



FINAL SCREENING REPORT

PROJECT NAME: The Proposed new Heuningspruit 50MW PV Solar Facility and Storage, near Koppies, Free State Province

DESTE A REFERENCE NUMBER: EMS/11(i),14,19,24(ii),28(ii),56(ii),1,15,49b)(i)(cc),ee,12(b)(iv)/23/06

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1. Purpose for the EIA Screening

According to DEFF, the National Web based Environmental Screening Tool is a geographically based web-enabled application which allows a proponent intending to submit an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity.

The Screening Tool also provides site specific EIA process and review information, for example, the Screening Tool may identify if an industrial development zone, minimum information requirement, Environmental Management Framework or bio-regional plan applies to a specific area.

Further to this, the Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

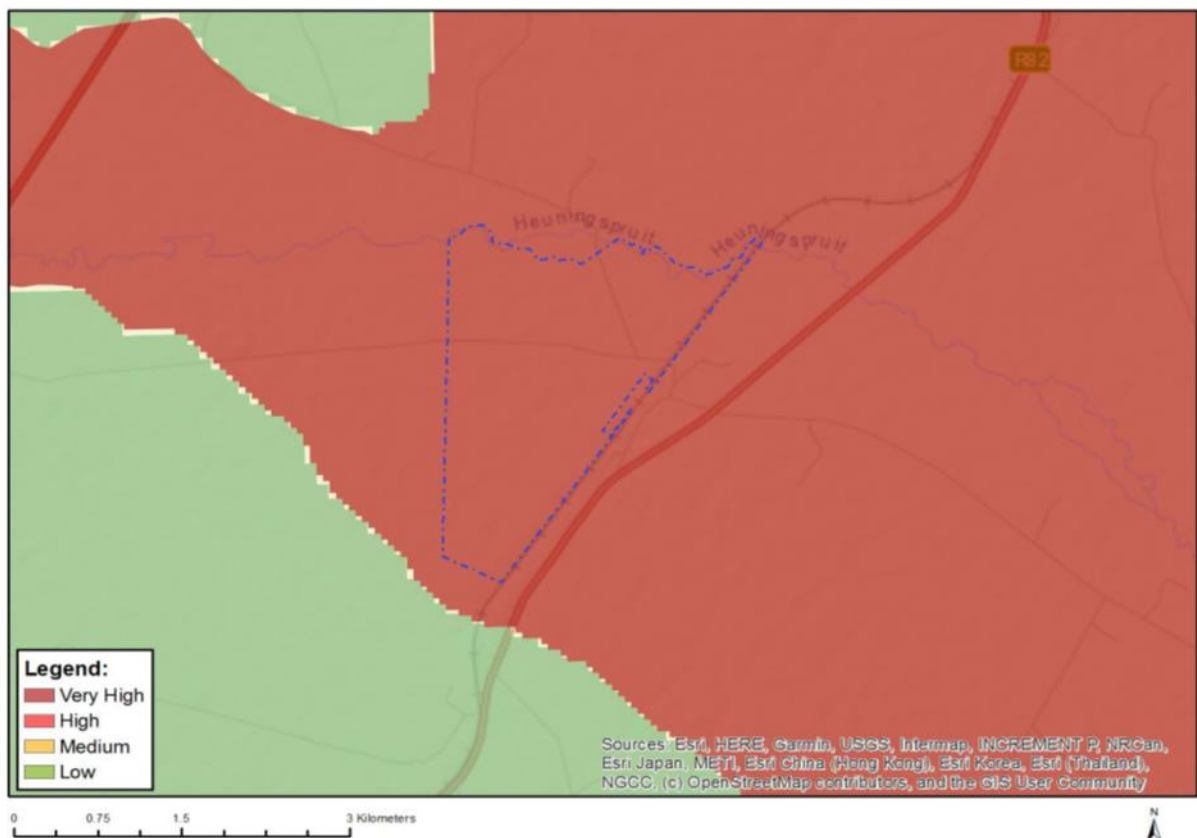
Finally, the Screening Tool allows for the generating of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended whereby a Screening Report is required to accompany any application for Environmental Authorisation and as such the tool has been developed in a manner that is user friendly and no specific software or specialised GIS skills are required to operate this system.

2. Background Information

The initial screening report for the proposed Heuningspruit 50 MW Solar Energy Facility and Storage was established in February 2023. The screening revealed the following:

2.1 Water Resources/ Aquatic Resources:

Figure 1: Map of Relative Aquatic Biodiversity Theme Sensitivity



Very Sensitive	High	Medium	Low
X			

Sensitivity Verification Results:

Methodology for verification: Preliminary on-site inspection

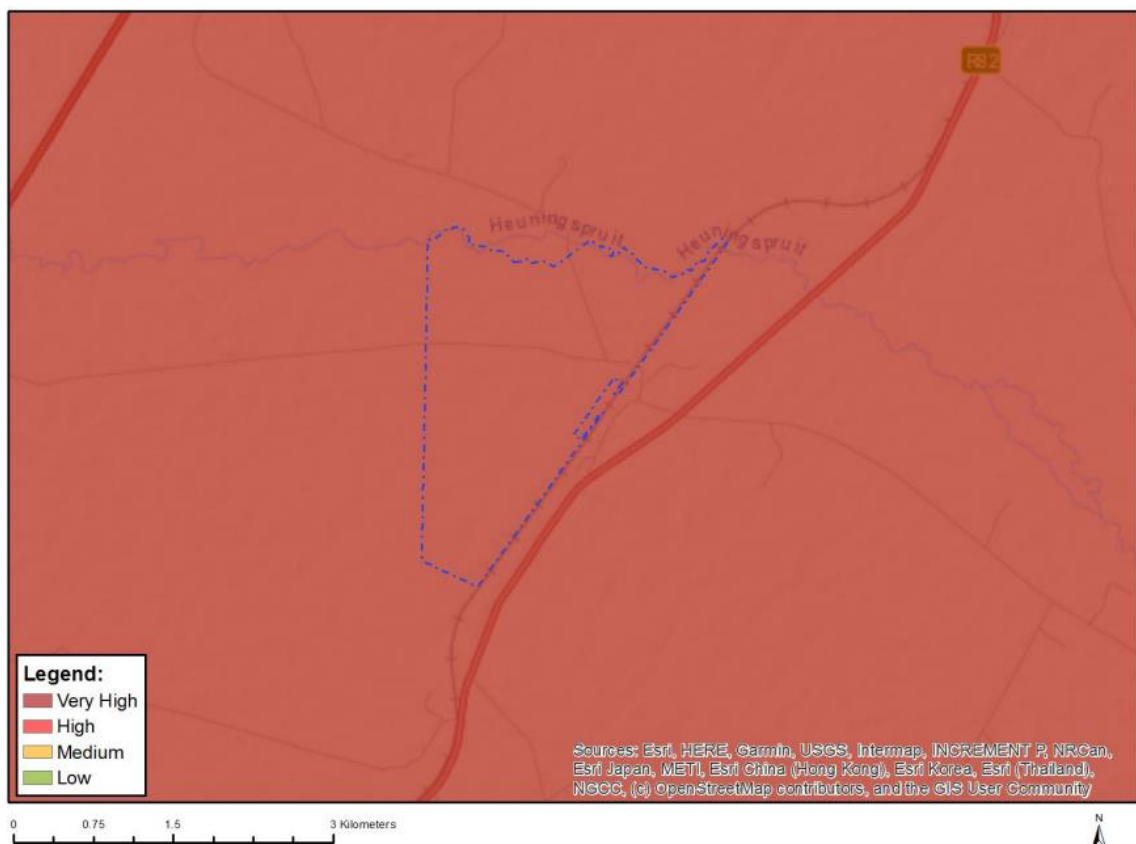
Findings: Based on the Specialists study conducted by Mora Ecological, it was found that the earmarked site is indeed sensitive, but mitigatable. The EMPr has been established to ensure that all impacts identified during scoping face are mitigated effectively at all phases of the development. One of the Specialist's recommendations is for **PV 3** (Alternative 3) to be moved from the Northern



side of the development to the Western side of the earmarked site, to avoid flood line area.

2.2 Terrestrial Biodiversity (Fauna, Flora & Avifauna)

Figure 2: Map of Relative Terrestrial Theme Sensitivity



Very Sensitive	High	Medium	Low
X			

Sensitivity Verification Results:

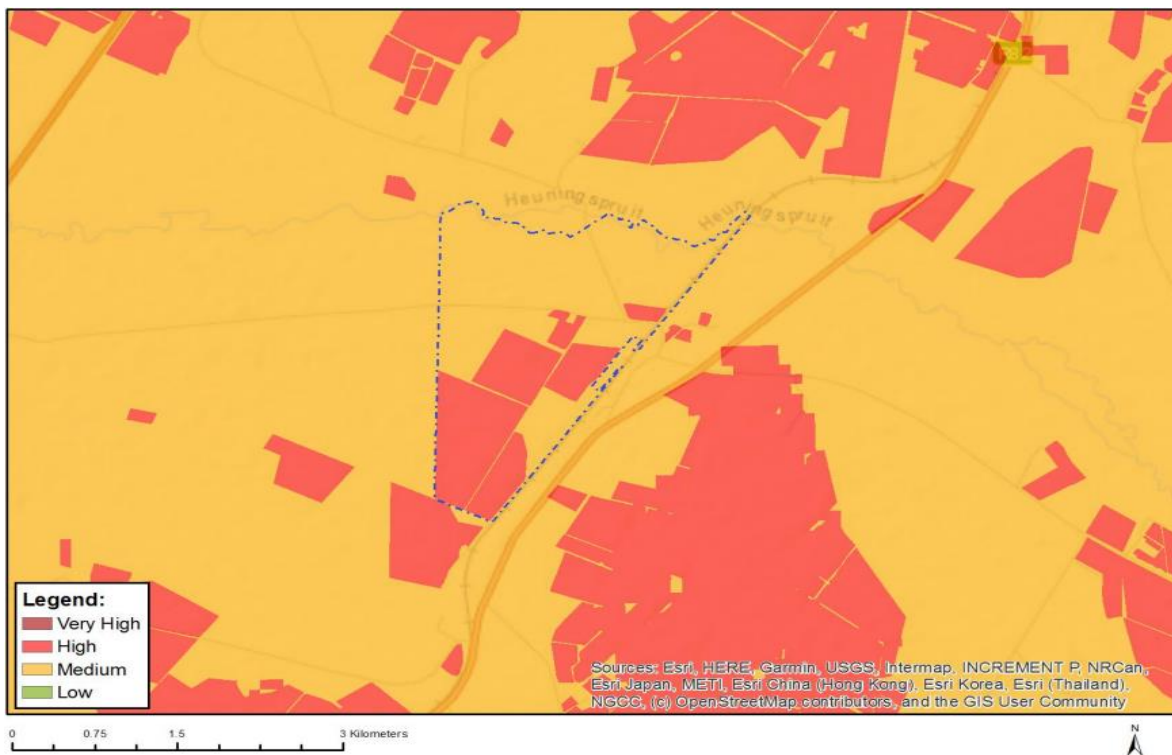
Methodology for verification: Preliminary on-site inspection



Findings: Based on the Specialists study conducted by Mora Ecological, although the site has a high Terrestrial Biodiversity theme, there are no evident fatal flaws that would prevent the proposed development from being authorised, nor being conducted in a sustainable manner, provided the Mitigations provided in the EMPr are adhered-to.

2.3 Agricultural

Figure 3: Map of Relative Agricultural Theme Sensitivity



Very Sensitive	High	Medium	Low
	X		

Sensitivity Verification Results:

Methodology for verification: Preliminary on-site inspection

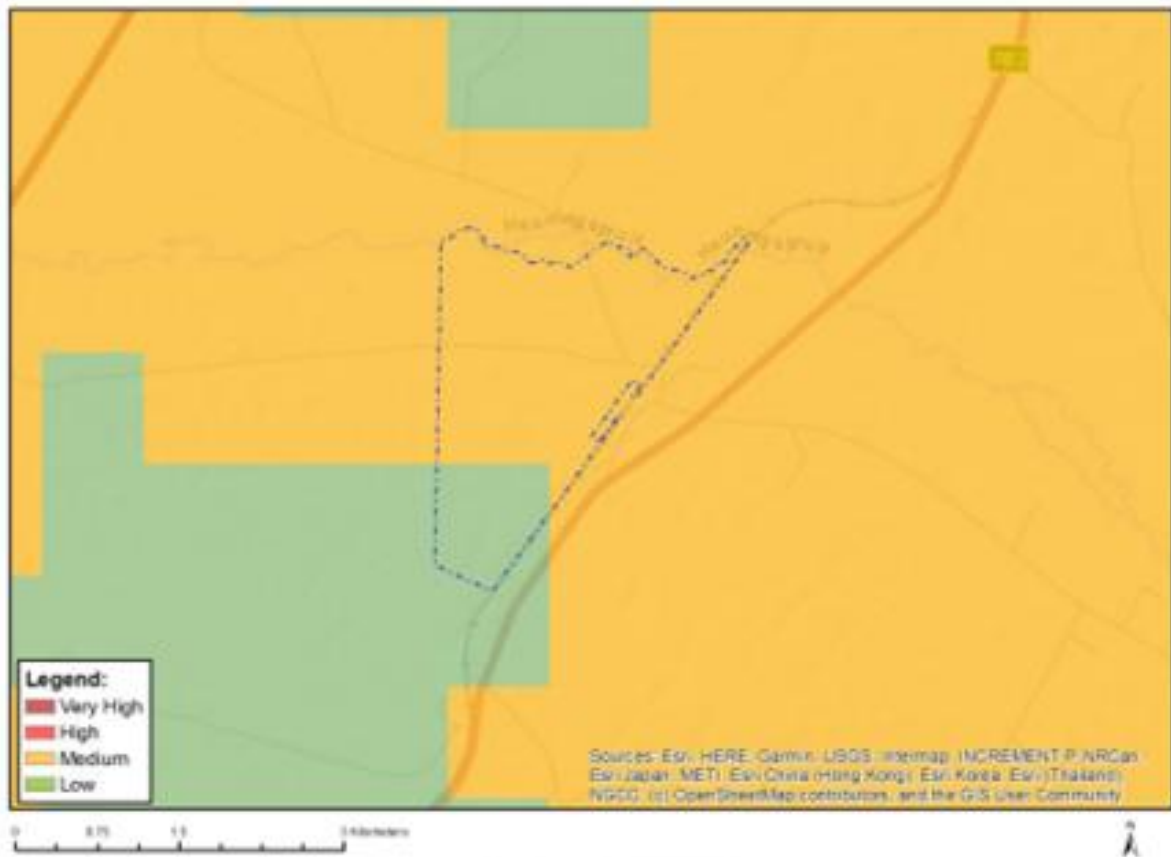
Findings: Based on the Specialists study conducted by Dr Dupisani, the assessment conducted in Dec 2022 revealed that the site is not as sensitive as predicted. An impact assessment was conducted, and the site was found to



carry a low-medium significant impact, at all phases of the project development (refer to page 21-36 of the specialists' report). According to DR du Pisani's study results, all potential impacts, can be mitigated with effective monitoring in place.

2.4 FAUNA / Avifauna

Figure 4: Map of Relative Animal Theme Sensitivity



Very Sensitive	High	Medium	Low
		X	

Sensitivity Verification Results:

Methodology for verification: Preliminary on-site inspection

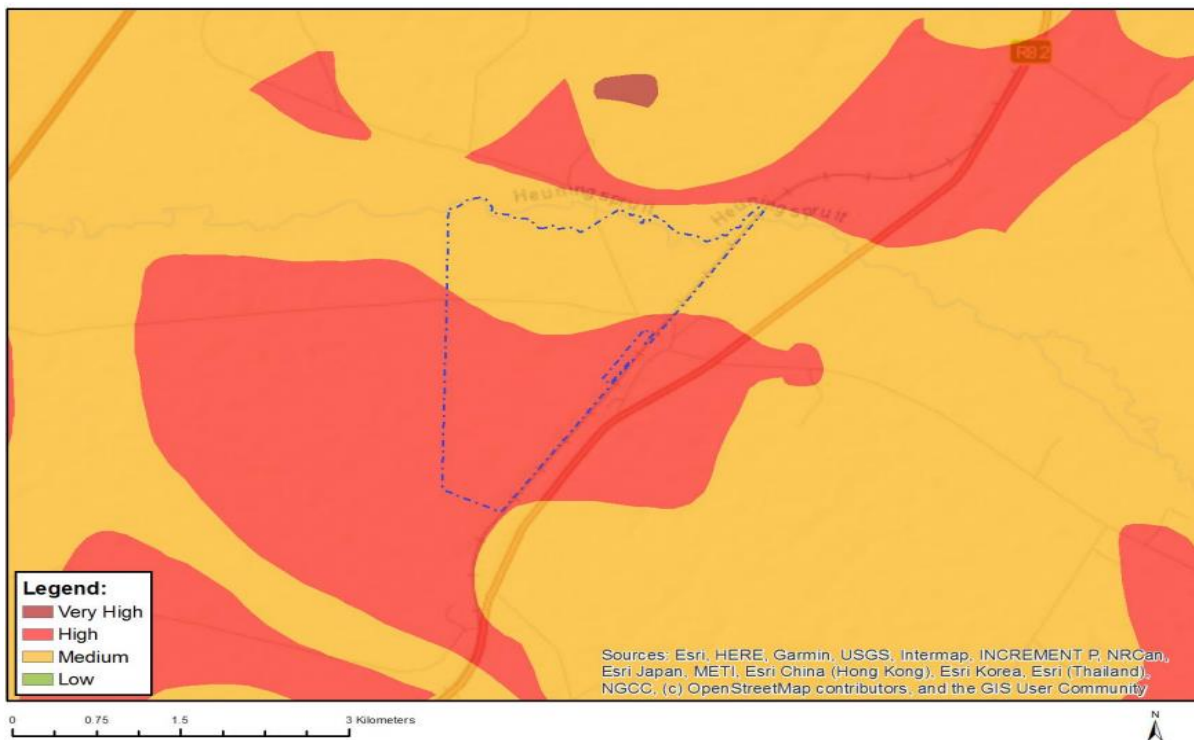


Findings: Based on the Specialists study conducted by Mora Ecological, potential impacts were evaluated against the data captured during the fieldwork to identify relevance to the project area, specifically the proposed prospecting footprint. Impacts were assessed in terms of the construction, operational, decommissioning, rehabilitation and closure phases. According to the specialist report, none of the Mammalia, Reptile or Amphibian species are Red Data or of conservation concern.

Considering the proposed project, buffer zones were suggested that mitigation techniques will be advised to ensure that threats are kept to a minimum. It is therefore the opinion of the specialist that the proposed development be considered, provided that all mitigations and recommendations are strictly followed. Overall, the impacts associated with this proposed solar facility are considered Low-Medium.

2.5 Paleontological

Figure 5: Map of Relative Paleontological theme Sensitivity



Very Sensitive	High	Medium	Low
	X		



Sensitivity Verification Results:

Methodology for verification: Preliminary on-site inspection

Findings: The study conducted by Prof Marion Bamford stated that based on the nature of the project, surface activities may impact upon the fossil heritage if preserved in the development footprint. The geological structures suggest that the rocks are the right age but wrong type to contain fossils. The study concluded that the impact on the palaeontological heritage would be low, so as far as the palaeontological heritage is concerned, the project should be authorised.

2.6 Plants

Figure 5: Map of Relative Plant Species Theme Sensitivity





Very Sensitive	High	Medium	Low
			X

Sensitivity Verification Results:

Methodology for verification: Preliminary on-site inspection

Findings: Mora Ecological Services conducted a study and the following was found. Twelve broad vegetation types occur in the NLM. The most dominant vegetation type is the Central Free State Grassland, which covers approximately 56% (395,000ha) of the NLM area, followed by the Frankfort Highveld Grassland and Vaal-Vet Sandy Grassland, which respectively covers approximately 19% and 14% of the NLM area each.

Three other vegetation types cover more than 1% of the NLM, i.e. Vredefort Dome Granite Grassland (6%), Soweto Highveld Grassland (3%) and Eastern Free State Clay Grassland (1%). The remaining six vegetation types are the Andesite Mountain Bushveld, Bloemfontein Karroid Shrubland, Eastern Temperate Freshwater Wetlands, Gold Reef Mountain Bushveld, Highveld Salt Pans and Northern Free State Shrubland, each of which covers less than 1% of the study area (Ngwathe EMF; 2013).

DFFE Screening report identified the earmarked site as having a low Sensitive Plant Species theme, as indicated in the above-mentioned map. The study conducted does not seem to reveal any discrepancies. The site has portions with alien species that require great maintenance to avoid the spread.

3. Conclusion



Figure 3.1 Overall Sensitivity

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		
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			

Based on the sensitivity verification conducted, the initial screening report provided almost 95% accurate findings, which permits the department to allow the project to move to the next EIA phase.

According to the results of Scoping Specialists Studies done, the proposed development can be executed in sustainable manner, provided mitigation measures recommended are implemented, and monitoring done as planned. With mitigations, the overall sensitivity of the site ranges from Medium -Low.