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

EIA Reference number: To Be Confirmed

Project name: Turffontein Solar 1 PV Facility and Grid Infrastructure

Project title: The Proposed Turffontein Solar 1 Photovoltaic Solar Energy Facility and Grid

Connection Infrastructure Near Carletonville Gauteng and North West Provinces

Date screening report generated: 15/02/2023 21:43:05

Applicant: Turffontein Solar 1 (Pty) Ltd

Compiler: Environamics Environmental Consultants

Compiler signature:

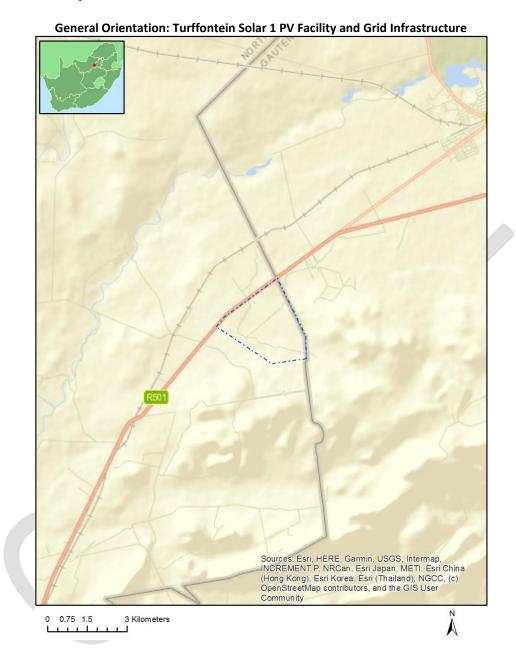
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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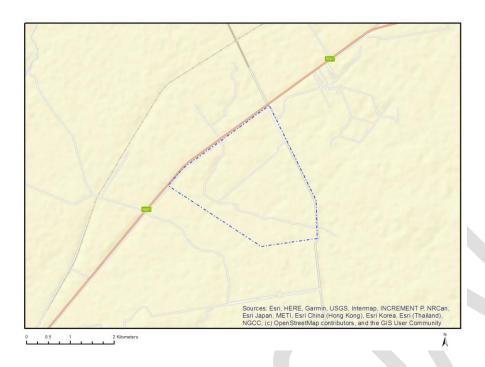
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Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

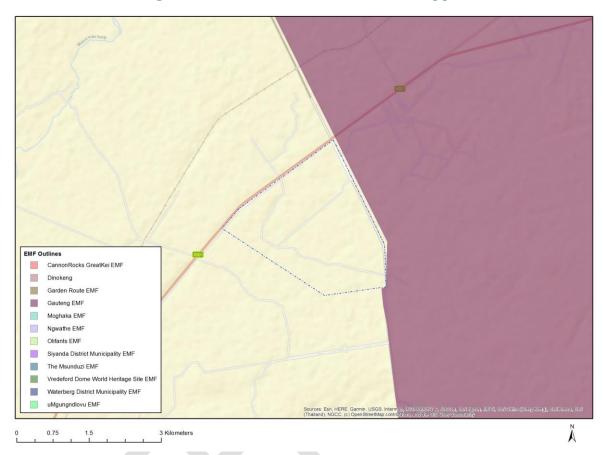
No	Farm Name	Farm/ Erf	Portion	Latitude	Longitude	Property
		No				Туре
1		126	0	26°25'27.01S	27°11'8.03E	Farm
2	KLEINFONTEIN	141	0	26°27'56.69S	27°15'8.6E	Farm
3	BLAAUWBANK	125	0	26°23'49.56S	27°13'6.11E	Farm
4	GERHARDMINNEBRON	139	0	26°28'30.14S	27°10'49.09E	Farm
5	GERHARDMINNEBRON	139	17	26°27'32.11S	27°11'2.2E	Farm Portion
6		126	3	26°26'17.36S	27°11'50.73E	Farm Portion
7	KLEINFONTEIN	141	0	26°28'16.5S	27°14'25.15E	Farm Portion
8		126	4	26°26'21.12S	27°12'1.38E	Farm Portion
9	BLAAUWBANK	125	13	26°25'23.14S	27°13'51.32E	Farm Portion
10	GERHARDMINNEBRON	139	40	26°27'10.89S	27°13'21.22E	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

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



Environme ntal	LINK
Managem	
ent	
Framewor	
k	
Gauteng EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF 2021 G
	azette 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:

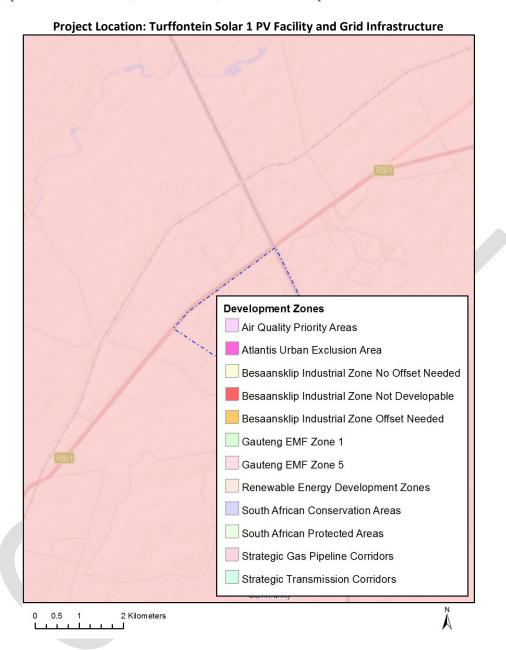
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

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 Transmissi on Corridor- Central corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors- Phase 3: Richards Bay to Gauteng	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined GAS.pdf

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		Х		
Animal Species Theme			Х	

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

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

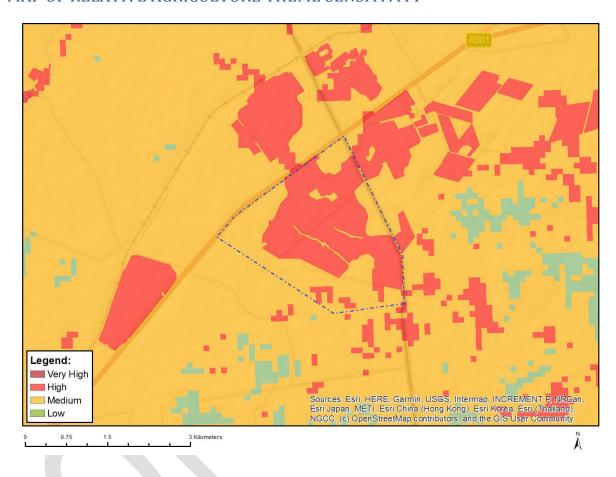
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7	Impact Assessm ent Civil Aviation Assessm	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	ent Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_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
1 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.

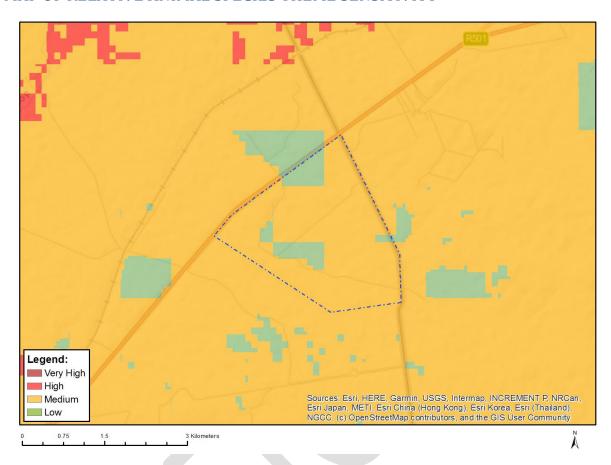
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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
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	Feature(s)
Low	Subject to confirmation
Medium Aves-Tyto capensis	
Medium	Aves-Eupodotis senegalensis
Medium	Mammalia-Hydrictis maculicollis

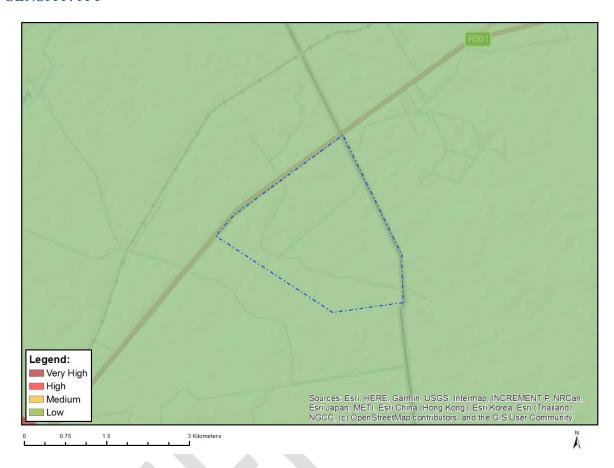
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Strategic water source area

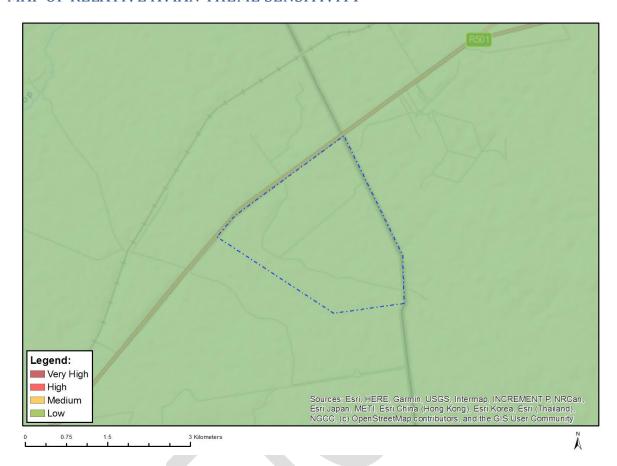
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

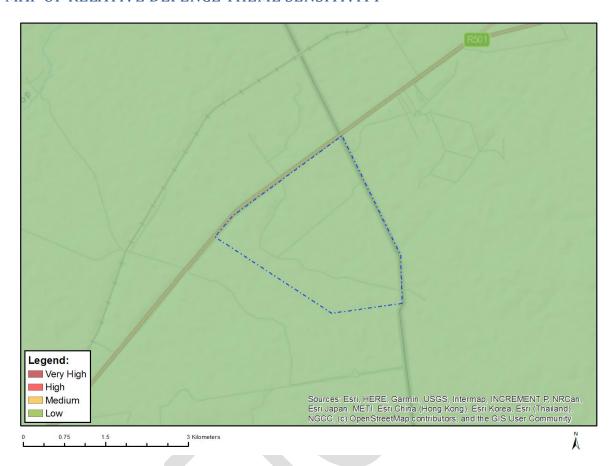
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

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

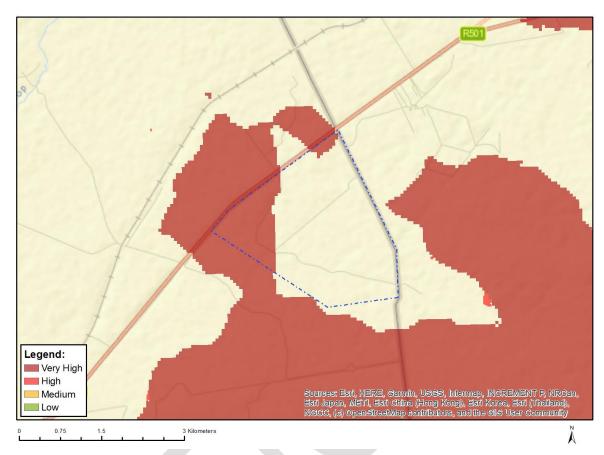
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Feature(s)	
nsitivity	

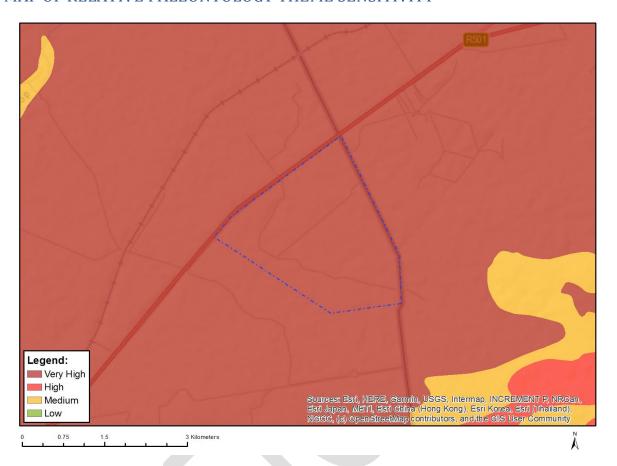
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

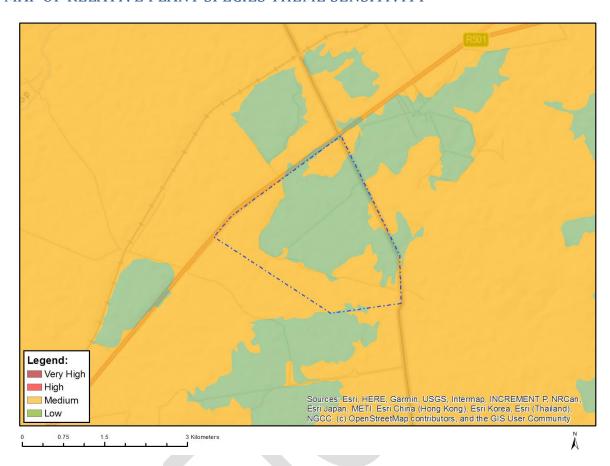
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

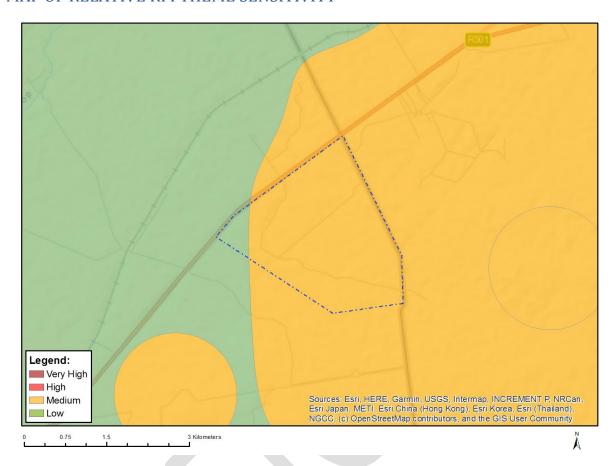


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1261
Medium	Sensitive species 1248

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Within 5 km of a Sentech High Power Terrestrial Broadcasting Facility

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	Critical biodiveristy area 2	
Very High	Critical biodiveristy area 1	
Very High	Ecological support area 2	
Very High	Protected Areas Expansion Strategy	