

NOTES AND SPECIFICATIONS

- GENERAL**
1. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SANS REQUIREMENTS.
 2. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS MUST BE AS SHOWN APPROVED ON SITE.
 3. THE CONTRACTOR TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS THIRD EDITION.
 4. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS THIRD EDITION.
 5. THE SIGNATURE OR INITIALS ON THIS DRAWING OF THE CONSULTANT REMAINS RESPONSIBLE TO THE CONSULTANT REMAINS RESPONSIBLE TO THE ENGINEER.
 6. THE PUBLIC WORKS AND INFRASTRUCTURE DEVELOPMENT DEPARTMENT HAVE BEEN NOTIFIED OF THE FINAL POSITION OF SERVICES TO BE DETERMINED.
 7. POLYETHYLENE (PE), 100% HDPE SHALL BE USED UNLESS OTHERWISE NOTED TO SANS 1001 FOR STIFFNESS CLASS 400 PRES.

NOTES: MANHOLES

- 2.1 TYPICAL WALLS FOR H=0-0.50m WITHIN ERECTOR ROAD RESERVES
- 2.2 CONCRETE MANHOLE SECTIONS MUST BE FINISHED WITH AN 80mm SQUARE SUEDE BRUSH OR WITH AN 80mm SQUARE SUEDE BRUSH 344 OR 345.
- 2.3 PHOTOGRAPHIC MANHOLE SECTIONS MUST BE IN ACCORDANCE WITH SANS 1024.
- 2.4 MANHOLE FRAMES MAY ONLY BE BUILT ON UNFINISHED SIDEWALKS ON A WRITTEN INSTRUCTION BY THE ENGINEER.
- 2.5 OVER EXCAVATION MAY ONLY BE FILLED AFTER APPROVAL BY THE ENGINEER WITH APPROVED FREE FROM STONES AND WITH AN OPTIMAL MOISTURE CONTENT.
- 2.6 NO PART OF THE MANHOLE MAY BE FINISHED OFF WITH CEMENT-WASH OR MORTAR.
- 2.7 1000mm INSIDE DIAMETER (ID) MANHOLES TO BE USED UP TO A DEPTH OF 1200mm BETWEEN 1200mm INSTALLED, 1500mm ID MANHOLES TO BE INSTALLED FOR MANHOLES DEEPER THAN 3000mm.
- 2.8 STEP RINGS TO BE 300mm HIGH OR SIMILAR.

NOTES: BEDDING

- 3.1 SELECTED BACKFILL CLASS 1 SANDS APPROVED FREE FROM STONES AND WITH AN OPTIMAL MOISTURE CONTENT.
- 3.2 SELECTED BACKFILL CLASS 1 SANDS SELECTED NOT CONTAINING STONES LARGER THAN 150mm.
- 3.3 CLASS 8 BEDDING GRAVEL SHALL CONSIST OF AN APPROVED SELECTED GRAVEL MATERIAL WITH A PI NOT EXCEEDING 0.5 FREE FROM STONES EXCEEDING 30mm, SWELLING LESS THAN 10% AND SHALLOWS OF 0.5%.
- 3.4 CLASS 10 BEDDING GRAVEL SHALL CONSIST OF AN APPROVED SELECTED GRAVEL MATERIAL WITH A PI NOT EXCEEDING 0.5 FREE FROM STONES EXCEEDING 30mm, SWELLING LESS THAN 10% AND SHALLOWS OF 0.5%.
- 3.5 FLEXIBLE JOINTS MUST BE PROVIDED AT EACH BEDDING/CONCRETE JOINT WITH A 12mm THICK SOFTBOARD PLACED VERTICALLY FOR THE ENTIRE LENGTH OF THE JOINT TO PREVENT SLUSH FROM PENETRATING THE JOINT.
- 3.6 EXCEPT FOR THE 300mm BACKFILL ON THE TOP OF THE PIPE, THE BALANCE OF THE TRENCH MAY BE FILLING WITH CLASS 10 BEDDING GRAVEL. THE COMPRESSIVE STRENGTH OF 15MPa.
- 3.7 MINIMUM DEPTH TO THE INVERT OF A SEWER CONNECTION IN A ROAD RESERVE IS 1.50m AND 1.2m RESPECTIVELY.

AMENDMENTS

NO.	DATE	DESCRIPTION
1	2017	ISSUED FOR CLIENT REVIEW

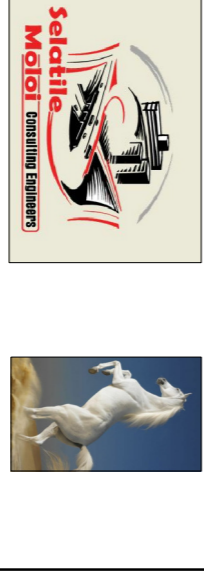
PROJECT STATUS

DESIGNED BY	DATE	DESIGNED BY	DATE
CHECKED BY	DATE	CHECKED BY	DATE
APPROVED BY	DATE	APPROVED BY	DATE

PROJECT ENVIRONMENT (GENERAL)

NAME	SIGNATURE AND/ OR No.	DATE
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SEMO - THABURE TMR JV



DEPARTMENT OF HUMAN SETTLEMENTS
 human settlements
 Department of Human Settlements
 FREE STATE PROVINCE

SIGNATURE: _____ DATE: _____
 DRAWING APPROVED BY DIRECTOR

LOCATION OF PROJECT:
FATENG TSE NTSHO
PAUL ROUX
FREE STATE

DESCRIPTION OF PROJECT:
SEWER RETICULATION LAYOUT
DRAWING

CONTRACT No.:	PROJECT No.:
HS-80/2016/0017	08161
DATE:	SCALE:
SEPTEMBER 2017	AS SHOWN
DRAWING NO.	SHEET NO.
08161-S101A	1 OF 1

