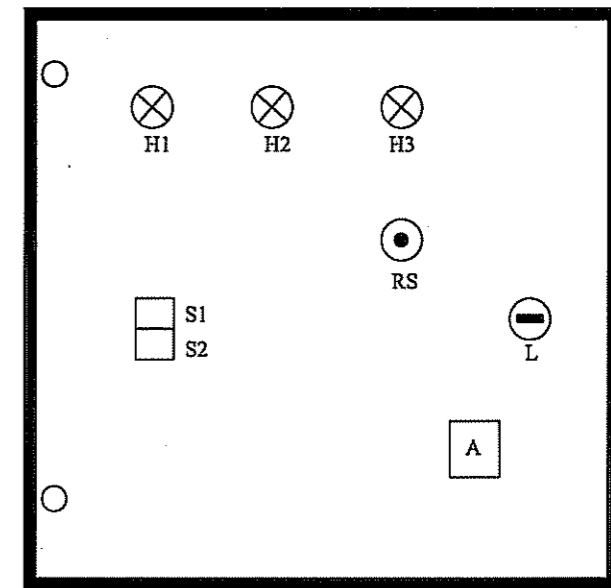


PANEL DESIGN
 CASING: SHEET METAL
 THICKNESS: 2mm
 PROTECTION: IP 54
 PAINT: RAL 7032, GREEN
 DEPTH: 200mm

LEGEND

ITEM No.	ITEM DESCRIPTION
Q1	CHANGE-OVER SWITCH, 4P BREAKER
Q2	MAIN CIRCUIT, MCB, 3P, Th/Mg, + RCD
Q3	MOTOR CIRCUIT, MCB, 3P, /Mg
V	VOLTMETER, 0-500V
A	AMMETER, 0-40A
S1	START BUTTON
S2	STOP BUTTON
H1	INDICATOR LIGHT 'POWER ON'
H2	INDICATOR LIGHT 'TRIP'
H3	INDICATOR LIGHT 'RUN'
L	LOCKABLE KEY
RS	ALARM RE-SET BUTTON



OWNER:
 THE MINISTRY OF WATER AND IRRIGATION
 THE REPUBLIC OF KENYA

PROJECT NAME:
 THE PROJECT FOR
 RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO., LTD.**

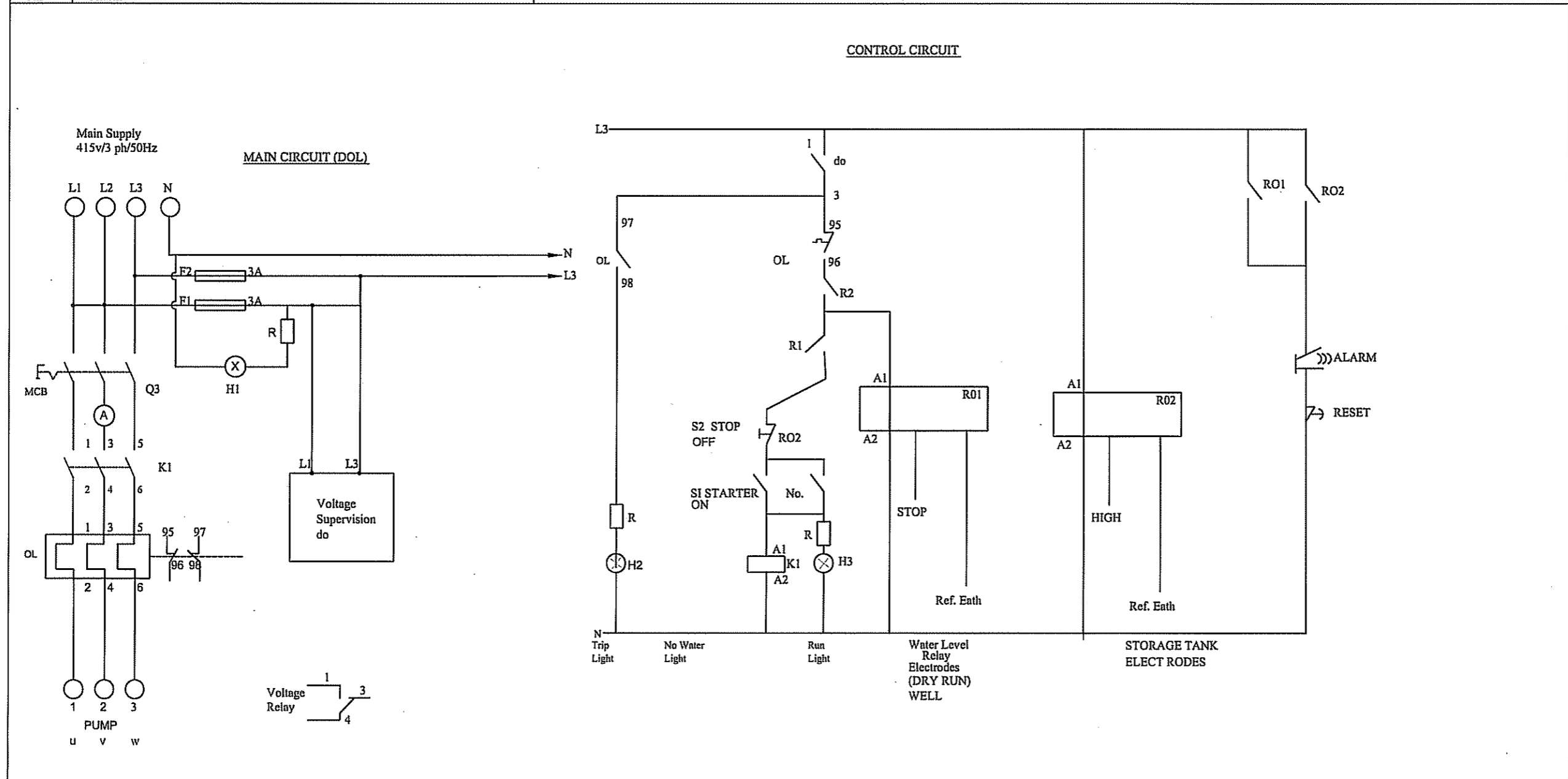
TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
 CONTROL PANEL

SCALE	DATE	DRAWING NO.
NONE	FEB. 2006	SP-069

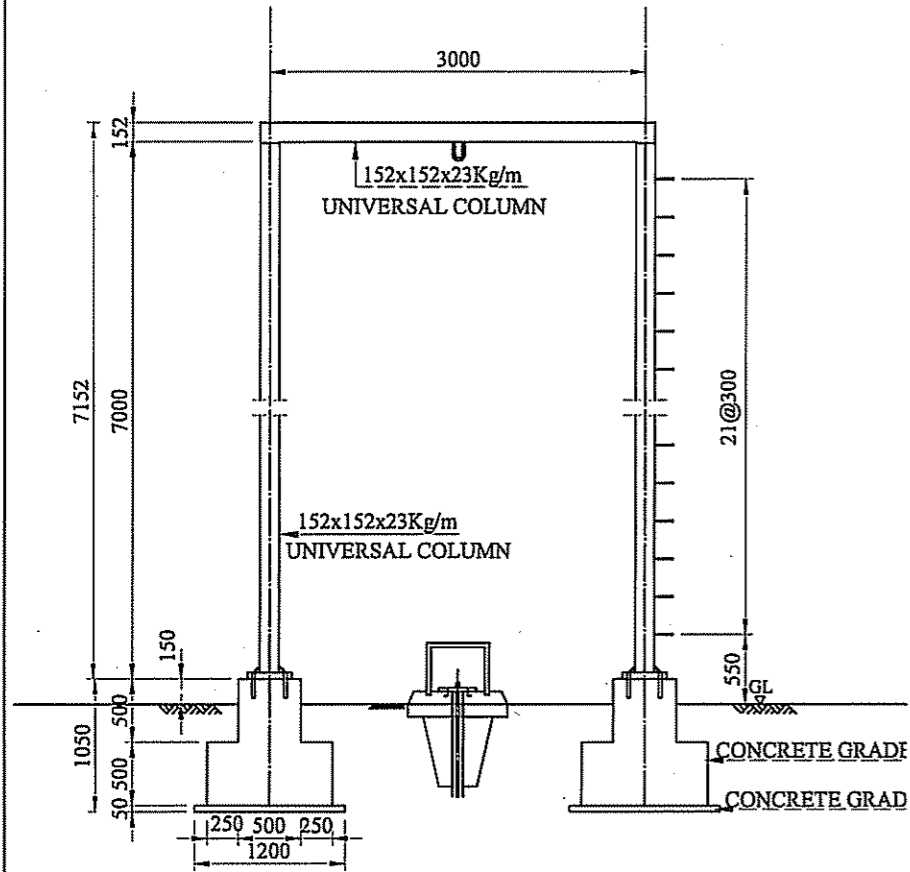
LEGEND	
Item No.	Item Description
Q3	Motor Circuit Breaker, mcb, 3P, Mg
K1	Motor Contactor with Auxiliary Relay
A	Ammeter, 0-40A
F1,F2	Fuses, 3A
S1	Start, On
S2	Stop, Off
H1	Indicator Light, Trip (Red)
H2	Indicator Light, Power on
do	Phase Failure, U/O Voltage Relay
R01	Level Relay: Well (Dry Run Protection), R02: Level Relay, Tank
R	Resistors
AL	Alarm

NOTES:

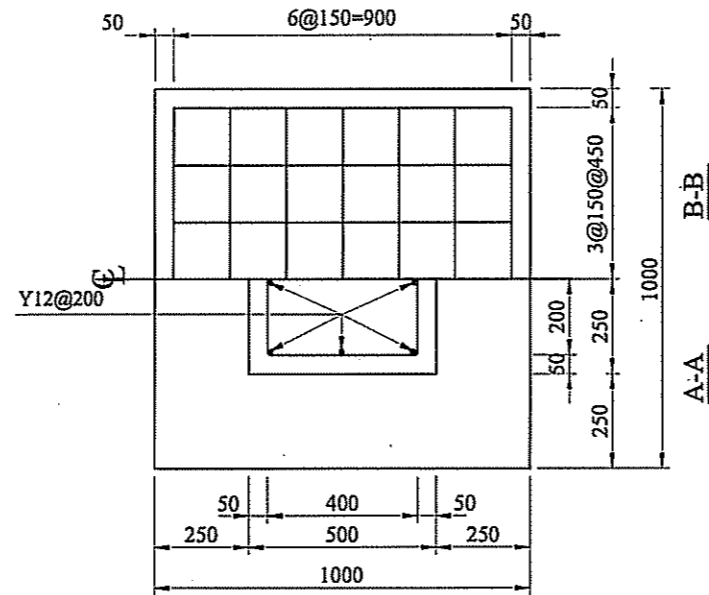
1. This schematic is for guidance only. The Contractor shall submit a complete design based on this schematic indicating the make and type of all the contactors, relays, etc.
2. The schematic is for DOL starter. A similar circuit will be required for Star Dela starter complete with star and delta contactors &, time delay relay and interlock.
3. Substantiation of correct logic and discrimination data such as i-t curves for mcb's shall be submitted for the approval of the Consultant.



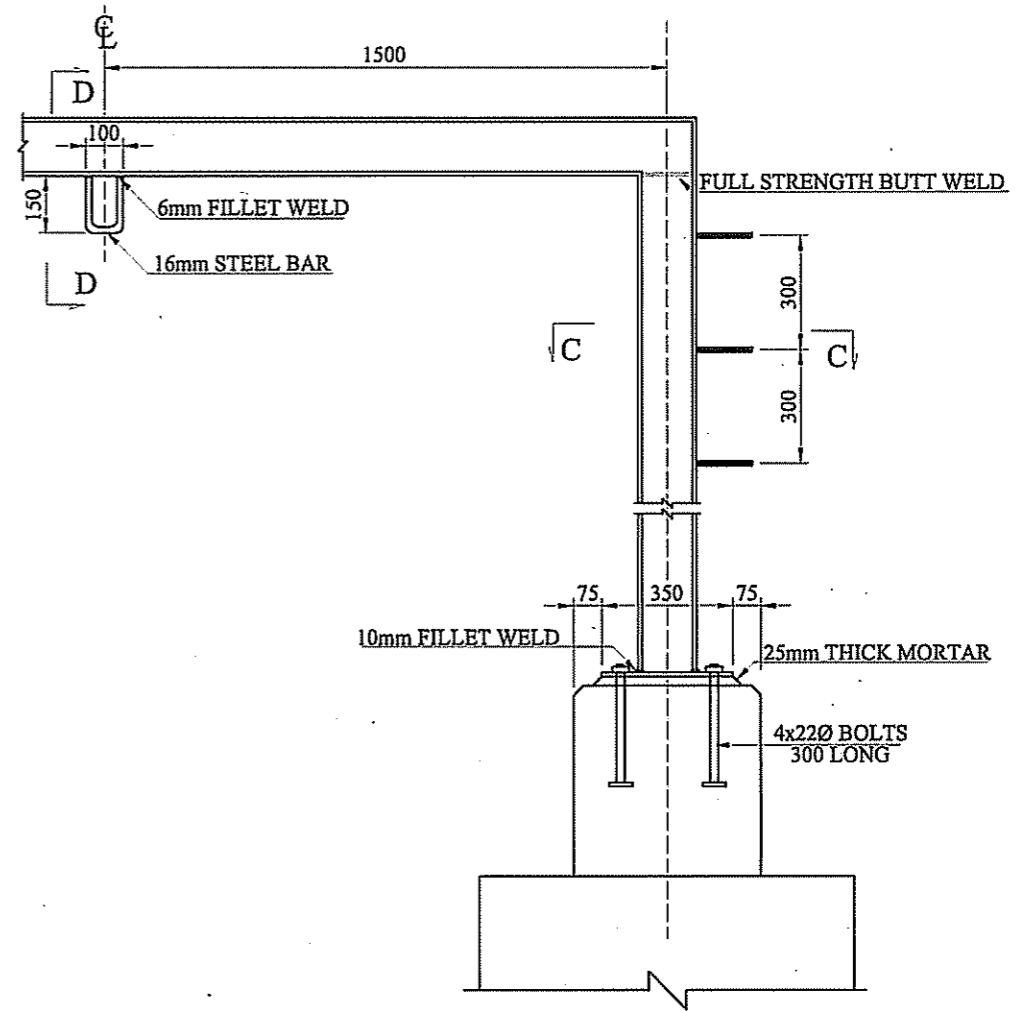
OWNER: THE MINISTRY OF WATER AND IRRIGATION THE REPUBLIC OF KENYA	PROJECT NAME: THE PROJECT FOR RURAL WATER SUPPLY	CONSULTING ENGINEERS: NIPPON KOEI CO., LTD.	TITLE: CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP		
			CONTROL CIRCUIT		
			SCALE NONE	DATE FEB. 2006	DRAWING NO. SP-070



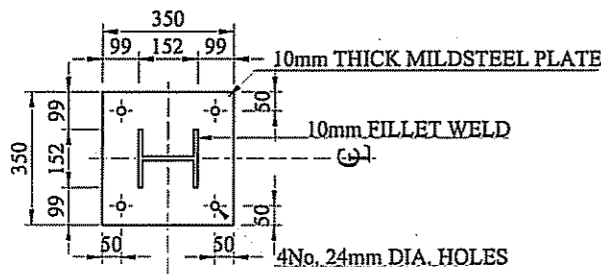
GANTRY CRANE
Scale 1:60



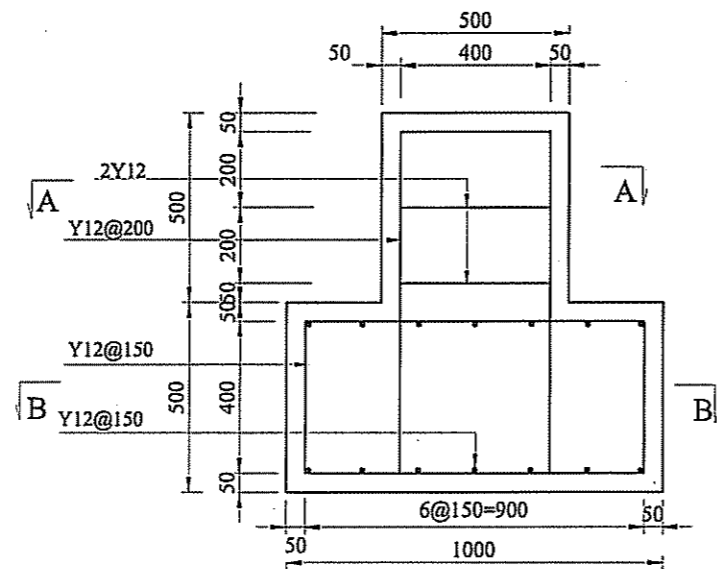
SECTIONAL PLAN A-A & B-B
Scale 1:20



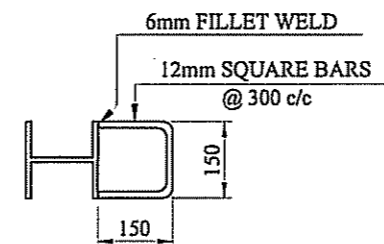
DETAIL OF GANTRY
Scale 1:20



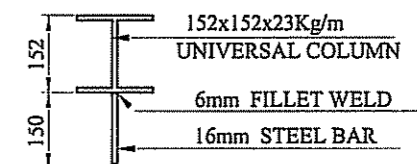
DETAIL OF BASE PLATE
Scale 1:20



FOUNDATION BASE
Scale 1:20



SECTION C-C
Scale 1:15



SECTION D-D
Scale 1:15

NOTE

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NO. SP-068.

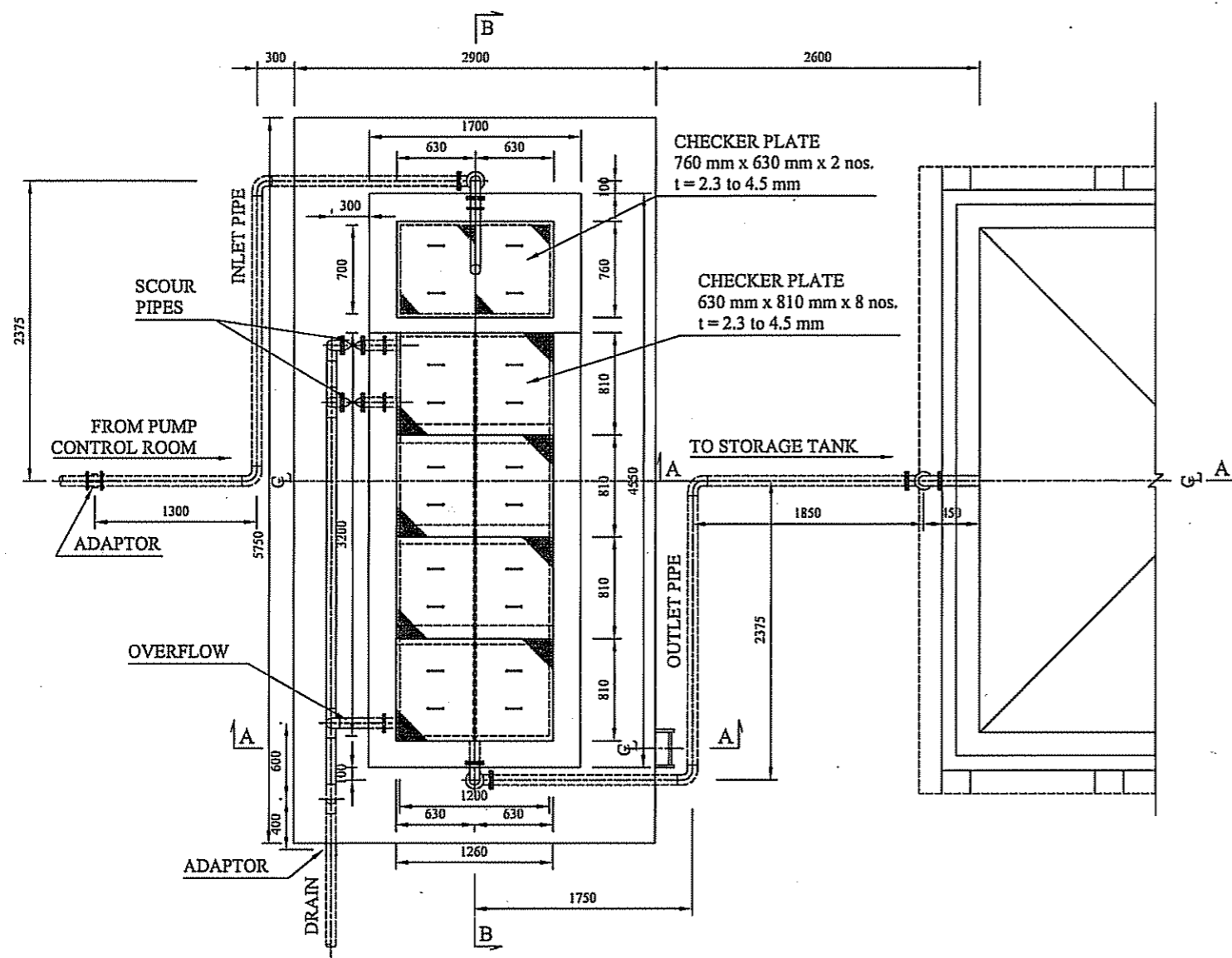
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

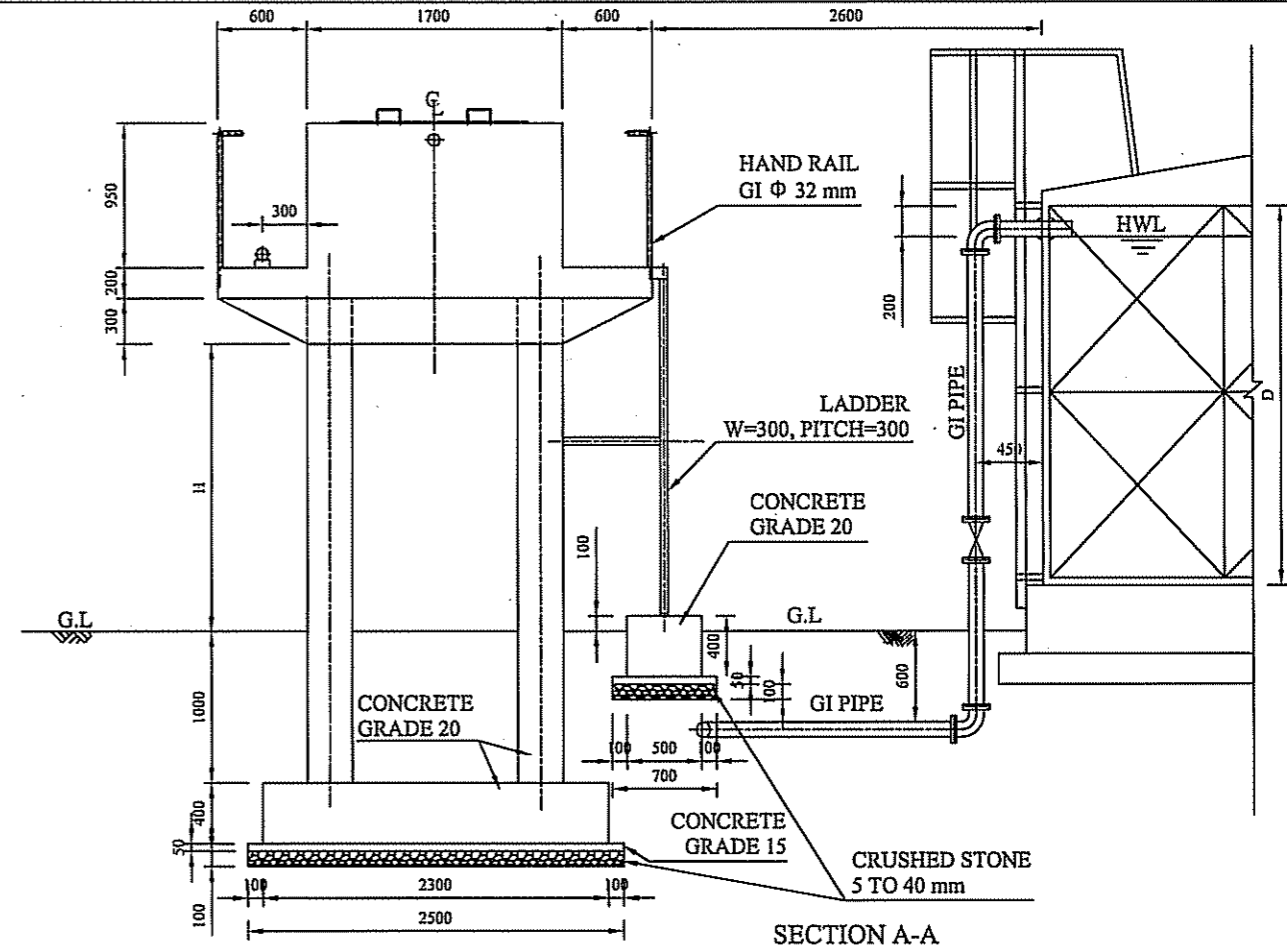
CONSULTING ENGINEERS:
 **NIPPON KOEI CO., LTD.**

TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
GANTRY CRANE DETAILS

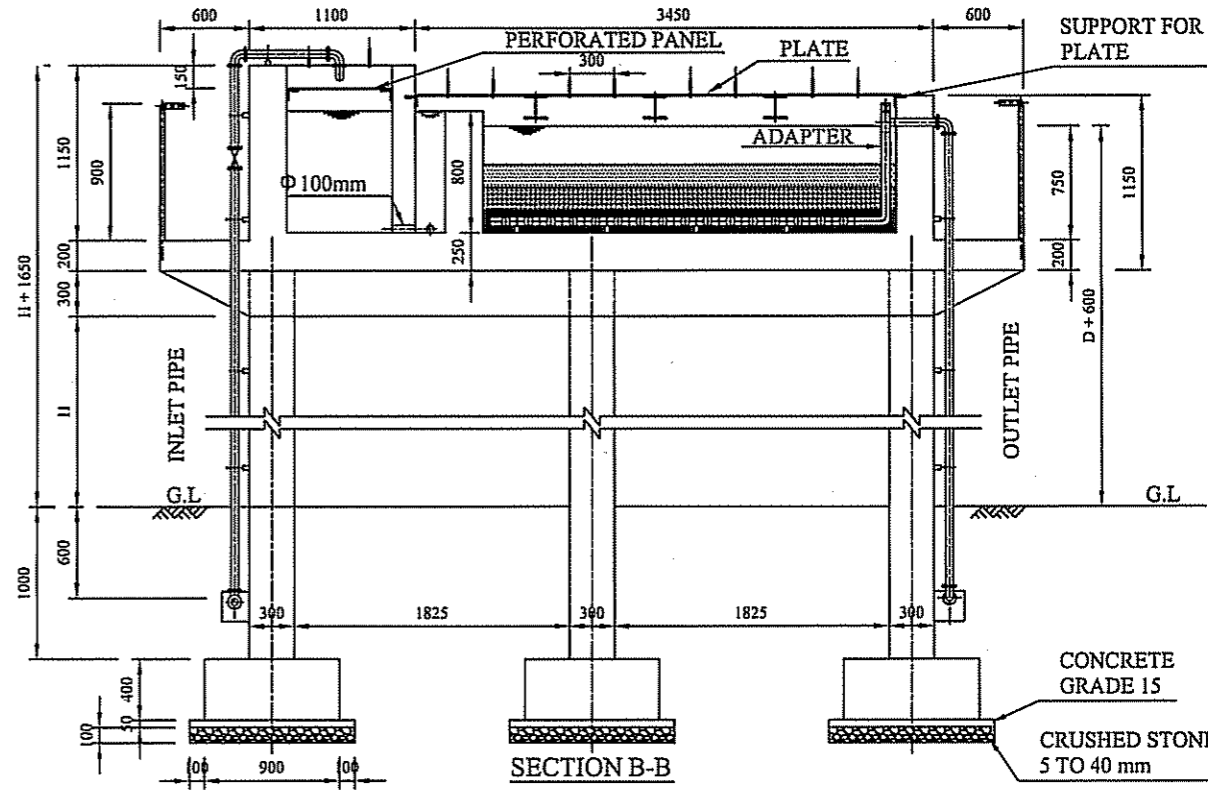
SCALE 1:60 1:20 1:15	DATE FEB 2006	DRAWING NO. SP-071
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LAYOUT PLAN



SECTION A-A



SECTION B-B

NOTE :

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-078.
2. ALL METALLIC OR FERROUS PARTS SHALL BE GALVANISED.
3. ALL SECTIONS IN CONTACT WITH WATER SHALL BE LINED WITH 30 mm THICK WATER PROOFING MORTAR.

LOCATION No.	Tank Type	D (m)	H (m)	INLET PIPE	OUTLET PIPE
55	V10	1.22	0.57	GI 50 mm	GI 50 mm
59				GI 40 mm	
.61	V24	2.44	1.79	GI 50 mm	
66				GI 50 mm	

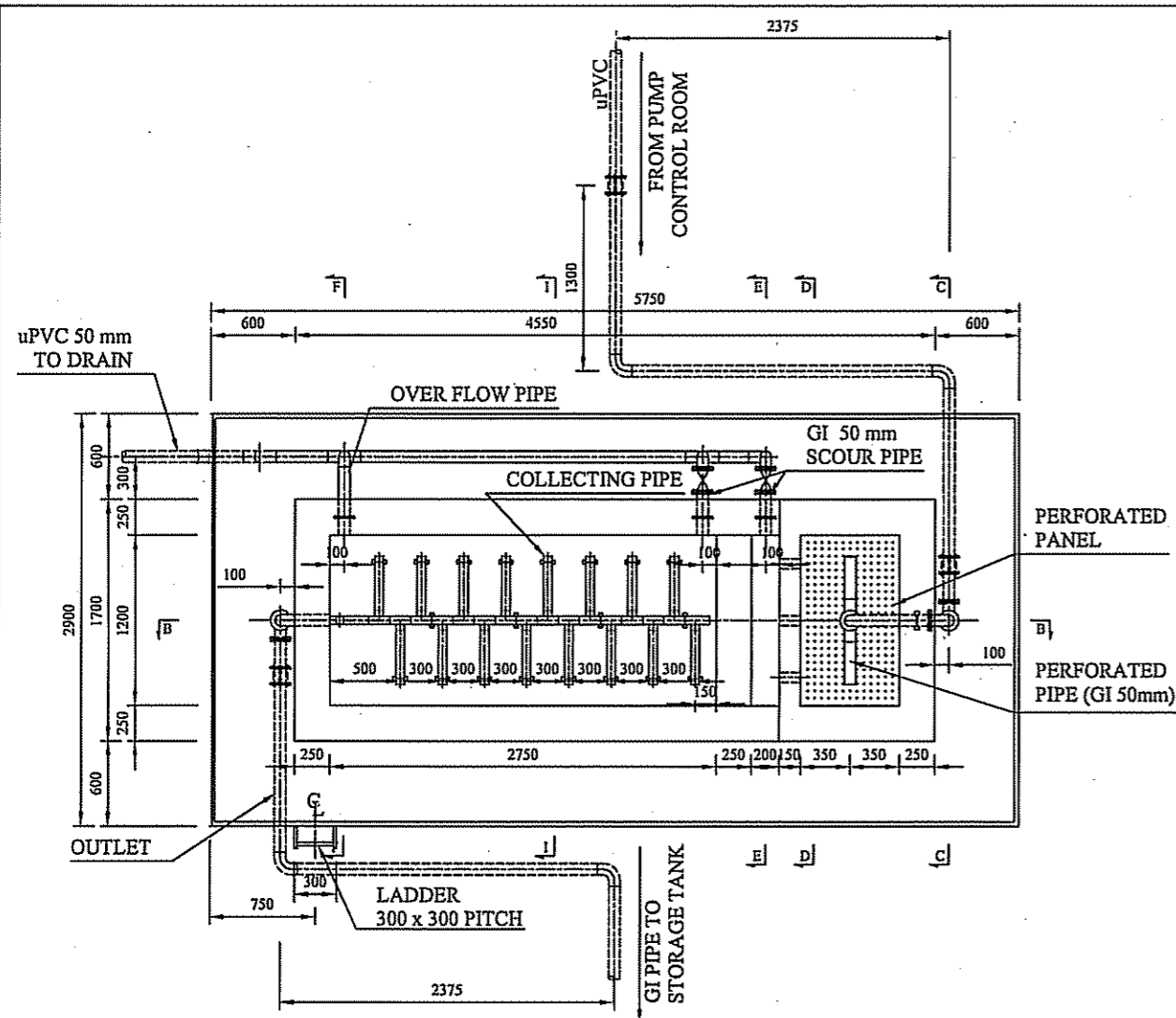
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

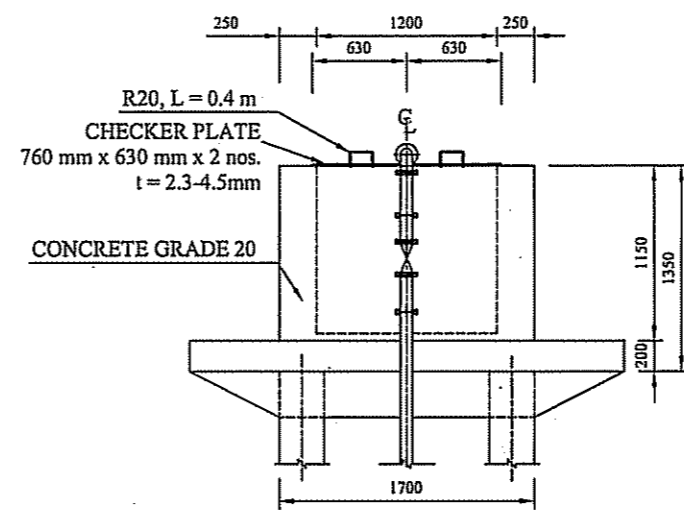
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
IRON FILTER TYPE III (1/2)

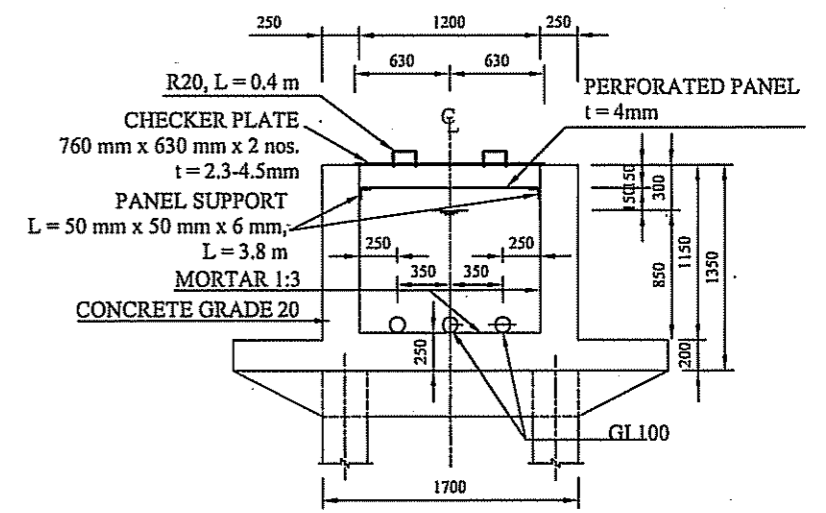
SCALE 1:50	DATE FEB. 2006	DRAWING NO. SP-076
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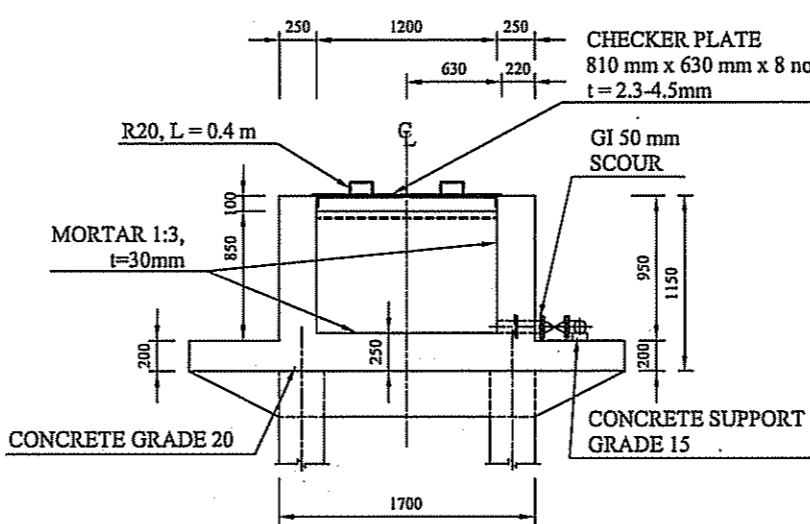
PLAN



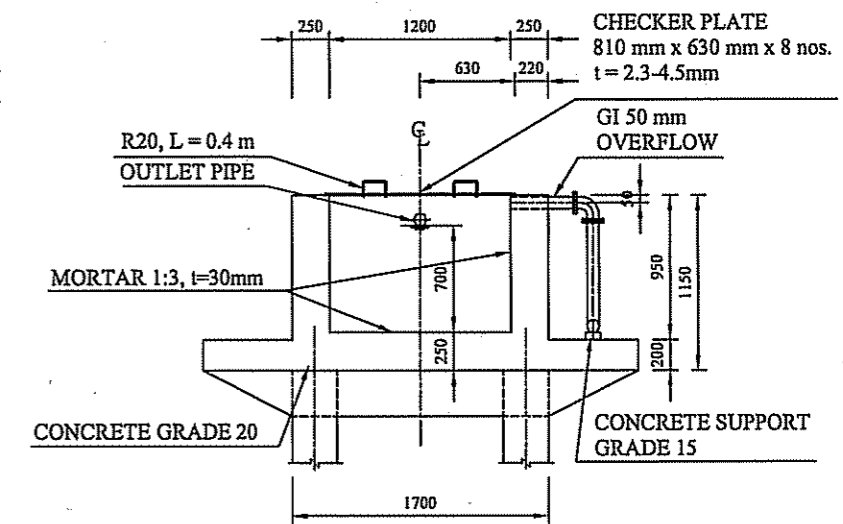
SECTION C-C



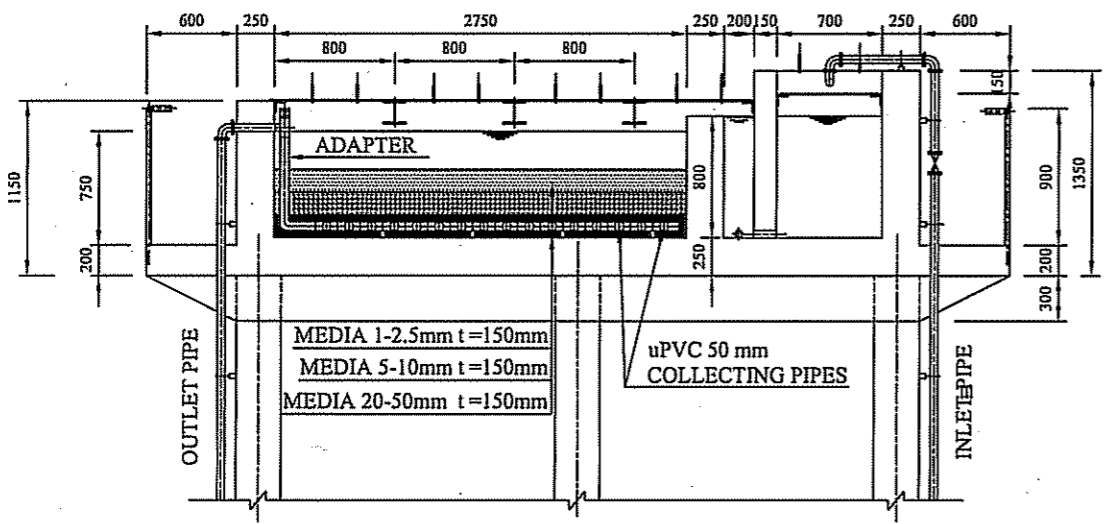
SECTION D-D



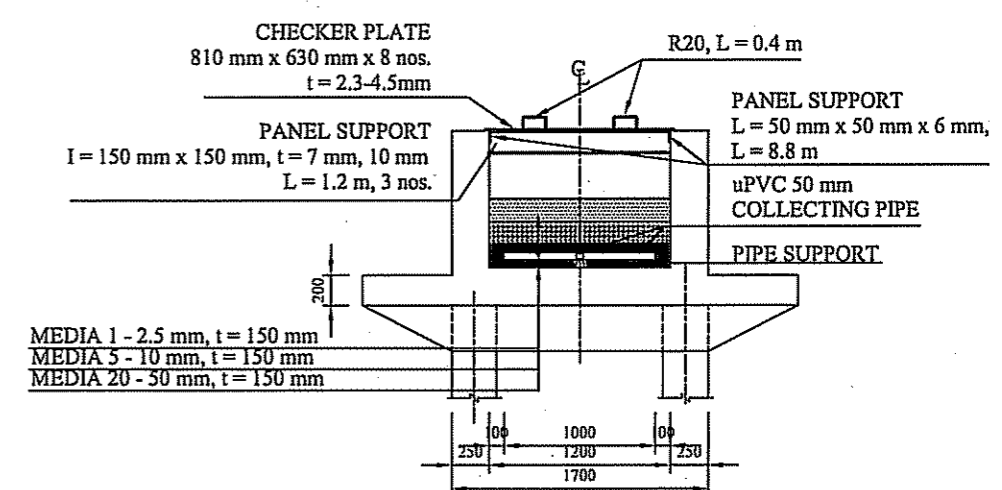
SECTION E-E



SECTION F-F




SECTION B-B

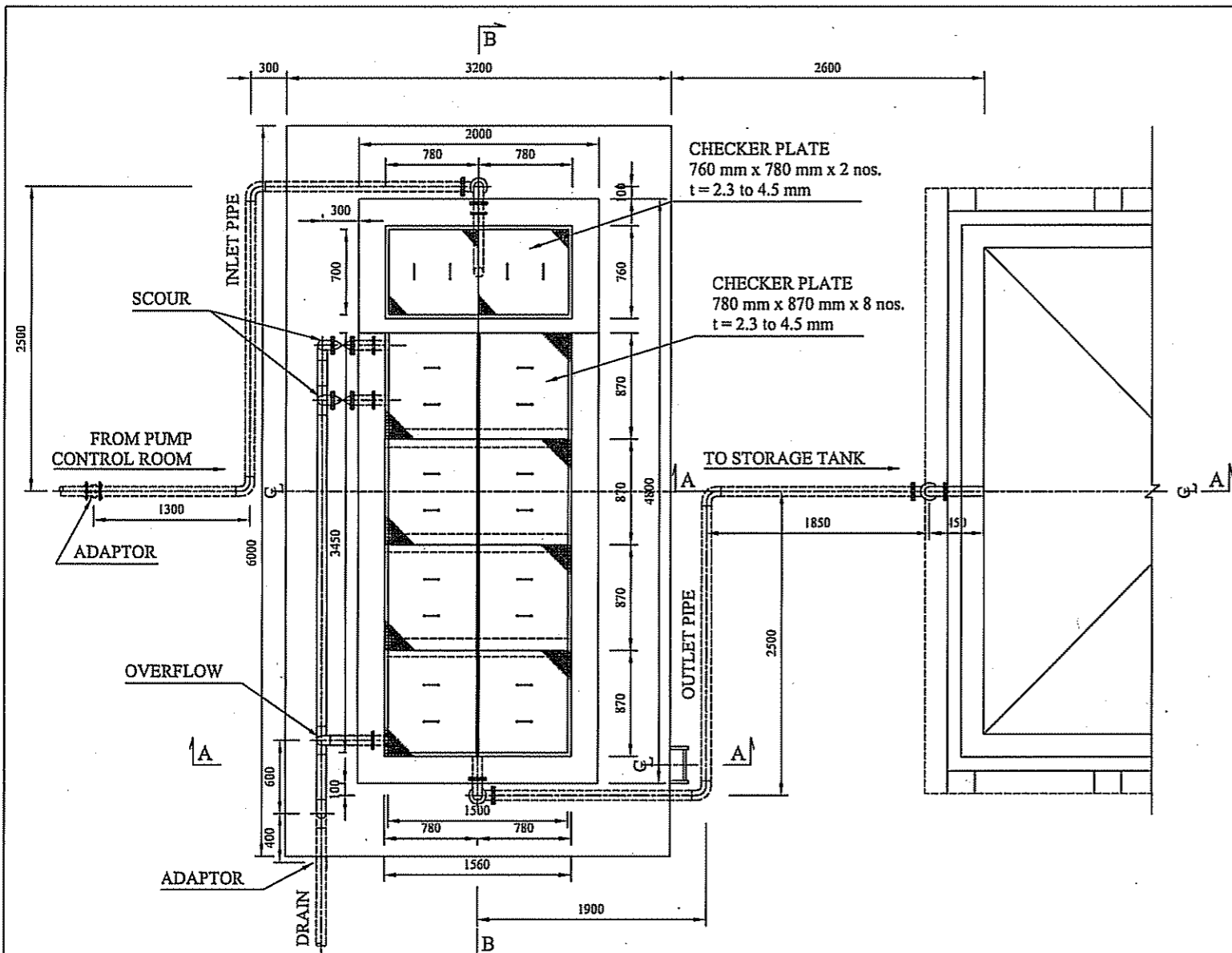


SECTION I-I

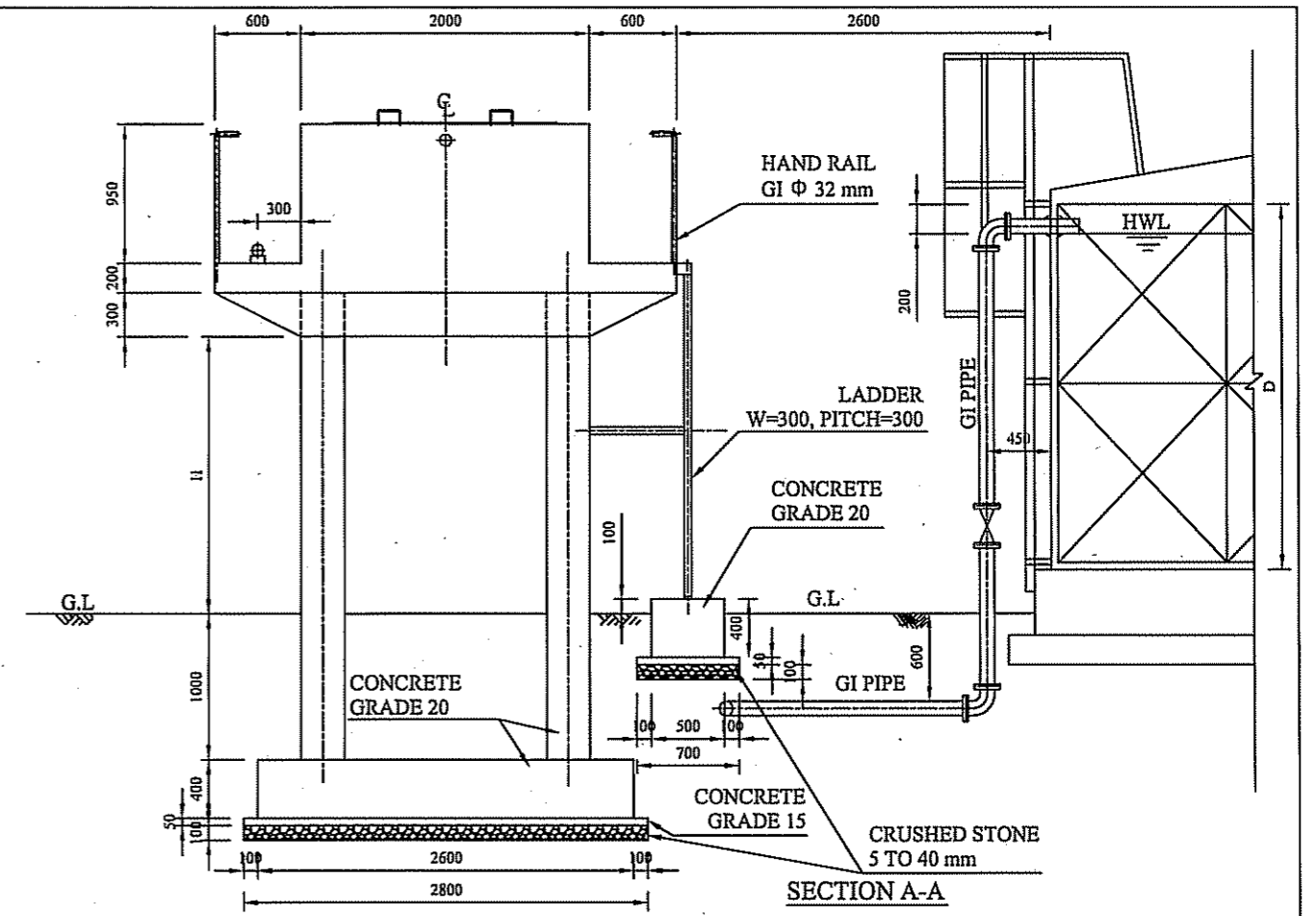
NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-079.

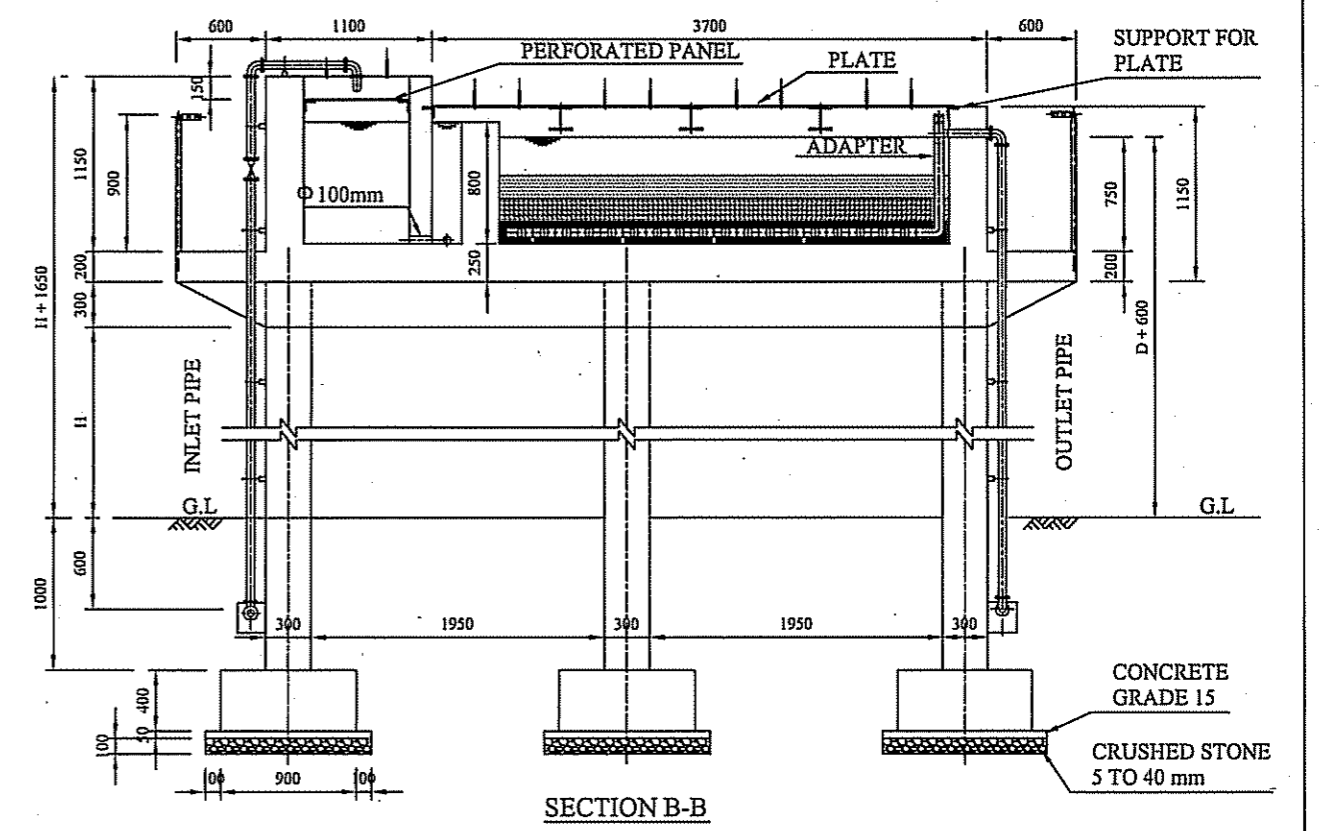
<p>OWNER: THE MINISTRY OF WATER AND IRRIGATION THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR RURAL WATER SUPPLY</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO., LTD.</p>	<p>CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP IRON FILTER TYPE III (2/2)</p>		
		<p>SCALE 1:50</p>	<p>DATE FEB. 2006</p>	<p>DRAWING NO. SP-077</p>	



LAYOUT PLAN



SECTION A-A



SECTION B-B

NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-082.
2. ALL METALLIC OR FERROUS PARTS SHALL BE GALVANISED.
3. ALL SECTIONS IN CONTACT WITH WATER SHALL BE LINED WITH 30 mm THICK WATER PROOFING MORTAR.

LOCATION No.	Tank Type	D (m)	H (m)	INLET PIPE	OUTLET PIPE
60	V50	2.44	1.79		
62	V15	1.22	0.57	GI 50 mm	GI 50 mm
	V15	1.22	0.57		

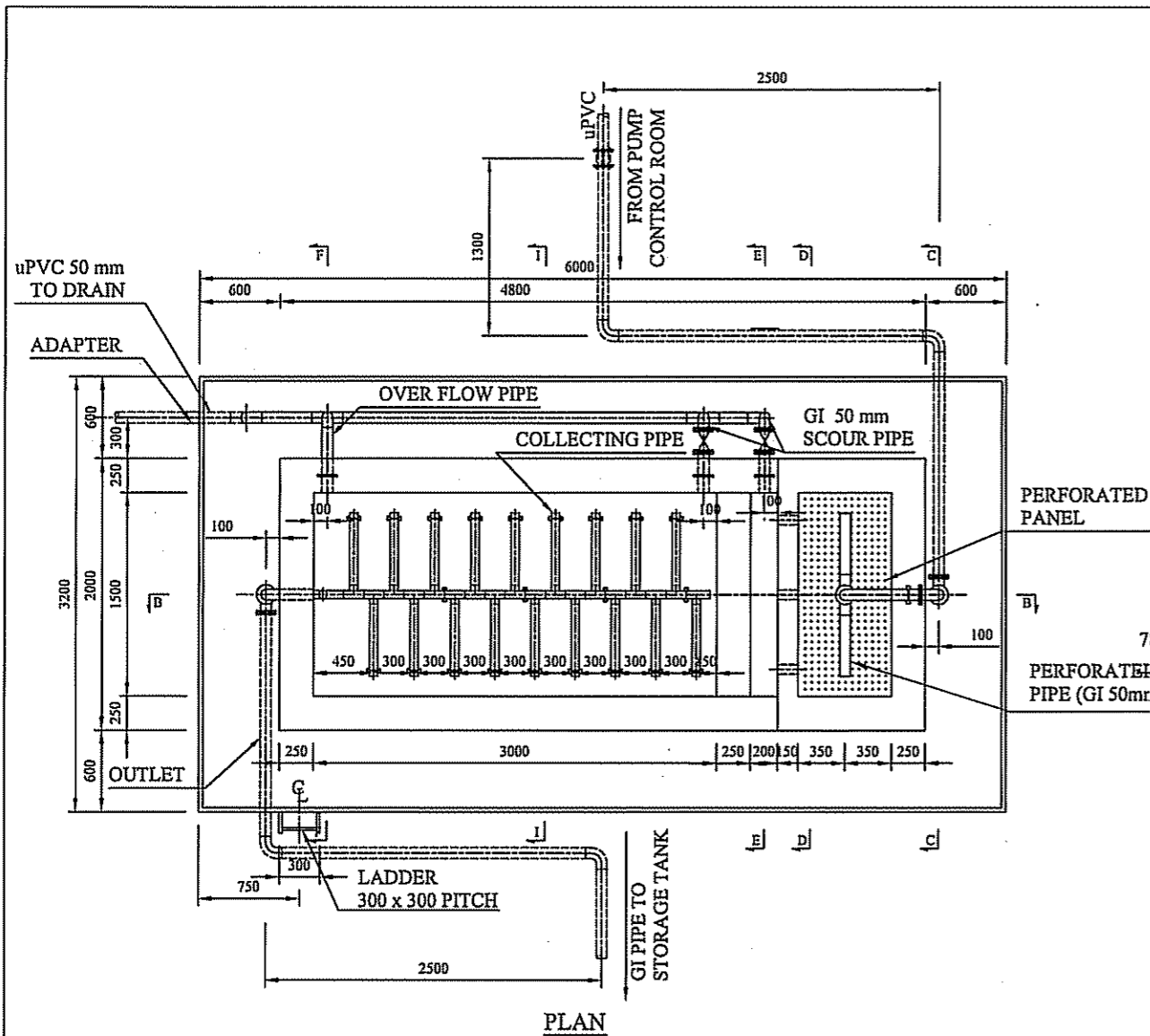
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

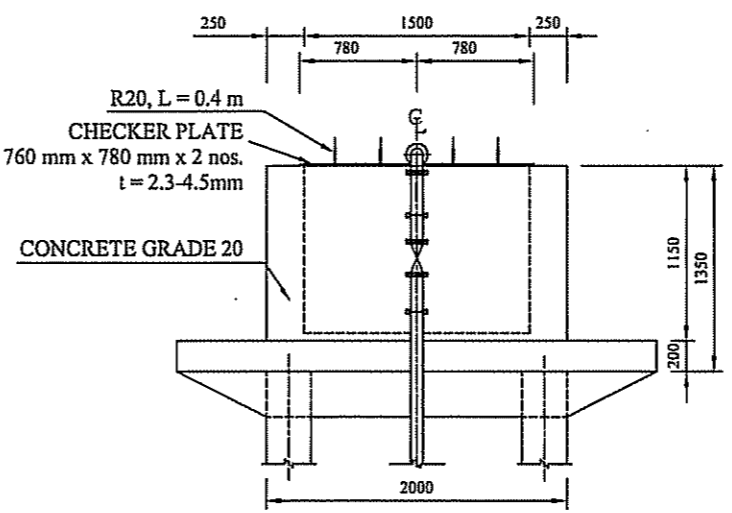
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
IRON FILTER TYPE IV (1/2)

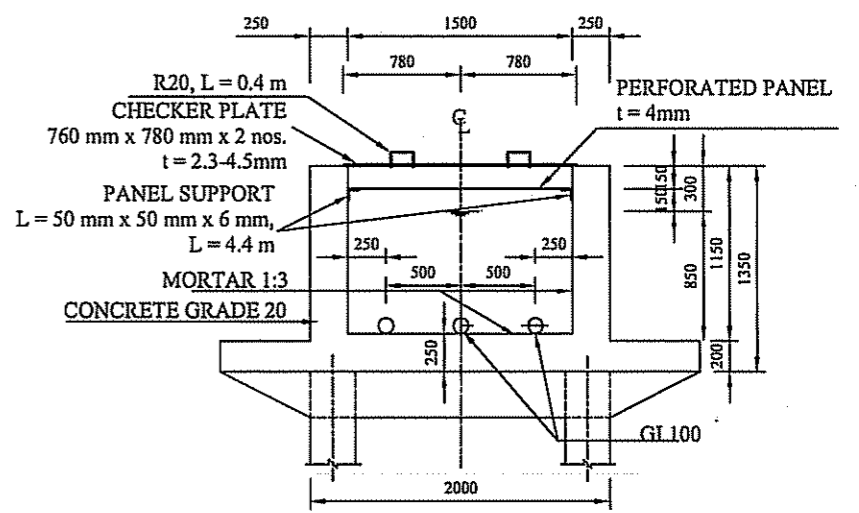
SCALE 1:50	DATE FEB. 2006	DRAWING NO. SP-080
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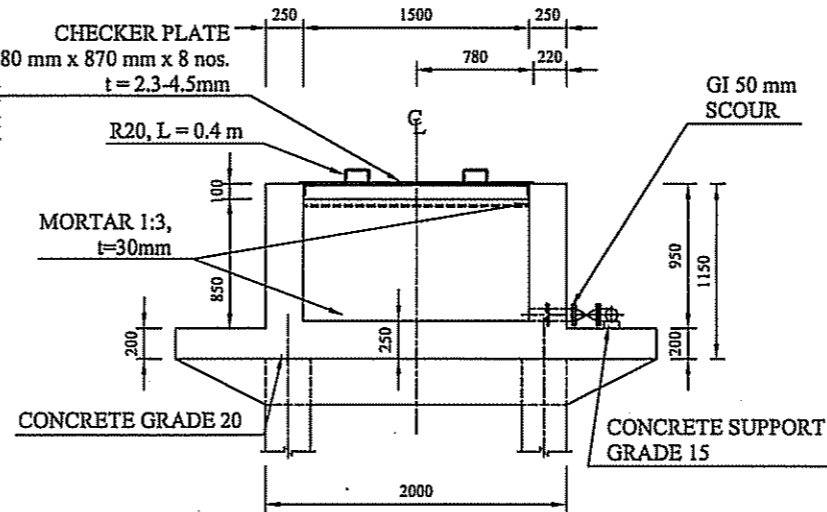
PLAN



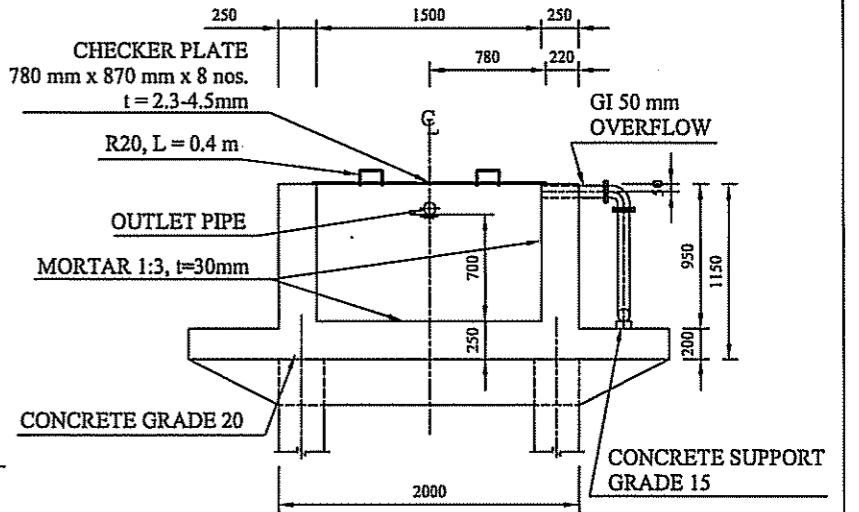
SECTION C-C



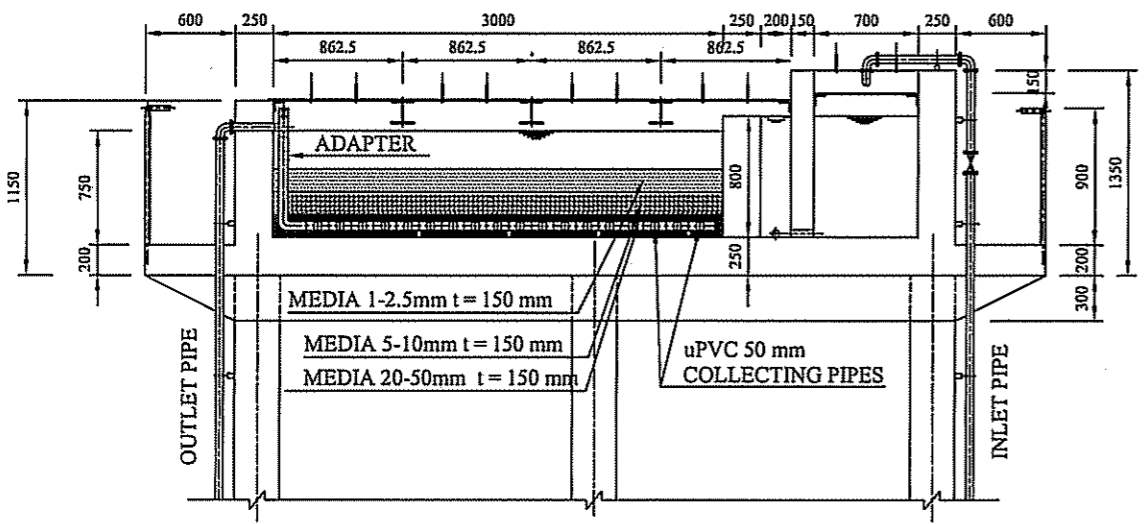
SECTION D-D



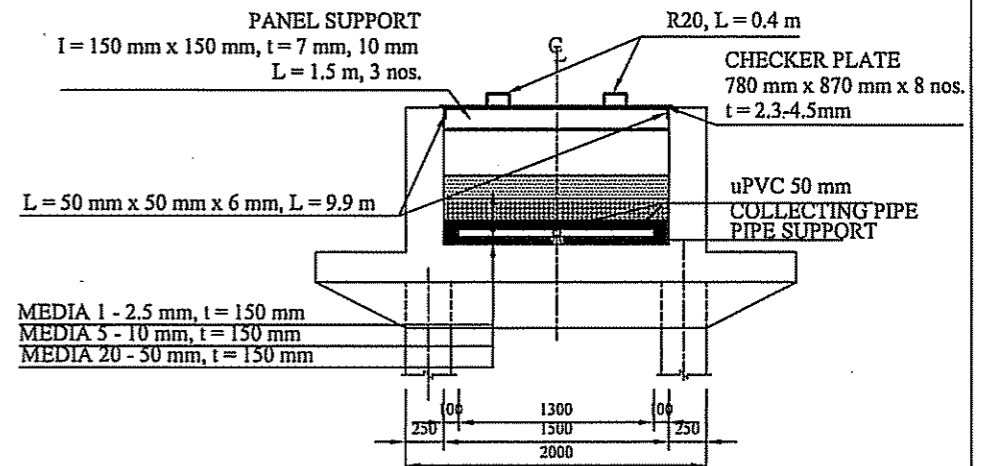
SECTION E-E



SECTION F-F




SECTION B-B

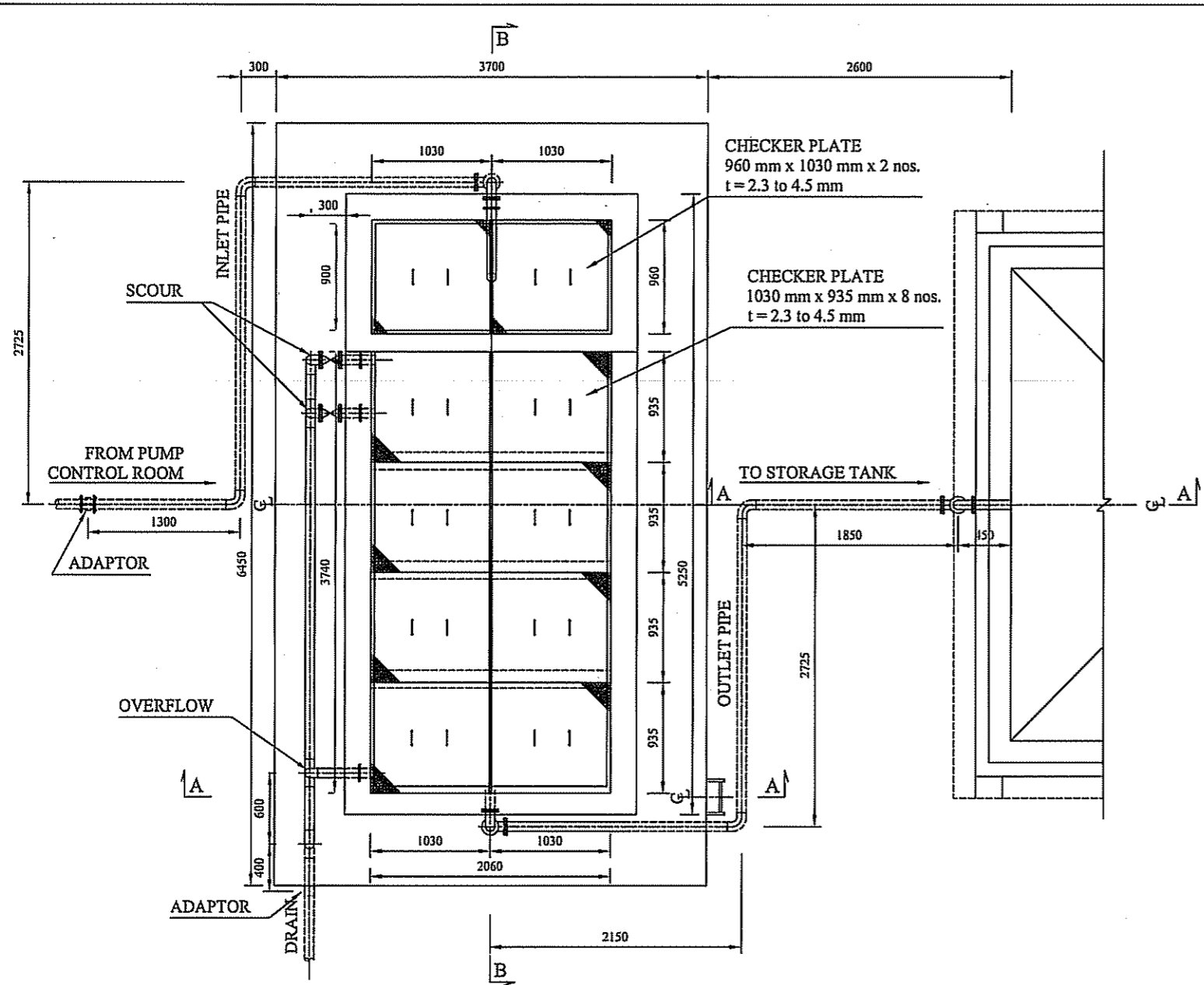


SECTION I-I

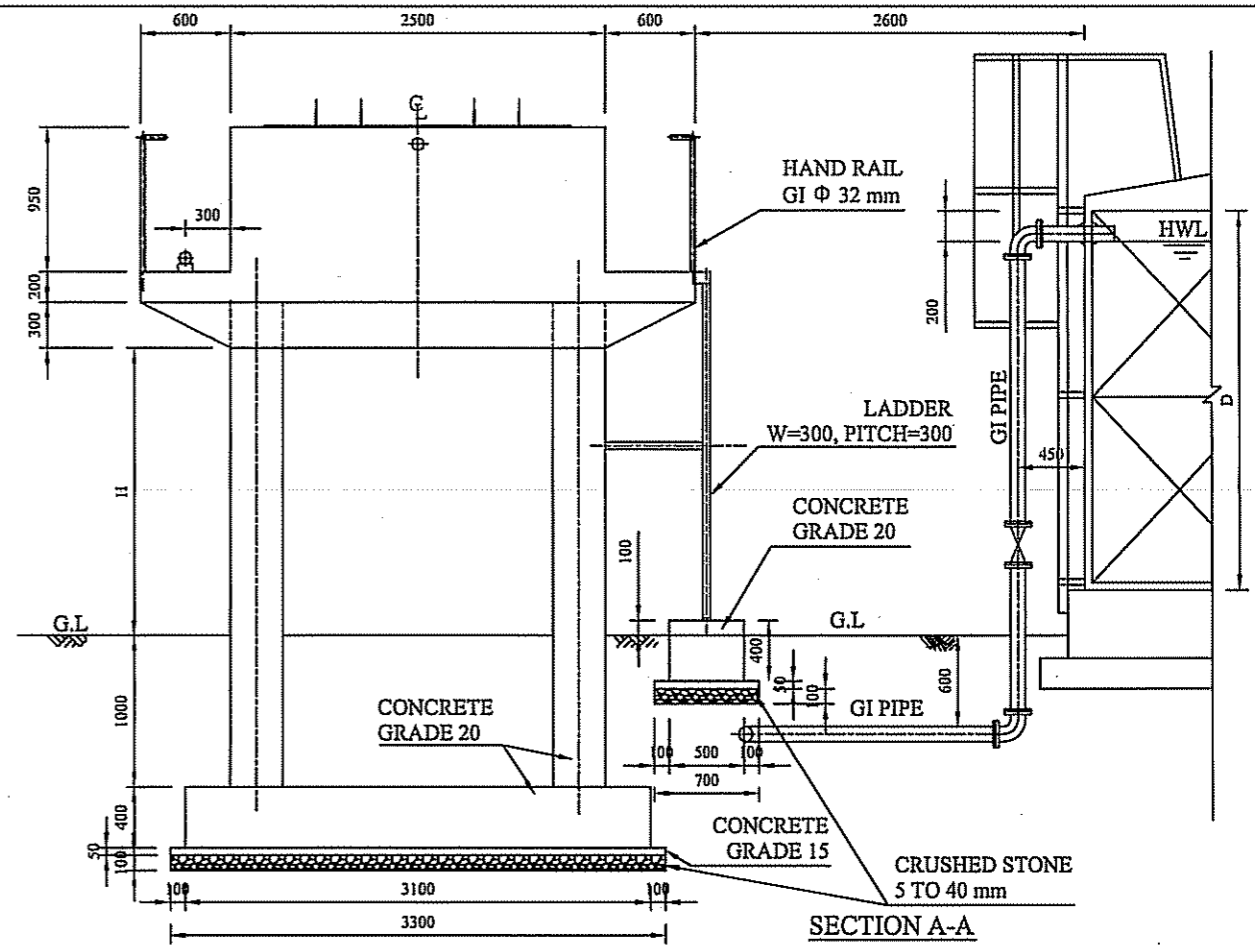
NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-083.

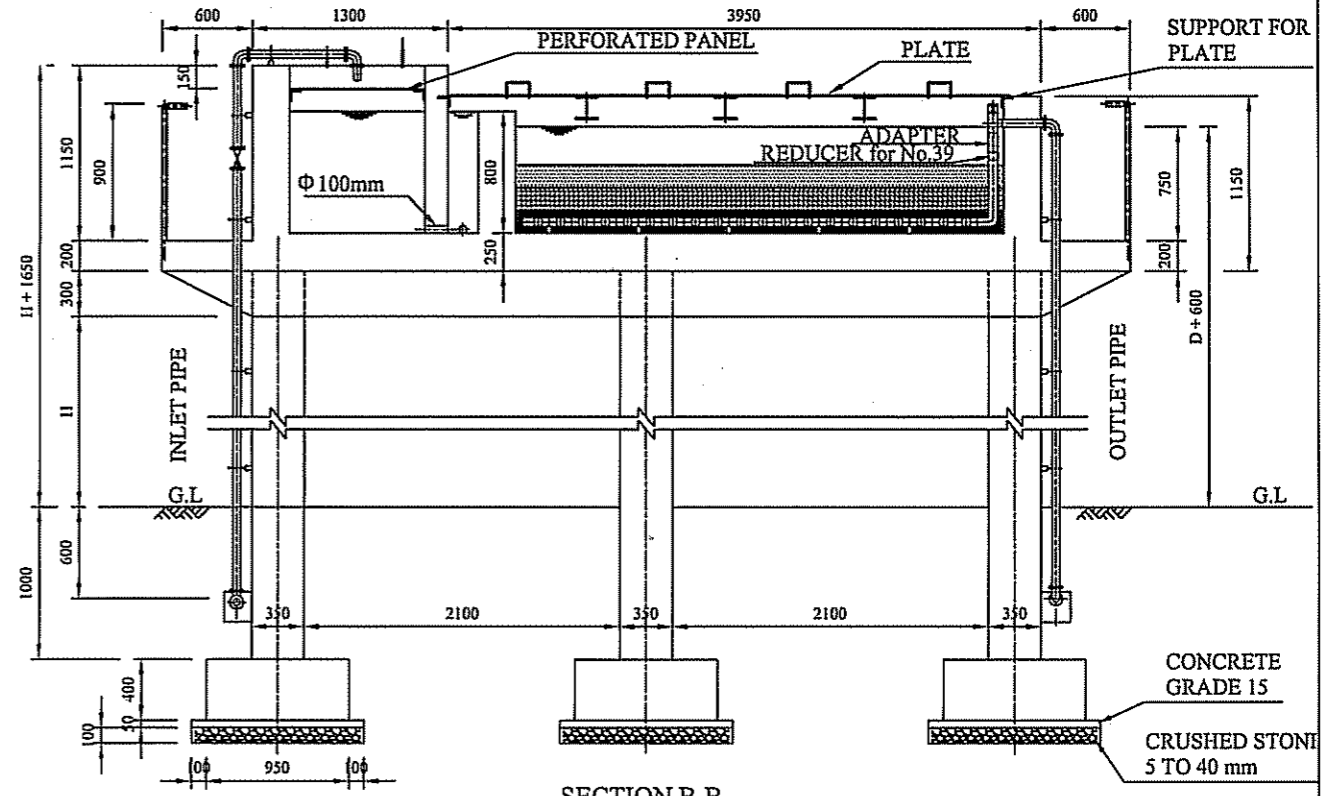
<p>OWNER: THE MINISTRY OF WATER AND IRRIGATION THE REPUBLIC OF KENYA</p>	<p>PROJECT NAME: THE PROJECT FOR RURAL WATER SUPPLY</p>	<p>CONSULTING ENGINEERS:  NIPPON KOEI CO., LTD.</p>	<p>CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP IRON FILTER TYPE IV (2/2)</p>		
		<p>SCALE 1:50</p>	<p>DATE FEB. 2006</p>	<p>DRAWING NO. SP-081</p>	



LAYOUT PLAN



SECTION A-A



SECTION B-B

- NOTE:**
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-086.
 2. ALL METALLIC OR FERROUS PARTS SHALL BE GALVANISED.
 3. ALL SECTIONS IN CONTACT WITH WATER SHALL BE LINED WITH 30 mm THICK WATER PROOFING MORTAR.

LOCATION No.	Tank Type	D (m)	H (m)	INLET PIPE	OUTLET PIPE
32	V50	2.44	1.79	GI 50 mm	GI 50 mm
39				GI 80 mm	GI 80 mm
67				GI 50 mm	GI 50 mm

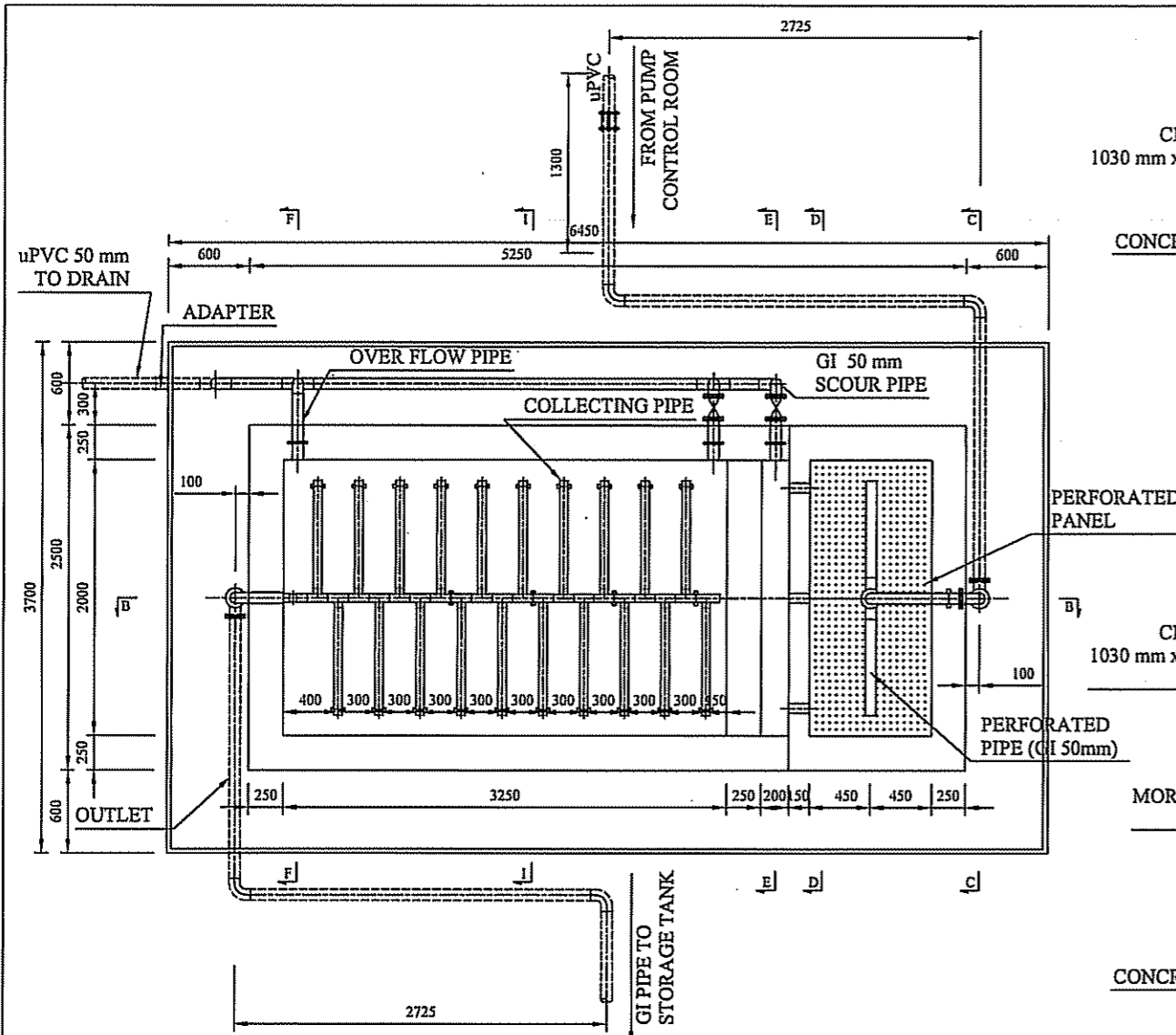
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

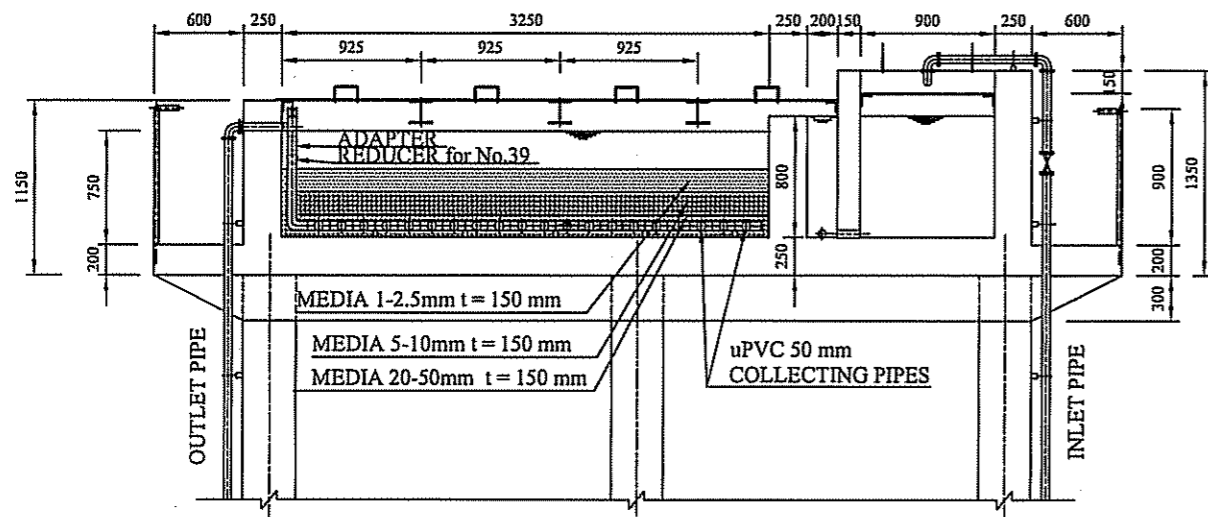
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
IRON FILTER TYPE VI (1/2)

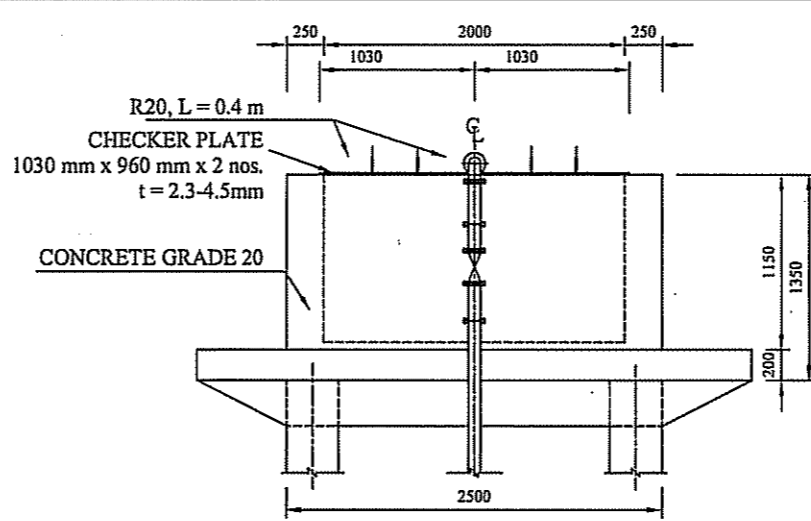
SCALE 1:50	DATE FEB. 2006	DRAWING NO. SP-084
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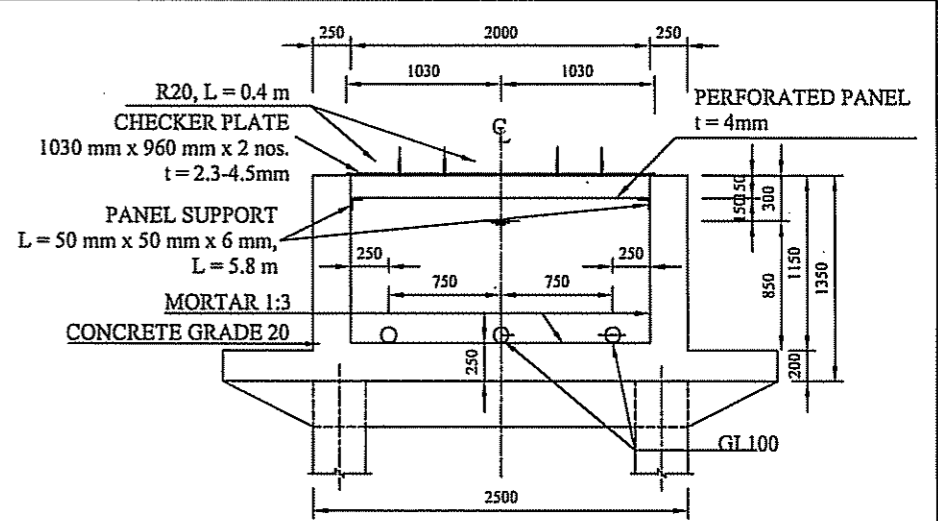
PLAN



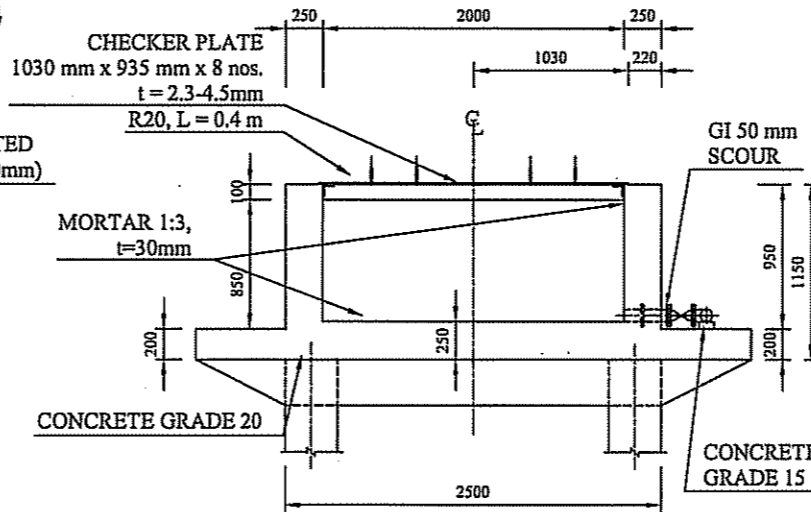
SECTION B-B



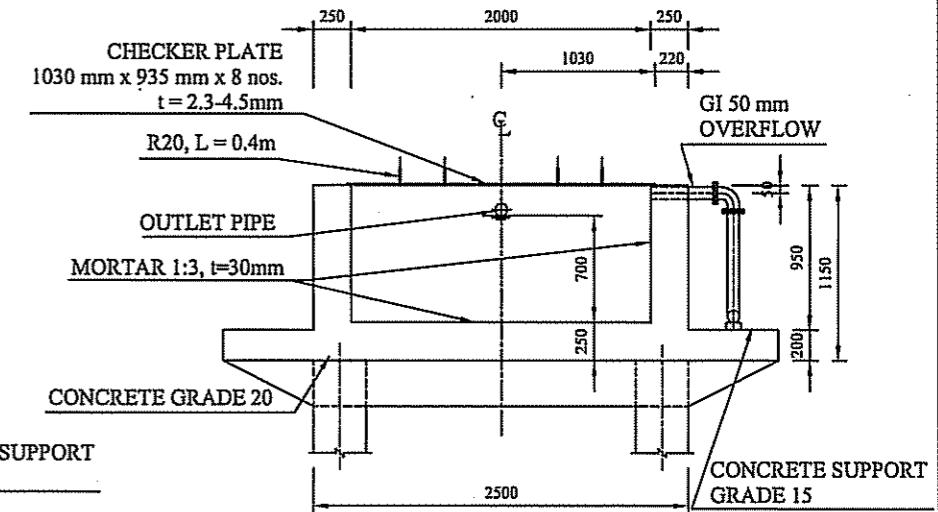
SECTION C-C



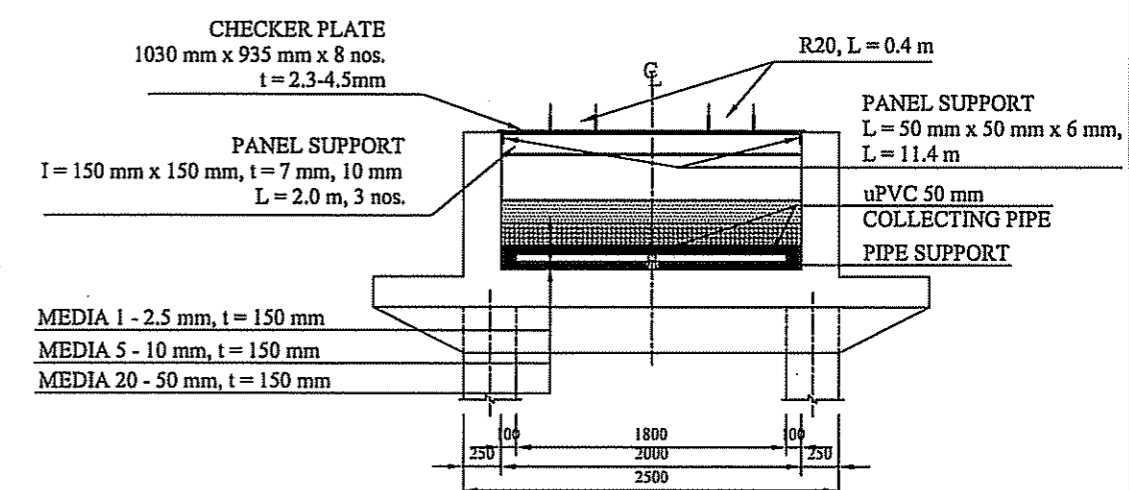
SECTION D-D



SECTION E-E



SECTION F-F



SECTION I-I

NOTE:

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRG. No. SP-086.

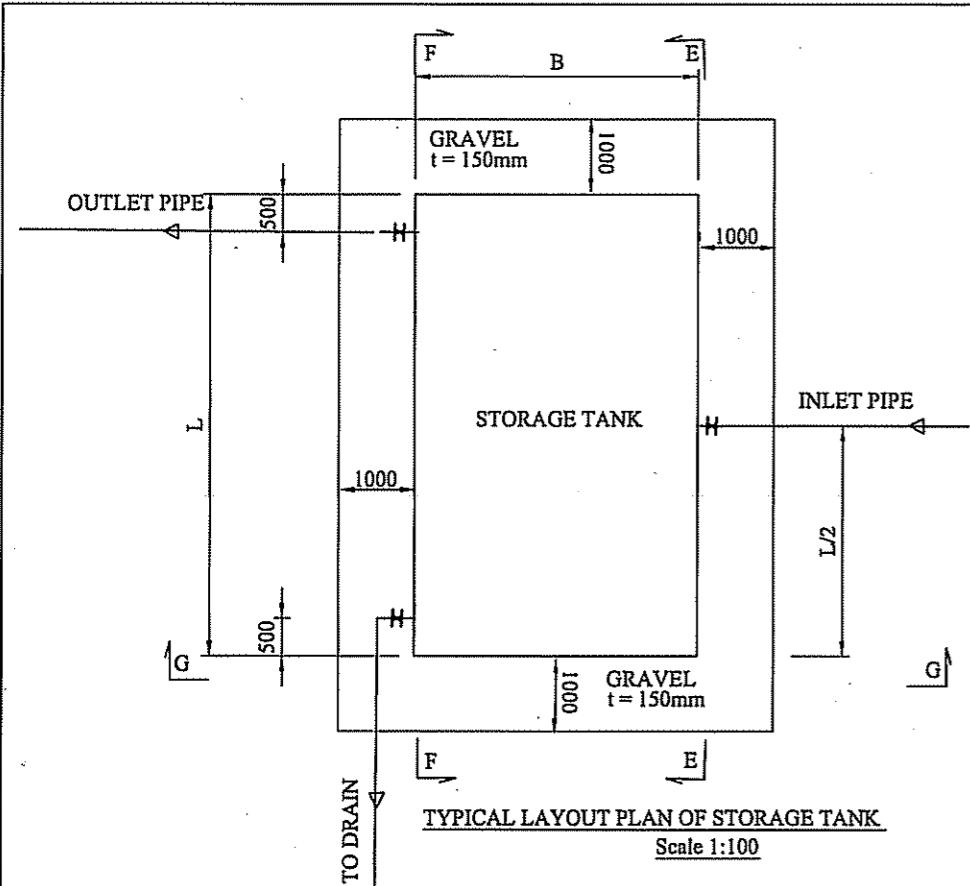
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

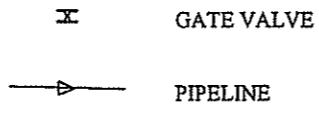
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
IRON FILTER TYPE VI (2/2)

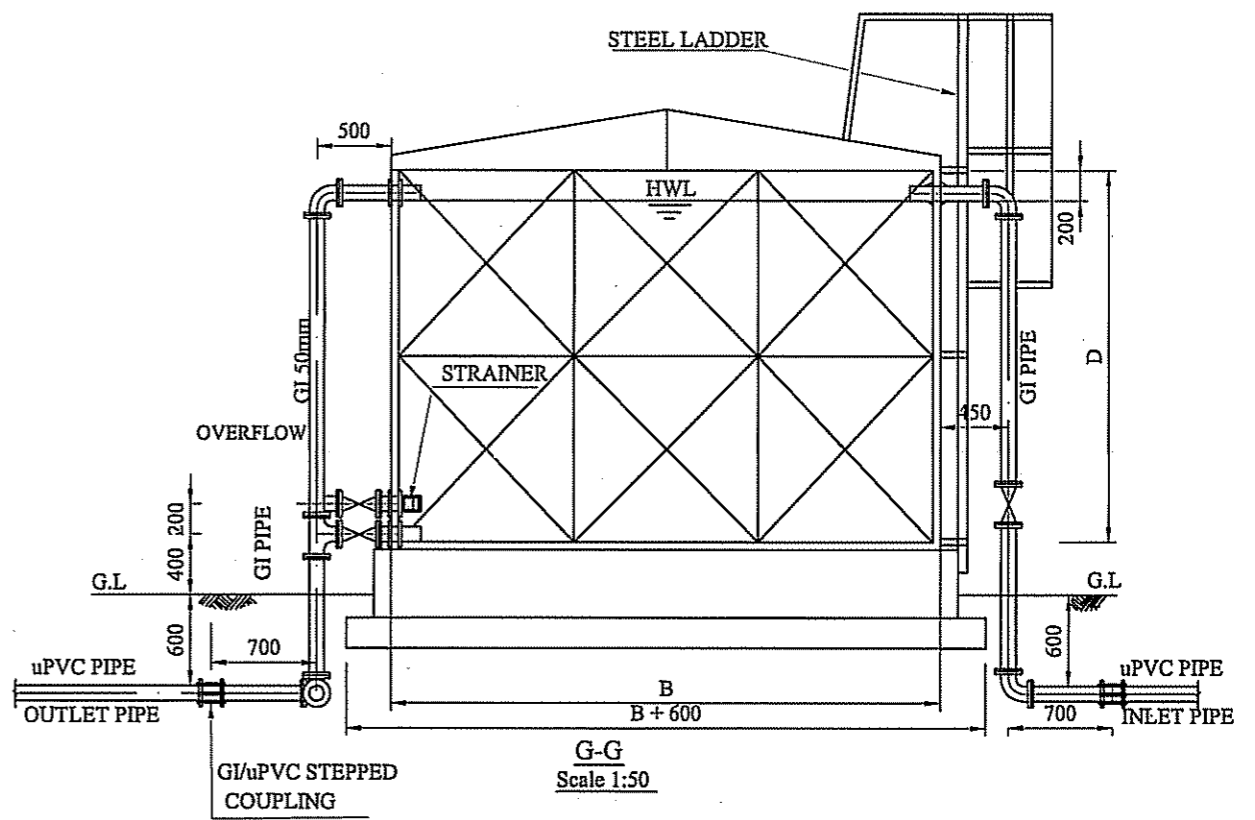
SCALE	DATE	DRAWING NO.
1:50	FEB. 2006	SP-085



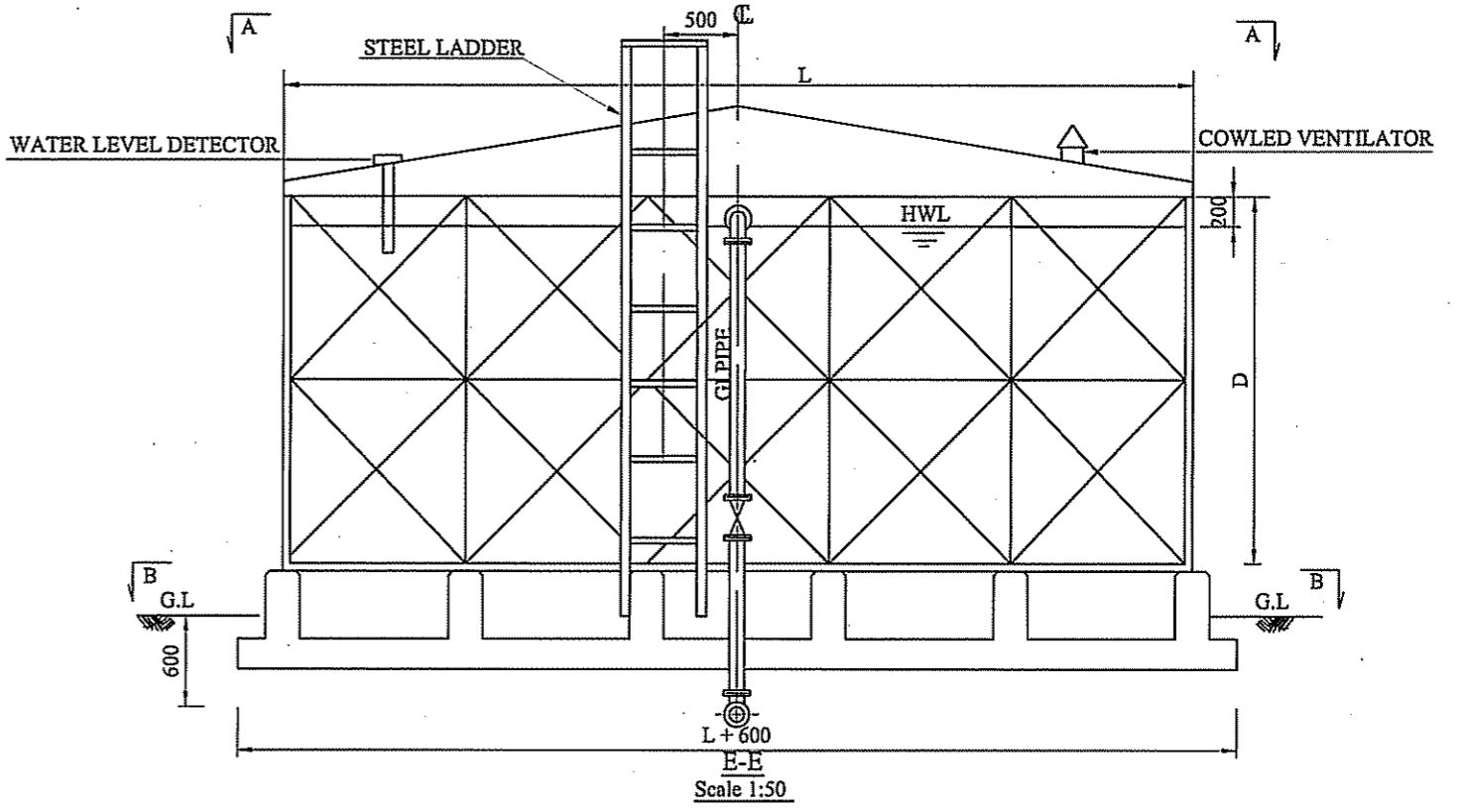
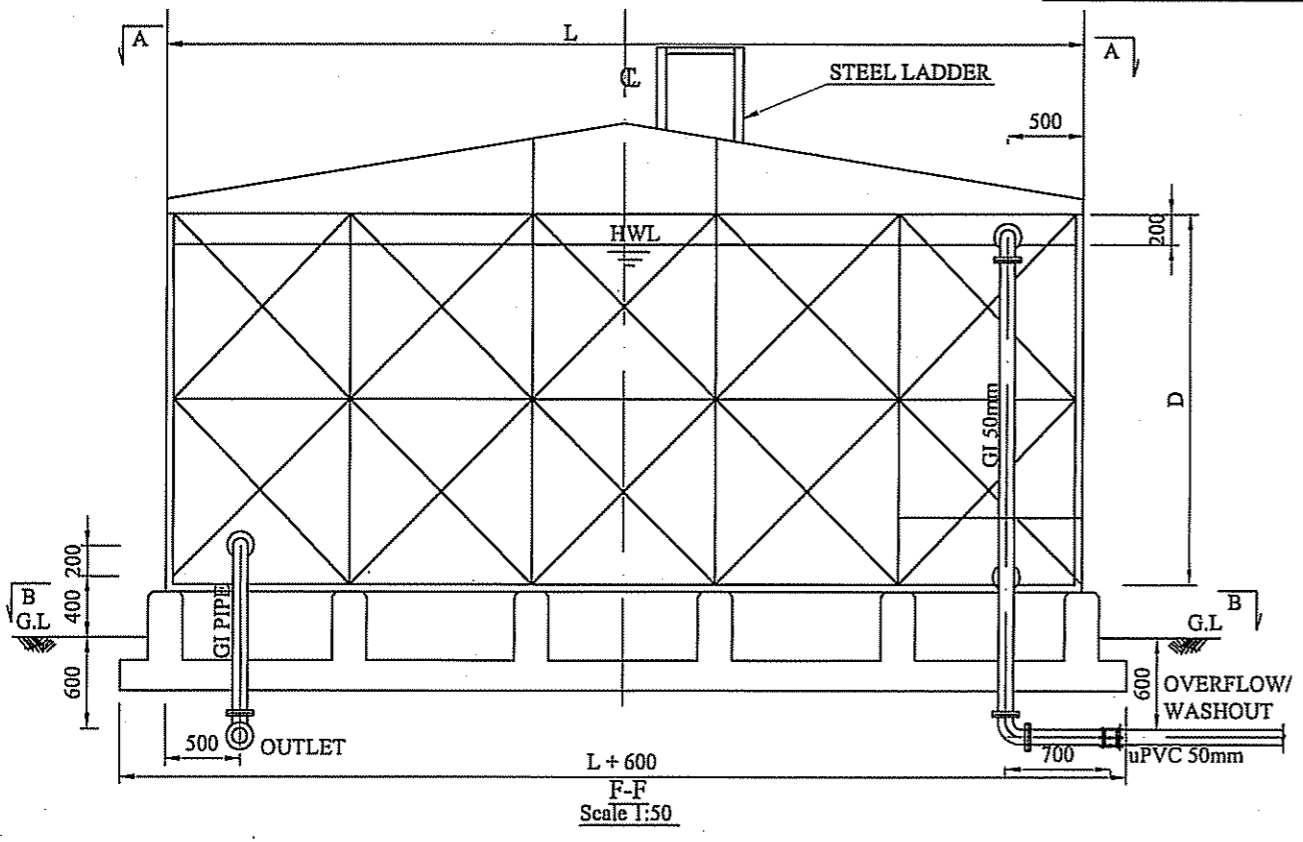
LEGEND



PIPE	DIMENSION (mm)	LOCATION NO.
INLET	GI40	87
	GI50	8, 10, 11, 15, 18, 20, 21, 27, 32, 33, 46, 55, 59, 60, 61, 62x2, 66, 67, 74, 85, 89
	GI80	16, 30, 39
OUTLET	GI40	87
	GI50	8, 10, 11, 15, 18, 20, 21, 27, 32, 33, 39, 46, 55, 59, 60, 61, 62x2, 66, 67, 74, 85, 87, 89
	GI80	16, 30



NOTE: FOR LADDER DETAILS SEE DRAWING NO SP-121



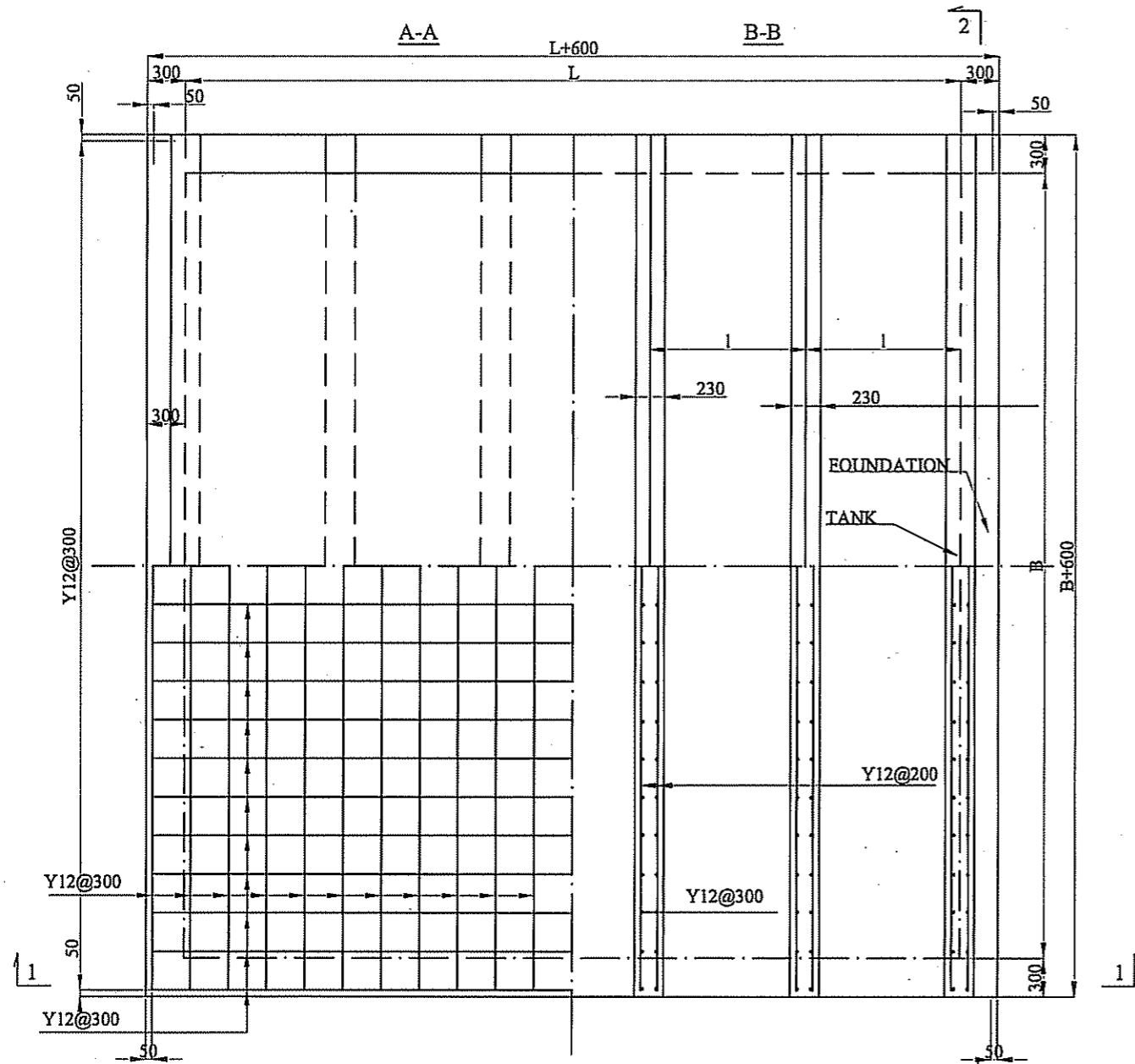
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

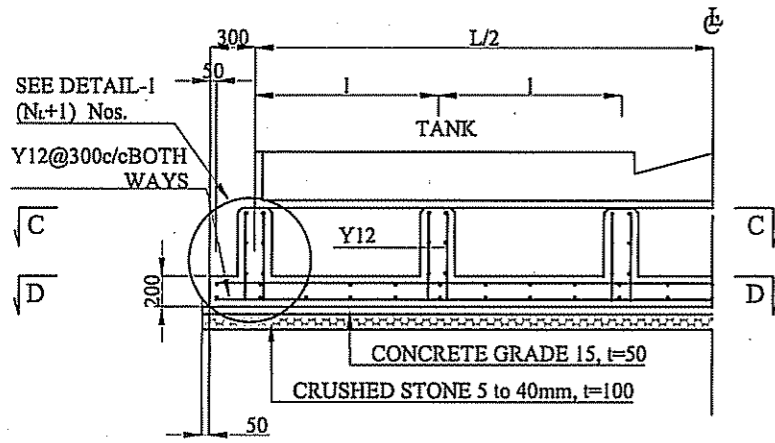
TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
STORAGE TANK (1/2)

SCALE 1:50 1:100	DATE FEB. 2006	DRAWING NO. SP-087
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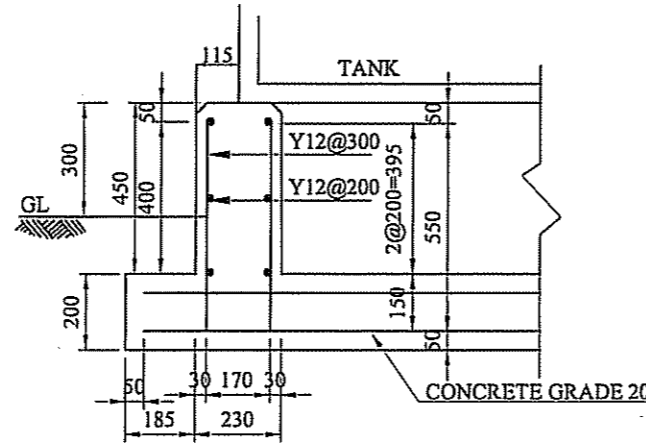


D-D
Scale 1:50

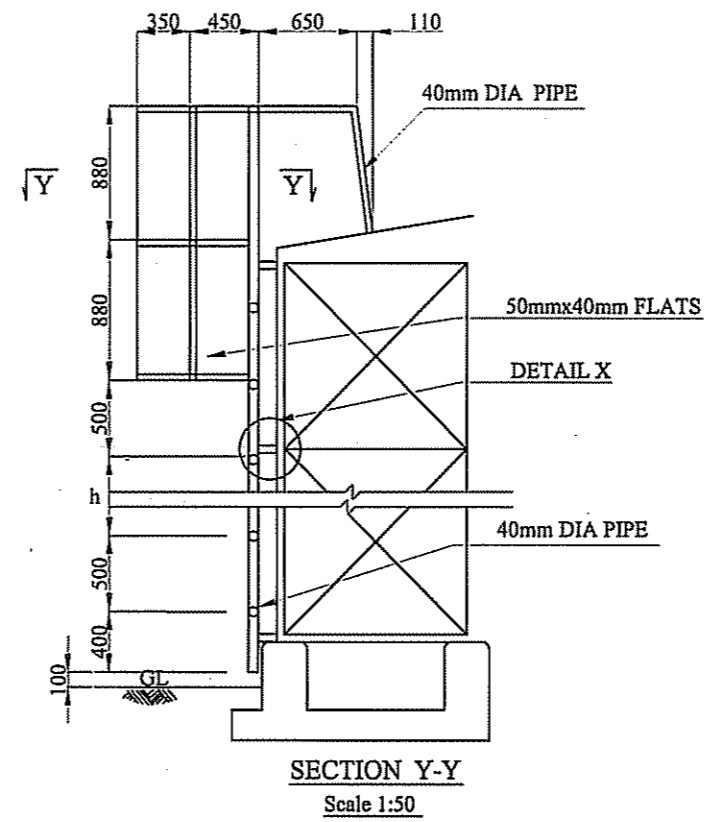
C-C
Scale 1:50



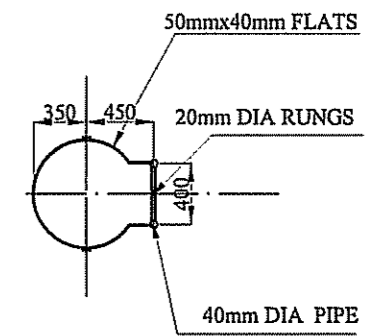
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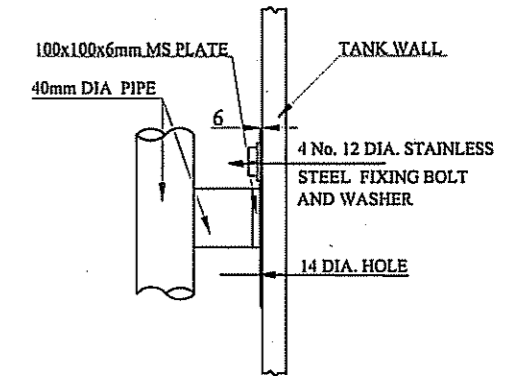
DETAIL 1
Scale 1:20



SECTION Y-Y
Scale 1:50



SECTION Y-Y
Scale 1:50



DETAIL X
Scale 1:5

STEEL LADDER DETAILS

Tank Type	Storage Tank Vol		Square Side		Dimension & Number					Weight & Tank			Location No.
	Class (m ³)	Actual (m ³)	l (m)	L (m)	N _l (nos.)	B (m)	N _B (nos.)	D (m)	N _D (nos.)	Empty (t)	Full Water (t)	Ladder Height h (m)	
V8	8.0	8.0	1.00	2.00	2	2.00	2	2.00	2	1.2	9.2	0	11, 18
V10	10.0	10.9	1.22	3.66	3	2.44	2	1.22	1	1.7	12.6	0	18, 55
V15	15.0	16.3	1.22	3.66	3	3.66	3	1.22	1	2.4	18.7	0	62x2, 87, 89, 93
V24	24.0	29.1	1.22	4.88	4	2.44	2	2.44	2	3.1	32.2	0.5	8, 21, 33, 46, 55, 59, 61, 66, 69
V50	50.0	54.5	1.22	6.10	5	3.66	3	2.44	2	4.8	59.2	0.5	10, 11, 15, 16, 20, 27, 30, 32, 39, 60, 67, 74, 85

OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

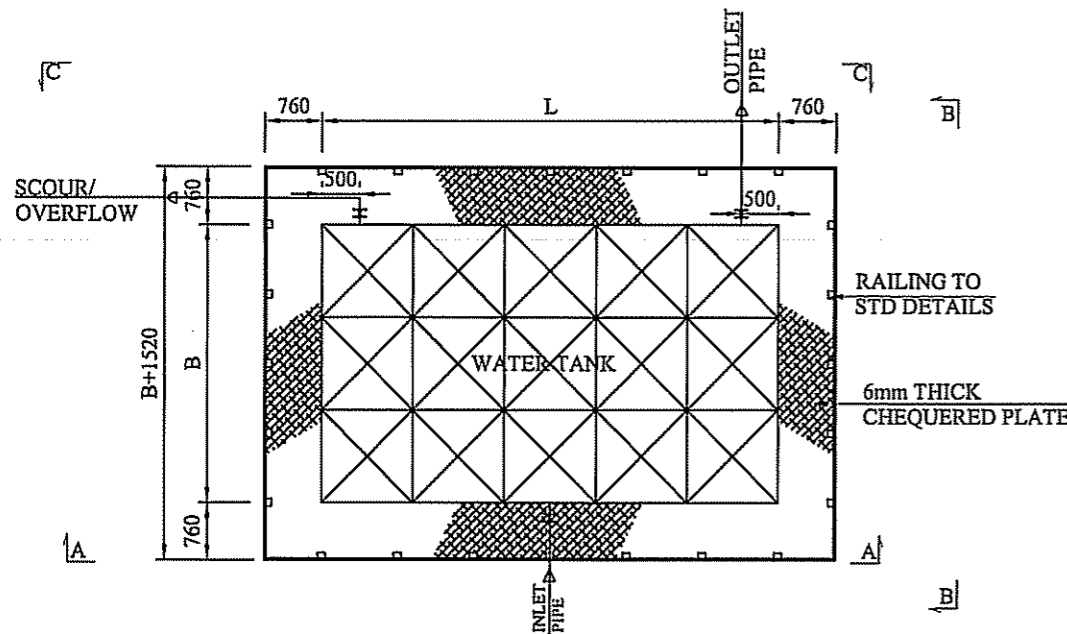
PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

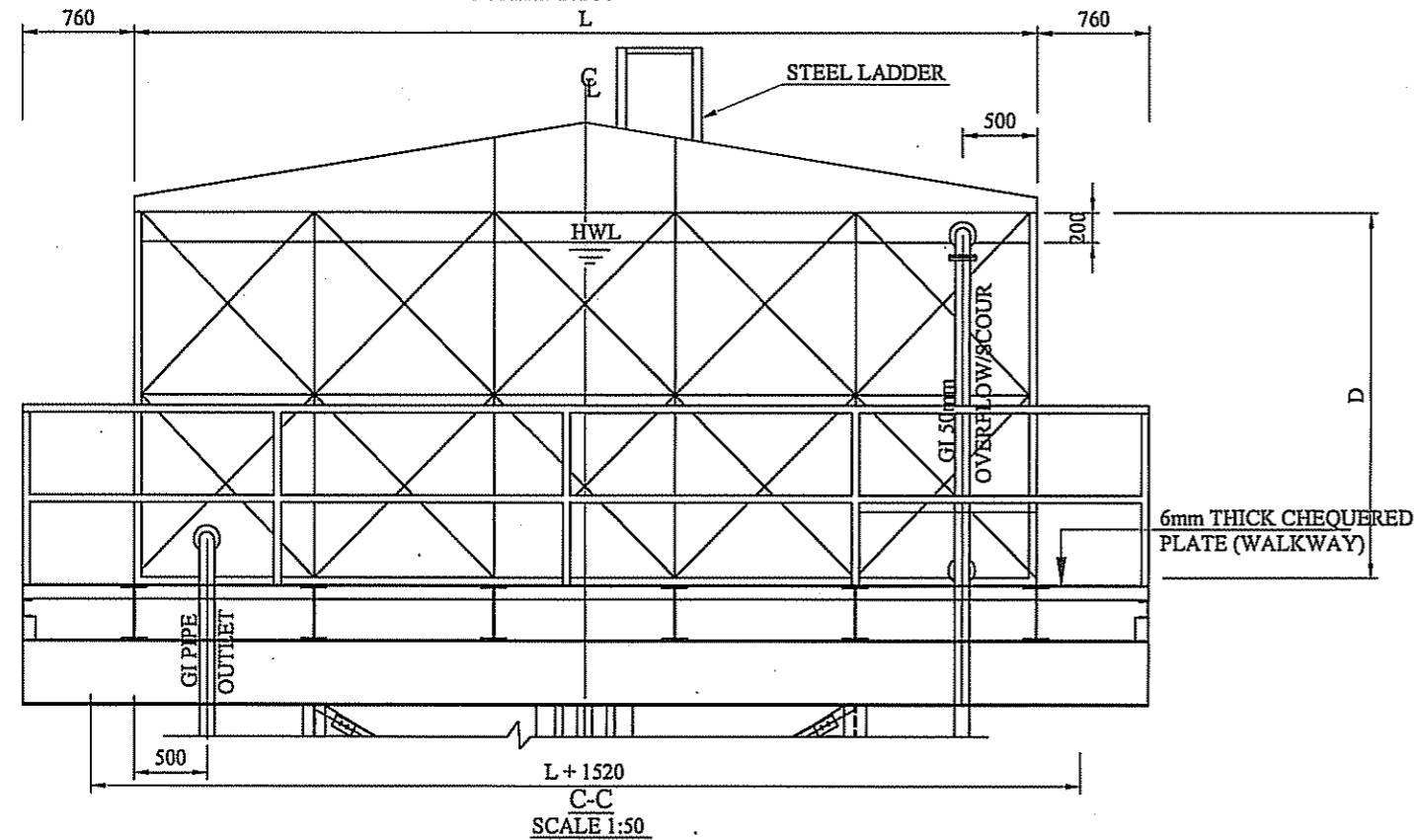
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
STORAGE TANK (2/2)

SCALE 1:5 1:20 1:50	DATE FEB. 2006	DRAWING NO. SP-088
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Tank Type	Storage Tank Volume		Square Side		Dimension & Number					Weight & Tank		Tower Height H (m)	Location No.
	Class (m ²)	Actual (m ²)	l (m)	L (m)	NL (nos.)	B (m)	NB (nos.)	D (m)	ND (nos.)	Empty (t)	Full Water (t)		
V15	15.0	16.3	1.22	3.66	3	3.66	3	1.22	1	2.4	18.7	5	82, 93
V50	50.0	54.5	1.22	6.10	5	3.66	3	2.44	2	4.8	59.2	5	41, 54
												10	4



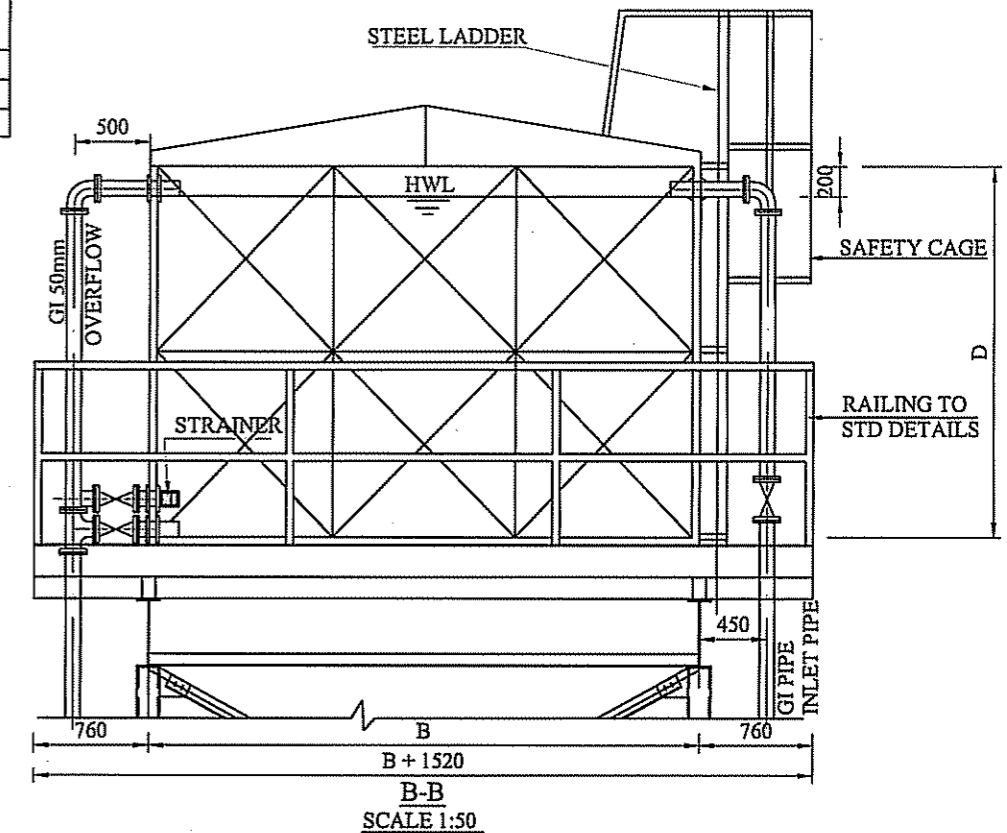
TYPICAL LAYOUT PLAN OF ELEVATED STORAGE TANK
SCALE 1:100



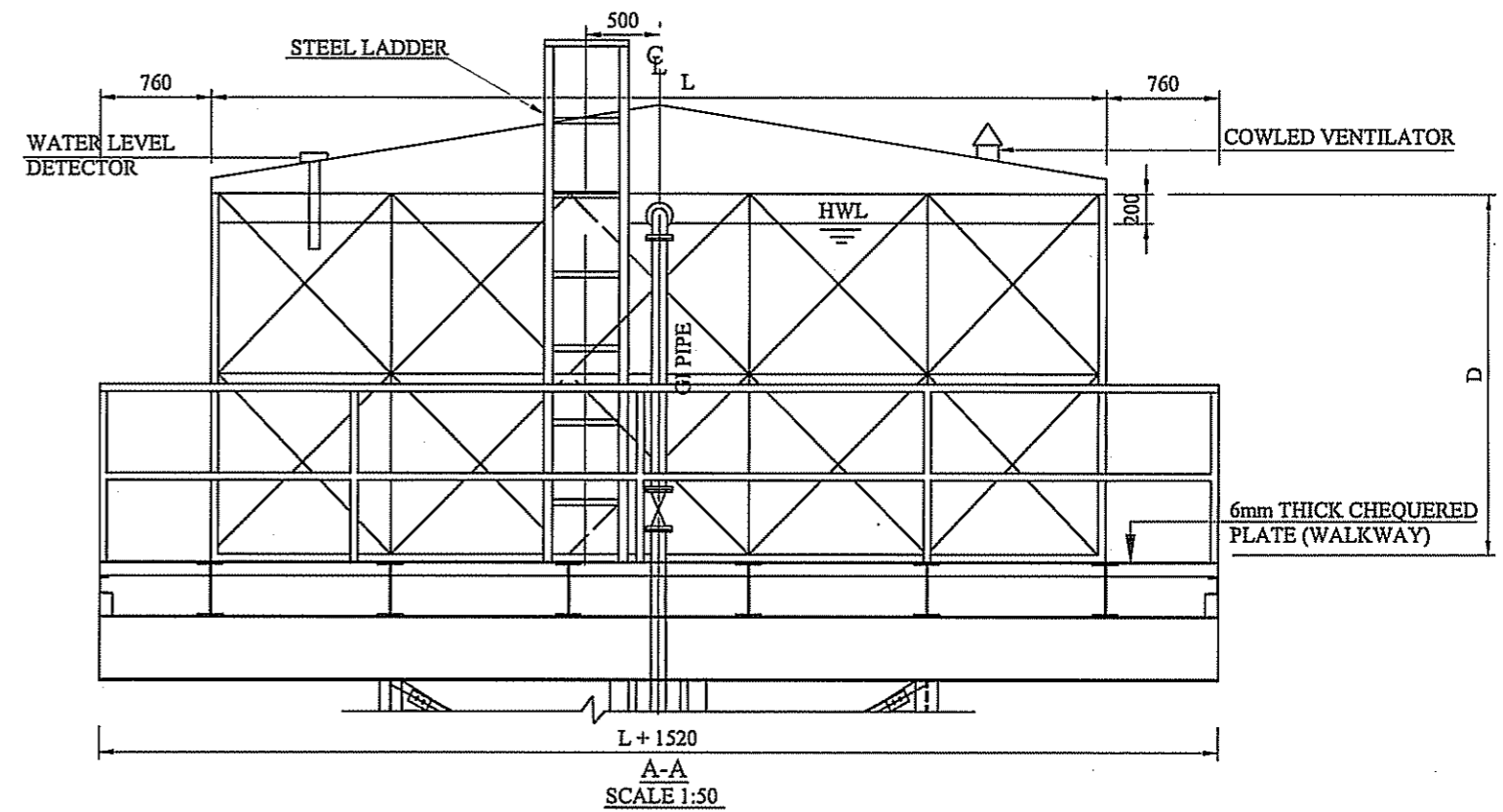
PIPE	DIMENSION (mm)	LOCATION NO.
INLET	GI 40	82, 93
	GI 50	41, 54
	GI 80	4
OUTLET	GI 50	41, 54, 82, 93
	GI 80	4

LEGEND:

- ⊞ GATE VALVE
- PIPELINE



NOTE: FOR LADDER DETAILS SEE DRAWING NO SP-103



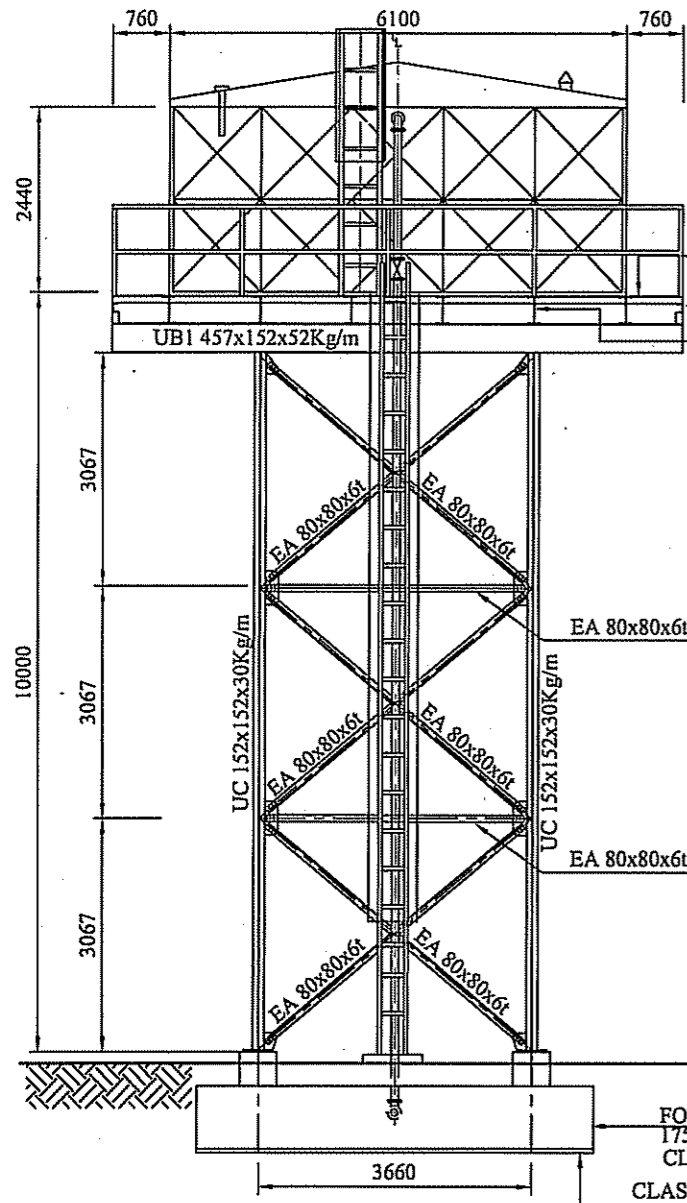
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

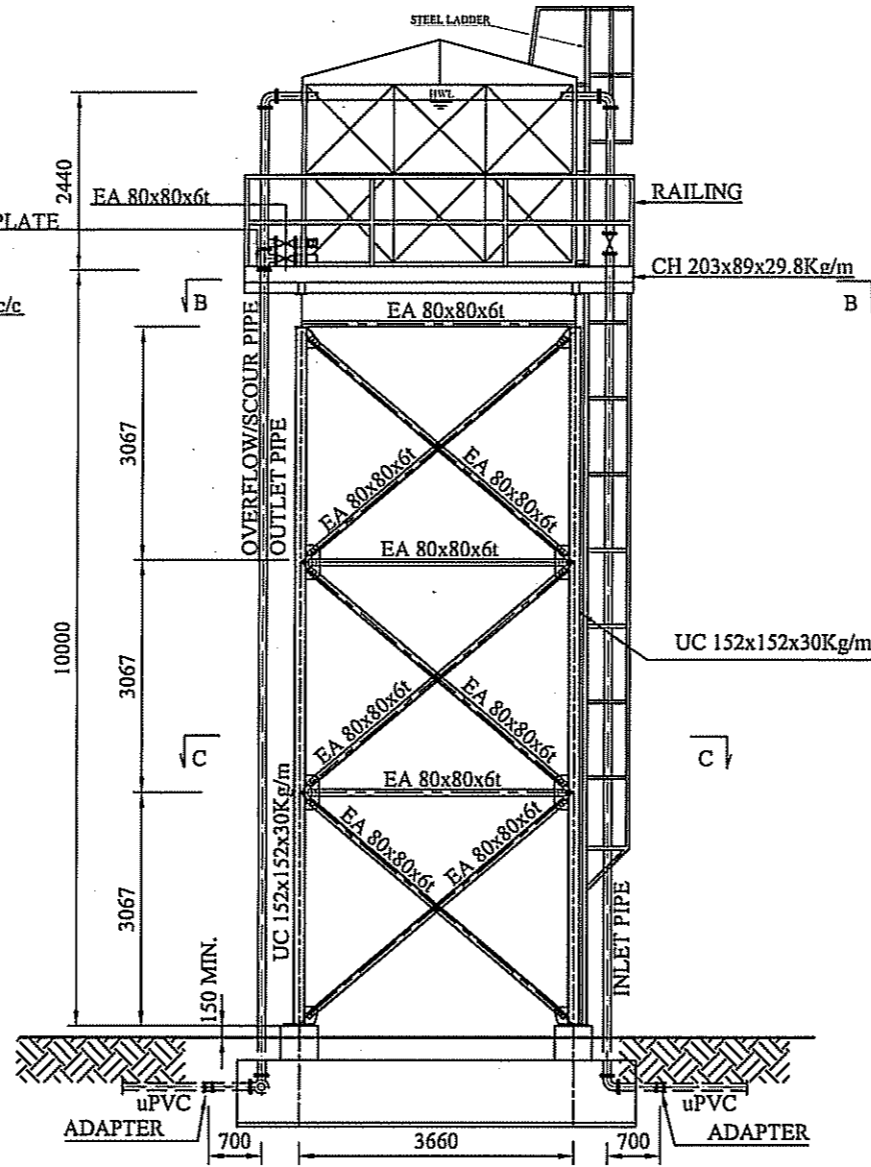
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK

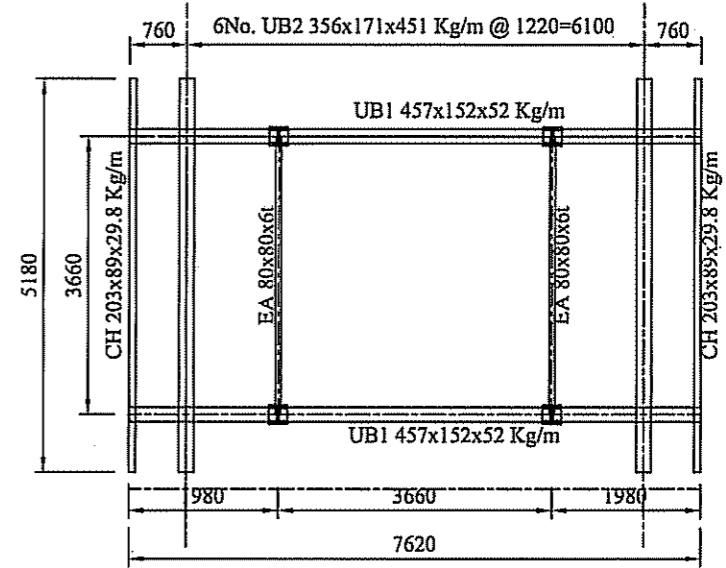
SCALE 1:50 1:100	DATE FEB. 2006	DRAWING NO. SP089
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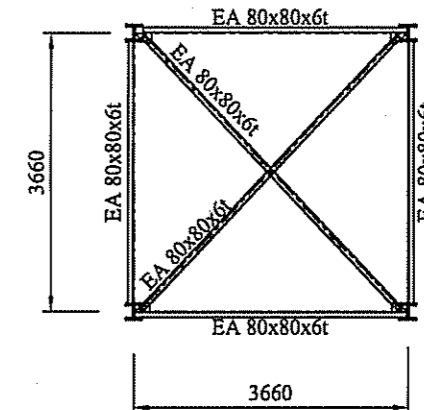
FRONT VIEW
SCALE 1:100



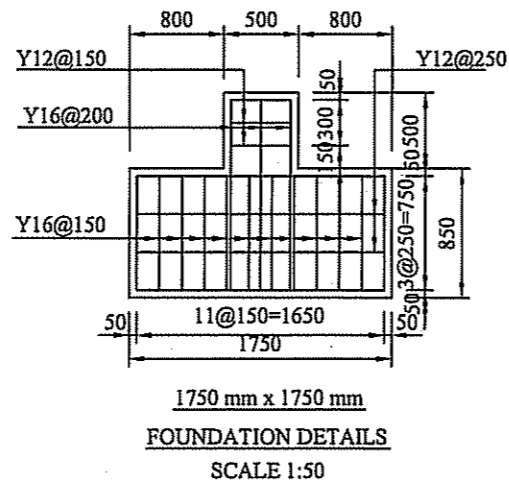
SIDE VIEW
SCALE 1:100



SECTION B-B
SCALE 1:100



SECTION C-C
BRACING AT EVERY LEVEL EXCEPT TOP AND BOTTOM
SCALE 1:100



FOUNDATION DETAILS
SCALE 1:50

LOCATION No.	TANK TYPE	INLET PIPE (mm)	OUTLET PIPE (mm)
4	V50	GI 80	GI 80

NOTE:

- SHS - SQUARE HOLLOW SECTION
- UB - UNIVERSAL BEAM
- UC - UNIVERSAL COLUMN
- CH - CHANNEL SECTION
- EA - EQUAL ANGLE

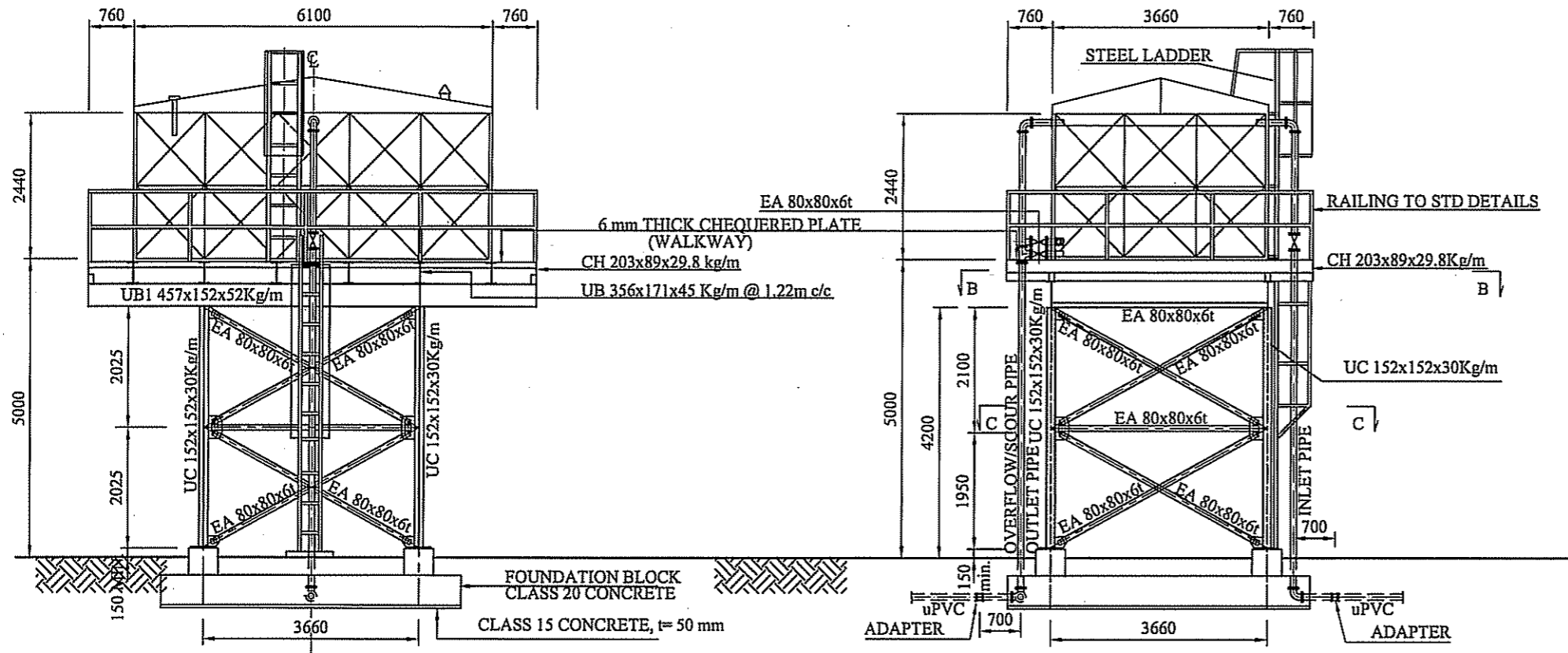
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

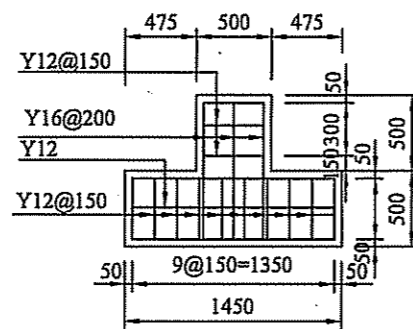
TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK - TYPE I (10 m)

SCALE 1:50 1:100	DATE FEB. 2006	DRAWING NO. SP-090
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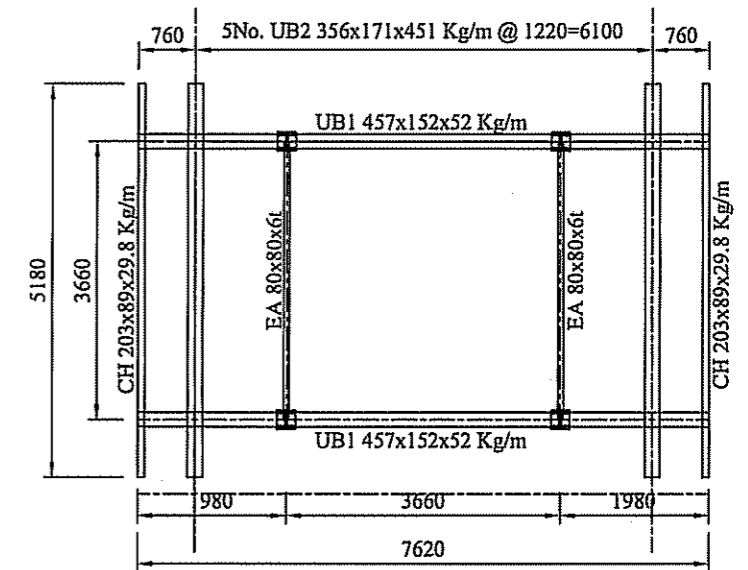


FRONT VIEW
SCALE 1:100

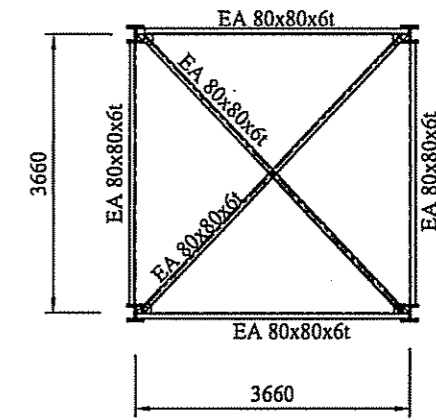
SIDE VIEW
SCALE 1:100



FOUNDATION DETAILS
SCALE 1:50



SECTION B-B
SCALE 1:100



SECTION C-C
BRACING AT TOWER MID-HEIGHT
SCALE 1:100


NOTE:

- SHS - SQUARE HOLLOW SECTION
- UB - UNIVERSAL BEAM
- UC - UNIVERSAL COLUMN
- CH - CHANNEL SECTION
- EA - EQUAL ANGLE

LOCATION No.	TANK TYPE	INLET PIPE (mm)	OUTLET PIPE (mm)
41	V50	GI 50	GI 50
54			

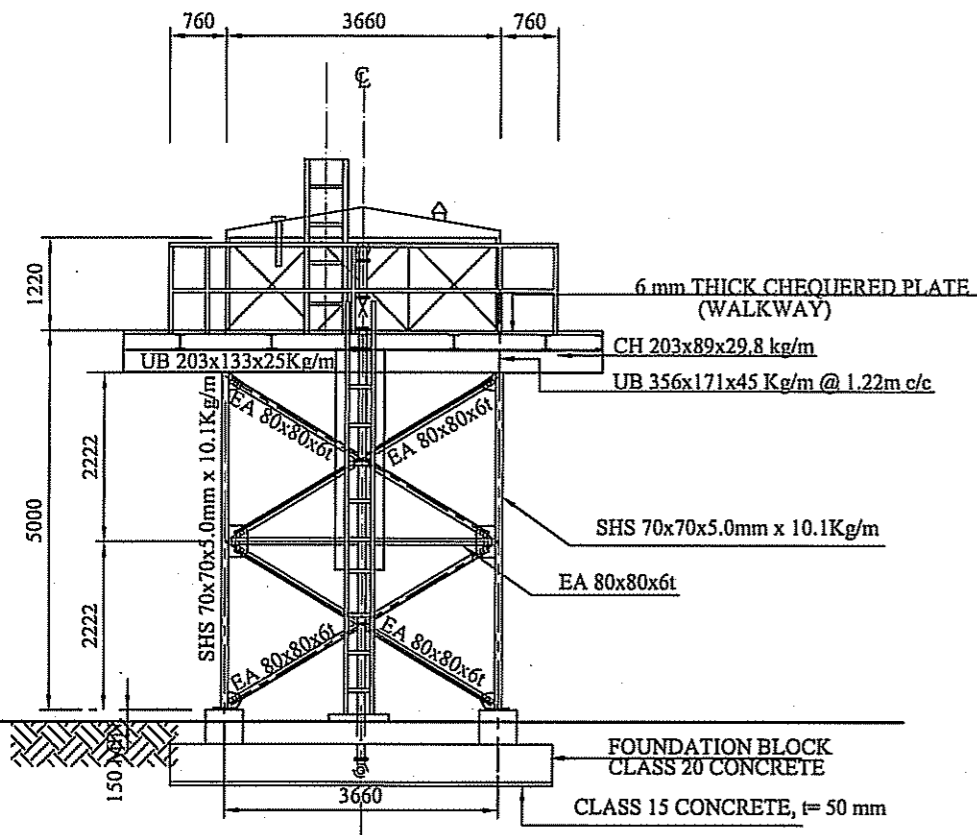
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

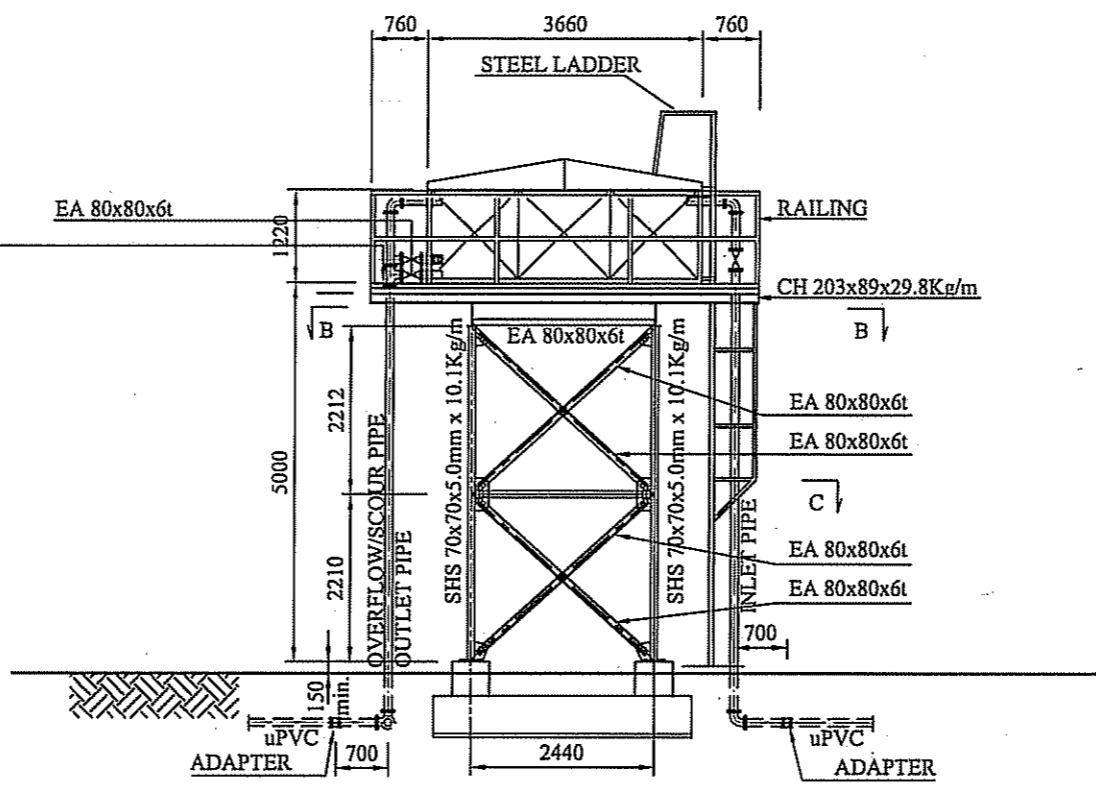
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK - TYPE III (5 m)

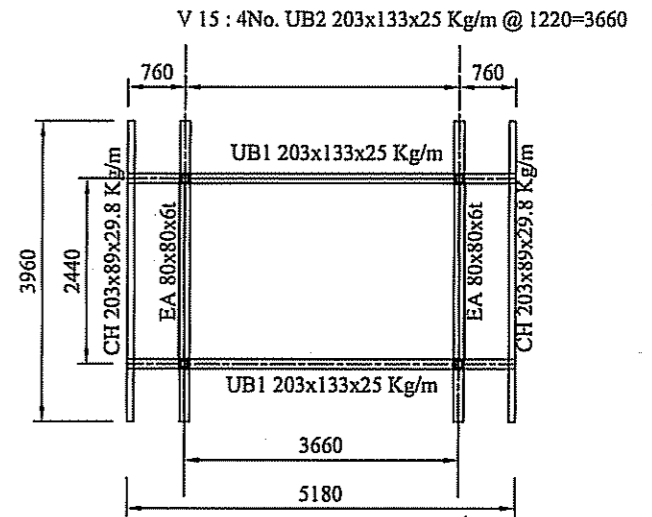
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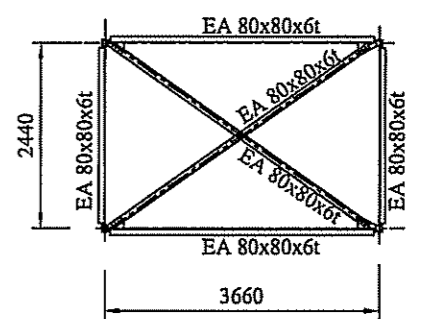
FRONT VIEW
SCALE 1:100



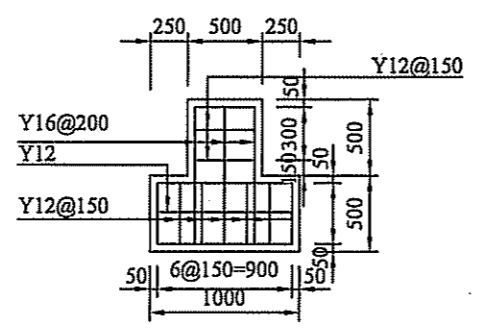
SIDE VIEW
SCALE 1:100



SECTION B-B
SCALE 1:100



SECTION C-C
BRACING AT TOWER MID-HEIGHT
SCALE 1:100



FOUNDATION DETAIL
SCALE 1:50

LOCATION No.	TANK TYPE	INLET PIPE (mm)	OUTLET PIPE (mm)
82	V15	GI 40	GI 50
93			

- NOTE:**
- SHS - SQUARE HOLLOW SECTION
 - UB - UNIVERSAL BEAM
 - UC - UNIVERSAL COLUMN
 - CH - CHANNEL SECTION
 - EA - EQUAL ANGLE

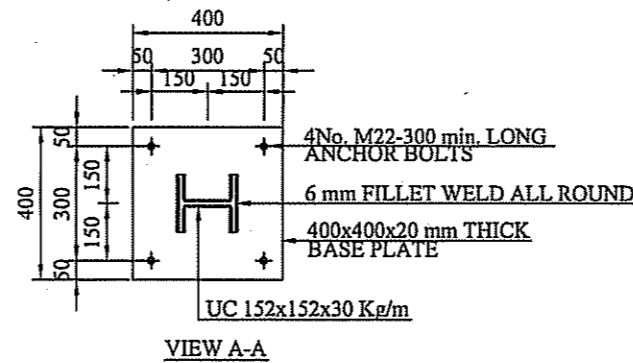
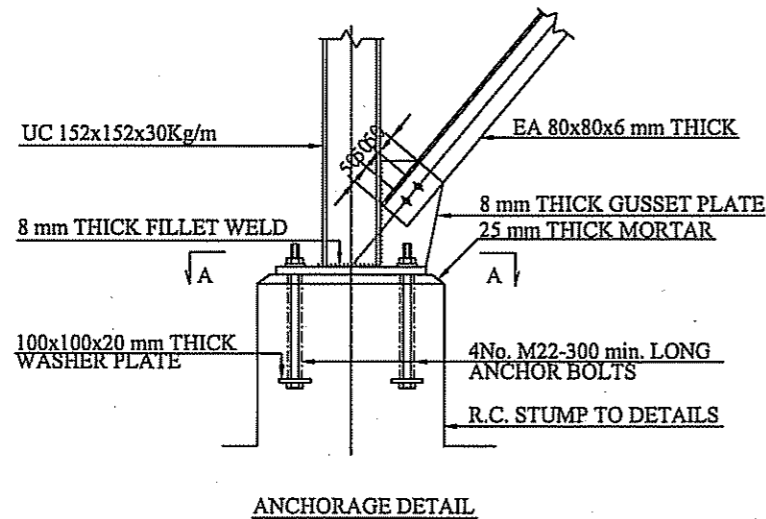
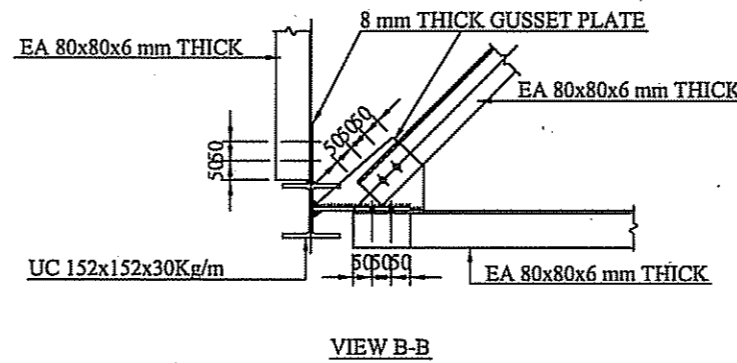
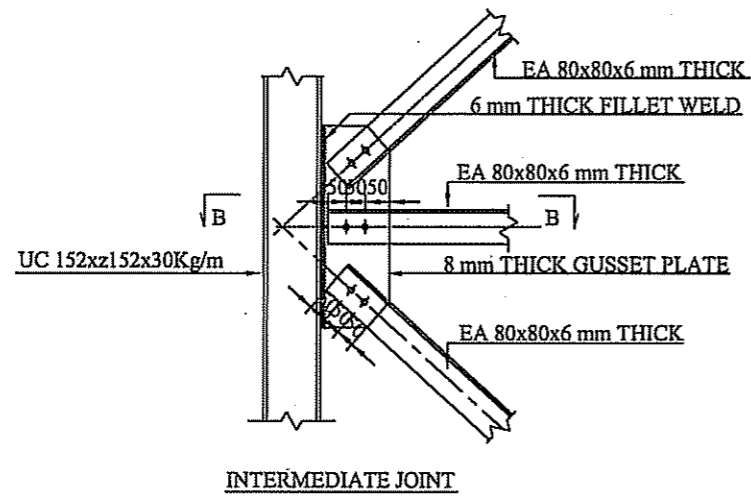
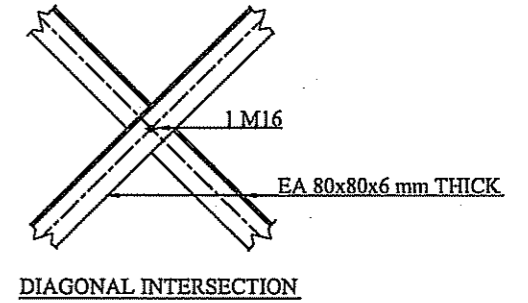
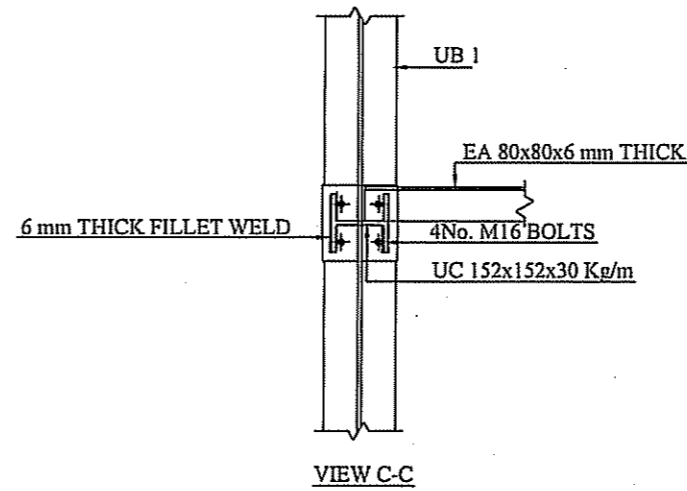
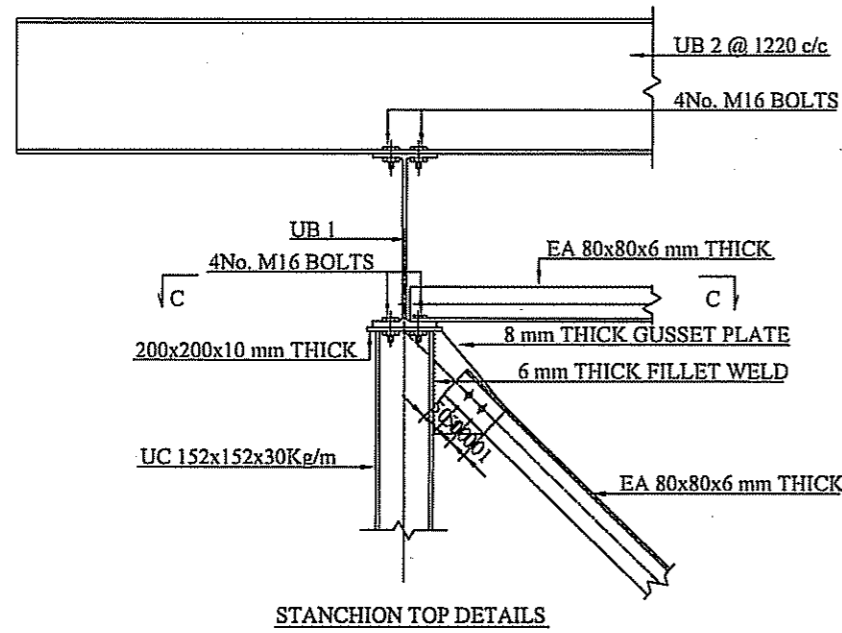
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO., LTD.**

TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK - TYPE V (5 m)

SCALE 1:50 1:100	DATE FEB. 2006	DRAWING NO. SP-092
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LEGEND:

- SHS - SQUARE HOLLOW SECTION
- UB - UNIVERSAL BEAM
- UC - UNIVERSAL COLUMN
- CH - CHANNEL SECTION
- EA - EQUAL ANGLE

NOTES:

1. ALL WELDS TO BE 6 mm THICK UNLESS OTHERWISE STATED.
2. ALL BOLTS TO BE 2M16 (GRADE 5.8).
3. ALL GUSSET PLATE TO BE 8 mm THICK.
4. ALL STEEL SHALL BE GRADE 43 AND SHALL BE GALVANISED.

OWNER:

THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:

THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:

 **NIPPON KOEI CO.,LTD.**

TITLE:
**CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK - TOWER CONNECTION DETAILS
AND RAILING (1/2)**

SCALE

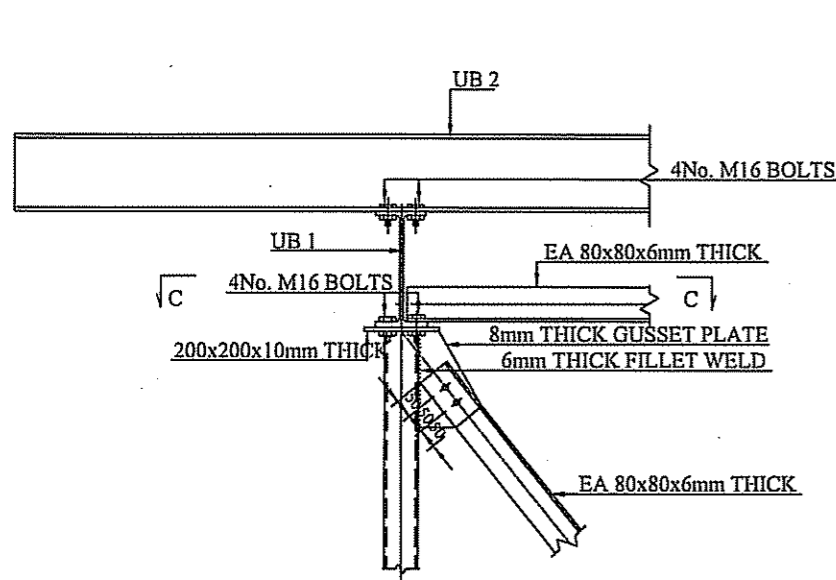
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DATE

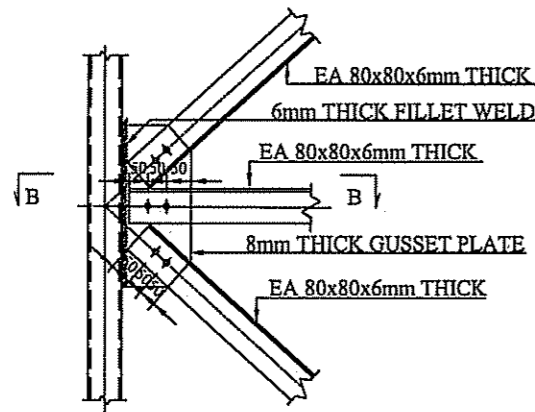
FEB. 2006

DRAWING NO.

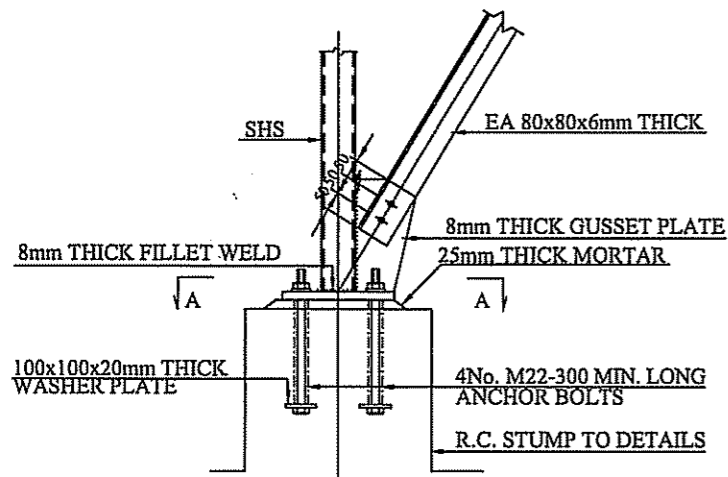
SP-093



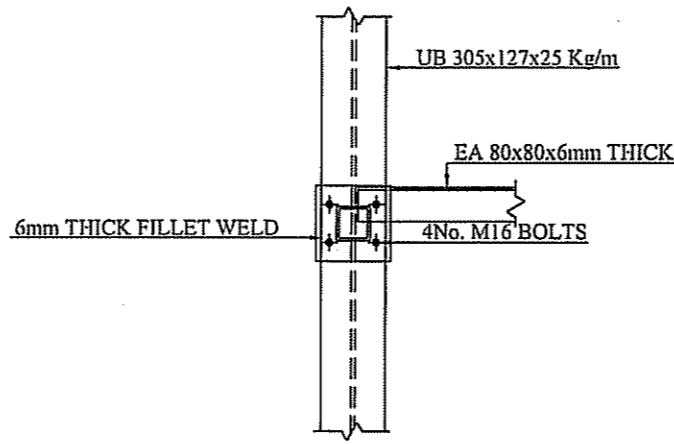
STANCHION TOP DETAILS
SCALE 1:20



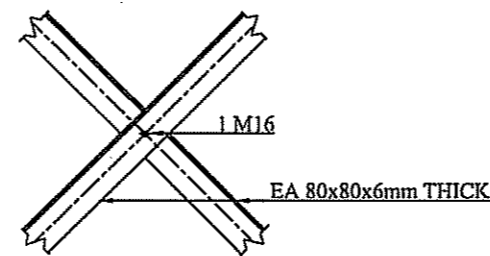
INTERMEDIATE JOINT
SCALE 1:20



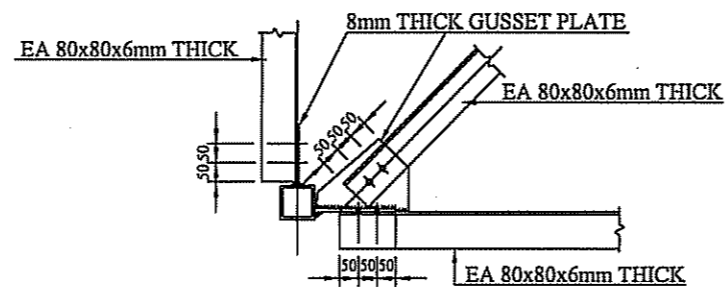
ANCHORAGE DETAIL
SCALE 1:20



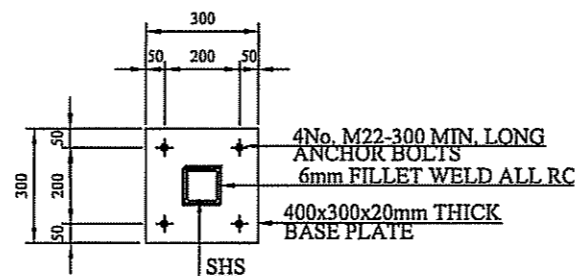
VIEW C-C
SCALE 1:20



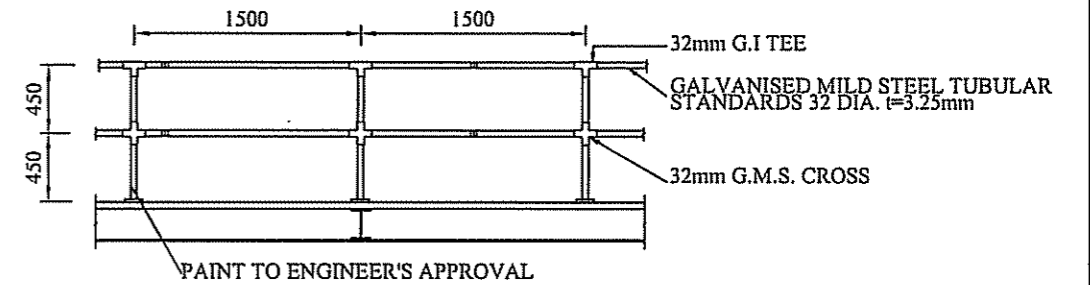
DIAGONAL INTERSECTION
SCALE 1:20



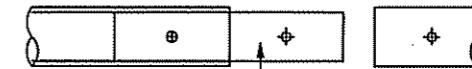
VIEW B-B
SCALE 1:20



VIEW A-A
SCALE 1:20

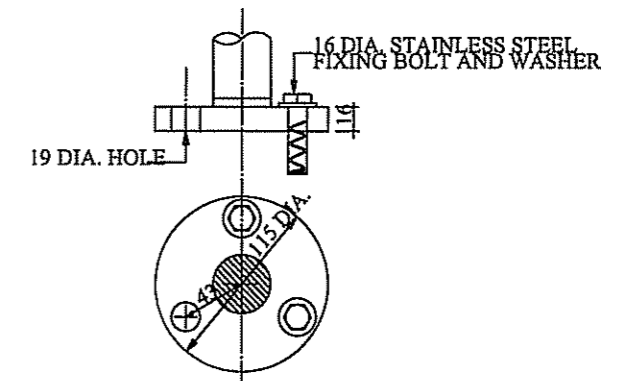


HANDRAILING
SCALE 1:50



SLEEVE 152 LONG 4 MINIMUM THICKNESS
SECURED BY TWO 6 DIA. CADMIUM PLATED
GRUB SCREWS IN UNDER SIDE.

TUBULAR HANDRAILING JOINT
SCALE - 1:5



ROUND BASE
SCALE - 1:5

GUARDRAIL DETAILS

LEGEND:

- SHS - SQUARE HOLLOW SECTION
- UB - UNIVERSAL BEAM
- UC - UNIVERSAL COLUMN
- CH - CHANNEL SECTION
- EA - EQUAL ANGLE

NOTES:

1. ALL WELDS TO BE 6 mm THICK UNLESS OTHERWISE STATED.
2. ALL BOLTS TO BE 2M16 (GRADE 5.8).
3. ALL GUSSET PLATE TO BE 8 mm THICK.
4. ALL STEEL SHALL BE GRADE 43 AND SHALL BE GALVANISED.

OWNER:

THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:

THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:

 NIPPON KOEI CO., LTD.

TITLE:

CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
ELEVATED STORAGE TANK - TOWER CONNECTION DETAILS
AND RAILING (2/2)

SCALE

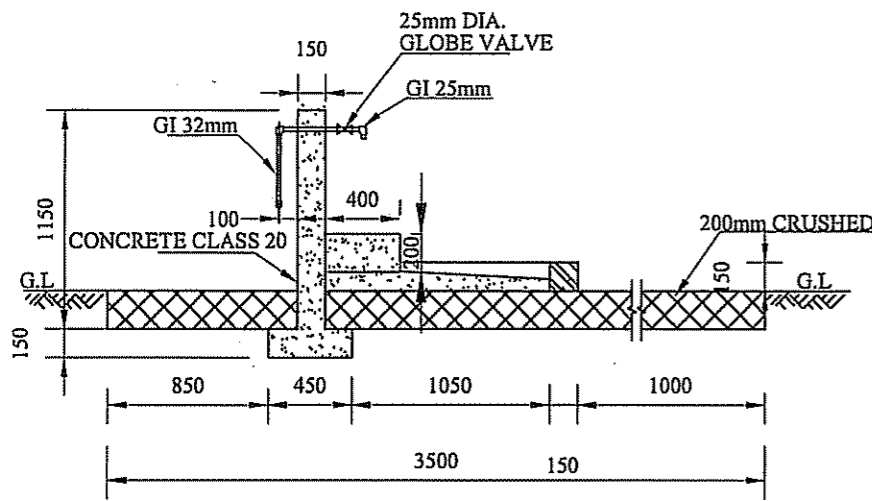
1:5
1:20
1:50

DATE

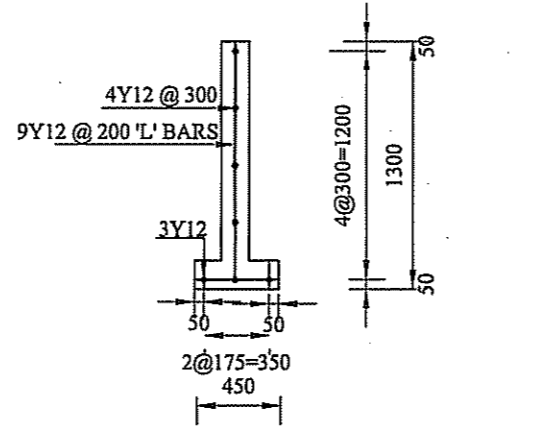
FEB. 2006

DRAWING NO.

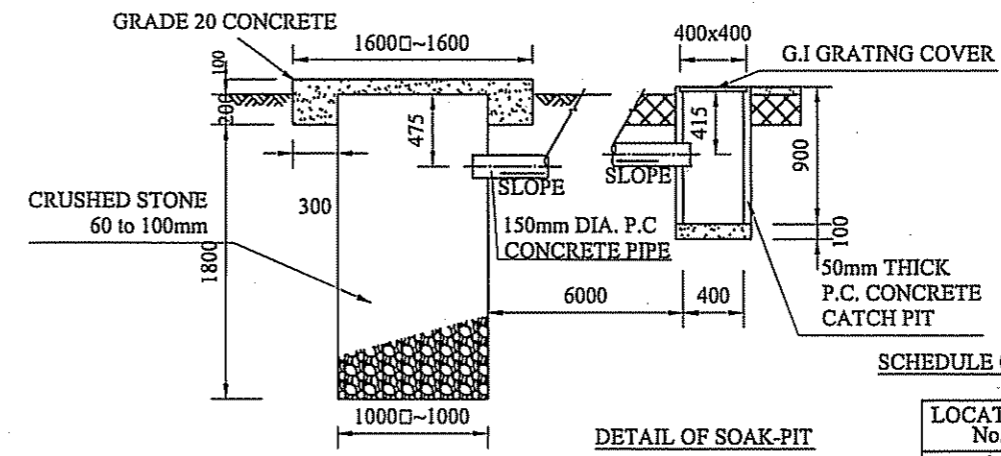
SP-094



SECTION A-A
Scale 1:40



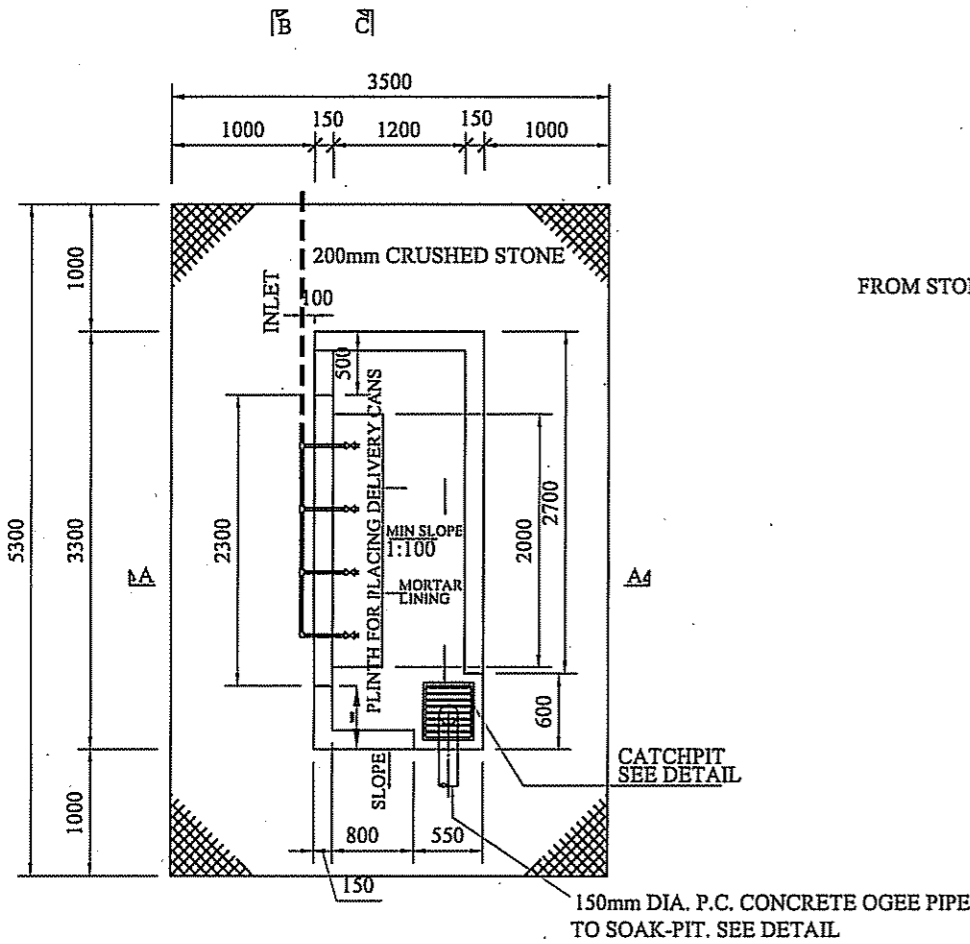
TYPICAL SECTION THRU WALL REINFORCEMENT
Scale 1:40



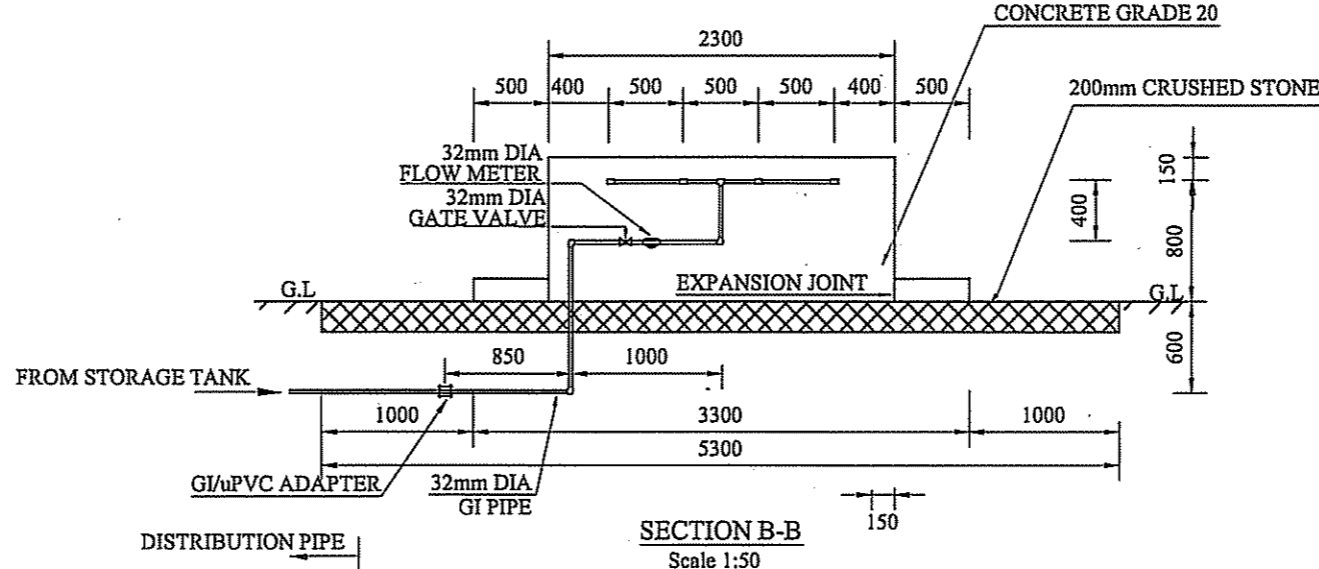
DETAIL OF SOAK-PIT AND CATCH PIT
Scale 1:50

SCHEDULE OF PUBLIC TAPS & WATER KIOSKS

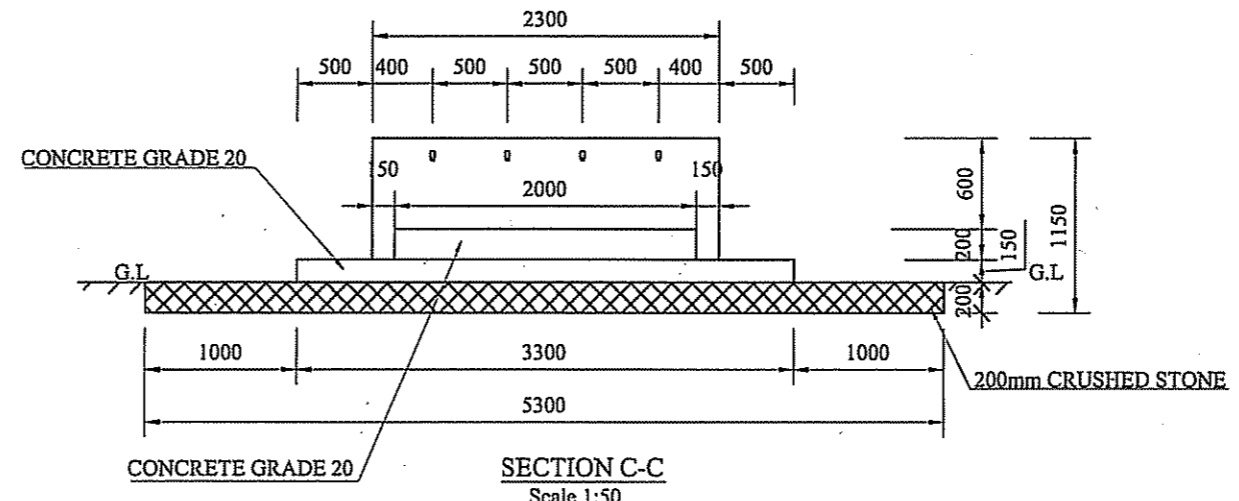
LOCATION No.	PUBLIC TAP	WATER KIOSK	
		A	B
4	1		1
8	1		
10	1		
11			3
15		2	1
16			1
18		1	1
20			1
21	1		
27			1
30			1
32			1
33			1
39	1		
41			2
46			1
54	1		1
55			2
20			1
60	1		
61	1		
62		1	1
66	1		
67			1
69	1		1
74			1
82			1
85	1		
87			1
89			1
93			1



SECTION PLAN
Scale 1:60




SECTION B-B
Scale 1:50



SECTION C-C
Scale 1:50

OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

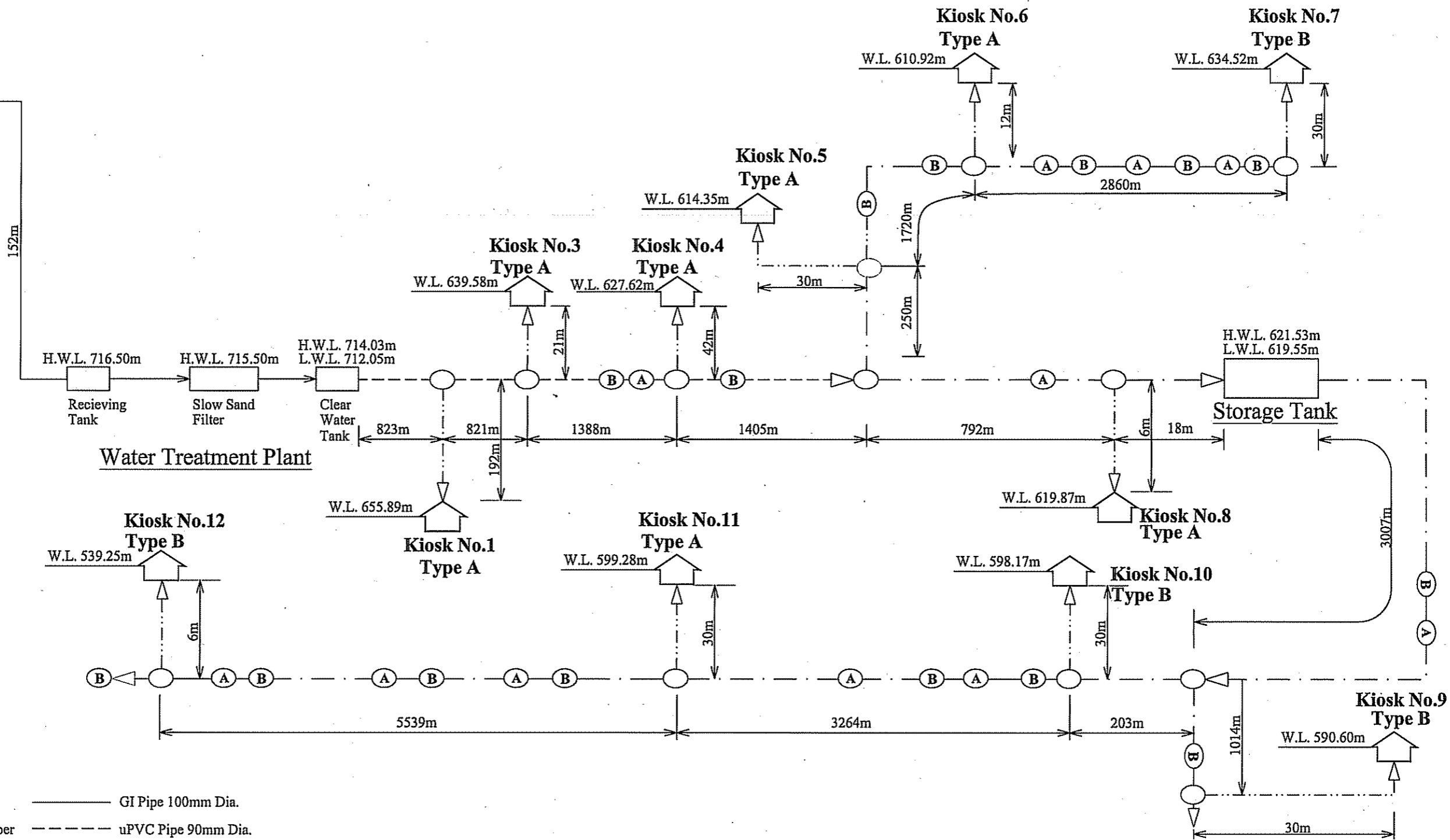
CONSULTING ENGINEERS:
 NIPPON KOEI CO., LTD.

TITLE:
CONSTRUCTION OF WATER SUPPLY FACILITIES BY SUBMERSIBLE PUMP
PUBLIC TAP

SCALE 1:40 1:50 1:60	DATE FEB. 2006	DRAWING NO. SP-097
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H.W.L. 721.04m
L.W.L. 720.19m

Mora Intake



LEGEND

- Branch Chamber
- ⊖ Blow Off Valve Chamber
- ⊕ Air Valve Chamber
- GI Pipe 100mm Dia.
- uPVC Pipe 90mm Dia.
- · - · - uPVC Pipe 63mm Dia.
- · · · · uPVC Pipe 50mm Dia.

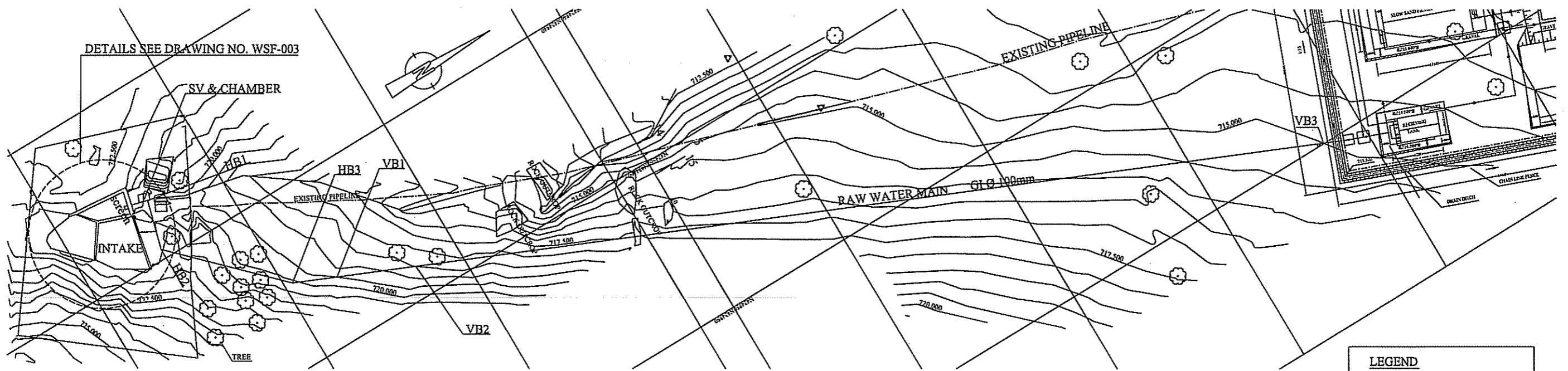
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

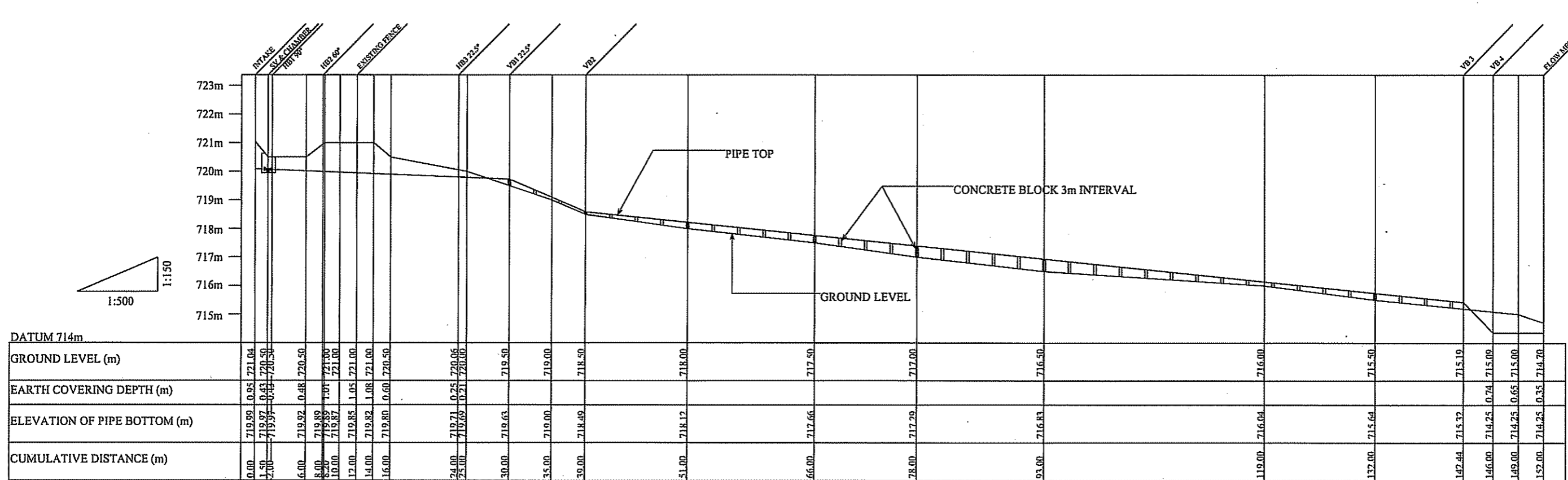
TITLE:
REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
GENERAL FLOW DIAGRAM FOR WATER SUPPLY FACILITIES

SCALE	DATE	DRAWING NO.
NONE	FEB. 2006	WSF-001



PLAN
SCALE 1:500

LEGEND	
HB	= HORIZONTAL BEND
VB	= VERTICAL BEND
SV	= SLUICE VALVE



NOTES
 - INTAKE DETAILS SEE DRAWING No. WSF-003, 004
 - SLUICE VALVE CHAMBER DETAILS SEE DRAWING No. WSF-046

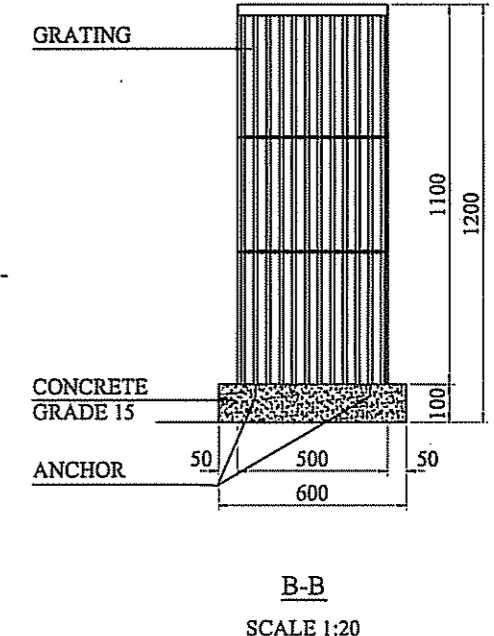
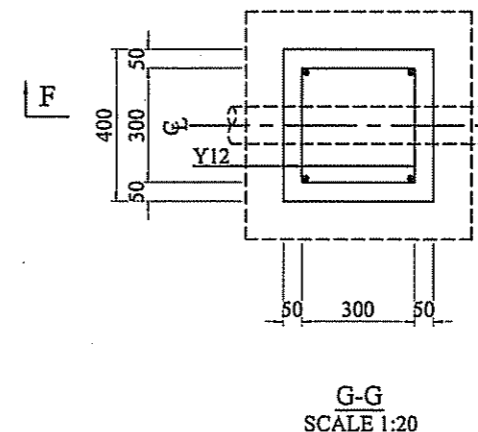
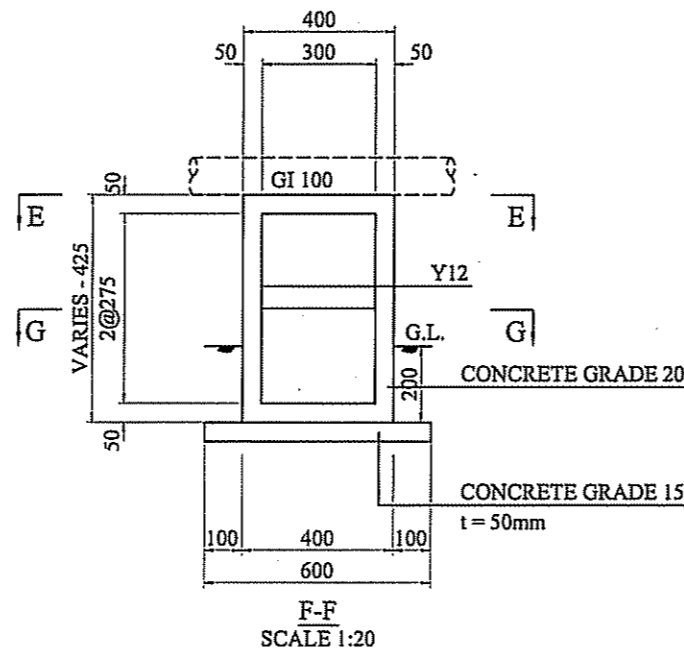
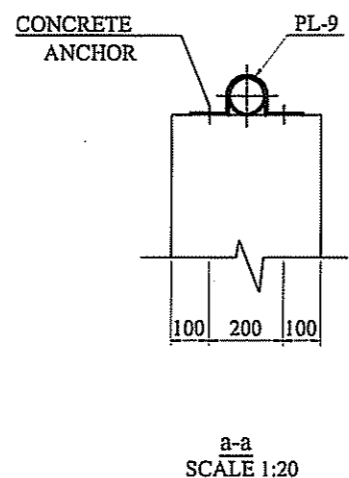
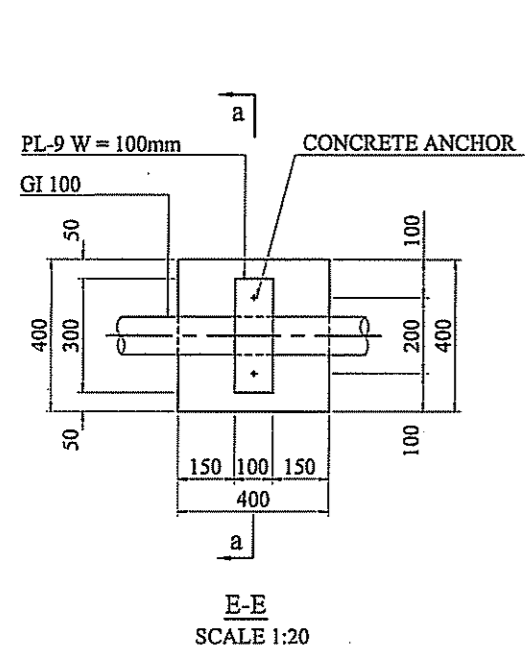
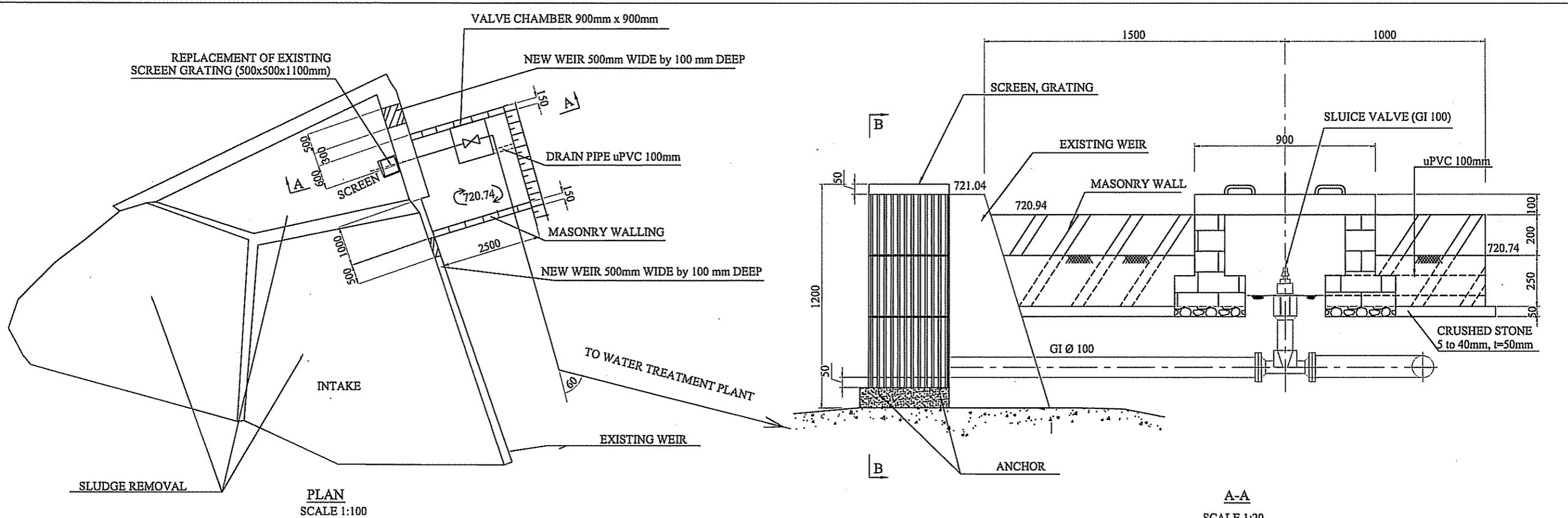
OWNER:
 THE MINISTRY OF WATER AND IRRIGATION
 THE REPUBLIC OF KENYA

PROJECT NAME:
 THE PROJECT FOR
 RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

TITLE:
REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
PLAN & PROFILE OF RAW WATER MAIN

SCALE H = 1:500 V = 1:150	DATE FEB. 2006	DRAWING NO. WSF-002
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CONCRETE BLOCK DETAILS

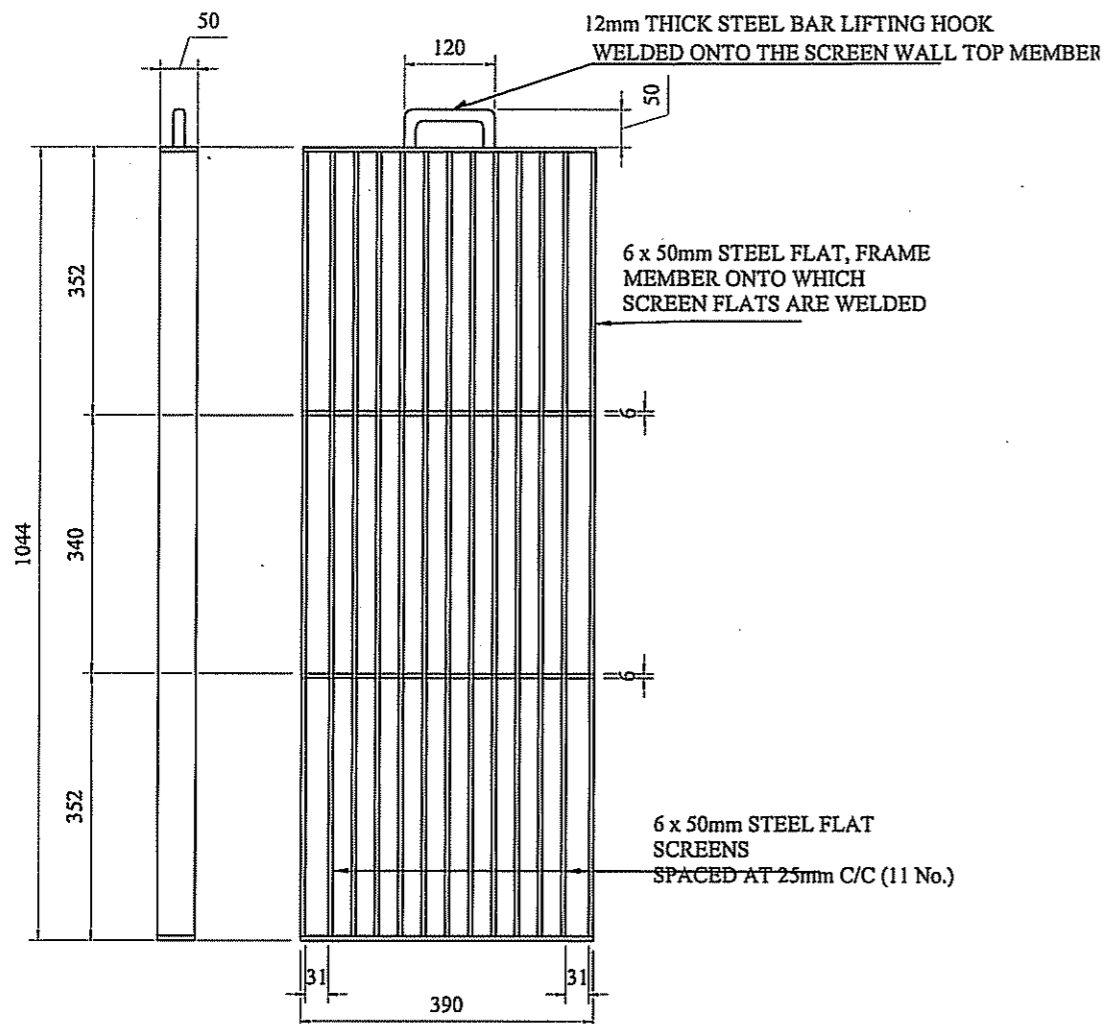
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

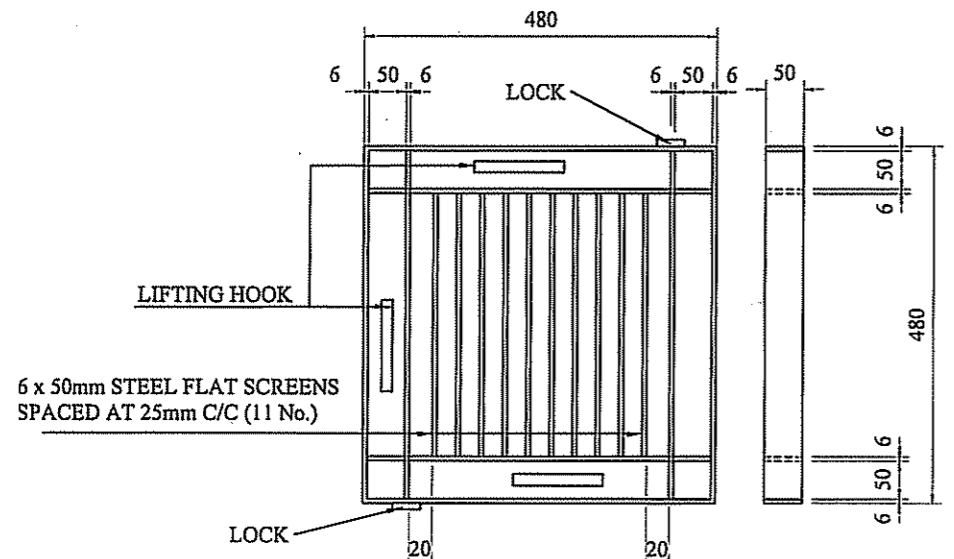
CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

TITLE:
REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
INTAKE STRUCTURE DETAILS (1/2)

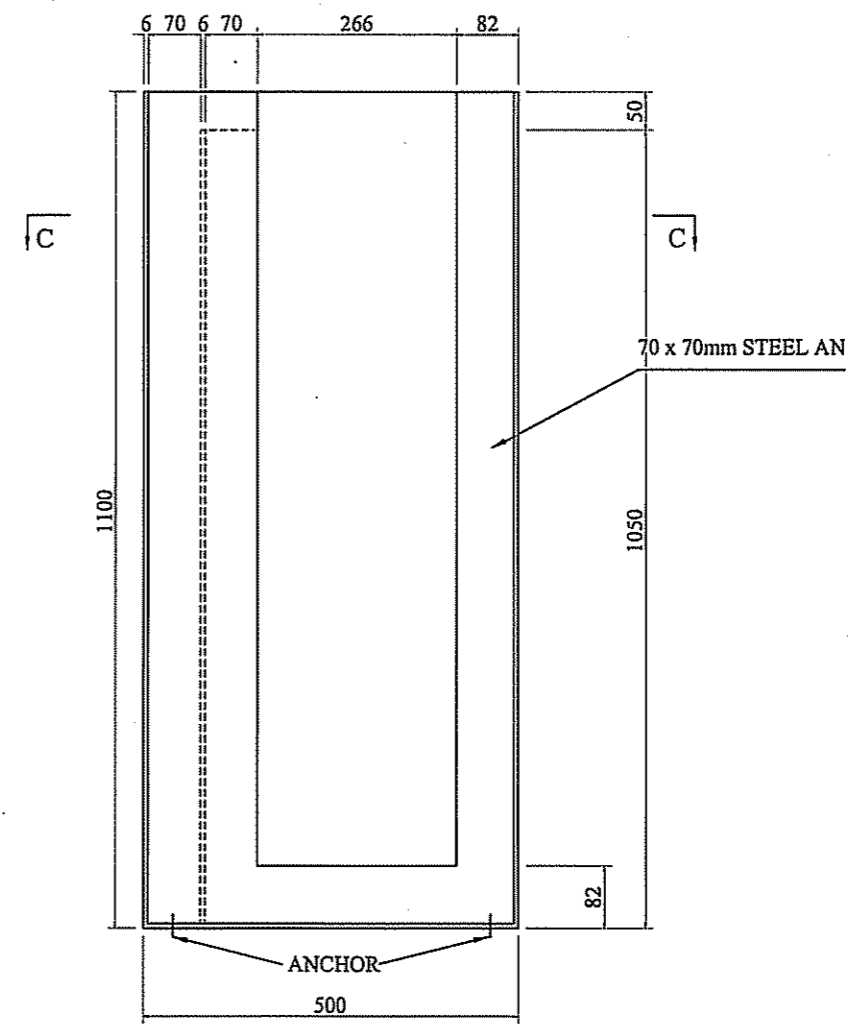
SCALE	DATE	DRAWING NO.
1:100 1:20	FEB.2006	WSF-003



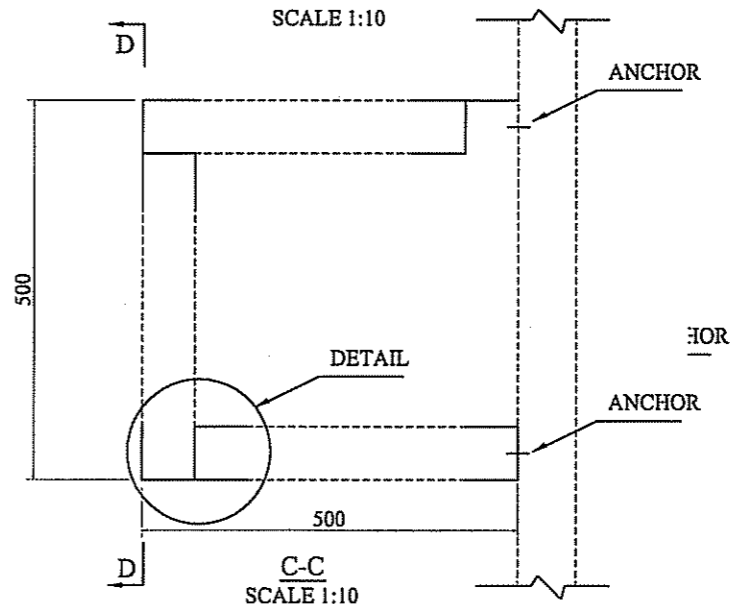
SCREEN WALL
SCALE 1:10



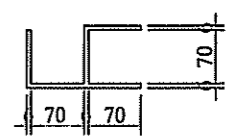
SCREEN COVER
SCALE 1:10



D-D
SCALE 1:10



C-C
SCALE 1:10
SCREEN FRAME



DETAIL
SCALE 1:10

NOTE: ALL STEEL MATERIAL SHALL BE GALVANISED

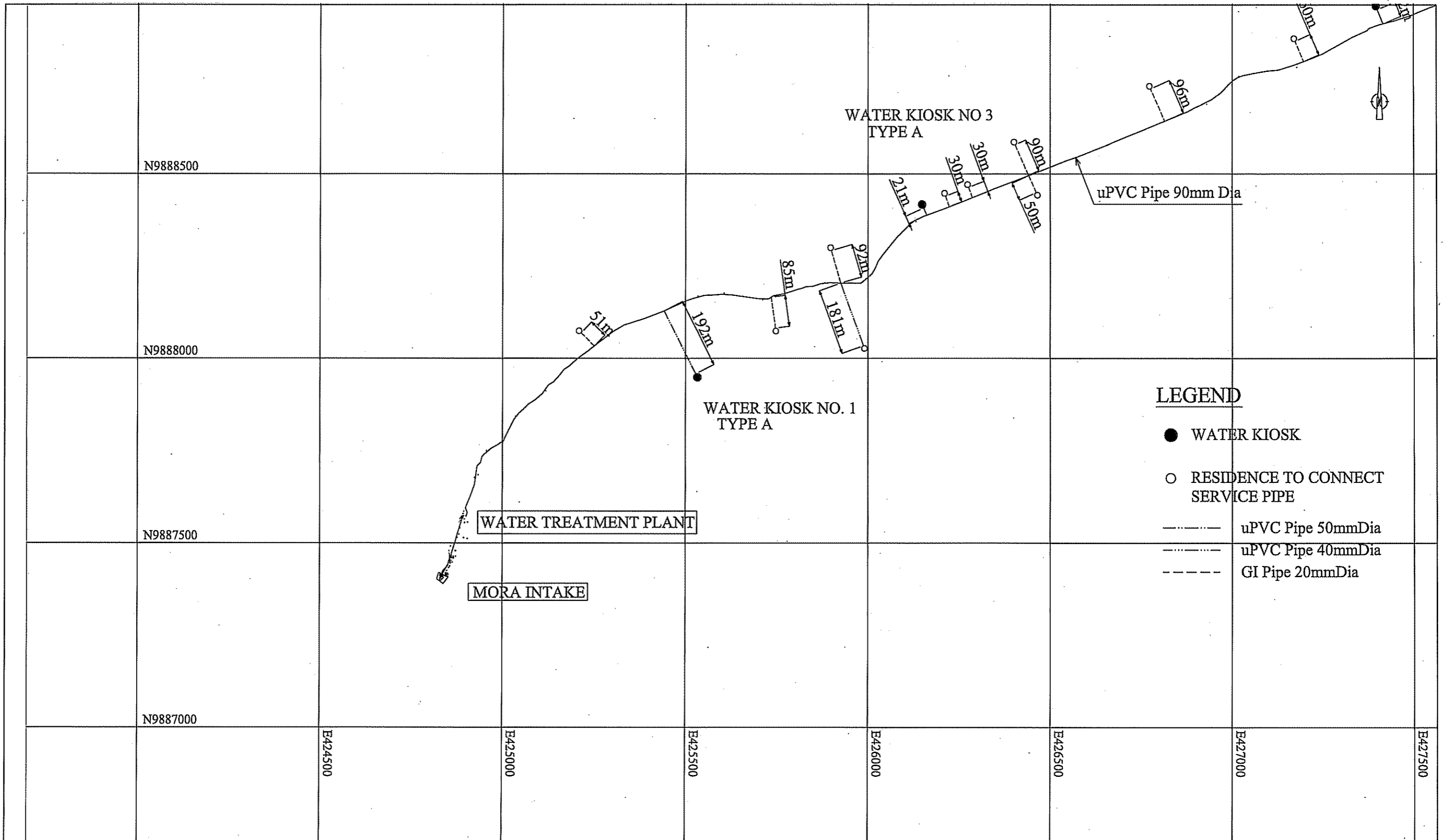
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**


TITLE:
REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
INTAKE STRUCTURE DETAILS (2/2)

SCALE	DATE	DRAWING NO.
1:10	FEB.2006	WSF-004



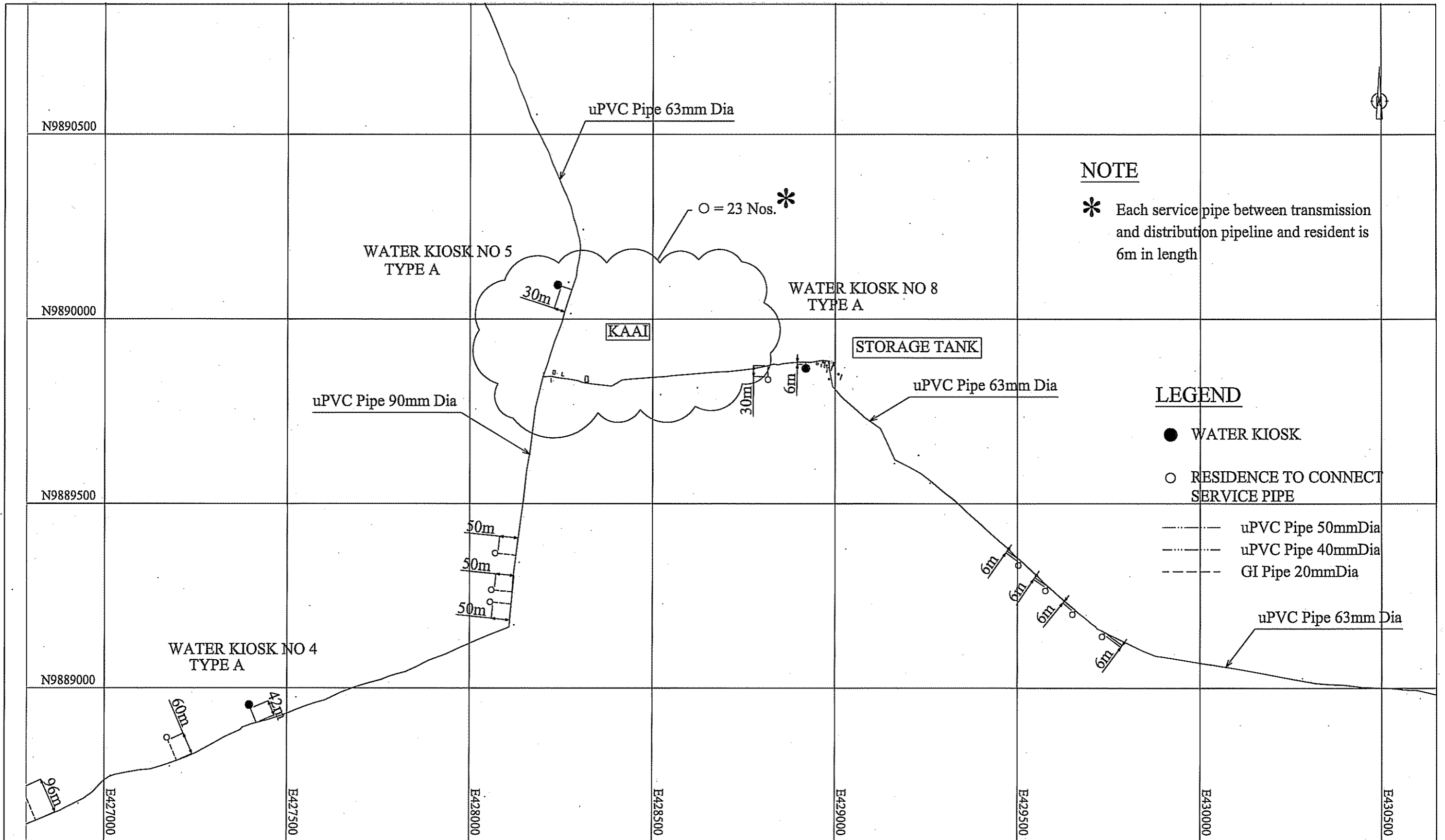
OWNER:
 THE MINISTRY OF WATER AND IRRIGATION
 THE REPUBLIC OF KENYA

PROJECT NAME:
 THE PROJECT FOR
 RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

TITLE:
 REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
 PLAN OF TRANSMISSION AND DISTRIBUTION PIPE LINE(1/9)

SCALE 1:1000	DATE FEB.2006	DRAWING NO. WSF-005
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NOTE

* Each service pipe between transmission and distribution pipeline and resident is 6m in length

LEGEND

- WATER KIOSK
- RESIDENCE TO CONNECT SERVICE PIPE
- uPVC Pipe 50mmDia
- - - uPVC Pipe 40mmDia
- - - GI Pipe 20mmDia
- uPVC Pipe 63mm Dia

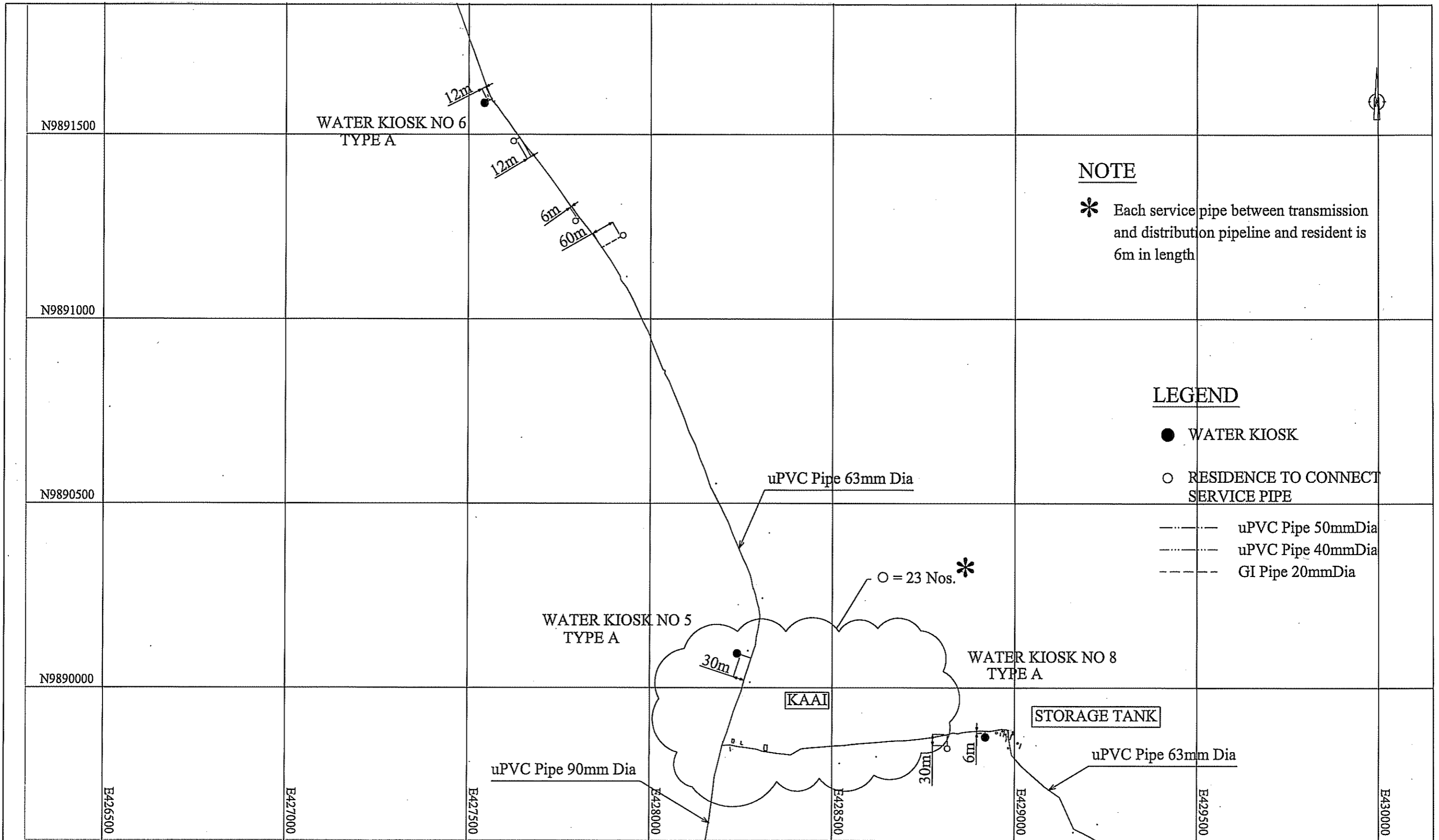
OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY.

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

TITLE:
REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
PLAN OF TRANSMISSION AND DISTRIBUTION PIPE LINE(2/9)

SCALE	DATE	DRAWING NO.
1:1000	FEB.2006	WSF-006



NOTE

* Each service pipe between transmission and distribution pipeline and resident is 6m in length

LEGEND

- WATER KIOSK
- RESIDENCE TO CONNECT SERVICE PIPE
- uPVC Pipe 50mmDia
- uPVC Pipe 40mmDia
- GI Pipe 20mmDia

OWNER:
THE MINISTRY OF WATER AND IRRIGATION
THE REPUBLIC OF KENYA

PROJECT NAME:
THE PROJECT FOR
RURAL WATER SUPPLY

CONSULTING ENGINEERS:
 **NIPPON KOEI CO.,LTD.**

TITLE:
**REHABILITATION OF MORA SPRING WATER SUPPLY FACILITY
PLAN OF TRANSMISSION AND DISTRIBUTION PIPE LINE(3/9)**

SCALE 1:1000	DATE FEB.2006	DRAWING NO. WSF-007
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