

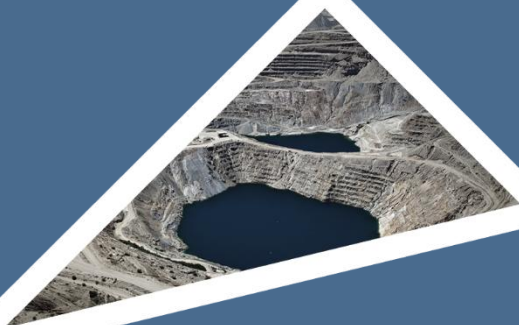


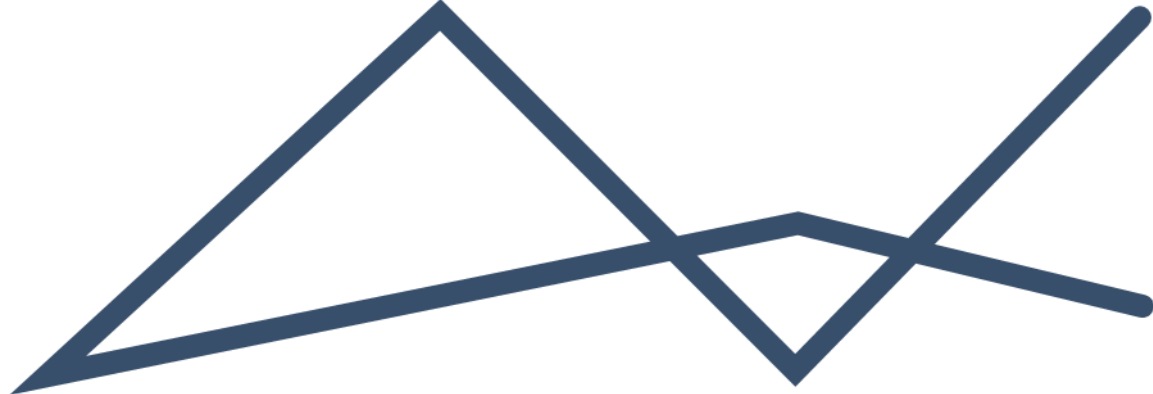
ENVIRONMENTAL  
IMPACT  
MANAGEMENT  
SERVICES

T 011 789 7170 E [info@eims.co.za](mailto:info@eims.co.za) W [www.eims.co.za](http://www.eims.co.za)

## SITE SENSITIVITY AND VERIFICATION REPORT

NTCSA ARIES-PAULPUTS-KOKERBOOM 400KV POWERLINE AND  
SUBSTATION EXPANSION PROJECT





#### DOCUMENT DETAILS

**EIMS REFERENCE:** 1704

**DOCUMENT TITLE:** SITE SENSITIVITY AND VERIFICATION REPORT: NTCSA ARIES-PAULPUTS-KOKERBOOM 400KV POWERLINE AND SUBSTATION EXPANSION PROJECT

#### DOCUMENT CONTROL

	NAME	SIGNATURE	DATE
<b>COMPILED:</b>	Dr Lucien James	Sent Electronically	2025/08/06
<b>CHECKED:</b>	John von Mayer	Sent Electronically	2025/08/06
<b>AUTHORIZED:</b>	Liam Whitlow	Sent Electronically	2025/08/13

#### REVISION AND AMENDMENTS

REVISION DATE:	REV #	DESCRIPTION
2025/08/06	ORIGINAL DOCUMENT	SITE SENSITIVITY AND VERIFICATION REPORT



## Table of Contents

1	Scope and Purpose .....	1
2	Project Background.....	2
2.1	Project Aspects.....	2
2.2	Site Locality and layout .....	2
2.3	DFFE Screening Tool Assessment .....	3
3	Site Assessment .....	4
3.1	Gradient .....	4
3.2	Sensitive Areas .....	5
3.3	Vegetation.....	5
3.4	Land Cover/ Use Description.....	6
4	Verification Findings and Motivation.....	14

## List of Figures

Figure 1: Site locality map.....	3
----------------------------------	---

## List of Tables

Table 1: Project description .....	2
Table 2: Screening Tool Report- Proposed development area environmental sensitivity. ....	3
Table 3: Site photographs.....	7
Table 4: Assessment for specialist studies and motivation. ....	14



# 1 SCOPE AND PURPOSE

*Regulation 16(1)(b)(v) of the Environmental Impact Assessment Regulations (GNR 982 promulgated under the National Environmental Management Act (Act 107 of 1998-NEMA)), requires that a Screening Report generated by the national web-based environmental screening tool for the specific site and activity must accompany any application for Environmental Authorization.*

*The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening. On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided.*

*Prior to commencing with a specialist assessment identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. The site sensitivity verification must be undertaken through the use of:*

- a) a desk top analysis, using satellite imagery;*
- b) a preliminary on-site inspection; and*
- c) any other available and relevant information.*

*This Site Sensitivity and Verification Report (SSVR) is a record of the outcome of the site sensitivity verification in compliance with the requirements of the procedures for the assessment and minimum criteria for reporting on identified environmental themes in terms of Sections 24(5)(a) and (h) and 44 of the NEMA. The SSVR aims to:*

- a) confirm or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;*
- b) contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and*
- c) be submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations(EIA Regulations).*



## 2 PROJECT BACKGROUND

### 2.1 PROJECT ASPECTS

NTCSA proposes the development of a 400kV Loop-In-Loop-Out (LILO) between Paulputs Substation and the Aries-Kokerboom Powerline. The proposed project will necessitate the upgrading of Paulputs Substation and the construction of a 400kV powerline between Paulputs Substation and the existing Aries-Kokerboom powerline. The proposed powerline is approximately 50km in length. A high-level summary of the main components of the development are listed in Table 1.

Table 1: Project description

		Location (DD MM SS)	
Project Aspect	Details	Latitude	Longitude
<b>1. Upgrade of Paulputs Substation</b>	The development will involve primarily, the upgrading of Paulputs substation to accommodate for the LILO to the Aries-Kokerboom powerline.	28°52'44.05"S	19°33'53.16"E
<b>2. Construction of a 400kV Powerline (~50kms in length)</b>	The LILO will consist for the large part, of a powerline from Paulputs substation to the Aries-Kokerboom powerline.	Start: 28°52'43.12"S Middle: 28°52'47.57"S End: 28°51'42.17"S	19°33'53.35"E  19°33'56.49"E  20°0'18.92"E
<b>3. Rerouting of an existing road</b>	An existing dirt road will have to be rerouted to accommodate for the proposed substation upgrade.	28°52'46.85"S	19°33'59.31"E

### 2.2 SITE LOCALITY AND LAYOUT

The proposed project is located on Farms Blad-Grond South No. 94 Portions 3, 0 (Remaining Extent), 1 (Remaining Extent), 4 (Remaining Extent), 5 (Remaining Extent), Blad-Grond North No. 77 Portion 2 (Remaining Extent), Steyns Puts 178 Portion 1 (Remaining Extent), Lucas Vlei No. 93 Portion 4 (Remaining Extent), 5 (Remaining Extent), Scuit-Klip No. 92 Portions 0 (Remaining Extent), 1 (Remaining Extent), 2 (Remaining Extent), 4, and Konkoonsies No. 91 Portion 1 and 6, in the Khâi-Ma and Kai !Garib Local Municipalities, Northern Cape. The site is approximately 30kms northeast of Pofadder.





Aspect	Very High	High	Medium	Low
Palaeontology Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Plant Species Theme	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Terrestrial Biodiversity Theme	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other??	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3 SITE ASSESSMENT

Prior to commencing with a specialist assessment identified in the Screening Report, the current use of the land and the environmental sensitivity of the site, must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. The site sensitivity verification must be undertaken through the use of:

- a desk top analysis, using satellite imagery;
- a preliminary on-site inspection; and
- any other available and relevant information.

The sub-sections below aim to provide context of the existing site conditions to support the site sensitivity and verification.

#### 3.1 GRADIENT

The general gradient characteristics of the site:

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



### 3.2 SENSITIVE AREAS

<i>Is the site located in the immediate vicinity of the following:</i>	Yes	No	Comment
Erosion Channels or areas of severe erosion/ destabilized soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Several drainage lines can be observed in proximity to Paulputs Substation. These drainage channels have given rise to eroded ground.
Wetlands (within 32m)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No wetlands were observed in the vicinity of the site. However, several drainage channels can be observed.
Unstable slopes or geological features (rocky outcrops)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	A dune is situation to the East of Paulputs Substation. The dune consists of loose, sandy substrate as well as stoney ground.
Bare areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sandy areas which are not vegetated can be observed on site, particularly on top of the dune.
Other Sensitive or risk areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Different flora and fauna were observed including a small sized weaver nest.
Are any existing servitudes and structures directly or indirectly affected by the proposed sites and routes (e.g. Eskom, public road servitudes and restrictions- 60m from National Road, farmer's water/irrigation supplies, etc.)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Several existing servitudes and structures are in proximity of the development. The proposed powerline runs along an existing Natonal Road (N14). The development will also affect a dirt road running north to south to Pofadder. Existing powerline infrastructure is also in proximity to the development given that the development affects the substation. A farmhouse and a graveyard were also present close to the proposed powerline. Several PV facilities can be observed close to the site.

### 3.3 VEGETATION

<i>Which of the listed descriptions best describes the general groundcover on and around the site?</i>				
<input checked="" type="checkbox"/> Natural veld - good condition	<input type="checkbox"/> Natural veld with scattered aliens	<input type="checkbox"/> Natural veld with heavy alien infestation	<input type="checkbox"/> Veld dominated by alien species	<input type="checkbox"/> Gardens
<input type="checkbox"/> Sport field	<input type="checkbox"/> Cultivated land	<input type="checkbox"/> Paved surface	<input type="checkbox"/> Building or other structure	<input type="checkbox"/> Bare soil
<b>Comments on vegetation composition:</b>		Vegetation is natural as would be expected in this area. The area has, however, been disturbed by surrounding developments.		





<b>Comments on weed species/type</b>	No specific weed colonies were noted. However, alien species may still be present given the overall disturbance of the area.
--------------------------------------	--

### 3.4 LAND COVER/ USE DESCRIPTION



The SSVR aims to:

- confirm or dispute the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.; and
- contain motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

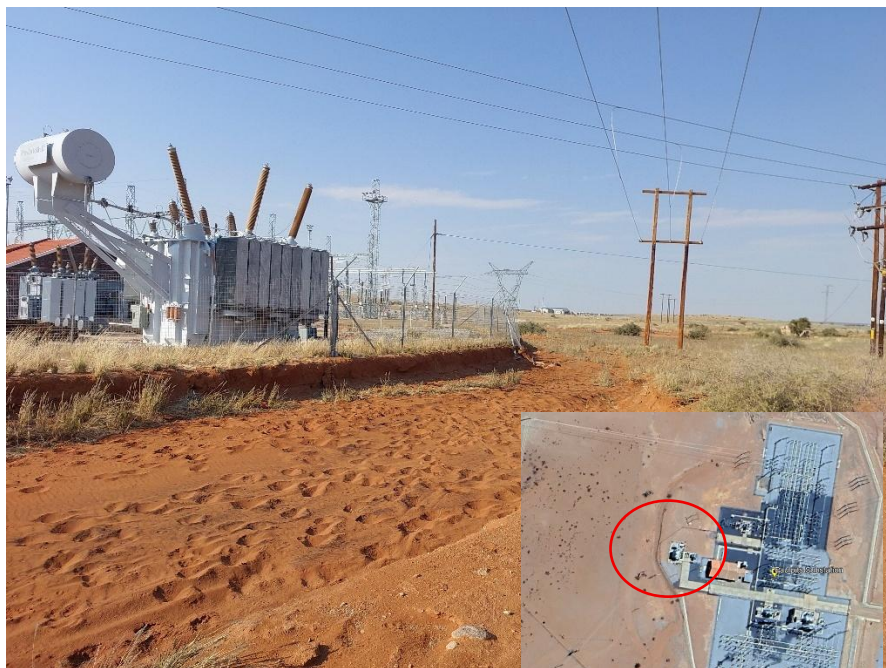
Land-uses related to the immediate area surrounding Paulputs Substation mainly relates to the Solar PV facilities. The proposed powerline will cover an area of multiple land-uses including vacant farm lands, with several natural waterbodies, non-perennial streams and rivers in proximity to the powerline route. Roads are also in proximity to the site as well as a granite quarry ~8kms north of Paulputs Substation at the close-by hills/ridges north of the substation. Please refer to Table 3 which includes several photographs of the site and land-uses.



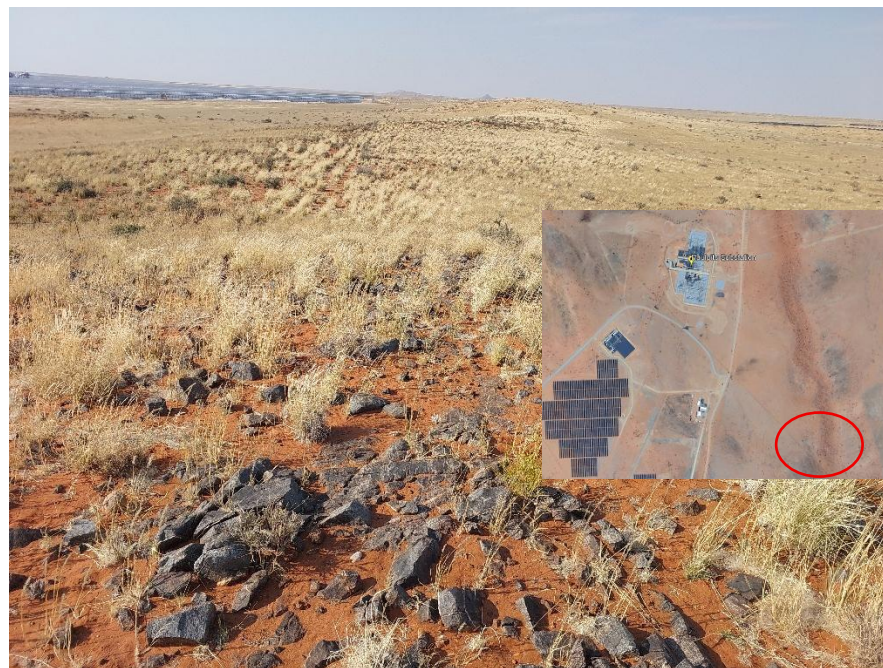
Table 3: Site photographs.

	
Paulputs Substation – Gate of facility photographed	Dirt road along to and along Paulputs Substation to be re-routed





Watercourse/erosion along the west of Paulputs Substation



Photograph taken from on top of the dune to the east of Paulputs Substation



The land is generally flat except for the elevated area to the north of Paulputs Substation



Some plant species can be observed around the site and along the proposed powerline servitude such as Camel thorn and Quiver Trees

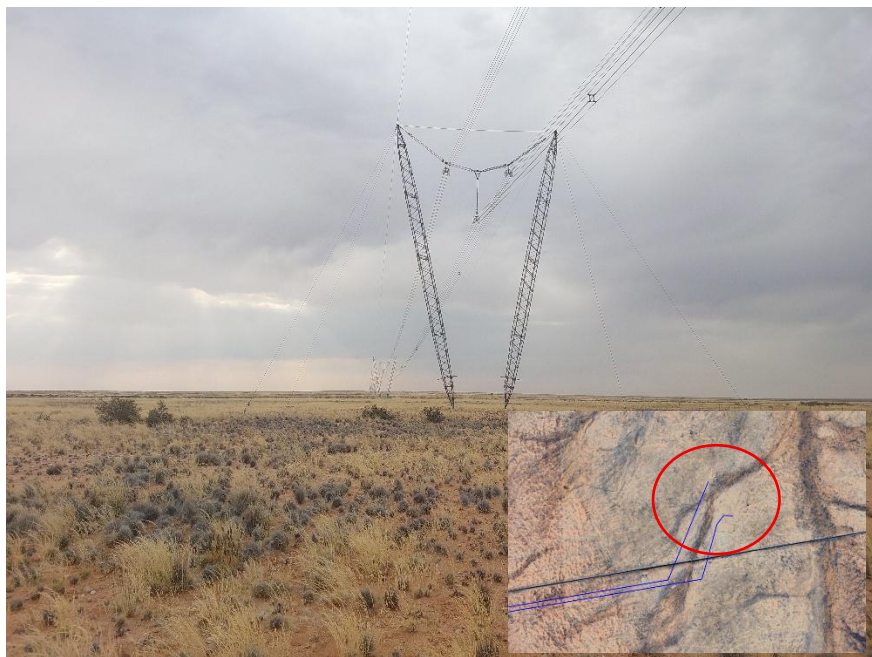




Photograph of nearby solar PV facility. Several PV facilities are in proximity to Paulputs Substation



Clear drainage line in proximity and to the north of Paulputs Substation



Connection point of the LILO along the current Aries-Kokerboom powerline



A farmhouse in proximity of the proposed powerline suggested to be older than 60 years and protected by the National Heritage Resources Act of 1990.





Graveyard identified in proximity of the proposed powerline. Confirmed to be a private/family graveyard



Different birds were noted including larger avifaunal species (photographed: *Aves-Neotis ludwigii*)



Some floral species typical of the Namakwa area were noted in the area



The proposed powerline runs along the N14. The main road is photographed here





## 4 VERIFICATION FINDINGS AND MOTIVATION

The Screening Report identifies preliminary development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmentally sensitive features on the site based on the site sensitivity screening (Section 2.3). On the basis of the sensitivities identified in the site sensitivity screening, a list of preliminary specialist studies required to be considered in the Impact Assessment process are provided. Table 4 below lists the screening tool identified specialist studies and associated screening tool sensitivity. Based on the findings of the site verification process (Section 3) a verified or suggested revised sensitivity is provided together with an associated motivation.

Table 4: Assessment for specialist studies and motivation.

Screening Specialist Required:	Tool Study	Level of Sensitivity:	Suggested Sensitivity:	Required level of Assessment	Motivation
Agriculture Impact Assessment		Medium	Low	None	Agricultural land will be minimally affected by the activities. No agricultural land or active agriculture was observed on site.
Archaeological and Cultural Heritage Impact Assessment		High	High	Full Study	As graves and historical buildings were identified, the sensitivity of the affected area can be confirmed. Additional heritage features may also be affected.
Palaeontology Impact Assessment		Medium	Low	Full Study	Minimal bedrock was observed as part of the affected area. However, a desktop assessment is recommended to confirm the sensitivity observed.
Terrestrial Biodiversity Impact Assessment		Very High	Very High	Full Study	Given the occurrence of certain plant species, a full assessment is recommended to



Screening Specialist Required:	Tool Study	Level of Sensitivity:	Suggested Sensitivity:	Required level of Assessment	Motivation
					assess the impact of the assessment.
Aquatic Biodiversity Impact Assessment		Very High	Medium	Full Study	The watercourses which could be impacted by the project are mainly non-perennial. A wetlands and aquatic assessment is recommended in this regard.
Geotechnical Assessment		High	High	Full Study	This assessment will be undertaken by NTCSA as part of the design for the substation.
Plant Species Assessment		Medium	Medium	Full Study	The impact of the project on plant species will be assessed as part of the terrestrial ecological assessment.
Animal Species Assessment		High	Medium	Full Study	While not many animal species have been noted during the Site Sensitivity Verification assessment, the area may still be sensitive. The impact of the project on animal species will be assessed as part of the terrestrial ecological assessment to be undertaken.
Landscape/Visual Impact Assessment		High	High	Full Study	The project will have an impact on the landscape given that it will



Screening Specialist Required:	Tool Study	Level of Sensitivity:	Suggested Sensitivity:	Required level of Assessment	Motivation
					involve the construction of pylon tower infrastructure. The overall sense of place of the area is expected to be impacted by the construction of the proposed powerline.
Avian Impact Assessment		High	High	Full Study	This sensitivity was confirmed on spotting a specimen of <i>Aves-Neotis ludwigii</i> (Ludwig's Bastard). A full assessment will be undertaken.
Civil Aviation Assessment		Low	Low	None	The site is not near any aerodromes or airports. Protocols suggest that no assessment is required if the project falls within an area of Low sensitivity. Therefore, comment will be obtained from ATNS/CAA as part of the EIA process.
RFI Assessment		High	Medium	Compliance Statement	This assessment was flagged by the screening tool, however, the reason for highlighting this was not clear. It is possible that this assessment was recommended given the site's proximity to the Square Kilometre Array. The site does not fall within any of the SKA Karoo



Screening Specialist Required:	Tool Study	Level of Sensitivity:	Suggested Sensitivity:	Required level of Assessment	Motivation
					Central Astronomy Advantage Areas, and therefore, a Compliance Statement and comment from SAHRAO as well as Sentech will be requested.

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS  
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE  
ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** N/A

**Project name:** Aries-Paulputs-Kokerboom

**Project title:** NTCSA Aries-Paulputs-Kokerboom Powerline

**Date screening report generated:** 21/11/2025 07:33:26

**Applicant:** NTCSA

**Compiler:** Dr L James

**Compiler signature:** .....

**Application Category:** Utilities Infrastructure|Electricity|Distribution and Transmission|Powerline

## Table of Contents

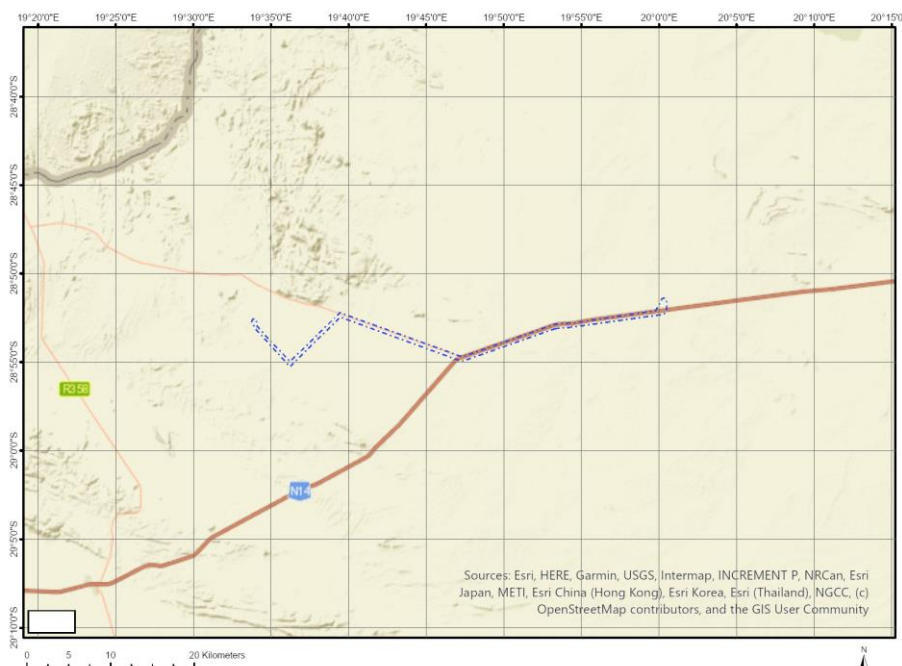
Proposed Project Location .....	3
Orientation map 1: General location .....	3
Map of proposed site and relevant area(s) .....	4
Cadastral details of the proposed site .....	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area .....	5
Environmental Management Frameworks relevant to the application .....	6
Environmental screening results and assessment outcomes .....	6
Relevant development incentives, restrictions, exclusions or prohibitions .....	6
Proposed Development Area Environmental Sensitivity .....	7
Specialist assessments identified .....	7
Results of the environmental sensitivity of the proposed area .....	9
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY .....	9
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY .....	10
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY .....	11
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY .....	12
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY .....	13
MAP OF RELATIVE DEFENCE THEME SENSITIVITY .....	14
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY .....	15
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY .....	16
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY .....	17

# Proposed Project Location

## Orientation map 1: General location



## Map of proposed site and relevant area(s)



## Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1		91	0	28°56'22.36S	19°32'21.35E	Farm
2		94	0	28°55'54.56S	19°57'17.57E	Farm
3		93	0	28°58'6.22S	19°48'50.5E	Farm
4		73	0	28°47'58.36S	20°0'50.72E	Farm
5		92	0	28°53'56.27S	19°39'52.2E	Farm
6		78	0	28°49'42.75S	19°47'3.08E	Farm
7		77	0	28°48'45.84S	19°53'50.14E	Farm
8	BLAD-GROND SOUTH	94	6	28°52'46.24S	19°54'33.16E	Farm Portion
9	BLAD-GROND SOUTH	94	10	28°52'20.79S	19°57'44.66E	Farm Portion
10	BLAD-GROND SOUTH	94	3	28°52'4.36S	19°58'37.7E	Farm Portion
11	BLAD-GROND SOUTH	94	3	28°52'46.8S	19°59'9.18E	Farm Portion
12	KONKOONSIES	91	6	28°53'30.26S	19°33'37.23E	Farm Portion
13	DROOGE VLAKTE	73	3	28°50'31.5S	20°1'51.76E	Farm Portion
14	BLAD-GROND SOUTH	94	1	28°55'34.64S	19°59'16.16E	Farm Portion
15	BLAD-GROND SOUTH	94	4	28°56'55.63S	19°56'38.17E	Farm Portion
16	BLAD-GROND SOUTH	94	0	28°56'15.65S	19°54'28.76E	Farm Portion
17	BLAD-GROND SOUTH	94	5	28°54'20.74S	19°53'13.97E	Farm Portion
18	BLAD-GROND NORTH	77	2	28°53'32.58S	19°52'24.49E	Farm Portion



19	BLAD-GROND NORTH	77	7	28°52'52.71S	19°53'16.75E	Farm Portion
20	KONKOONSIES	91	1	28°58'5.17S	19°34'6.88E	Farm Portion
21	UPPER ZWART	78	4	28°53'37.35S	19°50'49.57E	Farm Portion
22	STEYNS PUTS	178	1	28°53'55.84S	19°51'9.96E	Farm Portion
23	LUCAS VLEI	93	4	28°55'17.69S	19°45'43.49E	Farm Portion
24	LUCAS VLEI	93	9	28°56'10.23S	19°45'34.96E	Farm Portion
25	LUCAS VLEI	93	4	28°57'6.11S	19°45'29.24E	Farm Portion
26	LUCAS VLEI	93	5	28°53'49.18S	19°48'16.93E	Farm Portion
27	LUCAS VLEI	93	5	28°54'53.83S	19°49'7.1E	Farm Portion
28	LUCAS VLEI	93	12	28°54'18.36S	19°48'37.77E	Farm Portion
29	LUCAS VLEI	93	11	28°54'17.62S	19°48'37.41E	Farm Portion
30	SCUIT-KLIP	92	2	28°53'44.31S	19°43'18.38E	Farm Portion
31	SCUIT-KLIP	92	0	28°54'28.13S	19°39'23.54E	Farm Portion
32	SCUIT-KLIP	92	1	28°52'8.22S	19°38'29.53E	Farm Portion
33	SCUIT-KLIP	92	4	28°52'11.6S	19°35'24.92E	Farm Portion
34	LUCAS VLEI	93	10	28°54'14.11S	19°48'49.58E	Farm Portion

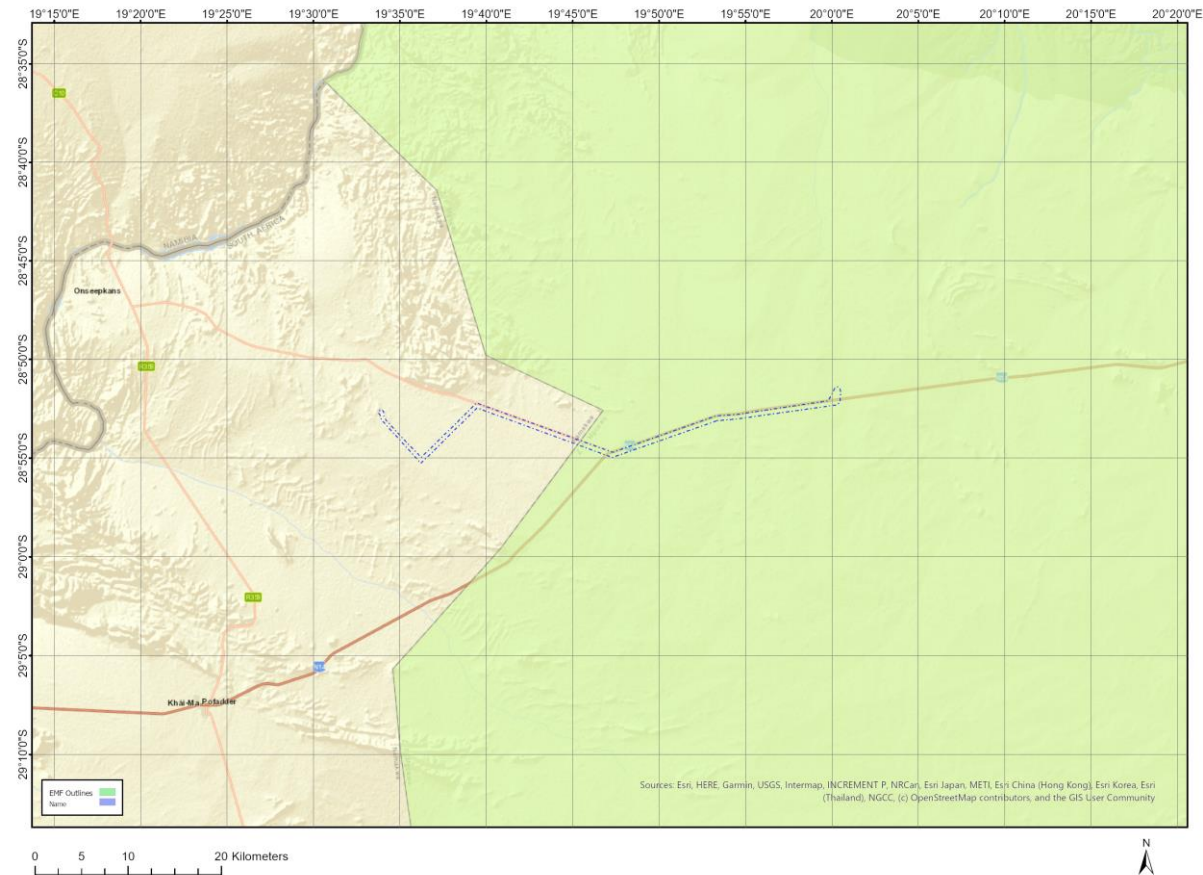
Development footprint<sup>1</sup> vertices:  
No development footprint(s) specified.

### Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/1832/1A	Solar - CSP	Approved	0
2	14/12/16/3/3/2/870	Solar - CSP	Approved	0
3	12/12/20/2564	Solar PV	Approved	19.5
4	14/12/16/3/3/2/1088	Solar PV	Approved	2.1
5	12/12/20/1832/2A	Solar - CSP	Approved	0
6	14/12/16/3/3/1/2417	Wind	Approved	0.2
7	12/12/20/2443	Solar PV	Approved	0
8	12/12/20/2098	Solar PV	Approved	0
9	14/12/16/3/3/2/1120	Wind	Approved	0
10	12/12/20/1832	Solar - CSP	Approved	0
11	14/12/16/3/3/2/1089	Solar PV	Approved	2.1
12	14/12/16/3/3/1/2418	Wind	Approved	0
13	12/12/20/2098/1	Solar PV	Approved	0
14	12/12/20/1832/3A	Solar - CSP	Approved	0
15	12/12/20/2443/AM2	Solar PV	Approved	0
16	12/12/20/2443/AM1	Solar PV	Approved	0
17	14/12/16/3/3/2/1090	Solar PV	Approved	2.1

<sup>1</sup> “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Siyanda District Municipality EMF	<a href="https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.pdf">https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA EMF REPORT 2008.pdf</a>

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Utilities Infrastructure|Electricity|Distribution and Transmission|Powerline.**

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Northern	<a href="https://screening.environment.gov.za/ScreeningDownloads/Developmen">https://screening.environment.gov.za/ScreeningDownloads/Developmen</a>

corridor	<a href="#">tZones/Combined_EGI.pdf</a>
Main Electricity Transmission Substation	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution_Transmission.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution_Transmission.pdf</a>
Main Electricity Distribution Substation	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution_Transmission.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution_Transmission.pdf</a>
Augrabies Falls National Park Buffer	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/AFNP_Management_Plan.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/AFNP_Management_Plan.pdf</a>

### Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme			X	
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

### Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

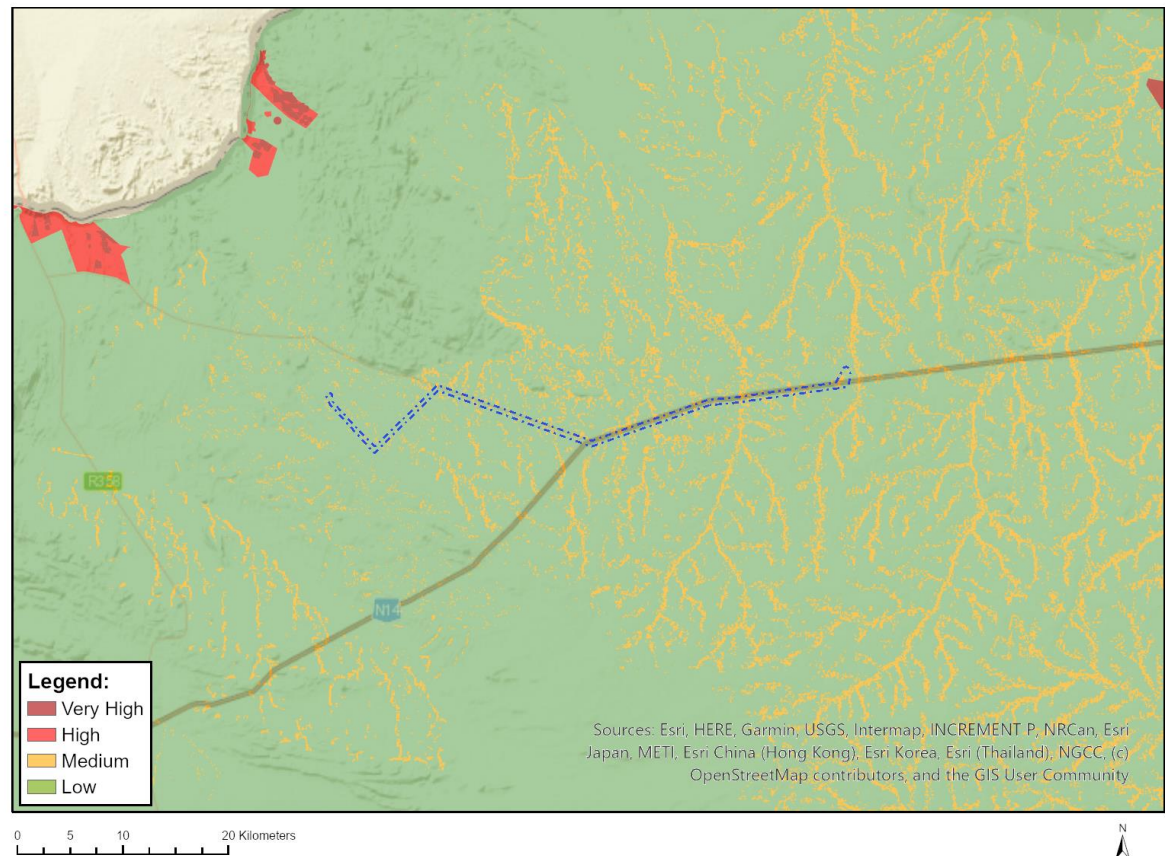
No	Specialist assessment	Assessment Protocol
1	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
2	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf</a>
3	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf</a>
4	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf</a>
5	Landscape/Visual Impact	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Landscape_Visual_Impact_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Landscape_Visual_Impact_Assessment_Protocols.pdf</a>

	Assessment	<a href="#">ssmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
6	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforHIA.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforHIA.pdf</a>
7	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforPIA.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforPIA.pdf</a>
8	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
9	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf</a>
10	Avian Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf</a>
11	Civil Aviation Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf</a>
12	RFI Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>

# Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

## MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



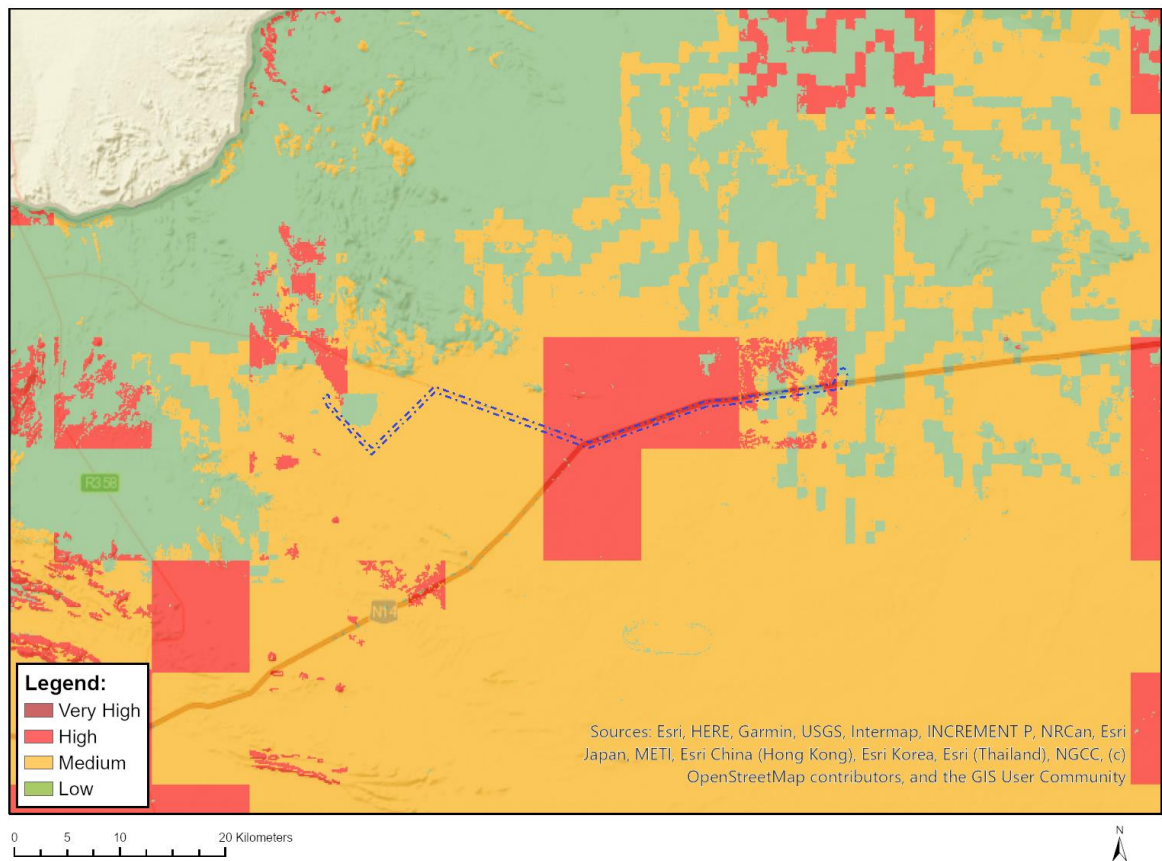
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	04. Low-Very low
Low	03. Low-Very low
Low	05. Low
Medium	06. Low-Moderate
Medium	07. Low-Moderate



## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



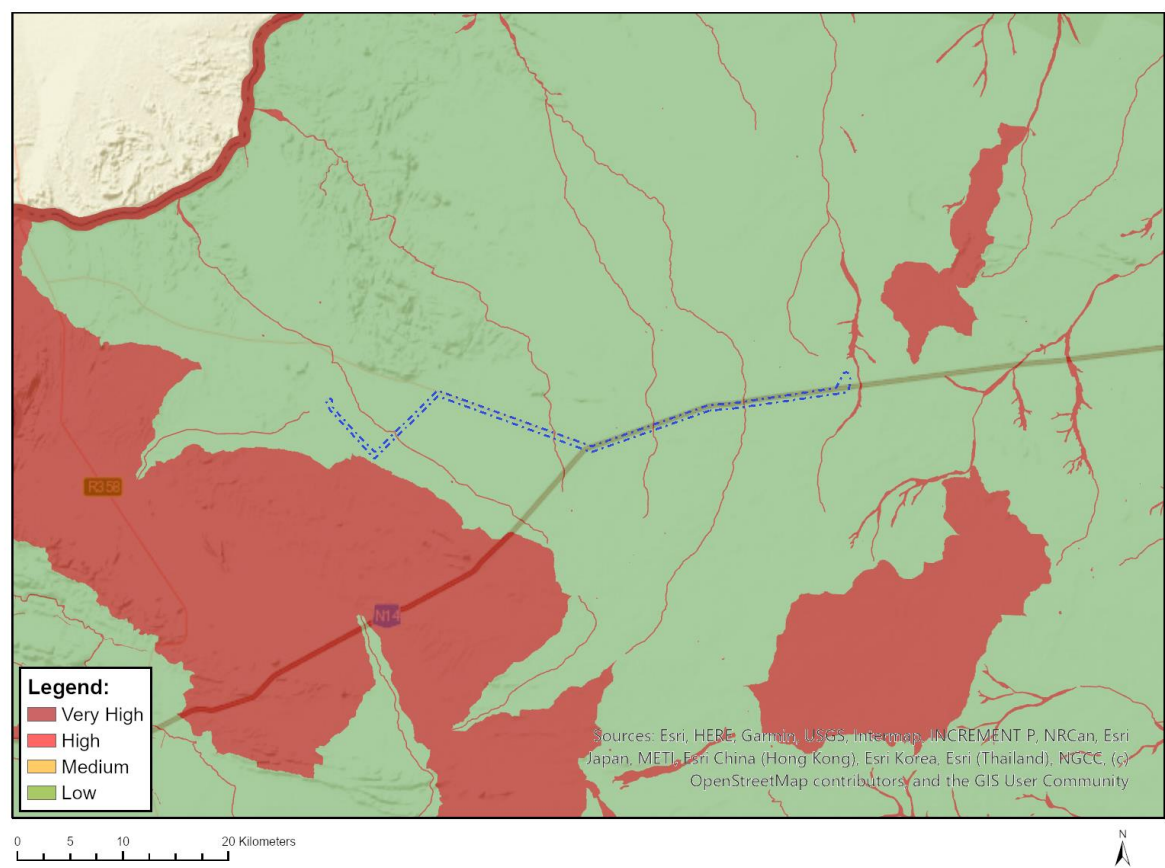
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Falco biarmicus
High	Aves-Neotis ludwigii
Low	Subject to confirmation
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

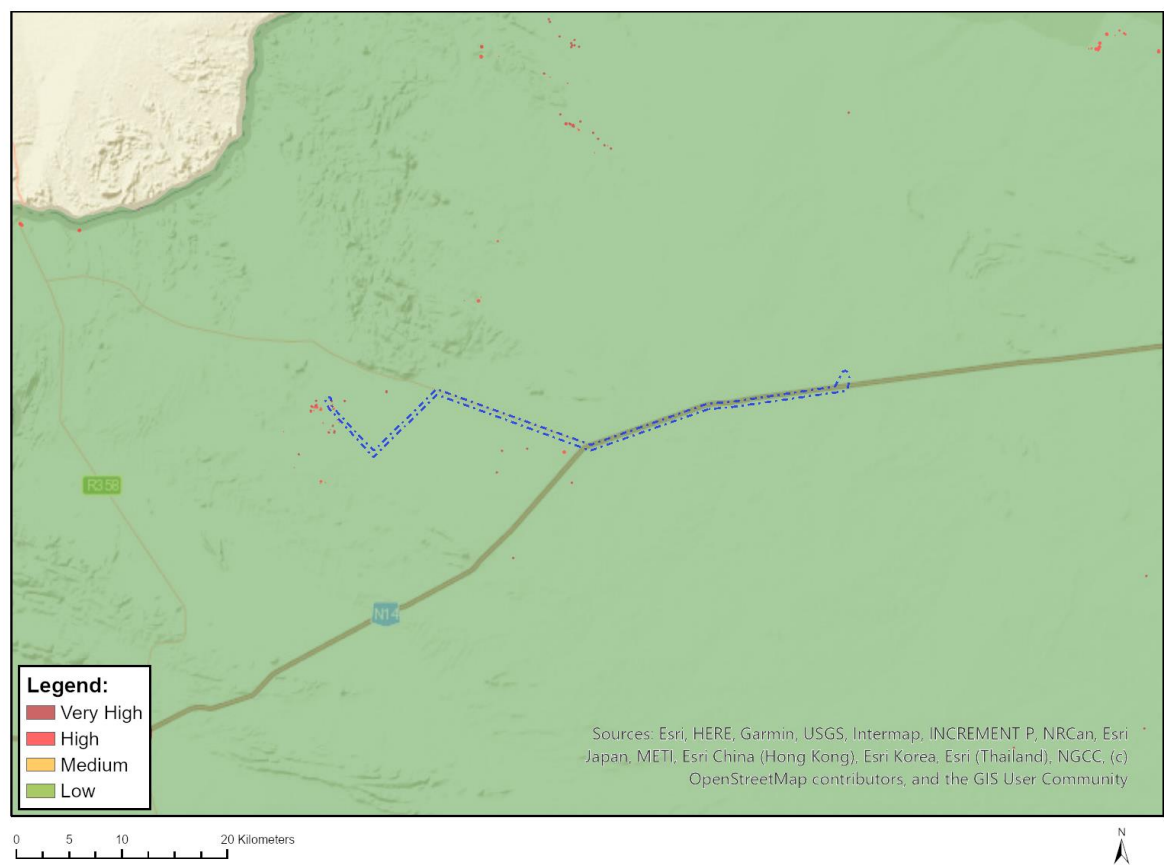


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Rivers

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



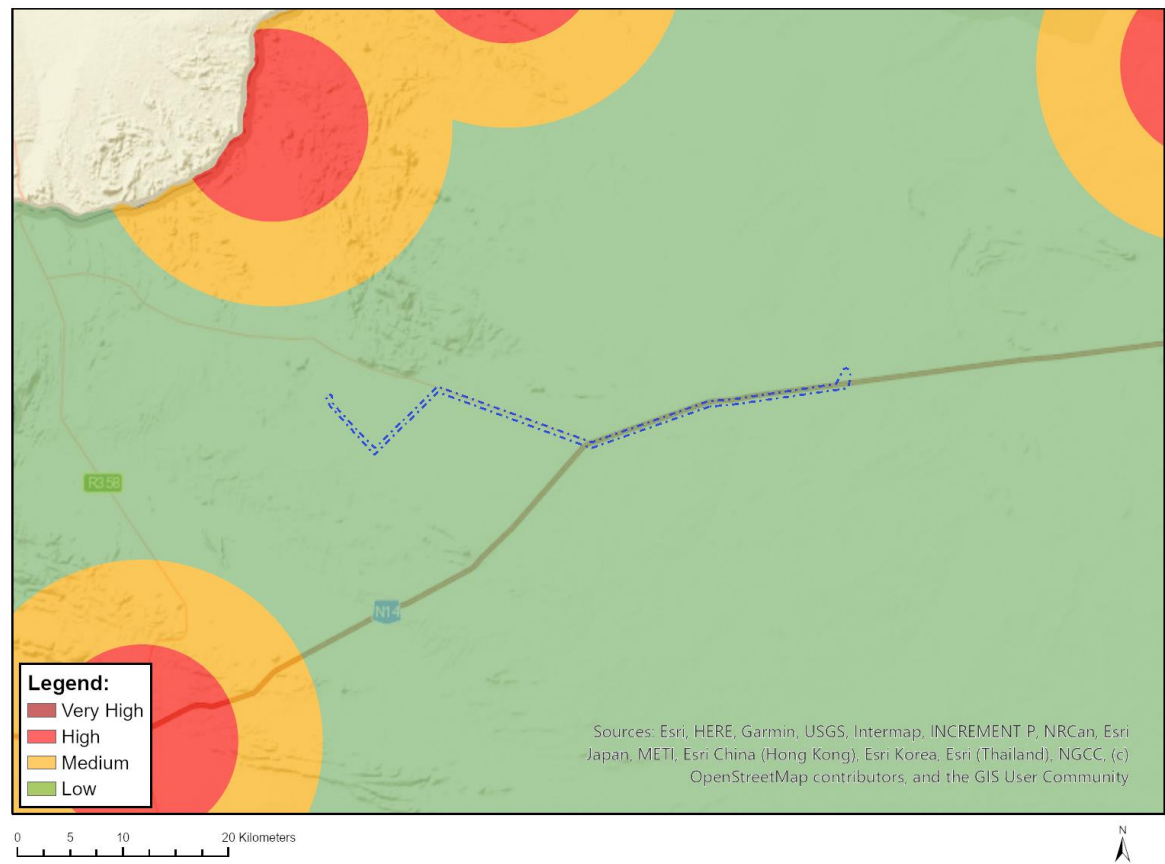
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 100m of a Grade IIIb Heritage site
High	Within 50m of a Grade IIIc Heritage site
Low	Low Sensitivity
Very High	Within 100m of an Ungraded Heritage site



MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

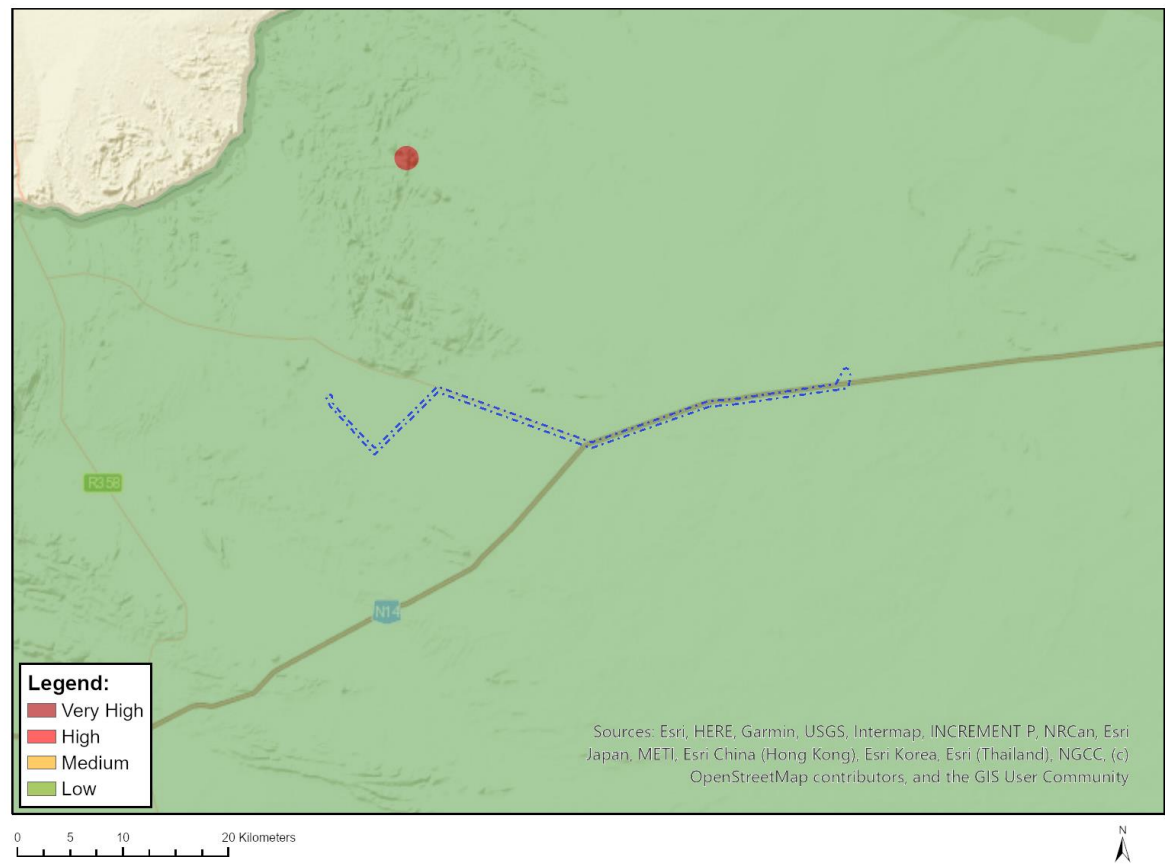


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

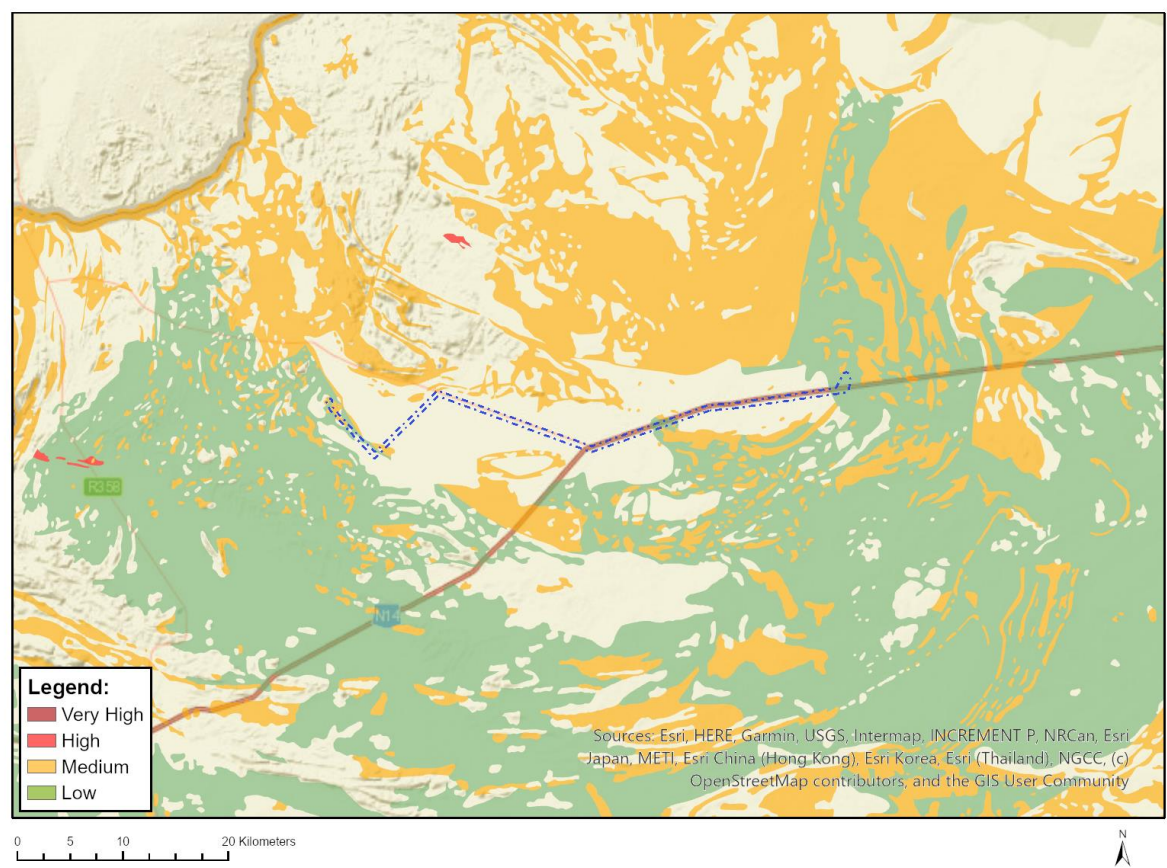


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

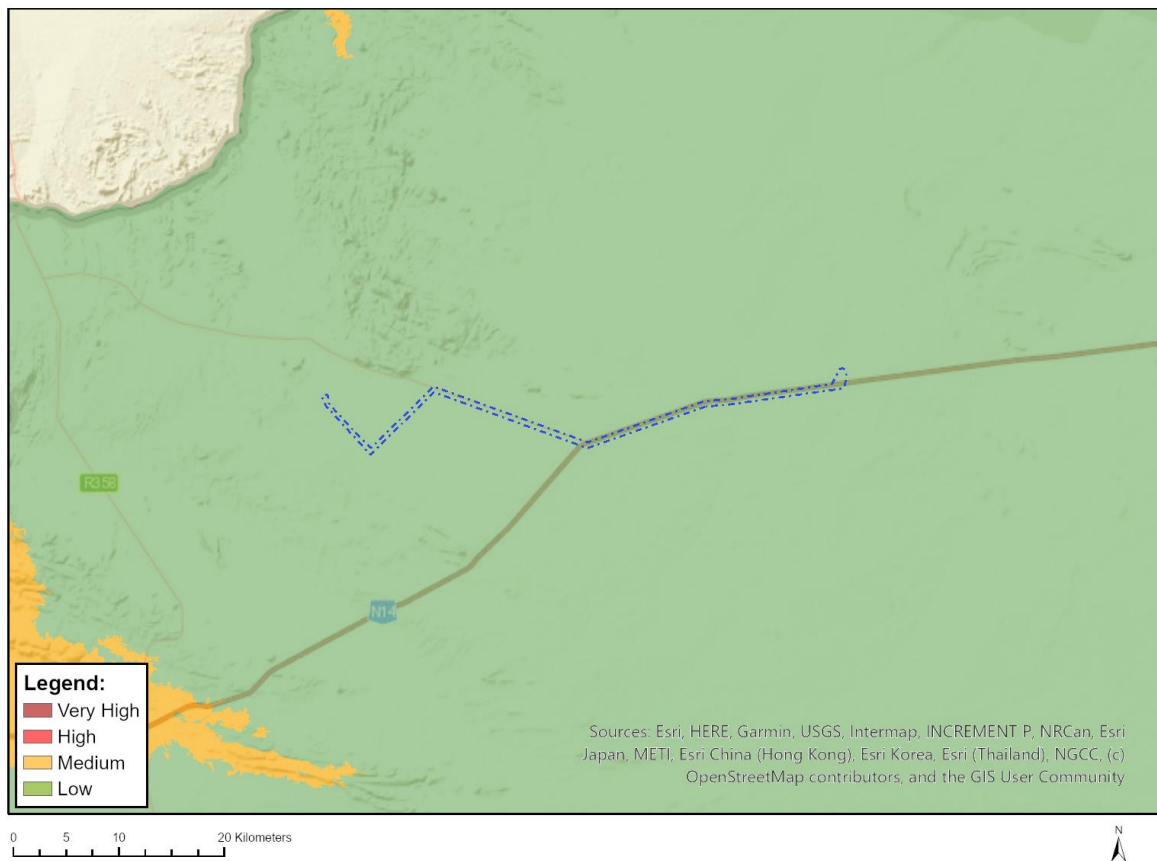


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity
Medium	Features with a Medium paleontological sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



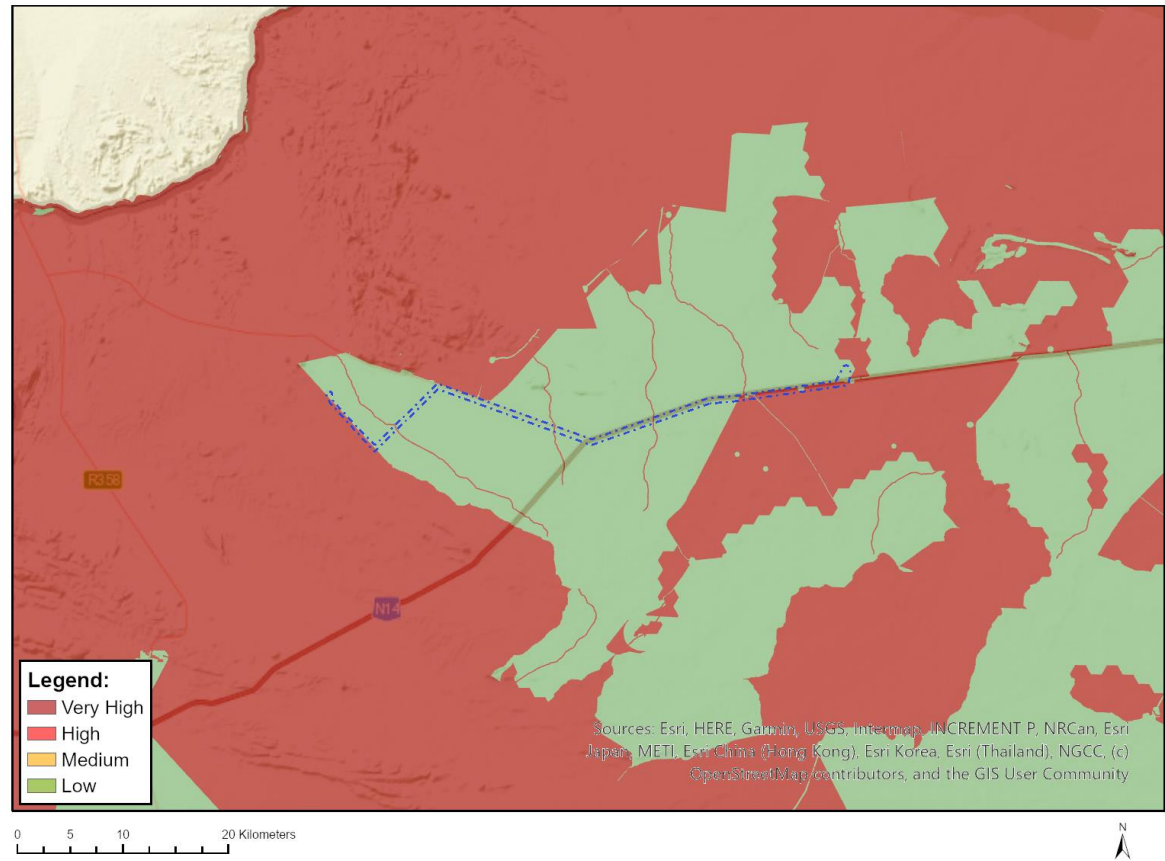
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Crotalaria pearsonii
Medium	Sensitive species 144

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	CBA 1
Very High	CBA 2
Very High	ESA
Very High	SANParks PAES (2025)