[Appendix]

1. Member List of Survey Team

(1) Basic Design Study (Oct. 28~Dec. 1, 1989)

| Mr. Takushi OBATA | Team Leader | Director General Yokohama Plant Protection Station Ministry of Agriculture, Forestry and Fisheries |
|------------------------|-------------------------------|---|
| Mr. Mitsunobu KURATA | Quarantine Cooperation | Officer International Cooperation Division Ministry of Agriculture, Forestry and Fisheries |
| Mr. Kenichi SHISHIDO | Project Coordinator | First Basic Design Study Division Grant Aid Plannig & Survey Department, JICA |
| Mr. Takanori TANAKA | Project Manager, Architect | Yamashita Sekkei Inc. |
| Mr. Jin KUBOTA | Architect | Yamashita Sekkei Inc. |
| Mr. Masayoshi MASUZAWA | Engineer | Yamashita Sekkei Inc. |
| Mr. Yukinori SHIMAMOTO | Equipment Planning | Yamashita Sekkei Inc. (Overseas Merchandise Inspection Co., Ltd.) |
| Mr. Toru INOUE | Plant Quarantine Service | Yamashita Sekkei Inc. (Japan Fumigation Technology Association) |
| | | |

(2) Supplement Basic Design Study (May 19~May 31, 1990)

| Mr. Takanori TANAKA | Project Manager, Architect | Yamashita Sekkei Inc. | |
|------------------------|-------------------------------|-----------------------|--|
| | | | |
| Mr. Masayoshi MASUZAWA | Engineer | Yamashita Sekkei Inc. | |

| Mr. Toshio MORITA | Team Leader | Director Research Division, Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries |
|---------------------|------------------------------|--|
| Mr. Takanori TANAKA | Project Manager Architect | Yamashita Sekkei Inc. |

(3) Explanation of Draft Final Report (July 21~Aug. 1, 1990)

Mr. Yukinori SHIMAMOTO Equipment Planning

Yamashita Sekkei Inc. (Overseas Merchandise Inspection Co., Ltd.)

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2. Survey Schedule

| No. | Da | te | Schedule |
|------|---------|-------|--|
| 1 | Oct. 28 | (Sat) | Survey of Plant Quarantine Station at Narita Airport Lv. Tokyo (Messrs. Obata, Kurata, Shishido, Tanaka, Kubota Masuzawa, Shimamoto, Inoue) Ar. Bangkok |
| 2 | 29 | (Sun) | Lv. Bangkok Ar. Colombo |
| 3 | 30 | (Mon) | Meeting at Japanese Embassy and JICA office Cortesy call on Dept. of External Resources and MOAFC |
| 4 | 31 | (Tue) | Survey of proposed site and plant quarantine station at Katunayake Airport Lv. Colombo Ar. Kandy Meeting at DOA |
| 5 | Nov. 1 | (Wed) | Meeting at CARI Survey of PGRC and CARI |
| 6 | 2 | (Thu) | Meeting at CARI Lv. Kandy Ar. Colombo (Messrs. Kubota, Masuzawa) Meeting at Survey Dept. |
| 7 | 3 | (Fri) | Meeting at CARI Meeting at MOAFC, Irrigation Dept., Survey Dept. and Airport & Aviation Services Ltd. Lv. Kandy Ar. Colombo (Messrs. Tanaka, Shimamoto, Inoue |
| 8 | 4 | (Sat) | Survey of construction condition Arrangement of survey data |
| 9 | 5 | (Sun) | Arrangement of survey data Lv. Kandy Ar. Colombo (Messrs. Obata, Shishido, Kurata) |
| . 10 | 6 | (Mon) | Survey of plant quarantine station at Colombo Seaport Meeting at JICA office Meeting at Irrigation Dept. and Airport & Aviation Services Ltd. Signing of Minutes of Discussions at MOAFC |
| 11 | 7 | (Tue) | Meeting at Dept. of Civil Aviation and CEB Team meeting (discussion on proposed site) |
| 12 | . 8 | (Wed) | Lv. Colombo Ar. Bangkok (Messrs. Obata, Shishido, Kurata) Meeting at MOAFC Report to Japanese Embassy and JICA office Survey of construction condition |

(1) Basic Design Study (Oct. 28~Dec.1, 1989)

| No. | Date | Schedule |
|-----|--------------|---|
| 13 | Nov. 9 (Thu) | Lv. Colombo Ar. Kandy (Messrs. Tanaka, Shimamoto, Inoue) Meeting at CARI Report on proposed site to Dept. of External Resources Survey of construction condition |
| 14 | 10 (Fri) | Meeting at CARI Survey of UPFA Survey of construction condition |
| 15 | 11 (Sat) | Meeting at CARI Arrangement of survey data |
| 16 | 12 (Sun) | Arrangement of survey data |
| 17 | 13 (Mon) | Meeting at CARI Meeting at JICA office and Japanese Embassy Survey on foreign exchange rate at Central Bank of Sri Lanka Meeting at Dept. of Meteology |
| 18 | 14 (Tue) | Meeting at CARI Lv. Kandy Ar. Colombo (Messrs. Tanaka, Shimamoto, Inoue) Survey of construction condition |
| 19 | 15 (Wed) | Report to Japanese Embassy and JICA office Meeting at MOAFC Survey of construction condition Team meeting |
| 20 | 16 (Thu) | Meeting at Dept. of Civil Aviation Meeting at JICA office Meeting at CEB N.W. Divisional office and Dept. of Telecommunication Survey of construction condition |
| 21 | 17 (Fri) | Survey of similar grant aid project Survey of construction condition Meeting at CEB N.W. Divisional office and survey of power supply condition at proposed site |
| 22 | 18 (Sat) | Meeting at Lanka Electricity Company Ltd. Survey of proposed site Team Meeting |
| 23 | 19 (Sun) | Preparation of report on proposed site Team Meeting |
| 24 | 20 (Mon) | Meeting at Dept. of Civil Aviation Lv. Colombo Ar. Bangkok (Messrs. Kubota, Masuzawa, Shimamoto, Inoue) Lv. Bangkok (Mr. Kubota) |

| No. | Date | 9 | Schedule |
|-----|---------|-------|--|
| 25 | Nov. 21 | (Tue) | Survey of similar grant aid project Survey of construction condition Ar. Tokyo (Mr. Kubota) Lv. Bangkok Ar. Tokyo (Messrs. Masuzawa, Shimamoto, Inoue) |
| 26 | 22 | (Wed) | Survey of construction condition Preparation of report on proposed site |
| 27 | 23 | (Thu) | Meeting at Lanka Electricity Company Ltd. Survey of construction condition |
| 28 | 24 | (Fri) | Meeting at MOAFC Survey of construction condition |
| 29 | 25 | (Sat) | Survey of construction condition Preparation of report |
| 30 | 26 | (Sun) | Arrangement of survey data |
| 31 | 27 (| (Mon) | Meeting at MOAFC (Submission of report on proposed site) Meeting at Japanese Embassy and JICA office |
| 32 | 28 | (Tue) | Meeting with Chairman of Airport & Aviation Services Ltd. |
| 33 | 29 (| (Wed) | Meeting with Minister of MOAFC Meeting at Japanese Embassy Survey of construction condition |
| 34 | 30 | (Thu) | Lv. Colombo (Mr. Tanaka) Ar. Bangkok |
| 35 | Dec. 1 | (Fri) | Lv. Bangkok (Mr. Tanaka) Ar. Tokyo |

MOAFC DOA

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: Department of Agriculture

CARI ÷ Central Agricultural Research Institute

CEB : Ceylon Electricity Board

| No. | Da | te | Schedule |
|-----|--------|-------|--|
| 1 | May 19 | (Sat) | Lv. Tokyo (Messrs. Tanaka, Masuzawa) Ar. Bangkok |
| 2 | 20 | (Sun) | Lv. Bangkok Ar. Colombo |
| 3 | 21 | (Mon) | Meeting at Japanese Embassy and JICA office Courtesy call on MOADR, Dept. of External Resources and Airport & Aviation Services Ltd. |
| 4 | 22 | (Tue) | Survey of proposed site and infrastructure Lv. Colombo Ar. Kandy (Mr. Tanaka) Meeting at CARI |
| 5 | 23 | (Wed) | Meeting at CARI Lv. Kandy Ar. Colombo (Mr. Tanaka) Meeting at Dept. of Telecommunication of Negombo Branch Meeting at Airport & Aviation Services Ltd. Meeting at CEB N. W. Divisional office and survey of power supply condition around proposed site |
| 6 | 24 | (Thu) | Meeting at CEB N.W. Divisional office Survey of construction condition |
| 7 | 25 | (Fri) | Meeting at Dept. of Telecommunication (Metro & Regen 2) Meeting at Water Resources Board and Central Environmental Authority Survey of construction condition |
| 8 | 26 | (Sat) | Arrangement of survey data Preparation of survey report |
| . 9 | 27 | (Sun) | Preparation of survey report |
| 10 | 28 | (Mon) | Meeting at MOADR Meeting at Dept. of Telecommunication (Metro & Regien 2) Survey of foreign exchange rate at Central Bank of Sri Lanka Survey of construction condition |
| 11 | 29 | (Tue) | Survey of proposed site Meeting at Japanese Embassy and JICA office |
| 12 | 30 | (Wed) | Lv. Colombo (Messrs. Tanaka, Masuzawa) Ar. Bangkok |
| 13 | 31 | (Thu) | Lv. Bangkok (Messrs. Tanaka, Masuzawa) Ar. Tokyo |

(2) Supplement Basic Design Study (May 19~May 31, 1990)

| No. | De | ato | Schedule |
|-----|--------|-------|--|
| 1 | Jul 21 | (Sat) | Lv. Tokyo (Messrs. Morita, Tanaka, Shimamoto) Ar. Bangkok |
| 2 | 22 | (Sun) | Lv. Bangkok Ar. Colombo Survey of proposed construction site |
| 3 | 23 | (Mon) | Meeting at Japanese Embassy and JICA office Courtesy call on MOADR, Dept. of External Resources and Airport & Aviation Services Ltd. |
| 4 | 24 | (Tue) | Lv. Colombo Ar. Kandy Meeting at CARI |
| 5 | 25 | (Wed) | Meeting at CARI, Survey of PGRC |
| 6 | 26 | (Thu) | Meeting at DOA, Meeting at the Plant Quarantine Division |
| 7 | 27 | (Fri) | Lv. Kandy Ar. Colombo Meeting at Airport & Aviation Services Ltd. |
| 8 | 28 | (Sat) | Survey of construction conditions Team meeting |
| 9 | 29 | (Sun) | Arrangement of survey data Team meeting |
| 10 | 30 | (Mon) | Meeting at MOADR Meeting at JICA office Signing of Minutes of Discussions at MOADR |
| 11 | 31 | (Tue) | Report to Japanese Embassy and JICA office Lv. Colombo (Messrs. Morita, Tanaka, Shimamoto) |
| 12 | Aug. 1 | (Wed) | Ar. Tokyo |

(3) Explanation of Draft Final Report (July 21~Aug. 1, 1990)

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3. Member List of Concerning Party in Sri Lanka

Ministry of Agricultural, Food & Co-operatives

| Mr. Lalith Atbulathmudali | ex-Minister |
|---------------------------|--------------|
| Mr. M. D. D. Pieris | ex-Secretary |

Ministry of Agricultural Development and Research.

| Secretary |
|-------------------------------------|
| Secretary to the State Minister |
| Director of Agriculture Development |
| Dy. Director |
| Dy. Director |
| |

Department of Agriculture

| Dr. S. D. I. E. Gunawardene | ex-Director |
|-----------------------------|-----------------------------------|
| Mr. M. Weerasinghe | Director |
| Mr. A. M. Abeyratne | Chief Accountant |
| Mr. H. B. Senerath | Asst. Director (Plant Protection) |

Central Agricultural Research Institute

| Dr. S. Amarasiri | Dy. Director |
|--------------------------|--------------------------------|
| Dr. M. H. J. P. Fernando | Dy. Director |
| Mr. W. D. Albert | Dy. Director |
| Dr. P. Shivanahan | Chief Plant Quarantine Officer |
| Mr. R. S. U. de Silva | Research Officer |

Department of External Resources

Mr. S. Weerapana

Asst. Director

Airport & Aviation Services Ltd.

Mr. D. D. G. P. Ladduwahetty Mr. D. Dissonayake Mr. P. U. Jayasinghe Mr. H. T. DE Z. Amarasekera Chairman Executive Director Executive Commercial & Propertin Senior Air Traffic Controller Mr. M. R. Peries Mr. K. V. P. Fernanzo

Department of Civil Aviation

Mr. M. L. U. DE S. Malalgoda

Survey Department

Mr. S. T. Herat Mr. E. Perera Mr. S. Kalutanhi

Irrigation Department

Mr. K. W. Perera Mr. S. H. C. DE Silva

Ceylon Electricity Board

Mr. N. Wijemanne Mr. P. P. D. Rodrigo

Department of Telecommunication

Mr. R. Dissanayake Mr. S. Jayasinghe Mr. R. D. Somasiri Mr. T. D. G. Liyanage

Central Environmental Authority

Mr. K. G. D. Bandaratilaka

Water Resources Board

Mr. A. D. Millevitanatcay

Department of Meteorology

Dr. A. W. Mohottala

Manager Maintenance Chief Engineer

Director of Civil Aviation

Surveyor General Addl. Surveyor General Superintendent of Surveyor

Dy. Director Consultant

Addl. General Manager (Head Office) Engineer (North Western Div. Office)

Engineer External Plant Projects Telecommunication Engineer Deputy Director (Metro & Regien 2) Regional Telecommunication Engineer Negombo

Director of Environmental Protection

Asst. General Manager of Operations

Director

Lanka Electricity Company (Private) Ltd.

Mr. N. DE Livera Branch Manager (Kelaniya Branch)

Embassy of Japan

Mr. Toshihisa Takata Mr. Shin Murakami Dr. Ei Kubota

JICA Sri Lanka Office

Mr. Hideo Yasuki Mr. Hiroshi Niino Mr. Toshiro Yamashita Counsellor First Secreatary Second Secretary

Resident Representative Asst. Resident Representative Asst. Resident Representative

4. Minutes of Discussion

(1) Basic Design Study

MINUTES OF DISCUSSIONS

ON

THE PROJECT FOR ESTABLISHMENT OF THE NATIONAL PLANT QUARANTINE SERVICES

IN

THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to the request of the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan decided to conduct a basic design study on the Project for Establishment of the National Plant Quarantine Services (hereinafter referred to as "the Project"), and the Japan International Cooperation Agency (hereinafter referred to as "JICA") sent to Sri Lanka a study team headed by Mr. Takushi OBATA, Director General of Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries from October 29 to November 30,1989.

The team had a series of discussions with the officials of the Government of Sri Lanka, concerned with the Project, and conducted a field survey.

As a result of the study, both parties have agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, be examined towards the realisation of the Project, subject to the approval by the authorities concerned.

Mr. Takushi OBATA Leader Basic Design Study Team Japan International Cooperation Agency (JICA)

M.D.D.Pieris,

Secretary,

Ministry of Agriculture, Food and Co-operatives, Sri Lanka.

November 6, 1989 Colombo, SRI LANKA.

ATTACHMENT

1. The Project Title

The Project for Establishment of the National Plant Quarantine Services

2. The Objectives of the Project

The Objectives of the Project are to construct the National Plant Quarantine Services and to provide necessary equipment for the Improvement of Plant Quarantine Service.

3. The Responsible Ministry and Implementation Agency for the Project

3.1 The responsible ministry is the Ministry of Agriculture, Food and Co-operatives.

3.2 The implementation agency is the Department of Agriculture.

4. The Project Site

The project site is located at Katunayake (near the International Airport), and is shown in Annex 1.

5. The Major Items Requested for the Project

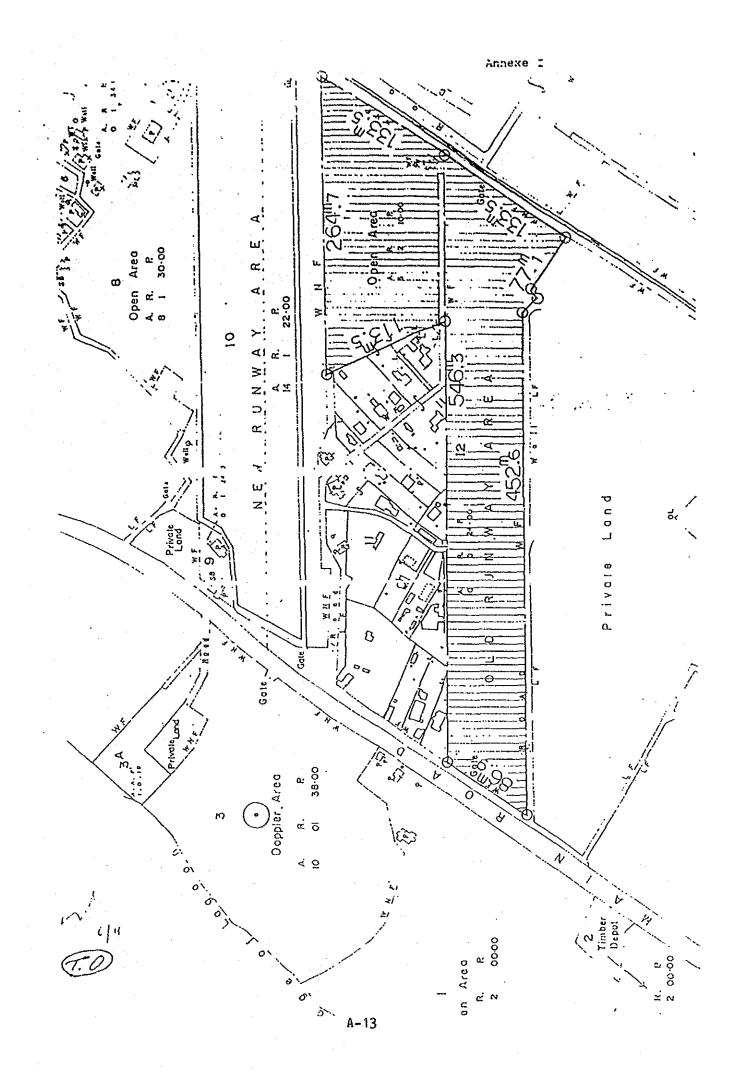
The major items requested for the Project are listed in Annex 2

- 6. Grant Aid Programme
 - 6.1 The Sri Lankan side has understood the system of Japan's Grant Aid Programme and the principle for use of Japanese consulting firm(s) and contractor(s) for the implementation of the Project.
 - 6.2 The Study Team will convey to the Government of Japan the desire of the Government of Sri Lanka that the former takes necessary measures to co-operate in implementing the Project and provides necessary facilities and equipment under the Japan's Grant Aid Programme.

6.3 The Government of Sri Lanka will take necessary measures as listed in Annex 3 on condition that the Grant Aid by the Government of Japan would be extended to the Project.

7. Technical Co-operation

The Sri Lankan side stressed the need for the Technical Co-operation from the Government of Japan for the Improvement of Plant Quarantine Services.



ANNEX 2

THE MAJOR ITEMS REQUESTED FOR THE PROJECT

A. Building

- 1. Testing Rooms for following fields;
 - 1) Bacteriology and Mycology
 - 2) Virology
 - 3) Entomology
 - 4) Nematology
 - 5) Treatment
 - 6) Tissue Culture

2. Inspection Room

- 3. Administration Office
- 4. Director's Room
- 5. Meeting Rooms
- 6. Staff Rooms
- 7. Others

B. Supporting Facilities

- 1. Glass House
- 2. Screen House
- 3. Fumigation House
- 4. Isolated Fields
- 5. Incinerator
- 6. Garage
- 7. Others

C. Equipment

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- 1. Testing Equipment
- 2. Equipment for seaport and airport
- 3 Farm Machinery
- 4. Vehicles
- 5. Others

ANNEX 3

UNDERTAKINGS BY THE GOVERNMENT OF SRI LANKA

- 1. To secure the site for the project.
- 2. To clear, level and reclaim the site as needed prior to the commencement of the construction.
- 3. To construct the access roads to the site and to supply temporary power, water and telephone service necessary for the construction prior to the commencement of the construction.
- 4. To undertake incidental external works such as planting, fencing and making gates in and around the site.
- 5. To connect distributing line of electricity to the site.
- 6. To connect city water distribution main to the site.
- 7. To connect the city drainage main (for storm, sewer and others) to the site.
- 8. To connect the telephone trunk line to the main distribution frame/panel to be equipped inside the building.
- 9. To provide general furniture for daily activities
- 10. To obtain the building permit prior to the commencement of the construction
- 11. To bear commissions to the Japanese foreign exchange bank for the banking services based on the Banking Arrangement.
- 12. To ensure the necessary budget and personnel for the proper and effective operation and maintenance of the facilities and the equipment provided under the Grant Aid.

- 13. To ensure prompt unloading, tax exemption, custom clearance at the port of disembarkation in Sri Lanka and prompt internal transportation of the products provided under the Grant Aid.
- 14. To exempt Japanese nationals involved in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in Sri Lanka with respect to the supply of the products and the services under the verified contracts.
- 15. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contracts such facilities as may be necessary for their entry into Sri Lanka and stay therein for the execution of the Project."
- 16. To maintain and use properly and effectively the facilities constructed and the equipment provided under the Grant Aid.

17. To bear all the expenses, other than those to be borne by the Grant necessary for construction of the facilities as well as for the transportation and installation of the equipment.

(2) Letter on Construction Site (Basic Design Study)

7 November 1989

Mr M D D Pieris Secretary Ministry of Agriculture, Food & Co-operatives Sri Lanka

Dear Mr Pieris

Although the minutes of discussions on the project for the establishment of the National Plant Quarantine Services was exchanged on 6 November 1989, it has been acknowledged by an authority concerned of the Ministry of Defense that any building cannot be constructed in the proposed site because of the "Air Navigation Act".

I, as the leader of Basic Design Study Team, hereby recommend that the above information be confirmed by you and, if necessary, another construction site be secured near the Xatunayake Airport as soon as possible.

If we are not informed of the location of the new site as an alternative by 19 November, the remaining five members of the Team will suspend the field survey and return to Japan on 20 November.

Your quick action toward the solution of this issue would be highly appreciated.

Thank you very much.

Yours faithfully

TAKUSHI OBATA

Leader Basic Design Study Team Japan International Co-operation Agency

- cc: 1. Mr. N. Vamadeva, Secretary to the State Minister for Agriculture
 - Mr. S. Weerapana. Asst.Director, Department of External Resources.
 - 3. Dr.S.D.I.Z. Gunawardene. Director, Department of Agriculture
 - 4. Dr. M. H. S. P. Fernando, Deputy Director, CARI
 - 5. Embassy of Japan
 - 6. JICA Sri Lanka Office.

(3) Explanation of Draft Final Report

MINUTES OF DISCUSSIONS

ON

THE DRAFT FINAL REPORT OF THE BASIC DESIGN STUDY ON THE PROJECT FOR ESTABLISHMENT OF THE NATIONAL PLANT QUARANTINE SERVICES IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

In response to the request by the Government of Sri Lanka, the Government of Japan decided to conduct a basic design study on the Project for Establishment of the National Plant Quarantine Services (hereinafter referred to as "the Project"), and the Japan International Cooperation Agency (JICA) sent the Basic Design Study Team to Sri Lanka from October 29 to November 30, 1989.

As a result of the study, JICA prepared a Draft Final Report and dispatched a team headed by Mr. Toshio MORITA, Director of the Research Division, Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries, to explain and discuss it with the relevant officials of the Government of Sri Lanka from July 21 to August 1, 1990.

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

Colombo, July 30th, 1990

Morita

Mr. Toshio MORITA Team Leader Draft Final Report Team Japan International Cooperation Agency

Dixon Nilaweera Secretary Ministry of Agricultural Development and Research Sri Lanka

MAJOR POINTS OF UNDERSTANDING

- 1. The Sri Lankan side principally agreed to the basic design proposed in the Draft Final Report with minor and appropriate alterations, as per ANNEXURE to be incorporated in the Final Report.
- 2. The Final Report (10 copies in English) will be submitted to the Democratic Socialist Republic of Sri Lanka in August 1990.
- 3. The Sri Lankan side understood the system of Japan's Grant Aid Program and confirmed that the Government of Sri Lanka will take necessary measures, as agreed in the Minutes of Discussion dated November 6, 1989, upon execution of the grant aid for the Project by the Government of Japan.
- 4. Both parties recognized that, as mentioned in Chapter 5-(4) on Recommendations, personnel assignment and budgetary appropriation are both vitally important for the successful implementation of the Project.
- 5. The Sri Lankan side reiteratedly requested the Technical Cooperation with the following contents and the Study Team agreed to convey the request to the Government of Japan.
 - 1) The project-type technical cooperation be extended in all the technical fields which the Precise Inspection Division is consisted of.
 - 2) The training in Japan for the counterparts be also provided before the project-type technical cooperation commenced.

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ANNEXURE

ALTERATIONS

BUILDINGS

- 1. The access roads to the Administration Block and to the Plant Quarantine/Treatment Block shall be covered by concrete pavement.
- 2. The isolated field shall be enclosed with net fences for the protection of plants.
- 3. Stand-by tube well pump shall be considered.
- 4. The facility shall be designed so as to reduce the power consumption to the minimum.

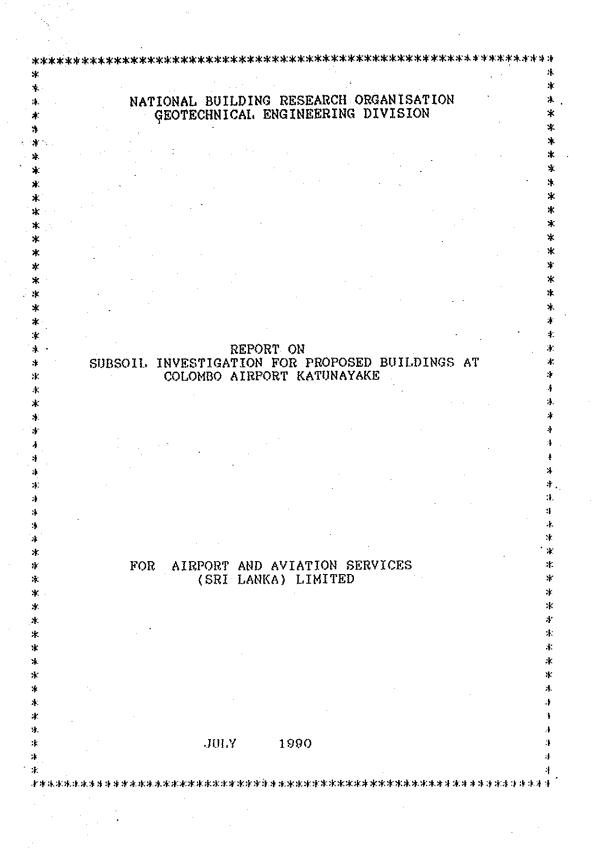
EQUIPMENT

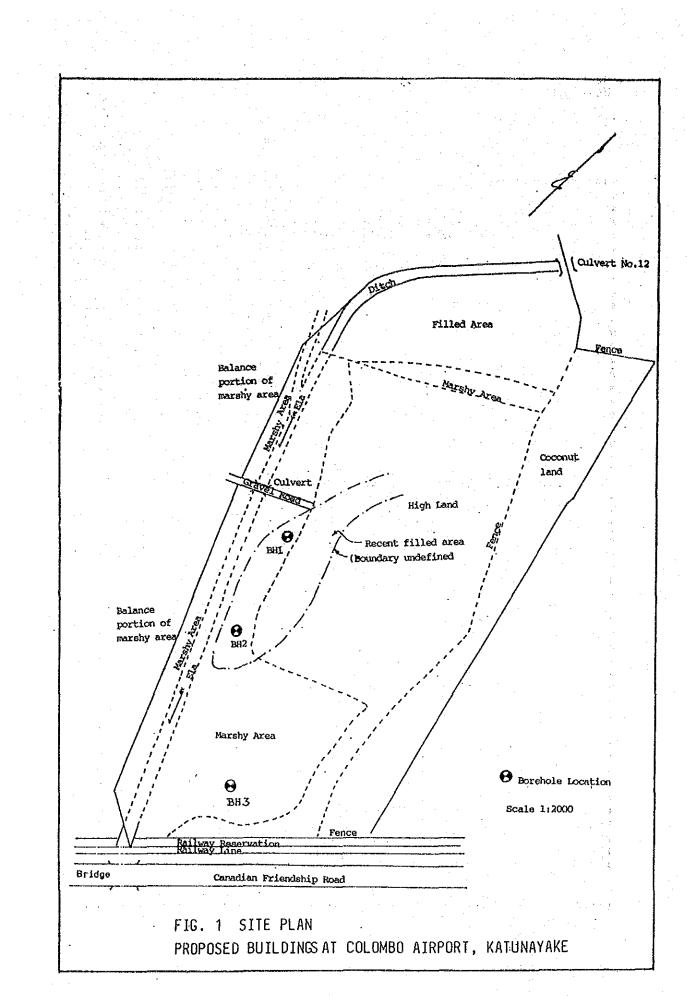
- 1) Following equipment shall be added.
 - 1. White boards for the Inspection Rooms and other rooms.
 - 2. Small safe box for the Administration Office and for the Seaport Plant Quarantine Station
 - 3. Typewriters (Sinhala, Tamil and English)
 - 4. Paper cutter for the Printing Room
 - 5. Fumiscopes (TOUKA-TYPE)
- 2. Personal Computer shall have a system with more than 2 terminal stations for input data.

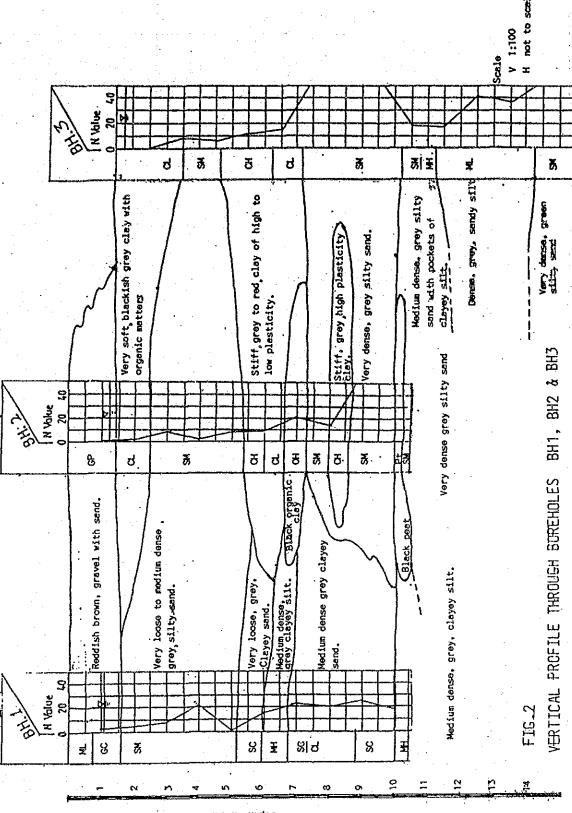
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| 1 | | | to tipo | | 2.45 | | | | · | · | | |
| 2.70 | SM | Loose, blackish grey, coarse grained silty-sand. | 9 (0 1118 | | | | | | <u>.</u> | | | |
| 3.00 | 5., I | | | DS | 3.00 | 3.00 | 6 | .4 | 3 | 7 | | |
| 3,20 | СН | Medium stiff, brownish red (| nottled grey | ŀ | 3,45 | | | | Į | | r fill | |
| | | high plasticity clay. | | i . | | | | | | | | |
| 4.00 | | | | DS | 4.00 | 4.00 | 2 | 5 | 6. | 13 | | |
| | | Stiff, pink mottled grey, his clay with pockets of clayey | | ۲ ۲ | 4.45 | | | | Į . | | | li i i i i i |
| | Ю | CIBY WITH DERBES OF CLOSES | | | | | | | | | | |
| 4,75 | | | ······································ | DS | = 00 · | 5.00 | 4 | 7 | | 16 | | |
| . 5.00 | a | Very stiff; yellow mottled | red,silty | 05 | 5.00 | 5.00 | 4 | . ' | 9 | 10 | | RIIII |
| | 1 | clay with partially weather | | | 5,45 | | | | | | | |
| 5.70 | | ······································ | | | | | | | | | | |
| 6.00 | | Sample not recovered. | | . | 6.09 | 6.00 | 19 | <i>5</i> 3 | | | | |
| | | | | | 6,25 | | • | · | | | | |
| | | · · · | | | | | | | | | 聞聞 | |
| 6,75 | | , | | DS | 7,00 | 7,00 | 11 | 34 | > <u>20</u> 5 | | | |
| 1.00 | | | | | 7,30 | | | | 5 | | | |
| | SM | Very dense, grey,medium to grained silty send. | fin o | | | _ | | | | | | |
| · · · | | Atomion strik some | | | 0.00 | 8.00 | 54 | >50 | | | | |
| 8.00 | 1. 1. j. j. | | _ | DS | 8,00 | 0.00 | 11 | 150 | | | 雦雦 | |
| ÷ | | | • | | 8,25 | | | | | | | |
| · · · · | | | | | | | | | | | | |
| 8,75 | - | Medium dense, whitish grey. | medium | Ds | 9,00 | 9.00 | 6 | 7 | 12 | 19 | | |
| 9.00 | <u>SM</u> мн | to fine grained silty sand fines and pockets of clayey | silt, | | 9.45 | | | | | | | |
| | | THINK WIT PLANE TO TO THE | | | | | | | | | | |
| 9.70 | | · · · · · · · · · · · · · · · · · · · | د | | | | | | | | | |
| | | : Deepthils Herach, | GEOTECHNI | <u>`</u> | L | | | ابسيسنا | | | | |

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|----------------|--------------------------------|--|--|--|--|---|---|---|---|--|--|
| (| OF BOREHOLE | | | | | | , | <u> </u> | Anne | xe 1 | ∦ - 3 2 , . 2 ⊷ , ⊷ |
| OF P | | | Bore Hole BH3 Contd. | | | | | | | | |
| on ; | | ALUIAYAN | death of hore hate | | | | | | | | |
| meth | od; Wash boring | connenced | Water struck at GL | | | | | بر ندن ج | | | |
| ng Mu | d : Bentonite | completed | ستنفذ كمناجح | GWL of bore hole | | | | 6L-0-25 M | | | |
| | | • | • | | S | STANDARD PENETRATION TEST DATA | | | | | |
| | Dessification & Description | n of Soil | | | depth tested GL m | | or 15 | | N-value | | |
| 2 - 1 1 - 2 | | | Sampling m | | | 1 | 2 | 3 | for 30cm | graphi | ca. tic |
| | | | DS | 10.00 | 10.00 | 4 | 7. | 11 | 18 (| | Ī |
| | | | | 10,45 | | | | | | 111 - N | j. |
| | of sand and mica. | • | | | | | | | | | Ň |
| | | | DS | 11.00 | 11.00 | . 6 | 16 | 25 | 41 | | |
| ML | | ey,sandy | | 11.45 | | | | | | | H |
| | (Weathered rock) | • | DS | 12.00 | 12.00 | 8 | 15 | 22 | - 37 - | | |
| | • | | | | | | 1 A. | | | | |
| | Vary danse, dark grovish | 07860 | | 12,42 | N | | - | | | | |
| SM | medium to fine grained si | | DS | 13.00 | 13.00 | 19 | 36 | >20 | | | |
| | (weathered rock) | · · | | | | ~70 | | | * | | |
| | | | 105 7, 1 1 | 13.80 | 13,70 | /10 | | | | | |
| | Borehole terminated at 13 | 90m depth. | | 13,90 | | | 1.1 | | | | |
| | н Н | | | | Refus | l to | Pene | trat | On | | ļ. |
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| - 1. 1. B. | | | | | | | | - | | | |
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| | O,F P on : meth ng mu | Colombo Airport, on : KatUnsyeke method : Mash boring ng mud : Bentonite Classification & Description ML Medium dense, groenish gre to dark grey with small sp brownish red, cleyey silt of sand and mica. (weathered rock ML Dense, greenish grey to gr silt with mice. (Weethered rock) Very dense, dark greyish medium to fine grained si (weathered rock) | DF PROJECT : Soil Investigation: for Proposition Airport, Katunayaka on : Katunsyake method; Mash boring commenced ng mud : Bentonite completed Classification & Description of Soil KL Medium dense, greenish grey, to dark grey with small spots of brownish red, clayey silt with traces of sand and mica. (weathered rock ML Dense, greenish grey to grey, sandy silt with mice. (Weathered rock) Very dense, dark greyish green, medium to fine grained silty send. (weathered rock) | DF PROJECT : Soil Investigation: for Proposed Colombo Airport, Katunayaka on : KatUnsyeke method : Mash boring commenced on : ng mud : Bentonite completed on : Classification & Description of Soil Der Sam ML Medium dense, greenish grey, to dark grey with small spots of brownish red, clayey silt with traces of sand and mica. (weathered rock DS ML Dense, greenish grey to grey, sandy silt with mica. (Weathered rock) DS Very dense, dark greyish green, medium to fine grained silty send. (weathered rock) DS SM medium to fine grained silty send. (weathered rock) DS | DF PROJECT : Soil Investigation: for Proposed Buildings Colombo Airport, Katunayaka on : KatUnsykke method : Mash boring commenced on : 01.05.1 ng mud : Bentonite completed on : 04.06.1 Classification & Description of Soil Depth of Sampling m Mu to dark grey with small spots of brownish red, cleyey silt with traces of sand and mica. (weathered rock DS 11.00 Mu Dense, greenish grey to grey, sandy silt with mica. (Weathered rock) DS 12.00 12.45 SM medium to fine grained silty send. (weathered rock) DS 13.00 13.32 DS 13.80 2.1 | DF PROJECT : Soil Investigation: for Proposed Buildings at Colombo Airport, Katunayaka on : Katunsyeke method : Mash boring commenced on : 01.06.1990 ng mud : Bentonite completed on : 04.06.1990 Classification & Description of Soil Type and depth Classification & Description of Soil Depth of tor dark grey with small spots of brownish red, cleyey silt with traces of send and mice. (weathered rock Description of grey, sandy ML Dense, greenish grey to grey, sandy Silt with mice. (Weethered rock) DS 12.00 12.00 12.45 Wery dense, dark greyish green, medium to fine grained silty send. (weathered rock) DS 13.00 13.32 Borehole terminated at 13.90 m depth. Borehole terminated at 13.90 m depth. | DF PROJECT : Soil Investigation: for Proposed Buildings at Colombo Airport, Katunayake Gro on : Katunsyske dept method : Mash boring commenced on : 01.05.1990 Wate ng mud : Bentonite completed on : 04.05.1990 GML Classification & Description of Soil Type and depth depth of Sampling m GL m 1 ML Medium dense, greenish grey, to dark grey with small spots of brownish red, cleyey silt with traces of sand and mica. (weathered rock DS 11.00 11.00 4 ML Dense, greenish grey to grey, sandy silt with mice. (Weethered rock) DS 12.00 12.00 8 12.45 M Very dense, dark greyish green, medium to fine grained silty send. (weathered rock) DS 13.80 13.00 19 Borehole terminated at 13.90 m depth. Borehole terminated at 13.90 m depth. | Dif PROJECT : Soil Investigation: for Proposed Buildings at Colombo Airport, Katunayake Bore Ho ground on : Katuneyake depth of method ; Mash boring commenced on : 01.05.1990 Water st (or of completed on : 04.06.1990) ng mud : Bentonite completed on : 04.06.1990 GML of bill (of completed on : 04.06.1990) Classification & Description of Soil Type and Depth of Sampling m completed on : 04.06.1990 ML Medium dense, groenish grey, to derk grey with small spots of brownish red, clayey silt with traces of sand and mica. (weathered rock DS 10.00 10.00 4 7 ML Dense, greenish grey to grey, sandy silt with mice. (Weethered rock) DS 11.00 11.00 6 16 ML Very dense, dark greyish green, medium to fine grained silty send. (weathered rock) DS 13.00 13.00 19 36 Borehole terminated at 13.50 m depth. DS 13.80 13.90 70 | Dif PROJECT : Soil Investigation: for Proposed Buildings at Colombo Airport, Katunayaka Bore Hole ground elev. ground elev. on : Katunsyske depth of bore method : Wash boring commenced on : 01.06.1990 Mater struck ng mud : Bentonite completed on : 04.06.1990 GML on completed on completed on : 04.06.1990 GML on completed on completed on : 04.06.1990 Classification & Description of Soil Type and Depth of Sampling R STANDARD PENETR ML to dark grey with snall spots of brownish red, cleyey silt with traces of send and mice. DS 10.00 10.00 4 7 11 ML Dense, greenish grey to grey, sendy silt with mice. DS 11.00 11.00 6 16 25 ML Very dense, dark greyish green, medium to fine grained silty send. DS 13.00 13.00 13.00 13.90 740 Borehole terminated at 13.00 m depth. 13.50 13.90 740 14 15.50 15.50 | OF PROJECT : Soil Investigation: for Proposed Buildings at Colombo Airport, Katunayaka Bore Hole Bis Bis Struck on: Katunayake ground elevation on: Katunayake depth of bore hole method; Mash boring commenced on: 01.05.1990 Water struck at GI mg mud : Bentonite completed on: 04.06.1990 GML or completion Glassification & Description of Soil Type and Depth of Sampling m depth tested number of ML Medium dense, greenish grey, to derk grey with small spots of brownish red, cleyey silt with traces of send and mica. (weathered rock) DS 10.00 10.00 4 7 11 18 or 30cm ML Dense, greenish grey to grey, sandy silt with nice, (Weethered rock) DS 12.00 12.00 8 15 22 37 SM Weithered rock) DS 13.00 13.00 19 36 >20 DS 13.80 13.90 70 13.90 70 13.90 14 >20 | Dif PROJECT : Soil Investigation for Proposed Buildings at Colombo Airport, Katunayake Bore Hole By Condd. By Condd. on : KatUneyeke depth of bore hole 13.83 method ; Mash boring commenced on : 01.06.1990 Water struck at GL ng mud : Bentonite completed on : 04.06.1990 GHL of bore hole 13.83 Classification & Description of Soil Type and Depth of Sampling m GL m 1 2 3 30cm preshits of send and mica. (weathered rock) ML Dense, greenish grey, to grey, sendy silt with mica. (Weethered rock) DS 10.00 10.00 4 7 11 18 0 11.45 ML Dense, derk groyish green, medium to fine greined silty send. (Weethered rock) DS 13.00 13.00 19 36 22 37 37 Borehole torminated et 13.90 m depth. DS 13.80 13.90 710 14 14 14 14 |

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