



**ACTION AGAINST HUNGER
DAIKUNDI OFFICE
WASH DEPARTMENT**

(TECHNICAL DRAWING PART)

PROJECT NAME:
WATER SUPPLY NETWORK PROJECT

JUN, 10, 2024

PREPARED BY: WASH DEPARTMENT

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DW.No:

G-101

Action Against Hunger

WASH Department

Project Name

Province

District

Water Supply

Daikundi

Shahrستان

Design&Drawing by

Chick by

Approved by

Mohamad Nekandesh

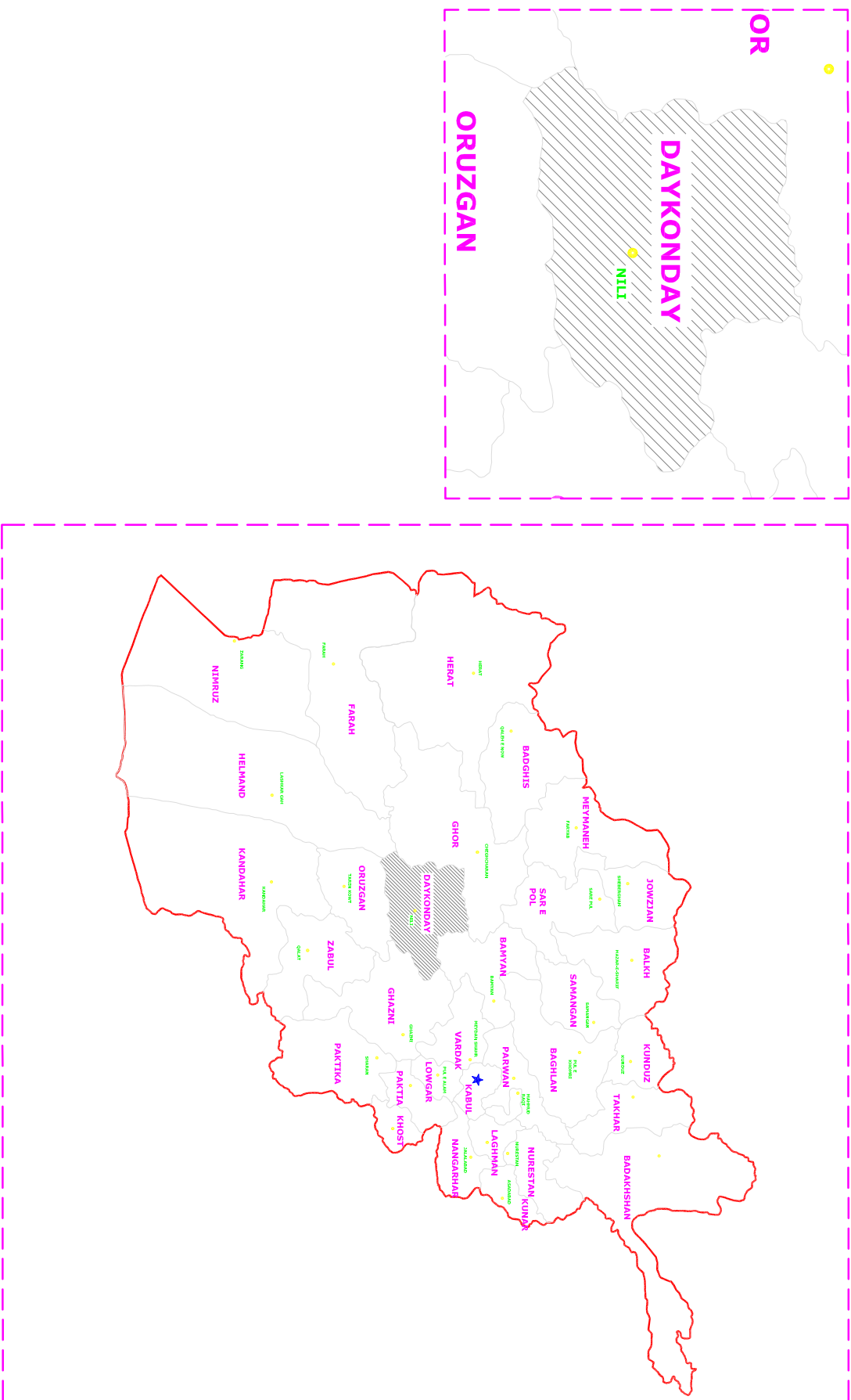
Mohamad Nekandesh

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

LOCATION OF PROJECT AT DAIKUNDI, AFGHANISTAN



DW.No:

G-102

Action Against Hunger

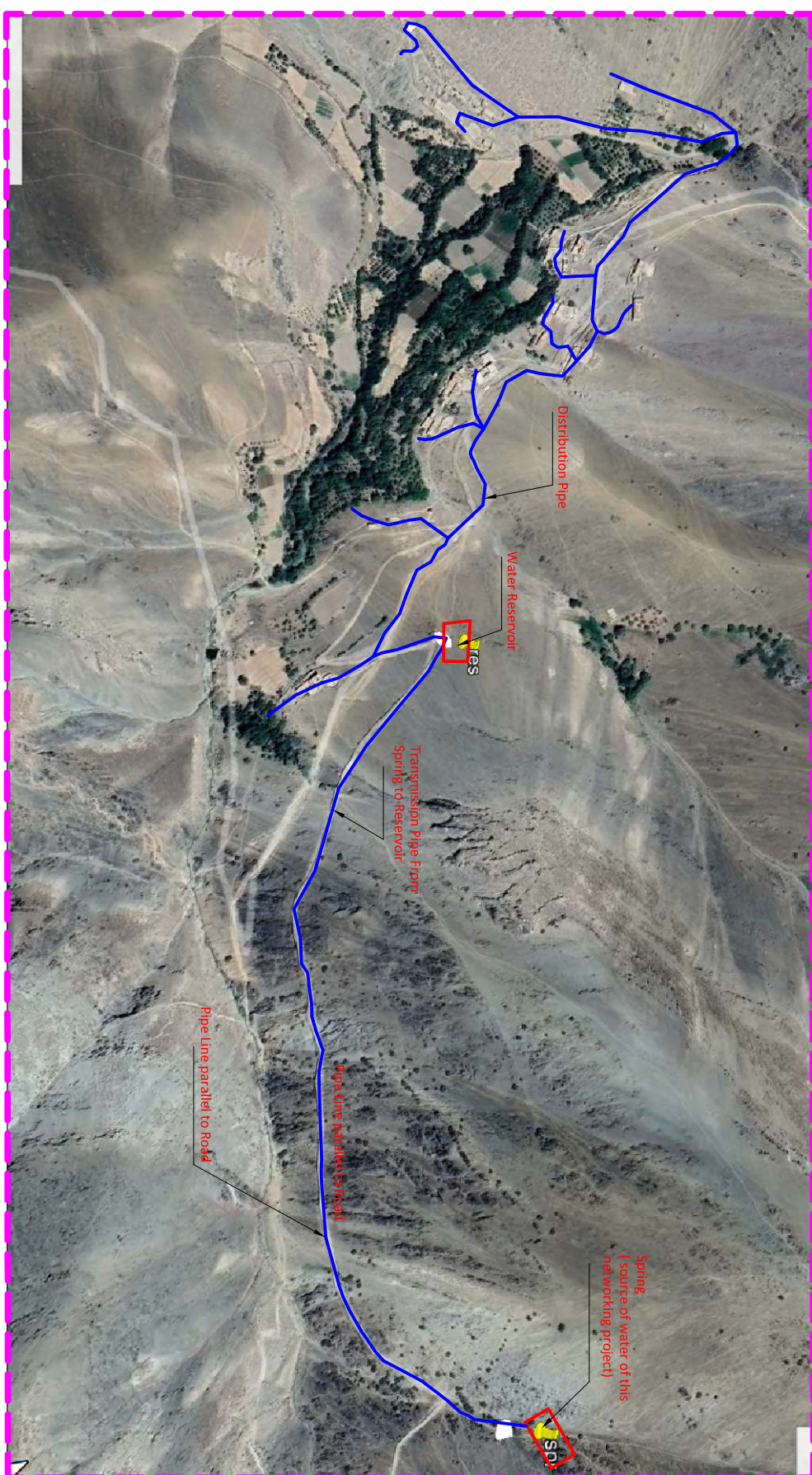
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahrstan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Site plan for Robat Jamalog Networking project



G-103 SITE PLAN

SCALE: N.T.S



DW.No:

G-103

Action Against Hunger

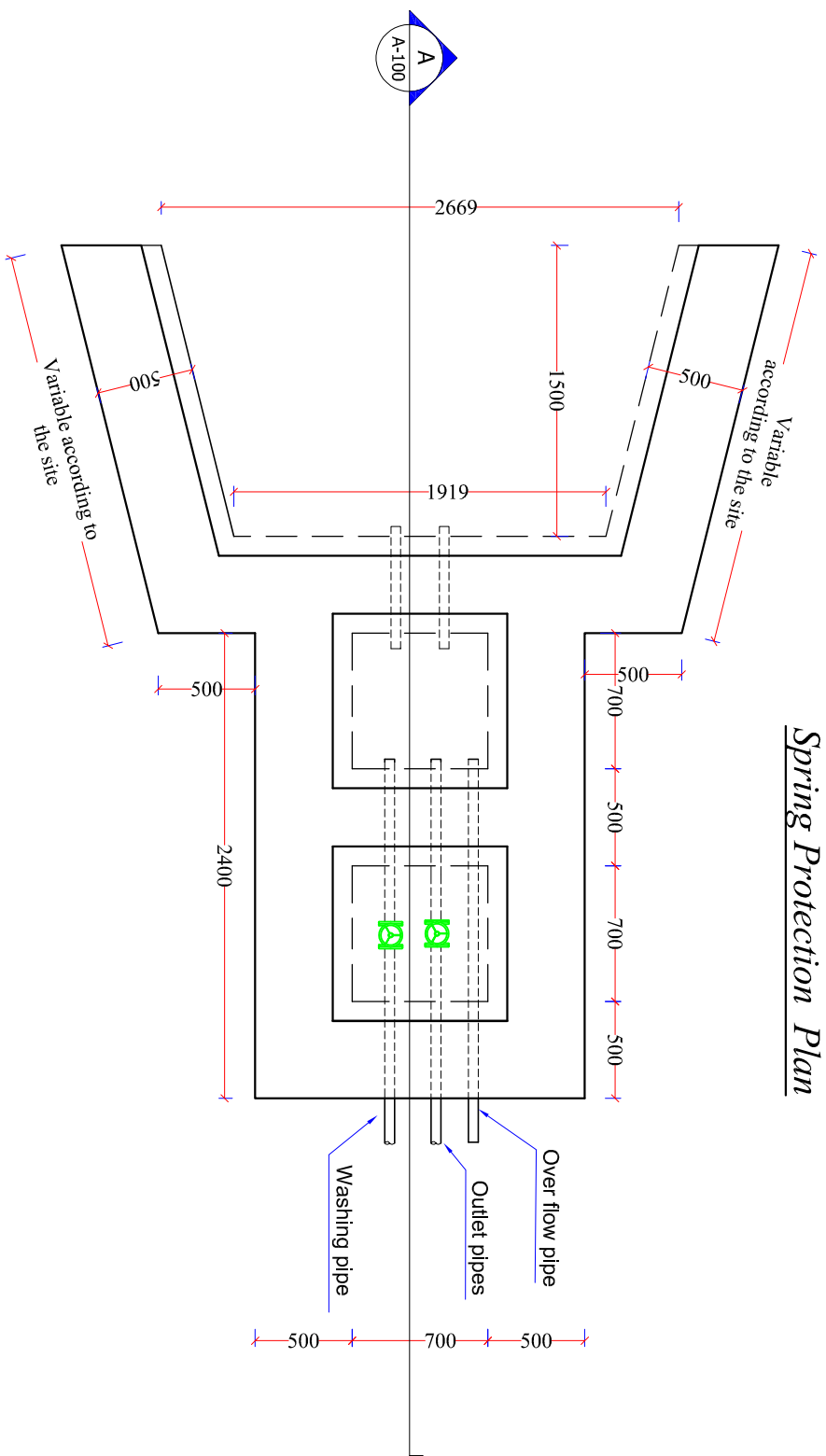
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	(.....)	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

- Note:**
- 1- All dimensions are in mm unless otherwise stated.
 - 2- All PCC works should be with 1:2:4 mortar unless otherwise stated.
 - 3- All RCC works should be with 1:1.5:3 mortar unless otherwise stated.
 - 4- Stone masonry must be worked with 1:4 mortar unless otherwise stated.
 - 5- Curing must be continued upto 28 days.
 - 6- Clear and Clean water must be used every where.



Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification



DW.No:

A-101

Action Against Hunger

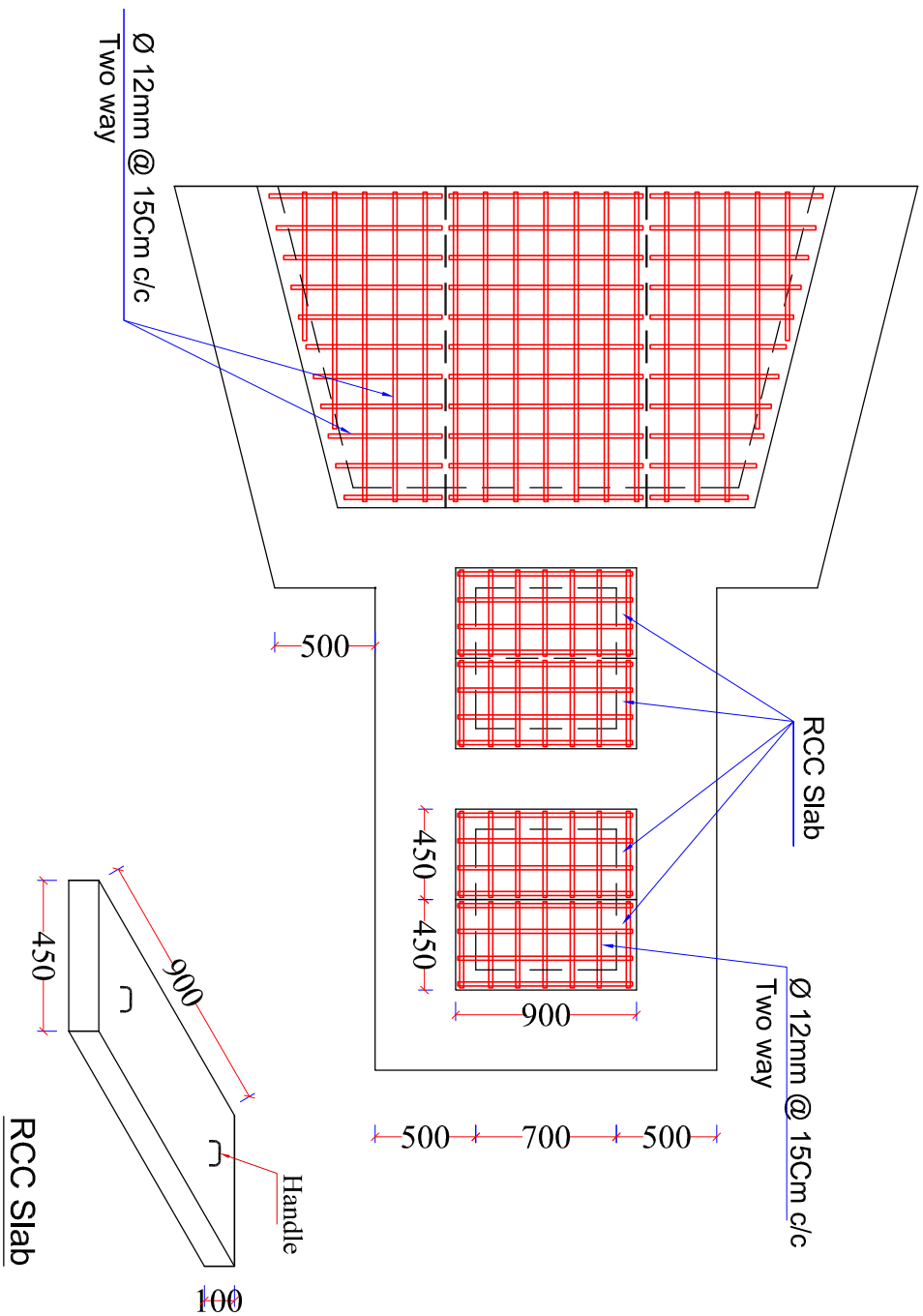
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

Spring Protection Structure Reinforcement



DW.No:

A-102

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahristan

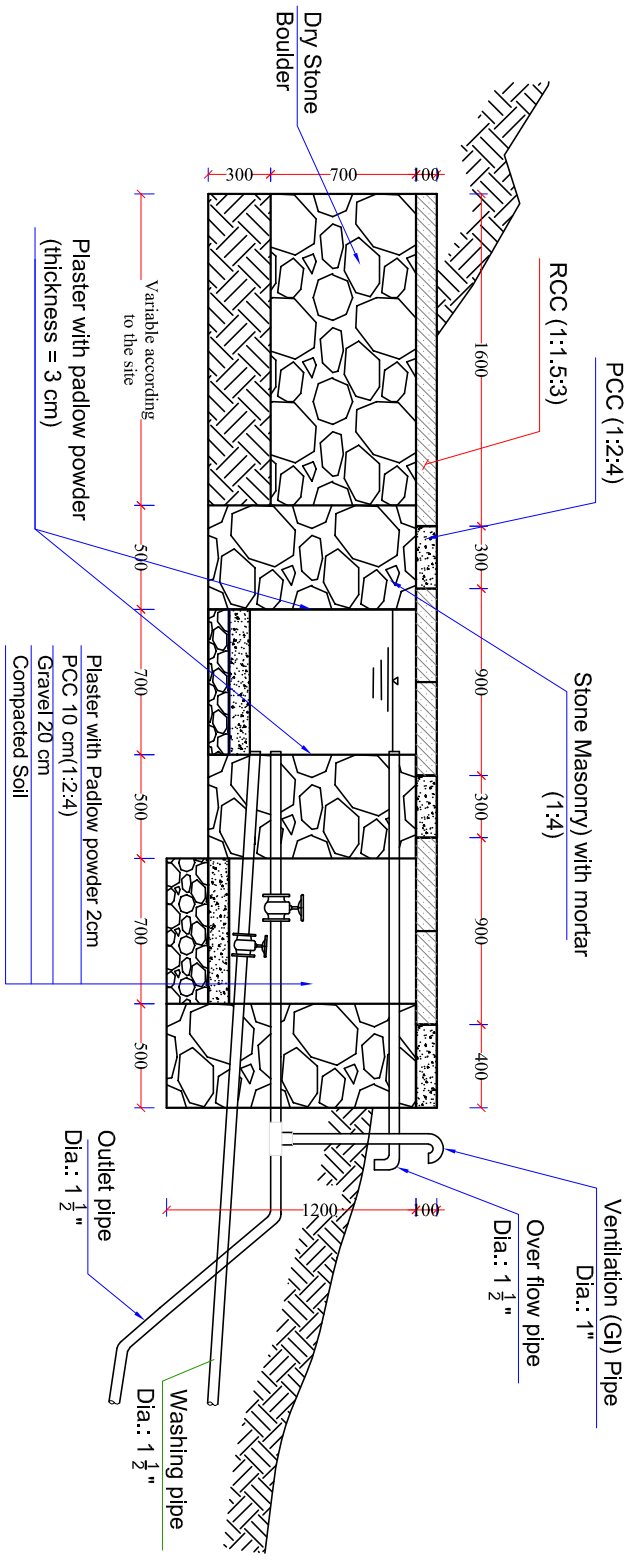
Approved by

Yaddullah Jalali

Scale:


Note: All dimension are in millimeter

Note:
The inside of sedimentation and gate valve box should be plastered with cement-sand mortar and padlow powder.



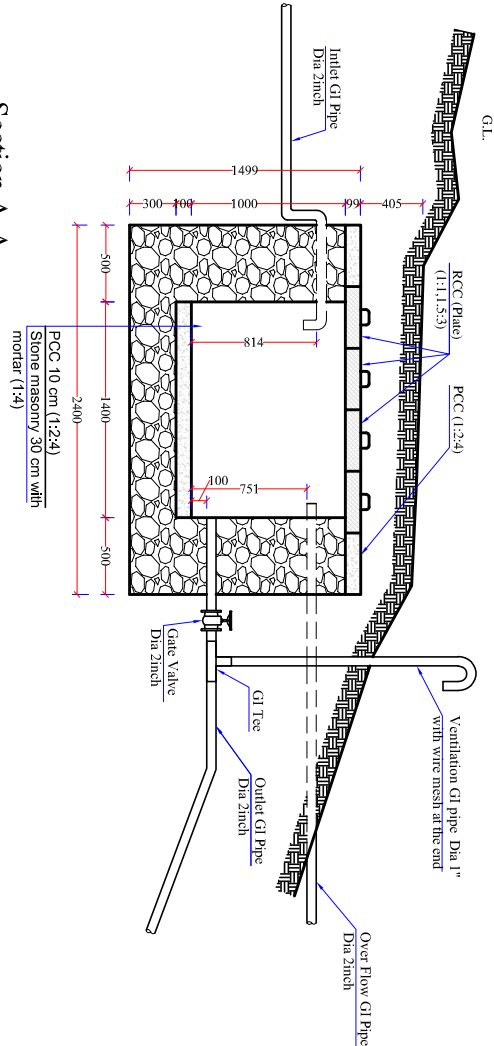
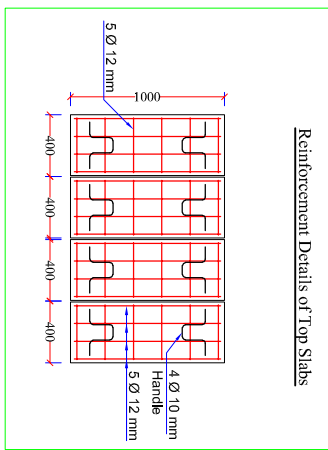
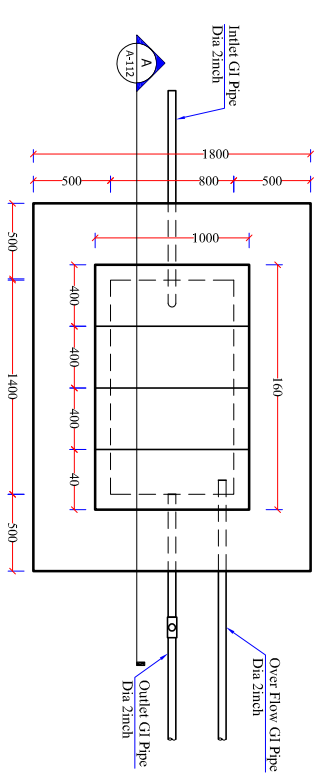
Section A - A

Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification

	DW.No:	Action Against Hunger				Scale:
		WASH Department				Note: All dimension are in millimeter
	A-103	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
		Province	Daikundi	Chick by	Mohamad Nekandesh	
District		Shahristan	Approved by	Yaddullah Jalali		

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
 - 2- During RCC work vibrator must be used to avoid water leakage from reservoir.
 - 3- All PCC works should be with 1:2:4 mortar unless otherwise stated.
 - 4- All RCC works should be with 1:1.5:3 mortar.
 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.

BREAK PRESSURE TANK



Section A-A

Note:
All GI pipe and polyethylene pipe diameters chose according to BoQ specification



DW.No:	Action Against Hunger				Scale:
	WASH Department				Note: All dimension are in millimeter
A-104	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
	Province	Daikundi	Chick by	Mohamad Nekandesh	
	District	Shahristan	Approved by	Yaddullah Jalali	

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
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 - 3- All PCC works should be with 1:2:4 mortar unless otherwise stated.
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 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.

Over flow 1
1 1/2" GI Pipe

Main hole
60x60 cm

Inlet 1 1/2"
GI pipe

Out let Pipe
2"GI pipe

Drain pipe
GI 2 " inch



DW.No:

A-105

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahristan

Approved by

Yaddullah Jalali

Scale:

Note: All
dimension are
in millimeter

1

2


3

4

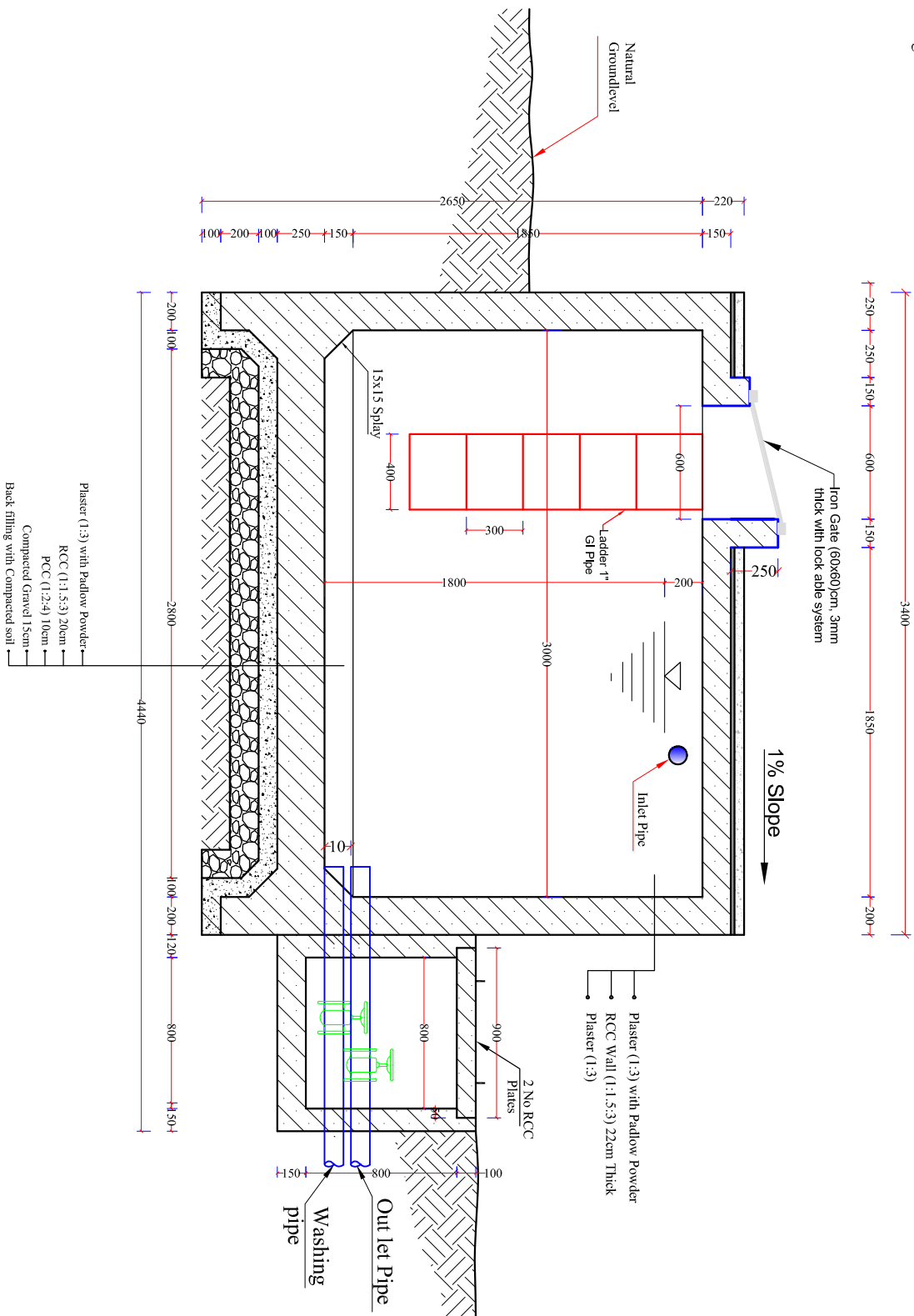
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SCALE: 1:20

	DW.No:	Action Against Hunger				Scale:
		WASH Department				Note: All dimension are in millimeter
	A-106	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
		Province	Daikundi	Chick by	Mohamad Nekandesh	
District		Shahristan	Approved by	Yaddullah Jalali		

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
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 - 4- All RCC works should be with 1:1.5:3 mortar.
 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.



A-107 SECTION A-A
REF: SCALE 1:20



DW.No:

A-107

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahrstan

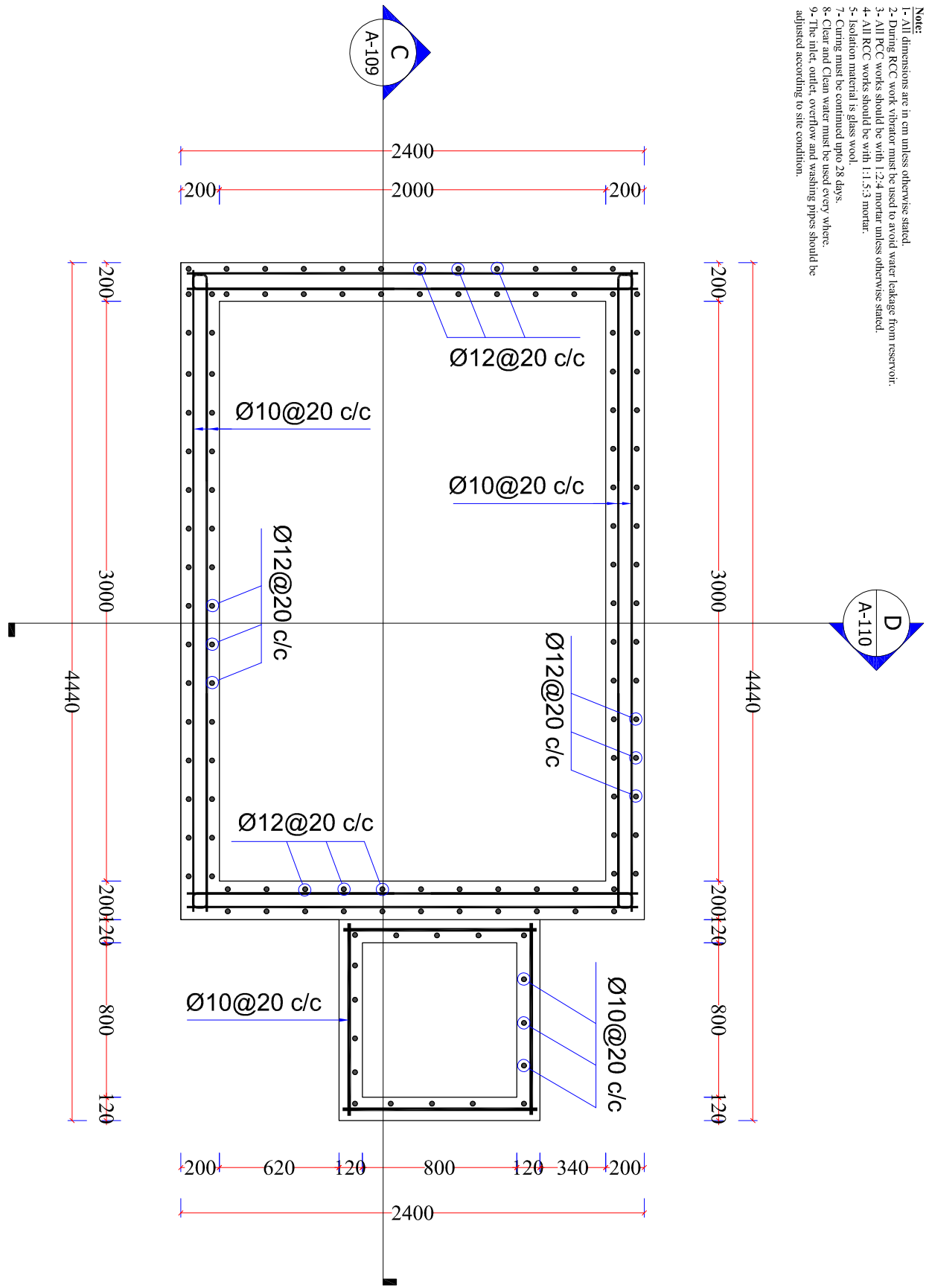
Approved by

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

- Note:**
- 1- All dimensions are in cm unless otherwise stated.
 - 2- During RCC work vibrator must be used to avoid water leakage from reservoir.
 - 3- All RCC works should be with 1:2:4 mortar unless otherwise stated.
 - 4- All RCC works should be with 1:1.5:3 mortar.
 - 5- Isolation material is glass wool.
 - 7- Curing must be continued upto 28 days.
 - 8- Clear and Clean water must be used every where.
 - 9- The inlet, outlet, overflow and washing pipes should be adjusted according to site condition.



A-108 HORIZONTAL REINFORCEMENT PLAN
SCALE: 1:20



DW.No:

A-108

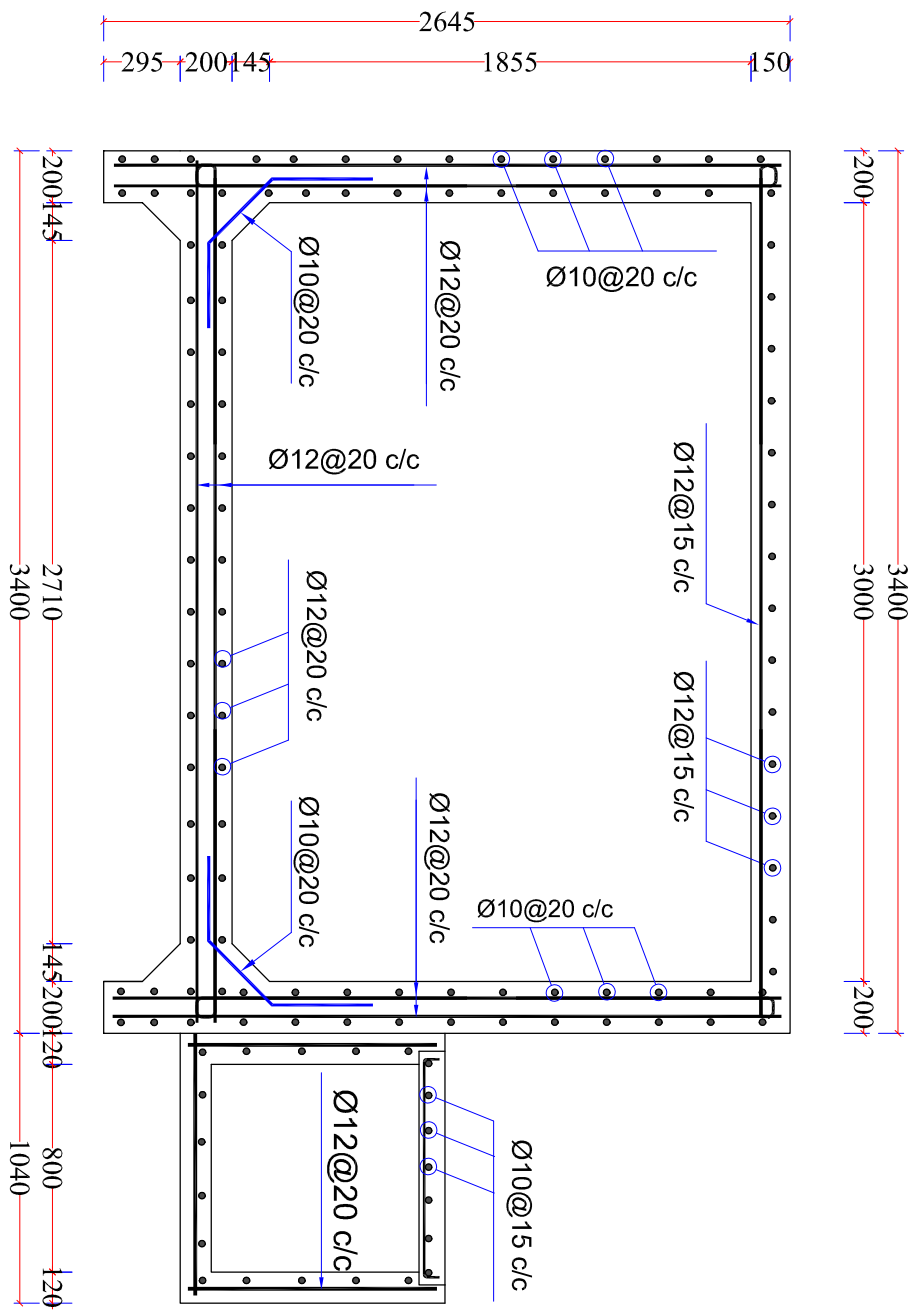
Action Against Hunger

WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter



A.109 SECTION C-C

SCALE: 1:20



DW.No:

A-109

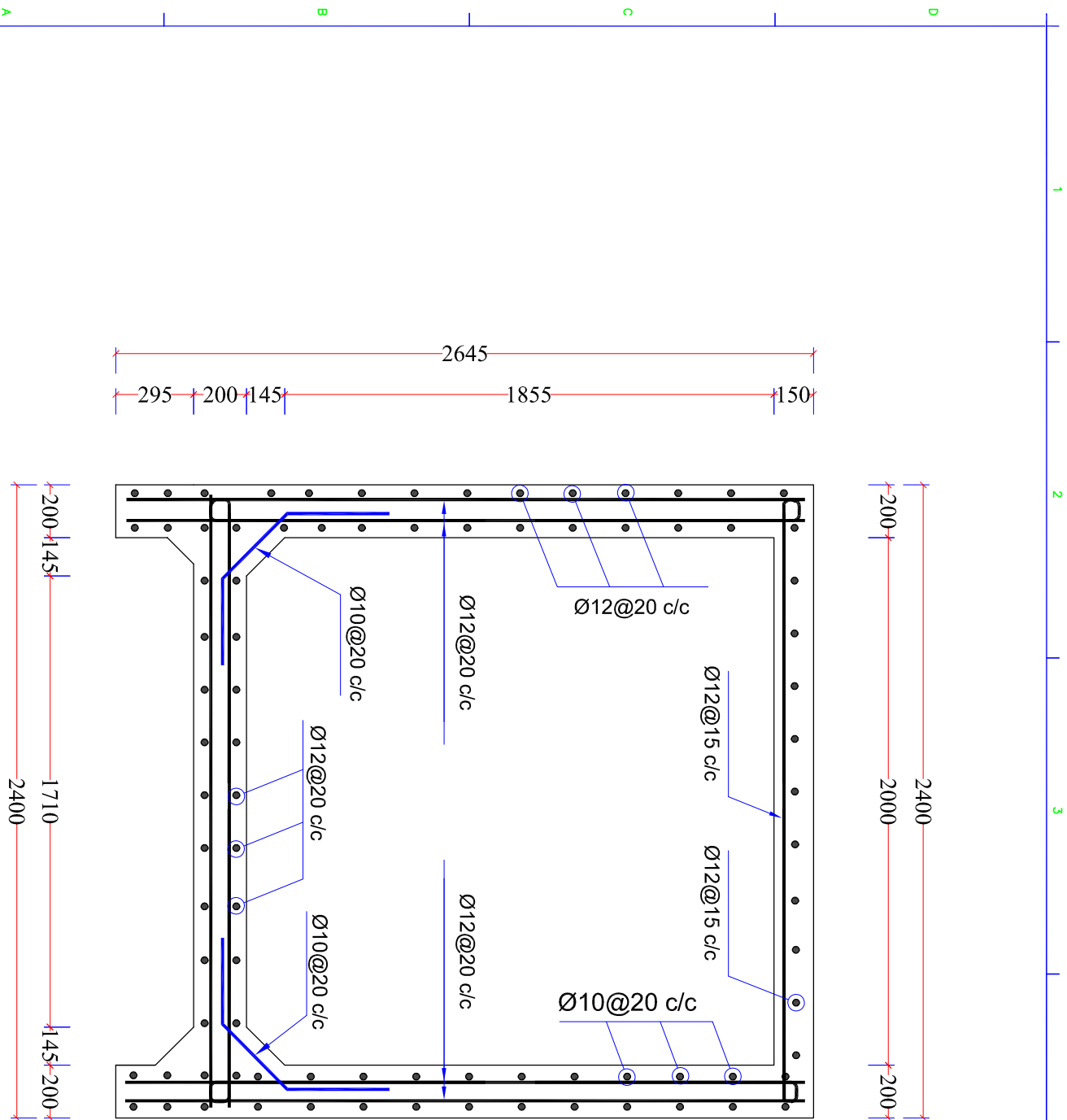
Action Against Hunger

WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter



DW.No:

A-110

Action Against Hunger

WASH Department

Project Name

Water Supply

Design&Drawing by

Mohamad Nekandesh

Province

Daikundi

Chick by

Mohamad Nekandesh

District

Shahristan

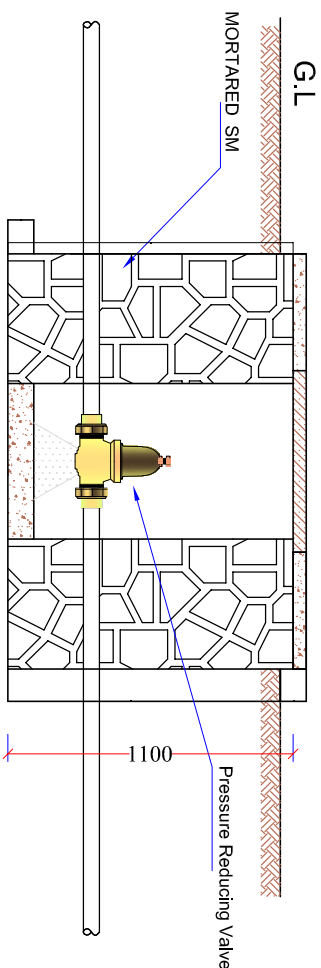
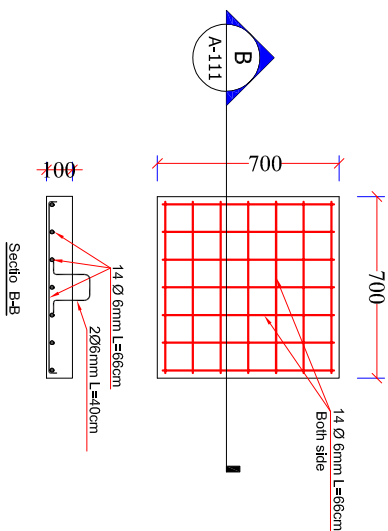
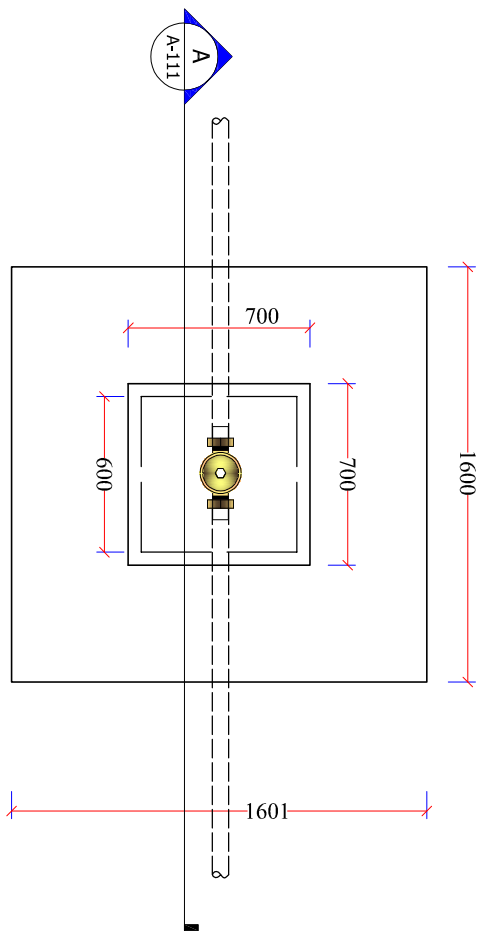
Approved by

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

VALE BREAK PRESSURE



SECTION A-A

TYPICAL DIMENSIONS OF VALVE CHAMBER

S.NO.	DIAMETER OF VALVE (mm.)	DIMENSION (mm.) (L x B)
1.	50	600 X 600

Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification

A.111 VALE BREAK PRESSURE

REF.

SCALE: 1:20



DW.No:

A-111

Action Against Hunger

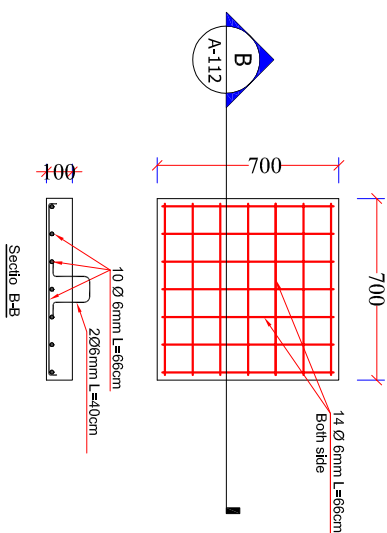
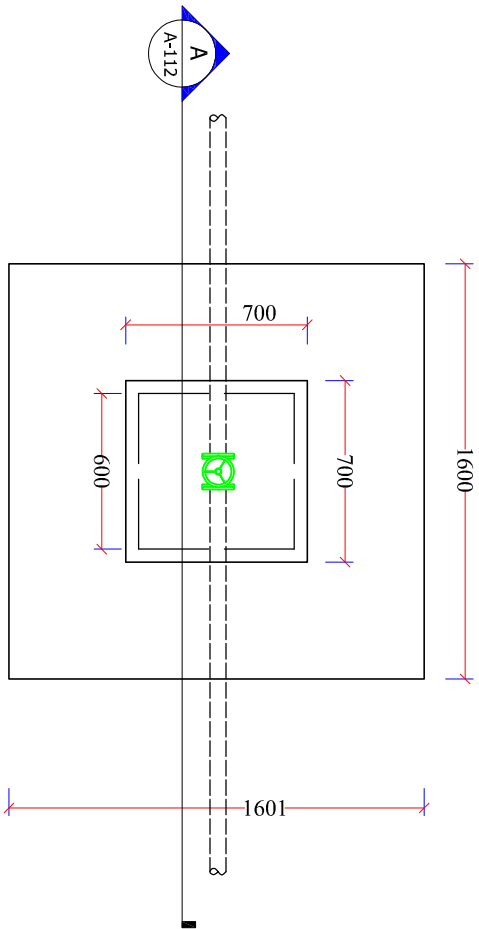
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

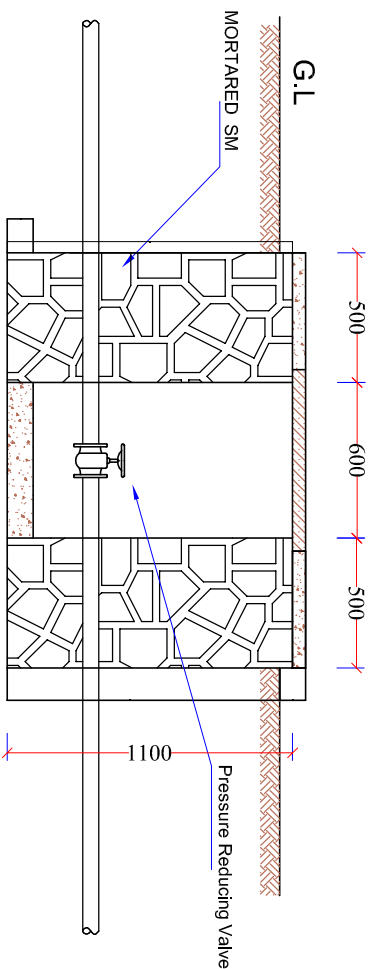
GATE VALE BOX FOR CONTROL



TYPICAL DIMENSIONS OF VALVE CHAMBER

S.NO.	DIAMETER OF VALVE (mm.)	DIMENSION (L x B)
1.	50	600 X600

SECTION A-A



Note:
All GI and polyethylene pipes diameters must chose according to BoQ specification

A-112 GATE VALE BOX

SCALE: 1:20



DW.No:

A-112

Action Against Hunger

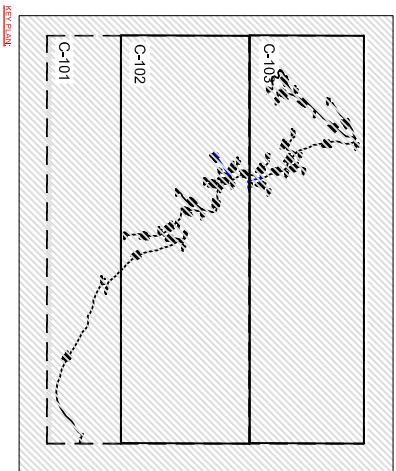
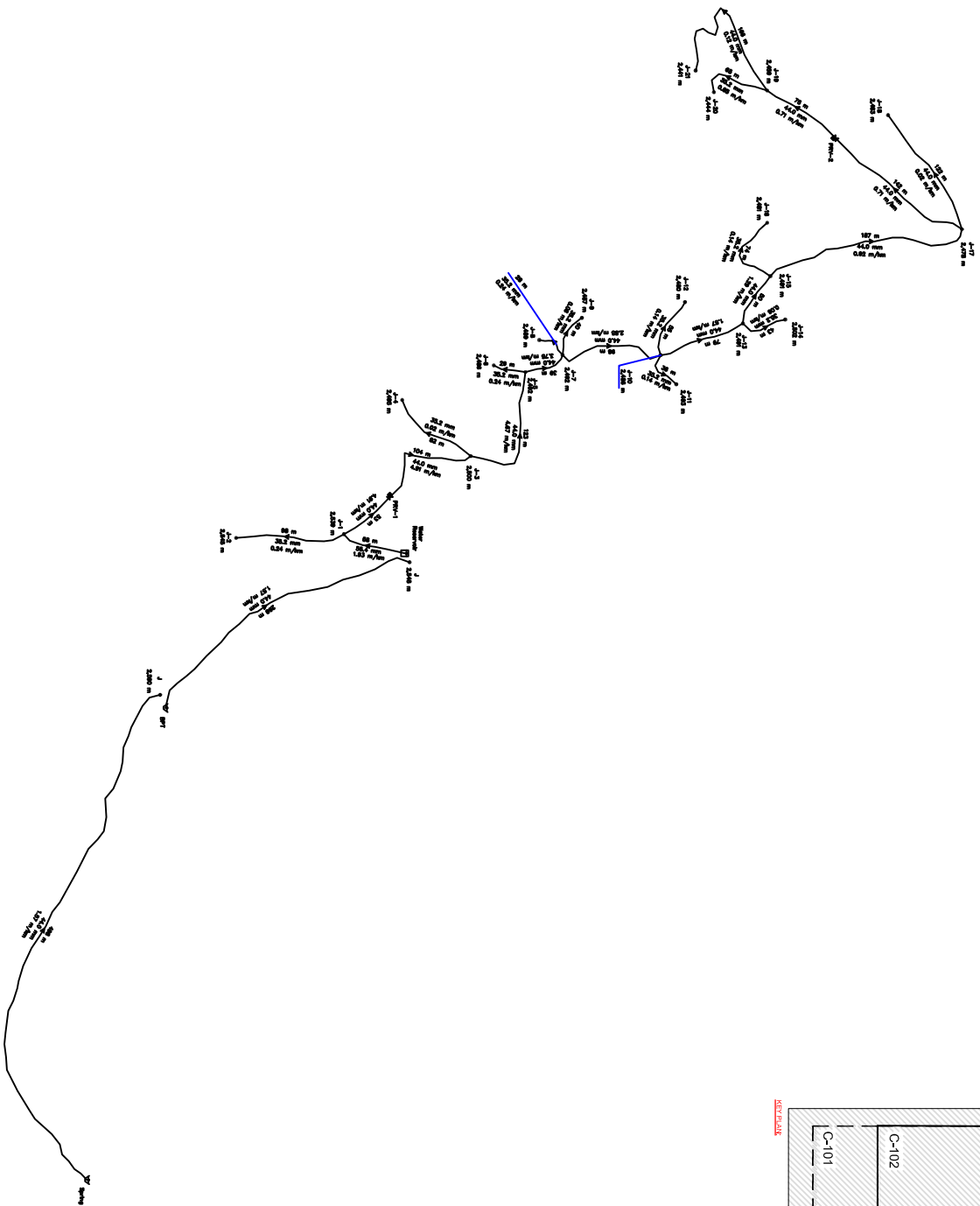
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

1. Node ID
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2546.000
B.P.T	286,872.21	3,718,819.09	2590.000
V.B.P-1	286,684.53	3,719,018.66	2507.000
V.B.P-2	286,365.62	3,719,415.00	2465.000

LEGEND	
SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Action Against Hunger

WASH Department

DW.No:

C-100

Note: All dimension showed in sheet

Project Name
Province
District

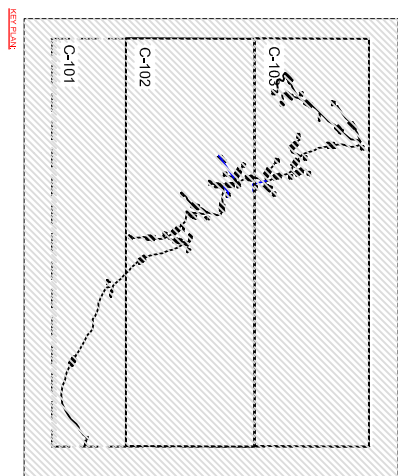
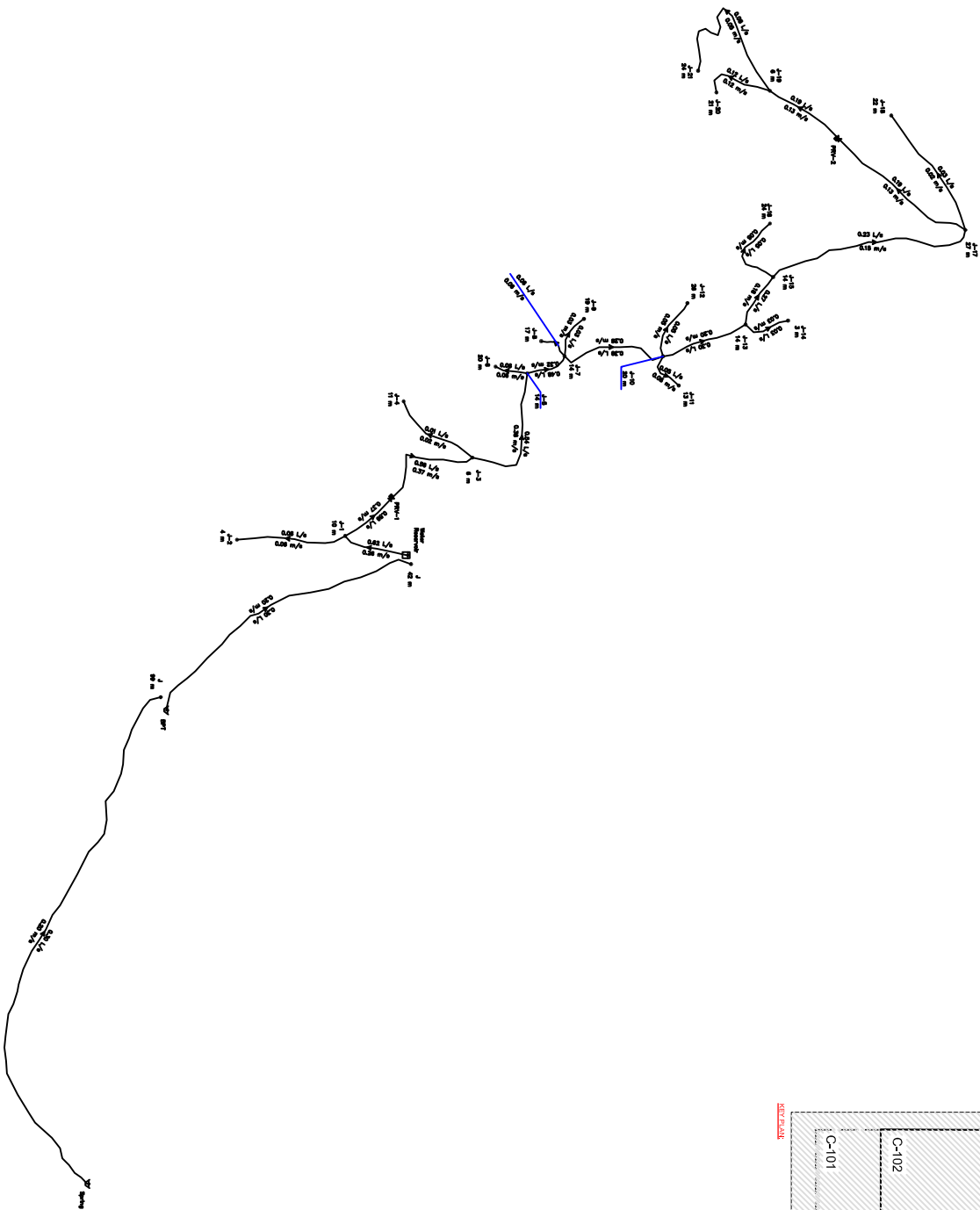
Water Supply
Daikundi
Shahristan

Design by
Drawing& Lyout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....



1. Node ID
2. Flow in (Liter/ sec)
3. Velocity in (Meter/sec)
4. Pressure Head (Meter)



LEGEND			
SPRING PROTECTION			
BREAK PRESSURE TANK			
WATER RESERVOIR			
VALE BREAK PRESSURE			
GREEN AREA			
BENCH MARK			
GREEN AREAS			
PCC			
ROC			

Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,281.97	3,719,748.32	2890.000
RESERVOIR	286,731.72	3,719,032.14	2548.000
B.P. 1	286,872.21	3,718,819.09	2590.000
V.B-P-1	286,584.53	3,719,016.66	2507.000
V.B-P-2	286,365.82	3,719,415.00	2465.000

Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2546.000
B.P.T	286,872.21	3,718,819.09	2590.000
V.B.P-1	286,684.53	3,719,018.66	2507.000
V.B.P-2	286,365.62	3,719,415.00	2465.000

Action Against Hunger

WASH Department

DW.No:

C1-100

Project Name
Province
District

Water Supply
Daikundi
Shahristan

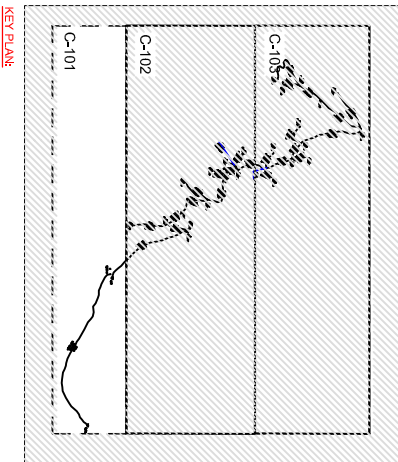
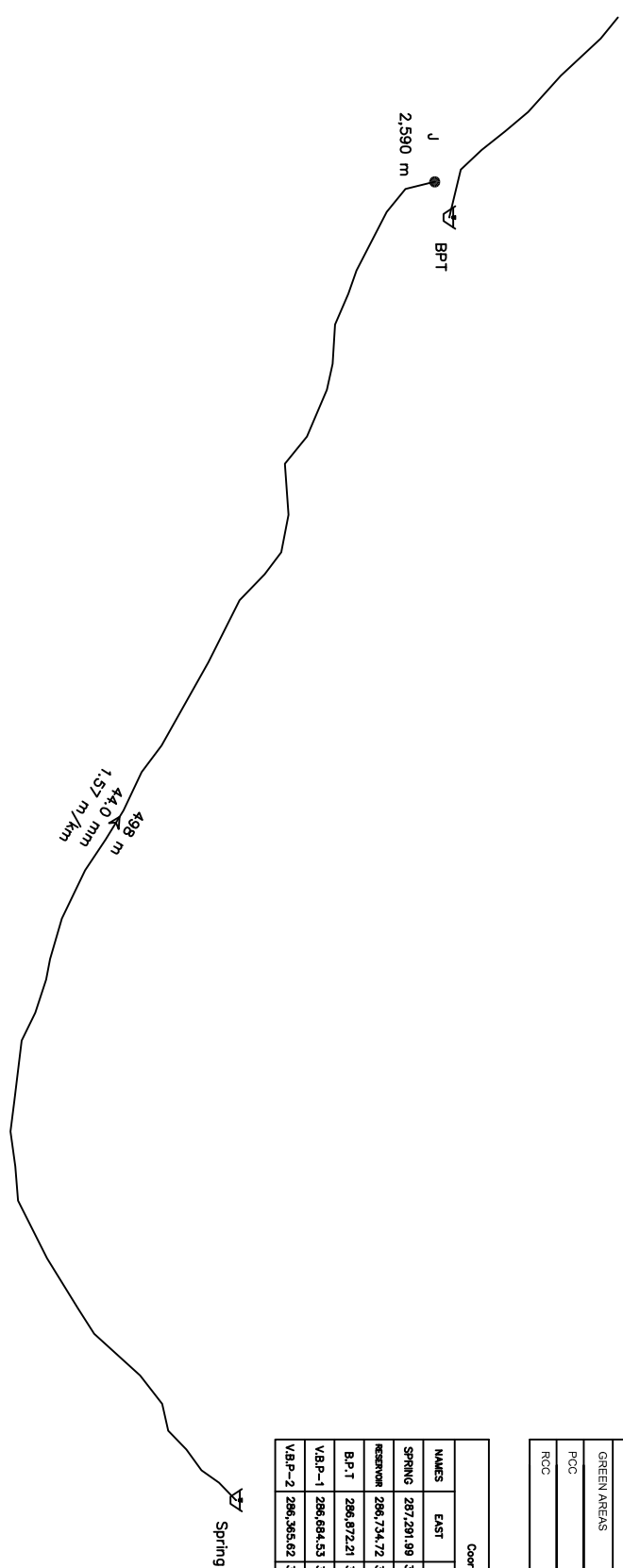
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN:

LEGEND:

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2548.000
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V.B.P-2	286,365.62	3,719,415.00	2465.000

Action Against Hunger

WASH Department

DW.No:

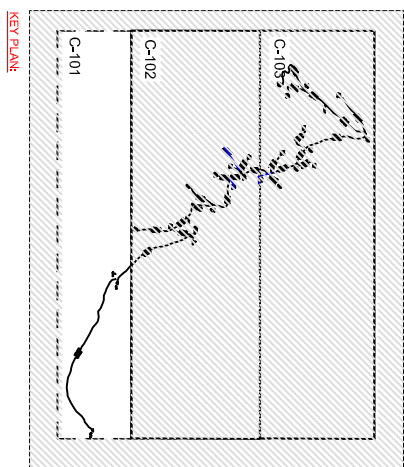
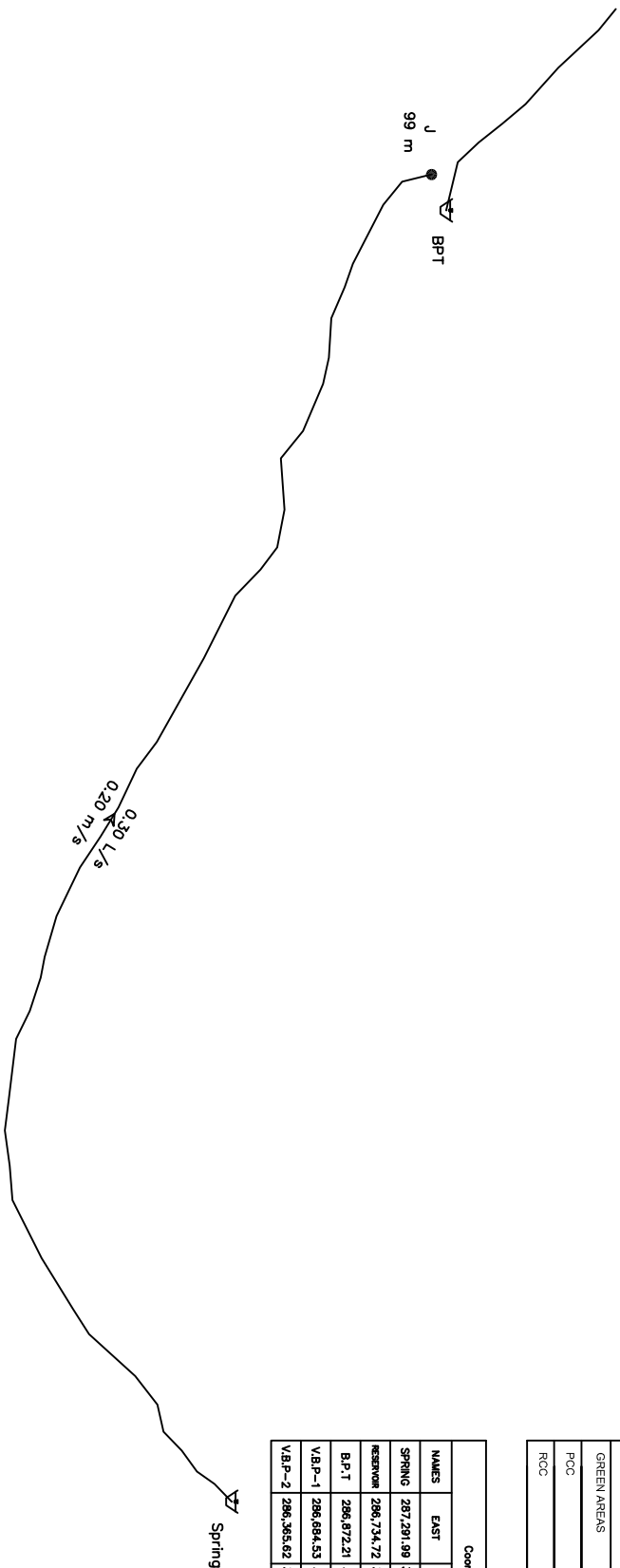
C-101

Note: All dimension showed in sheet

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing& Lyout by	Mohamad Nekandesh
District	Shahristan	Approved by



1. Node ID
2. Flow in (Liter/ sec)
3. Velocity in (Meter/sec)
4. Pressure Head (Meter)



KEY PLAN

LEGEND:

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates			
NAMES	EAST	NORTH	ELEVATION
SPRING	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2548.000
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V.B.P-2	286,365.62	3,719,415.00	2465.000

Action Against Hunger

WASH Department

DW.No:

C1-101

Project Name

Water Supply

Design by

Yaddullah Jalali

Province

Daikundi

Drawing& Layout by

Mohamad Nekandesh

District

Shahristan

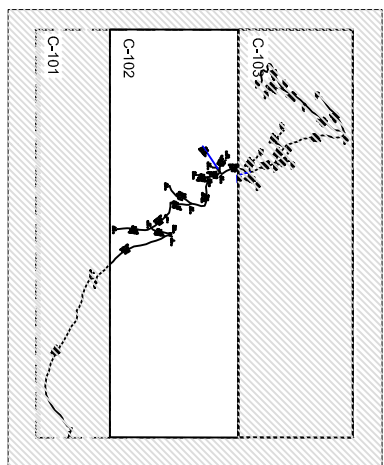
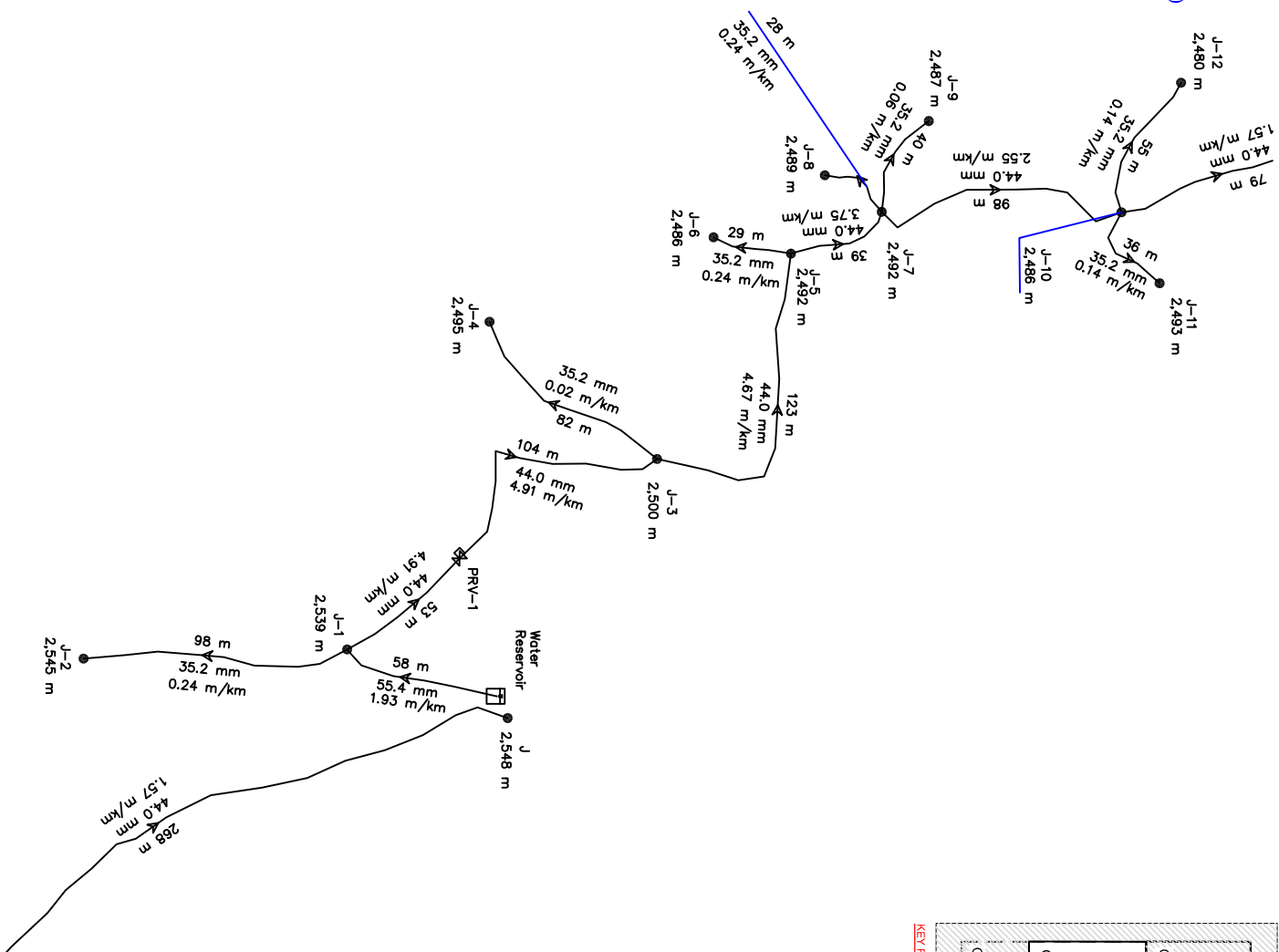
Approved by

.....

Note: All dimension showed in sheet



1. Node ID
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



KEY PLAN

LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,749.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,365.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C-102

Note: All dimension showed in sheet

Project Name
Province
District

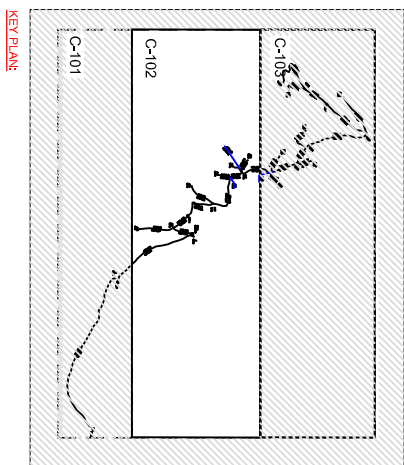
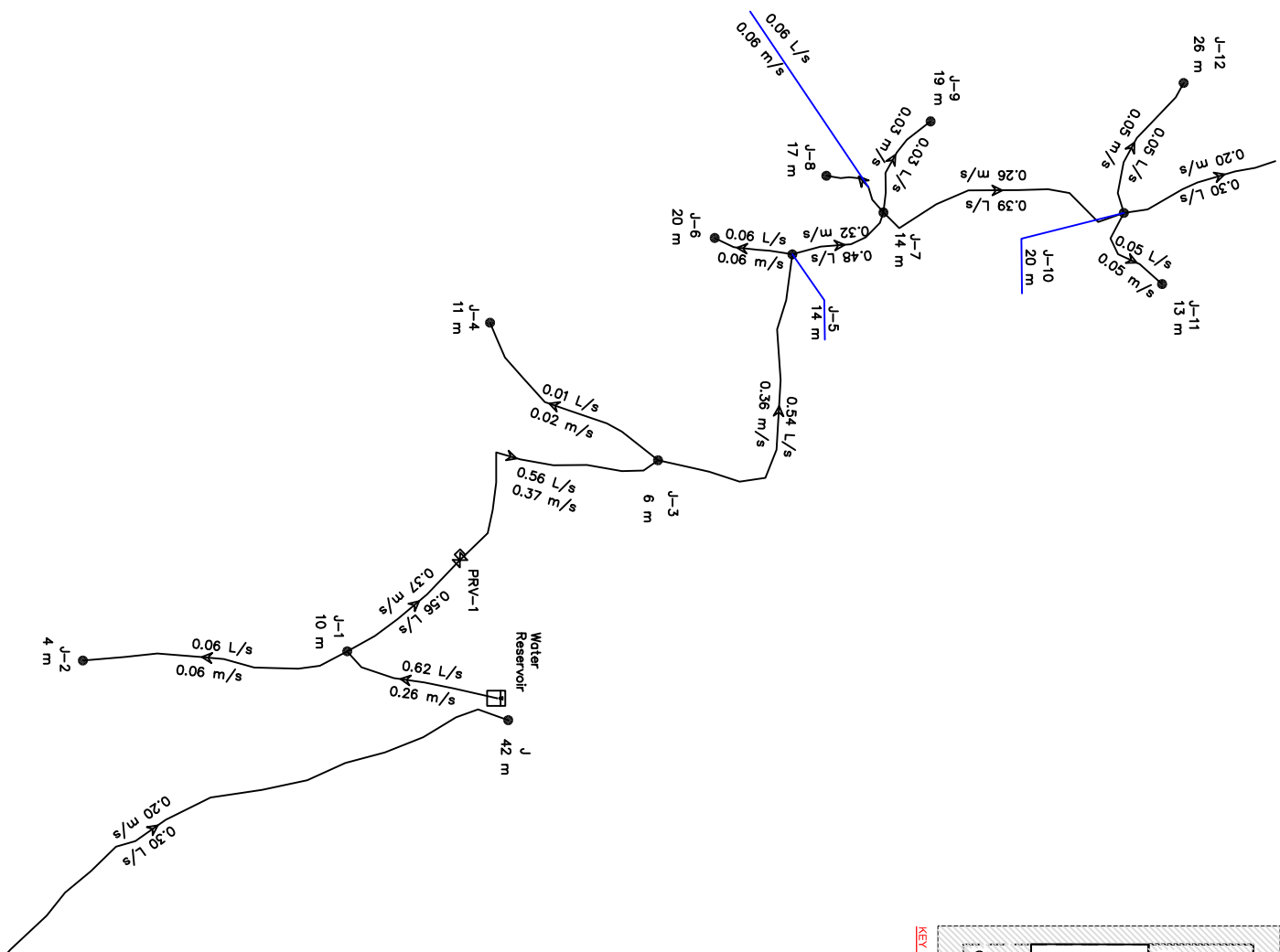
Water Supply
Daikundi
Shahristan

Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....



1. Node ID
2. Flow in (Liter/ sec)
3. Velocity in (Meter/sec)
4. Pressure Head (Meter)



LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,749.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,365.62	3,719,415.00

Action Against Hunger

WASH Department

DW.No:

C1-102

Project Name
Province
District

Water Supply
Daikundi
Shahristan

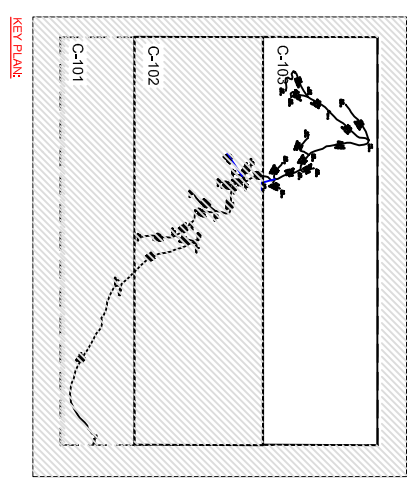
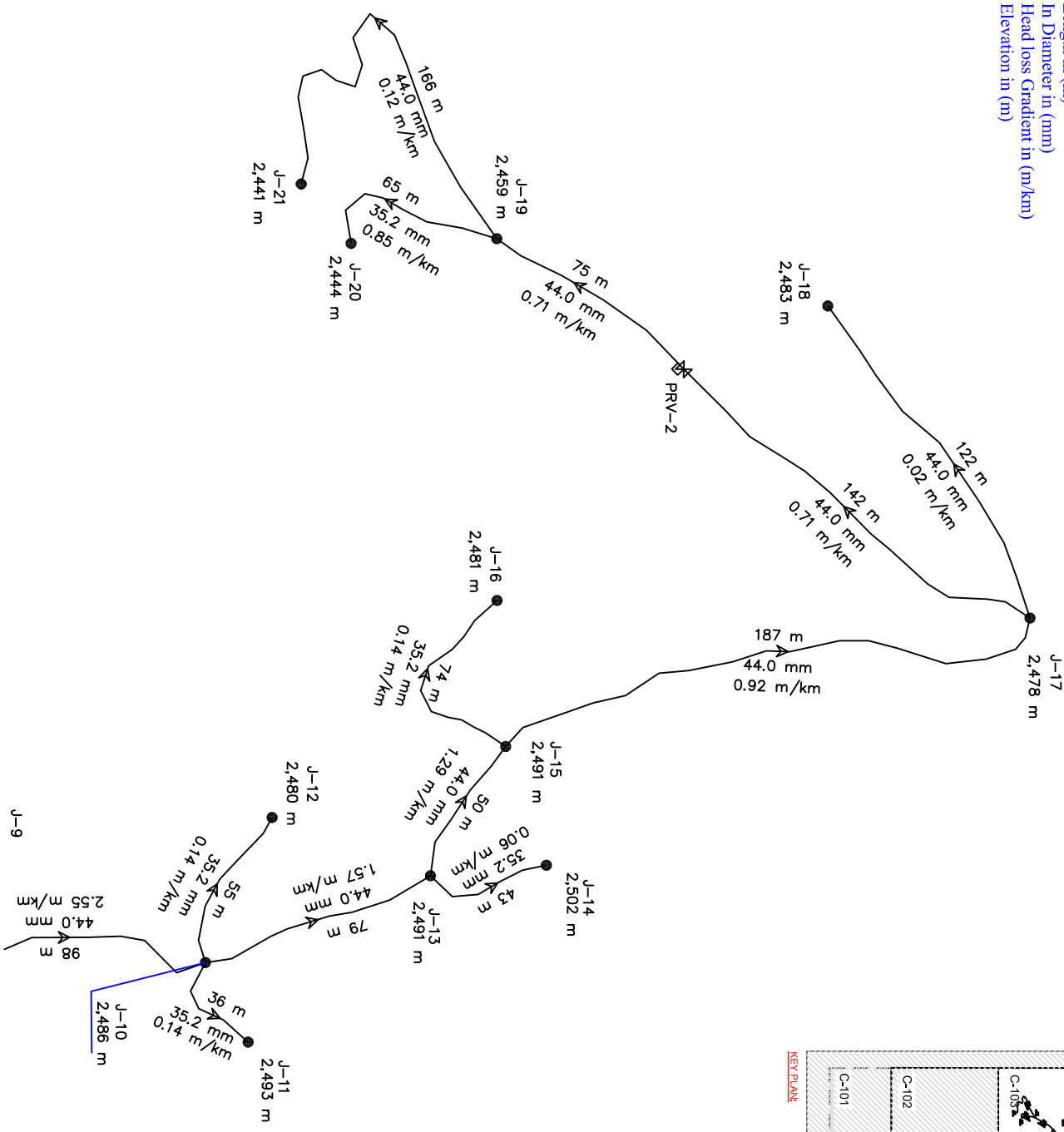
Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

Note: All dimension showed in sheet



1. Node ID
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,749.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,365.62	3,719,415.00

Action Against Hunger

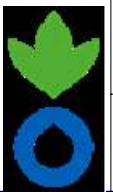
WASH Department

DW.No:

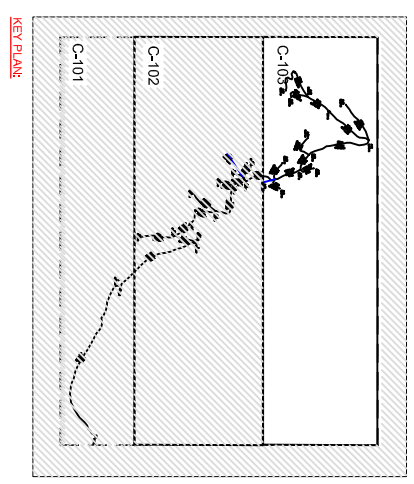
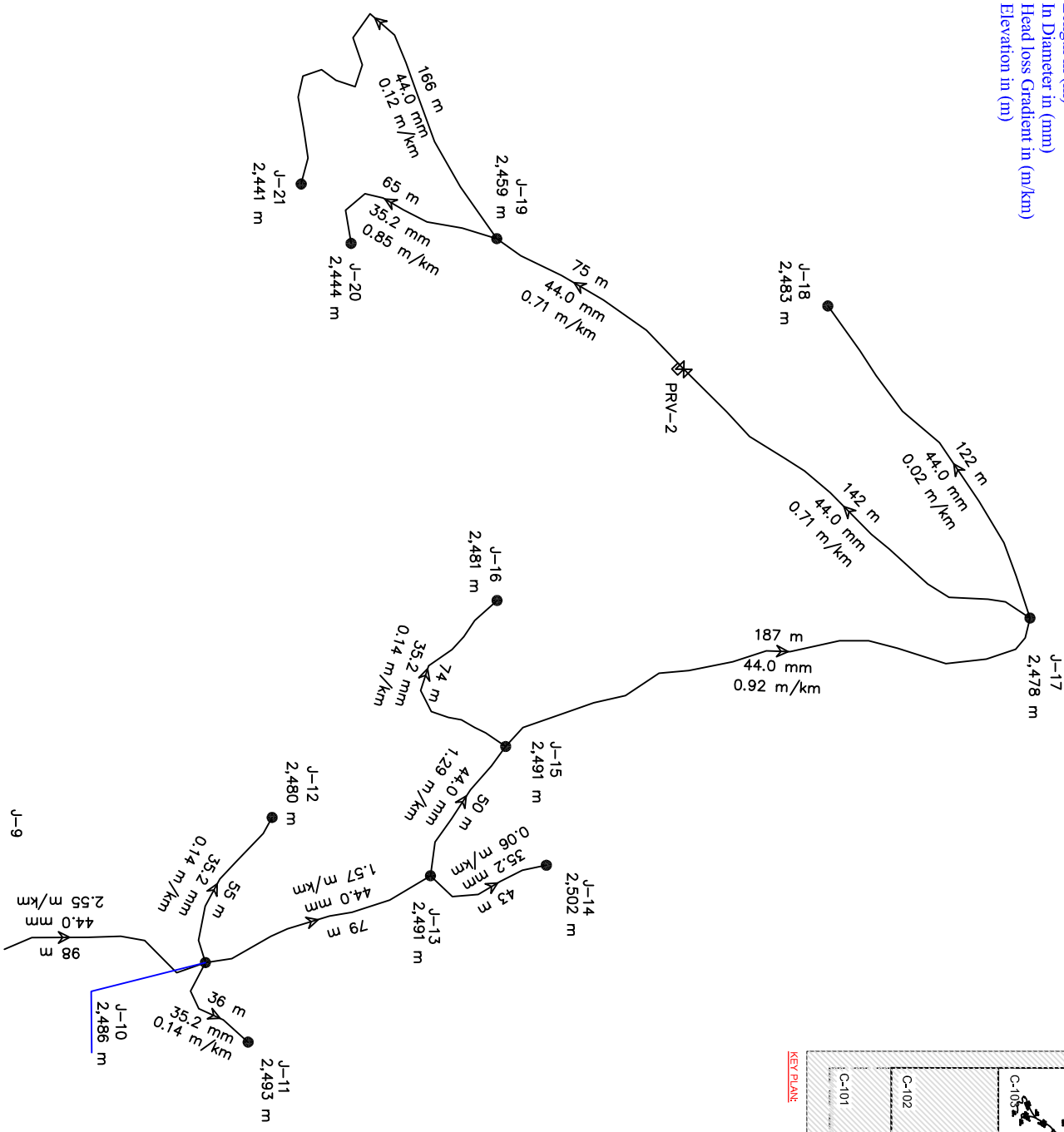
C-103

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing& Lyout by	Mohamad Nekandesh
District	Shahristan	Approved by

Note: All dimension showed in sheet



1. Node ID
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)



LEGEND

SPRING PROTECTION	
BREAK PRESSURE TANK	
WATER RESERVOIR	
VALE BREAK PRESSURE	
GREEN AREA	
BENCH MARK	
GREEN AREAS	
PCC	
ROC	

Coordinates		
NAMES	EAST	NORTH
SPRING	287,291.99	3,718,749.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,365.62	3,719,415.00

Action Against Hunger

WASH Department

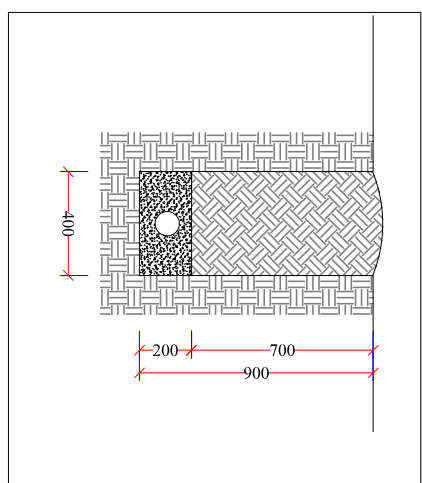
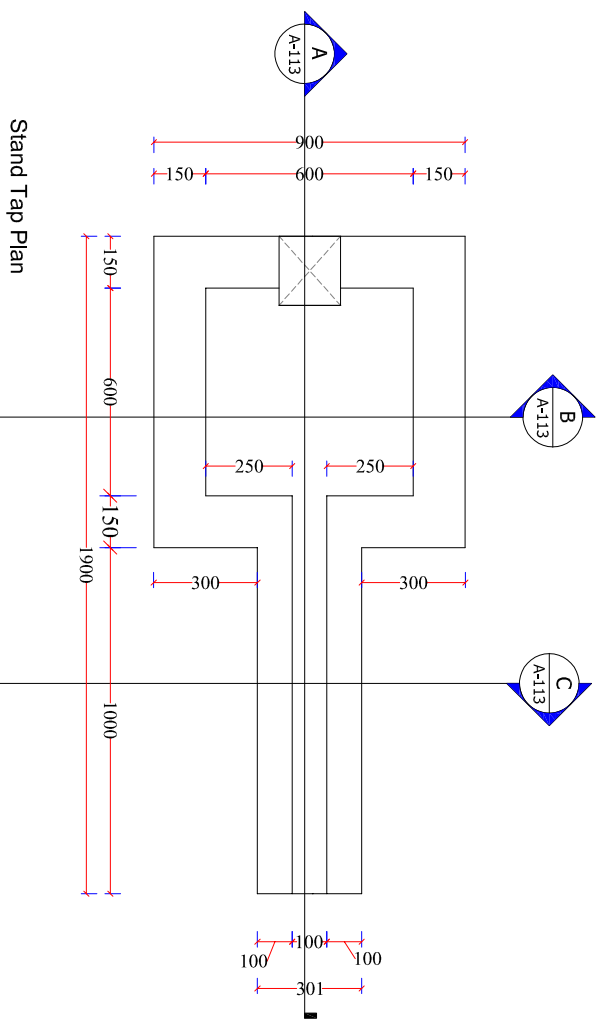
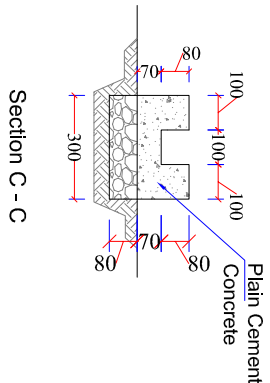
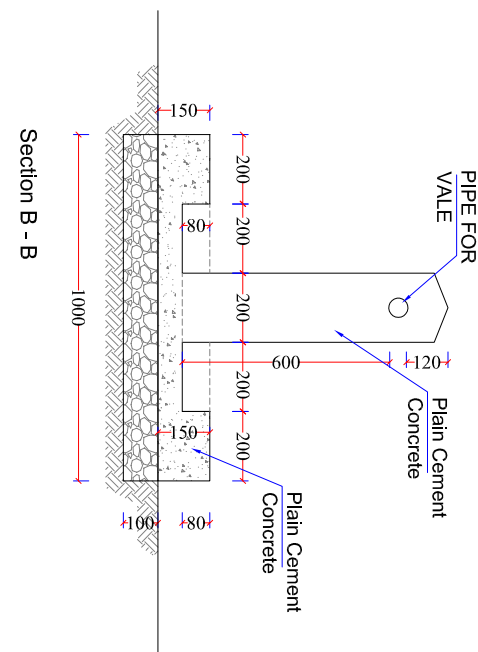
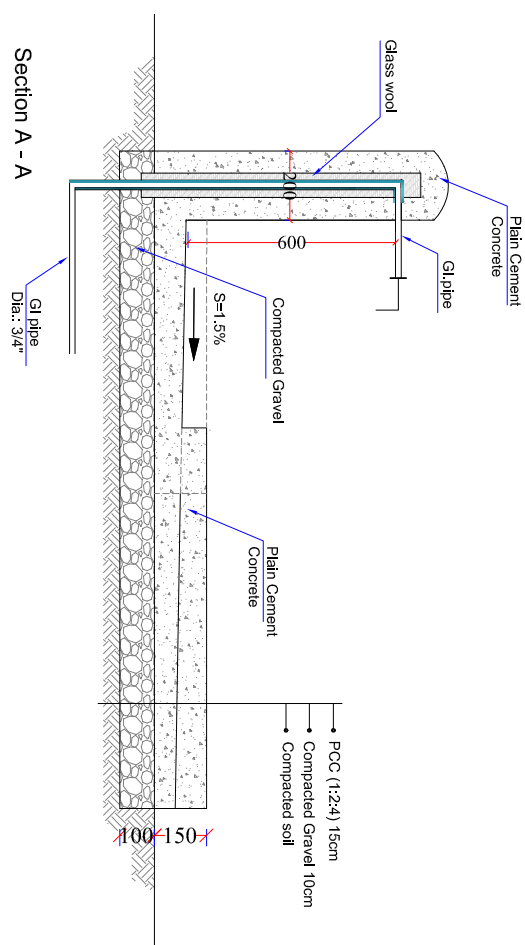
DW.No:


C-103

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing& Lyout by	Mohamad Nekandesh
District	Shahristan	Approved by

Note: All dimension showed in sheet





	DW.No:	Action Against Hunger				Scale:
		WASH Department				Note: All dimension are in millimeter
	A-113	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
		Province	Daikundi	Chick by	Mohamad Nekandesh	
District		Shahristan	Approved by	Yaddullah Jalali		