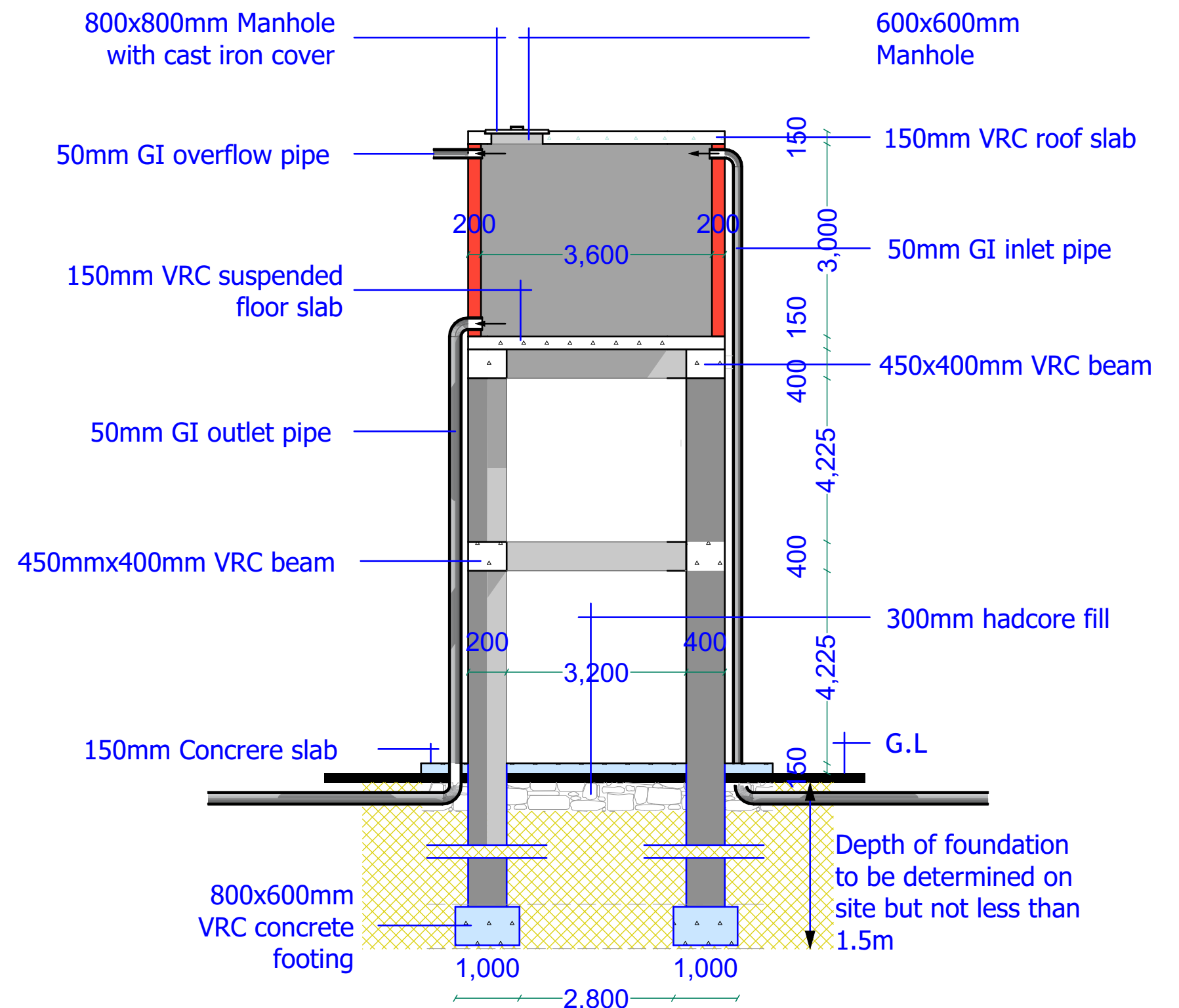


Floor Plan



Sectional Elevation

GENERAL NOTES

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PROJECT

EXCAVATION OF SHALLOW WELLS

IMPLEMENTING AGENCY



DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

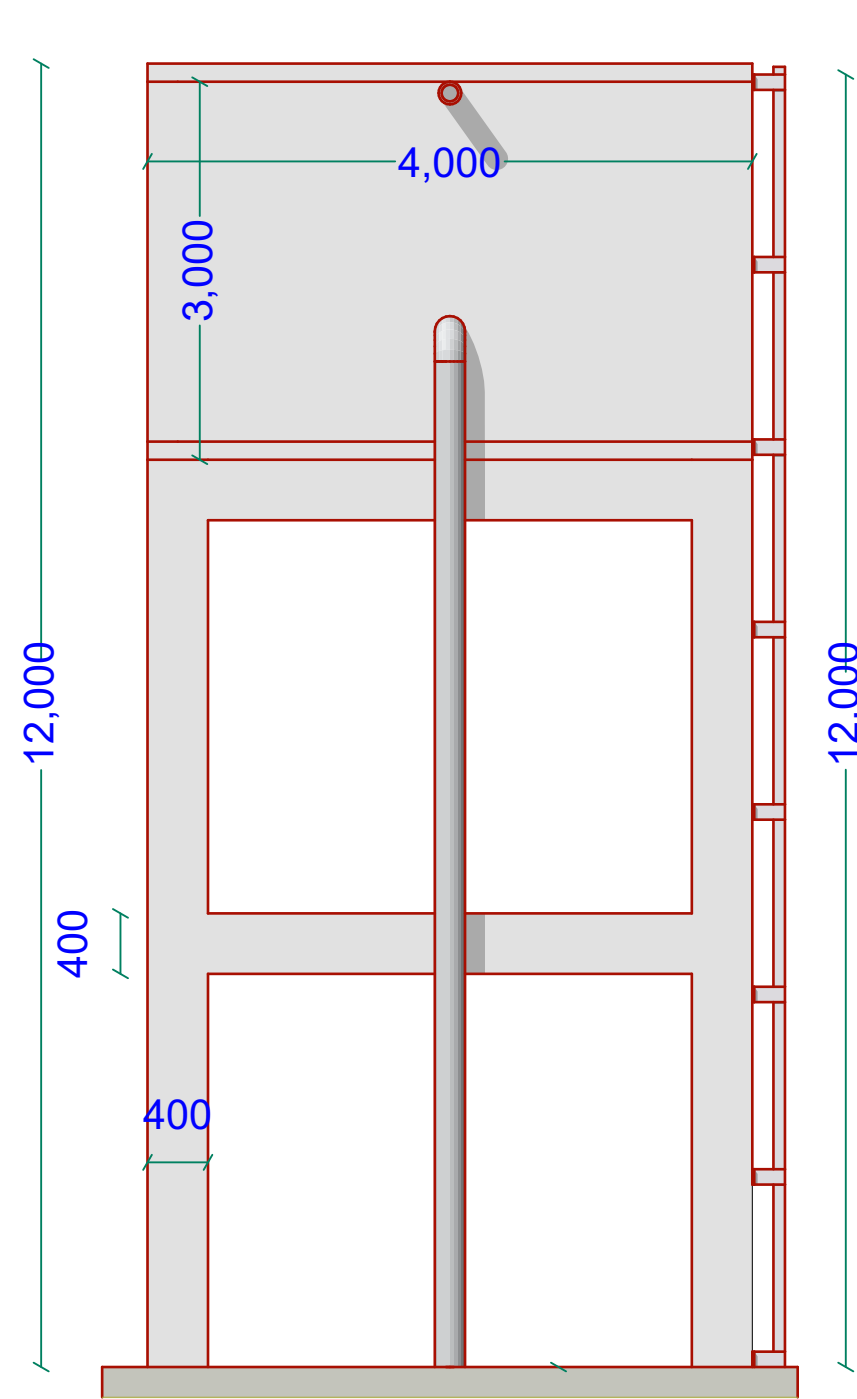
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DRAWING N°:

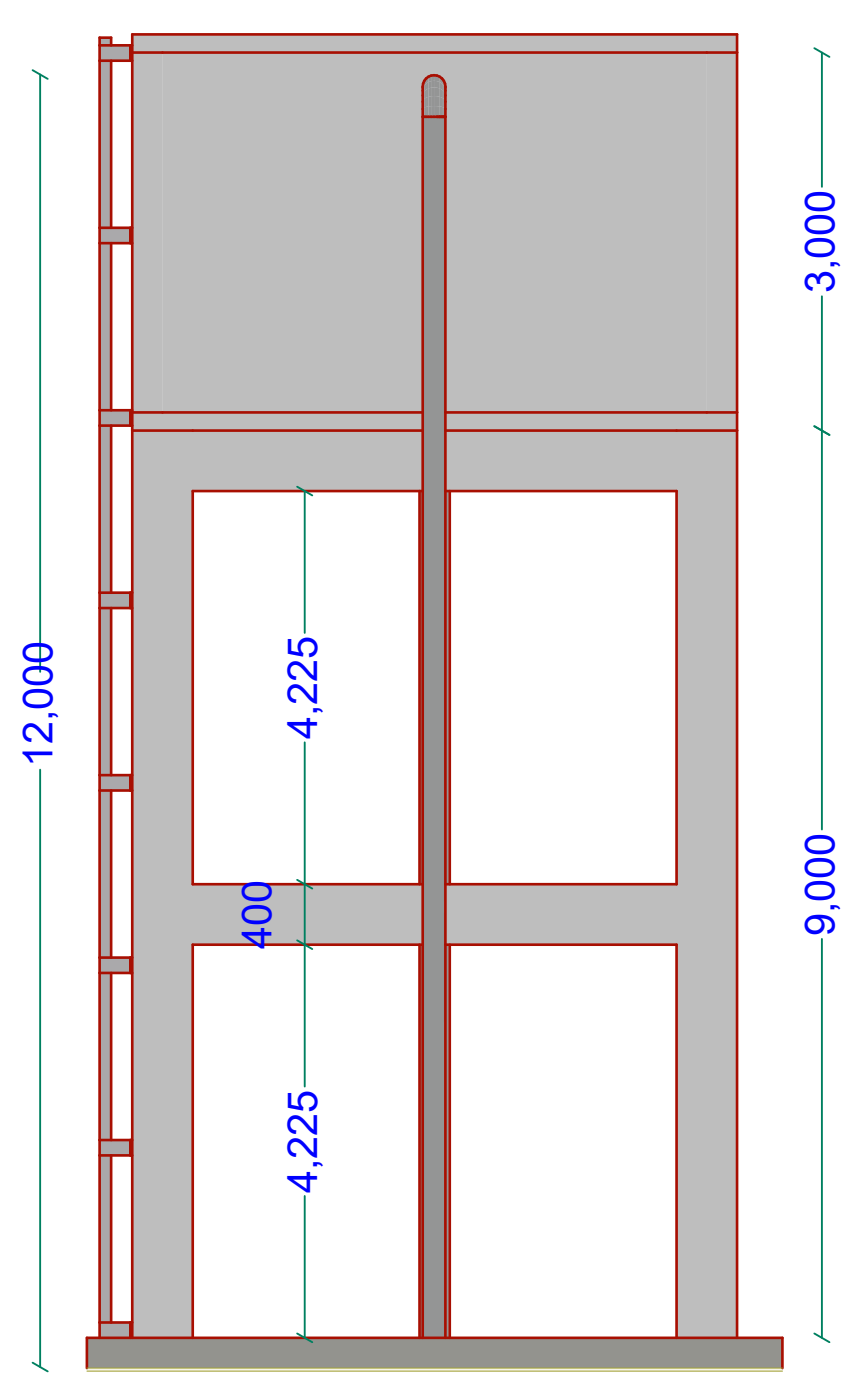
PROJECT N°:

ELEVATED TANK

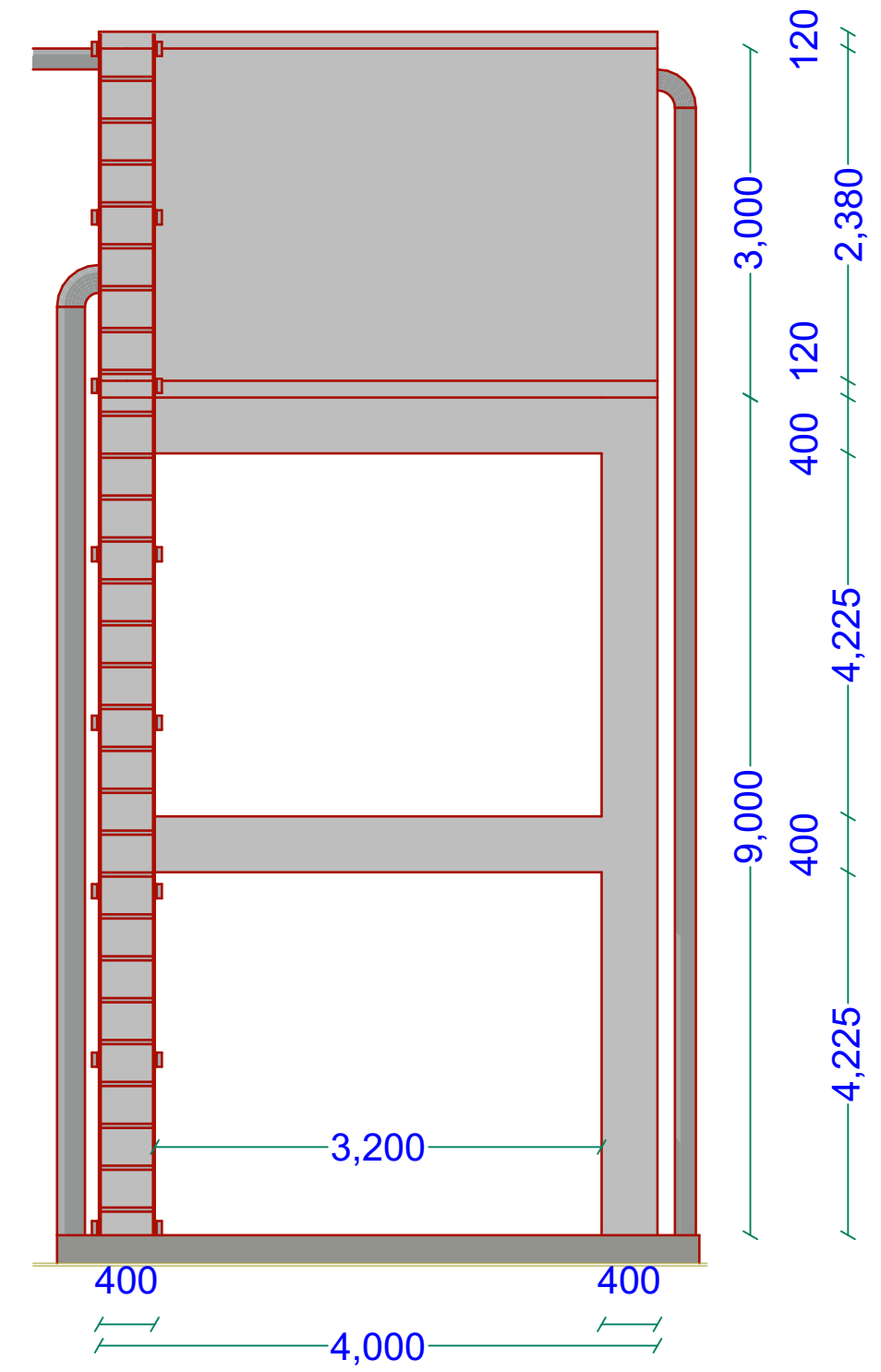
SHEET N°:



South Elevation



North Elevation



East Elevation

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WASH

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DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

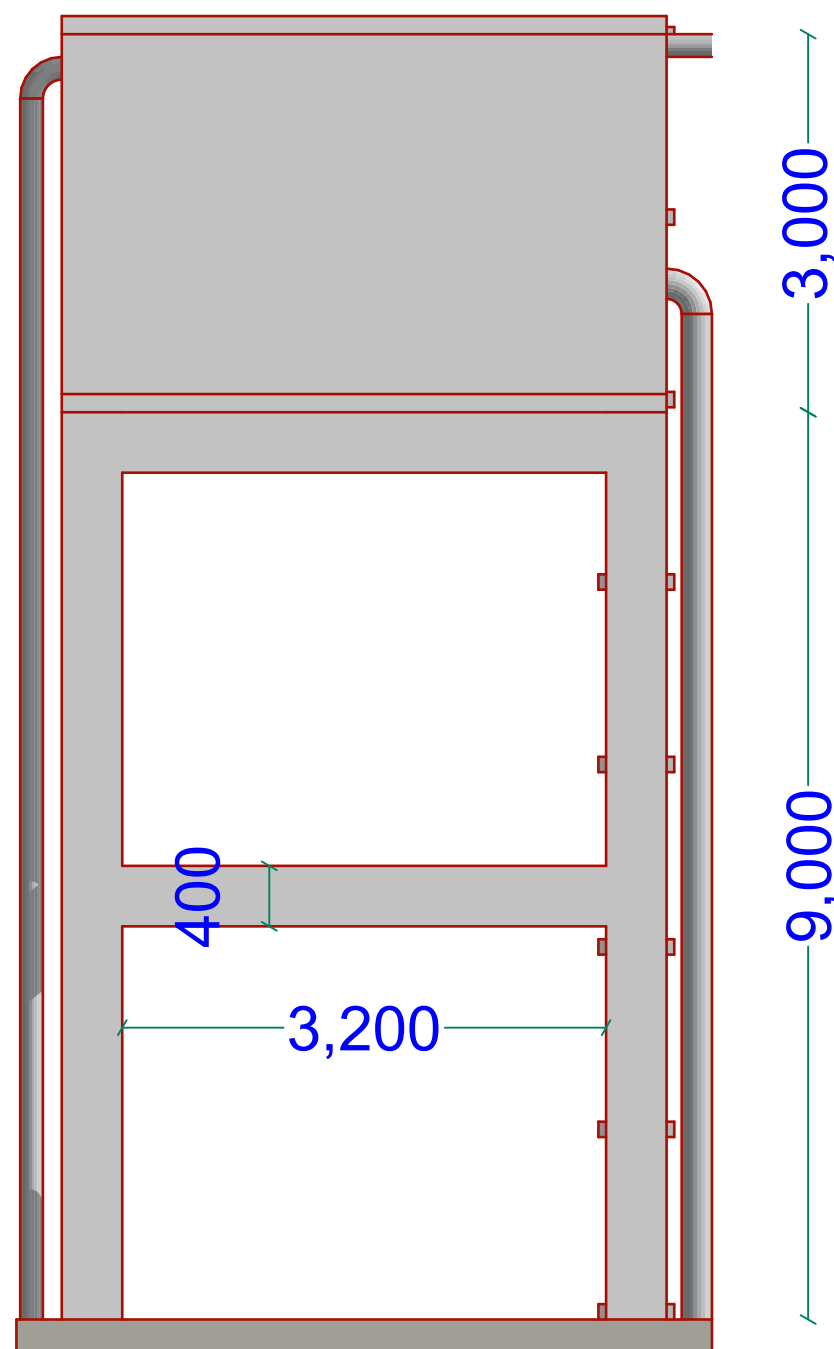
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DRAWING N^o:

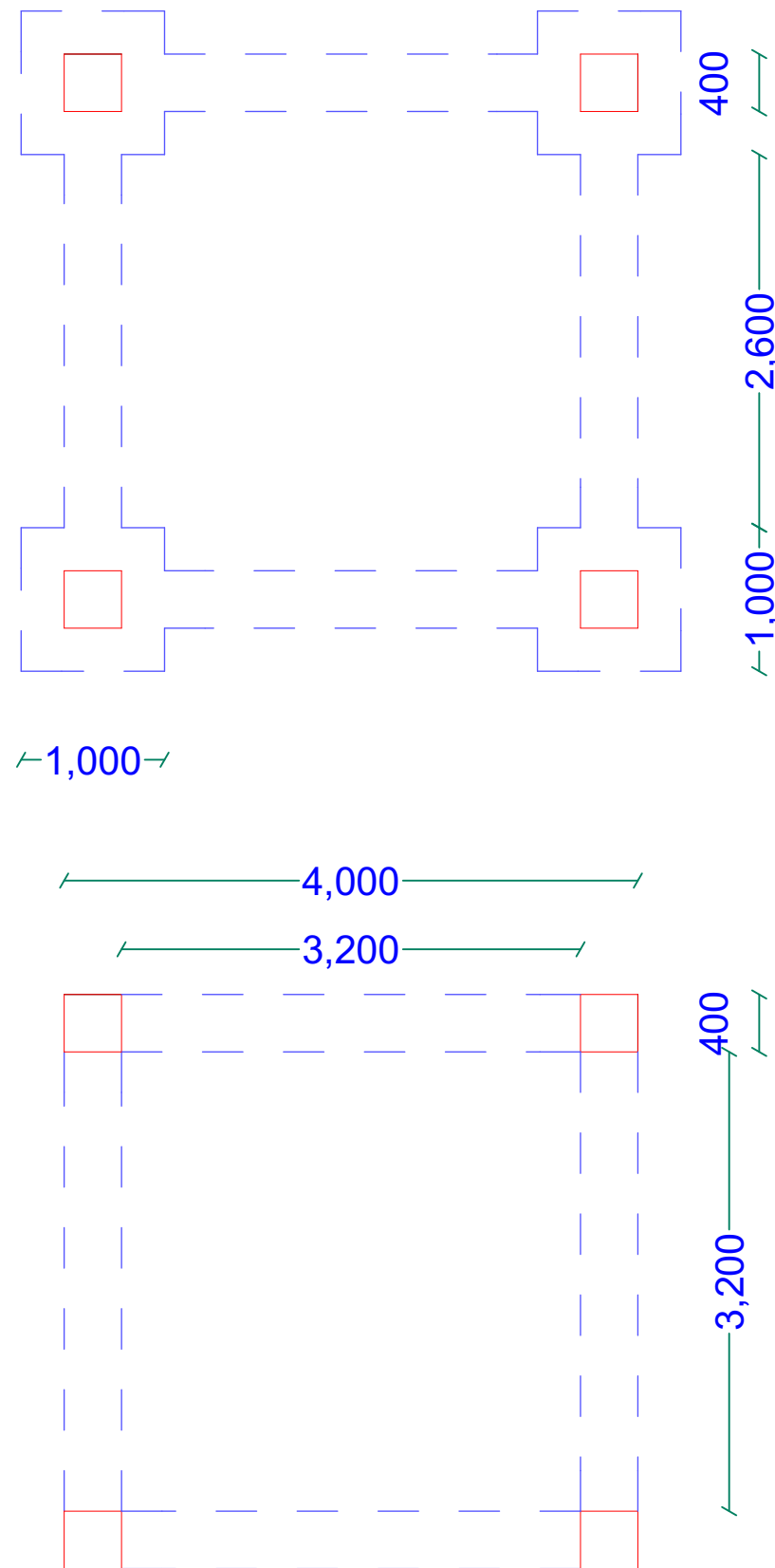
PROJECT N^o:

ELEVATED TANK

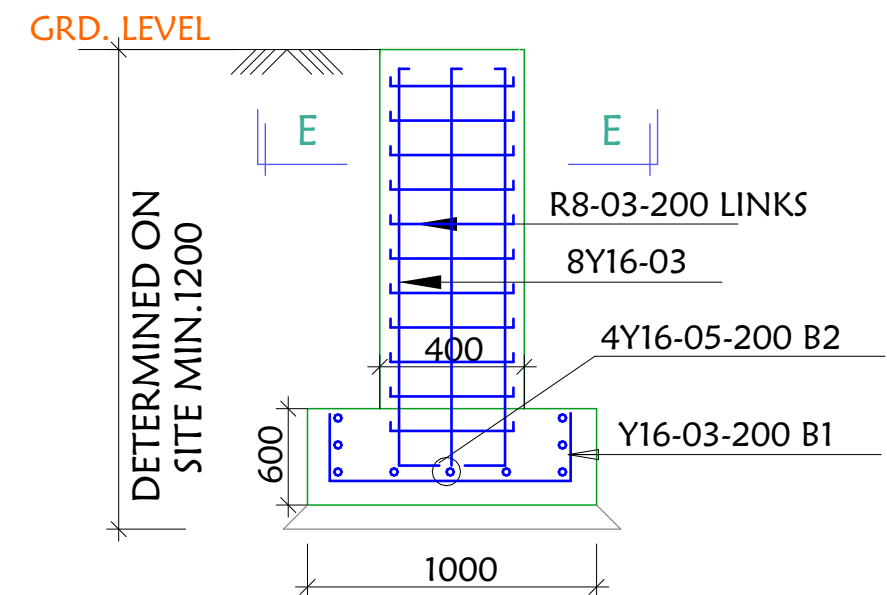
SHEET N^o:



West Elevation

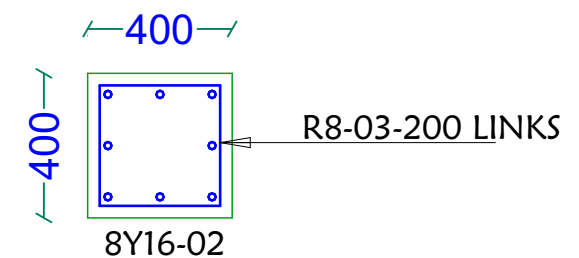


FOUNDATION LAYOUT



SECTION D-D

SCALE 1:25



SECTION E-E (Column)

SCALE 1:25

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EXCAVATION OF SHALLOW WELLS

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WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

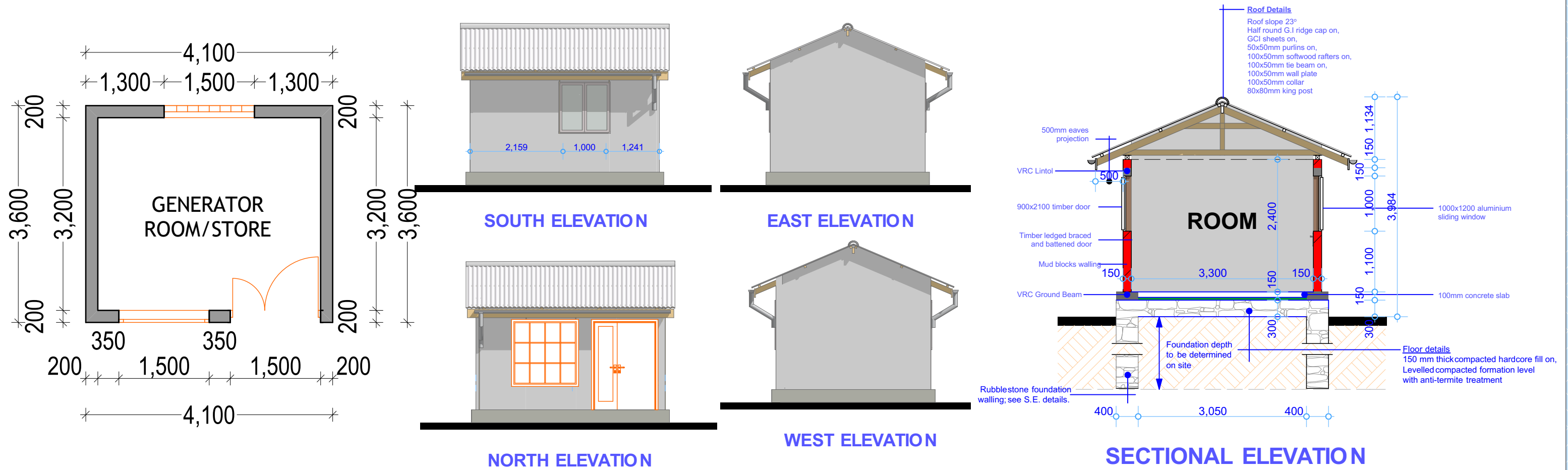
DRAWING TITLE:

DRAWING N^o:

PROJECT N^o:

ELEVATED TANK

SHEET N^o:



PROJECT
PROPOSED
REHABILITATION/CONSTRUCTION WORKS



LOCATION
WASH SUPPORTED
ACTIVITIES IN SOMALIA

DESCRIPTION

REV.	DESCRIPTION	DATE

STATUS	NEW CONSTRUCTION
DATE	APRIL 2020
DESIGNED BY:	ENG. WANJA D.
DRAWN BY :	ENG. WANJA D.
REVIEWED BY:	
APPROVED BY:	DR. O. KHYARE

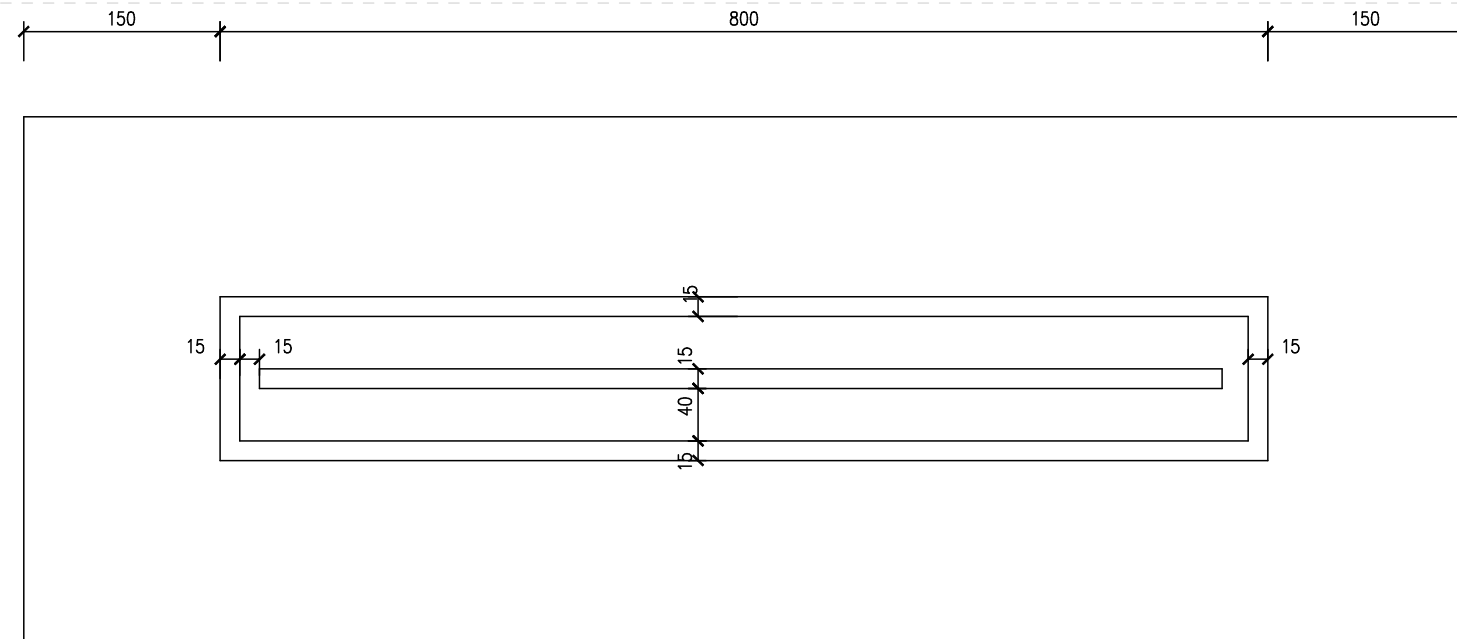
DRAWING TITLE:	Details
DRAWING N°:	
PROJECT N°:	

SHEET N°:

Goat/Sheep trough

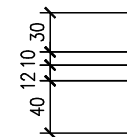


A diagram of a rectangular prism. The front face is a rectangle with a width of 138 and a height of 125. The depth of the prism is 138. The dimensions are labeled with arrows: 138 for the width, 125 for the height, and 138 for the depth.



Layout

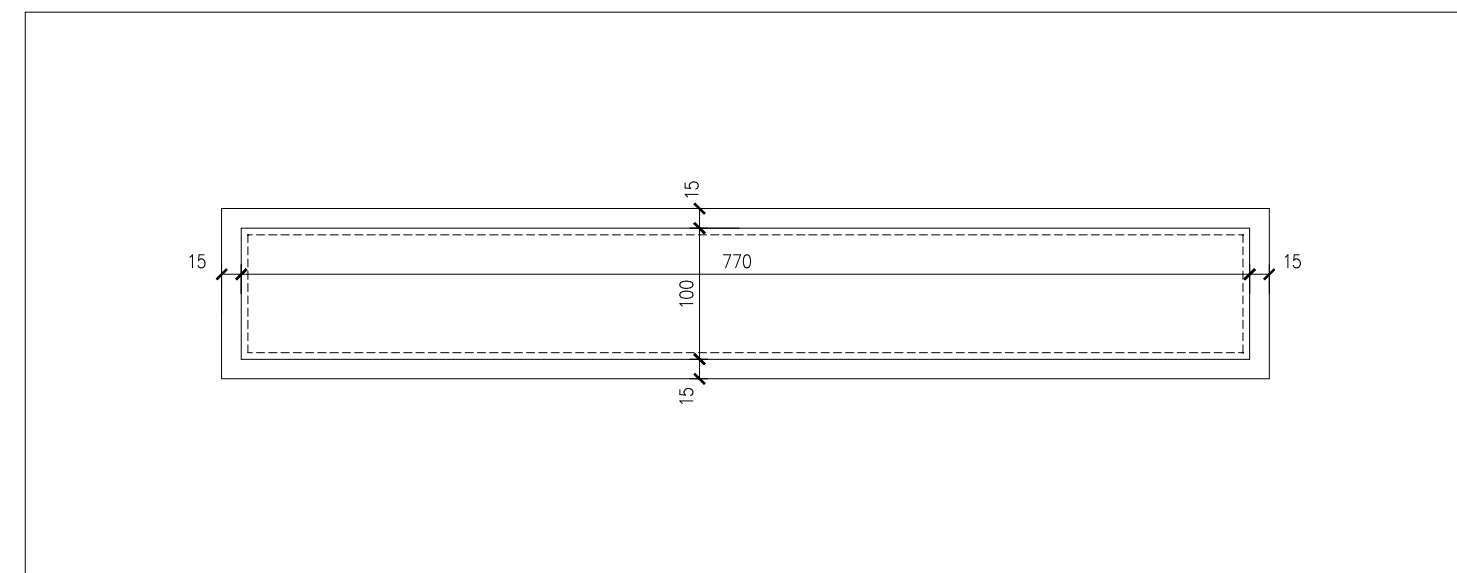
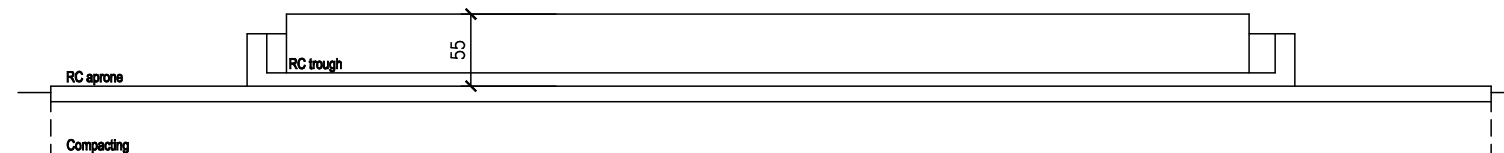
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AA section

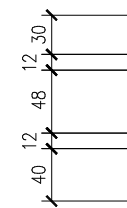
Scale: 1/50

Carmel troughs



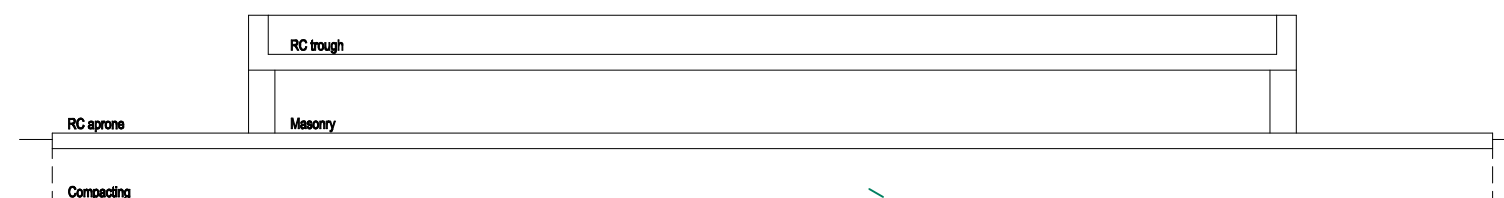
Layout

Scale: 1/50



AA section

Scale: 1/50



PROJECT

WELLS REHABILITATION
WORKS



LOCATION

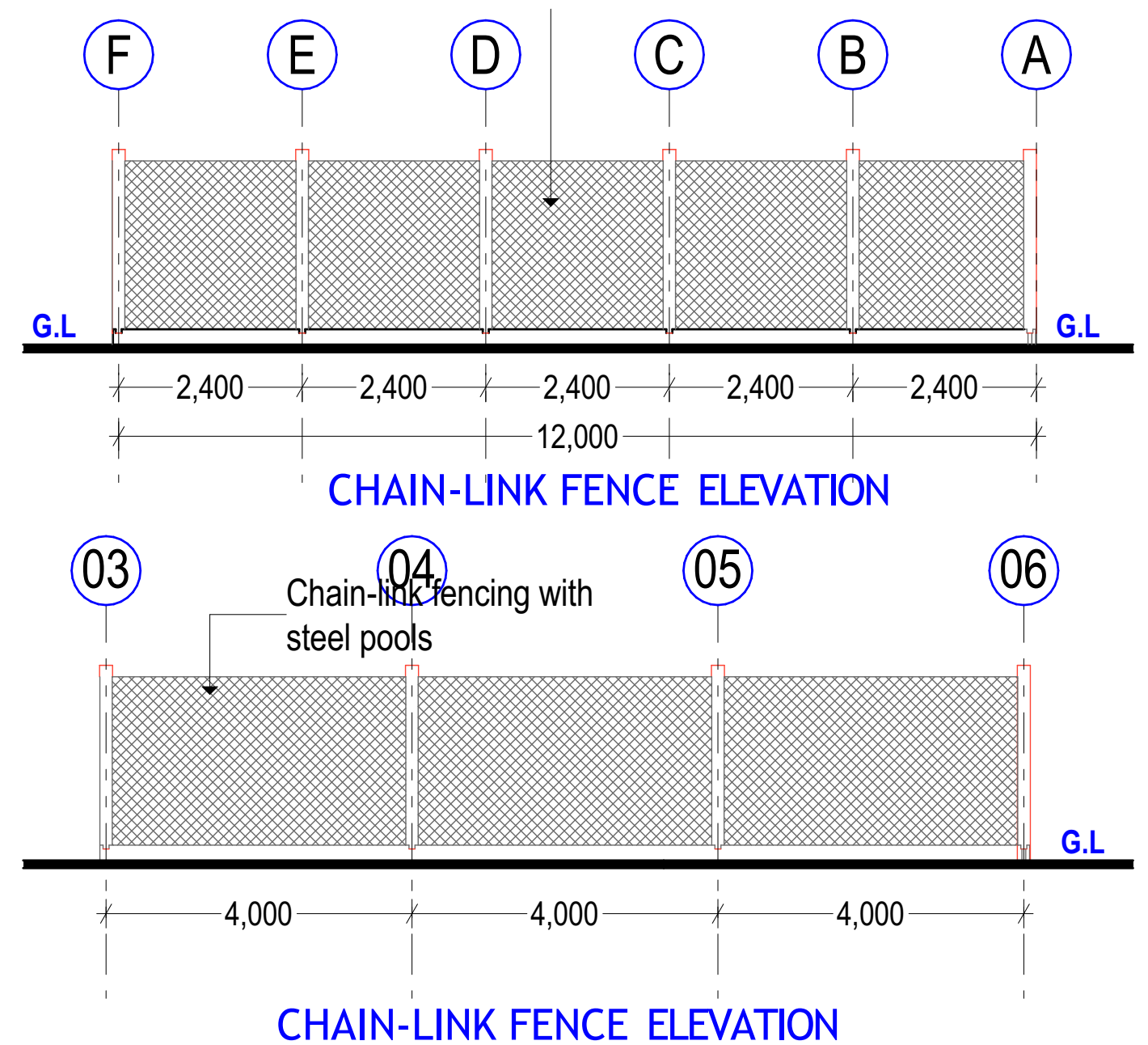
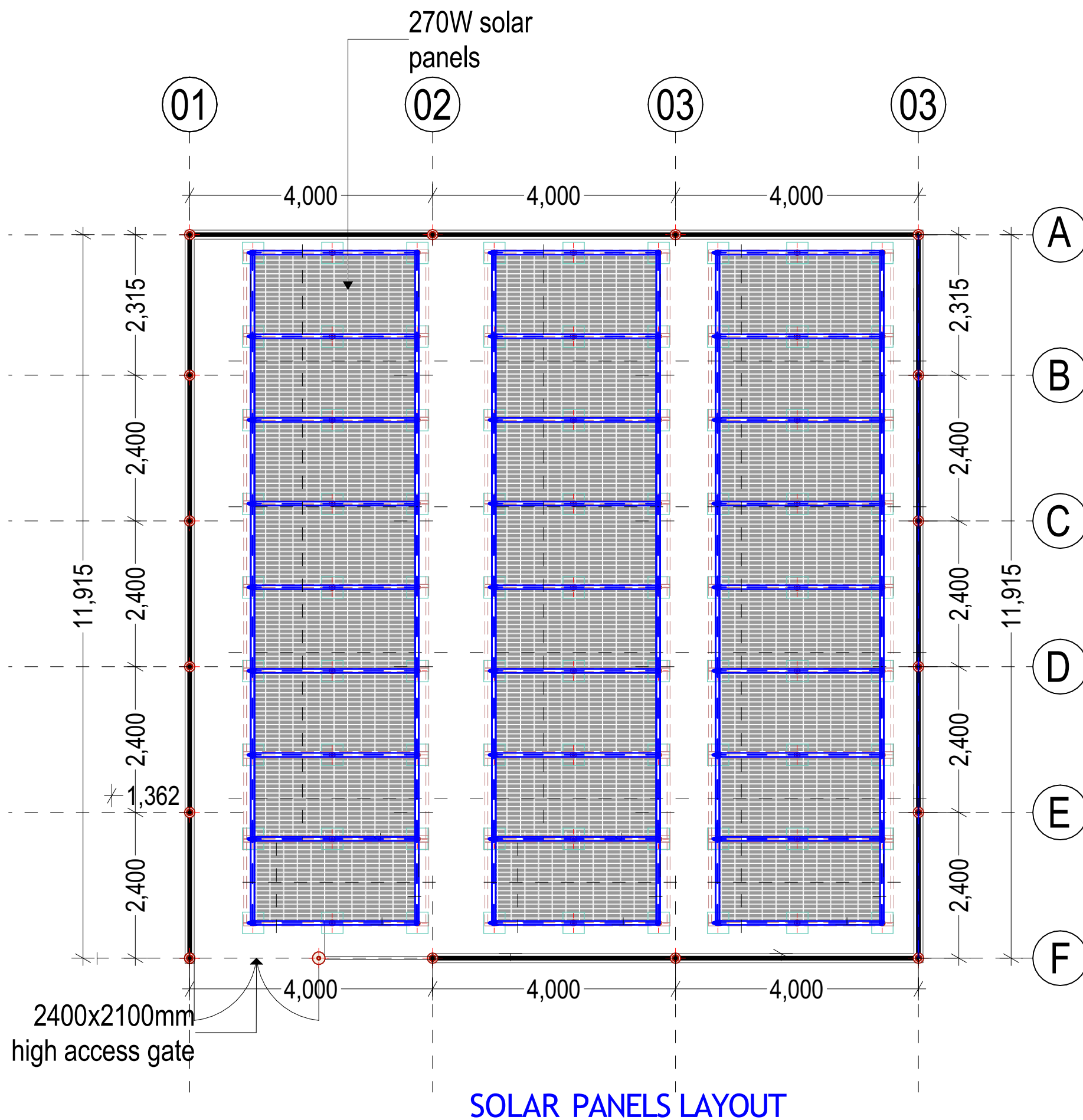
WASH SUPPORTED BENEFICIARY SITES IN SOMALIA

DESCRIPTION

REV.	DESCRIPTION	DATE	STATUS	REHABILITATION WORKS
			DATE	JUN 2020
			DESIGNED BY:	ENG. WANJA D.
			DRAWN BY :	ENG. WANJA D.
			REVIEWED BY:	
			APPROVED BY:	DR. O. KHYARE

	<u>DRAWING TITLE :</u>
	Details
	<u>DRAWING N^o:</u>
	<u>PROJECT N^o:</u>

BOREHOLES



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EXCAVATION OF SHALLOW WELLS

IMPLEMENTING AGENCY



DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY :	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:

DRAWING N°:

PROJECT N°:

SOLAR LAYOUT

SHEET N°:

PS2-4000 C-SJ17-4

Solar Submersible Pump System for 6" wells

System Overview

Head	max. 45 m
Flow rate	max. 26 m³/h

Technical Data

Controller PS2-4000

- Controlling and monitoring
- Control inputs for dry running protection, remote control etc.
- Protected against reverse polarity, overload and overtemperature
- Integrated MPPT (Maximum Power Point Tracking)
- Integrated Sun Sensor

Power	max. 4,0 kW
Input voltage	max. 375 V
Optimum Vmp**	> 238 V
Motor current	max. 14 A
Efficiency	max. 98 %
Ambient temp.	-40...50 °C
Enclosure class	IP68

Motor ECDRIVE 4000-C

- Maintenance-free brushless DC motor
- Water filled
- Premium materials, stainless steel: AISI 304/316
- No electronics in the motor

Rated power	4,0 kW
Efficiency	max. 92 %
Motor speed	900...3 300 rpm
Insulation class	F
Enclosure class	IP68
Submersion	max. 150 m

Pump End PE C-SJ17-4

- Non-return valve
- Premium materials, stainless steel: AISI 304
- Optional: dry running protection
- Centrifugal pump



Pump Unit PU4000 C-SJ17-4 (Motor, Pump End)

Borehole diameter	min. 6,0 in
Water temperature	max. 50 °C

Standards



2006/42/EC, 2004/108/EC, 2006/95/EC

IEC/EN 61702:1995

The logos shown reflect the approvals that have been granted for this product family. Products are ordered and supplied with the approvals specific to the market requirements.

**Vmp: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

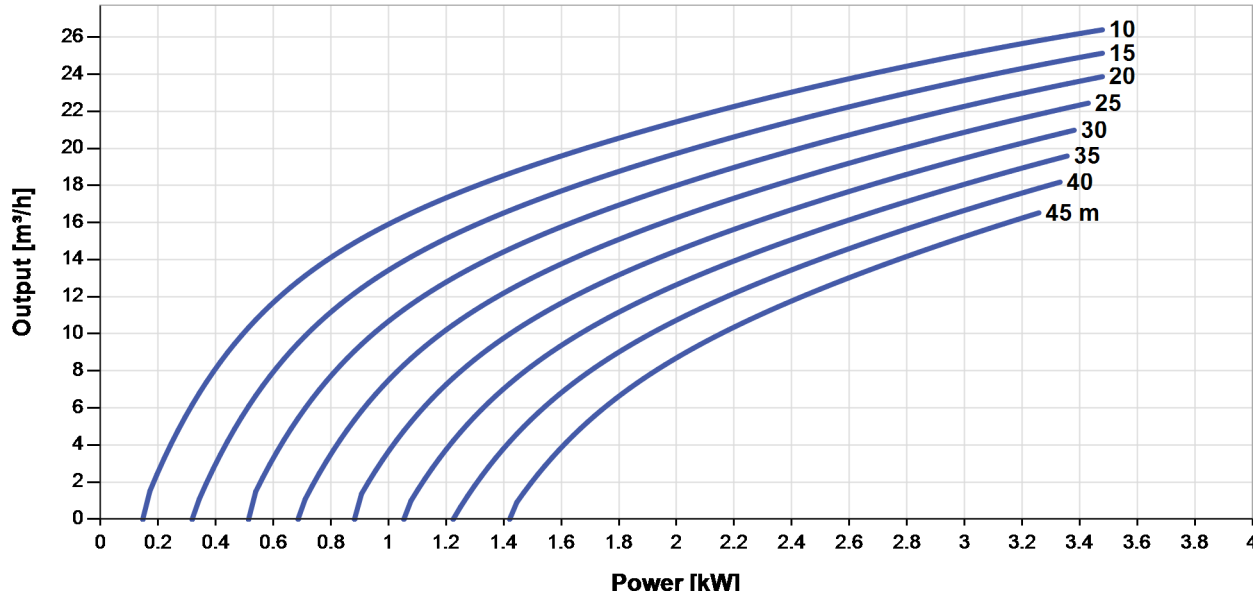


PS2-4000 C-SJ17-4

Solar Submersible Pump System for 6" wells

Pump Chart

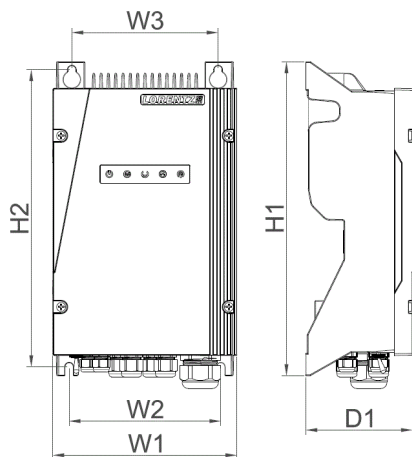
V_{mp}* > 238 V



Dimensions and Weights

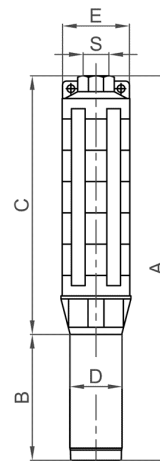
Controller

H1 = 352 mm
H2 = 333 mm
W1 = 207 mm
W2 = 170 mm
W3 = 164 mm
D1 = 124 mm



Pump Unit

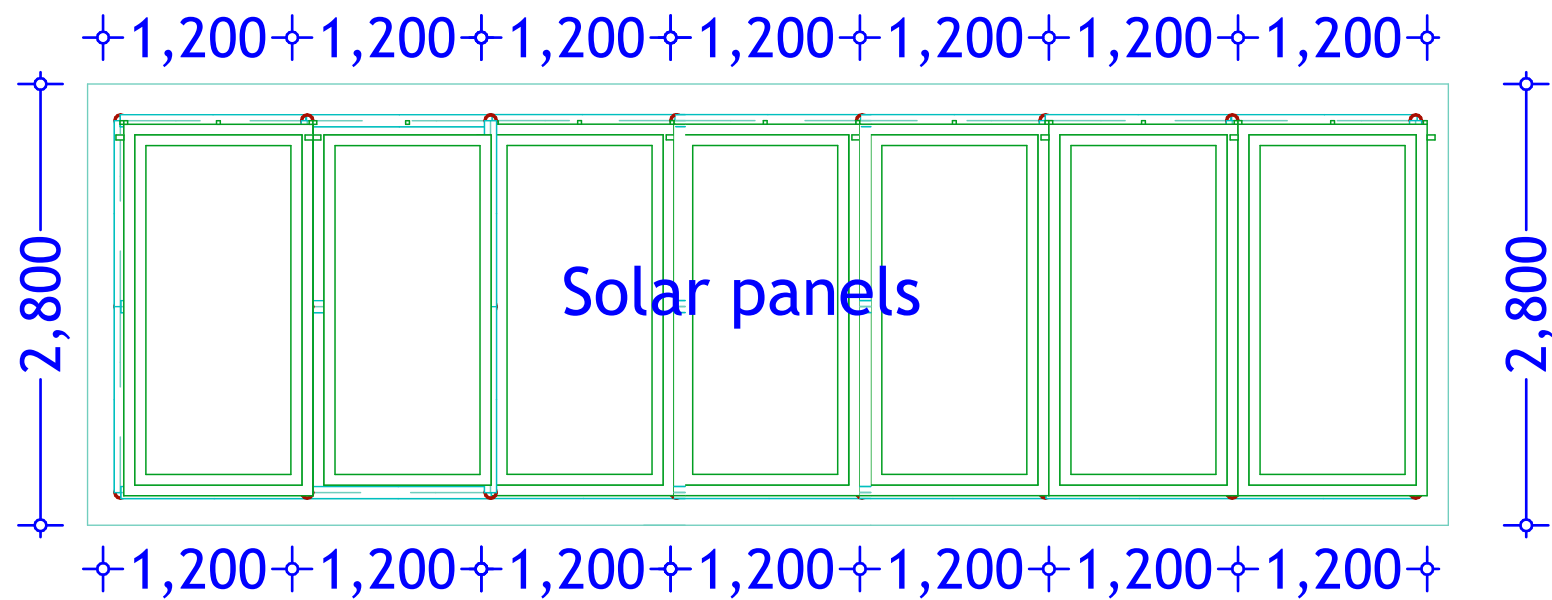
A = 754 mm
B = 245 mm
C = 509 mm
D = 96 mm
E = 133 mm
S = 2,5 in



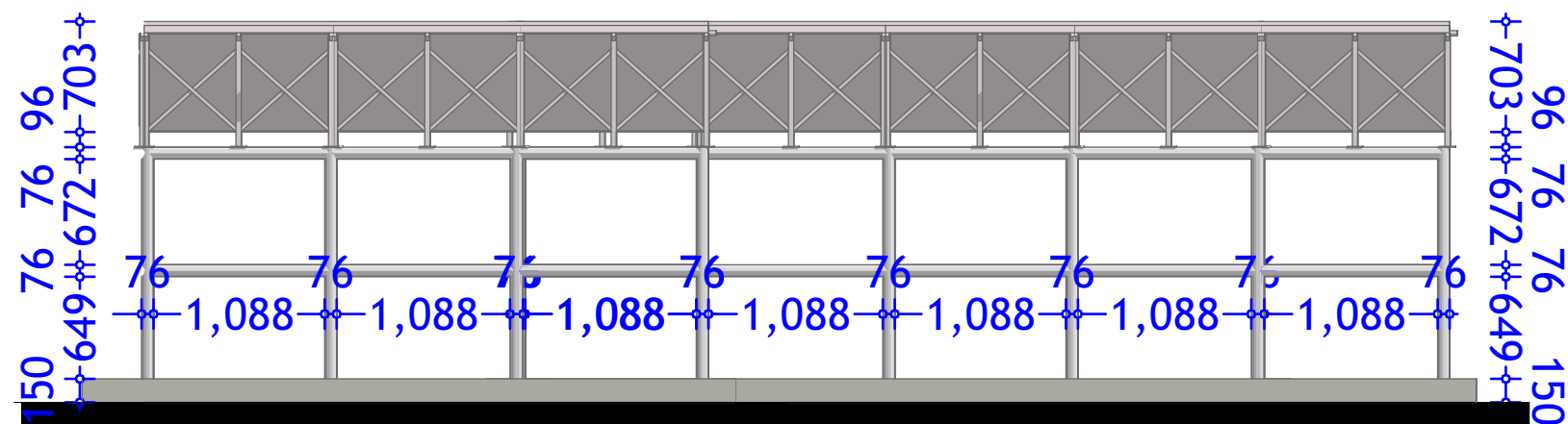
	Net weight
Controller	6,1 kg
Pump Unit	21 kg
Motor	10 kg
Pump End	11 kg

*V_{mp}: MPP-voltage under Standard Test Conditions (STC): 1000 W/m² solar irradiance, 25 °C cell temperature

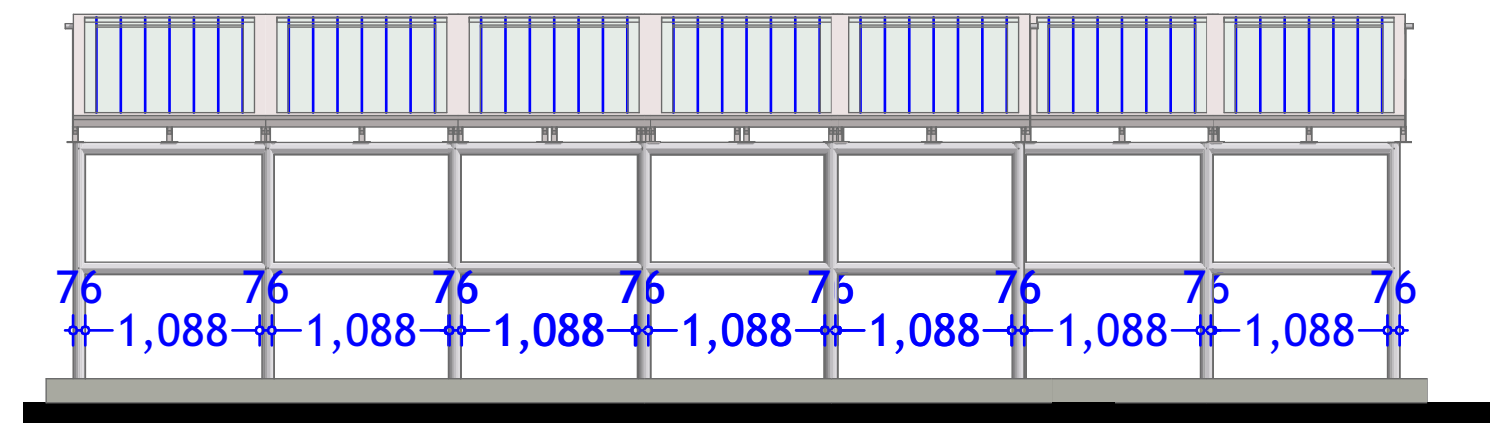




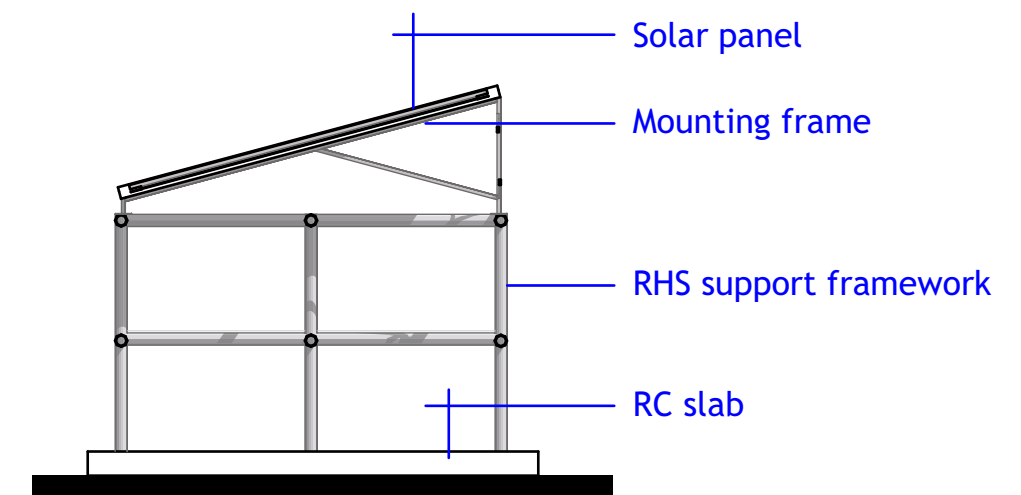
TYPICAL 8 NO. PANEL LAYOUT



SOLAR STRUCTURE ELEVATION



SOLAR STRUCTURE ELEVATION



SOLAR STRUCTURE ELEVATION

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PROJECT

EXCAVATION OF SHALLOW WELLS

IMPLEMENTING AGENCY



DEPARTMENT

WATER SANITATION AND HYGIENE
WASH

SCALE	
DATE	JUNE 2020
DESIGNED BY:	ENG. Wanja.D
DRAWN BY:	ENG. Wanja.D
REVIEWED BY:	
APPROVED BY:	

DRAWING TITLE:

DRAWING N^o:

PROJECT N^o:

S.STRUCTURE
DETAILS

SHEET N^o: