



26 April 2024  
532062/ACS

Eskom Holdings SOC Ltd  
Procurement and Supply Chain Management  
Brackenfell Minors Capital  
Brackenfell  
7560

**Attention: Ms Namhla Dondi**

Dear Ms Dondi

**532062/ACS: Agricultural Compliance Statement for the Eskom Ceres - Witzenberg 132/66kV Powerline, Western Cape**

**1. Introduction and background**

**1.1 Introduction**

SRK Consulting (South Africa) (Pty) Ltd. (SRK) has been appointed by Eskom Holdings SOC Limited (Eskom) as the independent consultants to undertake the Basic Assessment (BA) process<sup>1</sup> for the proposed Ceres - Witzenberg powerline and substation project, within the Ceres Valley in the Western Cape province, South Africa. The powerline and substation have been proposed as a replacement for the current 66kV powerline running from Ceres to Witzenberg with that of a 17 km single-circuit 132 kV powerline. As part of the project, a new substation, to be located in Prince Alfred Hamlet, has also been proposed.

As per the Department of Environment, Forestry and Fisheries' (DEFF) requirements, the DEFF's national web-based screening tool was applied, by SRK, to the proposed development. The screening tool identified the agricultural sensitivity of the area to be very high, thus triggering the need for an Agricultural Agro-Ecosystems Assessment in accordance with the requirements of the Department of Environmental Affairs Procedures for the Assessment and Minimum Criteria for Reporting on Environmental Themes<sup>2</sup> (Figure 1).

<sup>1</sup> The project triggers the need for a Basic Assessment (BA) process to be undertaken as part of an application for Environmental Authorisation for the proposed development. The BA process is being undertaken in terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (GN R982, as amended by GN R 326) as promulgated under the National Environmental Management Act (No. 107 of 1998) (NEMA).

<sup>2</sup> Reference: Government Gazette No. 43110, published in Government Notice No. 320, dated 20 March 2020: Part B: Environmental Themes. Theme 1 - Agriculture – Protocol for the specialist assessment and minimum report content requirements for environmental impacts on agricultural resources.

**Partners** R Armstrong, JS Bartels, CM Bauman, N Brien, JM Brown, LSE Coetsier, CD Dalgliesh, BM Engelsman, R Gardiner, M Hinsch, SG Jones, W Jordaan, WC Joughin, DA Kilian, F Lake, JA Lake, NG Macfarlane, V Maharaj, I Mahomed, HAC Meintjes, MJ Morris, DH Mossop, GP Nel, VS Reddy, S Reuther, PJ Shepherd, T Shepherd, MJ Sim, VM Simposya, JS Stiff, M van Huyssteen, AT van Zyl, MD Wanless, CJ Wessels, ML Wertz, A Wood

**Directors** AJ Barrett, CD Dalgliesh, WC Joughin, V Maharaj, VS Reddy, T Shepherd, AT van Zyl

**Associate Partners** PJ Aucamp, T Claassen, SA de Villiers, IT Doku, M du Toit, LM Linzer, JI Mainama, RD O'Brien, LC Shand

**Consultants** JR Dixon, PrEng, GC Howell, PrEng, PhD, WC Joughin, PrEng, MSc, PR Labrum, PrEng, LM Linzer, PrSci Nat, PhD, SA Lorentz, PhD, RRW McNeill, PrTech Eng, HAC Meintjes, PrEng, MSc, PN Rosewarne, PrSci Nat, MSc, PE Schmidt, B.Comm, DipAcc, CA(SA), AA Smithen, PrEng, TR Stacey, PrEng, DSc, PJ Terbrugge, PrSci Nat, MSc, HFJ Theart, PrSci Nat, PhD, DJ Venter, PrTech Eng

**African Offices:**

Cape Town + 27 (0) 21 659 3060  
Durban + 27 (0) 31 279 1200  
East London + 27 (0) 43 748 6292  
Johannesburg + 27 (0) 11 441 1111  
Pietermaritzburg + 27 (0) 33 347 5069  
Port Elizabeth + 27 (0) 41 509 4800  
Pretoria + 27 (0) 12 361 9821  
Accra + 23 (3) 24 485 0928  
Lubumbashi + 243 (0) 81 999 9775

**Group Offices:**

Africa  
Asia  
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South America



## 1.2 Motivation for an Agricultural Compliance Statement

In terms of Table 1 in the Protocol for the assessment and reporting of environmental impacts on the agricultural resources (GN 320, dated 20 March 2020)<sup>3</sup>, item 1.1 states that:

*“An applicant intending to undertake an activity identified in the Scope of this Protocol on a site identified on the screening tool as being of “very high” or “high” sensitivity for agricultural resources must submit an Agricultural Agro-Ecosystems Assessment, **unless:***

*1.1.1) the application is for a **linear activity for which impacts to the agricultural resource are temporary** and the land in the opinion of the soil scientist or agricultural specialist based on the mitigation and remedial measures, can be returned to the current land capability within two years of the completion of construction phase;*

*1.1.2) impact on agricultural resources is from an **electricity pylon**; or*

*1.1.3) information gathered from the Site Sensitivity Verification differs from the designation of “very high” or “high” agricultural sensitivity, and it is found to be of a “medium” or “low” sensitivity.”*

Whilst the identification of a very highly sensitive area by the screening tool would trigger a full Agricultural Agro-Ecosystem Specialist Assessment as per the requirements in Subsection 1.1 of the Protocol, Subsection 1.1.2 read with Subsection 1.2 is applicable to this study. Owing to the fact that the proposed development is that of a powerline, this section is applicable and negates the need for a full Assessment, requiring only an Agricultural Compliance Statement (this document) to be submitted.

The requirements of such a Statement, as presented in Table 1 below, are addressed in the following sections.

**Table 1: Agricultural Compliance Statement requirements**

| Section in Table 1 of the Protocol | Requirement  | Relevant Report Section |
|------------------------------------|--|-------------------------|
| 3.3.1                              | Contact details and relevant experience as well as SACNASP registration number of the soil scientist or agricultural specialist preparing the assessment including a curriculum vitae  | Appendix A              |
| 3.3.2                              | A signed statement of independence   | Appendix B              |
| 3.3.3                              | A map showing the proposed development footprint (including supporting infrastructure) with a 50m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool  | Figure 1                |
| 3.3.4                              | Confirmation from the specialist that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities   | Section 4               |
| 3.3.5                              | A substantiated statement from the soil scientist or agricultural specialist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not, of the proposed development   | Sections 2 and 3        |
| 3.3.6                              | Any conditions to which the statement is subjected   | Section 4               |
| 3.3.7                              | In the case of a linear activity, confirmation from the agricultural specialist or soil scientist, that in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase | Section 4               |
| 3.3.8                              | Where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr   | Section 4               |
| 3.3.9                              | A description of the assumptions made as well as any uncertainties or gaps in knowledge or data  | Section 4               |

<sup>3</sup> Reference: Government Gazette No. 43110, published in Government Notice No. 320, dated 20 March 2020: Part B: Environmental Themes. Theme 1 - Agriculture – Protocol for the specialist assessment and minimum report content requirements for environmental impacts on agricultural resources.

### 1.3 Project overview

The proposed project comprises the following key aspects:

- Construction of the new Prince Alfred Hamlet Substation (~0.552 ha) located to the northwest of Prince Alfred Hamlet.
- Construction of an approximately 17 km long 132 kV Kingbird<sup>4</sup> powerline from the existing Ceres Substation to the existing Witzenberg Substation. This will include:
  - A 100 m wide corridor (i.e. 50 m on each side of the line) extending the full length of the proposed approximately 17 km powerline route:
    - Vegetation (including crops<sup>5</sup>) in the servitude will only be trimmed or cleared if it is necessary to maintain access to the powerline, to meet legal clearance requirements, and when vegetation poses a fire risk.
    - Eskom will make use of existing access roads wherever possible.
  - Approximately 92 pylon positions, each with a footprint of between 5 and 20 m<sup>2</sup>, located within the 100 m wide corridor:
    - The exact placement of pylons within the 100 m wide corridor is still to be determined and will depend on factors such as topography and access.
    - Foundations for pylons will be approximately 4.5 m deep.
    - The average span between pylons is approximately 100 to 400 m.
    - As an indication, pylons will typically have a footprint of 5 m<sup>2</sup> (braced-double steel pole structures) and 20 m<sup>2</sup> (steel monopole structures).
    - Pylons will be assembled in on-site laydown areas of approximately 225 m<sup>2</sup>. A laydown area will be required at each pylon position.

### 1.4 Scope of this document

The scope of this document is to:

- Provide an overview (i.e. agricultural context) of the proposed powerline alignment alternative routes) and receiving environment to be impacted on in terms of:
  - Agricultural activities in the area surrounding the proposed powerline.
  - Soils and land types within the area.
- Make recommendations for the proposed powerline corridors in relation agricultural activities and impacts.

### 1.5 Methodology applied

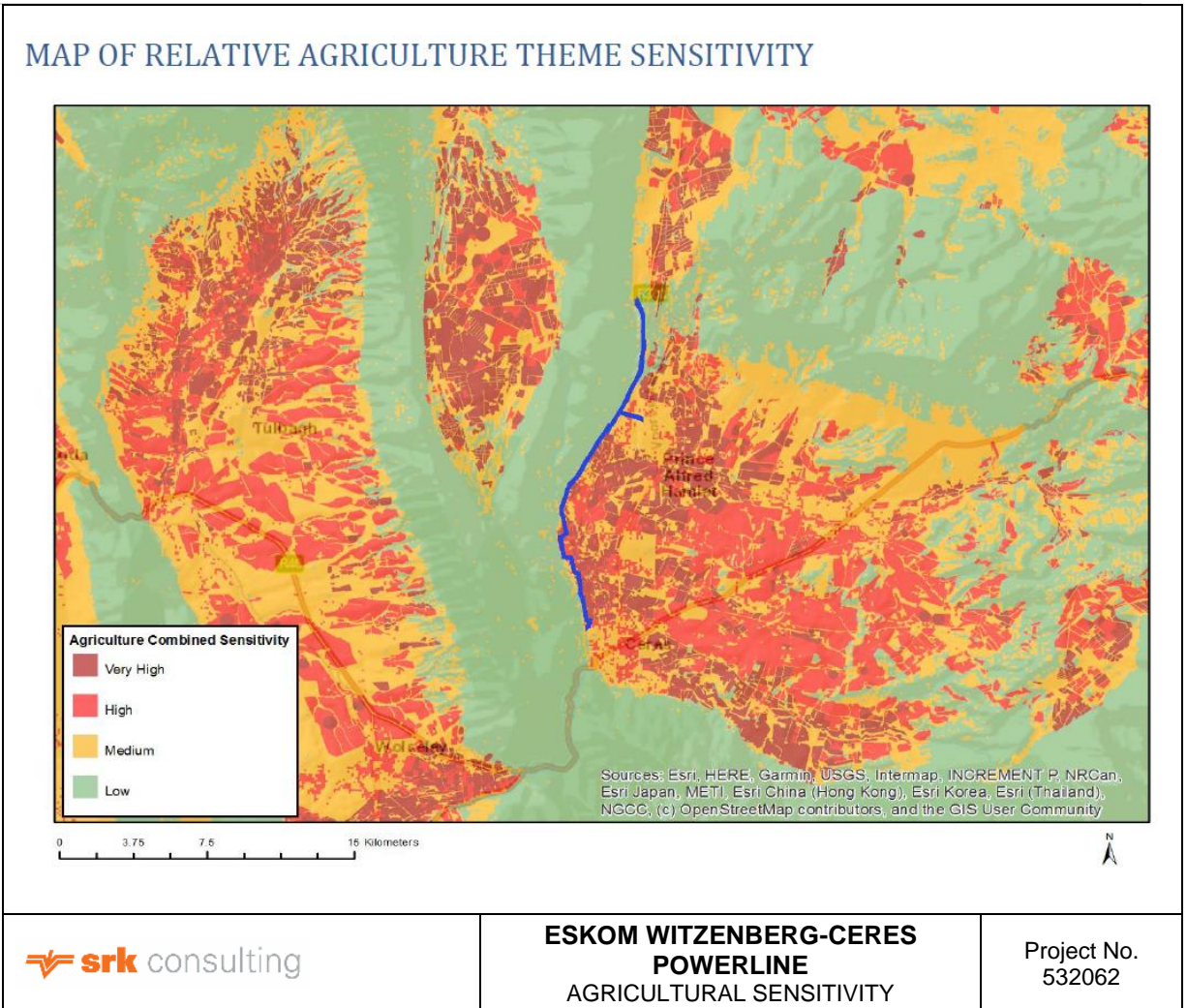
The methodology applied to this document entailed the following:

- Desktop assessment of the proposed development footprint (including the 100 m wide corridor) considering factors relevant to agriculture within the area including:
  - Areas of properties falling within the development footprint using the Surveyor General's cadastral datasets.
  - Current land use based on the DEA's National Land Classification 2018 data within, and surrounding, the development footprint.
  - Land Types, and associated soils, falling within the development footprint using the South African Land Type Survey (conducted over the period 1972 to 2002).
- Provision of recommendations/mitigation measures to be implemented with regards to the project.

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<sup>4</sup> Kingbird is a type of aluminium overhead conductor that is steel reinforced.

<sup>5</sup> It is assumed that where crops/orchards/vineyards within the 100 m servitude are cleared for construction of the powerline, these can be replanted with suitable low-growing crops (apart from in the pylon footprints and dedicated access roads).



**Figure 1: Agricultural Land Sensitivity Surrounding Proposed Powerline Corridors (Source: DEFF national web-based screening tool, 2021)**

## 2. Overview of the Site and Receiving Environment

Located within the Ceres Valley (also known as the Warm Bokkeveld Valley) in the Witzenberg Local Municipality, the proposed powerline is to be developed in order to meet the increasing demand from surrounding agricultural activities. Currently, supply to Witzenberg is a single 132 kV powerline from Romansriver and Witzenberg, whilst the only supply to Ceres is that of the remainder of the 66 kV powerline (following the destruction of much of the powerline following a fire) from the Witzenberg substation.

Figure 2 shows the locality of the proposed powerline in relation to surface water resources, towns and road infrastructure. The figure illustrates that the proposed powerline extends northwards from just west of Ceres through to the existing Witzenberg Substation located to the northwest of Prince Alfred Hamlet.

### 2.1 Land Use in the Surrounding Area

The broader study area is predominantly under some form of agricultural land use, with small pockets of residential and industrial areas identified to the east of the proposed powerline corridor. To the west of the powerline lies the Skurweberge mountain range, the foot of which is the siting for much of the proposed powerline corridor.

As shown in Figure 3, much of the area directly adjacent to the first half of the proposed powerline corridor (i.e. as the line moves from the Ceres Substation) is under cultivation, with orchards being the most frequently occurring crop throughout much of this portion of the corridor. However, as the corridor extends past these orchard areas (just to the west/northwest of Prince Alfred Hamlet), the land use

changes and the area is dominated by natural vegetation with seemingly little agricultural value given its degraded status (as per the National Land Classification 2018 (NLC2018)) and mountainous nature.

Given the annual crop types grown within the area, these small areas of dryland cropping adjacent to the corridor will most likely be under wheat, lucerne or some hardier fruit and vegetable crops. It is evident from the spatial information available that almost all of the cultivated areas that will potentially be lost to accommodate the construction (temporary impact) of the proposed powerline will be under annual crop types and not established crops that require a number of years prior to first harvest. These established crop types (especially the orchard areas adjacent to the corridor footprint) fall on, or just outside, much of the corridor based on the powerline route provided (Figure 4).

In terms of long-term impacts, the areas falling within the pylon footprint will be cleared permanently and will no longer be available for cultivation – as such, the micro-siting of the pylons (including along farm boundaries and away from fields/cultivated areas) should be done to minimise the potential loss of any vineyards/orchards. However, much of the surrounding area lost to construction activities such as lay down areas should be easily rehabilitated (assuming no contamination of land/fuel spills from truck etc) and, in many instances where feasible, returned to some form of annual dryland cropping within 12 to 24 months of the activities being undertaken.

Plates below show the surrounding natural and agricultural land use surrounding the proposed corridor.



Plate 1a: Transitional landscape from natural vegetation (to the right of the image) towards cultivated lands (to the left of the image)



Plate 1b: Example of existing electricity infrastructure spanning established crops in the Ceres Valley

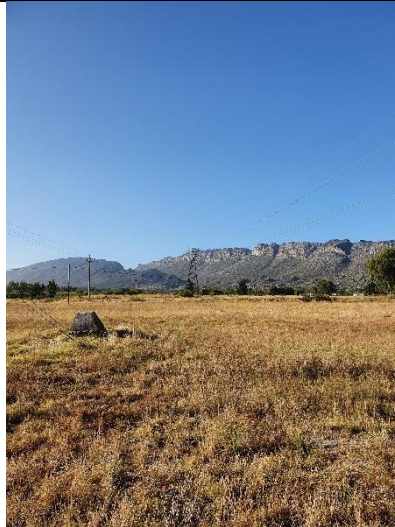


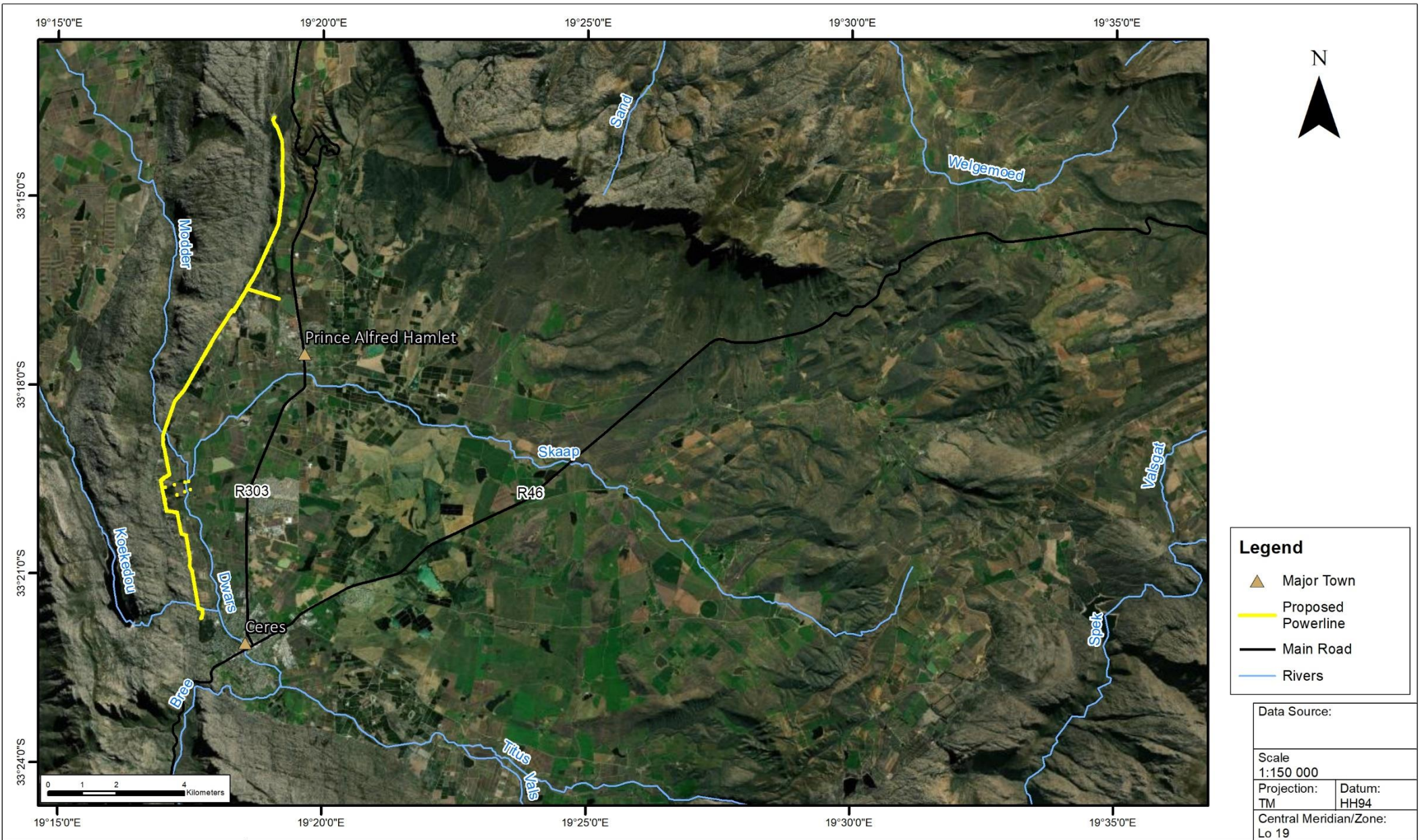
Plate 1c: Natural veld and low shrubland (predominantly fynbos) in the area surrounding the proposed corridor



Plate 1d: Disturbed areas and natural vegetation surrounding existing access routes

|   |  |                       |
|---|--|-----------------------|
|  | <b>ESKOM WITZENBERG-CERES POWERLINE</b><br>NATURAL AND AGRICULTURAL LAND USE | Project No.<br>532062 |
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**Plate 1 (a-d): Images of natural and agricultural land use in the area surrounding the proposed corridor**



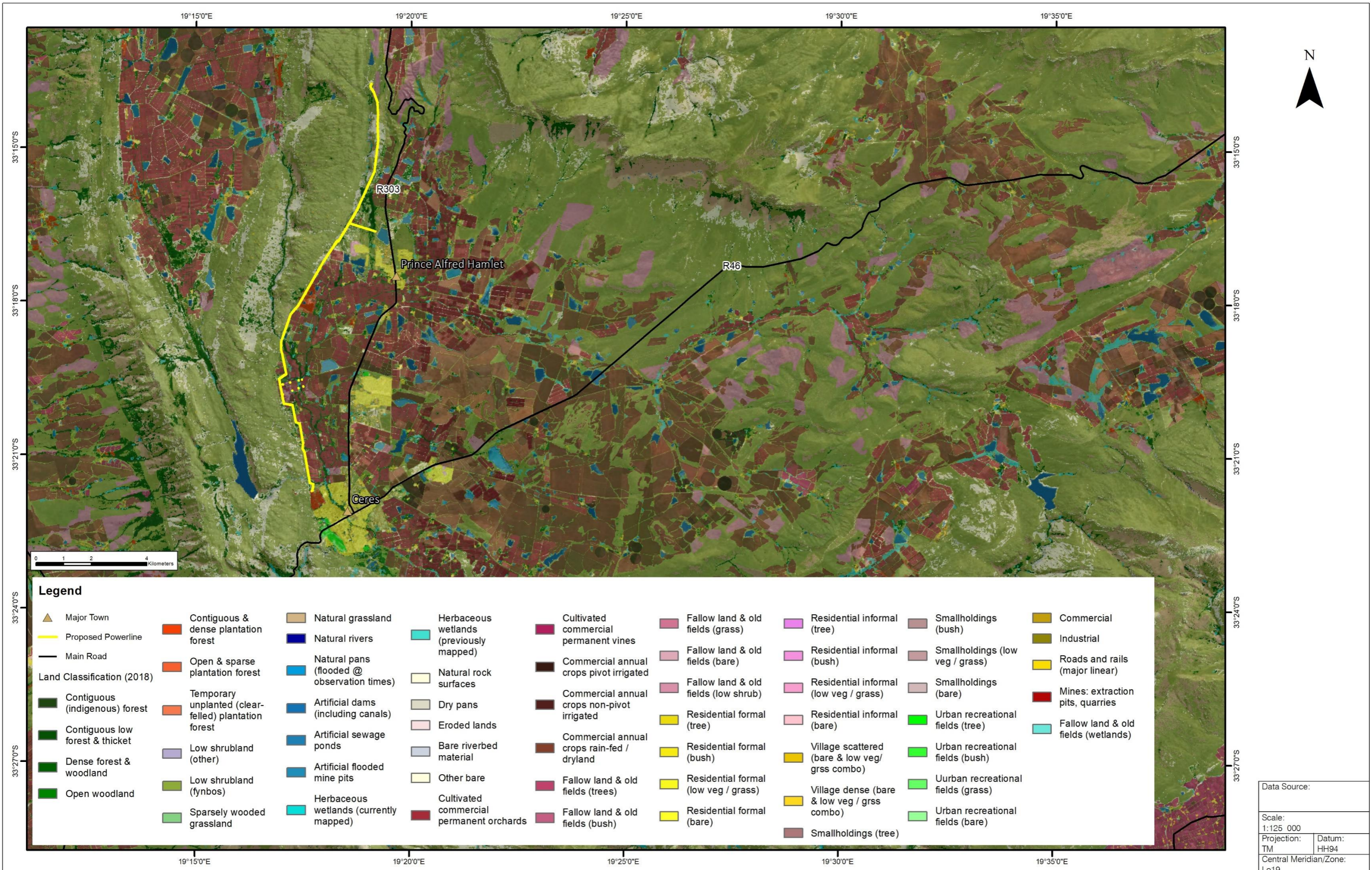
**WITZENBERG-CERES POWERLINE: AGRICULTURAL COMPLIANCE STATEMENT  
SITE LOCALITY**

| Legend |                    |
|--------|--------------------|
|        | Major Town         |
|        | Proposed Powerline |
|        | Main Road          |
|        | Rivers             |

Data Source:

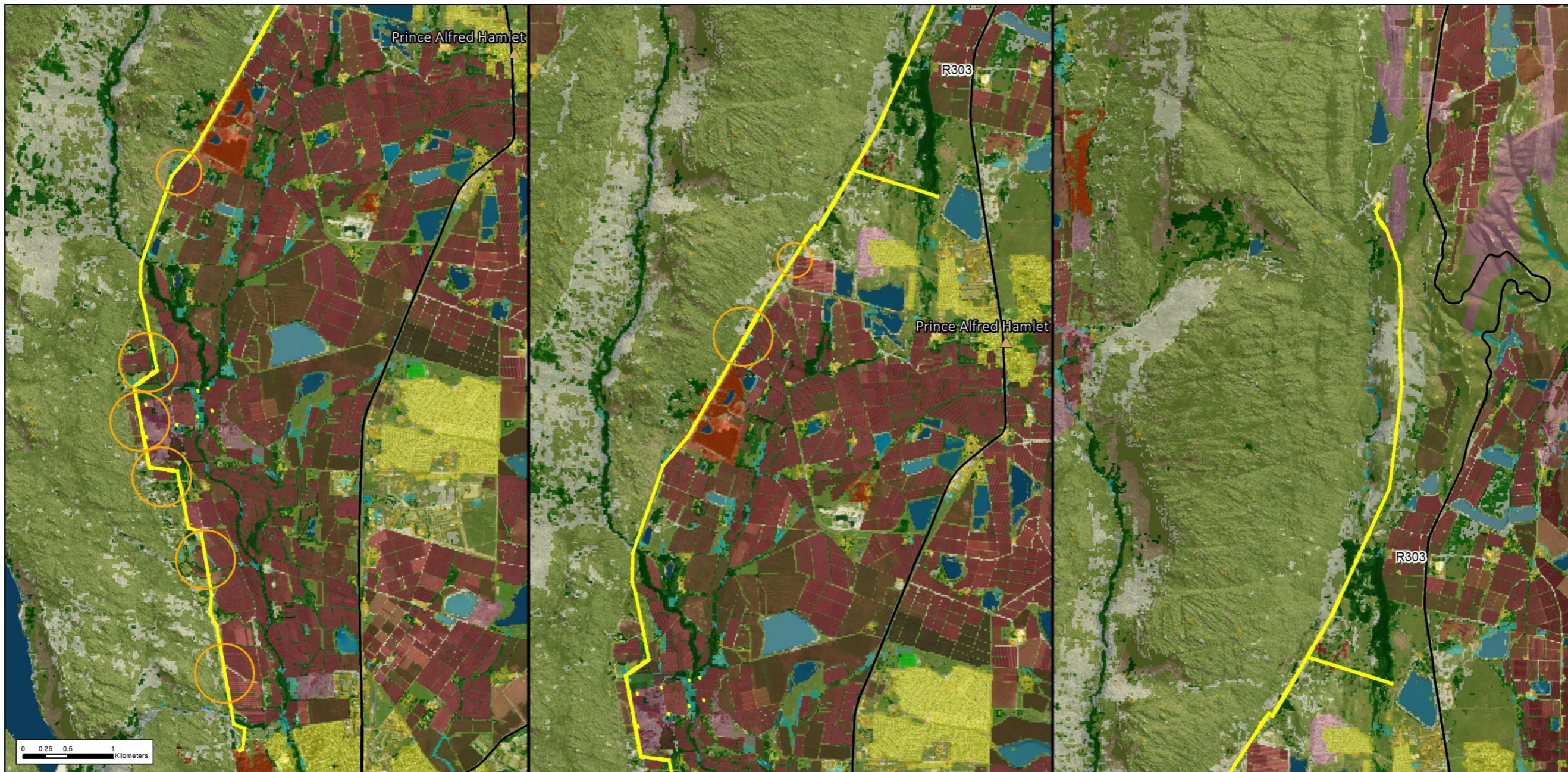
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| 532062      | 2            |



| Legend                          |  |  |  |   |                                      |   |                                   |                                     |  |
|---------------------------------|--|--|--|---|--------------------------------------|---|-----------------------------------|-------------------------------------|--|
| Major Town                      | Contiguous & dense plantation forest                 | Natural grassland                          | Herbaceous wetlands (previously mapped)    | Cultivated commercial permanent vines       | Fallow land & old fields (grass)     | Residential informal (tree)                     | Smallholdings (bush)              | Commercial                          |  |
| Proposed Powerline              | Open & sparse plantation forest                      | Natural rivers                             | Natural pans (flooded @ observation times) | Commercial annual crops pivot irrigated     | Fallow land & old fields (bare)      | Residential informal (bush)                     | Smallholdings (low veg / grass)   | Industrial                          |  |
| Main Road                       | Temporary unplanted (clear-felled) plantation forest | Natural pans (flooded @ observation times) | Artificial dams (including canals)         | Commercial annual crops non-pivot irrigated | Fallow land & old fields (low shrub) | Residential informal (low veg / grass)          | Smallholdings (bare)              | Roads and rails (major linear)      |  |
| Land Classification (2018)      | Low shrubland (other)                                | Artificial dams (including canals)         | Artificial sewage ponds                    | Commercial annual crops rain-fed / dryland  | Residential formal (tree)            | Residential informal (bare)                     | Urban recreational fields (tree)  | Mines: extraction pits, quarries    |  |
| Contiguous (indigenous) forest  | Low shrubland (fynbos)                               | Artificial sewage ponds                    | Artificial flooded mine pits               | Fallow land & old fields (trees)            | Residential formal (bush)            | Village scattered (bare & low veg / grss combo) | Urban recreational fields (bush)  | Fallow land & old fields (wetlands) |  |
| Contiguous low forest & thicket | Sparsely wooded grassland                            | Artificial flooded mine pits               | Herbaceous wetlands (currently mapped)     | Fallow land & old fields (bush)             | Residential formal (low veg / grass) | Village dense (bare & low veg / grss combo)     | Urban recreational fields (grass) |                                     |  |
| Dense forest & woodland         |  | Herbaceous wetlands (currently mapped)     |  |   | Residential formal (bare)            | Smallholdings (tree)                            | Urban recreational fields (bare)  |                                     |  |
| Open woodland                   |  |  |  |   |                                      |   |                                   |                                     |  |





| Legend                            |  |  |   |   |                                    |  |  |                                       |  |
|-----------------------------------|--|--|---|---|------------------------------------|--|--|---------------------------------------|--|
| ▲ Major Town                      | Contiguous & dense plantation forest                 | ■ Natural rivers                             | ■ Herbaceous wetlands (previously mapped) | ■ Cultivated commercial permanent orchards    | ■ Fallow land & old fields (bush)  | ■ Residential formal (low veg / grass)   | ■ Village scattered (bare & low veg/ grss combo) | ■ Urban recreational fields (bare)    |  |
| — Proposed Powerline              | Open & sparse plantation forest                      | ■ Natural pans (flooded @ observation times) | ■ Natural rock surfaces                   | ■ Commercial annual crops non-pivot irrigated | ■ Fallow land & old fields (grass) | ■ Residential formal (bare)              | ■ Village dense (bare & low veg / grss combo)    | ■ Commercial                          |  |
| — Main Road                       | Temporary unplanted (clear-felled) plantation forest | ■ Artificial dams (including canals)         | ■ Dry pans                                | ■ Commercial annual crops rain-fed / dryland  | ■ Fallow land & old fields (bare)  | ■ Residential informal (tree)            | ■ Urban recreational fields (tree)               | ■ Industrial                          |  |
| Land Classification (2018)        |  | ■ Artificial sewage ponds                    | ■ Bare riverbed material                  | ■ Fallow land & old fields (trees)            | ■ Residential formal (tree)        | ■ Residential informal (low veg / grass) | ■ Urban recreational fields (bush)               | ■ Roads and rails (major linear)      |  |
| ■ Contiguous low forest & thicket | ■ Low shrubland (fynbos)                             | ■ Herbaceous wetlands (currently mapped)     | ■ Other bare                              |   | ■ Residential formal (bush)        | ■ Residential informal (bare)            | ■ Uurban recreational fields (grass)             | ■ Mines: extraction pits, quarries    |  |
| ■ Dense forest & woodland         | ■ Natural grassland                                  |  |   |   |                                    |  |  | ■ Fallow land & old fields (wetlands) |  |
| ■ Open woodland                   |  |  |   |   |                                    |  |  |                                       |  |

## 2.2 Soils in the Surrounding Area

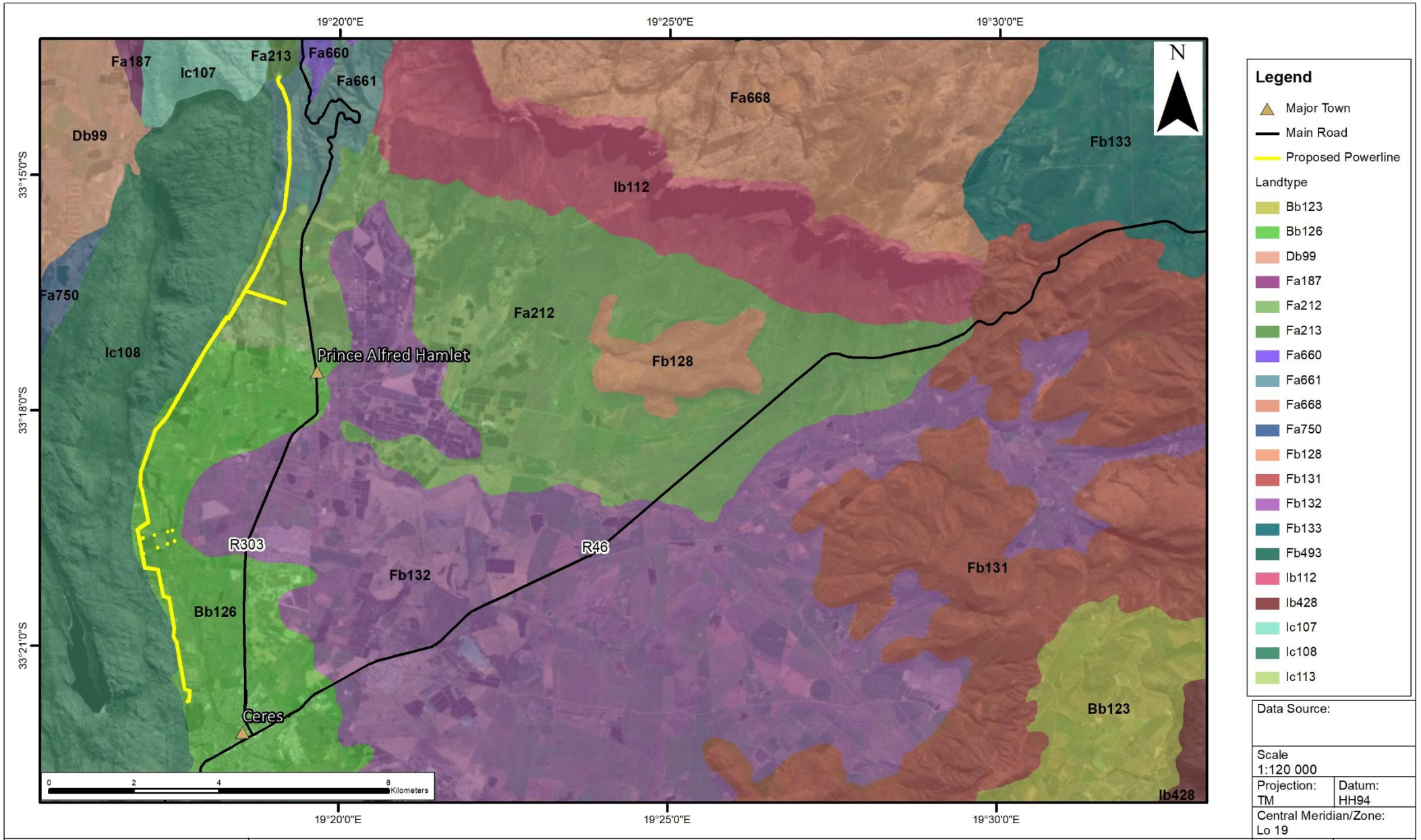
Figure 5 shows that the powerline footprint crosses through four main Land Types, namely Fa212, Fa213, Bb126 and Ic108. These Land Types provide an indication of soil forms likely to be found in the area, but also provide an overview of the topographical distribution of the soils as well as parameters such as depth and clay content.

Two of the four Land Types (BB126 and Fa212) are predominantly shale-based soils with the remaining two, Fa213 and Ic108, comprising predominantly sandstone. These Land Types are localised to the Worcester area of the Western Cape as their dominant geology stems from the Bokkeveld (as is the case with Bb126, Fa212 and Fa213) and Table Mountain Groups (Ic108). Offering mid- to deeper soils, the soil types within the area are dominated by sandy types, with much of the area being under sands dominating the western areas and sandy loams/sandy clay loams through the remainder of the area.

Along with the sandy and loamy soils, many of the soil forms found within the region have some percentage of clay and tend to be fairly deep, thus allowing for deeper rooting systems of many crops. These deeper soils also allow for better establishment of tree crops such as apples and vines, explaining why much of the area surrounding the powerline is under orchards and, to a lesser degree, vineyards. The more loamy and clayey soils also allow for greater water retention than sandy soils (such as those of Ic108 at the foot of the mountains) which assists in the retention of nutrients (both naturally occurring within the soil solution and from activities such as fertilizer and agro-chemical applications).

Owing to the fact that the disturbance to the soils within the powerline corridor will be localised, it is expected that the impacts on the soils will only be at the foundations of the pylons. No major earthworks are expected to be required along much of the corridor which should minimise the potential risk of soil destabilisation occurring near to cultivated lands; however, should blasting be required to excavate certain pylon locations, surrounding soils will need to be stabilised in line with the geotechnical design and considerations. Further to this, Eskom will need to ensure that blasting locations are sited in such a way that impacts (such as dust settlement or soil erosion from poorly stabilised soils) to nearby agricultural lands are minimised (i.e. not directly adjacent to, or within, cultivated lands). The greatest potential impact to the soils within the corridor will be as a result of contamination in the event of inadequate maintenance of equipment during both the construction and operational phases.

Whilst the mountainous nature of portions of the corridor may increase the potential for erosion, the localised nature of the pylons' siting would mean that any erosion as a result of construction activities (either through vegetation clearing or as a result of the terrain) should require mitigation measures around the foundations and not throughout the entire corridor. Further to this, the use of existing access roads (including farm roads where access has been granted), and the flying in of equipment and infrastructure to areas deemed too mountainous, should help to minimise the level of disturbance to areas both within and adjacent to cultivated lands.



### 3. Comment on Suitability of Project

As noted in Section 2.2 and presented in Figure 3, much of the agricultural land falling within the proposed powerline corridors is considered to be under dryland cropping practices and orchards. Therefore, the probability of the powerline interrupting any irrigation systems within the corridor is low<sup>6</sup>. Similarly, whilst Figure 3 shows that many of the crops being cultivated within the powerline corridor are that of orchards and vineyards (i.e. established crops), the powerline has reportedly been routed in such a way to prevent the erection of pylons within these established field boundaries.

It can reasonably be expected that for dryland fields the construction phase of the proposed powerline may result in some loss of agricultural yield for the year (i.e. due to construction, access, laydown areas and construction site camps). However, the type of cropping practiced is not reliant on requiring a number of years prior to the first harvest (such as is the case with apples, grapes, etc.) and means that the construction phase will potentially only impact a single year's harvest (assuming construction is completed within 12 months). The long-term loss of arable land due to the combined areas the pylons will occupy is not expected to be material, given that much of the powerline and the entire substation site is situated on natural and, in some instances, degraded land adjacent to agricultural lands.

Based on the proposed route provided, the alignment of the powerline appears to have been sited by Eskom to minimise, as far as is practical, crossing agriculturally productive lands. It appears that, where it was impossible for the powerline to not cross through established orchards, initial placement of pylons has been done in such a way that the field is spanned rather than used for the location of a pylon. As such, there has been an attempt by Eskom to minimise agricultural impacts where feasible. Further to this, where areas of agricultural land will be lost as a result of the powerline (predominantly the pylon positions close to the Ceres Substation), a positive impact will be the improved electrical supply to better support the local electrical demand for agricultural and related processing activities and businesses following the restrictions placed on the system after the loss of the previous powerline.

### 4. Conclusion and Recommendations

Whilst some portions the proposed powerline corridors do indeed fall within areas of very high agricultural sensitivity, given the nature and location of the proposed activities, SRK is of the view that:

- The potential long-term negative impacts associated with loss of agriculturally viable land are low.
- The above negative impacts are outweighed by the anticipated positive impacts that the project will bring to the local agricultural and processing industry (i.e. greater socio-economic potential).
- The exclusions stipulated in the Protocol for the assessment and reporting of environmental impacts on the agricultural resources (GN 320, dated 20 March 2020), are in principle favourable to the proposed powerline and substation development, based on the explicit mention of such activities and the relaxation of the specialist assessment required for such activities.
- A number of current, as well as future, users in the region has already been identified with many aiming to stimulate numerous socio-economic aspects within the area; however, these users requires a far greater electricity supply capacity than is currently available.
- The electrification will also potentially increase the ability of farms within the area to develop post-harvest processing facilities which will allow for greater returns per hectare of produce given that crops can then be processed on-site.

Based on the outcome of this desktop study it is deemed likely that the positive impacts of the proposed development on agriculture in the area will outweigh the negative impacts. However, in order to manage the potential negative impacts measures are recommended to be carried forward into the BAR process and associated Environmental Management Programme to mitigate any further potential negative impacts on the agricultural activities in the surrounding areas:

- Should pylons be required to be situated within field boundaries, micro-siting should be done in such a way as to ensure that established crop boundaries (such as orchards and vineyards) are spanned and pylon siting rather done in neighbouring dryland fields where annual crops are grown.
- Construction areas, laydown areas, access and servitudes should be negotiated with landowners in advance, and landowner agreements, compensation and other relevant land-legal matters resolved prior to commencement of construction.

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<sup>6</sup> This would however need to be confirmed with affected farmers during land expropriation negotiations to be conducted by Eskom.

- As shown in Figure 1, the proposed corridor is to cross both the Koukedou and Modder rivers, as well as numerous wetland areas identified during the Freshwater Impact Assessment. As such, disturbances to watercourses and both on- and off-channel storage (i.e. farm dams) should be prevented wherever possible. However, if construction in proximity to a water course is unavoidable, then construction activities must be conducted in line with the recommendations of the freshwater ecology report (Specialist Aquatic Ecosystems report for the Basic Assessment of the Proposed Ceres-Witzenberg Transmission Lines and Prince Alfred Hamlet substation prepared by Liz Day of Freshwater Consulting cc (January 2021)), namely:
  - No disturbances as a result of construction are to be located within 20 m of the edge / top of bank of any watercourse, unless unavoidable. Access routes and the laydown area at each pylon located near to these watercourses are to be clearly delineated to ensure disturbance is minimised.
  - For any water resources identified during the study, no disturbance is to take place within the following distances from each watercourse:
    - Very High Importance – a 25 m exclusion buffer is to be created around the watercourse;
    - High importance – a 10 m exclusion buffer is to be created around the watercourse; and
    - Medium Importance – the watercourse itself is to be treated as an exclusionary area with no activities or disturbance permitted.
- Similarly, the abovementioned recommendations should be applied in the case of any storage dams that may fall within the proposed powerline footprint, and any vegetation disturbed around such areas should be rehabilitated to ensure that no destabilisation of any earth dams occurs.
- Agricultural drainage channels that fall within any pylon footprint must be altered in such a way that any increased runoff from the hardened, impermeable surfaces around the pylon is diverted away from agricultural areas (either via man-made or natural drainage systems). This will ensure that any potential erosion and deposition of sediments on agricultural fields is minimised.

Yours faithfully,

**SRK Consulting (South Africa) (Pty) Ltd**

SRK Consulting - Certified Electronic Signature

 consulting  
532062/45/2024/LETTER REPORT  
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Roanne Sutcliffe, *Pr.Sci.Nat, Cand.Eng.*  
Agricultural Engineer

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Wouter Jordaan, *Pr.Sci.Nat*  
Principal Scientist/Partner

#### Disclaimer

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (South Africa) (Pty) Ltd (SRK). SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

## **Appendix A – Specialist CVs**

# Roanne Sutcliffe

## Principal Environmental Engineer



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| <b>Profession</b>                      | Principal Environmental Engineer  |
| <b>Education</b>                       | BSc (Hons) (Environmental Management), UNISA, 2022<br>MScEng (Agriculture), UKZN, 2018<br>BScEng (Agriculture), UKZN, 2016  |
| <b>Registrations/<br/>Affiliations</b> | Professional Natural Scientist, SACNASP, Reg. No.:<br>124140<br>Candidate Engineer, ECSA, Reg. No.:2018200523<br>Member, SAIAE<br>Member, WISA                        |
| <b>Awards</b>                          | Baynesfield Estate Award for Agricultural and<br>Environmental Innovation, 2017<br>TB Davis Scholarship, 2017<br>SAIAE Bronze Medal for Best Final Year Student, 2016 |

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| <b>Specialisation</b> | Environmental/bioresources engineering; Applied hydrology; GIS and remote sensing applications; Environmental auditing; Sustainability assessments; Tailings engineering; Mine closure. |
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| <b>Expertise</b> | Roanne Sutcliffe has been with SRK since the beginning of 2019, after having completed her MScEng in Agricultural Engineering at UKZN in which she studied the impacts of land use changes on water resources. She has 7 years' experience in numerous fields of bioresources engineering, with focus on the ways in which the sustainable production and usage of natural resources can influence the environmental and socio-economic spheres. She has overseen the development of numerous mine-wide closure plans and liability assessments, including tailings storage facilities' closure plans in line with GISTM requirements, throughout Africa. Her specializations include hydrological and environmental modelling, GIS and remote sensing applications, mine closure planning and liability assessments, tailings facility design and review, and sustainability assessments. |
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### Employment

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| <b>Nov 2023 – present</b>  | SRK Consulting (Pty) Ltd, Principal Environmental Engineer, Johannesburg |
| <b>May 2022 – Nov 2023</b> | SRK Consulting (Pty) Ltd, Senior Environmental Engineer, Durban          |
| <b>Jan 2019 – May 2022</b> | SRK Consulting (Pty) Ltd, Environmental Engineer, Durban                 |
| <b>2016 – 2018</b>         | University of Kwa-Zulu Natal (UKZN), Demonstrator, Durban                |

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|---------------------|----------------------|
| <b>Publications</b> | Several publications |
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| <b>Languages</b> | English – read, write, speak<br>Afrikaans – read, speak |
|------------------|---|

# Wouter Jordaan

## Partner / Principal Environmental Scientist



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| <b>Profession</b>                      | Environmental Impact and Risk<br>Environmental and Social Sustainability<br>Environmental Compliance and Due Diligence   |
| <b>Education</b>                       | BSc (Hons), Geography & Environmental Management, University of Johannesburg (UJ), 1999<br>BSc, Earth Sciences, Geography & Zoology, University of Johannesburg (UJ), 1998<br>BONSUCRO Level 3 (2016) – Lead Auditor (Agricultural Sustainability Auditor)<br>IEMA Accredited ISO14001 Auditors Course (Aspects International) |
| <b>Registrations/<br/>Affiliations</b> | Registered Professional Natural Scientist (Pr. Sci. Nat) 400157/09 with the South African Council for Natural Scientific Professions (SACNASP)<br>Member of the Institute of Director's of South Africa (IoDSA)<br>Member of the International Association for Impact Assessment (IAIA) – South African Chapter                |

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**Specialisation** Specialisation in Environmental and Social Due Diligence, Risk and Sustainability - focus on international and company specific sustainability standards, benchmarking, verification, improvement and international application, as a commodity specific risk assurance mechanism with banks, investors and lenders.

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**Key Experience and Roles** Wouter has 20 years of experience in the fields of environmental science and sustainability. He has experience in the following countries Democratic Republic of Congo (DRC), Botswana, Mauritius, Namibia, Kenya, Swaziland, Tanzania, Russia, Uganda and South Africa.

Wouter joined SRK in 2003 and has been a Partner in the South African practice since 2017. Wouter has served on the DRC Board as Director since 2018.

Wouter has been responsible for Business Development in the East Africa Region and provides management support to the SRK Lubumbashi Office in the Democratic Republic of Congo (DRC).

Wouter's expertise include the following:

- Environmental and Social Governance with a focus on internationally recognised sustainability standard implementation and improvement
- Transaction risk and advisory- environmental liability assessments, due diligence and review
- Lender and regulatory process - Environmental and social impact assessment, sustainability review in accordance with international Lender requirements
- Auditing and monitoring –Internal, verification and regulatory auditing
- Emergency environmental incidents – compliance advice with remediation and rehabilitation directives and liabilities
- Closure planning and liability assessment
- Visual Impact Assessment and Geospatial analyses



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# Wouter Jordaan

## Partner / Principal Environmental Scientist

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### Employment

|                       |   |
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| <b>2003 – present</b> | SRK Consulting (SA) (Pty) Ltd, Partner                            |
| <b>2001– 2003</b>     | Knowledge Factory Primedia (Pty) Ltd, GIS and Geodatabase Analyst |
| <b>2000 – 2001</b>    | Hellermann Tyton, Quality Systems Assistant (part-time)           |

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**Languages** English and Afrikaans – read, write, speak

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### Project Experience/ Highlights

Wouter has 23 years of experience in GIS and ESG and have been with SRK for the past 20 years in the role of Environmental Scientist and worked as a GIS Analyst three years prior to joining SRK. Wouter developed the Visual Impact Assessment offering in SRK's KwaZulu-Natal business unit in 2006. He believes in a group focus with collaboration being key to a project's success. The following is a summary of his experience:

#### Environmental and Social Impact Assessment

- Undertaken / managed >50 EIA's/ESIA's
- Reviewed most of the EIA Reports generated by the Durban ESG team
- Client and project management of junior staff projects
- ESIA for the ZAR1.0 billion Metal Coating Complex in Cato Ridge (IDC/IFC)
- ESIA for a cogeneration powerplant in Mauritius (AfDB and EIB funding)
- More than 10 EIA's related to power generation, distribution and electrification for Eskom and IPPs
- Numerous EIAs in the Richards Bay Industrial hub, focussing on heavy industry and port infrastructure
- Numerous ESIA's for copper/cobalt mines in the DRC

#### Environmental and Social Due Diligence and Review

- ESDD for as part of an acquisition of a packaging company in Nigeria
- Environmental and social review of a sugar factory and out grower scheme in Tanzania
- Environmental due diligence (ASTM Standard E1527-13) for an agribusiness acquisition in KwaZulu-Natal
- Environmental due diligence of a FMCG company in Uganda
- Environmental review of an ESIA to determine compliance with potential lender requirements and Good International Industry Practice (GIIP)
- Due Diligence to determine potential material Environmental, Health and Safety liabilities associated with a targeted acquisition of a chemical manufacturing facility in South Durban
- Environmental and Health and Safety due diligence of a chemical manufacturer in Nairobi, Kenya
- Environmental risk assessment and closure cost review of an Aluminium Smelter as part of our client's bid for the Aluminium Cast House
- Environmental due diligence
- Due diligence review of the environmental, social and security aspects of a Mine in Namibia as part of a financing arrangement
- Liability assessment of an animal feeds business in Umbogintwini, KwaZulu-Natal
- Legal review and liability assessment for a proposed expansion of the vehicle production line at Toyota South Africa Motors (TSAM)

# Wouter Jordaan

## Partner / Principal Environmental Scientist

### Environmental and Social Governance

- Currently undertaking a SECO funded project that aims to enable access to preferential finance terms as an incentive for improving sustainability performance of small-scale farmers. The project focus is to develop a financing mechanism that recognises the benefits of complying with ISEAL standards' environmental and social criteria for two targeted commodities to incentivise responsible lending by FIs
- Benchmarking the Bonsucro Standard to other sustainability standards (BCI and AWS) and international finance standards, i.e the IFC Performance Standards and the Sustainable Development Goals
- Gap assessment for a Sugar Mill in Mauritius in terms of the Bonsucro Standard
- Gap assessment for a Sugar Mill in South Africa (Malelane) in terms of the Bonsucro Standard
- Gap assessment and ESG training to a mill and an outgrower in Eswatini
- Sustainability reporting audit of an American owned personal care product facility in Verulam to verify its sustainability reporting to its headquarters in New York, USA
- Review of mill and farm performance of various mills against internationally accepted sustainability standards, with the view of preparing these mills and farms for sustainability certification

### Compliance and Incident Auditing

- Numerous cross-sectoral environmental compliance audits over the past 16+ years
- Wouter has fostered a good reputation with the enforcement authorities in South Africa and has been requested on numerous occasions to undertake independent compliance audits and assemble monitoring teams to audit and monitor major environmental incidents

### Mine and Industrial Closure

- Numerous closure cost models and plans, mainly for mines in the DRC
- Closure liability assessments and reviews for mines and industrial facilities

### Spatially Related GIS Skills

Wouter started the GIS department in Durban when he joined SRK in 2003. Since then, he trained a successor who commenced running the department in 2012. Some of the products Wouter developed for SRK are summarised below:

- Over 20 Visual Impact Assessments (VIA's) based on methodology developed in his own time when Wouter started with SRK. Currently he has trained two other resources to undertake VIA's and currently act as an advisor and reviewer, and have reviewed >20 VIA's
- Crime Prevention Through Environmental Design project for the uMhlathuze Municipality in 2004/2005 – the first of its kind undertaken in South Africa and contributed significantly to the spatial planning of the Richards Bay Municipality
- Wrote a script in ArcGIS to automate the risk modelling process as part of the Disaster Management Reporting for Municipalities and Governments (Botswana)
- Preliminary Study of land suitability for the establishment of formal housing in the vicinity of the Bisasar Road landfill site in Durban
- Numerous environmental opportunities and constraint analyses for landfill sites and cemeteries
- Numerous screening studies to inform spatial planning of residential, commercial and industrial developments

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## Business development

Business development is a key focus and Wouter is involved in a range of initiatives at SRK to empower younger staff to develop business for the company. He has published or co-authored articles in various media of which many are accessible via google searches. Wouter was invited to be a speaker at the Sugar and Ethanol Conference in Nairobi in 2017 and to be a speaker and panelist at the Bonsucro Conference in Thailand in 2019. He has also been involved in the SRK DRC practice for the past 7 years, leading the business development initiatives in that consulting practice.


## **Appendix B– Signed Statement of Independence**

I, *Roanne Ruth Sutcliffe*, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity;
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signed

SRK Consulting - Certified Electronic Signature

 *Roanne Ruth Sutcliffe*  
532062145  
8630-1679-158470K(O)-26/04/2024  
This signature has been printed digitally. The Author has given permission for its use for this document. The details are stored in the SRK Signature Database

Date: 26 April 2024