

**1 February 2023**

**NALA ENVIRONMENTAL CONSULTING FIRM**

Arlene Singh: arlene@veersgroup.com

**To whom it may concern:**

**SOIL / AGRICULTURAL POTENTIAL SPECIALIST INPUT FOR THE PART 2 AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION (EA) FOR THE PROPOSED CONSTRUCTION OF THE 765 KV GAMMA SUBSTATION ON THE FARMS UIT VLUGT FONTEIN NO.265 AND SCHIETKUIL NO.3 IN THE PIXLEY KA SEMA AND CENTRAL KAROO DISTRICT MUNICIPALITIES; WESTERN CAPE PROVINCE AND NORTHERN CAPE PROVINCE (DFFE REF: 12/12/20/873).**

- 1 The 2007 Geotechnical Aspects Regarding Foundation Conditions at Gamma Substation's Two Proposed Sites conducted by PG Hansmeyer, and 2007 Specialist Report: Land Use (no authors provided) as part of the Environmental Impact Assessment (EIA) for the proposed Construction of the 765 KV Gamma Substation on the farms Uit Vlucht Fontein and Schietkuil in the Western Cape and Northern Cape (DEA REF. No. 12/12/20/873), refers.
- 2 The two abovementioned studies as part of the Environmental Authorisation (EA) process (DFFE REF. NO. 12/12/20/873) have been reviewed by The Biodiversity Company (TBC) who conducted a site assessment in April 2022, followed by a Sensitivity Verification in October 2022. Associated site visits were conducted in March 2022, April 2022 and August 2022.
- 3 The construction date for the additional infrastructure for the Gamma Substation is not yet finalised. However, to optimize the proposed project, the following amendments are applied for in terms of the EIA Regulations, 2012:
  - 3.1. Addition of Conditions to the EA regarding the Updated Layout (April 2023);
  - 3.2. Amendment to the project description on Page 3 of the Environmental authorisation related to the updated layout and co-ordinates of the 765 kV Gamma Substation;
  - 3.3. Amendment to the Title of the Environmental Authorisation; and
  - 3.4. Change the name of the contact person and contact details for the Holder of the Environmental Authorisation.
- 4 This change in layout, although within the scope of the current EA, requires that the respective specialist studies hitherto undertaken as part of the original EA process must be reviewed by respective specialists in order to ascertain whether conditions on site have changed. This letter serves this purpose. Nala Environmental has requested confirmation regarding the assessed impacts in terms of the following:
  - An assessment of all impacts (including cumulative impacts) related to the proposed changes

- Discussion on the change in impact or any new impacts, if any
  - Additional mitigation measures, if any
  - Any disadvantages and advantages that may result due to the amendment.
- 5 No impact assessment was conducted as part of the 2007 Geotechnical Aspects Regarding Foundation Conditions at Gamma Substation's Two Proposed Sites report as this is not a requirement for a Geotechnical investigation. Cumulative impacts were not assessed as this is not a requirement of a Geotechnical investigation.
- 6 Conclusions from the 2007 Geotechnical Aspects Regarding Foundation Conditions at Gamma Substation's Two Proposed Sites report included the following:
- 6.1. The current Gamma substation site is 'underlain by greyish-blue shale of the Beaufort Group intruded by NW trending dolerite dykes'.
  - 6.2. The current Gamma substation site is 'covered in partially to well cemented calcrete sequentially underlain by shale bedrock in various stages of weathering.'
  - 6.3. Some powerful excavation was determined to be necessary with concrete aggregate anticipated to have to be imported from De Aar and Port Elizabeth.
- 7 Impact Assessment from the 2007 Specialist report: Land Use included a description of possible impacts but no impact tables. Impacts included:
- 7.1. No impact on the land use was expected.
  - 7.2. Erosion is identified as a potential impact where disturbance occurs as a result of construction.
  - 7.3. Cumulative Impacts were not assessed**
- 8 Conclusions from the 2007 Specialist Report: Land Use included the following:
- 8.1. No serious impacts are expected.
  - 8.2. Erosion should be avoided, particularly the sedimentation of nearby water sources.
- 9 No impact assessment was conducted for the 2022 Agricultural Compliance Statement Report (I Baker, M Mamera, TBC, 2022) as a Low sensitivity for agriculture as defined by the screening tool required a compliance statement and not a full impact assessment. Cumulative impacts were not assessed.

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- 10 Conclusions from the 2022 Agricultural Compliance Statement<sup>1</sup> report (I Baker and M Mamera, TBC, 2022) related to the Emoyeni Grid infrastructure with those applicable specifically to the Gamma Substation extracted included the following:
- 10.1. The Gamma Substation and associated turn-ins is located in an area of Low Agricultural potential.
  - 10.2. The substation area and associated turn-ins is not associated with any arable soils with suitable land use limited to grazing and wildlife farming.
- 11 The Site Sensitivity Verification (TBC 2022) for the 132KV grid connection infrastructure, associated access tracks and water course crossings associated with the authorised Emoyeni wind energy facilities, does not include an impact assessment and associated tables due to its nature as a Site Sensitivity Verification.
- 12 The conclusions of the Site Sensitivity Verification (TBC 2022) for the 132KV grid connection infrastructure, associated access tracks and water course crossings associated with the authorised Emoyeni wind energy facilities include the following:
- 12.1. The assessment area was identified with the screening tool as possessing a Low land capability.
  - 12.2. The Gamma Substation area has Low land capability.
  - 12.3. The classification of the screening tool was considered to be accurate.
- 13 Mitigation measures prescribed by each of the reviewed specialist reports remain applicable and must be adhered to.
- 14 In order to manage the impacts effectively, the following additional mitigation management should be put into place for the general impacts associated with soils:
- 14.1. To minimise the footprint of construction as much as possible.
  - 14.2. Where soil is removed/disturbed, ensure it is stored for rehabilitation and revegetated as soon as possible.
  - 14.3. Implement all appropriate soil conservation measures, including contouring, re-vegetation, geotextiles and slope stabilisation (for all infrastructure).

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<sup>1</sup> This assessment was conducted in accordance with the amendments to the Environmental Impact Assessment Regulations. 2014 (GNR 326, 7 April 2017) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). The approach has taken cognisance of the recently published Government Notices (GN) 320 (20 March 2020) and GN 1150 (30 October 2020): "Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation" (Reporting Criteria).

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- 14.4. Management of stormwater and discharge from the facility, to avoid scouring of the receiving area.
- 15 The desktop agricultural theme sensitivity according to the screening tool for the site area is 'Low' due to the lack of agricultural potential. A compliance statement assessment confirmed the 'Low' classification of the Gamma substation area (April 2022), which was then confirmed by the Sensitivity Verification (October 2022).
- 16 Impacts identified as part of the 2007 Specialist Report: Land Use as part of the Environmental Impact Assessment (EIA) for the proposed Construction of the 765 KV Gamma Substation on the farms Uit Vlucht Fontein and Schietkuil in the Western Cape and Northern Cape (DEA REF. No. 12/12/20/873) are considered to be relevant for the proposed new layout. No new impacts were identified in the most recent study, nor are any new impacts expected. It is considered that impacts so far identified and assessed are an accurate representation of the impacts associated with the proposed new layout of the Gamma substation.
- 17 Cumulative impacts were not assessed.
- 18 In terms of soils there are no advantages of the proposed new layout. However, the proposed new layout is not expected to result in an increase in expected impacts or their associated severities. Disadvantages include erosions risk associated with construction.
- 19 All prescribed mitigation measures and supporting recommendations presented here will help to achieve an acceptable residual impact. These measures and recommendations will remain applicable for the requested extension of the EA. To this end, these measures have been included in the updated EMPr for this development as per the requirements of the Environmental Authorisation.
- 20 As such, should the measures described above, and as included in the updated EMPr for this development be implemented, it is the reasoned opinion of the specialist that the proposed layout changes i.e., the inclusion of the proposed substation yard within the authorised footprint of the existing Gamma Substation and the proposed turn-in of the Droer-Hydra 2 400kV powerline be approved.
- 21 We trust you find the above in order. If there are any uncertainties or additional information required, please feel free to contact the undersigned.

Kind regards,



Andrew Husted



Leigh-Ann de Wet

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Project Management (SACNASP 400213/11)

info@thebiodiversitycompany.com

Ecologist (SACNASP 400233/12)

[leigh-ann@thebiodiversitycompany.com](mailto:leigh-ann@thebiodiversitycompany.com)

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## TERMS OF REFERENCE AND ENVIRONMENTAL IMPACT METHODOLOGY

### TERMS OF REFERENCE:

The report amendment report must reflect:

- An assessment of all impacts related to the proposed changes;
- Advantages and disadvantages associated with the changes;
- Comparative assessment of the impacts before the changes and after the changes; and
- Measures to ensure avoidance, management and mitigation of impacts associated with such proposed changes, and any changes to the EMPr.

The assessment must be clear on whether each of the proposed changes to the EA will:

- Increase the significance of impacts originally identified in the EIA report or lead to any additional impacts; or
- Have a zero or negligible effect on the significance of impacts identified in the EIA report; or
- Lead to a reduction in any of the identified impacts in the EIA report.

Please take note that should there be no change to impacts and their significance ratings as identified in the EIA process (as the corridor has already been assessed), no impact tables will be necessary to include. Should there be an increase or decrease in significance or additional impacts not identified within the EIA process, the Impact Assessment Methodology and table format should be used and additional mitigation measures, if any, should be included.

### ENVIRONMENTAL IMPACT METHODOLOGY:

The impact significance rating methodology, as provided by Nala, is guided by the requirements of the NEMA EIA Regulations 2014 (as amended).

Direct, indirect and cumulative impacts associated with the projects must be assessed in terms of the following criteria:

- 
- » The **nature**, which shall include a description of what causes the effect, what will be affected and how it will be affected.
  - » The **extent**, wherein it will be indicated whether the impact will be local (limited to the immediate area or site of development) or regional, and a value between 1 and 5 will be assigned as appropriate (with 1 being low and 5 being high):
  - » The **duration**, wherein it will be indicated whether:
    - \* the lifetime of the impact will be of a very short duration (0–1 years) – assigned a score of 1;
    - \* the lifetime of the impact will be of a short duration (2-5 years) - assigned a score of 2;
    - \* medium-term (5–15 years) – assigned a score of 3;
    - \* long term (> 15 years) - assigned a score of 4; or
    - \* permanent - assigned a score of 5;
  - » The **magnitude**, quantified on a scale from 0-10, where 0 is small and will have no effect on the environment, 2 is minor and will not result in an impact on processes, 4 is low and will cause a slight impact on processes, 6 is moderate and will result in processes continuing but in a modified way, 8 is high (processes are altered to the extent that they temporarily cease), and 10 is very high and results in complete destruction of patterns and permanent cessation of processes.
  - » The **probability of occurrence**, which shall describe the likelihood of the impact actually occurring. Probability will be estimated on a scale of 1–5, where 1 is very improbable (probably will not happen), 2 is improbable (some possibility, but low likelihood), 3 is probable (distinct possibility), 4 is highly probable (most likely) and 5 is definite (impact will occur regardless of any prevention measures).
  - » the **significance**, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium or high; and
  - » the **status**, which will be described as either positive, negative or neutral.
  - » the degree to which the impact can be reversed.
  - » the degree to which the impact may cause irreplaceable loss of resources.
  - » the *degree* to which the impact can be *mitigated*.

The **significance** is calculated by combining the criteria in the following formula:

$$S = (E+D+M) P$$

S = Significance weighting

E = Extent

D = Duration

M = Magnitude

P = Probability

The **significance weightings** for each potential impact are as follows:

- » < 30 points: Low (i.e., where this impact would not have a direct influence on the decision to develop in the area),
- » 30-60 points: Medium (i.e., where the impact could influence the decision to develop in the area unless it is effectively mitigated),
- » > 60 points: High (i.e., where the impact must have an influence on the decision process to develop in the area).

**Example of Impact table summarising the significance of impacts (with and without mitigation)**

Nature:		
[Outline and describe fully the impact anticipated as per the assessment undertaken]		
	Without mitigation	With mitigation
Extent	High (3)	Low (1)
Duration	Medium-term (3)	Medium-term (3)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Probable (3)
Significance	Medium (36)	Low (24)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources?	Yes	No
Can impacts be mitigated?	Yes	
<b>Mitigation:</b> “Mitigation“, means to anticipate and prevent negative impacts and risks, then to minimise them, rehabilitate or repair impacts to the extent feasible. Provide a description of how these mitigation measures will be undertaken keeping the above definition in mind		
<b>Residual Impacts:</b> “Residual Risk“, means the risk that will remain after all the recommended measures have been undertaken to mitigate the impact associated with the activity (Green Leaves III, 2014).		



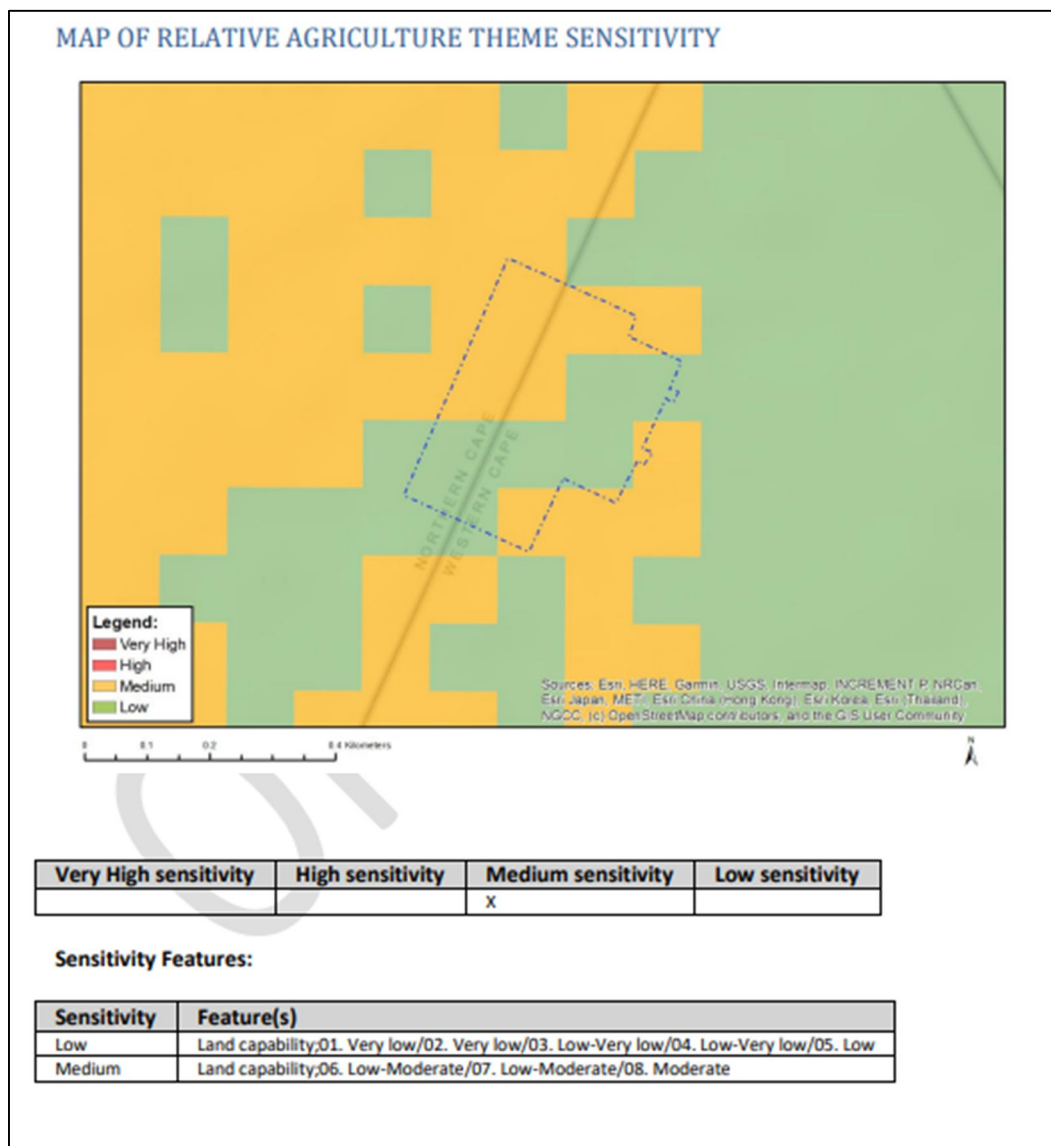


Figure 1. Agricultural Theme Sensitivity (Screening Tool) for the proposed Gamma substation yard

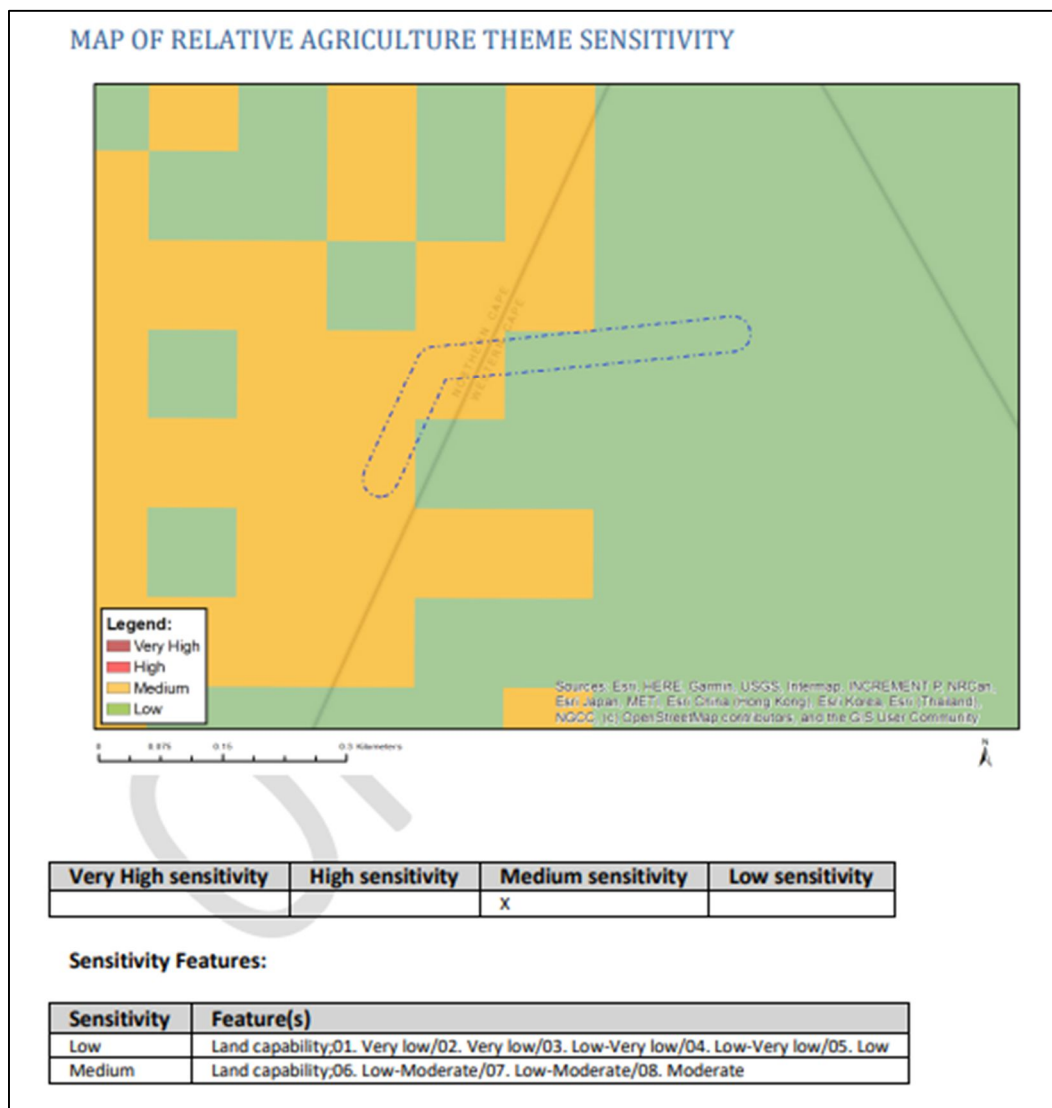


Figure 2. Agricultural Theme Sensitivity (Screening Tool) for the section of the proposed 400kV Hydra-Droerivier Turn-in

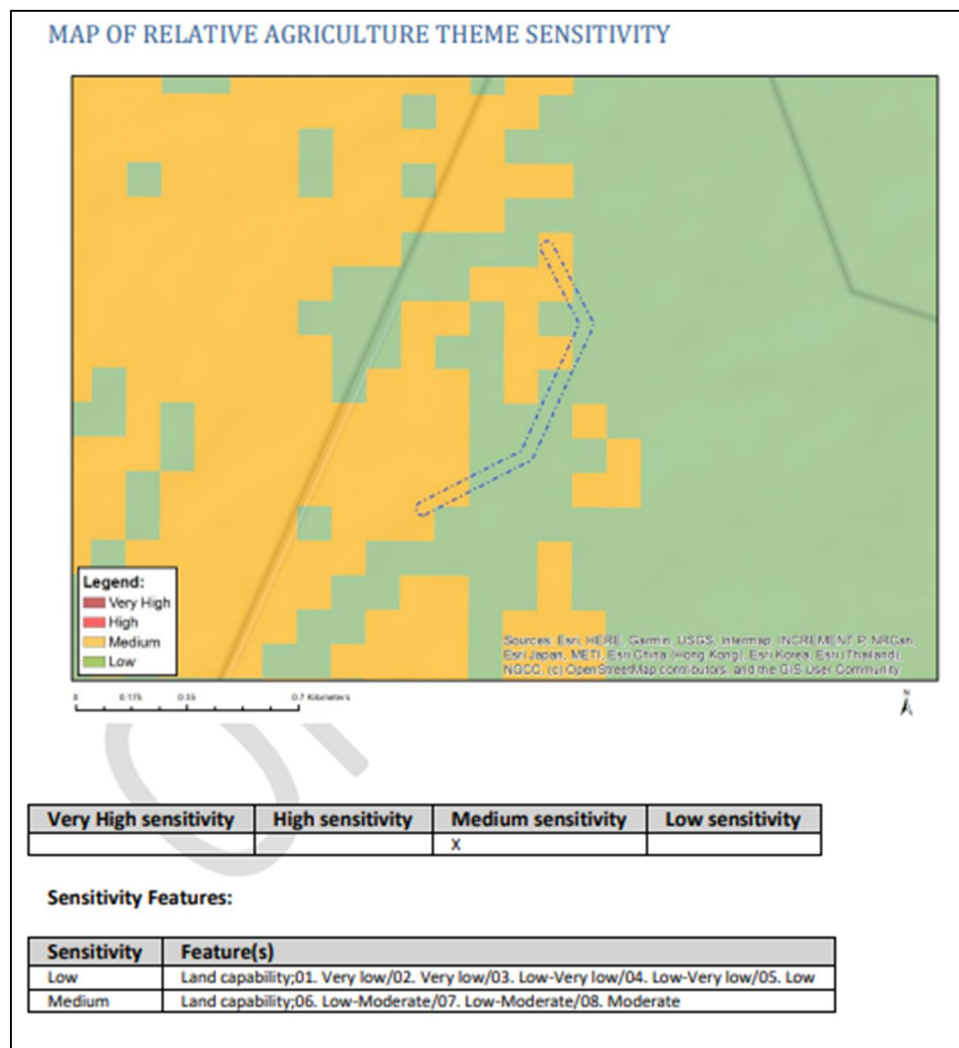


Figure 3. Agricultural Theme Sensitivity (Screening Tool) for the section of the proposed 400kV Hydra-Droerivier Turn-in

## **SITE SENSITIVITY VERIFICATION REPORT**



## SOIL AND AGRICULTURAL POTENTIAL: SITE SENSITIVITY VERIFICATION: GAMMA SUBSTATION

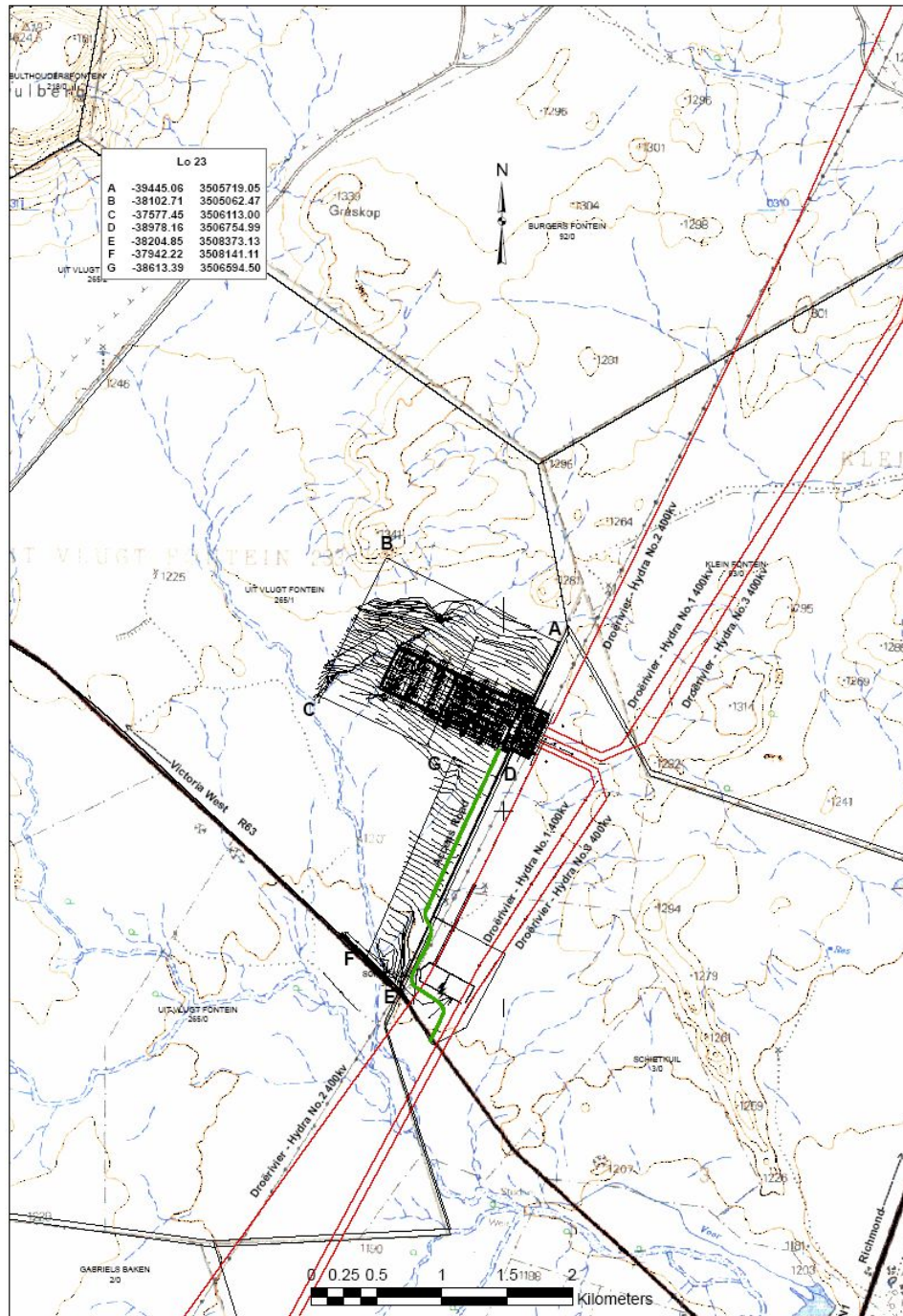
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### 1. INTRODUCTION

The construction of the Eskom Gamma Substation was authorised by the Department of Environmental Affairs in 2007. The approval was for constructing the complete Gamma substation. However, it was noted that individual components would be constructed in a phased approach as determined by the electricity demand over several years.

As such, the first construction phase of the Gamma substation commenced during the original validity period of the EA and was completed in 2013 (Figure 1).



*Figure 1 - As per the Final Environmental Impact Report (FEIR) (2007) indicating the layout of the 765kV Gamma Substation as authorised.*

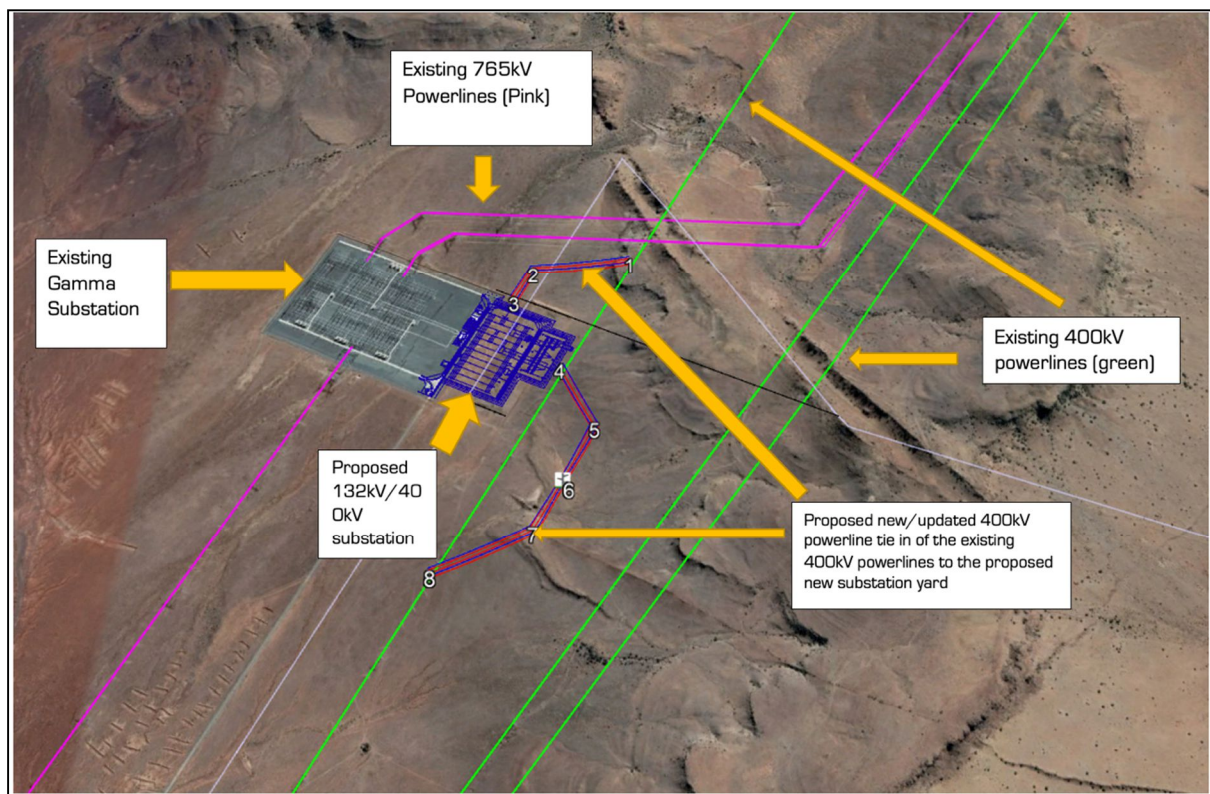
### ***Proposed Second Phase***

The holder of the EA proposes to commence construction of the second phase of the authorised substation development, specifically the development of a 132/400kV yard at the existing MTS and OHL turn-in of the existing 400kV Droër-Hydra 2 Overhead Powerline into the substation yard, as provided for in the current EA.



The next phase of construction activities associated with the EA is directly linked to the increased demand for grid infrastructure which is linked to upcoming Renewable Energy projects in the Northern and Western Cape Provinces. Notably, the 132kV/400kV yard and 400kV OHL turn-ins are needed to enable the connection of the authorised Umsinde Emoyeni Wind Farm (DFFE Ref: 14/12/16/3/3/2/686) which has been registered as Strategic Integrated Project (SIP).

The proposed 132kV/400kV yard and 400kV OHL turn-ins fall within the scope of the current EA. However – based on further technical analysis and design – it has been identified that the layout of the authorised infrastructure will need to be updated to reflect the updated configuration proposed (i.e., the 132kV/400kV substation yard and 400kV turn-in) to be implemented. The updated layout falls within the scope and footprint of what was originally assessed in the original EIA process, however for the avoidance of doubt the holder wishes to have the updated layout approved by DFFE prior to implementation thereof.



*Figure 2 - Proposed Updated Layout depicting the existing Gamma Substation with the next phase of the authorised development now proposed for implementation (new proposed 132kV/400kV Substation yard and new reconfigured turn-in and turn-out of the existing 400kV powerline).*

A Part 2 amendment application is proposed to be undertaken for the proposed update to the layout to the existing 765kV Gamma Substation and associated powerline turn-in infrastructure. The next phase of the Gamma MTS development that will now be implemented will consist of:

1. A substation yard with a step-up voltage of 132kV/400kV on Farm Schietkuil 3 and Farm Uit Vlucht Fontein 265; and

2. In addition, the existing Eskom 400kV overhead powerline that currently bypasses the existing Gamma Substation (i.e. the "Droerivier- Hydra No. 2" 400kV OHL) will be reconfigured to turn-in and turn-out of the new substation yard

In terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) Environmental Impact Assessment (EIA) Regulations [4 December 2014, Government Notice (GN) R982, R983, R984 and R985, as amended], various aspects of the proposed development may have an impact on the environment and are considered to be listed activities. These activities require authorisation from the National Competent Authority (CA), namely the Department of Forestry, Fisheries and the Environment (DFFE), prior to the commencement thereof. Further to this as per GN R. 2313 : ***Adoptions of the standard for the development and expansion of powerlines and substation with identified geographical areas and the exclusion of this infrastructure from the requirements to obtain Environmental Authorisation***, the Standard was adopted in terms of section 24(10)(a) of the Act for the purpose of excluding the activities contemplated in paragraph 5.1 and 5.2 of the Schedule from the requirement to obtain environmental authorisation prior to commencement. In terms of the procedural requirement set out in the standard, screening tool reports have been undertaken for the updated gamma substation layout and associated infrastructure and site sensitivity verifications have been undertaken by the relevant specialists in accordance with the sensitivity themes. As per 6.1. of the GNR .2313, "Where any part of the infrastructure occurs on an area for which the environmental sensitivity for any environmental theme is identified as being very high or high by the national web based environmental screening tool and confirmed to be such through the application of the procedures set out in the Standard", the site sensitivity verifications have been performed as per the procedural requirements set out.

In accordance with GN 320 and GN 1150 (20 March 2020)<sup>1</sup> of the NEMA EIA Regulations of 2014 (as amended), prior to commencing with a specialist assessment, a site sensitivity verification must be undertaken to confirm the current land use and environmental sensitivity of the proposed project areas as identified by the National Web-Based Environmental Screening Tool (i.e., Screening Tool). Leigh- Ann De Wet, Andrew Husted and Jan Jacobs, as terrestrial specialists, have been commissioned to verify the sensitivity of the project sites under these specialist protocols.

The scope of this report is for one (1) application, namely the Part 2 amendment application for the proposed update to the layout to the existing 765kV Gamma Substation and associated powerline turn-in infrastructure. The next phase of the Gamma MTS development that will now be implemented will consist of:

1. A substation yard with a step-up voltage of 132kV/400kV on Farm Schietkuil 3 and Farm Uit Vlucht Fontein 265; and
2. In addition, the existing Eskom 400kV overhead powerline that currently bypasses the existing Gamma Substation (i.e. the "Droerivier- Hydra No. 2" 400kV OHL) will be reconfigured to turn-in and turn-out of the new substation yard

## 2. SITE SENSITIVITY VERIFICATION METHODOLOGY

The following information sources were consulted to compile this report:

- Land Type Survey Staff. 1972 - 2006. Land Types of South Africa: Digital Map (1:250 000 Scale) and Soil Inventory Databases. Pretoria: ARC-Institute for Soil, Climate, and Water:

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<sup>1</sup> GN 320 (20 March 2020): Procedures for The Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(A) and (H) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation



As part of the desktop assessment, baseline soil information is obtained using published South African Land Type Data. Land type data for the site is obtained from the Institute for Soil Climate and Water (ISCW) of the Agricultural Research Council (ARC) (Land Type Survey Staff, 1972 - 2006). The land type data is presented at a scale of 1:250 000 and comprises of the division of land into land types. In addition, a Digital Elevation Model (DEM) as well as the slope percentage of the area is calculated by means of the NASA Shuttle Radar Topography Mission Global 1 arc second digital elevation data by means of QGIS and SAGA software.

- Mucina, L., & Rutherford, M. C. 2006. The Vegetation of South Africa, Lesotho, and Swaziland. Strelitzia 19. Pretoria: National Biodiversity Institute:

The Vegetation of South Africa, Lesotho and Swaziland book is used to identify the vegetation type found under natural conditions for the area in question. It is also used to determine its climate capability, which is calculated by dividing the Mean Annual Precipitation (MAP) with Mean Annual Potential Evapotranspiration (MAPE).

- Smith, B. 2006. The Farming Handbook. Netherlands & South Africa: University of KwaZulu-Natal Press & CTA:

The Farming Handbook is used to determine the land capability and ultimately the land potential of the area in question. Land capability is solely determined by means of the National Land Capability Evaluation Raster Data Layer. Thereafter, results from climate capability and land capability are used to determine the land potential of the area (Table 2.1). Land capability and agricultural potential are briefly determined by a combination of soil, terrain, and climate features. At the same time an indication is given about the permanent limitations associated with the different land use classes (Table 2.2). Land capability is divided into eight classes, and these may be divided into three capability groups (Table 2.3). The risk of use increases from class I to class VIII (Smith, 2006).

**Table 2.1: The combination table for land potential classification**

Land capability class	Climate capability class							
	C1	C2	C3	C4	C5	C6	C7	C8
I	L1	L1	L2	L2	L3	L3	L4	L4
II	L1	L2	L2	L3	L3	L4	L4	L5
III	L2	L2	L3	L3	L4	L4	L5	L6
IV	L2	L3	L3	L4	L4	L5	L5	L6
V	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei
VI	L4	L4	L5	L5	L5	L6	L6	L7
VII	L5	L5	L6	L6	L7	L7	L7	L8
VIII	L6	L6	L7	L7	L8	L8	L8	L8

**Table 2.2: The Land Potential Classes**

Land potential	Description of land potential class
L1	Very high potential: No limitations. Appropriate contour protection must be implemented and inspected.
L2	High potential: Very infrequent and/or minor limitations due to soil, slope, temperatures, or rainfall. Appropriate contour protection must be implemented and inspected.
L3	Good potential: Infrequent and/or moderate limitations due to soil, slope, temperatures, or rainfall. Appropriate contour protection must be implemented and inspected.
L4	Moderate potential: Moderately regular and/or severe to moderate limitations due to soil, slope, temperatures, or rainfall. Appropriate permission is required before ploughing virgin land.
L5	Restricted potential: Regular and/or severe to moderate limitations due to soil, slope, temperatures, or rainfall.
L6	Very restricted potential: Regular and/or severe limitations due to soil, slope, temperatures, or rainfall. Non-arable
L7	Low potential: Severe limitations due to soil, slope, temperatures, or rainfall. Non-arable
L8	Very low potential: Very severe limitations due to soil, slope, temperatures, or rainfall. Non-arable

**Table 2.3: Land capability class and intensity of use (Smith, 2006)**

Land Capability Class	Increased Intensity of Use									Land Capability Groups
I	W	F	LG	MG	IG	LC	MC	IC	VIC	Arable Land
II	W	F	LG	MG	IG	LC	MC	IC		
III	W	F	LG	MG	IG	LC	MC			
IV	W	F	LG	MG	IG	LC				
V	W	F	LG	MG						Grazing Land
VI	W	F	LG	MG						
VII	W	F	LG							
VIII	W									Wildlife
W - Wildlife		MG - Moderate Grazing			MC - Moderate Cultivation					
F - Forestry		IG - Intensive Grazing			IC - Intensive Cultivation					
LG - Light Grazing		LC - Light Cultivation			VIC - Very Intensive Cultivation					

- Soil Classification Working Group. 1991. Soil Classification A Taxonomic system for South Africa. Pretoria: The Department of Agricultural Development; and Soil Classification Working Group. 2018. Soil Classification A Taxonomic system for South Africa. Pretoria: The Department of Agricultural Development:  
The Soil Classification book is used to identify and classify the different soil horizons within the profile to the soil family level. Soil colour, texture and clay percentage are main attributes used to differentiate the diagnostic horizons. The landscape features such as existing open trenches are also helpful in determining soil types and depth.
- DEA Screening Tool, 2022:

The DEA Screening tool is used to obtain the information regarding the land capability sensitivity and field crop boundary sensitivity of the assessment area. Fifteen land capabilities were digitized across South Africa, including:

- Land Capability 1 to 5 (Very low to Low);
- Land Capability 6 to 8 (Low to Moderate), and
- Land Capability 9 to 15 (Moderate to High).

A land capability characterized by “Low” to “moderate” sensitivities, conform to the requirements of an agricultural compliance statement only, while a land capability characterized by “High” sensitivities conforms to the requirements of a full Environmental Impact Assessment (EIA).

### 3. OUTCOME OF SITE SENSITIVITY VERIFICATION

The land capability and land potential of the resources in the assessment area are characterised by “Low” to “Moderate” sensitivities (see Figure 3.1), which conforms to the requirements of an agricultural compliance statement only.

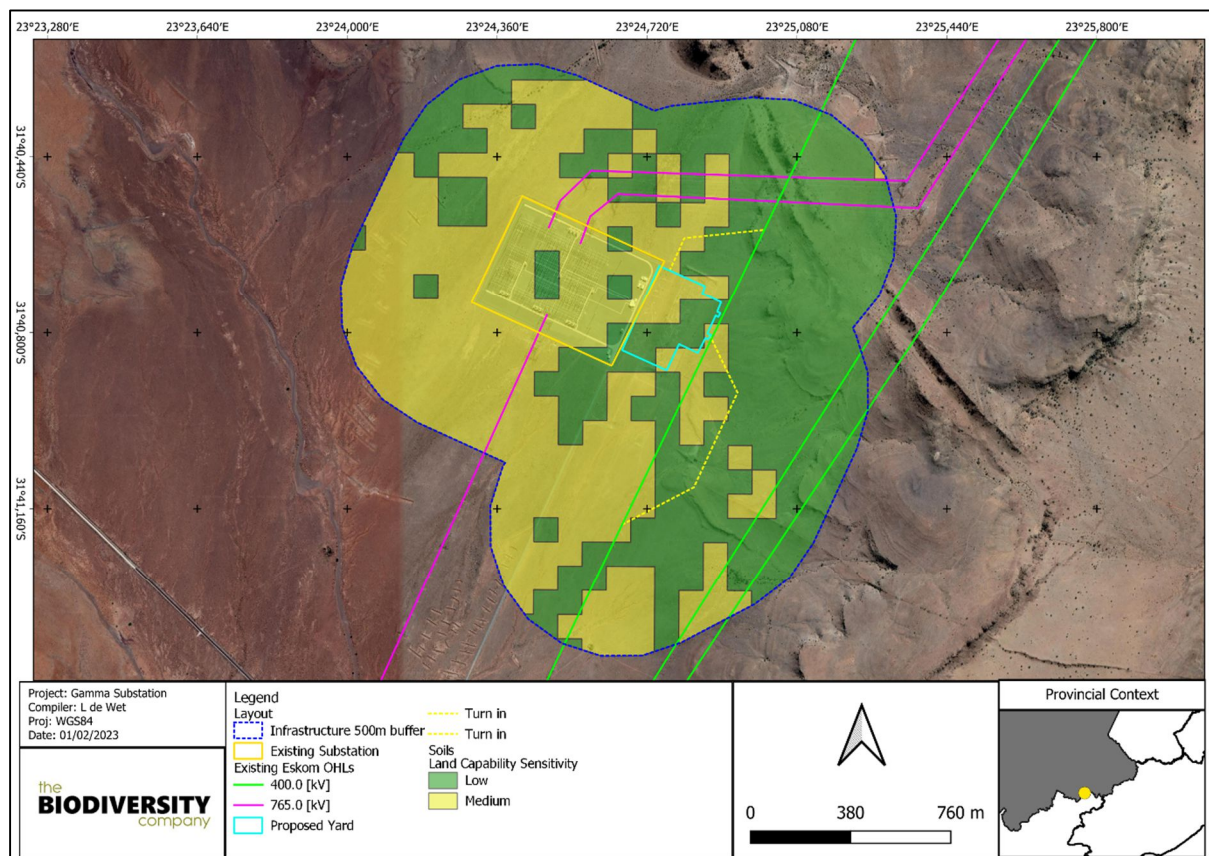


Figure 3.1: Land Capability Sensitivity map (DEA, 2022)

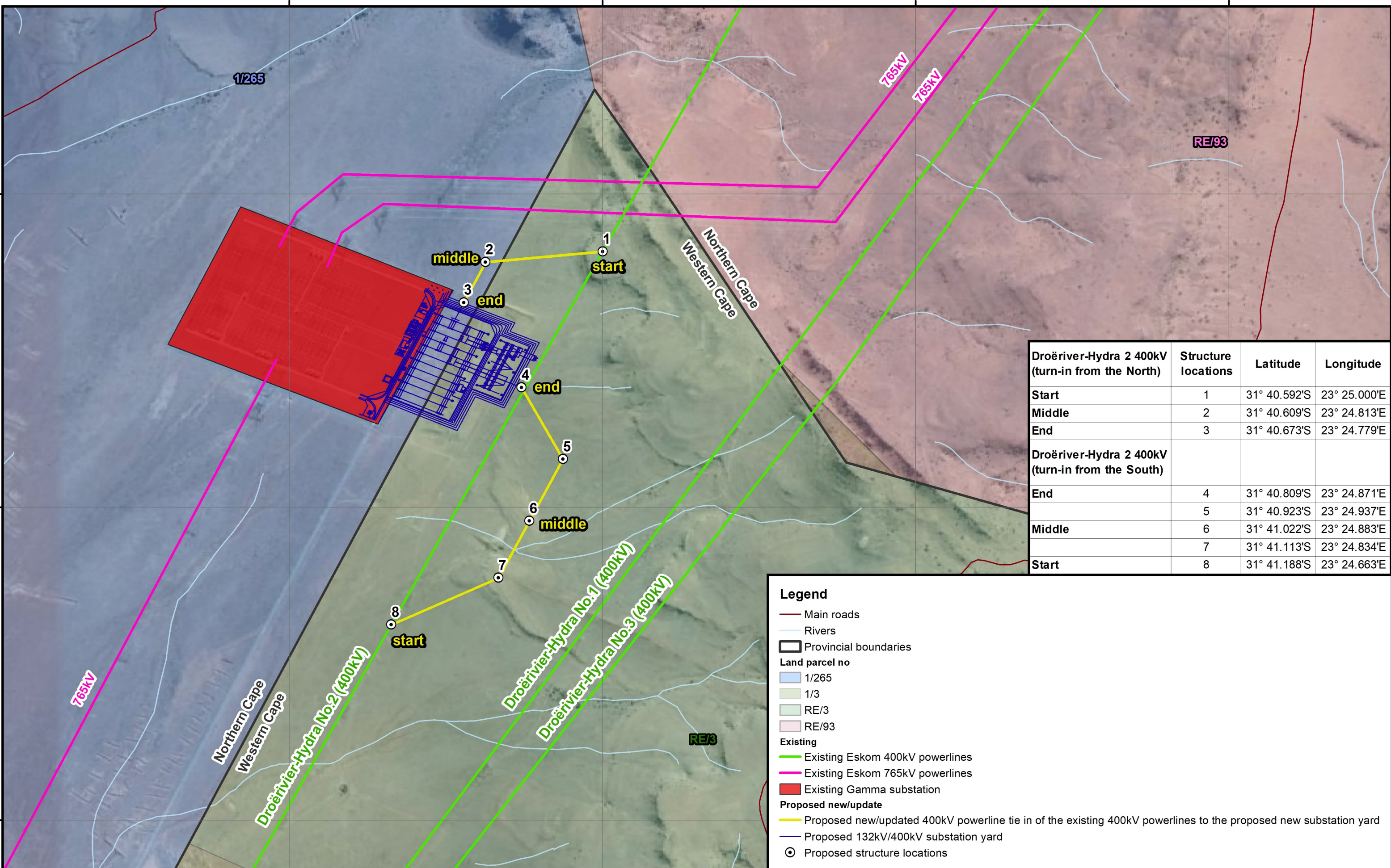
### 4. CONCLUSION

The assessment area was classified as a Low to Moderate land capability sensitivity area with no impacts on the agricultural production ability of the land. Substation assessment areas and access road will not have any impact on the agricultural potential of the land.

This classification is thus confirmed to be accurate as far as the impact of the proposed powerline, substation and associated infrastructure is concerned, based on actual conditions recorded on the ground during the site visit of March 2022, April 2022, and August 2022.

**APRIL 2023 UPDATED LAYOUT**





Droërivier-Hydra 2 400kV (turn-in from the North)	Structure locations	Latitude	Longitude
Start	1	31° 40.592'S	23° 25.000'E
Middle	2	31° 40.609'S	23° 24.813'E
End	3	31° 40.673'S	23° 24.779'E
Droërivier-Hydra 2 400kV (turn-in from the South)			
End	4	31° 40.809'S	23° 24.871'E
	5	31° 40.923'S	23° 24.937'E
Middle	6	31° 41.022'S	23° 24.883'E
	7	31° 41.113'S	23° 24.834'E
Start	8	31° 41.188'S	23° 24.663'E

**Legend**

- Main roads
- Rivers
- Provincial boundaries
- Land parcel no
  - 1/265
  - 1/3
  - RE/3
  - RE/93
- Existing
  - Existing Eskom 400kV powerlines
  - Existing Eskom 765kV powerlines
  - Existing Gamma substation
- Proposed new/update
  - Proposed new/updated 400kV powerline tie in of the existing 400kV powerlines to the proposed new substation yard
  - Proposed 132kV/400kV substation yard
  - Proposed structure locations