## LEGEND

**EXISTING:**
- SEWERS CL AND M.H'S
- STORMWATER CL DRAIN
- WATER MAINS CL AND VALVES
- ELECTRICITY CL(OH)
- TELECOMMS. CL (OH)
- FIBRE OPTIC CL
- ROAD CENTERLINES
- ROAD EDGE
- ROAD RESERVE
- FENCE/BOUNDARY AND GATE

**PROPOSED:**
- UPGRADE ROAD EDGE
- TRANSMISSION PIPE CL
- AIR VALVE
- SCOUR VALVE
- ISOLATING VALVE
- METER

NOTE:
1. ALL SERVICES DEPICTED ON THE PLAN & LONG SECTION ARE APPROXIMATE POSITIONS OF EXPECTED SERVICES OBTAINED FROM SERVICE PROVIDERS RECORDS THAT MAY BE ENCOUNTERED BY THE CONTRACTOR ALONG THE ROUTE. ALL SERVICES ARE TO BE TRACED AND PROVED IN CONJUNCTION WITH EACH SERVICE PROVIDER AND NOT LESS THAN 14 WORKING DAYS PRIOR TO EXCAVATION TO AVOID CAUSING DAMAGE TO '"EXISTING SERVICES".
2. ALL SERVICES SHOWN ON PLAN AND LONG SECTION AND ALL ADDITIONAL SERVICES PROVIDED BY THE SERVICE PROVIDER(S) SHALL BE DEFINED AS "KNOWN SERVICES". NO COMPENSATION WILL BE PAID FOR DAMAGE CAUSED TO "KNOWN SERVICES".

### SETTING OUT DATA

| REF | Y | X |
|---|---|---|
| PI-B53 | 28573.712 | 3748301.267 |
| PI-B54 | 28589.293 | 3748312.958 |
| PI-B55 | 28653.284 | 3748360.969 |
| PI-B56 | 28737.017 | 3748423.793 |
| PI-B57 | 28748.742 | 3748425.072 |
| PI-B58 | 28783.019 | 3748451.897 |
| PI-B59 | 28846.019 | 3748501.201 |
| PI-B60 | 28909.573 | 3748550.938 |
| PI-B61 | 28946.405 | 3748579.762 |
| PI-B62 | 28968.651 | 3748601.737 |

### SETTING OUT DATA

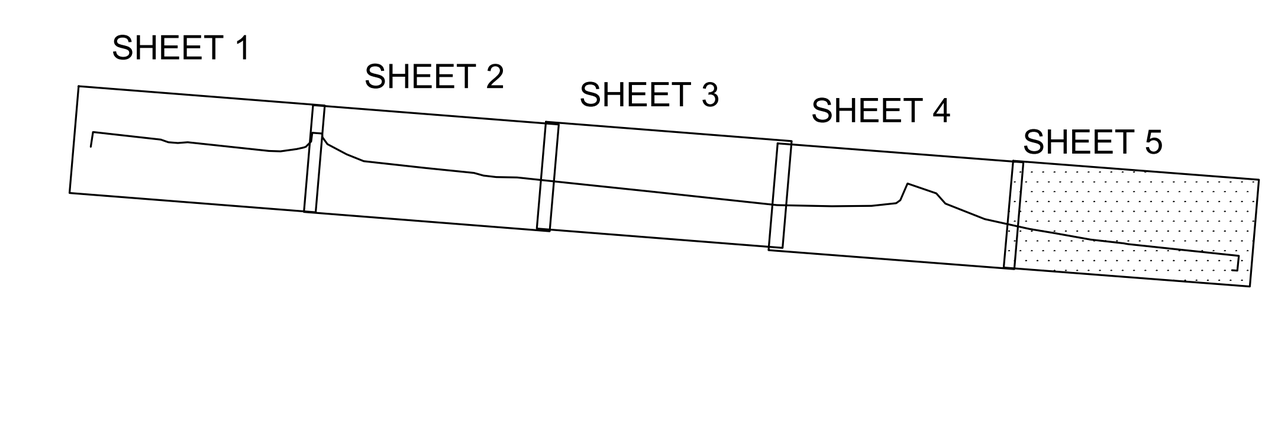
| REF | Y | X |
|---|---|---|
| PI-B63 | 28996.485 | 3748618.956 |
| PI-B64 | 29097.293 | 3748697.852 |
| PI-B65 | 29191.792 | 3748771.810 |
| PI-B66 | 29203.308 | 3748780.823 |
| PI-B67 | 29232.152 | 3748743.968 |
| PI-B68 | 29240.692 | 3748733.057 |
| PI-B69 | 29221.224 | 3748717.821 |
| PI-B70 | 29216.628 | 3748714.224 |

SETTING OUT CONTROL

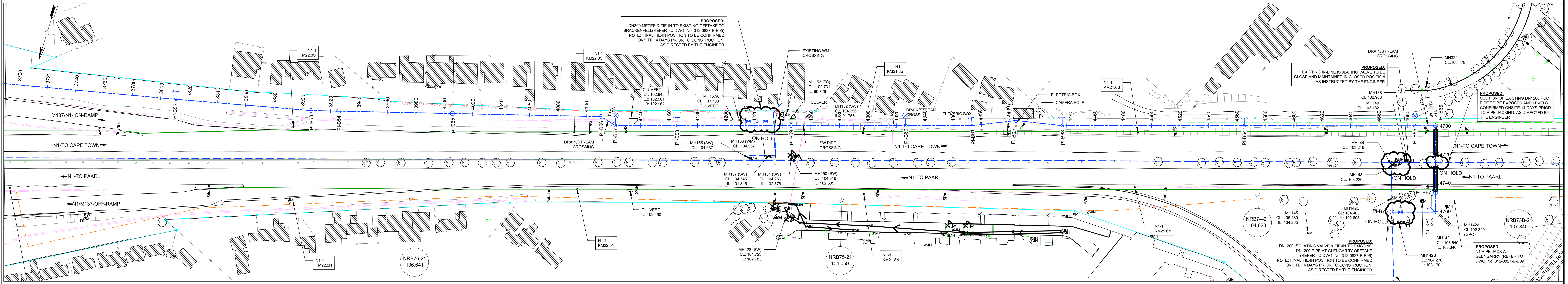
| NAME | Y | X | Z | DESCRIPTION |
|---|---|---|---|---|
| NRB 76-21 | 28667.68 | 3748296.05 | 106.641 | |
| NRB 75-21 | 28906.81 | 3748481.71 | 104.059 | |
| NRB 74-21 | 29134.78 | 3748665.41 | 104.623 | |
| NRB 73B-21 | 29321.66 | 3748788.01 | 107.84 | |

NOTE:
1. SURVEY BASED ON LO 19, SOUTH AFRICAN SURVEY GRID, WGS84 DATUM; 18 TO 20d E
2. THE ABOVE DATA IS UNIQUE TO THIS PROJECT ONLY. THE CONTRACTOR IS PROHIBITED FROM USING FOREIGN CONTROL BEACONS.

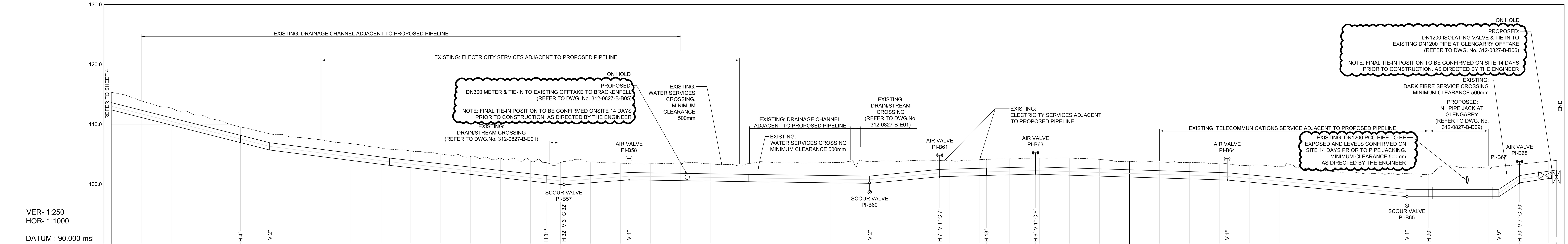
NOTE:
ALL DIMENSIONS TO BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS. REFER ANY DISCREPANCIES TO THE ENGINEER.




KEYPLAN




PLAN VIEW
SCALE - 1:1000




| PEG DISTANCE AT CH (m) | GROUND LEVEL AT CH | INVERT LEVEL AT CH | DEPTH TO IL AT CH (m) |
|---|---|---|---|
| 3820 | 115.3 | 112.4 | 2.9 |
| 3840 | 113.9 | 111.1 | 2.8 |
| 3860 | 112.7 | 109.9 | 2.8 |
| 3880 | 111.5 | 108.6 | 2.9 |
| 3900 | 109.9 | 107.3 | 2.6 |
| 3920 | 108.7 | 106.1 | 2.7 |
| 3940 | 107.9 | 105.2 | 2.6 |
| 3960 | 107.4 | 104.6 | 2.8 |
| 3980 | 106.8 | 104.0 | 2.8 |
| 4000 | 106.0 | 103.3 | 2.7 |
| 4020 | 105.5 | 102.7 | 2.8 |
| 4040 | 105.0 | 102.2 | 2.8 |
| 4060 | 104.6 | 101.6 | 3.0 |
| 4080 | 104.3 | 101.1 | 3.3 |
| 4100 | 103.9 | 100.5 | 3.4 |
| 4120 | 103.6 | 100.0 | 3.6 |
| 4140 | 103.7 | 100.2 | 3.5 |
| 4160 | 103.5 | 100.6 | 2.9 |
| 4180 | 103.4 | 100.7 | 2.7 |
| 4200 | 103.4 | 100.6 | 2.8 |
| 4220 | 103.4 | 100.5 | 2.9 |
| 4240 | 103.0 | 100.4 | 2.6 |
| 4260 | 103.7 | 100.4 | 3.3 |
| 4280 | 103.5 | 100.3 | 3.2 |
| 4300 | 103.6 | 100.2 | 3.4 |
| 4320 | 103.9 | 100.2 | 3.8 |
| 4340 | 103.8 | 100.5 | 3.4 |
| 4360 | 104.0 | 100.9 | 3.0 |
| 4380 | 104.0 | 101.3 | 2.7 |
| 4400 | 104.1 | 101.4 | 2.7 |
| 4420 | 104.2 | 101.6 | 2.7 |
| 4440 | 104.4 | 101.6 | 2.7 |
| 4460 | 104.4 | 101.5 | 2.9 |
| 4480 | 104.1 | 101.3 | 2.8 |
| 4500 | 103.8 | 101.2 | 2.6 |
| 4520 | 103.7 | 101.0 | 2.7 |
| 4540 | 103.6 | 100.9 | 2.7 |
| 4560 | 103.4 | 100.7 | 2.6 |
| 4580 | 103.1 | 100.3 | 2.8 |
| 4600 | 102.9 | 99.9 | 3.0 |
| 4620 | 102.6 | 99.4 | 3.1 |
| 4640 | 102.0 | 99.0 | 3.0 |
| 4660 | 101.7 | 98.5 | 3.2 |
| 4680 | 101.6 | 98.0 | 3.6 |
| 4700 | 101.6 | 97.9 | 3.7 |
| 4720 | 102.8 | 97.9 | 4.9 |
| 4740 | 102.7 | 97.9 | 4.8 |
| 4760 | 103.3 | 100.1 | 3.1 |
| 4780 | 103.8 | 101.0 | 2.9 |
| 4785 | 104.0 | 101.2 | 2.8 |

| PI REFERENCE | PEG DISTANCE AT PI (m) | GROUND LEVEL AT PI | INVERT LEVEL AT PI | DEPTH TO IL AT PI (m) | CUMULATIVE LENGTH |
|---|---|---|---|---|---|
| PI-B52 | 3810.7 | | 113.0 | 2.9 | 3811.20 |
| PI-B53 | 3906.3 | 109.5 | 106.9 | 2.6 | 3906.99 |
| PI-B54 | 3925.8 | 108.4 | 105.7 | 2.7 | 3926.51 |
| PI-B55 | 4005.8 | 105.8 | 103.1 | 2.7 | 4006.55 |
| PI-B56 | 4110.5 | 103.6 | 100.2 | 3.4 | 4111.27 |
| PI-B57 | 4122.2 | 103.8 | 99.9 | 3.9 | 4123.07 |
| PI-B58 | 4165.8 | 103.4 | 100.7 | 2.7 | 4166.60 |
| PI-B59 | 4245.8 | 103.4 | 100.4 | 3.0 | 4246.60 |
| PI-B60 | 4326.5 | 103.7 | 100.1 | 3.6 | 4327.30 |
| PI-B61 | 4373.2 | 103.9 | 101.3 | 2.7 | 4374.09 |
| PI-B62 | 4404.5 | 104.1 | 101.5 | 2.7 | 4405.36 |
| PI-B63 | 4437.2 | 104.4 | 101.7 | 2.7 | 4438.09 |
| PI-B64 | 4565.3 | 103.4 | 100.7 | 2.7 | 4566.10 |
| PI-B65 | 4685.3 | 101.7 | 97.9 | 3.8 | 4686.13 |
| PI-B66 | 4699.9 | 101.6 | 97.9 | 3.7 | 4700.76 |
| PI-B67 | 4746.7 | 103.0 | 97.9 | 5.1 | 4747.56 |
| PI-B68 | 4760.5 | 103.3 | 100.2 | 3.1 | 4761.60 |
| PI-B69 / PI-B70 | 4785.3 | 104.0 | 101.4 | 2.8 | 4786.34 |

| GRADE 1: | |
|---|---|
| PI-B52 – PI-B53 | - 15.789 |
| PI-B53 – PI-B54 | - 15.789 |
| PI-B54 – PI-B55 | - 31.19 |
| PI-B55 – PI-B56 | - 35.847 |
| PI-B56 – PI-B57 | - 35.847 |
| PI-B57 – PI-B58 | 52.168 |
| PI-B58 – PI-B59 | - 259.742 |
| PI-B59 – PI-B60 | - 293.621 |
| PI-B60 – PI-B61 | 42.105 |
| PI-B61 – PI-B62 | 152.833 |
| PI-B62 – PI-B63 | 152.833 |
| PI-B63 – PI-B64 | - 130.747 |
| PI-B64 – PI-B65 | - 43.15 |
| PI-B65 – PI-B66 | FLAT |
| PI-B66 – PI-B67 | FLAT |
| PI-B67 – PI-B68 | 6.004 |
| PI-B68 – end | 26.591 |
| end | 26.591 |

PIPE DESCRIPTION: DN1200 x 10mm THICK x GRADE X42, CEMENT MORTAR LINED, CEMENT MORTAR SHEATHING, CONTINUOUSLY WELDED STEEL PIPE

LONGITUDINAL SECTION
SCALE - V 1:250
H 1:1000

| No. | DATE | REVISION | CONSULT. ENG. |
|---|---|---|---|
| V1 | 27/11/2023 | ORIGINAL VERSION | |

CONSTRUCTION RECORD (AS-BUILT)
WORKS CONTRACT ENGINEER
Name :
Prof. Reg. No. :
Date :
SANRAL PROJECT MANAGER
Name :
Date :


HEAD OFFICE
48 Tambotie Avenue
Val de Grace
Pretoria
0184
PO Box 415
Pretoria 0001
South Africa
Tel: (012) 844 8000

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
Reg.No.1998/009584/30
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

WESTERN REGION
1 Havenga Street
Oakdale
Bellville
7530
Private Bag X19
Bellville
7535
6034
Tel: (021) 957 4600


ACCEPTANCE
THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING
for the SA NATIONAL ROADS AGENCY SOC LTD.
Date:

**PROJECT DESCRIPTION**
THE CAPACITY IMPROVEMENT OF THE NATIONAL ROUTE 1 SECTION 1 FROM OLD OAK INTERCHANGE (KM 18.90) TO KOELENOFF INTERCHANGE (KM 33.00)

**DRAWING DESCRIPTION**
N1 - WEMMERSHOEK PIPELINE RELOCATION
SECTION B - KRAAIFONTEIN TO BRACKENFELL
DN1200 PLAN AND LONGITUDINAL SECTION

SCALE : AS SHOWN | SHEET 5 OF 5

| PROJECT NUMBER | N.001-010-2021/1 | |
|---|---|---|
| DRAWING LOCATION DATA | START | END |
| ROUTE | N01 | N01 |
| SECTION | 01 | 01 |
| DRAWING km DISTANCE | 18.90 | 33.00 |
| DRAWING TYPE | ROADS-UTILITIES | |
| BRIDGE/STRUCTURE No. | - | |
| CONSULTANT DRAWING No. | 312-0827-B-A05 | VER |
| SANRAL DOCUMENT # | - | V 1 |

ORIGINAL SCALE: 1 : 100