

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

EIA Reference number: EA Ref No. 12/12/20/2412

Project name: Kusile 60 Year ADF Project

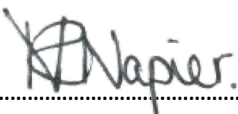
Project title: Construction and Operation of the 60 year ADF at Kusile Power Station

Date screening report generated: 01/07/2024 17:42:40

Applicant: Eskom Holdings SOC Limited

Compiler: EAP: Victoria Napier

Compiler signature:

A handwritten signature in black ink, appearing to read 'V Napier', is written over a dotted line.

Application Category: Any activities within or close to a watercourse

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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	KLIPFONTEIN	566	0	25°57'2.42S	28°55'54.3E	Farm
2	DWAALFONTEIN	565	0	25°58'35.83S	28°53'11.29E	Farm
3	DWAALFONTEIN	565	2	25°56'7.23S	28°53'14.67E	Farm Portion
4	KLIPFONTEIN	566	25	25°56'27.92S	28°53'48.04E	Farm Portion
5	KLIPFONTEIN	566	41	25°56'45.51S	28°55'49.27E	Farm Portion
6	DWAALFONTEIN	565	1	25°57'32.69S	28°53'22.61E	Farm Portion
7	KLIPFONTEIN	566	52	25°57'40.89S	28°55'42.04E	Farm Portion
8	KLIPFONTEIN	566	45	25°57'10.63S	28°55'41.14E	Farm Portion
9	KLIPFONTEIN	566	30	25°57'16.47S	28°55'20.84E	Farm Portion
10	KLIPFONTEIN	566	19	25°58'10.76S	28°54'24.77E	Farm Portion
11	KLIPFONTEIN	566	47	25°57'21.34S	28°55'37.56E	Farm Portion
12	DWAALFONTEIN	565	0	25°59'25.56S	28°53'11.61E	Farm Portion
13	KLIPFONTEIN	566	3	25°56'20.16S	28°55'22.28E	Farm Portion
14	KLIPFONTEIN	566	53	25°57'49.43S	28°55'27.9E	Farm Portion
15	KLIPFONTEIN	566	51	25°57'40.79S	28°55'30.84E	Farm Portion
16	KLIPFONTEIN	566	21	25°58'10.32S	28°54'0.55E	Farm Portion
17	KLIPFONTEIN	566	31	25°57'18.14S	28°55'59.12E	Farm Portion
18	KLIPFONTEIN	566	42	25°56'46.65S	28°55'56.52E	Farm Portion
19	KLIPFONTEIN	566	40	25°56'43.74S	28°55'42.48E	Farm Portion
20	KLIPFONTEIN	566	54	25°57'49.89S	28°55'39.87E	Farm Portion
21	KLIPFONTEIN	566	43	25°56'59.18S	28°55'44.44E	Farm Portion
22	KLIPFONTEIN	566	48	25°57'21.69S	28°55'47.41E	Farm Portion
23	KLIPFONTEIN	566	11	25°57'10S	28°54'10.72E	Farm Portion
24	KLIPFONTEIN	566	9	25°57'55.34S	28°54'58.34E	Farm Portion
25	KLIPFONTEIN	566	44	25°56'59.82S	28°55'53.23E	Farm Portion
26	KLIPFONTEIN	566	49	25°57'31.38S	28°55'34.04E	Farm Portion
27	KLIPFONTEIN	566	0	25°55'47.94S	28°54'30.79E	Farm Portion

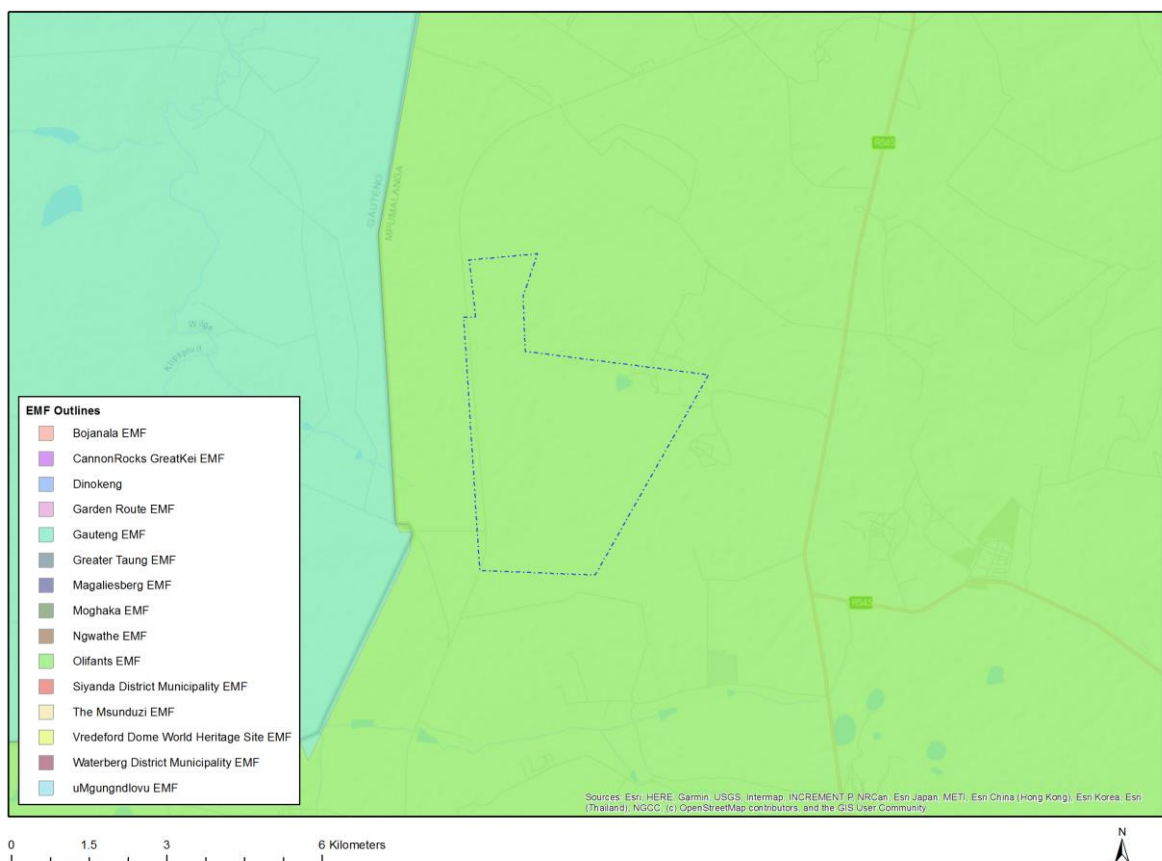
28	KLIPFONTEIN	566	10	25°57'8.86S	28°54'48.87E	Farm Portion
29	KLIPFONTEIN	566	17	25°56'17.38S	28°56'19.57E	Farm Portion
30	KLIPFONTEIN	566	66	25°58'13.19S	28°55'53.25E	Farm Portion
31	KLIPFONTEIN	566	50	25°57'31.54S	28°55'44.64E	Farm Portion
32	KLIPFONTEIN	566	26	25°56'15.02S	28°54'37.33E	Farm Portion
33	KLIPFONTEIN	566	46	25°57'11.59S	28°55'50.05E	Farm Portion
34	KLIPFONTEIN	566	70	25°57'33.16S	28°54'39.39E	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	14/12/16/3/3/97	Wind	Approved	20.6

Environmental Management Frameworks relevant to the application



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.

Environmental Management Framework	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone_4_6, 67, 78, 80, 92, 103, 122, 129.pdf

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:

Any activities within or close to a watercourse.

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-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf
Renewable energy development zones 9-Emalahleni	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.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		
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme	X			
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

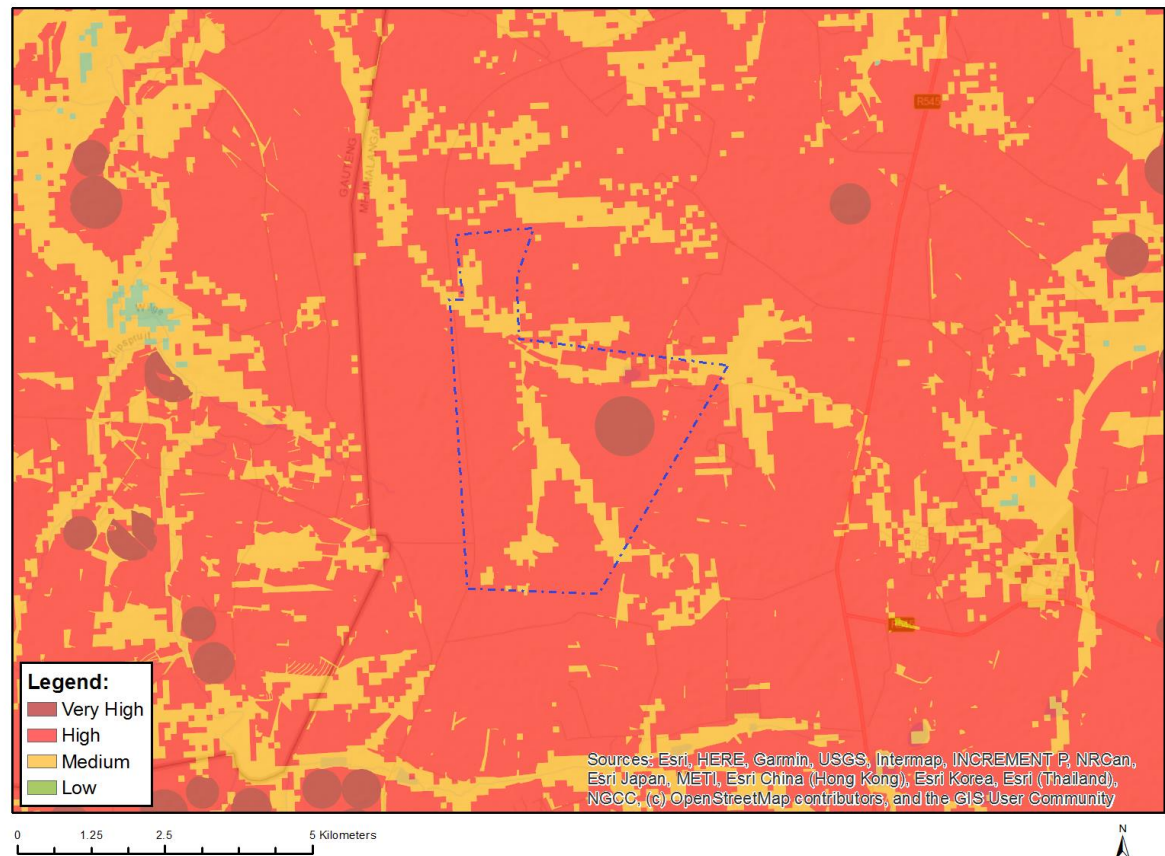
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, 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	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
7	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
8	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
9	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

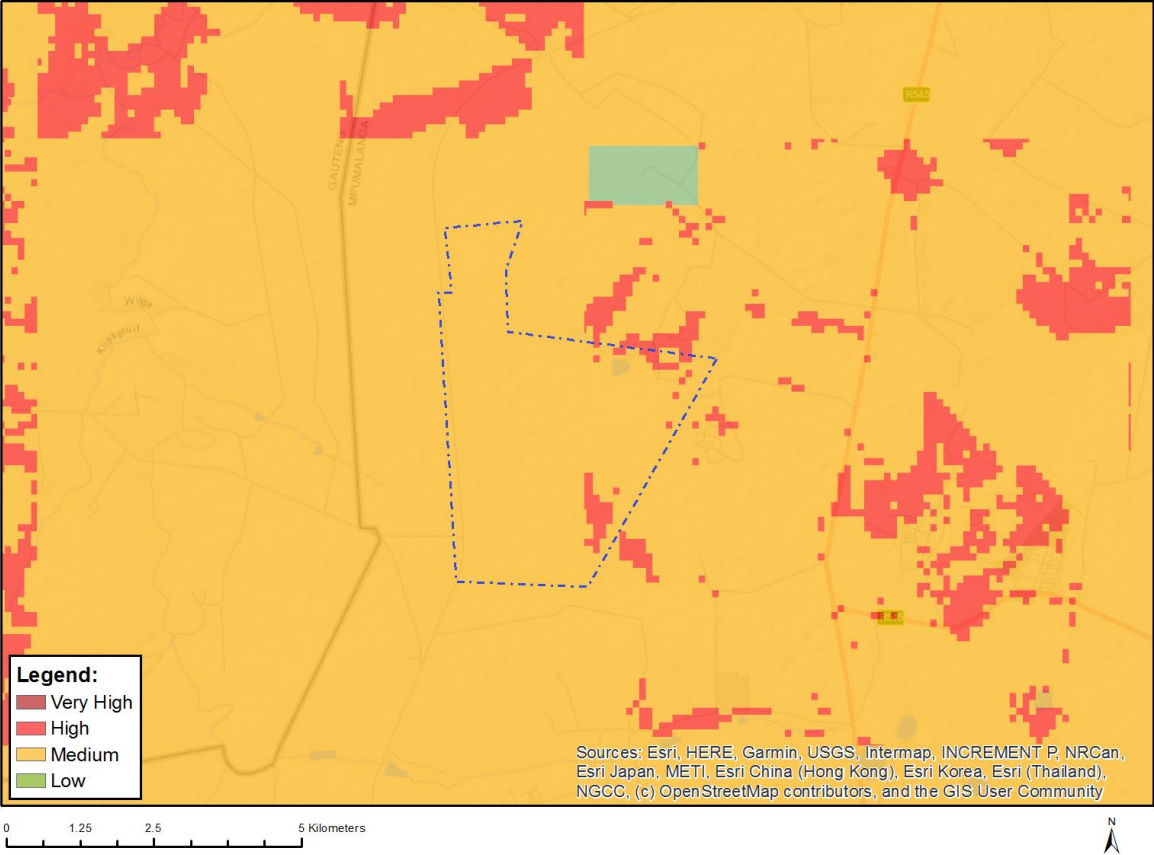


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;09. Moderate-High/10. Moderate-High
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Old Fields;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Old Fields;Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Pivot Irrigation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Pivot Irrigation;Land capability;09. Moderate-High/10. Moderate-High

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-Tyto capensis
High	Aves-Circus ranivorus
Medium	Aves-Tyto capensis
Medium	Aves-Circus ranivorus
Medium	Aves-Hydroprogne caspia
Medium	Aves-Eupodotis senegalensis
Medium	Mammalia-Chrysospalax villosus
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Dasymys robertsii
Medium	Mammalia-Hydrictis maculicollis
Medium	Mammalia-Ourebia ourebi ourebi
Medium	Invertebrate-Clonia uvarovi

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

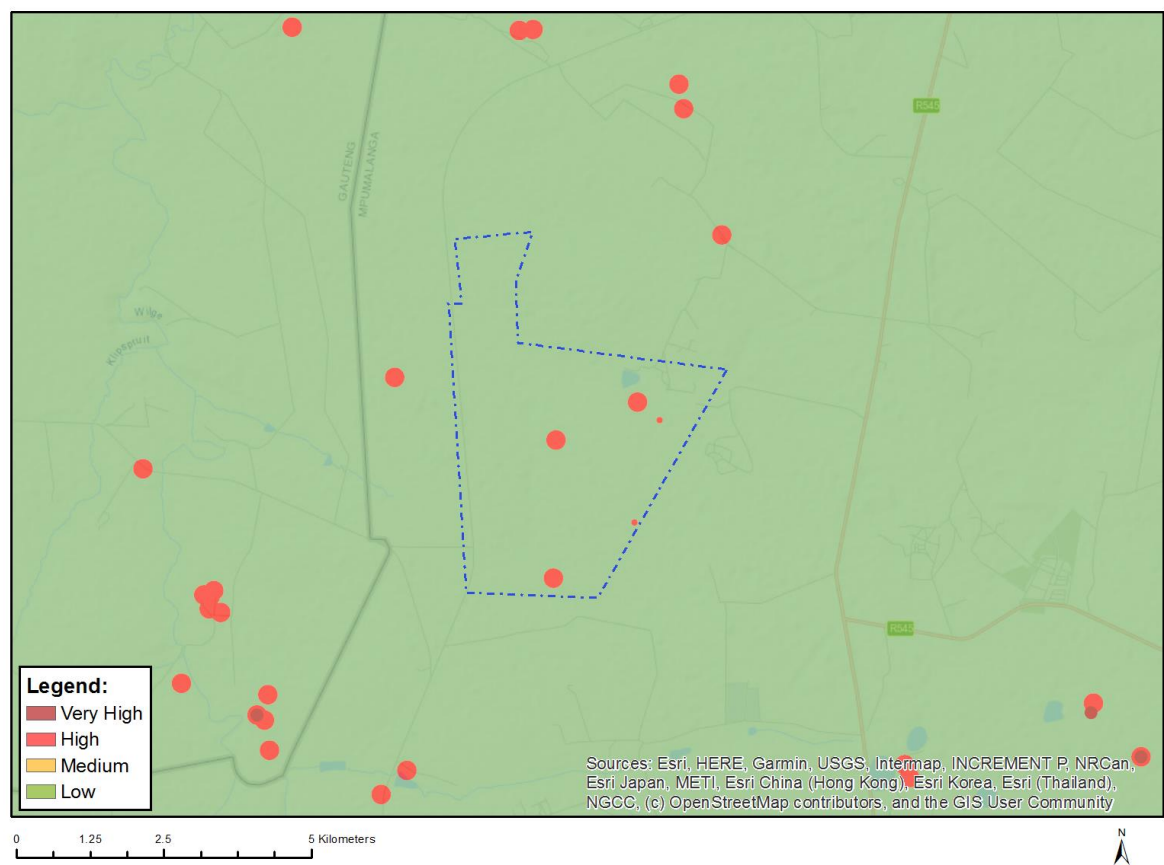


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	ESA: Wetlands
Very High	Wetlands_Mesic Highveld Grassland Bioregion (Seep)
Very High	Wetlands_Mesic Highveld Grassland Bioregion (Valley-bottom)

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

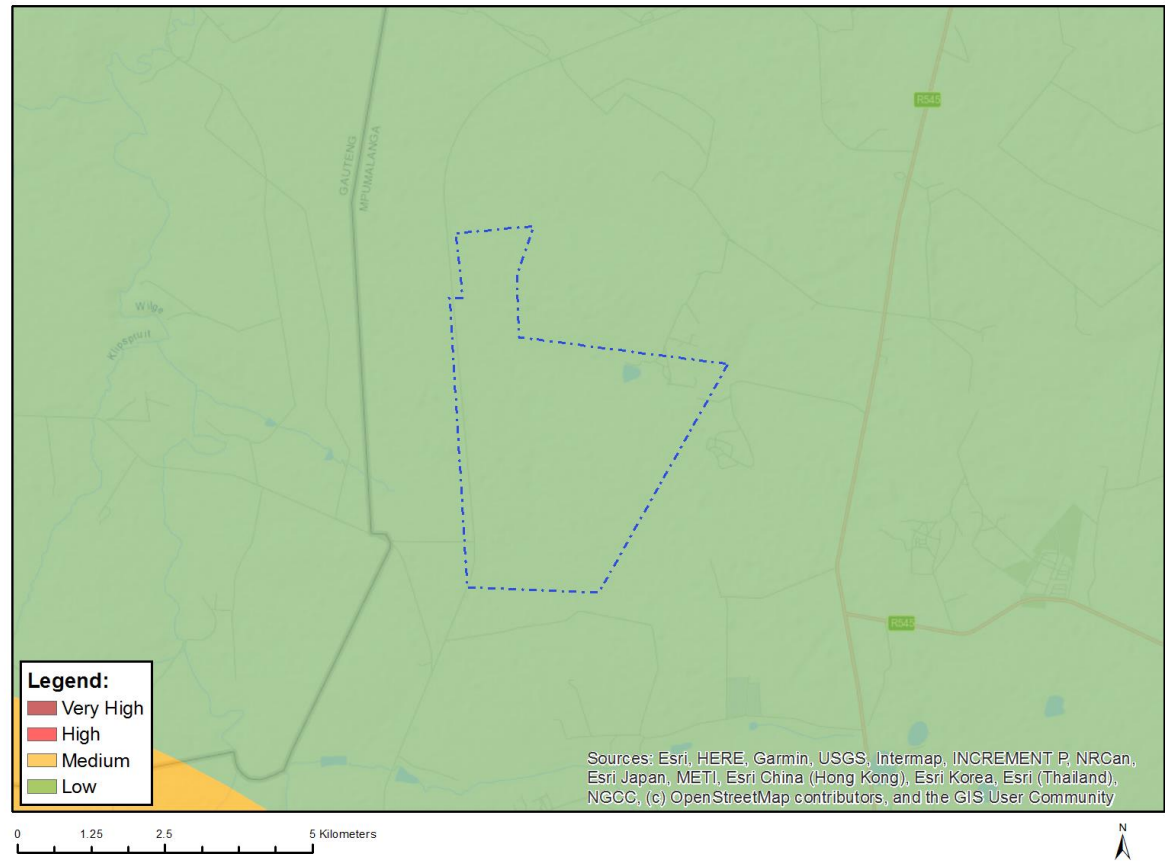


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 150m of a Grade IIIa Heritage site
High	Within 50m of a Grade IIIc Heritage site
Low	Low sensitivity

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

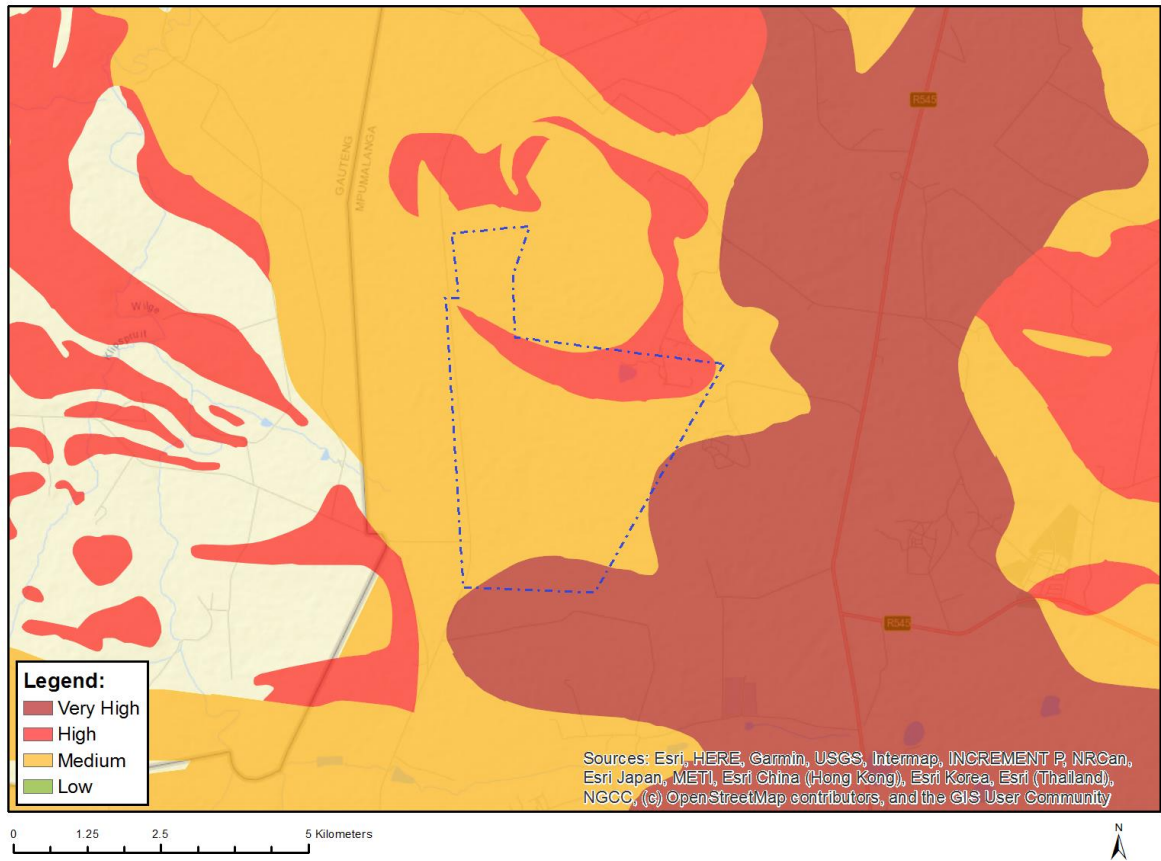


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

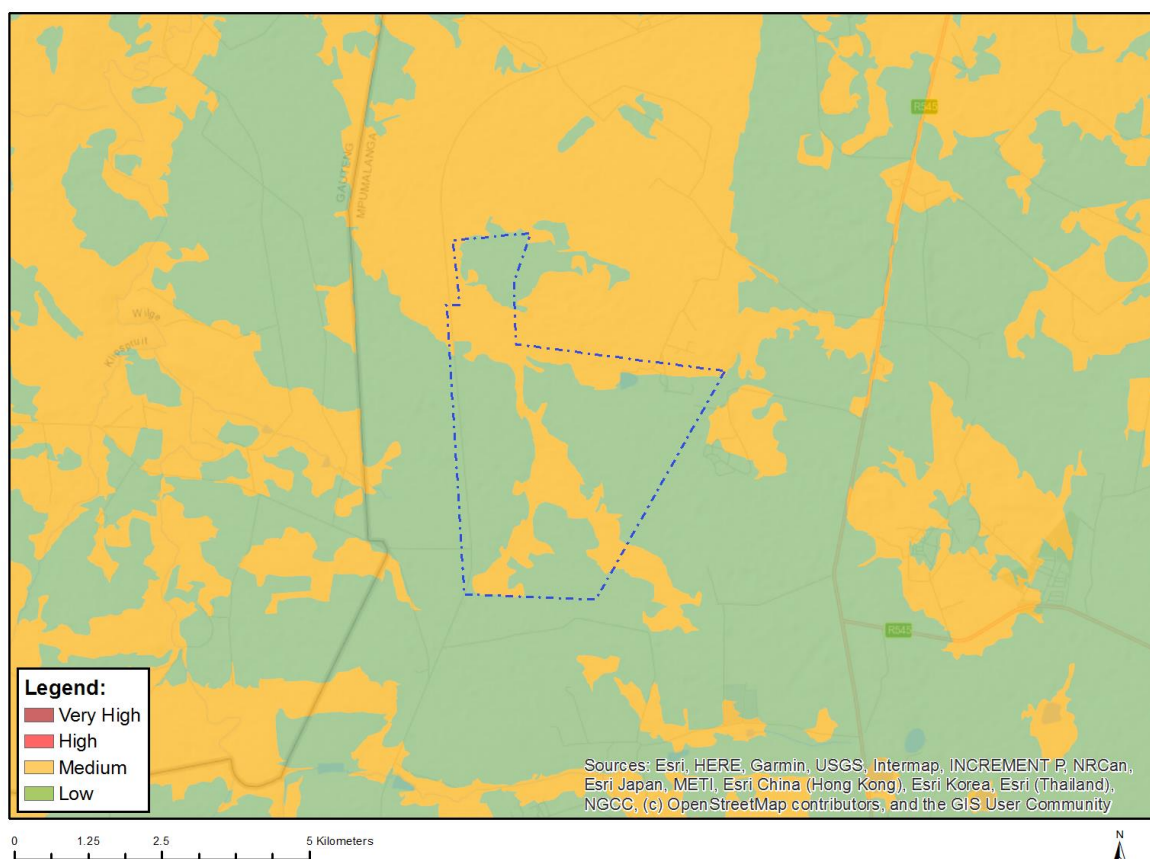


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



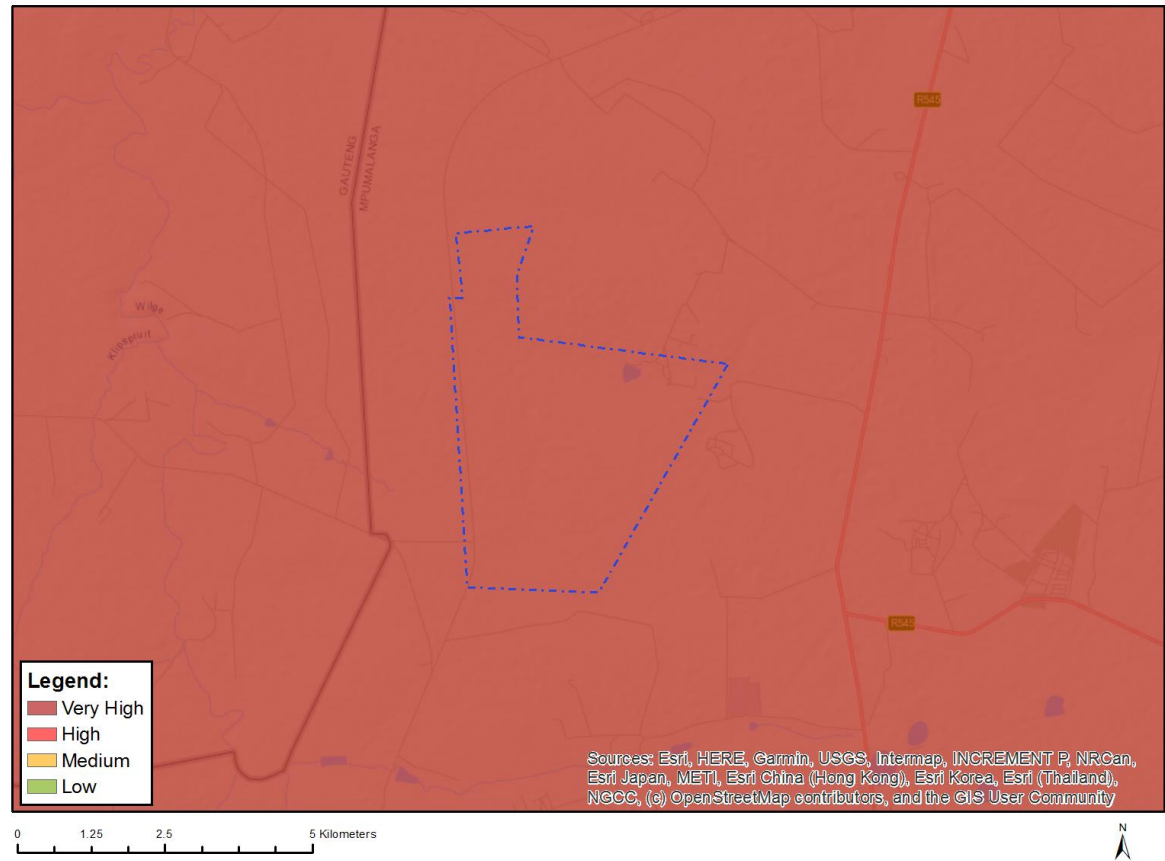
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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1252
Medium	Sensitive species 601
Medium	Ophioglossum gracillimum
Medium	Sensitive species 691
Medium	Pachycarpus suaveolens
Medium	Brachycorythis conica subsp. transvaalensis

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	VU_Rand Highveld Grassland
Very High	EN_Eastern Highveld Grassland