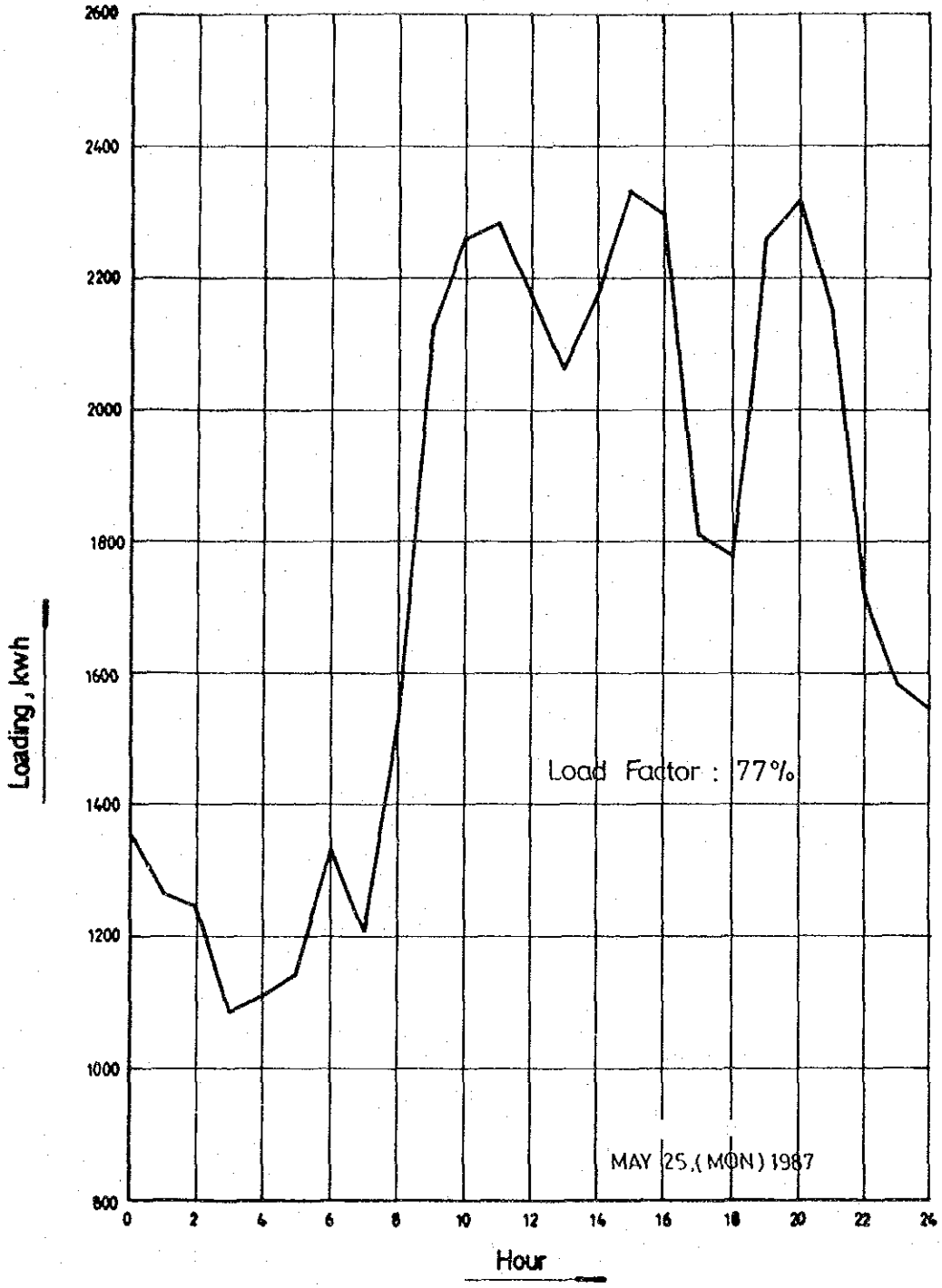

Figure 4.11 Daily Load Curve in Limbang

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

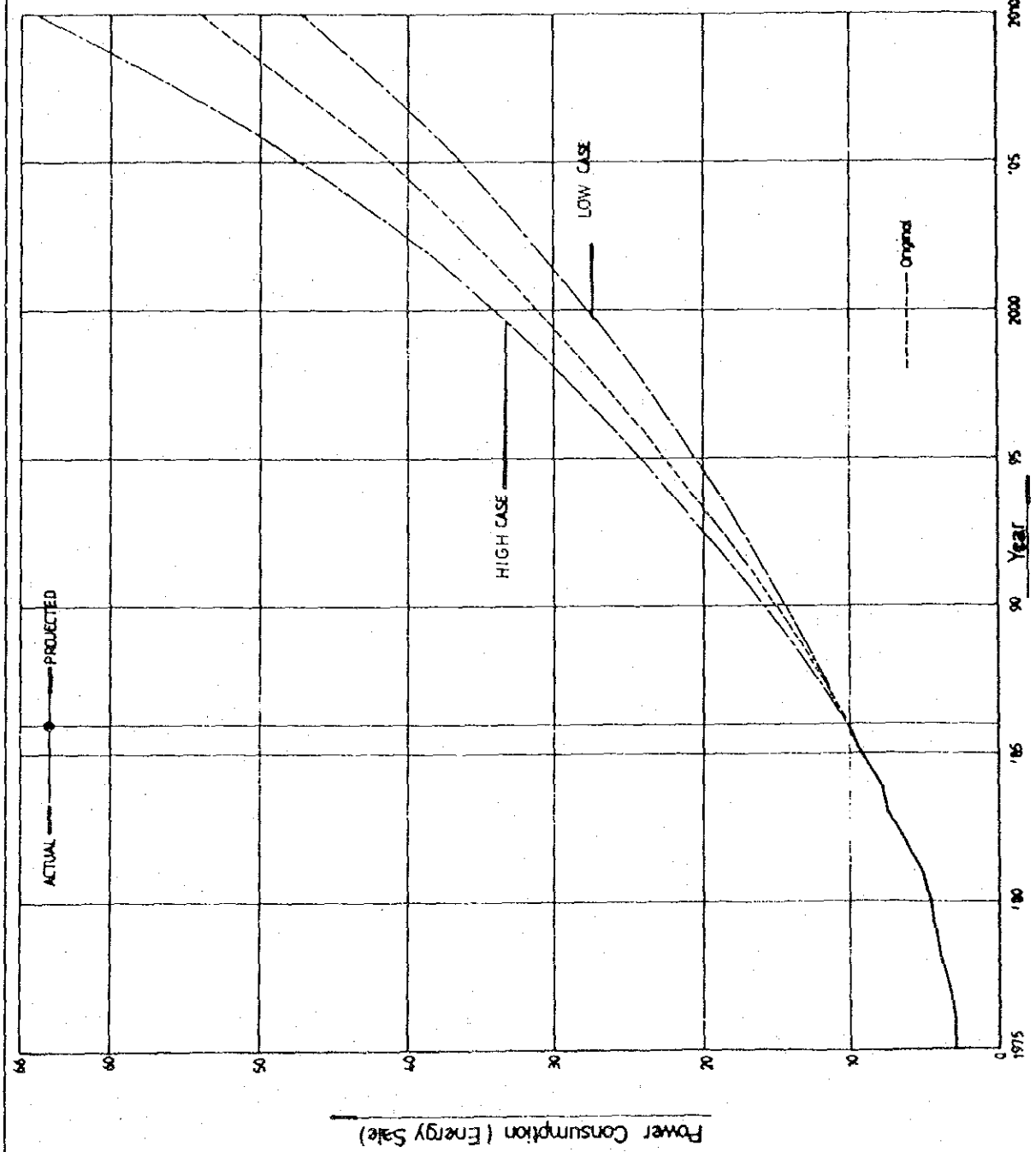

Fig.4.12. Forecasted Power Consumption in Comparison with High and Low Cases

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

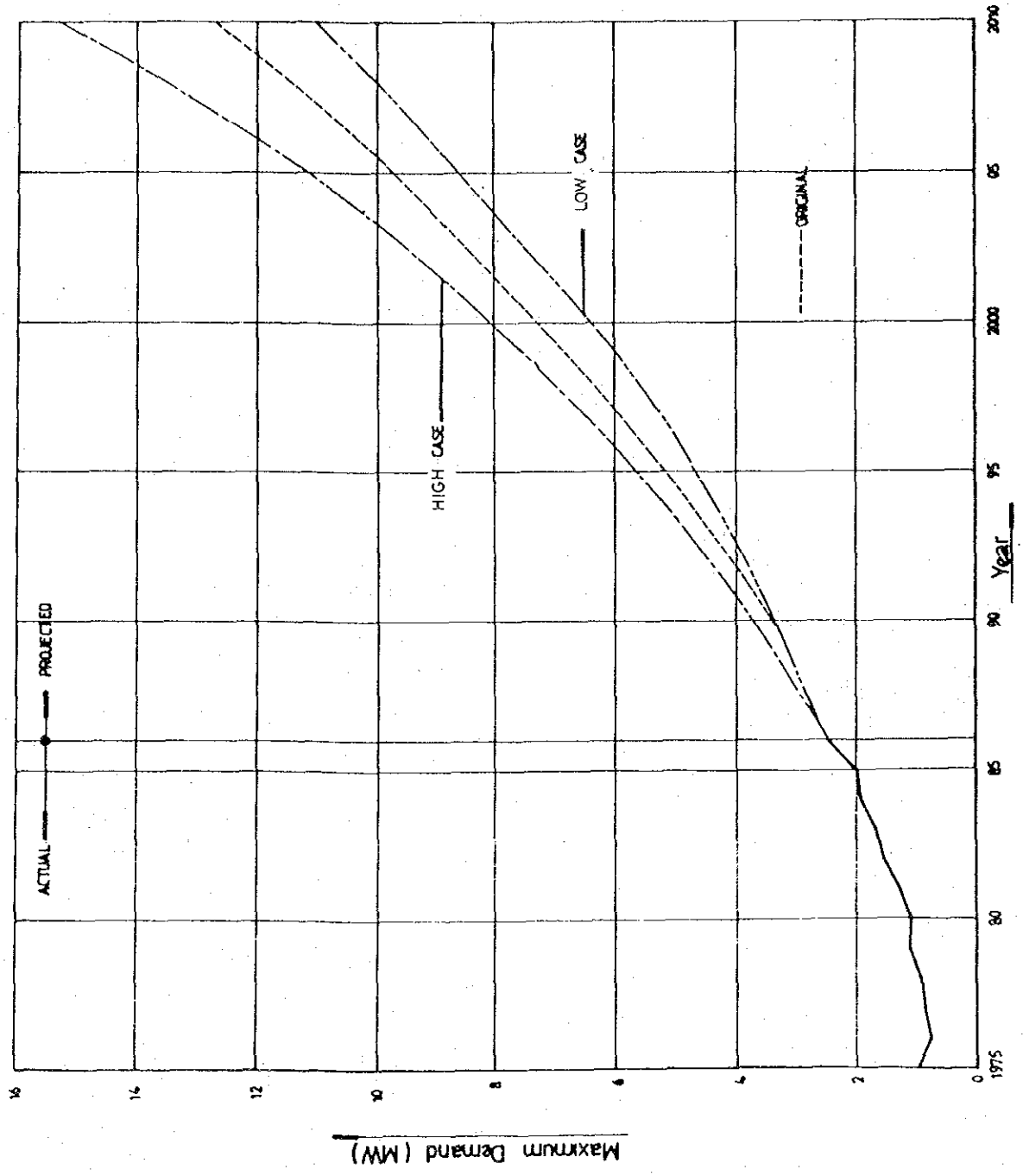

Fig.4.13. Forecasted Maximum Demand in Comparison with High and Low Cases.

GOVERNMENT OF MALAYSIA
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SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
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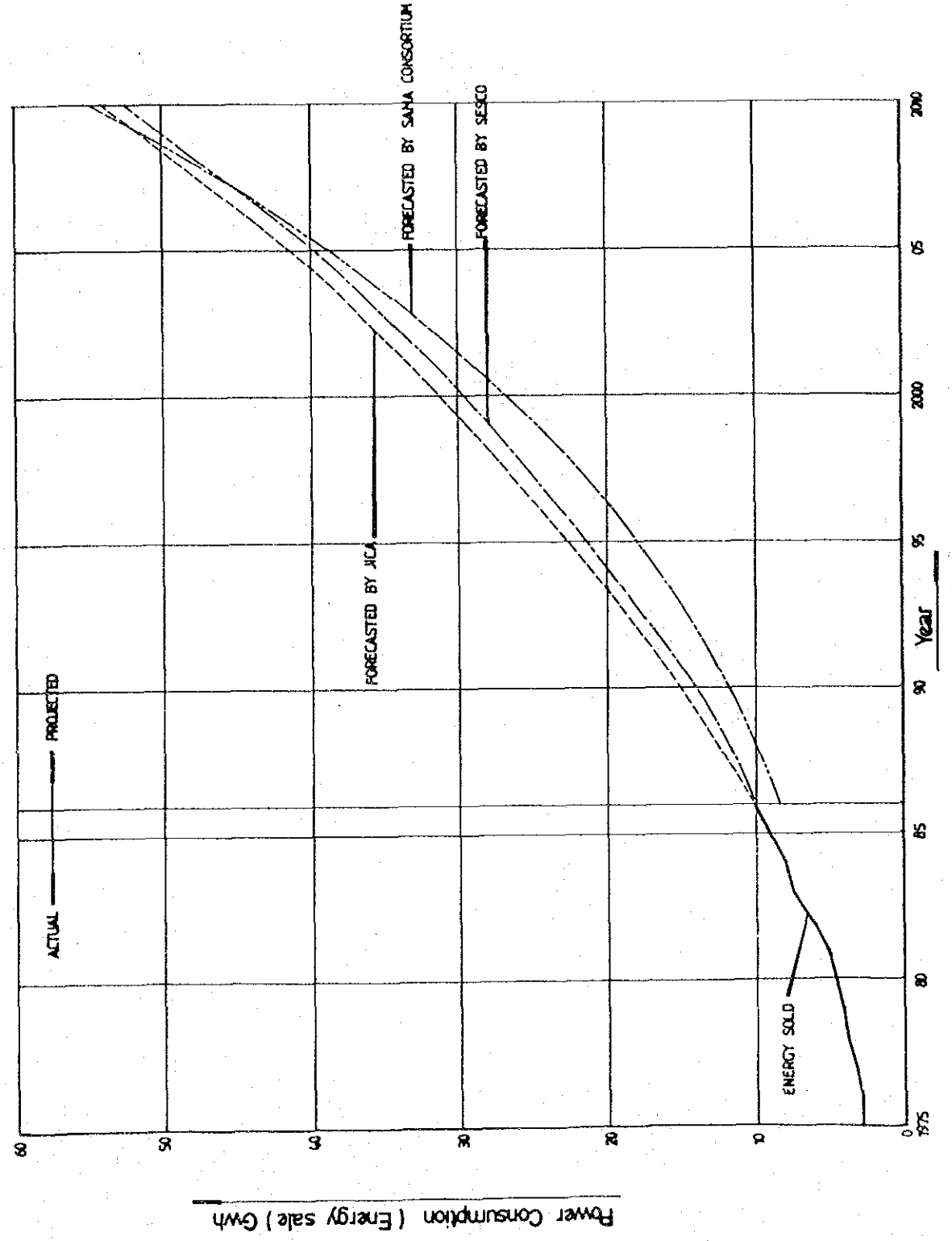

Fig.4.14. Comparison of Power Consumption between Previous Studies and Present One.

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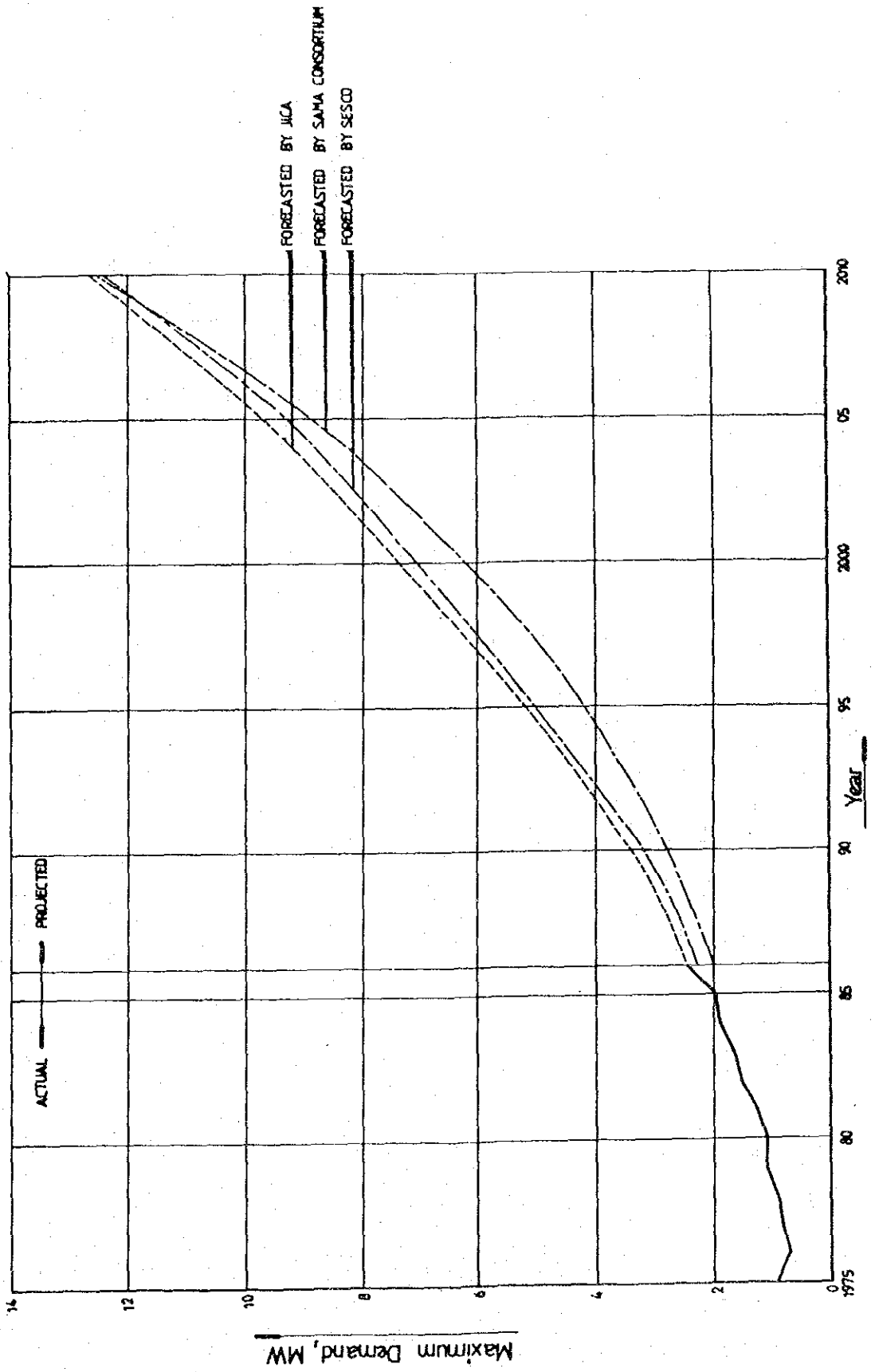
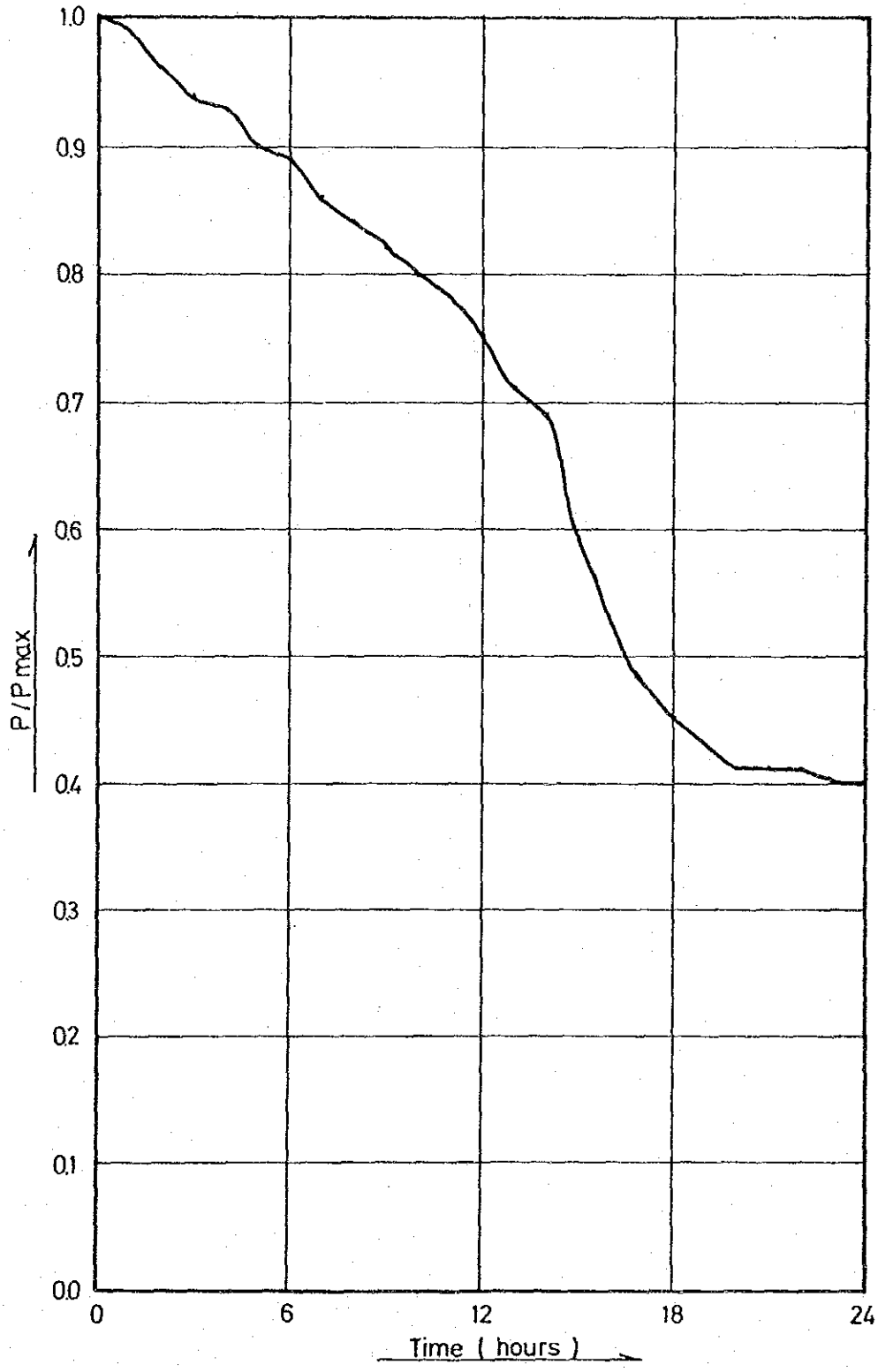


Fig.4.15. Comparison of Maximum Demand between Previous Studies and Present One,

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY



DAILY LOAD CURVE AT LIMBANG

Fig. 5.1 Daily Load Curve at Limbang

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

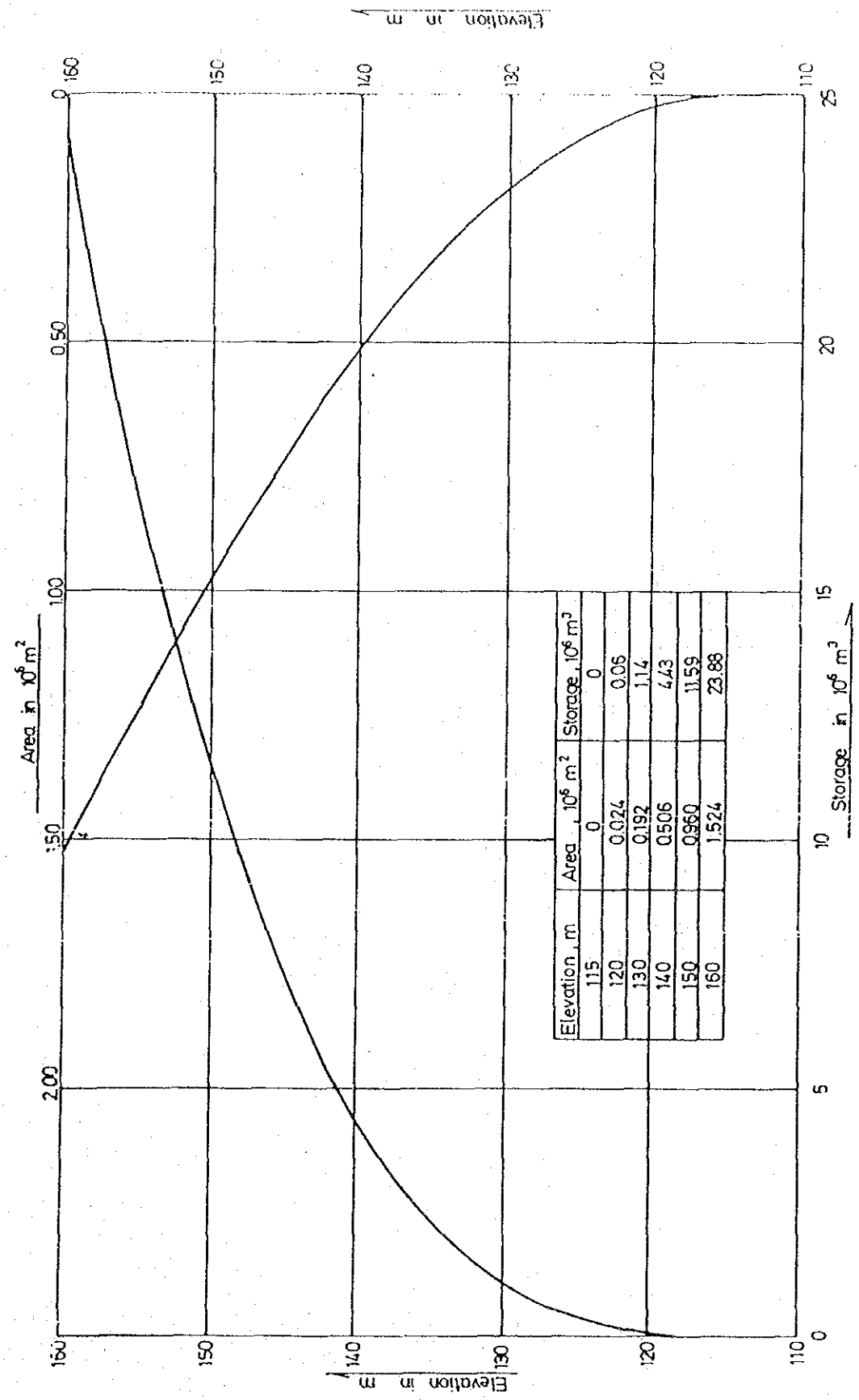
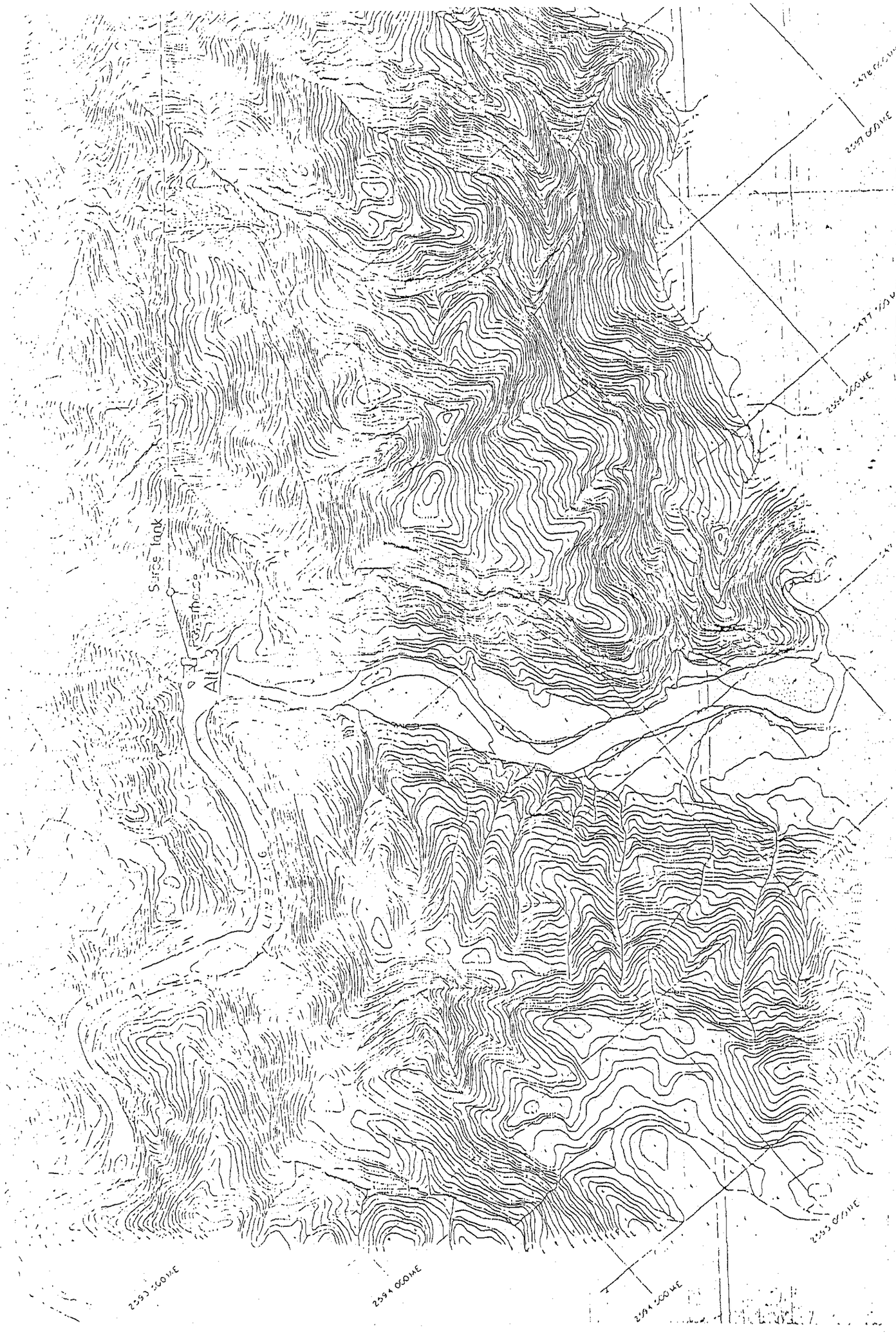


Fig. 5.2 Area - Storage Curve for Medamit-2

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY


Surge Tank
Alt 3
LIMBANG
2553 ODME
2554 ODME
2554 ODME
2553 ODME

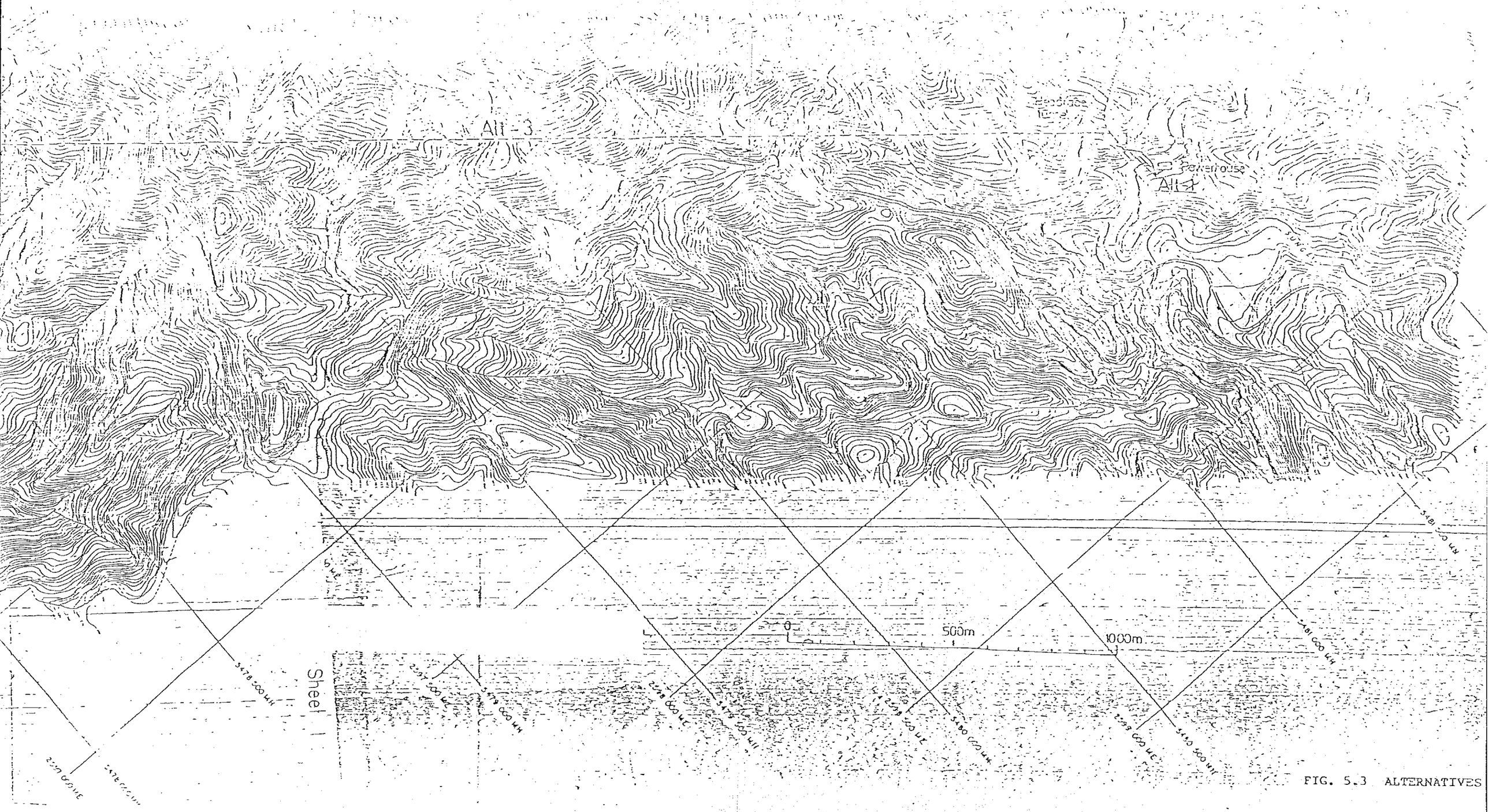


FIG. 5.3 ALTERNATIVES

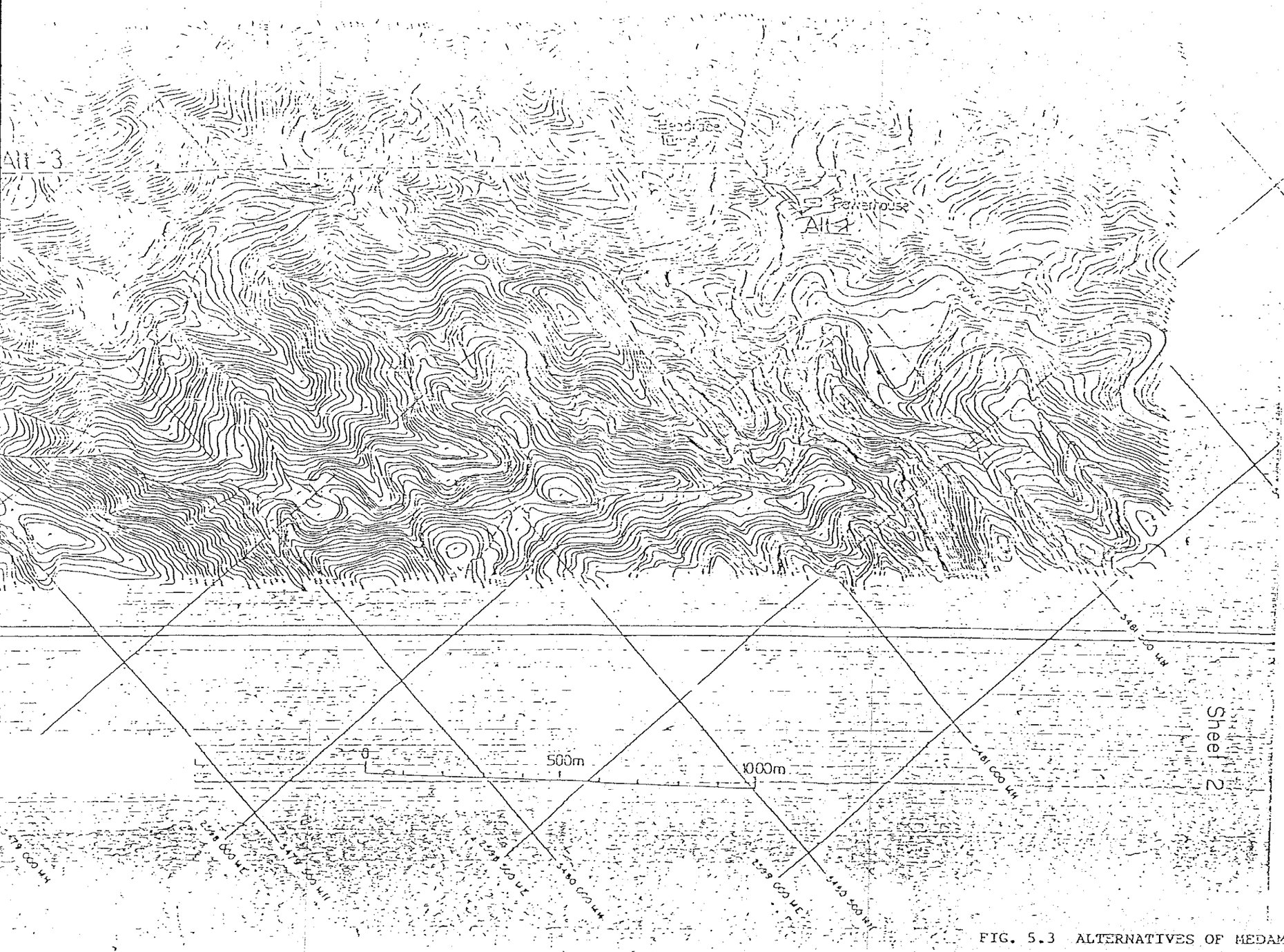


FIG. 5.3 ALTERNATIVES OF MEDAMIT-2

GOVERNMENT OF MALAYSIA
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JAPAN INTERNATIONAL COOPERATION AGENCY

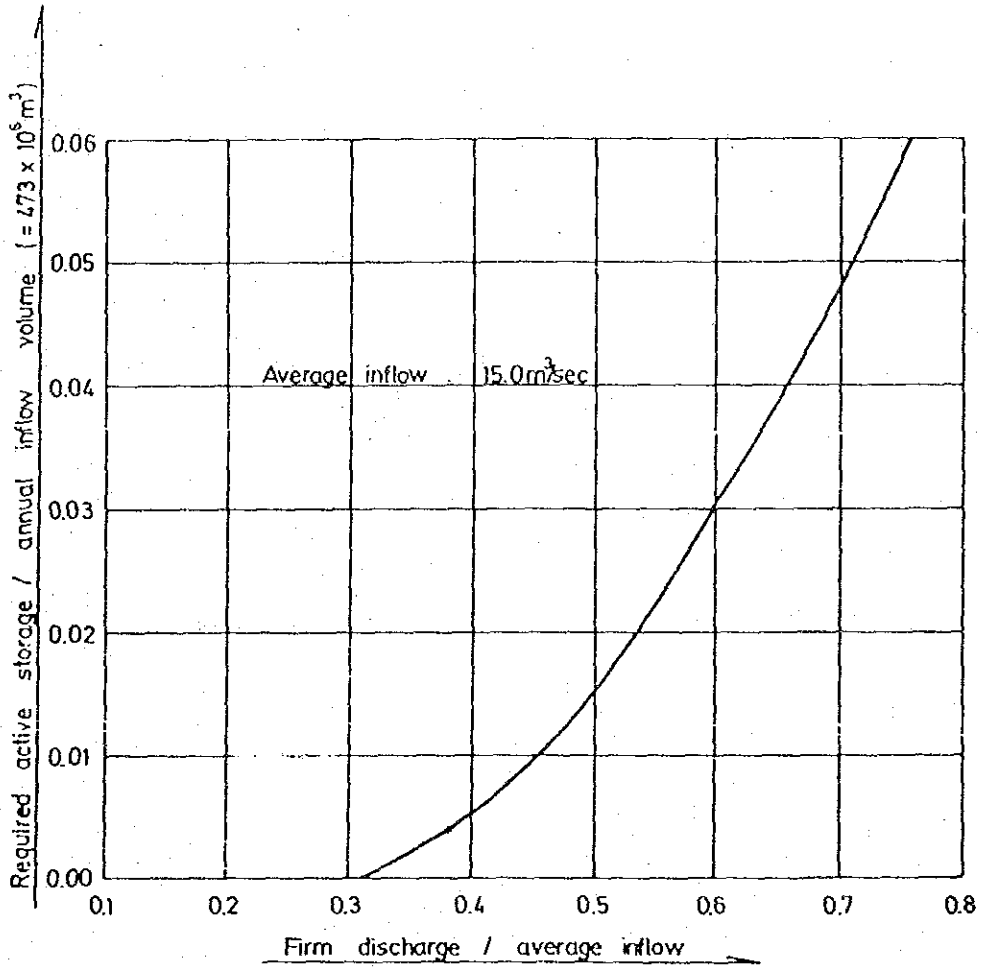
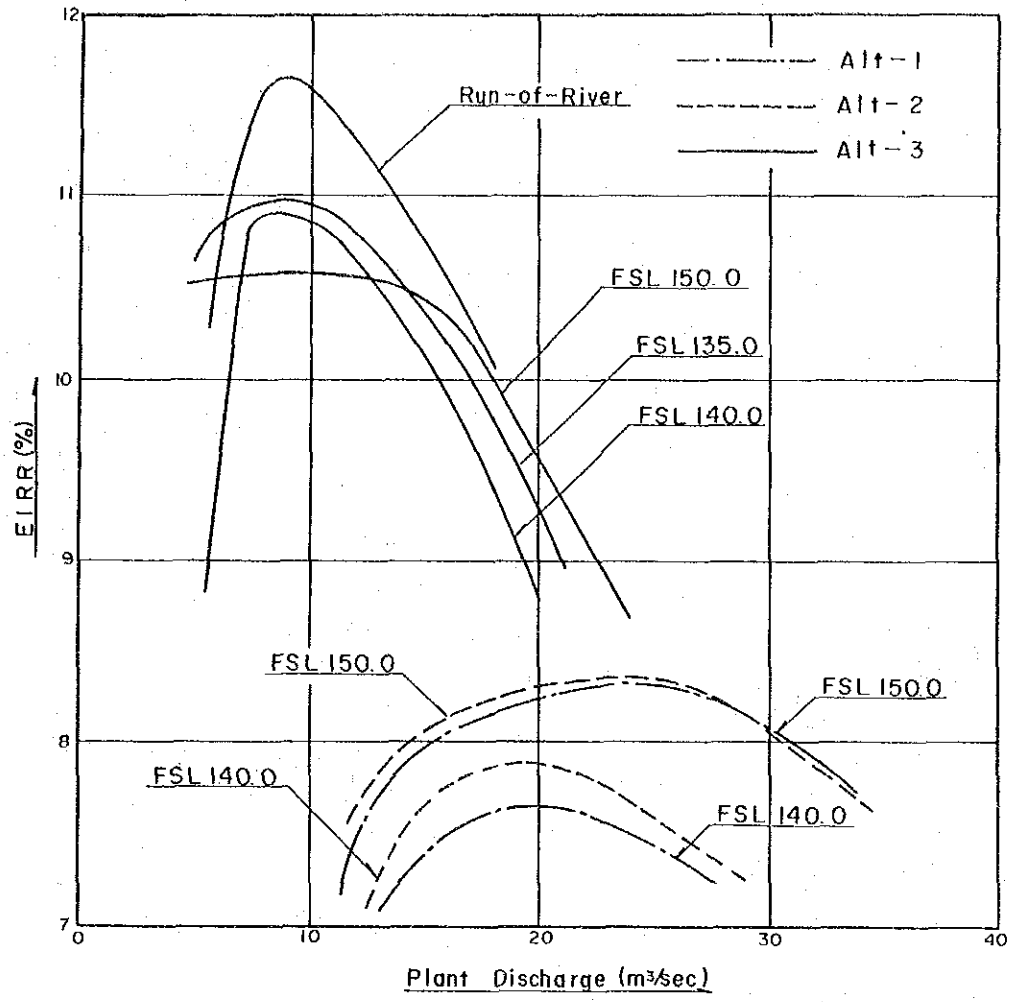


Fig. 5.4 Storage Draft Curve for Medamit-2

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY



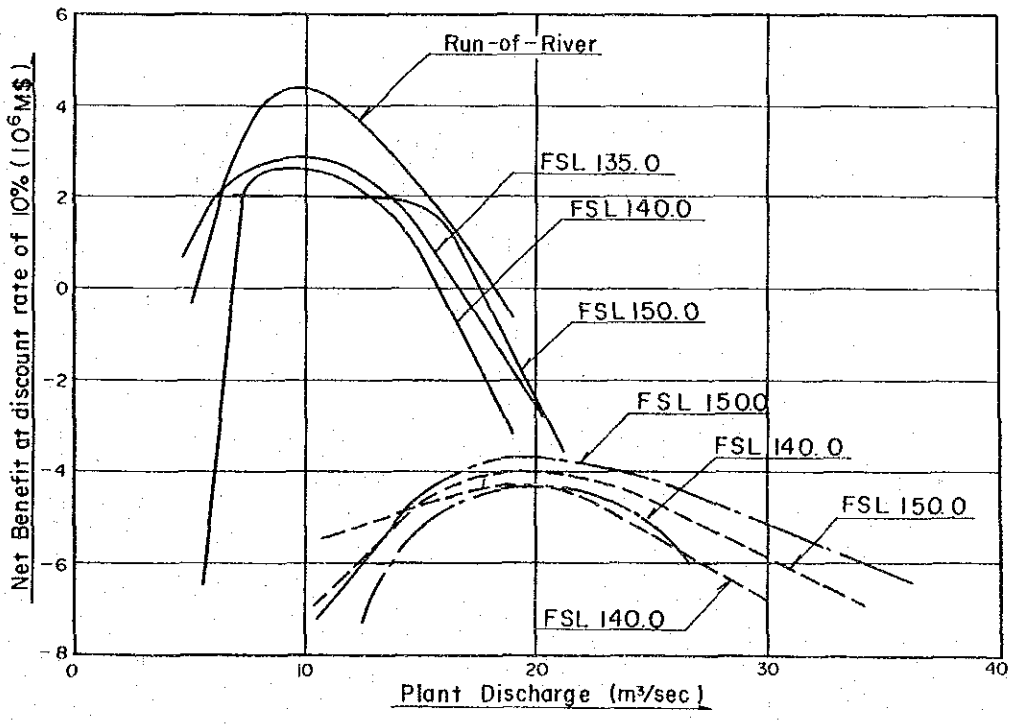


Fig.5.5 Net Benefit and EIRR of Medamit - 2

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

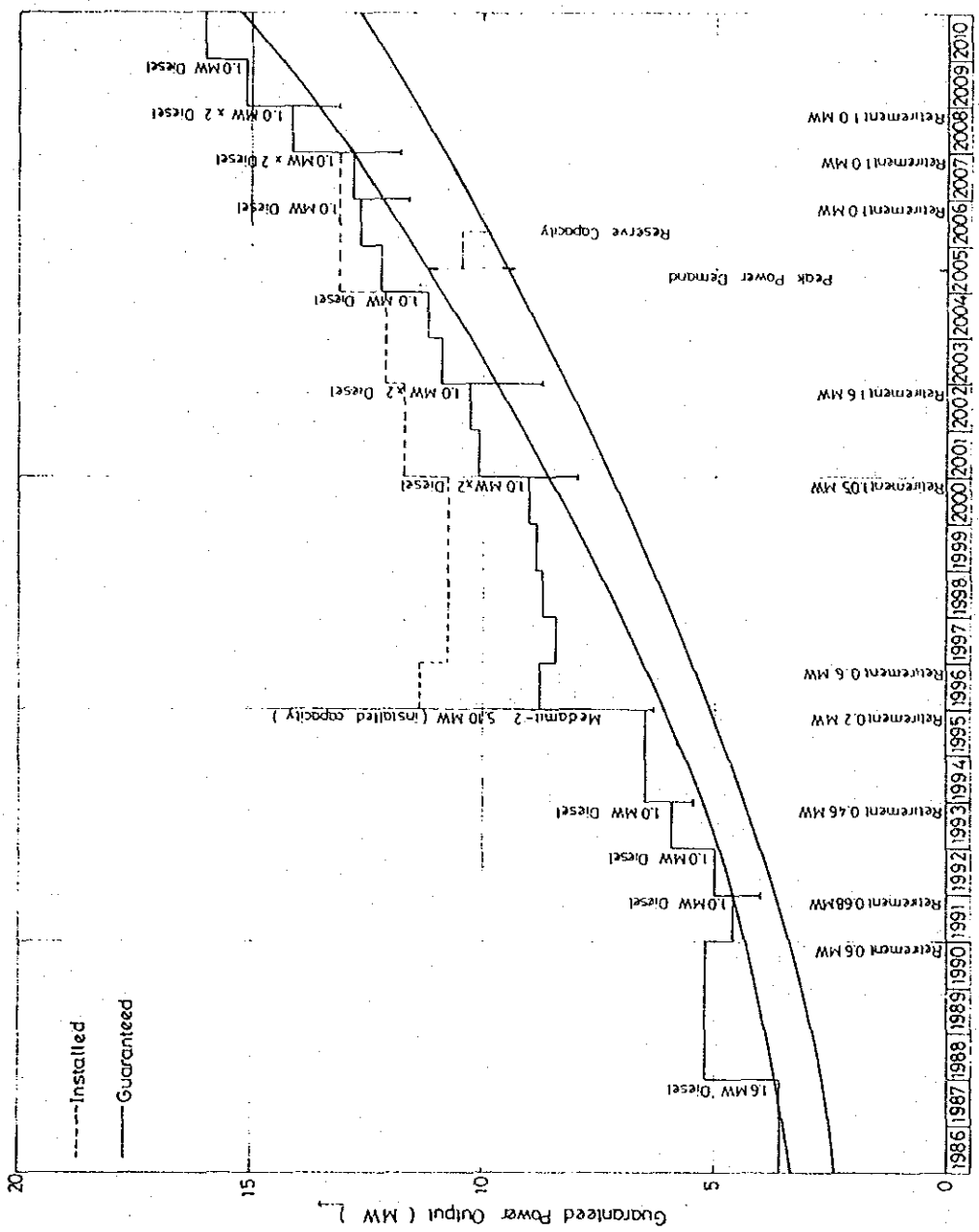


Fig. 5.6 Power Balance in the Limbang System

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

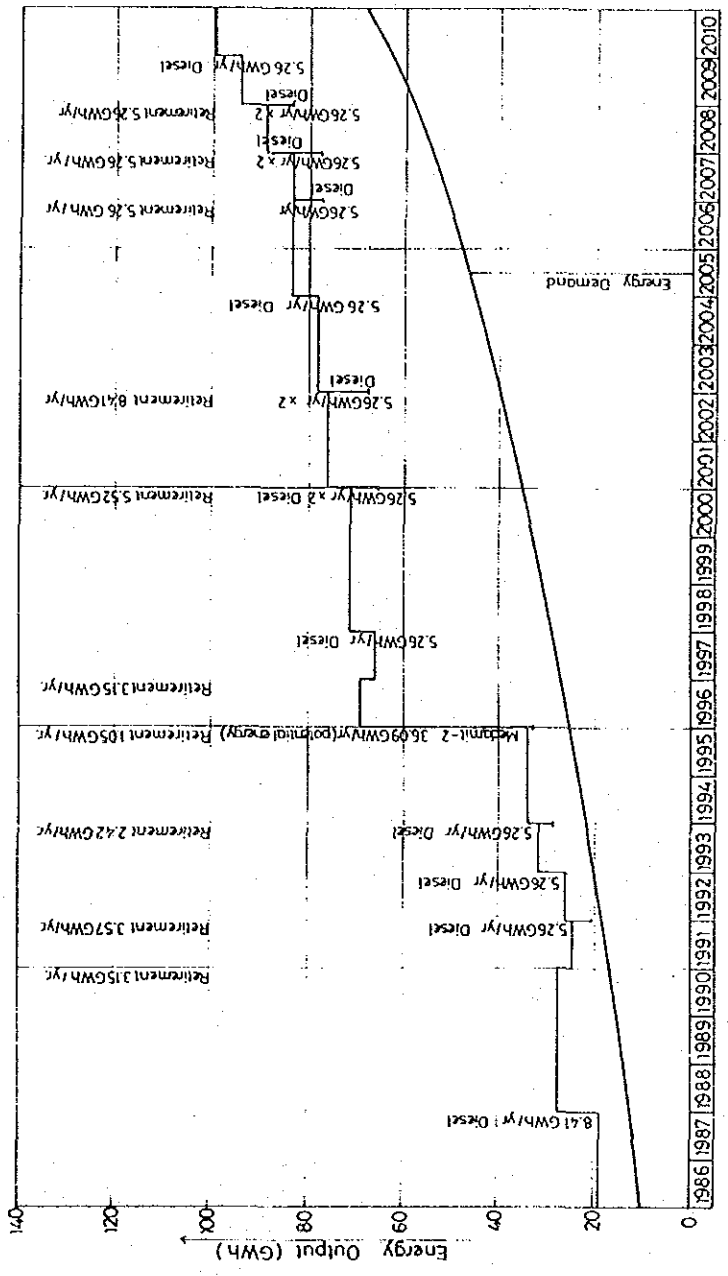


Fig. 5.7 Energy Balance in the Limbang System

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

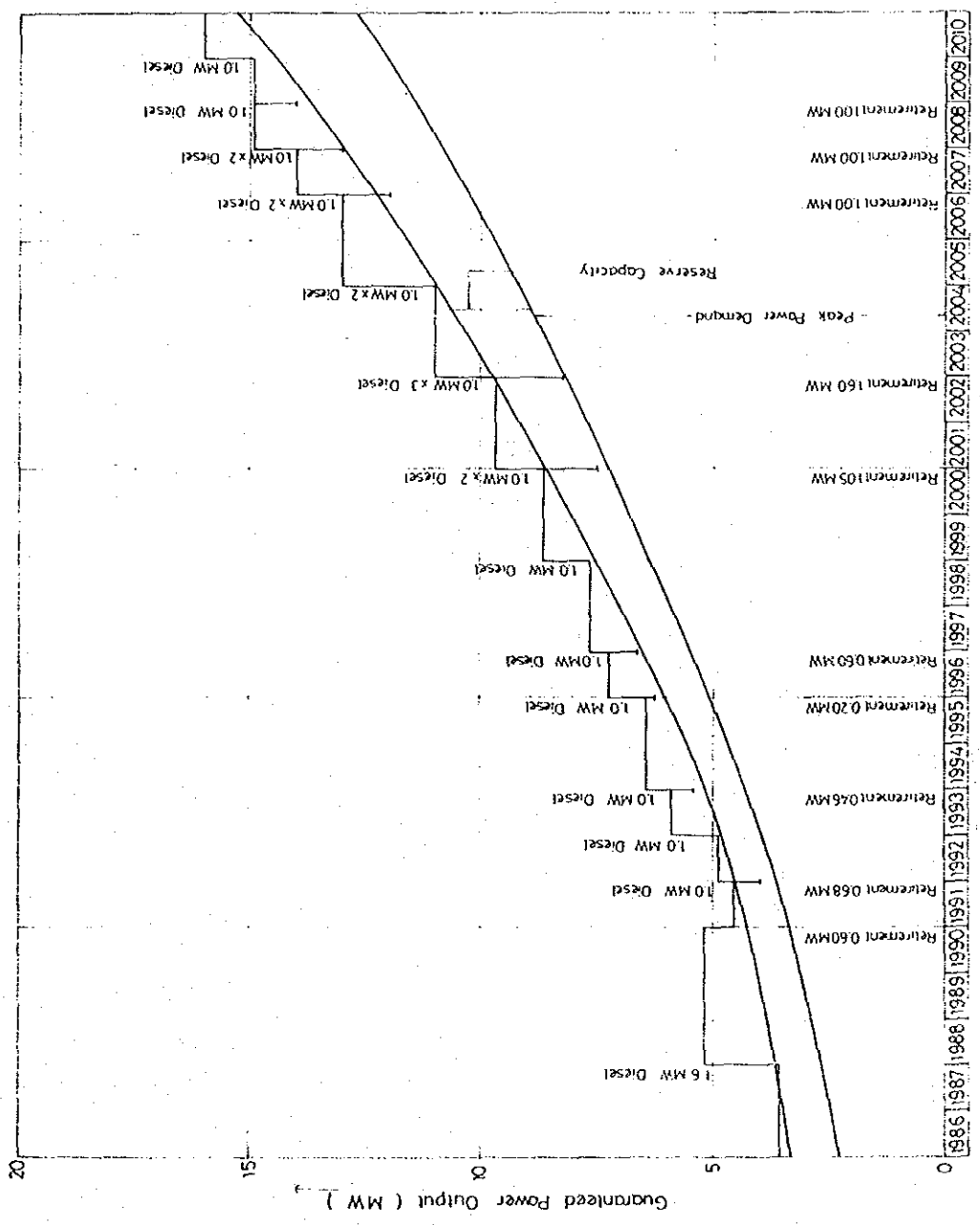


Fig. 5.8 Power Balance in the Limbang System (by All Diesel)

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

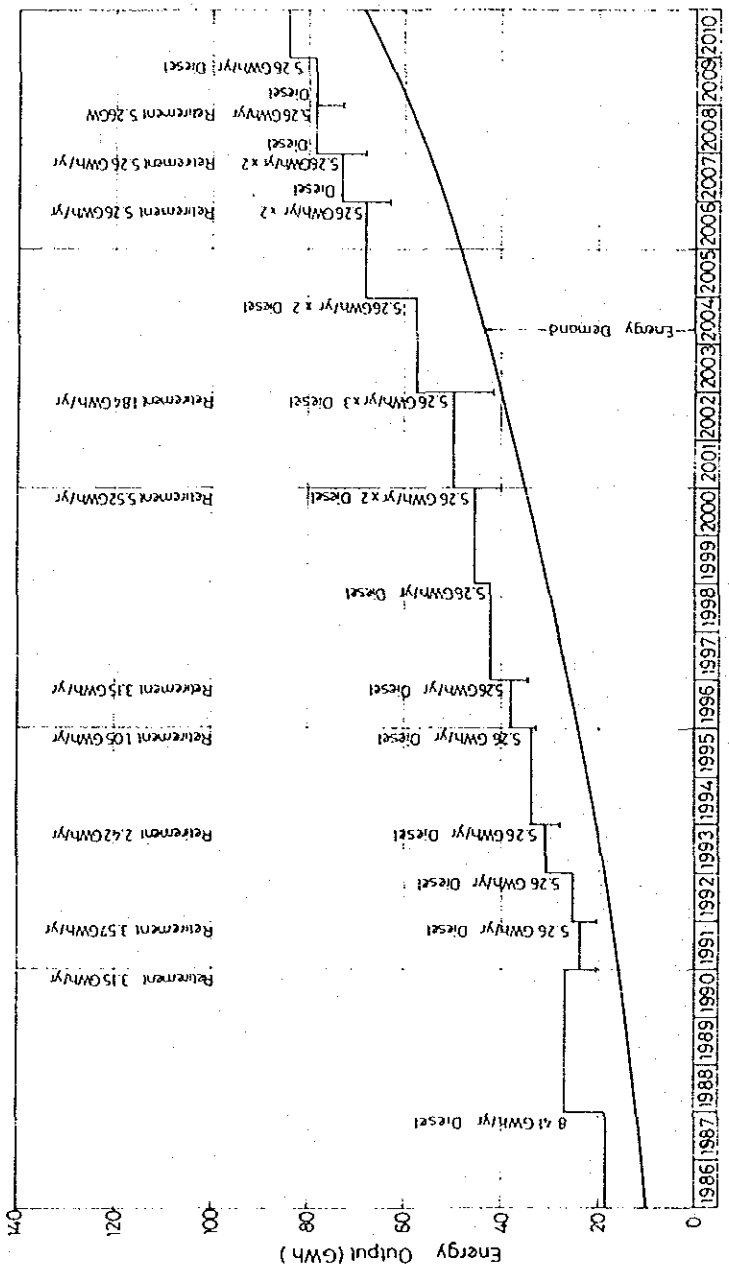
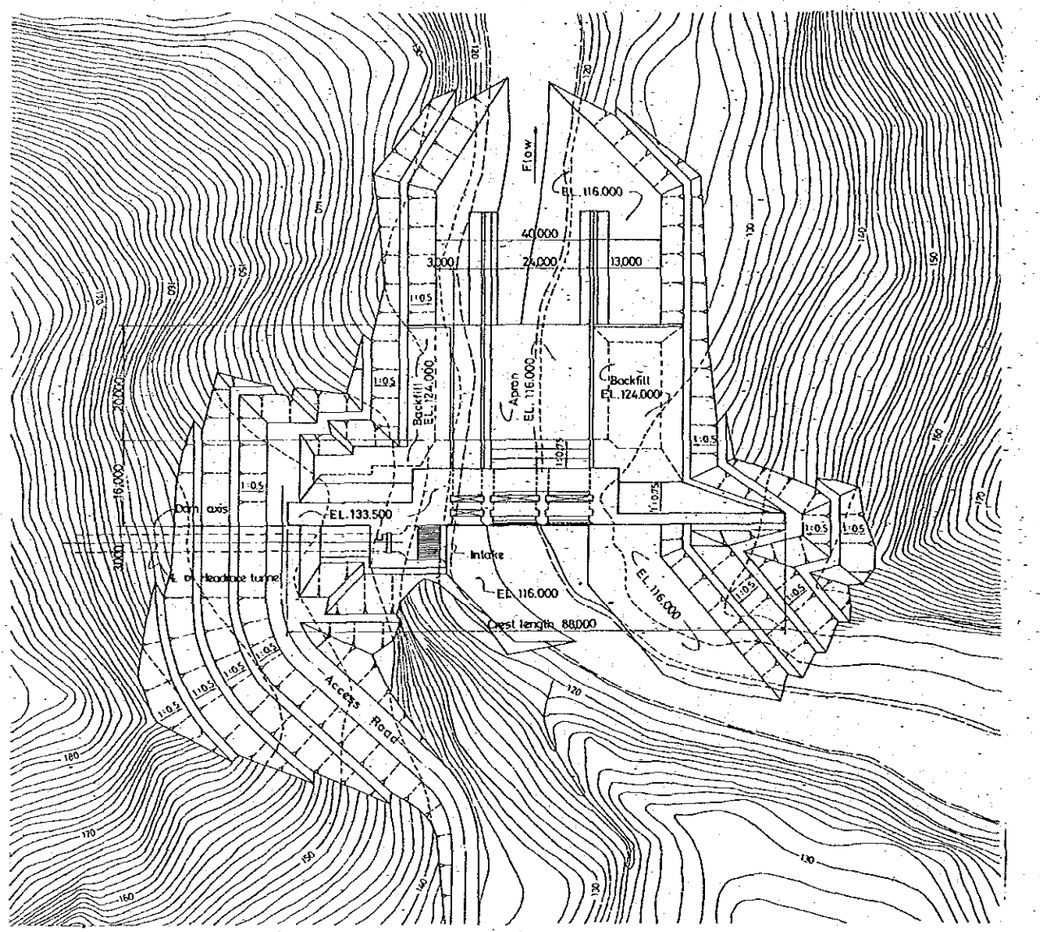
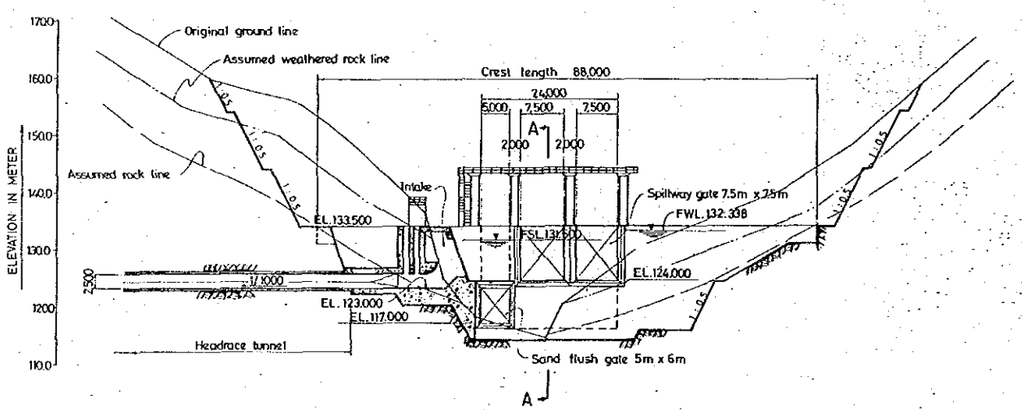


Fig. 5.9 Energy Balance in the Limbang System (by All Diesel)

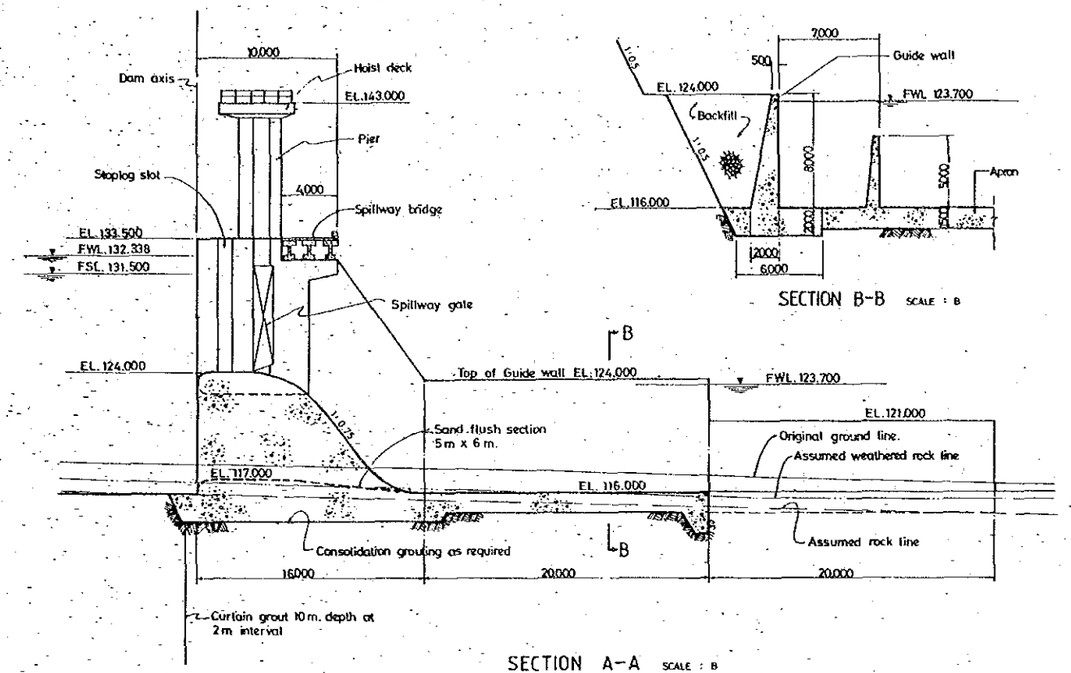
GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY



PLAN SCALE : A

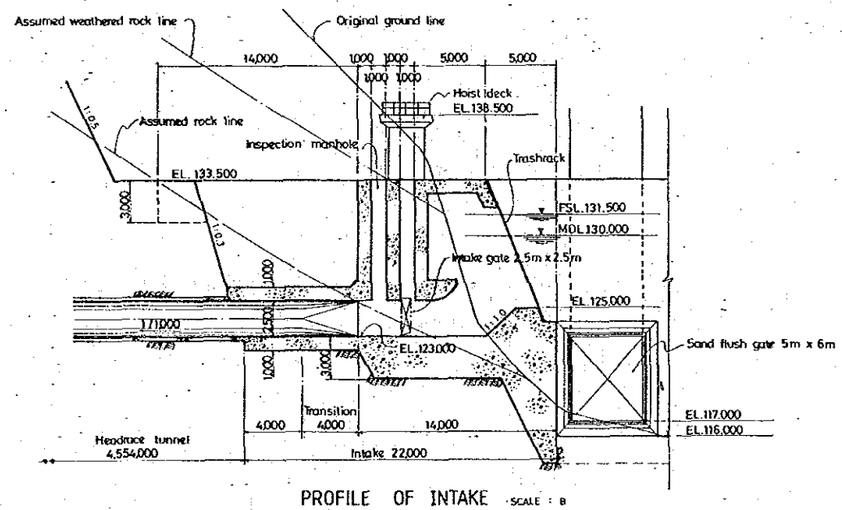


ELEVATION SCALE : A



SECTION A-A SCALE : B

SECTION B-B SCALE : B



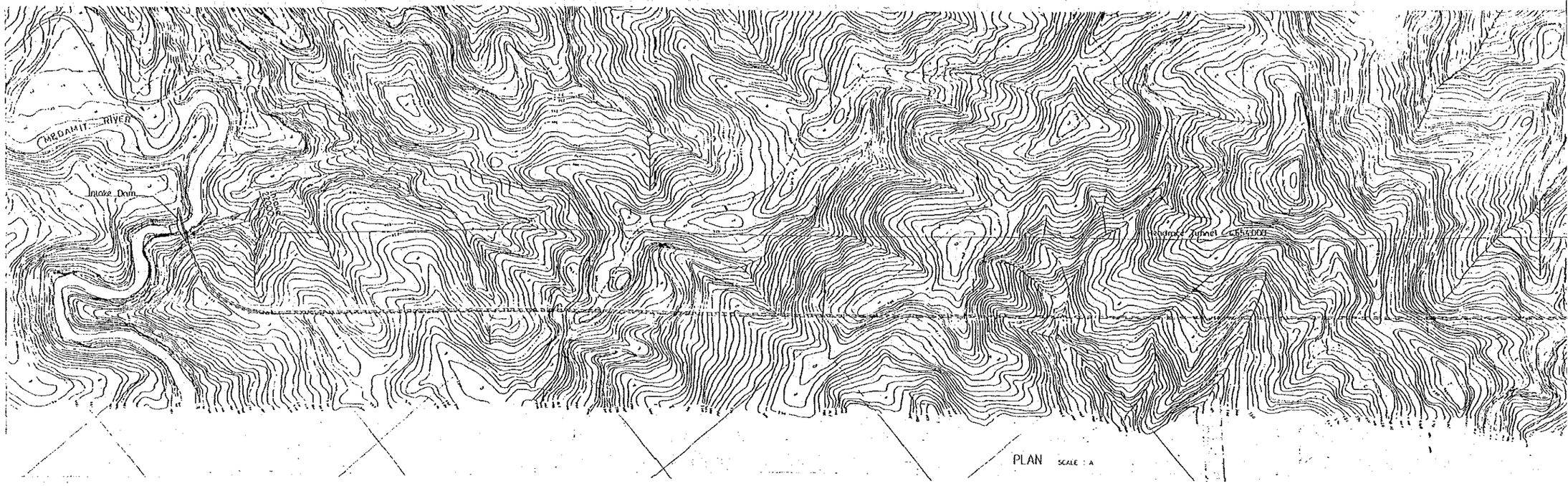
PROFILE OF INTAKE SCALE : B

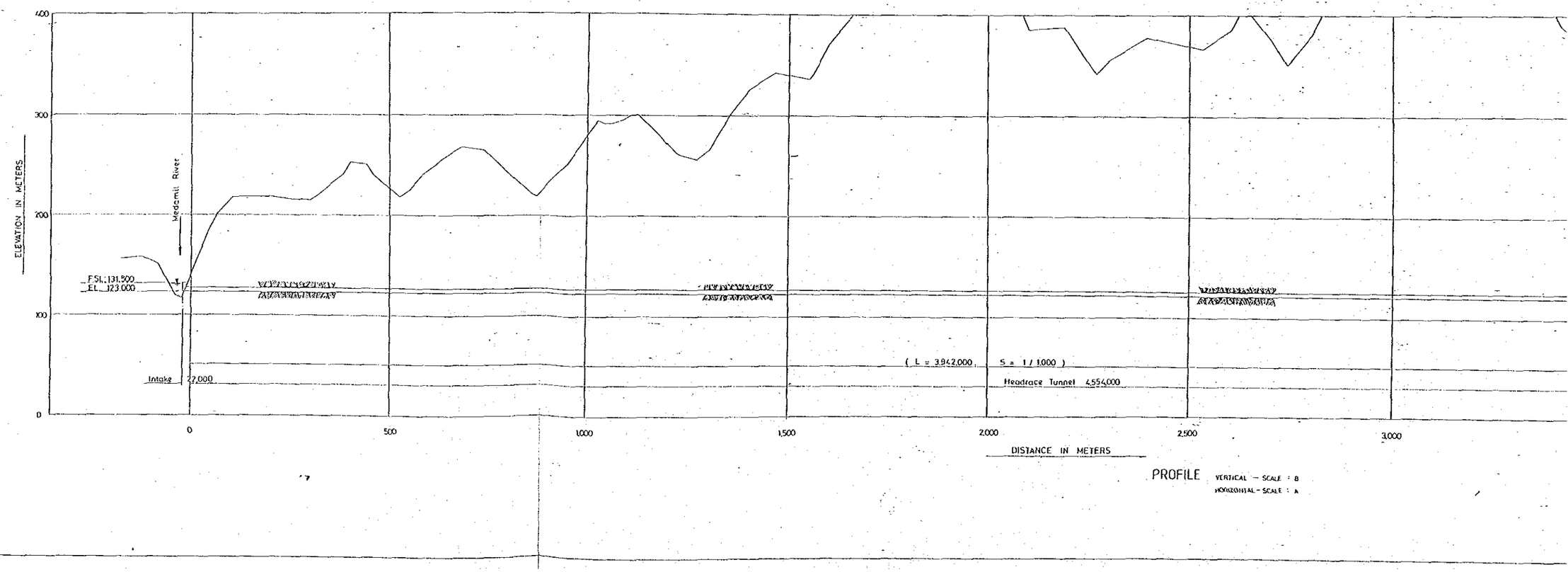
Fig. 6.1 Medamit-2 Project Intake Dam

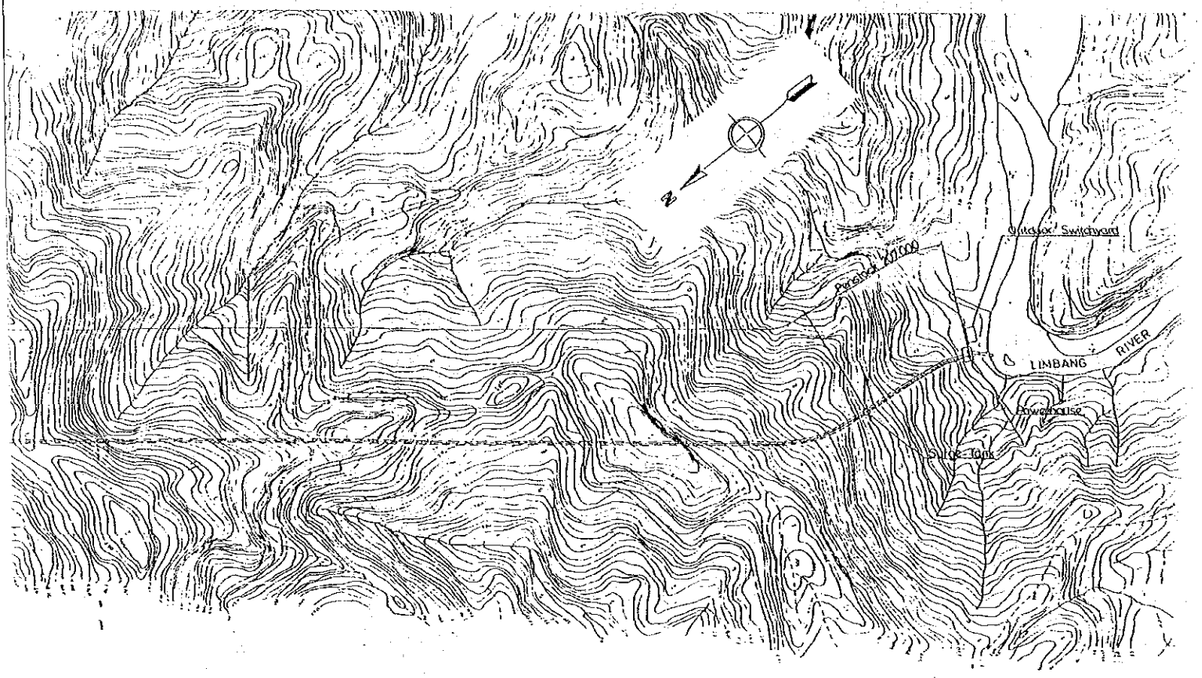
SCALE A 0 50m

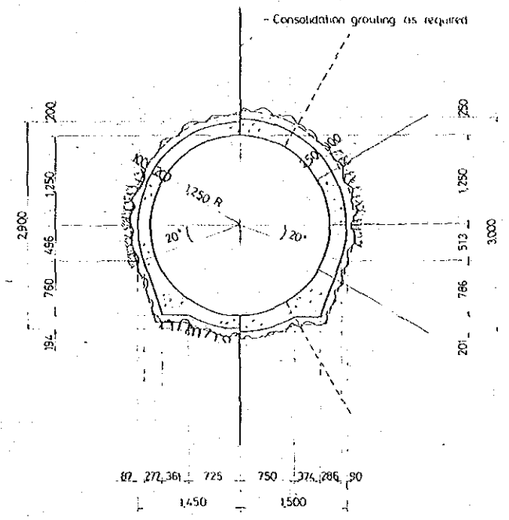
SCALE B 0 10 20m

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY


MEDAMIT RIVER
Intake Dam
Headrace Tunnel
PLAN SCALE : A


ELEVATION IN METERS
400
300
200
100
0
Medamit River
F.S.L. 131.500
E.L. 123.000
Intake 27.000
(L = 3942.000 , S = 1 / 1000)
Headrace Tunnel 4554.000
0
500
1,000
1,500
2,000
2,500
3,000
DISTANCE IN METERS
PROFILE VERTICAL — SCALE : B
HORIZONTAL - SCALE : A





TYPE I TYPE II

TYPICAL SECTION OF HEADRACE TUNNEL

SCALE C

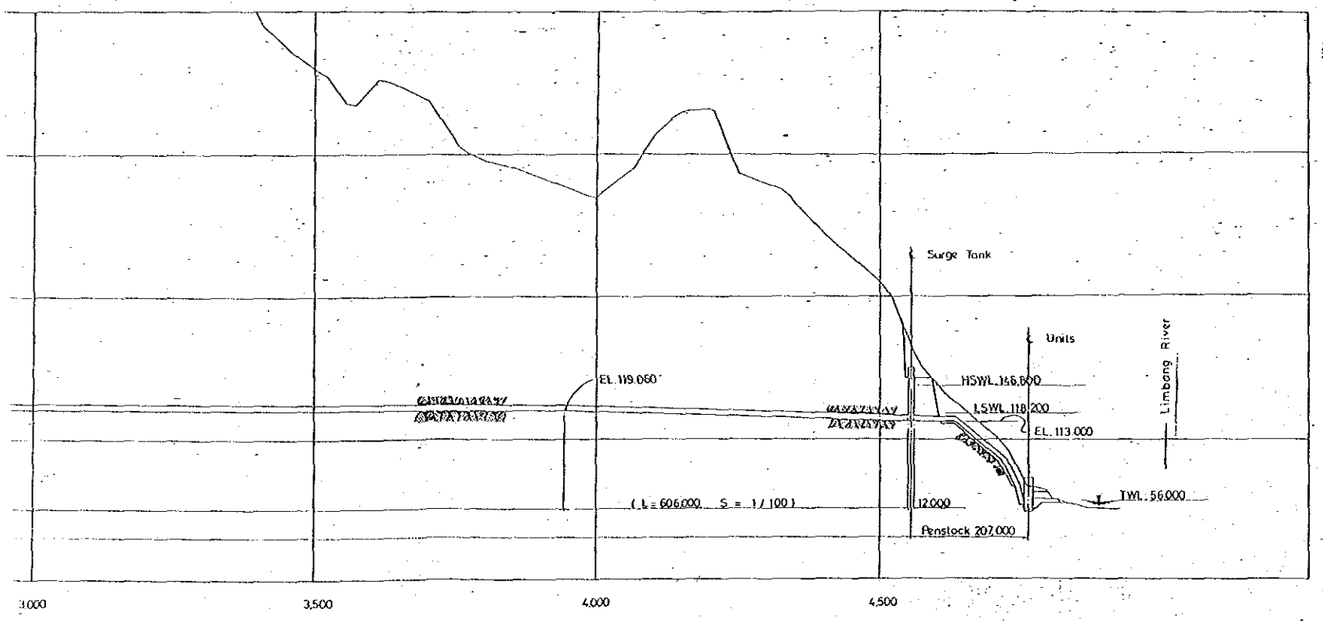


Fig. 6.2 Medamit-2 Project Waterway

SCALE : A 0 500 m

SCALE : B 0 100 200 m

SCALE : C 0 1 2 3 4 m

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

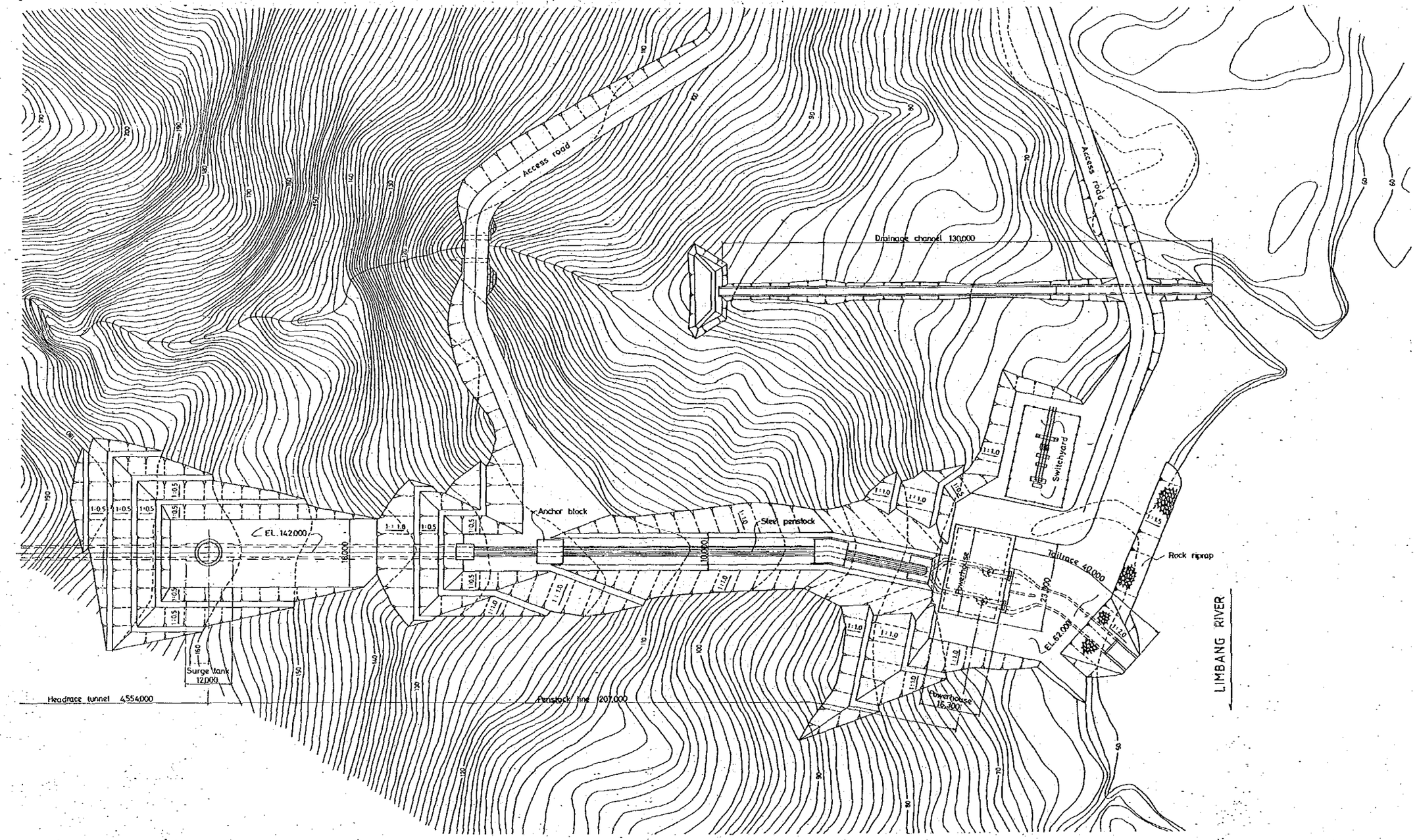
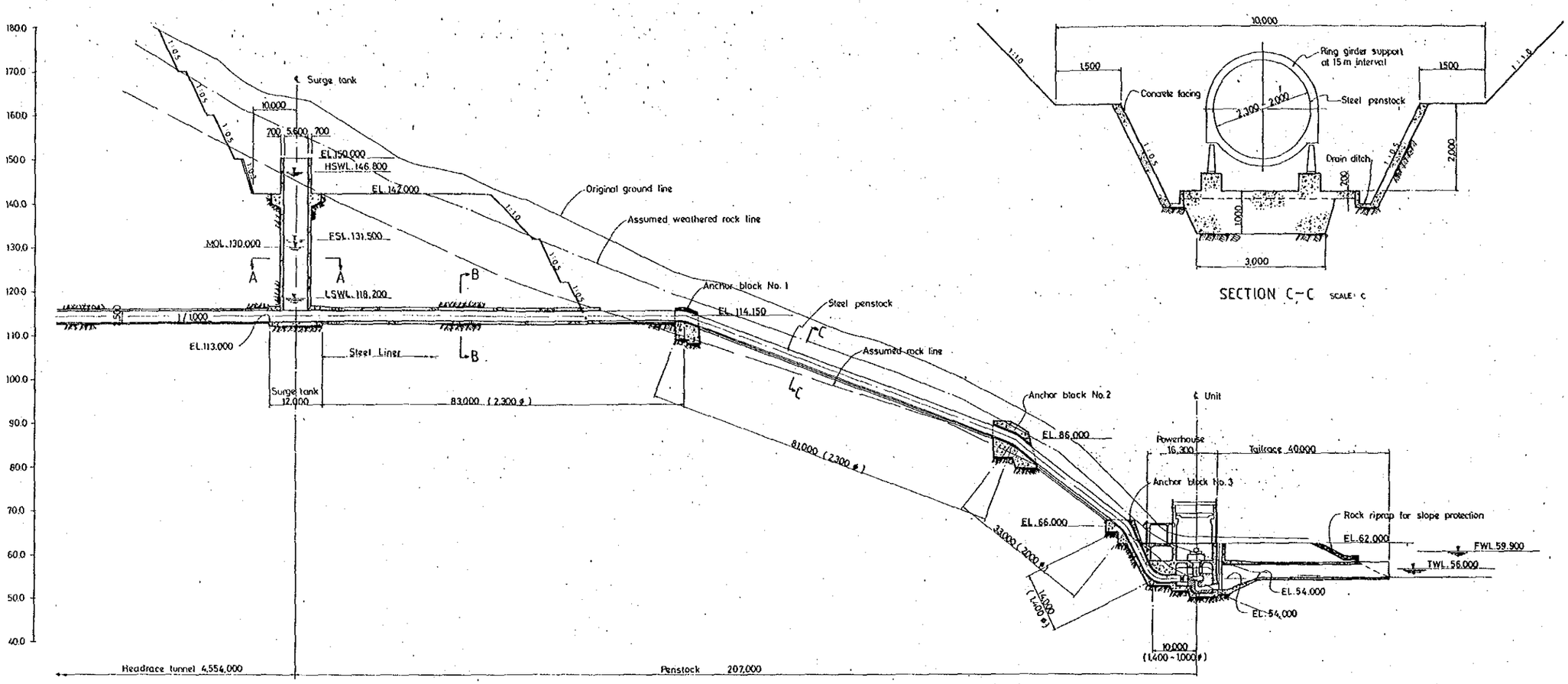


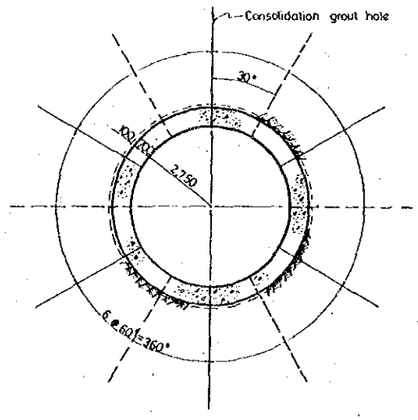
Fig. 6.3 Medamit-2 Project Plan of Penstock

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

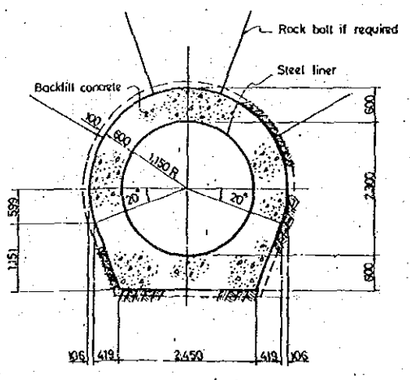


PROFILE SCALE: A

SECTION C-C SCALE: C



SECTION A-A SCALE: B



SECTION B-B SCALE: C

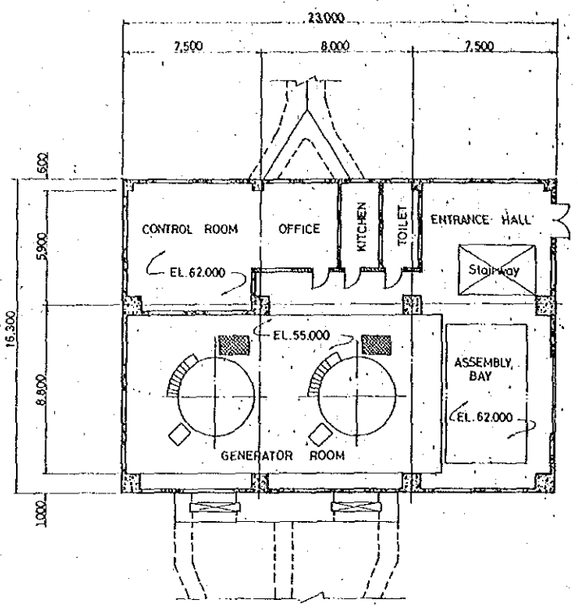
Fig. 6.4 Medamit-2 Project Profile and Cross Sections of Penstock

SCALE A 0 50m

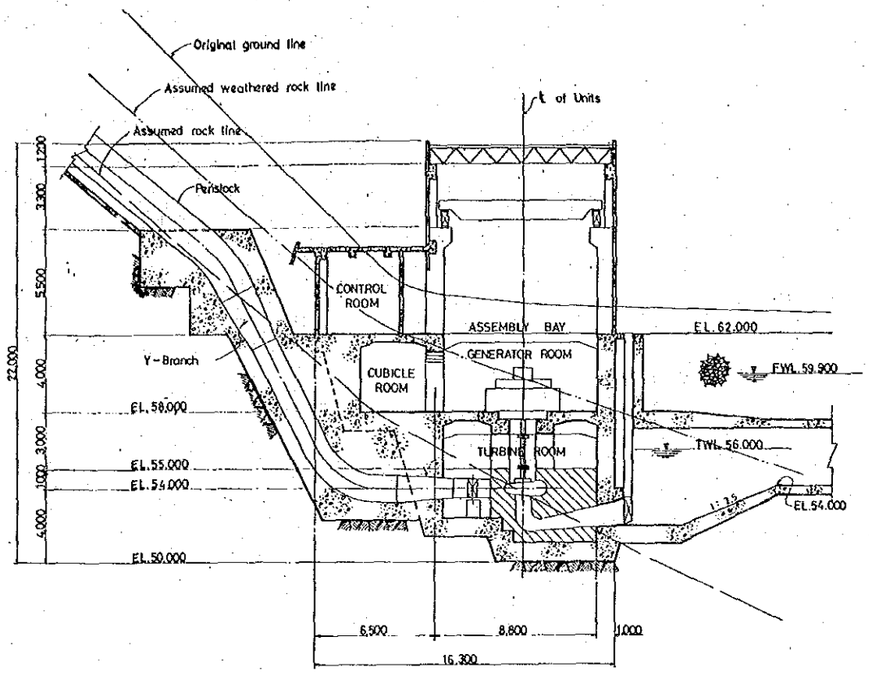
SCALE B 0 5 10m

SCALE C 0 5m

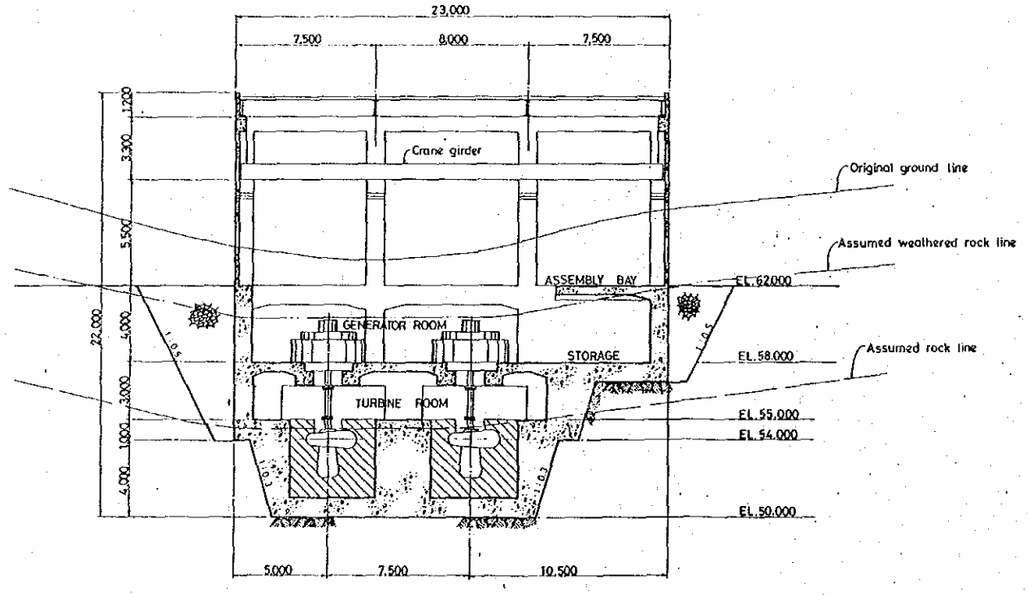
GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY



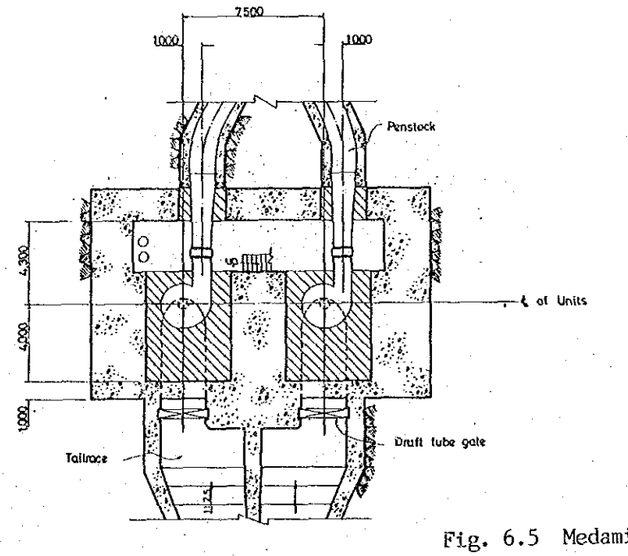
PLAN (EL. 62.000)



TRANSVERSE SECTION



LONGITUDINAL SECTION



PLAN (EL. 54.000)

Fig. 6.5 Medamit-2 Project

Powerhouse

SCALE 0 5 10 15 m

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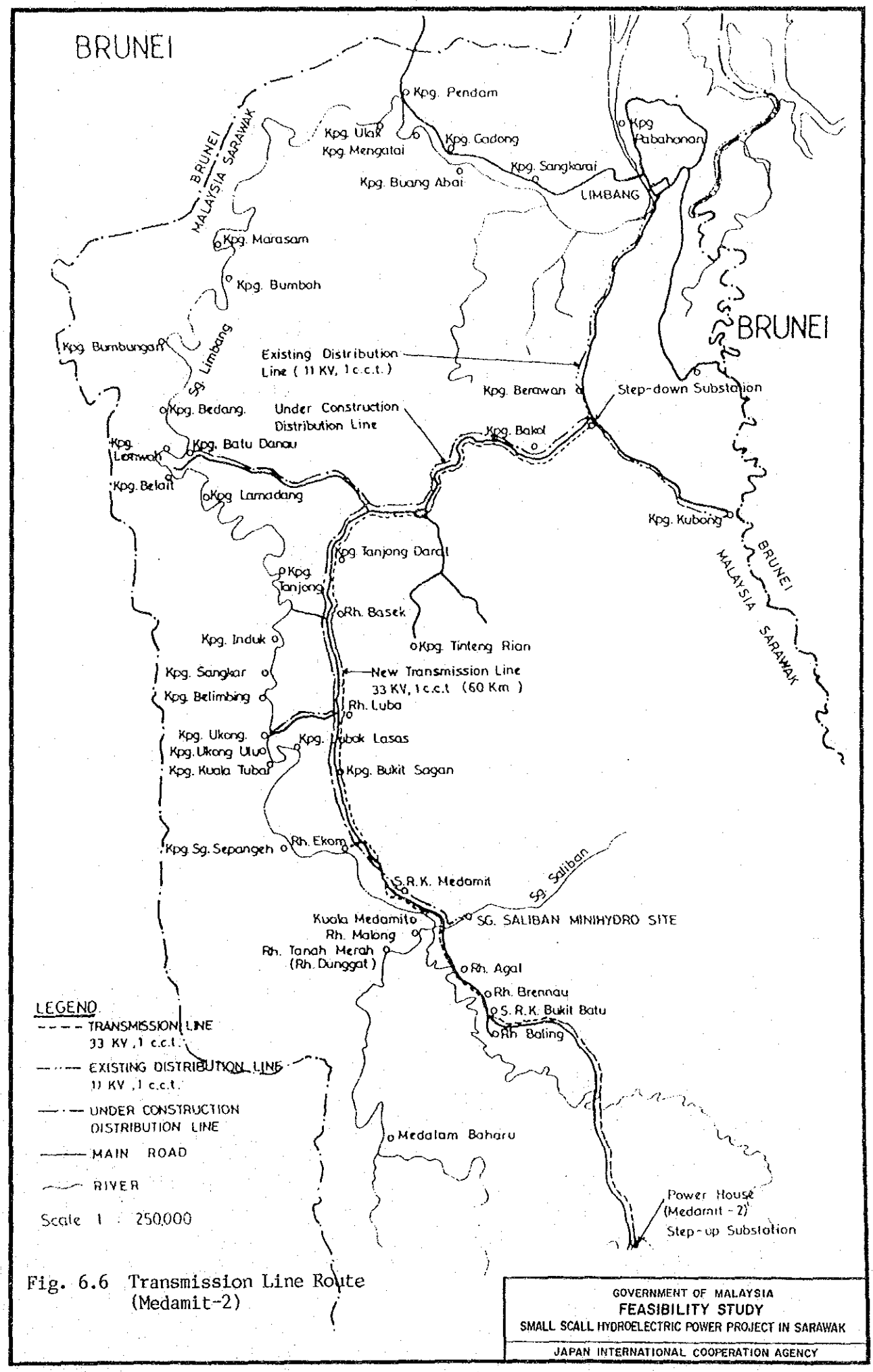

Fig. 6.6 Transmission Line Route (Medamit-2)

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

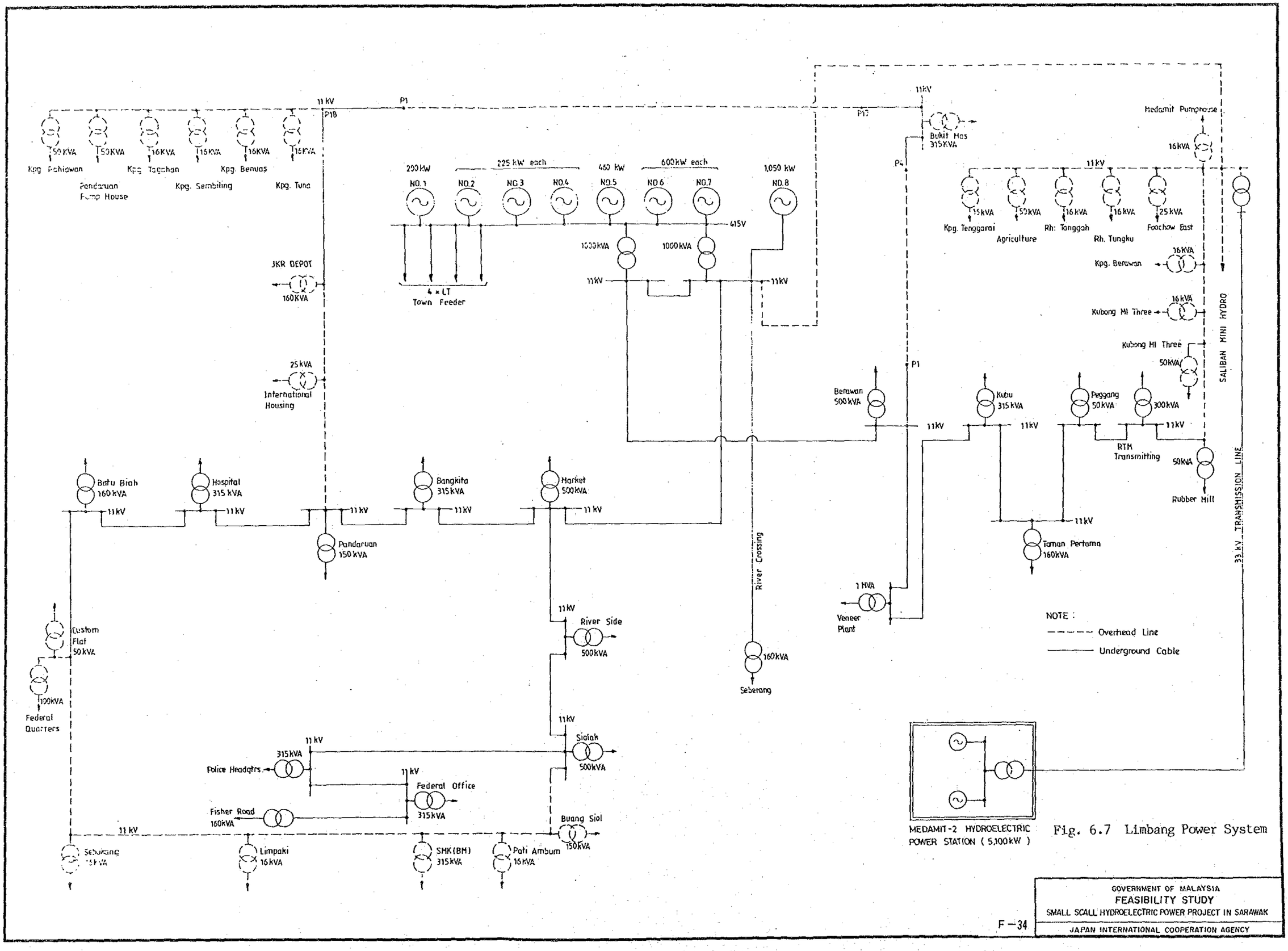

Fig. 6.7 Limbang Power System

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
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JAPAN INTERNATIONAL COOPERATION AGENCY

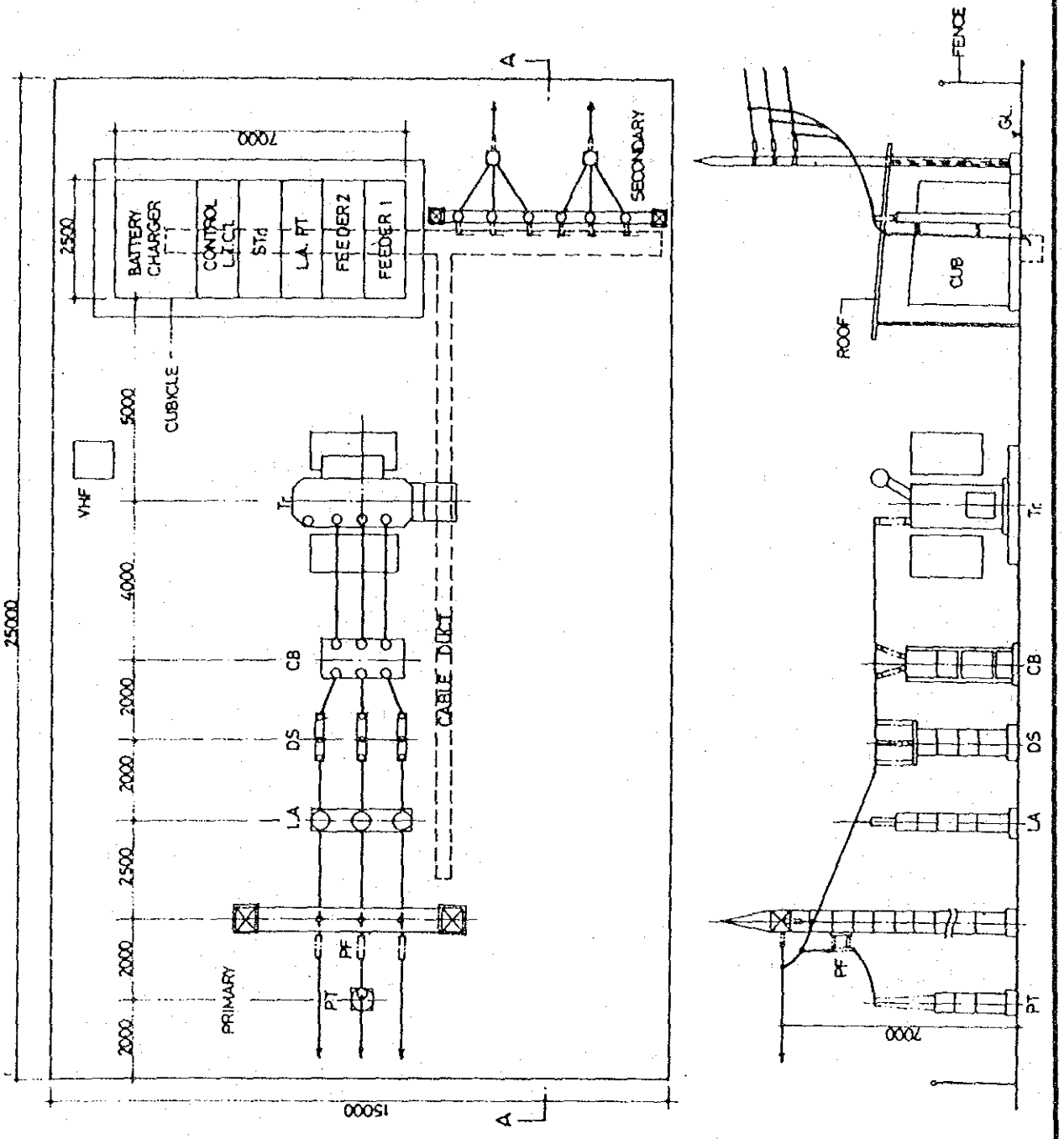

Fig. 6.8 Arrangement of Step-down Substation

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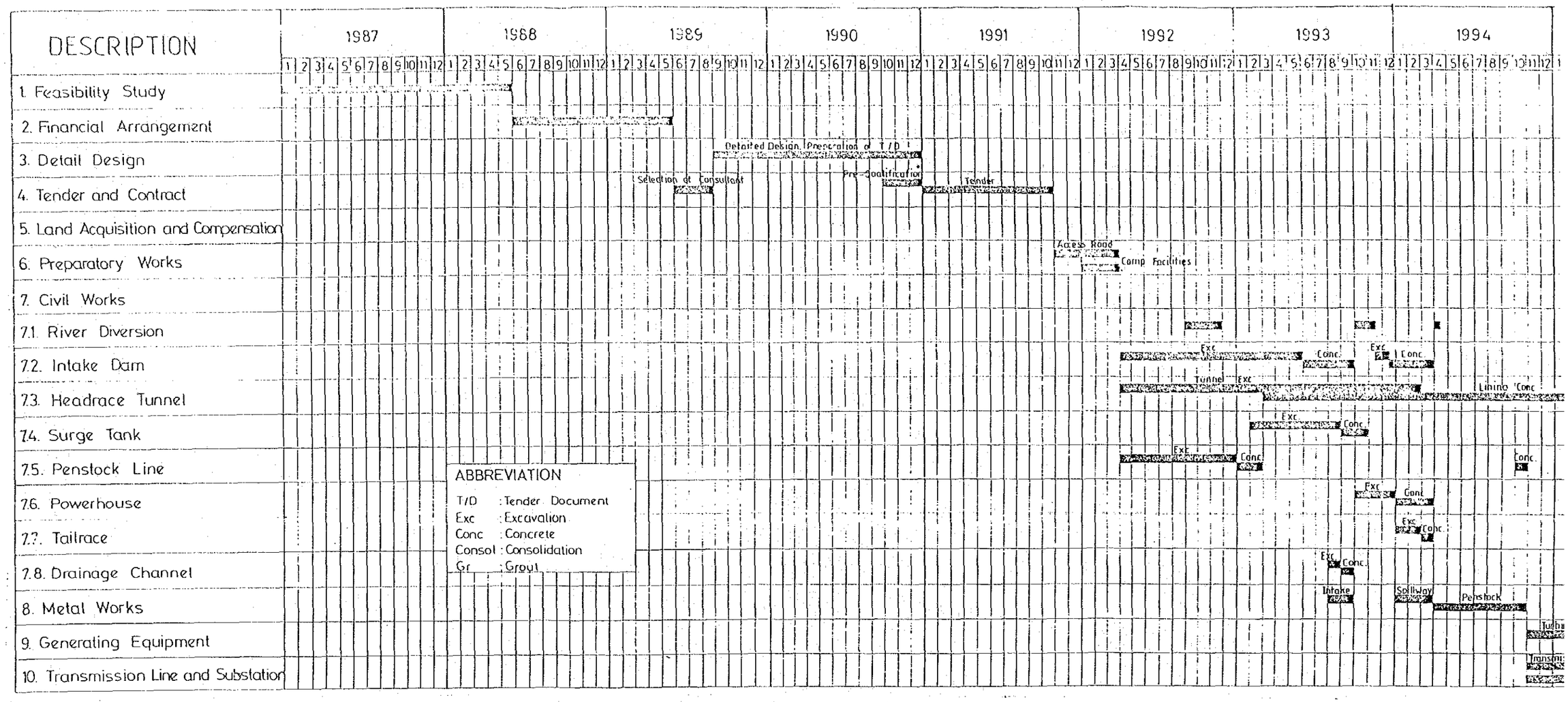


Fig.7.1. Construction Schedule.

SMALL SCALE HYD
JAPAN INTI

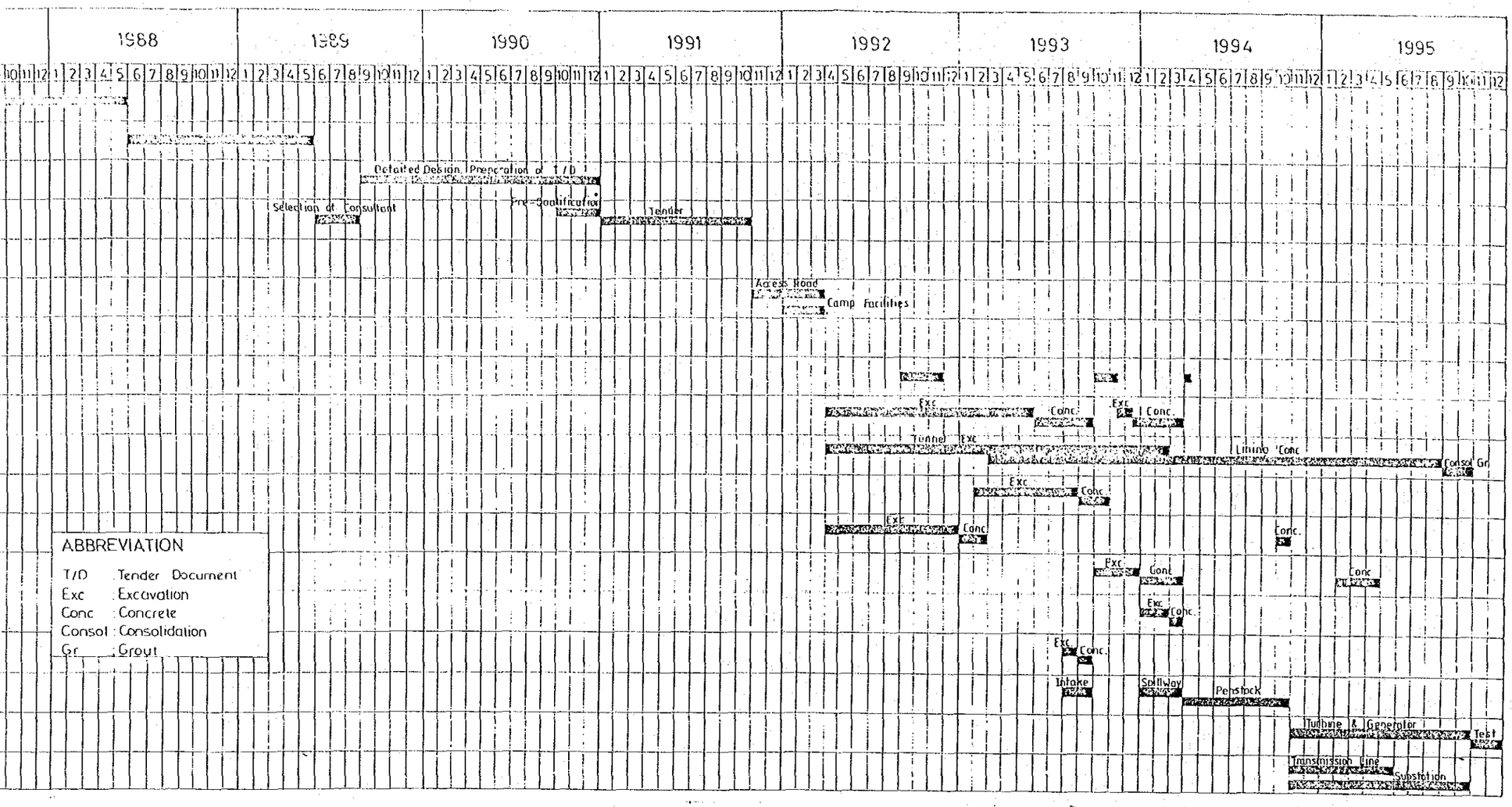
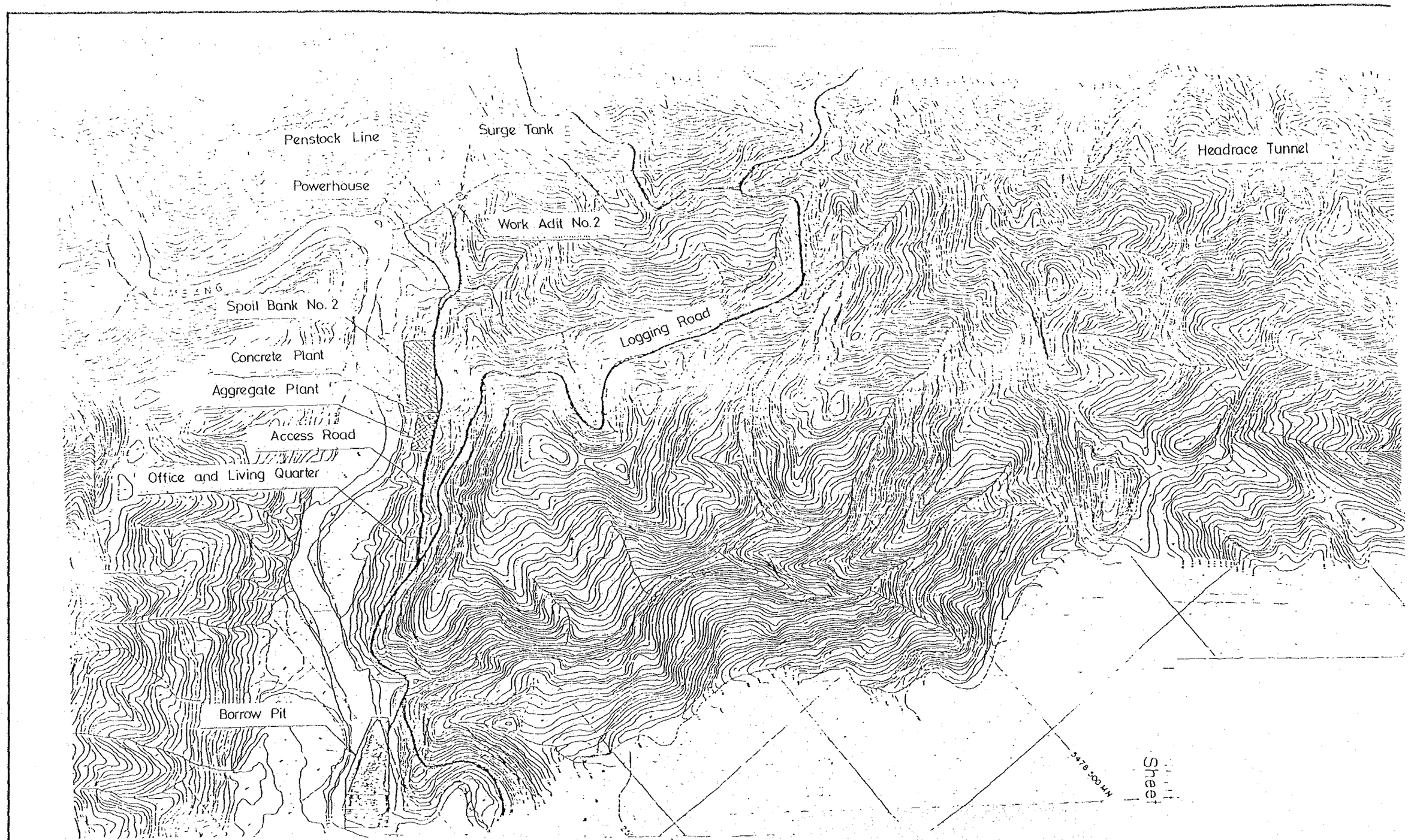


Fig.7.1. Construction Schedule.

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALE HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY


Penstock Line
Powerhouse
Surge Tank
Headrace Tunnel
Work Adit No.2
Spoil Bank No. 2
Logging Road
Concrete Plant
Aggregate Plant
Access Road
Office and Living Quarter
Borrow Pit
3478 500 MM
Sheet

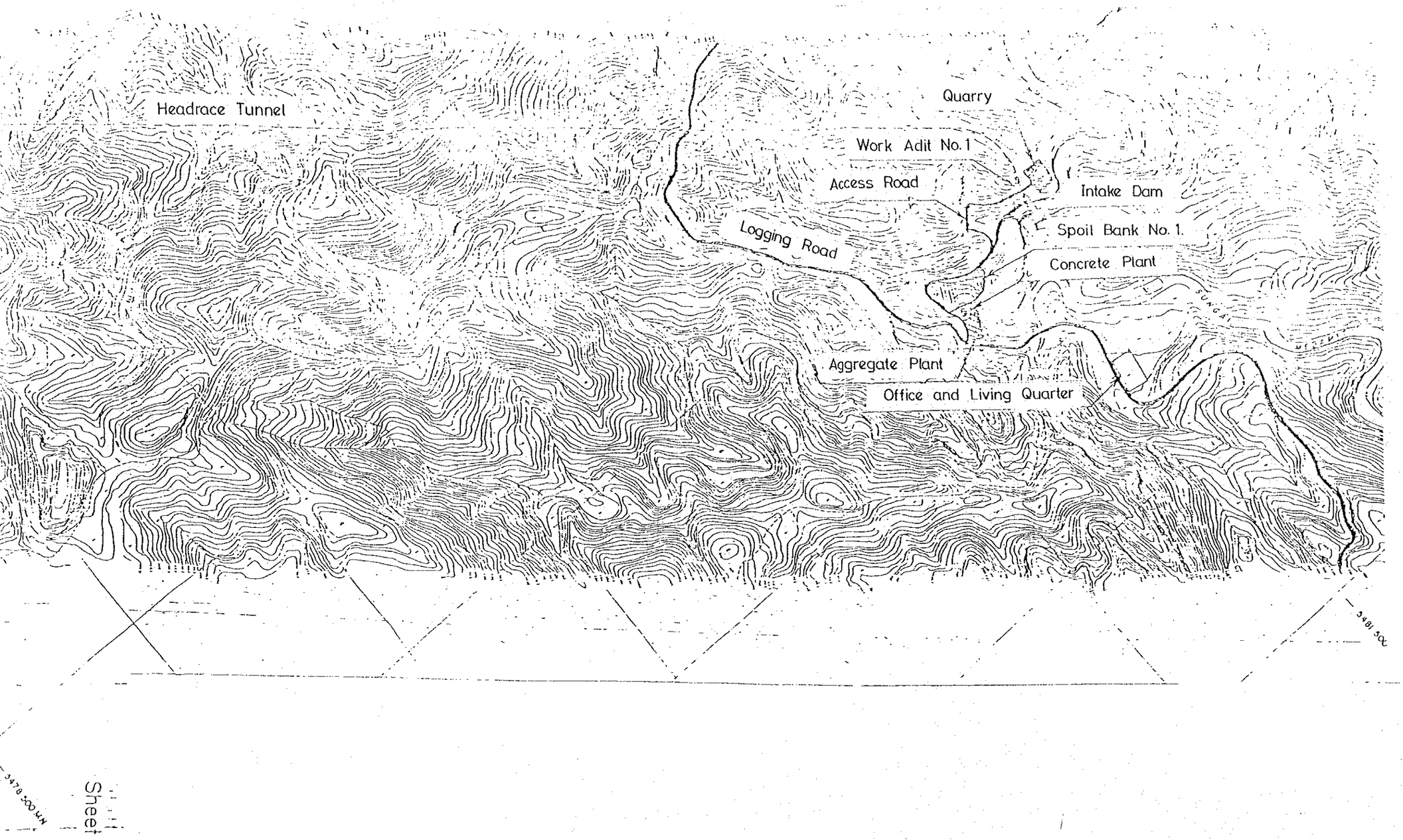


Fig. 7.2. General Plan

0 500 m 1 000 m

GOVERNMENT OF MALAYSIA
FEASIBILITY STUDY
SMALL SCALL HYDROELECTRIC POWER PROJECT IN SARAWAK
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig.7.3. Care of River.

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