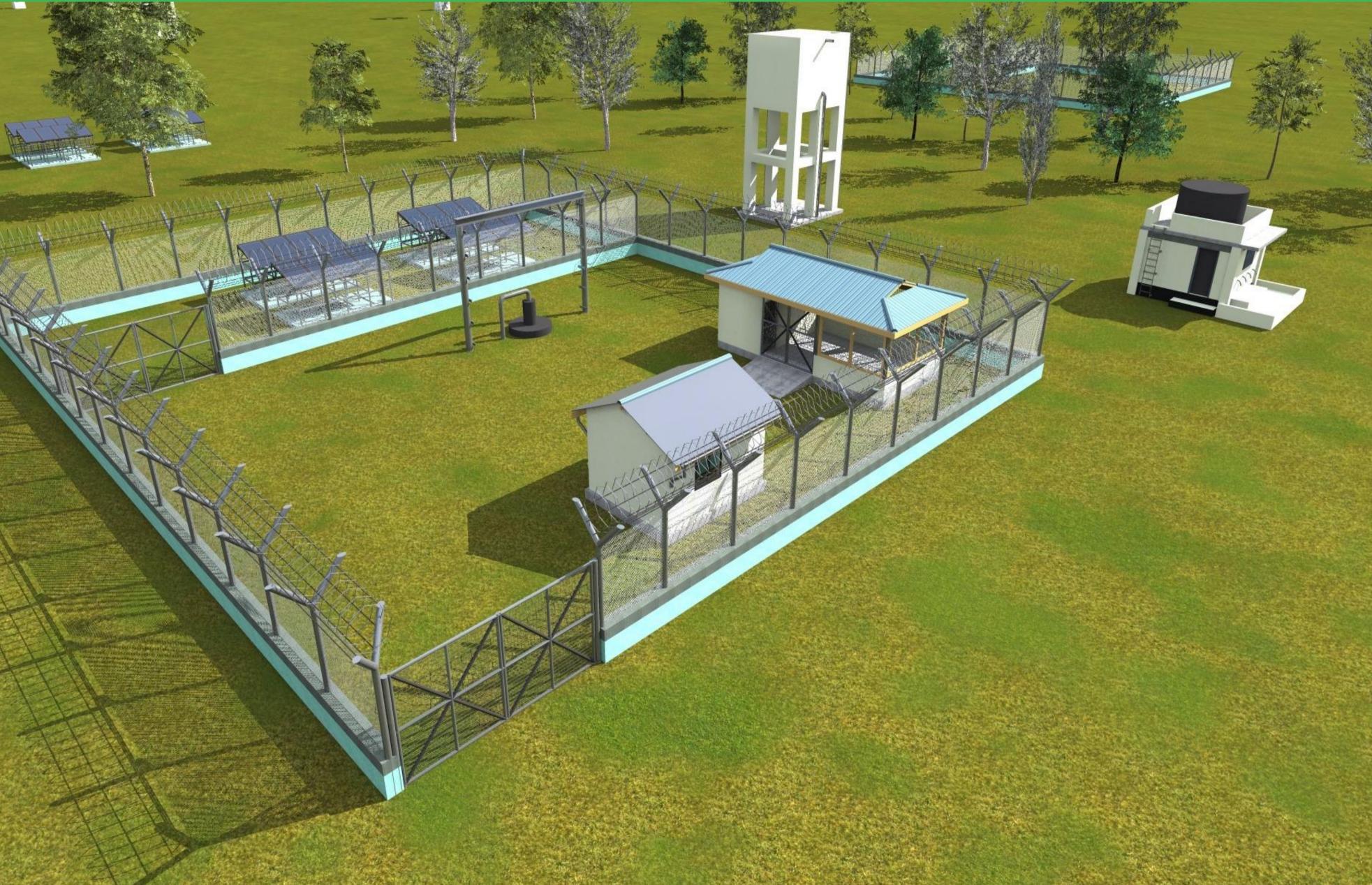
# PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-





**PROJECT:** 

#### PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

IMPLEMENTING AGENCY.



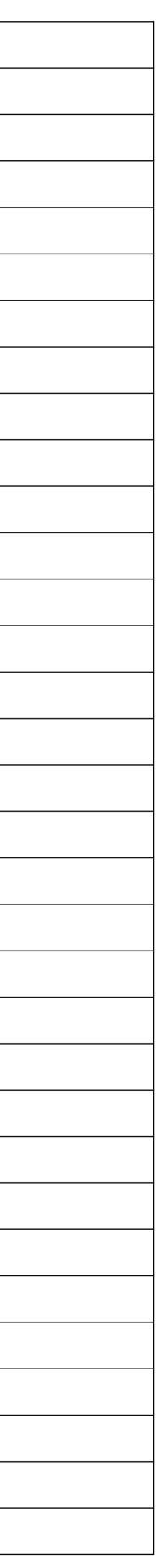
IOM International Organization for Migration

**GOVERNMENT:** 

## PROPOSED BALANBAL BOREHOLE REHABILITATION

## **DRAWING INDEX**

	SHEET N <sup>O</sup>	SHEET TITLE	DRAWING CONTENT
01.	01/32		Cover Page
02.	02/32		Drawing Index
03.	03/32		Site Location
04.	04/32		Site photos
05.	05/32		Proposed Master Plan
06.	06/32	WATER TANK	Floor Layout
07.	07/32		Elevations_1
08.	08/32		Elevations_2
09.	09/32		Sections
10.	10/32		3D Models
11.	11/32		Structural details
12.	12/32	GENERATOR SHED	Floor Layout
13.	13/32		Elevations
14.	14/32		Sections
15.	15/32		3D Models
16.	16/32		Structural details
17.	17/32	WATER KIOSK	Floor Layout
18.	18/32		Elevations
19.	19/32		Sections
20.	20/32		3D Models
21.	21/32	CARETAKERS ROOM	Floor Layout
22.	22/32		Elevations
23.	23/32		Sections
24.	24/32		3D Models
25.	25/32		Structural details
26.	26/32	LATRINES	Details
27.	27/32		3D Models
28.	28/32	BOUNDARY FENCE	Floor Layout
29.	29/32		Elevations_External 1
30.	30/32		Elevations_External 2
31.	31/32	WATER TROUGHS	Layout
31.	32/32		3D Scenes



### **APRIL 2016**



PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

Latitude	Longitude
05 <sup>0</sup> 45.650' S.	045 <sup>0</sup> 45.273' E.

Image © 2017 CNES / Airbus US Dept of State Geographer

SHEET TITLE:

SITE LOCATION

SCALE	
DATE	APRIL. 20
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
REVIEWED BY:	
APPROVED BY:	





PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

SHEET TITLE:	SCALE
	DATE APRIL. 20
EXISTING SITE PHOTOS	DESIGNED BY: J. NAND
	DRAWN BY: J. NAND
	REVIEWED BY:
	APPROVED BY:

17		
۷A		
٧A		

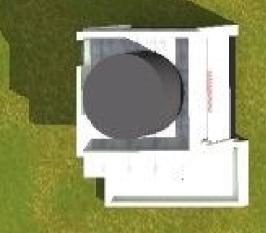
DRAWING TITLE:

DRAWING Nº:

PROJECT N<sup>O</sup>:



#### Proposed fencing

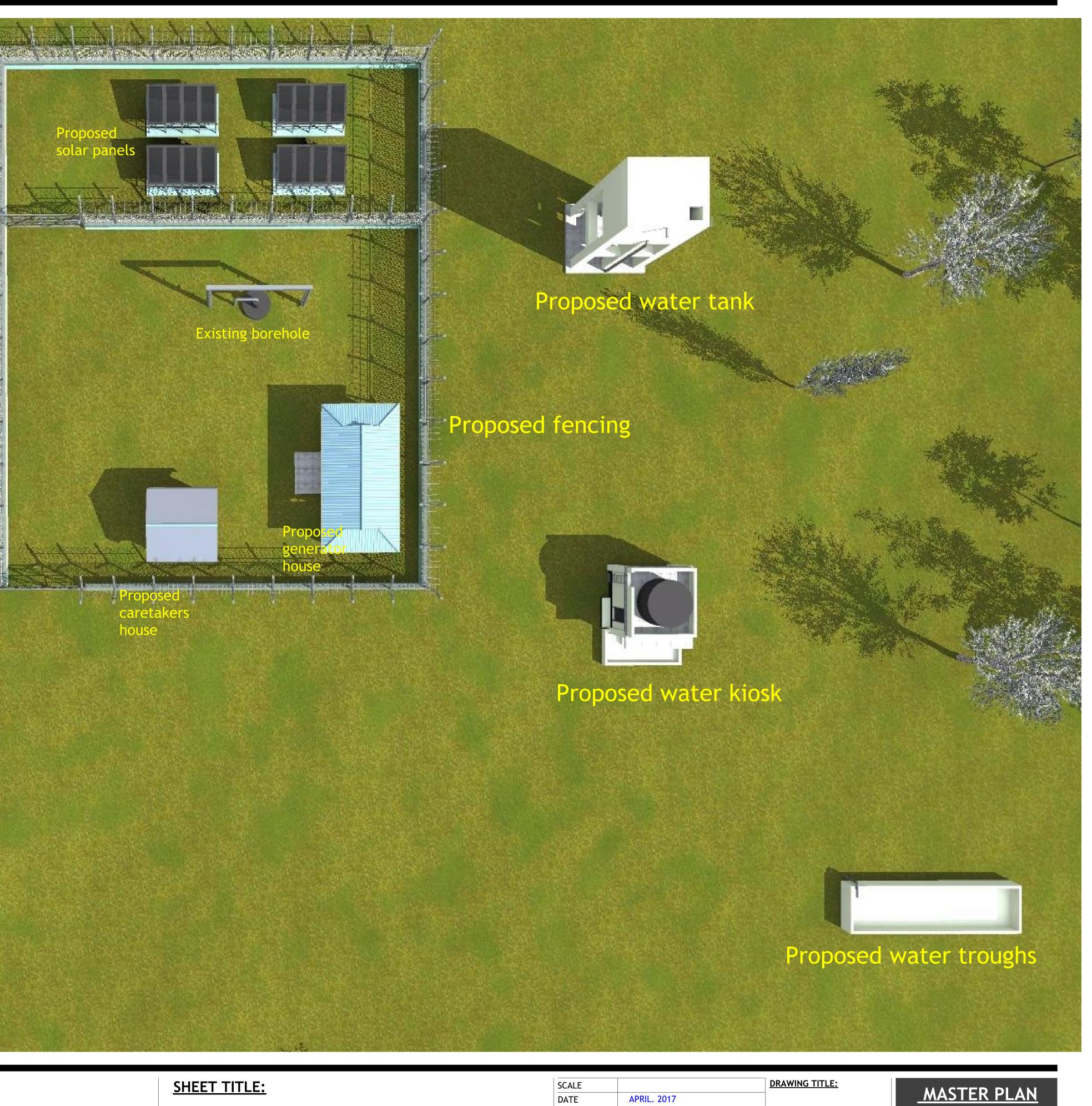


#### Proposed water kiosk

#### Proposed water troughs

PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-



PROPOSED MASTER PLAN

SCALE	
DATE	APRIL. 20
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
<b>REVIEWED BY:</b>	
APPROVED BY:	

VA	
VA	

<u>DRAWING N<sup>o</sup>:</u>

<u>PROJECT N<sup>o</sup>:</u>

<u>SHEET N<sup>o</sup>:</u> 05/32 1 -3,400-2

PROJECT.

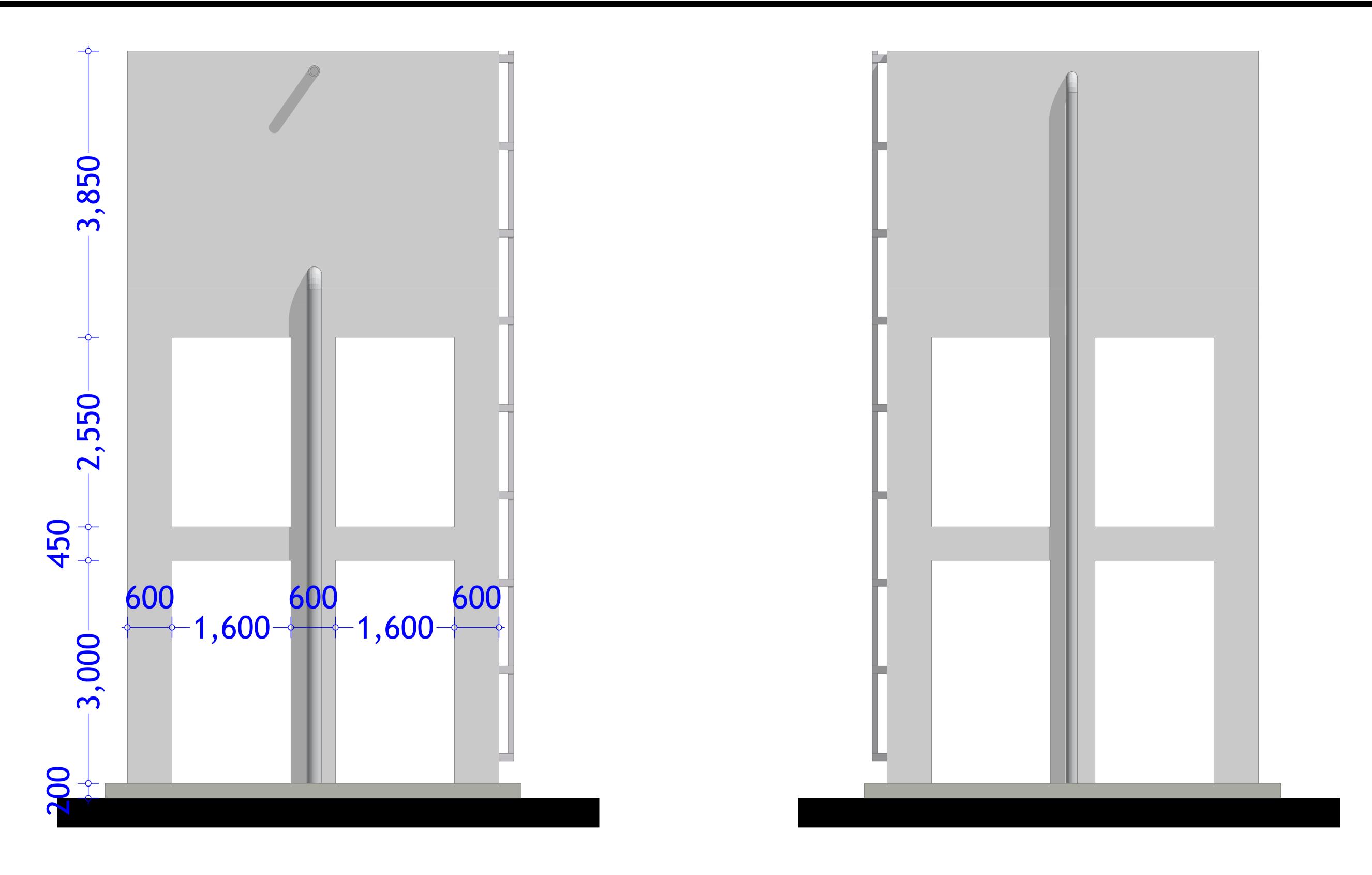
PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

	—— <b>5,000</b> ——			
<b>∻600</b> ∲—1,600	0—∲600∲—1,	600—∲600∲		
			<b>6000</b>	
			2,800	4,000
			<b>600</b> ←	
2,200	<b>D 2,</b>	200		
A	B	C		
Flc	or pla	n		

Floor	plan
-------	------

SHEET TITLE:	SCALE		
	DATE APRIL. 2017		
FLOOR LAYOUT	DESIGNED BY: J. NANDWA		
	DRAWN BY: J. NANDWA		
	REVIEWED BY:		
	APPROVED BY:		

7	DRAWING TITLE:	WATER TANK
	DRAWING N <sup>o</sup> :	
A		<u>SHEET N<sup>o</sup>:</u>
A	PROJECT Nº:	NC 122
	-	06/32



# South Elevation

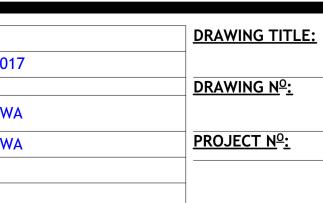
PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

SHEET TITLE: **ELEVATIONS\_1** 

SCALE	
DATE	APRIL. 20
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
REVIEWED BY:	
APPROVED BY:	



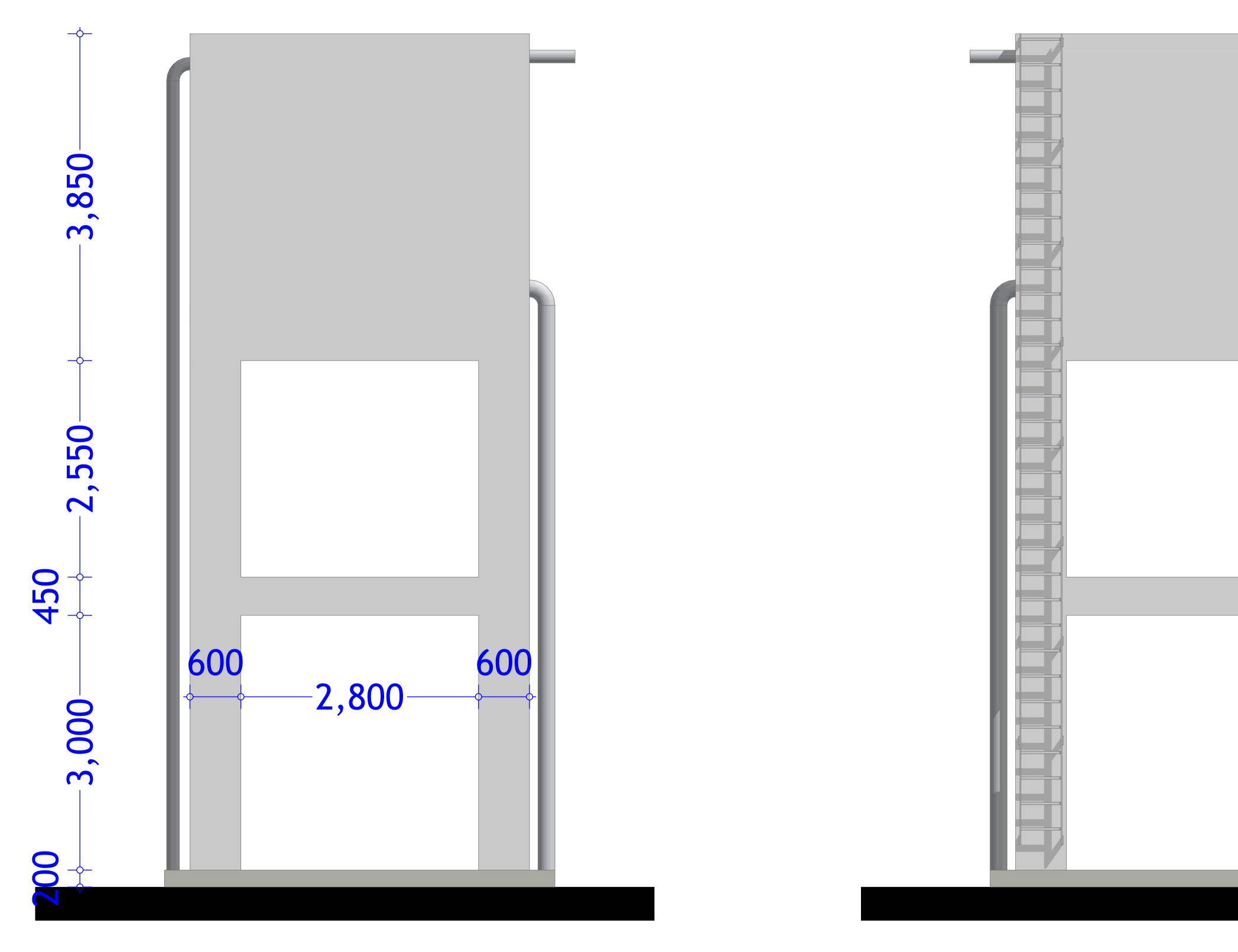




07/32

<u>SHEET N<sup>o</sup>:</u>

# North Elevation



# West Elevation

PROJECT.

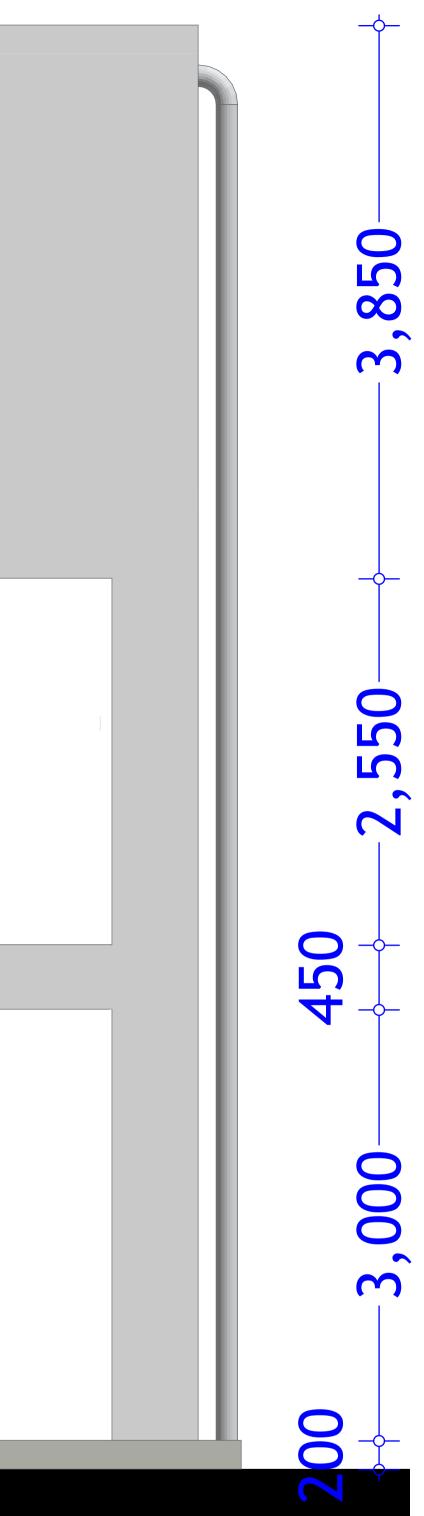
PROPOSED BALANBAL BOREHOLE REHABILITATION

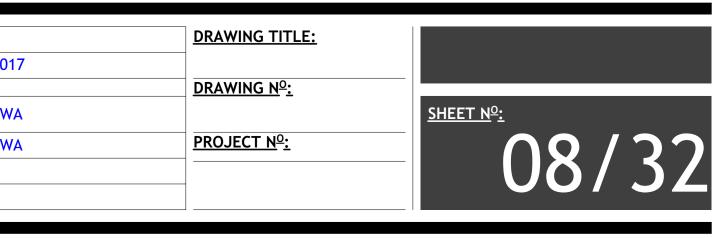
-BALANBAL DISTRICT-

# East Elevation

SHEET TITLE: ELEVATIONS\_2

APRIL. 20
J. NANDW
J. NANDW





800x800mm Manhole with cast iron cover

50mm GI overflow pipe

200mm VRC suspended floor slab

50mm GI outlet pipe

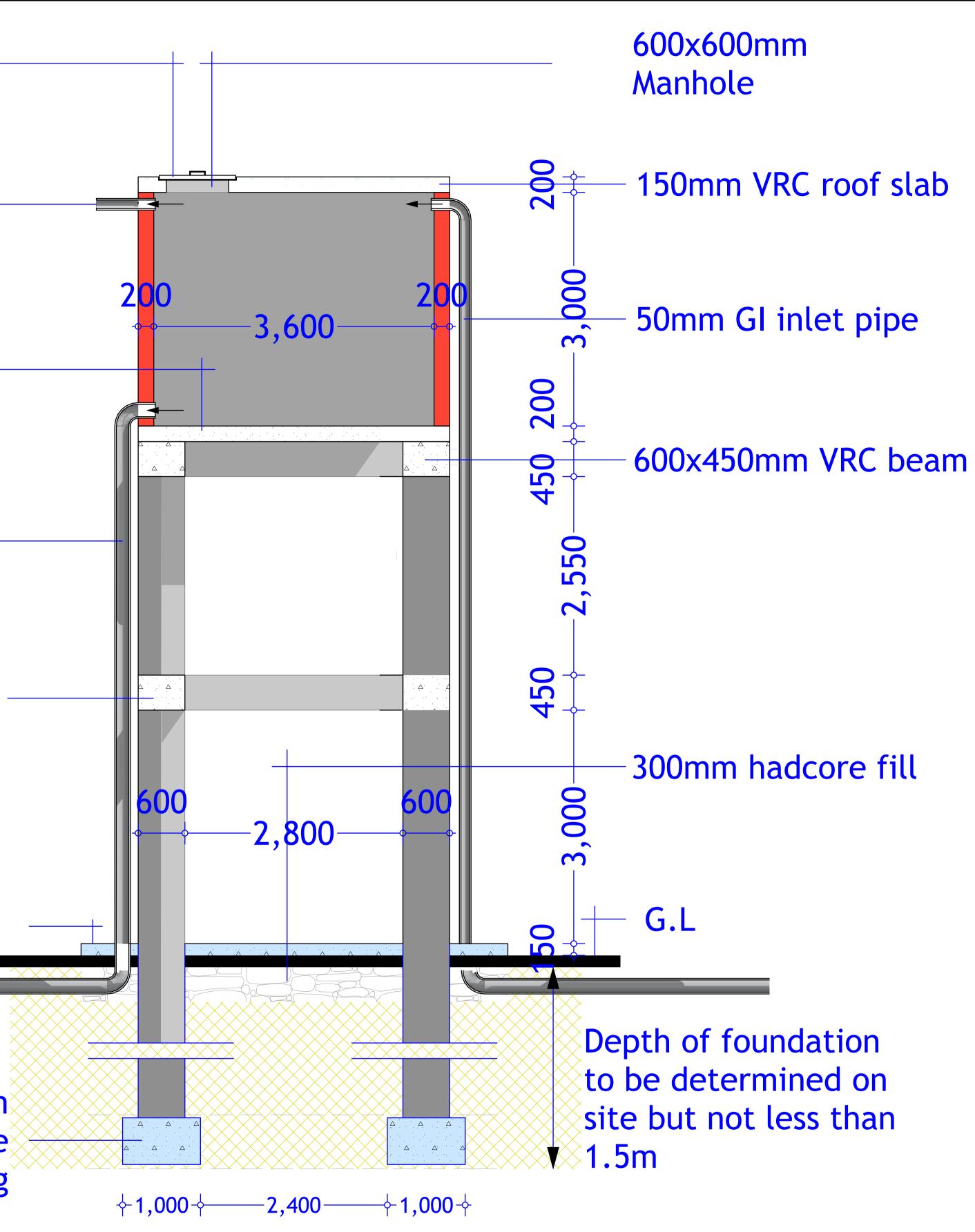
600mmx450mm VRC beam

150mm Concrere slab

800x600mm VRC concrete footing

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

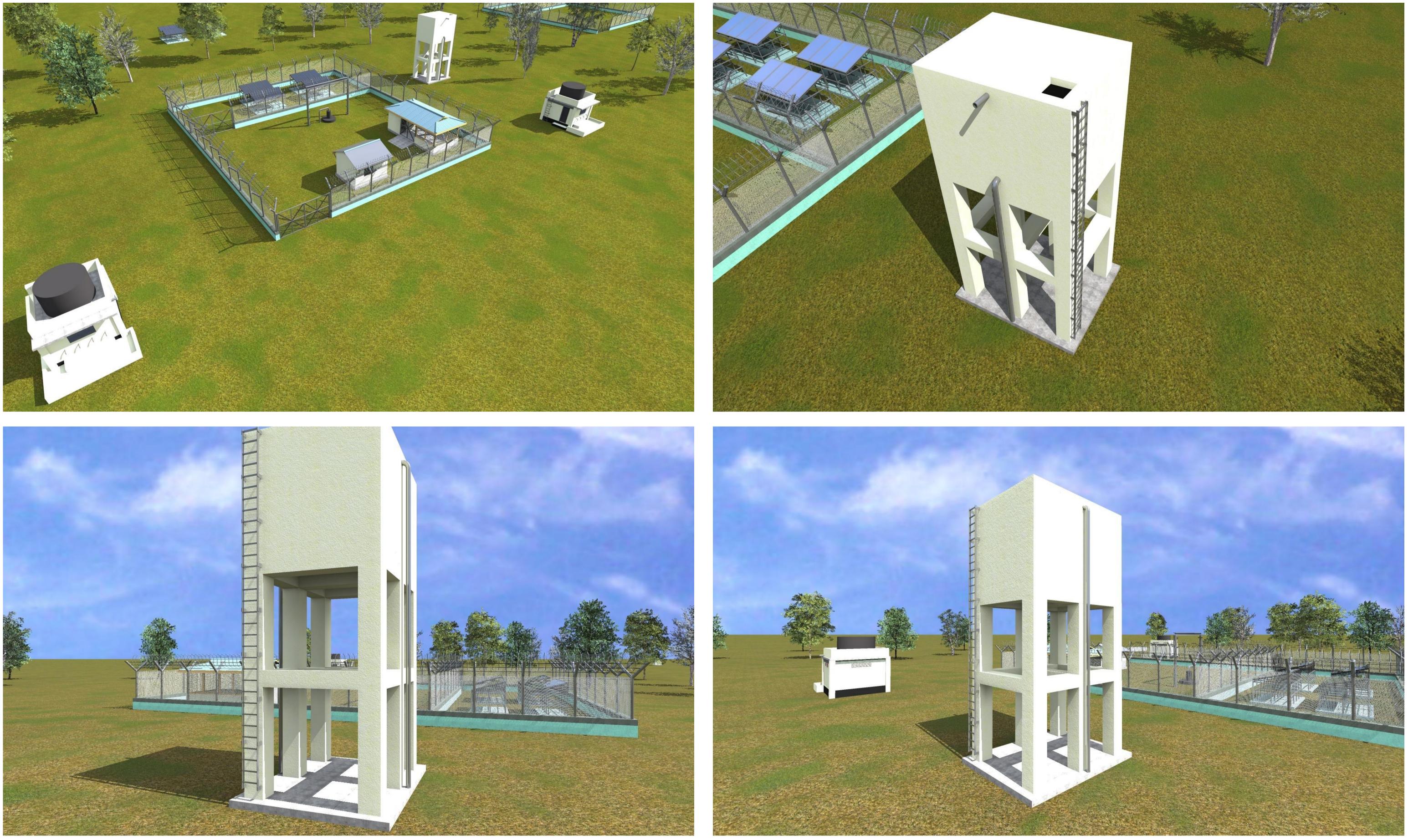
PROJECT.

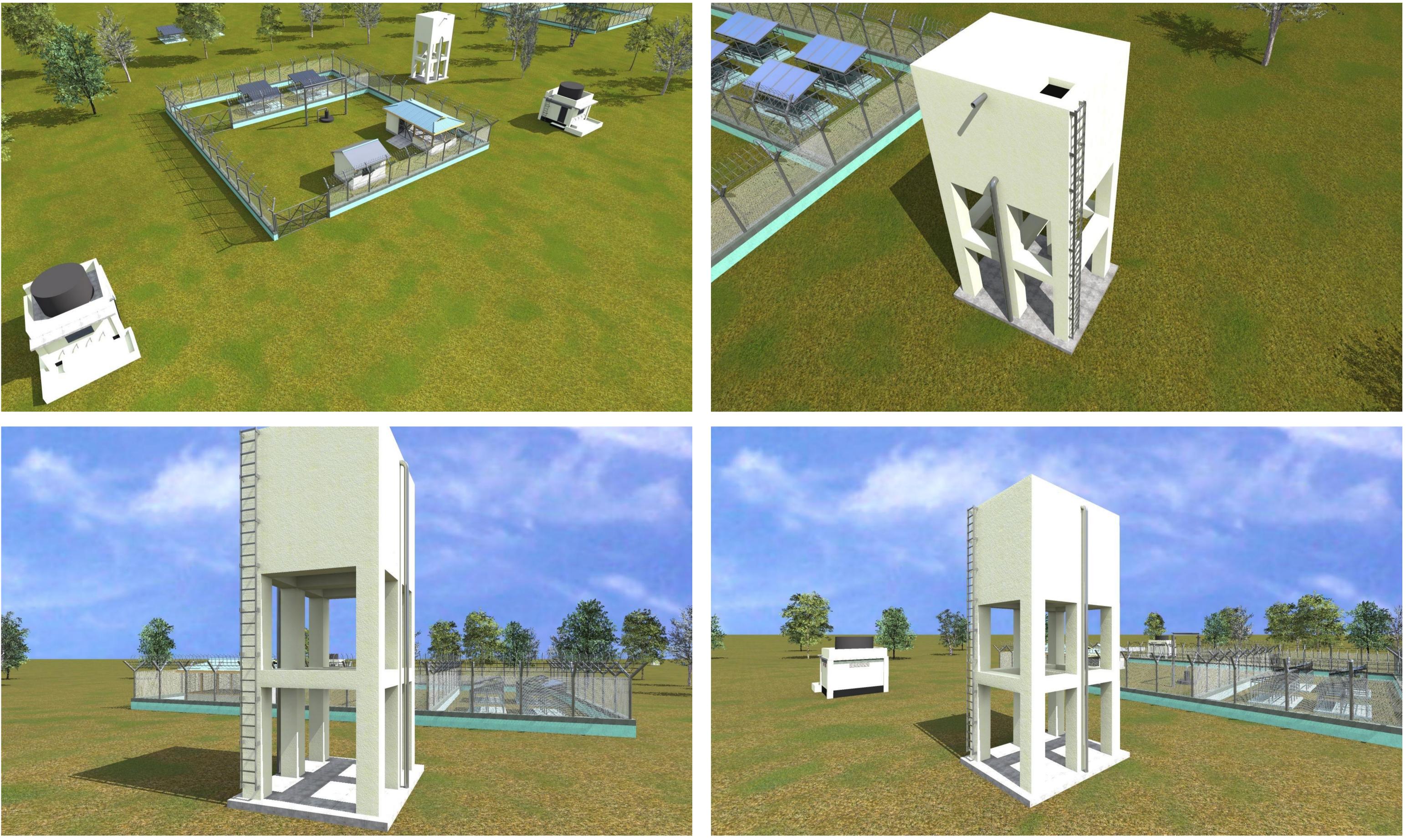


## Sectional Elevation

SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
SECTIONS	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	REVIEWED BY:	
	APPROVED BY:	

DRAWING TITLE: WATER TANK DRAWING N<sup>o</sup>: <u>SHEET N<sup>o</sup>:</u> 09/32 PROJECT N<sup>o</sup>:





PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

<u>SHEET TITLE:</u> **3D PRESENTATION** 

SCALE	
DATE	APRIL. 201
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
REVIEWED BY:	
APPROVED BY:	

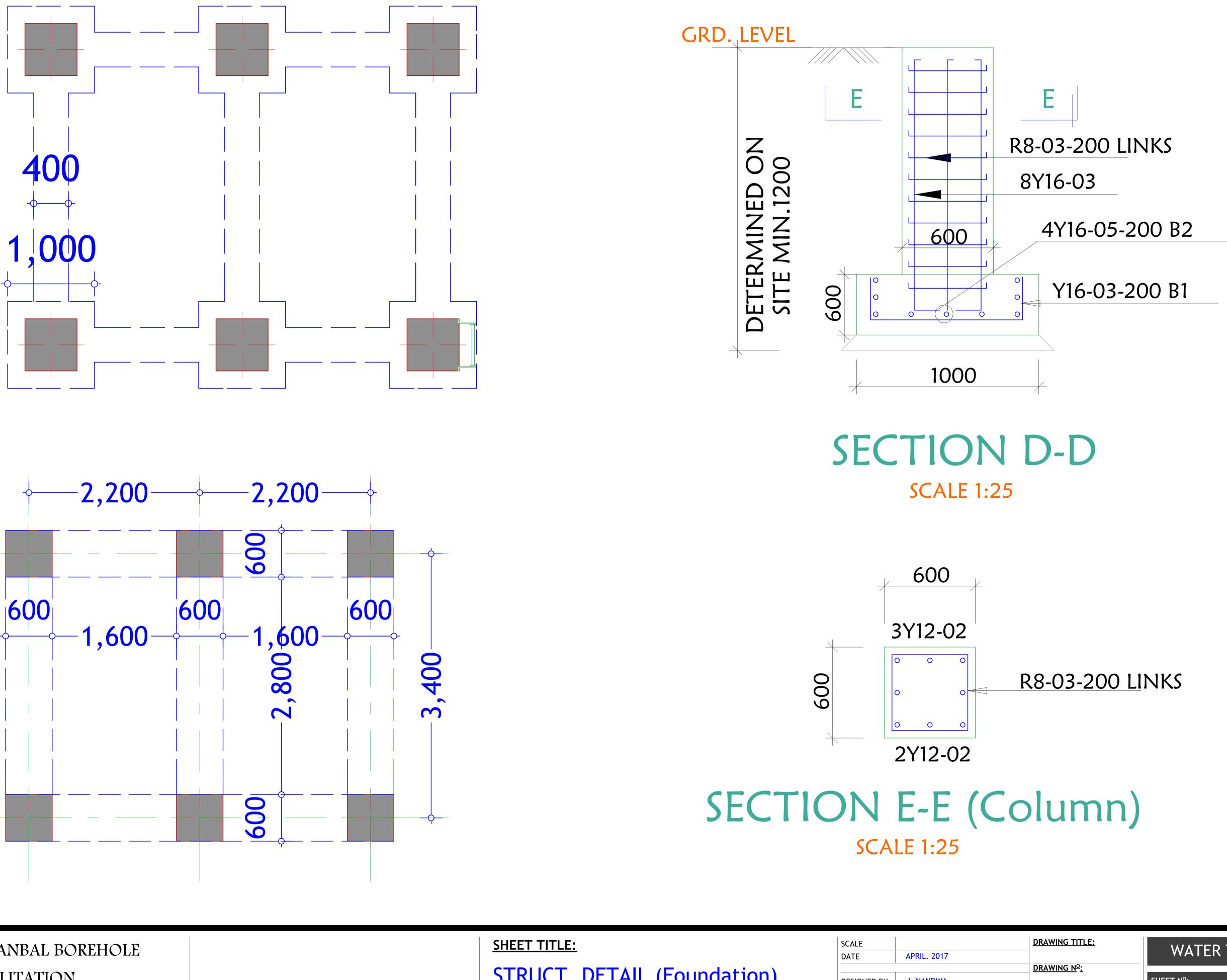
017

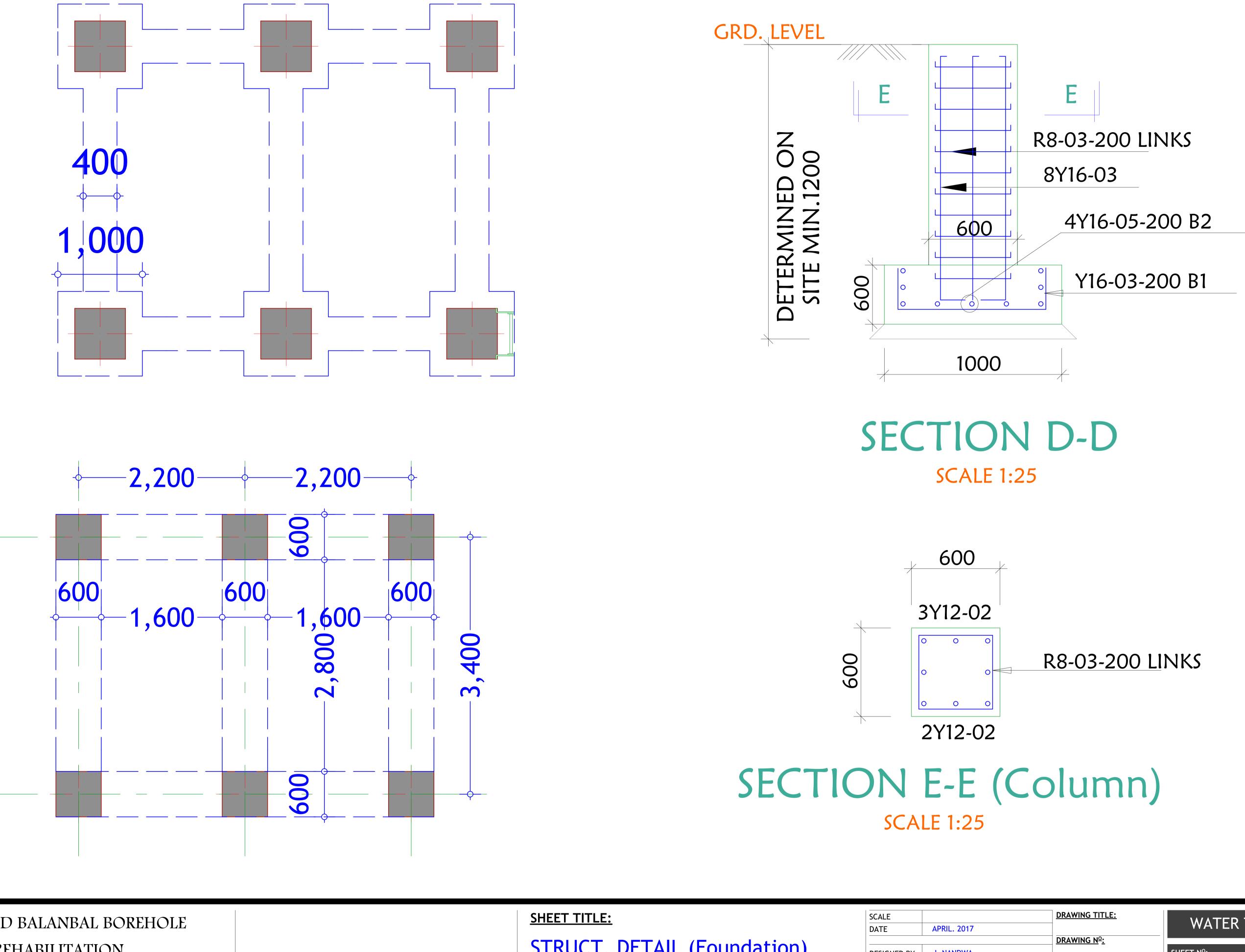
DRAWING TITLE:

DRAWING Nº:

PROJECT N<sup>O</sup>:

WATER TANK <u>SHEET N<sup>o</sup>:</u> 10/32



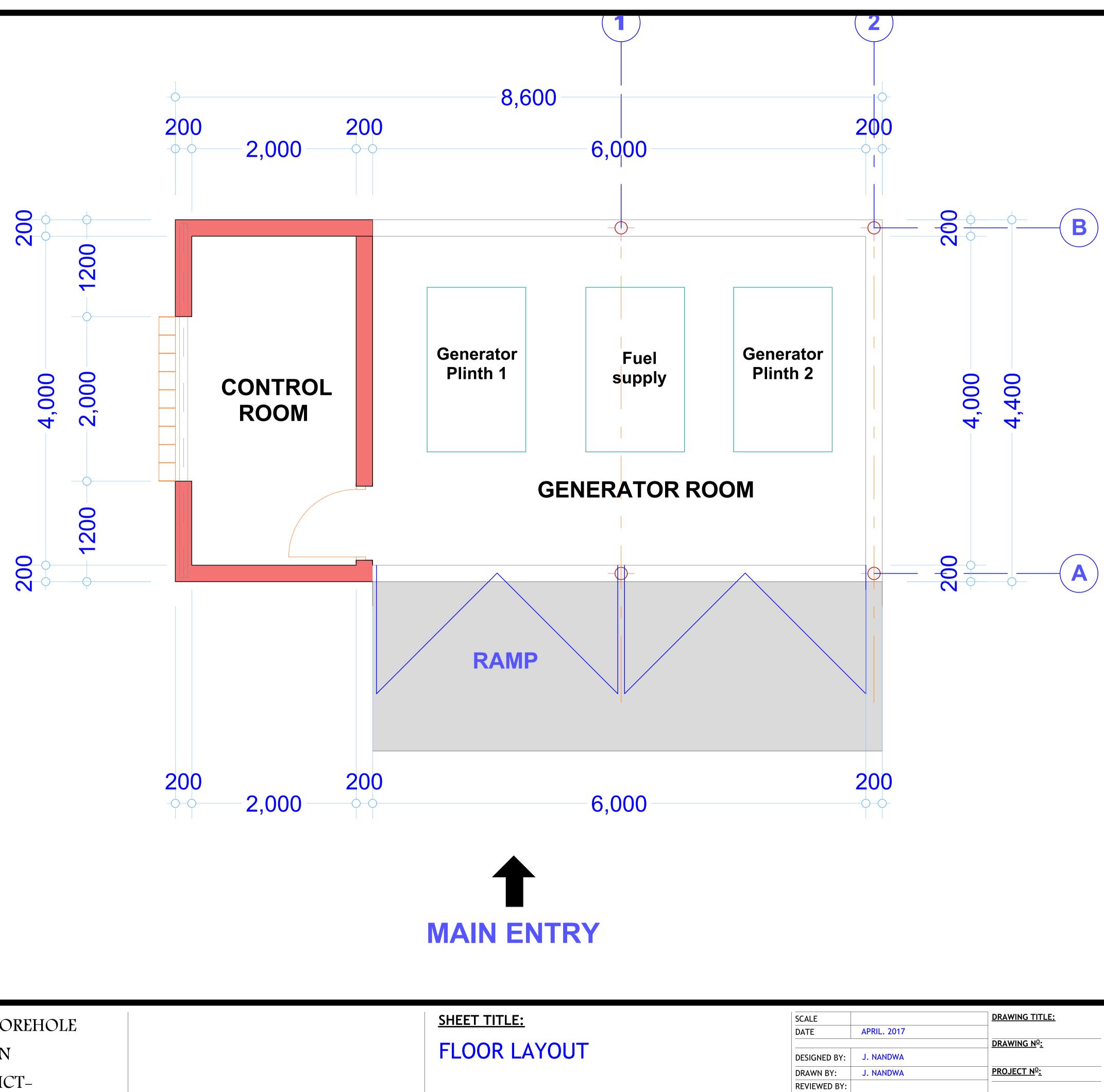


PROJECT. PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

STRUCT. DETAIL (Foundation)

J. NANDW **DESIGNED BY:** DRAWN BY: J. NANDW **REVIEWED BY:** APPROVED BY:

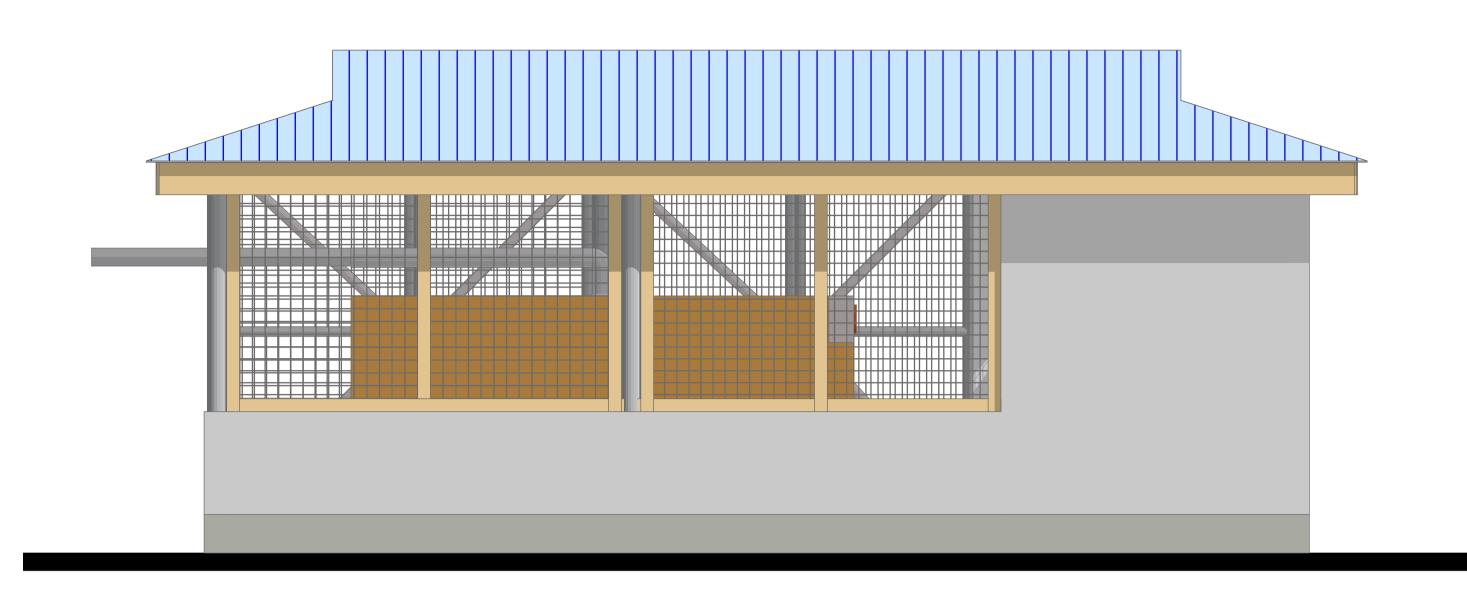
17	DRAWING TITLE:	WATER TANK
/A /A	DRAWING N <sup>o</sup> :       PROJECT N <sup>o</sup> :	<u>SHEET №:</u> 11/32



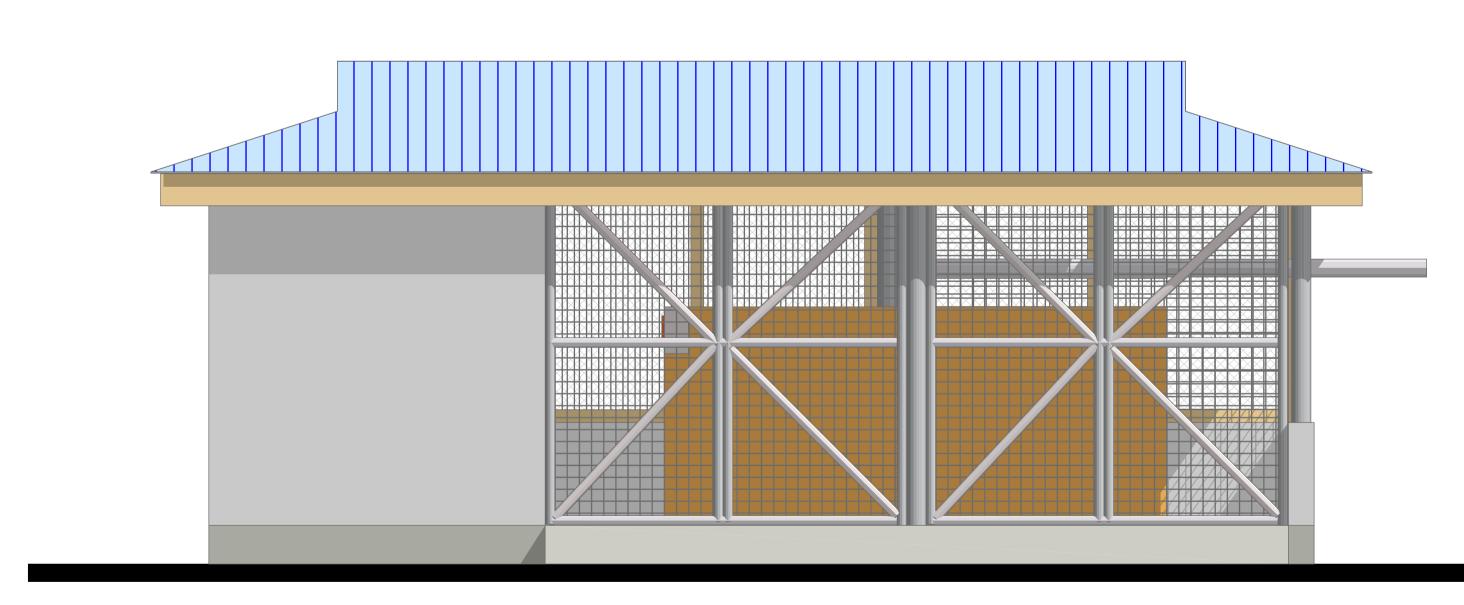
PROJECT.	PROPOSED BALANBAL BOREHOLE	
	REHABILITATION	
	-BALANBAL DISTRICT-	

017	DRAWING TITLE:	GENERATOR SHED
WA WA	DRAWING Nº:       PROJECT Nº:	<u>Sheet Nº:</u> 12/32

APPROVED BY:



### **SOUTH ELEVATION**

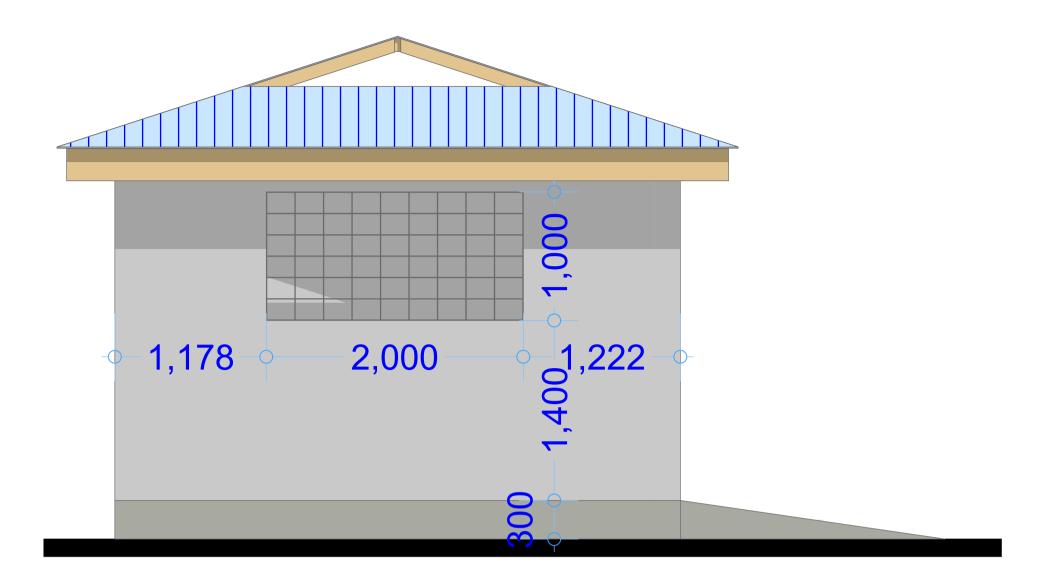


#### **NORTH ELEVATION**

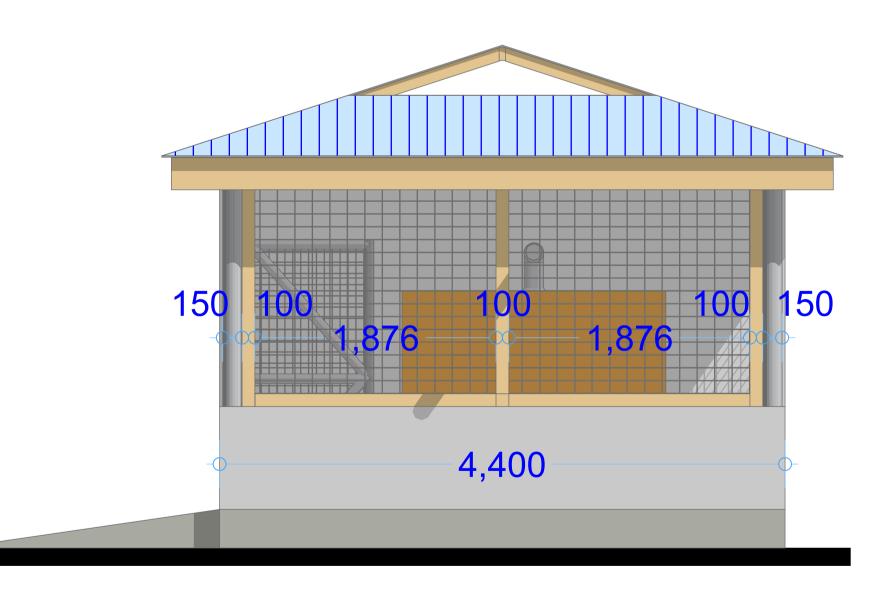
PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION

-BALANBAL DISTRICT-









SHEET TITLE: SCALE APRIL. 20 DATE ELEVATIONS J. NANDW DESIGNED BY: J. NANDW DRAWN BY: **REVIEWED BY:** APPROVED BY:

### **EAST ELEVATION**

## **WEST ELEVATION**

.017	DRAWING TITLE:	GENERATOR SHED
WA	DRAWING N <sup>o</sup> :	<u>SHEET N<sup>o</sup>:</u>
WA	PROJECT Nº:	13/32

Gauge 28 prepainted iron resincot roofing sheets: IT4 box profile, nailed on sawn hardwood structure. Roof pitch=22°. For structure; see S.E. details.

Timber framework

 $-\phi$ -

911

 $-\bigcirc$ 

1,213

330 687

470

20

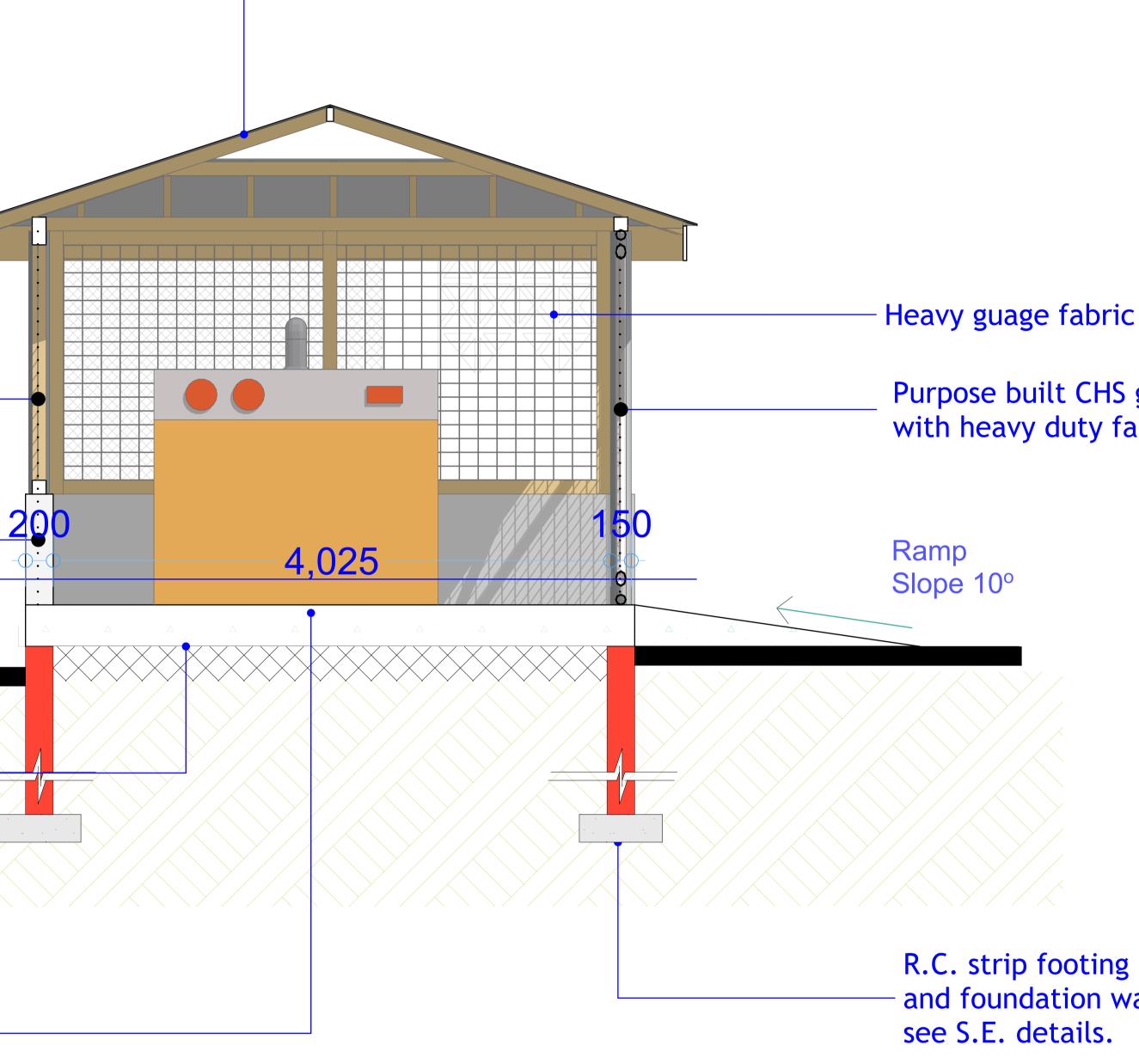
200mm hollow block walling with plaster and paint

150mm thick R.C. floorslab with B.R.C. mesh and D.P.M. cast on well compacted hardcore with blinding layer; see S.E. details.

RCC plinth.

PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-





Heavy guage fabric mesh wire

Purpose built CHS gate with heavy duty fabric mesh

and foundation walling,

17	DRAWING TITLE:	GENERATOR SHED
VA	DRAWING N <sup>o</sup> :	<u>SHEET N<sup>o</sup>:</u>
A	PROJECT N <sup>o</sup> :	14/32



PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

<u>SHEET TITLE:</u>
<b>3D PRESENTATION</b>

APRIL. 20
J. NANDW
J. NANDW

017 WA WA DRAWING TITLE:

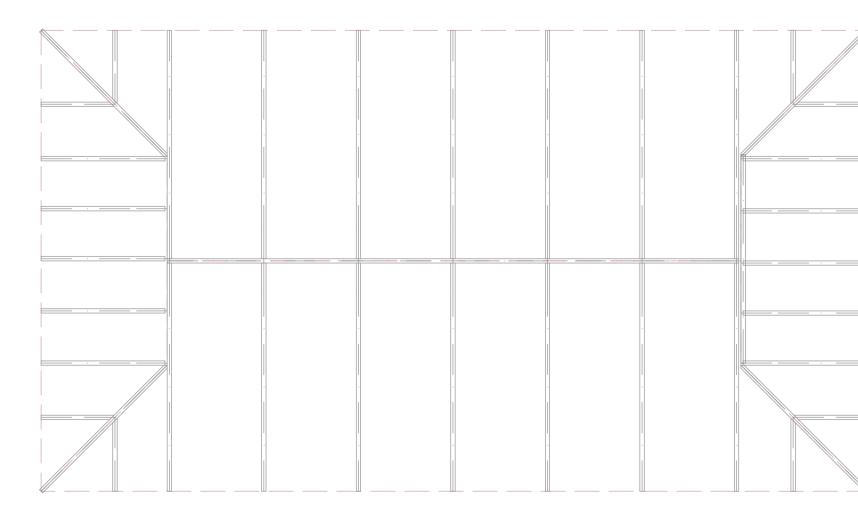
DRAWING N<sup>o</sup>:

PROJECT Nº:

<u>знеет №:</u> 15/32

GENERATOR SHED



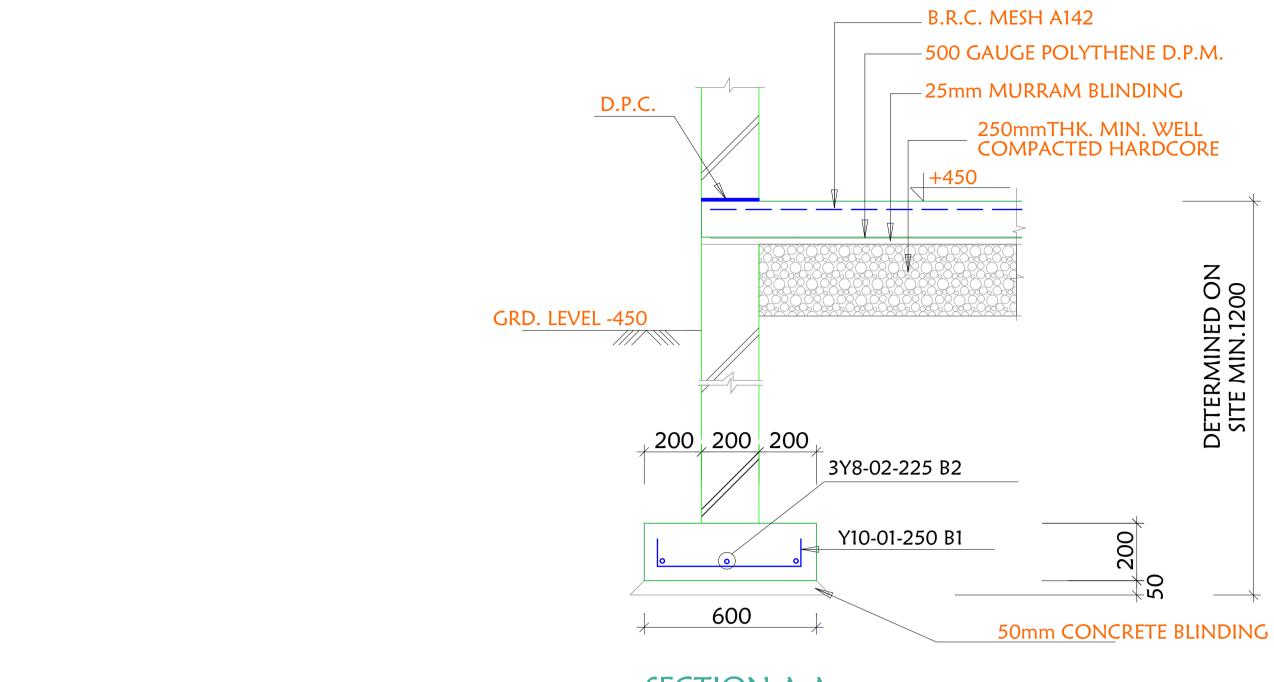


## TRUSS LAYOUT

PROJECT.

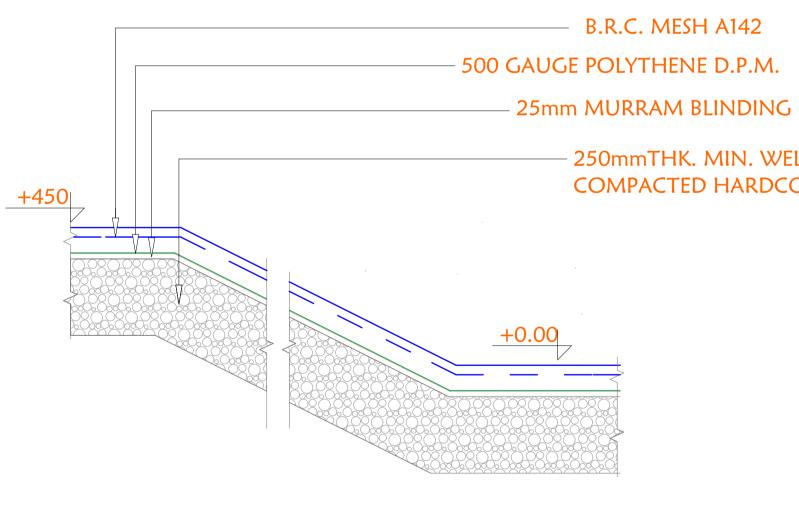
PROPOSED BALANBAL BOREHOLE REHABILITATION

-BALANBAL DISTRICT-



SECTION A-A **SCALE 1:25** 

#### FOUNDATION FOOTING DETAIL



SECTION D-D **SCALE 1:25** 

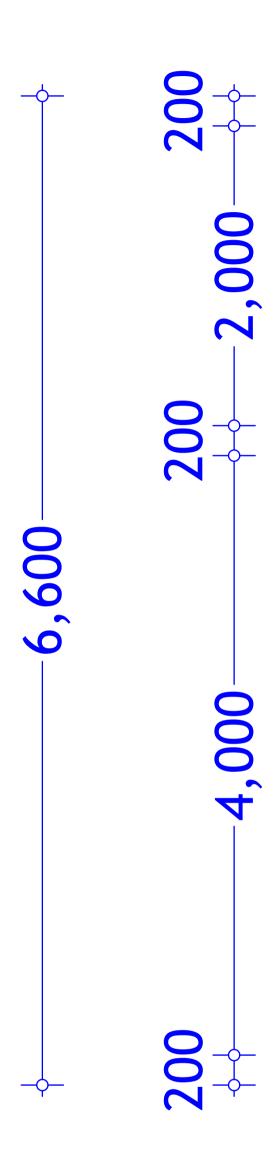
#### RAMP DETAILS

SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
STRUCT. DETAIL (Foundation)	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	<b>REVIEWED BY:</b>	
	APPROVED BY:	

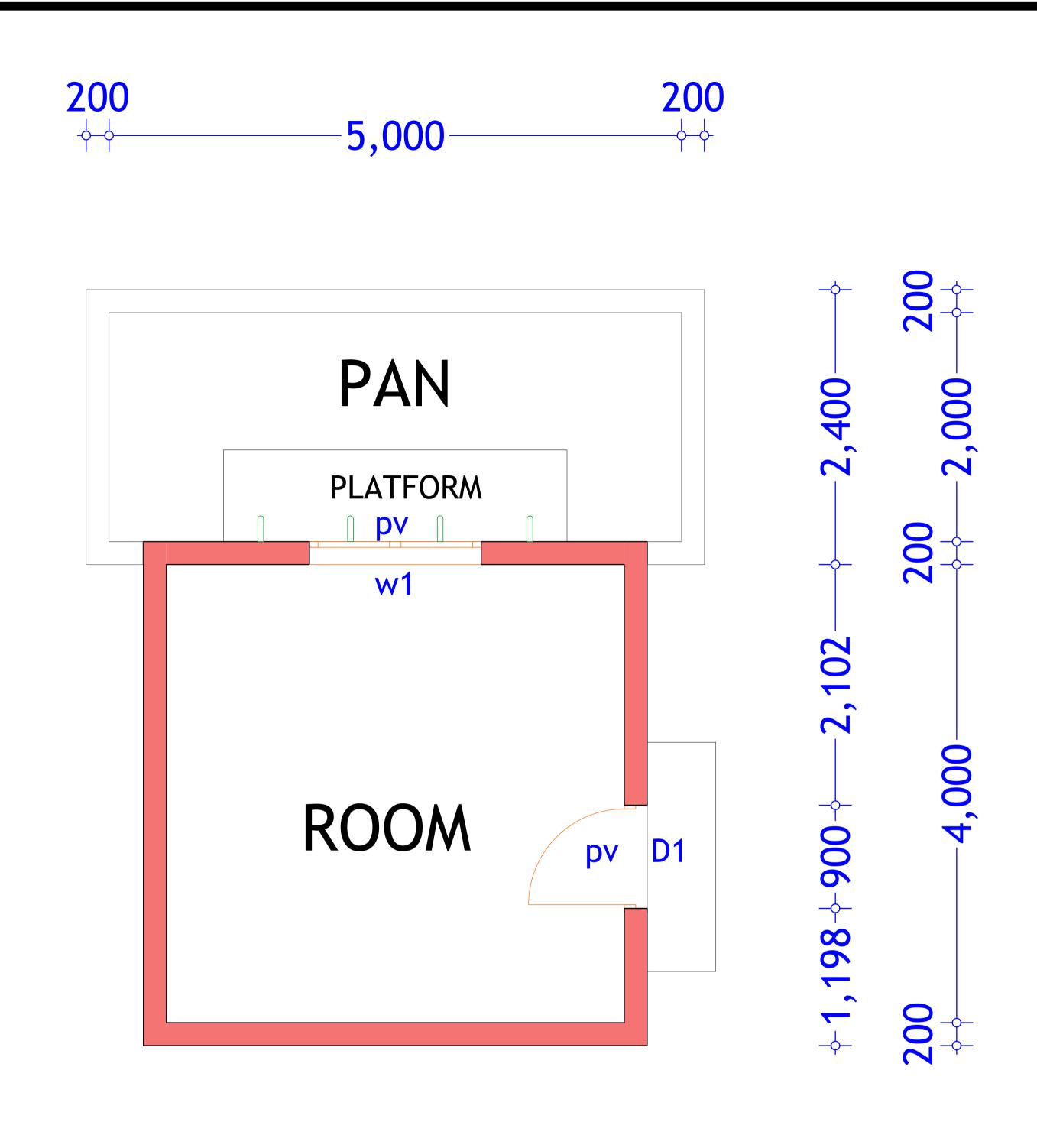
- B.R.C. MESH A142 - 500 GAUGE POLYTHENE D.P.M.

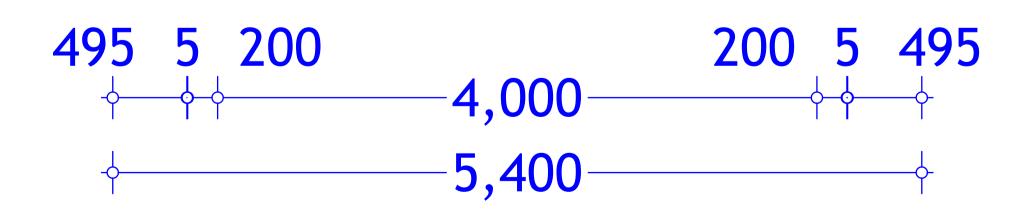
> - 250mmTHK. MIN. WELL COMPACTED HARDCORE

017	DRAWING TITLE:	GENERATOR SHED
WA WA	DRAWING N <sup>o</sup> :	<u>знеет №:</u> 16/32



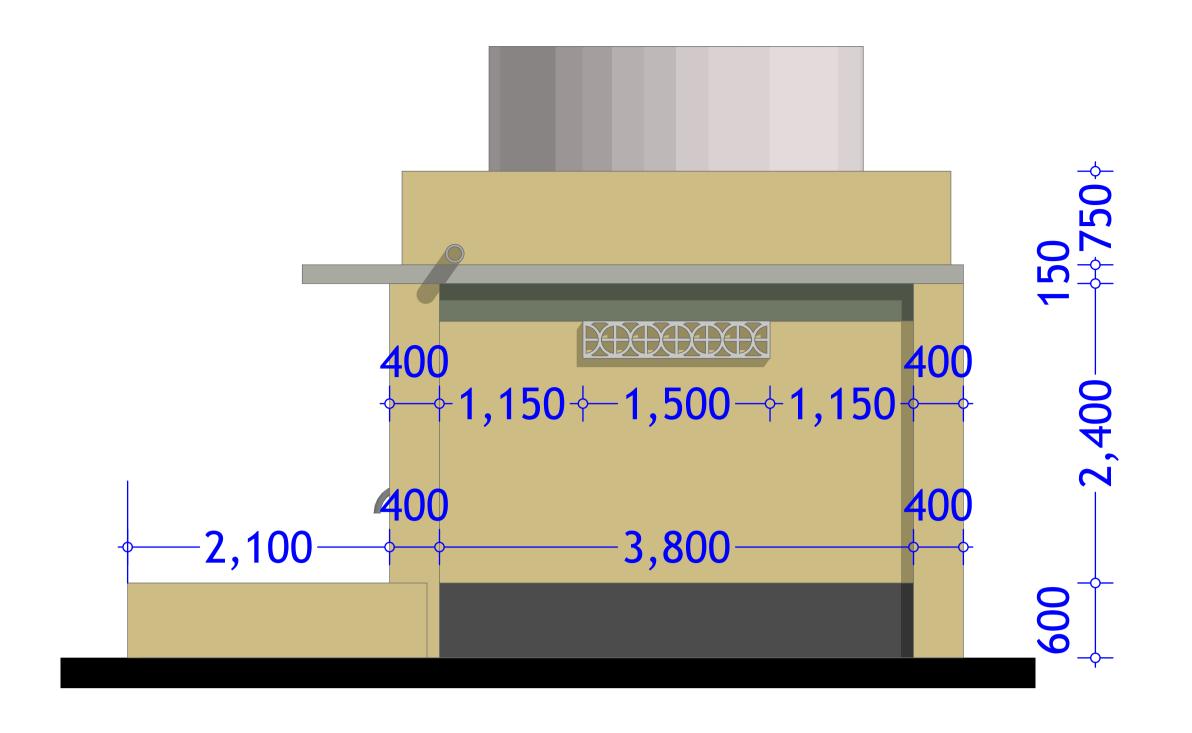
PROJECT.	PROPOSED BALANBAL BOREHOLE	
	REHABILITATION	
	-BALANBAL DISTRICT-	

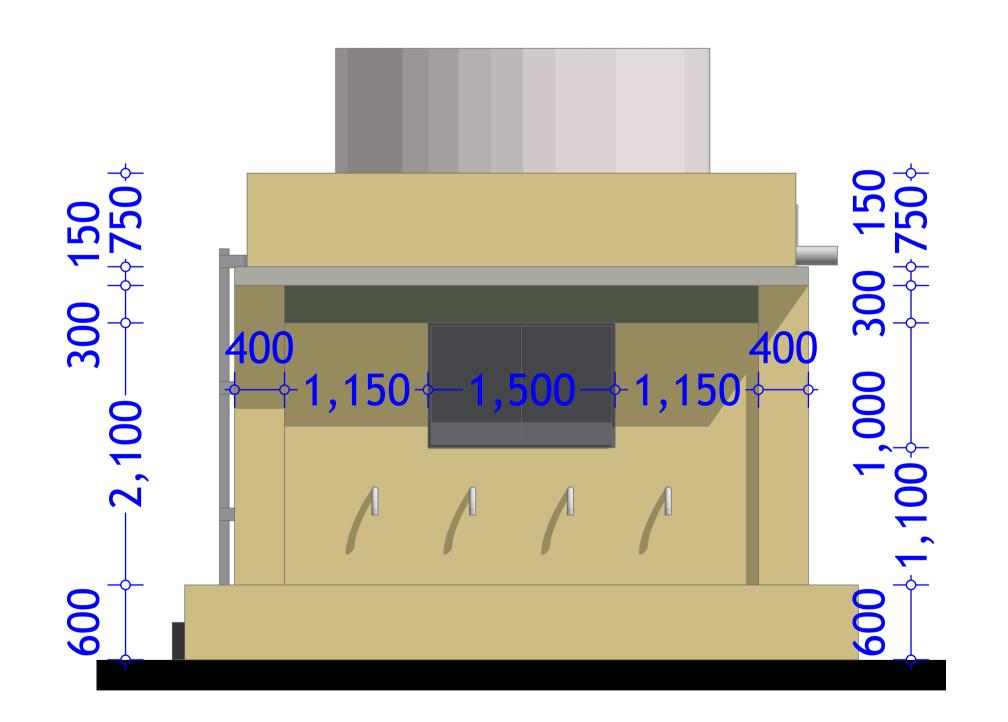




SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
FLOOR LAYOUT	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	<b>REVIEWED BY:</b>	
	APPROVED BY:	

DRAWING TITLE:	WATER KIOSK
VA     PROJECT N <sup>o</sup> :	<u>SHEET Nº:</u> 17/32

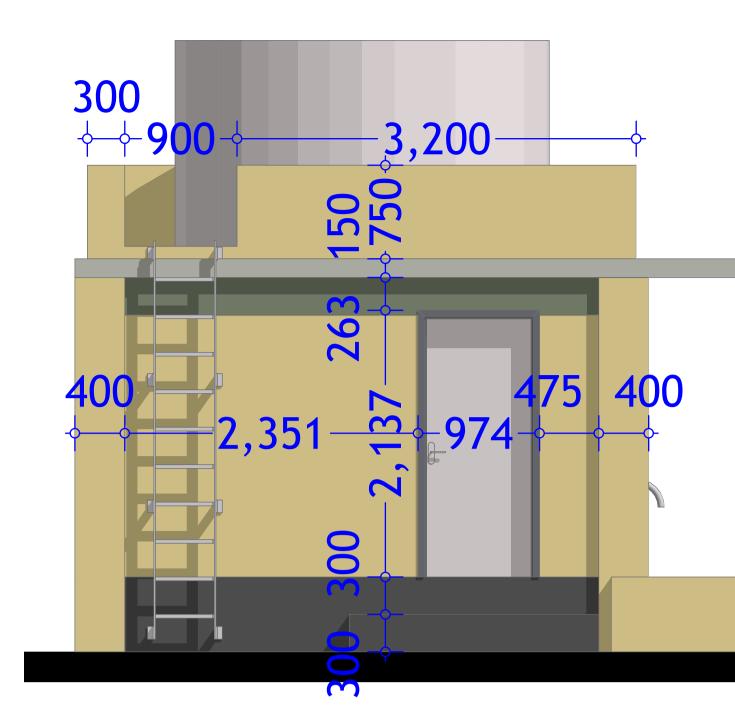


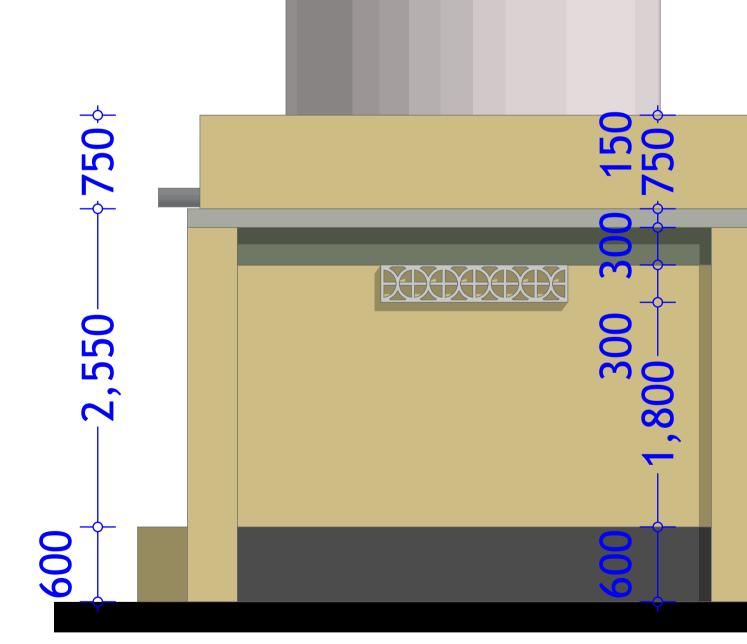


 PROJECT.
 PROPOSED BALANBAL BOREHOLE

 REHABILITATION

 -BALANBAL DISTRICT 





SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
ELEVATIONS	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	REVIEWED BY:	
	APPROVED BY:	

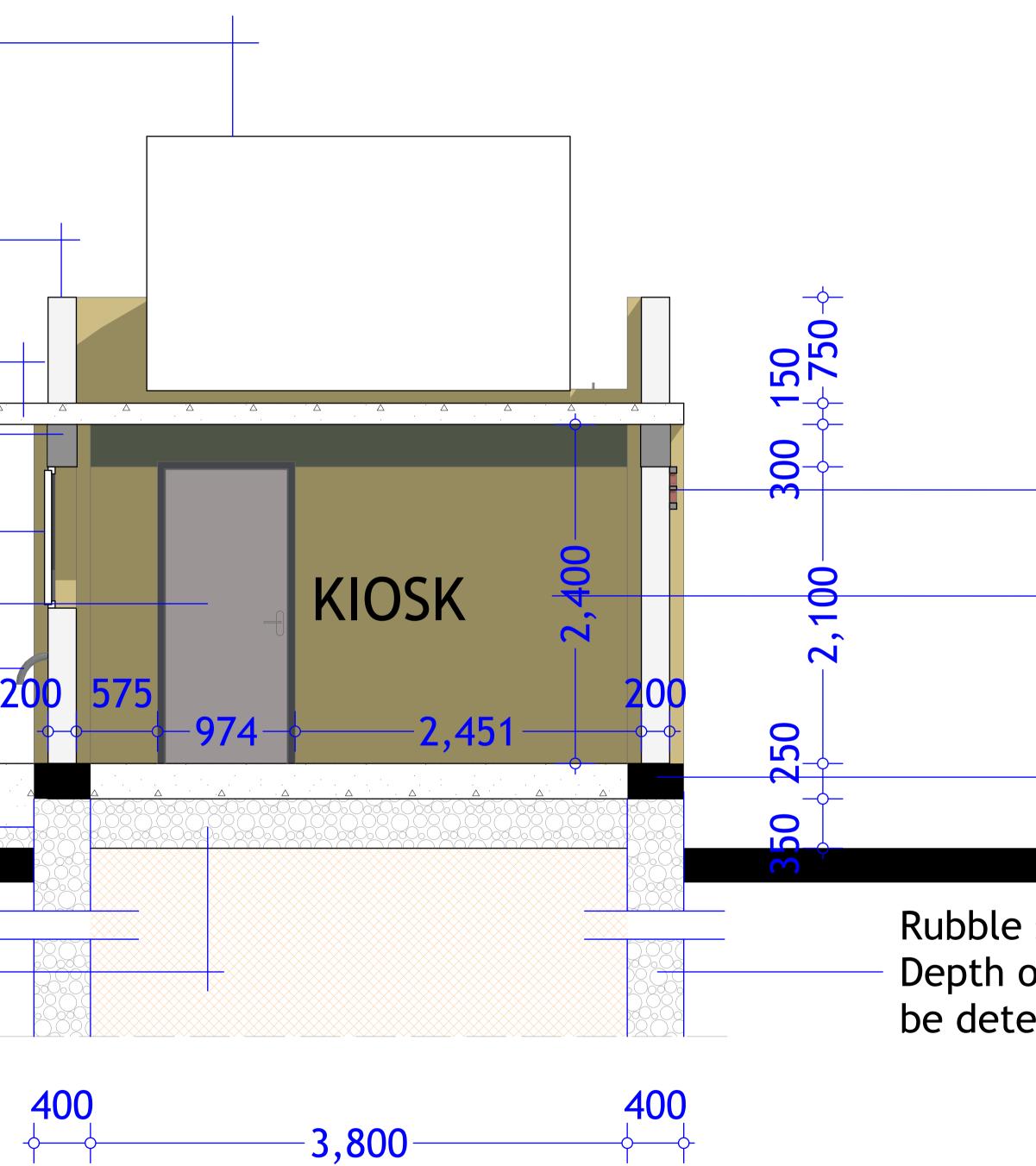
7	DRAWING TITLE:	WATER KIOSK
	DRAWING N <sup>O</sup> :	
Α		<u>SHEET N<sup>o</sup>:</u>
A	PROJECT Nº:	18/32

500ltrs PVC water resevoir
200 hollow block parapet walling
VRC slab canopy 300 VRC ring beam
steel casement window Single steel door
Dispensation pipe Dwarf wall

40mm cs screed on, 150mm VRC slab on, 50mm blinding on, 300mm hardcore fill on,

PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-



SHEET TITLE:		SCALE	
		DATE	APRIL. 2017
	SECTION	DESIGNED BY:	J. NANDWA
		DRAWN BY:	J. NANDWA
		REVIEWED BY:	
		APPROVED BY:	

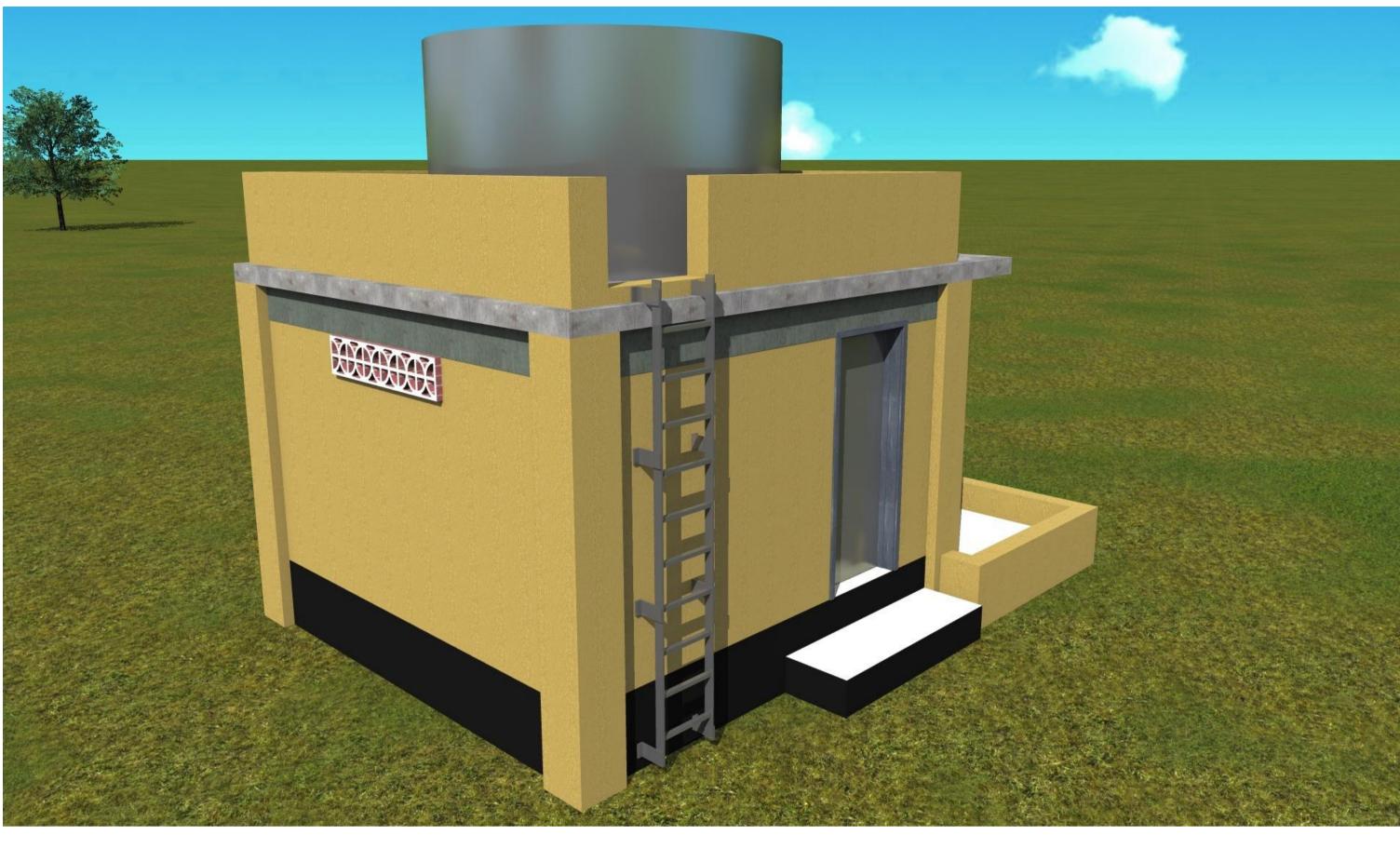
#### PCC vent

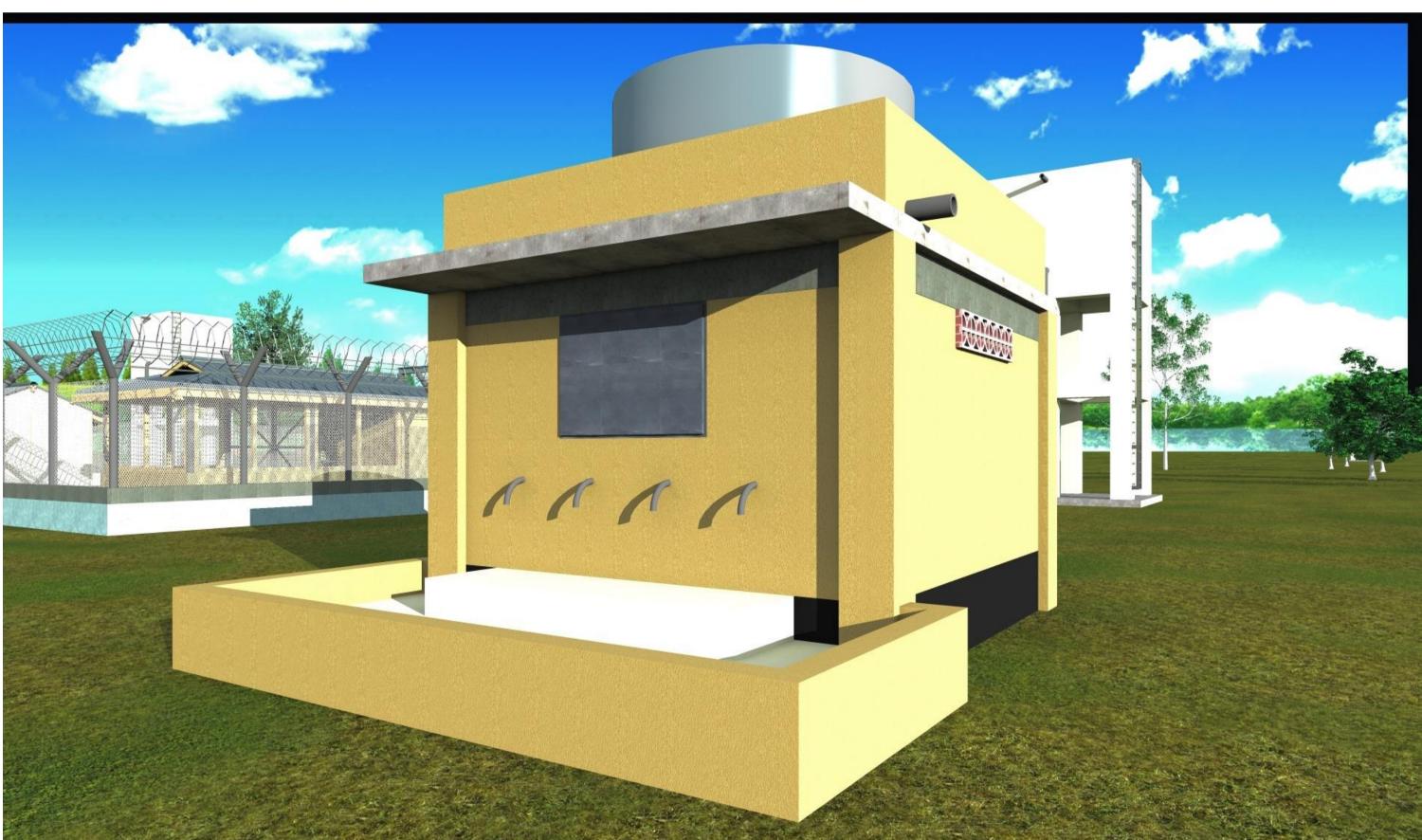
200 hollow block walling with plaster and paint as described

Ground beam

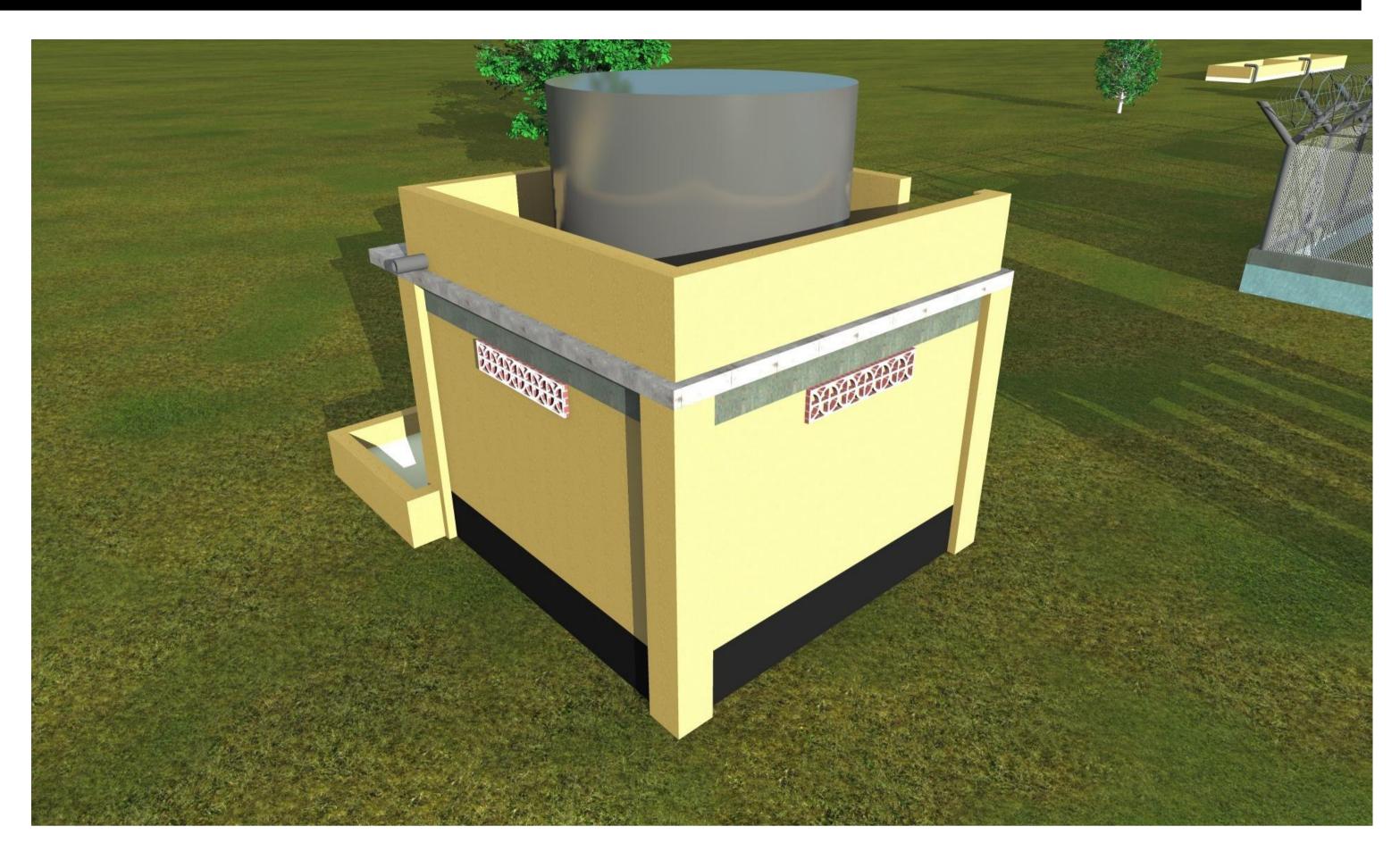
Rubble stone foundation Depth of foundation to be determined on site

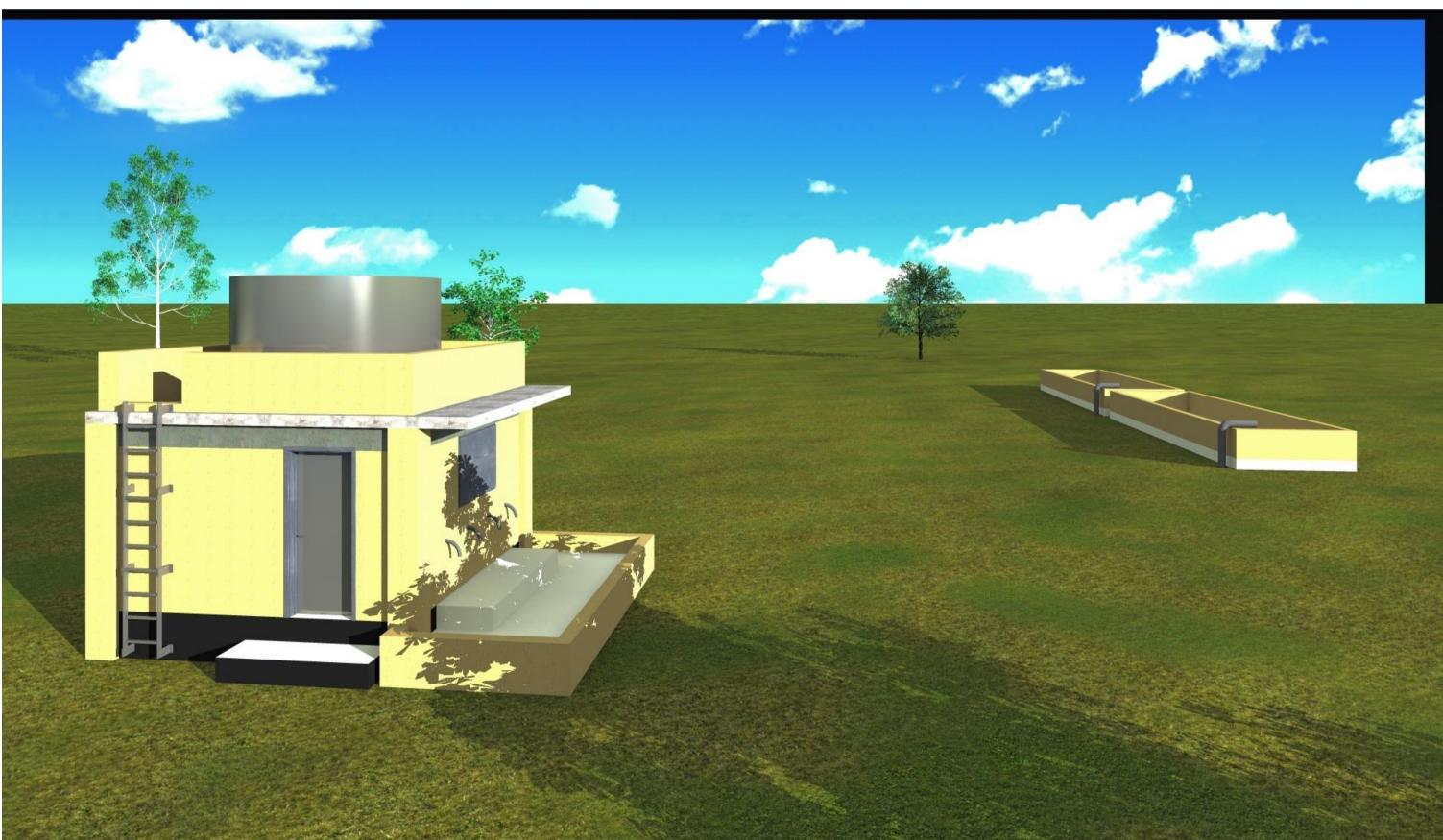
17	DRAWING TITLE:	WATER KIOSK
/A /A	DRAWING N <sup>o</sup> :	<u>Sheet Nº:</u> 19/32





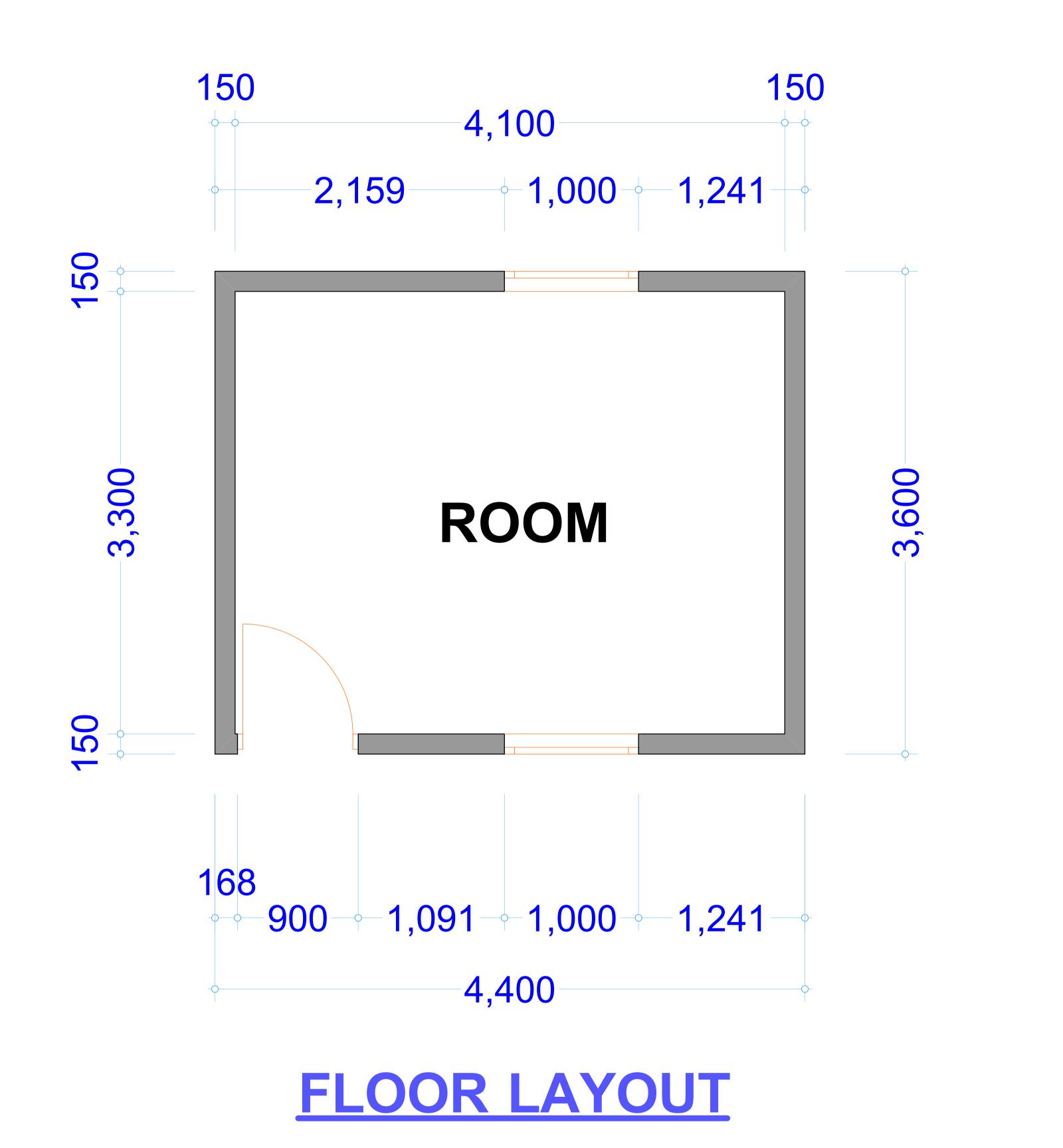
PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-





SHEET TITLE:	SCALE	
	DATE	APRIL. 20 <sup>°</sup>
3D Models	DESIGNED BY:	J. NANDW
	DRAWN BY:	J. NANDW
	<b>REVIEWED BY:</b>	
	APPROVED BY:	

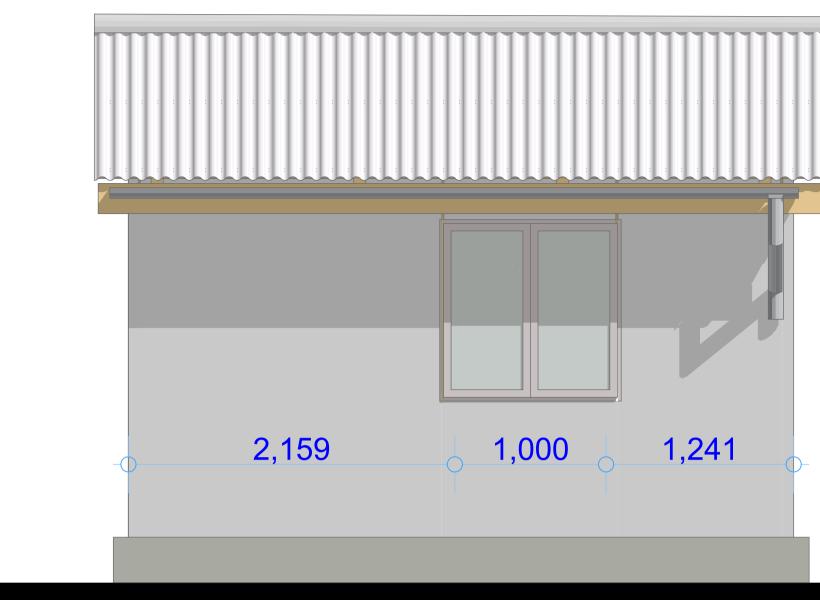
2017	DRAWING TITLE:	WATER KIOSK
NDWA	DRAWING N <sup>o</sup> :	<u>SHEET N<sup>o</sup>:</u>
NDWA	PROJECT Nº:	20/32



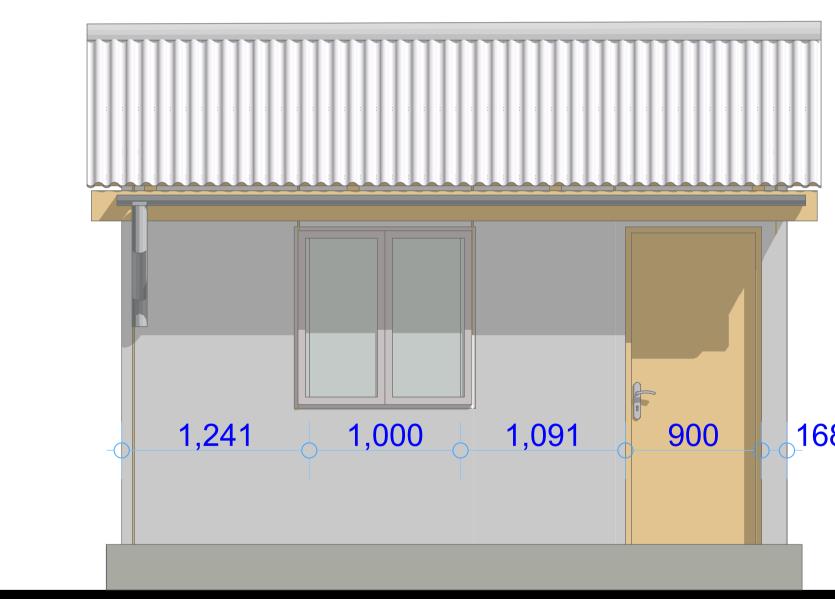
PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

SHEET TITLE:	SCALE		
		DATE	APRIL. 2017
	FLOOR LAYOUT	DESIGNED BY:	J. NANDWA
		DRAWN BY:	J. NANDWA
		REVIEWED BY:	
		APPROVED BY:	

17	DRAWING TITLE:	CARETAKERS ROOM
Ά	DRAWING N <sup>o</sup> :	<u>SHEET N<sup>o</sup>:</u>
A	PROJECT N <sup>O</sup> :	21/32



## **SOUTH ELEVATION**



## **NORTH ELEVATION**

PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

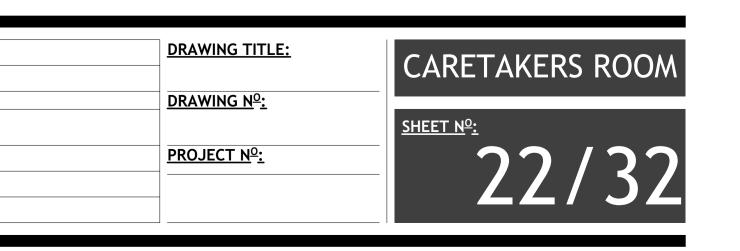




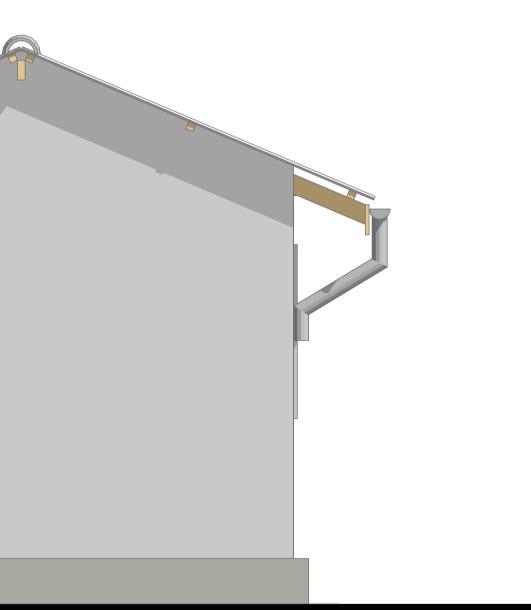
168

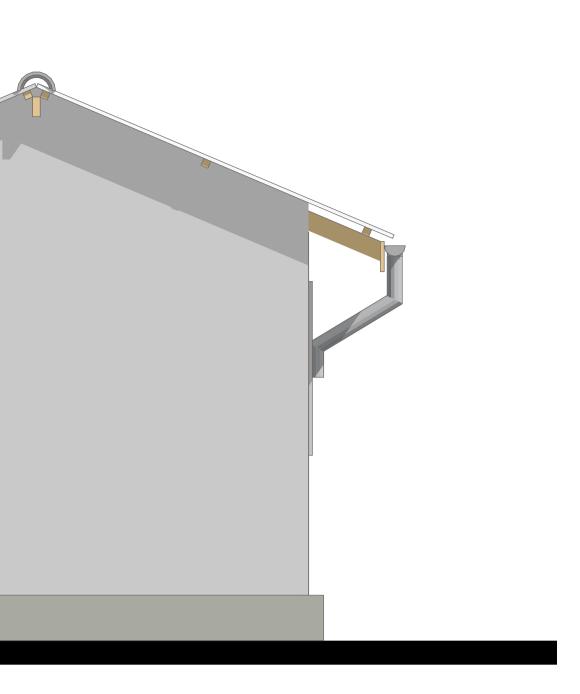
SHEET TITLE: ELEVATIONS SCALE APRIL. 2017 DATE J. NANDWA **DESIGNED BY:** J. NANDWA DRAWN BY: **REVIEWED BY:** APPROVED BY:

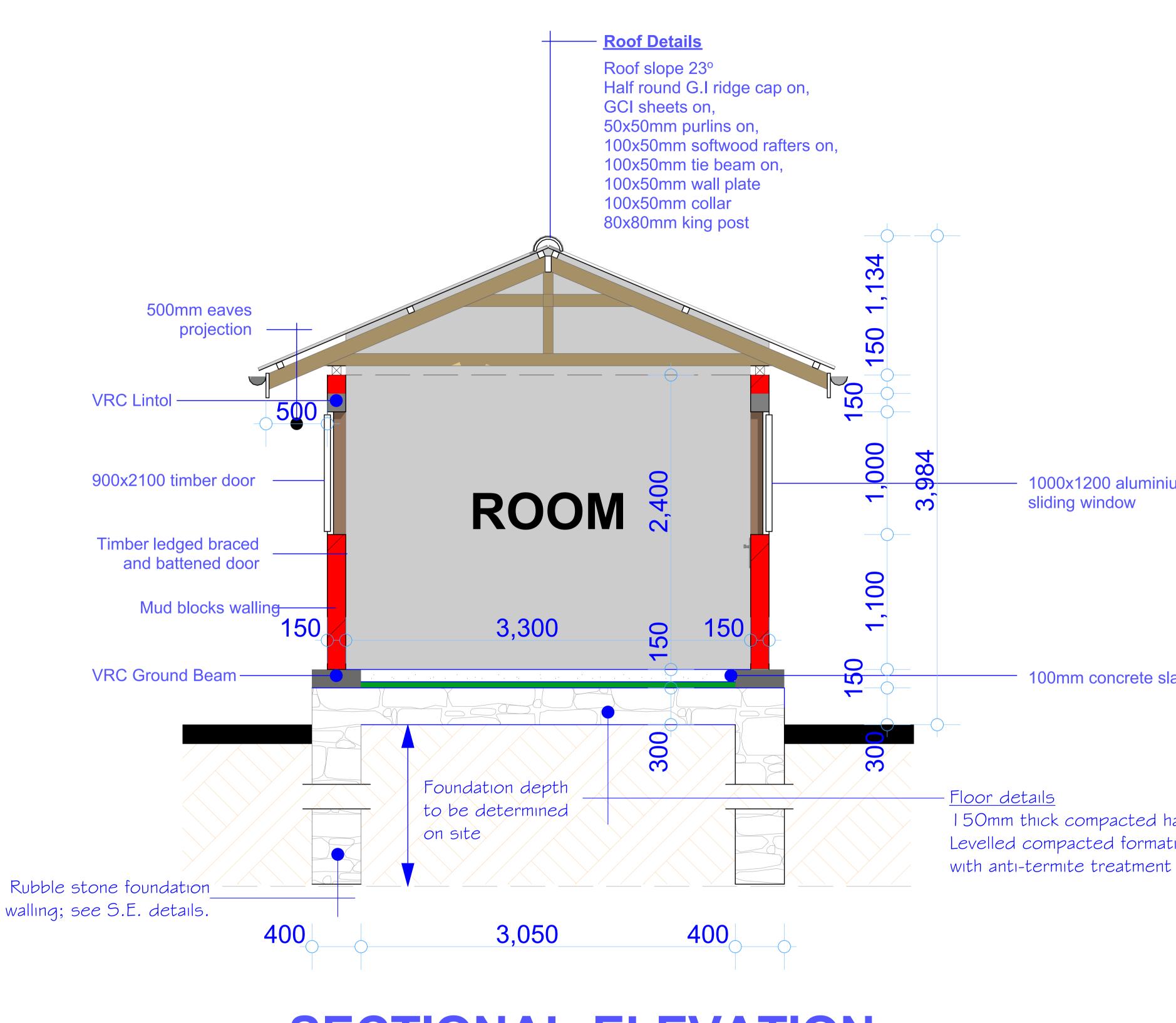












PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

## **SECTIONAL ELEVATION**

SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
SECTION	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	REVIEWED BY:	
	APPROVED BY:	

1000x1200 aluminium

100mm concrete slab

150mm thick compacted hardcore fill on, Levelled compacted formation level

> DRAWING TITLE: CARETAKERS ROOM <u>DRAWING N<sup>o</sup>:</u> <u>SHEET N<sup>o</sup>:</u> 23/32 PROJECT N<sup>o</sup>:





PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-



SHEET TITLE: **3D Models** 

SCALE	
DATE	APRIL. 20
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
REVIEWED BY:	
APPROVED BY:	

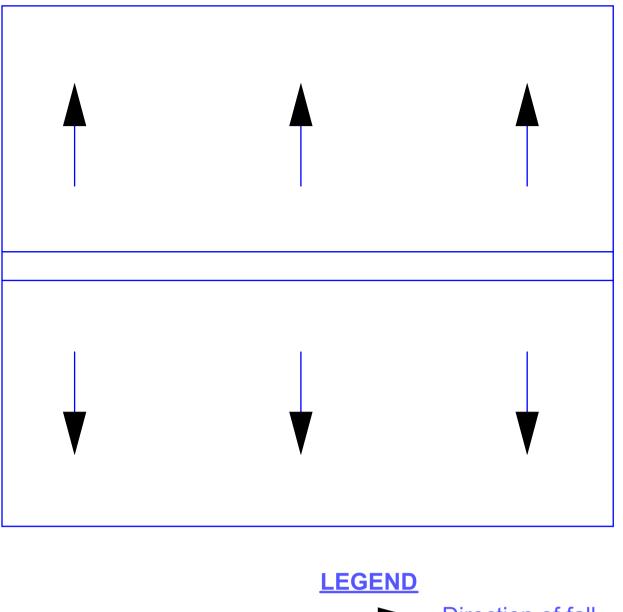
017

DRAWING TITLE:

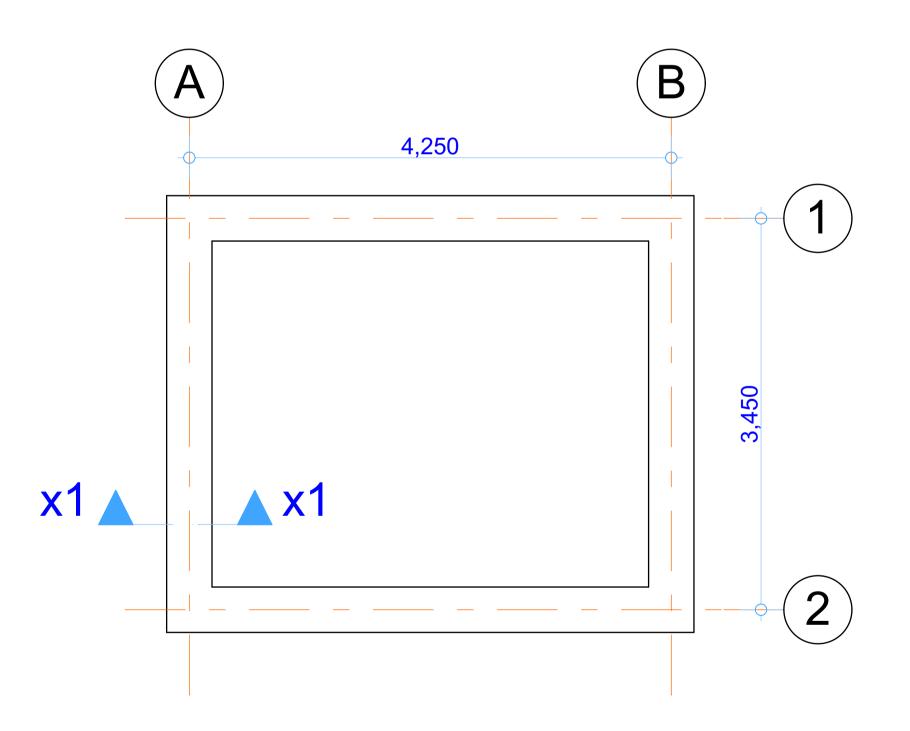
DRAWING Nº:

PROJECT N<sup>o</sup>:

CARETAKERS ROOM <u>SHEET N<sup>o</sup>:</u> 24/32



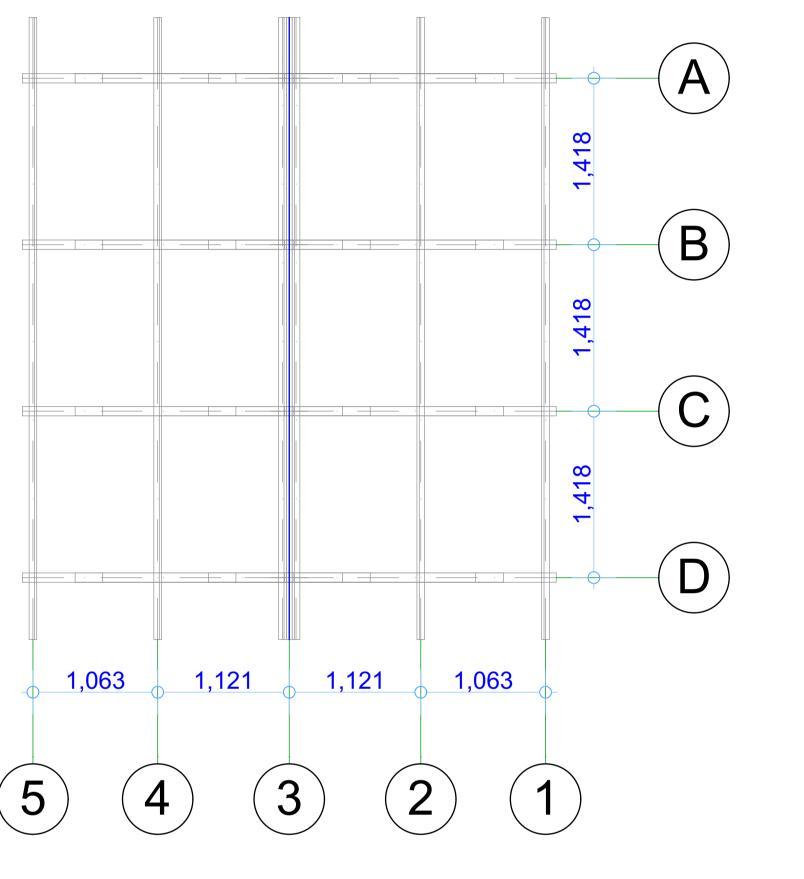




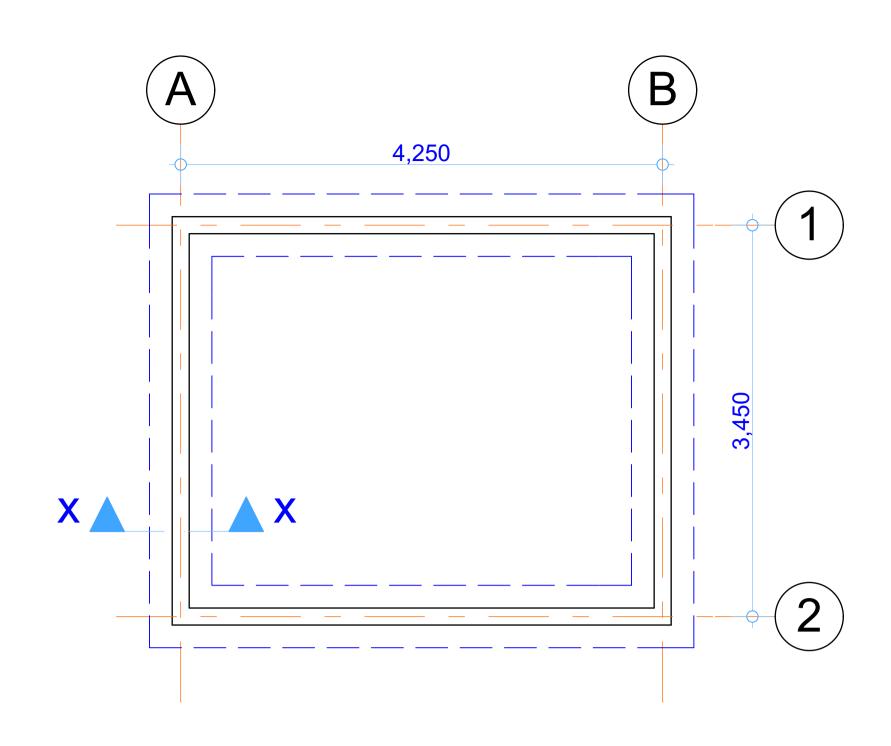
# RUBBLE STONE FOUNDATION LAYOUT

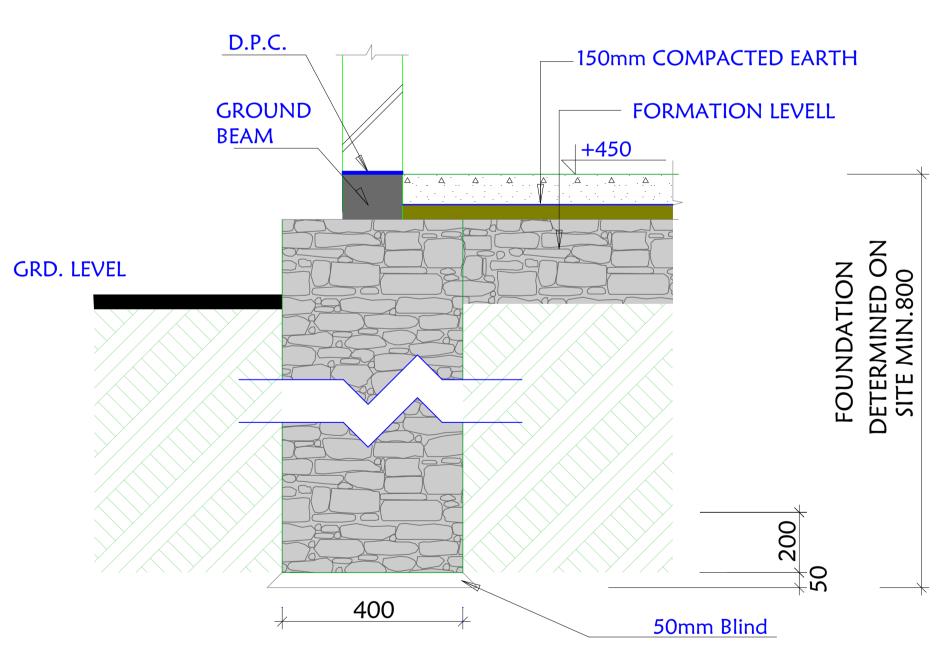
PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-











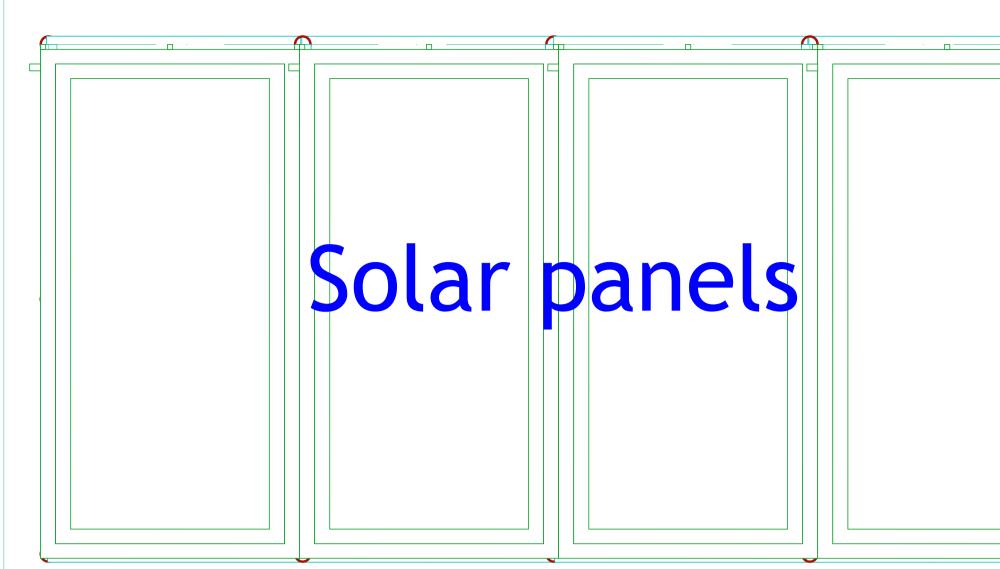
#### **RUBBLE STONE FOUNDATION FOOTING DETAIL**

SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
STRUCTURAL	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	<b>REVIEWED BY:</b>	
	APPROVED BY:	

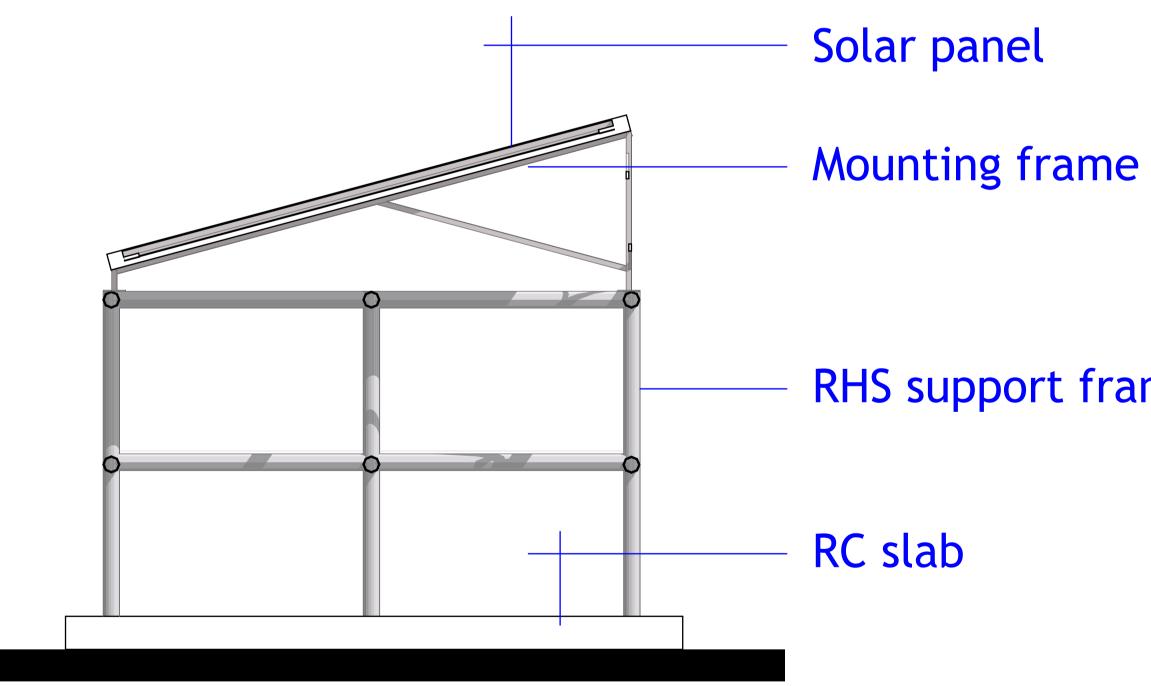


#### SECTION X-X **SCALE 1:25**

017	DRAWING TITLE:	CARETAKERS ROOM
VA	<u>DRAWING N<sup>o</sup>:</u>	<u>SHEET N<sup>o</sup>:</u>
VA	PROJECT N <sup>o</sup> :	25/32



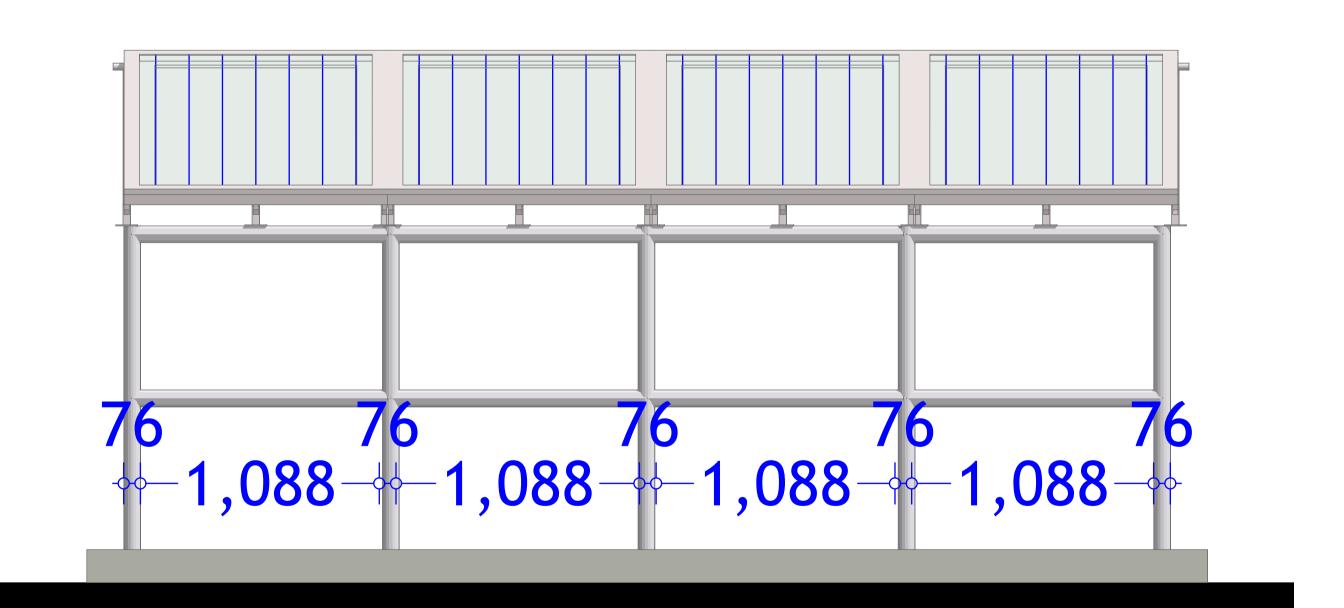
# +1,200+1,200+1,200+1,200+1,200



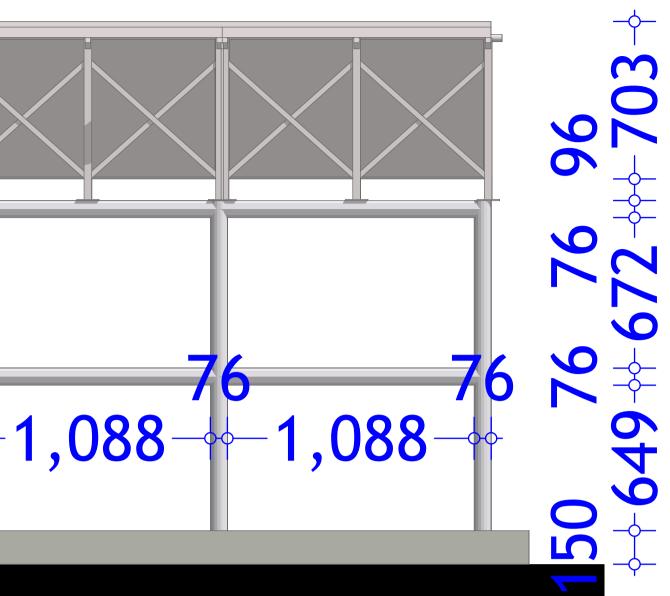
PROJECT.	PROPOSED BALANBAL BOREHOLE	
	REHABILITATION	
	-BALANBAL DISTRICT-	
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	-1,088-1,088
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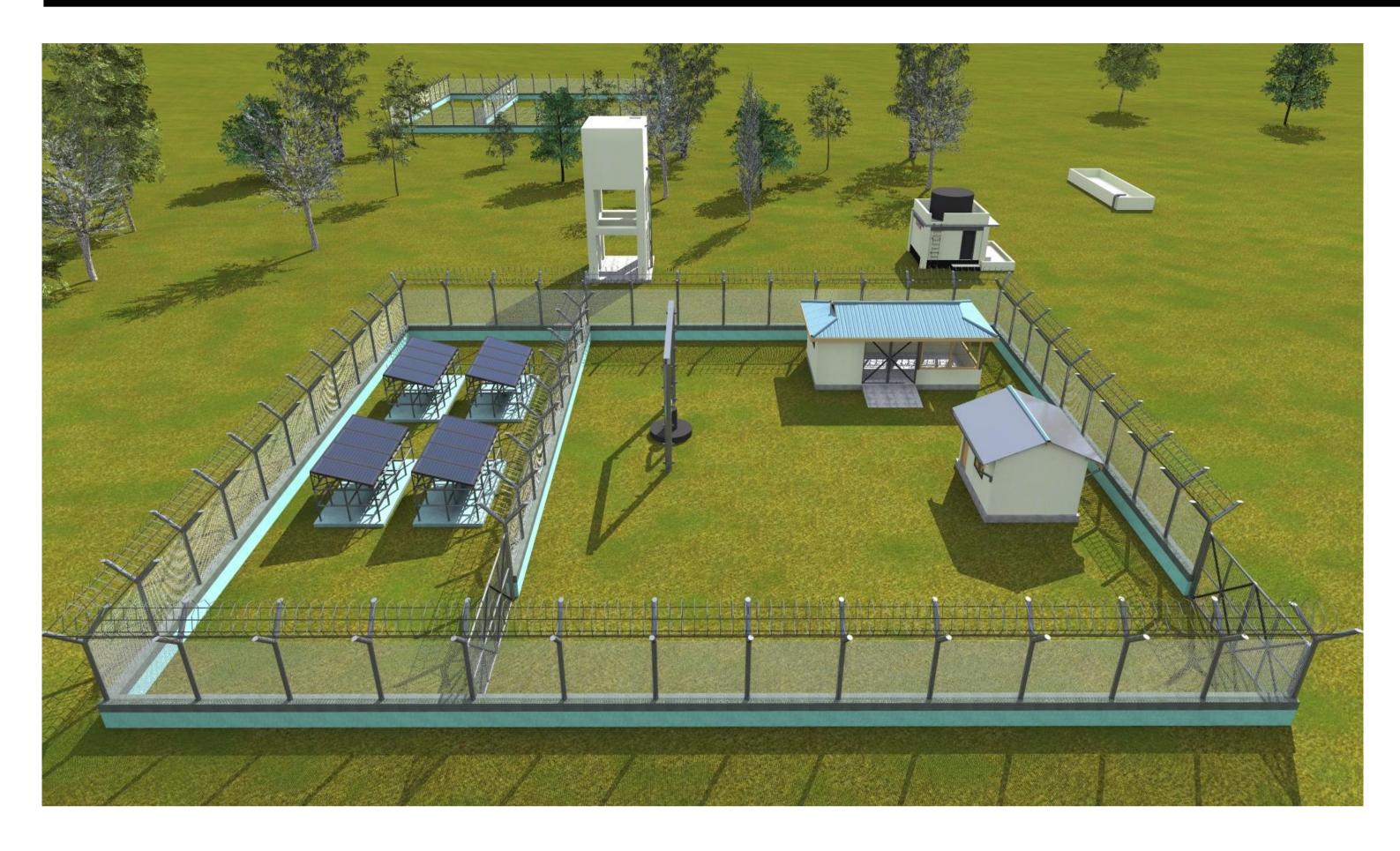
- RHS support framework



SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
DETAILS	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	<b>REVIEWED BY:</b>	
	APPROVED BY:	



017	DRAWING TITLE:	LATRINES
WA WA	DRAWING N <sup>o</sup> : PROJECT N <sup>o</sup> :	<u>Sheet Nº:</u> 26/32





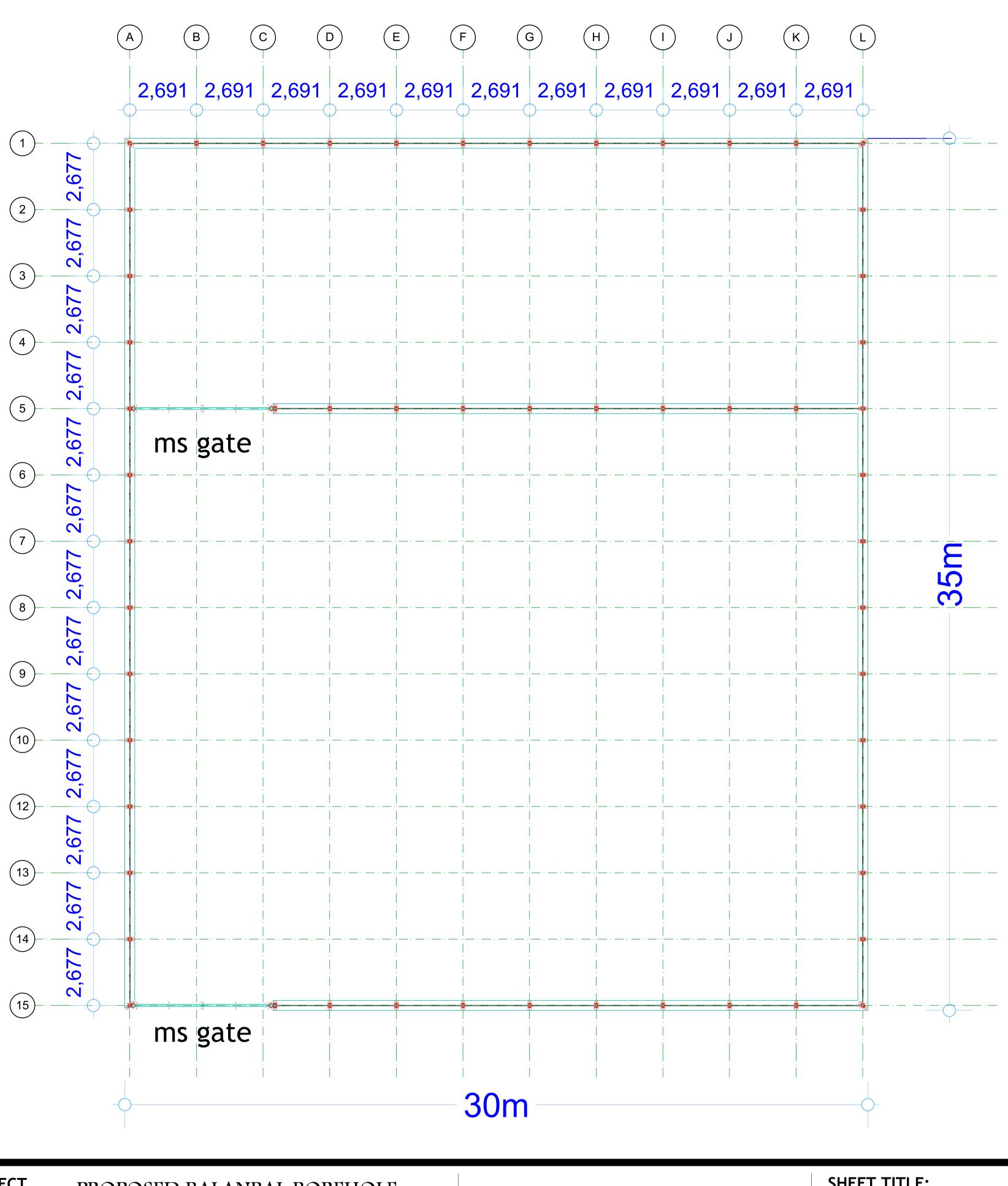
PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-



SHEET TITLE:				
3D	MODELS			

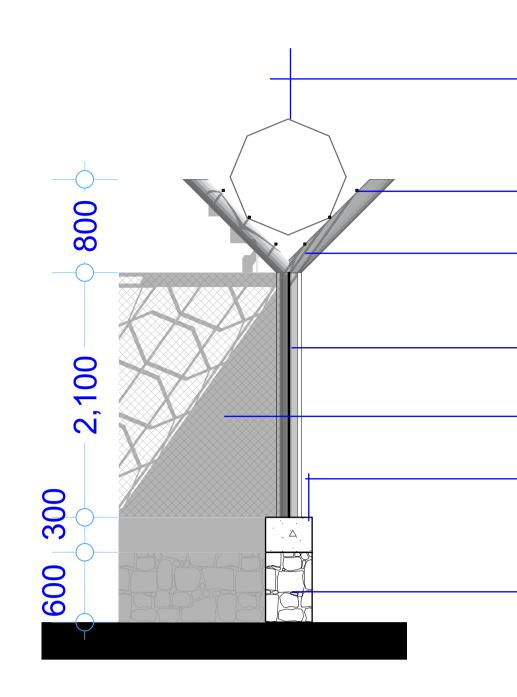
SCALE	
DATE	APRIL. 20 <sup>°</sup>
DESIGNED BY:	J. NANDW
DRAWN BY:	J. NANDW
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:	LATRINES
DRAWING N <sup>o</sup> :	<u>SHEET N<sup>o</sup>:</u>
PROJECT Nº:	
	27/32



PROPOSED BALANBAL BOREHOLE REHABILITATION

-BALANBAL DISTRICT-



SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	<b>REVIEWED BY:</b>	
	APPROVED BY:	
	·	

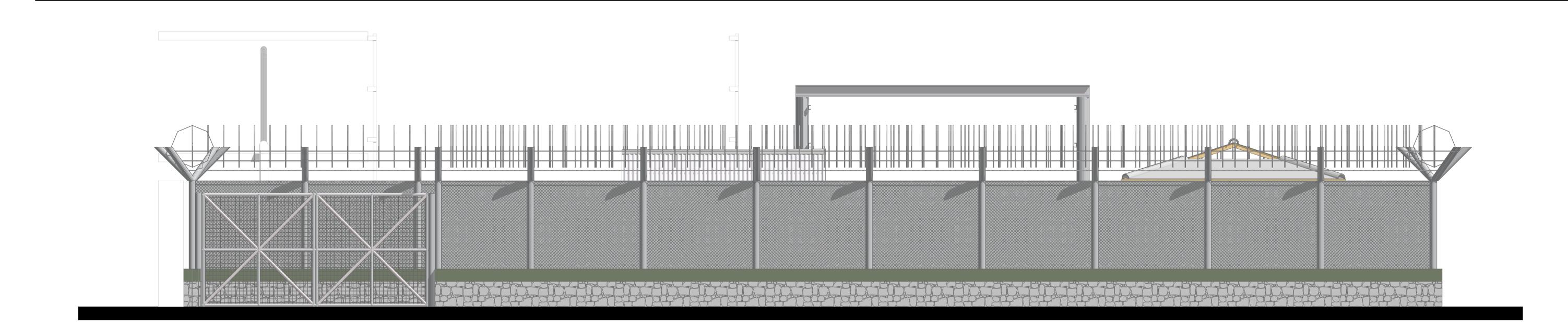
800mm concertina wire

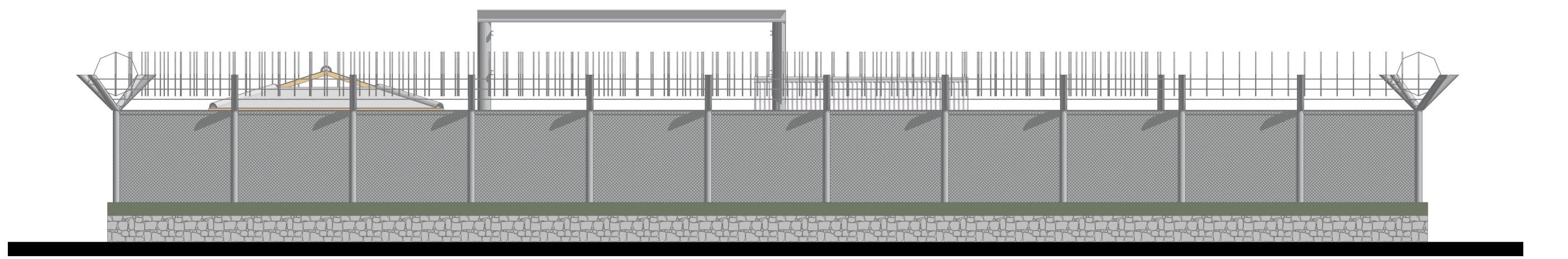
6No. Straining wire 50mm x 800mm CHS poles @ 45°

50mm x 3m CHS poles @ 2.5m c-c Heavy guage 3m high chainlink fence 300mm x 400mm wide VRC beam

600mm rubble stone foundation walling

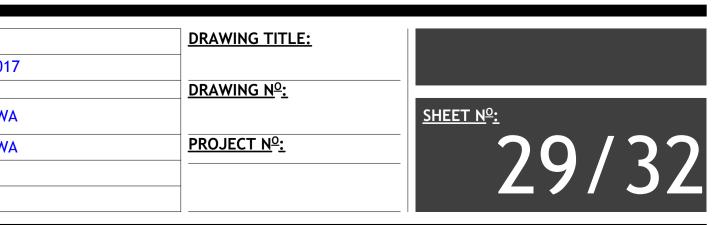
	DRAWING TITLE:	
17	FLOOR LAYOUT	
	DRAWING N <sup>o</sup> :	
Ά		<u>SHEET N<sup>o</sup>:</u>
Ά	PROJECT N <sup>o</sup> :	28/32

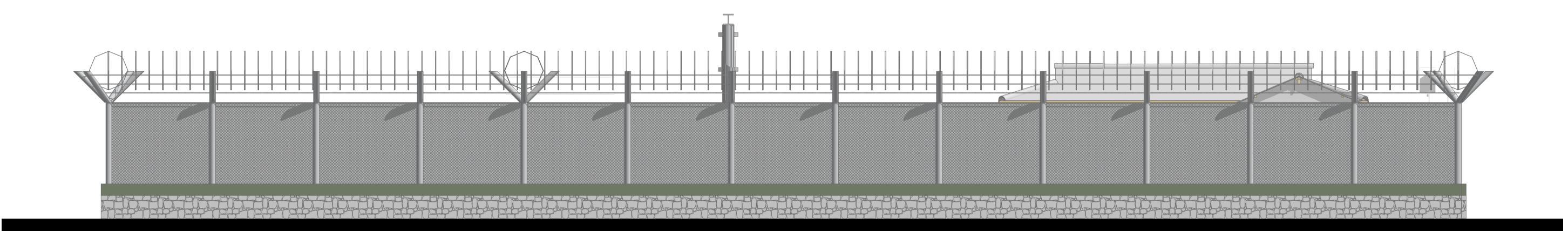


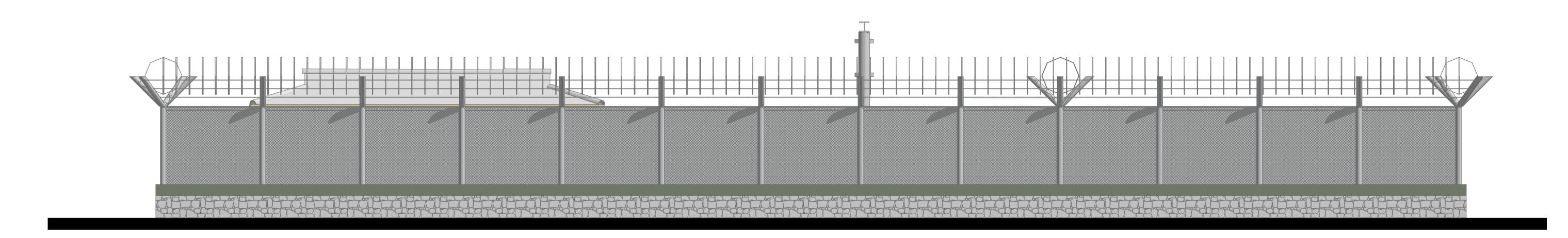


PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

<u>SHEET TITLE:</u>	SCALE	
	DATE	APRIL. 2017
ELEVATIONS	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	REVIEWED BY:	J. NANDWA
	APPROVED BY:	
		1



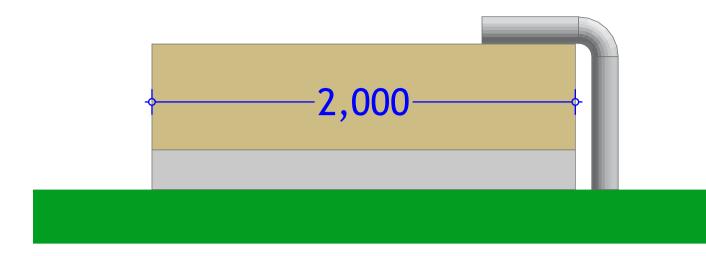




PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

SHEET TITLE:	SCALE	
	DATE	APRIL. 2017
ELEVATIONS	DESIGNED BY:	J. NANDWA
	DRAWN BY:	J. NANDWA
	REVIEWED BY:	
	APPROVED BY:	

	DRAWING TITLE:	
)17		
	DRAWING N <sup>o</sup> :	
VA		<u>SHEET N<sup>o</sup>:</u>
VA	PROJECT N <sup>o</sup> :	<b>ン</b> () () () () () () () () () () () () ()
	-	30/32



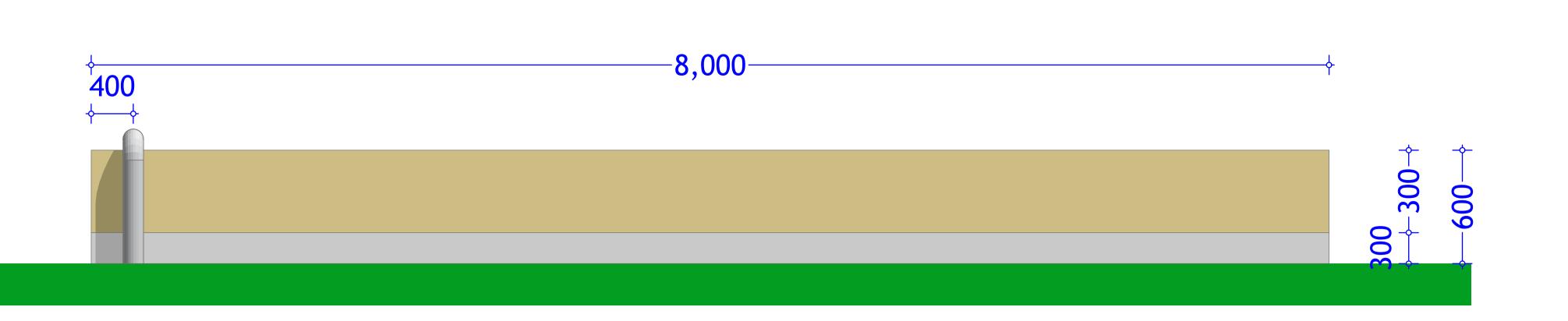
GI inlet pipe

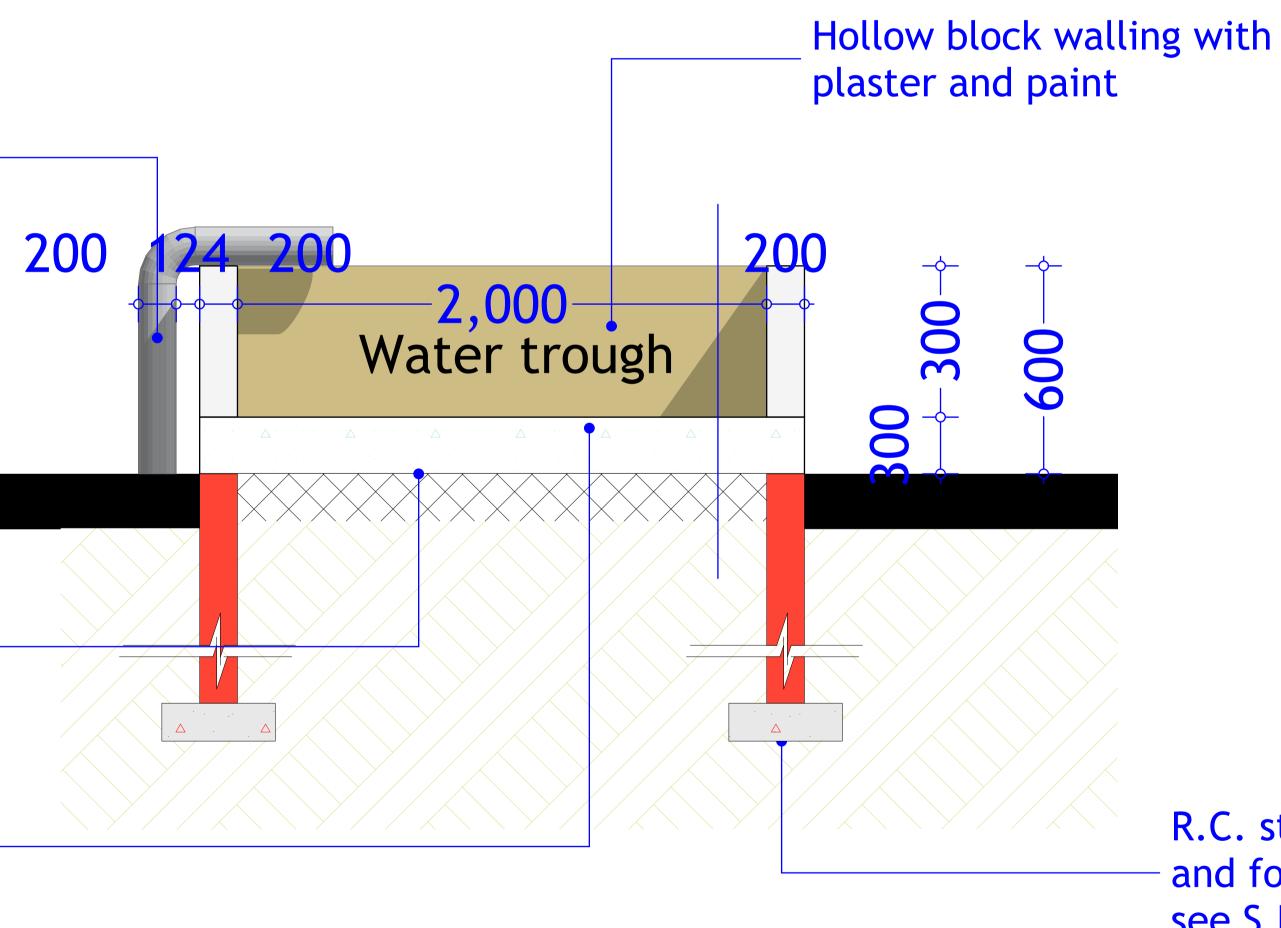
150mm thick R.C. floorslab with B.R.C. mesh and D.P.M. cast on well compacted hardcore with blinding layer; see S.E. details.

RCC plinth.

PROJECT.

PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT-

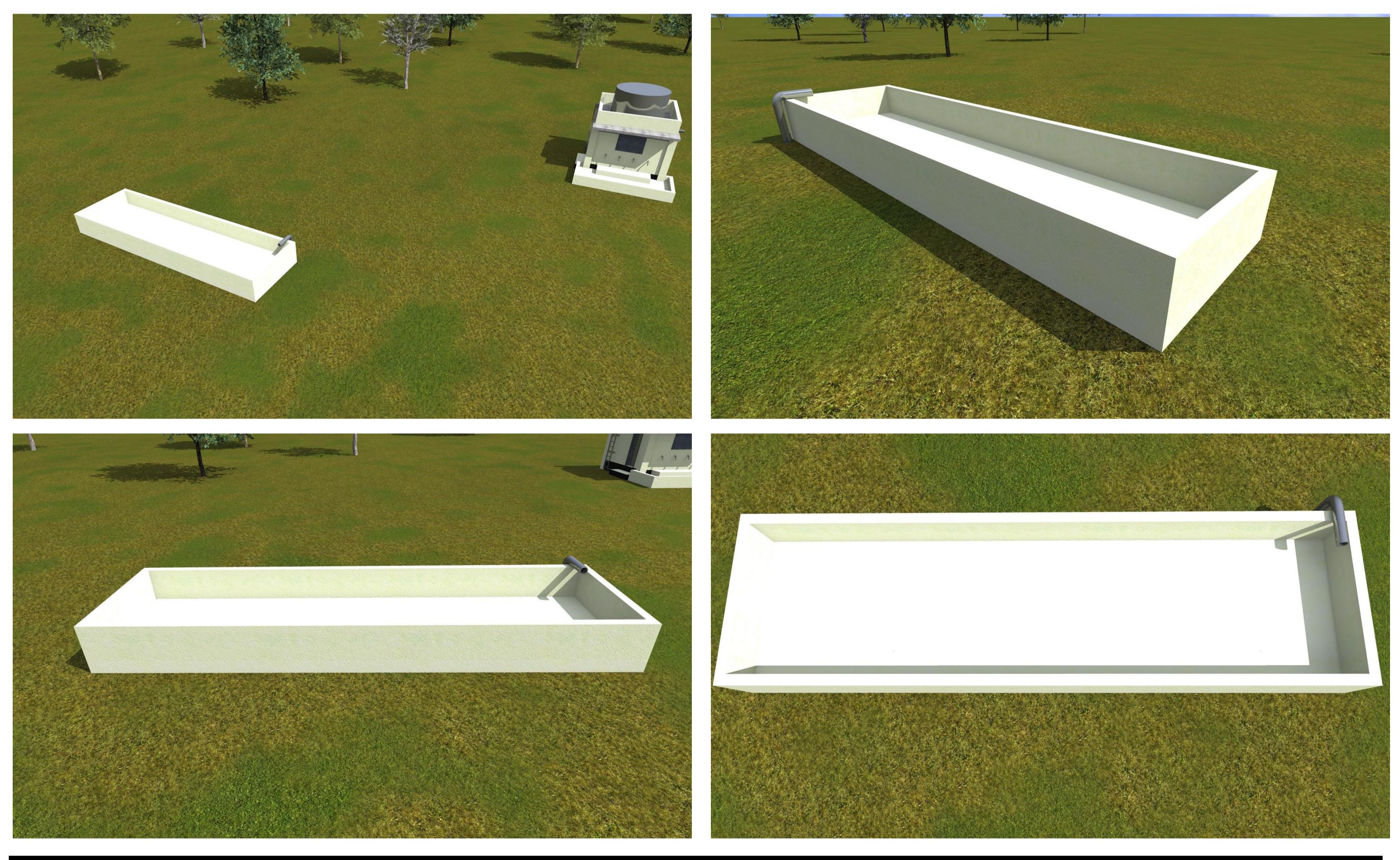






R.C. strip footing - and foundation walling, see S.E. details.

	DRAWING TITLE:	
7	DRAWING N <sup>o</sup> :	
A		SHEET N <sup>O</sup> :
A	PROJECT N <sup>0</sup> :	- 31/32



PROPOSED BALANBAL BOREHOLE REHABILITATION -BALANBAL DISTRICT- <u>Sheet title:</u> 3D Scenes

APRIL. 20
J. NANDW
J. NANDW

	DRAWING TITLE:	
17	DRAWING Nº:	
VA		<u>SHEET N<sup>o</sup>:</u>
VA	PROJECT Nº:	32/32