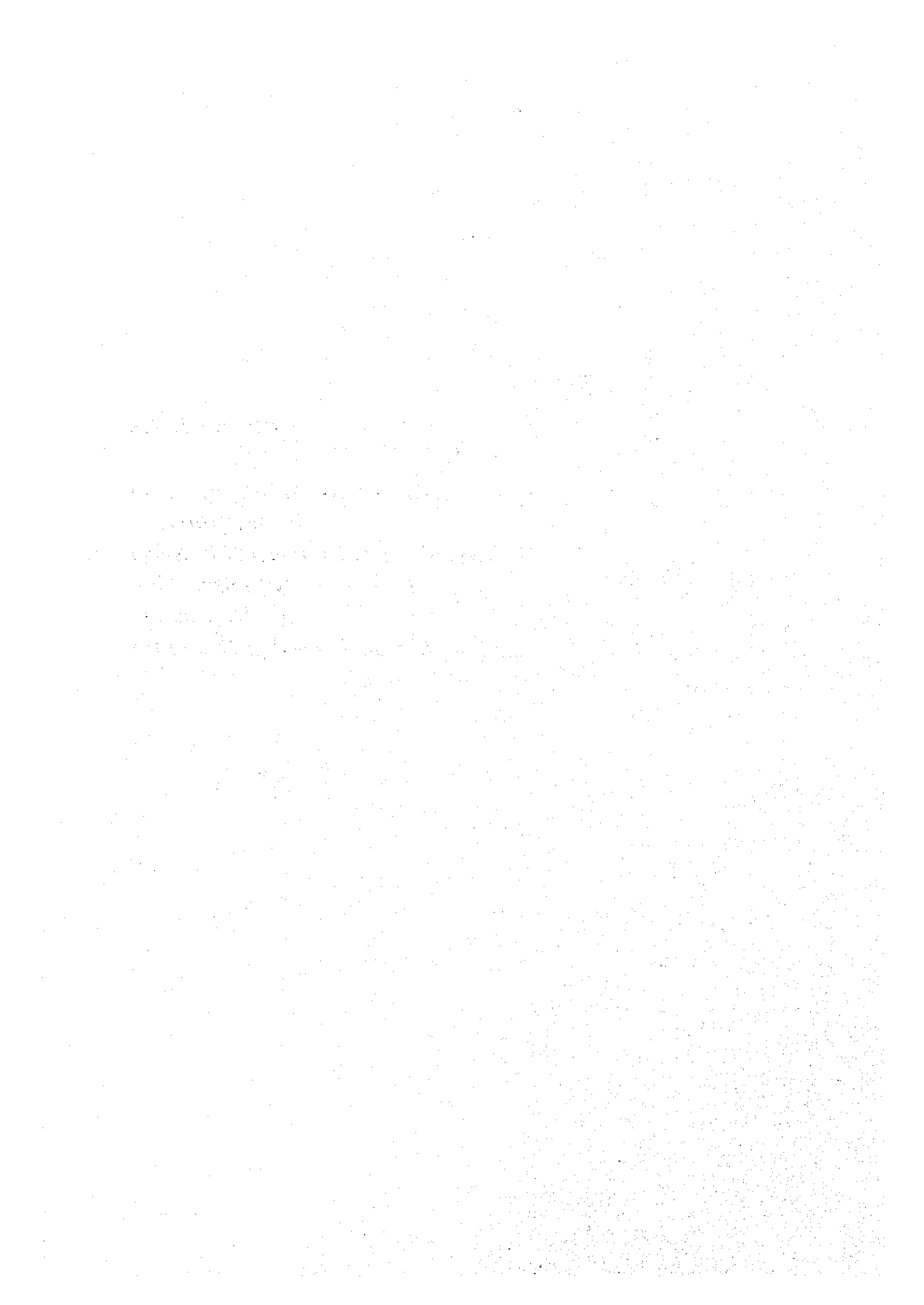


APPENDICES

- 1 Member List of Survey Team**
- 2 Survey Itinerary**
- 3 List of Party Concerned in Syria**
- 4 Minutes of Discussion**
- 5 References**
- 6 Basic Design Drawings**



1. Member List of the Study Team

Mr. Yoshiki Omura	Team Leader	Water Supply Development Specialist, JICA
Mr. Akihito Sanjo	Coordinator	First Project Study Division, Grant Aid Project Study Department, JICA
Mr. Masato Fujinami	Water Planner	Nippon Koei Co., Ltd.
Mr. Yoshiharu Inabe	Facility Designer	Nippon Koei Co., Ltd.
Mr. Hideyuki Wakasa	Equipment Planner	Nippon Koei Co., Ltd.
Mr. Tokuji Okada	Cost Estimator	Nippon Koei Co., Ltd.

2. Study Itinerary

No.	Date		Itinerary
1	1/9	Fri.	Tokyo to Paris
2	1/10	Sat.	Paris to Damascus, Meeting with JICA Syria Office
3	1/11	Sun.	Courtesy call on Japanese Embassy, JICA Syria Office, SPC, MOHU and DAWSSA
4	1/12	Mon.	Discussion with DAWSSA, Submission of Questionnaire
5	1/13	Tue.	Visited the Establishment of Drinking Water and Sewerage in the Rural Province of Damscus, Field inspection
6	1/14	Wed.	Discussion with DAWSSA, Preparation of Minute of Discussion
7	1/15	Thu.	Signing Ceremony for Minute of Discussion, Courtesy call on Japanese Embassy and JICA Syria Office
8	1/16	Fri.	Site survey and data collection
9	1/17	Sat.	- ditto -
10	1/18	Sun.	- ditto -
11	1/19	Mon.	Team meeting
12	1/20	Tue.	Courtesy call on JICA Syria Office, Damscus to Rome
13	1/21	Wed.	Leaved Rome
14	1/22	Thu.	Arrived at Narita

3. List of Party Concerned in the Recipient Country

State Planning Commission

1. Director of Technical & Scientific Cooperation Mr. Bassam Al Siabi
2. In charge of Japan Desk Ms. Elham Morad

Ministry of Housing and Utilities

1. H.E. Minister of Housing and Utilities Eng. Hussam Al Safadi

Damascus City Water Supply and Sewerage Authority (DAWSSA)

1. General Director, DAWSSA Eng. M. Adib Zein Elabdin
2. Major Projects Director, DAWSSA Eng. Nibras Mouayad Azem
3. Director of Design & Construction Works,
DAWSSA (Chief Counterpart) Eng. Khaled Shalak
4. Accounting Director, DAWSSA Ms. Fadia Damer
5. Financial Director, DAWSSA Mr. Fihmi Nahlawi
6. Civil Engineer Mr. Riad Hashimi
7. Civil Engineer Mr. Hussam Hredden
8. Sanitary Engineer Mr. Hussam Kassab
9. Mechanical Engineer Mr. Tawffeck Ghabra
10. Mechanical Engineer (Computer Dept.) Mr. Yassar Zahri

Establishment of Drinking Water Supply and Sewerage in the Rural Province of Damascus (EDWSSR)

1. General Director, EDWSSR Eng. Adnan Deeb
2. Director of Design & Construction Works,
EDWSSR Eng. Mamdoh Yuones

Embassy of Japan

1. Ambassador Mr. Takeshi Kagami
2. First Secretary Mr. Katsuhito Saka

JICA Syria Office

1. Resident Representative Mr. Katsuhiko Ebina
2. Assistant Resident Representative Mr. Shinji Goto

MINUTES OF DISCUSSIONS
IMPLEMENTATION REVIEW STUDY
ON THE PROJECT FOR
REHABILITATION OF WATER DISTRIBUTION PIPELINES
IN DAMASCUS CITY
IN SYRIAN ARAB REPUBLIC

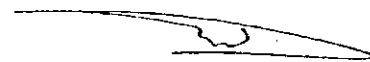
In response to the request from the Government of Syrian Arab Republic, the Government of Japan decided to conduct an Implementation Review Study on the Project for Rehabilitation of Water Distribution Pipelines in Damascus City (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA has sent to Syrian Arab Republic a Study Team headed by Mr. Yoshiaki OMURA, Development Specialist, JICA, and is scheduled to stay in the country from January 10 to 20, 1998. The Team held discussions with the officials concerned of Syrian Arab Republic and conducted a field survey at the study area. In the course of discussions and field survey, both parties have confirmed the main items described on the attached sheets. The Team will proceed further works and prepare the report of the Study for the Improvement Review.

Damascus, January 15, 1998



Mr. Yoshiaki Omura
Leader,
Study Team
JICA



Eng. M. Adib Zein Elabdin
General Director,
Damascus City Water Supply
and Sewerage Authority



Mr. Bassam Sibai
Director of Technical and
Science Cooperation,
State Planning Commission

ATTACHMENT

1. Components of Draft Report

The Government of Syrian Arab Republic has accepted in principle the components of the Implementation Review Study Report (Draft) as explained by the Team.

2. Items requested by Syrian Arab Republic

After discussions with the Team, the items finally requested by the Syrian side are shown in ANNEX I.

Both parties agreed that as the result of the study, minor modification on quantity might be made for practical formation of distribution networks.

3. Japan's Grant Aid System

(1) The Syrian side has understood Japan's Grant Aid System in ANNEX II as explained by the Team.

(2) The Syrian side will take necessary measures described in ANNEX III for the smooth implementation of the Project, in the event the Grant Aid Assistance by the Japanese Government is extended to the Project.

4. Schedule of Study

(1) The consultants of the Team will proceed to further studies in Syria until 20 January 1998.

(2) JICA will complete a final report and send it to Syrian Arab Republic by April 1998.

h *C/A*
- 1 -

5. Major Points of Discussions

(1) The following phasing was confirmed is appropriate.

- A) First phase
 - Wali area
 - Malki area
- B) Second phase
 - Old city area
- C) Third phase
 - Presidential area
 - Nasr area

(2) The following has been confirmed.

- 1) Syrian side will allocate the necessary budget and staff for implementation of the Project.
- 2) Syrian side will complete the installation of materials to be provided under the Project promptly.
- 3) Syrian side will prepare the stockyard and garage exclusively for the materials, equipment, and vehicles procured by the Project.



ANNEX-1

LIST OF PIPE LENGTH

PHASE	AREA	TOTAL (km)
I	W Wali area	8
	M Malki area	10
II	C Old city area	18
III	N Nasr area	10
	P Presidential area	5
TOTAL (km)		51

LIST OF MAINTENANCE EQUIPMENT

PARTICULAR	SPECIFICATION	Q'TY
1. Wheel Crane	Max. lifting capacity : 25,000nkg at 3.0 m 4-section boom, 8.6 - 26.9 m	1 no.
2. Small Excavator	1hoe bucket capacity : 0.02 m ³	3 nos.
3. Workshop Car (Mobile Workshop Truck)	Multi-compartment type utility car for plumbing	1 no.
4. Hand Tools		1 lot

ANNEX II Japan's Grant Aid Scheme

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal and Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

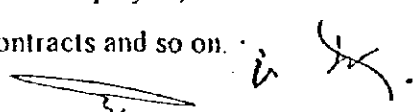
2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.



2. Basic Design Study

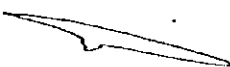
1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic points of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project
- e) Estimation of costs of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grand Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

i  *Rx*

2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA select (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project implementation after the Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

3. Japan's Grant Aid Scheme

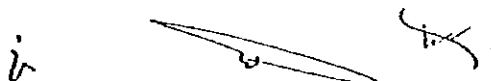
1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed.



However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However the prime contractors, namely, consulting contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means Japanese physical persons or Japanese juridical persons controlled by Japanese physical persons.)

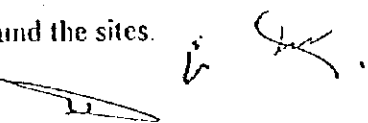
- 5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

- 6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.



- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid.
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) "Proper Use"

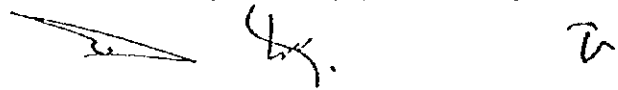
The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(8) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

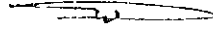
(9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese



yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.



i S.

**ANNEX III Necessary measures to be taken by the Government of the Recipient
Country in case Japan's Grant Aid is extended to the Project**

- (1) To provide data and information necessary for the Project.
- (2) To secure land for the sites of the Project.
- (3) To clear the sites prior to commencement of the construction.
- (4) To provide facilities for distribution of electricity, water supply, drainage and other incidental facilities outside the site.
- (5) To bear commissions to the Japanese foreign exchange bank to execute the banking services based upon the Banking Arrangement.
- (6) To ensure prompt unloading and customs clearance at port(s) of disembarkation in the recipient country and facilitate internal transportation therein of the products purchased under the Grant.
- (7) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the Verified Contract(s).
- (8) To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the Verified contract(s), such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.
- (9) To assign the necessary staff and secure the necessary budget for operation and maintenance of the equipment purchased under the Grant.
- (10) To maintain and use properly and effectively the equipment and materials purchased under the Grant.

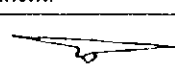
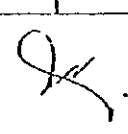



- (11) To maintain and use properly and effectively the facilities constructed under the Project.
- (12) To coordinate and solve any issues related to the Project which may be raised from the third parties or inhabitants in the Project area during implementation of the Project.
- (13) To bear all the expenses other than those to be borne by the Grant necessary for the Project implementation.

A handwritten signature in black ink, consisting of a stylized 'i' followed by a large, sweeping flourish that ends in a horizontal line.

Major Undertaking to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		•
2	To clear, level and reclaim the site when needed		•
3	To construct gates and fences in and around the site		•
4	To construct/secure the parking lot		•
5	To construct/secure roads		
	1) Within the site		•
	2) Outside the site		•
6	To procure materials and equipment for the project	•	
7	To execute pipe replacement works		•
8	To provide furniture and equipment		
	a. General furniture		•
	b. Project equipment	•	
9	To bear the following commissions to the Japanese foreign exchange bank for the banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
10	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	•	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site		•
11	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		•
12	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts.		•
13	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant		•
14	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.		•

5. References

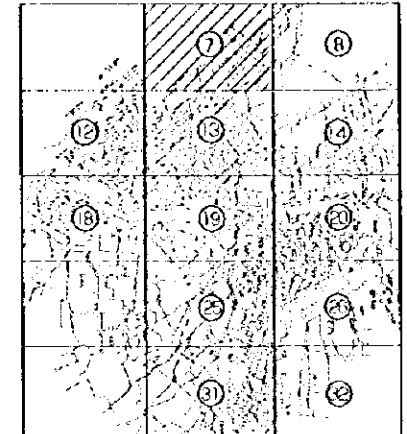
No.	Name of Data	Issued Year	Name of Publisher
1.	Distribution Network Drawings (S = 1/2,000)		DAWSSA
2.	Syria Road Network Map		Ministry of Communication
3.	Syria Railway Map		Ministry of Communication
4.	Valve Box Standard		DAWSSA
5.	Unit Price of Materials		DAWSSA

6. Basic Design Drawings

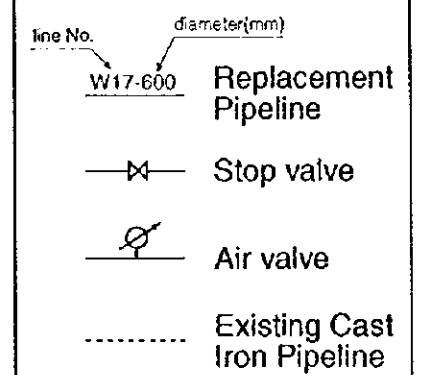
Drawing No.	Drawing Titles
NK-00	General Plan
NK-01	Detail of Replacement Pipelines (1/12)
NK-02	Detail of Replacement Pipelines (2/12)
NK-03	Detail of Replacement Pipelines (3/12)
NK-04	Detail of Replacement Pipelines (4/12)
NK-05	Detail of Replacement Pipelines (5/12)
NK-06	Detail of Replacement Pipelines (6/12)
NK-07	Detail of Replacement Pipelines (7/12)
NK-08	Detail of Replacement Pipelines (8/12)
NK-09	Detail of Replacement Pipelines (9/12)
NK-10	Detail of Replacement Pipelines (10/12)
NK-11	Detail of Replacement Pipelines (11/12)
NK-12	Detail of Replacement Pipelines (12/12)



Key Plan

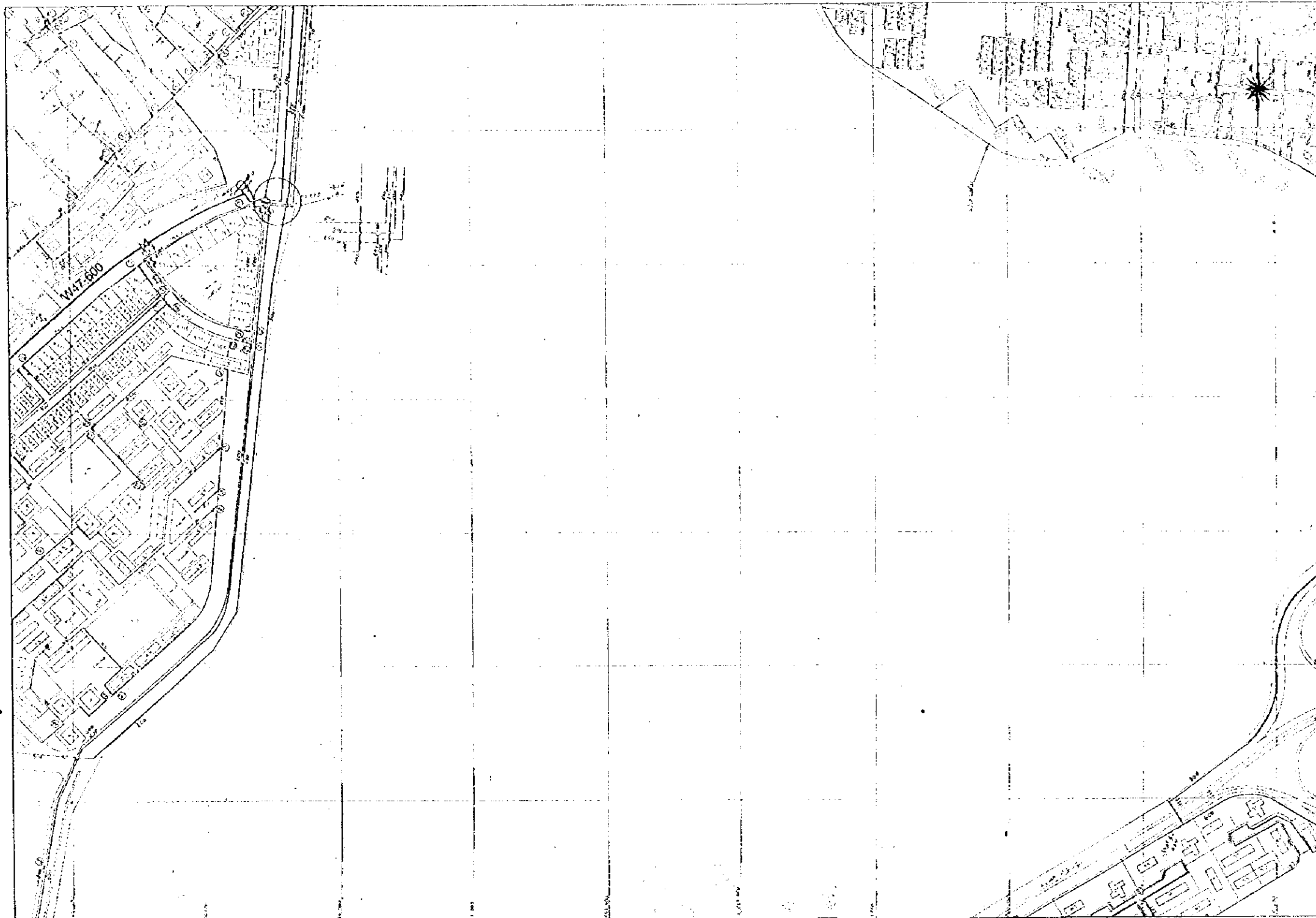
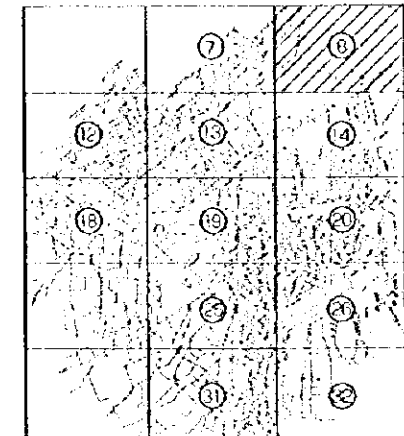


LEGEND



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
DWG. NO. NK-01
Detail of Replacement Pipelines (1/12)
 NIPPON KOEI CO., LTD.

Key Plan



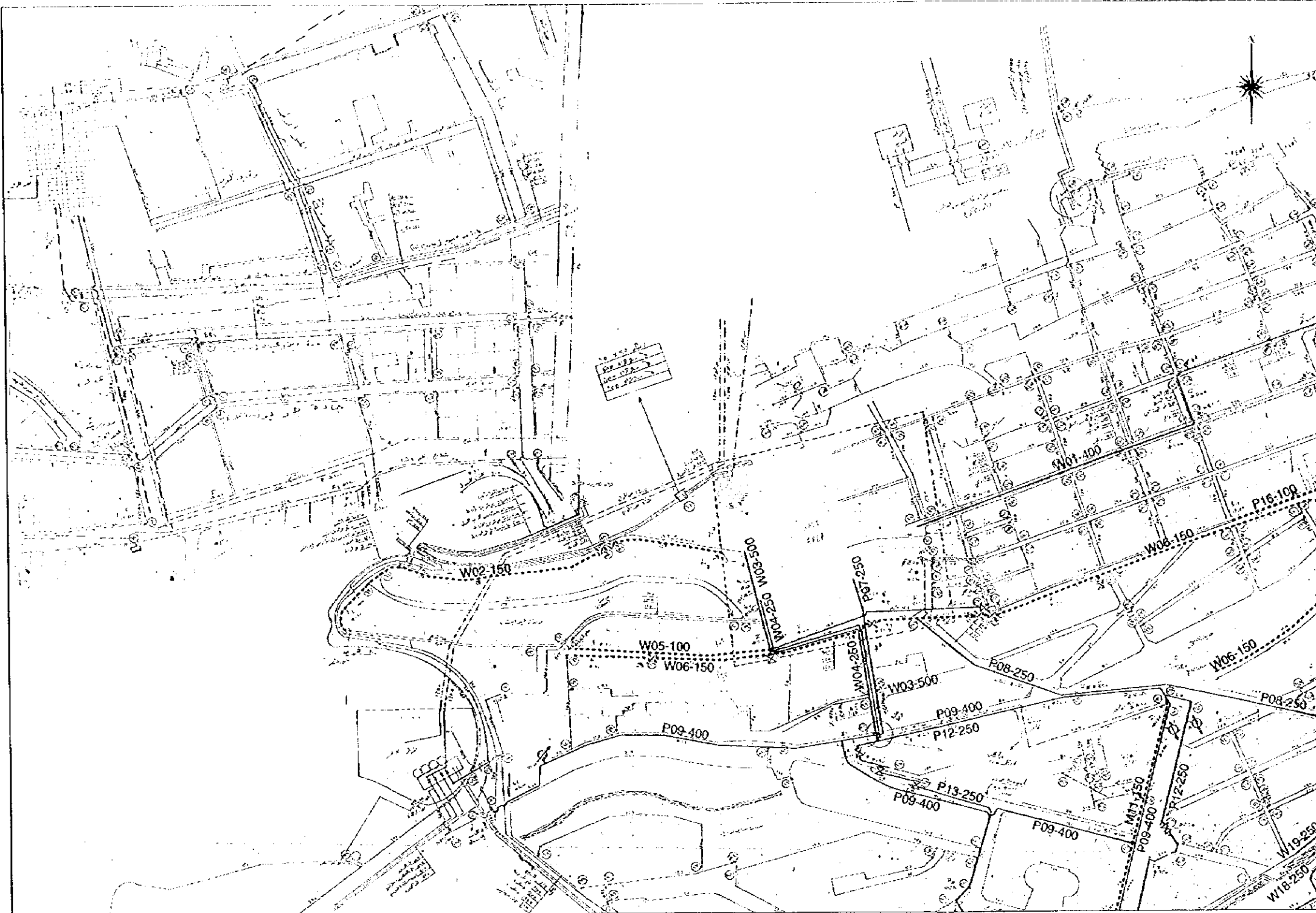
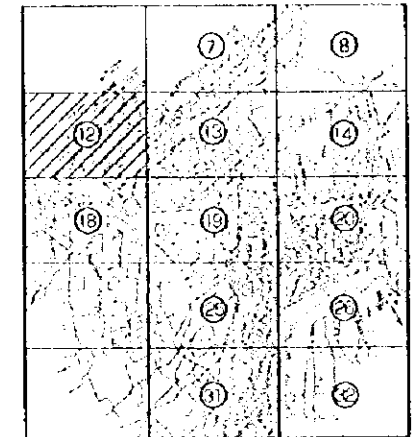
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| line No. | diameter(mm) | |
| W17-600 | | Replacement Pipeline |
| | | Stop valve |
| | | Air valve |
| | | Existing Cast Iron Pipeline |

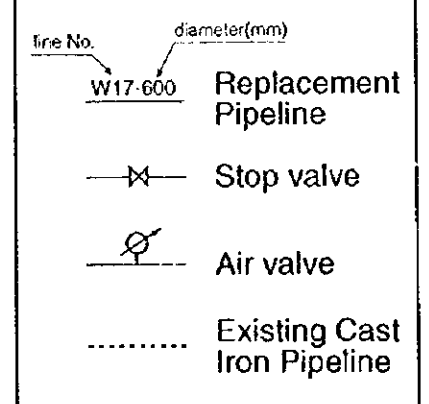


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
DWG. NO. NK-02
Detail of Replacement Pipelines (2/12)
 NIPPON KOEI CO., LTD.

Key Plan

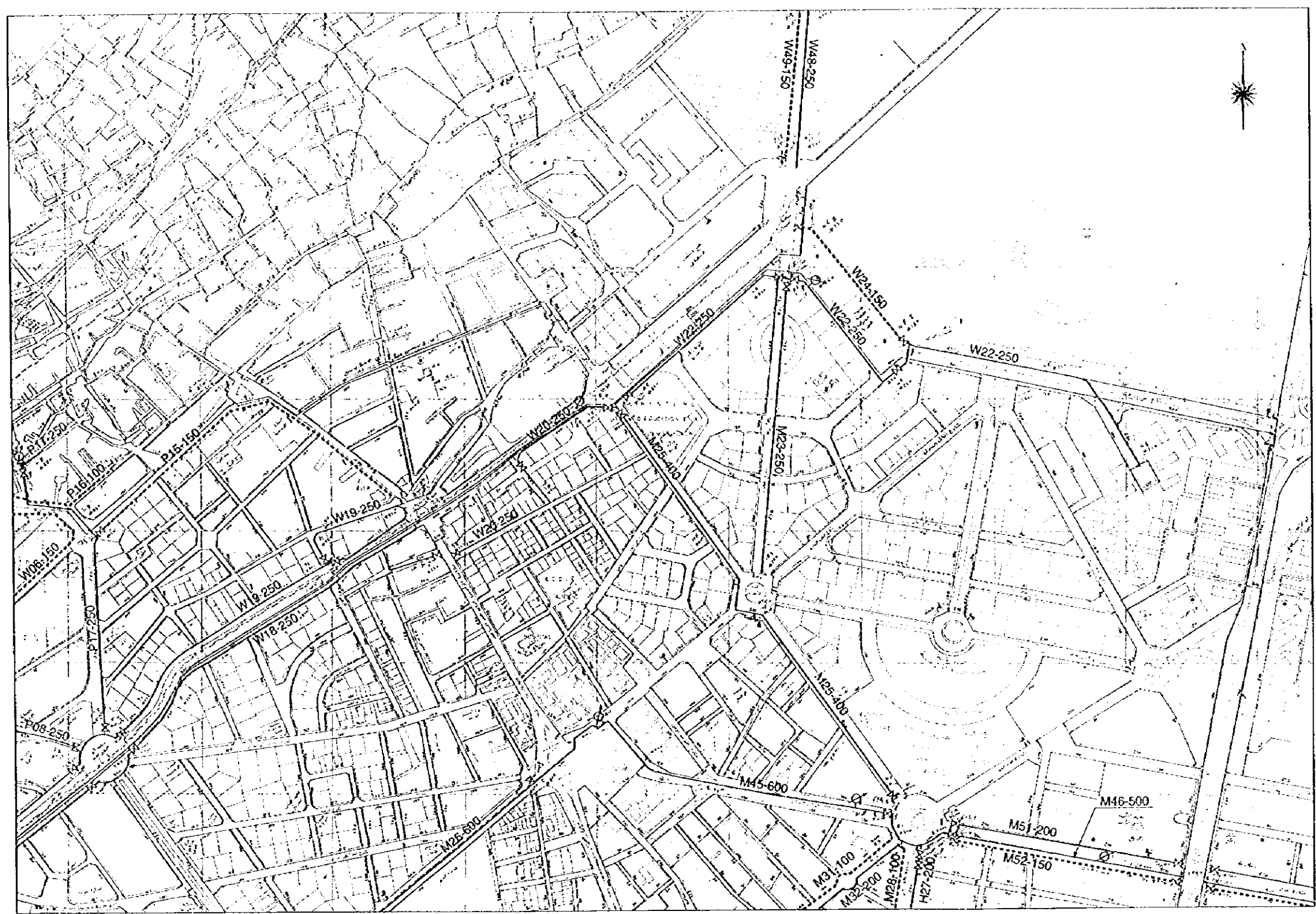
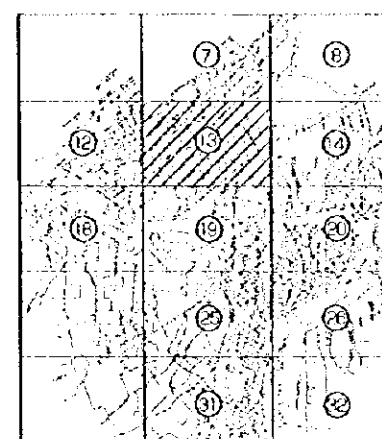


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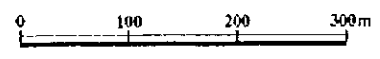
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-03
 Detail of Replacement Pipelines (3/12)
 NIPPON KOEI CO., LTD.

Key Plan



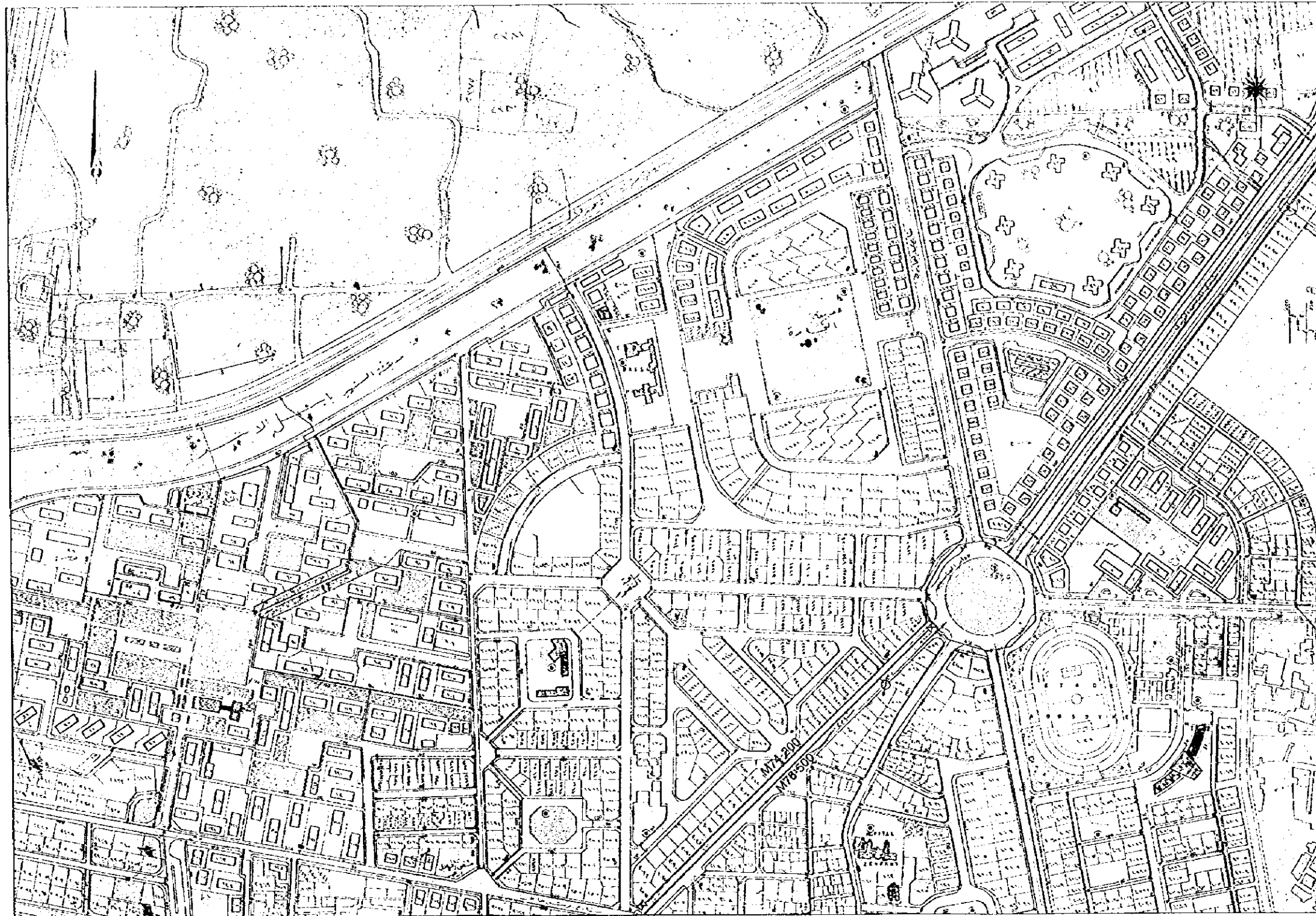
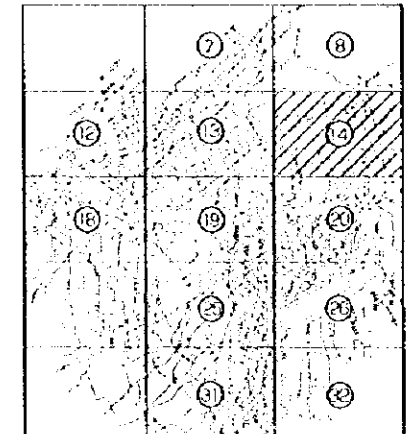
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| W17-600 | | Replacement Pipeline |
| | | Stop valve |
| | | Air valve |
| | | Existing Cast Iron Pipeline |



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-04
 Detail of Replacement Pipelines (4/12)
 NIPPON KOEI CO., LTD.

Key Plan

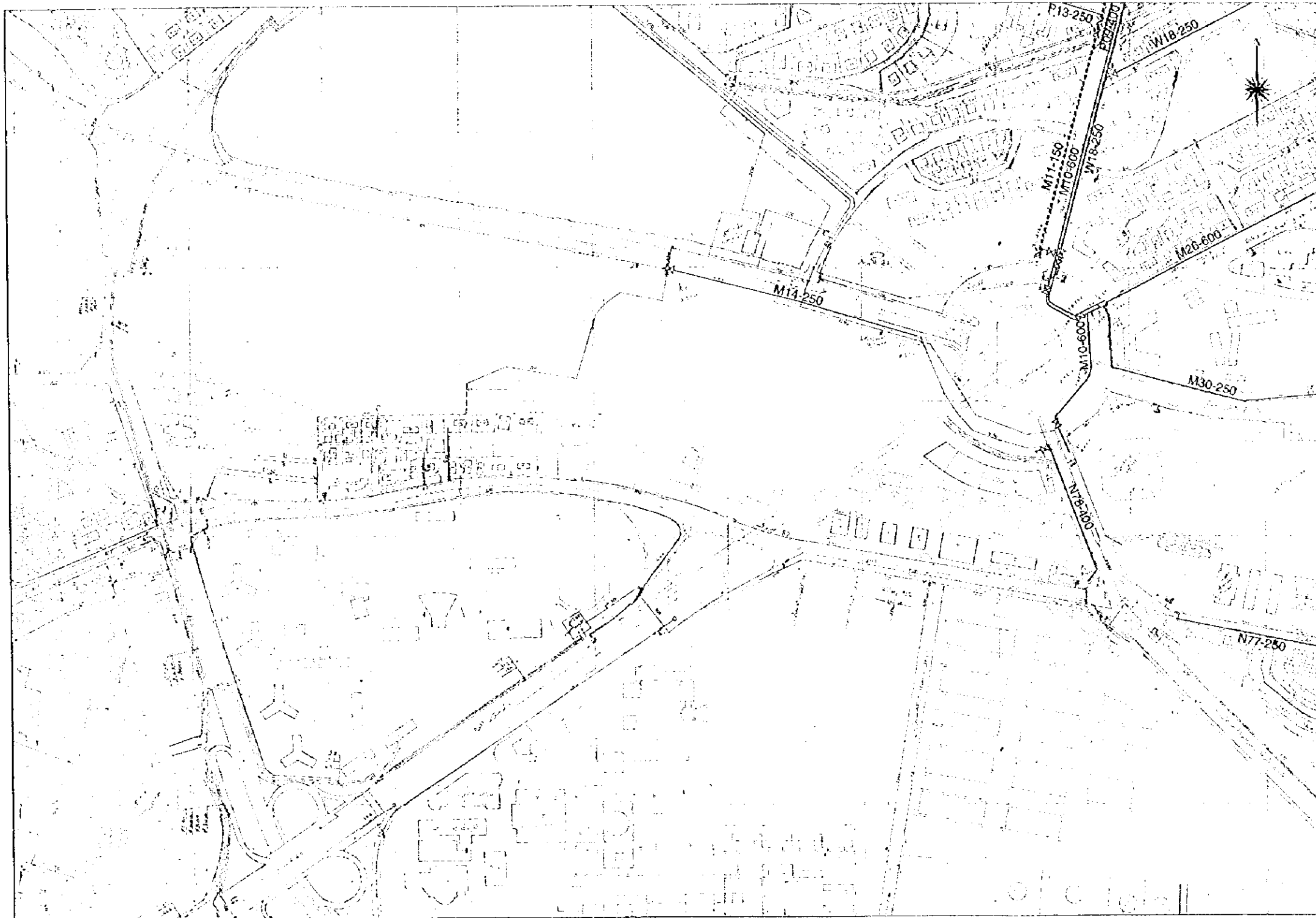


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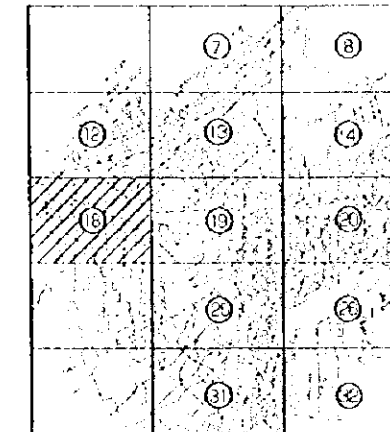
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| W17-600 | | Replacement Pipeline |
| | | —+— Stop valve |
| | | ⊗ Air valve |
| | | Existing Cast Iron Pipeline |



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
DWG. NO. NK-05
Detail of Replacement Pipelines (5/12)
 NIPPON KOEI CO., LTD.



Key Plan

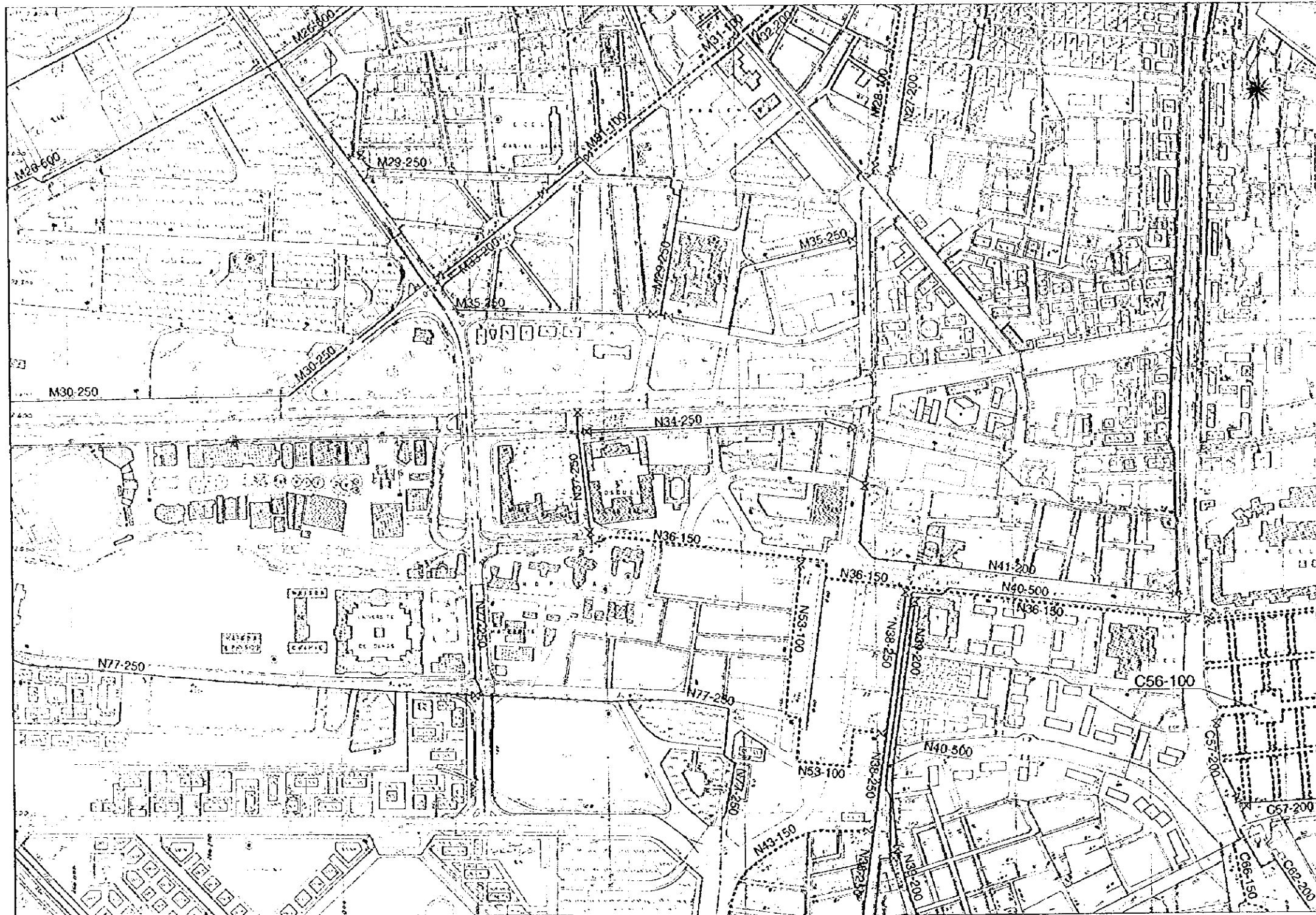


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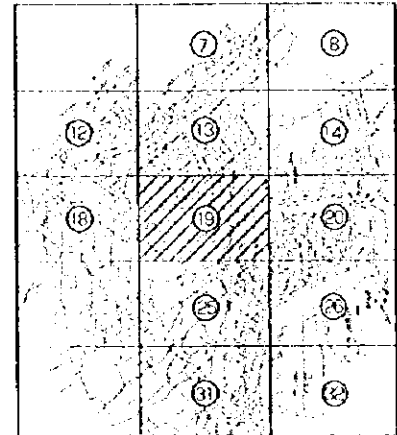
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| line No. | diameter(mm) | |
| W17-600 | | Replacement Pipeline |
| | | Stop valve |
| | | Air valve |
| | | Existing Cast Iron Pipeline |



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-06
 Detail of Replacement Pipelines (6/12)
 NIPPON KOEI CO., LTD.



Key Plan



LEGEND

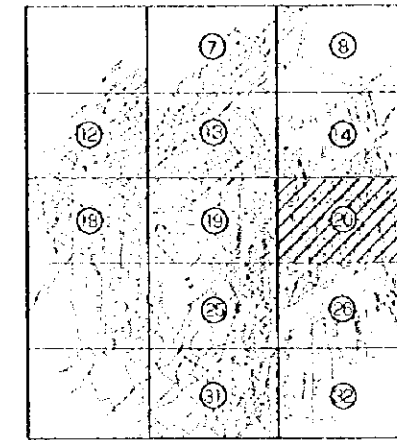
- line No. diameter(mm)
- W17.600 Replacement Pipeline
- ⌵ Stop valve
- ⊕ Air valve
- Existing Cast Iron Pipeline



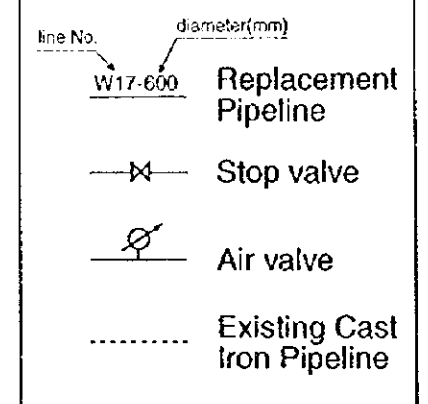
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-07
 Detail of Replacement Pipelines (7/12)
 NIPPON KOEI CO., LTD.



Key Plan



LEGEND



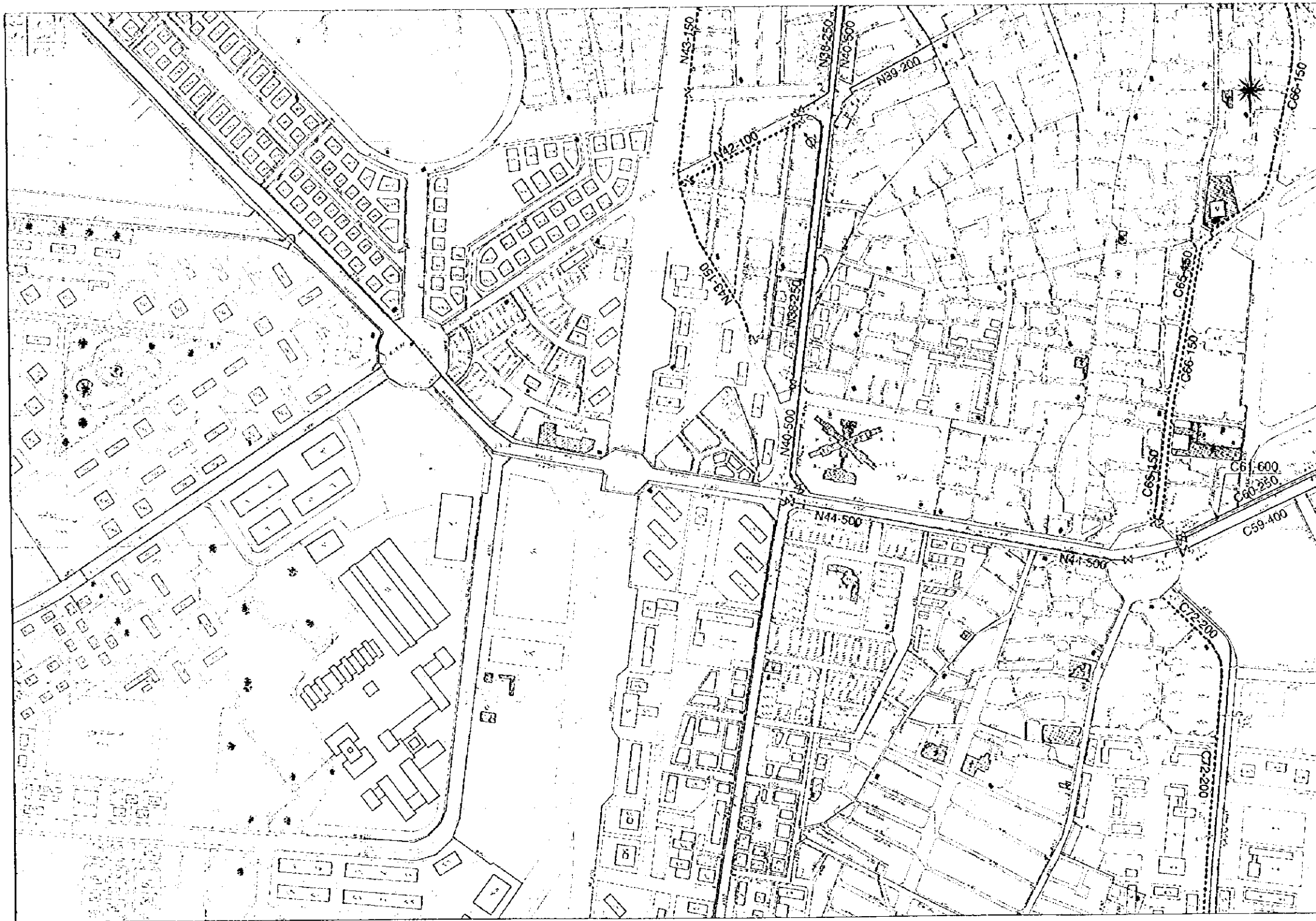
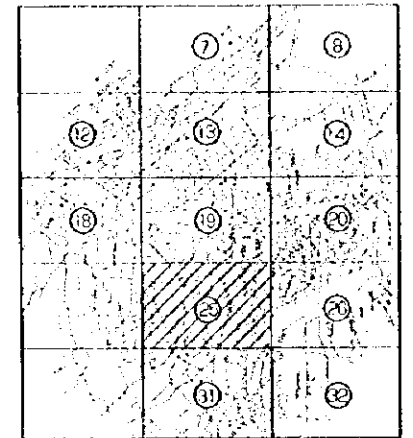
C56-100

C68-100

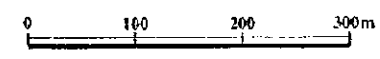
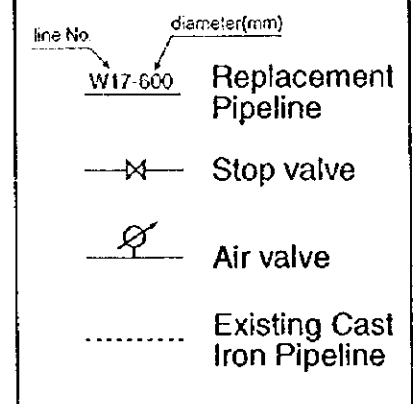


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-08
 Detail of Replacement Pipelines (8/12)
 NIPPON KOEI CO., LTD.

Key Plan

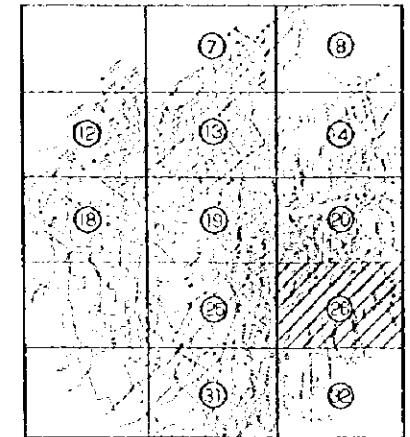


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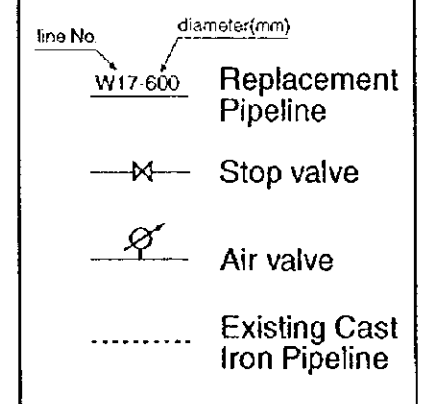


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-09
 Detail of Replacement Pipelines (9/12)
 NIPPON KOEI CO., LTD.

Key Plan

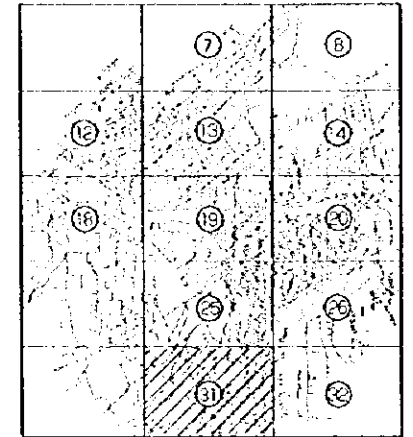


LEGEND



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
 DWG. NO. NK-10
 Detail of Replacement Pipelines (10/12)
 NIPPON KOEI CO., LTD.

Key Plan



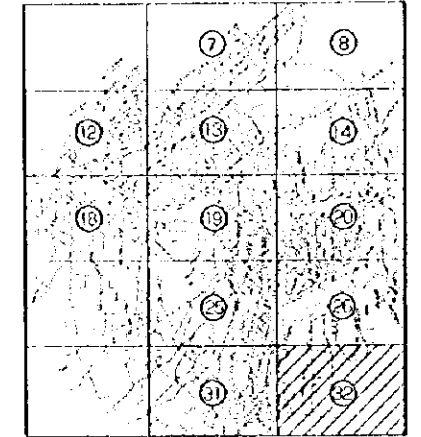
LEGEND

- | | | |
|---------|--------------|-----------------------------|
| line No | diameter(mm) | |
| W17-600 | | Replacement Pipeline |
| —X— | | Stop valve |
| ⊕ | | Air valve |
| ----- | | Existing Cast Iron Pipeline |

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
DWG. NO. NK-11
Detail of Replacement Pipelines (11/12)
 NIPPON KOEI CO., LTD.



Key Plan



LEGEND

- | | | |
|----------|--------------|-----------------------------|
| line No. | diameter(mm) | |
| W17-600 | | Replacement Pipeline |
| | | Stop valve |
| | | Air valve |
| | | Existing Cast Iron Pipeline |



JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 THE PROJECT FOR REHABILITATION
 OF WATER DISTRIBUTION PIPELINES IN DAMASCUS CITY
DWG. NO. NK-12
Detail of Replacement Pipelines (12/12)
 NIPPON KOEI CO., LTD.

JICA