OLIFANTSHOEK 132KV POWER LINE

Northern Cape Province

Social Impact Assessment

March 2020

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REPORT DETAILS

Title	:	Social Impact Assessment (SIA) Report: Olifantshoek 132kV Power Line, near Olifantshoek, Northern Cape Province
Authors	:	Savannah Environmental (Pty) Ltd Lisa Opperman
External Peer Review	:	Dr. Neville Bews & Associates Dr. Neville Bews
Client	:	Gamagara Local Municipality
Report Revision	:	Revision 0
Date	:	March 2020

When used as a reference this report should be cited as: Savannah Environmental (2020) Social Impact Assessment (SIA) Report for the Olifantshoek 132kV Power Line, near Olifantshoek, Northern Cape Province.

SPECIALIST DECLARATION OF INTEREST

I, Lisa Opperman, declare that –

- I act as the independent specialist in this application.
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant.
- I declare that there are no circumstances that may compromise my objectivity in performing such work.
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity.
- I will comply with the Act, Regulations and all other applicable legislation.
- I have no, and will not engage in, conflicting interests in the undertaking of the activity.
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing – any decision to be taken with respect to the application by the competent authority, and – the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority.
- All the particulars furnished by me in this form are true and correct.
- I realise that a false declaration is an offence in terms of Regulation 48 and is punishable in terms of section 24F of the Act.

Lisa Opperman
Name

Signature

March 2020
Date

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APPENDICES:

ACRONYMS

B-BBEE	Broad-Based Black Economic Empowerment
BA	Basic Assessment
CLO	Community Liaison Officer
DEA	Department of Environmental Affairs
DEFF	Department of Environment, Forestry and Fisheries (National)
DENC	Department of Environment and Nature Conservation (Northern Cape Provincial)
DoE	Department of Energy
DM	District Municipality
EA	Environmental Authorisation
EAP	Economically Active Population
ECA	Environment Conservation Act (No. 73 of 1989)
ECO	Environmental Control Officer
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EP	Equator Principles
EPC	Engineering, Procurement and Construction
GDP	Gross Domestic Product
GDP-R	Gross Domestic Product per Region
GGP	Gross Geographic Product
GHG	Greenhous Gas
GNP	Gross National Product
GNR	Government Notice
HDI	Historically Disadvantaged Individuals
I&AP	Interested and Affected Party
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IEP	Integrated Energy Plan
IFC	International Finance Corporation
IRP	Integrated Resource Plan
km	Kilometre
kV	Kilovolt
LED	Local Economic Development
LM	Local Municipality
MTS	Main Transmission Substation
NEMA	National Environmental Management Act (No. 107 of 1998)
NDP	National Development Plan
O&M	Operation and Maintenance
PGDS	Provincial Growth and Development Strategy
PICC	Presidential Infrastructure Coordinating Committee
PSDF	Provincial Spatial Development Framework
RBS	Revised Balanced Scenario
SDF	Spatial Development Framework

SIA	Social Impact Assessment
SIP	Strategic Infrastructure Project
SKA	Square Kilometre Array
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNESCO	United Nations Educational, Scientific and Cultural Organisation

1. INTRODUCTION AND PROJECT DESCRIPTION

The Gamagara Local Municipality is proposing the construction and operation of grid connection infrastructure consisting of a single circuit 132kV power line between the existing Emil Traction Substation and the authorised Olifantshoek Substation (**Figure 1.1**) near the town of Olifantshoek in the Northern Cape Province. The proposed power line will be used to strengthen the existing grid network within the municipal area in order to ensure an adequate supply of electricity to residents.

A 300m wide and 36km long grid connection corridor has been identified within which the power line will be developed. The power line servitude will be 31m wide. A 4m wide haul road will be required during the construction phase of the proposed development to provide access to the tower positions of the power line. The grid connection corridor is located within the Gamagara Local Municipality (LM) and the John Taolo Gaetsewe District Municipality (DM).

The development of the Olifantshoek 132kV Power Line requires Environmental Authorisation (EA) from the national Department of Environmental Affairs (DEA), in accordance with the National Environmental Management Act (No. 107 of 1998) (NEMA), and the Environmental Impact Assessment (EIA) Regulations, 2014 (GNR 326), as amended, subject to the completion of a Basic Assessment (BA) process. Lisa Opperman of Savannah Environmental (Pty) Ltd has been appointed as the independent social consultant responsible for undertaking a Social Impact Assessment (SIA) as part of the BA process being conducted for the project.

1.1. Details of the Independent Specialist

This SIA has been undertaken by Lisa Opperman of Savannah Environmental, and peer reviewed externally by Dr. Neville Bews of Dr. Neville Bews & Associates.

» **Lisa Opperman** – holds a Bachelor degree with Honours in Environmental Management and has five years of experience in the environmental field. Her key focus is on environmental and social impact assessments, public participation, environmental management plans and programmes, as well as mapping using ArcGIS for a variety of environmental projects.

» **Dr. Neville Bews** is a Senior Social Scientist and Human Resource professional at Dr. Neville Bews & Associates. Dr. Bews has a Doctorate in Literature and Philosophy (D. Litt. et Phil) from the Rand Afrikaans University (RAU) (now the University of Johannesburg (UJ)), and 37 years of experience in the fields of Social Impact Assessment and Research, and Human Resource Management. Dr. Bews has worked on a number of large infrastructure, mining and water resource projects.

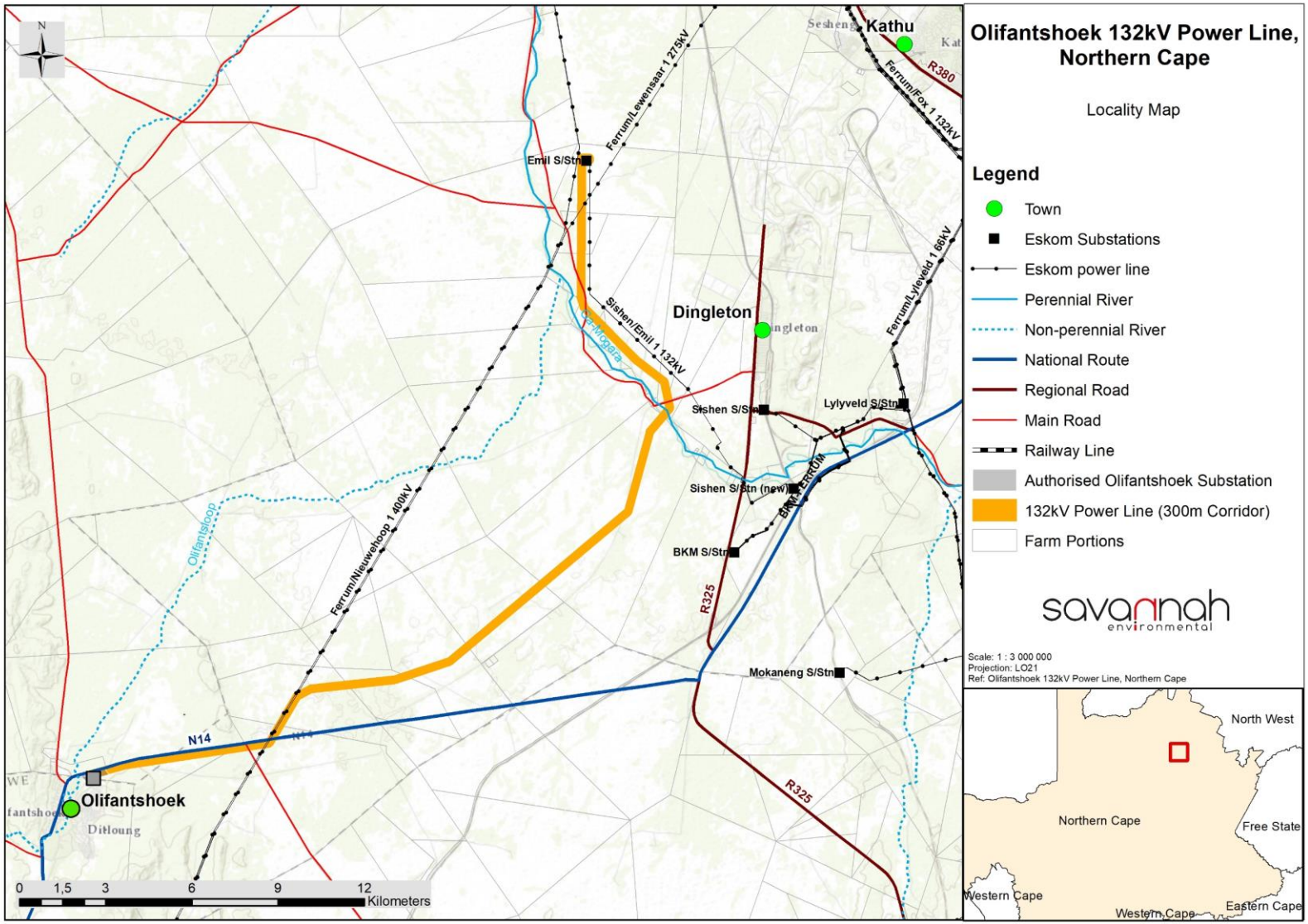

Figure 1.1: Proposed grid connection corridor for the Olifantshoek 132kV Power Line, near Olifantshoek, Northern Cape Province.

1.2. Structure of the SIA Report

This SIA Report has been prepared in accordance with the requirements of Appendix 6 of the 2014 EIA Regulations, as amended. An overview of the contents of this SIA Report, as prescribed by Appendix 6 of the 2014 EIA Regulations (GNR 326), and where the corresponding information can be found within the report is provided in **Table 1.1**.

Table 1.1: Summary of where the requirements of Appendix 6 of the 2014 NEMA EIA Regulations (GNR 326), as amended, are provided within this Specialist Report.

	Requirement	Location in Report
(a)	Details of – (i) The specialist who prepared the report. (ii) The expertise of that specialist to compile a specialist report including a curriculum vitae.	Section 1
(b)	A declaration that the specialist is independent in a form as may be specified by the competent authority.	Specialist Declaration of Interest
(c)	An indication of the scope of, and the purpose for which, the report was prepared.	Section 2
(cA)	An indication of the quality and age of base data used for the specialist report.	Section 4
(cB)	A description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change.	Section 5
(d)	The duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment.	Section 2
(e)	A description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used.	Section 2
(f)	Details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives.	Section 4 Section 5
(g)	An identification of any areas to be avoided, including buffers.	N/A
(h)	A map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers	N/A
(i)	A description of any assumptions made and any uncertainties or gaps in knowledge.	Section 2
(j)	A description of the findings and potential implications of such findings on the impact of the proposed activity or activities.	Section 5
(k)	Any mitigation measures for inclusion in the EMPr.	Appendix A
(l)	Any conditions for inclusion in the environmental authorisation.	Section 6
(m)	Any monitoring requirements for inclusion in the EMPr or environmental authorisation.	Appendix A
(n)	A reasoned opinion – (i) Whether the proposed activity, activities or portions thereof should be authorised. (iA) Regarding the acceptability of the proposed activity or activities. (ii) If the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures.	Section 6
(o)	A description of any consultation process that was undertaken during the course of preparing the specialist report.	Section 2
(p)	A summary and copies of any comments received during any consultation process and where applicable all responses thereto.	N/A
(q)	Any other information requested by the competent authority.	N/A

	Requirement	Location in Report
2.	Where a government notice gazetted by the Minister provides for any protocol or minimum information requirement to be applied to a specialist report, the requirements as indicated in such notice will apply.	N/A

2. METHODOLOGY AND APPROACH

2.1. Purpose of the Study

The International Principles for Social Impact Assessment define SIA as:

"*The processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions*".

The International Principles for Social Impact Assessment define social impacts as changes to one or more of the following:

- People's way of life – that is, how they live, work, play and interact with one another on a day-to-day basis.
- Their culture – that is, their shared beliefs, customs, values and language or dialect.
- Their community – its cohesion, stability, character, services and facilities.
- Their political systems – the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose.
- Their environment – the quality of the air and water people use, the availability and quality of the food they eat, the level of hazard or risk, dust and noise they are exposed to, the adequacy of sanitation, their physical safety, and their access to and control over resources.
- Their health and wellbeing – health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity.
- Their personal and property rights – particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties.
- Their fears and aspirations – their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

The purpose of this SIA Report is therefore to:

- Provide baseline information describing the social environment within which the project is proposed, and which may be impacted (both positively and negatively) as a result of the proposed development.
- Identify, describe and assess possible social risks / fatal flaws and social impacts that may arise as a result of the proposed development (in terms of the detailed design and construction, operation, and decommissioning phases of the project).
- Recommend ways in which negative impacts can be avoided, minimised, or their significance reduced, and positive impacts maximised or enhanced.

2.2. Approach to the Study

This SIA Report provides a snapshot of the current social setting within which the Olifantshoek 132kV Power Line is proposed. It provides an overview of the manner and degree to which the current status quo is likely to change or be impacted by the construction, operation and decommissioning of the project, as well as the manner in which the social environment is likely to impact on the development itself.

An overview of the assessment methodology utilised as part of this SIA is provided in **Section** Error! Reference source not found..

The SIA process comprised the following:

» Collection and review of existing information, including national, provincial, district, and local plans, policies, programmes, census data, and available literature from previous studies conducted within the area. Project specific information was obtained from the project proponent.
» Collection of primary data during telephonic interviews. Attempts were made to undertake telephonic interviews with affected landowners in order to gain inputs on the project, including the perceived social impacts and benefits. The questionnaire for the telephonic interviews were distributed to all affected landowners via email on 18 March 2020 for completion. Following the email correspondence the landowners were contacted telephonically to either provide feedback on the submission of the completed questionnaire or to provide verbal feedback as part of the telephonic discussions on the questionnaire. To date, only a few landowners have submitted the completed questionnaire and the majority of the landowners have been available to participate in telephonic interviews. During the interviews it also became clear that the site visit for the undertaking of face-to-face interviews was not required due to the information provided during the telephonic interviews. In cases where landowners were not available or not willing to participate in interviews this has been recorded. It must be noted that all social issues raised during the public participation process undertaken for the proposed grid connection infrastructure will be included, considered and addressed as part of the final SIA report for the project to be submitted to the DEA.
» Identification of potential direct, indirect and cumulative impacts likely to be associated with the construction, operation, and decommissioning of the proposed project.
» Assessment of identified impacts in terms of their nature, extent, duration, consequence / magnitude, probability, significance, and status.
» Where applicable, mitigation measures with which to minimise impacts and enhance benefits associated with the project were identified.
» Preparation of an SIA Report and inputs into the Environmental Management Programme (EMPr) to be prepared for the project.

2.2.1. Stakeholder Identification and Analysis

Stakeholders are defined as: "A*ny group or organisation which may affect or be affected by the issue under consideration*" (UN, 2001: 26).

These may be directly or indirectly impacted and may include organisations, institutions, groups of people or individuals, and can be at any level or position in society, from the international to regional, national, or household level (Franke & Guidero, 2012).

Stakeholder analysis involves the identification of affected or impacted people and their key grouping and sub-groupings (IFC, 2007). Identifying stakeholders that are directly and indirectly affected by the project is important to determine who might be impacted by the development and in what way. The key stakeholders in the area proposed for development have been identified, grouped / sub-grouped and described (as per Ilse Aucamp SIA methodology and Aucamp et al, 2011). There are immediate, direct and indirect areas of influence to the proposed development. Affected stakeholders comprise sensitive social receptors that may potentially be affected by the proposed development based on their location.

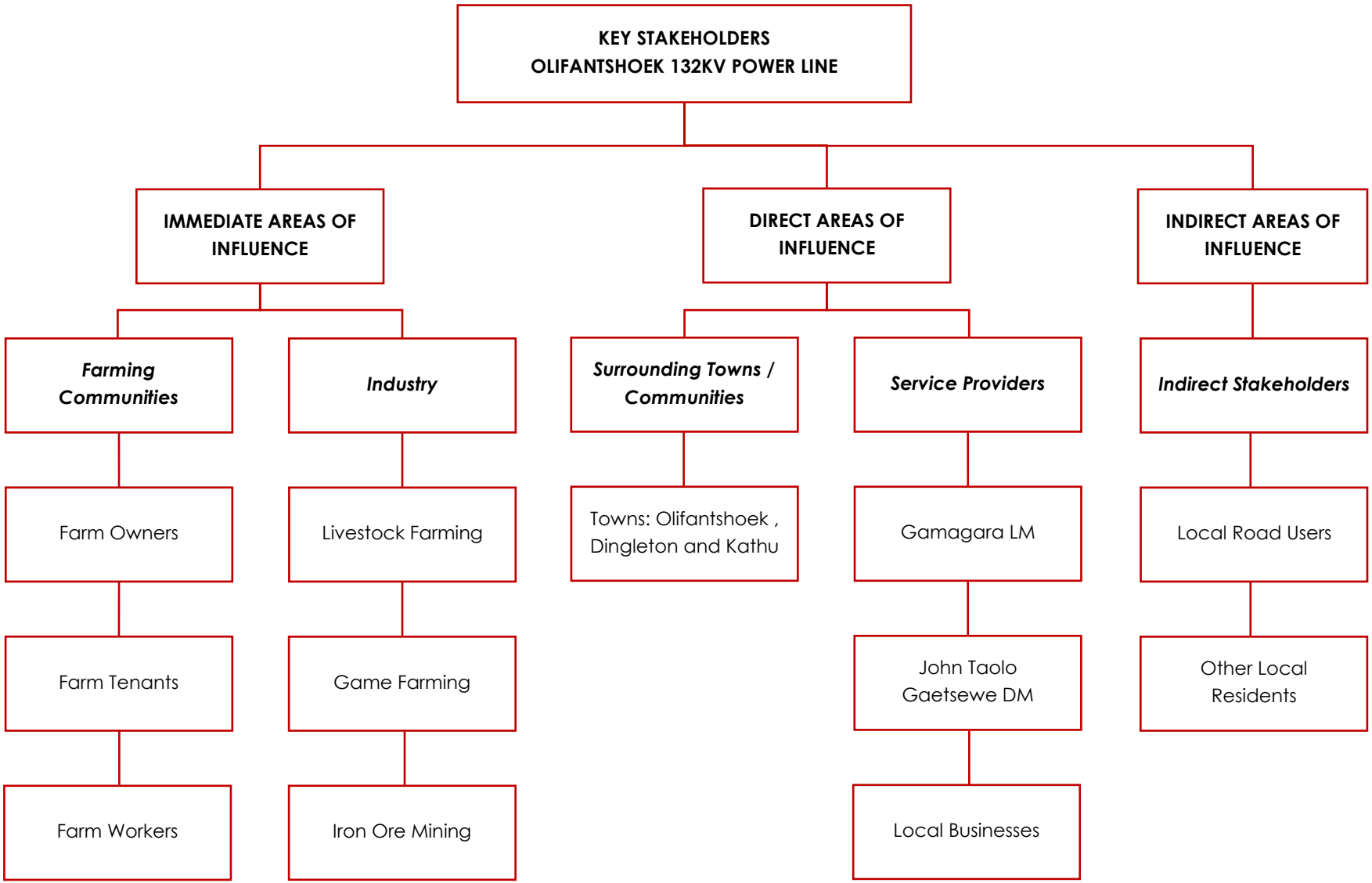

Figure 2.1: Key Stakeholders identified for the Olifantshoek 132kV Power Line, near Olifantshoek, Northern Cape Province.

A description of each of the stakeholders groups in relation to the proposed grid connection corridor is discussed in detail below:

- **Farming community:** The farming community can be grouped into three categories, namely farm owners, farm tenants, and farm workers. Farm owners comprise individuals who own and make a living off of their properties. Farm tenants are people who rent land and work on the land to earn an income. Farm workers are people who work, and also often reside on the farm with their families, and are seen as a vulnerable community.
- **Farming industry:** There are potentially vulnerable farming activities in the broader study area of the corridor. Agriculture is one of the main economic activities within the area, and the primary agricultural activities comprise mainly livestock farming.
- **Mining industry**: The undertaking of mining activities is a main economic activity with the local municipality. Various iron ore mines are located to the east of the grid connection corridor which include the Sishen Mine and the Khumani King Mine. The mining activities within the area are established and not considered to be vulnerable to the development of grid infrastructure outside of the areas being mined.
- **Surrounding towns / affected communities:** Two towns are located in proximity to the grid connection corridor. The first is Olifantshoek which is located just south-west of the southern point of the grid connection corridor. Olifantshoek has a low/medium density residential area, however new developments are underway which will lead to the town being a high density residential area. Kathu is located ~13km north-east of the northern point of the grid connection corridor. One other small town is located ~4km to the east of the grid connection corridor known as Dingleton or Dingle. The town consists of low density single residential houses. The town is surrounded by large mine activities and the residents of the town are planned to be relocated due to the expansion of mining activities in the direction of the town.
- **Service providers:** The major service providers which will be affected by the project include the DM, LM, and local businesses in the area. The Gamagara LM and to a lesser degree the John Taolo Gaetsewe DM are likely to be impacted by the proposed development. The Gamagara LM will absorb a number of positive and negative social impacts. In addition there are a number of local businesses in the surrounding area that could be impacted negatively or benefit from the opportunities of the proposed project. These include a brick manufacturer known as Langeberg Stene and, Biki Guest House, The Ranch Overnight Chalets and the Pudu Game Lodge.
- **Stakeholders outside the direct area of influence:** There are a number of stakeholders that reside outside the direct area of influence but who may be affected by the project. These include road users, including those that use the N14 national road and local gravel roads on a frequent basis as part of their daily or weekly movement patterns.

2.2.2. Collection and Review of Existing Information

Existing desktop information that has relevance to the proposed project, project area and / or surrounds was collected and reviewed. The following information was examined as part of this process:

- Project maps and layouts.
- Google Earth imagery.
- A description of the project (as provided by the project proponent).
- Responses to questions posed to the project proponent regarding employment and social upliftment and local economic development opportunities (as provided by the project proponent).

- Census Data (2011), and the Local Government Handbook (2019).
- Planning documentation such as Provincial Growth and Development Strategies (PGDSs), Local and District Municipality Integrated Development Plans (IDPs), Spatial Development Frameworks (SDFs), and development goals and objectives.
- Relevant legislation, guidelines, policies, plans, and frameworks.
- Available literature pertaining to social issues associated with the development and operation of grid connection infrastructure.

2.2.3. Collection of Primary Data

Attempts were made to hold telephonic interviews with affected and adjacent landowners and key stakeholders identified within the area on Thursday 19 March 2020, Thursday 26 March 2020 and Friday 27 March 2020 (refer to **Table 2.1**). A landowners map is included as **Figure 2.2**.

Where landowners provided feedback in terms of the questionnaire via email, this has been indicated in **Table 2.1** below.

Table 2.1: Overview of Telephonic Interviews with landowners as well as attempts made to contact the relevant parties.

Landowner	Property details	Date of contact / attempted contact	Notes and feedback (not verbatim, only summarised)
Mr. H. Hager (representative of the landowner – Sishen Mine)	Remaining Extent, Portions 1, 7 and 16 of the Farm Gamagara 541 Remaining Extent, Portions 2, 4 6 and 8 of the Farm Fritz 540	Completed the questionnaire and submitted via email on 18 March 2020	Concerns were raised regarding the potential negative impact on agriculture / farm activities, increased theft and increased traffic, noise and dust during the construction phase. Concerns regarding cumulative noise impacts during construction as a result of the existing mining operations were also raised. Increased negative impact on aesthetics of the area due to an existing 400kV power line. Sensitive areas identified in terms of the proposed development is the Sishen Nature Reserve located to the west and outside of the grid connection corridor. Support for the project was indicated.
Mr. G. Smith	Remaining Extent of the Farm Cox 571	Attempts of telephonic interview were made on 19 March 2020 and 26 March 2020. The interview was undertaken on 27 March 2020	This landowner utilises the property for agriculture, including cattle and game farming. The landowner advised that he is planning the expansion of the farm to use it for commercial hunting purposes. Concerns were raised regarding the development of another power line on the property as the landowner confirmed he already has three lines traversing through the property. The landowner raised concerns regarding the negative impacts of loss of game, theft and crime and impacts during operation due to the movement of people and maintenance contractors installing gates in the fencing and placing locks on the gates. Previous experiences with power line developments also resulted in farm gates being left open and game moving outside of property into adjacent properties. Concerns were also raised in terms of the development increasing the existing visual impacts of power lines. Support for the project was indicated.
Mr. D. Croucamp	Portion 2 of Farm Murray 570	Attempts of telephonic interview were made on 19 March 2020 and 26 March 2020. The interview was undertaken on 27 March 2020.	The landowner utilises the farm for the operation of a lodge which includes chalets and rooms. The lodge is known as The Ranch Overnight Chalets. The landowner also undertakes game farming on the property. The landowner does not foresee any social impacts. The landowner mentioned that he is concerned with low hanging power lines and the impact it will have on the game on his property, specifically giraffes. The landowner also indicated that when construction and/or operation of the power line is undertaken, he must be notified of any contractors entering the property. Support for the project was indicated.
Mr. A. Roelofse	Portion 3 of the Farm Murray 570, Portion 2 of the Farm Cox 571, Remaining Extent of the Farm Young 575 and Portion 3 of the Farm Beaumont 569	Attempts of telephonic interview were made on 19 March 2020 and 26 March 2020. The interview was undertaken on 27 March 2020.	The landowner utilises the farms for cattle farming and also has four permanent residences on the properties which has permanent tenants. Concerns where raised by the farmer regarding an impact on the cattle farming during construction and operation due to the enclosure of the servitude by fencing which removes a portion of his properties for use for cattle grazing. Other concerns raised relates to vegetation removal on the properties without approval from the landowner, specifically the removal of camel thorn trees and the contractors removing the wood from the property, as well as contractors not making use of the portable toilet facilities provided but rather the farm. Cumulative visual impacts due to the addition of a power line to the properties already traversed by power lines was also raised. Support for the project was indicated, based on the understanding that the electricity will be used to strengthen the network of Olifantshoek and enable development
Mrs. L Coetzee and Mr M. Coetzee	Remaining Extent of the Farm Neylan 766	Attempts of telephonic interview were made on 19 March 2020, 26 March 2020 and 27 March 2020.	Affected landowner not reachable after several attempts to undertake consultation.
Mr. C. Steenkamp	Remaining Extent of the Farm Smyth 566	Attempts of telephonic interview were made on 19 March 2020 and 26 March 2020. Landowner submitted feedback on questionnaire via email on 01 April 2020.	The landowner utilises the property for sheep, goat and cattle farming, free range pig farming, horse farming and riding, chicken farming, hunting, irrigation, firewood processing, abattoir, butchery and rented accommodation. The landowner advised that he has future plans for the property which includes the development of a charcoal plant. Concerns were raised regarding the impact of the proposed development on the current land use activities undertaken within the property as well as the neighbouring properties. Sensitive infrastructure within the property was identified by the landowner as being of a concern in terms of the proposed development, including a height beacon, windmills and concrete dams. The landowner also advised that there is a hunting camp and rare species sites located nearby which are considered to be

Landowner	Property details	Date of contact / attempted contact	Notes and feedback (not verbatim, only summarised)
			tourism attractions. Concerns relating to safety and security, noise and dust from construction on daily living patterns and visual impacts (i.e. sense of place) were also raised. The landowner indicated that he is not in support of the project.
Mr. E Maritz	Remaining Extent of the Farm Dingle 565	The interview was undertaken on 19 March 2020.	The landowner utilises the property for cattle farming. Concerns were raised relating to construction phase impacts, including vegetation removal, cattle theft, disturbance of existing farm infrastructure, including gates being left open by contractors. Noise, traffic and dust impacts were also raised as concerns for the construction phase, as well as overall disturbance. The landowner indicated that he is not in support of the project, but understand that there would be no other option.
Mr. D Malan	Portion 3 of the Farm Cox	The interview was undertaken on 19 March 2020.	The landowner utilises the property for the operation of a brick manufacturing plant known as Langeberg Stene. Future plans for the property includes the development of offices and a truck shop/stop. A four bedroom permanent residence is located on the property with tenants. Concerns were raised regarding the impact of the power line on the mining activity and reserves used for the manufacturing of bricks as the power line will move over these sensitive areas reducing the availability for use and impacting the economics of the operations. Concerns were also raised regarding the need to move the entrance of the facility due to the location of the grid connection corridor, as well as the impact of the location on the power line on future plans for the property. The landowner also advised that the power line could cross over the permanent residence within the property which will have a negative impact. The landowner is in support of the project subject to the electricity being used for the town of Olifantshoek and not for the mining activities undertaken within the area. The landowner indicated the private developers would benefit from the increased supply in electricity to contribute to development in Olifantshoek.
Mr. T. van der Linde	Remaining Extent of the Farm Murray 570 and Remaining Extent of the Farm Beaumont 569	The interview was undertaken on 19 March 2020.	The landowner utilises the property for cattle farming. Concerns were raised regarding the construction phase, relating to workers coming into the properties as well as theft. Further concerns were raised regarding the amount of existing power lines and the need for the proposed power line as Eskom has multiple lines going to Olifantshoek. The landowner indicated that he is not in support of the project.
Mr. M. van Zyl	Portion 4 of the Farm Neylan 766	The interview was undertaken on 26 March 2020.	The landowner utilises the property for commercial farming purposes which includes the breeding of Arabic horses, game farming, specifically Springboks and farming including cattle, goats and sheep. The property is also used for the operation of the Biki Guesthouse which consists of 10 rooms. Future plans for the property includes the construction of a permanent residence for the landowner. The landowner indicated that he does not foresee the proposed project impacting on the property and that he is in support of the project.
Mr. H. Wiesse	Remaining Extent of the Farm Hartley 576 and Portion 1 of the Farm Tomkins 657	Attempts of telephonic interview were made on 26 March 2020. The landowner was reached via telephone on 27 March 2020.	The landowner provided feedback on historical issues relating to the construction and operation of power lines by Eskom on the properties, however the landowner did not provide any inputs in terms of social impacts associated with the development of the proposed power line and was not willing to answer any question as per the questionnaire presented in **Appendix B**. The landowner advised that no work will be allowed on his properties until historical issues have been resolved, specifically relating to the roads on the property used and established by Eskom for previous power lines.

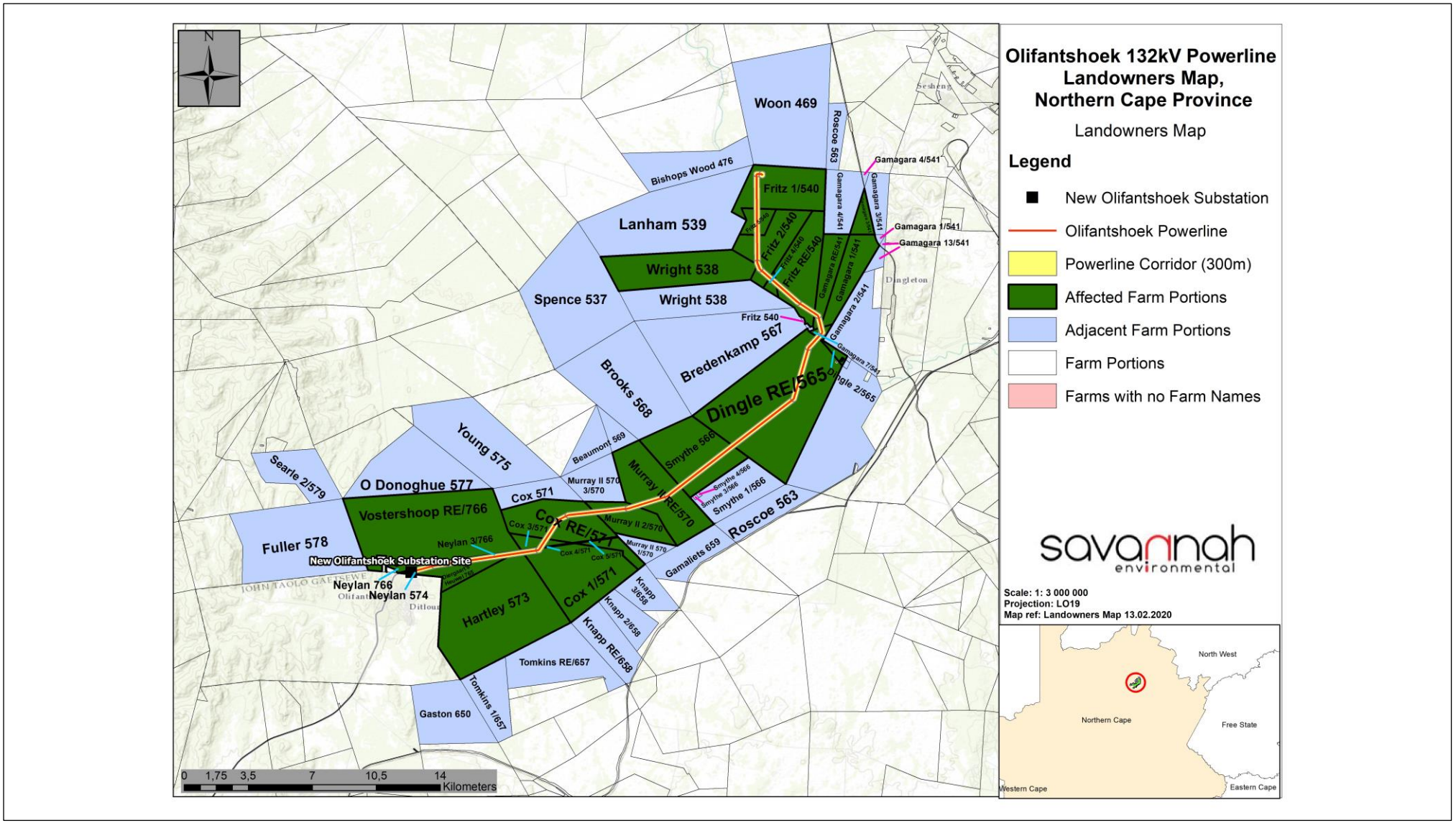

Figure 2.2: Landowners map of the affected and adjacent properties for the Olifantshoek 132kV Power Line

2.3. Impact Assessment Evaluation Method

The main objective of this SIA is to determine the social risks and opportunities, and positive and negative impacts which may be associated with the construction, operation, and decommissioning of the project. The methodology below allows for the evaluation of the overall impact of a proposed project on the social environment. This includes an assessment of the significant direct, indirect, and cumulative impacts associated with the project. Social impacts were assessed in terms of their perceived extent (scale), duration, magnitude (severity), probability (certainty), and status (negative, neutral or positive).

- The **nature**, which includes a description of what causes the effect, what will be affected and how it will be affected.
- The **extent**, wherein it is 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 was assigned as appropriate (with 1 being low and 5 being high).
- The **duration**, wherein it is 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.
  - 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 describes the likelihood of the impact actually occurring. Probability is 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 is determined through a synthesis of the characteristics described above and can be assessed as low, medium or high.
- The **status**, which will is 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** was then calculated by combining the criteria in the following formula:

S = (E+D+M)xP

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).

2.4. Limitations and Assumptions

The following assumptions and limitations are applicable to this SIA Report:

- Data derived from the 2011 Census, Northern Cape Provincial Spatial Development Framework (PSDF) 2012, Northern Cape Provincial Spatial Development Framework (PSDF) 2018 Review – Executive Summary, Final Second Review of the Integrated Development Plan (IDP) Gamagara Local Municipality 2019 – 2022 and the Integrated Development Plan (IDP) of the John Taolo Gaetsewe District Municipality 2019-2020 review was used to generate the majority of information provided in the baseline profile of the broader study area and the grid connection corridor. The possibility exists that some of the data utilised may be out of date, and may not provide an accurate reflection of the current status quo.
- This SIA Report was prepared based on information that was available to the specialist at the time of preparing the report. The sources consulted are not exhaustive, and the possibility exists that additional information which might strengthen arguments, contradict information in this report, and / or identify additional information might exist. Additional information available from the public participation undertaken during the BA process will be included and considered within the final report, where relevant.
- Some of the project projections reflected in this SIA Report may be subject to change, and therefore may be higher or lower than those estimated by the project proponent.
- It is assumed that the motivation for, and planning and feasibility study of the project were undertaken with integrity, and that information provided by the project proponent was accurate and true at the time of preparing this SIA Report.

3. LEGISLATION AND POLICY REVIEW

The legislative and policy context applicable to a project plays an important role in identifying and assessing the potential social impacts associated with the development. In this regard a key component of the SIA process is to assess a proposed development in terms of its suitability with regards to key planning and policy documents.

The following key pieces of documentation were reviewed as part of this legislation and policy review process:

National Policy and Planning Context:
- Constitution of the Republic of South Africa, 1996
- National Environmental Management Act (No. 107 of 1998) (NEMA)
- White Paper on the Energy Policy of the Republic of South Africa (1998)
- National Energy Act (No. 34 of 2008)
- Integrated Energy Plan (IEP) (2015)
- National Development Plan (NDP) 2030 (2012)
- Strategic Infrastructure Projects (SIPs)

Provincial Policy and Planning Context:
- Northern Cape Provincial Spatial Development Framework (PSDF) 2012
- Northern Cape Provincial Spatial Development Framework (PSDF) 2018 Review – Executive Summary (full documentation not publicly available)

Local Policy and Planning Context:
- Integrated Development Plan (IDP) of the John Taolo Gaetsewe District Municipality 2019-2020 review
- Final Second Review of the Integrated Development Plan (IDP) Gamagara Local Municipality 2019 – 2022

3.1. National Policy and Planning Context

Any project which contributes positively towards the objectives mentioned within national policies could be considered strategically important for the country. A review of the national policy environment suggests that the connection infrastructure is considered integral to contributing towards social upliftment and economic development, even if only limited in extent.

A brief review of the most relevant national legislation and policies is provided in table format (**Table 3.1**) below.

Table 3.1: Relevant national legislation and policies for the Olifantshoek 132kV Power Line

Relevant legislation or policy	Relevance to the proposed project
Constitution of the Republic of South Africa, 1996	Section 24 of the Constitution pertains specifically to the environment. It states that Everyone has the right to an environment that is not harmful to their health or well-being, and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation,

Relevant legislation or policy	Relevance to the proposed project
	promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. The Constitution outlines the need to promote social and economic development. Section 24 of the Constitution therefore requires that development be conducted in such a manner that it does not infringe on an individual's environmental rights, health, or well-being. This is especially significant for previously disadvantaged individuals who are most at risk to environmental impacts.
National Environmental Management Act (No. 107 of 1998) (NEMA)	This piece of legislation is South Africa's key piece of environmental legislation, and sets the framework for environmental management in South Africa. NEMA is founded on the principle that everyone has the right to an environment that is not harmful to their health or well-being as contained within the Bill of Rights. The national environmental management principles state that the social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment. The need for responsible and informed decision-making by government on the acceptability of environmental impacts is therefore enshrined within NEMA.
National Development Plan 2030 (2012)	The National Development Plan (NDP) 2030 is a plan prepared by the National Planning Commission in consultation with the South African public which is aimed at eliminating poverty and reducing inequality by 2030. In terms of the Energy Sector's role in empowering South Africa, the NDP envisages that, by 2030, South Africa will have an energy sector that promotes: » Economic growth and development through adequate investment in energy infrastructure. The sector should provide reliable and efficient energy service at competitive rates, while supporting economic growth through job creation. » Social equity through expanded access to energy at affordable tariffs and through targeted, sustainable subsidies for needy households. » Environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change. The NDP aims to provide a supportive environment for growth and development, while promoting a more labour-absorbing economy. The development of the grid connection infrastructure is considered to be relevant to the plan due to the need of the infrastructure for economic growth within the Gamagara Local Municipality municipal area.

3.2. Provincial Policies

This section provides a brief review of the most relevant provincial policies. The proposed Olifantshoek 132kV Power Line is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

A brief review of the most relevant provincial policies is provided in table format (**Table 3.2**) below.

Table 3.2: Relevant provincial policies for the Olifantshoek 132kV Power Line

Relevant policy	Relevance to the proposed project
Northern Cape Provincial Spatial Development Framework (PSDF) 2012	The Northern Cape Provincial Spatial Development Framework (PSDF) 2012 states that the overarching goal for the province is to enable sustainability through sustainable development. The province considers social and economic development as imperative in order to address the most significant challenge facing the Northern Cape, which is poverty. The development of the grid connection infrastructure is required in order to enable and strengthen the supply of electricity to the municipal area. The development of the grid connection infrastructure is considered to be relevant to the framework due to the opportunity provided in terms of economic development and growth in the area.
Northern Cape Provincial Spatial Development Framework (PSDF) 2018 Review – Executive Summary	The review of the Northern Cape PSDF (2018) refers to infrastructure investment and that a balance must be maintained between investments aimed at meeting the social needs of communities and investment aimed at promoting economic development and job creation. The Spatial Development Strategy identified in the PSDF for basic infrastructure includes the following points to be achieved: » Ensure efficient supply of water, electricity and waste management services to sustain additional industry growth. » Eradicate backlogs in water and sanitation, electricity, housing » Improve basic services. » Provide green infrastructure e.g. water tanks, renewable energy. » Eradicate backlogs and maintain basic services. The development of the Olifantshoek 132kV Power Line will contribute to achieving, albeit only to a limited extent, the basic infrastructure requirements for the Province and contribute to the social needs and economic development.

3.3. District and Local Municipalities Policies

The strategic policies at a district and local level have similar objectives for the respective areas, namely to accelerate economic growth, create jobs, and uplift communities. The proposed Olifantshoek 132kV Power Line is considered to align with the aims of these policies, even if contributions to achieving the goals therein are only minor.

A brief review of the most relevant district and local municipal policies is provided in table format (**Table 3.3**) below.

Table 3.3: Relevant district and local municipal policies for the Olifantshoek 132kV Power Line

Relevant policy	Relevance to the proposed project
Integrated Development Plan (IDP) of the John Taolo Gaetsewe District Municipality 2019-2020 review	The IDP identifies that there is a 10% gap in terms of access to electricity within the district municipal area. The IDP also states that the inadequate supply of electricity experienced in the municipal area is restraining economic growth. The development of the grid connection infrastructure is required in order to enable and strengthen the supply of electricity to the municipal area as is identified as a gap by the DM. The development of the grid connection infrastructure is considered to be relevant to the

Relevant policy	Relevance to the proposed project
	development plan due to the opportunity provided in terms of economic development and growth in the area.
Final Second Review of the Integrated Development Plan (IDP) Gamagara Local Municipality 2019 – 2022	The IDP states that the municipality has a current backlog of 3015 households that are not electrified due to capacity constraints. Priority community issues have been identified through engagement with communities. Basic service delivery and infrastructure development has been identified as a key community issue which includes the provision of electricity and the upgrading of infrastructure. The development of the grid connection infrastructure is required in order to enable and strengthen the supply of electricity to the municipal area and thereby contributing to the provision of electricity.

3.4. Conclusion

The review of relevant legislation, policies and documentation pertaining to the proposed development indicates that the establishment of the grid connection infrastructure is supported at a national, provincial, and local level, and that the proposed project will contribute positively towards a number of targets and policy aims.

4. SOCIAL PROFILE

The grid connection corridor assessed for the development and operation of the 132kV power line is 300m wide and 36km long. The power line will occupy a 31m wide servitude and will traverse thirty-one (31) properties. The grid connection corridor is located north-east of Olifantshoek and west of Kathu, in the Gamagara LM and the John Taolo Gaetsewe DM, in the Northern Cape Province (refer to **Table 4.1**). A corridor is being considered for the development of the grid connection infrastructure.

Table 4.1: Spatial Context of the study area for the development of the Olifantshoek 132kV Power Line

Province	Northern Cape Province
District Municipality	John Taolo Gaetsewe District Municipality
Local Municipality	Gamagara Local Municipality
Ward number(s)	3, 4, 5 and 6
Nearest town(s)	Olifantshoek (2.2km) west of the corridor and Kathu (13.3km) to the east of the corridor.
Affected Properties: Farm Name(s), Number(s) and Portion Numbers	**Grid Connection Corridor:** » Remaining Extent of the Farm Fritz 540 » Portion 1 of the Farm Fritz 540 » Portion 2 of the Farm Fritz 540 » Portion 4 of the Farm Fritz 540 » Portion 5 of the Farm Fritz 540 » Portion 8 of the Farm Fritz 540 » Portion 9 of the Farm Fritz 540 » Portion 10 of the Farm Fritz 540 » Remaining Extent of the Farm Gamagara 541 » Portion 1 of the Farm Gamagara 541 » Portion 7 of the Farm Gamagara 541 » Portion 1 of the Farm Wright 538 » Remaining Extent of the Farm Dingle 565 » Portion 2 of the Farm Dingle 565 » Remaining Extent of the Farm Smythe 566 » Remaining Extent of the Farm Murray 570 » Portion 2 of the Farm Murray 570 » Remaining Extent of the Farm Cox 571 » Portion 1 of the Farm Cox 571 » Portion 3 of the Farm Cox 571 » Portion 4 of the Farm Cox 571 » Remaining Extent of the Farm Hartley 573 » Portion 3 of the Farm Hartley 573 » Remaining Extent of the Farm Diegaart's Heuwel 765 » Remaining Extent of the Farm Neylan 574 » Portion 1 of the Farm Neylan 574 » Remaining Extent of the Farm Neylan 766 » Portion 3 of the Farm Neylan 766 » Portion 4 of the Farm Neylan 766 » Portion 7 of the Farm Neylan 766 » Remaining of Erf 155 Olifantshoek

SG 21 Digit Code (s)	**Grid Connection Corridor:** » C04100000000054000000 » C04100000000054000001 » C04100000000054000002 » C04100000000054000004 » C04100000000054000005 » C04100000000054000008 » C04100000000054000009 » C04100000000054000010 » C04100000000054100000 » C04100000000054100001 » C04100000000054100007 » C04100000000053800001 » C04100000000056500000 » C04100000000056500002 » C04100000000056600000 » C04100000000057000000 » C04100000000057000002 » C04100000000057100000 » C04100000000057100001 » C04100000000057100003 » C04100000000057100004 » C04100000000057300000 » C04100000000057300003 » C04100000000076600000 » C04100000000076600003 » C04100000000076600004 » C04100000000076600007 » C04100000000076500000 » C04100000000057400000 » C04100000000057400001 » C04100040000015500000
Current zoning and land use	Agriculture

This Chapter provides an overview of the socio-economic environment of the province, DM, and LM within which the Olifantshoek 132kV Power Line is proposed and provides the socio-economic basis against which potential issues can be identified.

4.1. Northern Cape Province

The Northern Cape Province is located in the north-western extent of South Africa and constitutes South Africa's largest province, occupying an area 372 889km² in extent, equivalent to nearly a third (30.5%) of the country's total land mass. It is also South Africa's most sparsely populated province with a population of 1 145 861, and a population density of 3.1/km². It is bordered by the provinces of the Western Cape, and Eastern Cape to the south, and south-east, the provinces of Free State, and North West to the east, Botswana and Namibia, to the north, and the Atlantic Ocean to the west. The Northern Cape is South Africa's only province which borders Namibia, and therefore plays an important role in terms of providing linkages between Namibia and the rest of South Africa. The Orange River is a significant feature within the province,

and the main source of water, and also constitutes the international border between South Africa and Namibia.

The Northern Cape offers unique tourism opportunities including wildlife conservation destinations, natural features, historic sites, festivals, cultural sites, stars gazing, adventure tourism, agricultural tourism, ecotourism, game farms, and hunting areas, etc. The province is home to the Richtersveld Botanical and Landscape World Heritage Site, which comprises a United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Site under the World Heritage Convention. The Northern Cape is also home to two Transfrontier National Parks, namely the Kgalagadi Transfrontier Park, and the Richtersveld /Ai-Ais Transfrontier Park, as well as five national parks, and six provincial reserves.

The Northern Cape plays a significant role in South Africa's science and technology sector, and is home to the Square Kilometre Array (SKA), the Southern African Large Telescope (SALT), and the Karoo Array Telescope (MeerKAT).

The Northern Cape makes the smallest contribution to South Africa's economy (contributing only 2% to South Africa's Gross Domestic Product per region (GDP-R) in 2007). The mining sector is the largest contributor to the provincial GDP, contributing 26%. The Northern Cape's mining industry is of national and international importance, as it produces approximately 37% of South Africa's diamond output, 44% of its zinc, 70% of its silver, 84% of its iron-ore, 93% of its lead and 99% of its manganese.

In 2007 the agricultural sector contributed 5.8% to the Northern Cape GDP per region which was equivalent to approximately R1.3 billion. The agricultural sector also employs approximately 19.5% of the total formally employed individuals (LED Strategy). The sector is experiencing significant growth in value-added activities, including game-farming, while food production and processing for the local and export market is also growing significantly (PGDS, July 2011). Approximately 96% of the land is used for stock farming, including beef cattle and sheep or goats, as well as game farming, while approximately 2% of the province is used for crop farming, mainly under irrigation in the Orange River Valley and Vaalharts Irrigation Scheme (LED Strategy).

The Northern Cape comprises five Districts, namely Frances Baard, John Taolo Gaetsewe, Namakwa, Pixley ka Seme, and ZF Mgcawu (refer to **Figure 4.1**).

4.2. John Taolo Gaetsewe DM

The John Taolo Gaetsewe DM is bordered by the ZF Mgcawu and Frances Baard DMs to the west and south and the North West Province to the east and north-east and Botswana to the north-west. The John Taolo Gaetsewe DM is the second smallest district in the Northern Cape, occupying only 7% of the Province. The John Taolo Gaetsewe DM comprises only three local municipalities which include the Gamagara Local Municipality, the Ga-Segonyana Local Municipality and the Joe Morolong Local Municipality (refer to **Figure 4.2**). The Joe Morolong Local Municipality is the largest local municipality in terms of size, with the Ga-Segonyana Local Municipality and Gamagara Local Municipality covering 16% and 10% respectively.

The John Taolo Gaetsewe DM comprises of 186 towns and settlements of which the majority (80%) are villages located in the Joe Morolong Municipality. The population of the DM accounts for 20.3% of the total population in the Northern Cape Province, which is the third largest population size after the Frances Baard and ZF Mgcawu Districts.

The John Taolo Gaetsewe DM is characterised by a mixture of land uses of which agriculture and mining are dominant. Minerals mined include manganese ore, iron ore and tiger's eye. The Sishen iron-ore mine is one of the longest iron-ore carriers in the world. The rural land in the district is used extensively for cattle, sheep, goat and game farming.

The area is also well known for its good commercial hunting in the winter, and holds potential as a tourism destination. The north-eastern region is comprised principally of high-density rural and peri-urban areas while the western and southern areas are sparsely populated and consist mainly of commercial farms and mining activities.

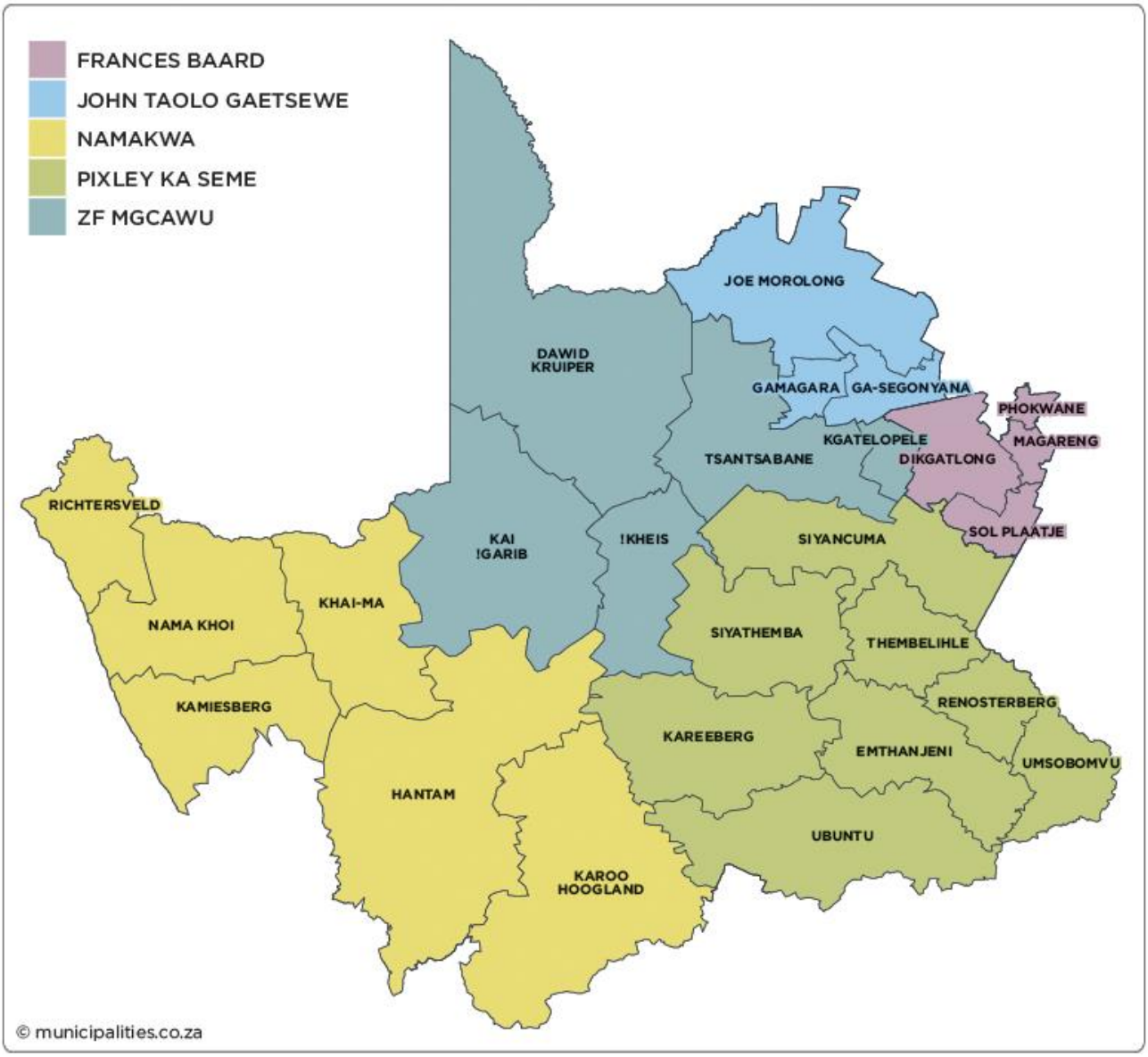

Figure 4.1: Map showing the municipalities of the Northern Cape (Source: www.municipalities.co.za).

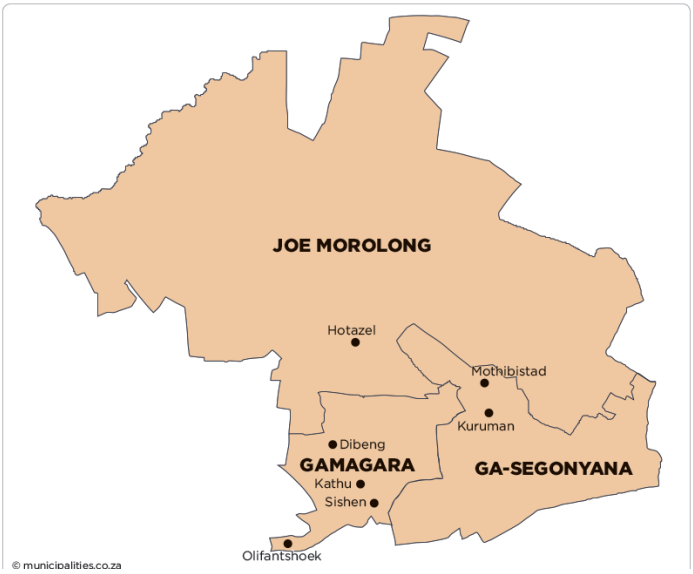

Figure 4.2: Map showing the municipalities of the ZF Mgcawu DM (Source: www.municipalities.co.za).

4.3. Gamagara LM

The Gamagara LM serves an area of 2619km^2, which is approximately 10% of the total John Taolo Gaetsewe DM area. The LM is located in the north-eastern section of the Northern Cape on the N14 National Road between Upington and Vryburg.

The Gamagara LM is a category B local municipality and includes four (4) towns namely, Kathu, Sishen Olifantshoek and Dibeng. Dingleton was a town within the LM but the residents of the town are planned to be relocated to Kathu due to mining activity planned by the Sishen iron-ore mine. The LM is classified as a small mining town.

The Gamagara LM is described as a developing municipality, and in order for the municipality to grow and develop land is needed. Most of the land is currently privately owned. The municipality does not have serviced land currently available due to illegal land grabs, however the municipality is in a process of negotiating with the mining companies in the area for land.

4.4. Grid Connection Corridor

The corridor is located between the towns of Kathu, located to the north-east of the northern end of the corridor, and Olifantshoek, located to the south-west of the southern end of the corridor. The town of Dingleton is located to the east of the corridor of which the residents are planned to be relocated to Kathu and other surrounding towns in order for the Sishen mine to expand its mining activities. The towns are mainly low-medium residential areas with the main focus being mining and agriculture in terms of land use and function.

The general area within which the corridor is located is sparsely populated with the Gamagara LM having a population density of approximately 16/km^2 and the John Taolo Gaetsewe DM having a population density of 8.2/km^2).

The grid connection corridor traverses thirty-one properties, which are mainly utilised for grazing purposes (specifically sheep farming). Mining activities are undertaken to the east of the corridor which includes mainly iron-ore mining associated with the Sishen Mine and the Khumani King Mine.

According to the National Landcover Map (2014), the corridor and the affected properties consist primarily of mining areas, mining-related buildings, low shrubland, grassland, woodland and open bush and limited sections of cultivated fields of low significance.

The N14 national road, which links the towns of Upington, Olifantshoek, Kathu, Kuruman and Vryburg (in the North West Province) is located south of the of the grid connection corridor, with the most southern section of the corridor traversing the N14 in order to connect the proposed power line to the authorised Olifantshoek Substation. The corridor is located near a railway line and runs parallel to the railway in the northern section, near the Emil Traction Substation.

The Ga-Mogara River is located within the northern section of the corridor. The corridor runs parallel to the River and then traverses the River in a southerly direction in order to complete the connection to the authorised Olifantshoek Substation.

The development of the Olifantshoek 132kV Power Line is required in order to strengthen the supply of electricity within the municipal area and to enable economic development, which ultimately requires the availability of sufficient electricity.

The area within which the power line is proposed has already been subjected to various disturbances in the landscape which has led to an alteration of the landscape from natural to industrial. Existing industrial infrastructure includes grid connection infrastructure consisting of various power lines and substations and mining areas (including mining related industrial infrastructure of the Sishen Mine and the Khumani King Mine). The existing power lines located within the area includes the Ferrum Niewehoop 400kV Power Line, the Ferrum Lewensaar 275kV Power Line and the Sishen Emil 132kV Power Line. The proposed corridor traverses or runs parallel to all three of these lines within the northern and southern sections of the corridor. Existing substations include the Emil Substation, Sishen Substation, BKM Substation and Lylyveld Substation. Other industrial infrastructure and disturbance in the landscape includes the operation of the Langeberg Stene brick manufacturing plant located along the N14 and slightly within the grid connection corridor. With the addition of the proposed Olifantshoek 132kV Power Line the area will become more industrial however only to a limited extent, due to the already industrial infrastructure present within the landscape, as discussed above. The addition of the proposed power line and change in land use for the affected areas is considered to be acceptable considering the current land use activities undertaken within the surrounding area.

There are no major social receptors located within or directly adjacent to the grid connection corridor. Social receptors which could be affected are the local travellers making use of the N14 national road, the R325 regional road and main roads (of a gravel/surfaced nature) present. Other social receptors located in the area include residents of the surrounding towns and adjacent land owners. Due to the fact that existing industrial infrastructure is present within the area, the development of the proposed project will not introduce industrial and grid-related infrastructure as a land use to the area. The nature and extent of the development and the distance of the corridor to these social receptors also provides some buffer in terms of direct impact.

Limited tourism activities are undertaken and/or facilities area present outside of the grid connection corridor. The Ranch Overnight Chalets is located ~1km south of the corridor and north of the N14. The facilities are marketed for use by anyone doing business with the mines located within the area as well as for travellers going towards Namibia, the Kgalagadi Transfrontier Park and the West Coast. The accommodation includes rooms and chalets, six caravan stands and a back packers lodge. The Ranch Overnight Chalets also cater for events such as weddings, birthday parties, conferences, product launches and cocktail parties and includes a banquet hall and conference rooms. The Pudu Game Lodge is located ~14km to the west of the grid connection corridor on the slopes of the Langeberg and Koranaberg Mountains near Olifantshoek. The facility offers accommodation in the form of four chalets and one 5-sleeper tent. There is also an open-air lapa and a swimming pool. Based on the nature and extent of the proposed project no impacts are considered to be significant based on the already disturbed and industrialised nature of the current landscape. The Biki Guest House is also located near the corridor

The description of the grid connection corridor and the surrounding area provided above is considered to be the current *status quo* and social landscape and characteristics associated with the area within which 132kV power line is proposed to be placed.

4.5. Baseline Description of the Social Environment

Table 4.2 provides a baseline summary of the socio-economic profile of the Gamagara LM within which the Olifantshoek 132kV Power Line is located. In order to provide context against which the LM's socio-economic profile can be compared, the socio-economic profiles of the John Taolo Gaetsewe DM, Northern Cape Province, and South Africa as a whole have also been considered. The data presented in this section have been derived from the 2011 Census, the Local Government Handbook South Africa 2019, the Northern Cape Provincial Spatial Development Framework (PSDF), and the John Taolo Gaetsewe DM and Gamagara LM IDPs.[1]

Table 4.2: Baseline description of the socio-economic characteristics of the area within which the Olifantshoek 132kV Power Line is proposed

Location characteristics
» The project is proposed within the Northern Cape Province, which is South Africa's largest, but least populated Province. » The project is proposed within the Gamagara LM of the John Taolo Gaetsewe DM. » The Gamagara LM is approximately 2619km² in extent, equivalent to approximately 10% of the John Taolo Gaetsewe DM.
Population characteristics
» Between 2011 and 2016 the Gamagara LM experienced a population growth rate of 28.93% over 5 years. » The Gamagara LM has a high urbanisation rate of 97.6%, which is significantly higher than that of the DM (24.9%). The main reason for the high rate is due to the Gamagara LM being a mining hub and individuals are moving in to the area seeking employment opportunities. » The Gamagara LM is male dominated, with males comprising approximately 56.4% of the LM population. The John Taolo Gaetsewe DM is female dominated, with females comprising approximately 50.8% of the DM population.

1 While information was derived from the Local Government Handbook South Africa 2019, Northern Cape PSDF, John Taolo Gaetsewe DM and Gamagara LM IDPs, these sources largely make use of statistical information derived from the Census 2011. The information presented in this Chapter may therefore be somewhat outdated, but is considered sufficient for the purposes of this assessment (i.e. to provide an overview of the socio-economic characteristics against which impacts can be identified and their significance assessed).

- Black Africans comprise the predominant population group within the Gamagara LM and John Taolo Gaetsewe DM.
- The Gamagara LM, John Taolo Gaetsewe DM, and Northern Cape provincial, and South African national population age structures are all youth dominated. A considerable proportion of the respective populations therefore comprise individuals within the economically active population between the ages of 15 and 64 years of age

Economic, education and household characteristics

- The Gamagara LM has a dependency ratio of 34.2, which is lower than the John Taolo Gaetsewe DM (57.9), Northern Cape Province (35.8), and South Africa (34.5).
- Education levels within the Gamagara LM are low with approximately 33% of the population aged 20 years and older who have completed Grade 12 / Matric. Only 10.8% of the age group have received higher education. This implies that the majority of the population can be expected to have a relatively low-skill level and would either require employment in low-skill sectors, or skills development opportunities in order to improve the skills level of the area.
- The unemployment rate of the Gamagara LM (17.7%) is lower than that of the John Taolo Gaetsewe DM (29.7%).
- Approximately 32% of people in the Gamagara LM have no monthly income. At least 64% of the population are earning less than R6400 per month. The area can therefore be expected to have a high poverty level with associated social consequences such as not being able to pay for basic needs and services and poor living conditions.
- The main economic sectors of the Gamagara LM includes mining, game farming and business services.
- 43% of employed people in the Gamagara LM are employed in the formal sector, of which 5% are employed in the informal sector.
- As of 2016 there were a total of 15 723 households within the Gamagara LM. This is equivalent to 21.7% of the total number of households within the John Taolo Gaetsewe DM (72 310), and 5% of the total number of households within Northern Cape Province (313 402).
- The majority of households within the Gamagara LM comprise of houses or brick houses, informal dwellings (i.e. shacks), a flat or house in a backyard, townhouse and flat or apartment in a block of flats.

Services

- The Gamagara LM achieved to provide the following household services:
  - 80.8% have access to flush toilet connected to sewerage;
  - 8.9% have weekly refuse removal;
  - 52% have access to piped water inside a dwelling; and
  - 88.1% have electricity for lighting.

5. SOCIAL IMPACT ASSESSMENT

This Chapter provides a detailed description and assessment of the potential social impacts that have been identified for the detailed design and construction, operation, and decommissioning phases, of the proposed Olifantshoek 132kV Power Line.

A 300m wide and 36km long grid connection corridor, within which the grid connection infrastructure will be developed, has been provided by the applicant for consideration as part of the Basic Assessment process and is considered within the SIA. The layout provides an indication of the grid connection corridor within which the power line will be developed and operated (**Figure 5.1**).

Through the undertaking of this Social Impact Assessment for the development of the power line, the current *status quo* of the area from a social and land use perspective was considered in order to provide an indication of the positive and negative social impacts expected to occur. This assessment considered the following points:

- The location of the grid connection corridor in relation to immediately adjacent and surrounding social features that may be affected.
- The nature, extent and significance of the features within the social landscape being considered.
- The existing disturbance already present within the social landscape (i.e. mining activities and other industrial developments/infrastructure).

Social impacts are expected to occur during both the construction and operation phases of the 132kV power line. The status of the impacts will either be positive or negative and either mitigation or enhancement measures are recommended for the management of the impacts depending on the status of the impacts.

5.1. Social Impacts during the Construction Phase

The majority of social impacts associated with the project are anticipated to occur during the construction phase of the development, and are typical of the type of social impacts generally associated with construction activities. These impacts will be temporary and short-term (~12 months), but could have long-term effects on the surrounding social environment if not planned or managed appropriately. It is therefore necessary that the detailed design phase be conducted in such a manner so as not to result in permanent social impacts associated with the ill-placement of project components or associated infrastructure or result in the mis-management of the construction phase activities.

The positive and negative social impacts identified and assessed for the construction phase includes:

- Direct and indirect employment opportunities
- Economic multiplier effects
- Influx of jobseekers and change in population
- Safety and security impacts
- Impacts on daily living and movement patterns
- Nuisance impacts, including noise and dust
- Visual impacts and sense of place impacts

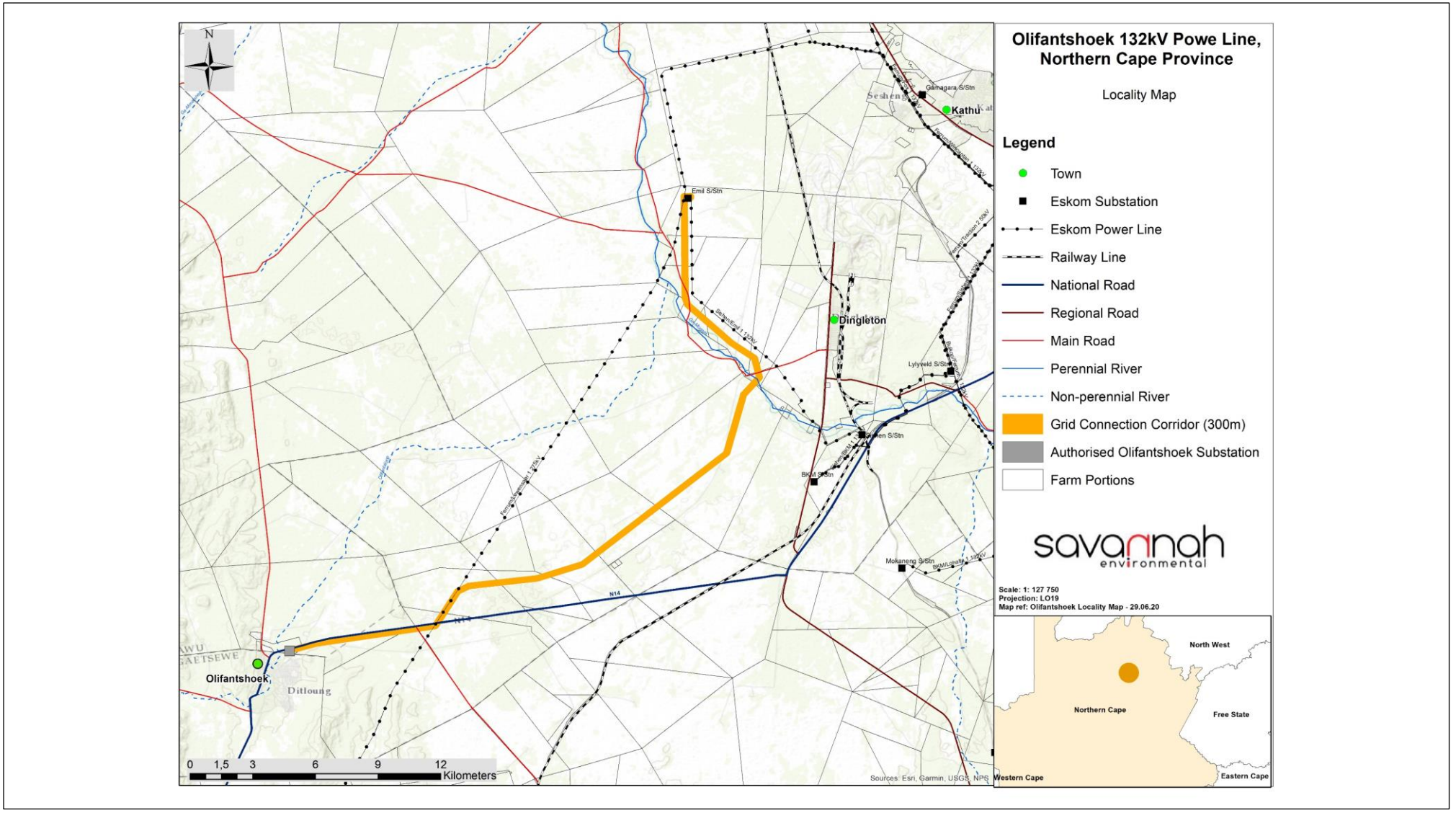

Figure 5.1: Layout of the grid connection corridor assessed for the Olifantshoek 132kV Power Line

Table 5.1: Impact assessment on direct and indirect employment opportunities

Nature: The creation of direct and indirect employment opportunities during the construction phase of the project.

It is anticipated that development of the grid connection infrastructure will result in the creation of approximately 10 employment opportunities, comprising a mixture of skilled, semi-skilled and unskilled positions. Employment opportunities generated as a result of the project will be temporary in nature, and will last for the duration of the construction period (i.e. ~12 months). The general labour force will, as far as possible and where skills are available, be sourced from the local labour pool. Where relevant skills are unavailable from the local labour pool, these would need to be sought elsewhere. The injection of income into the area, albeit limited, in the form of wages will represent an opportunity for the local economy and businesses in the area.

A number of indirect employment opportunities will also be created. Indirect employment opportunities will predominantly be created in the service industry, through the opportunity for the provision of secondary services to the construction team. Services may include, but are not limited to, accommodation, catering, and laundry services.

	Without enhancement	**With enhancement**
Extent	Local- Regional (3)	Local- Regional (3)
Duration	Short term (1)	Short term (1)
Magnitude	Small (0)	Minor (2)
Probability	Highly probable (4)	Highly probable (4)
Significance	**Low (16)**	**Low (24)**
Status (positive or negative)	Positive	Positive
Reversibility	N/A	N/A
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes (enhanced)	

Enhancement:

- A local employment policy should be adopted to maximise opportunities made available to the local labour force.
- Labour should be sourced from the local labour pool where possible. If the necessary skills are unavailable, labour should be sourced from (in order of preference) the greater Gamagara LM, John Taolo Gaetsewe DM, Northern Cape Province, South Africa, or elsewhere. Where required, training and skills development programmes should be initiated prior to the commencement of the construction phase.
- Labour force suppliers should as far as possible be sourced locally.
- Where feasible, local suppliers and contractors that are compliant with the Broad-Based Black Economic Empowerment (B-BBEE) criteria, should be used as far as possible to ensure that the benefits resulting from the project accrue, as far as possible, to the local communities which are also likely to be most significantly impacted / affected by the project.
- The recruitment selection process should seek to promote gender equality and the employment of women wherever possible.
- Proof of skills development must be provided to the upskilled individuals.

Residual impacts:

- Improved pool of skills and experience in the local area.
- Economic growth for small-scale entrepreneurs.

Table 5.2: Economic multiplier effects

Nature: Significance of the impact from the economic multiplier effects from the use of local goods and services.

There are likely to be opportunities for local businesses and service providers to provide services and materials for, and in doing so benefit from, the construction phase of the Olifantshoek 132kV Power Line. Off-site accommodation in the nearest towns (Olifantshoek or Kathu) may be required for contract workers and certain employees. The economic multiplier effects from the use of local goods and services will include, but is not limited to, construction materials, equipment and workforce essentials such as catering, trade clothing, safety equipment, accommodation, transportation and other goods.

In terms of business opportunities for local companies, expenditure during the construction phase will create business opportunities for the regional and local economy. The increase in demand for new materials and services in the nearby area may stimulate local business and local economic development. There is likely to be a direct increase in industry and indirect increase in secondary businesses.

	Without enhancement	**With enhancement**
Extent	Local- Regional (3)	Local- Regional (3)
Duration	Short term (1)	Short term (1)
Magnitude	Small (0)	Minor (2)
Probability	Highly probable (4)	Highly probable (4)
Significance	**Low (16)**	**Low (24)**
Status (positive or negative)	Positive	Positive
Reversibility	N/A	N/A
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes (enhanced)	

Enhancement:

- A local procurement policy should be adopted to maximise the benefit to the local economy and the existing local SMMEs.
- A database of local companies, specifically Historically Disadvantaged Individuals (HDIs) which qualify as potential service providers (e.g. construction companies, security companies, catering companies, waste collection companies, transportation companies etc.) should be created and companies listed thereon should be invited to bid for project-related work where applicable.
- Local procurement must be encouraged along with engagement with local authorities and business organisations to investigate the possibility of procurement of construction materials, goods and products from local suppliers where feasible.

Residual impacts:

- Improved local service sector; growth in local business.

Table 5.3: Assessment of impacts from an influx of jobseekers and change in population

Nature: In-migration of labourers in search of employment opportunities, and a resultant change in population, and increase in pressure on local resources and social networks, or existing services and infrastructure.

An influx of people looking for employment or other economic opportunities could result in increased pressure being placed on economic and social infrastructure, and a change in the local population. Population change refers to the size, structure, density as well as demographic profile of the local community.

An influx of jobseekers into an area, could lead to a temporary increase in the level of crime, cause social disruption and put pressure on basic services. It could also potentially create conflict between locals and outsiders due to potential differences in racial, cultural and ethnic composition. A further negative impact that could result due to an influx of jobseekers into an area is an increase in unemployment levels due to an oversupply of available workforce, particularly with respect to semi- and unskilled workers.

The Gamagara Local Municipality is already experiencing a high rate of urbanisation which implies an existing influx of people into the area which will create increased pressure in terms of service delivery as urbanisation increases. The development of the Olifantshoek 132kV Power Line is not expected to contribute significantly to the pressure due to the nature of the project and the actual employment opportunities available.

	Without mitigation	**With mitigation**
Extent	Local (1)	Local (1)
Duration	Short-term (2)	Short-term (2)
Magnitude	Small (0)	Small (0)
Probability	Probable (3)	Improbable (2)
Significance	**Low (9)**	**Low (6)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

- Develop and implement a recruitment protocol in consultation with the municipality and local community leaders. Ensure that the procedures for applications for employment are clearly communicated.
- Develop and implement a local procurement policy which prioritises "locals first" to prevent the movement of people into the area in search of work.
- Engage with local community representatives prior to construction to facilitate the adoption of the local's first procurement policy.
- Provide transportation for workers (from towns such as Olifantshoek and Kathu) to ensure workers can easily access their place of employment and do not need to move closer to the project site.
- Compile and implement a grievance mechanism.
- Appoint a Community Liaison Officer (CLO) to assist with the procurement of local labour.
- Prevent the recruitment of workers at the construction site.
- Implement a method of communication whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process.
- Establish clear rules and regulations for access to the construction site.
- Appoint a security company and implement appropriate security procedures to ensure that workers to not remain on site after working hours.
- Inform local community organisations and policing forums of construction activities and times and the duration of the construction phase.

Residual impacts:

- Possibility of outside workers remaining in the area after construction is completed and subsequent pressures on local infrastructure, resources and services.

Table 5.4: Assessment of safety and security impacts

Nature: Temporary increase in safety and security concerns associated with the influx of people during the construction phase.

The commencement of construction activities can be associated with an increase in crime within an area. The perceived loss of security during the construction phase of a project due to an influx of workers and / or outsiders to

the area (as in-migration of newcomers, construction workers or jobseekers are usually associated with an increase in crime), may have indirect effects such as increased safety and security concerns for neighbouring properties, damage to property, increased risk of veld fire, stock theft, poaching, crime and so forth.

The labour force will not permanently reside within the construction site.

	Without mitigation	**With mitigation**
Extent	Local (2)	Local (2)
Duration	Short term (2)	Short term (2)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Improbable (2)
Significance	**Medium (30)**	**Low (16)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

- Working hours should be kept within daylight hours during the construction phase.
- Employees should be easily identifiable and must adhere to the security rules of the construction site.
- Provide transportation for workers (from towns such as Olifantshoek and Kathu) to ensure workers do not need to move closer to the construction site.
- The perimeter of the main contractor's camp should be appropriately secured to prevent any unauthorised access to the site. The fencing of the site should be maintained throughout the construction period.
- The appointed EPC contractor must appoint a security company and ensure appropriate security procedures and measures are implemented.
- Access in and out of the construction site should be strictly controlled by a security company.
- A Community Liaison Officer (CLO) should be appointed and a grievance mechanism implemented. A communication protocol should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process.
- The EPC contractor to implement a stakeholder management plan to address neighbouring landowner concerns regarding safety and security.

Residual impacts:

- None anticipated.

Table 5.5: Assessment of impacts on daily living and movement patterns.

Nature: Temporary increase in traffic disruptions and movement patterns during the construction phase.

Project components and equipment will be transported using road transport. The N14 national road provides the primary access to the area, as well as secondary roads and gravel farm roads. Local farmers utilise the gravel access roads to access their farms; whereas travellers and community members utilise the N14 to access the towns and residential areas surrounding the grid connection corridor.

Increased traffic due to the movement of construction vehicles could cause disruptions to the local community and increase safety hazards. The use of local roads and transport systems may cause road deterioration and congestion. This impact will be magnified since farm roads are not designed to carry heavy traffic and are prone to erosion. Noise, vibrations, dust and visual pollution from heavy vehicle traffic and construction activities during the construction phase could also negatively impact local residents and road users.

Sensitive land uses has been identified within the corridor which will need to be avoided by the careful placement of the power line route within the grid connection corridor. These sensitive land uses includes permanent residences as

well as commercial activities such as the brick manufacturing plant and the associated mining activities that go with it.

	Without mitigation	**With mitigation**
Extent	Local-Regional (3)	Local (2)
Duration	Short term (1)	Short term (1)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Probable (3)
Significance	**Medium (30)**	**Low (21)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

- Working hours must preferably be restricted to daylight hours during the construction phase. Where deviation of working hours is required it must be approved by the relevant local authorities and surrounding landowners must be notified.
- All vehicles must be road worthy and drivers must be licensed, obey traffic rules, follow speed limits and made aware of the potential road safety issues.
- Construction vehicles should be inspected regularly by the EPC contractor to ensure their road worthiness.
- Adequate and strategically placed traffic warning signs and control measures must be placed along the N14 and gravel farm access roads to warn road users of the construction activities taking place for the duration of the construction phase. Warning signs must be visible at all times, and especially at night and must be maintained throughout the construction phase.
- Implement penalties for reckless driving as a way to enforce compliance to traffic rules.
- Avoid heavy vehicle activity through residential areas during "peak" hours (when children are taken to school, people driving to work, etc.).
- The developer and EPC contractor must ensure that all fencing along access roads is maintained in the present condition or repaired if disturbed or damaged due to construction activities.
- The developer and EPC Contractor must ensure that the roads utilised for construction activities are either maintained in the present condition or upgraded if damaged (i.e. wear and tear) due to construction activities.
- A protocol for communication must be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process.
- Undertake information sessions with the surrounding communities, and affected and adjacent landowners, prior to construction in order to ensure that communities are fully informed of the project to be developed in its final form. This must be undertaken through the appointment of a CLO.
- The placement of the power line route within the grid connection corridor must avoid the sensitive land uses undertaken by the affected landowners as far as possible. Consultation with the affected landowners must be undertaken in this regard.

Residual impacts:

- None anticipated.

Table 5.6: Assessment of nuisance impacts (noise and dust)

Nature: Nuisance impacts in terms of temporary increase in noise and dust.

Nuisance impacts associated with construction related activities include noise, dust, and possible disruption to adjacent properties. Site clearing activities increase the risk of dust and noise being generated, which can in turn negatively impact on adjacent properties. The movement of heavy construction vehicles and construction activities and equipment also have the potential to create noise, as well as impacts on travellers travelling along the N14 national road, and gravel access roads. The primary sources of noise during construction would be from construction

equipment, vehicle and truck traffic. Noise levels can be audible over a large distance although are generally short in duration. Dust would be generated from construction activities as well as trucks / vehicles driving on gravel access roads. This impact will negatively impact sensitive receptors. The impact of noise and dust on sensitive receptors can be reduced through the application of appropriate mitigation measures.

	Without mitigation	**With mitigation**
Extent	Local (1)	Local (1)
Duration	Short-term (2)	Short-term (2)
Magnitude	Moderate (6)	Minor (2)
Probability	Highly probable (4)	Probable (3)
Significance	**Medium (36)**	**Low (15)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

- The movement of heavy vehicles associated with the construction phase through populated areas should be timed to avoid weekends, public holidays and holiday periods, where feasible.
- Dust suppression measures must be implemented for heavy vehicles such as wetting of gravel roads on a regular basis and ensuring that vehicles used to transport sand and building materials are fitted with tarpaulins or covers.
- A speed limit of 40km/hr should be implemented on gravel roads.
- Ensure all vehicles are road worthy, drivers are licensed and are made aware of the potential noise and dust issues.
- A CLO should be appointed. A method of communication should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process.
- A stakeholder management plan must be implemented by the EPC contractor to address neighbouring farmer concerns regarding safety and security.

Residual impacts:

- Residual damage from construction activities.

Table 5.7: Assessment of visual impacts and impacts on the sense of place

Nature: Intrusion impacts from construction activities will have an impact on the area's "sense of place".

Intrusion impacts such as aesthetic pollution (i.e. building materials, construction vehicles, etc.), noise and light pollution will impact the "sense of place" for the local community. Construction related activities have the potential to negatively impact a local area's "sense of place". Such an impact is likely to be present during the construction phase. It is however expected that the power line will only affect areas and receptors that have already been exposed to other existing grid connection infrastructure (i.e. power lines and substations) and other industrial infrastructure, specifically mining related infrastructure (i.e. for which the sense of place has already been altered).

Given the location of the corridor within an area characterised as having a low-medium population density, and given the project's location within close proximity to operational and visible grid infrastructure and other industrial developments (such as mines), the visual impact and impact on the area's sense of place, from a social perspective, associated with the construction of the proposed project is anticipated to be of a very limited significance.

The identification of the significance of the impact or change on the general landscape character for the construction phase was undertaken through the consideration of the Landscape and Visual Impact Assessment (Environmental Planning and Design, 2020) undertaken for the project. The significance of the impact will be low with the implementation of the recommended mitigation measures provided for in the Visual Impact Assessment.

	Without mitigation	With mitigation
Extent	Local (1)	Local (1)
Duration	Short-term (1)	Short-term (1)
Magnitude	Minor (2)	Small (0)
Probability	Probable (3)	Improbable (2)
Significance	**Low (12)**	**Low (4)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

- Limit noise generating activities to daylight working hours and avoid weekends and public holidays.
- The movement of heavy vehicles associated with the construction phase should be timed to avoid weekends, public holidays and holiday periods where feasible.
- Dust suppression measures must be implemented for heavy vehicles such as wetting of gravel roads on a regular basis and ensuring that vehicles used to transport sand and building materials are fitted with tarpaulins or covers.
- All vehicles must be road-worthy and drivers must be licensed and made aware of the potential road safety issues and need for strict speed limits.
- Communication, complaints and grievance channels must be implemented and contact details of the CLO must be provided to the relevant local communities.
- Ensure proper management and tidiness of the construction site.
- Implement the relevant mitigation measures as recommended in the Visual Impact Assessment.

Residual impacts:

- None anticipated.

5.2. Social impacts during the Operation Phase

It is anticipated that the Olifantshoek 132kV Power Line will operate for approximately 50 years. While the grid connection infrastructure will be largely self-sufficient, monitoring and periodic maintenance activities will be required during the operation phase.

It must be noted that the ownership of the grid connection infrastructure will be transferred to Eskom following completion of construction, who will be responsible for the operation and maintenance of the infrastructure.

The potential positive and negative social impacts that could arise as a result of the operation of the proposed project include the following:

- Direct and indirect employment opportunities
- Visual impact and sense of place impacts
- Impacts associated with the loss of agricultural land

Table 5.8: Employment opportunities and skills development

Nature: The creation of employment opportunities and skills development opportunities during the operation phase

During the operation phase, it is expected that very limited employment opportunities will be available to Eskom employees as the maintenance will be undertaken by Eskom according to scheduled and preventative maintenance

regimes. These opportunities will be available for limited periods of time, during this phase of the Olifantshoek 132kV Power Line which will have a negligible positive impact to the area.		
	Without enhancement	**With enhancement**
Extent	Local (1)	Local (1)
Duration	Short term (2)	Short term (2)
Magnitude	Small (0)	Small (0)
Probability	Probable (3)	Probable (3)
Significance	**Low (9)**	**Low (9)**
Status (positive or negative)	Positive	Positive
Reversibility	N/A	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	No enhancement is relevant as Eskom employees will be utilised for the maintenance of the grid connection infrastructure.	
Enhancement: None available due to limited employment opportunities available.		
Residual impacts: None		

Table 5.9: Assessment of the visual impact and impacts on sense of place

Nature: Visual impacts and sense of place impacts associated with the operation phase of the Olifantshoek 132kV Power Line.

An area's sense of place is created through the interaction of various characteristics of the environment, including atmosphere, visual resources, aesthetics, climate, lifestyle, culture, and heritage. An area's sense of place is however subjective and largely dependent on the demographics of the population residing within the area and their perceptions regarding trade-offs. For example, while some individuals may prefer not to see any form of infrastructure development, others may be interested in large-scale infrastructure, or engineering projects and consider the impact to be less significant. Such a scenario may be true given that one of the main economic sectors within the area is mining which has altered the landscape from natural to industrial.

Given the location of the corridor within an area characterised as having a low-medium population density, and given the project's location within close proximity to existing operational and visible grid infrastructure and other industrial developments (i.e. mining activities), the visual impact and impact on the area's sense of place associated with the construction of the proposed project, from a social perspective, is anticipated to be of a very limited significance.

The identification of the significance of the impact and change of the general landscape character was undertaken through the consideration of the Landscape and Visual Impact Assessment (Environmental Planning and Design, 2020) undertaken for the project. The impact on the general landscape character was identified as being low, as per the Visual Impact Assessment.

	Without mitigation	**With mitigation**
Extent	Local (1)	Local (1)
Duration	Long-term (4)	Long-term (4)
Magnitude	Minor (2)	Small (0)
Probability	Improbable (2)	Improbable (2)
Significance	**Low (14)**	**Low (10)**

Status (positive or negative)	Negative	Negative
Reversibility	Yes	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

» Maintain and manage the grid connection infrastructure to be in a good and neat condition to ensure that no degradation of the area and the associated infrastructure servitude takes place and impacts the visual quality of the area.
» Implement the relevant mitigation measures as recommended in the Visual Impact Assessment for the change in the general landscape character.

Residual impacts:

» The visual impact of the grid infrastructure will remain until the infrastructure is completely decommissioned and removed. Thereafter the impact will be removed.

Table 5.90: Assessment on the loss of agricultural land and overall productivity

Nature: Loss of agricultural land and overall productivity as a result of the operation of the proposed project on an agricultural property.

The area is very dry which limits the undertaking of crop production within the affected properties. Cattle grazing and game farming are therefore rather undertaken within the area. With the development of the Olifantshoek 132kV Power Line existing agricultural activities will still be possible within the affected properties considering the nature and extent of the development.

	Without mitigation	**With mitigation**
Extent	Site (1)	Site (1)
Duration	Long term (4)	Long term (4)
Magnitude	Minor (2)	Small (0)
Probability	Improbable (2)	Improbable (2)
Significance	**Low (14)**	**Low (10)**
Status (positive or negative)	Negative	Negative
Reversibility	Reversible	Reversible
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	

Mitigation:

» Keep the project footprint as small as possible.
» Avoid interference with current agricultural activities undertaken within the affected properties.

Residual impacts:

» None expected to occur.

5.3. Cumulative Impacts

The EIA Regulations, 2014 (GNR 326) define a cumulative impact as follows:

"Cumulative impact in relation to an activity, means the past, current and reasonably foreseeable future impact of an activity, considered together with the impact of activities associated with that activity that in itself may not be significant, but may become significant when added to the existing and reasonably foreseeable impacts eventuating from similar or diverse activities."

The location of the grid connection corridor is in close proximity and/or adjacent to a number of other proposed, approved, and operational grid connection infrastructure.

Existing grid connection infrastructure located within the surrounding area of the corridor includes the Ferrum Niewehoop 400kV Power Line, the Ferrum Lewensaar 275kV Power Line and the Sishen Emil 132kV Power Line. The proposed corridor traverses or runs parallel to all three of these lines within the northern and southern sections of the corridor. Existing substations include the Emil Substation, Sishen Substation, BKM Substation and Lylyveld Substation.

A cumulative map is included in **Figure 5.2** illustrating grid connection infrastructure.

Considering the concentration of grid connection infrastructure within the surrounding area of the proposed Olifantshoek 132kV Power Line, the potential for cumulative impacts to occur is likely. Potential cumulative social impacts identified for the project include positive impacts on the economy, business development, and employment, as well as negative impacts such as an influx of jobseekers and change in the areas sense of place.

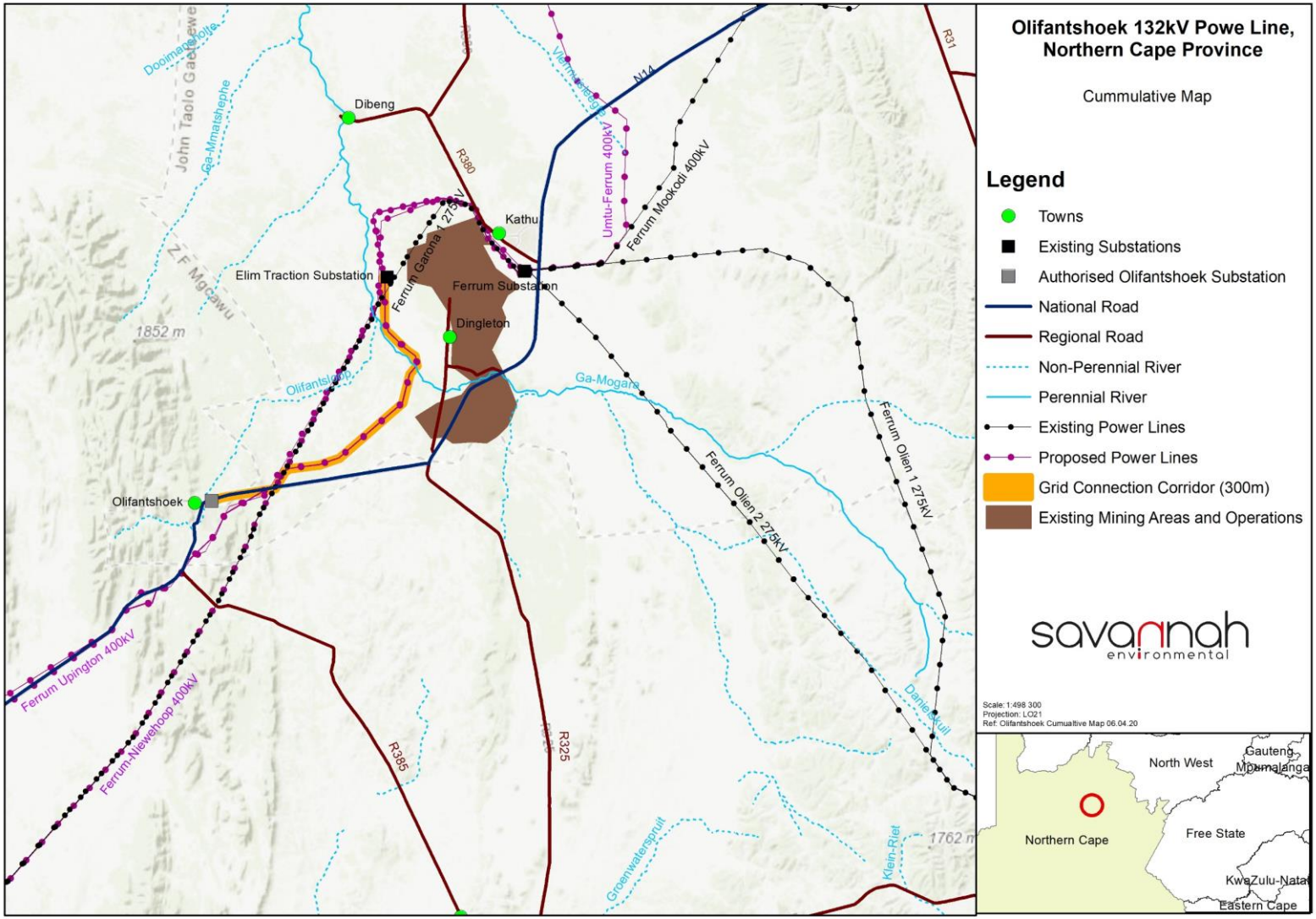

Figure 5.2: Cumulative map considered for the Olifantshoek 132kV Power Line

5.3.1. Cumulative Impacts associated with the Olifantshoek 132kV Power Line

Table 5.14: Cumulative impacts of employment opportunities, business opportunities and skills development

Nature: An increase in employment opportunities, skills development and business opportunities with the establishment of various grid connection infrastructure within the area.

The Olifantshoek 132kV Power Line and other existing and proposed grid connection infrastructure associated with the national grid within the area has the potential to result in significant positive cumulative impacts, specifically with regards to the creation of a number of limited socio-economic opportunities for the region, which in turn, can result in positive social benefits. The positive cumulative impacts include creation of limited employment, skills development and training opportunities, and downstream/spin-off business opportunities. The cumulative benefits to the local, and regional economy through limited employment and procurement of services are more considerable than that of the Olifantshoek 132kV Power Line alone.

	Overall impact of the proposed project considered in isolation	**Cumulative impact of the project and other projects in the area**
Extent	Local- Regional (3)	Local- Regional (3)
Duration	Long term (4)	Long term (4)
Magnitude	Minor (2)	Minor (2)
Probability	Probable (3)	Highly Probable (4)
Significance	**Low (27)**	**Medium (36)**
Status (positive or negative)	Positive	Positive
Reversibility	N/A	
Irreplaceable loss of resources?	N/A	
Can impacts be mitigated?	Yes (enhanced)	
Confidence in findings	High	

Enhancement:
The establishment of grid connection infrastructure projects within the area has the potential to have a positive cumulative impact on the area in the form of limited employment opportunities, skills development and business opportunities. The positive benefits will be enhanced if local employment policies are adopted and local services providers are utilised to maximise the project opportunities available to the local community.

Residual impacts:
- Improved pool of skills and experience in the local area.
- Improved standard of living through the creation of employment opportunities.
- Economic growth for small-scale entrepreneurs.

Table 5.15: Cumulative impact with large-scale in-migration of people

Nature: Negative impacts and change to the local economy with an in-migration of labourers, businesses and jobseekers to the area.

While the development of the Olifantshoek 132kV Power Line may not result in a major influx of people into the area, the development of several projects at the same time may have a cumulative impact on the in-migration and movement of people, it must however be noted that limited proposed grid connection infrastructure is planned for the area. Levels of unemployment, and the low level of earning potential may attract individuals to the area in search of better employment opportunities and standards of living.

It is very difficult to control an influx of people into an area, especially in a country where the unemployment rate is high. It is therefore important that the project proponent implements and strictly adheres to a local employment policy in order to reduce the potential of such an impact occurring.		
	Overall impact of the proposed project considered in isolation	**Cumulative impact of the project and other projects in the area**
Extent	Local (1)	Local-Regional (3)
Duration	Long term (4)	Long term (4)
Magnitude	Minor (2)	Low (4)
Probability	Very Improbable (1)	Improbable (2)
Significance	**Low (7)**	**Low (22)**
Status (positive or negative)	Negative	Negative
Reversibility	Yes	
Irreplaceable loss of resources?	No	
Can impacts be mitigated?	Yes	
Confidence in findings	High	
Mitigation: » Develop a recruitment policy / process (to be implemented by contractors), which will ensure the sourcing of labour locally, where available. » Work together with government agencies to ensure that service provision is in line with the development needs of the local area. » Form joint ventures with community organisations, through Trusts, which can provide local communities with benefits, such as employment opportunities and services. » Develop and implement a recruitment protocol in consultation with the municipality and local community leaders. Ensure that the procedures for applications for employment are clearly communicated.		
Residual impacts » Possibility of outside workers remaining in the area after the construction is completed and the subsequent potential pressure on local infrastructure and services.		

5.4. Decommissioning Phase

Typically, major social impacts associated with the decommissioning phase are linked to the loss of jobs and associated income and will be similar to the impacts during the construction phase associated with construction activities. This has implications for the households who are directly affected, the communities within which they live, and the relevant local authorities. However, due to operation phase employment opportunities being available only to Eskom employees, the impact of the decommissioning phase is expected to be negligible.

5.5. Assessment of Impacts for the No-Go Option:

The "no-go" alternative is the option of not constructing the Olifantshoek 132kV Power Line. The implementation of the proposed project is expected to result in a number of positive and negative social impacts. The majority of negative impacts identified for the project are associated with the construction phase of the project, while the positive impacts are associated with both the construction and operation phases of the project.

Potential negative social impacts associated with the construction and operation of the project include the following:

- Potential influx of job seekers and an associated change in population and increase in pressure on basic services.
- Potential safety and security impacts.
- Potential impacts on daily living and movement patterns.
- Potential nuisance impacts (noise and dust).
- Potential visual impact and impact on the sense of place.
- Potential loss of agricultural land.

Potential positive social impacts associated with the construction and operation of the project include the following:

- Potential direct and indirect employment opportunities.
- Potential economic multiplier effect.

The impacts of pursuing the "no-go" alternative can therefore be summarised as follows:

- The benefits would be that there is no disruption from nuisance impacts (noise and dust during construction), visual impacts and safety and security impacts. The impact is therefore neutral.
- There would also be an opportunity loss in terms of limited job creation, skills development, community upliftment and associated economic business opportunities for the local economy. This impact is considered to be negative.
- The opportunity to strengthen the grid connection within the municipal area would be lost which will have a negative impact on economic growth and development and therefore result in negative social impacts.

The option of not developing the Olifantshoek 132kV Power Line would compromise the development of the economy within the municipal area and the socio-economic benefits for local communities. These benefits would be forfeited and the current status quo of the social aspects associated with the area will remain as it is currently described in this report.

6. CONCLUSION AND RECOMMENDATIONS

This SIA focused on the collection of data to provide an understanding of the current social environment associated with the grid connection corridor within which the Olifantshoek 132kV Power Line is proposed and identifying and assessing social issues and potential social impacts associated with the development of such a nature. Secondary data was collected and presented in a literature review and primary data was collected through consultations (i.e. telephonic interviews) with landowners and key stakeholders. The environmental assessment framework for assessment of impacts and the relevant criteria was applied to evaluate the significance of the potential impacts and to recommend appropriate mitigation and enhancement measures for the identified impacts.

A summary of the potential positive and negative impacts identified for the detailed design, construction and operation phases are presented in Error! Reference source not found. and Error! Reference source not found.. A summary of the potential positive and negative cumulative social impacts identified for the project is provided in Error! Reference source not found..

Table 6.1: Summary of potential social impacts identified for the detailed design and construction phase of the Olifantshoek 132kV Power Line.

Impact	Significance Without Mitigation/ Enhancement	Significance With Mitigation/ Enhancement
Positive Impacts		
Creation of direct and indirect employment and skills development opportunities.	Low (16)	Low (24)
Economic multiplier effects	Low (16)	Low (24)
Negative Impacts		
In-migration of people (non-local workforce and jobseekers).	Low (9)	Low (6)
Safety and security impacts	Medium (30)	Low (16)
Impacts on daily living and movement patterns	Medium (30)	Low (21)
Nuisance impact (noise and dust)	Medium (36)	Low (15)
Visual and sense of place impacts	Low (12)	Low (4)

Table 6.2: Summary of potential social impacts identified for the operation phase of the Olifantshoek 132kV Power Line

Impact	Significance Without Mitigation/ Enhancement	Significance With Mitigation/ Enhancement
Positive Impacts		
Direct and indirect employment and skills development opportunities	Low (9)	Low (9)
Negative Impacts		
Visual and sense of place impacts	Low (14)	Low (10)
Impacts associated with the loss of agricultural land.	Low (14)	Low (10)

Table 6.3: Summary of potential cumulative social impacts identified for the Olifantshoek 132kV Power Line

Cumulative Impact	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Positive Cumulative Impacts		
Cumulative impact from employment, skills and business opportunities and skills development	Low (27)	Medium (36)
Negative Cumulative Impacts		
Cumulative impact with large-scale in-migration of people	Low (7)	Low (22)

6.1. Key findings and Recommendations

The social impacts identified (including all positive and negative impacts) will be either of a low or medium significance. No negative impacts with a high significance rating have been identified to be associated with the development of the Olifantshoek 132kV Power Line. All negative social impacts are within acceptable limits with no impacts considered as unacceptable from a social perspective. The recommendations proposed for the project are considered to be appropriate and suitable for the mitigation of the negative impacts and the enhancement of the positive impacts.

Based on the findings of the social impact assessment, the following recommendations are made:

- A Community Liaison Officer (CLO) must be appointed to assist with the management of social impacts and to deal with community issues, if feasible.
- Develop and implement a recruitment protocol in consultation with the municipality and local community leaders. Ensure that the procedures for applications for employment are clearly communicated.
- It is recommended that local labour be sourced, wherever possible, to ensure that benefits accrue to the local communities. Efforts should be made to involve local businesses during the construction phase where possible.
- Local procurement of services and equipment is required where possible in order to enhance the multiplier effect.
- Employ mitigation measures to minimise the dust and noise pollution and damage to existing roads.
- Safety and security risks should be taken into account during the planning / construction phase of the proposed project. Access control, security and management should be implemented to limit the risk of crime increasing in the area.

6.2. Overall Conclusion

The proposed project is unlikely to result in permanent damaging social impacts. From a social perspective it is concluded that the project is acceptable subject to the implementation of the recommended mitigation and enhancement measures and management actions identified for the project. Considering the findings of the report and the potential for mitigation and management of impacts, it is the reasoned opinion of the specialist that the project can be authorised from a social perspective.

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APPENDIX A:
ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)

1. Construction Phase

OBJECTIVE: Maximise local employment and skills opportunities associated with the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Opportunities and benefits associated with the creation of local employment and skills development to be maximised.
Activity/risk source	» Construction procurement practice employed by the Engineering, Procurement and Construction (EPC) Contractor » Developers investment plan
Mitigation: Target/Objective	The developer should aim to employ as many low-skilled and semi-skilled workers from the local area as possible. This should also be made a requirement for all contractors.

Mitigation: Action/control	Responsibility	Timeframe
Where feasible local suppliers and contractors, that are compliant with Broad-Based Black Economic Empowerment (B-BBEE) criteria, should be used as far as possible to ensure that the benefits resulting from the project accrue as far as possible to the local communities which are also likely to be most significantly impacted / affected by the project.	The Proponent & EPC Contractor	Pre-construction & construction phase
Adopt a local employment policy to maximise the opportunities made available to the local labour force.	The Proponent & EPC Contractor	Pre-construction & construction phase
Develop and implement a recruitment protocol in consultation with the municipality and local community leaders. Ensure that the procedures for applications for employment are clearly communicated.	The Proponent & EPC Contractor	Pre-construction & construction phase
In the recruitment selection process, a minimum percentage of women must be employed.	EPC Contractor	Pre-construction & construction phase
Set realistic local recruitment targets for the construction phase.	The Proponent & EPC Contractor	Pre-construction & construction phase
Training and skills development programmes to be initiated prior to the commencement of the construction phase.	The Proponent	Pre-construction & construction phase

Performance Indicator	» Implement a business policy document that sets out local employment and targets completed before the construction phase commences. » Employ as many local semi-skilled and unskilled labour as possible. » Training and skills development programme is undertaken prior to the commencement of construction phase.
Monitoring	» The developer and EPC Contractor must keep a record of local recruitments and information on local labour must be shared with the Environmental Control Officer (ECO) for reporting purposes. » Records and details of skills development must be kept and proof of skills development must be provided to the upskilled individual.

OBJECTIVE: Maximise the local economic multiplier effect during the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Potential local economic benefits
Activity/risk source	Developers procurement plan
Mitigation: Target/Objective	Increase the procurement of goods and services especially within the local economy

Mitigation: Action/control	Responsibility	Timeframe
A local procurement policy must be adopted to maximise the benefit to the local economy.	The Proponent & EPC Contractor	Pre-construction & construction phase
Develop a database of local companies, specifically Historically Disadvantaged Individuals (HDIs) which qualify as potential service providers (e.g. construction companies, security companies, catering companies, waste collection companies, transportation companies etc.) prior to the tender process and invite them to bid for project-related work where applicable.	The Proponent & EPC Contractor	Pre-construction & construction phase
Source as much goods and services as possible from the local area. Engage with local authorities and business organisations to investigate the possibility of procurement of construction materials, goods and products from local suppliers, where feasible.	The Proponent	Pre-construction & construction phase

Performance Indicator	» Local procurement policy is adopted. » Local goods and services are purchased from local suppliers, where feasible.
Monitoring	» The developer must monitor the indicators listed above to ensure that they have been met during the construction phase

OBJECTIVE: Reduce the pressure on resources, service delivery, infrastructure and social dynamics from a population change as a result of an increase of construction workers to the area during the construction phase

Project component/s	Construction of the proposed project.
Potential Impact	Population changes resulting in additional pressure on resources, service delivery, infrastructure maintenance and social dynamics during the construction phase as a result of an influx of construction workers and job seekers into the area.
Activity/risk source	Influx of construction workers and job seekers.
Mitigation: Target/Objective	To avoid or minimise the potential impact on local infrastructure, services and communities and their livelihoods.

Mitigation: Action/control	Responsibility	Timeframe
Implement a grievance and communication system for community issues.	The Proponent & EPC Contractor	Pre-construction & construction phase

Appoint a Community Liaison Officer (CLO).	The Proponent & EPC Contractor	Pre-construction & construction phase

Performance Indicator	» CLO is appointed.
Monitoring	» The developer and EPC contractor must monitor the indicators listed above to ensure that they have been met for the construction phase.

OBJECTIVE: Reduce the pressure on economic and social infrastructure and social conflicts from an influx of jobseekers during the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Decline on local economic and social infrastructure and services as well as a rise in social conflicts from an influx of jobseekers.
Activity/risk source	Influx of jobseekers.
Mitigation: Target/Objective	To avoid or minimise the potential impact on local infrastructure, services and communities and their livelihoods.

Mitigation: Action/control	Responsibility	Timeframe
A 'locals first' policy must be implemented for employment opportunities, especially for semi-skilled and low-skilled job categories.	The Proponent & EPC Contractor	Pre-construction & construction phase
The tender documentation must stipulate the use of local labour as far as possible.	EPC Contractor	Pre-construction & construction phase
Inform local community members of the construction schedule and exact size of workforce (e.g. Ward Councillor, surrounding landowners).	EPC Contractor	Pre-construction & construction phase
Recruitment of temporary workers on-site must not be permitted. A recruitment office with a CLO should be established to deal with jobseekers.	EPC Contractor	Pre-construction & construction phase
Set up a labour desk in a secure and suitable area to discourage the gathering of people at the construction site.	EPC Contractor	Pre-construction & construction phase
Have clear rules and regulations for access to the construction site.	EPC Contractor	Pre-construction & construction phase
All construction workers must be easily identifiable.	EPC Contractor	Pre-construction & construction phase
Local community organisations and policing forums, as well as affected and adjacent landowners, must be informed of construction times and the duration of the construction phase. Also procedures for the control and removal of loiterers at the construction site must be established.	EPC Contractor	Pre-construction & Construction phase
A security company must be appointed and appropriate security procedures must be implemented.	EPC Contractor	Pre-construction & Construction phase

Performance Indicator	» Ensure that a 'locals first' policy is adopted. » Ensure no recruitment takes place on-site. » Control/removal of loiters.

Monitoring	» The developer must keep a record of local recruitments and information on local labour to be shared with the ECO for reporting purposes

OBJECTIVE: To avoid or reduce traffic disruptions and movement patterns of the local community during the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Increase in traffic disruptions, safety hazards, and impacts on movement patterns of the local community as well as an impact on private property due to the use of the existing roads and heavy vehicle traffic in the local area.
Activity/risk source	Construction activities affecting daily living and movement patterns.
Mitigation: Target/Objective	To avoid or minimise the potential impact on local communities and their livelihoods.

Mitigation: Action/control	Responsibility	Timeframe
Working hours must be kept during daylight hours as per the Environment Conservation Act (No. 73 of 1989) (ECA) during the construction phase, and / or as any deviation that is approved by the relevant authorities.	EPC Contractor	Construction phase
All vehicles must be road worthy and drivers must be licensed, obey traffic rules, follow speed limits and be made aware of potential road safety issues.	EPC Contractor	Pre-construction & Construction phase
All vehicles must be inspected regularly to ensure their road safety worthiness. Records pertaining to this must be maintained and made available for inspection as necessary.	EPC Contractor	Construction phase
Adequate traffic warning signs and control measures (including speed limits) must be implemented along access roads to warn road users of the construction activities taking place for the duration of the construction phase. Ensure that all signage is visible at all times (especially at night) and must be maintained throughout the construction phase.	EPC Contractor	Construction phase
Implement penalties for drivers of all vehicles for reckless driving or speeding as a way to enforce compliance to traffic rules.	EPC Contractor	Construction phase
Infrastructure such as fencing and gates along access routes must be maintained in the present condition or repaired if disturbed or damaged due to construction activities.	EPC contractor	Construction phase
Ensure that roads utilised are either maintained in the present condition or restored if damaged due to construction activities.	EPC Contractor	Construction phase
A CLO should be appointed and a grievance mechanism implemented. A communication protocol should be implemented whereby procedures to lodge complaints are set out in order for the local community to express any complaints or grievances with the construction process.	EPC Contractor	Pre-construction & Construction phase

Performance Indicator	» Vehicles are roadworthy, inspected regularly and speed limits are adhered to. » Ensure that there are traffic warning signs along access roads, and ensure that these are well illuminated (especially at night).

	» Roads and electric fencing are maintained or improved upon if disturbed from project activities. » A CLO is appointed for the project.
Monitoring	» The developer and EPC Contractor must monitor the indicators listed above to ensure that they have been met for the construction phase.

OBJECTIVE: To avoid or minimise the potential intrusion impacts such as noise, dust, aesthetic pollution and light pollution during the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Intrusion impacts could impact the areas "sense of place" and heavy vehicles and construction activities can generate noise and dust.
Activity/risk source	Construction activities
Mitigation: Target/Objective	To avoid or minimise the potential intrusion impacts such as aesthetic pollution, noise, dust and light pollution during the construction phase.

Mitigation: Action/control	Responsibility	Timeframe
Limit noise generating activities to daylight working hours and avoid undertaking construction activities on weekends and public holidays.	EPC Contractor	Construction phase
The movement of heavy vehicles associated with the construction phase through populated areas should be timed to avoid weekends, public holidays and holiday periods where feasible.	EPC Contractor	Construction phase
Dust suppression measures must be implemented for heavy vehicles such as the wetting of gravel roads on a regular basis and ensuring that vehicles used to transport building materials are fitted with tarpaulins or covers.	EPC Contractor	Construction phase
All vehicles must be road-worthy and drivers must be licensed and made aware of the potential road safety issues and the need for strict speed limits.	EPC Contractor	Construction phase
Communication, complaints and grievance channels must be implemented and contact details of the CLO are to be provided to the local community.	EPC Contractor	Construction phase
Ensure that noise generated by machinery is within acceptable limits and implement silencers where required	EPC Contractor	Construction phase
Ensure that the construction site is kept clean and is maintained within a good condition which includes the removal of waste as and when required.	EPC Contractor	Construction phase
Ensure that the lighting used does not spill into the adjacent surrounding areas.	EPC Contractor	Construction phase
Ensure that damage caused by construction related traffic / project activities to the existing roads is repaired before the completion of the construction phase.	EPC Contractor	Construction phase
A speed limit of 40km/hr should be implemented on gravel roads.	EPC Contractor	Construction phase

Performance Indicator	» Limit noise generating activities.

	» Dust suppression measures implemented for all heavy vehicles that require such measures during the construction phase. » Enforcement of strict speeding limits. » CLO available for community grievances and communication channel. » Road worthy certificates are in place for all vehicles.
Monitoring	» The EPC contractor must monitor the indicators to ensure that they have been met for the construction phase

OBJECTIVE: To avoid or reduce the possibility of the increase in crime and safety and security issues during the construction phase

Project component/s	Construction of the proposed project
Potential Impact	Increase in crime due to influx of non-local workforce and job seekers into the area.
Activity/risk source	Safety and security risks associated with construction activities.
Mitigation: Target/Objective	To avoid or minimise the potential impact on local communities and their livelihoods.

Mitigation: Action/control	Responsibility	Timeframe
Working hours to be restricted to daylight hours as per the ECA during the construction phase, and / or as any deviation that is approved by the relevant authorities.	EPC Contractor	Construction phase
Employees should be easily identifiable and must adhere to the security rules of the project site.	EPC Contractor	Pre-construction & Construction phase
The perimeter of the construction site is to be appropriately secured to prevent any unauthorised access to the site. The fencing of the site is to be maintained throughout the construction period.	The Proponent & EPC Contractor	Pre-construction & Construction phase
Local community organisations and policing forums must be informed of construction times and the duration of the construction phase.	The Proponent & EPC Contractor	Pre-construction & Construction phase
Access in and out of the construction site should be strictly controlled by a security company.	EPC Contractor	Construction Phase
A security company is to be appointed and appropriate security procedures are to be implemented.	EPC Contractor	Construction Phase
No unauthorised entry to the construction site is to be allowed. Access control is to be implemented.	EPC Contractor	Construction Phase
Open fires on the construction site for heating, smoking or cooking are not allowed, except in designated areas.	EPC Contractor	Construction phase
The contractor must provide adequate firefighting equipment on site and provide firefighting training to selected construction staff.	EPC Contractor	Pre-construction & Construction phase
A comprehensive employee induction programme must be developed and utilised to cover land access protocols, fire management and road safety.	EPC Contractor	Pre-construction & Construction phase
Have designated personnel trained in first aid on site to deal with smaller incidents that require medical attention	EPC Contractor	Pre-construction & construction phase

Performance Indicator	» Employee induction programme, covering land access protocols, fire management and road safety » The construction site is appropriately secured with a controlled access system » Ensure a security company is appointed and appropriate security procedures and measures are implemented
Monitoring	» The developer and EPC contractor must monitor the indicators listed above to ensure that they have been met for the construction phase

2. Operation Phase

OBJECTIVE: Maximise local employment and skills opportunities associated with the operation phase of the project

Project component/s	Operation and maintenance of the proposed project.
Potential Impact	Loss of opportunities to stimulate production and employment of the local economy.
Activity/risk source	Labour practices employed during operations.
Mitigation: Target/Objective	Maximise local community employment benefits in the local economy.

Mitigation: Action/control	Responsibility	Timeframe
Adopt a local employment policy to maximise the opportunities made available to the local labour force.	The Proponent & Operation and Maintenance (O&M) Contractor	Operation phase
Establish vocational training programs for the local labour force to promote the development of skills.	The Proponent	Operation phase

Performance Indicator	» Percentage of workers that were employed from local communities. » Number of people attending vocational training on an annual basis.
Monitoring	» The developer must keep a record of local recruitments and information on local labour to be shared with the ECO for reporting purposes.

OBJECTIVE: Minimise visual impact and the impact on sense of place during the operation phase

Project component/s	Operation and maintenance of the proposed project.
Potential Impact	Visual impacts and sense of place impacts associated with the operation phase of project
Activity/risk source	Negative impact on receptors within the surrounding area.
Mitigation: Target/Objective	Minimise visual impact and the impact on the sense of place.

Mitigation: Action/control	Responsibility	Timeframe

Maintain and manage the facility to be in a good and neat condition to ensure that no degradation of the area and associated infrastructure servitudes takes place and impact the visual quality of the area.	The Proponent & Operation and Maintenance (O&M) Contractor	Operation phase
Implement the relevant mitigation measures as recommended in the Visual Impact Assessment for the change in character and sense of place of the landscape setting.	The Proponent	Operation phase

Performance Indicator	» No complaints are submitted regarding the management of the project.
Monitoring	» The proponent and O&M Contractor must monitor the indicators listed above to ensure that they have been met for the operation phase

APPENDIX B:
QUESTIONNAIRE USED FOR CONUSLTATION

SOCIAL IMPACT ASSESSMENT QUESTIONNAIRE

Interview Date:	
Interview Format:	
Landowner Interviewed (name & surname):	
Property Details: Farm Name/s	
Farm No/s:	
Portion No/s	
Project site / adjacent landowner	

The need for the questions is to get a better understanding of the social aspects related to the affected property(ies) and to identify activities on the property(ies) which may be impacted by the development. The results of the interviews will be used to inform the SIA and will not be included in the report verbatim.

No.	Question	Response
1.	How many people reside on the property(ies)? And does it include yourself?	
2.	The development of the project has the potential to impact (positive and negative) on current land use activities at the property(ies), please advise which activities are being undertaken so that this can be considered as part of the report.	
3.	Please advise whether any future land uses, other than the current land uses, are planned to be undertaken? Please also advise what the future activities would entail.	
4.	Is anybody currently employed on your property(ies)? If so, how many and do they reside on the property?	
5.	Do you foresee the proposed development having an impact on you, your property, or activities?	
6.	Do you foresee the proposed development having an impact on any neighbouring landowners, land users and / or their activities or properties?	

No.	Question	Response
7.	Are there any infrastructure or significant features located on your property i.e. communication tower; height beacon, etc?	
8.	Are there any tourism attractions located nearby that may be impacted by the proposed development? This includes guesthouses, game farms and nature reserves.	
9.	Do you have any safety and security concerns with the proposed development and associated infrastructure?	
10.	Would noise and dust from construction activities have any impact on your day-to-day activities or lifestyle?	
11.	Do you have any concerns in terms of visual impacts and the development affecting the area's sense of place (i.e. the atmosphere and the feel of the area)?	
12.	Do you have any other concerns or questions regarding the development?	
13.	Are you in support of the proposed development?	