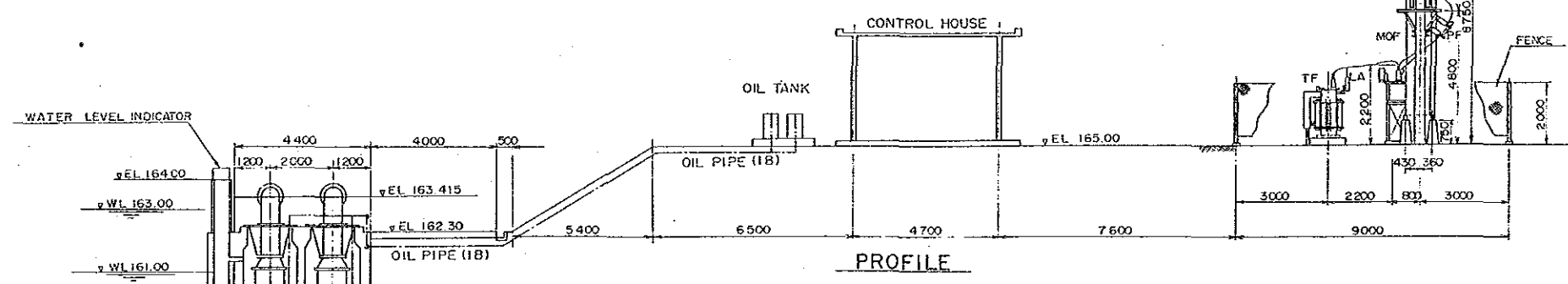
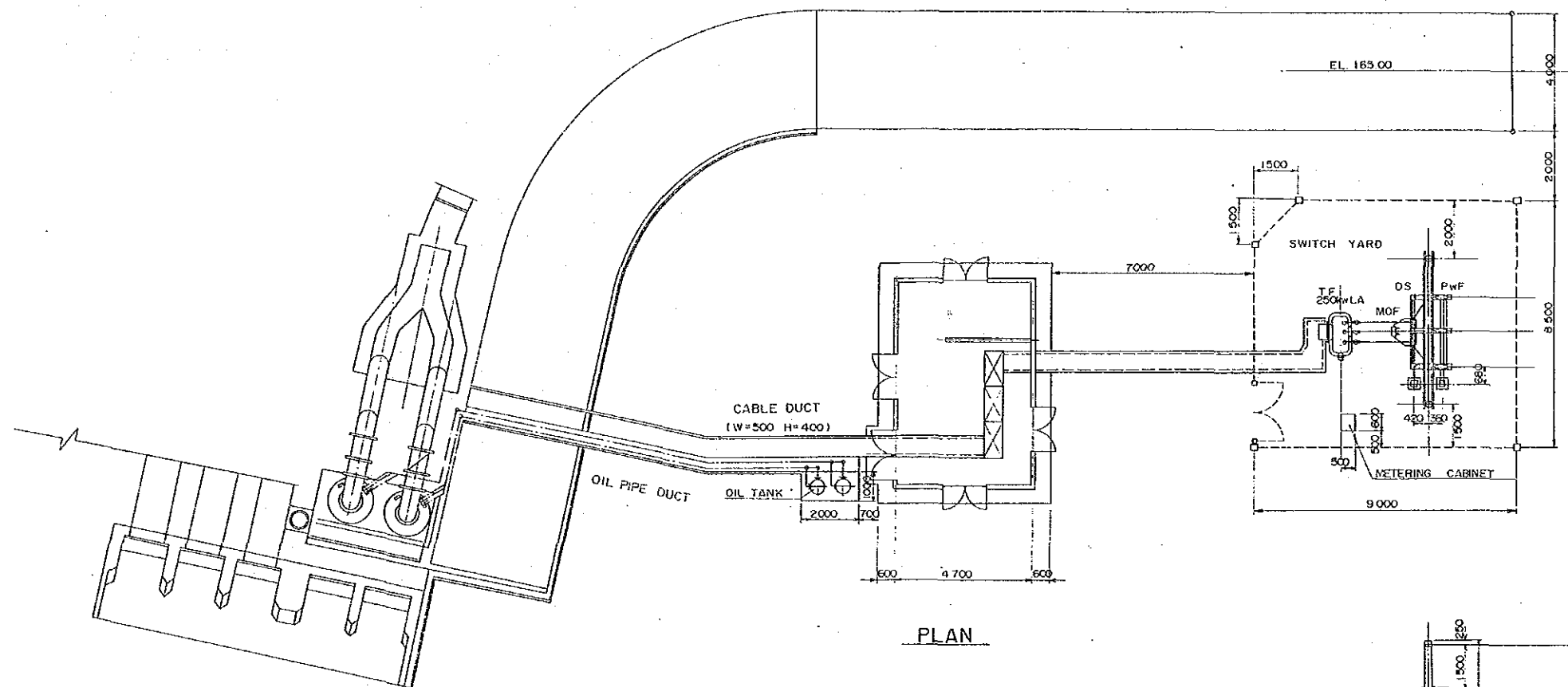
SCALE: A 0 500 1000 1500mm

SCALE: B 0 1000 2000 3000mm

SCALE: C 0 50 100 150mm

SCALE: D 0 100 200 300 400mm

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING SUB-LATERAL CULVERT, AQUEDUCT/ STEEL GATE FOR TURNOUT AND CHECK STRUCTURE		
Date	Drawing No.	3008
JAPAN INTERNATIONAL COOPERATION AGENCY		



PARTS LIST

PART NAME	MATERIALS	PART NAME	MATERIALS	PART NAME	MATERIALS
1 DELIVERY PIPE	SS 41	13 PACKING	Hycor OR15	25 BALL NUT	S25C
2 MOTOR TOP COVER	FC 20	14 PUMP CASING	FC 20	26 PACKING	Hycor OR15
3 BALL BEARING	NO 6314	15 MECHANICAL SEAL	SPECIAL	27 SEAL CASE	SUS 52
4 CABLE	CHLORINE CARBIDE CABLE	16 SEAL COVER	SUS 52	28 SEAL LINER	SUS27 Hcr PLATING
5 MOTOR CASE	SS 41	17 BALANCE RING	SCS 2	29 OIL SEAL	SYNTHETIC RUBBER
6 STATOR		18 IMPELLER	SC 46	30 DUST SEAL	SYNTHETIC RUBBER
7 ROTOR		19 IMPELLER NUT	SUS 52	31 SEAL RING	SUS 27 STELLITE WELDING
8 END RING COVER	SUS 27	20 SUCTION RING	SCS 2	32 SLINGER	SUS 27 STELLITE WELDING
9 TERMINAL COVER	SS 41	21 BELL MOUTH	FC 20	33 BOLT AND NUT	S25C
10 TERMINAL CASE	SS 41	22 SHAFT	S35C		
11 SCREW	SS 41	23 BEARING COVER	SUS 27		
12 BALL BEARING	MG 7320 DF	24 MOTOR BOTTOM COVER	FC 20		

DESIGN DATA	
DIAMETER	600 MM
TOTAL HEAD	6 M
CAPACITY	52 M ³ /MIN
SPEED	485 RPM
MOTOR	70 KW

LAO PEOPLE'S DEMOCRATIC REPUBLIC

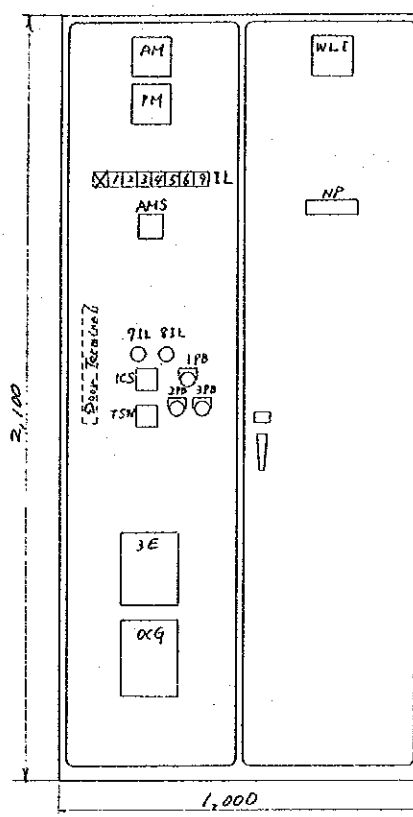
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
DRAINAGE PUMP STATION
GENERAL ARRANGEMENT

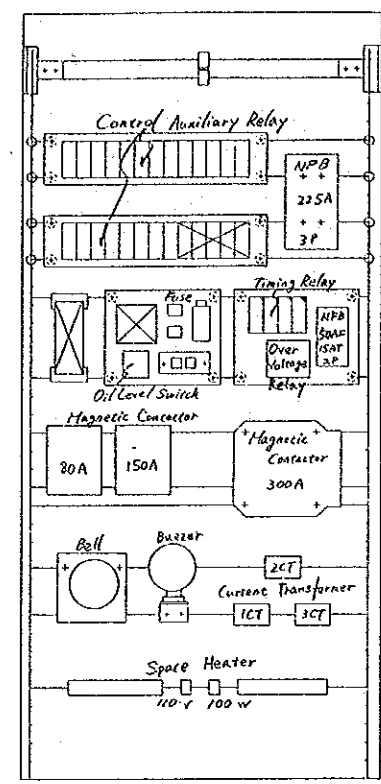
Date _____ Drawing No. 4001

JAPAN INTERNATIONAL COOPERATION AGENCY

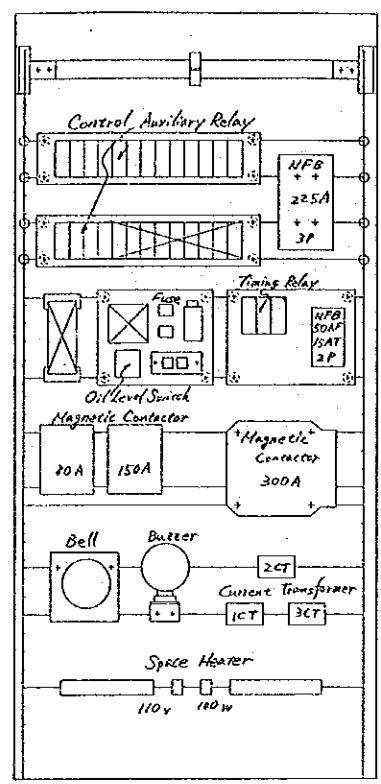
W 1,000 H 2,100 D 600



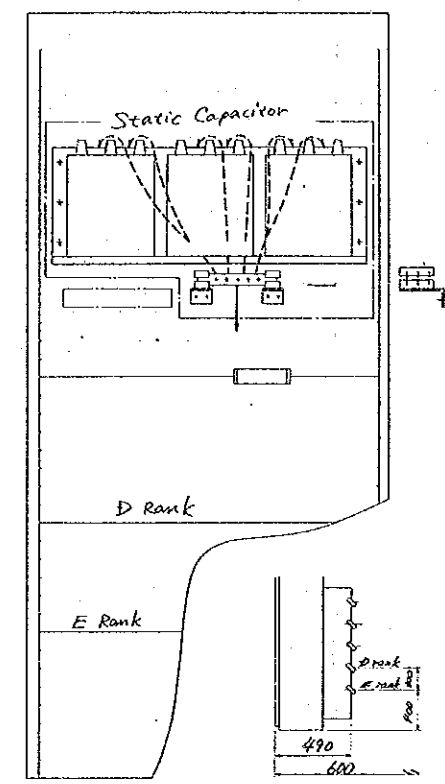
FRONT VIEW (DOOR)
Control Panel Nos. 1 & 2



FRONT VIEW (IN DOOR)
Control Panel No. 1



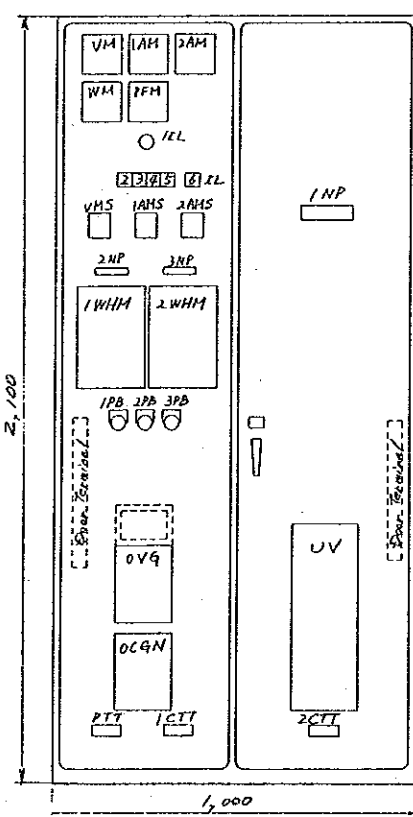
FRONT VIEW (IN DOOR)
Control Panel No. 2



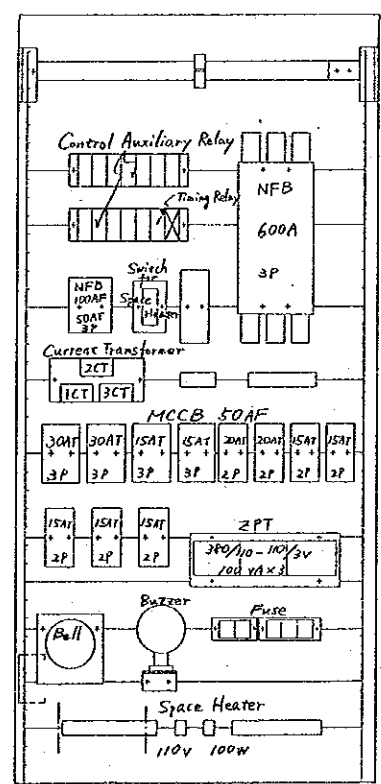
REAR VIEW (IN DOOR)
Control Panel Nos. 1 & 2

Code	Description	Rating
NP	Name plate	
1 IL	Lamp for 3E tripping	110V 2W Red
2 IL	" NFB tripping	" "
3 IL	" low water level	" "
4 IL	" grounding	" "
5 IL	" low level oil	" Orange
6 IL	" spare	" "
7 IL	" Stop	" Green
8 IL	" Run	" Red
9 IL	" spare	" orange
AM	AC Ammeter	200/5A 1.5 class
AMS	Switch for ammeter	3P transfer
WLI	Water level indicator	W.L.158.5-WL163.5
ICS	Control switch	Stop-Run-Start
TSW	Change over switch	Manual - Auto
1 PB	Push button for trouble reset	
2 PB	" bell stop	
3 PB	" buzzer stop	
3E	3F relay	5A 50/60Hz
OCG	Over current ground relay	0.5A 50Hz

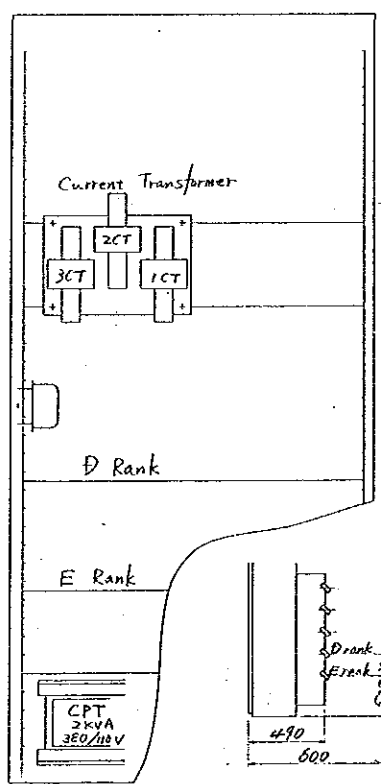
W 1,000 H 2,100 D 600



FRONT VIEW (DOOR)
Distribution Panel



FRONT VIEW (IN DOOR)
Distribution Panel



REAR VIEW (IN DOOR)
Distribution Panel

Code	Description	Rating
1 NP	Name plate	
2 NP	"	MAIN
3 NP	"	STATION
1 IL	Lamp for power source	110V 2W White
2 IL	" under voltage	" Red
3 IL	" NFB tripping	" "
4 IL	" High temp. of trans.	" "
5 IL	" grounding	" "
6 IL	" open permit of D.S.	" White
VM	AC Voltmeter	518/150V 1.5 class
1AM	AC Ammeter	500/5A "
2AM	"	75/5A "
VMS	Switch for voltmeter	3P transfer
1AHS	" ammeter	"
2AHS	"	"
PPH	3P	110/15 SA 50P 1.5 class
WH	3P	PT 110/110V CT 500/5A
1WHM	3P	
2WHM	3P	
1 PB	Push button for bell stop	
2 PB	" buzzer stop	
3 PB	" trouble reset	
UV	Under voltage relay	
OVG	Over voltage ground relay	
OCGN	Over current ground relay	
PTT	Test terminal for voltage	
CTT	" ampere	

LAO PEOPLE'S DEMOCRATIC REPUBLIC

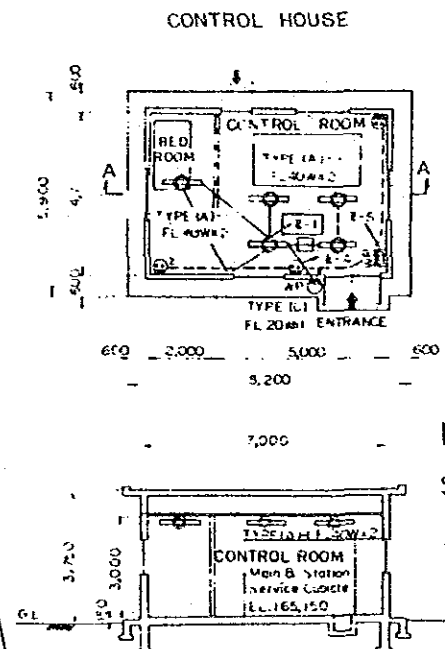
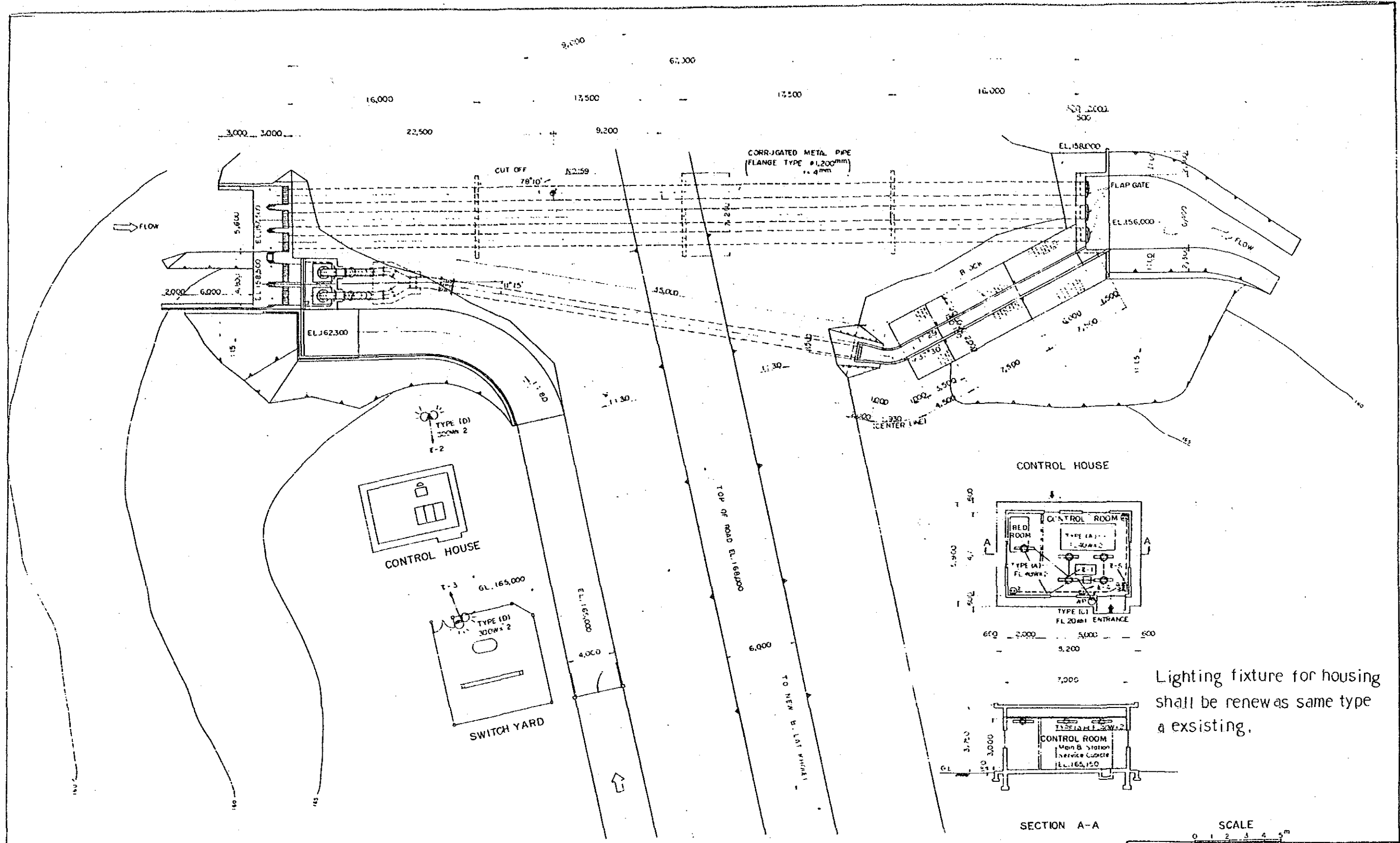
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING

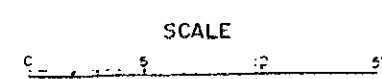
DRAINAGE PUMP STATION PANELS

Date	Drawing No.	4002
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JAPAN INTERNATIONAL COOPERATION AGENCY

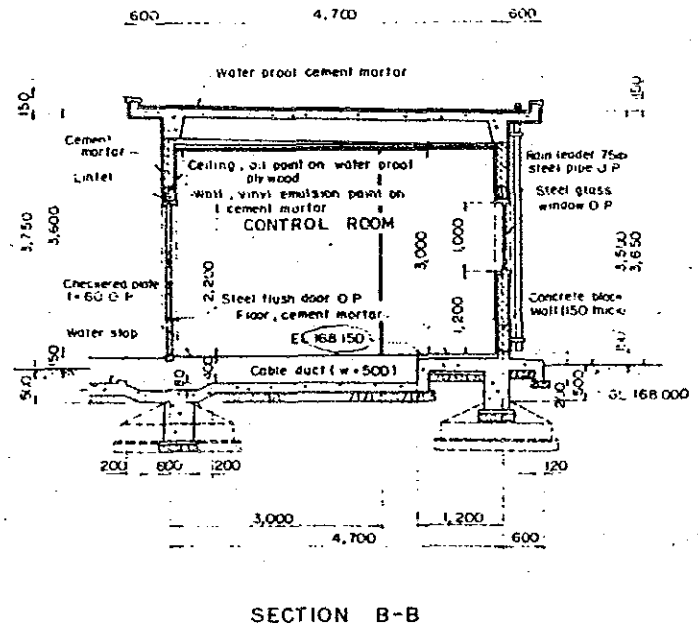
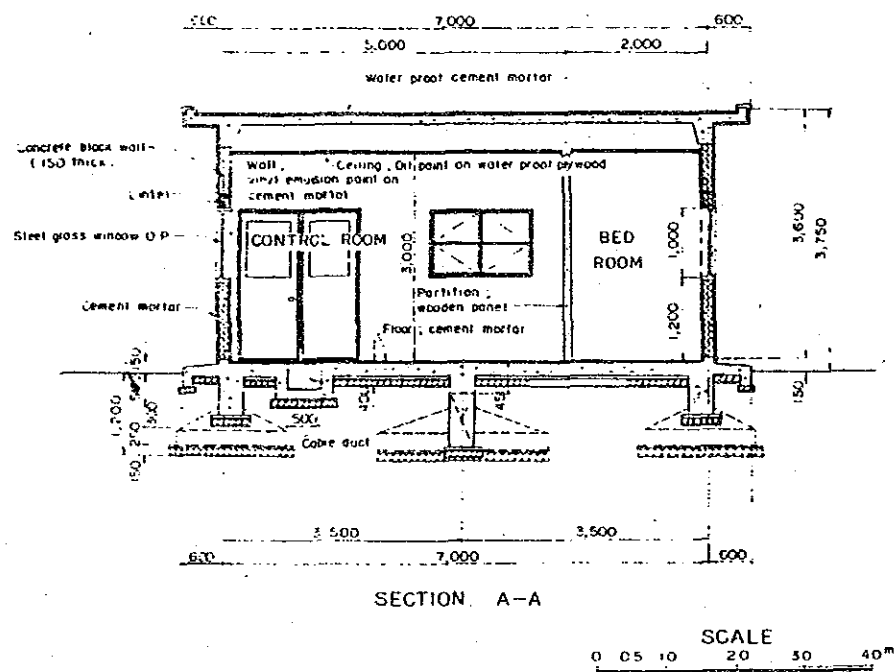
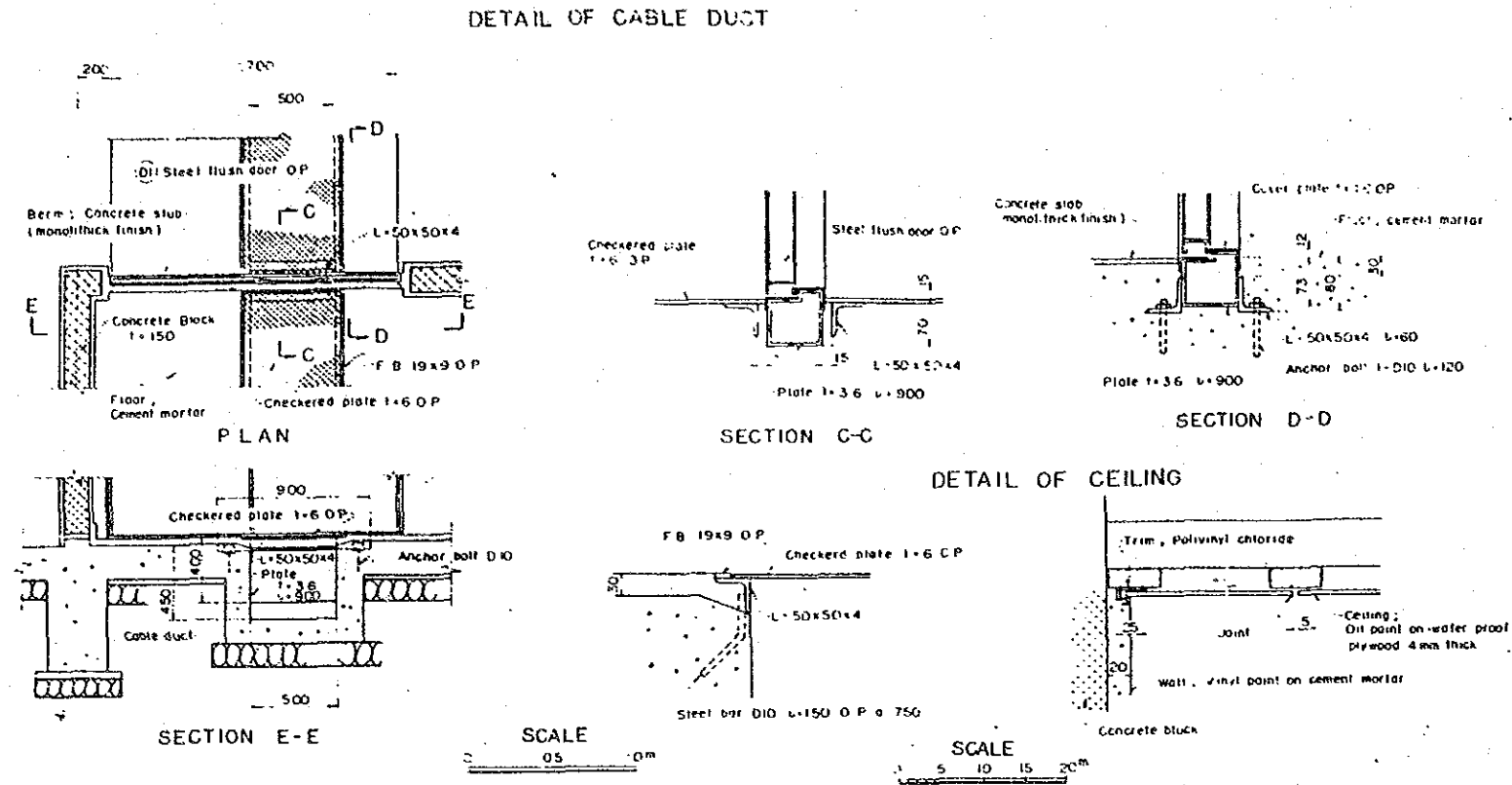
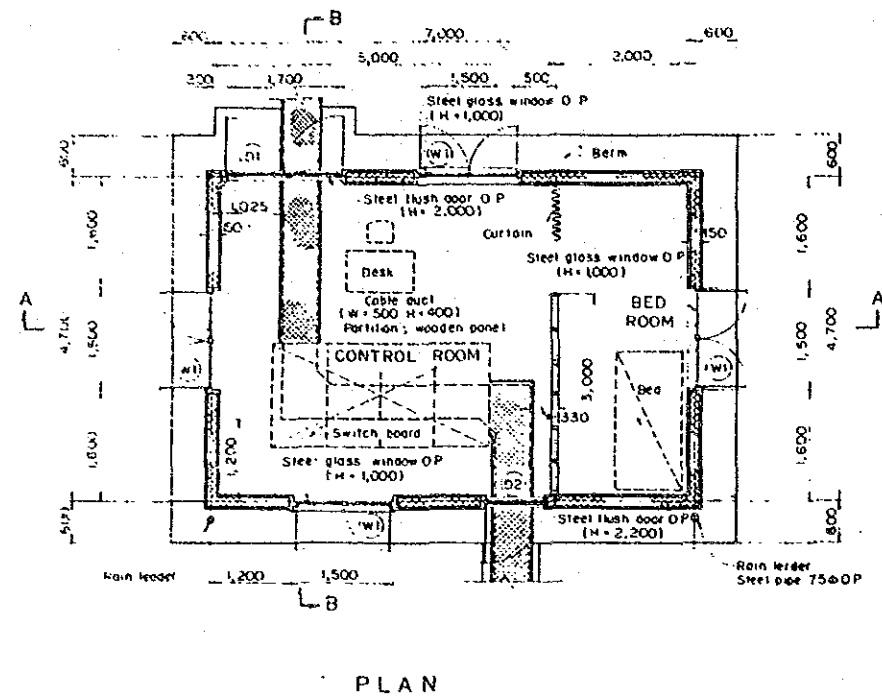


Lighting fixture for housing shall be renew as same type a existing.



NOTE
Lighting fixture of Drainage pumping station is shown on DRAWING NO.

LÀO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING DRAINAGE PUMP STATION OPERATION HOUSE (1/2)		
Date	Drawing No.	4003
JAPAN INTERNATIONAL COOPERATION AGENCY		



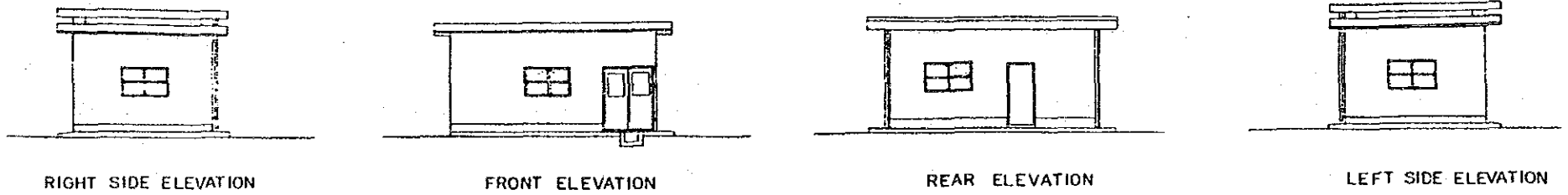
Renew and painting

Repainting

SCHEDULE OF FINISH

EXTERIOR FINISH		INTERIOR FINISH			
NO.	DESCRIPTION	FLOOR	SKIRTING	WALL	CEILING
1	Water proof cement mortar	Cement mortar	Cement mortar	Vinyl emulsion paint on cement mortar	Oil paint on water proof plywood (4mm thick)
2	Cement mortar	Cement mortar	Cement mortar	Vinyl emulsion paint on cement mortar	Oil paint on water proof plywood (4mm thick)
3	Cement mortar				
4	Concrete slab (monothick finish)				

Item of repairing were same as CONTROL HOUSE (1)



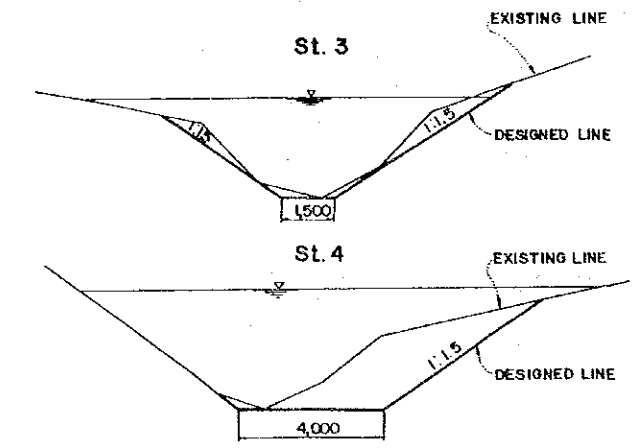
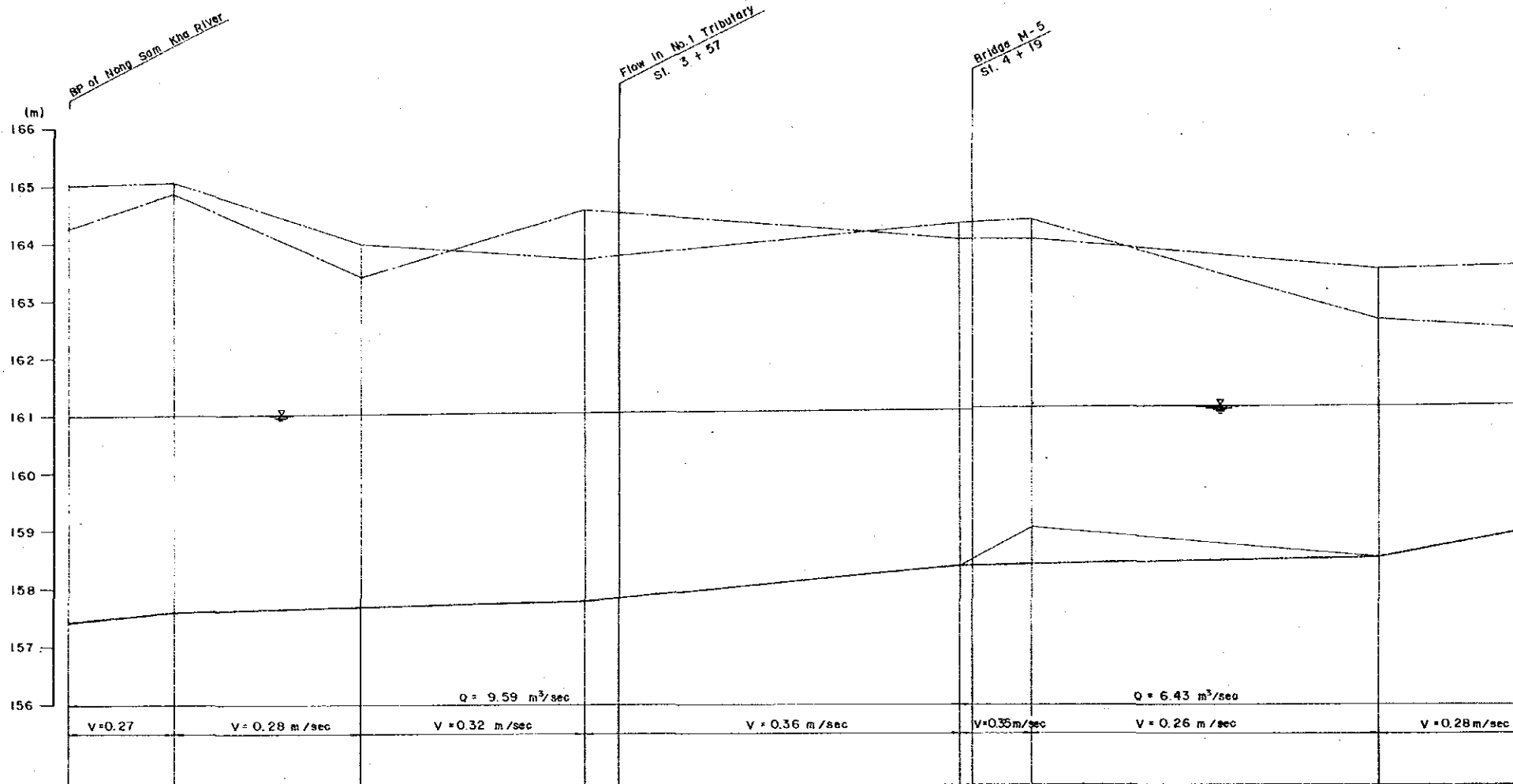
LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

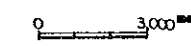
TITLE OF DRAWING
DRAINAGE PUMP STATION
OPERATION HOUSE (2/2)

Date _____ Drawing No. 4004

JAPAN INTERNATIONAL COOPERATION AGENCY



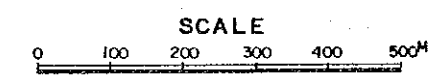
TYPICAL CROSS SECTION
(St. 3 AND St. 4)



LEGEND

- v — PROPOSED WATER SURFACE
- CANAL BASE
- EXISTING LEFT BANK OF CANAL
- RIGHT
- CANAL BASE

NOTE : 1) Q IS DESIGNED DISCHARGE (m³/SEC)
2) V IS AVERAGE VELOCITY OF DURING EACH STATION.



STATION NO.	ACCUMULATED DISTANCE		DISTANCE	
	000		000	
BP	000		000	
1	188.10		188.10	
2	326.70	514.80	326.70	514.80
3	393.80	908.60	393.80	908.60
4	632.70	1,598.30	632.70	1,598.30
5	811.10	1,698.40	811.10	1,698.40
6	575.30	2,273.70	575.30	2,273.70
7	268.40	2,542.10	268.40	2,542.10

PROPOSED ELEVATION	WATER SURFACE		BASE	
161.00	161.00	161.01	157.40	157.50
162.00	161.02		157.66	157.75
163.00			157.75	157.75
164.00			158.37	158.37
165.00			159.04	159.04
166.00			158.32	158.97

GROUND SURFACE ELEVATION	BASE		LEFT BANK		RIGHT BANK	
157.00	157.40	157.57	164.25	164.85	165.00	165.03
158.00	157.66		163.42		163.96	
159.00	157.75		164.56		163.69	
160.00	158.37		164.07		164.35	
161.00	159.04		164.07		164.40	
162.00	158.32		163.54		162.65	
163.00	158.97		163.60		162.50	

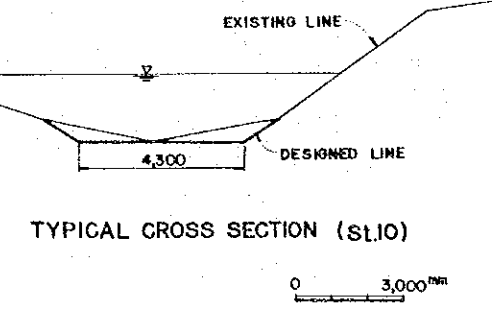
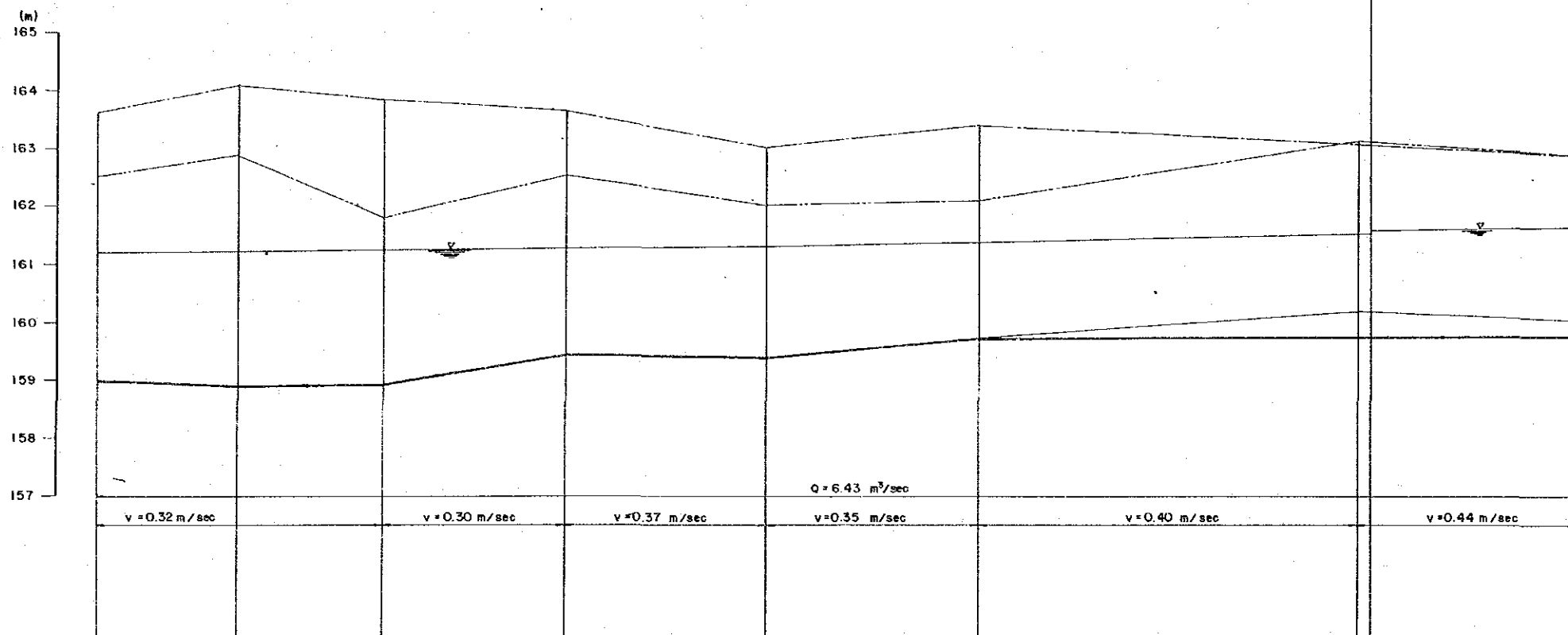
LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
NONG SAM KHA RIVER
PROFILE (1/4)

Date: _____ Drawing No. 5001

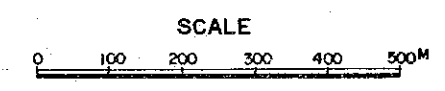
JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

- PROPOSED WATER SURFACE
- CANAL BASE
- EXISTING LEFT BANK OF CANAL
- EXISTING RIGHT BANK OF CANAL
- CANAL BASE

NOTE : 1) Q IS DESIGNED DISCHARGE (m³/SEC)
 2) V IS AVERAGE VELOCITY OF DURING EACH STATION



PROPOSED ELEVATION	WATER SURFACE	161.18	161.21	161.23	161.25	161.30	161.36	161.32	161.37	161.55
	BASE	158.97	158.80	158.87	159.41	159.41	159.70	159.71	159.75	159.75
GROUND SURFACE ELEVATION	BASE	158.97	158.80	158.87	159.41	159.41	159.70	160.17	159.99	159.99
	LEFT BANK	163.60	164.05	163.83	163.83	163.00	163.99	163.85	162.85	162.85
	RIGHT BANK	162.50	162.86	161.76	162.25	162.00	162.08	163.10	162.85	162.85
ACCUMULATED DISTANCE	2542.10	2789.60	3042.60	3359.60	3710.30	4079.90	4745.40	4768.40	5140.30	5140.30
DISTANCE	268.40	247.50	253.00	316.80	350.90	368.60	665.50	23.00	371.90	371.90
STATION	7	8	9	10	11	12	13	13	14	14

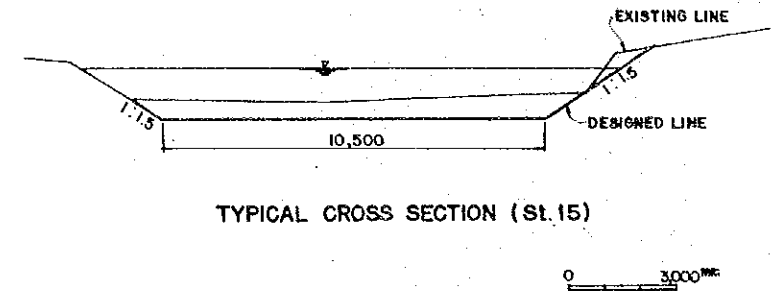
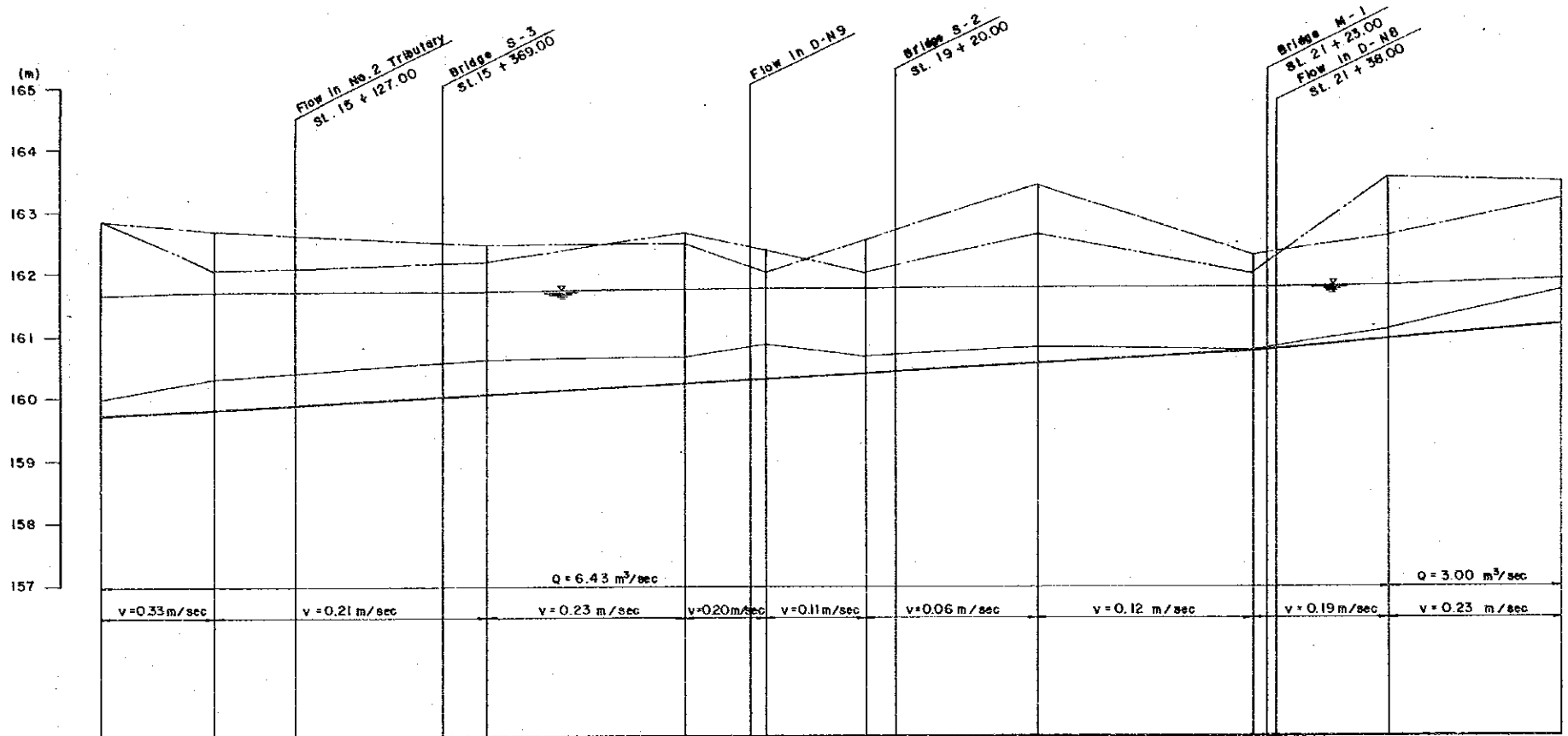
LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
 NONG SAM KHA RIVER
 PROFILE (2/4)

Date: _____ Drawing No. 5002

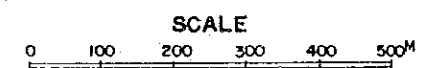
JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

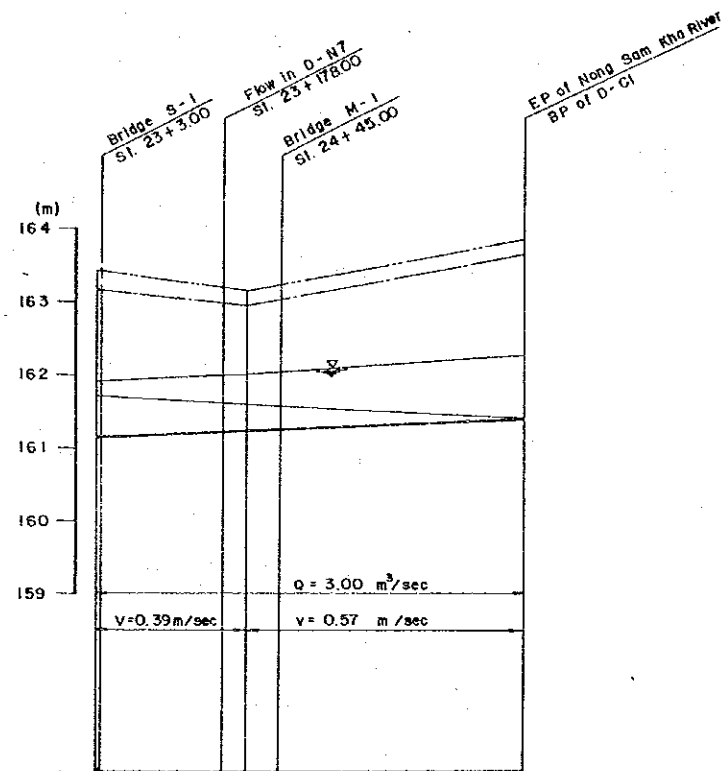
- ▲— PROPOSED WATER SURFACE
- CANAL BASE
- EXISTING LEFT BANK OF CANAL
- EXISTING RIGHT BANK OF CANAL
- CANAL BASE

NOTE : 1) Q IS DESIGNED DISCHARGE (m³/sec)
 2) V IS AVERAGE VELOCITY OF DURING EACH STATION

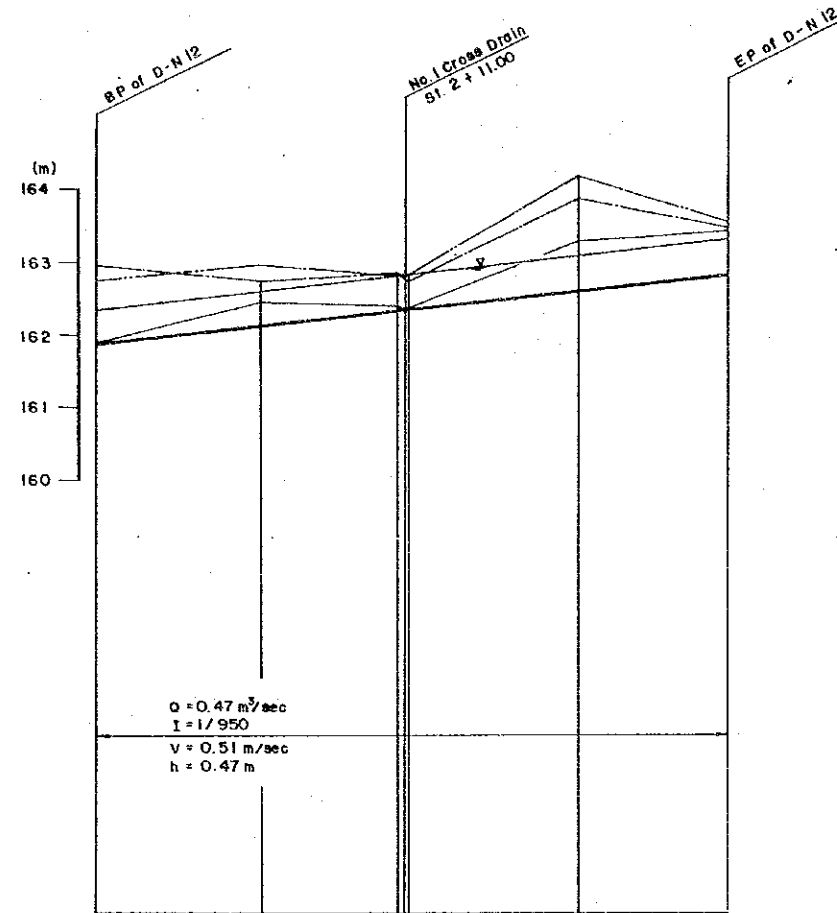


PROPOSED ELEVATION	WATER SURFACE	161.65	161.69	161.69	161.70	161.71	161.74	161.75	161.75	161.75	161.75	161.76	161.76	161.76	161.76	161.79	161.88
	BASE	159.75	159.80	159.86	159.98	160.02	160.23	160.29	160.30	160.40	160.41	160.75	160.77	160.78	160.92	161.15	
GROUND SURFACE ELEVATION	BASE	159.99	160.29	160.50	160.65	160.65	160.85	160.85	160.85	160.85	160.85	160.75	160.75	160.75	161.08	161.70	
	LEFT BANK	162.85	162.67	162.44	162.47	162.47	162.00	162.00	162.45	162.45	162.45	162.27	162.27	162.58	163.16		
	RIGHT BANK	162.85	162.05	162.16	162.64	162.64	162.35	162.35	162.00	162.00	162.60	161.95	161.95	163.50	163.43		
ACCUMULATED DISTANCE		5,140.30	5,325.10	5,452.10	5,694.10	5,764.00	6,081.90	6,188.60	6,213.90	6,374.90	6,394.50	7,003.70	7,036.70	7,031.70	7,232.50	7,503.10	
DISTANCE		394.90	184.80	127.00	242.00	69.90	317.90	106.70	25.30	160.60	20.00	347.60	23.00	15.00	190.80	270.60	
STATION NO.		14	15		16		17	18		19		20		21		22	23

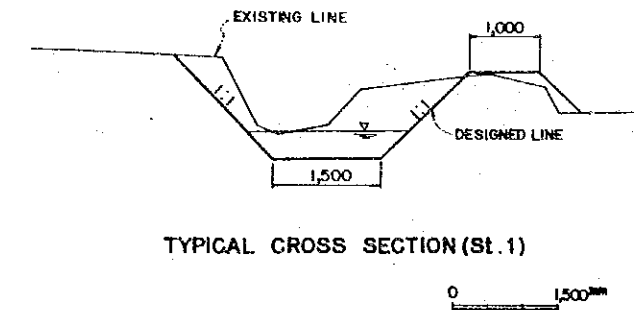
LAO PEOPLE'S DEMOCRATIC REPUBLIC			
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT			
TITLE OF DRAWING			
NONG SAM KHA RIVER			
PROFILE (3/4)			
Date	Drawing No.	5003	
JAPAN INTERNATIONAL COOPERATION AGENCY			



PROPOSED ELEVATION	WATER SURFACE	161.88 161.89 161.91	161.98	161.99 162.00 162.00	162.26
	BASE	161.13 161.13	161.22	161.23 161.25	161.40
GROUND SURFACE ELEVATION	BASE	161.70	161.60	161.40	161.40
	LEFT BANK	163.16	162.95	163.67	
	RIGHT BANK	163.43	163.15	163.84	163.67
ACCUMULATED DISTANCE	7503.10 7506.10	7681.10	7709.90 7754.90	8090.50	
DISTANCE	27.60 3.00	175.00	28.80 45.00	335.60	
STATION NO.	23	24		EP	



PROPOSED ELEVATION	WATER SURFACE	162.35	162.56	162.78 162.79 162.81 162.82	163.07	163.29
	BASE	161.88	162.09	162.31 162.33 162.35	162.58	162.80
GROUND SURFACE ELEVATION	BASE	161.88	162.45	162.38 162.33	163.28	163.42
	LEFT BANK	162.93	162.73	162.83 162.70	163.85	163.95
	RIGHT BANK	162.75	162.95	162.80 162.81	163.65	162.95
ACCUMULATED DISTANCE	0.00	203.70	412.90 421.50	666.10	870.20	
DISTANCE	0.00	202.70	210.20 1.00 14.00	238.60	204.10	
STATION NO.	BP	1	23	4	EP	

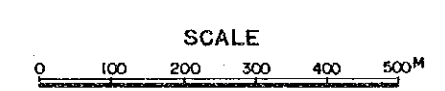


TYPICAL CROSS SECTION (St.1)

LEGEND

- ▽— PROPOSED WATER SURFACE
- CANAL BASE
- EXISTING LEFT BANK OF CANAL
- RIGHT
- CANAL BASE

NOTE : 1) Q IS DESIGNED DISCHARGE (m³/SEC)
2) V IS AVERAGE VELOCITY OF DURING EACH STATION.



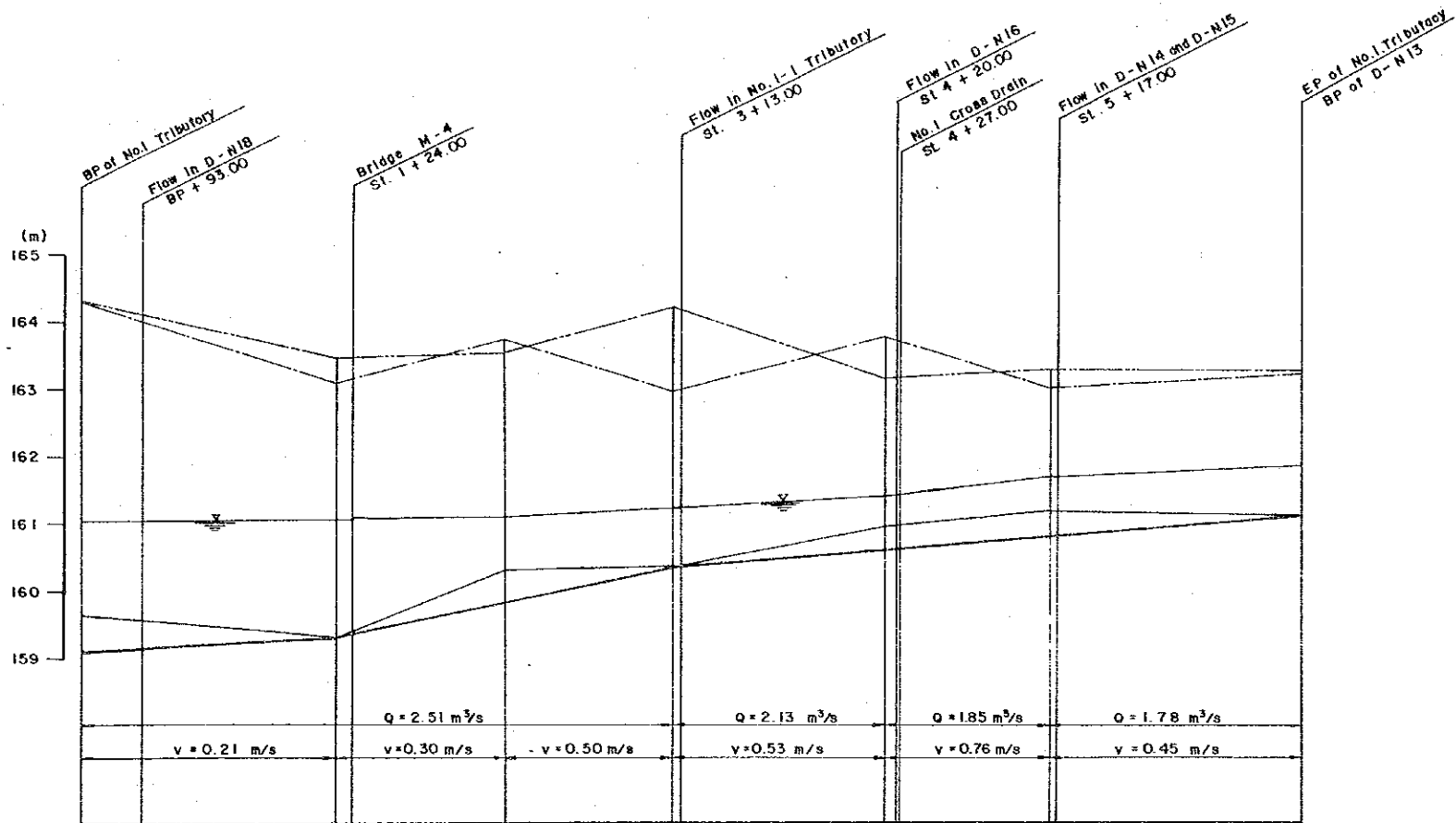
LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

TITLE OF DRAWING
NON SAM KHA RIVER
PROFILE(4/4) AND D-N12 PROFILE

Date _____ Drawing No. _____ 5004

JAPAN INTERNATIONAL COOPERATION AGENCY

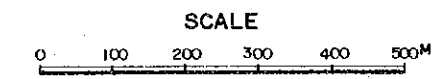


TYPICAL CROSS SECTION (St.1)

LEGEND

- PROPOSED WATER SURFACE
- CANAL BASE
- EXISTING LEFT BANK OF CANAL
- EXISTING RIGHT BANK OF CANAL
- CANAL BASE

NOTE : 1) Q IS DESIGNED DISCHARGE (m³/SEC)
 2) V IS AVERAGE VELOCITY OF DURING EACH STATION



PROPOSED ELEVATION	WATER SURFACE	161.04	161.04	161.06	161.06	161.10	161.22	161.23	161.40	161.42	161.68	161.86
	BASE	159.10	159.15	159.31	159.36	159.87	160.36	160.38	160.80	160.82	160.80	161.10
GROUND SURFACE ELEVATION	BASE	159.66		159.31		160.32	160.36		160.95		161.17	161.10
	LEFT BANK	164.28		163.08		163.72	162.97		163.76		163.02	163.23
	RIGHT BANK	164.30		163.45		163.54	164.20		163.15		163.28	163.25
ACCUMULATED DISTANCE	0.00	93.00	379.50	403.50	632.50	883.30	884.60	1023.30	1023.30	1023.30	1452.00	1832.60
DISTANCE	0.00	93.00	286.50	24.00	229.00	250.80	13.00	206.00	27.00	229.70	17.00	363.60
STATION NO.	BP		1		2		3		4		5	EP

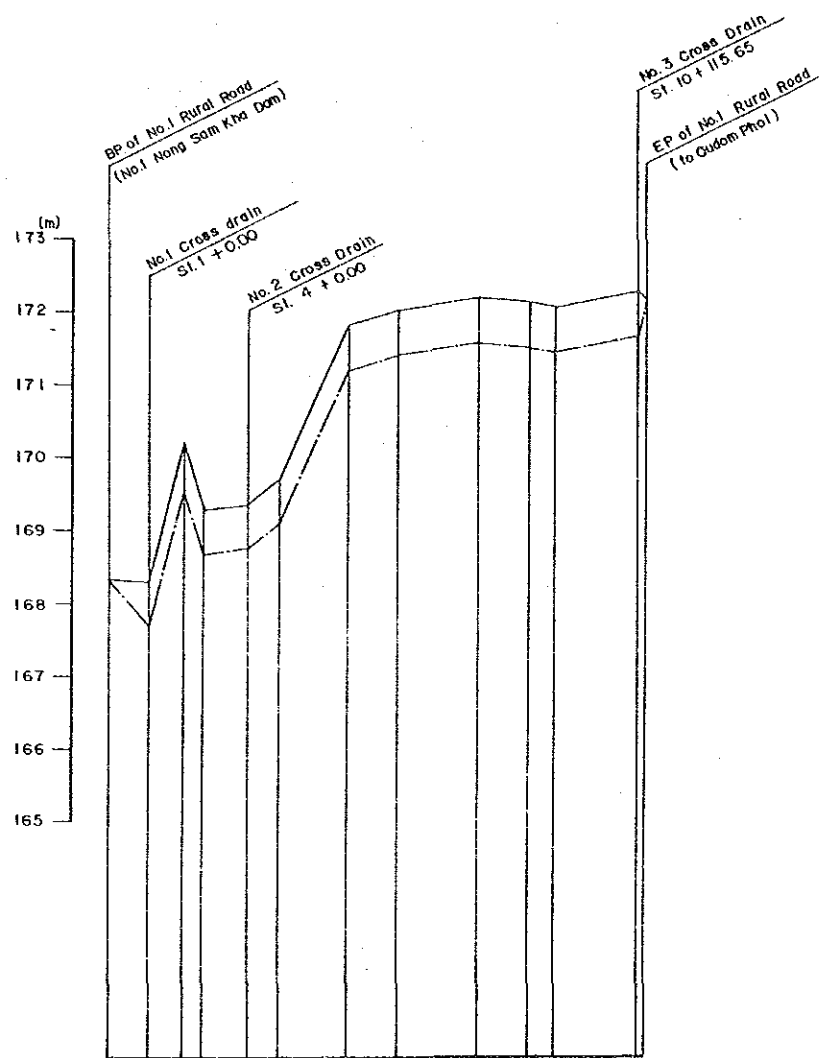
LAO PEOPLE'S DEMOCRATIC REPUBLIC

THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT

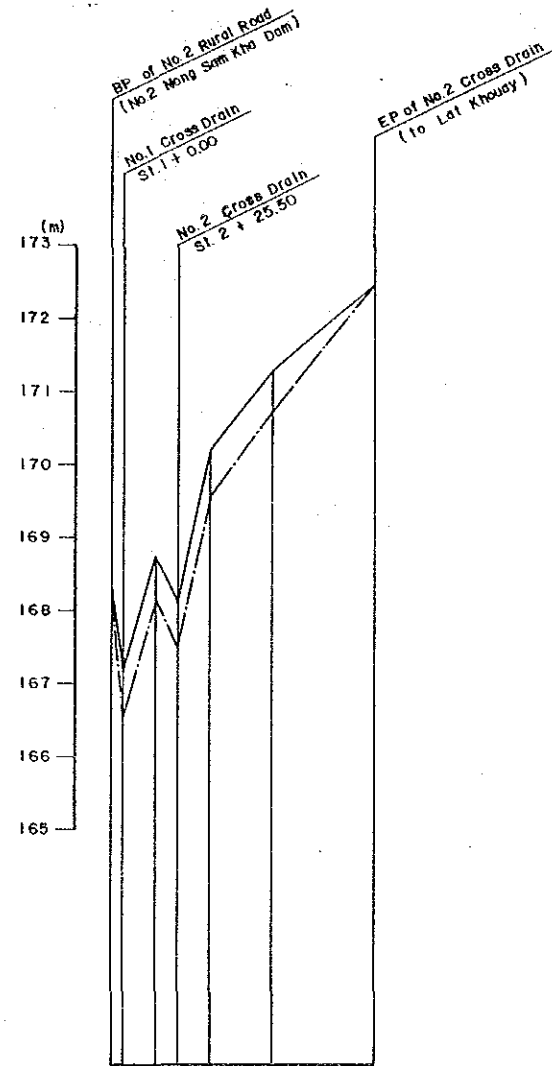
TITLE OF DRAWING
NO.1 TRIBUTARY PROFILE

Date: _____ Drawing No. 5005

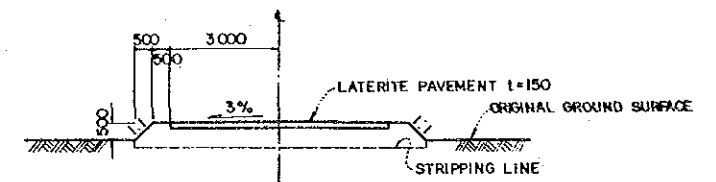
JAPAN INTERNATIONAL COOPERATION AGENCY



PROPOSED ELEVATION	168.33	168.28	170.18	169.27	169.35	169.69	171.77	171.98	172.16	172.10	172.03	172.25	172.14
GROUND SURFACE ELEVATION	168.33	167.67	169.57	168.66	168.74	169.08	171.16	171.37	171.55	171.49	171.42	171.64	172.14
ACCUMULATED DISTANCE	0.00	54.05	102.45	131.05	191.70	232.95	324.50	394.05	505.15	575.30	610.25	785.90	1000
DISTANCE	0.00	54.05	48.40	28.60	60.65	41.25	91.55	69.55	111.10	70.15	34.95	15.65	1000
STATION	BP	1	2	3	4	5	6	7	8	9	10	EP	
CURVE		1A 2°44'		1A 39°26'		1A 29°32'		1A 23°41'		1A 50°47'		1A 6°-11'	



PROPOSED ELEVATION	168.29	167.12	168.73	168.08	170.18	171.26	172.45
GROUND SURFACE ELEVATION	168.29	166.57	168.14	167.47	169.57	170.65	172.45
ACCUMULATED DISTANCE	0.00	14.20	63.10	88.60	130.40	219.20	356.70
DISTANCE	0.00	14.20	48.19	25.50	41.80	88.60	157.50
STATION	BP	2	3	4	EP		
CURVE		1A 40°28'		1A 22°39'		1A 38°-51'	



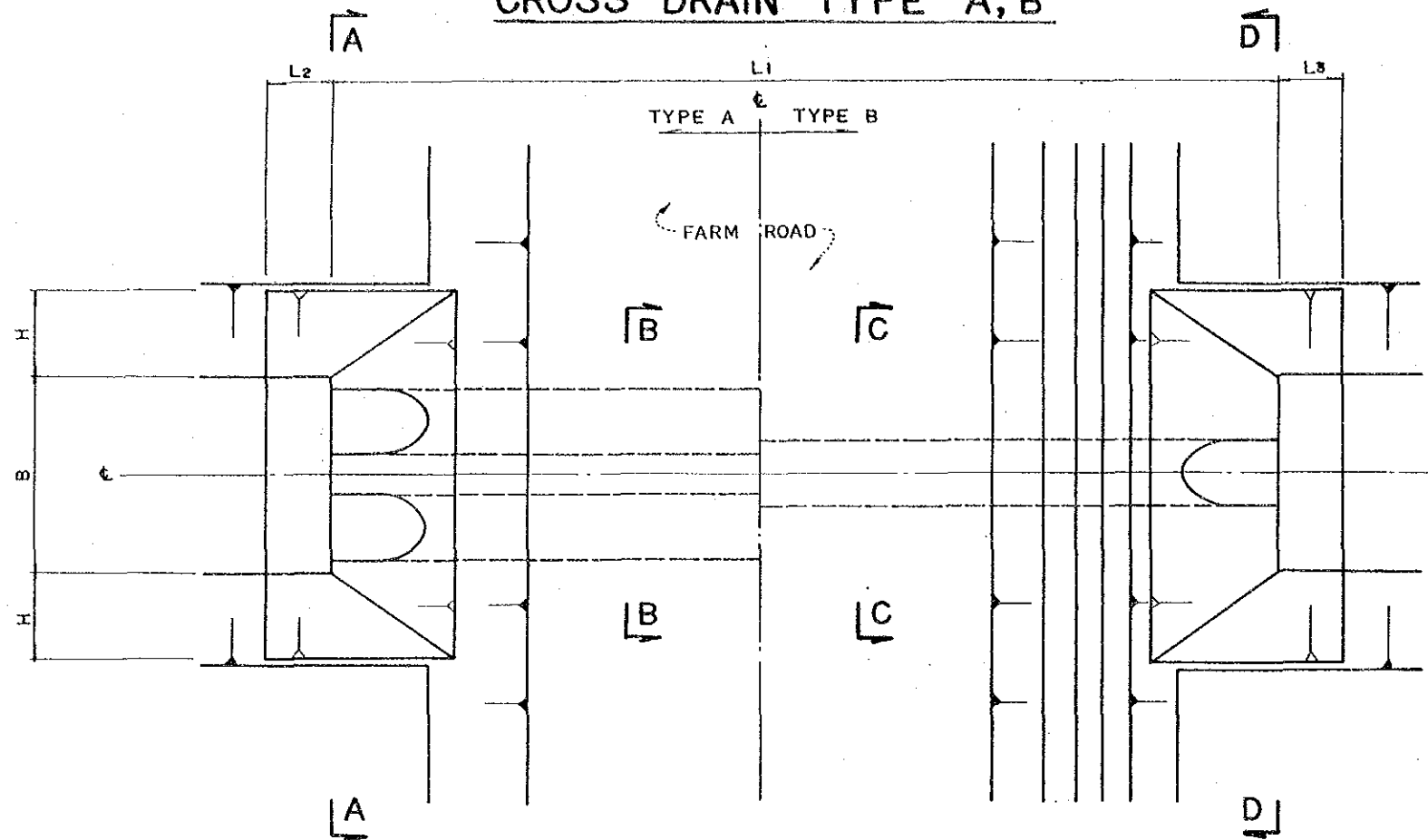
TYPICAL CROSS SECTION OF RURAL ROAD

0 3000mm

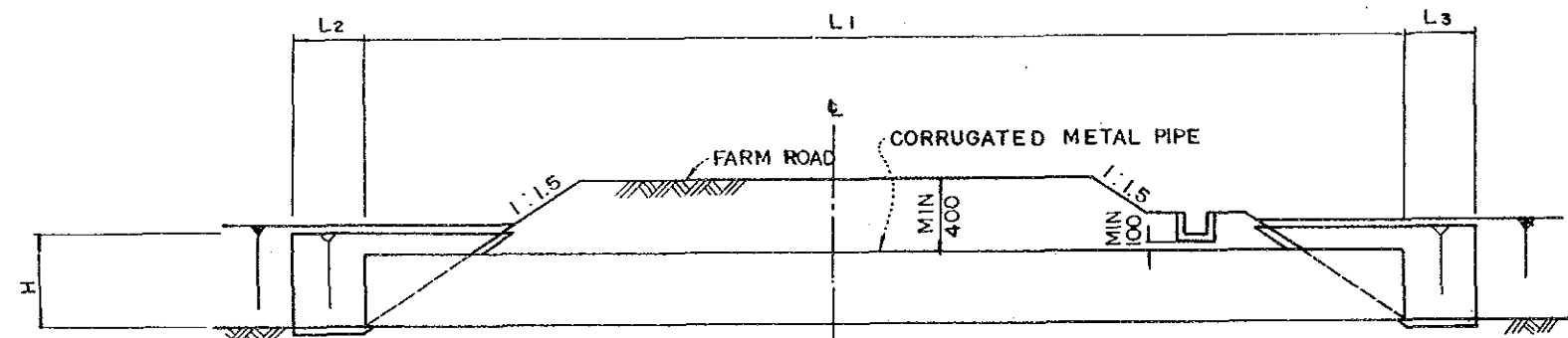


LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
NO.1 AND NO.2 RURAL ROAD		
PROFILE		
Date	Drawing No.	6001
JAPAN INTERNATIONAL COOPERATION AGENCY		

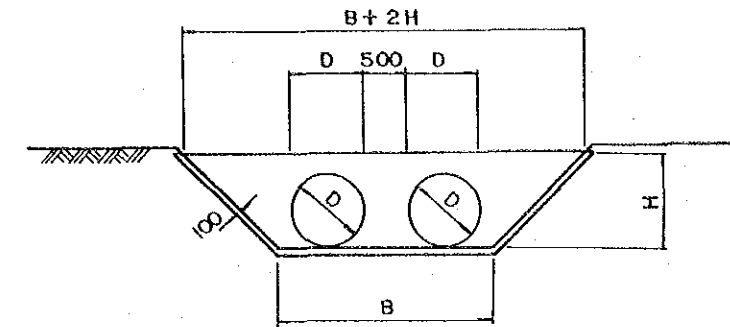
CROSS DRAIN TYPE A, B



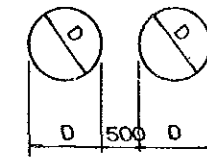
PLAN



PROFILE



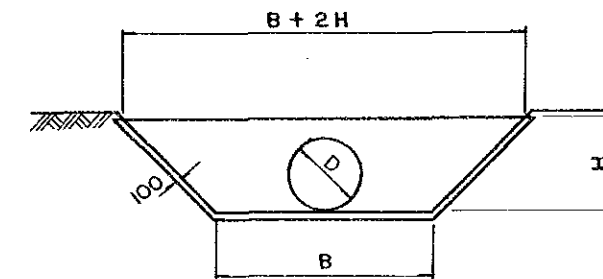
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D



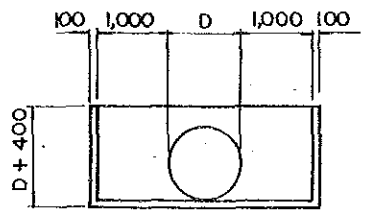
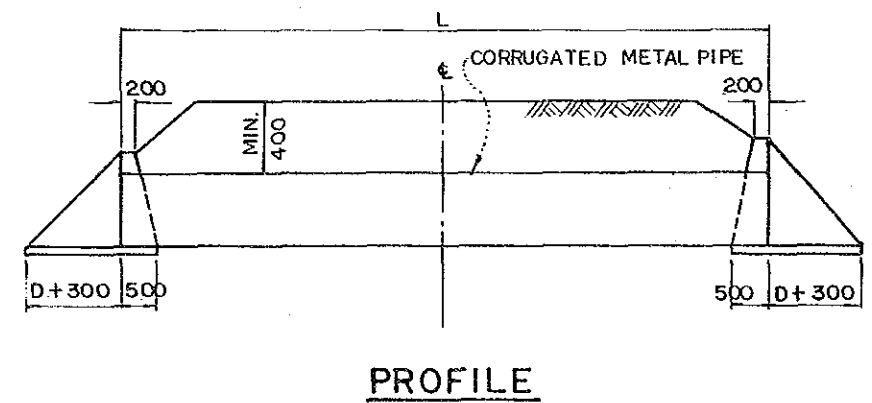
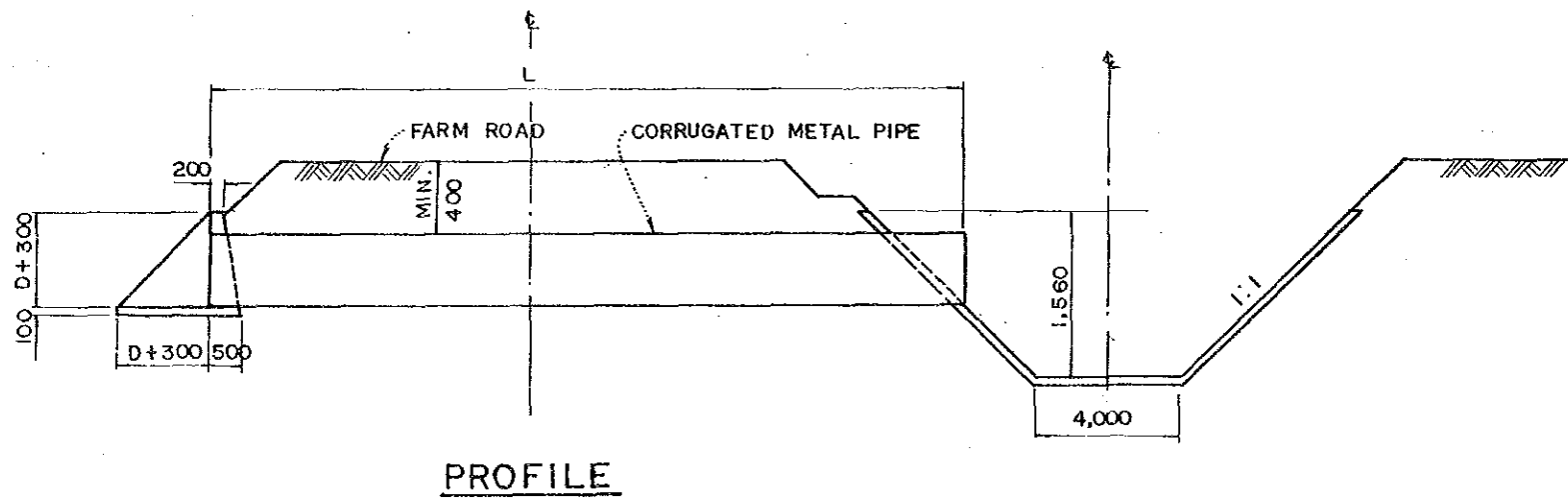
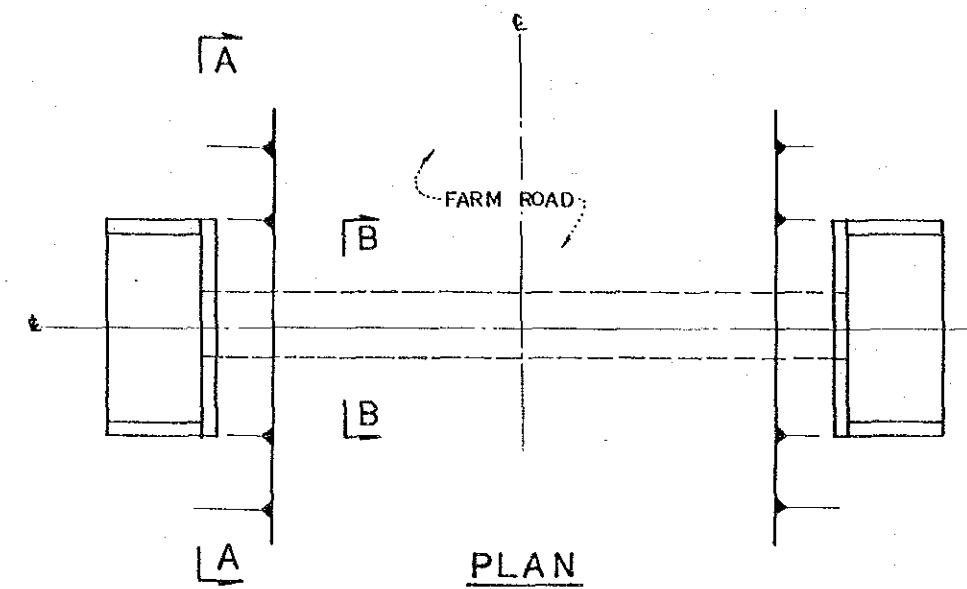
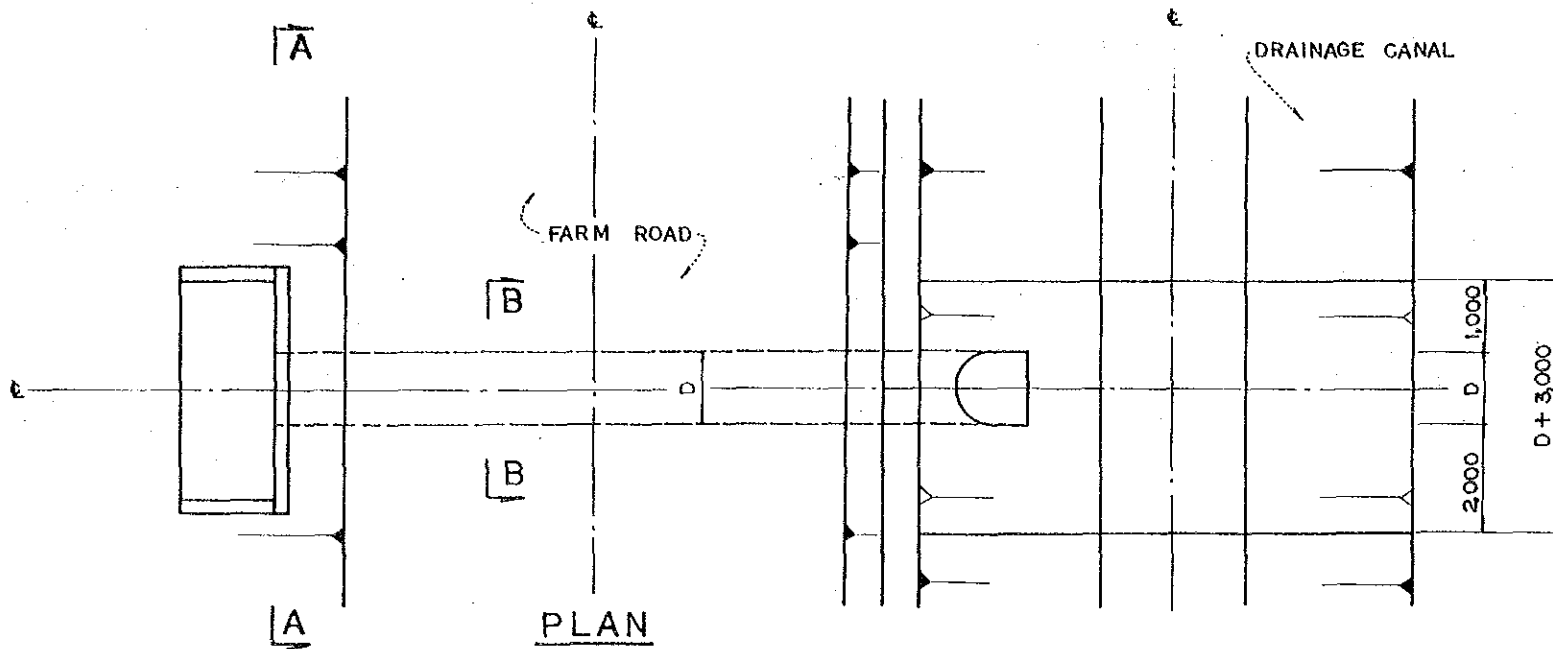
DIMENSION TABLE

LOCATION	TYPE	D	L1	L2	L3	B	H	LOCATION	TYPE	D	L1	L2	L3	B	H
NO.1 TRIBUTARY	A	1,000x2	13,000	3,000	3,000	4,000	1,100	D - N8 NO.2	A	600x2	13,000	3,000	3,000	4,000	700
NO.1-1 TRIBUTARY	A	1,000	13,000	3,000	3,000	3,000	1,100	D - C1 NO.1	A	1,000x2	13,000	3,000	5,000	4,000	1,200
NO.2 TRIBUTARY	A	1,000	13,000	3,000	3,000	5,000	1,640	D - C1 NO.2	A	1,000x2	13,000	3,000	5,000	4,000	1,200
D - N13 NO.1	A	1,000x2	13,000	3,000	3,000	4,000	1,100	I - N5 NO.1	B	600	7,000	3,000	3,000	1,000	700
D - N13 NO.2	A	800	13,000	3,000	2,000	4,000	900	I - N5 NO.2	B	600	7,000	3,000	3,000	1,000	700
D - N12 NO.1	B	800	15,000	3,000	3,000	1,500	900	I - N6 NO.1	B	600	7,000	3,000	3,000	1,500	700
D - N12 NO.2	A	800	13,000	3,000	3,000	1,500	900	I - N10-3 NO.1	B	800	15,000	3,000	3,000	1,500	900
D - N9 NO.1	A	800	13,000	3,000	3,000	1,500	900	I - N10-3 NO.2	B	800	15,000	3,000	3,000	1,500	900
D - N8 NO.1	A	1,000	13,000	3,000	3,000	4,000	1,300								

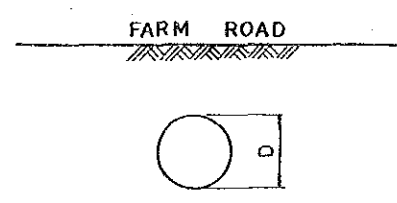
LAC PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
CROSS DRAIN (1/2)		
Date	Drawing No.	7001
JAPAN INTERNATIONAL COOPERATION AGENCY		

CROSS DRAIN TYPE C

CROSS DRAIN TYPE D



SECTION A-A



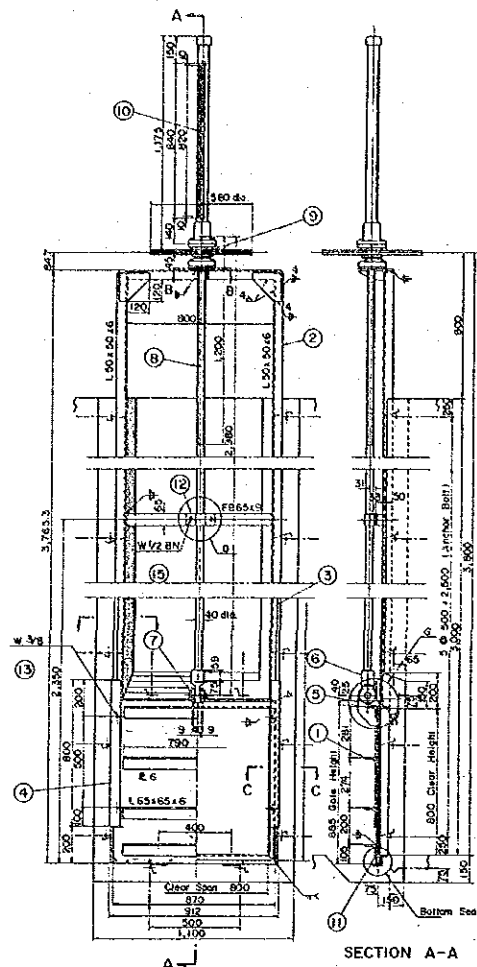
SECTION B-B

DIMENSION TABLE

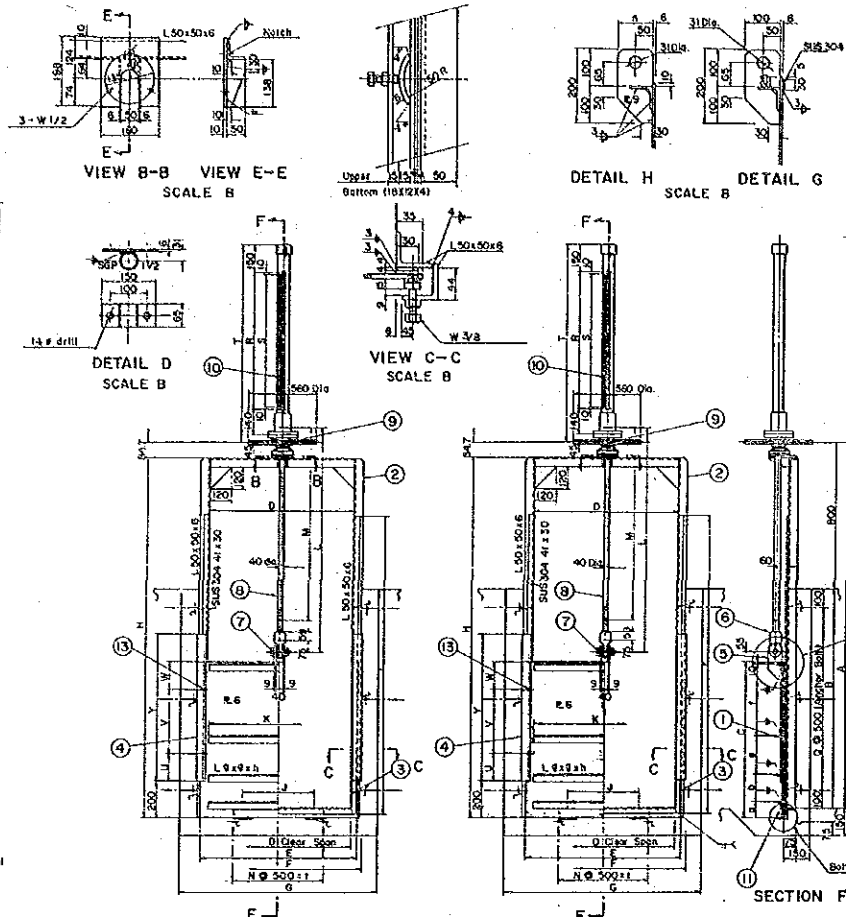
LOCATION	TYPE	D	L
NO.2 MAIN FARM ROAD NO.1	C	900	11,000
" NO.2	C	800	11,000
NO.3 MAIN FARM ROAD NO.1	D	600	9,000
" NO.2	D	600	9,000
" NO.3	D	600	9,000
" NO.4	D	600	9,000
" NO.5	D	600	9,000
NO.1 RURAL ROAD NO.1	D	600	9,000
" NO.2	D	600	9,000
" NO.3	D	600	9,000
NO.2 RURA ROAD NO.1	D	600	9,000
" NO.2	D	600	9,000

SCALE 0 1,000 2,000 3,000^{mm}

LAO PEOPLE'S DEMOCRATIC REPUBLIC
 THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT
 TITLE OF DRAWING
CROSS DRAIN (2/2)
 Date _____ Drawing No. 7002
 JAPAN INTERNATIONAL COOPERATION AGENCY



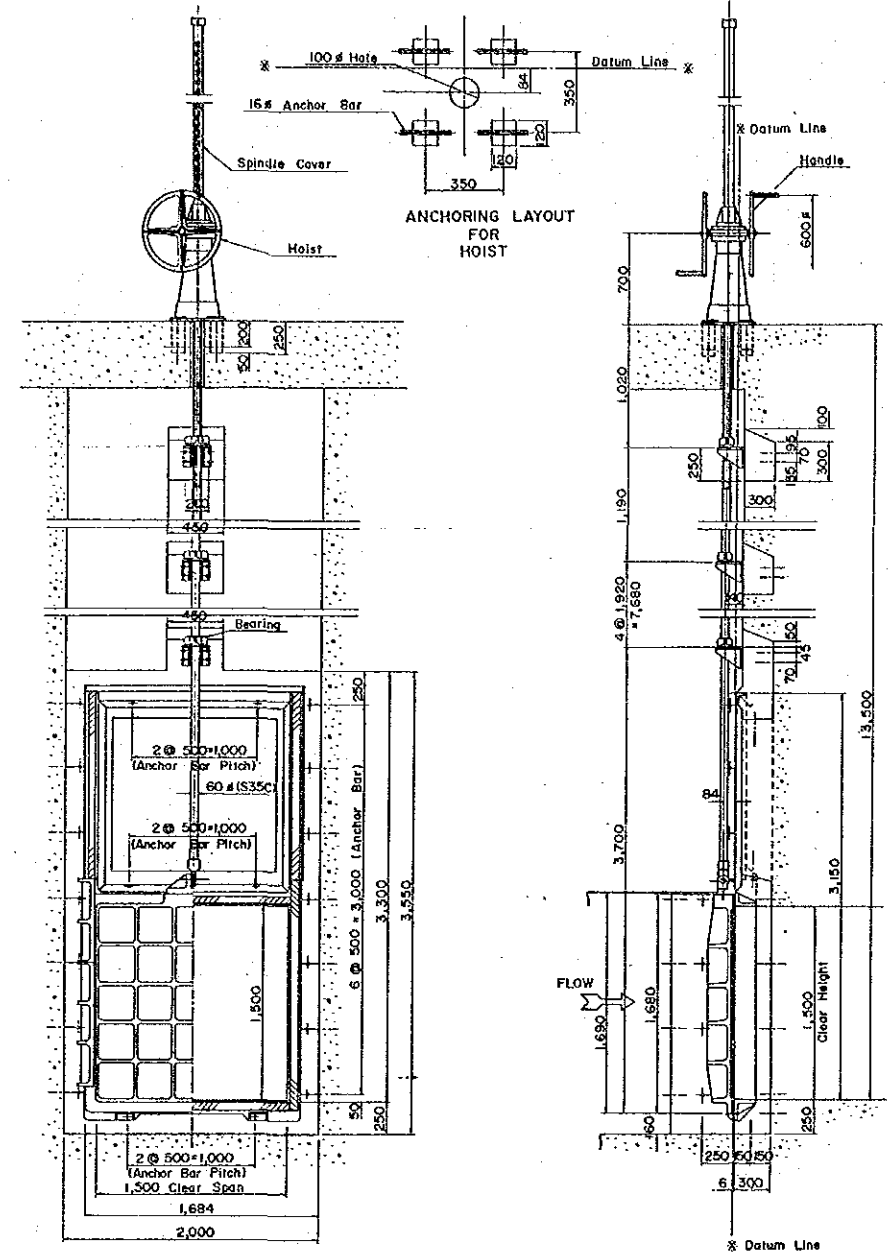
SECTION A-A
REGULATING GATE SCALE A



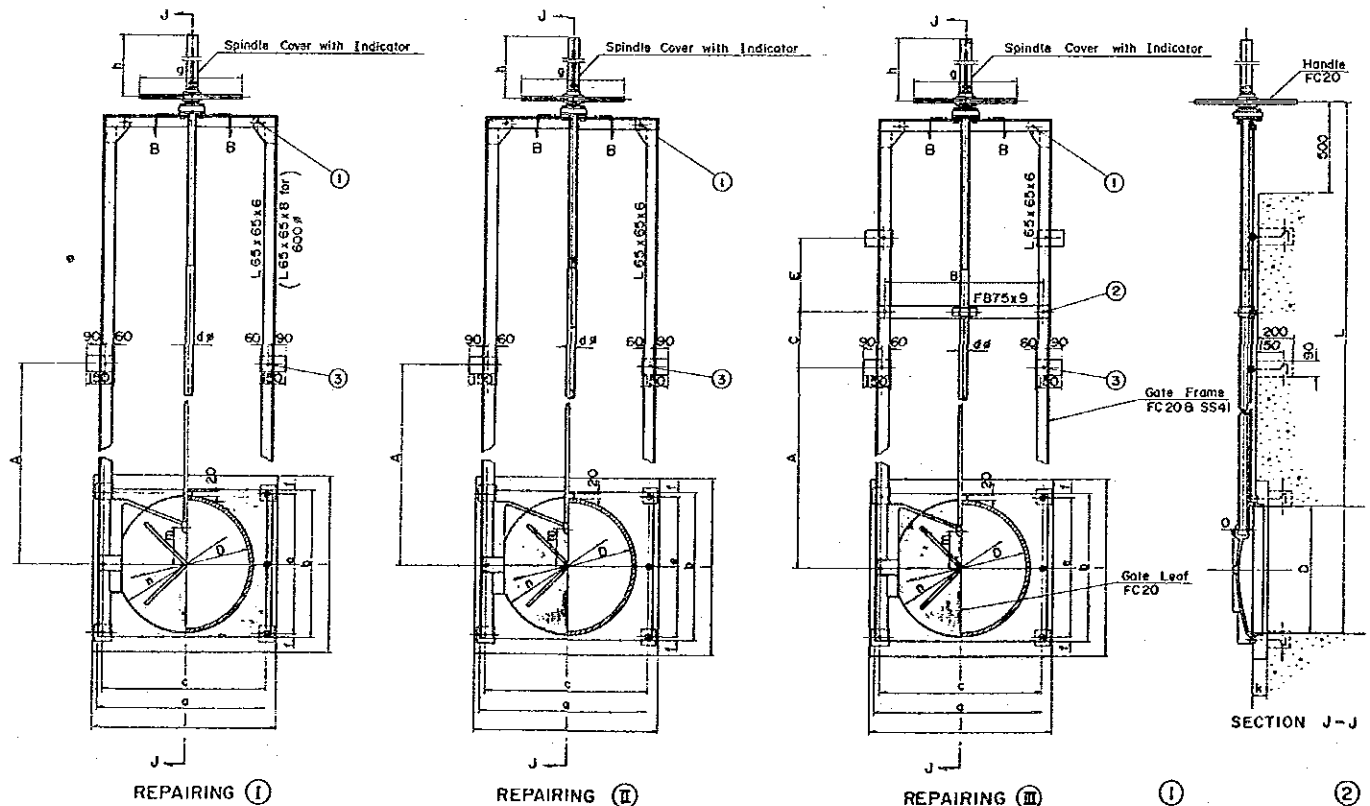
VIEW B-B VIEW E-E SCALE B
DETAIL H SCALE B
DETAIL G SCALE B
DETAIL D SCALE B
VIEW C-C SCALE B

CHECK GATE						
	N-1	N-2	N-3	N-4	N-5	N-6, L-1
A	2500	2500	2500	2000	2000	2000
B	1700	1700	1700	1200	1200	1200
C	1350	1245	1145	1000	700	700
D	1300	1200	1100	800	700	700
E	1370	1260	1160	860	760	760
F	1412	1312	1212	912	812	812
G	1600	1500	1400	1100	1000	1000
H	2465.3	2465.3	2465.3	2165.3	1965.3	1965.3
J	650	600	500	400	350	350
K	1290	1190	1090	790	690	690
L	1200	1300	1400	1200	1400	1400
M	1040	1140	1240	1040	1140	1140
N	2	2	1	1	1	1
O	3	3	3	2	2	2
P	1500	1500	1500	1000	1000	1000
R	920	1020	1120	1020	1020	1020
S	900	1000	1100	900	1000	1000
T	1252	1352	1452	1252	1352	1352
V	900	800	700	500	400	400
W	300	200	200	200	200	200
Y	1300	1200	1100	800	700	700
a	105	105	90	80	80	80
b	173	156	154	146	104	104
e	253	239	228	210	156	156
f	809	735	663	399	395	395
g	65	65	50	40	40	40
h	6	6	6	5	5	5
n	100	100	100	100	100	100
r	2300	2300	2280	2080	1480	1480
s	1000	1000	500	500	500	500
u	100	100	100	100	100	100
Design Head	1.06 m	1.00 m	0.95 m	1.00 m	0.65 m	0.65 m
Repair	(I)	(I)	(I)	(II)	(II)	(II)

PART NO.	MATERIAL	DESCRIPTION
1	SUS304	Gate leaf
2	SS41	Gate frame
3	SUS304	Seal seal
4	SS41	Guide
5	SS41	Bracket
6	FC20	Spindle socket
7	S20C-D	Spindle pin
8	SS41	Spindle
9	Assembly	Hoist
10	Assembly	Spindle cover
11	SS41	Stopper
12	SP	Stem guide
13	S20C-D	Hexagon bolt & nut
14	S20C-D	Hexagon bolt & nut
15	S20C-D	Hexagon bolt & nut



INTAKE GATE AND HOIST



TURNOUT GATE SCALE A

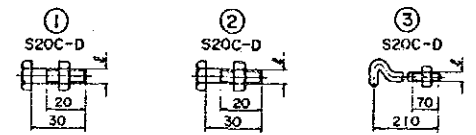
TURNOUT GATE AND NO.1 NONG SAM KHA DAM INTAKE GATE				
TURNOUT	D	L	A	REPAIRING
N-1	200#	1300	550	I
N-2	200#	1300	550	I
N-3	200#	1300	550	I
N-4	200#	1300	550	II
N-5	200#	1300	550	II
N-6(L)	400#	1150	300	I
N-6(L)	200#	1300	550	I
N-7(I)	300#	1250	450	II
N-7(II)	300#	1250	450	I
N-8	300#	1250	450	II
N-9	300#	1250	450	II
N-10(C)	600#	1600	650	II
N-10(L)	300#	1350	550	II
N-10(R)	300#	1350	550	II
N-11	300#	1250	450	II
N-12	300#	900	-	II
N-13	400#	1150	300	Spindle cover
LATERAL	300#	1250	450	I
L-2(C)	400#	1150	300	I
L-2(L)	400#	1150	300	I
L-2(R)	300#	1250	450	I
NONG SAN KHA INTAKE	400#	4000	1650	II
NONG SAN KHA NEW	400#	4000	1650	I

D	200#	300#	400#	600#
a	345	445	545	730
b	275	370	460	700
c	270	370	460	680
d	30#	30#	30#	40#
e	235	320	450	630
f	20	25	25	25
g	380#	380#	380#	500#
h	400	500	600	800
i	445	540	650	870
j	415	510	615	800
k	60	60	67	70
l	W 1/2	W 1/2	W 1/2	W 5/8
m	60	85	108	170
n	220#	320#	420#	630#
o	30#	30#	30#	35#
p	-	-	*430	-
q	-	-	*750	-
r	-	-	*750	-
Design Head	0.89m	0.64m	3.00m	2.15m

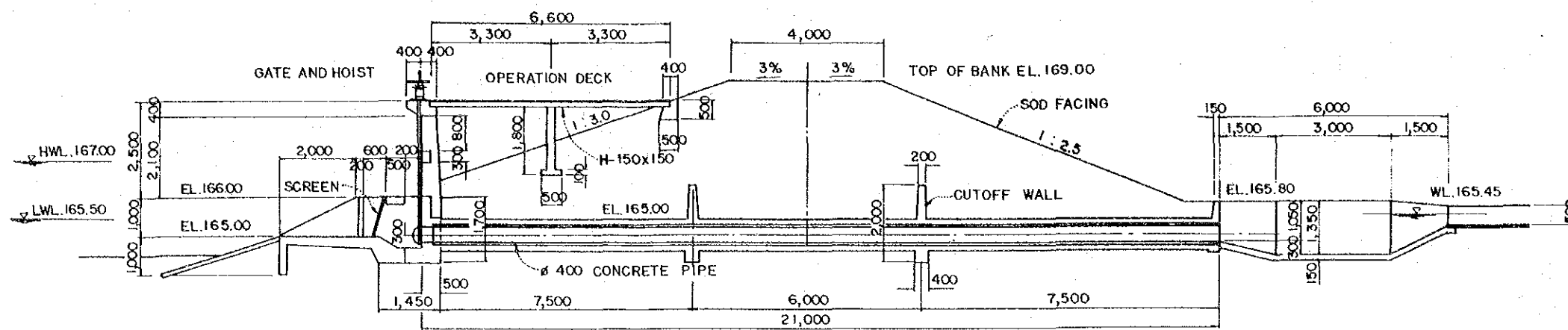
NOTE: * shows the value for Nong San Kha Dam Intake gate.

LEGEND
 : Parts to be replaced.

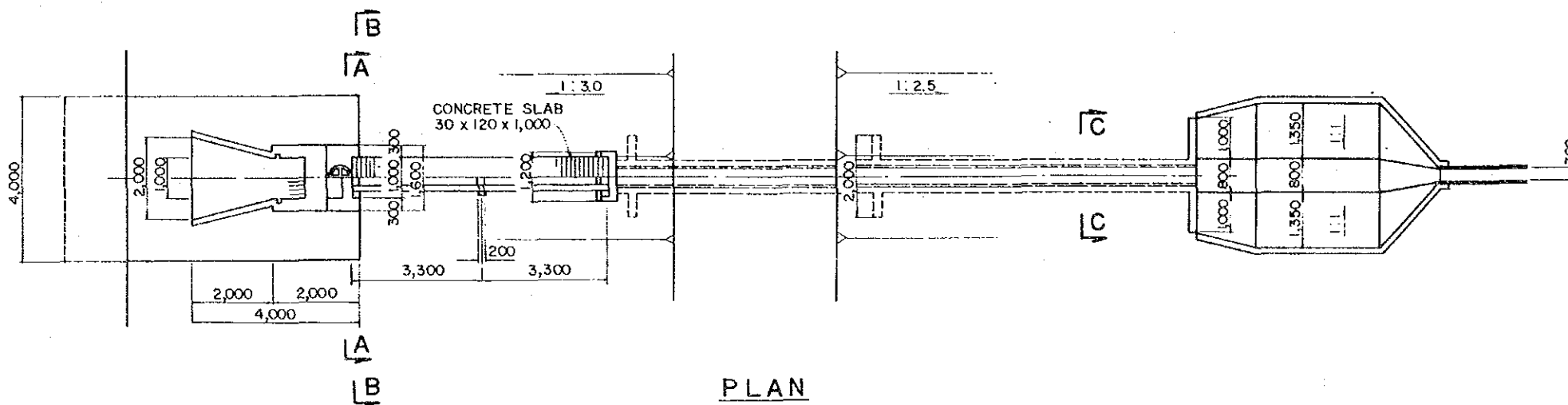
SCALE A 0 0.2 1.0 2.0m
 SCALE B 0 0.1 0.5 1.0m



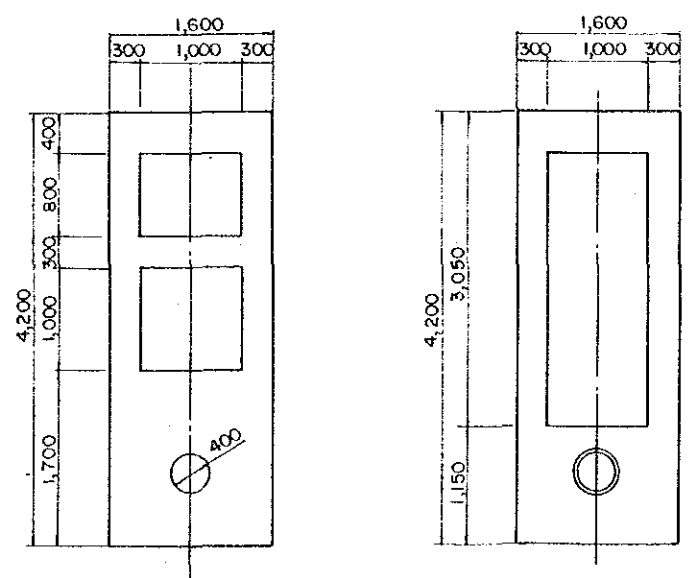
LAO PEOPLE'S DEMOCRATIC REPUBLIC
 THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT
 TITLE OF DRAWING
GATES AND HOISTS
 Date _____ Drawing No. 7003
 JAPAN INTERNATIONAL COOPERATION AGENCY



PROFILE

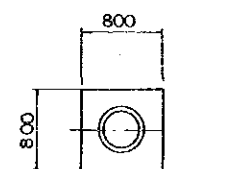


PLAN



SECTION A-A

SECTION B-B



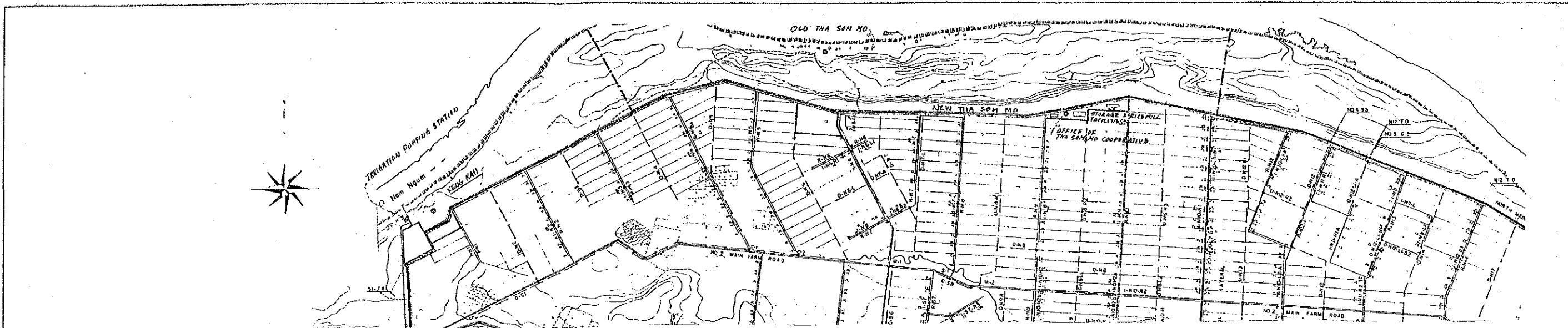
SECTION C-C

SCALE 0 500 1,000 1,500mm

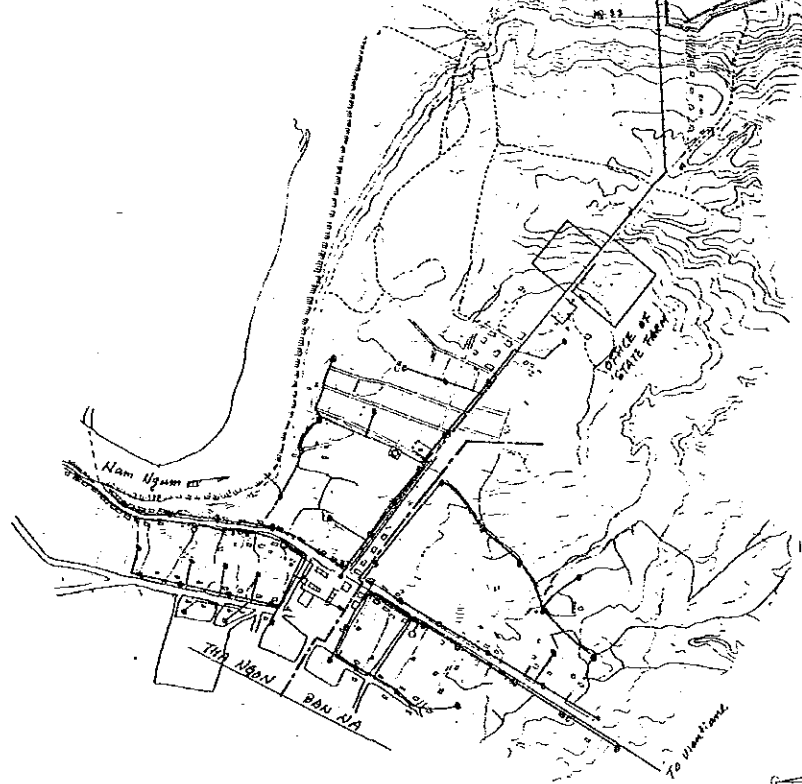
NOTE: THE APPROACH FROM THE MAINTENANCE ROAD LOCATED ALONG THE I-NS SUB-LATERAL TO THE TOP OF BANK SHOULD BE PROVIDED WITH THE LONGITUDINAL SLOPE OF 1:10.

SCALE 0 2,500 5,000mm

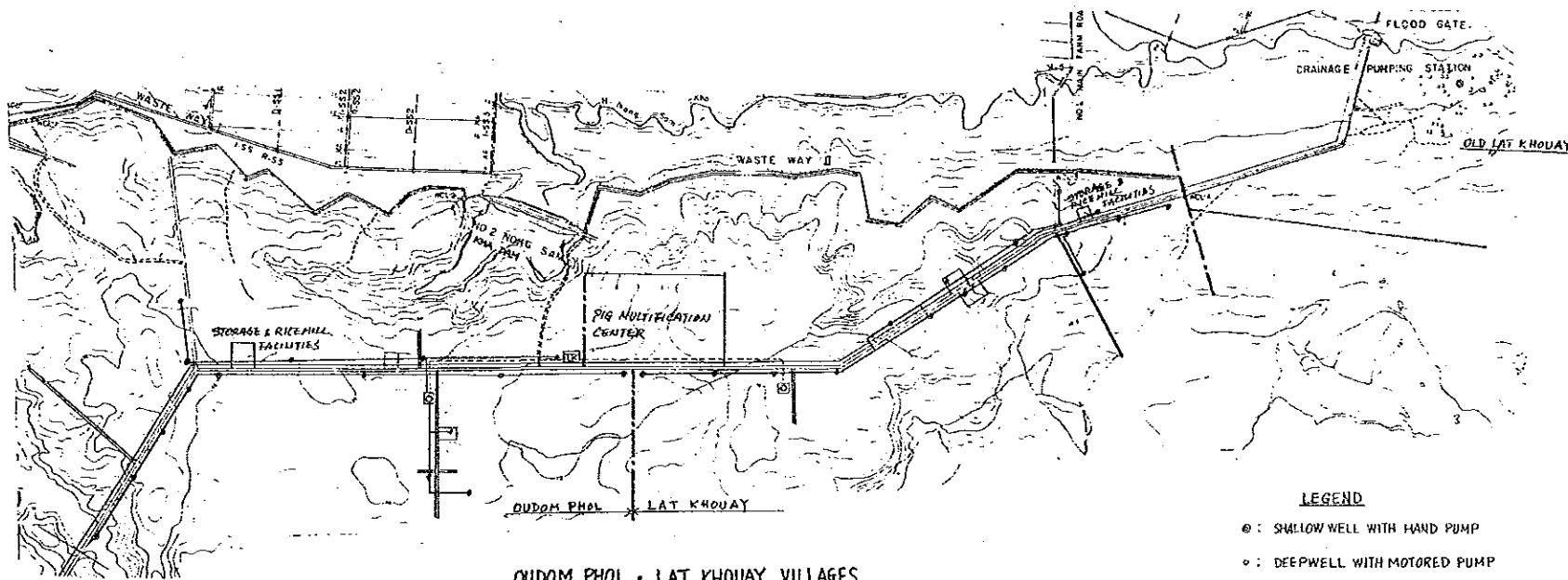
LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
INTAKE FOR I-NS SUB-LATERAL ON NO.1 NONG SAM KHA DAM		
Date	Drawing No.	8001
JAPAN INTERNATIONAL COOPERATION AGENCY		



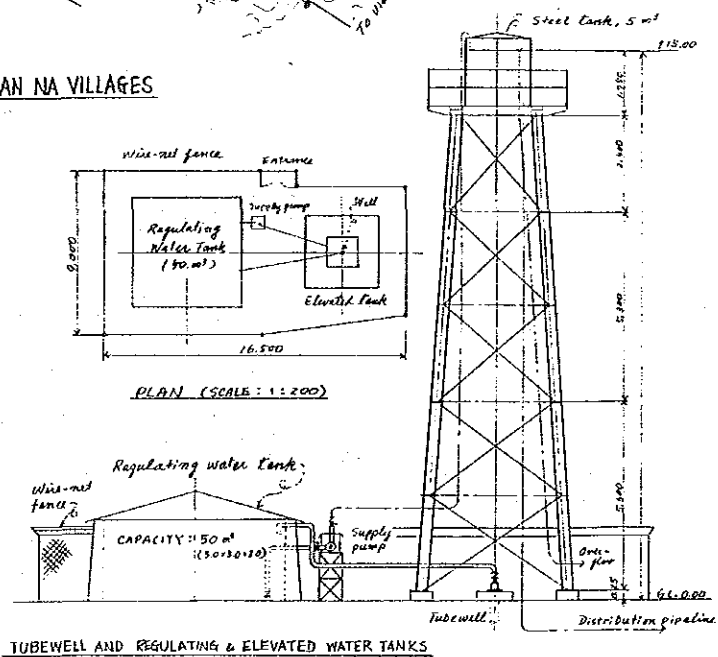
KENG KHAI & THA SOM MO VILLAGES



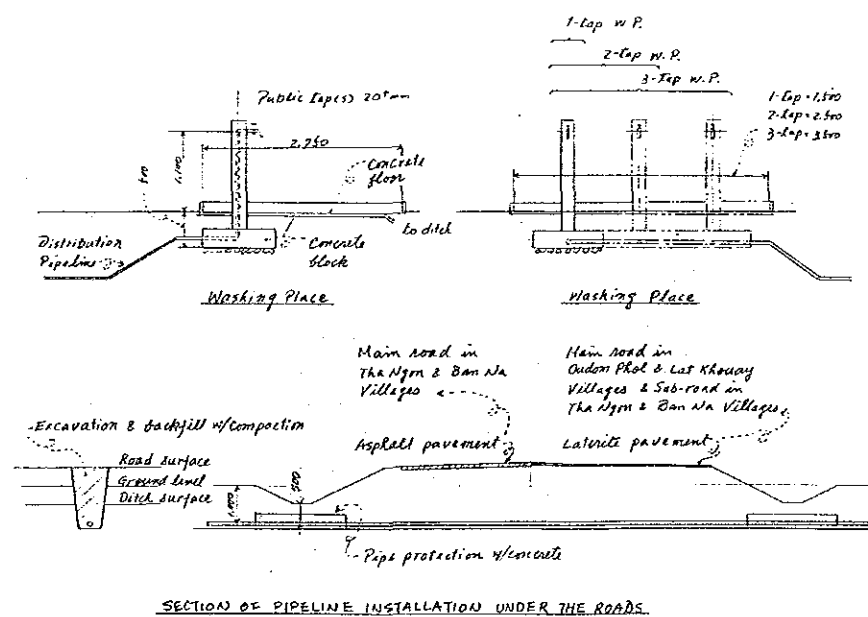
THA NGAN & BAN NA VILLAGES



OUDOM PHOL & LAT KHOUAY VILLAGES

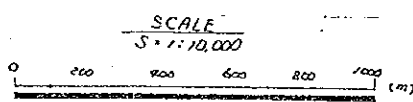


TUBEWELL AND REGULATING & ELEVATED WATER TANKS

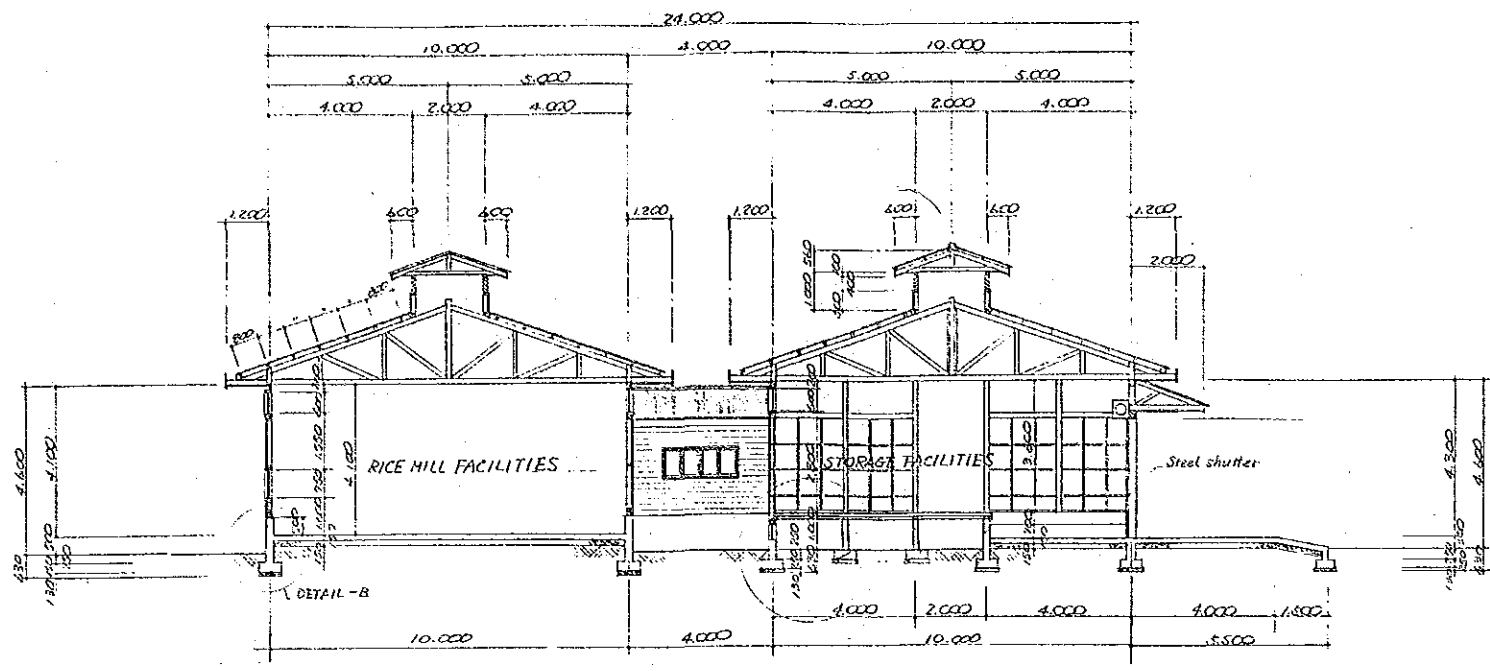


SECTION OF PIPELINE INSTALLATION UNDER THE ROADS.

- LEGEND**
- : SHALLOW WELL WITH HAND PUMP
 - ◐ : DEEPWELL WITH MOTORED PUMP
 - : REGULATING & ELEVATED WATER TANKS
 - ◻ : DEEPWELL & WATER TANKS
 - : WATER PIPELINE
 - ⋯ : WASHING PLACE WITH WATER TAP(S)
 - ⊞ : ELECTRIC TRANSFORMER, 22 KV/380/220V



LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
RURAL WATER SUPPLY SYSTEM		
GENERAL LAYOUT		
Date	Drawing No.	9001
JAPAN INTERNATIONAL COOPERATION AGENCY		

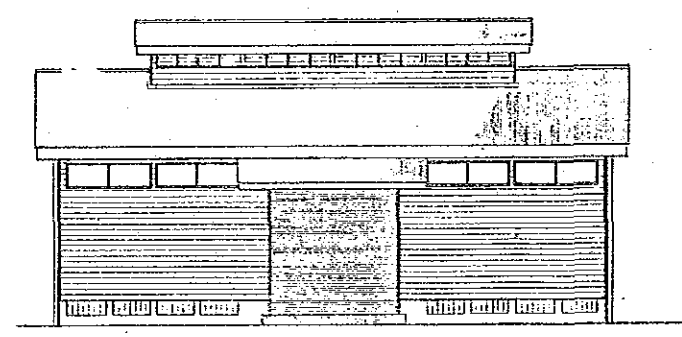


SECTION A-A s. 1/100

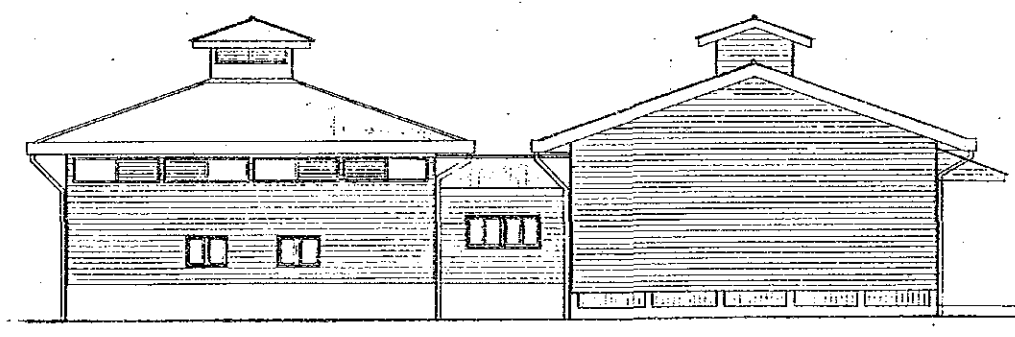
FINISH SCHEDULE.

PLACE	RICE MILL FACILITIES	STORAGE FACILITIES
ROOF	Corrugate asbestos cement sheet	Do
ROOF DRAIN	Galvanized steel sheet O.P finish	Do
DOWNSPOUT	Do # 100	Do
EAVES	Wood O.P finish	Do
FASCIA BOARD	Asbestos cement sheet	Do
EXTERIOR WALL	Wood O.P finish	Do
SKIRTING	Exposed concrete	Do
INTERIOR WALL	None	Plywood 9.0mm thick
FLOOR	Concrete trowel finish	Wooden floor 30mm thick
DOOR	Steel expansion and contract door O.P finish	
WINDOW	Wooden window and louver	Do.
GLASS	Wired glass 6.8 mm thick	Do.
SHUTTER	Steel shutter O.P finish	Do.

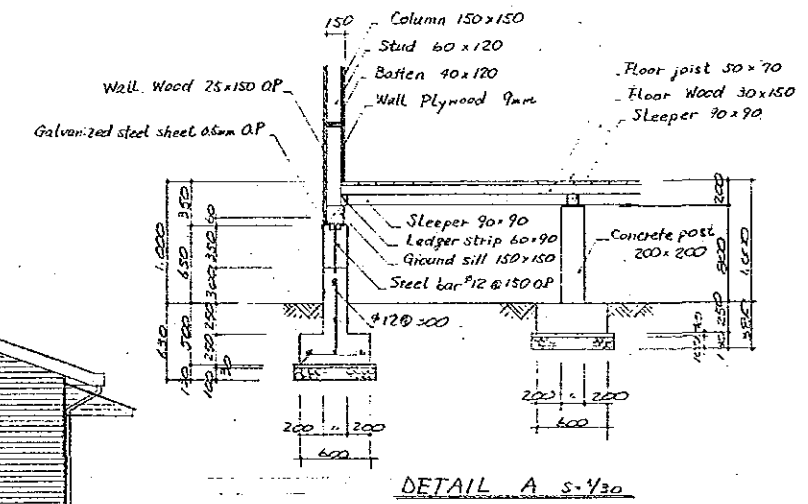
- * Apply antiseptic treatment to ground sill, ledger strip, sleeper, floor joist and foot of column and stud.
- * Steel surface shall be oil painted.



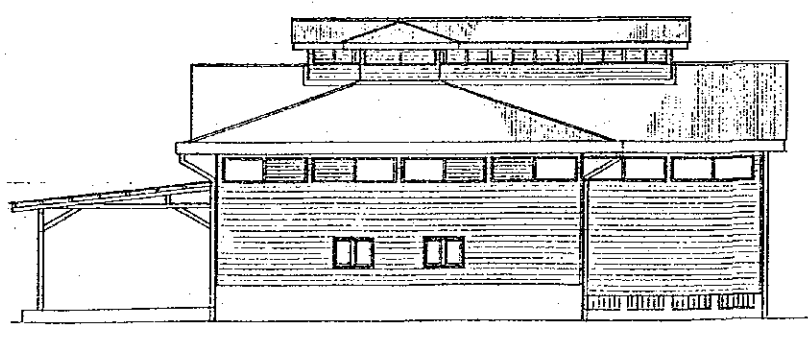
ELEVATION - A



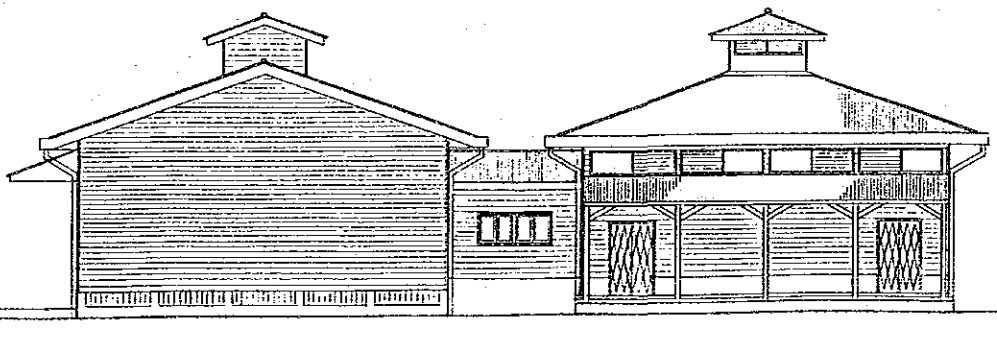
ELEVATION - B



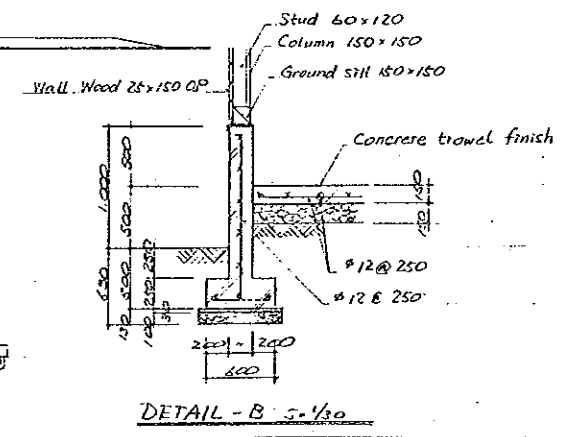
DETAIL A s. 1/30



ELEVATION - C



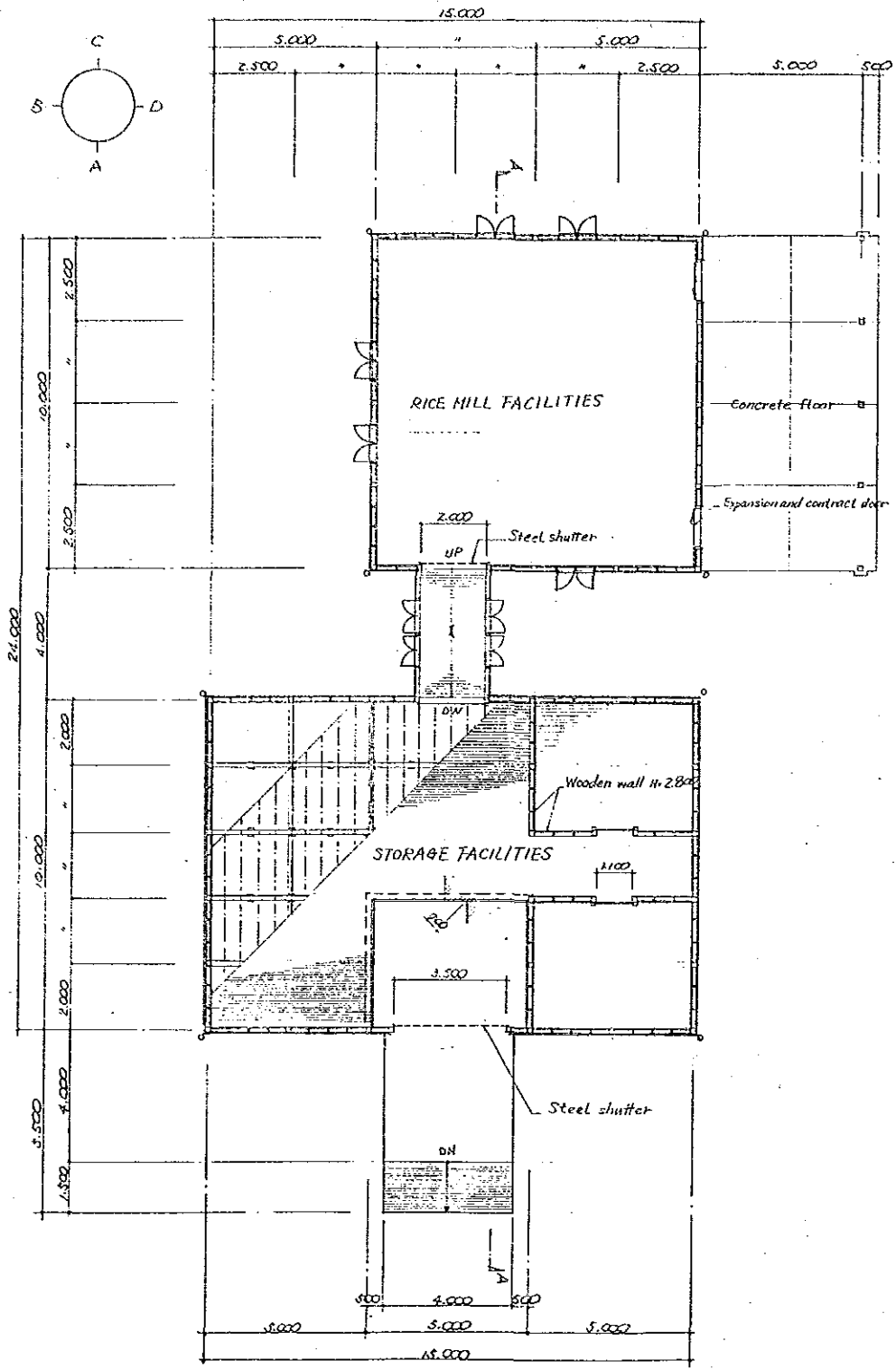
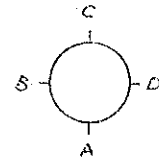
ELEVATION - D



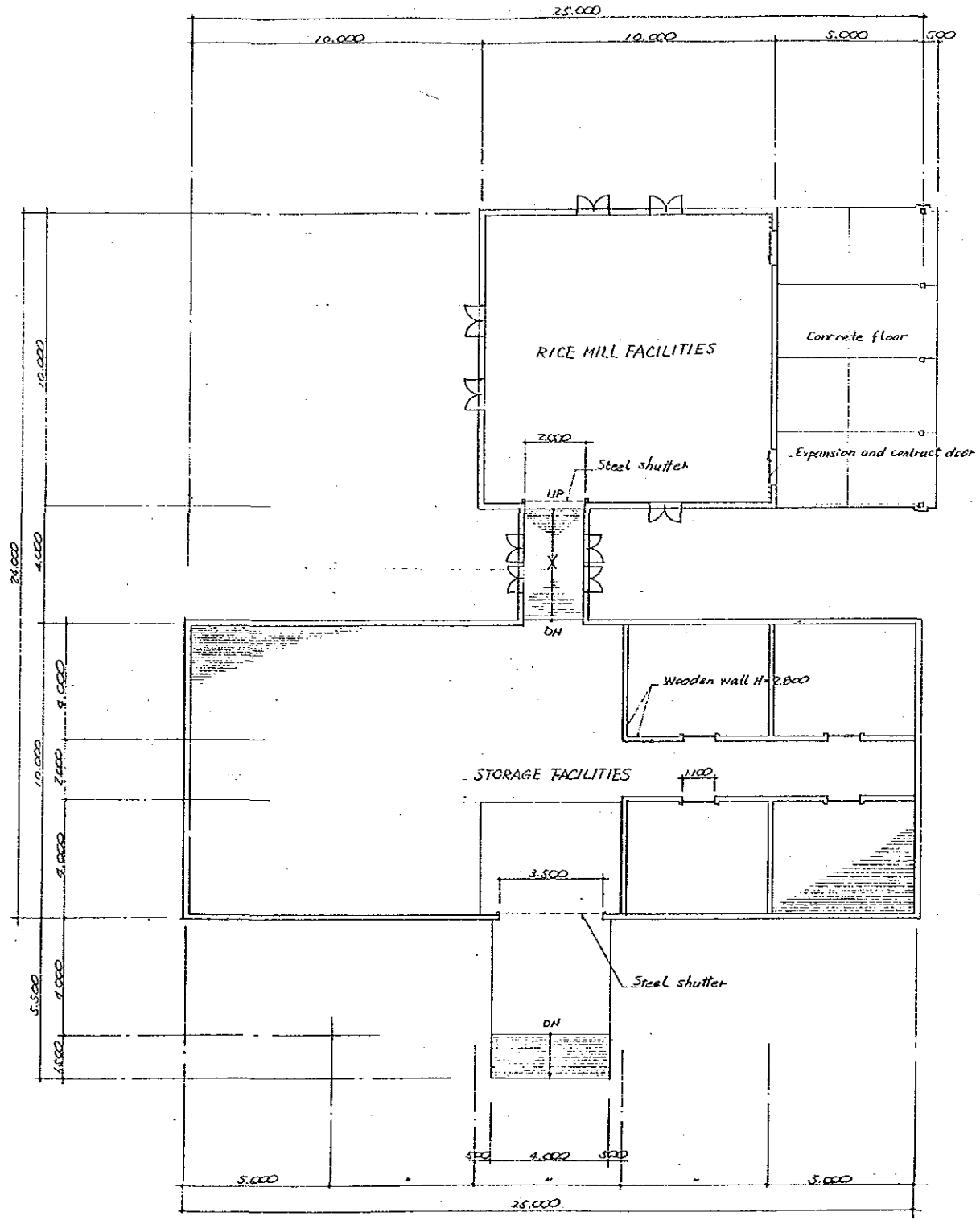
DETAIL - B s. 1/10

ELEVATION s. 1/100

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
RICE MILL AND STORAGE FACILITIES(1/3)		
Date	Drawing No.	10001
JAPAN INTERNATIONAL COOPERATION AGENCY		

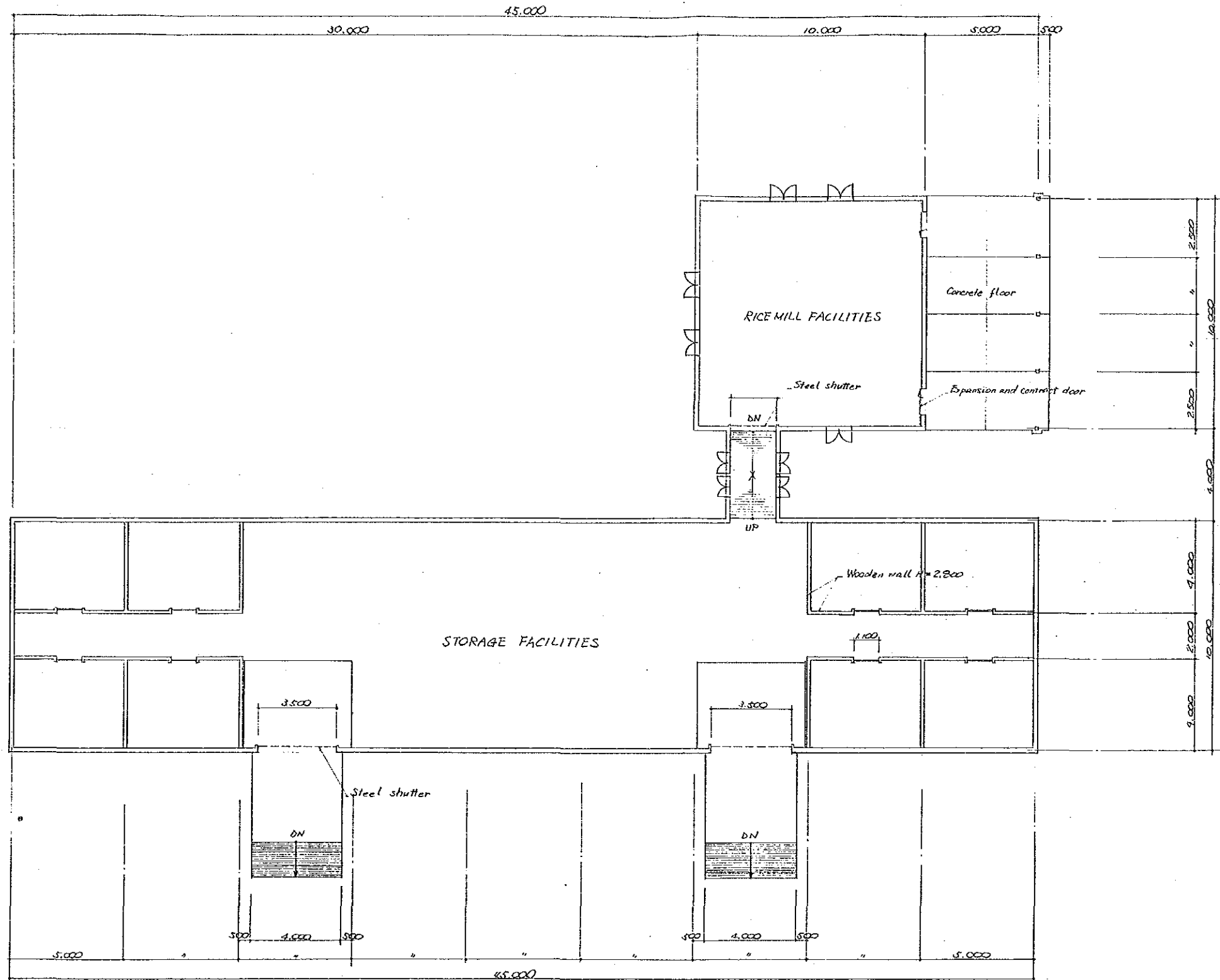


STORAGE FACILITIES AND RICE MILL FACILITIES S=1/100
 TYPE - I
 Storage facilities 150 m²
 Rice mill facilities 100 m²



STORAGE FACILITIES AND RICE MILL FACILITIES S=1/100
 TYPE - II
 Storage facilities 250 m²
 Rice mill facilities 100 m²

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
RICE MILL AND STORAGE FACILITIES (2/3)		
Date	Drawing No.	10002
JAPAN INTERNATIONAL COOPERATION AGENCY		



STORAGE FACILITIES AND RICE MILL FACILITIES S=1/100

TYPE - III

Storage facilities 150 m²
 Rice mill facilities 100 m²

LAO PEOPLE'S DEMOCRATIC REPUBLIC		
THA NGON REHABILITATION AND RURAL DEVELOPMENT PROJECT		
TITLE OF DRAWING		
RICE MILL AND STORAGE FACILITIES (3/3)		
Date:	Drawing No.	10003
JAPAN INTERNATIONAL COOPERATION AGENCY		

JICA