

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

EIA Reference number: TBC

Project name: Sunveld Energy PV Development

Project title: BER799: Sunveld Energy PV Development

Date screening report generated: 12/05/2023 12:06:59

Applicant: Sunveld Energy (PTY) LTD

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

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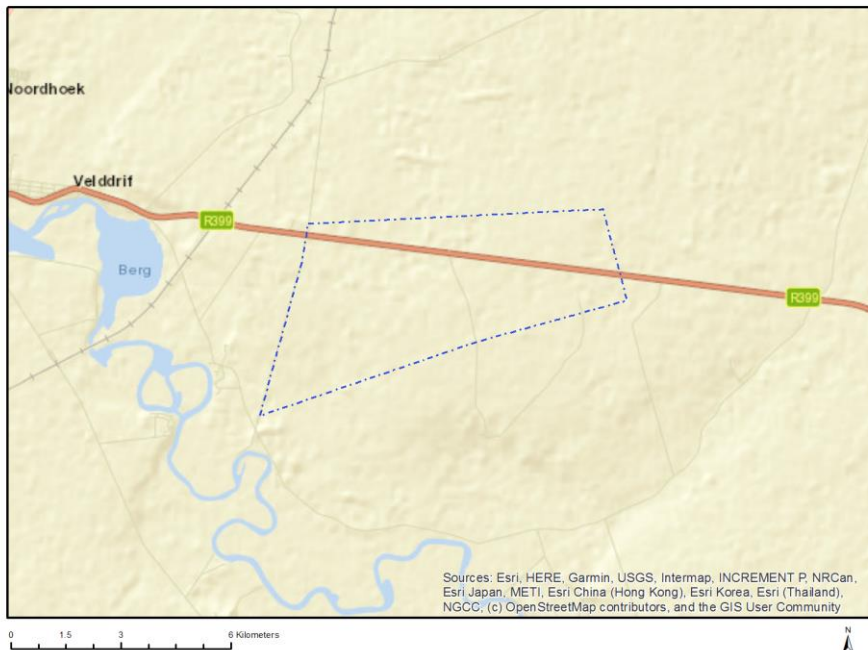
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Proposed Project Location

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 No	Portion	Latitude	Longitude	Property Type
1	VELDDRIFT	110	0	32°49'4.97S	18°13'47.59E	Farm
2	KRUISPAD	120	0	32°49'59.98S	18°15'12.69E	Farm
3	DOORNFONTEIN A	118	0	32°49'28.35S	18°17'55.2E	Farm
4	KRUISPAD	120	0	32°49'56.19S	18°15'13.9E	Farm Portion
5	DOORNFONTEIN A	118	0	32°49'27.93S	18°17'55.43E	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)
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¹ “development footprint”, means the area within the site on which the development will take place and includes 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.

1	12/12/20/2126/1	Solar PV	Approved	26.6
2	12/12/20/2126	Solar PV	Approved	26.6
3	12/12/20/2033	Solar PV	Approved	26.8
4	12/12/20/2625	Solar PV	Approved	25.6
5	14/12/16/3/3/2/1031	Solar PV	Approved	20.5
6	14/12/16/3/3/1/422	Solar PV	Approved	26.8
7	12/12/20/2626	Solar PV	Approved	24.8

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 Corridor-Western corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors-Phase 5: Abraham Villiers Bay (Northern Cape) to Saldanha	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf
Strategic Gas Pipeline Corridors-Phase 1a & 1b: Saldanha to Ankerlig and Saldanha to Mossel Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf
South African Conservation Areas	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SACAD_OR_2022_Q4_Metadata.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
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	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme		X		
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Avian Theme				X
Civil Aviation (Solar PV) Theme				X
Defence Theme			X	
Landscape (Solar) Theme	X			
Paleontology Theme				X
Plant Species Theme			X	
RFI Theme				X
Terrestrial Biodiversity Theme	X			

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	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf

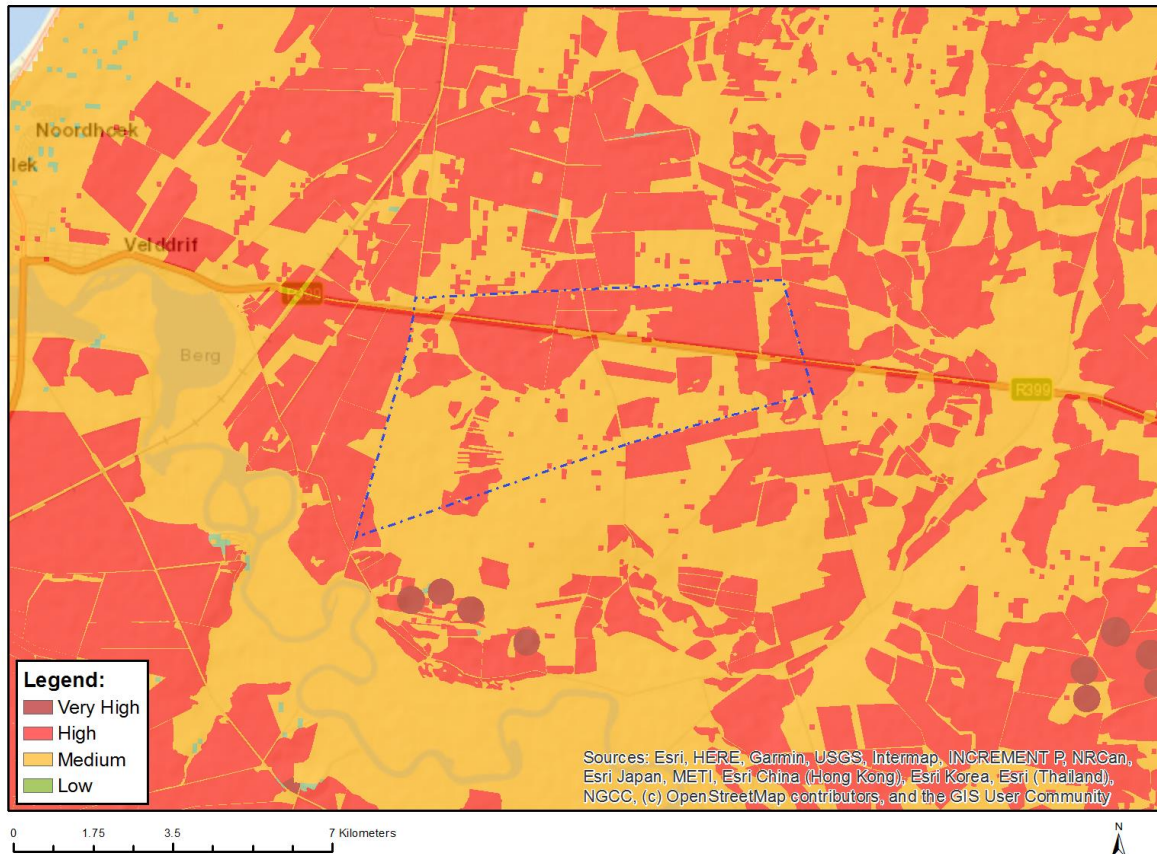
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

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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

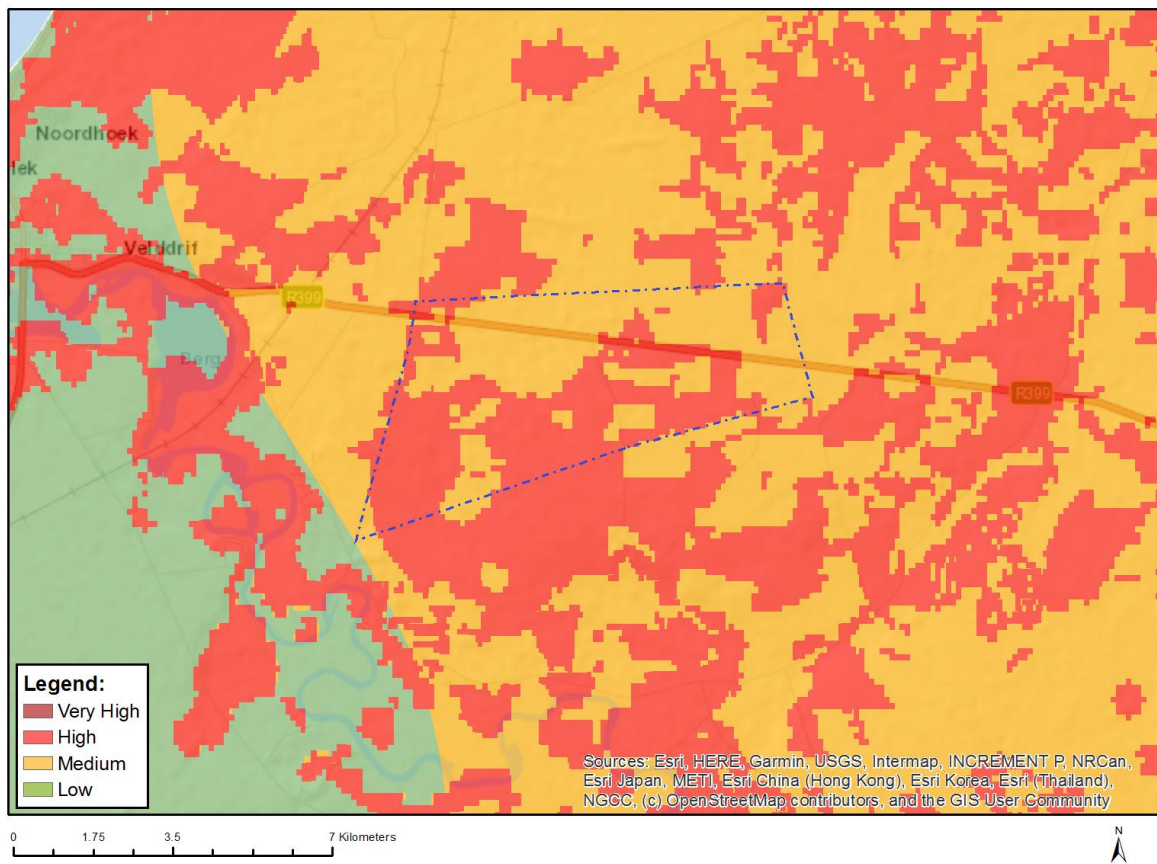


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

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
High	Strip Field Cultivation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Strip Field Cultivation;Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



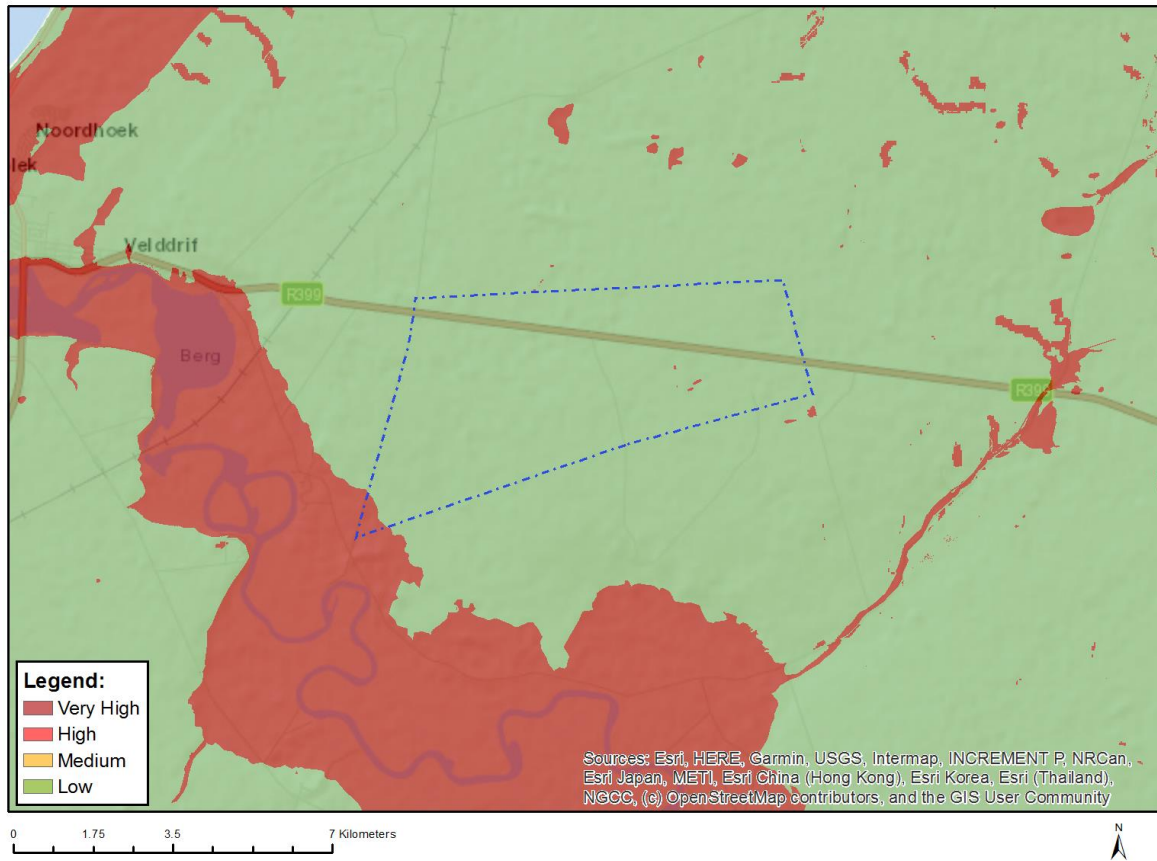
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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 Features:

Sensitivity	Feature(s)
High	Aves-Afrotis afra
High	Aves-Circus ranivorus
High	Aves-Circus maurus
High	Aves-Falco biarmicus
Medium	Aves-Circus ranivorus
Medium	Aves-Circus maurus
Medium	Invertebrate-Pachysoma aesculapius

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

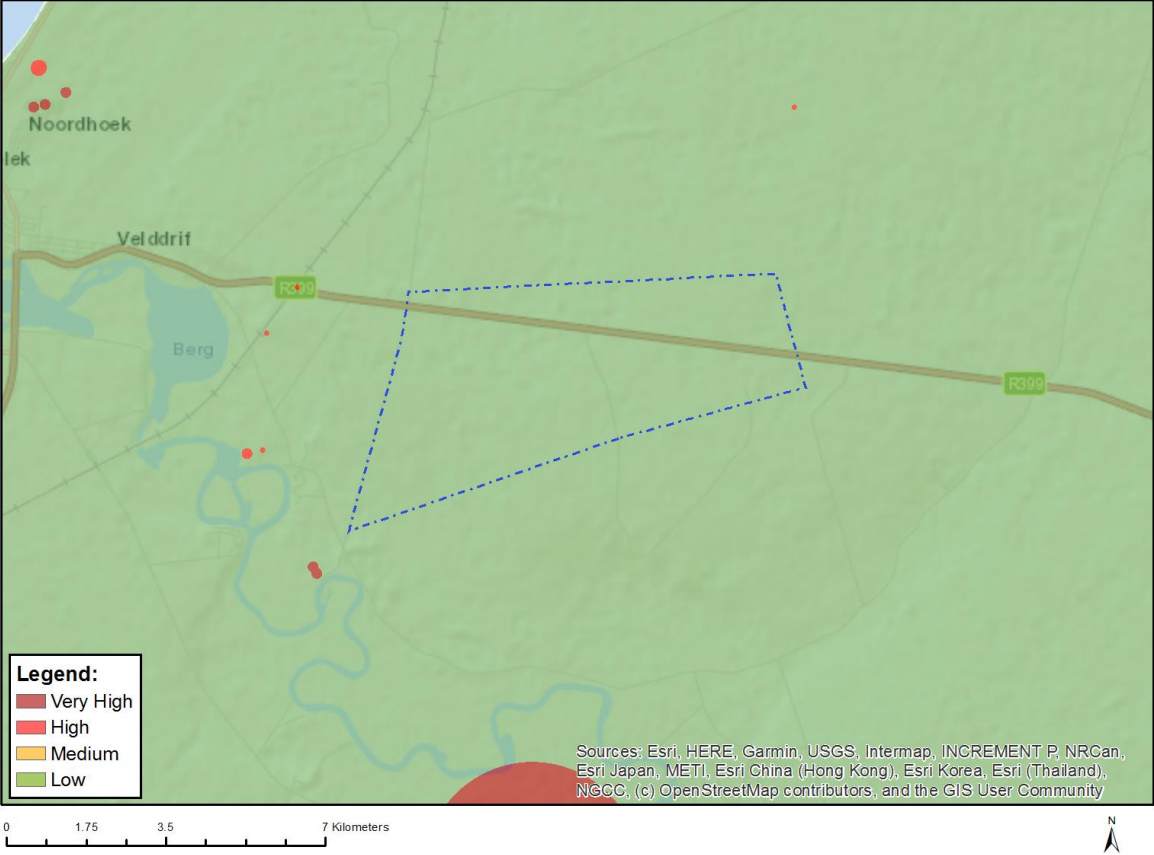


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	CBA 1: Aquatic
Very High	Estuary_Groot Berg
Very High	Wetlands_(Estuary)
Very High	Wetlands_West Strandveld Bioregion (Depression)

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

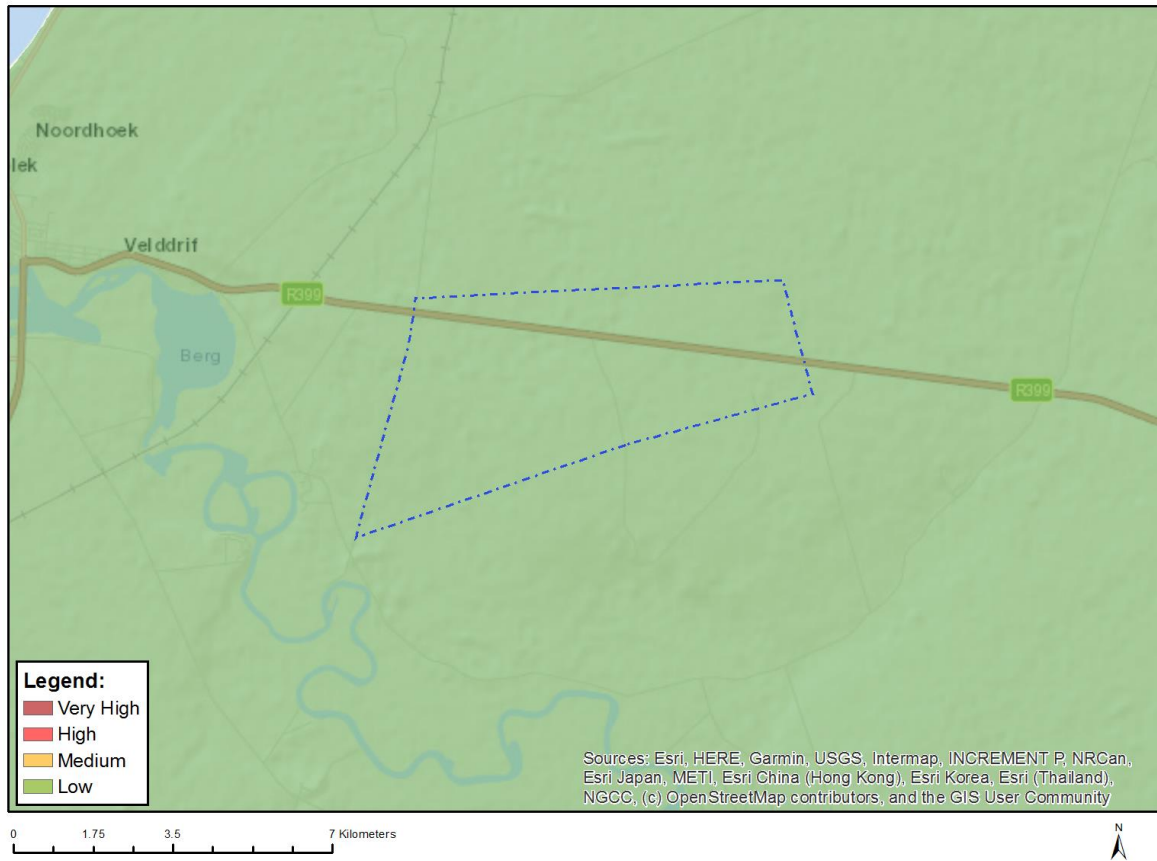


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

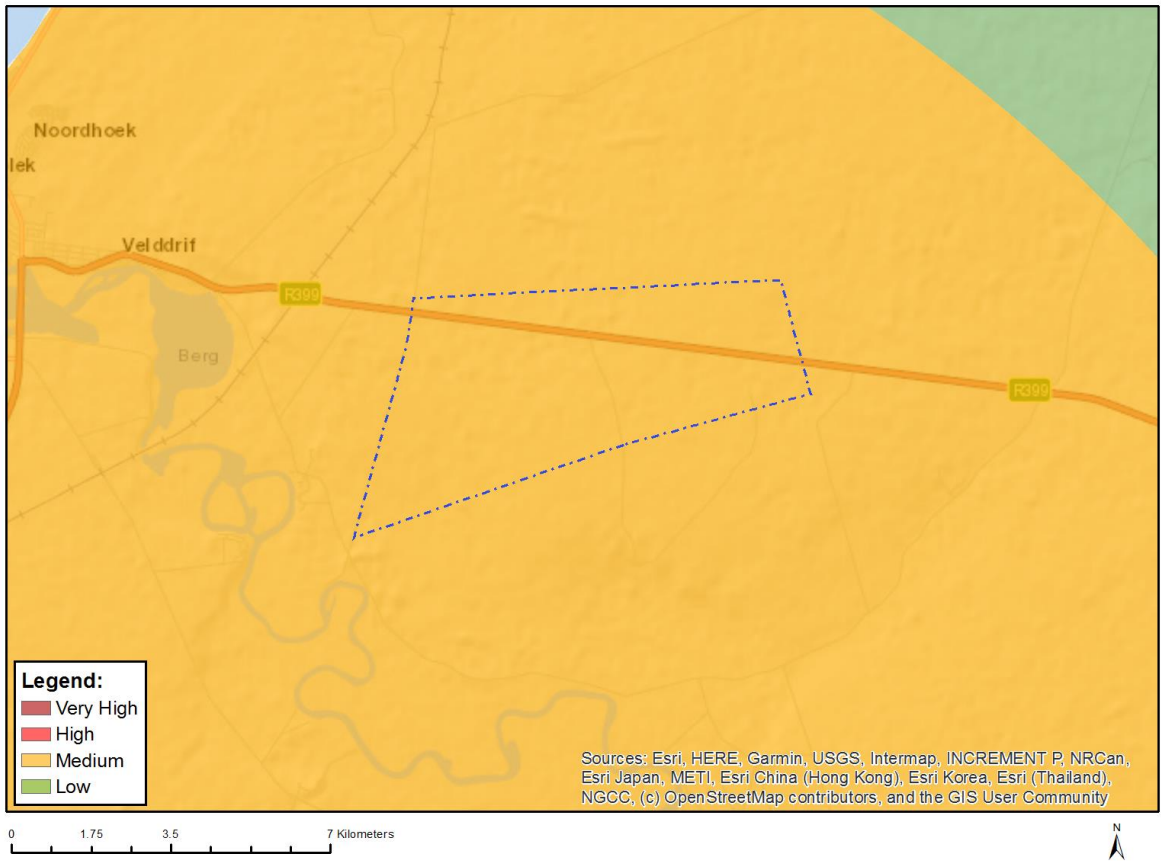
Unable to obtain map image.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

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

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

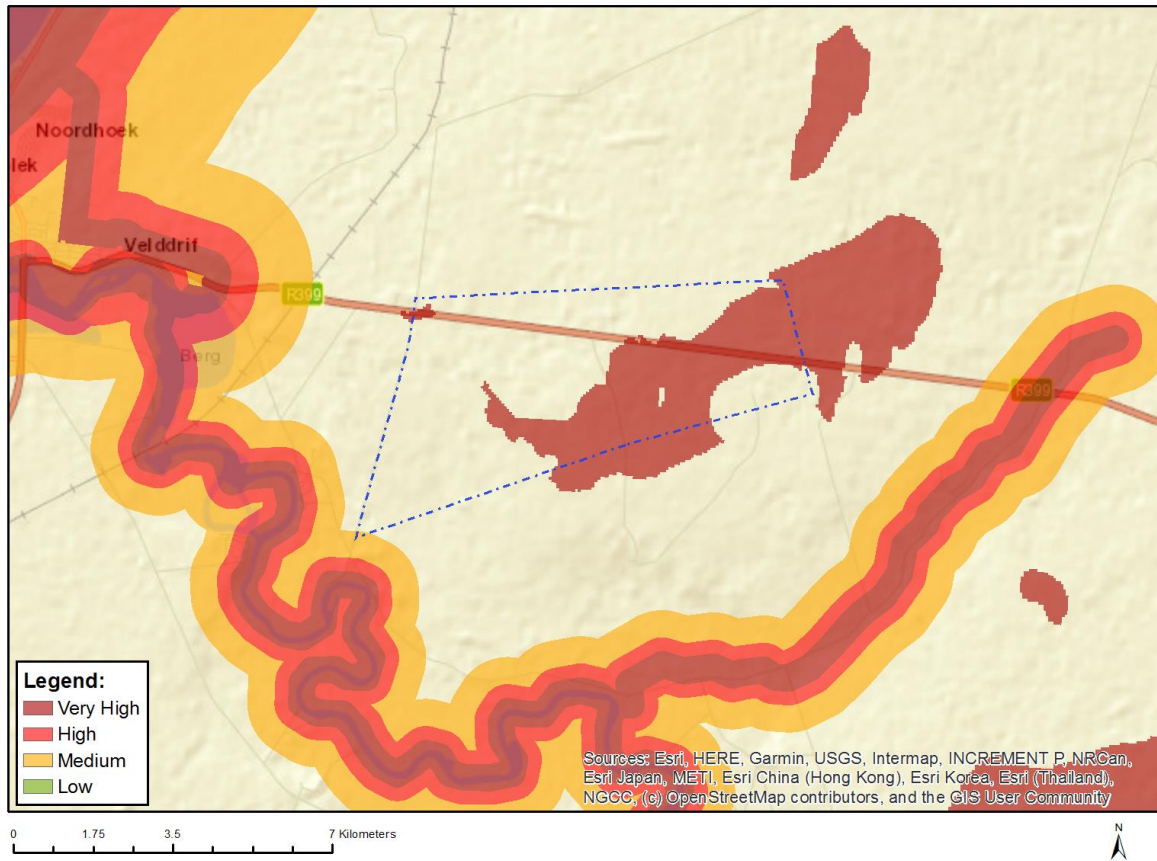


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Defence Site

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

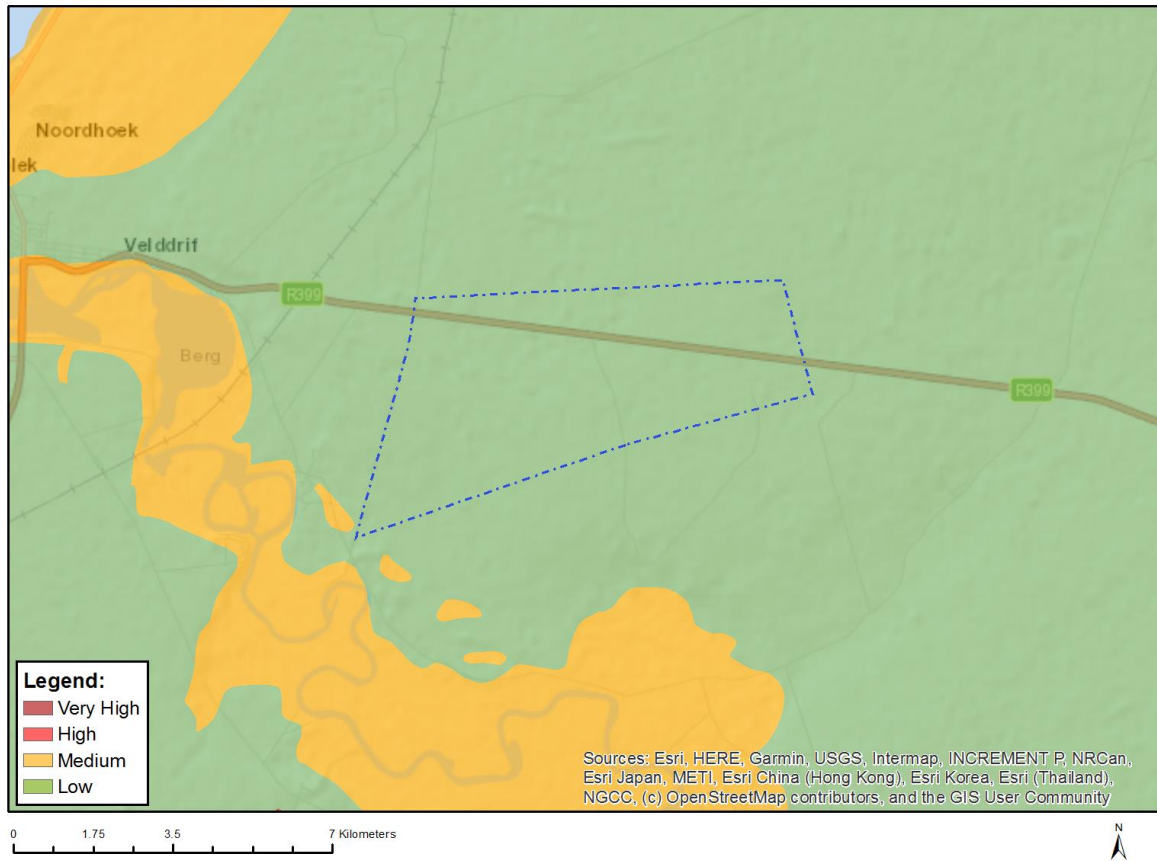


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Within 1000 m of a wetland
Very High	Mountain tops and high ridges

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

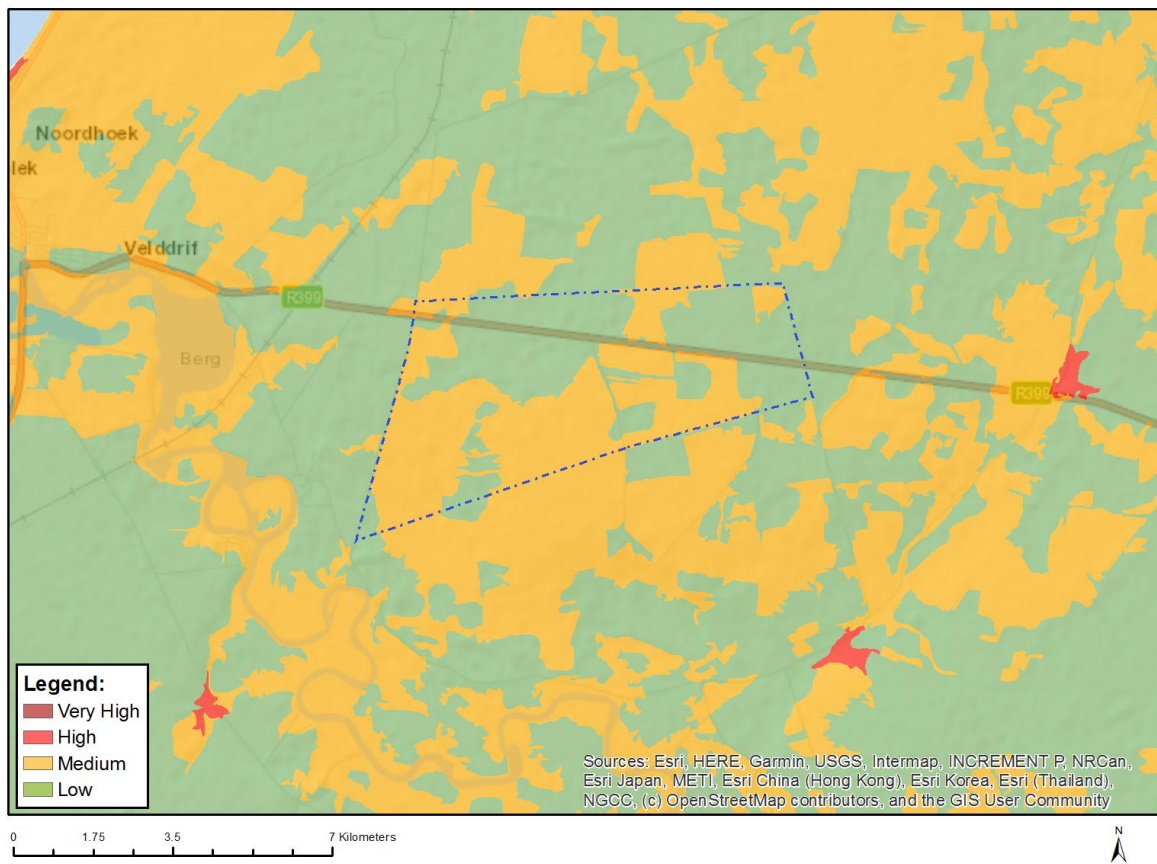


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low 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 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.

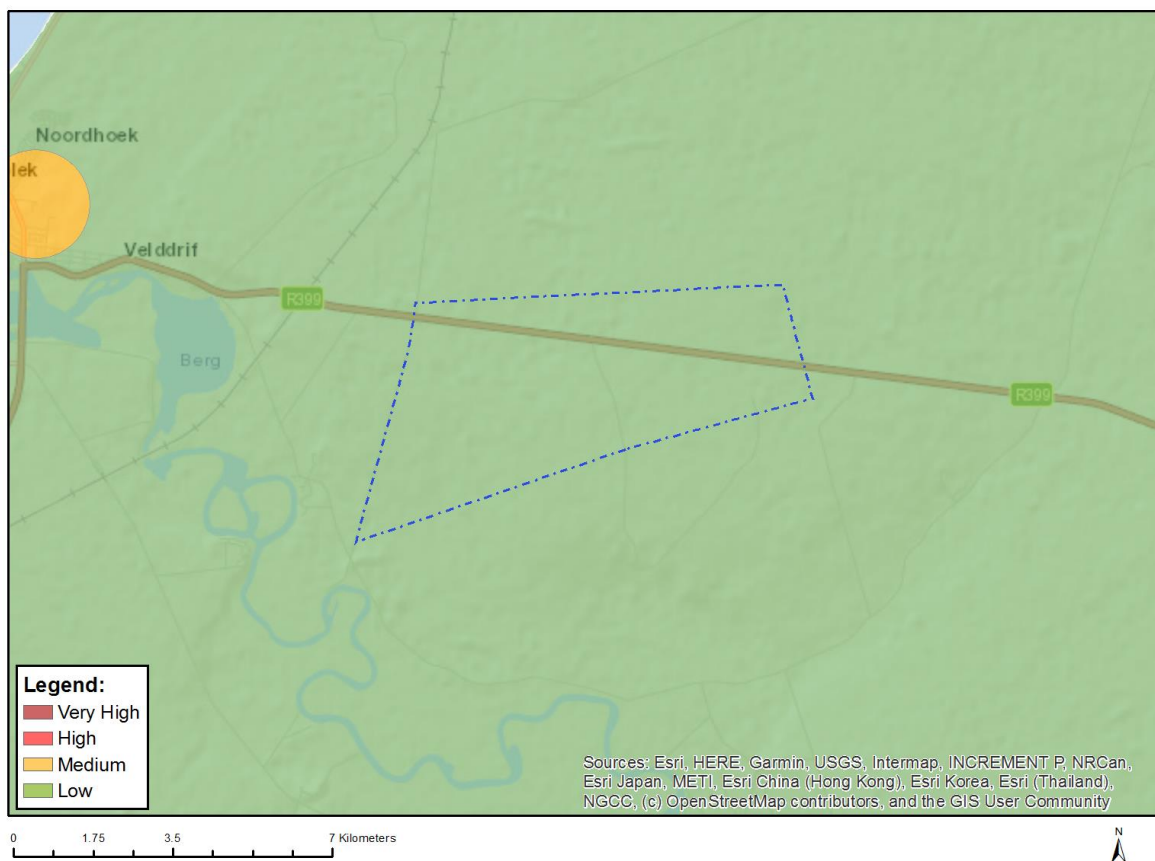
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Lampranthus coccineus
Medium	Sensitive species 244
Medium	Erepsia brevipetala
Medium	Cleretum clavatum
Medium	Drosanthemum hispifolium
Medium	Otholobium venustum
Medium	Leucadendron cinereum
Medium	Leucadendron foedum
Medium	Leucadendron stellare
Medium	Leucospermum hypophyllocarpodendron subsp. canaliculatum
Medium	Wahlenbergia umbellata
Medium	Manulea corymbosa

Medium	Echiostachys spicatus
Medium	Sensitive species 878
Medium	Geissorhiza lewisiae
Medium	Sensitive species 816
Medium	Ferraria densepunctulata
Medium	Ferraria parva
Medium	Empodium veratrifolium
Medium	Sensitive species 222
Medium	Galenia crystallina var. maritima
Medium	Steirodiscus tagetes
Medium	Cotula duckittiae
Medium	Cotula eckloniana
Medium	Helichrysum bachmannii
Medium	Oncosiphon africanum
Medium	Limonium acuminatum
Medium	Limonium depauperatum
Medium	Sarcocornia freitagii
Medium	Argyrobium velutinum
Medium	Xiphotheca reflexa
Medium	Leucospermum rodolentum
Medium	Protea scolymocephala
Medium	Sensitive species 599
Medium	Lachnaea capitata
Medium	Lachnaea grandiflora
Medium	Helichrysum dunense
Medium	Sensitive species 1225
Medium	Caesia sabulosa

MAP OF RELATIVE RFI THEME SENSITIVITY

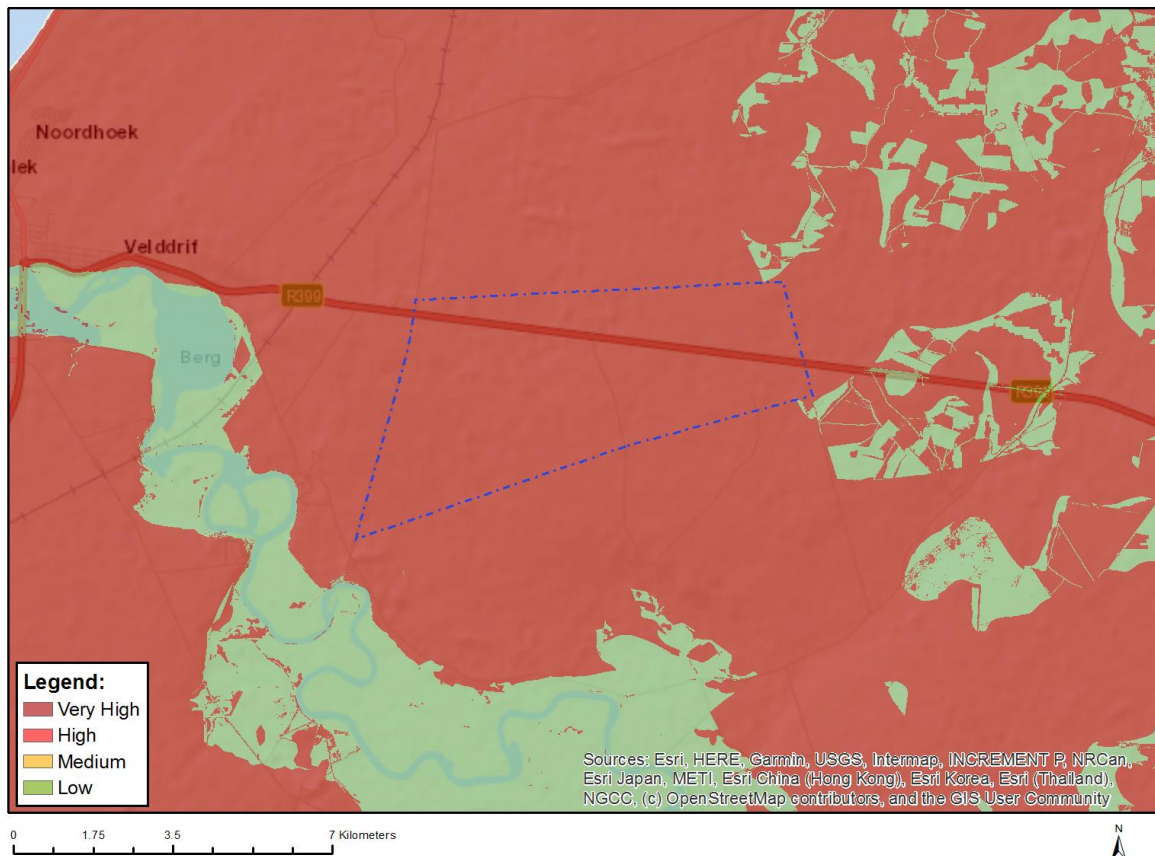


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Critical biodiversity area 1
Very High	Critical biodiversity area 2
Very High	Ecological support area 1
Very High	Ecological support area 2
Very High	Endangered ecosystem_Saldanha Flats Strandveld

On 20 March 2020 the Minister of Forestry, Fisheries and the Environmental published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the **current land use** and **environmental sensitivity** of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification by either an EAP or a specialist.

The report uses national datasets to identify site sensitivities and potential specialist studies that may be required for any particular development. Since the datasets are not necessarily groundtruthed, there may be instances where the required specialist study is in actual fact not necessary.

Prior to commencing with a specialist assessment, the **current use of the land** must be verified and the environmental sensitivity of the site under consideration identified by the screening tool must be verified by the undertaking a **site sensitivity verification** (SSV).

According to the Assessment Protocol for specialist involvement, if any part of the proposed development falls within an area of ‘high’ or ‘very high’ sensitivity and confirmed as such by the specialist or EAP, the requirements prescribed for such sensitivity must be followed.

It must be noted that the properties affected by proposed Sunveld Solar PV were the subject of two previous environmental impact assessment process, each of which culminated in the environmental authorisation for a development similar to what is currently being proposed. These previous studies must be consulted and taken into account by the specialists as part of this Environmental Assessment process.

In terms of legislative requirements The following is required to form part of a site sensitivity verification.

Table 1: General requirements for site sensitivity verifications in terms of GN43110.

SSV Requirement	Discussion
The SSV must be undertaken by an EAP or a specialist	This SSV report (SSVr) has been compiled by the EAP and the Specialists. Please refer to the Specialist SSVr's attached in appendices E1 to E7.
A preliminary on-site inspection must be undertaken	A site Inspection was undertaken by the EAP in June 2023. All specialists have undertaken site inspections between June and September 2023. Please refer to the Specialist SSVR's attached in Appendix E1-E7 for dates in which each specialist undertook field work.
A desktop analysis must be undertaken, alongside any other applicable/ relevant information.	Consideration has been given to the George GIS Viewer, CapeFarm Mapper spatial layers, and Google Earth. All relevant spatial biodiversity layers were consulted, including: <ul style="list-style-type: none"> - Garden Route Biodiversity Sector plan. - National Freshwater Ecosystems Priority areas. - National Spatial Biodiversity Assessment. - National Protected Areas Expansion Strategy.

1.1.1 General Site Information

The General site information for the proposed Sunveld Solar PV is discussed in detail in sections 5.1 – 5.7 of this report.

1.1.2 Screening Tool Results

According to the Screening Tool Report that was run on **12 May 2023**, the following summary of the Study Site environmental sensitivities were identified in the screening tool.

Table 2: Summary of the development footprint environmental sensitivities.

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

The verification of these sensitivities by the participating specialists is included in the sections below. Please also refer to the site sensitivity maps included in section 2.11 of this report.

1.1.2.1 Agriculture

The Screening Tool identifies the agricultural sensitivity theme as “High”, with high and medium sensitivity areas present on the site.

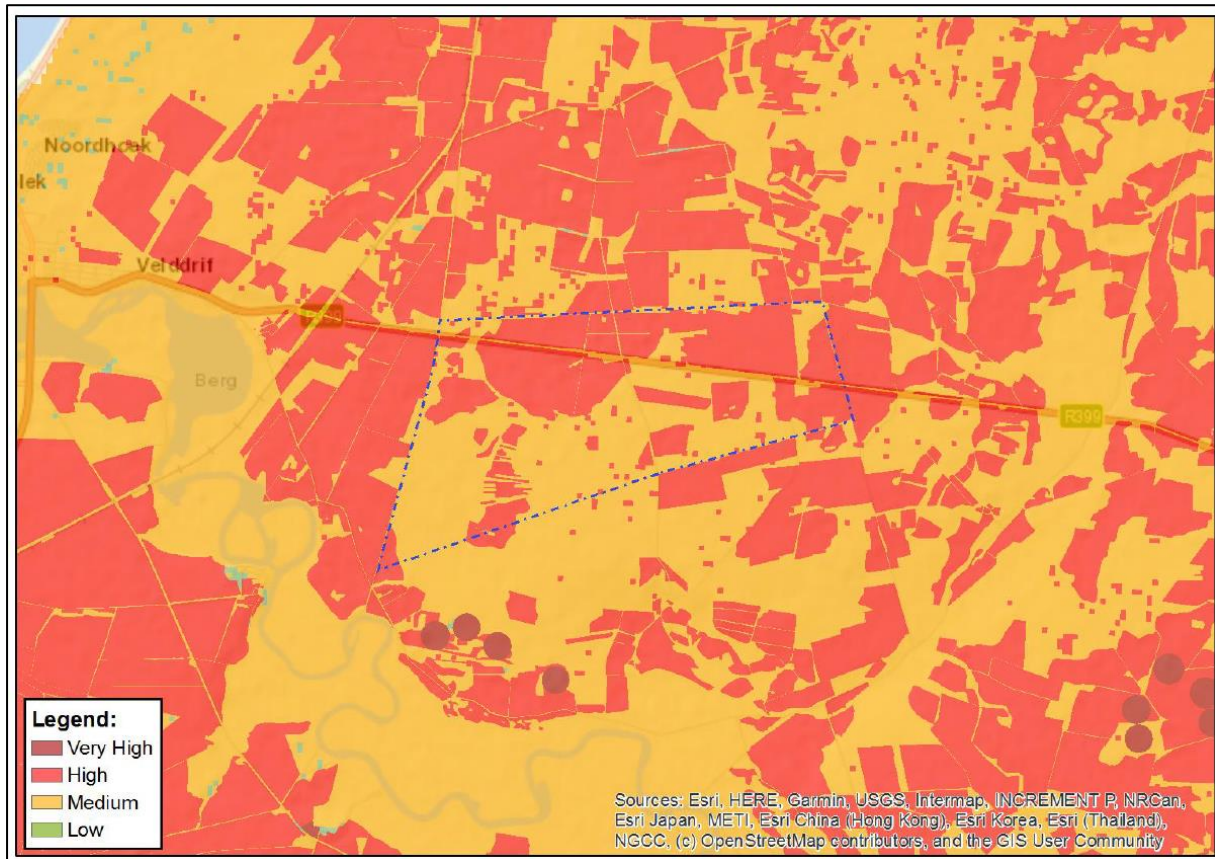


Figure 1: Image from Screening Tool identifying agricultural theme sensitivity for the Study Site.

The agricultural Specialist has refuted this and confirmed the entire site to be of medium sensitivity. Please refer to Appendix E6 for a copy of the Agriculture SSVr

1.1.2.2 Animal Species

The Screening Tool identifies the Animal Species sensitivity theme as “High”, with high and medium sensitivity areas present on the site.

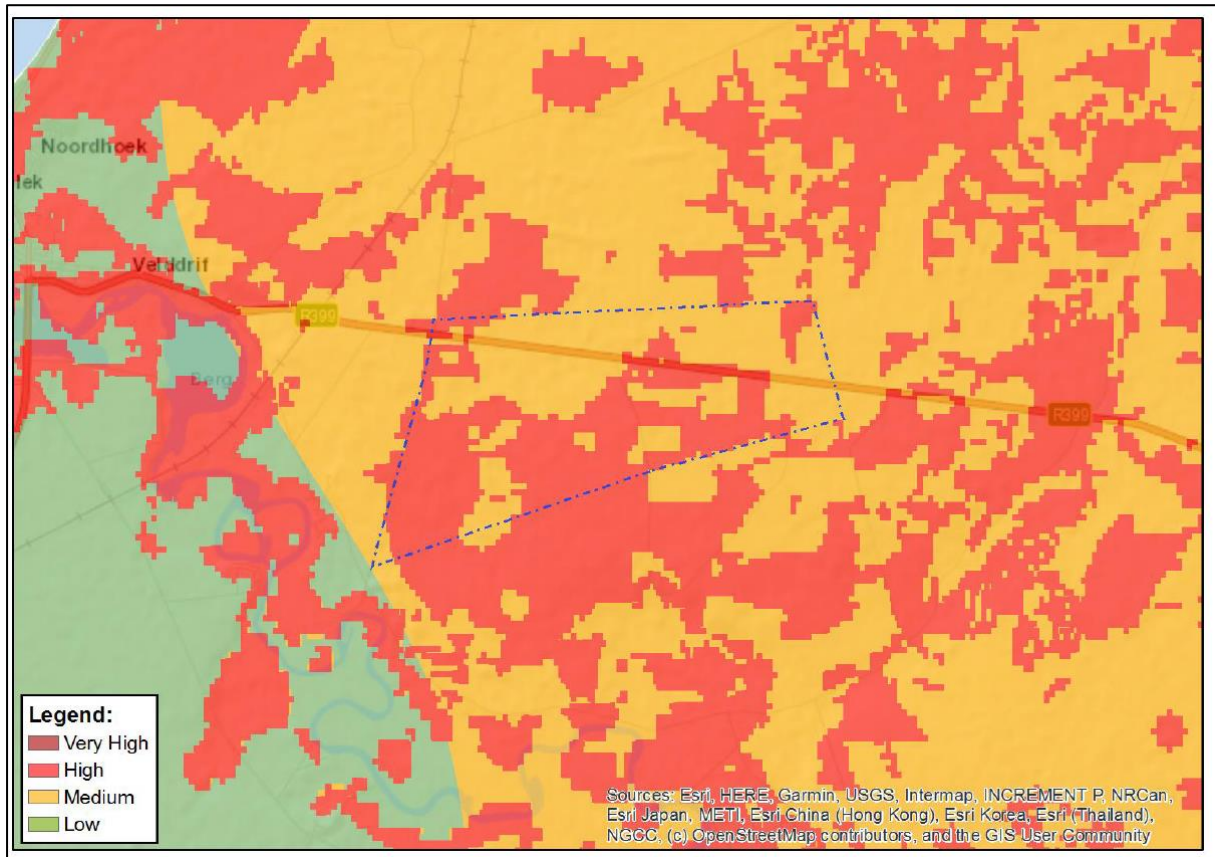


Figure 2: Image from Screening Tool identifying Animal Species theme sensitivity for the Study Site.

The Terrestrial Biodiversity Specialist (Appendix E1) has identified Very High, High, Medium and low sensitivities for different portions of the site.

The Invertebrate specialist has identified Medium to high and Medium sensitivities for different portions of the site.

The Avifaunal Specialist has confirmed the high sensitivity for Avifaunal Species and has mapped the specific sensitive habitat in this regard.

1.1.2.3 Aquatic Biodiversity

The Screening Tool identifies the Aquatic Biodiversity sensitivity theme as “Very High”, but with the majority of the site as low sensitivity.

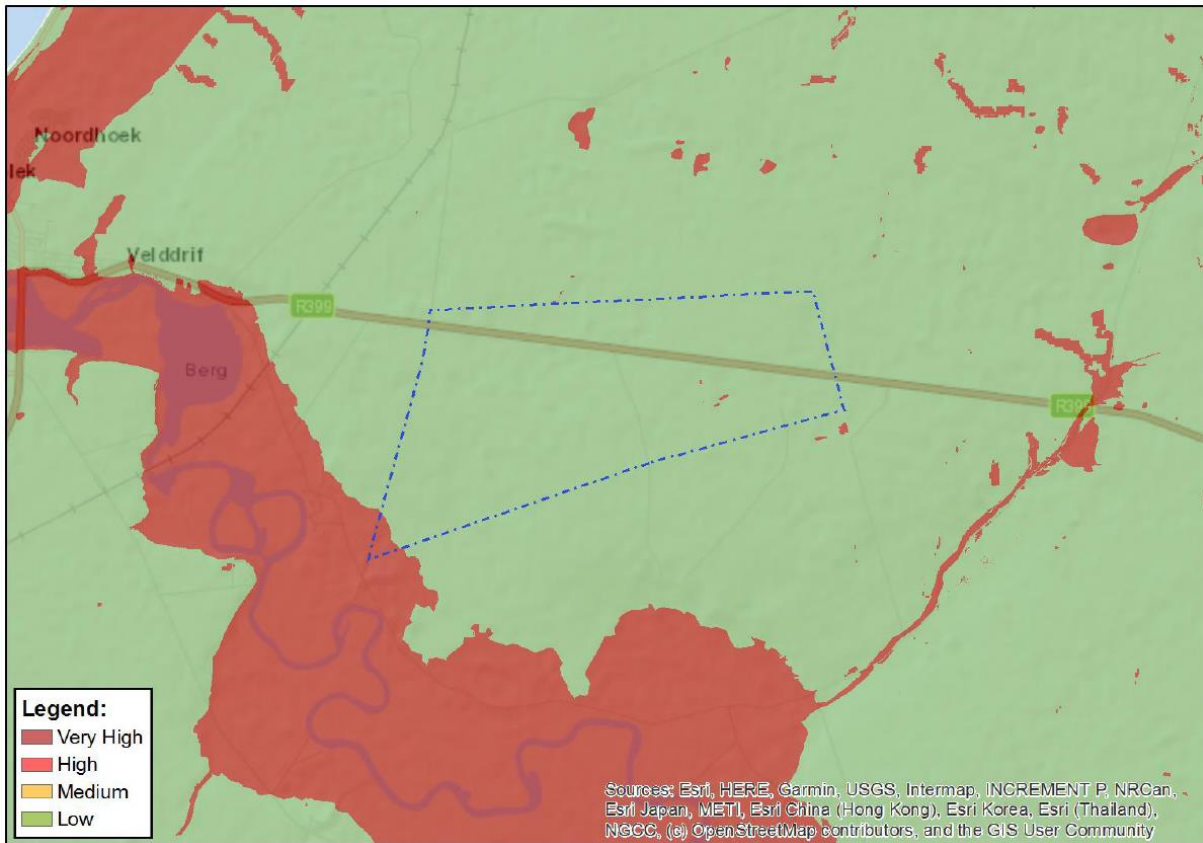


Figure 3: Image from Screening Tool identifying Aquatic Biodiversity theme sensitivity for the Study Site.

The Aquatic Biodiversity specialist (Appendix E4) has confirmed the Low sensitivity for the majority of the site and has refuted the Very High Sensitivity of Seasonal Pans and Categorised these as medium sensitivity (Notwithstanding this, these seasonal pans along with required buffers have been avoided by the preferred layout)

The Screening Tool identifies the Archaeology and Cultural Heritage sensitivity theme as “Low”.

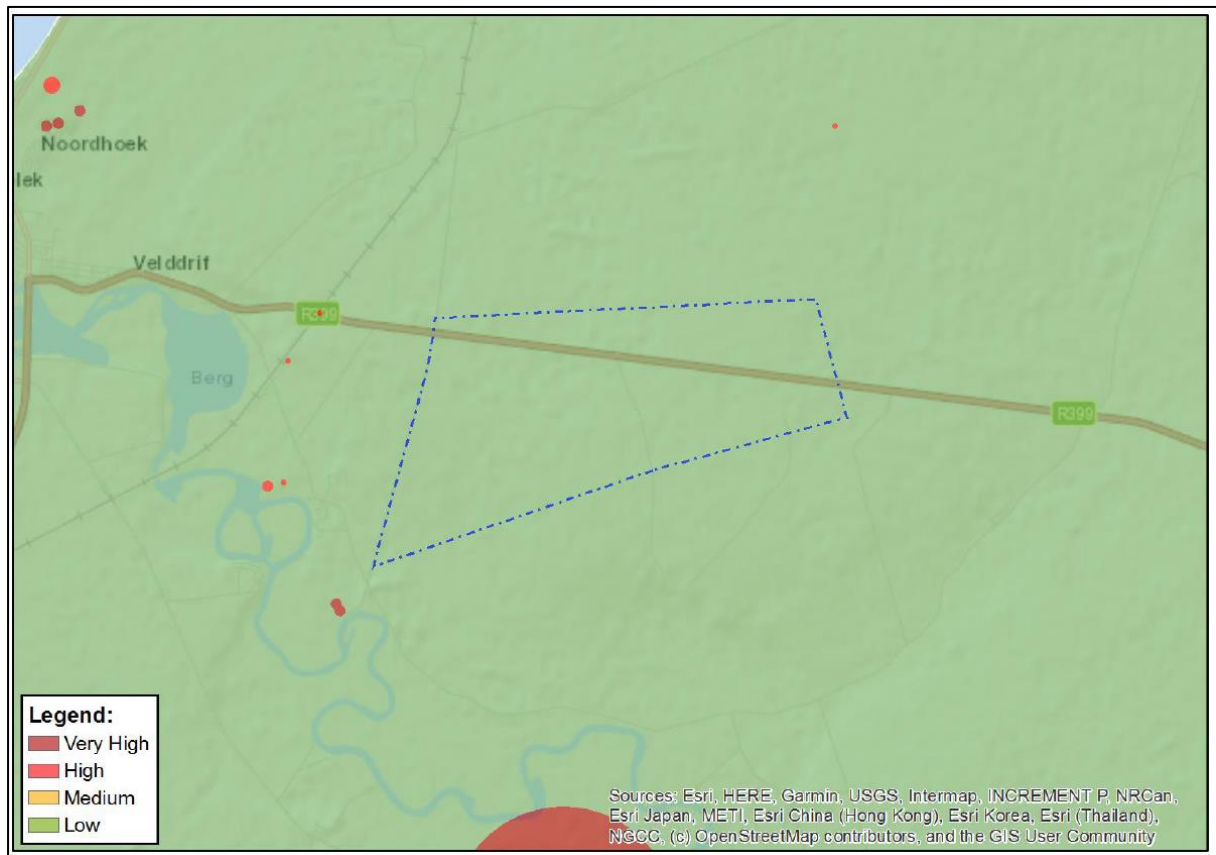


Figure 4: Image from Screening Tool identifying Archaeology and Cultural Heritage theme sensitivity for the Study Site.

The Heritage Specialist (Annexure E5) has confirmed the low sensitivity identified in the screening tool.

1.1.2.5 Avifauna

The Screening Tool identifies the Avifauna sensitivity theme as “Low”.

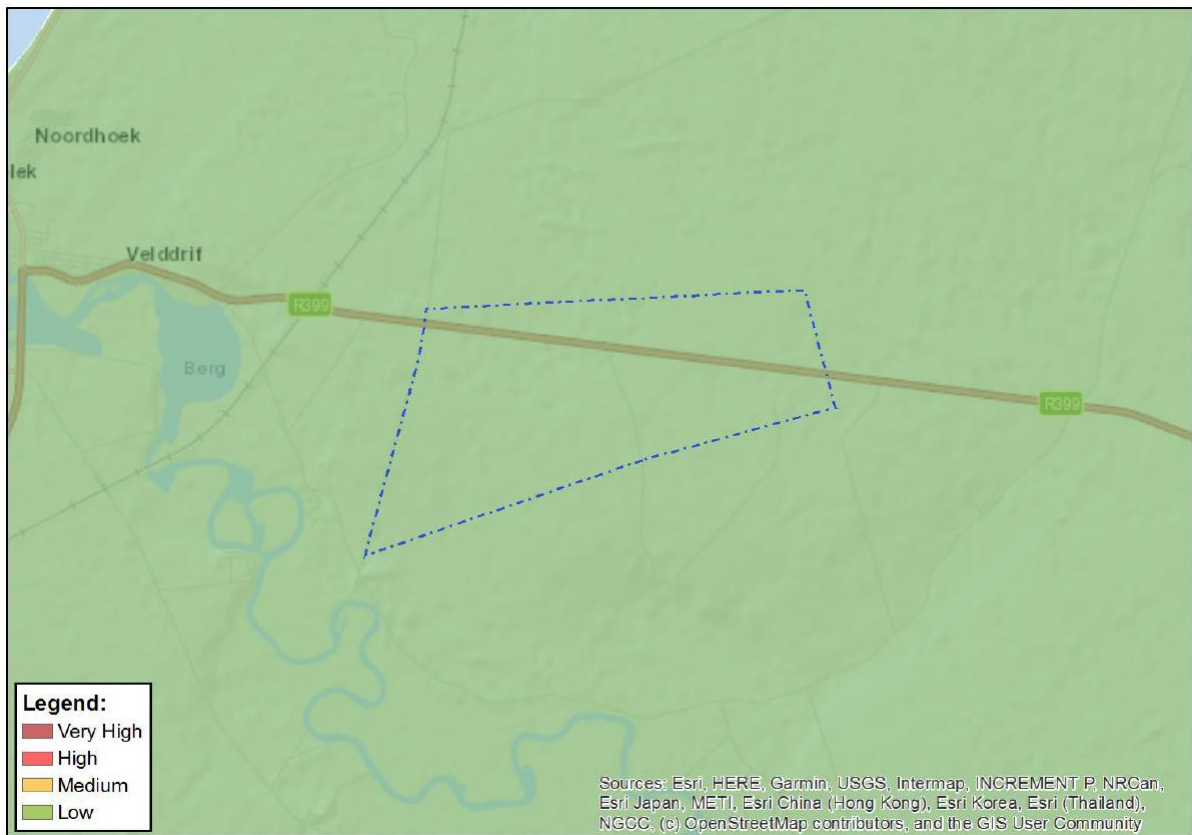


Figure 5: Image from Screening Tool identifying Avifauna theme sensitivity for the Study Site.

The Avifauna Specialist has refuted the Low sensitivity identified in the screening tool and has categorised portions of the study site as high, do to the presence of habitat for Species of Conservation concern.

The Screening Tool identifies the Visual and landscape sensitivity theme as “Very High”, but with the majority of the site consisting of medium sensitivity.

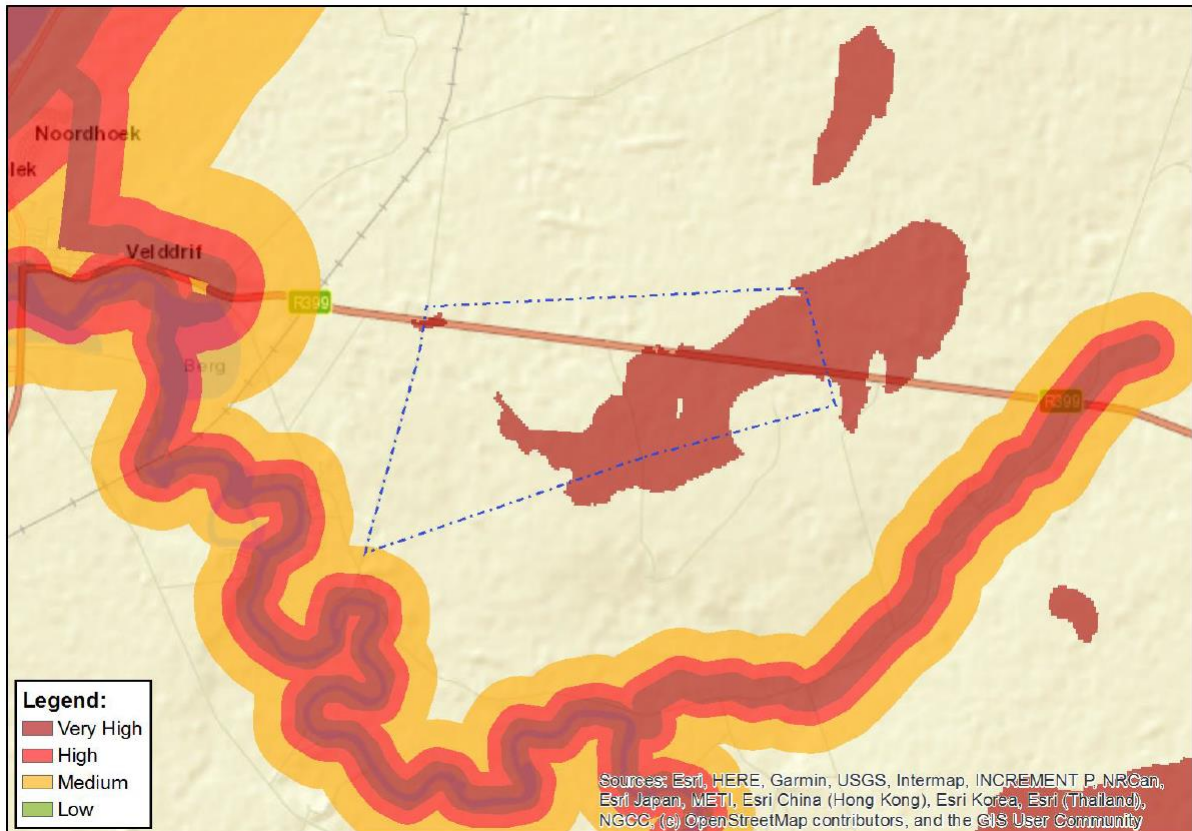


Figure 6: Image from Screening Tool identifying Visual and Landscape theme sensitivity for the Study Site.

The visual specialist (appendix E7) refuted the very high sensitivity in the Screening Tool in that the mapped area does not form a prominent ridgeline or mountain top.

The specialist categorised the site as ranging from low – high.

1.1.2.7 Palaeontology

The Screening Tool identifies the Palaeontology sensitivity theme as “Low”.

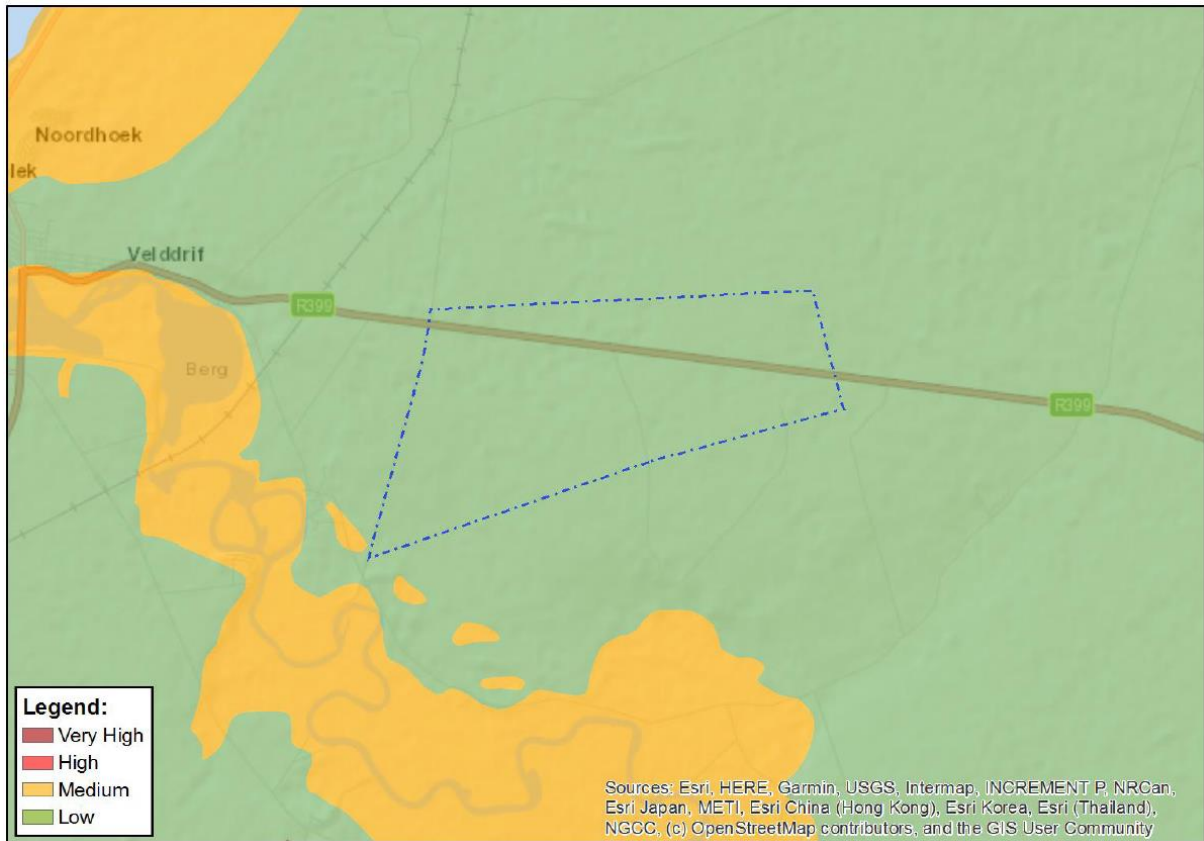


Figure 7: Image from Screening Tool identifying Palaeontology theme sensitivity for the Study Site.

The Heritage Specialist (Appendix E5) confirmed the low sensitivity in the screening tool. A palaeontology desktop assessment will still however be undertaken as part of the Environmental Impact Reporting Phase.

1.1.2.8 Plant Species

The Screening Tool identifies the Plant Species sensitivity theme as “Medium”, with low sensitivity areas also present on the site.

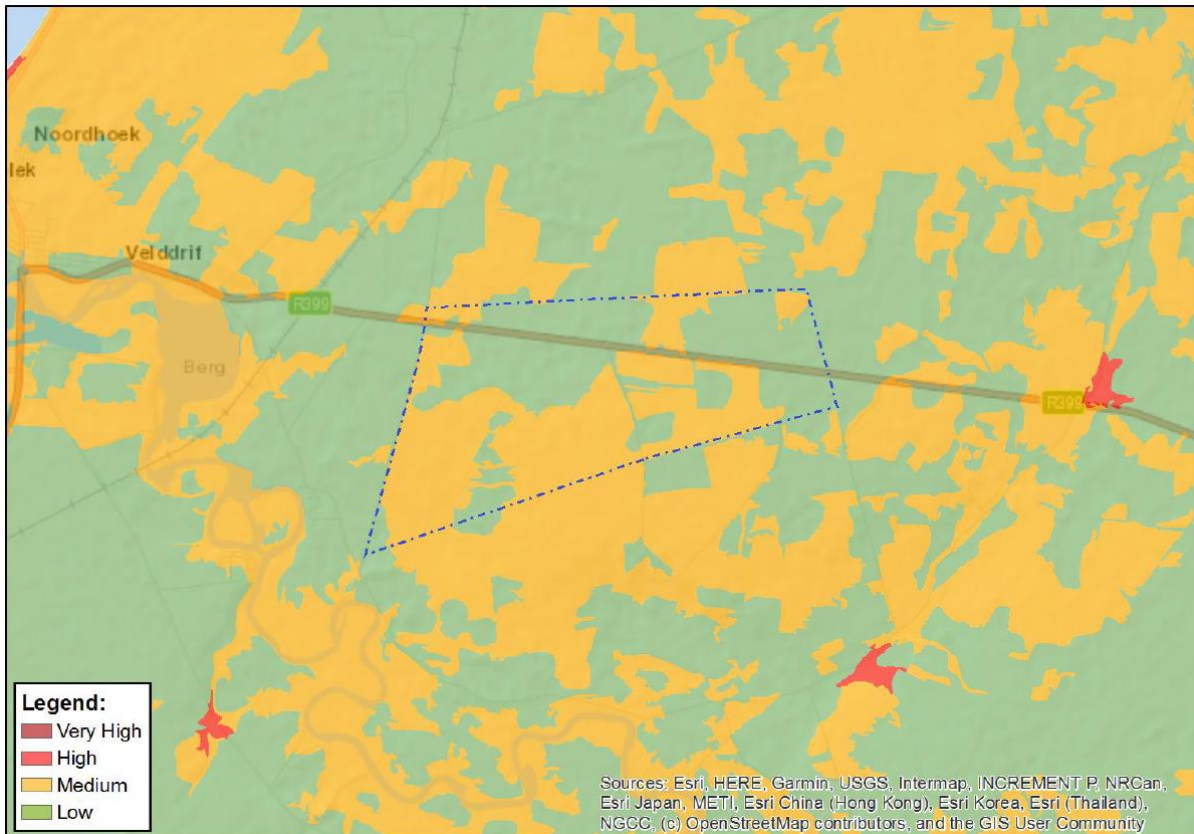


Figure 8: Image from Screening Tool identifying Plant Species theme sensitivity for the Study Site.

The Terrestrial Biodiversity Specialist (Appendix E1) has identified Very High, High, Medium and low sensitivities for different portions of the site.

1.1.2.9 Terrestrial Biodiversity

The Screening Tool identifies the Terrestrial Biodiversity sensitivity theme as “Very High”, for the entire site.

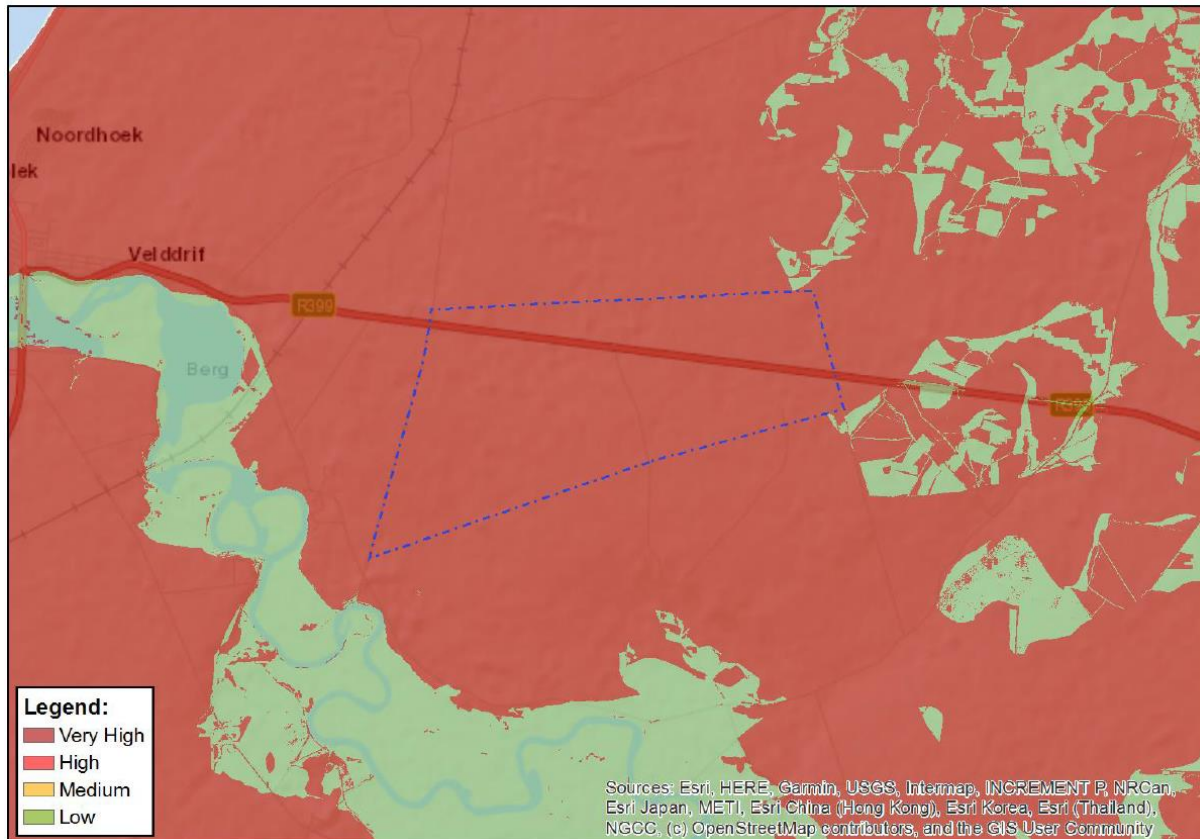


Figure 9: Image from Screening Tool identifying Terrestrial Biodiversity theme sensitivity for the Study Site.

The Terrestrial Biodiversity Specialist (Appendix E1) very high sensitivity of the entire site and has identified Very High, High, Medium and low sensitivities for different portions of the site.

1.1.3 Specialist Assessments

It is important to note that specialist involvement is needed when the environment could be **significantly affected** by the proposed activity, where that environment is **valued by, or important to society** and/or where there is **insufficient information** to determine whether impacts would be significant.

The scope of specialists' contribution (if required) depends on the **nature of the project**, the environmental context [of the site] and the amount of available information and does not always entail detailed studies or assessment of impacts (*Source: Guideline for the review of specialist input in EIA processes, 2005*).

Based on the SSV above read in conjunction with the Specialist SSVr's in appendices E1-E7, the following specialist assessments will be undertaken in the next stage of the environmental process:

1. Freshwater Biodiversity Compliance Statement
2. Terrestrial Biodiversity Impact Assessment
3. Plant Species Impact Assessment
4. Animal Species Impact Assessment (including compliance statement for invertebrate species.

5. Avifaunal Impact Assessment
6. Heritage Impact Assessment (including Cultural Heritage, Archaeology and Palaeontology)
7. Landscape and Visual Impact Assessment
8. Agricultural Compliance Statement.
9. Socio-Economic Impact Assessment