



**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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25	C-103	ENLARGE PLAN ( Node ID, Flow, Velocity, Pressure head )

Scale:

Note: All dimension are in millimeter

Action Against Hunger

WASH Department

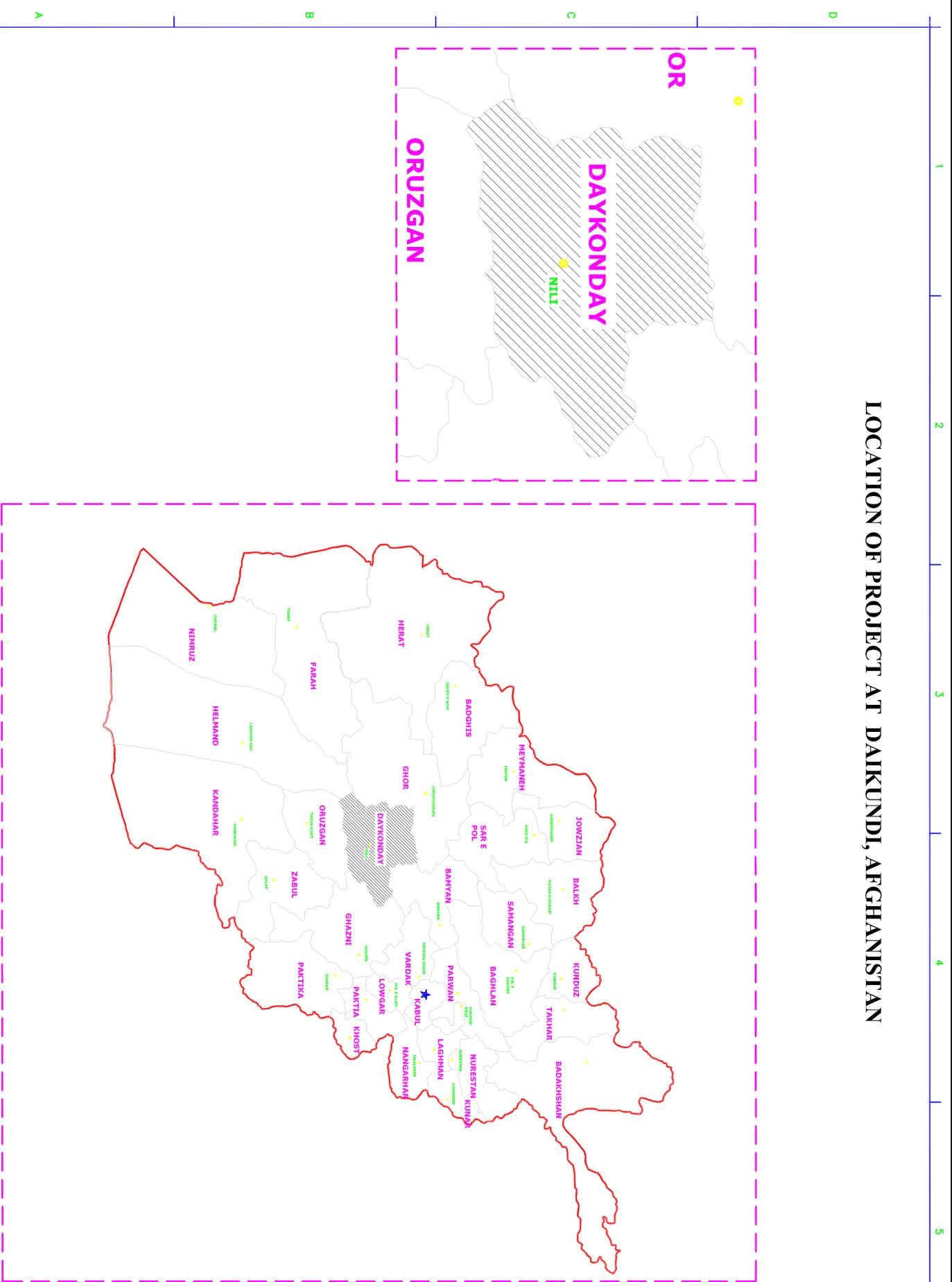
DW.No:

G-101

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



# LOCATION OF PROJECT AT DAIKUNDI, AFGHANISTAN



G-102 | LOCATION OF PROJECT  
REF. SCALE: N.T.S

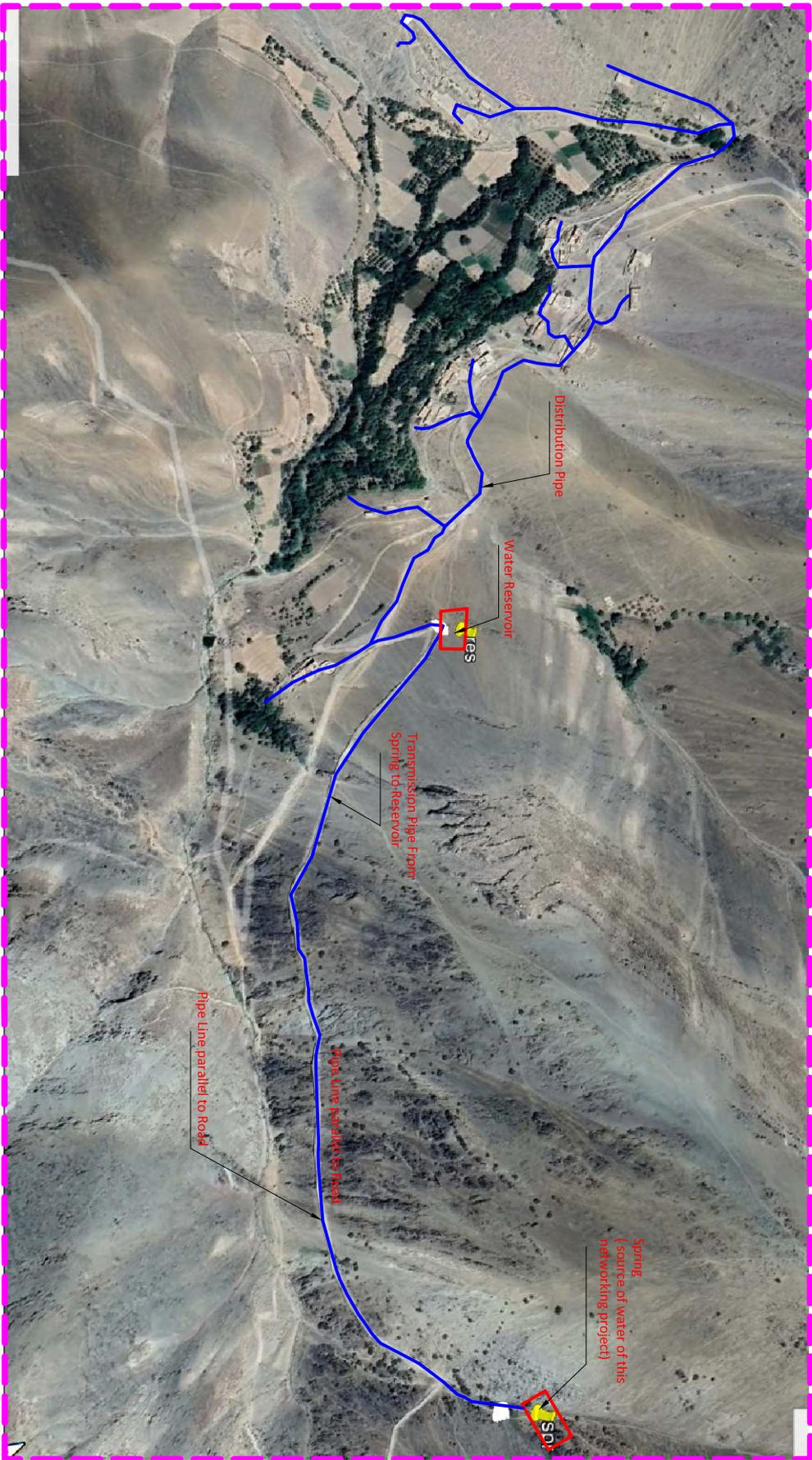


DW.No:  
**G-102**

Action Against Hunger			
WASH Department			
Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahrستان	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

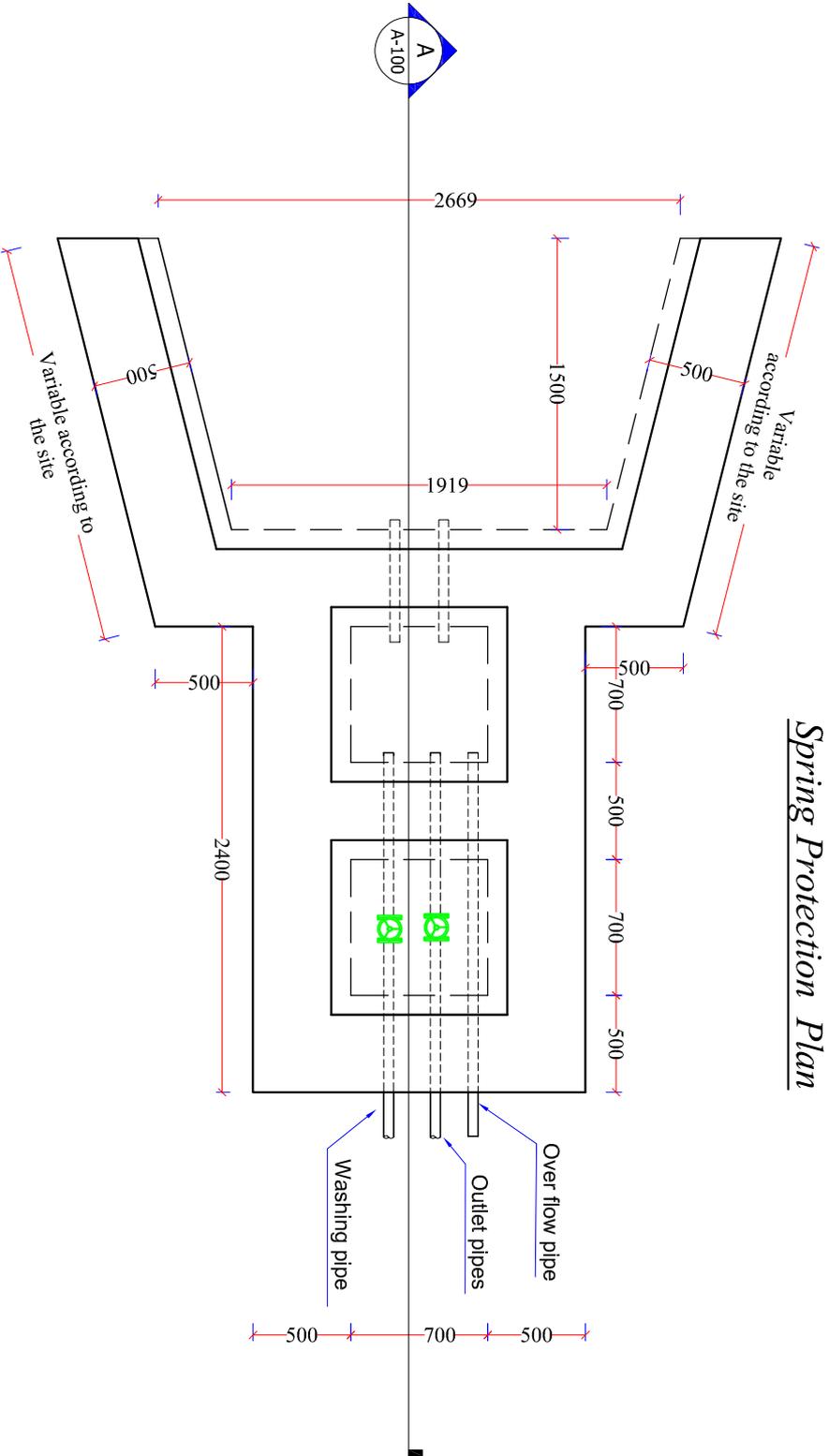
WASH Department

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.



### Spring Protection Plan

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



DW.No:

A-101

Action Against Hunger

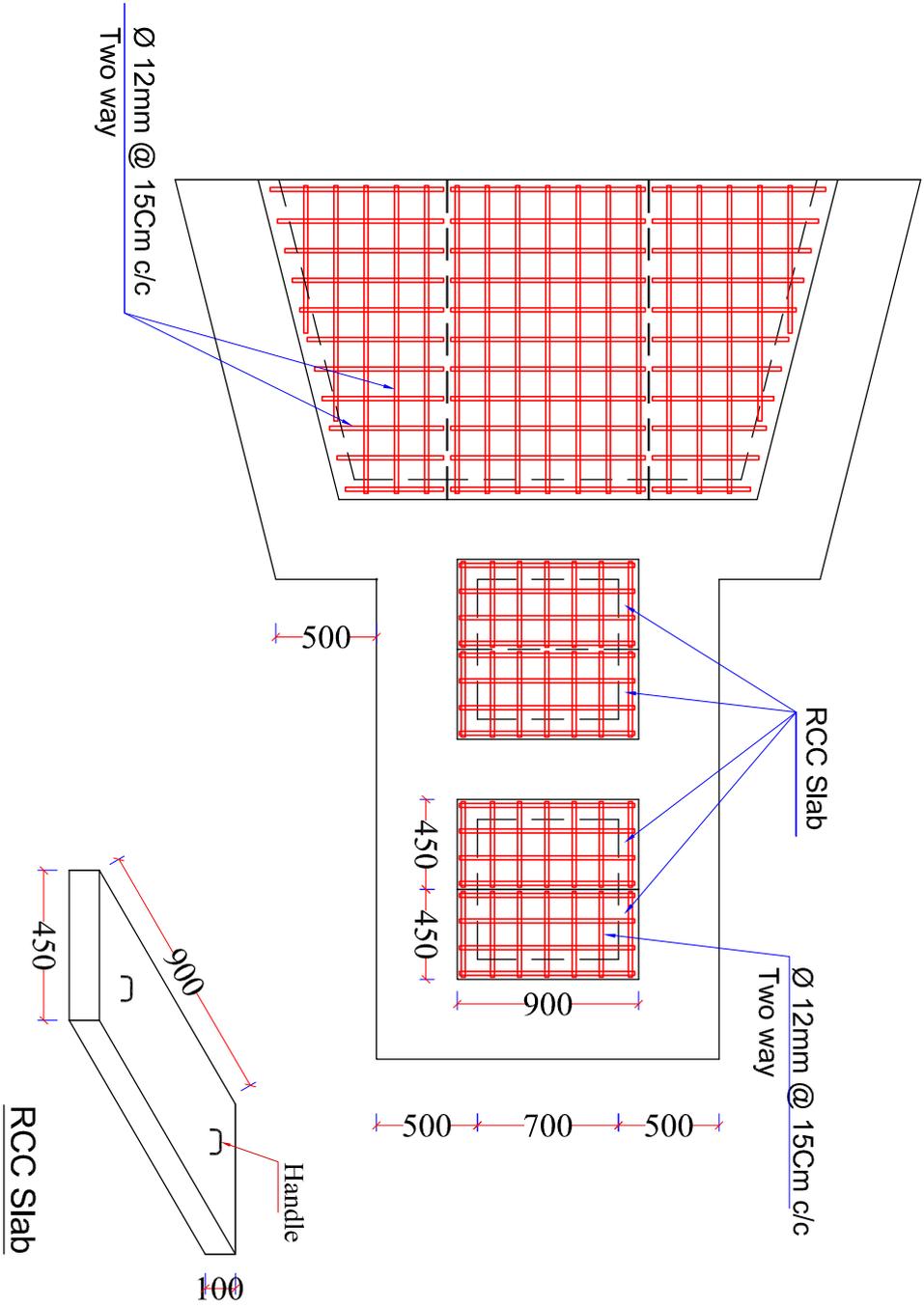
WASH Department

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

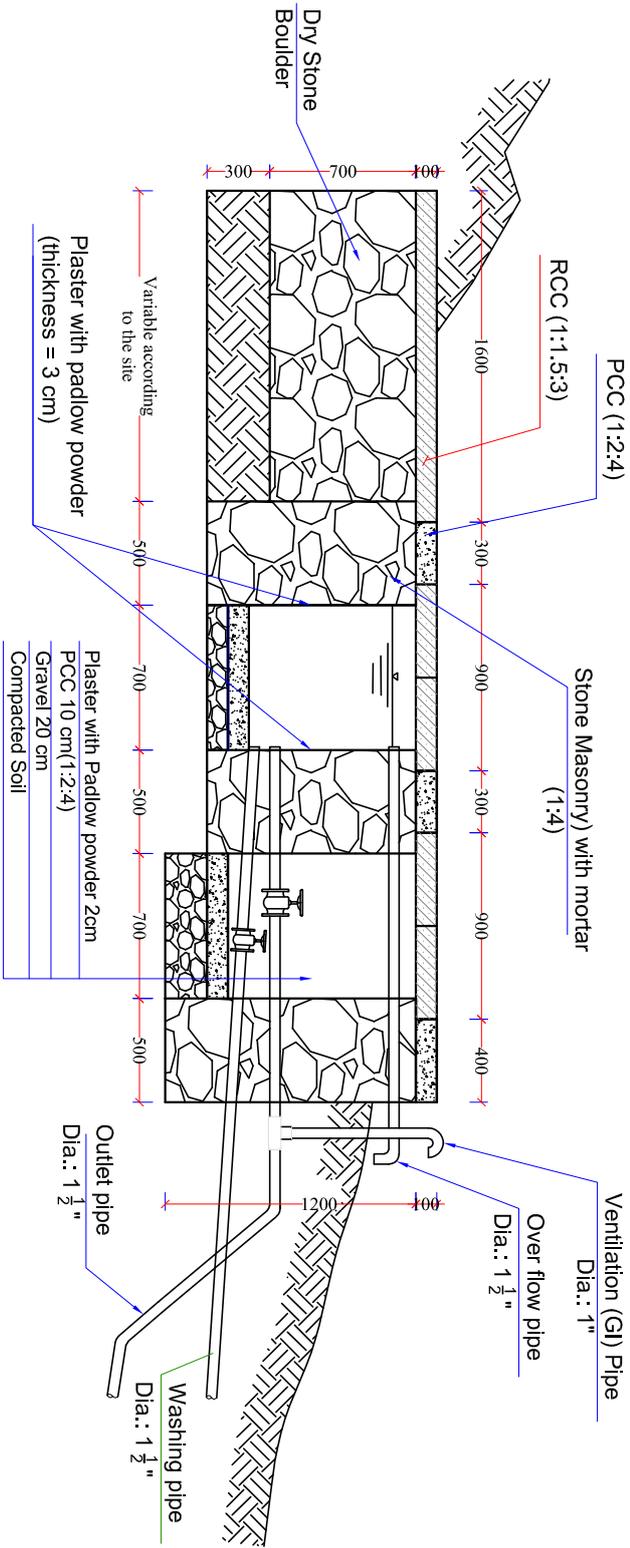


A-102 | SPRING PROTECTION REINFORCEMENT  
 REF: | SCALE: 1:25



DW.No:	Action Against Hunger				Scale:
	WASH Department				
A-102	Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	Note: All dimension are in millimeter
	Province	Daikundi	Chick by	Mohamad Nekandesh	
	District	Shahristan	Approved by	Yaddullah Jalali	

**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:

A-103

Action Against Hunger

WASH Department

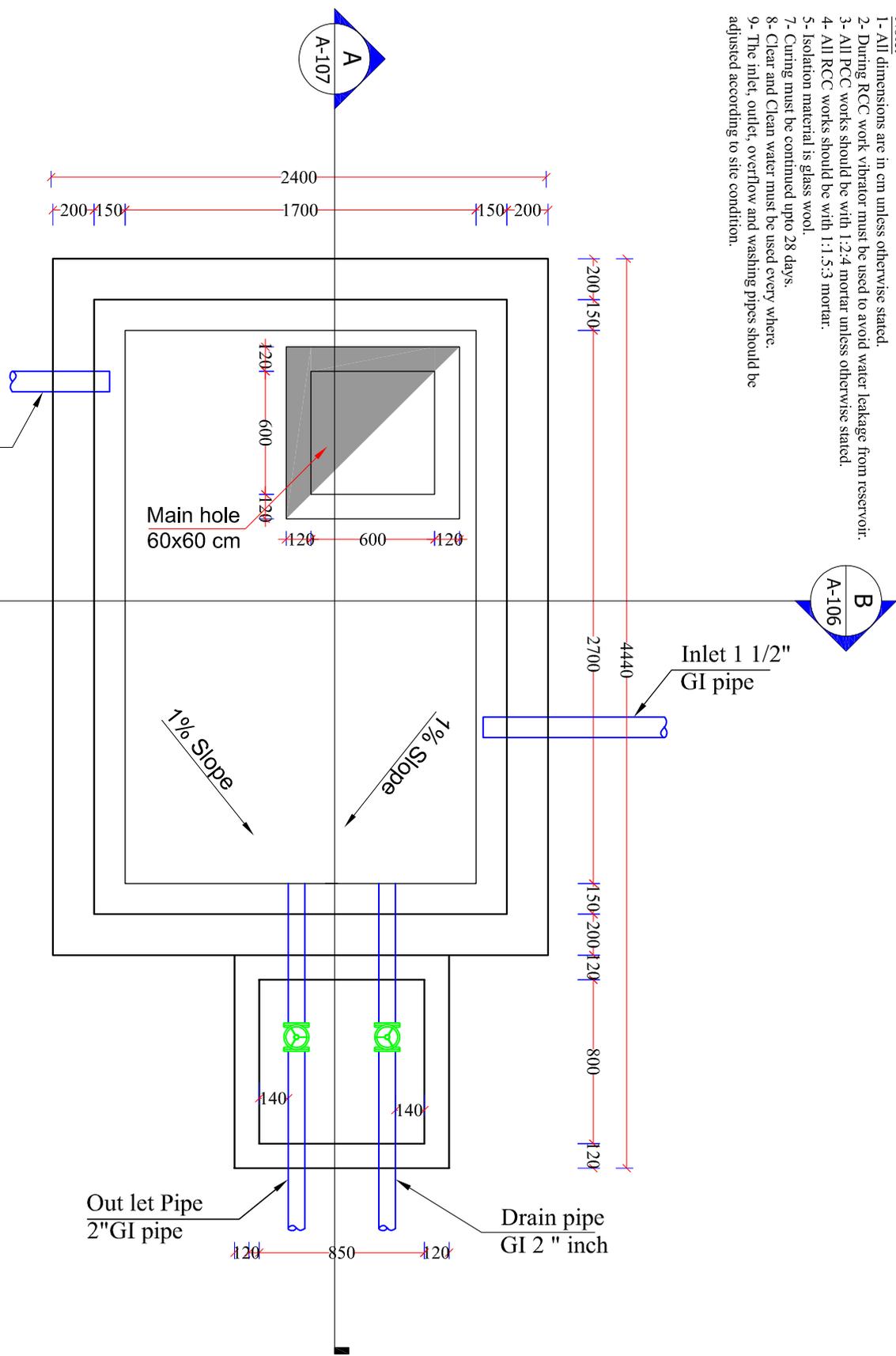
Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

Note: All dimension are in millimeter



- Note:**
- 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.



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

A-105 RESERVOIR PLAN  
SCALE: 1:20



DW.No:

A-105

Action Against Hunger

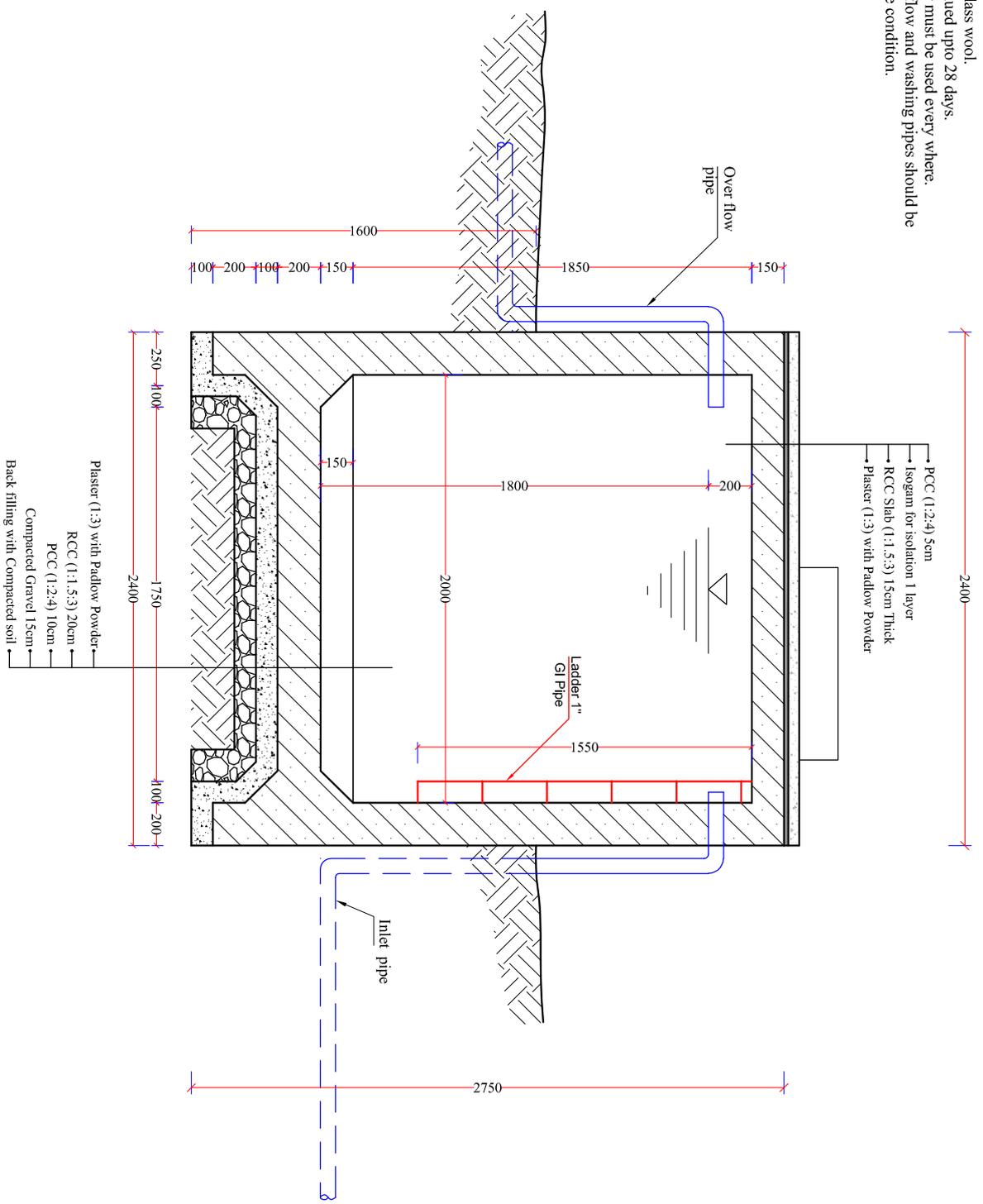
WASH Department

Scale:

Note: All dimension are in millimeter

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.
  - 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.



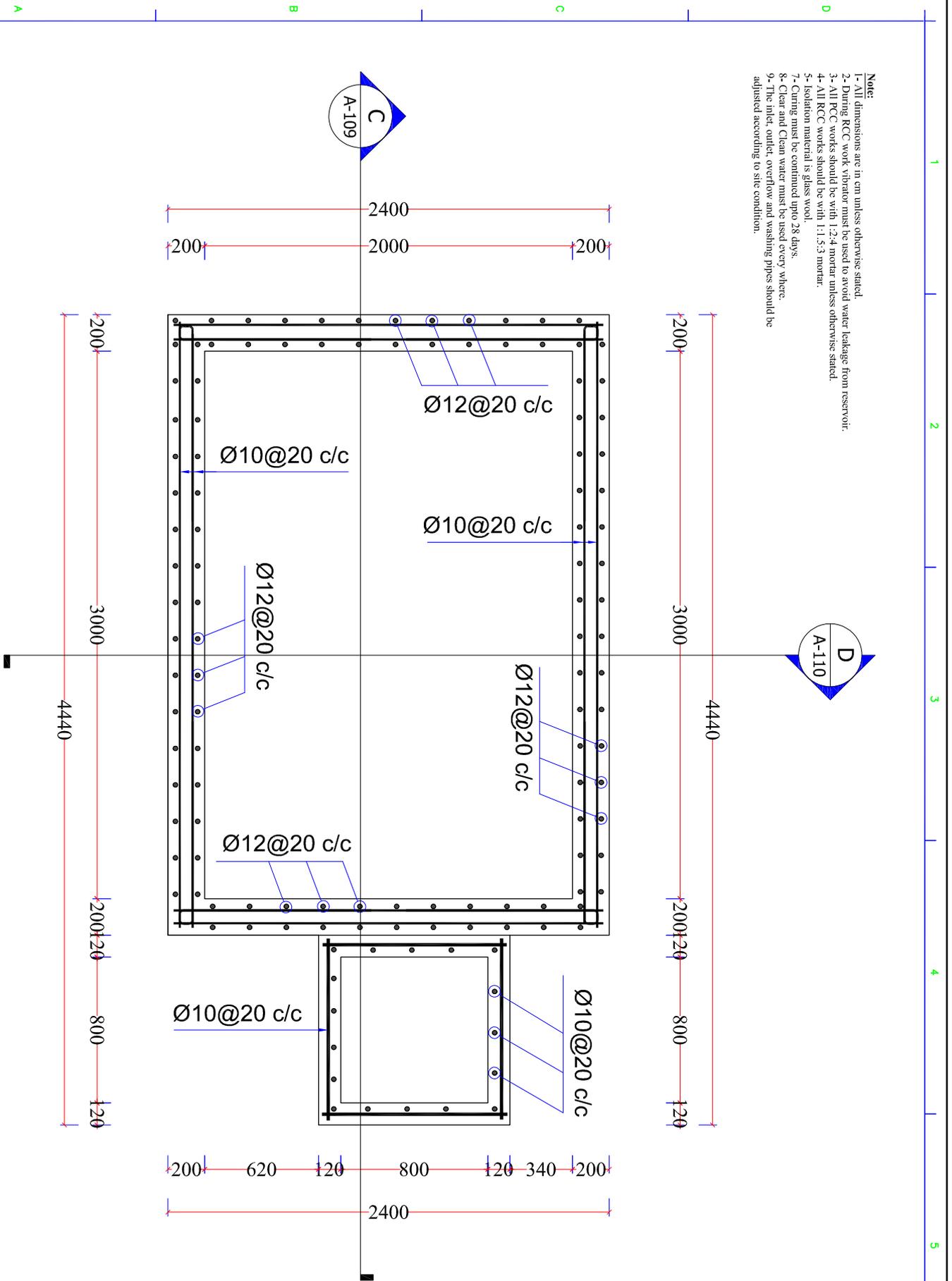
A-106 SECTION B-B  
SCALE: 1/20



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.
  - 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- Clean 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

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Province	Daikundi	Chick by	Mohamad Nekandesh
District	Shahristan	Approved by	Yaddullah Jalali

Scale:

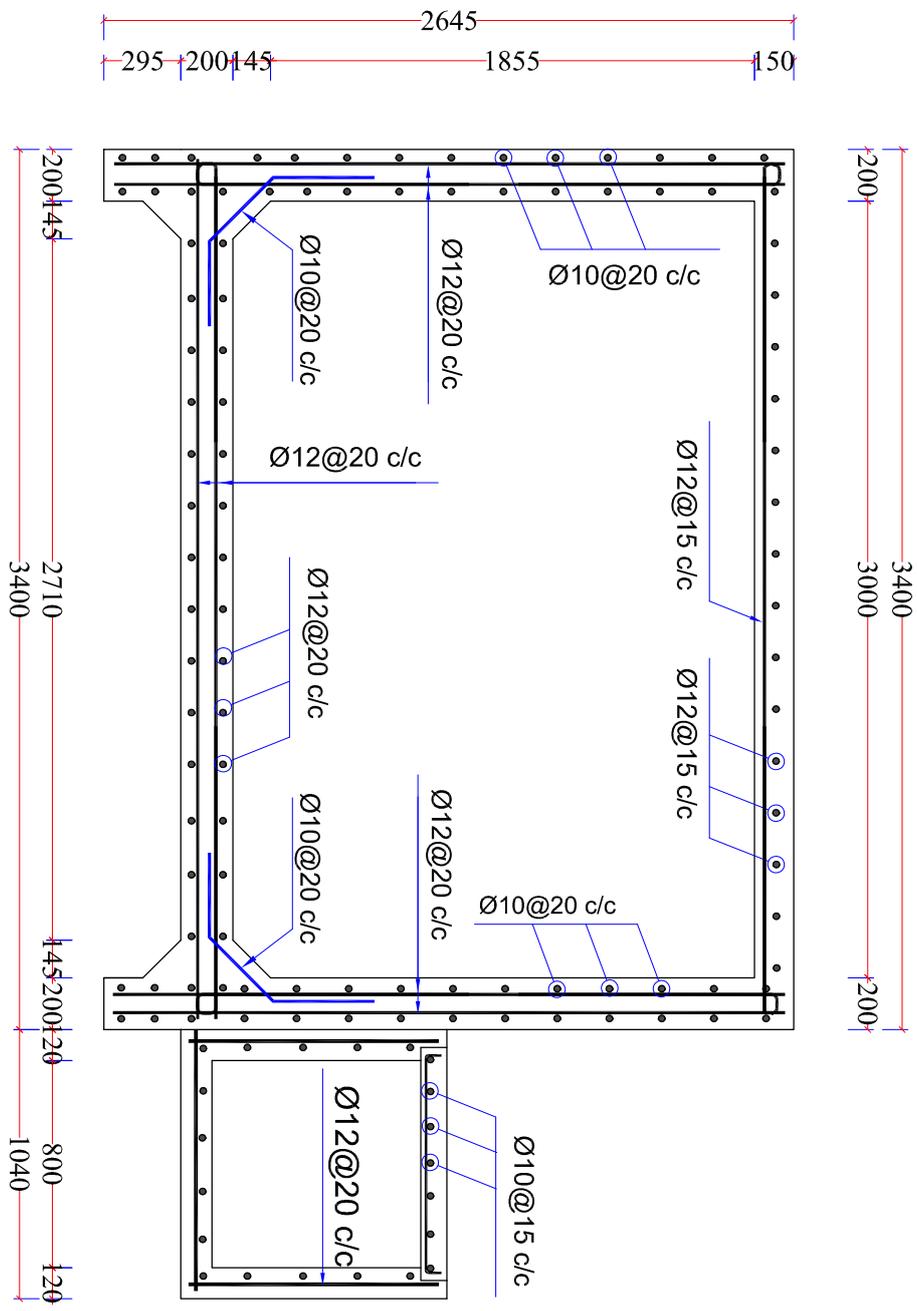
Note: All dimension are in millimeter

A B C D

1 2 3 4 5

A.109 SECTION C-C

SCALE: 1:20



DW.No:

A-109

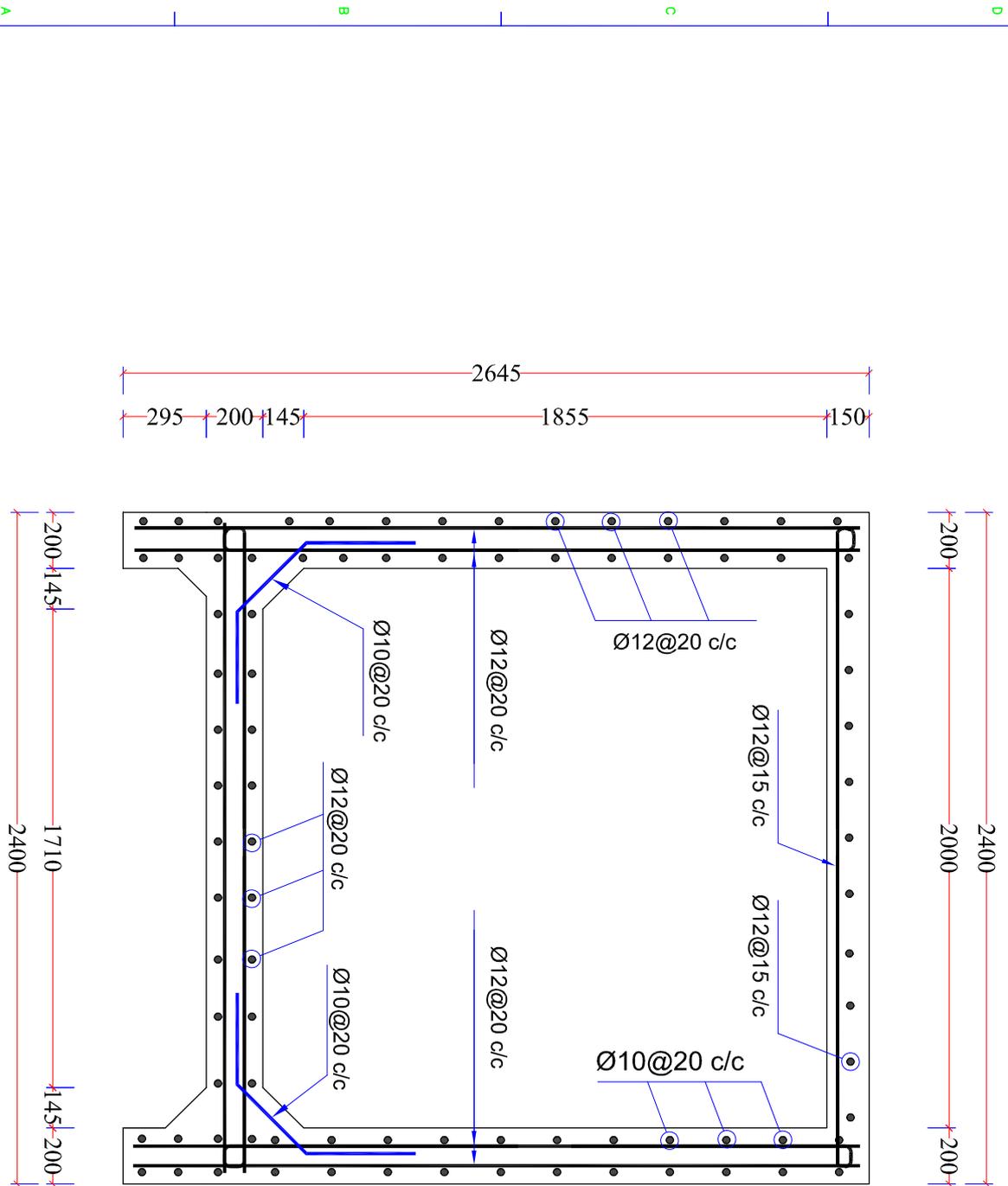
Action Against Hunger

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



A110 | SECTION D-D  
REF

SCALE: 1/5



DW.No:

A-110

Action Against Hunger

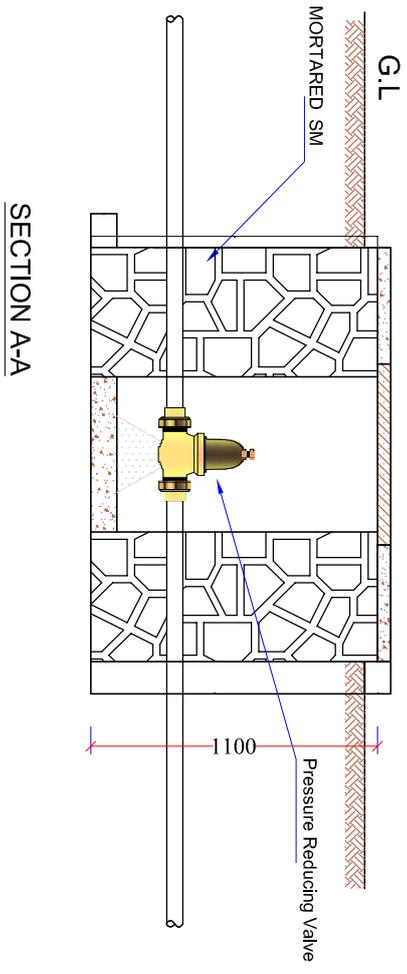
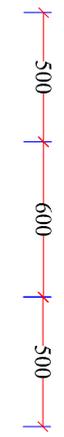
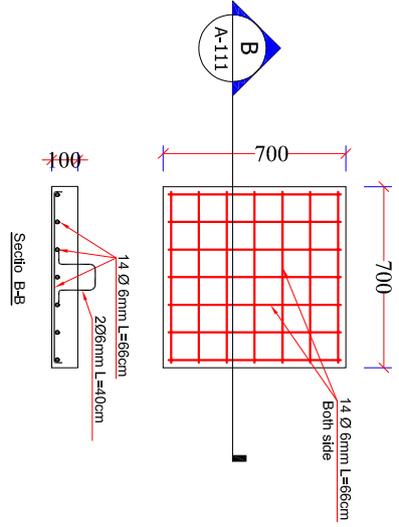
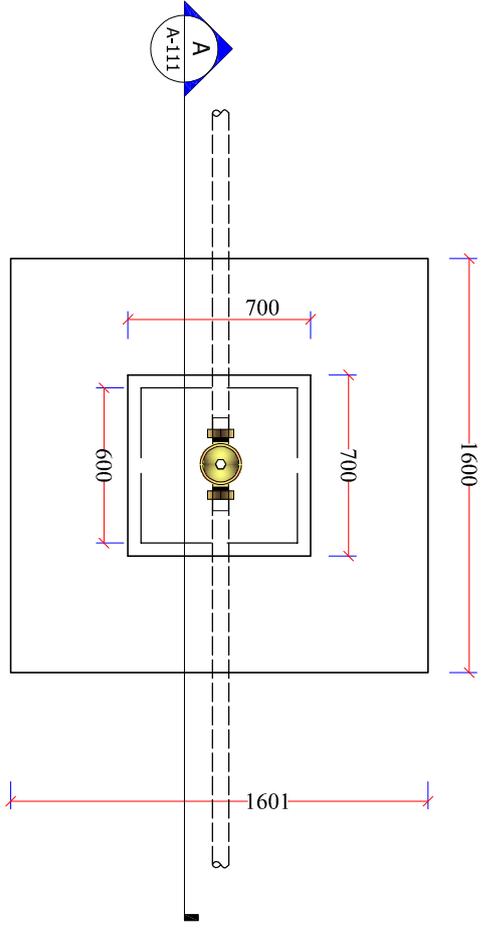
WASH Department

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



TYPICAL DIMENSIONS OF VALVE CHAMBER

SNO.	DIAMETER OF VALVE (mm.)	DIMENSION (L x B) (mm.)
1.	50	600 X 600

### SECTION A-A

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

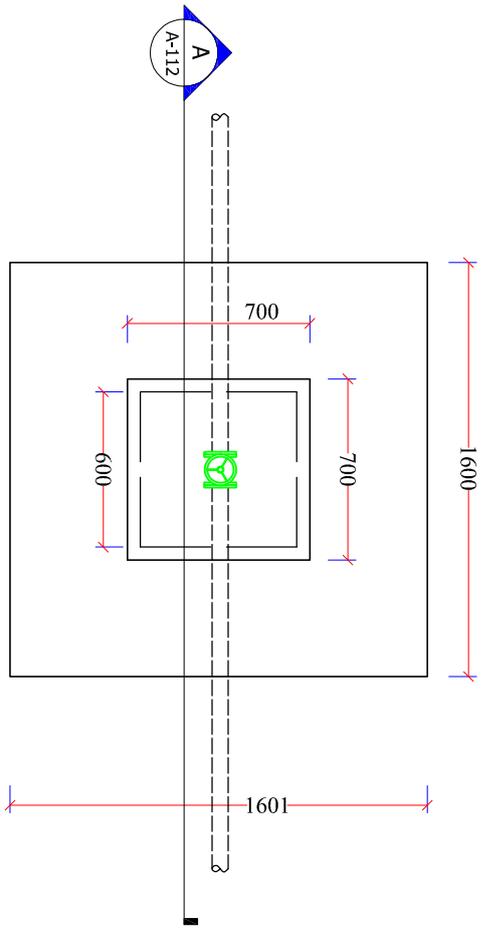


DW.No:  
**A-111**

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

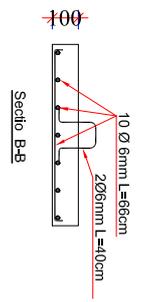
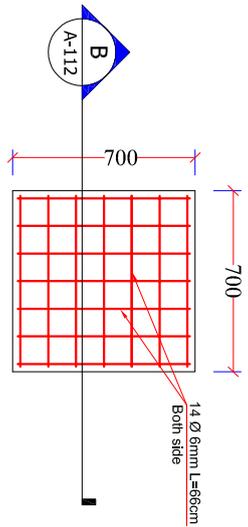
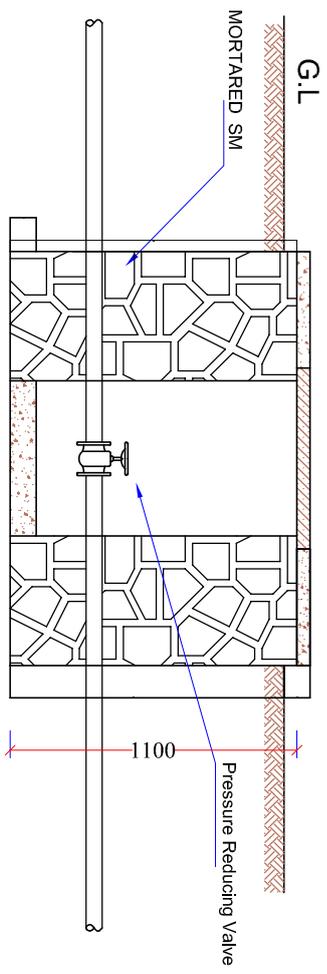
Scale:  
**Note: All dimension are in millimeter**

**GATE VALE BOX FOR CONTROL**



500 600 500

**SECTION A-A**



TYPICAL DIMENSIONS OF VALVE CHAMBER

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

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

A-112 GATE VALE BOX  
REF: SCALE: 1:20

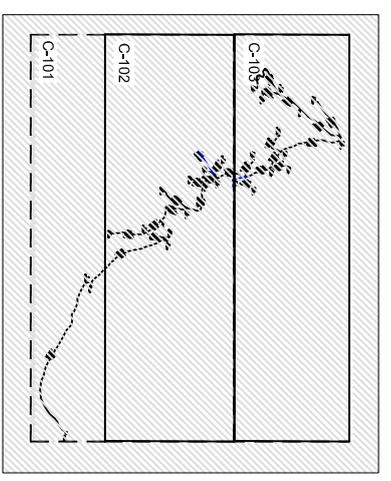
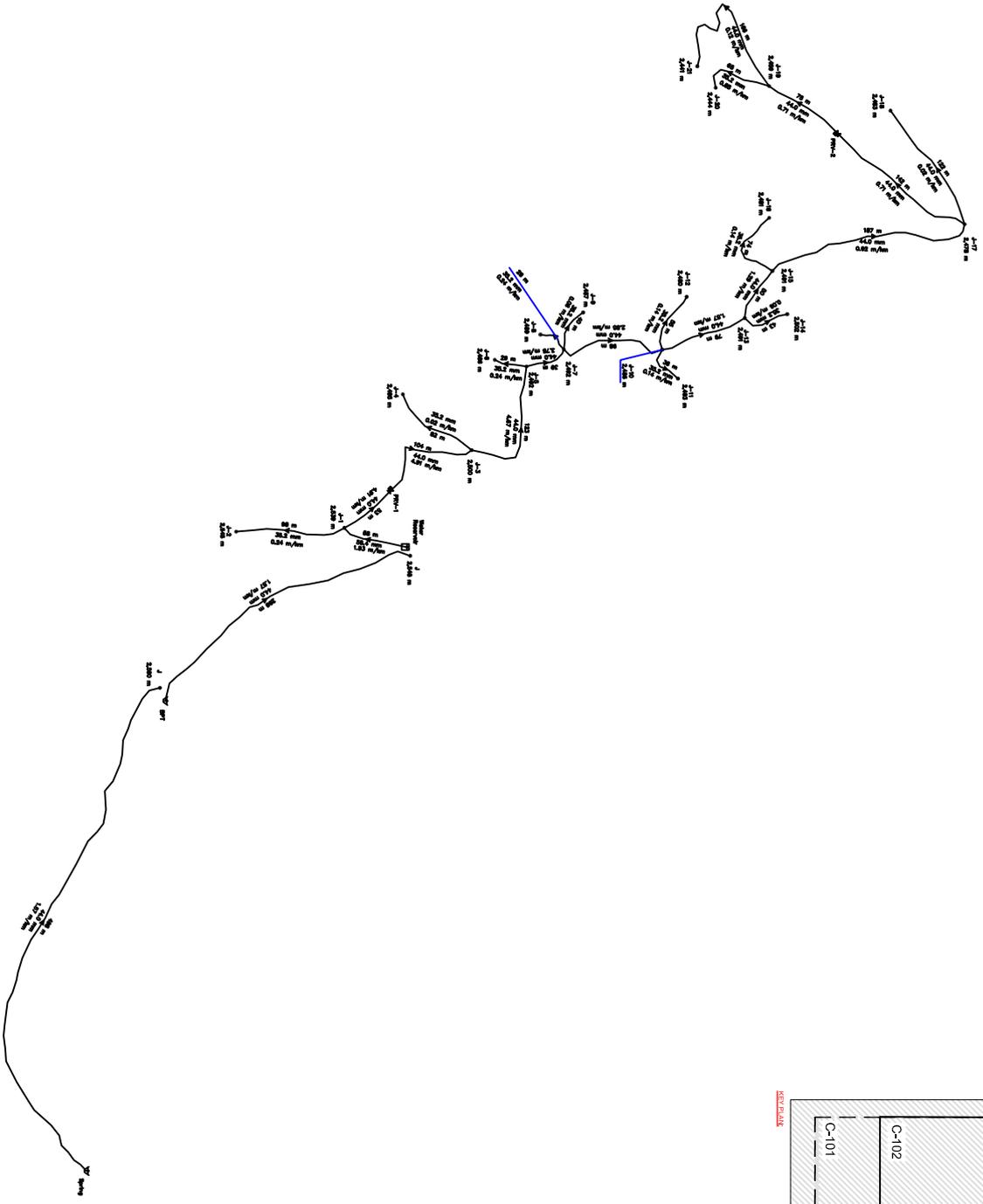


DW.No:  
**A-112**

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
SPRING	287,291.99	3,718,749.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,619.09
V.B.P-1	286,684.53	3,719,018.66
V.B.P-2	286,365.62	3,719,415.00
		2465.000

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

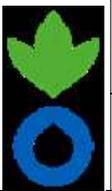
Action Against Hunger  
WASH Department

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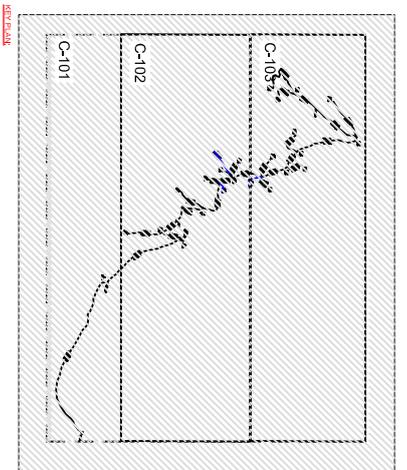
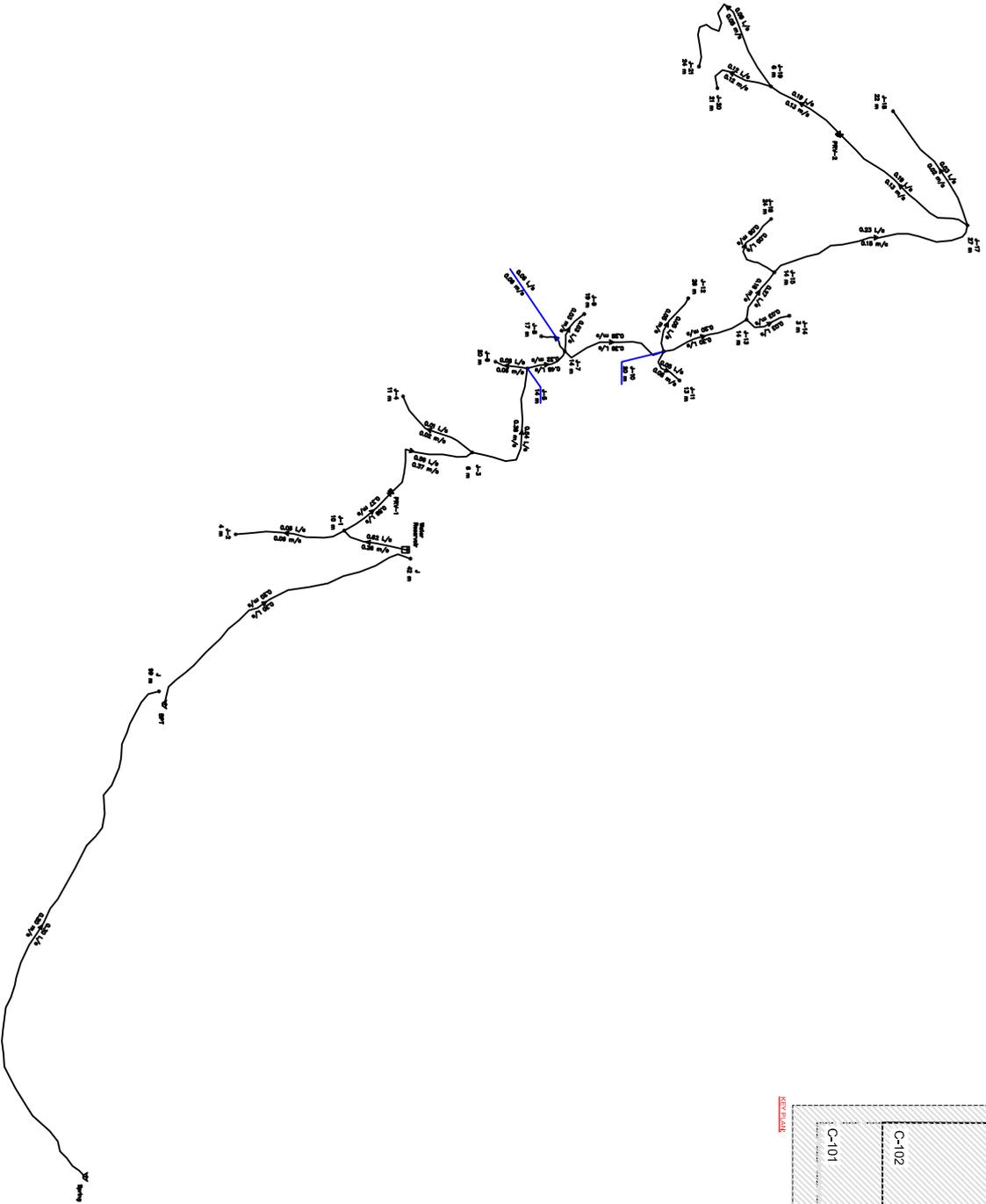
C-100

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. 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	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2546.000
B.P.T	286,872.21	3,718,619.09	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

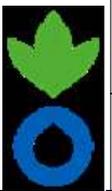
Action Against Hunger  
WASH Department

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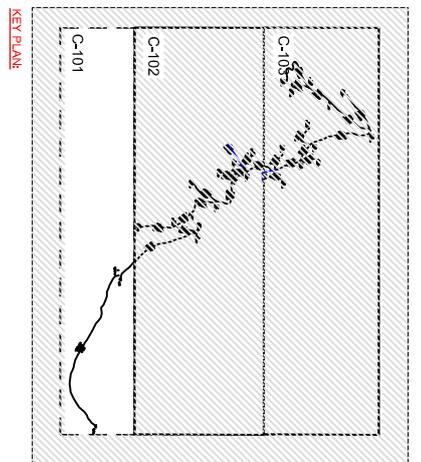
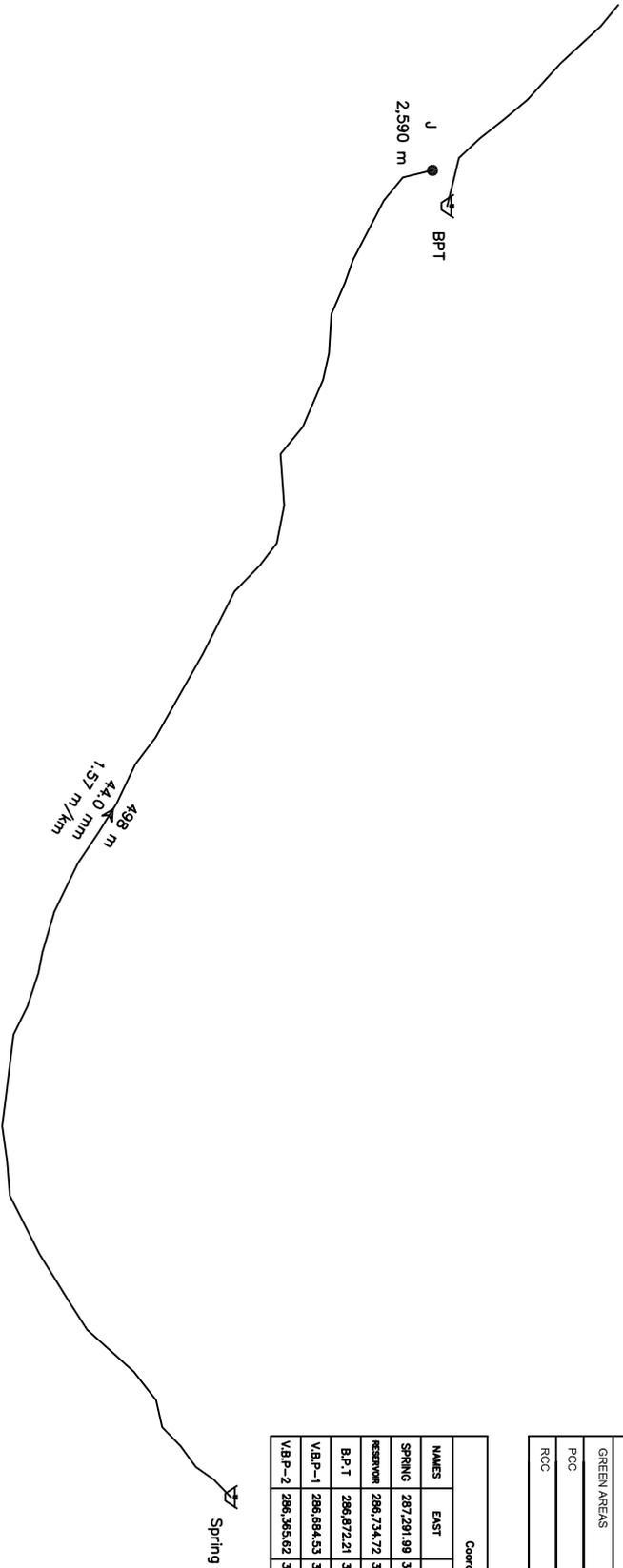
C1-100

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)



**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
B.P.T	286,872.21	3,718,819.09	2590.000
V.B.P-1	286,694.53	3,719,018.66	2507.000
V.B.P-2	286,365.62	3,719,415.00	2485.000

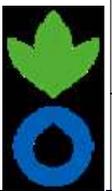
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WASH Department

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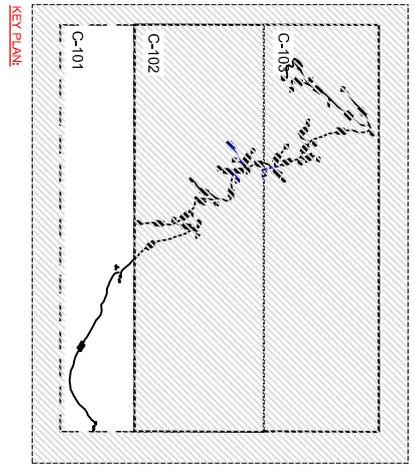
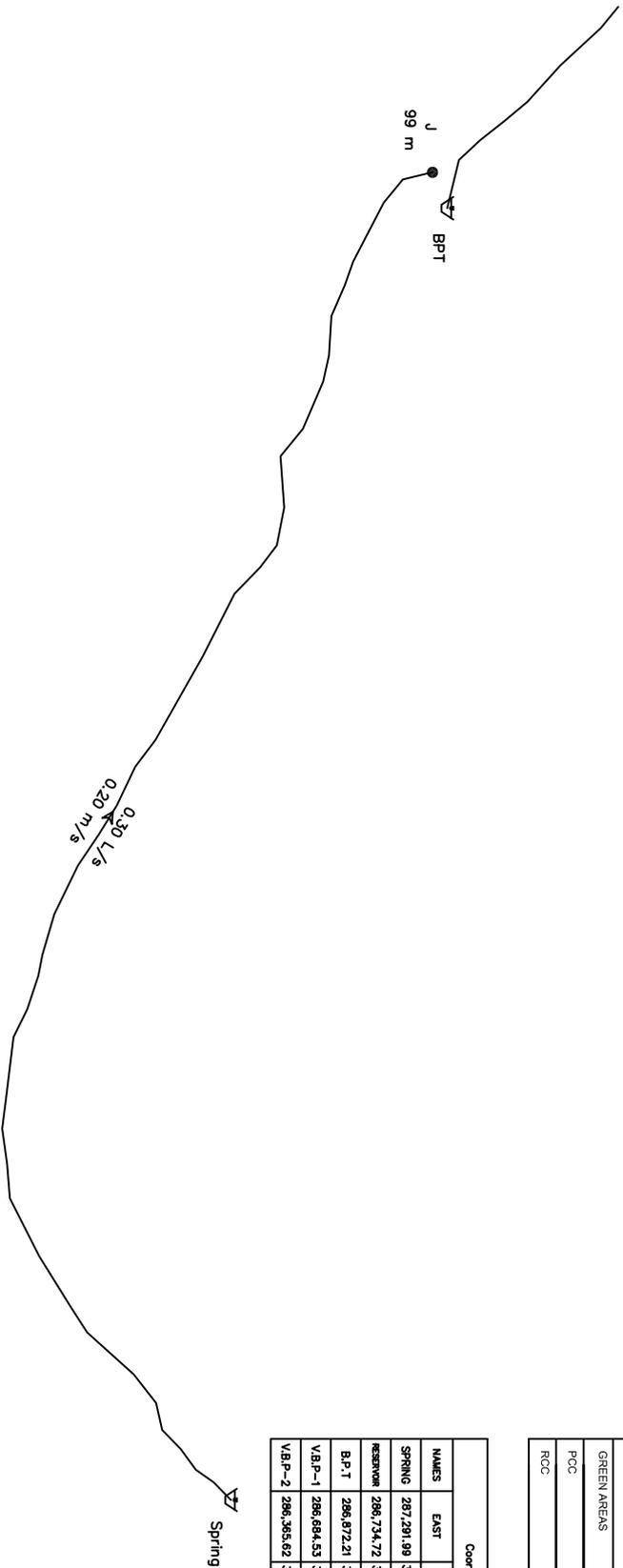
C-101

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. 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	287,291.99	3,718,749.32	2690.000
RESERVOIR	286,734.72	3,719,032.14	2548.000
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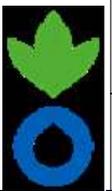
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WASH Department

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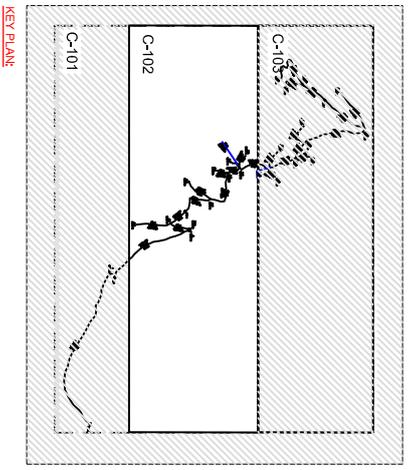
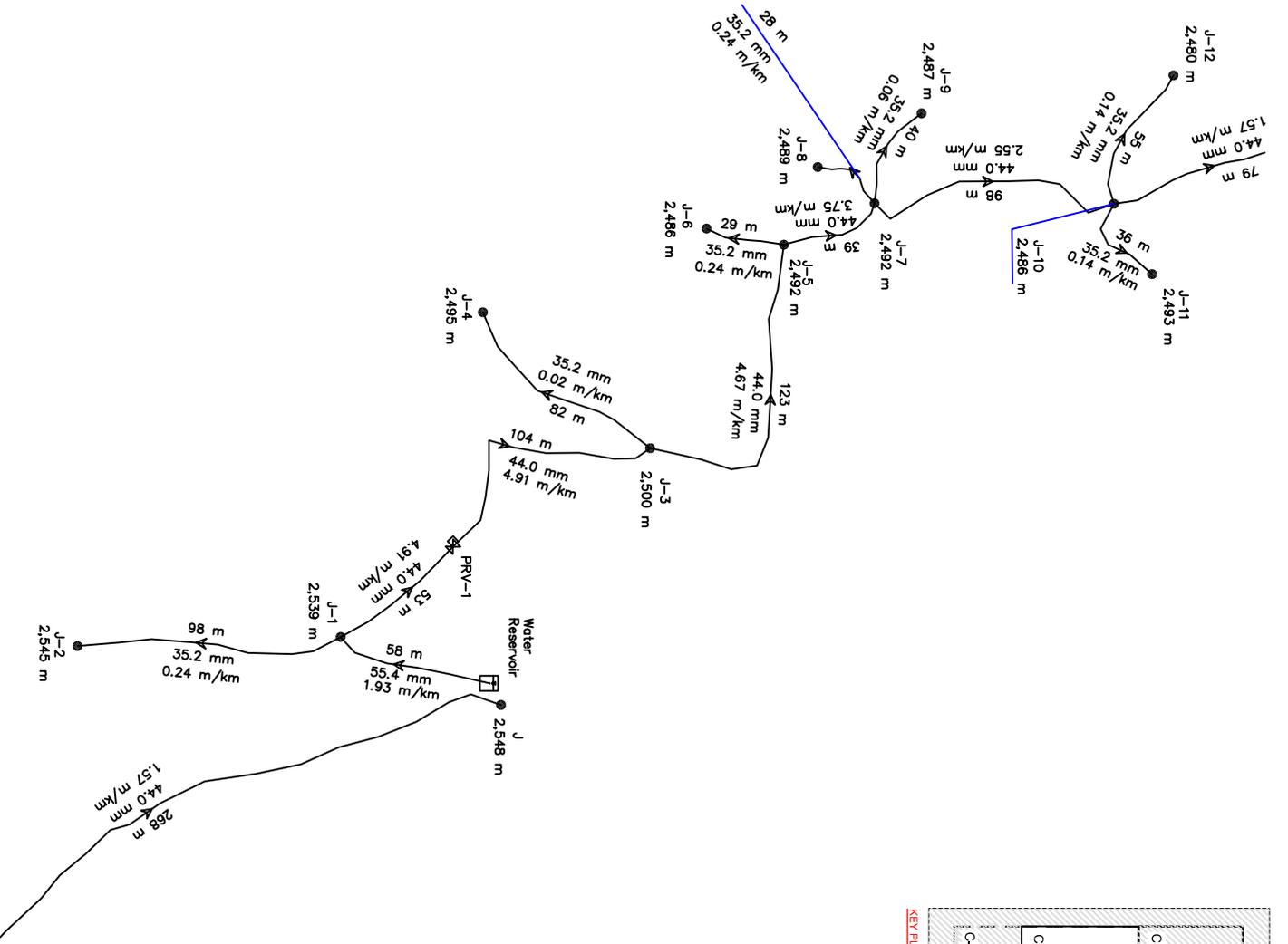
C1-101

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)



LEGEND:

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

Coordinates		
NAMES	EAST	NORTH
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B.P.T	286,972.21	3,718,919.09
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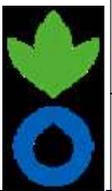
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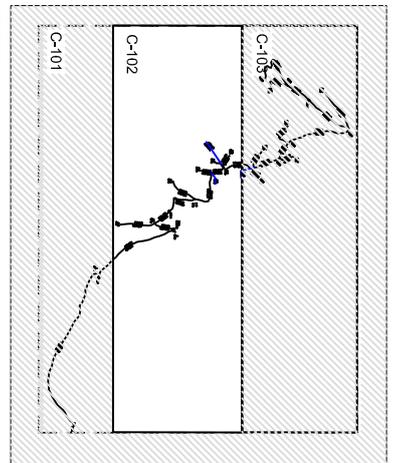
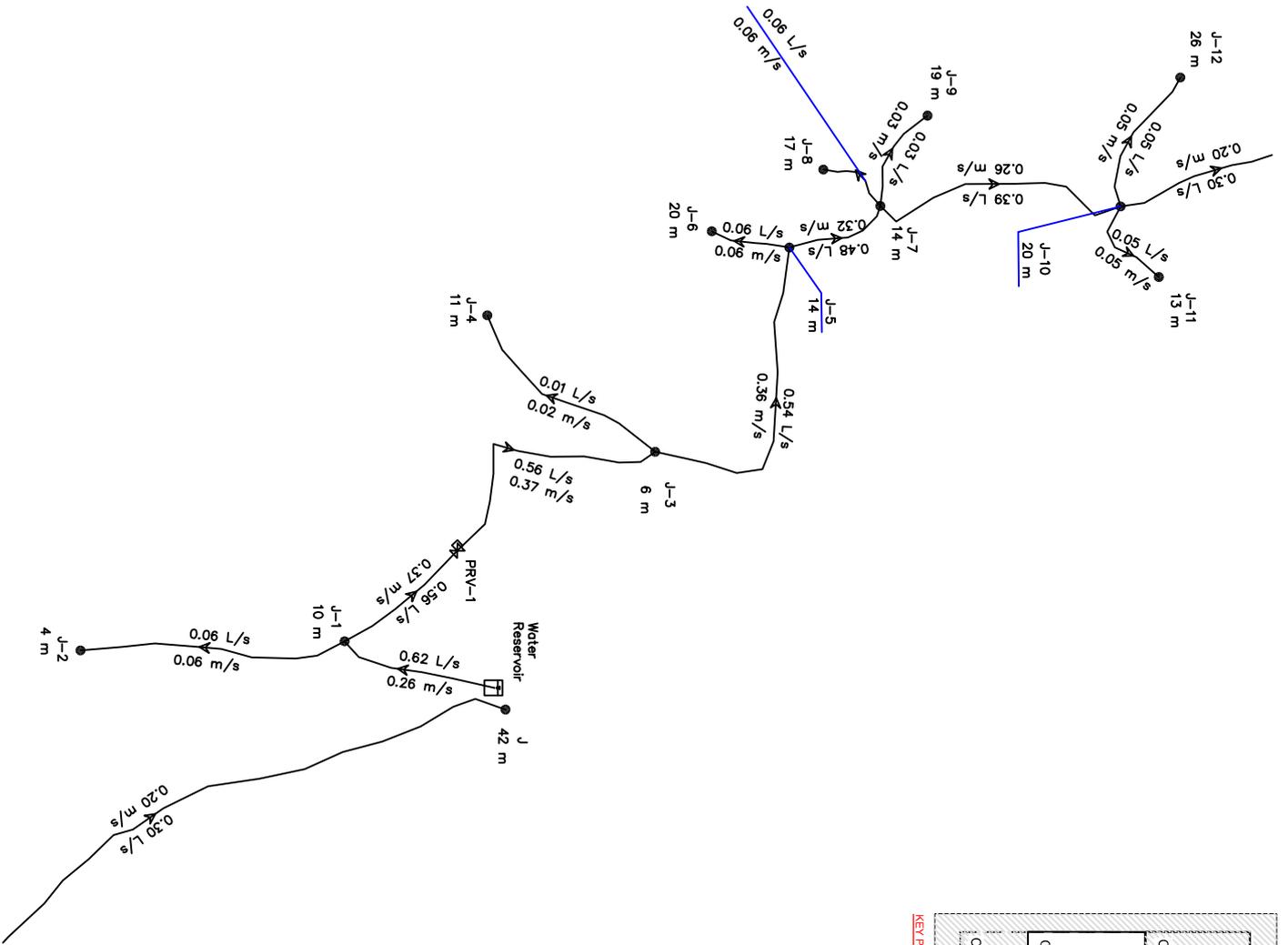
C-102

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. 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	2546.000
B.P.T	286,972.21	3,718,819.09	2690.000
V.A.P-1	286,684.53	3,719,018.66	2507.000
V.A.P-2	286,365.62	3,719,415.00	2465.000

## Action Against Hunger

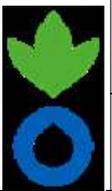
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DW.No:

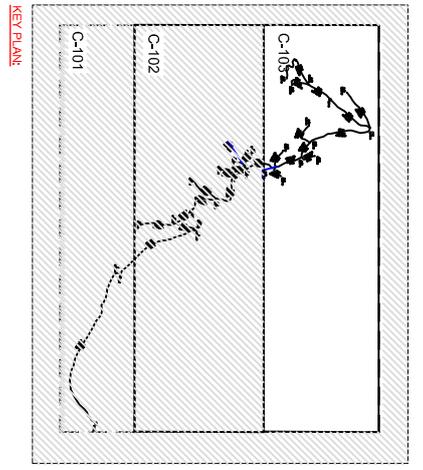
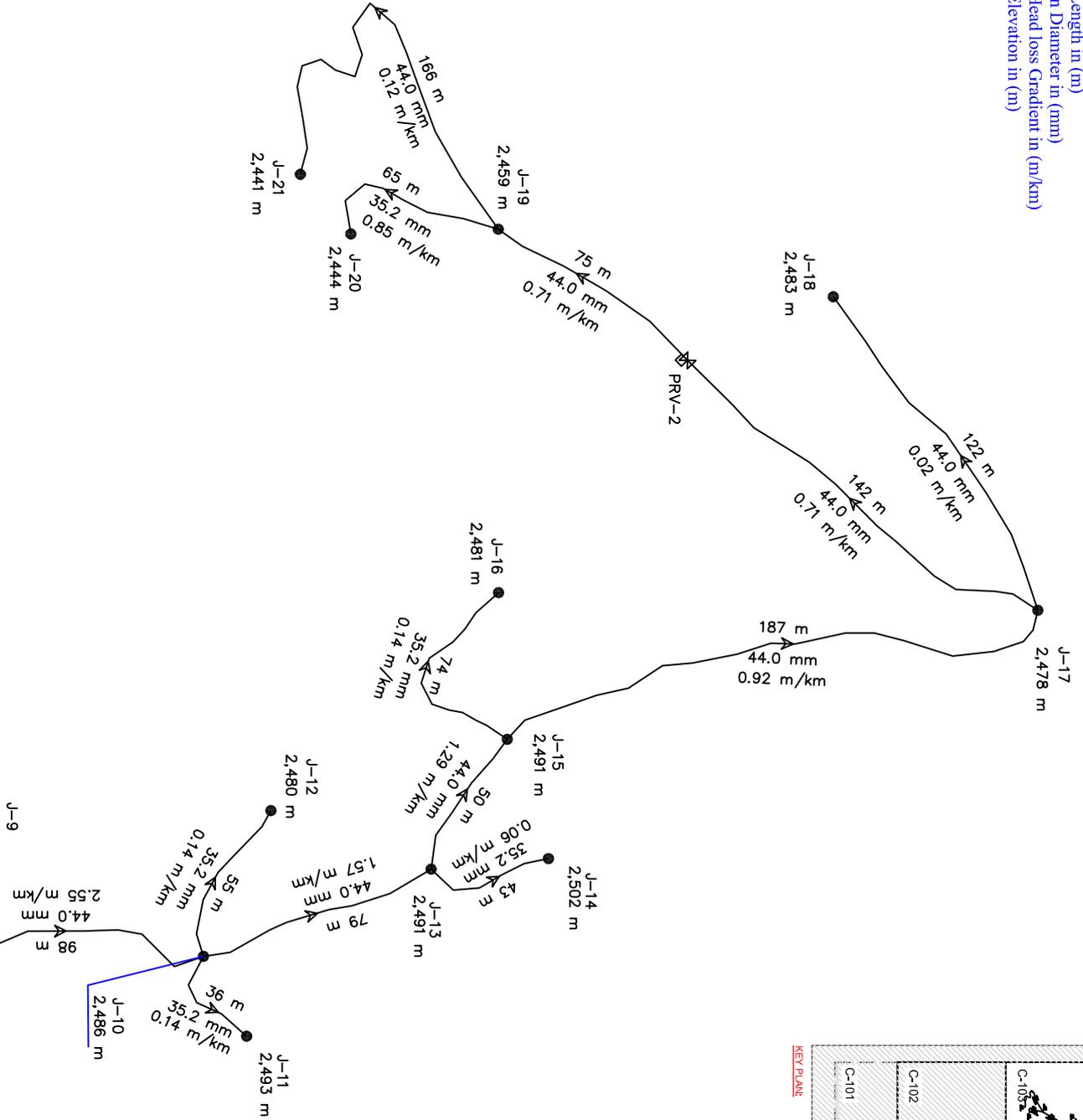
C1-102

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)



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	3,718,748.32	2690.000
RESERVOIR	296,734.72	3,719,032.14	2548.000
B.P.T	296,872.21	3,718,819.09	2590.000
V.A.P-1	296,694.53	3,719,018.66	2507.000
V.A.P-2	296,365.62	3,719,415.00	2465.000

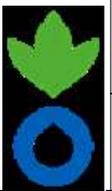
Action Against Hunger  
WASH Department

DW.No:

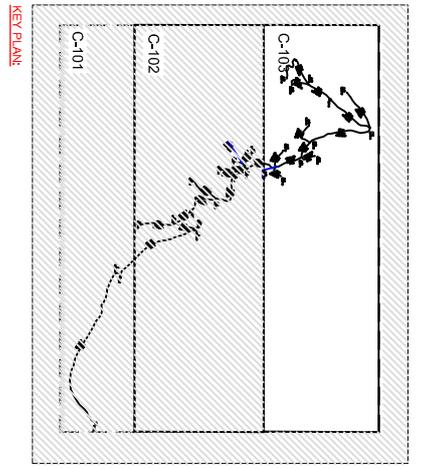
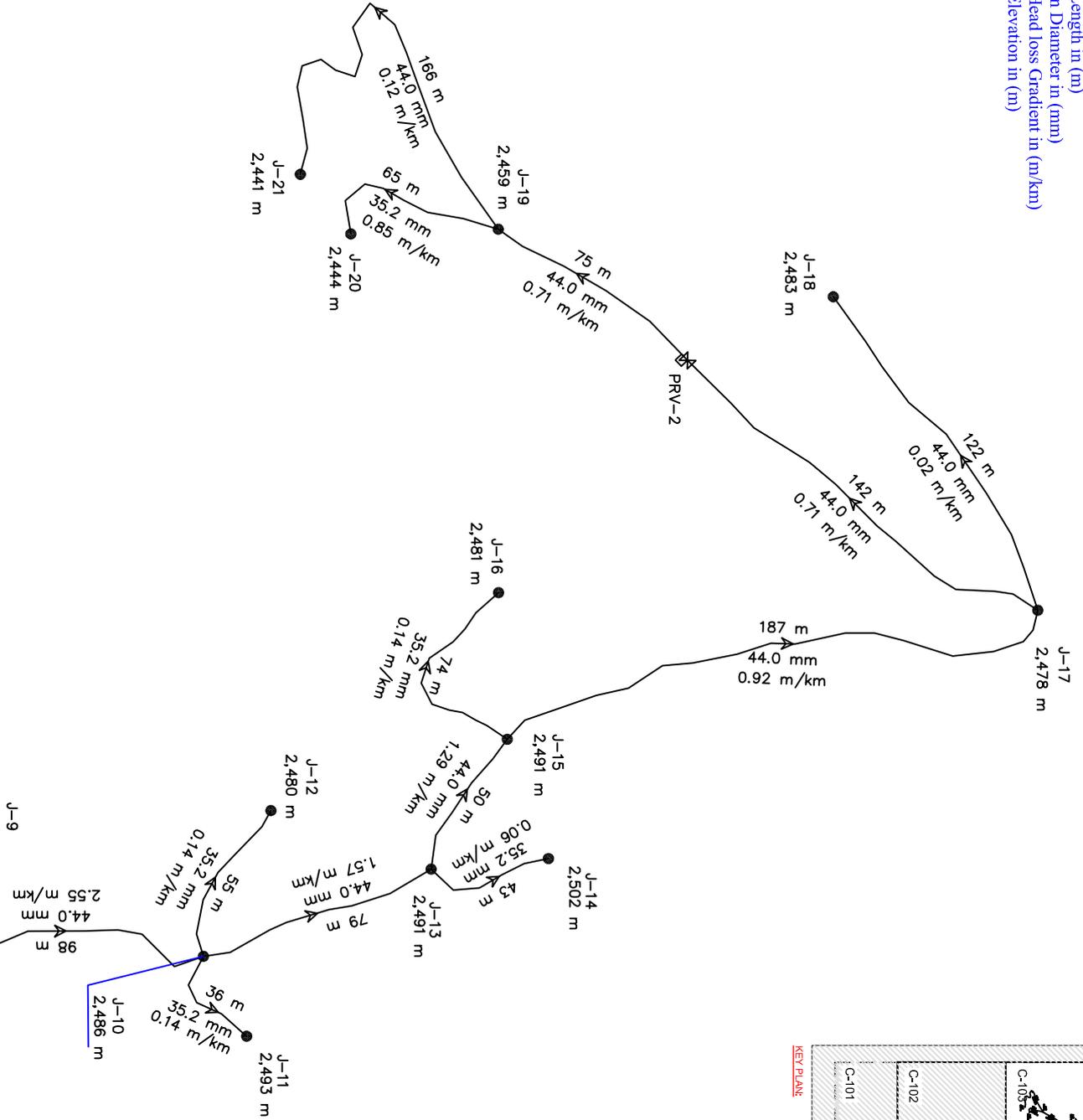
C-103

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)



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	3,718,748.32
RESERVOIR	286,734.72	3,719,032.14
B.P.T	286,872.21	3,718,819.09
V.A.P-1	286,684.53	3,719,018.66
V.A.P-2	286,365.62	3,719,415.00
		2465,000

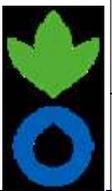
Action Against Hunger  
WASH Department

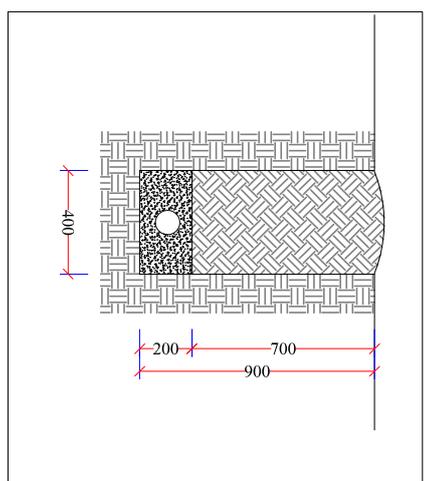
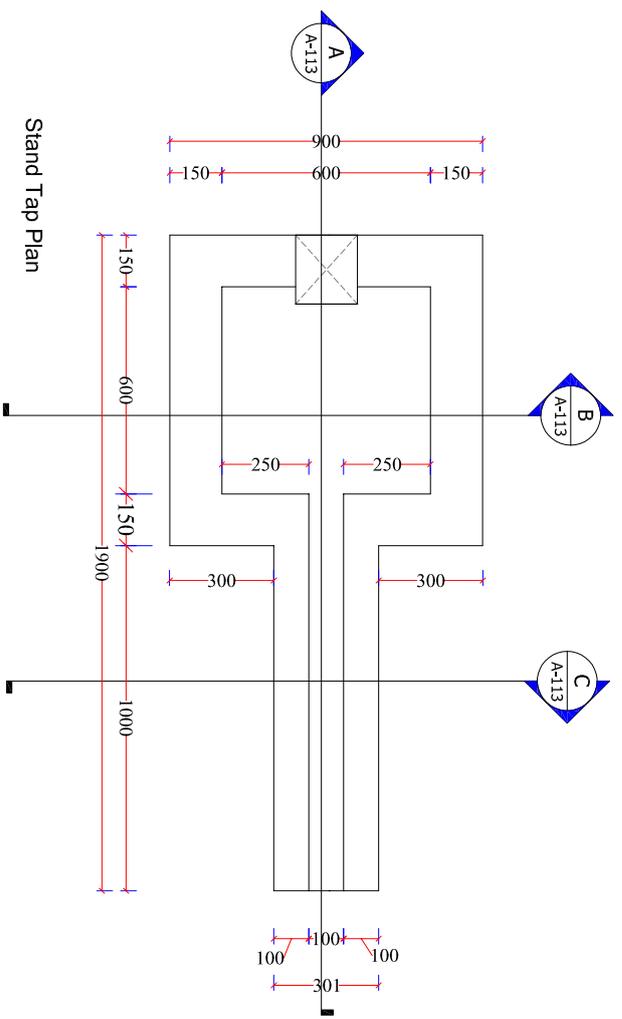
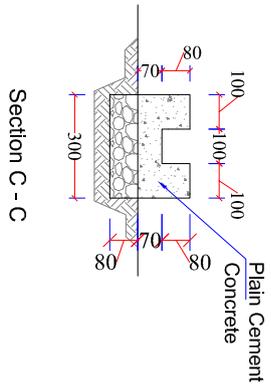
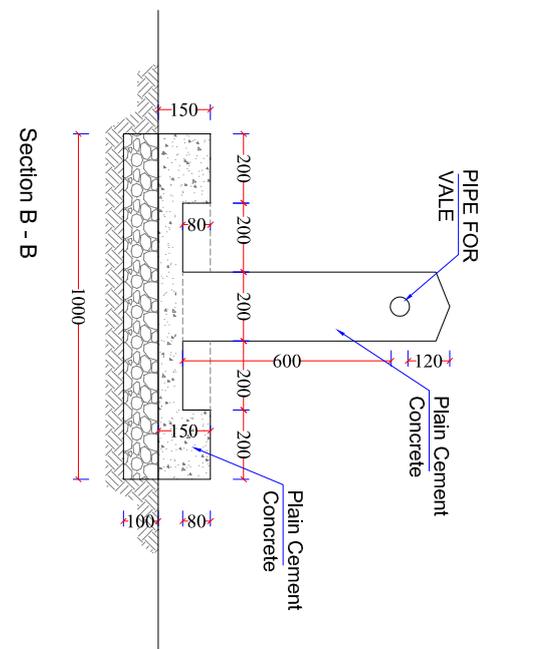
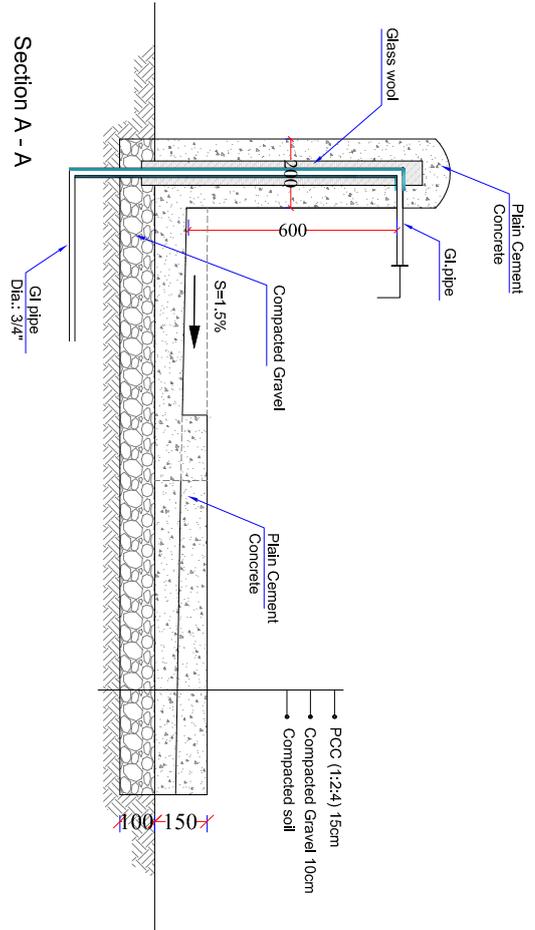
DW.No:

C-103

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





A B C D 1 2 3 4 5

A-113 STAND TAP  
REF. SHEET - 11  
SCALE: 1:15



DW.No:  
**A-113**

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