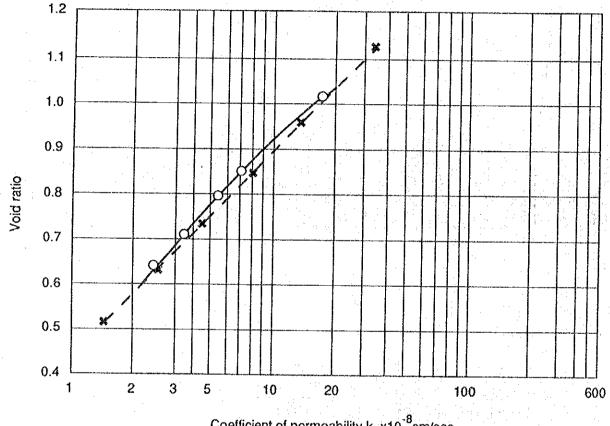
BRTC No. 455/89-90

dt. 30.8.89

Sent by : Soil Tech Diameter: 2.5 inch Height: 1.0 inch Sp. gravity: 2.65

Location: Dhaka City Site Bh No : M1 Depth: 3.0 m O

Bh No.: M2 Depth: 3.0 m 🗱



Coefficient of permeability k, x10<sup>-8</sup> cm/sec.

Results obtained from disturbed sample remoulded to liquid limit and tested in one Note: dimensional consolidation.

FIG. H. 7

PERMEABILITY FROM CONSOLIDATION TEST

UPDATING STUDY ON STORM WATER DRAINAGE SYSTEM IMPROVEMENT PROJECT IN DHAKA CITY

SUPPORTING REPORT - I - SCOPE OF WORK

## SCOPE OF WORK

FOR

UPDATING STUDY ON THE STORM WATER DRAINAGE SYSTEM IMPROVEMENT PROJECT

IN

DHAKA CITY

## AGREED UPON BETWEEN

# JAPAN INTERNATIONAL COOPERATION AGENCY

AND

EXTERNAL RESOURCES DIVISION, GOVERNMENT OF BANGLADESH

DHAKA , JUNE 1, 1989

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DEPUTY SECRETARY

EXTERNAL RESOURCES DIVISION

MINISTRY OF PLANNING

GOVERNMENT OF BANGLADESH

MR. MATSUZAWA WORTO
RESIDENT PEPRESENTATIVE
JICA BANGLADESH OFFICE
JAPAN INTERNATIONAL
COOPERATION ACENCY

# 1. INTRODUCTION

In response to the request of the Government of the People's Republic of Bangladesh (hereinafter referred to as "the Government of Bangladesh") the Government of Japan decided to conduct a updating study on Storm Water Drainage System Improvement Project in Dhaka City which was completed in October 1987, in accordance with relevant laws and regulations in force in Japan.

Accordingly the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation progremmes of the Government of Japan will undertake to update the previous study, mentioned above in close cooperation with Dhaka Water Supply and Sewerage Authority (DWASA), which is the Executive Agency on behalf of the Government of Bangladesh.

The present document sets forth the Scope of Works with regard to the Updating Study.

## 2. OBJECTIVES OF THE UPDATING STUDY

The objectives of the Updating Study are:

- To Review and reasses the area under Phase-I Programme to be included in the first priority zone, taking into consideration the flood of 1988 and theon-going related project.
- 2) To identify the urgent project to be included in the related Phase-I Programme.
- 3) To prepare preliminary design for the urgent project mentioned above.

## 3 STUDY AREA

The updating study area shall cover the first priority zone and other drainage zones as necessary, in view of the flood of 1988 and on-going related project.

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#### 4. OUTLINE OF THE UPDATING STUDY

In order to achieve the objectives mentioned above the Updating  $\mathsf{Study}$  shall cover the following items:

- 1) Data collection and analysis
  (Supplement of the previous study)
- 2) Survey on the storm damages in 1988
- 3) Survey on the present condition
- 4) Coordination between the previous study and on-going related project.
- 5) Updating the Phase-I Programme with due consideration of the total Programme.
- 6) Identification of the Urgent Project under refixed Phase-I Programme.
- 7) Longitudinal and sectional survey for all drainage channels necessary for updating the Project.
- 8) Topographic survey for proposed major facilities
- 9) Preliminary design of Urgent Project and Cost Estimation
- 10) Implementation programme
- 11) Project evaluation

## 5. SCHEDULE OF THE UPDATING STUDY

The Updating study will be performed in accordance with the tentative study schedule drawn in the appendix.

#### 6. REPORTS

JICA will prepare and submit the following reports in English to the Government of Bangladesh.

1) Inception Report: Twenty(20) copies at the commencement of the field survey in Bangladesh



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- 2) Progress Report: Twenty (20) copies within three(3) months after commencement of the Updating Study
- Twenty (20) copies within six(6) months after commencement of the Updating Study. The Government of Bangladesh will provide JICA with its comments within two(2) weeks after its reception of the Draft Final Report.
- 4) Final Report:
  Fifty(50) copies within one(1)month after the receipt of the comments on the Draft Final Report.

# 7. UNDERTAKINGS OF THE GOVERNMENT OF BANGLADESH

- 1) To facilitate smooth conduct of the Updating Study, the Government of Bangladesh will take necessary measures.
  - a) to secure the safety of the study team
  - b) to permit the members of the Study team to enter, leave and sojourn in Bangladesh for the duration of their assignment therein, and exempt them from alien registration requirements and consular fees.
  - c to exempt the members of the Study team from taxes, duties and other charges in equipment, machinery and other materials brought into Bangladesh for the conduct of the Updating Study.
    - d) to exempt the members of the Study team from income tax and other charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Study team for their services in connection with the implementation of the Updating Study.
    - e) to provide to the Study team with the necessary facilities for remittances as well as utilization of the funds intruduced into Bangladesh from japan in connection with the implementation of the Updating Study.
    - f) to secure permission for entry into private properties or restricted areas for the conduct of the Updating Study.



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- g) to secure permission for the Study team to take all data and documents (including photographs) related to the Updating Study out of Bangladesh to Japan.
- h) to provide medical services as needed. Its expenses will be chargeable on the members of the Study team.
- 2) The Government of Bangladesh shall bear claims, if any arises against the members of the Study team resulting from occuring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Updating Study, except when such claims arise from gross negligence or willfull misconduct on the part of the members of the Study team.
- Dhaka Water and Sewerage Authority (hereinafter referred to as "DWASA") shall act as counterpart agency to the Study team and also as coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Updating Study.
- 4) DWASA shall, at its own expenses, provides the study team with the following.
  - a) Data and information related to the Updating Study Area available with DWASA.
  - b) Counterpart personnel (only) necessary for the Updating Study.
  - c) Credentials or identification card.

#### 8. UNDERTAKINGS OF JICA

For the implementation of the Updating Study, JICA shall take the following measures:

- 1) to dispatch, at its own expenses, the Study team to Bangladesh.
- 2) to pursue technology transfer to the Bangladesh counterpart personnel in the course of the Updating study.

## 9. OTHERS

JICA and DWASA shall consult with each other in respect of any matter that may arise from or in connection with the Updating Study.



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