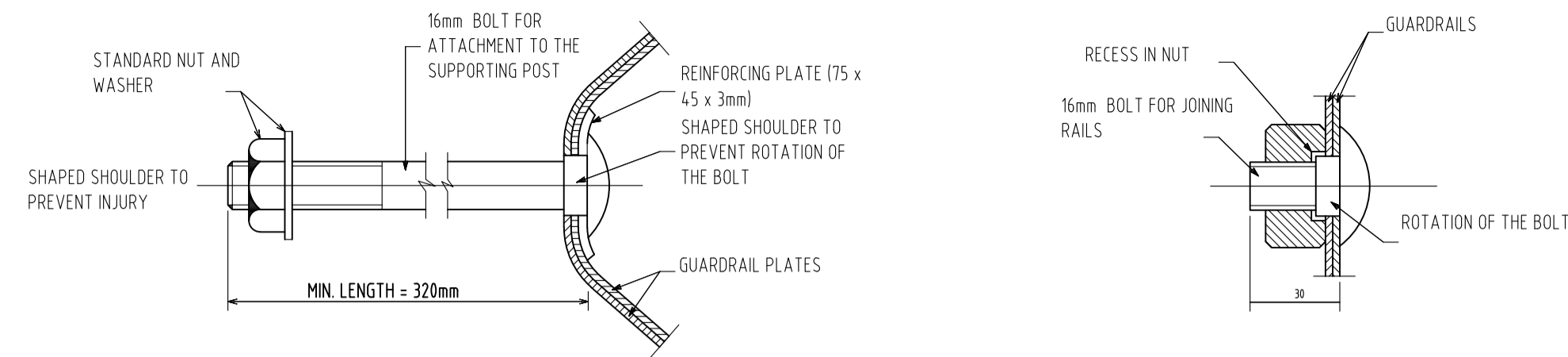
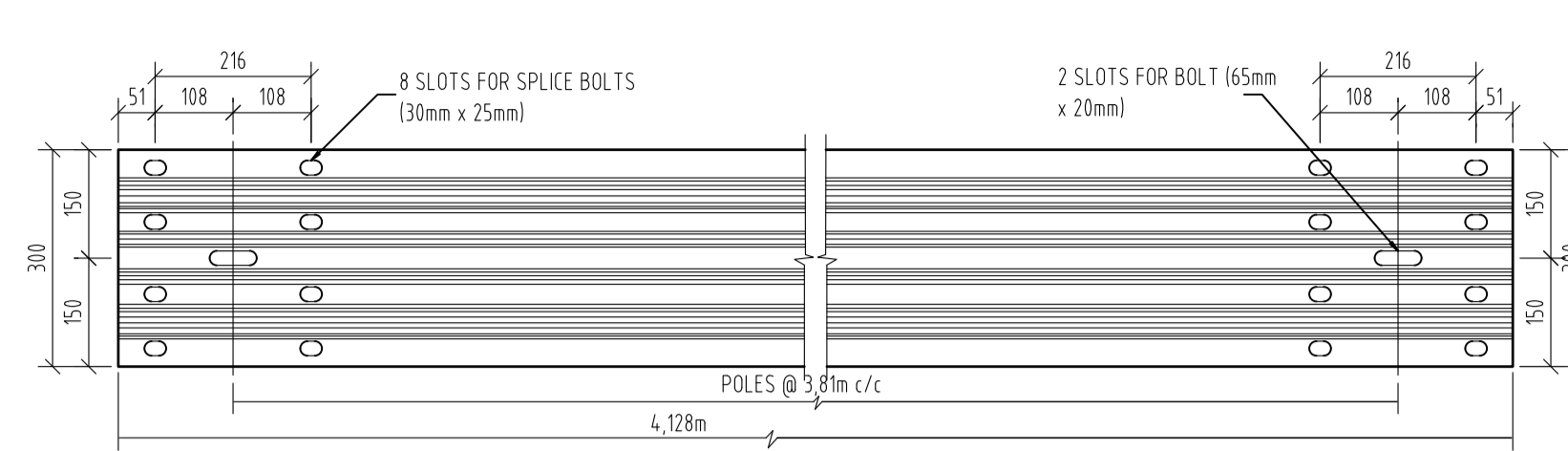


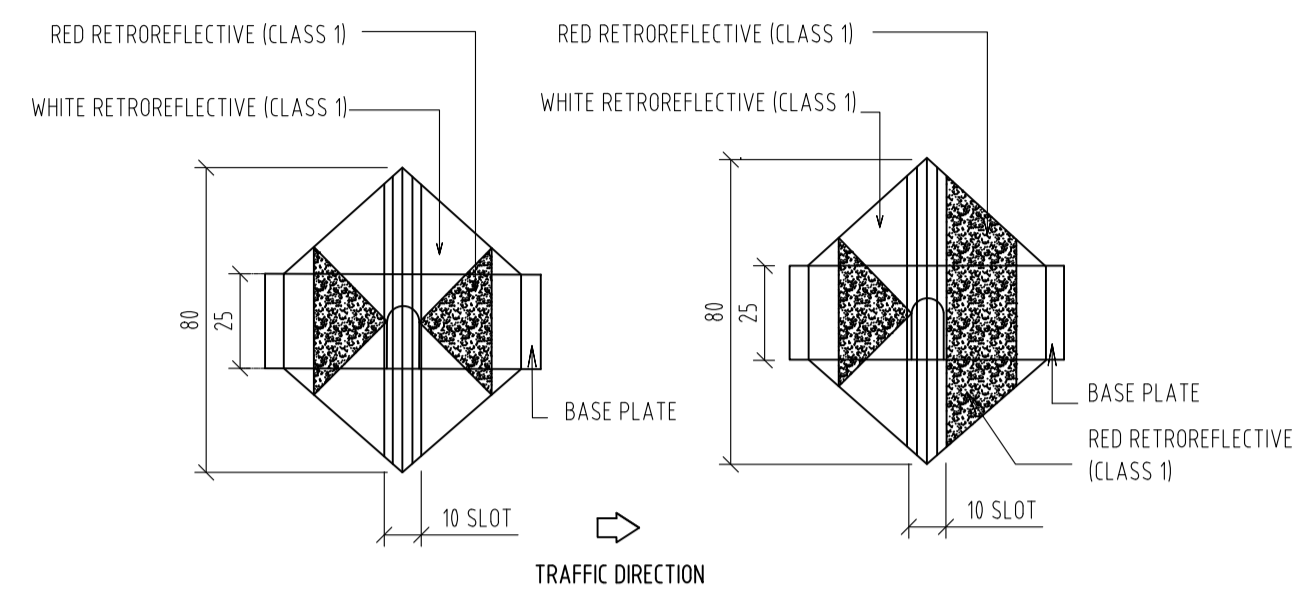
SECTION PLAN  
DETAIL OF BASEPLATE



TYPICAL BOLTS  
(SCALE- 1:2)



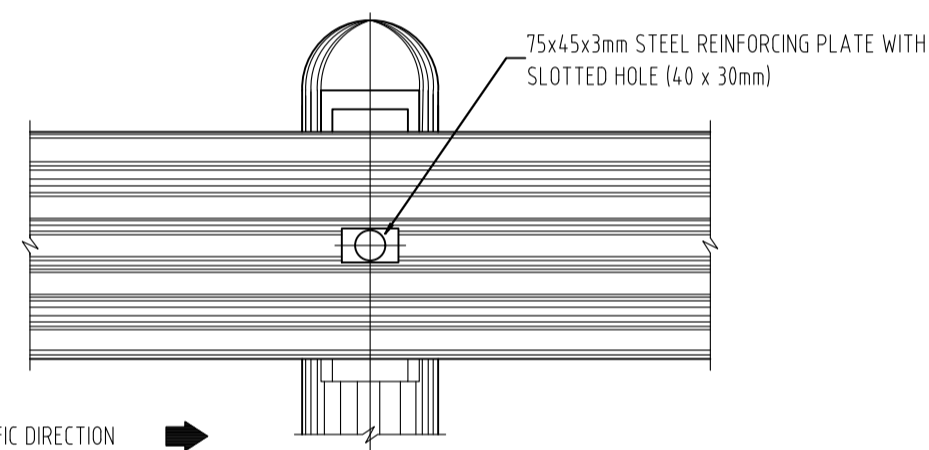
TYPICAL GUARDRAIL SECTION  
(SCALE- 1:10)



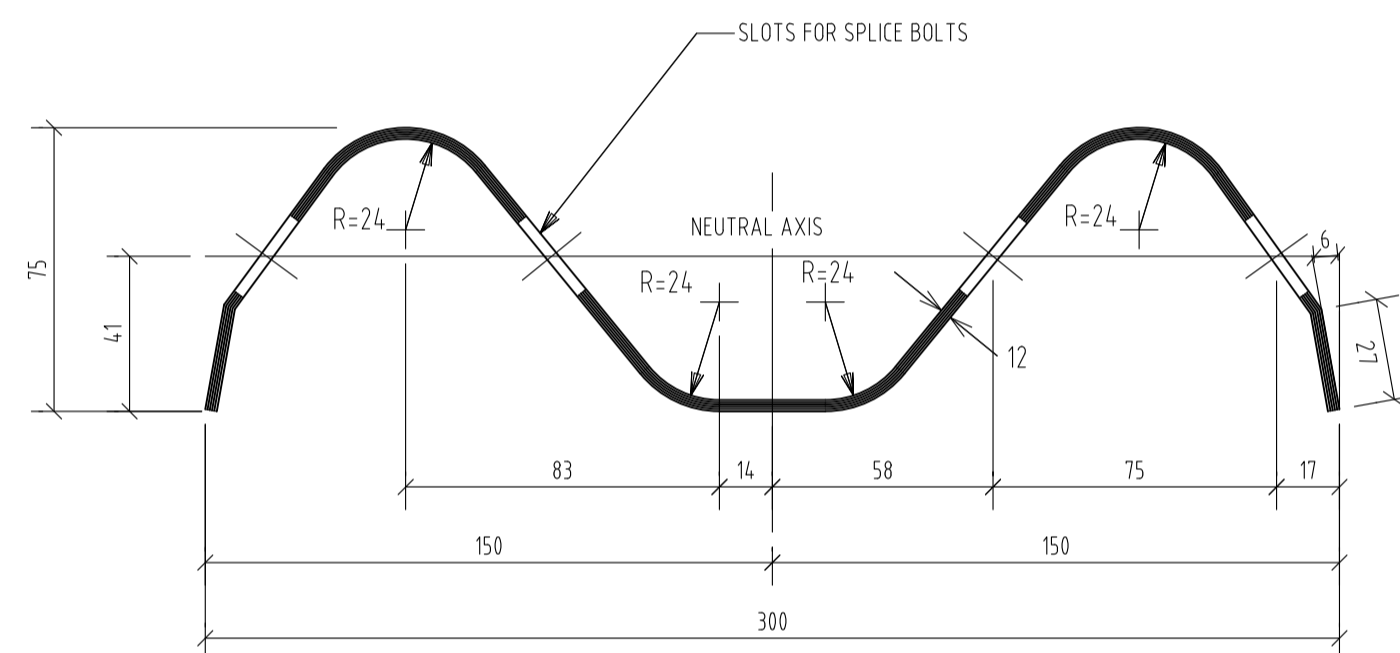
FRONT ELEVATION: TYPE D1 (A)  
FRONT ELEVATION: TYPE D1 (B)

DETAIL OF GUARDRAIL REFLECTIVE PLATES  
(SCALE- 1:2)

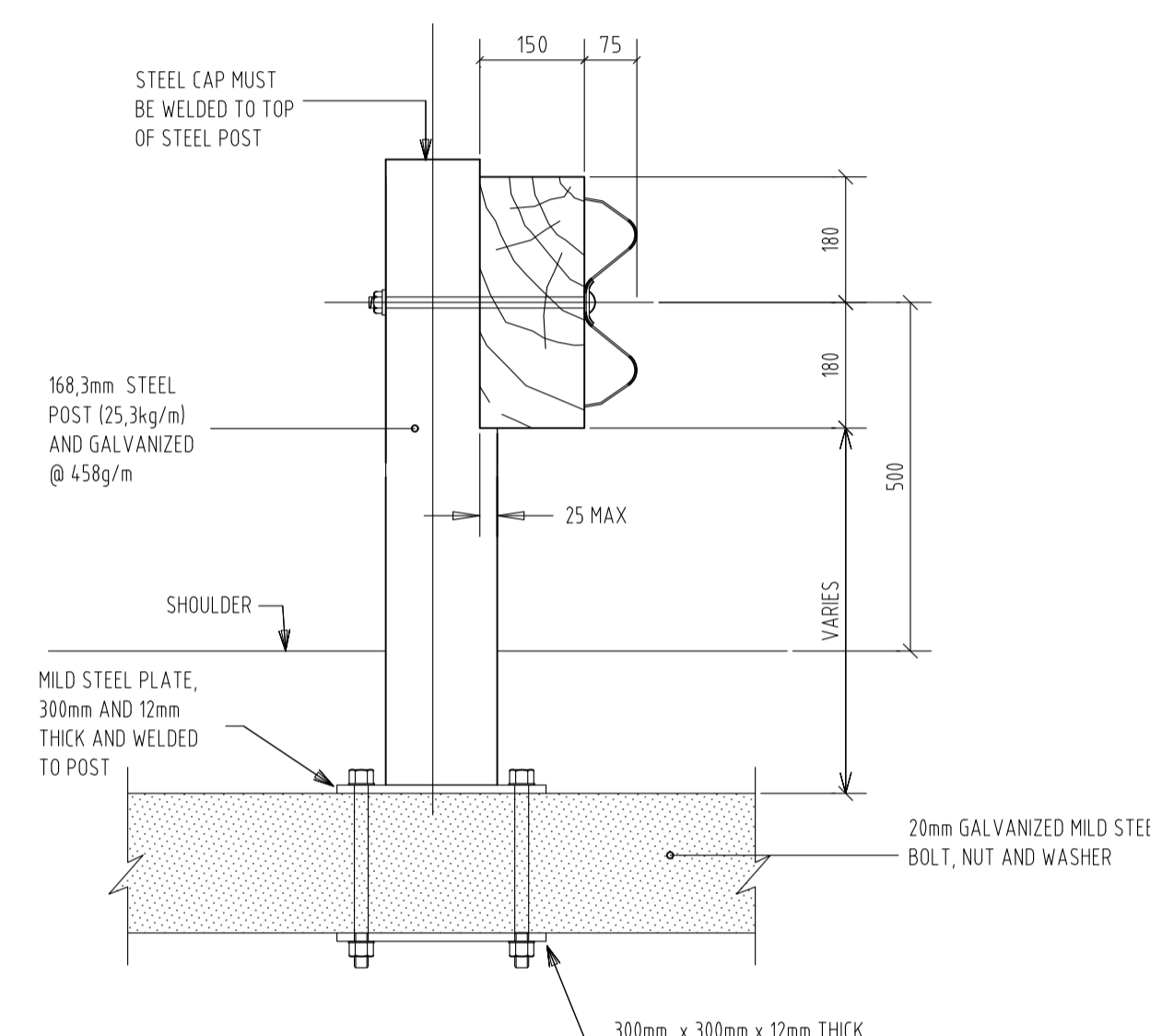
**NOTE**  
1. GUARDRAILS WILL ONLY BE PLACED WHERE REQUIRED BY THE ENGINEER.  
2. ALL GUARDRAILS MUST BE GALVANIZED AS SPECIFIED (NOT PAINTED).



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

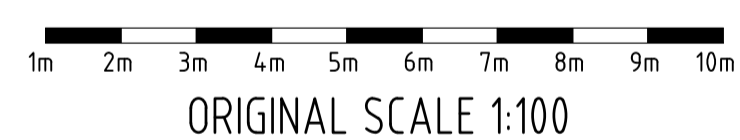


SECTION THROUGH GUARDRAIL  
(SCALE- 1:2)

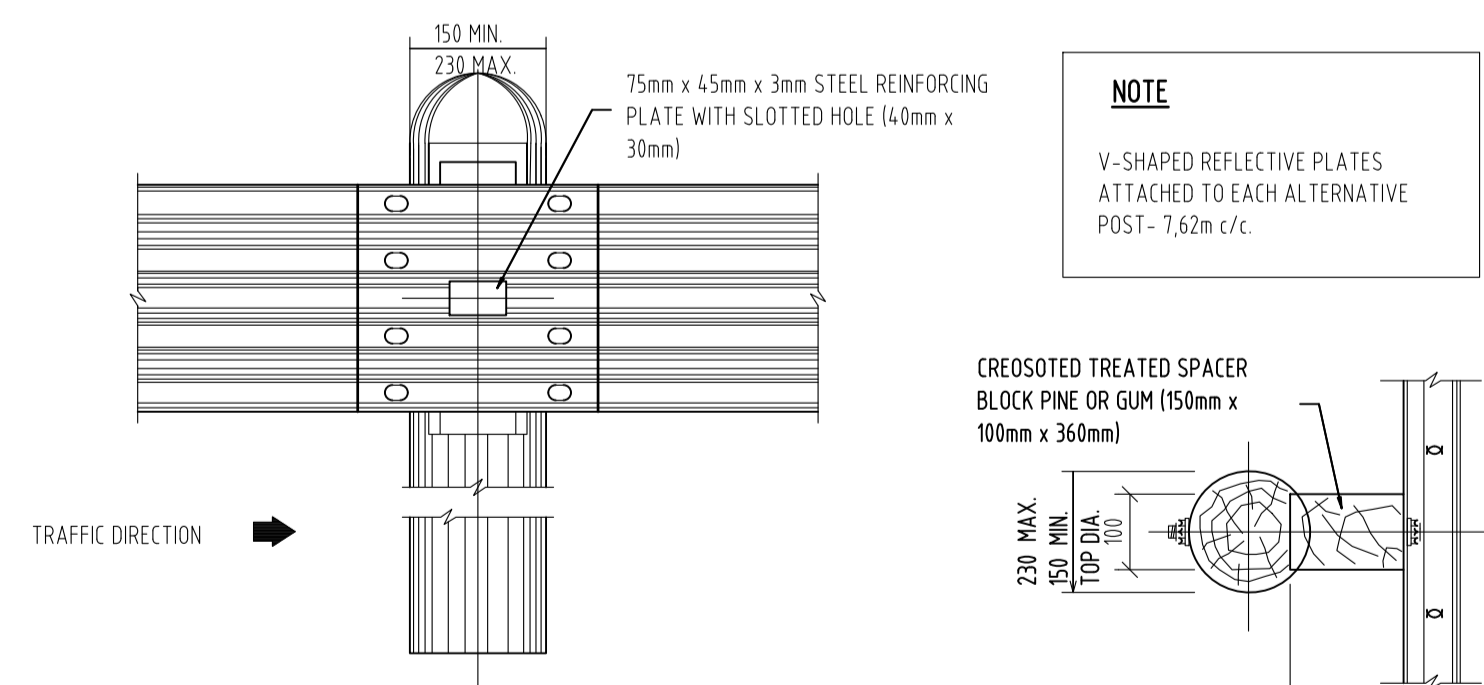


DETAIL OF STEEL GUARDRAIL POST  
(SCALE- 1:10)

- SPECIFICATIONS**
- BOLT: HIGH TENSILE STEEL 16mm
  - WASHERS: 3mm THICK
  - SPACER BLOCK: PINE OR GUM, PRESSURE IMPREGNATED WITH CREOSOTE WHICH COMPLIES WITH SABS 538 OR 539
  - POSTS: 150mm MIN - 230mm MAX, PINE OR GUM, PRESSURE IMPREGNATED WITH CREOSOTE WHICH COMPLIES WITH SABS 538 OR 539
  - GALVANIZING: GUARDRAILS SABS 763 TYPE A1 ARTICLES. BOLTS AND WASHERS: SABS 763 TYPE C1 ARTICLES
  - TIMBER POSTS: POSTS SHALL COMPLY WITH THE REQUIREMENTS OF SABS AND SHALL CARRY THE SABS MARK.
  - CREOSOTE TREATMENT: TIMBER POSTS AND SPACER BLOCKS SHALL BE TREATED IN ACCORDANCE WITH SABS 05 WITH CREOSOTE WHICH COMPLIES WITH SABS 538 OR 539F.
  - 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 THIS DRAWING.

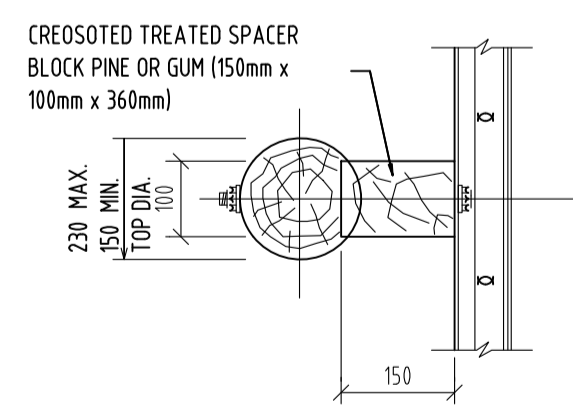


ORIGINAL SCALE 1:100

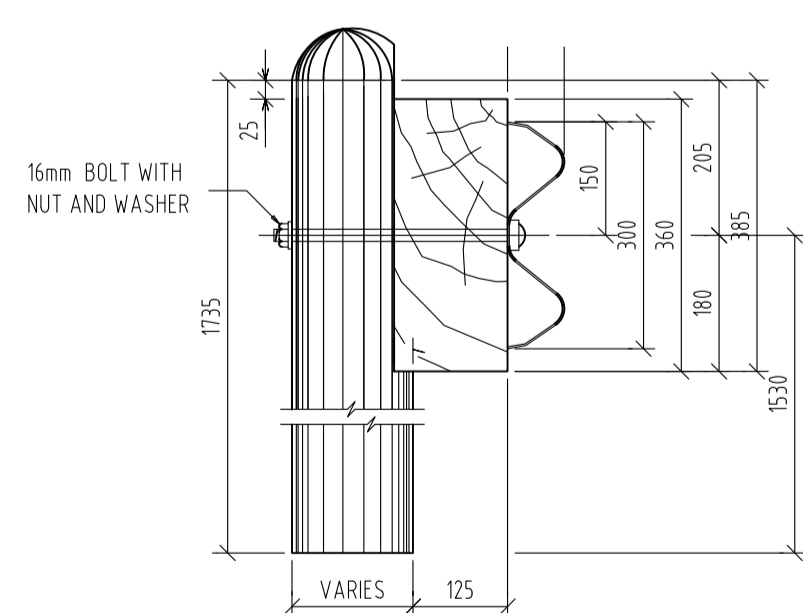


DETAIL A: FRONT ELEVATION  
NORMAL SPACING OF POSTS  
(SCALE- 1:10)

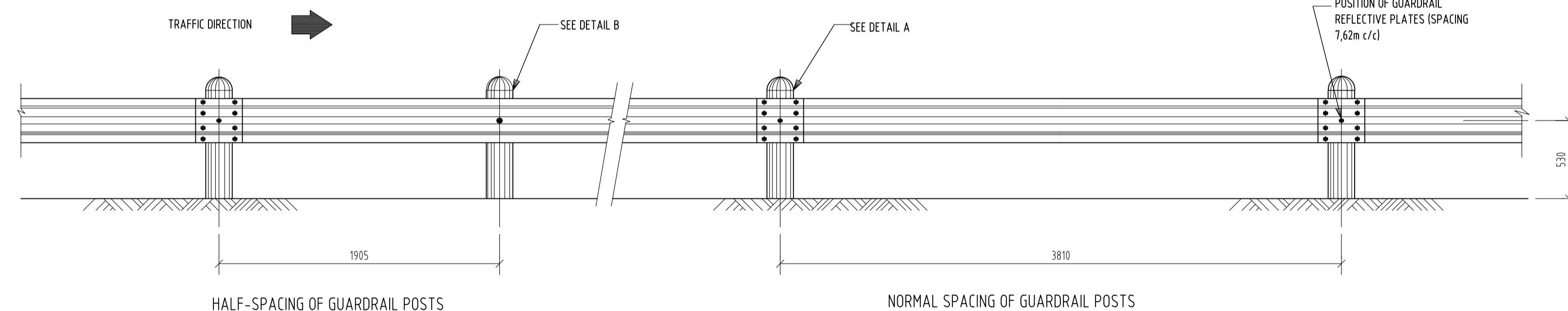
**NOTE**  
V-SHAPED REFLECTIVE PLATES ATTACHED TO EACH ALTERNATIVE POST - 7,62m c/c



PLAN  
(SCALE- 1:10)



ELEVATION OF GUARDRAIL  
(SCALE- 1:10)



SPACING OF POSTS AND POSITION OF REFLECTIVE PLATES  
(SCALE- 1:25)

FOR PRELIMINARY				DESIGNED BY	SM NXUMALO (Pr. Technician)	PALABORA COPPER (Pty) LIMITED	HLAYELENI CONSULTING ENGINEERS	PLM 00/2019		27 of 37
				CHECKED BY	LG NGCIBO (Pr. Technologist)	PO Box 05 1 Copper Road 1389 Phalaborwa, Limpopo	12 BICCARD STREET BICCARD HEIGHTS OFFICE 17 POLOKWANE 0699	UPGRADING OF P43/3 ROAD Ga-SELWANA ACCESS ROAD		AS SHOWN
REVISION 1				DRAWN BY	F BALOYI (Candidate Technician)	Tel: 015 780 2911 Fax: 015 780 2093	CLIENT	DATE	CONSULTANTS DRAWING NUMBER HCE 000/2019/169	
CONSULT DIR				CHECKED BY	SM NXUMALO (Pr. Technician)	HBIS GROUP PALABORA MINING COMPANY	CONSULTING ENGINEER	DATE	CLIENT DRAWING NUMBER PLM 000/2019/169	