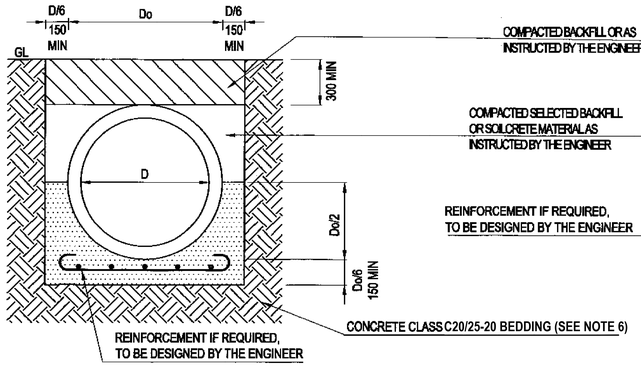
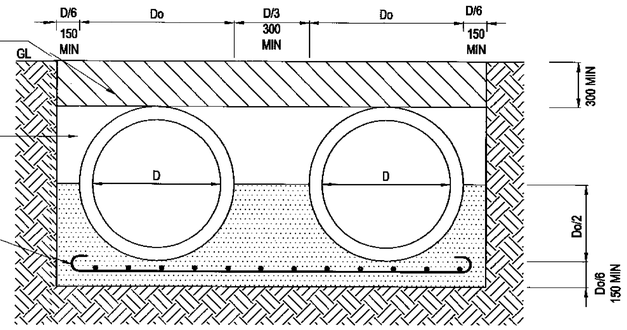


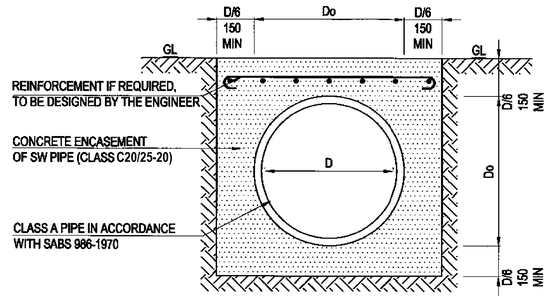
CLASS "A" BEDDING FOR SOFT EXCAVATIONS (SINGLE PIPE)

N.T.S.



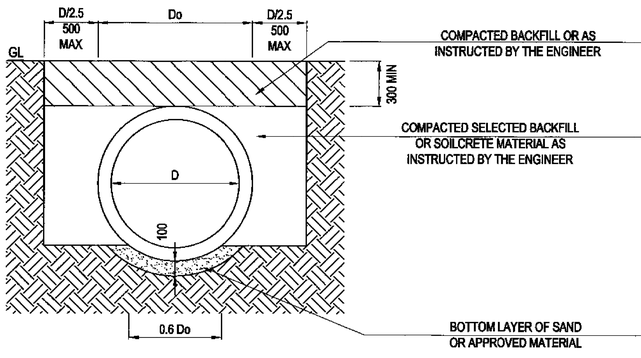
CLASS "A" BEDDING FOR SOFT EXCAVATIONS (DOUBLE PIPE)

N.T.S.



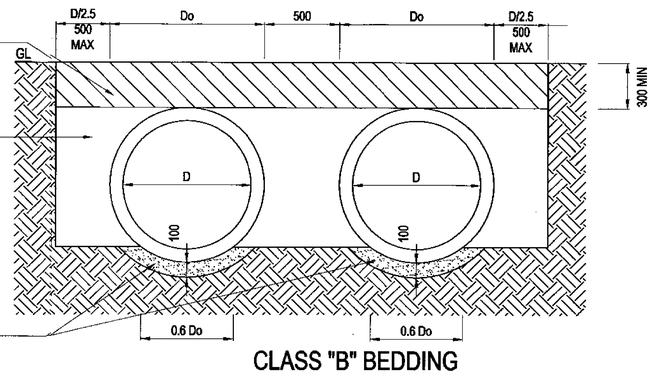
CONCRETE ENCASEMENT OF PIPES

SCALE : N.T.S.



CLASS "B" BEDDING FOR SOFT EXCAVATIONS (SINGLE PIPE)

N.T.S.



CLASS "B" BEDDING FOR SOFT EXCAVATIONS (DOUBLE PIPE)

N.T.S.

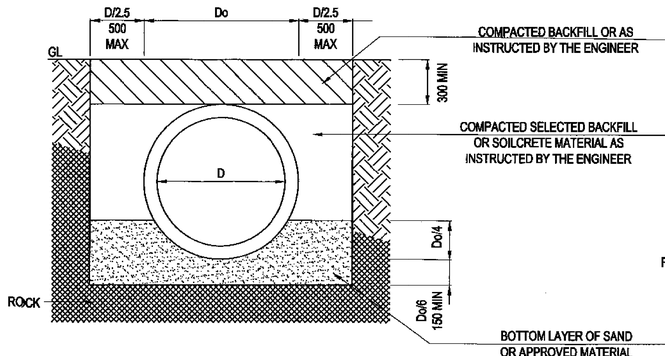
LEGEND:

H = TOTAL COVER OVER THE PIPE BELOW THE FINAL ROAD LEVEL
D = INTERNAL BARREL DIMENSION
Do = OUTSIDE BARREL DIMENSION
GL = GROUND LEVEL MEANING EITHER OF THE FOLLOWING:
AN INTERMEDIATED FILL LEVEL IN ORDER TO PROVIDE THE MINIMUM COVER OVER THE PIPE FOR A TRENCH CONDITION OR THE UNDERSIDE OF THE SELECTED SUBGRADE OR SUBBASE.

NOTES:

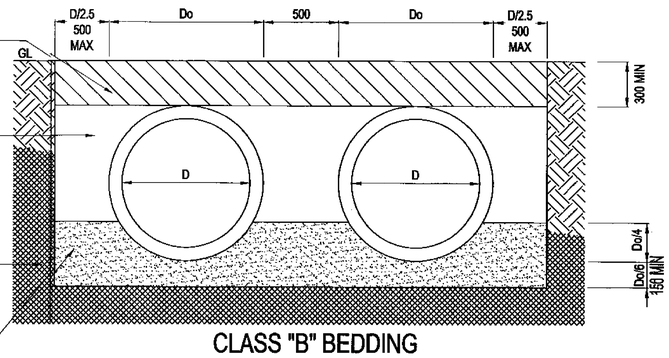
1. ALL CONCRETE PIPES SHALL COMPLY WITH THE REQUIREMENTS OF SANS 667 - 1986, STANDARD SPECIFICATIONS FOR NON-PRESSURE PIPES.
2. THE BEDDING TYPE SHALL BE DESIGNED IN ACCORDANCE WITH SANS 0102 PART II - 1987 IN CONJUNCTION WITH THE CONCRETE PIPE AND PORTAL CULVERT HANDBOOK (2006 REVISION) OF THE CONCRETE MANUFACTURERS
3. THE PIPE CLASS MUST BE DETERMINED FROM THE WEIGHT OF THE PRISM OF FILL ABOVE THE CULVERT PLUS THE SNABC LOADINGS IN ACCORDANCE WITH TMH 7 (PARTS 1 & 2) "CODE OF PRACTICE FOR THE DESIGN OF HIGHWAY BRIDGES AND CULVERTS IN SOUTH AFRICA".
4. THE MAXIMUM WHEEL LOAD ALLOWED ON THE PIPE IS 90 KN WITH A MINIMUM FILL OF 300MM ON TOP OF THE PIPE.
5. CONCRETE IN CLASS A BEDDING AND IN CONCRETE ENCASEMENT SHALL BE CLASS C20/25-20.
6. CONCRETE IN CLASS A BEDDING CAN EITHER BE REINFORCED OR UN-REINFORCED DEPENDING ON THE PREVAILING CONDITIONS.
7. MINIMUM 300MM SELECTED BACKFILL OR SOILCRETE MATERIAL OVER PIPES.
8. IN CASES WHERE H < 600MM THE PIPE SHALL BE ENCASED IN CLASS C20/25-20 CONCRETE AS SHOWN

NOMINAL PIPE DIA (D) Ø	DIA OUTSIDE (Do) (approx)	SIDE ALLOWANCE PER SIDE		
		ENCASE 150min	BEDDING	
			CLASS A Do/6 150min	CLASS B Do/2.5 150max
600	700	150	150	275
750	870	150	150	350
900	1030	175	175	400
1050	1195	200	200	500
1200	1360	225	225	500
1350	1525	250	250	500
1500	1680	300	300	500



CLASS "B" BEDDING FOR HARD EXCAVATIONS (SINGLE PIPE)

N.T.S.



CLASS "B" BEDDING FOR HARD EXCAVATIONS (DOUBLE PIPE)

N.T.S.

FOR TENDER ONLY

No.	DATE	REVISION	CONSULT. ENG.
T01	29/10/2024	ISSUED FOR RETENDER	
T00	28/02/2022	ISSUE FOR TENDER	

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

DESIGNED BY
NAME
Prof. Reg. No.
CHECKED BY
NAME
Prof. Reg. No.
DRAWN BY
NAME

CONSULTANT APPROVAL
Name :
Prof. Reg. No. :
Date :

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

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
Reg No. 1998/009884/30
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

NORTHERN REGION
38 Ida Street
Menlo Park
Pretoria
0081
Private Bag X17
Lynnwood Ridge
0040
Tel: (012) 426 6200

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
FOR TRAINING AND CONSTRUCTION MANAGEMENT SERVICES FOR A COMMUNITY DEVELOPMENT PROJECT TO UPGRADE ACCESS ROADS IN AND NEAR KWAMHLANGA TOWNSHIP – MPUMALANGA PROVINCE

STRUCTURE NAME
MISCELLANEOUS
PIPE LAYING DETAIL

SCALE : AS SHOWN
SHEET 1 OF 1

PROJECT NUMBER	C.002-053-2023/1		
DRAWING LOCATION DATA	START	END	
ROUTE	-	-	
SECTION	-	-	
DRAWING km DISTANCE	-	-	
DRAWING TYPE	TYPICAL DRAWING - ROADWORKS		
BRIDGE/STRUCTURE No.			
CONSULTANT DRAWING No.	60487450-4-1-C-DA-104-T-01		VER
SANRAL DOCUMENT #			T01

SANRAL TITLE BLOCK #1648234(DWG/PDF) VERSION V11.1