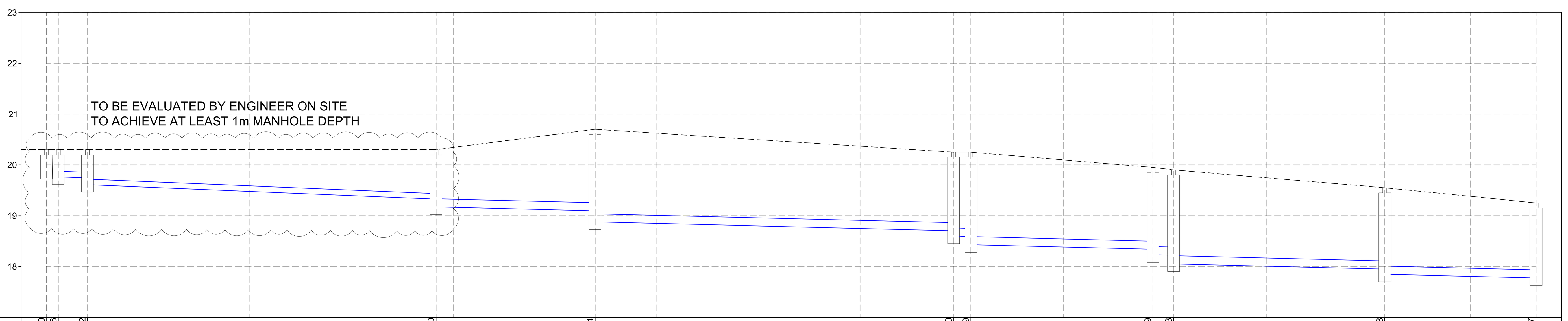
ALL DIMENSIONS AND LEVELS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

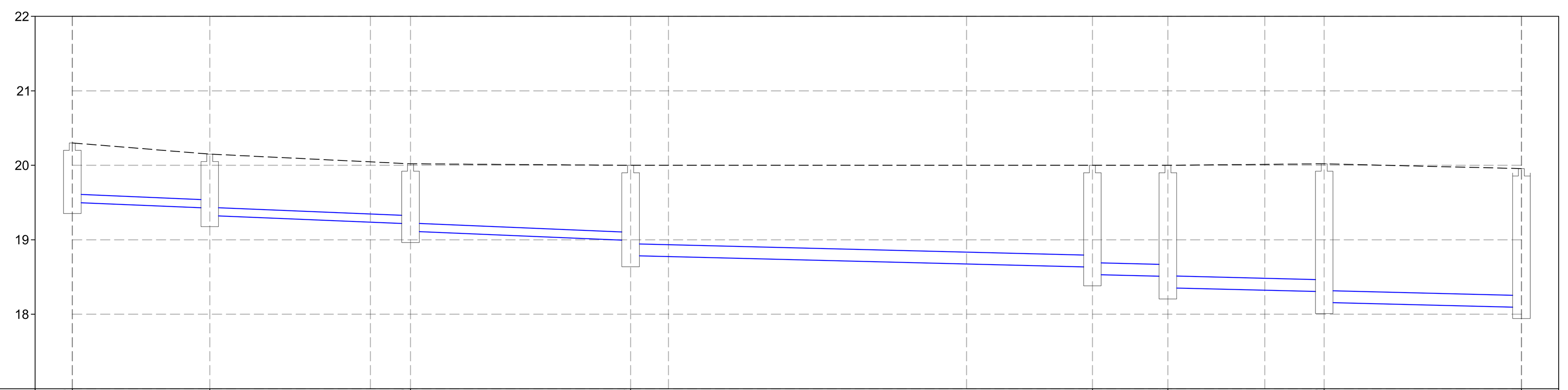


DATUM: 17.00

CHAINAGE (m)	0+000.00	0+001.16	0+004.02	0+038.30	0+053.94	0+089.20	0+090.89	0+108.79	0+110.83	0+131.58	0+146.47
EXISTING GROUND LEVEL (m)	20.3	20.3	20.3	20.3	20.7	20.25	20.25	19.95	19.90	19.55	19.251
PIPE INVERT LEVEL (m)	19.875	19.766	19.610	19.173	18.878	18.601	18.428	18.232	18.052	17.848	17.774
DEPTH TO PIPE INVERT (m)	0.42	0.53	0.69	1.12	1.82	1.64	1.82	1.71	1.85	1.70	1.47
REFERENCE	MH-01	MH-02	MH-03	MH-04	MH-07	MH-08	MH-09	MH-10	MH-11	MH-12	EX-MH

PIPE SLOPE (%)	0.83%			0.50%						
PIPE LENGTH (m)	1.16	2.86	34.28	15.63	35.26	1.69	17.90	2.04	20.76	14.89
PIPE SIZE (mm)	110mmØ uPVC CL.34			160mmØ uPVC CL.34						

1 LONGITUDINAL SECTION 1
1:50 V 1:250 H

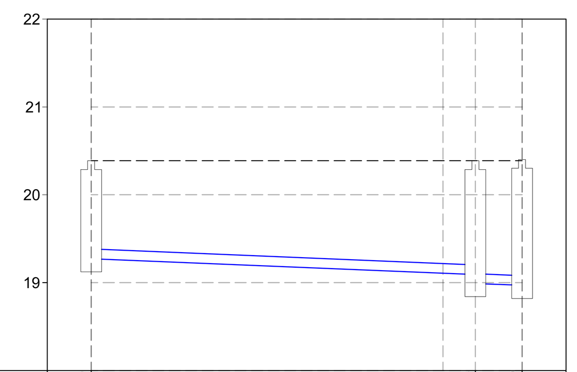


DATUM: 17.00

CHAINAGE (m)	0+000.00	0+009.22	0+022.69	0+037.46	0+068.44	0+073.50	0+083.99	0+097.22
EXISTING GROUND LEVEL (m)	20.30	20.15	20.05	20.00	20.00	20.00	20.20	19.90
PIPE INVERT LEVEL (m)	19.503	19.326	19.114	18.788	18.533	18.355	18.159	18.093
DEPTH TO PIPE INVERT (m)	1.16	1.35	1.58	1.96	1.73	1.89	2.01	
REFERENCE	MH-13	MH-14	MH-15	MH-16	MH-17	MH-18	MH-19	MH-11

PIPE SLOPE (%)	0.83%	0.83%	0.83%	0.50%	0.50%	0.50%	0.50%
PIPE LENGTH (m)	9.22	13.47	14.77	30.98	5.07	10.49	13.23
PIPE SIZE (mm)	110mmØ uPVC CL.34			160mmØ uPVC CL.34			

2 LONGITUDINAL SECTION 2
1:50 V 1:250 H



DATUM: 18.00

CHAINAGE (m)	0+000.00	0+021.84	0+024.49
EXISTING GROUND LEVEL (m)	20.30	20.30	20.30
PIPE INVERT LEVEL (m)	19.273	18.991	18.969
DEPTH TO PIPE INVERT (m)	1.03	1.30	1.12
REFERENCE	MH-06	MH-05	MH-04

PIPE SLOPE (%)	0.83%	0.83%
PIPE LENGTH (m)	21.84	2.65
PIPE SIZE (mm)	110mmØ uPVC CL.34	

3 LONGITUDINAL SECTION 3
1:50 V 1:250 H

REFERENCE DRAWINGS

DRAWING No	TITLE DESCRIPTION	SOURCE

NOTE

"SHOULD THESE DRAWINGS AND PROJECT SPECIFICATIONS BE USED OR RELIED UPON FOR ANY OTHER PURPOSE OTHER THAN WHAT THEY WERE INTENDED FOR ON THIS SPECIFIC SITE, WITHOUT FORCE ENGINEERING CONSULTINGS' PRIOR KNOWLEDGE AND WRITTEN CONSENT, THEN THE USER SHALL INDEMNIFY THE COPYRIGHT HOLDER AGAINST ALL LIABILITIES, CLAIMS, DAMAGES, LOSSES, FINES AND/OR PENALTIES (EITHER IN CONTRACT OR DELICT) INSTITUTED BY THE USER OR ANY OTHER PARTY AS RESULT OF THEIR RE-USE OF OR RELIANCE ON THESE DRAWINGS AND PROJECT SPECIFICATIONS."

GENERAL NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS.
2. ALL DIMENSIONS ARE IN mm AND ARE TO BE CHECKED ON SITE, ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. BEAM SIZES ARE GIVEN BREADTH x DEPTH.
4. CONCRETE COVER TO REINFORCING TO BE MAINTAINED BY THE USE OF EITHER NYLON SPACERS OR PRECAST CONCRETE BLOCKS WITH BINDING WIRES CAST IN.
5. REINFORCED CONCRETE :-
   REQUIRED CHARACTERISTIC CUBE STRENGTH AT 28 DAYS.

FOUNDATIONS	30 MPa
R.C. WALLS	30 MPa
BLINDING LAYER	15 MPa
SLABS	30 MPa

6. ALL REINFORCEMENT TO BE INSPECTED BY THE ENGINEER PRIOR TO CASTING OF CONCRETE. MINIMUM 1 DAYS NOTICE IS REQUIRED FOR INSPECTION.
7. FOUNDATIONS ARE DESIGNED FOR A MAXIMUM SAFE BEARING LOAD OF 150 kPa.
8. CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS :
   ALL ELEMENTS 50 mm
9. ALL WORK SHALL COMPLY WITH SANS 1200
10. DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH SANS 0100, 0160, 0162, 0163 & 1064 AS APPLICABLE.
11. THE WORKS WILL BE INSPECTED FROM TIME TO TIME BY THE CONSULTING ENGINEER TO ASCERTAIN THAT THE CONTRACTOR IS CARRYING OUT THE WORK IN GENERAL CONFORMITY WITH THE ENGINEERING DRAWINGS & DOCUMENTS. SUCH INSPECTIONS ARE NOT CARRIED OUT FOR THE BENEFIT OF THE CONTRACTOR , AND DO NOT RELIEVE HIM OF THE RESPONSIBILITY FOR THE PROPER CONSTRUCTION OF THE WORKS IN ACCORDANCE WITH THE ENGINEERING DRAWINGS , DOCUMENTS AND GOOD BUILDING PRACTICE.
12. LIVE LOADS AS PER TMH 7, PART 1 & 2 NA LOADING ONLY CONSIDERED

ALL MATERIALS & WORKMANSHIP TO BE IN ACCORDANCE WITH THE RELEVANT SABS SPECIFICATION.

ALL WORK TO BE CONTINUED IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS, ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY ACT, LATEST REVISION & THE CONSTRUCTION REGULATIONS.

THE MAIN CONTRACTOR IS TO ENSURE THAT A COMPETENT PERSON, APPROVED BY THE SOUTH AFRICAN QUALIFICATION AUTHORITY SUPERVISES AND APPROVES ALL ASPECTS OF THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, LATEST REVISION.

ALL TEMPORARY WORKS TO BE DESIGNED, DETAILED, SUPERVISED AND CERTIFIED BY A COMPETANT PERSON OR PROFESSIONAL ENGINEER AS DEFINED IN THE OHS ACT.

Rev	Description	Date	By	Approved
D	FOR APPROVAL	26/11/2024	I.B	H.PARUK
C	DETAILED DESIGN	13/09/2024	I.B	H.PARUK
B	PRELIMINARY DESIGN	02/08/2024	I.B	H.PARUK
A	CONCEPT DESIGN	22/12/2023	I.B	H.PARUK

	BY	DATE	SIGNATURE
DRAWN	I. BADAT	13/09/2024	
DESIGNED	I. BADAT	13/09/2024	
CHECKED	H. PARUK	13/09/2024	
APPROVED	H. PARUK	13/09/2024	

CONSULTANT

ARCHITECT

CLIENT NAME

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PROJECT NAME

MAKHAZA POLICE STATION

SEWER LONGSECTIONS

PROJECT No.	SCALE:	SHEET SIZE:	SHEET
23022	AS SHOWN	A0	01 OF 01

DRAWING No.	REVISION
FEC-23022-SEW-LSC-001	Rev D

FOR INFORMATION