



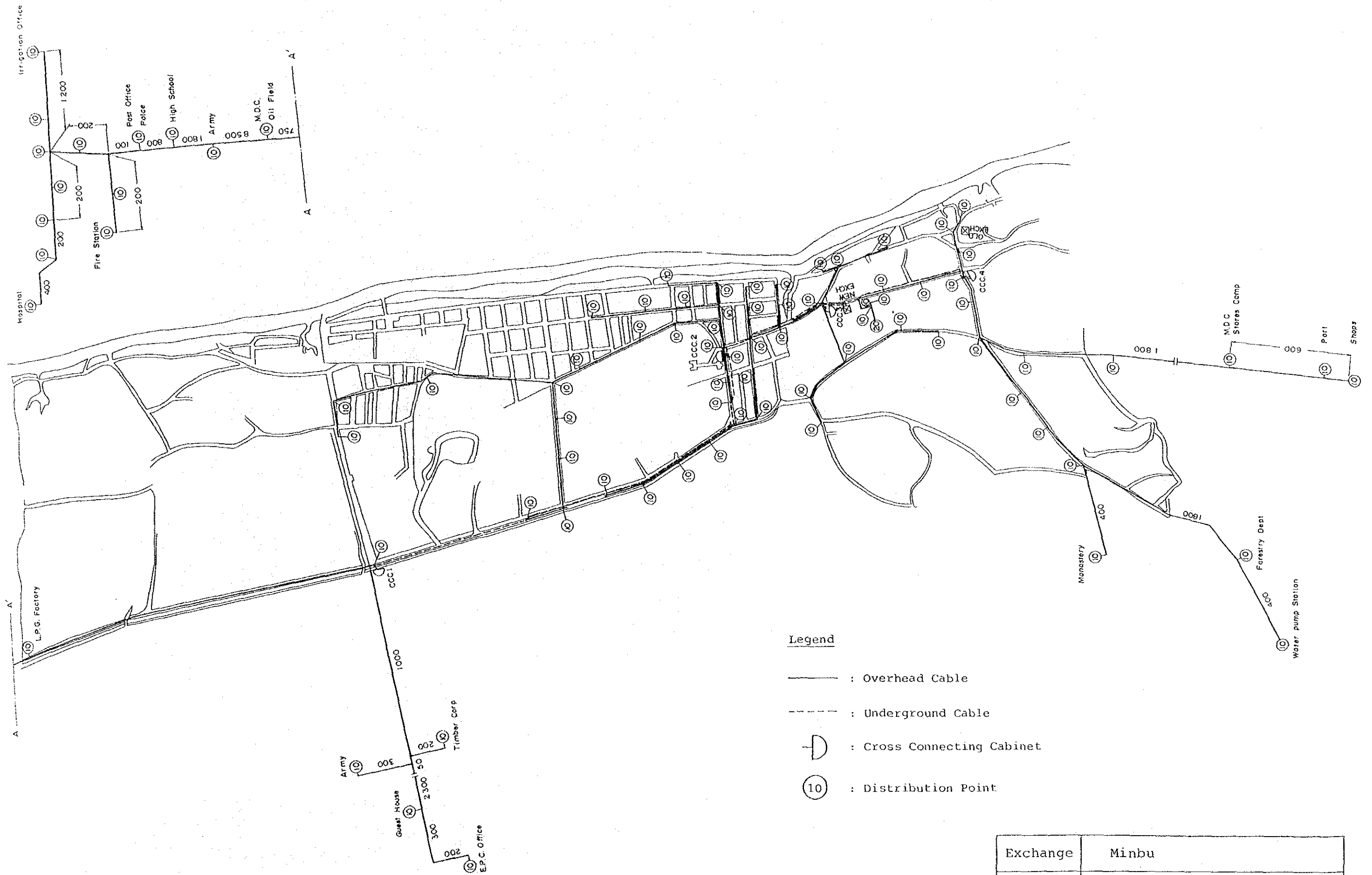
Legend

- : Overhead Cable
- - - : Underground Cable
- ⊖ : Cross Connecting Cabinet
- ⊙ : Distribution Point

Exchange	Myaungmya
Drawing	Key Map

Fig. D.2.1 Local Cable Route in Myaungmya

0 01 02 03 04 05 06 07 08 09 10"



Legend

- : Overhead Cable
- - - : Underground Cable
- D : Cross Connecting Cabinet
- 10 : Distribution Point

Exchange	Minbu
Drawing	Key Map

Fig. D.2.2 Local Cable Route in Minbu

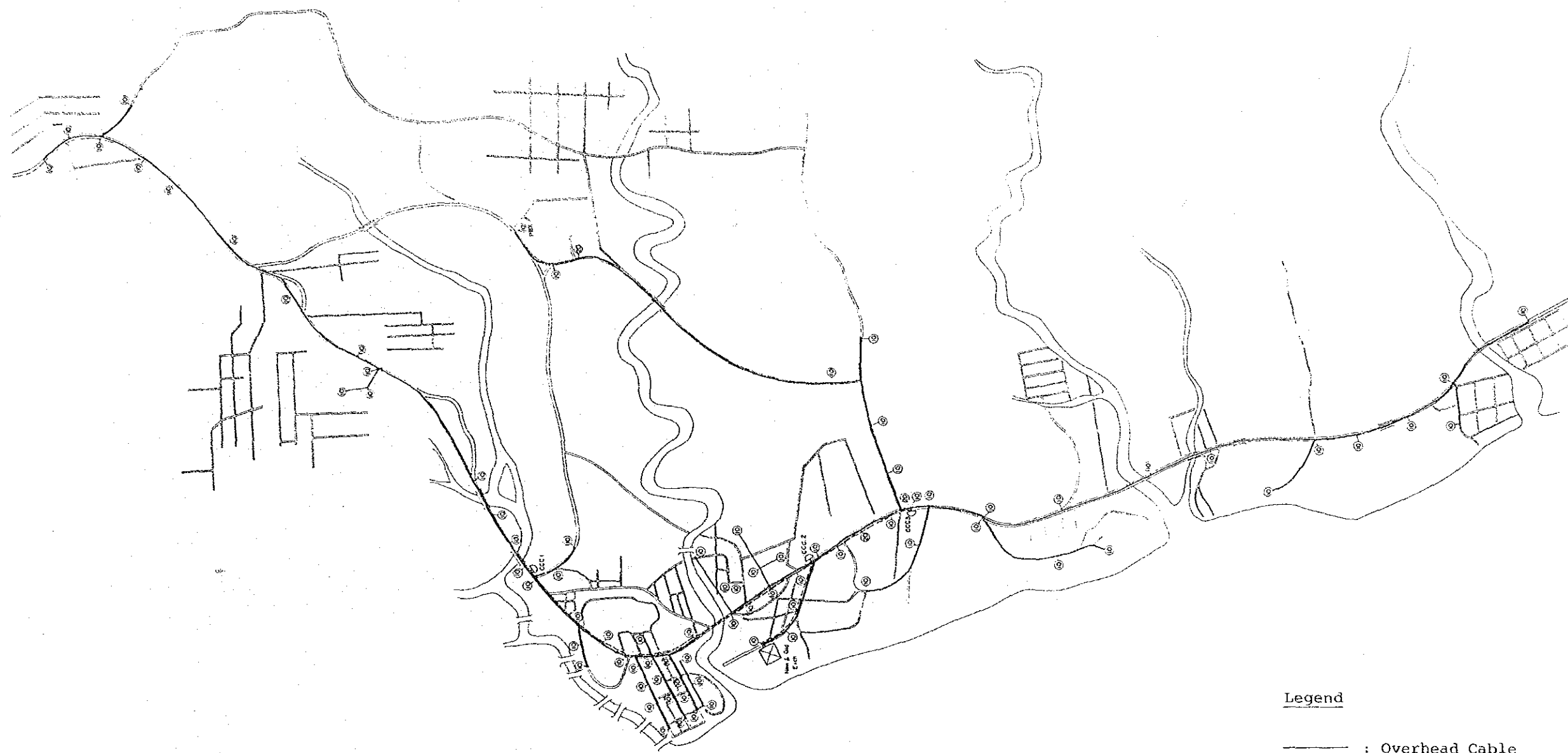


Legend

- : Overhead Cable
- - - : Underground Cable
- ⊔ : Cross Connecting Cabinet
- ⊙ : Distribution Point

Fig. D.2.3 Local Cable Route in Thayetmyo

Exchange	Thayetmyo
Drawing	Key Map



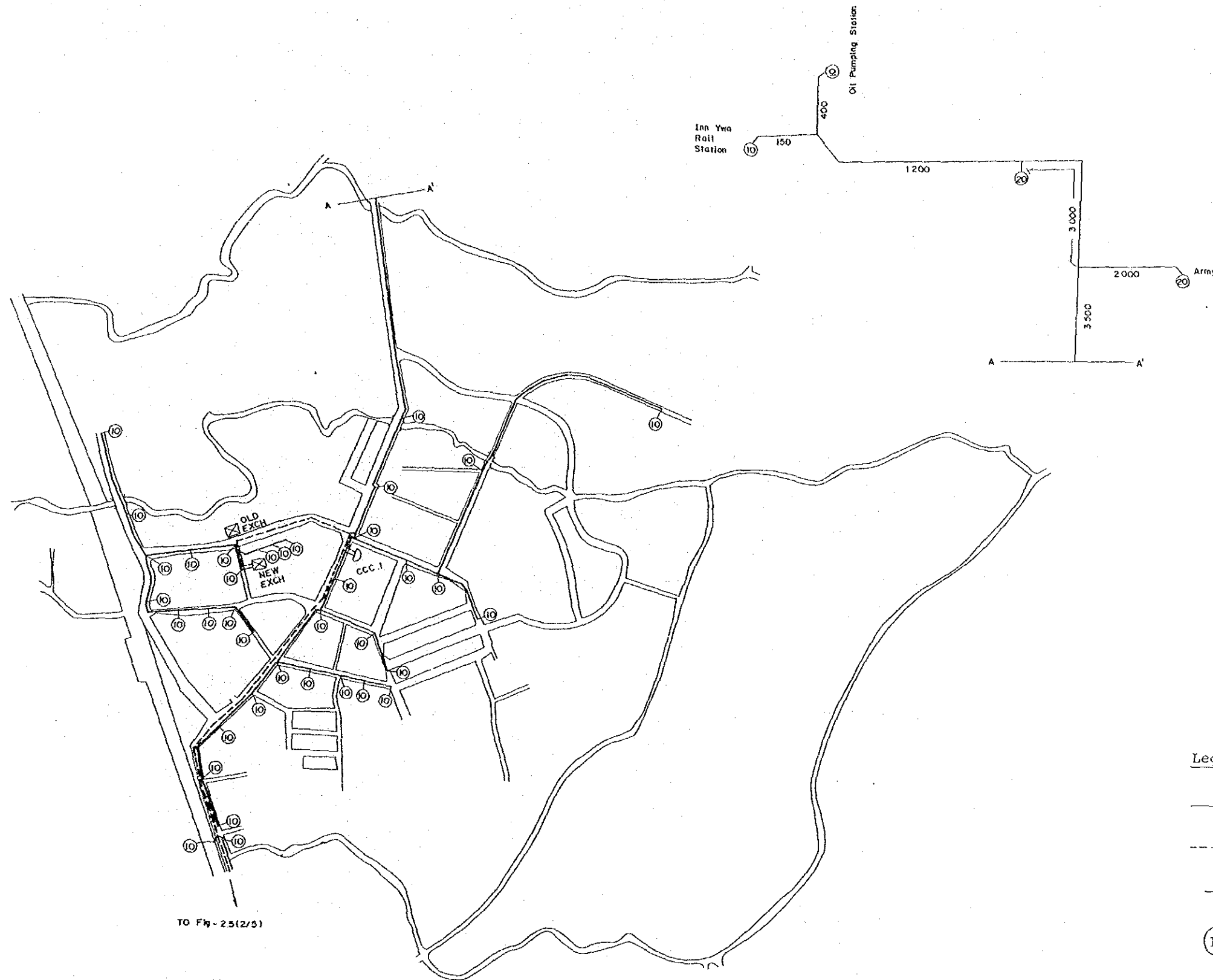
0 01 02 03 04 05 06 07 08 09 10 11 12 13

Legend

- : Overhead Cable
- : Underground Cable
- ⊥ : Cross Connecting Cabinet
- ⑩ : Distribution Point

Fig. D.2.4 Local Cable Route in Yenangyaung

Exchange	Yenangyaung
Drawing	Key Map



TO FN - 25(2/5)

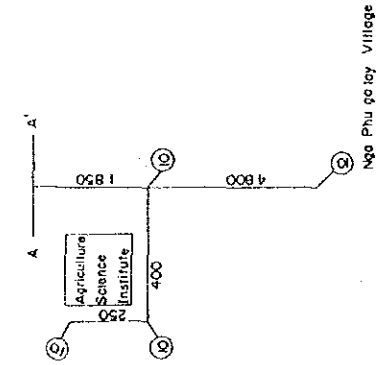
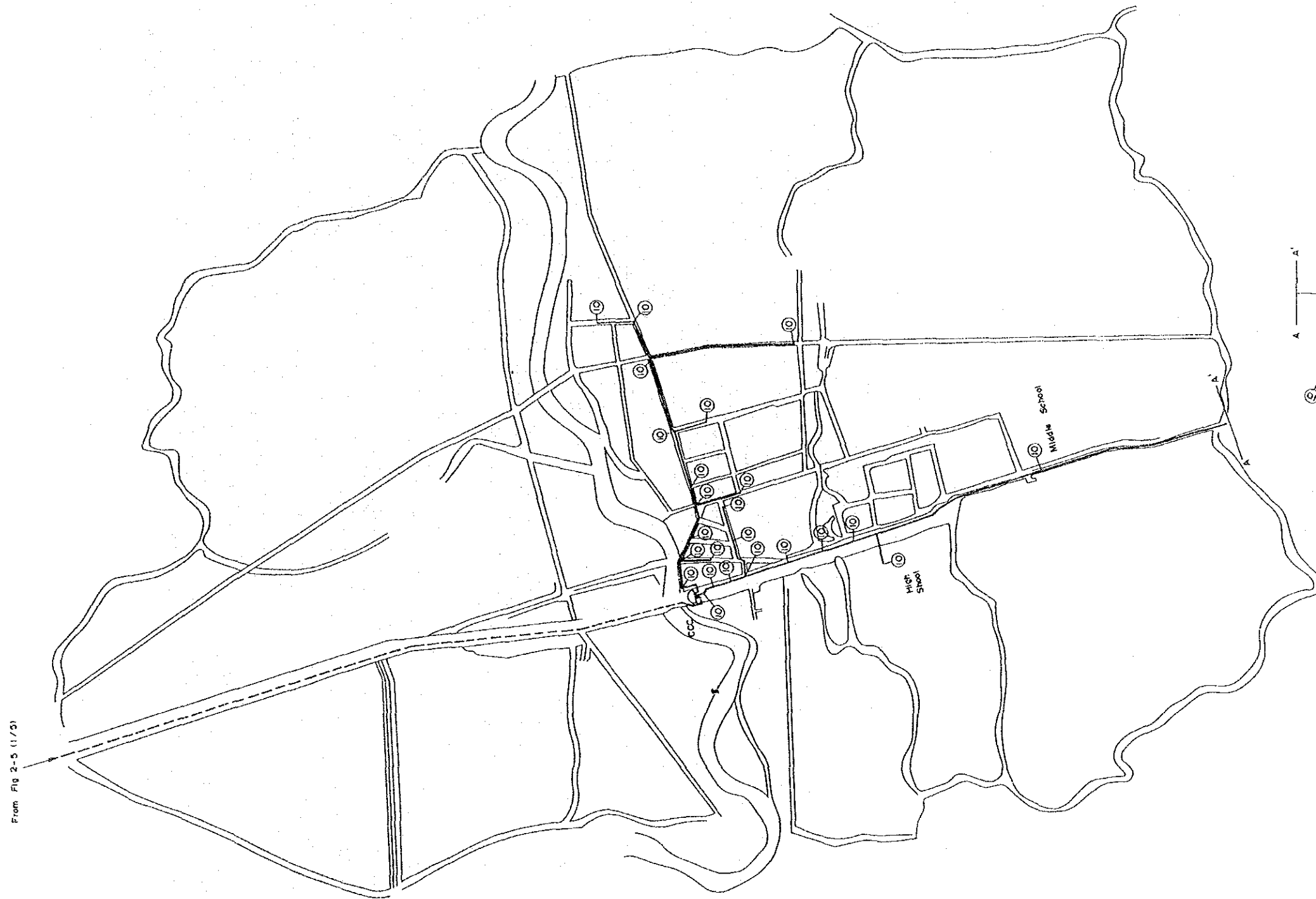
Legend

- : Overhead Cable
- - - : Underground Cable
- ⌋ : Cross Connecting Cabinet
- ⊙ : Distribution Point

Fig. D.2.5 Local Cable Route in Tharrawaddy (1/2)

0 01 02 03 04 05 06 07 08 09 10km

Exchange	Tharrawaddy (1/2)
Drawing	Key Map



From Fig 2-5 (1/5)

Legend

- : Overhead Cable
- - - : Underground Cable
- ⊔ : Cross Connecting Cabinet
- ⑩ : Distribution Point

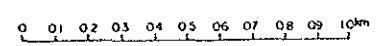
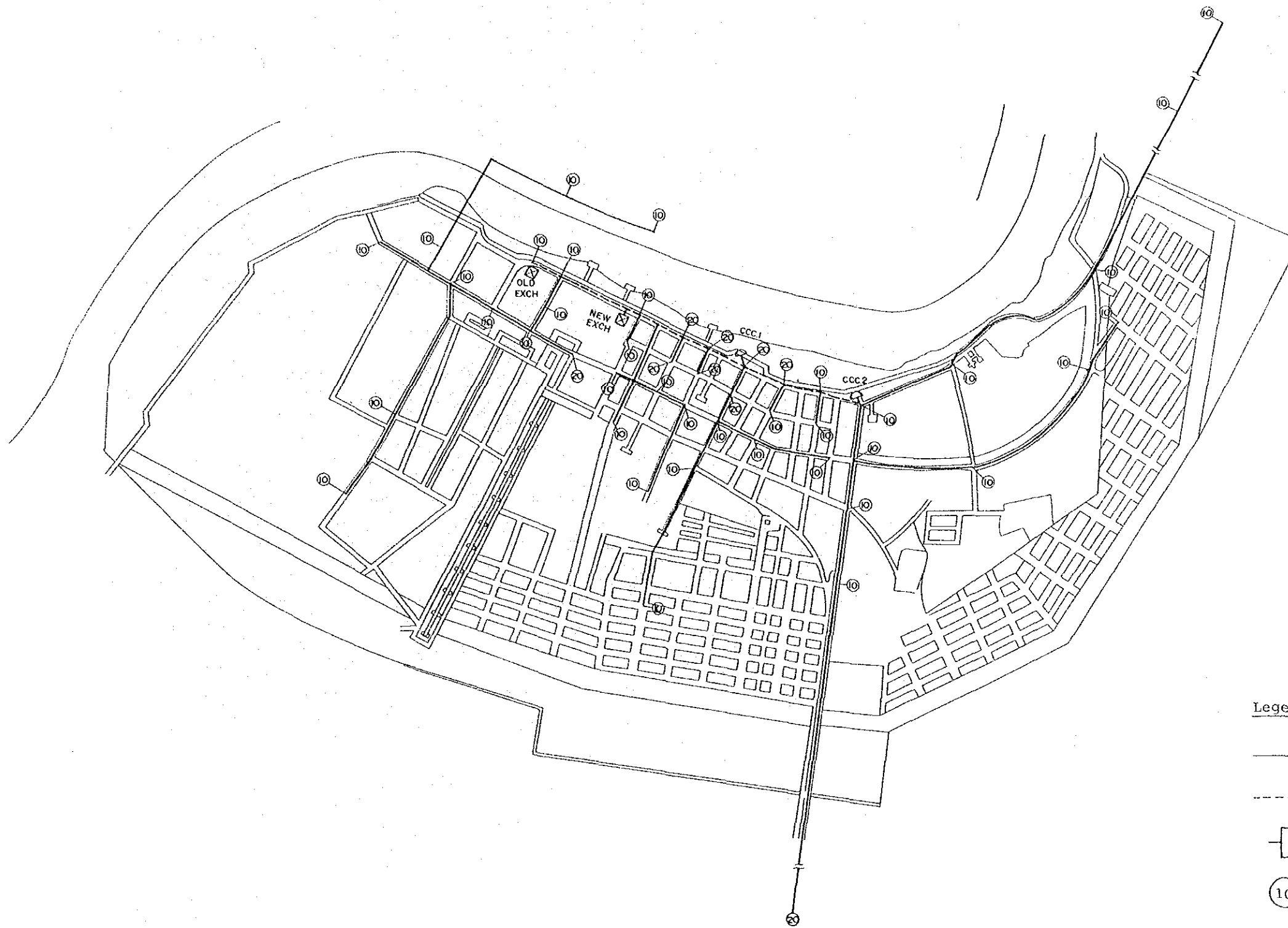


Fig. D.2.5 Local Cable Route in Tharrawaddy (2/2)

Exchange	Tharrawaddy (2/2)
Drawing	Key Map



Legend

- : Overhead Cable
- - - : Underground Cable
- ⊔ : Cross Connecting Cabinet
- ⑩ : Distribution Point

0 01 02 03 04 05 06 07 08 09 10km

Fig. D.2.6 Local Cable Route in Maubin

Exchange	Maubin
Drawing	Key Map



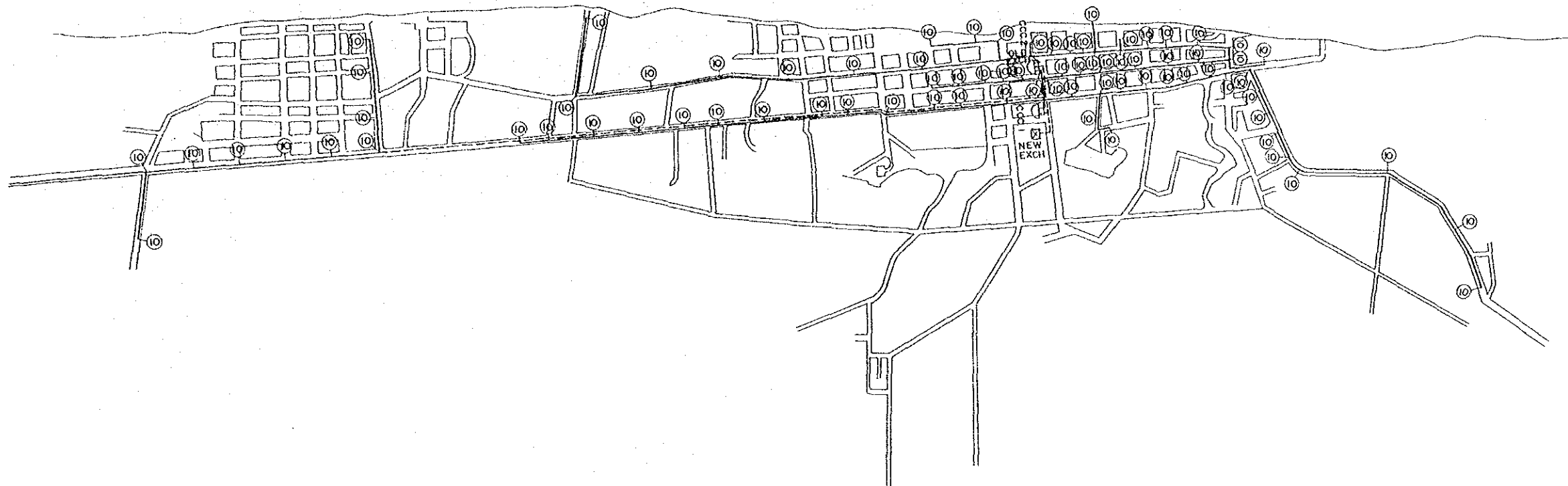
Legend

- : Overhead Cable
- - - : Underground Cable
- ⊖ : Cross Connecting Cabinet
- ⑩ : Distribution Point

Fig. D.2.7 Local Cable Route in Thaton

0 01 02 03 04 05 06 07 08 09 10m

Exchange	Thaton
Drawing	Key Map



Legend

- : Overhead Cable
- - - : Underground Cable
- ⊔ : Cross Connecting Cabinet
- ⑩ : Distribution Point

0 01 02 03 04 05 06 07 08 09 10km

Fig. D.2.8 Local Cable Route in Myede

Exchange	Myede
Drawing	Key Map

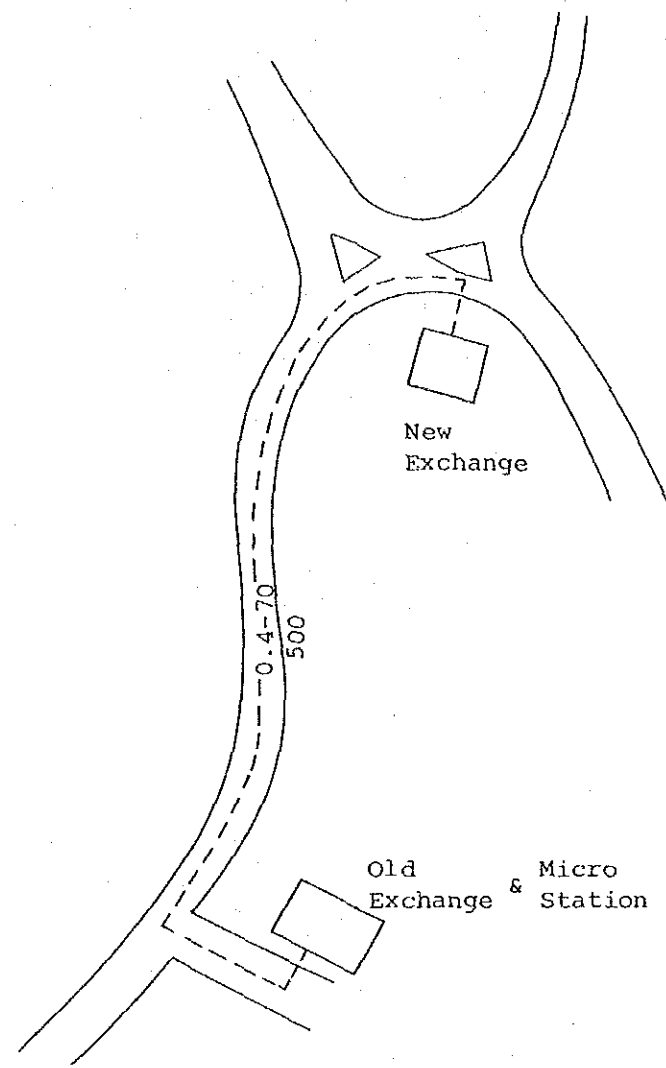


Fig. D.3.1 Toll Cable Route in Myaungmya

Legend

-- 0.4-70 -- : 0.4mm, 70 Pair
Underground Cable

Exchange	Myaungmya
Drawing	Toll Cable Route

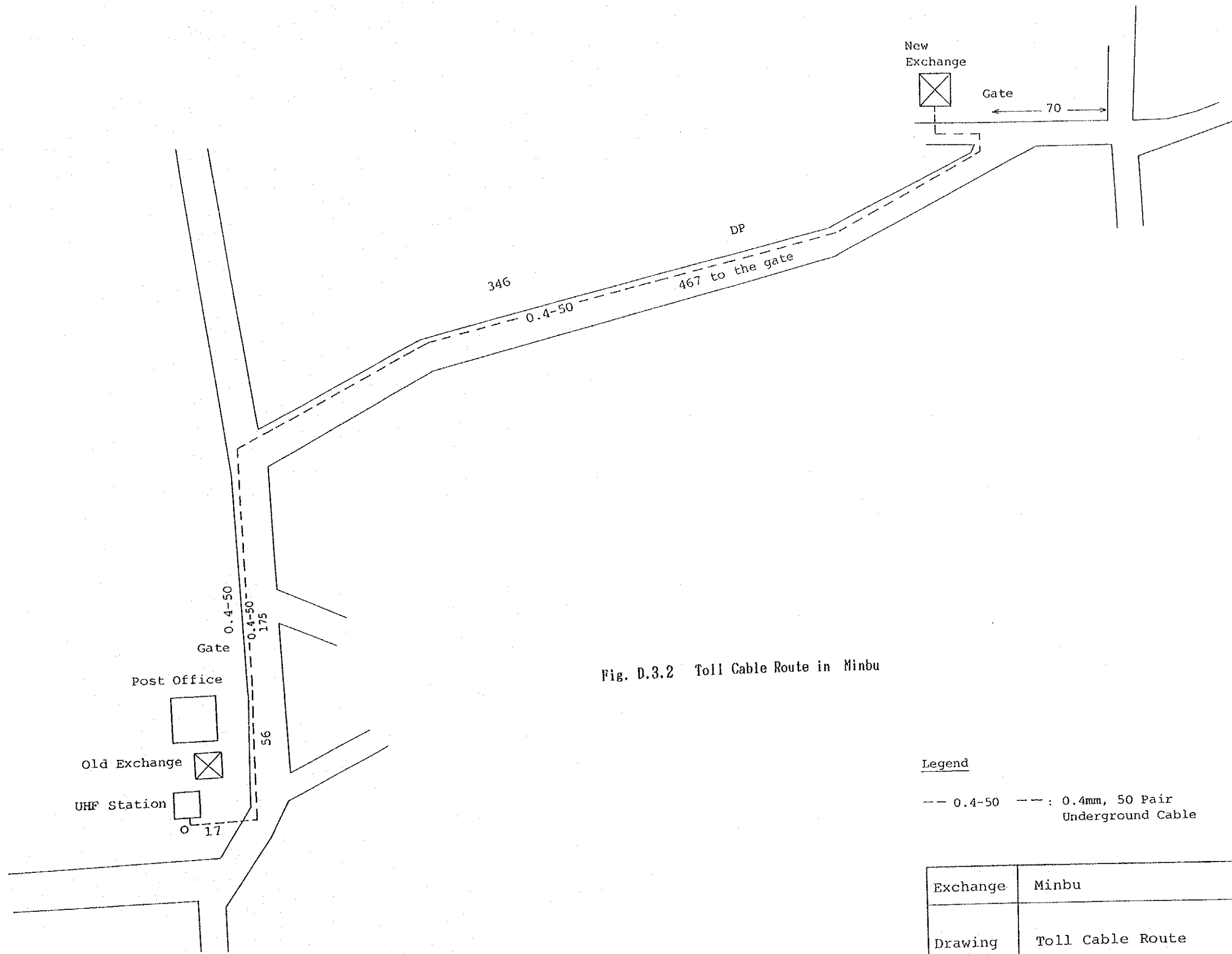


Fig. D.3.2 Toll Cable Route in Minbu

Legend

--- 0.4-50 --- : 0.4mm, 50 Pair
Underground Cable

Exchange	Minbu
Drawing	Toll Cable Route

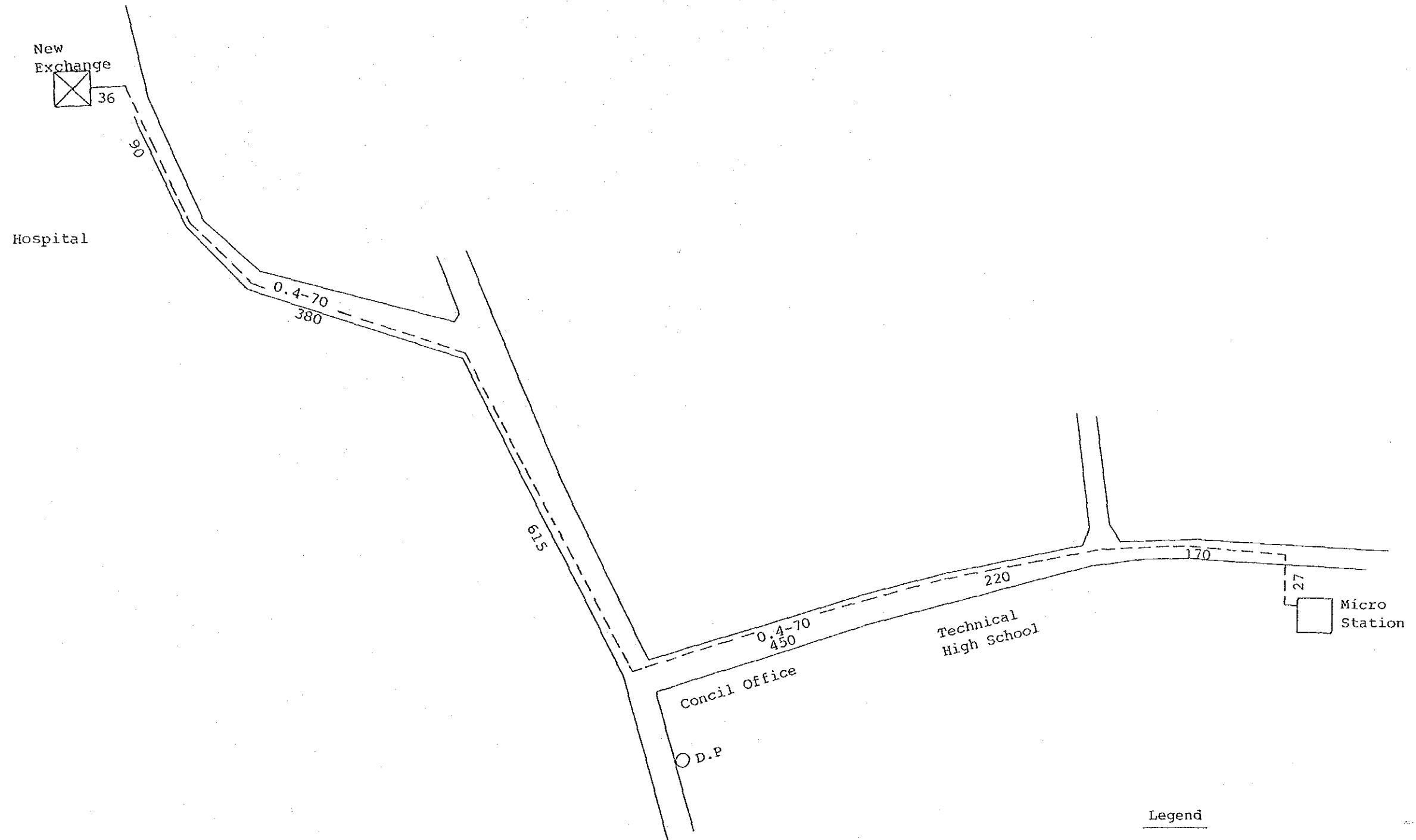


Fig. D.3.3 Toll Cable Route in Yenangyaung

Legend

--0.4-70 --- : 0.4mm, 70 Pair Underground Cable
 450 : 450 meter

Exchange	Yenangyaung
Drawing	Toll Cable Route

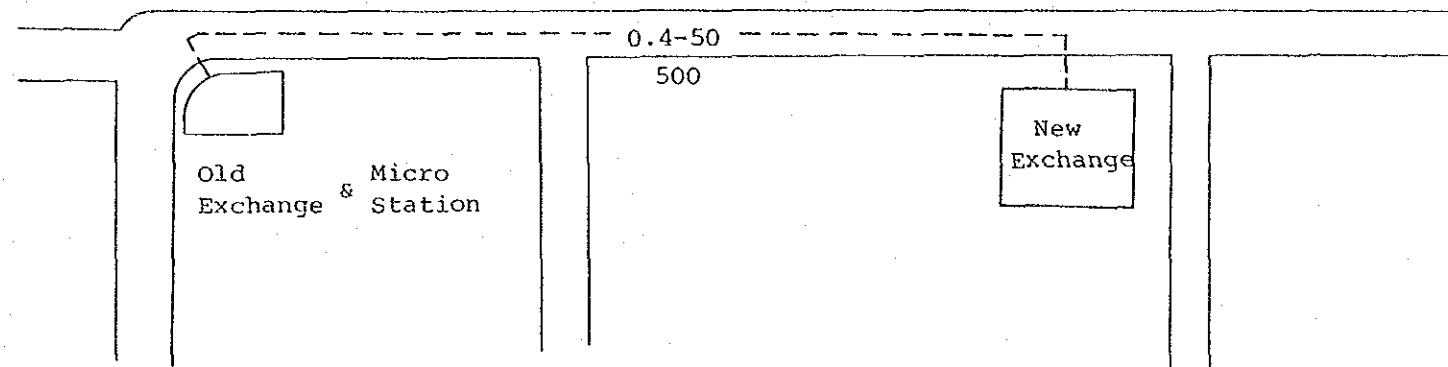


Fig. D.3.4 Toll Cable Route in Maubin

Legend

--- 0.4-50 --- : 0.4mm, 50 Pair
Underground Cable

Exchange	Maubin
Drawing	Toll Cable Route

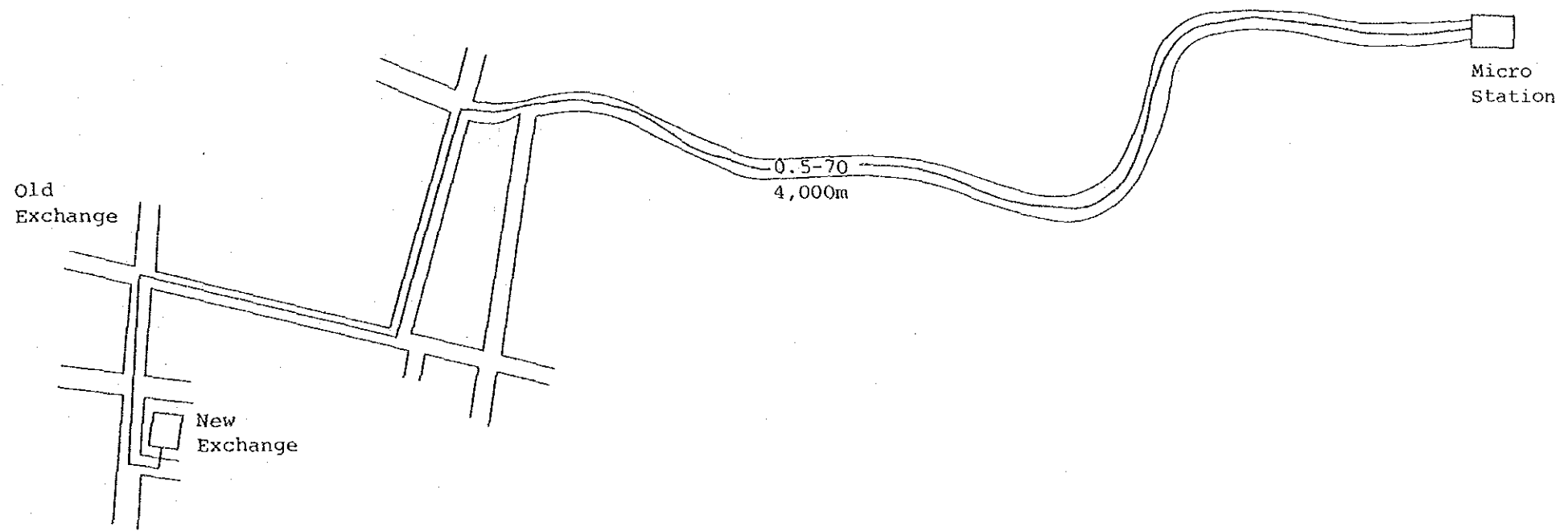


Fig. D.3.5 Toll Cable Route in Thaton

Legend

—0.5-70— : 0.5mm, 70 Pair Overhead Cable

Exchange	Thaton
Drawing	Toll Cable Route

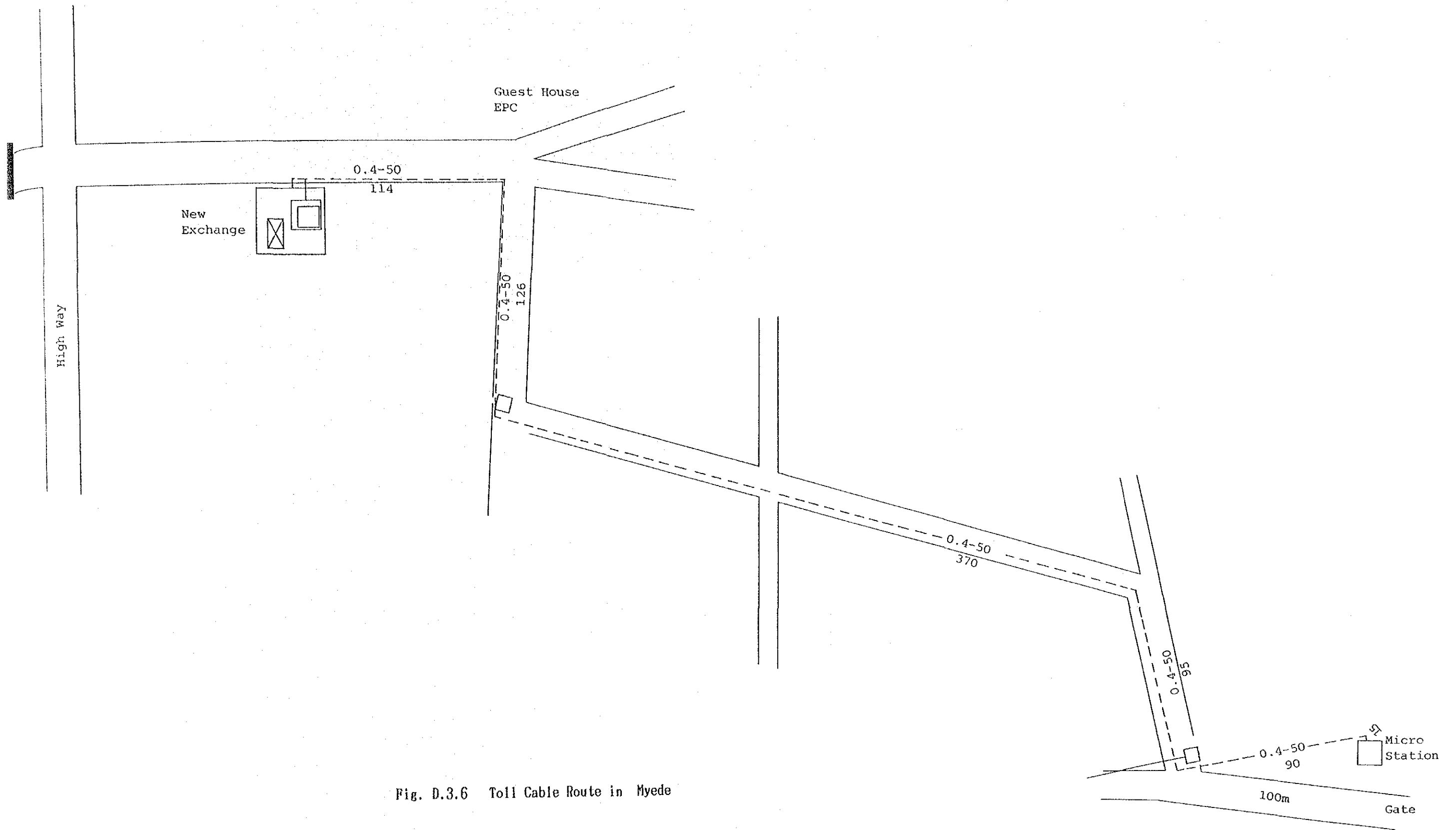


Fig. D.3.6 Toll Cable Route in Myede

Legend

--- 0.4-50 --- : 0.4mm, 50 Pair
Underground Cable

Exchange	Myede
Drawing	Toll Cable Route

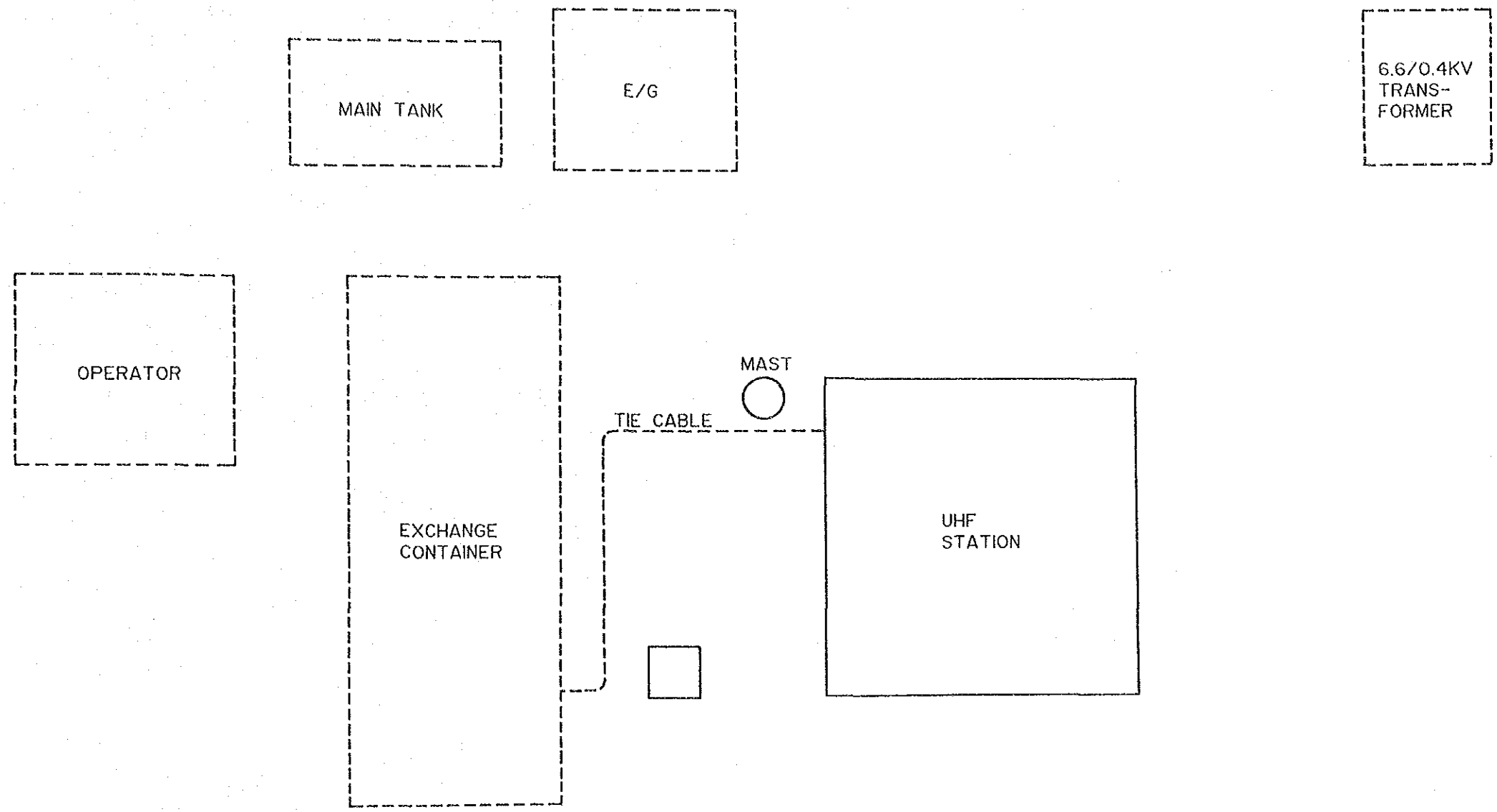


Fig. D.3.7 Tie Cable Route in Thayetmyo

TITLE	TIE CABLE ROUTE
SITE NAME	THAYETMYO NEW EXCHANGE
SCALE	1/200.

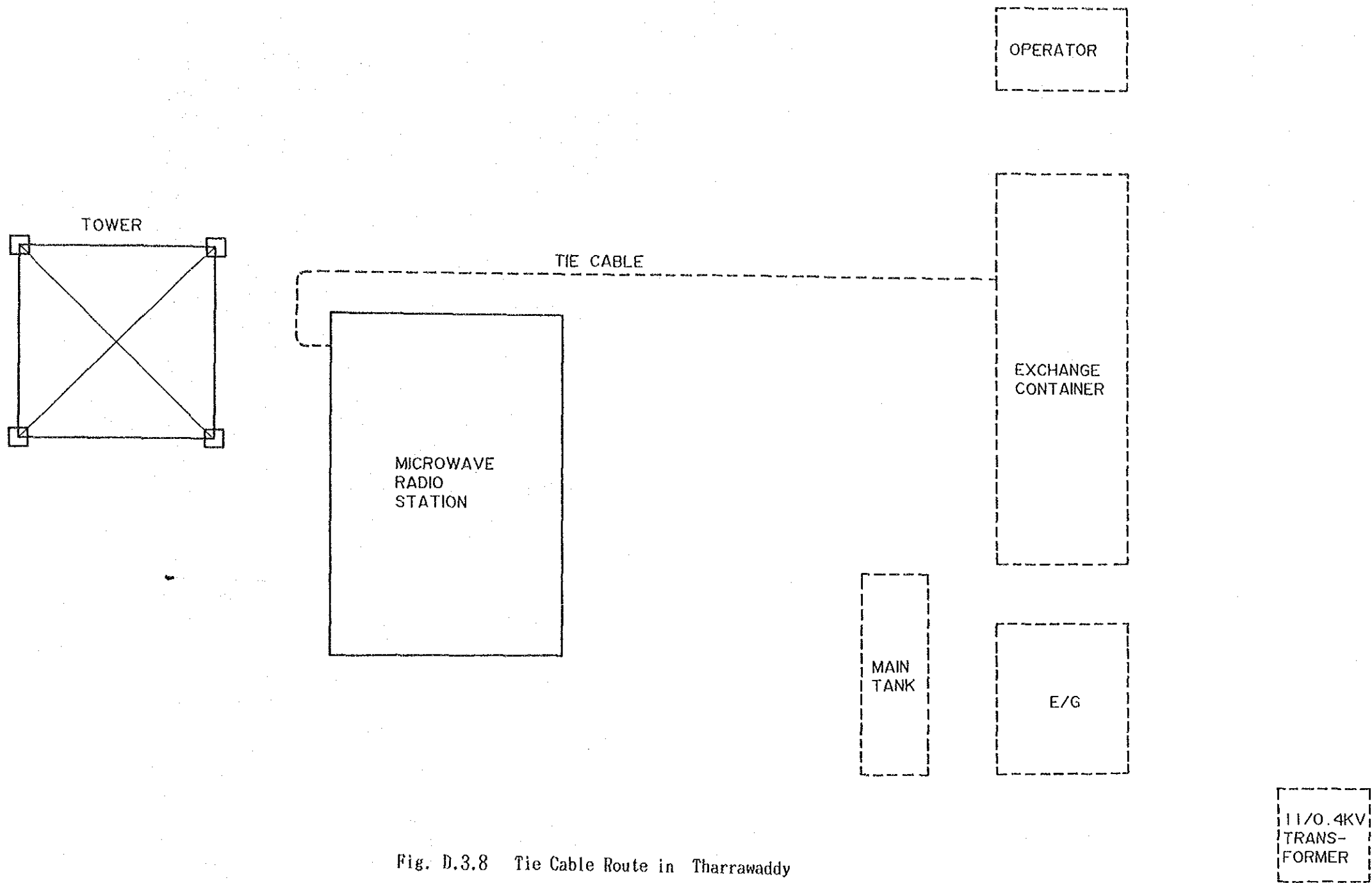


Fig. D.3.8 Tie Cable Route in Tharrawaddy

TITLE	TIE CABLE ROUTE
SITE NAME	THARRAWADDY NEW EXCHANGE
SCALE	1/200

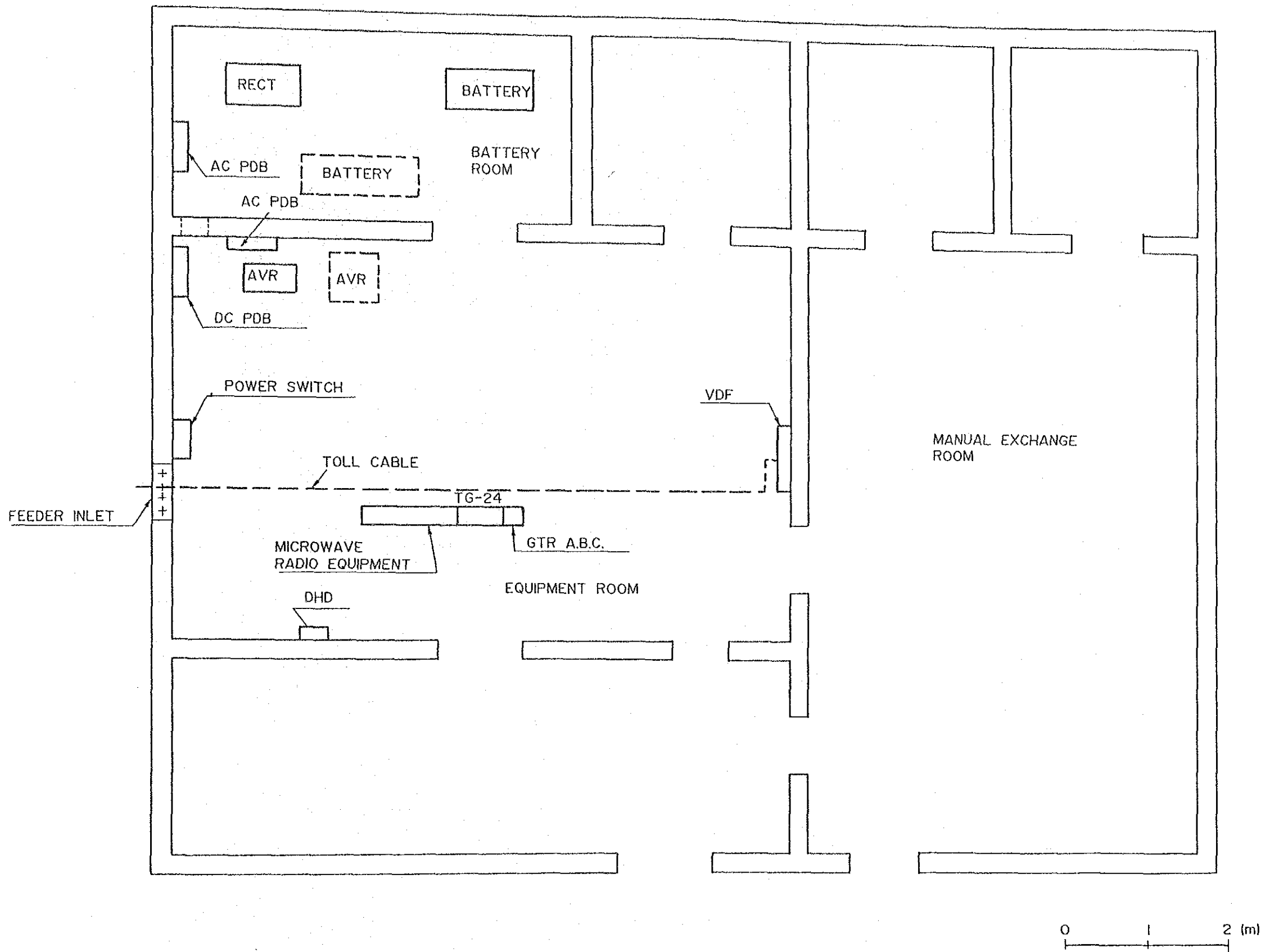


Fig. D.3.9 Floor Layout at Myaungmya Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	MYAUNGMYA MICROWAVE STATION
SCALE	1/50

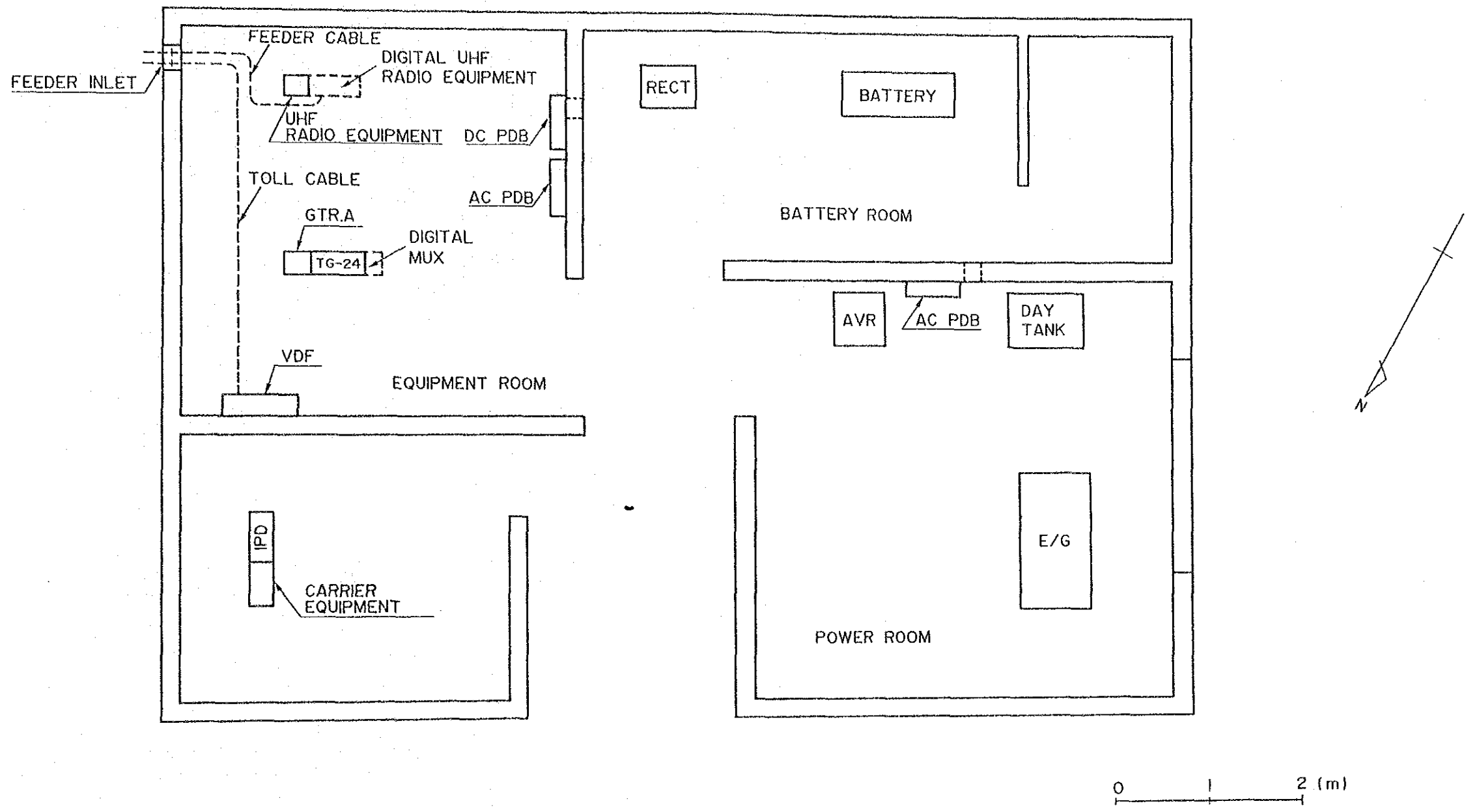


Fig. D.3.10 Floor Layout at Minbu UHF Station

TITLE	FLOOR LAYOUT
SITE NAME	MINBU UHF STATION
SCALE	1/50

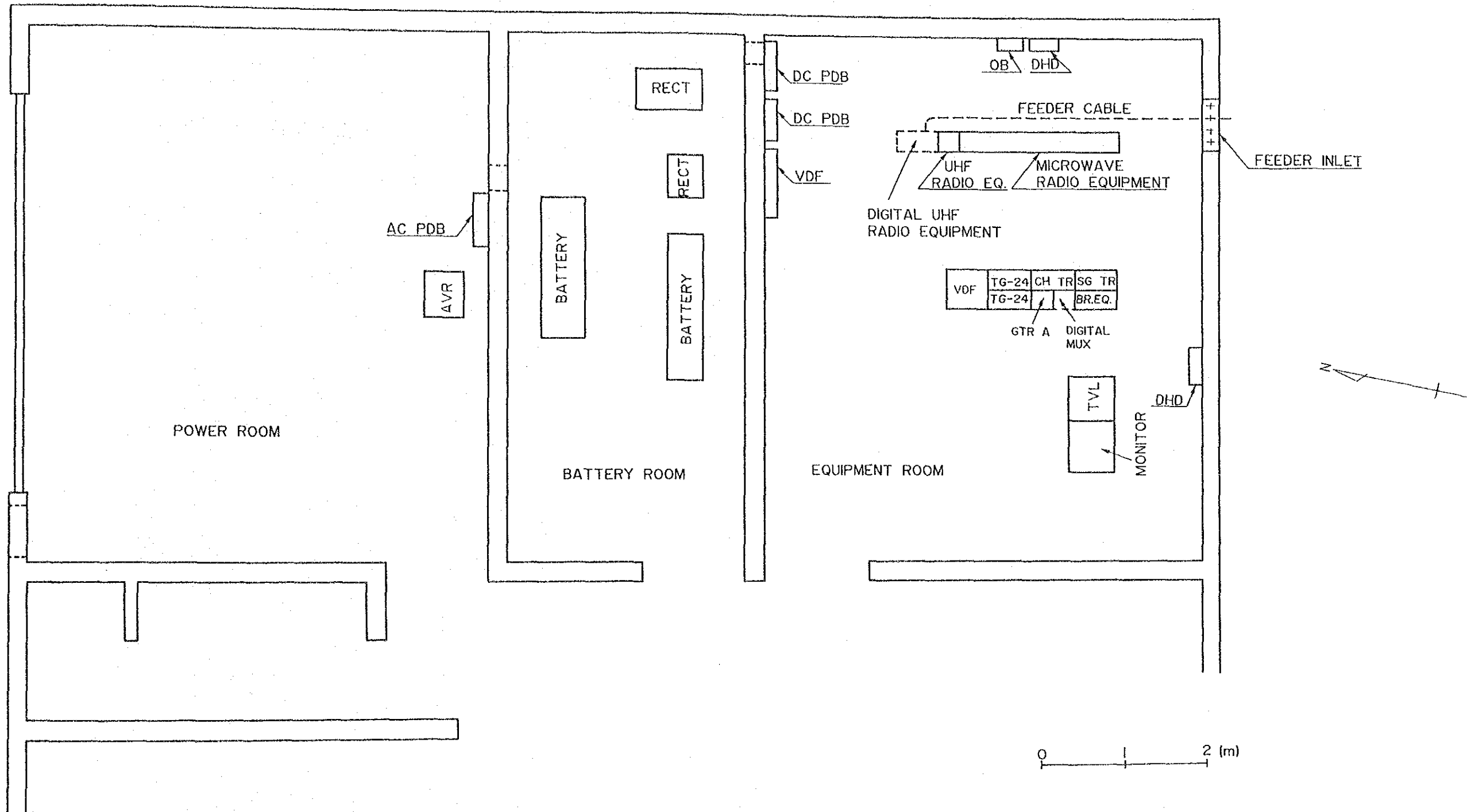


Fig. D.3.11 Floor Layout at Magwe Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	MAGWE MICROWAVE STATION
SCALE	1/50

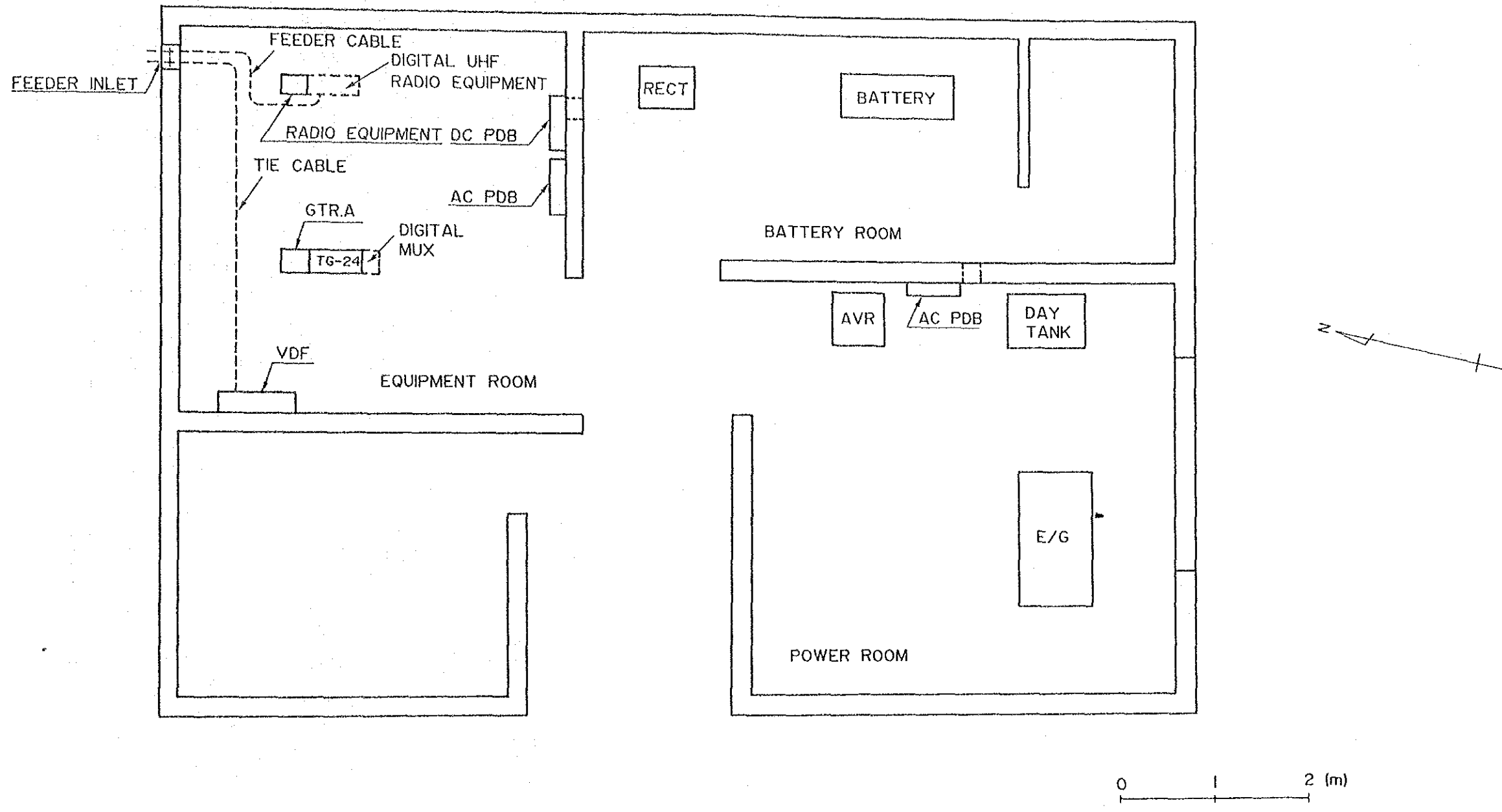


Fig. D.3.12 Floor Layout at Thayetmyo UHF Station

TITLE	FLOOR LAYOUT
SITE NAME	THAYETMYO UHF STATION
SCALE	1/50

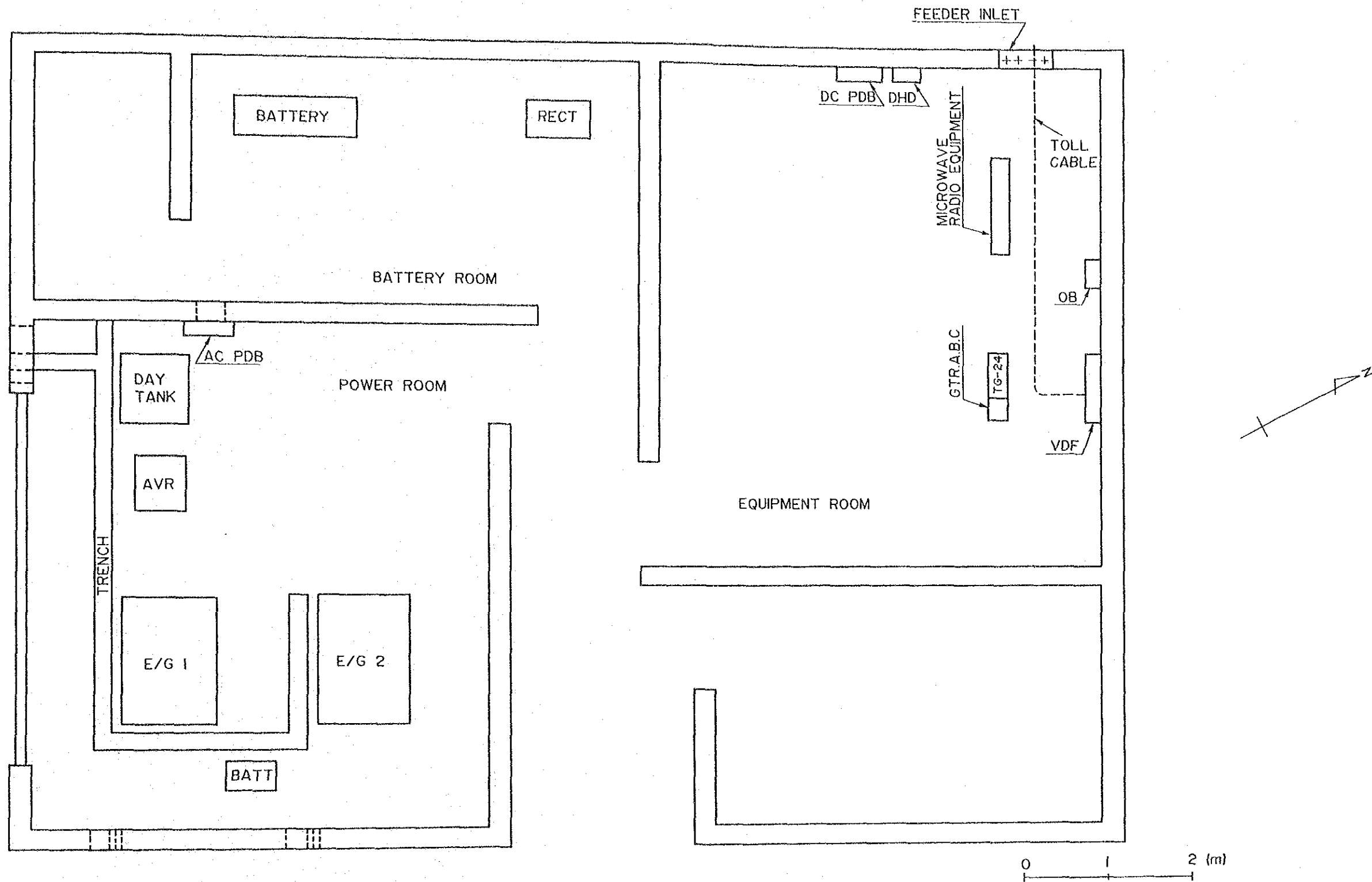


Fig. D.3.13 Floor Layout at Yenangyaung Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	YENANGYAUNG MICROWAVE STATION
SCALE	1/50

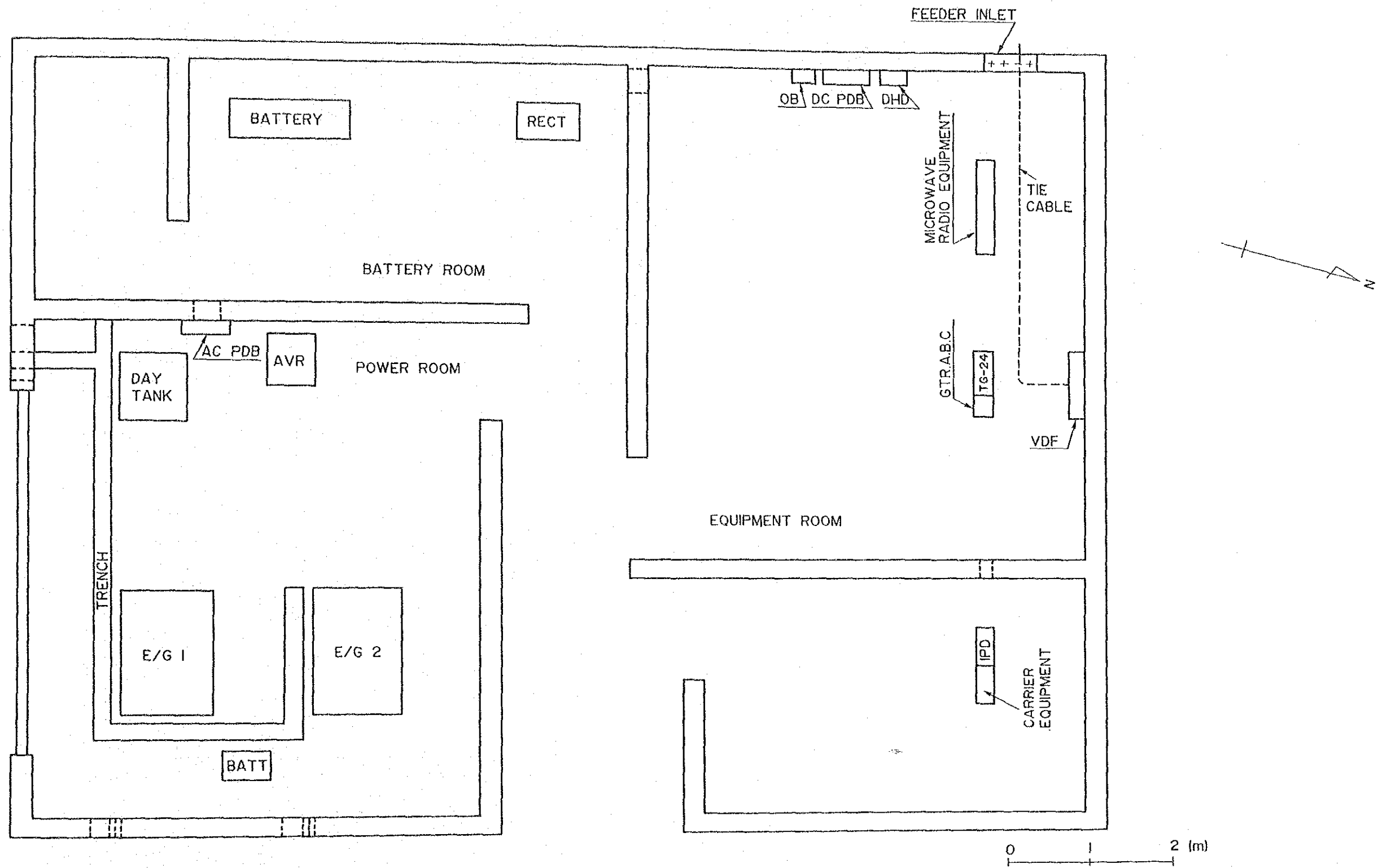


Fig. D.3.14 Floor Layout at Tharrawaddy Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	THARRAWADDY MICROWAVE STATION
SCALE	1/50

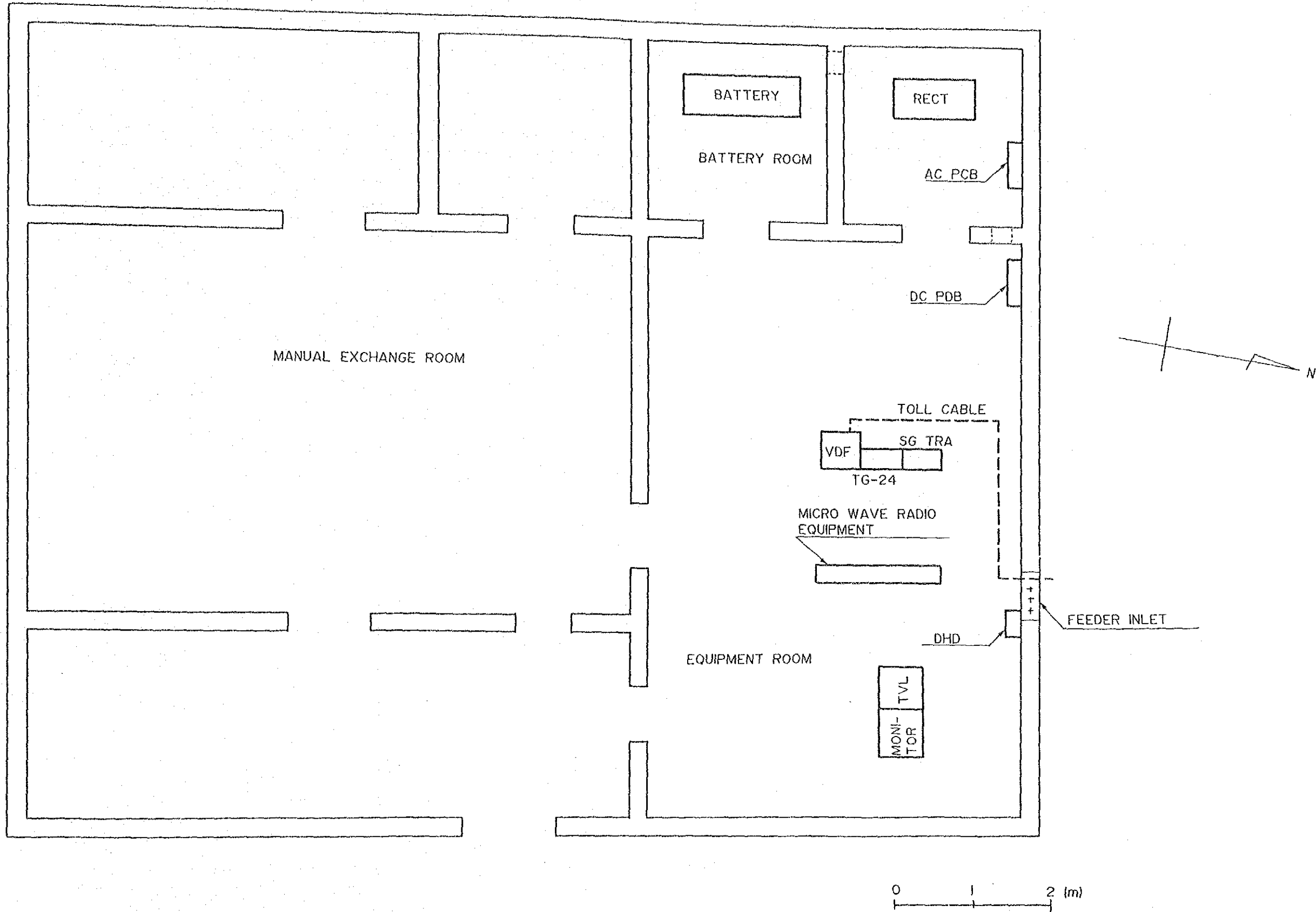


Fig. D.3.15 Floor Layout at Maubin Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	MAUBIN MICROWAVE STATION
SCALE	1/50

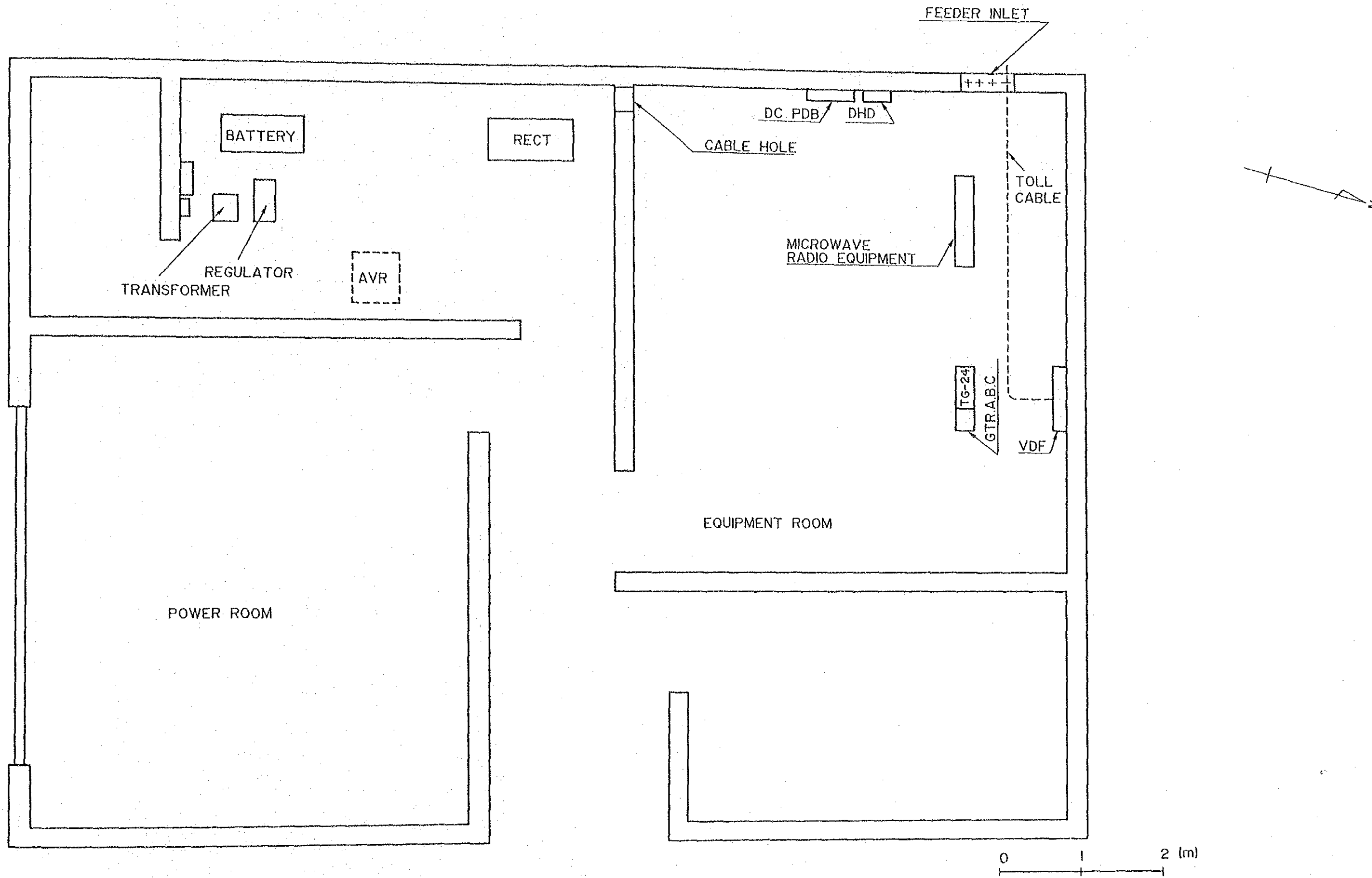


Fig. D.3.16 Floor Layout at Thaton Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	THATON MICROWAVE STATION
SCALE	1/50

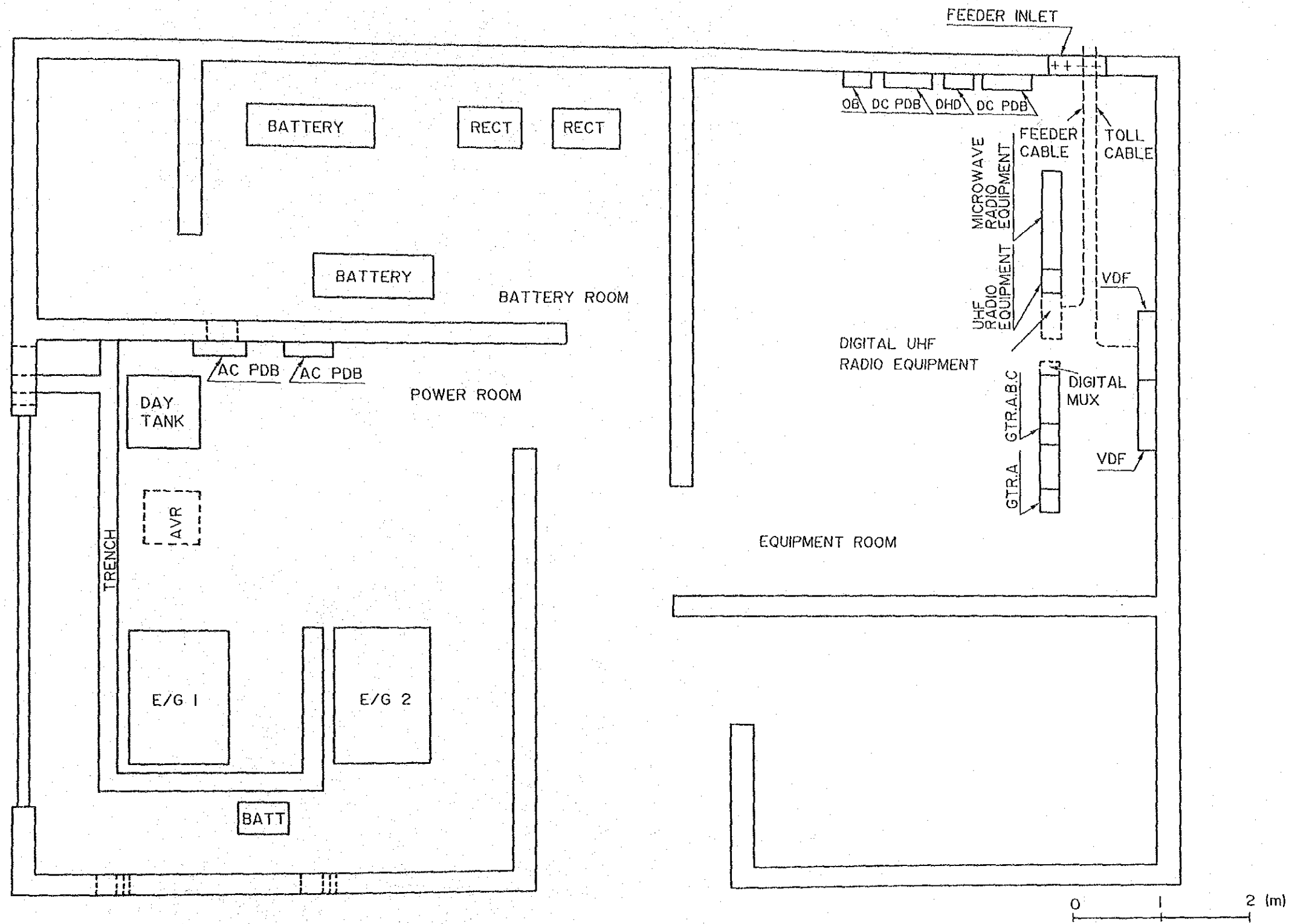


Fig. D.3.17 Floor Layout at Myede Microwave Station

TITLE	FLOOR LAYOUT
SITE NAME	MYEDE MICROWAVE STATION
SCALE	1/50

APPENDIX

APPENDIX I MINUTES OF DISCUSSIONS (B/D I, B/D II)
MINUTES OF DISCUSSIONS (B/D I)

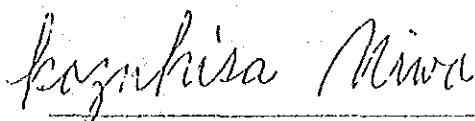
MINUTES OF DISCUSSIONS
ON
THE TEN TOWNSHIP TELEPHONE NETWORK DEVELOPMENT PROJECT
IN
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

In response to the request of the Government of the Socialist Republic of the Union of Burma, the Government of Japan has decided to conduct a basic design study on "The Ten Township Telephone Network Development Project" (hereinafter referred to as "the Project"), and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent the basic design study team (hereinafter referred to as "the Team") headed by Mr. Kazuhisa Niwa, Deputy Director of Land Communications Division, Radio Department, Telecommunications Bureau, the Ministry of Posts and Telecommunications, to Burma from 16th February to 20th March, 1987.

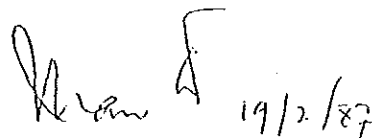
The Team had a series of discussions on the Project with the officials concerned of the Government of the Socialist Republic of the Union of Burma headed by U Than Tun, Managing Director of Posts & Telecommunications Corporation. The major points of understanding between the two parties are shown in the Attachment.

The basic design study is to be conducted on the basis of the Attachment herewith.

Rangoon, 19th February, 1987



Mr. Kazuhisa Niwa
Leader,
Basic Design Study Team,
JICA



U Than Tun
Managing Director,
Posts & Telecommunications Corporation,
Burma

- ATTACHMENT -

1. The objectives of the study are as follows:

- (1) To confirm the background of the Project.
- (2) To examine and assess the technical and economic viability of the Project.
- (3) To make a general layout and design.
- (4) To estimate cost of the Project and to study its implementing schedule.
- (5) To study a maintenance and operation plan, and
- (6) To evaluate the Project.

2. The request made by the Government of Burma is as follows:

(1) Towns where to carry out telephone service expansion and improvement are the following :

Kyaukpyu, Maubin, Minbu, Myaungmya, Myede, Sandoway, Thaton, Tharrawaddy, Thayetmyo and Yenangyaung.

- (2) The Project aims at expansion and improvement of toll and local telephone services by means of introduction of digital exchanges in the ten telephone offices.
- (3) A telephone service area where a digital exchange covers is planned to be a township.
- (4) The Project covers the telephone demand for four or five years after service commencement.
- (5) The following facilities will be provided for the Project.
 - Digital exchanges
 - Local cables
 - Telephone sets
 - Toll transmission equipment between new exchanges and the microwave terminal stations near the exchanges

Manual boards

- (6) The maintenance and operation for the digital exchanges and manual boards are carried out on a 24-hour shift. *X. K. M*
- (7) Training in the field of digital exchange and outside plant in Japan is requested for senior engineers who are selected from the headquarters and five division offices related to the Project.

At the same time, the on-the-job training in Burma will be requested for the personnel engaged in the installation and maintenance of the Project.

3. Executing Agency of the Project

Posts and Telecommunications Corporation is responsible for implementing the Project.

4. Items to be studied during the field survey are as follows:

- Myaungmya (telephone exchange, microwave repeater station, local outside plant)
- Sandoway (telephone exchange, microwave repeater station, UHF terminal, local outside plant)
- Minbu (telephone exchange, UHF terminal, local outside plant)
- Thayetmyo (telephone exchange, UHF terminal, local outside plant)
- Yenangyaung (telephone exchange, microwave repeater station, local and toll outside plant)
- Tharrawaddy (telephone exchange, microwave repeater station, local outside plant)
- Maubin (telephone exchange, microwave repeater station, local outside plant)

- Thaton (telephone exchange, microwave repeater station, local and toll outside plant)
- Myede (telephone exchange, microwave repeater station, local and toll outside plant)
- Kyaukpyu (telephone exchange, microwave repeater station, UHF terminal, local outside plant)

In Rangoon and Mandalay the field survey related to the facilities will be also carried out.

5. Network configurations and coverage areas of the Project to be studied are as shown in Appendix-1.

6. Upon completion of the field survey in Burma a progress report covering the following items will be prepared:

- Outline of field survey results
- Objective and necessity of the Project
- Basic principles of demand forecast and traffic forecast.
- Outline of equipment plan, maintenance/operation plan and training plan
- Equipment/materials, and the scope of work to be undertaken by the Burmese side

7. The tentative schedule of the study is shown in Appendix-2.

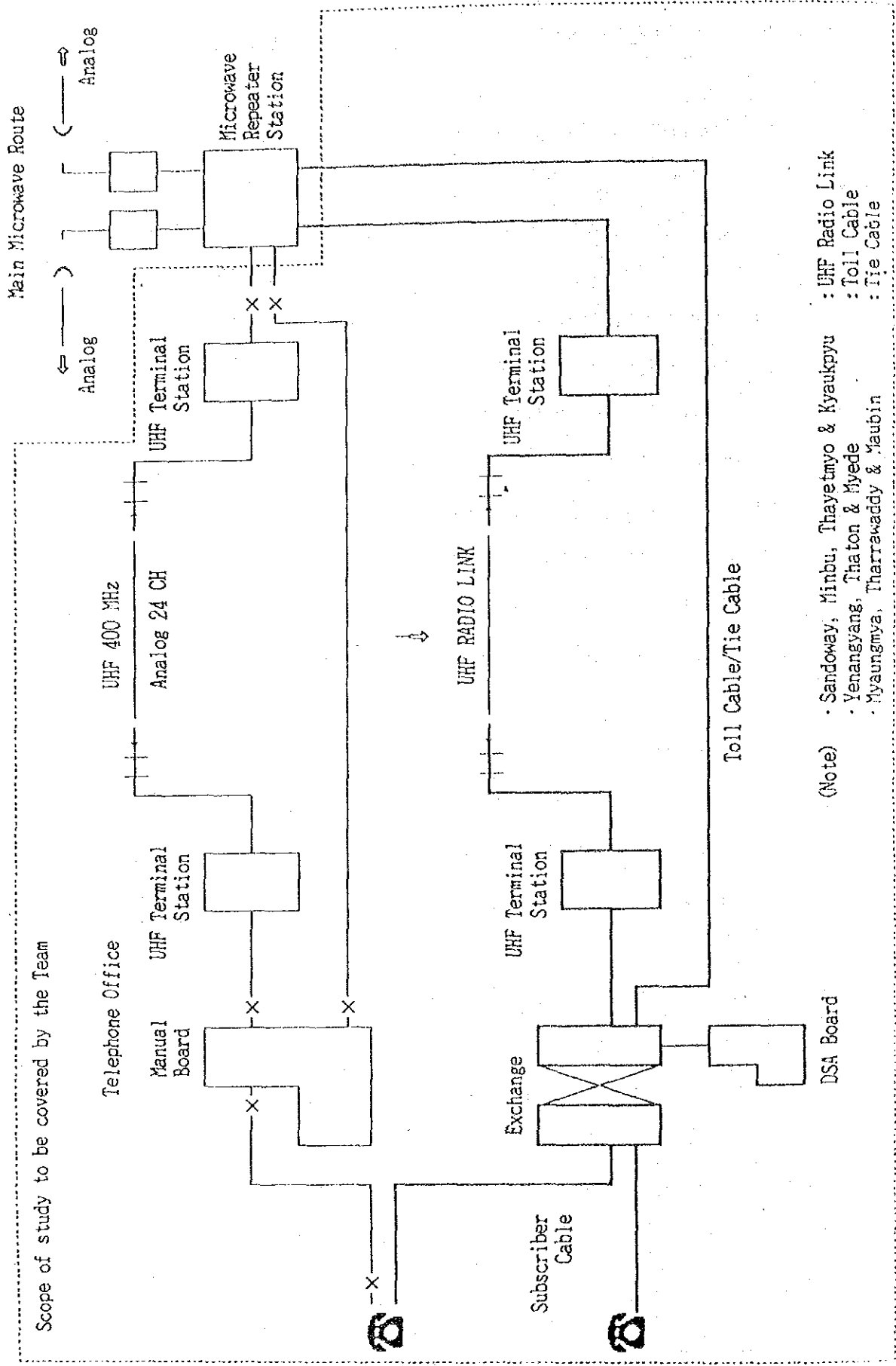
The Final Report (10 copies in English) will be submitted to the Burmese side by the end of August, 1987.

8. Measures to be taken by PTC during the field survey in Burma

- (1) Arrangement of six Burmese counterparts to take part in field surveys.
 Group A (one each for switching, outside plant and transmission)
 Group B (one each for switching, outside plant and transmission)
- (2) Arrangement of office for desk study (office plus secretary service).
- (3) Arrangement of vehicles for field survey tours.
- (4) Arrangement of local air trip, river trip, land trip, as well as accommodation, conveniences.
- (5) Permit for study activities and for entry into facilities concerned.
- (6) Tax exemption for equipment/materials necessary for the study.
- (7) Cooperation by the Government/public organizations concerned.
- (8) Supply of available data and information relating to study/survey work, and permit to take them out of Burma.

Note: The necessary expense concerning the items (3) & (4) is to be borne by the Study Team.

Appendix - 1 TELEPHONE NETWORK SYSTEM CONFIGURATION IN THE TEN TOWNSHIPS



- (Note)
- Sandoway, Minbu, Thayetmyo & Kyaukpadaung : UHF Radio Link
 - Yenangyang, Thaton & Myede : Toll Cable
 - Myaungmya, Tharrawaddy & Maubin : Tie Cable

Appendix-2

Tentative Schedule of the Study

Year & Month	1987											
Items	February	March	April	May	June	July	August	September				
• Inception Report	△											
• Field Survey		▬										
• Progress Report		△										
• Analysis Work in Japan				▬								
• Explanation of the Draft Final Report					▬	△						
• Final Report												△

Note: Burmese comments on the Draft Final Report will be given during the stay of the Explanation Team in Burma.

MINUTES OF DISCUSSIONS (B/D II)

MINUTES OF DISCUSSIONS

ON

THE TEN TOWNSHIP TELEPHONE NETWORK DEVELOPMENT PROJECT

IN

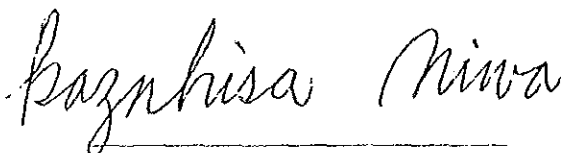
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

In response to the request of the Government of the Socialist Republic of the Union of Burma for Grant Aid for the Ten Township Telephone Network Development Project (hereinafter referred to as "the Project"), the Government of Japan has decided to conduct a basic design study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Burma the study team (hereinafter referred to as "the Team") headed by Mr. Kazuhisa Niwa, Deputy Director of the Land Communications Division, Radio Department, Telecommunications Bureau, Ministry of Posts and Telecommunications from February 15 to March 21, 1987.

The Team prepared a progress report based on the field survey, and presented it to the Posts and Telecommunications Corporation, Burma (hereinafter referred to as "the PTC").

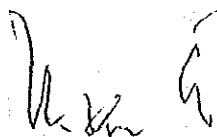
Both parties had a series of discussions on the report and agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Rangoon, March 19, 1987



Mr. Kazuhisa Niwa

Leader
The Basic Design Study Team,
JICA



U Than Tun

Managing Director
The Posts & Telecommunications
Corporation, Burma

ATTACHMENT

1. Objective of the Project

The objective of the Project is to expand and improve toll and local telephone services by means of introduction of automatic exchanges in the ten Townships listed in Annex I.

However, concerning Sandoway and Kyaukpyu Townships, 24 hour electric power supply is a prerequisite. If the prerequisite were not guaranteed, it would be impossible to include the two Townships into the Project.

The PTC said that the 24 hour electric power supply would be available before beginning of the Project, although the Team could not get any note of certification of it.

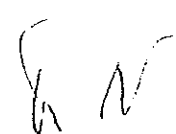
2. Executing organization

The PTC is the executing agency of the Project and shall be responsible for the preparatory and construction works of the Project.

3. Outline of equipment requested

The Team will convey the request of the Government of Burma to the Government of Japan that the latter will take the necessary measures to cooperate by providing the equipment listed in Annex II within the scope of the Japan's Grant Aid Programme.

4. The Burmese side has understood the Japan's Grant Aid System, explained by the Team, which includes a principle of the use of a Japanese Consultant and a Japanese firm for the execution of the Project.



5. The Government of Burma will take the necessary measures as listed in Annex III on condition that the Grant Aid provided by the Government of Japan shall be extended to the Project.
6. The scope of work of the Project is shown in Figure I.
7. For technical cooperation, the Team will convey to the Government of Japan the request of the Government of Burma to be provided with training programme in Japan in the field of digital exchange, transmission and outside plant.

Annex I

LIST OF THE TEN TOWNSHIPS

The ten Townships to be expanded and improved toll and local telephone services are as follows. Serial number indicates the order of priority given by the Burmese side.

1. Myaungmya
2. Minbu
3. Thayetmyo
4. Yenangyaung
5. Tharrawaddy
6. Maubin
7. Thaton
8. Myede
9. Sandoway
10. Kyaukpyu

Exchange area and exchange site of each Township are shown herewith.



Annex II

LIST OF EQUIPMENT REQUESTED BY THE BURMESE GOVERNMENT

1. Automatic exchange facilities
2. Toll transmission facilities
3. Outside plant facilities
4. Power plant
5. Construction machinery

R N

Annex III

NECESSARY MEASURES TO BE TAKEN BY THE BURMESE GOVERNMENT

- (1) To supply electric power to the Project sites.
- (2) To exempt taxes and to take necessary measures for customs clearance and prompt unloading of the materials and equipment brought for the Project at the port of disembarkation in Burma.
- (3) To accord Japanese nationals whose services may be required in connection with supply of the products and services under the verified contract such facilities as may be necessary for their entry into Burma and stay therein for the performance of their work.
- (4) To maintain and use properly and effectively the equipment purchased under the Grant Aid.
- (5) To bear all the expenses other than those to be borne by the Grant Aid necessary for the transportation as well as the installation of the equipment.
- (6) To execute the following works:
 - Construction of buildings, foundations, etc. necessary for the Project.
 - Arrangement of the storage place for outside plant materials, equipment, etc. and transportation of them to the Project sites.
 - Extension of microwave trunk circuits.
 - Procurement of telephone sets required for the Project

FN

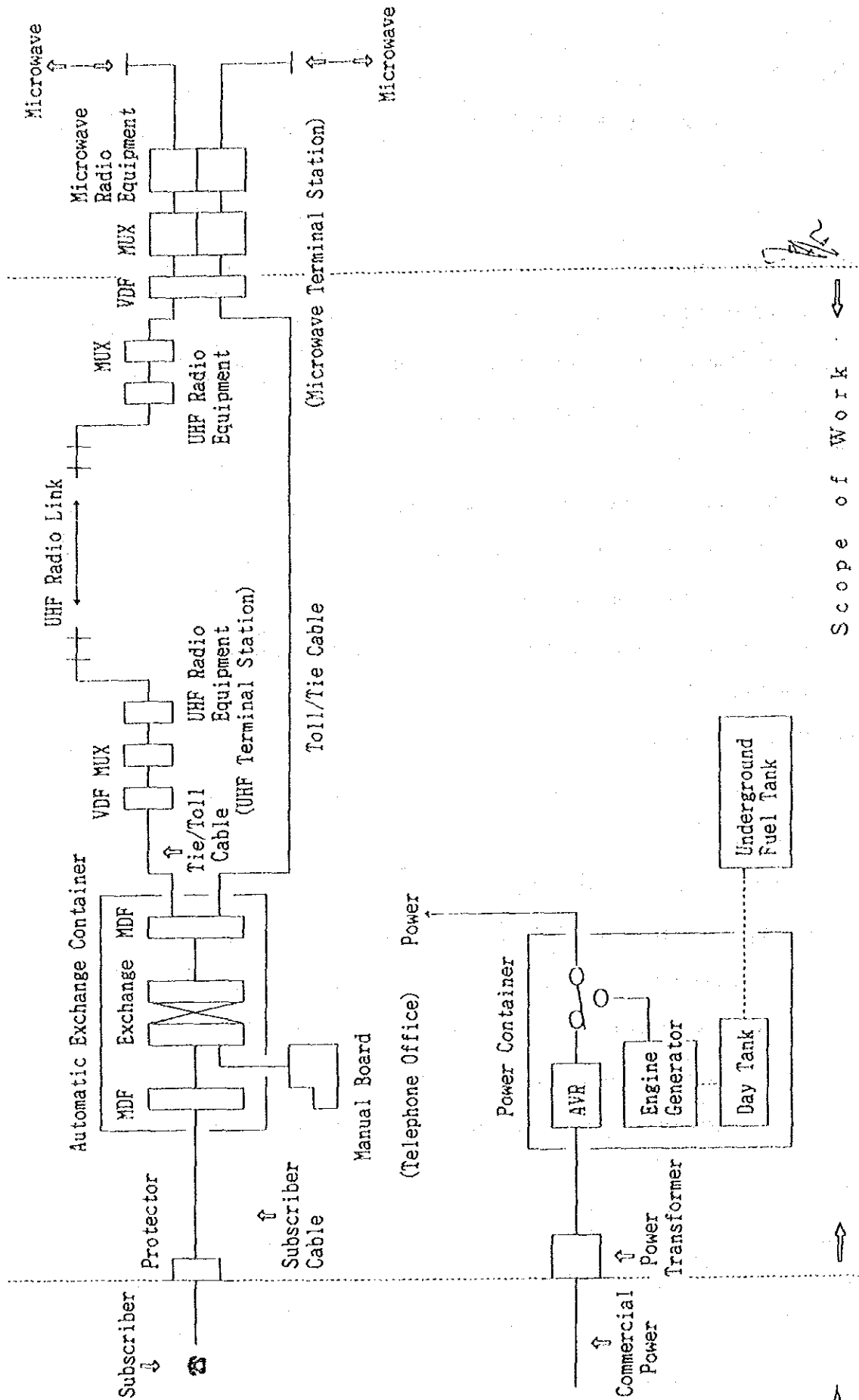


Figure 1. Scope of work in the Project

EXCHANGE AREA AND EXCHANGE SITE OF EACH TOWNSHIP

1. Myaungmya

2. Mianbu

3. Thayetmyo

4. Yenangyaung

5. Tharrawaddy

6. Maubin

7. Thaton

8. Myede

9. Sandoway

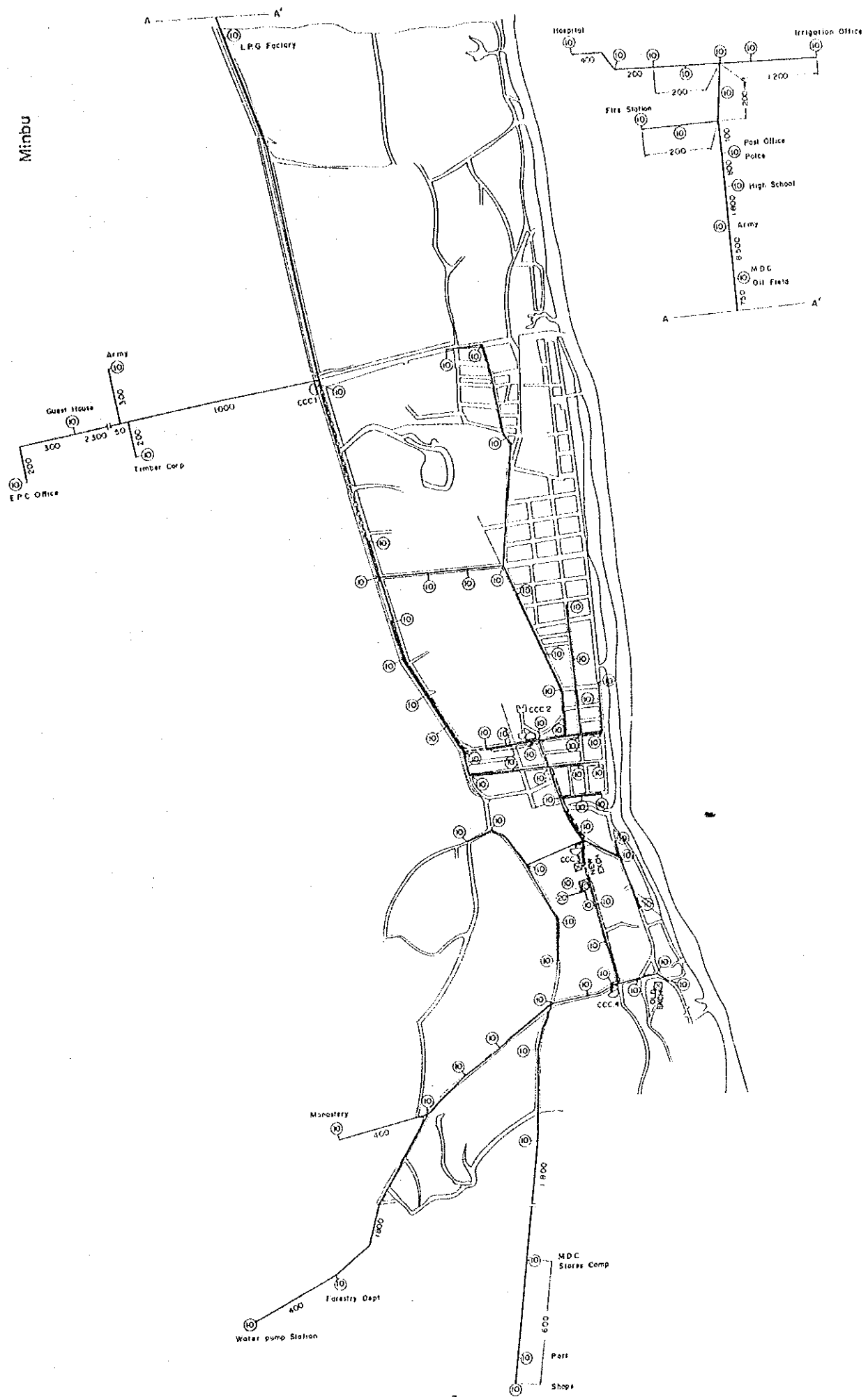
10. Kyaukpyu

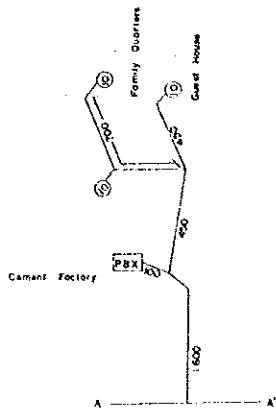
R N

Myaungmya

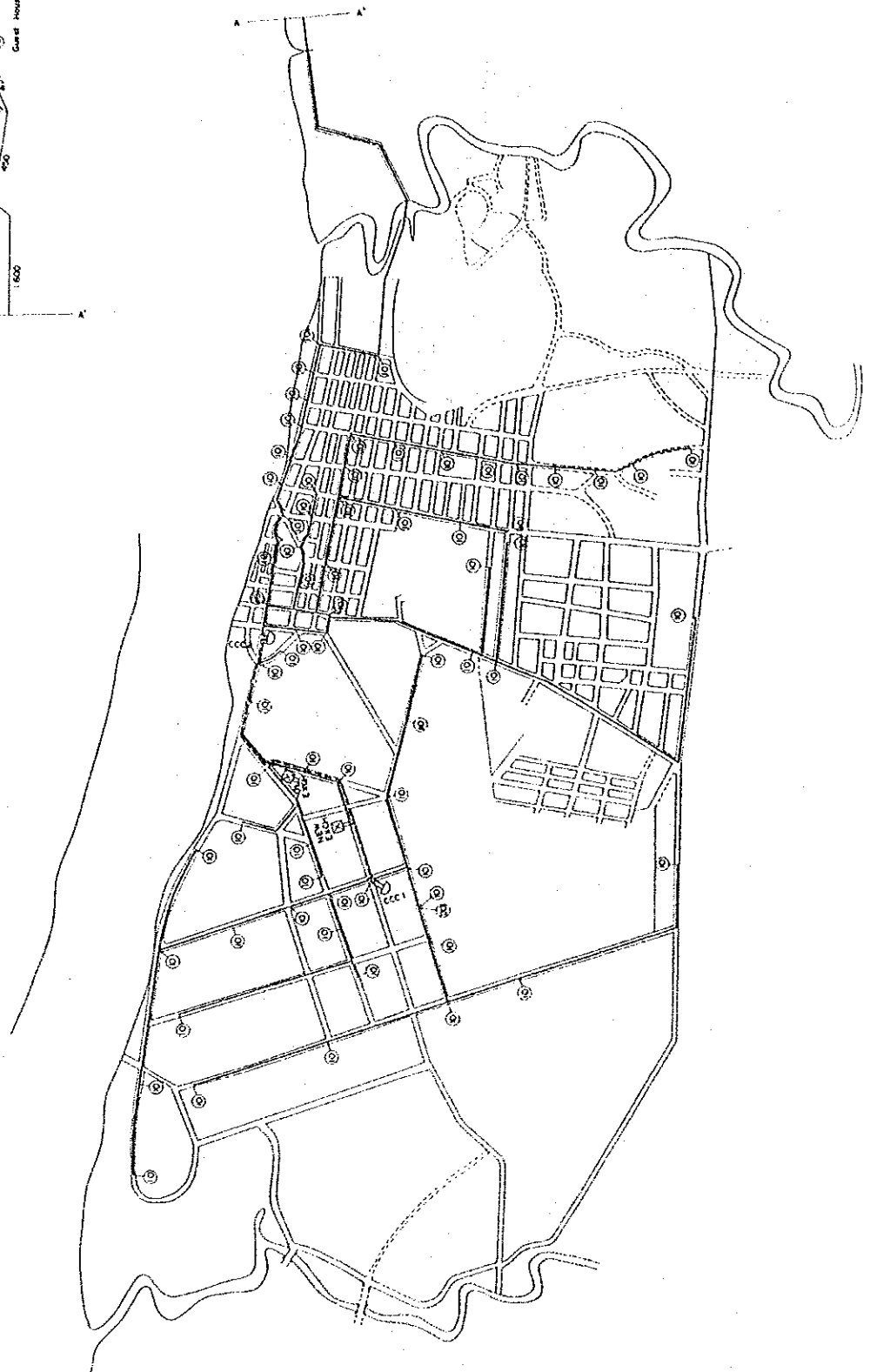


Minbu

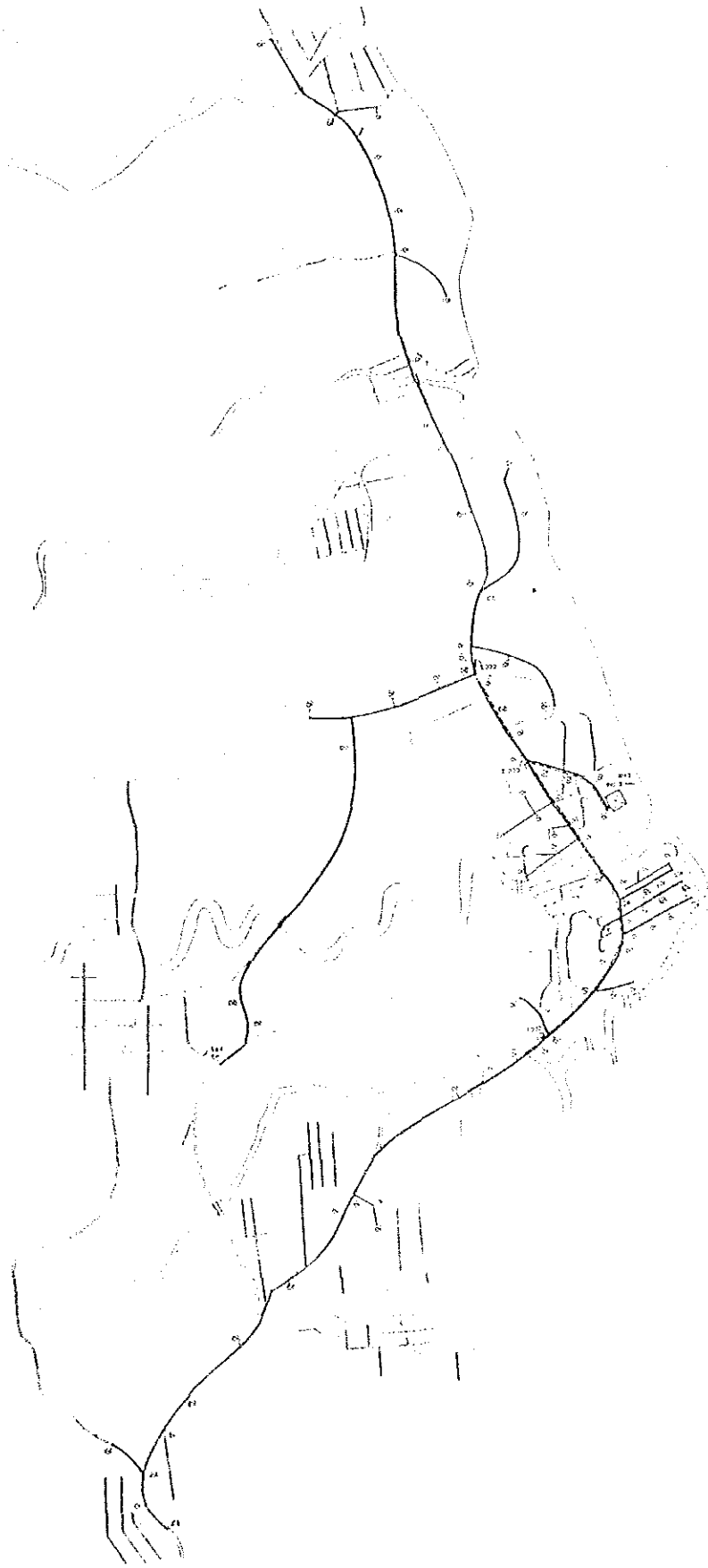


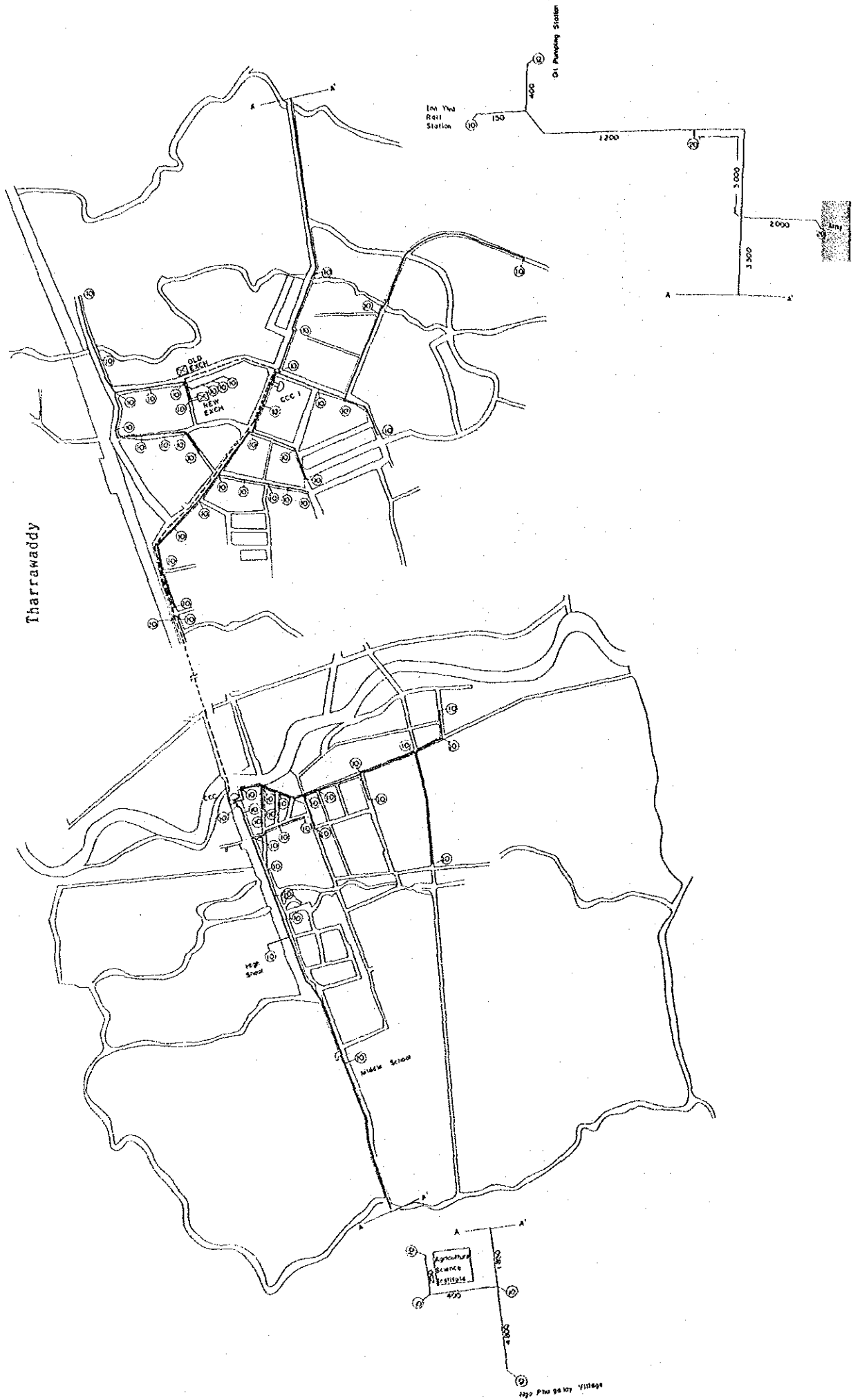


Thayetmyo

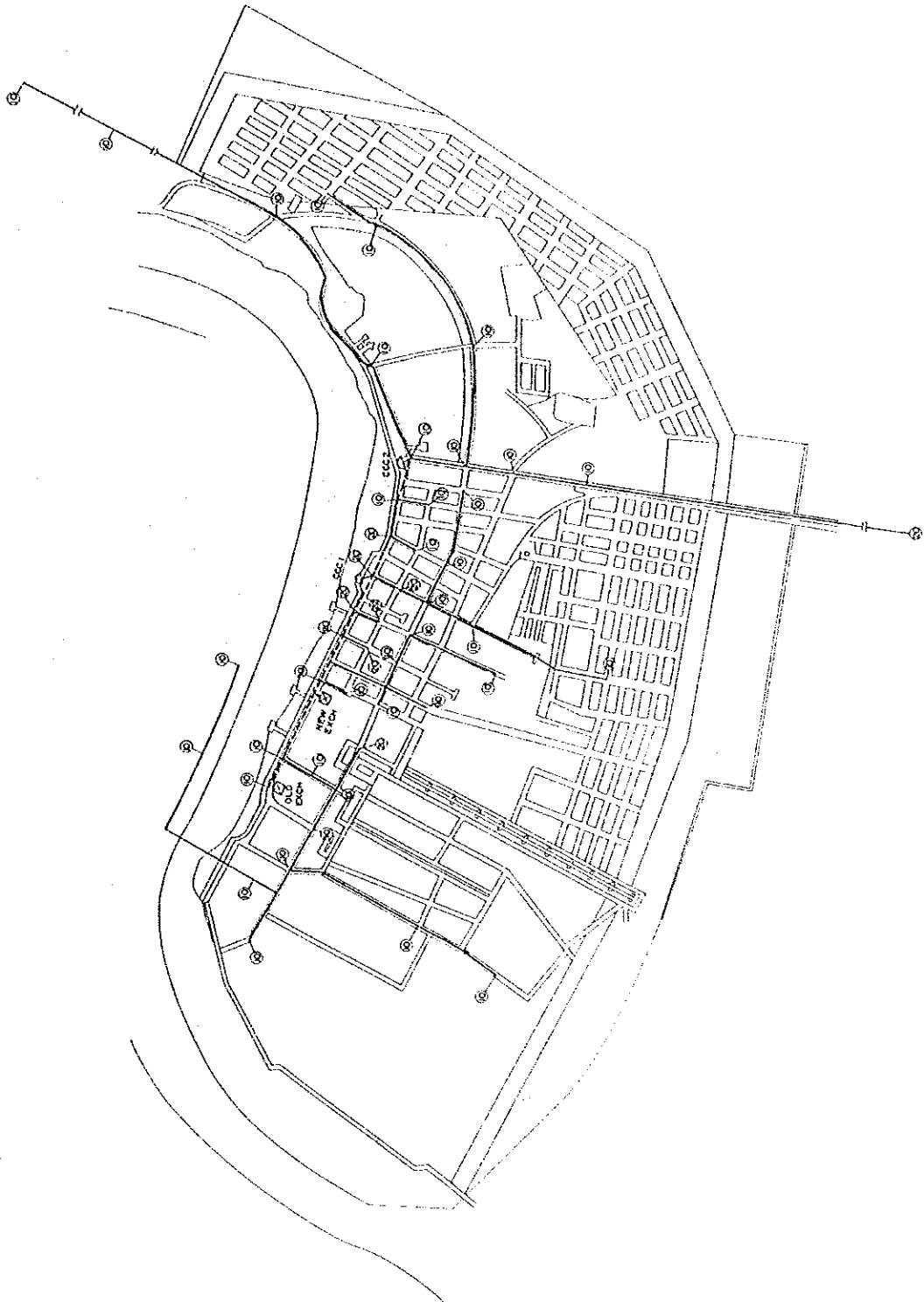


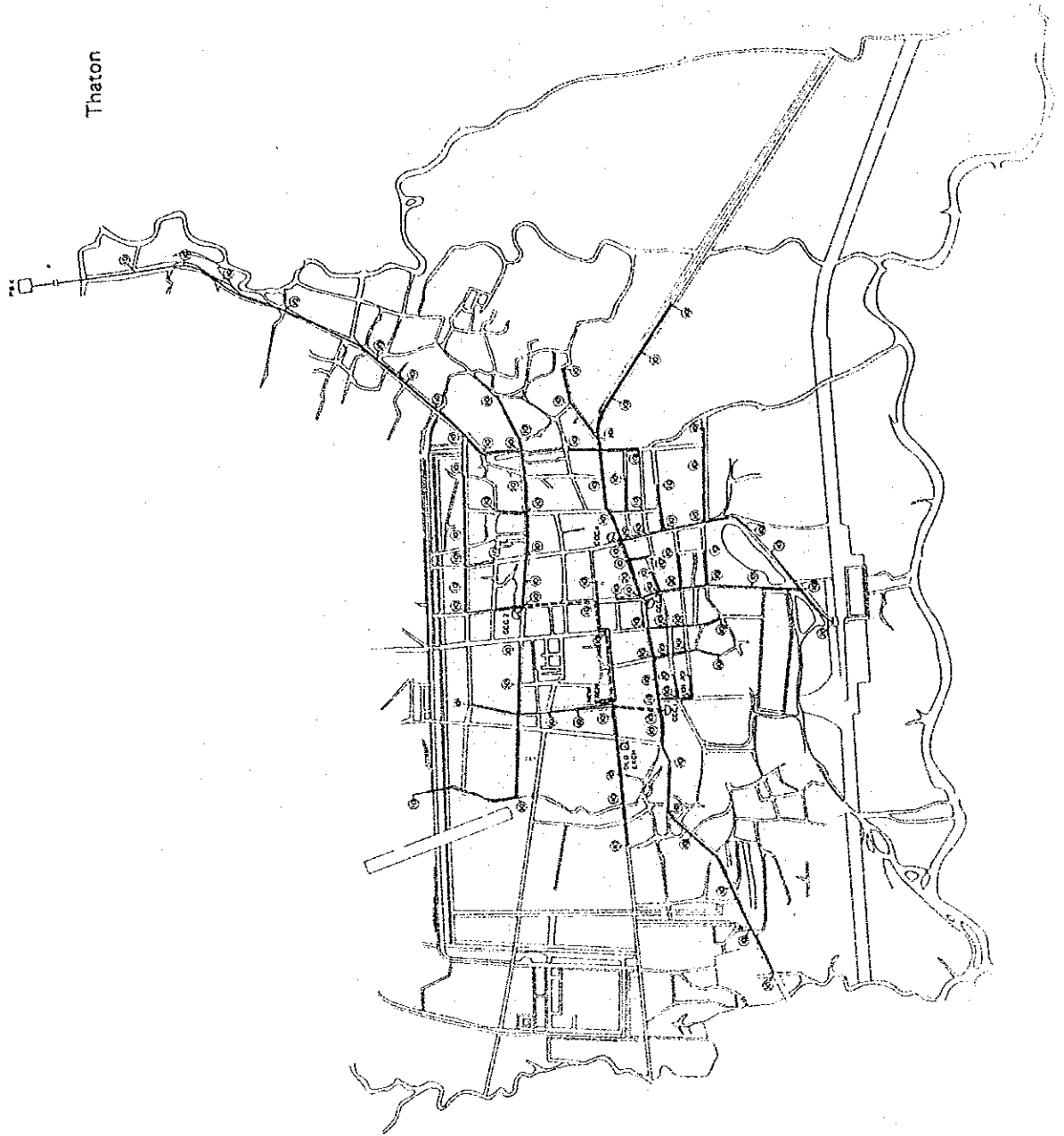
Yenangyaung





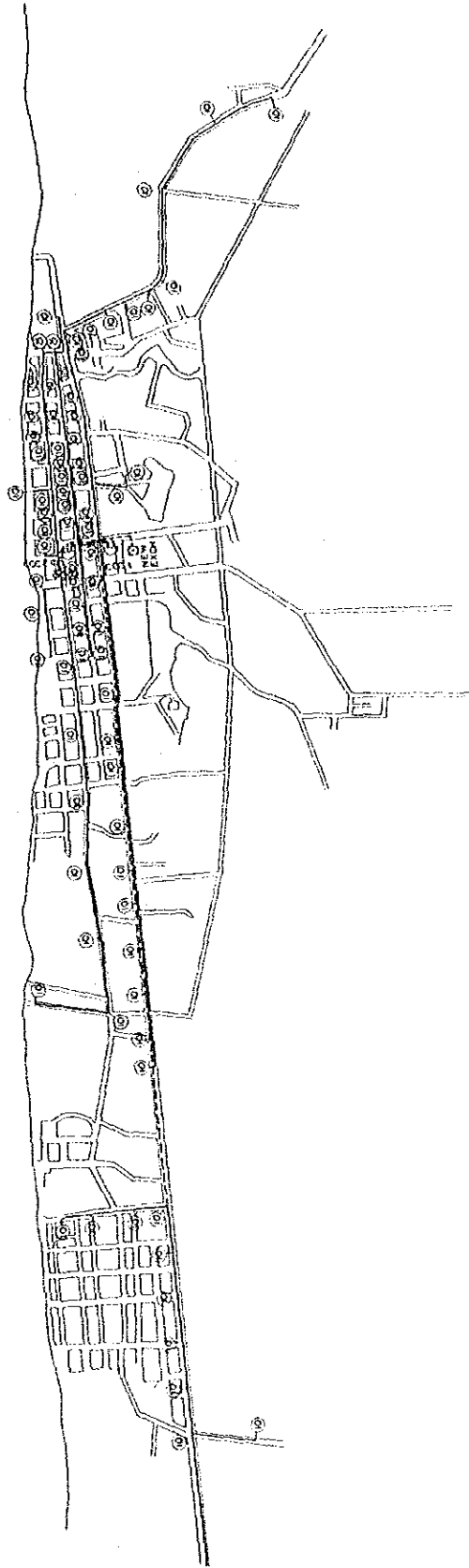
Maubin



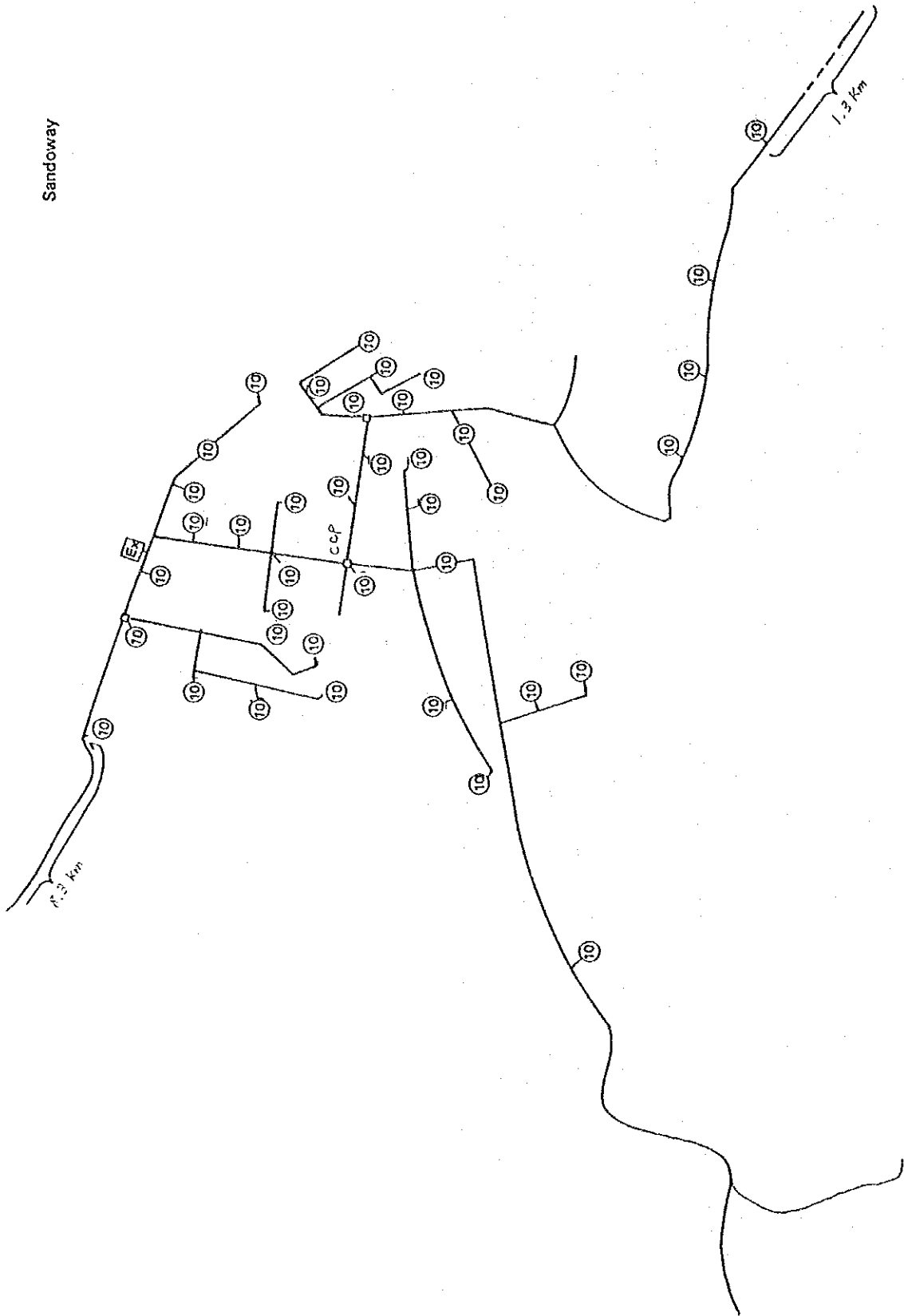


Thaton

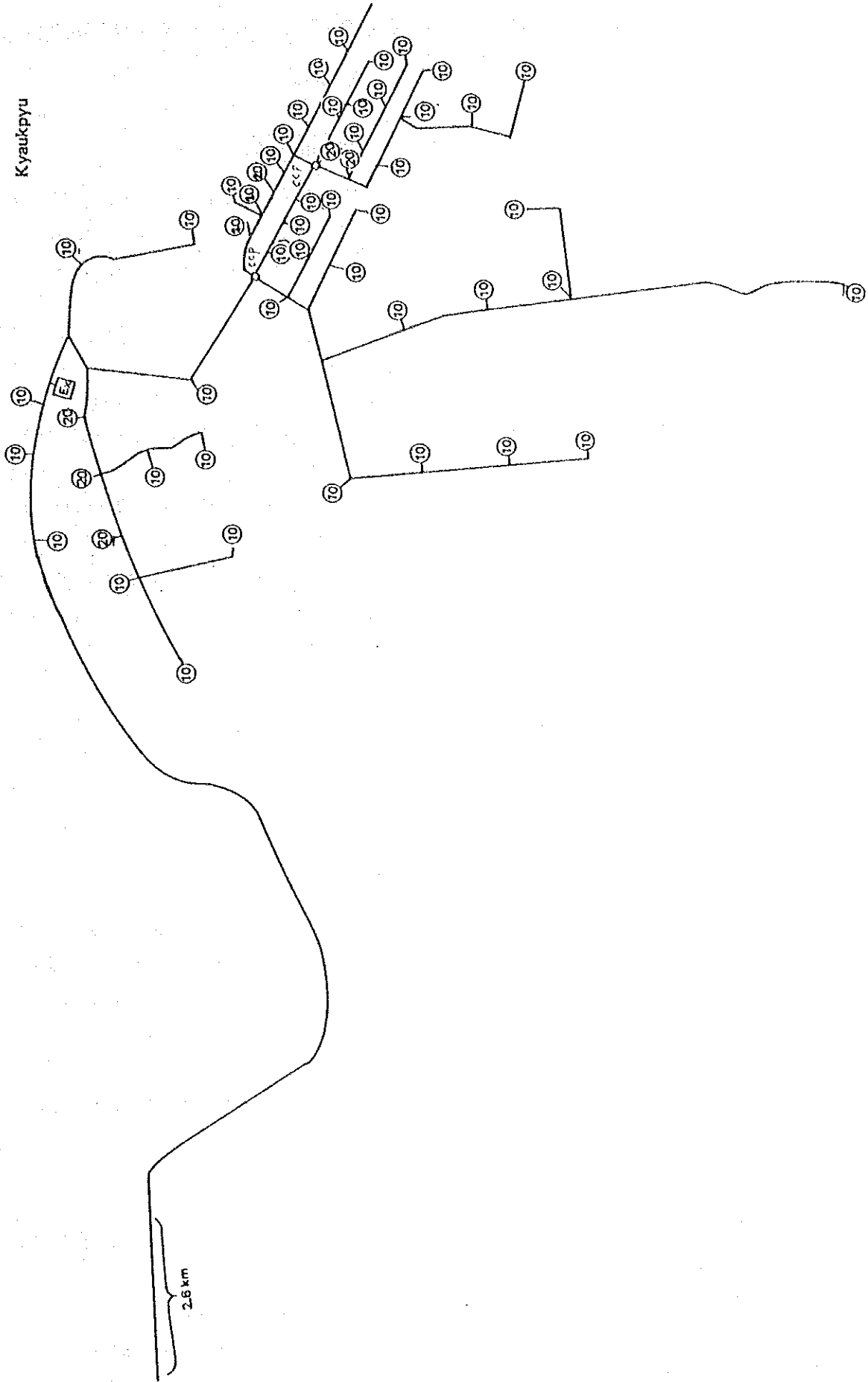
Myede



Sandoway



Кыаукпуу



APPENDIX II MINUTES OF DISCUSSIONS (DRAFT REPORT EXPLANATION)

MINUTES OF DISCUSSIONS
ON
THE PROJECT FOR TELEPHONE NETWORK
DEVELOPMENT IN TEN TOWNSHIPS
IN
THE SOCIALIST REPUBLIC OF THE UNION OF BURMA

In response to the request of the Government of the Socialist Republic of the Union of Burma for Grant Aid for the Project for Telephone Network Development in Ten Townships (hereinafter referred to as "the Project"), the Government of Japan decided to conduct a basic design study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Burma the team headed by Mr. Kazuhisa Niwa, Deputy Director of Land Communications Division, Radio Department, Telecommunications Bureau, the Ministry of Posts and Telecommunications, from February 16 to March 20, 1987.

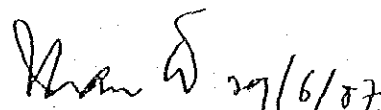
As the result of the study, JICA prepared a draft report and dispatched a draft final report explanation team headed by Mr. Hisakuni Nogami, Deputy Director of Trunk Communications Division, Radio Department, Telecommunications Bureau, the Ministry of Posts and Telecommunications, to explain and discuss it from June 22 to June 29, 1987.

Both parties had a series of discussions on the report and have agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Rangoon, June 29, 1987



Mr. Hisakuni Nogami
Leader, Draft Final Report Explanation
Team of Basic Design Study
Japan International Cooperation Agency



U Than Tun
Managing Director,
Posts and Telecommunications
Corporation, Burma

ATTACHMENT

1. The Burmese side has principally agreed to the basic design proposed in the draft final report with minor but appropriate alterations mutually agreed upon to be incorporated in the Final Report.
2. The name of the Project is altered as follows, as the two Townships, Sandoway and Kyaukpyu, have been excluded from the Project.
Former name : The Project for Telephone Network Development in Ten Townships in The Socialist Republic of the Union of Burma
New name : The Project for Telephone Network Development in Eight Townships in The Socialist Republic of the Union of Burma
3. The Burmese side has understood Japan's Grant Aid System and reconfirmed the measures to be taken by the Burmese side for the realization of the Project as agreed upon in the Minutes of Discussions dated March 19, 1987.
4. The Final Report (10 copies in English) will be submitted to the Burmese side by the end of August, 1987.

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25/6/87

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APPENDIX III MEMBER LIST OF THE TEAM

MEMBER LIST OF THE TEAM (Basic Design Study TEAM)

Duty	Name in Full	Professional Area
Team Leader	Kazuhisa NIWA	Deputy Director of the Land Communications Division, Radio Department, Telecommunications Bureau, Ministry of Posts & Telecommunications
Project Coordinator (Phase 1)	Toshio NAKAMURA	Deputy Head, Second Basic Design Study Division, Grant Aid Planning & Study Department, JICA
Project Coordinator (Phase 2)	Itaru HAMAKAWA	Second Basic Design Study Division, Grant Aid Planning & Study Department, JICA
Project Manager (Telephone Network Planning & Switching Equipment) (Group A)	Yoshio TANJI	NTT International Corporation
Outside Plant (Group A)	Tsutomu HATASE	NTT International Corporation
Transmission Equipment (Group A)	Takaaki MATSUGI	NTT International Corporation
Switching Equipment (Group B)	Kunihiko AGATA	NTT International Corporation
Outside Plant (Group B)	Mitsuo MAKINO	NTT International Corporation
Transmission Equipment (Group B)	Kiyoshi ECHIGO	NTT International Corporation

MEMBER LIST OF THE TEAM (Draft Final Report Explanation Team)

Duty	Name in Full	Professional Area
Team Leader	Hisakuni NAGAMI	Deputy Director of the Trunk Communications Division, Radio Department, Telecommunications Bureau, Ministry of Posts and Telecommunications
Project Coordinator	Minoru EGUNI	Grand Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs
Project Manager (Telephone Network Planning & Switching Equipment)	Yoshio TANII	NTT International Corporation
Outside Plant	Tsunomu HATASE	NTT International Corporation
Transmission Equipment	Takaaki MATSUGI	NTT International Corporation

Itinerary of the Field Survey (1/4)

APPENDIX IV ITINERARY

Date	Officials & Group A	Group B
Feb. 15 (Sun.)	Tokyo to Bangkok (TG-643)	Tokyo to Bangkok (One member only) (TG-643)
Feb. 16 (Mon.)	Bangkok to Rangoon (UB-222)	Bangkok to Rangoon (One member only) (UB-222)
Feb. 17 (Tue.)	<ul style="list-style-type: none"> - Courtesy visits to Japanese Embassy, JICA office and PTC (Note 1) - Courtesy Visits to F. E. R. D (Note 2) 	Tokyo to Bangkok (The Other two members) (JL-717)
Feb. 18 (Wed.)	<ul style="list-style-type: none"> - Consultations with PTC - Courtesy visits to the Ministry of Transports and Communications 	Bangkok to Rangoon (UB-222)
Feb. 19 (Thu.)	- Signature of Minutes of Discussion	- Consultations with PTC
Feb. 20 (Fri.)	<ul style="list-style-type: none"> - Preparations for field surveys - Official members leave from Burma (Two members) (UB-221) 	- Preparations for field surveys
Feb. 21 (Sat.)	<ul style="list-style-type: none"> - Official members arrival in Tokyo (TG-640) - Leave for field survey. - Move from Rangoon to Tharrawaddy by car. - Investigation in Tharrawaddy exchange offices, microwave station and exchange area. 	<ul style="list-style-type: none"> - Leave for field survey. - Move from Rangoon to Maubin by ship. - Investigation in Maubin exchange office, microwave station and exchange area.
Feb. 22 (Sun.)	- Investigation in Tharrawaddy exchange office, microwave station and exchange area.	- Investigation in Maubin exchange Office, microwave station and exchange area.
Feb. 23 (Mon.)	<ul style="list-style-type: none"> - Visit to Tharrawaddy township people's council office. - Investigation in Tharrawaddy exchange office, microwave station and exchange area. 	<ul style="list-style-type: none"> - Visit to Maubin township people's council office. - Visit to EPC office. (Note 3) - Investigation in Maubin exchange office, microwave station and exchange area. - Move from Maubin to Myaungmya by ship.

Itinerary of the Field Survey (2/4)

Date	Officials & Group A	Group B
Feb. 24 (Tue.)	<ul style="list-style-type: none"> • Move from Tharrawaddy to Myede by car. • Investigation in Promé exchange office and microwave station. 	<ul style="list-style-type: none"> • Move from Maubin to Myaungmya by ship. • Investigation in Myaungmya exchange office, microwave station and exchange area.
Feb. 25 (Wed.)	<ul style="list-style-type: none"> • Visit to Myede township people's council office. • Investigation in Myede exchange office, microwave station and exchange area. 	<ul style="list-style-type: none"> • Visit to Myaungmya township people's council office. • Visit to Jute Mill Factory and EPC office. • Investigation in Myaungmya exchange office, microwave station and exchange area.
Feb. 26 (Thu.)	<ul style="list-style-type: none"> • Investigation in Myede exchange office, microwave station and exchange area. 	<ul style="list-style-type: none"> • Investigation in Myaungmya exchange office, microwave station and exchange area. • Move from Myaungmya to Rangoon by ship.
Feb. 27 (Fri.)	<ul style="list-style-type: none"> • Move from Myede to Thayetmyo by car. • Visit to Thayet township people's council office. • Investigation in Thayet exchange office, UHF station and exchange area. 	<ul style="list-style-type: none"> • Move from Myaungmya to Rangoon by ship.
Feb. 28 (Sat.)	<ul style="list-style-type: none"> • Investigation in Thayetmyo exchange office, UHF station and exchange area. 	<ul style="list-style-type: none"> • Move from Rangoon to Sandoway by airplane. • Investigation in Sandoway exchange office and exchange area.
Mar. 1 (Sun.)	<ul style="list-style-type: none"> • Investigation in Tharrawaddy exchange office, UHF station and exchange area. 	<ul style="list-style-type: none"> • Investigation in Sandoway microwave station and exchange area. • Visit to Sandoway New Port and PPFC office. • Visit to Sandoway township people's council office.
Mar. 2 (Mon.)	<ul style="list-style-type: none"> • Arrangement of collected data. 	<ul style="list-style-type: none"> • Investigation in Sandoway exchange office and exchange area. • Visit to EPC office.
Mar. 3 (Tue.)	<ul style="list-style-type: none"> • Move from Thayetmyo to Minbu by car. • Investigation in Minbu exchange office, UHF station and exchange area. 	<ul style="list-style-type: none"> • Arrangement of collected data.

Itinerary of the Field Survey (3/4)

Date	Officials & Group A	Group B
Mar. 4 (Wed.)	<ul style="list-style-type: none"> - Visit to Minbu township people's council office. - Investigation in Minbu exchange office, UHF station and exchange area. 	<ul style="list-style-type: none"> - Move from Sandoway to Kyaukpyu by airplane. - Investigation in Kyaukpyu exchange office, UHF station and exchange area. - Visit to Kyaukpyu township people's council office.
Mar. 5 (Thu.)	<ul style="list-style-type: none"> - Investigation in Minbu exchange area. - Move from Minbu to Magwe by car. - Investigation in Magwe exchange office and microwave station. 	<ul style="list-style-type: none"> - Investigation in Kyaukpyu microwave station and exchange area. - Visit to EPC office, PPFC office and Kyaukpyu Port. (Note 4)
Mar. 6 (Fri.)	<ul style="list-style-type: none"> - Move from Magwe to Yenagyaung by car. - Visit to Yenagyaung township people's council office, microwave station and exchange area. 	<ul style="list-style-type: none"> - Investigation in Kyaukpyu exchange office, UHF station and exchange area.
Mar. 7 (Sat.)	<ul style="list-style-type: none"> - Investigation in Yenagyaung exchange office, microwave station and exchange area. 	<ul style="list-style-type: none"> - Move from Kyaukpyu to Rangoon by airplane.
Mar. 8 (Sun.)	<ul style="list-style-type: none"> - Move from Yenagyaung to Mandalay by car. 	<ul style="list-style-type: none"> - Move from Rangoon to Thaton by car.
Mar. 9 (Mon.)	<ul style="list-style-type: none"> - Investigation in Mandalay toll exchange office and microwave station. - Investigation in Maymyo exchange Office and exchange area. 	<ul style="list-style-type: none"> - Investigation in Thaton exchange office, microwave station and exchange area. - Visit to Thaton township people's council office. - Visit to Thaton Railway Station and EPC office.
Mar. 10 (Tue.)	<ul style="list-style-type: none"> - Investigation Sagaing exchange office and UHF station. - Move from Mandalay to Rangoon by airplane. - Return from Field Survey. 	<ul style="list-style-type: none"> - Investigation in Thanton exchange office and exchange area. - Visit to Thanton Post office.
Mar. 11 (Wed.)	<ul style="list-style-type: none"> - Arrangement of collected data. 	<ul style="list-style-type: none"> - Move from Thanton to Rangoon by car. - Return from field survey.
Mar. 12 (Thu.)	<ul style="list-style-type: none"> - Visit Training Center of PTC. - Investigation at Rangoon toll exchange office and microwave station. - Arrangement of collected data. 	<ul style="list-style-type: none"> - Visit to Training Center. - Investigation at Rangoon toll exchange office and microwave station. - Arrangement of collected data.

Itinerary of the Field Survey (4/4)

Date	Officials & Group A	Group B
Mar. 13 (Fri.)	<ul style="list-style-type: none"> - Progress report making. 	<ul style="list-style-type: none"> - Progress report making.
Mar. 14 (Sat.)	<ul style="list-style-type: none"> - Official members re-enter Burma. - Progress report making. 	<ul style="list-style-type: none"> - Progress report making.
Mar. 15 (Sun.)	<ul style="list-style-type: none"> - Consultations by team members 	<ul style="list-style-type: none"> - Consultations by team members
Mar. 16 (Mon.)	<ul style="list-style-type: none"> - Consultations with Japanese Embassy - Consultations with PTC 	<ul style="list-style-type: none"> - Two members leave Rangoon for Bangkok (TG-305) - Consultations with Japanese Embassy and PTC (One member)
Mar. 17 (Tue.)	<ul style="list-style-type: none"> - Consultations with PTC 	<ul style="list-style-type: none"> - Two members leave Bangkok for Tokyo (TG-740) - Consultations with PTC (One member)
Mar. 18 (Wed.)	<ul style="list-style-type: none"> - Consultations with PTC 	<ul style="list-style-type: none"> - Consultations with PTC (One member)
Mar. 19 (Tue.)	<ul style="list-style-type: none"> - Consultations with PTC - Signature of Minutes of Discussion - Courtesy visit to Japanese Embassy and JICA office. - Courtesy visit to F.S.R.D. and the Ministry of Transports and Communications 	<ul style="list-style-type: none"> - Consultations with PTC (One member)
Mar. 20 (Fri.)	<ul style="list-style-type: none"> Leave Rangoon for Bangkok (UB-221) 	<ul style="list-style-type: none"> Leave Rangoon for Bangkok (One member) (UB-221)
Mar. 21 (Sat.)	<ul style="list-style-type: none"> Leave Bangkok for Tokyo (TG-640) 	<ul style="list-style-type: none"> Leave Bangkok for Tokyo (One member) (TG-640)

(Note 1) → PTC : Posts and Telecommunications Corporation, Burma
 (Note 2) → F.E.R.D. : Foreign Economics Relations Department
 (Note 3) → EPC : Electric Power Corporation
 (Note 4) → PPFC : People's Pearl and Fishery Corporation

Itinerary of the Draft Final Report Explanation

Date	Itinerary
June 21 (Sun.)	Tokyo to Bangkok (TG-643)
June 22 (Mon.)	Bangkok to Rangoon (TG-305)
June 23 (Tue.)	<ul style="list-style-type: none"> • Courtesy visits to Japanese Embassy and JICA office • Courtesy visits to F. E. R. D. • Consultations with PTC
June 24 (Wed.)	<ul style="list-style-type: none"> • Courtesy visits to the Ministry of Transports and Communications • Consultations with PTC
June 25 (Thu.)	<ul style="list-style-type: none"> • Courtesy visits to Mr. Otaka (Japanese Ambassador) • Consultations with PTC
June 26 (Fri.)	<ul style="list-style-type: none"> • Consultations with PTC • Consultations with F. E. R. D.
June 27 (Sat.)	• Consultations with PTC
June 28 (Sun.)	• Consultations with PTC
June 29 (Mon.)	<ul style="list-style-type: none"> • Signature of Minutes of Discussion Leave Rangoon for Bangkok (TG-306)
June 30 (Tue.)	Leave Bangkok for Tokyo (TG-740)

APPENDIX V LIST OF PERSONS INTERVIEWED

1. Embassy of Japan in Burma

Mr. Hiroshi Ōlaka	Ambassador
Mr. Hiromu Nitta	Councillor and Deputy chief of mission
Mr. Haruhiko Kikugawa	Secretary
Mr. Toshihiko Matsuura	Secretary
Mr. Hiroyuki Kamenō	Attache

2. JICA Office in Burma

Mr. Tadashi Shinoura	Resident Representative (predecessor)
Mr. Tateo Fujimura	Resident Representative (successor)
Mr. Yuusuke Kitamura	Staff

3. Posts & Telecommunications Corporation, Burma; PTC

U Than Tun	Managing Director
Lt. Cdr. Khin Maung Myint	Deputy General Manager / Administration
Major Hla Zin	Deputy General Manager / Planning & Training
U Soe Tha	Superintendent Engineer / Telephone
U Myint Win	Superintendent Engineer / Long Distance
Major Thein Aung	Principal, Telecommunications and Postal Training Center
Daw Tin Tin Hlwe	Chief Accountant
Major Mya Than	Chief Controller of Store
U Ye Win	Deputy Superintendent Engineer / Telephone

(Counterpart in Group A)

U Tha Oo	Chief of Counterpart
U Sai Kham Hla	Communication Engineer (Grade I) / Switching
U MYO Myint Aung	Communication Engineer (Grade III) / Outside Plant
	Communication Engineer (Grade III) / Transmission

(Counterpart in Group B)

U Sai Soe Myint	Chief of Counterpart in Group B
U Kyi Myo Lwin	Communication Engineer (Grade II) / Outside Plant
U Myint Thein Tun	Communication Engineer (Grade III) / Switching
	Communication Engineer (Grade III) / Transmission

(Key Persons Concerned with PTC in 10 Townships)

U Min Ohn Wain	Communication Engineer (Grade II), Pegu Division
U Ye Myint	Manager, Magwe Division
Major Ba Win	Manager, Mandalay Division
U Chit Than	Communication Engineer (Grade II), Magwe Division
U Tun Tha	Manager, Arakan Division
U Aung Than	Communication Engineer (Grade II), Arakan State
U Thwin Lin	Manager, Mon State

4. F. E. R. D. (Foreign Economics Relations department)
(Belonging to Ministry of Planning and Finance)

U Soe Thwin	Director General
U Myint Aung	Director
U Antl Kyaw	Deputy Director
U Than Myint	Assistant Director
U Satt Hmung	Adviser

5. Ministry of Transport and Communications

U Tin Tun	Vice Minister
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6. Key Persons with Whom The Study Team Met in 10 Townships

Lt. Col. Sein Tin	Chairman, Tharrawaddy Township People's Council
Major Aung Thaw Oo	Chairman, Myede Township People's Council
U Maung Mye	Chairman, Thayetmyo Township People's Council
U San Hla Maung	Member, Minbu Township People's Council
Major Nyunt Win Maung Dway	Chairman, Yenangyaung Township People's Council
U Kyi Than	Chairman, Maubin Township People's Council
U Chit Sein	Asst. Engineer, EPC (Electric Power Corp.), Maubin
U Nyein	Chairman, Burma Socialistic Program Party, Myaungmya
Major Ayeko	Chairman, Myaungmya Township People's Council
Lt. Col. M. Awheel	Manager, Jute Mill Factory, Myaungmya
U Saw Thwe Htoo	Chief, EPC, Myaungmya
U Ko Lay	Chairman, Burma Socialistic Program Party, Sandoway
U Hla Win	Chairman, Sandoway Township People's Council
U Aung Gyi	Chief, Post Office, Sandoway
U Tun Wai	Chief, PFFC (People's Pearl & Fishery Corp.), Sandoway
U Chan Aye	Engineer, EPC, Sandoway
U Sankyaw Suwe	Chairman, Burma Socialistic Program Party, Kyaupyu
U Tun Aung	Chairman, Kyaupyu Township People's Council
U Maung Ohu	Inspetor, Land Record, Kyaupyu
U Tun Tin	Chief, EPC, Kyaupyu
U Chu San	Marine Superintendent, PFFC, Kyaupyu
U Saw Hla	Port Officer, Port Office, Kyaupyu
Captain Mya Maung	Secretary, Thaton Township People's Council
U Maing Maung Myint	Engineer, EPC, Thaton
U Kyaw Thein	Superintendent, Railway Station, Thaton

APPENDIX VI LIST OF RECEIVED DATA AND INFORMATION

1. Map

- (1) National Map
- (2) Map of RANGOON
- (3) Map of THARRAWADDY
- (4) Map of MYEDE
- (5) Map of THAYETMYO
- (6) Map of MINBU
- (7) Map of YENANGYAUNG
- (8) Map of MAUBIN
- (9) Map of MYAUNGMYA
- (10) Map of SANDOWAY
- (11) Map of KYAUPYU
- (12) Map of THATON

2. Field Survey Sheet

- (1) Survey Sheet in THARRAWADDY
- (2) Survey Sheet in MYEDE
- (3) Survey Sheet in THAYETMYO
- (4) Survey Sheet in MINBU
- (5) Survey Sheet in YENANGYAUNG
- (6) Survey Sheet in MAUBIN
- (7) Survey Sheet in MYAUNGMYA
- (8) Survey Sheet in SANDOWAY
- (9) Survey Sheet in KYAUPYU
- (10) Survey Sheet in THATON

3. Answers to Questionnaire of The Project

- (1) Monthly Meteorological Data
- (2) Unit Cost of Transport
- (3) Materials Regarding Fifth 4 year plan
- (4) Third Telecommunications Development Plan
- (5) Telecommunications Common Carrier Organizational Map
- (6) PTC Financial Condition
- (7) Nationwide Telephone Exchange Distribution Map
- (8) Toll Transmission System Route Map
- (9) Telephone Tariff
- (10) Schedule of Provisions and Conditions
- (11) Equipment Layout Plan of The Old Exchanges (10 Township)
- (12) Tentative Layout Plan of The New Exchanges (10 Township)
- (13) Statistical Data Showing Facilities and Maintenance Conditions
- (14) Trunking Diagrams of The Old Exchanges (10 Township)
- (15) Traffic Data (10 Township)
- (16) Construction Standard Practice Related Data
- (17) Communication System Diagrams and Power System Diagrams (for Transmission)
- (18) Existing Equipment Names (Quantity, Capacity, Type and Manufacture)
- (19) List of PBXs
- (20) Radio Frequency Channel Allocation
- (21) Equipment Layout Plan of Microwave Repeater Stations and UHF Stations
- (22) Drawings of Towers and Antennas
- (23) Number of Circuits by Destinations

- (24) Coverage Areas of The Project
- (25) Training of Personnel to Handle The Telecommunications Equipment
- (26) Back-up Service after The Warranty Period
- (27) Special Number Service
- (28) Application Standards to Design Outside Plant
- (29) Order of Priority for 10 Township

4. Telecommunications Data and Information

- (1) Posts and Telecommunications Corporation Organization
- (2) Posts and Telecommunications Corporation Summary of The System Basic Data, 3.12.'86
- (3) Income Statement for The Year Ending, 31.3.'86
- (4) Training Programme for PTC
- (5) Knowledge of Computer for PTC
- (6) Tariff Collection Ratio (1985 / 1986)
- (7) International Telephone Rates from Burma
- (8) Second Telecommunications Project Tariffs Summary in Kyats
- (9) Burma Telephone Directory' 1986
- (10) Feasibility Study Report of Transmission Department Project in Burma, Burma Posts and Telecommunications Corporation, March 1985

5. Construction Cost Estimation Data

- (1) Document for Cost Estimation
- (2) Maximum Loading in Ground

6. Economic Data

- (1) Selected Monthly Economic Indications, Statistical Paper No. 3, December 1986
- (2) Report to The PYITHU HLUTTAW on The Financial, Economic and Social Conditions of The Socialist Republic of The Union of Burma for 1986/87, Ministry of Planning and Finance, 1986
- (3) BURMA'S Currency and Credit
- (4) Financial and Economic Annual of Burma
- (5) The New Economic and Social Board

7. General

- (1) Socialist Republic of The Union of Burma State Economic Organization, Ministry of Trade
- (2) Upper Burma RULINGS 1897 - 1901
- (3) The Lower Burma Land Revenue Manual, 1938
- (4) Sandoway District, volume A, 1962
- (5) Thrawaddy District, volume A

APPENDIX VII FINANCIAL DATA OF PTC

PCSTS AND TELECOMMUNICATIONS CORPORATION (PTC)

BALANCE SHEETS
Kyats in million

Fiscal Year ending 31st March	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Particulars								
Current Asset	79.7	82.1	101.6	125.9	140.6	167.1	159.7	182.7
Fixed Assets								
Gross fixed assets	345.4	438.3	470.4	492.7	609.5	709.0	824.5	937.8
TOTAL ASSETS	425.1	520.4	572.0	618.6	750.1	876.1	984.2	1120.5
Current Liabilities	21.2	32.0	32.6	27.7	32.6	29.7	27.2	41.5
Long term debit	243.2	329.0	367.3	379.7	451.5	509.8	568.8	622.5
Provision for state contribution	0.9	-	3.8	14.2	15.5	23.3	14.3	11.4
Provision for bad debit	-	-	-	-	-	2.5	0.5	1.1
Provision for development fund	-	-	-	-	7.4	11.4	-	-
TOTAL LIABILITIES	265.3	361.0	403.7	421.6	507.0	576.7	610.8	676.5
Equity								
State fund	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
Grant	13.8	13.8	13.8	13.8	13.8	13.8	13.8	30.0
Retained earnings	68.9	68.5	77.4	106.1	152.2	208.5	282.5	336.9
TOTAL LIABILITIES & EQUITY	425.1	520.4	572.0	618.6	750.1	876.1	984.2	1120.5

POSTS AND TELECOMMUNICATIONS CORPORATION (PTC)

INCOME STATEMENT

Kyats in million

Fiscal Year ending 31st March	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Particulars								
Gross Sales Revenues	67.6	77.6	107.4	149.5	187.0	211.1	220.9	244.8
Commodity Tax	-	-	-	-	-	-	-	-
Net Sales Revenues. (A)	67.6	77.6	107.4	149.5	187.0	211.1	220.9	244.8
Costs and Expenses (B)	<u>51.6</u>	<u>60.7</u>	<u>72.5</u>	<u>81.1</u>	<u>88.2</u>	<u>90.4</u>	<u>97.8</u>	<u>122.5</u>
Administrative Expenses	9.8	10.5	11.0	13.3	14.0	13.9	16.1	18.2
Depreciation	8.3	10.7	26.3	27.1	28.1	28.8	32.5	60.9
Operating Expenses	33.5	39.5	35.2	40.7	46.1	47.7	49.2	53.4
Inventory Adjustment(C)	-	-	-	-	-	-	-	-
Operating Profit (D= A-B-C)	16.0	16.9	34.9	68.4	98.8	120.7	123.1	122.3
Non-Operating Revenues	0.2	0.7	0.4	0.6	0.4	0.6	1.3	1.9
Non-Operating Expenses	<u>6.5</u>	<u>17.2</u>	<u>22.6</u>	<u>26.6</u>	<u>25.5</u>	<u>32.1</u>	<u>33.0</u>	<u>41.6</u>
Interest Expense	6.1	16.8	22.1	26.4	25.1	29.2	32.6	36.6
Other Expenses	0.4	0.4	0.5	0.2	0.4	2.9	0.4	5.0
Profit Before Contribution	9.7	0.4	12.7	42.4	73.7	89.2	91.4	82.6
Provision for Development Fund	-	-	-	-	7.4	6.2	-	-
Contribution to the State	1.9	0.1	3.8	12.7	19.9	26.8	27.4	24.8
Net Profit after contribution	7.8	0.3	8.9	29.7	46.4	56.2	64.0	57.8

POSTS AND TELECOMMUNICATIONS CORPORATION (PTC)

CASH FLOW STATEMENT

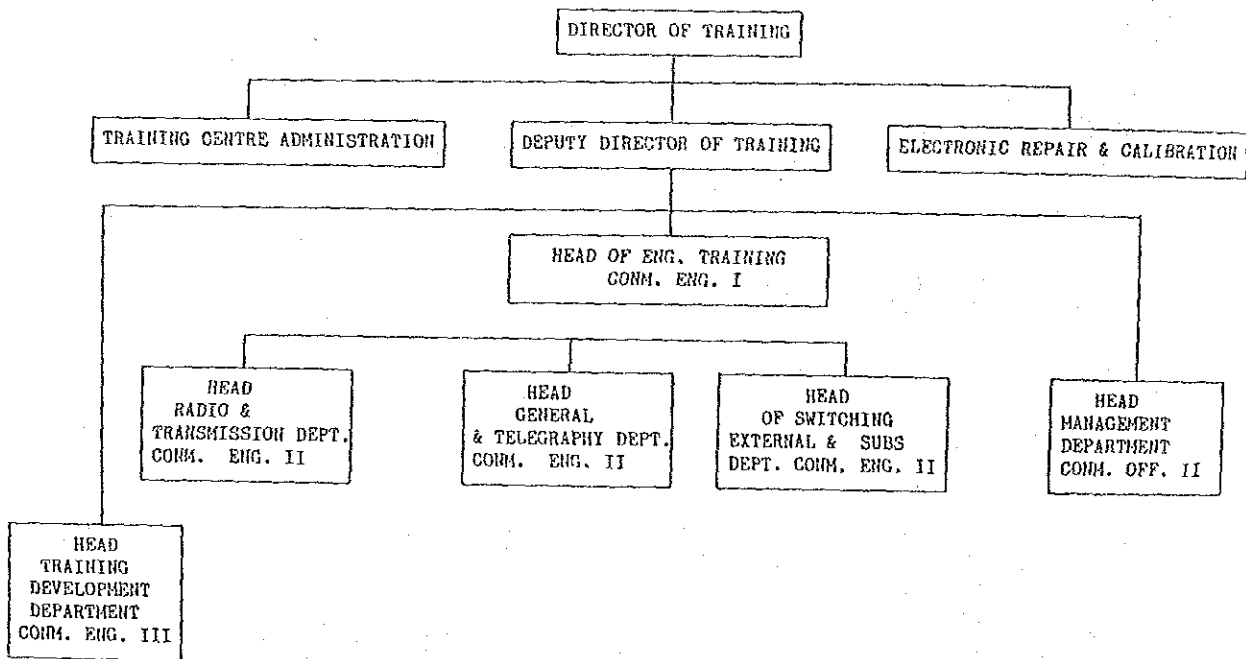
Kyats in million

Fiscal Year ending 31st March	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
Particulars								
Cash Generation (A)								
Net profit after contribution	7.8	0.3	9.0	29.7	46.4	62.4	64.0	57.8
Add Back								
Depreciation	8.2	10.7	26.3	27.1	28.0	28.8	32.4	50.9
Interest Expenditure	6.5	16.7	22.1	26.4	25.1	29.2	32.6	36.6
Others	-	-	-	-	-	-	-	-
Equity Injection (B)								
(Including adjustment on retained earnings)	-0.1	-0.8	-	-1.1	-0.2	-6.1	10.0	12.9
State fund								
Grant								
Long Term Borrowing (C)	116.8	96.0	47.6	43.4	142.2	129.7	114.2	131.4
(By lending Agency)								
Subscriber Deposit	0.8	1.2	0.6	0.2	1.0	0.6	9.2	2.5
Total Source of Funds (D+A+B+C)	140.0	124.1	105.6	126.4	242.5	244.6	262.4	292.1
Capital Investment (E)	146.6	103.5	58.4	49.4	144.8	128.3	147.9	164.2
Debit Services (F)								
Repayment of Loan	10.8	12.2	6.2	21.4	62.8	57.7	86.8	82.6
Interest Expenses	6.5	16.8	22.1	26.4	25.1	29.2	32.6	36.5
Change in Working Capital	-23.9	-8.4	18.9	29.2	9.8	29.4	-4.9	8.7
TOTAL APPLICATION OF FUNDS	140.0	124.1	105.6	126.4	242.5	244.6	262.4	292.1
(E + F)								

APPENDIX VIII DATA OF TELECOMMUNICATIONS AND POSTAL TRAINING CENTRE

Training Arrangement for Engineers and Technicians of Telecommunications and Postal Training Centre

Project	Investment (US Dollars)	Trainees
Phase I (1977-1980)	1,572,827	599
Phase II (1980-1985)	4,217,225	3,272
Phase III(1986-1989)	1,928,919	2,452
Total	7,718,971	6,323



Organization Structure of Telecommunications and Postal Training Centre

Training Course and Number of Trainees

(Phase I)

No.	Course Title	No. of Trainees	Passed	Failed
1.	Postal Wing	24	24	--
2.	Radio Transmission Wing	118	111	7
3.	Outside Plant Wing	233	230	3
4.	Telex and Telegraph Wing	47	47	--
5.	Switching Wing	93	93	--
6.	Supervisory and Junior Management Course Conducted by P. T. C. Head Quarters.	94	94	--
	T o t a l	609	599	10

(Phase II)

No.	Course Title	No. of Trainees	Passed	Failed
1.	Telex	573	573	--
2.	Radio, TV and Transmission	169	164	5
3.	Switching	190	188	2
4.	General	311	310	1
5.	Outside Plant	390	390	--
6.	Postal	166	166	--
7.	AD-HOC	958	958	--
	T o t a l	2757	2749	8

1987/88 Training Program (1/2)

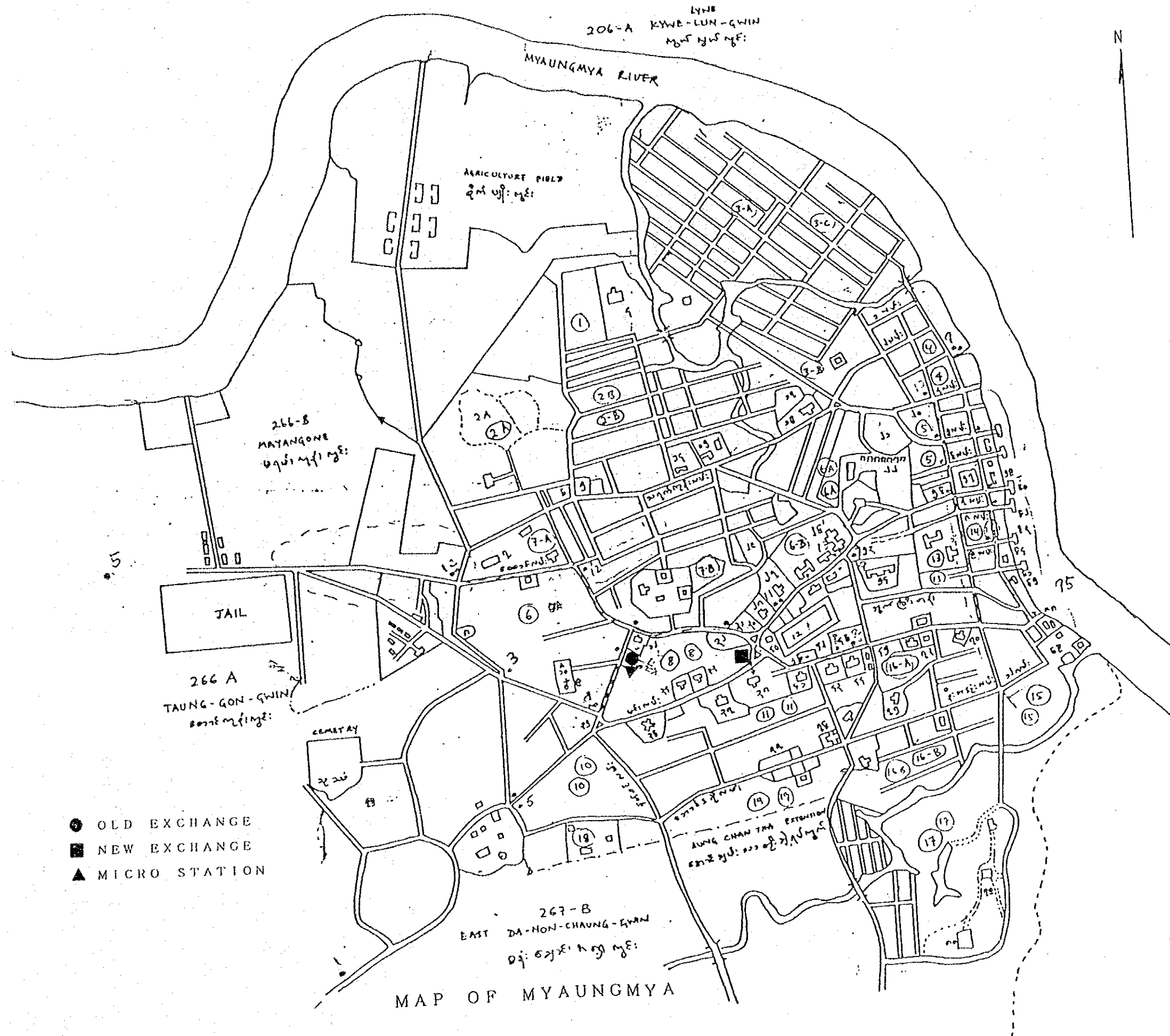
Course Title	No. of Courses	Maximum Trainees	Training Period
		No.	Weeks
<u>GENERAL</u>			
1. Basic Electronic (Modified)	2	30	4
2. Basic Electronic (B.Sc (Phy.))	2	20	6
3. Basic Electronic	2	20	10
4. Analogue Electronic	1	10	8
5. Basic Digital Electronic	3	16	6
6. 8085 Microprocessor	1	10	7
7. 6800 Microprocessor	1	10	6
8. Z-80 Microprocessor	1	10	6
9. Basic Language Programming Course	1	10	4
10. Personal Computer Application & Management Course	2	9	3
<u>RADIO & TRANSMISSION</u>			
1. Basic Radio	1	10	5
2. Fujitsu Microwave Radio	1	10	5
3. Fujitsu Multiplex	1	10	4
4. Basic Transmission	1	20	5
5. Basic PCM	3	15	3
6. HF (S.S.B.)	1	10	4
7. Line Carrier System (Gold Star)	1	10	5
<u>SWITCHING</u>			
1. C-400/460 Crossbar System	1	16	16
2. TMX-10 Engineering Course	1	8	4
3. TMX-10 Operation & Maintenance	1	8	8
4. NEAX-61 Digital Switching System	1	8	16
5. Subscriber Apparatus	1	10	4

1987/88 Training Program (2/2)

Course Title	No. of Courses	Maximum Trainees	Training Period
		No.	Weeks
<u>TELEGRAPH</u>			
1. Basic Telegraph Course	2	8	3
2. Shinko Teleprinter S-50J Maintenance Course	2	8	6
<u>EXTERNAL PLANT</u>			
1. Cable Installer Course	4	20	4
2. Cable Maintenance Course	2	12	5
<u>POSTAL</u>			
1. Postal Supervisors Course	1	12	6
2. Postal Officers Course	2	10	8
3. I.P.O Course	1	8	4
<u>AD-HOC</u>			
1. Introduction to PTC Course	4	20	4
2. Engine Control Cubical Course	1	10	4
3. Basic Radio Course (Modified)	1	15	4
4. Basic Transmission (Modified)	1	15	4
5. Shinko Teleprinter S-50J Maintenance Course (Modified)	1	8	4
6. Telex Operator Course	2	10	1
7. Telegraph Traffic Operation & Supervisory Course	2	16	6
8. Introduction to Computer Course	1	20	4
9. Introduction to Data Processing Course	1	20	12
10. COBOL Programming Course	1	20	16
11. Vocational Training Course (GTI)	1	30	4
12. Vocational Training Course (RIT)	1	18	7

APPENDIX IX MAPS OF THE TEN TOWNSHIPS

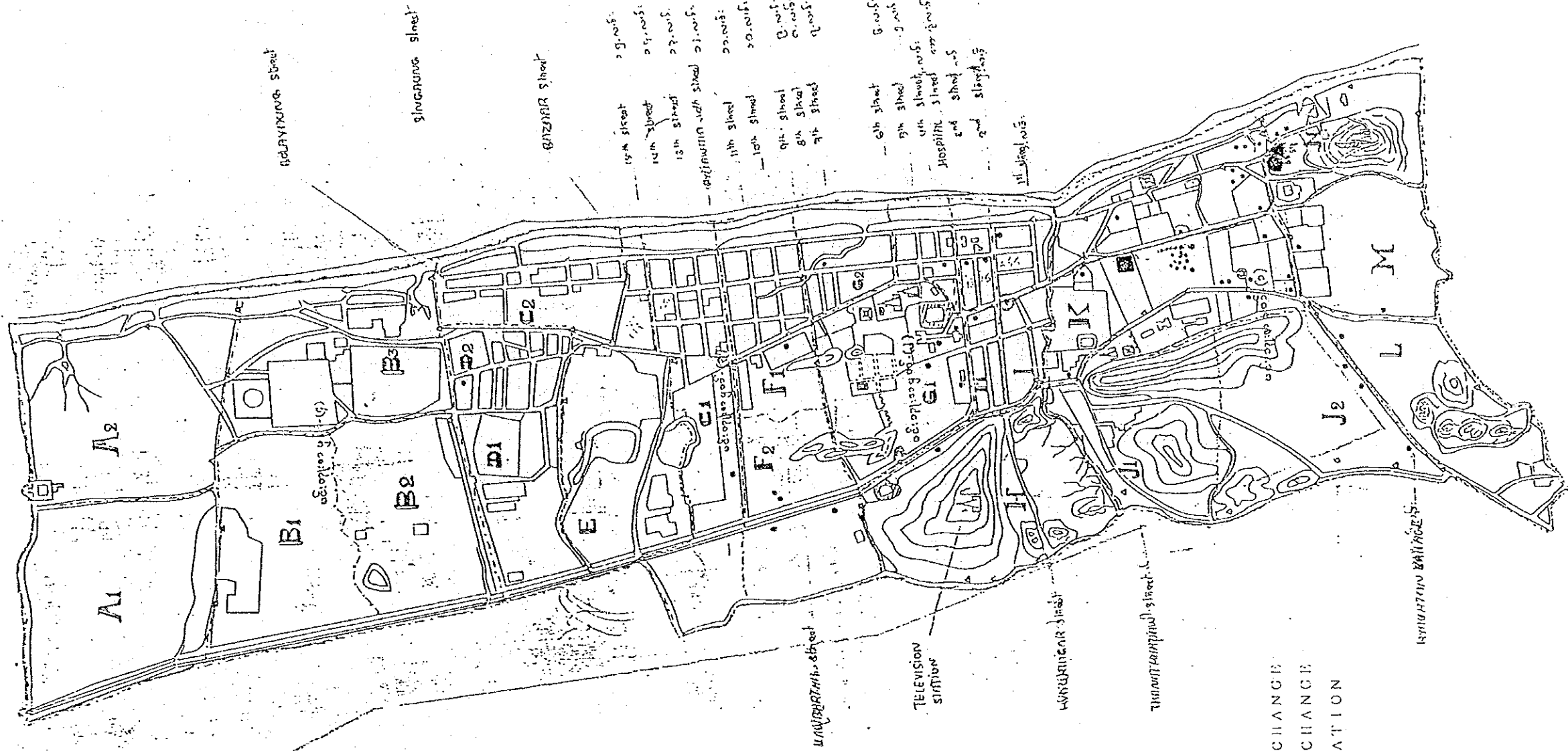
MYAUNGMYA
IRAWADDY DIVISION



မြောက် (North)

၆၀၀၆

မိူၼ်ဃုၼ်
မိူၼ်ဃုၼ်
မိူၼ်ဃုၼ်
မိူၼ်ဃုၼ်



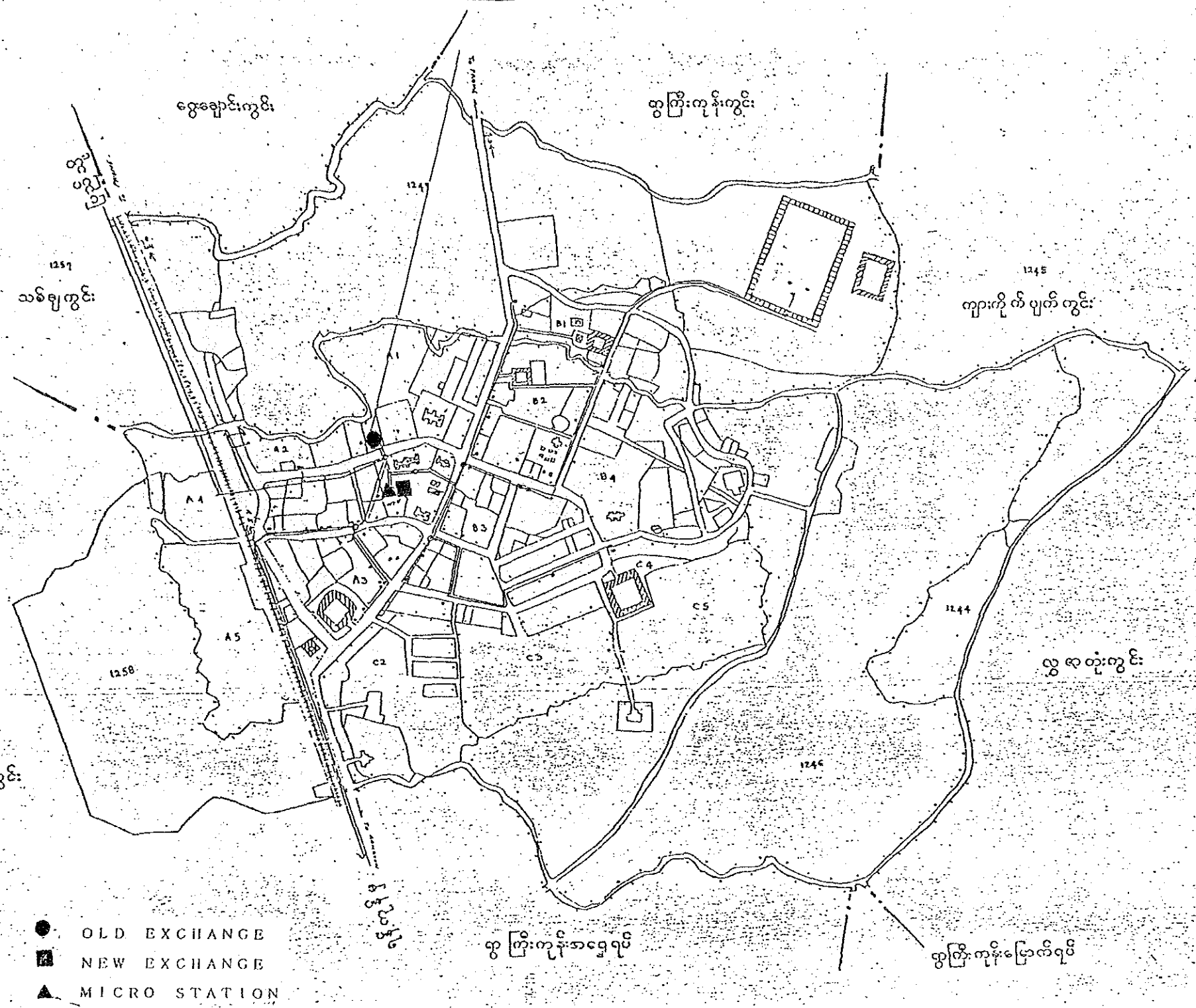
MAP OF MINBU



MAP OF YENANGYAUNG

CABLES & LINES NETWORK DIAGRAM

မှန်ပြင်
 သာယာဝတီမြို့
 သာယာဝတီခရိုင်
 ဝဇ္ဇာပင်ခရိုင်
 စစ်ကောင်စီတပ်



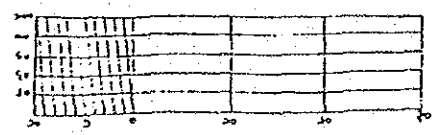
THARRAWADDY

INDEX

- 1. TELEPHONE
- 2. DISTANCE POINT
- 3. WIRELESS CABLE
- 4. OPEN WIRE LINE

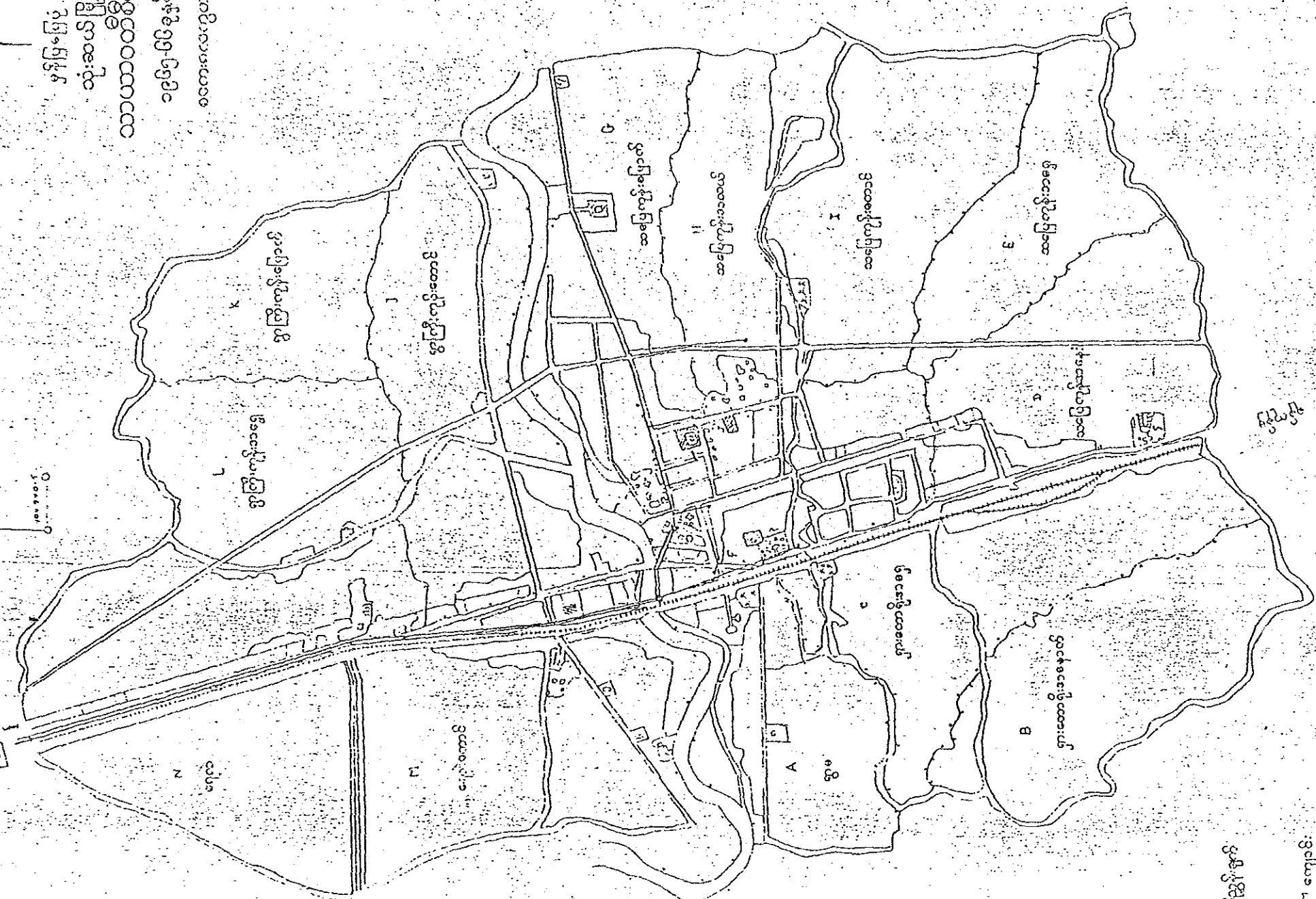
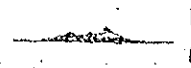
- OLD EXCHANGE
- NEW EXCHANGE
- ▲ MICRO STATION

MAP OF THARRAWADDY (1/2)



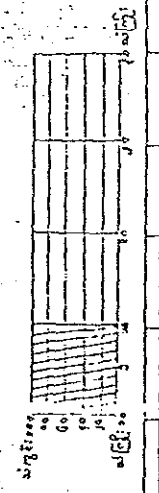
လယ်ဝန်
 သာယာဝတီ

မြို့ပြ-ပြင်
 သုံးဆယ်မြို့
 သာယာဝတီမြို့ရင်
 ဝဠမ္မိ-မြို့ရင်
 စကေး-ပေ-ပေ-ပေ



ရည်ညွှန်းချက်

- ၁. ရေ
- ၂. က.င.က ကျောင်း
- ၃. ရွှေတိဂုံကျောင်း
- ၄. ဆရာတော်
- ၅. လေ့လာကျောင်း
- ၆. သတင်းစာတိုက်
- ၇. ပြည်သူ့ဓန
- ၈. မြို့တော်

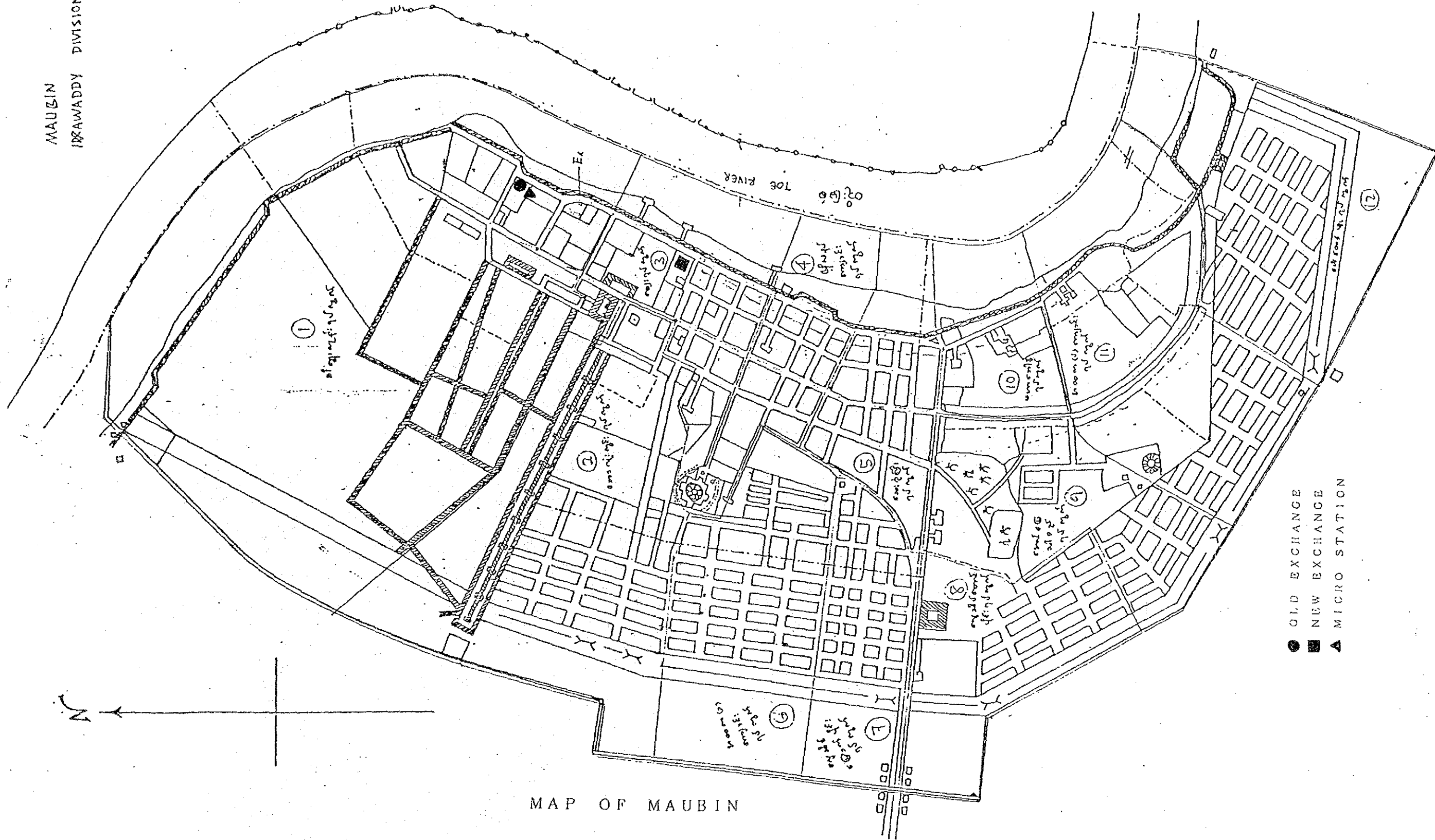


မြေပုံ
 ၁၉၅၅
 ၁၉၅၆

မြို့ရင်
 သာယာဝတီ

MAP OF THARRAWADDY (2/2)

MAUBIN
IRRAWADDY DIVISION



MAP OF MAUBIN

မာတိကာပြေပုံ
 သာယာပြေ
 သာယာပြေ
 သာယာပြေ
 သာယာပြေ

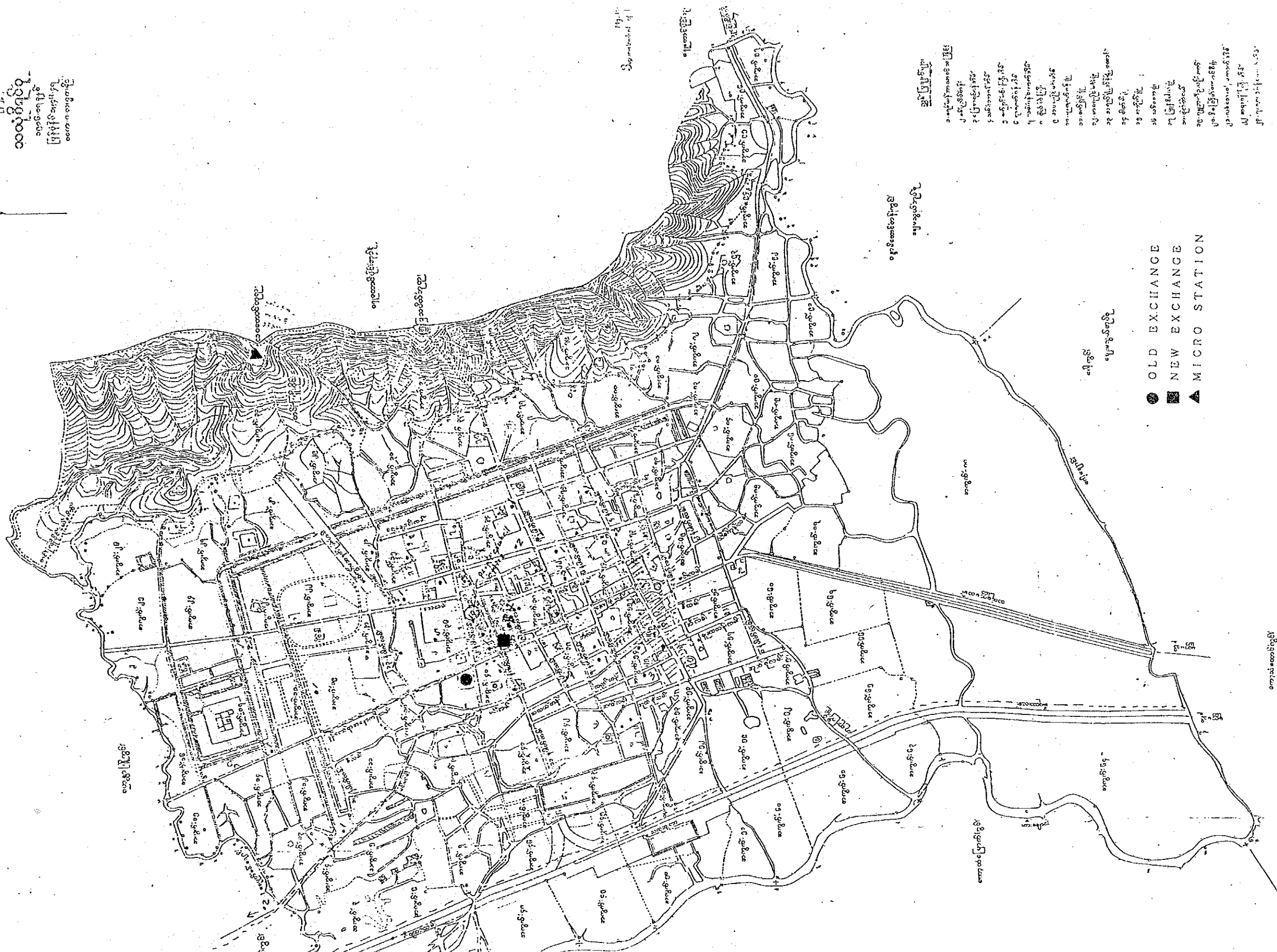
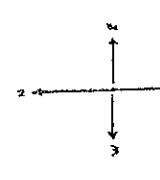


Fig. 11
Thaton

- ၁။ အင်္ဂလိပ်အစိုးရအဖွဲ့
- ၂။ အင်္ဂလိပ်အစိုးရ
- ၃။ အင်္ဂလိပ်အစိုးရ
- ၄။ အင်္ဂလိပ်အစိုးရ
- ၅။ အင်္ဂလိပ်အစိုးရ
- ၆။ အင်္ဂလိပ်အစိုးရ
- ၇။ အင်္ဂလိပ်အစိုးရ
- ၈။ အင်္ဂလိပ်အစိုးရ
- ၉။ အင်္ဂလိပ်အစိုးရ
- ၁၀။ အင်္ဂလိပ်အစိုးရ
- ၁၁။ အင်္ဂလိပ်အစိုးရ
- ၁၂။ အင်္ဂလိပ်အစိုးရ
- ၁၃။ အင်္ဂလိပ်အစိုးရ
- ၁၄။ အင်္ဂလိပ်အစိုးရ
- ၁၅။ အင်္ဂလိပ်အစိုးရ
- ၁၆။ အင်္ဂလိပ်အစိုးရ
- ၁၇။ အင်္ဂလိပ်အစိုးရ
- ၁၈။ အင်္ဂလိပ်အစိုးရ
- ၁၉။ အင်္ဂလိပ်အစိုးရ
- ၂၀။ အင်္ဂလိပ်အစိုးရ

● OLD EXCHANGE
 ■ NEW EXCHANGE
 ▲ MICRO STATION

MAP OF THATON

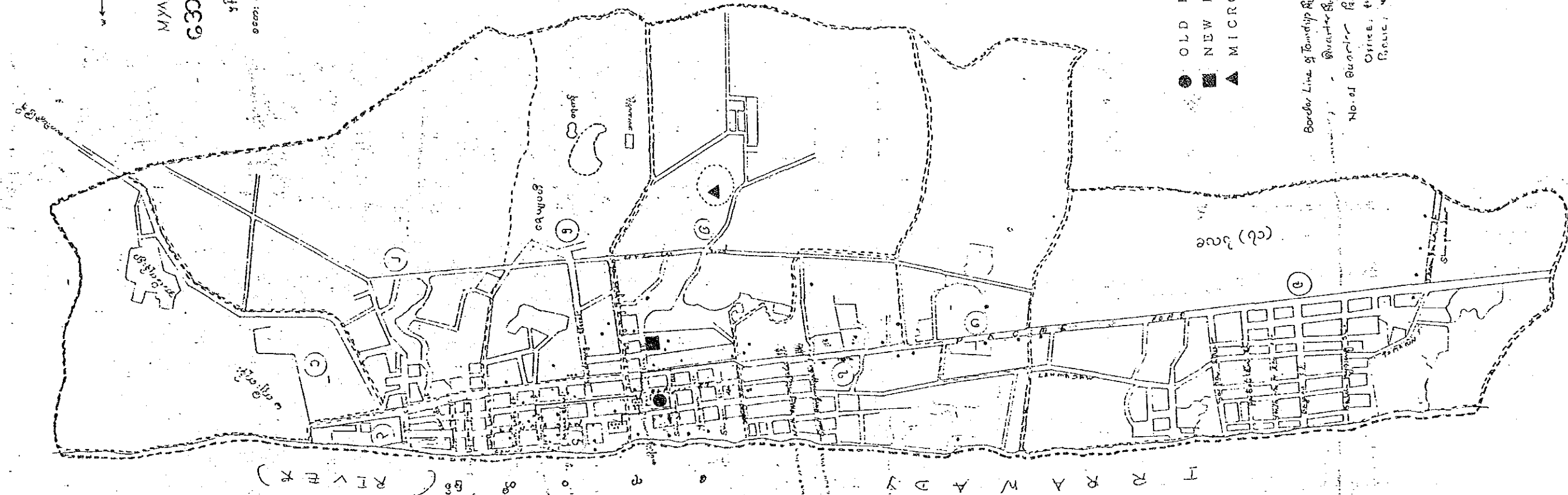


MYEDE

အောင်လံမြို့(မြေပုံ)

၁၆၆၆၆၆

စကေး: ၁ လက်မ = ၁ မိုင်



- OLD EXCHANGE
- NEW EXCHANGE
- ▲ MICRO STATION

မြို့ပြအချက်အလက်

Border Line of Township မြို့နယ်နိမိတ်

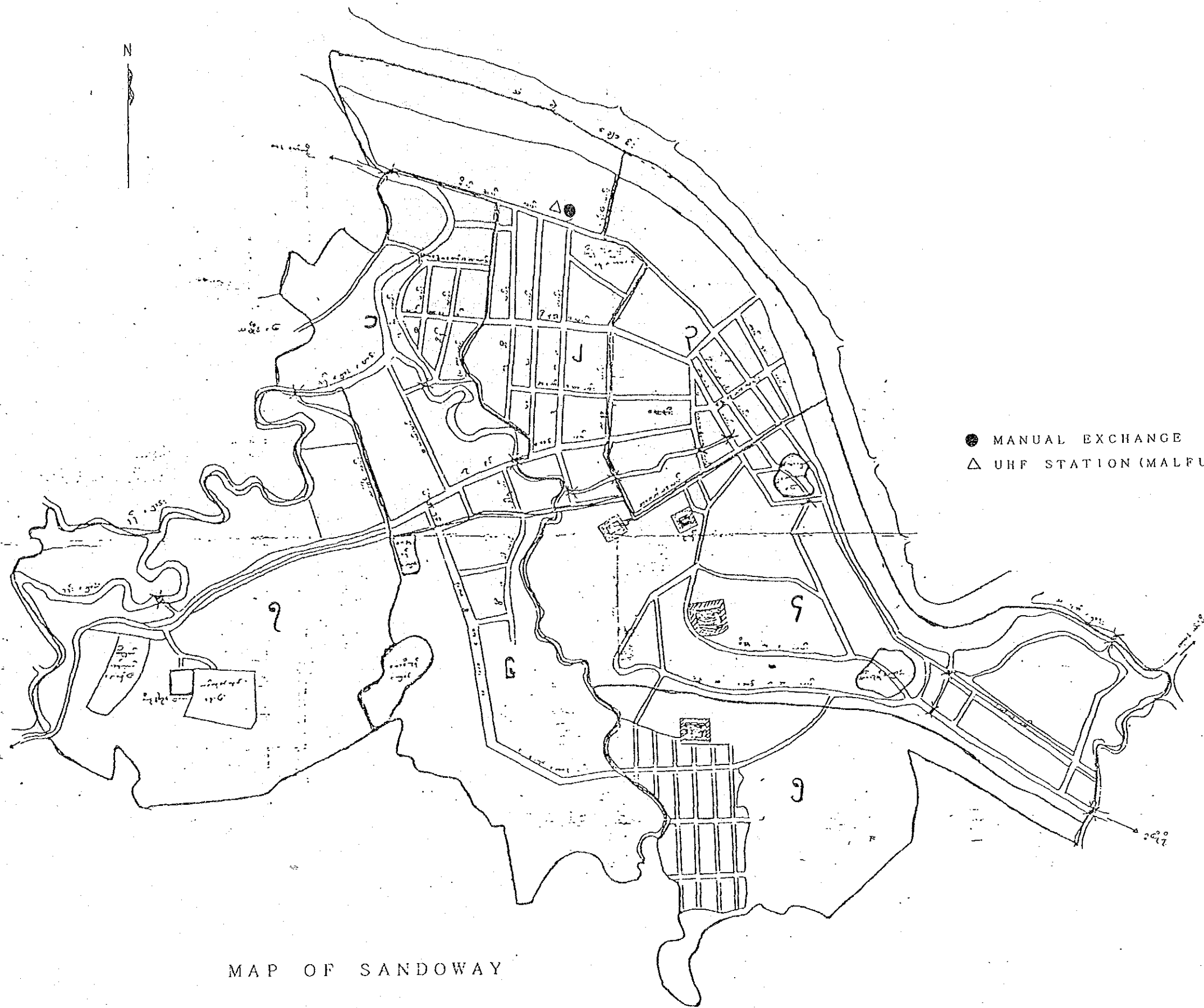
မြို့နယ်နိမိတ်အကျဉ်းချုပ်

No. of Survey မြေပုံအမှတ် = ၁, ၂, ၃, ၄, ၅, ၆, ၇, ၈, ၉

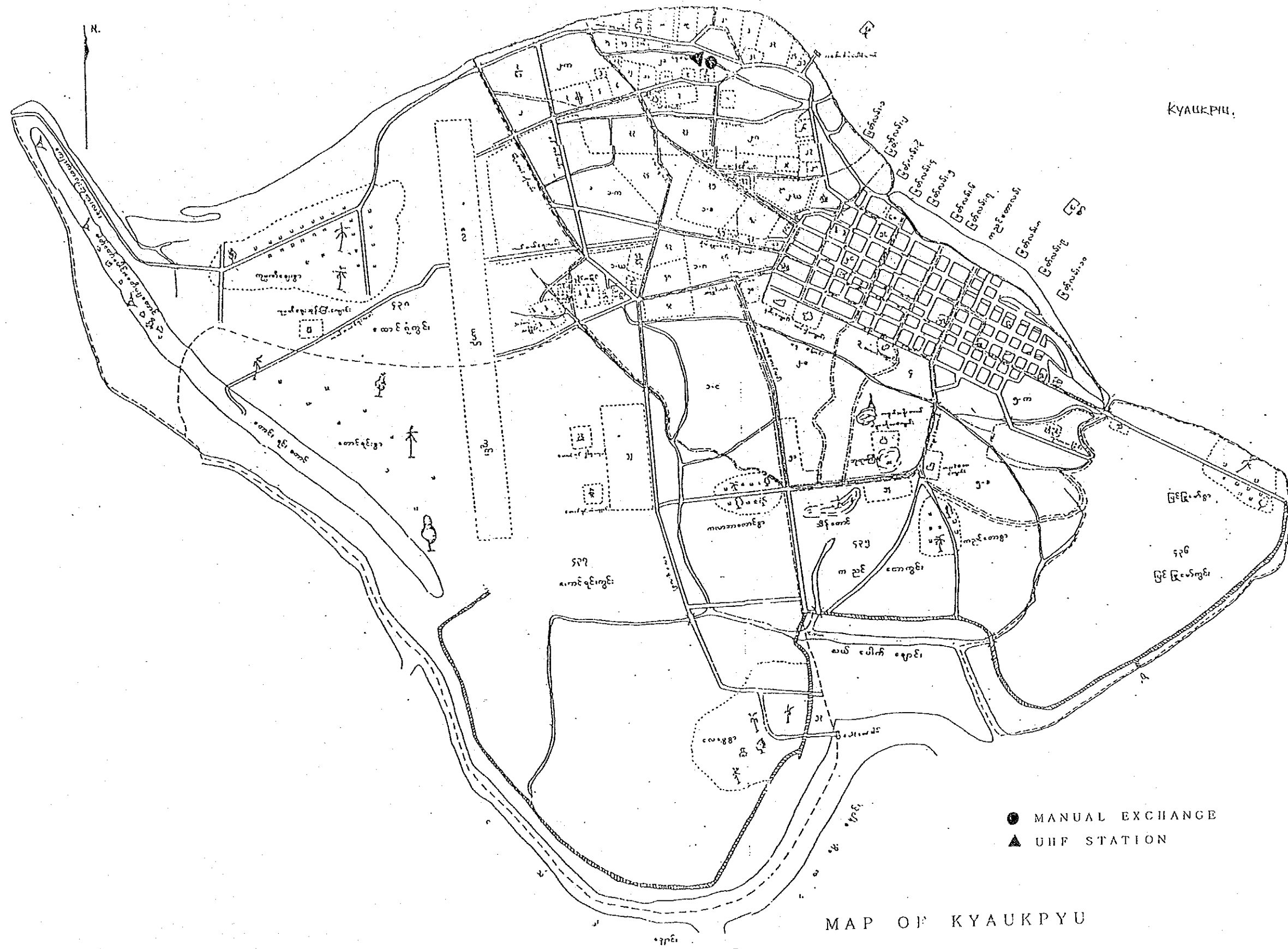
Office မြေပုံအမှတ်

Scale ၁:၅၀၀၀

MAP OF MYEDE

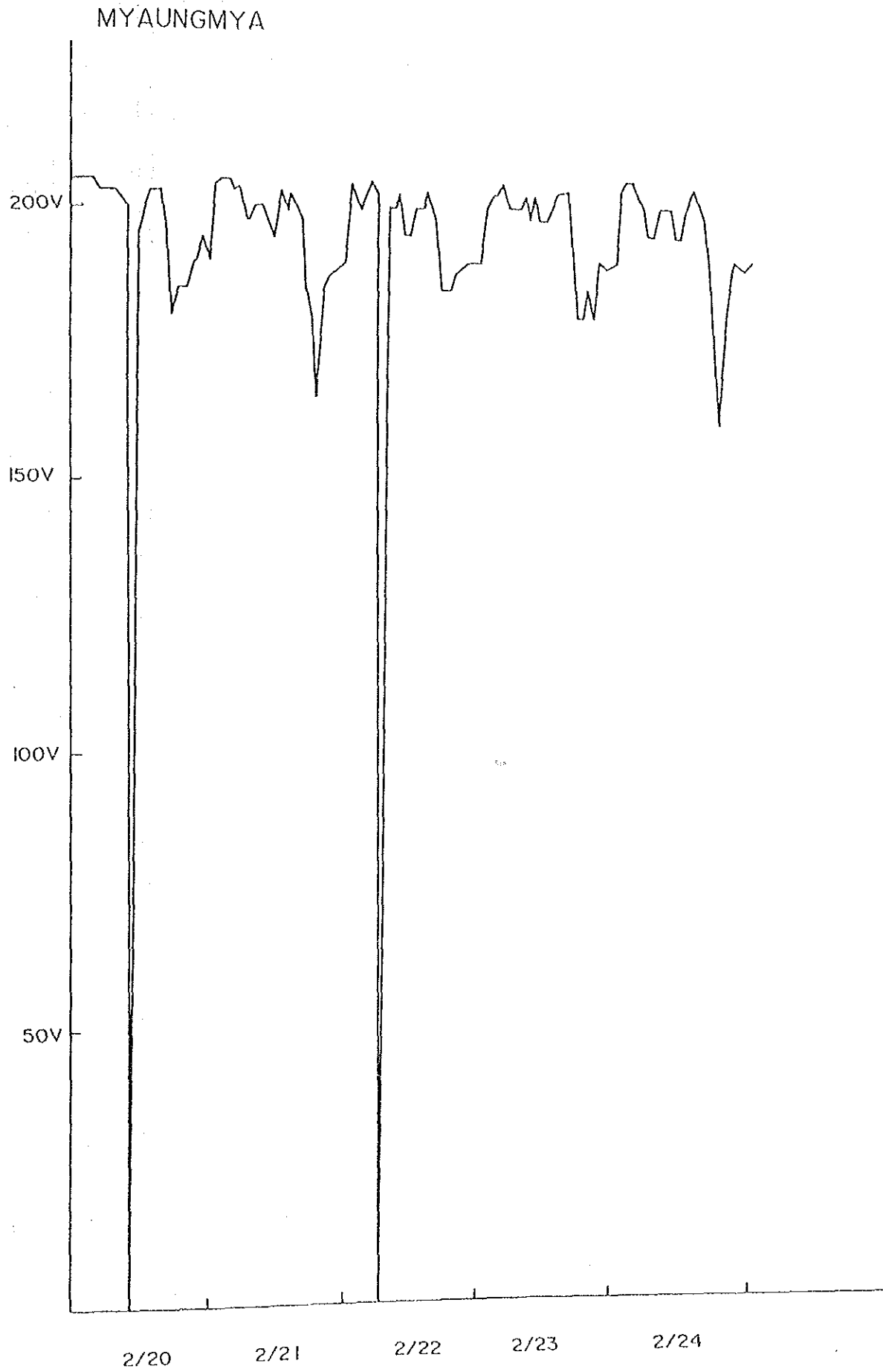


MAP OF SANDOWAY

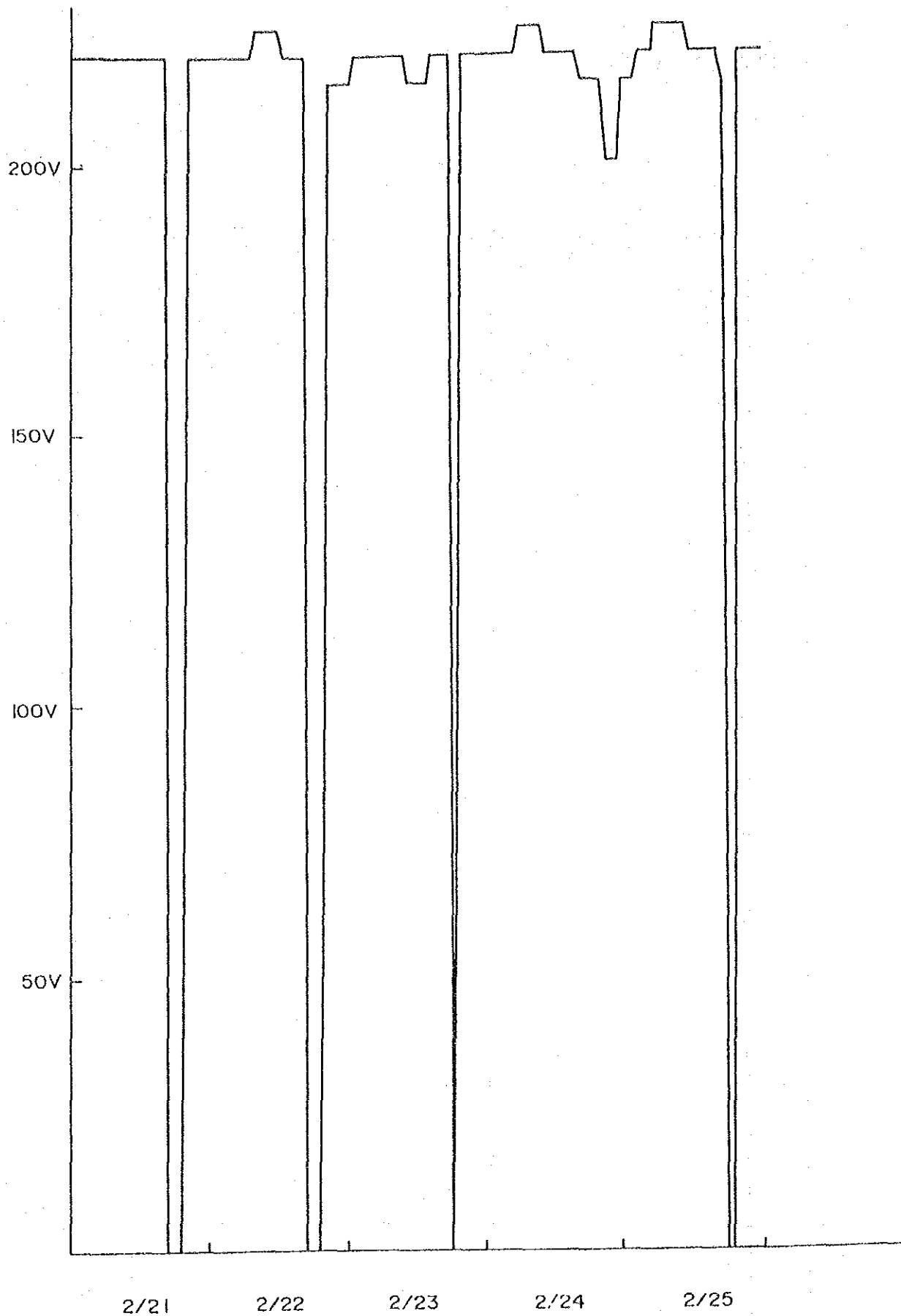


MAP OF KYAUKPYU

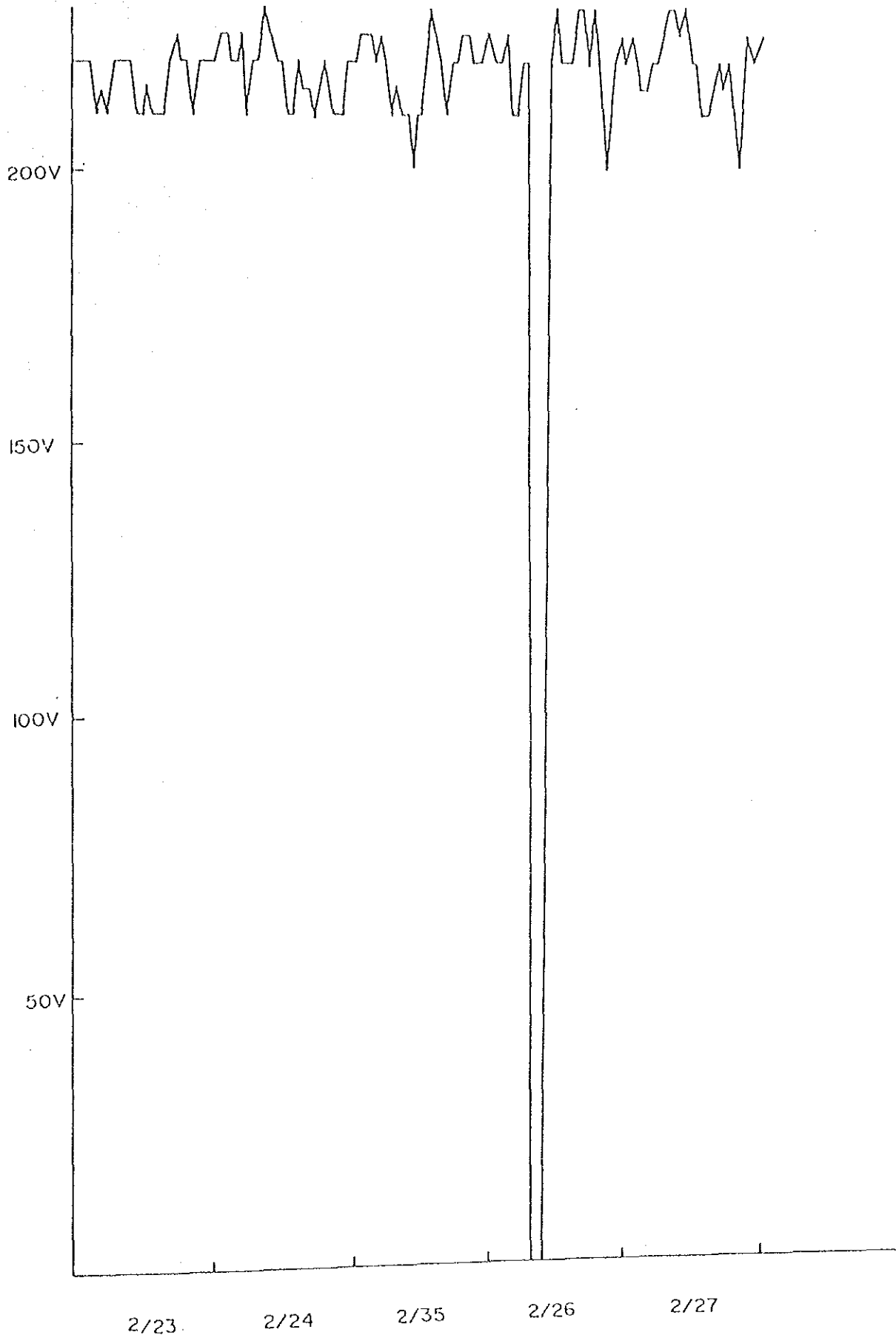
APPENDIX X COMMERCIAL POWER VOLTAGE FLUCTUATION RECORDS
IN THE TEN TOWNSHIPS



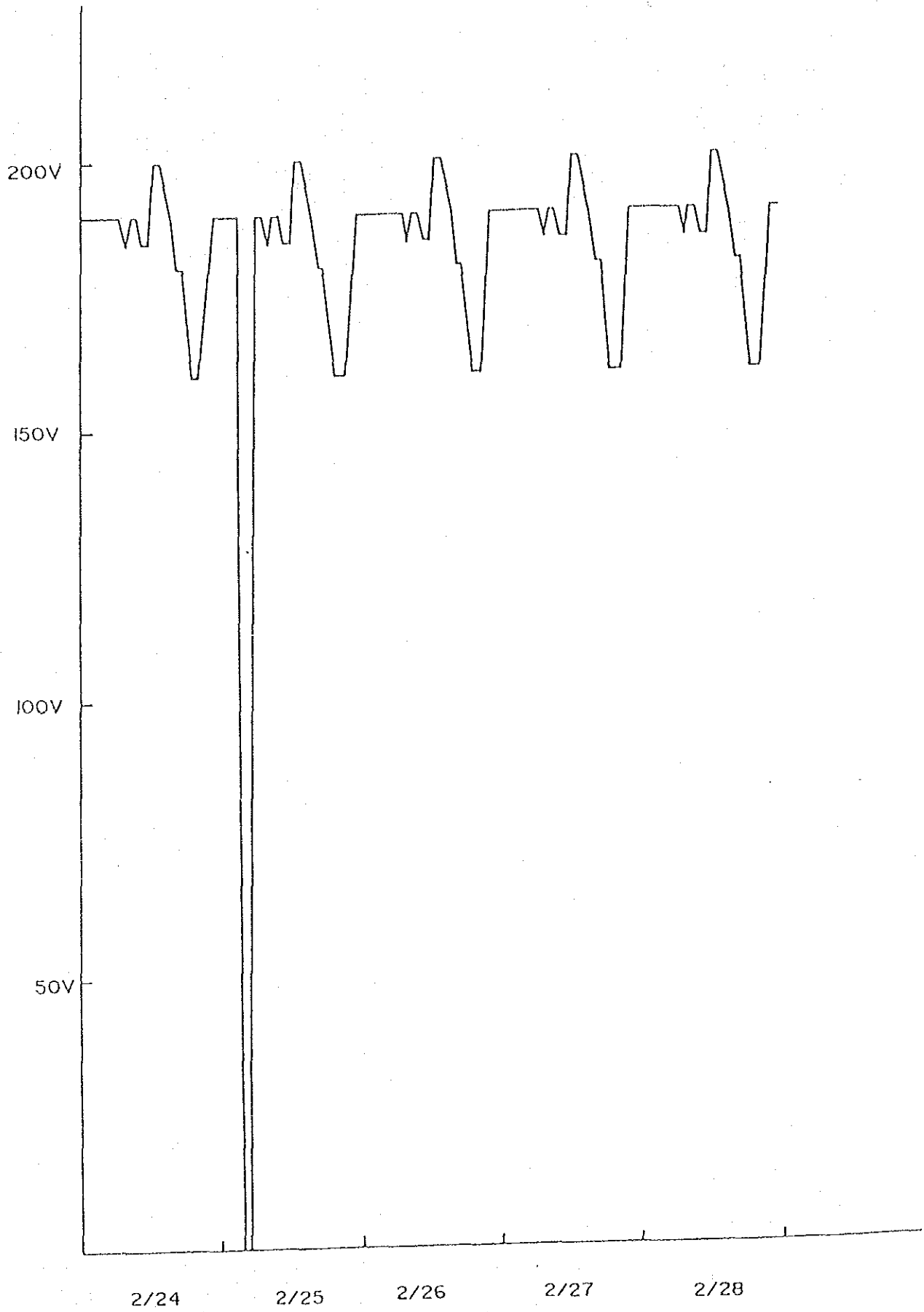
MINBU



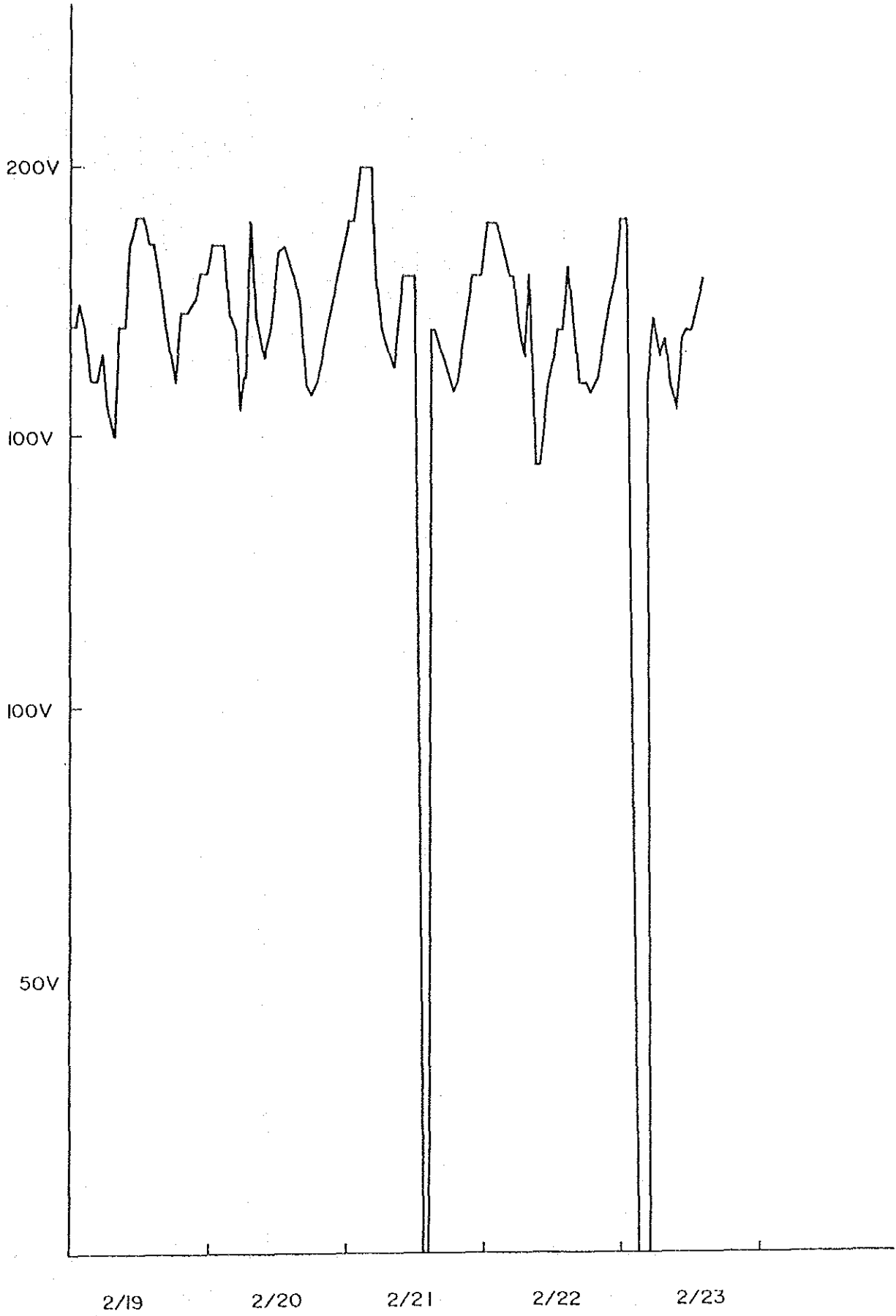
THAYETMYO



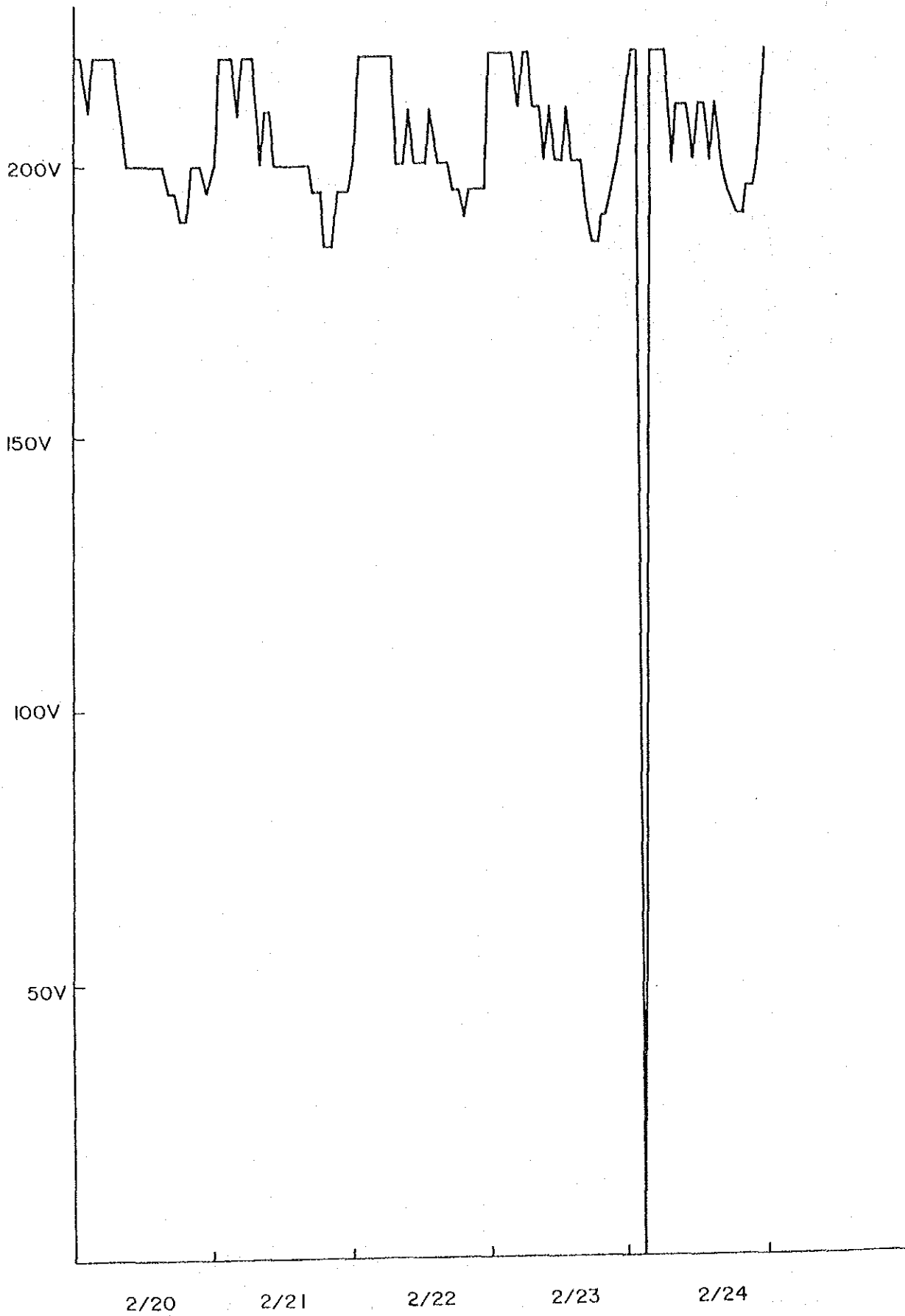
YENANGYAUNG



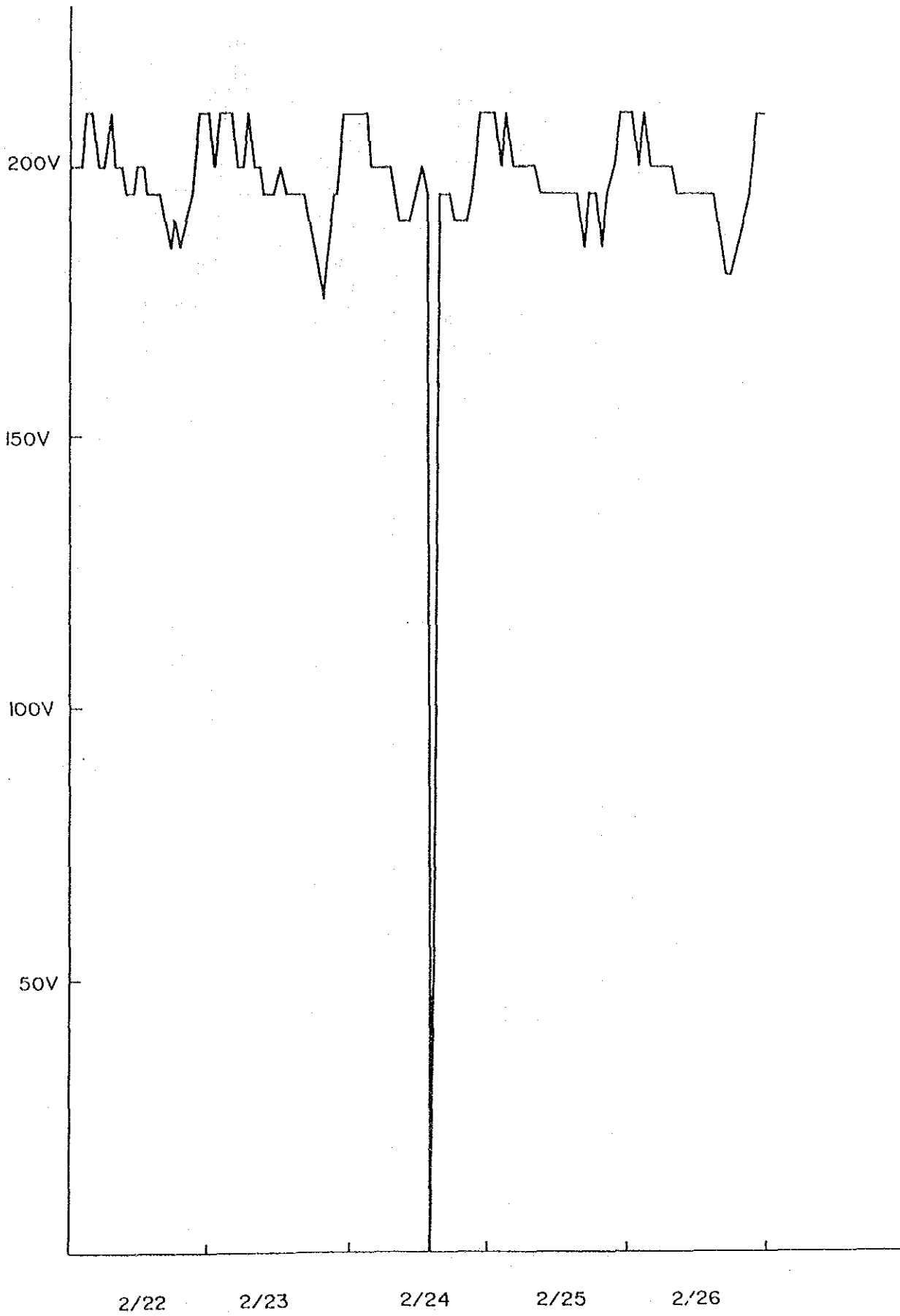
THARRAWADDY



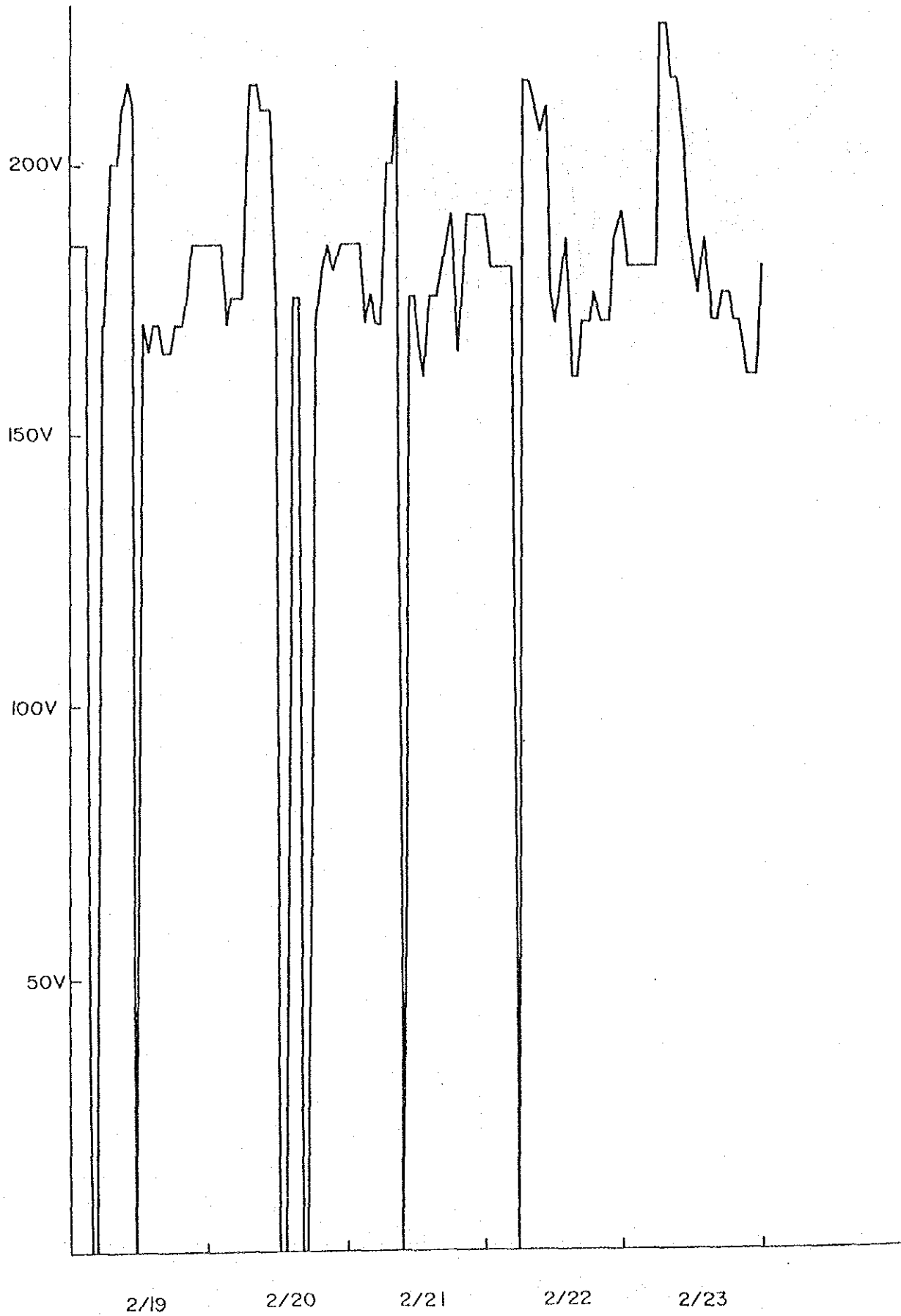
MAUBIN



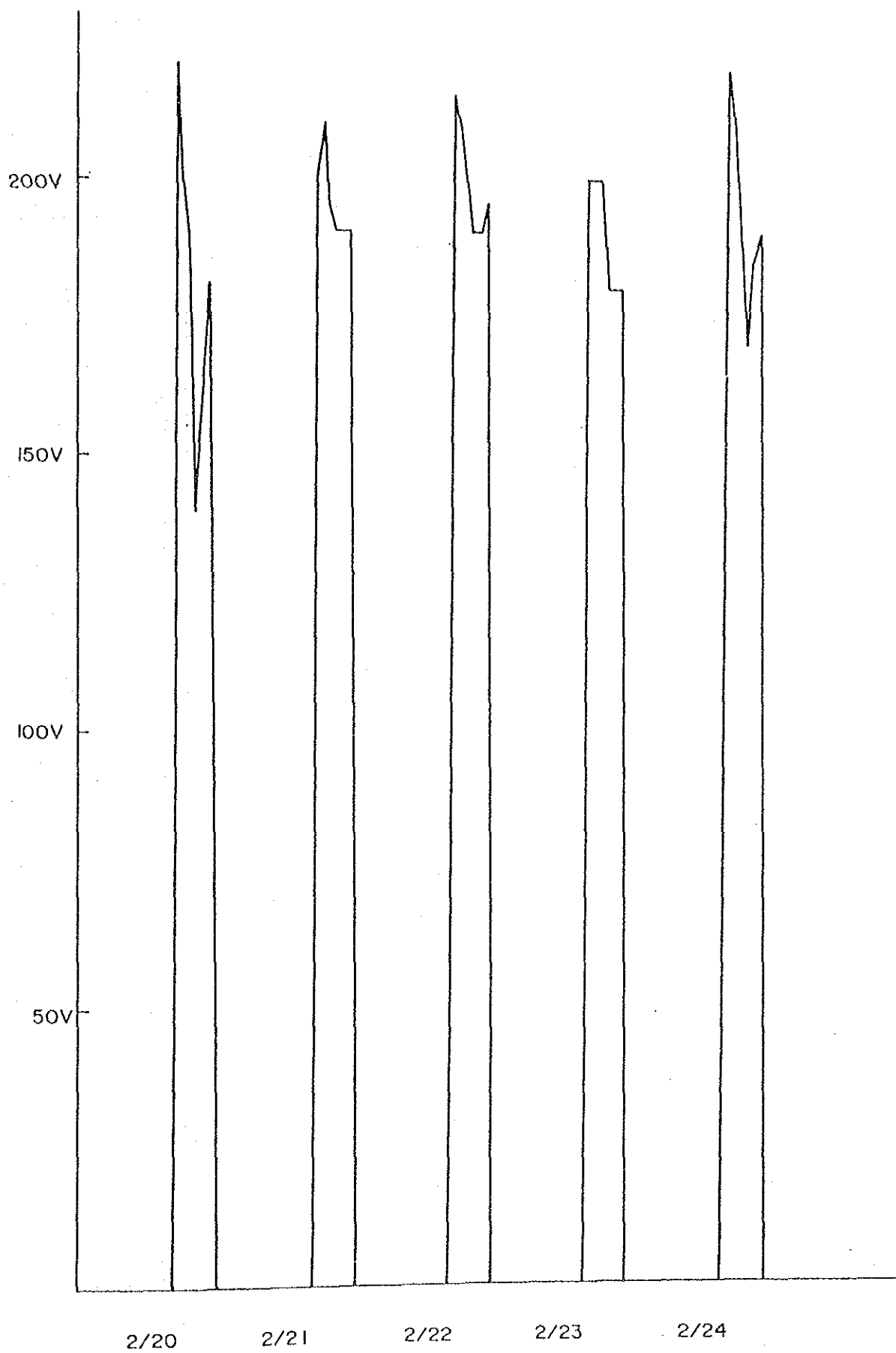
THATON



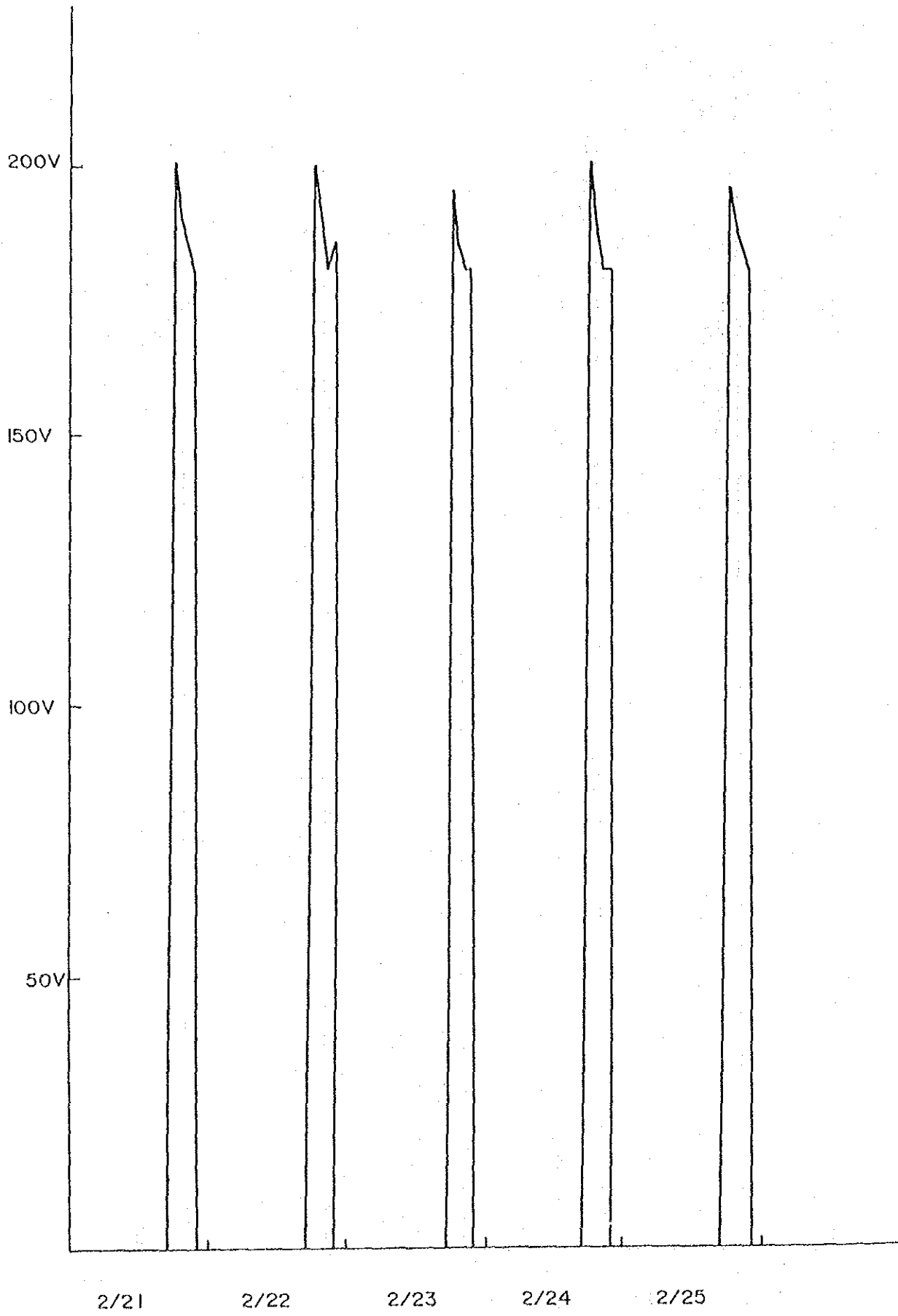
MYEDE



SANDDOWAY



KYAUKPYU



APPENDIX XII NUMBER OF TOLL CIRCUITS

FROM \ TO	RANGO	SYRIA	MAU	PEGU	THARR	HENZA	BASSE	MYAUN	THATO	PA-AN	MOULE	TAVOY	MERGU	MYANA	TOUNG	PROME	AKYAB	MANDA	SAGAI	MAYMY	MOYNA	SHWEB	MYING	PAKOK	CHAUK	MEIKT	TAUNG	LOIKA	LASHI	HAKA	YENAN	MINBU	MAGWE	MYEDE	THAYE	PYIM	MYITK	TOTAL				
RANGOON	—	49	18	83	14	42	99	31	23	43	114	33	24	21	31	45	60	257																								
SYRIAM	49																										20										18			1112		
MAUBIN	18																																								49	
PEGU	83																																								18	
THARRAWADDY	14																																								82	
HENZADA	42																																								14	
BASSEIN	99																																								42	
MYAUNGMY	30																																								99	
THATON	23																																								30	
PA-AN	43																																								23	
MOULEIN	114																																								43	
TAVOY	33																																								114	
MERGUI	24																																								33	
MYANAUNG	21																																								24	
TOUNGOO	31																																								21	
PROME	45																																								45	
AKYAB	60																																									60
MANDALAY	255																																								60	
SAGAI															10	17			44	37	34	18	44	46	47	44	72	42	45	18	27	22	48	22	19	29	33	976				
MAYMYO																			44																					44		
MONYAWA																			37																					37		
SHWESO																			34																					34		
MYINGYAN																			19																					19		
PAKOKKU																			44																					44		
CHAUK																			46																					46		
MEIKTLA	20																		46																					46		
TAUNGGYI																			41																						64	
LOHLAW																			72																						72	
LASHIO																			42																						42	
HAKA																			45																						45	
YENANGYAUNG																			17																						17	
MINBU																			27																						27	
MAGWE	27																		22																						22	
MYEDE																			47																						74	
THAYEIMYO																			22																						22	
PYINAMANA	18																		19																						19	
MYITKYINA																			29																						47	
TOTAL	1048	49	18	83	14	42	99	31	23	43	114	33	24	21	31	45	60	993	44	37	34	18	44	46	47	44	72	42	45	18	27	22	48	22	19	29	33					

JICA