

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

EIA Reference number: Not Assigned

Project name: Hercules Solar Cluster - Roode Kraal Solar PV1

Project title: Proposed Roode Solar PV1 development on the Farm Riet Roode Kraal 28, De Aar,
Northern Cape

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Applicant: Roode Kraal Solar PV1

Compiler: Sharples Environmental Services cc

Compiler signature:



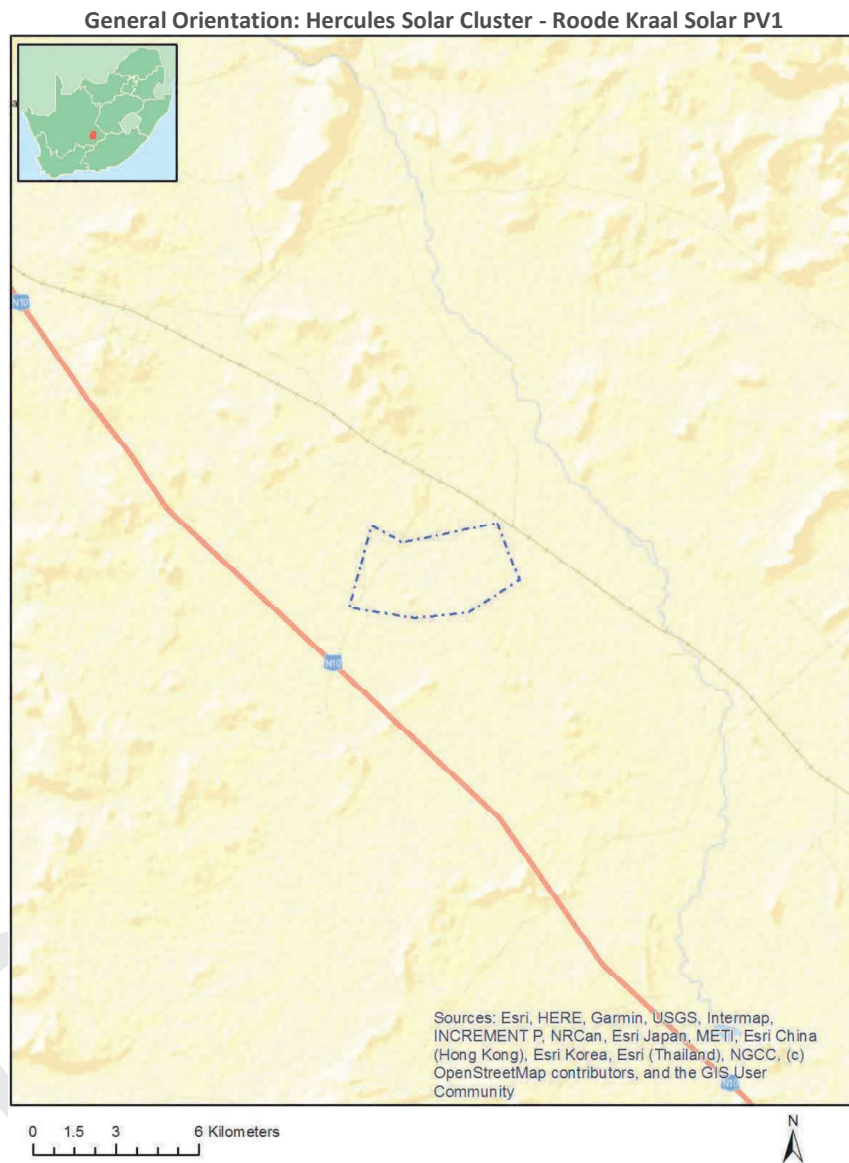
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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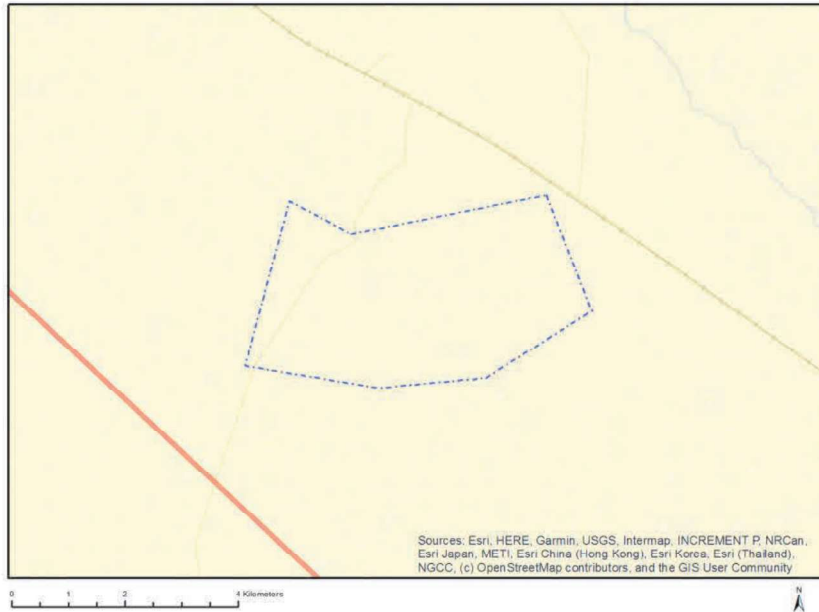
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Proposed Project Location

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	ROODE KRAAL	28	0	30°47'33.81S	24°13'32.6E	Farm
2	ROODE KRAAL	28	0	30°46'51.61S	24°10'30.95E	Farm Portion

Development footprint¹ 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	12/12/20/2250/2/AM5	Solar PV	Approved	4
2	14/12/16/3/3/2/382/1/AM4	Solar PV	Approved	11.8
3	12/12/20/2250/4/AM3	Solar PV	Approved	10
4	12/12/20/2250/3/AM3	Solar PV	Approved	7.7
5	14/12/16/3/3/2/382/7	Solar PV	Approved	11.8
6	14/12/16/3/3/2/382/5/A1	Solar PV	Approved	11.8

¹ “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.

7	14/12/16/3/3/2/382/1/A1	Solar PV	Approved	11.8
8	14/12/16/3/3/2/382/3/A2	Solar PV	Approved	11.8
9	12/12/20/2177	Solar PV	Approved	11.7
10	12/12/20/2250/1/AM1	Solar PV	Approved	4
11	12/12/20/2500/AM2	Solar PV	Approved	24.6
12	12/12/20/2463/1/AM3	Wind	Approved	15.8
13	12/12/20/2250/3	Solar PV	Approved	7.7
14	12/12/20/2025	Solar - CSP	Approved	23.2
15	14/12/16/3/3/1/2569	Solar PV	Approved	12.7
16	14/12/16/3/3/2/382/3/AM4	Solar PV	Approved	11.8
17	12/12/20/2250/2	Solar PV	Approved	4
18	12/12/20/2250/5	Solar PV	Approved	12
19	12/12/20/2463/1/AM5	Wind	Approved	15.8
20	14/12/16/3/3/2/382/4/AM3	Solar PV	Approved	11.8
21	12/12/20/2500/AM5	Solar PV	Approved	24.6
22	14/12/16/3/3/2/382/A1	Solar PV	Approved	11.8
23	14/12/16/3/3/2/2167	Solar PV	Approved	14.9
24	12/12/20/2250	Solar PV	Approved	4
25	12/12/20/2250/4/A1	Solar PV	Approved	10
26	12/12/20/2048/3	Solar PV	Approved	20.3
27	14/12/16/3/3/2/382/AM4	Solar PV	Approved	11.8
28	12/12/20/2313/AM2	Solar PV	Approved	11.3
29	12/12/20/2048/4	Solar PV	Approved	20.3
30	14/12/16/3/3/2/382/5/AM3	Solar PV	Approved	11.8
31	12/12/20/2025/1	Solar - CSP	Approved	23.2
32	14/12/16/3/3/1/2508	Solar PV	Approved	11.4
33	12/12/20/2025/2	Solar PV	Approved	23.2
34	12/12/20/2250/2/AM2	Solar PV	Approved	4
35	12/12/20/2463/1/A2	Wind	Approved	15.8
36	12/12/20/2048/2	Solar PV	Approved	20.3
37	14/12/16/3/3/2/382/3/AM3	Solar PV	Approved	11.8
38	12/12/20/2498/AM3	Solar PV	Approved	18.6
39	12/12/20/2250/2/AM3	Solar PV	Approved	4
40	12/12/20/2025/2/A	Solar PV	Approved	23.2
41	14/12/16/3/3/2/382/4/A1	Solar PV	Approved	11.8
42	12/12/20/2250/2/A1	Solar PV	Approved	4
43	14/12/16/3/3/2/382/3	Solar PV	Approved	11.8
44	12/12/20/2252/2/AM4	Solar - CSP	Approved	4
45	14/12/16/3/3/2/2156	Solar PV	Approved	2.5
46	12/12/20/2463/1/AM4	Wind	Approved	15.8
47	14/12/16/3/3/2/382/2/AM1	Solar PV	Approved	11.8
48	14/12/16/3/3/2/998	Solar PV	Approved	9.8
49	12/12/20/2500	Solar PV	Approved	24.6
50	12/12/20/2048/1	Solar PV	Approved	20.3
51	12/12/20/2250/5/AM2	Solar PV	Approved	12
52	14/12/16/3/3/2/2157	Solar PV	Approved	10
53	14/12/16/3/3/2/382/2/AM2	Solar PV	Approved	11.8
54	12/12/20/2250/1/AM2	Solar PV	Approved	4
55	14/12/16/3/3/2/2155	Solar PV	Approved	7.7
56	12/12/20/2498	Solar PV	Approved	18.6
57	14/12/16/3/3/1/2323	Solar PV	Approved	10
58	12/12/20/2250/1	Solar PV	Approved	4
59	12/12/20/2500/AM3	Solar PV	Approved	24.6
60	14/12/16/3/3/2/382/1	Solar PV	Approved	11.8
61	12/12/20/2463/2	Wind	Approved	15.8
62	14/12/16/3/3/2/382/6	Solar PV	Approved	11.8
63	12/12/20/2258/4	Solar PV	Approved	15.9
64	12/12/20/2463/1	Wind	Approved	24.5
65	14/12/16/3/3/1/2585	Solar PV	Approved	11.8
66	12/12/20/2177/AM1	Solar PV	Approved	11.7

67	12/12/20/2498/A1	Solar PV	Approved	18.6
68	14/12/16/3/3/2/382/1/AM5	Solar PV	Approved	11.8
69	12/12/20/2463/2/AM2	Wind	Approved	27.9
70	12/12/20/2250/2/AM4	Solar PV	Approved	4
71	12/12/20/2250/4/AM2	Solar PV	Approved	10
72	14/12/16/3/3/2/382/2	Solar PV	Approved	11.8
73	12/12/20/2250/4/AM4	Solar PV	Approved	10
74	14/12/16/3/3/1/2557	Wind	Approved	4
75	12/12/20/2463/1/2	Wind	Approved	15.8
76	12/12/20/1651	Wind	Approved	11
77	14/12/16/3/3/2/382/AM3	Solar PV	Approved	11.8
78	12/12/20/1651/A2	Wind	Approved	11
79	14/12/16/3/3/2/382/4	Solar PV	Approved	11.8
80	14/12/16/3/3/2/382/5	Solar PV	Approved	11.8
81	12/12/20/2250/4	Solar PV	Approved	10
82	12/12/20/1673	Solar PV	Approved	24.6
83	12/12/20/2500/AM6	Solar PV	Approved	24.6
84	12/12/20/2499/AM8	Solar PV	Approved	12.6
85	14/12/16/3/3/2/382/6/AM3	Solar PV	Approved	11.8
86	12/12/20/2250/5/A1	Solar PV	Approved	12
87	14/12/16/3/3/2/382/1/AM3	Solar PV	Approved	11.8
88	14/12/16/3/3/1/2329	Wind	Approved	23
89	14/12/16/3/3/2/382/4/A3	Solar PV	Approved	11.8
90	14/12/16/3/3/2/2267	Solar PV	Approved	6.8

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

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 | Generation | Renewable | Solar | PV.

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-Central corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf

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
Avian 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 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.

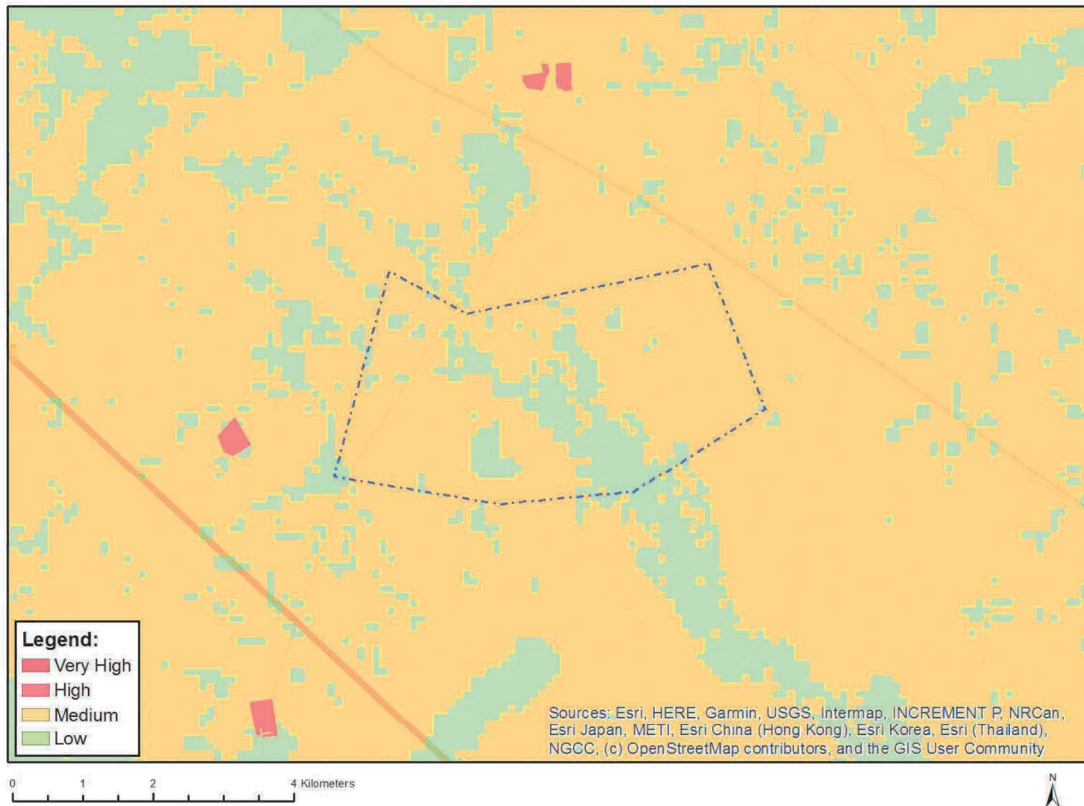
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defense_Assessment_Protocols.pdf

		ssmentProtocols/Gazetted Defence Installations Assessment Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species 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 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

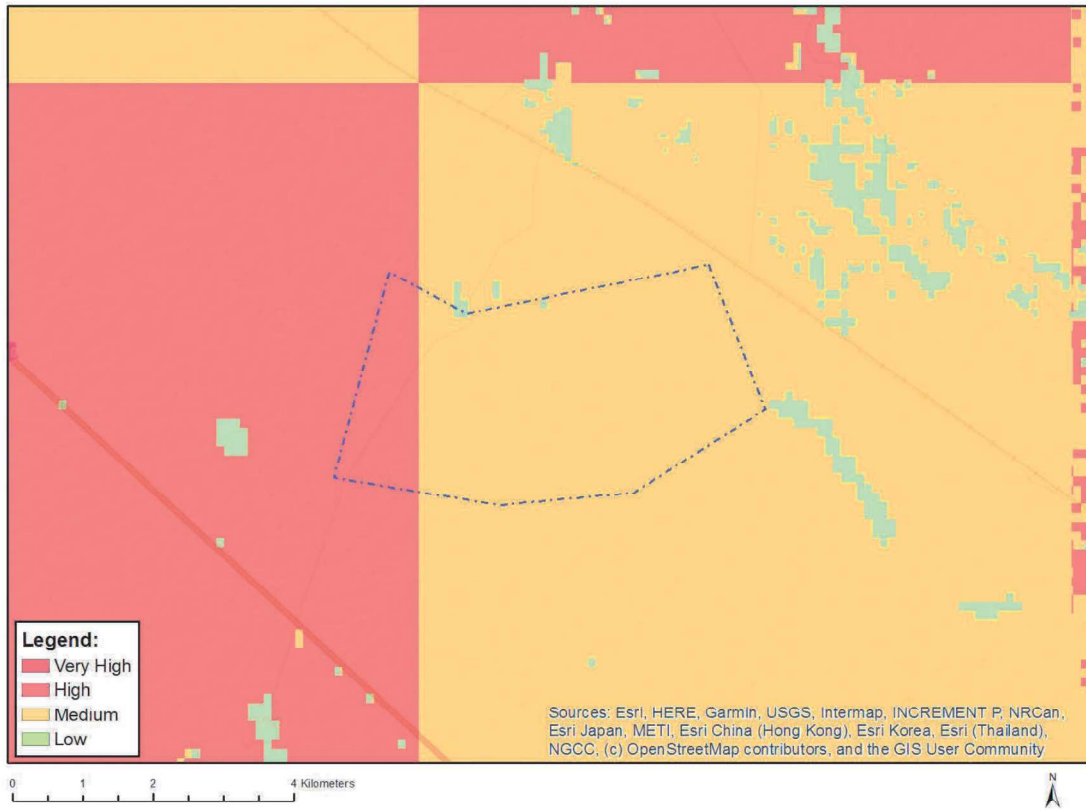


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



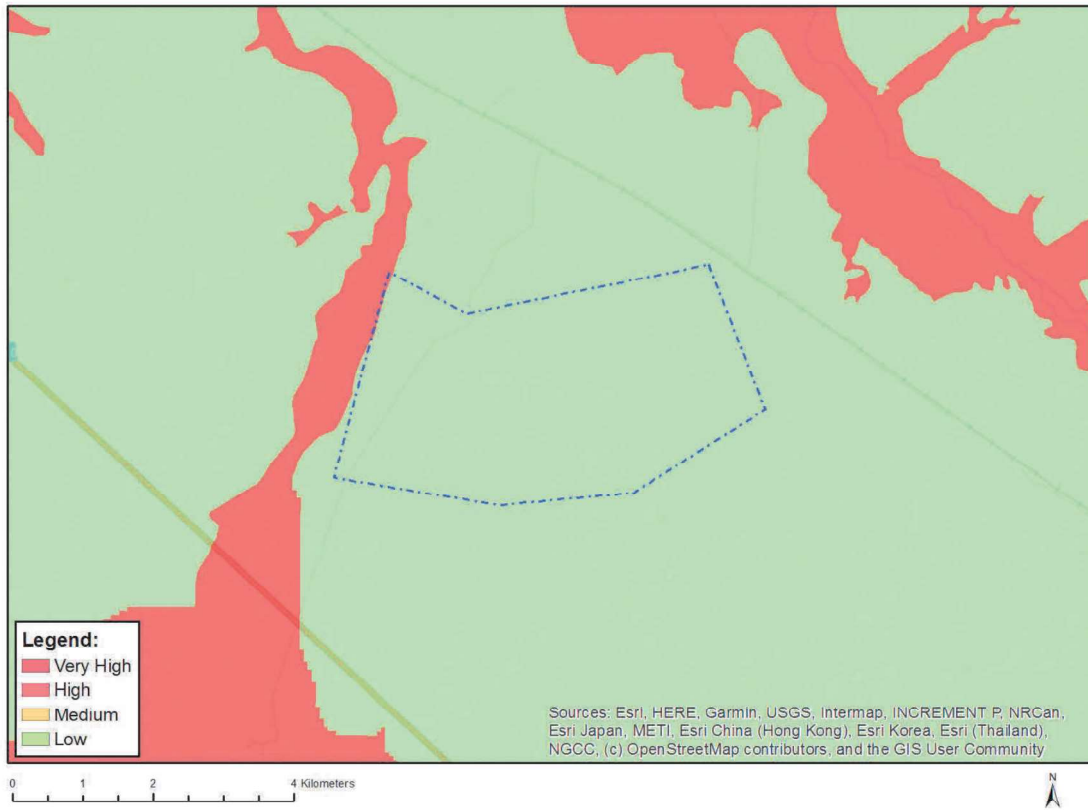
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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-Neotis ludwigii
Low	Subject to confirmation
Medium	Aves-Aquila rapax
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

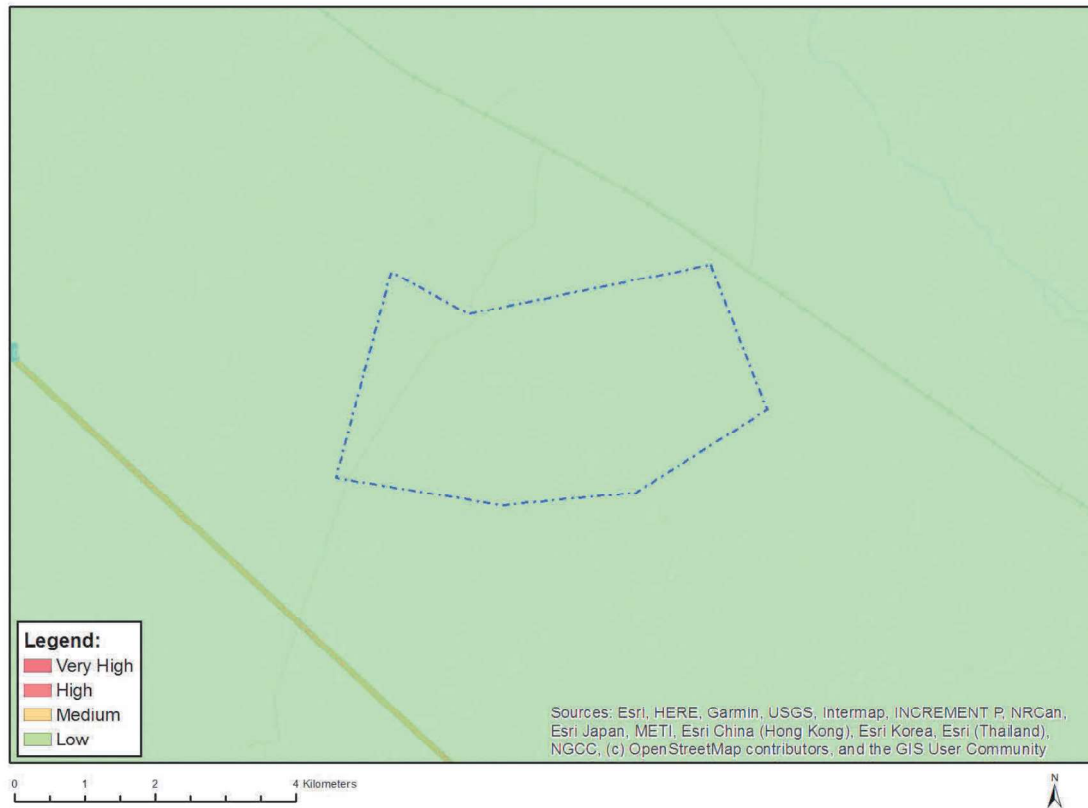


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands_(River)

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

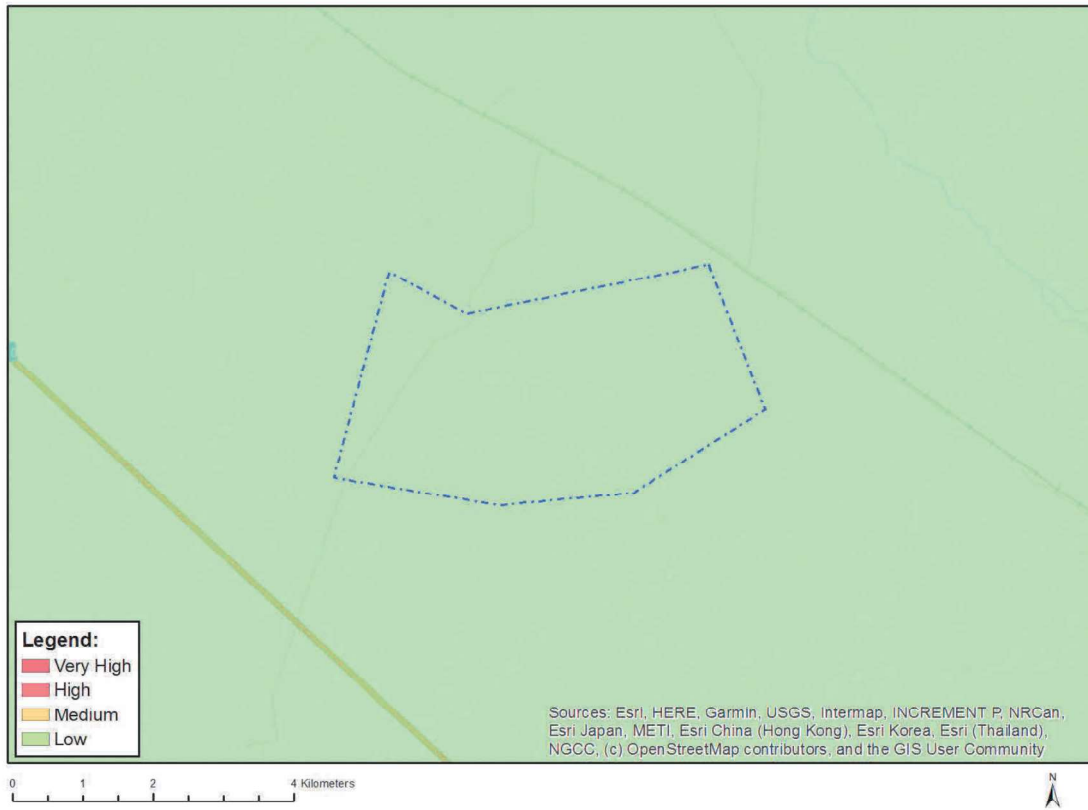


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE AVIAN THEME SENSITIVITY

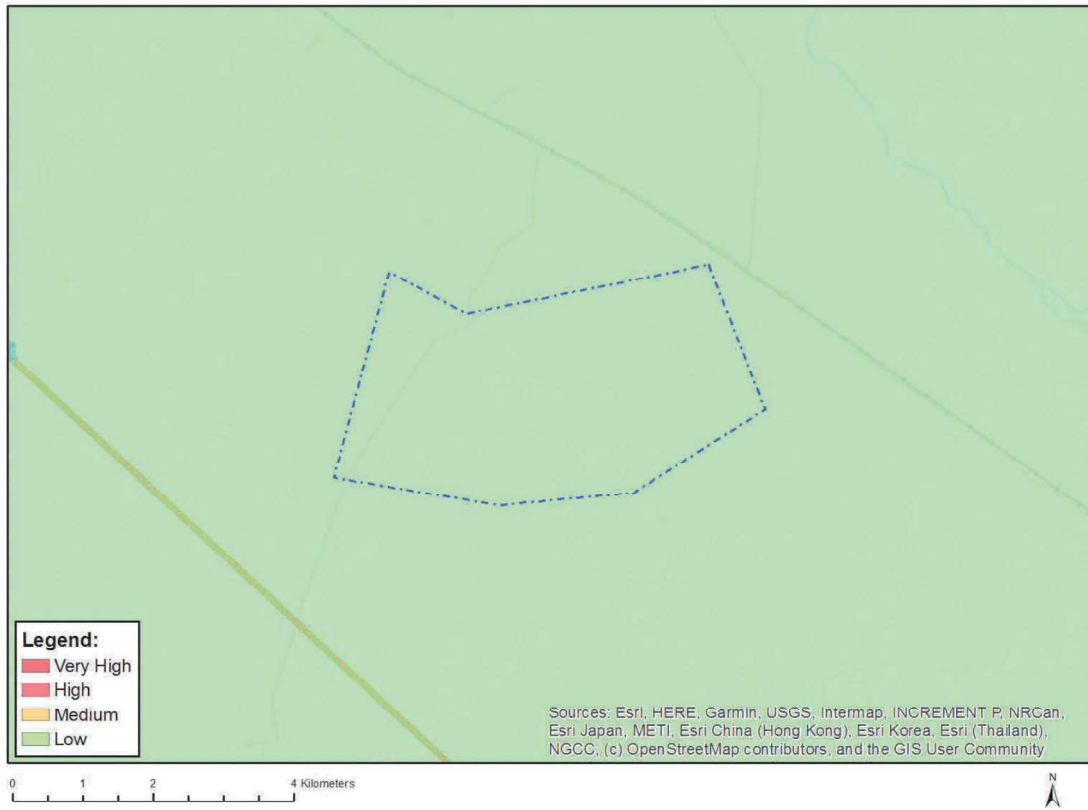


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

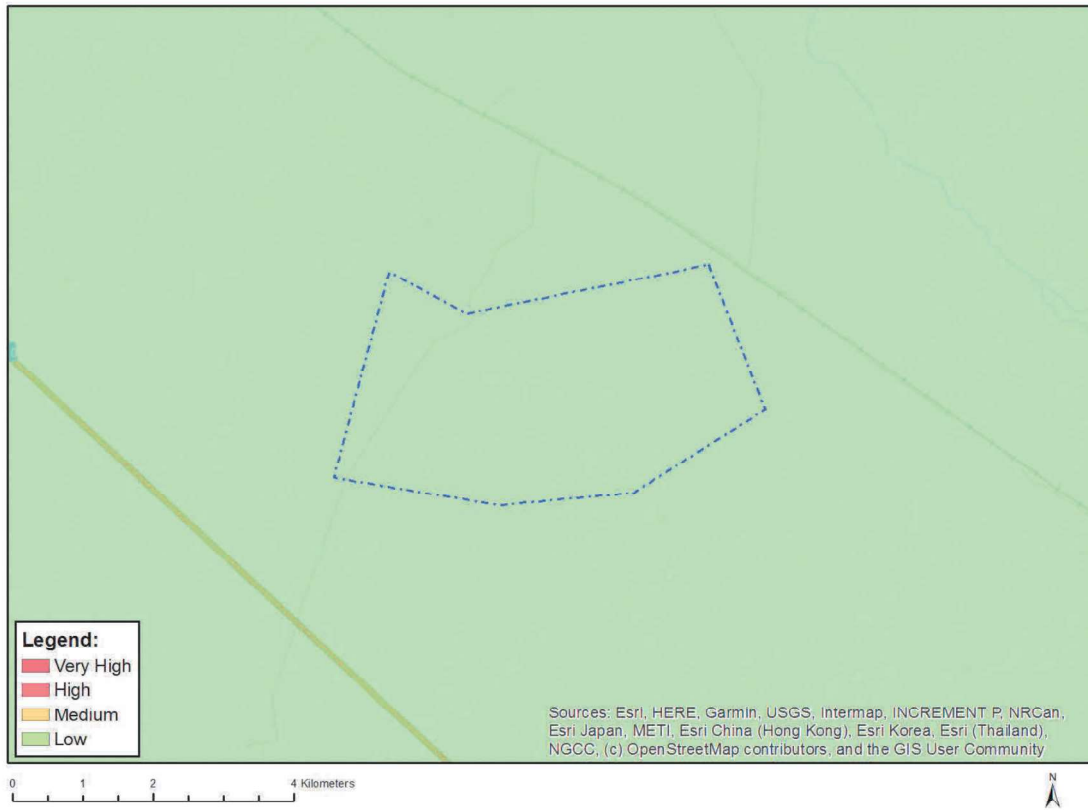


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

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

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

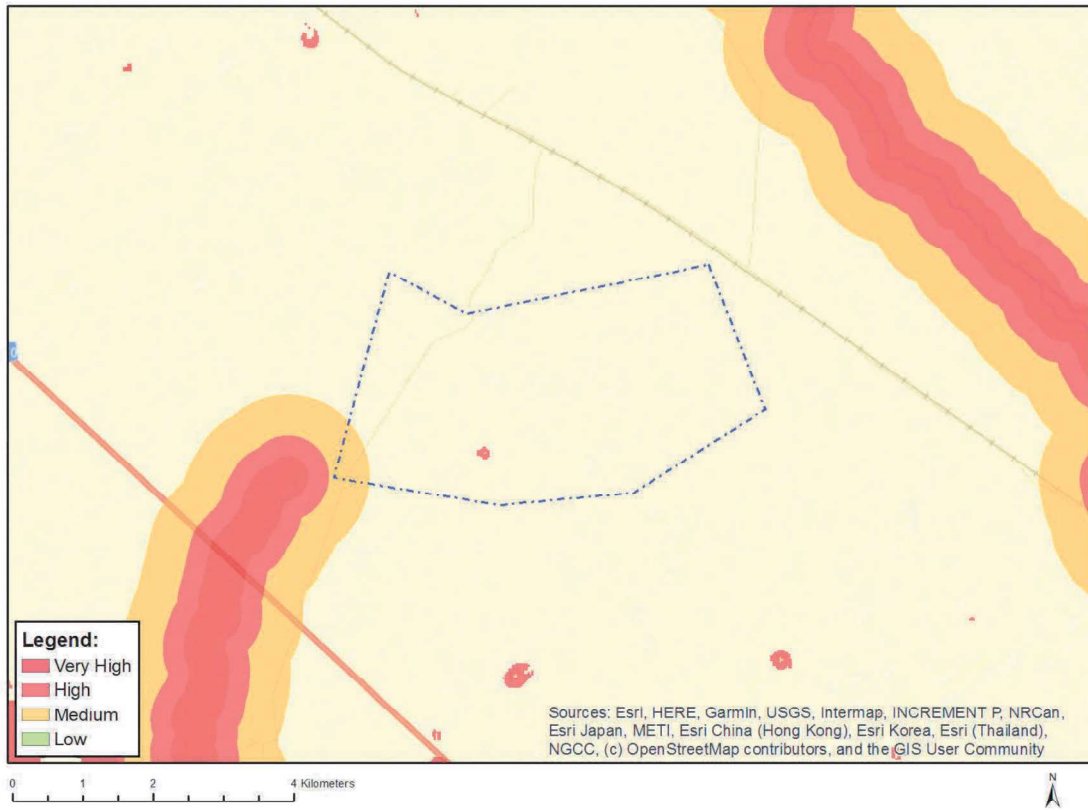


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

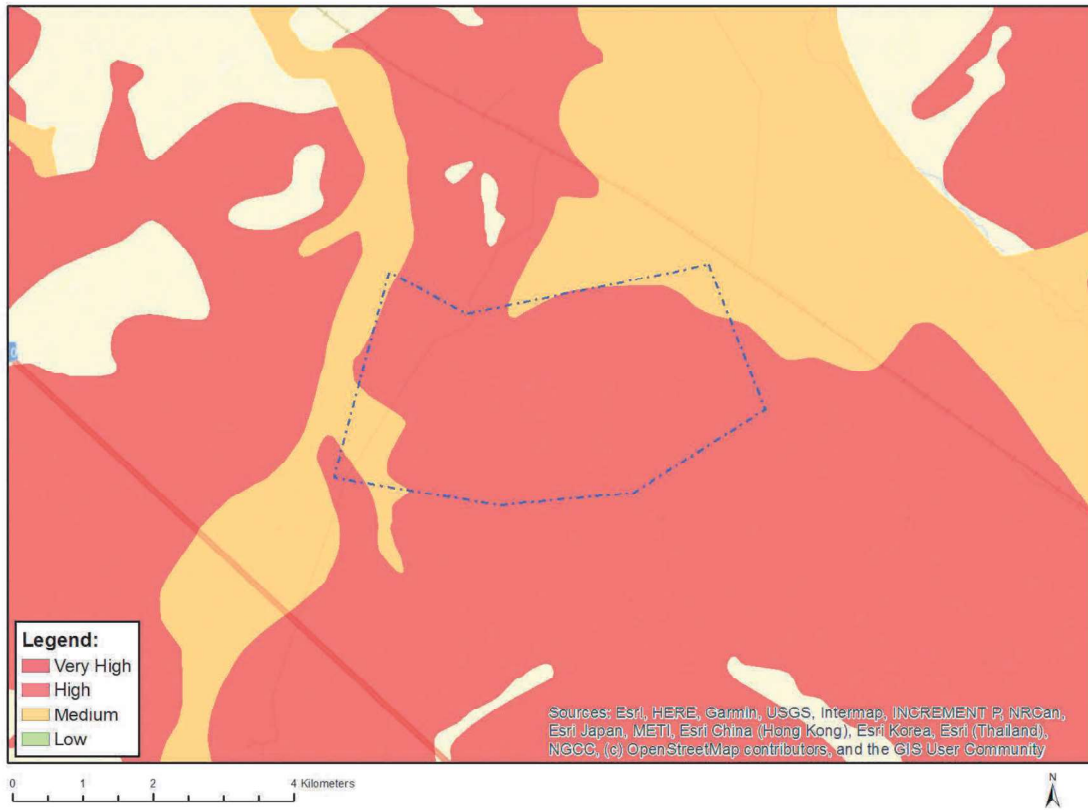


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Slope between 1:4 and 1:10
Low	Slope less than 1:10
Medium	Within 1000 m of a wetland

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

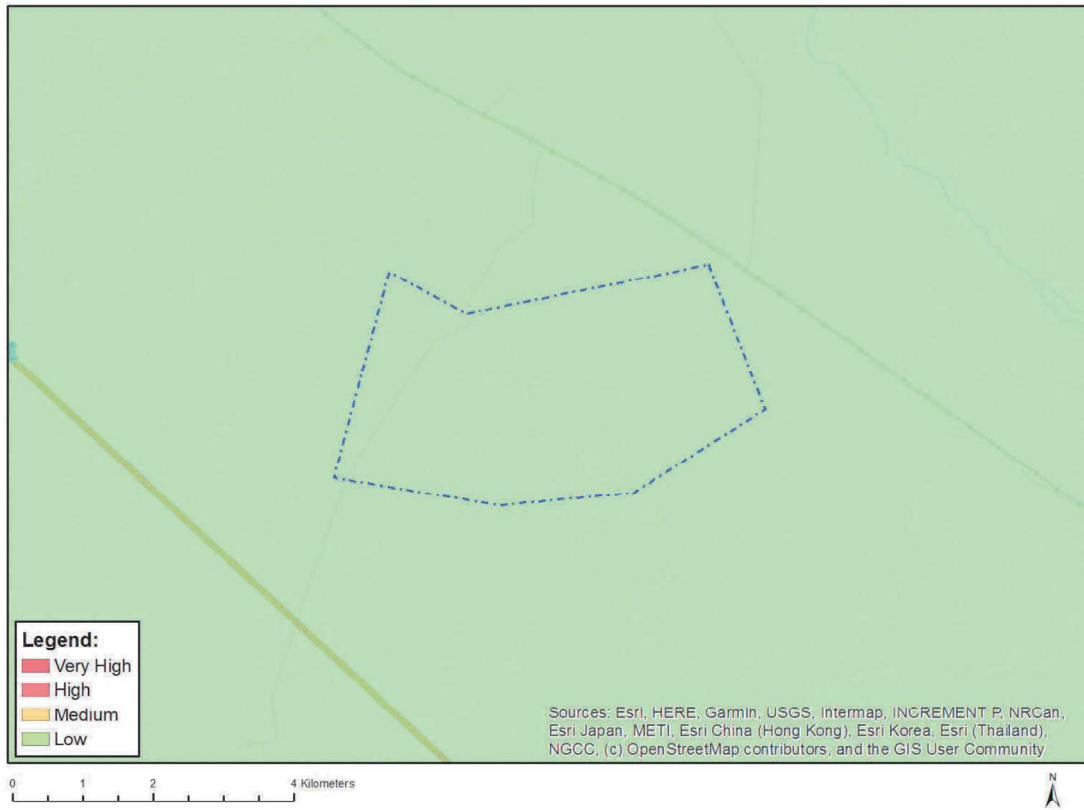


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity
Very High	Features with a Very High paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



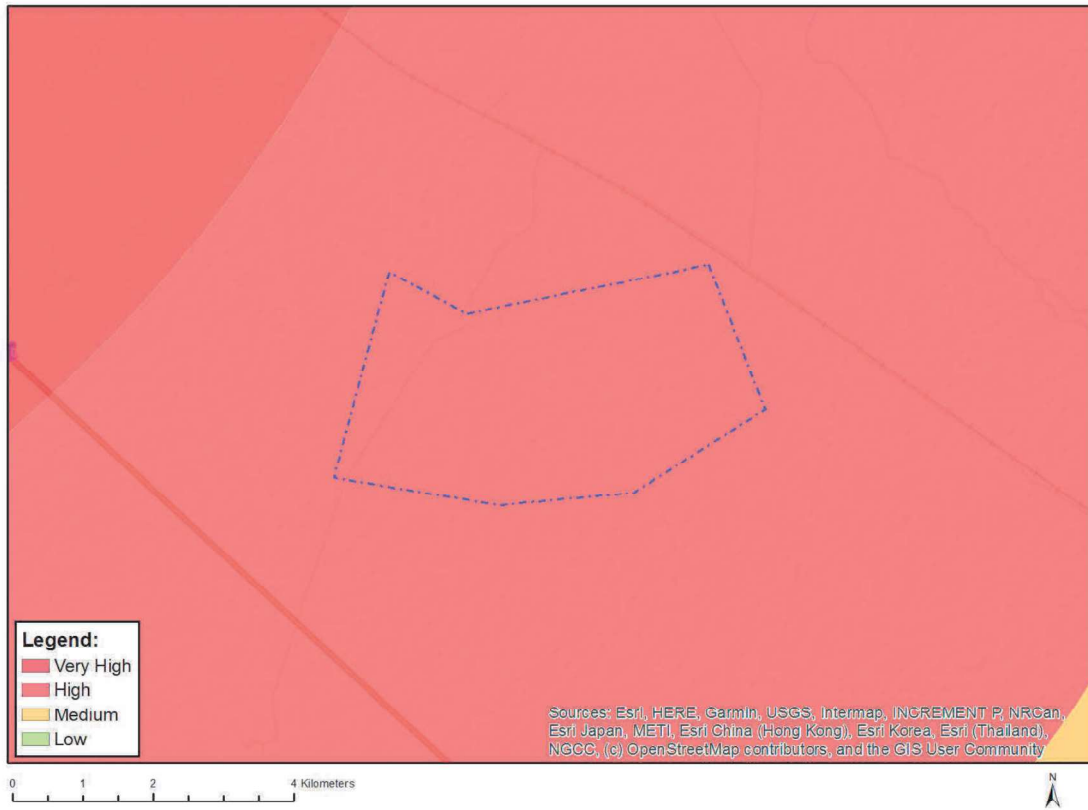
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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

MAP OF RELATIVE RFI THEME SENSITIVITY

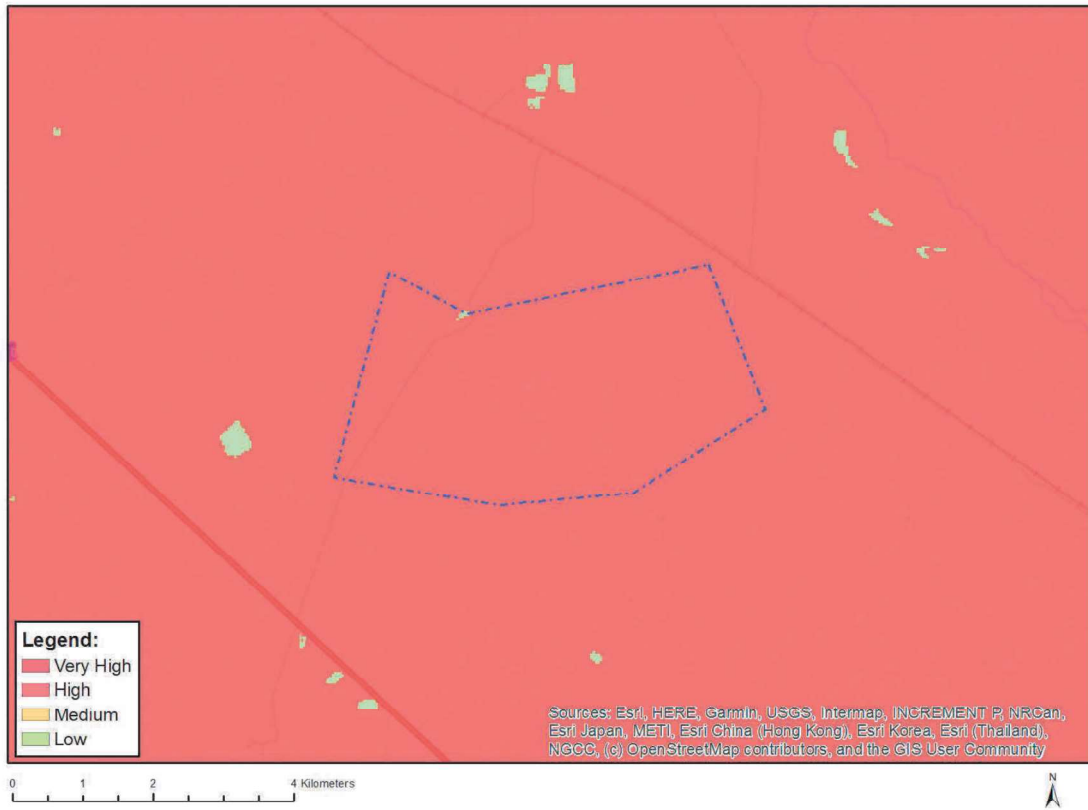


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Between 18 and 30 km from a Weather Radar installation and within the radar's line of sight

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	ESA