

X V. DRAWINGS

- **BUILDING OF SMALL-SCALE RURAL INDUSTRY (KAMPI YA SAMAKI)**
- **DOMESTICK WATER SUPPLY FACILITY (UPPER MUKUTANI)**
- **REHABILITATION OF PAN (RUGUS)**

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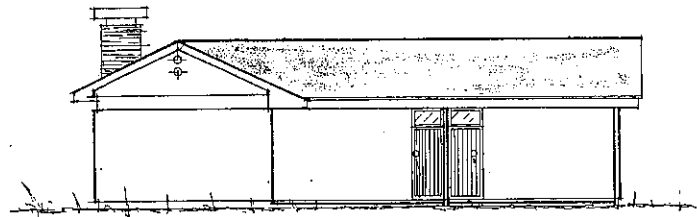
DOMESTIC WATER SUPPLY FACILITY (UPPER MUKUTANI)

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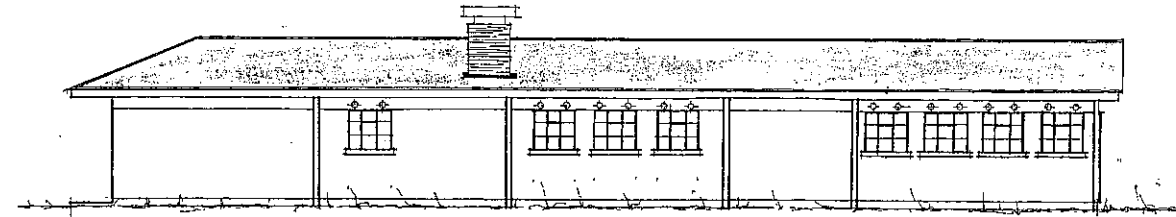
REHABILITATION OF PAN (RUGUS)

- Figure X IV-9. Outlet and Well Works

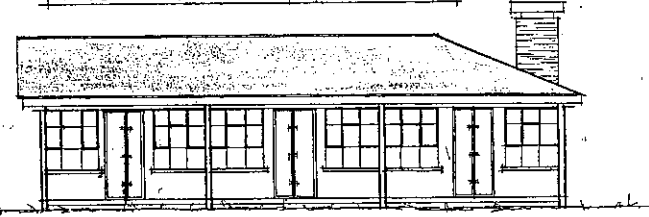
Figure X IV-1. Floor Plan, Elevation, Sections, Site Plan



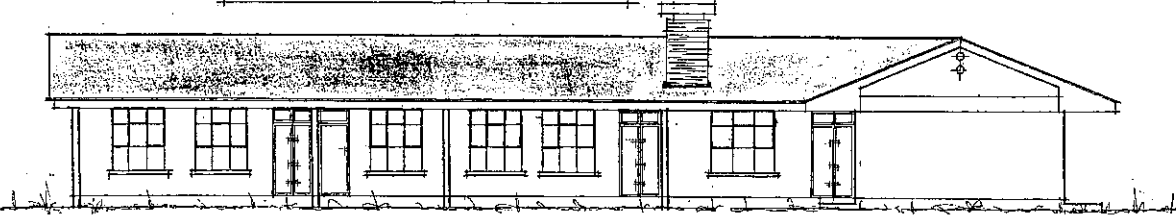
Elevation 03 Scale 1:100



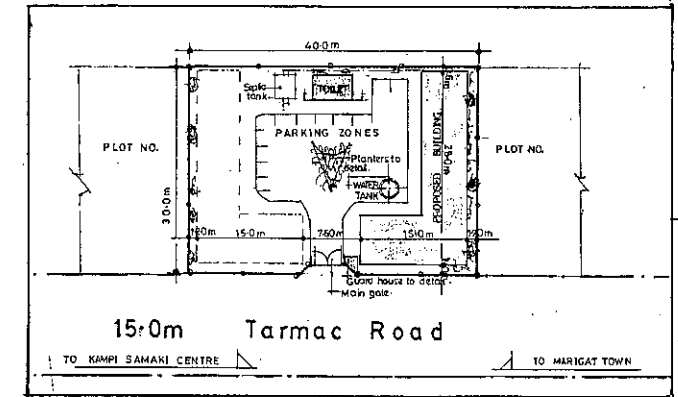
Elevation 02 Scale 1:100



Elevation 01 Scale 1:100



Elevation 04 Scale 1:100



SITE/BLOCK PLAN SCALE 1:500

| DOORS & WINDOWS SCHEDULE | | | | |
|--------------------------|------------------------------------|----|-------|--------|
| ITEM | DESCRIPTION | Nº | WIDTH | HEIGHT |
| D1 | LEADED BRANDED FL. WOOD (HARDWOOD) | 06 | 1200 | 2550 |
| D2 | " " " | 04 | 900 | 2550 |
| D3 | SOLID CORE FLUSH | 04 | 850 | 2100 |
| TOTAL | | 14 | | |
| W1 | STEEL CASEMENT | 01 | 1800 | 1500 |
| W2 | " " " | 11 | 1500 | 1800 |
| W3 | " " " | 08 | 1200 | 1200 |
| W4 | " " " | 04 | 600 | 600 |
| TOTAL | | 24 | | |

*ALL DIMENSIONS ARE IN MM
 *DRG MUST NOT BE SCALED ONLY FIGURED DIMENSIONS TO BE USED
 *ALL LEVELS & DIMENSIONS TO BE CHECKED ON SITE ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT BEFORE WORK COMMENCES.

PROJECT
PROPOSED COMMERCIAL DEVELOPMENT ON PLOT Nº

CLIENT
 LAKE BARINGO MUUNGANO WOMEN SELF-HELP GROUP
 KAMPI SAMAKI

SPONSOR
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

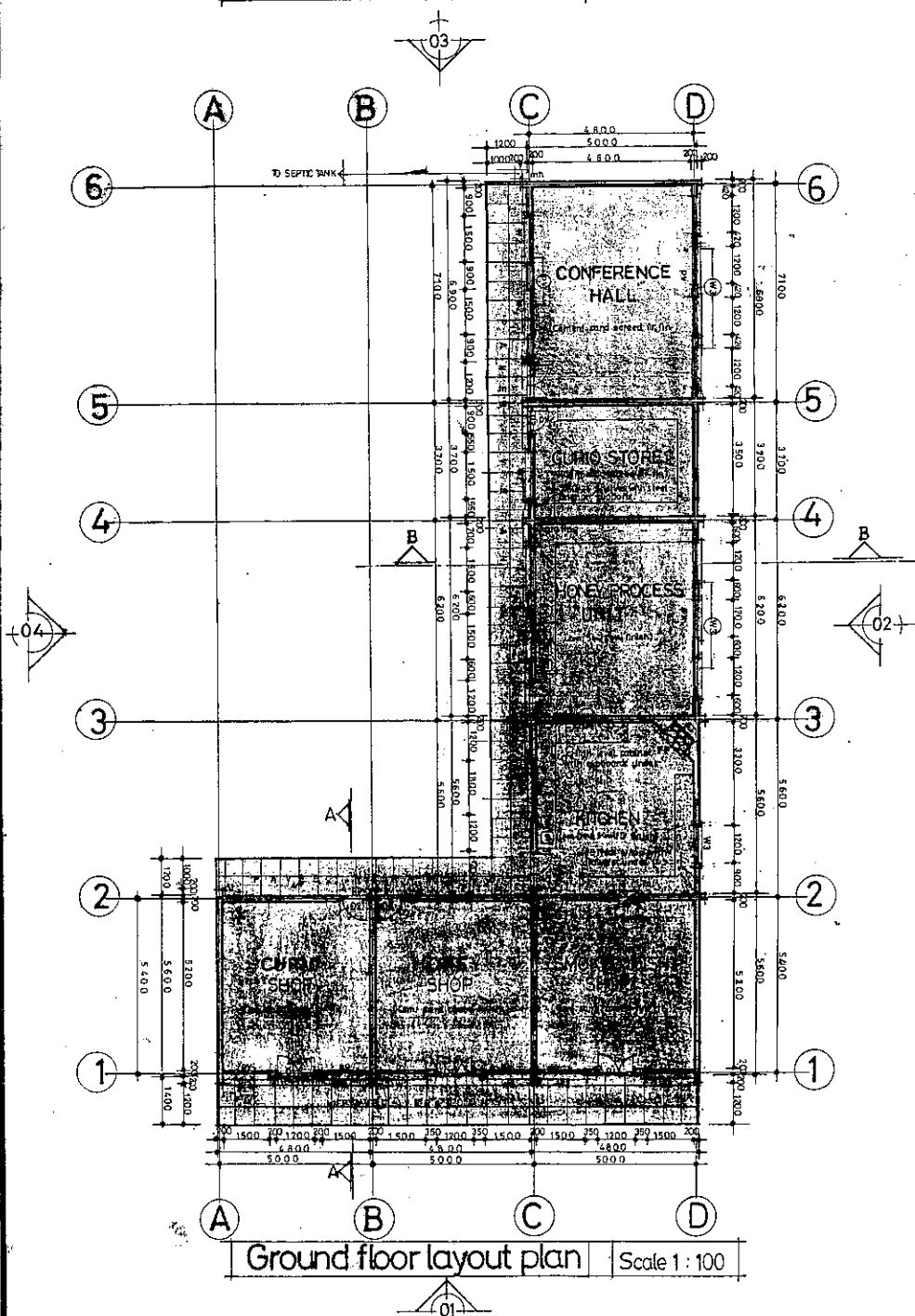
DESIGNED
 MAURICE KIPSANG
 PO BOX 325
 KABARNET

DRG. Nº
Arc 2000 = MK 019

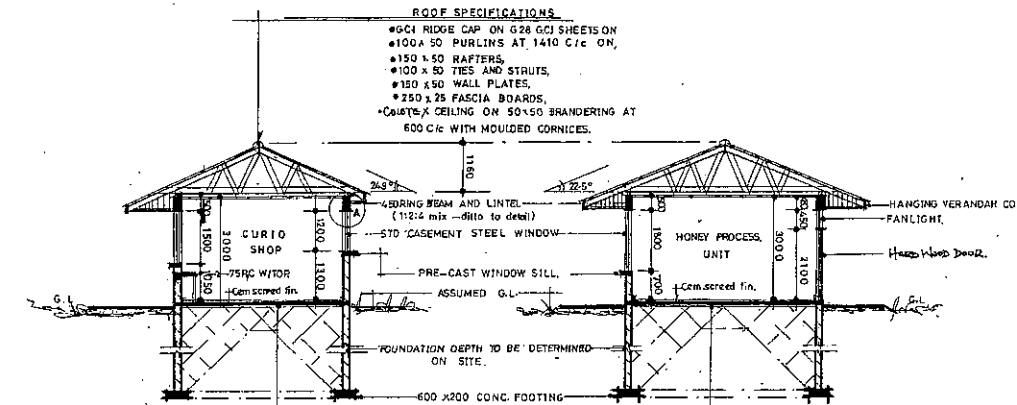
DRAWING TITLE
 FLOOR PLANS
 ELEVATIONS
 SECTIONS
 SITE PLAN

DATE
 APRIL 2000

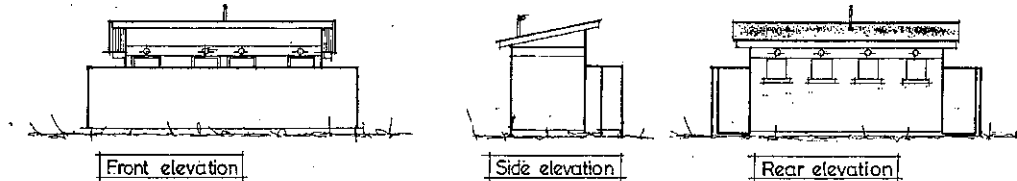
SCALE(S)
 1:100 & 1:500



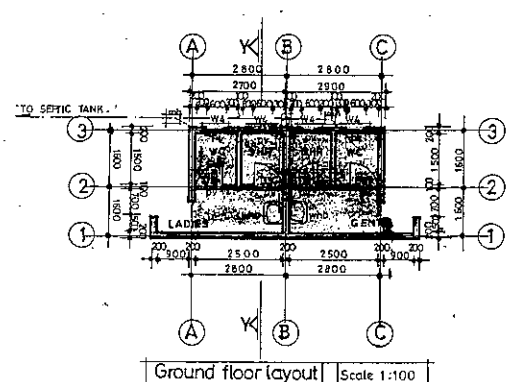
Ground floor layout plan Scale 1:100



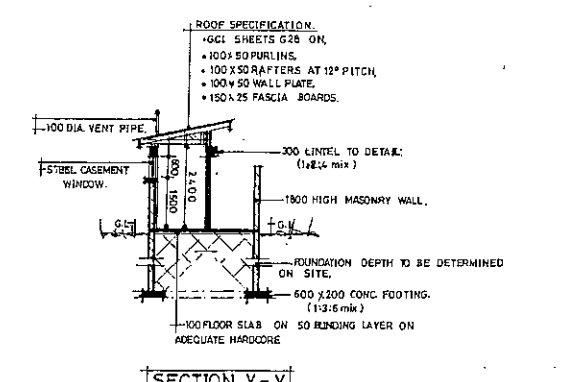
Section B=B Scale 1:100 Section A=A



Front elevation Side elevation Rear elevation

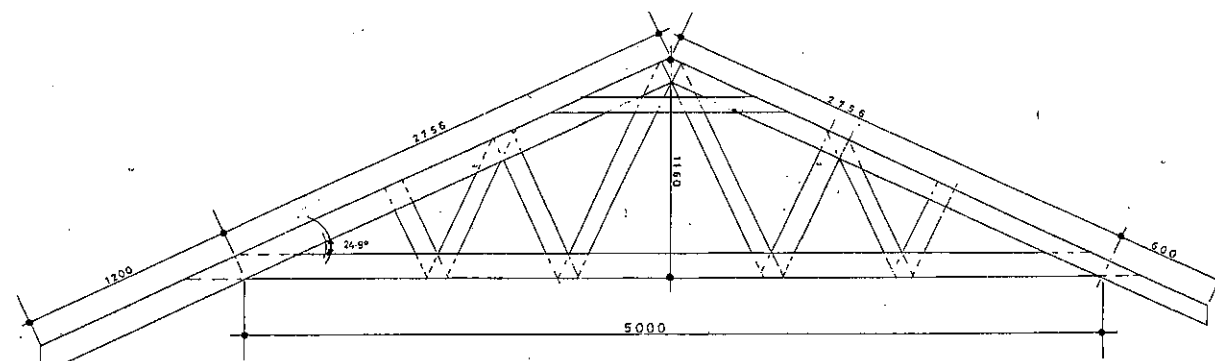
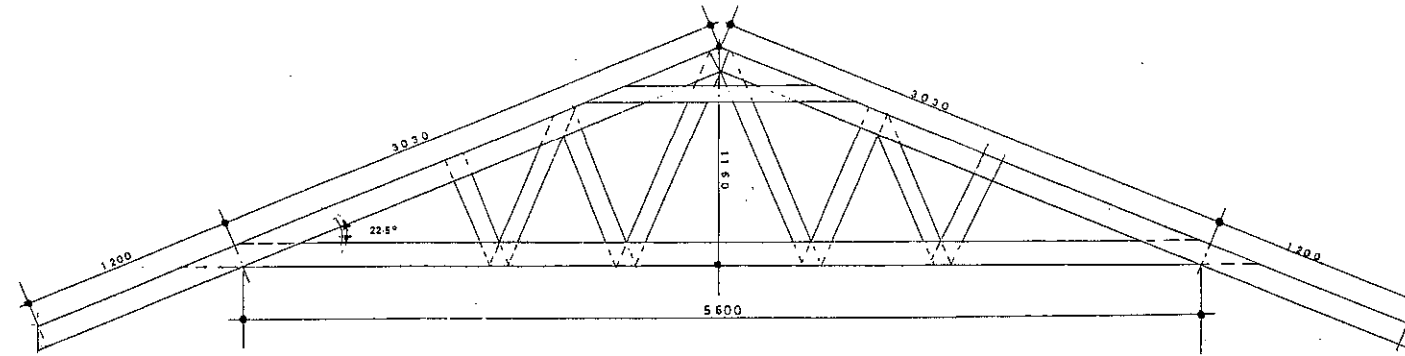
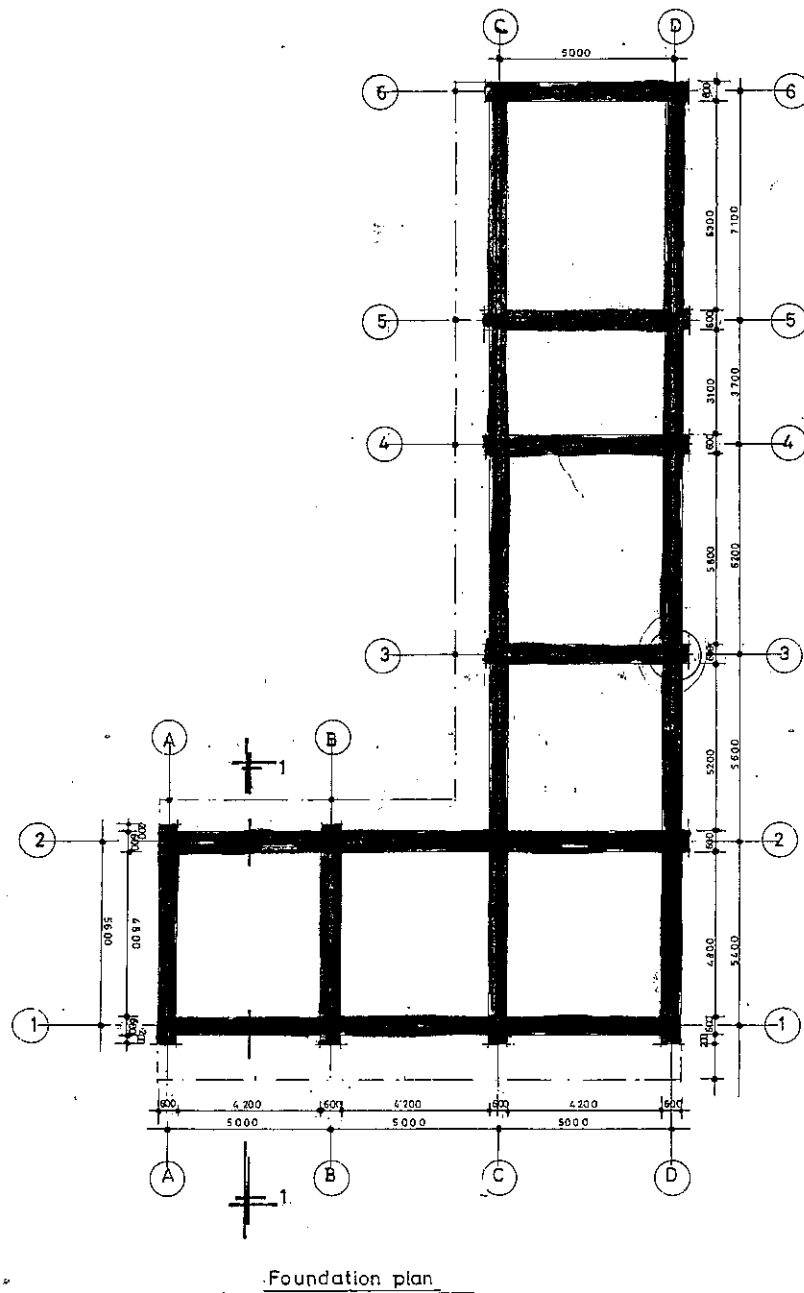
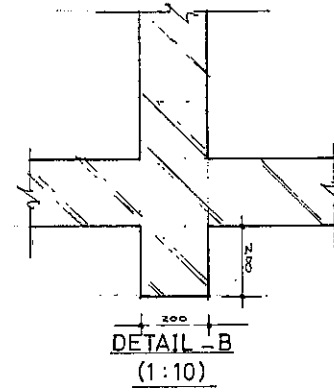
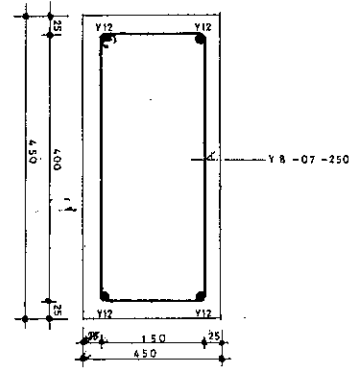
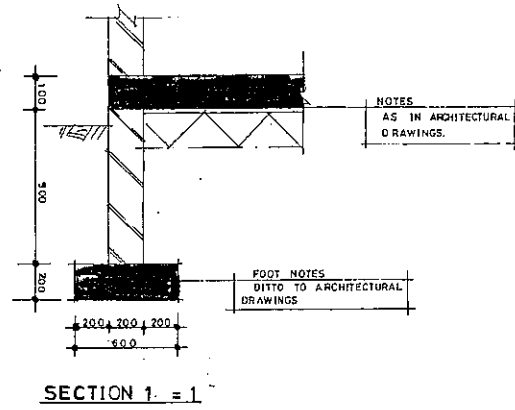


Typical Toilets layout Scale 1:100



SECTION Y=Y

Figure X IV-2. Foundation Plan, Lintel Detail and Truss Details



NOTES

- *ALL DIMENSIONS ARE IN (mm).
- *THESE DRAWINGS TO BE READ IN CONJUNCTION TO ALL ARCHITECTURAL DRAWINGS.
- *ALL STRUCTURAL CONCRETE TO BE CLASS 20 AND MASS CONCRETE BE CLASS 10.
- *ALL JOINTS (MASONRY) SHALL NOT BE MORE THAN 15mm AND MAX. OVERLAP NOT MORE THAN 100mm.

PROJECT:
PROPOSED DEVELOPMENT
ON PLOT No. _____

CLIENT
LAKE BARINGO MUUNGANO WOMEN
SELF-HELP GROUP

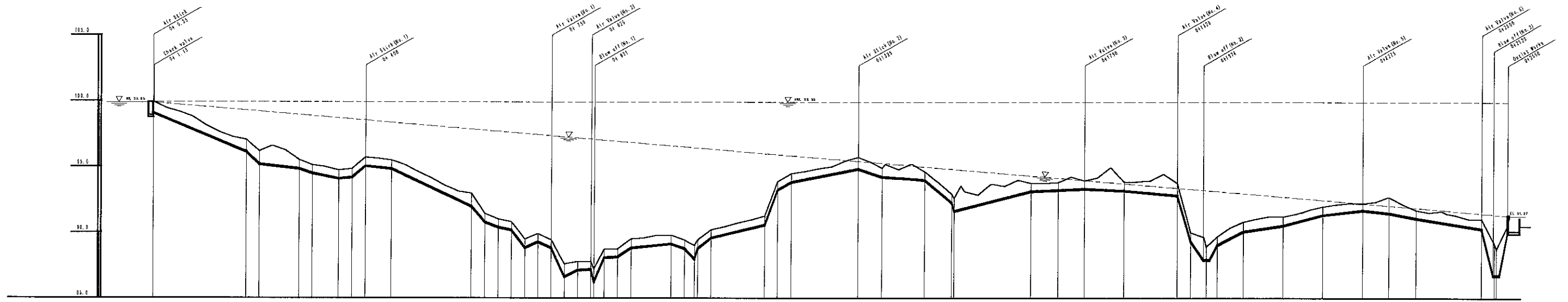
SPONSORS
JAPAN INTERNATIONAL COOPERATION
AGENCY

DRG TITLE
FOUNDATION PLAN LINTEL DETAIL
AND TRUSS DETAILS

| | |
|--------------------------|-----------------|
| DRAWN: MAURICE KIPSANG | JOB NO. |
| DESIGNED: M.K. | MK / STR / 2000 |
| SCALE: 1:100, 1:20 & 1:5 | DRG. NO. |
| DATE: APRIL 2000 | 01 |

Figure X IV-3. Longitudinal Section

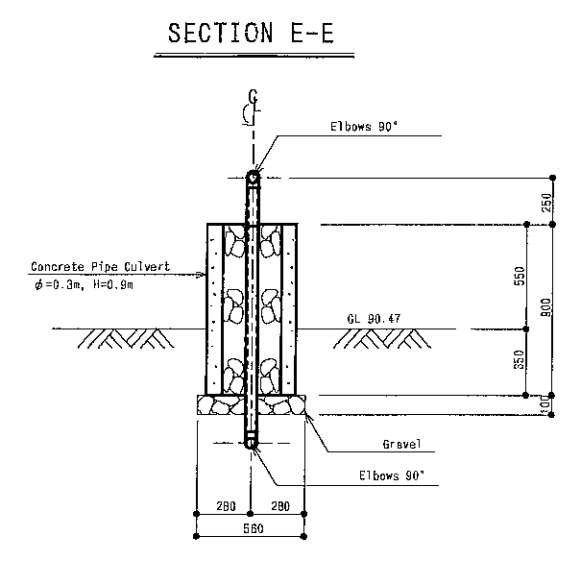
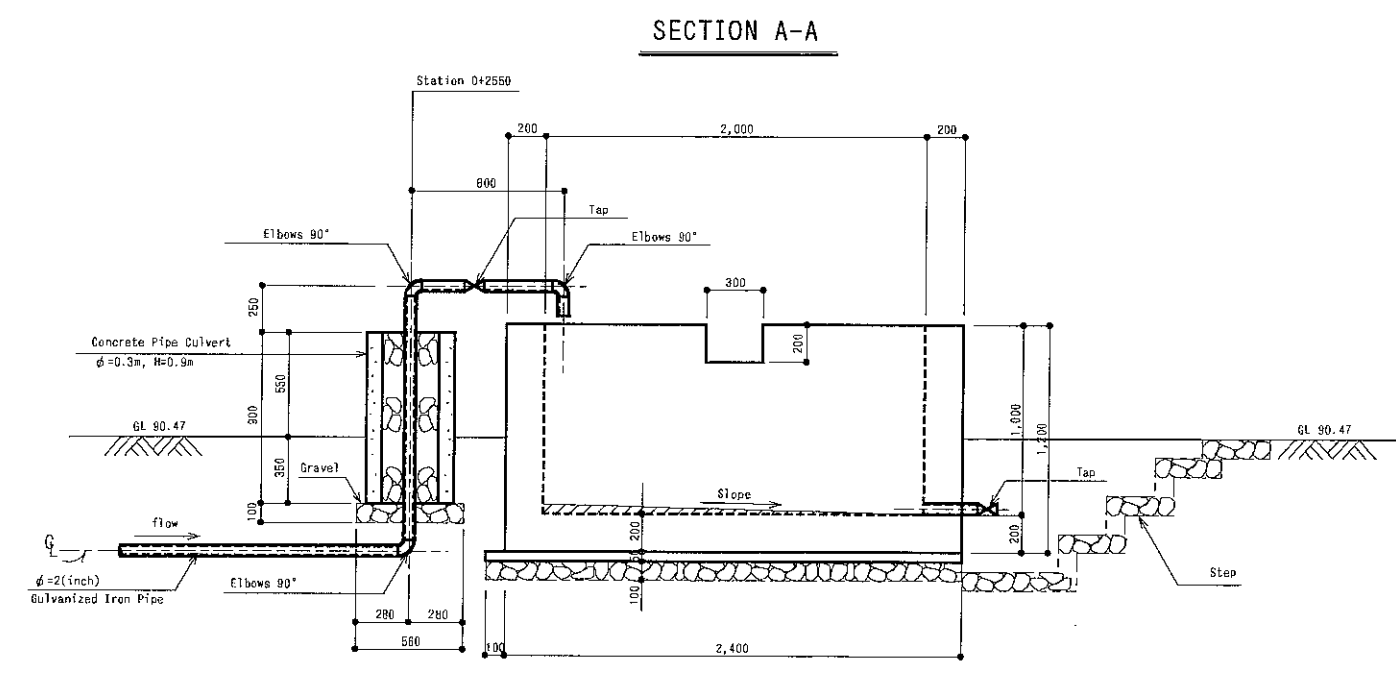
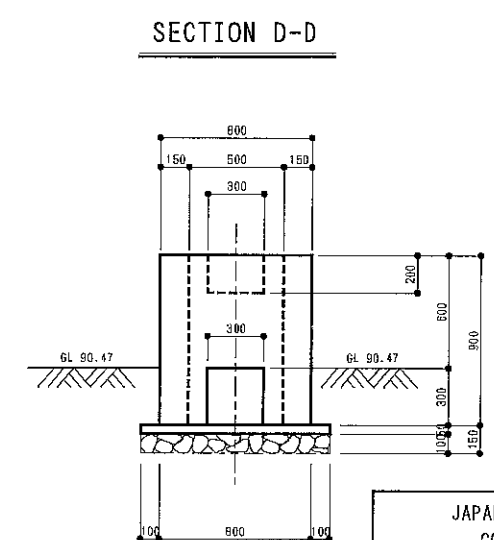
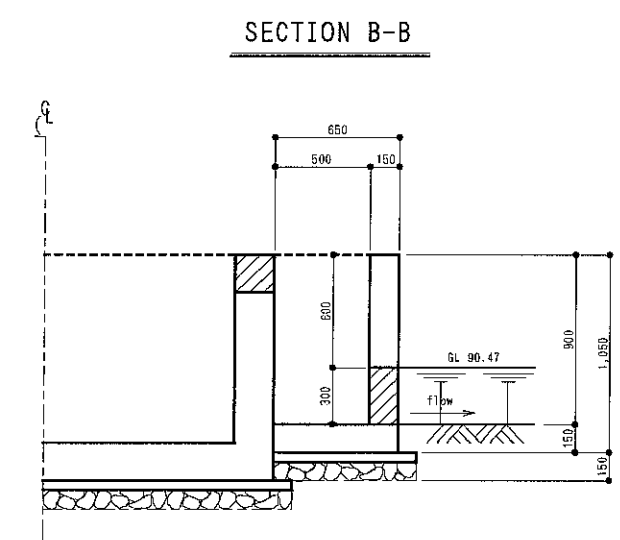
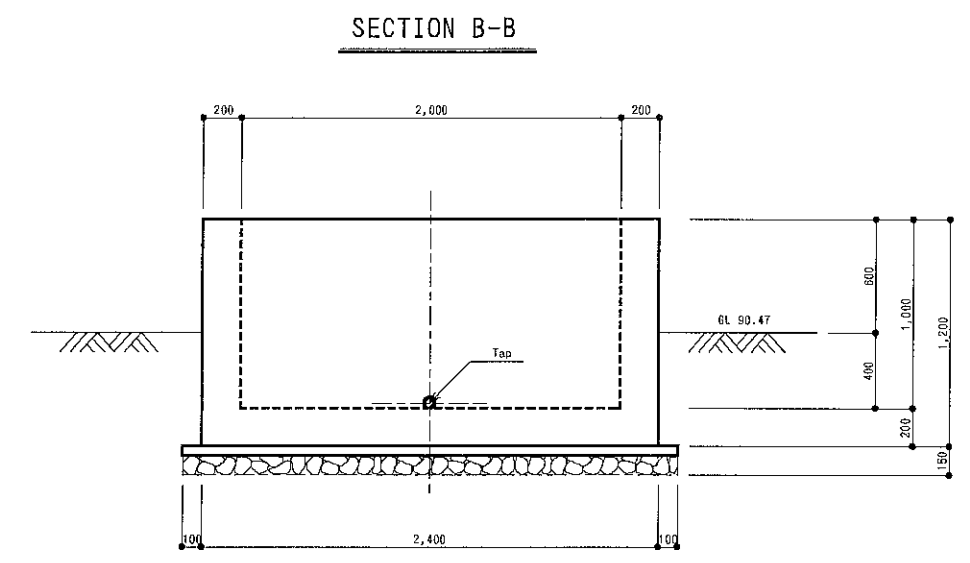
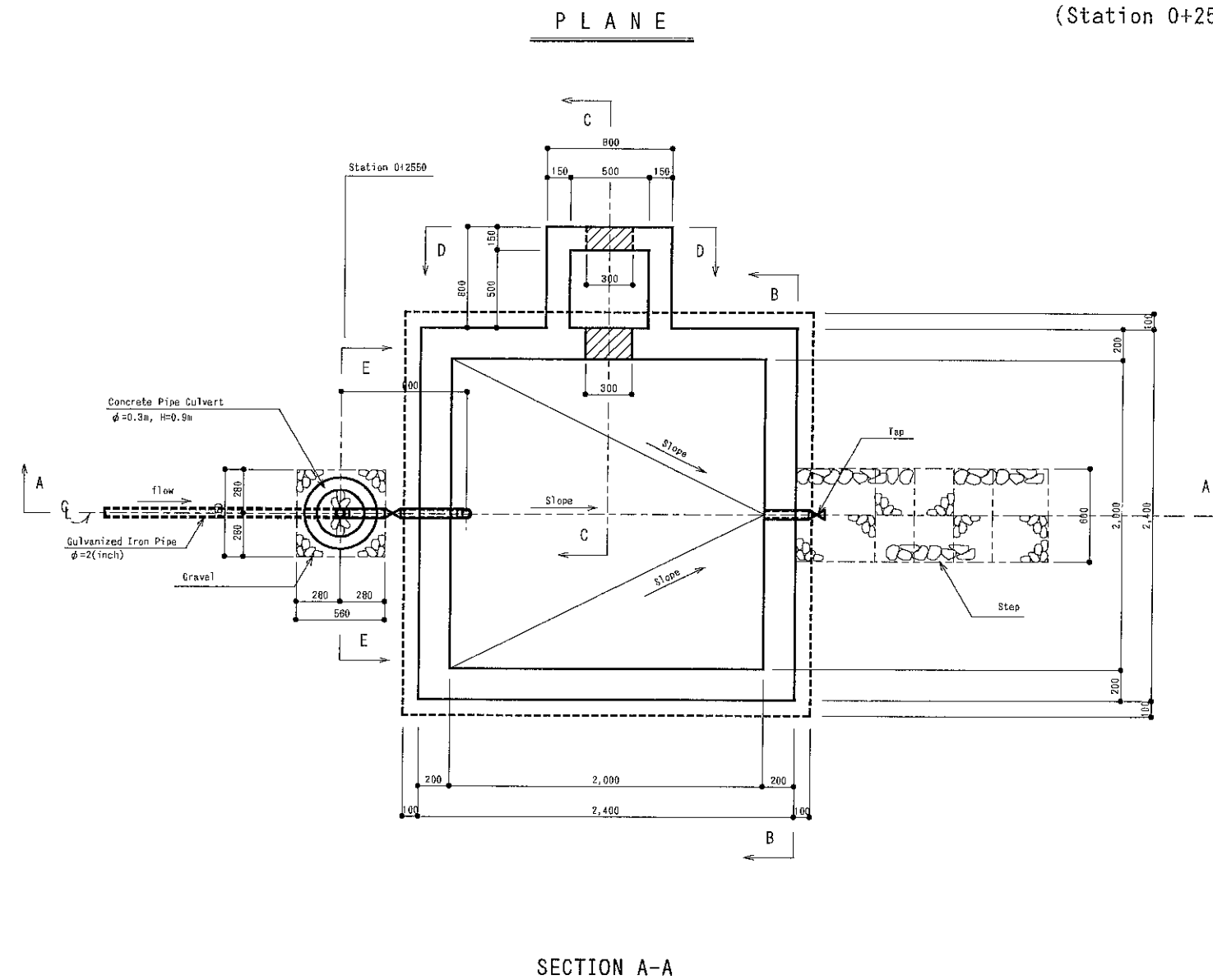
LONGITUDINAL SECTION of PROPOSED MAIN



| EXISTING | GROUND LEVEL (m) | CHAINAGE/DISTANCE (m) | STATION | PEG NO. | CURVE | SOIL TYPE | ELEVATION OF PIPE CENTRE | HYDRAULIC LEVEL | HYDRAULIC GRADIENT | VALVE CHAMBER No. | OFF-TAKE & FLOW RATE | CONNECTIONS | PIPE DETAILS | SURVEY REMARKS |
|----------|------------------|-----------------------|---------|---------|-------|--------------------|--------------------------|-----------------|--------------------|-------------------|----------------------|-------------|--------------|----------------|
| | 95.000 | 0 | 0+00 | 101 | | WETLANDY CLAY LOAM | 95.000 | 95.000 | 0.000 | | | | | Stream bed |
| | 95.025 | 25 | 0+25 | 102 | | WETLANDY CLAY LOAM | 95.025 | 95.025 | 0.000 | | | | | |
| | 95.050 | 50 | 0+50 | 103 | | WETLANDY CLAY LOAM | 95.050 | 95.050 | 0.000 | | | | | |
| | 95.075 | 75 | 0+75 | 104 | | WETLANDY CLAY LOAM | 95.075 | 95.075 | 0.000 | | | | | |
| | 95.100 | 100 | 0+100 | 105 | | WETLANDY CLAY LOAM | 95.100 | 95.100 | 0.000 | | | | | |
| | 95.125 | 125 | 0+125 | 106 | | WETLANDY CLAY LOAM | 95.125 | 95.125 | 0.000 | | | | | |
| | 95.150 | 150 | 0+150 | 107 | | WETLANDY CLAY LOAM | 95.150 | 95.150 | 0.000 | | | | | |
| | 95.175 | 175 | 0+175 | 108 | | WETLANDY CLAY LOAM | 95.175 | 95.175 | 0.000 | | | | | |
| | 95.200 | 200 | 0+200 | 109 | | WETLANDY CLAY LOAM | 95.200 | 95.200 | 0.000 | | | | | |
| | 95.225 | 225 | 0+225 | 110 | | WETLANDY CLAY LOAM | 95.225 | 95.225 | 0.000 | | | | | |
| | 95.250 | 250 | 0+250 | 111 | | WETLANDY CLAY LOAM | 95.250 | 95.250 | 0.000 | | | | | |
| | 95.275 | 275 | 0+275 | 112 | | WETLANDY CLAY LOAM | 95.275 | 95.275 | 0.000 | | | | | |
| | 95.300 | 300 | 0+300 | 113 | | WETLANDY CLAY LOAM | 95.300 | 95.300 | 0.000 | | | | | |
| | 95.325 | 325 | 0+325 | 114 | | WETLANDY CLAY LOAM | 95.325 | 95.325 | 0.000 | | | | | |
| | 95.350 | 350 | 0+350 | 115 | | WETLANDY CLAY LOAM | 95.350 | 95.350 | 0.000 | | | | | |
| | 95.375 | 375 | 0+375 | 116 | | WETLANDY CLAY LOAM | 95.375 | 95.375 | 0.000 | | | | | |
| | 95.400 | 400 | 0+400 | 117 | | WETLANDY CLAY LOAM | 95.400 | 95.400 | 0.000 | | | | | |
| | 95.425 | 425 | 0+425 | 118 | | WETLANDY CLAY LOAM | 95.425 | 95.425 | 0.000 | | | | | |
| | 95.450 | 450 | 0+450 | 119 | | WETLANDY CLAY LOAM | 95.450 | 95.450 | 0.000 | | | | | |
| | 95.475 | 475 | 0+475 | 120 | | WETLANDY CLAY LOAM | 95.475 | 95.475 | 0.000 | | | | | |
| | 95.500 | 500 | 0+500 | 121 | | WETLANDY CLAY LOAM | 95.500 | 95.500 | 0.000 | | | | | |
| | 95.525 | 525 | 0+525 | 122 | | WETLANDY CLAY LOAM | 95.525 | 95.525 | 0.000 | | | | | |
| | 95.550 | 550 | 0+550 | 123 | | WETLANDY CLAY LOAM | 95.550 | 95.550 | 0.000 | | | | | |
| | 95.575 | 575 | 0+575 | 124 | | WETLANDY CLAY LOAM | 95.575 | 95.575 | 0.000 | | | | | |
| | 95.600 | 600 | 0+600 | 125 | | WETLANDY CLAY LOAM | 95.600 | 95.600 | 0.000 | | | | | |
| | 95.625 | 625 | 0+625 | 126 | | WETLANDY CLAY LOAM | 95.625 | 95.625 | 0.000 | | | | | |
| | 95.650 | 650 | 0+650 | 127 | | WETLANDY CLAY LOAM | 95.650 | 95.650 | 0.000 | | | | | |
| | 95.675 | 675 | 0+675 | 128 | | WETLANDY CLAY LOAM | 95.675 | 95.675 | 0.000 | | | | | |
| | 95.700 | 700 | 0+700 | 129 | | WETLANDY CLAY LOAM | 95.700 | 95.700 | 0.000 | | | | | |
| | 95.725 | 725 | 0+725 | 130 | | WETLANDY CLAY LOAM | 95.725 | 95.725 | 0.000 | | | | | |
| | 95.750 | 750 | 0+750 | 131 | | WETLANDY CLAY LOAM | 95.750 | 95.750 | 0.000 | | | | | |
| | 95.775 | 775 | 0+775 | 132 | | WETLANDY CLAY LOAM | 95.775 | 95.775 | 0.000 | | | | | |
| | 95.800 | 800 | 0+800 | 133 | | WETLANDY CLAY LOAM | 95.800 | 95.800 | 0.000 | | | | | |
| | 95.825 | 825 | 0+825 | 134 | | WETLANDY CLAY LOAM | 95.825 | 95.825 | 0.000 | | | | | |
| | 95.850 | 850 | 0+850 | 135 | | WETLANDY CLAY LOAM | 95.850 | 95.850 | 0.000 | | | | | |
| | 95.875 | 875 | 0+875 | 136 | | WETLANDY CLAY LOAM | 95.875 | 95.875 | 0.000 | | | | | |
| | 95.900 | 900 | 0+900 | 137 | | WETLANDY CLAY LOAM | 95.900 | 95.900 | 0.000 | | | | | |
| | 95.925 | 925 | 0+925 | 138 | | WETLANDY CLAY LOAM | 95.925 | 95.925 | 0.000 | | | | | |
| | 95.950 | 950 | 0+950 | 139 | | WETLANDY CLAY LOAM | 95.950 | 95.950 | 0.000 | | | | | |
| | 95.975 | 975 | 0+975 | 140 | | WETLANDY CLAY LOAM | 95.975 | 95.975 | 0.000 | | | | | |
| | 96.000 | 1000 | 0+1000 | 141 | | WETLANDY CLAY LOAM | 96.000 | 96.000 | 0.000 | | | | | |
| | 96.025 | 1025 | 0+1025 | 142 | | WETLANDY CLAY LOAM | 96.025 | 96.025 | 0.000 | | | | | |
| | 96.050 | 1050 | 0+1050 | 143 | | WETLANDY CLAY LOAM | 96.050 | 96.050 | 0.000 | | | | | |
| | 96.075 | 1075 | 0+1075 | 144 | | WETLANDY CLAY LOAM | 96.075 | 96.075 | 0.000 | | | | | |
| | 96.100 | 1100 | 0+1100 | 145 | | WETLANDY CLAY LOAM | 96.100 | 96.100 | 0.000 | | | | | |
| | 96.125 | 1125 | 0+1125 | 146 | | WETLANDY CLAY LOAM | 96.125 | 96.125 | 0.000 | | | | | |
| | 96.150 | 1150 | 0+1150 | 147 | | WETLANDY CLAY LOAM | 96.150 | 96.150 | 0.000 | | | | | |
| | 96.175 | 1175 | 0+1175 | 148 | | WETLANDY CLAY LOAM | 96.175 | 96.175 | 0.000 | | | | | |
| | 96.200 | 1200 | 0+1200 | 149 | | WETLANDY CLAY LOAM | 96.200 | 96.200 | 0.000 | | | | | |
| | 96.225 | 1225 | 0+1225 | 150 | | WETLANDY CLAY LOAM | 96.225 | 96.225 | 0.000 | | | | | |
| | 96.250 | 1250 | 0+1250 | 151 | | WETLANDY CLAY LOAM | 96.250 | 96.250 | 0.000 | | | | | |
| | 96.275 | 1275 | 0+1275 | 152 | | WETLANDY CLAY LOAM | 96.275 | 96.275 | 0.000 | | | | | |
| | 96.300 | 1300 | 0+1300 | 153 | | WETLANDY CLAY LOAM | 96.300 | 96.300 | 0.000 | | | | | |
| | 96.325 | 1325 | 0+1325 | 154 | | WETLANDY CLAY LOAM | 96.325 | 96.325 | 0.000 | | | | | |
| | 96.350 | 1350 | 0+1350 | 155 | | WETLANDY CLAY LOAM | 96.350 | 96.350 | 0.000 | | | | | |
| | 96.375 | 1375 | 0+1375 | 156 | | WETLANDY CLAY LOAM | 96.375 | 96.375 | 0.000 | | | | | |
| | 96.400 | 1400 | 0+1400 | 157 | | WETLANDY CLAY LOAM | 96.400 | 96.400 | 0.000 | | | | | |
| | 96.425 | 1425 | 0+1425 | 158 | | WETLANDY CLAY LOAM | 96.425 | 96.425 | 0.000 | | | | | |
| | 96.450 | 1450 | 0+1450 | 159 | | WETLANDY CLAY LOAM | 96.450 | 96.450 | 0.000 | | | | | |
| | 96.475 | 1475 | 0+1475 | 160 | | WETLANDY CLAY LOAM | 96.475 | 96.475 | 0.000 | | | | | |
| | 96.500 | 1500 | 0+1500 | 161 | | WETLANDY CLAY LOAM | 96.500 | 96.500 | 0.000 | | | | | |
| | 96.525 | 1525 | 0+1525 | 162 | | WETLANDY CLAY LOAM | 96.525 | 96.525 | 0.000 | | | | | |
| | 96.550 | 1550 | 0+1550 | 163 | | WETLANDY CLAY LOAM | 96.550 | 96.550 | 0.000 | | | | | |
| | 96.575 | 1575 | 0+1575 | 164 | | WETLANDY CLAY LOAM | 96.575 | 96.575 | 0.000 | | | | | |
| | 96.600 | 1600 | 0+1600 | 165 | | WETLANDY CLAY LOAM | 96.600 | 96.600 | 0.000 | | | | | |
| | 96.625 | 1625 | 0+1625 | 166 | | WETLANDY CLAY LOAM | 96.625 | 96.625 | 0.000 | | | | | |
| | 96.650 | 1650 | 0+1650 | 167 | | WETLANDY CLAY LOAM | 96.650 | 96.650 | 0.000 | | | | | |
| | 96.675 | 1675 | 0+1675 | 168 | | WETLANDY CLAY LOAM | 96.675 | 96.675 | 0.000 | | | | | |
| | 96.700 | 1700 | 0+1700 | 169 | | WETLANDY CLAY LOAM | 96.700 | 96.700 | 0.000 | | | | | |
| | 96.725 | 1725 | 0+1725 | 170 | | WETLANDY CLAY LOAM | 96.725 | 96.725 | 0.000 | | | | | |
| | 96.750 | 1750 | 0+1750 | 171 | | WETLANDY CLAY LOAM | 96.750 | 96.750 | 0.000 | | | | | |
| | 96.775 | 1775 | 0+1775 | 172 | | WETLANDY CLAY LOAM | 96.775 | 96.775 | 0.000 | | | | | |
| | 96.800 | 1800 | 0+1800 | 173 | | WETLANDY CLAY LOAM | 96.800 | 96.800 | 0.000 | | | | | |
| | 96.825 | 1825 | 0+1825 | 174 | | WETLANDY CLAY LOAM | 96.825 | 96.825 | 0.000 | | | | | |
| | 96.850 | 1850 | 0+1850 | 175 | | WETLANDY CLAY LOAM | 96.850 | 96.850 | 0.000 | | | | | |
| | 96.875 | 1875 | 0+1875 | 176 | | WETLANDY CLAY LOAM | 96.875 | 96.875 | 0.000 | | | | | |
| | 96.900 | 1900 | 0+1900 | 177 | | WETLANDY CLAY LOAM | 96.900 | 96.900 | 0.000 | | | | | |
| | 96.925 | 1925 | 0+1925 | 178 | | WETLANDY CLAY LOAM | 96.925 | 96.925 | 0.000 | | | | | |
| | 96.950 | 1950 | 0+1950 | 179 | | WETLANDY CLAY LOAM | 96.950 | 96.950 | 0.000 | | | | | |
| | 96.975 | 1975 | 0+1975 | 180 | | WETLANDY CLAY LOAM | 96.975 | 96.975 | 0.000 | | | | | |
| | 97.000 | 2000 | 0+2000 | 181 | | WETLANDY CLAY LOAM | 97.000 | 97.000 | 0.000 | | | | | |
| | 97.025 | 2025 | 0+2025 | 182 | | WETLANDY CLAY LOAM | 97.025 | 97.025 | 0.000 | | | | | |
| | 97.050 | 2050 | 0+2050 | 183 | | WETLANDY CLAY LOAM | 97.050 | 97.050 | 0.000 | | | | | |
| | 97.075 | 2075 | 0+2075 | | | | | | | | | | | |

Figure X IV-4. Outlet Works

OUTLET WORKS
(Station 0+2550)



JAPAN INTERNATIONAL
CO-OPERATION
AGENCY

REPUBLIC OF KENYA
RIFT VALLEY PROVINCE
BARINGO DISTRICT

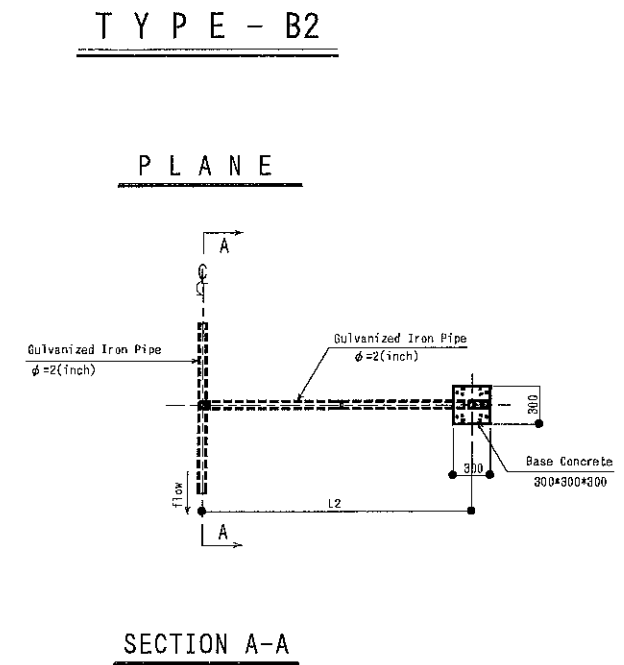
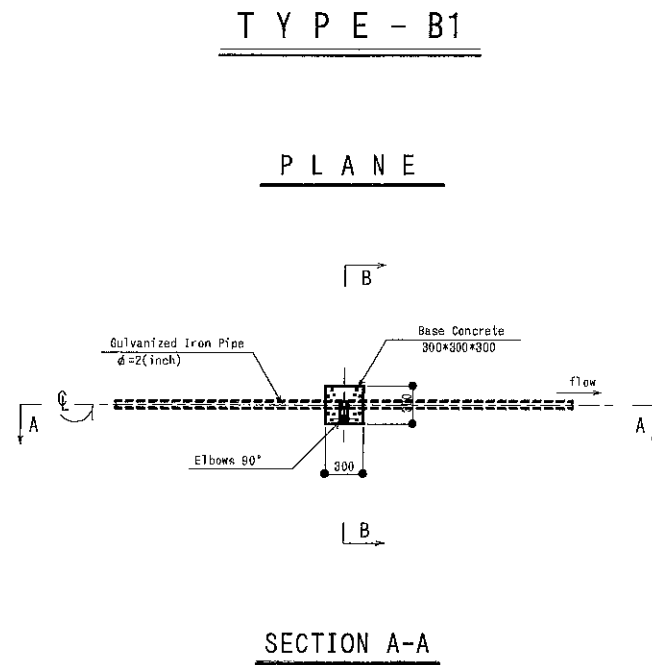
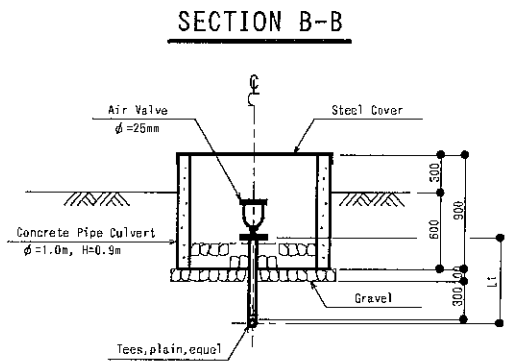
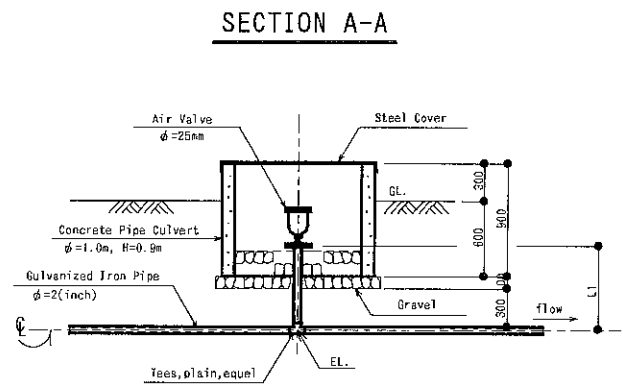
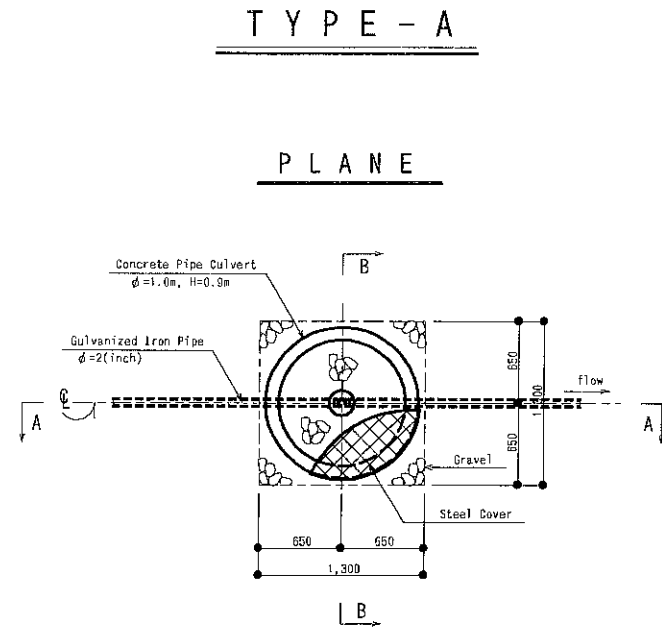
JICA STUDY TEAM
(SANYU CONSULTANTS INC.)

MUKUTANI TRADING CENTRE
WATER PROJECT
OUTLET WORKS

SCALE
1/20
ALL units in millimetres

| | SURVEYED BY | DRAWN BY | CHECKED BY | DESIGNED BY | CHECKED BY |
|-----------|-------------|----------|------------|-------------|------------|
| NAME | P. Kemei | P. Kemei | Rotich, P | | |
| SIGNATURE | | | | | |
| DATE | DEC/2000 | JAN/2001 | | | |

Figure X IV-6. Air Valve / Air Stick



MATERIALS LIST

| Station | Type | Galvanized Iron Pipe | | Concrete Pipe Culvert | Tees | Elbows 90° | Air Valve | Steel Cover | Remarks |
|---------|------|----------------------|--------|-----------------------|------|------------|-----------|-------------|---------|
| | | L1 (m) | L2 (m) | | | | | | |
| 0+400 | B1 | 5.40 | — | — | 1 | 2 | — | — | |
| 0+750 | | | | | | | | | |
| 0+825 | | | | | | | | | |
| 0+1325 | B1 | 5.60 | — | — | 1 | 2 | — | — | |
| 0+1750 | | | | | | | | | |
| 0+1925 | | | | | | | | | |
| 0+2275 | | | | | | | | | |
| 0+2500 | | | | | | | | | |

JAPAN INTERNATIONAL
CO-OPERATION
AGENCY

REPUBLIC OF KENYA
RIFT VALLEY PROVINCE
BARINGO DISTRICT

JICA STUDY TEAM
(SANYU CONSULTANTS INC.)

MUKUTANI TRADING CENTRE
WATER PROJECT
AIR VALVE / AIR STICK

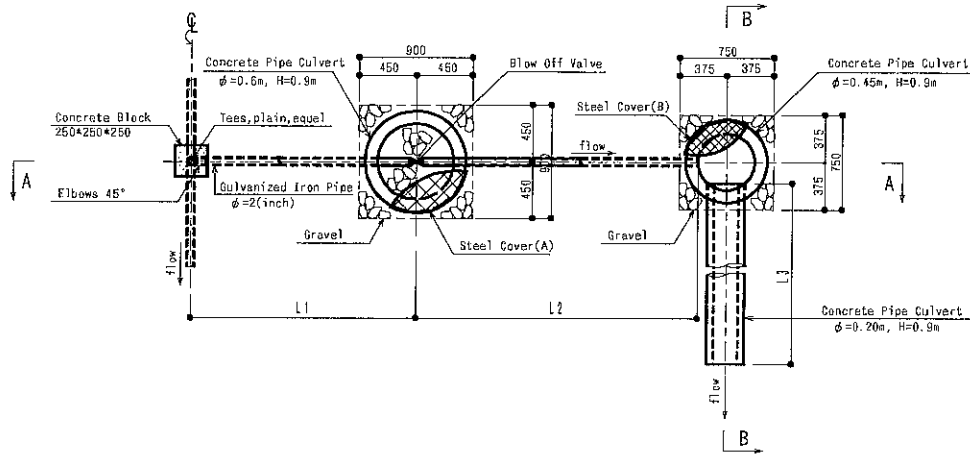
SCALE
1/30
ALL units in milli metres

| | SURVEYED BY | DRAWN BY | CHECKED BY | DESIGNED BY | CHECKED BY |
|-----------|-------------|----------|------------|-------------|------------|
| NAME | P. Kemei | P. Kemei | Rotich, P | | |
| SIGNATURE | | | | | |
| DATE | DEC/2000 | JAN/2001 | | | |

Figure X IV-7. Blow Off

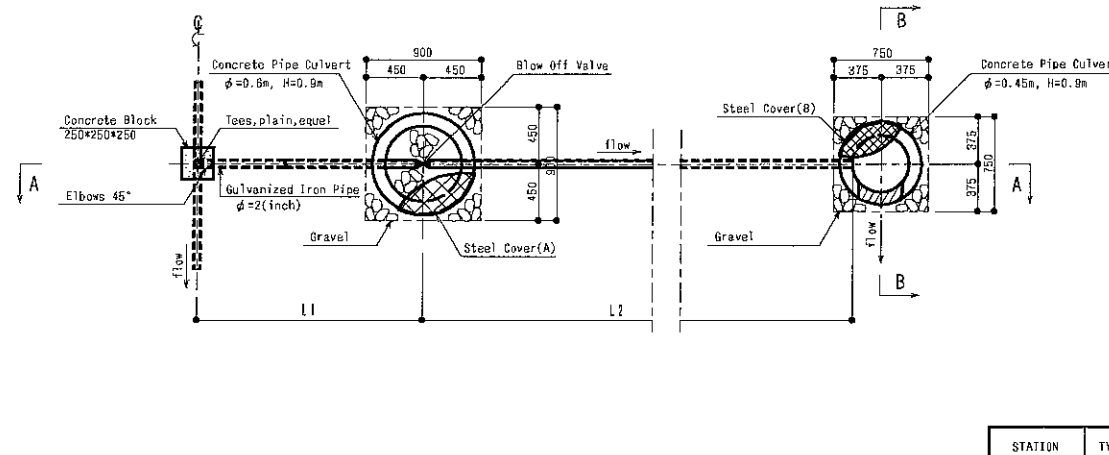
TYPE - A

PLANE

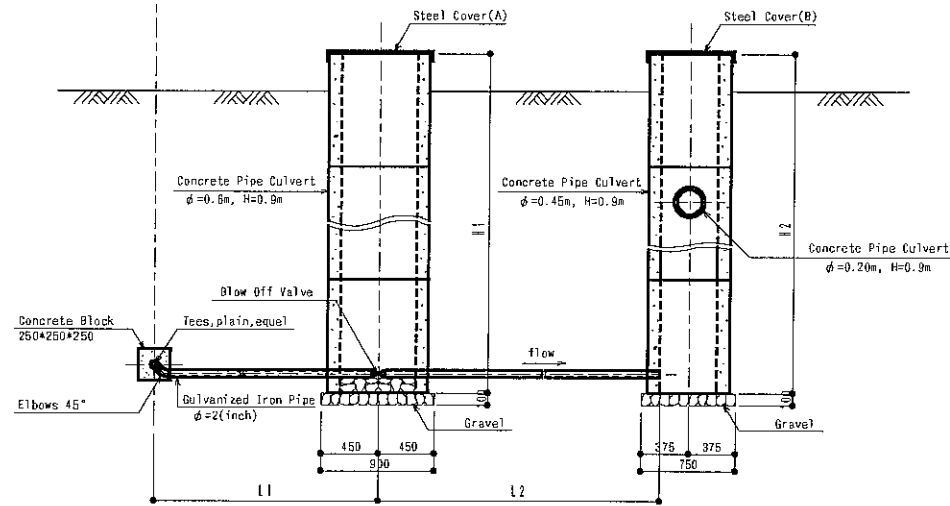


TYPE - B

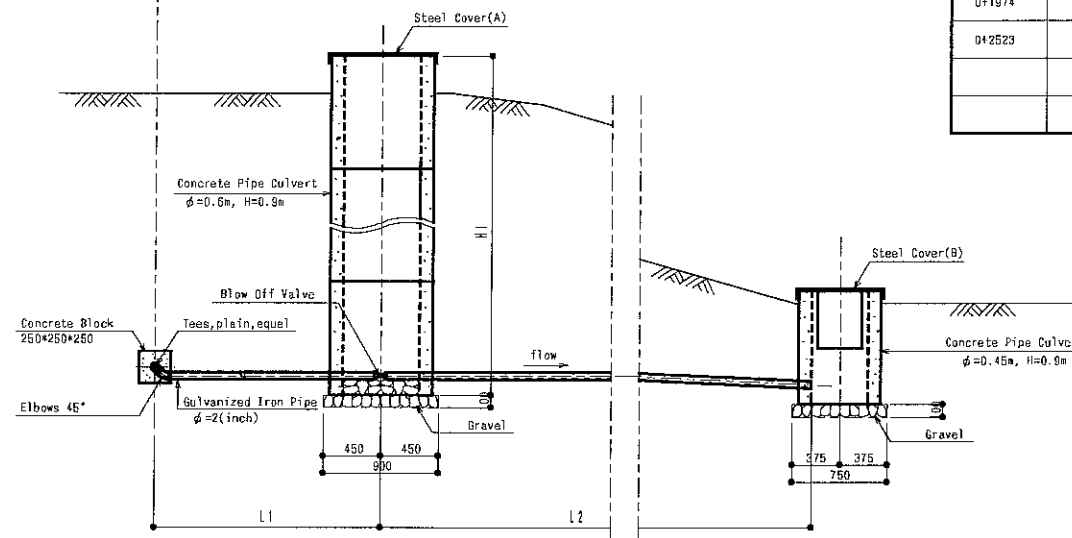
PLANE



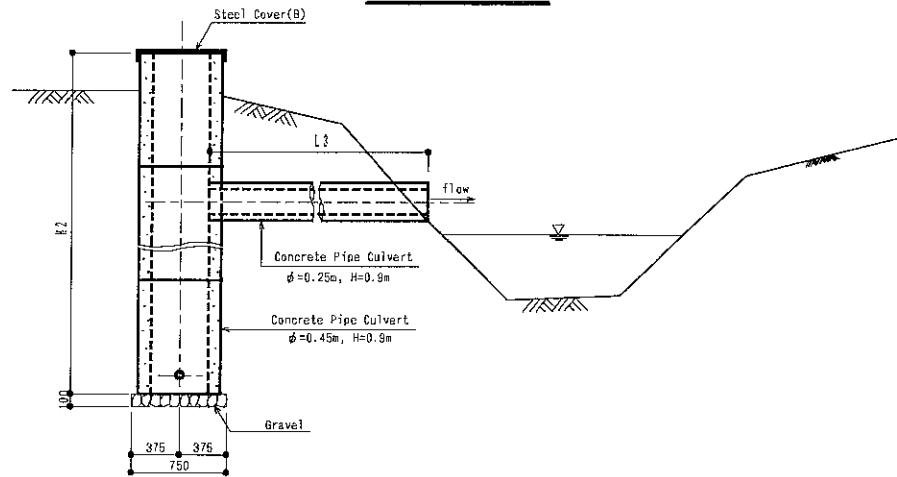
SECTION A-A



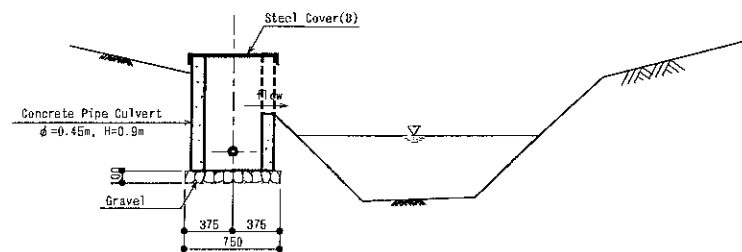
SECTION A-A



SECTION B-B



SECTION B-B



MATERIALS LIST

| STATION | TYPE | Galvanized Iron Pipe | | | Concrete Pipe Culvert | | | Tees | Elbows 45° | Valve | STEEL COVER | |
|---------|------|----------------------|--------|--------|-----------------------|--------|-----|------|------------|-------|-------------|--|
| | | L1 (m) | L2 (m) | H1 (m) | H2 (m) | L3 (m) | (A) | | | | (B) | |
| 0+831 | | | | | | | | | | | | |
| 0+1974 | | | | | | | | | | | | |
| 0+2523 | | | | | | | | | | | | |

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BARINGO DISTRICT

JICA STUDY TEAM
(SANYU CONSULTANTS INC.)

MUKUTANI TRADING CENTRE
WATER PROJECT

BLOW OFF

SCALE
1/30
ALL units in milli metres

| | SURVEYED BY | DRAWN BY | CHECKED BY | DESIGNED BY | CHECKED BY |
|-----------|-------------|----------|------------|-------------|------------|
| NAME | P. Kemei | P. Kemei | Rotich, P | | |
| SIGNATURE | | | | | |
| DATE | DEC/2000 | JAN/2001 | | | |

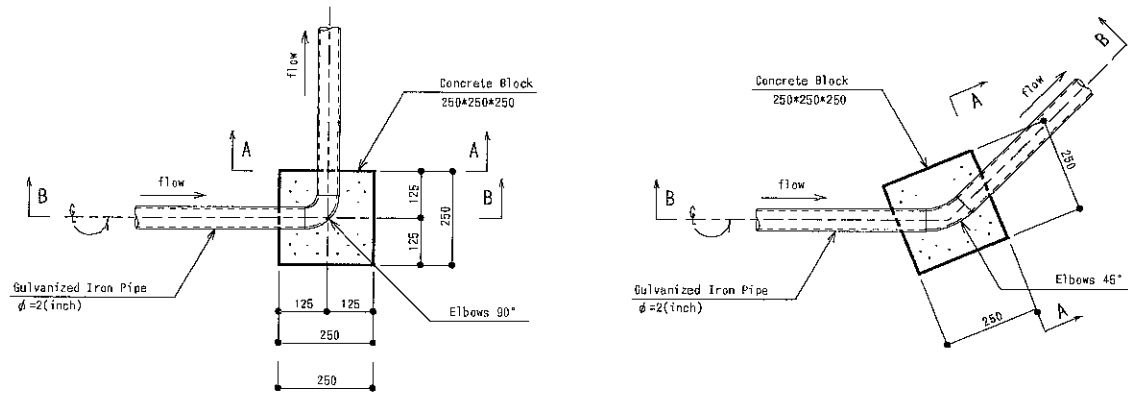
Figure X IV-8. Pipeline Typical Section / Concrete Block

CONCRETE BLOCK

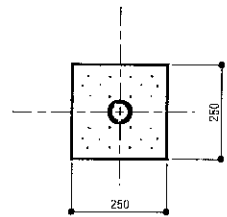
S = 1/10

HORIZONTAL BEND

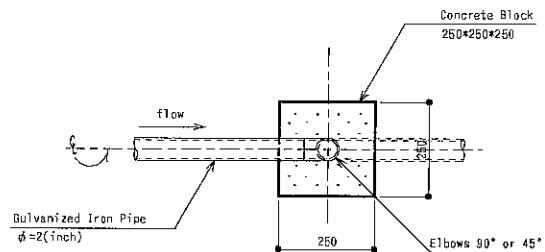
PLANE



SECTION A-A

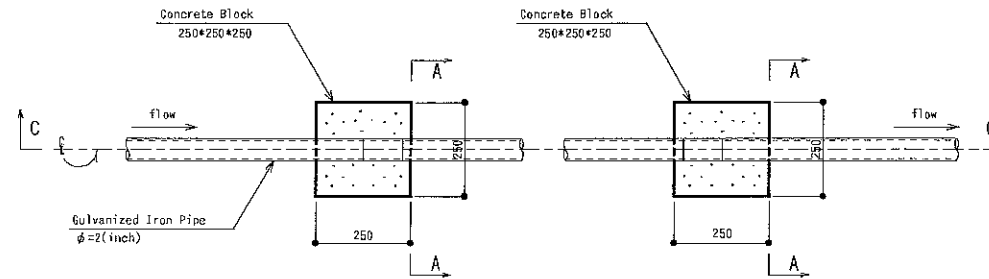


SECTION B-B

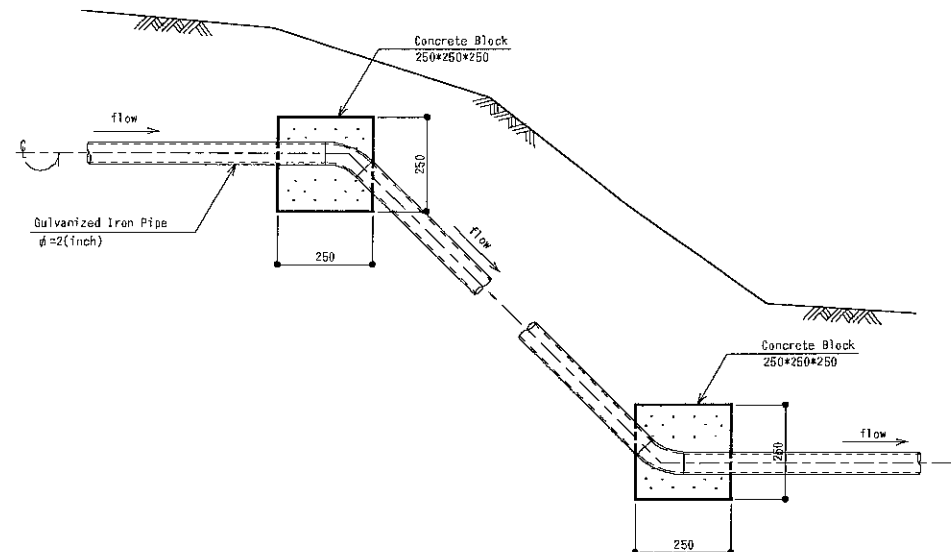


VERTICAL BEND

PLANE



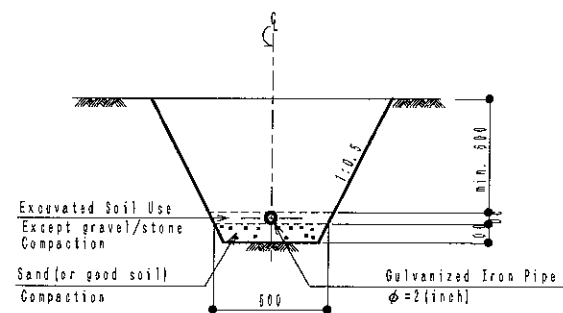
SECTION C-C



PIPE LINE

TYPICAL SECTION

S = 1/20



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BARINGO DISTRICT

JICA STUDY TEAM
(SANYU CONSULTANTS INC.)

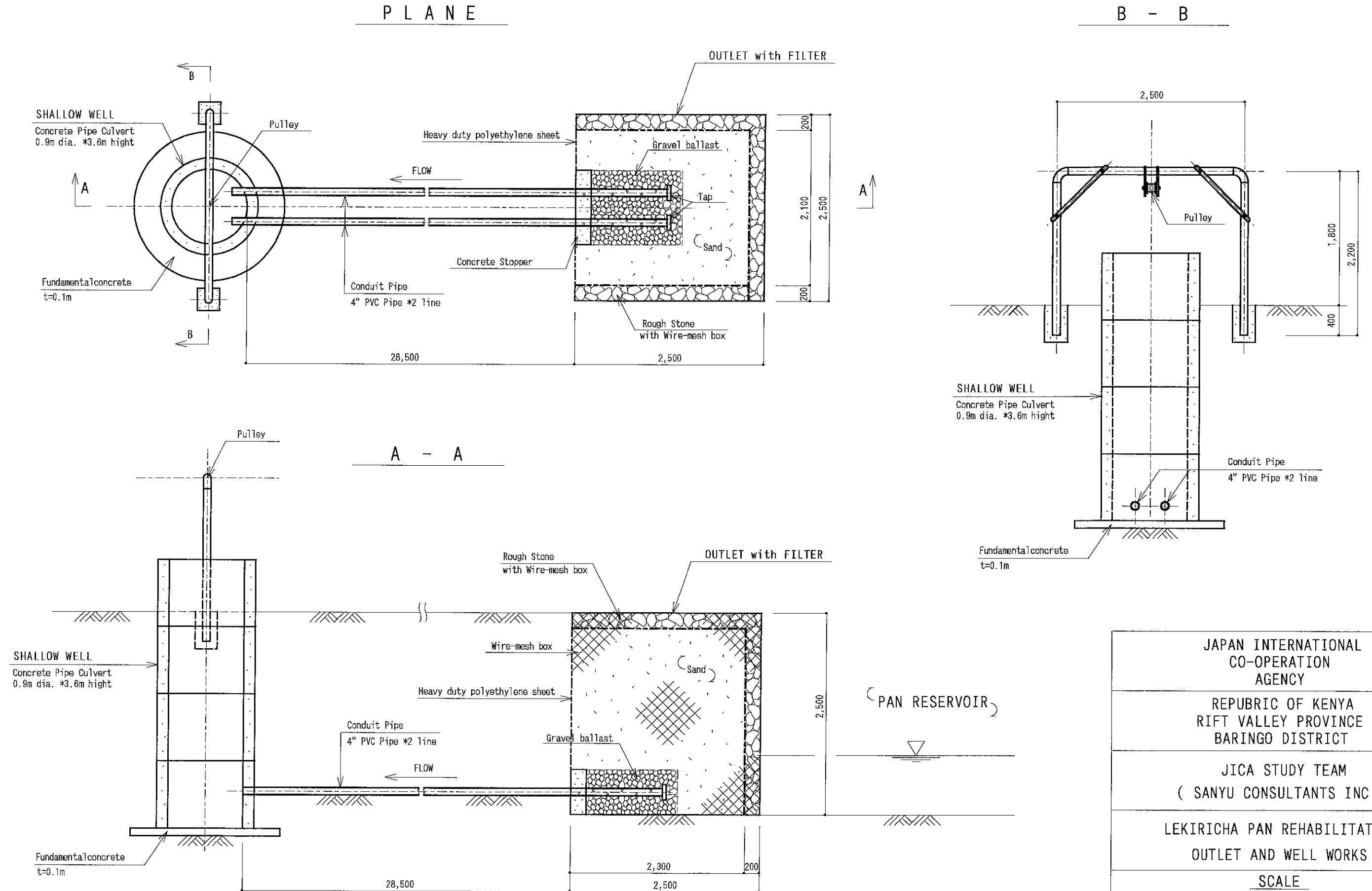
MUKUTANI TRADING CENTRE
WATER PROJECT
PIPE LINE TYPICAL SECTION
/ CONCRETE BLOCK

SCALE
1/10, 1/20
ALL units in milli metres

| | SURVEYED BY | DRAWN BY | CHECKED BY | DESIGNED BY | CHECKED BY |
|-----------|-------------|----------|------------|-------------|------------|
| NAME | P. Kemei | P. Kemei | Rotich, P | | |
| SIGNATURE | | | | | |
| DATE | DEC/2000 | JAN/2001 | | | |

Figure X IV-9. Outlet and Well Works

OUTLET and WELL WORKS of LEKRICHHA PAN



| |
|---|
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| JICA STUDY TEAM (SANYU CONSULTANTS INC.) |
| LEKIRICHA PAN REHABILITATION OUTLET AND WELL WORKS |
| SCALE 1 / 50 All units in mill metres |