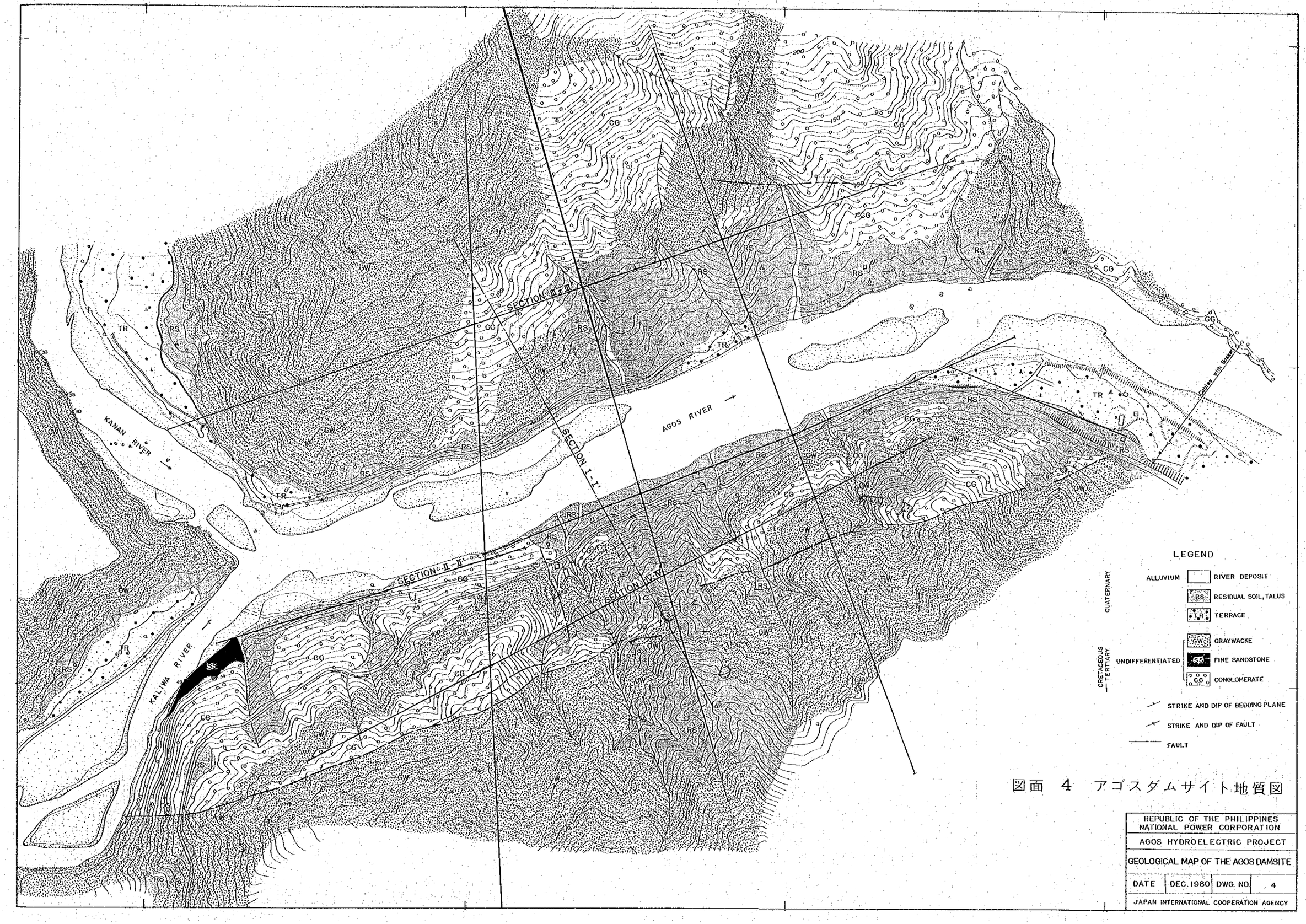
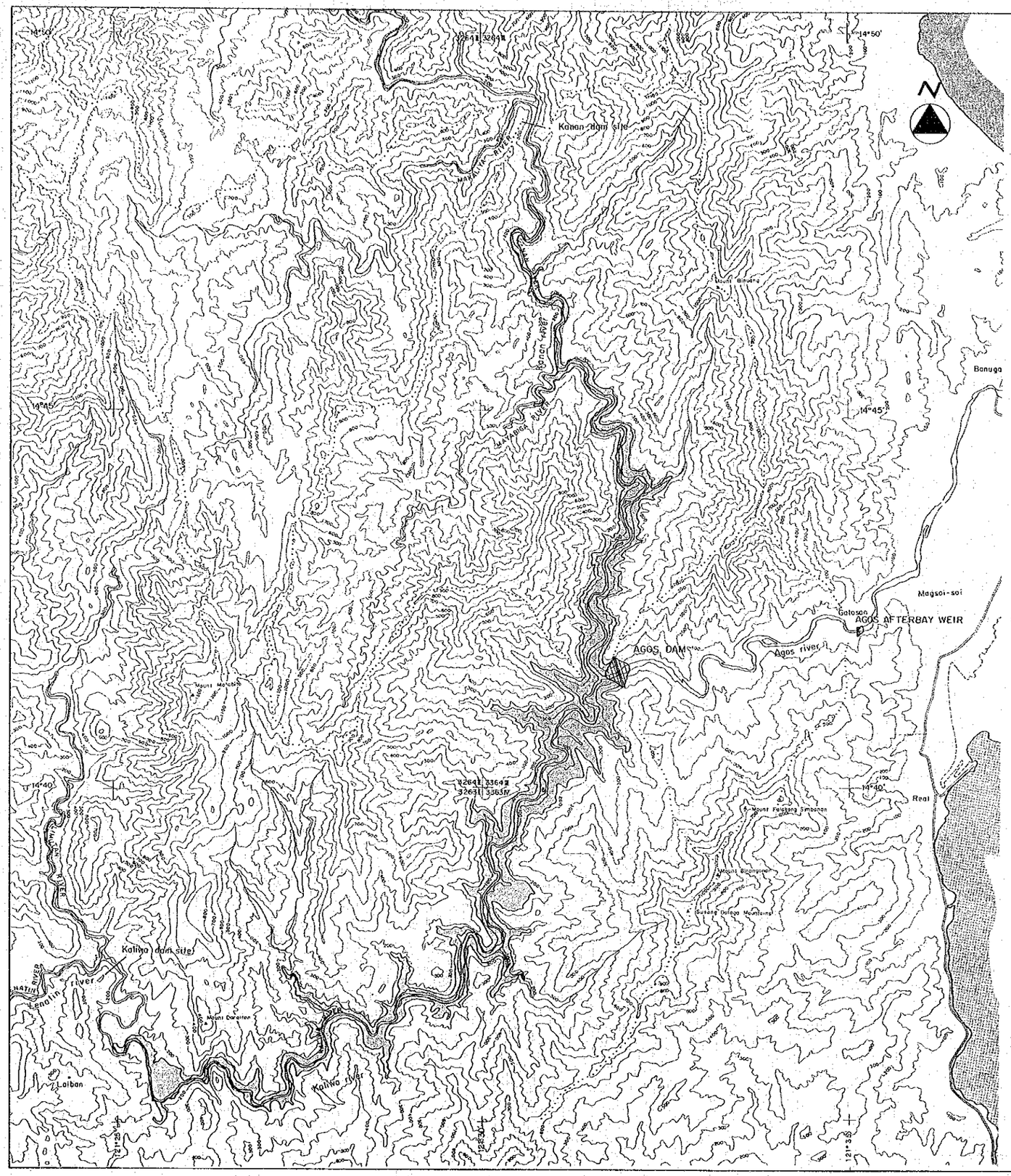
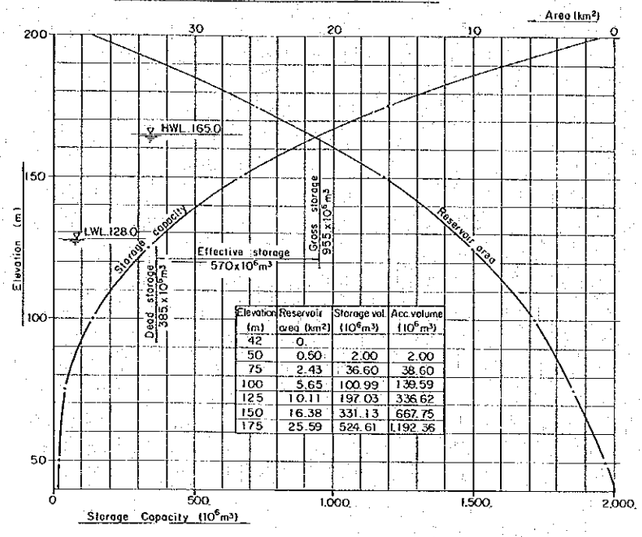


図面 4 アゴスダムサイト地質図

REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION			
AGOS HYDROELECTRIC PROJECT			
GEOLOGICAL MAP OF THE AGOS DAMSITE			
DATE	DEC. 1980	DWG. NO.	4
JAPAN INTERNATIONAL COOPERATION AGENCY			



Capacity - area curve of Agos Dam



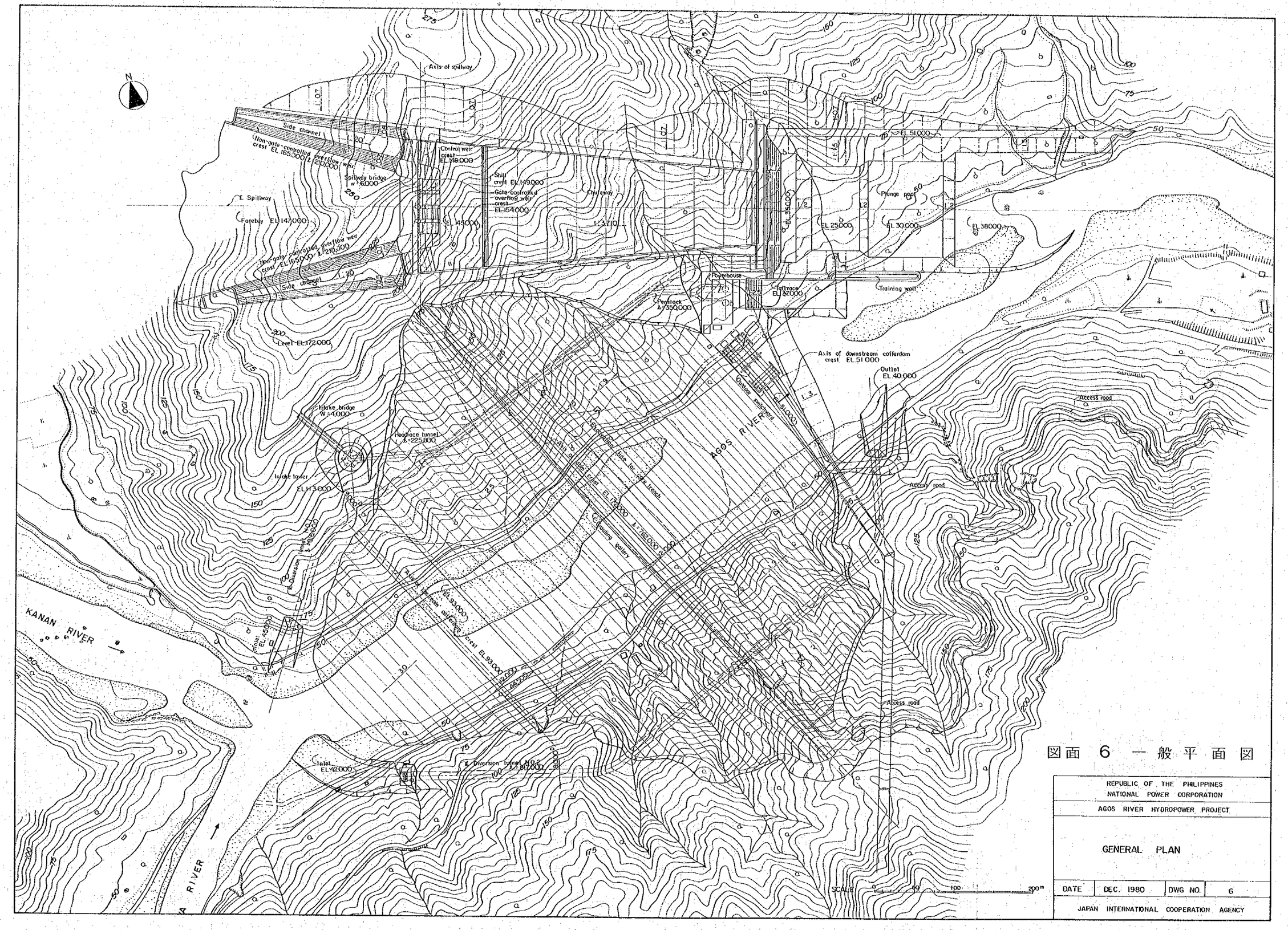
Elevation (m)	Reservoir area (km²)	Storage vol. (10⁶m³)	Acc. volume (10⁶m³)
42	0.		
50	0.50	2.00	2.00
75	2.43	36.60	38.60
100	5.65	100.99	139.59
125	10.11	197.03	336.62
150	16.38	331.13	667.75
175	25.99	524.61	1192.36

Reservoir Area based on NPC and PICOREM'S 1:5,000 map.

SCALE 0 1 2 3 4 5km

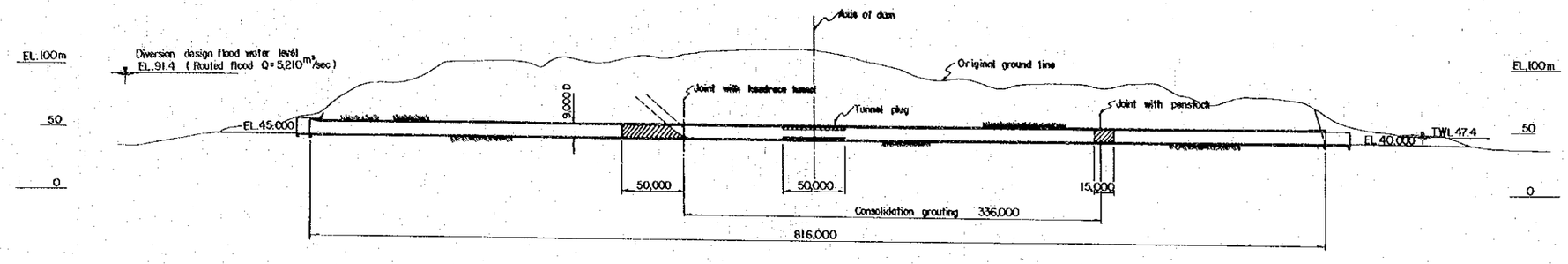
図面 5 貯 水 池

REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION			
AGOS RIVER HYDROPOWER PROJECT			
RESERVOIR AREA			
DATE	DEC. 1980	DWG NO.	5
JAPAN INTERNATIONAL COOPERATION AGENCY			



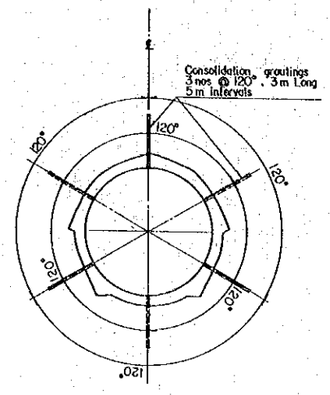
図面 6 一般平面図

REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION	
AGOS RIVER HYDROPOWER PROJECT	
GENERAL PLAN	
DATE: DEC. 1980	DWG NO.: 6
JAPAN INTERNATIONAL COOPERATION AGENCY	



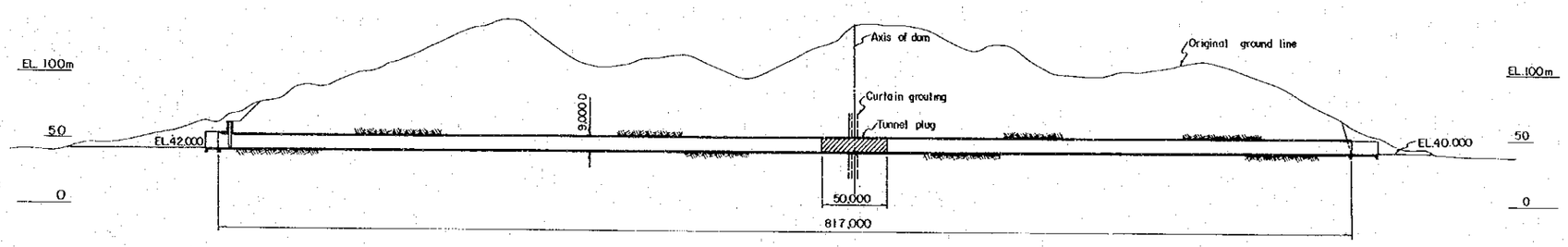
DIVERSION TUNNEL No. 1 (used for Waterway)

SCALE A



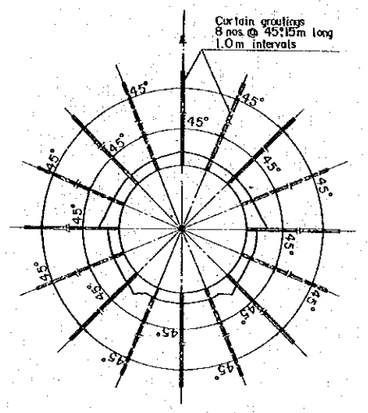
ARRANGEMENT OF CONSOLIDATION GROUT HOLE

SCALE B



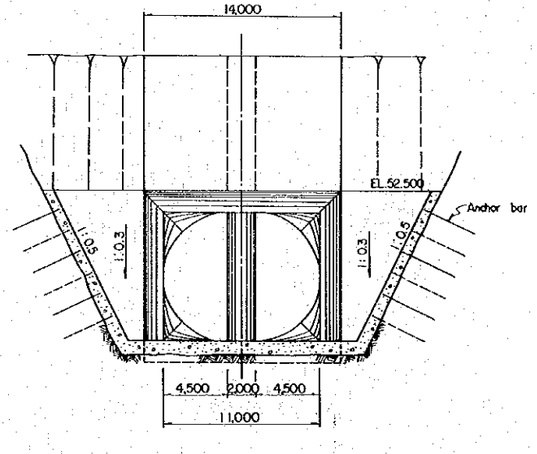
DIVERSION TUNNEL No. 2

SCALE A



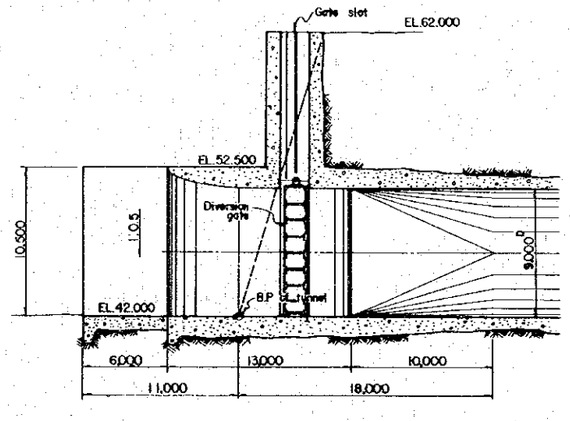
ARRANGEMENT OF CURTAIN GROUT HOLE

SCALE B



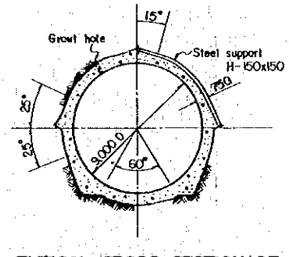
FRONT ELEVATION OF DIVERSION INLET

SCALE B



PROFILE OF DIVERSION INLET

SCALE B



TYPICAL CROSS SECTION OF DIVERSION TUNNEL

SCALE B

図面 7 仮 排 水 路

SCALE A 0 50 100 200m

SCALE B 0 5 10 20m

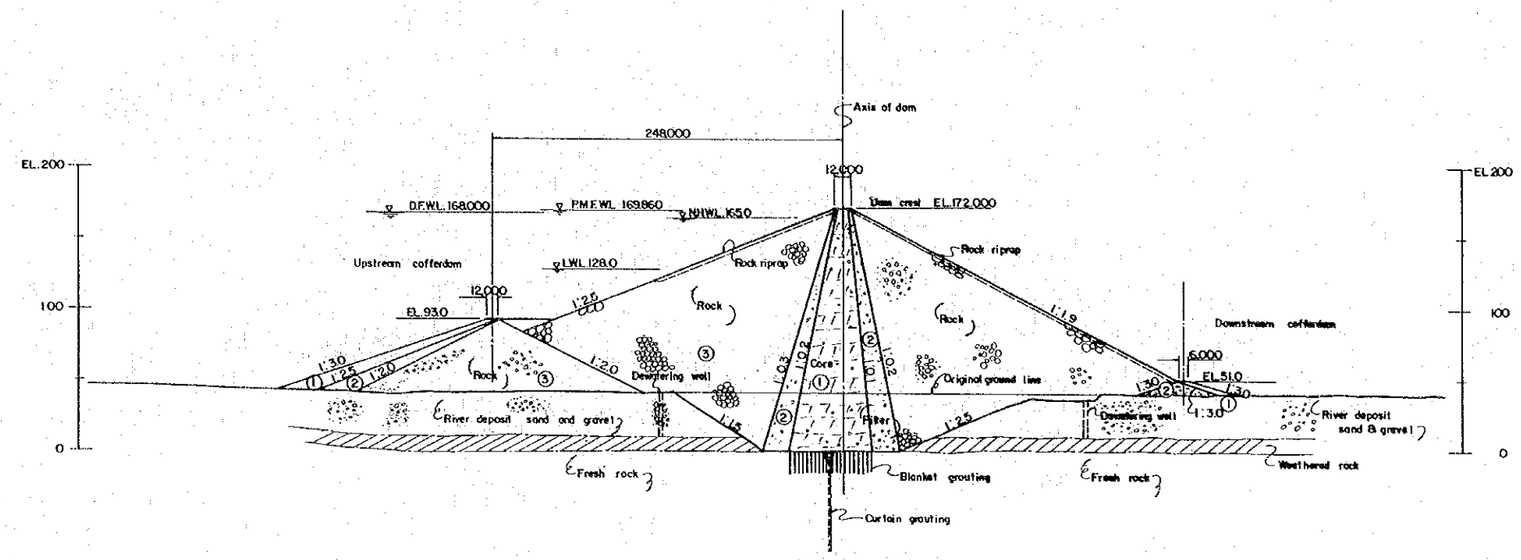
REPUBLIC OF THE PHILIPPINES
NATIONAL POWER CORPORATION

AGOS RIVER HYDROPOWER PROJECT

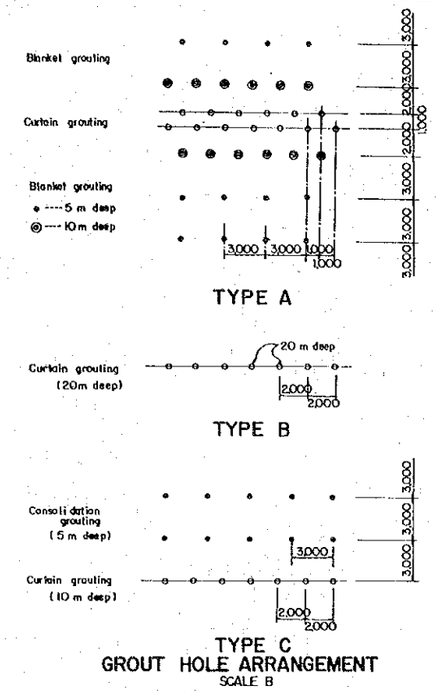
DIVERSION TUNNELS

DATE	DEC. 1980	DWG NO.	7

JAPAN INTERNATIONAL COOPERATION AGENCY



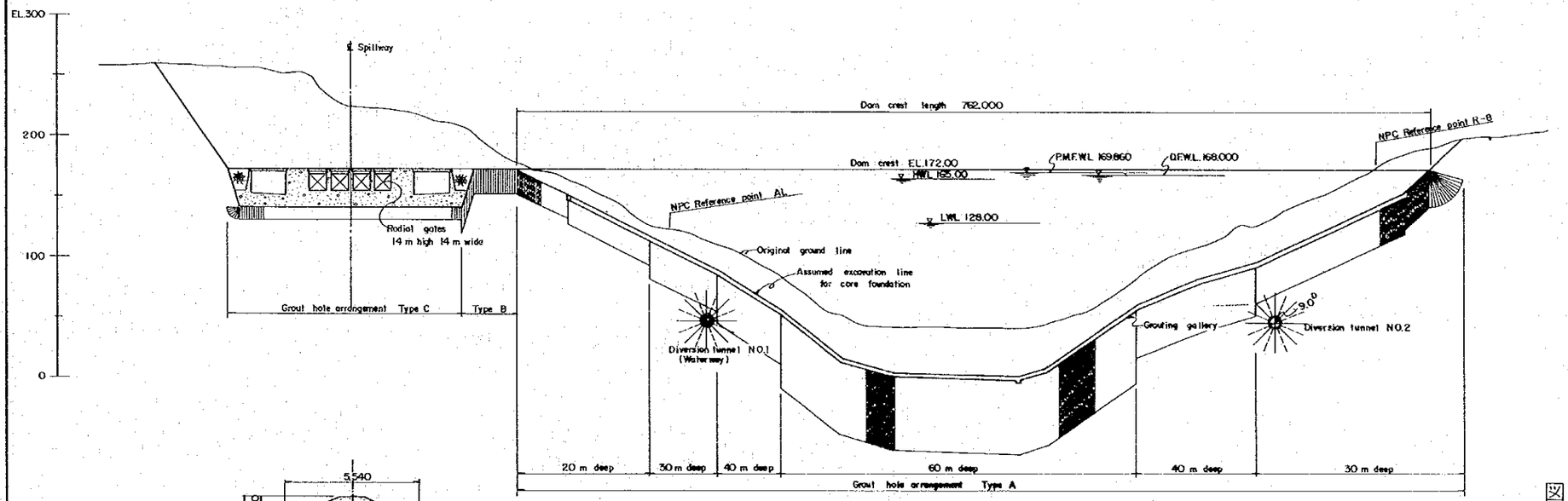
TYPICAL CROSS SECTION
SCALE A



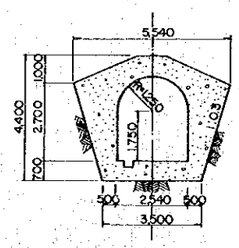
TYPE A

TYPE B

TYPE C
GROUT HOLE ARRANGEMENT
SCALE B



PROFILE
SCALE A



TYPICAL SECTION OF GROUTING GALLERY
SCALE C

図面 8 ダ ム

SCALE A 0 50 100 200 m
SCALE B 0 5 10 20 m
SCALE C 0 5 10 m

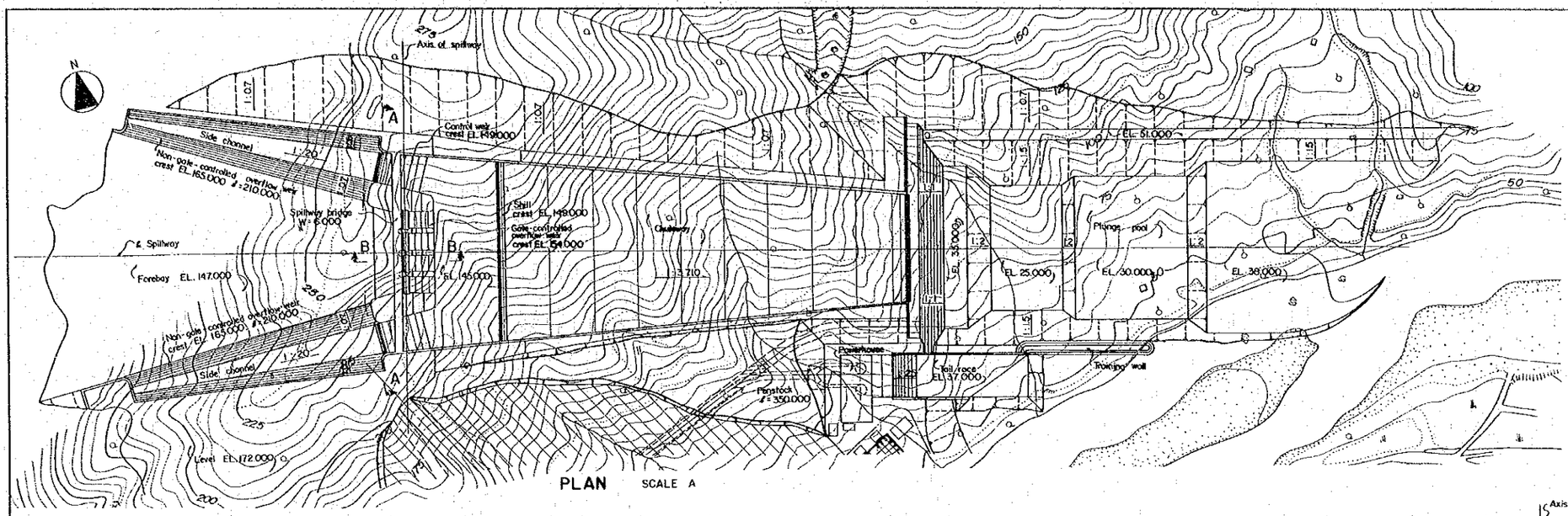
REPUBLIC OF THE PHILIPPINES
NATIONAL POWER CORPORATION

AGOS RIVER HYDROPOWER PROJECT

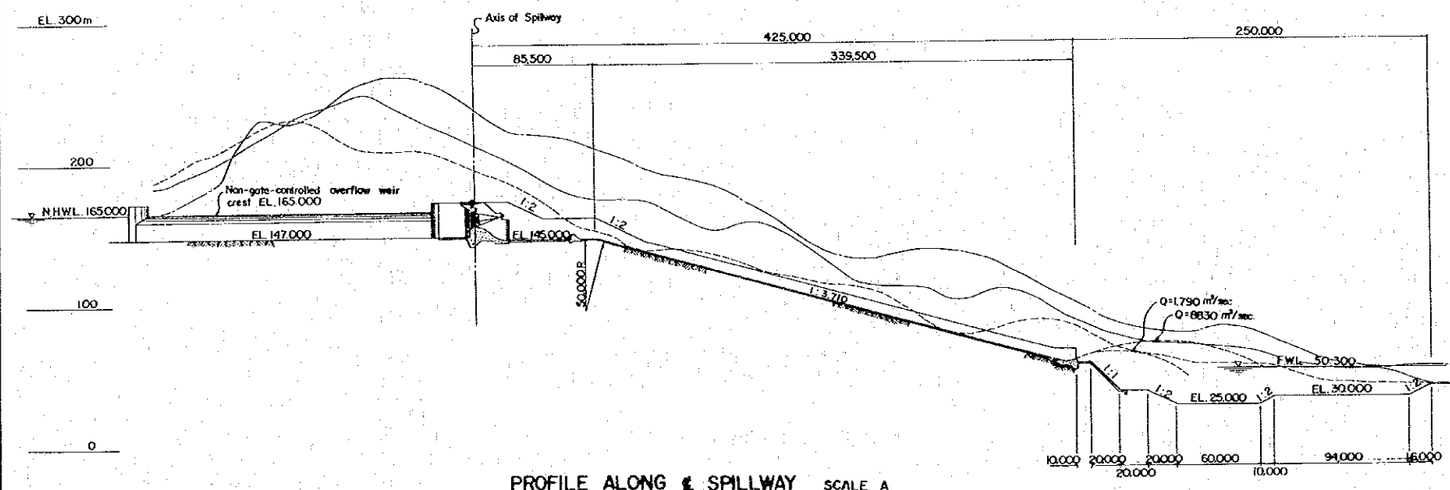
DAM

DATE	DEC. 1980	DWG NO.	8

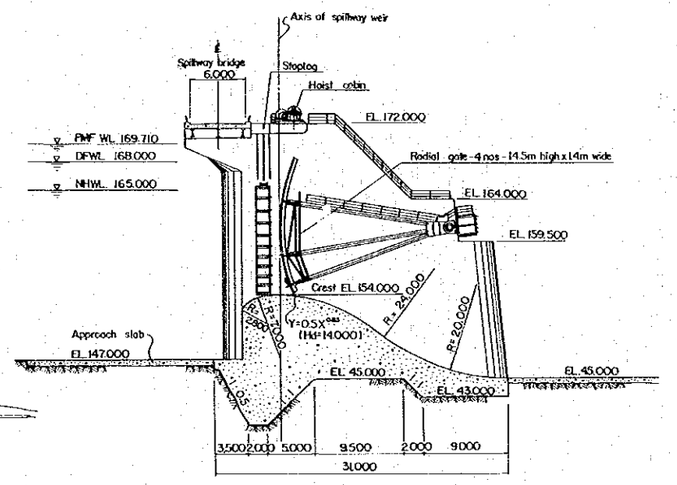
JAPAN INTERNATIONAL COOPERATION AGENCY



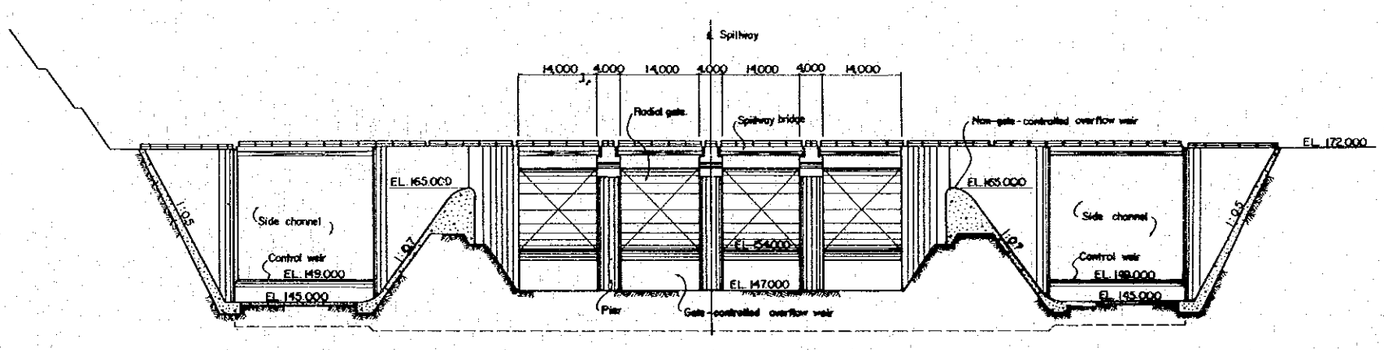
PLAN SCALE A



PROFILE ALONG ℄ SPILLWAY SCALE A



SECTION B-B SCALE C



SECTION A-A SCALE B

NOTE ;

1. Peak discharge of P.M.F. = 17,300 m³/sec.
2. Spillway design discharge = 10,600 m³/sec.
3. 200-year flood = 8,830 m³/sec.
4. 2-year flood = 1,790 m³/sec.

SCALE A 0 100 200m

SCALE B 0 10 20 30 40 50m

SCALE C 0 10 20 30m

図面 9 余 水 吐

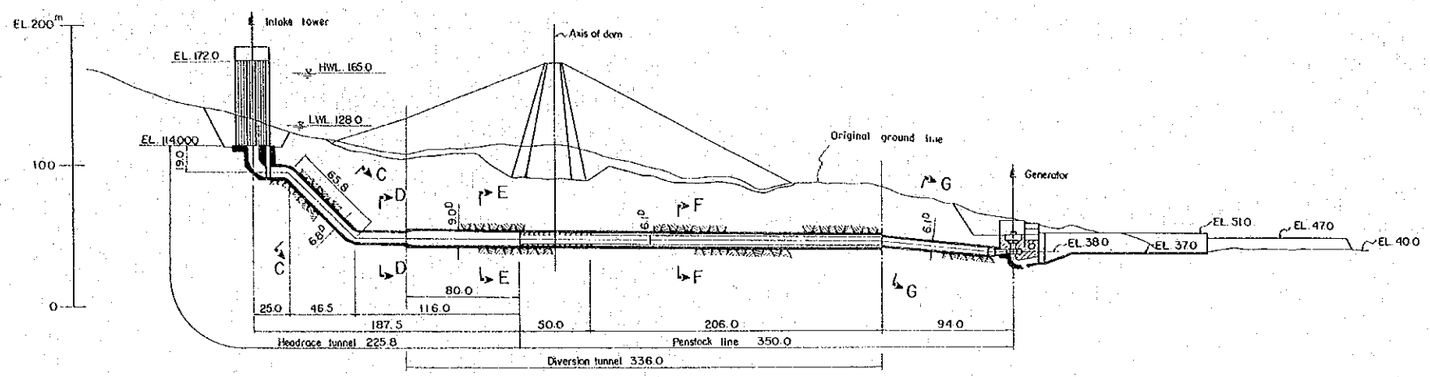
REPUBLIC OF THE PHILIPPINES
NATIONAL POWER CORPORATION

AGOS RIVER HYDROPOWER PROJECT

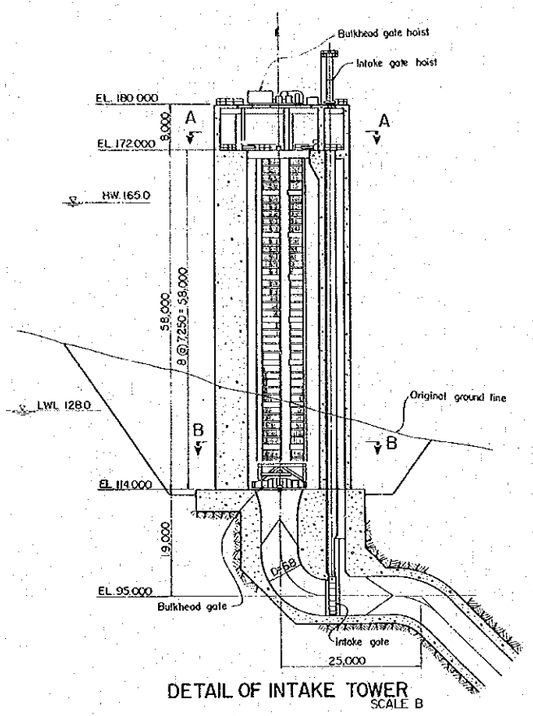
SPILLWAY

DATE	DEC. 1980	DWG NO.	9

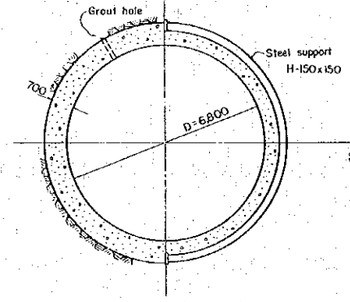
JAPAN INTERNATIONAL COOPERATION AGENCY



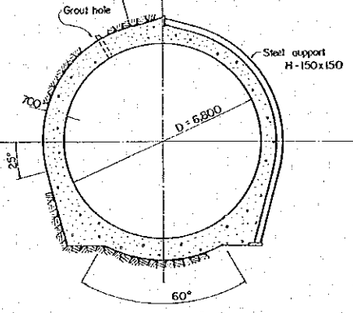
PROFILE OF WATERWAY SCALE A



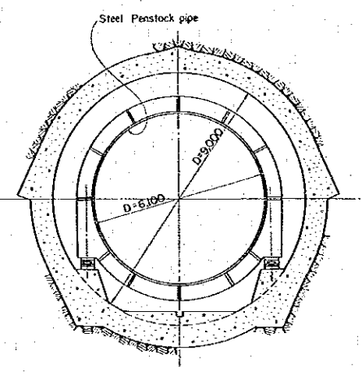
DETAIL OF INTAKE TOWER SCALE B



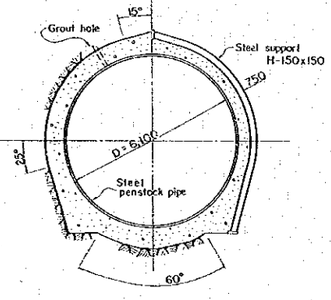
SECTION C-C SCALE C



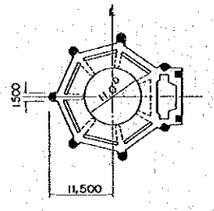
SECTION D-D SCALE C



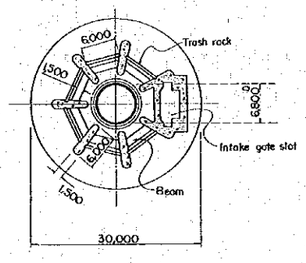
SECTION F-F SCALE C



SECTION G-G SCALE C



SECTION A-A SCALE B



SECTION B-B SCALE B

SCALE A 0 50 100 200m

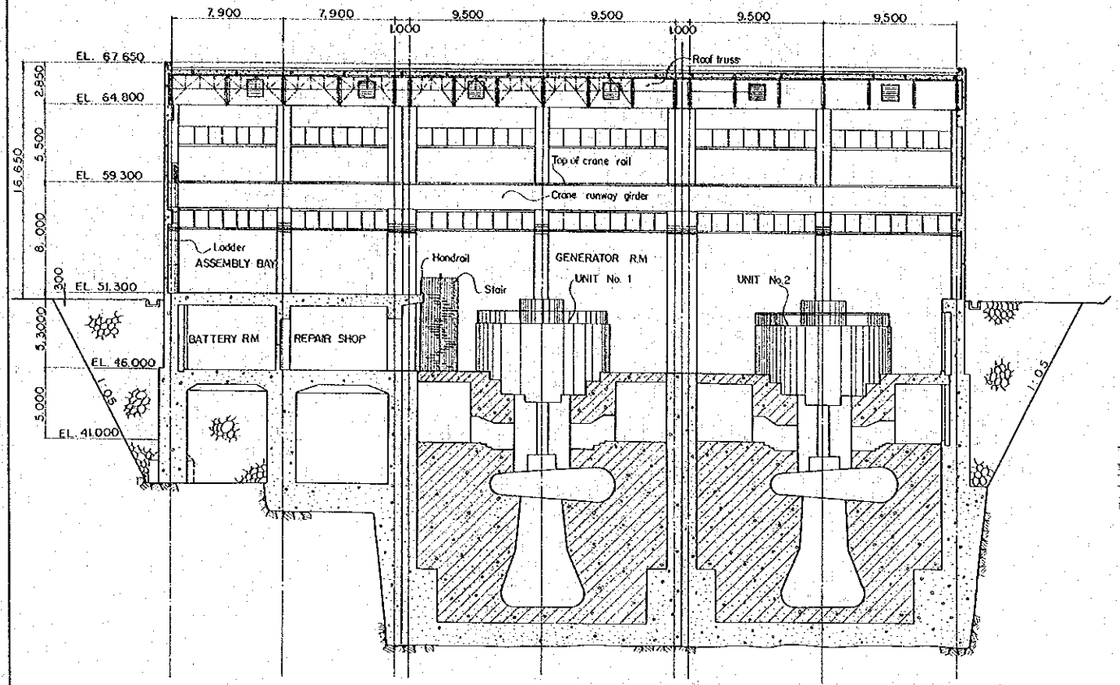
SCALE B 0 10 20 30 40 50m

SCALE C 0 5 10m

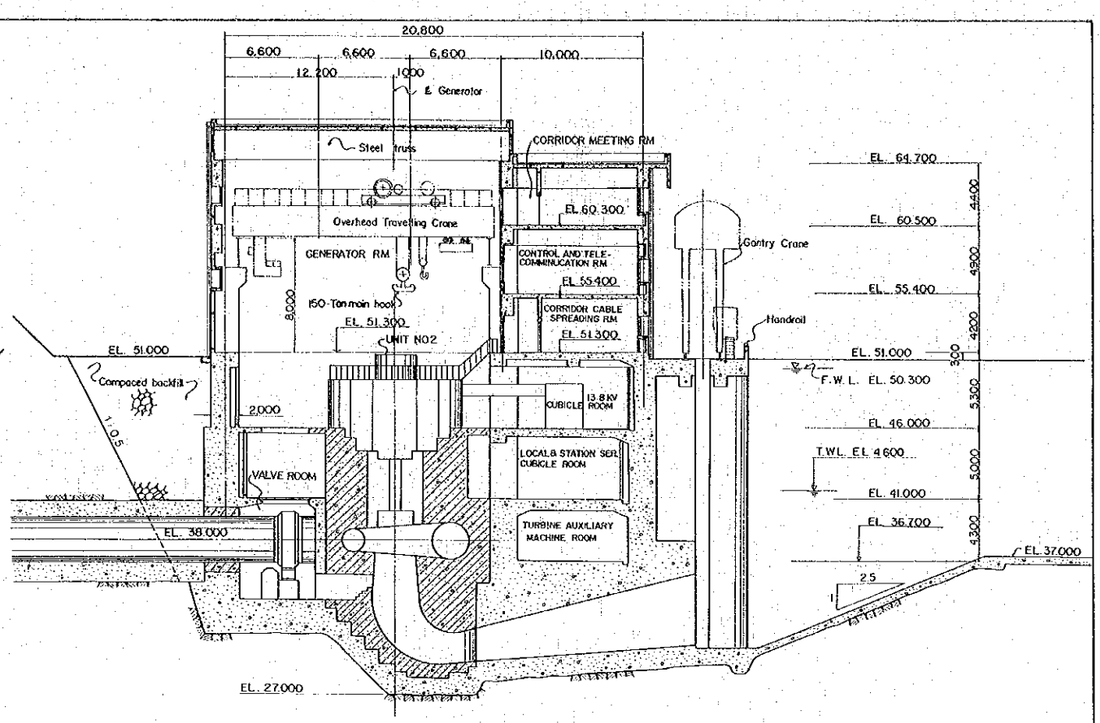
Section E-E refer to Dwg. No. 7

図面 10 取水口及び発電水路

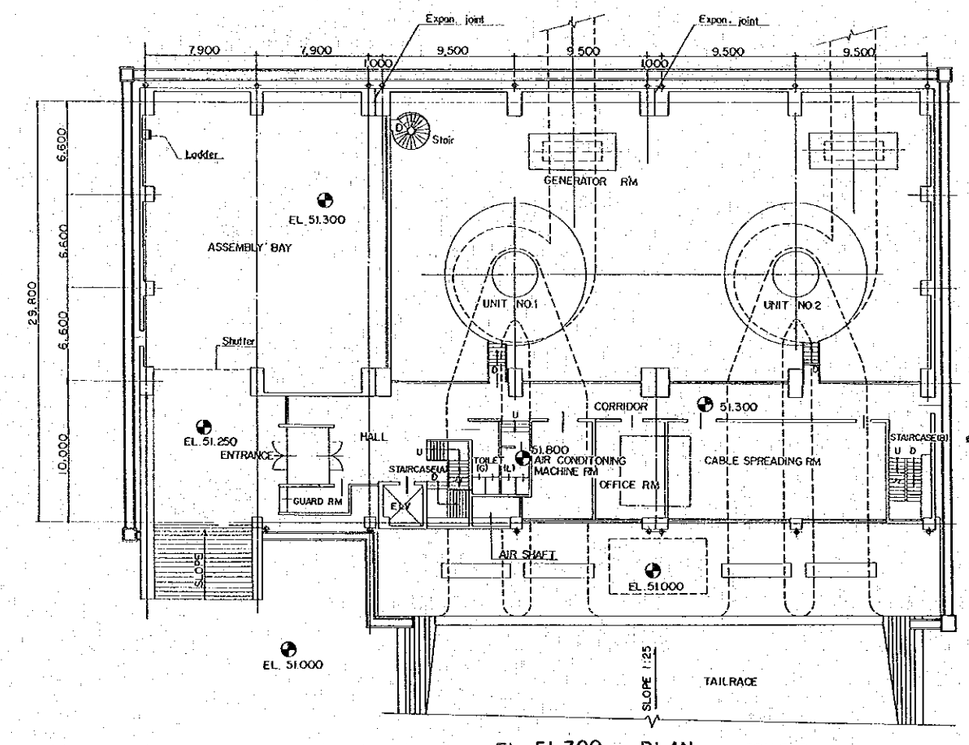
REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION	
AGOS RIVER HYDROPOWER PROJECT	
INTAKE TOWER AND WATERWAY	
DATE: DEC. 1980	DWG NO.: 10
JAPAN INTERNATIONAL COOPERATION AGENCY	



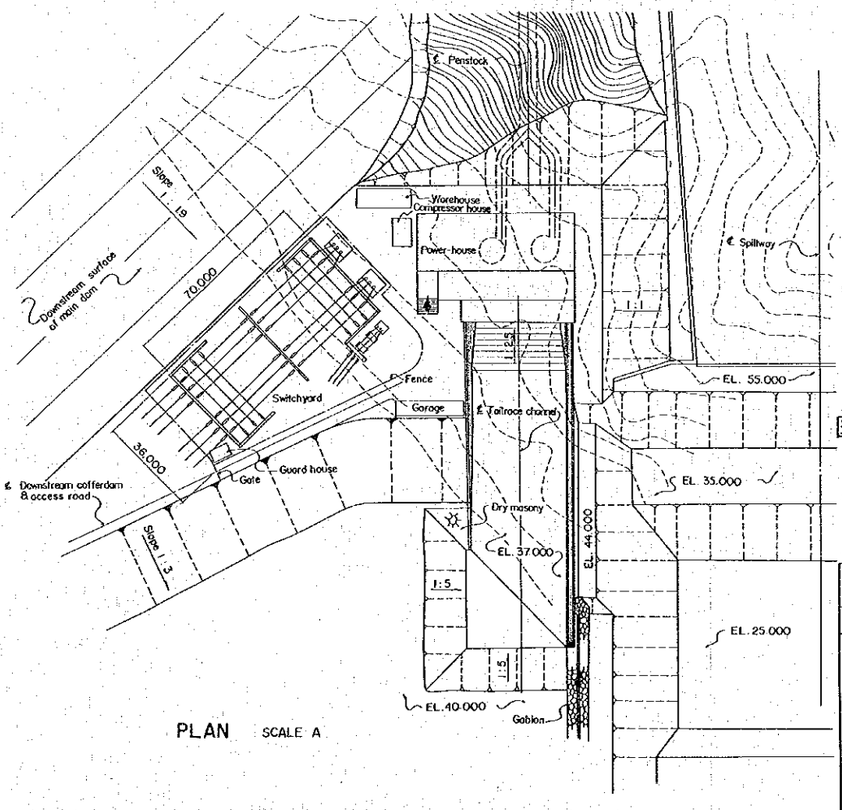
LONGITUDINAL SECTION SCALE B



TRANSVERSAL SECTION SCALE B



EL. 51.300 PLAN SCALE B



PLAN SCALE A

図面 11 発 電 所

SCALE A 0 50 100m

SCALE B 0 5 10 20m

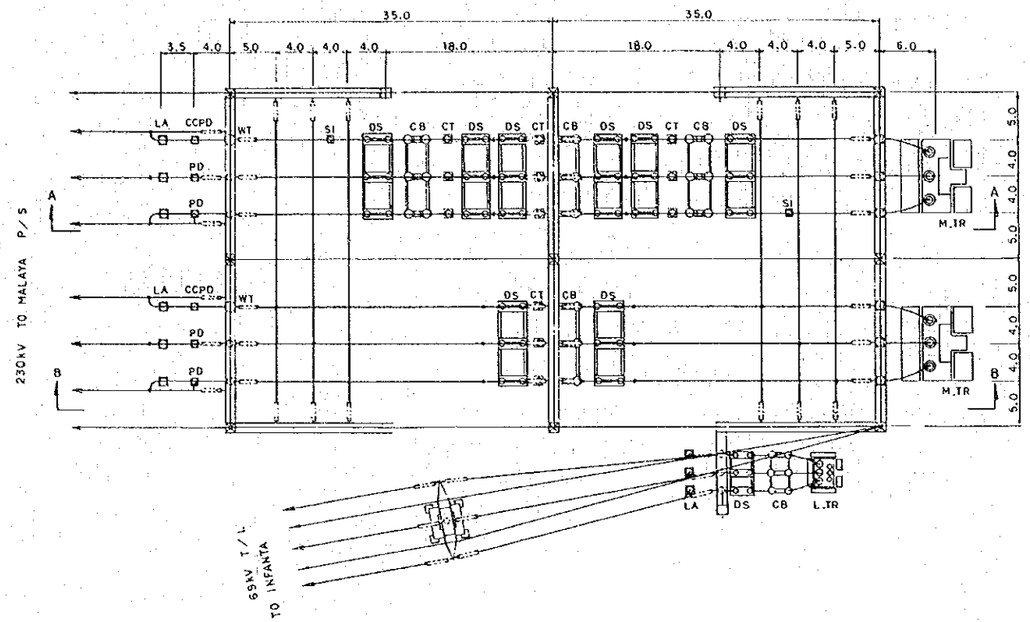
REPUBLIC OF THE PHILIPPINES
NATIONAL POWER CORPORATION

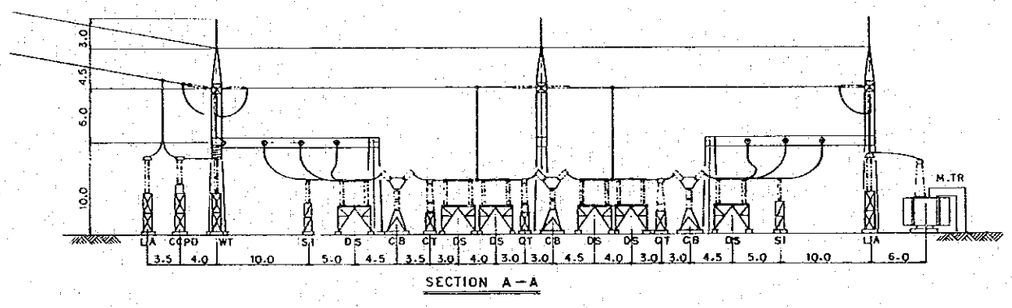
AGOS RIVER HYDROPOWER PROJECT

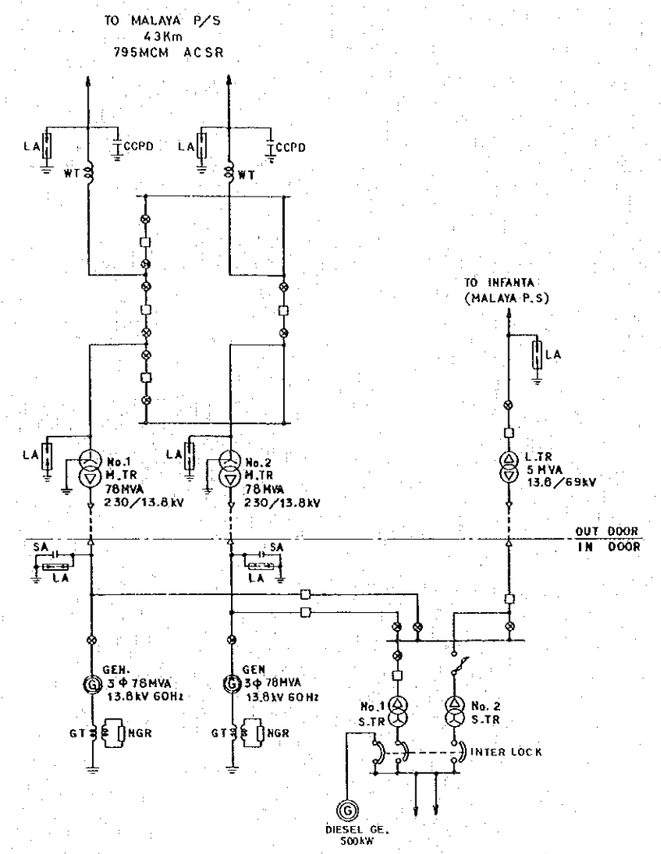
POWERHOUSE

DATE	DEC. 1980	DWG NO.	11

JAPAN INTERNATIONAL COOPERATION AGENCY







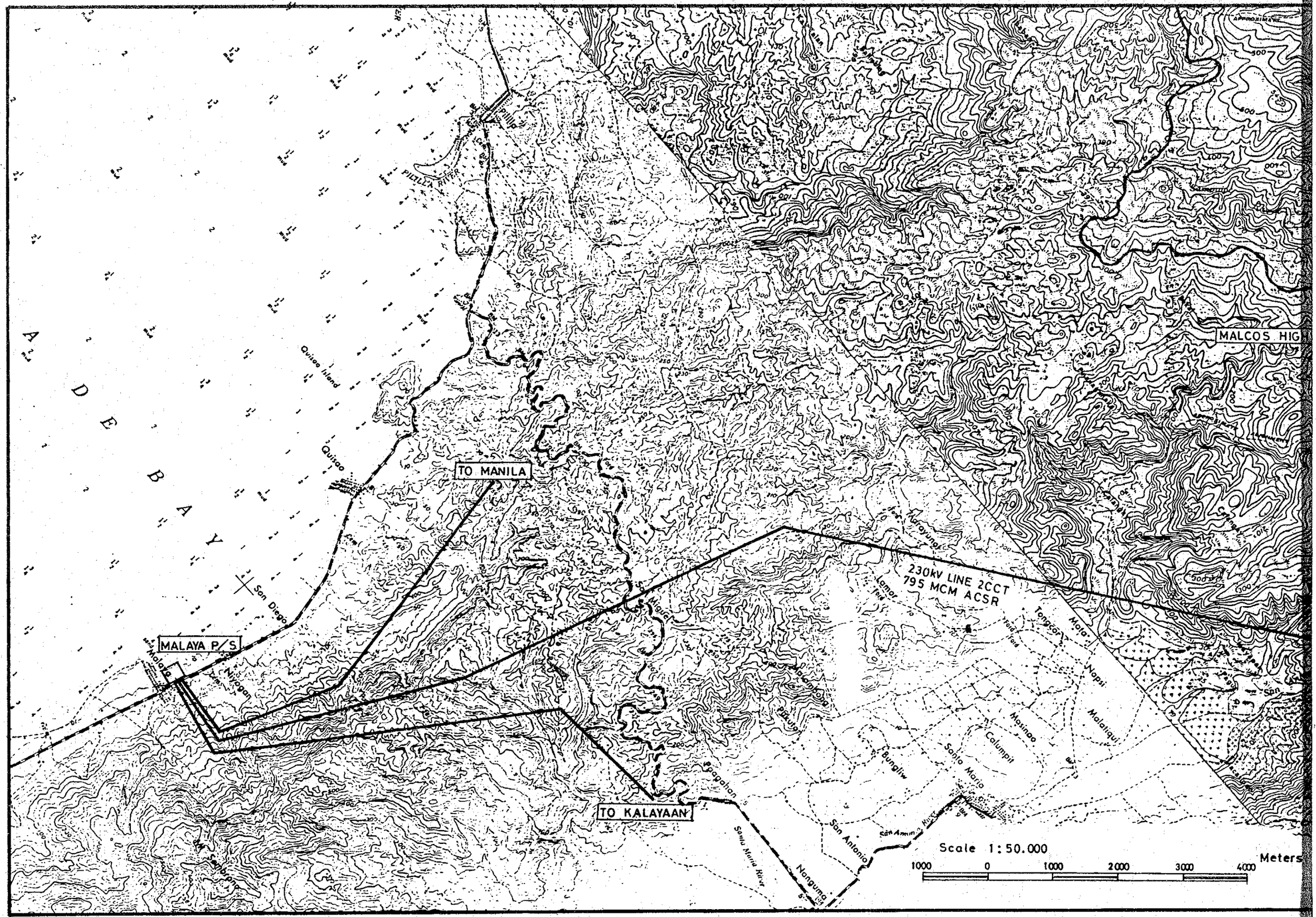
LEGEND	
⊗	DISCONNECTING SWITCH
□	CIRCUIT BREAKER
	LIGHTNING ARRESTER
G	GENERATOR
	TRANSFORMER
	WAVE TRAP

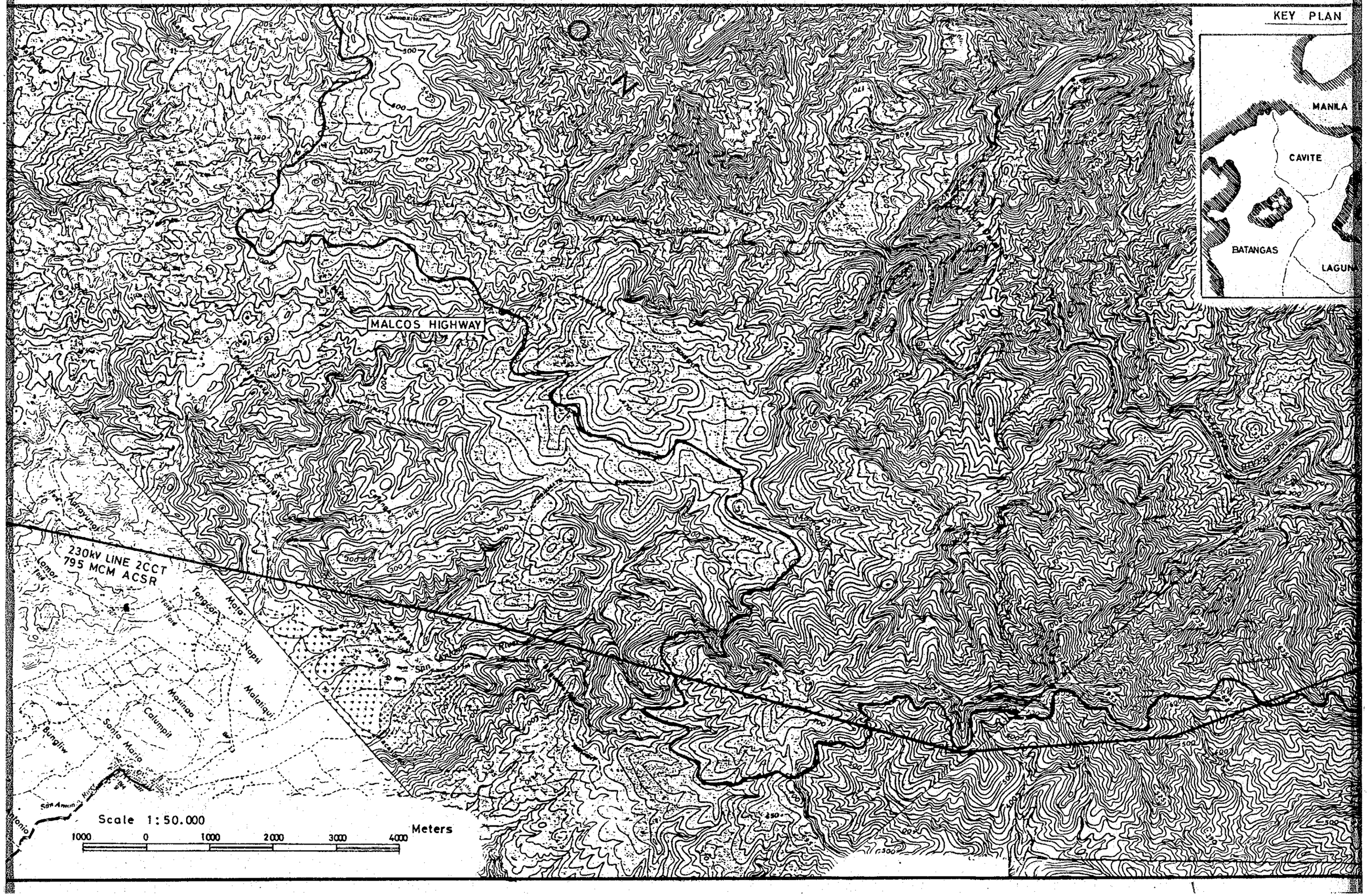
No.1 S.TR
750kVA 13.8kV/440/220V

No.2 S.TR
750kVA 13.8kV/440/220V

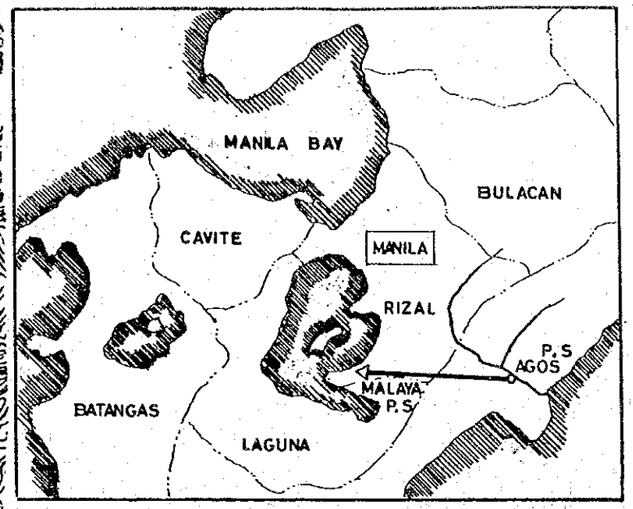
図面 12　単線結線図と屋外開閉所

REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION			
AGOS RIVER HYDROPOWER PROJECT			
SINGLE LINE DIAGRAM AND OUTDOOR SWITCH YARD			
DATE	DEC 1980	DWG. NO.	12
JAPAN INTERNATIONAL COOPERATION AGENCY			


MALCOS HIGH
PICALEA RIVER
Quisao Island
Quisao
TO MANILA
A D E B A Y
San Diego
MALAYA P/S
Malaya
Nilogan
San Miguel
230kv LINE 2CCT
795 MCM ACSR
Lamot
Tongson
Mata
Napsi
Malatiqui
Mastnao
Calumpit
Bungliw
Santa Maria
Pagahan
TO KALAYAAN
Santa Maria River
San Antonio
San Ammi
Nanguma
Scale 1:50.000
1000 0 1000 2000 3000 4000 Meters


KEY PLAN
MANILA
CAVITE
BATANGAS
LAGUNA
MALCOS HIGHWAY
230kV LINE 2CCT
795 MCM ACSR
Lomer
Tongson
Maia
Napsi
Malatiqui
Mastinao
Calumpit
Santa Maria
Bunglaw
Scale 1:50.000
1000 0 1000 2000 3000 4000 Meters

KEY PLAN

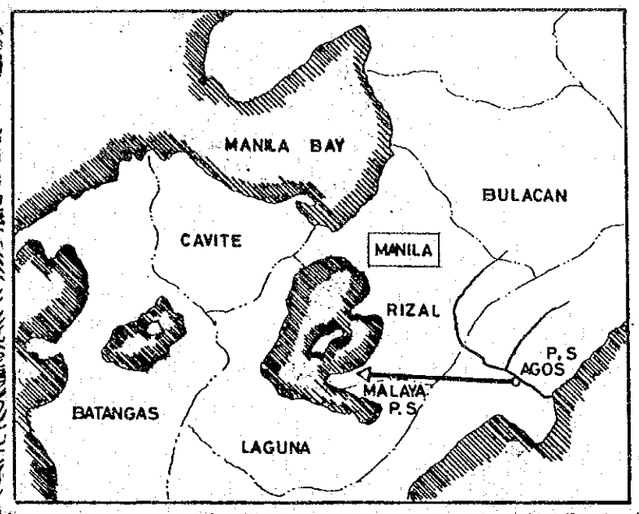


N

AGO

MALCOS HIG

KEY PLAN



N

AGOS No.1 DAM

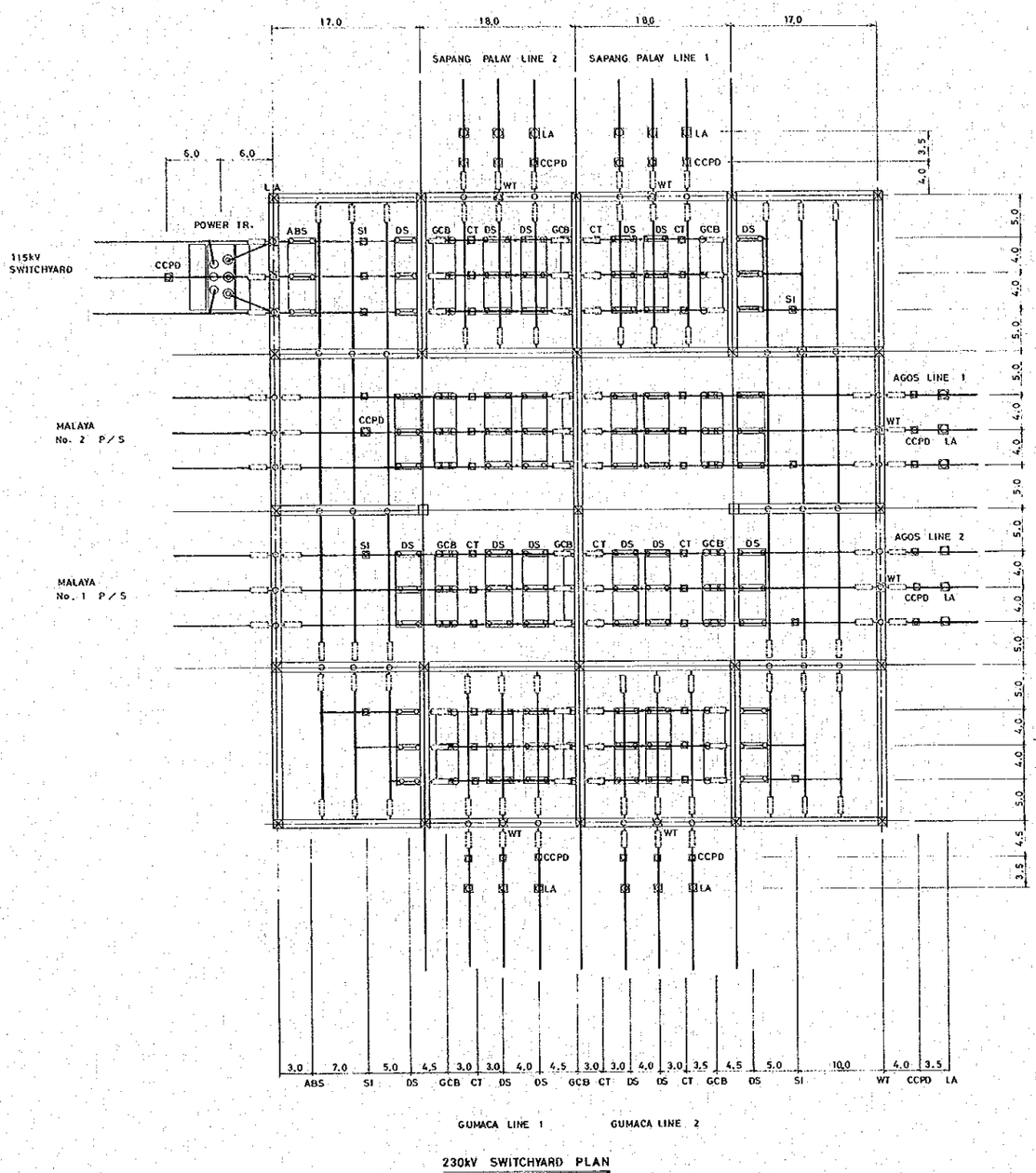
AGOS No.1 P/S

69kV LINE 1CCT TO INFANTA

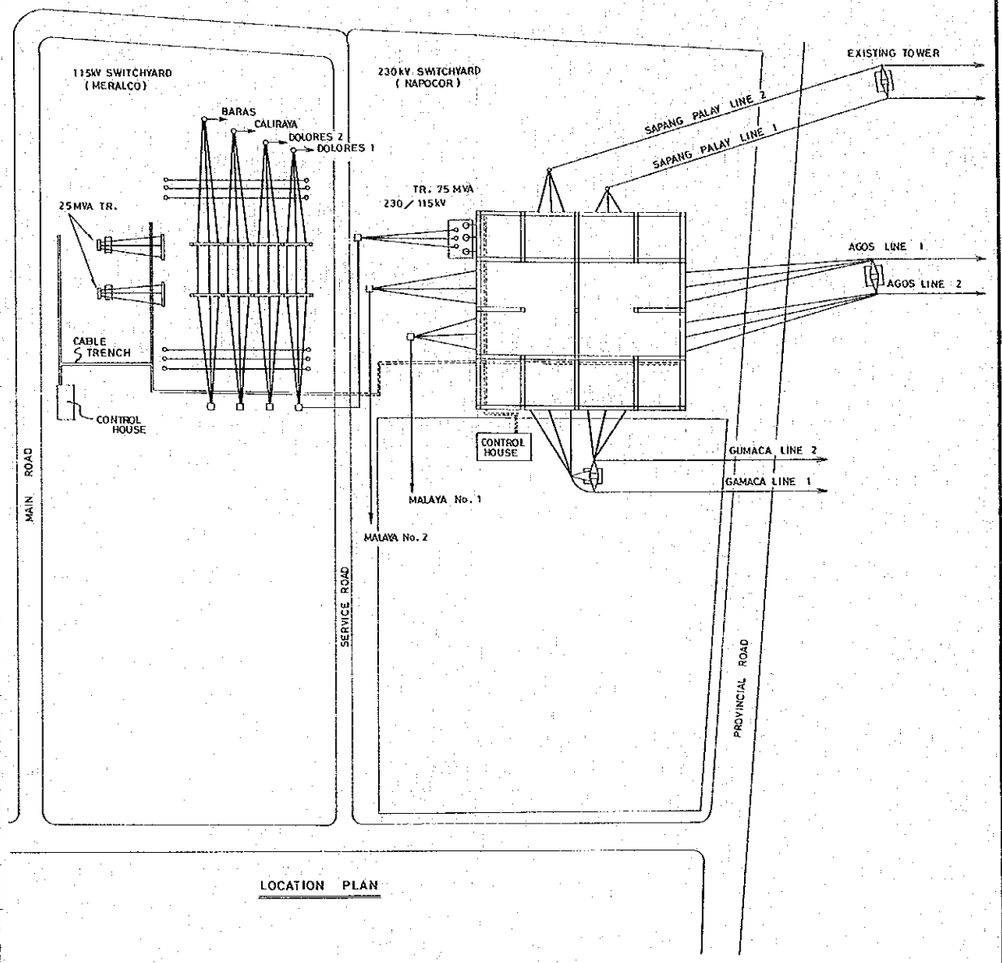
MALCOS HIGHWAY

図面 13 送電線路線

REPBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION			
AGOS RIVER HYDROPOWER PROJECT			
230kV TRANSMISSION LINE ROUTE MAP			
DATE	DEC 1980	DWG. NO.	13
JAPAN INTERNATIONAL COOPERATION AGENCY			



230kV SWITCHYARD PLAN



LOCATION PLAN

NOTE:

[ ] EXTENSION FOR AGOS HYDROPOWER PROJECT

図面 14 マラヤ変電所

REPUBLIC OF THE PHILIPPINES NATIONAL POWER CORPORATION			
AGOS RIVER HYDROPOWER PROJECT			
MALAYA SUBSTATION PLAN AND LAYOUT			
DATE	DEC 1980	DWG. NO.	14
JAPAN INTERNATIONAL COOPERATION AGENCY