

NOTES AND SPECIFICATIONS

GENERAL

1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
2. ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED)
3. DO NOT SCALE FROM THIS DRAWING.
4. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTMM DETAIL DRAWINGS (IF APPLICABLE)
6. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE ARCHITECT DRAWINGS. (IF APPLICABLE)
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
8. THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY MANAGER OF THE ROADS & TRANSPORT DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
9. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE ROADS & TRANSPORT DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

LEGEND

- EXISTING STORMWATER
- NEW STORMWATER
- NEW JUNCTION / MANHOLE
- NEW GRID INLET
- NEW 3m KERB INLET
- STORMWATER SURFACE FLOW DIRECTION

ABBREVIATIONS:

- MH - MANHOLE
- GI - GRID INLET
- KI - KERB INLET

AMENDMENTS

NR	DATE	APPROVED	DESCRIPTION	PAR.
0	30/03/2023	J. ROETS	FOR APPROVAL & CONSTRUCTION	

DESIGNED J.L. ROETS
DATE 30/03/2023
DRAWN T. DEETLEFS
DESIGN CHECKED BY J.L. ROETS
DATE 30/03/2023
MANAGER D.J. CHALMERS

PROJECT STATUS

CONCEPT DRAWING: []
 TENDER DRAWING: []
 APPROVED FOR CONSTRUCTION DRAWING: []
 AS BUILT DRAWING: []

PROJECT ENGINEER (CONSULTANT)
 J.L. ROETS 9370055 30/03/2023

INITIALS AND SURNAME SIGNATURE AND P. No. DATE

PROJECT ENGINEER (CITY OF TSHWANE)
 WAG BRULINS 0572081

CONSULTANT DETAIL

ENGITECH
Civil and Structural Engineers

CITY OF TSHWANE
ROADS AND TRANSPORT DEPARTMENT

GROUP HEAD Mr Letsoankane P. (Pheko)
P.O. BOX 1409 PRETORIA 0001

DIVISIONAL HEAD Mr Thagale M.K.P. (Mavren)
P.O. BOX 1409 PRETORIA 0001

DRAWING APPROVED BY DIVISIONAL HEAD
Mr Thagale M.K.P. (Mavren)

ALPHEN PARK
ERF 12

STORMWATER
MANAGEMENT PLAN

WAYLEAVE_NO.: WL2223-0301

CONTRACT No.: PROJECT No.: 2109081

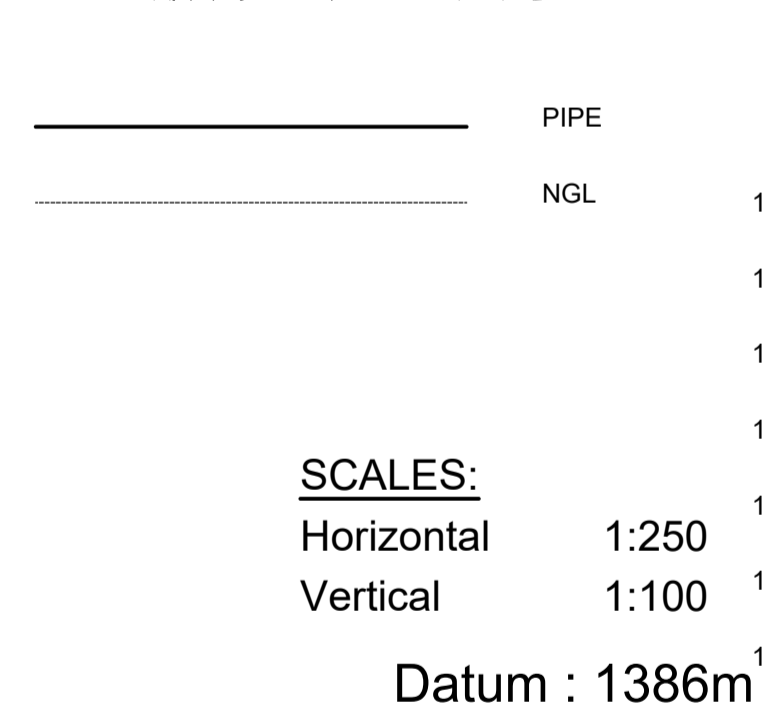
DATE: MARCH 2023 SCALE: AS SHOWN ORIGINAL PAPER SIZE: A1

DRAWING NO: E0221-CIV-04 SHEET NO: REVISION

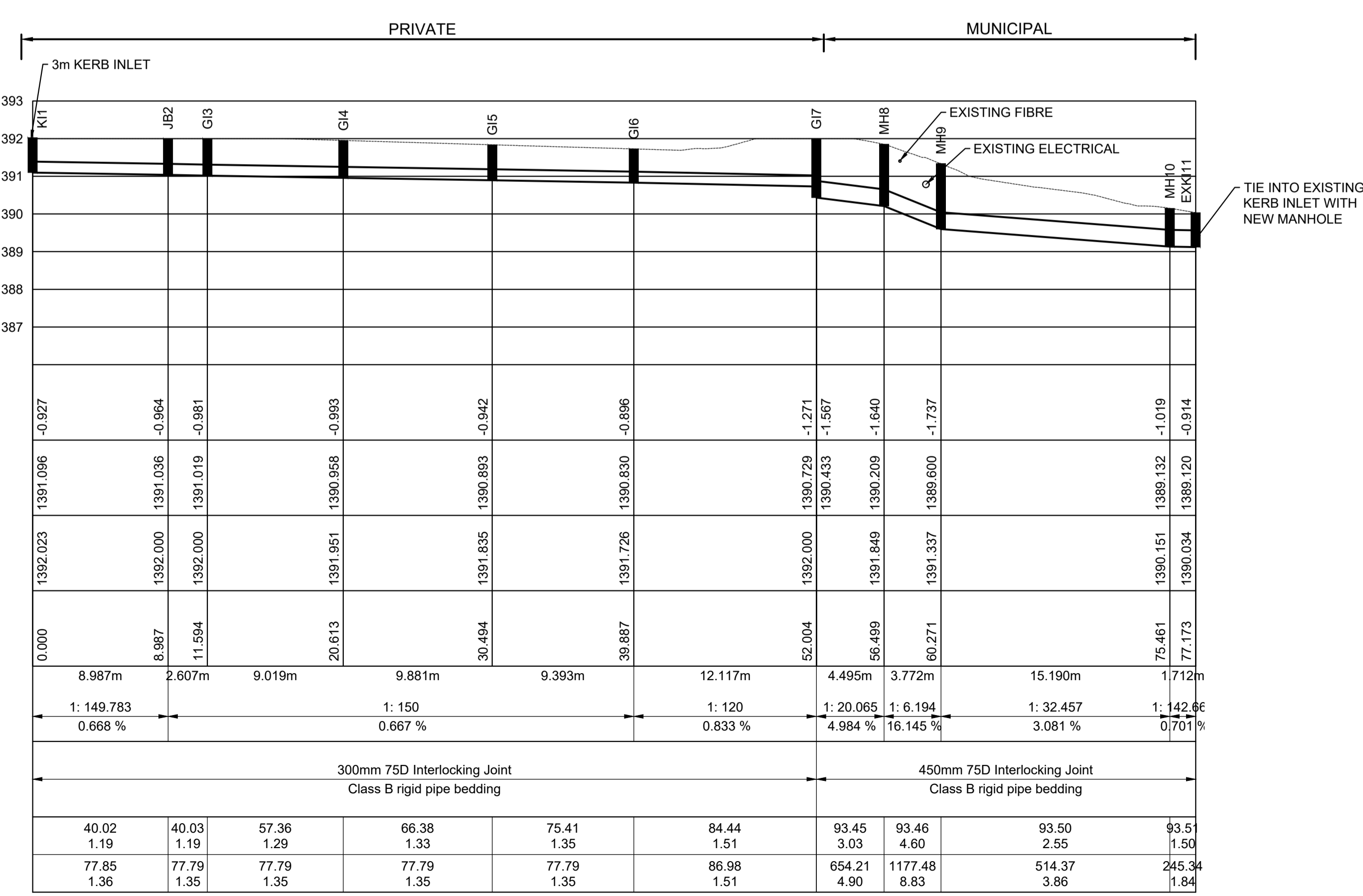
COORDINATE LIST
WGS84 La29

MH No.	YLo	XLo
KI1	73679.396	2852548.629
JB2	73673.312	2852542.015
GI3	73673.031	2852539.423
GI4	73664.069	2852540.436
GI5	73654.250	2852541.546
GI6	73644.917	2852542.603
GI7	73632.877	2852543.966
MH8	73628.418	2852544.529
MH9	73624.938	2852543.071
MH10	73621.045	2852528.389
EXK11	73619.549	2852527.555

LAYOUT PLAN
Scale 1:250



DEPTH TO INVERTS	INVERT LEVEL	GROUND LEVEL	CHAINAGE (m)	PIPE GRADES	PIPE DETAILS	HYDRAULICS
					300mm 75D Interlocking Joint Class B rigid pipe bedding	DESIGN: Q (l/s) V (m/s) MAX.(0.8D): Q (l/s) V (m/s)
					450mm 75D Interlocking Joint Class B rigid pipe bedding	



NOTES:

1. ALL WORK MUST BE CARRIED OUT IN ACCORDANCE WITH THE CONDITIONS AND QUALITY CONTROL AS SPECIFIED IN THE LATEST REVISIONS OF THE APPLICABLE SANS 1200 SERIES AND OR WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005) AND THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION OF CIVIL ENGINEERING WORKS (2004).
2. ALL WORK MUST COMPLY WITH THE LATEST REVISION OF "STANDARD CONSTRUCTION DETAILS AND DESIGN STANDARDS" AS ISSUED BY THE CITY OF TSHWANE ROADS AND STORMWATER DIVISION. (LATEST REVISION).
3. ALL BELLMOUTH RADII MIN 10m UNLESS OTHERWISE STATED.
4. SURFACING OF ROADS TO BE 25mm CONTINUOUSLY GRADED (MEDIUM GRADE) ASPHALT OR 80mm INTERLOCKING PAVING, AS SHOWN ON THE DRAWINGS.
5. ALL STORMWATER PIPES TO BE CONCRETE CLASS 75D CONCRETE PIPES, UNLESS OTHERWISE SPECIFIED.
6. STORMWATER PIPES TO BE JOINED SOFFIT TO SOFFIT.
7. THE CONTRACTOR MUST COMPLY WITH ALL REGULAR ON-SITE INSPECTIONS FOR ACCEPTANCE OF COMPLETED WORK, IN THE PRESENCE OF BOTH THE ENGINEER AND THE REPRESENTATIVE OF THE COT ROADS AND STORMWATER DIVISION.
8. THE CONTRACTOR MUST PROVE THE QUALITY OF ALL LAYERWORKS WITH SUITABLE LABORATORY TEST RESULTS. THE COSTS INCURRED FOR THESE WILL BE FOR THE ACCOUNT OF THE CONTRACTOR.
9. FOR STANDARD TYPICAL DETAIL DRAWINGS, REFER TO THE SPECIFIC GUIDELINES OF LOCAL COUNCIL "STANDARD CONSTRUCTION DETAILS".
10. DESTROY ALL PREVIOUS DRAWINGS ON RECEIPT OF REVISED DRAWING.
11. ONLY APPROVED SELECTED IMPORTED MATERIAL MAY BE USED AS FILL MATERIAL, COMPACTED IN LAYERS NOT EXCEEDING 150mm AT THE CORRECTLY SPECIFIED DENSITIES.
12. FINISHED LEVELS MUST BE WITHIN 20mm OF THE SPECIFIED LEVELS.
13. HORIZONTAL DIMENSIONS MUST BE WITHIN 50mm OF THE SPECIFIED DIMENSION.
14. THE CONTRACTOR MUST LOCATE AND PROTECT ALL EXISTING SERVICES BEFORE COMMENCEMENT OF THE WORK.
15. MANHOLES MUST BE IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS AND EQUIPPED WITH MEDIUM DUTY PRECAST CONCRETE COVERS AND FRAMES (SANS TYPE4).
16. MANHOLES IN CARRIAGE WAY MUST BE EQUIPPED WITH HEAVY DUTY CAST IRON COVERS AND FRAMES (SANS TYPE4).
17. ALL CONCRETE WORK SHALL FULLY COMPLY WITH SANS 1200 G.
18. ALL BRICKWORK SHALL FULLY COMPLY WITH SANS 0164.
19. ALL LEVELS AND POSITIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION.