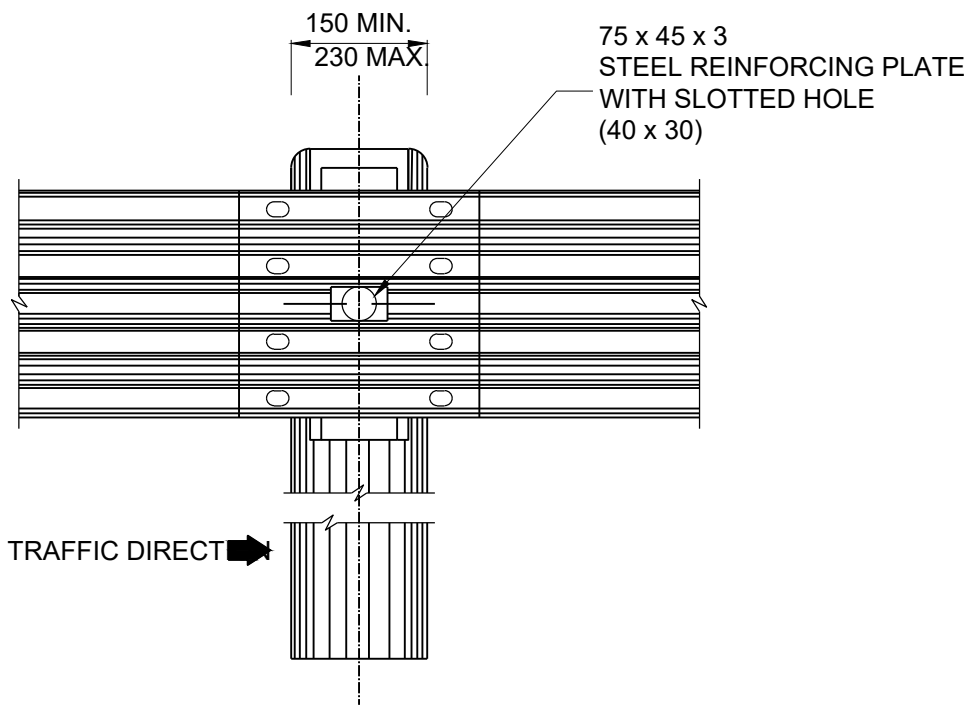
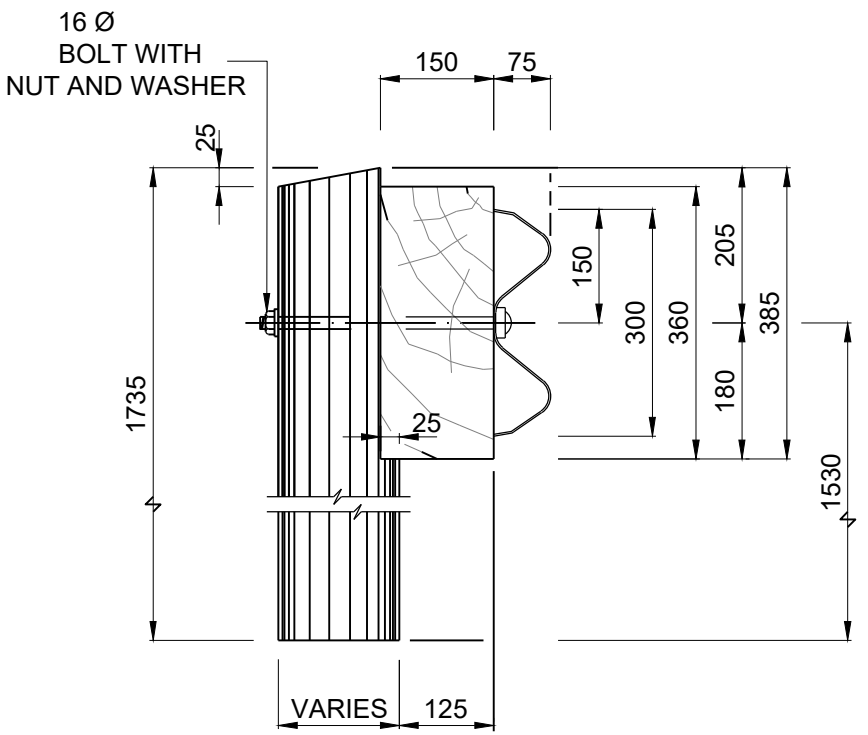


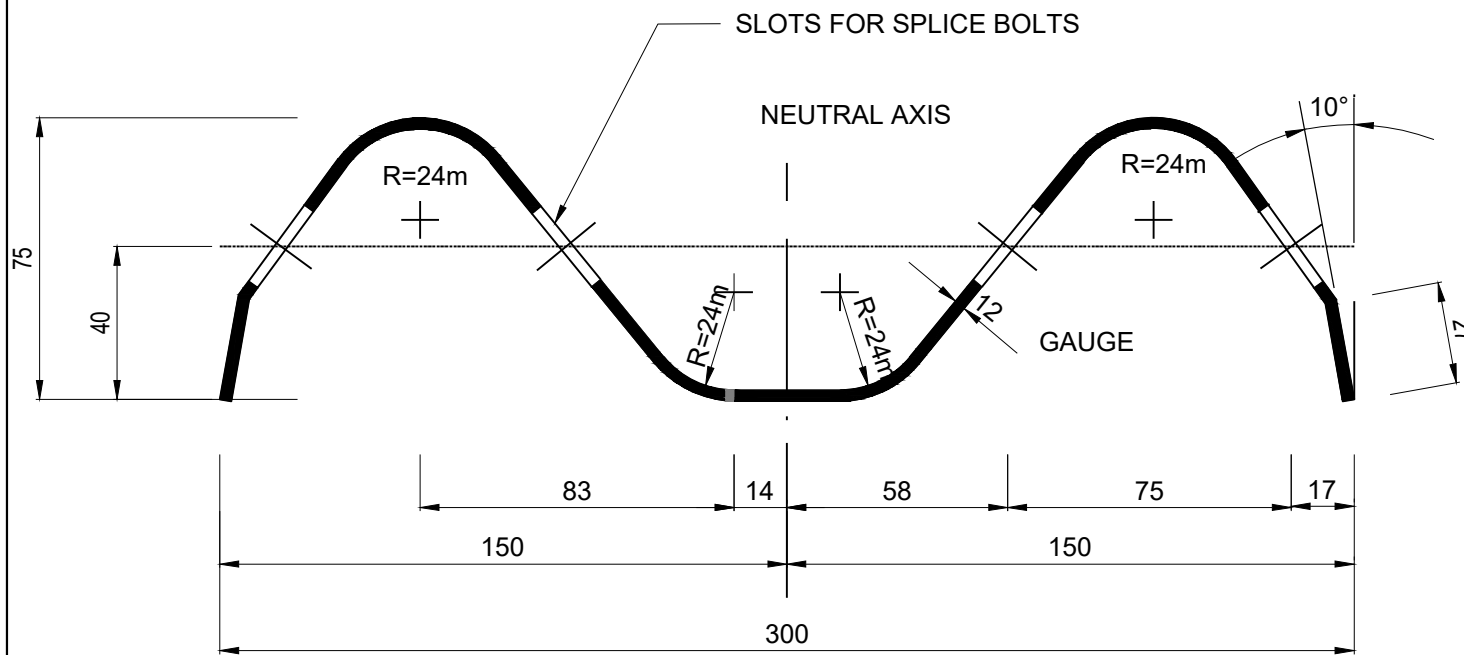
TYPICAL GUARDRAIL SECTION
SCALE: 1 : 10



DETAIL A : FRONT ELEVATION
NORMAL SPACING OF POSTS
SCALE: 1 : 10

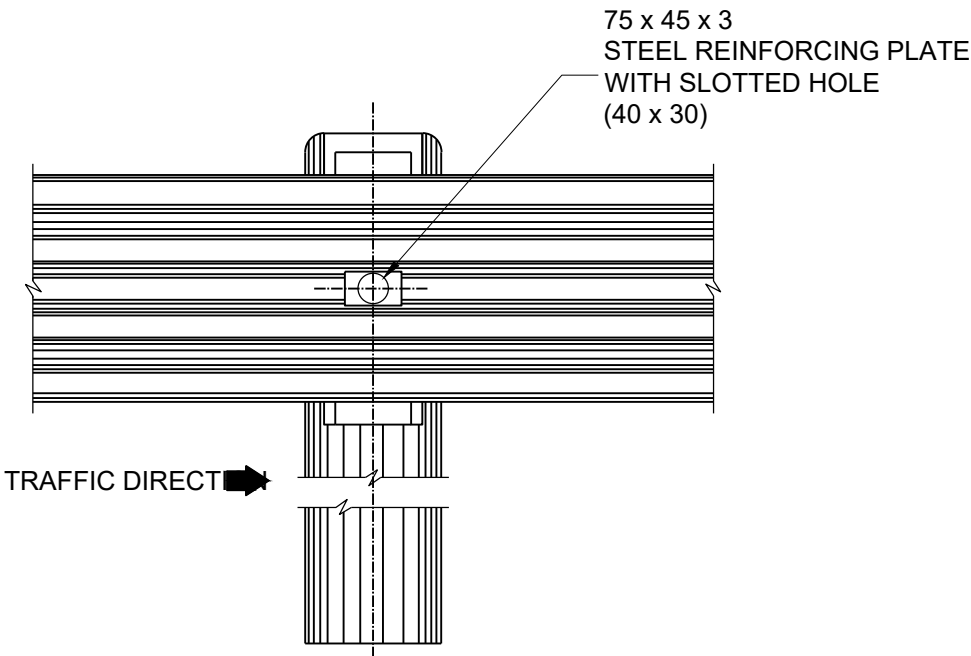


ELEVATION OF GUARDRAIL
SCALE: 1 : 10

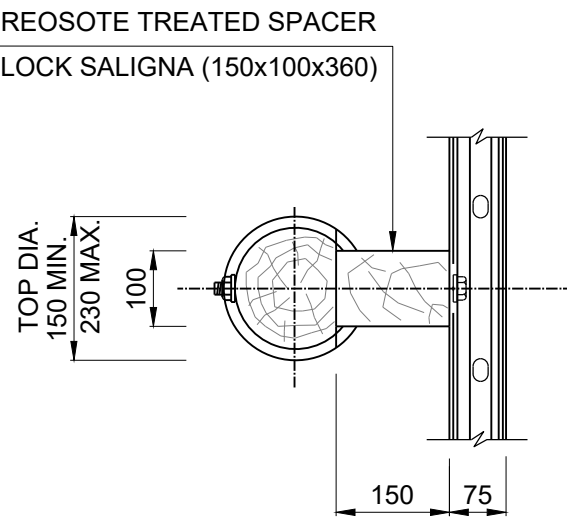


SECTION THROUGH GUARDRAIL
SCALE: 1 : 2

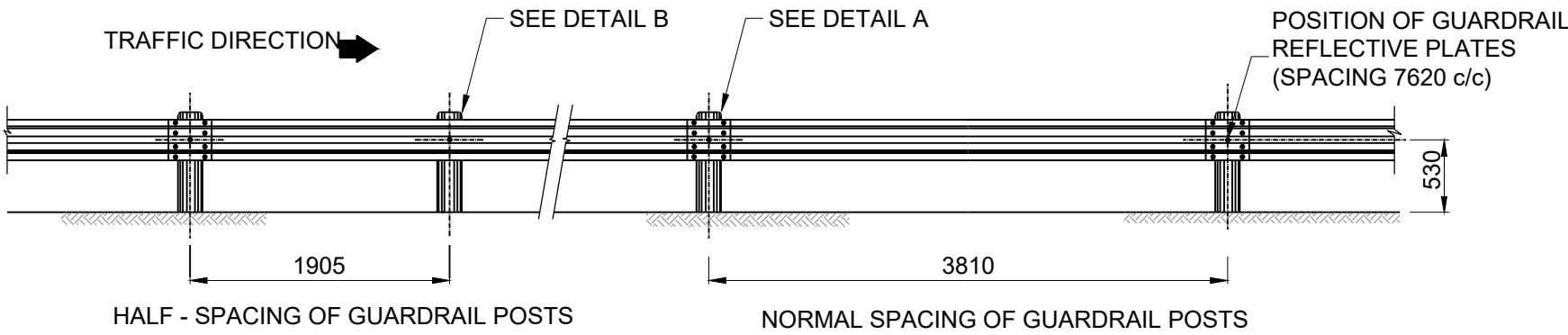
NOTE:
1. GUARDRAILS SHALL ONLY BE PLACED WHERE REQUIRED BY THE ENGINEER.
2. ALL GUARDRAILS MUST BE GALVANIZED AS SPECIFIED (NOT PAINTED).



DETAIL B : FRONT ELEVATION
HALF SPACING OF POSTS
SCALE: 1 : 10



PLAN
SCALE: 1 : 10



SPACING OF POSTS AND POSITION OF REFLECTIVE PLATES
SCALE: 1 : 50

SPECIFICATIONS

- BOLT:**
HIGH TENSILE STEEL 16 Ø
- WASHERS:**
3mm THICK
- SPACER BLOCK:**
PINE OR GUM, PRESSURE IMPREGNATED IN ACCORDANCE WITH SANS 100005 WITH CREOSOTE WHICH COMPLIES WITH SANS 538 OR 539
- POSTS:**
150 Ø MIN - 230 Ø MAX, SALIGNA (BLUEGUM), PRESSURE IMPREGNATED IN ACCORDANCE WITH SANS 100005 WITH CREOSOTE WHICH COMPLIES WITH SANS 538 OR SANS 539.

- GALVANIZING:**
GUARDRAILS:(SANS 121/ISO 1461):TYPE A1 ARTICLES.
BOLTS AND WASHERS: (SANS 121/ISO 1461) TYPE C1 ARTICLES.
- TIMBER POSTS:**
POSTS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 457 AND SHALL CARRY THE SANS MARK.
- REFLECTIVE PLATES:**
THE OUTER SURFACES SHALL BE COATED WITH ENGINEERING GRADE RETRO-REFLECTIVE MATERIAL WHICH COMPLIES WITH THE PROVISIONS OF CKS 191 IN THE COLOURS SHOWN ON DRAWING TD-R-GR-002

CONSTRUCTION RECORD (AS-BUILT)				DESIGNED BY				CONSULTANT APPROVAL				HEAD OFFICE				NORTHERN REGION				ACCEPTANCE				PROJECT DESCRIPTION				PROJECT NUMBER			
WORKS CONTRACT ENGINEER				NAME:				Name:				48 Tamboite Avenue Val de Grace Pretoria 0184				38 Ida Street Menlo Park Pretoria 0081				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				PERIODIC MAINTENANCE ON NATIONAL ROUTE 2 SECTION 21X FROM HARDING (KM 60.1) TO IZINGOLWENI (KM 102.0)				DRAWING LOCATION DATA			
Name:				Date:				Date:				PO Box 415 Pretoria 0001 South Africa				Private Bag X17 Lynnwood Ridge 0040								ROUTE				START			
Date:				CHECKED BY				Date:				Tel: (012) 844 8000				Tel: (012) 426 6200								SECTION				N2			
SANRAL PROJECT MANAGER				NAME				Name:				Reg No: 100000000000000000												DRAWING TYPE				21X			
Name:				Prof. Reg. No.				Date:																BRIDGE/STRUCTURE No.				60.1			
Date:				DRAWN BY				Date:																CONSULTANT DRAWING No.				102.0			
No.				DATE				NAME																SANRAL DOCUMENT #				D812/2774/T			
REVISION				CONSULT. ENG.				SIGN :				DATE :												SCALE :				AS SHOWN			
																								SHEET				1			
																								OF				2			