

PAARDE VALLEY PV2 SOLAR ENERGY FACILITY

ON THE REMAINDER OF PORTION 2 OF PAARDE VALLEY 145, DE AAR, NORTHERN CAPE PROVINCE

DFFE Ref Nr 12/12/20/2500/AM7

SITE VERIFICATION REPORT

Background to the Site Verification Report

In terms of the gazetted agricultural protocol, a site sensitivity verification must be submitted that:

- confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
- contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

The DFFE Screening Tool Report dated 26 May 2023 is attached under Addendum B(1)(a) and should be read with this document.

The sensitivities identified in the DFFE Screening Tool Report are indicative only and had to be verified by suitably qualified persons (the EAP or relevant specialist) which guided the extent of specialist assessments undertaken. More details are provided in the relevant specialist reports contained in Appendix C of the Motivational Report.

Note that the specialists involved with this site verification were either involved during the 2012 assessments and/or the subsequent assessments done in 2022 and 2023.

Content of this Site Verification Sensitivity Report

The following is supplied with this document:

- Environmental theme sensitivities according to the DFFE Screening Tool Report
- The DFFE Screening Tool Report Sensitivity Maps
- Site Verification Table

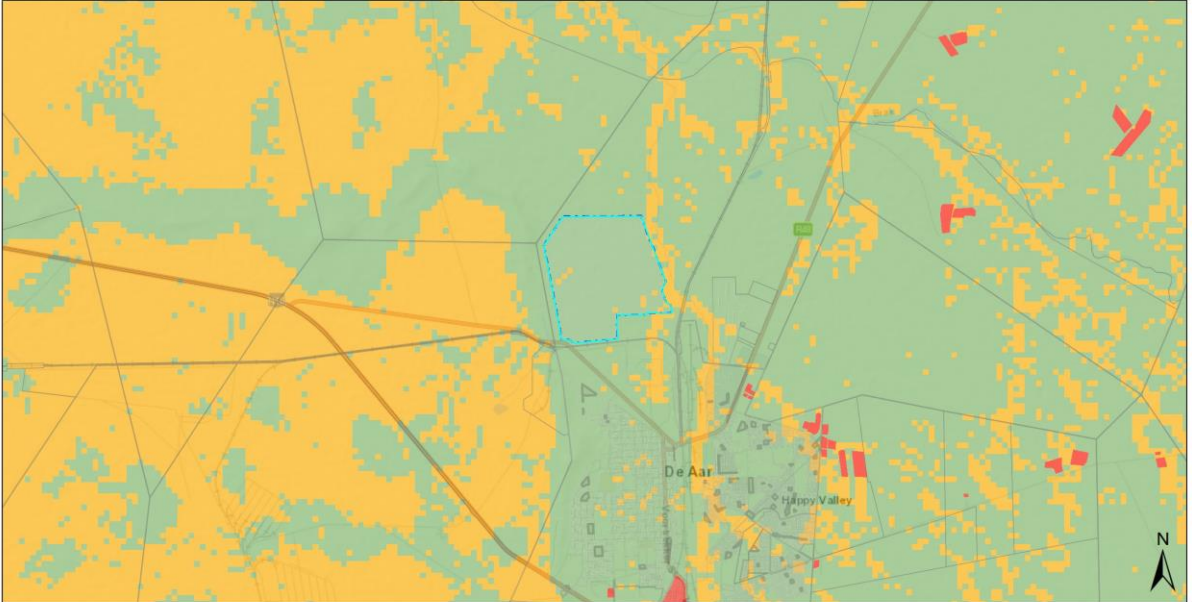
Environmental theme sensitivities identified in the DFFE Screening Tool Report

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			
Palaeontology Theme		X		
Plant Species Theme			X	
RFI Theme	X			
Terrestrial Biodiversity Theme	X			

DFFE Screening Tool Sensitivity Maps



Agricultural Sensitivities



26 May 2023

Legend

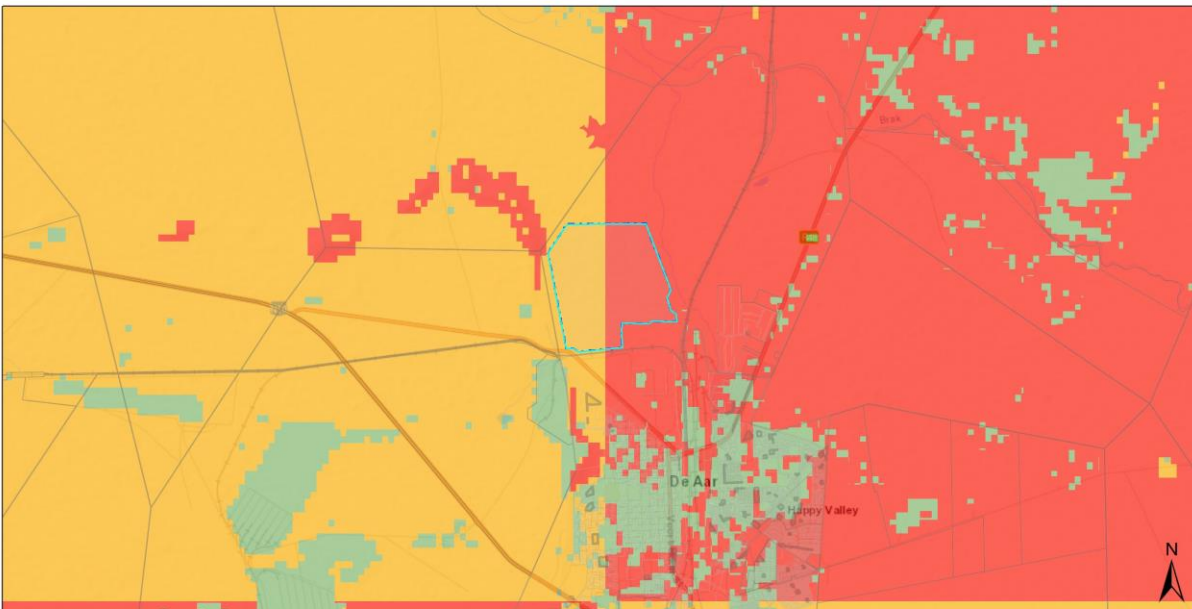
- | | | |
|---|--|---|
| <ul style="list-style-type: none"> — Screening Tool Site Area EIA Application Development Footprint EIA Application Site National Jurisdiction Area | <p>Cadastre</p> <ul style="list-style-type: none"> Erven Farm Portion Farm Agri Holding | <ul style="list-style-type: none"> Public Place <p>Agriculture Combined Sensitivity</p> <ul style="list-style-type: none"> Very High High Medium Low |
|---|--|---|

0 2.75 5.5
km
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Swi Korea, Esri (Thailand), IGN, Esri OpenStreetMap contributors, and the GIS User Community

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Animal Species Sensitivities



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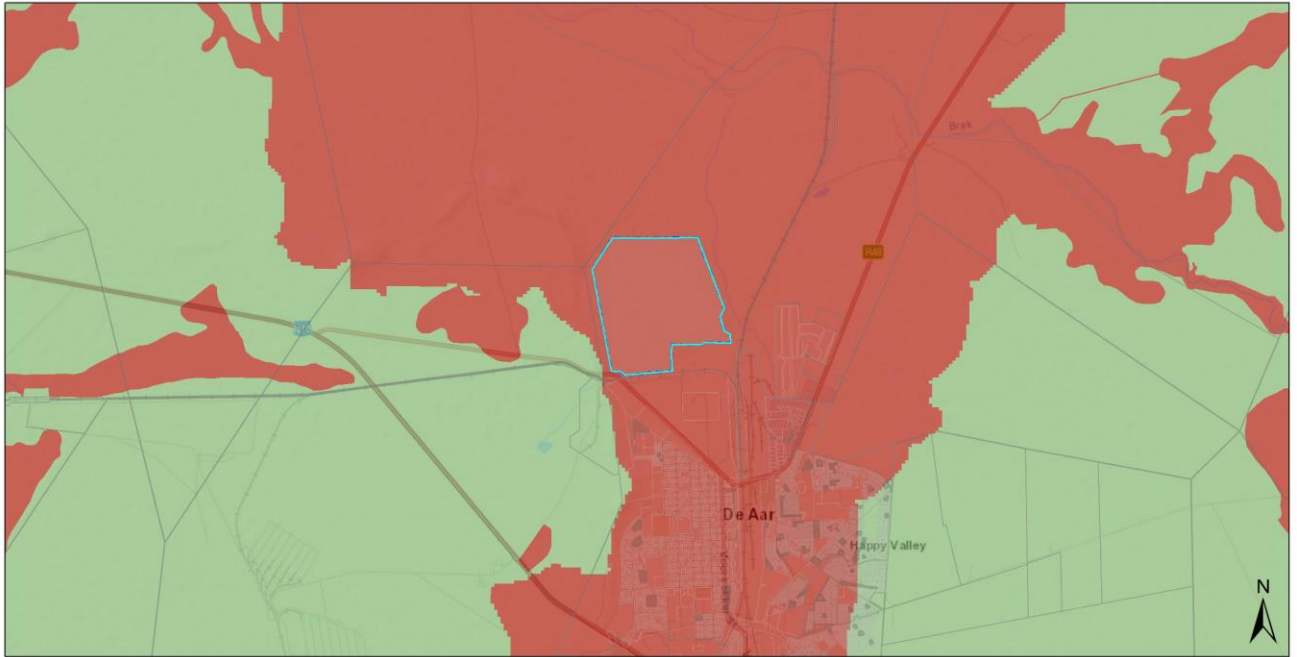
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|---|--|--|
| <ul style="list-style-type: none"> — Screening Tool Site Area EIA Application Development Footprint EIA Application Site National Jurisdiction Area | <p>Cadastre</p> <ul style="list-style-type: none"> Erven Farm Portion Farm Agri Holding | <ul style="list-style-type: none"> Public Place <p>Animal Species Combined Sensitivity</p> <ul style="list-style-type: none"> Very High High Medium Low |
|---|--|--|

0 2.75 5.5
km
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Swi Korea, Esri (Thailand), IGN, Esri OpenStreetMap contributors, and the GIS User Community

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Aquatic Biodiversity Sensitivities



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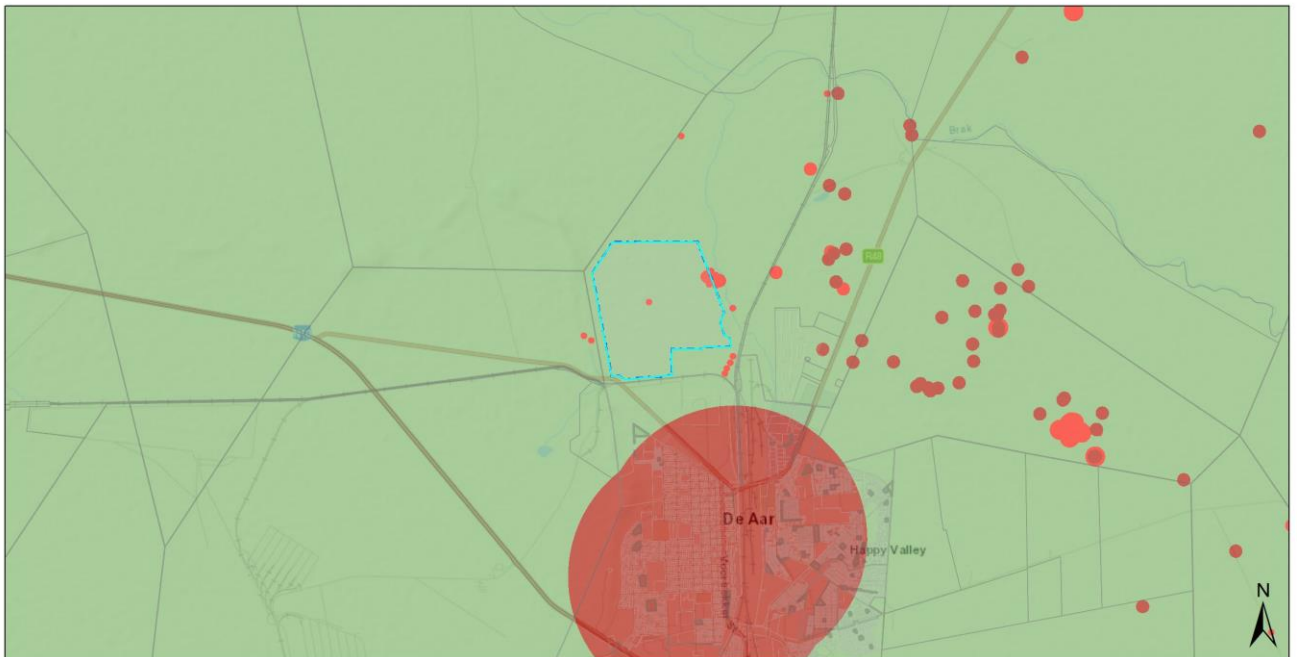
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|---|----------------|---|
| — Screening Tool | □ Erven | □ Public Place |
| ■ Site Area | □ Farm Portion | ■ Aquatic Biodiversity Combined Sensitivity |
| ▨ EIA Application Development Footprint | □ Farm | ■ Very High |
| ■ EIA Application Site | □ Agri Holding | ■ Low |
| □ National Jurisdiction Area | | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Archaeological and Cultural Heritage Sensitivities



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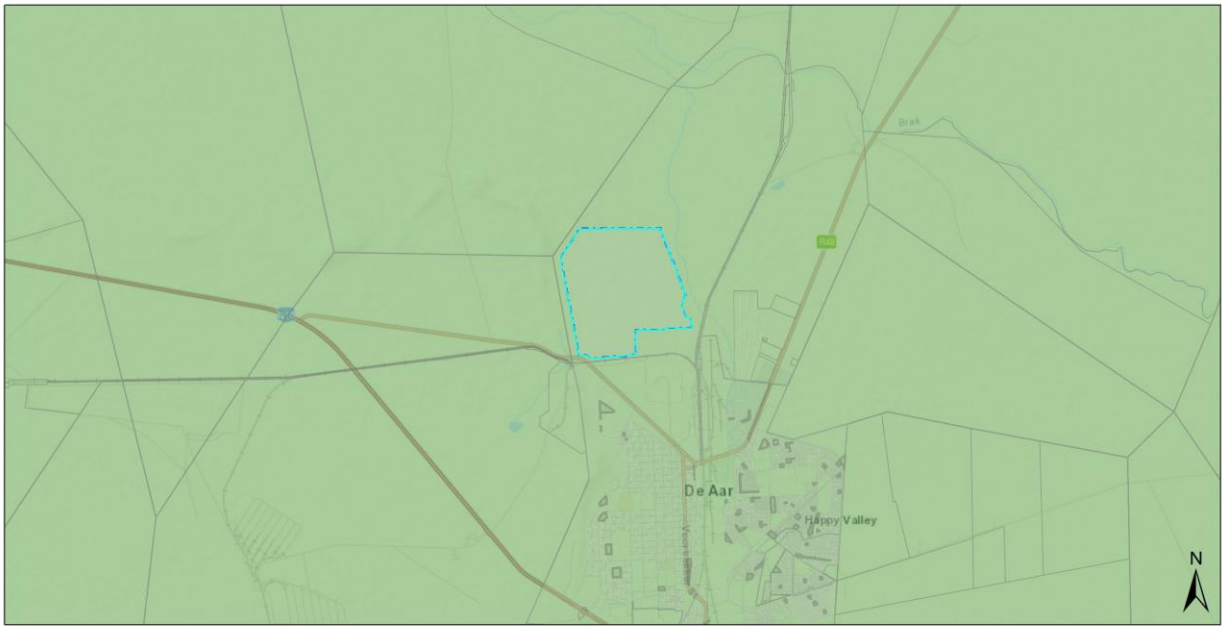
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| — Screening Tool | □ Erven | □ Public Place |
| ■ Site Area | □ Farm Portion | ■ Archaeological and Cultural Heritage Combined Sensitivity |
| ▨ EIA Application Development Footprint | □ Farm | ■ Very High |
| ■ EIA Application Site | □ Agri Holding | ■ High |
| □ National Jurisdiction Area | | ■ Low |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Avian Sensitivities



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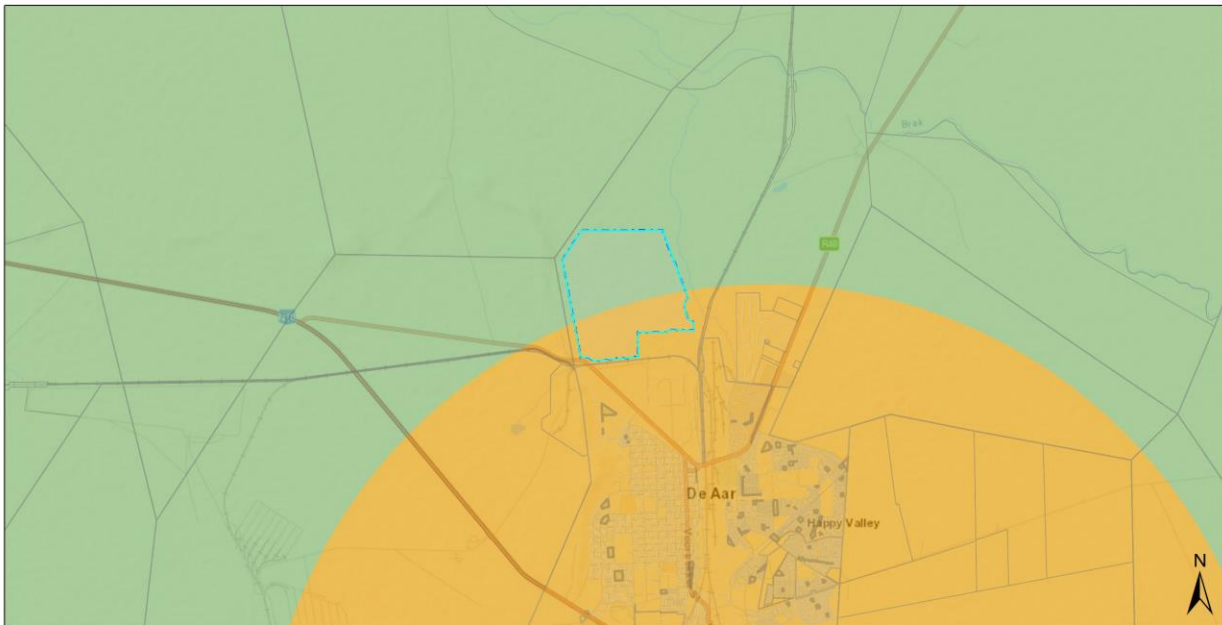
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|---|----------------|------------------------------|-------|
| — Screening Tool | □ Erven | □ Public Place | ■ Low |
| ■ Site Area | □ Farm Portion | ■ Avian Combined Sensitivity | |
| □ EIA Application Development Footprint | □ Farm | ■ Very High | |
| ■ EIA Application Site | □ Agri Holding | ■ High | |
| □ National Jurisdiction Area | | ■ Medium | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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Civil Aviation Sensitivities



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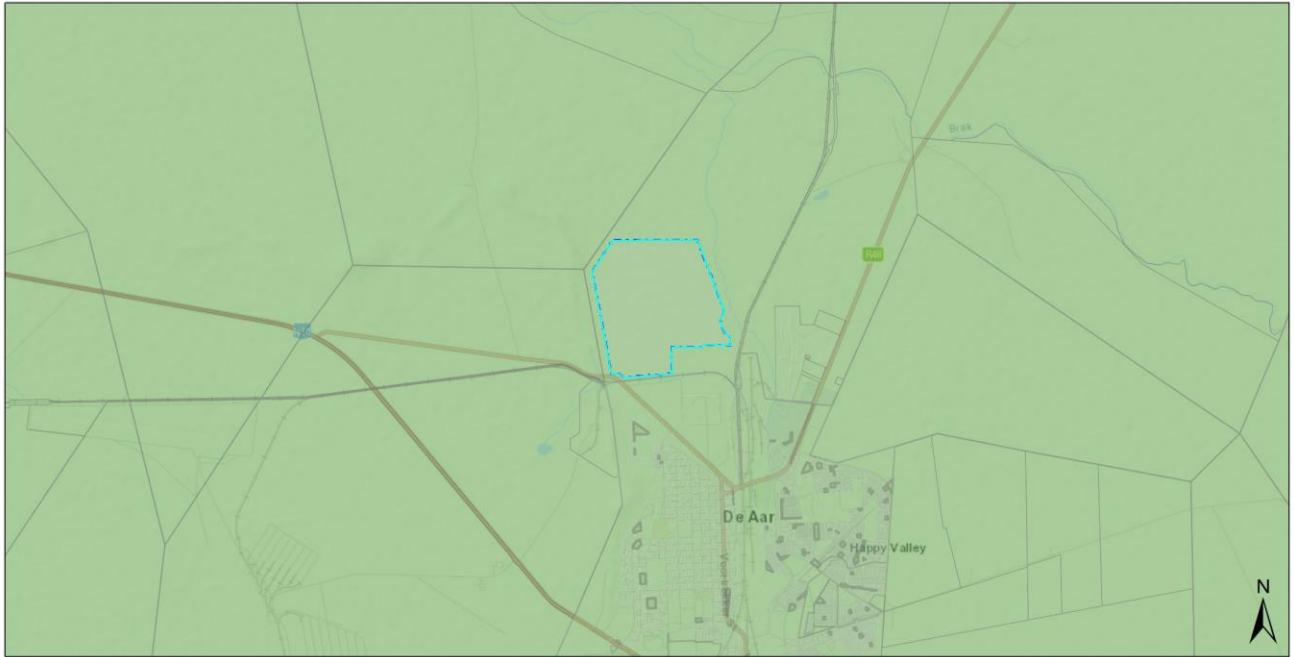
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|---|----------------|----------------|--|
| — Screening Tool | □ Erven | □ Public Place | ■ Civil Aviation (Solar PV) Combined Sensitivity |
| ■ Site Area | □ Farm Portion | ■ Medium | |
| □ EIA Application Development Footprint | □ Farm | ■ Low | |
| ■ EIA Application Site | □ Agri Holding | | |
| □ National Jurisdiction Area | | | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

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Defence Sensitivities



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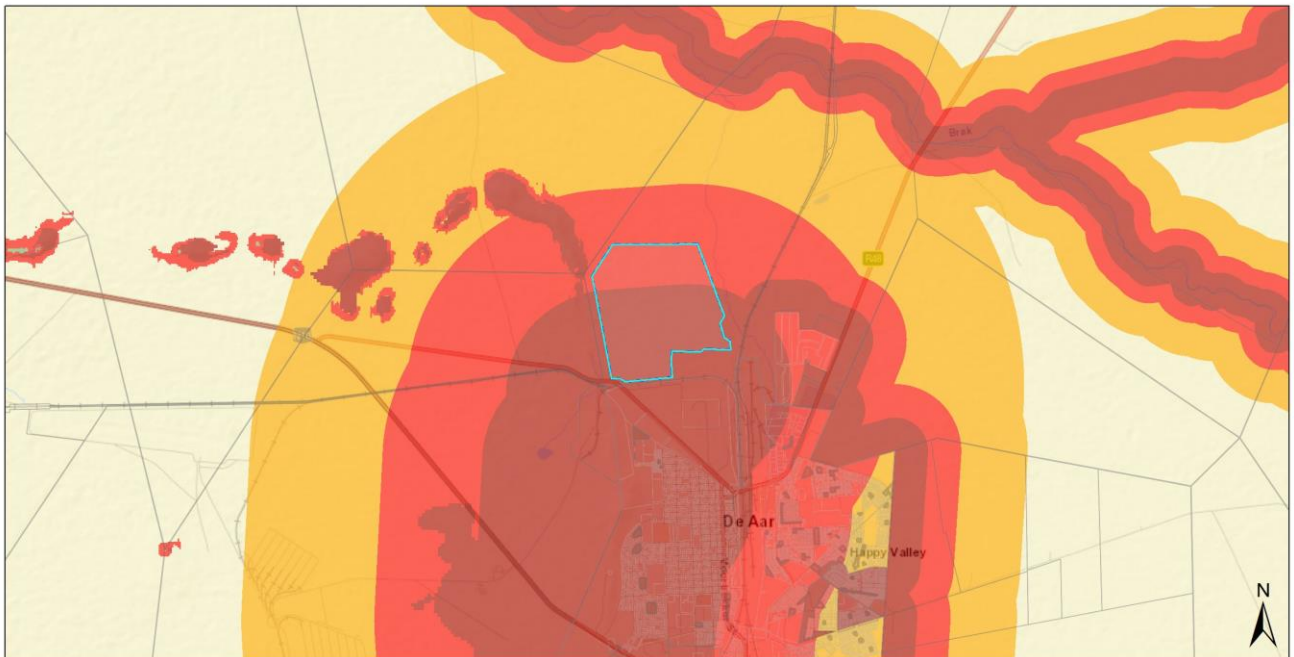
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- | | | |
|---|----------------|-------------------------------------|
| — Screening Tool | □ Erven | □ Public Place |
| ■ Site Area | □ Farm Portion | Defence Combined Sensitivity |
| □ EIA Application Development Footprint | □ Farm | ■ Very High |
| ■ EIA Application Site | □ Agri Holding | ■ Medium |
| □ National Jurisdiction Area | | ■ Low |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Landscape Sensitivities



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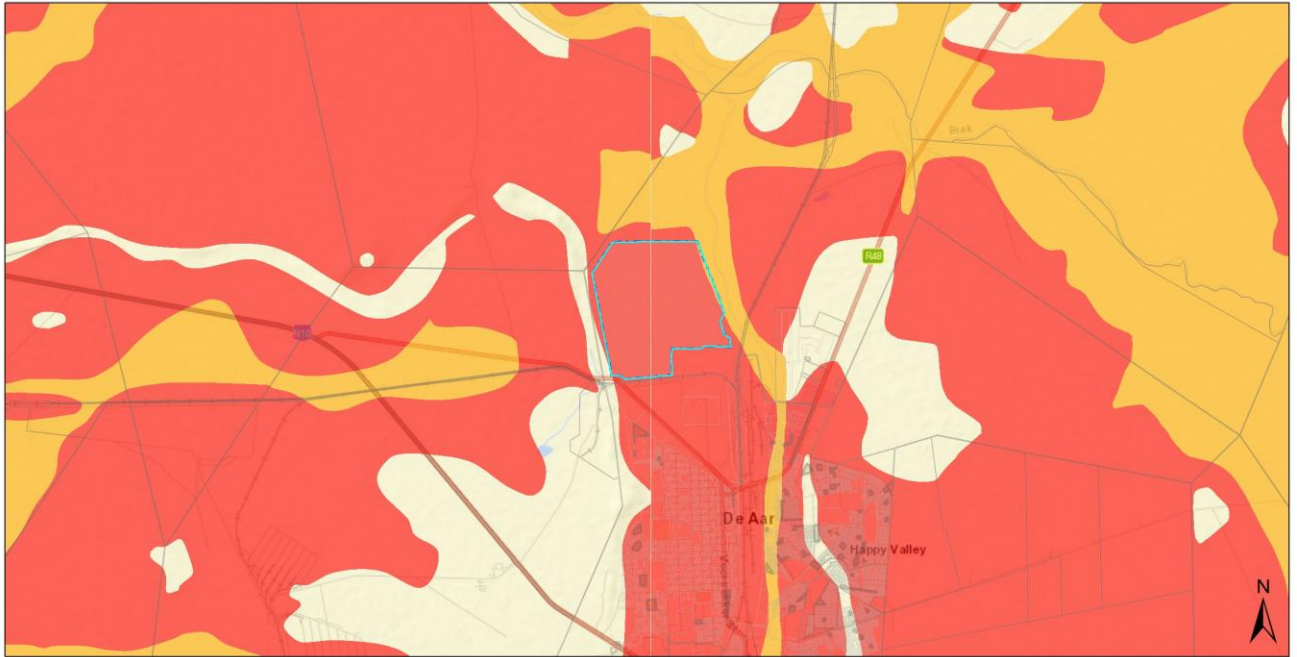
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- | | | | |
|---|----------------|---|-------|
| — Screening Tool | □ Erven | □ Public Place | ■ Low |
| ■ Site Area | □ Farm Portion | Landscape (Solar) Combined Sensitivity | |
| □ EIA Application Development Footprint | □ Farm | ■ Very High | |
| ■ EIA Application Site | □ Agri Holding | ■ High | |
| □ National Jurisdiction Area | | ■ Medium | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Palaeontological Sensitivities



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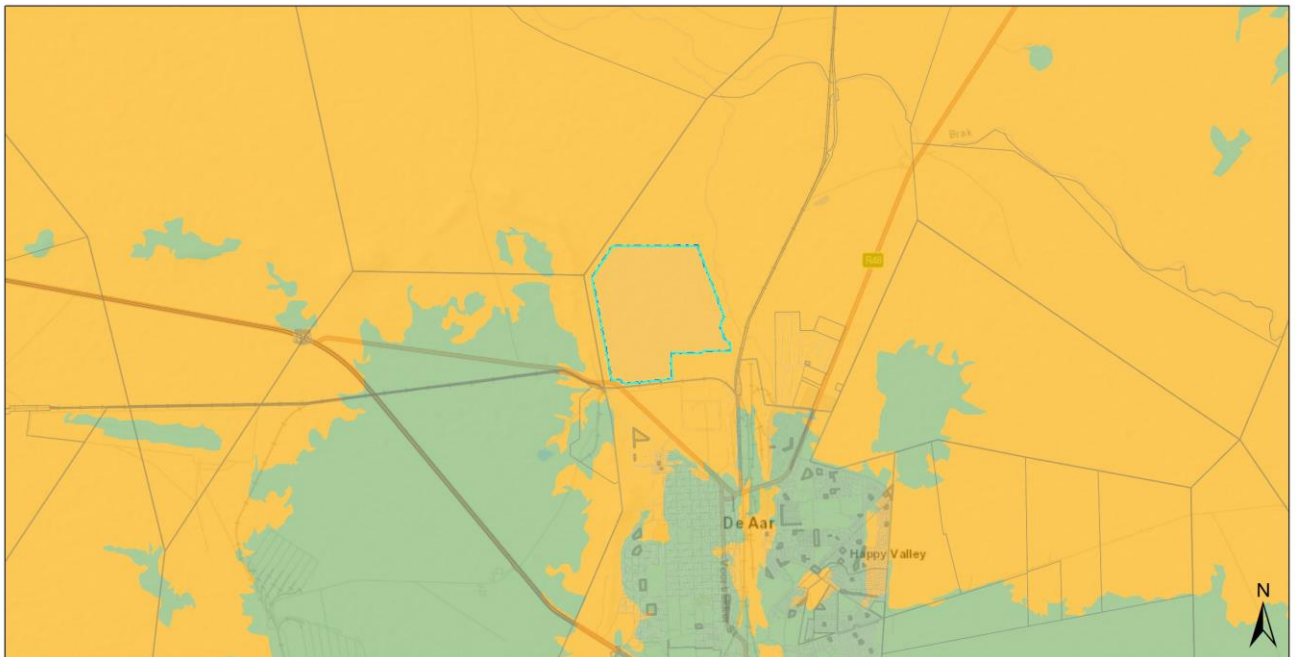
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|---------------------------------------|--------------|---|-----|
| Screening Tool | Erven | Public Place | Low |
| Site Area | Farm Portion | Palaeontology Combined Sensitivity | |
| EIA Application Development Footprint | Farm | Very High | |
| EIA Application Site | Agri Holding | High | |
| National Jurisdiction Area | | Medium | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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Plant Species Sensitivities



26 May 2023

Legend

- | | | | |
|---------------------------------------|--------------|---|-----|
| Screening Tool | Erven | Public Place | Low |
| Site Area | Farm Portion | Plant Species Combined Sensitivity | |
| EIA Application Development Footprint | Farm | Very High | |
| EIA Application Site | Agri Holding | High | |
| National Jurisdiction Area | | Medium | |

0 2.75 5.5 km
 Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

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SITE VERIFICATION TABLE

Specialist Assessment required	Confirmation if assessment was done or excluded	DFFE Screening Tool Sensitivity	EAP / Specialist Rating : Confirm or dispute the DFFE Screening Tool
Agricultural Impact Assessment	<p>An Agricultural Impact Statement is summarised in Chapter 4 and is included as Appendix C(4) of the Motivational Report.</p>	MEDIUM SENSITIVITY	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The Agricultural Impact Assessment completed in 2012 rated the significance of the agricultural impact as VERY LOW. This was because the site was found to have a low agricultural production potential due to the arid climate as well as restrictive soil characteristics. It has now been confirmed by the specialist that the current status of the site remains exactly as it was in the original assessment. Agricultural production potential is a function of climate, terrain and soils and cannot change significantly in the time period since the original assessment, or even in a much longer time period.</p> <p>The site is therefore confirmed as having a LOW agricultural sensitivity and is recommended for development.</p>
Landscape / Visual Impact Assessment	<p>A Visual Impact Statement is summarised in Chapter 4 and is included as Appendix C(6) of the Motivational Report.</p>	VERY HIGH	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The specialist confirmed the sensitivity as MEDIUM to LOW.</p> <p>Refer to Pages 6 and 7 of the Visual Impact Statement for the specialist's sensitivity verification.</p>

<p>Archaeological and Cultural Heritage Impact Assessment</p>	<p>A Heritage Impact Statement is summarised in Chapter 4 and is included as Appendix C(5) of the Motivational Report.</p>	<p>HIGH</p>	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The specialist concluded that the significance of potential impacts on archaeological resources will be VERY LOW NEGATIVE. No mitigation is required besides reporting of any chance finds and the impact significance post-mitigation is thus considered to also be VERY LOW NEGATIVE.</p> <p>The significance of the impacts to the landscape can be considered to be VERY LOW NEGATIVE. The original assessment also rated these impacts as VERY LOW NEGATIVE.</p>
<p>Palaeontology Impact Assessment</p>	<p>A Palaeontological Impact Statement is summarised in Chapter 4 and is included as Appendix C(5) of the Motivational Report.</p>	<p>HIGH</p>	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The significance of the impacts to palaeontology are considered to be LOW NEGATIVE. The original significance rating was low negative and no mitigation measures were proposed. The rating of low (rather than very low) is partly for precautionary reasons.</p>
<p>Terrestrial Biodiversity Impact Assessment</p>	<p>A Terrestrial Biodiversity Walkthrough Report & Impact Statement is summarised in Chapter 4 and is included as Appendix C(1) of the Motivational Report.</p>	<p>VERY HIGH</p>	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The ecological assessment conducted in 2012 concluded that the overall impacts of this proposed project are of LOW OR MODERATE significance. With mitigation measures implemented, it should be possible to reduce all negative impacts to LOW significance, except for the significance of impacts on natural vegetation, which remains medium. Relative to other parts of the country where similar assessments have been conducted, this site has LOW sensitivity and</p>

			<p>few conservation issues.</p> <p>The specialist confirmed that the initial impact rating undertaken during the initial assessment is still valid.</p>
Plant Species Assessment	<p>This component is addressed under the Terrestrial Biodiversity Walkthrough Report & Impact Statement is summarised in Chapter 4 and is included as Appendix C(1) of the Motivational Report.</p>	HIGH	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>The ecological assessment conducted in 2012 concluded that the overall impacts of this proposed project are of LOW OR MODERATE significance. With mitigation measures implemented, it should be possible to reduce all negative impacts to LOW significance, except for the significance of impacts on natural vegetation, which remains medium. Relative to other parts of the country where similar assessments have been conducted, this site has LOW sensitivity and few conservation issues.</p> <p>The specialist confirmed that the initial impact rating undertaken during the initial assessment is still valid.</p>
Animal Species Assessment	<p>This component is addressed under the Avifaunal Impact Statement summarised in Chapter 4 and is included as Appendix C(2) of the Motivational Report.</p> <p>The DFFE sensitivity classification for the animal theme is linked to avifauna, even though the separate</p>	HIGH	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>During the 2012 assessment the specialist rated the pre-mitigation significance as LOW-MEDIUM-HIGH and the residual impact significance as LOW-MEDIUM.</p> <p>The specialist confirmed that the initial impact rating undertaken during the initial assessment is still valid.</p>

	avian sensitivity is rated as LOW sensitivity.		
Aquatic Biodiversity Impact Assessment	An <i>Aquatic Impact Statement</i> is summarised in Chapter 4 and is included as Appendix C(3) of the Motivational Report.	VERY HIGH	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p> <p>In the January 2012 assessment of the aquatic features, the Sandsloot River that passes to the east of the site was deemed to be moderately modified and containing wetland habitat that was still in places largely natural. The features were considered of LOW ecological importance and sensitivity.</p> <p>The Screening Tool has indicated that the wider area in which the PV facility is proposed is mapped as being of very high Aquatic Biodiversity Combined Sensitivity. The very high sensitivity is linked to the Strategic Water Source Area for groundwater that has been identified in the wider area. The proposed project is unlikely to impact the Strategic Water Source Area.</p> <p>Given the fact that the approved PV site is located outside of the mapped aquatic features and no physical changes are proposed, the assessed impact rating is LOW with mitigation.</p>
Civil Aviation Assessment	No specialist input was proposed. The SA Civil Aviation Authority (SACAA) was however approached for comment on the Motivational Report,	MEDIUM	<p>EAP <u>disputes</u> the sensitivity rating</p> <p>The De Aar Military Airport is located 8,6km west of De Aar.</p>

			<p>The SA Civil Aviation Authority (SACAA) was approached for comment on the Motivational Report and any conditions of the CAA will form part of the EMPr that is being updated to include latest protocols and best practices.</p> <p>The EAP is confident that the PV solar farm will not impact negatively on any civil aviation activities and that potential proposed measures will not change the management outcome of the PV facility. The impact on civil aviation infrastructure should be LOW</p>
Defence Assessment	<p>The Defence Theme was rated as having a Low sensitivity, and therefore no specialist input is proposed.</p>	LOW	<p>EAP <u>confirms</u> the sensitivity rating</p> <p>The closest defence facility to the site is the South African Defence Department Ammunition Depot and School of Munitions, De Aar. This is situated 3,8km west of De Aar. The De Aar Military Airport is located 8,6km west of De Aar.</p> <p>The EAP is confident that the PV solar farm will not impact negatively on any defence activity. There is therefore no reason to dispute the rating of LOW.</p> <p>The South African Defence Department, care of the Ammunition Depot and School of Munitions De Aar was however approached for comment on the Motivational Report.</p>
RFI Assessment	<p>An <i>RFI Assessment</i> was done and is summarised in Chapter 5 and is</p>	VERY HIGH	<p>Specialist <u>disputes</u> the DFFE Screening Tool Rating</p>

included under Appendix D(2)) of this report.

According to the DFFE screening report there are two sensitivity features affected by the proposed PV facility. A telecommunications facility within 1km, listed as medium sensitivity, and a Weather Radar Installation less than 18km, listed as very high sensitivity. This means that there is a possibility that the proposed PV facility will interfere with existing electrical/electronic equipment or electrical/electronic infrastructure.

The RFI study concluded that the proposed PV facility will have no RFI influence on the potentially sensitive receivers. The impact significance is therefore LOW.

