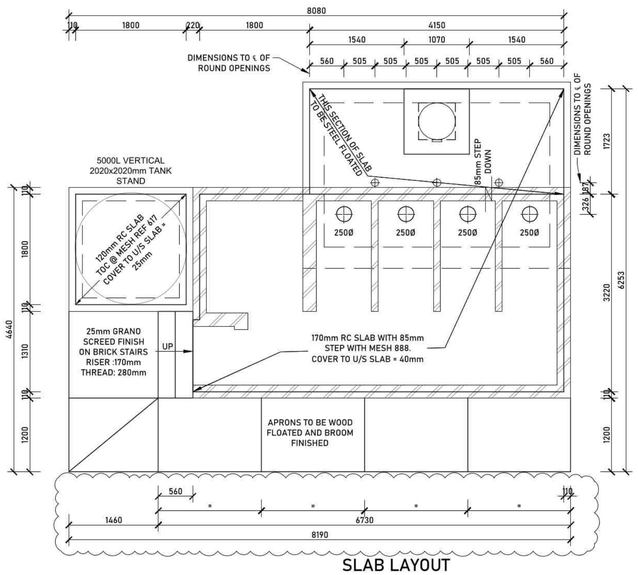
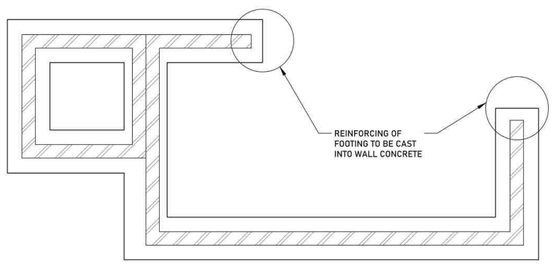
MEMBER	TYPE & SIZE	BAR MARK	TOTAL No	LENGTH OF EACH BAR(mm)	SHAPE CODE	BENDING DIMENSIONS A (mm)	B (mm)	C (mm)	D (mm)	E/R (mm)	
ANTI-CRACKING	Y12	01	16	600	20						
STARTER	Y12	02	62	900	37	650					
STOOL	R10	ST	35	520	83	300	96	100			
MEMBER	MESH REFERENCE		TOTAL AREA								
TANK SLAB 120mm THK	MESH REF 617		3.5m²								MIN LAP LENGTH = 400mm
GROUND FLOOR SLAB 170mm THK	MESH REF 888		31m²								MIN LAP LENGTH = 480mm
PIT SLAB 200mm THK	MESH REF 888		14m²								MIN LAP LENGTH = 480mm
PIT WALL 1	MESH REF 888		16m²								MIN LAP LENGTH = 480mm
PIT WALL 2	MESH REF 888		11m²								MIN LAP LENGTH = 480mm
700 x 200 FOUNDATION	MESH REF 888		15m³								MIN LAP LENGTH = 480mm



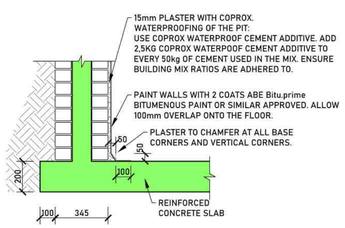
SLAB LAYOUT

SCALE 1:50



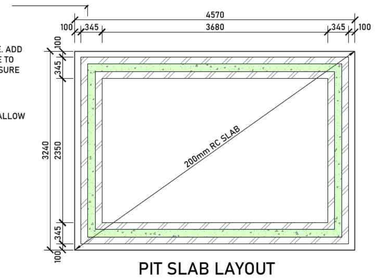
FOUNDATION LAYOUT

SCALE 1:50



PIT WATERPROOFING DETAIL

SCALE 1 : 20



PIT SLAB LAYOUT

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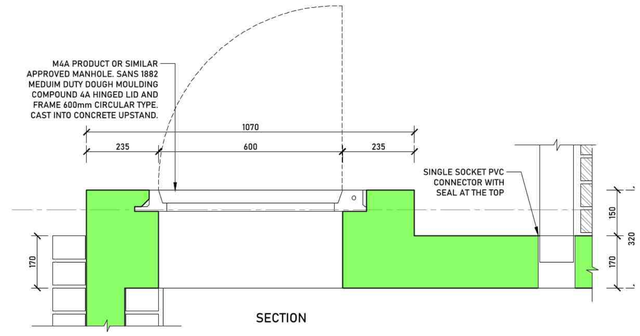
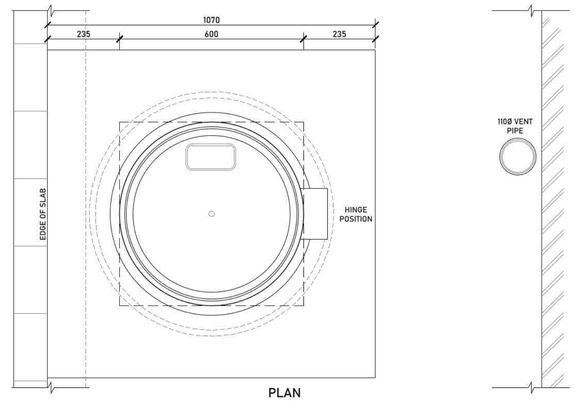


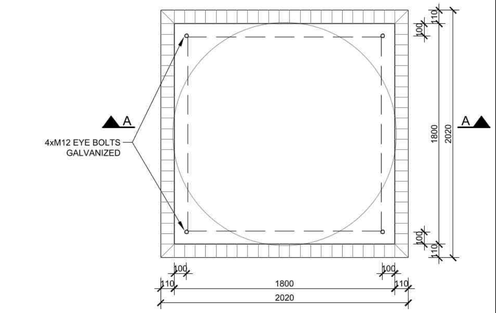
SECTION



PLAN

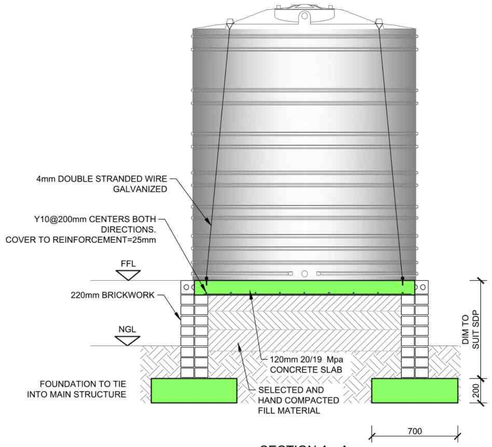
LOCKABLE MANHOLE DETAILS

SCALE 1 : 10



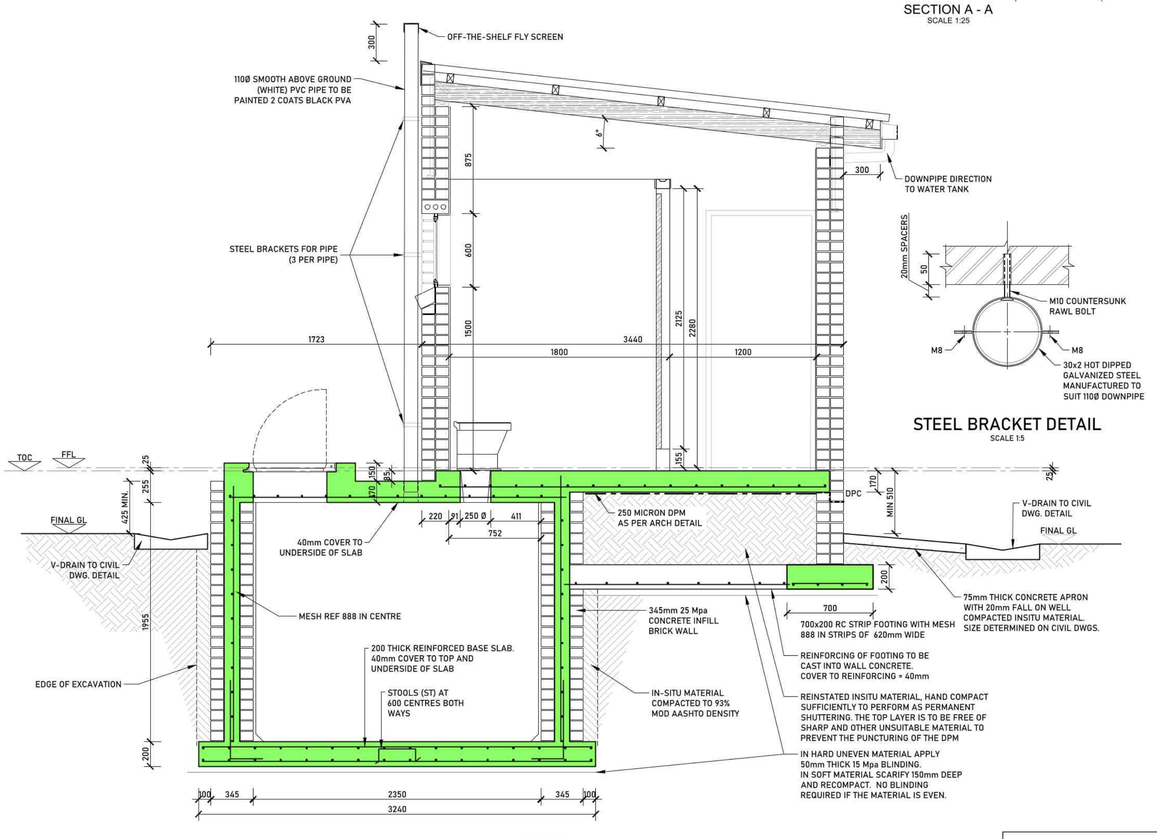
TANK STAND PLAN

SCALE 1:25



SECTION A - A

SCALE 1:25



SECTION A-A

SCALE 1 : 25

STEEL BRACKET DETAIL

SCALE 1:5

THE MVULA TRUST: .....

DATE: .....

GENERAL NOTES

CONCRETE STRENGTH
(A) strength at 28 days
(B) strength at 28 days
(C) 28 days
(D) 28 days

FOUNDATIONS..... 20 Mpa cube
SLABS..... 30 Mpa cube
WALLS..... 30 Mpa cube strength at
APRON..... 25 Mpa cube strength at

NOTE:
1. BEAM DEPTH INCLUDES SLAB THICKNESS
2. CONTRACTOR IS TO MAINTAIN STEEL IN CORRECT POSITION AFTER PLACING AND DURING CONCRETING
3. STONE, SAND AND CEMENT TO BE TO THE SATISFACTION OF THE CONSULTING ENGINEER.
4. NO CONCRETE TO BE POURED UNTIL THE STEEL HAS BEEN INSPECTED BY THE CONSULTING ENGINEER.
5. ANY BREAKS IN THE CONCRETE ARE TO BE MADE IN ACCORDANCE WITH THE ENGINEERS INSTRUCTIONS.
6. NO STRUCTURAL ALTERATIONS TO BE MADE WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER.
7. THE STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING CONDITIONS:
(A) SAFE GROUND PRESSURE..... 150 kN/sq m
(B) LIVE LOAD ON SLAB..... 2.5 kN/sq m
8. THE DESIGN ON THIS DRAWING REMAINS THE PROPERTY OF KETSHANA CONSULTING ENGINEERS - COPYRIGHT IS RESERVED.
9. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE WORK IS PUT IN HAND. ANY DISCREPANCY MUST IMMEDIATELY BE REPORTED TO THE ENGINEER.
10. THIS DRAWING IS NOT TO BE SCALED.
11. APRON COVER TO BE 25mm
12. FOR FFL, REFER TO SITE LAYOUT AND ARCHITECTS DRAWINGS.
13. UNIT TO BE MIRRORED DEPENDANT ON SITE CONDITIONS.
14. THE CONCRETE MIX FOR THE FLOOR SLAB AND WALLS OF THE PIT MUST INCLUDE 2.5kg COPROX / 50kg OF CEMENT OR SIMILAR APPROVED.

REINFORCING NOTES:
1. MINIMUM LAP LENGTH = 40 x BARØ.
2. LAP LENGTHS FOR UNEQUAL BAR DIAMETERS SHALL BE BASED ON THE SMALLER BAR DIAMETER.
3. MAXIMUM SIZE OF AGGREGATES SHALL BE 20mm. AGGREGATE SHALL BE WELL GRADED.
4. BENDING OF REINFORCEMENT SHALL COMPLY WITH SANS 282.
5. MILD STEEL YIELD STRESS = 250Mpa
6. HIGH TENSILE STEEL YIELD STRESS = 450MPa
7. WELDING OF REINFORCEMENT IS NOT ALLOWED UNLESS IT HAS BEEN APPROVED BY THE ENGINEER IN WRITING.
8. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
9.

No	APPROVED	AMENDMENTS	DATE
2	LC	REINFORCING ADDED, APRON NOTES & CHANGES ACCORDING CLOUDED AREA	25-11-2022
1	LC	ISSUED TO CONSULTANTS	21-11-2022

SURVEYED	-	-
DRAWN	CS / WA	OCT 2022
DESIGNED	L. COETZER	OCT 2022
CHECKED	L. COETZER	OCT 2022
APPROVED	PR REGISTRATION NO. 201570266	DATE: 21-11-2022

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CLIENT

THE MVULA TRUST
A leading developmental NGO

Sanitation Appropriate For Education (SAFE) Initiative

PROJECT TITLE

SAFE PROGRAMME: CONSTRUCTION OF ABLUTION BLOCKS IN VARIOUS SCHOOLS IN THE EASTERN CAPE

DRAWING TITLE

DWG 15 - FEMALE STRUCTURAL PLAN, SECTION AND DETAILS (4 Seats)

SCALE	SHEET SET	SHEET SIZE
AS SHOW	SHEET 1 OF 1 SHEETS	A1
DRAWING No.		REVISION
K021-S-115		R2

2022/11/25 02:05 PM

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