



NOTES :

1. T = 60mm (20mm LEVELLING COURSE + 40mm ASPHALT) OR 100mm MAX (20mm LEVELLING COURSE + 2x40mm ASPHALT)
2. ALL SHARP EDGES TO BE CHAMFERED 20mmx20mm U.N.O.
3. READ THIS DRAWING IN CONJUNCTION WITH DRW. Nos. 21 AND 22 FOR INTERIOR PANELS TYPE 100 AND TYPE 200 RESPECTIVELY.
4. TOP RAILS AS SHOWN ON THIS DRAWING TO MATCH TYPE 100 INTERIOR PANELS.
5. GAP UNDER TOP RAIL FILLED IN TO MATCH TYPE 200 INTERIOR PANELS.
6. ALL JOINTS BETWEEN PANELS AND ALL VERTICAL DIMENSIONS SHOWN SHALL BE PERPENDICULAR TO THE ROAD SURFACE IN ALL CASES.
7. ALL EXPOSED CORNERS CHAMFERED 20mmx20mm UNLESS OTHERWISE SHOWN.
8. CONCRETE CLASS SHALL BE : D32/40/21

NOTES :

1. GENERAL
ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT CLAUSES OF SECTION C13 AND SECTION C20 OF THE STANDARD SPECIFICATIONS. THE PROJECT SPECIFICATIONS AND SHALL INCLUDE THE FOLLOWING:
1.1 STRUCTURAL MILD STEEL SHALL COMPLY WITH THE REQUIREMENTS OF SANS 1431:2005 GRADE 350W.
1.2 M20 FIXING BOLTS AND NUTS SHALL BE GRADE 8.8 TO SANS 1700 SET:1996
1.3 WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF BS 5135.
1.4 THE SURFACE PREPARATION AND CORROSION PROTECTION OF THE STRUCTURAL STEEL MEMBERS SHALL BE AS FOLLOWS:
1.4.1. BY MANUFACTURER PRIOR TO DISPATCH TO THE WORKS
(a) DESIGN, FABRICATION AND INSPECTION SHALL COMPLY WITH THE RECOMMENDATIONS OF SANS 121:2000. NOTE THE APPENDIX DEALING WITH THE EFFECT OF CHEMICAL COMPOSITION OF STEEL.
(b) AFTER MANUFACTURE THE COMPLETE ASSEMBLY, INCLUDING FIXING BOLTS, SHALL BE HEAVY DUTY HOT-DIP GALVANIZED IN ACCORDANCE WITH SANS 121:2000 TO A ZINC COAT THICKNESS OF NOT LESS THAN 105 MICRONS.
1.4.2. ON SITE
GALVANISING AT HOLES DRILLED FOR FIXING OF GUARDRAIL TO END BLOCK AND CUT ENDS OF GUARDRAILS SHALL BE REPAIRED WITH "ZINCFIX", AVAILABLE FROM THE HOT-DIP GALVANIZERS ASSOCIATION OF SOUTHERN AFRICA.

FOR TENDER PURPOSES ONLY

CONSTRUCTION RECORD (AS-BUILT)		DESIGNED BY		CONSULTANT APPROVAL		HEAD OFFICE		EASTERN REGION		ACCEPTANCE		REHABILITATION OF NATIONAL ROUTE N11 SECTION 13 FROM R518 INTERSECTION(km 8.340) TO GROOTSANDSLOOT RIVER(km 24.280)		PROJECT NUMBER		NRA N.011-130-2010/1	
WORKS CONTRACT ENGINEER		CHECKED BY		Name : Prof. Reg. No. : Date : 11/03/2021		48 Tambotie Avenue Val de Grace Pretoria 0184		58 van Eck Place Pietermaritzburg 3201		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		ROUTE SECTION		N11 13		N11 13	
SANRAL PROJECT MANAGER		DRAWN BY		Name : Prof. Reg. No. : Date : 11/03/2021		PO Box 415 Pretoria 0001 South Africa		PO Box 100410 Scottsville 3209		for the SA NATIONAL ROADS AGENCY SOC LTD.		DRAWING km DISTANCE		15.58		15.62	
ORIGINAL VERSION		CONSULT. ENG.		Name : Date : 11/03/2021		Tel: (012) 844 8000		Tel: (033) 392 8100		DITHOKENG RIVER BRIDGE B0270 AT km 15.606		DRAWING TYPE		STRUCTURES-BRIDGES		BRIDGE/STRUCTURE No.	
REVISION		CONSULT. ENG.		Name : Date : 11/03/2021		Tel: (012) 844 8000		Tel: (033) 392 8100		END BLOCK CONCRETE DETAIL		CONSULTANT DRAWING No.		BCD/B0270/18		SANRAL DOCUMENT #	
11/03/2021		11/03/2021		11/03/2021		11/03/2021		11/03/2021		SCALE : AS SHOWN		SHEET 18 OF 22		V0		V0	