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

EIA Reference number:

Project name: Kekana Substation and Powerline

Project title: proposed kekana and loop in loop out Powerline

Date screening report generated: 03/04/2024 09:11:32

Applicant: Eskom Holdings SOC Limited

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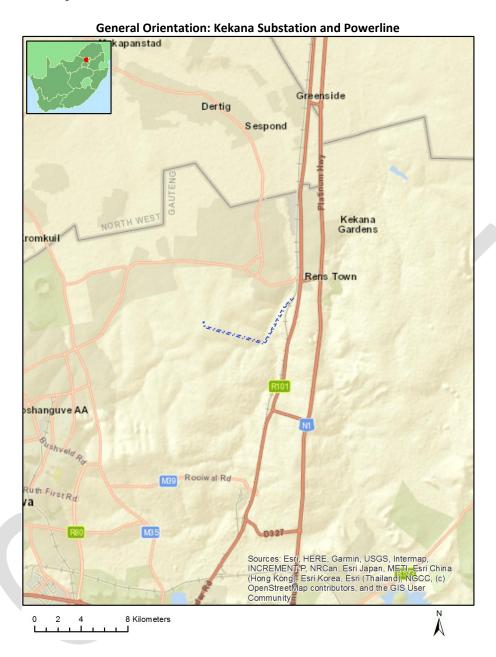
Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

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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/	Portion	Latitude	Longitude	Property
		Erf No				Туре
1	KAP	111	0	25°26'11.09S	28°12'38.96E	Farm
2	STERKWATER	106	0	25°27'10.38S	28°10'22.17E	Farm
3	KLIPDRIFT	116	0	25°26'20.99S	28°16'28.9E	Farm
4	HAMANSKRAAL	112	0	25°24'44.54S	28°15'15.42E	Farm
5	RONDAVEL ALIAS	109	0	25°26'52.16S	28°13'53.92E	Farm
	SCHOONGEZICHT					
6	STERKWATER	106	2	25°26'54.91S	28°11'29.57E	Farm Portion
7	STERKWATER	106	4	25°26'34.56S	28°12'9.67E	Farm Portion
8	KAP	111	1	25°26'11.09S	28°12'38.96E	Farm Portion
9	KLIPDRIFT	116	4	25°25'37.79S	28°16'12.32E	Farm Portion
10	RONDAVEL ALIAS	109	37	25°26'52.88S	28°13'56.22E	Farm Portion
	SCHOONGEZICHT					
11	KLIPDRIFT	116	0	25°26'26.16S	28°16'0.99E	Farm Portion
12	KLIPDRIFT	116	1	25°25'46.63S	28°16'11.6E	Farm Portion
13	RONDAVEL ALIAS	109	0	25°26'16.53S	28°14'11.25E	Farm Portion
	SCHOONGEZICHT					
14	HAMANSKRAAL	112	2	25°25'4.38S	28°16'29.44E	Farm Portion

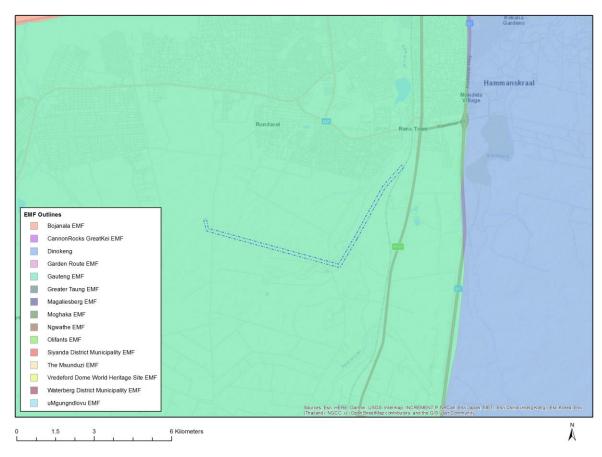
Development footprint¹ vertices: No development footprint(s) specified.

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.

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	Distance from proposed
			application	area (km)
1	14/12/16/3/3/2/423/AM2	Solar PV	Approved	12.4
2	14/12/16/3/3/1/492	Solar PV	Approved	26
3	14/12/16/3/3/1/743	Solar PV	Approved	10.2
4	12/12/20/2543	Solar PV	Approved	10.2
5	14/12/16/3/3/2/423	Solar PV	Approved	12.4
6	14/12/16/3/3/1/491	Solar PV	Approved	26
7	14/12/16/3/3/2/423/AM1	Solar PV	Approved	12.4
8	14/12/16/3/3/2/510/AM1	Solar PV	Approved	26

Environmental Management Frameworks relevant to the application



Environmental	LINK
Management	
Framework	
Gauteng EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF
	2021 Gazette and summary.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: **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
Gauteng EMF-Urban development zone 1	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Zone1 2021.pdf
Main Electricity Transmission Substation	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution Transmission.pdf
South African Protected Areas	https://screening.environment.gov.za/ScreeningDownloads/Developmen tZones/SAPAD OR 2023 Q3 Metadata.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	High	Medium	Low
	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme	X			
Animal Species Theme		Χ		
Aquatic Biodiversity Theme	Х			
Archaeological and Cultural				Х
Heritage Theme				
Civil Aviation Theme		Χ		
Defence Theme				Х
Paleontology Theme		Х		
Plant Species Theme			Х	
Terrestrial Biodiversity Theme	Х			

Specialist assessments identified

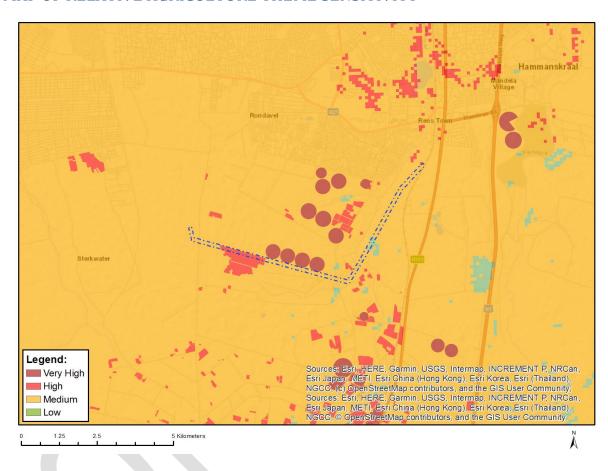
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report,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

No	Specialist	Assessment Protocol
	assessment	
1	Agricultural Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_General_Agriculture_Assessment_Pro
		tocols.pdf
2	Landscape/Visual Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_General_Requirement_Assessment_P
		<u>rotocols.pdf</u>
3	Archaeological and	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Cultural Heritage Impact Assessment	ssmentProtocols/Gazetted_General_Requirement_Assessment_P
	Assessment	<u>rotocols.pdf</u>
4	Palaeontology Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_General_Requirement_Assessment_P
		<u>rotocols.pdf</u>
5	Terrestrial Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Terrestrial Biodiversity Assessment
		<u>Protocols.pdf</u>
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Aquatic Biodiversity Assessment Pr
		<u>otocols.pdf</u>
7	Avian Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Avifauna Assessment Protocols.pdf
8	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_Civil_Aviation_Installations_Assessme
		<u>nt Protocols.pdf</u>
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_General_Requirement_Assessment_P
		<u>rotocols.pdf</u>
11	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.
		<u>pdf</u>
12	Animal Species	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_Animal_Species_Assessment_Protoco
		<u>ls.pdf</u>

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.

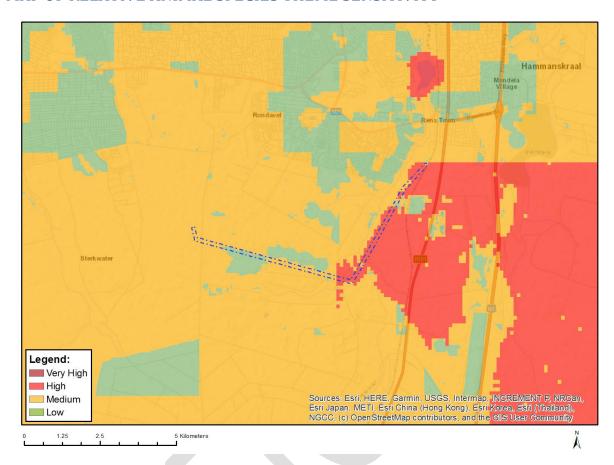
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	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
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
Very High	Pivot Irrigation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

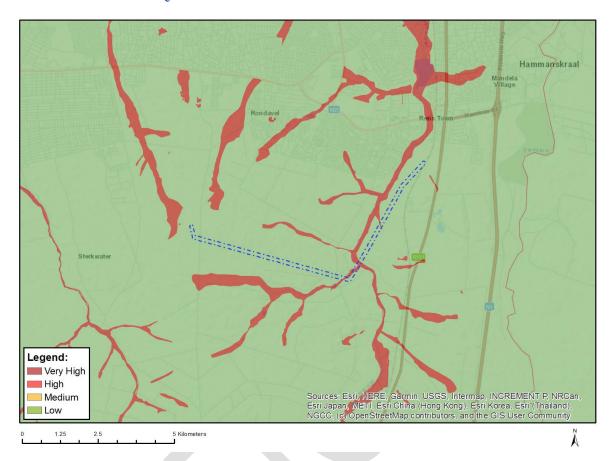


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	Feature(s)
High	Aves-Polemaetus bellicosus
Low	Subject to confirmation
Medium	Aves-Podica senegalensis
Medium	Aves-Hydroprogne caspia
Medium	Aves-Eupodotis senegalensis
Medium	Sensitive species 5
Medium	Mammalia-Dasymys robertsii
Medium	Reptilia-Kinixys lobatsiana

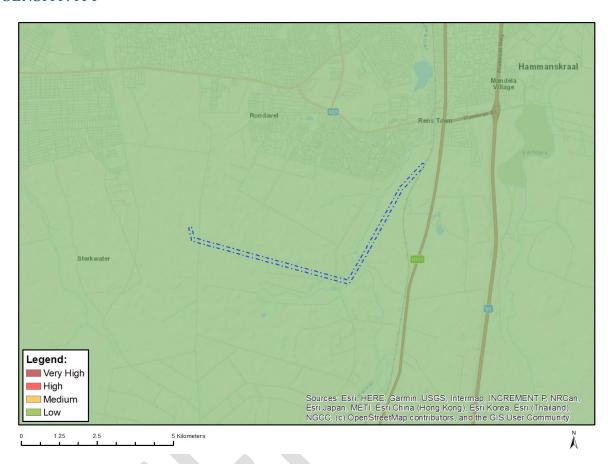
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Rivers_D
Very High	Wetlands_Central Bushveld Bioregion (Valley-bottom)

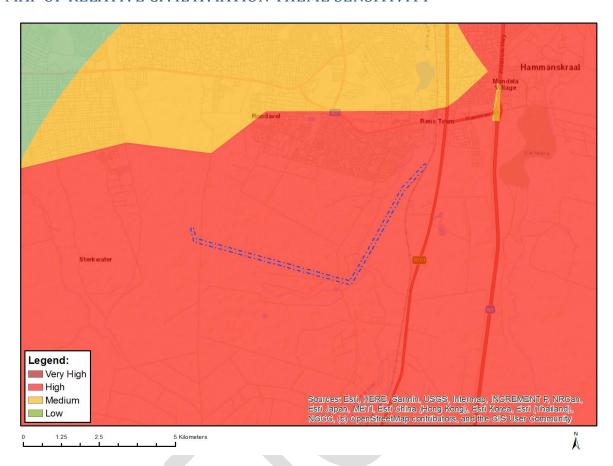
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

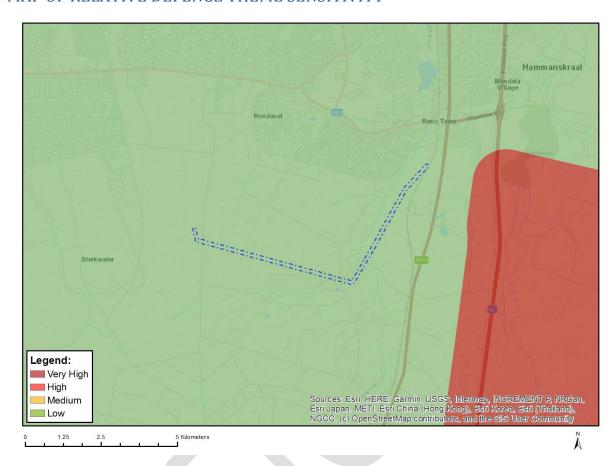
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
High	Dangerous and restricted airspace as demarcated
Medium	Between 8 and 15 km of other civil aviation aerodrome

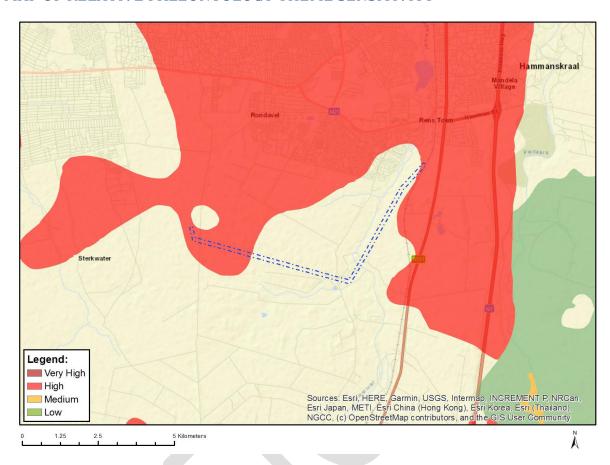
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

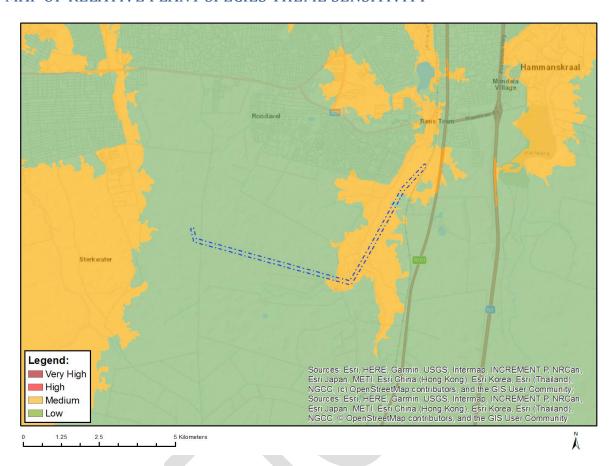
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
High	Features with a 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	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1252

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Sterkwater Private Nature Reserve
Very High	CBA 1
Very High	CBA 2
Very High	ESA 1
Very High	ESA 2
Very High	National Protected Area Expansion Strategy (NPAES)
Very High	VU_Springbokvlakte Thornveld