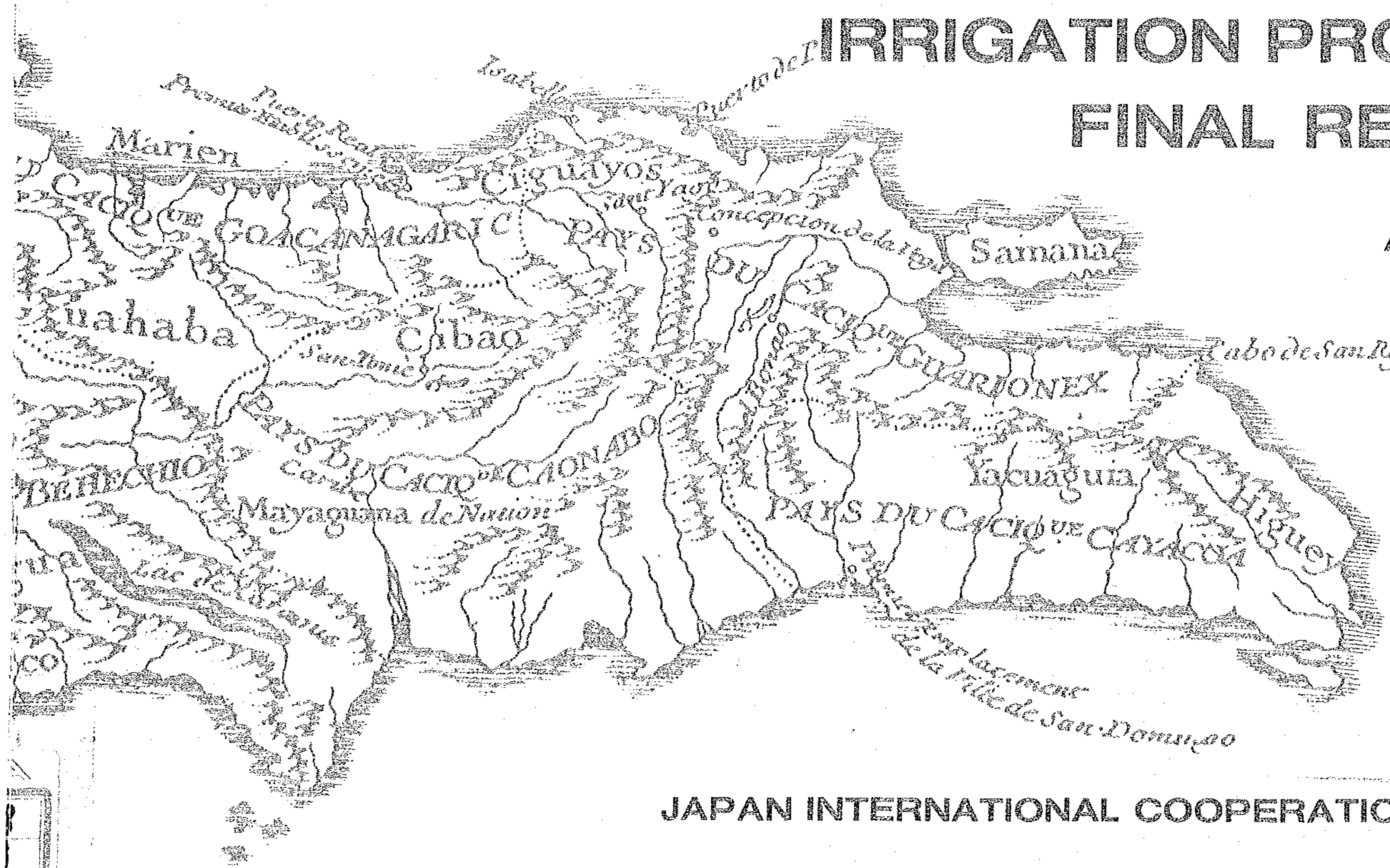
No. 3

THE DOMINICAN REPUBLIC
INSTITUTO NACIONAL DE RECURSOS HIDRAULICOS

FEASIBILITY STUDY ON THE CONSTANZA VALLEY IRRIGATION PROJECT FINAL REPORT

ANNEX

VOLUME Ⅱ



JUNE 1990

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

AFT
90—22

JICA LIBRARY
1084089[0]
2143 0

THE DOMINICAN REPUBLIC
INSTITUTO NACIONAL DE RECURSOS HIDRAULICOS

FEASIBILITY STUDY ON THE CONSTANZA VALLEY IRRIGATION PROJECT FINAL REPORT

ANNEX

VOLUME II

JUNE 1990

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

国際協力事業団
21430

LIST OF DRAWINGS

GENERAL PLAN 1

LONGITUDINAL PROFILE OF HEAD RACE 2

LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 1/3) 3

LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 2/3) 4

LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 3/3) 5

LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL CONSTANZA) 6

BAR SCREEN BACK STREAM DIVISION WORKS (1/2) 7

BAR SCREEN BACK STREAM DIVISION WORKS (1/2) 8

PLAN OF HEAD RACE (BAR SCREEN BACK STREAM DIVISION WORKS~ EXISTING DIVISION WORKS) 9

TYPICAL SECTION OF BOX CULVERT AND OPEN CANAL
(BAR SCREEN BACK STREAM DIVISION WORKS~ EXISTING DIVISION WORKS) 10

REHABILITATION PLAN OF EXITING HEAD WORKS 11

DIVISION WORKS-1 12

DIVISION WORKS-2 13

CONFLUENCE WORKS 14

TYPICAL SECTION OF OPEN CANAL WITH WET MASONRY AND CHUTE 15

AQUEDUCT (1/3) 16

AQUEDUCT (2/3) 17

AQUEDUCT (3/3) 18

ROAD CROSSING BOX CULVERT 19

SIPHON 20

WASH-OUT VALVE PIT (ϕ600) 21

GATE VALVE PIT, WASH-OUT VALVE PIT (ϕ300, ϕ400) 22

AIR VALVE PIT (ϕ600) 23

AIR VALVE PIT (ϕ300, ϕ400) 24

PRESSURE REDUCING VALVE PIT (ϕ400) 25

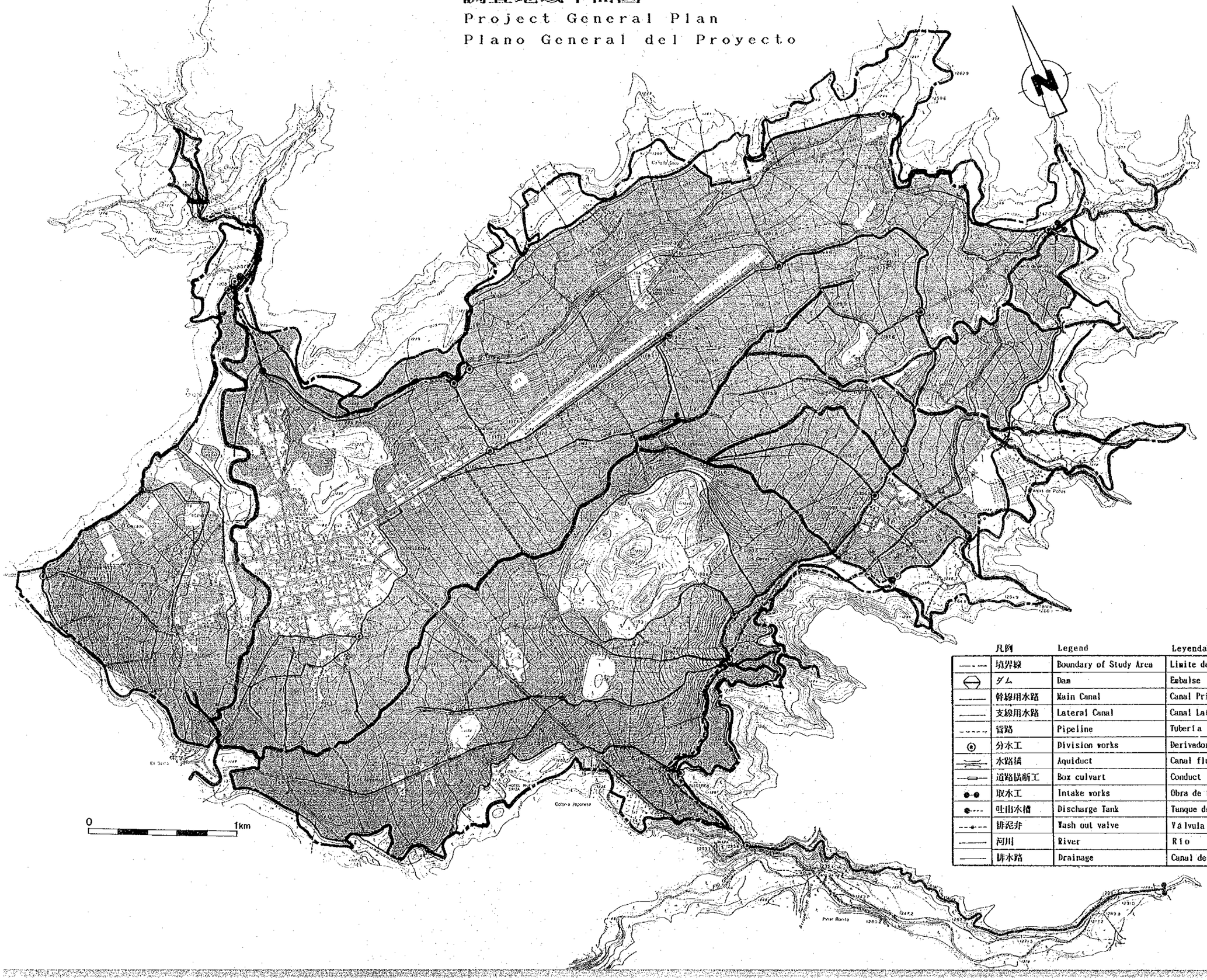
PANTUFLAS DAM (1/2) 26

PANTUFLAS DAM (2/2) 27

INCLINED CONDUIT 28

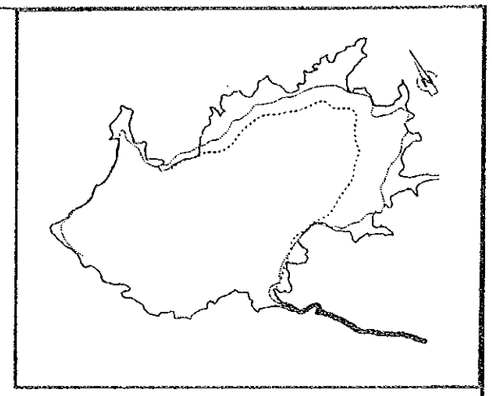
SPILLWAY 29

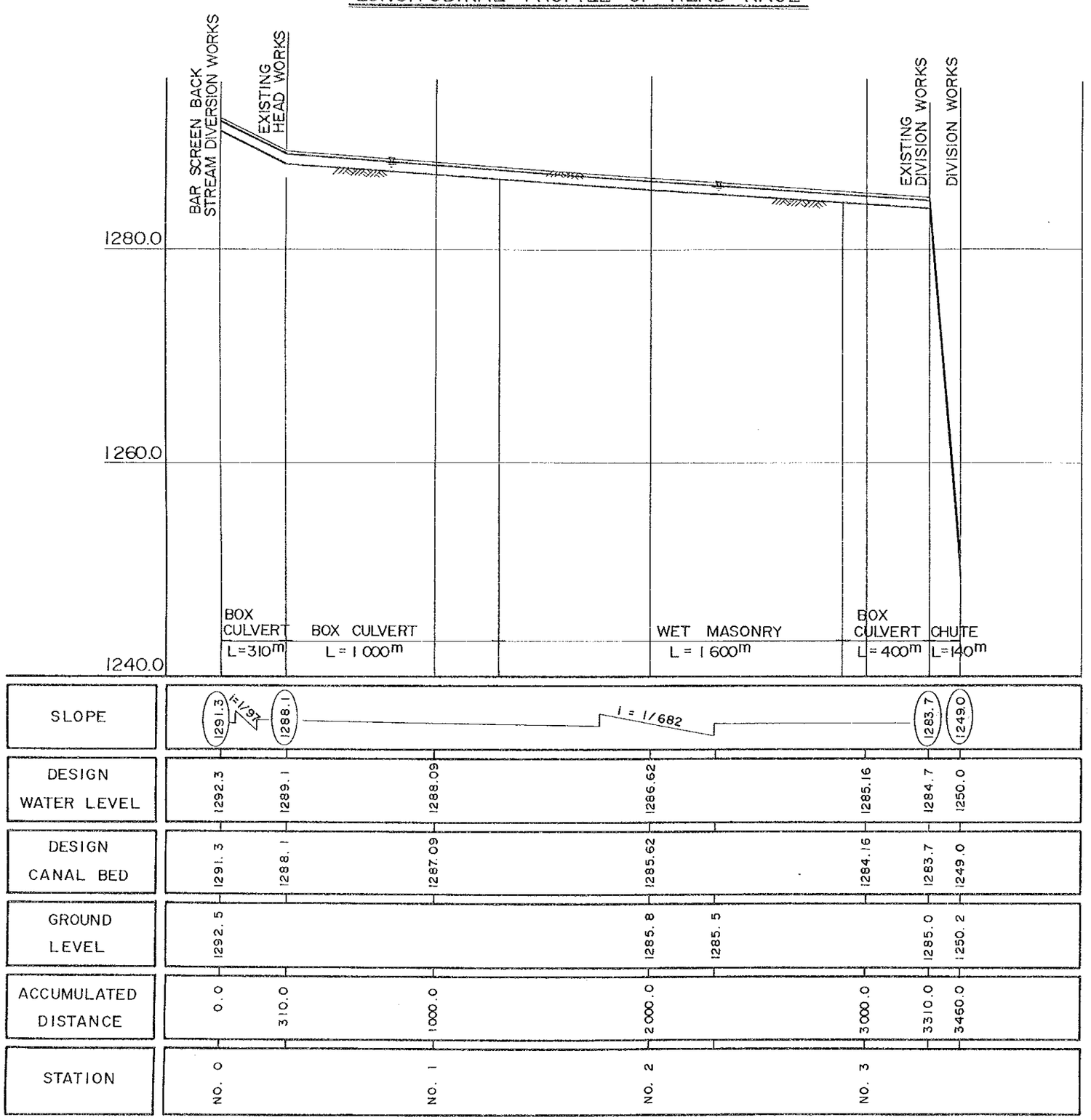
調査地域平面図
Project General Plan
Plano General del Proyecto



凡例	Legend	Leyenda
境界線	Boundary of Study Area	Límite de Área del Estudio
ダム	Dam	Embalse
幹線用水路	Main Canal	Canal Principal
支線用水路	Lateral Canal	Canal Lateral
管路	Pipeline	Tubería
分水工	Division works	Derivadora
水路橋	Aquiduct	Canal flumen
道路横断工	Box culvert	Conducto
取水工	Intake works	Obra de toma
吐出水槽	Discharge Tank	Tanque de descarga
排泥弁	Wash out valve	Válvula de deslave
河川	River	Río
排水路	Drainage	Canal de drenaje

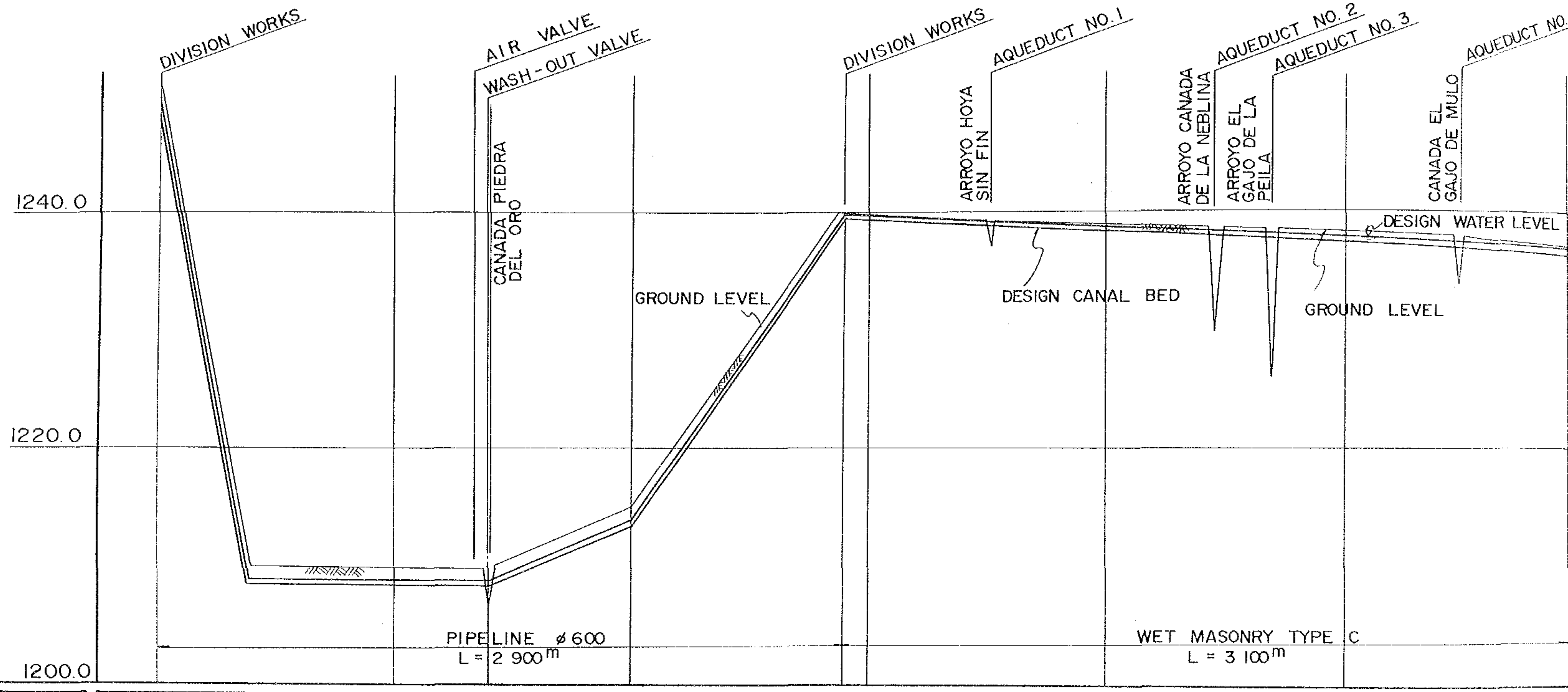
LONGITUDINAL PROFILE OF HEAD RACE

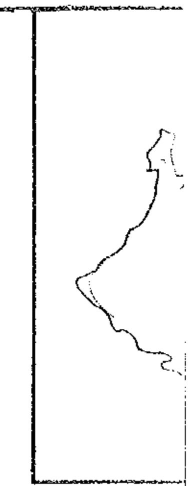




THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
LONGITUDINAL PROFILE OF HEAD RACE
MARCH, 1990 | NO. 2
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

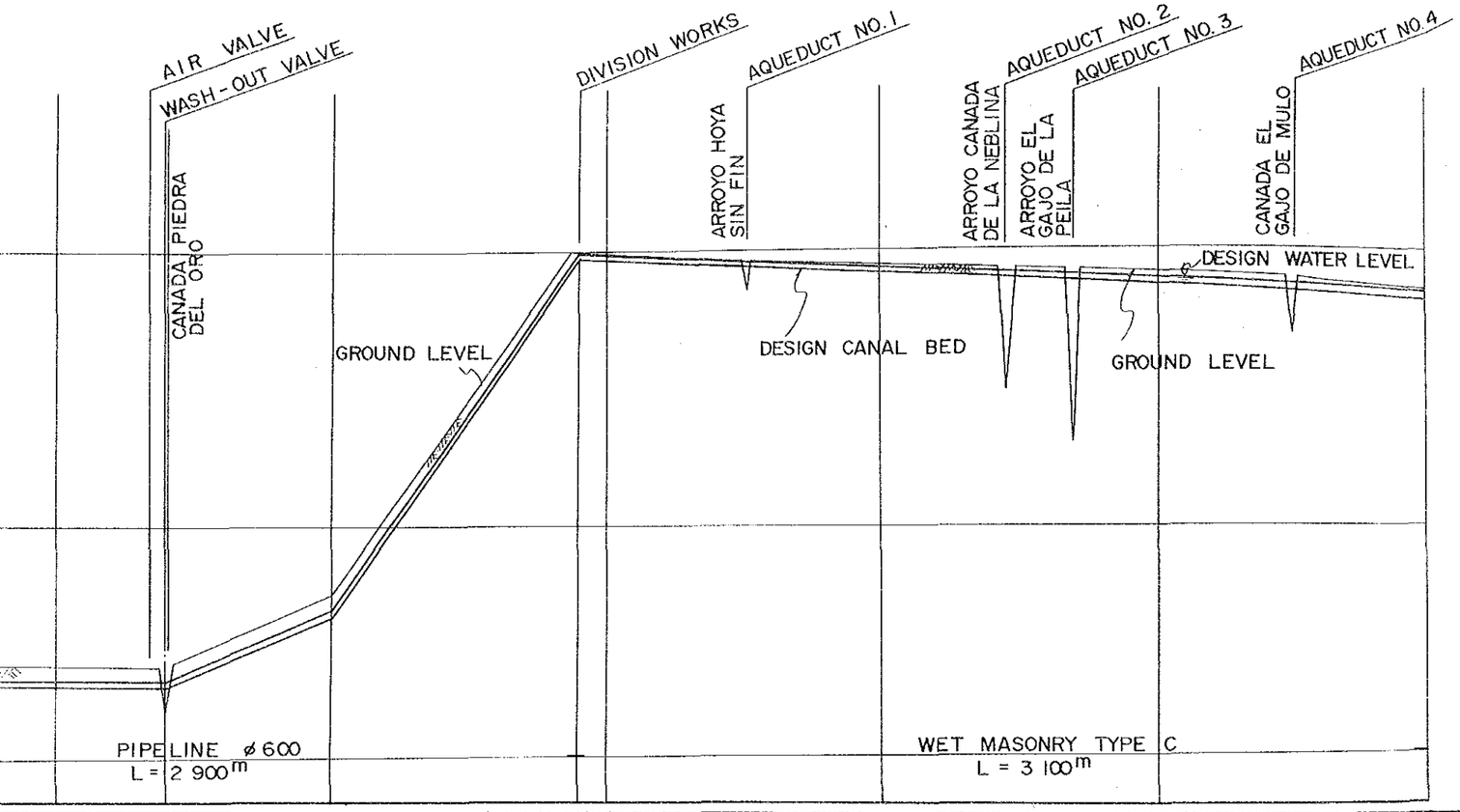
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 1/3)





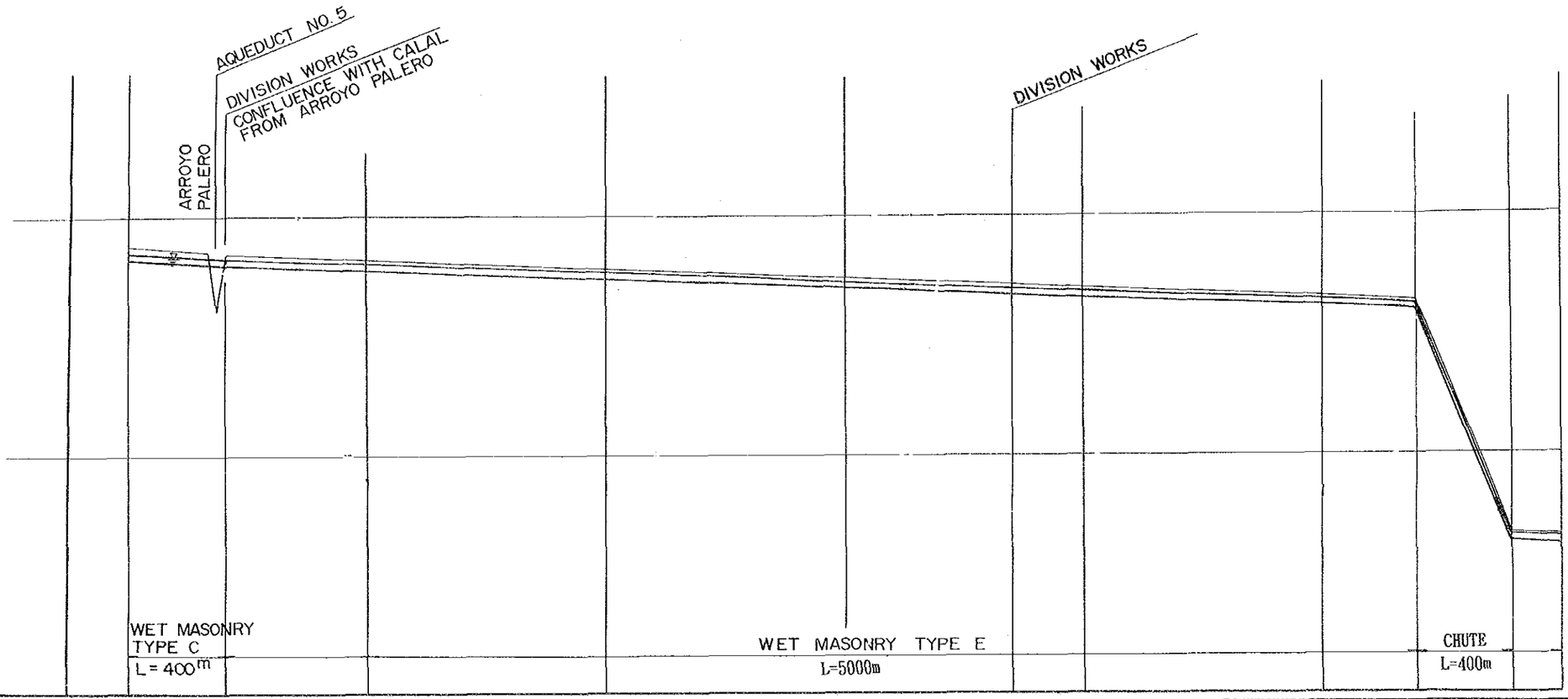
SLOPE						1239.50			I = 1/1 000				1236.40
DESIGN WATER LEVEL						1240.00	1239.90		1238.90		1237.90		1236.90
DESIGN CANAL BED						1239.50	1239.40		1238.40		1237.40		1236.40
GROUND LEVEL	1248.0	1210.0	1210.0	1210.0	1215.0	1240.6	1240.6	1240.6 1237.6 1240.6	1239.6	1239.6 1239.0 1238.0	1237.6	1238.6 1234.0 1238.0	1237.40
ACCUMULATED DISTANCE	0.0	400.0	1000.0	1400.0	2000.0	2900.0	3000.0	3500.0 3520.0	4020.0	4520.0 4570.0 4670.0 4720.0	5000.0	5470.0 5500.0	6000.0
STATION	NO. 0		NO. 1		NO. 2		NO. 3		NO. 4		NO. 5		NO. 6

TUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 1/3)



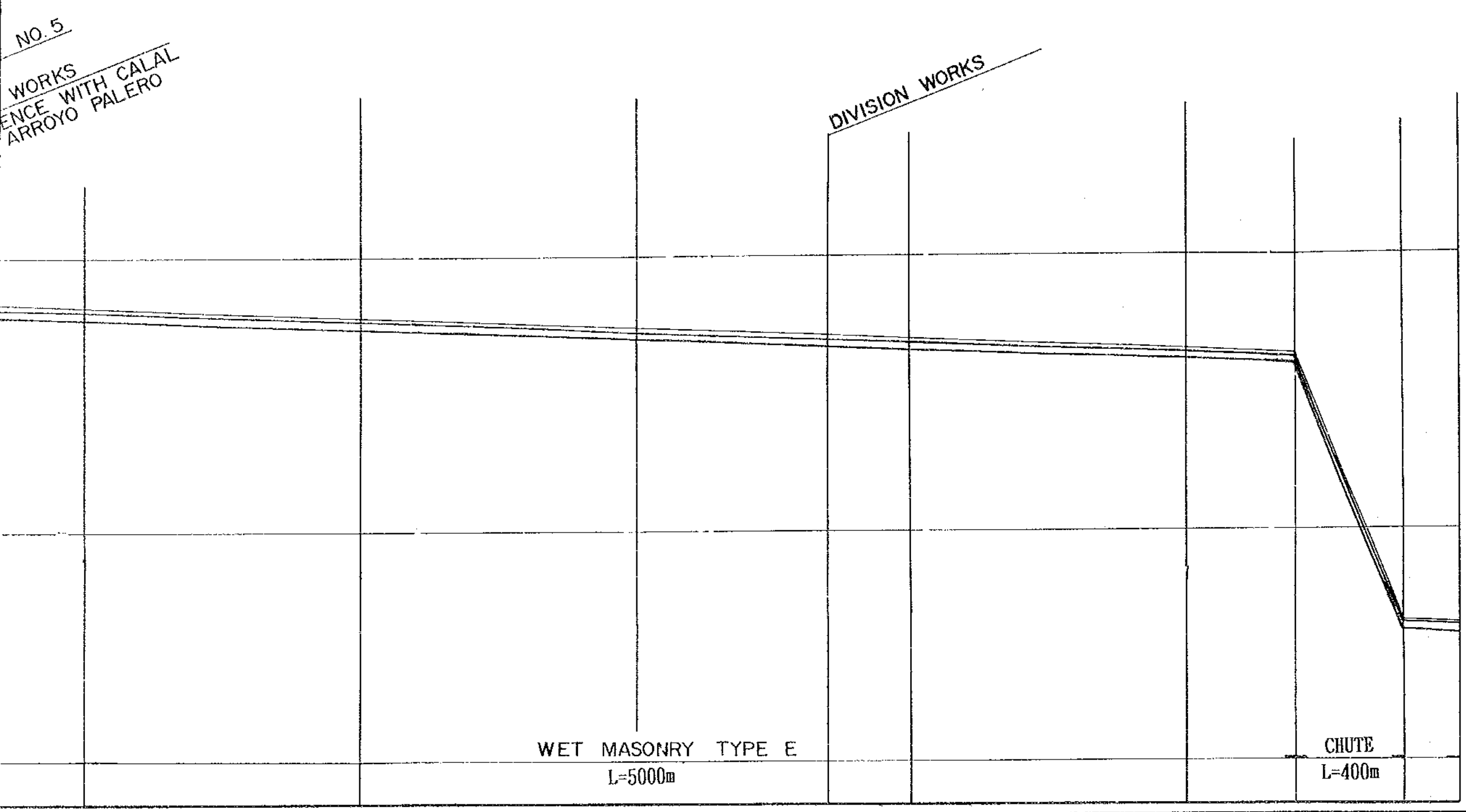
THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 1/3)
MARCH, 1990 | NO. 3
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

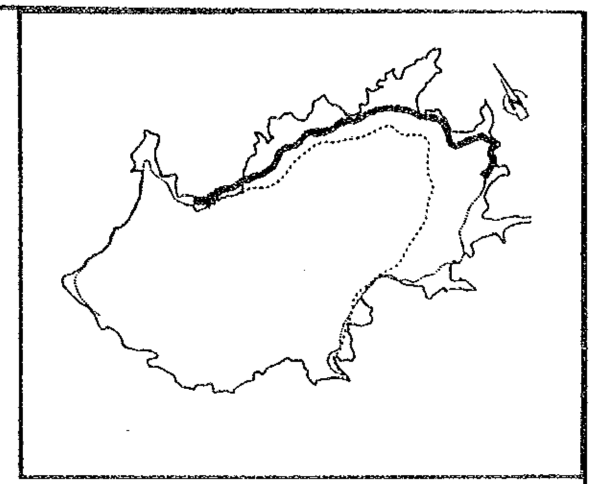
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 2/3)



SLOPE	1236.40	1236.0	I=1/324	1217.5	I = 1/1000					1231.0	L=1/21.5	1212.7	1212.5
DESIGN WATER LEVEL	1236.90	1236.50		1235.90	1234.90		1233.90		1232.90	1231.90	1231.50	1213.2	1212.95
DESIGN CANAL BED	1236.40	1236.00		1235.40	1234.40		1233.40		1232.40	1231.40	1231.0		1212.50
GROUND LEVEL	1237.0	1237.0 1232.0 1237.0		1236.0	1235.0		1234.0	1216.0	1233.0	1232.0	1232.60		1213.50
ACCUMULATED DISTANCE	6000.0	6365.0 6400.0	6700.0	7000.0	8000.0	8200.0	9000.0	9358.8 9388.8	10000.0 10100.0	11000.0	11400.0	11800.0	12000.0
STATION	NO. 6			NO. 7	NO. 8		NO. 9		NO. 10	NO. 11			NO. 12

GITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 2/3)

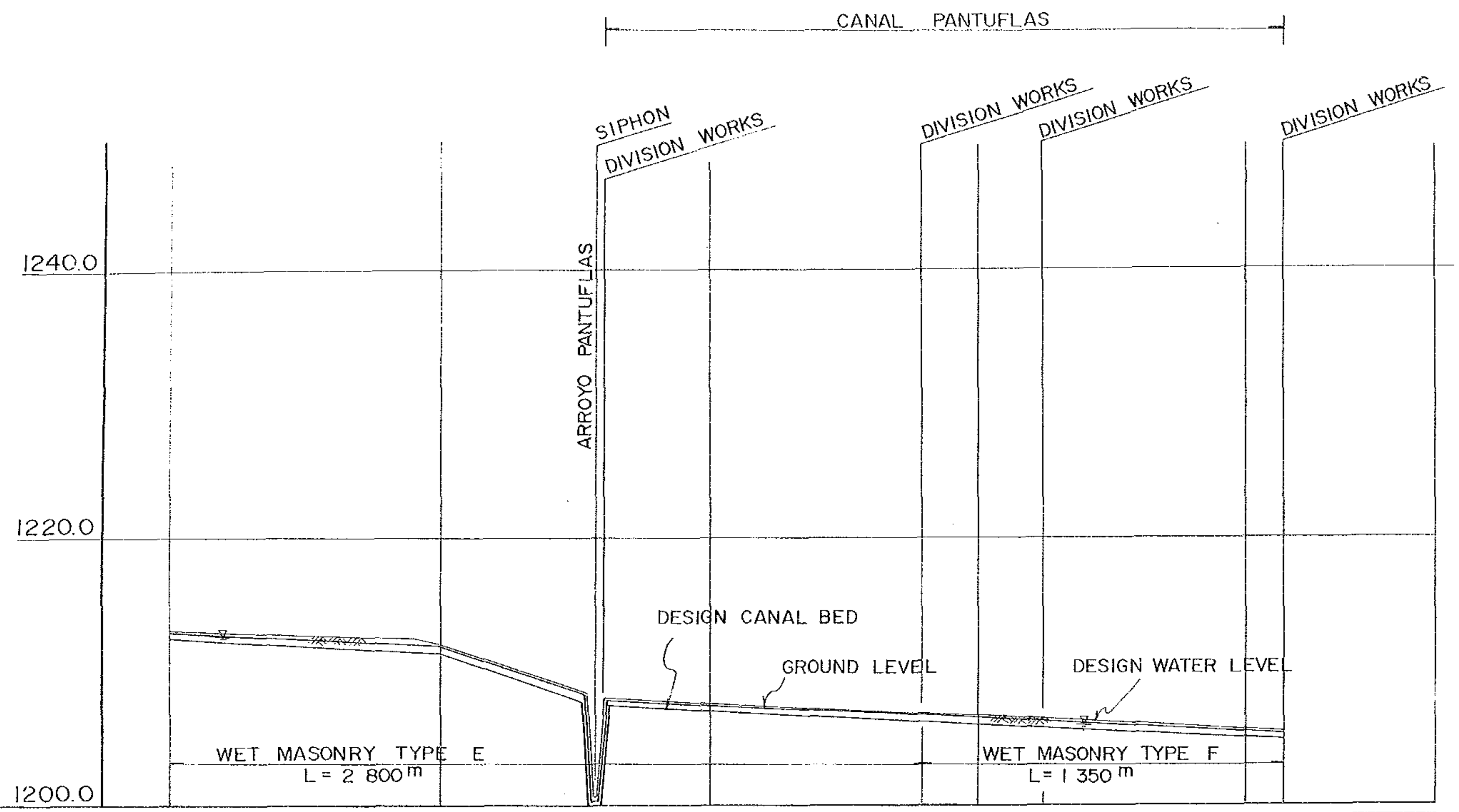


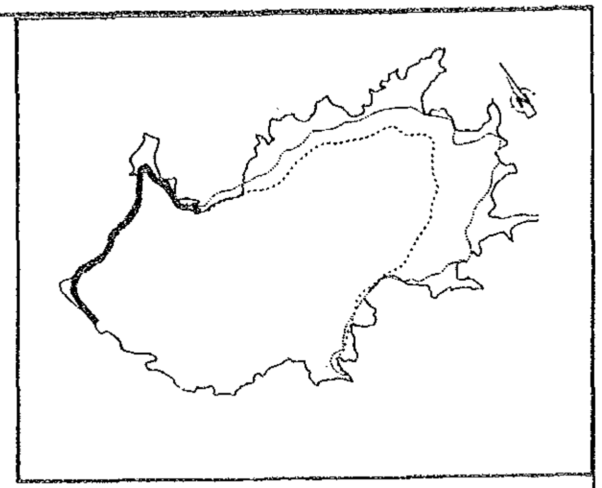


1217.5			f = 1/1000				1231.0	I=1/21.9 1212.7	1212.5
1235.90	1234.90		1233.90		1232.90	1231.90	1231.50	1213.2	1212.95
1235.40	1234.40		1233.40		1232.40	1231.40	1231.0		1212.50
1236.0	1235.0		1234.0	1216.0	1233.0	1232.0	1232.60		1213.50
7000.0	8000.0	8200.0	9000.0	9250.0 9300.0	10000.0 10100.0	11000.0	11400.0	11800.0	12000.0
NO. 7	NO. 8		NO. 9		NO. 10	NO. 11			NO. 12

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
LONGITUDINAL PROFILE OF MAIN·IRRIGATION CANAL (CANAL NUEVA CONSTANZA 2/3)
MARCH, 1990 | NO. 4
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 3/3)

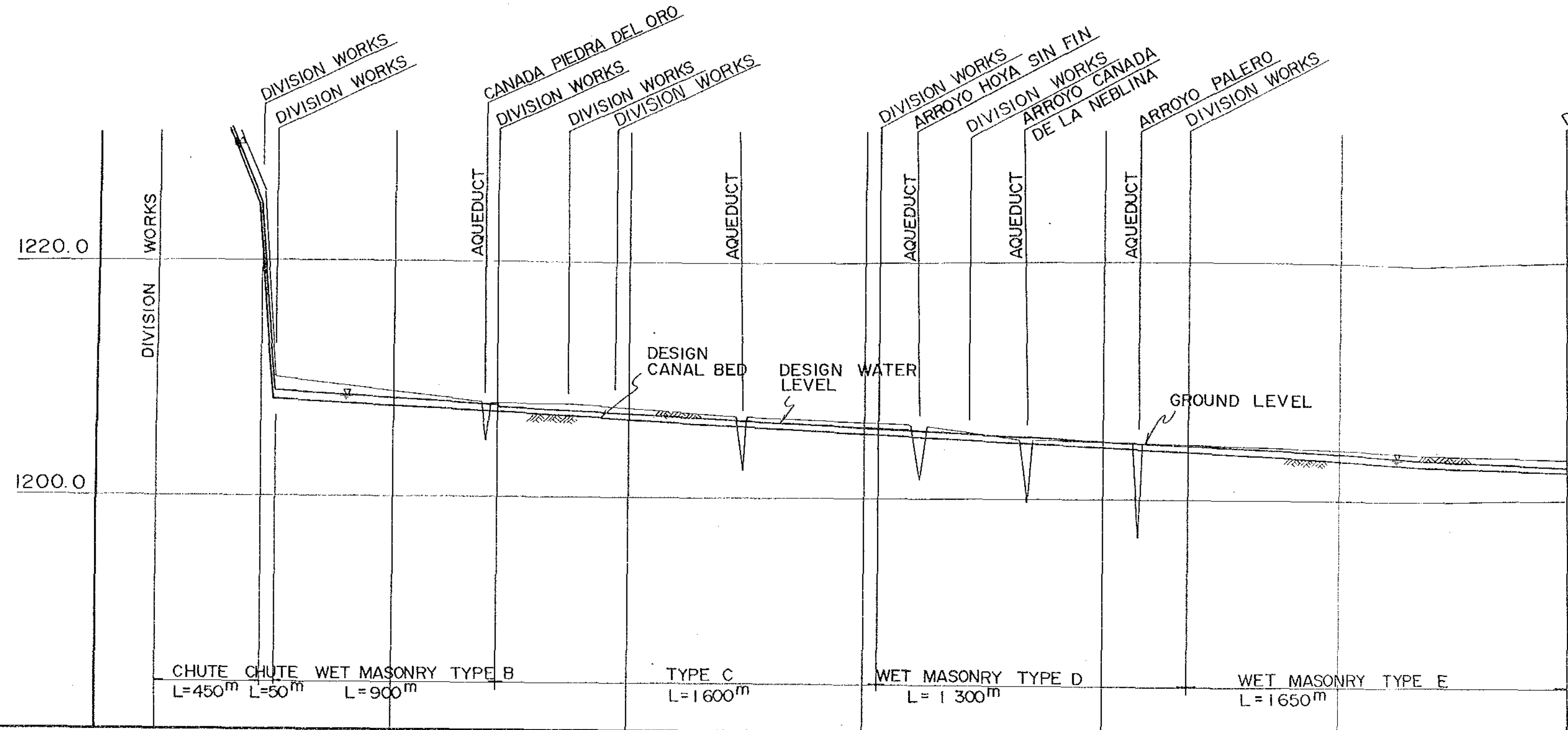


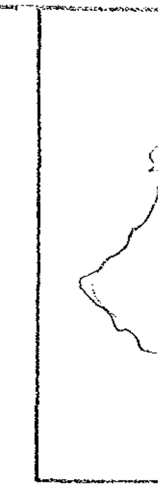


SLOPE	1212.5	i = 1/1 000 1211.5	i = 1/134 1208.0	1207.5	i = 1/1 000					1204.95
DESIGN WATER LEVEL	1212.95	1211.95		1207.95	1207.55		1206.45		1205.45	1205.30
DESIGN CANAL BED	1212.5	1211.5		1207.5	1207.1		1206.1		1205.1	1204.95
GROUND LEVEL	1213.0	1212.0	1209.0	1208.0		1207.0		1206.5		1205.5
ACCUMULATED DISTANCE	12 000.0	13 000.0	13467.6	13 600.0	14 000.0	14 800.0	15 000.0	15250.0	16 000.0	16 150.0
STATION	NO. 12	NO. 3			NO. 14		NO. 15		NO. 16	

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL NUEVA CONSTANZA 3/3)
MARCH, 1990 | NO. 5
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

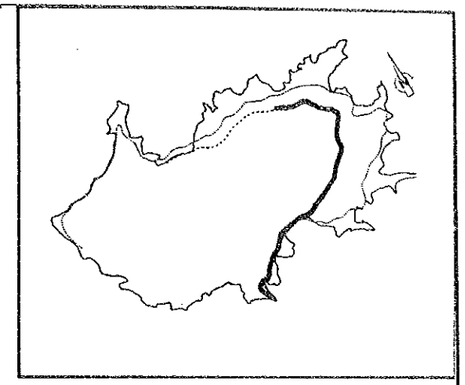
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL CONSTANZA)

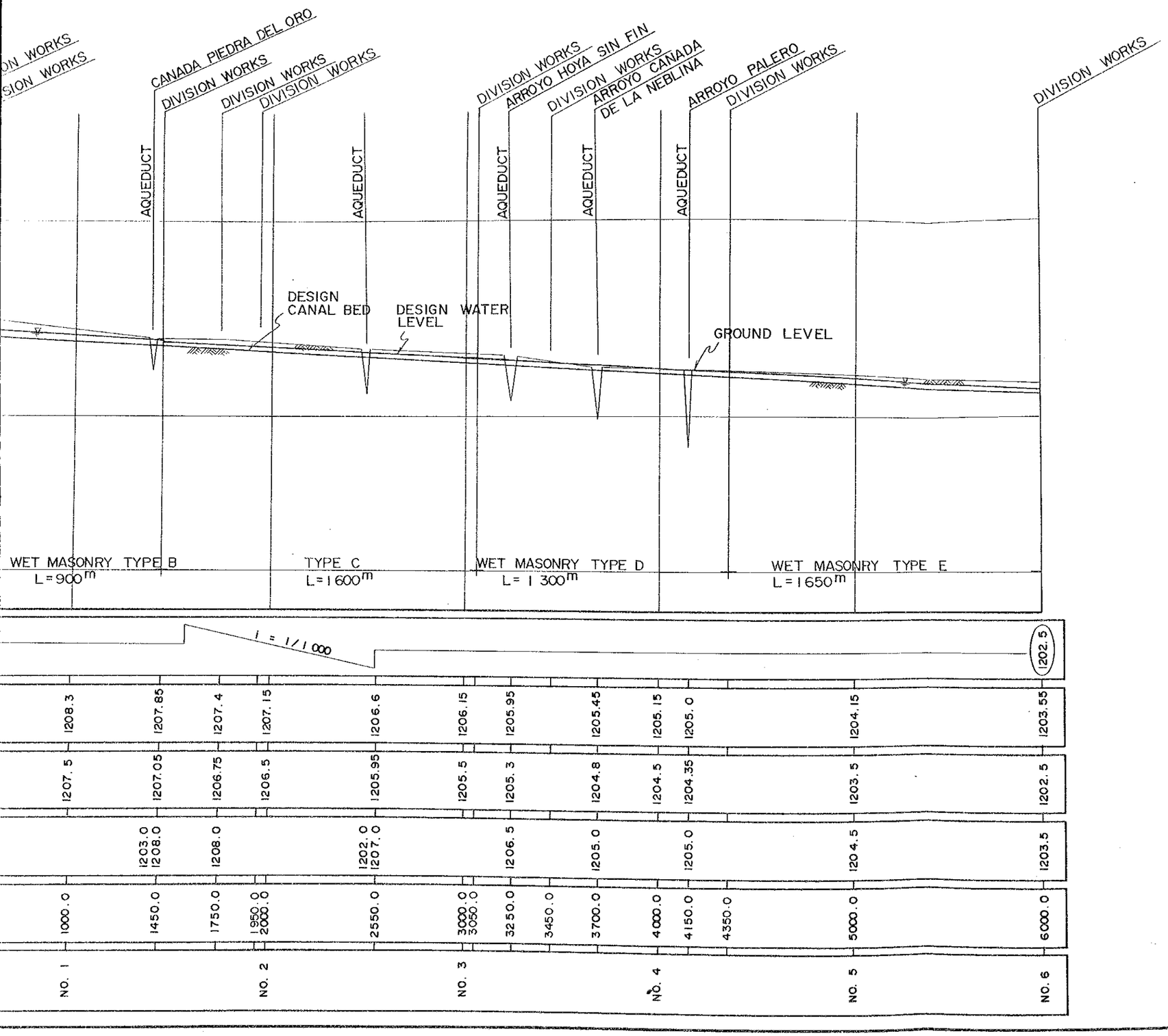




SLOPE	1249.0	1225.0 / 1208.0				i = 1/1000										1202.5
DESIGN WATER LEVEL		1225.8 / 1208.8	1208.3	1207.85	1207.4	1207.15	1206.6	1206.15	1205.95		1205.45	1205.15	1205.0		1204.15	1203.55
DESIGN CANAL BED		1225.0 / 1208.0	1207.5	1207.05	1206.75	1206.5	1205.95	1205.5	1205.3		1204.8	1204.5	1204.35		1203.5	1202.5
GROUND LEVEL	1249.0	1226.0 / 1210.0		1203.0 / 1208.0	1208.0		1202.0 / 1207.0		1206.5		1205.0		1205.0		1204.5	1203.5
ACCUMULATED DISTANCE	0	450.0 / 500.0	1000.0	1450.0	1750.0	1950.0 / 2000.0	2550.0	3000.0 / 3050.0	3250.0	3450.0	3700.0	4000.0	4150.0	4350.0	5000.0	6000.0
STATION	NO. 0		NO. 1			NO. 2		NO. 3				NO. 4			NO. 5	NO. 6

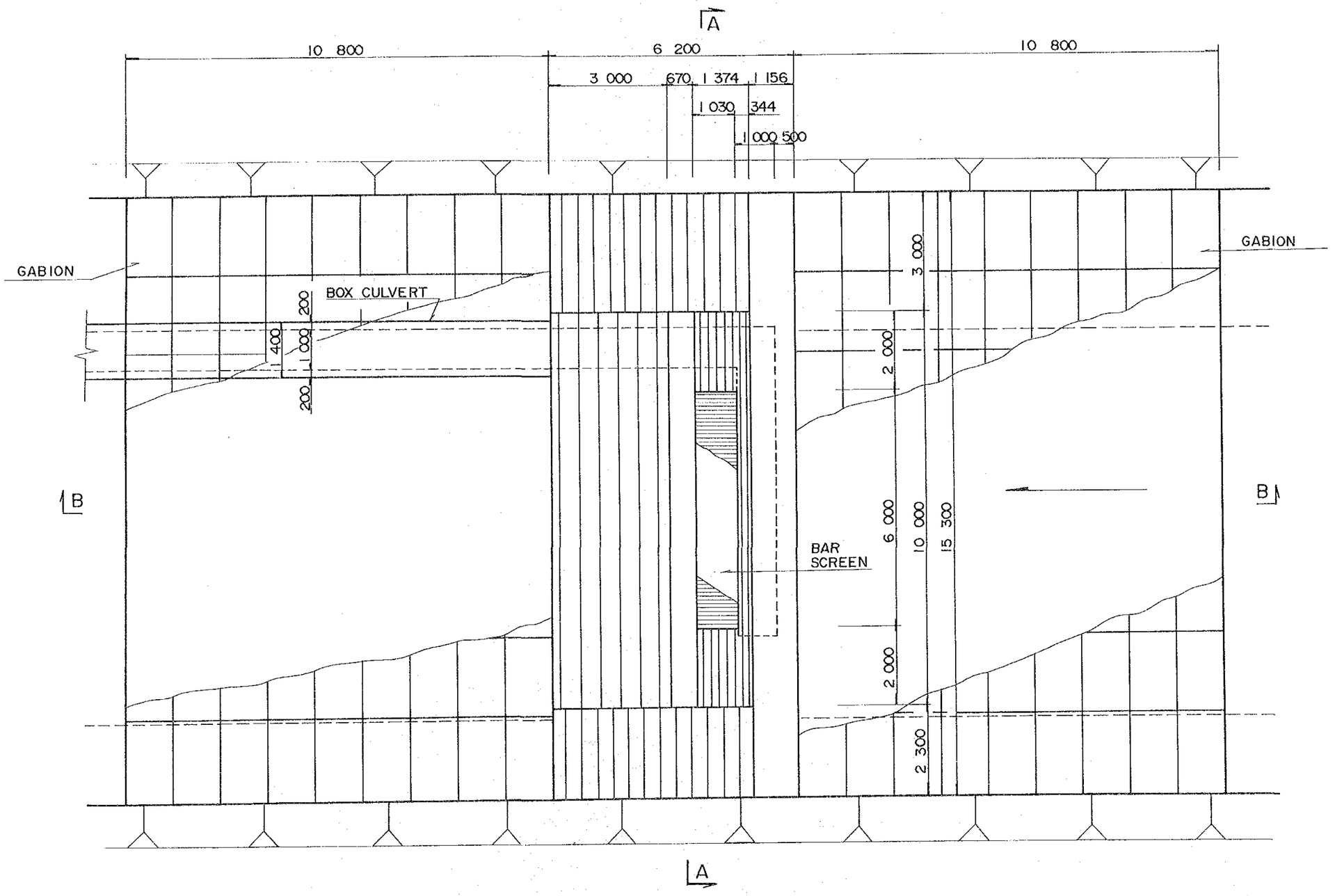
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL CONSTANZA)





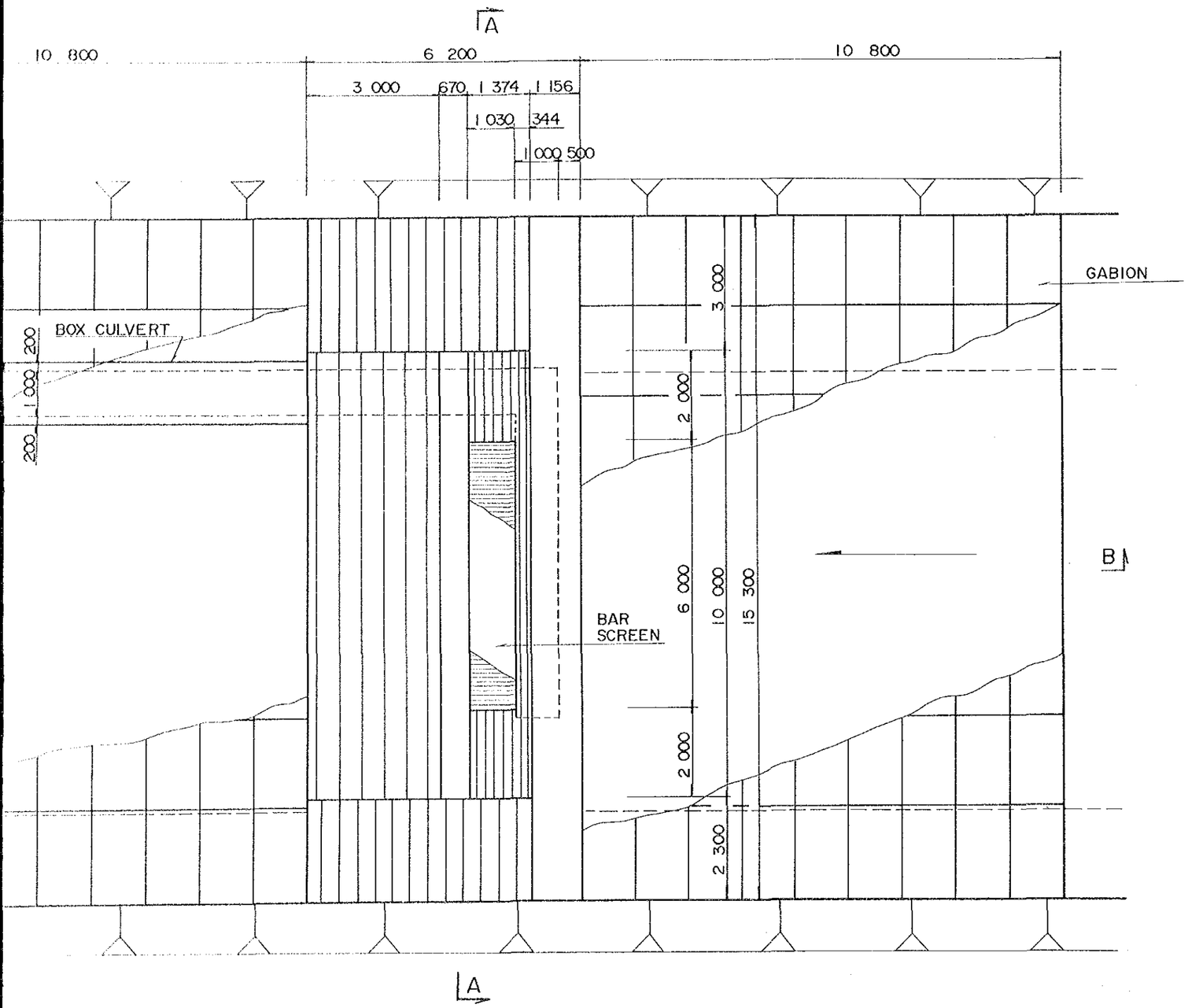
THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
LONGITUDINAL PROFILE OF MAIN IRRIGATION CANAL (CANAL CONSTANZA)	
MARCH, 1990	NO. 6
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

BAR SCREEN BACK STREAM DIVERSION WORKS (1/2)



PLAN S = 1/100

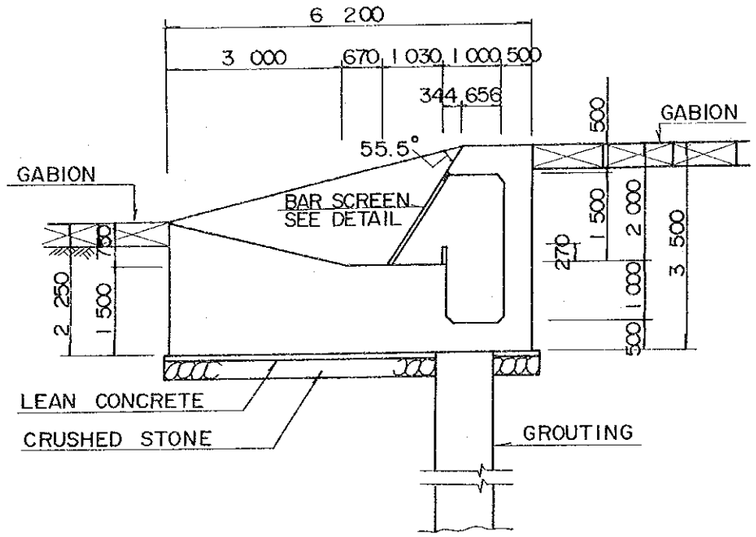
BAR SCREEN BACK STREAM DIVERSION WORKS (1/2)



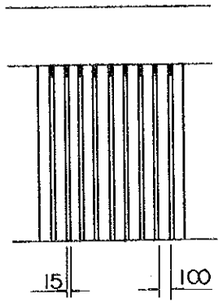
PLAN S = 1/100

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
BAR SCREEN BACK STREAM DIVISION WORKS(1/2)
MARCH, 1990 | NO. 7
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

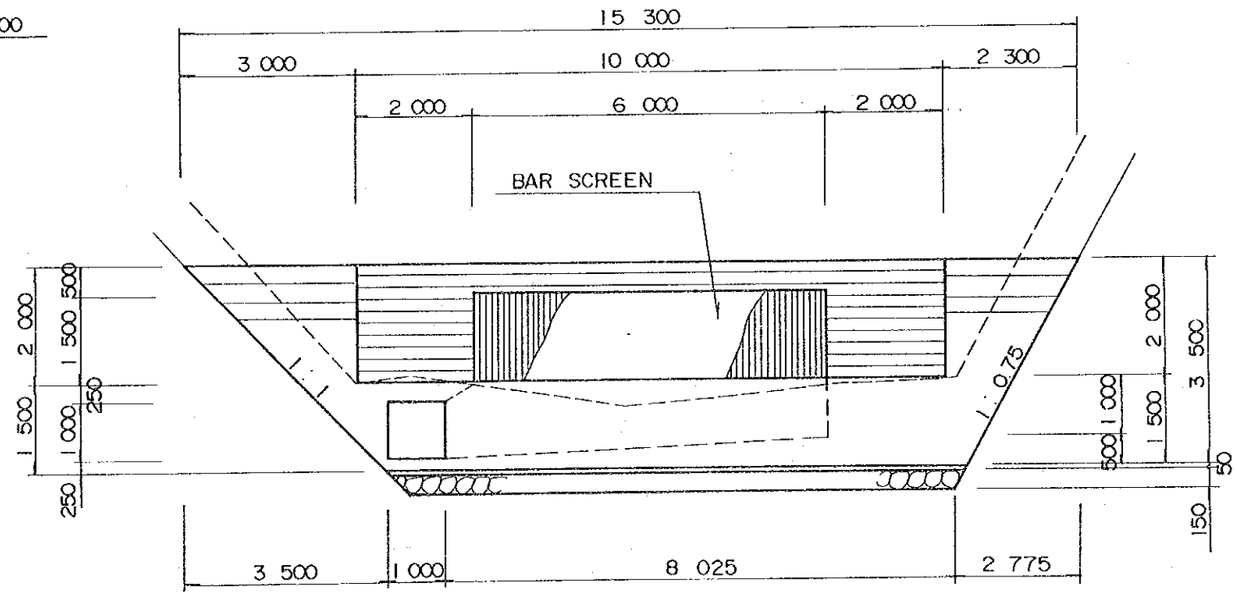
BAR SCREEN BACK STREAM DIVERSION WORKS (2/2)



SECTION B-B S=1/100



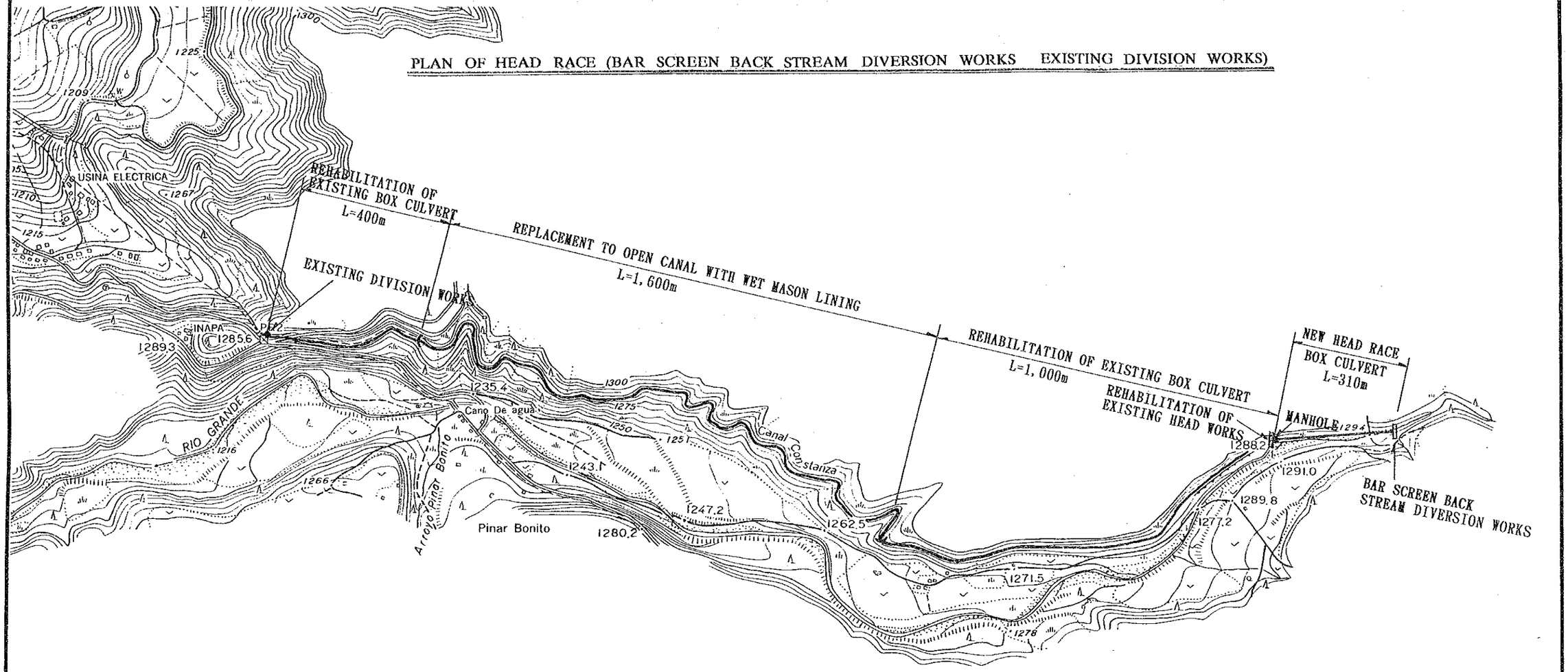
DETAIL OF SCREEN BAR N.T.S



SECTION A-A S=1/100

THE DOMINICAN REPUBLIC THE CONSTANZA IRRIGATION PROJECT	
BAR SCREEN BACK SREAM DIVERSION WORKS(2/2)	
MARCH, 1990	NO. 8
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

PLAN OF HEAD RACE (BAR SCREEN BACK STREAM DIVISION WORKS EXISTING DIVISION WORKS)

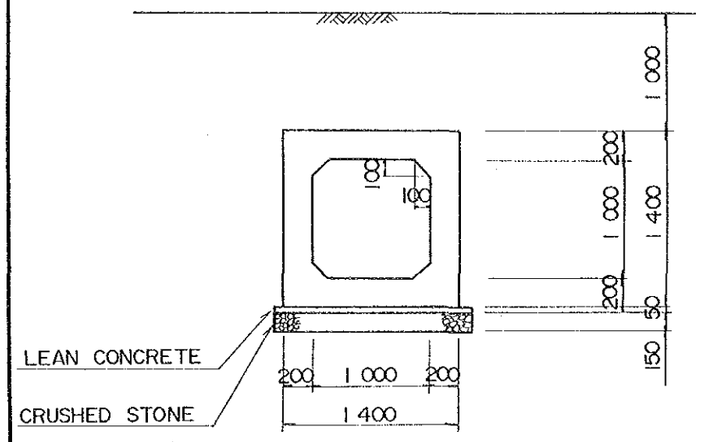


PLAN

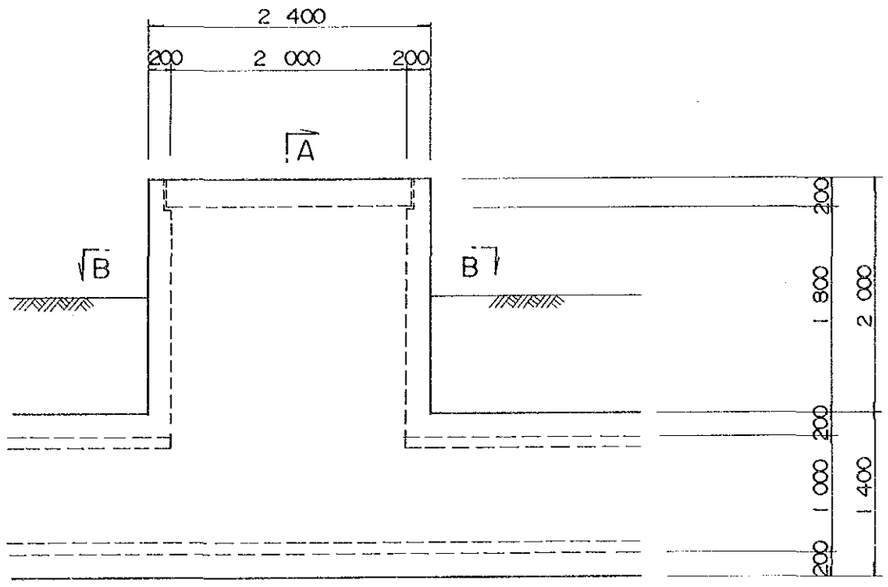
S=1/10000

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
PLAN OF HEAD RACE (BAR SCREEN BACK STEAM DIVISION WORKS ~EXISTING DIVISION WORKS)	
MARCH, 1990	NO. 9
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

TYPICAL SECTION OF BOX CULVERT AND OPEN CANAL
(BAR SCREEN BACK STREAM INTAKE ~ EXISTING DIVISION WORKS)

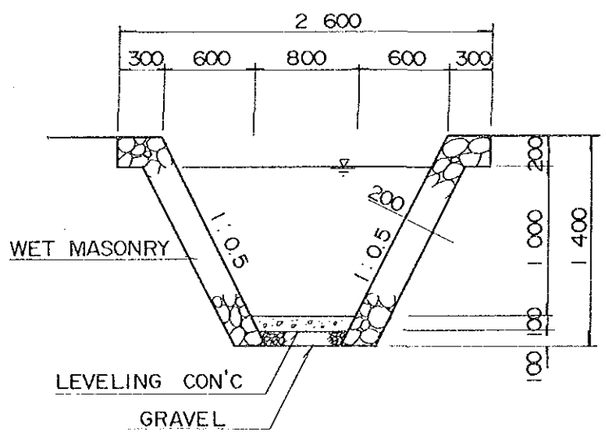


TYPICAL SECTION OF
BOX CULVERT S = 1/50

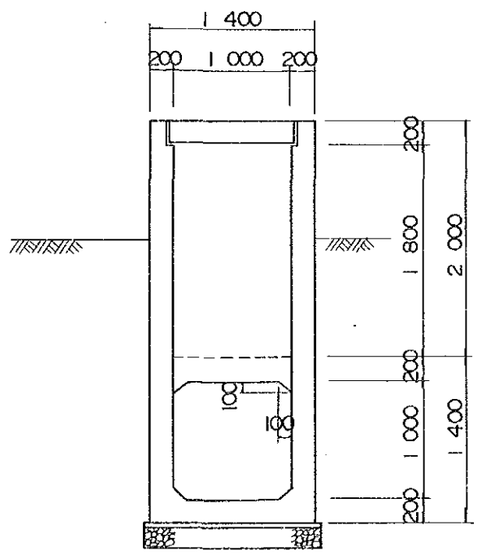


A

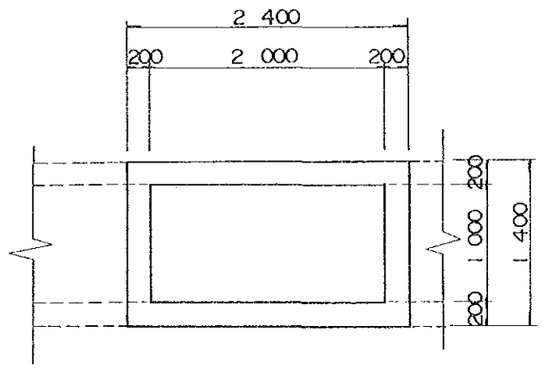
MANHOLE S = 1/50



TYPICAL SECTION OF NEW HEAD RACE S=1/40



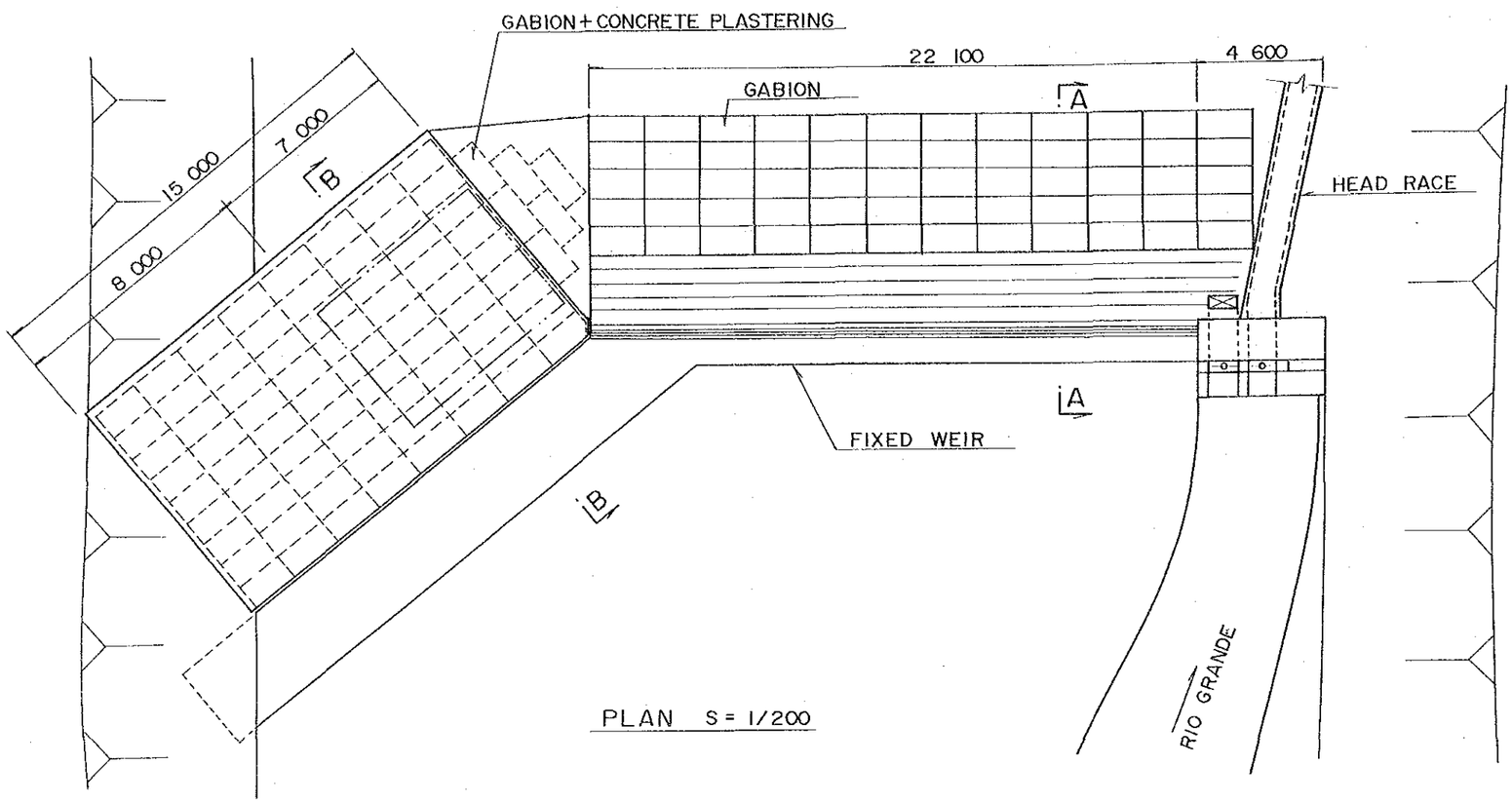
SECTION A-A S = 1/50



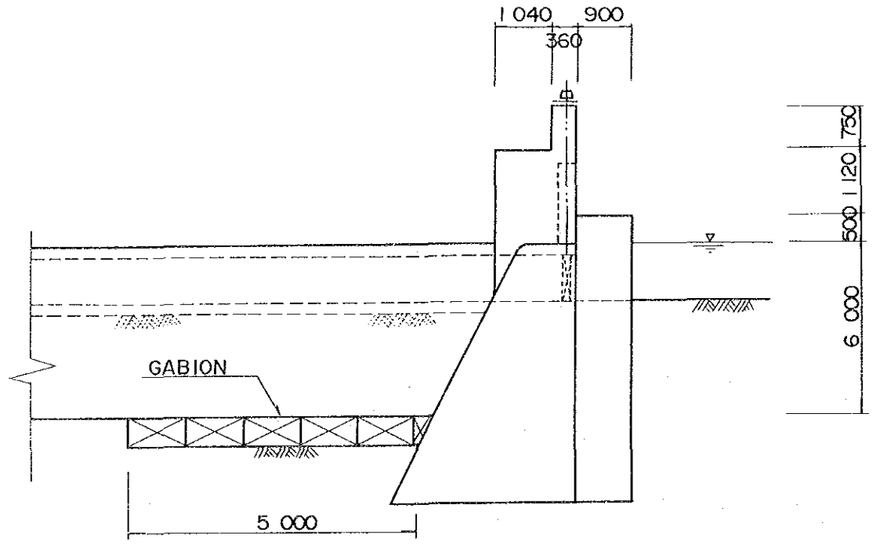
SECTION B-B S = 1/50

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
TYPICAL SECTION OF BOX CLUVERT & OPEN CANAL (BAR SCREEN BACK STREAM DIVISION WORKS ~EXIZTING DIVISION WORKS)	
MARCH, 1990	NO. 10
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

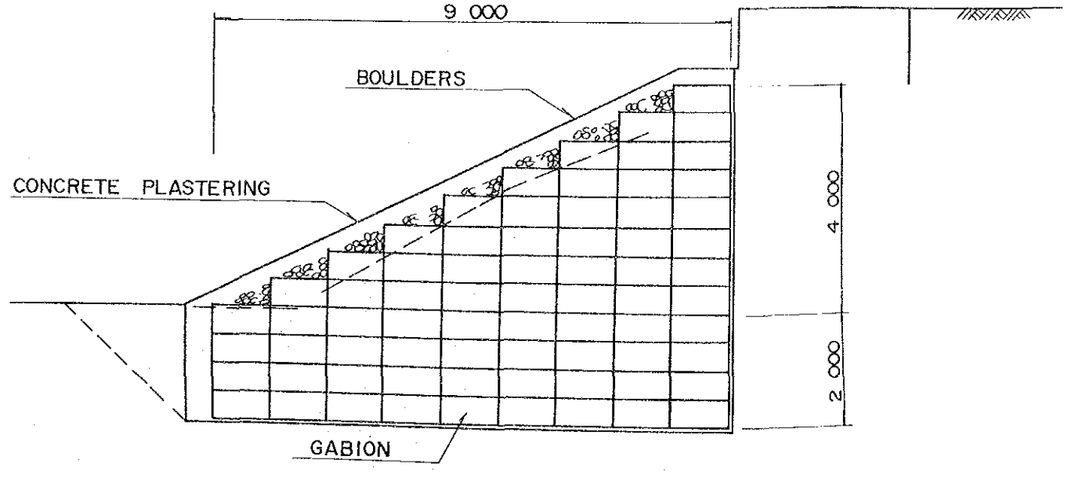
REHABILITATION OF EXISTING HEAD WORKS



PLAN S = 1/200



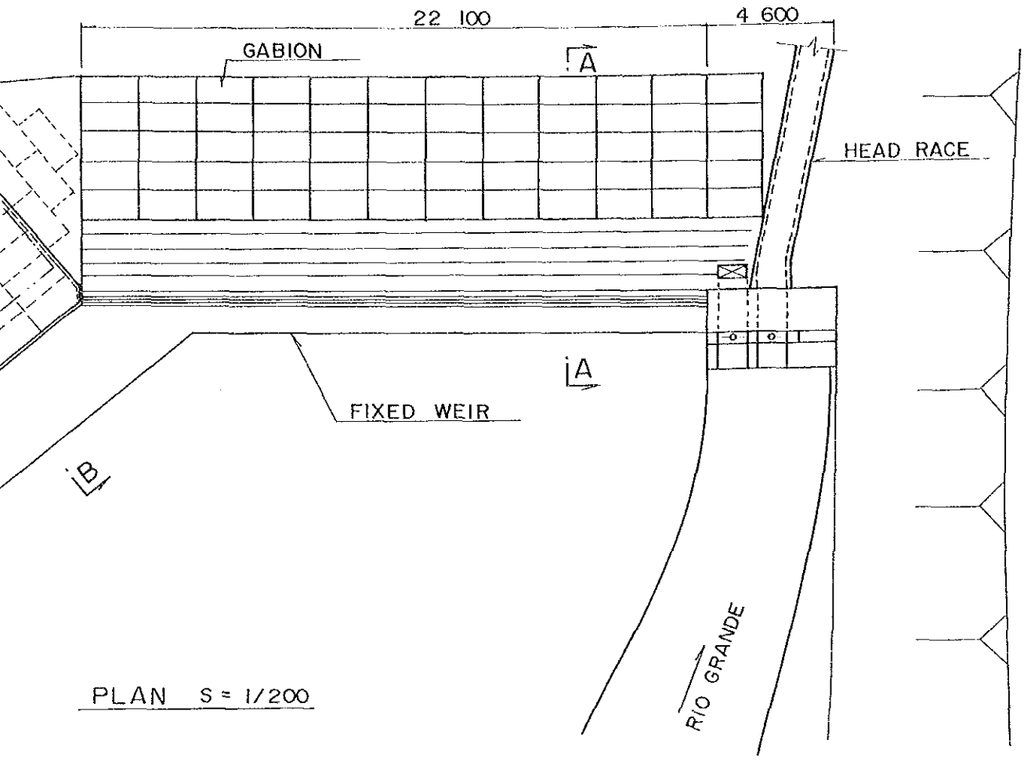
SECTION A-A S = 1/100



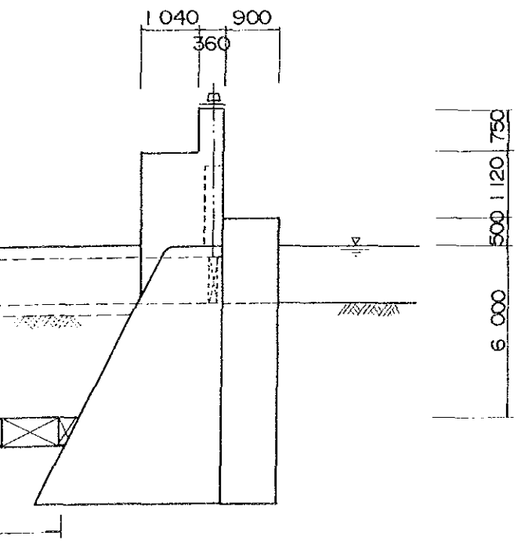
SECTION B-B S = 1/100

REHABILITATION OF EXISTING HEAD WORKS

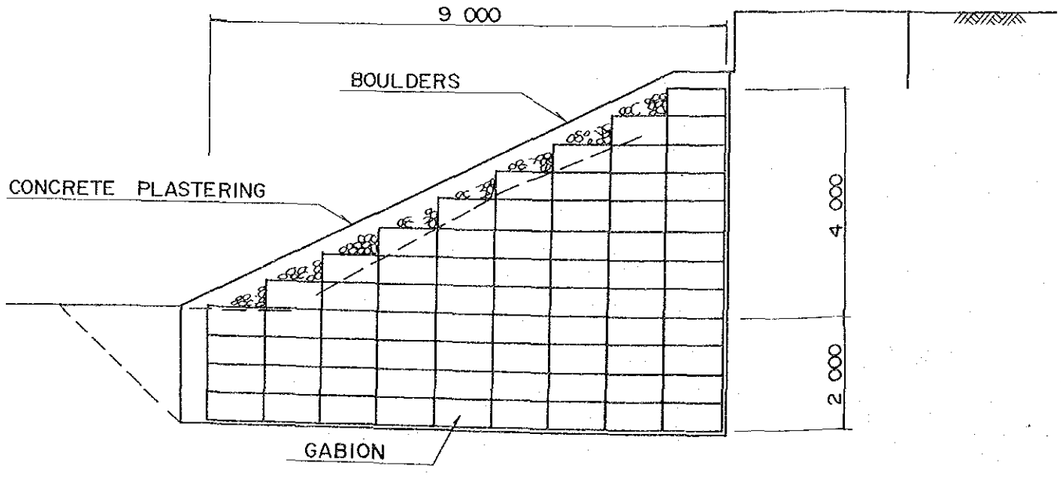
GABION + CONCRETE PLASTERING



PLAN S = 1/200



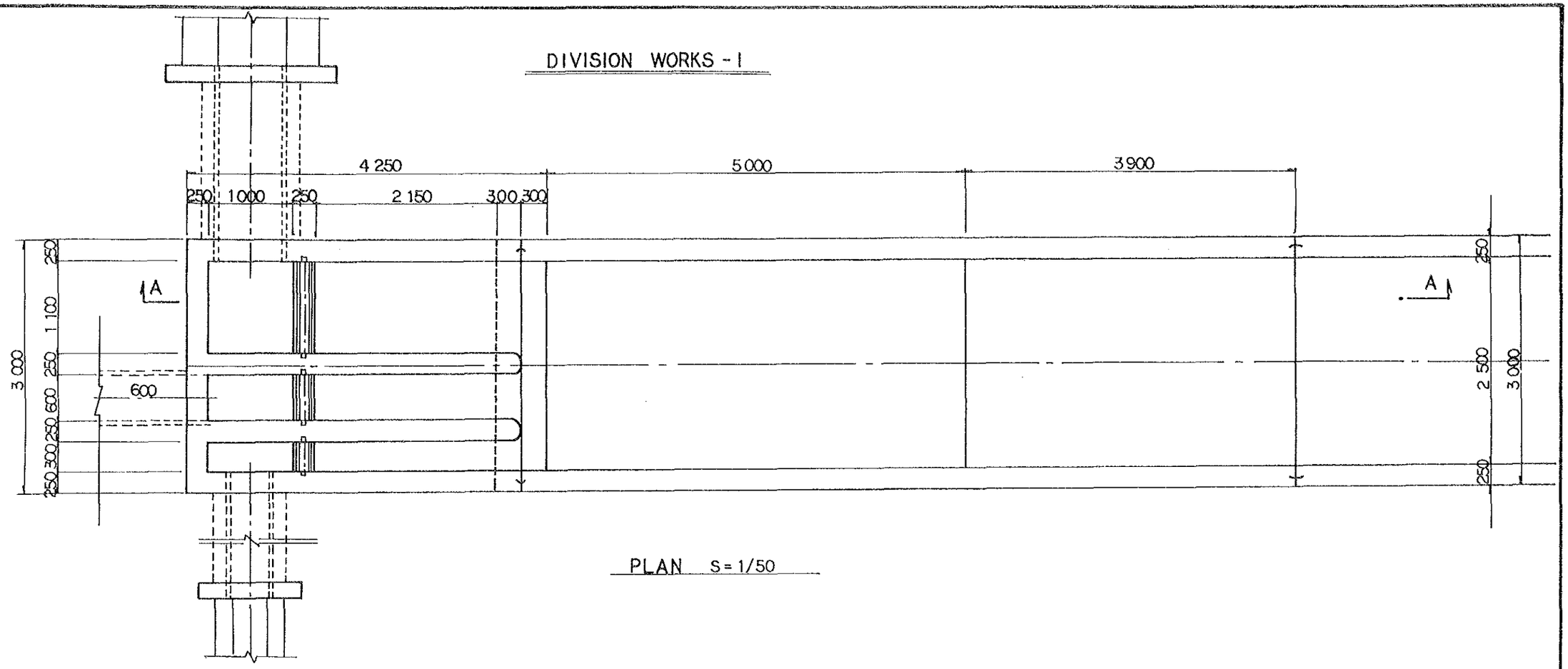
A S = 1/100

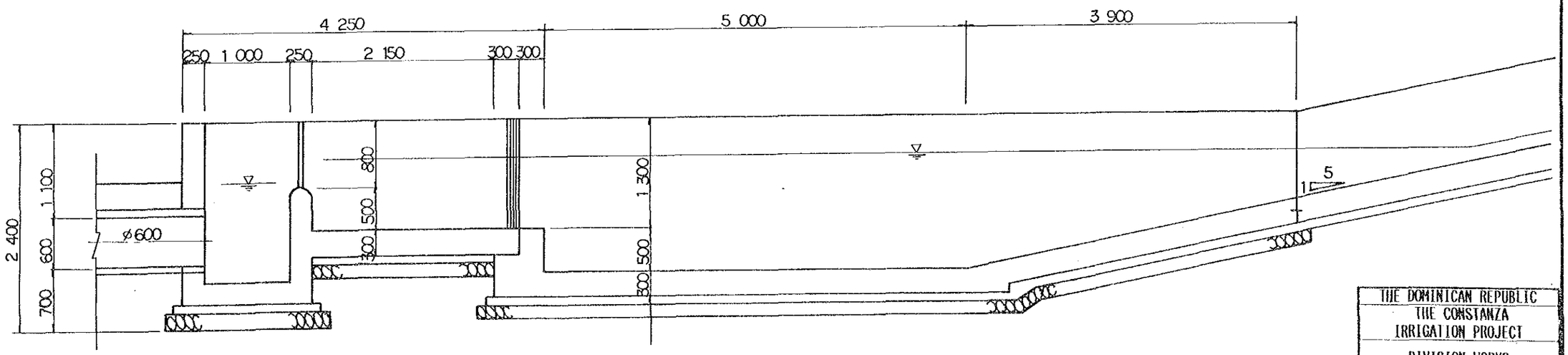


SECTION B-B S = 1/100

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
REHABILITATION PLAN OF EXISTING HEAD WORKS	
MARCH, 1990	NO. 11
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

DIVISION WORKS - 1

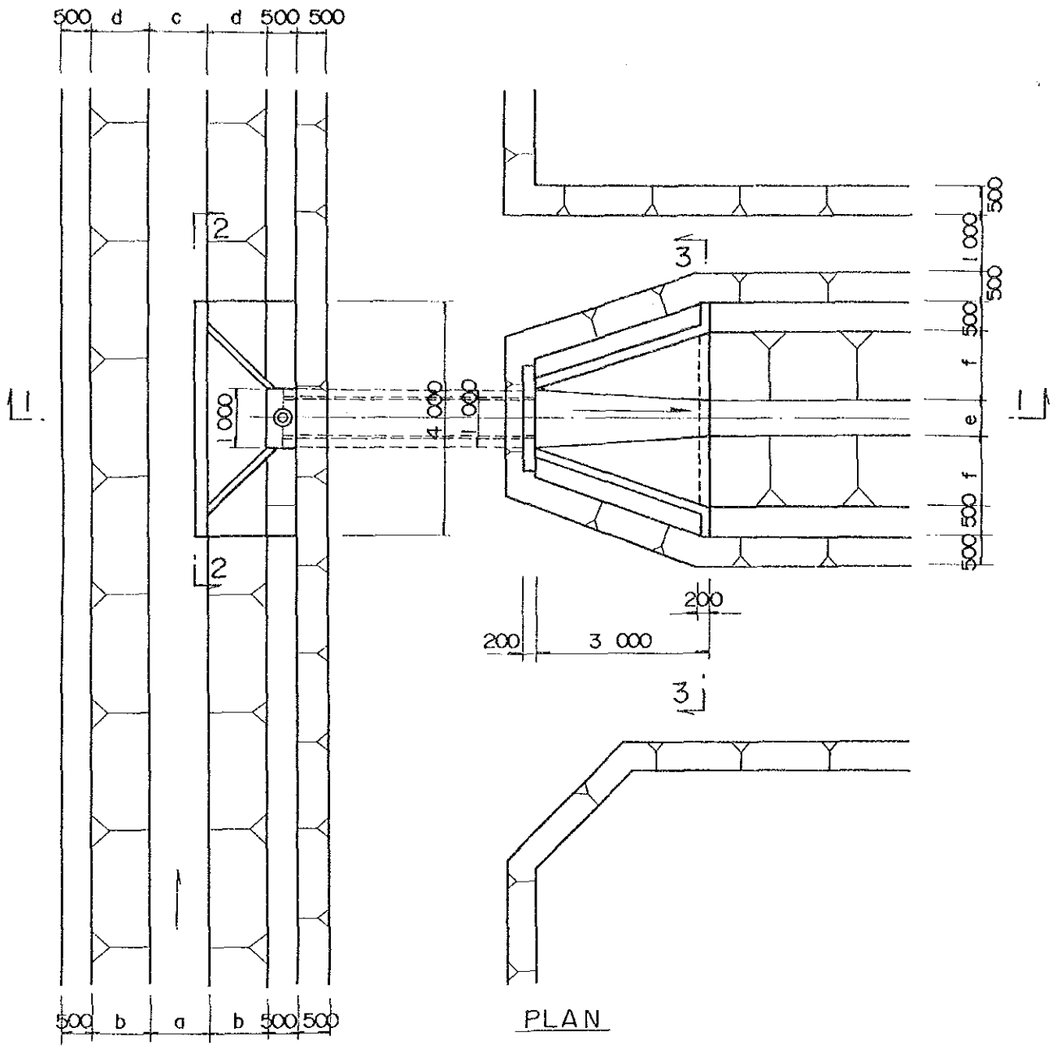




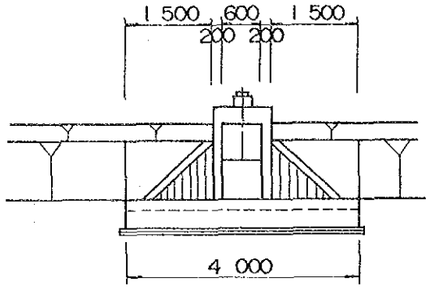
SECTION A-A S=1/50

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
DIVISION WORKS 1	
MARCH, 1990	NO. 12
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

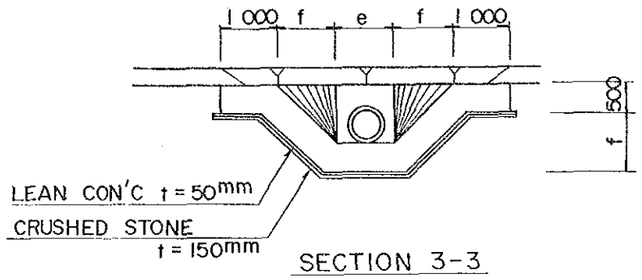
DIVISION WORKS-2



PLAN

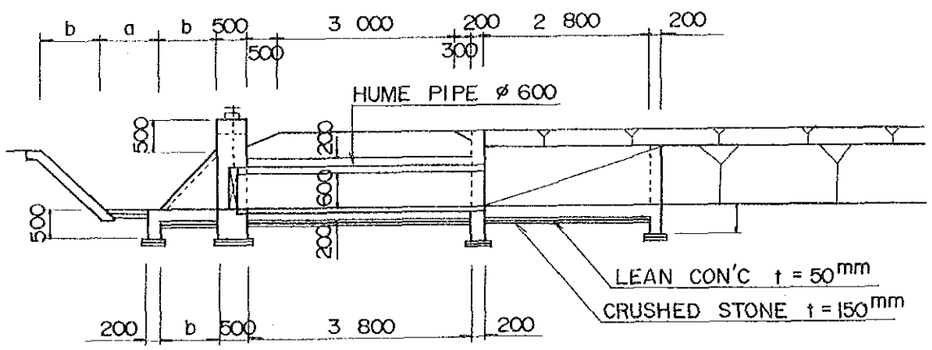


SECTION 2-2



SECTION 3-3

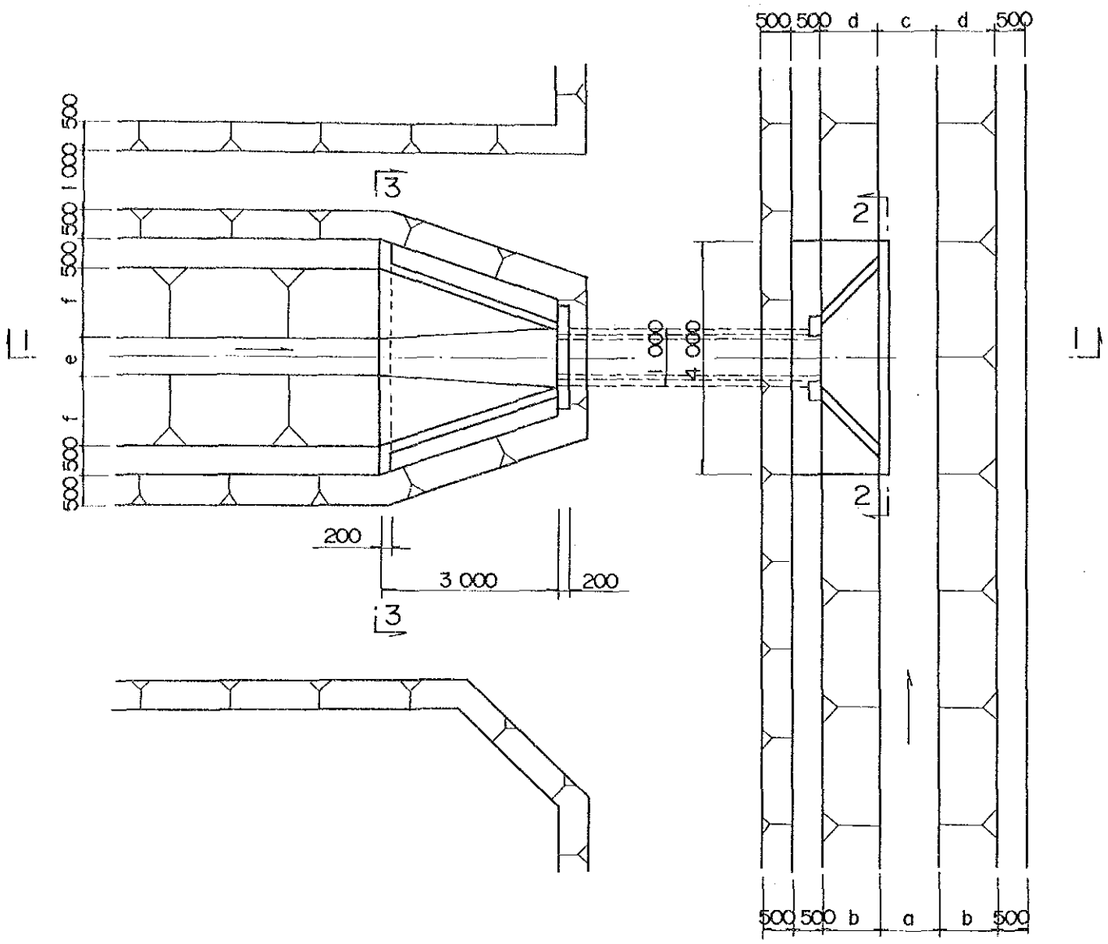
Note: a ~ f varies according to the type of canal (Refer to Dwg. No.15)



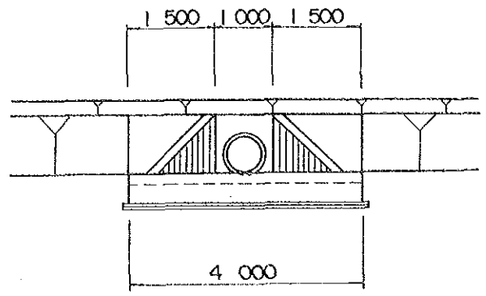
SECTION 1-1

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
DIVISION WORKS 2	
MARCH, 1990	NO. 13
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

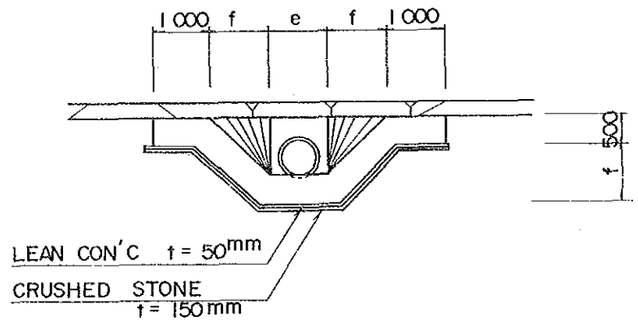
CONFLUENCE WORKS



PLAN

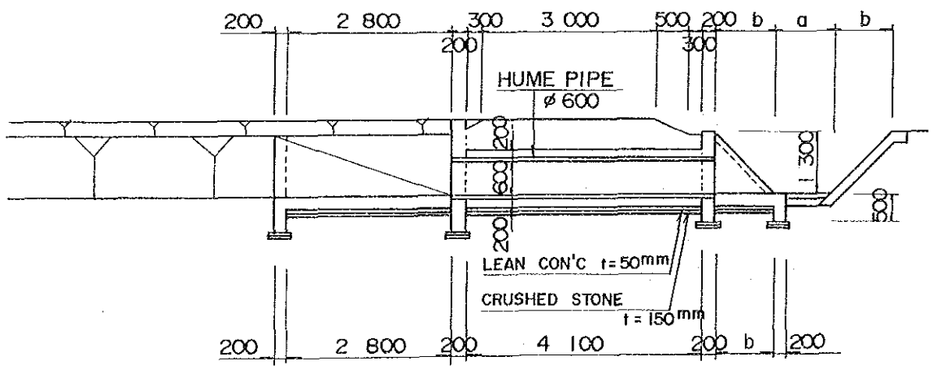


SECTION 2-2



SECTION 3-3

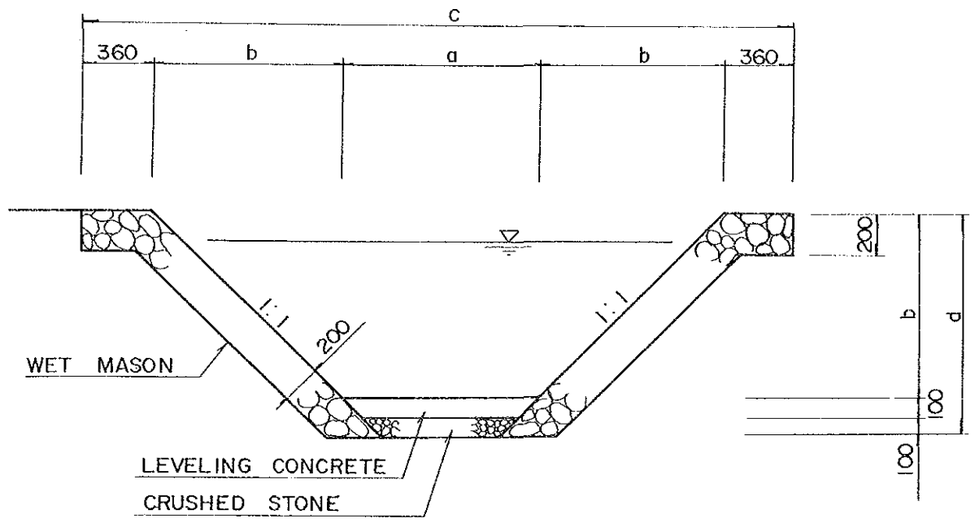
Note: a ~ f varies according to the type of canal (Refer to Dwg. No.15)



SECTION 1-1

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
COFULENCE WORKS	
MARCH, 1990	NO. 14
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

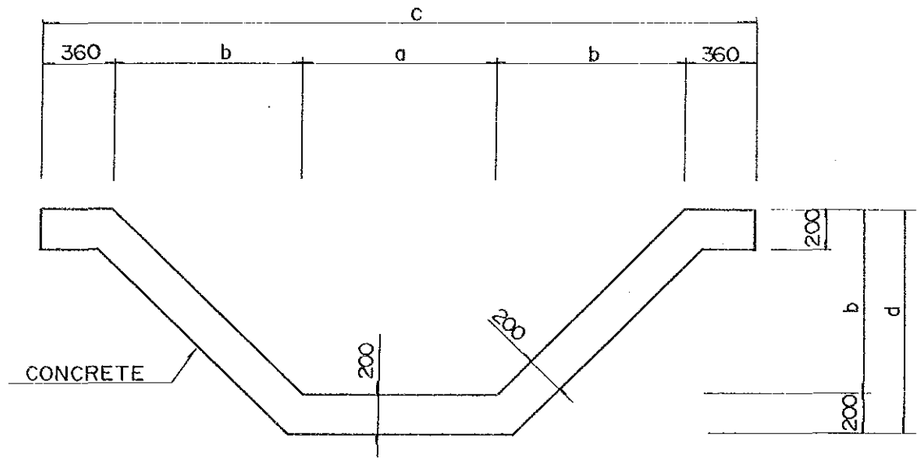
TYPICAL SECTION OF OPEN CHANNEL WITH WET MASON LINING AND CHUTE



TYPICAL SECTION OF OPEN CANAL
WITH WET MASONRY LINING

TABLE

TYPE	a	b	c	d
A	1.00	0.95	3.62	1.15
B	0.80	0.80	3.12	1.00
C	0.70	0.70	2.82	0.90
D	0.60	0.65	2.62	0.85
E	0.50	0.60	2.42	0.80
F	0.40	0.50	2.12	0.70



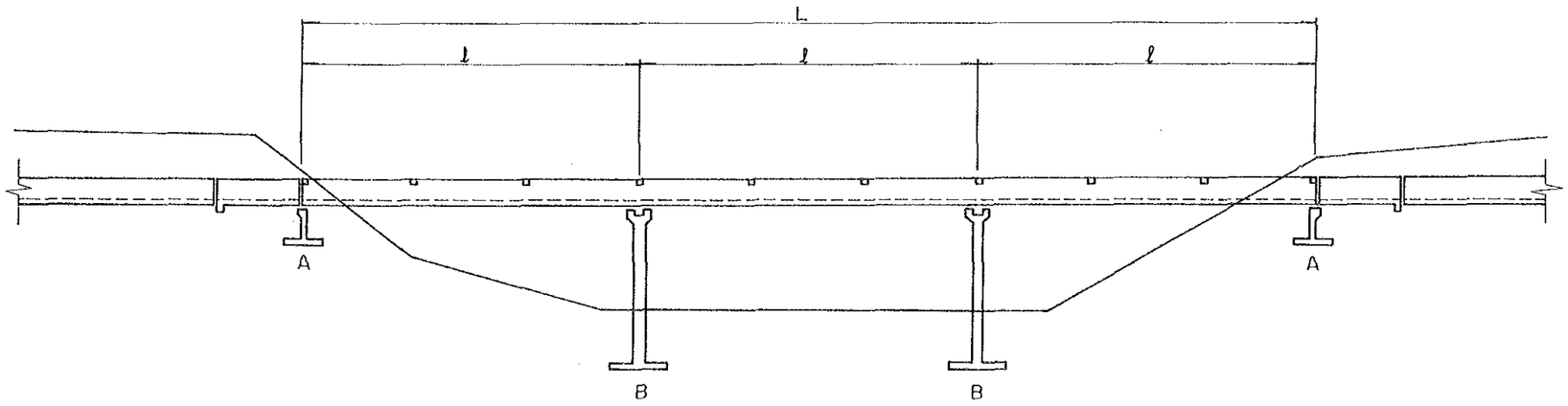
TYPICAL SECTION OF CHUTE

TABLE

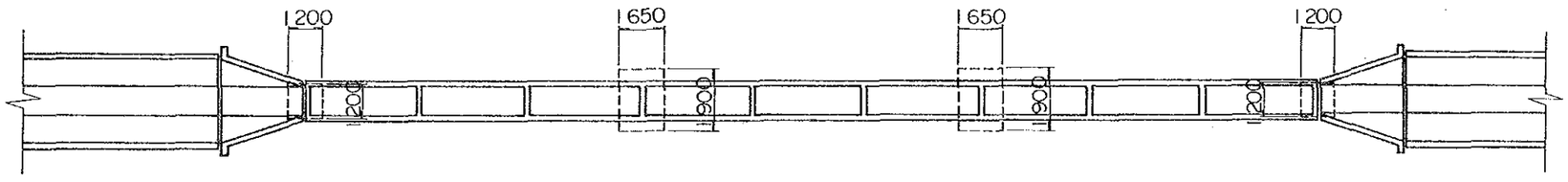
TYPE	a	b	c	d
A	1.00	0.95	3.62	1.15
B	0.80	0.80	3.12	1.00
C	0.70	0.70	2.82	0.90
D	0.60	0.65	2.62	0.85
E	0.50	0.60	2.42	0.80
F	0.40	0.50	2.12	0.70

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
TYPICAL SECTION OF OPEN CANAL WITH WET MESONRY AND CHUTE
MARCH, 1990 | NO. 15
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

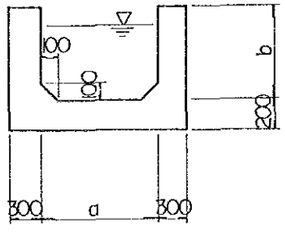
AQUEDUCT (1/3)



ELEVATION



PLAN



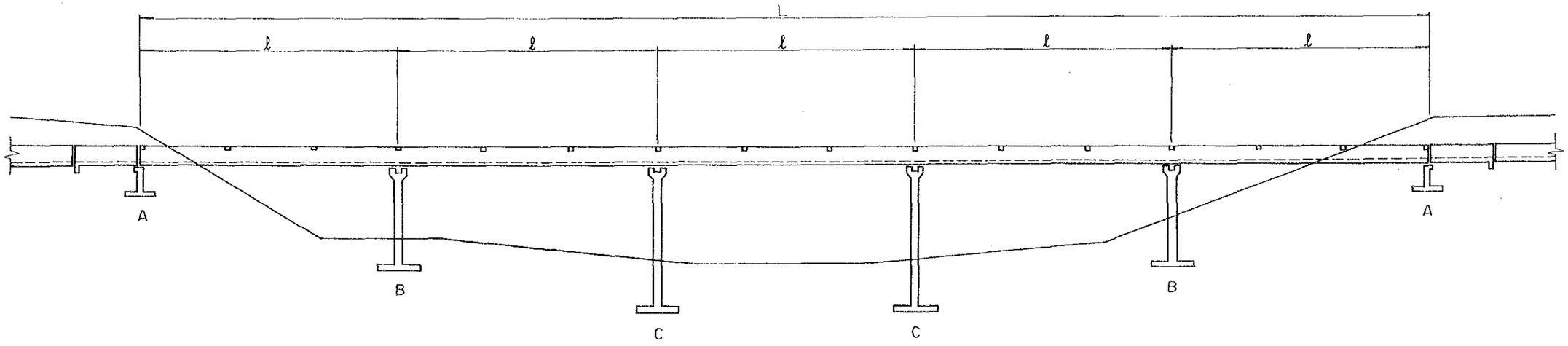
TYPICAL SECTION OF FLUME

TABLE

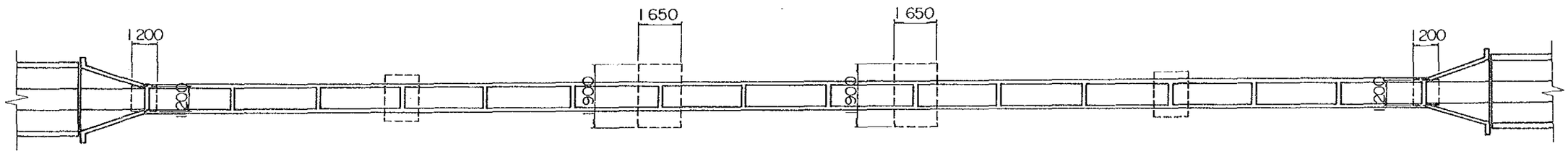
	L(m)	ℓ(m)	PIER		a(m)	b(m)
			A	B		
AQUEDUCT NO. 1	21.0	7.0	No. 1	NO. 3 (h=5m)	0.60	0.65
AQUEDUCT NO. 4	30.0	10.0	No. 1	NO. 3 (h=7m)	0.60	0.65
AQUEDUCT NO. 6	30.0	10.0	No. 1	NO. 3 (h=5m)	0.60	0.50

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
AQUEDUCT (1/3)
MARCH, 1990 | NO. 16
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

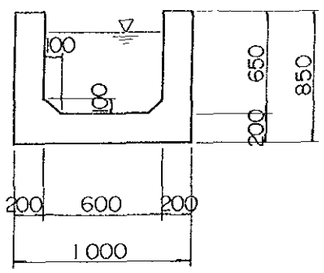
AQUEDUCT (2/3)



ELEVATION



PLAN



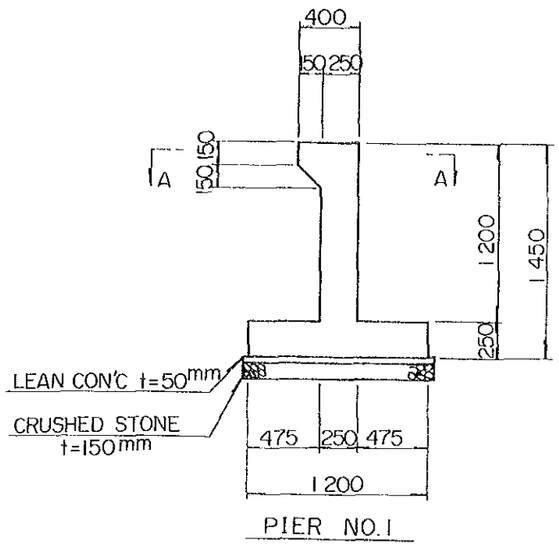
TYPICAL SECTION OF FLUME

TABLE

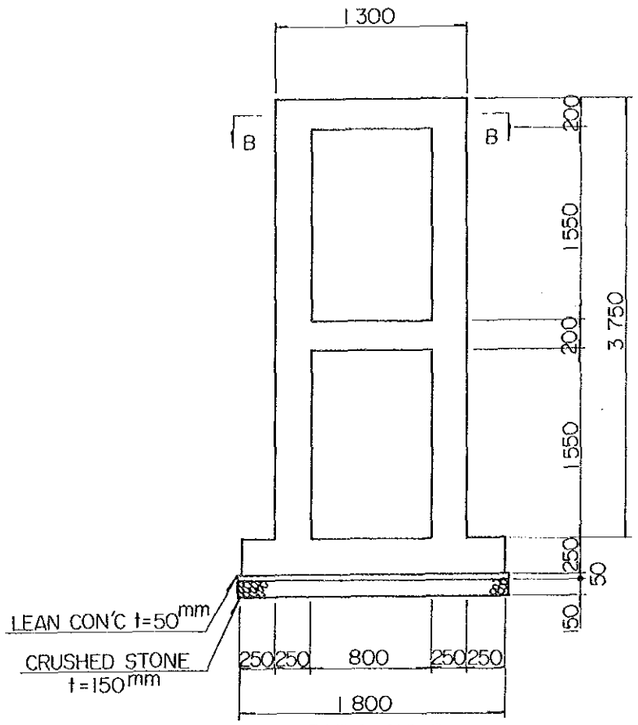
	L(m)	ℓ(m)	PIER		
			A	B	C
AQUEDUCT NO. 2	50.0	10.0	NO. 1	NO. 3 (h=6m)	NO. 6 (h=12m)
AQUEDUCT NO. 3	50.0	10.0	NO. 1	NO. 3 (h=7m)	NO. 3 (h=15m)
AQUEDUCT NO. 5	60.0	12.0	NO. 1	NO. 2	NO. 3 (h=7m)

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
AQUEDUCT (2/3)
MARCH, 1990 | NO. 17
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

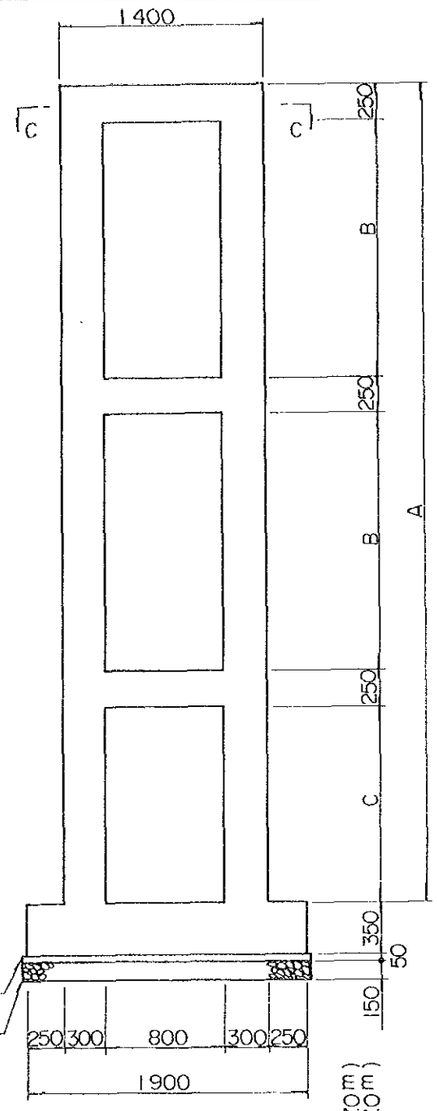
AQUEDUCT (3/3)



PIER NO.1

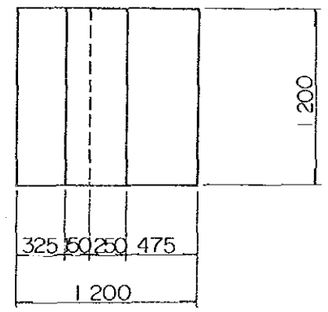


PIER NO.2

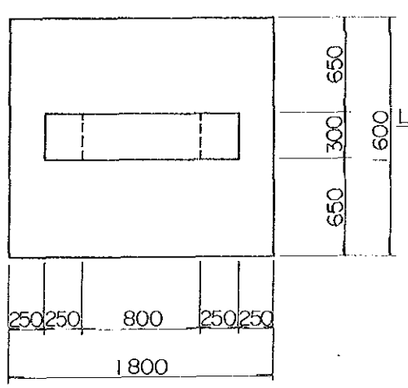


PIER NO.3

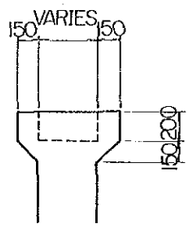
SECTION C - C



SECTION A - A



SECTION B - B



DETAIL OF HEAD OF PIER

TABLE

	PIER			A	B	C
AQUEDUCT NO. 1	NO. 1	—	NO. 3 (h=5m)	5.0	1.5	1.25
AQUEDUCT NO. 2	NO. 1	NO. 3 (h=6m)	NO. 3 (h=12m)	6.0 12.0	1.75 3.75	1.75 3.75
AQUEDUCT NO. 3	NO. 1	NO. 3 (h=7m)	NO. 3 (h=15m)	7.0 15.0	2.1 4.75	2.05 4.75
AQUEDUCT NO. 4	NO. 1	—	NO. 3 (h=7m)	7.0	2.1	2.05
AQUEDUCT NO. 5	NO. 1	NO. 2	NO. 3 (h=7m)	7.0	2.1	2.05
AQUEDUCT NO. 6	NO. 1	—	NO. 3 (h=5m)	5.0	1.5	1.25

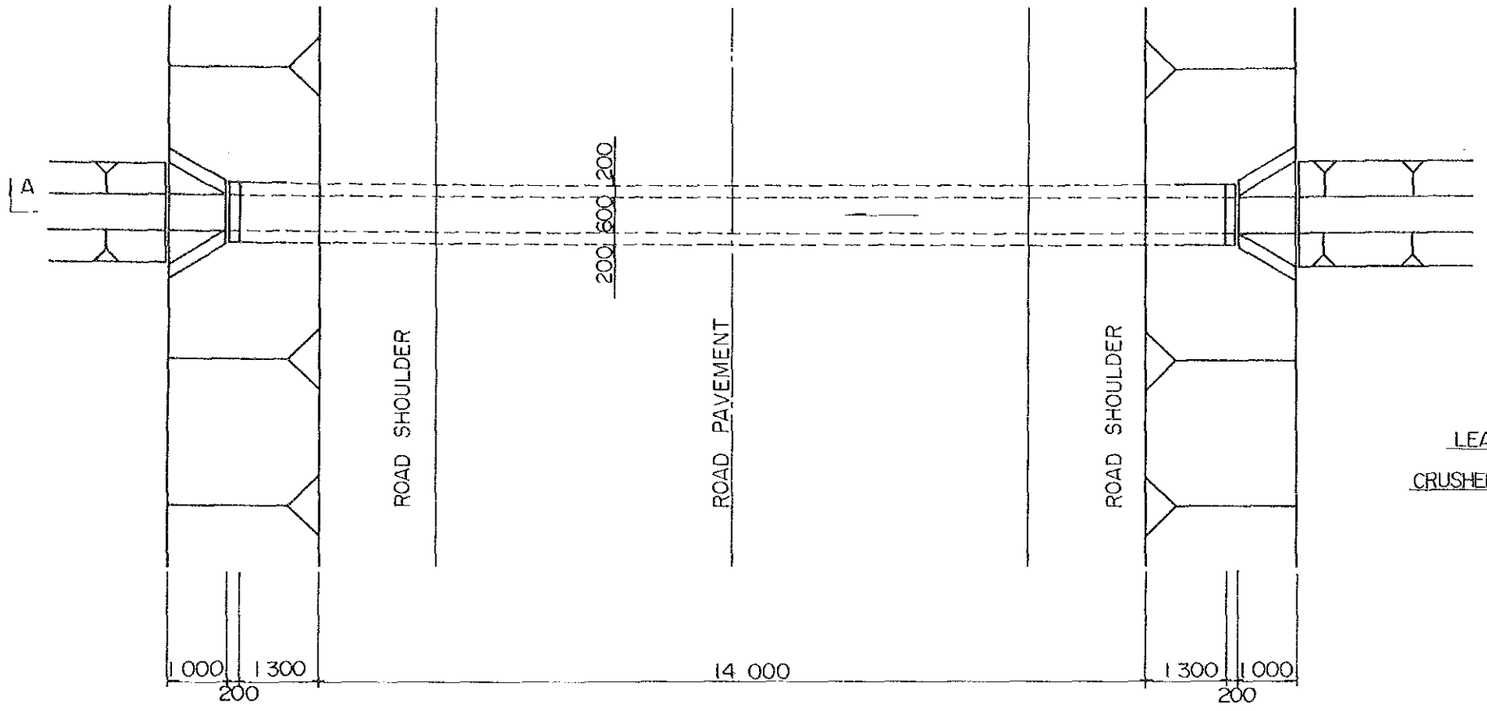
THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT

AQUEDUCT (3/3)

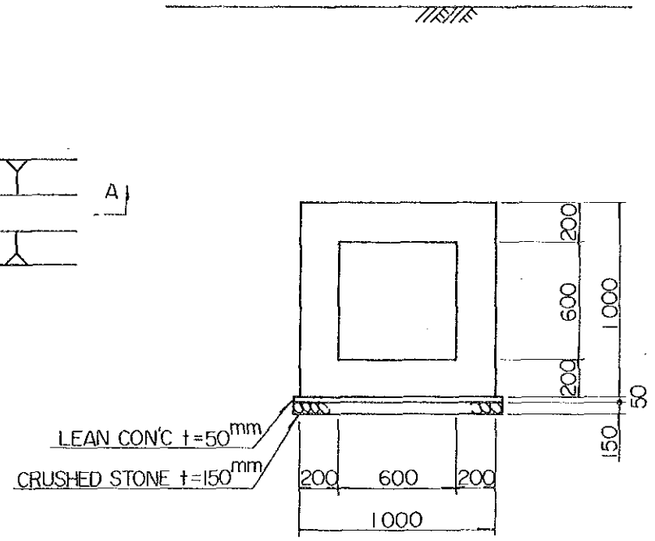
MARCH, 1990 | NO. 18

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

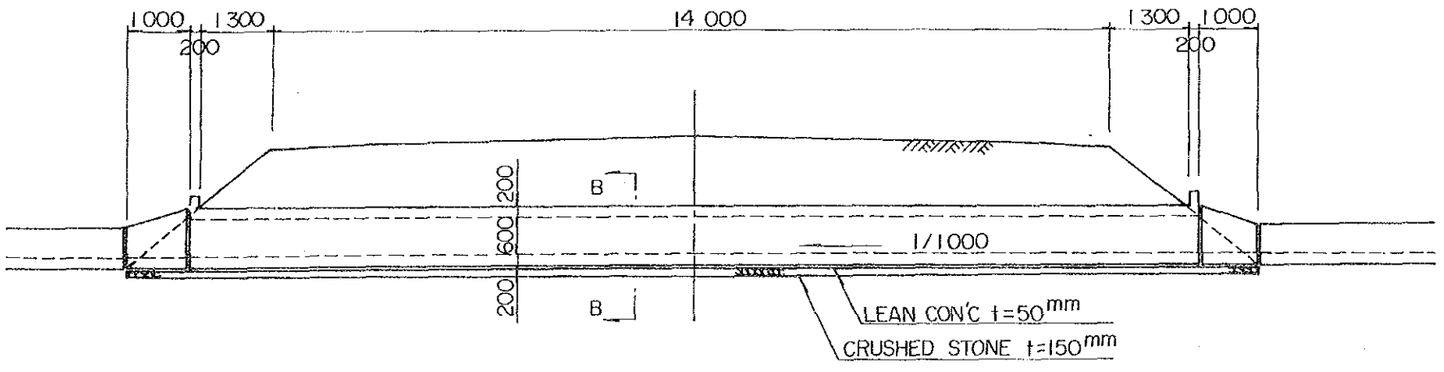
ROAD CROSSING BOX CULVERT



PLAN
S = 1/100



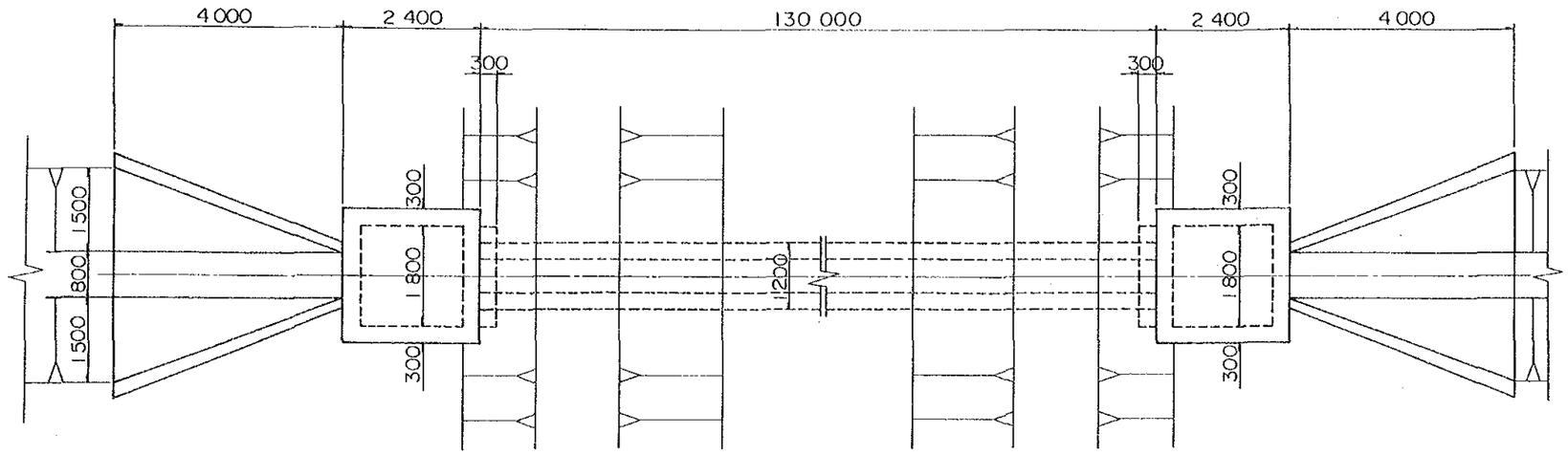
SECTION B - B
S = 1/30



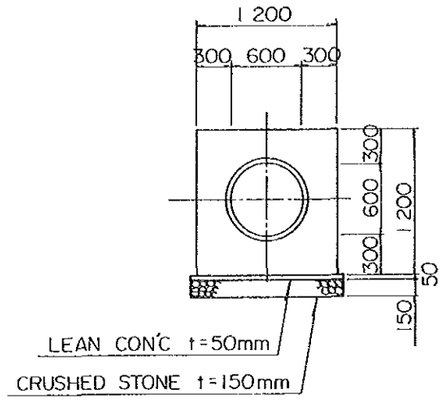
SECTION A - A
S = 1/100

THE DOMINICAN REPUBLIC THE CONSTANZA IRRIGATION PROJECT	
ROAD CROSSING BOX CULVERT	
MARCH, 1990	NO. 19
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

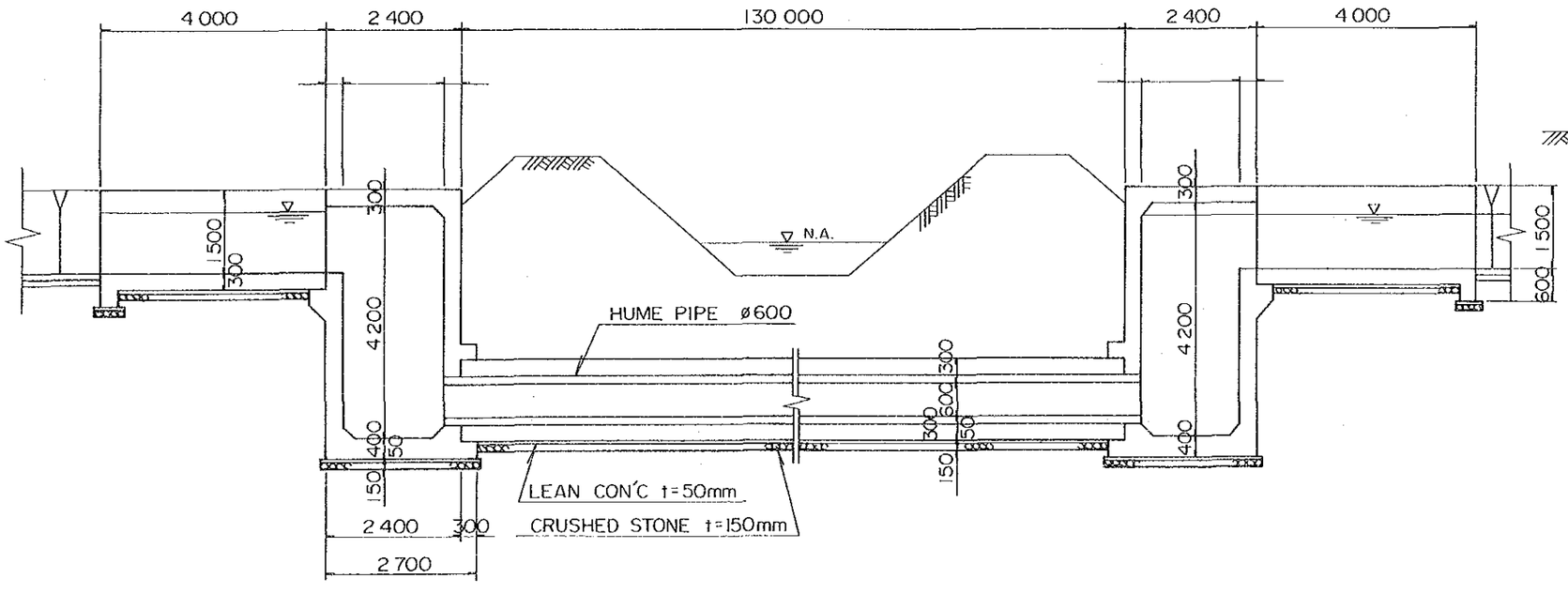
SIPHON



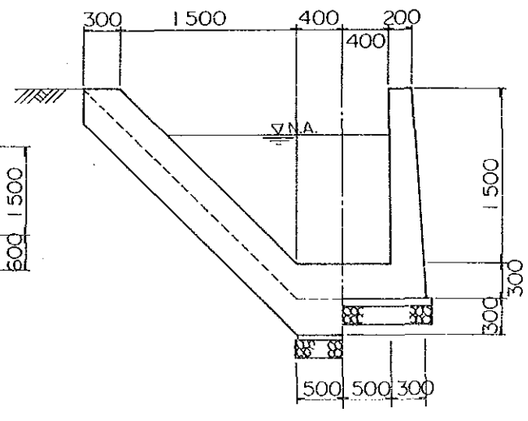
PLAN S = 1/100



SIPHON S = 1/50



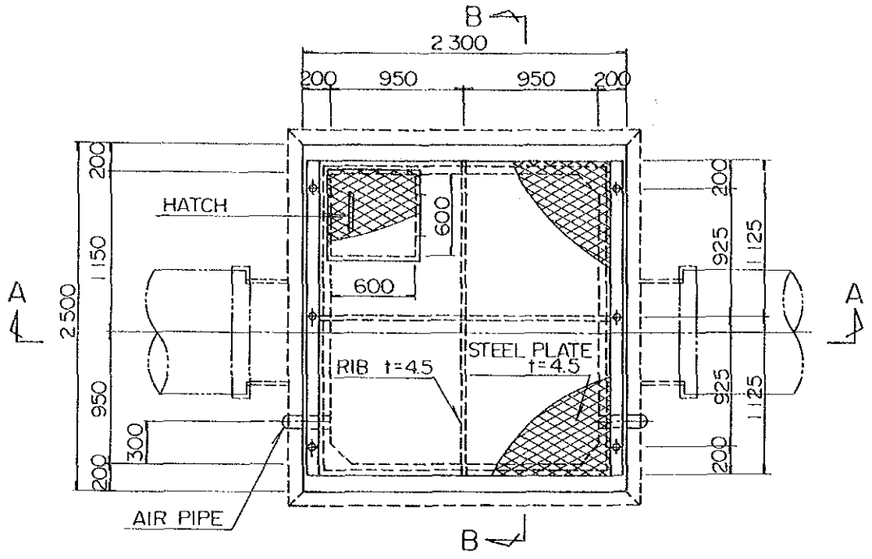
LONGITUDINAL SECTION S = 1/100



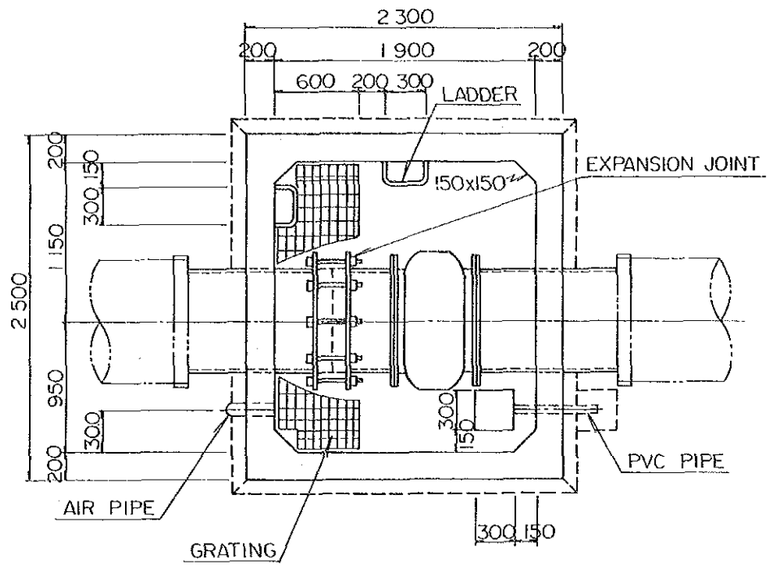
TRANSITION S = 1/50

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
SIPHON	
MARCH, 1990	NO. 20
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

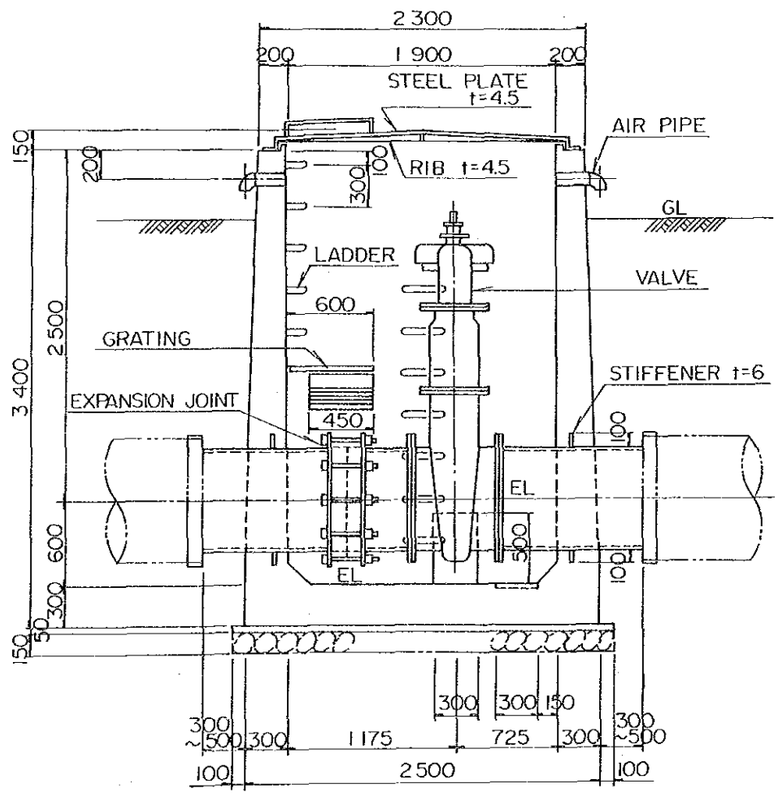
WASH-OUT VALVE PIT (ø600)



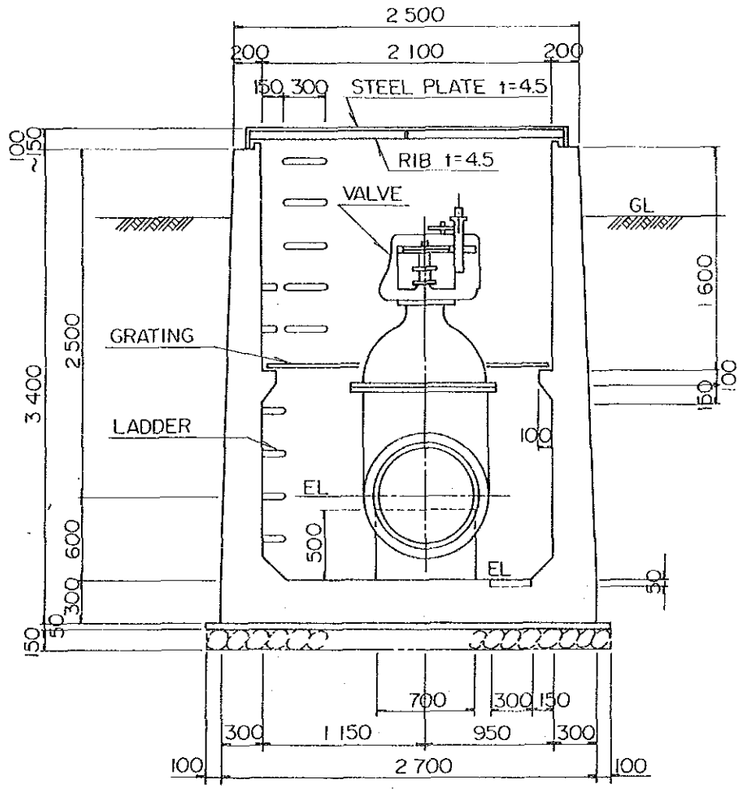
PLAN - 1



PLAN - 2



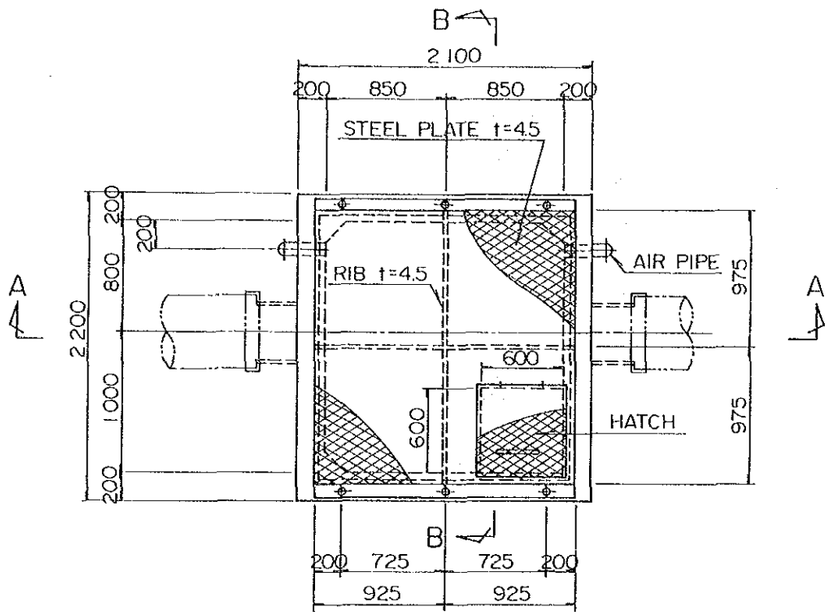
SECTION A-A



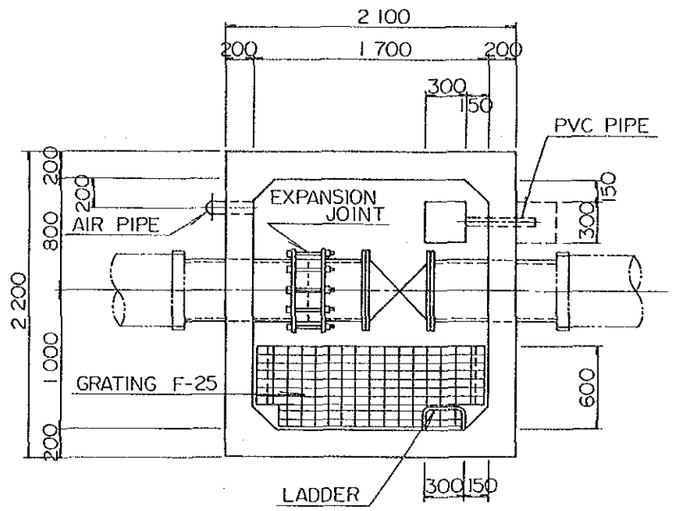
SECTION B-B

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
WASH-OUT VALVE PIT (ϕ600)
MARCH, 1990 | NO. 21
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

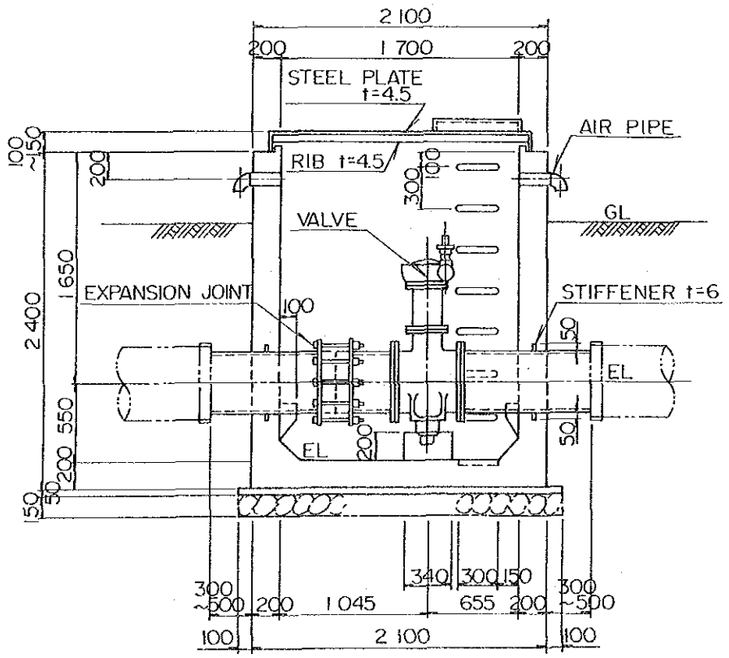
GATE VALVE PIT WASH-OUT VALVE PIT (ø300, ø400)



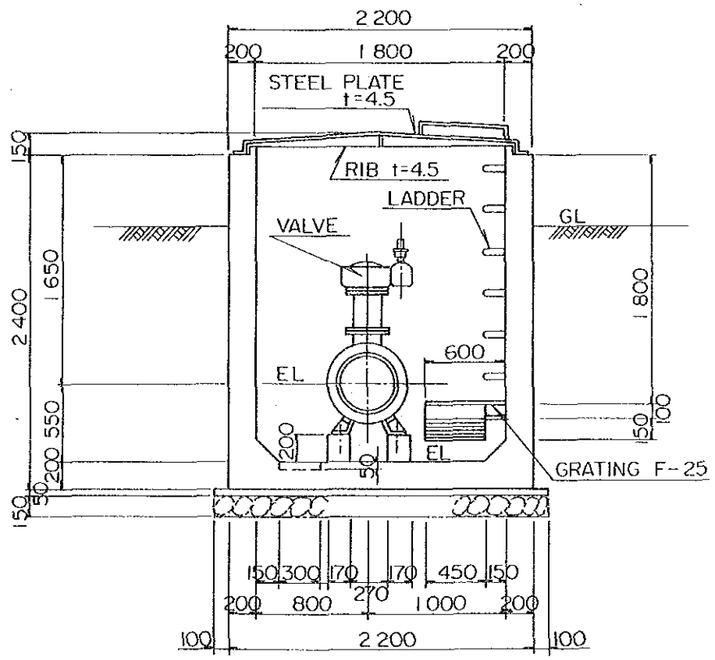
PLAN-1



PLAN-2



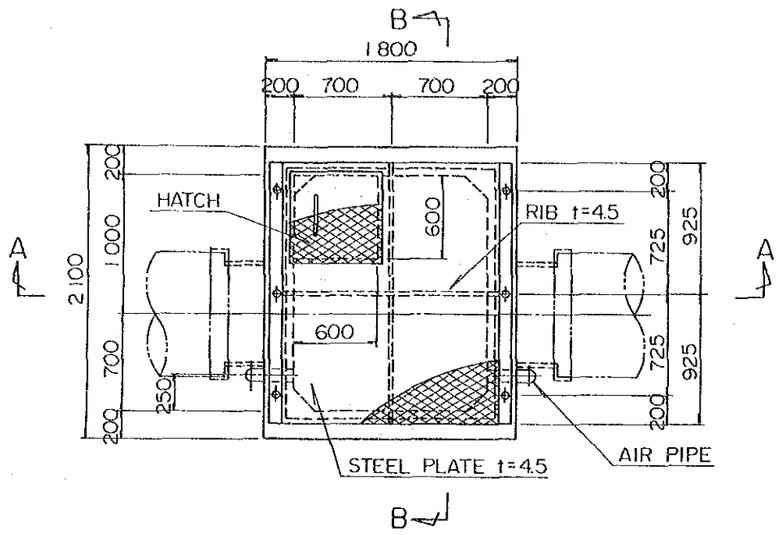
SECTION A-A



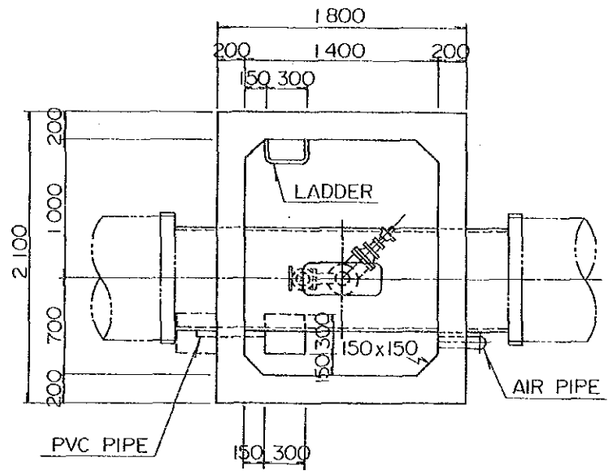
SECTION B-B

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
GATE VALVE PIT, WASH-OUT VALVE PIT (ϕ300, ϕ400)	
MARCH, 1990	NO. 22
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

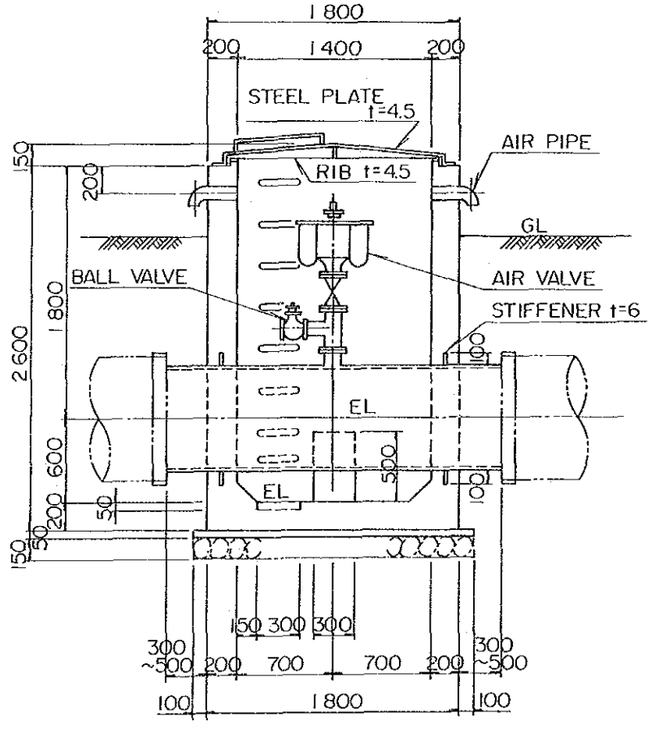
AIR VALVE PIT (ø600)



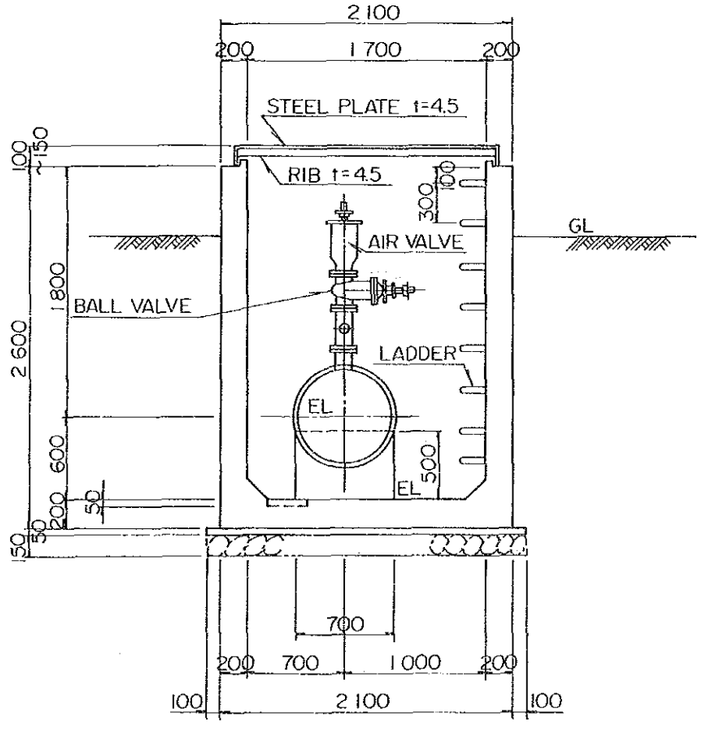
PLAN - 1



PLAN - 2



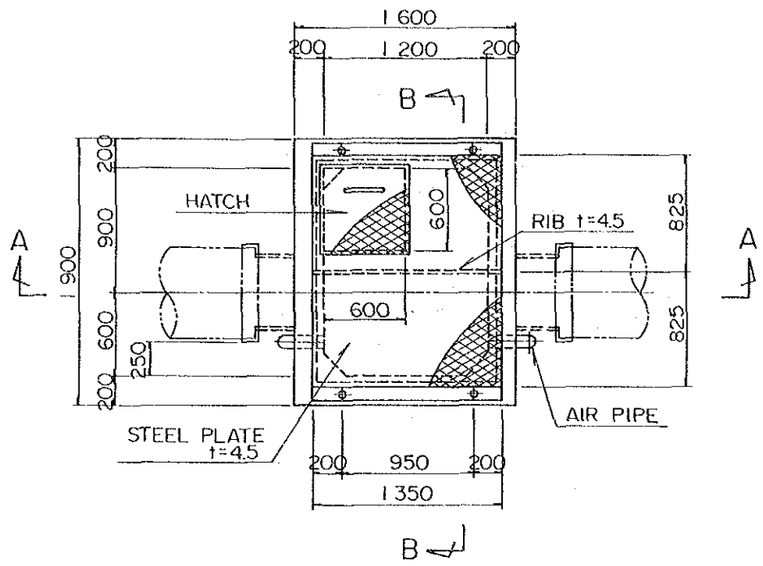
SECTION A - A



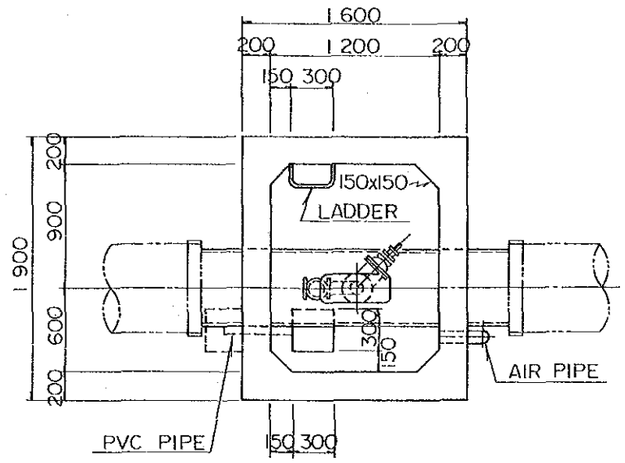
SECTION B - B

THE DOMINICAN REPUBLIC THE CONSTANZA IRRIGATION PROJECT	
AIR VALVE PIT (ϕ600)	
MARCH, 1990	NO. 23
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

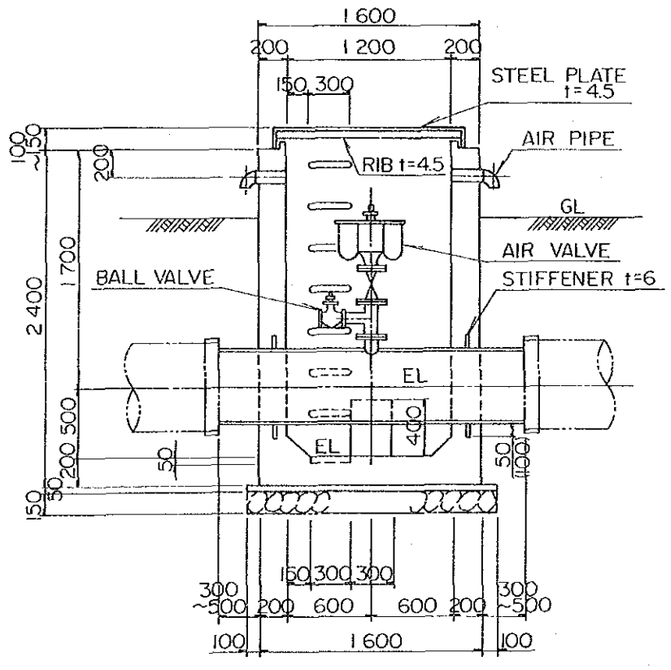
AIR VALVE PIT (ø300, ø400)



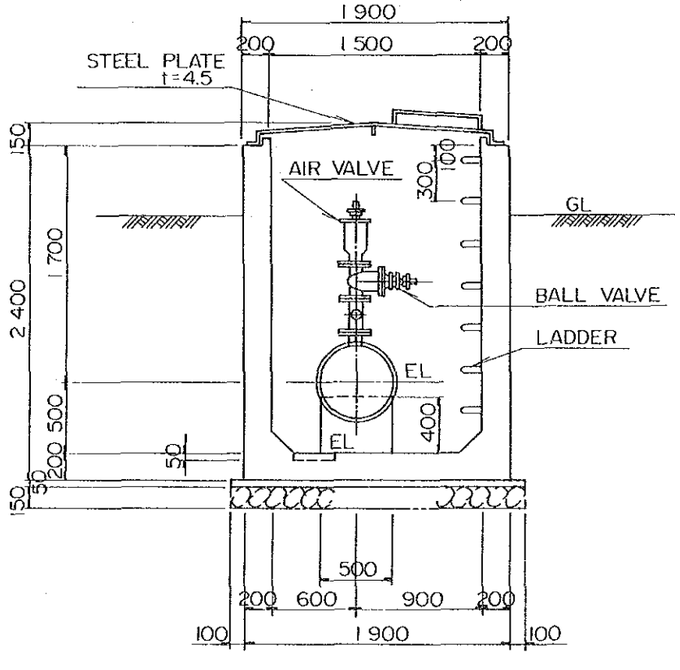
PLAN - 1



PLAN - 2



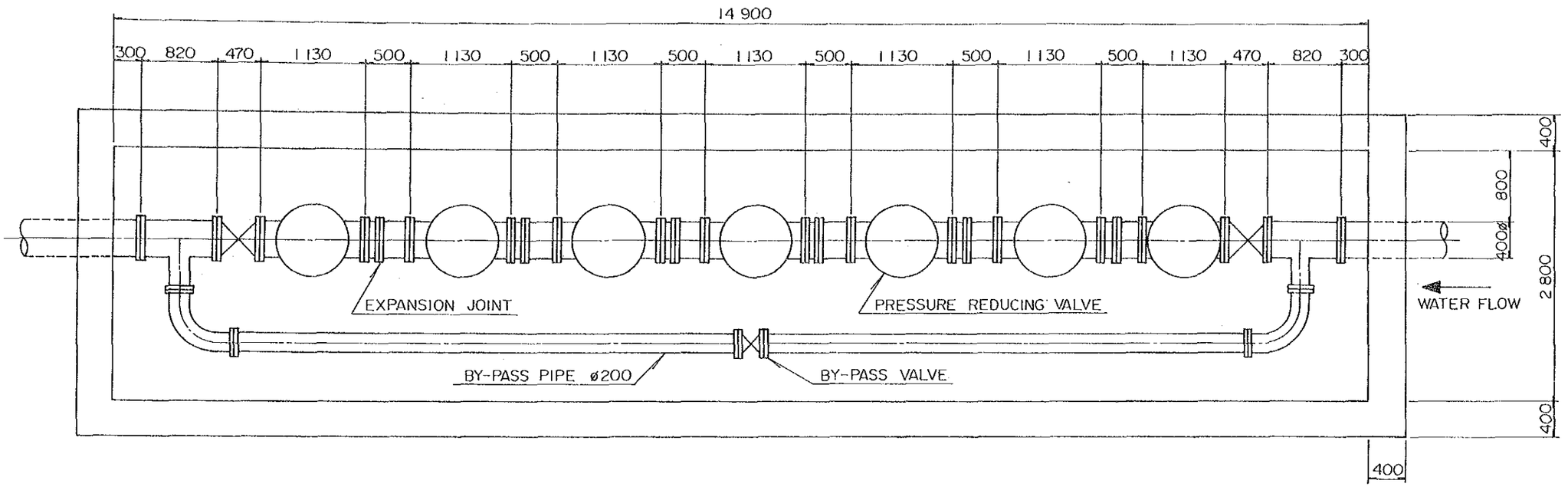
SECTION A - A

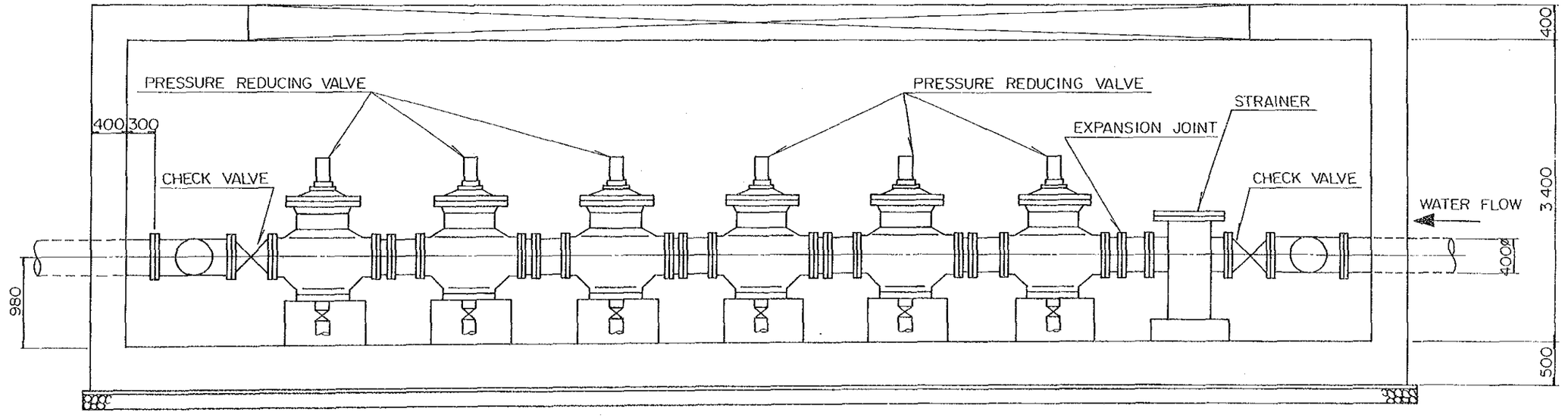


SECTION B - B

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
AIR VALVE PIT (ϕ300, ϕ400)	
MARCH, 1990	NO. 24
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

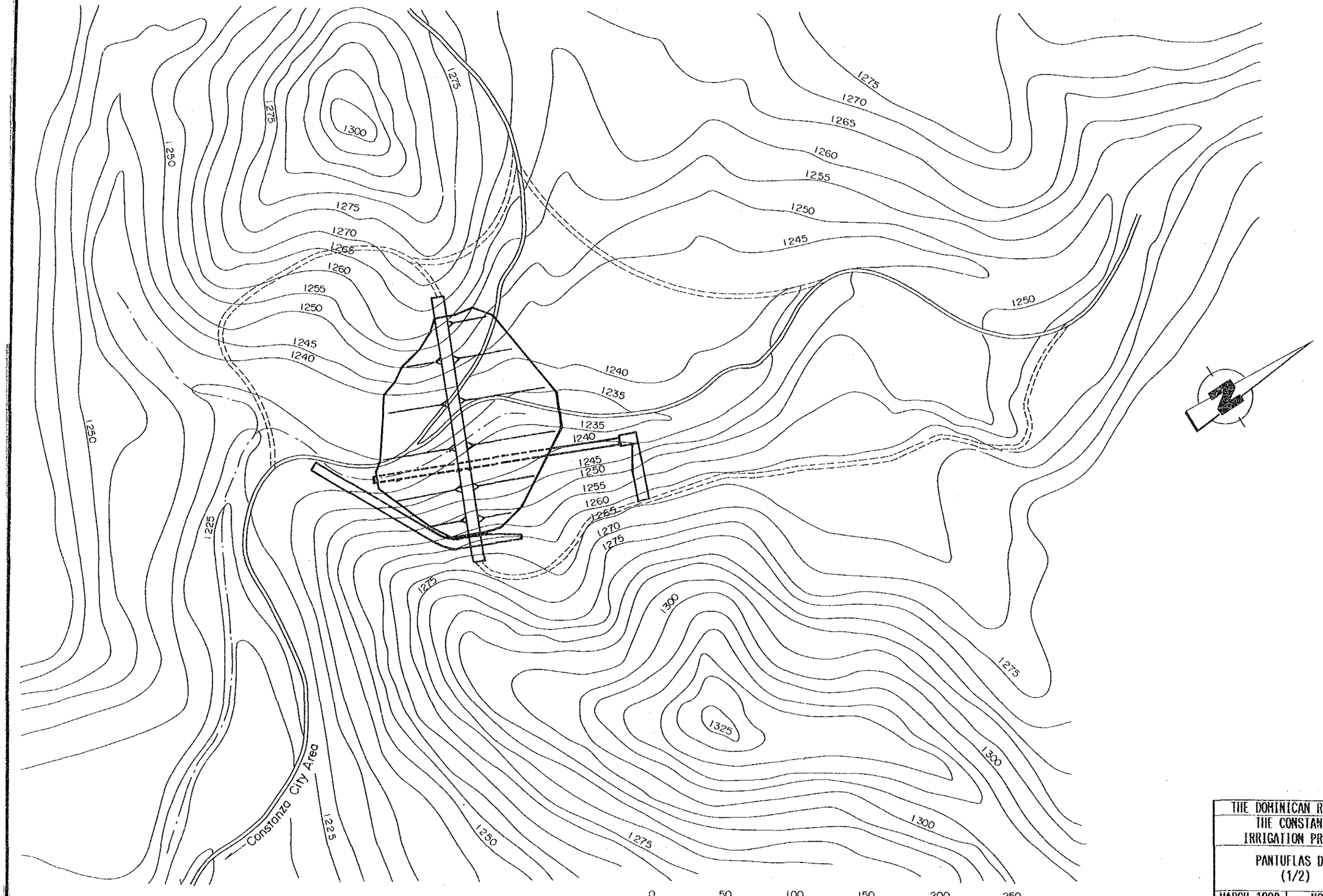
PRESSURE REDUCING VALVE PIT (ø400)





THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
PRESSURE REDUCING VALVE PIT(ϕ400)	
MARCH, 1990	NO. 25
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

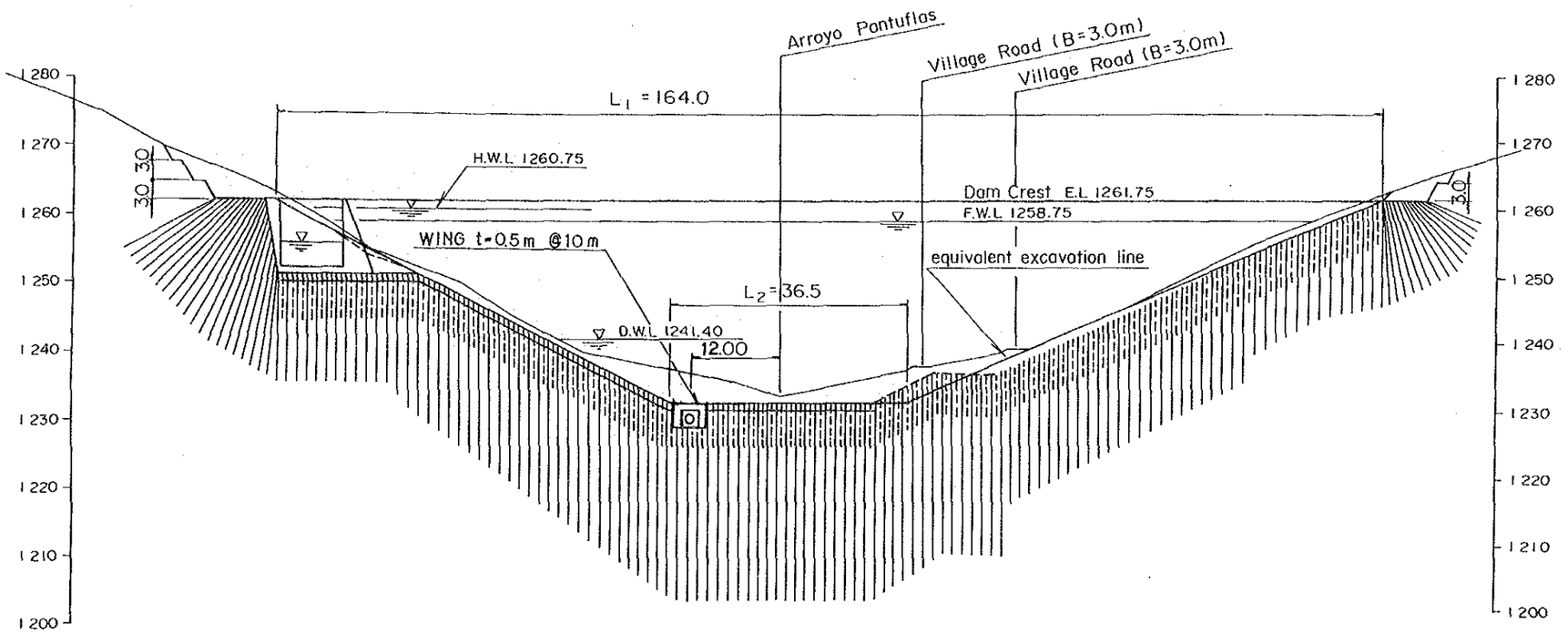
PANTUFLAS DAM (1/2)



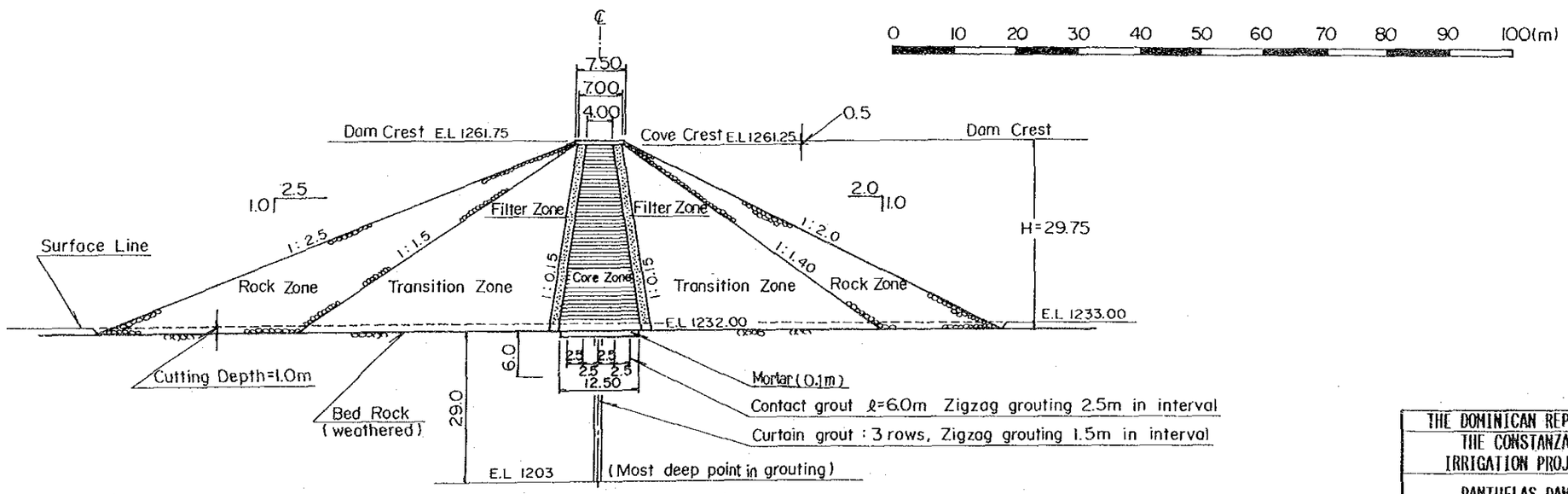
GENERAL PLAN

THE DOMINICAN REPUBLIC
THE CONSTANZA IRRIGATION PROJECT
PANTUFLAS DAM (1/2)
MARCH, 1990 | NO. 26
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

PANTUFLAS DAM (2/2)



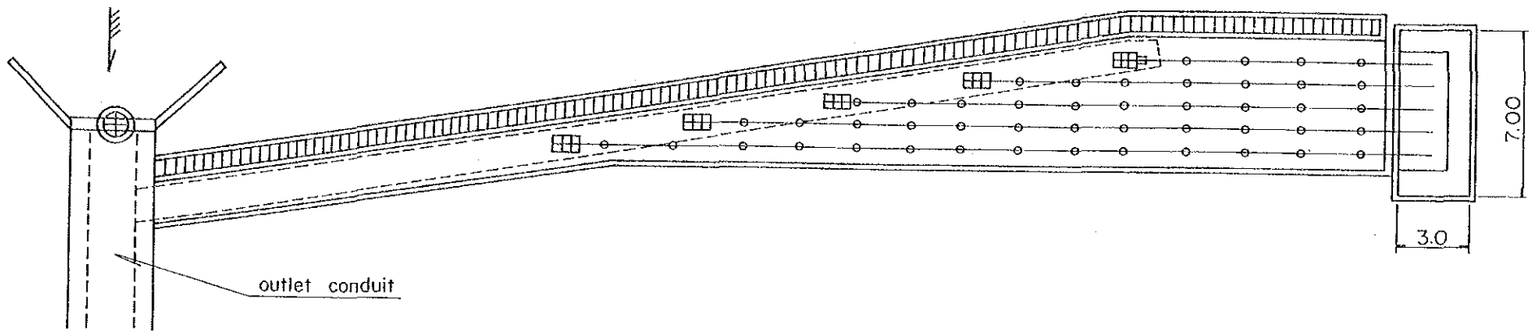
LONGITUDINAL SECTION ALONG DAM AXIS



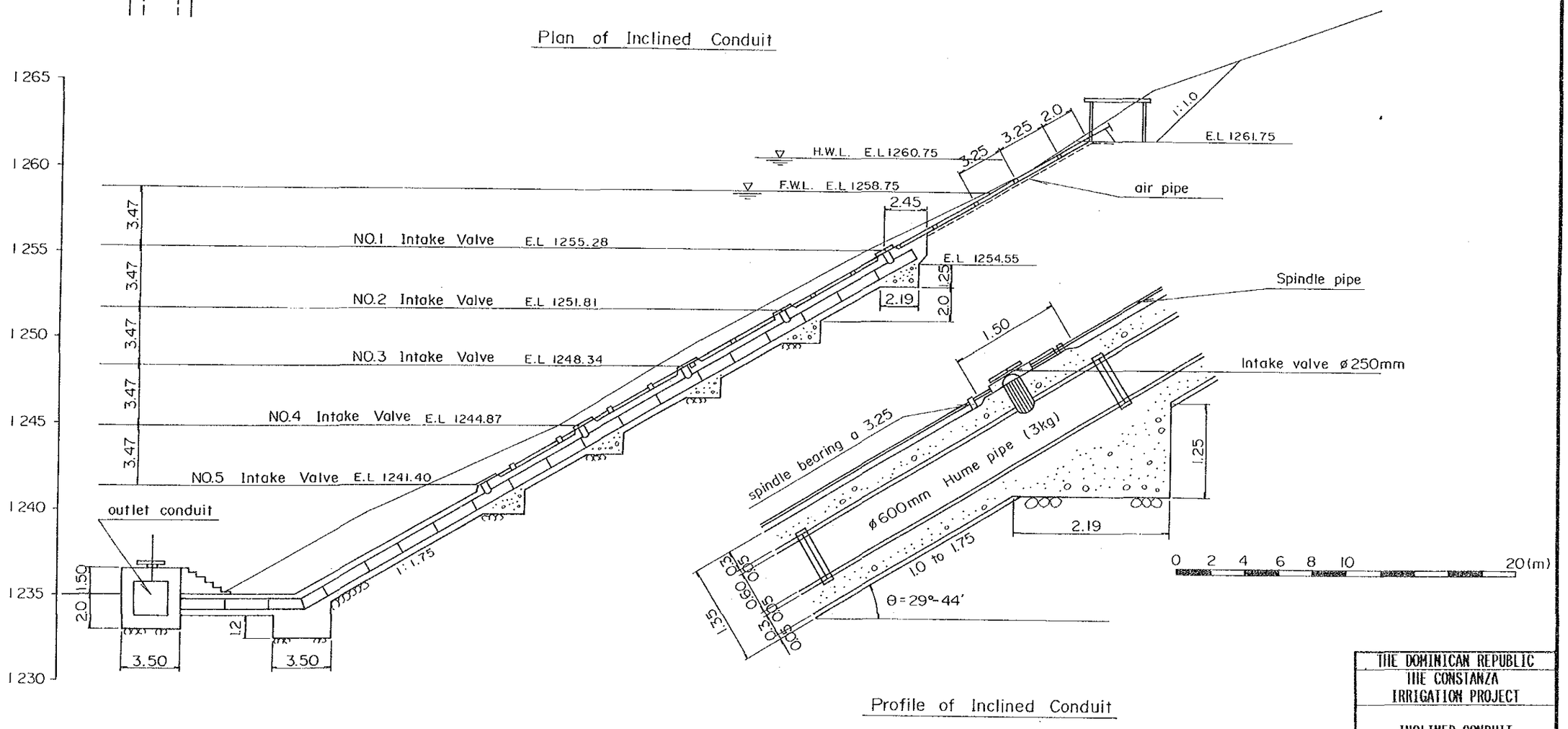
TYPICAL CROSS SECTION

THE DOMINICAN REPUBLIC
THE CONSTANZA · IRRIGATION PROJECT
PANTUFLAS DAM (2/2)
MARCH, 1990 | NO. 27
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

INCLINED CONDUIT



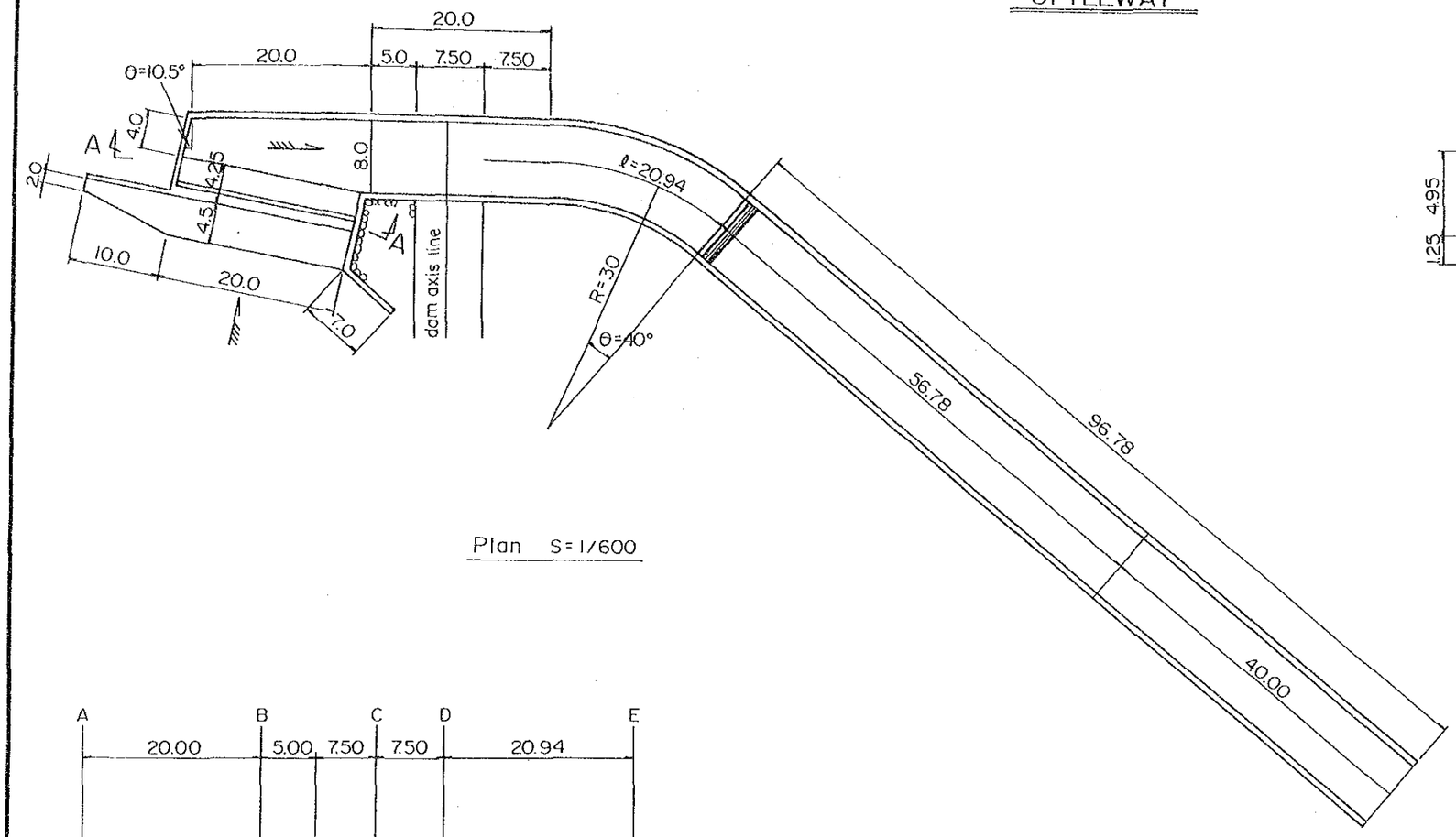
Plan of Inclined Conduit



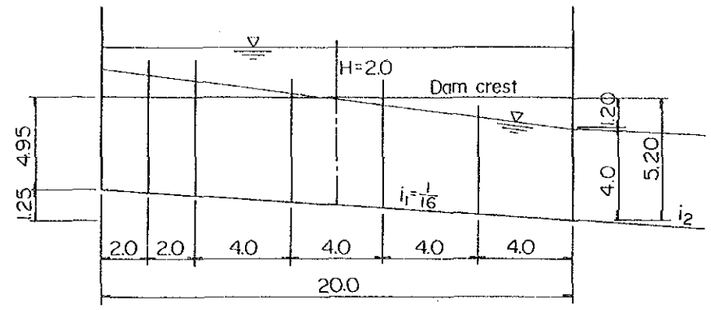
Profile of Inclined Conduit

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
INCLINED CONDUIT	
MARCH, 1990	NO. 28
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

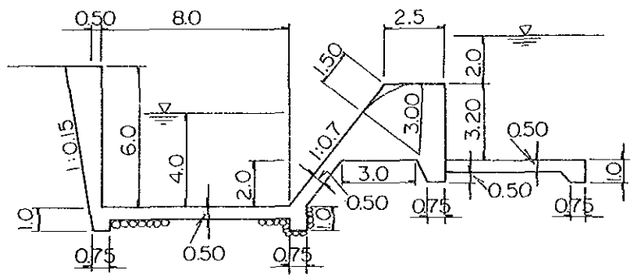
SPILLWAY



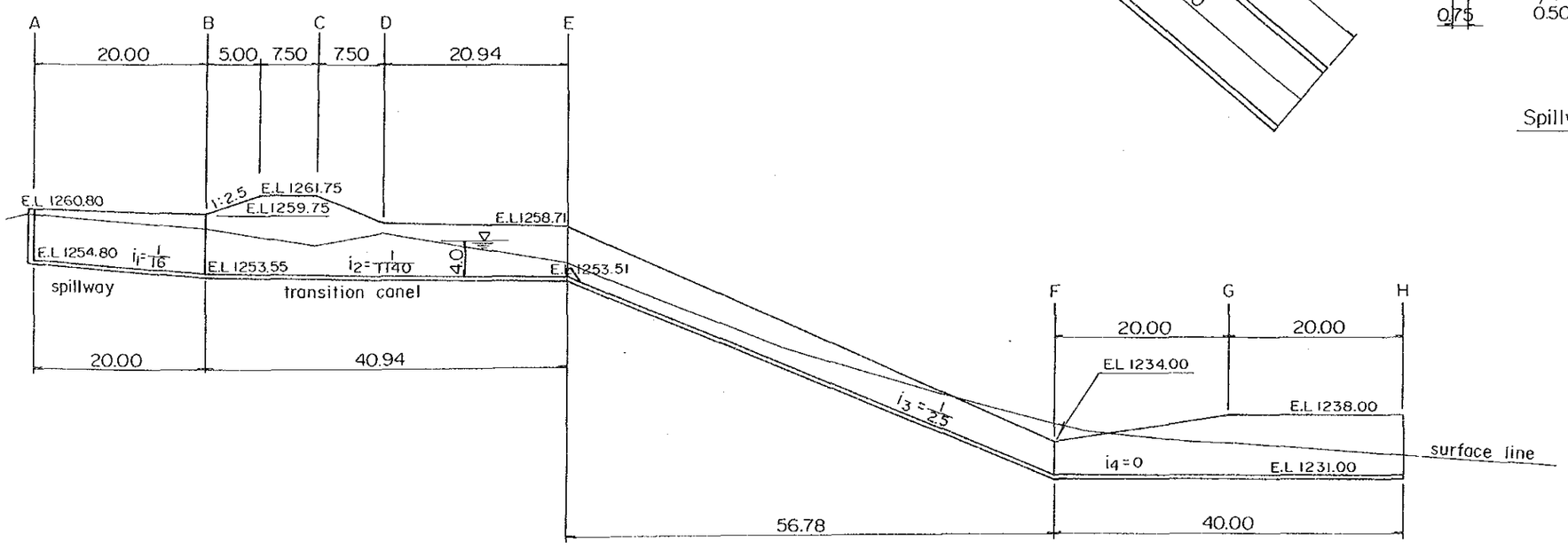
Plan S=1/600



SECTION A-A S=1/250



Spillway weir S=1/250



Spillway Profile S=1/600

THE DOMINICAN REPUBLIC	
THE CONSTANZA IRRIGATION PROJECT	
SPILLWAY	
MARCH, 1990	NO. 29
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	

JICA