

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR  
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION  
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT  
FOOTPRINT ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** TBC

**Project name:** GK PV

**Project title:** 100 MW PV

**Date screening report generated:** 07/04/2020 18:24:07

**Applicant:** GK PV (Pty) Ltd

**Compiler:** Cape EAPrac

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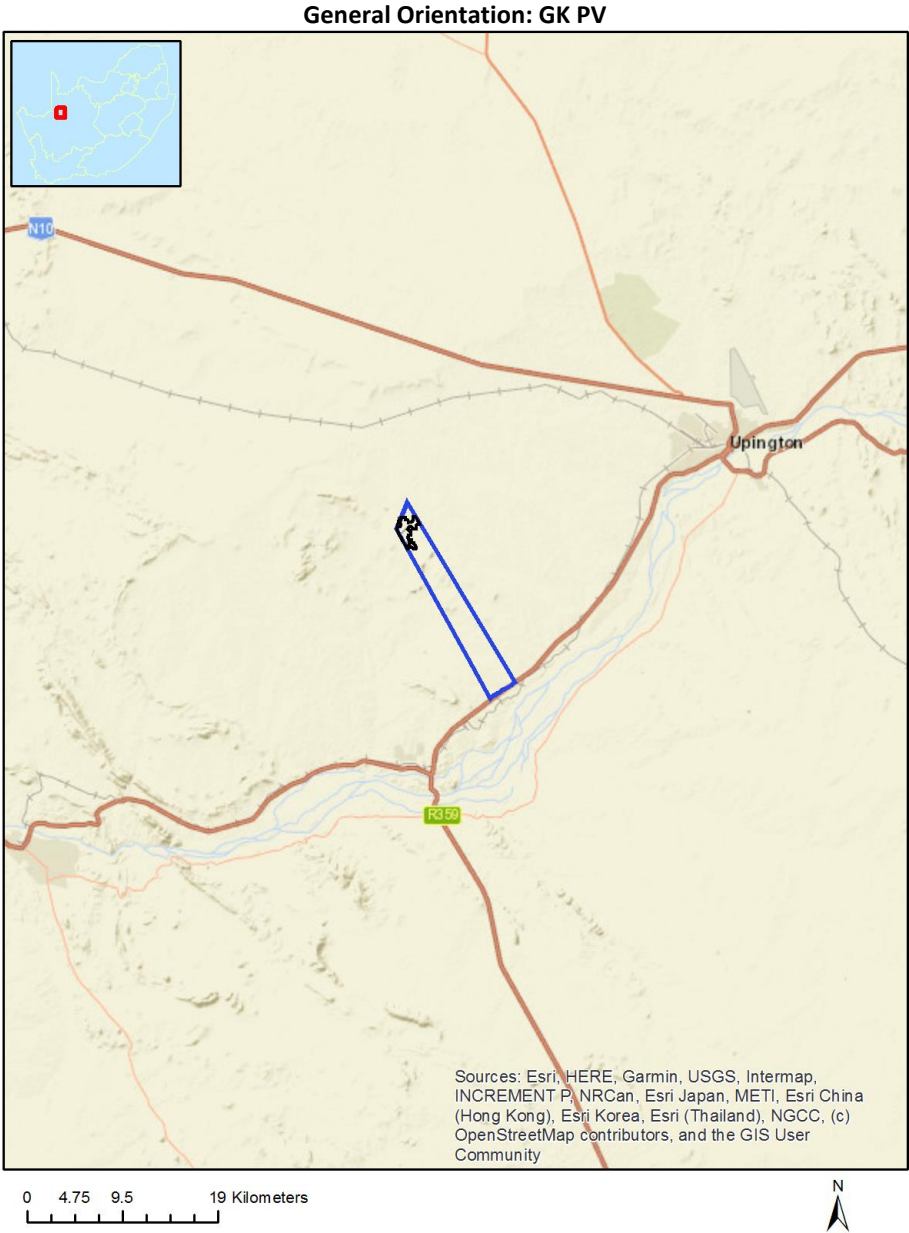
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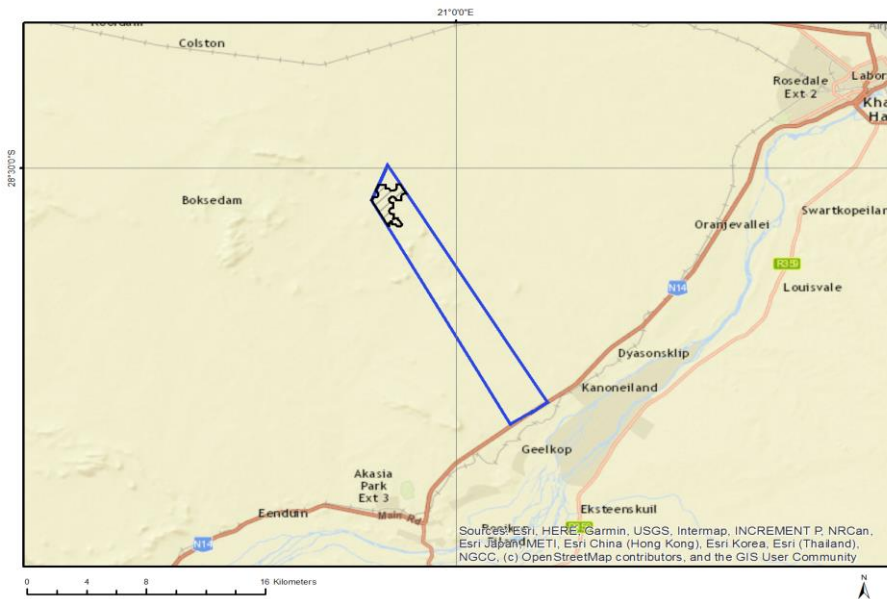
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# Proposed Project Location

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	GEELKOP	456	0	28°34'59.55S	21°0'6.12E	Farm
2	GEELKOP	456	0	28°35'1.67S	21°0'7.37E	Farm Portion

Development footprint<sup>1</sup> vertices:

Footprint	Latitude	Longitude
1	28°31'9.02S	20°58'1.86E
1	28°31'9.04S	20°57'50.19E
1	28°31'6.5S	20°57'49.81E
1	28°31'4.73S	20°57'48.78E
1	28°31'3.28S	20°57'47.16E
1	28°31'2.38S	20°57'45.12E
1	28°31'2.05S	20°57'42.84E
1	28°31'2.37S	20°57'40.53E
1	28°31'3.3S	20°57'38.48E
1	28°31'4.72S	20°57'36.9E
1	28°31'6.55S	20°57'35.85E
1	28°31'8.51S	20°57'35.51E
1	28°31'10.48S	20°57'35.85E
1	28°31'12.36S	20°57'36.9E
1	28°31'13.74S	20°57'38.5E
1	28°31'14.72S	20°57'40.55E
1	28°31'15.06S	20°57'42.82E

<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.

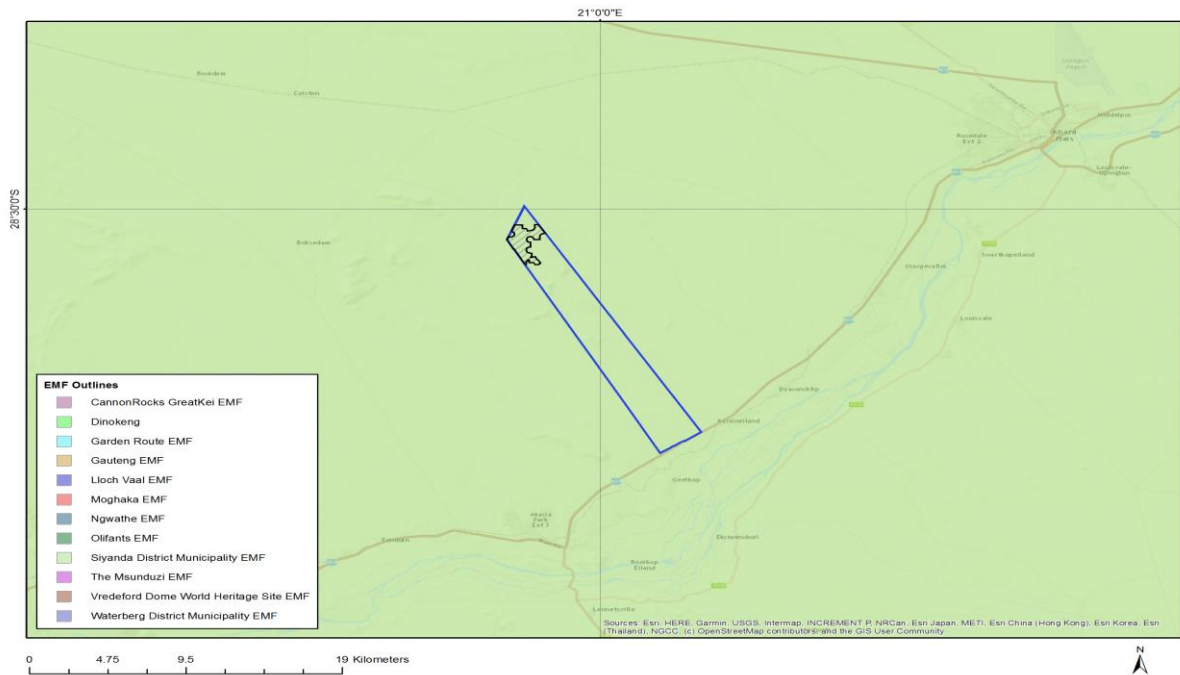
1	28°31'15.03S	20°57'43.9E
1	28°31'25.75S	20°57'43.9E
1	28°31'25.78S	20°57'42.03E
1	28°31'26.07S	20°57'39.89E
1	28°31'26.99S	20°57'37.82E
1	28°31'28.44S	20°57'36.21E
1	28°31'30.28S	20°57'35.18E
1	28°31'34.26S	20°57'35.17E
1	28°31'36.04S	20°57'36.22E
1	28°31'37.51S	20°57'37.84E
1	28°31'38.44S	20°57'39.93E
1	28°31'38.73S	20°57'42.21E
1	28°31'39.56S	20°57'45.77E
1	28°31'47.01S	20°57'45.75E
1	28°31'47.66S	20°57'43.91E
1	28°31'49S	20°57'43.88E
1	28°31'49.16S	20°57'44.09E
1	28°31'47.73S	20°57'48.2E
1	28°31'47.78S	20°57'53.52E
1	28°31'49.97S	20°57'53.56E
1	28°31'52.79S	20°57'56.36E
1	28°31'55.61S	20°57'59.21E
1	28°31'58.87S	20°58'1.36E
1	28°32'0.49S	20°58'2.43E
1	28°32'2.92S	20°58'1.64E
1	28°32'4.17S	20°58'0.18E
1	28°32'5.75S	20°57'58.84E
1	28°32'5.74S	20°57'52.96E
1	28°32'0.79S	20°57'49.1E
1	28°32'0.77S	20°57'41.3E
1	28°31'54.44S	20°57'39.9E
1	28°31'54.43S	20°57'38.89E
1	28°31'57.68S	20°57'38.89E
1	28°31'57.73S	20°57'35.15E
1	28°32'4.87S	20°57'35.12E
1	28°32'4.86S	20°57'32.69E
1	28°31'29.83S	20°57'10.69E
1	28°31'30.31S	20°57'9.71E
1	28°31'9.31S	20°56'56.52E
1	28°31'1.63S	20°57'0.04E
1	28°31'1.78S	20°57'0.16E
1	28°31'2.68S	20°57'2.23E
1	28°31'3.01S	20°57'4.5E
1	28°31'2.68S	20°57'6.77E
1	28°31'1.76S	20°57'8.82E
1	28°31'0.3S	20°57'10.46E
1	28°30'58.5S	20°57'11.52E
1	28°30'54.53S	20°57'11.51E
1	28°30'52.68S	20°57'10.43E
1	28°30'51.25S	20°57'8.81E
1	28°30'50.32S	20°57'6.79E
1	28°30'46.98S	20°57'6.79E
1	28°30'36.17S	20°57'11.76E
1	28°30'36.18S	20°57'28.07E
1	28°30'44.32S	20°57'28.05E
1	28°30'44.32S	20°57'35.43E
1	28°30'48.33S	20°57'37.8E
1	28°30'48.81S	20°57'37.8E
1	28°30'49.06S	20°57'37.82E
1	28°30'49.12S	20°57'37.96E

1	28°30'47.83S	20°57'46.63E
1	28°30'46.87S	20°57'48.75E
1	28°30'45.44S	20°57'50.35E
1	28°30'43.64S	20°57'51.39E
1	28°30'41.6S	20°57'51.75E
1	28°30'35.17S	20°57'51.78E
1	28°30'35.13S	20°57'58.68E
1	28°30'55.27S	20°58'12.49E
1	28°30'55.26S	20°58'8.69E
1	28°30'55.56S	20°58'6.48E
1	28°30'56.49S	20°58'4.36E
1	28°30'57.91S	20°58'2.76E
1	28°30'59.57S	20°58'1.85E
1	28°31'9.02S	20°58'1.86E

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	14/12/16/3/3/2/657	Solar CSP	Approved	6.1
2	12/12/20/1831/2	Solar CSP	Approved	6.1
3	12/12/20/1831/1	Solar CSP	Approved	6.1
4	12/12/20/2229	Solar PV	Approved	9.2
5	12/12/20/2518	Solar PV	Approved	24.5
6	14/12/16/3/3/3/82	Solar CSP	Approved	0
7	12/12/20/2230	Solar PV	Approved	0
8	14/12/16/3/3/2/656	Solar CSP	Approved	6.1
9	12/12/20/1831	Solar CSP	Approved	6.1
10	14/12/16/3/3/2/816	Solar PV	Approved	0
11	12/12/20/777	Solar CSP	Approved	10.9
12	12/12/20/1831/3	Solar PV	Approved	6.1

## 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.doc">https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.doc</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 footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV | Solar PV.

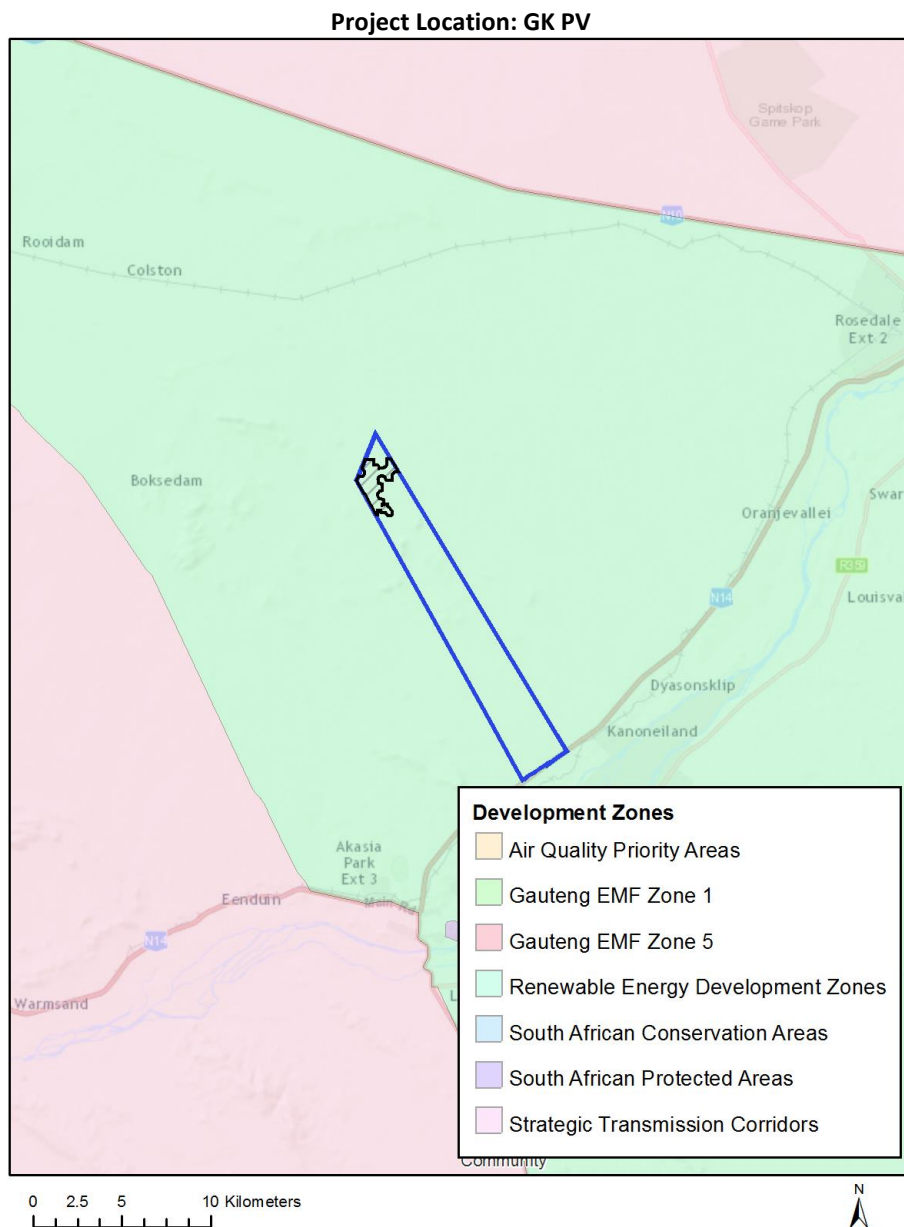
### Relevant development incentives, restrictions, exclusions or prohibitions

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

Incentive, restriction or prohibit	Implication

ion	
Strategic Transmission Corridor-Northern corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf</a>
Renewable energy development zones 7-Upington	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf</a>

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones





## Proposed Development Area Environmental Sensitivity

The following summary of the development footprint 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	
Avian Theme		X		
Bats Theme				X
Civil Aviation (Solar PV) Theme				X
Defence Theme				X
Landscape (Solar) Theme	X			
Paleontology Theme			X	
Plant Species Theme			X	
RFI Theme			X	
Terrestrial Biodiversity Theme				X

## Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, 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 footprint situation.

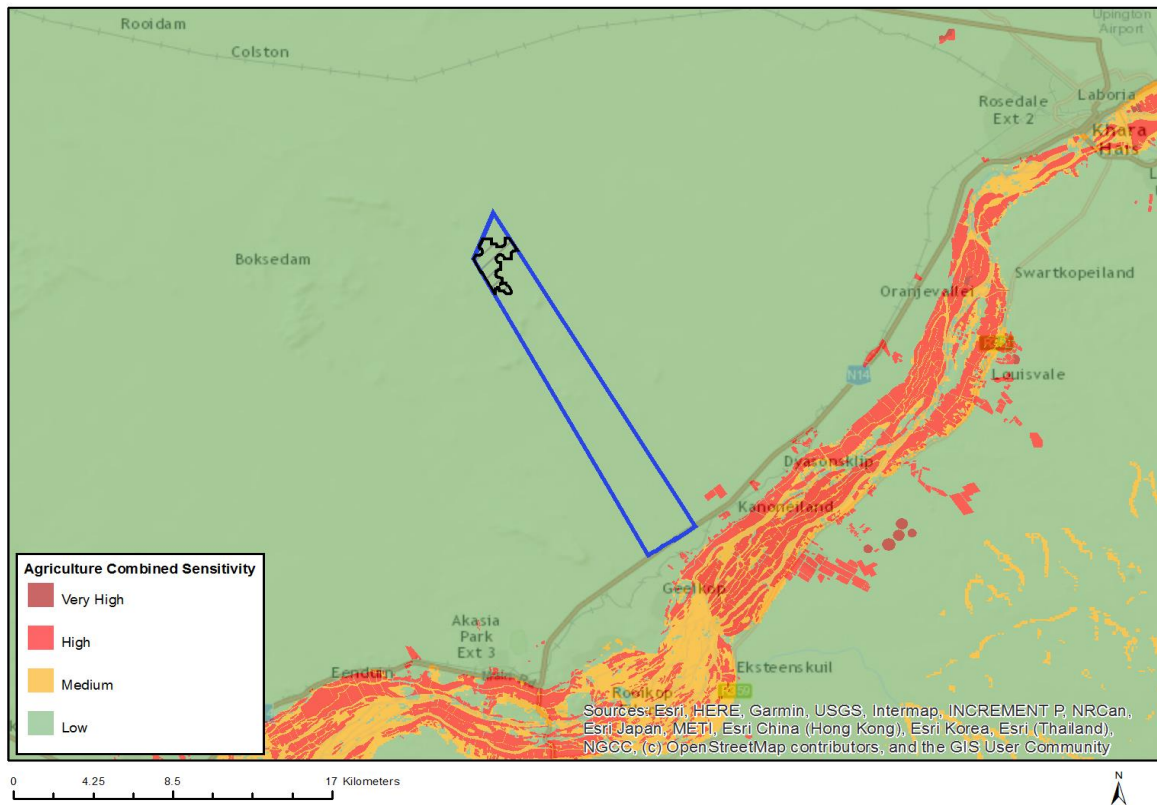
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf</a>
2	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>

	Assessment	
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted Terrestrial Biodiversity Assessment Protocols.pdf</a>
6	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted Aquatic Biodiversity Assessment.pdf</a>
7	Avian Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf</a>
8	Civil Aviation Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted Civil Aviation Installations Assessment Protocols.pdf</a>
9	Defense Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Defence_Installations_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted Defence Installations Assessment Protocols.pdf</a>
10	RFI Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf</a>
11	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf</a>
12	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf</a>
13	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf</a>
14	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted 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 footprint 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

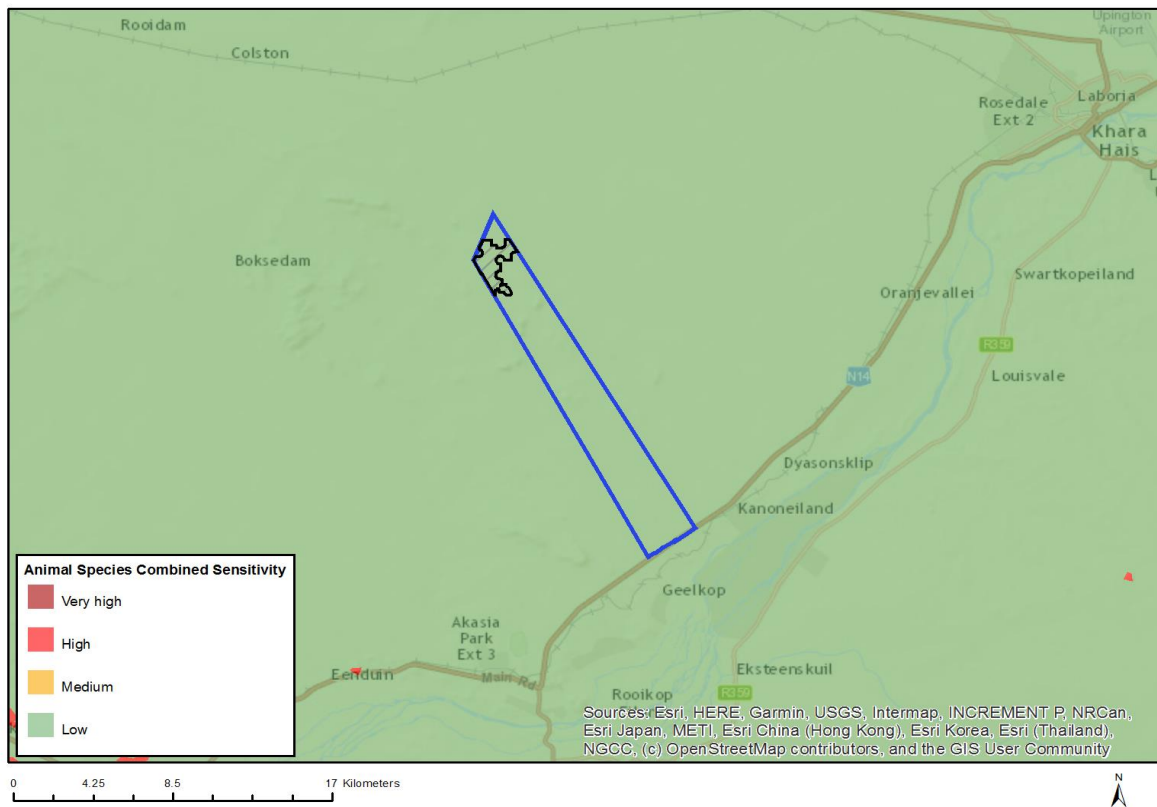


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

#### Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

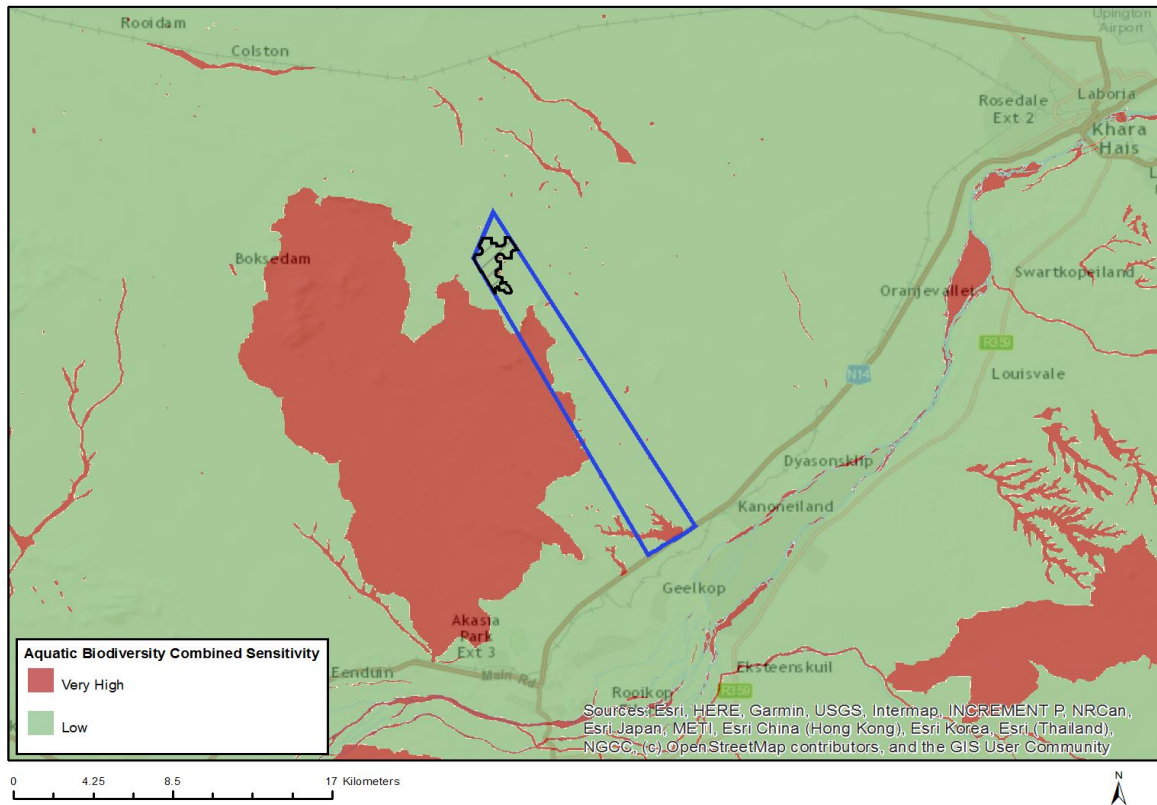


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

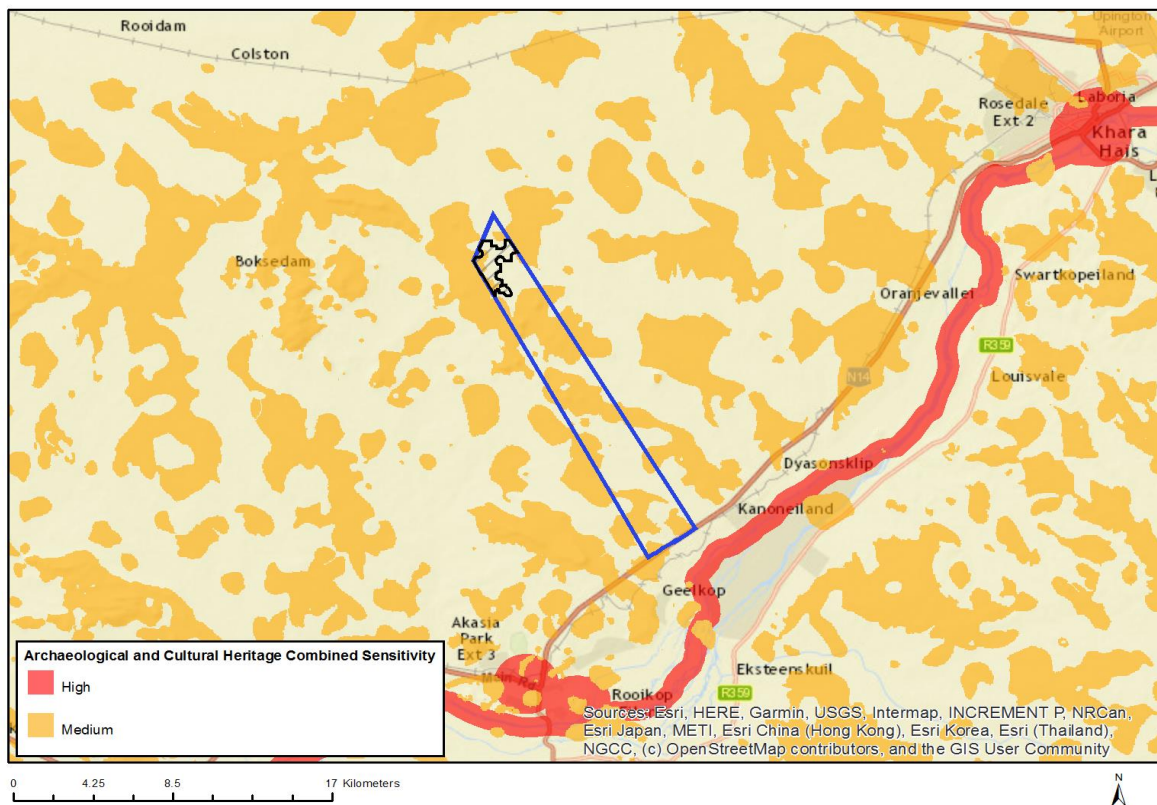


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

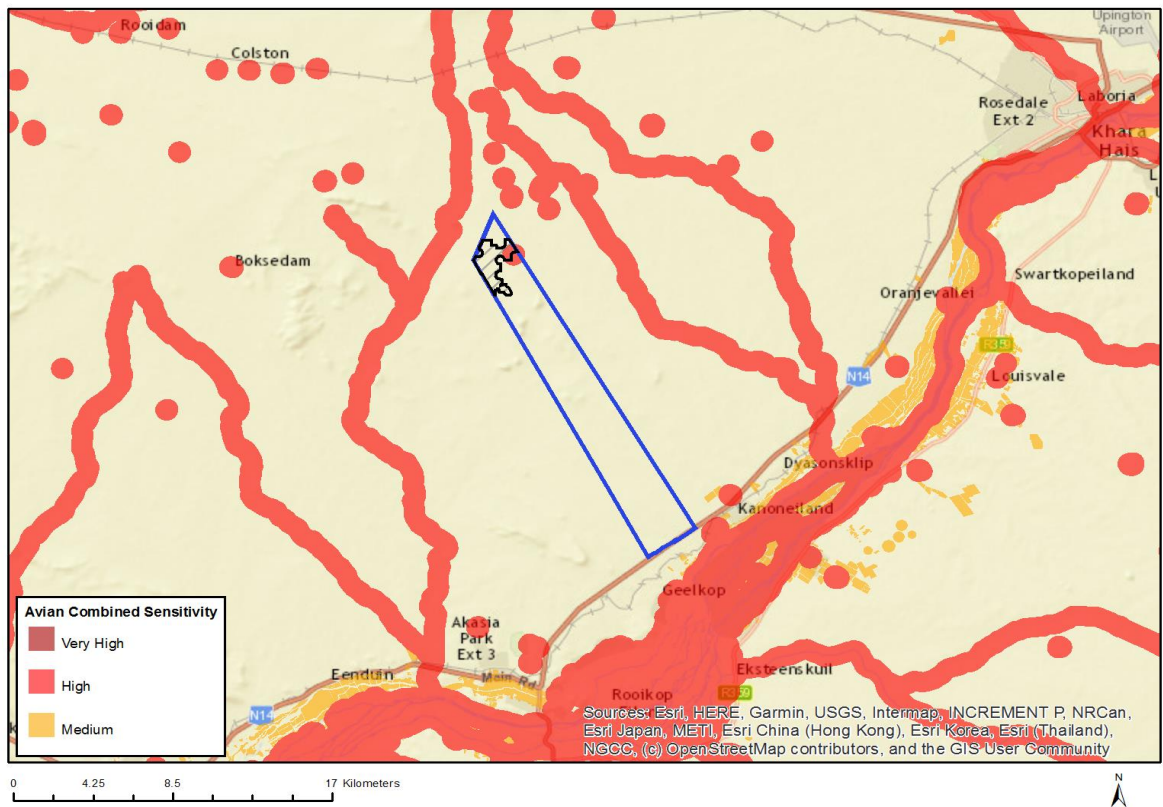


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

## Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mountain or ridge

## MAP OF RELATIVE AVIAN THEME SENSITIVITY

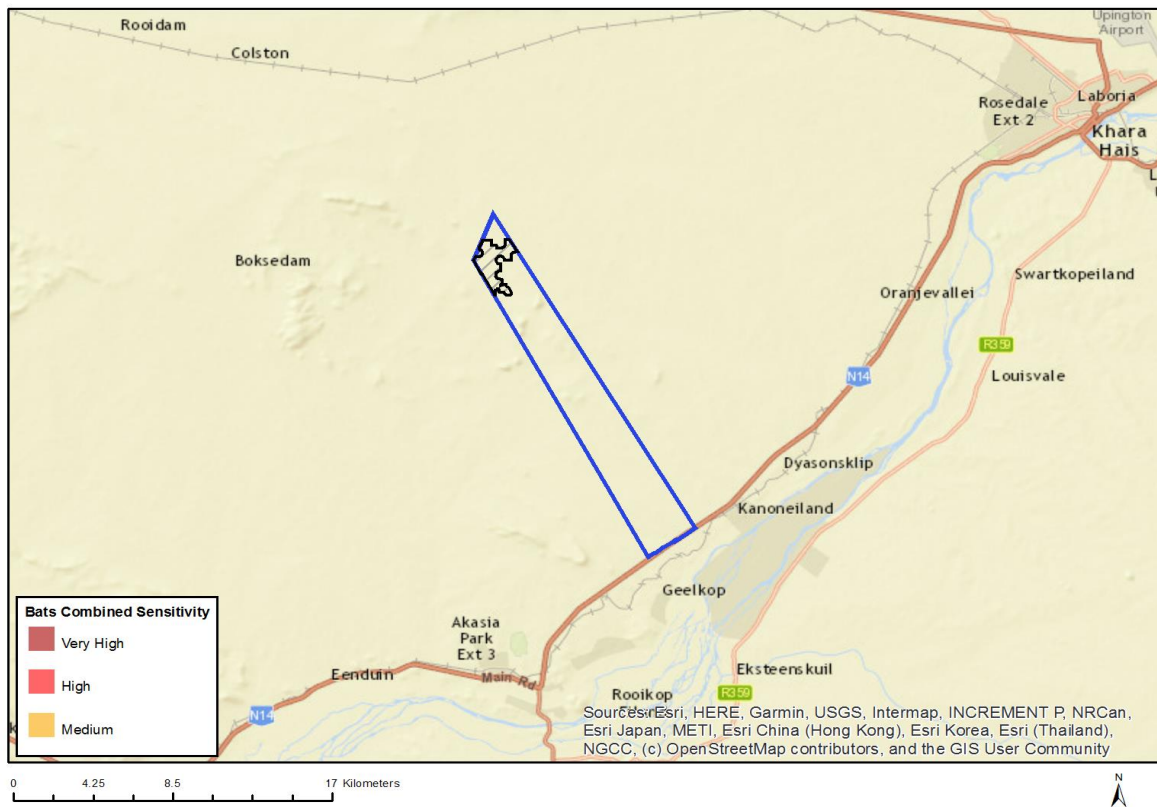


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 500 m of a wetland

## MAP OF RELATIVE BATS THEME SENSITIVITY



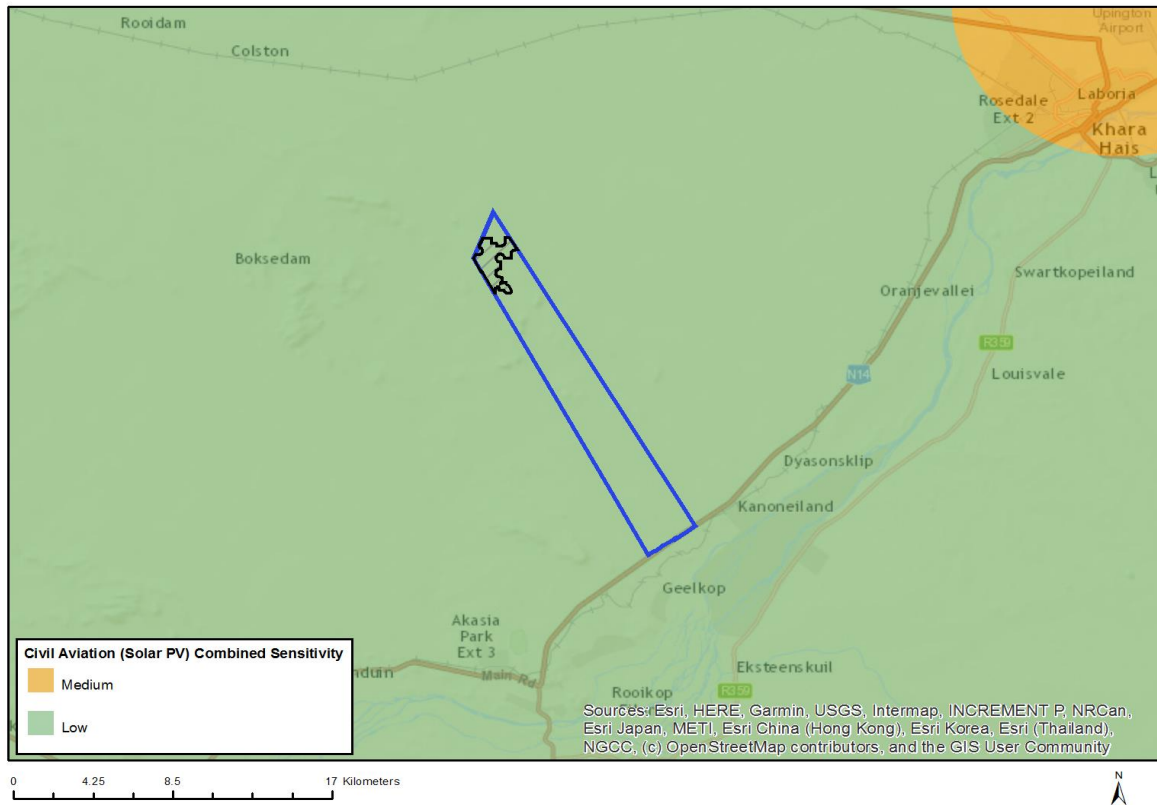
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity



## MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

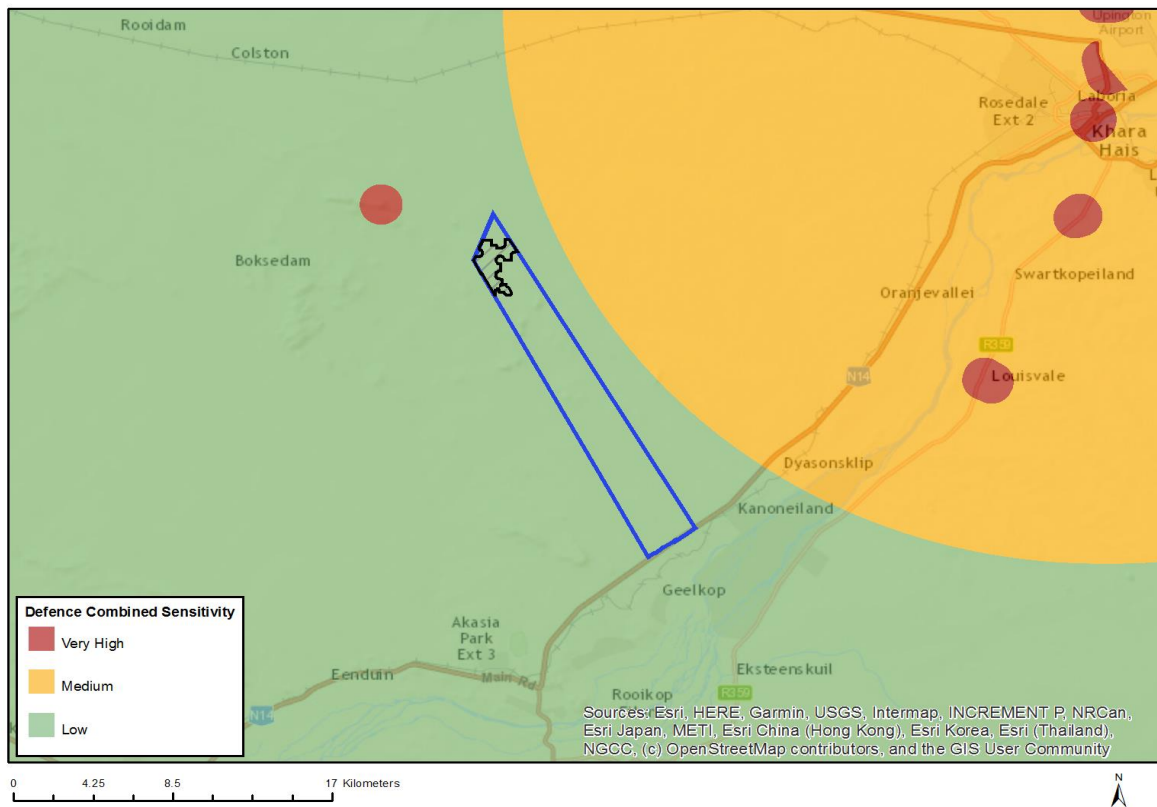


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

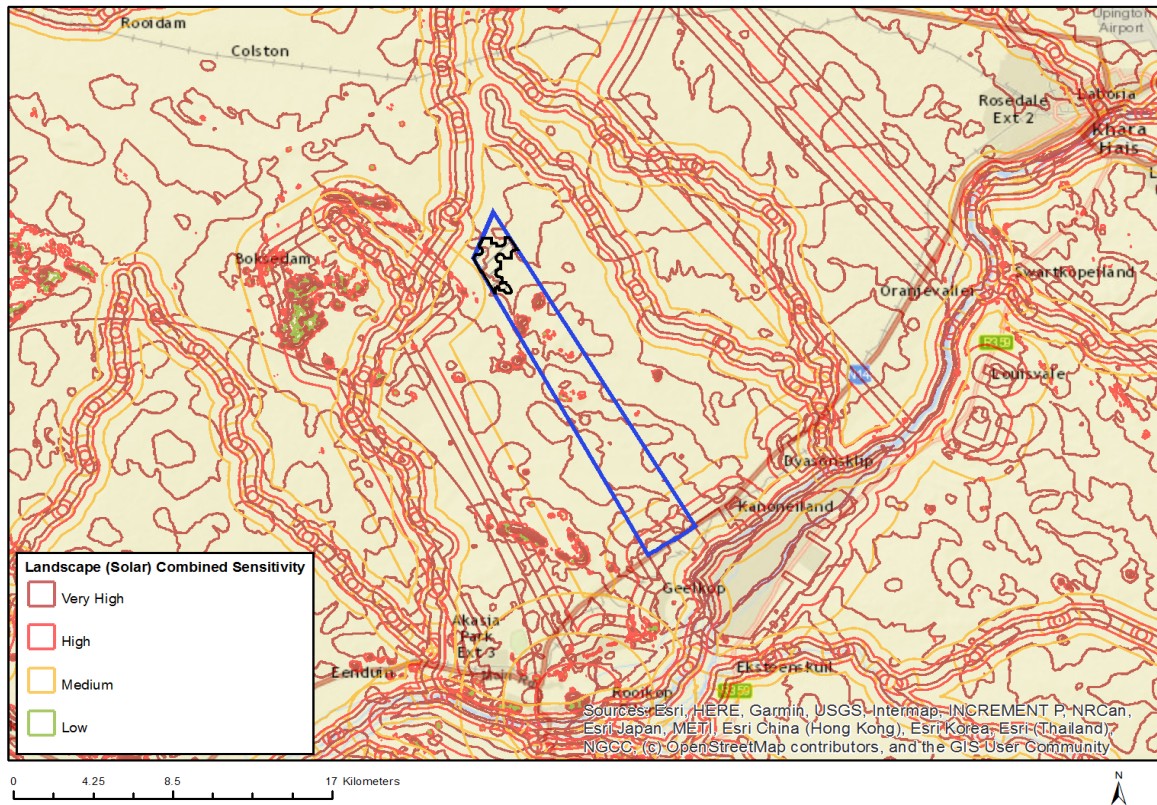


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

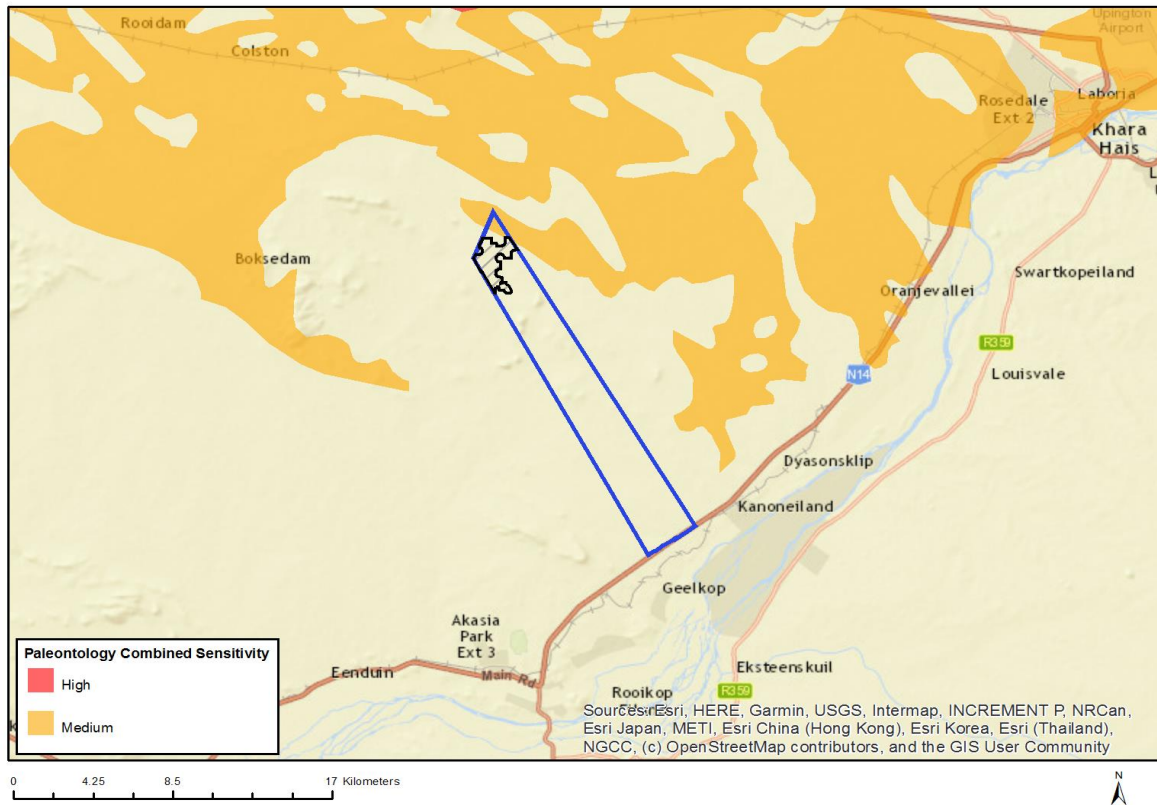


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Mountain tops and high ridges

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

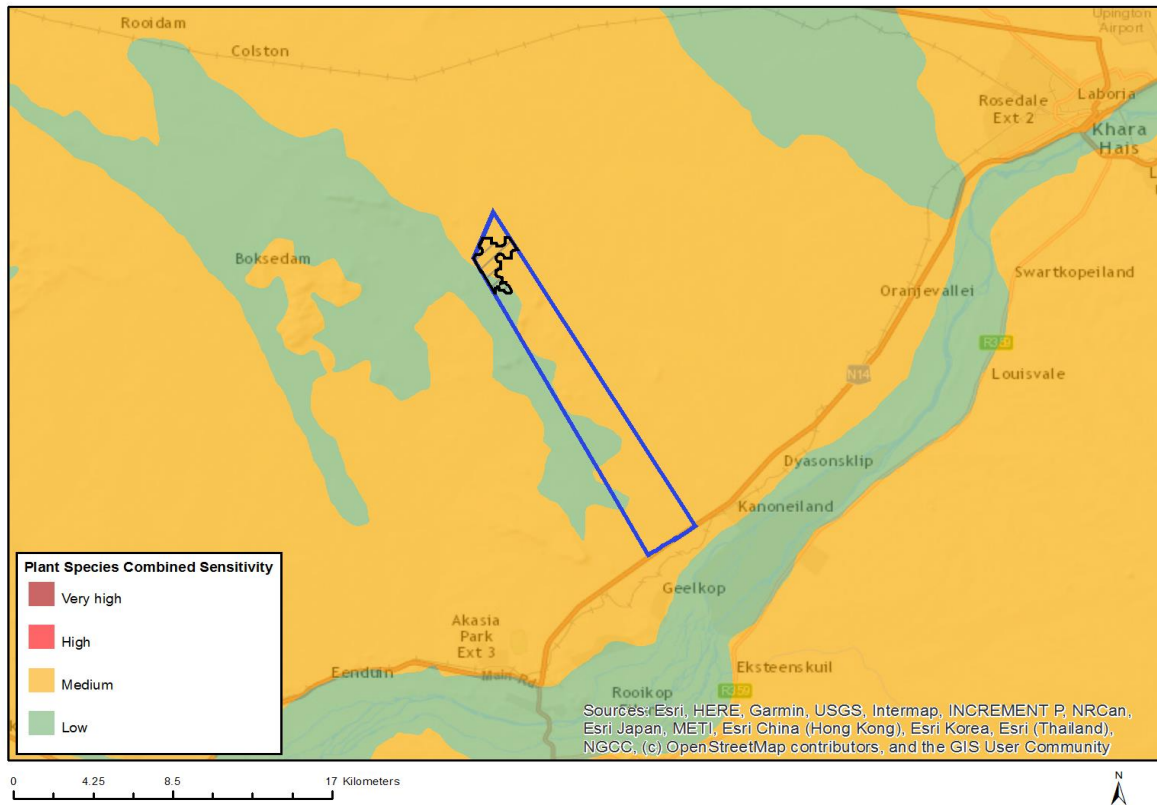


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Rock units with a medium paleontological sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

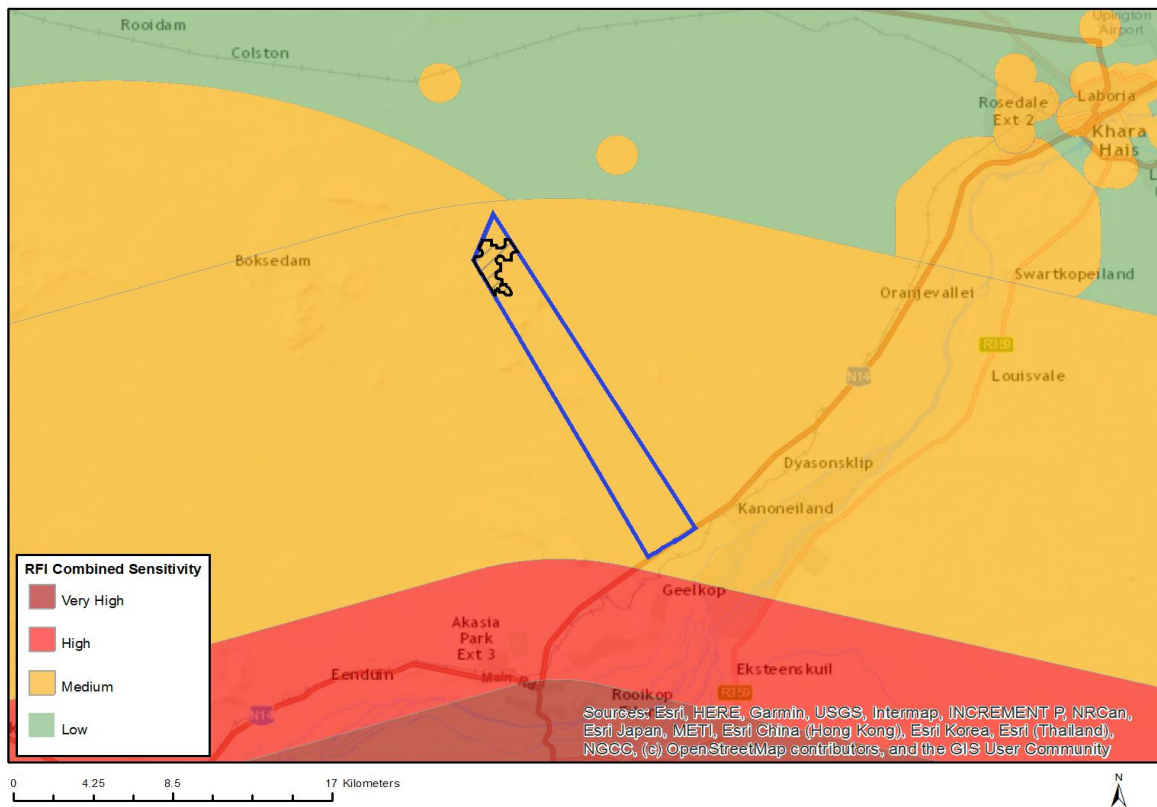


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Sensitive species 44

## MAP OF RELATIVE RFI THEME SENSITIVITY

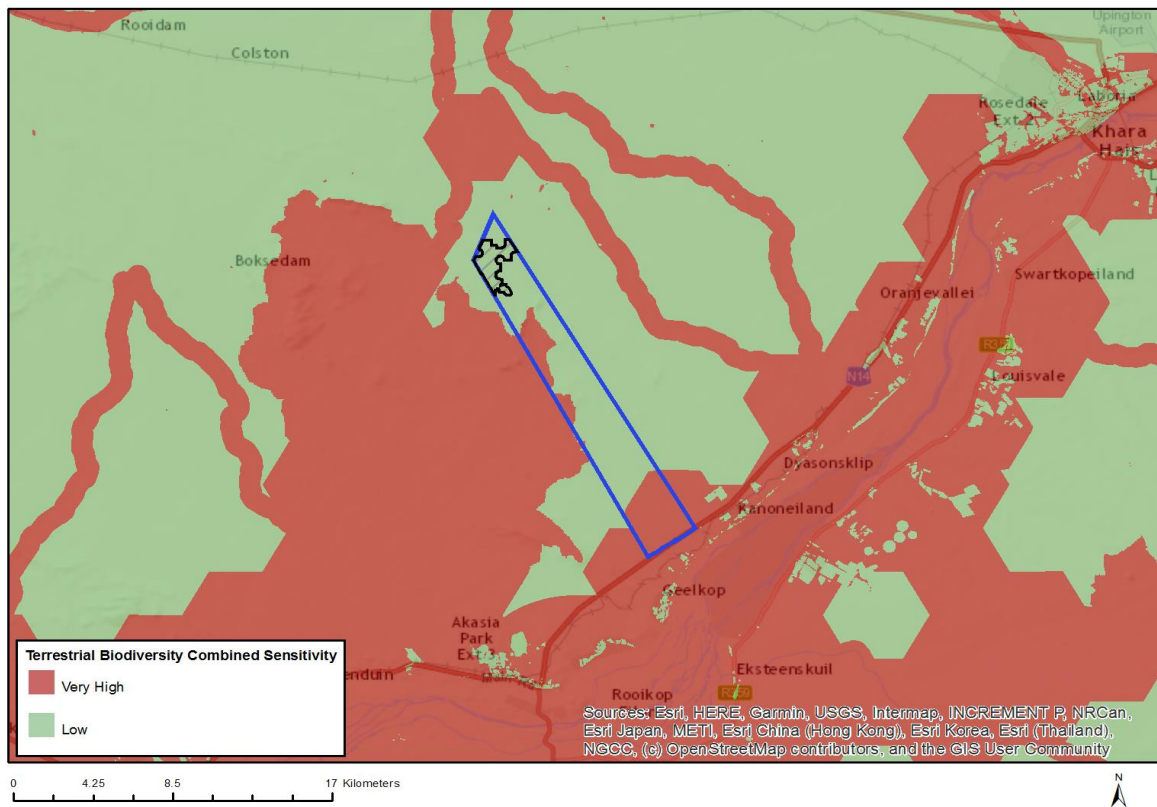


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 14 and 32 km of a SKA receptor
Medium	Between 14 and 32 km of the Radio Astronomy Advantage Area

## 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