

# Merensky-Uchoba 132kV Power Line Second Route Deviation Steelpoort, Limpopo Province

## Draft Environmental Sensitivity Report

In support of the registration of the project in terms of Government Notice Nr 2313, 27 July 2022:  
Standard for the Development and Expansion of Power Lines and Substations within identified  
Geographical Areas, promulgated on 27 July 2022

May 2023

### Applicant

Eskom Holdings SOC Limited care of the Eskom Limpopo Operating Unit  
92 Hans van Rensburg Street, Polokwane, 0700

Contact persons:

Ms Tshifhiwa Matamela

079 745 4296 / MatameTE@eskom.co.za

Ms Munzhedzi Mudau

076 988 8169 / 015 299 0498 / MudauMu@eskom.co.za

### Compiled by

Landscape Dynamics Environmental Consultants

Contact persons: Annelize Erasmus and Susanna Nel

info@landscapedynamics.co.za

Tel 082 566 4530 / 082 888 4060



#### Western Cape Province- Cape Town Office

3 Palomino Close, Somerset West, 7130  
021 855 0912 / 082 888 4060  
info@landscapedynamics.co.za  
susanna@landscapedynamics.co.za

#### Representation Offices

Limpopo Province  
Mpumalanga Province  
Kwazulu-Natal Province  
Northern Cape Province

#### Gauteng Province- Pretoria (Head) Office

91 Wenning Street, Groenkloof, Pretoria,  
0181  
PO Box 947, Groenkloof, Pretoria, 0027  
012 460 6043 / 082 566 4530  
info@landscapedynamics.co.za  
annelize@landscapedynamics.co.za

## **LIST OF CONTENT**

<b>CHAPTER 1: BACKGROUND.....</b>	<b>1</b>
1.1 BACKGROUND.....	1
1.2 LOCALITY.....	1
1.3 LEGAL CONTEXT .....	2
1.3.1 Standard for the Development and Expansion of Power Lines and Substations within identified Geographical Areas .....	2
1.3.2 Listed Activities triggered in terms of NEMA.....	3
1.4 PRE-NEGOTIATED AGREEMENTS .....	4
1.5 DETAILS AND RELEVANT EXPERTISE OF THE EAP AND SPECIALISTS.....	5
<b>CHAPTER 2: PROJECT DESCRIPTION .....</b>	<b>6</b>
<b>CHAPTER 3: SCREENING TOOL.....</b>	<b>7</b>
<b>CHAPTER 4: SPECIALISTS IMPACT STATEMENTS .....</b>	<b>11</b>
4.1 SPECIALIST CONFIRMING STATEMENT: ECOLOGICAL ASSESSMENT .....	11
4.1.1 Confirming Statement .....	11
4.1.2 Site Specific Mitigation .....	13
4.1.3 Ecological Sensitivity Maps .....	15
4.1.4 DFFE Screening Tool Sensitivity Rating vs Specialist Rating.....	19
4.1.5 Conclusion relating to Ecological Impact.....	20
4.2 SPECIALIST CONFIRMING STATEMENT: AQUATIC ASSESSMENT .....	20
4.2.1 Confirming Statement .....	20
4.2.2 Site Specific Mitigation .....	21
4.2.3 Water Use Authorisation .....	22
4.2.4 Aquatic Sensitivity Map .....	23
4.2.5 DFFE Screening Tool Sensitivity Rating vs Specialist Rating.....	27
4.2.6 Conclusion relating to Aquatic Impact.....	27
4.3 SPECIALIST CONFIRMING STATEMENT: AVIFAUNA ASSESSMENT .....	27
4.3.1 Confirming Statement .....	27
4.3.2 Avifauna Sensitivity Maps.....	30
4.3.3 DFFE Screening Tool Sensitivity Rating vs Specialist Rating.....	32
4.3.4 Conclusion.....	32
4.4 SPECIALIST CONFIRMING STATEMENT: ARCHAEOLOGICAL ASSESSMENT .....	32
4.4.1 Confirming Statement .....	33
4.4.2 Archaeological Sensitivity Map .....	36
4.4.3 Site Specific Mitigation .....	37

4.4.4	DFFE Screening Tool Sensitivity Rating vs Specialist Rating .....	37
4.4.5	Conclusion.....	38
4.5	SPECIALIST CONFIRMING STATEMENT: PALAEOLOGICAL DESKTOP STUDY .....	38
4.5.1	Confirming Statement .....	38
4.5.2	SAHRIS Palaeo Sensitivity Map.....	40
4.5.3	Conclusion.....	41
4.6	EAP CONFIRMING STATEMENT: CIVIL AVIATION.....	41
4.6.1.	Confirming Statement.....	41
4.6.2.	Aviation Environmental Sensitivity Map.....	44
4.6.3.	DFFE Screening Tool Sensitivity Rating vs EAP Rating.....	45
4.6.4.	Conclusion .....	46
4.7	EAP CONFIRMING STATEMENT: DEFENCE.....	46
4.7.1	Confirming Statement .....	46
4.7.2	DFFE Screening Tool Sensitivity Rating vs EAP Rating .....	48
4.7.3	Conclusion .....	48
4.8	APPLICATION OF PRINCIPLES STIPULATED IN CHAPTER 3 OF THE STANDARD .....	48
4.9	CONCLUSION OF ENVIRONMENTAL SENSITIVITIES .....	49
4.10	COMBINED ENVIRONMENTAL SENSITIVITY MAP.....	50
<b>CHAPTER 4: PUBLIC PARTICIPATION PROCESS.....</b>		<b>51</b>
4.1	OBJECTIVES OF PUBLIC PARTICIPATION.....	51
4.2	PUBLIC PARTICIPATION PROCESS FOLLOWED .....	51
4.3	COMMENT RECEIVED ON THE DRAFT ENVIRONMENTAL SENSITIVITY REPORT .....	51
<b>CHAPTER 5: CONCLUSION.....</b>		<b>52</b>

**LIST OF FIGURES**

Figure 1 Locality Map ..... 1  
Figure 2 Location of 132kV Route Corridor in relation to the Strategic Transmission Corridor ..... 2  
Figure 3 Route Map with 100m Corridor ..... 6  
Figure 4 Ecological Sensitivity Maps .....15  
Figure 5 Avifauna Sensitivity Maps .....23  
Figure 6 Avifauna Sensitivity Map .....31  
Figure 7 Archaeological Sensitivity Map .....36  
Figure 8 Paleosensitivity Map derived from SAHRIA .....40  
Figure 9 Aviation Environmental Sensitivity Map .....45  
Figure 10 Combined Environmental Sensitivity Map .....50

**LIST OF TABLES**

Table 1 NEMA Listed Activity that is triggered ..... 3  
Table 2 Directly Affected Properties and Registered Landowners ..... 4  
Table 3 Environmental Themes and Sensitivities based on the DFFE Screening Tool Report ..... 7  
Table 4 DFFE Screening Tool Verification .....10

## Appendices

### Appendix A: Mapping and Environmental Sensitivities

- A(1) Locality Map
- A(2) Pre-negotiated Powerline Route and 100m Corridor
- A(3) 250 Coordinates of Centreline of 100m Corridor
- A(4) DFFE Screening Tool Report
- A(5) Combined Environmental Sensitivity Map (Vegetation, Aquatic, Avian and Heritage)
- A(6) Pre-negotiated Powerline Route and 100m Corridor KMZ File (*Electronic copy only*)
- A(7) Combined Environmental Sensitivity Map KMZ File (*Electronic copy only*)

### Appendix B: Landowner Agreements

### Appendix C: Specialists Reports

- C(1)(a) Ecological Specialist Confirming Statement
- C(1)(b) Ecological (Fauna, Flora & Ecology) Addendum to Statement
- C(2) Aquatic Specialist Confirming Statement
- C(3)(a) Specialist Confirming Statement: Avifauna
- C(3)(b) Avifauna Addendum to Statement
- C(4) Archaeological Impact Assessment and Confirming Statement
- C(5) Palaeontological Desktop Study and Confirming Statement

### Appendix D: Public Participation Programme

- D(1) Interested & Affected Parties Register
- D(2) (a) Newspaper Advertisement
- (b) Proof of Placement
- D(3) (a) Background Information Document
- (b) Proof of Distribution of the BID
- D(4) Proof of Distribution of the Draft Environmental Sensitivity Report (*included in the Final ESR*)
- D(5) Written comment received on the Draft ESR (*included in the Final ESR*)
- D(6) Comment & Responses Report (*included in the Final ESR*)

### Appendix E: Environmental Management Programme

- E(1) Gazetted Generic EMPr
- E(2) Part B Section 2: Declaration and Signature of the Applicant
- E(3) Part C: Site Specific EMPr

### Appendix F: Declarations, CVs and Professional Registrations

- F(1) Declaration of Independence: EAP
- F(2) Landscape Dynamics Company Profile and Condensed CVs of the EAPs
- F(3) EAPASA Registration Certificates of the EAPs
- F(4) Declaration of Independence: Specialists
- F(5) Condensed CVs of Specialists
- F(6) SACNASP Registration Certificates

# Executive Summary

## BACKGROUND

Landscape Dynamics Environmental Consultants was appointed by Eskom Holdings SOC Limited, care of the Eskom Limpopo Operating Unit to apply for the Registration of the proposed **Merensky-Uchoba 132kV Power Line Second Route Deviation**. The decision-making authority (Competent Authority) for this Registration process is the National Department of Forestry, Fisheries and Environment (DFFE).

An application is made with the DFFE to registration the project in terms of *Government Notice Nr 2313, 27 July 2022: Standard for the Development and Expansion of Power Lines and Substations within identified Geographical Areas*, promulgated on 27 July 2022 (herein after referred to as "**the Standard**"). The distribution of this Draft Environmental Sensitivity Report (ESR) forms part of this registration process.

## LOCALITY

The Merensky-Uchoba 132kV Deviation Power Line runs mostly along the R555 and south of the Steelpoort River, close to the town of Steelpoort within the Fetakgomo Tubatse Local Municipality, Limpopo Province.

## PRE-NEGOTIATED AGREEMENTS

As per the requirements of the Standard, the directly affected landowners signed pre-negotiated agreements, thereby confirming that they are in agreement with the power line being built across their properties within a 100m wide corridor with the understanding that the positions of the pylons within the corridor will be finalised during the final design stage of the project.

## PROJECT DESCRIPTION

Environmental Authorisation was issued on 10 November 2020 for the Merensky-Uchoba 132kV Powerline Project. This project involved an approximately 18km powerline from the existing Merensky Substation to connect to the Merensky-Jane Furse-Uchoba Powerline T-Off. Eskom requires now to deviate a section of the authorised route to accommodate site-specific problems encountered. This deviation is now called the 'Merensky-Uchoba 132kV Power Line Second Route Deviation'.

The project components are the following:

- An approximately 10,6km route is applicable
- A 100m corridor width was investigated and assessed. The servitude width required for the purpose of the powerline within this corridor will be 31m.
- The 132kv Overhead Power Line will have a capacity of 132kV and monopole steel pylons will be used.
- Existing access roads to the powerline will be used. A new approximately 6m wide access road will be developed for construction, maintenance and inspection purposes within the servitude area along the powerline, but outside the identified High and Very High Sensitive Areas.

It is requested that the *corridor* be approved and registered and not the servitude only. This will enable reasonable adjustments within the corridor during the final design phase of this project. *Note that only the required 31m wide servitude will eventually be registered within the route corridor and not the entire corridor.*

## DFFE SCREENING TOOL REPORT

### Environmental Themes and Sensitivities

The DFFE Screening Tool Report identified certain Environmental Sensitivities within the proposed powerline route. These identified sensitivities are indicative only and had to be verified on site by a suitably qualified person (the EAP or a specialist). Either the EAPs or the relevant specialists provided confirming statements relating to whether they confirm or dispute the relevant sensitivity ratings provided in the DFFE Screening Tool Report.

### Specialist Studies

Based on the environmental sensitivities of the proposed development footprint, 12 specialist assessments had been identified by the Screening Tool for inclusion in the assessment report. However, based on past experience of the EAP, the following specialists were appointed to undertake applicable studies for this project:

- Ecologist (fauna and flora)
- Aquatic specialist
- Avifauna specialist
- Archaeologist
- Palaeontologist

## CONFIRMING STATEMENTS AND ENVIRONMENTAL SENSITIVITIES

### Specialist Confirming Statement: Ecological Assessment

The largest part of the proposed deviation route has a Low ecological sensitivity except for Vegetation Unit 3 (Tributaries - High) and Vegetation Unit 2 (*Senegalia grandicornuta-Terminalia prunioides* woodland - Medium) which comprise small sections of the route and corridor investigated. Pylon placement within Vegetation Unit 3 (the tributaries) is not allowed and these areas must be spanned. Site specific mitigation measures were provided to be included in the Site Specific EMPr and this, together with the implementation of the Generic EMPr will ensure that the impact on the biodiversity of the site will be acceptable.

### Specialist Confirming Statement: Aquatic Assessment

The identified watercourses must be spanned, in other words no pylons are allowed within the watercourses and their associated buffers. Access in the High Sensitivity Zones is allowed only on foot or via existing access roads. This, together with the implementation of the Generic- and Site Specific EMPr will ensure that the impact on watercourses will be acceptable.

### Specialist Confirming Statement: Avifauna Assessment

In accordance with the baseline conditions as presented in Section 7 and the outcomes of the impact assessment detailed in Section 8 of the specialist report, the construction and operation of the proposed Merensky-Uchoba 132kV steel monopole power line second route deviation and its associated 6m road servitude (for construction and maintenance purposes) are not deemed to present unmitigable negative environmental issues or impacts. It is the specialist's opinion that the construction of the project within the 100m corridor will result in acceptable levels of impact on the resident avifauna subject to the proposed mitigation and management measures.

### **Specialist Confirming Statement: Archaeological Assessment**

Three heritage sites had been identified. The first site is a stone wall terrace which has a low heritage significance and is just outside the 100m wide corridor. Two grave sites had been identified within the 100m wide corridor. It is proposed that they be left in situ, are fenced and that a 20m buffer be implemented. No heritage permit is required. The specialist concluded that the impact significance will be low after mitigation.

### **Specialist Confirming Statement: Palaeontological Desktop Study**

Based on experience of the specialist and the lack of any previously recorded fossils from the area, it is extremely unlikely that any fossils would be preserved in the river sands, gravel and alluvium of the Quaternary. There is a very small chance that transported fossils may occur in the river sands; therefore a *Fossil Chance Find Protocol* had to be added to the EMP. The impact on the palaeontological heritage is confirmed to be very low to zero. No 'no-go' areas and/or buffer zones are required and no site specific mitigation measures were identified.

### **EAP Confirming Statement: Civil Aviation**

There are no airstrips or other civil aviation infrastructure situated within the 100m power line corridor. Due to the presence of numerous powerlines (both distribution and transmission) within the direct vicinity of the proposed project, it is not expected that significant additional impact on the civil aviation component in the macro area will occur resulting from the construction of the proposed new 132kV distribution powerline. The SACAA was approached for comment on the Draft ESR and no comment was received.

### **EAP Confirming Statement: Defence**

There are no defence areas and/or infrastructure within the 100m route corridor, neither has any obvious defence areas and/or infrastructure been identified in the macro area. The DFFE Screening Tool rates the Defence Theme as Low and there is no known reason why this should be disputed.

## **APPLICATION OF PRINCIPLES STIPULATED IN CHAPTER 3 OF THE STANDARD**

All the general environmental principles as stipulated in Chapter 3 of the Standard were adhered to. This was confirmed by the relevant specialists, the client as well as the EAPs.

## **PUBLIC PARTICIPATION PROCESS**

The Public Participation Process follows is summarised as follows:

- A Register of Interested & Affected Parties (IAPS) was compiled which includes the contact details of affected landowners, municipalities, government departments and other applicable organisations. This list is being updated throughout the registration process.
- A Background Information Document (BID), announcing the project and with a request to register as an IAP was distributed on 30 April 2023.
- A newspaper advertisement was placed in the Citizen on 4 May 2023.
- The Draft ESR was distributed by reasonable means and according to the Standard for a 30-commenting period (excluding public holidays) on 5 May 2023. The Draft ESR was submitted to SAHRA on 2 June 2023. The final date for comment is therefore 2 July 2023.
- The Draft ESR was submitted to the DFFE for comment on 5 May 2023 via their online system.
- Comment received on the Draft ESR will be included in the Final ESR.
- The Final ESR with the official registration application will be submitted to the DFFE for their



- consideration for Registration of the project.
- IAPs will be notified of the availability of the Final ESR for information.
- Once the DFEE has made their decision regarding the registration application, the IAPs will be informed of the decision and the opportunity to appeal.

## CONCLUSION

It is concluded that the registration process up to date was strictly done according to the Standard:

- The Screening Tool was used as guidance to determine the need for certain specialists and to determine the applicable environmental themes.
- All identified high environmental sensitivities will be avoided and mitigation has, where applicable, been included in the Site-Specific EMPr to minimise the impact where the project will traverse areas of Medium or Low environmental sensitive areas.
- Signed pre-negotiated agreements from all the directly affected landowners are attached to this document.
- The Public Participation Process is conducted according to all stipulations as per the Standard.
- General environmental principles were followed whilst the route planning was conducted.

\*\*\*\*\*

---

# CHAPTER 1: BACKGROUND

## 1.1 BACKGROUND

Landscape Dynamics Environmental Consultants (the Environmental Assessment Practitioners, the EAPs) was appointed by **Eskom Holdings SOC Limited, care of the Eskom Limpopo Operating Unit** ('the Applicant') to apply for the Registration of the proposed **Merensky-Uchoba 132kV Second Route Deviation** ('the Project').

The Competent Authority (CA) for this Registration process is the National Department of Forestry, Fisheries and Environment (DFFE).

The distribution of this Draft Environmental Sensitivity Report (ESR) forms part of the registration process in terms of the *Government Notice Nr 2313, 27 July 2022: Standard for the Development and Expansion of Power Lines and Substations within identified Geographical Areas*. Legal requirement and described in Paragraph 1.3.1 below.

## 1.2 LOCALITY

The Merensky-Uchoba 132kV Deviation Power Line runs mostly along the R555 and south of the Steelpoort River, close to Steelpoort within the Fetakgomo Tubatse Local Municipality, Limpopo Province. Refer to the Locality Map in Appendix A(1).

**Merensky-Uchoba 132kV Power Line Second Route Deviation  
Macro Locality Map**



Figure 1 Locality Map

© albert.froneman@gmail.com

## 1.3 LEGAL CONTEXT

### 1.3.1 Standard for the Development and Expansion of Power Lines and Substations within identified Geographical Areas

The Registration process is being done according to the stipulations as contained in *Government Notice Nr 2313, 27 July 2022: Standard for the Development and Expansion of Power Lines and Substations within identified Geographical Areas*, promulgated on 27 July 2022 (“the Standard”).

Registration according to the above-mentioned document must be followed when the following is applicable to the proposed power line development:

- More than 50% of the power line must fall within a Strategic Transmission Corridor (STC) as identified in Government Gazette No 41445 of 16 February 2018 and Government Gazette No 44504 of 29 April 2021;
- The power line pylons must all be placed in areas that have been identified as being Low and Medium environmental sensitivity.

In the case of the Merensky-Uchoba 132kV Power Line Second Route Deviation, the following applies:

- The power line is  $\pm 10,7$ km in length of which  $\pm 5,5$ km falls within the International STC, which equates to more than the required 50% (please refer to the map below);



Figure 2 Location of 132kV Route Corridor in relation to the Strategic Transmission Corridor

- The specialists appointed for this project all confirmed that the project infrastructure will be placed within areas of Very Low, Low and Medium environmental sensitivity.

The process involved with an application for registration in terms of the Standard is summarised as follows:

- The Applicant must identify a viable route which meets their technical requirements.
- An independent Environmental Assessment Practitioner (EAP) must be appointed to assist in

- identification of the above-mentioned route from an environmental and landowner perspective.
- A specialist team must be identified and appointed by the EAP. The DFFE Screening Tool and associated verification must guide the choice of specialists.
- Relevant stakeholders and their contact details must be identified and kept in a Register of Interested & Affected Parties (IAPs).
- The EAP must announce the project by distributing a Background Information Document (BID) to all IAPs. A notification of the proposed application for registration of the project in terms of the Standard must also be placed in a newspaper.
- The EAP must compile an Environmental Sensitivity Report (ESR) based on the findings and recommendations of the specialists. This document must be distributed for a 30-day commenting period (exclusive of public holidays).
- The Final ESR must contain and address all comment received. All IAPs on the register must be notified of the availability thereof for information purposes.
- The official DFFE Registration form will be compiled and submitted to the DFFE with the Final ESR in support of the application for registration in terms of the Standard.
- The DFFE has 30 days to make a decision and issue a registration number if approved.
- All IAPs must be informed of the DFFE decision and the opportunity to appeal.

### 1.3.2 Listed Activities triggered in terms of NEMA

The proposed project triggers the listed activity mentioned below. Note, however, that according to Paragraph 1.3 of the Standard, provisions of the Standard are applicable, regardless of the mentioned listed activities, if 50% or more of the proposed project falls within a STC and if all pylons are being placed within Low or Medium sensitive areas.

Listing Notice 1 (GN R327)		
11	<p>The development of facilities or infrastructure for the transmission and distribution of electricity</p> <ol style="list-style-type: none"> <li>i. <b>outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts</b></li> <li>ii. inside urban areas or industrial complexes with a capacity of 275 kilovolts or more; excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is —               <ol style="list-style-type: none"> <li>a) temporarily required to allow for maintenance of existing infrastructure;</li> <li>b) 2 kilometres or shorter in length;</li> <li>c) within an existing transmission line servitude; and</li> <li>d) will be removed within 18 months of the commencement of development.</li> </ol> </li> </ol>	<p>A 132kV power line will be constructed.</p> <p>More than 50% of the proposed project falls within the International Strategic Transmission Corridor and all pylons will be placed within Low or Medium sensitive areas; therefore registration can take place in terms of the Standard.</p>

Table 1 NEMA Listed Activity that is triggered

### Screening Tool Sensitivity Map vs Limpopo Conservation Plan as per SANBI

The Terrestrial Biodiversity Sensitivity Map as per the Screening Tool and the Limpopo Conservation Plan v2 as obtain from <https://bgis.sanbi.org> do not hold the same data base. It was however confirmed via email on 3 May 2023 (Mr Jeffrey Manuel: [J.Manuel@sanbi.org.za](mailto:J.Manuel@sanbi.org.za)) that the information as per the Screening Tool should be used since *this* information is based on the latest gazetted bioregional plan. It is therefore confirmed that the proposed route corridor *does not* run through any Critical Biodiversity Area. The Screening Tool was therefore used to determine the applicability of NEMA Listing Notice 3.

## 1.4 PRE-NEGOTIATED AGREEMENTS

As per the requirements of the Standard, the directly affected landowners all signed a pre-negotiated agreement, thereby confirming that they are in agreement with the power line being built on their properties. These agreements all confirm acceptance of a 100m wide corridor with the understanding that the positions of the pylons will be finalised during the final design stage of the project and that the pylons may be placed anywhere within this corridor. The pre-negotiated agreements are attached under Appendix B

The following properties with the relevant landowners are affected:

Property Descriptions	Registered Landowners
Portion 3 of the Farm Grootboom 336-KT	Tubatse African Agricultural Merging Farmers Communal Prop Assoc (TAAMF)
Portion 0 (the Remaining Extent) of the Farm Grootboom 336-KT	Parsons Transport Holdings Pty Ltd
Portion 4 of the Farm Grootboom 336-KT	Engen Petroleum Ltd (care of Reinhardt Transport)
Portion 0 (the Remaining Extent) of the Farm of Annex Grootboom 335-KT Portion 1 of the Farm Annex Grootboom 335-KT, Portion 1 of the Farm Spitskop 333-KT Portion 2 of the Farm Spitskop 333-KT Portion 3 of the Farm Spitskop 333-KT Portion 0 (the Remaining Extent) of the Farm Goudmyn 337-KT Portion 6 of the Farm Goudmyn 337-KT	Samancor Chrome Ltd
Portions 10, 11 & 29 of the Farm Spitskop 333-KT	Dithamaga Trust

Table 2 Directly Affected Properties and Registered Landowners

## **1.5 DETAILS AND RELEVANT EXPERTISE OF THE EAP AND SPECIALISTS**

### **Landscape Dynamics Environmental Consultants**

The two Environmental Assessment Practitioners (EAPs) for the project, Annelize Erasmus and Susanna Nel, both directors of Landscape Dynamics Environmental Consultants (Pty) Ltd (LDEC) were either responsible or co-responsible for all projects undertaken by LDEC since inception in 1997. Approximately 300 applications for Environmental Authorisations were made and more than 70 applications for electrical infrastructure (Eskom and the private sector) forms part of these 300 applications.

The LDEC Company Profile with condensed CVs of the EAPs as well as the Declaration of Independence and the proof of EAPASA registration are attached under Appendix F.

### **Specialists**

All the specialists appointed for this project have significant experience in their respective fields. Their condensed CVs, declarations of independence and the proof of SACNASP registration where relevant are attached under Appendix F.

## CHAPTER 2: PROJECT DESCRIPTION

Environmental Authorisation was issued on 10 November 2020 for the Merensky-Uchoba 132kV Powerline Project. This project involved an approximately 18km powerline from the existing Merensky Substation to connect to the Merensky-Jane Furse-Uchoba Powerline T-Off. Eskom now requires deviating a section of the authorised route to accommodate site-specific problems encountered. This deviation is now called the **Merensky-Uchoba 132kV Power Line Second Route Deviation**. Refer to Appendix A(2) for a map of the Pre-Negotiated Powerline Route and the 100m Corridor as well as Appendix A(3) for the coordinates of the centre line of the corridor and Appendix A(6) for the KMZ file of the proposed deviation route.

The project components are the following:

- An approximately 10,7km route is applicable
- A 100m corridor width was investigated and assessed. The servitude width required for the purpose of the powerline within this corridor will be 31m.
- The 132kv Overhead Power Line will have a capacity of 132kV and monopole steel pylons will be used.
- Existing access roads to the powerline will be used. A new approximately 6m wide access road will be developed for construction, maintenance and inspection purposes within the servitude area along the powerline, but outside the identified High and Very High Sensitive Areas.

It is requested that the corridor be approved and registered and not the servitude only. This will enable reasonable adjustments within the corridor during the final design phase of this project. Note that only the required 31m wide servitude will eventually be registered within the route corridor and not the entire corridor.

### Merensky-Uchoba 132kV Powerline Second Deviation Route

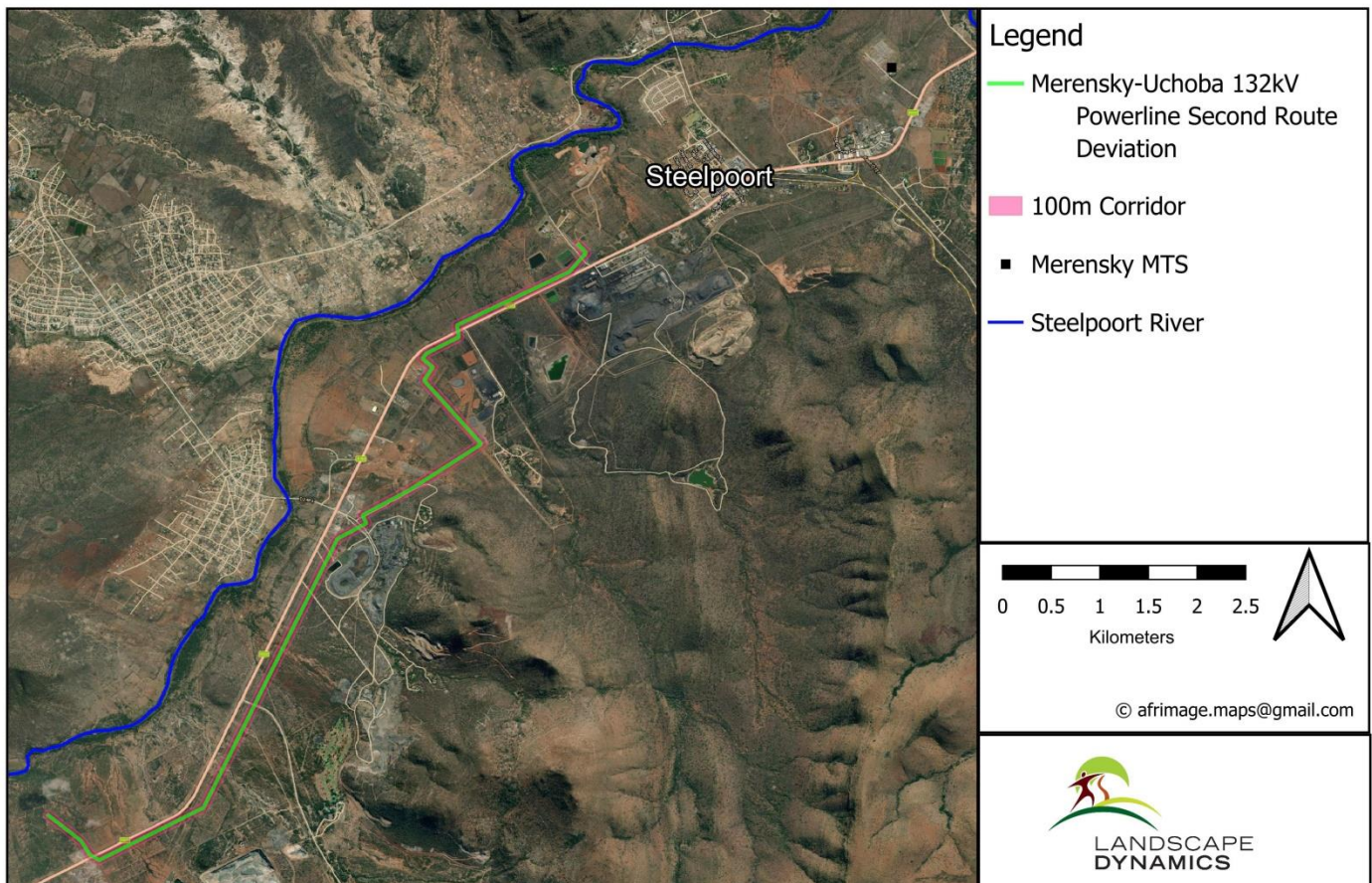


Figure 3 Route Map with 100m Corridor

## CHAPTER 3: SCREENING TOOL

### 3.1 ENVIRONMENTAL THEMES AND SENSITIVITIES

The DFFE Screening Tool Report (attached as Addendum A(2)) identified certain Environmental Sensitivities within the proposed powerline route and, based on these results recommended specialist studies that need to be undertaken.

These identified sensitivities are indicative only and had to be verified on site by a suitably qualified person (the EAP or a specialist) before the need of the recommended specialist assessments could be confirmed.

The following table is applicable to the Merensky-Deviation 132kV Power Line Second Route Deviation:

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

**Table 3 Environmental Themes and Sensitivities based on the DFFE Screening Tool Report**

### 3.2 DFFE SCREENING TOOL VERIFICATION

Based on the environmental sensitivities of the proposed development footprint, 12x specialist assessments had been identified by the Screening Tool for inclusion in the assessment report. It was the responsibility of the EAP to confirm this list and to motivate the reason for not including any of the identified specialist studies where applicable including the provision of photographic evidence of the site situation. Find below a summary of the **DFFE Screening Tool Verification**.

Impact Assessment	Motivation
Agricultural Impact Assessment	<p>An Agricultural Impact Assessment and input from an agricultural specialist is not required for this specific project due to the following reasons:</p> <ul style="list-style-type: none"> <li>The Site Verification as undertaken by the EAP revealed that the agricultural activities within this area is minimal (some old abandoned agricultural fields are present in a small section of the proposed route corridor). Small scale (subsistence) farming activities within the route corridor are mostly related to grazing by cattle and goats and can continue undisturbed within the power line</li> </ul>



servitude. The land is pre-dominantly used for mining purposes.

- There are no irrigation activities within the proposed corridor or within the macro area – normally power lines are rerouted to circuit any irrigated fields (spill irrigation) which is not applicable to this project;
- A change of land use is not going to take place. No loss of agricultural land will occur, because agricultural activities can continue underneath the powerlines.
- Most of the directly affected properties belong to mining companies.
- Environmental Authorisation of the 18km Merensky-Uchoba 132kV power line was obtained in 2020 and the Department of Agriculture was provided with the opportunity to comment. No objection from this Department was received. The deviation route (this project) is in close vicinity to the 18km authorised route within the same and even more degraded environment. The Department of Agriculture, Land Reform & Rural Development (DALRRD) also received a copy of this Draft ESR for comment; and
- None of the landowners raised any concern in terms of impact on agricultural activities and all directly affected landowners signed the pre-negotiated agreement.

The Standard states that the Agricultural Confirming Statement must be completed by a soil scientist or agricultural specialist registered with SACNASP. Due to the reasons given above, an agricultural specialist has not been appointed for this project and a confirming statement is thus not provided.

#### Landscape / Visual Impact Assessment

- The Deviation Route as proposed is in the vicinity of the already authorised Merensky-Uchoba 132kV Power Line project (authorised in 2020) and the visual aspects of the line was satisfactorily address at that time (no specific mitigation was proposed);
- The area is in general highly disturbed with roads, various other industrial activities and mines and associated infrastructure;
- The deviation will take place for most part of the route parallel to an existing Eskom corridor and the R555. The addition of monopole steel structures associated with this deviation project is insignificant compared to the much large transmission pylon structures.
- Significant experience of the EAPs in the field of Eskom infrastructure projects in rural areas was applied in terms of the expected visual impact.
- The EAP concludes with confidence that negligent significant additional visual impact will occur as a result of the deviation project.

The Standard states that the Visual Confirming Statement must be completed by a visual specialist. Due to the reasons given above, a visual specialist has not been appointed for this project and a confirming

	statement is thus not provided.
Archaeological and Cultural Heritage Impact Assessment	An <i>Archaeological Impact Assessment</i> was undertaken and the results are discussed in this Environmental Sensitivity Report which is also submitted to the South African Heritage Resources Agency (SAHRA) for comment and/or approval.
Palaeontology Impact Assessment	A <i>Palaeontological Desktop Study</i> was undertaken and the results are discussed in this Environmental Sensitivity Report which is also submitted to the South African Heritage Resources Agency (SAHRA) for comment and/or approval.
Terrestrial Biodiversity Impact Assessment	An <i>Ecological Impact Assessment</i> was undertaken, the results are discussed in this Environmental Sensitivity Report.
Aquatic Biodiversity Impact Assessment	An <i>Aquatic Impact Assessment</i> was undertaken, the results which are discussed in this Environmental Sensitivity Report.
Avian Impact Assessment	An <i>Avian Impact Assessment</i> was undertaken and the results are discussed in this Environmental Sensitivity Report.
Civil Aviation Assessment	The SA Civil Aviation Authority was notified of this project and will be provided with an opportunity to comment during the distribution of the Environmental Sensitivity Report. Further actions will be based on their instructions, if any.
Radio Frequency Interference (RFI) Assessment	RFI falls within the mandate of the Department of Higher Education, Science and Technology in terms of the Astronomy Geographic Advantage Act.  Based on previous experience with numerous Eskom power line projects over the last 24 years, the EAPs are confident that a RFI Assessment will not impact on the viability of this power line project and such an assessment is not required.
Geotechnical Assessment	The applicant has site-specific geotechnical investigations which they undertake during the design phase of the project (after the registration of the power line). Furthermore, the final design of the foundations are done by engineers strictly according to generally acceptable as well as Eskom-specific engineering standards and norms, taking the site-specific geotechnical constraints and recommendations into account.  The EAP can therefore with confidence state that a geotechnical study

	during the registration stages of the project will not impact on the viability of the project and is therefore not required as part of the studies for Environmental Authorisation.
Plant Species Assessment	This component is addressed under the Ecological Assessment mentioned above. The findings are provided in this Environmental Sensitivity Report.
Animal Species Assessment	This component is addressed under the Ecological Assessment mentioned above. The findings are provided in this Environmental Sensitivity Report.

**Table 4 DFFE Screening Tool Verification**

Based on past experience of the EAPs, as well as site verifications conducted, the following specialists were appointed to undertake applicable studies for this project:

- Ecologist
- Aquatic Specialist
- Avifauna specialist
- Archaeologist
- Palaeontologist

All specialist studies as undertaken were done according to the applicable Protocol as stipulated in the Screening Tool Report.

## CHAPTER 4: SPECIALISTS IMPACT STATEMENTS

The specialist reports comply with the legislated requirements as described in the “*Standard for the Development and Expansion of Power Lines and Substations within Identified Geographical Areas*” by the Department of Forestry, Fisheries and the Environment (2022).

All specialists were provided with the project description provided in Chapter 2 of this ESR which clearly stipulates the requirement for assessment of a 100m corridor. They were also provided with the proposed route and corridor, together with the DFFE Screening Tool Report to guide their assessments.

All specialist reports are contained in Appendix C of this ESR. They are summarised by highlighting the following in this Chapter 4.

- Specialist confirming statement (as per Appendix B “*Format of Environmental Specialist Confirming Statements*” provided in the Standard regulations).
- Site-specific mitigation (only those not included in the Generic EMPr for Powerlines)
- Sensitivity map
- Screening Tool Sensitivity Rating vs Specialist’s Rating confirming if the specialist agree or dispute the site classification in terms of the DFFE Screening Tool Report,

### 4.1 SPECIALIST CONFIRMING STATEMENT: ECOLOGICAL ASSESSMENT

A **Specialist Confirming Statement: Ecology** was undertaken by Prof Leslie Brown and is attached under Appendix C. A concise summary thereof follows below.

#### 4.1.1 Confirming Statement

CONFIRMING STATEMENT	
<b><i>A statement on the duration, date and season of the site verification inspection and walkthrough as well as the relevance of the season to the outcome of the confirming statement.</i></b>	
The survey was conducted during a site visit on 29 March 2023 which is within the middle of the growing season with most plants flowering and identifiable. An additional site visit was done on 17 May 2023 to assess an small amendment to the initially proposed route. <i>Refer to Pages 6-8 of the specialist report.</i>	
<b><i>Confirmation that the terrestrial ecology (flora and fauna) within the final pre-negotiated route and/or the substation location is low based on the most recently available desktop data, site verification inspection and walk through.</i></b>	
Five vegetation units were identified in the proposed deviation corridor. The correspondent Biodiversity Importance (environmental sensitivity) is as follows:	
<b>Vegetation Unit</b>	<b>Biodiversity Importance</b>
Unit 1: <i>Vachellia tortilis</i> shrubland	Low
Unit 2: <i>Senegalia grandicornuta-Terminalia prunioides</i> woodland	Medium (to be mitigated)
Unit 3: Tributaries	<b>High (to be avoided)</b>
Unit 4: Degraded Areas	Very Low
Unit 5: Developed areas	Very Low

Pylon placement will NOT take place within the areas identified as having a High Biodiversity Importance. These areas may however be spanned by the power line conductors because the impact to the ecological sensitivity will be minimal / zero.

See Section 3 and Figure 12-14 of the specialist report.

**Identification of terrestrial ecological areas to be avoided within the final pre-negotiated route, including buffers and/or the substation location.**

The Tributaries (Vegetation Unit 3) should be avoided due to their water channelling functions.

See Section 3 and Figures 12-14 of the specialist report.

**A terrestrial biodiversity sensitivity map, generated by the screening tool and enhanced by any relevant additional information including the walkthrough, overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure).**

The sensitivity map shows that the largest part of the proposed deviation route has a low ecological sensitivity except for vegetation unit 3 which comprises small sections of the route and 100m corridor. Pylon placement within vegetation unit 2 (medium Ecological sensitivity) need to be ground-truthed during the final design phase to ensure that no threatened species is affected.

See Figures 12-16 and Sections 3.2.2 & 3.2.3 of the specialist report.

**A description on how the identified environmental sensitivity, relating to terrestrial ecology, has been considered in determining the final pre-negotiated route and/or the substation location.**

The sensitivity maps indicate the areas to be avoided in the final placement of the pylons. It is not thought that the proposed deviation route would have any negative effect on the ecosystems provided that no placement of pylons is done within the Tributaries (vegetation unit 3) and that placement in the *Senegalia grandicornuta-Terminalia prunioides* woodland (vegetation unit 2) is mitigated and ground-truthed.

See Section 4 & See Figures 14-16 of the specialist report.

**A description on how the identified engineering constraints, relating to terrestrial ecology, have been considered in determining the preferred route.**

The pylons should easily be able to span the sensitive tributary areas, while it would be able to move pylons within vegetation unit 2 should it impact threatened species.

See Section 4 of the specialist report.

**A description of the implementation of the mitigation hierarchy in order to determine the final pre-negotiated route and/or substation location.**

The mitigation hierarchy includes the following steps (in order of decreasing desirability): Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies:

- Avoid

The High Biodiversity Areas (environmental sensitive areas – unit 3) will be avoided (pylon placement will not take place within these areas).

- Minimise

Impact to the biodiversity of the site will be minimised in all other units especially unit 2, by implementing the site-specific mitigation measures, read together with the gazetted Generic EMPr.

- Rehabilitate

Rehabilitation of disturbed areas will be done according to the Eskom Generic EMPr.

- Offset

Offsets are not applicable to this project.

**How the comments from interested and affected parties on the proposed route and/or substation location were incorporated.**

This Specialist Confirming Statement is being distributed together with the Draft Environmental Sensitivity Report (ESR) for public comment. Should any input from the public change the content / outcome of this report, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.

**A statement confirming that:**

- a) impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or**
- b) where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMP**

The impact management actions in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks are mostly sufficient, but additional site-specific mitigation measures are provided and also needs to be applied.

See sections 3 & 4 of the specialist

#### 4.1.2 Site Specific Mitigation

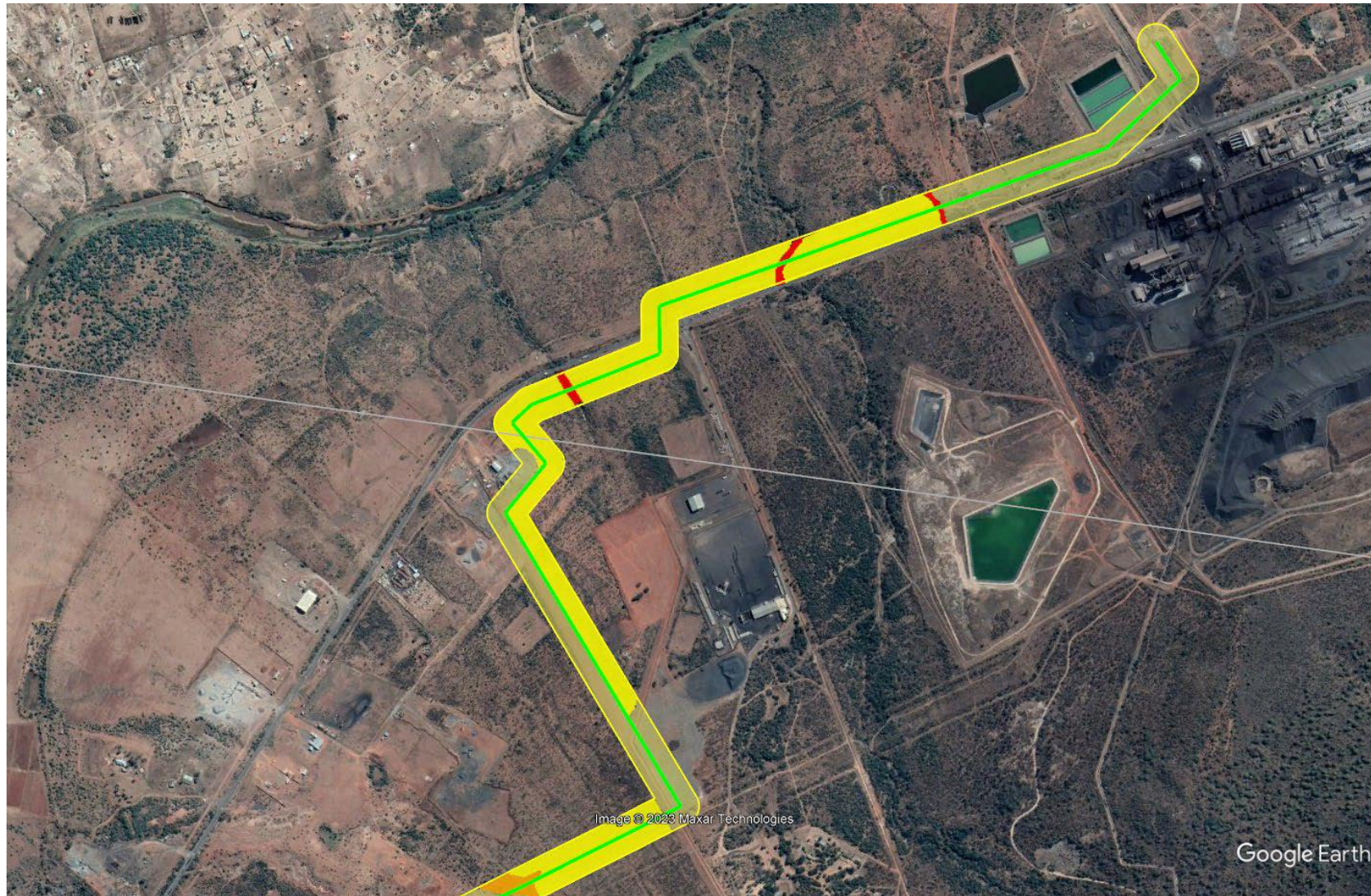
Based on the results of this study as well as the Site Ecological Importance classification DEFF (2020), the following specific mitigation measures are recommended.

Ecological Importance*	Vegetation Unit	Impact/mitigation Statement
High	Unit 3 (Tributaries)	<ul style="list-style-type: none"> <li>• Pylons must not be placed within these areas and associated buffer zones (as per aquatic report), but the areas may be spanned.</li> <li>• Threatened/endemic/protected species present.</li> <li>• No threatened plant species may be removed or trimmed without obtaining the necessary permits from the Conservation authorities.</li> <li>• No person must be allowed to enter the tributary areas unless for crossing the area by foot, which should be at a designated point for all to use or via an existing access road.</li> <li>• Alien invasive plants present within the vegetation unit must be removed and eradicated throughout all stages of the project.</li> <li>• Also refer to the Eskom Generic EMP</li> </ul>
Medium	Unit 2 ( <i>Senegalia grandicornuta-Terminalia prunioides</i> woodland)	<ul style="list-style-type: none"> <li>• Placement of pylons permitted but with mitigation.</li> <li>• Final pylon placement within this vegetation unit must be confirmed by conducting a walkdown by a qualified ecologist/botanist to ensure that no Threatened/Endemic/Protected will be negatively affected. Where such species are encountered the pylon placement should be adjusted</li> <li>• Suitable habitat for threatened species.</li> <li>• No threatened plant species may be removed or trimmed without obtaining the necessary permits from the Conservation authorities.</li> <li>• If a road has to be developed to gain access to construction within vegetation unit 3 it has to be confirmed that there are no Threatened/Endemic/Protected present.</li> <li>• Alien invasive plants present within the various vegetation</li> </ul>

		<p>units must be removed and eradicated throughout all stages of the project.</p> <ul style="list-style-type: none"> <li>• Also refer to the Eskom Generic EMP.</li> </ul>
Low	Unit 1 ( <i>Vachellia tortilis</i> shrubland)	<ul style="list-style-type: none"> <li>• Alien invasive plants present within the various vegetation units must be removed and eradicated throughout all stages of the project.</li> <li>• Where a protected plant is encountered, it must preferably be avoided and the pylon placement adjusted. (<i>However, if not possible then a permit must be obtained to remove them.</i>)</li> <li>• Also refer to the Eskom Generic EMP.</li> </ul>
Very Low	Unit 4 (Degraded areas) Unit 5 (Developed areas)	<ul style="list-style-type: none"> <li>• Alien invasive plants present within the various vegetation units must be removed and eradicated throughout all stages of the project.</li> <li>• Also refer to the Eskom Generic EMP.</li> </ul>
<b>Site specific mitigation</b>	<b>Vegetation unit</b>	<b>Impact/mitigation Statement</b>
	All vegetation units	<ul style="list-style-type: none"> <li>• To minimise the effect on the vegetation, insects, small mammals, and environment it is recommended that the construction be done within the winter period as far as possible, when most plants are dormant and animals less active.</li> <li>• Vegetation clearance should be restricted to the approved development areas allowing remaining animals the opportunity to move away from the disturbance.</li> <li>• No collection of gathering of firewood and medicinal plants must be allowed.</li> <li>• Where vegetation needs to be “opened” to gain access it is recommended that the herbaceous species are cut short rather than removing them.</li> <li>• Current servitude roads must be used as far as possible, and no unnecessary roads developed.</li> <li>• No animals should be intentionally killed or destroyed and poaching and hunting should not be permitted on the site.</li> <li>• No hunting with firearms (shotguns, air rifles or pellet guns) or catapults should be permitted on the property as well as neighbouring areas.</li> <li>• Any animals encountered in the development areas must be relocated away from the development site.</li> <li>• Where lighting is required for safety or security reasons, this should be targeted at the areas requiring attention. Yellow sodium lights should be prescribed as they do not attract invertebrates at night and will not disturb the existing wildlife. Sodium lamps require a third less energy than conventional light bulbs.</li> </ul>

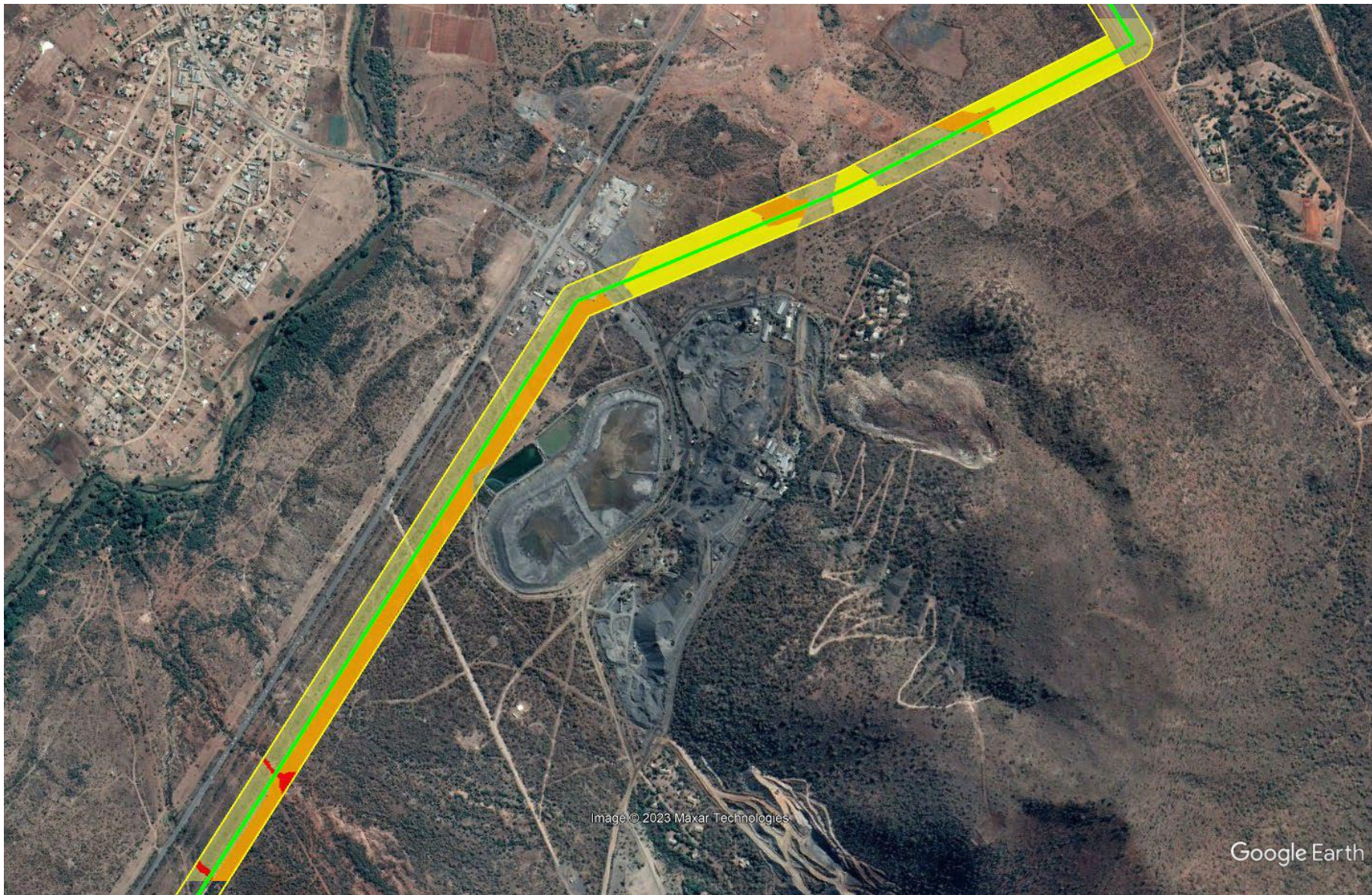
### 4.1.3 Ecological Sensitivity Maps

Figure 4 Ecological Sensitivity Maps

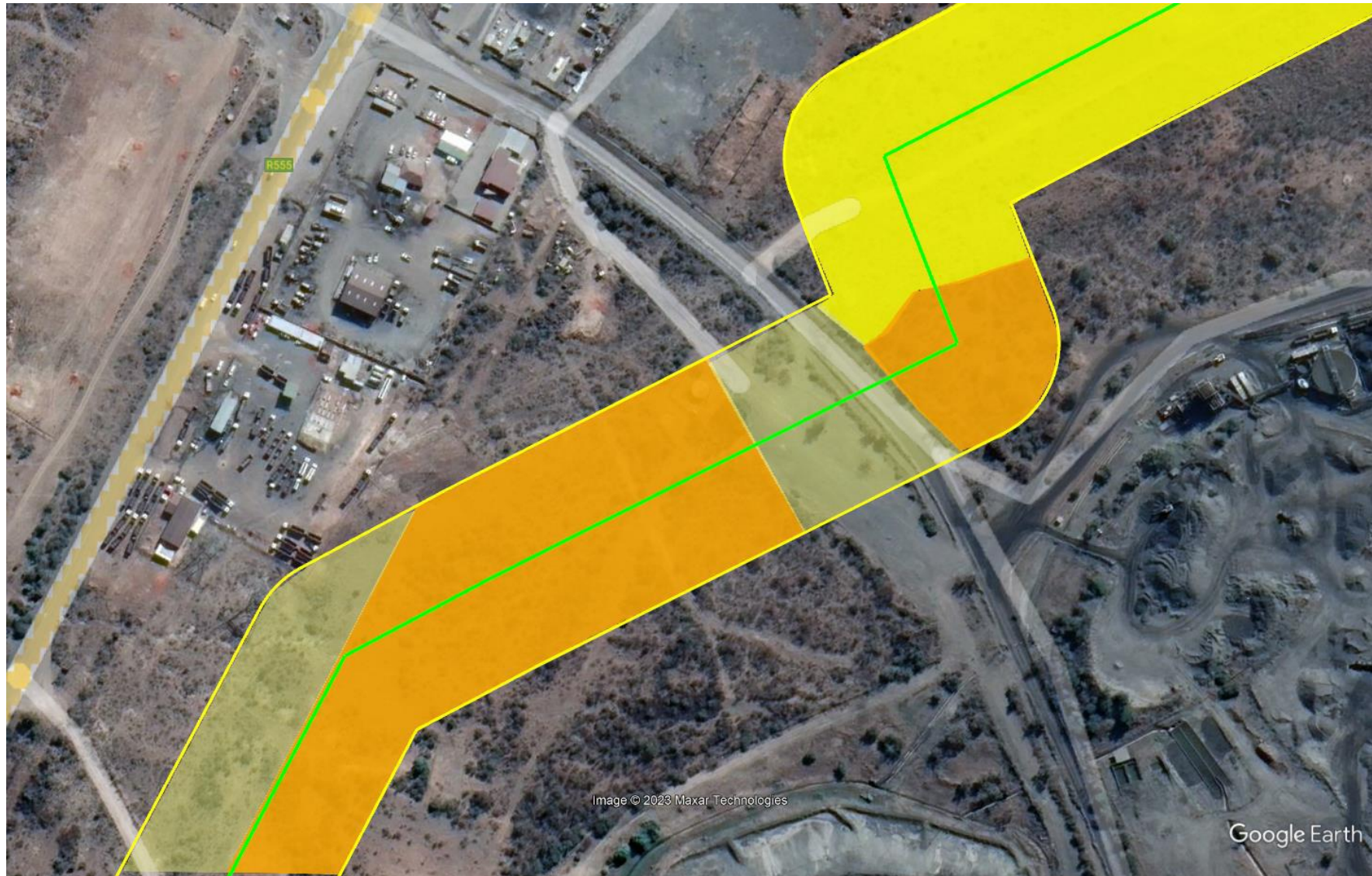


Map of relative plant sensitivity (Red=High; Orange=Medium; Yellow=Low; Light yellow=Very low;) (Source: Google Earth, 2023)





Map of relative plant sensitivity (Red=High; Orange=Medium; Yellow=Low; Light yellow=Very low;) (Source: Google Earth, 2023)



Area where an additional assessment was made to accommodate a slight deviation: Map of relative plant sensitivity (Red=High; Orange=Medium; Yellow=Low; Light yellow=Very low) (Source: Google Earth, 2023)



Map of relative plant sensitivity (Red=High; Orange=Medium; Yellow=Low; Light yellow=Very low) (Source: Google Earth, 2023)

#### 4.1.4 DFFE Screening Tool Sensitivity Rating vs Specialist Rating

Sensitivity Theme	Screening Tool Site Sensitivity	Specialist Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed / confirmed												
Animal Species	<p><b>Medium &amp; High</b></p> <p>A rating of <u>High</u> was given due to the possible existence of the following animals (not avifauna) within a specific area within the proposed 100m corridor</p> <table border="1"> <tr> <td>Medium</td> <td>Mammalia-Crocidura maquassiensis</td> </tr> <tr> <td>Medium</td> <td>Mammalia-Dasymys robertsii</td> </tr> <tr> <td>Medium</td> <td>Mammalia-Lycan pictus</td> </tr> <tr> <td>Medium</td> <td>Reptilia-Kinixys lobatsiana</td> </tr> </table>	Medium	Mammalia-Crocidura maquassiensis	Medium	Mammalia-Dasymys robertsii	Medium	Mammalia-Lycan pictus	Medium	Reptilia-Kinixys lobatsiana	High, Medium and Low	Based on the field visit & habitat assessment vegetation units 2 & 3 ( <i>Senegalia grandicornuta-Terminalia prunoides</i> woodland & Tributaries) provide marginal habitat for the animal species of concern as described in section 3.2.3. The other areas along the proposed deviation route are degraded with no suitable habitat for these species. The main reasons as indicated in the report are anthropogenic activities, mining, infrastructure, urban developments, fences that resulted in habitat degradation.				
Medium	Mammalia-Crocidura maquassiensis														
Medium	Mammalia-Dasymys robertsii														
Medium	Mammalia-Lycan pictus														
Medium	Reptilia-Kinixys lobatsiana														
Plant Species	<p><b>Medium &amp; Low</b></p> <p>A rating of <u>Medium</u> was given due to the possible existence of the following plants within two specific areas within the proposed 100m corridor.</p> <table border="1"> <thead> <tr> <th>Sensitivity</th> <th>Feature(s)</th> </tr> </thead> <tbody> <tr> <td>Medium</td> <td>Asparagus fourei</td> </tr> <tr> <td>Medium</td> <td>Polygala sekhukhuniensis</td> </tr> <tr> <td>Medium</td> <td>Searsia batophylla</td> </tr> <tr> <td>Medium</td> <td>Searsia sekhukhuniensis</td> </tr> <tr> <td>Medium</td> <td>Combretum petrophilum</td> </tr> </tbody> </table>	Sensitivity	Feature(s)	Medium	Asparagus fourei	Medium	Polygala sekhukhuniensis	Medium	Searsia batophylla	Medium	Searsia sekhukhuniensis	Medium	Combretum petrophilum	High, Medium and Low	Based on the identification and field assessment of the different vegetation units (see Section 3 for descriptions & Specialist statement on page 3) all units except the <i>Senegalia grandicornuta-Terminalia prunoides</i> woodland (unit 2 – Medium) and unit 4 (Tributaries – High) achieved a Low-Very low sensitivity. Only one sensitive species was found, to be present within vegetation unit 4 (Tributaries – see section 3.2.4). Also see an extensive list of possible species of concern that were assessed in section 3.2.4 for more detail. The vegetation of the largest part of the proposed deviation has a Very Low to Low sensitivity as indicated in Figure 9 due to habitat degradation and various anthropogenic activities.
Sensitivity	Feature(s)														
Medium	Asparagus fourei														
Medium	Polygala sekhukhuniensis														
Medium	Searsia batophylla														
Medium	Searsia sekhukhuniensis														
Medium	Combretum petrophilum														
Terrestrial Biodiversity	<p><b>Very High</b></p> <p>A rating of <u>Very High</u> was given due to the site falling within a ESA 1 and ESA 2</p> <table border="1"> <thead> <tr> <th>Sensitivity</th> <th>Feature(s)</th> </tr> </thead> <tbody> <tr> <td>Low</td> <td>Low Sensitivity</td> </tr> <tr> <td>Very High</td> <td>Ecological support area 1</td> </tr> <tr> <td>Very High</td> <td>Ecological support area 2</td> </tr> </tbody> </table>	Sensitivity	Feature(s)	Low	Low Sensitivity	Very High	Ecological support area 1	Very High	Ecological support area 2	Medium & Low	Overall, vegetation unit 4 (Tributaries) has a medium terrestrial diversity while the other units have a low terrestrial diversity. This is based on the low to moderate species richness in terms of plants and animal species with the largest part of the proposed deviation corridor consisting of degraded habitats to extreme human activities (mining, infrastructure, industrial developments, urban development, roads and fences etc) as described in section 3 of this report.				
Sensitivity	Feature(s)														
Low	Low Sensitivity														
Very High	Ecological support area 1														
Very High	Ecological support area 2														

#### 4.1.5 Conclusion relating to Ecological Impact

The largest part of the proposed deviation route has a Low ecological sensitivity except for Vegetation Unit 3 (High) and Vegetation Unit 2 (Medium) which comprises small sections of the route and corridor investigated. Pylon placement within Vegetation Unit 3 (the tributaries) is not allowed and these areas must be spanned. Site specific mitigation measures were provided to be included in the Site Specific EMPr and this, together with the implementation of the Generic EMPr will ensure that the impact on the biodiversity of the site will be acceptable.

#### 4.2 SPECIALIST CONFIRMING STATEMENT: AQUATIC ASSESSMENT

A **Specialist Confirming Statement: Aquatic Assessment** was undertaken by Prof Leslie Brown and it attached under Appendix D. A concise summary thereof follows below.

##### 4.2.1 Confirming Statement

<b>CONFIRMING STATEMENT</b>					
<b><i>A statement on the duration, date and season of the site verification inspection and walkthrough as well as the relevance of the season to the outcome of the confirming statement.</i></b>					
The survey was conducted during a once-off site visit on 29 March 2023. An additional site visit was done on 17 May 2023 to assess an small amendment to the initially proposed route. <i>Refer to pages 5-6 of the specialist report.</i>					
<b><i>Confirmation that the aquatic ecology (flora and fauna) and existing environmental impacts within the final pre-negotiated route and/or substation location is low, based on the most recently available desktop data, site verification inspection and walk through.</i></b>					
Eleven tributaries were identified within the 100m corridor of the proposed deviation route. The correspondent environmental sensitivity is as follows:					
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #d9ead3;">Vegetation Unit</th> <th style="background-color: #d9ead3;">Aquatic Biodiversity Importance</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Tributaries</td> <td style="background-color: #d9534f; color: white; text-align: center;">High (to be avoided)</td> </tr> </tbody> </table>	Vegetation Unit	Aquatic Biodiversity Importance	Tributaries	High (to be avoided)	
Vegetation Unit	Aquatic Biodiversity Importance				
Tributaries	High (to be avoided)				
Pylon placement will NOT take place within the areas identified as having 'n High Aquatic Biodiversity Importance and their associated 32m buffer zones. These areas may however by spanned by the power line conductors because the impact to the ecological sensitivity will be minimal / zero. <i>Refer to Section 3 and Figures 3-6 of the specialist report.</i>					
<b><i>Identification of aquatic ecological areas to be avoided within the preliminary corridor, including buffers.</i></b>					
The Tributaries should be avoided due to their water channelling and storage functions. <i>Refer to Section 4 and Figures 9-12 of the specialist report.</i>					
<b><i>An aquatic biodiversity sensitivity map, generated by the screening tool and enhanced by any relevant additional information, overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure).</i></b>					
The Aquatic Sensitivity Map clearly shows the various watercourses with their associated buffers. Pylon placement is not allowed within these areas and must be spanned. <i>Refer to Section 3.1 - 3.3 of the specialist report.</i>					
<b><i>A description on how the identified environmental sensitivity, relating to aquatic ecology, has been considered in determining the proposed route.</i></b>					
It is not thought that the proposed deviation route would have any negative effect on the watercourses provided that no placement of pylons is done within the Tributaries. <i>See Section 4 &amp; Figure 9-12 of the specialist report.</i>					

**A description on how the identified engineering constraints, relating to aquatic ecology, have been considered in determining the proposed route.**

The pylons should easily be able to span sensitive areas such as the Tributaries and should have no effect on the watercourses.

See Section 4 of the specialist report.

**A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location.**

The mitigation hierarchy includes the following steps (in order of decreasing desirability): Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies:

- **Avoid**  
The identified watercourses and associated buffers will be avoided (pylon placement will not take place within these areas).
- **Minimise**  
Impact to the biodiversity of the site will be minimised by implementing the site-specific mitigation measures, read together with the Eskom Generic EMPr.
- **Rehabilitate**  
Rehabilitation of disturbed areas will be done according to the Eskom Generic EMPr.
- **Offset**  
Offsets are not applicable to this project.

**How the comments from interested and affected parties on the proposed route and/or substation location were incorporated.**

This Specialist Confirming Statement is distributed together with the Draft Environmental Sensitivity Report (ESR) for public comment. Should any input from the public change the content / outcome of this report, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.

- A statement confirming that:**
- a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
  - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMP

The impact management actions in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks are mostly sufficient, but additional site-specific mitigation measures are provided and also needs to be applied.

See Section 4 of the Specialist Report.

**4.2.2 Site Specific Mitigation**

Ecological Importance*	Watercourse	Impact/mitigation Statement
Very High	Tributaries	<ul style="list-style-type: none"> <li>• Pylons must not be placed within these areas and associated buffer zones, but the areas may be spanned.</li> <li>• Threatened/endemic/protected species present in tributaries.</li> <li>• No threatened plant species may be removed or trimmed without obtaining the necessary permits from the Conservation authorities.</li> <li>• No person must be allowed to enter the tributary areas unless for crossing the area, which should be at a designated point for all to use.</li> </ul>

		<ul style="list-style-type: none"> <li>• Alien invasive plants present within the watercourses must be removed and eradicated throughout all stages of the project.</li> <li>• No roads are to be constructed through the watercourse areas.</li> <li>• Also refer to the Eskom Generic EMPr</li> </ul>
Site specific mitigation	Vegetation unit	Impact/mitigation Statement
	All watercourse units	<ul style="list-style-type: none"> <li>• To minimise the effect on the watercourses, vegetation, insects, small mammals, and environment it is recommended that the construction be done within the winter period as far as possible, when most plants are dormant and animals less active.</li> <li>• No vegetation clearance (except for alien plant removal) within the watercourse areas.</li> <li>• Regular monitoring (monthly) for damage to the environment as well as establishment of alien plant species must be conducted.</li> <li>• No animals should be intentionally killed or destroyed and poaching and hunting should not be permitted on the site.</li> <li>• No hunting with firearms (shotguns, air rifles or pellet guns) or catapults should be permitted on the property as well as neighbouring areas.</li> <li>• Any animals encountered in the development areas must be relocated away from the site.</li> <li>• Where lighting is required for safety or security reasons, this should be targeted at the areas requiring attention. Yellow sodium lights should be prescribed as they do not attract invertebrates at night and will not disturb the existing wildlife. Sodium lamps require a third less energy than conventional light bulbs.</li> </ul>

#### 4.2.3 Water Use Authorisation

Since pylon placement will fall outside of all the delineated buffers, *Section 21(c): Impeding or diverting the flow of water in a watercourse* and *Section 21(i): Altering the bed, banks, course or characteristics of a watercourse* of the National Water Act will *not* be triggered. It is therefore NOT required to apply for Water Use Authorisation for this project.

#### 4.2.4 Aquatic Sensitivity Map

Figure 5 Avifauna Sensitivity Maps



Watercourses and associated 32m buffer zones (Blue=Tributaries; Red=32m buffer zones; Yellow=100 m corridor; Green=Proposed Deviation)





Watercourses and associated 32m buffer zones (Blue=Tributaries; Red=32m buffer zones; Yellow=100 m corridor; Green=Proposed Deviation)



Watercourses and associated 32m buffer zones (Blue=Tributaries; Red=32m buffer zones; Yellow=100 m corridor; Green=Proposed Deviation)



Watercourses and associated 32m buffer zones (Blue=Tributaries; Red=32m buffer zones; Yellow=100 m corridor; Green=Proposed Deviation)

#### 4.2.5 DFFE Screening Tool Sensitivity Rating vs Specialist Rating

Screening Tool Site Sensitivity	Specialist Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed / confirmed
Low	Low & Moderate	<p>Watercourses are important ecosystems in terms of their water channelling and storing capacities as well as habitat that they provide to various plant and animal species (terrestrial &amp; aquatic). Numerous tributaries (that are seasonally moist and channel surface water towards the Steelpoort river during high rainfall events) had been identified within the proposed deviation route and associated 100m corridor. They have been classified as having a medium biodiversity due to the presence of red data plant species present and achieved a Moderate EIS (Ecological Importance and Sensitivity (EIS) and a High HI (Habitat Integrity) (see Section 3) indicating their ecological sensitivity as a watercourse. These areas only support aquatic faunal species during the wet season depending on the rainfall.</p> <p>No development should be allowed within any of the watercourse areas and a 32m buffer zone is required around their edges where no development may take place as listed in Section 4 of the Specialist Report.</p>

#### 4.2.6 Conclusion relating to Aquatic Impact

The identified watercourses must be spanned, in other words no pylons are allowed within the watercourses and their associated buffers. Access in the High Sensitivity Zones is allowed only on foot or via existing access roads. This, together with the implementation of the Generic- and Site Specific EMPr will ensure that the impact on watercourses will be acceptable.

### 4.3 SPECIALIST CONFIRMING STATEMENT: AVIFAUNA ASSESSMENT

#### 4.3.1 Confirming Statement

CONFIRMING STATEMENT
<b><i>A statement on the duration, date and season of the site verification inspection and walk through as well as the relevance of the season to the outcome of the confirming statement</i></b>
The site verification was conducted over two, one-day periods (16 September 2022 and 20 January 2023 respectively) during the austral spring and summer seasons. These area considered peak season surveys in avifaunal terms, maximising the opportunity to observe seasonal migrants. Incidental points counts were conducted along the length of the proposed route where all species observed and heard were recorded. A additional assessment was done on 17 May 2023 to investigate a small deviation to the route.
<b><i>A description of the affected environment relating to avifauna within the preliminary corridor, based on the most recently available desktop data, site verification inspection and walk through information</i></b>

A total of 241 bird species have been recorded across the four pentads, within which the proposed power line deviation is located, during the SABAP2 atlassing period to date.

The presence of these species in the broader area provides an indication of the diversity of species that could potentially occur along the proposed power line deviation. Of the 241 species, four are regional Red List species (i.e. SCC) (Taylor et al, 2015). Relevant to this development, 44 species are classified as priority power line species (see definition in section 4). Of the power line sensitive species, 12 are likely to occur regularly along the proposed 132kV power line second route deviation.

The site verifications yielded a total species list of 68 species which is considered an accurate reflection of the avian communities likely to be utilising the habitats within the proposed 132kV power line second route deviation, given the significant levels of disturbance and habitat transformation in the area.

***Identification of avifaunal sensitive areas to be avoided within the preliminary corridor, including buffers;***

No VERY HIGH or HIGH sensitivity areas were identified. There are no areas that need to be avoided.

***An avifauna sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure);***

MEDIUM areas of sensitivity requiring mitigation (bird flight diverters) include open grassland areas and ephemeral drainage lines – Figure 6, Section 8

***A description on how the identified environmental sensitivity, relating to avifauna, has been considered in determining the proposed route;***

There are no specific avifaunal constraints that impact on the determination of the proposed 132kV power line second route deviation.

The majority of the proposed 132kV power line second route deviation occurs within habitats that are subject to significant transformation and disturbance, resulting in a LOW sensitivity. Areas that are deemed moderately sensitive include small pockets of grassland habitat and the ephemeral drainage lines and may be areas where avian collisions with the power line may occur. It is recommended that bird flight diverters be installed where the power line crosses these areas.

***A description on how the identified engineering constraints, relating to avifauna, have been considered in determining the proposed route;***

The orientation of the power line within close proximity to the R555 road is likely to preclude the presence of SCC, thereby reducing the likely disturbance and collision impacts. Power line spans are likely to traverse comfortably across the Steelpoort River and ephemeral drainage lines thereby minimising the potential habitat loss impact at these important avian corridors.

***A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;***

Mitigation hierarchy includes the following steps in the order of decreasing desirability: Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies:

**Avoid**

There are no identified areas of VERY HIGH or HIGH sensitivity that must be avoided

**Minimise**

- \* The 132kV power line second route deviation must be constructed using a bird friendly structure (i.e. DT 7641/7649).
- \* Additional mitigation in the form of insulating sleeves on *jumper*s present on strain poles and terminal poles is also required, alternatively all jumpers must be suspended below the crossarms.
- \* Bird flight diverters to be installed on earthwires of spans crossing The Steelpoort River, ephemeral drainage lines and old agricultural land (grassland habitat).
- \* The recommendations of the ecological and botanical specialist studies must be strictly implemented, especially as far as limitation of the construction footprint (especially the removal of natural vegetation) and rehabilitation of disturbed areas is concerned.
- \* If collision or electrocution impacts are recorded once the Merensky-Uchoba 132kV power line is operational, it is recommended that a representative from the Eskom-Endangered Wildlife Trust Strategic Partnership investigate the mortalities and provide recommendations for site-specific mitigation to be applied reactively.

**Rehabilitate**

Rehabilitation of avian resources is not applicable to this project

**Offset**

Offsets are not applicable to this project

**How the inputs of I&APs were considered when determining the final pre-negotiated route and/or substation location; and**

This Specialist Confirming Statement is being distributed together with the Draft Environmental Sensitivity Report (ESR) for public comment. Should any input from the public change the content / outcome of this confirming statement, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.

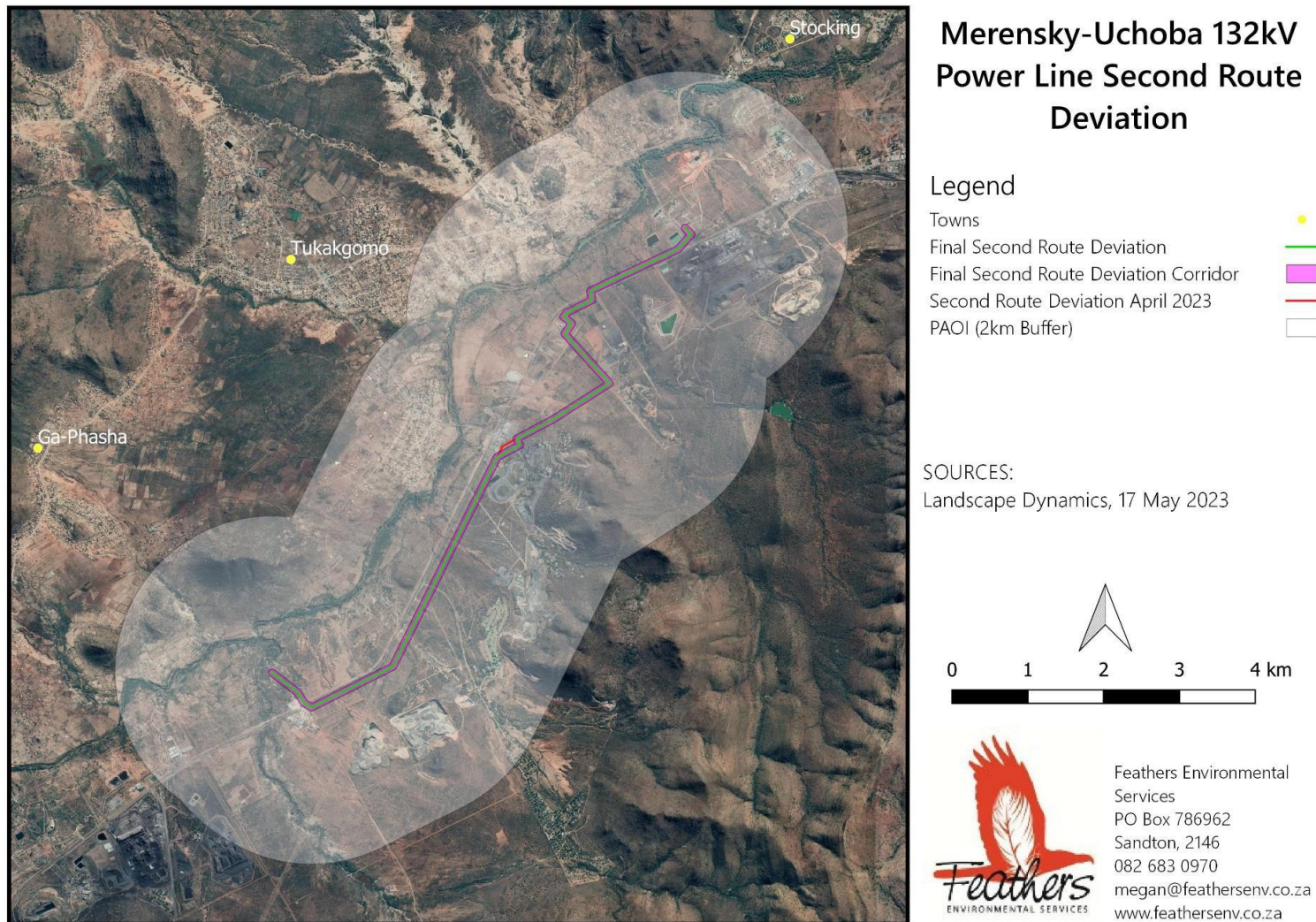
**A statement confirming that:**

- a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or**
- b. where required specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;**

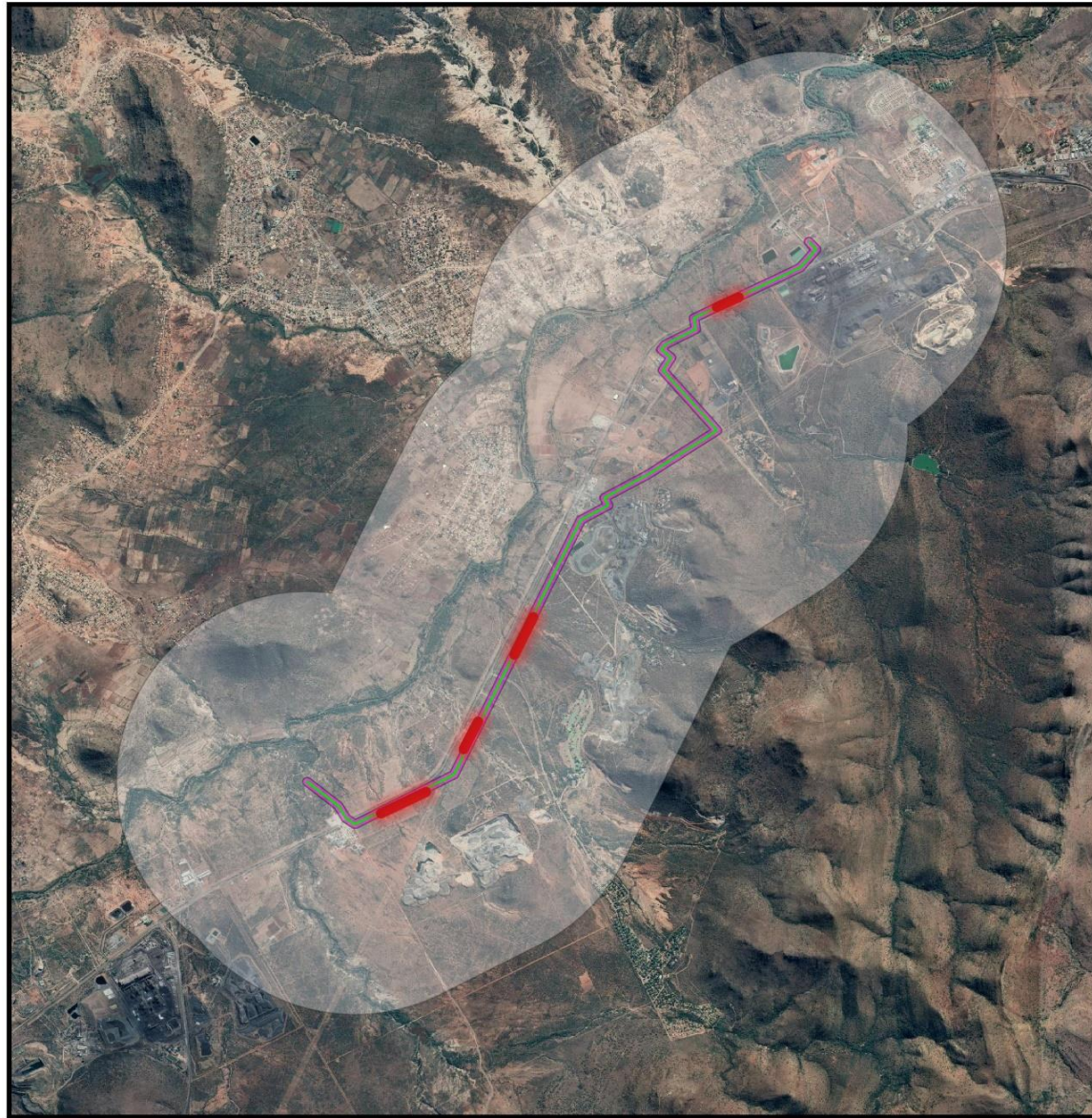
The Eskom Generic EMPr is sufficient for the avoidance, management and mitigation of impacts and risks associated with disturbance, however site specific mitigation measures should also be included in the EMPr. These include:

- \* The 132kV power line must be constructed using a bird friendly structure (i.e. DT 7641/7649).
- \* Additional mitigation in the form of insulating sleeves on *jumper*s present on strain poles and terminal poles is also required, alternatively all jumpers must be suspended below the crossarms.
- \* Bird flight diverters to be installed on earthwires of spans crossing the Steelpoort River, ephemeral drainage lines and old agricultural land (grassland habitat).
- \* If additional collision or electrocution impacts are recorded once the Merensky-Uchoba 132kV power line is operational, it is recommended that a representative from the Eskom-Endangered Wildlife Trust Strategic Partnership investigate the mortalities and provide recommendations for site-specific mitigation to be applied reactively.

### 4.3.2 Avifauna Sensitivity Maps



Regional map detailing the location of the amended section of the proposed Merensky-Uchoba 132kV Power Line Second Route Deviation located near Steelpoort in the Sekhukhune District Municipality, Limpopo Province



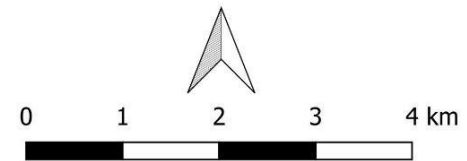
## Merensky-Uchoba 132kV Power Line Second Route Deviation

### Legend

- Second Route Deviation Collision Risk Areas —
- Final Second Route Deviation —
- Final Second Route Deviation Corridor —
- PAOI (2km Buffer)

### SOURCES:

Landscape Dynamics, 17 May 2023



Feathers Environmental Services  
 PO Box 786962  
 Sandton, 2146  
 082 683 0970  
 megan@feathersenv.co.za  
 www.feathersenv.co.za

Collision risk areas – ephemeral drainage lines and open grassland habitat. These areas will require collision mitigation in the form of bird flight diverters

Figure 6 Avifauna Sensitivity Map



### 4.3.3 DFFE Screening Tool Sensitivity Rating vs Specialist Rating

Sensitivity Theme	Screening Tool Site Sensitivity	Specialist Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed /and also confirmed
Animal Species	<b>HIGH</b> Lanner Falcon <i>Falco biarmicus</i>	<b>MEDIUM</b>	Lanner Falcon has been recorded in the PAOI in relatively low abundances according to SABAP2 data. The species may occasionally forage along the proposed second route deviation and within the broader Project Area of Influence (PAOI), but is highly unlikely that area earmarked for the 132kV power line second route deviation will support the breeding requirements of this species, owing to the significant levels of anthropogenic disturbance.
Animal Species	<b>MEDIUM</b> Secretary bird <i>Sagittarius serpentarius</i>  Tawny Eagle <i>Aquila rapax</i>	<b>MEDIUM</b>	Secretary bird and Tawny Eagle have not been recorded in the PAOI according to SABAP2 data. These species may occasionally forage along the proposed second route deviation and within the broader POAI, but is highly unlikely that area earmarked for the 132kV power line second route deviation will support the breeding requirements of these species, owing to the significant levels of anthropogenic disturbance.

### 4.3.4 Conclusion

In accordance with the baseline conditions as presented in Section 7 and the outcomes of the impact assessment detailed in Section 8 of the specialist report, the construction and operation of the proposed Merensky-Uchoba 132kV steel monopole power line second route deviation and its associated 6m road servitude (for construction and maintenance purposes) are not deemed to present unmitigable negative environmental issues or impacts. It is this specialist's opinion that the construction of the 132kV power line and road servitude within the 100m second route deviation corridor will result in acceptable levels of impact on the resident avifauna subject to the aforementioned mitigation and management measures.

## 4.4 SPECIALIST CONFIRMING STATEMENT: ARCHAEOLOGICAL ASSESSMENT

A **Specialist Confirming Statement: Archaeological Assessment** was undertaken by Prof Anton van Vollenhoven and is attached under Appendix D. A concise summary thereof follows below.

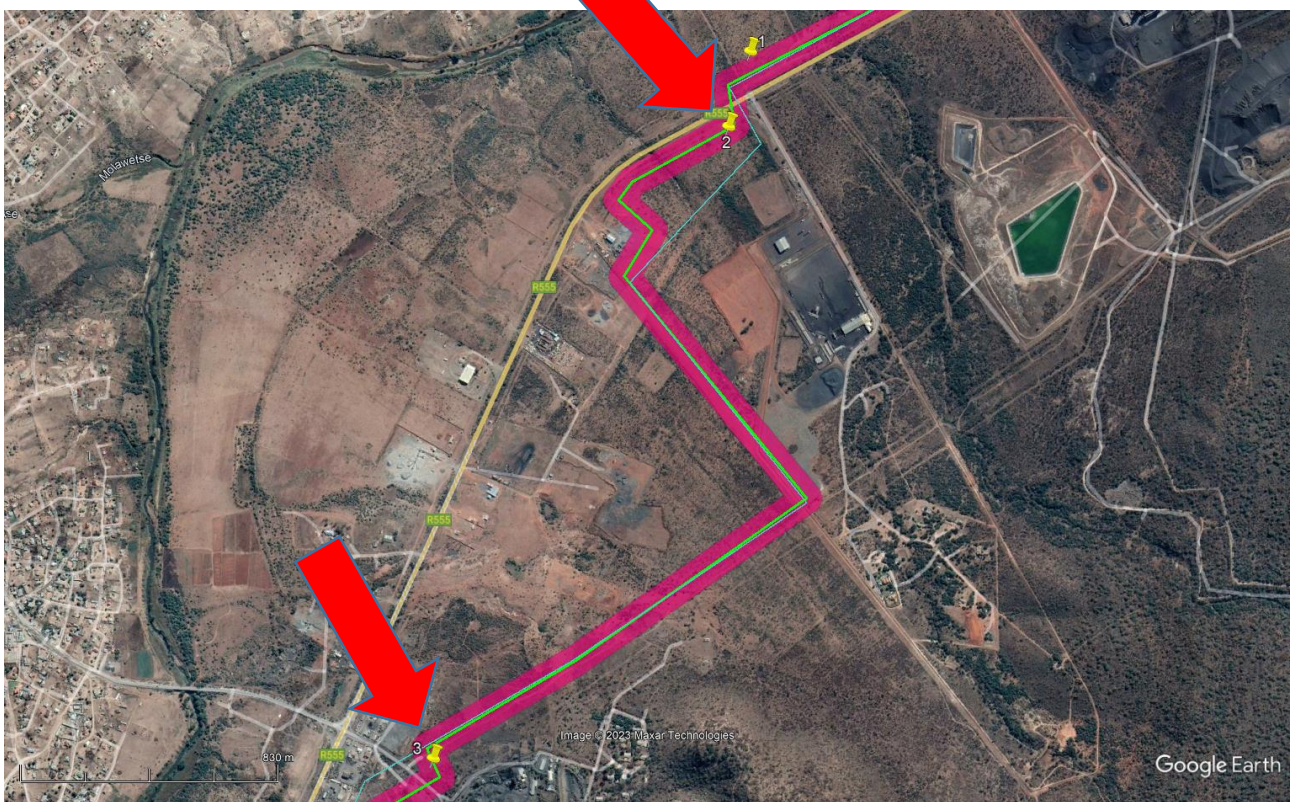
#### 4.4.1 Confirming Statement

<b>CONFIRMING STATEMENT</b>	
<b><i>A description of the affected environment in terms of heritage resources, and an indication of existing heritage impacts within the preliminary corridor based on the site verification inspection and walk through.</i></b>	<p>The environment along the length of the route within the surveyed area is much the same and consist of areas disturbed by ongoing building activities with low vegetation and an open under footing; existing power lines with pioneer vegetation growth; an old abandoned agricultural field. The topography of the area is reasonably flat.</p> <p>Two sites of high cultural heritage significance (graves) was identified during the field survey. A third, which is of low cultural significance was also identified.</p> <p>Refer to Sections 7 and 8 of the specialist report.</p>
<b><i>Identification of heritage resources areas to be avoided within the preliminary corridor, including buffers;</i></b>	<p>Two no-go areas (graves) was identified and must be avoided. A 20m demarcated buffer must be demarcated around the fenced cemetery and the single grave to protect it further during the construction period. The single grave should also be fenced.</p> <p>Refer to Section 9 of the specialist report.</p>
<b><i>A heritage sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool and the South African Heritage Resources Information System, site verification inspection and walk through (where necessary);</i></b>	<p>Refer to Section, Figure 25 of the specialist report.</p> <p>Low to zero sensitivity, except at the grave sites, which has a high sensitivity.</p>
<b><i>Where required, a written comment or letter of no objection from the South African Heritage Resources Agency and/or applicable provincial heritage authority confirming that there is no unacceptable</i></b>	<p>This report was submitted to SAHRA and their comment or letter of no objection will be included in the Final Environmental Sensitivity Report (ESR) which will be submitted to the</p>

<b><i>impact on heritage resources and palaeontology;</i></b>	DFFE for decision making.
<b><i>Confirmation that any recommendations as required by the South African Heritage Resources Agency and/or applicable provincial heritage authority have been incorporated and considered;</i></b>	Recommendations made by SAHRA (if any) will be incorporated into the Final ESR which will be submitted to the DFFE for decision making
<b><i>A description on how the identified environmental sensitivity pertaining to heritage resources and palaeontology has been considered in determining the proposed route;</i></b>	<p>Three sites of cultural heritage importance was identified:</p> <ul style="list-style-type: none"> <li>• The first is stone walling of about 100 x 66 m in size. The site is about 33 m from the proposed development. There will be no impact and the site is of low significance in any event. No mitigation is proposed. The site coordinates are the following: 24°44'44.55"S; 30°10'45.45"E</li> <li>• The second is a grave site which lies 30m from the nearest pylon development and 15m from the powerline and thus within the 100 m corridor. Mitigation is proposed consisting of in situ preservation with a buffer zone of at least 20 m and the site being fenced. The final placement of the pylons must avoid this area and the line may not span it either. The site coordinates are the following: 24°44'52.57"S; 30°10'42.93"E</li> <li>• The third is a single stone packed grave which lies 17m from the powerline and thus within the 100 m corridor. Mitigation is proposed consisting of in situ preservation with a buffer zone of at least 20 m and the site being fenced. (Note that the site is under existing power lines.) The final placement of the pylons must avoid this area and the line may not span it either. The site coordinates are the following: 24°44'52.57"S; 30°10'42.93"E</li> </ul>
<b><i>A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;</i></b>	<p>Mitigation hierarchy includes the following steps (in the order of decreasing desirability: Avoid, Minimise, Rehabilitate, and Offset). In the case of this project, the following applies:</p> <ul style="list-style-type: none"> <li>• Avoid</li> </ul> <p>The graves will be avoided and the project will</p>

	<p>not impact on these or the people visiting the site.</p> <ul style="list-style-type: none"> <li>• Minimise Impact to possible heritage resources is minimised by the inclusion of the “Chance Find Procedure”, and other mitigation into the EMPr.</li> <li>• Rehabilitate Rehabilitation of heritage resources is not applicable to this project</li> <li>• Offset Offsets are not applicable to this project</li> </ul>
<p><b><i>How the inputs of I&amp;APs were considered when determining the final pre-negotiated route and/or substation location; and</i></b></p>	<p>This AIA is being distributed together with the Draft Environmental Sensitivity Report (ESR) for public comment. Should any input from the public / SAHRA change the content / outcome of this report, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.</p>
<p><b><i>A statement confirming that:</i></b></p> <p><b><i>a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or</i></b></p> <p><b><i>b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.</i></b></p>	<p>a. Generic EMPr template table ii; Section 4; The Eskom Generic EMPr is sufficient for the avoidance, management and mitigation of impacts and risks, however site specific mitigation measures should also be included in the EMPr. These mitigation measures are included under Section 10: Conclusion and Recommendations and include an Archaeological and Cultural Heritage Chance Find Protocol as well as management actions for the protection of the two graveyards.</p>

## 4.4.2 Archaeological Sensitivity Map



Three heritage sites had been identified. The two grave sites are indicated by a red arrow and must be avoided. The third site is of low significance and can be destroyed.

Figure 7 Archaeological Sensitivity Map

### 4.4.3 Site Specific Mitigation

The following mitigation measures which are not necessarily specified in the Generic EMP must be implemented:

- The stone terrace identified and described is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation.
- Two graveyards fall within the 100m wide corridor:
  - Graveyard 1 consists of at least 4 graves and is situated at 24°44'52.57"S; 30°10'42.93"E
  - Graveyard 2 consists of one single grave situated at 24°45'58.72"S; 30°10'8.95"E

Site specific mitigation measures must be implemented to protect the two gravesites (which are situated within the 100m corridor) from disturbance and/or destruction. Mitigation is required consisting of in situ preservation with a buffer zone of at least 20 m and the site being fenced. The final placement of the pylons must avoid this area and the line may not span it either.
- The proposed project may continue, but only after receiving comments from SAHRA and implementing the mitigation measures indicated above.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, work on site cease immediately and a qualified archaeologist be called in to investigate the occurrence.
- In this regard the following 'Chance find Procedure' should be followed:
  - Upon finding any archaeological or historical material all work at the affected area must cease.
  - The area should be demarcated to prevent any further work there until an investigation has been completed.
  - An archaeologist should be contacted immediately to provide advice on the matter.
  - Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.
  - SAHRA's APM Unit must also be notified
  - If needed the necessary, permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
  - The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
  - Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.

### 4.4.4 DFFE Screening Tool Sensitivity Rating vs Specialist Rating

Sensitivity Theme	Screening Tool Site Sensitivity	Specialist Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed /confirmed
Archaeological and Cultural Heritage Theme	High Reason given for this rating: Grave site (Grade IIIB) within 100m of the proposed line	Low Sensitivity	The entire corridor is rated as having a LOW sensitivity, except two sites (graves) that is rated as having a HIGH sensitivity. These sites are between 17 and 30m from the nearest pylons and within the 100m wide corridor. Site specific mitigation measures have been provided to protect this

		<p>graveyard from disturbance and/or destruction. These measures include:</p> <ul style="list-style-type: none"> <li>• Fencing of the graves with a 20m buffer zone</li> <li>• The powerline may not span this graves and pylon placement must avoid this fenced area.</li> </ul> <p>With the implementation of the proposed mitigation measures that focuses on avoidance, the final sensitivity can be rated as LOW.</p>
--	--	--

#### 4.4.5 Conclusion

Two grave sites had been identified within the 100m corridor, however, with the implementation of the proposed mitigation measures that focuses on avoidance, the final sensitivity can be rated as LOW and the project can be supported from a heritage point of view.

#### 4.5 SPECIALIST CONFIRMING STATEMENT: PALAEOLOGICAL DESKTOP STUDY

A **Specialist Confirming Statement: Palaeontological Desktop Study** was undertaken by Prof Marion Bamford and is attached under Appendix D. A concise summary thereof follows below.

##### 4.5.1 Confirming Statement

CONFIRMING STATEMENT		
51	<b><i>A description of the affected environment in terms of heritage resources and palaeontology, and an indication of existing heritage and palaeontological impacts within the preliminary corridor based on the site verification inspection and walk through.</i></b>	<p>Refer to Sections 3, 4 in the specialist report.</p> <p>According to the stipulations made by SAHRA, only a desktop study is required.</p>
52	<b><i>Identification of heritage resources and palaeontological areas to be avoided within the preliminary corridor, including buffers;</i></b>	<p>Refer to Section 6 in the specialist report.</p> <p>No 'no-go' area and no buffers to be avoided.</p>
53	<b><i>A heritage sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool and</i></b>	<p>Screening tool palaeontology map – Figure 6 in the specialist report.</p> <p>SAHRIS Palaeosensitivity Map – Figure 5 in the specialist report.</p> <p>Low to zero sensitivity</p>

	<b><i>the South African Heritage Resources Information System, site verification inspection and walk through (where necessary);</i></b>	
54	<b><i>Where required, a written comment or letter of no objection from the South African Heritage Resources Agency and/or applicable provincial heritage authority confirming that there is no unacceptable impact on heritage resources and palaeontology;</i></b>	This report was submitted to SAHRA and their comment or letter of no objection will be included in the Final Environmental Sensitivity Report (ESR) which will be submitted to DFFE for decision making.
55	<b><i>Confirmation that any recommendations as required by the South African Heritage Resources Agency and/or applicable provincial heritage authority have been incorporated and considered;</i></b>	Recommendations made by SAHRA will be incorporated into the Final ESR which will be submitted to DFFE for decision making
56	<b><i>A description on how the identified environmental sensitivity pertaining to heritage resources and palaeontology has been considered in determining the proposed route;</i></b>	The proposed route and 100m corridor have a Low palaeontological sensitivity and therefore does not impact on route planning.  Further detail can be obtained in Section 3 of the specialist report.
57	<b><i>A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;</i></b>	Refer to Section 4 in the specialist report.  The mitigation hierarchy includes the following steps in the order of decreasing desirability: Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies: <ul style="list-style-type: none"> <li>• Avoid: <p style="margin-left: 40px;">There are no high sensitive palaeontological areas that should be avoided.</p> </li> <li>• Minimise: <p style="margin-left: 40px;">Impact to possible palaeontological resources is minimised by the inclusion of the “Chance Find Procedure” into the EMPr.</p> </li> <li>• Rehabilitate: <p style="margin-left: 40px;">Rehabilitation of palaeontological resources is not applicable to this project</p> </li> <li>• Offset: <p style="margin-left: 40px;">Offsets are not applicable to this project</p> </li> </ul>
58	<b><i>How the inputs of I&amp;APs were considered when determining the final pre-negotiated route and/or substation location; and</i></b>	This Palaeontological Impact Assessment (PIA) is being distributed together with the Draft Environmental Sensitivity Report (ESR) for public comment. Should any input from the public / SAHRA change the content / outcome of this report, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.
59	<b><i>A statement confirming that: a. impact management actions as contained in the pre-approved Generic</i></b>	The gazette Generic EMPr is sufficient for the avoidance, management and mitigation of impacts and risks, however site specific mitigation measures should



<p><b>EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or</b>  <b>b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.</b></p>	<p>also be included in the EMPr. These mitigation measures are included under Section 8 and Appendix A of the specialist report and include a Fossil Chance Find Protocol as well as photographs of examples of fossils from the Quaternary sands that should accompany the Fossil Chance Find Protocol into the Site Specific EMPr.</p>
<p><b>Specialist Details</b></p>	<p>Prof Marion Bamford  PhD Palaeontology, Wits 1990  P O Box 652, WITS 2050  Johannesburg</p>

#### 4.5.2 SAHRIS Palaeo Sensitivity Map



SAHRIS palaeosensitivity map for the Merensky-Uchoba 132kV Power Line Second Route Deviation route and very wide buffer shown within the yellow rectangle. Background colours indicate the following degrees of sensitivity: red = very highly sensitive; orange/yellow = high; green = moderate; blue = low; grey = insignificant/zero.

Figure 8 Paleosensitivity Map derived from SAHRIA

#### 4.5.3 DFFE Screening Tool Sensitivity Rating vs Specialist Rating

Sensitivity Theme	Screening Tool Site Sensitivity	Specialist Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed / confirmed
	Medium Sensitivity	Low Sensitivity	The Palaeo-sensitivity map from the DFFE screening tool indicates incorrectly that the Quaternary sands and the non-fossiliferous

Paleontological Theme			<p>Rustenburg Layered Suite (volcanic rocks) has a medium sensitivity</p> <p>In the case of this project, the following applies:</p> <ul style="list-style-type: none"> <li>• There are no high sensitive palaeontological areas that should be avoided.</li> </ul> <p>5 Impact to possible palaeontological resources is minimised by the inclusion of the “Chance Find Procedure” into the EMPr.</p> <ul style="list-style-type: none"> <li>• Rehabilitation of palaeontological resources is not applicable to this project</li> </ul>
-----------------------	--	--	---

### 4.5.3 Conclusion

Based on experience of the specialist and the lack of any previously recorded fossils from the area, it is extremely unlikely that any fossils would be preserved in the river sands, gravel and alluvium of the Quaternary. There is a very small chance that transported fossils may occur in the river sands; therefore a *Fossil Chance Find Protocol* should be added to the EMPr.

The impact on the palaeontological heritage is confirmed to be very low to zero. No ‘no-go’ areas and/or buffer zones are required and no site specific mitigation measures were identified. The Merensky-Uchoba 132kV Power Line Second Route Deviation is supported from a palaeontological perspective.

## 4.6 EAP CONFIRMING STATEMENT: CIVIL AVIATION

### 4.6.1. Confirming Statement

The Environmental Specifications for the Civil Aviation Theme are as follows:

- Engage with Civil Aviation Authority to identify potential hazards and obstacles to civil aviation installations and conditions as described in the South African Civil Aviation Regulations of 2011.
- The outcomes of the engagement process must be documented in the final environmental sensitivity report, including any restrictions or design requirements.

<b>Confirming Statement</b>	
<b><i>A signed declaration of independence by the EAP on a form prescribed by the competent authority as contained in Appendix E of this Standard;</i></b>	The signed declaration of independence by the EAP is attached under Appendix F(1).
<b><i>Confirmation that the affected environment within the preliminary corridor is low or medium, as it pertains to aspects of civil aviation based on desk top information, the site verification inspection and the walk through;</i></b>	The Screening Tool rates the Defence Theme as High and Medium.  Even though the relevant distances had been determined as qualifying for High and Medium Sensitivity, due to the presence of numerous powerlines (both distribution and transmission) within the direct vicinity of the proposed project, it is not expected that significant additional impact on the civil aviation component in the macro area will occur resulting from the construction of the proposed new 132kV distribution powerline.
<b><i>Identification of civil aviation areas to be avoided within the proposed route, including buffers;</i></b>	No civil aviation structures occur within the 100m route corridor.
<b><i>A civil aviation sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool;</i></b>	The sensitivity map as per the Screening Tool is provided below. The airfield positions are provided in Figure 9 below – the information was obtained from <a href="http://www.atns.com">www.atns.com</a> : Air Traffic and Navigation Services (ATNS): Aeronautical Information Management.
<b><i>Where required, a written comment from the South African Civil Aviation Authority (SACAA), which may require input from the Obstacle Evaluation Committee (OEC), confirming that there is no unacceptable impact on civil aviation installations;</i></b>	This Draft ESR was distributed to the Civil Aviation Authority (CAA) and their comment (if any) will be included and addressed in the Final ESR.
<b><i>Confirmation that any restrictions or design requirements as required by the SACAA and/or OEC have been incorporated and considered;</i></b>	This Draft ESR was distributed to the defence authority and their comment (if any) will be included in the Final ESR.
<b><i>A description on how the identified environmental sensitivity, as it pertains to civil aviation, has been considered in determining the</i></b>	No specific civil aviation sensitivities that could influence route determination were identified.

<b>proposed route;</b>	
<b>A description on how the identified engineering constraints, as it pertains to civil aviation, have been considered in determining the proposed route;</b>	There are no identified engineering constraints pertaining to aviation. The route is planned in an area that is characterised by numerous power lines including 400kV transmission lines which are way bigger than the proposed 132kV monopole structures.
<b>A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;</b>	The mitigation hierarchy includes the following steps (in order of decreasing desirability): Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies: <ul style="list-style-type: none"> <li>• Avoid There are no sensitive aviation areas that should be avoided.</li> <li>• Minimise Requirements from the CAA (if any) will be included in the Final ESR.</li> <li>• Rehabilitate Not applicable to this project</li> <li>• Offset Offsets are not applicable to this project</li> </ul>
<b>How the inputs of I&amp;APs were considered when determining the final pre-negotiated route and/or substation location; and</b>	The Draft ESR is being distributed for public comment. Should any input from the public change the content / outcome of this Confirming Statement, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.
<b>A statement confirming that:</b> <ol style="list-style-type: none"> <li>a. <b>impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or</b></li> <li>b. <b>where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;</b></li> </ol>	The Eskom Generic EMPr is sufficient for the avoidance, management and mitigation of impacts and risks, however site specific mitigation measures may be included in the EMPr after comment from the CAA has been received.

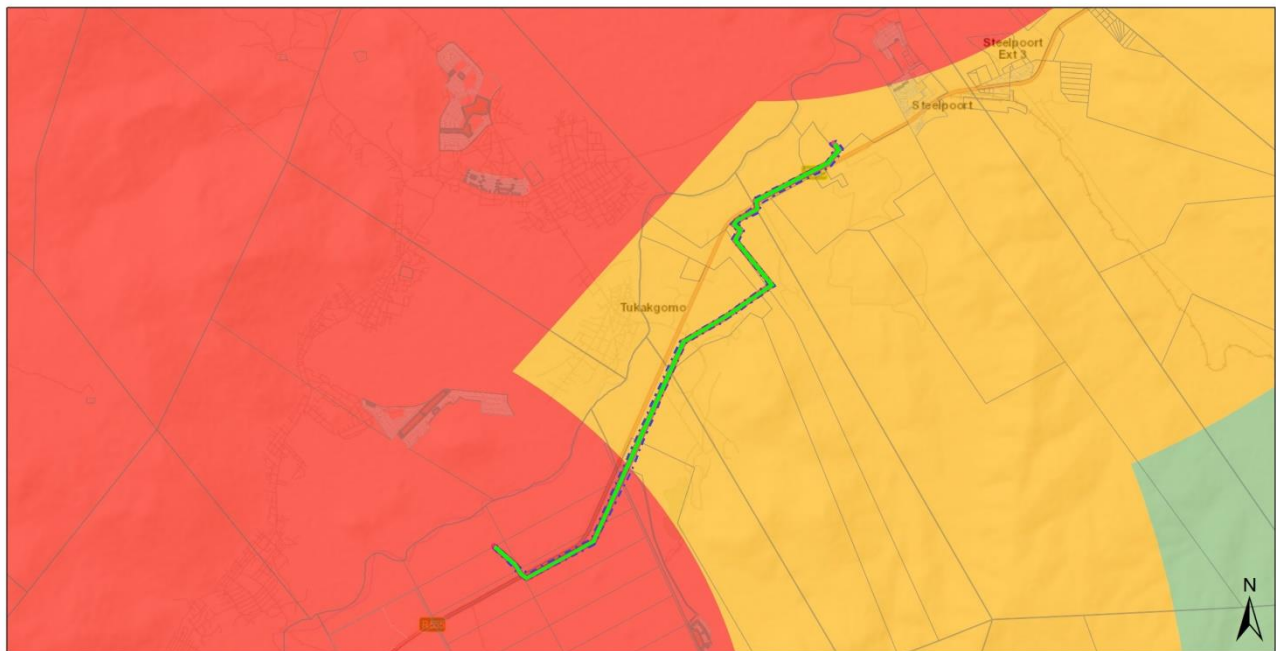
#### 4.6.2. Aviation Environmental Sensitivity Map

According to the Screening Tool, the project falls within a High as well as Medium sensitive Civil Aviation area:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome



#### Civil Aviation Sensitivities



26 April 2023

2nd Deviation FINAL WITH BUFFER - 11 April	National Jurisdiction Area	Agri Holding	Medium
2nd Deviation FINAL WITH BUFFER - 11 April	Cadastre	Public Place	Low
Site Area	Erven	<b>Civil Aviation Combined Sensitivity</b>	
EIA Application Development Footprint	Farm Portion	Very High	
EIA Application Site	Farm	High	

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

Copyright 2023  
National Department of Environmental Affairs,  
Government of South Africa

The airfield positions in the map below were obtained from [www.atns.com](http://www.atns.com): Air Traffic and Navigation Services (ATNS): Aeronautical Information Management.

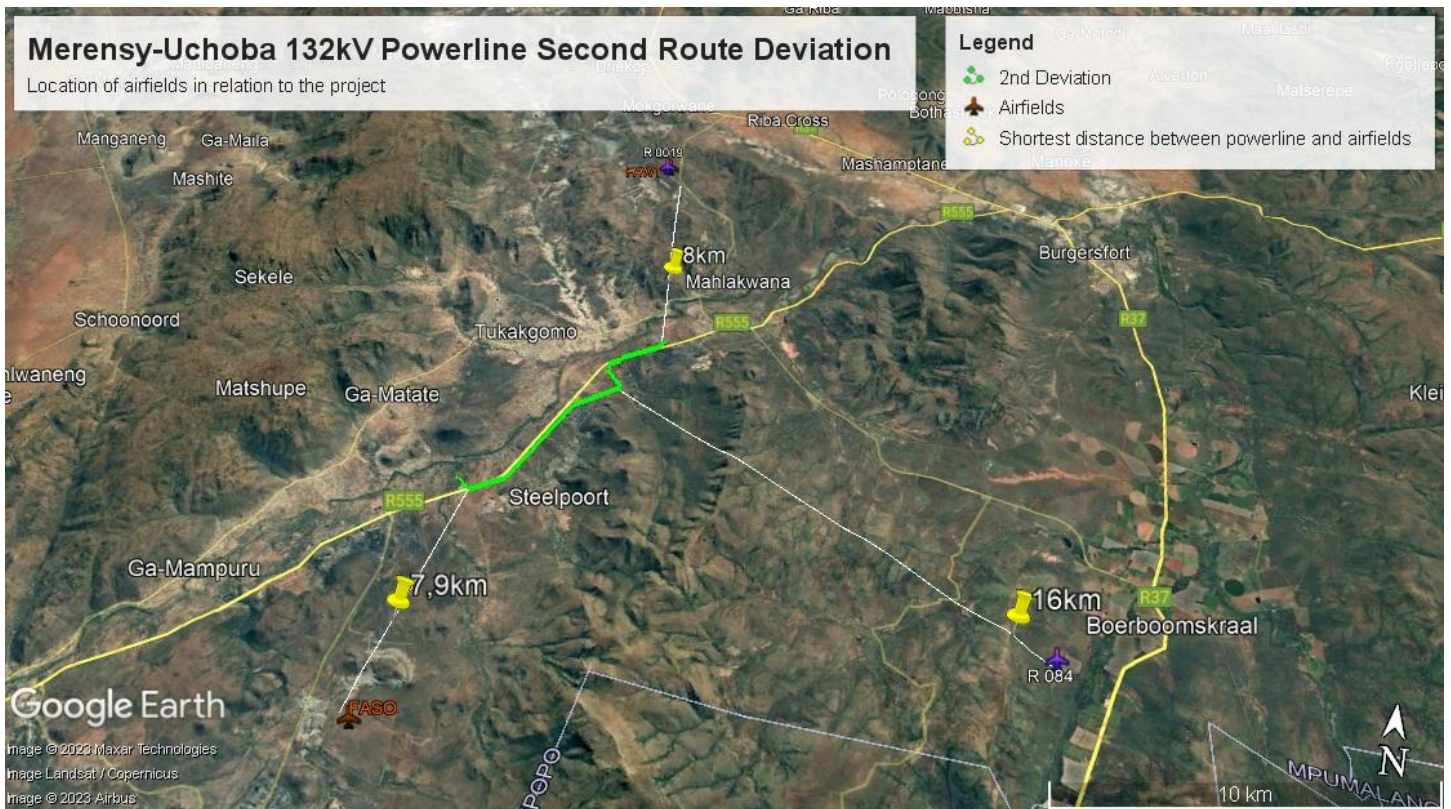


Figure 9 Aviation Environmental Sensitivity Map

#### 4.6.3. DFFE Screening Tool Sensitivity Rating vs EAP Rating

Screening Tool Site Sensitivity	EAP Site Sensitivity	Reasons why the Screening Tool Sensitivity is disputed or confirmed
High Within 8km of other civil aviation aerodrome	Low	The airfield positions as obtained from <a href="http://www.atns.com">www.atns.com</a> : <i>Air Traffic and Navigation Services (ATNS): Aeronautical Information Management</i> confirms the ratings of High and Medium: There are three airstrips situated 7,9km, 8km and 16km respectively from the proposed project..
Medium Between 8 and 15km of other civil aviation aerodrome		Even though the relevant distances had been determined as qualifying for High and Medium Sensitivity, due to the presence of numerous powerlines (both distribution and transmission) within the direct vicinity of the proposed project, it is not expected that significant additional impact on the civil aviation component in the macro area will occur resulting from the construction of the proposed new 132kV distribution powerline.
		The South African Civil Aviation Authority (CAA) was approached for comment during the distribution of the Draft ESR. Comment received, if any, will be included and addressed in the Final ESR.

#### 4.6.4. Conclusion

There are no airstrips or other civil aviation infrastructure situated within the 100m power line corridor. Due to the presence of numerous powerlines (both distribution and transmission) within the direct vicinity of the proposed project, it is not expected that significant additional impact on the civil aviation component in the macro area will occur resulting from the construction of the proposed new 132kV distribution powerline. Comment (if any) from the SACAA will be included in the Final ESR.

### 4.7 EAP CONFIRMING STATEMENT: DEFENCE

#### 4.7.1 Confirming Statement

The Environmental Specifications for the Defence Theme are as follows

- Engage with the defence authorities in the event of the power line being located within:
  - a) 1km of forward airfields, high sites, operational military bases, military training areas, shooting ranges, border posts, all other Department of defence features (including naval bases, housing, offices, workshops);
  - b) 8km from air force bases;
  - c) 10km from ammunition depots; or
  - d) 56km from bombing ranges.
- The outcomes of the engagement process, where required, must be documented in the final environmental sensitivity report, including any restrictions or design requirements.

<b>Confirming Statement</b>	
<b><i>A signed declaration of independence by the EAP on a form prescribed by the competent authority as contained in Appendix E of this Standard;</i></b>	The signed declaration of independence by the EAP is attached under Appendix F(1).
<b><i>Confirmation that the affected environment within the preliminary corridor is low or medium, as it pertains to aspects of Defence;</i></b>	The Screening Tool rates the Defence Theme as Low and there is no known reason why this should be disputed.
<b><i>Identification of defence areas to be avoided within the preliminary corridor, including buffers;</i></b>	There are no defence areas that should be avoided.
<b><i>A defence sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool;</i></b>	The sensitivity map as per the Screening Tool is provided below.
<b><i>Where required, a written comment from the defence authority confirming that there is no</i></b>	This Draft ESR was distributed to the defence authority and their comment (if any) will be included

<b><i>unacceptable impact on military areas of interest;</i></b>	in the Final ESR.
<b><i>Confirmation that any restrictions or design requirements as required by the defence authority have been incorporated and considered;</i></b>	This Draft ESR was distributed to the defence authority and their comment (if any) will be included in the Final ESR.
<b><i>A description on how the identified environmental sensitivity, as it pertains to defence, has been considered in determining the proposed route;</i></b>	No specific defence sensitivities that could influence route determination were identified.
<b><i>A description on how the identified engineering constraints, as it pertains to defence, have been considered in determining the proposed route;</i></b>	There are no identified engineering constraints pertaining to defence.
<b><i>A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;</i></b>	<p>The mitigation hierarchy includes the following steps (in order of decreasing desirability): Avoid, Minimise, Rehabilitate, and Offset. In the case of this project, the following applies:</p> <ul style="list-style-type: none"> <li>• Avoid There are no sensitive defence areas that should be avoided.</li> <li>• Minimise Requirements from the defence authority (if any) will be included in the Final ESR.</li> <li>• Rehabilitate Rehabilitation of defence resources is not applicable to this project</li> <li>• Offset Offsets are not applicable to this project</li> </ul>
<b><i>How the inputs of IAPs were considered when determining the final pre-negotiated route and/or substation location and</i></b>	The Draft ESR is being distributed for public comment. Should any input from the public change the content / outcome of this Confirming Statement, amendments will be made and submitted with the Final ESR. The Final ESR will be submitted to DFFE for decision making and registration of the project.
<b><i>A statement confirming that:</i></b> <ul style="list-style-type: none"> <li>a) <b><i>impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or</i></b></li> <li>b) <b><i>where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.</i></b></li> </ul>	The Eskom Generic EMPr is sufficient for the avoidance, management and mitigation of impacts and risks, however site specific mitigation measures may be included in the EMPr after comment from the defence authority has been received.



#### 4.7.2 DFFE Screening Tool Sensitivity Rating vs EAP Rating

Screening Tool Site Sensitivity	EAP Site Sensitivity	Reasons why the Screening Tool Sensitivity is <del>disputed</del> or confirmed
Low	Low	<p>The Screening Tool rates the Defence Theme as Low and there is no known reason why this should be disputed.</p> <p>The Department of Defence was approached for comment during the distribution of the Draft ESR and any comment be included and addressed in the Final ESR.</p>

#### 4.7.3 Conclusion

There are no defence areas and/or infrastructure within the 100m route corridor, neither has any obvious defence areas and/or infrastructure been identified in the macro area. The DFFE Screening Tool rates the Defence Theme as Low and there is no known reason why this should be disputed.

#### 4.8 APPLICATION OF PRINCIPLES STIPULATED IN CHAPTER 3 OF THE STANDARD

The following principles were adhered to:

Environmental Principle	Confirmation from specialist that it was adhered to
There must be no removal of threatened plant species	Confirmed by Prof Leslie Brown (ecologist)
<p>There must be no impact on Tier 1 plant species</p> <p>A tier 1 plant species means "Habitat for species that are endemic to South Africa, where all the known occurrences of that species</p> <ul style="list-style-type: none"> <li>• are within an area of 10km<sup>2</sup> are considered Critical Habitat[1];</li> <li>• as all remaining habitat is irreplaceable[2]</li> <li>• Typically these include species that qualify under Critically Endangered (CR), Endangered (EN), or Vulnerable (VU)[3]</li> <li>• Criteria of the IUCN or species listed as Critically/ Extremely[4] Rare under South Africa's National Red List Criteria.</li> </ul> <p>For each species reliant in a Critical Habitat, all remaining suitable habitat has been manually mapped at a fine scale</p>	Prof Leslie Brown (ecologist) confirmed that Tier 1 plant species are found in vegetation unit 3 but these plants will be conserved because the areas will be mitigated and/or avoided. There will therefore be no impact on Tier 1 plant species.
Clear-cutting during construction must be kept to a maximum of	The client confirmed that all

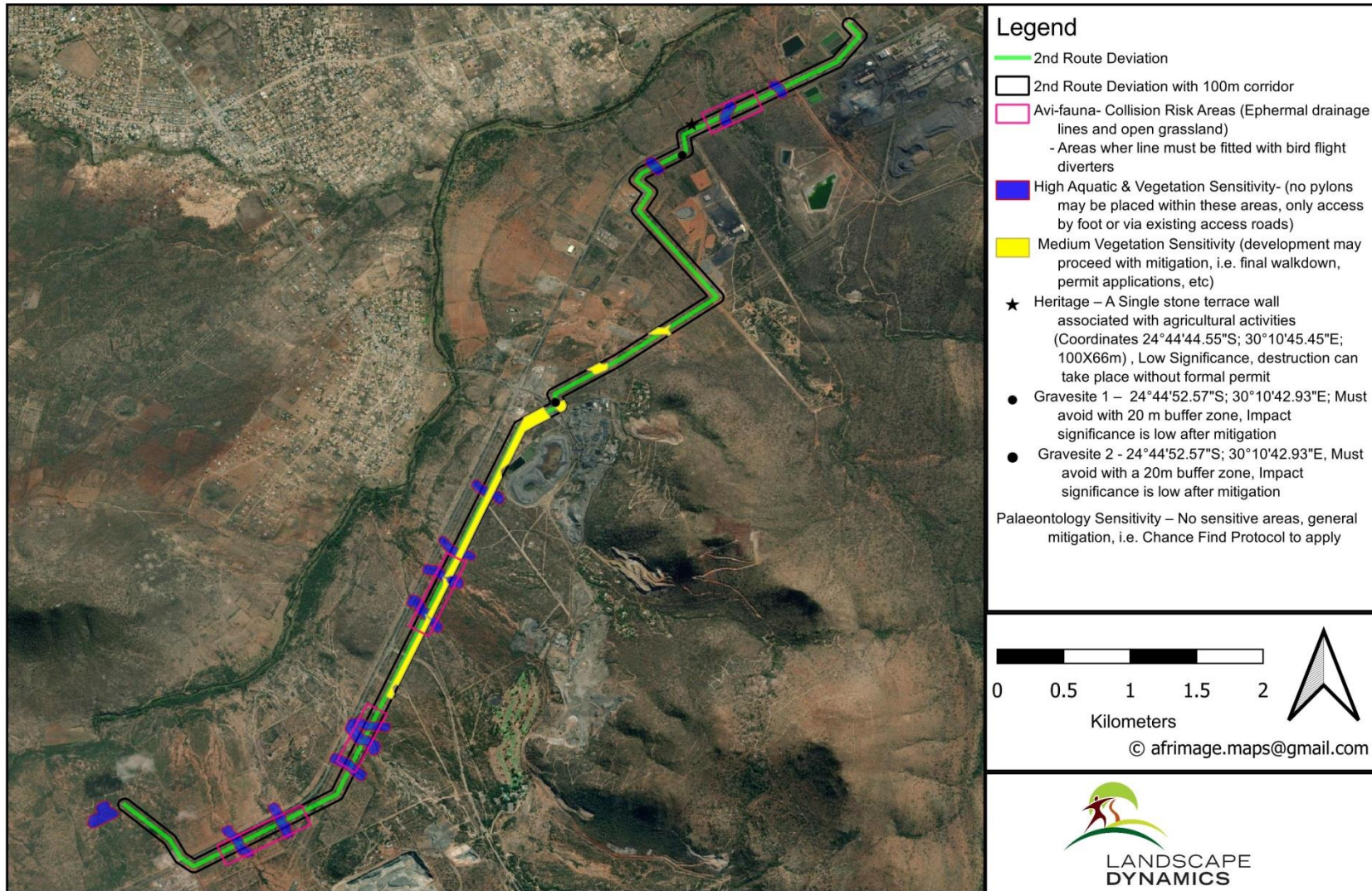
8m	foundations do not exceed 8mx8m.
Wetlands must be avoided or, where wetland crossing is unavoidable, the power line should be routed over the narrowest part of the wetland. For the most part, wetlands and rivers can be traversed by the power line with little to no impact by placing the pylons outside of the wetland.	Confirmed by Prof Leslie Brown (ecologist)
Avoid all known Blue Swallow breeding habitat by a 2.5 km buffer. Should the full extent of the buffering not be practically possible, a thorough investigation must be conducted by a suitably experienced avifaunal specialist with experience of Blue Swallows to identify any potential nesting holes, which must then be appropriately buffered, in consultation with Ezemvelo KwaZulu-Natal Wildlife and BirdLife South Africa to prevent destruction of the nest holes.	Confirmed by Ms Megan Diamond (avifauna specialists)
Avoid Cape Vulture and White-backed Vulture breeding colonies by a 5 km buffer. In addition, it would require management of the potential impacts on the breeding birds once construction commences, which would necessitate the involvement of the avifaunal specialist and the environmental control officer (ECO).	Confirmed by Ms Megan Diamond (avifauna specialists)
Avoid Lappet-faced Vulture and Bearded Vulture restaurants by a 5 km buffer. Should the full extent of the buffering at vulture restaurants not be practically possible, the vulture restaurant should be relocated in consultation with the owner of the restaurant.	Confirmed by Ms Megan Diamond (avifauna specialists)
The power line alignment or substation footing shall not be located within 500m of the edge of waterbodies found to be suitable for Greater Flamingo, Black Stork, Blue Crane, Great White Pelican, Lesser Flamingo and African Marsh-harrier.	Confirmed by Ms Megan Diamond (avifauna specialists)
The power line alignment or substation shall not be located within 1km of major piggyeries and poultry farms.	Confirmed by the EAP

#### 4.9 CONCLUSION OF ENVIRONMENTAL SENSITIVITIES

All environmental themes as identified by the DFFE Screening Tool are rated as having a MEDIUM or LOW environmental sensitivity by the specialists and/or the EAPs. Those areas that are rated as having a HIGH environmental sensitivity will be spanned (in other words avoided) by the power line and the project will thus not impact on these areas.

4.10 COMBINED ENVIRONMENTAL SENSITIVITY MAP

Merensky-Uchoba 132kV Power Line Second Route Deviation  
 Combined Environmental Sensitivity Map



## CHAPTER 4: PUBLIC PARTICIPATION PROCESS

### 4.1 OBJECTIVES OF PUBLIC PARTICIPATION

The main aim of public participation is to ensure transparency throughout the Registration process. The objectives of public participation are the following:

- To identify all potentially directly and indirectly affected stakeholders, government departments, municipalities and landowners;
- To communicate the proposed project in an objective manner with the aim to obtain informed input;
- To assist the Interested & Affected Parties (IAPs) with the identification of issues of concern, and providing suggestions for enhanced benefits and alternatives;
- To obtain the local knowledge and experience of IAPs;
- To communicate the proceedings and findings of the specialist studies;
- To ensure that informed comment is possible;
- To ensure that all concerns, comment and objections raised are appropriately and satisfactorily documented and addressed.

### 4.2 PUBLIC PARTICIPATION PROCESS FOLLOWED

The Public Participation Process follows is summarised as follows:

- A Register of Interested & Affected Parties (IAPS) was compiled which includes the contact details of affected landowners, municipalities, government departments and other applicable organisations. This list is being updated throughout the registration process.
- A Background Information Document (BID), announcing the project and with a request to register as an IAP was distributed on 30 April 2023.
- A newspaper advertisement was placed in the Citizen on 4 May 2023.
- The Draft ESR was distributed by reasonable means and according to the Standard for a 30-commenting period (excluding public holidays) on 5 May 2023. The Draft ESR was submitted to SAHRA on 2 June 2023. The final date for comment is therefore 2 July 2023.
- The Draft ESR was submitted to the DFFE for comment on 5 May 2023 via their online system.
- Comment received on the Draft ESR will be included in the Final ESR.
- The Final ESR with the official registration application will be submitted to the DFFE for their consideration for Registration of the project.
- IAPs will be notified of the availability of the Final ESR for information.
- Once the DFFE has made their decision regarding the registration application, the IAPs will be informed of the decision and the opportunity to appeal.

:

### 4.3 COMMENT RECEIVED ON THE DRAFT ENVIRONMENTAL SENSITIVITY REPORT

All comment received during the registration process will be included and addressed in a Comment & Responses Report in the Final ESR.

## CHAPTER 5: CONCLUSION

It is concluded that the registration process was strictly done according to the Standard:

- The Screening Tool was used as guidance to determine the need for certain specialists and to determine the applicable environmental themes.
- All identified HIGH and VERY HIGH environmental sensitivities will be avoided and mitigation measures have, where applicable, been included in the Site Specific EMPr (Appendix E) to minimise the impact where the project will traverse areas of Medium or Low environmental sensitive areas.
- Signed pre-negotiated agreements from all the directly affected landowners are attached to this document.
- The Public Participation Process is conducted according to all stipulations as per the Standard.
- General environmental principles were followed whilst the route planning was conducted.

### EAP Recommendation

The EAPs are confident to recommend the Merensky-Uchoba 132kV Second Route Deviation for registration in terms of the Standard.

\*\*\*\*\*

---