



**ACTION AGAINST HUNGER
DAIKUNDI OFFICE
WASH DEPARTMENT**

(TECHNICAL DRAWING PART)

**PROJECT NAME:
WATER SUPPLY NETWORK PROJECT**

JUN, 10, 2024

PREPARED BY: WASH DEPARTMENT

INDEX SHEET

NUMBER	SHEET NUMBER	SHEET TITLES
1	G-100	COVER SHEET
2	G-101	INDEX SHEET
3	G-102	LOCATION OF PROJECT
4	G-103	SITE PLAN OF PROJECT
5	A-101	SPRING PROTECTION PLAN
6	A-102	SPRING PROTECTION REINFORCEMENT SLAB
7	A-103	SPRING PROTECTION SECTION
8	A-105	WATER RESERVOIR TANK PLAN
9	A-106	WATER RESERVOIR TANK SECTION B-B
10	A-107	WATER RESERVOIR TANK SECTION A-A
11	A-108	REINFORCEMENT IN HORIZONTAL SECTION OF WATER RESERVOIR TANK
12	A-109	REINFORCEMENT IN SECTION C-C OF WATER RESERVOIR TANK
13	A-110	REINFORCEMENT IN SECTION D-D OF WATER RESERVOIR TANK
14	A-111	VALE BREAK PRESSURE (VALE FOR REDUCING PRESSURE)
15	A-112	GATE VALE BOX
16	A-113	STAND TAP AND DIG SPECIFICATION OF LAYING PIPE
17	C-100	KEY PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)
18	C-1-100	KEY PLAN (Node ID, Flow, Velocity, Pressure head)
19	C-101	ENLARGE PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)
20	C1-101	ENLARGE PLAN (Node ID, Flow, Velocity, Pressure head)
21	C-102	ENLARGE PLAN (Node ID, Length, Diameter, Headloss, Gradient, Elevation)
22	C1-102	ENLARGE PLAN (Node ID, Flow, Velocity, Pressure head)

Scale:

Note: All dimension are in millimeter

Action Against Hunger

WASH Department

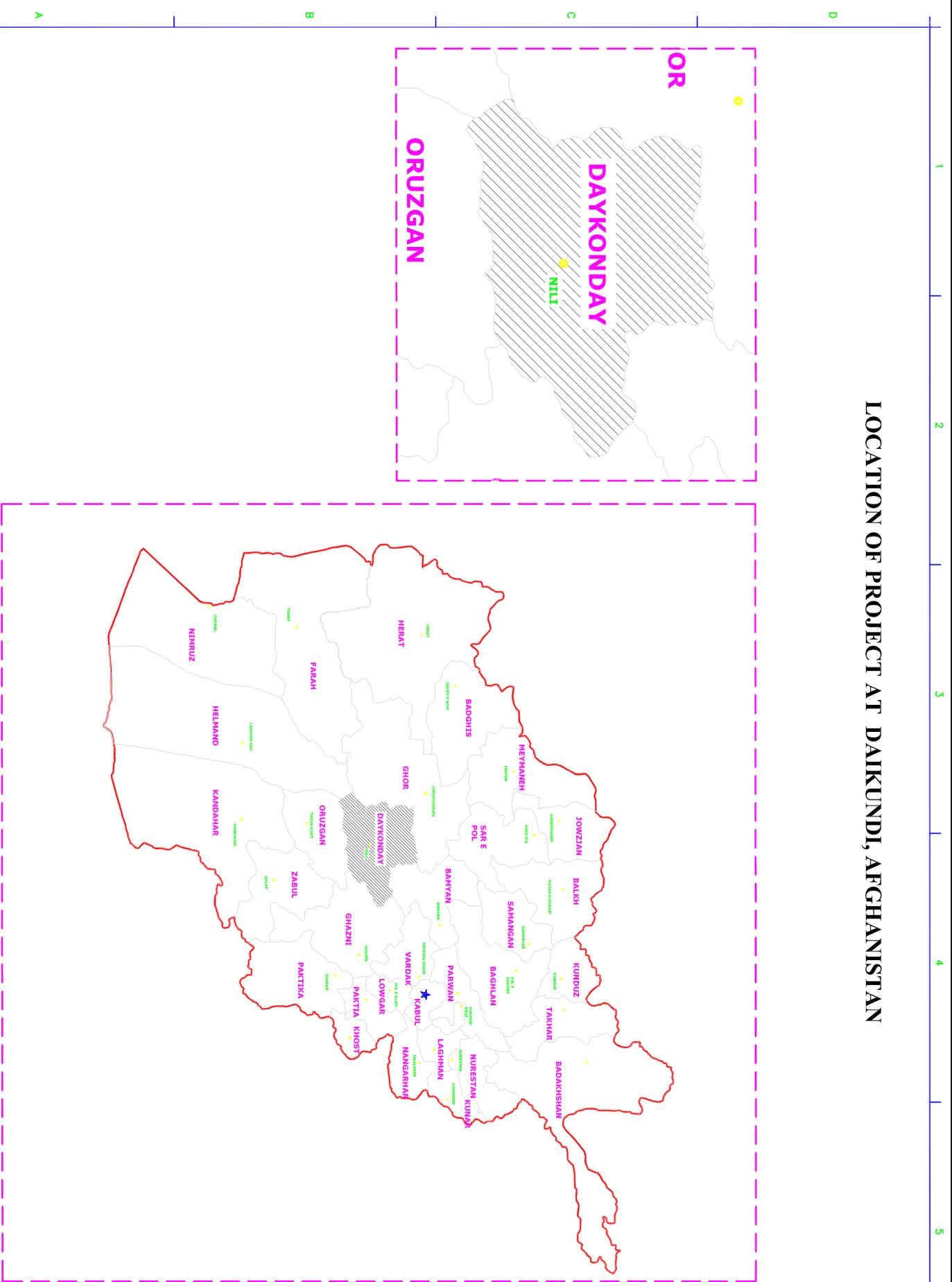
DW.No:

G-101

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



LOCATION OF PROJECT AT DAIKUNDI, AFGHANISTAN



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



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

Site plan for Naw Joye pato Networking project

1 2 3 4 5

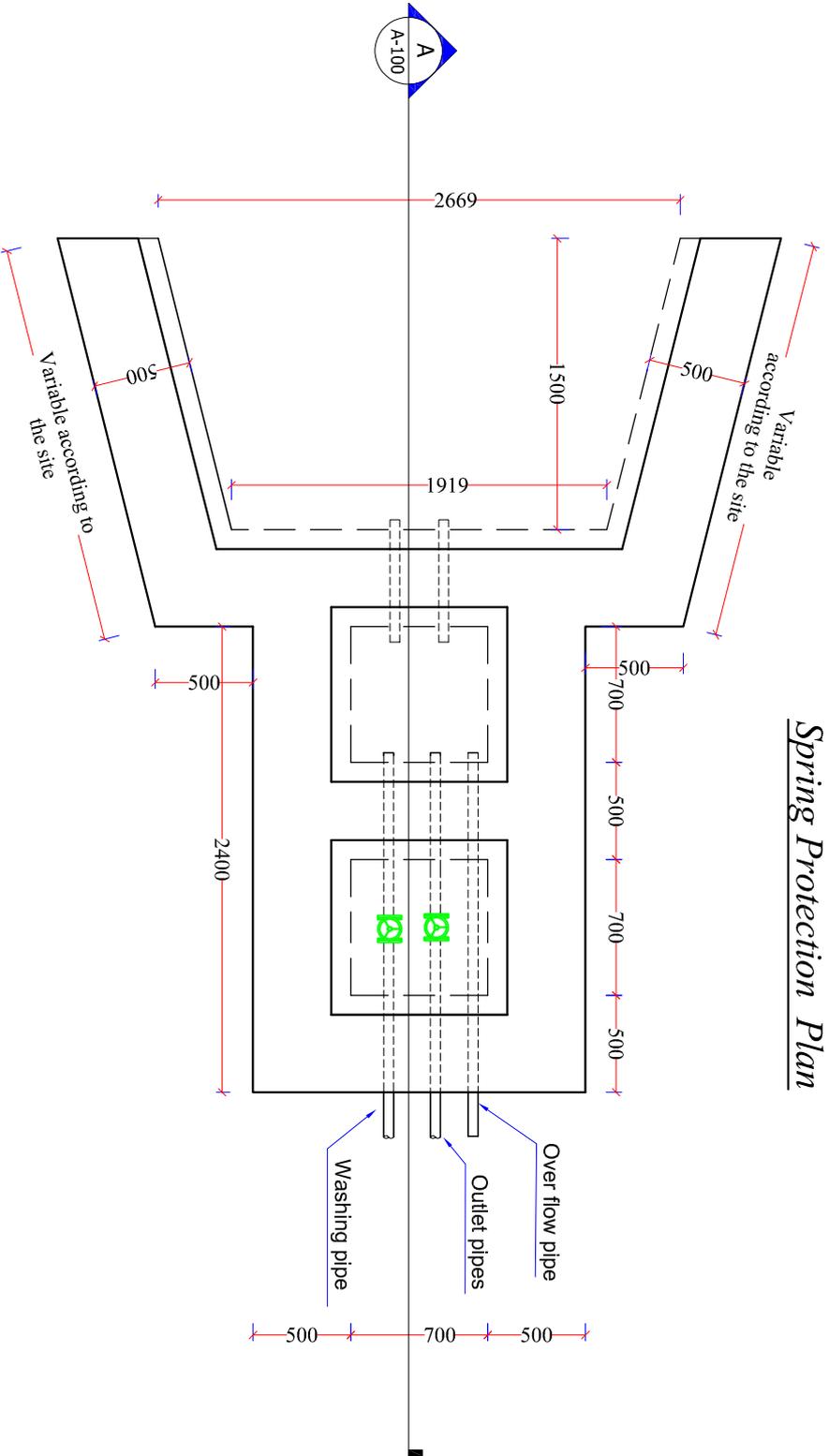


G-103 | SITE PLAN
REF. SCALE: 1:5



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

- 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

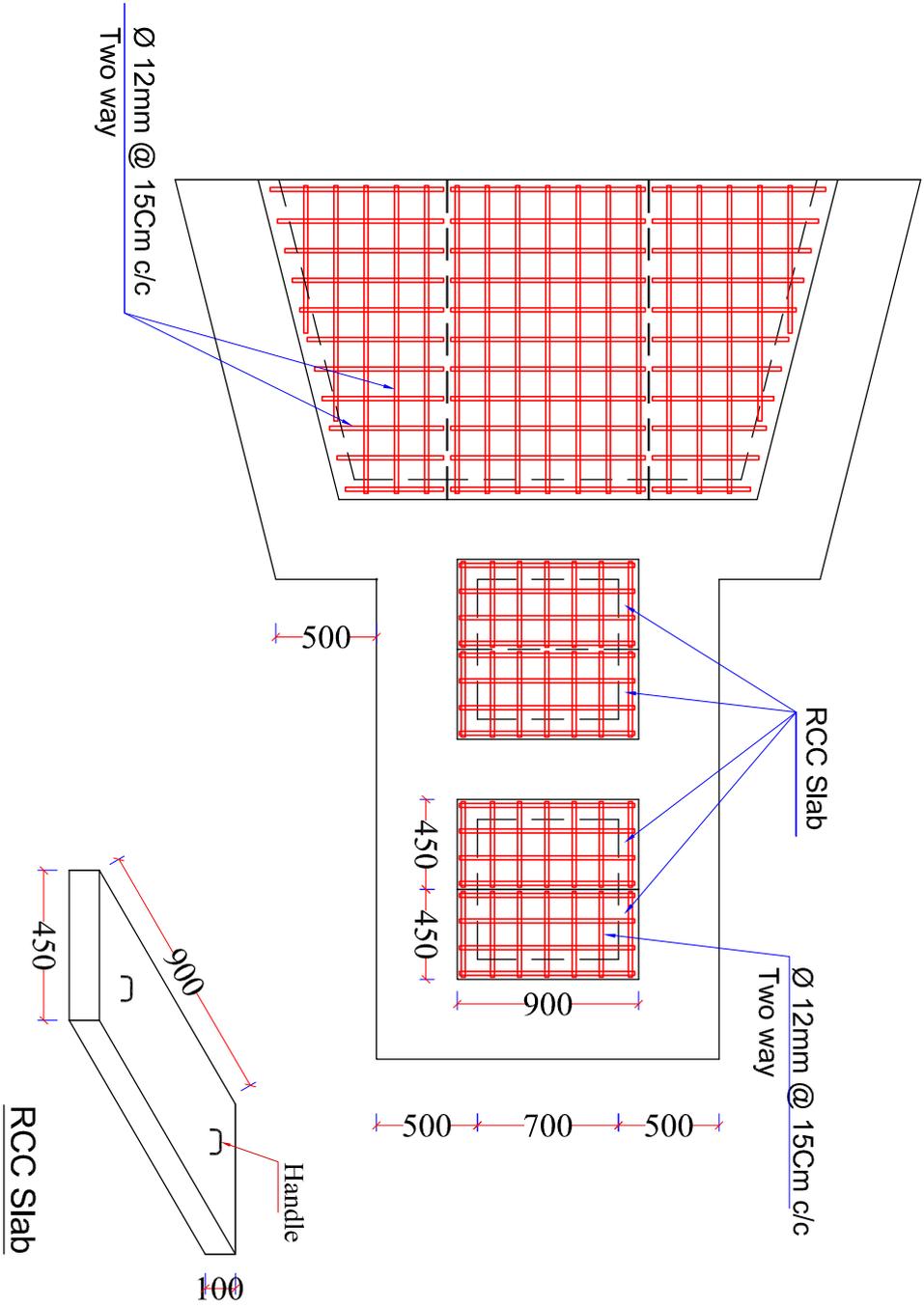
WASH Department

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

Scale:

Note: All dimension are in millimeter

Spring Protection Structure Reinforcement

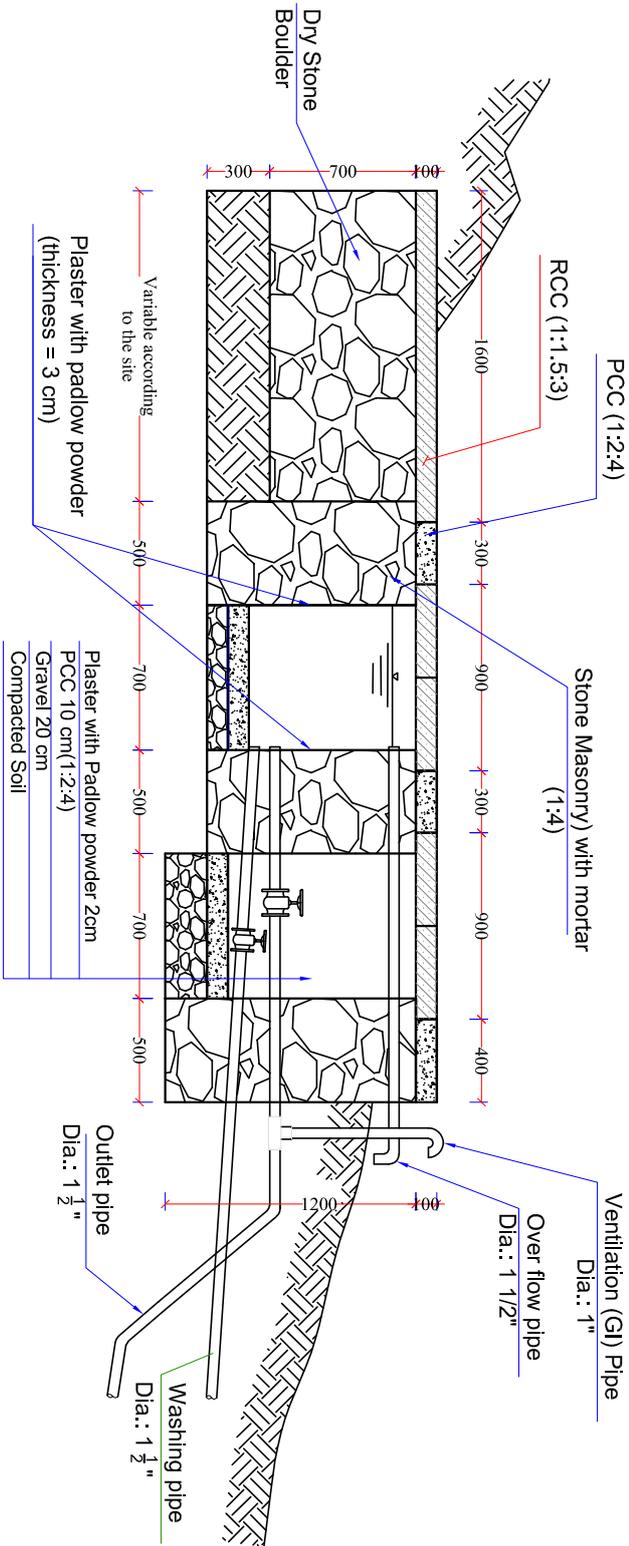


A-102 | SPRING PROTECTION REINFORCEMENT
 REF: | SCALE: 1:25



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	Pato	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

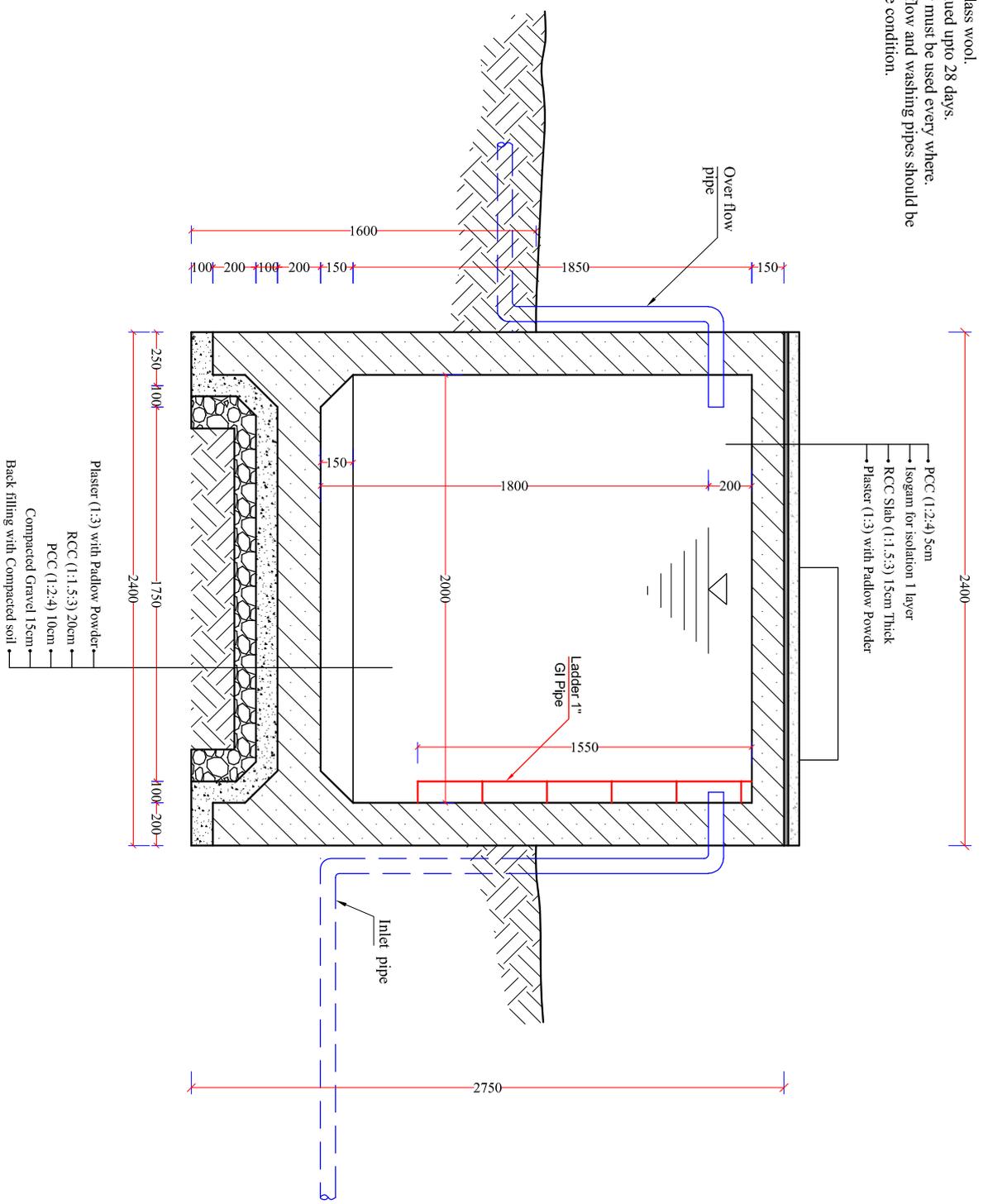
WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Pato	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.



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

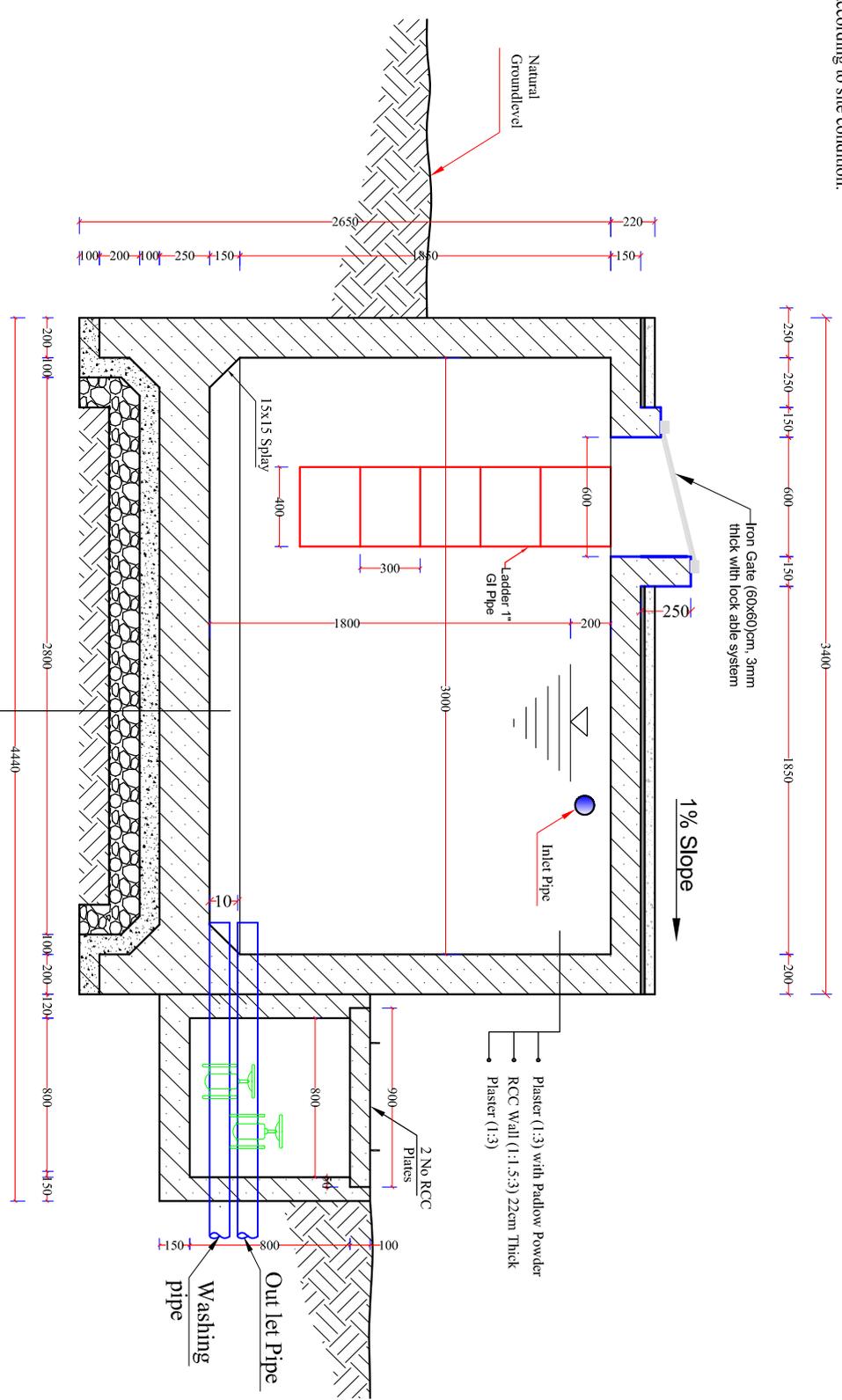


DW.No:
A-106

Action Against Hunger			
WASH Department			
Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Pato	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 and polyethylene pipes diameters must chose according to BoQ specification

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

- Plaster (1:3) with Padlow Powder
- RCC (1:1.5:3) 20cm
- PCC (1:2:4) 10cm
- Compacted Gravel 15cm
- Back filling with Compacted soil

- Plaster (1:3) with Padlow Powder
- RCC Wall (1:1.5:3) 22cm Thick
- Plaster (1:3)



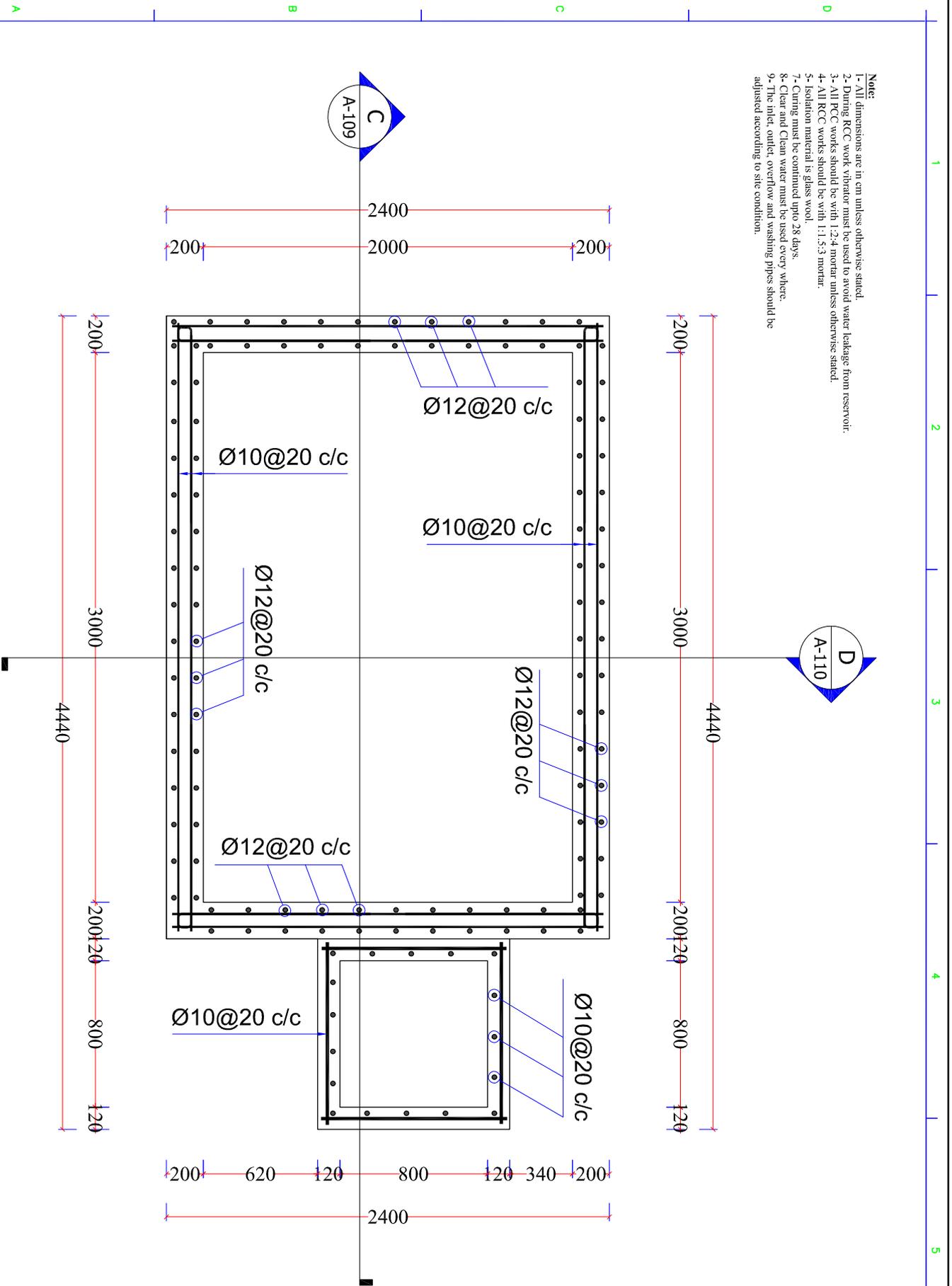
DW.No:
A-107

Action Against Hunger
WASH Department

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

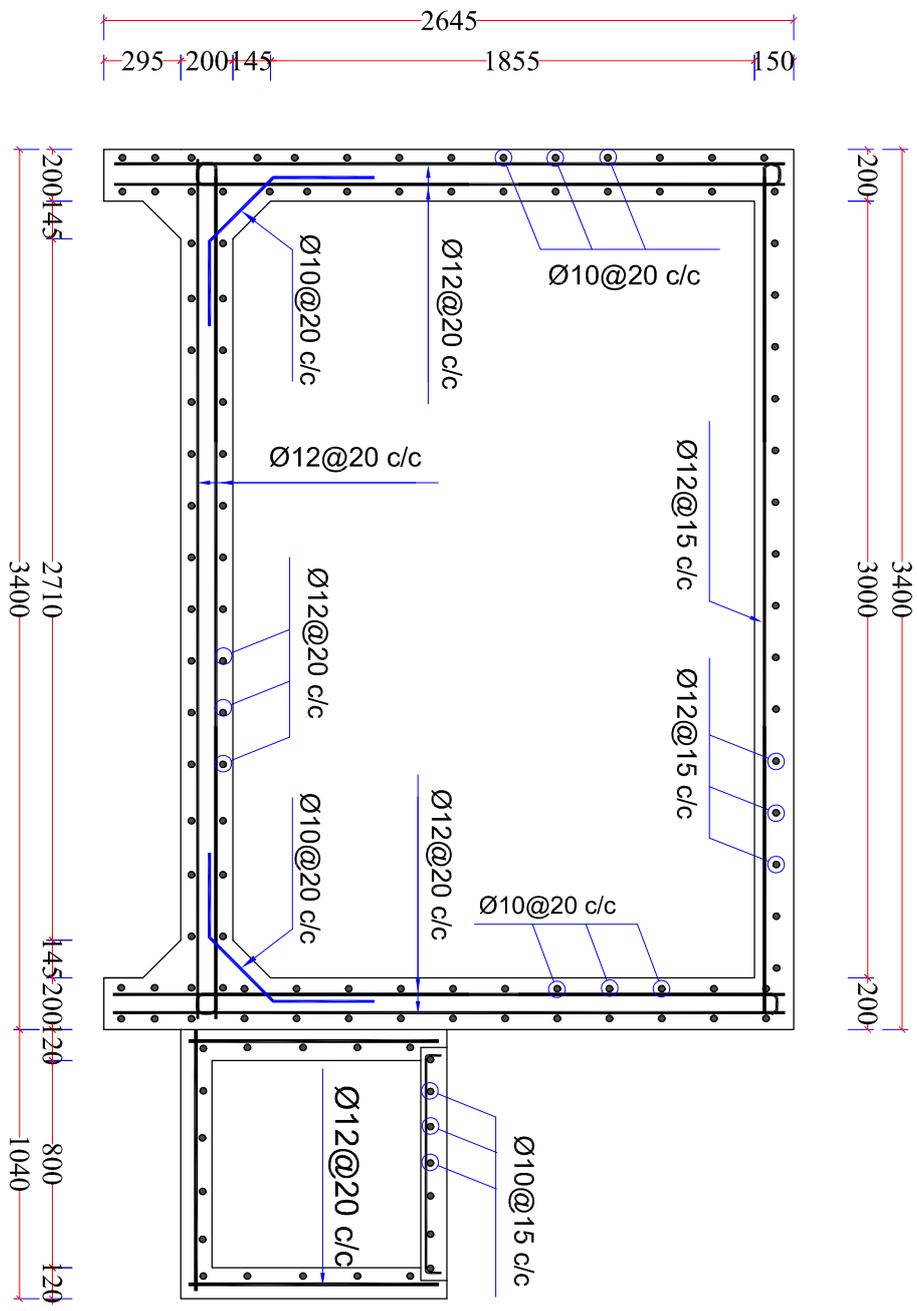
Scale:

Note: All dimension are in millimeter

A B C D

1 2 3 4 5

A.109 SECTION C-C
REF.
SCALE: 1:20



DW.No:

A-109

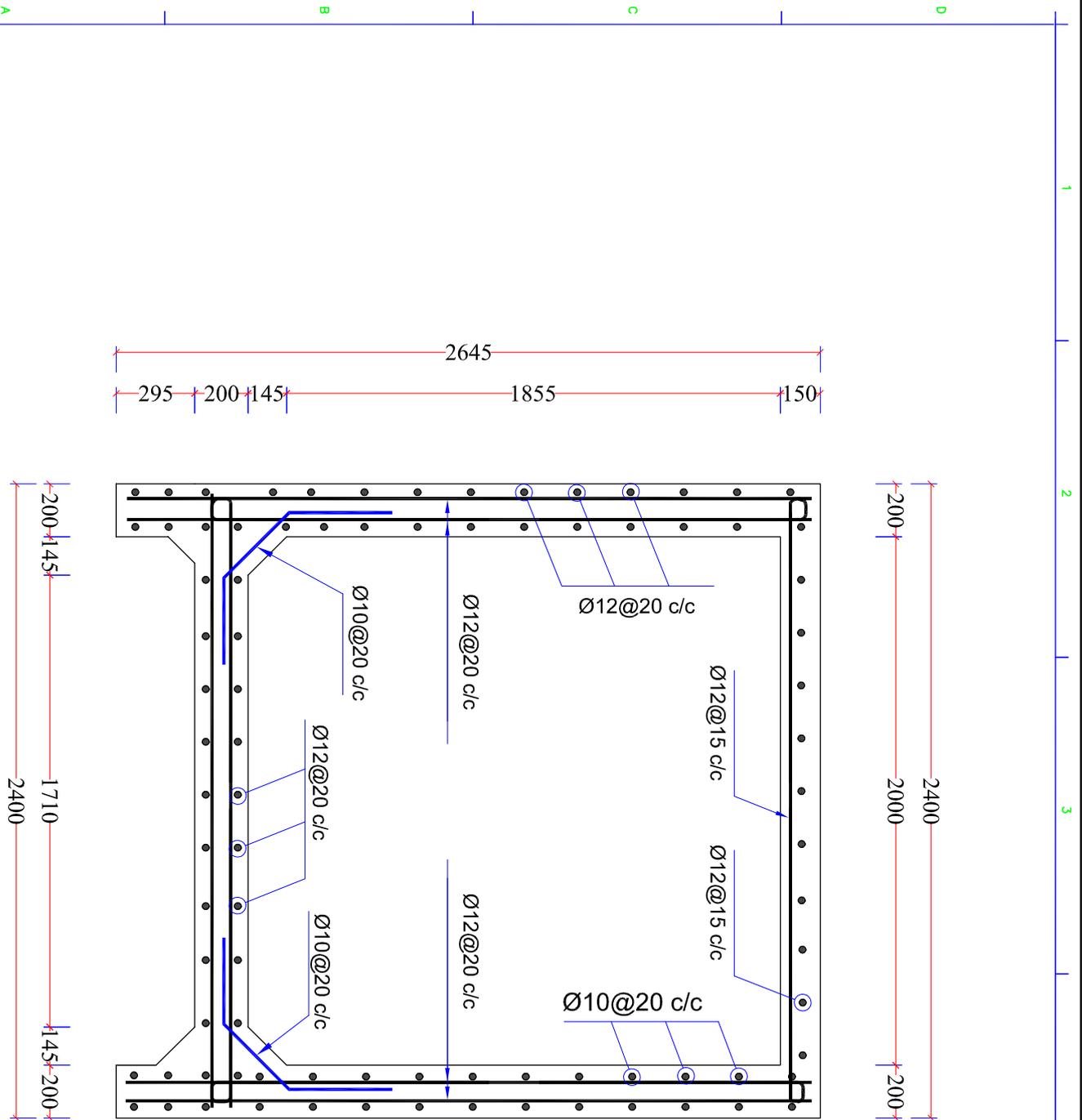
Action Against Hunger

WASH Department

Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh
Province	Daikundi	Chick by	Mohamad Nekandesh
District	Pato	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

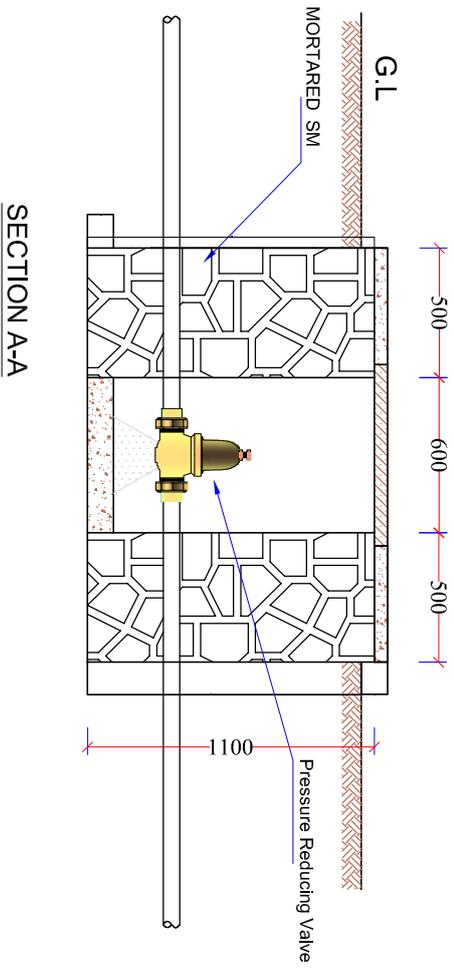
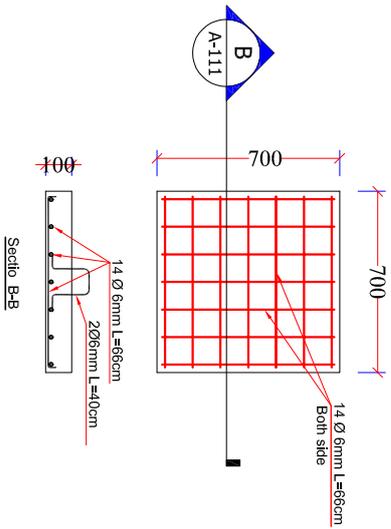
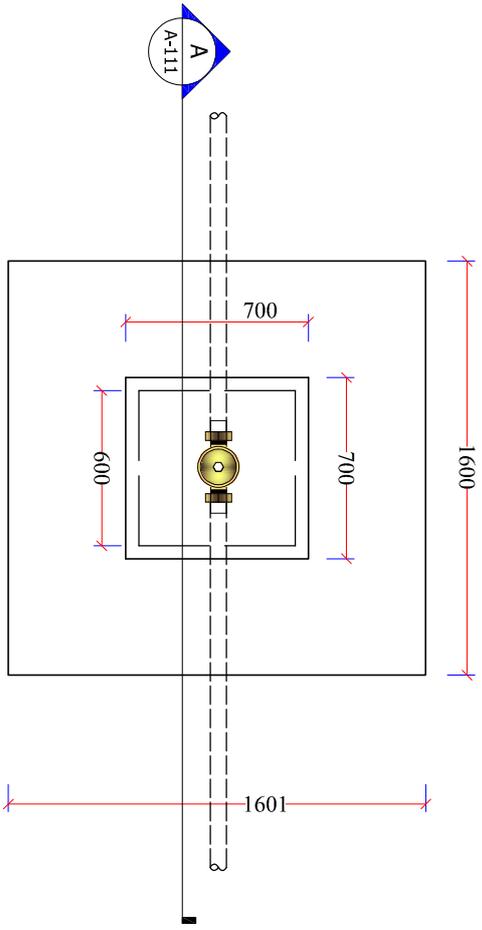
WASH Department

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

Scale:

Note: All dimension are in millimeter

VALE BREAK PRESSURE



TYPICAL DIMENSIONS OF VALVE CHAMBER

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

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



DW.No:

A-111

Action Against Hunger

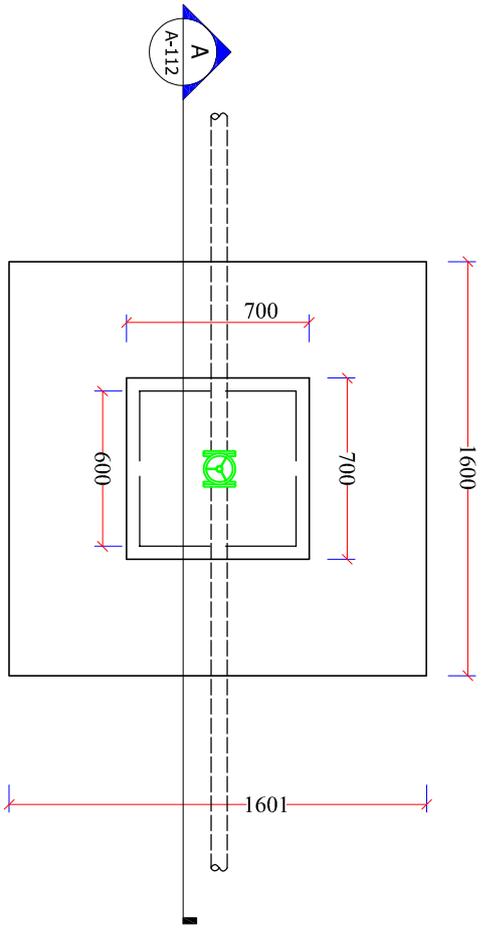
WASH Department

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

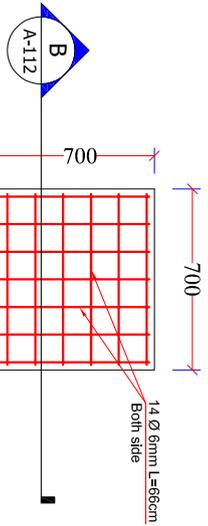
Scale:

Note: All dimension are in millimeter

GATE VALE BOX FOR CONTROL

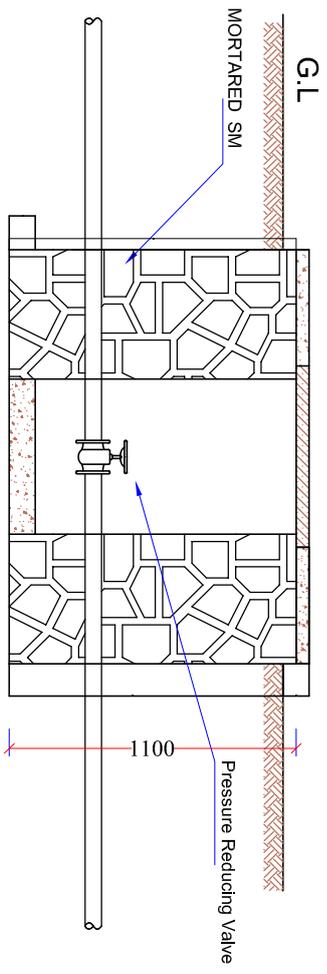


1600
700
600
500



700
700
14 Ø 6mm L=66cm
Both side
2Ø 6mm L=40cm
10 Ø 6mm L=66cm
Sectio B-B

SECTION A-A



500
600
500
1100

Typical Dimensions of Valve Chamber

S.No.	Diameter of Valve (mm.)	Dimension (L x B)
1.	50	600 X 600

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

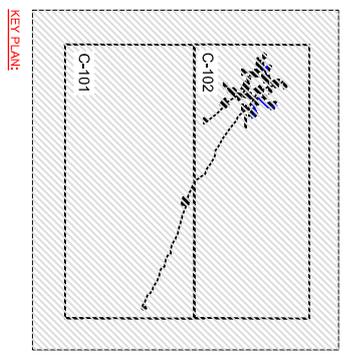
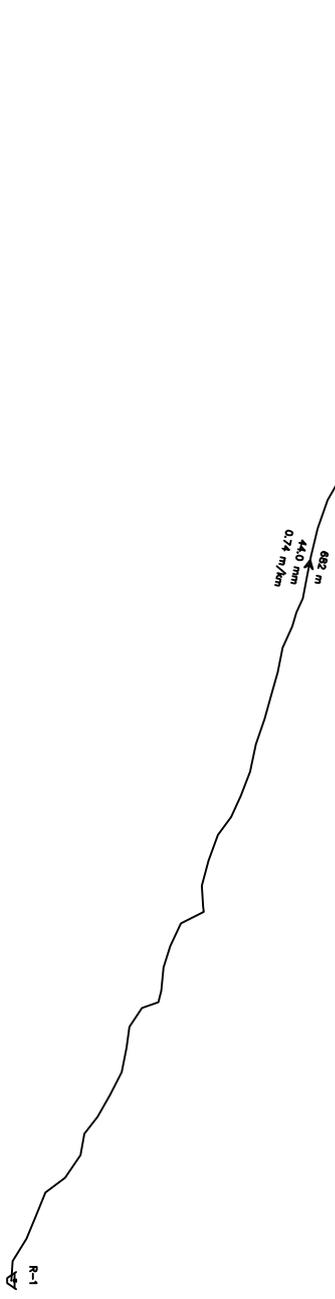
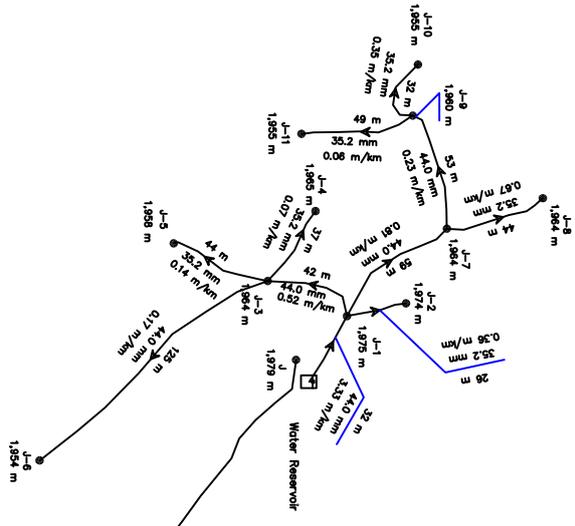


DW.No:
A-112

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



KEY PLAN

LEGEND:

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

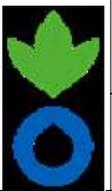
COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,490.57	1998.000
RESERVOIR	228,939.14	3,713,794.05	1979.000

Action Against Hunger

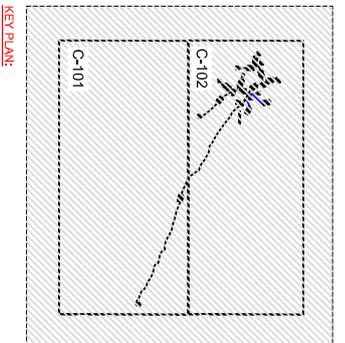
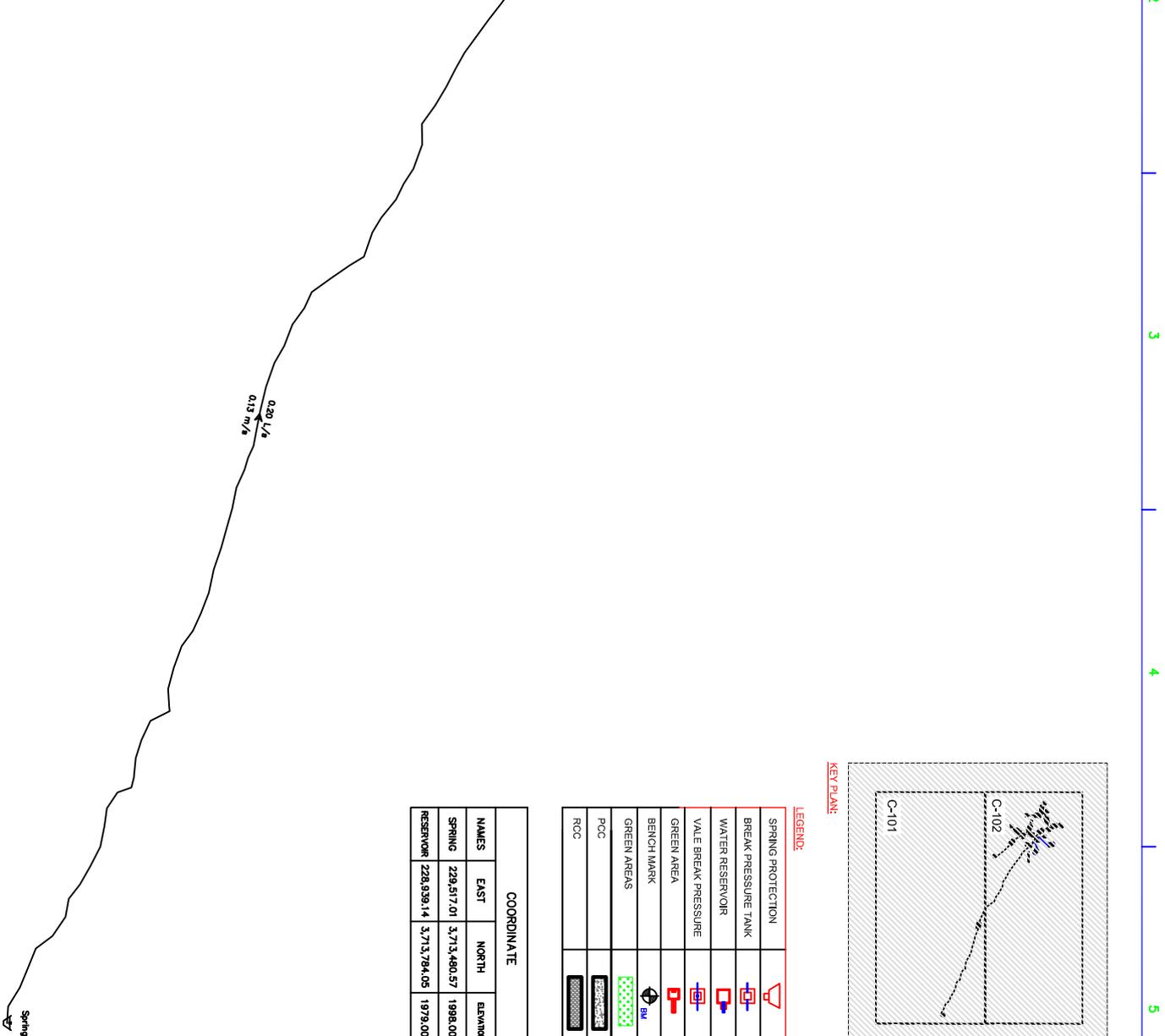
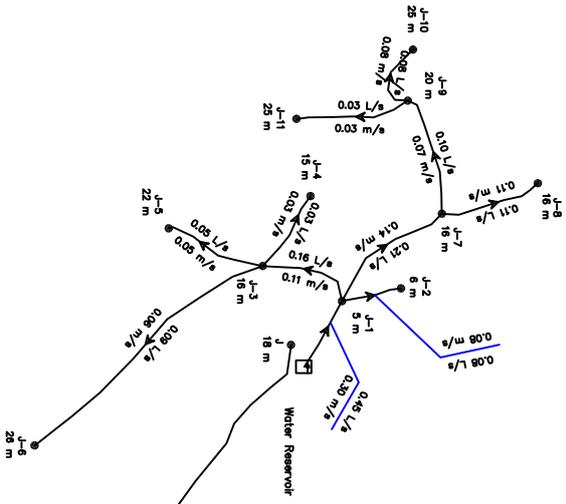
WASH Department

DW.No:	Project Name			Water Supply	Design by	Yaddullah Jalali
	C-100	Province		Daikundi	Drawing & Layout by	Mohamad Nekandesh
District		Pato	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	
RCC	

COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,480.57	1998.000
RESERVOIR	228,939.14	3,713,794.05	1979.000

Action Against Hunger

WASH Department

DW.No:

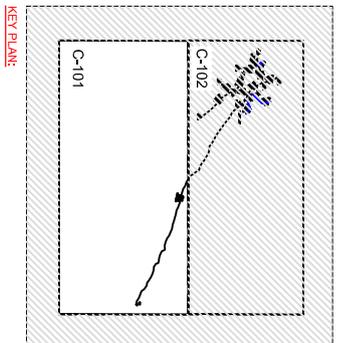
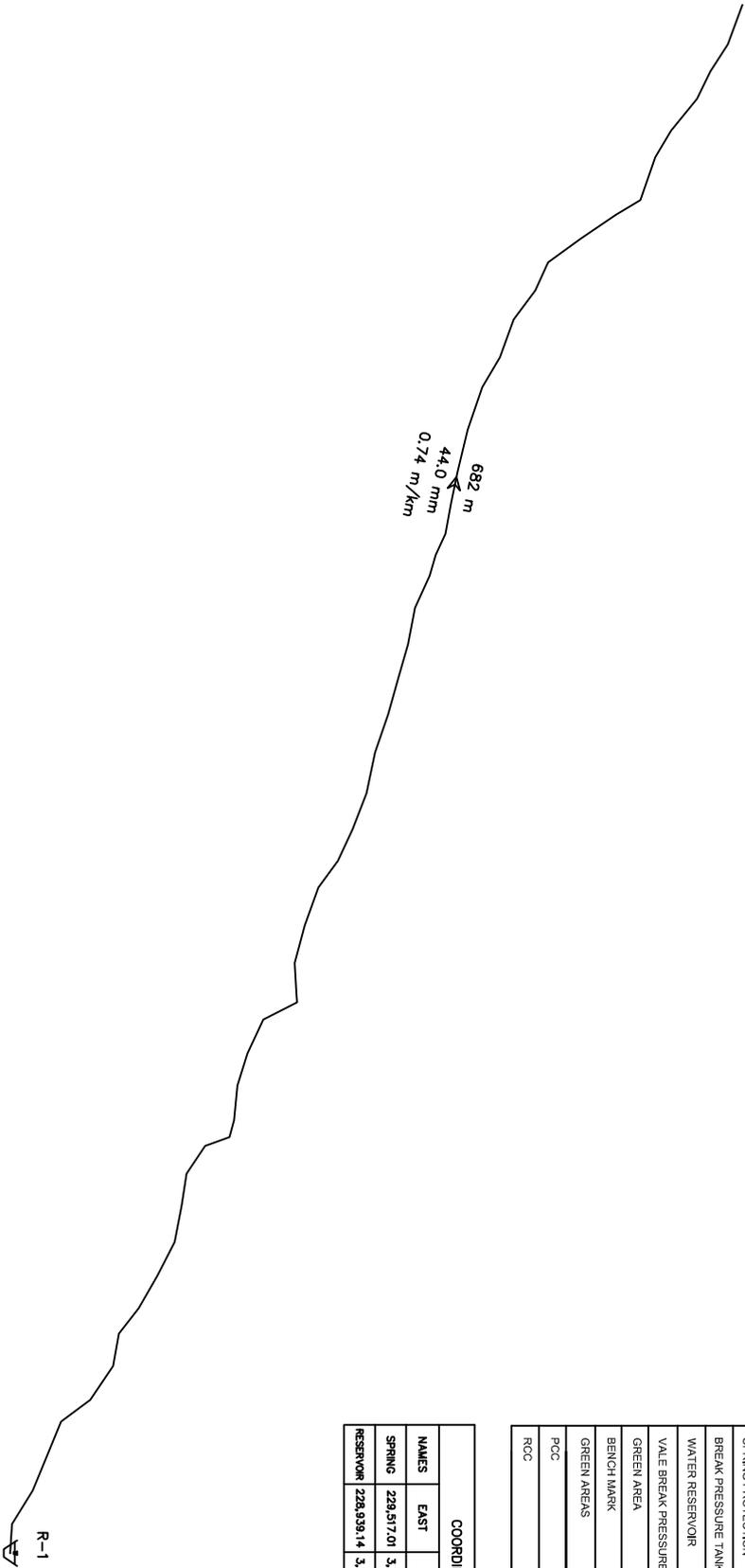
C1-100

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing & Layout by	Mohamad Nekandesh
District	Pato	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	
RCC	

COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,490.57	1998.000
RESERVOIR	228,939.14	3,713,784.05	1979.000

Action Against Hunger

WASH Department

DW.No:

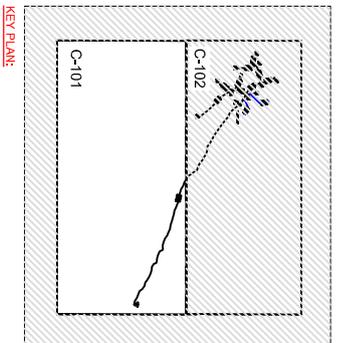
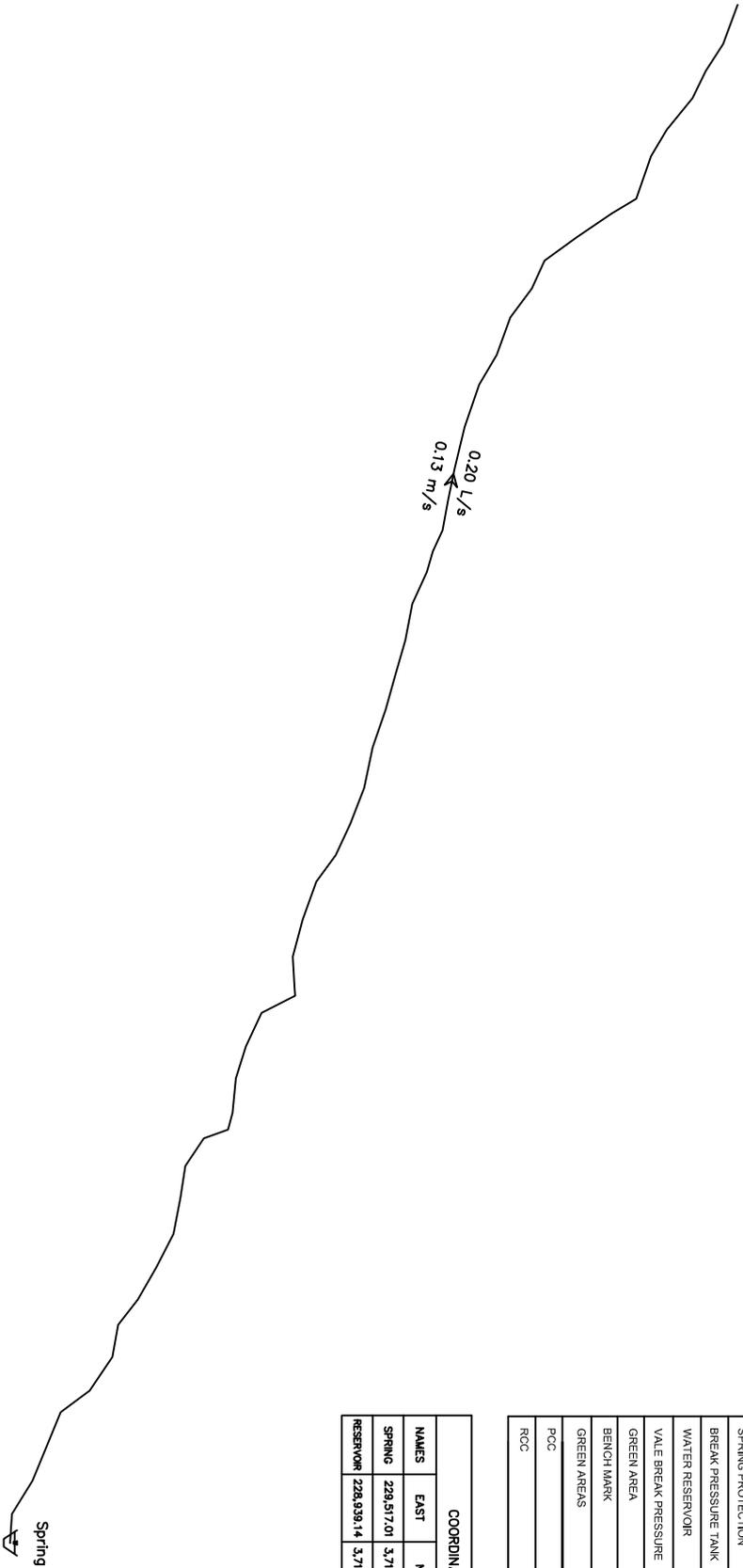
C-101

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing & Layout by	Mohamad Nekandesh
District	Pato	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	
RCC	

COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,490.57	1998,000
RESERVOIR	228,939.14	3,713,794.05	1979,000

Action Against Hunger

WASH Department

DW.No:

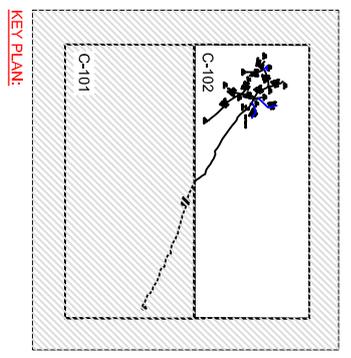
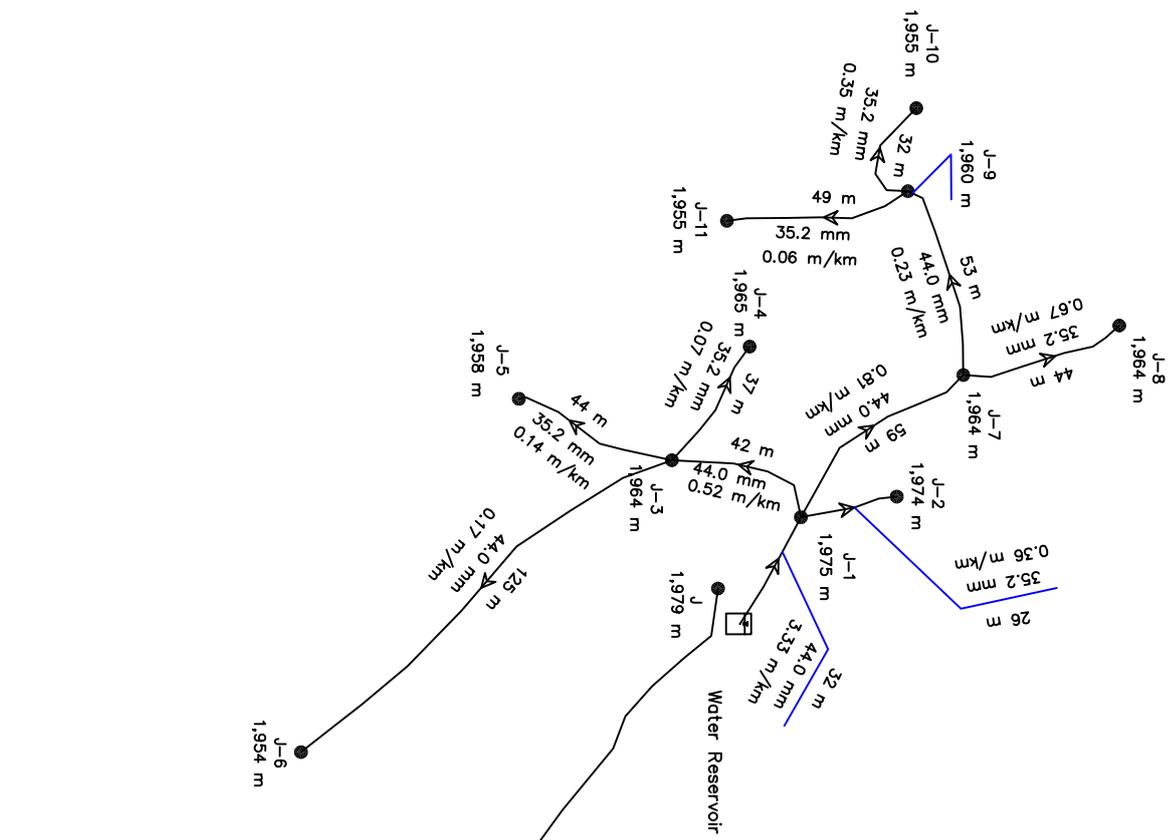
C1-101

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing& Layout by	Mohamad Nekandesh
District	Pato	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	
RCC	

COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,480.57	1998,000
RESERVOIR	228,939.14	3,713,784.05	1979,000

Action Against Hunger

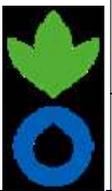
WASH Department

DW.No:

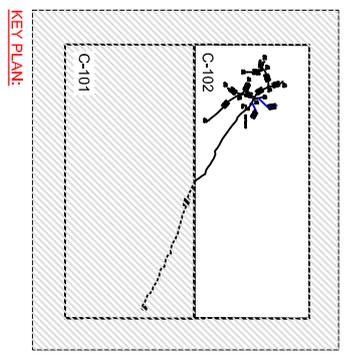
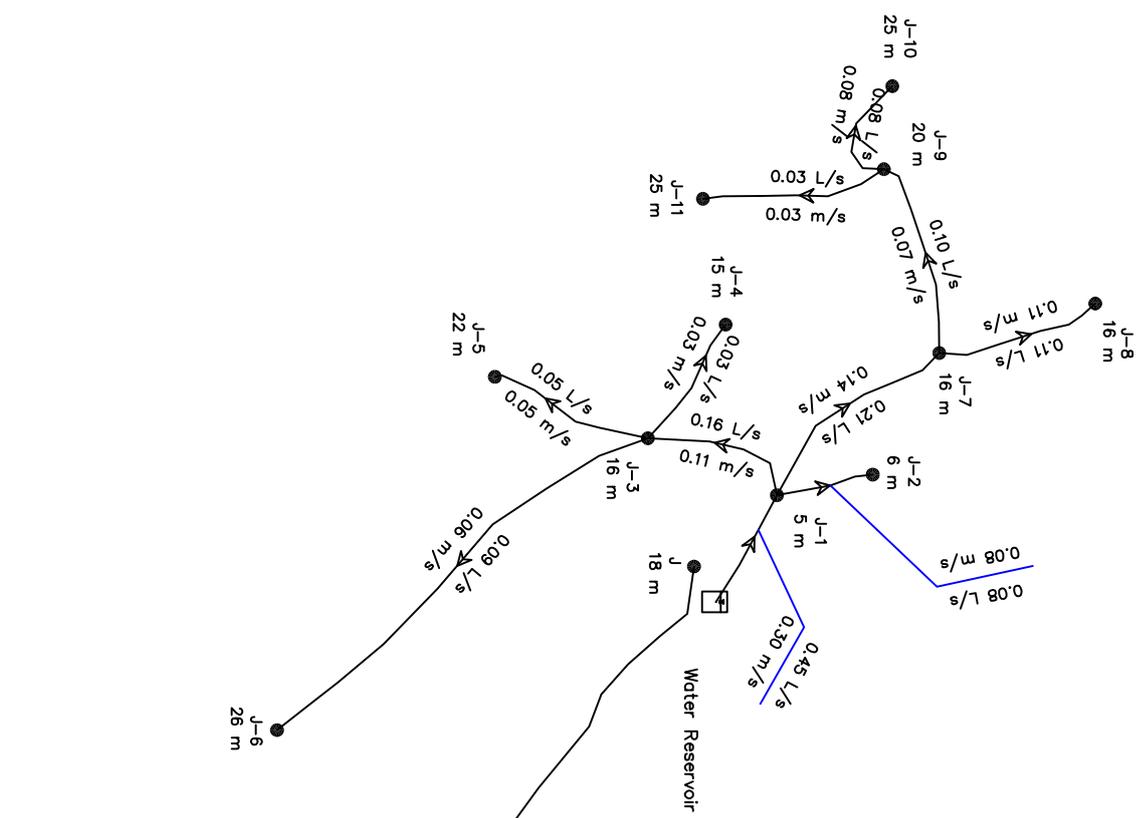
C-102

Project Name	Water Supply	Design by	Yaddullah Jalali
Province	Daikundi	Drawing & Layout by	Mohamad Nekandesh
District	Pato	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	
RCC	

COORDINATE			
NAMES	EAST	NORTH	ELEVATION
SPRING	229,517.01	3,713,480.57	1998,000
RESERVOIR	228,939.14	3,713,784.05	1979,000

0.20 L/s
0.13 m/s

Action Against Hunger

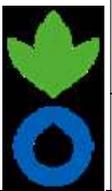
WASH Department

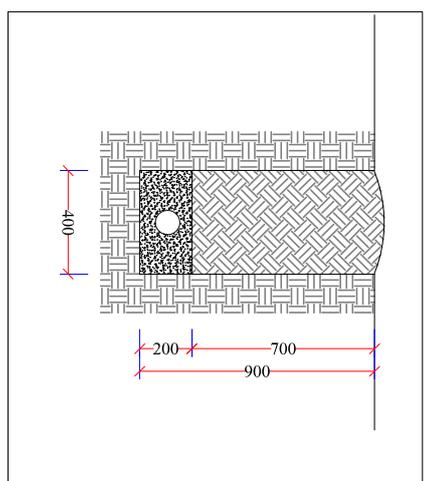
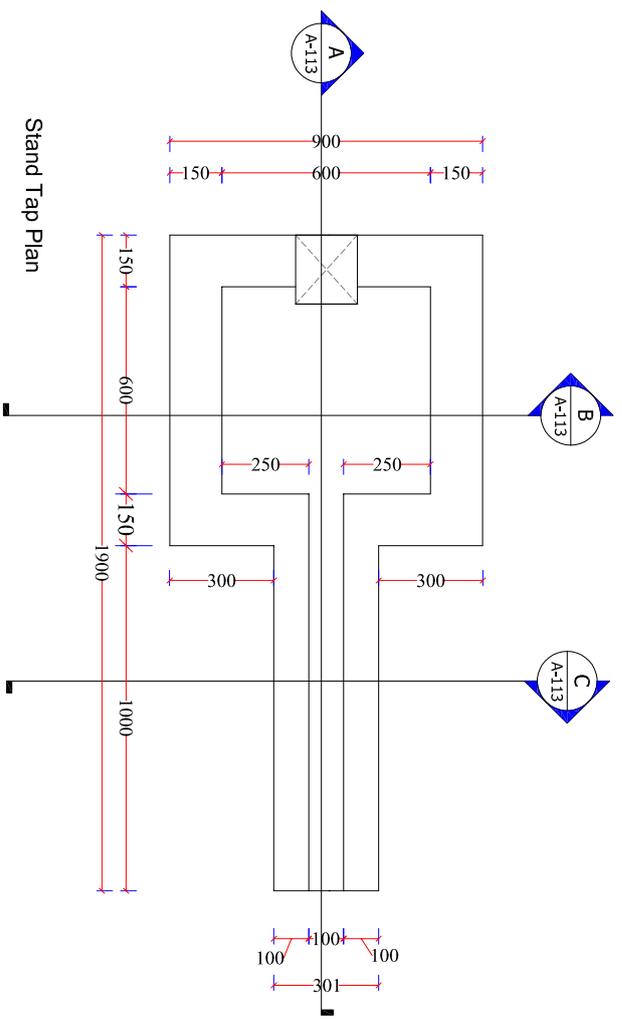
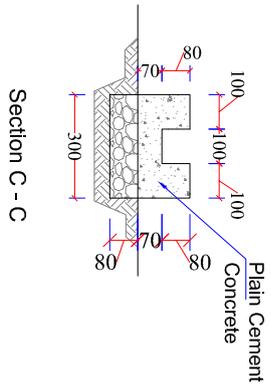
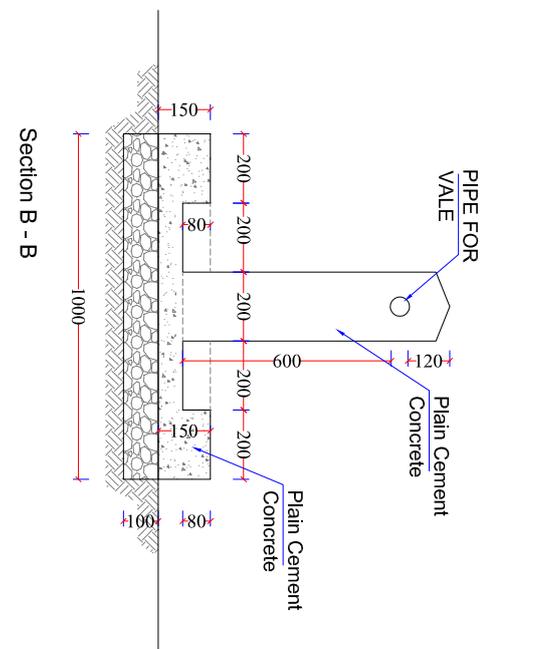
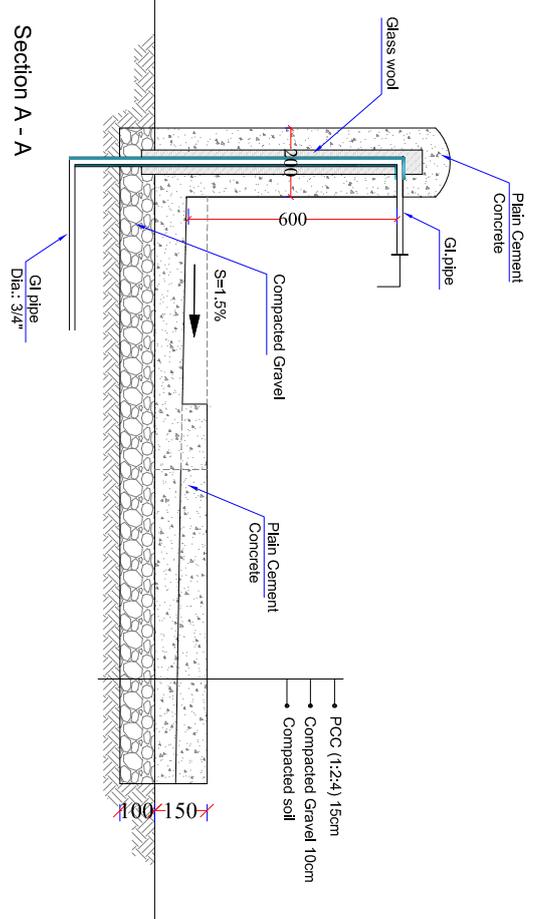
DW.No:

C1-102

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

Note: All dimension showed in sheet





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



DW.No:

A-113

Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter