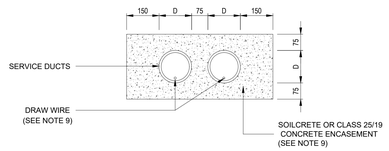
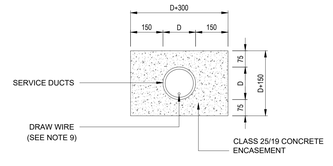


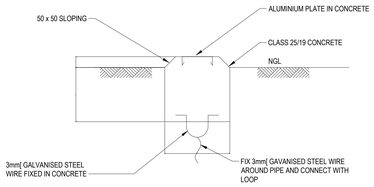
SLEEVE CONFIGURATION
MULTIPLE SERVICE DUCT
1:10



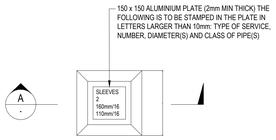
SLEEVE CONFIGURATION
DOUBLE SERVICE DUCT
1:10



SLEEVE CONFIGURATION
SINGLE SERVICE DUCT
1:10



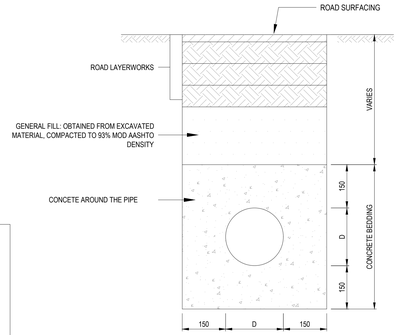
SECTION A
AS SHOWN



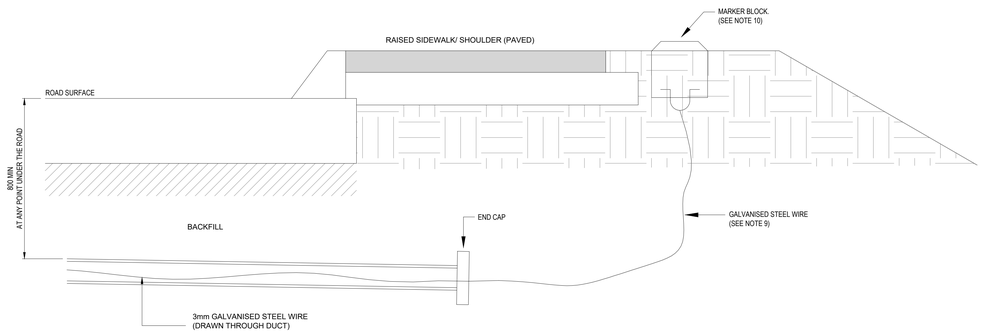
MARKER BLOCK DETAIL
1:10

NOTES ON SERVICE DUCTS:

1. DUCTS TO BE GREEN CORRUGATED DOUBLE WALL SOLID HDPE PIPE CLASS 450N GEOSYNTHETIC AFRICA GEODUCT OR SIMILAR APPROVED. DUCT SIZE AS SPECIFIED ON THE LAYOUT DRAWING.
2. ALL PIPES TO COMPLY WITH IMPACT TEST BS 3505.
3. ALL DUCTS TO BE INSTALLED AFTER UPPER SELECTED SUBGRADE HAS BEEN COMPLETED.
4. DUCTS TO BE LAID HORIZONTAL.
5. ALL DUCTS TO BE LAID AT MINIMUM 600mm BELOW GROUND EXCEPT UNDERNEATH ROADS.
6. THE MINIMUM DISTANCE BETWEEN ELECTRICAL AND OTHER DUCTS IS AS FOLLOWS:
   6.1 TELECOMMUNICATION DUCTS 0,3m.
   6.2 HOUSE CONNECTIONS 0,3m.
7. 3mm DIA. GALVANIZED STEEL WIRE OR 4mm DIA. HIGH TENSILE COPPER WIRE MUST BE DRAWN THROUGH DUCT BEFORE IT IS SEALED OFF WITH BITUMEN COATED PLUGS.
8. THE DUCTS MUST EXTEND TO AT LEAST 1m FROM BACK OF SIDEWALK
9. A GALVANIZED STEEL LOCATING WIRE MUST BE ATTACHED FROM THE PLUG TO THE MARKER BLOCK.
10. DUCT POSITIONS MUST BE CLEARLY MARKED WITH A MARKER BLOCK.
11. WHEN A DUCT CROSSES AN EXISTING SERVICE SUCH AS AN ELECTRICITY SUPPLY CABLE, A WATER SUPPLY PIPE OR A SEWERAGE PIPE, THE TELECOMMUNICATION DUCT SHALL, IF POSSIBLE, BE LAID NOT LESS THAN 25 MM ABOVE THE EXISTING SERVICE. WHERE THE DEPTH OF THE EXISTING SERVICE IS INSUFFICIENT FOR THIS TO BE DONE, THE TELECOMMUNICATION DUCT SHALL BE LAID TO PASS NOT LESS THAN 25 MM BELOW THE OTHER SERVICE.
12. HDPE DUCTS TO BE JOINTED AS PER SUPPLIER INSTALLATION GUIDELINES.
13. A LENGTH OF 3,05 MM DIAMETER GALVANIZED STEEL WIRE SHALL BE ATTACHED TO THE CLEANING-BRUSH AND DRAWN INTO THE PIPE AND LEFT FOR USE AS A DRAW WIRE THAT CONNECTS TO A CONCRETE MARKER BLOCK. ALL OPEN PIPE ENDS MUST BE PLUGGED TO PREVENT THE INGRESS OF DIRT.



CONCRETE BEDDING DETAIL & UNDER
ROAD OR SHALLOW COVER
(ALTERNATIVE TO ENCASEMENT)
1:20

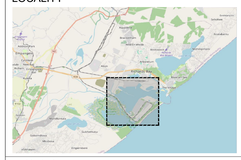


SERVICE DUCT AND MARKER BLOCK PLACEMENT
1:10

NOTES

1. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.
3. ALL LEVELS ARE IN METERS TO MEAN SEA LEVEL.
4. DRAWINGS MUST BE READ IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND GENERAL NOTES DRAWINGS.
5. IF APPLICABLE, DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS AND ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.

LOCALITY



LEGEND

SYMBOL	DESCRIPTION

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
E2	FOR TENDER	RR	HVDM	HVDM	18 07 25
E1	FOR TENDER	RR	HVDM	HVDM	26 06 25

REVISIONS

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ZUTARI
IMPACT. ENGINEERED.

CONTRACTOR / CONSULTANT

TITLE	NAME	SIGN	DATE
DRAWN	I. SEBOLA		18 07 25
CHECKED	H. VAN DER MERWE		18 07 25
DESIGNED	I. SEBOLA		18 07 25
CHECKED	H. VAN DER MERWE		18 07 25

PR.ENG. / PR.TECH./PR. ARCH

NAME	H. VAN DER MERWE	DATE
SIGNATURE		18 07 25
REG. NUMBER	201270225	
TITLE	Pr. TechENG	

TRANSNET NATIONAL PORTS AUTHORITY

TITLE	NAME	SIGN	DATE
DRAWN			
CHECKED			
DESIGNED			
CHECKED			

PR.ENG. / PR.TECH./PR. ARCH

NAME	DATE
SIGNATURE	
REG. NUMBER	
SCALE	AS SHOWN

TRANSNET

Transnet National Ports Authority

TRANSNET SOC Ltd : REG No. 1990/000900/30
NEWARK ROAD
RICHARDS BAY
TEL: 035 788 0067
PO BOX 181, RICHARDS BAY 3900, SOUTH AFIRCA

PROJECT / AREA / ASSET / SUBJECT/DRAWING TITLE

PORT OF RICHARDS BAY

PORT ROADS REHABILITATION & UPGRADE
(REPAIRS TO PORT ROADS)
SERVICE DUCT TYPICAL DETAILS

PAPER SIZE	TRANSNET DRW. NO.	REV.
A0	TBC	E2
	PROJECT DRG. NO.	REV.
	1006614-DRG-20-NW-CC-D006	T2