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

EIA Reference number: 12/12/20/2313/2/1

Project name: Loeriesfontein 3 PV and IPP Portion of the Substation **Project title:** Loeriesfontein 3 PV and IPP Portion of the Substation

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Applicant: South Africa Mainstream Renewable Power Loeriesfontein 3 (Pty) Ltd

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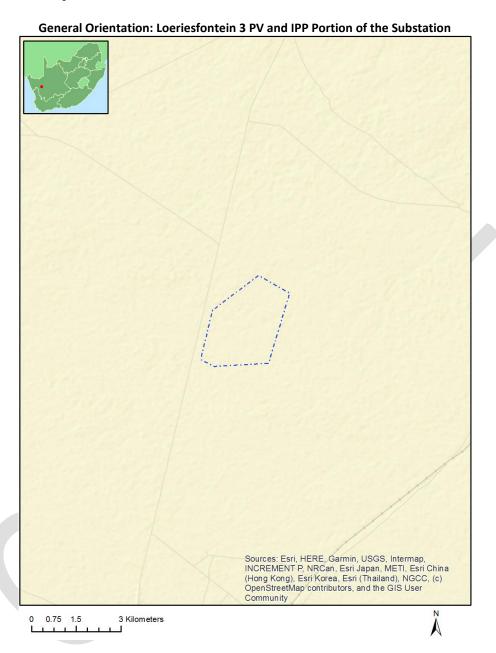
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

Table of Contents

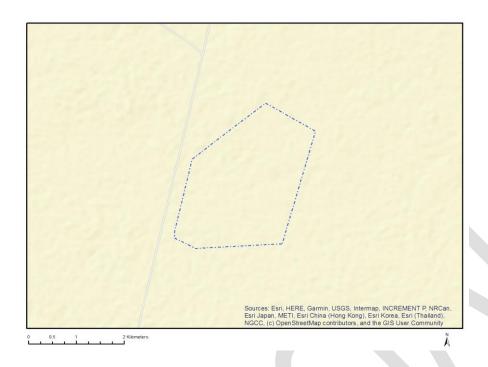
P	roposed Project Location	3
	Orientation map 1: General location	3
١	Лар of proposed site and relevant area(s)	4
	Cadastral details of the proposed site	4
	Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
	Environmental Management Frameworks relevant to the application	5
E	nvironmental screening results and assessment outcomes	5
	Relevant development incentives, restrictions, exclusions or prohibitions	5
	Nap indicating proposed development footprint within applicable development incentive, estriction, exclusion or prohibition zones	
	Proposed Development Area Environmental Sensitivity	
	Specialist assessments identified	
R	esults of the environmental sensitivity of the proposed area.	
	MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	
	MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	
	MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
	MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	
	MAP OF RELATIVE AVIAN THEME SENSITIVITY	13
	MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	
	MAP OF RELATIVE DEFENCE THEME SENSITIVITY	15
	MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY	16
	MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	17
	MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	18
	MAP OF RELATIVE RFI THEME SENSITIVITY	19
	MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	20

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	Portion	Latitude	Longitude	Property
		No				Type
1	AAN DIE KARREE	213	0	30°24'30.22S	19°34'43.91E	Farm
	DOORN PAN					
2	AAN DIE KARREE	213	1	30°24'30.31S	19°36'21.6E	Farm Portion
	DOORN PAN					
3	AAN DIE KARREE	213	2	30°23'46.24S	19°34'44.97E	Farm Portion
	DOORN PAN					

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 Class		Classification	Status of	Distance from proposed
	No		application	area (km)
1	12/12/20/2321/2	Solar PV	Approved	0

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.

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:

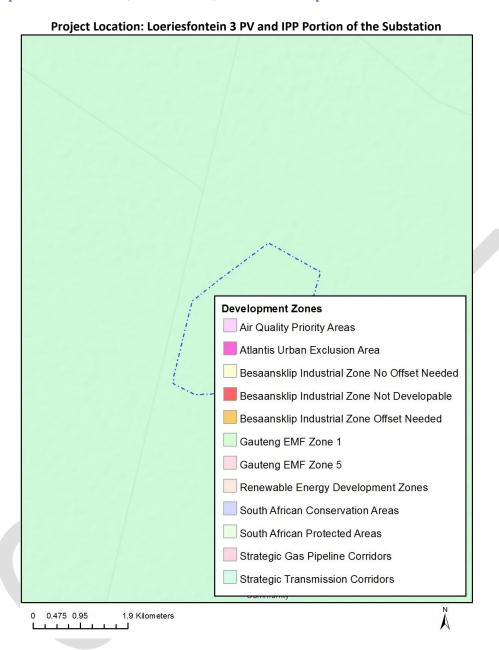
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

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	Implication
,	
restrictio	
n or	
prohibiti	
on	
Strategic	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Co
Transmissi	mbined EGI.pdf
on	
Corridor-	
Western	
corridor	

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



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			Χ	
Animal Species Theme		Х		

Page 6 of 20 <u>Disclaimer applies</u> 12/11/2022

Aquatic Biodiversity Theme	Χ			
Archaeological and Cultural		Х		
Heritage Theme				
Avian Theme				Χ
Civil Aviation (Solar PV)				X
Theme				
Defence Theme				X
Landscape (Solar) Theme	Χ			
Paleontology Theme	Χ			
Plant Species Theme			Х	
RFI Theme	Χ			
Terrestrial Biodiversity Theme	Χ			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, 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.

N	Special	Assessment Protocol
0	ist	
	assess	
	ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted WindAndSolar Agriculture Assessment Protocols.pdf
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
3	Archaeo logical and Cultural Heritage Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
4	Palaeon tology Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
5	Terrestri al Biodiver sity Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiver sity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

Page 7 of 20

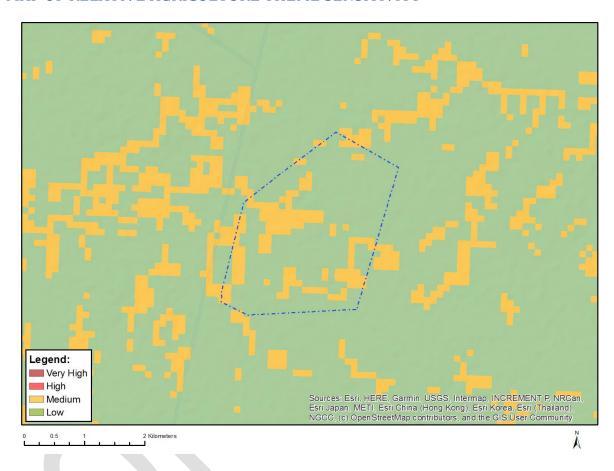
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	Impact Assessm ent	
7	Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted Civil Aviation Installations Assessment Protocols.pdf
8	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_General_Requirement_Assessment_Protocols.pdf
1 0	Geotech nical Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted General Requirement Assessment Protocols.pdf
1	Socio- Economi c Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted General Requirement Assessment Protocols.pdf
1 2	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted Plant Species Assessment Protocols.pdf
3	Animal Species Assessm ent	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
		Χ	

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	y Feature(s)	
High	Aves-Neotis ludwigii	
High	Aves-Calendulauda burra	
Medium	Aves-Sagittarius serpentarius	

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Freshwater ecosystem priority area quinary catchments

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

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

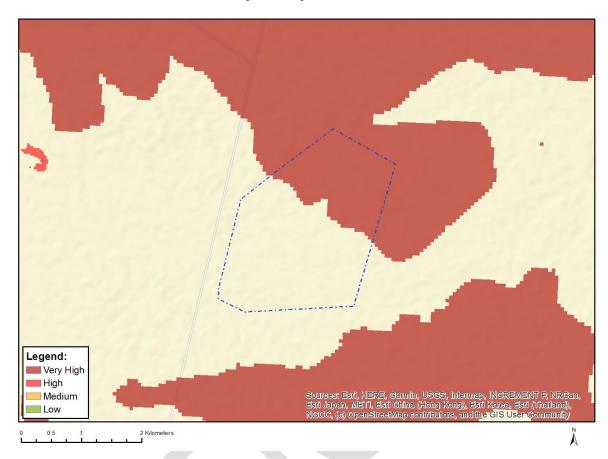
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

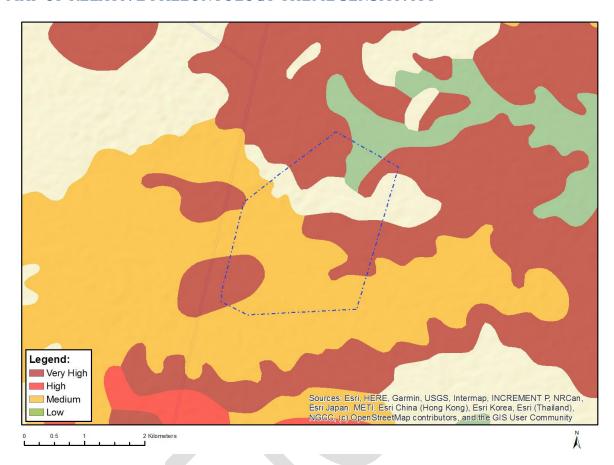
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Mountain tops and high ridges

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Low	Features with a Low 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	Feature(s)
Low	Low Sensitivity
Medium	Dregeochloa calviniensis

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	Between 8 and 14 km of the Radio Astronomy Advantage Area
Medium	Between 14 and 32 km of the Radio Astronomy Advantage Area
Very High	Inside or within 8 km of the Radio Astronomy Advantage Area

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Ecological support area
Very High	FEPA Subcatchments