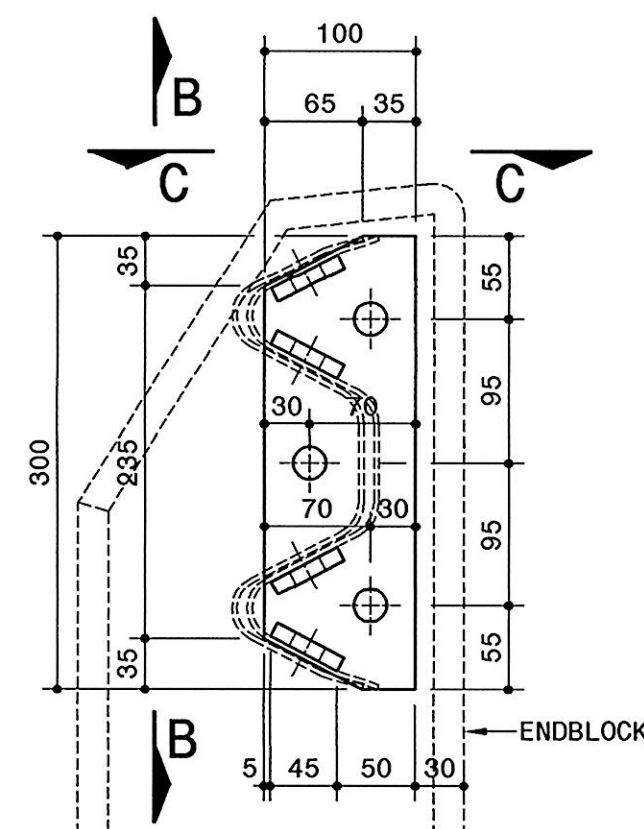
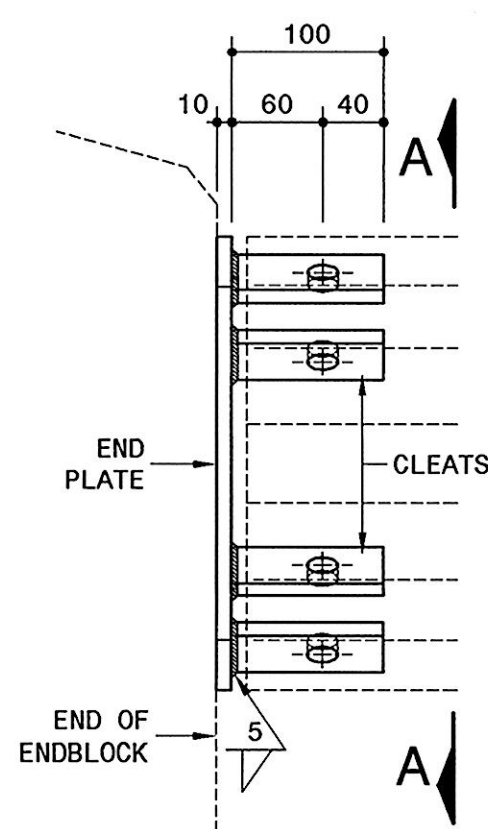




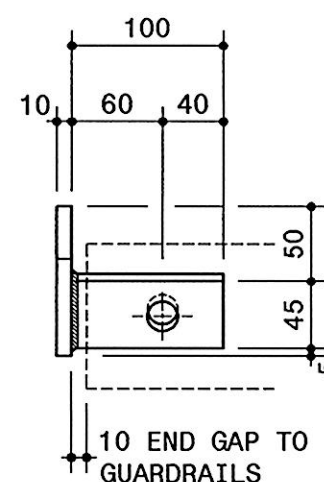
ELEVATION A-A
SCALE 1:5

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



ELEVATION B-B
SCALE 1:5

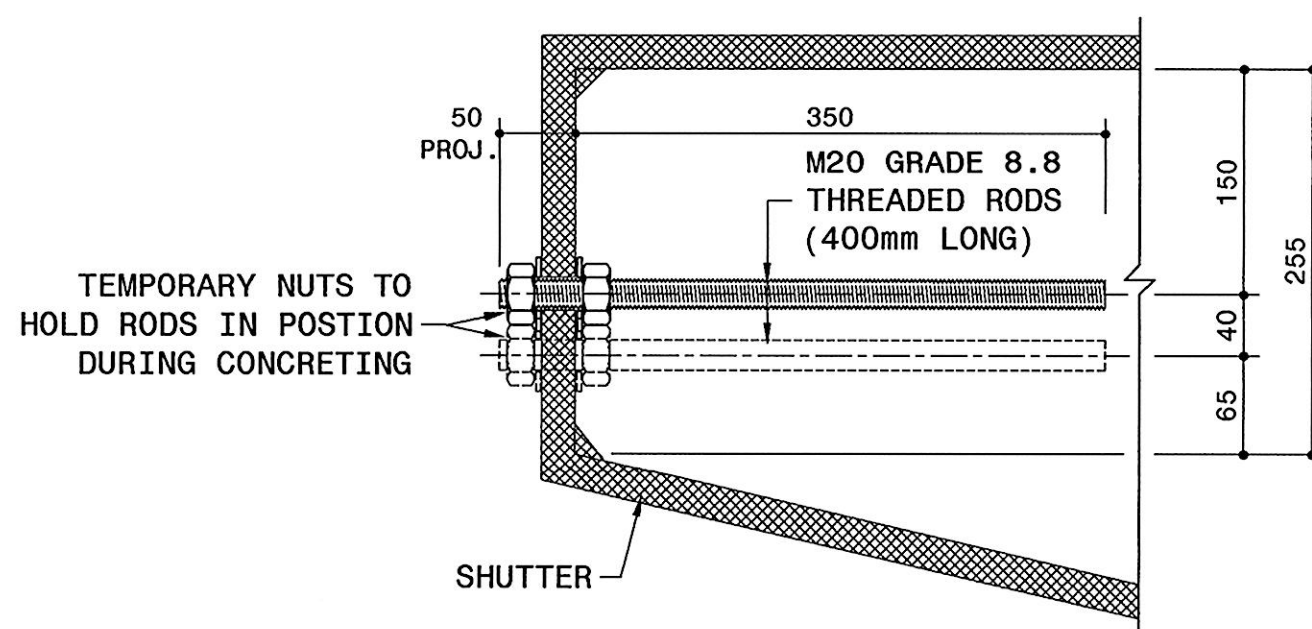
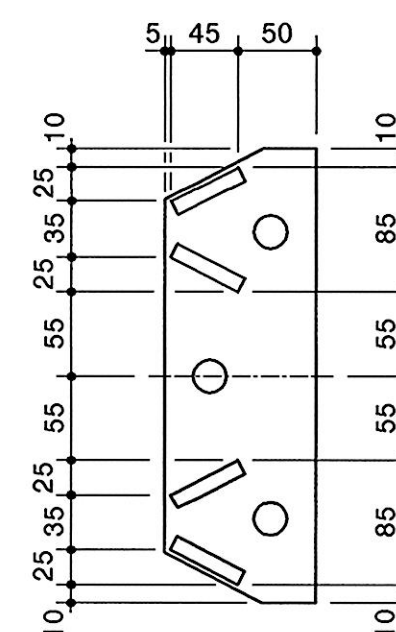
MATERIALS
END PLATE : 100x10 FLAT BAR
CLEATS : 50x10 FLAT BAR
(SEE ALSO NOTE 1.2)



PLAN C-C
SCALE 1:5

CLEAT SETTING OUT DETAILS
SCALE 1:5

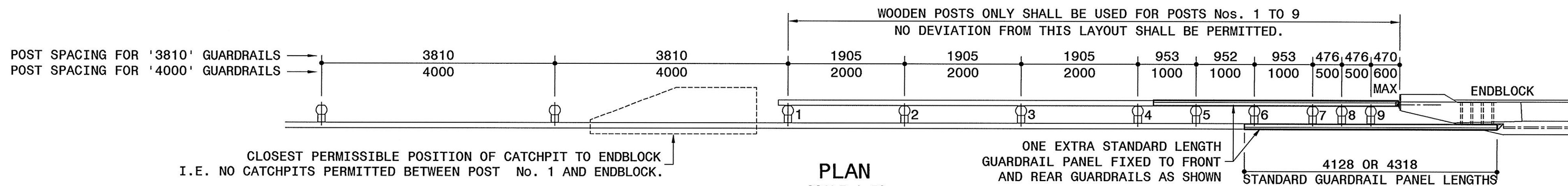
CLEAT SETTING OUT DIMENSIONS
ARE PROVISIONAL AND SHALL BE
CONFIRMED WITH THE ACTUAL
GUARDRAIL SECTION TO BE USED



TYPICAL PLAN SECTION THRO' END OF ENDBLOCK
SCALE 1:5

(SEE DWG. Nos. TD-S-P-1003-1 AND TD-S-P-1003-2)

REAR GUARDRAIL TO ENDBLOCK CONNECTION DETAILS



PLAN
SCALE 1:50

SHOWING POST SPACING AND GUARDRAIL ARRANGEMENT AT BOTH BRIDGE APPROACHES AND DEPARTURES.
(READ IN CONJUNCTION WITH DWG. No. TD-R-GR-200-V2)

GUARDRAIL APPROACH & DEPARTURE DETAILS

NOTES

1. GENERAL

ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE
RELEVANT CLAUSES OF SECTION 6700 AND SECTION 5400 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, THREADED ANCHOR RODS 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.

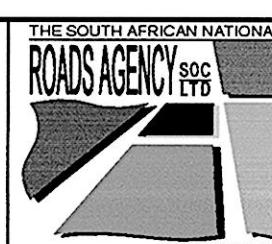
(b) AFTER MANUFACTURE THE COMPLETE ASSEMBLY, INCLUDING
FIXING BOLTS, SHALL BE HEAVY DUTY HOT-DIP
GALVANIZED IN ACCORDANCE WITH SANS 121:2000 TO A
ZINC COAT THICKNESS OF NOT LESS THAN 105 MICRONS.

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.

No.	DATE	REVISION	APPROVED
V1	2012-05-23	ORIGINAL VERSION	

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

APPROVED
Date: 2012-05-25

TYPICAL DRAWINGS - STRUCTURES
F-SHAPE PARAPET
REAR GUARDRAIL TO ENDBLOCK CONNECTION
AND GUARDRAIL APPROACH & DEPARTURE DETAILS

SANRAL DOC. No. (PDF)
223301
SANRAL DOC. No. (DWG)
223302
SANRAL DRAWING No.
TD-S-P-5003-1-V1

1m 0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m
ORIGINAL SCALE : 1:100

TD-S-P-5003-1-V1