

SITE VERIFICATION REPORT

21 April 2023

THE DEVELOPMENT OF THE PROPOSED
ACRUX SOLAR PV PROJECT ONE NEAR
BLOEMFONTEIN, FREE STATE PROVINCE



PROJECT DETAIL

DFFE Reference No's.	:	2023-04-0011
Project Title	:	Proposed Acrux Solar PV Project One near Bloemfontein, Free State Province
Authors	:	Ms. Mary-Jane Khanyile
Reviewed	:	Ms. Roschel Maharaj
Client	:	Acrux Solar PV Project One (Pty) Ltd
Report Status	:	Site Verification Report
Submission date	:	21 April 2023

When used as a reference this report should be cited as: Environamics (2023). Site Verification Report: Proposed Acrux Solar PV Project One near Bloemfontein, Free State Province.

COPYRIGHT RESERVED

This technical report has been produced for Acrux Solar PV Project One (Pty) Ltd. The intellectual property contained in this report remains vested in Environamics and Acrux Solar PV Project One (Pty) Ltd. No part of this report may be reproduced in any manner without written permission from Environamics or Acrux Solar PV Project One (Pty) Ltd.

TABLE OF CONTENTS

PROJECT DETAIL	2
TABLE OF CONTENTS	3
LIST OF FIGURES	4
LIST OF TABLES	4
1 INTRODUCTION	6
1.1 Specialist Assessments Identified by the Screening Report.....	6
2 SITE VERIFICATION PV FACILITY	7
2.1 Screening Tool Results for the PV Facility	7
2.2 Sensitivities of the Studies not Conducted as a Part of the S&EIR Process.....	10
2.3 Civil Aviation Theme	10
2.4 Defence Theme	11
2.5 RFI Theme.....	12
2.6 Site Verification	13
3 SITE VERIFICATION SUBSTATION	23
3.1 Screening Tool Results for the Substation	23
3.2 Sensitivities of the Studies not Conducted.....	25
3.3 Civil Aviation Theme	25
3.4 Defence Theme	26
3.5 Site Verification	27
4 SITE VERIFICATION POWERLINE	35
4.1 Screening Tool Results for the Powerline	35
4.2 Sensitivities of the Studies not Conducted.....	37
4.3 Civil Aviation Theme	37
4.4 Defence Theme	38
4.5 Site Verification	39
5 LAND USE	47
5.1 Current/ Verified Land Use.....	47
6 CONCLUSION	50

LIST OF FIGURES

Figure 2.1: Map of relative civil aviation (solar PV) theme sensitivity	Error! Bookmark not defined.
Figure 2.2: Map of relative defence theme sensitivity	Error! Bookmark not defined.
Figure 2.3: Map of relative RFI theme sensitivity	Error! Bookmark not defined.
Figure 3.1: Map of relative civil aviation theme sensitivity	Error! Bookmark not defined.
Figure 3.2: Map of relative defence theme sensitivity	Error! Bookmark not defined.
Figure 4.1: Map of relative civil aviation theme sensitivity	Error! Bookmark not defined.
Figure 4.2: Map of relative defence theme sensitivity	Error! Bookmark not defined.
Figure 5.1: The site (taken towards the north)	47
Figure 5.2: The site (taken towards the north east)	48
Figure 5.3: The site (taken towards the east)	48
Figure 5.4: The site (taken towards the south)	49
Figure 5.5: The site (taken towards the west)	49

LIST OF TABLES

Table 2.1: Specialist studies identified by the DFFE screening tool for the PV facility and specialist studies conducted	7
Table 2.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme	14
Table 2.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme	14
Table 2.4: Verification of DFFE Screening Report Ratings for the Aquatic Biodiversity Theme ...	15
Table 2.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Theme	16
Table 2.6: Verification of DFFE Screening Report Sensitivity Ratings for the Avian Theme	16
Table 2.7: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme	17
Table 2.8: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme	18
Table 2.9: Verification of DFFE Screening Report Sensitivity Ratings for the Landscape (Solar) Theme	19
Table 2.10: Verification of DFFE Screening Report Sensitivity Ratings for the Paleontological Theme	19
Table 2.11: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme	20
Table 2.12: Verification of DFFE Screening Report Sensitivity Ratings for the RFI Theme	21
Table 2.13: Verification of DFFE Screening Report Sensitivity Ratings for the RFI Theme	22
Table 3.1: Specialist studies identified by the DFFE screening tool for the substation and specialist studies conducted	23
Table 3.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme	28

Table 3.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme.....	28
Table 3.4: Verification of DFFE Screening Report Sensitivity Ratings for the Aquatic Biodiversity Theme.....	29
Table 3.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Heritage Theme	30
Table 3.6: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme	30
Table 3.7: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme	31
Table 3.8: Verification of DFFE Screening Report Sensitivity Ratings for the Palaeontology Theme	32
Table 3.9: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme	32
Table 3.10: Verification of DFFE Screening Report Sensitivity Ratings for the Terrestrial Theme	33
Table 4.1: Specialist studies identified by the DFFE screening tool for the powerline and specialist studies conducted.....	35
Table 4.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme	40
Table 4.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme.....	40
Table 4.4: Verification of DFFE Screening Report Sensitivity Ratings for the Aquatic Biodiversity Theme.....	41
Table 4.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Heritage Theme	42
Table 4.6: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme	42
Table 4.7: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme	43
Table 4.8: Verification of DFFE Screening Report Sensitivity Ratings for the Palaeontology Theme	44
Table 4.9: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme	45
Table 4.10: Verification of DFFE Screening Report Sensitivity Ratings for the Terrestrial Theme	45

1 INTRODUCTION

This Site Verification Report is compiled in compliance with Government Notice No. 320, dated 20 March 2020, which includes the requirement for an Initial Site Sensitivity Verification Report to be produced for a development footprint. The outcome of the Initial Site Verification must be recorded in the form of a report that-

- a) Confirms or disputes the current use of the land and environmental sensitivity as identified by the national web based environmental screening tool;
- b) Contains a motivation and evidence of either the verified or different use of the land and environmental sensitivity;
- c) Is submitted together with the relevant reports prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

1.1 Specialist Assessments Identified by the Screening Report

The DFFE Screening Tool Reports (Appendix B of the Scoping Report) identified the following specialist assessments to be included in the S&EIR processes:

1. Agricultural Impact Assessment
2. Animal Species Assessment
3. Aquatic Biodiversity Impact Assessment
4. Archaeological and Cultural Heritage Impact Assessment
5. Avian Impact Assessment
6. Civil Aviation Assessment
7. Defense Assessment
8. Landscape/Visual Impact Assessment
9. Paleontology Impact Assessment
10. Plant Species Assessment
11. RFI Assessment
12. Terrestrial Biodiversity Impact Assessment
13. Socio-economic Impact Assessment
14. Geotechnical Assessment

The tables included below provides an indication of the specialist studies identified by the DFFE Screening Tool Report for the various applicable categories, as well as an indication of whether the studies were undertaken or not and a motivation or confirmation of the studies being included or not.

2 SITE VERIFICATION PV FACILITY

2.1 Screening Tool Results for the PV Facility

Table 2.1: Specialist studies identified by the DFFE screening tool for the PV facility and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Comment and Appendix
<p>Agricultural Impact Assessment</p> <p>Sensitivity: High</p> <p>Feature(s): Old fields and potential for crop cultivation. Low to moderate land capability.</p>	Yes	An Agricultural Statement is included in Appendix E of the Scoping Report.
<p>Animal Species Assessment</p> <p>Sensitivity: Medium</p> <p>Feature(s): Presence of sensitive animal species i.e., Mammalia, <i>Hydrictis maculicollis</i></p>	Yes	An ecological scoping statement is included in Appendix E of the Scoping Report.
<p>Aquatic Biodiversity Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area lies in close proximity to a strategic water source area</p>	Yes	<p>An aquatic scoping statement is included in Appendix E.</p> <p>This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.</p>
<p>Archaeological and Cultural Heritage Impact Assessment</p> <p>Sensitivity: Low</p>	Yes	A Cultural Heritage desktop assessment is included in Appendix E of the Scoping Report, as per the requirements of the National Heritage Resources Act.
<p>Avian Impact Assessment</p> <p>Sensitivity: Low</p>	Yes	An Avifaunal scoping statement is included in Appendix E.

<p>Civil Aviation Assessment</p> <p>Sensitivity: Low</p> <p>Feature(s): No major or other types of civil aviation aerodromes have been identified</p>	<p>No</p>	<p>The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. No major or other types of civil aviation aerodromes were found to be located in close proximity of the site. The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date by the CAA regarding the project. The project is also not located within an area considered to be of a high sensitivity.</p>
<p>Defence Theme</p> <p>Sensitivity: Medium</p> <p>Feature(s): The site could potentially lie in close proximity to a defence site</p>	<p>No</p>	<p>The EAP disagrees with the sensitivity. No negative impacts are expected to occur on defence installations/sites and potential impacts will be site specific and can be mitigated.</p> <p>The South African National Defence Force (SANDF) has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project.</p>
<p>Landscape / Visual Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area lies within 1.5km of a nature reserve and is characterised by mountain tops and high ridges</p>	<p>Yes</p>	<p>A Visual Impact Assessment is included in Appendix E of the Scoping Report.</p>
<p>Palaeontological Impact Assessment</p>	<p>Yes</p>	<p>A Palaeontological screening assessment is included in Appendix</p>

<p>Sensitivity: Very High</p> <p>Feature(s): The project area may comprise features that have a very high paleontological sensitivity</p>		<p>E of the Scoping Report, as per the requirements of the National Heritage Resources Act.</p>
<p>Plant species Assessment</p> <p>Sensitivity: Medium</p> <p>Feature(s): The project area may comprise of 257 sensitivity species</p>	<p>Yes</p>	<p>An ecological scoping statement is included in Appendix E of the Scoping Report.</p>
<p>RFI Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area is located less than 18km from a Weather Radar Installation</p>	<p>No</p>	<p>The site verification is inconclusive as no desktop information could be sought. However, no negative impacts are expected to impact on weather radar installations. Impacts resulting from the proposed development are expected to occur within the project area and will be mitigated accordingly.</p> <p>The South African Radio Astronomy Observatory (SARAO) has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date by the SARAO regarding the project.</p>
<p>Terrestrial Biodiversity Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area comprises of a vulnerable ecosystem and Highlands Reserve</p>	<p>Yes</p>	<p>An ecological scoping statement is included in Appendix E of the Scoping Report.</p>
<p>Geotechnical Assessment</p> <p>Sensitivity: Not indicated</p>	<p>No</p>	<p>The detailed Geotechnical Assessment will be conducted before construction begins as part</p>

		of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern.
Socio-Economic Assessment Sensitivity: Not indicated	Yes	A Social Impact Assessment is included in Appendix E.

2.2 Sensitivities of the Studies not Conducted as a Part of the S&EIR Process

This section has been produced specifically to consider the Civil Aviation, Defence and RFI theme and addresses the content requirements of (a) and (b) listed in section 1 above.

The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern.

The sensitivities for the Civil Aviation, Defence and RFI themes associated with Acrux Solar PV Project One facility are as follows:

2.3 Civil Aviation Theme

The site sensitivity is classified as low for the solar PV facility as no major or other types of civil aviation aerodromes are present. Refer to Figure 2.1.

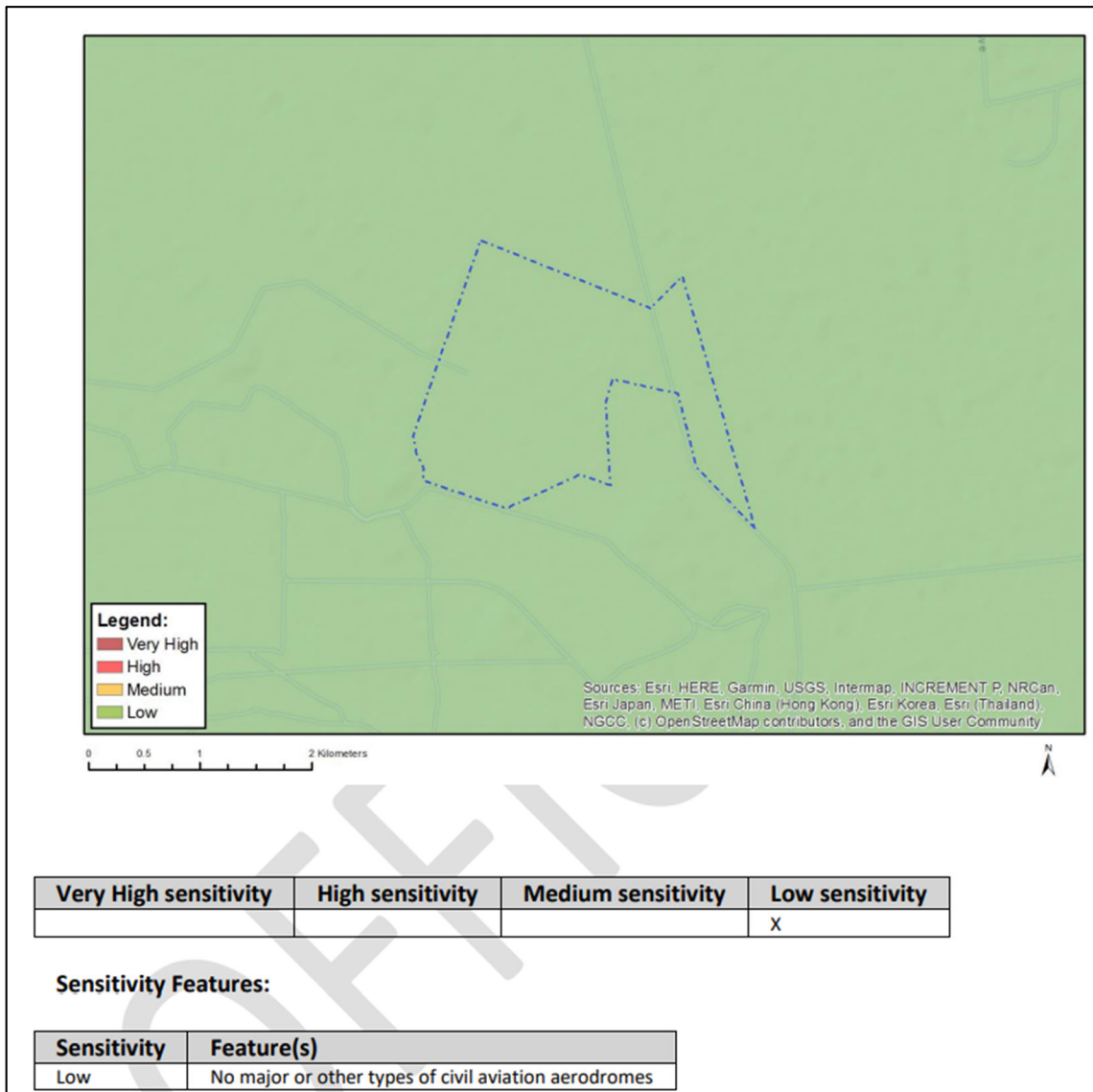


Figure 2.1: Map of relative civil aviation (solar PV) theme sensitivity

2.4 Defence Theme

The site sensitivity is classified as medium for the solar PV facility as a defense site may potentially be located in close proximity to the site. Refer to Figure 2.2.

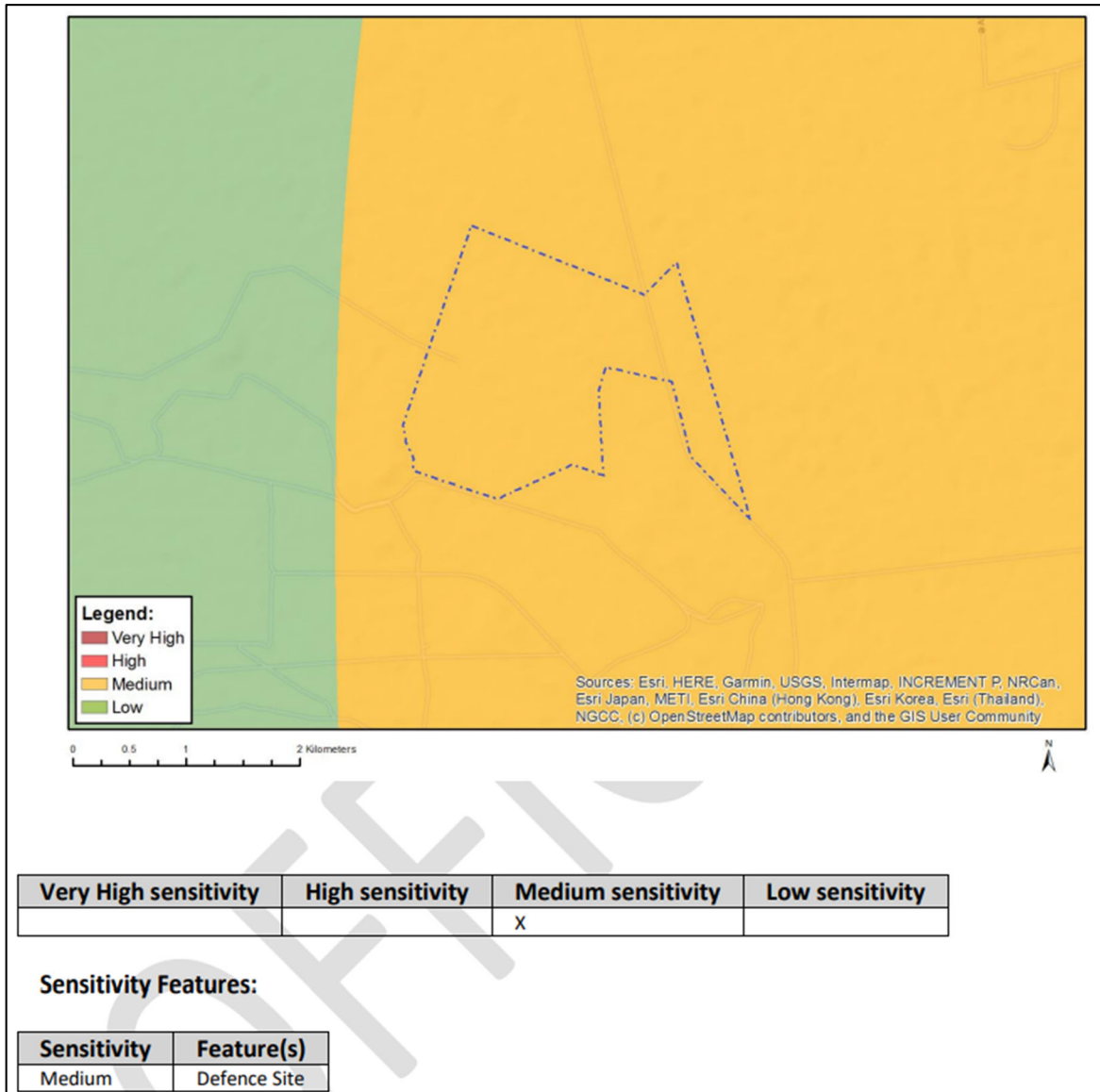


Figure 2.2: Map of relative defence theme sensitivity

2.5 RFI Theme

The site sensitivity is classified as very high for the solar PV facility, due to the project area potentially lying less than 18 km from a Weather Radar installation. Refer to Figure 2.3.

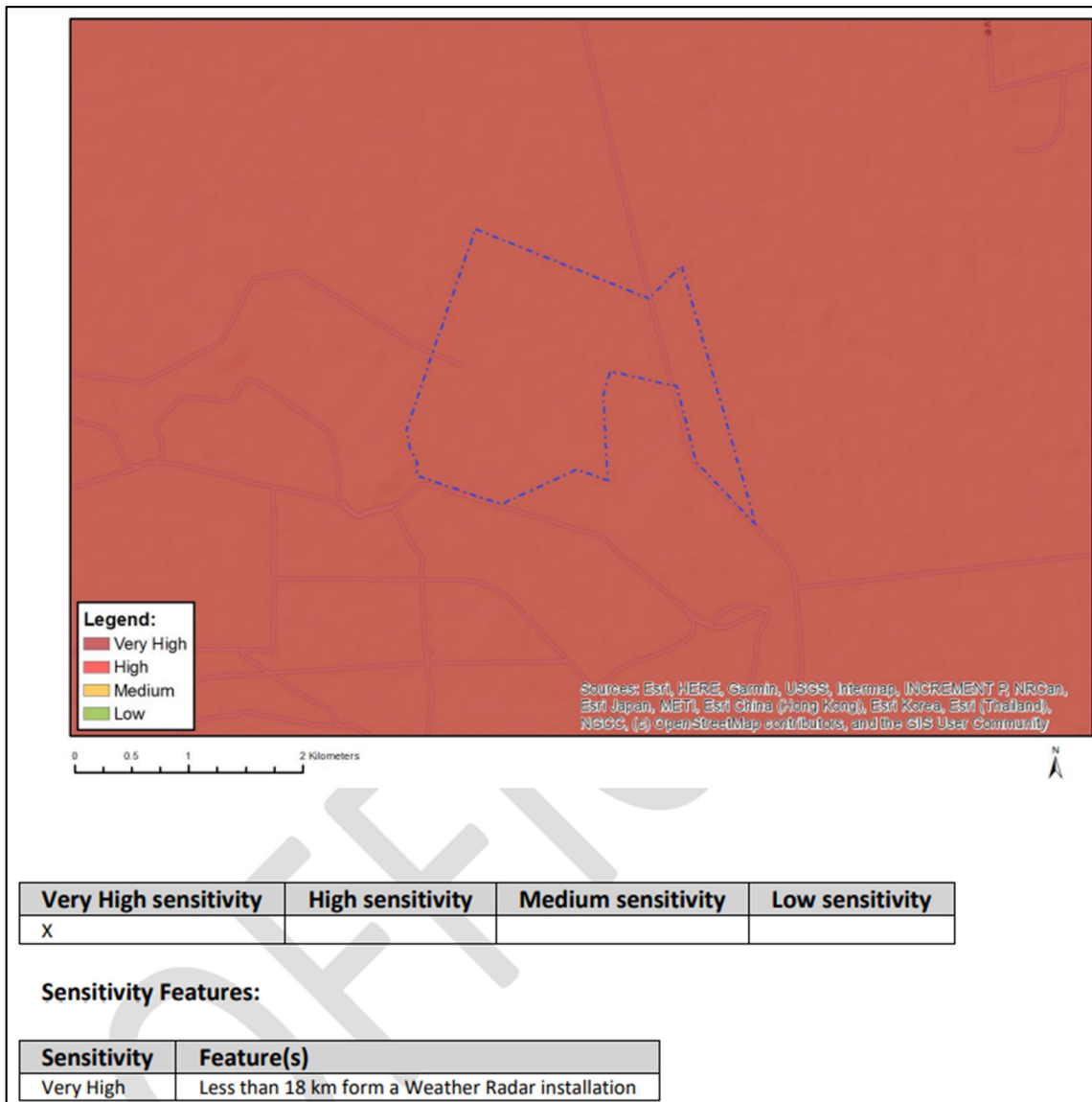


Figure 2.3: Map of relative RFI theme sensitivity

2.6 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report and provide feedback from the EAP.

2.6.1 Agriculture Theme

The site sensitivity is classified as high sensitivity, due to land capability and crop cultivation potential of the site.

Table 2.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>High</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as high sensitivity considering agriculture is disputed to by the EAP. The proposed site is used for cattle grazing as the area cannot support cultivation due to non-arable lands and climate limitations.</p> <p>An Agricultural Compliance Statement (Appendix E) have been provided for the site in accordance with the Protocols (G.NR 320). The compliance statement confirmed the sensitivity of the site as being low.</p>

2.6.2 Animal Species Theme

The site sensitivity is classified as medium, due to the potential occurrence of sensitive animal species i.e., *Mammalia-Hydrictis maculicollis*.

Table 2.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Low to Medium</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes</p>	<p><u>EAP Feedback</u></p> <p>Medium</p>	<p>The identification of the site as medium sensitivity considering animal species is agreed to by the EAP. This is based on the current land use of the site being used for game farming purposes.</p> <p>The majority of animals in the project site have been introduced into the area as the farm is being used form game farming purposes. The medium sensitivity should be</p>

<p>in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e. protocols for terrestrial plant and animal species)</p>		<p>retained as the potential exists that SCC or protected species can occur.</p> <p>A Terrestrial Biodiversity Compliance Statement (Appendix E) have been provided for the site which includes an animal species assessment site accordance with the Protocols (G.NR 1150).</p>
--	--	--

2.6.3 Aquatic Biodiversity Theme

The site sensitivity is classified as very high due to the project site being located in strategic water source area.

Table 2.4: Verification of DFFE Screening Report Ratings for the Aquatic Biodiversity Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very High</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>	<p><u>EAP Feedback</u></p> <p>Medium</p>	<p>The identification of the site as Very High sensitivity considering Aquatic Biodiversity is disputed to by the EAP. This is based on site inspection and desktop assessment.</p> <p>No wetlands or riparian features were identified within the project footprint. The desktop assessment confirmed that there are no NFEPA wetlands located on or in close proximity to the project site. The proposed facility will have negligible to no influence on the ground water systems associated with the strategic water source area.</p> <p>However, due to the DFFE screening tool identifying the site as Very High Sensitivity a Wetland Baseline and Risk Assessment (Appendix E) must be conducted for the project.</p>

2.6.4 Archaeological and Cultural Heritage Theme

The site sensitivity is classified as low.

Table 2.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as low sensitivity considering Archaeological and Cultural Heritage is agreed to by the EAP. This is based desktop assessment and site inspection.</p> <p>No sites or features of cultural or heritage significance were identified on the project site through review of satellite imagery and site inspection.</p> <p>A Phase 1 Cultural and Heritage Impact Assessment (Appendix E) was conducted to ensure that no Cultural or Heritage features are missed on site. The assessment confirmed the low sensitivity rating as no sites, features or object of cultural significance were identified.</p>

2.6.5 Avian Theme

The site sensitivity is classified as low.

Table 2.6: Verification of DFFE Screening Report Sensitivity Ratings for the Avian Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>Specialist assessment must be conducted in</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as low sensitivity considering Avifauna is agreed to by the EAP. This is based desktop assessment and site inspection.</p>

<p>accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>		<p>An Avifaunal Impact Assessment (Appendix E) has been conducted for the site. The specialist confirmed the presence of Cape Vultures within the project area of influence; however the site was given a medium sensitivity rating due to limited opportunities for foraging and water resources.</p>
--	--	--

2.6.6 Civil Aviation Theme

The site sensitivity is classified as low.

Table 2.7: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Low</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as low sensitivity considering civil aviation is agreed to by the EAP. No major or other types of civil aviation aerodromes have been found to be located in close proximity to the site.</p> <p>The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process.</p>

Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.		
--	--	--

2.6.7 Defence Theme

The site sensitivity is classified as medium, as a defense base could be in a close proximity from the proposed area.

Table 2.8: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme

Identified Sensitivity		Comment
DFFE Screening Report	EAP Feedback	
Medium As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.	Low	The sensitivity for the entire extent of the site is medium as the closest military operations are the Tempe Military Base located ~9.4km north of the affected property. The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and comment. No comments have been received as part of the public participation process.

2.6.8 Landscape (Solar) Theme

The site sensitivity is classified as high to very high for the solar PV facility, majority of the site is very high due the property potentially lying within 1.5 km from a nature reserve and is characterized by mountain tops and high ridge as well as slope between 1:4 and 1:10.

Table 2.9: Verification of DFFE Screening Report Sensitivity Ratings for the Landscape (Solar) Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Landscape is disputed by the EAP. This is based on the overall low visual impact that the solar facility will have on the surrounding landscape and the relatively short powerline route. A Visual Impact Assessment (Appendix E) have been conducted for the site.</p>

2.6.9 Palaeontology Theme

The site sensitivity is classified as high to very high for the solar PV facility, due to the potential of features with very high paleontological sensitivity.

Table 2.10: Verification of DFFE Screening Report Sensitivity Ratings for the Paleontological Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>As no specific assessment protocol has been prescribed,</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Palaeontology is disputed by the EAP.</p>

<p>the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>		<p>A Palaeontological Impact Assessment (Appendix E) have been conducted for the project.</p>
--	--	---

2.6.10 Plant Species Theme

The site sensitivity is classified as low to medium for the solar PV facility, due to the site potentially housing 257 sensitive species.

Table 2.11: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u> Medium Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying</p>	<p><u>EAP Feedback</u> Low</p>	<p>The identification of the site as medium sensitivity considering plant species is agreed to by the EAP.</p> <p>The site inspection indicated that the area is sensitive to species 527 due to the cattle grazing activities taking place on site. Refer to Figure 5.1–5.5 for photographs of the site under assessment.</p> <p>The Terrestrial Plant Species Compliance Statement (Appendix E) will be provided for the site accordance with the Protocols (G.NR 1150).</p>

For Environmental Authorisation, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e., protocols for terrestrial plant and animal species		
--	--	--

2.6.11 RFI (radio Frequency Interference) Theme

The site sensitivity is classified as very high for the solar PV facility, due to the property potentially lying less than 18 km from a Weather Radar installation.

Table 2.12: Verification of DFFE Screening Report Sensitivity Ratings for the RFI Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The site verification screening report indicates that a Weather Radar installation Facility lies less than 18 km of the proposed development. However, the site verification is inconclusive as no desktop information could be sought. No negative impacts are expected to impact on weather radar installations. Impacts resulting from the proposed development are expected to occur within the project area and will be mitigated accordingly.</p> <p>The South African Radio Astronomy Observatory (SARAO) have been consulted regarding the development of the project and the Scoping Report has been circulated to SARAO for review and commenting. No comment has been received from SARAO to date.</p>

2.6.12 Terrestrial Biodiversity Theme

The site sensitivity is classified as high to very high, due to the presence of vulnerable ecosystem and Highlands Reserve.

Table 2.13: Verification of DFFE Screening Report Sensitivity Ratings for the RFI Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e. protocols for terrestrial plant and animal species)</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Terrestrial Biodiversity is disputed by the EAP. This is based on the current land use of the site being used for grazing and site inspection.</p> <p>The Terrestrial Biodiversity Specialist Assessment (Appendix E) have been provided for the site accordance with the Protocols (G.NR320)</p>

3 SITE VERIFICATION SUBSTATION

3.1 Screening Tool Results for the Substation

Table 3.1: Specialist studies identified by the DFFE screening tool for the substation and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Appendix
<p>Agricultural Impact Assessment</p> <p>Sensitivity: High</p> <p>Feature(s): Old fields and potential for crop cultivation Low to moderate land capability</p>	Yes	An Agricultural Statement is included in Appendix E of the Scoping Report.
<p>Animal Species Assessment</p> <p>Sensitivity: Medium</p> <p>Feature(s): Presence of sensitive animal species i.e., Mammalia, <i>Hydrictis maculicollis</i></p>	Yes	An ecological scoping statement is included in Appendix E of the Scoping Report.
<p>Aquatic Biodiversity Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area lies in close proximity to a strategic water source area</p>	Yes	<p>An aquatic scoping statement is included in Appendix E.</p> <p>This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.</p>
<p>Archaeological and Cultural Heritage Impact Assessment</p> <p>Sensitivity: Low</p>	Yes	A Cultural Heritage desktop assessment included in Appendix E of the Scoping Report, as per the requirements of the National Heritage Resources Act.
<p>Civil Aviation Assessment</p> <p>Sensitivity: High</p>	No	The site is located within a high sensitivity, indicating a dangerous and restricted airspace as demarcated according to the screening tool report. However, it

<p>Feature(s): dangerous and restricted airspace as demarcated</p>		<p>is not anticipated that the proposed activities will cause interference with civil aviation aerodromes located at a fair distance away.</p> <p>The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date by the CAA regarding the project.</p>
<p>Defence Theme</p> <p>Sensitivity: Very high</p> <p>Feature(s): The site lies in close proximity to a defence site</p>	<p>No</p>	<p>The sensitivity for the entire extent of the site is medium to very high. Defence base has been found to be located in close proximity to the project site. However, no negative impacts are expected to occur on defence installations/sites/bases and potential impacts will be site specific and can be mitigated.</p> <p>The South African National Defence Force (SANDF) has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project.</p>
<p>Palaeontological Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature (s): The project area may comprise features that have a very high paleontological sensitivity</p>	<p>Yes</p>	<p>A Palaeontological screening assessment is included in Appendix E of the Scoping Report, as per the requirements of the National Heritage Resources Act.</p>
<p>Plant species Assessment</p> <p>Sensitivity: Medium</p>	<p>Yes</p>	<p>An ecological scoping statement is included in Appendix E of the Scoping Report.</p>

Feature(s): The project area may comprise of 257 sensitivity species		
Terrestrial Biodiversity Impact Assessment Sensitivity: Very High Feature(s): The project area comprises of a vulnerable ecosystem and Highlands Reserve	Yes	An ecological scoping statement is included in Appendix E of the Scoping Report.

3.2 Sensitivities of the Studies not Conducted

This section has been produced specifically to consider the Civil Aviation and Defence themes and addresses the content requirements of (a) and (b) in section 1 above.

The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern.

The sensitivities for the Civil Aviation and Defence themes associated with Acrux Solar PV Project One substation facility are as follows:

3.3 Civil Aviation Theme

The site sensitivity is classified as high for the substation category. According to the Screening Tool Report the site is a dangerous and restricted airspace as demarcated within the civil aerodromes. Refer to Figure 3.1.

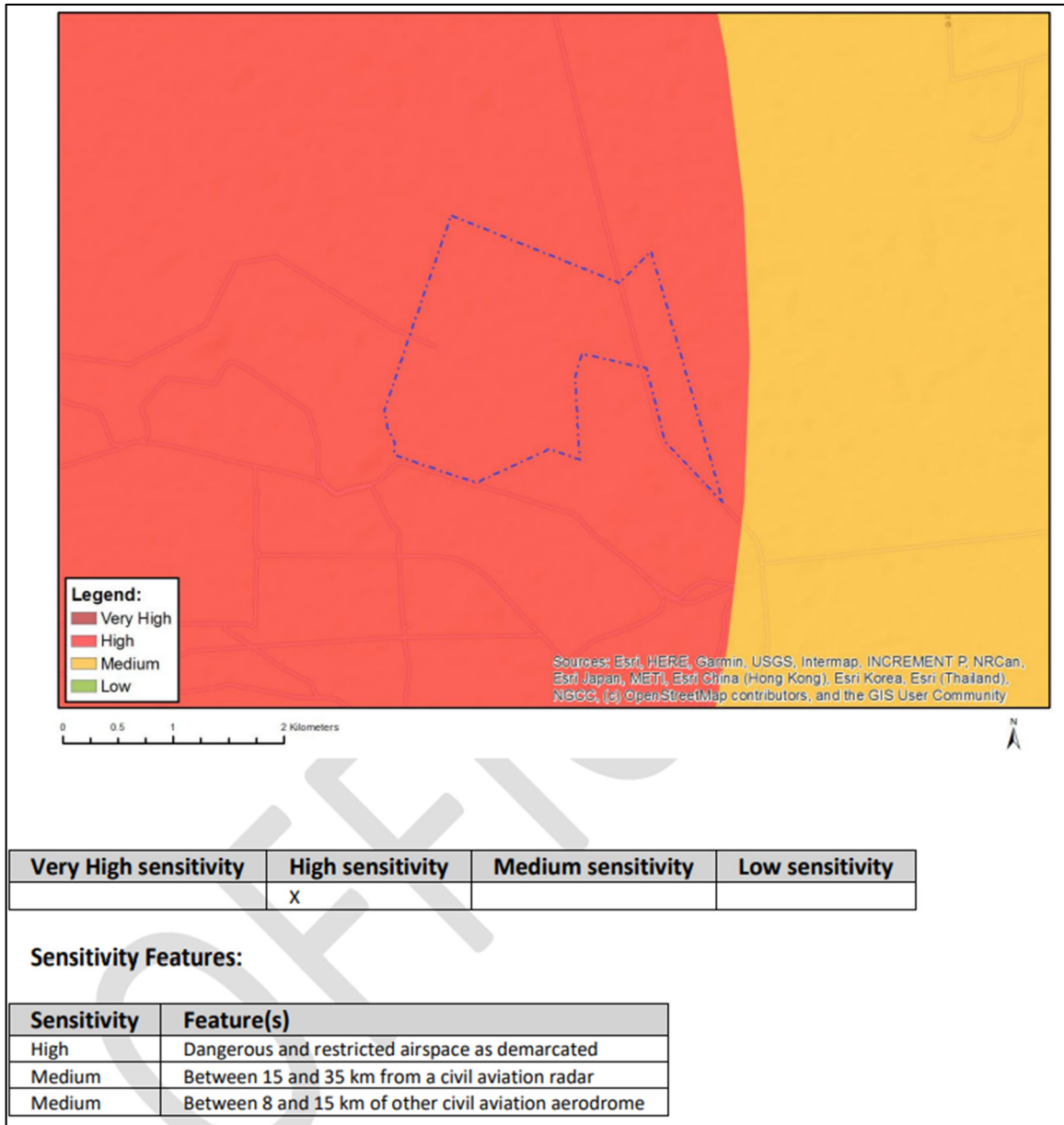


Figure 3.1: Map of relative civil aviation theme sensitivity

3.4 Defence Theme

The site sensitivity is classified as medium to very high for the substation as a military/defence site has been identified in close proximity to the site. Refer to Figure 3.2.

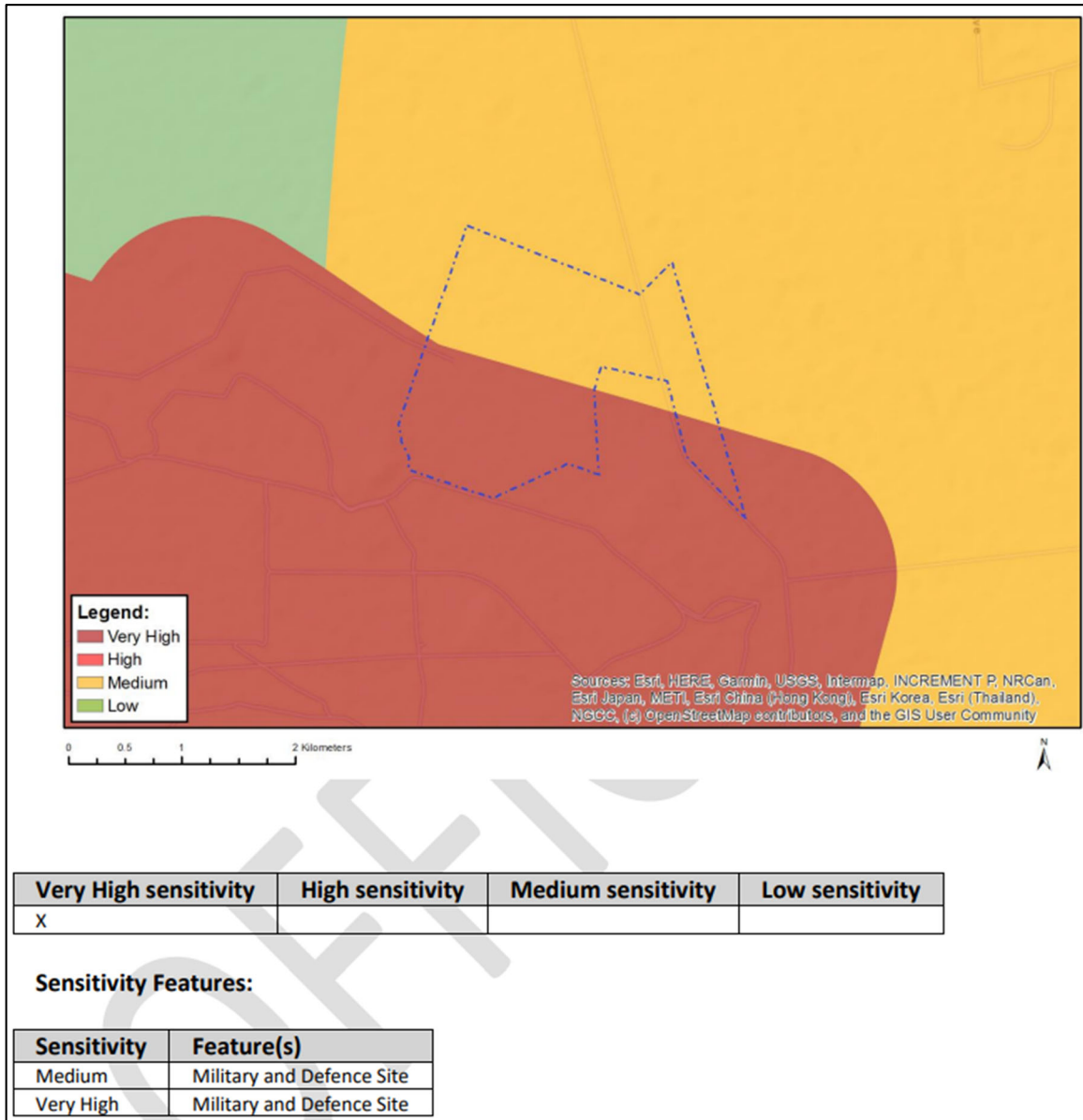


Figure 3.2: Map of relative defence theme sensitivity

3.5 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report on studies that were not undertaken and provide feedback from the EAP.

3.5.1 Agricultural Theme

The site sensitivity is classified as medium to high sensitivity. The medium sensitivity features a land capability;06. Low-Moderate/07.Low-Moderate/0.8Moderate. A high sensitivity features an old field:Land capability;06. Ver low/02. Very low/03. Low-_very low/04. Low-Very low/05. Low.

Table 3.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>High</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as high sensitivity considering agriculture is disputed to by the EAP. This is based on the current land use of the site being used for cattle grazing purposes.</p> <p>The proposed site is used for cattle grazing as the area cannot support cultivation due to non-arable lands and climate limitations.</p> <p>An Agricultural Compliance Statement (Appendix E) have been provided for the site in accordance with the Protocols (G.NR 320). The compliance statement confirmed the sensitivity of the site as being low.</p>

3.5.2 Animal Species Theme

The site sensitivity is classified as medium, due to the potential occurrence of sensitive animal species i.e., *Mammalia-Hydriectis maculicollis*

Table 3.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Medium</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as medium sensitivity considering animal species is agreed to by the EAP. This is based on the current land use of the site being used for cattle grazing purposes.</p> <p>The majority of animals in the project site have been introduced into the area as the farm is being used for gazing purposes. The</p>

Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.		<p>high sensitivities evidence of existing SCC or protected species occurrence on site.</p> <p>A Terrestrial Animal Species Specialist Assessment Report (Appendix E) have been provided for the site which includes an animal species assessment site accordance with the Protocols (G.NR1150</p>
--	--	--

3.5.3 Aquatic Biodiversity Theme

The site sensitivity is classified as very high due to the project site being located in strategic water source area.

Table 3.4: Verification of DFFE Screening Report Sensitivity Ratings for the Aquatic Biodiversity Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very High</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Aquatic Biodiversity is disputed to by the EAP. This is based on site inspection and desktop assessment.</p> <p>No wetlands or riparian features were identified within the project footprint. The desktop assessment confirmed that there are no NFEPA wetlands located on or in close proximity to the project site. The proposed facility will have negligible to no influence on the ground water systems associated with the strategic water source area.</p> <p>However, due to the DFFE screening tool identifying the site as Very High Sensitivity a Wetland Baseline and Risk Assessment (Appendix E) will be conducted for the project.</p>

3.5.4 Archaeological and Cultural Heritage Theme

The site sensitivity is classified as low.

Table 3.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Heritage Theme

Identified Sensitivity		Comment
DFFE Screening Report	EAP Feedback	
Low	Low	
Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.		<p>The identification of the site as low sensitivity considering Archaeological and Cultural Heritage is agreed to by the EAP. This is based desktop assessment and site inspection.</p> <p>No sites or features of cultural or heritage significance were identified on the project site through review of satellite imagery and site inspection.</p> <p>A Phase 1 Cultural and Heritage Impact Assessment (Appendix E) was conducted to ensure that no Cultural or Heritage features are missed on site.</p>

3.5.5 Civil Aviation Theme

The site sensitivity is classified as high, due to the property lying between 8 and 15 km of other civil aviation aerodrome and/ or between 15 and 35km from a civil aviation radar. The high sensitivity areas are dangerous and restricted airspace as demarcated.

Table 3.6: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme

Identified Sensitivity		Comment
DFFE Screening Report	EAP Feedback	
High	Low	
		The civil aviation theme was identified as high sensitivity for the solar PV theme as per section 2 above. The proposed development is not expected to result in

<p>There is low potential for negative impacts on the civil aviation theme, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts will not be required.</p>		<p>unacceptable negative impacts on civil aviation.</p> <p>The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process.</p> <p>The CAA has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
--	--	---

3.5.6 Defence Theme

The site sensitivity is classified as very high, as a defence base is in a close proximity from the proposed area.

Table 3.7: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very High</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The sensitivity for the entire extent of the site is ranges from medium to very high assessment has been included. The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments have been received as part of the public participation process. The SANDF has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>

specialist assessment is required.		
------------------------------------	--	--

3.5.7 Palaeontology Theme

The site sensitivity is classified as medium to very high for the solar PV facility, due to the potential to have features with medium paleontological and very high paleontological sensitivity.

Table 3.8: Verification of DFFE Screening Report Sensitivity Ratings for the Palaeontology Theme

Identified Sensitivity		Comment
<u>DFFE Screening Report</u> Very High As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.	<u>EAP Feedback</u> Low	The identification of the site as very high sensitivity considering Palaeontology is disputed by the EAP. A Palaeontological Impact Assessment (Appendix E) have been conducted for the project.

3.5.8 Plant Species Theme

The site sensitivity is classified as low to medium very high for the solar PV facility, due to the species 257 in the project area.

Table 3.9: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme

Identified Sensitivity	Comment
------------------------	---------

<p><u>DFFE Screening Report</u></p> <p>Medium</p> <p>Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying For Environmental Authorisation, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e., protocols for terrestrial plant and animal species</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as medium sensitivity considering plant species is agreed to by the EAP.</p> <p>The site inspection indicated that the area is sensitive to species 527 due to the cattle grazing activities taking place on site. Refer to Figure 5.1–5.5 for photographs of the site under assessment.</p> <p>The Terrestrial Plant Species Compliance Statement (Appendix E) will be provided for the site accordance with the Protocols (G.NR 1150).</p>
---	---	--

3.5.9 Terrestrial Theme

The site sensitivity is classified as low to very high, due to the presence of Vulnerable ecosystem Highlands Reserve.

Table 3.10: Verification of DFFE Screening Report Sensitivity Ratings for the Terrestrial Theme

Identified Sensitivity	Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with</p>	<p><u>EAP Feedback</u></p> <p>Low</p> <p>The identification of the site as very high sensitivity considering Terrestrial Biodiversity is disputed by the EAP. This is based on the current land use of the site being used for gazing and site inspection.</p> <p>The Terrestrial Biodiversity Specialist Assessment (Appendix E) have been provided for the site accordance with the Protocols (G.NR320)</p>

<p>Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 when applying for Environmental Authorisation, which were promulgated in Government Notice No.1150 of 30 October 2020 (i.e. protocols for terrestrial plant and animal species</p>		
--	--	--

4 SITE VERIFICATION POWERLINE

4.1 Screening Tool Results for the Powerline

Table 4.1: Specialist studies identified by the DFFE screening tool for the powerline and specialist studies conducted

Study identified in the DFFE Screening Tool and sensitivity	Study included?	Appendix
<p>Agricultural Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): . Pivot irrigation and low to moderate land capability</p>	Yes	An Agricultural Statement is included in Appendix E of the Scoping Report.
<p>Animal Species Assessment</p> <p>Sensitivity: Medium</p> <p>Feature(s): Presence of sensitive animal species i.e., Mammalia, <i>Hydrictis maculicollis</i></p>	Yes	An ecological scoping statement is included in Appendix E of the Scoping Report.
<p>Aquatic Biodiversity Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area lies in close proximity to a strategic water source area</p>	Yes	<p>An aquatic scoping statement is included in Appendix E.</p> <p>This assessment has been undertaken in terms of the Protocols of GNR320 – refer to the content of the report.</p>
<p>Archaeological and Cultural Heritage Impact Assessment</p> <p>Sensitivity: Low</p>	Yes	A Cultural Heritage desktop assessment included in Appendix E of the Scoping Report, as per the requirements of the National Heritage Resources Act.
<p>Civil Aviation Assessment</p> <p>Sensitivity: High</p>	No	The majority of the powerline route is located within medium sensitivity, while only a small portion of the route intrudes into a high sensitivity. It is not anticipated that the proposed activities will

<p>Feature(s): The site is potentially located between 8 and 15 km of other civil aviation aerodromes</p>		<p>cause interference with civil aviation aerodromes located at a fair distance away.</p> <p>The Civil Aviation Authority has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date by the CAA regarding the project.</p>
<p>Defence Theme</p> <p>Sensitivity: Very high</p> <p>Feature(s): The site lies in close proximity to a military and defence site</p>	<p>No</p>	<p>The sensitivity for majority of the powerline route is of medium sensitivity, while only a small portion of the route intrudes into a high sensitivity area. Defence base has been found to be located in close proximity to the project site. However, no negative impacts are expected to occur on defence installations/sites/bases and potential impacts will be site specific and can be mitigated.</p> <p>The South African National Defence Force (SANDF) has been consulted regarding the development of the project since the commencement of the S&EIR Process. No specific negative impacts or issues have been raised to date regarding the project.</p>
<p>Palaeontological Impact Assessment</p> <p>Sensitivity: Very High</p> <p>Feature(s): The project area may comprise features that have a very high paleontological sensitivity</p>	<p>Yes</p>	<p>A Palaeontological screening assessment is included in Appendix E of the Scoping Report, as per the requirements of the National Heritage Resources Act.</p>
<p>Plant species Assessment</p> <p>Sensitivity: Medium</p>	<p>Yes</p>	<p>An ecological scoping statement is included in Appendix E of the Scoping Report.</p>

Feature(s): The project area may comprise of 257 sensitivity species		
Terrestrial Biodiversity Impact Assessment Sensitivity: Very High Feature(s): The project is located in a vulnerable ecosystem	Yes	An ecological scoping statement is included in Appendix E of the Scoping Report.

4.2 Sensitivities of the Studies not Conducted

This section has been produced specifically to consider the Civil Aviation and Defence themes and addresses the content requirements of (a) and (b) above.

The remaining required specialist studies have been undertaken as part of the Scoping and Environmental Impact Reporting (S&EIR) process as listed in the DFFE Screening Tool Reports. The only study not considered as relevant is the Geotechnical Assessment which will only be undertaken before construction begins as part of the micro-siting of the facility layout. The consideration of geotechnical aspects is considered to be of a technical concern rather than an environmental concern.

The sensitivities for the Civil Aviation and Defence themes associated with Acrux Solar PV Project One powerline are as follows:

4.3 Civil Aviation Theme

The site sensitivity is classified as medium to high for the powerline category. According to the Screening Tool Report the site is medium due to potentially being located between 8 and 15 km of other civil aviation aerodromes and also between 15 and 35 km from civil aviation radar. High sensitivity indicated a dangerous and restricted airspace as demarcated. Refer to Figure 4.1.

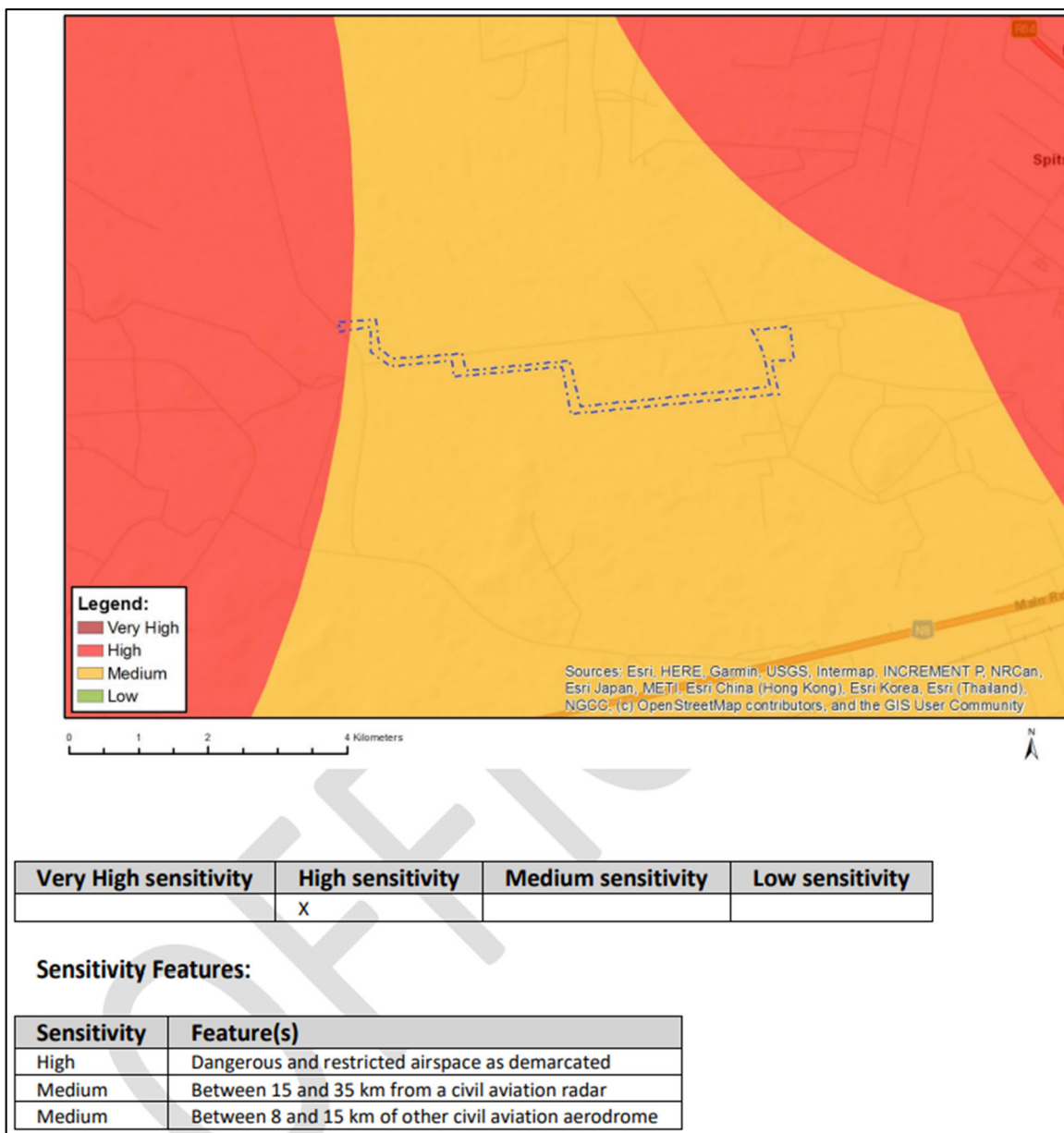


Figure 4.1: Map of relative civil aviation theme sensitivity

4.4 Defence Theme

The site sensitivity is classified as medium to very high for the powerline category as military and defense base has been identified in close proximity to the site. Refer to Figure 4.2.

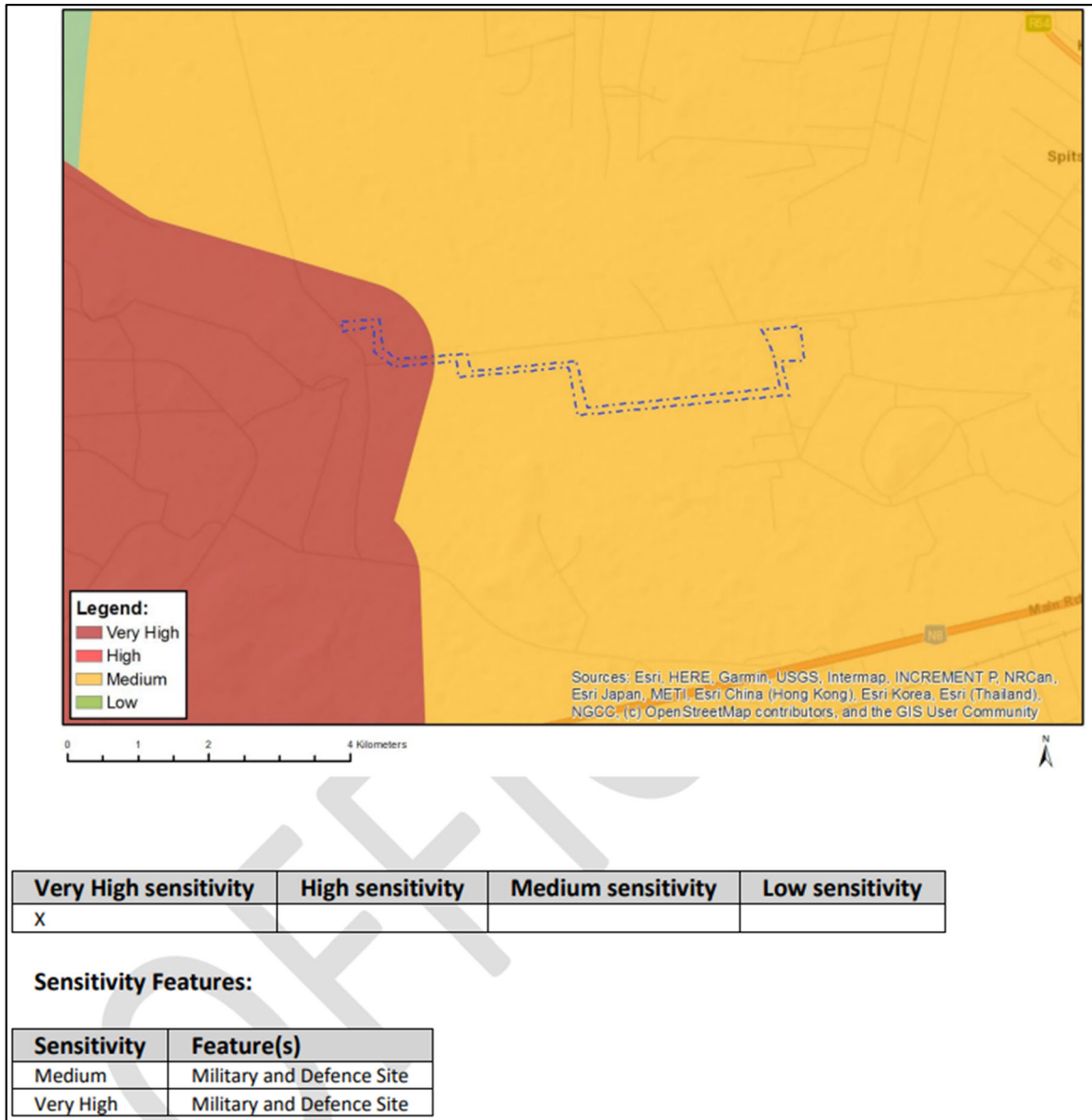


Figure 4.2: Map of relative defence theme sensitivity

4.5 Site Verification

This section will evaluate and verify the sensitivity ratings provided by the DFFE Screening Tool Report on studies that were not undertaken and provide feedback from the EAP.

4.5.1 Agricultural Theme

The site sensitivity is classified as medium to high sensitivity. The medium sensitivity features a land capability;06. Low-Moderate/07.Low-Moderate/0.8Moderate. A high old field:Land capability;06. Ver low/02. Very low/03. Low-_very low/04. Low-Very low/05. Low.

Table 4.2: Verification of DFFE Screening Report Sensitivity Ratings for the Agriculture Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>High</p> <p>Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as medium sensitivity considering agriculture is disputed to by the EAP. This is based on the current land use of the site being used for cattle grazing purposes.</p> <p>The proposed site is used for grazing as the area cannot support cultivation due to non-arable lands and climate limitations.</p> <p>An Agricultural Compliance Statement (Appendix E) have been provided for the site in accordance with the Protocols (G.NR 320). The compliance statement confirmed the sensitivity of the site as being low.</p>

4.5.2 Animal Species Theme

The site sensitivity is classified as medium, due to the potential occurrence of sensitive animal species i.e., *Mammalia-Hydrictis maculicollis*

Table 4.3: Verification of DFFE Screening Report Sensitivity Ratings for the Animal Species Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Medium</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as medium sensitivity considering animal species is agreed to by the EAP. This is based on the current land use of the site being used for cattle grazing purposes.</p> <p>The majority of animals in the project site have been introduced into the area as the farm is being used for gazing purposes. The</p>

Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.		<p>high sensitivities evidence of existing SCC or protected species occurrence on site.</p> <p>A Terrestrial Animal Species Specialist Assessment Report (Appendix E) have been provided for the site which includes an animal species assessment site accordance with the Protocols (G.NR1150</p>
--	--	--

4.5.3 Aquatic Biodiversity Theme

The site sensitivity is classified as very high due to the project site being located in strategic water source area.

Table 4.4: Verification of DFFE Screening Report Sensitivity Ratings for the Aquatic Biodiversity Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very High</p> <p>Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Aquatic Biodiversity is disputed to by the EAP. This is based on site inspection and desktop assessment.</p> <p>No wetlands or riparian features were identified within the project footprint. The desktop assessment confirmed that there are no NFEPA wetlands located on or in close proximity to the project site. The proposed facility will have negligible to no influence on the ground water systems associated with the strategic water source area.</p> <p>However, due to the DFFE screening tool identifying the site as Very High Sensitivity a Wetland Baseline and Risk Assessment (Appendix E) will be conducted for the project.</p>

Government Notice No. 320 of 20 March 2020.		
--	--	--

4.5.4 Archaeological and Cultural Heritage Theme

The site sensitivity is classified as low.

Table 4.5: Verification of DFFE Screening Report Sensitivity Ratings for the Archaeological and Cultural Heritage Theme

Identified Sensitivity		Comment
DFFE Screening Report Low Specialist assessment must be conducted in accordance to Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation, which were promulgated in Government Notice No. 320 of 20 March 2020.	EAP Feedback Low	The identification of the site as low sensitivity considering Archaeological and Cultural Heritage is agreed to by the EAP. This is based desktop assessment and site inspection. No sites or features of cultural or heritage significance were identified on the project site through review of satellite imagery and site inspection. A Phase 1 Cultural and Heritage Impact Assessment (Appendix E) was conducted to ensure that no Cultural or Heritage features are missed on site.

4.5.5 Civil Aviation Theme

The site sensitivity is classified as medium to high, dues to the property lying between 8 and 15 km of other civil aviation aerodrome and/ or between 15 and 35km from a civil aviation radar. The high sensitivity areas are dangerous and restricted airspace as demarcated.

Table 4.6: Verification of DFFE Screening Report Sensitivity Ratings for the Civil Aviation Theme

Identified Sensitivity	Comment

<p><u>DFFE Screening Report</u></p> <p>High</p> <p>There is low potential for negative impacts on the civil aviation theme, and if there are impacts there is a high likelihood of mitigation. Further assessment of the potential impacts will not be required.</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The civil aviation theme was identified as high sensitivity for the solar PV theme as per section 2 above. The proposed development is not expected to result in unacceptable negative impacts on civil aviation.</p> <p>The Civil Aviation Authority (CAA) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments from the CAA have been received as part of the public participation process.</p> <p>The CAA has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>
--	---	--

4.5.6 Defence Theme

The site sensitivity is classified as very high, as a defence base is in a close proximity from the proposed area.

Table 4.7: Verification of DFFE Screening Report Sensitivity Ratings for the Defence Theme

Identified Sensitivity	Comment
<p><u>DFFE Screening Report</u></p> <p>Very High</p> <p>As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental</p>	<p><u>EAP Feedback</u></p> <p>Low</p>
	<p>The sensitivity for the entire extent of the site is ranges from medium to very high assessment has been included. The South African National Defence Force (SANDF) has been identified as an I&AP, and has received the Draft Scoping report for review and commenting. No comments have been received as part of the public participation process. The SANDF has not been removed from the I&AP database and will therefore, also receive the draft EIA report for comment.</p>

Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.		
--	--	--

4.5.7 Palaeontology Theme

The site sensitivity is classified as medium to very high for the solar PV facility, due to the potential to have features with medium paleontological and very high paleontological sensitivity.

Table 4.8: Verification of DFFE Screening Report Sensitivity Ratings for the Palaeontology Theme

Identified Sensitivity		Comment
<u>DFFE Screening Report</u> Very High As no specific assessment protocol has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (The Act), where a specialist assessment is required.	<u>EAP Feedback</u> Low	The identification of the site as very high sensitivity considering Palaeontology is disputed by the EAP. A Palaeontological Impact Assessment (Appendix E) have been conducted for the project.

4.5.8 Plant Species Theme

The site sensitivity is classified as low to medium very high for the solar PV facility, due to the species 257 in the project area.

Table 4.9: Verification of DFFE Screening Report Sensitivity Ratings for the Plant Species Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Medium</p> <p>Specialist assessment must be conducted in accordance with Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying For Environmental Authorisation, which were promulgated in Government Notice No. 1150 of 30 October 2020 (i.e., protocols for terrestrial plant and animal species</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as medium sensitivity considering plant species is agreed to by the EAP.</p> <p>The site inspection indicated that the area is sensitive to species 527 due to the cattle grazing activities taking place on site. Refer to Figure 5.1–5.5 for photographs of the site under assessment.</p> <p>The Terrestrial Plant Species Compliance Statement (Appendix E) will be provided for the site accordance with the Protocols (G.NR 1150).</p>

4.5.9 Terrestrial Theme

The site sensitivity is classified as low to very high, due to the presence of Vulnerable ecosystem.

Table 4.10: Verification of DFFE Screening Report Sensitivity Ratings for the Terrestrial Theme

Identified Sensitivity		Comment
<p><u>DFFE Screening Report</u></p> <p>Very high</p> <p>As no specific assessment protocol</p>	<p><u>EAP Feedback</u></p> <p>Low</p>	<p>The identification of the site as very high sensitivity considering Terrestrial Biodiversity is disputed by the EAP. This is based on the current land use of the site being used for gazing and site inspection.</p>

<p>has been prescribed, the required level of assessment must be based on the findings of the Initial Site Sensitivity Verification and must comply with Appendix 6 of the Environmental Impact Assessment Regulations promulgated under sections 24(5) and 44 of the National Environmental Management Act, 1998 when applying for Environmental Authorisation, which were promulgated in Government Notice No.1150 of 30 October2020 (i.e. protocols for terrestrial plant and animal species</p>		<p>The Terrestrial Biodiversity Specialist Assessment (Appendix E) have been provided for the site accordance with the Protocols (G.NR320)</p>
---	--	--

5 LAND USE

5.1 Current/ Verified Land Use

The current land use of the properties is mainly used for cattle grazing. The town of Bloemfontein is located approximately 20 km east of the proposed development.

Most of the surrounding area has a low number of farmsteads/buildings that are sparsely populated. The area is located within an agricultural region, and the immediate area is presently used for cattle grazing.

Refer to Figures 5.1 – 5.5 for photographs of the site under assessment.



Figure 5.1: The site (taken towards the north)



Figure 5.2: The site (taken towards the north east)



Figure 5.3: The site and farmhouse (taken towards the east)



Figure 5.4: The site and gravel access road (taken towards the south)

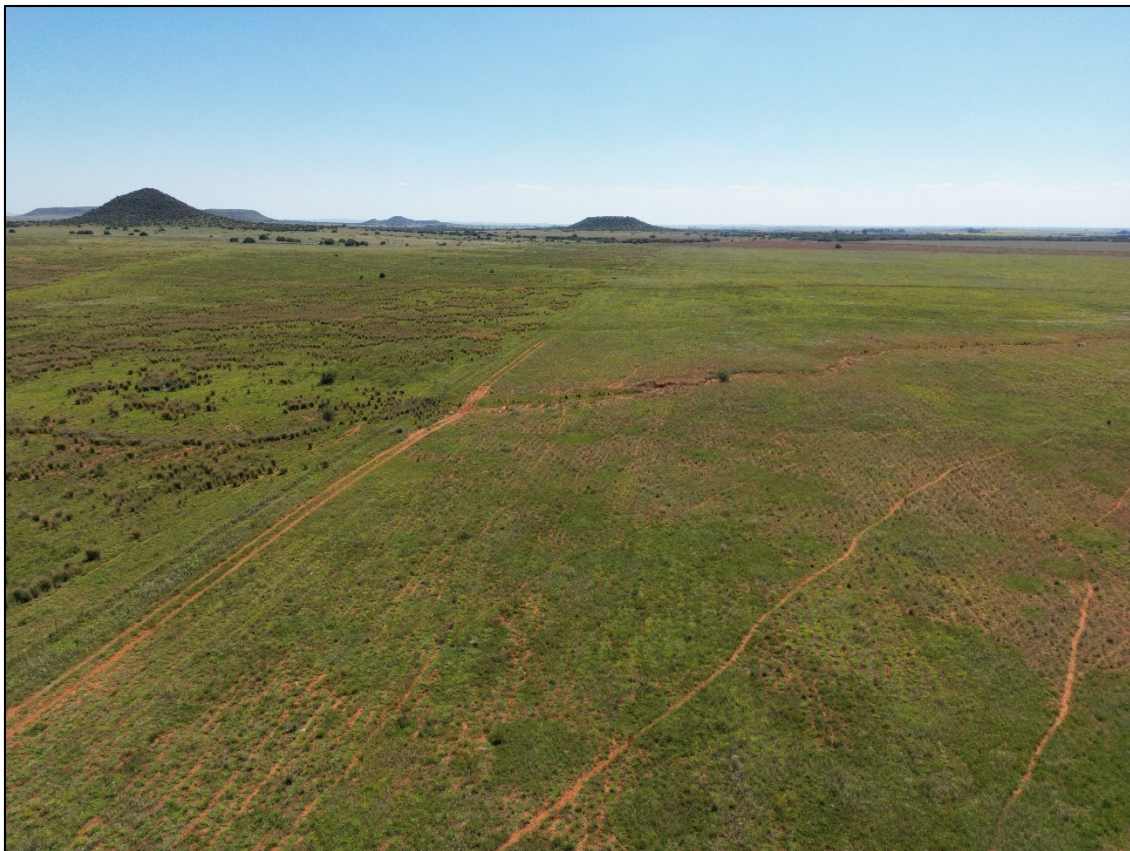


Figure 5.5: The site (taken towards the west)

6 CONCLUSION

The DFFE Screening Tool Report identified thirteen (13) specialists' studies to be conducted, which includes Agricultural Impact Assessment, Landscape/Visual Impact Assessment, Archaeological and Cultural Heritage Impact Assessment, Palaeontology Impact Assessment, Terrestrial Biodiversity Impact Assessment, Aquatic Biodiversity Impact Assessment, Avian Impact Assessment, Civil Aviation Assessment, RFI Assessment, Geotechnical Assessment, Socio-Economic Impact Assessment, Plant Species Assessment and Animal Species Assessment.

The Agriculture, Aquatic Biodiversity, Landscape, Palaeontological and Terrestrial Biodiversity Themes sensitivities are disputed by this report. The Animal Species, Avian, Archaeological and Cultural Heritage and Plant Specie themes sensitivities are agreed to. Specialist assessments have been conducted for the above-mentioned themes and confirms the EAPs feedback.

The sensitivity ratings for the Civil Aviation and Defence theme are confirmed by the site verification. Although the RFI and civil aviation was rated with medium to high sensitivity, no unacceptable impact is expected to occur. The relevant stakeholders will be consulted as part of the S&EIR process to obtain comment on the proposed development.