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

Project name: Karroid PV **Project title:** 100MW PV

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Applicant: Karroid PV (Pty) Ltd

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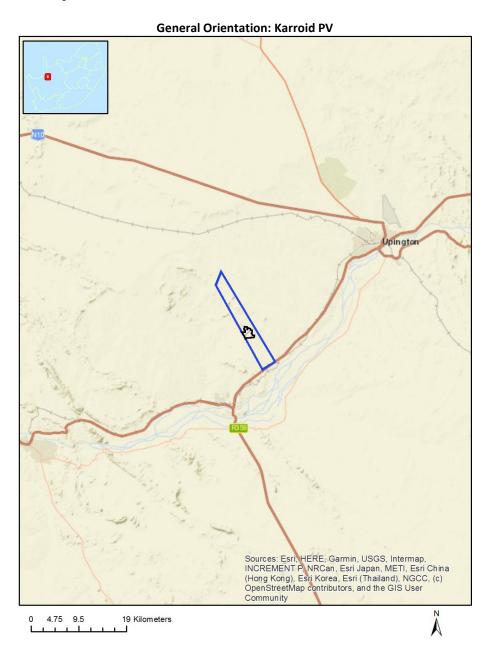
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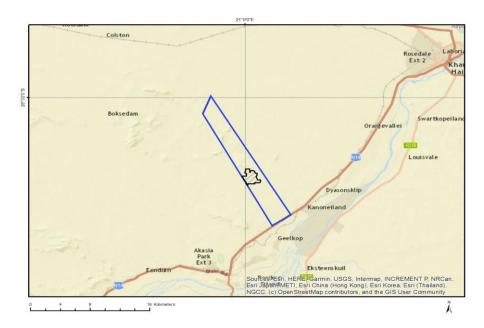
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Proposed Project Location

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 footprint¹ vertices:

Footprint	Latitude	Longitude
1	28°36'10.43S	21°0'29.48E
1	28°36'10.42S	21°0'12.9E
1	28°36'12.85S	21°0'12.87E
1	28°36'15.4S	21°0'12.77E
1	28°36'15.38S	21°0'10.38E
1	28°36'13.03S	21°0'10.48E
1	28°36'13.02S	21°0'8.62E
1	28°36'10.58S	21°0'6.8E
1	28°36'7.55S	21°0'6.8E
1	28°36'5.78S	21°0'5.67E
1	28°36'0.74S	21°0'2.5E
1	28°35'57.37S	21°0'0.36E
1	28°35'52.78S	20°59'57.08E
1	28°35'43.76S	20°59'51.03E
1	28°35'41.32S	20°59'49.39E
1	28°35'37.03S	20°59'46.52E
1	28°35'37.04S	21°0'6.79E

¹ "development footprint", means the area within the site on which the development will take place and incudes 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°35'29.32S	21°0'6.79E
1	28°35'27.01S	21°0'6.79E
1	28°35'26.87S	21°0'6.69E
1	28°35'25.43S	21°0'5.06E
1	28°35'24.49S	21°0'3.01E
1	28°35'24.19S	21°0'0.74E
1	28°35'18.27S	21°0'0.75E
1	28°35'18.27S	21°0'2.55E
1	28°35'6.97S	21°0'2.55E
1	28°35'6.96S	21°0'20.91E
1	28°35'20.57S	21°0'20.92E
1	28°35'20.55S	21°0'22.35E
1	28°35'17.85S	21°0'22.35E
1	28°35'13.54S	21°0'26.9E
1	28°35'13.51S	21°0'33.17E
1	28°35'14.56S	21°0'37.48E
1	28°35'18.12S	21°0'42.61E
1	28°35'20.61S	21°0'43E
1	28°35'25.35S	21°0'48.28E
1	28°35'25.77S	21°0'48.89E
1	28°35'25.77S	21°0'52.32E
1	28°35'29.74S	21°0'52.23E
1	28°35'38.41S	21°0'49.12E
1	28°35'41.88S	21°0'48.58E
1	28°35'45.32S	21°0'51.99E
1	28°35'49.99S	21°0'53.13E
1	28°35'51.44S	21°0'53.76E
1	28°35'52.77S	21°0'55.08E
1	28°35'53.44S	21°0'58.52E
1	28°35'53.44S	21°1'4.76E
1	28°35'54.18S	21°1'7.46E
1	28°36'0.37S	21°1'7.48E
1	28°36'3.85S	21°1'5.44E
1	28°36'5.3S	21°1'3.78E
1	28°36'6.2S	21°1'2.39E
1	28°36'6.19S	21°1'0.95E
1	28°36'6.2S	21°0'44.33E
1	28°36'6.21S	21°0'42.97E
1	28°36'10.45S	21°0'42.97E
1	28°36'10.44S	21°0'36.82E
1	28°36'10.45S	21°0'32.38E
1	28°36'10.43S	21°0'29.48E

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	7.7
2	12/12/20/1831/2	Solar CSP	Approved	7.7
3	12/12/20/1831/1	Solar CSP	Approved	7.7
4	12/12/20/2229	Solar PV	Approved	9.6
5	12/12/20/2518	Solar PV	Approved	15.8
6	14/12/16/3/3/3/82	Solar CSP	Approved	9.8
7	12/12/20/2230	Solar PV	Approved	0
8	14/12/16/3/3/2/656	Solar CSP	Approved	7.7

9	12/12/20/1831	Solar CSP	Approved	7.7
10	14/12/16/3/3/2/816	Solar PV	Approved	0.7
11	12/12/20/777	Solar CSP	Approved	12.5
12	12/12/20/1831/3	Solar PV	Approved	7.7

Environmental Management Frameworks relevant to the application



Environme	LINK
ntal	
Manageme	
nt	
Framework	
Siyanda	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA EMF
District	REPORT 2008.doc
Municipality	NET OTT EGGGGGG
EMF	

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:

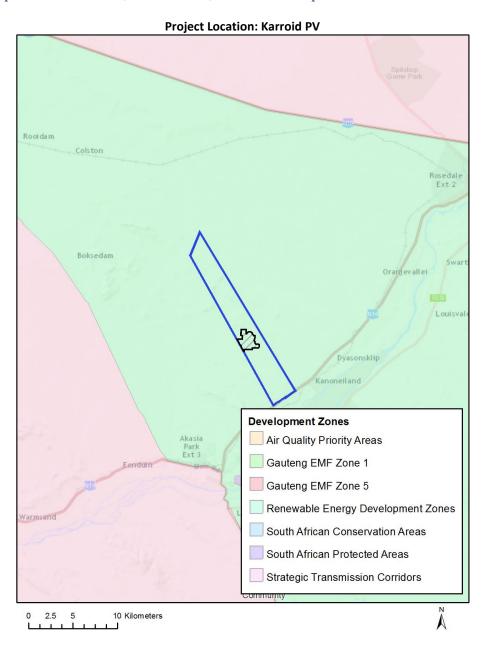
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV | Solar PV.

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.

Incentiv	Implication
e, restricti	
on or	
prohibit	
ion	
Strategic Transmiss ion Corridor- Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR 350 of 13 April 2017.pdf
Renewabl e energy developm ent zones 7- Upington	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR 350 of 13 April 2017.pdf

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				Χ
Animal Species Theme				Χ

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Aquatic Biodiversity Theme	X		
Archaeological and Cultural		Х	
Heritage Theme			
Bats Theme			Х
Civil Aviation (Solar PV)			Х
Theme			
Defence Theme			Х
Landscape (Solar) Theme	Χ		
Plant Species Theme		Х	
RFI Theme		Х	
Terrestrial Biodiversity Theme	Х		

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 0	Specia list assess ment	Assessment Protocol
1	Agricult ural Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted_Agriculture_Assessment_Protocols.pdf
2	Landsca pe/Visu al Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeo logical and Cultural Heritag e Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeon tology Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf
5	Terrestr ial Biodiver sity Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted Terrestrial Biodiversity Assessment Protocols.pdf
6	Aquatic Biodiver sity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted Aquatic Biodiversity Assessment.pdf

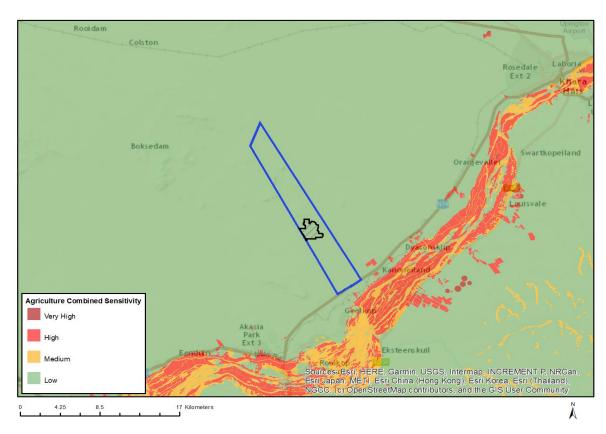
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	Impact	
	Assess	
	ment	
7	Avian Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted_General_Requirement_Assessment_Protocols.pdf
8	Civil Aviation Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
9	Defense Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted_Defence_Installations_Assessment_Protocols.pdf
1 0	RFI Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted_General_Requirement_Assessment_Protocols.pdf
1	Geotec hnical Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted_General_Requirement_Assessment_Protocols.pdf
1 2	Socio- Econom ic Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf
3	Plant Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf
1 4	Animal Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf

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.

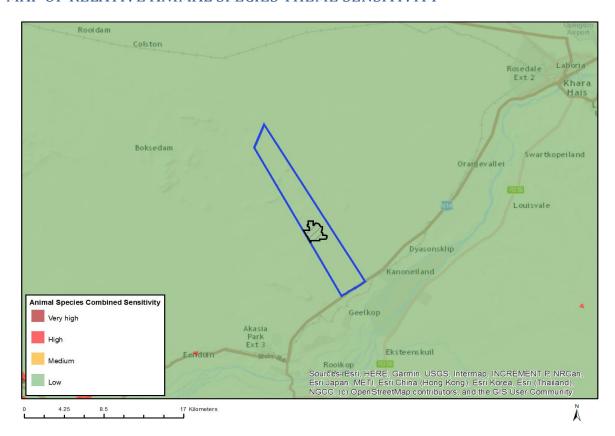
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

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

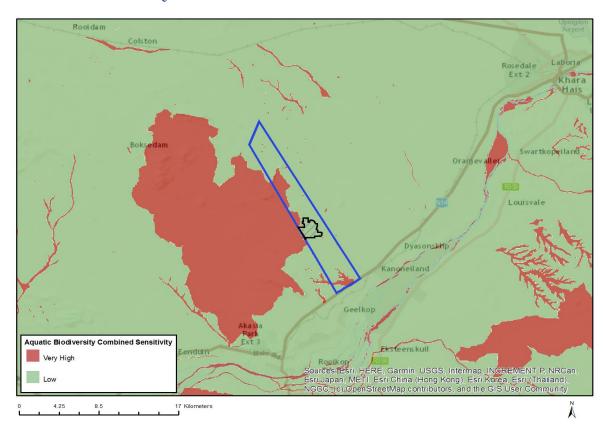
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands and Estuaries
Very High	Freshwater ecosystem priority area quinary catchments

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

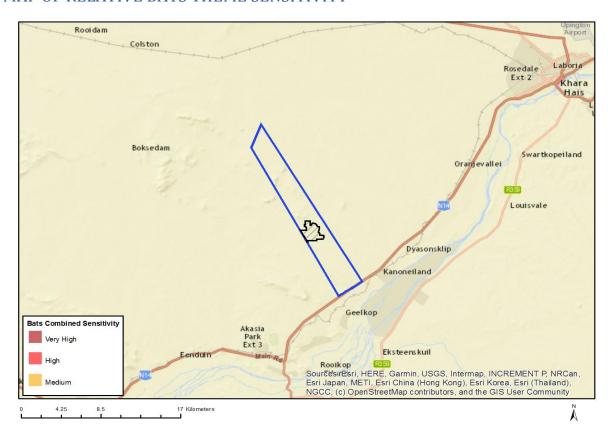
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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mountain or ridge

MAP OF RELATIVE BATS THEME SENSITIVITY

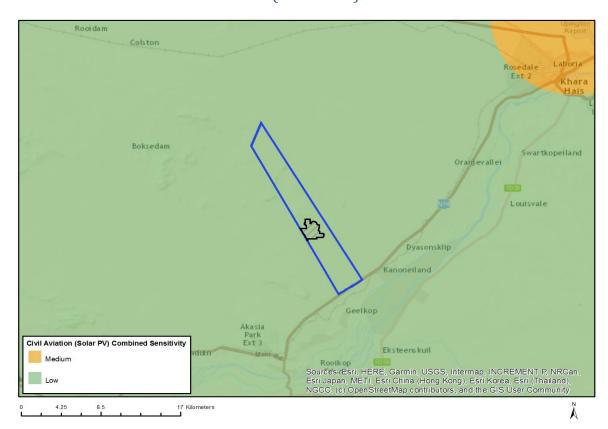


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity Features:

Sensitivity	Feature(s)	
Low	Low sensitivity	

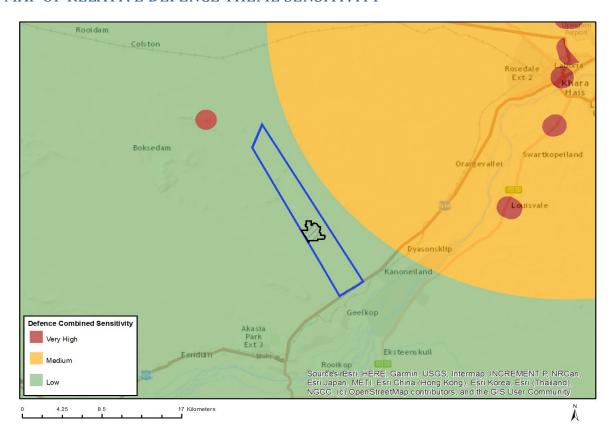
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

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

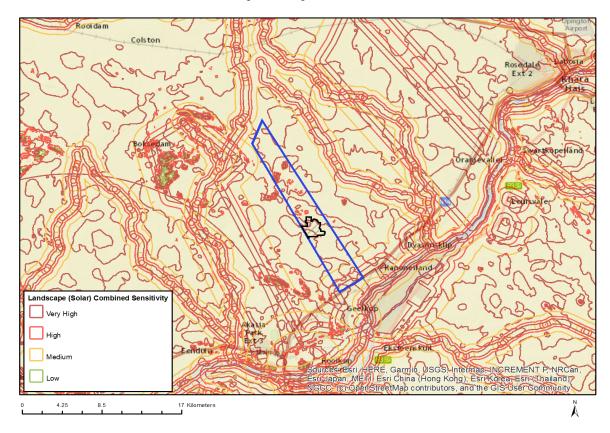
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

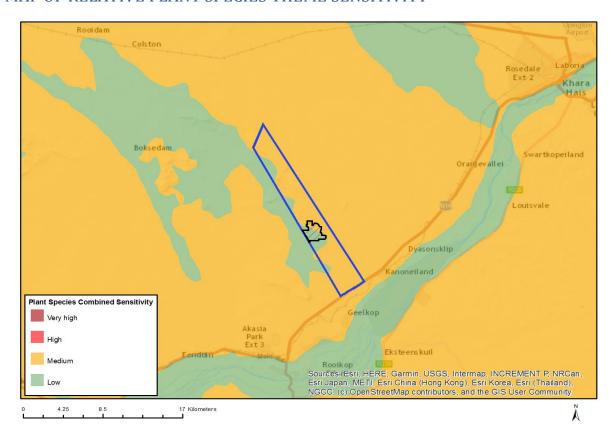
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

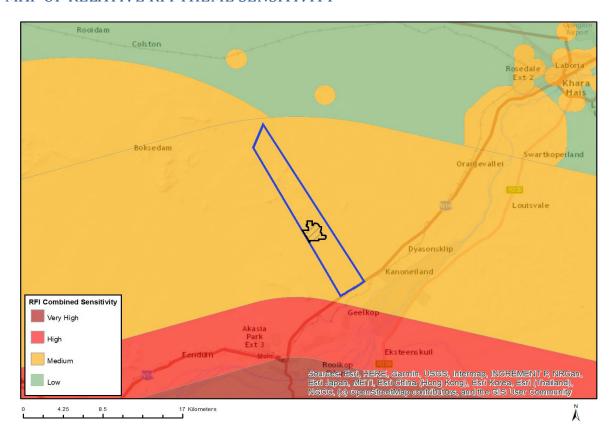
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

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

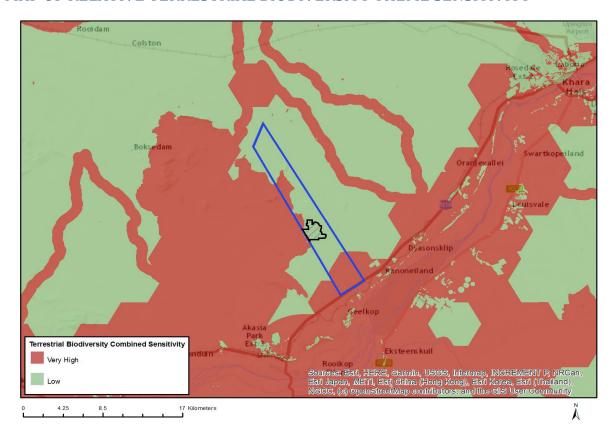
MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

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
Х			

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Freshwater ecosystem priority area quinary catchments