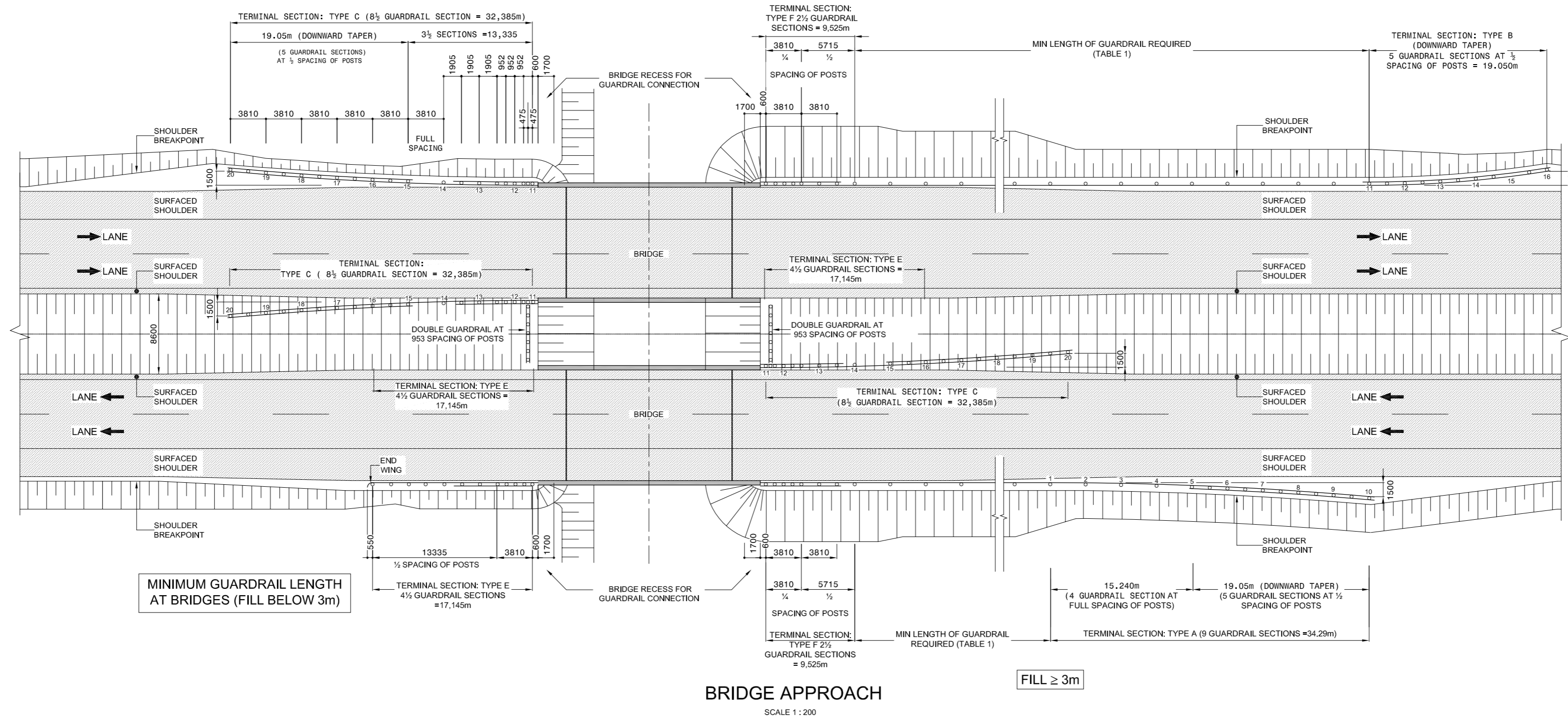


GUARDRAIL PLACING DETAILS AT BRIDGE APPROACHES AND HIGH FILL (DUAL CARRIAGEWAY)



SETTING OUT POSITIONS OF GUARDRAIL POSTS

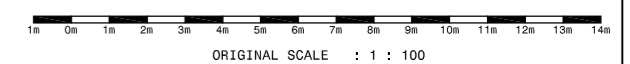
APPROACH SIDE	TERMINAL SECTION TYPE A			TERMINAL SECTION TYPE C		
	POST No.	HORIZONTAL OFF-SET X (mm)	VERTICAL OFF-SET Y (mm)	POST No.	HORIZONTAL OFF-SET X (mm)	VERTICAL OFF-SET Y (mm)
	1	0	0	11	0	0
	2	19	0	12	0	0
	3	74	0	13	23	0
	4	167	0	14	94	0
	5	296	0	15	211	0
	6	463	36	16	375	36
	7	667	144	17	566	144
	8	907	324	18	844	324
	9	1185	576	19	1148	576
	10	1500	900	20	1500	900

TABLE 1

MIN LENGTH OF GUARDRAIL REQUIRED (EXCLUDING TERMINAL SECTIONS)	
DESIGN SPEED km/h	MIN LENGTH
60	12 SECTIONS (45.72m)
70	14 SECTIONS (53.34m)
80	16 SECTIONS (60.96m)
90	20 SECTIONS (76.20m)
100	23 SECTIONS (87.63m)
110	27 SECTIONS (102.87m)
120	29 SECTIONS (110.49m)
130	32 SECTIONS (121.92m)
140	35 SECTIONS (133.35m)

NOTE:

- TYPE E AND F POSTS DO NOT REQUIRE OFF-SET DETAILS.
- DOUBLE GUARDRAIL FRONT AND BACK.



	CONSTRUCTION RECORD (AS-BUILT) WORKS CONTRACT ENGINEER Name: _____ Prof. Reg. No.: _____ Date: _____	SNA CIVIL AND STRUCTURAL ENGINEERS (Pty) LTD SNAVIA BUILDING 285 ALBERTUS STREET LA MONTAGNE 0184 Tel: 012-842 0000 Fax: 012-803 4429 e-mail: pla@sna.co.za web: www.sna.co.za	TRANS AFRICAN CONCESSIONS (PTY) LTD BLOCK 8 THORNHILL OFFICE PARK 94 BEKKER ROAD MIDRAND PO Box 10817 VORNA VALLEY 1688 Tel: 011-805 8788 Fax: 011-805 8789 gesterhuyain@tracn.co.za www.tracn.co.za B DE BRUTO	DESIGNED BY NAME: G. LOUBSER Prof. Reg. No.: 880359 CHECKED BY NAME: J.B.W. STOLTZ Prof. Reg. No.: 980512 DRAWN BY NAME: L.V.D. MERWIE	CONSULTANT APPROVAL Name: J.W.B. STOLTZ Prof. Reg. No.: 980512 Date: APRIL 2016	HEAD OFFICE 46 Tambotie Avenue Val de Grace Pretoria 0184 PO Box 415 Pretoria 0001 South Africa Tel: (012) 844 8000	SANRAL SOUTH AFRICAN NATIONAL ROADS AGENCY BUILDING SOUTH AFRICA THROUGH BETTER ROADS	NORTHERN REGION 38 Ida Street Menlo Park Pretoria 0081 Private Bag X17 Lynnwood Ridge 0040 Tel: (012) 426 6200	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: _____	PROJECT DESCRIPTION MAPUTO DEVELOPMENT CORRIDOR (MDC) PRETORIA TO LEBOMBO BORDER POST ROUTINE ROAD MAINTENANCE DRAWING DESCRIPTION GUARDRAIL PLACING DETAILS AT BRIDGE APPROACHES AND HIGH FILL (DUAL CARRIAGEWAY)	PROJECT NUMBER TRAC/MAINT-2019-01 DRAWING LOCATION DATA ROUTE SECTION DRAWING km DISTANCE BRIDGE/STRUCTURE No. CONSULTANT DRAWING No. SANRAL DOCUMENT #	TRAC/MAINT-2019-01 START END PRETORIA LEBOMBO BORDER ROADS - TYPICAL DETAILS SCALE : AS SHOWN (A0) SHEET 1 OF 1
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