

- LA: Lightning Arrester
- CVT: Capacitance Voltage Transformer
- DS: Disconnecting Switch
- CT: Current Transformer
- CB: Circuit Breaker
- M.TR Main Transformer

Fig. 11.5 Layout of Outdoor Equipment

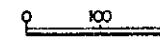
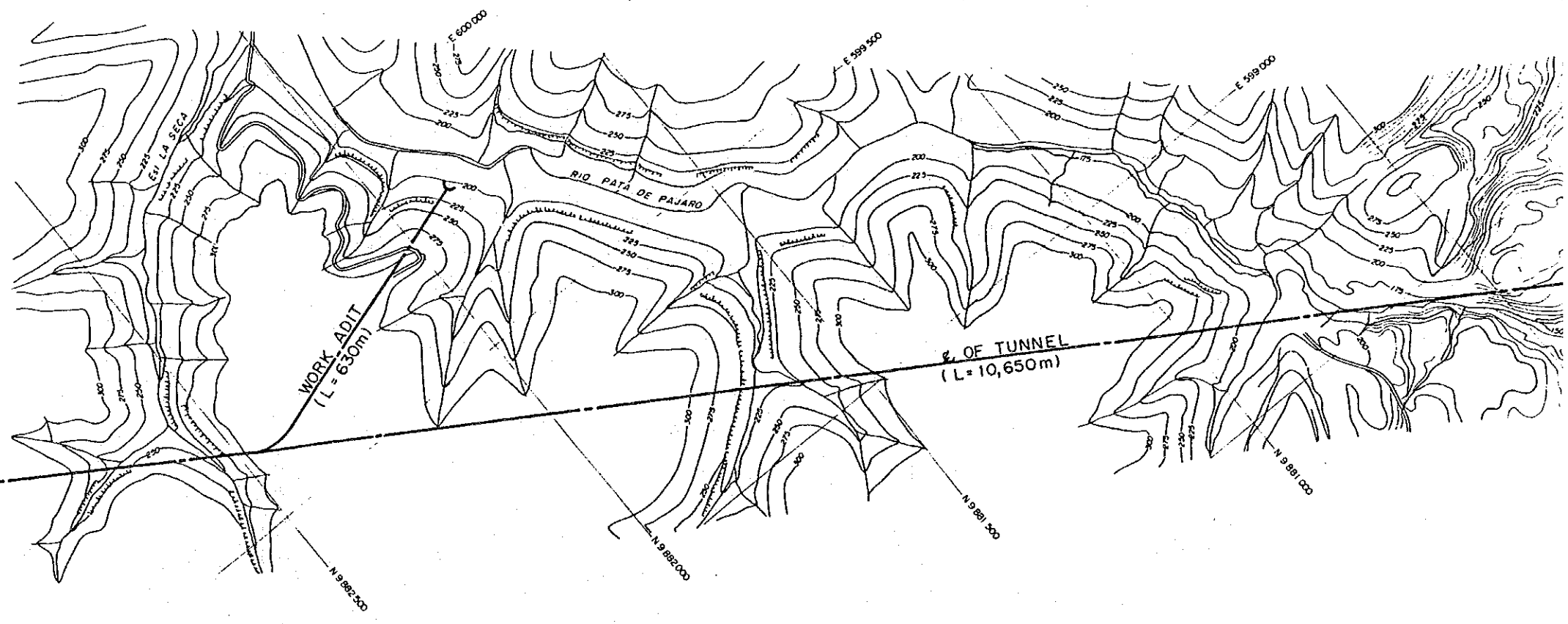
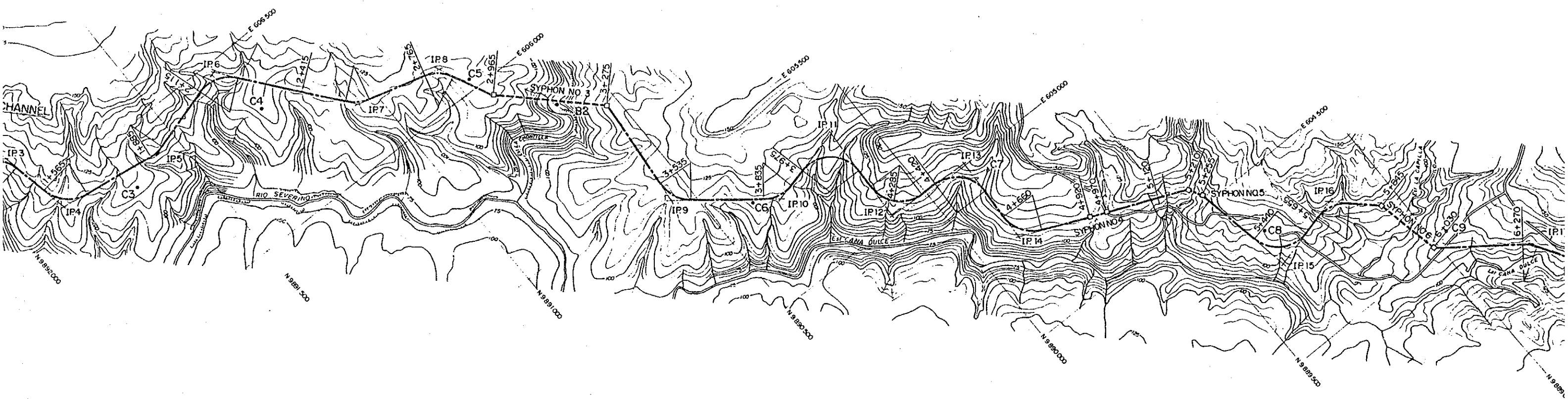
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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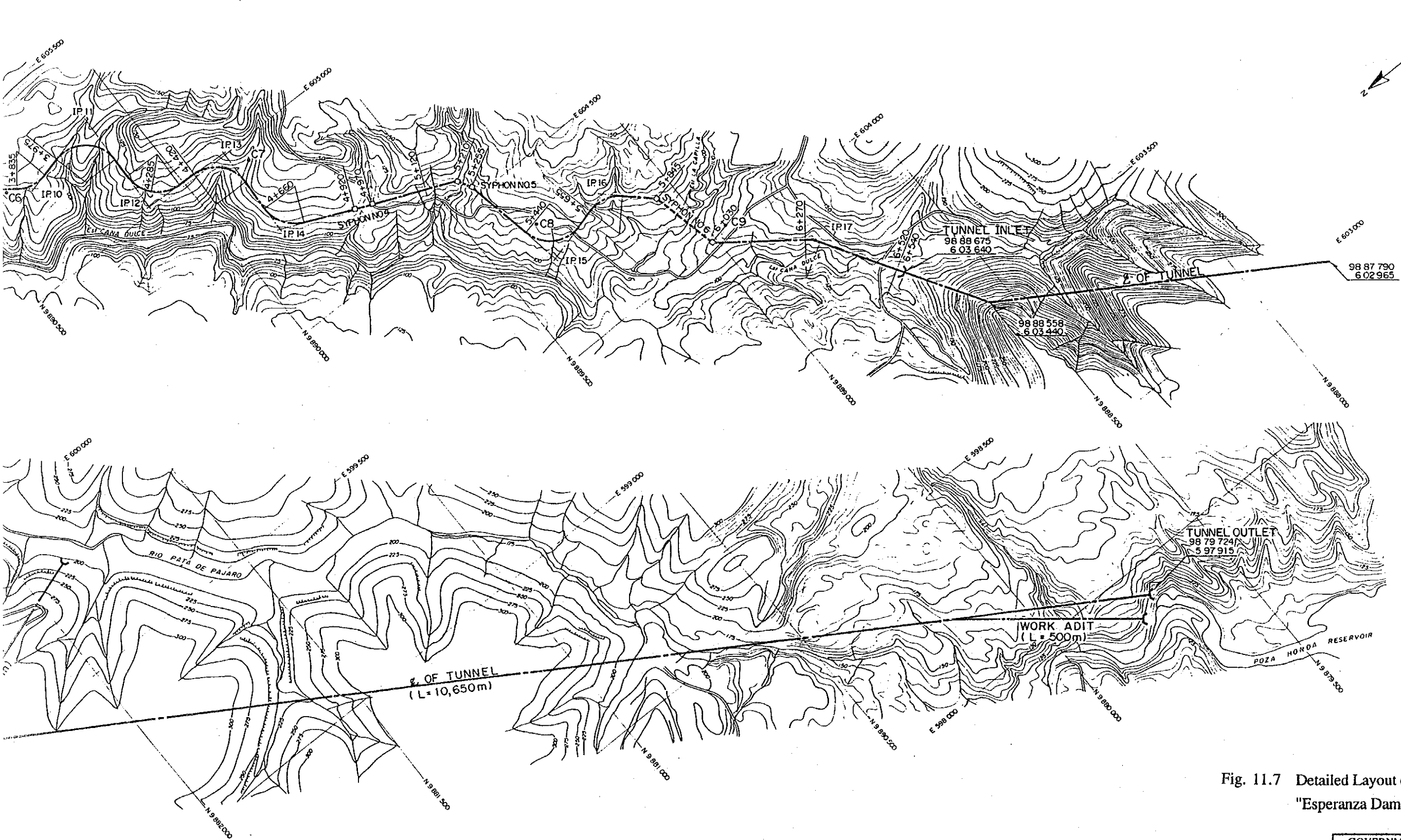
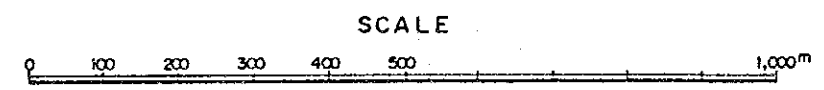


Fig. 11.7 Detailed Layout of Water Transbasin Scheme  
 "Esperanza Dam (Severino) - Poza Honda Dam"



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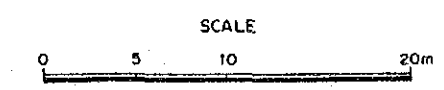
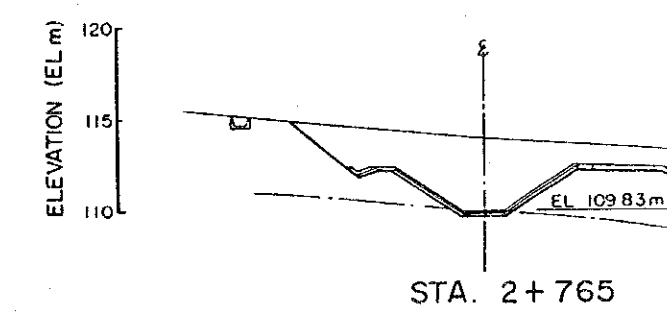
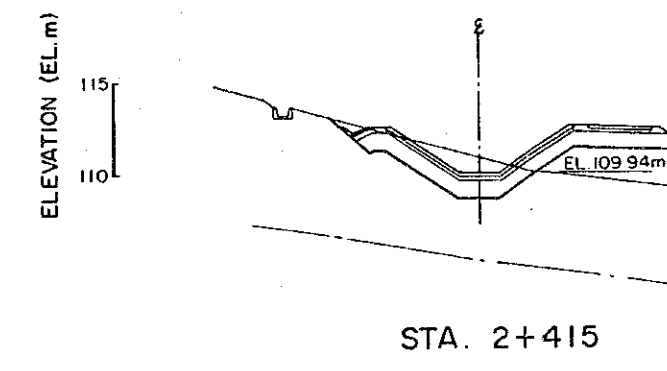
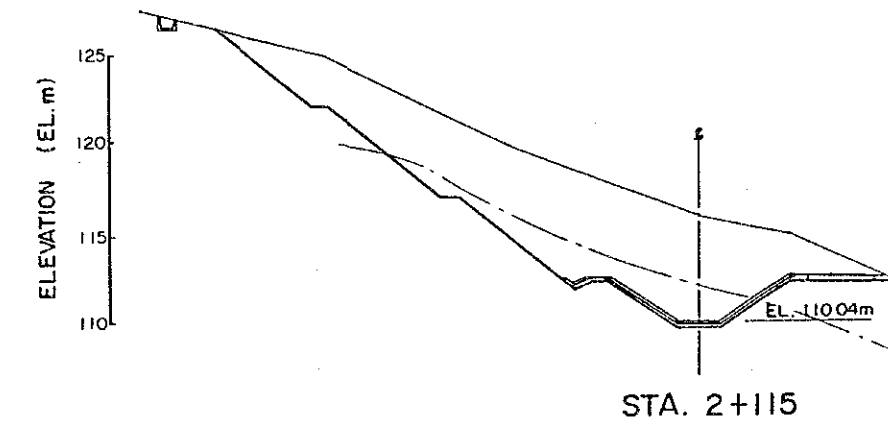
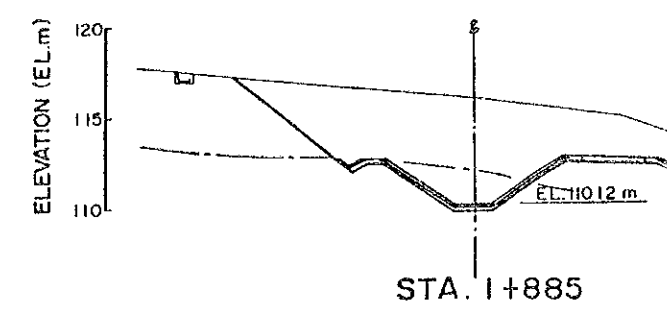
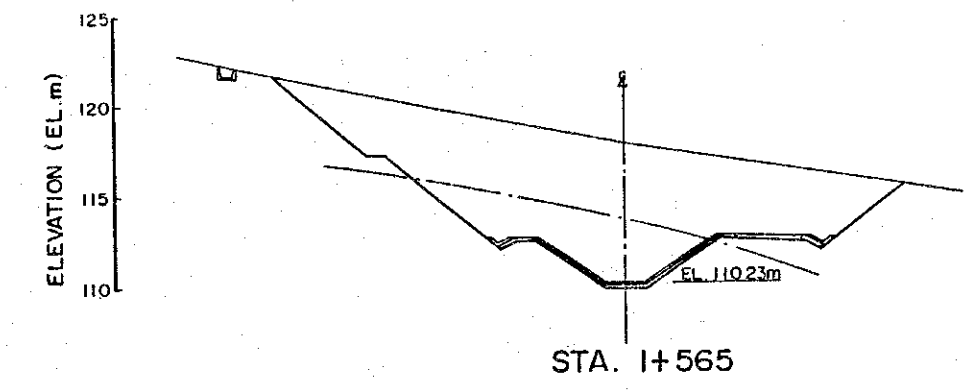
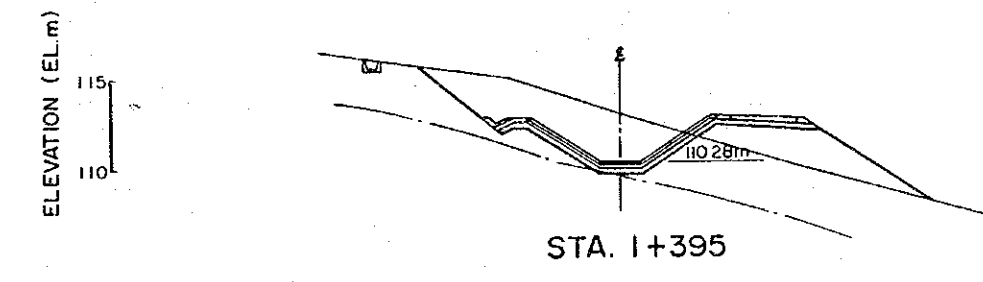
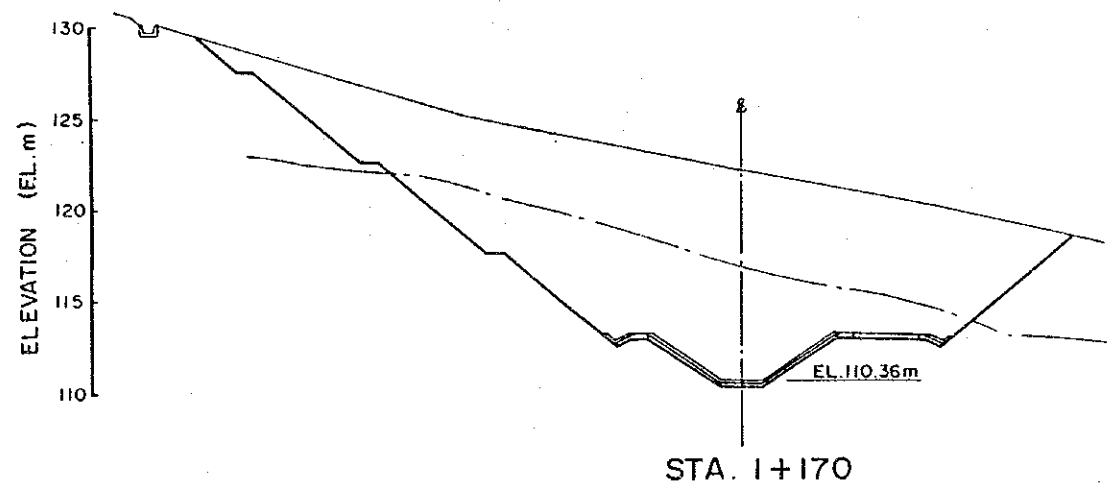
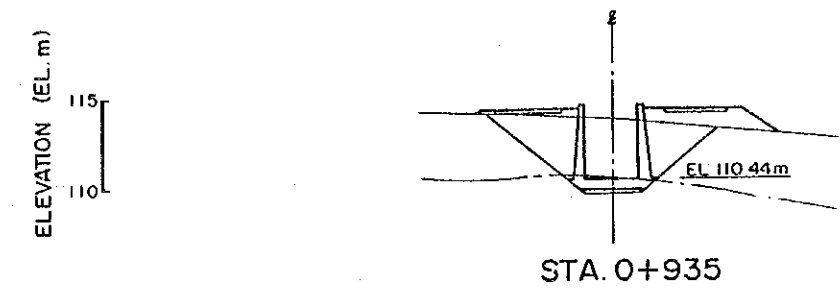
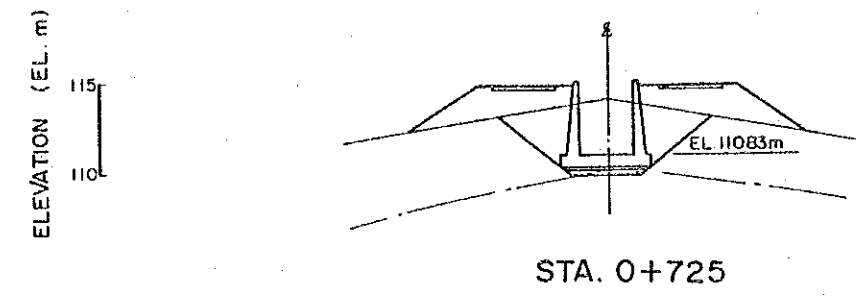
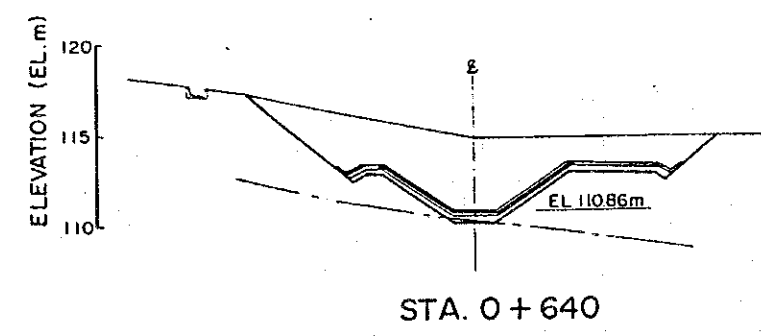
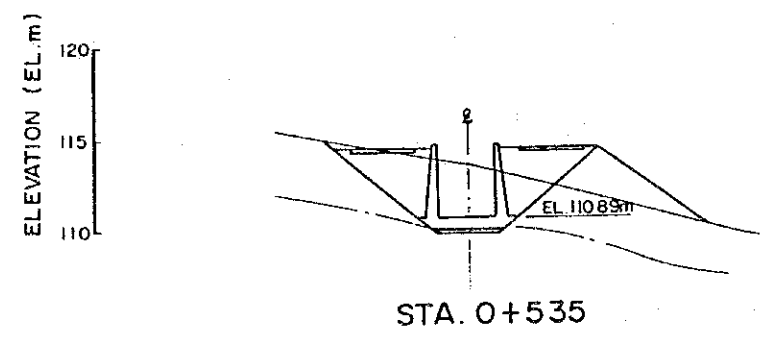
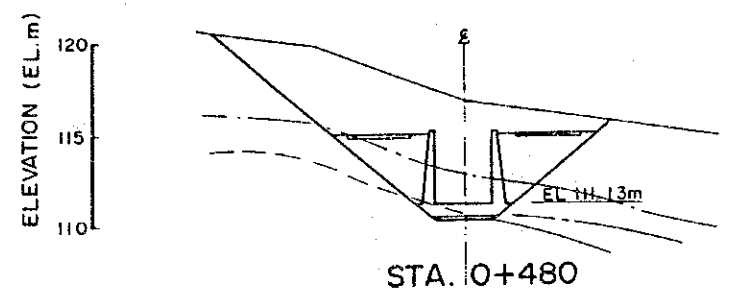
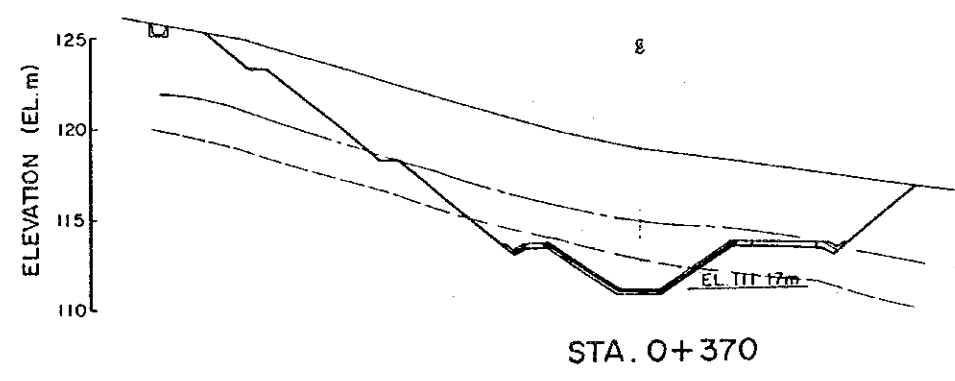
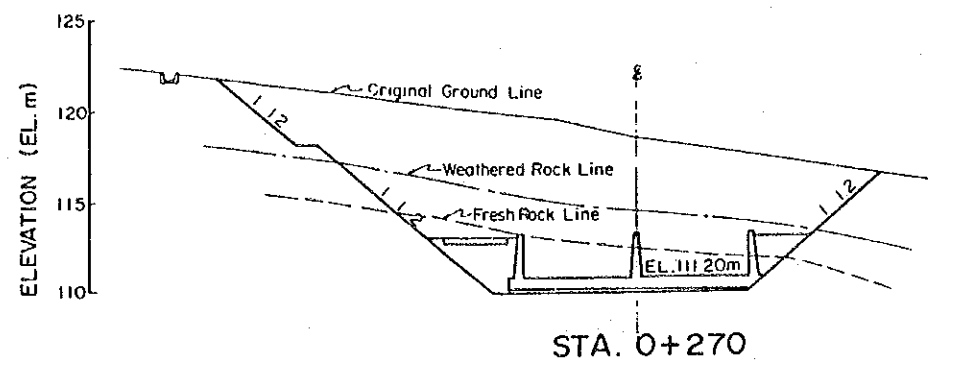


Fig. 11.8 Cross Section of

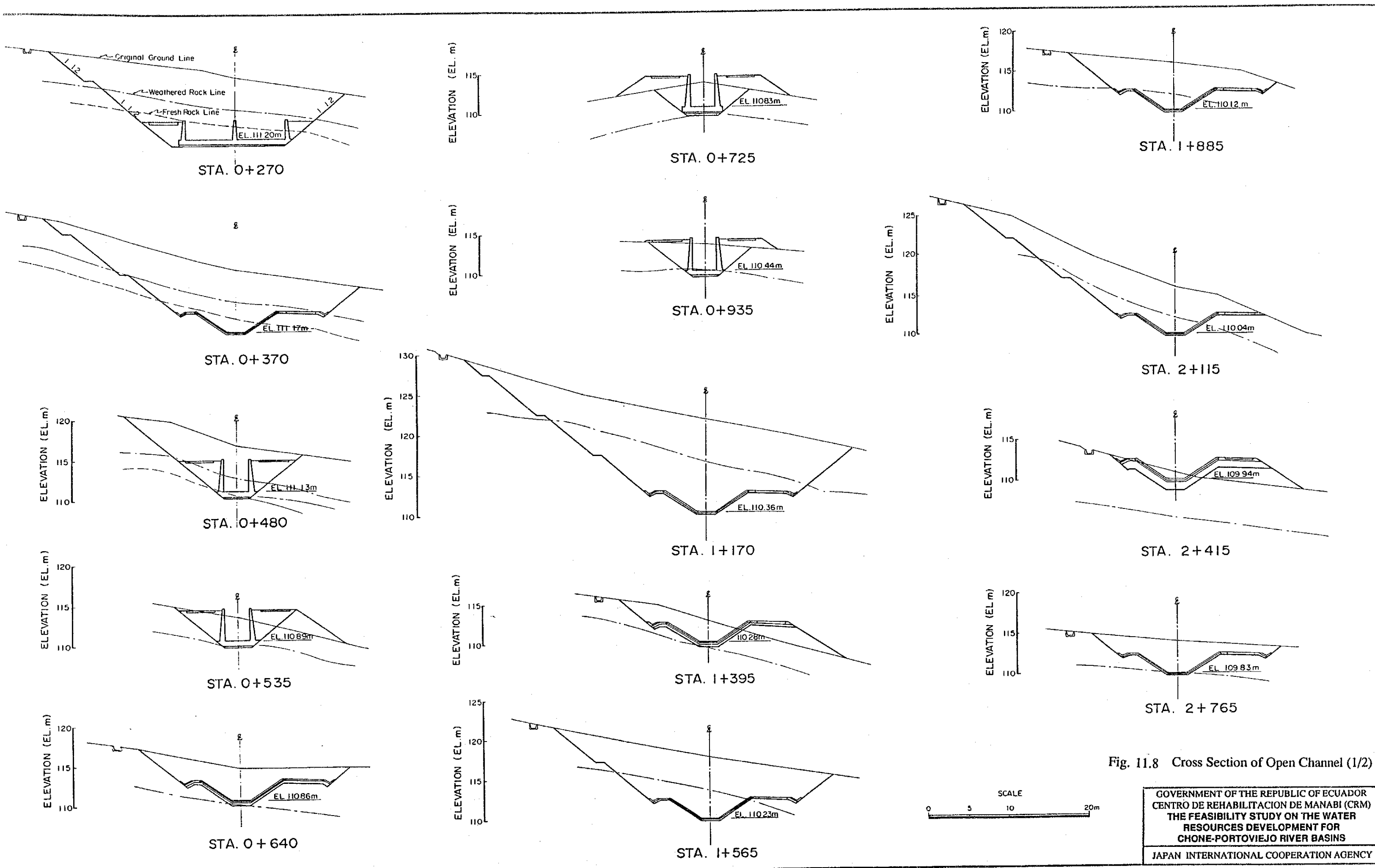
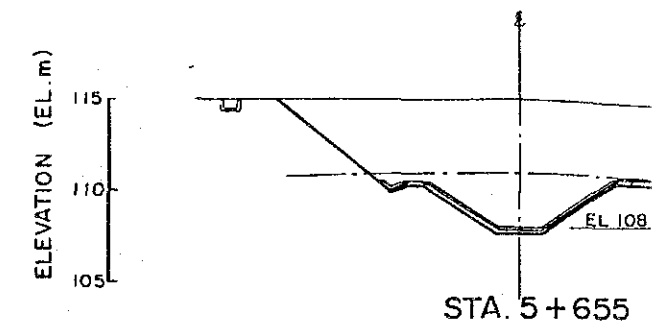
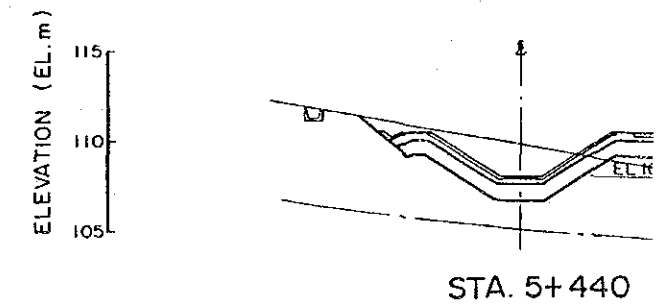
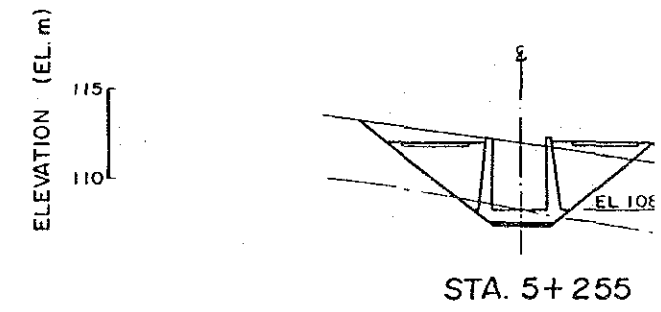
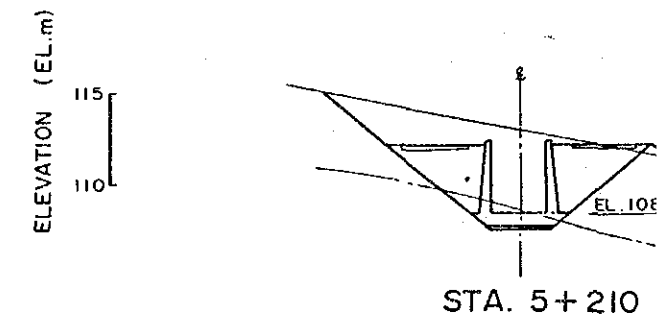
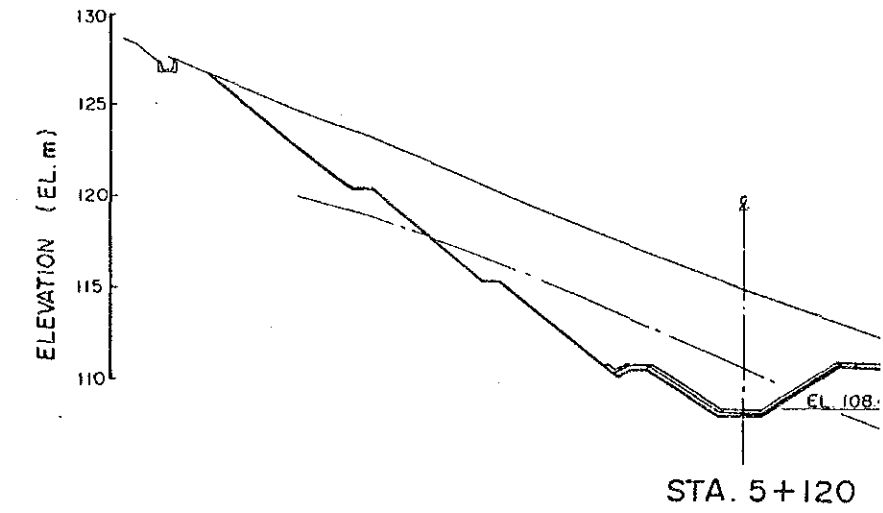
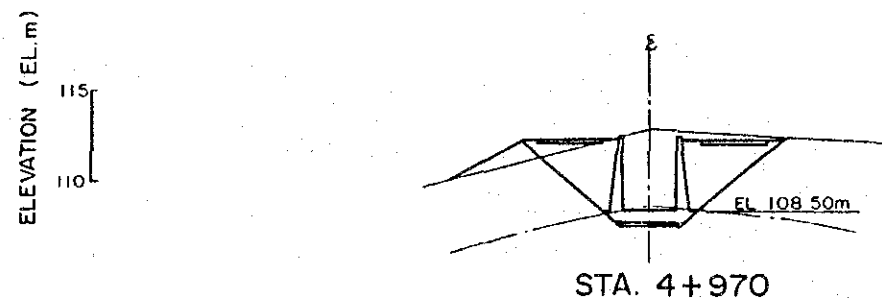
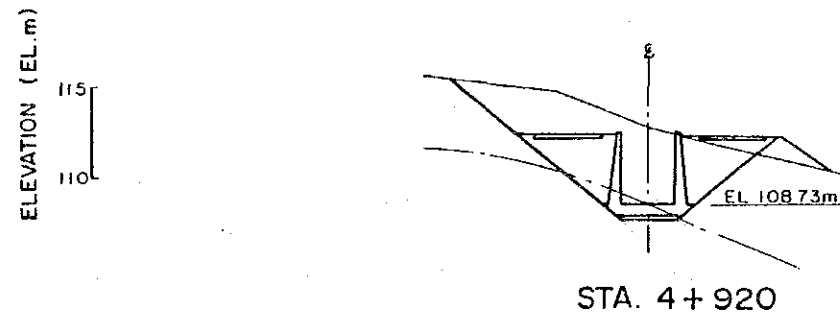
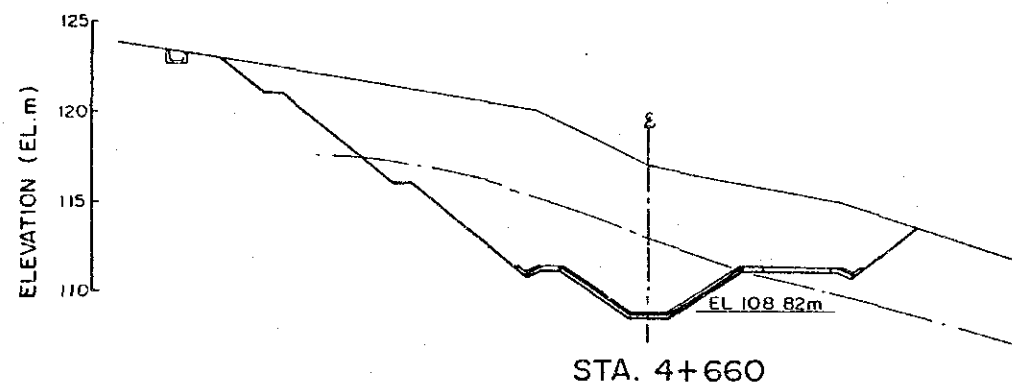
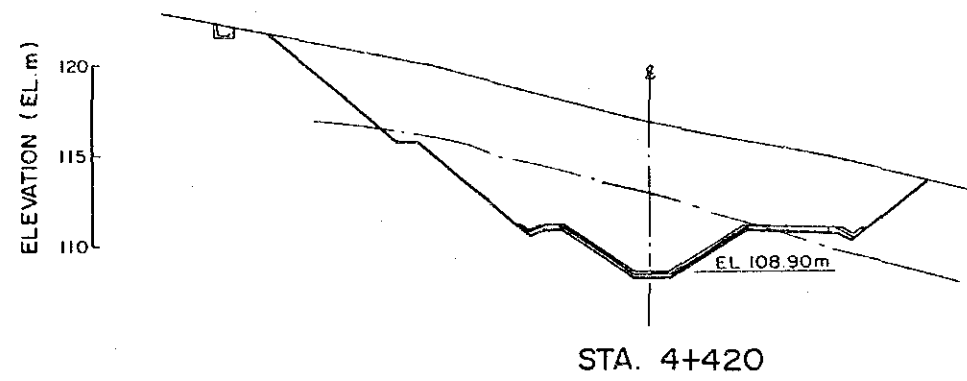
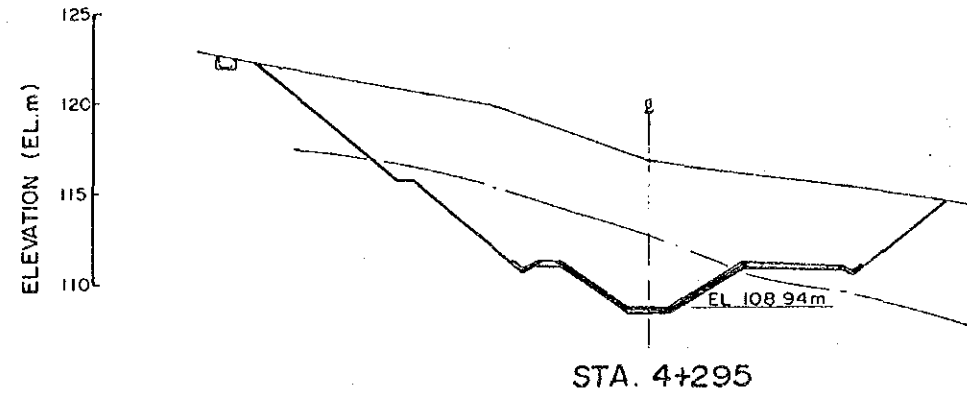
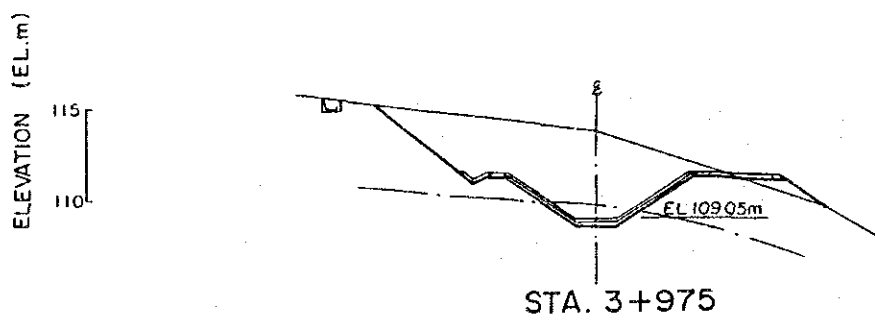
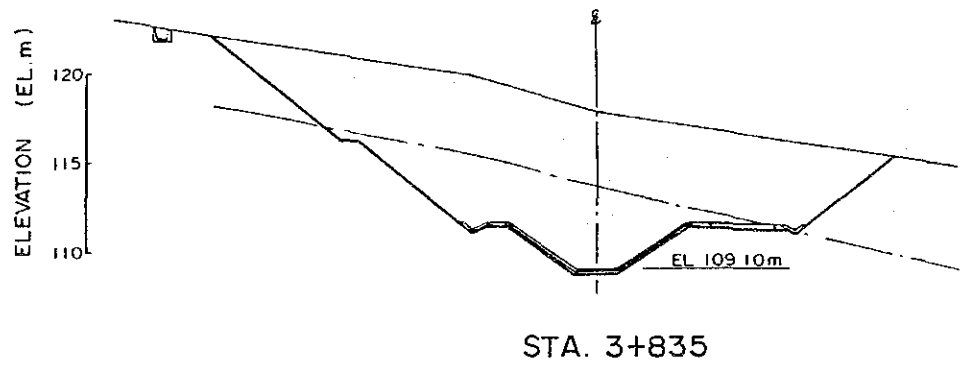
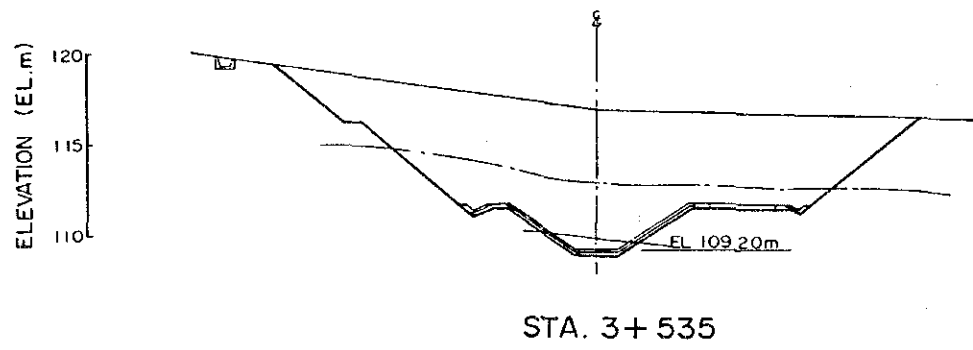
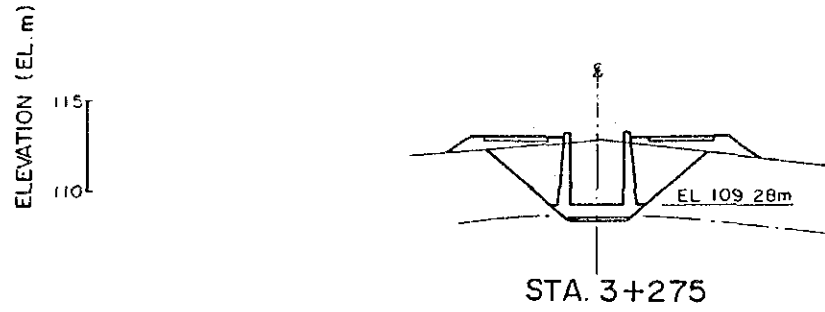
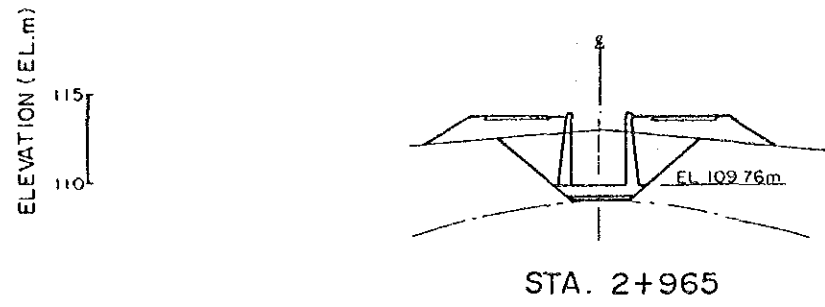


Fig. 11.8 Cross Section of Open Channel (1/2)





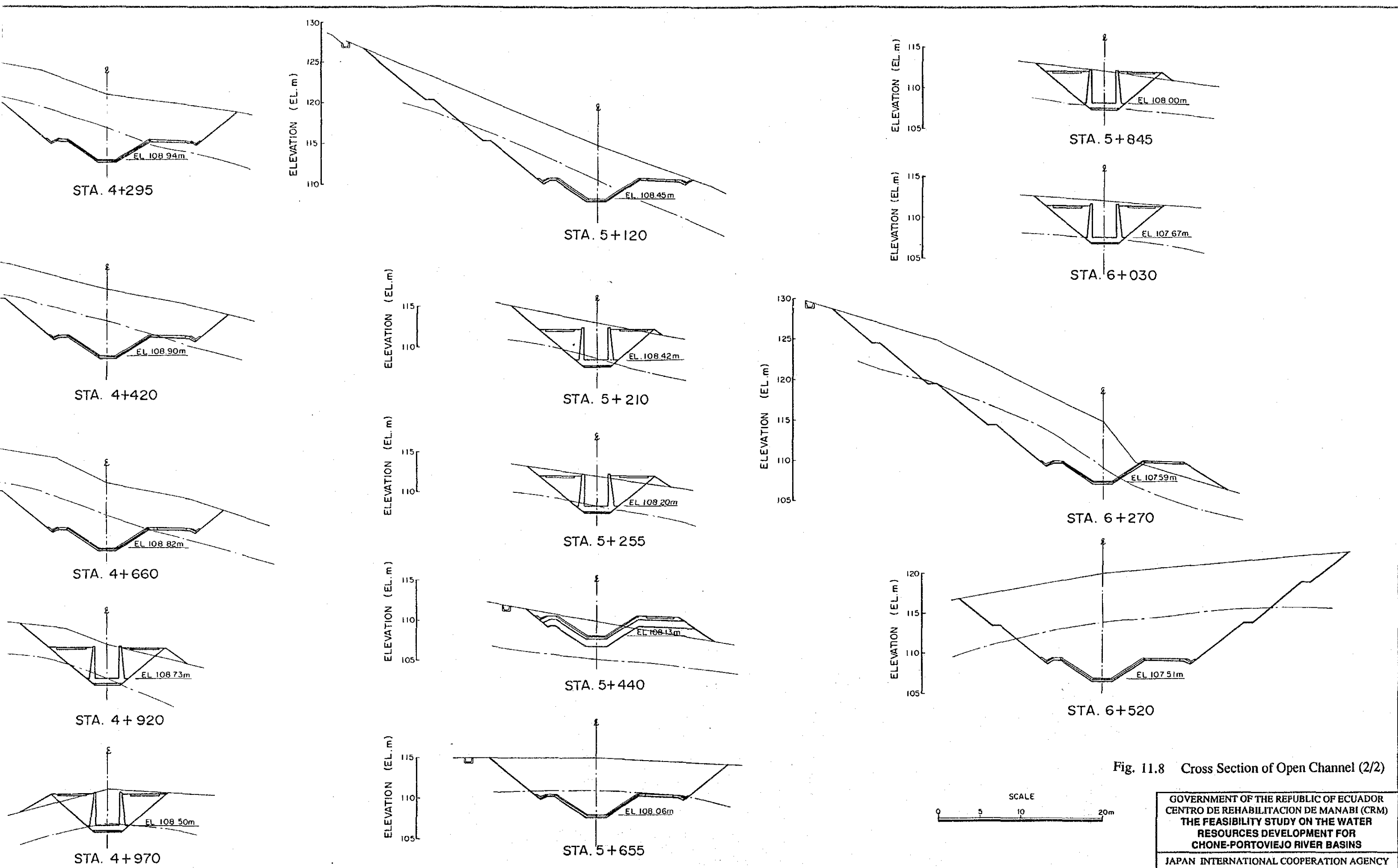
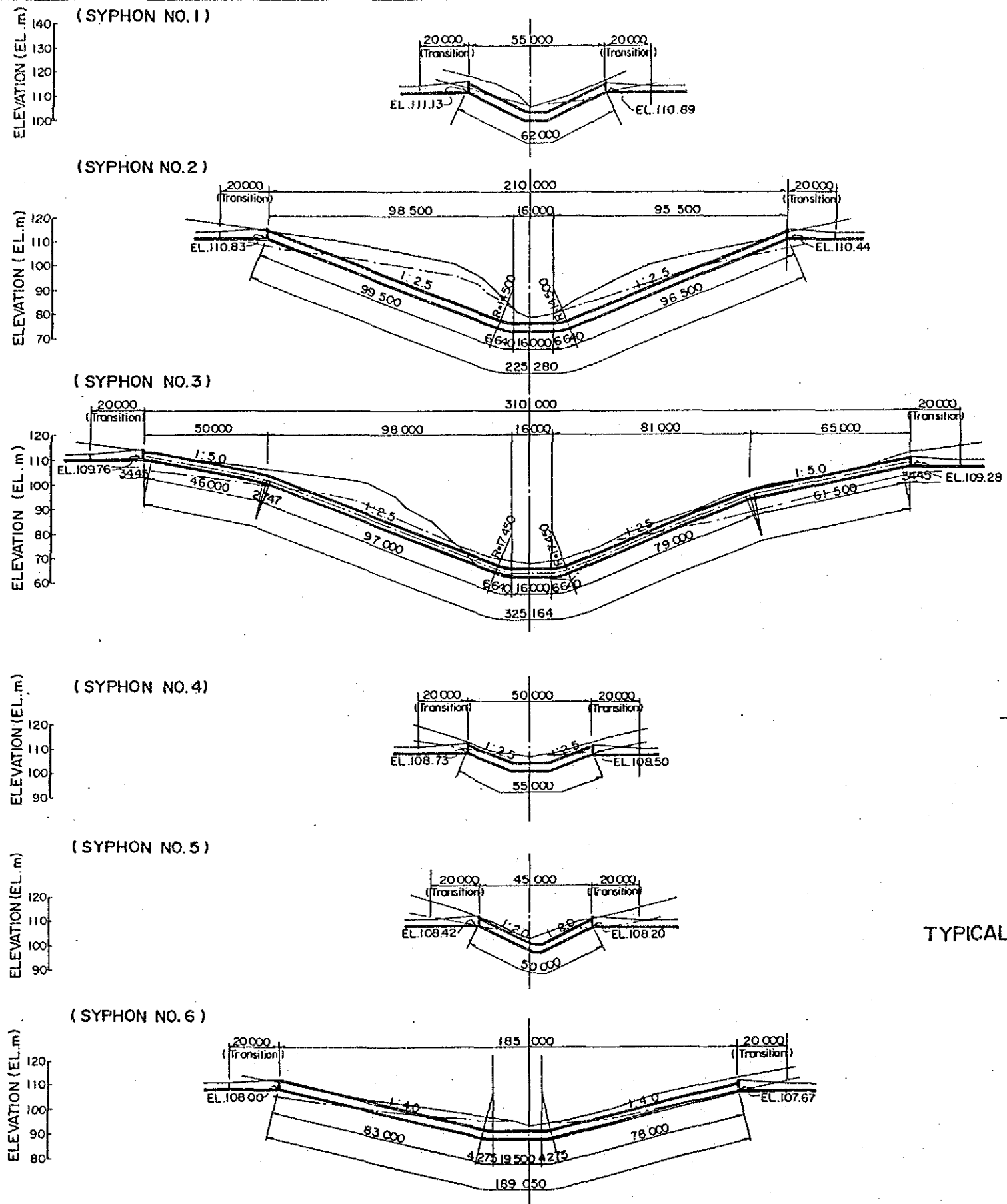
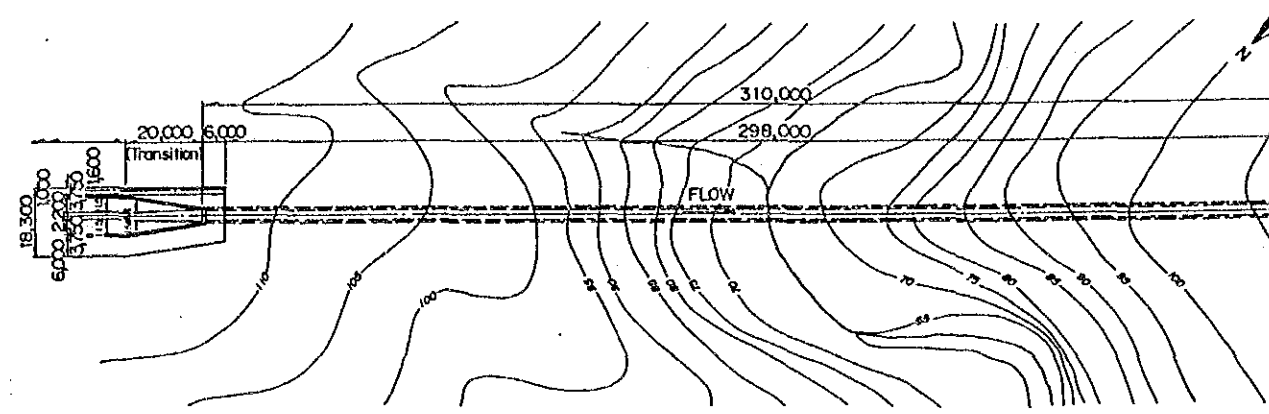


Fig. 11.8 Cross Section of Open Channel (2/2)

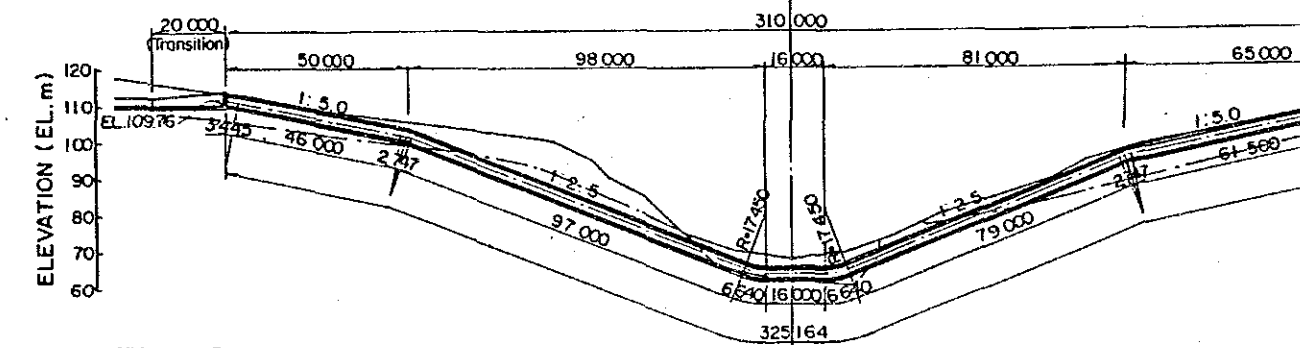
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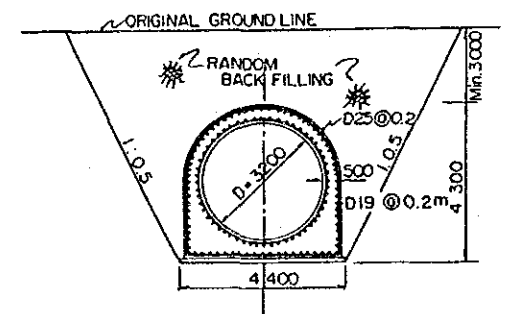
PROFILE OF SYPHON (No.1-No.6) SCALE A



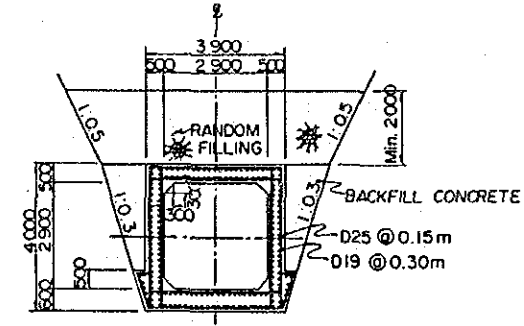
PLAN OF SYPHON No.3 SCALE A



PROFILE OF SYPHON No.3 SCALE A



TYPICAL SECTION OF SYPHON NO.2 AND NO.3 SCALE B



TYPICAL SECTION OF SYPHON NO.1, NO.4- NO.6 SCALE B

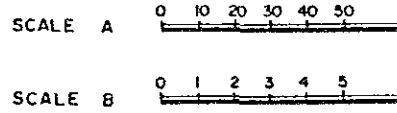
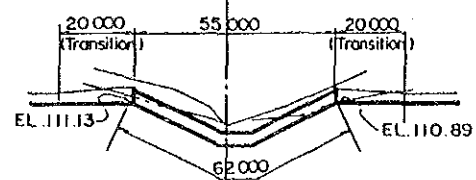
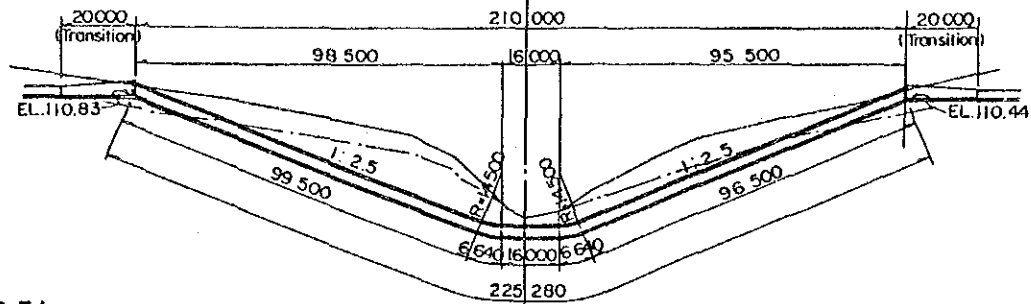


Fig. 11.9

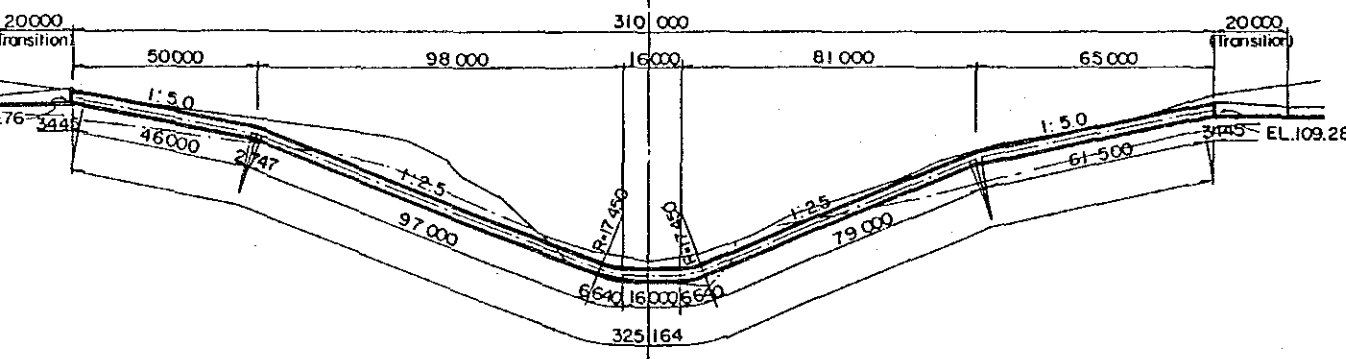
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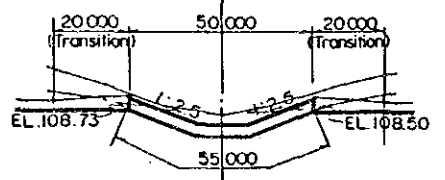
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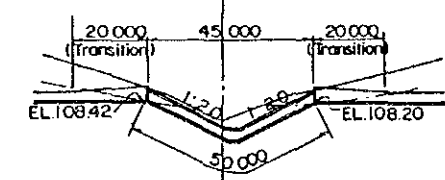
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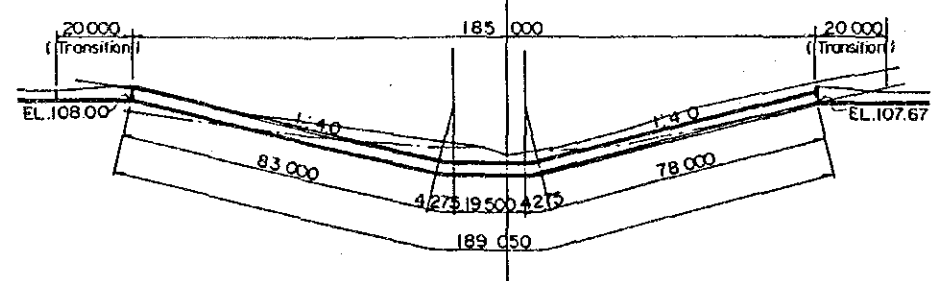
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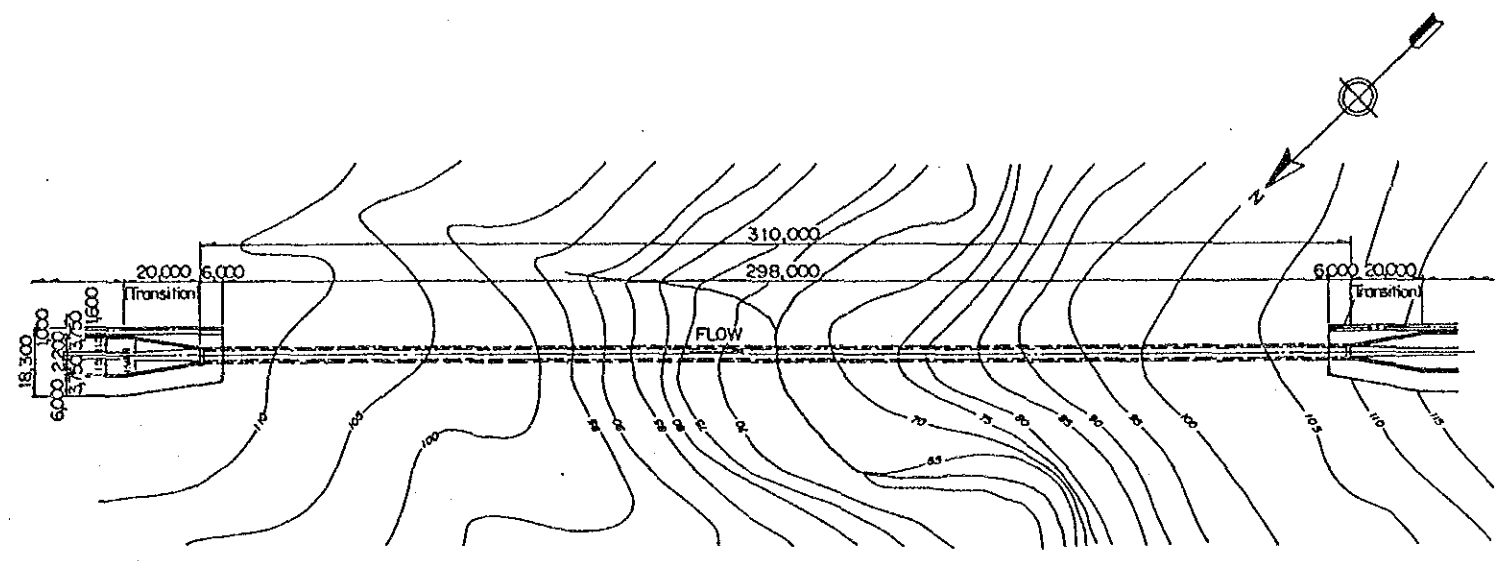
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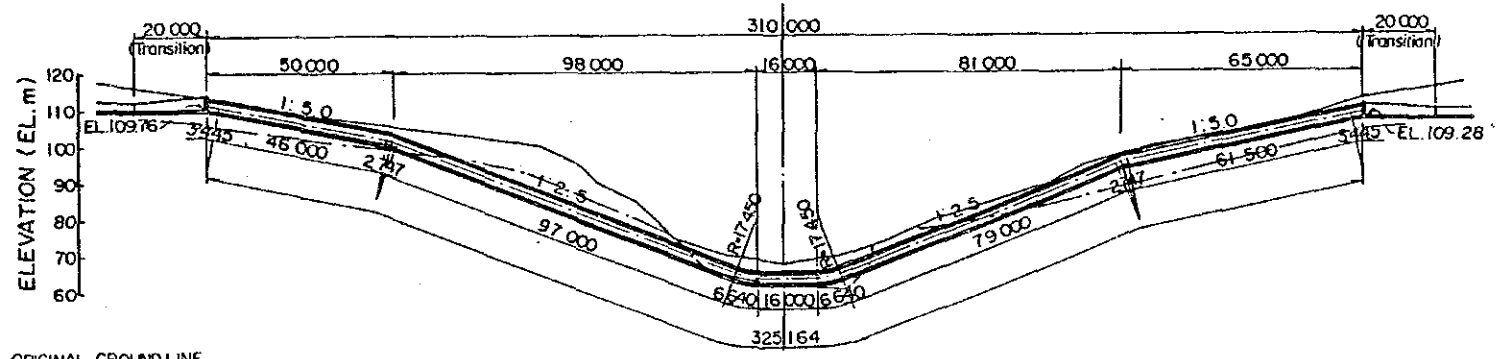
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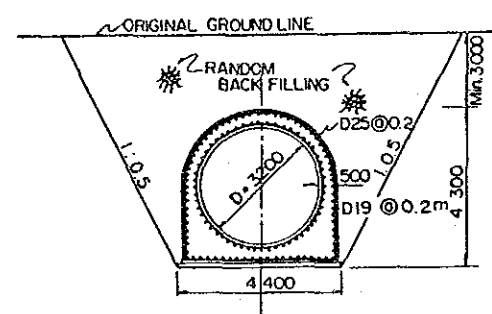
PROFILE OF SYPHON (No.1-No.6) SCALE A



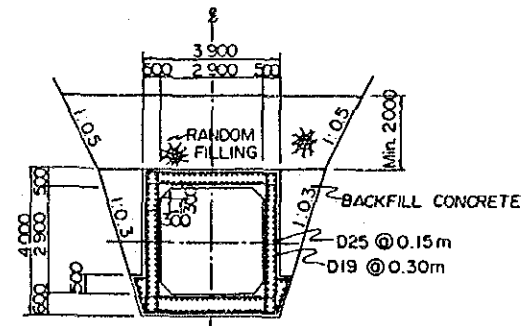
PLAN OF SYPHON No.3 SCALE A



PROFILE OF SYPHON No.3 SCALE A



TYPICAL SECTION OF SYPHON NO.2 AND NO.3 SCALE B

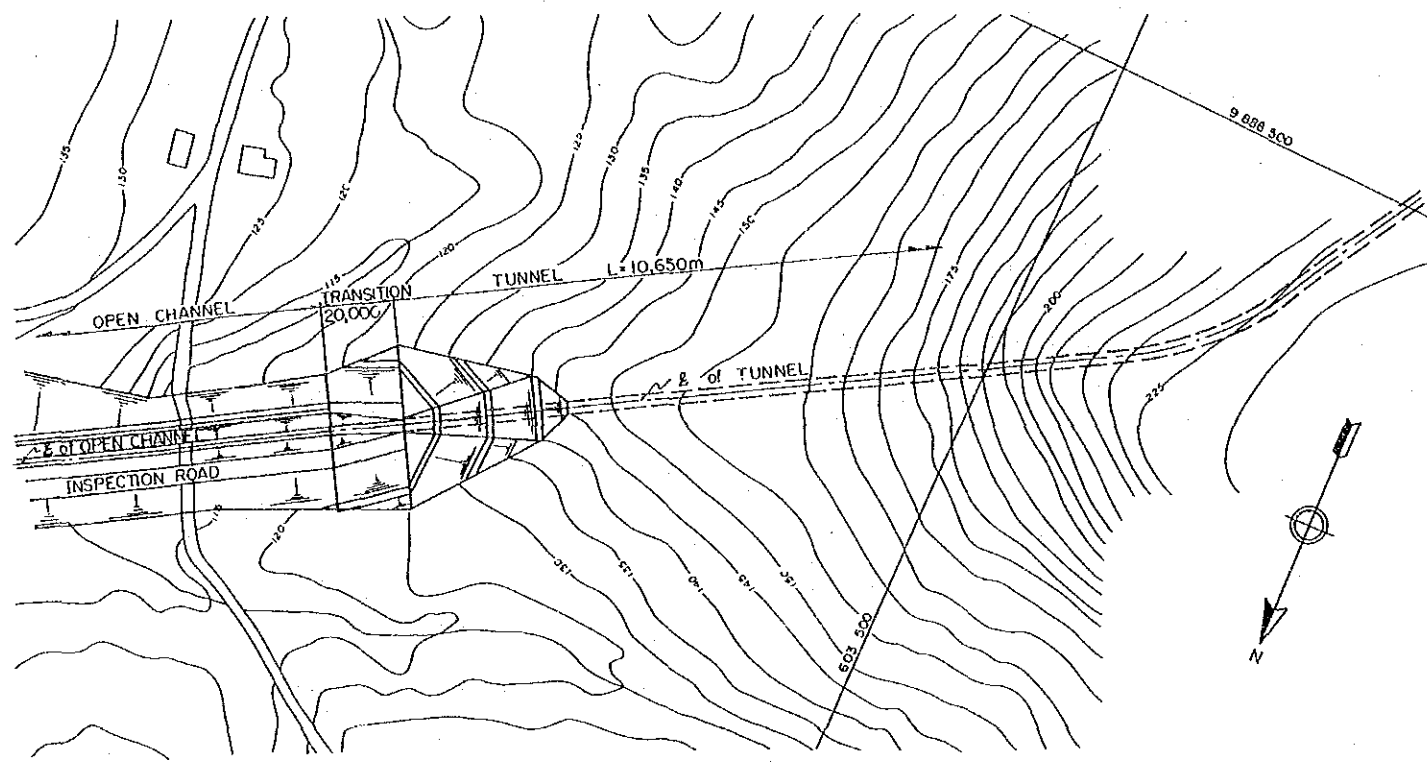


TYPICAL SECTION OF SYPHON NO.1, NO.4-NO.6 SCALE B

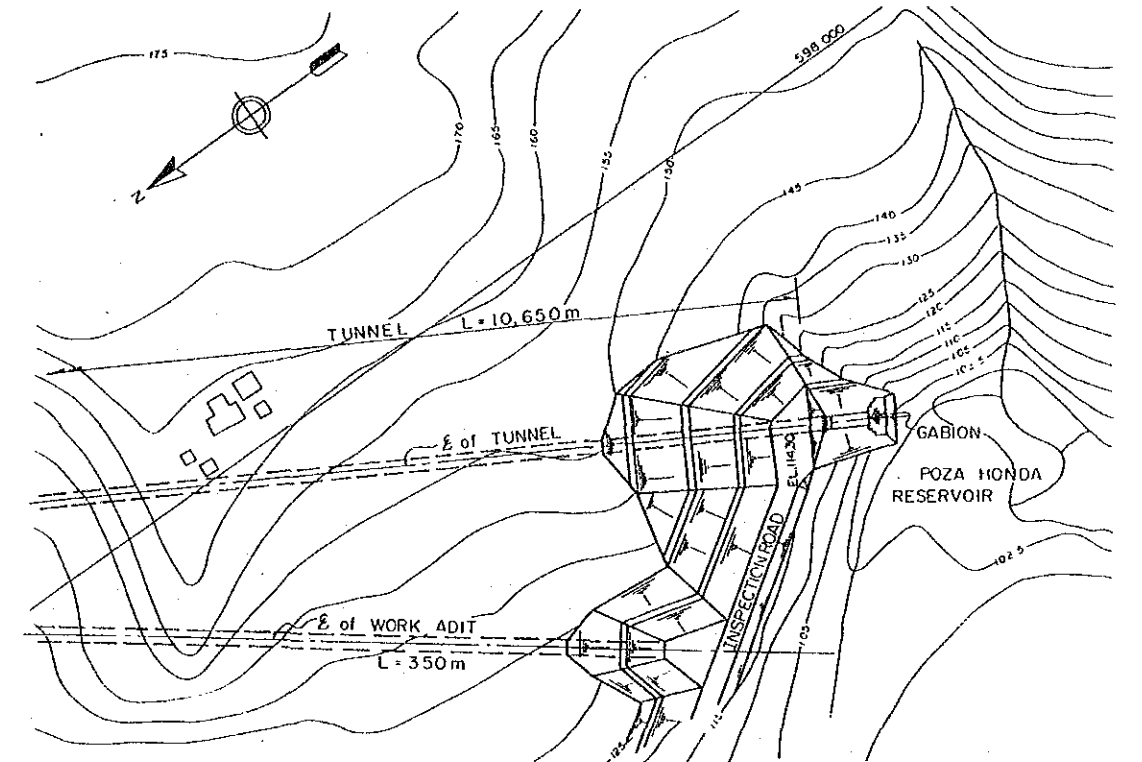


Fig. 11.9 Basic Design of Syphons

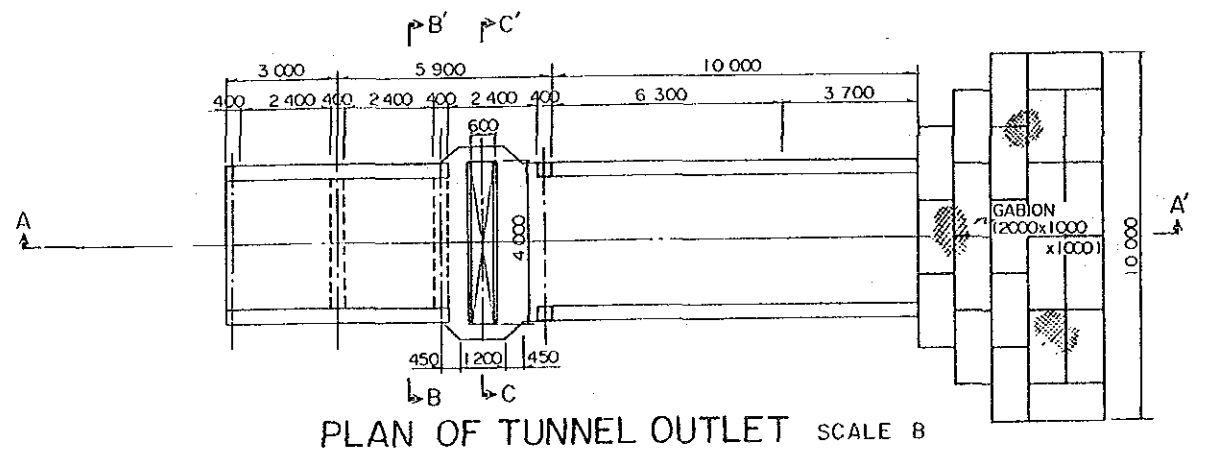
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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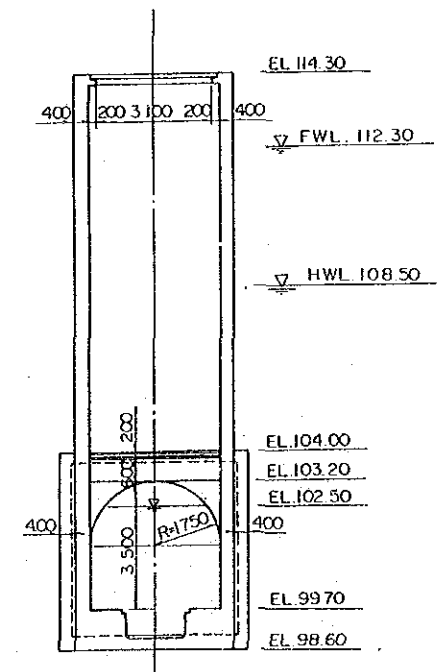
LAYOUT PLAN OF TUNNEL INLET SCALE A



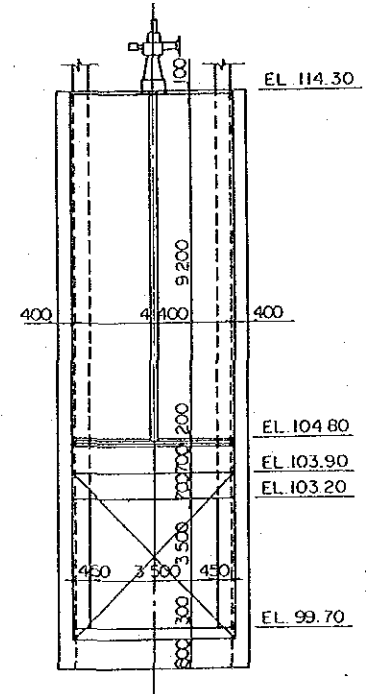
LAYOUT PLAN OF TUNNEL OUTLET SCALE A



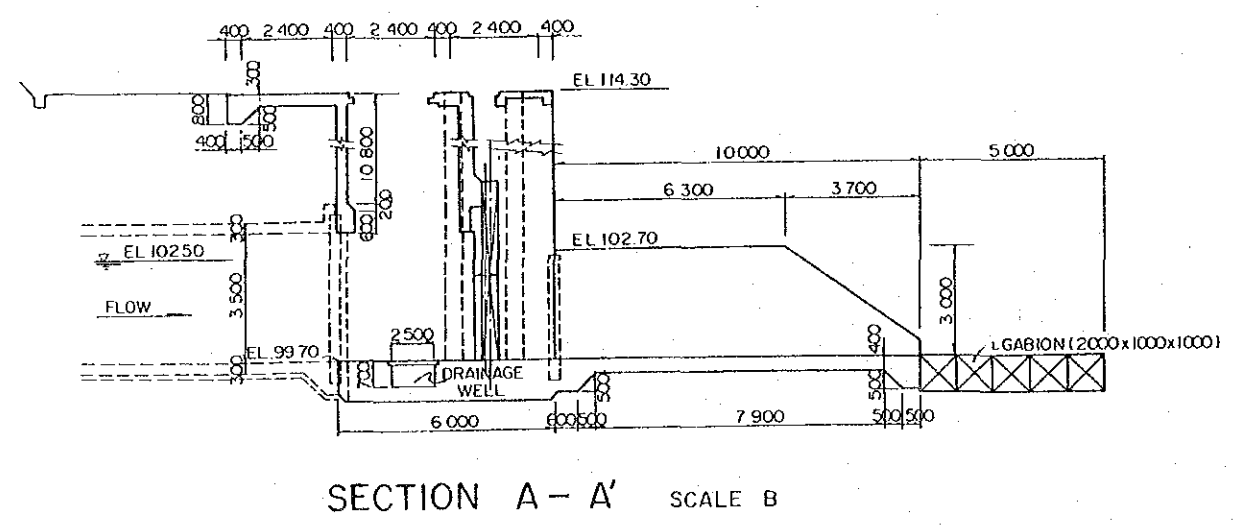
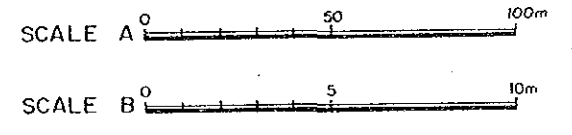
PLAN OF TUNNEL OUTLET SCALE B



SECTION OF OUTLET B - B' SCALE B



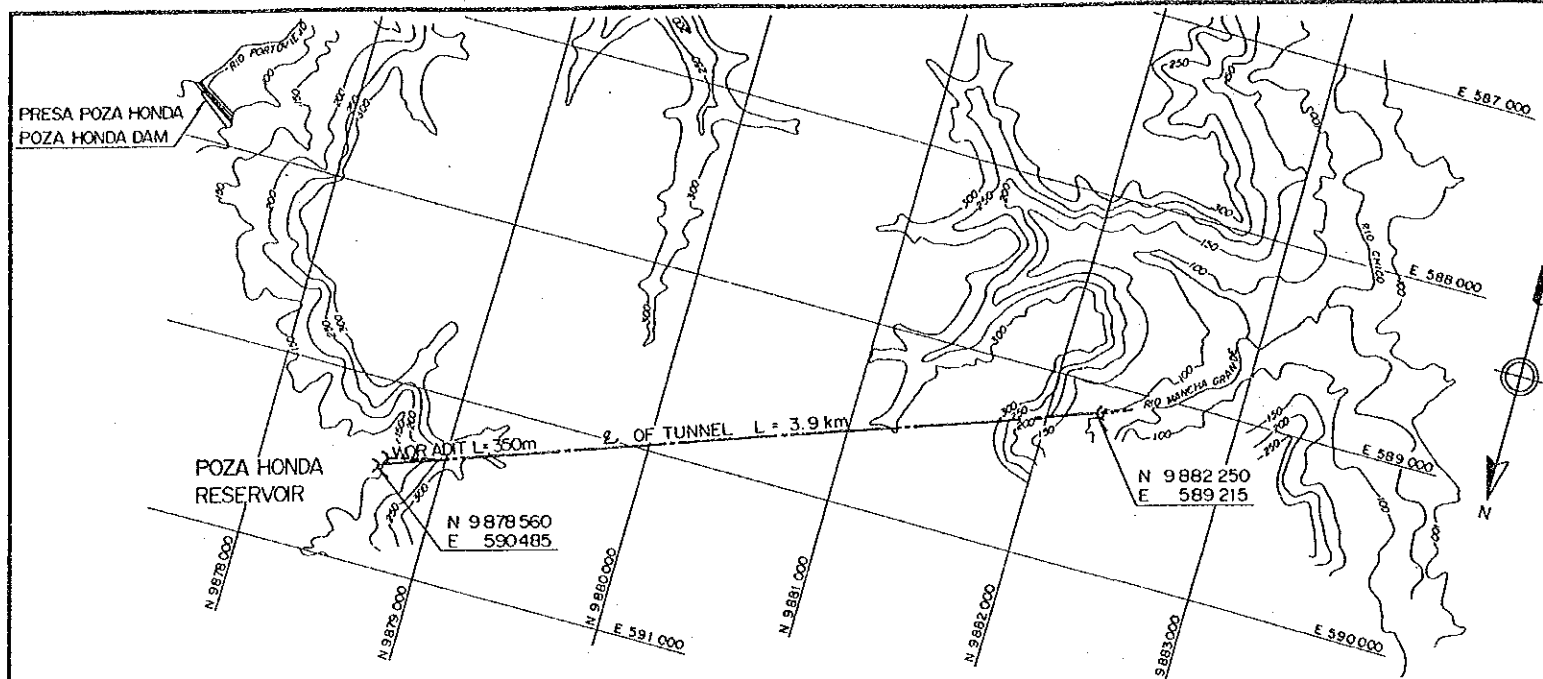
SECTION OF OUTLET C - C' SCALE B



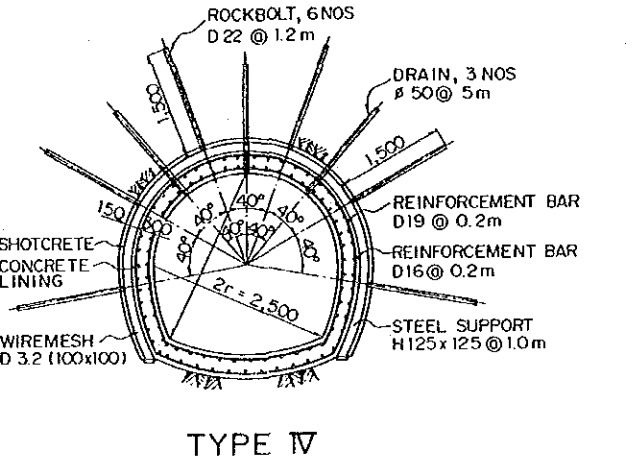
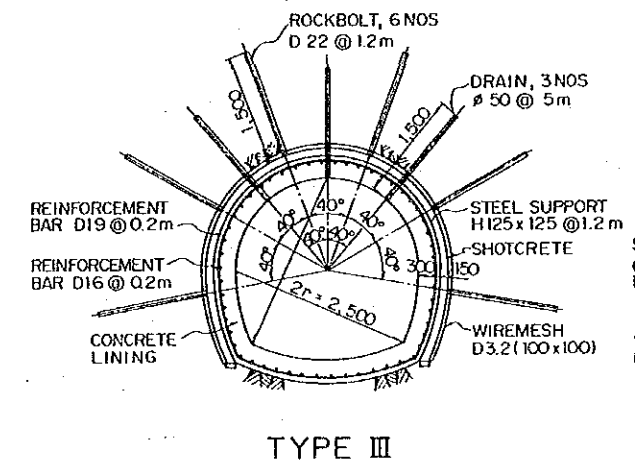
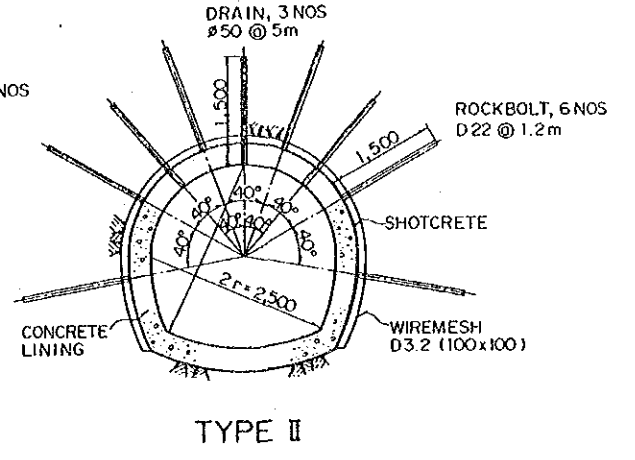
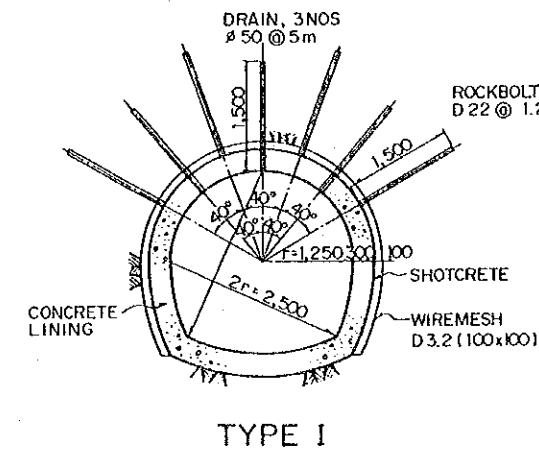
SECTION A - A' SCALE B

Fig. 11.10 Basic Design of Tunnel Inlet and Outlet for Water Transbasin Scheme "Esperanza (Severino) - Poza Honda Dam"

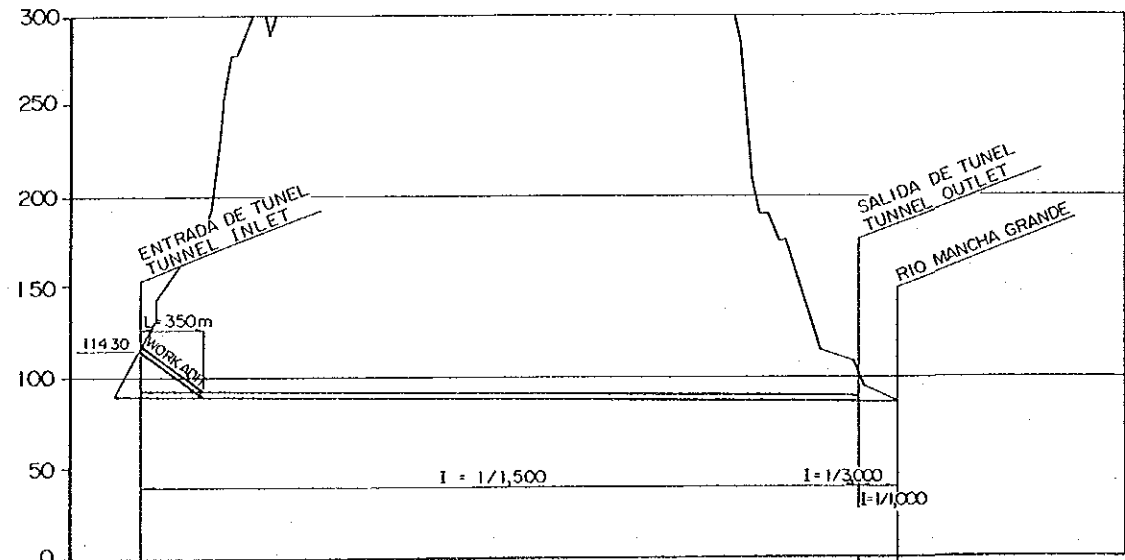
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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PLANTA PLAN SCALE A



TUNNEL SECTION SCALE C



TIPOS DE ESTRUCTURAS TYPE OF STRUCTURE	TUNNEL L = 3,902m				OPEN CHANNEL L = 205m	
COTA DE ESTRUCTURA ELEVATION OF STRUCTURE (EL. m)	89.50	89.23	88.57	87.90	87.30	87.29
COTA DEL TERRENO ELEVATION OF GROUND (EL. m)	120				103	89
DISTANCIA ACUMULADA ACCUMULATE DISTANCE (m)	0	1.000	2.000	3.000	3.902	4.107
DISTANCIA DISTANCE (m)	0	1.000	1.000	1.000	3.902	205
ESTACION STATION	0+000	1+000	2+000	3+000	3+902	4+107

PERFIL PROFILE H; SCALE A V; SCALE B

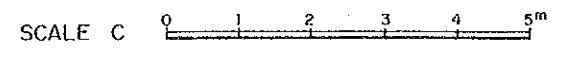
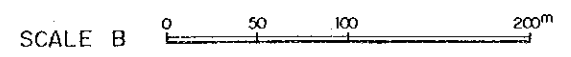
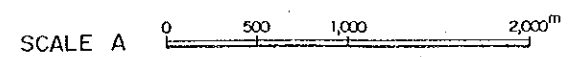
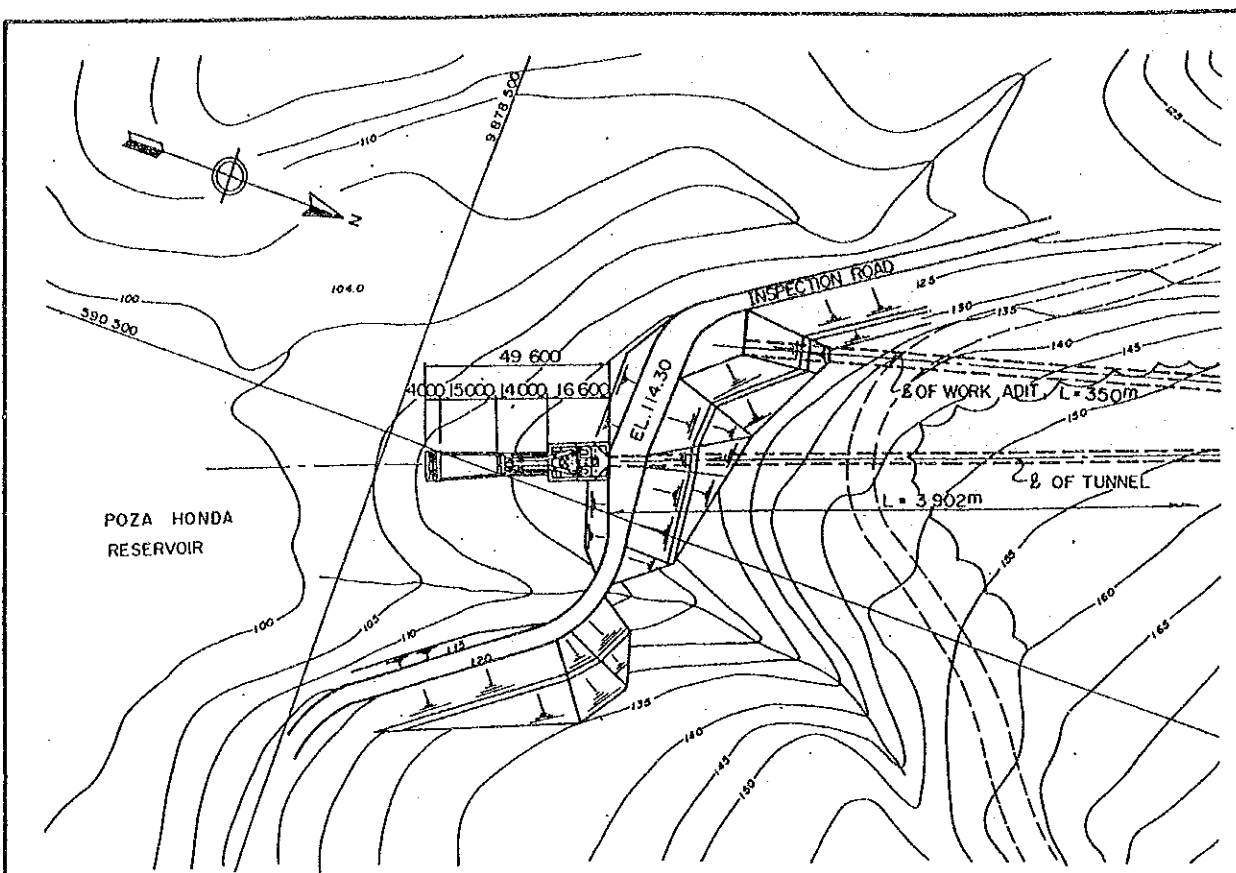
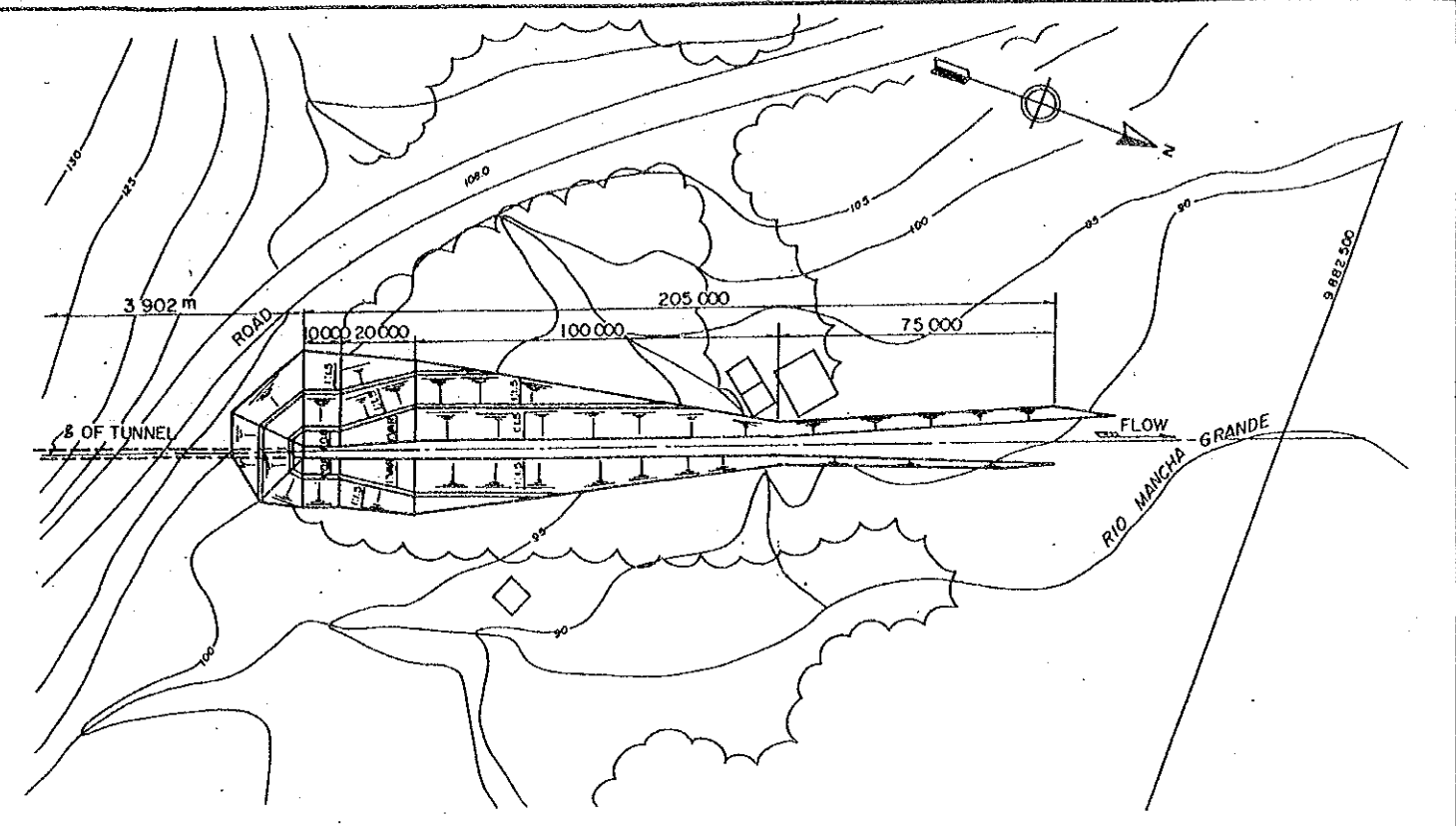


Fig. 11.11 Basic Design of Water Transbasin Scheme "Poza Honda Dam - Rio Mancha Grande"

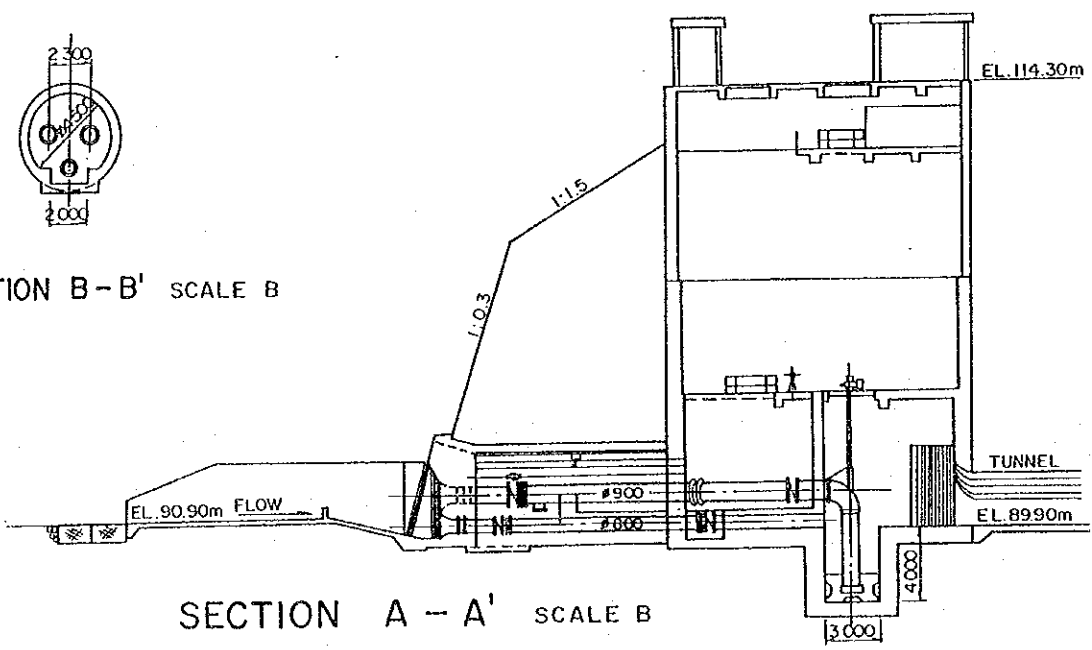
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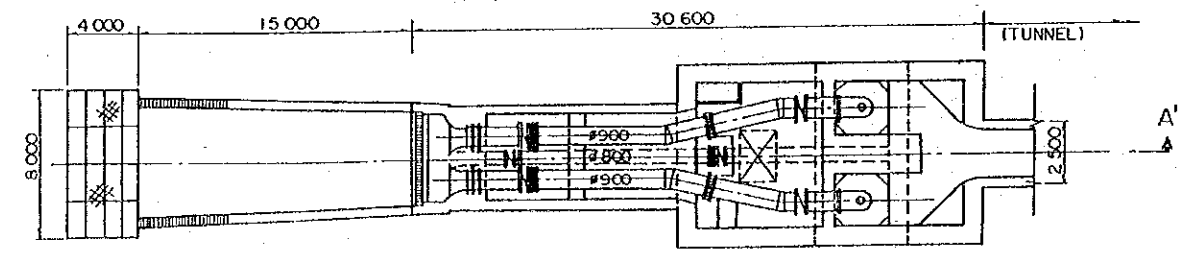
LAYOUT PLAN OF TUNNEL INLET SCALE A



LAYOUT PLAN OF TUNNEL OUTLET SCALE A



SECTION B-B' SCALE B



SECTION A-A' SCALE B



PLAN OF TUNNEL INLET SCALE B

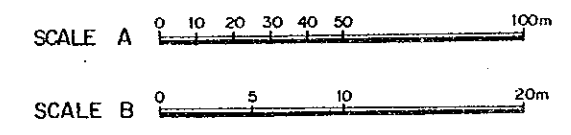
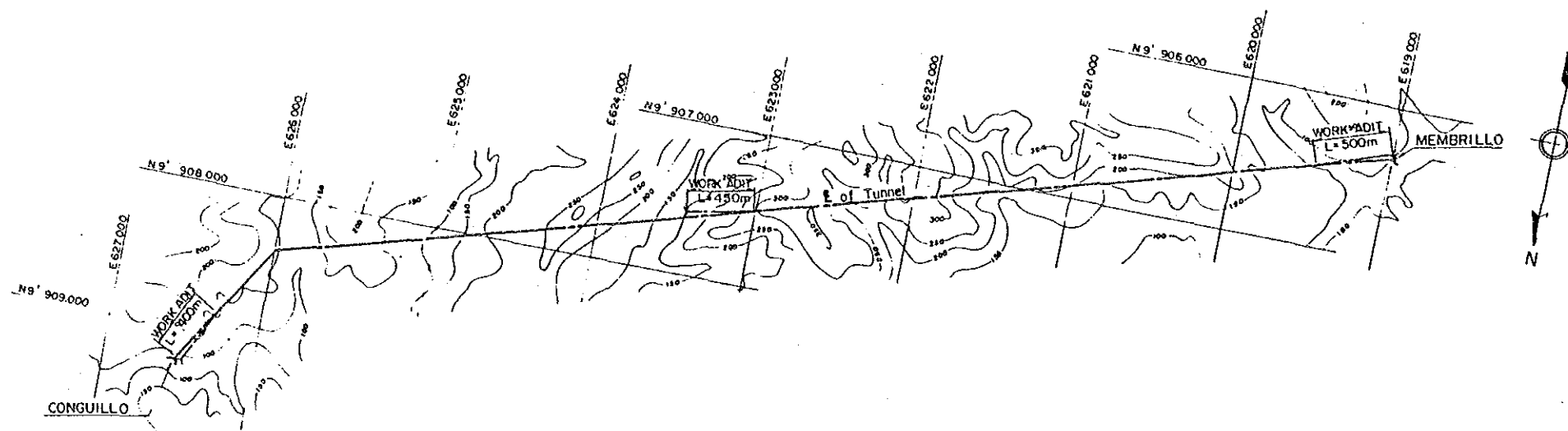
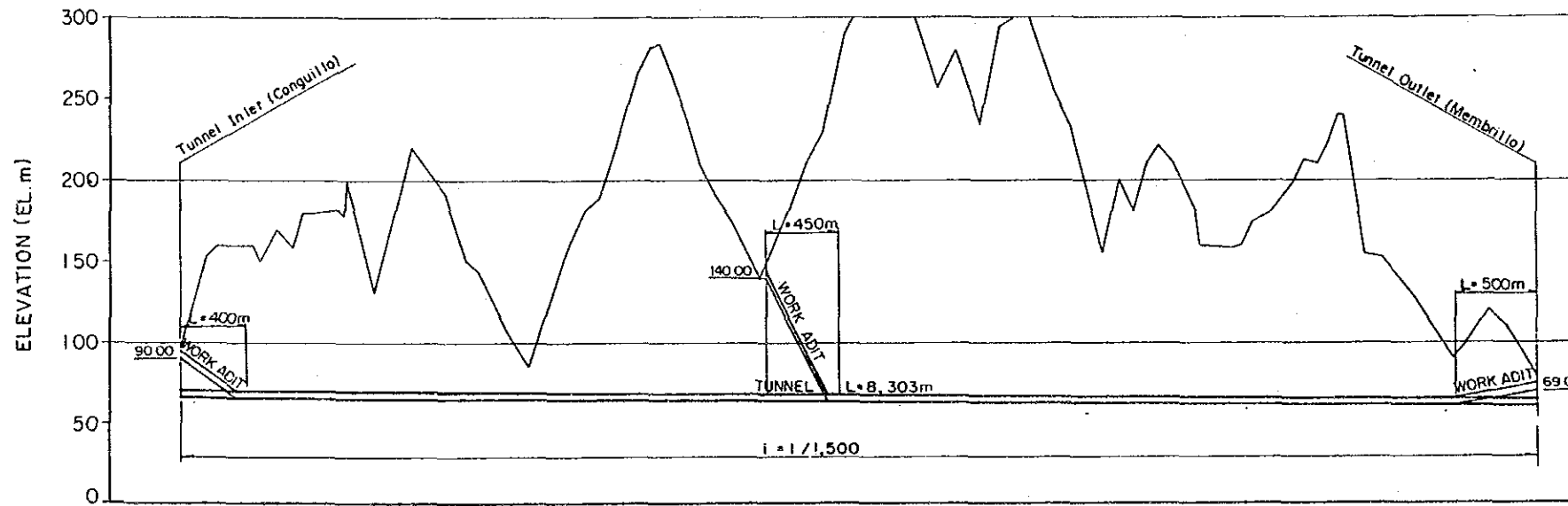


Fig. 11.12 Basic Design of Tunnel Inlet and Outlet for Water Transbasin Scheme "Poza Honda Dam - Rio Mancha Grande"

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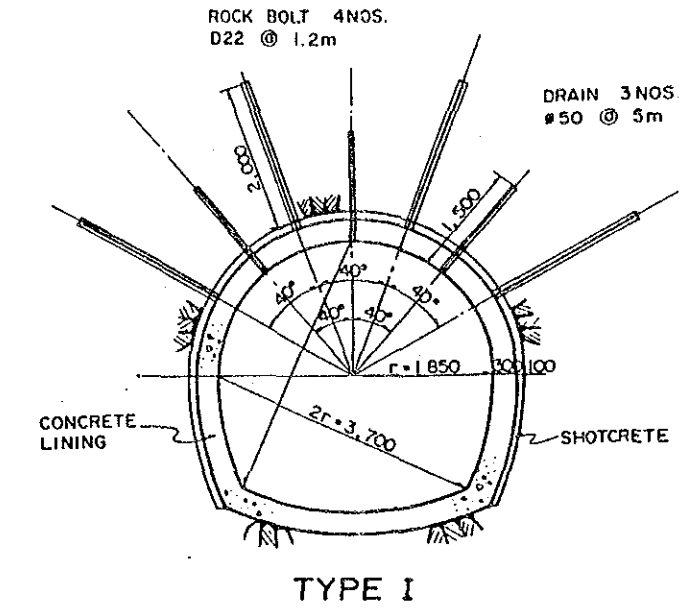


PLAN SCALE A

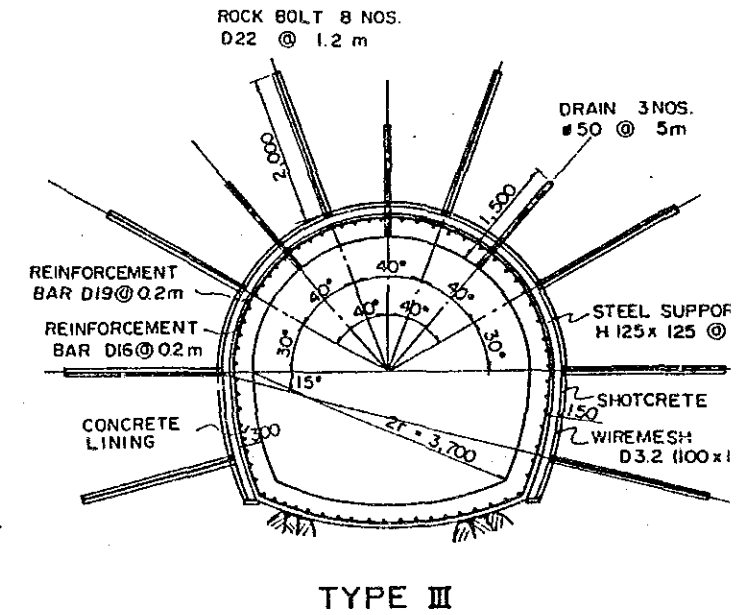


TYPE OF STRUCTURE	TUNNEL									
ELEVATION OF FORMATION (EL. m)	66.00	64.35	64.70	64.05	140.0	63.40	62.75	62.10	61.45	58.50
ELEVATION OF GROUND (EL. m)	95.00	180.00	105.00	264.00	150.00	258.00	290.00	220.00	212.00	80.00
ACCUMULATED DISTANCE (m)	0	1 000	2 000	3 000	3 580	4 000	5 000	6 000	7 000	8 303
DISTANCE (m)	0	1 000	1 000	1 000	580	420	1 000	1 000	1 000	1 303
STATION	0+000	1+000	2+000	3+000	3+580	4+000	5+000	6+000	7+000	8+303

PROFILE H : SCALE A  
V : SCALE B

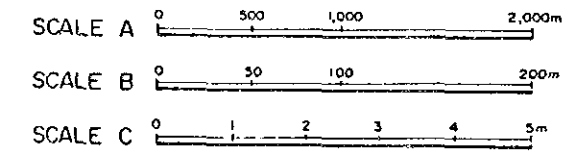


TYPE I

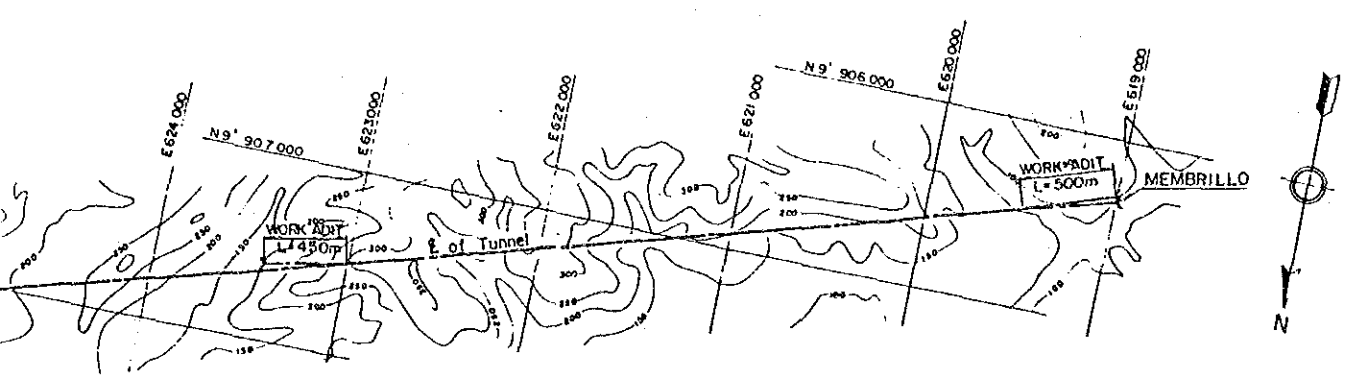


TYPE III

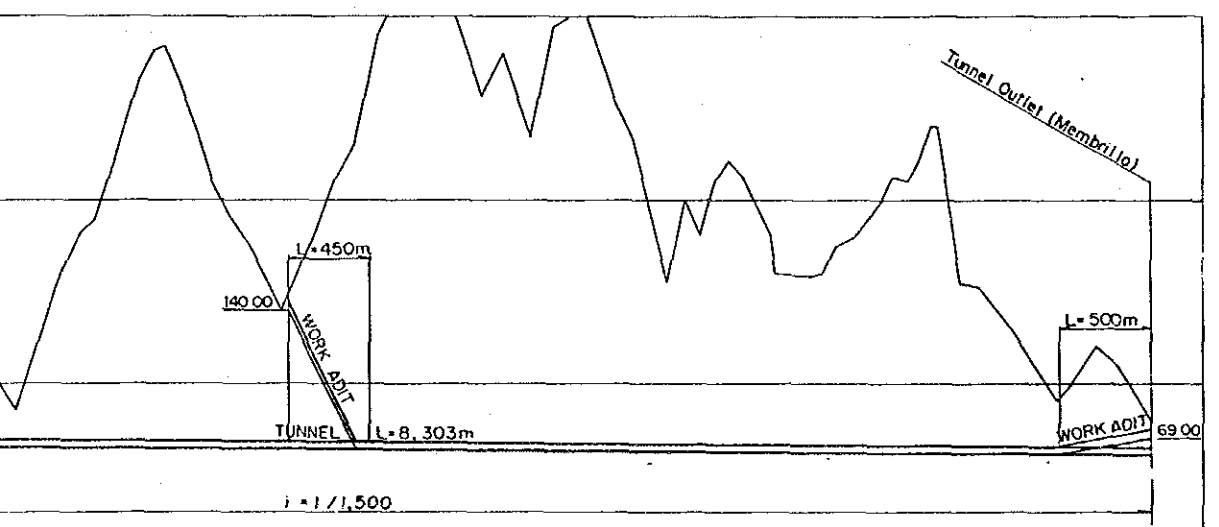
TUNNEL





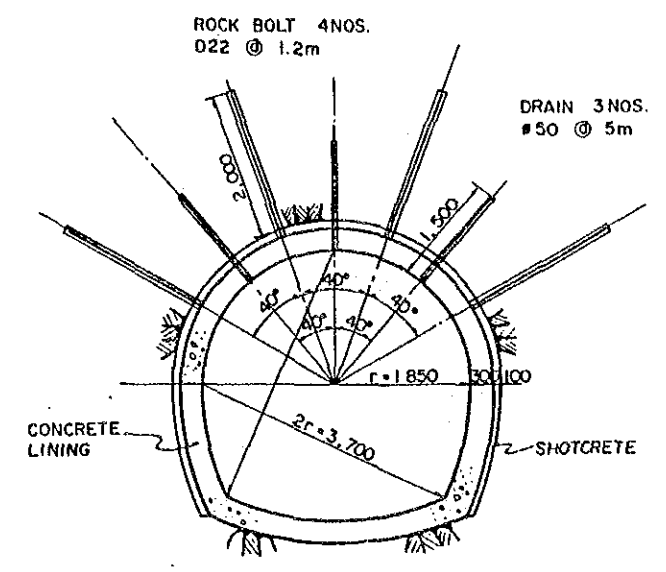


PLAN SCALE A

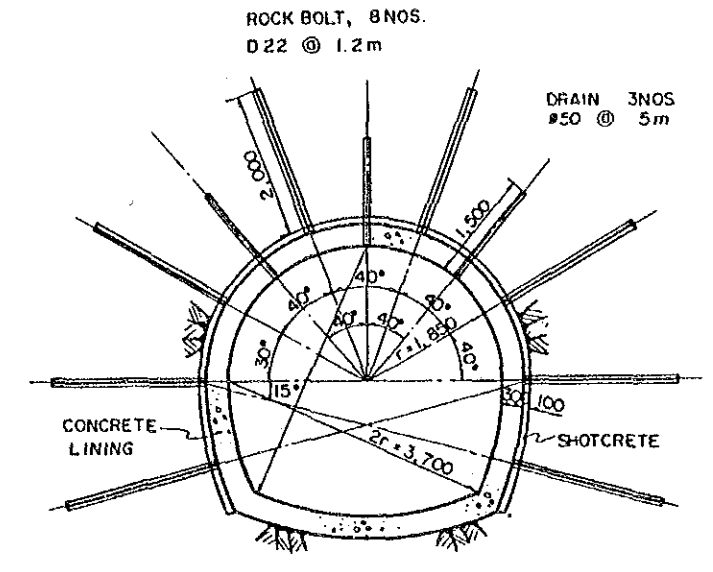


TUNNEL							
3+000	3+500	4+000	5+000	6+000	7+000	8+000	8+303
1000	580	420	1000	1000	1000	1303	
3000	3580	4000	5000	6000	7000	8303	
26400	15000	25800	25000	22000	21200	8000	
6405	1400	6340	6275	6210	6145	5850	

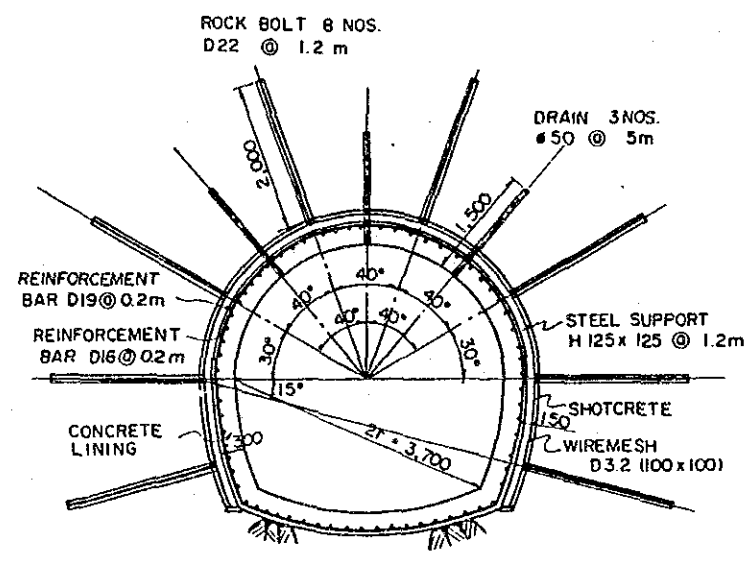
PROFILE H: SCALE A  
V: SCALE B



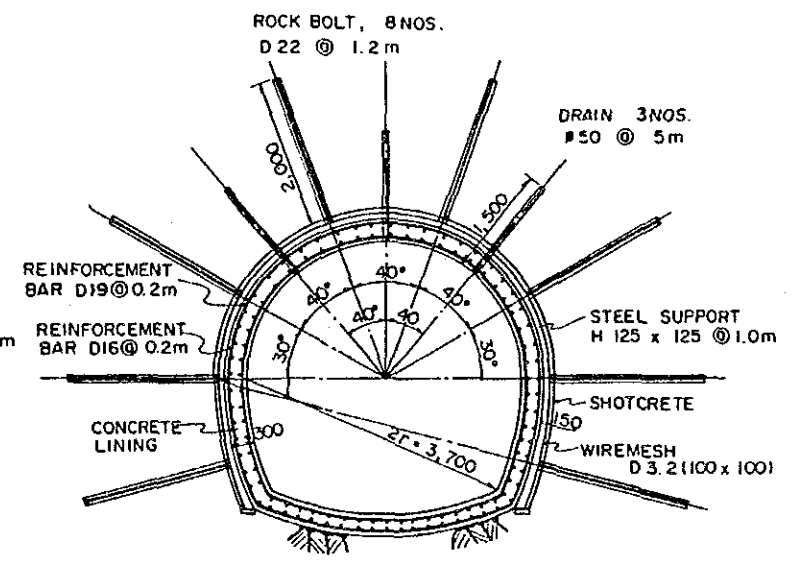
TYPE I



TYPE II



TYPE III



TYPE IV

TUNNEL SECTION SCALE C

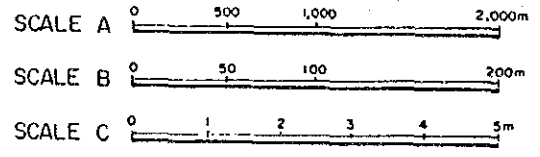
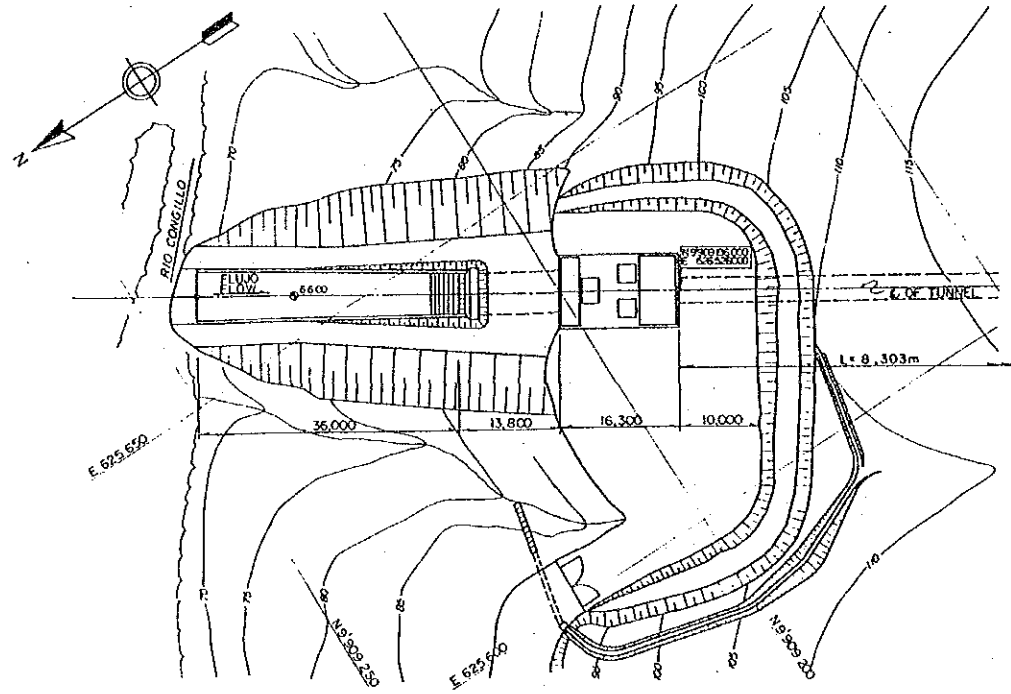
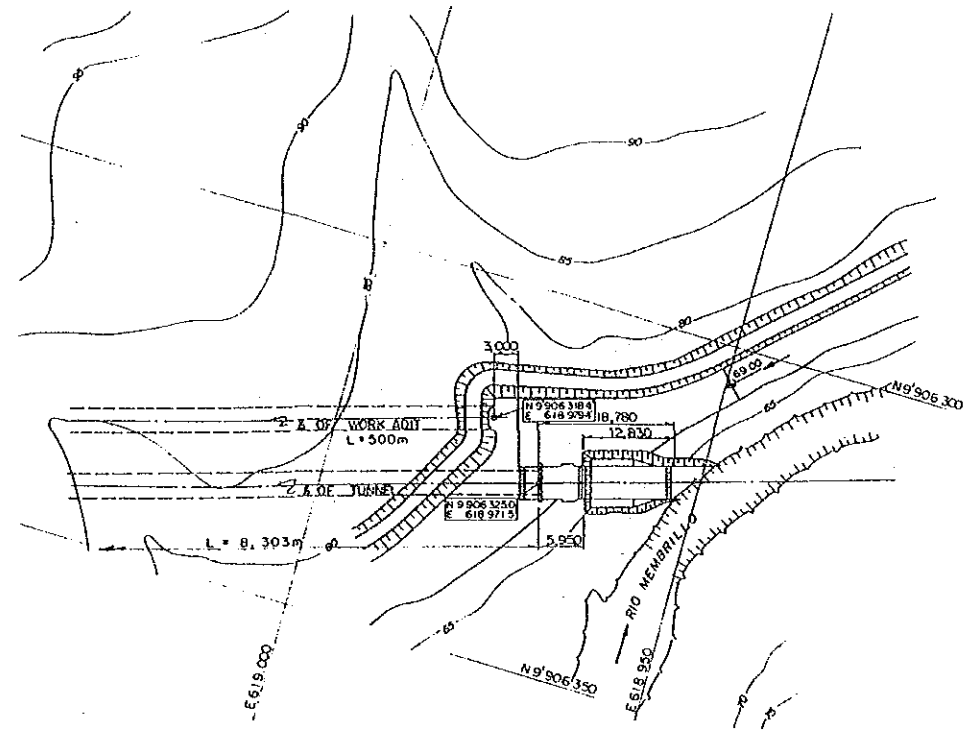


Fig. 11.13 Basic Design of Water Transbasin Scheme "Daule Peripa - Esperanza Dam"

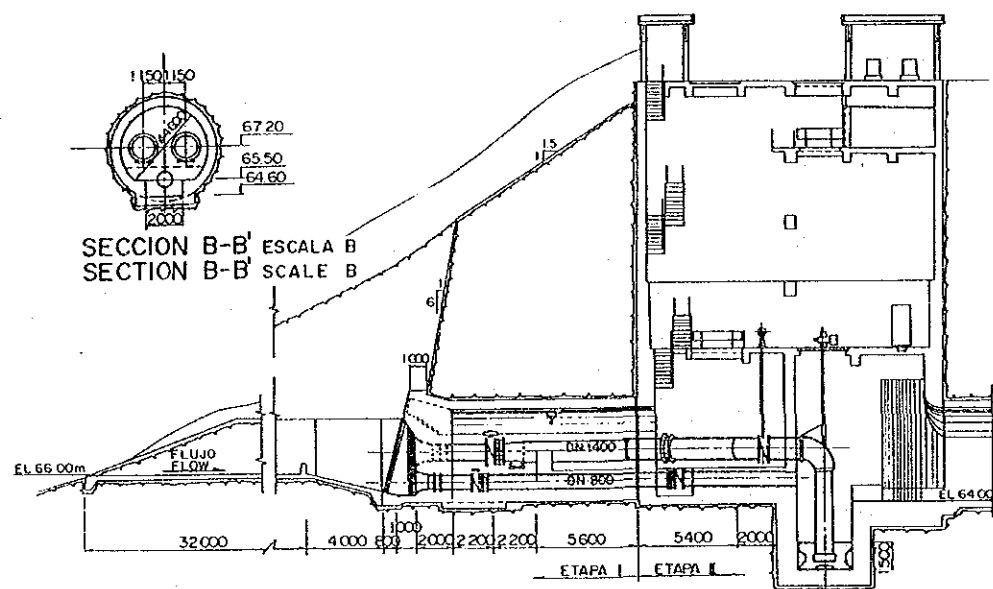
GOVERNMENT OF THE REPUBLIC OF ECUADOR  
CENTRO DE REHABILITACION DE MANABI (CRM)  
THE FEASIBILITY STUDY ON THE WATER  
RESOURCES DEVELOPMENT FOR  
CHONE-PORTOVIEJO RIVER BASINS  
JAPAN INTERNATIONAL COOPERATION AGENCY



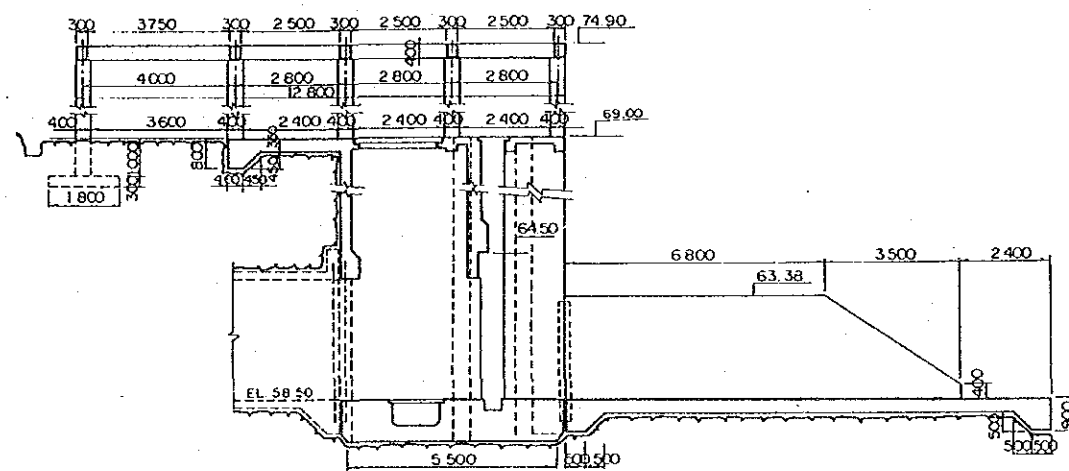
LAYOUT PLAN OF TUNNEL INLET SCALE A



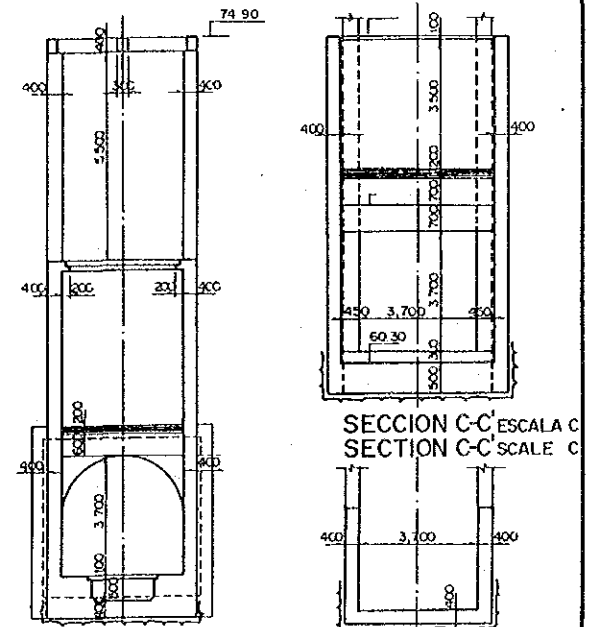
LAYOUT PLAN OF TUNNEL OUTLET SCALE A



SECCION A-A' ESCALA B  
SECTION A-A' SCALE B

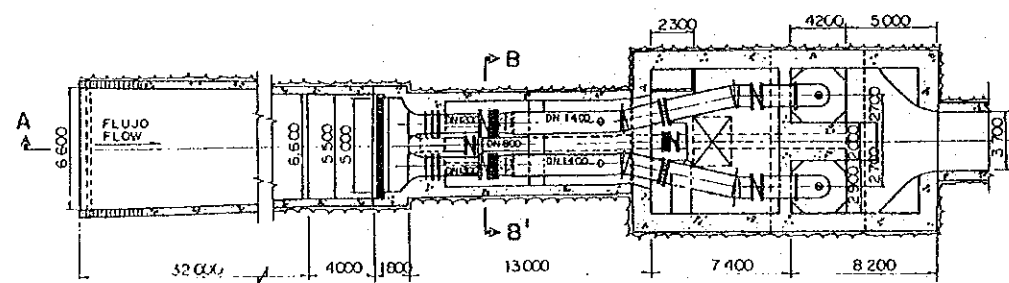
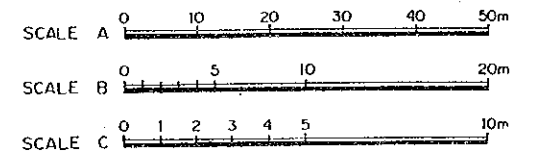


SECCION A-A' ESCALA C  
SECTION A-A' SCALE C

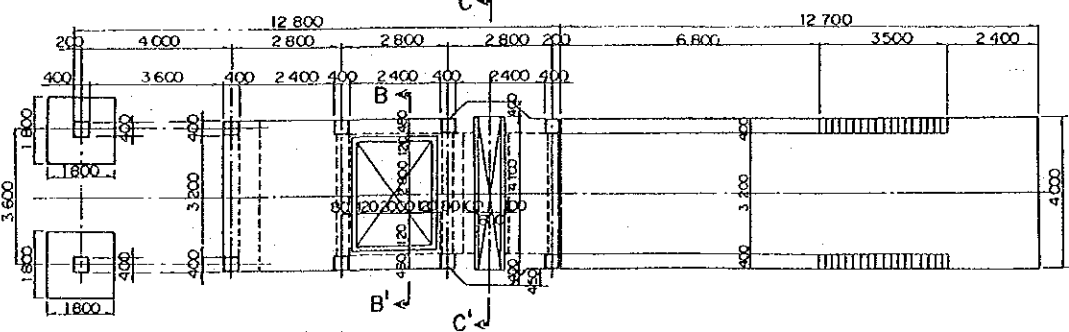


SECCION B-B' ESCALA C  
SECTION B-B' SCALE C

SECCION D-D' ESCALA C  
SECTION D-D' SCALE C



PLANTA DE ENTRADA DE TUNEL ESCALA B  
PLAN OF TUNNEL INLET SCALE B



PLANTA DE SALIDA DE TUNEL A LA COTA 69.00 ESCALA C  
PLAN OF TUNNEL OUTLET AT EL. 69.00 SCALE C

Fig. 11.14 Basic Design of Tunnel Inlet and Outlet for Water Transbasin "Daule Peripa - Esperanza Dam"

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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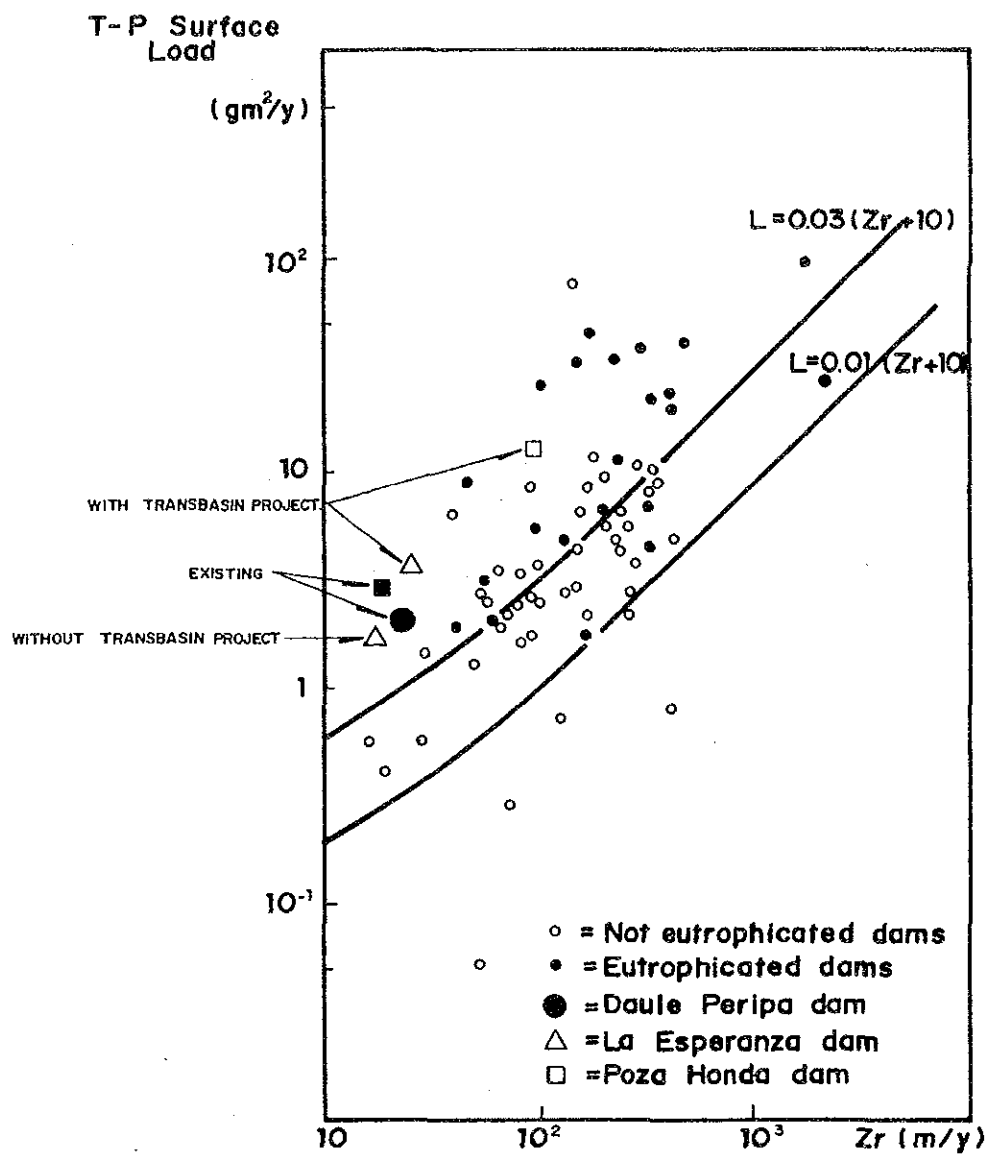


Fig. 13.1 Possibility of Eutrophication (Vollenweider Model)

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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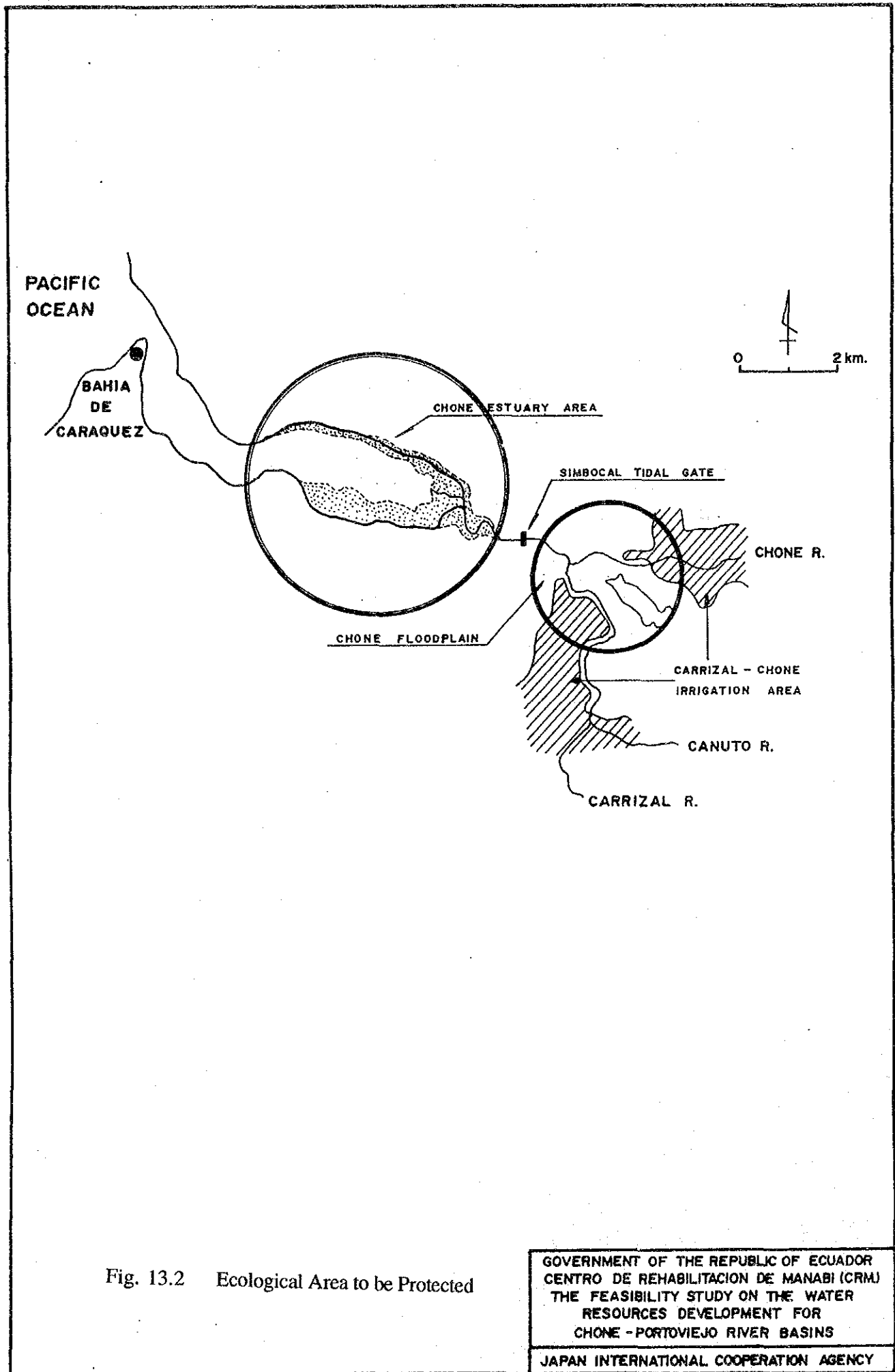
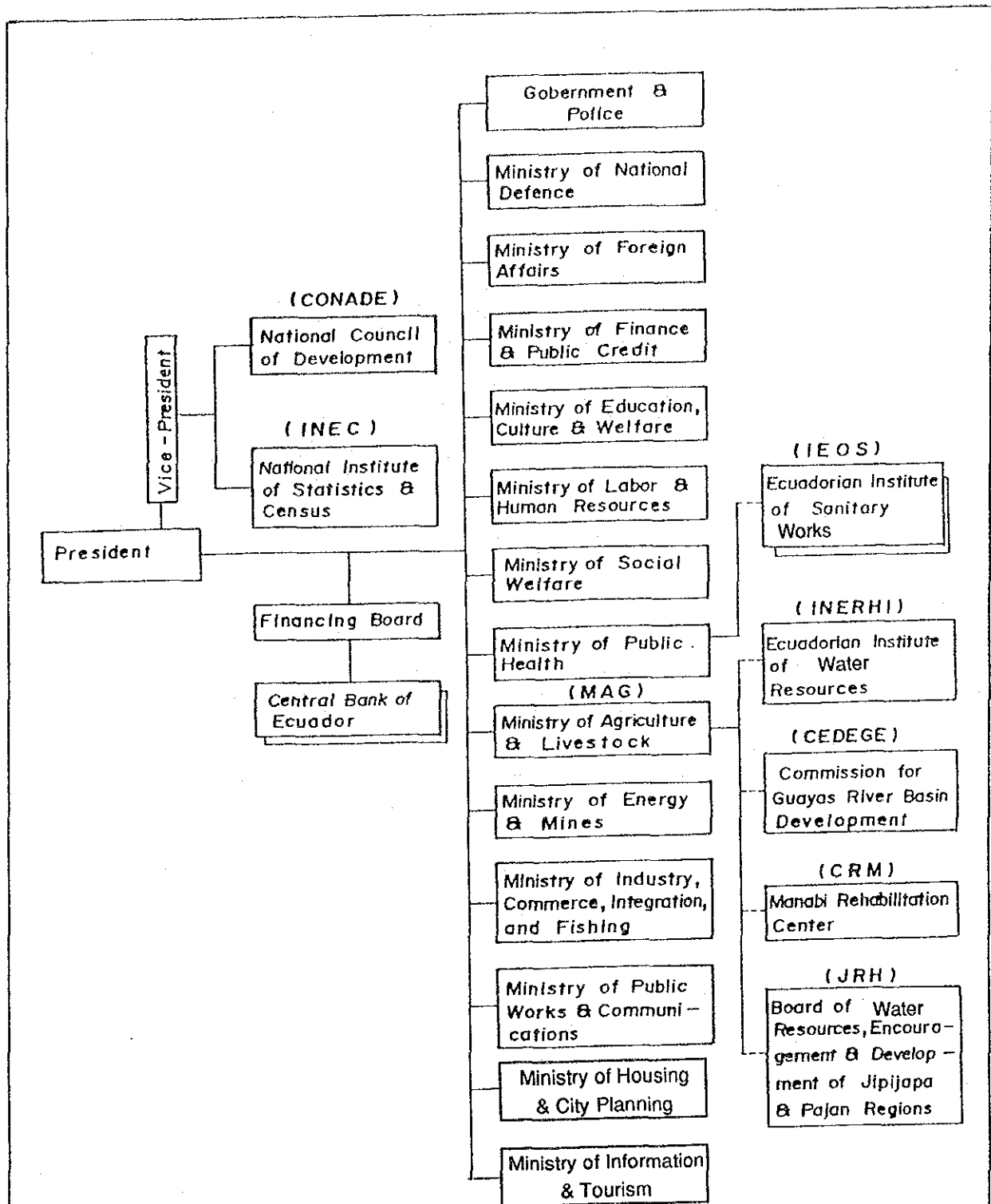


Fig. 13.2 Ecological Area to be Protected

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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Source: Dirección de Normas y Consolidación Financiera de la Contraloría General del Estado (Department of Regulation & Financial Consolidation for the General Supervision, Ecuador).

Fig. 14.1 Executive Branch of Government of Ecuador (As of July 1992)

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
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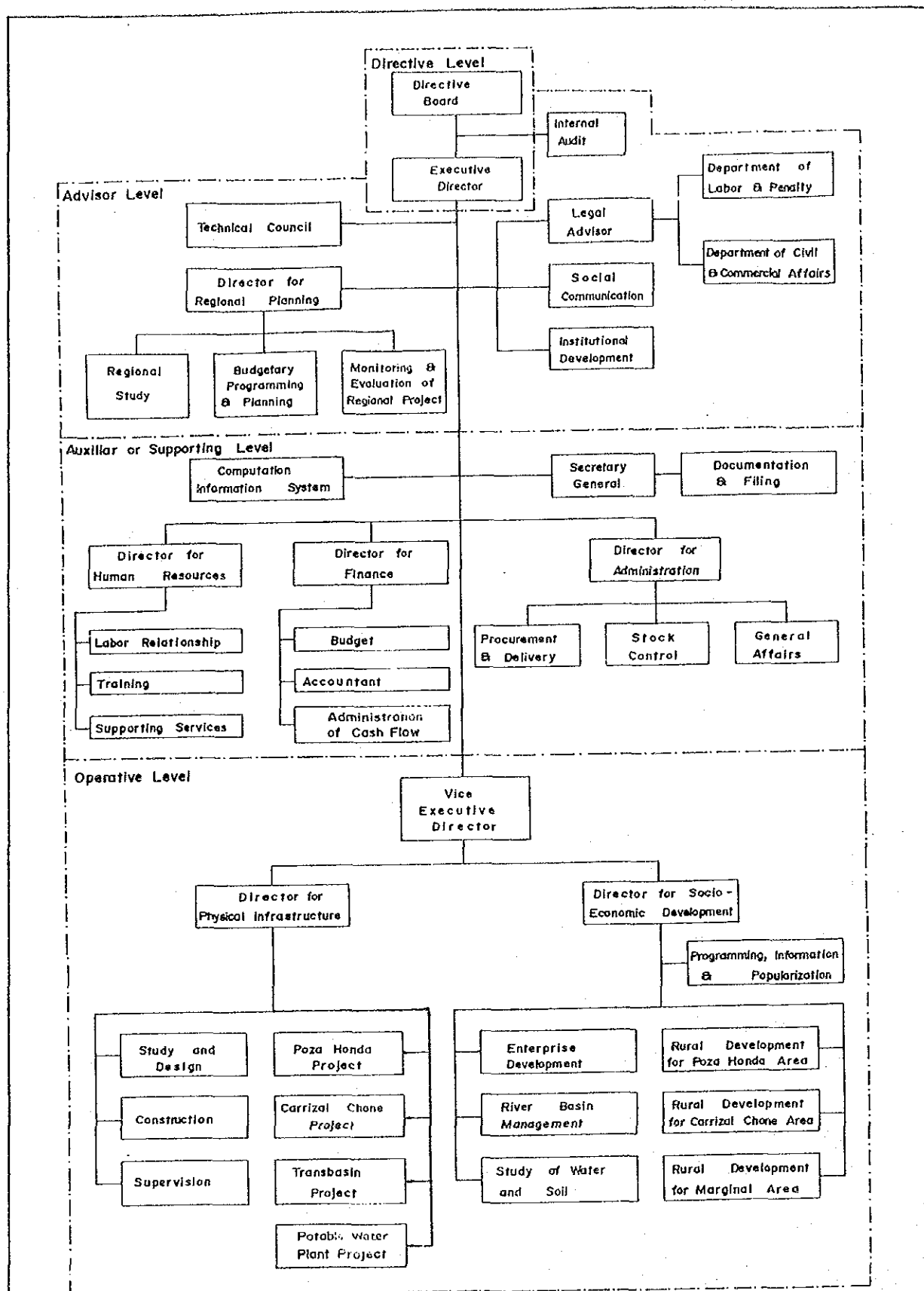


Fig. 14.2 Existing Organization of CRM

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE MANABI (CRM)  
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JAPAN INTERNATIONAL COOPERATION AGENCY

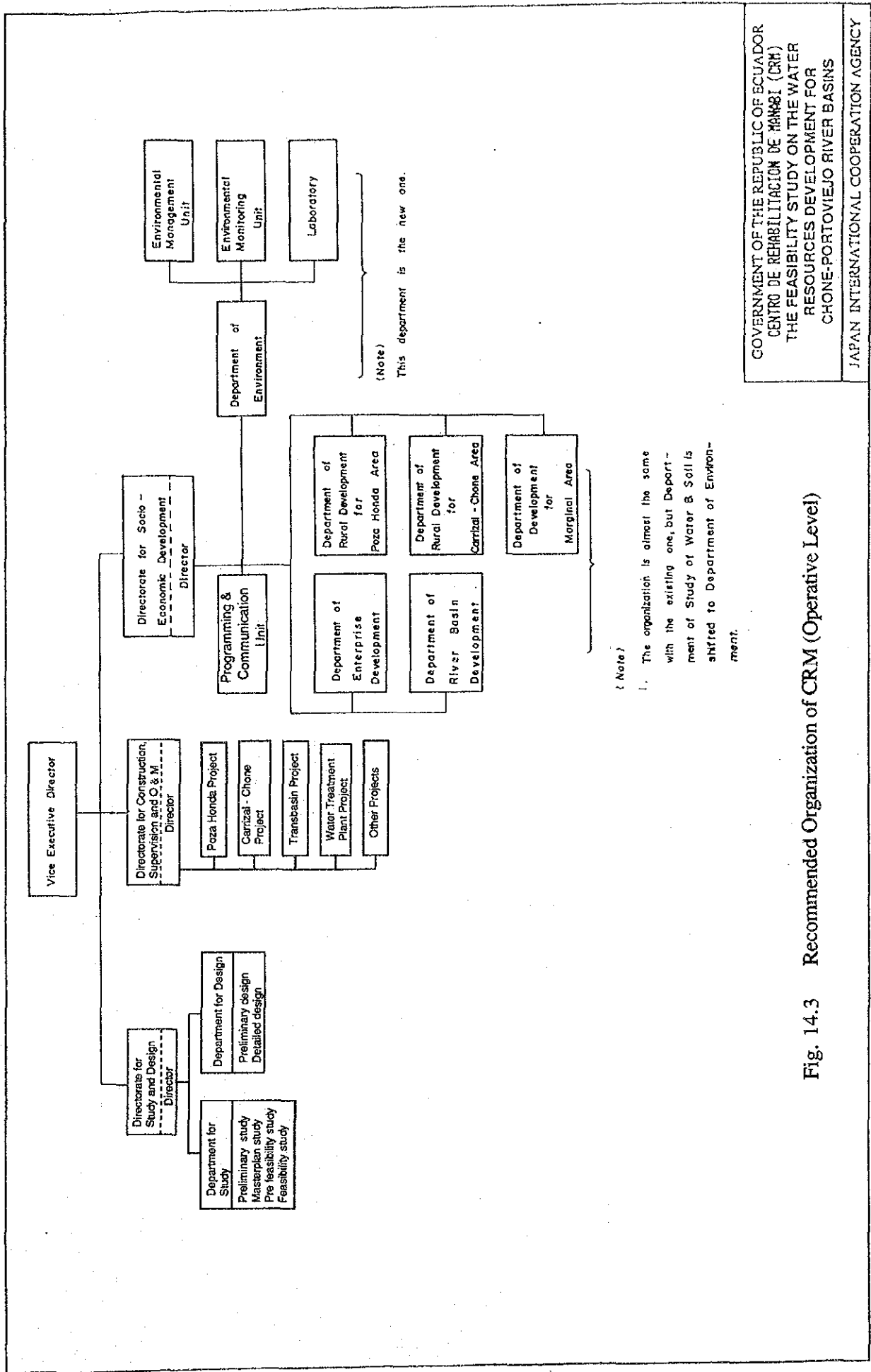
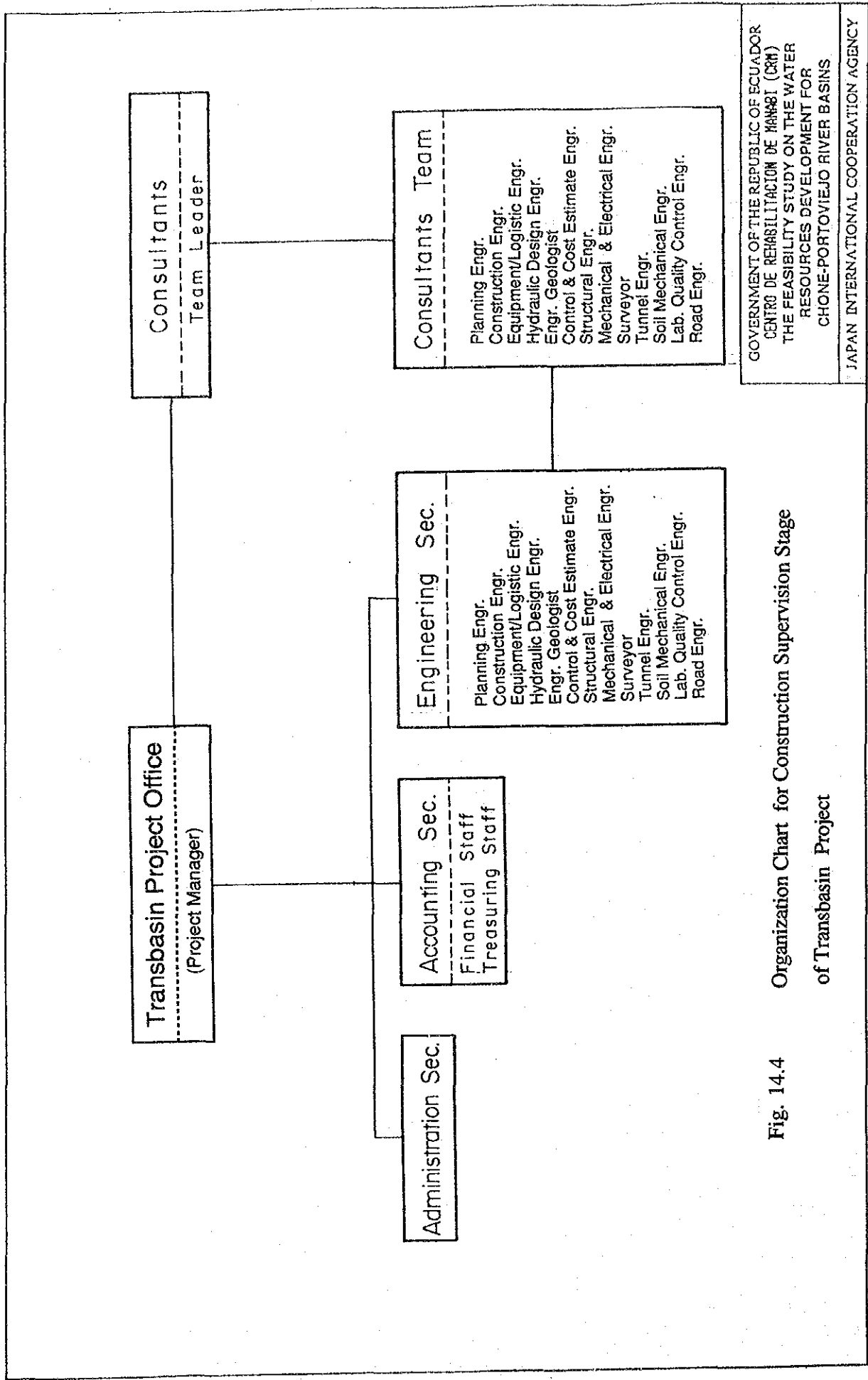


Fig. 14.3 Recommended Organization of CRM (Operative Level)

GOVERNMENT OF THE REPUBLIC OF ECUADOR  
 CENTRO DE REHABILITACION DE RANOS (CRM)  
 THE FEASIBILITY STUDY ON THE WATER  
 RESOURCES DEVELOPMENT FOR  
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GOVERNMENT OF THE REPUBLIC OF ECUADOR  
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Fig. 14.4 Organization Chart for Construction Supervision Stage of Transbasin Project



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