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

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EIA Reference number: TBC

Project name: Switiching Station Option 1_Lion Thorn Solar PV

Project title: Switiching Station Option 1_Lion Thorn Solar PV

Date screening report generated: 07/06/2023 07:36:58

Applicant: Upgrade Energy (Pty) Ltd

Compiler: SiVEST

Compiler signature:

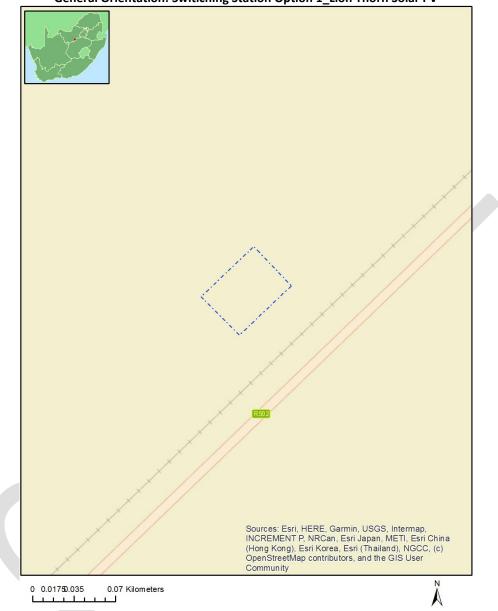
Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Substation

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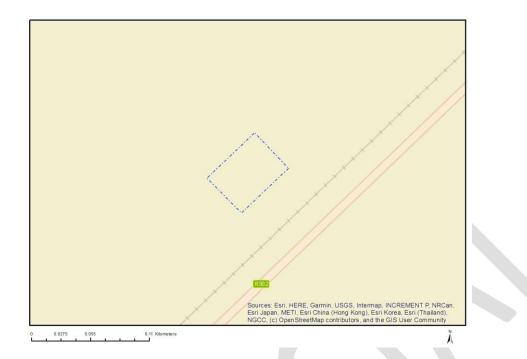
Proposed Project Location

Orientation map 1: General location



General Orientation: Switiching Station Option 1_Lion Thorn Solar PV

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	LEEUWBOSCH	44	0	27°11'27.59S	26°18'45.97E	Farm
2	LEEUWBOSCH	44	37	27°12'10.08S	26°18'15.54E	Farm Portion
3	LEEUWBOSCH	44	42	27°12'12.87S	26°18'30.29E	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	14/12/16/3/3/1/1519	Solar PV	Approved	8.6

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.

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 | Distribution and Transmission | Substation.

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	https://screening.environment.gov.za/ScreeningDownloads/Developmen
Corridor-Central corridor	tZones/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			Х	
Animal Species Theme				Х
Aquatic Biodiversity Theme				Х
Archaeological and Cultural				Х
Heritage Theme				
Civil Aviation Theme				Х
Defence Theme				Х
Paleontology Theme			Х	
Plant Species Theme			Х	
Terrestrial Biodiversity Theme	Х			

Specialist assessments identified

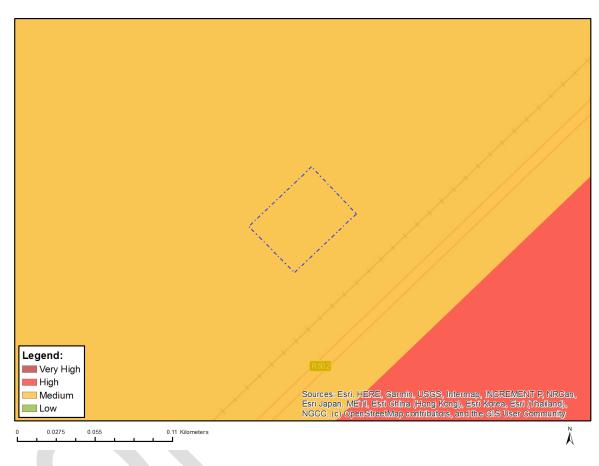
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report,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

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No	Specialist	Assessment Protocol
	assessment	
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Agriculture_Assessment_Pro tocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Requirement_Assessment_P rotocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Requirement_Assessment_P rotocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_ Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Pr otocols.pdf
6	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted General Requirement Assessment P rotocols.pdf
7	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_Plant_Species_Assessment_Protocols. pdf
8	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_Animal_Species_Assessment_Protoco ls.pdf

Results of the environmental sensitivity of the proposed area.

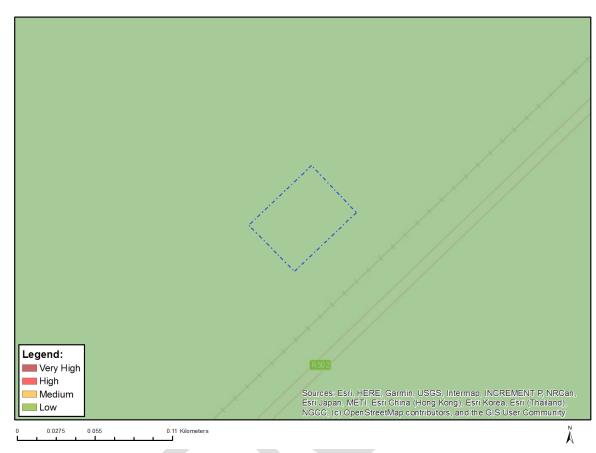
The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.



MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

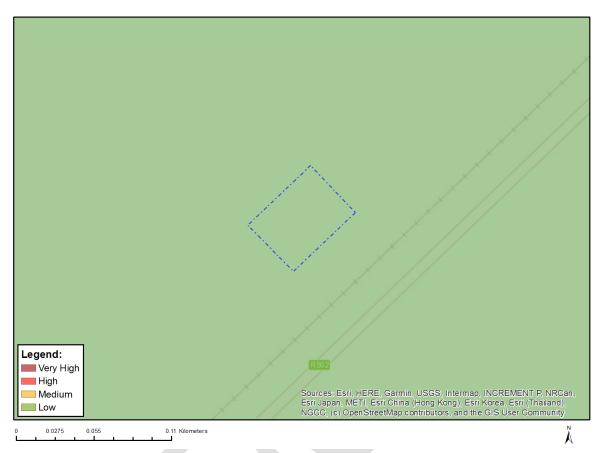


MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

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 <u>eiadatarequests@sanbi.org.za</u> 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
			Х

Sensitivity	Feature(s)
Low	Subject to confirmation



MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

Legend: Very High Medium 0 0075 0 005 0 11 Memeters

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

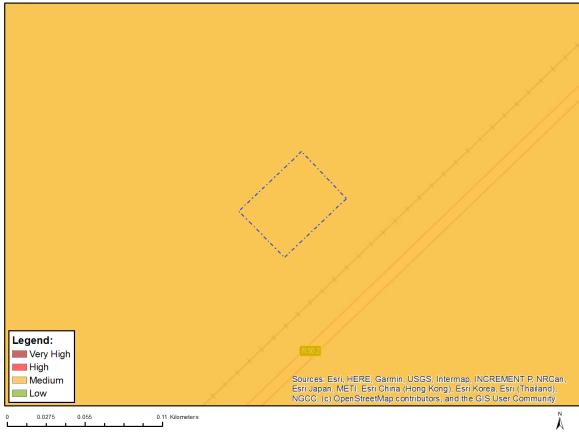
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low Sensitivity
LOW	LOW Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)	
Low	Features with a Low paleontological sensitivity	
Medium	Features with a Medium paleontological sensitivity	

Egend: Very High Bediani Sources: Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCan, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCAN, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCAN, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCAN, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCAN, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, P, NRCAN, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREMENT, Esr. Krea, Esr. HERE; Garmin, USCS; Intermap, INCREM

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		х	

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1261

Legend: Image: State in the state in

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
Very High	ESA 1
Very High	EN_Vaal-Vet Sandy Grassland