



03 April 2023

Our Ref: BRV727/13

DEA&DP Ref: 16/3/3/6/7/1/B5/2/1053/22

SITE SENSITIVITY VERIFICATION REPORT FOR BASIC ASSESSMENT APPLICATION
GROOTFONTEIN ACCESS ROAD ON REMAINDER AND PORTION 5 OF THE FARM
GROOTFONTEIN NUMBER 149

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 Screening Tool report uses crude national datasets to identify site sensitivities and potential specialist studies that may be required for any particular development. Since the datasets are not ground truthed, there may be instances where the required specialist study are 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)** by either an Environmental Assessment Practitioner or specialist to **determine the applicability of the outcomes of the Screening Tool.**

1. The SSV must be undertaken by an EAP or a specialist.
 - This site sensitivity verification report has been compiled by the EAP taking into consideration the numerous specialist site sensitivity verifications that have already taken place by the specialists that undertook assessments in terms of the previous Environmental processes that have taken place in respect of the larger project.
2. A preliminary on-site inspection must be undertaken.
 - A site inspection was conducted by Dale Holder from Cape EAPrac on the 04 February 2022 as well as by specialists during numerous assessments that took place for the greater project in 2020 and 2021 (details of these are provided below).
3. A desktop analysis must be undertaken, alongside any other applicable/relevant information.
 - A full spatial analysis in terms of existing environmental programmes has taken place and appended to the application that has been submitted. The results of this analysis are also discussed in further detail below.

Grootfontein Access Road (Pty) Ltd intend on constructing an access road on Remainder and Portion 5 of the Farm Grootfontein number 149, in the Witzenberg Local Municipality of the Western Cape Province. The purpose of the access road is to provide access to three authorised Photovoltaic

(PV) energy generation facilities, known as Grootfontein PV1, Grootfontein PV2 and Grootfontein PV 2 on the Remainder of Farm Grootfontein 149. These three projects were selected as preferred bidders in Round 5 of the Department of Energy's (DOE) Renewable Energy Independent Power Producers Procurement Programme.

It must be noted that each of these authorised facilities (Grootfontein PV1, Grootfontein PV2 and Grootfontein PV3) have an access road authorised in their respective EA's. Grootfontein Access Road (Pty) Ltd propose the construction of a single access road to access all three of these facilities as opposed to an access road for each facility as currently authorised.

1 SCREENING TOOL RESULTS

According to the Screening Tool Report for this site that was run on **31 March 2022**, the following summary of the development footprint environmental sensitivities is identified.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme		X		
Plant Species Theme			X	
Terrestrial Biodiversity Theme				X

Below is confirmation of the studies required for the Application based on the sensitivity themes identified above.

2 SITE SENSITIVITY VERIFICATION

Agriculture (Medium Sensitivity)

The Agricultural specialist has confirmed that the aridity of the area is a significant agricultural constraint that seriously limits the level of agricultural production (including grazing) which is possible across the site. Soils also include a high proportion of shallow, rocky soils on underlying rock.

As a result of these limitations, the specialist concluded that the site is unsuitable for cultivation and agricultural land use is limited to low density grazing.

The specialist has classified the majority of the development area as low agricultural sensitivity, but confirmed that the site does include some smaller patches of medium sensitivity.

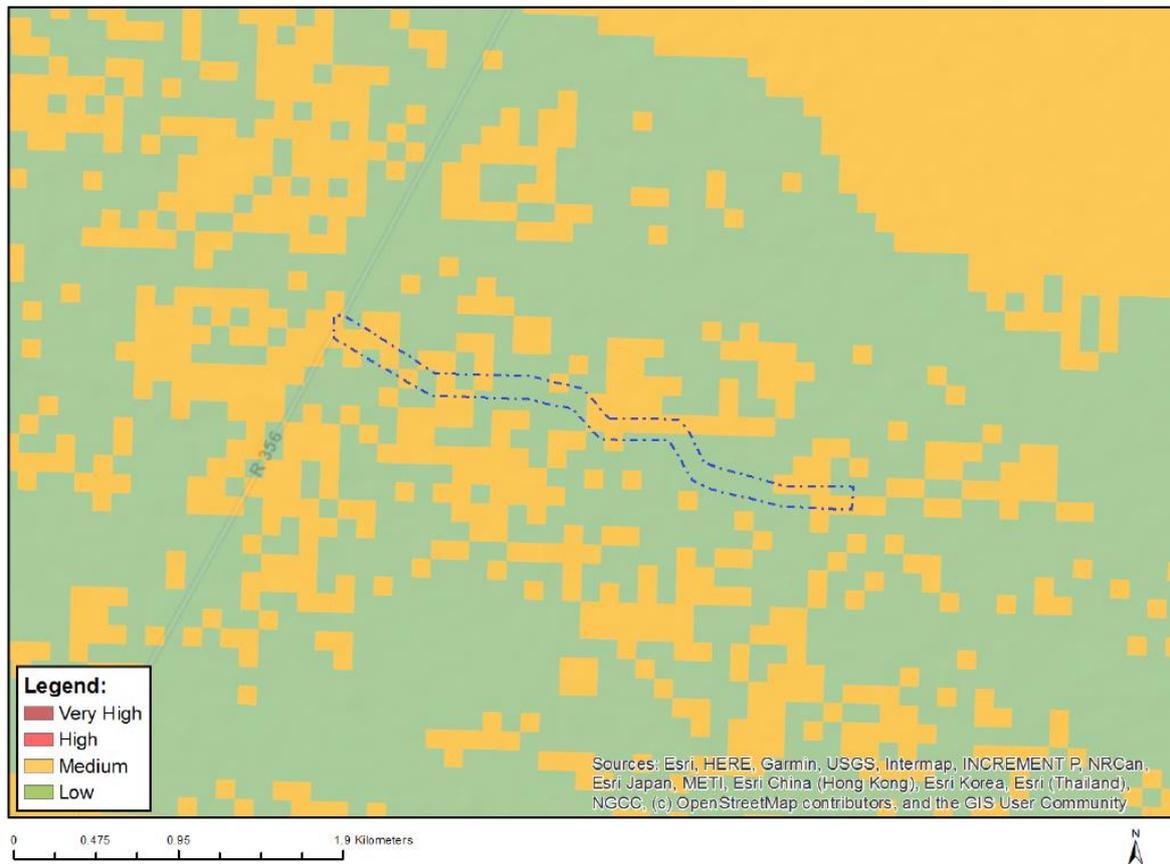


Figure 1: Agricultural theme sensitivity as depicted in the Screening tool.

Notwithstanding the low and medium sensitivity, and Agricultural Impact Assessment has been compiled by an Agricultural Specialist for the greater site. It is also noteworthy that the Subdivision of Agricultural Land Approvals in terms of Act 70 of 70 have been granted for the site by the Department of Agriculture. The Department of Agriculture be contacted as part of the Basic Assessment to comment on the development proposal.

Animal Species (Medium Sensitivity)

The screening tool identified the sensitivity for animal species as “Medium” for the following species.

Sensitivity	Feature(s)
Medium	Aves-Neotis ludwigii

Figure 2: Species sensitivity for Grootfontein Access Road.

The relevance of these species to the study site is discussed in this site sensitivity verification report.

The avifaunal specialist confirmed that the site investigation revealed that the study area is generally low sensitivity for avifauna, with a few areas of very high sensitivity namely water reservoirs (permanent surface water) and drainage lines (ephemeral water resource and drainage line woodland habitat) and one priority species nest, namely a Greater Kestrel. The earth dams are very small and basically dry for the majority of the year, therefore, they constitute low sensitive habitat.

There is no specific road theme for avifauna in the DEFF screening tool, and the study area is classified as mostly medium sensitivity for Animal Species Theme, with small areas of low and high sensitivity. The medium sensitivity rating is linked to the presence of Ludwig’s Bustard. The High and Low sensitivity ratings are not linked to avifauna.

Aquatic Biodiversity (Low Sensitivity)

The screening tool identifies the aquatic biodiversity theme as low, with no specific features listed.



Figure 3: Aquatic sensitivity theme as depicted in the screening tool.

In terms of the Access road, the Screening Tool shows the sensitivity to be low.

The high sensitivities within the greater area are attributed to the Groot River and related to the presence of certain critically endangered species, such as Clanwilliam sandfish (*L seeberi*). While the riverine rabbit (*Bunolagus monticularis*).

The specialist has confirmed the following with regards to the site sensitivity:

- The terrestrial environments which are deemed to have “low sensitivity” from an ecological perspective. These are the areas where the access road is proposed
- The riparian environments, are deemed to have “high sensitivity”. These fall outside the footprint of the Facility and this Access Road.
- Areas of terrestrial importance and a “buffer” at the interface of the terrestrial and riparian areas, which approximates 100m and includes areas of sheet wash and flood extremes. These areas have also been excluded from the proposed development footprint.

This low sensitivity theme depicted in the screening tool has thus been confirmed by the Aquatic Specialist (SDP Ecological Services) and ALL identified riparian areas (Grootfontein, Klein Grootfontein and Grootdoring) as well as their buffers were entirely avoided by the proposed Grootfontein Access Road as depicted in the image below.



Figure 4: Proposed Grootfontein Access Road in relation to the delineated riparian areas and their associated buffers.

Archaeological & Cultural Heritage (Low)

The screening tool identified this theme as being “low” with no specific features identified.

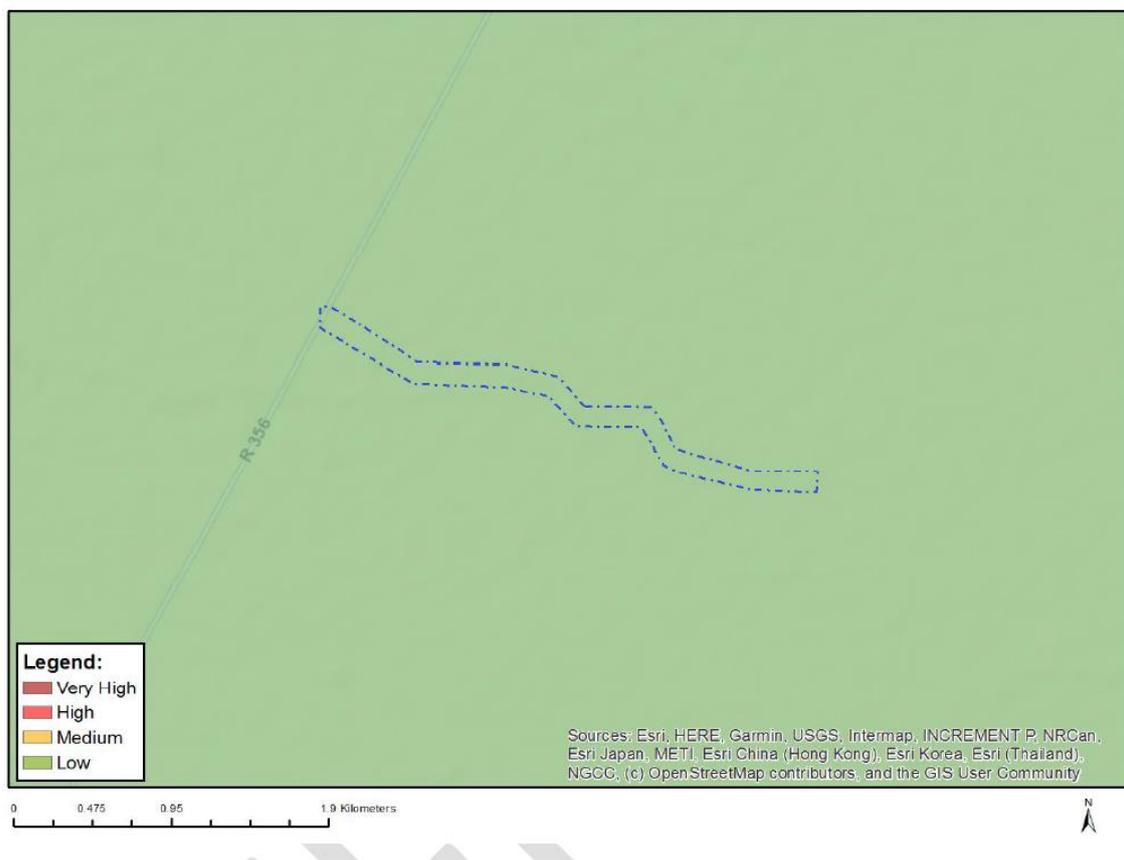


Figure 5: Archaeological and Cultural sensitivity theme as depicted in the screening tool.

Dr Jayson Orton of ASHA consulting undertook a site sensitivity analysis of the total affected property.

The specialist confirmed that the archaeological resources within the greater area deemed to have generally low cultural significance for their scientific value. The vast majority are rated as NCW but in a few instances grades of IIIc have been assigned. It should be noted that two sites of high significance (Grade IIIa) were found to the north of the study area as depicted in the figure below.

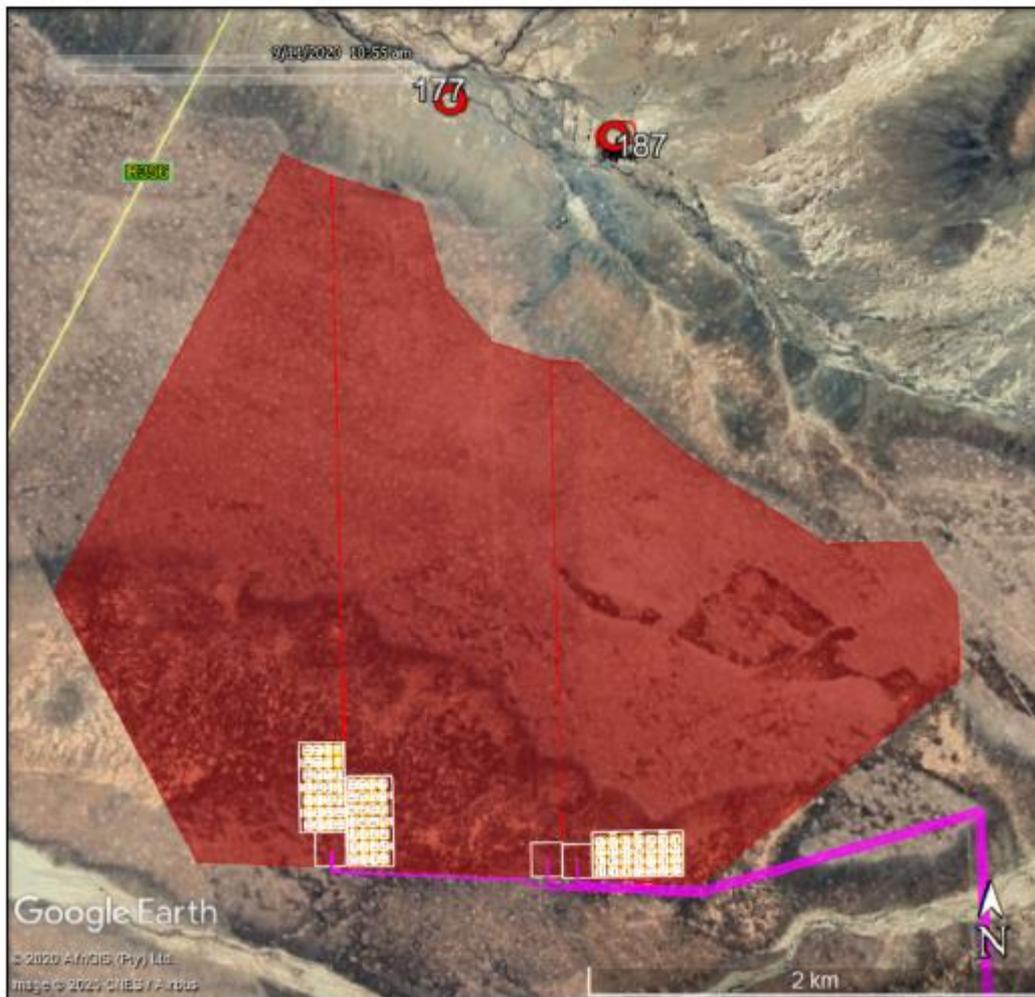


Figure 6: Showing High sensitivity features in relation to the PV Projects.

There are no historical archaeological resources within the PV site or the access road and as such, the low sensitivity theme depicted in the screening tool is confirmed.

It must furthermore be noted that Heritage Western Cape have approved the access road in terms of Section 38(8) of the NHRA. A copy of this approval will be included in the Draft Basic Assessment Report.

Palaeontology (High Sensitivity)

The screening tool identified this theme as being "High" as depicted in the figure below.



Figure 7: Paleontological sensitivity theme as depicted in the screening tool.

Dr John Almond undertook a Palaeontological Sensitivity Analysis of the entire property, from which the following is summarised.

The palaeosensitivity map generated by the DFFE screening tool for the road is high sensitivity, corresponding to the Dwyka Group outcrop area, and (3) a central band with unspecified sensitivity which corresponds to the folded Lower Ecca Group outcrop area.

On the basis of (1) the recent palaeontological field survey for the proposed solar and power line projects as well as (2) several desktop- and field-based previous PIA studies in the Ceres Karoo (notably Almond 2010a-c, 2016a, 2018, 2020), the screening tool map was disputed and rejected by the Specialist as an accurate reflection of palaeosensitivity within the present study area. The main reasons for this are:

- The inaccurate overlay of the project area on the palaeosensitivity map (which is based primarily on the relevant 1: 250 000 geological maps);
- The Dwyka Group is generally regarded as of LOW palaeosensitivity whereas the Tierberg Formation is of MEDIUM sensitivity, at most. Field data for the proposed project suggest a LOW palaeosensitivity for the Tierberg Formation outcrop area here due to weathering and extensive cover by low-sensitivity calcrete, gravels and soils.
- Potentially-sensitive rock units such as the basal Prince Albert Formation and Whitehill Formation are not rated on the map (Field data suggests these are generally of LOW palaeosensitivity in this region, mainly due to weathering and cleavage development).
- The map does not address the Late Caenozoic sediments that mantle the bedrocks in the project area, and in particular the pediment gravels (ancient alluvium) underlying almost the entire solar PV study areas as well as younger alluvium along the Grootrivier and its tributaries. Almost all the new fossil occurrences noted during the recent field survey were found in such

settings. However, these fossils are generally of low conservation value and the palaeosensitivity of the Late Caenozoic sediments is according rated as LOW.

The specialist concluded that the entire project area for the proposed solar PV facilities infrastructure (including this access road) is of LOW palaeosensitivity.

Civil Aviation (Low Sensitivity)

According to the screening tool, the Civil aviation theme is depicted as low sensitivity with no features identified within proximity of the proposed access road.

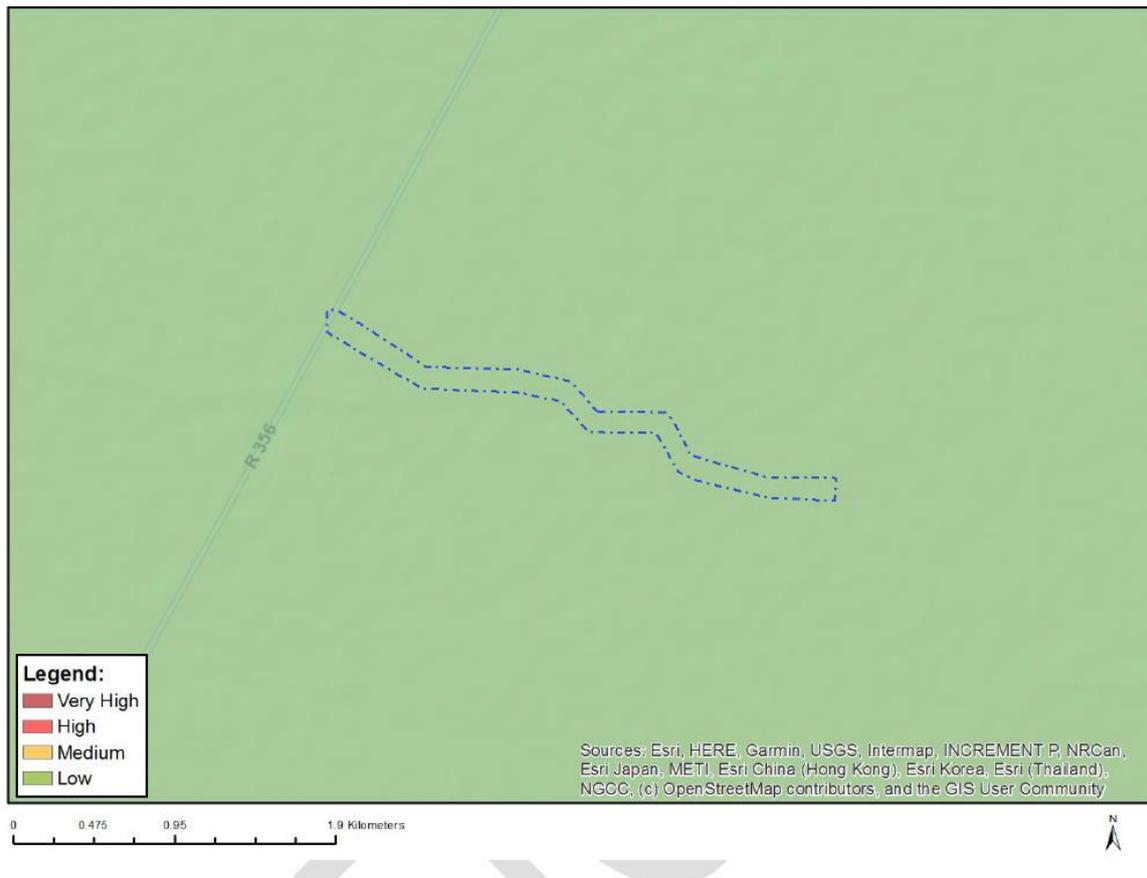


Figure 8: Civil Aviation sensitivity theme as depicted in the screening tool.

The low sensitivity theme depicted in the screening tool is confirmed by the EAP and it has been confirmed during the site inspection that no runways, landing strips of civil aviation infrastructure are in proximity of the proposed access road.

Furthermore, the development does not trigger the obstacle collision / potential hazard requirements as set out by the CAA, i.e.

- Buildings or other objects which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome, or navigation aid, or which will adversely affect the performance of the radio navigation or instrument landing systems,
- There are no buildings or objects higher than 45 metres above the mean level of the landing area;
- No building, structure or object which projects above a slope of 1 in 20 and which is within 3000 metres measured from the nearest point on the boundary of an aerodrome;
- No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome.

Cape EAPrac therefore acknowledges the Low sensitivity of the theme but is of the opinion that this sensitivity theme is in fact **'NOT APPLICABLE'** to this site since it is also not necessary to request approval in terms of the Civil Aviation Act for obstacles. However comment will be requested from the Civil Aviation Authority as part of the Basic Assessment process.

Defence (Low Sensitivity)

The screening tool identified this theme as being “low”.

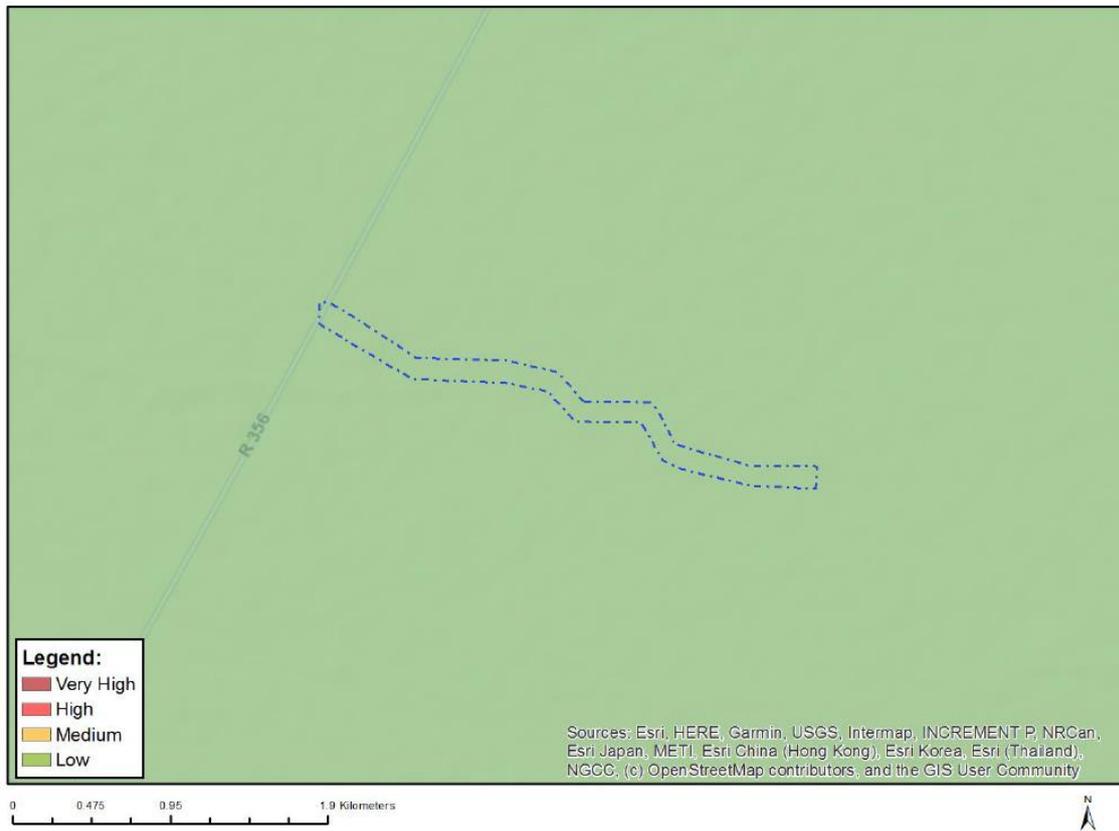


Figure 9: Defense sensitivity theme as depicted in the screening tool.

The EAP this low sensitivity as there are not any nearby defence installations nothing that is proposed, poses any threat to any military site(s) that may be in proximity to the study area. No further studies are required. The Department of Defence will be provided an opportunity to provide comment on the Draft Basic Assessment Report.

Plant Species (Medium Sensitivity)

The screening tool identified this theme as being “medium” for the following species:

Sensitivity	Feature(s)
Medium	Sensitive species 651
Medium	Braunsia stayneri
Medium	Sensitive species 841
Medium	Sensitive species 1199
Medium	Calobota elongata
Medium	Erioccephalus grandiflorus
Medium	Sensitive species 275
Medium	Octopoma nanum

Figure 10: Sensitive Flora Species identified by the screening tool.

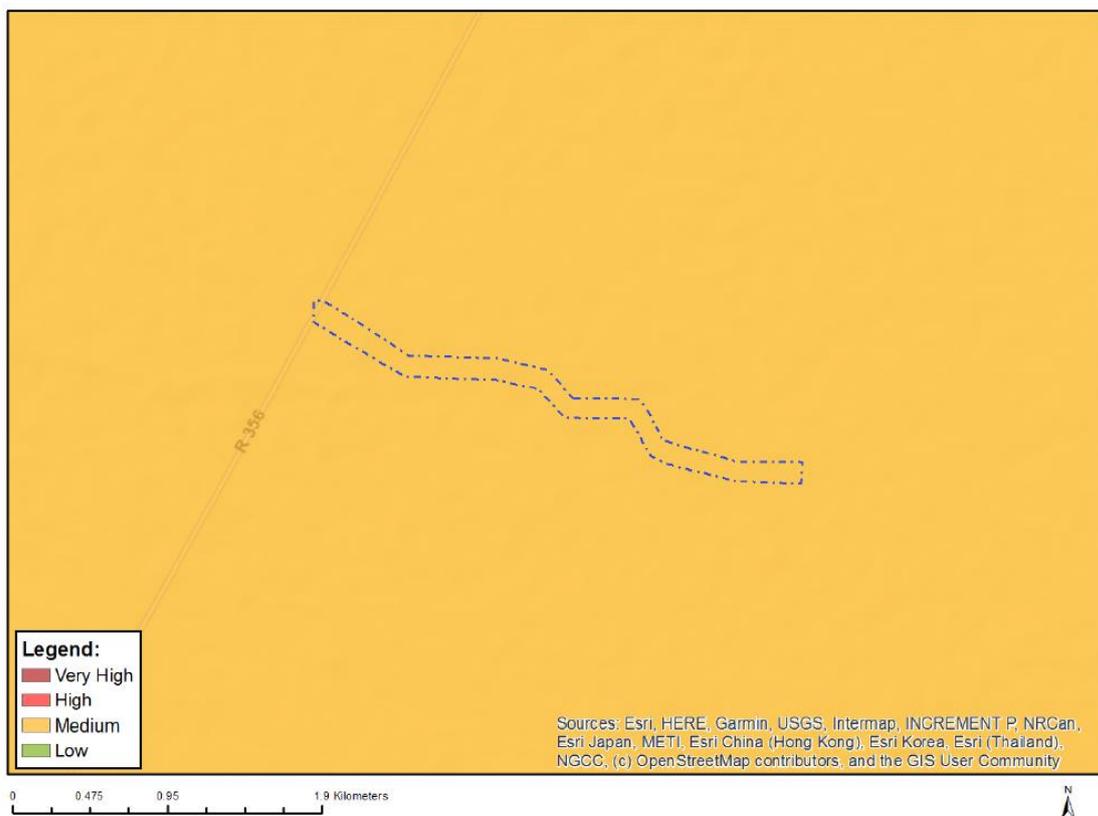


Figure 11: Plant species sensitivity theme as depicted in the screening tool.

The Specialist confirmed a **low plant species sensitivity** for the majority of the property, including the areas where this access road is proposed. However, areas of moderate and high ecological sensitivity were encountered along the scarp slopes and sheetwash environments, which have the potential to provide suitable habitat for lithic and geophytic plants of conservation significance (the access road has however avoided these specific areas).

Terrestrial Biodiversity (Low Sensitivity)

The screening tool identified this theme as being “low” with no specific sensitivity features listed.

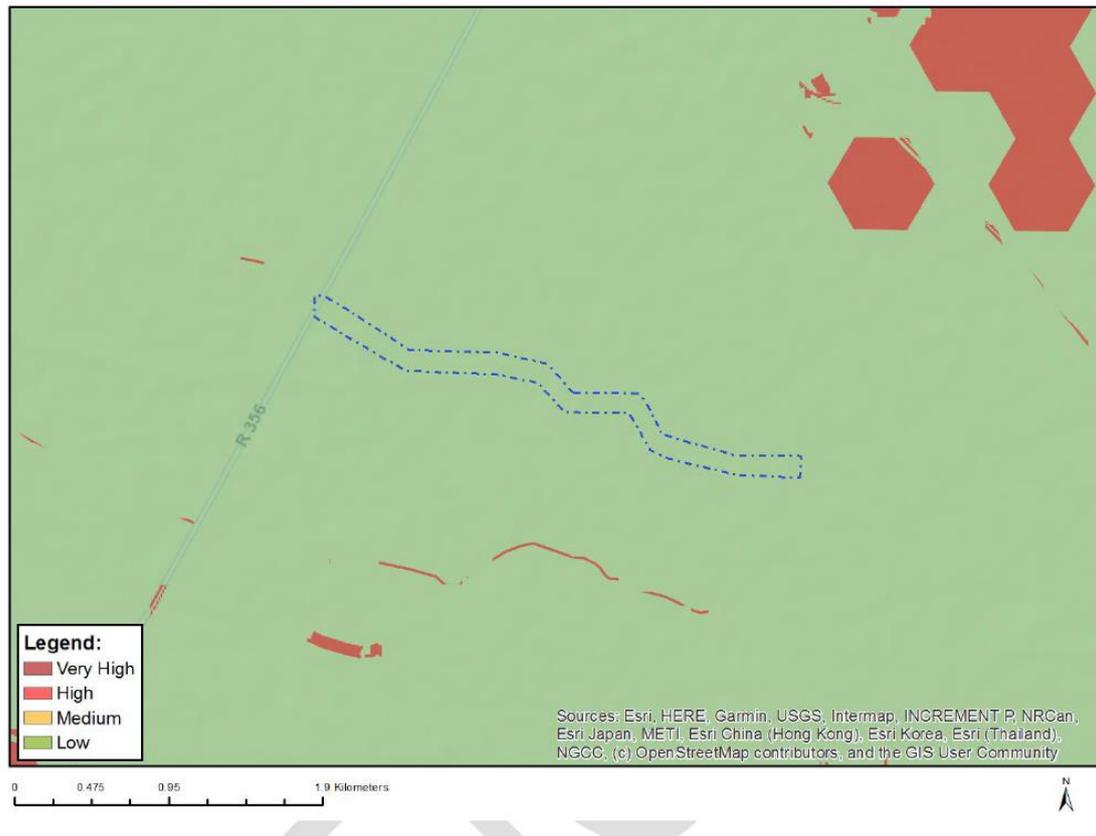


Figure 12: Terrestrial biodiversity sensitivity theme as depicted in the screening tool.

The Terrestrial biodiversity specialist SDP Ecological Solutions has confirmed the screening tool sensitivity as low due to low levels of faunal and botanical diversity being evident on higher ground within the Grootfontein area and most faunal populations being associated with the riverine environments

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 or not impacts would be significant.

All of the specialists assessments identified in the screening tool with the exception of the Noise assessment and geotechnical assessment will be undertaken. The detailed specialist studies undertaken for the greater PV development, which included 3 separate access roads (which will now be replaced by this single access road) will be utilised and supplemented with additional specialist input where appropriate.

A noise impact assessment will not be undertaken. The proposed access road is a low speed (40kph) gravel road with no nearby receptors sensitive to noise. The closest receptor is a farm house situated more than 4.5km away from the road and any road noise from a low speed gravel road would be zero.

A geotechnical assessment will not be undertaken, as the proposed Grootfontein access road will not include any major excavations or infill and will be maintained low class road at natural ground level.

Should any of the specialist identify the need for any additional studies, the Basic Assessment will reflect such more in-depth studies.

Kind regards,

A handwritten signature in black ink, consisting of several overlapping loops and a horizontal line extending to the left.

Mr Dale Holder
082 448 9225.
Cape EAPrac