



**ACTION AGAINST HUNGER
DAIKUNDI OFFICE
WASH DEPARTMENT**


(TECHNICAL DRAWING PART)

PROJECT NAME:
WATER SUPPLY NETWORK PROJECT

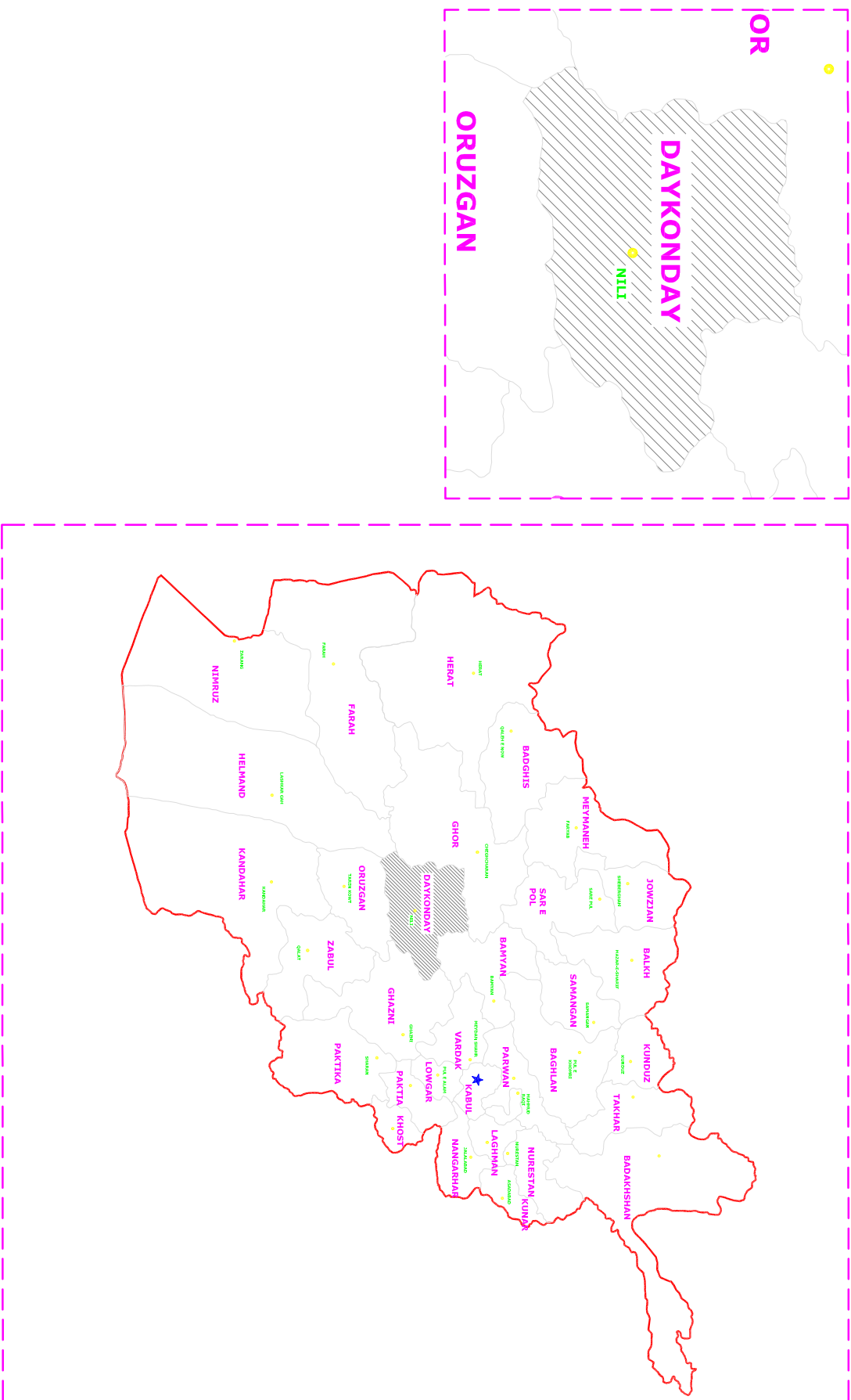
JUN, 10, 2024

PREPARED BY: WASH DEPARTMENT

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	DW.No:	Action Against Hunger				Scale:
		WASH Department				Note: All dimension are in millimeter
		Project Name	Water Supply	Design&Drawing by	Mohamad Nekandesh	
		Province	Daikundi	Chick by	Mohamad Nekandesh	
G-101		District	Pato	Approved by	Yaddullah Jalali	

LOCATION OF PROJECT AT DAIKUNDI, AFGHANISTAN



G-102 | LOCATION OF PROJECT
REF | SCALE: NTS



DW.No:

G-102

Action Against Hunger

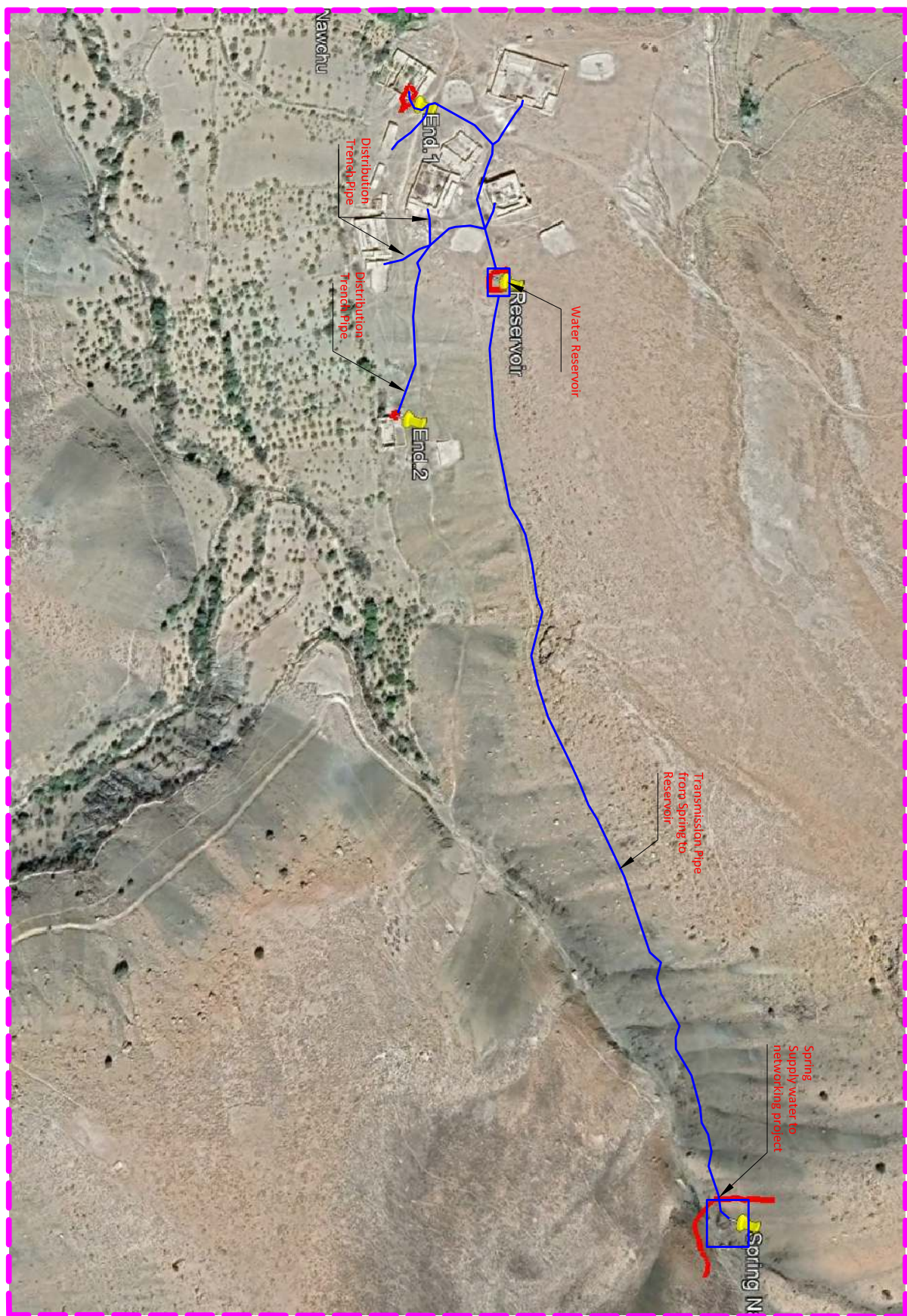
WASH Department

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

Scale:

Note: All dimension are in millimeter

Site plan for Naw Joye pato Networking project



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

(.....)

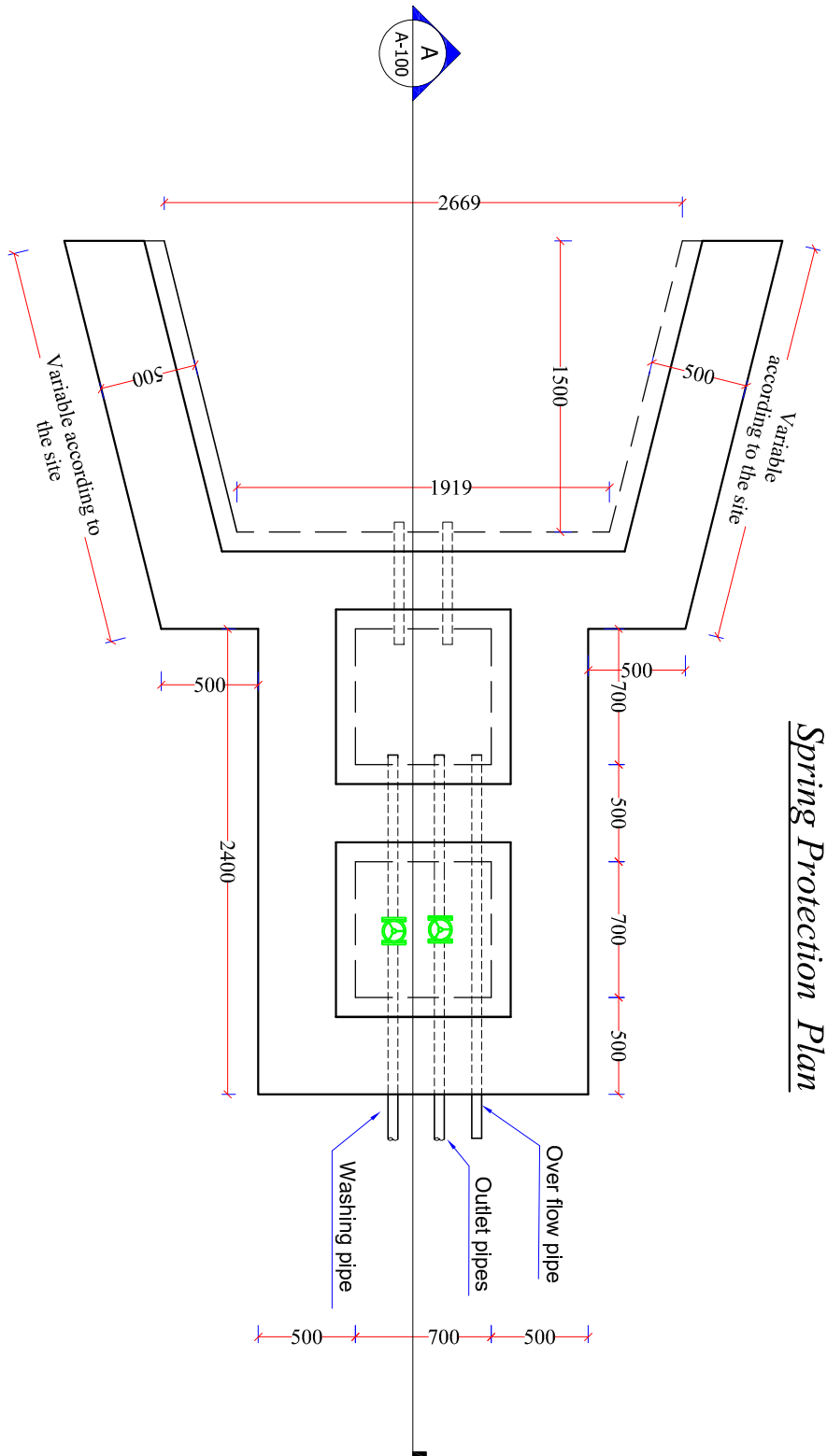
Approved by

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

Pato

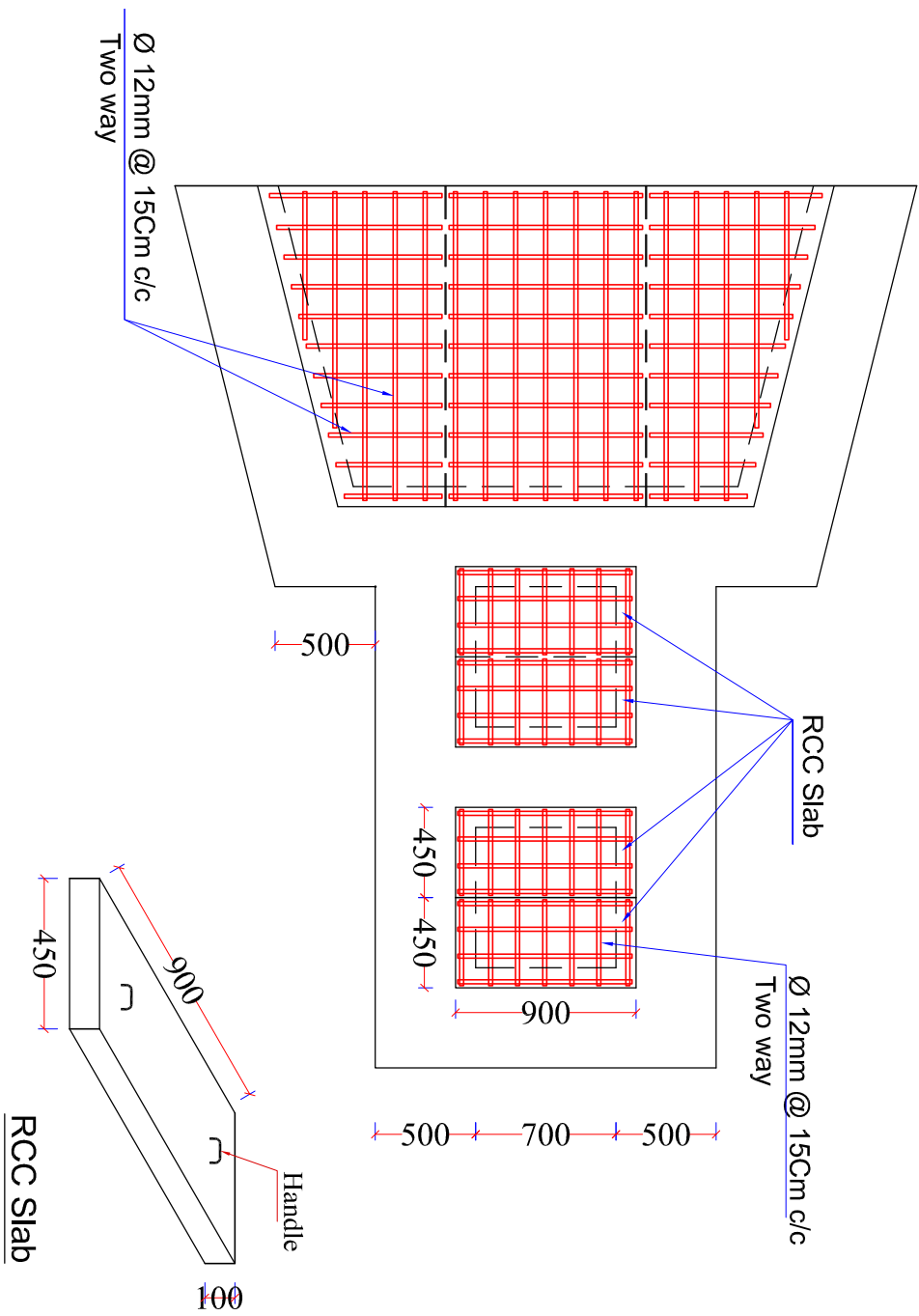
Approved by

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

Pato

Approved by

Yaddullah Jalali


Scale:

Note: All dimension are in millimeter

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



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		Pato	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.

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

Pato

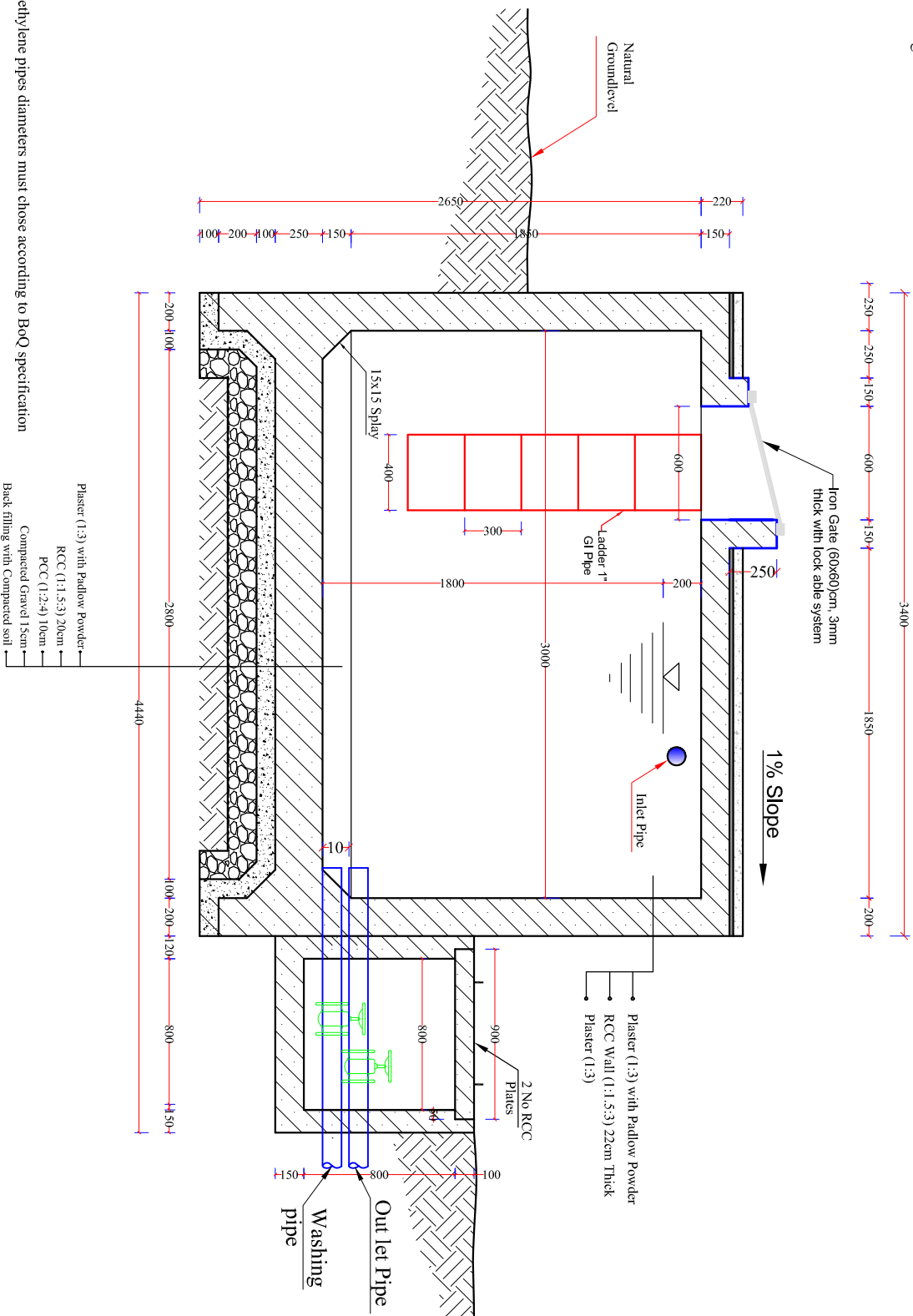
Approved by

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

Action Against Hunger

WASH Department

Scale:

Note: All dimension are in millimeter

DW.No:

A-107

Project Name
Province
District

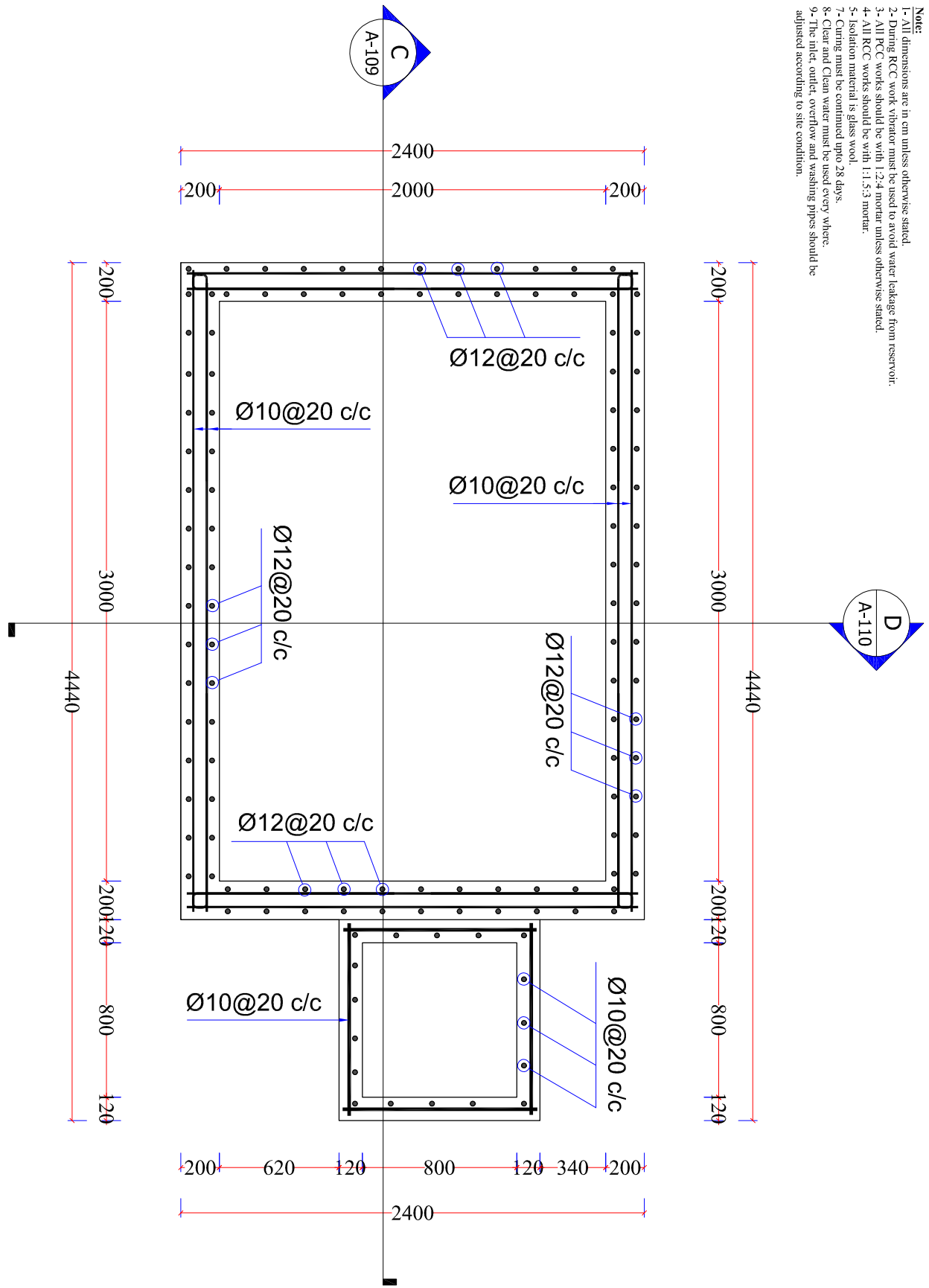
Water Supply
Daikundi
Pato

Design&Drawing by
Chick by
Approved by

Mohamad Nekandesh
Mohamad Nekandesh
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- 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

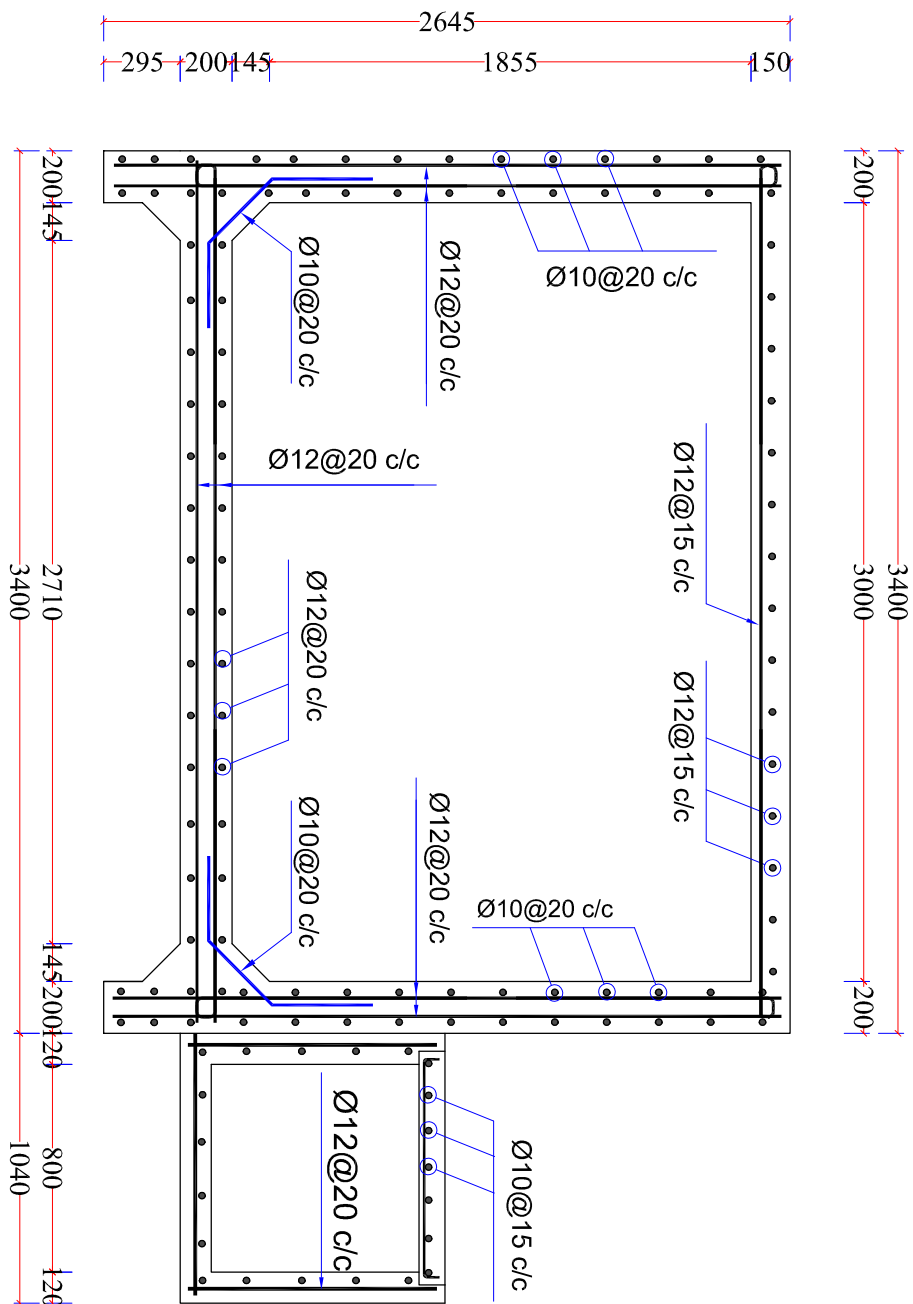
Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter



A.109 SECTION C-C

SCALE: 1:20



DW.No:

A-109

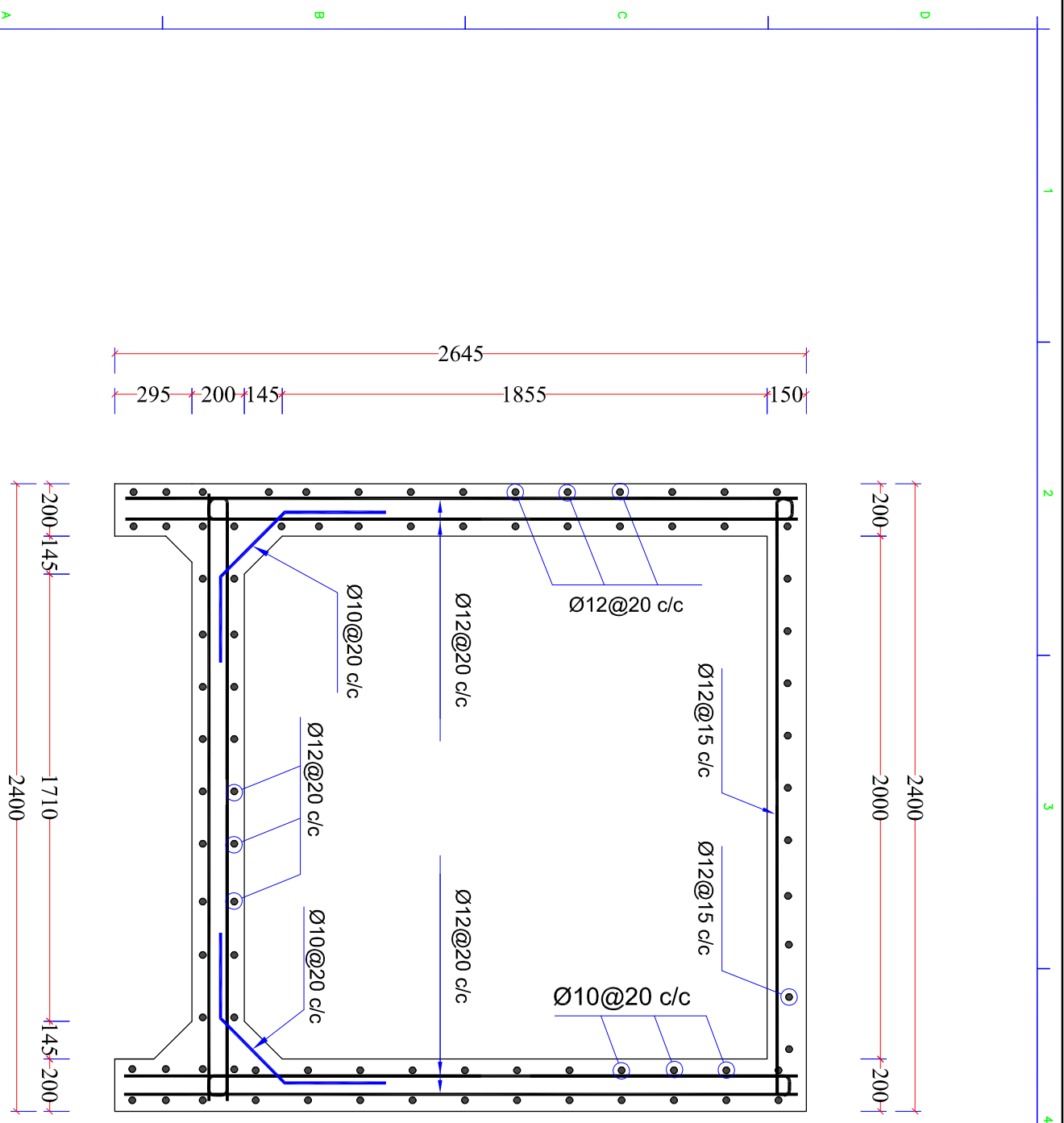
Action Against Hunger

WASH Department

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

Scale:

Note: All dimension are in millimeter



DW.No:

A-110

Action Against Hunger

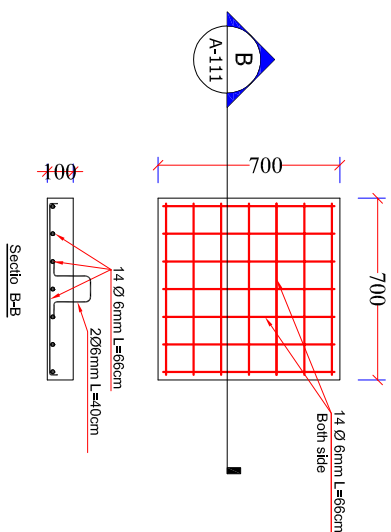
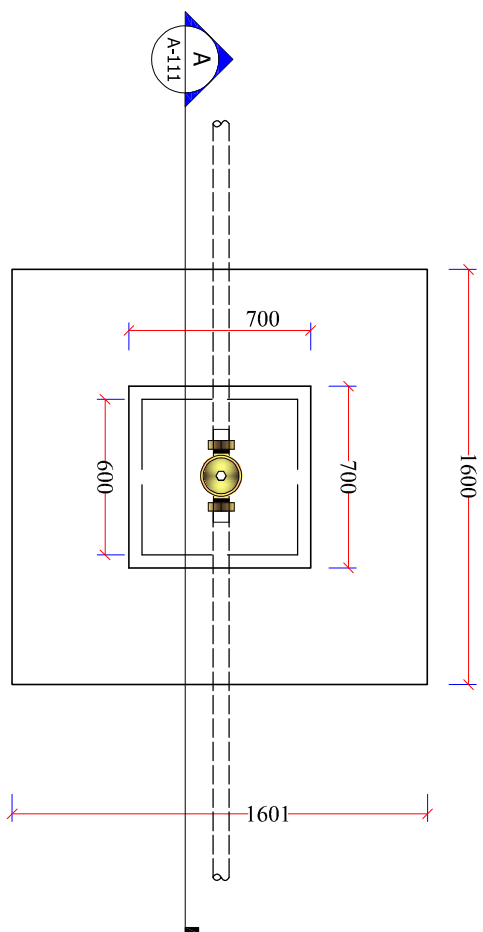
WASH Department

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

Scale:

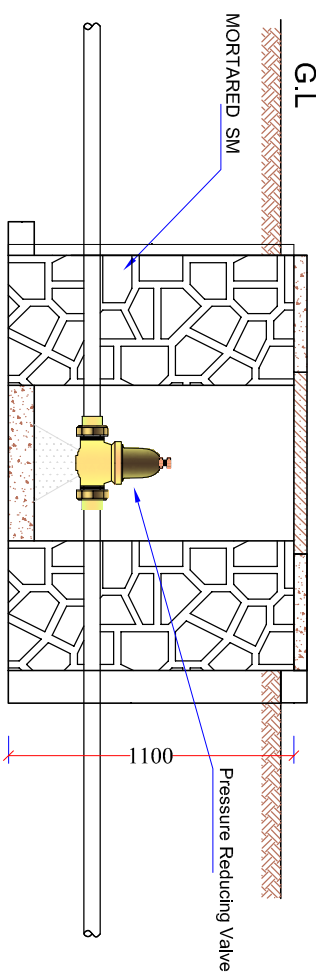
Note: All dimension are in millimeter

VALE BREAK PRESSURE



TYPICAL DIMENSIONS OF VALVE CHAMBER

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



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

Pato

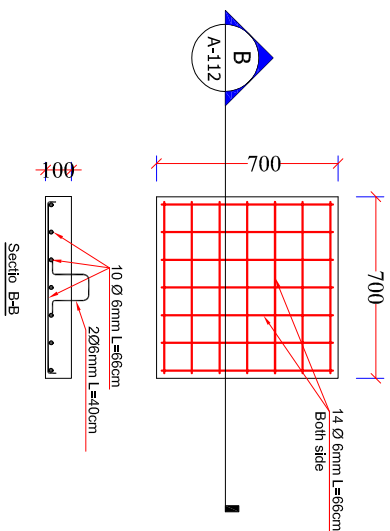
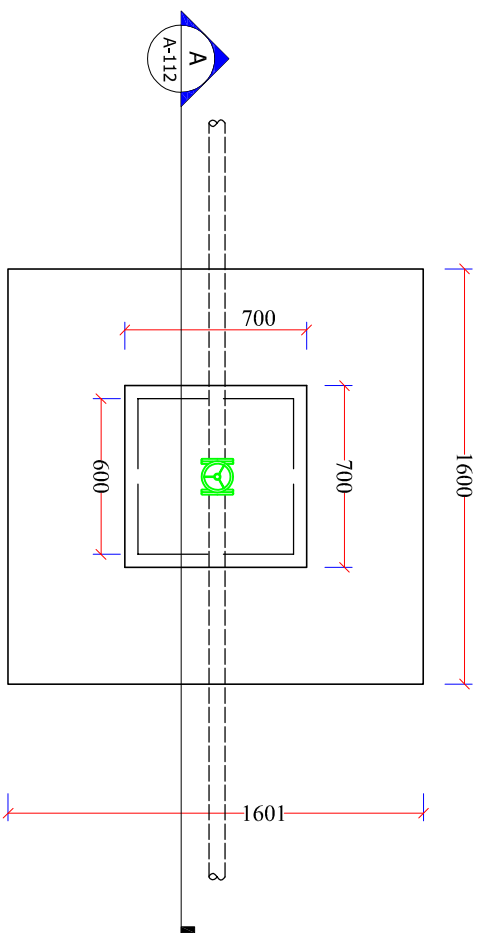
Approved by

Yaddullah Jalali

Scale:

Note: All dimension are in millimeter

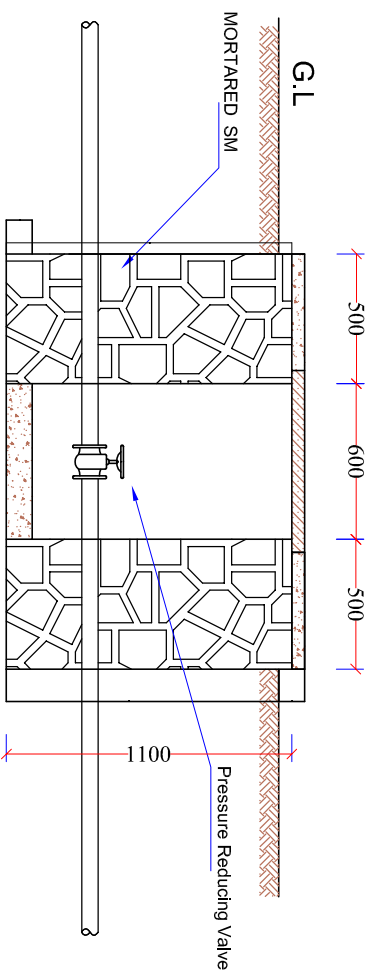
GATE VALE BOX FOR CONTROL



Typical Dimensions of Valve Chamber

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

SECTION A-A



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



DW.No:

A-112

Action Against Hunger

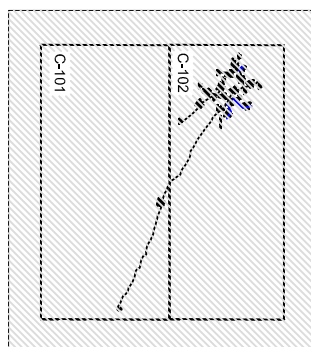
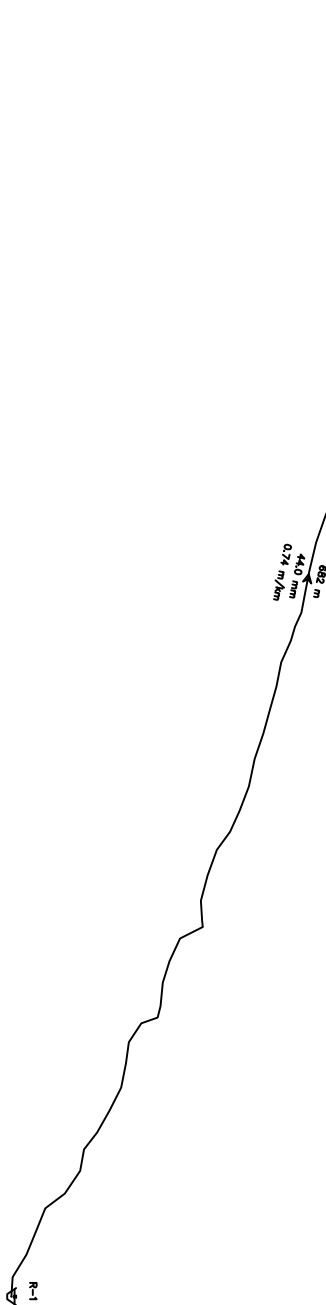
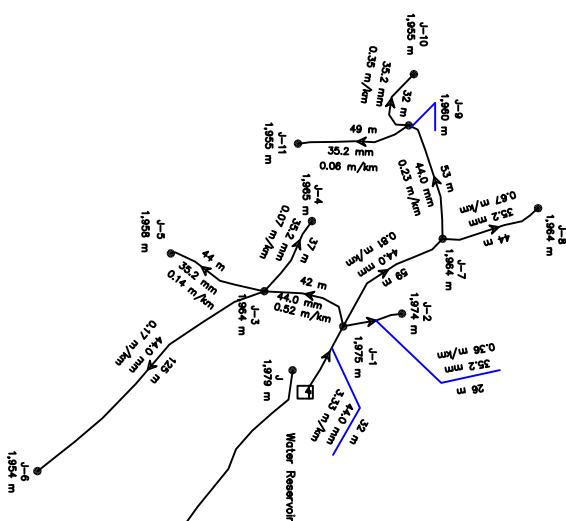
WASH Department

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	
ROC	

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:

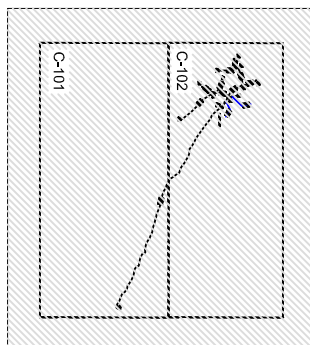
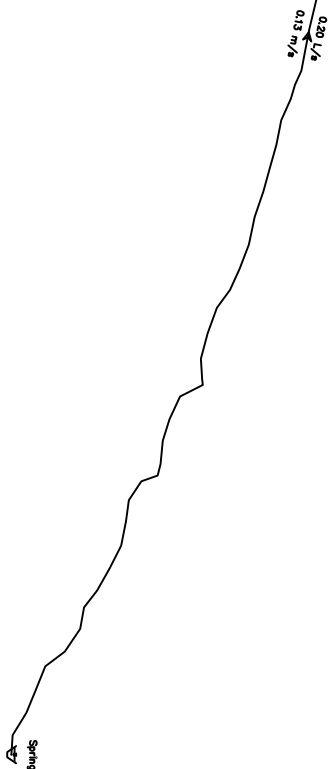
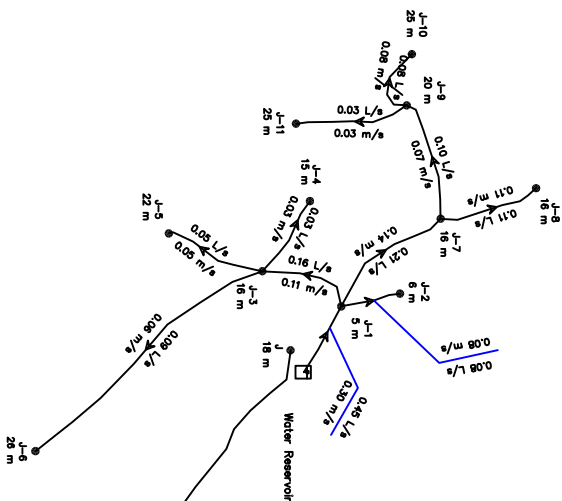
C-100

Note: All dimension showed in sheet

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

COORDINATE		
NAMES	EAST	NORTH
SPRING	229,517.01	3,713,480.57
RESERVOIR	228,939.14	3,713,784.05

Action Against Hunger

WASH Department

DW.No:

C1-100

Note: All dimension showed in sheet

Project Name
Province
District

Water Supply
Daikundi
Pato

Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....












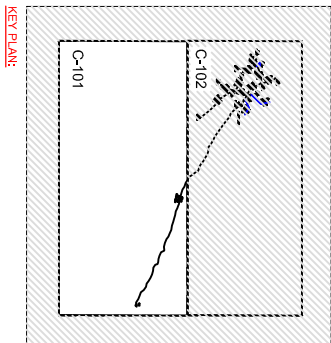
1. Node ID:
2. Length in (m)
3. In Diameter in (mm)
4. Head loss Gradient in (m/km)
5. Elevation in (m)

682 m
44.0 mm
0.74 m/km

R-1

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

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-101

Project Name
Province
District

Water Supply
Daikundi
Pato

Design by
Drawing& Layout by
Approved by

Yaddullah Jalali
Mohamad Nekandesh
.....

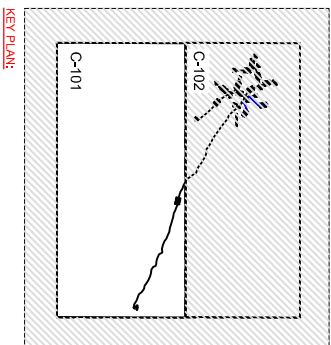
Note: All dimension showed in sheet



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

0.20 L/s
0.13 m/s

Spring



KEY PLAN:

LEGEND:

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

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:

C1-101

Project Name

Water Supply

Design by

Yaddullah Jalali

Province

Daikundi

Drawing& Layout by

Mohamad Nekandesh

District

Pato

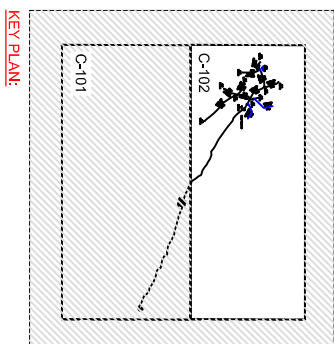
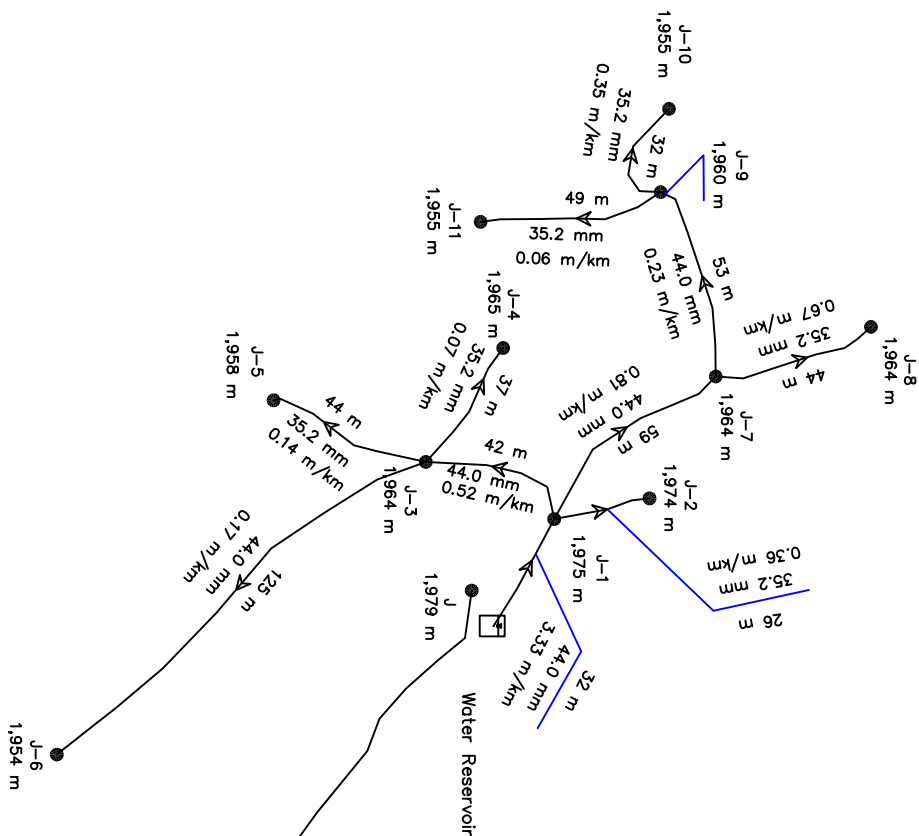
Approved by

.....

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)



KEY PLAN:

LEGEND:

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

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

682 m
44.0 mm
0.74 m/km

Action Against Hunger

WASH Department

DW.No:

C-102

Note: All dimension showed in sheet

Project Name

Water Supply

Design by

Yaddullah Jalali

Province

Daikundi

Drawing& Layout by

Mohamad Nekandesh

District

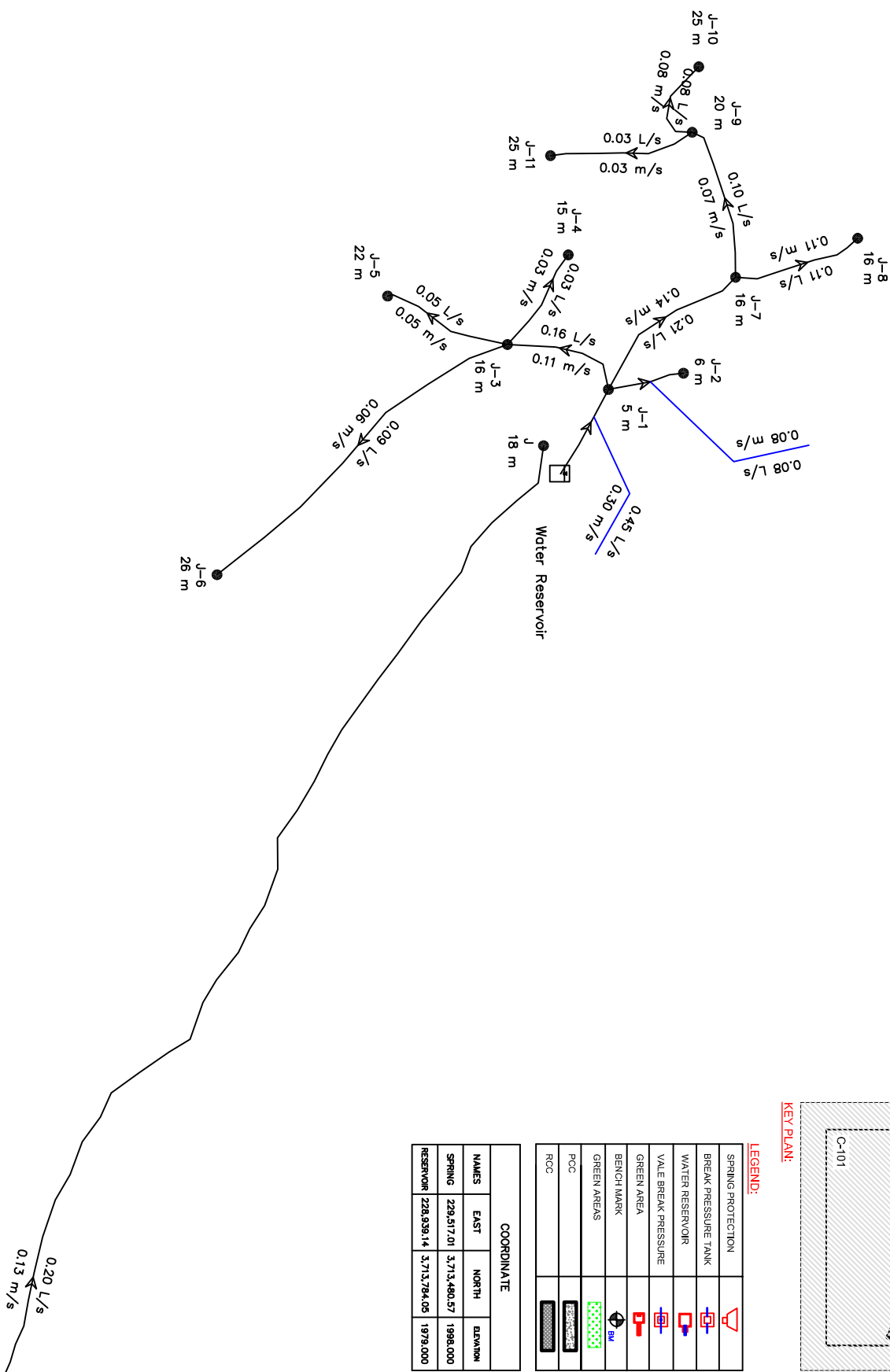
Pato

Approved by

.....



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



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

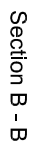
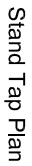
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
Approved by

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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		Pato	Approved by	Yaddullah Jalali		