

Telex : Agrico BM 2033	
Cable : AGRICORP	
Telephones : —	83480
Managing Director	70289
G. M. (Admin)	72621
Office	72655

The Socialist Republic Of The Union Of Burma
MINISTRY OF AGRICULTURE AND FORESTS
AGRICULTURE CORPORATION
No. 74, SHWEDAGON PAGODA ROAD
RANGOON, BURMA.

No. 571/Seed Bank/86/1752

Dated the, 23rd Sept. 1986.

To, ✓

Mr. Y. Kitamura,
Deputy Resident Representative, JICA,
Embassy of Japan, Rangoon.

Sub: Preliminary Soil Test Datas, (Soil Profile of Bore No. 2 & 3)

Dear Mr. Kitamura,

Enclosed herewith the Soil Profile blue prints of Bore No. 2 and No. 3 on the soil samples taken from the project site of the Seed Bank Project at Yezin, ARI, Pyinmana, received from the Research and Soil Testing Laboratories, Construction Corporation, for favour of transmittal the same to the Team Leader or to Mr. H. Uchigasaki, Architectural Planner, Basic Design Study Team for the Seed Bank Project.

Thanking you for the cooperation.

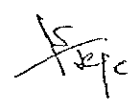
Yours sincerely,

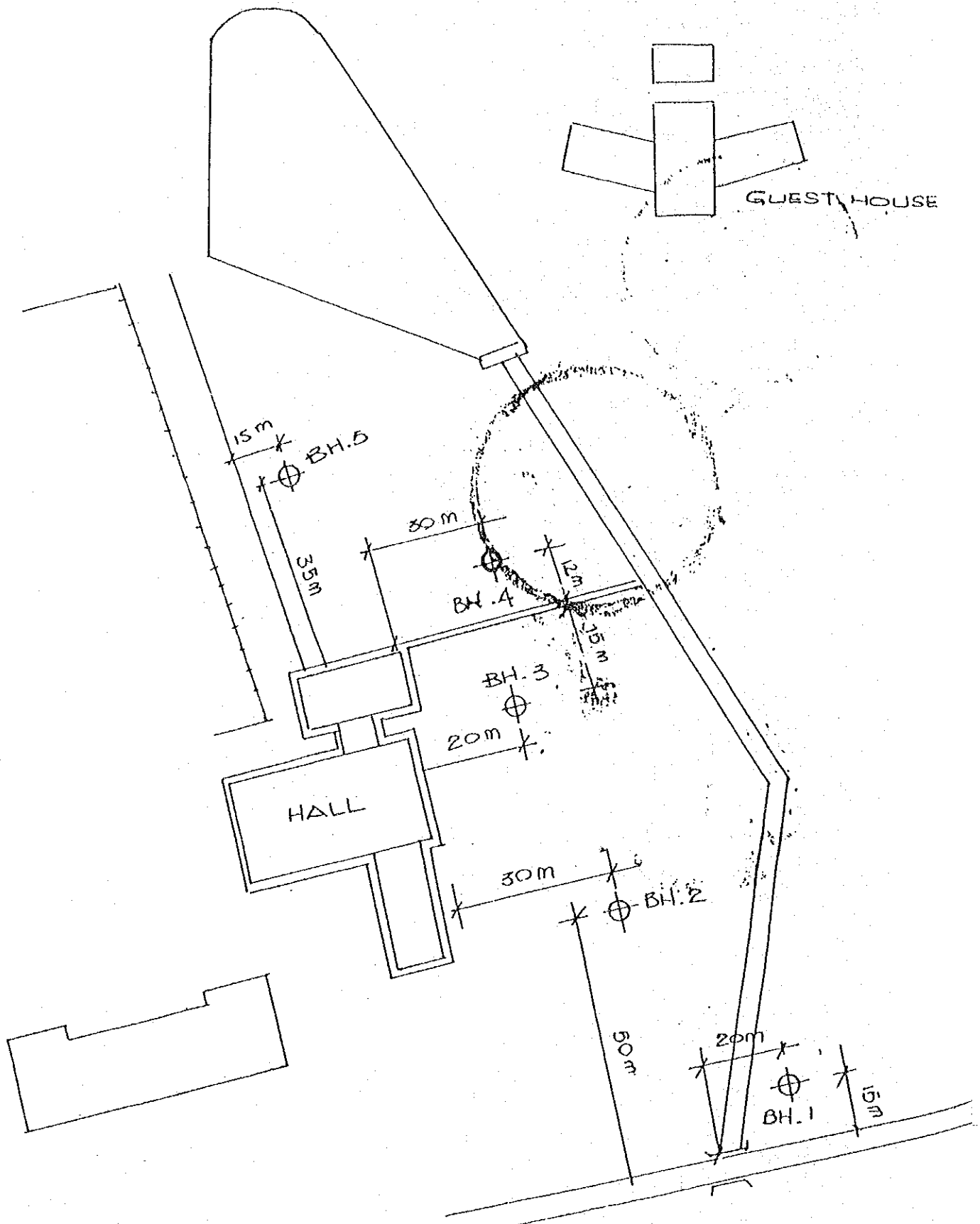
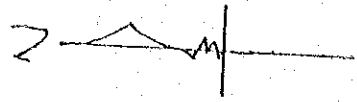


for Managing Director,
(AUNG KHIN, General Manager (OSD)).

c.c.

The Director General, PSD, MAF.
The General Manager (ARI).






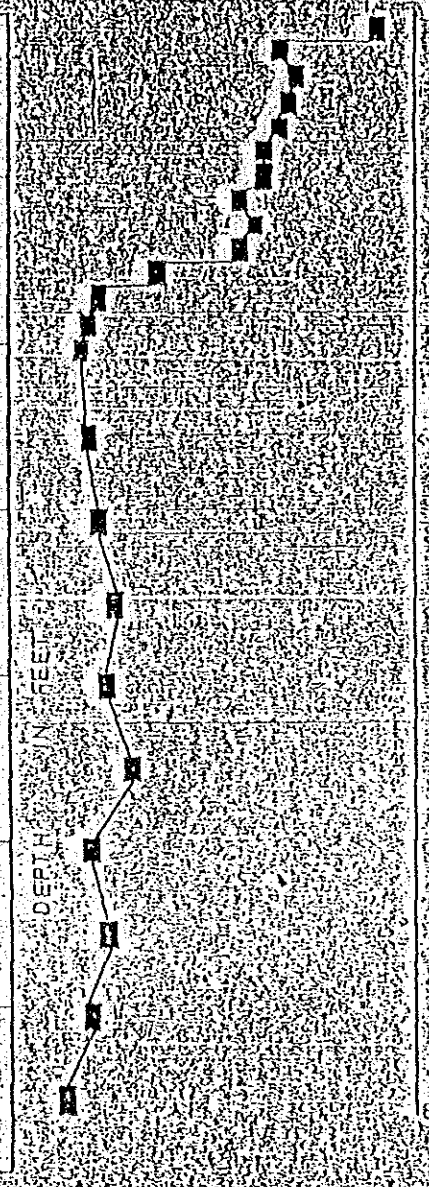
 PROPOSED BOREHOLE LOCATION

Fig. 1 BOREHOLE LOCATION PLAN

No. of hammer blow / FT

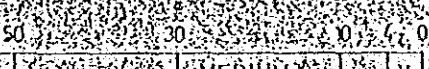


B.H. 2



Dark brown SAND, some SILT, some Gravel, trace Clay
 Yellowish gray SAND, some Silt, trace Clay, trace fine Gravel
 Grayish brown Clayey SAND & SILT, trace fine Gravel
 Grayish brown SAND, some Silt, trace Clay, trace fine Gravel
 Gray Clayey SAND & SILT, trace Gravel
 Yellowish brown Clayey SAND & SILT, some Gravel
 Brownish yellow Gravelly SAND, some Silt, some Clay
 Yellowish brown Gravelly SAND, some Silt, some Clay
 Yellowish brown Clayey SAND & SILT, trace Gravel
 Gray Clayey SAND, some Silt, trace fine Gravel
 Yellowish brown Clayey SAND, some Silt, trace fine Gravel
 Gray Silty & Clayey SAND
 Yellowish brown Silty & Clayey SAND

BASED ON TERZAGHI STANDARD SPT



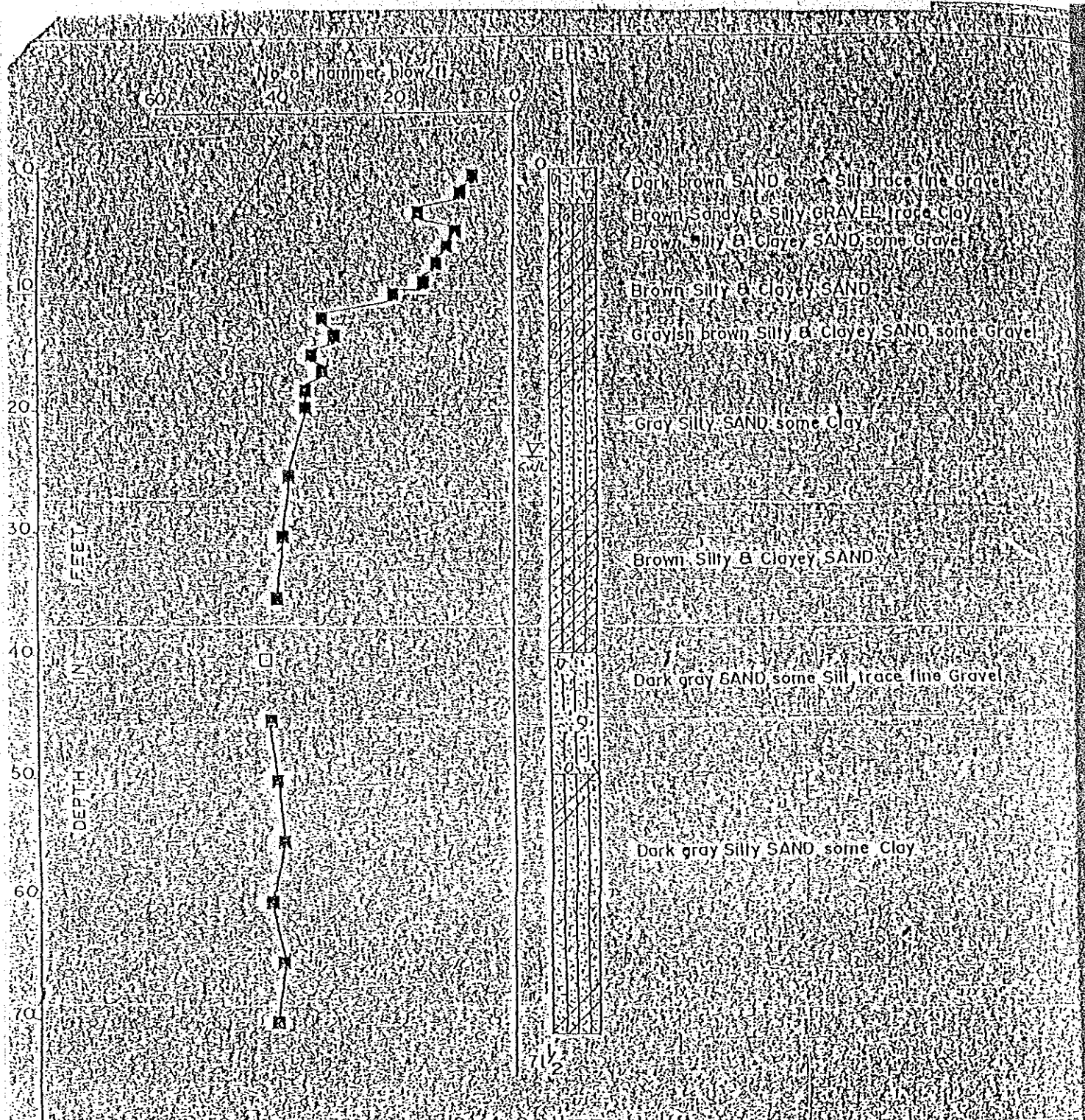
LEGEND FOR SAMPLING

■ STANDARD SPLIT SPOON SAMPLER DRIVEN WITH 140 LB HAMMER, DROP 30

Fig 2.2. PROFILE OF BOREHOLE
 SEED BANK PROJECT, YEZIN

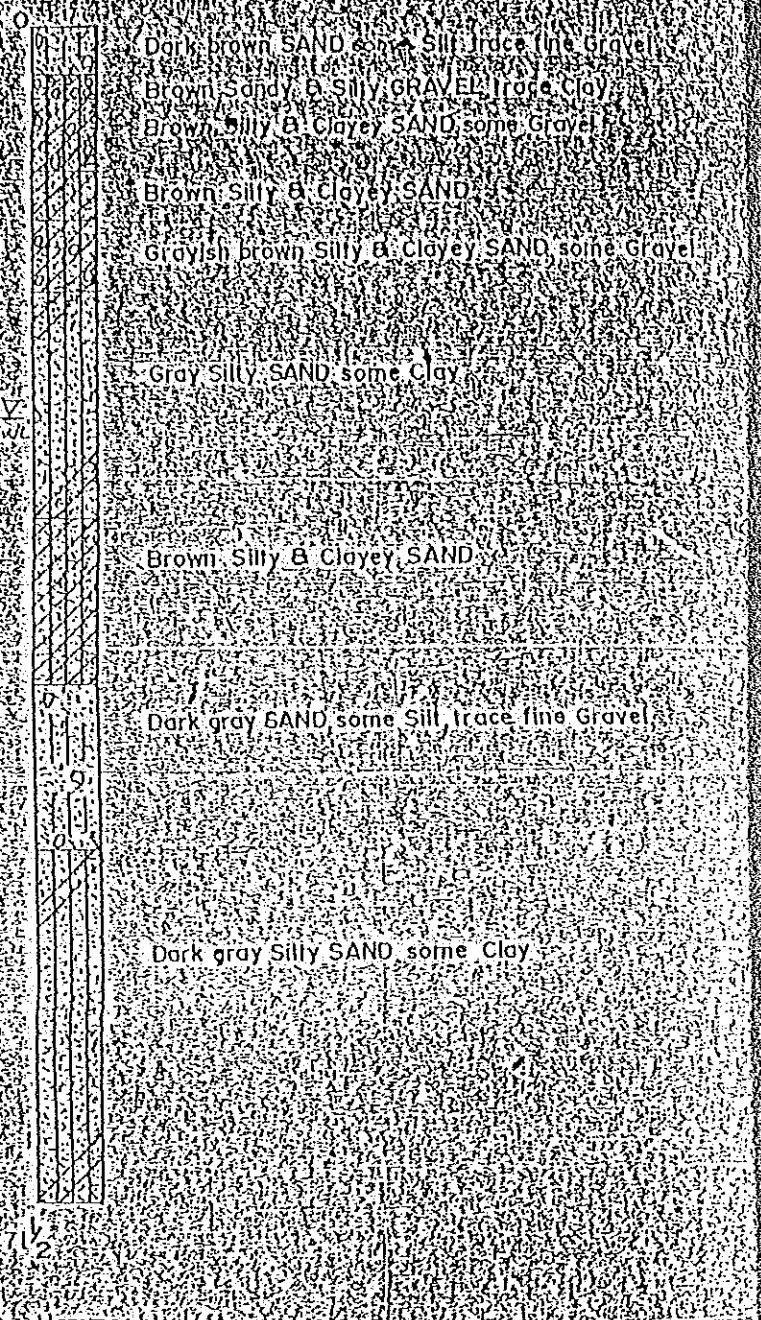
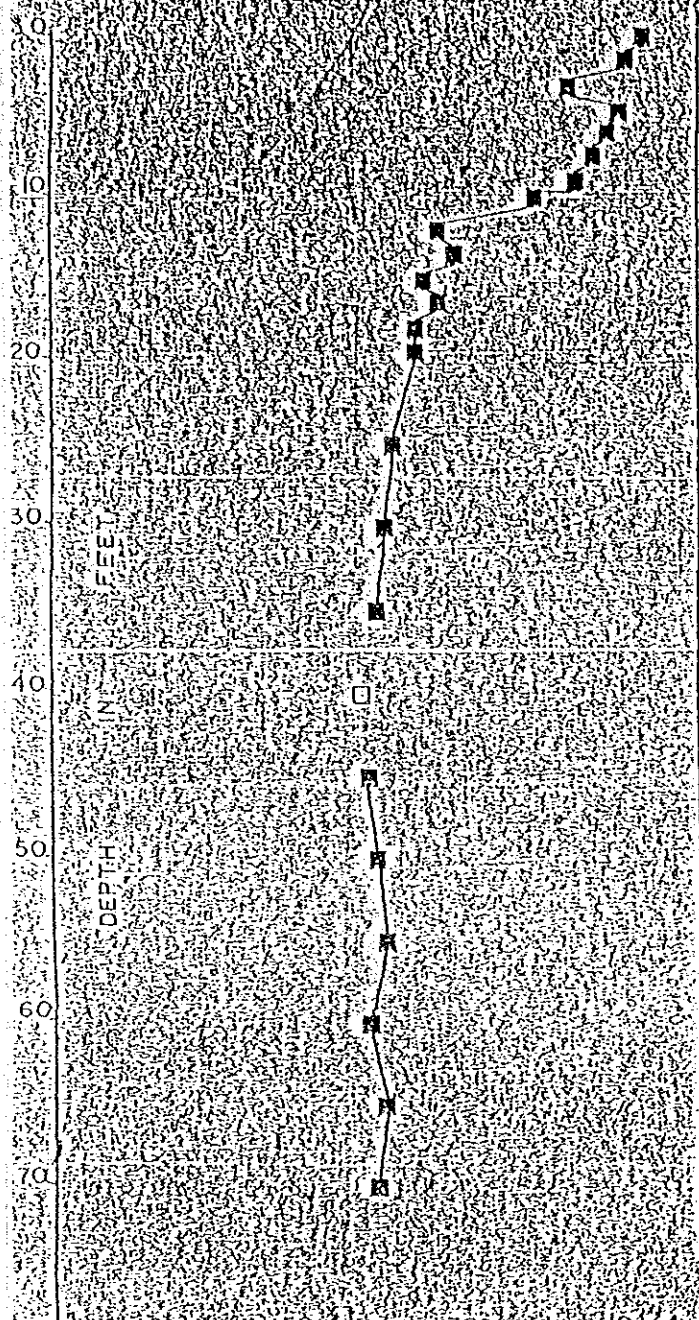
Drawn by: K. Ki
 Checked by: Nyunt Do (s.p.m.)
 September 1986

Scale: V. 1=10



No. of hammer blow/ft

60 40 20 0



very dense	dense	medium dense	loose
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Based on Terzaghi standard for SPT

LEGEND FOR SAMPLING

□ Standard Shelby sampler driven with 140 lbs hammer, drop 30"

■ Standard split spoon sampler driven with 140 lbs hammer, drop 30"

Hammer blow/ft

90 70 40 20

Relative density (%)

Telex : 21311 AGRICO BM
Cable : AGRICORP
Telephones : — 83480
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MINISTRY OF AGRICULTURE AND FORESTS
AGRICULTURE CORPORATION
No. 74 SHWEDAGON PAGODA ROAD
RANGOON, BURMA.

No. 571/Seed Bank/86/1839

Dated the 10th Oct. 1986

To,

Mr. Y. Kitamura,
Deputy Resident Representative, JICA,
Embassy of Japan, Rangoon.

Sub: Preliminary Soil Test Datas. (Soil Profile of Bore No. 4 & 5)

Dear Mr. Kitamura,

Concerning the captioned subject and in continuation to my letter of same file No. 1752(29/9/86), enclosed herewith the Soil Profile blue prints of Bore No. 4 and No. 5 on the soil samples taken from the project site of the Seed Bank Project at Yezin, ARI, Pyinmana, together with Bore-hole Location Plan (Blue Print), received from the Research and Soil Testing Laboratories, Construction Corporation, for favour of transmittal the same to the Team Leader or to Mr. H. Uchigasaki, Architectural Planner, Basic Design Study Team for the Seed Bank Project.

Thanking you for the cooperation.

Yours sincerely,



for Managing Director,
(AUNG KHIN, General Manager(OSD)).

cc: The Director General, PSD, MAF.
The General Manager(ARI).

15
2
292

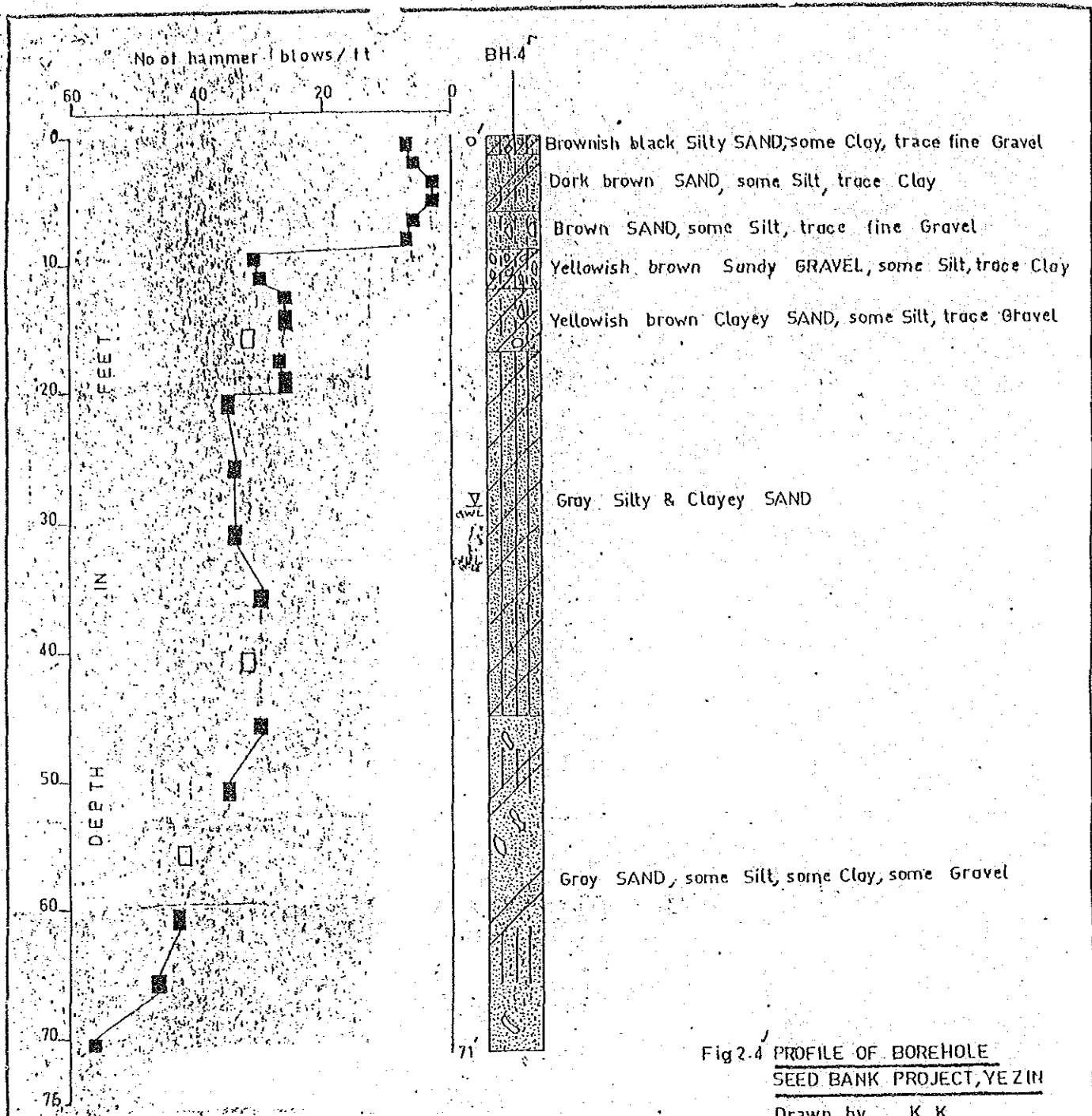


Fig 2.4 PROFILE OF BOREHOLE
SEED BANK PROJECT, YE ZIN

Drawn by — K.K
Checked by — Nyunt Oo (s.o. inr)

OCTOBER-1986

SCALE V. 1" = 10'

60 40 20 0

BASED ON TERZAGHI STANDARD FOR SPI

50	30	10	4	0
VERY DENSE	DENSE	MEDIUM DENSE	L	V L

HAMMER BLOWS/FT

90	70	40	20	0
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RELATIVE DENSITY %

LEGEND FOR SAMPLING

- THIN WALL STANDARD SHELBY SAMPLER DRIVEN WITH 140 LB HAMMER DROP 30'
- STANDARD SPLIT SPOON SAMPLER DRIVEN WITH 140 LB HAMMER DROP 30'

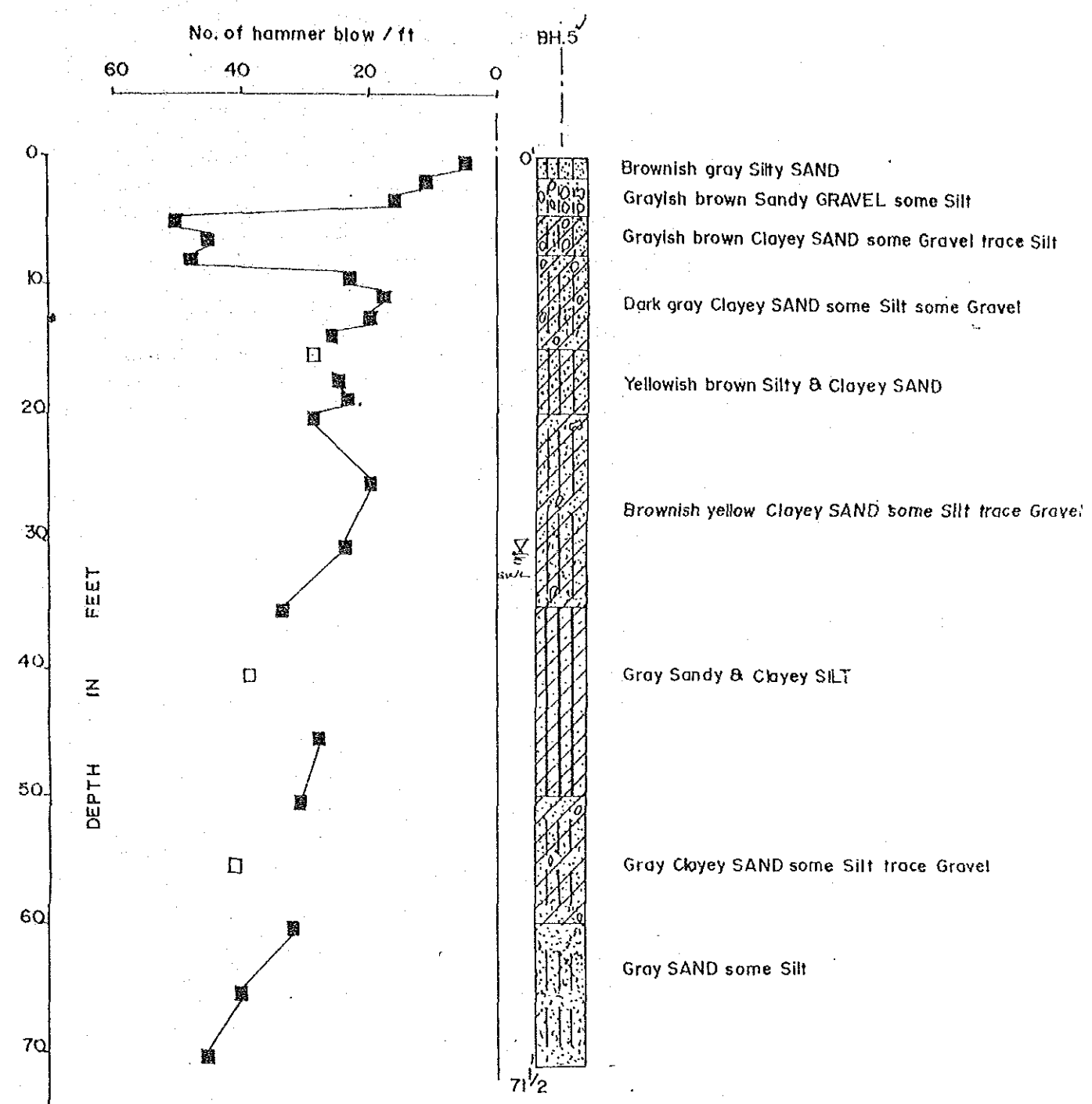
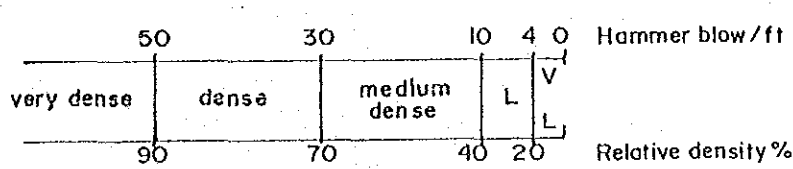


FIG. 2 - 5 PROFILE OF BOREHOLE
SEED BANK PROJECT,
YEZIN



BASED ON TERZAGHI STANDARD FOR SPT

LEGEND FOR SAMPLING

- Standard shelly sampler driven with 140 lbs hammer, drop 30"
- Standard split - spoon sampler driven with 140 lbs hammer, drop 30"

Drawn by Win Cho,
Checked by Nyunt Oo. s.o III
October. 1988

Scale. 1" = 10'

Appendix 6 PROPOSED TRAINING CURRICULUM

New and experienced technicians at existing research centers and laboratories will be trained under the project. Class size will be limited to about 20 trainee per course and each course period will cover about 3 months (13 weeks). As the trainees will already have received basic instruction at university or college, the course content will be concentrated on seed preservation and plant breeding which will be immediately applicable to their work place after completion of the course.

Classes will be centered in the training study room and training room; however, observation and practical training will also be conducted as required in the research laboratory, genetic resource preservation management center, and genetic resource information management center. Subjects for the training course, schedule, instructors and curriculum planning committee are described hereunder.

(1) Items of Lecture

	Unit No.
1) Introduction of Genetic Resources Preservation	4
a) Theory and significance of genetic resources preservation	2
b) Preservation method of genetic resources in international institute	2
2) Technique for Exploration and Collection of Seed	10
a) Purpose of exploration and collection of genetic resources	1
b) Technique for exploration and collection	5
c) Management of collected genetic resources	4
3) Technique for Characteristics Research of Genetic Resources	20
a) Introduction of characteristics research	2
b) Research method of morphological characters	10
c) Research method of chemical characters	5
d) Research method of physical characters	3

4) Technique for Seed Testing	20
a) Method of germination test	10
b) Method of pathological test	5
c) Mathematical analysis	5
5) Technique for Seed Preservation	9
a) Technique for seed drying	2
b) Moisture control technique for seed preservation	3
c) Preservation ability of seed	4

Total 63

(2) Curriculum Schedule

Week	Curriculum	Contents
1	(Guidance) Introduction of genetic resources preservation	Lecture
2	Technique for exploration and collection of seed	Lecture
3		Experiment Training (Field, Seed Bank Section)
4	Technique for characteristics research of genetic resources	Lecture
5		Experiment
6		Training (Laboratory, ARI
7		Division's Laboratory)
8	Technique for seed test	Lecture
9		Experiment
10		Training (Isolated facility,
11		Seed Bank Section, Information Section)
12	Technique for seed preservation	Lecture
13		Training (Seed Bank Section)

(3) Instructors

Instructors will be drawn mainly from project research staff and staff from each crop division in the ARI. The number of lecturers required is 15 in accordance with the number of subjects to be taught. Instruction will be organized under the following divisions for each subject.

Item of training	Responsibility	Proposed Lecturer
1 Guidance	Administration	Chief officer
2 Theory and significance of genetic resources preservation	"	Project manager (P.M.)
3 Preservation method of genetic resources in international Institute	"	P.M. or Information Section research officer
4 Purpose of exploration and collection of genetic resources	Introduction Lab	Chief research officer
5 Technique for exploration and collection	"	Chief research officer or research officer
6 Management of collected genetic resources	"	"
7 Introduction of characteristics research	Evaluation Lab	Chief research officer
8 Research method of morphological characters	Introduction Lab	Chief research officer of ARI Division's research officer
9 Research method of chemical characters	Evaluation Lab	Chief Research officer or research officer in Preservation Lab
10 Research method of physical characters	"	Chief Research officer or research officer in Introduction Lab
11 Method of germination test	Seed Bank Section	Research officer
12 Method of pathological test	Introduction Lab	"
13 Mathematical analysis	Information Section	"

14	Technique for seed drying	Seed Bank Section	Research officer
15	Moisture control technique for seed preservation	Preservation Lab	Research officer or research officer in Seed Bank Section
16	Preservation ability of seed	"	Research officer
17	Completion ceremony	Administration	P.M. or chief officer

Instructors will be appointed by the curriculum committee and instructors from other agencies or international organizations will be invited in consultation with the said committee.

(4) Curriculum Committee

The curriculum will be planned by a committee of eight members composed of the project manager, the directors of each laboratory, facility and office, and the ARI director, with the project manager as chairman. The committee will appoint certain members within the committee to draft a curriculum proposal including content and training level. The draft will then be discussed by the committee and the final curriculum determined.

In the initial stage of the project, experts from Japan will participate in and support the committee's activities. Moreover, the committee will also be responsible for providing textbooks in accordance with the curriculum with back up from Japanese experts.

JICA