FINAL CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAM

FOR THE

MEDUPI-BORUTHO TRANSMISSION POWERLINE PROJECT

APRIL 2013

VOLUME I: MAIN REPORT & APPENDICES

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LIST OF ABBREVIATIONS

CE	Consulting Engineers
C	Contractor
CELO	Contractor Environmental Liaison Officer
CM	Contract Manager (Eskom)
NEMA	National Environmental Management Act (Dedicated Person)
ECO	Environmental Control Officer
ELO	Environmental Liaison Officer
CEMPR	Construction Environmental Management Programme
DEA	Department of Environmental Affairs
RoD	Record of Desicsion
SABS	South African Bureau of Standards
SAHRA	South African Heritage Resource Agency
SAMOAC	South African Manual for Outdoor Advertising Control
SS	Site Supervisor

A. SECTION 1: GENERAL INFORMATION

1. *Introduction*

Baagi Environmental Consultancy CC, as Independent Environmental Consultants, were appointed by Eskom Holdings SOC Limited to facilitate and compile a site specific Environmental Management Program for the Medupi-Borutho Transmission Power Line Project. Medupi-Borutho Transmission Line Project forms part of the Mokopane Integration Network. The Record of Decision, RoD, pertaining to this project was issued under Reference number 12/12/20/1187, "Proposed Mokopane Integration Project, Limpopo Province".

2. *Background*

It is widely accepted that any development can pose various risks to the environment as well as the inhabitants in the surrounding areas. These possible risks should be taken into account during both the construction and operational phase of the development. The purpose of this document is to provide management responses that will ensure impacts resulting from the development are minimised. This CEMPR is, therefore, a stand-alone document, which must be used onsite during each phase of the development (construction and operation).

This document should be flexible, so as to allow the contractor and Eskom Holdings SOC Limited to conform to the management commitments without being prescriptive. The management commitments should ensure that the anticipated risks on the environment will be minimised if they are consistently and effectively adhered to. The onus to undertake the requirements set out in the CEMPR rests with Eskom Holdings SOC Limited, the main contractors and subcontractors, which will promote responsibility and commitment. Any party responsible for transgression of the underlying management measures outlined in this document, will be held liable for non-compliances and will be dealt with accordingly.

Furthermore, this document is considered to dynamic and flexible. Therefore, this document can be amended with new issues, which arise during the entire construction and operational period. The final CEMPR will be submitted to the DEA for approval. In cases where there are significant changes to the CEMPR, then the CEMPR will need to be resubmitted to DEA for approval.

The process that was followed in compiling the CEMPR is in compliance with Regulation 34 in terms of chapter 5 of the National Environmental Management Act (Act 107 of 1998) of New Environmental Impact Assessment Regulation, 2006 promulgated on the 21 April 2006. The purpose of this CEMPR is to formulate mitigation measures that should be made binding on all contractors during the construction phase as well as measures that should be implemented during the operational phase.

3. *Project Scope*

The proposed project is a component of the Mokopane Integration Project. It will entail the construction of a 400kV transmission power line from Medupi Power Station to the Borutho

Substation. A favourable Record of Decision (RoD) was received from the National Department of Environmental Affairs and its reference number is 12/12/20/1187. It must be clearly emphasised that this CEMPR is not solely for all the agreed activities stipulated under positive environmental authorization received from DEA.

The construction of the project (reference number 12/12/20/1187) is being undertaken in phases, therefore this CEMPR is only relevant with regards to the proposed construction of a 400kV transmission power line from Medupi-Borutho covering a distance of approximately 170km.

The final CEMPR must be read in conjunction with the EIR associated with the RoD as well as the Draft EMP included in the EIR. All of these documents should be seen as one set and information should be assessed in conjunction will all the relevant documentation to ensure compliance and correctness. In compiling this CEMPR the conditions of the RoD, the Final EIR and the Draft EMP were taken into account.

4. Terms of Reference of the CEMPR

As a condition of the RoD, a construction Environmental Management Programme (CEMPR) must be compiled and approved by DEA, prior to the commencement of the construction activities for the proposed project. This document is also in accordance with the requirements stipulated in the Environmental Impact Assessment (EIA) Regulations of the National Environmental Management Act (NEMA). The regulations state that a Construction Environmental Management Programme (CEMPR) is to be implemented by the appointed contractor, which will ensure that environmental impacts that may occur due to construction activities are mitigated on site.

The CEMPR will provide environmental management guidelines, which must be complied with by the contractor during construction of the power lines and associated pylons, in fulfilment of ISO 14001 requirements. The Environmental Control Officer (ECO), acting independently from Eskom Holdings SOC Limited, will monitor the implementation of the CEMPR. The CEMPR will form part of the contractual agreement to be entered into by Eskom Holdings SOC Limited and the appointed contractor. Compliance with the CEMPR must therefore, form part of all contractor's working tender documentation and be endorsed contractually. The recommendations and constraints, as set out in this document, are enforceable under the general conditions.

5. Objectives of the CEMPr

The objective of this CEMPR is to ensure that:

- Environmental management conditions and requirements are implemented from the start of the project,
- The contractor is able to and shall include any costs of compliance with this CEMPR into the tender price;

- Precautions against environmental damage and claims arising from such damage are taken timeously;
- The completion date of the contract is not delayed due to environmental problems with the landowner, grid staff, communities or regulatory authorities arising during the course of the project execution;
- The asset created conforms to environmental standard required by ISO 14001 and Transmission Policy;
- Eskom Project manager and Contractor take into consideration the landowner special conditions in regards to the power lines which transverses private property;
- Environmental conditions stipulated in the Environmental Authorisation (EA) are implemented;
- Resolve problems and claims arising from damaged immediately to ensure a smooth flow of operations;
- Implementation of this CEMPR for the benefit of all involved; and
- Preservation of the natural environment by limiting destructive activities on site.

6. Limitations of the Study

The project initiation meeting held in November 2012 reached consensus amongst project managers and specialists that the study would be conducted over 10 days (which was later extended to 12 days), visiting each pylon point and walking the areas between all the pylons. The specialists also determined areas to be visited for specific purposes outside of the walk down area. This was agreed to be the most effective way in which to do the study and would have enabled each specialist to walk to each and every pylon along the alignment.

The study was limited as a result of access not being granted by various landowners that were still in negotiations with Eskom, by the presence of wild and dangerous wildlife on various farms and through unpredictable weather during the walk-down process. Therefore, various farms were not visited during the walk-down process and were assessed using desktop studies.

The outcome of the CEMPR report is reliant on the findings of the specialist reports as per the relevant discipline.

7. Legal Framework

Depending on the type of development that is being proposed, certain legislation applies, either as a framework to guide the development process or as permit or approval requirements. This CEMPR has been undertaken in accordance with provisions of the Environmental Authorisation issued by the DEA and in accordance with the provision of the Constitution and principles of Integrated Environmental Management.

All legislation applicable to the development must be strictly enforced both during the construction and operational phases. The contractor must be acquainted with the relevant environmental legislation, including provincial and local government regulations, which are in place to ensure the protection of the environment. The environmental legislation applicable to the project includes, but is not limited to, the following:

- The Constitution of the Republic of South Africa, 1996;
- National Environmental management Act, 1998 (Act No. 107 of 1998) (NEMA);
- National Environmental Management: Air Quality Management Act (Act No. 39 of 2004);
- National Water Act, 1998 (Act No. 36 of 1998);
- National Environmental Management: Biodiversity Act (Act 10 of 2004);
- Fencing Act(No. 31 of1963 (as amended by act 108 of 1991));
- Occupational Health and Safety Amendment Act (Act No. 181 of 1998);
- Hazardous Substances Act, 1973 (Act No. 15 of 1973);
- National Heritage Resource Act, 1999 (Act No. 25 0f 1999);
- Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983);
- National Environmental Management: Waste Act (Act No. 59 of 2008).

The Constitution of the Republic of South Africa

The Constitution of South Africa states that everyone has the right to an environment that is not harmful to his or her health or well-being and to have the environment protected for the benefit of present and future generations.

The Act implies that measures must be implemented to:

1. Prevent pollution and ecological degradation;
2. Promote conservation, and
3. Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The National Environmental Management Act

There are various elements within the National Environmental Management Act that are relevant to the construction and operational phases of the Medupi - Borutho transmission power line. The 'polluter pays' concept is enforced to ensure that any party or parties, which undertakes any activity that may cause, causes or caused any pollution, must prevent, mitigate or remedy the effects.

Section 2 of Chapter 1 of the National Environmental Management provides details of the environmental management principles that should be adhere to during both the construction and operational phase of the development. The consideration of various factors must be brought into focus:

- Avoidance/minimisation of the loss of biodiversity,
- Avoidance/minimisation of the disturbance of ecosystems,
- Avoidance/minimisation of pollution,
- Avoidance/minimisation of cultural and heritage sites,
- Avoidance/minimisation/recycling of waste,
- Responsible and equitable use of renewable and non-renewable resources, and
- Avoidance/minimisation/mitigation of adverse impacts.

The National Environmental Management: Air Quality Act

The National Environmental Management: Air Quality Act (AQA) is the main legislative piece that controls air pollution within South Africa. The main objective of the AQA is to restore, protect and enhance the quality of air in South Africa, through sustainable development. The AQA aims to achieve these objectives through the establishment of norms and standards, and provide a regulatory framework for air quality management planning and reporting.

The National Water Act

The National Water Act (NWA) is the main legislative piece that controls both private and public water use within South Africa. According to section 19(1) of the National Water Act 'an owner of land, a person in control of land or a person who occupies or uses land on which any activity or process is or was performed or undertaken or any other situation exists, which causes, has caused or is likely to cause pollution of a water resource, must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring.'

In accordance with Section 21 of the National Water Act the following are considered as water uses and therefore need to be licensed:

a) Taking water from a water resource.
b) Storing water.
c) Impending or diverting the flow of water in a watercourse.
d) Engaging in a stream flow reduction activity.
e) Engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1).
f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit.

g) “Disposing of waste in a manner which may detrimentally impact on a water resource.

h) Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process.

i) Altering the beds, banks, course or characteristics of a watercourse.

j) Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people.

k) Using water for recreational purposes.

National Environmental Management: Biodiversity Act

The Biodiversity Act provides for the management and conservation of South Africa’s biodiversity within the framework of NEMA and the protection of species and ecosystems that warrant national protection. As part of its implementation strategy, the National Spatial Biodiversity Assessment was established. The Biodiversity Act further requires landowners to manage and conserve South Africa’s biodiversity for current and future generations. The National Spatial Biodiversity Assessment classifies areas as worthy of protection based on their biophysical characteristics, which are ranked according to priority levels.

Fencing Act

The Act regulates matters with regard to boundary fences of farms and makes provisions for the erection, alteration, maintenance, damage and repair of. It also spells rights of owners or leaseholders where the land is subject to certain servitudes and outlines procedures for settling of disputes due to wilful actions including leaving gates opened and unauthorised entry to private land.

Occupational Health and Safety Amendment Act

The Act makes provision for the health and safety of persons at work and persons that are not employees against any hazards that may arise out of or in connection with the work related activities. The act has provisions regarding the maintenance and operation of plant and machinery, working conditions to the use of protective clothing and equipment. The Act therefore informs the EMP on measures and procedures to be incorporated regarding the safety and health of the persons on site.

Hazardous Substances Act

The main objectives of the Hazardous Substances Act is to provide measures, norms and standards for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure. The Hazardous Substances Act also aims to provide for the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances and products.

The National Heritage Resources Act

The Act aims to promote an integrated system for the identification, assessment, and management of the heritage resources of South Africa. Section 35(4) of this above-mentioned Act states that no person may, without a permit issued by the responsible heritage resources authority; destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite.

This Act is concerned with the protection of the archaeological or paleontological sites or meteorites. Furthermore, Section 36(3) of the National Heritage Resources Act states that no person may, without a permit issued by the relevant heritage resources authority handle any human remains. Human remains can only be handled by a registered undertaker or an institution given the authority to do so under the Human Tissues Act (Act 65 of 1983 as amended).

Conservation of Agricultural Resources Act

The Act provides for control over the utilisation of the natural agricultural resources in the Republic of South Africa in order to promote the conservation of soil, the water resources, vegetation and the combating of weeds and invader plants.

The National Environmental Management: Waste Act

The National Environmental Management: Waste Act is the main legislative piece that aims to consolidate waste management within South Africa. Part 2 of the Waste Act details the general duty in respect to the management of waste by the holder of the waste. In accordance to Section 16(1) of the Waste act, 'a holder of waste must, within the holder's power, take all reasonable measures to:

a) avoid the generation of waste and where such generation cannot be avoided to minimise the toxicity and amounts of waste that are generated;

b) reduce, re-use, recycle and recover waste;

c) where waste must be disposed of, ensure that the waste is treated and disposed of in an environmentally sound manner;

d) manage the waste in such a manner that it does not endanger health or the environment or cause a nuisance through noise, odour or visual impacts;

e) prevent any employee or any person under his or her supervision from contravening this Act; and

f) prevent the waste from being used for an unauthorised purpose.'

8. *Possible Permit Applications*

Water Use Licence

Any construction or operation activities near or in a permanent drainage system may have implications in terms of the National Water Act 1998 (Act No.36 of 1998), and thereby, may require the application for Water Use Licence. Therefore, the contractor must in consultation with the ECO, assess all areas along the alignment well in advance in order to ensure the relevant Water Use License is applied for where required. The following should be considered in terms of Water Use Licence applications:

- Linear infrastructure such as power lines often requires new crossings through watercourses.
- These crossings may result in watercourse vegetation loss, surface flow obstructions, erosion and desiccation impacts.
- Wetlands and other watercourses are protected water resources in the National Water Act (NWA), Act 36 of 1998. Development or transformation of the watercourses is regarded as a *water use*, which can only be allowed through an approved Water Use License, irrespective of the condition of the affected watercourse.
- The NWA defines water use in a watercourse specifically related to wetlands and riparian areas as follow:
  (c) impeding or diverting the flow of water in a watercourse.

  (i) altering the bed, banks, course or characteristics of a watercourse.

- New access roads cannot be created through watercourses without a Water Use License. It is therefore important that existing roads be used for access through drainage lines to avoid the creation of new tracks or roads through drainage lines and pans.
- Existing roads should therefore, be used for access as far as possible and new crossings should only be considered as a last resort.
- In addition, no pylon or other infrastructure can be constructed within a watercourse without a Water Use License.

However, during the walk down pylons were found which directly impact on drainage systems and wetlands (refer to **Appendix 6**) therefore, it is proposed as part of the mitigation measures to move the respective pylon from the respective drainage system. In cases where the moving of a pylon from a drainage system is not possible, then a Water Use Licence Application will need to be applied for.

Heritage permit

In the event that any heritage artefacts are found on site, it would be necessary to apply for a Heritage Permit under the National Heritage Resource Act, 1999 (Act No. 25 of 1999). A number of sites dating from the Early Stone Age to the Late Iron Age and more recent historical time-period were identified and recorded by the specialist (refer to **Appendix 6**). Some of the sites are highly significant and if negatively impacted on will have to be mitigated.

Removal of protected trees permit

In the event whereby Red Data plants are affected by construction activities, measure should be taken to avoid or rescue these plants. During the specialist walk down six (5) protected species and dead trees of avifaunal importance where observed and permits are required to remove or destroy these species in terms of National Forest Act No 84 of 1998. These permits should be obtained from the Provincial Authorities in terms their respective Provincial Conservation Ordinances. The following species require permits; *Sclerocarya birrea* (Marula), *Combretum imberbe* (Leadwood)*, Boscia albitrunca* (Sheperd Tree)*, Acacia erioloba* (Camel Thorn), *Adansonia digitata* (Baobab), *Spirostachys africana* (Tamboti) as well as dead trees of avifaunal importance. Of the six protected species found in the area, *Adansonia digitata* (Baobab)was not found underneath the proposed power lines. An attempt should be made to evaluate and avoid obviously large specimens of trees, which would qualify as champion or remarkable trees based on their height (> 10 m), stem diameter at chest height (> 1 m) and the diameter of their crowns (> 15 m).

The fauna and flora (ecology) report, in the section discussion and recommendations, set out the fundamentals in the cost of plant rescue and plant re-vegetation for the species above

9. Environmental Monitoring and Auditing

To measure and ensure compliance to this CEMPR it is imperative that a monitoring and auditing programme be established, in which monthly reports are submitted to Eskom and DEA to indicate the level of compliance. In addition, potential risks to the project will have to be identified. Where the ECO identifies a transgression or blatant disregard to the CEMPR it should be reported to Eskom immediately and rectification steps undertaken.

Bearing in mind that this document is a living document, it may be updated from time to time. The ECO, in consultation with the proponent (Eskom) can make recommendations to the proponent for certain CEMPR amendments. The proponent should then officially apply to DEA for the approval of the proposed amendments to the CEMPR. The amended CEMPR becomes valid once the authority (DEA) approves it in writing.

B. SECTION 2: SITE SPECIFIC ENVIRONMENTAL MANANGEMENT PROGRAM

1. Background

Environmental aspects that are generic and specific for the construction and operation stages for the individual tower locations are identified and mitigation procedures are described.

During the construction phase and maintenance of the power lines, some habitat destruction and alteration inevitably takes place. Habitat destruction and alteration will result from the construction of access roads to the pylons, the removal of vegetation within the pylon footprints and the clearing of servitudes. Servitudes have to be cleared of excess vegetation at regular intervals in order to allow access to the line for maintenance, to prevent vegetation from intruding into the legal prescribed clearance gap between the ground and the conductors and to minimise the risk of fire under the line, which can result in the electrical flashover. These activities have an impact on birds breeding, foraging and roosting in or in close proximity of the servitude through habitat modification.

Whilst the indirect impact of the power line on avifauna through habitat destruction and disturbance can be mitigated by generic means, the impact of bird collision from the power lines is highly specialised and sites specific. Therefore, the impact of bird collision requires its own mitigation at each tower and span.

Where it is anticipated that ecological qualities of the landscape are going to be particularly altered by the various pylons, whether it to be the position or the result of erection and construction requirements, it is necessary to identify those locations and to describe what mitigations are required. In this way the specific ecological mitigation relates to an identified condition that will result in short term or long term ecological impacts. If this is not addressed in time and in a particular manner, persistent and irreversible long-term ecological impacts will result.

2. Technical Specifications

2.1. 400kV Transmission Power Line Specifications

The construction activities, with regards to the 400kV transmission lines, will not only include the stringing of the power lines, but also the erection of pylons and the clearing of vegetation for the pylons and the servitude roads. The technical details regarding the 400kV transmission power line are as follows:

- Single line servitude size is 55m;
- Towers are up to 42m in height;
- Distance between towers is between 350 and 500m, depending on terrain and route angles; and
- Minimum conductor clearance is 8.1m, above ground.

Tower design for the 400kV power lines are going to be the Guyed-V suspension and the Cross-Rope suspension as shown in **Figure 1** and **Figure 2**, whilst Self-supporting Strain towers and Self-supporting Suspension towers(refer to **Figure3**) will likely be utilised where difficult terrain is encountered or line deviations of more than 30° is unavoidable. The servitude width required for the construction of the 400kV power lines is 55 m, which means 55m for each respective 400kV power line.

The major construction activities that are generally associated with the construction phase of the loop-in and Loop-out transmission power lines include the following:

- Servitude gate installation to facilitate access to the construction site;
- Vegetation clearing to facilitate access, construction and the safe operation of the loop-in and loop-out lines;
- Pegging of tower positions for construction by the contractor;
- Transportation of equipment, materials and personnel to site and stores;
- Terracing of site;
- Installation of foundations for the towers;
- Tower assembly and erection;
- Conductor stringing and regulation;
- Taking over the line from the contractor for commissioning;
- Final inspection of the line, commissioning and hand over to the Grid Line and Servitude Manager for operation;
- Rehabilitation of disturbed areas;

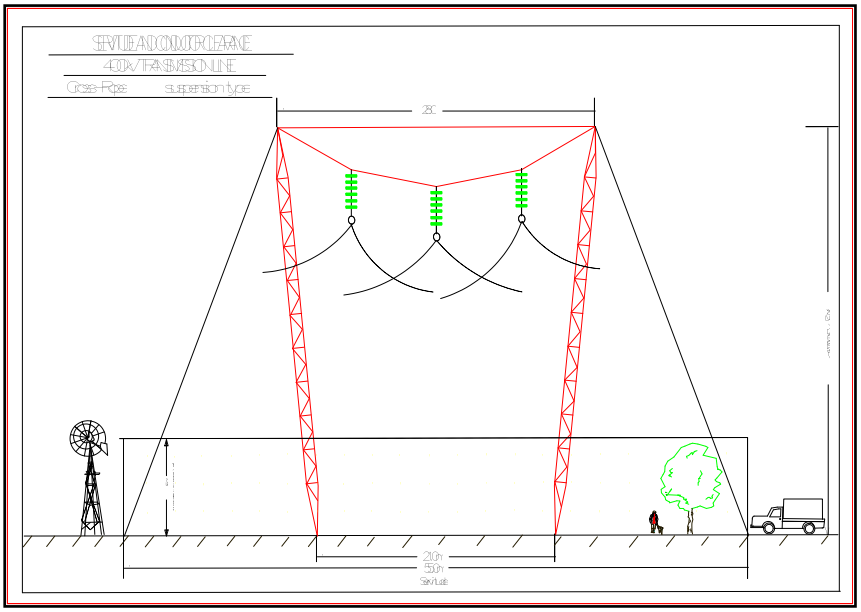

Figure 1: Cross-Rope Suspension Tower

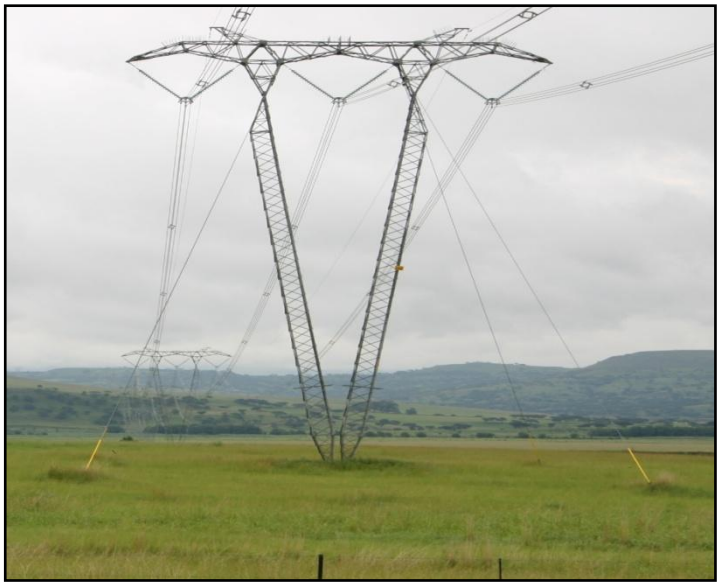

Figure 2: Guyed-V Suspension Tower

Figure 3: Self-Supporting Strain Tower

3. *Environmental Matrix*

Function	Name / Cell No	Responsibility
Project Manager (PM) Eskom		Overall management of project and CEMPR implementation
Site Supervisor/ Contract Manager (CM) Eskom		Oversees site works, liaison with Contractor, PM and ECO
Environmental Control Officer (ECO) Eskom		Implementation of CEMPR and liaison between Eskom, Contractor and Landowners
Contractor (C)		Implementation and compliance with recommendations and conditions of the CEMPR, Appoints dedicated person (CELO) to work with ECO
Contractor Environmental Liaison Officer (CELO)		Implementation of CEMPR, landowner interaction, environmental control of site actions, re-mediation and rehabilitation work.
Group Capital Environmental Advisor (Eskom)		Environmental advice and auditing

The point of departure for this CEMPR is to take a pro-active route by addressing potential problems before they occur. This should limit the corrective measures required during the construction and operational phases of the development. Additional mitigation will be included throughout the project's various phases, as required and if necessary.

4. *Responsibility of the Role Players*

- **Eskom Holdings SOC Limited**

The Eskom Team remains ultimately responsible for ensuring that the development is implemented according to the requirements of the CEMPR. Although the Eskom Team appoints specific role players to perform functions on their behalf, this responsibility is delegated. The Eskom Team is responsible for ensuring that sufficient resources (time, financial, human, equipment, etc.) are available to the other role players (e.g. the ECO, CELO and contractor) to efficiently perform their tasks in terms of the CEMPR. The Eskom Team is liable for restoring the environment in the event of negligence leading to damage to the environment.

The Eskom Team must ensure that the CEMPR is included in the tender documentation so that the contractor who is appointed is bound to the conditions of the CEMPR. The Eskom Team must appoint an independent Environmental Control Officer (ECO) during the construction phase to oversee all the environmental aspects relating to the development.

- **Contractor**

The contractor, as the Eskom's agent on site, is bound to the CEMPR conditions through its contract with the Eskom Holdings SOC Limited, and is responsible for ensuring that it adheres to all the conditions of the CEMPR. The contractor must be thoroughly familiarised with the CEMPR requirements before coming onto site and must request clarification on any aspect of these documents, should they be unclear. The contractor must ensure they have provided sufficient budget for complying with all CEMPR conditions at the tender stage.

The contractor must comply with all orders (whether verbal or written) given by the ECO, project manager or site engineer in terms of the CEMPR.

- **Environmental Control Officer (ECO)**

The Environmental Control Officer (ECO) is appointed by the Eskom Holdings SOC Limited as an independent monitor of the implementation of the CEMPR and monitor project compliance. The ECO must form part of the project team and be involved in all aspects of project planning that can influence environmental conditions on the site. The ECO must attend relevant project meetings, conduct inspections to assess compliance with the CEMPR and be responsible for providing feedback on potential environmental problems associated with the development. In addition, the ECO is responsible for:

- Liaison with relevant authorities;
- Liaison with contractors regarding environmental management;
- Undertaking routine monitoring and indentifying a competent person/institution to be responsible for specialist monitoring, if necessary; and
- The ECO has the right to enter the site and undertake monitoring and auditing at any time, subject to compliance with health and safety requirements applicable to the site (e.g. wearing of safety boots and protective head gear).

The following responsibilities, as reflected in the original RoD must be complied with:

- The ECO must be appointed before construction commences. It is advised that the appointment must be before the planning phase as the ECO will be required during this phase as well to ensure that the planned construction is in line with the RoD and CEMPR;
- Monthly reporting to the DEA must include the following information:
  - Description of all activities on site;
  - Problem identified;
  - Transgressions noted; and
  - A task schedule of task undertaken by the ECO.
- ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation;
- The following will be maintained on site:
  - Records relating to monitoring and auditing must be kept on site and made available for inspection;
  - Site diary;
  - Copies of all monthly reports submitted to DEA;
  - A quarterly audit is conducted and copies of the audit is submitted to the DEA;
  - Schedule of current activities on site as well as monitoring activities schedule; and
  - Compile a register of complaints by the public as well as the remedies applied to the complaints.
- All documentation, reports and notifications, required to be submitted to the department in terms of this authorization, must be submitted to the Director: Compliance Monitoring at the department.

An ECO must be contacted to the oversee the project throughout and up to the completion of the rehabilitation on site and the site is handed over to Eskom by all the contractors.

▪ Liaison with Authorities

The ECO will be responsible for liaising with the National Department of Environment (DEA). The ECO must submit monthly environmental reports and quarterly audit reports to the authorities. These environmental and audit reports must contain information on the contractor and Eskom's levels of compliance with the CEMPR.

The audit report must also include a description of the general state of the site, with specific reference to non-compliance. The ECO is to recommend corrective action measures to eliminate the occurrence of the non-compliance incidents. In order to keep a record of any impacts, an Environmental Log Sheet (refer to **Appendix 1**) should be kept on a continual basis.

- **Liaison with Contractors**

The Eskom EO is responsible for informing the contractors of any decisions that are taken concerning environmental management during the construction phase. This would also include informing the contractors with the necessary corrective action to be taken.

- **Contractor Environmental Liaison Officer (CELO)**

The contractor must appoint an Environmental Liaison Officer (CELO) to assist with day-to-day monitoring of the construction activities. Any issues raised by the ECO will be routed to the CELO for the contractors' attention and subsequently, CELO liaise with the main contractor for his or her attention. The CELO shall be permanently on site during the construction phase to ensure daily environmental compliance with the CEMPR and should ideally be a senior and respected member of the construction crew.

5. CEMPR Approach

A project team compromised of environmental consultants as a project manager and various specialists have contributed to the compilation of this CEMPR. The specialists and their associate studies, which were undertaken to inform the CEMPR, are listed in the table below.

Specialist	Organisation	Study/Function
Mr. Ryan Nel	Baagi Environmental Consultancy CC	Project Manager
Mr. Lukas Niemand	Pachnoda Consulting cc	Avifauna & Fauna
Mr. Sam Laurence	Enviro-insight	Vegetation & Fauna
Mr. Nkosinathi Tomose	NGT Projects & Heritage Consultants (Pty) Ltd	Cultural & Heritage
Mr. Retief Grobler	Imperata	Surface Water & Wetland

Prior to a site visit to the proposed Medupi-Borutho transmission power line walk down process the specialists were provided with the tower positions and coordinates in order to acquaint themselves with the area .

The site visit was undertaken from the 10th of January 2013 to the 21st of January 2013, by the following specialists:

- Avifauna
- Wetland;
- Cultural and Heritage; and
- Flora and Fauna (Ecological).

The entire alignment corridors, as approved in the RoD, and pylons were visited that Eskom indicated within the approximate 170km stretch. The specialists applied a zig-zag method for the power lines as the power lines are spatially positioned parallel to each other.

The project team undertook individual specialist assessments of all the proposed pylon positions. Where the pylon positions were found to be inappropriate from an environmental perspective, recommendations for an alternative location of the pylon were made and recorded. In addition, the project team identified sensitive micro-environments along the route, which included water bodies, areas of high erosion, avifauna niches and ecological significant areas.

The survey was undertaken on foot and vehicle to include all pylons and predetermined points.

The specialist reports submitted, including potential impacts and recommendations for mitigation measures for the power lines have all been incorporated into the CEMPR and specialist reports have been added in this report in **Appendix 6** respectively.

6. Description of the Affected Environmental Aspects

6.1. Flora Aspects

The majority of the habitat consists of woodland, varying structurally between closed and semi-open. Predominant species include *Combretum appiculatum*, *Spirostachys africana*, *Sclerocarya birrea*, *Acacia nigrescens*, *Grewia flava/bicolor*, *Acacia tortillis*, *Terminalia sericea* and *Acacia erubescens*. Mucina and Rutherford (2006) list the vegetation types as;

- Limpopo sweet bushveld
- Makhado sweet bushveld
- Polokwane plateau bushveld
- Roodeberg bushveld
- Subtropical alluvial vegetation
- Waterberg mountain bushveld

Limpopo Sweet Bushveld

This vegetation type is a dominant community to the western portion of the proposed line corridor and is found extensively in the region as a whole. It exhibits a medium to short, semi open structure with dominants such as *Grewia flava* and *Grewia bicolor*, various *Acacia* sp.s, pockets of *Dichrostachys cinerea* (due to overgrazing effects) with infusions of taller *Acacia nigrescens*. This habitat type is not considered to be threatened.

Makhado sweet bushveld

This vegetation type is the dominant community towards the western end of the line corridor above altitudes of 850 m, where it serves as the transition up to the Polokwane plateau bushveld. It exhibits a medium to short, semi open to open structure with dominants such as various Acacia sp.s, *Commiphora sp.s, Boscia albitrunca*, pockets of *Dichrostachys cinerea* (due to overgrazing effects) with infusions of *Acacia erubescens* and *Terminalia sericea* on sandy soils. This habitat type is not considered to be threatened.

Polokwane plateau bushveld

This vegetation type is the not a dominant vegetation community within the proposed line corridor and is found at the end of the line at altiudes over 12500 m. The structure is open savanna with some thorn *Acacia* thorn tree incursions. This habitat type is not considered to be threatened although game ranching activities have made the unit susceptible to encroachment.

Roodeberg bushveld

This vegetation type, featuring gentle undulations, is the dominant community within the central portion of the proposed line corridor at altitudes above 850 m and is also found extensively in the region. It exhibits a medium to tall, semi-open to closed structure with dominants such as Grewia flava and *Grewia bicolor*, *Kirkia* acuminata, various *Acacia sp.s* (including protected *A. Erioloba*), pockets of *Dichrostachys cinerea* (due to overgrazing effects) with infusions of taller *Acacia burkei*. This habitat type is not considered to be threatened.

Subtropical alluvial vegetation

This vegetation type is associated with drainage lines and shows very scarce influence within the western portion of the proposed line corridor. As a drainage line associate, it is not found extensively in the region. It exhibits a tall, semi open structure with dominants such as Rhus sp.s, *Ziziphus mucronata,* various Acacia sp.s, pockets of *Combretum hereoense* (due with infusions of taller *Acacia nigrescens*. This habitat type is not considered to be threatened, although sensitivity is increased due to the increased risks of erosion and the sandy alluvial soil types.

Waterberg mountain bushveld

This vegetation type is the dominant in the area but is only occasionally traversed by the line corridor, where koppie infusions dominate the landscape. The vegetation type exhibits typical ridge vegetation structure medium to short, semi open to semi-closed structure with a mixture of dominants such as various Acacia sp.s, broadleaf trees such as *Combretum* and *Terminalia sp.s* with infusions of taller *Sclececarya* and *Terminalia sp's*. This habitat type is not considered to be threatened.

6.2. Tree Marking

The walk down involved a detailed vegetation assessment and the identification of protected trees in the proposed power line corridor. During the walk down, six protected species were identified as candidates to be marked in accordance with the legislation, as well as dead trees with regards to the avifaunal importance. The relevant species are listed as:

- *Acacia erioloba* (Camel Thorn) – Fabaceae
- *Adansonia digitata* (Baobab) – Bombacaceae
- *Boscia albitrunca* (Shepherd Tree) – Capparaceae
- *Combretum imberbe* (Leadwood) – Combretaceae
- *Sclerocarrya birrea caffra* (Maroela) – Anacardiaceae
- *Spirostachys africana* (Tamboti) – Euphorbiaceae
- Dead Tress - Avifaunal Importance

In total, 776 individual trees were recorded within the zones of the power lines. Of the six protected tree species found in the area, only Baobab (*Adansonia digitata*) was not found underneath the proposed line. Of the five species found in the 5 m buffer, Maroela (*Sclerocarya birrea caffra*), Camelthorn (*Acacia erioloba*) and Sheppard bush (*Boscia albitrunca*) are co-dominant. Tambotie (*Spirostachys africana*) was also highly prevalent, especially considering the adjusted figures. Leadwood (*Combretum imberbe*) were essentially absent in any significant numbers. *Boscia foetida* or stink bush is found in much higher densities in some areas than *B. albitrunca* and should not be confused. However, as *B. foetida* is strongly associated with termitaria (an important faunal micro habitat); it should be excluded from clearance where possible. The figures were based on the mapping of a 5 metre (either side of the line) (776 protected trees and dead trees) clearance zone under the proposed power lines. These figures can be submitted to the provincial government in order to apply for the necessary removal permits.

6.3. Fauna Aspects

For the purpose of this document, the faunal communities are represented by all taxa, excluding avifauna (birds), which are addressed separately. The faunal species are mostly typical bushveld associates, either free roaming or reintroduced for the purpose of game farming practice. Some species, such as blesbok *Damaliscus pyagarus phillipsi* are grassland associates and are considered to be alien to the biome. Smaller faunal taxa such as herpetofauna (reptiles and amphibians) as well as invertebrates are naturally occurring and are not subject to management practices.

6.4. Avifauna Vegetation Aspects

The proposed transmission line corresponds to the Savanna Biome and more particularly to the Central Bushveld Bioregion as defined by Mucina & Rutherford (2006). It comprehends five ecological types namely (1) Limpopo Sweet Bushveld (2) Roodeberg Bushveld, (3) Waterberg Mountain Bushveld, (4) Makhado Sweet Bushveld and (5) Polokwane Plateau Bushveld:

1. L*impopo Sweet Bushveld* – This vegetation type coincides with the western section of the proposed alignment. It is an extensive bushveld type that occurs from the lower reaches of the Crocodile and Marico Rivers down to the Limpopo River valley and into Botswana on the other side of the border. It is predominantly located on extensive plains that are irregularly interspersed by tributaries of the Limpopo River. It is a short, open woodland dominated by *Acacia erioloba*, *A nigrescens* and *Terminalia sericea,* while disturbed areas are often invaded by dense thickets of *Acacia mellifera* and *Dichrostachys cinerea*.

The high palatability of the graminoid composition makes this vegetation type very suitable for game farming practices. The Limpopo Sweet Bushveld is Least Threatened and extensive in geographic coverage. It is however poorly conserved (e.g. D'Nyala Nature Reserve) even though it straddles many privately owned game farms. It is transformed by cultivation, but future threats include the mining of coal and urbanisation.

2. *Roodeberg Bushveld* – This vegetation type is confined to the central section of the proposed alignment. It is typical of the plains that straddles the bushveld near the Tropic of Capricorn, and extends from Marken northwards through to Swartwater and the base of Blouberg mountain. The vegetation structure is earmarked by short woodland with a poorly developed graminoid layer.

The Roodeberg Bushveld is Least Threatened with about 6 % statutorily conserved in the Blouberg and Wonderkop Nature Reserves.

3. *Waterberg Mountain Bushveld* – This vegetation type is scattered along the proposed alignment and restricted to prominent hills and ridges. This vegetation type is confined to the Waterberg Mountains, but also includes a number of outlier hills and ridges such as the Vlieëpoortberge and Boshofsberge in the Thabazimbi district. The floristic composition is complex and varies from *Faurea saligna – Protea caffra* bushveld on high slopes, grading into mixed *Diplorhynchus condylocarpon* woodland on mid and foot slopes to *Burkea africana – Terminalia sericea* savanna on low-lying valleys and areas of deep sand.

This unit is not threatened since more than 9 % is formally conserved within the Marakele National Park and Moepel Nature Reserve. More than 3 % of this woodland type is transformed by cultivation..

4. *Makhado Sweet Bushveld* – This vegetation type is confined to the eastern section of the proposed alignment. It is typical of the undulating plains south of the Soutpansperg Mountain and east of the Waterberg. The vegetation structure is short and shrubby with a poorly developed grass layer. It is a bushveld type that is transitional between the higher-lying Polokwane Plateau and the lower-lying Limpopo River valley (Mucina & Rutherford (2006).

The Makhado Sweet Bushveld is Vulnerable with about 1 % statutorily conserved in the Bellevue Nature Reserve.

5. Polokwane Plateau Bushveld – This vegetation type is confined to the extreme eastern part of the proposed alignment. It is confined to the high-lying plains north of Polokwane where it consists of short, open bushveld with a well developed graminoid layer.

The Polokwanr Plateau Bushveld is Least threatened with less than 2 % statutorily conserved in the Percy Fyfe and Kuscke Nature Reserves.

Local Vegetation Description

The composition and distribution of the vegetation communities on the study area are a consequence of a combination of factors simulated by soil texture, soil depth, animal activity and past anthropogenic disturbances. The major vegetation communities on the study area include the following:

(1) A *microphyllous woodland* consisting of two sub-communities located on (1) sodic/ephemeral systems or on (2) intense overgrazed or over-utilized natural bushveld. The composition and structure of this woodland stand are influenced by the presence of game (trampling), livestock or human activities as witnessed by (1) an accented piosphere effect surrounding pan depressions or (2) the presence of secondary thornveld on areas used for grazing purposes. Typical species include *Acacia tortilis, A. erubescens, Dichrostachys cinerea* and a poorly defined graminoid layer (due to the persistent trampling by game or livestock). However, the dominant vegetation adjacent to the ephemeral pans includes canopy constituents such as *Boscia foetida* and *Spirostachys africana*.

Therefore, the observed floristic composition and structure were greatly modified by the activities (grazing and trampling) of game and livestock. Many of the compliment species are bush-encroacher taxa that tend to occupy areas subjected to past soil disturbances (as evidenced by the activities of cattle and game).

It should be noted that the sodic systems (mainly associated with seasonal plans) are unique in providing an ephemeral resource for game species based on the perceived high mineral content of the soils. It therefore represents an important focal congregating point for many game species.

(2) A *deciduous mesophyllous woodland* on sandy or coarse-grained soils. The composition is prominent on highly leached soils and is dominated by medium to tall *Combretum apiculatum, Acacia nigrescens, Terminalia sericea, Peltophorum africanum* and a dense shrubby mid-stratum of *Grewia* shrub. The graminoid layer is dominated by *Eragrostis pallens* and *Eragrostis rigidior*. This community has a lower ("sourish") grazing capacity in comparison to the microphyllous woodlands.

It is represented by two prominent units comprising of a *Grewia bicolor - G. flava – Eragrostis rigidior* alliance and a *Combretum apiculatum – Eragrostis pallens* alliance. The former consists of a short, mixed shrubland dominated by *Grewia flava* and *G. bicolor* with a relatively well-defined graminoid layer of *Eragrostis rigidior*. It appears to be transitional between the microphyllous and broad-leaved woodlands boasting many noteworthy taxa such as *Acacia erubescens, Grewia monticola, Combretum apiculatum* and *Dichrostachys cinerea*.

The latter differed from the previous unit in having a floristic composition with an elevated abundance of tall *Combretum apiculatum, Terminalia sericea, Peltophorum africanum* and *Eragrostis pallens*. This alliance consists of a distinct canopy of *Combretum apiculatum* and a shrub layer dominated by woody species such as *Grewia bicolor, Peltophorum africanum* and *Euclea undulata*. The graminoid layer is sparse and consisted of *Eragrostis pallens* and *Aristida stipitata.*

(3) Isolated patches of *Colophospermum mopane*. The distribution of *C. mopane* veld is highly localised and fragmented, consisting of tall open woodland dominated by *Colophospermum mopane*. The graminoid layer is poorly defined.

(4) *Mixed mountain bushveld*. This unit is located on the central part of the proposed alignment and is restricted to the ridges, hills and outcrops. It is typified by a deciduous canopy dominated by *Combretum apiculatum* and *Commiphora mollis*. However, other noteworthy species include *Sterculia rogersii, Aloe marlothii, Euphorbia ingens, Croton gratissimus* and *Kirkia acuminata*.

Habitat types and their avifaunal importance

The abovementioned vegetation (or bushveld) units host a high diversity of bird species representing a broad spectrum of different functional groups (e.g. raptors, scavengers, insectivores, frugivores, granivores, hole-nesters, leaf-gleaners, hawkers and many more covering both the basal, mid and upper strata of the vegetation layer). This high diversity is partly explained by the occurrence of microphyllous woodlands hosting many species with arid thornveld and Kalahari affinities (e.g. Crimson-breasted Shrike *Laniarius atrococcineus*, Chestnut-vented Titbabbler *Parisoma subcaeruleum*, Southern Pied Babbler *Turdoides bicolor*, Black-faced Waxbill *Estrilda erythronotos,* Ashy Tit *Parus cinerascens* and Barred Wren-Warbler *Calamonastes fasciolatus*). This "thornveld" assemblage is augmented by taxa with mesic affinities pertaining to the broad-leaved woodlands and is represented by a prominent insectivorous guild of passerine

taxa (e.g. Golden-breasted Bunting *Emberiza flaviventris*, Chin-spot Batis *Batis molitor*, White-browed Scrub-robin *Cercotrichas Leucophrys,* Rattling Cisticola *Cisticola chiniana* and Black-backed Puffback *Dryoscopus cubla*).

In addition, a number of azonal habitat units were also identified in the study area, and it was necessary to elaborate on their importance from an avifaunal perspective:

- *Drainage lines and perennial rivers* – These range from ill-defined and highly seasonal streams to fairly large perennial rivers (e.g. the Mokolo, Lephalala and Mogalakwena Rivers). These linear systems facilitate bird dispersal, thereby linking the study area with other important water bodies located within the Limpopo River catchment. It provides important habitat and refuge for piscivorous species (e.g. White-breasted Cormorant *Phalacrocorax carbo* and African Fish Eagle *Haliaeetus vocifer*) while exposed sandbars and mudflats are important congregation areas for wading birds (herons and storks);

- *Man-made impoundments* (dams) *and ephemeral depressions* – these represent small ephemeral waterbodies. They have undoubtedly benefit the colonisation and range expansion of many waterbird species that favours open water habitat (e.g. White-faced Duck *Dendrocygna viduata*, Comb Duck *Sarkidiornis melanotos*, Little Grebe *Tachybaptus ruficollis,* African Spoonbill *Platalea alba*, including species that are prone towards power line collisions such as the " Yellow-billed Stork *Mycteria ibis*, Black Stork *Ciconia nigra* and Marabou Stork *Leptoptilos crumeniferus*). The two most important functions of these waterbodies are to provide a safe refuge and nesting habitat for waterbird species. The depressions, especially when inundated, provide breeding and foraging habitat for a number of nomadic and intra-African migrant species such the Dwarf Bittern (*Ixobrychus sturmii*) and Greater Painted Snipe (*Rostratula benghalensis*);

- *Arable land, secondary woodland and open savannoid grassland* – These are cultivated land or intensely grazed areas corresponding to irrigated croplands, old fields and tribal land (corresponding to the eastern section of the study area). These areas are important foraging habitat for terrestrial taxa such as the White Stork (*Ciconia ciconia*), Abdim's Stork (*C. abdimii*), Secretarybird (*Sagittarius serpentarius*) and Kori Bustard (*Ardeotis kori*);

- *Old cattle kraals and reservoirs* – These were thinly scattered along the alignment and comprised of open trampled vegetation that were in most instances surrounded by tall vegetation – e.g. *Acacia nigrescens*. These areas are often utilised by scavenger species (African White-backed Vulture *G. africanus*) engaged in activities such as bathing or drinking;

- *Dead trees* - The dead trees provide essential roosting and breeding habitat for hole- and cavity-nesting species including the "near-threatened" Red-billed Oxpecker (*Buphagus erythrorhynchus*) (Barnes, 2000);

- *Outcrops and ridges* – These occur as scattered landmarks and provide for high spatial heterogeneities and niche space. These areas are earmarked by vertical cliffs that are

often utilised by birds of prey for roosting or breeding habitat (e.g. Peregrine Falcon *Falco peregrinus* and African Hawk-eagle *Aquila spilogaster*).

6.5. Heritage and Cultural Aspects

The Historical archaeology is a period in archaeological records that refers to the last 500 years in archaeological records. This period encapsulates the Late Stone Age, Late Iron Age, and the period of European settlers and/or "colonist" in southern Africa. The archaeological records that characterises this period includes ruminants of Stone Age industries (and material culture), the Late Iron Age material culture (e.g. pottery/ceramics, iron age implements etc) and built environment (e.g. elaborate stone wall settlements etc) and the settlers material culture and built environment. In other regions of the country, settler towns become a dominant form of built environment and landscape features. However, in the Limpopo Province such complexity can be dated as far back as the MIA to LIA (e.g. Huffman, 2005). Some of the oldest settler towns that occur within along the study area include the village town of Steenbokpan, Elisras (i.e. modern day Lephalale) and Potgietersrus (i.e. modern day Mokopane). In this province, these earliest towns were established by the European settlers of Dutch descent – the Afrikaans communities after they Trekked from the then Cape Colony to avoid British Administration in the 1930s and 19840s. They fall within what was then called the Transvaal - direct translation for across the Vaal River. Therefore, some of the above towns such as Potgietersrus can attributed to the Great Trek movement. During the Great Trek these Afrikaans communities, commonly referred to as the Boers (farmers), who left the British Administration of the Cape Colony (i.e. a former Dutch colony in 1795 and again in 1806) established several republics north of the British Colonies - these republics included the Boer Republic of the Orange Free State (1845) and the Transvaal across the Vaal River were our study area is located. The Transvaal which had different autonomous and separate states which were later united to form what became known as the Zuid Afrikaanse Republiek (South African Republic) the ZAR (Celliers, 2010) .

Throughout the middle of the 1800 Century AD the Limpopo Province witnessed range of settlement patterns- the occupation and reoccupation of the region by the different culture groups that contributed to the contemporary peopling of the present day Limpopo Province (Tomose, 2012).There are various factors that contributed to this historical times settlement of the region. The first has to do with the availability of natural resources and the second is political driven. For example, the Great Trek is a political motivated movement of people that influence the peopling of Limpopo Province and our current study area. The attraction of people to natural resources available in this province date as far back as the 1st Millennium AD, to MIA and the LIA periods alike. During the historical times the availability of natural resources also played a pivotal role in the choice of settlement of people, based not only from a subsistence point of view but also driven by commerce or commercial gains resulting from the exploitation of available natural resources such as coal, iron ore and tin. The town of Thabazimbi, for example - located south of the current study area, is known to have developed from the exploitation of its rich haematite deposits (iron ore) during the early 1900s (Circa 1919). Iscor (Iron and Steel Corporation) in this region is synonymous with Thabazimbi. Mokopane (former Potgietersrus) on the other hand is synonymous with the Great Trek - located in the Makapans Poort (name attributed to one of the

Ndebele Chief in the region Chief Mokopane/Makapan) and on the gap between the Waterberg Mountain Range and Strydom mountain, this town was chosen by one of the Great Trek leaders Mr Hendrick Potgieter in 1852 and it said to have acquired its name in honour of his son Pieter Johannes who was killed in action in a battle between the Ndebele Chief who had settled in the area i.e. Chief Mokopane and Hendrick Potgieter's people. This town and its surroundings is also known to have played a pivotal role during the South African Wars, commonly known as the Anglo-Boer War. A number of skirmishes are reported to have taken place in proximity of this town. Monuments dedicated to such event still stand and are recorded in some of the maps showing the town. The question that one would pose is how was the area occupied by the Ndebele, an area better known for the Sotho Tswana languages speakers - BaPedi.

The presence of the Ndebele people in this region of South Africa was partly influence by the *mfecane* processes, contributing to migrations and displacements of people in the region and throughout many parts of South Africa and southern Africa (Tomose, 2012). For example, in the region the mfecane processes can be linked to the Ndebele of Mzilikazi who later settled in Zimbabwe (ibid).

This like the mfecane, the interaction between the Trek Boer or Pioneers as the also known, the Sotho-Tswana people and the Ndebele also triggered wars in the region – wars between the African chiefdoms and the incoming settlers. One such example is the battle of Blouberg, also known as the Malebogo wars, between Chief Malebogo and President Kruger of the ZAR in the Blouberg Mountains and the Makgabeng Plateau (Smith pers.com 2006). Some of these colonial wars and battles lasted into the early 1900s like the First (mid 1860s) and Second (1899 -1902) South African Wars. The later effectively led to complete subjugation of African communities to settler administration starting as part of the ZAR of Transvaal, the Union of South Africa in 1910 following the annexing of the region by the British, the Nationalist South Africa (1982), the Apartheid South Africa as proclaimed in 1962 up to late 1980s until the Democratic South Africa resulting from first democratic elections in 1994.

Contrary to the development of the above discuss town, the town of Lephalale like Thabazimbi is associated to the development of commerce in the region. For example, in the 1880s gold was discovered near the town of Polokwane and this development led to influx of prospectors, miners and traders in the region. The Waterberg area was mostly settled by the farmers who worked to sustain the industrial processes culminating from discovered natural resources. However, it also became known as a trade post for traders. Coal is another resource that came to define this region - in 1941, for example, Iscor started exploration programmes around Lephalale to test the extent of coal deposits. Eventually Grootegeluk mine, which currently services Eskom Power Stations like Medupi and Matimba, was sunk to exploit the coal deposits. The first townships of Lephalale were proclaimed only in 1960. The town Elisras itself was laid out in December 1960 and was named after two of the pioneer families in the area - Ellis and Erasmus. In 2002 the name was changed to Lephalale. The name Lephalale is derived from the Lephalale River derived from Tswana verb, which means to flow or one, which overflows (Raper, 2004:86,204; van Schalkwyk, 2005b).

6.6. Wetlands and Surface water course

In terms of the Ramsar Convention on Wetlands (Iran 1971), to which South Africa is a contracting party, "… wetlands include a wide variety of habitats such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas such as salt marshes, mangroves, and sea grass beds, but also coral reefs and other marine areas no deeper than six meters at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs" (Ramsar Convention Secretariat 2007).

In South Africa, wetlands are defined as "…land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil" (National Water Act, Act No. 36 of 1998), (NWA). Wetlands are also included in the definition of a watercourse within the NWA, which implies that whatever legislation refers to watercourses will also be applicable to wetlands. The types of features included within the definition of a watercourse include:

- "…a river or spring…"
- "…a natural channel in which water flows regularly or intermittently…"
- "…a wetland, lake or dam into which, or from which, water flows…"
- "…any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse…"

In addition, the NWA stipulates that "…reference to a watercourse includes, where relevant, its bed and banks…". This has important implications for the management of watercourses and encroachment on their boundaries, as discussed further on in this document.

The NWA defines riparian areas as "…the physical structure and associated vegetation of the areas associated with a watercourse which are commonly characterized by alluvial soils, and which are inundated or flooded to an extent and with a frequency sufficient to support vegetation of species with a composition and physical structure distinct from those of adjacent land areas…" Note that this does not imply that the plant species within a riparian zone must be aquatic, only that the species composition of plant assemblages must be different within the riparian area and adjacent uplands.

In terms of the latest wetland delineation document available from the Department of Water Affairs and Forestry (DWAF), now known as the Department of Water and Environmental Affairs (DWEA), "wetlands must have one of the following attributes" (DWAF 2005):

- **Wetland (hydromorphic)** soils that display characteristics resulting from prolonged saturation.
- The presence, at least occasionally, of **wetland associated plants (hydrophytes)**.
- A high **water table** that results in saturation at or near the surface, leading to anaerobic conditions developing in the top 50 cm of the soil.

It follows that the level of confidence associated with a specific area being considered as a wetland is proportionate to the number of confirmed indicators that positively correlate with wetland habitat. Not all indicators are always present within a specific biophysical and land use setting, while not all indicators are always reliable and/or useful under all conditions. The use of additional wetness indicators from different disciplines that are internationally applied therefore adds value and confidence in the identification and delineation of wetland habitats, especially in challenging environments (Illgner et al., 2009).

7. *Method Statement*

A Contractor shall submit a written method statement to the ECO for review and recommendations, covering these activities, which are identified (in this document and/or by the ECO), as being potential harmful to the environment. Method statements indicate how compliance with the Environmental Specification will be achieved. The approval of the method statements will be undertaken by both the ECO and Eskom.

The Method Statement shall state clearly:

- Timing of activities;
- Materials to be used;
- Equipment and staffing requirements;
- Proposed construction procedure designed to implement the relevant environmental specifications;
- The system to be implemented to ensure compliance with the above; and
- Other information deemed necessary by the ECO.

The method statement shall be submitted at least 14 working days prior to projected commencement of work on an activity, to allow the ECO time to review and provide recommendations on the method statement. The Contractor shall not commence work on that activity until such time as the method statement has been approved in writing by ECO, which shall be done within seven working days of receipt.

Due to changing circumstances, it may be necessary to modify method statements. In such cases, the proposed modifications must be indicated and agreed upon in writing between Eskom, the ECO and the Contractor.

The ECO and SS must retain records of any amendments and ensure that the most current version of any method statement is being used.

The following are typical Method Statement's which will be called for by the ECO:

- Location, layout and preparation of the construction camp(s) and materials storage areas;
- Location, layout and preparation of cement/concrete batching facilities including the methods employed for the mixing of concrete and the management of runoff water from such areas;
- Contaminated water management Program, including the containment of runoff and polluted water;
- Emergency construction Method Statements (including details of methods for fuel spills and clean up operations);
- Rehabilitation of disturbed areas and re-vegetation after construction is complete;
- Solid waste management and removal of waste from site; and
- Crossing of erosion trenches and drainage lines

The specific activities for which a method statement is required is indicated in the Table below, under general environmental specifications for the construction of the development by the

following asterisk (√). Please note that wherever the √ appears, the Contractor shall submit a method statement. Additional method statements may be required by the ECO during the course of works, depending on the nature of the construction works and the location thereof. The SS and ECO shall approve any deviation from a method statement. The examples of how method statement should be prepared by contractor for different activities are found in **Appendix 7**. All the activities listed under **Appendix 7** as an example for method statement, a contractor shall be required to prepare method statement for each of the activities to be subjected to approval by ECO.

8. *Generic Mitigation Measures*

These measures must be read with the original EMP complied during the Environmental Impact Assessment for which the Record of Decision has been issued (refer to **Appendix 5)**. The ECO must utilise this final CEMP in conjunction with the original Draft EMP.

Construction Phase	Environmental Issue	Mitigation Requirements
1. Appoint contractor, labourers etc	• All Eskom employees and contracted personnel must be made aware of the environmental sensitivities pertaining to this project.	1. The ECO must design documentation and have an induction lecture with all Eskom employees and contracted personnel before, and if required during the construction of the power lines. The ECO must ensure that all parties are aware of the required legislation as well as the requirements set out by the RoD, EIR, Draft EMP and CEMPR. All parties must sign documentation that indicates their acceptance and acknowledgement of these documents and their contents.
2. Access road selection, servitude clearance and construction	• Vehicles and machinery can impact on • natural vegetation.	1. Limit unnecessary driving and track 'creation'. 2. Make use of existing roads and servitudes. 3. Machinery or vehicles should not be driven through wetlands, pans, seep areas, streams or drainage lines, except if the required WUL has been undertaken for the affected watercourse. 4. No creation of roads along the servitude in pans, wetlands, seep areas, streams or drainage line, except if the required WUL has been undertaken for the affected watercourse. 5. Where sensitive areas have been identified bush clearance must be done by hand and not mechanically. 6. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site.
3. Delivery of material for pylon	• See above road access	1. Limit unnecessary driving and track 'creation'. 2. Make use of existing roads and servitudes. 3. Machinery or vehicles should not be driven through wetlands, pans, seep areas, streams or drainage lines, except if the required WUL has been undertaken

Construction Phase	Environmental Issue	Mitigation Requirements
		for the affected watercourse. 4. No creation of roads along the servitude in pans, wetlands, seep areas, streams or drainage line, except if the required WUL has been undertaken for the affected watercourse. 5. Where sensitive areas have been identified bush clearance must be done by hand and not mechanically. 6. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site.
4. Assembly of pylon	• Trampling of access areas	1. The assembly of the pylons must only take place within the cleared servitude area. These areas must be clearly demarcated if within the proximity of sensitive areas such as pans, dams, drainage lines and water channels as well as protected and marked trees. 2. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site.
5. Erection of pylon	• Trampling of access areas	1. The assembly of the pylons must only take place within the cleared servitude area. These areas must be clearly demarcated if within the proximity of sensitive areas such as pans, dams, drainage lines and water channels as well as protected and marked trees. 2. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site.
6. Conductor stringing	• Damage to sensitive areas and vegetation during unrolling of conductors and stringing • As soon as conductors are strung they pose a collision risk to birds	1. The unrolling of conductor and the stringing must only take place within the cleared servitude area. These areas must be clearly demarcated if within the proximity of sensitive areas such as pans, dams, drainage lines and water channels as well as protected and marked trees. 2. Anti collision marking devices must be installed as described below, as soon as conductors are strung.

Construction Phase	Environmental Issue	Mitigation Requirements
		3. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site.
7. Rehabilitation	• Damaged sensitive areas	1. All areas indicated as sensitive which has been damaged during the construction phase must be rehabilitated as per the approved rehabilitation method statement.
8. Construction camp and offices	• Clearing of natural areas or loss of sensitive areas and habitats	1. Use already established campsites that exist. In the event that the existing campsites cannot be utilised or are unavailable, the correct environmental permits and municipal by-laws must be considered for the establishment of new campsites. Confirmation must also be received from the municipality that the site is allowed.
9.Environmental incidents	• The contractor must take corrective action to mitigate an incident appropriate to the nature and scale of the incident and must also rehabilitate any residual environmental damage caused by the incident or by the mitigation measures themselves.	1. The ECO to be informed as soon as the incident has occurred and the contractor must implement corrective measures to be implemented.
Operational Phase	**Environmental Issue**	**Mitigation Requirements**
1. Maintenance of avifaunal mitigation aspects	• Bird interactions with the power lines may occur during the operational phase, such as collisions, nests, bird related faulting	1. Eskom's standard line monitoring will be sufficient to detect any problems and allow evaluation of the success of mitigation measures.

8.1. Ecology

Construction Phase	Environmental Issue	Mitigation Requirements
1. Access road selection, servitude clearance and construction	• Erosion can become a problem especially in wetland sensitive areas such as pans, drainage lines, channels. The mechanical action of construction machinery can cause indiscriminate vegetation destruction, soil trampling and compaction effects and localised erosion.	1. All sensitive areas must be demarcated before construction commences, this includes bush clearance. 2. Drainage lines and pans must be excluded from all heavy construction activities, unless these water resources have the required WUL. 3. Termitaria should be excluded from all heavy construction activities where possible. 4. No unnecessary off-road driving, keep to existing road infrastructure. 5. Regular monitoring of the construction process, especially in identified sensitive habitats should be carried out by the ECO all through the construction phase. 6.Construction should be undertaken, where possible, during the hours of 06H00 and 18H00 to minimise the effects of noise. 7. Construction during rutting (late winter) or during the calving/lambing season should be undertaken with minimal disturbance, as far as possible, to rutting and calving. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include speed limits, construction during specified hours, no poaching, avoidance of sensitive areas and non-mechanical cutting of vegetation. 8. Pylons listed with additional access roads or access problems must be subjected to the following criteria: a. Access to the pylon must be achieved from the nearest road access point: and b. Plant rescue operations are needed prior to access roads being constructed.

Construction Phase	Environmental Issue	Mitigation Requirements
		9. Zero tolerance for poaching. 10. No killing of any fauna or wildlife on site. 11. No wood is to be removed from site. 12. No attempt should ever be made to remove or kill any snakes. A local specialist should be called in the event of any encounters.
2. Foundation, excavation and casting of concrete	• Disruption of soil and seedbed, removal of woody component	1. Obtain permits for the removal or destruction of trees, which are protected in terms of the National Protected Tree List and the relevant Provincial Conservation Ordinance. Also obtain permits (picking and cutting permits) for the removal of indigenous vegetation. 2. Only woody species within the servitude should be removed. 3.Large trees which could qualify as champion trees should be avoided where possible. Large trees can be removed if the required permit has been obtained. 4. All protected trees must be avoided and left undisturbed if possible. Protected trees can be removed if the required permit has been obtained. 5. Top soil to be temporarily stockpiled/separated from subsoil and backfilled last to facilitate rehabilitation.
3. Delivery of material for pylon	• Impact on fauna due to noise and habitat destruction	1. Construction should be undertaken, where possible, during the hours of 06H00 and 18h00 to minimise the effects of noise. 2. Delivery during rutting (late winter) or during the calving/lambing season should be undertaken with minimal disturbance, as far as possible, to rutting and calving. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include speed limits, construction during specified hours, no poaching, avoidance of sensitive areas and non-mechanical cutting of vegetation. 3. Zero tolerance for poaching.

Construction Phase	Environmental Issue	Mitigation Requirements
		4. No killing of any fauna on site.
4.Construction and assembly of pylon	• Impact on fauna due to noise and habitat destruction	1. Construction should be undertaken, where possible, during the hours of 06H00 and 18h00 to minimise the effects of noise. 2. Delivery during rutting (late winter) or during the calving/lambing season should be undertaken with minimal disturbance, as far as possible, to rutting and calving. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include speed limits, construction during specified hours, no poaching, avoidance of sensitive areas and non-mechanical cutting of vegetation. 3. Zero tolerance for poaching. 4. No killing of any fauna on site. 5. No attempt should ever be made to remove or kill any snakes. A local specialist should be called in the event of any encounters
5. Erection of pylon	• Impact on fauna due to noise and habitat destruction	1. Construction should be undertaken, where possible, during the hours of 06H00 and 18h00 to minimise the effects of noise. 2. Delivery during rutting (late winter) or during the calving/lambing season should be undertaken with minimal disturbance, as far as possible, to rutting and calving. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include speed limits, construction during specified hours, no poaching, avoidance of sensitive areas and non-mechanical cutting of vegetation. 3. Zero tolerance for poaching. 4. No killing of any fauna or wildlife on site.
6. Conductor stringing	• Impact on fauna due to noise and habitat destruction	1. Obtain permits for the removal or destruction of trees, which are protected in terms of the National Protected Tree List and the relevant Provincial Conservation Ordinance. Also obtain permits (picking and cutting permits) for the

Construction Phase	Environmental Issue	Mitigation Requirements
		removal of indigenous vegetation. 2. Only woody species within the servitude should be removed. 3.Large trees which could qualify as champion trees should be avoided where possible. Large trees can be removed if the required permit has been obtained. 4. All marked trees must be avoided and left undisturbed if possible. Marked trees can be removed if the required permit has been obtained 5. Top soil to be temporarily stockpiled/separated from subsoil and backfilled last to facilitate rehabilitation. 6. Construction should be undertaken, where possible, during the hours of 06H00 and 18h00 to minimise the effects of noise. 7. Construction during rutting (late winter) or during the calving/lambing season should be undertaken with minimal disturbance, as far as possible, to rutting and calving. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include speed limits, construction during specified hours, avoidance of sensitive areas and non-mechanical cutting of vegetation. 8. No fires are to be made on site, no littering and no preparing of food. All waste to be removed daily from site. 9. Zero tolerance for poaching. 10. No killing of any fauna on site removal to be done by a specialist.
7. Rehabilitation	• Disturbed soil potentially colonised by weeds and invaders	1. Use stored topsoil for top soiling and the introduction of local, indigenous species. 2. Where sensitive areas have been damaged a rehabilitation plan must be

Construction Phase	Environmental Issue	Mitigation Requirements
		designed and implemented under the control of the ECO.
Operational Phase	**Environmental Issue**	**Mitigation Requirements**
1. Maintenance of ecological mitigation aspects	• Increase in weeds and invader species, erosion of the maintenance road	1. Pylons and servitudes should be monitored for the sprouting and establishment of declared weeds and invaders, especially in areas that have been disturbed during the construction phase.
2. Invasive alien plant species	• Introduction and spread of invasive alien plant species	1. Eradicate all declared alien invasive plant species through use of a specialist group, such as Working for Water, if possible. The eradication of alien invasive plant species should be undertaken at the discretion of Eskom.

8.2. Surface Water and Wetlands

Construction Phase	Environmental Issue	Mitigation Requirements
1. Concentration of surface flow patterns	• Changes to the hydrological regime (e.g. duration, frequency, timing, volume and/or velocity of flows) and hence spatial extent of watercourses and/or hydrological cues for aquatic biota.	1. Pylons that overlap with surface watercourses need to be moved to avoid negative impacts and legislative transgressions.
2. Hydrocarbons (e.g. diesel and petrol) polluting watercourses	• Oxygen depletion, bioaccumulation of toxic compounds in biota, disruption of the endocrine system in biota	1. A spill cleanup program must be designed before construction commences. 2. All parties must have an induction cause to ensure they understand and can implement the spill cleanup program. 3. All refuelling should occur outside of buffered watercourses and drainage lines
3. Loss of vegetation cover (e.g. through vegetation clearing) and erosion.	• Loss in watercourse habitat, change in vegetation cover, potential increase in turbidity and hence decrease in water quality.	1. All watercourse and sensitive habitats are to be demarcated and avoided if possible. It is important that buffered depressions (pans) and drainage lines be demarcated on site along the construction servitude, as well as in the surrounding landscape, as identified in this report, prior and during the construction phase of the project. However, watercourse can be disturbed if the required WUL from DWA is obtained.
4. Pylon construction, roads, stockpiles, fences and other infrastructure.	• Modifies watercourse habitat, change flow patterns and surface ponding.	1. Towers are not to be placed within the buffer zone of wetlands, pans, drainage lines, channels and erosion sensitive areas. The buffer zone will be as indicated by the wetland specialist, where required. 2. New access roads cannot be created through watercourses without a Water Use License. It is therefore important that existing roads be used for access through drainage lines to avoid the creation of new tracks or roads through drainage lines and pans.
5. Construction activities in wetlands and sensitive habitat (e.g. erection of pylons and the construction of temporary and permanent watercourse crossings).	• flow resistance, loss of habitat, and elevated erosion risk.	1. All water courses and sensitive habitats is to be demarcated and avoided if possible. 2. Rehabilitation of these areas to be done directly once construction and stringing has been completed in the area.

		3. A rehabilitation program for these areas, as indicated in this report, is to be developed and implemented.
Operational Phase	**Environmental Issue**	**Mitigation Requirements**
1. Maintenance of ecological mitigation aspects	• Management and maintenance of erosion area	1. Servitudes should be monitored for erosion and degradation of sensitive and wetland areas. Any areas indicating degradation from the baseline information in the EIR and this CEMPR or erosion areas must be rehabilitated.
2. Invasive alien plant species	• Introduction and spread of invasive alien plant species, especially in wetland zones	1. Eradicate all declared alien invasive plant species through use of a specialist group, such as Working for Water, if possible. The eradication of alien invasive plant species should be undertaken at the discretion of Eskom. Eradication of alien plants should occur in all areas disturbed by the construction activities.

8.3. Heritage

Construction Phase	Environmental Issue	Mitigation Requirements
1. Access roads to pylons	• Damage to artefact scatters on landscape (open sites)	1.Avoid graves on site as indicated and be on the lookout for other graves in the area. 2. Use existing infrastructure (tracks and farm roads) where possible. 3. New roads only to be constructed where unavoidable. These preferably to be surveyed. 4. Should any additional archaeological artefacts be exposed during excavation, work on the area where the artefacts were found, must cease immediately and the ECO must be notified as soon as possible.
2. Foundation, excavation and casting of concrete	• Buried archaeological material may be accidentally unearthed during the course of construction	1. Should any additional archaeological artefacts be exposed during excavation, work on the area where the artefacts were found, must cease immediately and the ECO must be notified as soon as possible. 2. If this occurs, all construction activities are to be halted immediately and SAHRA must be informed.
3. Delivery of material (pylons) & assembly of towers	• Damage to artefact scatters on landscape (open sites)	1. Use existing infrastructure (tracks and farm roads) where possible. 2. New roads only to be constructed where unavoidable. These preferably to be surveyed.
4. Erection of towers	• Construction teams on site collecting or damaging archaeological artefacts and sites • Damage to archaeological resources • Damage to significant archaeological sites	1. The environmental officer should ensure that this does not occur. 2. The developments should stay clear of drainage lines and rocky outcrops were possible. 3. Mitigation measures for significant sites would include detailed mapping and drawing, archaeological excavations and management.
5. Conductor stringing	• Damage to artefact scatters on landscape (open sites)	1. Use existing infrastructure (tracks and farm roads) where possible.

Construction Phase	Environmental Issue	Mitigation Requirements
	• Damage to archaeological resources • Damage to significant archaeological sites	2. New roads only to be constructed where unavoidable. 3. These preferably to be surveyed. 4. Should any additional archaeological artefacts be exposed during excavation, work on the area where the artefacts were found, must cease immediately and the ECO must be notified as soon as possible. 5. The developments should stay clear of drainage lines and rocky outcrops were possible. 6. Mitigation measures for significant sites would include detailed mapping and drawing, archaeological excavations and management.
6. Rehabilitation	• Surface scatters of artefacts will be moved	1. No mitigation required, as these are open sites and not stratified and sealed. Damage to artefacts will be most unlikely.
Operational Phase	**Environmental Issue**	**Mitigation Requirements**
1. Maintenance of heritage/archaeological mitigation aspect	• Looting of sites by maintenance teams	1. Access to cultural and heritage sensitive sites must be denied to maintenance teams. 2. No collection of artefacts on any site.

8.4. Avi-Fauna

Construction Phase	Environmental Issue	Mitigation Requirements
1. Access roads to pylons	• Damage to sensitive areas/habitats (e.g. dams and drainage lines).	1. Existing roads should be used during the construction phase and no access roads are allowed on or near any sensitive area/habitat 2. Drainage lines and dams must be excluded from all heavy construction activities.
2. Wetland areas	• Damage to sensitive areas/habitats	1. These areas should be avoided by all means and no construction personnel or vehicles may enter such areas. If avoidance of these areas are not possible, then the required Water Use Licence must be obtained for the DWA.
3. Construction camps (pylons)	• Damage to sensitive areas/habitats	1. Large trees and dead trees should preferably be retained. However, technical requirements for power line operation should be taken into consideration for large trees and dead trees under the power line. 2. Sensitive areas and habitats surrounding the construction camps should be barricaded, and stringing operations should not interfere with the integrity of these specimens.
4. Construction of pylons	• Damage to sensitive areas/habitats	1. When encountered, construction activities should cease until the nestlings have successfully fledged and left the area. 2. Construction during peak breeding months of June-July should be undertaken with minimal disturbance, as far as possible, to breeding. During this period, strict measure must be taken to ensure that mitigation measures that reduce disturbance are adhered to. Measures include construction during specified hours, no poaching and avoidance of sensitive and demarcated areas. 3. Fit metal bird guards/spikes on all bends (self supporting towers).
5. Conductor stringing	• Collisions and electrocutions of avifauna	1. Bird flight diverters should be installed on all pylons and conductors in sensitive areas/habitats.
Operational Phase	**Environmental Issue**	**Mitigation Requirements**

1. Monitoring of collisions	• bird mortalities due to power line collisions	1. It is strongly advised that the alignments be patrolled every month for at least a year (preferably two years) after commencement of the operational phase to quantify bird mortalities of species and numbers involved in collisions (counting of carcasses or signs of carcasses). 2. The data should be stored at the electrical infrastructure mortality incident register of EWT

9. General Environmental Specifications for the Construction and Operational Phase

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
• **Construction Initiation, Site Monitoring, Auditing and Reporting**			
❖ Eskom must appoint a suitably qualified ECO, prior to the commencement of construction, on a daily basis, monitor project compliance with the conditions of EA, environmental legislation and the recommendations of the revised EMP. Eskom to notify the authorities of the appointment.	PM	Once-off	
❖ The ECO / CECO shall remain employed until all rehabilitation measures are completed and the site is handed over to Eskom by the contractor for operation.	PM	Continuous	
❖ Fourteen (14) days written notice must be given to the Department prior to construction and prior to operation commencing. Commencement for the purposes of this condition includes site preparation. The notice must include the anticipated date on which the activity will commence.	PM	Prior to construction	
❖ Records and documents as indicated below must be kept on site in accordance with the standard Eskom site documentation policy. The documentation shall be signed by all parties to indicate acceptance and understanding. **The following documentation shall be kept on site:** 1. Access negotiations and physical access Program; 2. Complaints register; 3. Site daily dairy; 4. Records of all remediation / rehabilitation activities; 5. Copies of two-weekly reports to the Tx Services Environmental Advisor; 6. Copy of the Construction Environmental Management Program; 7. Environmental Incident Log; 8. ECO inspection audit reports; 9. The record of decision issued for the project. 10. Copies of all permits and licenses, and 11. HIRSA	Contractor CELO	Continuous	
❖ All records relating to monitoring and auditing must be made available for inspection to any relevant authority, or Eskom's Environmental Audit Team (Tx service Environmental	Contractor	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
Advisor), in respect of the development. Monthly reports of the ECO must be submitted to all relevant authorities.	CELO		
❖ DEA reserves the right to monitor and audit the development throughout its full life cycle to ensure compliance with the RoD as well as mitigation measures in the final EIR report and this CEMPR.	Contractor CELO	As necessary	
❖ No work shall commence until permission is granted from the Environmental Advisor from Transmission Services and acceptance of this EMP from DEAT has been obtained.	PM	Once-off	
❖ The landowners shall always be kept informed about any changes to the construction programme should they be involved.	ECO CELO	As necessary	
❖ All contact with landowner shall always be courteous at all times and a record of all conversations must be kept. ❖ The rights of landowners shall be respected at all times and all staff shall be sensitized to the fact that they are working on the private property. ❖ The contact numbers of the contractor's, ECO officer and the Eskom project manager shall be made available to the landowner as this will ensure open channels of communication and prompt response to queries and claims.	ECO CELO	As necessary	
Management objectives		**Measurable targets**	
▸ Maintain good relationship with Landowners. ▸ Maintain accurate records in order to prove compliance to the CEMPR and Eskom 's commitment to fulfil these requirements		▸ **No delays in the project due to Landowner interference** ▸ **Landowner signs final release form.**	
▪ **Environmental Induction Training**			
❖ An initial environmental awareness training session is required prior to any work commencing.	CELO	When new staff are contracted and before the start of construction and if required follow up after environmental impact incidence, outside of the CEMPR or EIA occurred	
❖ The contractor must ensure that all site staff are aware of, and understand the contents and condition of CEMPR, the key environmental issues and the consequences of non-	Contractor	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
compliance.	C ECO		
❖ The ECO will assist the contractor with the course content for the environmental awareness-training course, and the contractor shall communicate this information to his employees on the site, to any new employees coming onto the site, to his subcontractor, casual labourers and to the suppliers.	Contractor ECO	As necessary	
❖ All site staff must attend induction training on the CEMPR and records must be kept of all attendees. • Induction training must be undertaken in a language that is understood by site staff and must include the following topics: • Key potential or actual environmental construction related impacts on site related environmental precautions, which need to be taken to avoid or mitigate these impacts; • Key mitigation measures to be implemented during construction activities; • Emergency responses to issues on site; • Roles and responsibilities of all staff on site; and • The benefits of achieving conformance with, and consequences of transgressions of environmental specifications or requirements of the CEMPR.	Contractor ECO	As necessary	
▪ **Planning and Site Preparation**			
❖ All work must be undertaken in an environmentally sensitive manner.	Contractor	Continuous	√
❖ The Contractor must provide Eskom with the intended actions and programme for site establishment including the site layout, demarcation for hazardous materials storage, soil stockpiles, stormwater management infrastructure, access points for deliveries and services, and the position of site offices and ablutions.	Contractor	Once-off	√
❖ A precautionary approach must be adopted with any works deviating from specifications being approved by both the SS/CM and ECO.	Contractor ECO	Prior to construction	
❖ All site establishment components must be positioned to • Limit visual intrusion on neighbours; and • Minimise the area disturbed.	Contractor ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
	CECO		
❖ The landowner of the farm on which the campsite is proposed must be consulted and approval must be granted in writing prior to the establishment of the campsite.	Contractor ECO	Prior to construction	
❖ Municipal by-laws should be consulted and if required, approval for the contractors camp should be obtained from the local municipality.	Contractor ECO	Prior to construction	
❖ The contractor's camp shall be sited so as to cause the least amount of disturbance to adjacent landowners and fenced.	Contractor PM ECO CELO	Prior to construction	
❖ Operation of heavy machinery and construction equipment known to produce high noise levels shall be limited. Silent compressors must be used. Noise generated by employees shouting or whistling must also be limited.	Contractor	Continuous	
❖ Operations and construction activities must only occur during daylight hours 06H00 to 18H00. Any activities outside of these time frames must be approved by the local communities and land owners.	Contractor CELO	Continuous	
❖ Appropriate safety and precaution signs shall be erected prior to the start of construction at all access points to and from the site and all areas in close proximity to the public.	Contractor	Continuous	
❖ Installation of amenities, such as ablution facilities, shall take place prior to construction activities commencing.	Contractor	Prior to construction	
❖ The necessary ablution facilities with chemical toilets shall be provided at the construction camp. ❖ The Contractor shall supply a wastewater management system that will comply with legal requirements. The ECO and Eskom must approve this.	Contractor ECO	Prior to construction	√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
▪ **Demarcation of sensitive areas as determined by the specialist studies**			
❖ Sensitive areas shall be fenced and areas secured before construction can proceed.	Contractor ECO	Continuous	
❖ "No-go" areas shall be demarcated by fences steel standards and four strands of wire, and personnel and equipment shall not be permitted within these areas. Danger tape may not be used due to the risk of it being eaten by livestock.	Contractor CELO	Continuous	
▪ **Site Clearance**			
❖ Removal of any protected and unprotected vegetation shall be avoided until such time as soil stripping is required and similarly exposed surfaces must be re-vegetated or stabilized as soon as is practically possible.	Contractor CELO	Continuous	√
❖ All earthworks and excavations must be undertaken in such a manner so as to minimize the extent of any impacts caused by such activities.	Contractor ECO	Continuous	
❖ Disturbance of vegetation must be limited to areas of construction.	Contractor ECO	Continuous	
❖ The removal or picking of any protected or unprotected plants shall not be permitted and no horticultural specimens (even within the demarcated working area) shall be removed, damaged or tampered with unless allowed to do so through the undertaking of the of a vegetation removal permit.	Contractor CELO ECO	Continuous	
❖ Impacts on surrounding servitudes shall be avoided.	Contractor ECO	Continuous	
❖ The topsoil (i.e. the top 10-20 cm of soil, depending on the landscape position) must be stockpiled in a suitable place in order to be replaced on top of the exposed subsoil during rehabilitation.	Contractor CELO	As necessary	
❖ Soil stockpiles should not exceed 2 m in height and no traffic should be allowed on top of the stockpiles.	Contractor CELO	As necessary	
❖ Erosion damage to soil stockpiles should be prevented with soil conservation works such as deflection berms etc.	Contractor ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Topsoil stockpiles older than 6 months should be upgraded/enriched before use to ensure the effectiveness of the topsoil.	Contractor CELO	As necessary	
❖ After completion of construction, the site should be properly cleared of all excavated material (rocks, excess soil etc.) and construction rubble, waste, litter etc. and properly rehabilitated/re-vegetated.	Contractor ECO	On completion of construction	
▪ **Access to Site**			
❖ The site and associated infrastructure and equipment shall be off-limits to the public.	Contractor ECO	Continuous	
❖ All construction vehicles using public roads shall be in a roadworthy condition.	Contractor ECO	Continuous	
❖ Vehicle speeds shall not exceed 40km/h along un-tarred roads on private property or when traversing unconsolidated and non-vegetated areas. Where necessary, speed limits must be indicated on the roads.	Contractor	Continuous	
❖ Construction Vehicles shall not be maintained of serviced on site. Spills of any kind will be reported as an incident and rehabilitation implemented.	Contractor ECO CELO	Continuous	
❖ Access routes shall be planned in conjunction with the Contractor, Eskom and the Landowners. All agreements reached shall be documented in writing and no verbal agreements should be made.	Contractor Eskom	Prior to construction	√
❖ The EEO shall, together with a representative of the Contractor (EO) and the ECO, negotiate with each landowner the access route to reach the servitude and each tower position. The access agreement will be formalized in the form – "Access to Farms" and signed by the three parties (refer to **Appendix 9**). ❖ The Contractor will mark the proposed route and/or a competent representative will accompany the equipment when opening the access gate. ❖ Any deviation from the written agreement shall be closed and re-vegetated immediately.	EEO Contractor CEO ECO	As necessary	
❖ The Contractor shall signpost the access roads to the tower positions, immediately after access has been negotiated.	Contractor ECO	Once access has been	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
		negotiated.	
❖ Maximum use of both the existing servitudes and the existing roads shall be made. In circumstances where private roads must be used, the condition of the said roads must be recorded prior to use (e.g. photographed) and the condition thereof agreed by the landowner, the SS and the Contractor.	Contractor ECO	Prior to use of roads	
❖ All private roads used for access to the servitude shall be maintained by the Contractor and upon completion of the works, be left in the original condition.	Contractor	Continuous	√
❖ Existing water diversion berms are to be maintained during construction and upon completion be repaired as instructed by the SS.	Contractor CELO SS ECO	Continuous	√
• **Use of existing roads**			
❖ Maximum use of both the existing servitudes and the existing roads shall be made. In circumstances where private roads must be used, the condition of the said roads must be recorded prior to use and the condition thereof agreed by the landowner, the SS and the Contractor.	Contractor CELO ECO	Prior to use of Roads	
❖ All private roads used for access to the servitude shall be maintained by the Contractor and upon completion of the works, be left in the original condition.	Contractor	Continuous	
❖ Existing water diversion berms are to be maintained during construction and upon completion be repaired as instructed by the SS.	Contractor CELO SS ECO	Continuous	√
❖ Implement dust control measures, such as dampening with water or use of specific chemicals will be implemented where necessary, as indicated by Eskom.	Contractor CELO	Continuous	√
❖ Ensure traffic safety measures (e.g. traffic warning signs, flagmen) are erected to the satisfaction of Eskom. If traffic signs are erected on public roads, the local department of roads must be consulted.	Contractor CELO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
• **Construction of new roads**			
❖ Access shall not necessarily be continuous along the line, and the Contractor must therefore acquaint himself with the physical access restrictions such as rivers, roads, etc. along the line. As far as possible, access roads shall follow the contour in hilly areas, as opposed to winding down steep slopes.	Contractor ECO	Prior to construction	√
❖ Access is to be established by vehicles passing over the same track on natural ground. Multiple tracks are not permitted. Access roads shall only be constructed where necessary at watercourses (will require a WUL and may trigger a NEMA listed activity), on steep slopes or where boulders prohibit vehicular traffic. The ECO would need to determine if any other passing would be required in such cases.	Contractor ECO	Prior to construction	
❖ The Contractor must inform the SS and ECO before entering any of the following areas: **i)** Naturally wet areas: Pans, Drainage lines and Channels identified. **ii)** Any area after rain; and **iii)** Any environmentally sensitive area.	Contractor ECO	As necessary	
❖ If access is across running water, the Contractor must take precautions not to impede the natural flow of water. If instructed, the Contractor must stone pitch the crossing point. There shall be no pollution of water. Access across running water and the method of crossing shall be at the approval of the SS/ECO and the landowner. A WUL would be required for crossing the watercourse.	Contractor ECO SS	As necessary	√
❖ Where construction of a new road has been agreed, the road width shall be determined by need, such as equipment size, and shall be no wider than necessary. Construction of the road may trigger a NEMA listed activity.	Contractor ECO	Prior to construction	
❖ In areas with a side slope of over 4%, roads may be constructed to a 4% out slope. The road shall be constructed so that material will not be accumulated in one pile or piles, but distributed as evenly as possible. The material shall be side-cast as construction proceeds, and shall not be side-cast so as to make a barrier on the downhill side. The cut banks shall not overhang the road cut, and shall if necessary be trimmed back at an angle which would	Contractor ECO	Prior to construction	√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
ensure stability of the slope for the duration of the works. The sides or shoulders of roads shall not act as a canal			
❖ Water diversion berms shall be built immediately after the opening of the new access road. In addition, water outlets shall be made at intervals where berms are installed, and suitably stone pitched if instructed by the SS.	Contractor ECO SS	Upon completion of new roads	√
❖ No cutting and filling shall be allowed in areas of 4% side slope and less.	Contractor ECO	As necessary	
❖ Contours shall not be crossed by vehicles and equipment unless agreed upon, in writing, by the landowner and the SS.	Contractor CELO SS ECO	As necessary	
❖ Existing drainage systems shall not be blocked or altered in any way.	Contractor CELO	Continuous	
❖ No painting or marking of rocks or vegetation to identify locality or other information shall be allowed as it will disfigure the natural setting. Marking shall be done by steel stakes with tags, if required.	Contractor CELO	As necessary	
❖ The cutting down of bushes and trees to gain line of sight must be minimised as it will damage the visual character of the site.	Contractor CELO ECO	As necessary	
❖ Alignments of roads must be selected to minimize adjacent landform change such as cut and fill sections.	Contractor CELO	As necessary	√
❖ In cut sections strip the top layer of soil (minimum 100 mm), stockpile upslope of the cut area in windrows or in separate areas. This soil will include rock and vegetation.	Contractor CELO	As necessary	
❖ Shape cut and fill slopes to blend with adjacent landform by rounding off top cut and fill slopes, re-spreading soil and the placement of rocks packed or randomly placed to hold the replaced soil.	Contractor CELO/ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ No trees or shrubs shall be cut for survey purposes. Offset stations or points shall be set to get around the line of site obstacle.	Contractor/ CELO ECO	As necessary	
❖ The installation of concrete pipes and drifts, to facilitate access, shall be at the discretion of the ECO on site. All structures shall be properly designed and drawings shall be available for reference purposes. Where required, a Water Use Licence must be obtained from the DWA.	Contractor ECO	As necessary	
❖ Any dangerous crossings shall be marked as such and where necessary, speed limits shall be enforced.	Contractor ECO	Prior to construction	
• **Closure of roads**			
❖ Upon completion, only roads as indicated by the SS shall be closed.	Contractor SS ECO	Upon completion	√
❖ In areas where no cut or fill has been made, barriers of earth, rocks or other suitable material shall affect closure.	Contractor	Upon completion	
❖ In areas with 30% slope and less, the fill of the road shall be placed back into the roadway using equipment that does not work outside the road cut (e.g. back-hoe). ❖ In areas of greater that 30% slope, the equipment shall break the road shoulder down so that the slope nearly approximates to the original slope of the ground. ❖ The cut banks shall be pushed down into the road and a near normal side slope shall be re-established and re-vegetated.	Contractor ECO	Upon completion	
❖ Replacement of earth shall be at slopes less than the normal angle of repose for the soil type involved.	Contractor ECO	As necessary	
❖ A photographic record of the condition of existing access / private roads to be used shall be made prior to their use for comparison purposes at the end of the construction period.	Contractor CELO ECO	Prior to construction	
❖ The Contractor shall properly mark all access roads to show the direction of travel (where	Contractor	Prior to construction	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
appropriate). The tower numbers to which the road leads must also be indicated.	ECO		
❖ All roads that are not to be used shall be marked with a "**NO ENTRY** " sign.	Contractor ECO	As necessary	
❖ All roads closed will be rehabilitated to the surrounding natural areas, with six monthly follow-up to determine success of the rehabilitation as well as to determine if any erosion has occurred. The rehabilitation monitoring should continue as per the rehabilitation plan or until success of the road rehabilitation is assured.	ECO	After road closure and twice yearly	
• **Water diversion berms**			
❖ Develop a clean and dirty water separation plan prior to construction	Contractor ECO	Once-off	√
❖ All water diversion berms must be approved by the ECO and Eskom.	Eskom ECO	As necessary	√
❖ Where berms are installed on severe slopes the outflow shall be suitably stone pitched to prevent erosion from starting at the base of the berm.	Contractor ECO	As necessary	
❖ Water diversion berms shall be installed from the start of the contract.	Contractor ECO	As necessary	√
❖ Water diversion berms shall be spaced according to the ground slope and actual soil conditions, but no greater than the following: • Where the track has a slope of less than 2% : 50m apart • Where the track has a slope of 2% - 10% : 25m apart • Where the track has a slope of 10% - 15% : 20m apart • Where the track has a slope of more than 15% : 10m apart	Contractor CELO ECO	As necessary	
❖ Berms shall be suitably compacted to a minimum height of 350mm.	Contractor CELO ECO	As necessary	
❖ The breadth of the water diversion berm shall be 4m at the base, and extend beyond the width of the road for 2m on the outlet side to prevent water flowing back into the road. It shall be angled to a gradient of 1% to enable the water to drain off slowly.	Contractor CELO ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Berms shall be constructed so that a canal is formed at the upslope side.	Contractor CELO ECO	As necessary	
❖ Berms should be created not closer than 10m from identified wetland areas, so as to ensure that no construction material and/or waste flow into wetland systems.	Contractor CELO ECO	Continuous	
❖ Where the in-situ material is unsuitable for the construction of water diversion berms, alternative methods of construction must be investigated and proposed by the Contractor and submitted to the PM for acceptance.	Contractor ECO PM	As necessary	
❖ Where the in-situ material is unsuitable for the construction of water diversion berms, alternative methods of construction must be investigated and proposed by the Contractor and submitted to the PM for acceptance.	Contractor ECO PM	As necessary	
❖ Where necessary, a suitable mixture of grass seed shall be used to re-seed damaged areas. Badly damaged areas shall be fenced in to enhance rehabilitation. ❖ The grass mix should consist of a mix of *Cynodon dactylon*(50%); *Eragrostis curvula*(30%) and the remainder should consist of other pioneer grass species suitable for the area (20%). The introduction of forbs from the Fabaceae family is also recommended. A specialist should be consulted to determine the quantity per area (e.g. kg per ha) for re-seeding.	Contractor CELO ECO	As necessary	
❖ The above water diversion berms shall be maintained at all times and be repaired at the end of the contract.	Contractor CELO ECO	Upon completion	√
❖ No roads shall be constructed on slopes of more than 20% unless such roads follow contours. In such areas the Contractor shall only use existing roads or alternative methods of construction. The Contractor shall take such areas into consideration during the tender.	Contractor CELO ECO	As necessary	
❖ Surface runoff water from the road shall be managed by not allowing its concentration. ❖ Provide diversion berms across the road to deflect water to undisturbed vegetated areas as	Contractor CELO		

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
necessary. ❖ The frequency, form and size of the berms will depend on the slope and material available. ❖ Material from the excavation for the foundations shall be used to create the berms where possible. ❖ The excavation of material alongside the road for the berm formation shall not be allowed.	ECO	As necessary	
• **Borrow pits**			
❖ Borrow pits - The Contractor's decision as to the location of borrow pits shall be at the acceptance of the SS. The Contractor shall be responsible for the rehabilitation and re-vegetation of the borrow pits. It is the Contractor's responsibility to negotiate the royalties for the borrow pits with the landowner. The Contractor shall, in consultation with the ECO, determine whether an authorization is required under the Mineral and Petroleum Resources Act, 2002 for the opening or extension of borrow pits.	Contractor ECO SS	As necessary	√
• **Levelling at tower sites**			
❖ No levelling at tower sites shall be permitted unless approved by the SS.	Contractor SS	As necessary	
❖ The steep slopes formed by the cutbanks and respective fillings, when building the tower platforms, shall be trimmed back to an angle that ensures stability of the slope. When the ground is loose, berms are to be built on the top of the slope. 2m long logs spaced evenly must be pegged across the down-slope and the disturbed area must be re-vegetated.	Contractor CELO ECO	As necessary	
Management objectives		**Measurable targets**	
▸ Minimize damage to existing access roads. ▸ Minimize damage to environment due to construction of new access roads. ▸ Minimize loss of topsoil and erosion.		▸ **No claims from Landowners due to damage on access roads** ▸ **No visible erosion on access roads six months after completion of construction** ▸ **No loss of topsoil due to runoff water on access roads**	
• **Tower positions / construction**			
❖ Disturbance of topsoil on tower sites with severe slopes shall be minimised at all costs.	Contractor	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
	CELO ECO		
❖ The Contractor shall select a suitable level area free of rock and large bushes for tower assembly. ❖ Cut vegetation (grass and shrubs), if required. No clearing of vegetation or soil by grading machinery shall be undertaken.	Contractor CELO	As necessary	
❖ At any tower sites where conventional foundations are installed, the Contractor shall remove the topsoil separately and store it for later use during rehabilitation of such tower sites.	Contractor CELO ECO	As necessary	
❖ During backfilling operations, the Contractor shall ensure that topsoil is replaced at the surface.	Contractor CELO ECO	As necessary	
❖ Re-seeding shall be done on disturbed areas as directed by the ECO.	Contractor ECO	As necessary	
❖ Slopes in excess of 2% must be contoured and slopes in excess of 12% must be terraced. Other methods of rehabilitation of tower sites may also be used at the discretion of the Environmental Control Officer, e.g. stone pitching, logging, etc.	Contractor ECO	As necessary	
❖ Contour banks shall be spaced according to the slope on tower sites. The type of soil shall also be taken into consideration.	Contractor	As necessary	
❖ The creation of platforms for pylon on sloping landforms must be done in a manner that does not create scars that visually alter the landscape character.	Contractor ECO	As necessary	
❖ Cut and fill slopes shall be shaped to blend with the adjacent landform by rounding off the top edge of each.	Contractor CELO ECO	As necessary	
❖ Re-spread stockpiled soil and pack rock on slopes to protect surface against erosion. This shall occur in all instances at the tower foundations.	Contractor CELO ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ All waste concrete must be removed from the site. Surplus other material shall be used to create berms in the access road where required.	Contractor CELO	As necessary	
❖ Implement dust suppression measures e.g. regular watering, during the drilling of the foundations.	Contractor	As necessary	√
Management objectives		**Measurable targets**	
▸ Minimize damage to topsoil and environment at tower positions. ▸ Successful rehabilitation of all damaged areas. ▸ Prevention of erosion. ▸ Avoid dust generation		▸ **No loss of topsoil due to construction activities** ▸ **All disturbed areas successfully rehabilitated within three months of completion of the contract** ▸ **No visible erosion scars three months after completion of the contract**	
• **Gate installation and gate control**			
❖ Attention is drawn to the Fencing Act No. 31 of 1963, in particular with regard to the leaving open of gates and the dropping of fences for crossing purposes, climbing, and wilful damage or removal of fences.	Contractor ECO	Continuous	
❖ At points where the line crosses a fence in which there is no suitable gate within the extent of the line servitude, the Contractor must install a servitude gate as detailed in the relevant drawing, based on the SS's instruction and Landowner agreement. The Contractor shall mark these crossing points when the tower positions are being pegged.	Contractor ECO	Prior to tower construction	
❖ All vehicles shall pass through gates when crossing fences and the Contractor shall not be allowed to drop fences temporarily for the purpose of driving over them. No construction work shall be allowed to commence on any section of line, unless all gates in that section have been installed. Installation of gates in fences on major road reserves shall comply with the ordinances of the relevant Provincial Authority. No gates may be installed in fences along National Roads and railway lines.	Contractor ECO	Prior to Construction	
• **Installation of gates**			
❖ Care shall be taken that the gates shall be so erected that a gap of no more than 100mm to the ground is left below the gate (refer to **Appendix 8**).	Contractor ECO	As necessary	
❖ Where required, the Contractor shall replace rusted or damaged wire strands on either	Contractor	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
side of the gate with similar new wiring to prevent the movement of animals. The extent of the replacement shall be on the SS's instruction.	SS ECO		
• **Securing of gates**			
❖ The Contractor shall ensure that all servitude gates used are kept closed and locked at all times.	Contractor	As necessary	
❖ The Contractor shall provide locks for all servitude gates, and when responsibility of the transmission line is taken over by the Employer, these locks shall be recovered by the Contractor and replaced by locks supplied by the Employer. ❖ The Contractor shall also ensure that all existing farm gates used are kept closed. ❖ The Contractor shall provide the SS with keys for the above locks. No keys shall be provided to landowners to avoid conflict situations between neighbouring landowners.	Contractor ECO	As necessary	
Management objective		**Measurable targets**	
▸ Properly installed gates to allow access to the servitude. ▸ Minimize damage to fences. ▸ Limit access to Eskom and Contractor personnel with gate keys. ▸ Manage the movement of livestock.		▸ **No transgressions of the fencing act and therefore no litigation** ▸ **No damage to fences and subsequent complaints from Landowners** ▸ **All gates equipped with locks and kept locked at all times to limit access to key holders** ▸ **All fences properly tied off to the gate posts** ▸ **All gates properly and neatly installed according to specifications** ▸ **No complaints or claims due to open gates**	
• **Construction - within the servitude**			
❖ All foundation excavations shall be kept covered or barricaded in a manner acceptable to the SS to prevent injury to people and livestock. Four strand wire fencing shall be used to barricade excavations. Failure to maintain proper protection of excavations may result in the suspension of excavation work until proper protection has been restored.	Contractor CELO ECO	Continuous	
❖ Material removed from the excavation, which is not suitable or not required for backfill shall be spread evenly over or adjacent to the tower position. If in the opinion of the SS the excavated material is not suitable for spreading it shall be disposed of as directed by the SS.	Contractor CELO		√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Spreading of subsoil and topsoil will not be permitted. ❖ All excavated soil suitable for backfill will be returned to the excavation by backfilling with the subsoil first and the topsoil last.	SS ECO	Continuous	
❖ All other construction waste, nuts, bolts, surplus concrete, etc. shall be removed from the tower sites and servitude. Plastic, litter and conductor off cuts etc. shall be removed immediately from site to avoid injury to farm animals and wildlife.	Contractor CELO ECO	Continuous	
❖ No surplus concrete or concrete washing shall be allowed to be dumped on the servitude, at tower locations, anywhere on site or on neighbouring properties. ❖ No concrete washing is allowed in or near watercourses or wetlands.	Contractor CELO	Continuous	
• **Winch and tensioner stations**			
❖ The sitting of winch and tensioner stations shall be done in conjunction with the landowner, the contractor and the ECO. The ECO will determine whether any of the specialists that participated in the compilation of the CEMPR, will be required for the sitting of winch and tensioner stations. The ECO, landowner and the contractor shall identify sites in advance for approval of the specialists.	PM ECO CELO	As necessary	√
❖ Eskom-supplied material, especially conductor drums shall be protected on site. This normally means that a firebreak is bladed around a drum station in the veld. ❖ Once the stringing of conductor has been completed in a certain area, the winch- and tensioner stations shall be rehabilitated where necessary. These areas may not be left to rehabilitate on their own. ❖ If the area was badly damaged, re-seeding shall be done and fencing in of the area shall be considered and carried out.	Contractor ECO	As necessary	
❖ Should the Contractor want to leave guards on site, this shall be discussed and negotiated with the Landowner. Proper facilities must be provided to ensure sanitation standards are met. Mobile chemical toilets shall be installed at such sites where a large number of the workforce is concentrated.	Contractor PM ECO	Prior to construction	√
Management objective		**Measurable targets**	
▸ Minimize damage to vegetation. ▸ Minimize damage to topsoil.		▸ **No damage to vegetation outside the servitude** ▸ **No loss of topsoil**	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
▸ Successful rehabilitation of disturbed areas.		▸ **No visible erosion three months after completion of the contract** ▸ **All disturbed areas successfully rehabilitated three months after completion of the contract**	
• **Stringing Operations**			
❖ In order to prevent damages to farm land, the necessary scaffolding or protection measures must be installed.	Contractor ECO	Prior to stringing operations	√
❖ The disruption of services must be prevented. All structures supplying services such as telephone and smaller power lines, as well as main roads and farms, must therefore be safeguarded.	Contractor ECO	Continuous	
❖ All fences shall be protected against damage during stringing operations. ❖ "Rugby" posts to protect roads and telephone lines shall be made as necessary.	Contractor ECO	As necessary	
❖ The entire footprint of the stringing storage areas shall be monitored.	Contractor ECO	Continuous	
❖ The existing 8m servitude cleared during the tower construction process must be utilized for access of construction machinery required for stringing and bird flapper installation as well as for maintenance. ❖ In the case where the servitude has not been cleared, the ECO must be consulted to ensure sensitive areas such as rocky outcrops, wetland areas, ridges, etc. are not impacted on negatively.	Contractor ECO	Continuous	
❖ Visual degradation of areas where stringing machinery is operated shall be avoided as this may result in severely disturbed vegetation, as traction of machines tear up grass and vegetation. ❖ Disturbed areas shall be repaired as soon as a "span" of 3 to 6 km of the stringing operation is complete. This to be done by the contractor.	Contractor ECO	After every 3 to 6km of stringing is complete	
❖ Should the Contractor want to leave guards on site, this shall be discussed and negotiated with the Landowner. Proper facilities must be provided to ensure sanitation standards are met. Mobile chemical toilets shall be installed at such sites where a large number of the workforce is concentrated.	Contractor PM ECO	Prior to construction	√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Substantial temporary conductor supports shall be used, or equally effective measures taken, to prevent encroachment of statutory clearances, or other clearance requirements stated in the permits, between the conductor being strung and other power or communication lines, roads or railways being crossed. ❖ Suitable structures under each phase shall be erected to protect all fences from conductor damage during stringing. Temporary changes in poles, fixtures or conductors of lines being crossed shall only be carried out if accepted by the SS. The Contractor shall indicate any changes considered necessary and the SS will co-ordinate any changes with the owner of the service.	Contractor ECO		√
Management objective		**Measurable targets**	
▸ Prevent damage to expensive structures such as windmills, farmhouse etc. ▸ Prevent disruption of services.		▸ **No claims emanating from damage to supporting structures** ▸ **No complaints or claims arising from disruption of services**	
• **Ablution Facilities**			
❖ Abluting anywhere other than in the toilets shall not be permitted. Under no circumstances shall use of the veld be permitted.	Contractor ECO	Continuous	
❖ Toilets must be secured to prevent them from blowing over.	Contractor ECO	Continuous	
❖ A registered service provider shall be appointed and shall empty toilets regularly.	Contractor ECO	Prior to construction	
❖ Chemical and waste from toilet cleaning operations should not be spilled on the ground at anytime.	Contractor CELO ECO	Continuous	
❖ Ablution facilities must be maintained in a hygienic state and serviced regularly. Toilet paper will be provided. Toilet paper is also a source of littering, and the Contractor shall be forced to clean up any litter.	Contractor CELO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
• **Water Management**			
❖ Strict control shall be maintained and the ECO shall regularly inspect the abstraction point and methods used. The connection must be kept in neat working order without leaks or spillages. The ECO should ensure that the a WUL and/or registration has been undertaken for the abstraction of water from the abstraction point (borehole, river etc.)	Contractor CELO ECO	Continuous	
❖ Storm water must be effectively captured and led well away from structures.	Contractor CELO ECO	As necessary	
❖ No ponding of surface water shall occur adjacent to foundations both during and after construction.	Contractor CELO ECO	Continuous	
❖ No mechanical plant or equipment shall be washed on site, unless in an area equipped for such a purpose.	Contractor CELO ECO	Continuous	
❖ Pollutants such as cement, concrete, lime, chemicals and fuels shall not be discharged into any water source or wetland.	Contractor CELO ECO	Continuous	
❖ Water from ablution facilities and the Contractor‘s camp shall be discharged into a conservancy/septic tank for removal from the site.	Contractor CELO ECO	Continuous	
❖ The dust control measures, such as watering, chemical stabilisation and the reduction of surface wind speed through the use of windbreaks and source enclosures must be put in place during construction activities. Emission control efficiencies of 50% can readily be achieved through the implementation of effective watering programme for unpaved roads and material handling points.	Contractor CELO	Continuous	
• **Air Quality**			
❖ The production of dust from areas cleared of vegetation and soil stockpiles shall be avoided.	Contractor CELO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
	ECO		
❖ Stockpiles shall be located in areas where they are exposed to the minimum erosive effects of wind.	Contractor CELO ECO	As necessary	
❖ Excavation, handling and transport of erodable materials must be avoided under high wind conditions.	Contractor CELO ECO	As necessary	
❖ Dust-suppression measures must be used on stockpiles and exposed areas.	Contractor CELO	As necessary	
❖ All machinery and equipment to be used on site shall be properly serviced and in good working order to avoid excessive smoke and exhaust fumes.	Contractor	Continuous	
• **Erosion and Sedimentation Control**			
❖ Areas susceptible to erosion shall be protected by installing temporary and permanent drainage works.	Contractor CELO ECO	As necessary	√
❖ Cleared areas must be stabilized and managed to prevent and control erosion. The method of stabilization shall be determined in consultation with the SS.	Contractor CELO SS ECO	As necessary	
❖ Measures must be implemented to protect the construction site from erosion by stormwater.	Contractor ECO	Continuous	
❖ Vehicular traffic shall not be allowed in permanently wet areas.	Contractor ECO	Continuous	
❖ No damage shall be caused to wet areas.	Contractor ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Where necessary, alternative methods of construction shall be used to avoid damage to wet areas.	Contractor ECO	Continuous	
❖ Any work or access near or in a permanent drainage system may have implications in terms of the National Water Act, 1998 (Act No. 36 of 1998), and therefore may well require the application of a Water Use License. Therefore, the contractor must in consultation with the ECO and a representative of Eskom, assess all areas along the alignment well in advance in order to ensure the relevant Water Use License is applied for where required.	Contractor ECO	As necessary	
Management objectives		**Measurable targets**	
▸ Avoid wet areas to prevent damage. ▸ Avoid the requirement for additional environmental authorisations as a result of working in wetlands.		▸ **No damage to wet areas** ▸ **No complaints from landowners and litigation**	
• **River crossings**			
❖ If a river crossing or stream crossing must be created, a Water Use License must be obtained from the Department of Water Affairs and Forestry before the crossing is constructed.	Contractor CELO ECO	As necessary	
❖ Stream and river crossings shall be avoided as far as practicable as they may cause erosion and downstream siltation.	Contractor CELO ECO	As necessary	
❖ Existing drifts and bridges may be used at the consent of the landowner. However, such structures must be examined for strength and durability before being used.	Contractor ECO	As necessary	
❖ In the event of a need for new bridges and drifts to be constructed, approval must be sought from Eskom and the Landowner and this must be done in consultation with the ECO. ❖ An environmental authorization will be required under the National Environmental Management Act, 1998 (Act No.107 of 1998).	Contractor ECO	As necessary	√
❖ All structures constructed for river access purposes shall be properly designed and drawings of such structures shall be available for record purposes.	Contractor CELO ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
Management objectives		**Measurable targets**	
▸ Minimize damage to river and stream embankments. ▸ Minimize erosion of embankments and subsequent siltation of rivers, streams and dams.		▸ **No new access roads through river and stream banks** ▸ **No visible erosion scars on embankments once construction is completed**	
• **Erosion and Donga Crossings**			
❖ Where necessary, crossing of dongas and eroded areas shall be thoroughly planned.	Contractor CELO ECO	As necessary	
❖ Water diversion berms shall be installed at donga crossings to ensure water runoff from the power line servitude does not run into dongas and cause or exacerbate an erosion hazard.	Contractor CELO ECO	As necessary	
❖ Suitable erosion containment structures shall be constructed at donga crossings where required and viable.	Contractor CELO ECO	As necessary	
❖ All structures shall be properly designed and drawings shall be available for reference purposes.		As necessary	
❖ No unplanned / improperly planned cutting of donga embankments are allowed as this leads to further erosion and degradation of the environment.	Contractor CELO ECO	Continuous	
❖ In general, soil disturbance should be kept to a minimum. The disturbance of land contour banks or other erosion control structures shall be avoided.	Contractor ECO	As necessary	
Management objectives		**Measurable targets**	
▸ Minimize erosion damage on donga crossings. ▸ Minimize impeding the natural flow of water. ▸ Minimize initiation of erosion through donga embankments.		▸ **No disturbance to donga embankments** ▸ **No erosion visible on donga embankments due to construction activities** ▸ **No interference with the natural flow of water**	
• **Landscaping and Re-vegetation**			

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ General disturbance of land surface will degrade by erosion. Permanent visual scarring will result. ❖ The Contractor shall rip all areas compacted by machinery, smooth off and integrate disturbed areas visually into surrounding landform using spoil rock and stockpiled top layer of soil. ❖ Where practically possible, the Contractor shall temporally fence the area (with four strands of wire) until vegetation has been re-established to ensure that game and livestock do not have access to areas that are on slopes and on erodible soils. The fencing aspect shall be agreed with the landowner prior to erection. Consultation with landowner should be undertaken to determine the preferred rehabilitation strategy.	Contractor ECO	As necessary	
❖ The removal or picking of any protected or unprotected indigenous plants is not permitted without the applicable permits or outside the servitude.	Contractor ECO	Continuous	
❖ Areas where soils have been compacted shall be rehabilitated once construction is completed.	Contractor ECO	As necessary	
❖ All declared aliens shall be identified and managed in accordance with the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983).	Contractor ECO	Continuous	
❖ The establishment and re-growth of alien vegetation must be controlled after the removal of grass.	Contractor ECO	As necessary	
❖ No damage shall be caused to any farms unless both the landowner and the SS, prior to the work commencing agree upon the extent of the intended damage. ❖ While the presence of crops was not apparent at the time of the site visit, farms may change to crops at a later stage, either during construction or operation.	Contractor ECO	As necessary	
• **Landscaping, stabilisation and soil stockpiling**			
❖ Exposed slopes and/or destabilized areas should be landscaped to blend in with the surrounding area.	Contractor ECO	As necessary	
❖ In exposed areas with slopes steeper than 1:3, re-vegetation should not be used as the primary means of stabilization. Such slopes should rather be stabilized by suitable structures agreed to by the ECO which can be enhanced by re-vegetation to facilitate blending with the environment.	Contractor ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
			√
❖ Erosion of rehabilitated areas shall be prevented.	Contractor CELO ECO	As necessary	
• **Re-vegetation**			
❖ Exposed areas with slopes less than 1:3 should be rehabilitated with a grass mix that blends in with the surrounding vegetation. ❖ The grass mix should consist of a mix of *Cynodon dactylon*(50%); *Eragrostis curvula*(30%) and the remainder should consist of other pioneer grass species suitable for the area (20%). The introduction of forbs from the Fabaceae family is also recommended. A specialist should be consulted to determine the quantity per area (e.g. kg per ha) for re-seeding.	Contractor CELO ECO	As necessary	
❖ In the local situation the areas that are re-vegetated will stand out amongst the grasses in the area. ❖ Therefore, the re-vegetated areas should be properly fenced, where practically possible, until the grass sward is well established to protect it from overgrazing and trampling by livestock and game. ❖ The fertiliser should be applied conservatively, just enough in order to help the grasses to establish. ❖ Re-vegetation should take place within the rainy season and water of a reasonable quality will have to be supplied as needed until the grasses reach the seed-filling stage.	Contractor CELO ECO	As necessary	
❖ The re-vegetated areas should be temporarily fenced, with agreement of the landowner (with four strands of wire) to prevent damage by grazing animals. Consultation with landowner should be undertaken to determine the preferred rehabilitation strategy.	Contractor CELO ECO	As necessary	
❖ Re-vegetated areas should be monitored every 4 months for the first 12 months and once a year thereafter for the maintenance period of two years.	Contractor	Continuous	
❖ Re-vegetated areas showing inadequate surface coverage (less than 30% coverage, 8 months after re-vegetation) should be prepared and re-vegetated from scratch.	Contractor CELO ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Damage to re-vegetated areas should be repaired promptly.	Contractor ECO	As necessary	
❖ Exotic weeds and invaders that might establish on the re-vegetated areas should be controlled to allow the grasses to properly establish.	Contractor ECO	As necessary	
❖ Weed control methods should be confirmed with the PM to prevent any undesirable secondary impacts.	Contractor ECO	As necessary	
Management objectives		**Measurable targets**	
▸ Minimize damage to vegetation. ▸ Keep servitude as natural looking as possible. ▸ Minimize interference by vegetation to pylon and power lines. ▸ Minimize possibility of erosion due to removal of vegetation. ▸ Minimize removal of plant material on river and stream embankments. ▸ Eradication of alien invader species. ▸ Minimize scarring of the soil surface and land features. ▸ Minimize disturbance and loss of topsoil Rehabilitate all disturbed areas along the servitude.		▸ **No vegetation interfering with structures as per statutory safety requirements, upon completion of the contract** ▸ **No de-stumping of vegetation on river and stream embankments** ▸ **All alien invaders removed** ▸ **No visible herbicide damage to the vegetation along the servitude one year after completion of the contract due to incorrect herbicide use** ▸ **No litigation due to unauthorized removal of vegetation** ▸ **No visible erosion scars once construction is completed** ▸ **No claims regarding damage leading to litigation** ▸ **All damaged areas successfully rehabilitated one year after completion**	
• **Fauna Protection**			
❖ It is illegal to interfere with any wildlife or other fauna. All fauna occurring on-site shall be protected. Hunting and snaring must not be permitted.	Contractor ECO	Continuous	
❖ Tower excavations and construction camps must be fenced off to prevent wildlife from entering the sites.	Contractor CELO ECO	Prior to construction	
❖ Should any new sites or nests be found, during the construction process, that was not known or have been noted before, each site shall be assessed for merit and the necessary	Contractor CELO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
precautions be taken to ensure the least disturbance.	ECO		
• **Archaeology / Heritage**			
❖ If any heritage/archaeological sites/objects are discovered during the construction or operational processes, the ECO or other relevant person on site should note the location of and ensure that such sites/objects are not disturbed/destroyed and contact the Eskom Environmental Advisor and South African Heritage Resources Association (SAHRA).	Contractor ECO	As necessary	
❖ In the event that any heritage/archaeological sites are discovered during construction they shall be demarcated with wire fencing with a radius of at least 30 m. Construction teams shall not be allowed access to these sites. ❖ No construction camps shall be allowed within 50 m of any known archaeological sites. ❖ The collection of heritage/archaeological objects/artefacts at identified sites shall not be allowed.	Contractor ECO	As necessary	√
❖ Any destruction of a heritage site can only be allowed once a permit is obtained from SAHRA and the site has been mapped and noted. ❖ Permits shall be obtained from the SAHRA should the proposed line affect any heritage sites.	Contractor ECO	As necessary	
Management objectives		**Measurable targets**	
▸ The preservation and appropriate management of new archaeological finds, should these be discovered during construction.		▸ **No destruction of or damage to new heritage sites**	
• **Infrastructure**			
❖ Where pipelines are found along the route, the depth of the pipes under the surface shall be determined to ensure that proper protection is afforded to such structures. ❖ All pipelines shall be clearly marked and protected. ❖ Any damage to pipe lines shall be repaired immediately and the cost will be for the contractors account.	Contractor ECO	As necessary	
❖ It is probable that the use of private roads for construction purposes would lead to damage due to heavy equipment and frequent use. The Contractor shall be responsible to repair roads if damaged. Photographs must be taken of the road prior and post use to prove the extent of the damage caused by construction activities. ❖ All existing private access roads used for construction purposes, shall be maintained at all	Contractor ECO	As necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
times. This will ensure that the local people have free access to and from their properties.			
❖ Some Landowners use electrically driven farming activities such as irrigation. Power cuts to facilitate construction and especially stringing shall therefore be carefully planned. ❖ Disruptions shall be kept to a minimum. They should be well advertised and communicated to the Landowners prior to it the power being cut. ❖ Care must be taken not to damage irrigation equipment, lines, channels and crops, as this could lead to major claims being instituted against Eskom and the Contractor. ❖ The position of all pipelines and irrigation lines must be obtained from the Landowners and be shown on the access plans.	Contractor CELO ECO	Prior to power cuts	
Management objectives		**Measurable targets**	
▸ The control of temporary or permanent damage to landowner's equipment and installations. ▸ Control of interference with the normal operation of landowner's equipment and installations. ▸ Securing of the safe use of infrastructure, landowner's equipment and installations.		▸ **No unplanned disruptions of services** ▸ **No damage to any plant or installations** ▸ **No complaints from authorities or Landowners regarding disruption of services** ▸ **No litigation due to losses of landowner's equipment, installations and crops**	
• **Materials Use, Handling, Storage and Transport (Cement, Fuel [Petrol and Diesel] and Oils)**			
❖ Procedures for material handling shall be discussed with and approved by the ECO.	Contractor ECO	Once-off	
❖ Relevant national, regional and local legislation regarding the transport, use and disposal of hazardous waste must be adhered to at all times.	Contractor ECO	Continuous	
❖ Hazardous waste generated during construction must be classified in terms of the Hazardous Substances Act.	ECO Contractor	As necessary	
❖ A permit must be obtained if the storage, handling, transporting and disposal of any hazardous waste are within the thresholds stated in the NEMWA. The permit will have specific conditions that must be adhered to in accordance with the hazardous waste class.	ECO Contractor	As necessary	
❖ Hazardous waste must be disposed of at either a licensed H:h or H:H waste disposal site depending on the class of hazardous waste being disposed .	ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
	Contractor		
❖ An emergency procedure to deal with accidents and incidents (e.g. spills) arising from hazardous substances shall be compiled and implemented.	Contractor ECO	Once-off	√
❖ All mechanical equipment used in construction activities shall be clean and free of oil, petrol, and diesel leaks.	Contractor ECO	Continuous	
❖ Spills of hazardous substances, in excess of one litre shall be reported to the ECO immediately and the appointed Tx Services Environmental Advisor (Tx Key Performance Indicator requirement).	Contractor ECO	As necessary	
❖ A register for spills and incidents involving hazardous materials shall be maintained. ❖ Soil or yard stone, which has been contaminated, shall be removed and disposed of at an approved waste disposal site. ❖ Alternatively, contaminated soil can be treated on site through bioremediation. Should a person experienced in bioremediation not be available on site, a specialist contractor shall be used. ❖ Such spills must be cleaned and remediated to the satisfaction of the ECO. ❖ A method statement is required from the Contractor that details the procedure to be followed in dealing with leaks or spills.	Contractor CELO ECO	As necessary	√
❖ A complete emergency spill kit shall be available on site at all times. The Contractor must also ensure that relevant staff members are trained to use the emergency spill kit and on the manner in which to deal will spills of hazardous substances (oils, diesel or petrol).	Contractor ECO	Continuous	
❖ A concrete platform with a bund wall must be allocated to accommodate fuel, oil paint, bitumen, herbicide and insecticides to guard against infiltration of hazardous substances into the soil. Fuel tanks must be bunded to hold 110% of the contents of the tank. The tanks shall be housed in a roofed area so that no water will collect within the bund wall. It is recommended that the most preferable site for these activities may be at one of the existing substations.	Contractor ECO	Once-off	√
❖ All staff handling hazardous waste must be trained accordingly.	Contractor ECO	Once-off	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ All necessary approvals with respect to fuel storage and dispensing shall be obtained from the appropriate authorities.	Contractor ECO	As necessary	
❖ Areas of fuels storage and other flammable materials shall comply with standard fire safety regulations and will require the approval of the SS/CM and the local Fire Prevention Officer.	Contractor SS ECO	As necessary	
❖ No smoking shall be allowed in the vicinity of the stores and adequate fire-fighting equipment shall be accessible at fuel storage area and areas in the vicinity of the storage area. "**No smoking**" and "**Danger**" signs shall be erected at hazardous substance storage areas.	Contractor	Continuous	
❖ All empty and externally dirty tanks shall be sealed and stored on an area where the ground has been protected.	Contractor	Continuous	
• **Batching Plants**			
❖ Concrete shall not be mixed directly on the ground.	Contractor ECO	Continuous	
❖ The concrete batching activity shall be located in an area of low environmental sensitivity. The site for the batch plant shall be indicated on the site layout program.	Contractor ECO	Once-off	√
❖ All wastewater resulting from batching of concrete shall be disposed of via the wastewater management system.	Contractor	Continuous	
❖ Suitable screening and containment must be in place to prevent windblown contamination from cement storage, mixing, loading and batching operations.	Contractor	Continuous	
❖ The Contractor shall be responsible for negotiating the site of his batching plant (if required) and the conditions under it may be established, with the landowner. The Contractor shall be responsible for the proper management of the batching plant.	Contractor CELO	As necessary	√
❖ The use of local water for concrete must first be negotiated with the landowner and the appropriate authorities. Such water is to be analyzed and accepted by the PM before use.	Contractor PM ECO	Prior to batching	
❖ Upon completion of works, the ground of the batching plant area shall be rehabilitated and the site cleaned and left as it was found and to the satisfaction of the SS and landowner.	Contractor ECO	Upon completion	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
• **Servicing of vehicles**			
❖ Servicing of vehicles in the veld is strictly prohibited.	Contractor ECO	Continuous	
❖ Only emergency repairs shall be allowed on site and a drip tray shall be used to prevent oil spills.	Contractor ECO	As necessary	
❖ All vehicles shall be serviced in the designated area.	Contractor ECO	As necessary	
❖ In the event of a breakdown in the veld, any oil spills shall be cleaned up and the following shall apply: ❖ All contaminated soil shall be removed and be placed in containers. ❖ Contaminated soil can be taken to one central point at the Contractors campsite where bioremediation can be done. ❖ Smaller spills can be treated on site. ❖ A specialist Contractor shall be used for the bio-remediation of contaminated soil. ❖ The area around the fuel storage drum at the Contractor's campsite shall also be re-mediated upon completion of the contract ❖ All oil spills must be reported to the ECO and SS.	Contractor ECO	As necessary	**√**
Management objective		**Measurable targets**	
▸ Prevention of pollution of the environment. ▸ Minimize chances of transgression of the legislation controlling pollution.		▸ **No pollution of the environment** ▸ **No litigation due to transgression of pollution control acts** ▸ **No complaints from Landowners**	
• **Fire Prevention**			
❖ The Contractor must document a fire reduction management plan. The plan will identify sources of fire hazards, and appropriate management measures to reduce the identified risk. The relevant authority will be notified of such potential fire hazards.	Contractor CELO	As necessary	
❖ No fires shall be allowed on site under any circumstance even for that of cooking in the manner indicated below (The Forest Act, No 122 of 1984).	Contractor CELO ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ In terms of the Atmospheric Pollution Prevention Act (APPA),burning is not permitted for waste disposal.	Contractor CELO ECO	Continuous	
❖ Accidental fires in natural grassland should be prevented through proper sensitization of the contractors and their workers towards the associated risks, dangers and damage of property.	Contractor ECO	Continuous	
❖ The Contractor shall have fire-fighting equipment, for each construction team readily available on site, especially during the winter months. The fire fighting equipment shall be regularly checked and shall be approved by the ECO / Safety and Health Officer on site.	Contractor ECO	Continuous	
❖ An emergency preparedness Program should be in place in order to fight accidental veld fires, should they occur. The adjacent land owners/users/managers should also be informed and/or involved.	Contractor ECO	Continuous	**√**
❖ The use of open fires for cooking of food etc. by construction and maintenance personnel should be strictly prohibited. Temporary enclosed areas (windshield) for food preparation should be provided specifically for this reason. The Contractor shall supply alternative cooking facilities.	Contractor	Continuous	
❖ Use of branches of trees and shrubs for fire making purposes must be strictly prohibited. Penalties for the unnecessary removal and/or destruction of any plant for any reason (firewood, medicinal use, collector's value etc) should be agreed upon beforehand and be included in the contract.	Contractor ECO	Prior to construction	
Management objectives		**Measurable targets**	
▸ Minimize risk of veld fires. ▸ Minimize damage to grazing. ▸ Prevent runaway fires.		▸ **No veld fires started by the Contractor's work force** ▸ **No claims from Landowners for damages due to veld fires** ▸ **No litigation**	
• **Emergency Procedures**			
❖ Emergency procedures shall be set up prior to the commencement of work. It must include but not be limited to fires, spills, and contamination of ground and surface water, accidents to employees and damage to services.	Contractor ECO	Once-off	**√**

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Key staff shall be trained in emergency response and all staff made aware of the emergency procedures.	Contractor ECO	As necessary	
❖ A register of all incidents, accidents, etc. must be maintained, which includes the action taken after the event has occurred. The ECO must be informed of the event.	Contractor CELO ECO	Continuous	
❖ The site and all operations shall comply with all National Health and Safety Standards and other relevant national, regional and local regulations. Eskom shall appoint a Health and Safety (H&S) Officer.	Contractor ECO	Continuous	
❖ The Contractor is liable for any expenses incurred by any organizations called to assist with fighting fires and any cost relating to the rehabilitation of burnt areas/and/or properties and persons should the fire be the cause of the Contractor's activities on site.	Contractor ECO	As necessary	
❖ All equipment shall be user safe and vehicles shall be roadworthy.	Contractor ECO	Continuous	
• **Health and safety**			
❖ A medical and safety induction must be prepared and must be undertaken prior to entering the site.	Contractor	As necessary	
❖ No site staff other than security personnel shall be housed on site.	Contractor ECO	Continuous	
❖ Potable water and washing facilities shall be made available for all personnel.	Contractor ECO	Continuous	
❖ Public access to the construction site shall be prevented at all times.	Contractor ECO	Continuous	
❖ Portable toilets shall be provided on site. The toilets must be cleaned regularly and the number of toilets shall be based on a minimum ratio of 15 people per toilet.	Contractor ECO	Continuous	
❖ Designated eating areas shall be allocated.	Contractor ECO	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Staff must wear the necessary personal protective equipment.	Contractor ECO	Continuous	
❖ Daily clean up of working areas will take place and safety notices or tape placed in areas of danger	Contractor ECO	Continuous	
▪ **Prevention of disease**			
❖ All the necessary precautions against the spreading of disease, especially in farms with livestock and game, shall be taken.	Contractor ECO	Continuous	√
Management objective		**Measurable target**	
▸ Prevent litigation due to infestation of livestock or game.		▸ **No complaints and claims from Landowners** ▸ **No litigation**	
• **Waste management**			
❖ An on-site waste management program to prevent the spread of refuse within and beyond the site shall be developed and implemented.	Contractor SS ECO	Once-off	√
❖ Sufficient bins with secure lids for waste disposal purposes shall be provided. These bins must be emptied regularly. The waste must be disposed at a registered/ permitted waste disposal site.	Contractor ECO	Continuous	
❖ A daily clean-up of the site must be maintained.	Contractor ECO	Continuous	
❖ No waste shall be buried or burned on site. All solid waste collected on site shall be disposed of offsite at an appropriate permitted landfill site. Where a permitted landfill site is not available in proximity to the construction site, the Contractor must provide a method statement with regard to waste management.	Contractor ECO	Continuous	√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Covered waste bins shall be supplied by the contractor.	Contractor ECO	As necessary	
❖ The site office and materials storage area must be kept neat and tidy and free of litter.	Contractor ECO	Continuous	
❖ Littering by the employees of the Contractor shall not be allowed.	Contractor ECO	Continuous	
❖ The Contractor shall collect all litter and dispose thereof in terms of the approved waste management Program.	Contractor ECO	Continuous	
❖ Refuse generated from the campsite, construction area, storage area or any other area shall be collected and placed in a skip on a daily basis.	Contractor ECO	Continuous	
❖ A litter patrol around the construction camp and work areas as well as along the alignment are to take place every day to collect any litter that may have been strewn around.	Contractor ECO	Continuous	
❖ A skip, with a cover, must be used to contain refuse from campsite bins, rubble and other construction material.	Contractor ECO	Continuous	
❖ Once full and on a regular basis, the contents of the skip must be disposed of at a permitted landfill site.	Contractor ECO	Continuous	
❖ No hazardous material, e.g. oil or diesel fuel shall be disposed of in any unregistered waste site.	Contractor ECO	Continuous	
❖ Material that may harm humans or animals must not be left on site.	Contractor ECO	Continuous	
❖ Any broken insulators shall be removed and all shards picked up. Broken, damaged and unused nuts, bolts and washers must be picked up and removed from site.	Contractor ECO	Continuous	
❖ The piling of any material that could rot and release unpleasant smells into the air will not be permitted.	Contractor ECO	Continuous	
❖ Surplus concrete may not be dumped indiscriminately on site, but must be disposed of at a licensed landfill site, or in designated areas agreed by the Landowner and ECO.	Contractor	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
	ECO		
❖ Concrete trucks shall not be washed on site after depositing concrete into foundations. Any spilled concrete shall be cleaned up immediately.	Contractor CELO ECO	Continuous	
Management objectives		**Measurable targets**	
▸ Neat workplace and site. ▸ To keep the servitude neat and clean. ▸ Disposal of rubble and refuse in an appropriate manner. ▸ Minimize litigation. ▸ Minimize Landowner complaints.		▸ **No complaints from Landowners** ▸ **No rubble or refuse lying around on site** ▸ **No incidents of litigation** ▸ **No complaints from Landowners** ▸ **No visible concrete spillage on the servitude**	
▪ **Bird Flight Diverters**			
❖ In areas where there is a potential for bird collisions (especially rare or endangered species) with new overhead lines or where there are actual collisions on existing lines it is advisable to install bird flappers or bird flight diverters on the earth wires. Collisions should be reported to Eskom so that the matter can be resolved.	PM ECO Contractor	As necessary	
❖ Transmission shall use the <u>double loop bird flight diverter (BFD):</u> • Black and white spirals are of preformed 14mm diameter PVC UV stabilized rod. • Half of the spirals must be of white colour and the other half must be of black colour. • Diverters should be fitted to the entire span	PM ECO Contractor	As necessary	
❖ Installation of the bird flight diverters at specific spans as per the Avifaunal specialist report must be: • Installed on both earth wires, staggered; • Installed only on 60% of the span and in the middle of the span; and • On the lower middle lower span, spirals must be installed at 10 metre intervals on each earth wire and with alternating colours on each side.	PM ECO Contractor	As necessary	
▪ **Sanitation**			
❖ Ensure that proper sanitation is achieved ❖ No complaints received from Landowners regarding sanitation ❖ Regular cleaning of and empting of sanitation equipment must take place	ECO Contractor	Continuous	√

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ All staff must be provided with adequate sanitation facilities and equipment.			
▪ **Destruction of heritage resources**			
❖ Construction personnel must be alert and must inform the ECO and Eskom should they come across any findings. ❖ Should any additional archaeological artefacts be exposed during excavation, work on the area where the artefacts were found, must cease immediately and the ECO must be notified as soon as possible. ❖ Upon receipt of such notification, the ECO must be notified and Eskom should arrange for the excavation to be examined by an Archaeologist as soon as possible. ❖ Under no circumstances shall archaeological artefacts be removed, destroyed or interfered with. ❖ Any archaeological sites exposed during construction or operational phases may not be disturbed prior to authorization by the South African Heritage Resources Agency. The removal, exhuming, destruction, altering or any other disturbances of heritage sites must be authorized by SAHRA in terms of the National Heritage Resources Act (Act No. 26 of 1999).	ECO Contractor		
▪ **Traffic impact**			
❖ Vehicular movement beyond the property boundaries should be limited during peak hour. Access to the site must follow current and established routes. ❖ It must be ensured that a backlog of traffic does not develop at the access points during peak hours, through the implementation of an efficient and effective access control system. ❖ Security fence at the campsite is to be inspected daily to ensure no illegal entry points are created.	ECO Contractor	As a Necessary	
▪ **Crime, safety and security**			
❖ Illegal occupants on the property must be removed to ensure no uncontrolled fires, cutting down of vegetation and littering. ❖ The site and crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the National Building Regulations. ❖ Ensure the contacts details of the police or security company and ambulance services are available on the site.	ECO Contractor	Continuous	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
❖ Ensure that the handling of equipments and materials is supervised and adequately instructed. ❖ Do not allow the movement of public within the development site by posting notices at the entrance gates, and where necessary on the boundary fence. ❖ Appropriate notification signs must be erected, warning the residents and visitors about the hazards around the construction site and presence of heavy vehicles. ❖ No collecting of wood or the removal of wood or any item not associated with the construction activities will be allowed. ❖ No picking, pouching or snaring and killing of any fauna or flora will be allowed.			
▪ **Atmospheric pollution**			
❖ Dust production must be controlled by regular watering of roads and works area, should the need arise. ❖ Points of ingress and egress onto the site must be regularly cleaned for dust and mud. ❖ No refuse wastes are burnt on the premises or on surrounding premises. ❖ All vehicles transporting material that can be blown off (e.g. soil, rubble etc.) must be covered with a tarpaulin, and speed limits of 30 km/h must be adhered to. ❖ Vehicles to be used during the construction phase are to be kept in good working condition so as not to be the source of excessive fumes and nuisance.	ECO Contractor	As a necessary	
▪ **Social & Economic Benefits**			
❖ Contractor will be encouraged to employ local people on work that does not requires specialized skills. ❖ Contractor must clearly emphasize to the general public that some work requires specialized skills and therefore contractor will bring skilled personnel for such work. ❖ Local community shall be informed about possible employment opportunities arising within the development in order to conflict between contractor and community. ❖ Impact on local communities due to construction activities will be limited as far as possible. No unnecessary noise or movement from access roads or corridors will be allowed.	Contractor CELO	As a necessary	
▪ **Vegetation clearance and maintenance**			
❖ No less than an 8 metre (or as determined per site) wide strip of identified vegetation along the centre line of the power line should be cleared (Refer to **Appendix 10**). ❖ Clear all vegetation within proposed tower position and within a maximum (depending on	Contractor ECO	As a necessary	

Environmental Specification	Responsible Individual	Frequency	**Method Statement Required**
the tower type and voltage) radius of 5 m around the position, including de-stumping /cutting stumps to ground level, treating with an herbicide and re-compaction of soil (Refer to **Appendix 10**). ❖ Selective trimming or cutting down of Indigenous vegetation within servitude area interfering or posing a threat to the integrity of the power line (Refer to **Appendix 10**). ❖ Deep valleys and environmentally sensitive areas that restrict vehicle access, or legally protected areas, shall not be cleared of vegetation provided that the vegetation poses no threat to the safe operation and reliability of the power line. In the case of the construction of new power lines, a one (1) metre "trace-line" may be cut through the vegetation for stringing purposes only and no vehicle access shall be allowed along the cleared "trace-line". Alternative methods of stringing across inaccessible valleys should however be considered (see refer to **Appendix 10**). ❖ It shall be ascertained from the property owners concerned whether they wish to retain the cut vegetation. If not, it shall be removed, or disposed of in an appropriate manner to the satisfaction of the owner. Burning shall not be permitted under any circumstance.			

10. Site Specific Farms Affected and Special Landowner Conditions

The proposed 400kVMedupi-Borutho Transmission Power Line is situated on the following farms, for which the following **special landowner conditions** need to be considered for the CEMPR:

Farm Name	Portion	Owner	Special Conditions
Zwartwater 507 LQ	0	Eskom Holdings LTD	The applicant or his contractor must notify Alan Bosman of Eskom Properties- Tel 083 226 9589, at least seven (7) days prior to the commencement of any work whatsoever on the property.
Hanglip 508 LQ	1	Batis Prop PTY LTD	The lightning conductor and the lapa must be shifted
Hanglip 508 LQ	3	Waterkloof Familie Trust	No specific conditions.
Hanglip 508 LQ	2	Batis Prop PTY LTD	The lightning conductor and the lapa must be shifted
Eendracht 505 LQ	0	No Details of the Owner	No specific conditions
Grootestryd 465 LQ	0	Eskom Holdings LTD	The applicant or his contractor must notify Alan Bosman of Eskom Properties- Tel 083 226 9589, at least seven (7) days prior to the commencement of any work whatsoever on the property.
Peerboom 466 LQ	2	Eskom Holdings LTD	The applicant or his contractor must notify Alan Bosman of Eskom Properties- Tel 083 226 9589, at least seven (7) days prior to the commencement of any work whatsoever on the property.
Zongezien 467 LQ	0	Eskom Holdings LTD	Eskom Property
Zongezien 467 LQ	2	Owner not Available	No Specific conditions
Zongezien 467 LQ	1	Private Person	No Specific conditions
Kalkfontein468 LQ	3	Private Person	No Specific conditions
Welgelegen 469 LQ	0	Sunfox 33 cc.	No Specific conditions

Vogelstruitsfontein 644 LQ	0	Pontes Estates cc	No Specific conditions
Vogelstruitsfontein 472 LQ	2	Owner not Available	No Specific conditions
Gorkum 473 LQ	0	Seswahla Sand PTY LTD	Eskom to use existing gates for entrance and exit. No new gates to be installed.
Gorkum 473 LQ	0	Shadewind 8 PTY LTD	Eskom is allowed to position the line in any alignment to cater for any engineering designs on this property.
Werkendam 474	1	Zegrow investment Holdings	Contact owner before construction. The property is registered under a company that will be VAT registered in due course.
Uiterste 475 LQ	0	Uiterstevreden PTY LTD	Speak to the land owner about air craft warming spheres. Existing lines must be maintained every year.
Grietas Vlakte 500 LQ	0	Groothoop Trust	Die hele serwituut moet heeltemaal ontbos word
Grietas Vlakte 500 LQ	2	Groothoop Trust	Die hele serwituut moet heeltemaal ontbos word
Jacobs Loop 477 LQ	0	Carico Trading PTY LTD	Hekke moet te alle tye toe en gesluit gehou word. Serwituut area moet skoon gemaak word en gereeld ondeerhou word.
Jacobs Loop 477 LQ	2	Private Person	No Specific conditions
Grootfontein 479 LQ	0	Private Person	No Specific conditions
Grootfontein 479 LQ	2	Private Person	The farm has been consolidated and is now called Mooplaats 702.
Halbosrust 497 LQ	0	Private Person	The farm has been consolidated and is now called Mooplaats 702.
Marseilles 496 LQ	0	Crown Hill Prop 73cc	Konstruksie spane moet die eienaares Mev. Kaiser Skakel on 083 775 3472 voordat hul die eiedam betref A>G>V aktiewe jag aktiwiteite reg deur die jaar.

Marseilles 496 LQ	2	Immelwade INV PTY LTD	No Specific conditions
Goodhope 492 LQ	0	Private Person	Die totale Bestaande kraglyn serwituut area soweras die nuwe serwituut moet heeltemal skoongemak word en op ngereelde basis ondrhou word. Daar is erosie onder die bestaande kraglyn wat herstel moet word op die gepatse manier.
Gelyk 491 LQ	0	Trust	Land owner to use his own attorney for the registration. Matopi trees on the servitude must be avoided if possible. A ground dam along the servitude to be avoided if possible.
Gelyk 491 LQ	0	Lewia Familie Trust	Land owner to use his own attorney for the registration. Matopi trees on the servitude must be avoided if possible. A ground dam along the servitude to be avoided if possible.
New York 490LQ	0	H.G Oberholzer Eiendomme cc	No Specific conditions
Rotterdam 488 LQ	0	Owner not available	No Specific conditions
PortLock 489 LQ	0	Owner not available	Eskom to use existing gates. No bulldozers to be used for bush clearing. Remove all bushes from farm cut bushes.
PortLock 489 LQ	0	Owner not available	No Specific conditions
Katberg 481 LQ	0	Laminaria Holding 14 PTY LTD	Die serwituut hekke moet onderhou word op die destander serwituut en nuwe hekke moet behoerlik geinstalleer.
George IV523 LQ	2	Preymentos Beleggings cc	No Specific conditions
Durban 522 LQ	0	Willie Lewies Familie Trust	The land owner has giraffe on the property. Contact land owner before construction.
Wynberg 521 LQ	0	Sandsering cc	The land owner has giraffe on the property. Contact land owner before construction.
Gotha 816 LQ	0	Kliprivier Safari's PTY LTD	Eskom sal op Eskom kostes die transformator verskilf na die nuwe possie van die arbeidershuise.
Robertson 518 LQ	0	Private Person	Hiermee word ooreengekom dat n voor en na waard uitgevoer sal word op die eiendom bedryf.

Robertson 518 LQ	0	Heystek Stefan	Hiermee word ooreengekom dat n voor en na waard uitgevoer sal word op die eiendom bedryf.
Over Yssel 512 LR	1	Private Person	No Specific conditions
Rhinoland 530 LQ	0	Rhinolands Safaris PTY LTD	No Specific conditions
Johannisberg 509 LR	1	Rhinolands Safaris PTY LTD	No Specific Conditions
Johannisberg 509 LR	2	Private Person	No specific Conditions
Johannisberg 509 LR	3	Unkown	No specific Conditions
Johannisberg 509 LR	15	Kitsbeleg elf PTY LTD	Hekke moet te alle tye toegehou word sodat wild nie kan ontsnap nie.
Johannisberg 509 LR	17	Vierplaas Boerdery cc	Hiermee word ooreengekom dat die kraglyn torings in samewerking met die eienaar so geplaas word dat die torings nie ploes en besproeiings bedrywighede sal raaknie
Johannisberg 509 LR	5	Vierplaas boerdery BK	The positioning of the tower should be made in such a way that it does not disturb the pivotal irrigation system of the land owner.Eskom shall work closely with the land owner in arranging this.
Johannisberg 509 LR	0	Vierplaas Boerdery BP	No specific Conditions
Goerge Town 532 LR	0	Medisys cc	Eskom to make sure game does not escape during construction, to rehabilitate the existing gates on the property.
Groenefontein 494 LR	0	African Spirit Trading 287 PTY LTD	Care should be takent that during the installation of gates no game escapes.
Weltevreden 508 LR	2	Private aperson	No specific Conditions
Bergsig 511 LR	0	Owner not Available	No specific Conditions
Uitkomst 507 LR	1	Private Person	Indien die jagkamp geraal word deyr die sewituut moet die kamp verskuif word op Eskom

			kostes.
Klein Denteren 495 LR	0	Private Person	Indien die jagkamp geraal word deyr die sewituut moet die kamp verskuif word op Eskom kostes.
Burgers Vlei 496 LR	0	Private Person	Indien die hagterswoning asoek die veilingskompleks langs die routet inbreuk maar op die Eskom serwituut word.
Liliefontein 506 LR	2	Herberg Boerdery PTY LTD	Dit word bevestig dat hier die eiendom in same werking met alkatrant bedryf word as n wildebesigheid.
Sterkfontein 459 LR	1	Diablo trade 221 (PTY) LTD	Die eienaar versoek dat Eskom hom persoonlik sal kontat alvorens Eskom die eiedom will beteree tudens onderhoud van die kraglyne nadie oprigtig daarvan.
Sterkfontein 459 LR	2	Diablo trade 221 (PTY) LTD	Die eienaar versoek dat Eskom hom persoonlik sal kontat alvorens Eskom die eiedom will beteree tudens onderhoud van die kraglyne nadie oprigtig daarvan.
Vianen 450 LR	0	Fritz Bezuidenhout Trust	No Specific Conditions
Kafferboom 664	0	National Government of South Africa	No Specific Conditions
Rietfontein 665 LR	1	National Government of South Africa	No Specific Conditions
Magalakwin 666	0	National Government of South Africa	No Specific Conditions
Ruigtevley 701 LR	0	National Government of South Africa	No Specific Conditions
Zeekoegat 673 LR	0	National Government of South Africa	No Specific Conditions

Diepkuil 707 LR	0	National Government of South Africa	No Specific Conditions
Ryswyk 706 LR	0	National Government of South Africa	No Specific Conditions
Sterkloop 720 LR	0	National Government of South Africa	No Specific Conditions
Madamefontein 721 LR	0	National Government of South Africa	No Specific Conditions
Buffel Hoek 722 LR	0	National Government of South Africa	No Specific Conditions
Haaspan 724 LR	0	National Government of South Africa	No Specific Conditions
Vlakfontein 739 LR	0	National Government of South Africa	No Specific Conditions
Cleremont 738 LR	0	National Government of South Africa	No Specific Conditions
Vlakfontein 763	1	National Government of South Africa	No Specific Conditions
Vlakfontein 763	0	National Government of South Africa	No Specific Conditions
Vogelstruisfontein 765 LR	0	National Government of South Africa	No Specific Conditions

Elandsfontein 766 LR	0	National Government of South Africa	No Specific Conditions
Dorstland 768 LR	2	National Government of South Africa	No Specific Conditions
Dorstland 768 LR	3	National Government of South Africa	No Specific Conditions
Dorstland 768 LR	1	National Government of South Africa	No Specific Conditions
Dorstland 768 LR	0	National Government of South Africa	No Specific Conditions
Stirum 767 LR	2	National Government of South Africa	No Specific Conditions
Lumberg 769 LR	0	National Government of South Africa	No Specific Conditions
Noord Holland 775 LR	0	National Government of South Africa	No Specific Conditions
Zuid Holland 773 LR	0	National Government of South Africa	No Specific Conditions
Zuid Holland 773 LR	0	National Government of South Africa	No Specific Conditions
Noord Braband 774 LR	0	National Government of South Africa	No Specific Conditions

11. Site Specific Impact and Mitigation Measures

11.1. Biophysical Aspects

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor001	**W256**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor002	**W255**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor003	**W253**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor004	**W252**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor005	**W250**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor006	**W248**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor007	**W247**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor008	**W245**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor009	**W244/W243**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor010	**W242**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor011	**W241/W240**	No specific issues	No mitigation required	Seasonal pan. Honey badger tracks 10m away. Potential bullfrog habitat.	Move back 50m towards 231 (NW)	Pylon in close proximity to small seasonal pan - could provide habitat for storks/waterfowl	Move back 50 m to W231 (NW).
Me-Bor012	**W239**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor013	**W238**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor014	**W237**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to large impoundment/pan.	Fit bird flight diverters.
Me-Bor015	**W236**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to large impoundment/pan.	Fit bird flight diverters.
Me-Bor016	**W235**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor017	**W234**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor018	**W232**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor019	**W231**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to large impoundment/pan.	Fit bird flight diverters.
Me-Bor020	**W230**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to large impoundment/pan.	Fit bird flight diverters.
Me-Bor021	**W229**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor022	**W228**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor023	**W227**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor024	**W226**	No specific issues	No mitigation required	No specific issues	No mitigation required	Active nest of raptor (possibly Wahlberg's Eagle *Aquila wahlbergi*).	Monitor and barricade during construction
Me-Bor025	**W225**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor026	**W224**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor027	**W223**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor028	**W222**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor029	**W221**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor030	**W220**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor031	**W219**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor032	**W217**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor033	**W216**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor034	**W215**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor035	**W213/W214**	No specific issues	No mitigation required	No specific issues	No mitigation required	Old grazed fields - good for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor036	**W212**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor037	**W211**	No specific issues	No mitigation required	Sensitive habitat. Rock refugia.	Move back 30m towards pylon W212	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor038	**W210**	Overlap with a watercourse	Move 50 m east to avoid overlap with a tributary of the Sandloop (non-perennial river). Take not that the movement of adjacent pylons may result in new areas of overlap in the western and eastern direction.	No specific issues	No mitigation required	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor039	**W209**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor040	**W208**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor041	**W206**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor042	**W205**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land and spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor043	**W204**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor044	**W203**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor045	**W202**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor046	**W201**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor047	**W200**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor048	**W199**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor049	**W198**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor050	**W197**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-	**W196**	No specific issues	No mitigation required	No specific issues	No mitigation	Spanning seasonal pans.	Fit bird flight

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor051					required	High vulture activity.	diverters.
Me-Bor052	**W195**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor053	**W194**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor054	**W193**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor055	**W192**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor056	**W191**	No specific issues	No mitigation required	Temporary pan. African bullfrog identified. Between W191 and W190.	Buffer and protect.	Spanning seasonal drainage lines.	Fit bird flight diverters.
Me-Bor057	**W190**	No specific issues	No mitigation required	Temporary pan. African bullfrog identified. Between W191 and W190.	Buffer and protect.	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor058	**W189**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal pans. High vulture activity.	Fit bird flight diverters.
Me-Bor059	**W188**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor060	**W186**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning Mokolo river and agricultural land	Fit bird flight diverters.
Me-Bor061	**W185**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning Mokolo river and agricultural land	Fit bird flight diverters.
Me-Bor062	**W184**	Located 12 m away from the edge of a riparian area associated with the perennial Mokolo River. The current pylon position will overlap with a 32 m buffer zone around the edge of the watercourse.	Move the pylon 25 m in a western direction to avoid overlap with the 32 m buffer. Note that the crossing distance between relocated pylons W184 and W183 may be more than 500 m.	Mokolo River beneath existing and proposed power lines.	Buffer riparian habitats.	Spanning Mokolo river and agricultural land	Fit bird flight diverters.
Me-Bor063	**W183**	Overlaps with a large watercourse crossing (near its western edge)	Move the pylon 55 m to the east to avoid overlap with the watercourse and its associated 32 m buffer zone. Note that the crossing distance between relocated pylons W184 and W183 may be more than 500 m.	Rocky outcrop on pylon site. Rocky refugia.	Move pylon 50m towards pylon W184 or W182	Pylon on outcrops.	Move back 50 m to W182.
Me-Bor064	**W182**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning Mokolo river and agricultural land	Fit bird flight diverters.
Me-Bor065	**W180/W181**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning Mokolo river and agricultural land.	Fit bird flight diverters.
Me-	**W179/W1**	No specific issues	No mitigation required	No specific issues	No mitigation	Spanning Mokolo river	Fit bird flight

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor066	**78**				required	and agricultural land	diverters.
Me-Bor067	**W177/W176**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning Mokolo river and agricultural land	Fit bird flight diverters.
Me-Bor068	**W175**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor069	**W174**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor070	**W173**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor071	**W172**	Overlaps with a watercourse.	Move the pylon a minimum distance of 100 m in a western direction to avoid overlap with the watercourse. It is preferable to move the pylon 135 m to avoid overlap with the watercourse buffer. Note that pylon W171 is located in close proximity to the edge of the same watercourse; movement of this pylon in the western direction (more than 115 m) will result in overlap with the watercourse.	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor072	**W171**	No specific issues	No mitigation required	No specific issues	No mitigation required	Possible large sodic systems	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor073	**W170**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor074	**W169**	No specific issues	No mitigation required	Rocky ridge near proposed line.	Buffer ridge and protect from damage during construction.	No specific issues	No mitigation required
Me-Bor075	**W168**	No specific issues	No mitigation required	Sensitive habitat. Rocky refugia. Possibly unstable substrate.	Move pylon west by 50m to avoid sensitive area.	Pylon on outcrops.	Move pylon 50 m west.
Me-Bor076	**W167**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land	Fit bird flight diverters.
Me-Bor077	**W166**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land	Fit bird flight diverters.
Me-Bor078	**W165**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land	Fit bird flight diverters.
Me-	**W163**	No specific issues	No mitigation required	No specific issues	No mitigation	Nearby ridge with	Fit bird flight

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor079					required	vertical cliffs and spanning overgrazed land	diverters.
Me-Bor080	**W162**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land	Fit bird flight diverters.
Me-Bor081	**W161**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land.	Fit bird flight diverters.
Me-Bor082	**W160**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land.	Fit bird flight diverters.
Me-Bor083	**W159**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed	Fit bird flight diverters.
Me-Bor084	**W158**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed	Fit bird flight diverters.
Me-Bor085	**W157**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						spanning overgrazed	
Me-Bor086	**W156**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby ridge with vertical cliffs and spanning overgrazed land	Fit bird flight diverters.
Me-Bor087	**W155**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land.	Fit bird flight diverters
Me-Bor088	**W154**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land.	Fit bird flight diverters
Me-Bor089	**W153**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land.	Fit bird flight diverters
Me-Bor090	**W152**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor091	**W151**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor092	**W150**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning artificial dam	Fit bird flight diverters
Me-Bor093	**W149**	No specific issues	No mitigation required	Seasonal pan 10m away and claywall dam nearby.	Move pylon away from pan	Pylon 10 m from seasonal pan and artificial dam.	Move pylon 30 m away from dam.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor094	**W148**	No specific issues	No mitigation required	Small clay dam with small hide situated in path of suggested power line	Buffer	Spanning artificial dam	Fit bird flight diverters
Me-Bor095	**W147**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor096	**W146**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor097	**W145**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor098	**W144**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor099	**W143**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor100	**W142**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.
Me-Bor101	**W141**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						lines	
Me-Bor102	**W140**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.
Me-Bor103	**W139**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.
Me-Bor104	**W138**	Marginally overlaps with a wash landscape feature (located near its eastern edge).	Move the pylon 50 m to the east. The relocation of the pylon will still result in overlap with the 32 m buffer. This is, however, not regarded as a significant impact on the discontinuous wash.	Possible seasonal pan area	Movement of pylons requires verification	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.
Me-Bor105	**W137**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.
Me-Bor106	**W135/W136**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open savannoid grassland and ephemeral drainage lines	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor107	**W134**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor108	**W133**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor109	**W132**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor110	**W131**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor111	**W130**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor112	**W129**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor113	**W128**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor114	**W127**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor115	**W126**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor116	**W124**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor117	**W123**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor118	**W122/W121**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor119	**W120**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor120	**W119**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor121	**W118**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor122	**W117**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor123	**W116**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor124	**W115**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor125	**W114**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to small artificial dam	Fit bird flight diverters
Me-Bor126	**W113**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to small artificial dam	Fit bird flight diverters

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor127	**W112**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning old kraal - could include foraging birds of prey (vultures).	Move pylons 100 m east and fit bird diverters.
Me-Bor128	**W111**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning old kraal - could include foraging birds of prey (vultures).	Move pylons 100 m east and fit bird diverters.
Me-Bor129	**W110**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning old kraal - could include foraging birds of prey (vultures).	Move pylons 100 m east and fit bird diverters.
Me-Bor130	**W109**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor131	**W108/W107**	No specific issues	No mitigation required	Pylon position on current fence line	Consider repositioning of fence	No specific issues	No mitigation required
Me-Bor132	**W106**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor133	**W105**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor134	**W104**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor135	**W103**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor136	**W102**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor137	**W101**	Overlap with indistinct watercourse	Move the pylon a minimum distance of 100 m in a western direction to avoid overlap with the watercourse. It is preferable to move the pylon 135 m to avoid overlap with the watercourse buffer.	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor138	**W265**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor139	**W264**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor140	**W263**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor141	**W262**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor142	**W261**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						agricultural land	
Me-Bor143	**W260**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor144	**W259/W273**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and old agricultural land	Fit bird flight diverters.
Me-Bor145	**W272**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning open area with reservoir - could be used by large birds of prey (vultures).	Consider moving pylons south (50-100 m) to avoid spanning of the reservoir; fit bird diverters to line.
Me-Bor146	**W271**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor147	**W270**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor148	**W269**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor149	**W268**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-	**W267**	No specific issues	No mitigation required	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor150					required		required
Me-Bor151	**W276**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to old agricultural land	Fit bird flight diverters
Me-Bor152	**W275**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to old agricultural land	Fit bird flight diverters
Me-Bor153	**W274**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to old agricultural land	Fit bird flight diverters
Me-Bor154	**W288**	No specific issues	No mitigation required	No specific issues	No mitigation required	Close proximity to old agricultural land	Fit bird flight diverters
Me-Bor155	**W287**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor156	**W286**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor157	**W285**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor158	**W284**	Pylon overlaps with watercourse	Move pylon move 75 m to the west to avoid overlap with the watercourse and its 32 m buffer.	River crossed. Riparian thickets and habitats.	Buffer riparian habitats	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor159	**W283**	No specific issues	No mitigation required	River crossed. Riparian thickets	Buffer riparian habitats	Spanning river and old agricultural land	Fit bird flight diverters

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
				and habitats.			
Me-Bor160	**W282**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor161	**W281**	No specific issues	No mitigation required	Very near to farmhouse.	Move 100m West - consult heritage specialist	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor162	**W280**	Pylon overlaps with watercourse	Move pylon 35 m to the west	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor163	**W279**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor164	**W278**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor165	**W299**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor166	**W298**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor167	**W297**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor168	**W296**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor169	**W295**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and old agricultural land	Fit bird flight diverters
Me-Bor170	**W294**	Pylon overlaps with watercourse	Move pylon 55 m to the east	Soil erosion noted.	Move pylon towards 293 to avoid unstable soils. Consider erosion control.	No specific issues	No mitigation required
Me-Bor171	**W293**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor172	**W292**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land	Fit bird flight diverters
Me-Bor173	**W291**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby agricultural land	Fit bird flight diverters
Me-Bor174	**W290**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor175	**W312**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor176	**W311**	No specific issues	No mitigation required	No specific issues	No mitigation required	Parallel to seasonal drainage line	Fit bird flight diverters
Me-Bor177	**W310**	No specific issues	No mitigation required	No specific issues	No mitigation required	Parallel to seasonal drainage line	Fit bird flight diverters

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor178	**W309**	Pylons border a watercourse and overlaps with its 32m buffer.	Recommend that the pylon is moved 30 m to the west to avoid overlap with a watercourse buffer zone	Ephemeral drainage line nearby	Consider erosion control	Parallel to seasonal drainage line	Fit bird flight diverters
Me-Bor179	**W308**	Pylon is located in the centre of a highly erosive watercourse. Watercourse is broader than 500 m in this section of the alignment.	Pylon should be moved 375 m to the east to avoid overlap with the watercourse. Ideally the pylon should be moved 410 m to avoid overlap with the watercourse buffer.	Ephemeral drainage line nearby	Consider erosion control	Parallel to seasonal drainage line	Fit bird flight diverters
Me-Bor180	**W307**	No specific issues	No mitigation required	Erosion areas of concern between W307 and W308	Consider erosion repair and control measures	Parallel to seasonal drainage line	Fit bird flight diverters
Me-Bor181	**W306**	No specific issues	No mitigation required	Erosion areas of concern between W307 and W308	Consider erosion repair and control measures	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor182	**W305**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor183	**W304**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-	**W303**	No specific issues	No mitigation required	No specific issues	No mitigation	Spanning perennial river and in close proximity to	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor184					required	a number of agricultural lands.	
Me-Bor185	**W302**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor186	**W301**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor187	**W316**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor188	**W315**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor189	**W314**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning perennial river and in close proximity to a number of agricultural lands.	Fit bird flight diverters.
Me-Bor190	**W329**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-	**W328**	No specific issues	No mitigation required	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor191					required		required
Me-Bor192	**W327**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor193	**W326**	Pylon located on edge of watercourse buffer.	Pylon should be moved 15 m to the west.	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor194	**W325**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor195	**W324**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor196	**W323**	No specific issues	No mitigation required	Sensitive rocky habitat.	Move pylon position off of rocky outcrop. Suggest to the North by approximately 100m.	Pylon coincides with outcrop.	Move pylon to the north by approx. 100 m.
Me-Bor197	**W322**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor198	**W321**	Pylon located in watercourse buffer	Pylon should be moved 10 m east	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-	**W320**	No specific issues	No mitigation required	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor199					required		required
Me-Bor200	**W319**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor201	**W318**	Pylon located in watercourse buffer	Pylon should be moved 15 m to the west.	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor202	**W332**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor203	**W331**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor204	**W339**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor205	**W338**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						along valleys).	
Me-Bor206	**W337**	Pylon located in watercourse buffer	Pylon should be moved 30 m to the west.	Amphitheatre catchment area on steep slopes	Move pylon to crest	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor207	**W336**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor208	**W335**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor209	**W334**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.
Me-Bor210	**W350**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys. Increase visibility of lines for commuting birds (e.g. along valleys).	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor211	**W349**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor212	**W348**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor213	**W347**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor214	**W346**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor215	**W345**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor216	**W344**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor217	**W343**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor218	**W342**	No specific issues	No mitigation required	Rocky slopes; giant land snail and bullfrogs nearby	Buffer and protect	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor219	**W341/W362**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-	**W361**	Pylon located in	Pylon should be moved 15 m to the	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor220		watercourse buffer	northeast.		required		required
Me-Bor221	**W360**	Pylon located in watercourse buffer	Pylon should be moved 10 m to the northwest.	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor222	**W359**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor223	**W358**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor224	**W357**	Pylon located in watercourse crossing of approximately 1 km wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor225	**W356**	Pylon located in watercourse crossing of approximately 1 km wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	Surface water. Possible seasonal pan. Between W355 and W356	No mitigation required	Seasonally inundated - could attract waterfowl.	Fit bird flight diverters.
Me-Bor226	**W355**	Pylon located near edge of a watercourse crossing of approximately 1 km wide	Pylon can be moved 40 m to the northeast to void overlap	Surface water. Possible seasonal pan. Between W355 and W356	No mitigation required	Seasonally inundated - could attract waterfowl.	Fit bird flight diverters.
Me-Bor227	**W354**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor228	**W353**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor229	**W372**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor230	**W371**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor231	**W370**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor232	**W369**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor233	**W368**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor234	**W367**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor235	**W366**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor236	**W365**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor237	**W364**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor238	**W379**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor239	**W378**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor240	**W377**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines with pans	Fit bird flight diverters.
Me-Bor241	**W376**	Pylon located inside watercourse crossing	Pylon should be moved 80 m to the east to avoid overlap with the watercourse and its buffer..	No specific issues	No mitigation required	Spanning seasonal drainage lines with pans	Fit bird flight diverters.
Me-Bor242	**W375**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor243	**W374**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor244	**W373/W388**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area of open bushveld and old agricultural land	Fit bird flight diverters.
Me-Bor245	**W387**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area of open bushveld and old agricultural land	Fit bird flight diverters.
Me-Bor246	**W386**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area of open bushveld and old agricultural land	Fit bird flight diverters.
Me-	**W385**	No specific issues	No mitigation required	No specific issues	No mitigation	Area of open bushveld	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor247					required	and old agricultural land	
Me-Bor248	**W384**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area of open bushveld and old agricultural land	Fit bird flight diverters.
Me-Bor249	**W383**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor250	**W382**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor251	**W381**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor252	**W395**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor253	**W394**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor254	**W393**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor255	**W392**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor256	**W391**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-	**W390**	No specific issues	No mitigation required	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor257					required		required
Me-Bor258	**W400**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor259	**W399**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor260	**W398**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor261	**W397**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor262	**W410**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor263	**W409**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor264	**W408**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor265	**W407**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						terrestrial bird species.	
Me-Bor266	**W406**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor267	**W405**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor268	**W404**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor269	**W403**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor270	**W402**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor271	**W422**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor272	**W421**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor273	**W420**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor274	**W419**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor275	**W418**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line.	Fit bird flight diverters.
Me-Bor276	**W417**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line.	Fit bird flight diverters.
Me-Bor277	**W416**	Pylon located in watercourse buffer	Move pylon 10 m west if possible.	No specific issues	No mitigation required	Spanning seasonal drainage line.	Fit bird flight diverters.
Me-Bor278	**W415**	Pylon located in a watercourse near its edge	Move pylon 25 m west. Pylon will still be located within the wetland buffer, with limited opportunity to prevent the impact.	No specific issues	No mitigation required	Spanning old agricultural land	Fit bird flight diverters.
Me-Bor279	**W414**	Pylon located in watercourse crossing of approximately 1 km wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	No specific issues	No mitigation required	Spanning old agricultural land	Fit bird flight diverters.
Me-Bor280	**W413**	Pylon located in watercourse crossing of approximately 1 km wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	Drainage channel nearby	No mitigation required	Spanning old agricultural land	Fit bird flight diverters.
Me-Bor281	**W412**	Pylon located in watercourse crossing of approximately 1 km wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	No specific issues	No mitigation required	Spanning old agricultural land	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor282	**W411/W431**	No specific issues	No mitigation required	Evident erosion headcut nearby. Small rocky outcrop near pylon site.	Consider erosion control measures. Avoid rocky outcrops by moving pylon east by a few meters.	Seasonal drainage line.	Fit bird flight diverters.
Me-Bor283	**W430**	No specific issues	No mitigation required	Rocky slopes/koppie	Consider moving pylon down slope but take note of drainage channel at base of slope	Seasonal drainage line.	Fit bird flight diverters.
Me-Bor284	**W429**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor285	**W428**	Pylon located in a watercourse	Move pylon 100 m west	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor286	**W427**	Pylon located in a watercourse	Move pylon 165 m west	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor287	**W426**	Pylon located in watercourse crossing of approximately 720 m wide	Limited opportunity to move pylon out of watercourse due to wide crossing width. Construction likely to be required inside watercourse	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor288	**W425**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor289	**W424**	Pylon located in a watercourse	Move pylon 55 m west	Raised termite mound. Clear signs of water runoff.	Move pylon east by 30m	No specific issues	No mitigation required
Me-Bor290	**W434**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to ridges.	Fit bird flight diverters.
Me-Bor291	**W433**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to ridges.	Fit bird flight diverters.
Me-Bor292	**W432/W438**	Pylon located in a watercourse	Move pylon 75 m west	Ephemeral drainage line nearby.	Consider erosion control measures	Alignment in close proximity to ridges.	Fit bird flight diverters.
Me-Bor293	**W437**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to ridges.	Fit bird flight diverters.
Me-Bor294	**W436**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor295	**W435/W454**	Pylon located in a watercourse	Move pylon 75 m west	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor296	**W453**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor297	**W452**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor298	**W451**	No specific issues	No mitigation required	River system (Sterkrivier): active channel 15m, macro channel 50m	Protect, as far as possible, riparian woodlands on both sides of the Sterkrivier.	Spanning river and agricultural land.	Fit bird flight diverters.
Me-Bor299	**W450**	Pylon located in a watercourse	Move pylon 30 m east	No specific issues	No mitigation required	Spanning river and agricultural land.	Fit bird flight diverters.
Me-Bor300	**W449**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and agricultural land.	Fit bird flight diverters.
Me-Bor301	**W448**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning river and agricultural land.	Fit bird flight diverters.
Me-Bor302	**W447**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor303	**W446**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor304	**W445**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor305	**W444**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor306	**W443**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor307	**W442**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor308	**W441**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor309	**W440**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor310	**W473**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor311	**W472**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor312	**W471**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor313	**W470**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor314	**W469**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor315	**W468**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor316	**W467**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor317	**W466**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor318	**W465**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor319	**W464**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor320	**W463**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor321	**W462**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor322	**W461**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor323	**W460**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to seasonal pan/dam.	Fit bird flight diverters.
Me-Bor324	**W459**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to seasonal pan/dam.	Fit bird flight diverters.
Me-	**W458**	No specific issues	No mitigation required	No specific issues	No mitigation	No specific issues	No mitigation

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor325					required		required
Me-Bor326	**W457**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor327	**W456**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor328	**W455/W518**	Pylon located in a watercourse	Move pylon 40 m west	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor329	**W517**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor330	**W516**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor331	**W515**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor332	**W514**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor333	**W513**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor334	**W512**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor335	**W511**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor336	**W510**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor337	**W509**	Pylon located in suspected watercourse	Move pylon 40 m south	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
						vegetation	
Me-Bor338	**W508**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor339	**W507**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor340	**W506**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor341	**W505**	Pylon located in watercourse buffer	No real opportunity to move pylon out of buffer, recommend additional sediment control during construction, should construction occur during the wet season (September to May).	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor342	**W504**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor343	**W503**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage lines and areas previously cleared of vegetation	Fit bird flight diverters.
Me-Bor344	**W502**	No specific issues	No mitigation required	No specific issues	No mitigation required	Nearby artificial dam and drainage line - movement corridor for birds.	Fit bird flight diverters.
Me-Bor345	**W501**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor346	**W500**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor347	**W499**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor348	**W498**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning steep slopes and valleys.	Fit bird flight diverters.
Me-Bor349	**W497**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor350	**W496**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor351	**W495**	Pylon located in watercourse buffer	No real opportunity to move pylon out of buffer, recommend additional	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
			sediment control during construction, should construction occur during the wet season (September to May).				
Me-Bor352	**W494**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor353	**W493**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning drainage line and artificial dam.	Fit bird flight diverters.
Me-Bor354	**W492**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning drainage line and artificial dam.	Fit bird flight diverters.
Me-Bor355	**W491**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning drainage line and artificial dam.	Fit bird flight diverters.
Me-Bor356	**W490**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning drainage line and artificial dam.	Fit bird flight diverters.
Me-Bor357	**W489**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning drainage line and artificial dam.	Fit bird flight diverters.
Me-Bor358	**W488**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor359	**W487**	Pylon located in watercourse buffer	Move pylon 15 m north	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor360	**W486**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor361	**W485**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor362	**W484**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor363	**W483**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor364	**W482**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor365	**W481**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor366	**W480**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning large alluvial depression and open bushveld	Fit bird flight diverters.
Me-Bor367	**W479**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor368	**W478**	No specific issues	No mitigation required	Signs of sheet washing and runoff nearby.	Consider erosion control measures.	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor369	**W477**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor370	**W476**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning agricultural land.	Fit bird flight diverters.
Me-Bor371	**W475**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor372	**W474/W538**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor373	**W537**	No specific issues	No mitigation required	Rocky outcrops between W0536 and W0538 support isolated habitats and plant communities. Preservation required.	Ensure measures to prevent damage to rocky habitats between W0536 and W0538.	Alignment in close proximity to ridge habitat	Fit bird flight diverters
Me-Bor374	**W536**	No specific issues	No mitigation required	Rocky outcrop. Sensitive area. High avifaunal activity and diversity	Recommend moving pylon position 50m SE toward W535 or	Alignment in close proximity to ridge habitat	Fit bird flight diverters

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
				noted.	in NE direction to avoid outcrops.		
Me-Bor375	**W535**	No specific issues	No mitigation required	No specific issues	No mitigation required	Alignment in close proximity to ridge habitat	Fit bird flight diverters
Me-Bor376	**W534**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor377	**W533**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line - movement corridor for birds.	Fit bird flight diverters.
Me-Bor378	**W532**	Pylon located in watercourse buffer	Move pylon 25 m south	No specific issues	No mitigation required	Spanning seasonal drainage line - movement corridor for birds.	Fit bird flight diverters.
Me-Bor379	**W531**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line - movement corridor for birds.	Fit bird flight diverters.
Me-Bor380	**W530**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line - movement corridor for birds.	Fit bird flight diverters.
Me-	**W529**	No specific issues	No mitigation required	No specific issues	No mitigation	Spanning seasonal drainage line -	Fit bird flight

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor381					required	movement corridor for birds.	diverters.
Me-Bor382	**W528**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor383	**W527**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor384	**W526**	Pylon located in watercourse	Move pylon 75 m southeast	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor385	**W525**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor386	**W524**	Pylon located in watercourse	Move pylon 155 m southeast	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor387	**W523**	No specific issues	No mitigation required	Rocky soils. Higher levels of biodiversity.	Recommend moving pylon 50m downhill, away from rocky areas of higher biodiversity.	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor388	**W522**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-	**W521**	No specific issues	No mitigation required	No specific issues	No mitigation	Area previously cleared - good habitat for large	Fit bird flight

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Bor389					required	terrestrial bird species.	diverters.
Me-Bor390	**W520**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor391	**W519/W549**	Pylon located in watercourse	Move pylon 110 m southeast	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor392	**W548**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor393	**W547**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor394	**W546**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor395	**W545**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor396	**W544**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor397	**W543**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor398	**W542**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor399	**W541**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor400	**W540**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor401	**W539/W555**	No specific issues	No mitigation required	Severely disturbed - most likely by over-grazing. Sever bush encroachment.	Vulture nest on adjacent pylon.	No specific issues	No mitigation required
Me-Bor402	**W554**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor403	**W553**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor404	**W552**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor405	**W551**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor406	**W550/W569**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor407	**W568**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor408	**W567**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor409	**W566**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor410	**W565**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor411	**W564**	No specific issues	No mitigation required	No specific issues	No mitigation required	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor412	**W563**	No specific issues	No mitigation required	Bullfrog call noted along ephemeral drainage lines between W562 and W563	Protect and conserve ephemeral drainage lines between W562 and W563	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor413	**W562**	No specific issues	No mitigation required	Bullfrog call noted along ephemeral drainage lines between W562 and W563	Protect and conserve ephemeral drainage lines between W562 and W563	Area previously cleared - good habitat for large terrestrial bird species.	Fit bird flight diverters.
Me-Bor414	**W561**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and close proximity to dam.	Fit bird flight diverters.
Me-Bor415	**W560**	No specific issues	No mitigation required	No specific issues	No mitigation required	Spanning seasonal drainage line and close proximity to dam.	Fit bird flight diverters.
Me-Bor416	**W559**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor417	**W558**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor418	**W557**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor419	**W556/W574**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor420	**W573**	Pylon located in watercourse buffer	Move pylon 25 m southeast	No specific issues	No mitigation required	No specific issues	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Surface water	Surface water Mitigation	Ecology (Flora and Fauna)	Ecology (Flora and Fauna) Mitigation	Avifauna	Avifauna Mitigation
Me-Bor421	**W572**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor422	**W571**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor423	**W570**	Pylon located in watercourse buffer	Move pylon 25 m south	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor424	**W576**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required
Me-Bor425	**W578**	No specific issues	No mitigation required	No specific issues	No mitigation required	No specific issues	No mitigation required

11.2. Heritage Aspects

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor001	**W256**	No specific issues	Not applicable	No mitigation required
Me-Bor002	**W255**	No specific issues	Not applicable	No mitigation required
Me-Bor003	**W253**	No specific issues	Not applicable	No mitigation required
Me-Bor004	**W252**	No specific issues	Not applicable	No mitigation required
Me-Bor005	**W250**	No specific issues	Not applicable	No mitigation required
Me-Bor006	**W248**	No specific issues	Not applicable	No mitigation required
Me-Bor007	**W247**	No specific issues	Not applicable	No mitigation required
Me-Bor008	**W245**	No specific issues	Not applicable	No mitigation required
Me-Bor009	**W244/W243**	No specific issues	Not applicable	No mitigation required
Me-Bor010	**W242**	No specific issues	Not applicable	No mitigation required
Me-Bor011	**W241/W240**	No specific issues	Not applicable	No mitigation required
Me-Bor012	**W239**	No specific issues	Not applicable	No mitigation required
Me-Bor013	**W238**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor014	**W237**	No specific issues	Not applicable	No mitigation required
Me-Bor015	**W236**	No specific issues	Not applicable	No mitigation required
Me-Bor016	**W235**	No specific issues	Not applicable	No mitigation required
Me-Bor017	**W234**	No specific issues	Not applicable	No mitigation required
Me-Bor018	**W232**	No specific issues	Not applicable	No mitigation required
Me-Bor019	**W231**	No specific issues	Not applicable	No mitigation required
Me-Bor020	**W230**	No specific issues	Not applicable	No mitigation required
Me-Bor021	**W229**	No specific issues	Not applicable	No mitigation required
Me-Bor022	**W228**	No specific issues	Not applicable	No mitigation required
Me-Bor023	**W227**	No specific issues	Not applicable	No mitigation required
Me-Bor024	**W226**	No specific issues	Not applicable	No mitigation required
Me-Bor025	**W225**	No specific issues	Not applicable	No mitigation required
Me-Bor026	**W224**	No specific issues	Not applicable	No mitigation required
Me-Bor027	**W223**	No specific issues	Not applicable	No mitigation required
Me-Bor028	**W222**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor029	**W221**	No specific issues	Not applicable	No mitigation required
Me-Bor030	**W220**	No specific issues	Not applicable	No mitigation required
Me-Bor031	**W219**	No specific issues	Not applicable	No mitigation required
Me-Bor032	**W217**	No specific issues	Not applicable	No mitigation required
Me-Bor033	**W216**	No specific issues	Not applicable	No mitigation required
Me-Bor034	**W215**	No specific issues	Not applicable	No mitigation required
Me-Bor035	**W213/W214**	No specific issues	Not applicable	No mitigation required
Me-Bor036	**W212**	No specific issues	Not applicable	No mitigation required
Me-Bor037	**W211**	No specific issues	Not applicable	No mitigation required
Me-Bor038	**W210**	No specific issues	Not applicable	No mitigation required
Me-Bor039	**W209**	No specific issues	Not applicable	No mitigation required
Me-Bor040	**W208**	No specific issues	Not applicable	No mitigation required
Me-Bor041	**W206**	No specific issues	Not applicable	No mitigation required
Me-Bor042	**W205**	No specific issues	Not applicable	No mitigation required
Me-Bor043	**W204**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor044	**W203**	No specific issues	Not applicable	No mitigation required
Me-Bor045	**W202**	No specific issues	Not applicable	No mitigation required
Me-Bor046	**W201**	No specific issues	Not applicable	No mitigation required
Me-Bor047	**W200**	No specific issues	Not applicable	No mitigation required
Me-Bor048	**W199**	No specific issues	Not applicable	No mitigation required
Me-Bor049	**W198**	No specific issues	Not applicable	No mitigation required
Me-Bor050	**W197**	No specific issues	Not applicable	No mitigation required
Me-Bor051	**W196**	No specific issues	Not applicable	No mitigation required
Me-Bor052	**W195**	No specific issues	Not applicable	No mitigation required
Me-Bor053	**W194**	No specific issues	Not applicable	No mitigation required
Me-Bor054	**W193**	No specific issues	Not applicable	No mitigation required
Me-Bor055	**W192**	No specific issues	Not applicable	No mitigation required
Me-Bor056	**W191**	No specific issues	Not applicable	No mitigation required
Me-Bor057	**W190**	No specific issues	Not applicable	No mitigation required
Me-Bor058	**W189**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor059	**W188**	No specific issues	Not applicable	No mitigation required
Me-Bor060	**W186**	No specific issues	Not applicable	No mitigation required
Me-Bor061	**W185**	No specific issues	Not applicable	No mitigation required
Me-Bor062	**W184**	No specific issues	Not applicable	No mitigation required
Me-Bor063	**W183**	No specific issues	Not applicable	No mitigation required
Me-Bor064	**W182**	No specific issues	Not applicable	No mitigation required
Me-Bor065	**W180/W181**	Stone Age Scatter and Iron Age ruin	4m	There no further mitigation measures proposed for this site for it is of low heritage significance. Site recording during the physical survey is deemed sufficient.
Me-Bor066	**W179/W178**	No specific issues	Not applicable	No mitigation required
Me-Bor067	**W177/W176**	No specific issues	Not applicable	No mitigation required
Me-Bor068	**W175**	No specific issues	Not applicable	No mitigation required
Me-Bor069	**W174**	No specific issues	Not applicable	No mitigation required
Me-Bor070	**W173**	No specific issues	Not applicable	No mitigation required
Me-Bor071	**W172**	No specific issues	Not applicable	No mitigation required
Me-Bor072	**W171**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor073	**W170**	No specific issues	Not applicable	No mitigation required
Me-Bor074	**W169**	No specific issues	Not applicable	No mitigation required
Me-Bor075	**W168**	No specific issues	Not applicable	No mitigation required
Me-Bor076	**W167**	No specific issues	Not applicable	No mitigation required
Me-Bor077	**W166**	No specific issues	Not applicable	No mitigation required
Me-Bor078	**W165**	No specific issues	Not applicable	No mitigation required
Me-Bor079	**W163**	No specific issues	Not applicable	No mitigation required
Me-Bor080	**W162**	No specific issues	Not applicable	No mitigation required
Me-Bor081	**W161**	No specific issues	Not applicable	No mitigation required
Me-Bor082	**W160**	No specific issues	Not applicable	No mitigation required
Me-Bor083	**W159**	No specific issues	Not applicable	No mitigation required
Me-Bor084	**W158**	No specific issues	Not applicable	No mitigation required
Me-Bor085	**W157**	No specific issues	Not applicable	No mitigation required
Me-Bor086	**W156**	No specific issues	Not applicable	No mitigation required
Me-Bor087	**W155**	Historic isolated grinding	207m	Collection of material from field and placing it at an accredited research

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
		stone		institution
Me-Bor088	**W154**	No specific issues	Not applicable	No mitigation required
Me-Bor089	**W153**	No specific issues	Not applicable	No mitigation required
Me-Bor090	**W152**	No specific issues	Not applicable	No mitigation required
Me-Bor091	**W151**	No specific issues	Not applicable	No mitigation required
Me-Bor092	**W150**	No specific issues	Not applicable	No mitigation required
Me-Bor093	**W149**	No specific issues	Not applicable	No mitigation required
Me-Bor094	**W148**	No specific issues	Not applicable	No mitigation required
Me-Bor095	**W147**	No specific issues	Not applicable	No mitigation required
Me-Bor096	**W146**	No specific issues	Not applicable	No mitigation required
Me-Bor097	**W145**	No specific issues	Not applicable	No mitigation required
Me-Bor098	**W144**	No specific issues	Not applicable	No mitigation required
Me-Bor099	**W143**	No specific issues	Not applicable	No mitigation required
Me-Bor100	**W142**	No specific issues	Not applicable	No mitigation required
Me-Bor101	**W141**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor102	**W140**	No specific issues	Not applicable	No mitigation required
Me-Bor103	**W139**	No specific issues	Not applicable	No mitigation required
Me-Bor104	**W138**	No specific issues	Not applicable	No mitigation required
Me-Bor105	**W137**	No specific issues	Not applicable	No mitigation required
Me-Bor106	**W135/W136**	No specific issues	Not applicable	No mitigation required
Me-Bor107	**W134**	No specific issues	Not applicable	No mitigation required
Me-Bor108	**W133**	No specific issues	Not applicable	No mitigation required
Me-Bor109	**W132**	No specific issues	Not applicable	No mitigation required
Me-Bor110	**W131**	No specific issues	Not applicable	No mitigation required
Me-Bor111	**W130**	Large concentration of flakes, retouched flakes and cores	204m, 127m, 102m, 90m, 85m, 44m and 16m	The site requires mapping and controlled sampling before the project construction phase
Me-Bor112	**W129**	LIA potshards/Occurrence	43m	No further action required - the site fall outside the development footprint
Me-Bor113	**W128**	No specific issues	Not applicable	No mitigation required
Me-Bor114	**W127**	No specific issues	Not applicable	No mitigation required
Me-Bor115	**W126**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor116	**W124**	No specific issues	Not applicable	No mitigation required
Me-Bor117	**W123**	No specific issues	Not applicable	No mitigation required
Me-Bor118	**W122/W121**	LIA potshard scatter	130m and 77m	No further action required - insignificant scatter/isolated potshard
Me-Bor119	**W120**	No specific issues	Not applicable	No mitigation required
Me-Bor120	**W119**	No specific issues	Not applicable	No mitigation required
Me-Bor121	**W118**	No specific issues	Not applicable	No mitigation required
Me-Bor122	**W117**	No specific issues	Not applicable	No mitigation required
Me-Bor123	**W116**	No specific issues	Not applicable	No mitigation required
Me-Bor124	**W115**	No specific issues	Not applicable	No mitigation required
Me-Bor125	**W114**	No specific issues	Not applicable	No mitigation required
Me-Bor126	**W113**	No specific issues	Not applicable	No mitigation required
Me-Bor127	**W112**	No specific issues	Not applicable	No mitigation required
Me-Bor128	**W111**	Built environment &landscape site	175m and 99m	No further action required - the site is of low heritage significance with negligible
Me-Bor129	**W110**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor130	**W109**	No specific issues	Not applicable	No mitigation required
Me-Bor131	**W108/W107**	No specific issues	Not applicable	No mitigation required
Me-Bor132	**W106**	No specific issues	Not applicable	No mitigation required
Me-Bor133	**W105**	No specific issues	Not applicable	No mitigation required
Me-Bor134	**W104**	No specific issues	Not applicable	No mitigation required
Me-Bor135	**W103**	No specific issues	Not applicable	No mitigation required
Me-Bor136	**W102**	No specific issues	Not applicable	No mitigation required
Me-Bor137	**W101**	No specific issues	Not applicable	No mitigation required
Me-Bor138	**W265**	No specific issues	Not applicable	No mitigation required
Me-Bor139	**W264**	Built environment & landscape site	45m	No further action required - the site is not a heritage site and has negligible impact significance
Me-Bor140	**W263**	No specific issues	Not applicable	No mitigation required
Me-Bor141	**W262**	No specific issues	Not applicable	No mitigation required
Me-Bor142	**W261**	No specific issues	Not applicable	No mitigation required
Me-Bor143	**W260**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor144	**W259/W273**	No specific issues	Not applicable	No mitigation required
Me-Bor145	**W272**	Built environment & landscape site	116m	No further action required - the site is not a heritage site and has negligible impact significance
Me-Bor146	**W271**	No specific issues	Not applicable	No mitigation required
Me-Bor147	**W270**	No specific issues	Not applicable	No mitigation required
Me-Bor148	**W269**	No specific issues	Not applicable	No mitigation required
Me-Bor149	**W268**	No specific issues	Not applicable	No mitigation required
Me-Bor150	**W267**	No specific issues	Not applicable	No mitigation required
Me-Bor151	**W276**	No specific issues	Not applicable	No mitigation required
Me-Bor152	**W275**	No specific issues	Not applicable	No mitigation required
Me-Bor153	**W274**	No specific issues	Not applicable	No mitigation required
Me-Bor154	**W288**	No specific issues	Not applicable	No mitigation required
Me-Bor155	**W287**	No specific issues	Not applicable	No mitigation required
Me-Bor156	**W286**	No specific issues	Not applicable	No mitigation required
Me-Bor157	**W285**	Cores, hammer stones, retouched flakes and	55m and 150m	No further action required. It also falls outside the project development footprint

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
		cobbles		
Me-Bor158	**W284**	Isolate Core/Scatter	158m	No further action required - the site is not a heritage site rather a scatter and has negligible impact significance
Me-Bor159	**W283**	1. LIA/Historic grinding stone and grinder 2. Historical ash Midden. 3. LIA/Historic burnt daga floors pieces; daga floors and cement floors. 4. Built Environment & Landscape	1. 53m 2. 104m, 44m and 30m 3. 69m, 65m and 64m 4. 135m	1. Collection of the materials (grinding stone and grinder) from the field and placing them at an accredited archaeological research institution. 2. The site (historical ash Midden) did not display any form of material culture in it. It is a thin layer of ash and as such no further action is required to mitigate it. 3. The predominance of site of recent with exception to the burnt daga floor pieces. Based on the possible age of the site and what is contained at the site there are no proposed mitigation measures for this site.
Me-Bor160	**W282**	No specific issues	Not applicable	No mitigation required
Me-Bor161	**W281**	Built Environment & Landscape	32m	The only applicable and proposed mitigation is in terms of visual impact of the house - this is proposed in "kind". To possible move the pylon position by approximately 60m south-west of its current position.
Me-Bor162	**W280**	No specific issues	Not applicable	No mitigation required
Me-Bor163	**W279**	No specific issues	Not applicable	No mitigation required
Me-Bor164	**W278**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor165	**W299**	No specific issues	Not applicable	No mitigation required
Me-Bor166	**W298**	No specific issues	Not applicable	No mitigation required
Me-Bor167	**W297**	No specific issues	Not applicable	No mitigation required
Me-Bor168	**W296**	No specific issues	Not applicable	No mitigation required
Me-Bor169	**W295**	No specific issues	Not applicable	No mitigation required
Me-Bor170	**W294**	No specific issues	Not applicable	No mitigation required
Me-Bor171	**W293**	No specific issues	Not applicable	No mitigation required
Me-Bor172	**W292**	No specific issues	Not applicable	No mitigation required
Me-Bor173	**W291**	No specific issues	Not applicable	No mitigation required
Me-Bor174	**W290**	No specific issues	Not applicable	No mitigation required
Me-Bor175	**W312**	No specific issues	Not applicable	No mitigation required
Me-Bor176	**W311**	No specific issues	Not applicable	No mitigation required
Me-Bor177	**W310**	No specific issues	Not applicable	No mitigation required
Me-Bor178	**W309**	No specific issues	Not applicable	No mitigation required
Me-Bor179	**W308**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor180	**W307**	No specific issues	Not applicable	No mitigation required
Me-Bor181	**W306**	No specific issues	Not applicable	No mitigation required
Me-Bor182	**W305**	No specific issues	Not applicable	No mitigation required
Me-Bor183	**W304**	No specific issues	Not applicable	No mitigation required
Me-Bor184	**W303**	No specific issues	Not applicable	No mitigation required
Me-Bor185	**W302**	No specific issues	Not applicable	No mitigation required
Me-Bor186	**W301**	No specific issues	Not applicable	No mitigation required
Me-Bor187	**W316**	Cattle feeding lots and drinking ponds	92m	No Mitigation Measure Required
Me-Bor188	**W315**	No specific issues	Not applicable	No mitigation required
Me-Bor189	**W314**	No specific issues	Not applicable	No mitigation required
Me-Bor190	**W329**	No specific issues	Not applicable	No mitigation required
Me-Bor191	**W328**	No specific issues	Not applicable	No mitigation required
Me-Bor192	**W327**	No specific issues	Not applicable	No mitigation required
Me-Bor193	**W326**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor194	**W325**	No specific issues	Not applicable	No mitigation required
Me-Bor195	**W324**	No specific issues	Not applicable	No mitigation required
Me-Bor196	**W323**	No specific issues	Not applicable	No mitigation required
Me-Bor197	**W322**	No specific issues	Not applicable	No mitigation required
Me-Bor198	**W321**	No specific issues	Not applicable	No mitigation required
Me-Bor199	**W320**	No specific issues	Not applicable	No mitigation required
Me-Bor200	**W319**	No specific issues	Not applicable	No mitigation required
Me-Bor201	**W318**	No specific issues	Not applicable	No mitigation required
Me-Bor202	**W332**	MSA flakes and retouched flakes	154m	No further action is required. Recording of the site during the survey was sufficient
Me-Bor203	**W331**	No specific issues	Not applicable	No mitigation required
Me-Bor204	**W339**	No specific issues	Not applicable	No mitigation required
Me-Bor205	**W338**	Stone walled kraal	67m, 58m and 37m	The site should be avoided and be treated as a no-go area to avoid an potential impacts during the servitude clearance.
Me-Bor206	**W337**	No specific issues	Not applicable	No mitigation required
Me-Bor207	**W336**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor208	**W335**	No specific issues	Not applicable	No mitigation required
Me-Bor209	**W334**	No specific issues	Not applicable	No mitigation required
Me-Bor210	**W350**	No specific issues	Not applicable	No mitigation required
Me-Bor211	**W349**	No specific issues	Not applicable	No mitigation required
Me-Bor212	**W348**	No specific issues	Not applicable	No mitigation required
Me-Bor213	**W347**	No specific issues	Not applicable	No mitigation required
Me-Bor214	**W346**	No specific issues	Not applicable	No mitigation required
Me-Bor215	**W345**	No specific issues	Not applicable	No mitigation required
Me-Bor216	**W344**	No specific issues	Not applicable	No mitigation required
Me-Bor217	**W343**	No specific issues	Not applicable	No mitigation required
Me-Bor218	**W342**	No specific issues	Not applicable	No mitigation required
Me-Bor219	**W341/W362**	No specific issues	Not applicable	No mitigation required
Me-Bor220	**W361**	No specific issues	Not applicable	No mitigation required
Me-Bor221	**W360**	No specific issues	Not applicable	No mitigation required
Me-Bor222	**W359**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor223	**W358**	No specific issues	Not applicable	No mitigation required
Me-Bor224	**W357**	1.LIA/Historic isolated grinding stone 2. Isolated hand axe	1. 34m 2. 74m	1. The piece of the grinding stone should be collected and placed at an accredited archaeological research institution 2. No further action necessary
Me-Bor225	**W356**	MSA flakes and retouched flakes	198m and 127m	Mapping of the site and controlled sampling required
Me-Bor226	**W355**	MSA flakes and retouched flakes	143m	Mapping of the site and controlled sampling required
Me-Bor227	**W354**	Scatter of MSA flakes and retouched flakes	159m	No further action necessary
Me-Bor228	**W353**	No specific issues	Not applicable	No mitigation required
Me-Bor229	**W372**	No specific issues	Not applicable	No mitigation required
Me-Bor230	**W371**	No specific issues	Not applicable	No mitigation required
Me-Bor231	**W370**	No specific issues	Not applicable	No mitigation required
Me-Bor232	**W369**	No specific issues	Not applicable	No mitigation required
Me-Bor233	**W368**	No specific issues	Not applicable	No mitigation required
Me-Bor234	**W367**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor235	**W366**	No specific issues	Not applicable	No mitigation required
Me-Bor236	**W365**	No specific issues	Not applicable	No mitigation required
Me-Bor237	**W364**	No specific issues	Not applicable	No mitigation required
Me-Bor238	**W379**	No specific issues	Not applicable	No mitigation required
Me-Bor239	**W378**	No specific issues	Not applicable	No mitigation required
Me-Bor240	**W377**	No specific issues	Not applicable	No mitigation required
Me-Bor241	**W376**	No specific issues	Not applicable	No mitigation required
Me-Bor242	**W375**	No specific issues	Not applicable	No mitigation required
Me-Bor243	**W374**	No specific issues	Not applicable	No mitigation required
Me-Bor244	**W373/W388**	No specific issues	Not applicable	No mitigation required
Me-Bor245	**W387**	No specific issues	Not applicable	No mitigation required
Me-Bor246	**W386**	No specific issues	Not applicable	No mitigation required
Me-Bor247	**W385**	No specific issues	Not applicable	No mitigation required
Me-Bor248	**W384**	No specific issues	Not applicable	No mitigation required
Me-Bor249	**W383**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor250	**W382**	No specific issues	Not applicable	No mitigation required
Me-Bor251	**W381**	No specific issues	Not applicable	No mitigation required
Me-Bor252	**W395**	No specific issues	Not applicable	No mitigation required
Me-Bor253	**W394**	No specific issues	Not applicable	No mitigation required
Me-Bor254	**W393**	No specific issues	Not applicable	No mitigation required
Me-Bor255	**W392**	No specific issues	Not applicable	No mitigation required
Me-Bor256	**W391**	No specific issues	Not applicable	No mitigation required
Me-Bor257	**W390**	No specific issues	Not applicable	No mitigation required
Me-Bor258	**W400**	No specific issues	Not applicable	No mitigation required
Me-Bor259	**W399**	Built environment & landscape site	73m	No further action required - the site is not a heritage site and has negligible impact significance even though it falls directly within the line corridor servitude.
Me-Bor260	**W398**	No specific issues	Not applicable	No mitigation required
Me-Bor261	**W397**	No specific issues	Not applicable	No mitigation required
Me-Bor262	**W410**	No specific issues	Not applicable	No mitigation required
Me-Bor263	**W409**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor264	**W408**	No specific issues	Not applicable	No mitigation required
Me-Bor265	**W407**	No specific issues	Not applicable	No mitigation required
Me-Bor266	**W406**	No specific issues	Not applicable	No mitigation required
Me-Bor267	**W405**	No specific issues	Not applicable	No mitigation required
Me-Bor268	**W404**	No specific issues	Not applicable	No mitigation required
Me-Bor269	**W403**	No specific issues	Not applicable	No mitigation required
Me-Bor270	**W402**	No specific issues	Not applicable	No mitigation required
Me-Bor271	**W422**	No specific issues	Not applicable	No mitigation required
Me-Bor272	**W421**	No specific issues	Not applicable	No mitigation required
Me-Bor273	**W420**	No specific issues	Not applicable	No mitigation required
Me-Bor274	**W419**	No specific issues	Not applicable	No mitigation required
Me-Bor275	**W418**	No specific issues	Not applicable	No mitigation required
Me-Bor276	**W417**	No specific issues	Not applicable	No mitigation required
Me-Bor277	**W416**	No specific issues	Not applicable	No mitigation required
Me-Bor278	**W415**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor279	**W414**	No specific issues	Not applicable	No mitigation required
Me-Bor280	**W413**	No specific issues	Not applicable	No mitigation required
Me-Bor281	**W412**	No specific issues	Not applicable	No mitigation required
Me-Bor282	**W411/W431**	Built environment & landscape site	65m	No further action required - the site will not be affected, it falls outside project footprint.
Me-Bor283	**W430**	No specific issues	Not applicable	No mitigation required
Me-Bor284	**W429**	No specific issues	Not applicable	No mitigation required
Me-Bor285	**W428**	No specific issues	Not applicable	No mitigation required
Me-Bor286	**W427**	No specific issues	Not applicable	No mitigation required
Me-Bor287	**W426**	LSA digging stick suspension stone	211m	rarity of such LSA material and the fact that it was in plough fields which could increase the susceptibility of this material being further displaced. It was collected by the archaeologist who is in a process to apply for a rescue permit with SAHRA APM Unit to place the material at Wits Archaeology Department for teaching and display purposes.
Me-Bor288	**W425**	No specific issues	Not applicable	No mitigation required
Me-Bor289	**W424**	No specific issues	Not applicable	No mitigation required
Me-Bor290	**W434**	No specific issues	Not applicable	No mitigation required
Me-Bor291	**W433**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor292	**W432/W438**	Retouched flakes and cobbles	62m	No further action required
Me-Bor293	**W437**	No specific issues	Not applicable	No mitigation required
Me-Bor294	**W436**	No specific issues	Not applicable	No mitigation required
Me-Bor295	**W435/W454**	No specific issues	Not applicable	No mitigation required
Me-Bor296	**W453**	No specific issues	Not applicable	No mitigation required
Me-Bor297	**W452**	No specific issues	Not applicable	No mitigation required
Me-Bor298	**W451**	Retouched flakes and cobbles	141m and 142m	No further action required - the site is not a heritage site and has negligible impact significance
Me-Bor299	**W450**	No specific issues	Not applicable	No mitigation required
Me-Bor300	**W449**	No specific issues	Not applicable	No mitigation required
Me-Bor301	**W448**	No specific issues	Not applicable	No mitigation required
Me-Bor302	**W447**	No specific issues	Not applicable	No mitigation required
Me-Bor303	**W446**	No specific issues	Not applicable	No mitigation required
Me-Bor304	**W445**	No specific issues	Not applicable	No mitigation required
Me-Bor305	**W444**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor306	**W443**	No specific issues	Not applicable	No mitigation required
Me-Bor307	**W442**	No specific issues	Not applicable	No mitigation required
Me-Bor308	**W441**	No specific issues	Not applicable	No mitigation required
Me-Bor309	**W440**	No specific issues	Not applicable	No mitigation required
Me-Bor310	**W473**	No specific issues	Not applicable	No mitigation required
Me-Bor311	**W472**	No specific issues	Not applicable	No mitigation required
Me-Bor312	**W471**	LIA/Historic isolated grinding stone	86m	The piece of the grinding stone should be collected and placed at an accredited archaeological research institution
Me-Bor313	**W470**	No specific issues	Not applicable	No mitigation required
Me-Bor314	**W469**	No specific issues	Not applicable	No mitigation required
Me-Bor315	**W468**	No specific issues	Not applicable	No mitigation required
Me-Bor316	**W467**	No specific issues	Not applicable	No mitigation required
Me-Bor317	**W466**	No specific issues	Not applicable	No mitigation required
Me-Bor318	**W465**	No specific issues	Not applicable	No mitigation required
Me-Bor319	**W464**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor320	**W463**	No specific issues	Not applicable	No mitigation required
Me-Bor321	**W462**	No specific issues	Not applicable	No mitigation required
Me-Bor322	**W461**	No specific issues	Not applicable	No mitigation required
Me-Bor323	**W460**	No specific issues	Not applicable	No mitigation required
Me-Bor324	**W459**	No specific issues	Not applicable	No mitigation required
Me-Bor325	**W458**	No specific issues	Not applicable	No mitigation required
Me-Bor326	**W457**	No specific issues	Not applicable	No mitigation required
Me-Bor327	**W456**	No specific issues	Not applicable	No mitigation required
Me-Bor328	**W455/W518**	Dam	31m	No further action required - the site is not a heritage site and has negligible impact significance
Me-Bor329	**W517**	No specific issues	Not applicable	No mitigation required
Me-Bor330	**W516**	No specific issues	Not applicable	No mitigation required
Me-Bor331	**W515**	No specific issues	Not applicable	No mitigation required
Me-Bor332	**W514**	No specific issues	Not applicable	No mitigation required
Me-Bor333	**W513**	No specific issues	Not applicable	No mitigation required
Me-Bor334	**W512**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor335	**W511**	No specific issues	Not applicable	No mitigation required
Me-Bor336	**W510**	No specific issues	Not applicable	No mitigation required
Me-Bor337	**W509**	No specific issues	Not applicable	No mitigation required
Me-Bor338	**W508**	No specific issues	Not applicable	No mitigation required
Me-Bor339	**W507**	No specific issues	Not applicable	No mitigation required
Me-Bor340	**W506**	No specific issues	Not applicable	No mitigation required
Me-Bor341	**W505**	No specific issues	Not applicable	No mitigation required
Me-Bor342	**W504**	No specific issues	Not applicable	No mitigation required
Me-Bor343	**W503**	No specific issues	Not applicable	No mitigation required
Me-Bor344	**W502**	No specific issues	Not applicable	No mitigation required
Me-Bor345	**W501**	No specific issues	Not applicable	No mitigation required
Me-Bor346	**W500**	No specific issues	Not applicable	No mitigation required
Me-Bor347	**W499**	No specific issues	Not applicable	No mitigation required
Me-Bor348	**W498**	No specific issues	Not applicable	No mitigation required
Me-Bor349	**W497**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor350	**W496**	No specific issues	Not applicable	No mitigation required
Me-Bor351	**W495**	No specific issues	Not applicable	No mitigation required
Me-Bor352	**W494**	No specific issues	Not applicable	No mitigation required
Me-Bor353	**W493**	No specific issues	Not applicable	No mitigation required
Me-Bor354	**W492**	No specific issues	Not applicable	No mitigation required
Me-Bor355	**W491**	No specific issues	Not applicable	No mitigation required
Me-Bor356	**W490**	No specific issues	Not applicable	No mitigation required
Me-Bor357	**W489**	No specific issues	Not applicable	No mitigation required
Me-Bor358	**W488**	No specific issues	Not applicable	No mitigation required
Me-Bor359	**W487**	No specific issues	Not applicable	No mitigation required
Me-Bor360	**W486**	No specific issues	Not applicable	No mitigation required
Me-Bor361	**W485**	No specific issues	Not applicable	No mitigation required
Me-Bor362	**W484**	No specific issues	Not applicable	No mitigation required
Me-Bor363	**W483**	No specific issues	Not applicable	No mitigation required
Me-Bor364	**W482**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor365	**W481**	No specific issues	Not applicable	No mitigation required
Me-Bor366	**W480**	No specific issues	Not applicable	No mitigation required
Me-Bor367	**W479**	No specific issues	Not applicable	No mitigation required
Me-Bor368	**W478**	No specific issues	Not applicable	No mitigation required
Me-Bor369	**W477**	Cemetery	98m	Avoid the site and treat it as no go area
Me-Bor370	**W476**	Rondaval structures and court-yard walls	64m	No further action required
Me-Bor371	**W475**	No specific issues	Not applicable	No mitigation required
Me-Bor372	**W474/W538**	No specific issues	Not applicable	No mitigation required
Me-Bor373	**W537**	No specific issues	Not applicable	No mitigation required
Me-Bor374	**W536**	No specific issues	Not applicable	No mitigation required
Me-Bor375	**W535**	No specific issues	Not applicable	No mitigation required
Me-Bor376	**W534**	No specific issues	Not applicable	No mitigation required
Me-Bor377	**W533**	No specific issues	Not applicable	No mitigation required
Me-Bor378	**W532**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor379	**W531**	No specific issues	Not applicable	No mitigation required
Me-Bor380	**W530**	No specific issues	Not applicable	No mitigation required
Me-Bor381	**W529**	No specific issues	Not applicable	No mitigation required
Me-Bor382	**W528**	No specific issues	Not applicable	No mitigation required
Me-Bor383	**W527**	No specific issues	Not applicable	No mitigation required
Me-Bor384	**W526**	No specific issues	Not applicable	No mitigation required
Me-Bor385	**W525**	No specific issues	Not applicable	No mitigation required
Me-Bor386	**W524**	No specific issues	Not applicable	No mitigation required
Me-Bor387	**W523**	No specific issues	Not applicable	No mitigation required
Me-Bor388	**W522**	No specific issues	Not applicable	No mitigation required
Me-Bor389	**W521**	No specific issues	Not applicable	No mitigation required
Me-Bor390	**W520**	No specific issues	Not applicable	No mitigation required
Me-Bor391	**W519/W549**	No specific issues	Not applicable	No mitigation required
Me-Bor392	**W548**	No specific issues	Not applicable	No mitigation required
Me-Bor393	**W547**	Small heaps of calcrete	65m	No further action required - the site is not a heritage site and has negligible impact significance

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
		stones mounds		
Me-Bor394	**W546**	Stone walled complex	236m	Portion of the site have already been completely destructed - the only mitigation at this point would be to avoid the site. Especially areas that are still intact and treat it/them as not-go areas. But, most of these section fall outs the current proposed line corridor servitude
Me-Bor395	**W545**	No specific issues	Not applicable	No mitigation required
Me-Bor396	**W544**	No specific issues	Not applicable	No mitigation required
Me-Bor397	**W543**	No specific issues	Not applicable	No mitigation required
Me-Bor398	**W542**	No specific issues	Not applicable	No mitigation required
Me-Bor399	**W541**	No specific issues	Not applicable	No mitigation required
Me-Bor400	**W540**	No specific issues	Not applicable	No mitigation required
Me-Bor401	**W539/W555**	No specific issues	Not applicable	No mitigation required
Me-Bor402	**W554**	No specific issues	Not applicable	No mitigation required
Me-Bor403	**W553**	No specific issues	Not applicable	No mitigation required
Me-Bor404	**W552**	Structure (tin house structure)	91m	From a tangle heritage point of view, no further action required - the site is not a heritage site and has negligible impact significance. However, from a spiritual point of view because it is a place of worship by the Z.C.C church a consultative process is advised.
Me-Bor405	**W551**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor406	**W550/W569**	No specific issues	Not applicable	No mitigation required
Me-Bor407	**W568**	No specific issues	Not applicable	No mitigation required
Me-Bor408	**W567**	No specific issues	Not applicable	No mitigation required
Me-Bor409	**W566**	No specific issues	Not applicable	No mitigation required
Me-Bor410	**W565**	No specific issues	Not applicable	No mitigation required
Me-Bor411	**W564**	No specific issues	Not applicable	No mitigation required
Me-Bor412	**W563**	No specific issues	Not applicable	No mitigation required
Me-Bor413	**W562**	No specific issues	Not applicable	No mitigation required
Me-Bor414	**W561**	Potential grave	20m	No further action required - the site is not a heritage site and has negligible impact significance
Me-Bor415	**W560**	No specific issues	Not applicable	No mitigation required
Me-Bor416	**W559**	No specific issues	Not applicable	No mitigation required
Me-Bor417	**W558**	No specific issues	Not applicable	No mitigation required
Me-Bor418	**W557**	No specific issues	Not applicable	No mitigation required
Me-Bor419	**W556/W574**	No specific issues	Not applicable	No mitigation required

Tower Code: Eskom	Tower Code: Specialist	Heritage	Distance of Resource from Pylon	Heritage Mitigation
Me-Bor420	**W573**	No specific issues	Not applicable	No mitigation required
Me-Bor421	**W572**	No specific issues	Not applicable	No mitigation required
Me-Bor422	**W571**	No specific issues	Not applicable	No mitigation required
Me-Bor423	**W570**	No specific issues	Not applicable	No mitigation required
Me-Bor424	**W576**	No specific issues	Not applicable	No mitigation required
Me-Bor425	**W578**	No specific issues	Not applicable	No mitigation required

12. Summarization of Site Specific Mitigation on Areas of Concern

The areas of greatest concern, with regards to the site specific mitigation, are the watercourse and wetland areas that are situated throughout the study area, as shown in the figures below (**Figure 4** to **Figure 18**). These watercourse and wetland areas are of the greatest concern for specialists, as they are important water resources, have high biodiversity and are important from a avifaunal aspect, therefore, require the most site specific mitigation.

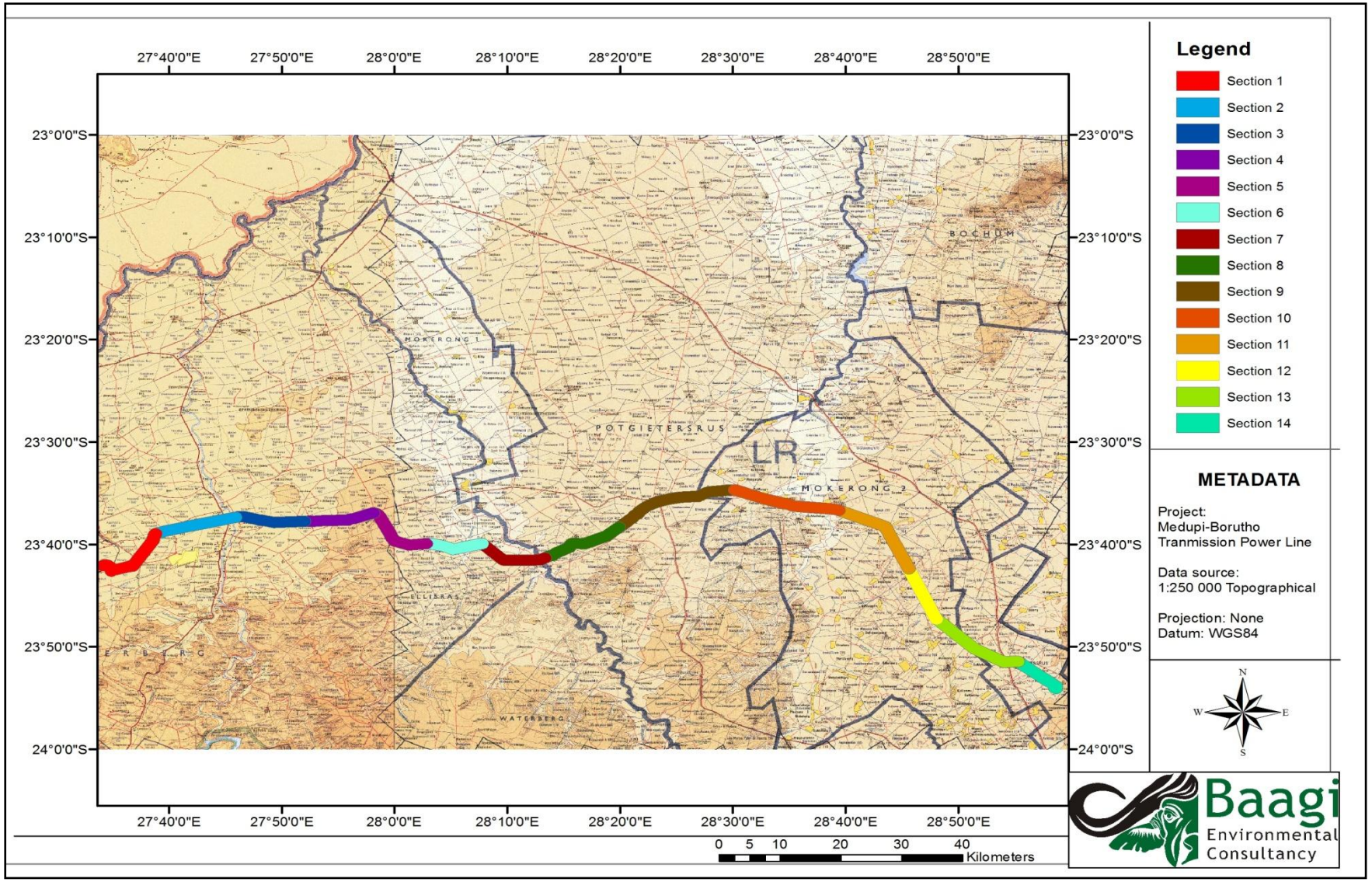

Figure 4: Overall Study Area - All Sections

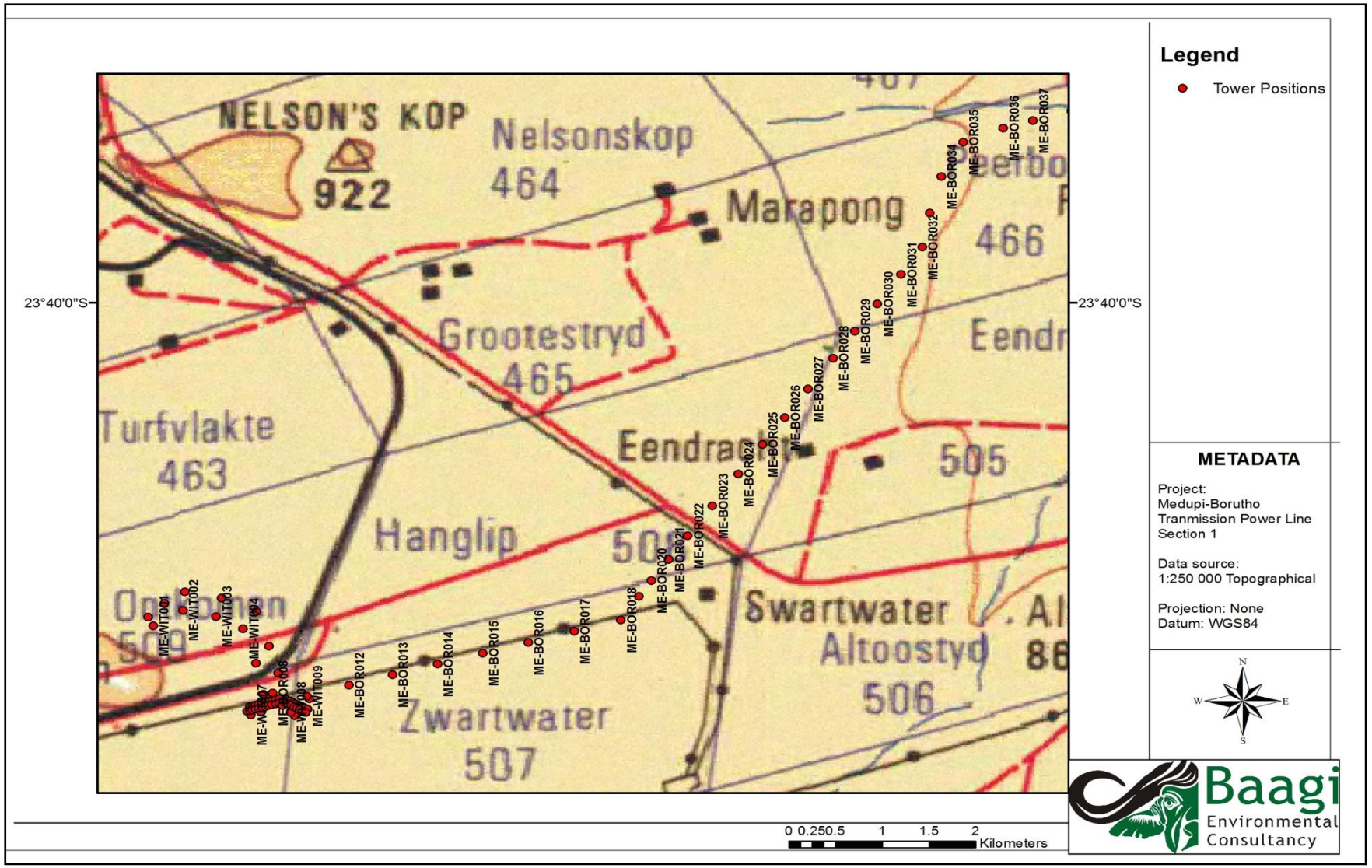

Figure 5: Overall Study Area - Section 1

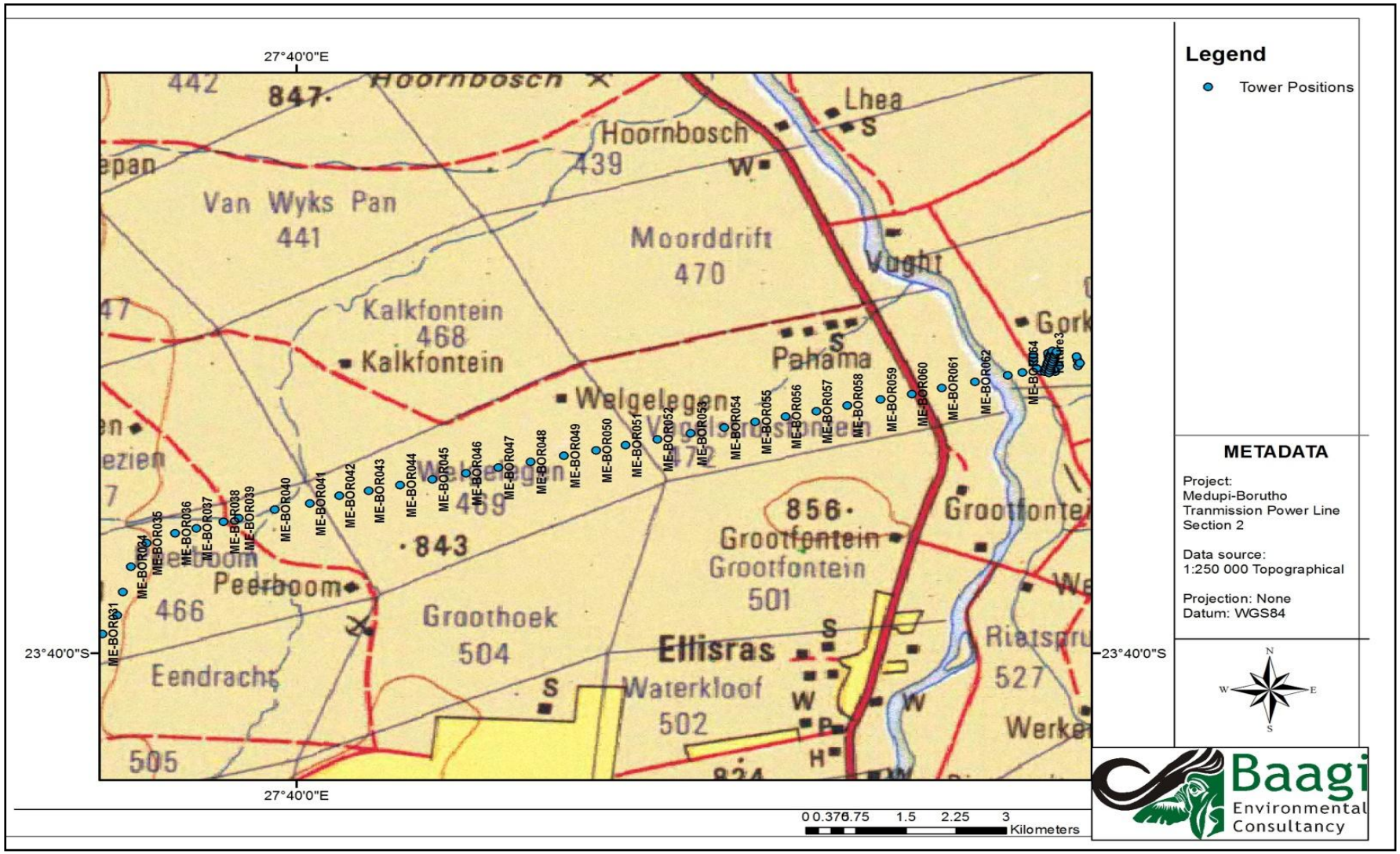

Figure 6: Overall Study Area - Section 2

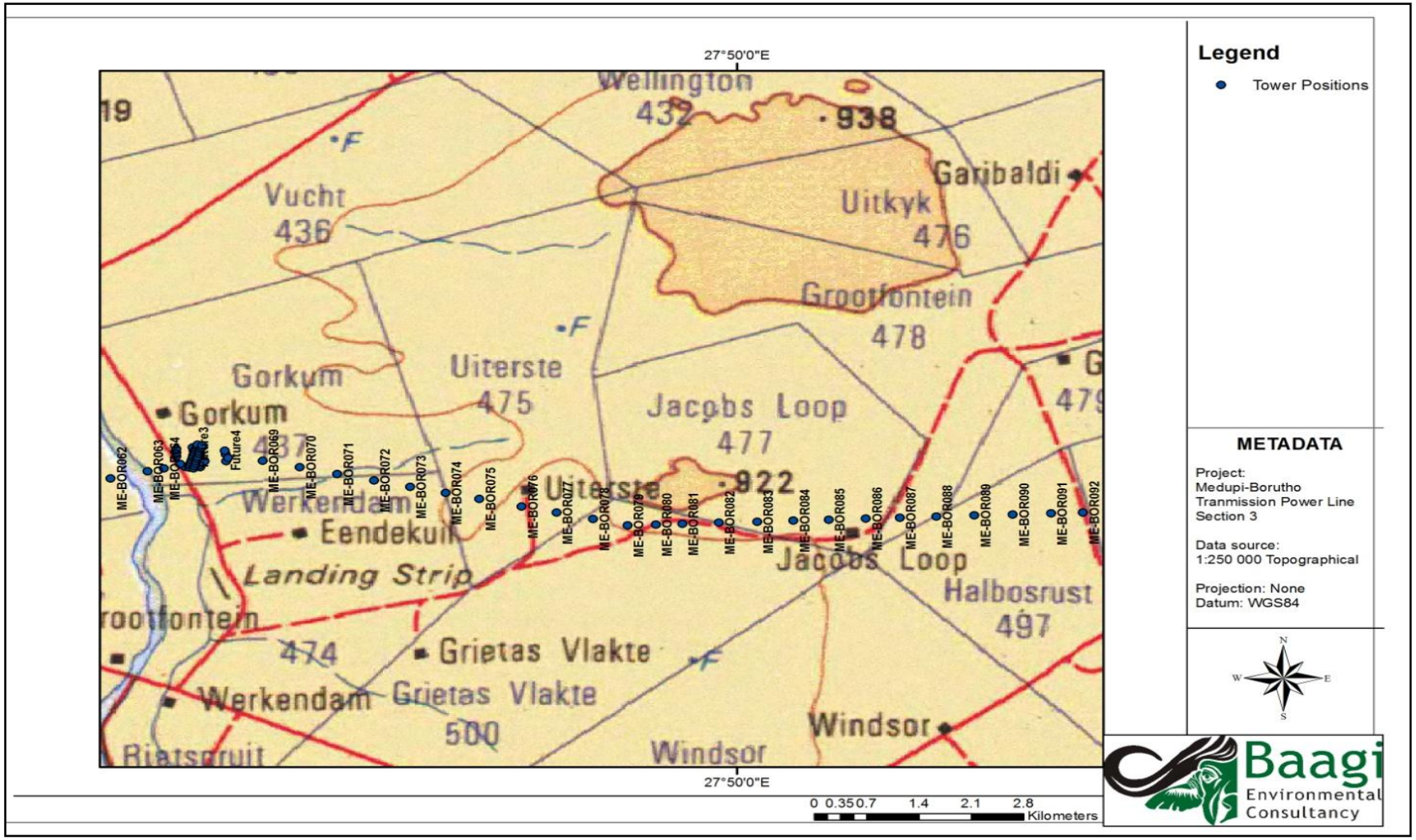

Figure 7: Overall Study Area - Section 3

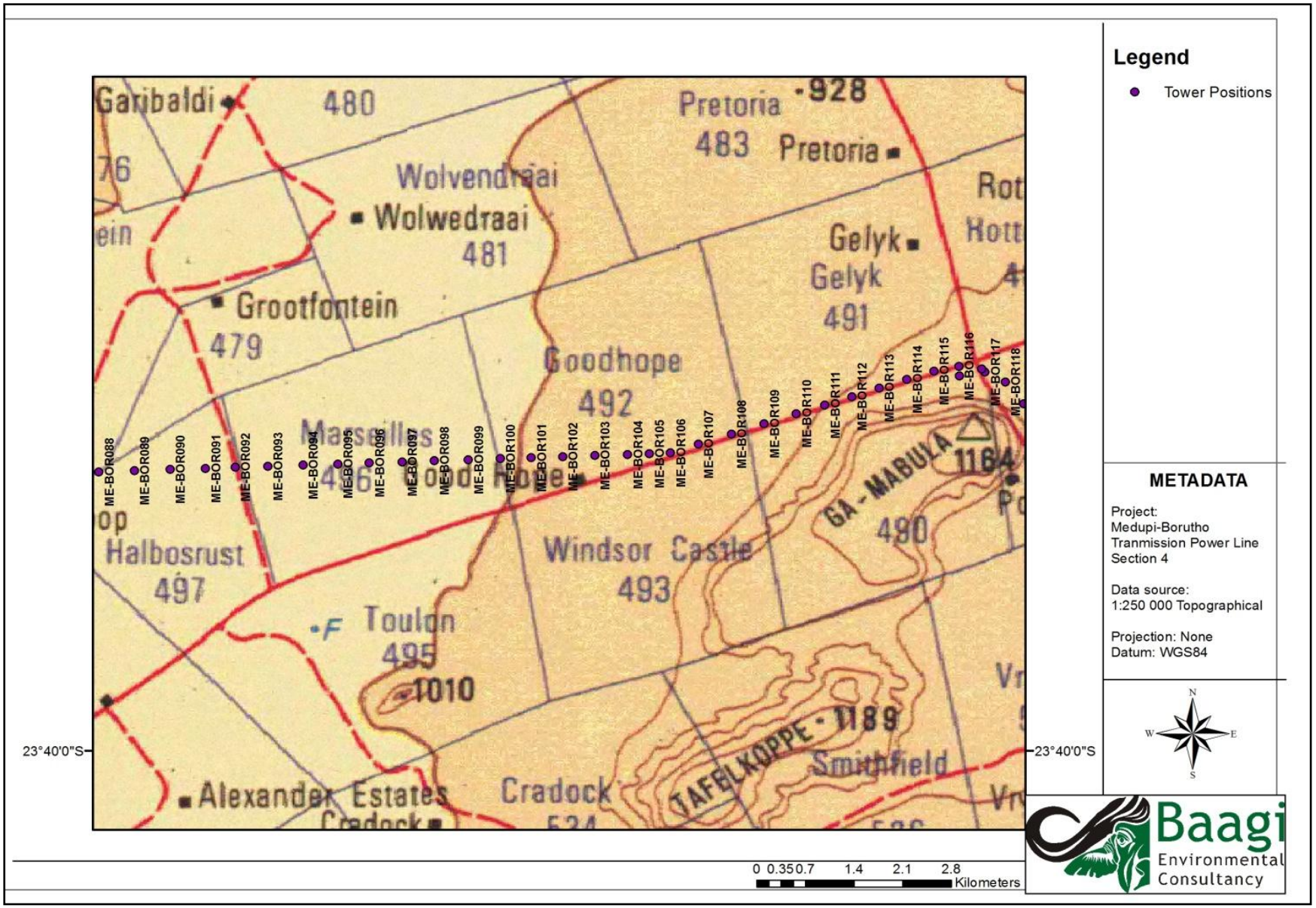

Figure 8: Overall Study Area - Section 4

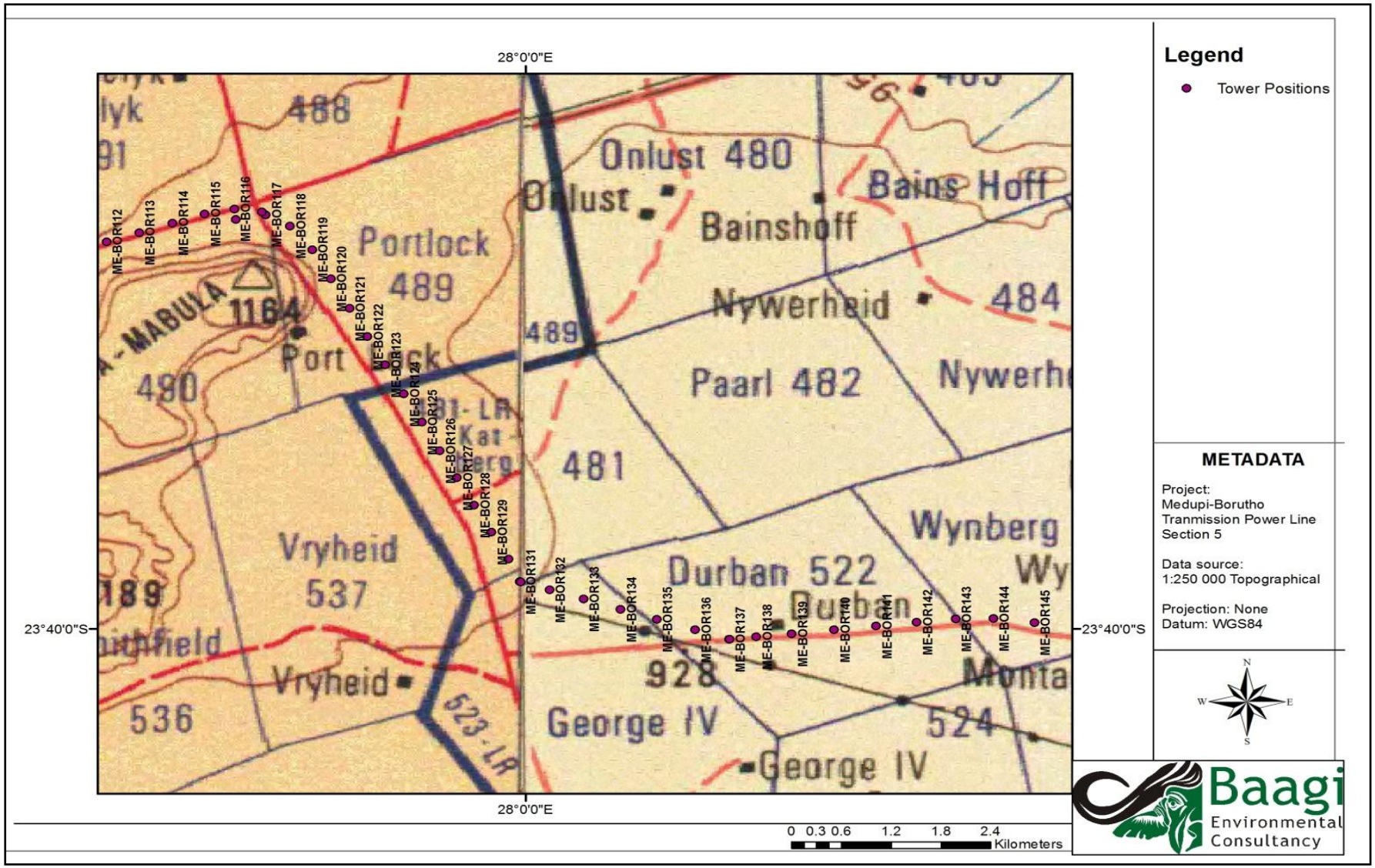

Figure 9: Overall Study Area - Section 5

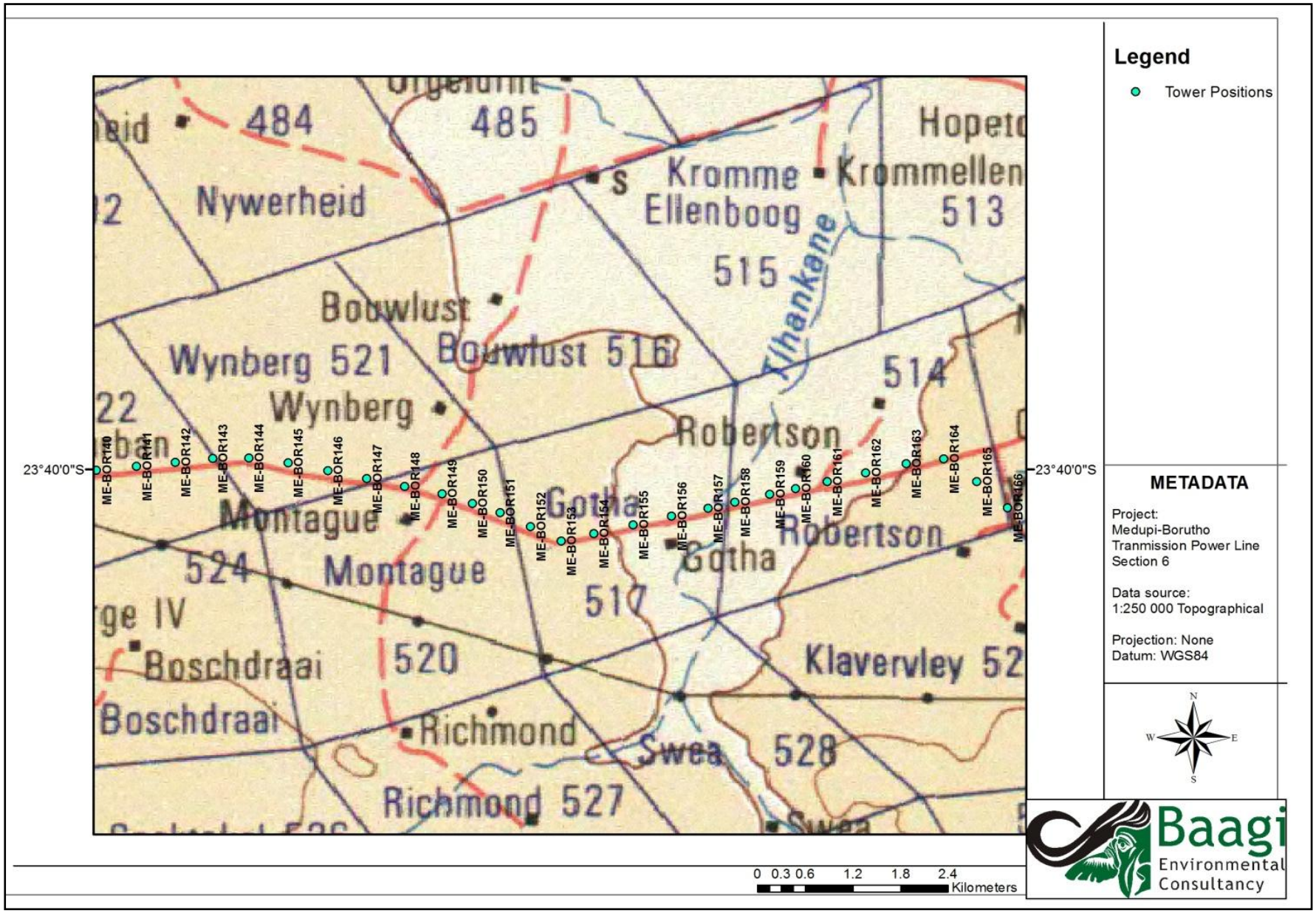

Figure 10: Overall Study Area - Section 6

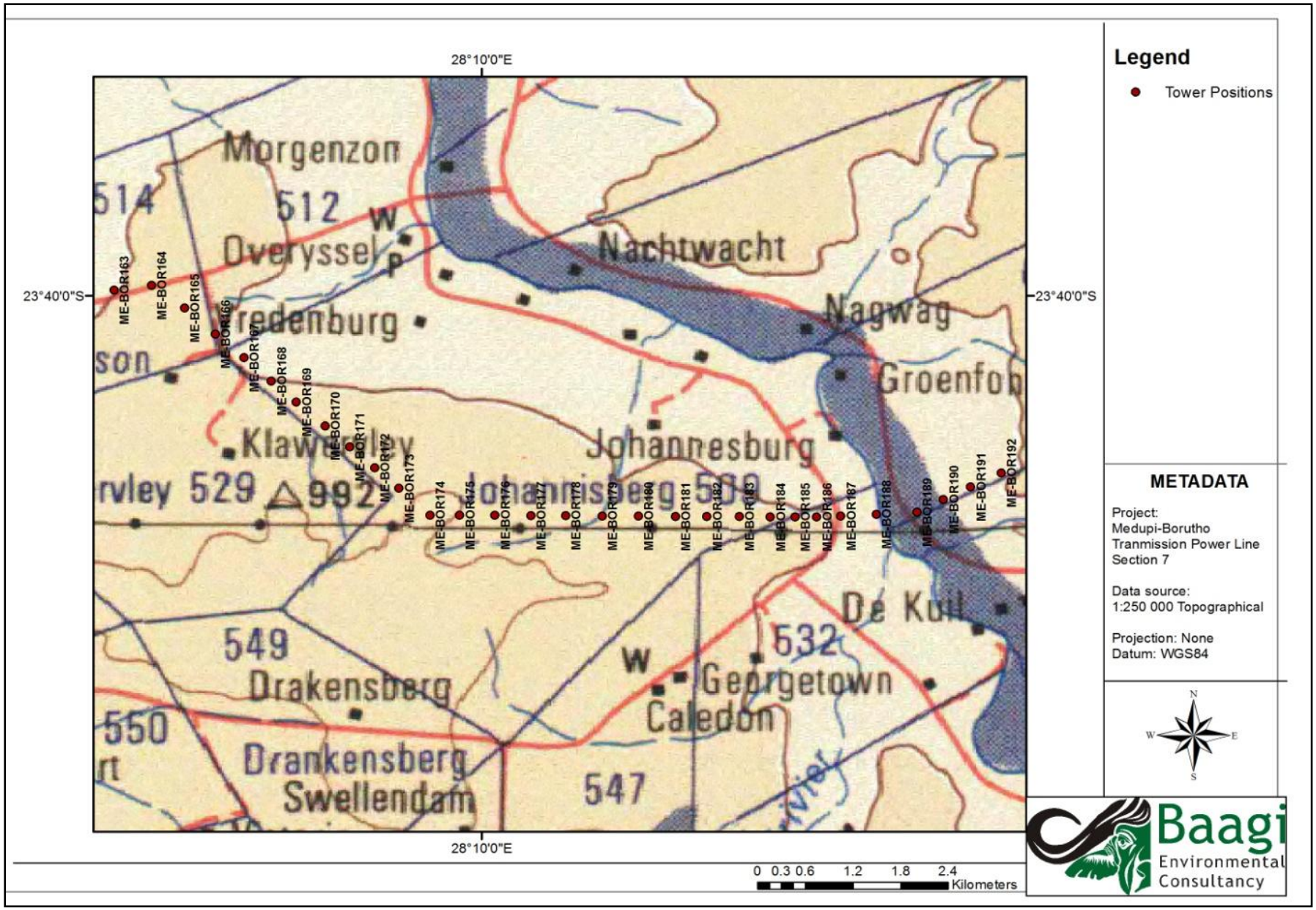

Figure 11: Overall Study Area - Section 7

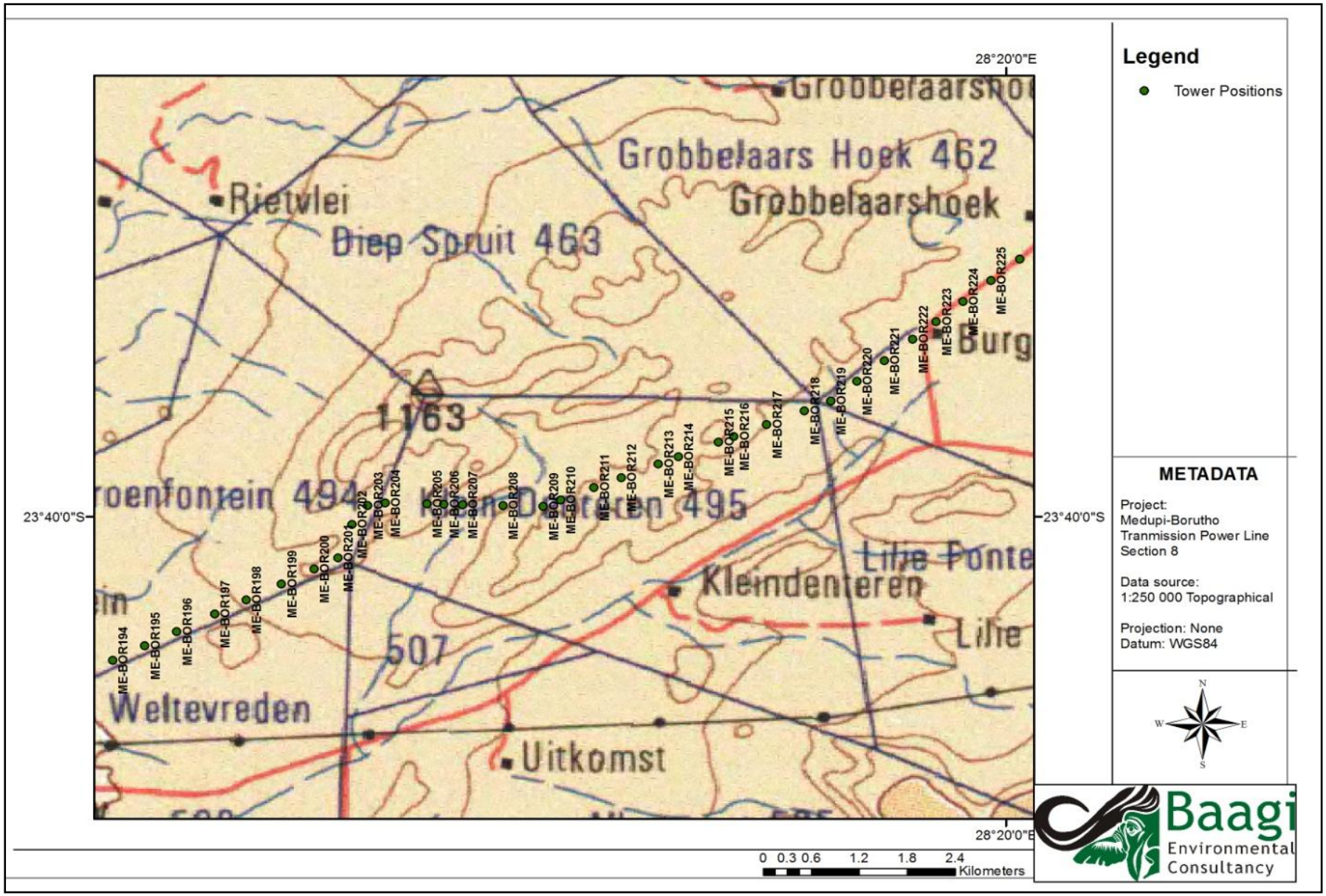

Figure 12: Overall Study Area - Section 8

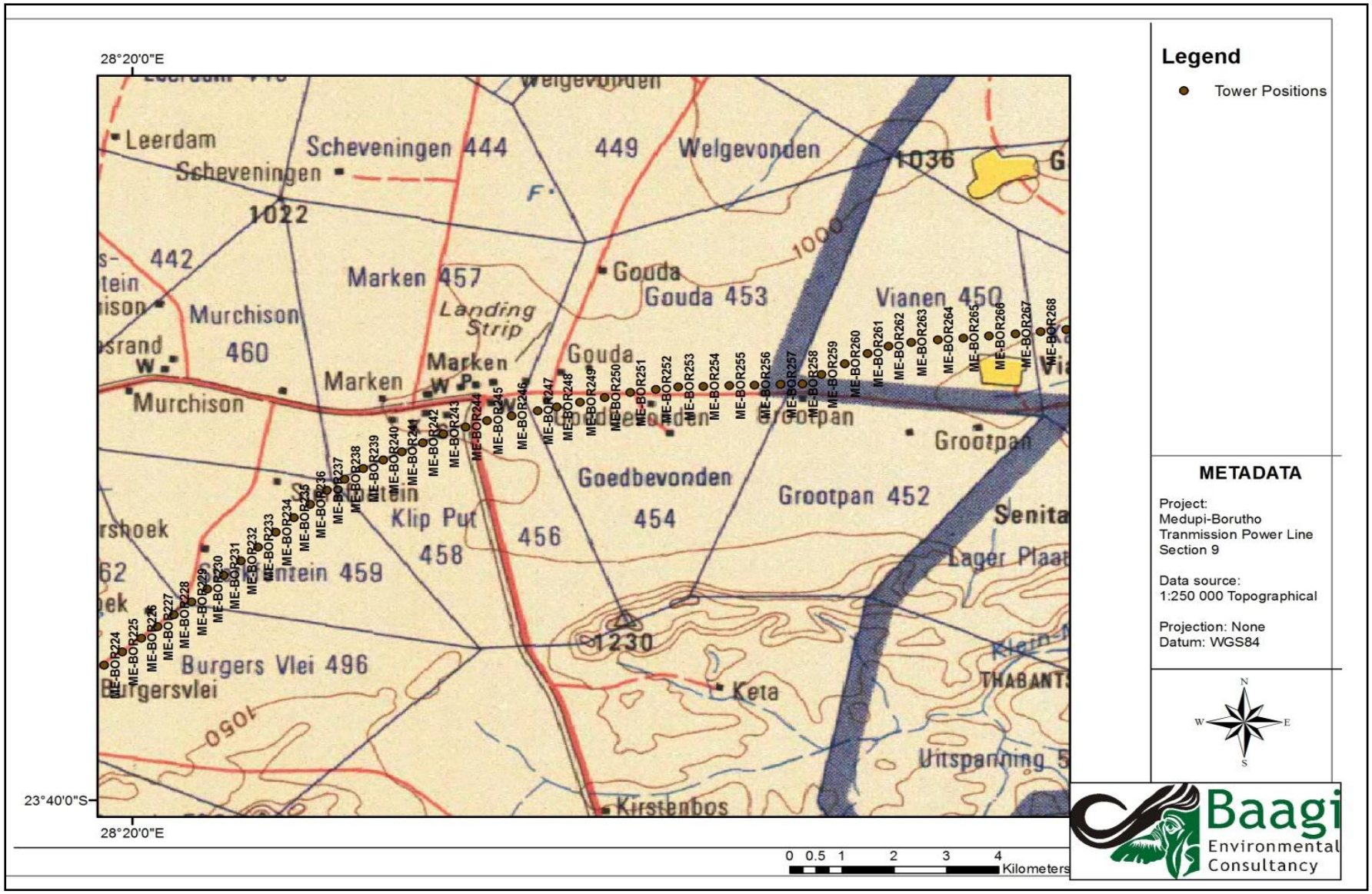

Figure 13: Overall Study Area - Section 9

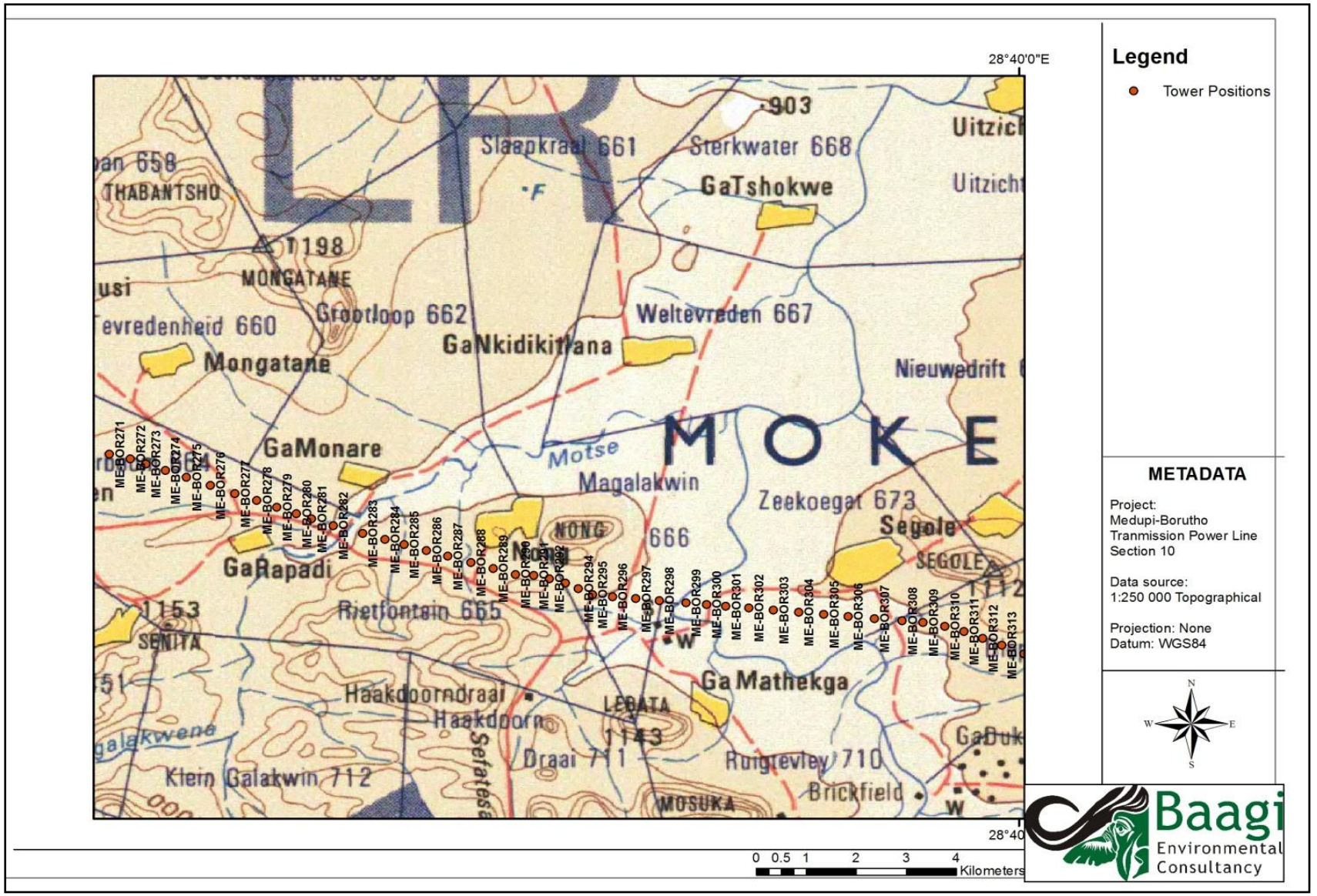

Figure 14: Overall Study Area - Section 10

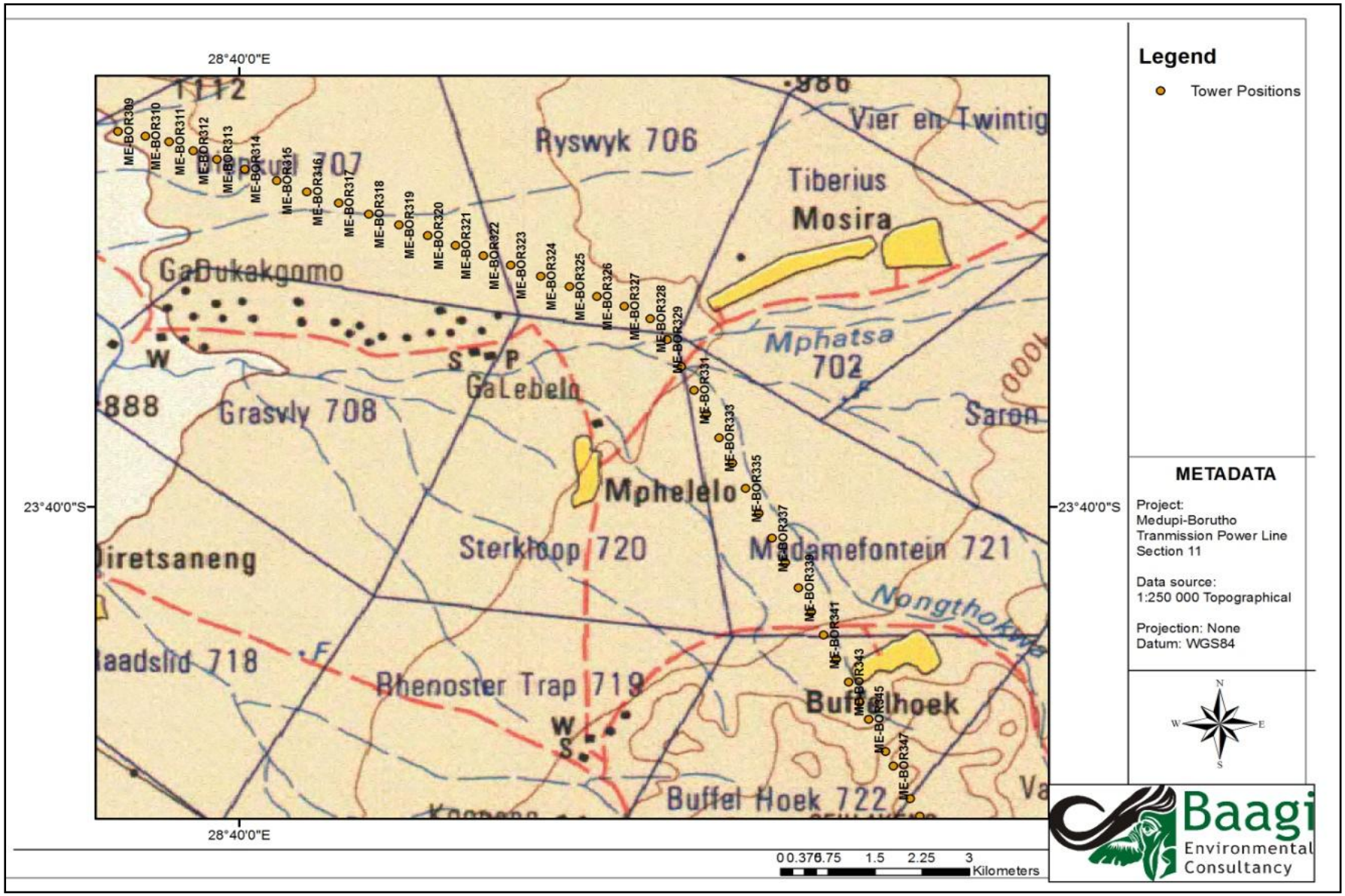

Figure 15: Overall Study Area - Section 11

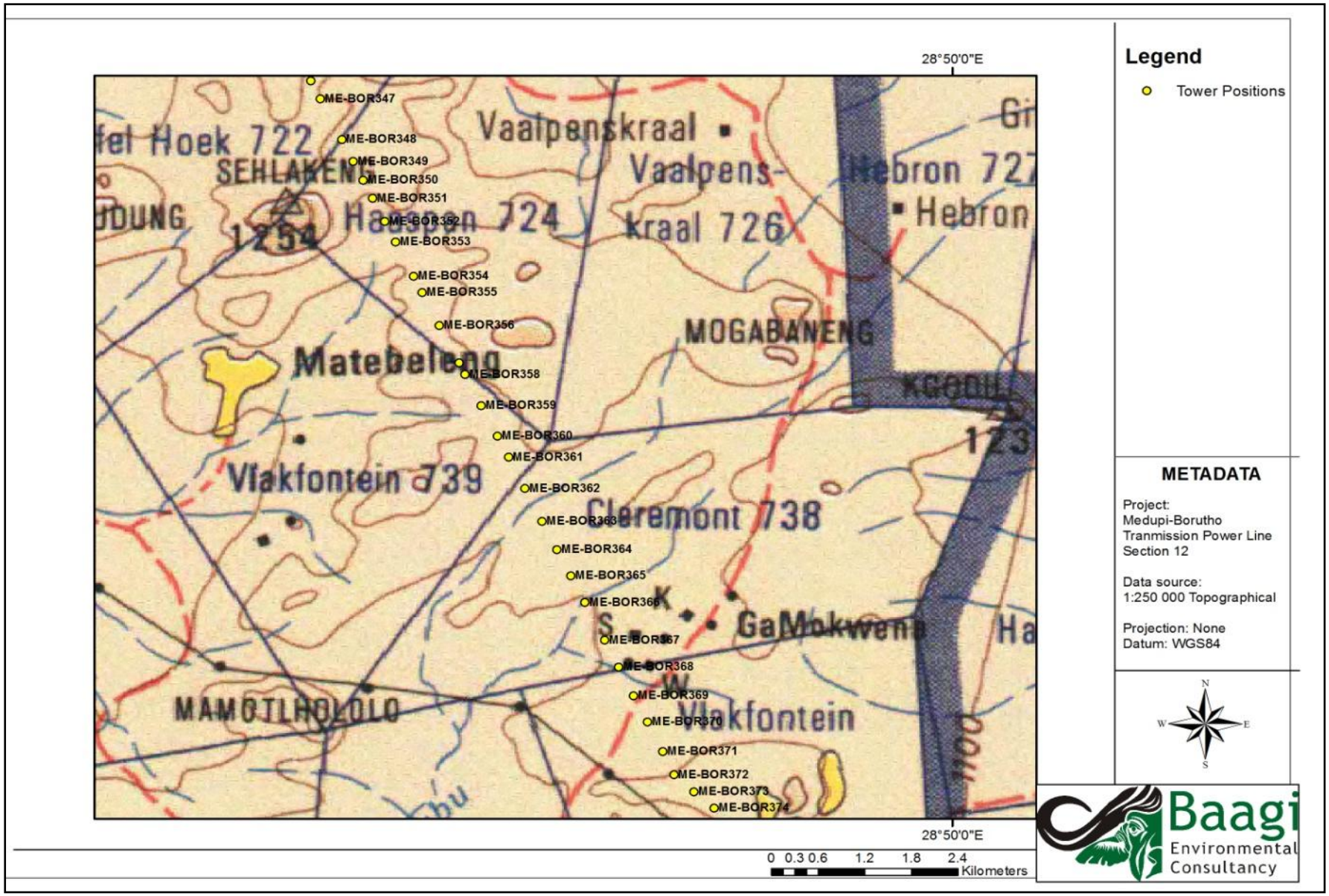

Figure 16: Overall Study Area - Section 12

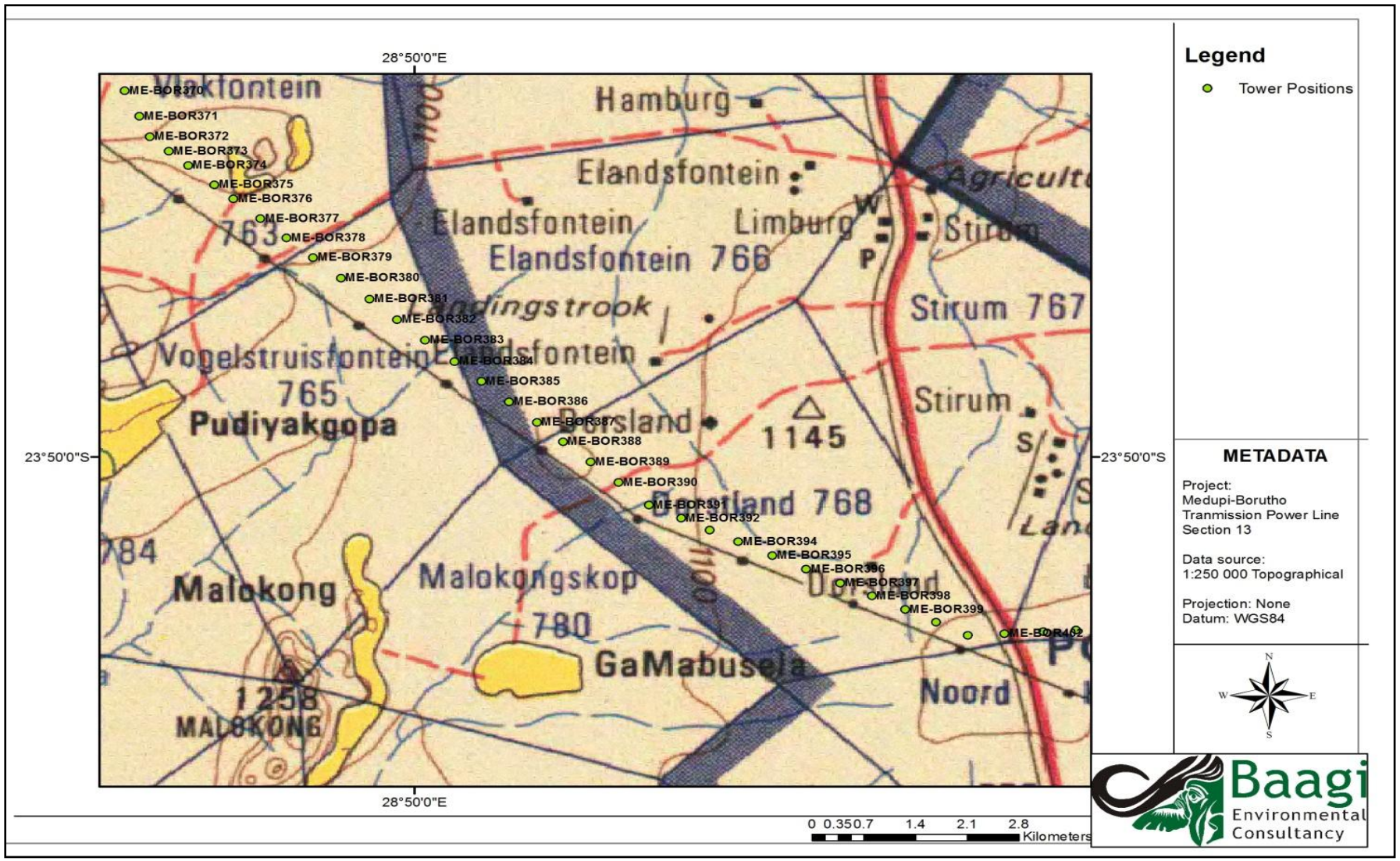

Figure 17: Overall Study Area - Section 13

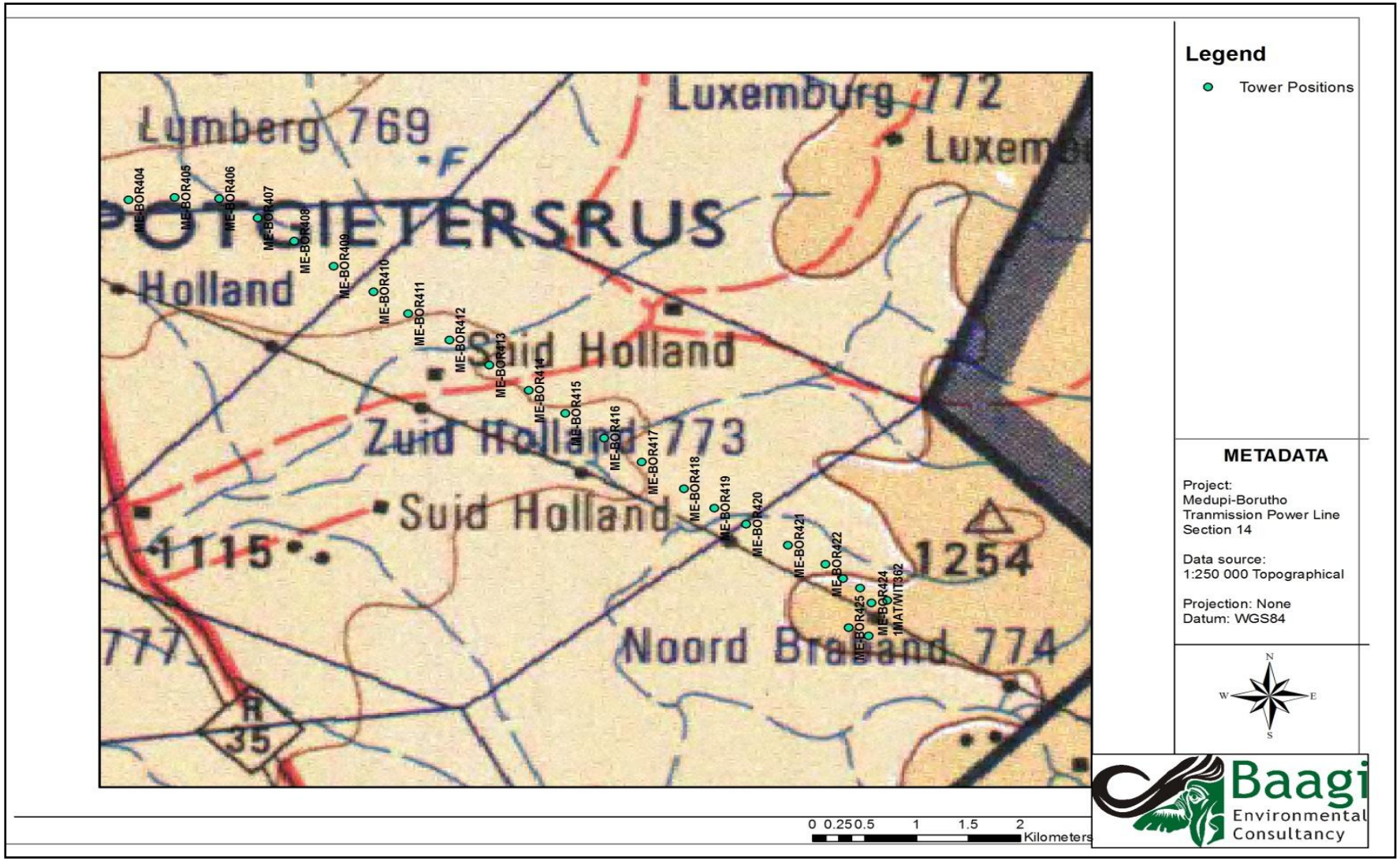

Figure 18: Overall Study Area - Section 14

C. SECTION 3: CONCLUSIONS

This Environmental Management Program should be used as an on-site reference document during all phases of this development, and auditing should take place in order to determine compliance with this CEMPR. Parties responsible for transgression of this CEMPR should be held responsible for any rehabilitation that may need to be undertaken. Parties responsible for environmental degradation through irresponsible behaviour / negligence should receive penalties.

Process facilitated the identification of relevant and practical mitigation measures, which may be used by the construction team and Eskom to draw up and respond to tender documentation. It is thus key to this process that this document be included during tendering to allow all potential bidders for this work to seriously consider and cost for such mitigation. This will ensure that the document receives the necessary buy in that it requires from the outset of the project.

This CEMPR was compiled in an iterative manner that allowed for a pre-screening of the pylons by the specialist team. This enabled specialists to identify pylons that could be moved slightly from one position to another to avoid more sensitive environmental features, such as drainage lines, areas susceptible to erosion and heritage artefacts. This in turn made it possible for the technical team to revise all the profiles to the agreement of all specialists concerned.

The protected tree species found on site have been marked and will require permit if they are to be removed. It is however important to keep in mind that these trees, although accepted as protected species, do occur in the abundance in the site area. Seeds of the species will be found within the seed bank and will return and grow once the disturbance of the construction has been completed. The replacement ratio for the trees within this area can thus be low as they will recover to a certain extent themselves.

More important is the protection of big dead trees and the replacement of removed dead trees, as these trees are very important habitat, nesting and roosting, sites for birds. This issue is usually ignored when it comes to CEMP. If any dead trees, four meters or higher, are removed they must be replaced or replacement dead trees created.

In order to have records of environmental incidences and the handling thereof, it is suggested that incidence logs (**Appendix 1**) be filled in by the Environmental Control Officer or Environmental Liaison Officer. The contract manager needs to be informed of such incidences and further actions need to be taken, should the need arise.

APPENDIX 1: INCIDENT AND ENVIRONMENTAL LOG

ENVIRONMENTAL INCIDENT LOG				
Date	*Env. Condition*	Comments (Include any possible explanations for current condition and possible responsible parties. Include photographs, records etc. if available)	Corrective Action Taken (Give details and attach documentation as far as possible)	**Signature**

APPENDIX 2: DECLARATION OF UNDERSTANDING BY DEVELOPER, ENGINEER AND CONTRACTOR

DECLARATION OF UNDERSTANDING BY THE DEVELOPER

I, _____

Representing _____

Declare that I have read and understood the contents of the Environmental Management Program for:

Contract _____

I also declare that I understand my responsibilities in terms of enforcing and implementing the Environmental Specifications for the aforementioned Contract.

Signed: _____

Place: _____

Date: _____

Witness 1: _____

Witness2: _____

DECLARATION OF UNDERSTANDING BY THE ENGINEER

I, _____

Representing _____

Declare that I have read and understood the contents of the Environmental Management Program for:

Contract _____

I also declare that I understand my responsibilities in terms of enforcing and implementing the Environmental Specifications for the aforementioned Contract.

Signed: _____

Place: _____

Date: _____

Witness 1: _____

Witness2: _____

DECLARATION OF UNDERSTANDING BY THE CONTRACTOR

I, _____

Representing _____

Declare that I have read and understood the contents of the Environmental Management Program for:

Contract _____

I also declare that I understand my responsibilities in terms of enforcing and implementing the Environmental Specifications for the aforementioned Contract.

Signed: _____

Place: _____

Date: _____

Witness 1: _____

Witness2:

APPENDIX 3: OIL SPILL CLEAN-UP AND REHABILITATION

APPENDIX 4: SAFETY, HEALTH, ENVIRONMENT & QUALITY (SHEQ) POLICY

APPENDIX 5: RECORD OF DECISION

APPENDIX 6: SPECIALIST REPORTS

1. **AVIFAUNA & FAUNA**

2. FAUNA AND FLORA INCLUDING TREE MARKING REPORT

3. HIA REPORT

4. Wetland and Surface Water

APPENDIX 7: METHOD STATEMENTS

METHOD STATEMENT: Solid Waste Management

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? [give a brief description of the works to be undertaken on site that will generate waste (hazardous and non-hazardous wastes)]: * Note: please attach extra pages if more space is required.

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT: Solid Waste Management (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date: **End Date:**…….

HOW IS WASTE TO BE MANAGED ON SITE? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement **Solid Waste Management (contd.)** (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

(Signed) _____ (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Crew Camps and Construction Lay Down Areas

CONTRACT:…… **DATE**:…….

WHAT CREW CAMPS AND CONSTRUCTION LAY DOWN AREAS ARE REQUIRED ON SITE DURING CONSTRUCTION? (give a brief description of these): * Note: please attach extra pages if more space is required

***Insert additional pages as required**

WHERE ARE THE CREW CAMPS AND CONSTRUCTION LAY DOWN AREAS TO BE LOCATED? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Crew Camps and Construction Lay Down Areas (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:…….. **End Date:**…….

HOW ARE CREW CAMPS AND CONSTRUCTION LAY DOWN AREAS TO BE MANAGED? (provide as much detail as possible, including annotated sketches and plans where possible):
* Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Crew Camps and Construction Lay Down Areas (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to

and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Workshop and Maintenance/Cleaning of Plant

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works): * Note: please attach extra pages if more space is required

***Insert additional pages as required**

WHERE ARE THE WORKSHOPS AND CLEANING BAYS TO BE LOCATED? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Workshop and Maintenance/Cleaning of Plant (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:……. **End Date:**……

HOW ARE WORKSHOPS AND PLANT MAINTENANCE/CLEANING TO BE MANAGED DURING CONSTRUCTION? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Workshop and Maintenance/Cleaning of Plant (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____ _____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____ _____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

_____

(Signed) (Print name)

Dated: _____

ANNEXURE 4 D (SAMPLE)

METHOD STATEMENT: Cement and Concrete Batching

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Cement and Concrete Batching (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:…….. **End Date:**…….

HOW ARE THE WORKS TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

***Insert additional pages as required**

Cement and Concrete Batching (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT: Dust Control

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN ON SITE THAT COULD GENERATE DUST? (give a brief description of the works): * Note: please attach extra pages if more space is required

***Insert additional pages as required**

WHERE ARE THE WORKS TO BE UNDERTAKEN (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

***Insert additional pages as required**

METHOD STATEMENT: Duct Control (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:…. **End Date:**…….

HOW ARE THE WORKS TO BE UNDERTAKEN SO AS TO MINIMISE AND CONTROL DUST GENERATION ON SITE? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Dust Control (contd.)(SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Hydrocarbon and Emergency Spill Procedure

CONTRACT:…… **DATE**:…….

WHAT HAZARDOUS SUBSTANCES (INCL. FUELS) ARE TO BE STORED ON SITE? (give a brief description of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE THESE SUBSTANCES TO BE STORED ON SITE? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Hydrocarbon and Emergency Spill Procedures (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date: **End Date:**…….

HOW ARE HAZARDOUS SUBSTANCES TO BE MANAGED TO AVOID SPILLAGES AND WHAT EMERGENCY PROCEDURES ARE TO BE IMPLEMENTED IN CASE OF A SPILLAGE? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Hydrocarbon and Emergency Spill Procedures (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Diesel Tanks and Re-fuelling Procedures

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the number and capacity of diesel tanks to be kept on site): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Diesel Tanks and Re-fuelling Procedures (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:. **End Date:**……

HOW ARE DIESEL TANKS TO BE MANAGED AND RE-FUELLING TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible):
* Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Diesel Tanks and Re-fuelling Procedure (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Sourcing, Excavating, Transporting and Dumping of Fill and Spoil Material

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Sourcing, Excavating, Transporting and Dumping of Fill and Spoil Material (Contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date: **End Date:**…….

HOW ARE THE WORKS TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Sourcing, Excavating, Transporting and Dumping of Fill and Spoil Material (Contd.)

(SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Topsoil Management

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works to be undertaken that require topsoil to be stripped): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Topsoil Management (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:…….. **End Date:**…….

HOW ARE TOPSOIL STOCKPILES TO BE MANAGED? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Topsoil Management (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Fire Management

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Fire Management (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:. **End Date:**……

HOW ARE THE WORKS TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Fire Management (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

METHOD STATEMENT:

Rehabilitation of Crew Camps and Other Disturbed Areas

CONTRACT:…… **DATE**:…….

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of works to be undertaken that may result in the need for rehabilitation of the affected areas): * Note: please attach extra pages if more space is required

*Insert additional pages as required

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated Program and a full description of the extent of the works): * Note: please attach extra pages if more space is required

*Insert additional pages as required

METHOD STATEMENT:

Rehabilitation of Crew Camps and Other Disturbed Areas (contd.)

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date: **End Date:**…….

HOW ARE THE REHABILITATION WORKS TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible): * Note: please attach extra pages if more space is required

*Insert additional pages as required

DECLARATIONS for Method Statement

Rehabilitation of Crew Camps and Other Disturbed Areas (contd.) (SAMPLE)

1) ENGINEER

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) ECO

The work described in this Method Statement, if carried out according to the methodology described, is satisfactory to prevent or control environmental harm and is thus approved:

_____

(Signed) (Print name)

Dated:._____

2) CONTRACTOR

I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement

_____

(Signed) (Print name)

Dated: _____

APPENDIX 8: GATE INSTALLATION GUIDELINES

APPENDIX 9: ACCESS TO FARMS REPORT

APPENDIX 10: VEGETATION CLEARANCE GUIDELINES REPORT