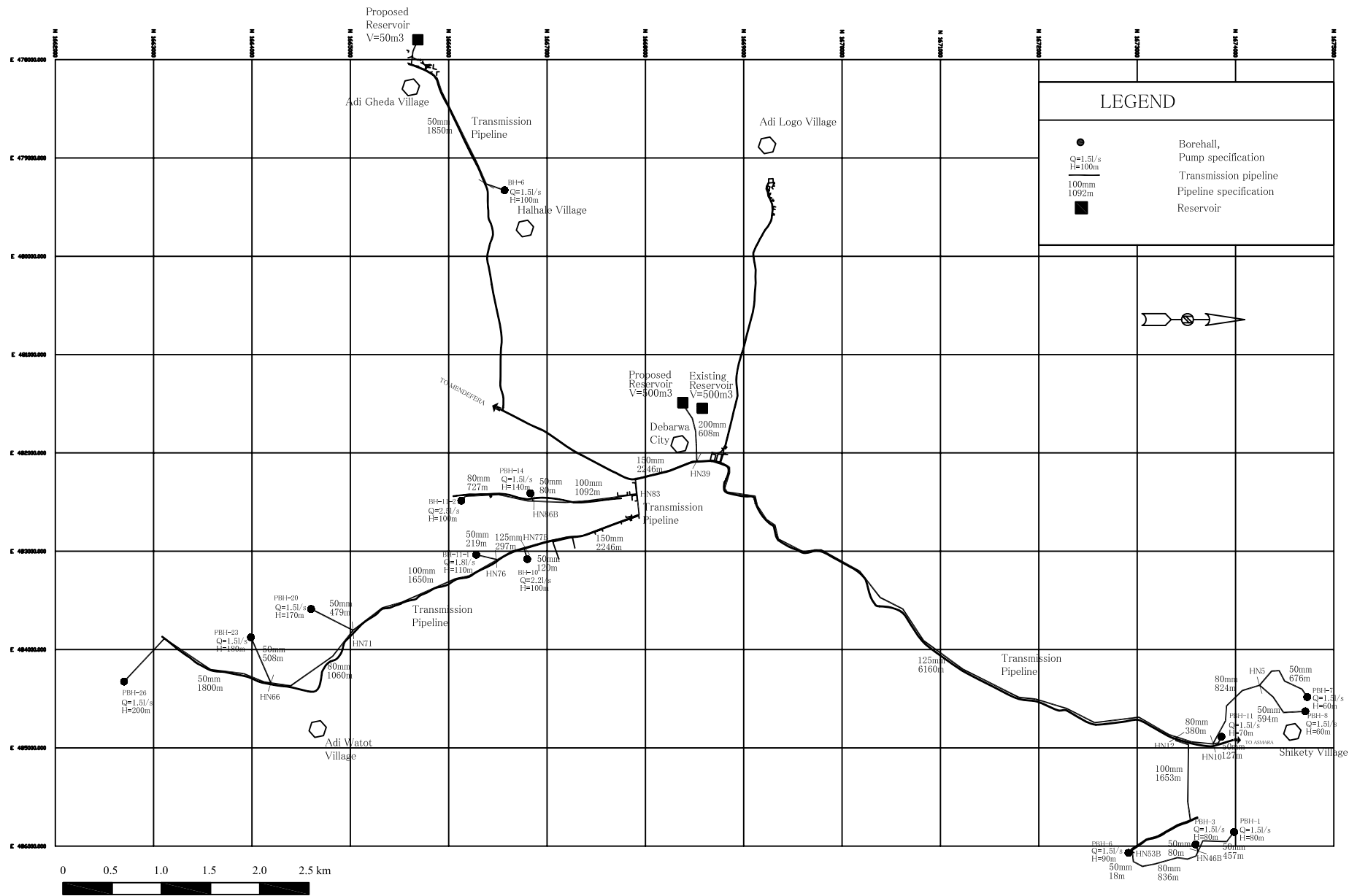


5.6

Basic Design Drawings



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD.

DRAWING TITLE
Water Supply Facility Plan in Debarwa Town
(1) Transmission Pipeline

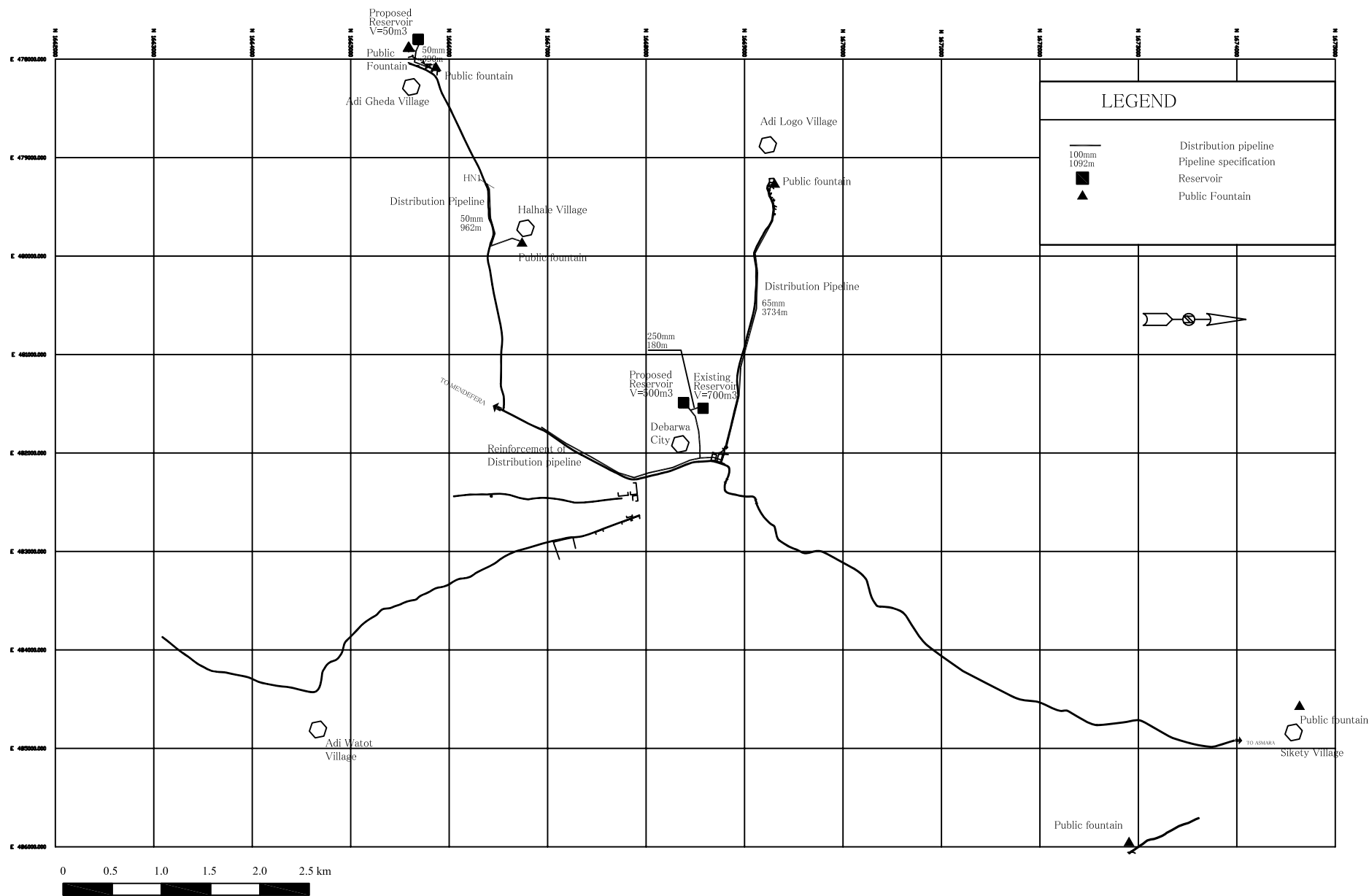
SCALE

DATE

MAY 2006

DRAWING NO.

BD-001



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Water Supply Facility Plan in Debarwa Town
(2) Distribution Pipeline

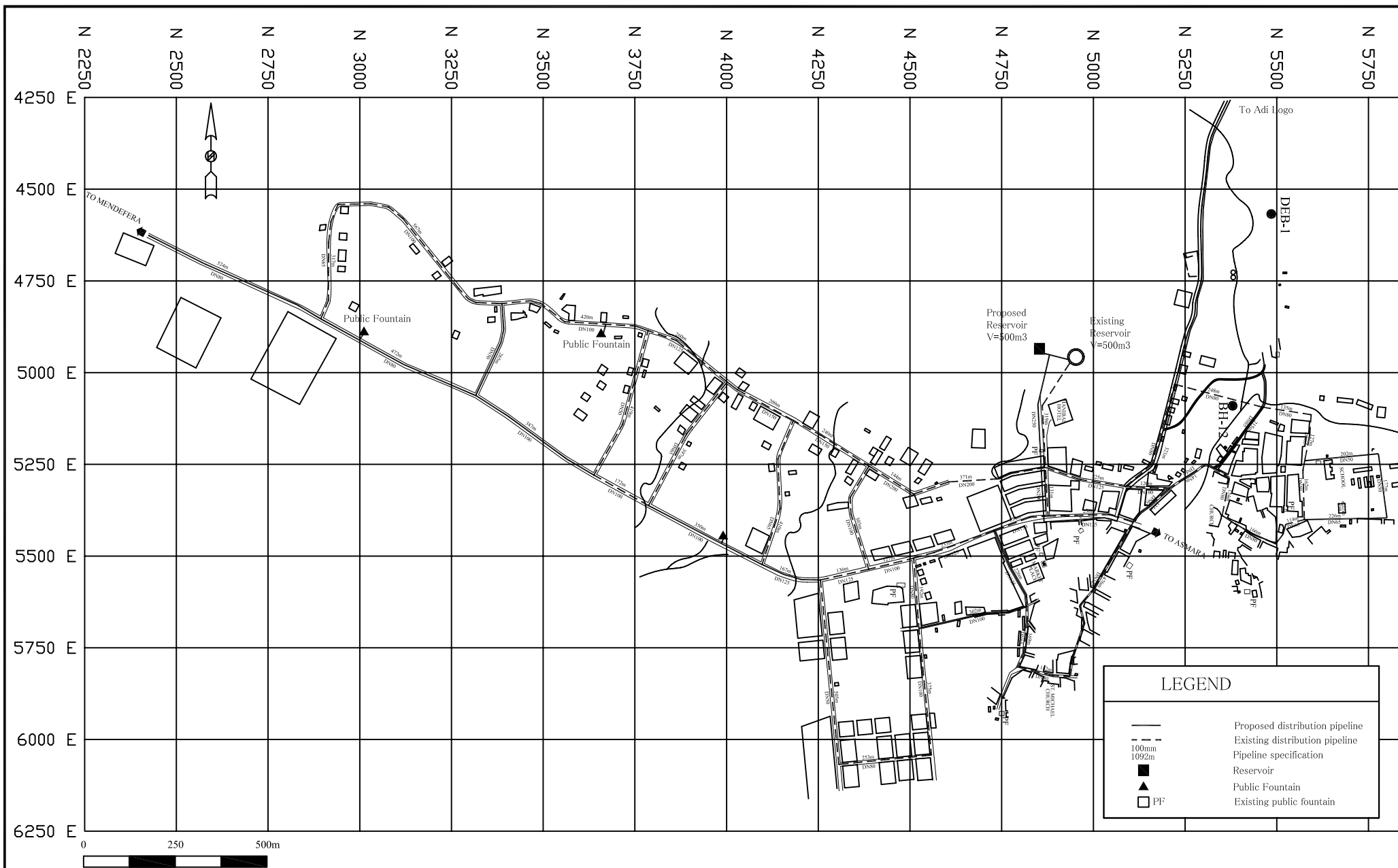
SCALE

DATE

MAY 2006

DRAWING NO.

BD-002



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Water Supply Facility Plan in Debarwa Town
(3) Distribution Pipeline

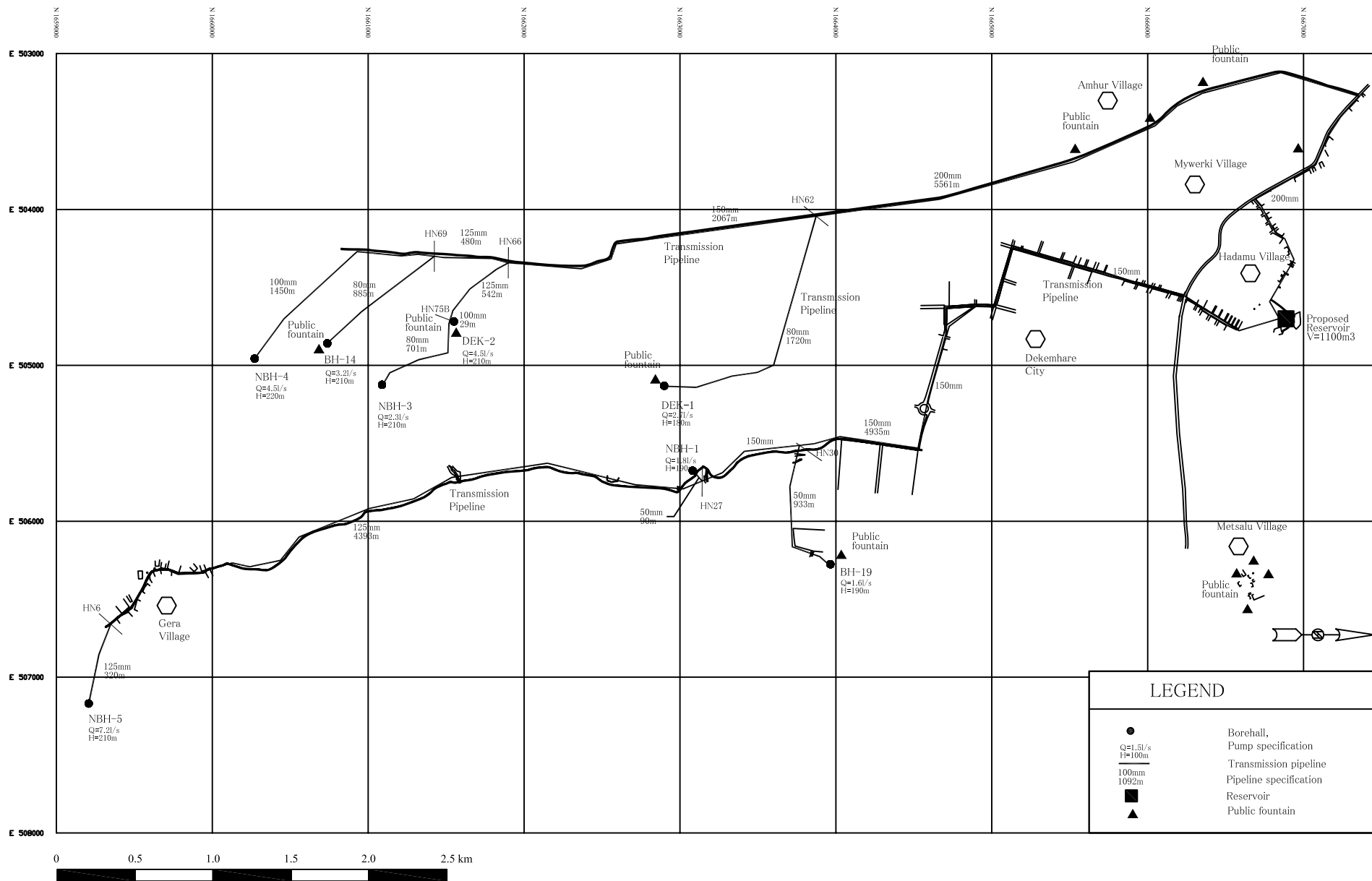
SCALE

DATE

MAY 2006

DRAWING NO.

BD-003



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
**Water Supply Facility Plan in Dekemhare Town
(1) Transmission Pipeline**

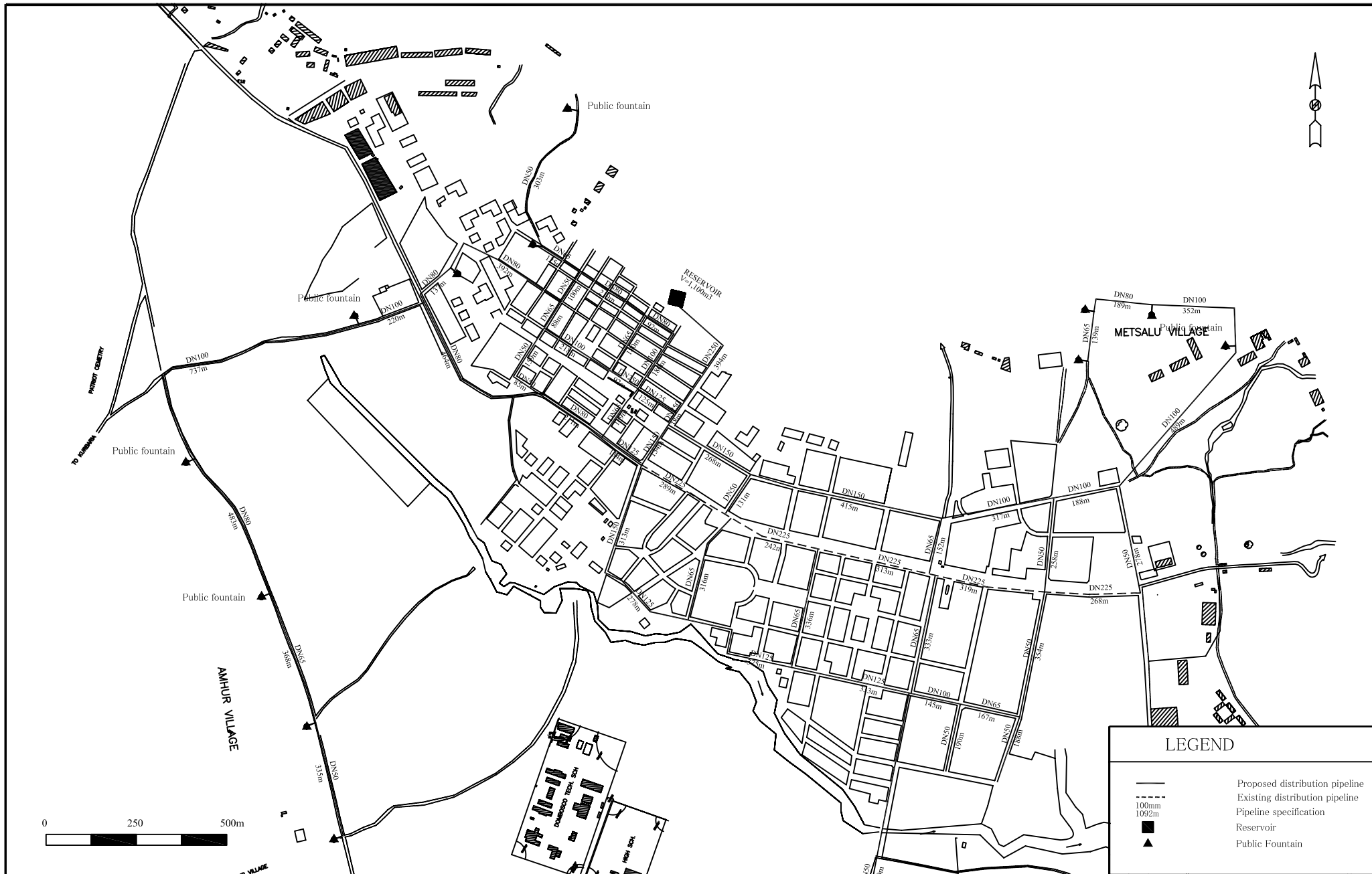
SCALE

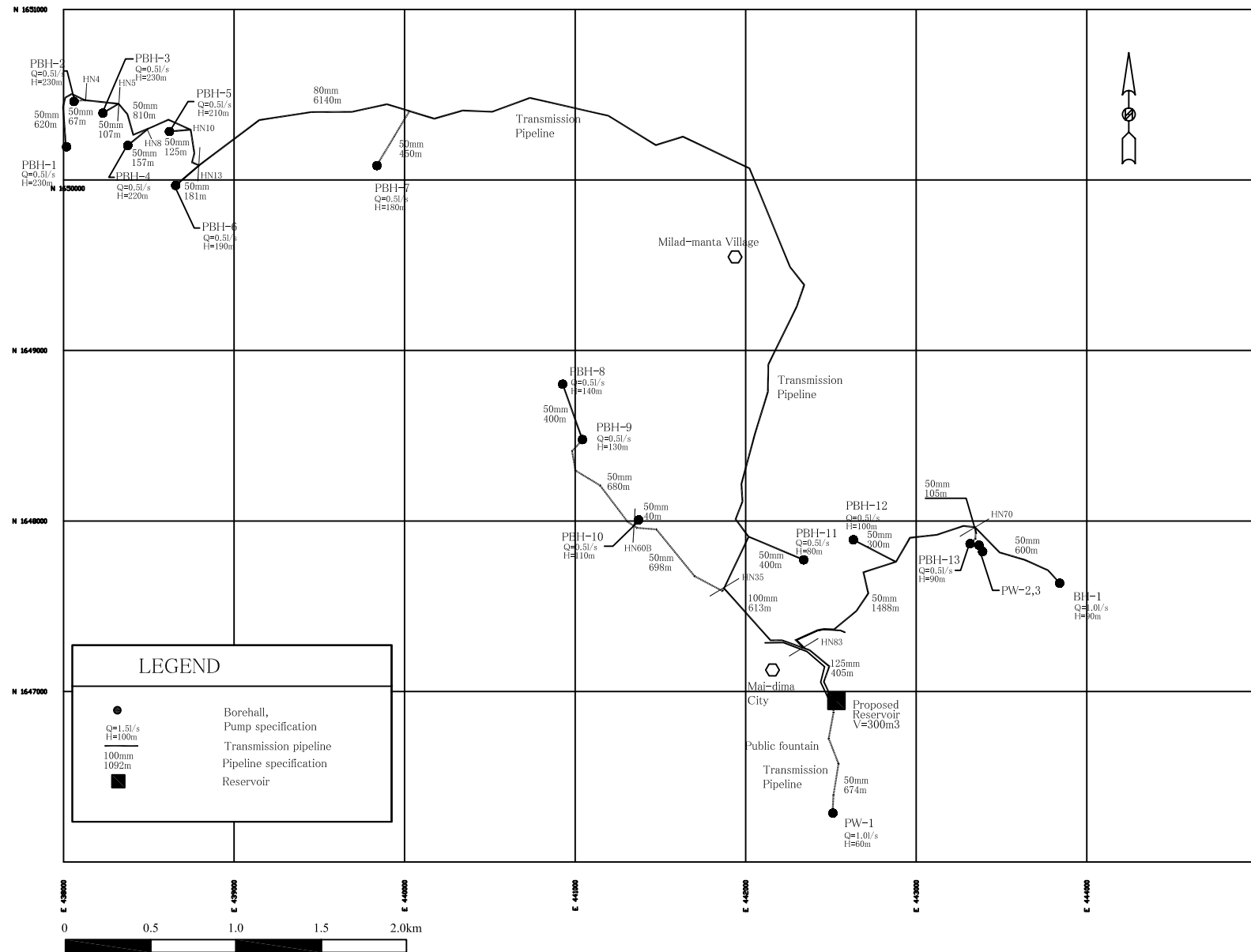
DATE

MAY 2006

DRAWING NO.

BD-004





THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

NIPPON KOEI CO., LTD.

DRAWING TITLE
Water Supply Facility Plan in May-dima Town
(1) Transmission Pipeline

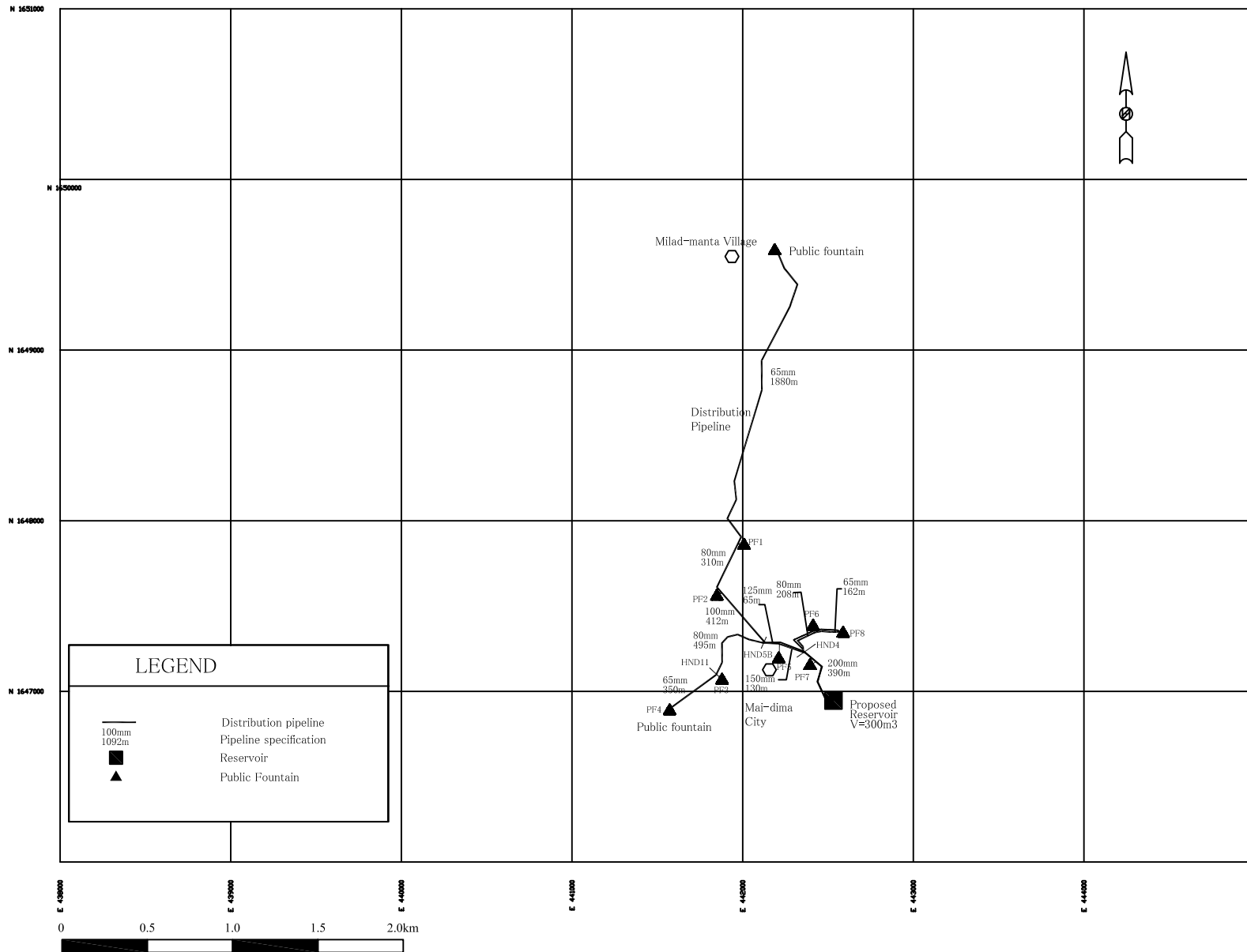
SCALE

DATE

MAY 2006

DRAWING NO.

BD-006



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Water Supply Facility Plan in May-dima Town
(2) Distribution Pipeline

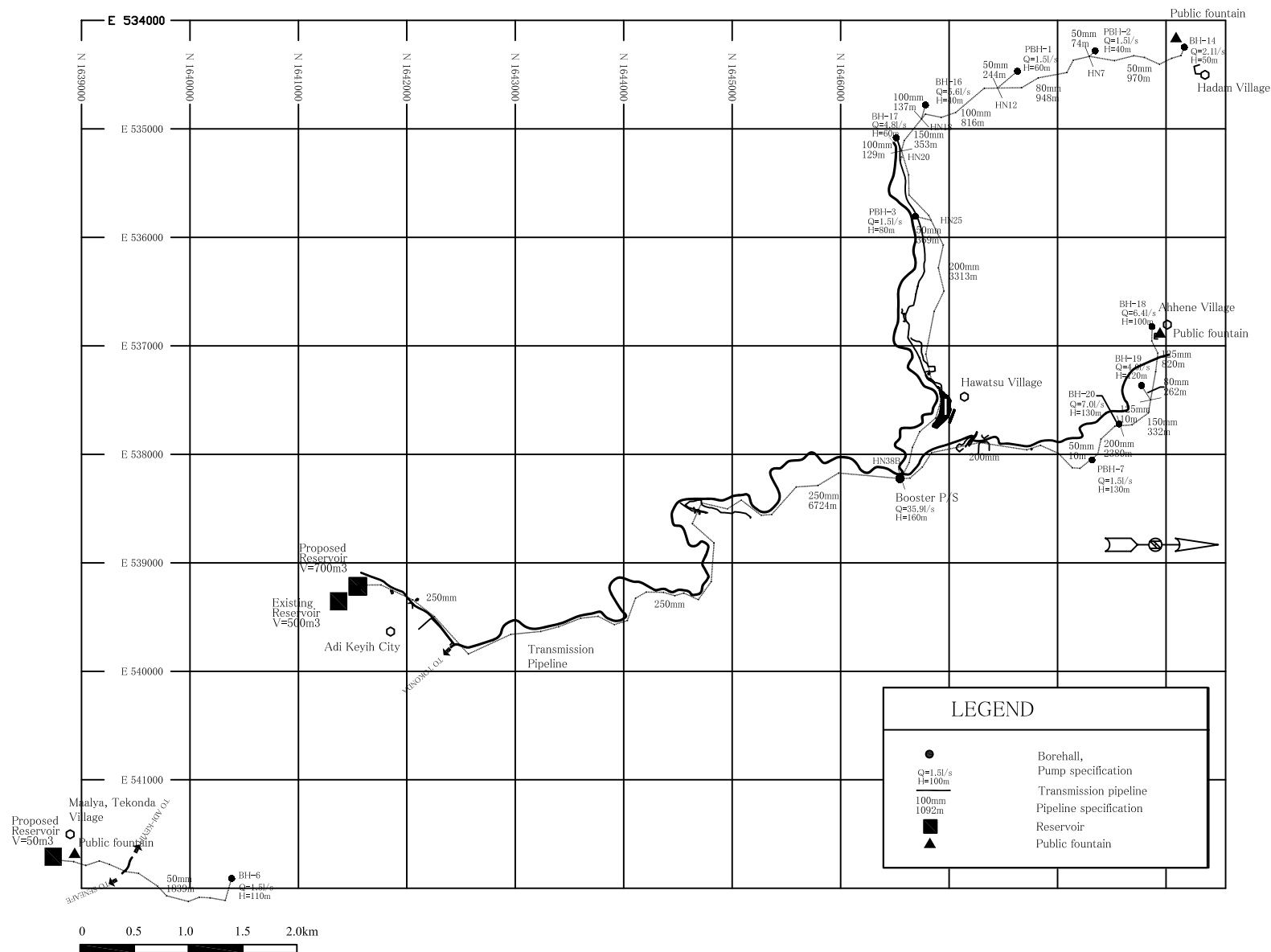
SCALE

DATE

MAY 2006

DRAWING NO.

BD-007



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
**Water Supply Facility Plan in Adi Keyih Town
(1) Transmission Pipeline**

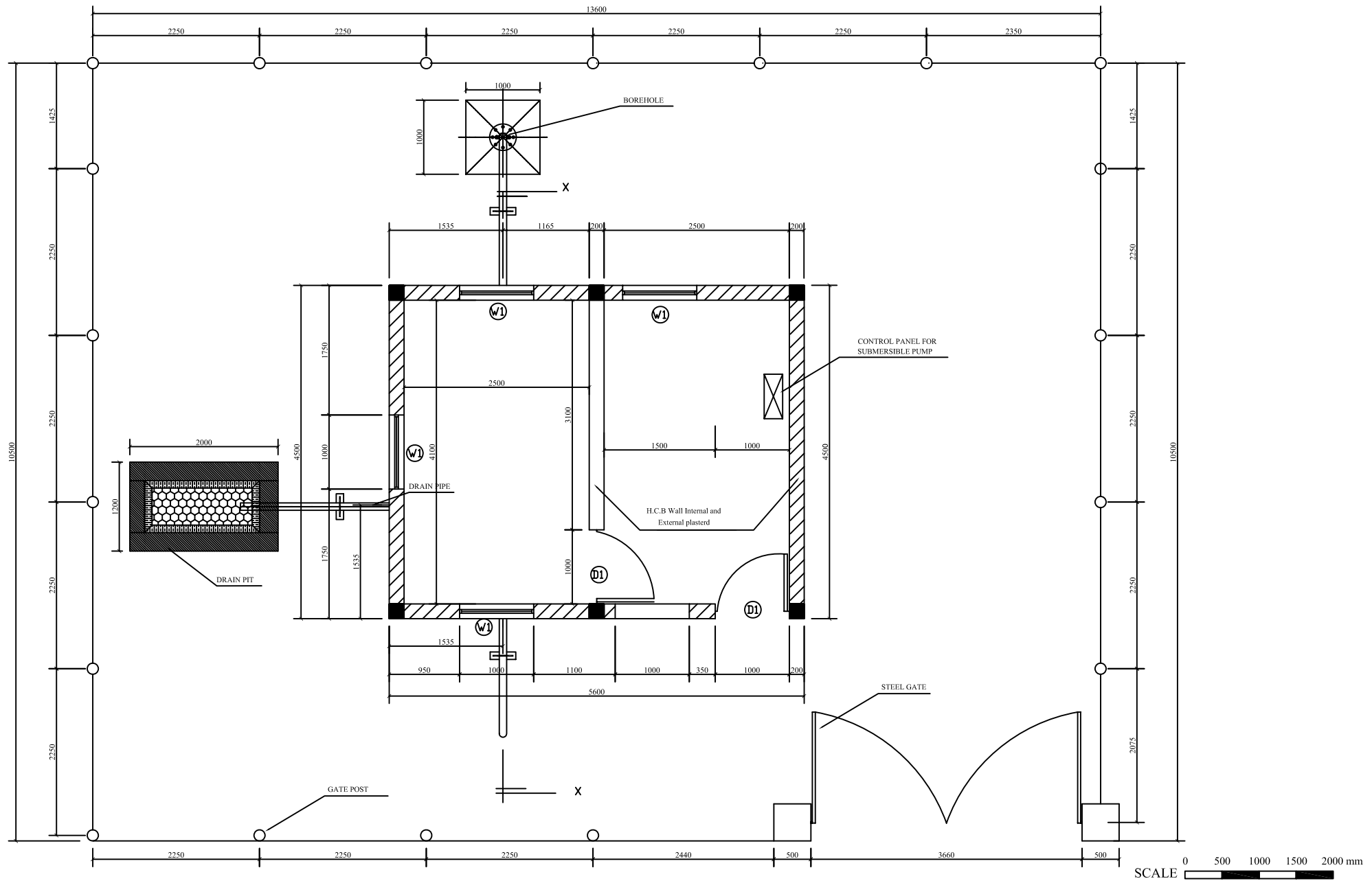
SCALE

DATE

MAY 2006

DRAWING NO.

BD-008



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO., LTD.**

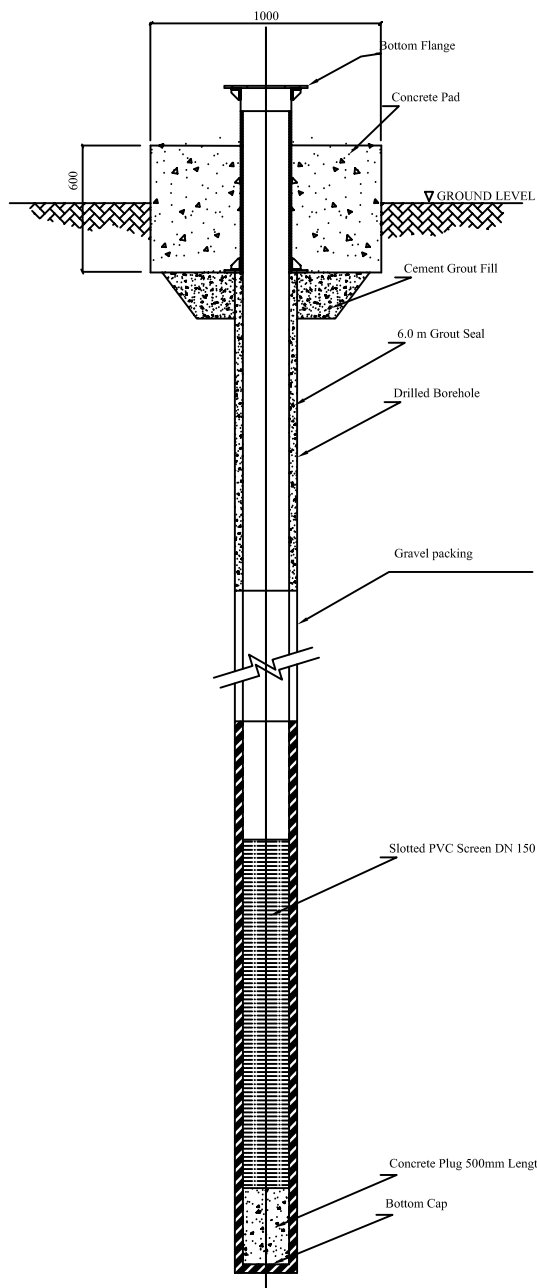
DRAWING TITLE
Pump House Layout Plan

SCALE

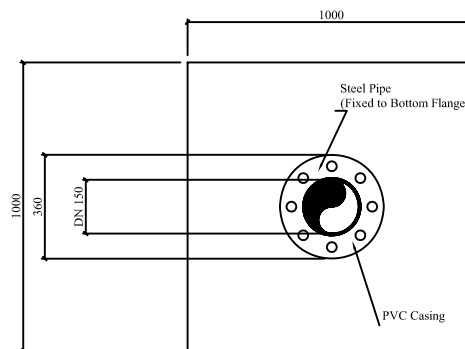
DATE

MAY 2006

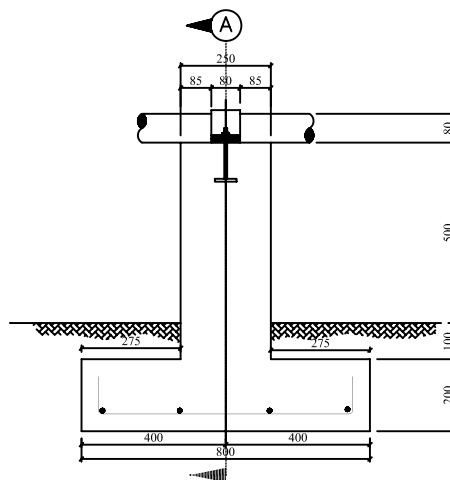
DRAWING NO.
BD-009



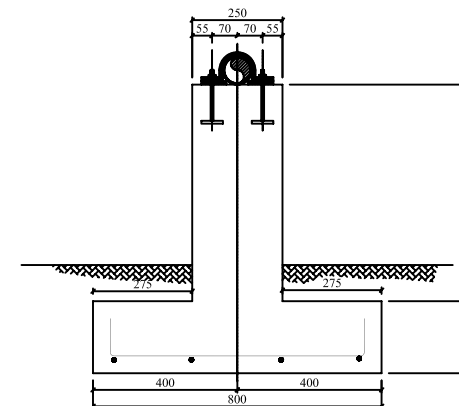
DRILLED BOREHOLE AND CASING



BOREHOLE PLAN VIEW

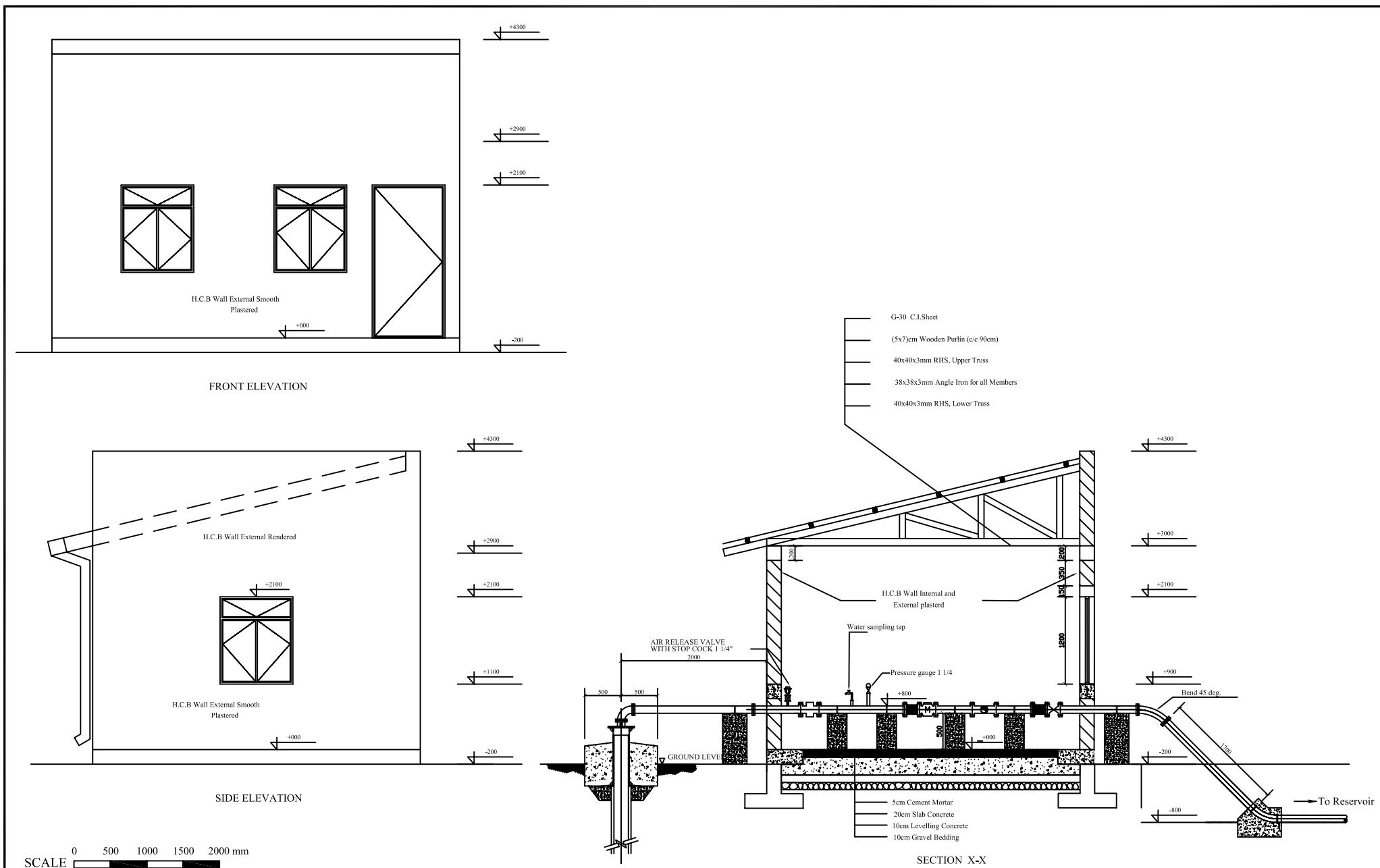


PIPE SUPPORT



(Section A-A)





THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO., LTD.**

DRAWING TITLE

Pump House

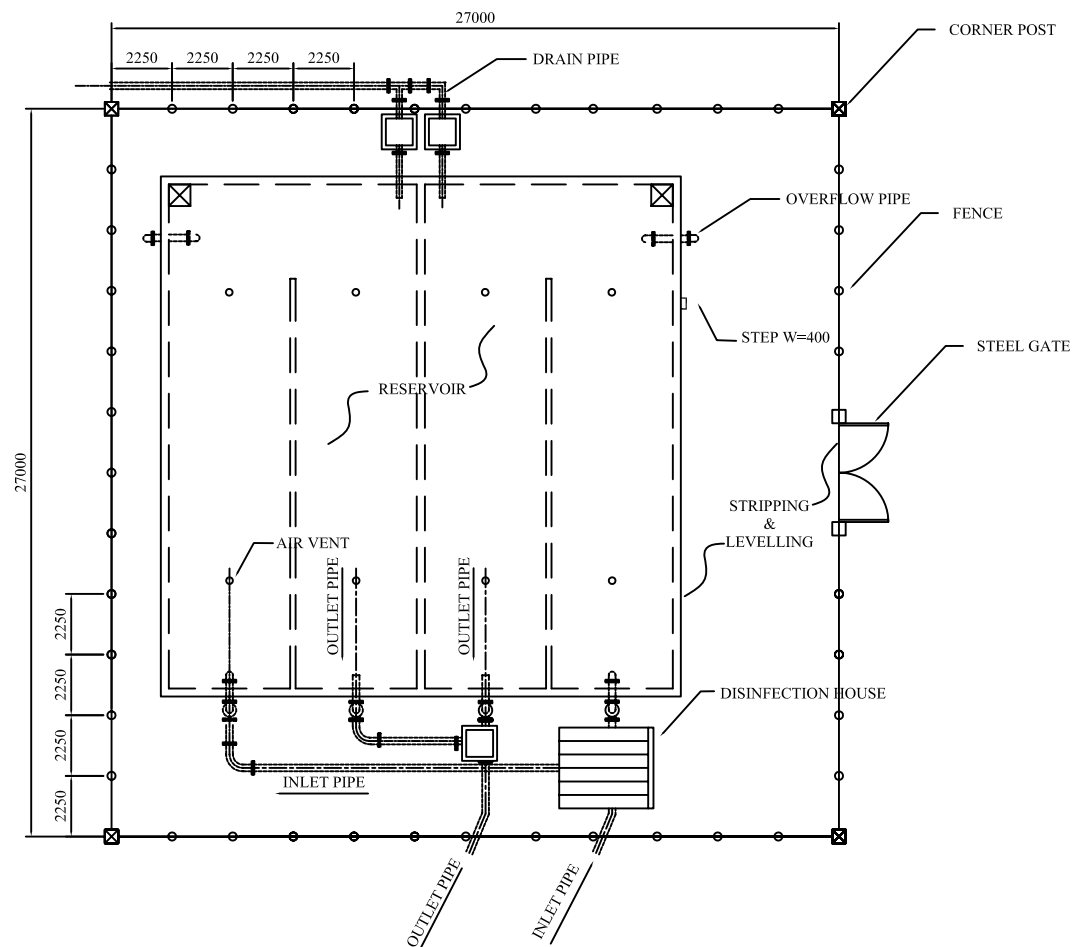
SCALE

DATE

MAY 2006

DRAWING NO.

BD-011



LAYOUT PLAN



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Reservoir Area Layout Plan

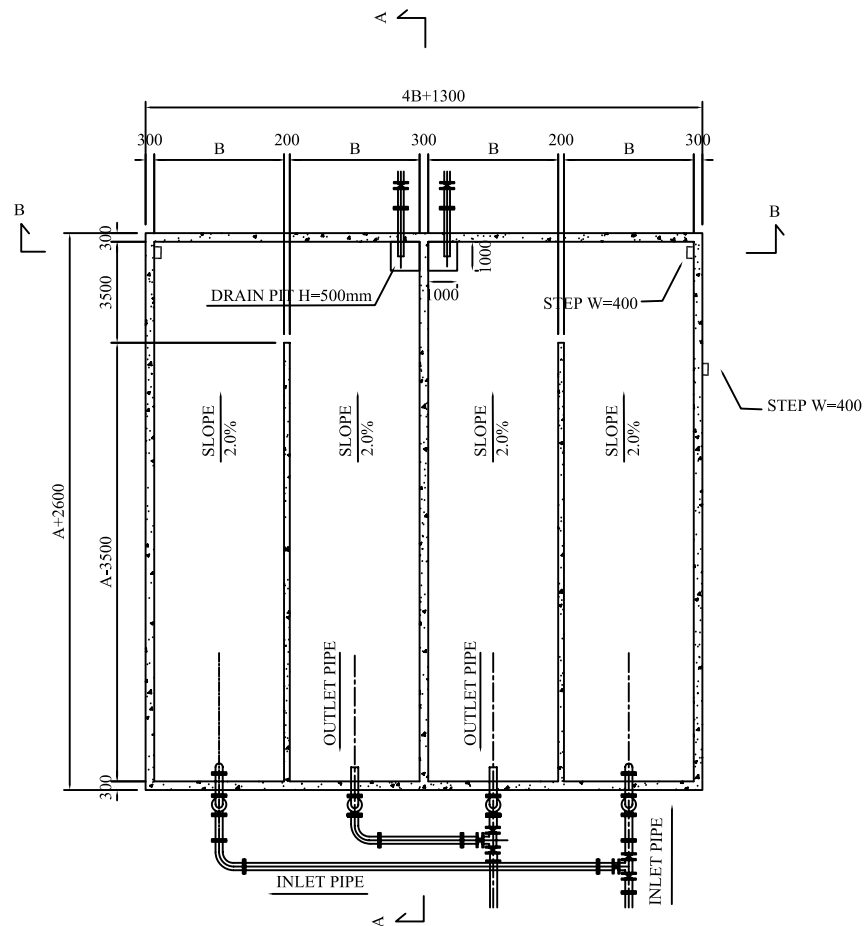
SCALE

DATE

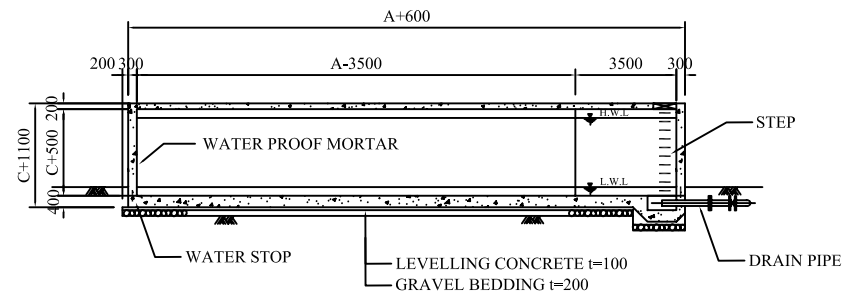
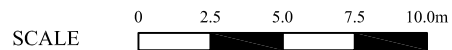
MAY 2006

DRAWING NO.

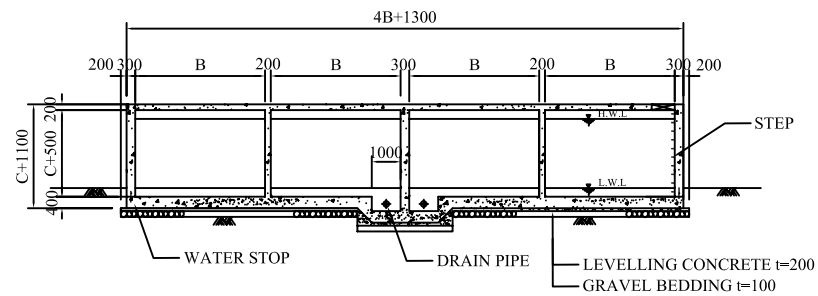
BD-012



RESERVOIR PLAN

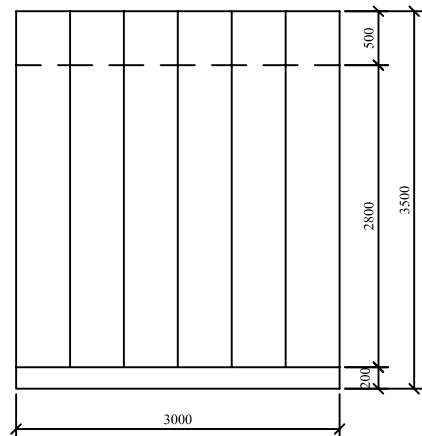


SECTION A-A

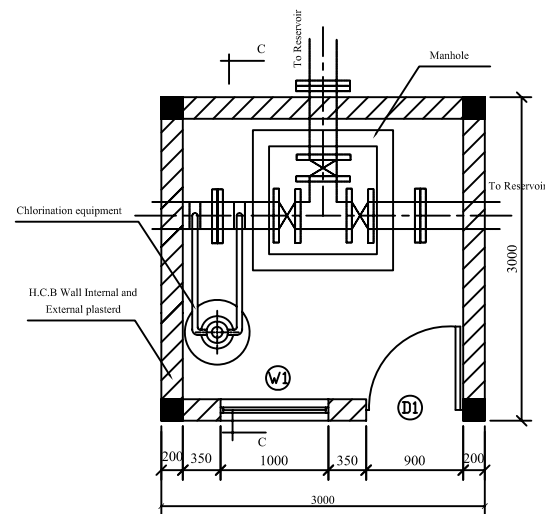


SECTION B-B

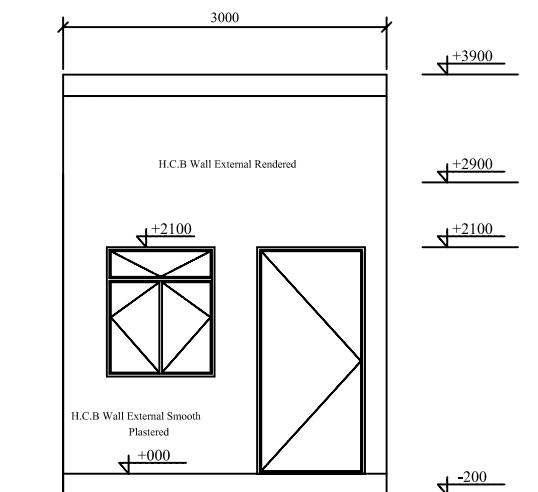
CITY	VOLUME	LENGTH		
		A	B	C
DEBARWA	500m ³	12.0m	3.5m	3.0m
	50m ³	5.0m	1.25m	2.0m
DEKEMHARE	1100m ³	18.0m	4.5m	3.0m
MAI-DIMA	300m ³	10.0m	2.5m	3.0m
ADIKEYH	700m ³	15.0m	4.0m	3.0m
	50m ³	5.0m	1.25m	2.0m



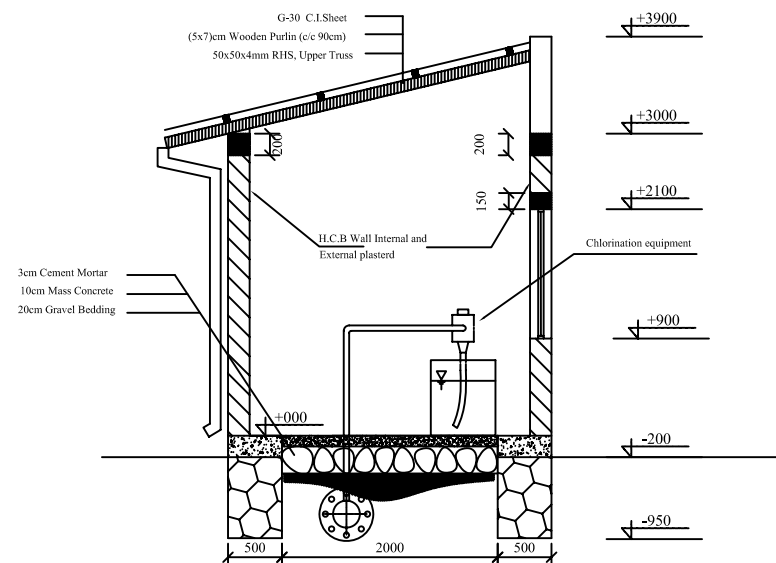
ROOF PLAN



PLAN



FRONT ELEVATION OF THE HOUSE



SECTION C-C



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

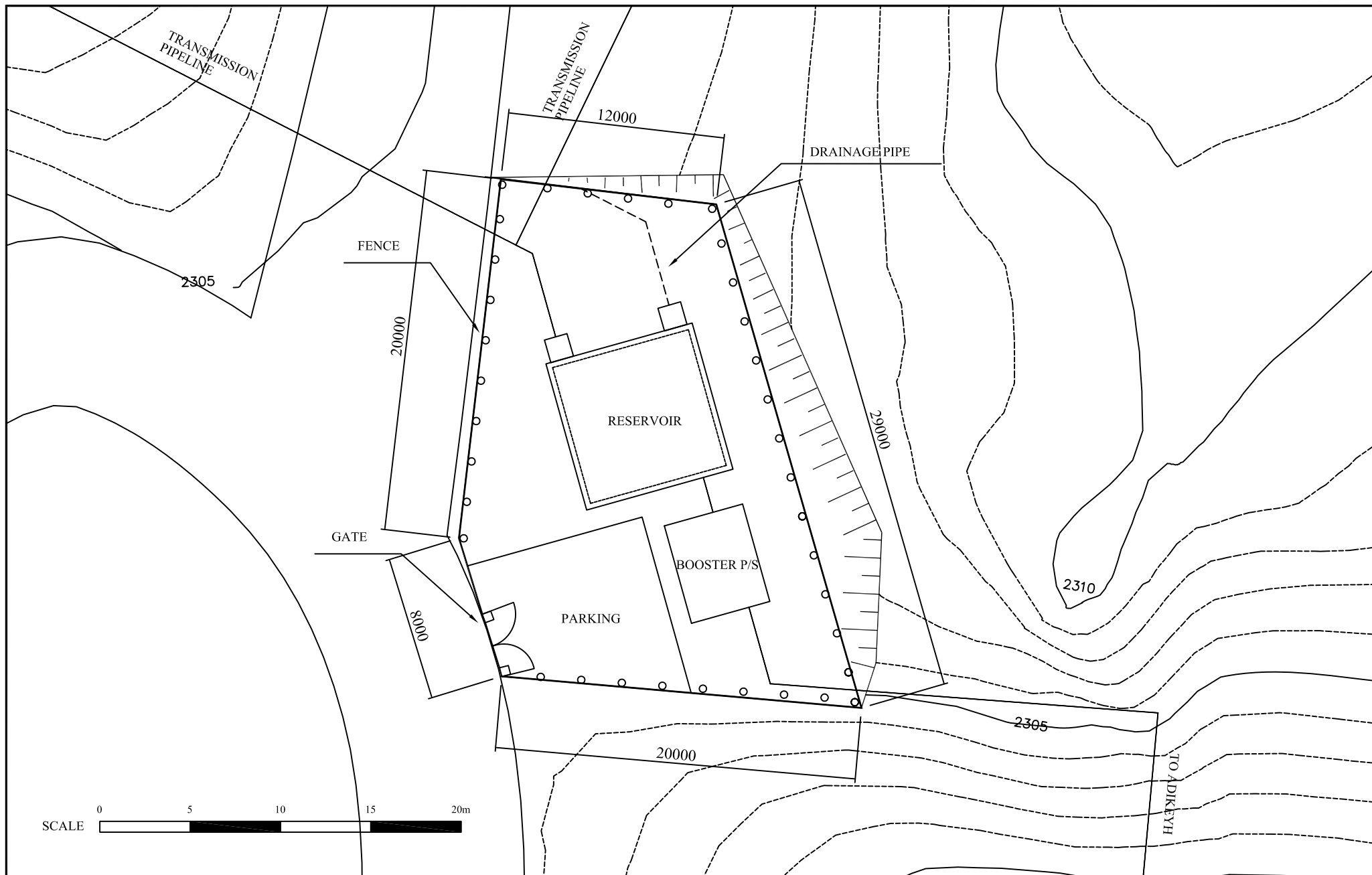
 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Disinfection Facilities

SCALE

DATE
MAY 2006

DRAWING NO.
BD-014



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO., LTD.**

DRAWING TITLE

Booster Pump Station Area Layout Plan

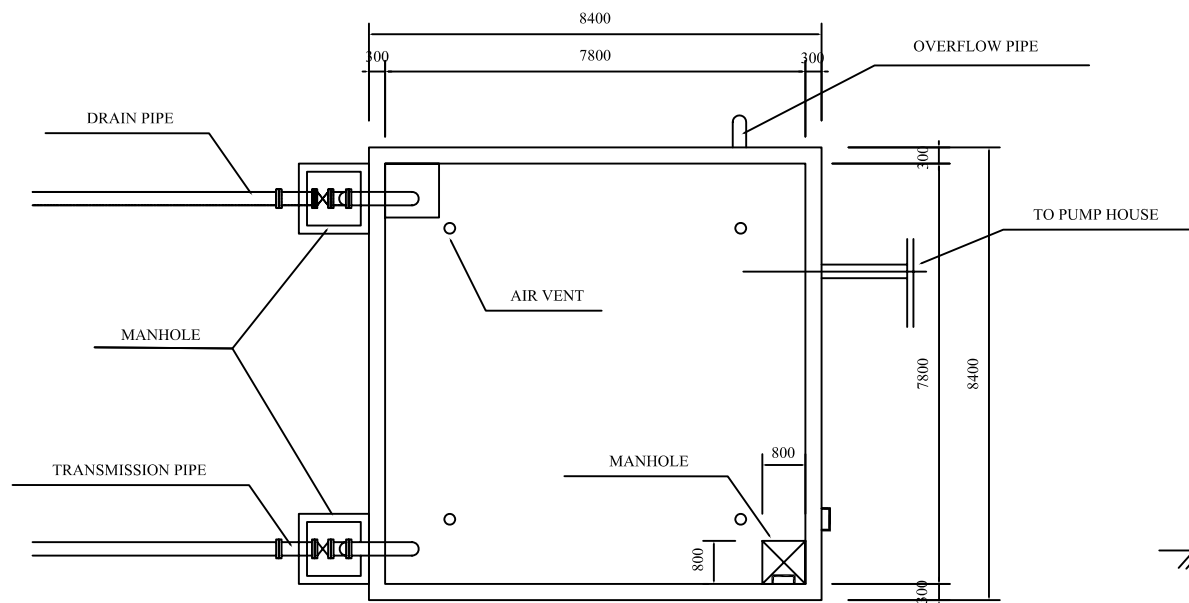
SCALE

DATE

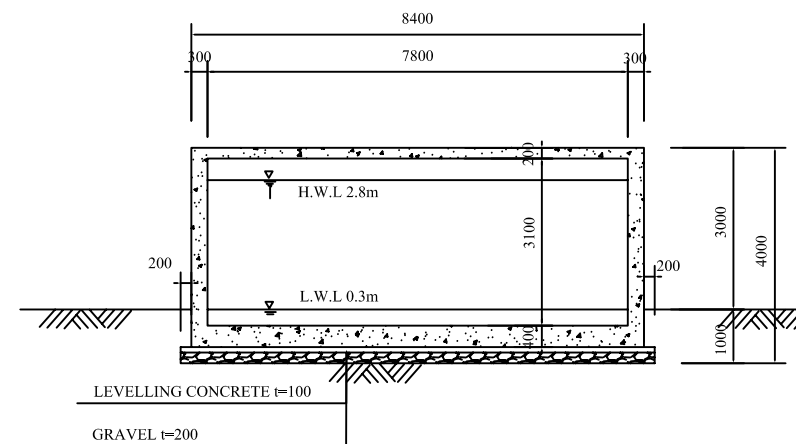
MAY 2006

DRAWING NO.

BD-015



RESERVOIR PLAN



SECTION

SCALE 0 2.5 5.0 7.5 10.0m

THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 NIPPON KOEI CO., LTD.

DRAWING TITLE

Reservoir Tank

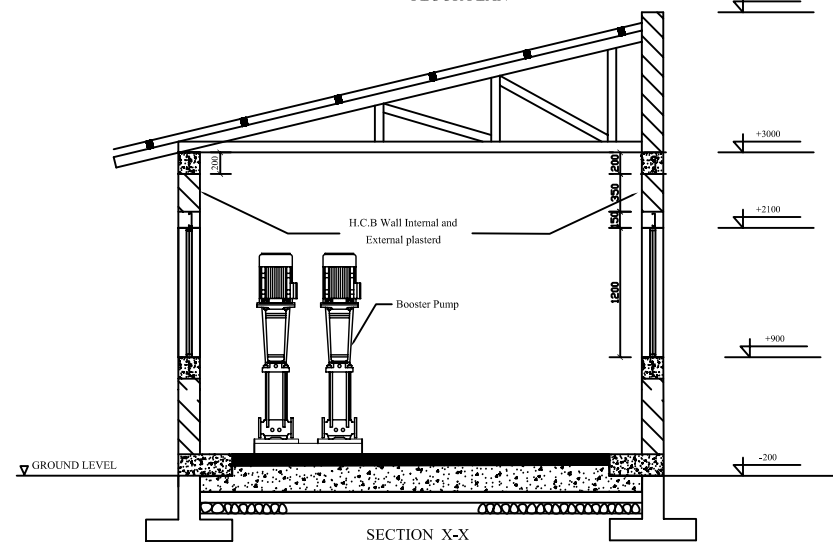
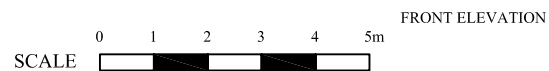
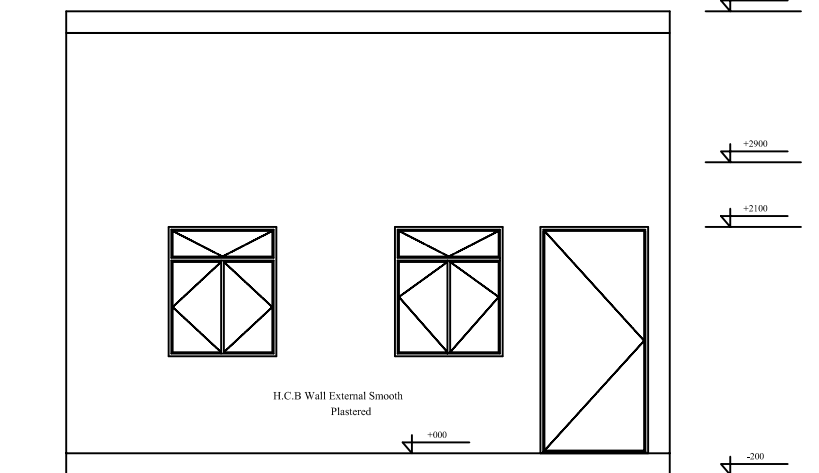
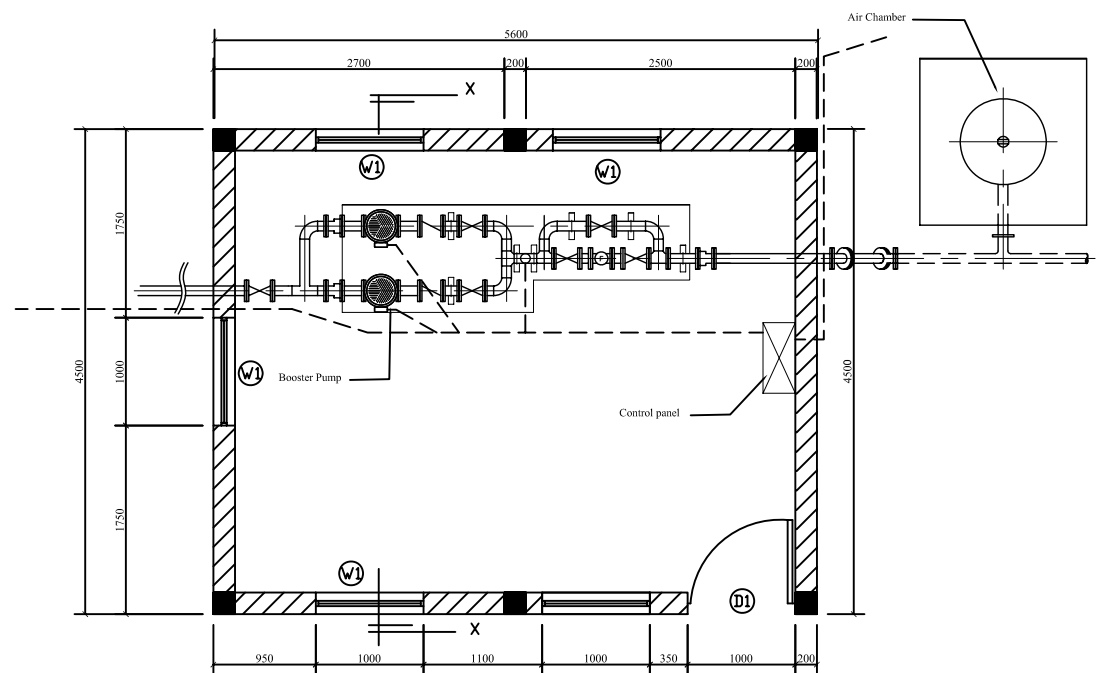
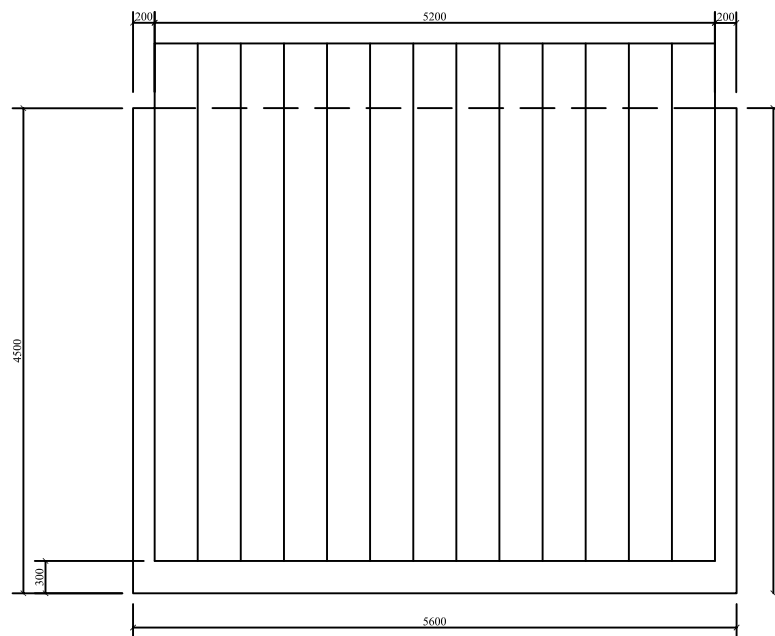
SCALE

DATE

MAY 2006

DRAWING NO.

BD-016



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY



DRAWING TITLE

Booster Pump House

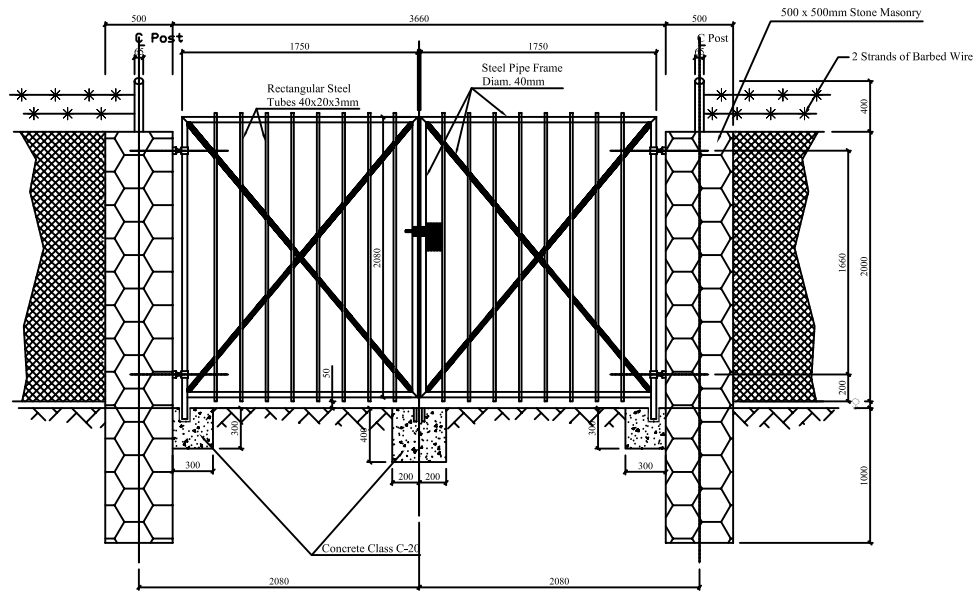
SCALE

DATE _____

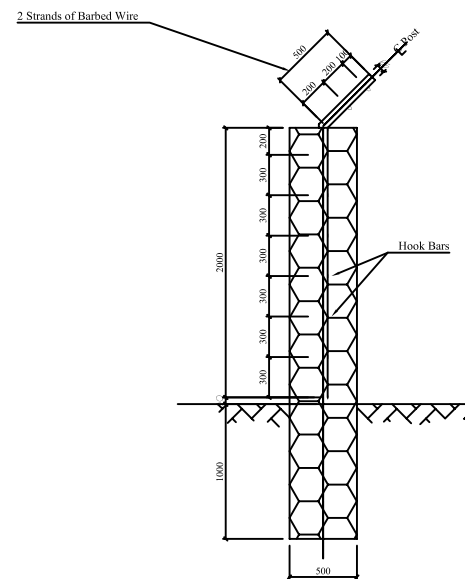
MAY 2006

DRAWING NO.

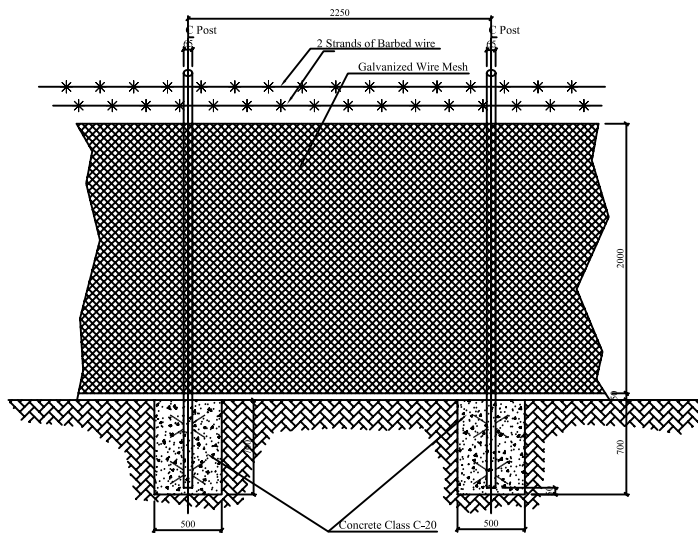
BD-017



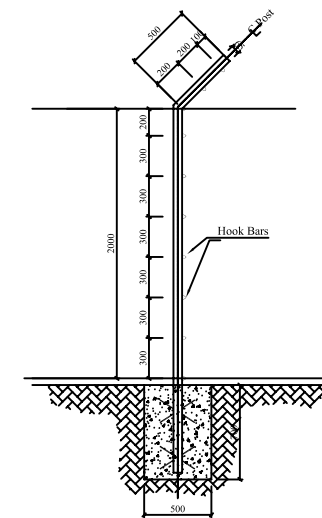
REAR ELEVATION OF GATE



SIDE VIEW OF GATE POST



ELEVATION VIEW OF FENCE



SIDE VIEW OF FENCE



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO., LTD.**

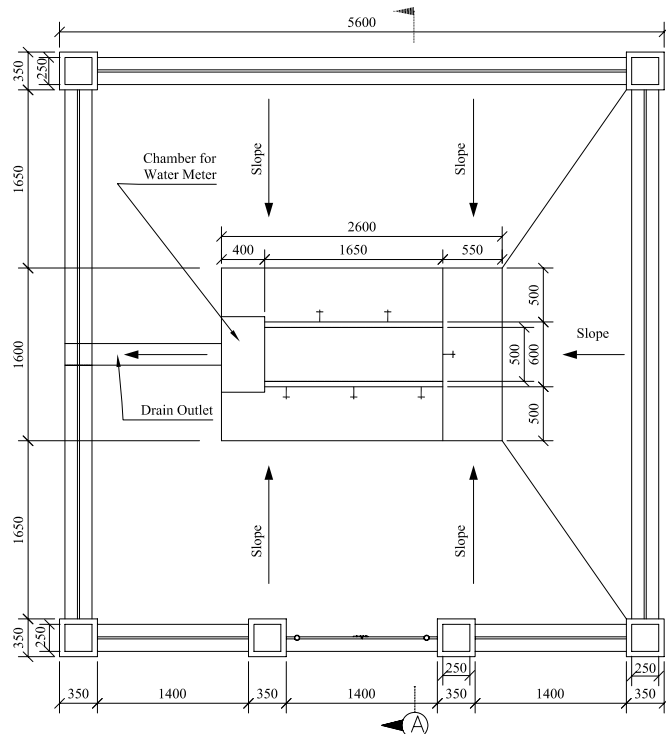
DRAWING TITLE
Fence and Gate

SCALE

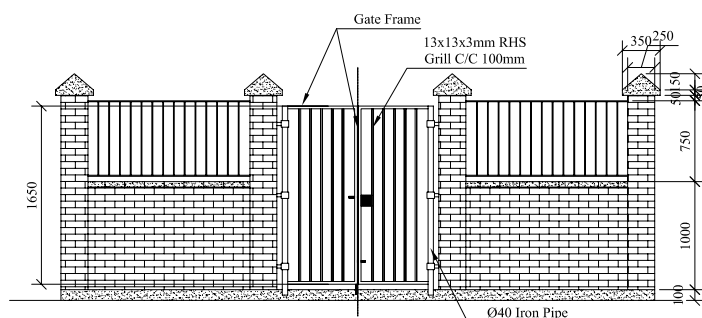
DATE

MAY 2006

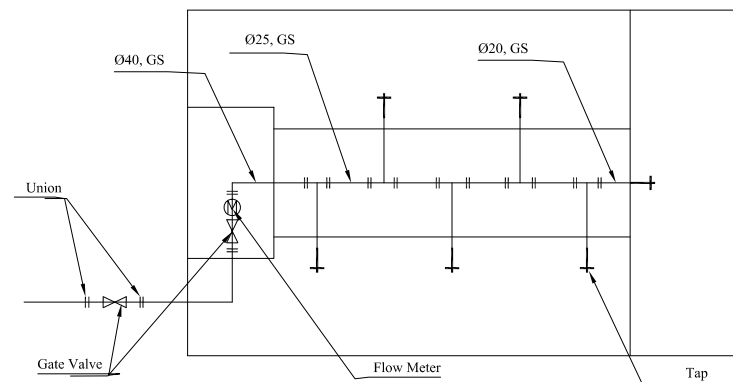
DRAWING NO.
BD-018



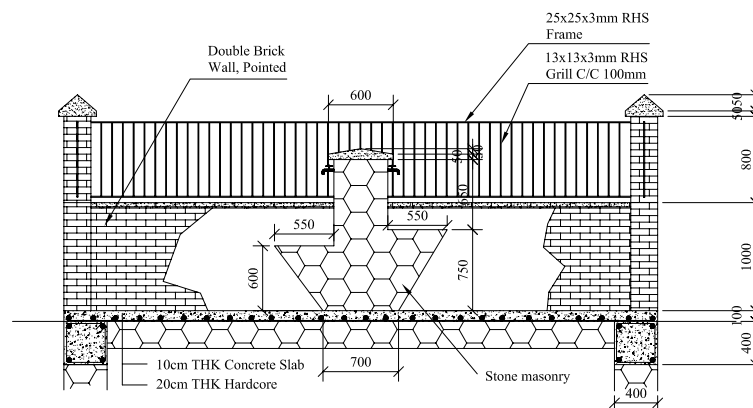
PLAN OF PUBLIC FOUNTAIN



FRONT ELEVATION



PLUMBING WORKS



SECTION A-A

SCALE 0 1000 2000 3000 4000mm

THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE

Public Fountain

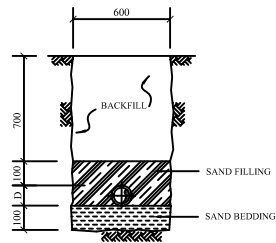
SCALE

DATE

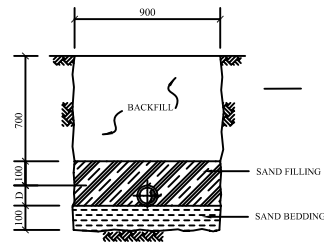
MAY 2006

DRAWING NO.

BD-019

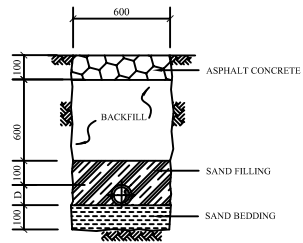


STANDARD CROSS SECTION
D 50 ~ 150mm

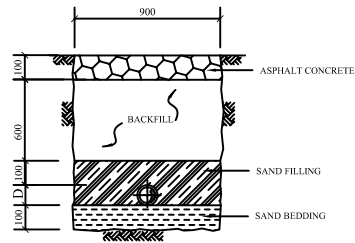


STANDARD CROSS SECTION
D 200 mm ~

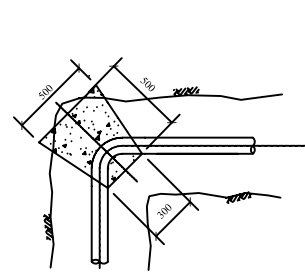
* Note : Excavated material is applied to normal section and selected material is used for rock section.



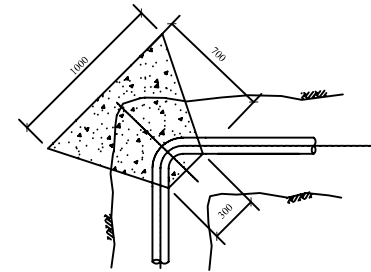
ASPHALT ROAD REPAIRING SECTION
D 50 ~ 150mm



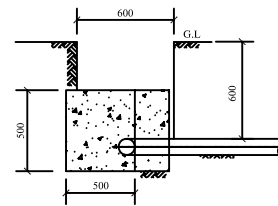
ASPHALT ROAD REPAIRING SECTION
D 200 mm ~



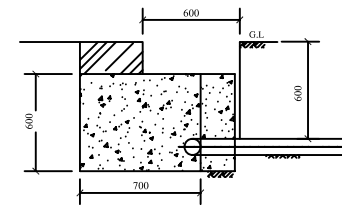
TRUST BLOCK PIPE LESS THAN D150



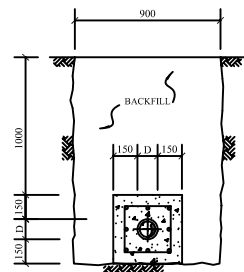
TRUST BLOCK PIPE MORE THAN D200



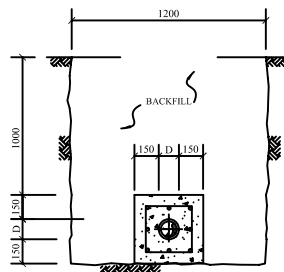
TYPICAL SECTION



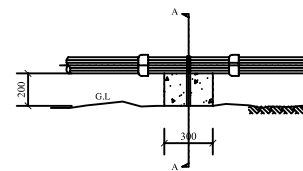
TYPICAL SECTION



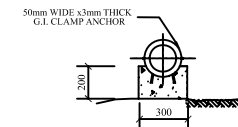
RIVER CROSS SECTION
D 40 ~ 150mm



RIVER CROSS SECTION
D 200mm ~



THRUST BLOCK



SECTION A-A



THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 NIPPON KOEI CO.,LTD.

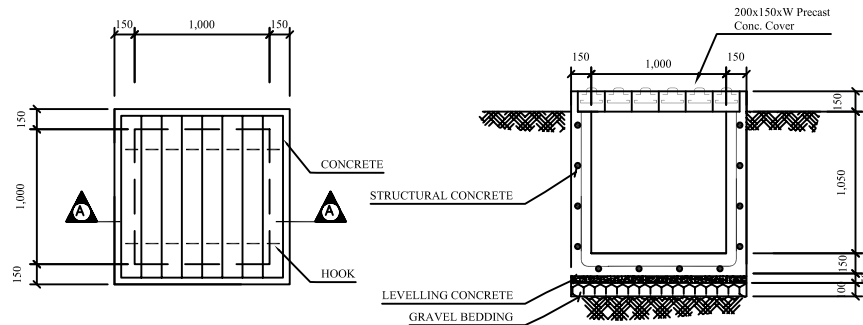
DRAWING TITLE
Pipe Installation Works

SCALE

DATE

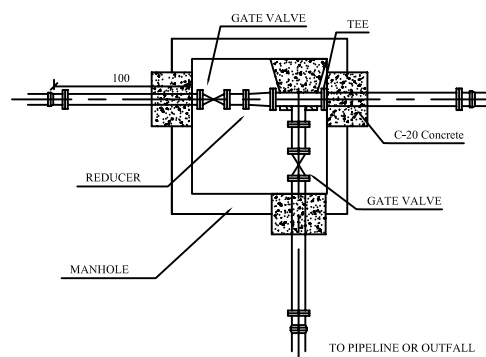
MAY 2006

DRAWING NO.
BD-020

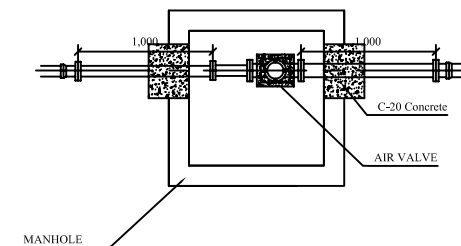


MANHOLE PLAN

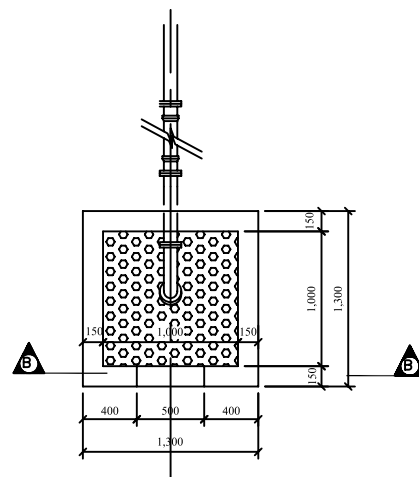
SECTION A-A



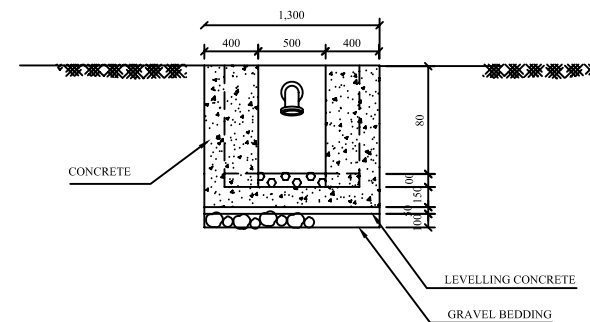
GATE VALVE & FITTINGS PLAN



AIR VALVE PLAN



OUTFALL PLAN



SECTION B-B

SCALE
0 500 1000 1500 2000mm

THE BASIC DESIGN STUDY ON THE PROJECT
FOR URBAN WATER SUPPLY IN DEBUB REGION
IN THE STATE OF ERITREA

JAPAN INTERNATIONAL COOPERATION AGENCY

 **NIPPON KOEI CO.,LTD.**

DRAWING TITLE
Manhole and Valve

SCALE

DATE
MAY 2006

DRAWING NO.
BD-021