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

.....

EIA Reference number: 14/12/16/3/3/2/2286

Project name: Luckhoff Solar 3

Project title: Proposed Luckhoff Solar 3 Photovoltaic Solar Energy Facility near Luckhoff , Free State Province

Date screening report generated: 17/05/2023 22:22:47

Applicant: Luckhoff Solar 3 (Pty) Ltd

Compiler: Environamics Environmental Consultants

Compiler signature:

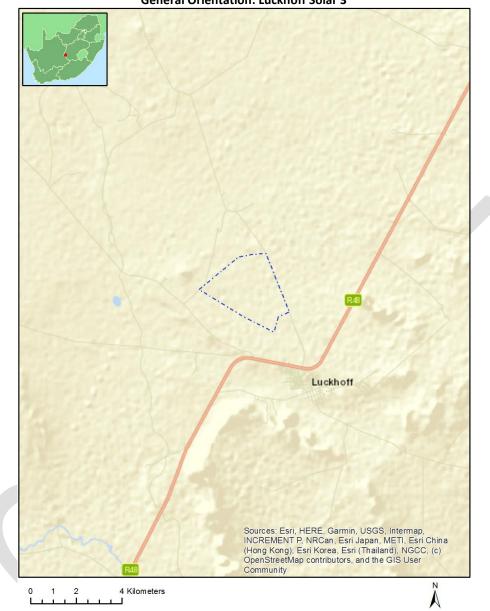
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

Table of Contents

Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	5
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Proposed Development Area Environmental Sensitivity	
Specialist assessments identified	
Results of the environmental sensitivity of the proposed area	8
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	8
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	9
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	10
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	11
MAP OF RELATIVE AVIAN THEME SENSITIVITY	12
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	13
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	14
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY	15
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	16
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	17
MAP OF RELATIVE RFI THEME SENSITIVITY	18
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	19

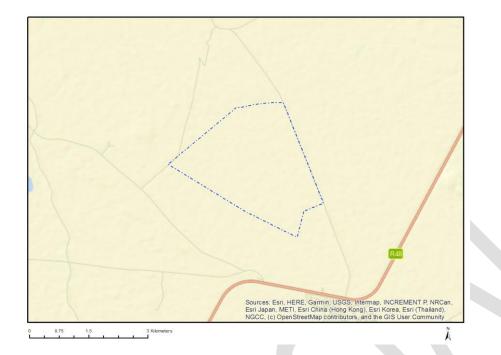
Proposed Project Location

Orientation map 1: General location



General Orientation: Luckhoff Solar 3

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	RORICH'S HULP	505	0	29°42'56.69S	24°45'12.12E	Farm
2	KLEIN PALMIETFONTEIN	370	0	29°44'13.48S	24°45'32.69E	Farm
3	DE DORPSGRONDEN	577	0	29°44'38.3S	24°48'4.05E	Farm
	VAN LUCKHOFF					
4	VIJGEBOOM	714	0	29°43'49.1S	24°44'42.75E	Farm
5	MOOIDOORNS	1224	0	29°41'55.43S	24°44'48.51E	Farm
6	RORICH'S HULP	505	0	29°42'56.84S	24°45'18E	Farm Portion
7	KLEIN PALMIETFONTEIN	370	0	29°44'13.48S	24°45'32.69E	Farm Portion
8	DE DORPSGRONDEN	577	0	29°45'21.81S	24°46'57.55E	Farm Portion
	VAN LUCKHOFF					
9	VIJGEBOOM	714	0	29°43'49.1S	24°44'42.75E	Farm Portion
10	MOOIDOORNS	1224	0	29°41'56.97S	24°44'47.7E	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 nearby wind or solar developments found.

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	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	High	Medium	Low
	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme			Х	
Animal Species Theme			Х	
Aquatic Biodiversity Theme				Х
Archaeological and Cultural				Х
Heritage Theme				
Avian Theme				Х
Civil Aviation (Solar PV)				Х
Theme				
Defence Theme				Х
Landscape (Solar) Theme	Х			
Paleontology Theme		Х		
Plant Species Theme			Х	

RFI Theme		Х	
Terrestrial Biodiversity Theme	Х		

Specialist assessments identified

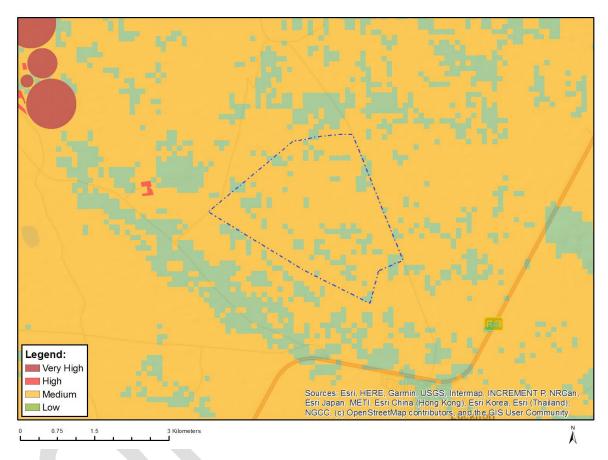
Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, 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_WindAndSolar_Agriculture_Assessme
		nt_Protocols.pdf
2	Landscape/Visual Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_General_Requirement_Assessment_P
		rotocols.pdf
3	Archaeological and	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Cultural Heritage Impact	ssmentProtocols/Gazetted General Requirement Assessment P
	Assessment	rotocols.pdf
4	Palaeontology Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
5	Terrestrial Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Terrestrial Biodiversity Assessment
		Protocols.pdf
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Aquatic Biodiversity Assessment Pr
		otocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Civil Aviation Installations Assessme
		nt Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Defence Installations Assessment Pr
		otocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
11	Socio-Economic	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
12	han species Assessment	ssmentProtocols/Gazetted Plant Species Assessment Protocols.
13	Animal Species	pdf https://screeping.onvironment.gov.zg/ScreepingDownloads/Asso
13	Animal Species	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Animal Species Assessment Protoco

ls.pdf

Results of the environmental sensitivity of the proposed area.

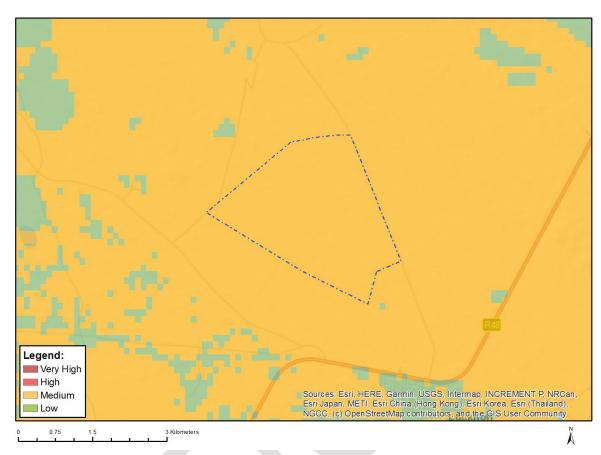
The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive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

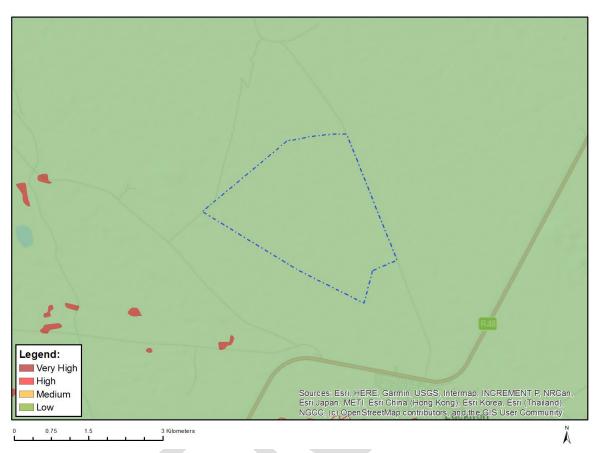


MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

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 <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)
Medium	Aves-Neotis ludwigii

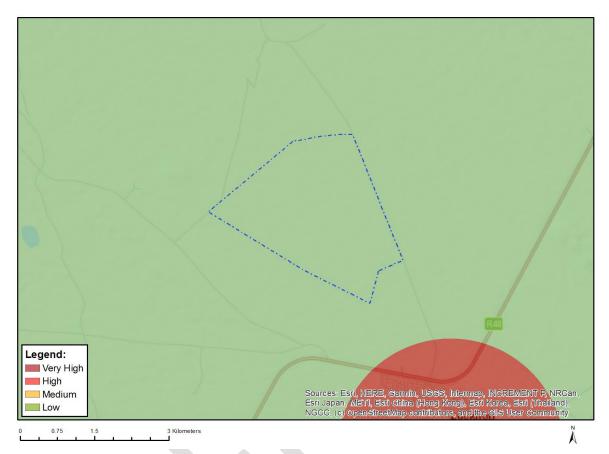


MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

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

MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

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

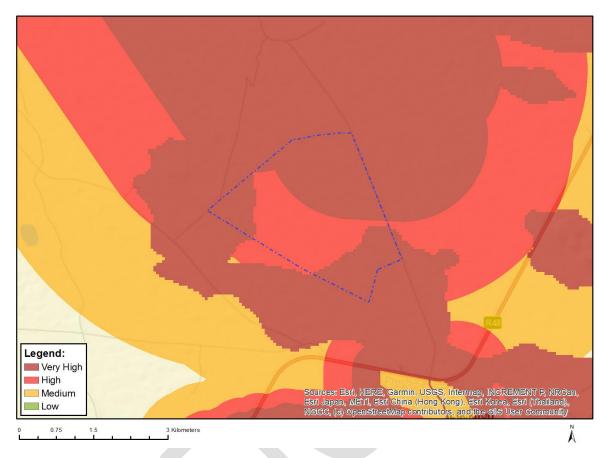
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
х			

Sensitivity	Feature(s)
High	Between 1.5 and 3 km of a nature reserve
Medium	Between a and 2 km of a town or village
Very High	Mountain tops and high ridges
Very High	Within 1.5 km of a nature reserve

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	Х		

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

Legend: Legend: Surces: Esri, HERE; Garma, USCS; Intermae, INCREMENT, P. NRCan, Surces: Sur

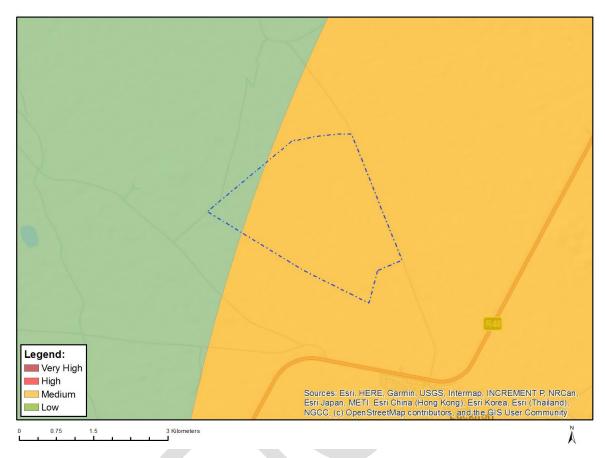
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

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 <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	

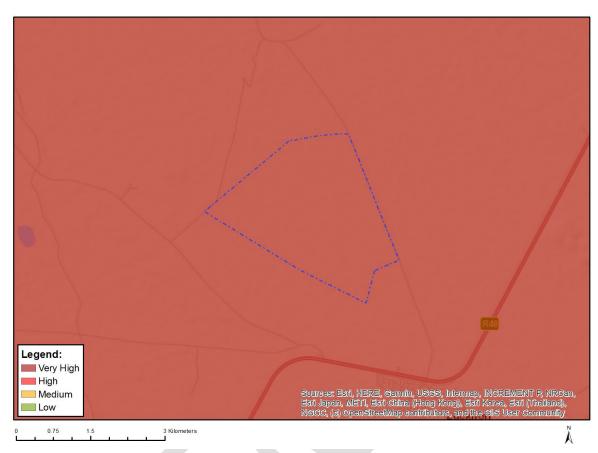
Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Tridentea virescens

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		х	

Sensitivity	Feature(s)	
Low	Low sensitivity	
Medium	Between 14 and 32 km of a SKA receptor	



MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
Very High	Critical biodiveristy area 1
Very High	Critical biodiveristy area 2
Very High	Ecological support area 1