ENDBLOCK CONNECTION NOTES

1. **GENERAL NOTES FOR ENDBLOCK CONNECTION:**
   ALL WORK SHALL COMPLY WITH THE RELEVANT CLAUSES OF CHAPTERS 13, 14 & 20 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE WORKS FOR SOUTH AFRICAN ROAD AUTHORITIES, THE PROJECT SPECIFICATIONS AND SHALL INCLUDE THE FOLLOWING:

1.1. STRUCTURAL MILD STEEL SHALL COMPLY WITH THE REQUIREMENTS OF SANS 50025 GRADE S275JR.

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 BSEN 1011.

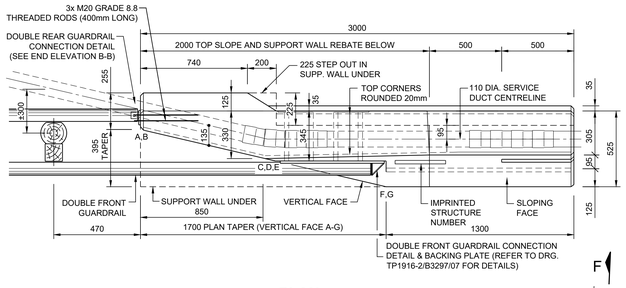
1.4. THE SURFACE PREPARATION AND CORROSION PROTECTION OF THE STRUCTURAL STEEL MEMBERS SHALL BE AS FOLLOWS:

1.4.1. BY MANUFACTURER PRIOR TO DISPATCH OF WORKS:
(a) DESIGN, FABRICATION AND INSPECTION SHALL COMPLY WITH THE RECOMMENDATION OF SANS 121:2000. NOTE THE APPENDIX DEALING WITH THE EFFECT OF CHEMICAL COMPOSITION OF STEEL.

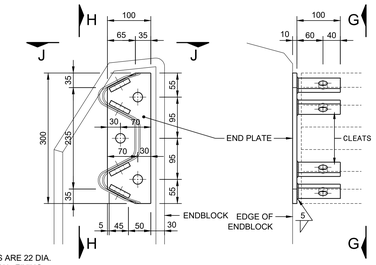
(b) AFTER MANUFACTURE THE COMPLETE ASSEMBLY, INCLUDING FIXING BOLTS, SHALL BE HEAVY DUTU HOT-DIP GLAVANISED IN ACCORDANCE WITH SANS 121:2000 TO A ZINC COAT THICKNESS OF NOT LESS THAN 105 MICRONS.

1.4.2. ON SITE:
GALVANISING AT HOLES DRILLED FOR FIXING OF GUARDRAILS TO END BLOCK AND CUT ENDS OF GUARDRAILS SHALL BE REPAIRED WITH WITH PRODUCTS APPROVED BY THE HOT-DIP GALVANISERS ASSOCIATION OF SOUTHERN AFRICA.

NOTE
REFER TO DETAIL DRAWING TP1916-2/B3297/02 FOR GENERAL AND CONCRETE NOTES.



PLAN
SCALE 1:15

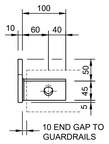


ALL HOLES ARE 22 DIA. FOR 20 DIA. FIXING BOLTS AND THREADED ANCHORS

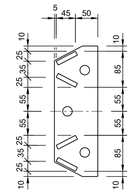
ELEVATION G - G
SCALE 1:5

ELEVATION H - H
SCALE 1:5

MATERIALS
END PLATE : 100x10 FLAT BAR
CLEATS : 50x10 FLAT BAR
(SEE ALSO NOTE 8.2)



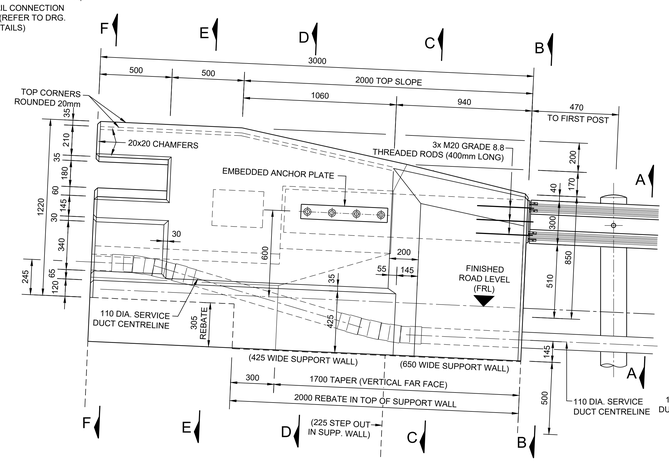
PLAN J - J
SCALE 1:5



CLEAT SETTING OUT DIMENSIONS ARE PROVISIONAL AND SHALL BE CONFIRMED WITH THE ACTUAL GUARDRAIL SECTION TO BE USED

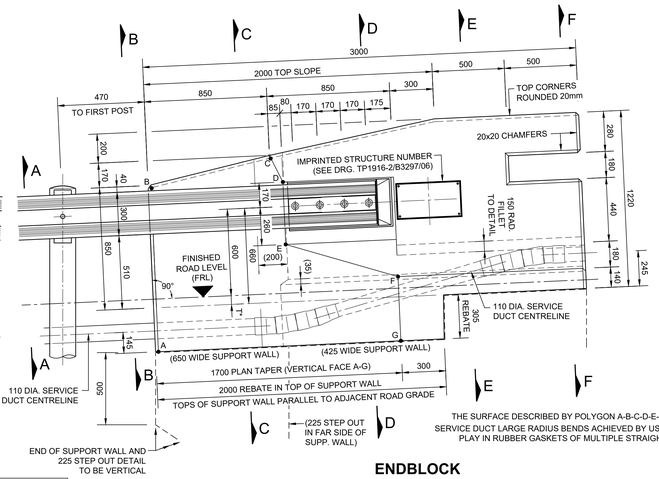
CLEAT SETTING OUT DETAILS
SCALE 1:5

REAR GUARDRAIL TO ENDBLOCK CONNECTION DETAILS



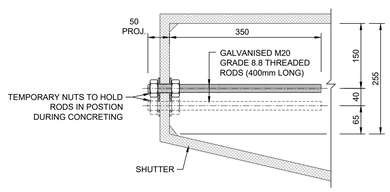
ENDBLOCK OUTSIDE ELEVATION
SCALE 1:15

*T = 60mm MIN (20mm LEVELING COURSE + 40mm ASPHALT) OR 100mm MAX (20mm LEVELING COURSE + 2x40mm ASPHALT).

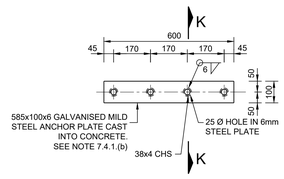


THE SURFACE DESCRIBED BY POLYGON A-B-C-D-E-F-G-A IS PLANAR. SERVICE DUCT LARGE RADIUS BENDS ACHIEVED BY USING ACCUMULATIVE PLAY IN RUBBER GASKETS OF MULTIPLE STRAIGHT COUPLERS.

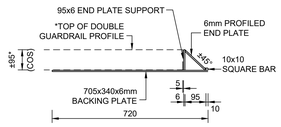
ENDBLOCK INSIDE ELEVATION
SCALE 1:15



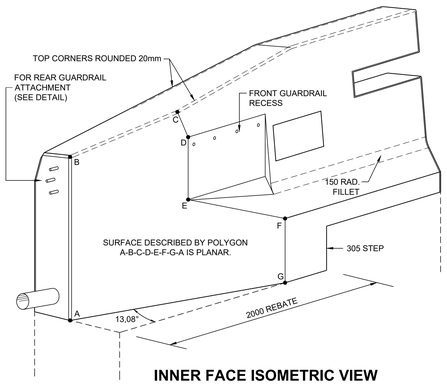
TYPICAL PLAN SECTION THROUGH END OF ENDBLOCK
SCALE 1:5



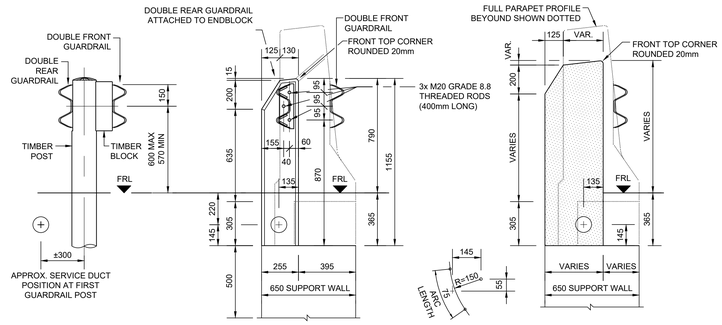
ANCHOR PLATE DETAIL
SCALE 1:10



SECTION L - L
SCALE 1:10



INNER FACE ISOMETRIC VIEW
N.T.S.

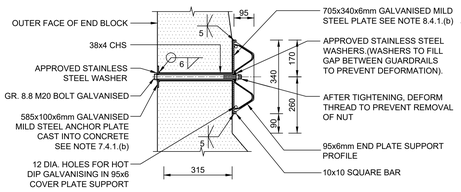


SECTION A - A
SCALE 1:15

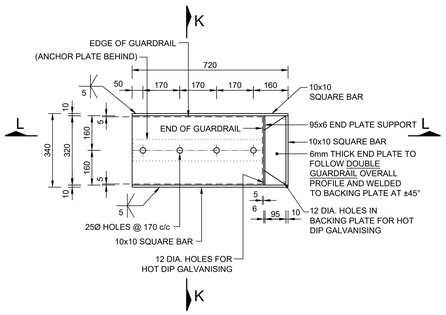
END ELEVATION B - B
SCALE 1:15

FILLET DETAIL
N.T.S.

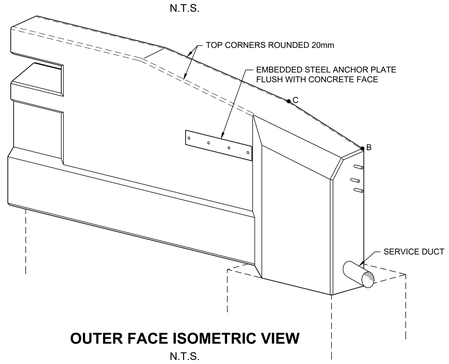
SECTION C - C
SCALE 1:15



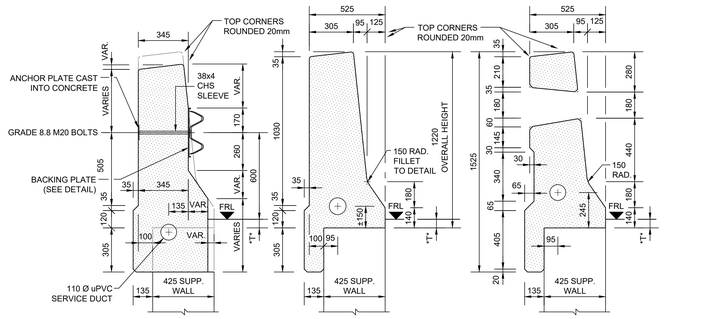
SECTION K - K
SCALE 1:10



BACKING PLATE DETAIL
SCALE 1:10



OUTER FACE ISOMETRIC VIEW
N.T.S.



SECTION D - D
SCALE 1:15

SECTION E - E
SCALE 1:15

SECTION F - F
SCALE 1:15

No.	DATE	REVISION	CONSULT. ENG.
V2	12/11/2020	SCANNED ORIGINAL WITH SIGNATURE	KG MALCOMSON
V1	12/11/2020	ORIGINAL VERSION	KG MALCOMSON

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

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Prof. Reg. No. : 880542
Date : 02 / 12 / 2019

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Reg. No. 1998/00595/06
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

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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:

MSBBR: REPAIRS TO BRIDGE PARAPETS; R40 NELSPRUIT B0064 AND R33 PIET RETIEF B3297

EMERGENCY REPAIR FOR BRIDGE B3297 ON R033/06N AT km 27.5

ENDBLOCK CONCRETE DETAILS

SCALE : AS SHOWN | **SHEET 05 OF 10**

PROJECT NUMBER	NRA X.002-063-2018/01-C05	
DRAWING LOCATION DATA	START	END
ROUTE	R033	R033
SECTION	06N	06N
DRAWING km DISTANCE	27.5	27.5
DRAWING TYPE	STRUCTURES-BRIDGES	
BRIDGE/STRUCTURE No.	B3297	
CONSULTANT DRAWING No.	TP1916-2/B3297/05	VER
SANRAL DOCUMENT #	18972235	V2

DRAWING No :- TP1916-2/B3297/05