SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD

BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT NRA X.002-114-2019/1F

ROUTINE ROAD MAINTENANCE OF NATIONAL ROAD R510 FROM RUSTENBURG TO THE LIMPOPO BORDER, R556 FROM R510 INTERSECTION TO R565 INTERSECTION, AND R565 FROM RUSTENBURG TO R556 INTERSECTION

ROAD CONDITION REPORT
April 2026

PREPARED FOR:

CHIEF EXECUTIVE OFFICER
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED
48 TAMBOTIE AVENUE
VAL DE GRACE
PRETORIA, 0184

PREPARED BY:

CONSULTING ENGINEERS

SANRAL
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
BUILDING SOUTH AFRICA THROUGH BETTER ROADS

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

CONTRACT: NRA X.002-114-2019/1F

ROUTINE ROAD MAINTENANCE OF NATIONAL ROAD R510 FROM RUSTENBURG TO THE LIMPOPO BORDER, R556 FROM R510 INTERSECTION TO R565 INTERSECTION, AND R565 FROM RUSTENBURG TO R556 INTERSECTION

THIS DOCUMENT COMPILED BY:

CONSULTING
HOUSE NUMBER
ADDRESS
ROAD
AREA, TOWN, CODE

TEL: EMAIL:

UNDER THE DIRECTION OF:

THE SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD
NORTHERN REGION
38 IDA STREET
MENLO PARK
PRETORIA, GAUTENG, 0081

TEL: +27 (0) 12 957 4600 EMAIL: LuruliF@nra.co.za

DOCUMENT CONTROL FORM

Project Name:	**ROUTINE ROAD MAINTENANCE OF NATIONAL ROAD R510 FROM RUSTENBURG TO THE LIMPOPO BORDER, R556 FROM R510 INTERSECTION TO R565 INTERSECTION, AND R565 FROM RUSTENBURG TO R556 INTERSECTION**	
Contract Number	NRA X.002-114-2019/1	
Report Title:	Road Condition Report	
Document Path	Consulting\Projects Projects\061 NRA X.002-114-20191F\08 Reports and Presentations\081 Reports	
Document Status:	Final Draft	Issue Date: July 2026
Prepared for:	Client's Name: SANRAL	Contact Person: Fulufhelo Luruli Tel No.: 012 426 6296 Email address: LuruliF@nra.co.za
Prepared by:		

Document Verification Process:				
Discipline	**Author**	**Reviewer / Design Specialist**	**Signature:**	**Date:**
Verification by Author:	Elias Sekwena	Route Manager		July 2026
Checked by:	Keabetswe Pholo	Assistant Contracts Engineer		July 2026
Authorized by:	Charl de Villiers	Contracts Engineer		July 2026
Accepted by client:	Fulufhelo Luruli	SANRAL Project Manager		

Quality Verification: **This report/document has been prepared under the quality controls established by ROMH Consulting's Quality Management System.**

Document Issue Record:		
Rev. No.	**Description:**	**Issue Date:**
0	Issue for SANRAL's comments	July 2026

DISCLAIMER

This report has been compiled by the South African National Roads Agency SOC Limited for the use of its routine road maintenance contracts on the national road network.

The information provided in this report is based on data which has been collected on national routes included in this routine road maintenance contract.

The South African National Roads Agency SOC Limited takes no responsibility for the accuracy or adequacy of each item, which is offered in good faith.

TABLE OF CONTENTS

DOCUMENT CONTROL FORM i
DISCLAIMER ii
TABLE OF CONTENTS iii
LIST OF FIGURES vi
LIST OF TABLES vii
1 INTRODUCTION 1
1.1 TERMS OF REFERENCE 1
1.2 PURPOSE OF REPORT 1
2 SCOPE 2
2.1 BRIEF PROJECT DESCRPITION 2
3 DESCRIPTION OF CONTRACT 3
4 GENERAL 4
4.1 TRAFFIC 4
4.2 KM – DISTANCE REFERENCE 4
4.3 Material and Road Furniture Suppliers 4
5 INTERCHANGES AND INTERSECTIONS 6
5.1 INTERCHANGES 6
5.2 INTERSECTIONS 6
6 ROAD FURNITURE 9
6.1 EARTH DRAINS 9
6.2 CONCRETE DRAINS 9
6.3 GUARDRAILS 10
6.4 TRAFFIC SIGNS 11
6.5 FENCING 12
6.6 ROAD MARKINGS & ROAD STUDS 14
6.7 VEGETATION 14
6.7.1 Grass 14
6.7.2 Trees 16
6.7.3 Alien Vegetation 16
6.8 REST AREAS 16
7 BRIDGES 17
8 CULVERTS 18
8.1 EROSION PROTECTION AND GABIONS 19

8.2 EDGE BREAKS 19
8.3 SHOULDER REPAIRS 20
9 PAVEMENT LAYER REPAIRS 22
9.1 SURFACE TEXTURE 22
9.2 SURFACE FAILURES 22
9.3 AGGREGATE LOSS 23
9.4 BINDER CONDITION 24
9.5 BLOCK CRACKS 24
9.6 LONGITUDINAL CRACKS 25
9.7 TRANSVERSE CRACKS 25
9.8 CROCODILE CRACKS 26
9.9 POTHOLES 26
9.10 RUMBLE STRIPS 27
10 ILLEGAL ADVERTISING 29
11 SLOPE STABILITY 30
12 PEDESTRIAN PATHS 31
13 ROUTE MARKER BOARDS 32
14 PAVEMENT MANAGEMENT SYSTEM INFORMATION 33
14.1 R510 FROM RUSTENBURG TO THE NORTHWEST/ LIMPOPO BORDER 33
14.2 R556 FROM INTERSECTION WITH R565 TO INTERSECTION WITH R510 33
14.3 R565 FROM RUSTENBURG TO INTERSECTION WITH R556 33
14.4 DEFINITION OF CODES USED 34
14.5 PMS – ROAD INFORMTION 35
15 TRAFFIC INFORMATION 36
16 HISTORIC ROAD MAINTENANCE IFORMATIONS 37
17 VISUAL ASSESSMENT OF PAVEMENT 38
18 SUBCONTRACTORS AND BE's INFORMATION 39
19 FUTURE MAINTENANCE AND REHABILITATION PROJECTS 41
20 APPENDICES 42
ANNEXURE B 43
Traffic Counts 43
ANNEXURE C 44
Drainage Structures 44

ANNEXURE D **45**

Road Sign Inventory 45

ANNEXURE F **46**

Road Furniture 46

ANNEXURE G **47**

Services 47

ANNEXURE I **48**

Bridges 48

LIST OF FIGURES

Figure 3-1: Project Locality Plan. 3
Figure 5-1: Intersection at R510 Kanana and Mogwase. 6
Figure 6-1: Earth drains and shoulder repairs on R510. 9
Figure 6-2: Concrete V drain (left) and Kerb and channel (right) maintenance. 10
Figure 6-3: Guardrails at R510 before maintenance (left) and guardrails during maintenance (right) at R565. 11
Figure 6-4: Stockproof fencing 9 strands on steel post (left) and timber posts (right), SANRAL typical drawings. 12
Figure 6-5: Damaged fence along the routes (left) and installation of new fence at Boshoek (right). 13
Figure 6-6: Grass cutting on the R565/1. 15
Figure 6-7: Tree cutting and tree felling in progress. 16
Figure 7-1: Bridge with remedial works. 17
Figure 8-1: Culverts underway maintenance of cleaning. 19
Figure 10-1: Unauthorized advertising along the routes. 29
Figure 12-1: A typical sidewalk found along the R510. 31
Figure 13-1: Damaged kilometer marker board and direction sign board along the R565 32

LIST OF TABLES

Table 3-1: Route information 3
Table 4-1: Traffic information for each of the project routes 4
Table 4-2: Material source summary. 4
Table 5-1: Intersection information 6
Table 6-1: Total length of guardrails along the route sections. 11
Table 6-2: summary of guardrails maintained the past 6 months. 11
Table 6-3: Repaired and replaced Road signs along the routes. 12
Table 6-4: Fencing erected along the routes for this report period. 12
Table 6-5: Road markings along R565/1. 14
Table 6-6: Summary of the amount of re-paint work done thus far. 14
Table 7-1: Bridges found along the routes. 17
Table 8-1: A summary of culverts cleaned in the past 12 months. 18
Table 8-2: Extent and frequency of edge break repair along the project routes. 20
Table 9-1: Extent of pavement distress on contract routes. 22
Table 14-1: Material descriptions and specifications 34
Table 15-1: Traffic information for each of the project routes 36
Table 18-1: Summary of Subcontractors 39
Table 19-1: Future maintenance projects 41

1 INTRODUCTION

1.1 TERMS OF REFERENCE

Consulting Engineers (Pty) Ltd (Consulting) was appointed by the South African National Roads Agency SOC Ltd (SANRAL) to provide Routine Road Maintenance of National Road R510 from Rustenburg to the Limpopo border, R556 from R510 intersection to R565 intersection, and R565 from Rustenburg to R556 intersection.

1.2 PURPOSE OF REPORT

This report intends to provide information regarding the current condition of the road network forming part of this contract. The information given is based on:

- Road assessment data collected; and
- Desktop study of the maintenance work done during the previous maintenance contracts.

This information will assist the maintenance team during the maintenance period of the project. The contract period for the construction monitoring was initially three years and was extended.

The nature of work to be carried out under this contract includes inter alia:

- Establishment of camps on site
- Inspection of the road and night inspections
- Traffic accommodation
- Pavement layer repairs
- Edge build-up removal
- Repair of potholes, edge breaks, and surface failures
- Crack sealing and patching asphalt pavement.
- Repair of slope failures and washaways
- Stabilization of cuttings
- Cleaning of all drainage structures, including removal of grass and debris from grids, as well as clearing bridge drainage ports and scuppers
- Repairing damaged fencing
- Shoulder repairs
- Clearing refuses from the road reserve, lay-byes, and interchanges.
- Repairing damaged road signs
- Cleaning of road signs
- Installation and replacement of road studs
- Repairing damaged guardrails
- Road marking
- Gabion protection
- Regular mowing of grass in the road reserve including the median and the removal of grass cuttings
- Application of herbicide on road edges and around road signs
- Eradication of weeds and undesirable plant growth
- Emergency assistance
- Minor road work done under dayworks.

2 SCOPE

2.1 BRIEF PROJECT DESCRPITION

The primary aim of this report is to provide the Contractor with a general overview of the condition of the road network forming part of this contract. The topics covered fall under the following broad categories:

- General information
- General as-built information
- Traffic information
- Road furniture information
- Historic routine-road maintenance information
- Proposed future rehabilitation projects.
- Subcontractors and BBBEE's involved with routine road maintenance.

3 DESCRIPTION OF CONTRACT

The project is situated within Rustenburg Local Municipality and Moses Kotane Local Municipality, with Rustenburg serving as the primary center. The contract encompasses a total length of approximately 122.08 kilometers and consists of various national routes, as indicated in Figure 3-1 and Table 3-1. A new section of R510 starting from km 2.83 to km 14.6 was allocated to this project on the 2nd of May 2023. On the 17 June 2025, another section(R565/2) was added on to the network. The R565/2 going through Phokeng is 8.9km making the total length 142.83km.



Figure 3-1: Project Locality Plan.

Table 3-1: Route information

Route	Kilometer		Length (km)	Road Pavement Area (m^2) *	Road Reserve Area DUAL(m^2))	Road Reserve Area (ha)
	Start	End				
R510	2.830	72.100	69.27	636 240	165.06	213.74
R556	0.000	29.660	29.660	266 400	-	168
R565/1	0.000	35.000	35.000	474 000	93.48	82
R565/2	0.000	8.900/11.400	8.900	140 000	124.6	67
TOTAL			**142.83**	**1 516 640**	**383.14**	**530.74**

4 GENERAL

4.1 TRAFFIC

An analysis of the traffic carried by the route is provided in Table 4-1and includes the following traffic measures:

- Annual average daily traffic (AADT) in both directions,
- The number of E80 kN axle loads and the year in which it was observed.

This information was obtained from the Department's CTO system (Comprehensive Traffic Observations).

Table 4-1: Traffic information for each of the project routes

Route/Section	Station	Type	Data Period	ADT*	ADTT**	Pavement Class
R510-1	19237	Secondary	2019	4116	535	-
R556-1	88	Secondary	2019	21212	679	-
R565-1	19245	Secondary	2019	6224	585	ES10
R565-2	19245	Secondary	2019	6224	585	ES10

**Average Daily Traffic*
*** Average Daily Truck Traffic*

The detailed traffic report is given in Annexure B.

4.2 KM – DISTANCE REFERENCE

The South African National Roads Agency SOC Ltd (SANRAL) km-distance reference marker boards (blue boards) have been installed on all sections to assist with determining accurate locations of points of interest along the route. All sections of the X.002-114-2019/1F network are provided with blue marker boards spaced at 200m intervals. A few blue marker boards were discovered to be missing along some of the routes and are frequently reported.

4.3 Material and Road Furniture Suppliers

The material and road furniture suppliers identified on the routes are provided as follows:

Table 4-2: Material source summary.

NAME	PRODUCTS	Tel. No.
Supa signs	Perm/temp signs	011 493 0459
Much Asphalt	BTB/Medium asphalt	011 423 1004
Actop Asphalt	Cold mix	011 395 3346
Mpumalanga discount Material CC	Fence	011 892 2090
Afrisam	Cement	087 809 0906
Mpho BA Trading	Timber poles/signs	067 046 2058
Armco	Guardrails	011 974 8511

NAME	PRODUCTS	Tel. No.
Through IT	KM marker boards	012 661 0814
National Asphalt	BTB/Medium asphalt	012 562 9500
G.Harrop-Allin & Sons	Timber poles	012 803 5175

5 INTERCHANGES AND INTERSECTIONS

5.1 INTERCHANGES

There are no interchanges along all the routes forming part of this contract.

5.2 INTERSECTIONS

The intersections that were found along the routes are summarized in Table 5-1. A typical intersection on the R510 undergoing a maintenance of road marking done by the main contractor is shown in Figure 5-1. Most of these intersections were found to be surfaced with either a seal or asphalt surfacing.



Figure 5-1: Intersection at R510 Kanana and Mogwase.

Table 5-1: Intersection information

TYPE	INTERSECTION	CO-ORDINATES		REMARKS
		LATITUDE	LONGITUDE	
R510 SECTION 1				
Side-junction - Left	Unknown	25° 38' 13.19" S	27° 15' 49.01" E	Surfaced
Side-junction - Right	Dr Molapo	25° 38' 1.81" S	27° 15' 51.46" E	Surfaced
Side-junction - Left	Unknown	25° 37' 11.12" S	27° 16' 12.84" E	Surfaced
Junction	Tlou Str.	25° 37' 11.13" S	27° 16' 14.49" E	Surfaced
Side-junction - Left	Unknown	-	-	Surfaced
Junction	Dr Lalabhai Dudhia	25° 36' 37.14" S	27° 16' 38.70" E	Surfaced
Junction	Z543	25° 36' 15.83" S	27° 16' 54.60" E	Surfaced
Side-junction - Left	Unknown	25° 35' 56.28" S	27° 17' 8.78" E	Surfaced

TYPE	INTERSECTION	CO-ORDINATES		REMARKS
		LATITUDE	LONGITUDE	
Side-junction - Left	Chachalaza	25° 35' 43.41" S	27° 17' 17.19" E	Surfaced
Side-junction - Left	Unknown	25° 35' 36.87" S	27° 17' 21.56" E	Surfaced
Side-junction - Left	Unknown	25° 35' 34.86" S	27° 17' 22.78" E	Surfaced
Junction	Motlhabeng 1	25° 35' 26.30" S	27° 17' 28.74" E	Surfaced
Side-junction - Right	Mmilo Str.	25° 35' 11.02" S	27° 17' 41.90" E	Surfaced
Side-junction - Left	Unknown	25° 35' 9.09" S	27° 17' 43.05" E	Surfaced
Side-junction - Right	Motlhabeng	25° 35' 4.60" S	27° 17' 47.22" E	Surfaced
Junction	Thekwane	25° 34' 51.51" S	27° 17' 57.21" E	Surfaced
Side-junction - Right	Maledu Str.	25° 34' 36.61" S	27° 18' 8.03" E	Surfaced
Side-junction - Left	Phetwane	25° 34' 24.32" S	27° 18' 14.83" E	Surfaced
Junction	Morakaneng	25° 34' 2.73" S	27° 18' 27.37" E	Surfaced
Round About	Rustenburg/Tsitsing/ Kanana	25° 33' 48.65" S	27° 18' 37.05" E	Surfaced
Side-junction - Left	Unknown	25° 33' 24.61" S	27° 18' 29.45" E	Surfaced
Side-junction - Left	Kanana	25°34'02.92"S	27°18'27.68"E	Surfaced
Side-junction - Right	Mosenthal/Beestekraal	25°33'52.16"S	27°18'34.05"E	Surfaced
Side-junction - Right	Tsitsing/Tlaseng	25°29'04.59"S	27°19'18.13"E	Surfaced
Junction	R556 Pretoria/Pilanesberg	25°27'11.29"S	27°18'48.66"E	Surfaced
Side-junction - Left	Monnakato	25°21'27.68"S	27°17'27.33"E	Surfaced
Side-junction - Left	Ga-Ramokoka	25°18'44.92"S	27°17'29.76"E	Surfaced
Side-junction - Left	Millitary Base/Mankwe	25°16'44.32"S	27°16'53.12"E	Surfaced
Junction	Ramokoka/Industrial	25°16'09.17"S	27°16'42.40"E	Surfaced
Junction	Mankwe Factory/Mogwase/Pilanesberg/ Sun City	25°15'22.11"S	27°16'28.02"E	Surfaced
Side-junction - Right	Sandfontein	25°12'52.63"S	27°15'40.35"E	Surfaced
Side-junction - Left	Doringpoort	25°11'40.05"S	27°15'15.76"E	Surfaced
Junction	Welgeval/Sandfontein	25°11'27.87"S	27°15'11.75"E	Surfaced
Side-junction - Left	Moruleng	25°08'04.04"S	27°14'32.50"E	Surfaced
R556 SECTION 1				
Junction	R565 Derdepoort/ R565 Rustenburg	25°22'41.98"S	27°03'38.43"E	Surfaced
Junction	Ledig	25°22'32.09"S	27°03'54.01"E	Surfaced
Side-junction - Left	Sun City Village	25°21'46.39"S	27°06'01.61"E	Surfaced
Side-junction - Left	Sun City	25°21'38.40"S	27°06'26.56"E	Surfaced
Side-junction - Right	Chaneng	25°21'34.16"S	27°07'08.53"E	Surfaced
Offramp - Left	Mogwase/Pilanesberg National Park	25°21'30.30"S	27°07'43.77"E	Surfaced
Side-junction - Left	Mogwase/Pilanesberg National Park	25°21'26.81"S	27°08'19.25"E	Surfaced
Side-junction - Right	Mogono/Ga-Luka	25°23'04.83"S	27°13'23.47"E	Surfaced
Junction	Monnakato	25°23'56.86"S	27°15'09.01"E	Surfaced
Junction	Maile	25°25'28.56"S	27°17'11.41"E	Surfaced
Junction	Unknown	25°26'58.49"S	27°18'36.56"E	Surfaced
Junction	R510 Rustenburg/R510 Northam	25°27'11.33"S	27°18'48.63"E	Surfaced
R565 Section 2				
Side-junction - Right	N4 Onramp/N4 Offramp	25°38'44.94"S	27°09'42.91"E	Surfaced
Junction	Swartruggens Road	25°38'02.35"S	27°09'25.91"E	Surfaced
Intersection	Intersection	25°36'48.29"S	27°09'10.18"E	Surfaced
Intersection	Phokeng/Morgenzon	25°36'00.82"S	27°07'57.88"E	Surfaced
Junction	Phokeng	25°34'58.69"S	27°07'58.73"E	Surfaced
Junction	Unknown	25°34'09.20"S	27°08'26.29"E	Surfaced

TYPE	INTERSECTION	CO-ORDINATES		REMARKS
		LATITUDE	LONGITUDE	
Junction - Circle	Phokeng/R565 Sun City	25°33'37.42"S	27°08'40.19"E	Surfaced
Side-junction - Left	Spa	25°32'46.44"S	27°07'38.74"E	Surfaced
Side-junction - Right	Boekenhoutfontein	25°32'30.67"S	27°07'26.07"E	Surfaced
Side-junction - Right	Rasimone/Boshoekstatie	25°30'19.23"S	27°05'54.77"E	Surfaced
Side-junction - Left	Lindleyspoort	25°29'33.06"S	27°05'08.41"E	Surfaced
Side-junction - Right	Chaneng	25°26'36.54"S	27°05'17.11"E	Surfaced
Intersection	R565 Sun City/Phatsima	25°22'41.98"S	27°03'38.43"E	Surfaced

6 ROAD FURNITURE

Road furniture refers to various physical elements or objects that are installed along the route to provide information, guidance, and enhance safety for road users. These elements are typically placed strategically to assist drivers in navigating the road network and to convey important information about the road conditions. Common examples of road furniture include traffic lights, signposts, road signs, guardrails, kilometer marker boards, fences, reflectors, road marking and road studs. The sub-headings below provide detailed information on the current road conditions.

6.1 EARTH DRAINS

The earth drains identified along the routes are generally in good condition and are well maintained. Rehabilitation of the earth drains along the R510 is currently underway as shown in Figure 6-1 below and the work on shoulder is completed on the R565 and now on-going on R510. The material that is being cleared from the drains is then used for the re-graveling of the shoulders along the route.

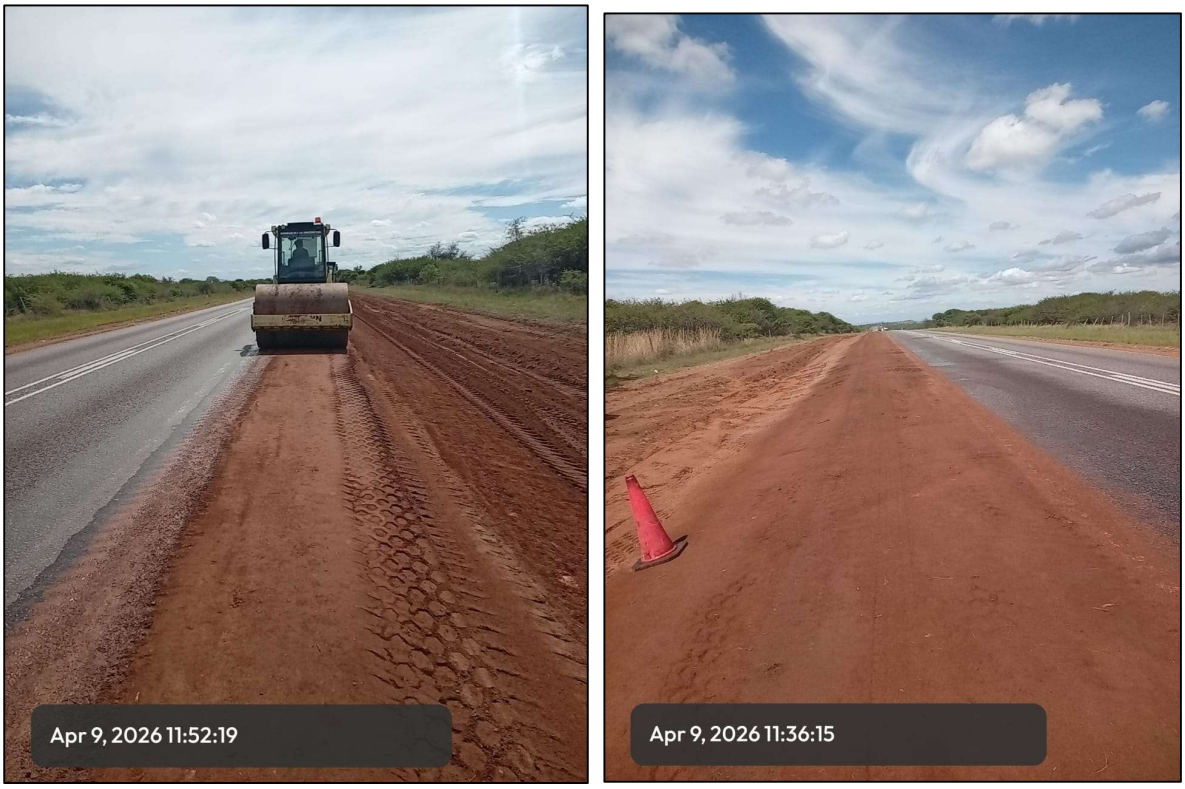


Figure 6-1: Earth drains and shoulder repairs on R510.

6.2 CONCRETE DRAINS

A combined length of 144.34 kilometers of concrete drains is along the R510, R565 and R556/1&2. Out of these, approximately 80km are in good condition, with maintenance work being performed as and when required. The other 65km of concrete drains work is on-going and it is done by the main contractor and grade 2CE subcontractors on all the sections that require maintenance.



Figure 6-2: Concrete V drain (left) and Kerb and channel (right) maintenance.

6.3 GUARDRAILS

During the visual assessment that was conducted on the routes, approximately 16.6km of guardrails were identified, and their details are summarized in Table 6-1 below. All the guardrails within the entire network of Moses Kotane and Rustenburg municipalities were re-aligned and painted as per specifications. Guardrails are scheduled for repairs only in the event of damage caused by accidents or stolen.

After having outsourced a service provider for road safety assessed of the site, the service provider located areas that require an erection of new guardrails. The guardrails are required due to the hollow sides of the road and will prevent any fatal accidents that might occur. A job instruction was issued to the main contractor to complete the guardrail erections according to the specifications.



Figure 6-3: Guardrails at R510 before maintenance (left) and guardrails during maintenance (right) at R565.

Table 6-1: Total length of guardrails along the route sections.

ROUTE	TOTAL LENGTH	TYPE OF CHANNEL
R510 Section 1	2424	Armco Guardrails
R556 Section 1	7060	Armco Guardrails
R565 Section 1	6770	Armco Guardrails
R565 Section 2	335.28	Armco Guardrails

Table 6-2: summary of guardrails maintained the past 6 months.

ROUTE	SECTION	REPLACED & RE-ALIGNED(m)	PAINTED(m)
R565/1&2/R556/510	1	2503.69	4129.93

6.4 TRAFFIC SIGNS

A survey of road signs in the road reserve was conducted along all project routes, and these are summarized in Table 6-3. All the road signs were found to be in good condition and examples of the signs that were found are included in Annexure D and Annexure H. The contractor is currently maintaining all routes in the contract by:

- Cleaning of the road signs; and
- Replacement of damaged signs due to strike action, vandalism, and car accidents.

All existing road traffic signs are cleaned on all routes. Repairing and replacing damaged road signs is ongoing, and an inventory of newly installed road traffic signs is included in Annexure D.

Table 6-3: Repaired and replaced Road signs along the routes.

SERIES	NUMBER PER ROUTE			
	R510	R565	R556/1	R556/2
GA Series	9	4	5	12
GB Series	7	5	4	3
GDL-Series	2	4	1	2
GF-Series2	5	6	4	2
GFS-Series	3	2	1	7
GL5- Series	3	5	2	8
GL- Series	1	0	0	1
GS- Series	0	3	1	1
IN- Series	2	3	3	0
R- Series	34	64	46	37
W- Series	18	14	22	29

6.5 FENCING

From the project routes, we have observed two types of fences, a 6-strand or 9-strand stormproof configuration. However, in residential areas within a 10km radius along these routes, there are sections where there is no fencing present. A recent survey conducted has identified a total length of 104 km across the routes that require the repairing and/or installation of fencing. Figure 6-4 is a SANRAL typical drawing of fencing.

A work authorization was done to procure the necessary fencing material for the grade 2CE's and 3CEs to erect the fencing and is on-going on R565/1.

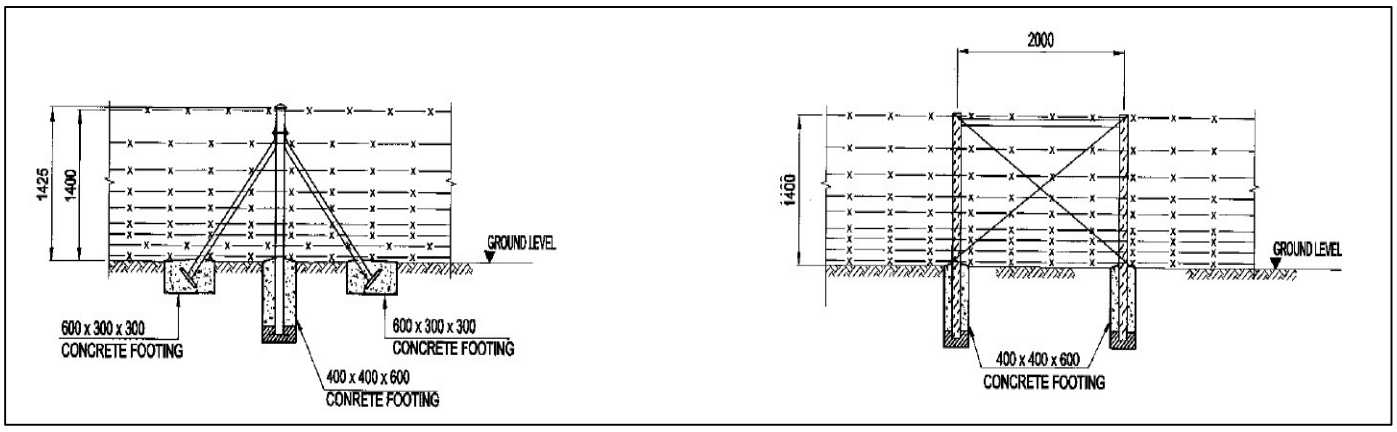


Figure 6-4: Stockproof fencing 9 strands on steel post (left) and timber posts (right), SANRAL typical drawings.

Table 6-4: Fencing erected along the routes for this report period.

Route	Section	FROM	TO	DIRECTION	LENGTH
R510	1	2.83	72.10	Both	-
R556	1	0.00	29.20	Both	-
R565	1	0.00	35.00	Both	-
R565	2	0.00	8.9	Both	-



Figure 6-5: Damaged fence along the routes (left) and installation of new fence at Boshoek (right).

6.6 ROAD MARKINGS & ROAD STUDS

In 2023, an external contractor was contracted by SANRAL for a road marking project which included road studs. The project commenced and the routes are well-kept with fresh paint and new road studs where they were missing. Thus, it improved the previously poor conditions, hence the Table 6-5 to Table 6- below. On the newly absorbed sections, the main contractor is installing the road studs and doing the road markings.

Table 6-5: Road markings along R565/1.

LOCATION		CONDITION			CARRIAGEWAY		LOCATION		CONDITION			CARRIAGEWAY	
FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE	FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE
0.0	11.2	√				√	11.2	17.0	√			√	
17.0	24.2		√			√	24.2	35.0	√			√	

Table 6-6: Road markings along R565/2.

LOCATION		CONDITION			CARRIAGEWAY		LOCATION		CONDITION			CARRIAGEWAY	
FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE	FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE
0.0	8.9		√		√								

Table 6-7: Road markings along R556.

LOCATION		CONDITION			CARRIAGEWAY		LOCATION		CONDITION			CARRIAGEWAY	
FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE	FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE
0.0	29.6	√				√							

Table 6-8: Road markings along R510.

LOCATION		CONDITION			CARRIAGEWAY		LOCATION		CONDITION			CARRIAGEWAY	
FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE	FROM	TO	GOOD	FAIRLY GOOD	POOR	DUAL	SINGLE
2.83	14.62			√	√		14.62	72.1	√				√

Table 6-6: Summary of the amount of re-paint work done thus far.

ROUTE	QUANTITY
R510-1	472.23 m
R556-1	-
R565-1	-
R565-2	983.40

6.7 VEGETATION

6.7.1 Grass

- Type: The type of grass found in most parts of our network is Panicum virgatum L which is a Blackwell switch grass.
- % Brush cutting: 40 % of the mowing is hand mowing as most of the grass is cut using a tractor.

- Frequency of mowing: Frequency of mowing is three times per year.
- Frequency of baling: No bailing is done on this Contract.

The grass cutting on all the routes has generally decreased in terms of progress due to shortage of bush-cutters on site. Hence, the current job instruction is undergoing penalties.



Figure 6-6: Grass cutting on the R565/1.

6.7.2 Trees

The main contractor together with the subcontractors were previously issued job instructions to eradicate all the undesired vegetation along the Moses Kotane and the Rustenburg municipalities as they posed a danger to the road users and hid the road signs.

The indigenous trees will be maintained throughout the project duration, and trees which are non-indigenous/alien are being removed on instruction by the Engineer.



Figure 6-7: Tree cutting and tree felling in progress.

Shrubs
Shrubs are generally eradicated when the grass cutting team is executing their work as it forms part of the general mowing specifications.

6.7.3 Alien Vegetation

Physical Eradication of alien vegetation is done on an ongoing basis. Indigenous trees and other vegetation encroaching on the road are removed as soon as they are identified.

6.8 REST AREAS

No Rest areas were noted along the National Routes included in this Contract.

7 BRIDGES

The bridges identified along the routes were assessed and most were found in good condition. There is minor distress issues found on the bridges. The distress observed includes minor spalling, vegetation growth under guardrails and cosmetic issues such as peeling paint on some of the bridges. Table 7-1 shows a list of the bridges identified along the routes. The figure 7-1 shows before and during the remedial of works.

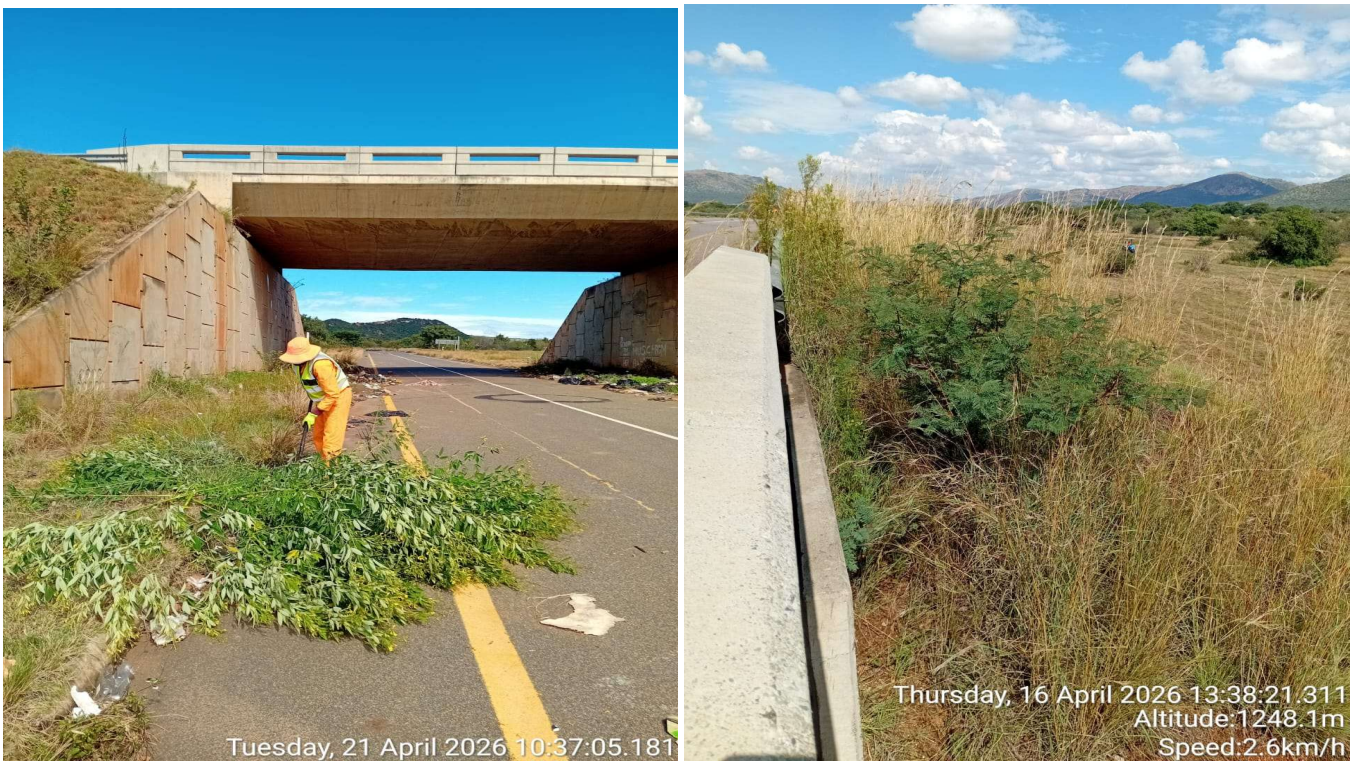


Figure 7-1: Bridge with remedial works.

Table 7-1: Bridges found along the routes.

Chainage (km)	Bridge Number	River	Length (m)	Width (m)	Parapets	Remarks
R565 SECTION 1						
32.600	B2050 1964	Elands	80	20	Concrete	
33.300	B2471 1966	N/A	15	20	Concrete	
R556 SECTION 1						
11.400	N/A	Elands	70	11	Concrete	
13.600	N/A	N/A	35	11	Concrete	Crossing Over rail
15.600	N/A	N/A	33	11	Concrete	Old paint
R510 SECTION 1						
54.200	B2256 1967	N/A	30	12	Concrete	Rail Overpass
47.850	B4401 1981	N/A	33	13	Concrete	Disused Underpass
40.100	LK5-250M	Elands	48	8	Steel	
12.180	Unknown	N/A	21	17	Concrete	
4.380	Unknown	N/A	18	17	Concrete	

8 CULVERTS

The discussion to follow gives a general indication of the typical drainage infrastructure along the contract routes. A site inventory indicating the culvert details (number, size, position, and condition) is included in Annexure C.

The general topography of the region is relatively flat, indicating the flow of stormwater runoff. In efforts to manage stormwater effectively, the flat terrain dictating overland flow demands culverts be placed at frequent intervals, 50 to 60m apart and sometimes as frequent as 20m. The flat terrain leads to culverts being placed below the natural ground, creating siltation and daylighting issues, as nature tends to maintain its natural flow path. Most of the drainage issues identified during the visual survey were the following in nature:

- Siltation,
- Debris build-up at inlets,
- Sub-standard inlet and outlet structures (Headwalls & Wing Walls)
- Undersized Culverts (Minimum Height/Diameter 600mm)
- Scour/Erosion.

The culverts identified along the routes primarily composed of concrete box culverts and concrete pipes of different sizes. To provide a summary of the condition of these culverts, their sizes, and general conditions, please refer to **APPENDIX C.**

The general topography of the region is flat, which indicates that stormwater typically flows over the land surface. To effectively manage stormwater in such terrain, it is necessary to install culverts at frequent intervals. These intervals usually range from 50 to 60 meters apart, and sometimes even as close as 20 meters along R556-1.

Due to the flat nature of the terrain, the culverts are situated below the natural ground level. This placement has led to issues with silt accumulation and daylighting. Nature tends to follow its own flow path, which creates challenges when culverts are installed below the ground level.

The culverts on the entire network are in good condition. The subcontractors have been maintaining the standard and conditions of all culverts as instructed for both Moses Kotane and the Rustenburg local municipalities.

Table 8-1: A summary of culverts cleaned in the past 12 months.

ROUTE	CHAINAGE (KM)		NUMBER OF CULVERTS CLEANED	CONDITION
	START	END		
R565/1	0	35.0	36	Some requires maintenance
R565/2	0	8.9	48	Some requires maintenance
R510	2.83	72.1	52	Some requires maintenance
R556	11.4	29.6	68	Some requires maintenance



Figure 8-1: Culverts underway maintenance of cleaning.

8.1 EROSION PROTECTION AND GABIONS

Gabions are installed along the National Routes specified in this Contract to address road condition concerns. These gabions serve as protective measures to prevent erosion, primarily focusing on the road shoulder and the surrounding areas of drainage structures.

Thus far no gabion protection or stone peaching has been done.

8.2 EDGE BREAKS

Edge breaks occur when the road shoulder is in a deteriorated state, primarily caused by either strength at the road's edge or the infiltration of water into the pavement through the shoulders. It is important to address significant edge breaks, particularly when accompanied by edge drops, as they can lead to tire damage if left unaddressed. To provide an overview of the repair requirements, Table 8-2 below outlines the scope and frequency of edge break repairs along the project routes.

There is a lot of work to be done on repairing the edge breaks on the R565 and R510. The job instruction was given after the intervention or rather clarification of how the work should be carried out (through the JI)



Figure 8-2: Edge breaks found along R510.

The table below indicates the extent and frequency of edge break repair along the project routes.

Table 8-2: Extent and frequency of edge break repair along the project routes.

Route	Extent (Isolated / Intermittent / Extensive)	Frequency of Repair (No. Repairs Per Year)
R510-1	Isolated	1
R556-1	Isolated	1
R565-1	Extensive	2

8.3 SHOULDER REPAIRS

A significant number of National Routes covered by this Contract feature unpaved (gravel) shoulders. The widths of these shoulders typically range from 1 m to 3 m. In most cases, the shoulder material consists of sandy gravel, which is currently undergoing erosion, as shown in Figure 8-.

A survey was conducted on the R510, revealing that a stretch of over 46.1 km along the route has experienced erosion and significant drop-offs, ranging from 50 mm to 75 mm. This poses a safety hazard for drivers intending to veer off the pavement, given the design speed of that road section. To address this concern, a dedicated shoulder team was deployed on site for shoulder repairs.

During the current reporting period, approximately 63 kms of the shoulder have been repaired with continued maintenance efforts actively in progress.

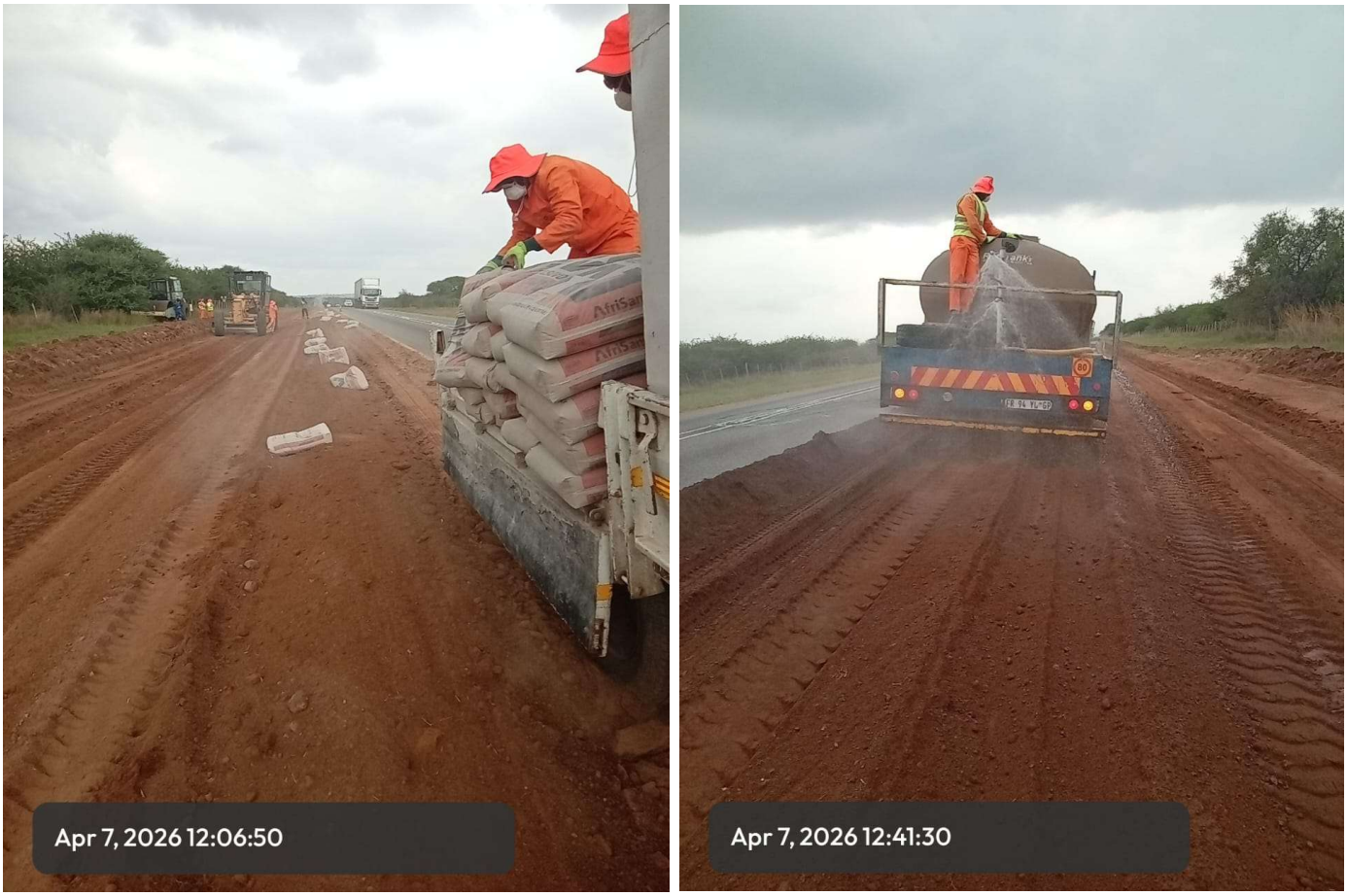


Figure 8-3: Rehabilitation of gravel shoulders along the R510.

9 PAVEMENT LAYER REPAIRS

The detailed visual condition assessment was conducted along the routes specified in this contract. The visual assessment was conducted according to guidelines provided in TMH 9 (2020) and TRH12 (1997). The condition assessment was conducted by walking the road and recording all sections that show signs of distress. The assessment of the condition of the pavement was based on functional and structural distress types which related to the condition of the pavement surfacing and pavement structure. Recorded distresses were referenced relative to chainage.

The distress mechanisms described below allow water to seep into the pavement layers and contribute towards the accelerated deterioration of the pavement structure. Problem areas were identified and are to be addressed using base repairs, surface repairs, and surface treatment. Potholes are expected to be repaired continuously along all project routes.

The extent to which the distress mechanisms occur can be described as follows:

- Isolated: failures/distresses which are isolated or localized in one or two areas over
- the length of the road.
- Intermittent: failures/distresses which occur irregularly over the length of the road.
- Extensive: Widespread and extensive failures/distresses over the length of the road

Table 9-1: Extent of pavement distress on contract routes.

Route:	Section	VISUAL PAVEMENT CONDITION (SOUND, WARNING OR SEVERE)								
		BLEEDING	RIDING QUALITY	CRACKING	RUTTING	SURFACE DETERIORATION	DEFORMATION (SETTLEMENT)	POTHOLES / PATCHES	EDGE-BREAKS	SHOULDER DROP-OFFS
R565	1	Warning	Sound	Warning	Warning	Warning	Sound	Sound	Severe	Warning
R565	2	Warning	Sound	Warning	Warning	Warning	Sound	Sound	Severe	Warning
R556	1	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound	Sound
R510	1	Sound	Sound	Sound	Warning	Warning	Severe	Sound	Warning	Sound

Pavement condition surveys were conducted along the national routes which form part of this Contract. From the pavement evaluation, route R510 and R556 can be classified as being in fair condition; these two appear to have been recently resurfaced. There are isolated sections that occasionally develop potholes and surface failures.

9.1 SURFACE TEXTURE

The following observations were made about the surfacing texture of the cape seal found along this route.

- Cape seal – From km 30.0 – 33.0 on R565 the seal was done quite recently with very coarse aggregate, but aggregate loss was observed in isolated areas which indicates the need for a fog spray to rejuvenate the binder. The rest of the section was observed to be with varying voids on aggregates due to bleeding and surface failures.

9.2 SURFACE FAILURES

Surfacing failures from degree 1 to 5 were observed in isolated areas along the road. The main failures observed are:

- Localized loss of surfacing due to poor bonding with the underlying layer.
- Poor seal construction
- Crocodile cracks.

- Undulation with aggregate loss

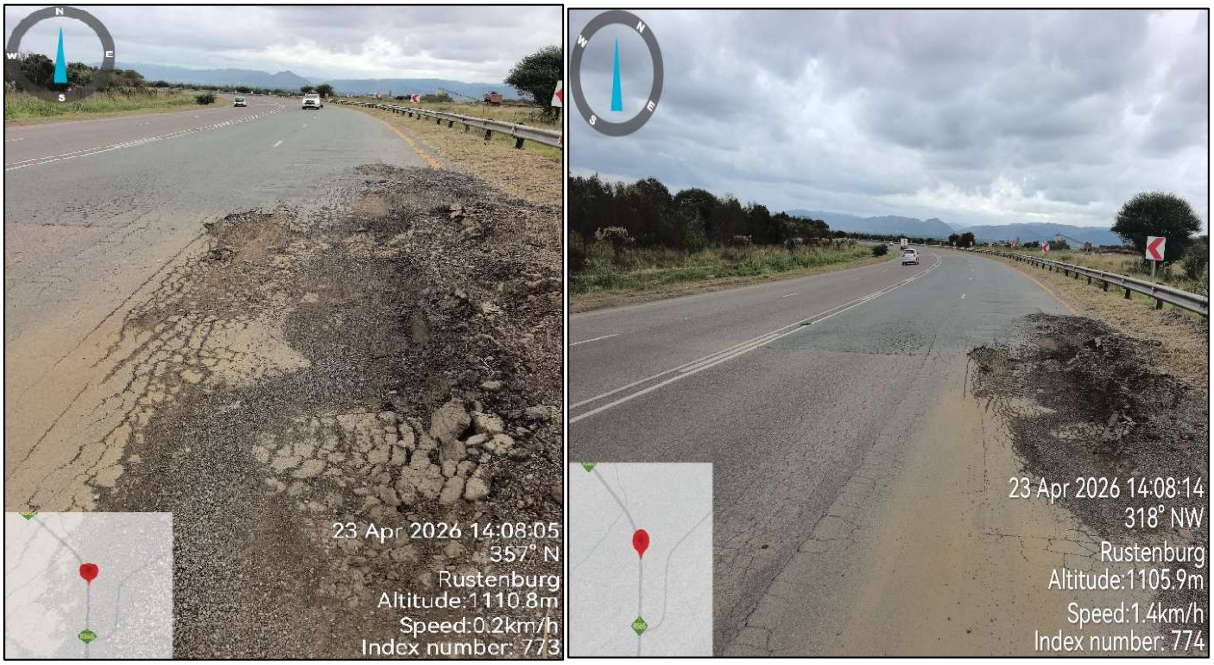


Figure 9-1: Surfacing failures on R565/1.

9.3 AGGREGATE LOSS

Aggregate loss was mainly observed from km 3.2 to 4.0 on R565 where there is a general active loss of aggregates in large areas. The degree of aggregate loss varies from degree 1 – 5 on this route. The cause of the loss of aggregate can be attributed to decreasing of binder content and the related adhesion properties due to ageing of the surface.

The binder condition on this route was assessed by removing chips from the edge of the road where stone chips can be easily dislodged from the surface.



Figure 9 2: Aggregate loss

9.4 BINDER CONDITION

The binder condition of the section with the single seal was found to have little binder content remaining and is dull, grey, and brittle with aggregate that can be easily dislodged. The overall binder condition for this section is degree 5.



Figure 9 3: The binder condition

9.5 BLOCK CRACKS

Block cracks varying from degree 1 to 5 were observed in isolated locations of the road. The block cracks observed were mainly faint, while others were more distinctive although no spalling was observed. The severe block cracks observed had narrow spacing with the pumping of fines.



Figure 9-4: Block cracks.

9.6 LONGITUDINAL CRACKS

Longitudinal cracks were observed mostly between km 33.2 to 33.6 on R565, with the severity of the cracks varying between degree 2 and 5. Longitudinal cracking was generally more prevalent in the middle of the lane of the road and was often observed to initiate the process of emerging potholes. The patching team has fixed the severe portions and is currently in a sound condition.

9.7 TRANSVERSE CRACKS

Isolated transverse cracking was observed at isolated locations along the R565. These cracks vary in degrees in severity, ranging from degree 1 to degree 3. The cracks were mainly observed along the surface shoulder as shown below.



Figure 9-5: Isolated transverse cracking.

9.8 CROCODILE CRACKS

During the road condition assessment, it was noted that crocodile cracks were primarily restricted to wheel paths, along sections with extensive spalling with and pumping. These distresses predominantly resulted from fatigue-induced failures in both the surface and base layers. The degree of severity was observed to range from 1 – 5.

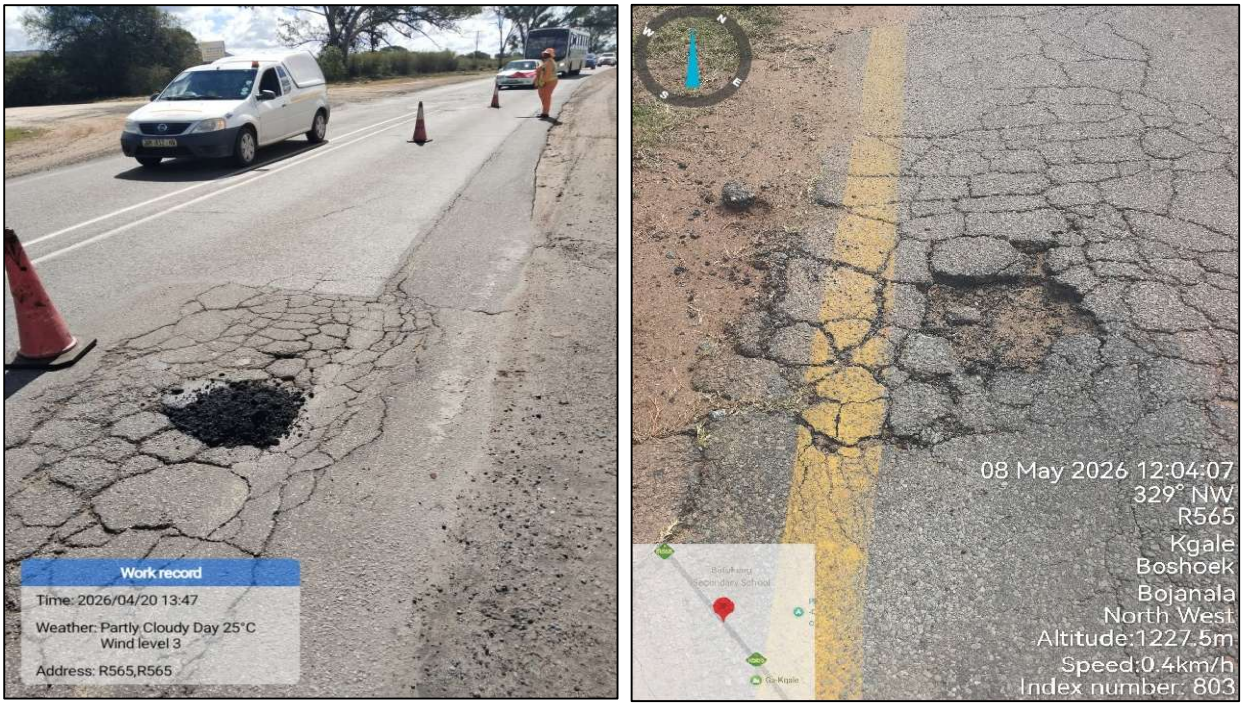


Figure 9-6: Crocodile crack on the center of the road

9.9 POTHOLES

Potholes of degree 5 were observed in isolated locations along the road. The potholes observed appear to be attributed to the spalling of cracks and the dislodging of the surface thereby leaving the base layer exposed to the effects of water ingress. However, any potholes that may appear on the routes are fixed by the route patrol as and when they appear.

work was done to rectify the damage. The damage to the flood remains to be an alarming factor in this project.



Figure 9-7: Potholes at R510(left), Closed potholes (right)

9.10 RUMBLE STRIPS

There are rumble strips on R565, and they are currently in good condition.



Figure 9-8: rumble strips on R565/2.

10 ILLEGAL ADVERTISING

As part of an ongoing activity, all unauthorized advertisements within the road reserve are being removed. In line with regulations, we are also submitting applications to SANRAL (South African National Roads Agency Limited) for the approval of facility signs. For advertisements located outside the road reserve, they are subject to SANRAL's statutory control process. The statutory control division of SANRAL will review the existing road signs and differentiate between compliant signs and those that are considered illegal.

Quotations for the removal of unauthorized stickers were submitted to the Route Manager for approval. However, the procedure could not take place because it puts the Route Patrol Team in danger. This is mostly tribal land hence, the RRM site team had to report on the matter with the local tribal leaders which are currently working on dealing with the problems of illegal signs, hawkers, and dangerous illegal truck stops.
Once the operations on both municipalities are formed the mandated 21-day period for sticker placement has passed, our Maintenance teams will be instructed to remove all signs deemed illegal within the road reserve. Any new signs erected by third parties within the road reserve will be promptly removed if prior approval from SANRAL has not been obtained.

Moreover, the RRM team routinely removes smaller illegal signs and posters during their daily patrols.





Figure 10-1: Unauthorized advertising along the routes.

11 SLOPE STABILITY

There is nothing to report at this stage.

12 PEDESTRIAN PATHS

It was noted that only R556, R565/2 and R510 have designated pedestrian sidewalks. The sidewalk along R556 stretches from km 0.0 to km 5.2, R565/2 from km 0.0 to km 8.9 and R510 from km 2.83 to km 13.68. These sidewalks run parallel on both sides of the road, covering a total distance of approximately 50km, which has been well-maintained.

The sidewalk consists of block paving bricks. A general condition of the sidewalk along the R510 that will go under maintenance is shown in Figure 12-1 below.



Figure 12-1: A typical sidewalk found along the R510.

13 ROUTE MARKER BOARDS

A survey of blue marker boards in the road reserve was conducted along all project routes. Most of the blue marker boards were found to be in good condition. All route boards that are stolen or damaged are replaced as the contract progresses.





Figure 13-1: Damaged kilometer marker board and direction sign board along the R565.

14 PAVEMENT MANAGEMENT SYSTEM INFORMATION

The information presented in the following sections includes all the information as recorded from the visual assessments of the road network within the national road reserve up to the limits of the South African National Roads Agency's jurisdiction.

Excluded are provincial, municipal and private cross-roads, which are not accessible from the road reserve of the national road. The total distance is approximately 122 kilometres, and a Locality Plan is included in Annexure A.

14.1 R510 FROM RUSTENBURG TO THE NORTHWEST/ LIMPOPO BORDER

This route previously known as the Provincial Road P16 Section 2 was declared to be under the jurisdiction of SANRAL in 2007. The route starts north of Rustenburg at km 2.83 and it proceeds in a northerly direction up to the North-West/Limpopo Provincial Border at km 72.1.

Type of carriageway	=	Single
Surfacing	=	13 mm single seal
Interchanges	=	None
Shoulders	=	Unsurfaced gravel shoulder
Toll Plazas	=	None
Carriage width	=	7 metres
Road reserve width	=	33 metres
Median description	=	None
Topography	=	Flat rolling terrain
Climate (Weinert)	=	>3

14.2 R556 FROM INTERSECTION WITH R565 TO INTERSECTION WITH R510

This route, previously known as the Provincial Road P51 Section 1, was declared to be under the jurisdiction of SANRAL in 2007. The route commences from the junction with Provincial Road P115 Section 1, also known as Route R565 south of Sun City at km 0.00, from where it proceeds in an easterly direction where it terminates as a National Road at its junction with the Route R510 at km 29.66.

Type of carriageway	=	Single
Surfacing	=	Asphalt
Interchanges	=	None
Shoulders	=	2m gravel and 1.5m paved shoulder
Toll Plazas	=	None
Carriage width	=	9 – 11 metres
Road reserve width	=	46 – 57 metres
Median description	=	None
Topography	=	Flat rolling terrain
Climate (Weinert)	=	>3

14.3 R565 FROM RUSTENBURG TO INTERSECTION WITH R556

This route previously known as the Provincial Road P115 Section 1, was declared to be under the jurisdiction of SANRAL in 2007. The route commences at km 0.00 at the intersection with the N4, where it joins Provincial District Road D287 also known as the R104, from where it proceeds in a general northerly direction up to its junction with Route R556 south of Sun City, and it terminates as a National Road at km 35.

Type of carriageway	=	km 0.00 to km 17.6 is a double carriageway km 17.6.00 to km 33.2 is a single carriageway.
Surfacing	=	Asphalt and double seal
Interchanges	=	None
Shoulders	=	1- 2 m gravel and surfaced
Toll Plazas	=	None
Carriage width	=	7 – 17 metres
Road reserve width	=	17 – 43 metres
Median description	=	7 metres blocked paved
Topography	=	Flat rolling terrain
Climate (Weinert)	=	>3

14.4 DEFINITION OF CODES USED

Table 14-1: Material descriptions and specifications

Code	Material	Abbreviated Specification
G1 G2 G3 G4 G5 G6 G7 G8 G9 G10	Graded crushed stone Graded crushed stone Graded crushed stone Natural gravel Natural gravel Natural gravel Gravel – soil Gravel – soil Gravel – soil Gravel – soil	86 – 88 % of apparent density; PI < 4.5 100 – 102 % mod. AASHTO; PI < 6 Min. 98 % mod. AASHTO; PI < 6 CBR > 80; PI < 6 CBR > 45; PI < 10 CBR > 25; PI < 10 CBR > 15 CBR > 10, in-situ CBR > 7, in-situ CBR > 3, in-situ
BC BS	Hot-mix Asphalt Hot-mix Asphalt	Continuously graded Semi-gap graded
PCC CRC	Portland cement concrete Continuously reinforced concrete	Mod. rupture > 4,5 MPa
C1 C2 C3 C4	Cemented crushed stone or gravel Cemented crushed stone or gravel Cemented natural gravel Cemented natural gravel	UCS 6 – 12 MPa at 100 % mod. AASHTO UCS 3 – 6 MPa at 100 % mod. AASHTO UCS 1.5 – 3 MPa at 100 % mod. AASHTO UCS 0.75 – 1.5 MPa at 100 % mod. AASHTO
AG AC AS AO AP	Asphalt surfacing Asphalt surfacing Asphalt surfacing Asphalt surfacing Asphalt surfacing	Gap-graded Continuously graded Semi-gap-graded Open-graded Porous

Code	Material	Abbreviated Specification
S1	Surface treatment	Single seal
S2	Surface treatment	Multiple seal
S3	Sand seal	
S4	Cape seal	
S5	Slurry	Fine grading
S6	Slurry	Coarse grading
S7	Surface renewal	Rejuvenator
S8	Surface renewal	Diluted emulsion
WM1	Water-bound macadam	PI < 6, 88 – 90 % of apparent density
WM2	Water-bound macadam	PI < 6, 86 – 88 % of apparent density
PM	Penetration macadam	Coarse stone with bitumen or tar
DR	Dump rock	Ungraded waste rock

14.5 PMS – ROAD INFORMTION

There is currently no PMS data available for the roads included in this Contract. During the Routine Road Maintenance contract, SANRAL may carry out mechanical surveys on the routes, and these measurements will consist of:

- Riding quality.
- Falling Weight Deflectometer; and
- Texture.

15 TRAFFIC INFORMATION

There are no primary/permanent traffic counting stations in all the routes forming part of this contract. The traffic data was provided by SANRAL and Syntell / Mikros Traffic Monitoring (Pty) Ltd and the traffic data is summarised in Table 15-1 and a detailed traffic survey is included in Annexure B.

The traffic date supplied by SANRAL includes the annual average daily traffic (AADT) in both directions, as well as the number of heavy vehicles (AADTT).

Table 15-1: Traffic information for each of the project routes

Route/Section	Station	Type	Available data	ADT*	ADTT**	Pavement Class
R510-1	19237	Secondary	3.90%	4116	535	-
R556-1	88	Secondary	2.20%	21212	679	-
R565-1	19245	Secondary	3.90%	6224	585	-
R565-2	19245	Secondary	3.90%	6224	585	-

**Annual Average Daily Traffic*
*** Annual Average Daily Truck Traffic*

The detailed traffic report is given in Annexure B.

16 HISTORIC ROAD MAINTENANCE IFORMATIONS

The previous RRM project was carried out under the contract NRA X.002-032-2013/1, with KBK Engineers (Pty) Ltd serving as the Consulting Engineers and Penny Farthing Engineering SA (Pty) Ltd as the Contractor. Starting from November 2020, Consulting Engineers assumed control of the contract. Various maintenance activities have been performed on the routes. These works encompass a range of tasks, including but not limited to:

- Surface patching
- Edge break repairs
- Pothole repairs
- Debris and litter clean up from culverts.
- Removal of vegetation growing on edges of pavement
- Shoulder repairs
- Guardrail repair and installation of new ones, and maintenance
- Grass cutting and mowing in the shoulder.
- Physical eradication of undesirable vegetation

17 VISUAL ASSESSMENT OF PAVEMENT

Pavement condition surveys were conducted along the national routes which form part of this Contract. From the pavement evaluation, route R510 and R556 can be classified as being in fair condition; these two appear to have been recently resurfaced. There are isolated sections that occasionally develop potholes and surface failures.

18 SUBCONTRACTORS AND BE's INFORMATION

During the duration of the project, a total of thirty (30) subcontractors were appointed under the main contractor, SR Constructions. However, it is important to note that all these subcontractors no longer form part of this contract as their contracts have reached their expiration or end date. Table 18-1 provides a comprehensive summary of the contact details for the appointed subcontractors involved in the project.

Table 18-1: Summary of Subcontractors

SMME	PACKAGE	PERIOD CONTRACTED/EXTENDED	CONTACT PERSON	COMMENTS
Pila Holdings	R535 917.98	12 months	Kgomotso Modingoane	Contract Ended
Floyd Segoe	R592 833.47	12 months	Floyd Segoe	Contract Ended
Scalo Supplies & Projects	R1 232 357.44	12 months	Andries Shole	Contract Ended
Reabusarona Trading & Projects	R4 777 379.54	30 months	Thabo Samuel Molefe	Contract Ended
Batlotlegi Trading Enterprise	R6 358 973.11	30 months	Steve Makhubu	Contract Ended
Odirile Mathebula Mokotong	R6 720 150.83	30 months	Happy Stemer	Contract Ended
Ba-Mophato	R385 557.1	10 months	Graig	Contract Ended
Keorapetswe Investments	R506 109.15	10 months	Keorapetse Legodi	Contract Ended
Push Civils	R3 389 390.57	28 months	Tebogo Mokotso	Contract Ended
TBM	R4 652 006.87	28 months	Boitumelo Tsheola	Contract Ended
Phillsam Construction & projects	R699 285.22	19 months	Letlhogonolo Sambo	Contract Ended
Imperio Enterprise	R2 061 829.19	19 months	Kenny Molemane	Contract Ended
Sufficiency services & projects	R1 981 644.04	19 months	Mable Thate	Contract Ended
Olerato Enterprise	R819 416.56	16 months	Lesego Mannathoko	Contract Ended
MotheoMolemo Trading & Projects	R1 808 993.49	13 months	Tshiamo Mekgoe	Contract Ended
Olehi Trading	R2 300 423.77	13 months	Precious Motuku	Contract Ended
Godiraona Transport and Projects	R455 875.00	20 months	Godiraona Ramosito	Contract Ended
Good Phasell	R449 112.00	20 months	Poppy Phala	Contract Ended
KEM and GSG Projects	R903 679.00	20 months	Kgothatso Montsho	Contract Ended
Kopanye Group	R494 900.00	20 months	Thebe Ramokgopa	Contract Ended
M and 2D Services and Projects	R924 847.00	20 months	Mable Thate	Contract Ended
OPM Resources	R905 118.80	20 months	Olerato Motuku	Contract Ended

Ora Lira Projects	R478 112.00	20 months	Oratile Ramokoka	Contract Ended
Pholothero	R908 078.00	20 months	Tshiamo Mekgoe	Contract Ended
Push Freight	R473 660.00	20 months	Pious Maruping	Contract Ended
Reabusarona Trading and Projects	R2 969 838.80	20 months	Thabo Molefe	Contract Ended
Reoke Engineering Consultants and Projects	R920 000.00	20 months	Mmamiki Tiro	Contract Ended
Setitofo Sa Bapu Business Enterprise	R498 690.00	20 months	Lesego Mapedi	Contract Ended
Tsa Ntai Construction	R942 022.50	20 months	Natalie Montwedi	Contract Ended
Turks Transport and Trading	R2 908 625.00	20 months	Tumelo Letsholo	Contract Ended

19 FUTURE MAINTENANCE AND REHABILITATION PROJECTS

Table 19-1 shows future maintenance projects and their estimated star date.

Table 19-1: Future maintenance projects

Project	Description	Starting date
X-002-159-2023/1	RRM Maintenance	To be confirmed
R565	Upgrade single to dual carriageway	To be confirmed
R510	Community development project	To be confirmed

20 APPENDICES

ANNEXURE B

Traffic Counts

ANNEXURE C

Drainage Structures

ANNEXURE D

Road Sign Inventory

ANNEXURE F

Road Furniture

ANNEXURE G

Services

ANNEXURE I

Bridges

ROMH CONSULTING
Building 12, Highgrove Office Park
50 Tegel Avenue
Highveld
Centurion
0157

Contact Person: Boitumelo Selekana
Email: info@romh.co.za
Tel: 010 035 1460