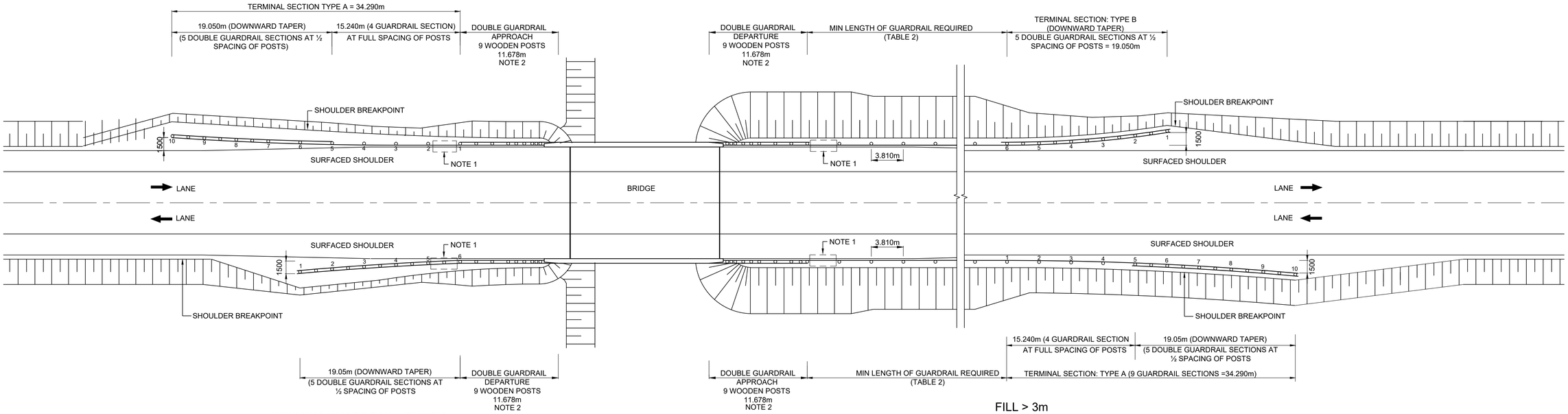

MINIMUM GUARDRAIL LENGTH
AT BRIDGES (FILL BELOW 3m)

BRIDGE APPROACH
SCALE 1 : 250

FILL > 3m

TABLE 1 : SETTING OUT POSITIONS OF GUARDRAIL POSTS

TERMINAL SECTION: TYPE A : L=34.29m				TERMINAL SECTION: TYPE B : L=19.050m			
	POST No.	HORIZONTAL OFF-SET X(mm)	VERTICAL OFF-SET Y(mm)		POST No.	HORIZONTAL OFF-SET X(mm)	VERTICAL OFF-SET Y(mm)
APPROACH SIDE	1	0	0	DEPARTING SIDE	6	0	0
	2	19	0		5	60	36
	3	74	0		4	240	144
	4	167	0		3	540	324
	5	296	0		2	960	576
	6	463	36		1	1500	900
	7	667	144				
	8	907	324				
	9	1185	576				
	10	1500	900				

TABLE 2

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)

NOTES

1. CLOSEST PERMISSIBLE POSITION OF CATCHPIT TO ENDBLOCK ie. NO CATCHPIT PERMITTED BETWEEN POST No. 1 AND ENDBLOCK.
2. REFER TO SANRAL TYPICAL DRAWING TD-S-P-5003-1-V1 FOR DETAILS OF GUARDRAIL TO ENDBLOCK CONNECTION AND GUARDRAIL APPROACH AND DEPARTURE DETAILS.
3. GUARDRAIL SPACING = 3.810m.

No.	DATE	REVISION	CONSULT. ENG.
V1	30/09/2022	ORIGINAL VERSION	

CONSTRUCTION RECORD
WORKS CONTRACT ENGINEER
Name : Gret van Niekerk
Prof. Reg. No. : 790095
Date : 2022/10/31
SANRAL PROJECT MANAGER
Name : Imelda Julies
Date : 2022/10/31

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DRAWN BY
NAME: Leoni Coffee

CONSULTANT APPROVAL
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Prof. Reg. No. : 790095
Date : 2022/10/31

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Reg.No. 1998/00688/06
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 CEO: SA NATIONAL ROADS AGENCY SOC LTD.
Date:

PROJECT DESCRIPTION
THE PERIODIC MAINTENANCE (REPAIR AND RESEAL) OF NATIONAL ROUTE 10 SECTION 5 FROM LUIPERTSKOP (km 40.00) TO HANOVER (km 62.17)

DRAWING NAME
GUARDRAILS
PLACING DETAIL AT BRIDGE APPROACHES AND HIGH FILL (SINGLE CARRIAGEWAY)

SCALE : AS SHOWN **SHEET** 5 OF 5

PROJECT NUMBER	N.010-050-2020/3		
DRAWING LOCATION DATA	START	END	
ROUTE			
SECTION			
DRAWING km DISTANCE			
DRAWING TYPE	ROADS - ANCILLARY WORKS		
BRIDGE/STRUCTURE No.	NA		
CONSULTANT DRAWING No.	FA	PM05-T-454	VER
SANRAL DOCUMENT #	TENDER PURPOSES ONLY		