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

EIA Reference number:

Project name: C-N014-08 Akkerboom

Project title: C-N014-08 Akkerboom

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Applicant: Zero Carbon Charge

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Compiler signature:

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

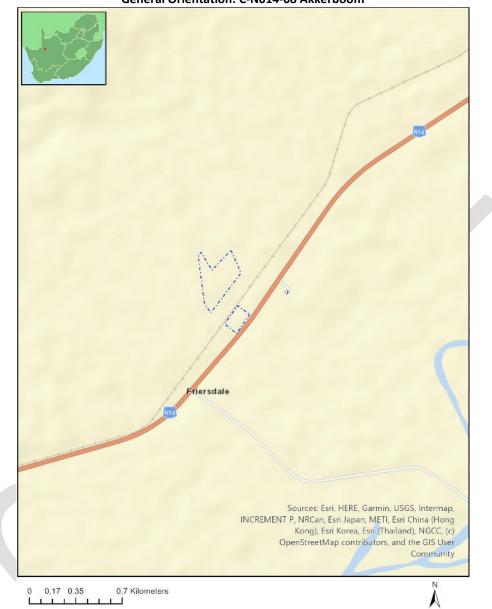
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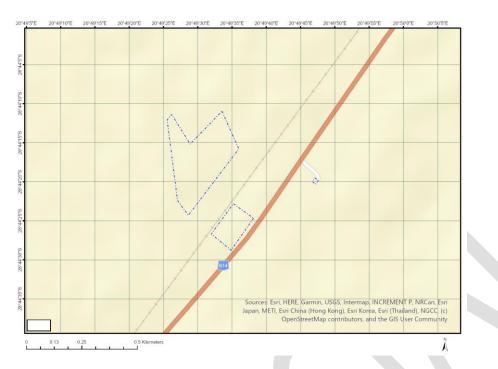
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Proposed Project Location

Orientation map 1: General location



General Orientation: C-N014-08 Akkerboom



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	FRIER`S DALE	466	0	28°40'20.53S	20°47'32.9E	Farm
2	FRIER`S DALE	466	19	28°44'31.39S	20°49'47.3E	Farm Portion
3	FRIER`S DALE	466	47	28°44'19.65S	20°49'29.87E	Farm Portion
4	FRIER`S DALE	466	45	28°44'25.08S	20°49'33.28E	Farm Portion
5	FRIER`S DALE	466	46	28°44'10.99S	20°49'30.04E	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	14/12/16/3/3/1/2210	Solar PV	Approved	25.1
2	14/12/16/3/3/1/2205	Solar PV	Approved	25.1
3	12/12/20/2230/AM3	Solar PV	Approved	25.1

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.

4	14/12/16/3/3/1/2043	Solar PV	Approved	28
5	14/12/16/3/3/1/2207	Solar PV	Approved	25.1
6	14/12/16/3/3/1/2206	Solar PV	Approved	25.1
7	14/12/16/3/3/1/2107	Solar PV	Approved	28
8	12/12/20/2546/AM2	Solar PV	Approved	26.3
9	14/12/16/3/3/3/82	Solar - CSP	Approved	28.2
10	14/12/16/3/3/1/2042	Solar PV	Approved	28
11	12/12/20/2518	Solar PV	Approved	17.4
12	12/12/20/2231	Solar PV	Approved	16.5
13	14/12/16/3/3/1/1754	Solar PV	Approved	15.3
14	14/12/16/3/3/1/1755	Solar PV	Approved	14.9
15	14/12/16/3/3/1/2043/AM2	Solar PV	Approved	28
16	14/12/16/3/3/2/815	Solar PV	Approved	28
17	12/12/20/2229/AM4	Solar PV	Approved	10.2
18	14/12/16/3/3/1/2362	Solar PV	Approved	26.9
19	14/12/16/3/3/1/2209	Solar PV	Approved	25.1
20	12/12/20/2229	Solar PV	Approved	10.2
21	14/12/16/3/3/2/631	Solar PV	Approved	7.1
22	12/12/20/2519	Solar PV	Approved	23.2
23	14/12/16/3/3/1/2044/AM2	Solar PV	Approved	28
24	12/12/20/2546/AM1	Solar PV	Approved	26.3
25	12/12/20/2230	Solar PV	Approved	25.1
26	14/12/16/3/3/1/2044	Solar PV	Approved	28
27	14/12/16/3/3/2/816	Solar PV	Approved	28
28	14/12/16/3/3/1/2208	Solar PV	Approved	25.1
29	14/12/16/3/3/1/2209/AM1	Solar PV	Approved	25.1
30	14/12/16/3/3/1/2204	Solar PV	Approved	25.1

Environmental Management Frameworks relevant to the application



Disclaimer applies 03/10/2024

Environmental Management Framework	LINK
Siyanda District	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYAND
Municipality EMF	A_EMF_REPORT_2008.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, restriction or prohibition	Implication
Strategic Transmission Corridor-Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/Developmen 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				
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			

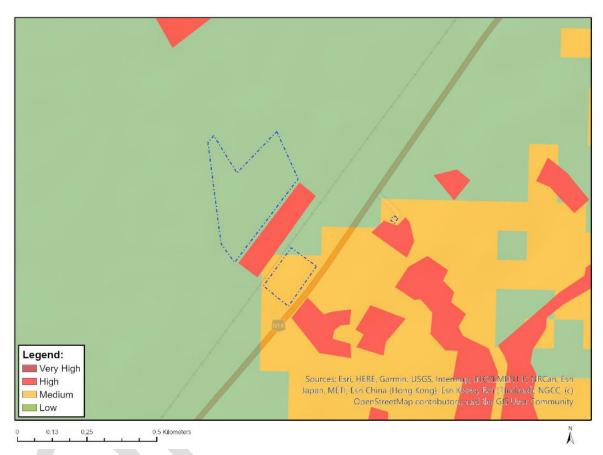
Specialist assessments identified

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
		<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	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
		<u>otocols.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	Socio-Economic	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted_General_Requirement_Assessment_P
		<u>rotocols.pdf</u>
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		<pre>ssmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.</pre>
		<u>pdf</u>
13	Animal Species	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	<pre>ssmentProtocols/Gazetted_Animal_Species_Assessment_Protoco</pre>
		<u>ls.pdf</u>

Results of the environmental sensitivity of the proposed area.

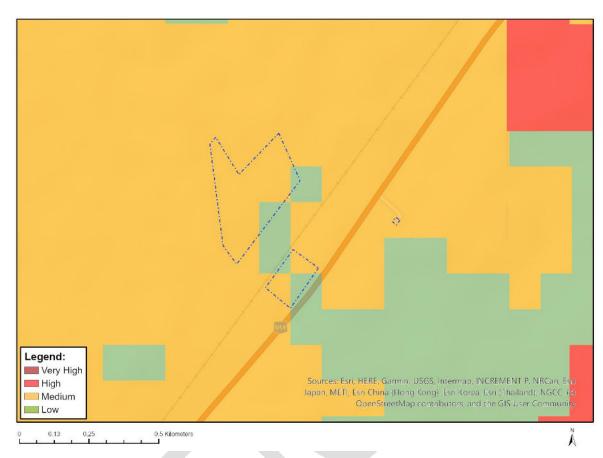
The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive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



MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		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)
Low	Subject to confirmation
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)
Very High	South African Large Telescope

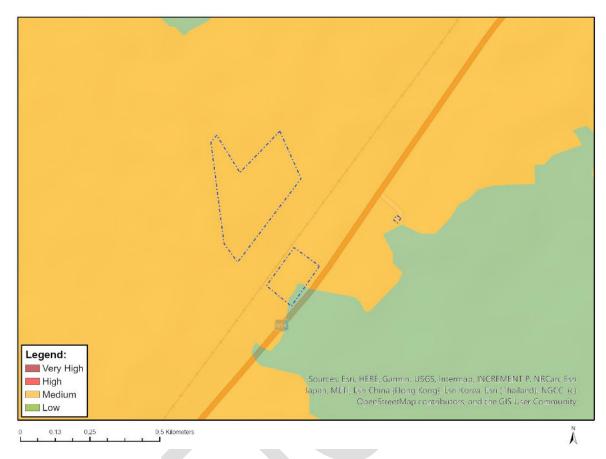
Image: Sector Sector

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		х	

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

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	Sensitive species 144

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	Less than 8 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)	
Low	Low Sensitivity	
Very High	CBA 1	
Very High	CBA 2	