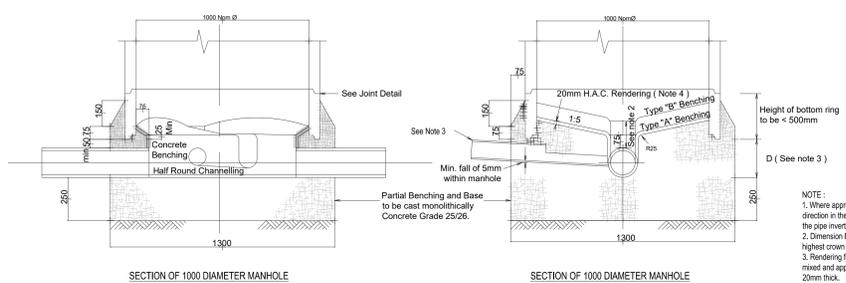
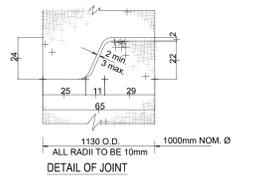


STANDARD CHANNELLING IN PRECAST CONCRETE MANHOLES



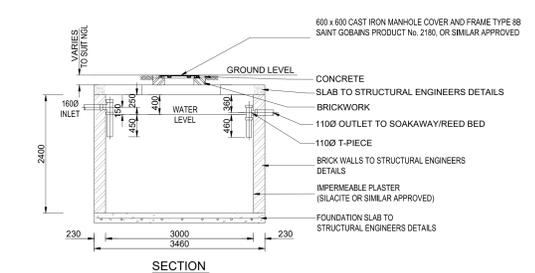
SECTION OF 1000 DIAMETER MANHOLE

SECTION OF 1000 DIAMETER MANHOLE

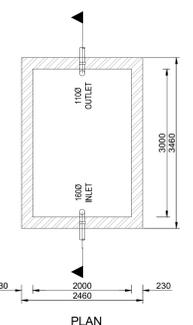


DETAIL OF JOINT

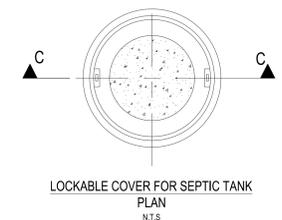
NOTE:
 1. Where approach grades into the manhole are 1:15 or steeper and associated with a change in direction in the manhole of 30° or more, the banching is to be brought up two pipe diameters above the pipe invert (Type B banching sewers).
 2. Dimension D varies with the diameter of the sewer pipes and shall be a point 50mm above the highest crown of the pipes.
 3. Rendering for manhole banching shall consist of one part H.A.C. to two parts sand thoroughly mixed and applied to concrete surfaces while the latter are still green. Rendering shall be at least 20mm thick.



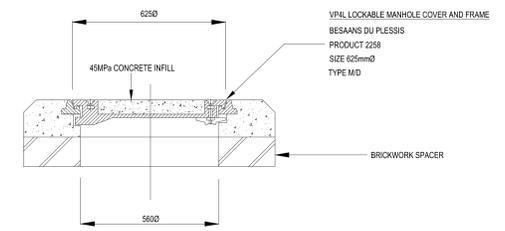
SECTION



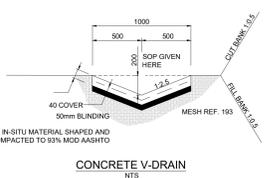
PLAN SEPTIC TANK DETAIL 1:50



LOCKABLE COVER FOR SEPTIC TANK N.T.S.

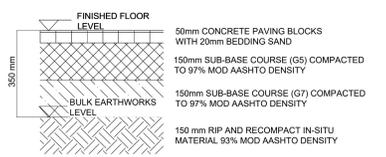


SECTION C-C N.T.S.

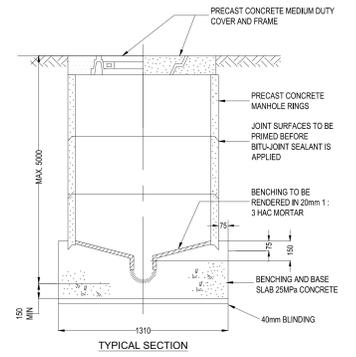


CONCRETE V-DRAIN N.T.S.

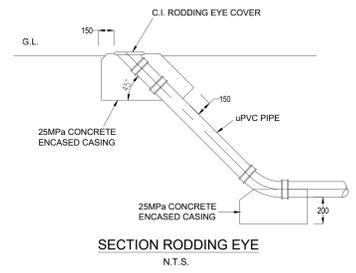
NOTE:
 1. CONCRETE CHANNEL TO BE 100mm THICK USING 19/25 MPa CONCRETE. CONCRETE TO BE CAST IN 2.0m ALTERNATE PANELS WITH EXPANSION JOINTS AT 1m INTERVALS (EVERY 5th PANEL).
 2. CONCRETE CHANNEL TO BE REINFORCED WITH MESH REF. 193 MINIMUM COVER = 40mm



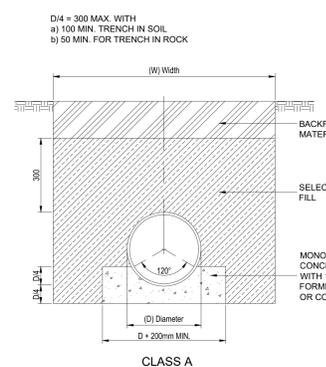
BLOCK PAVING LAYERWORKS DETAIL SCALE 1:10



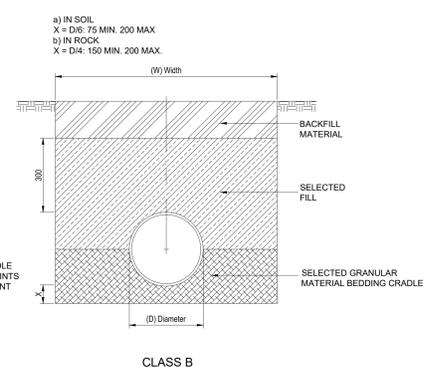
PRECAST CONCRETE SEWER RING MANHOLE DETAIL N.T.S.



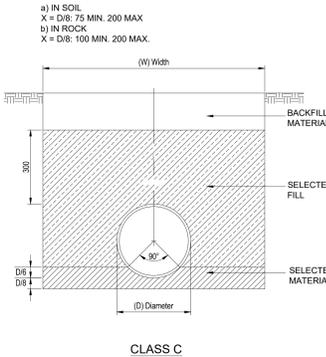
SECTION RODDING EYE N.T.S.



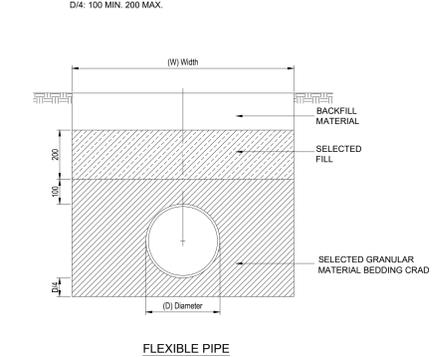
CLASS A



CLASS B



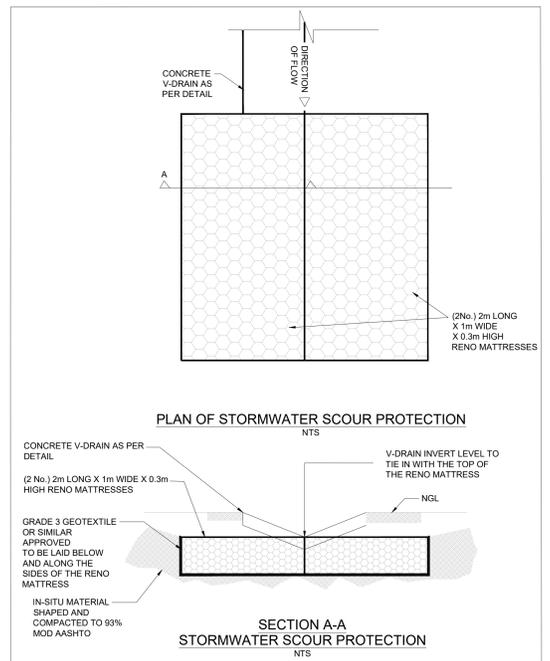
CLASS C



FLEXIBLE PIPE

W = TRENCH PAY WIDTH
 D = OUTSIDE DIAMETER OF PIPE

PIPE BEDDING DETAILS SCALE: 1:10



PLAN OF STORMWATER SCOUR PROTECTION N.T.S.

SECTION A-A STORMWATER SCOUR PROTECTION N.T.S.

REFERENCE DRAWINGS

DRAWING NO.	DESCRIPTION

NOTES:

- DRAWINGS ARE NOT TO BE SCALED. ALL LEVELS AND DIMENSIONS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE BROUGHT TO THE ENGINEER/ARCHITECT'S ATTENTION IMMEDIATELY.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS, SCHEDULES AND SPECIFICATIONS RELATED TO THIS PROJECT.
- ALL BUILDING WORK AND MATERIALS ARE TO COMPLY WITH LOCAL AUTHORITY'S REQUIREMENTS AND ARE TO BE IN ACCORDANCE WITH SANS 1040 NATIONAL BUILDING REGULATIONS AND SANS 1200.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WORKS FROM SURFACE WATER RUNOFF THAT MAY CAUSE EROSION DAMAGE USING CHANNELS, BERMS, PUMPS etc. AS AND WHEN REQUIRED AND DIRECT GROUND WATER AWAY FROM THE WORKS.
- ALL CUT AND FILL BANKS ARE 1V:2H UNLESS OTHERWISE STATED.

LEGEND

- SEWER MANHOLE
- 160mm DIAMETER SEWER PIPE
- PROPOSED SEPTIC TANK
- PROPOSED SOAKAWAY
- 1m CONCRETE V-DRAIN CHANNEL
- EXISTING BUILDING
- NEW BUILDING
- PROPOSED BLOCK PAVED WALKWAY
- PROPOSED DISABLED RAMP
- NEW FENCE REFER TO ARCHITECTURAL FOR FENCE DETAILS
- EXISTING FENCE
- ELEVATED WATER TANK
- 25mm Dia WATER PIPE
- 50mm Dia WATER PIPE
- STAND PIPE
- BOREHOLE
- FLOW DIRECTION
- RENO-MATTRESS
- 1:2 FILL EMBANKMENT
- 1:2 CUT EMBANKMENT

IMPLEMENTING AGENT

A	14-11-2022	SIST	FOR TENDER
NO.	DATE	INT	DESCRIPTION

ISSUE / REVISIONS

NO.	DATE	DESCRIPTION

DRAWING CHECK

DESIGNED	BY	DRAWN	CHECKED
M MKHZE	M MKHZE	M MKHZE	T MUDAU

PROFESSIONAL APPROVAL

NAME	REG NO.	SIGNATURE	DATE
T. MUDAU	(PRNO 201603310)	[Signature]	14-11-2022

CLIENT

LIMPOPO PROVINCE EDUCATION

THE MVULA TRUST
A leading developmental NGO

CLIENT APPROVAL

NAME	DIVISION	ROLE	SIGNATURE

PROJECT NAME

PROPOSED PERMANENT SANITATION FACILITIES FOR NTSZEDZENI SECONDARY SCHOOL

EMIS 930361088

SITE ADDRESS

LIMPOPO PROVINCE

DRAWING TITLE

STANDARD DETAILS

PROJECT NO.	TYPE	NUMBER	DISCIPLINE	STATUS	REV
SIST221107	ST	200	C	T	A

P: PRELIMINARY T: TENDER C: CONSTRUCTION A: AS-BUILT SCALE: A8 @ A1

DISCIPLINE

CIVIL INFRASTRUCTURE

CONSORTIUM

DURBAN

22 Simons Nkanyana/Gale Road, PO BOX 111 Durban, 3600 KwaZulu-Natal, South Africa +27 (0) 31 903 2864 Tel www.sistengineers.co.za

FOR TENDER

SIST ENGINEERS