

No. 1

JAPAN INTERNATIONAL COOPERATION AGENCY
THE HASHEMITE KINGDOM OF JORDAN
THE GREATER AMMAN

BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR
IMPROVEMENT OF SOLID WASTE
MANAGEMENT
IN THE GREATER AMMAN
IN THE HASHEMITE KINGDOM OF JORDAN

FEBRUARY, 1994

ENVIRONMENTAL TECHNOLOGIC CONSULTANT CO., LTD.

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BASIC DESIGN STUDY REPORT ON THE PROJECT FOR IMPROVEMENT OF SOLID WASTE MANAGEMENT IN THE GREATER AMMAN IN THE HASHEMITE KINGDOM OF JORDAN

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JAPAN INTERNATIONAL COOPERATION AGENCY
THE HASHEMITE KINGDOM OF JORDAN
THE GREATER AMMAN

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PREFACE

In response to a request from the Government of the Hashemite kingdom of Jordan, the Government of Japan decided to conduct a basic design study on the Project for Improvement of Solid Waste Management in the Greater Amman in the Hashemite Kingdom of Jordan and entrusted the study to the Japan International Cooperation Agency (JICA).

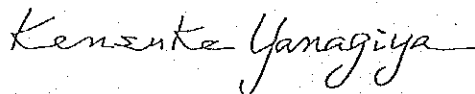
JICA sent to Jordan a study team headed by Mr. Hisatoshi Okubo, First Basic Design Study Division, Grant Aid Study and Design Department, JICA and constituted by members of Environmental Technologic Consultant Co., Ltd., from 23rd August to 21st September, 1993.

The team held discussions with the officials concerned of the Government of Jordan, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission headed by Mr. Naohiro Watari, Grant Aid Division, Bureau of Economic Cooperation, Ministry of Foreign Affairs, was sent to Jordan in order to discuss a draft report, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Hashemite Kingdom of Jordan for their close cooperation extended to the teams.

February, 1994



Kensuke Yanagiya

President

Japan International Cooperation Agency

February, 1994

Mr. Kensuke Yanagiya,
President
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

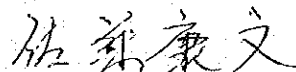
We are pleased to submit to you the basic design study report on the Project for Improvement of Solid Waste Management in the Greater Amman in the Hashemite Kingdom of Jordan.

This study was conducted by Environmental Technologic Consultant Co., Ltd, under a contract to JICA, during the period 18th August 1993 to 15th February 1994. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Jordan and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

We wish to take this opportunity to express our sincere gratitude to the officials concerned of JICA, the Ministry of Foreign Affairs, and the Ministry of Health and Welfare. We would also like to express our gratitude to the officials concerned of the Ministry of Planning the Municipality of Greater Amman, the JICA Jordan Office, the Embassy of Japan in Jordan for their cooperation and assistance throughout our field survey.

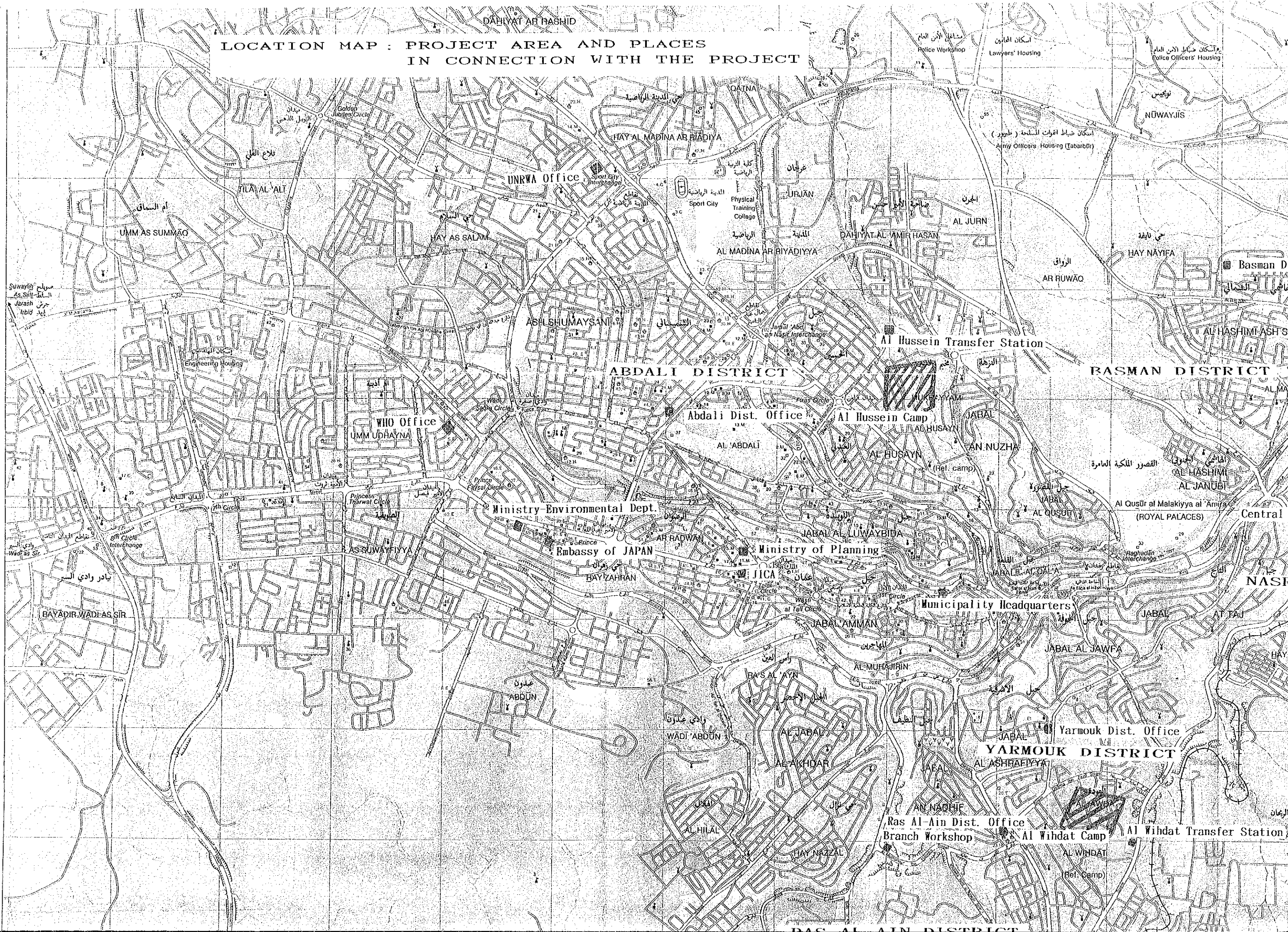
Finally, we hope that this report will contribute to further promotion of the project.

Very truly yours,



Yasufumi Sato
Chief Engineer,
Basic design study team on the
Project for Improvement of
Solid Waste Management in the
Greater Amman in the Hashemite
Kingdom of Jordan.

LOCATION MAP : PROJECT AREA AND PLACES
IN CONNECTION WITH THE PROJECT



DAHIYAT AR RASHID

UMM AS SUMMAQ

UNRWA Office

ABDALI DISTRICT

WHO Office

Abdali Dist. Office

Ministry-Environmental Dept.

Embassy of JAPAN

Ministry of Planning

Municipality Headquarters

BASMAN DISTRICT

Al Hussein Camp

Al Qusūr al Malakiyya al 'Amira
(ROYAL PALACES)

YARMOUK DISTRICT

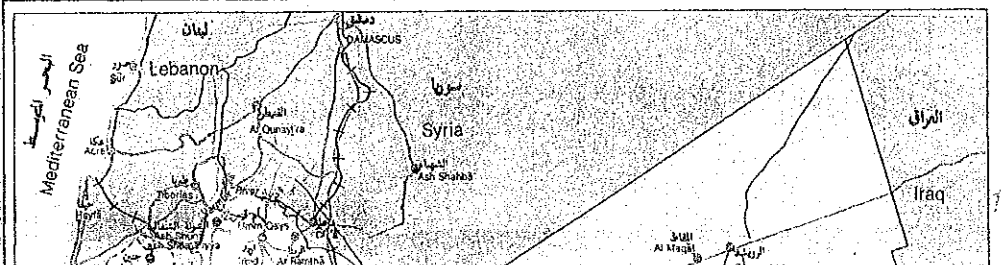
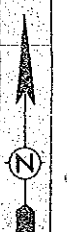
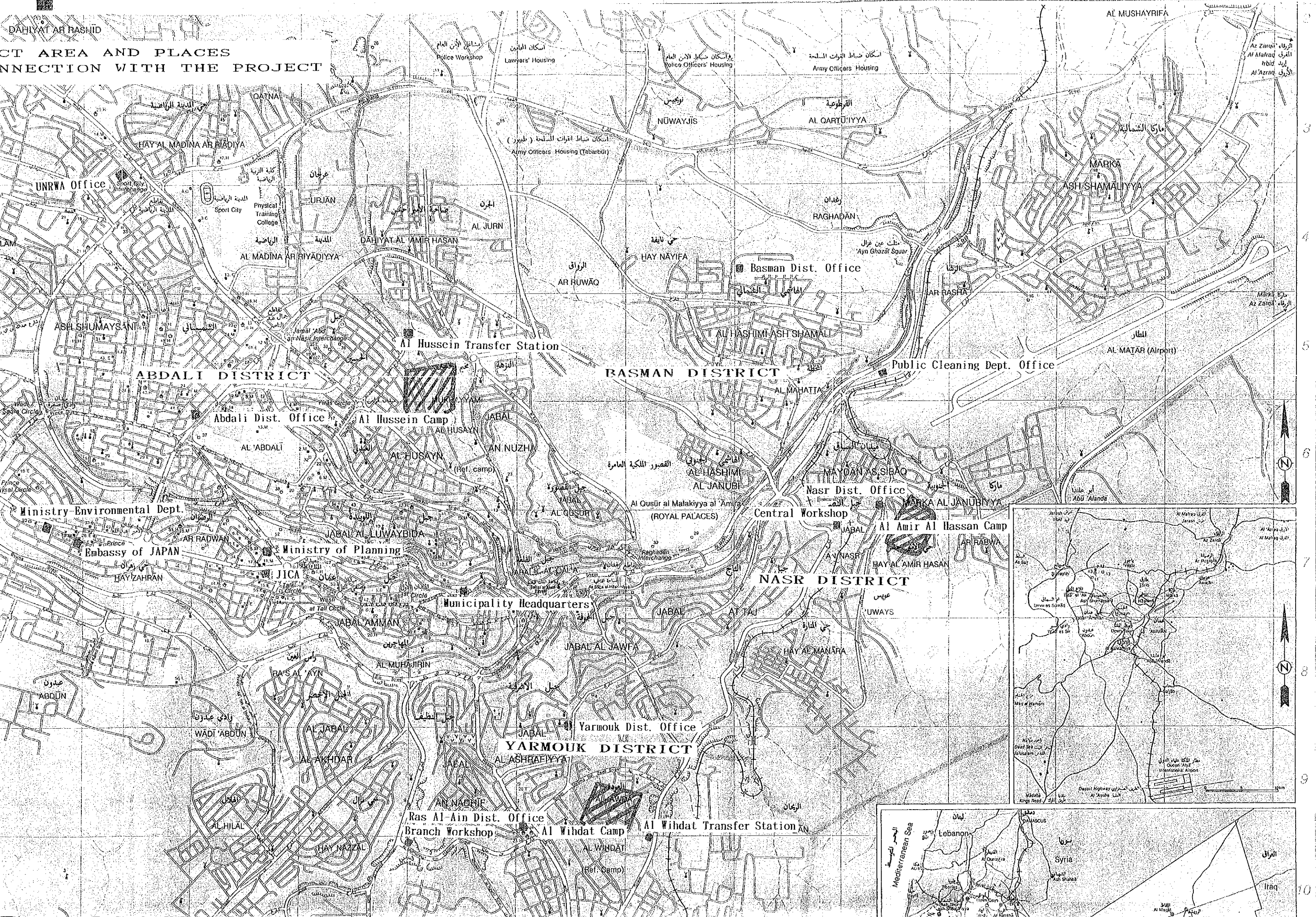
Yarmouk Dist. Office

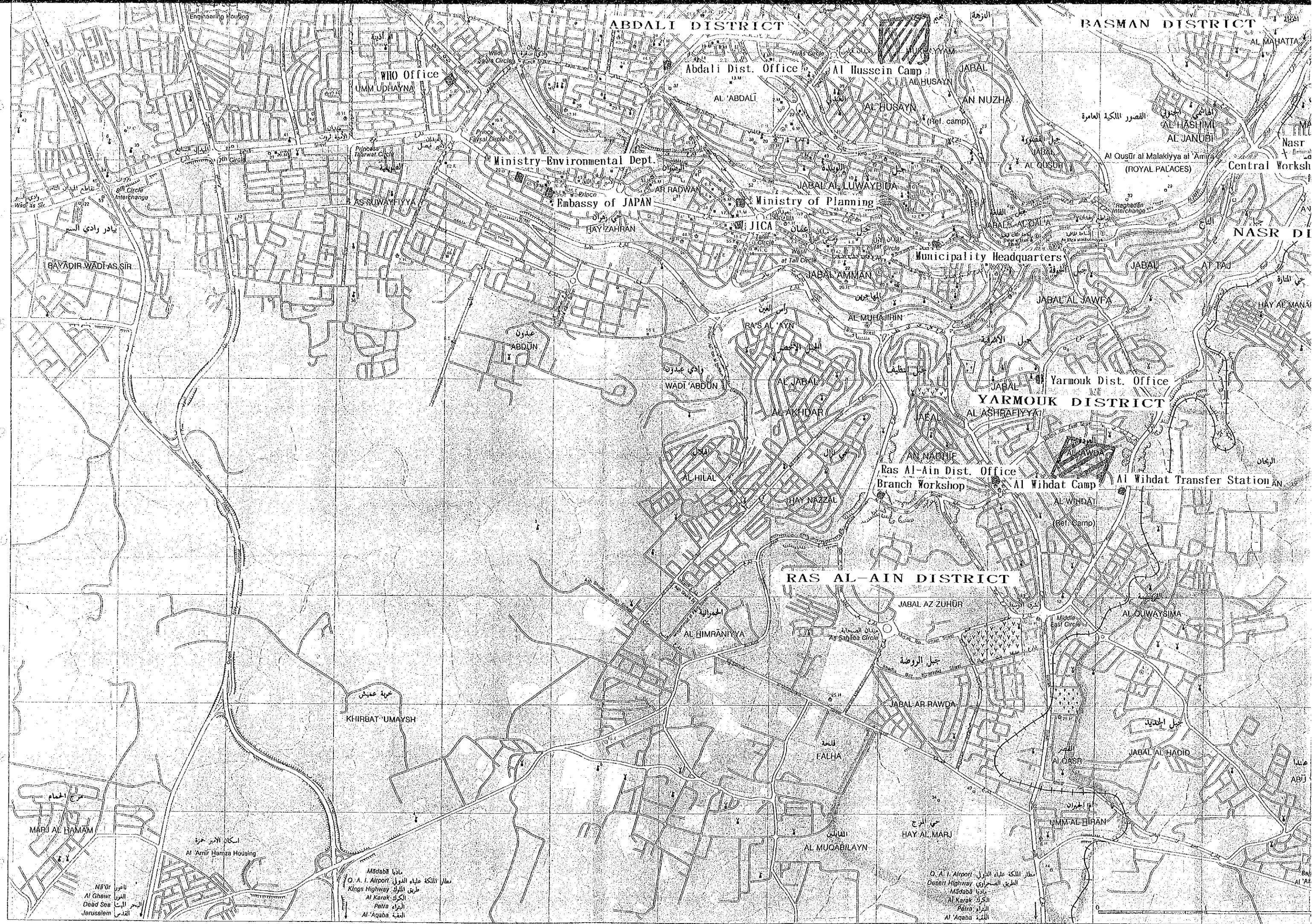
Ras Al-Ain Dist. Office
Branch Workshop

Al Wihdat Transfer Station

RAS AL AIN DISTRICT

DAHIYAT AR RASHID
CT AREA AND PLACES
NECTION WITH THE PROJECT





ABDALI DISTRICT

BASMAN DISTRICT

WHO Office

Abdali Dist. Office

Al Hussein Camp

Ministry Environmental Dept.

Embassy of JAPAN

Ministry of Planning

Municipality Headquarters

Al Qusūr al Malakiyya al 'Amiya (ROYAL PALACES)

Central Worksh

YARMOUK DISTRICT

Ras Al-Ain Dist. Office

Al Wihdat Camp

Al Wihdat Transfer Station

RAS AL-AIN DISTRICT

KHIRBAT 'UMAYSH

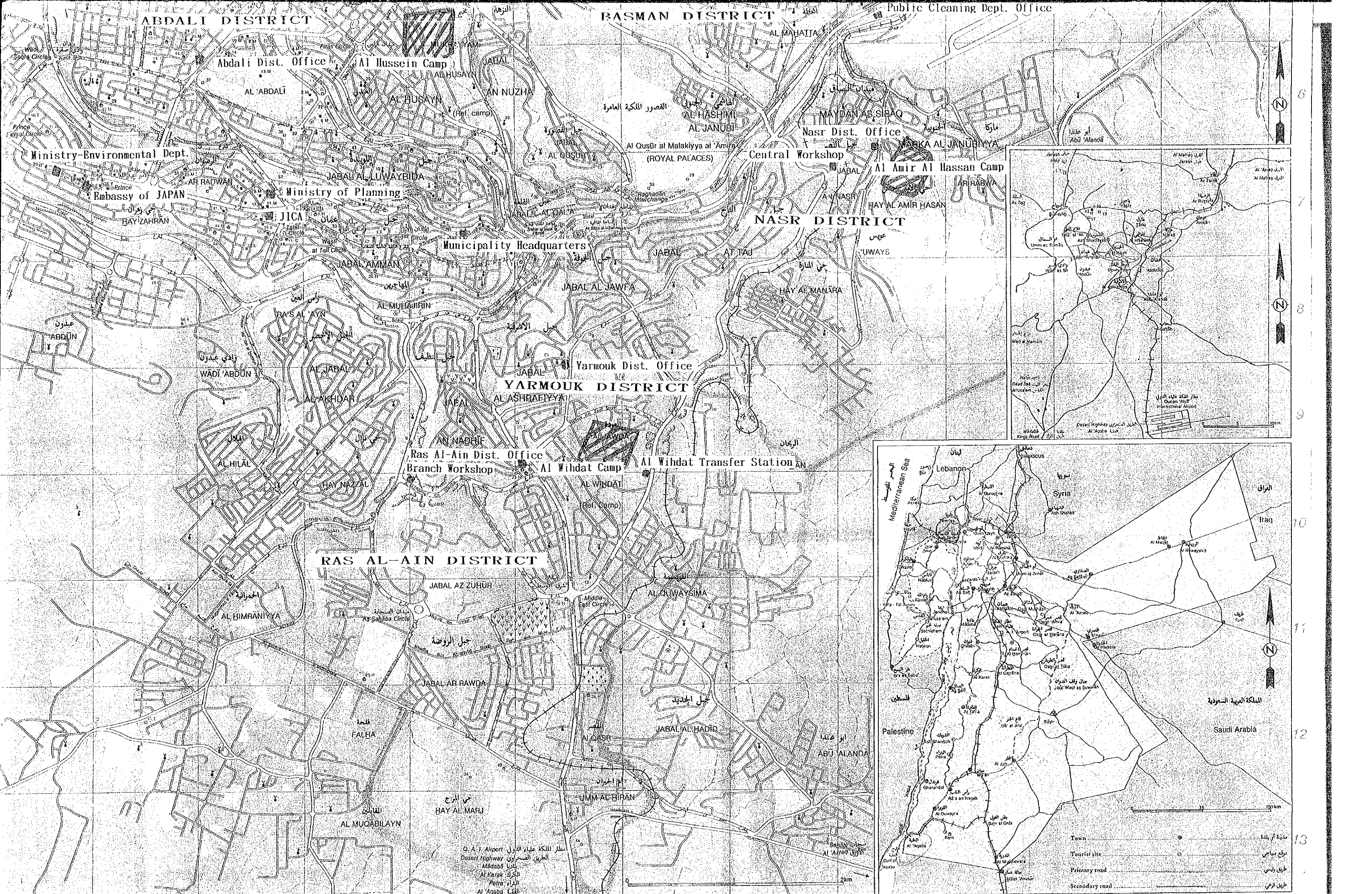
JABAL AR RAWDA

JABAL AL HADID

Nāḡūr
Al Ghawr
Dead Sea
Jerusalem

Mādāba
O. A. I. Airport
Kings Highway
Al Karak
Pella
Al 'Aqaba

O. A. I. Airport
Desert Highway
Mādāba
Al Karak
Pella
Al 'Aqaba



ABDALI DISTRICT

BASMAN DISTRICT

NASR DISTRICT

YARMOUK DISTRICT

RAS AL-AIN DISTRICT

Ministry-Environmental Dept.

Embassy of JAPAN

Ministry of Planning

JICA

Municipality Headquarters

Nasr Dist. Office

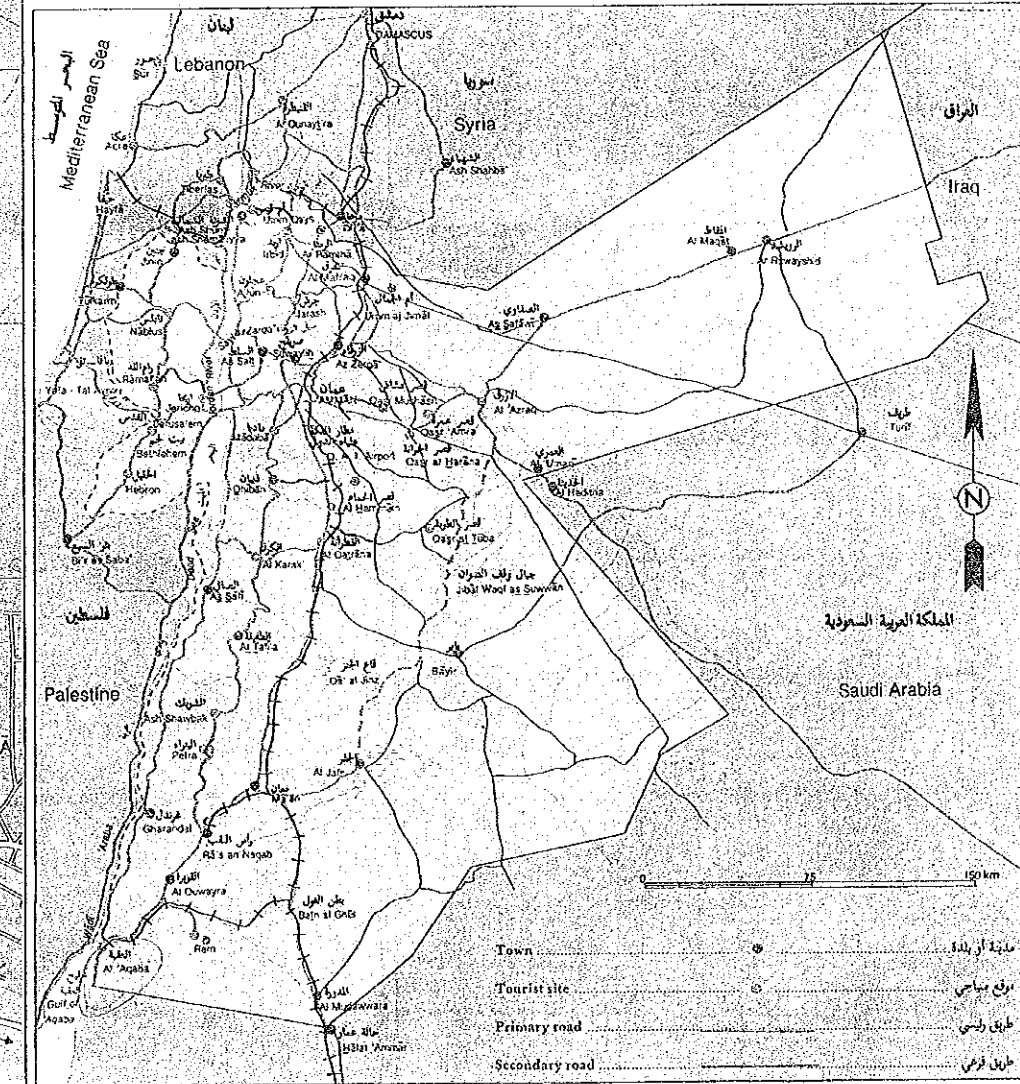
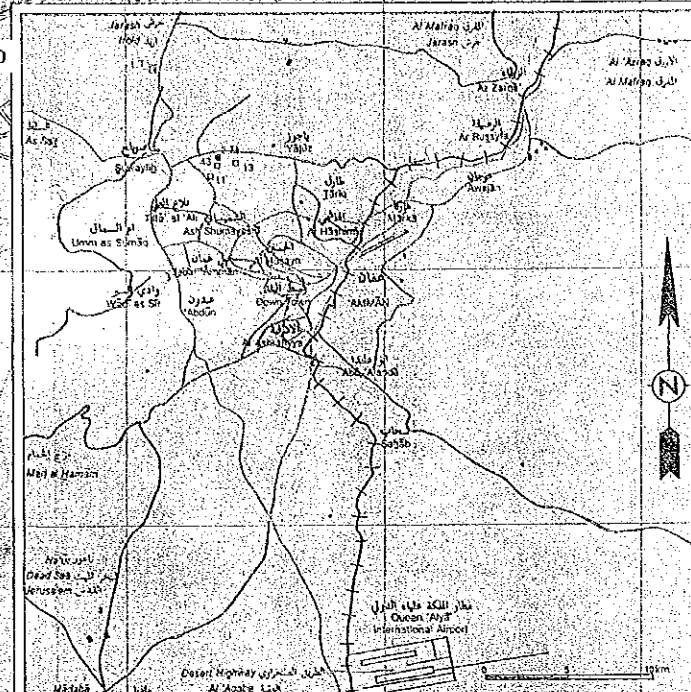
Central Workshop

Al Amir Al Hassan Camp

Yarmouk Dist. Office

Ras Al-Ain Dist. Office

Al Wihdat Transfer Station



Q. A. 1. Airport مطار الملكة علياء الدولي
 Desert Highway الطريق الصحراوي
 Madaba مادبا
 Al Karak الكرك
 Petra البتراء
 Al 'Aqaba العقابا

Town مدينة أو بلدة
 Tourist site موقع سياحي
 Primary road طريق رئيسي
 Secondary road طريق فرعي

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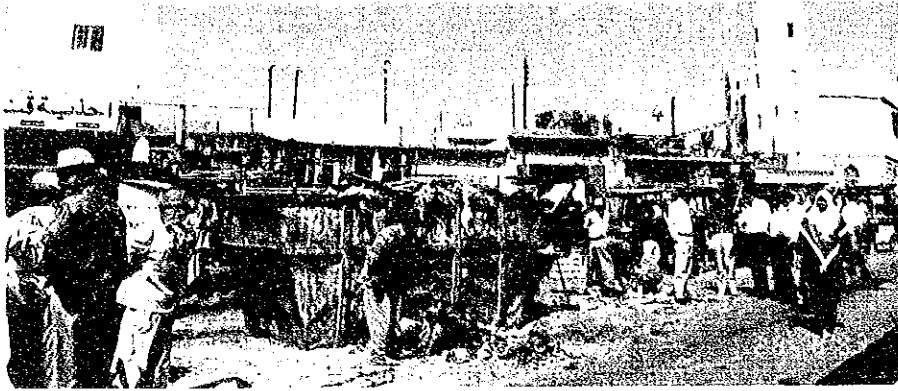
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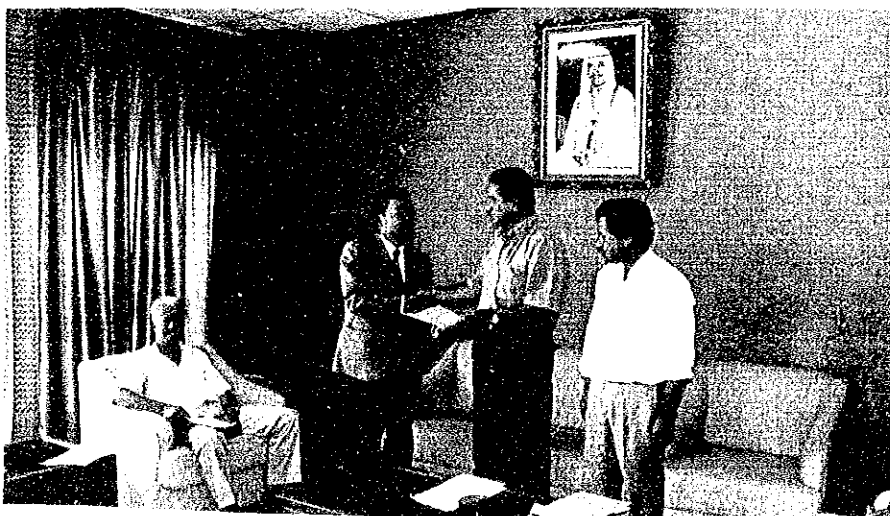
Palestine refugees camp
(Al Wihdat Camp)



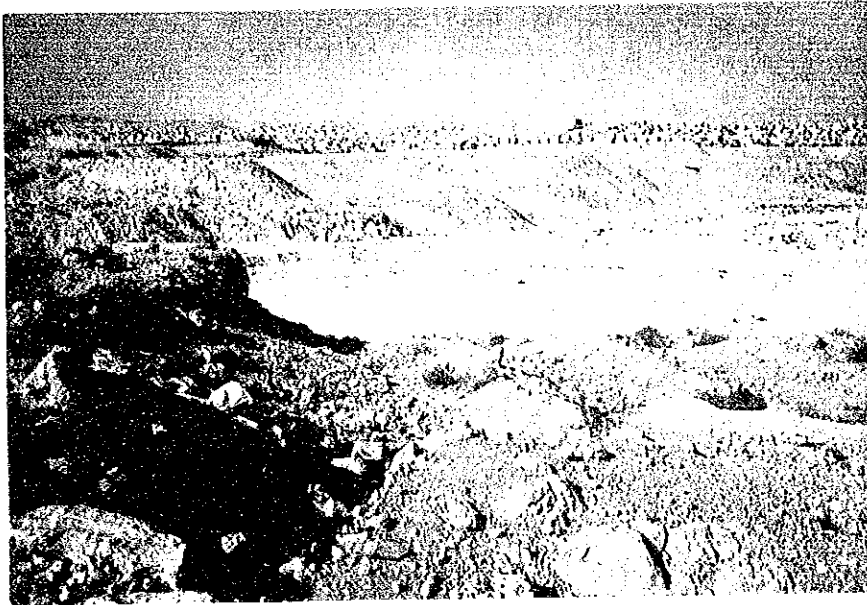
Narrow street in project
area
Door-to-door collection
by pushcarts
○ shows trash
receptacles



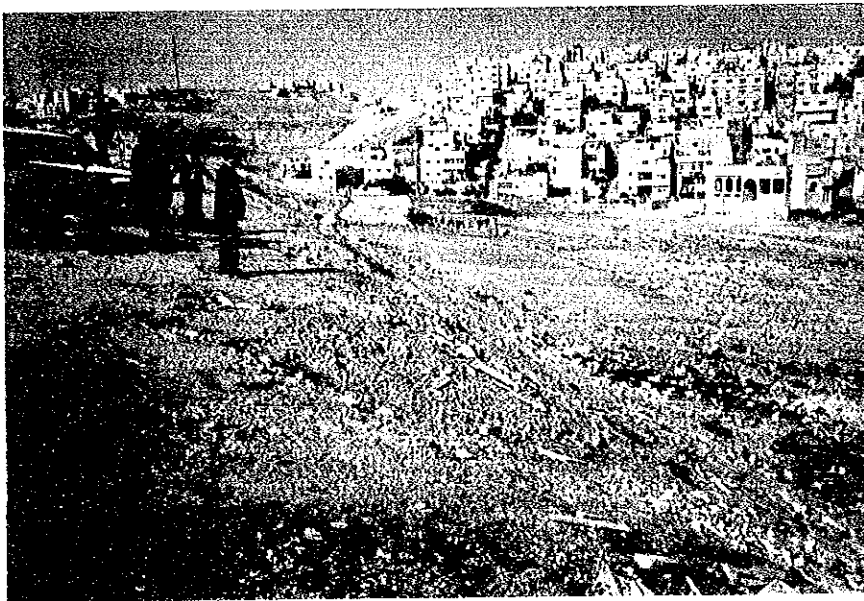
Rusayfa final
disposal site



Signing of Minutes of
Discussions
(31st August 1993)



Candidate site of
the next stage of
final disposal in
Rusayfa



Candidate site of
a transfer station
in Al Hussein



Signing of Minutes
of Discussions on
the draft report
(18th November 1993)