



FINAL BASIC ASSESSMENT REPORT FOR BOIKARABELO 132KV POWER LINE

LEDJADJA COAL (PTY) LTD



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Report Title: **Basic Assessment Report for Boikarabelo 132KV Power line**

Project Number: **LED1873**

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LIMPOPO

PROVINCIAL GOVERNMENT

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2010

Basic Assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

	(For official use only)
File Reference Number:	12/1/9/1-W55
NEAS Reference Number:	LIM/EIA/0000517/2012
Date Received:	
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Kindly note that:

1. The report must be compiled by an independent Environmental Assessment Practitioner.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **tick** the boxes that are applicable in the report.
4. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
5. An incomplete report may be returned to the applicant for revision.

Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

6. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
7. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2010.
8. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
9. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

<p>Postal Address:</p> <p>Central Administration Office Environmental Impact Management P. O. Box 55464 Polokwane 0700</p>	<p>Physical Address:</p> <p>Central Administration Office Environmental Affairs Building Cnr Suid and Dorp Streets Polokwane 0699</p>
<p>Queries should be directed to the Central Administration Office: Environmental Impact Management:-</p> <p>For attention: Mr E. V. Maluleke</p> <p>Tel: (015) 291 1315 / (015) 291 5640</p> <p>Fax: (015) 295 5015</p> <p>Email: malulekeev@ledet.gov.za</p>	

View the Department's website at <http://www.ledet.gov.za/> for the latest version of the documents.

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SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

Yes	
-----	--

If YES, please complete the form entitled “Details of specialist and declaration of interest” or appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

The specialist declarations of interest have been included in Appendix D.

The following specialist reports are attached in Appendix D. It must be noted that the alignment for the power line follows that of both the existing Boikarabelo railway line and the Marapong-Boikarabelo Effluent Transfer (MBET) pipeline. Apart from a visual assessment conducted for the proposed power line, existing specialist studies for the railway line and MBET have been utilised as part of this application:

- Visual Report (new).
- Flora and Fauna Report (reviewed for power line and railway line).
- Archaeology Statement (pipeline and railway line).
- Wetland study (railway line).

1 ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

This report has been prepared in accordance with the EIA Regulations published in Government Notice No. R543. These regulations fall under Section 24(5), as read with Section 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended in 2010) (NEMA).

¹ Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.

The proposed activity is listed under Government Notice R544 in terms of NEMA as set out below.

GN. Regulation	Activity no.	Description
544	10 (i)	<p>"The construction of facilities or infrastructure for the transmission and distribution of electricity – outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts".</p> <p><i>Construction of a 132 kV power line stretching from Eskom Holdings Ltd's Theunispan substation, located on the farm Vangpan 294 LQ, to Ledjadja Coal (Pty) Ltd's Boikarabelo Coal Mine (Kalkpan 243 LQ/Kruishout 271 LQ).</i></p>

Details of the Applicant and EAP

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Ledjadja Coal (Pty) Ltd (Ledjadja Coal) has received a 30 MVA power allocation from Eskom for the operation of the Boikarabelo Coal Mine. Ledjadja Coal therefore proposes to construct a 132 KV line between the Eskom Theunispan substation, located on portion 2 of the farm Vangpan 294LQ, and the Boikarabelo Coal Mine substation located on the farm Kruishout 271LQ. The proposed power line will be constructed within the Boikarabelo railway line servitude and therefore will run adjacent to the proposed railway line, except for

a small section which will run along the farm boundary of Kamiesbuilt 291 LQ and Groot-zwart-built 290LQ (Plan 2: Appendix A). The project area falls within the Lephalale Local Municipality, Limpopo Province.

The power line will consist of steel monopole structures with a height of 21 m with a total length of 20.5 km. The poles will be supported by a soil-cement backfill. Designs of the power line, together with the rail infrastructure, have been included in Appendix B.



Figure 1: Example of the proposed power line structure

The construction of the proposed power line will allow for the operation of the first phase of the Boikarabelo Coal Mine.

The following activities will be undertaken as part of the proposed project:

- Construction phase
 - Clearing of a 4 m servitude for the power line construction;
 - Construction of foundations for the monopoles;
 - Assembling and erection of monopoles;
 - Conductor stringing;
 - Final inspection of the power line; and
 - Rehabilitation of disturbed areas.

- Operational phase

- The 132 kV power line will require maintenance throughout the operational life of the power line. The power line will be serviced from the same access road utilized for the railway line and farm boundary roads.

1.1 Baseline Environment

The following section briefly describes the baseline environment within the project area; the various biophysical as well as social aspects are covered in the various sub-sections as set out below.

1.1.1 Climate

The project area lies within the Northern Arid Bushveld climatic region. This is a summer rainfall region with warm summers and moderate, dry winters. Rainfall mainly occurs between November and April with an average rainfall of approximately 345 mm per annum. The average monthly maximum temperatures are reached between November and January reaching 33°C. Records show that minimum temperatures of 5°C have been reached between June and July. The prevailing winds are in a north - easterly direction. Stormy conditions do not usually occur, but the wind speed will increase during the months of August and September.

1.1.2 Topography

The project area lies within the bounds of the Waterberg Coalfield. The project area gently slopes towards the centre as depicted on Plan 3 (Appendix A).

1.1.3 Soil and Land Capability

The soils found within the project area are represented by the Ae, Ah and Fb land types of the 2326 Ellisras land type map (Land Type Survey Staff, 1989). These land types indicate underlying geology consisting mainly of sandstone, siltstone and shale.

The Ae land type contains red, well drained low base status soils. The Hutton soil form is well represented in this land type. The soils are non-structured and the A horizon contains 6 – 12% clay. Soil texture represents a sandy loam textured soil. The Ae land type contains red well drained low base status soils. The Clovelly and Hutton soil forms are well represented in this land type. The soils are non-structured and the A horizon contains 6 – 12% clay. Soil texture represents a sandy loamy textured soil. The Ah land type contains red well drained high base status soils. The Hutton soil form is well represented in this land type. The soils are non-structured and the A horizon contains 6 – 12% clay. Soil texture represents a sandy loamy textured soil.

The Fb land type contains pedologically young soils. The soils found in the Fb land type are typically shallow with surface rock present. Soil forms typically present in this land type are Mispah and or Glenrosa soils. The Mispah soil form consists of very shallow rocky topsoil underlain by un-weathered parent material while the Glenrosa soil form is underlain by

weathered parent material. The clay content in the A horizon is in the order of 8 – 12% but can be higher where an influence of shale is present. Based on the above soil descriptions, low rainfall provides severe limitations causing the area in general to be unsuited for arable cultivation and restrict agricultural use to grazing cattle and/or wildlife.

1.1.4 Land Use

The dominant land use in the wider area is agricultural, mainly relating to game farming. The project area is well serviced by both tar and gravel (farm) roads.

1.1.5 Air Quality

According the Lephalale Municipality's Integrated Development Plan (IDP) (2011 – 2012), pollution sources in the Lephalale Local Municipality include power generation, mining and industrial emissions, domestic fuel burning, vehicle emissions, agricultural activities, biomass burning, waste treatment and disposal, and dust from various sources. Such activities within the Lephalale Local Municipality are the major sources of industrial emissions, contributing to approximately 96% of emissions in the District. The main contributing sources leading to an impeded air quality in the Lephalale Local Municipality are the Matimba Power station located approximately 16 km west of the town Lephalale and the Grootegeeluk Coal Mine, due to spontaneous combustion of overburden and discard. The air quality in the area is also impacted, to a lesser degree, by occasional veld fires during the winter months.

1.1.6 Surface Water

The project area is located within the Limpopo Catchment west of the town of Lephalale. The Limpopo River is situated 6.2 km north - west. The study area is associated with the Limpopo River quaternary catchment A41E of the Matlabas catchment, situated within the Limpopo Water Management Area (WMA 01). The proposed power line was designed to avoid the crossing of any wetlands or streams. A 100 m buffer area has been placed around all pans along the route. The wetlands and aquatics report (a previous study conducted for the Boikarabelo Railway Line) has been included in Appendix D.

1.1.7 Vegetation

The project area falls within the Kalahari thornveld and the transition into the Zambezan broad-leaved woodland. This vegetation type is characterized by wooded grassland. Furthermore, the area falls within the transition area between the Zambezan Regional Centre of Plant Endemism (also referred to as the Zambezan Region) and the Kalahari-Highveld Regional Transitional Zone as described by White (1983). *Acacia erioloba*, *Boscia albitrunca*, *Sclerocarya birrea* were identified within the servitude area. Plan 5 (Appendix A) depicts the red data tree species found along the route. A fauna and flora report has been included in Appendix D.

1.1.8 Animal Life

The savanna biome is populated by a greater diversity of bird species than any other biome in South Africa. The presence of both woody plants and a well-developed herbaceous layer provides diverse sources of food and shelter for specialist and generalist bird species, including seed-eaters, insectivores and both diurnal and nocturnal birds of prey. A fauna and flora report, which was completed for the MBET pipeline project, has been appended to Appendix D. An overview summary has also been included in relation to the power line.

1.1.9 Visual

The proposed power lines are not unwieldy and will be erected in an area that provides extensive visual screening due to the dense bushveld vegetation; the practical visibility of the proposed power lines will therefore be minimal. The visual exposure of the lines will be further decreased by the atmospheric haze in the Waterberg area. The sensitivity of the potential visual receptors that have been identified is variable; receptors such as lodges, houses, places of worship and holiday travel routes are likely to have a higher visual sensitivity, while the visual sensitivity of schools and shops is likely to be lower. The activities associated with the construction, operation and decommissioning of the proposed Boikarabelo Power lines will not be significant. However, the cumulative impacts associated with development in the Waterberg Area will likely lead to a change in the landscape and aesthetic character and an alteration to the sense of place. Corridor sharing (with the Boikarabelo railway line and MBET Pipeline) is being implemented so to reduce the likelihood of excessive vegetation clearing, since the vegetation in the area acts as a visual screen. A visual assessment report has been attached in appendix D.

1.1.10 Cultural Heritage

Heritage resources that were identified during a survey conducted along the route included Middle Stone Age - find spots and historical structures. Middle Stone Age sites have been previously identified within the surrounding areas, mostly around pans, so the Stone Age find spot is not unique and is extremely disturbed. Plan 5 depicts the archaeological sites identified. The archaeological report completed for the MBET pipeline together of that with the railway line have been appended to Appendix D. Based on the findings of these two studies, there is no foreseen impact on the any archaeological sites and a request for exemption from undertaking a Phase 1 Heritage and Archaeology assessment has been submitted to the South African Heritage Resource Agency (SAHRA).

1.1.11 Social and Economic Environment

The Lephalale Local Municipality is 1,960,515 ha in extent located in the north western part of the Waterberg District Municipality and makes up approximately 39.5% of the district municipal area. Lephalale Local Municipality's north western border is shared with Botswana. Lephalale Town, situated within the Lephalale Local Municipality, has been identified as a Provincial Growth Point for the province by the Spatial Development Framework (SDF) of the Limpopo Province (Waterberg Municipality, 2010 - 2011) and is an economic centre for the local municipality. The town of Lephalale is located approximately

40 km from the Stockpoort border post between South Africa and Botswana. The largest town in the Lephalale Municipal area is Lephalale, which consists of 42% of the municipal population and comprises the largest central economic node in the municipality (Lephalale Local Municipality, <http://www.lephalale.com>). Other towns in the broader area are Steenbokpan and Stockpoort, both identified by the local municipality as potential service growth nodes. Steenbokpan is located to the west of the project area, while Stockpoort is located to the north at the Stockpoort border post between South Africa and Botswana.

2 FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- the property on which or location where it is proposed to undertake the activity;
- the type of activity to be undertaken;
- the design or layout of the activity;
- the technology to be used in the activity;
- the operational aspects of the activity; and
- the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the Department may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.



Table 1: Comparison of alternative routes (Plan 6)

	Preferred Route	Alternative 1	Alternative 2	No Go Option
Properties	<p>The following properties will be traversed by the preferred option for the routing of the power line:</p> <ul style="list-style-type: none"> ▪ Vangpan 294LQ ; ▪ Steenbokpan 295LQ ▪ Slangkop 295LQ; ▪ Groot-Zwart-Bult 290LQ; ▪ Kamiesbult 291LQ; ▪ Bitterfontein 272LQ, and ▪ Kruishout 271LQ 	<p>The following properties will be traversed by the preferred option for the routing of the power line:</p> <ul style="list-style-type: none"> ▪ Vangpan 294LQ ; ▪ Steenbokpan 295LQ ▪ Slangkop 295LQ; ▪ Groot-Zwart-Bult 290LQ; ▪ Kamiesbult 291LQ; ▪ Bitterfontein 272LQ, and ▪ Kruishout 271LQ 	<p>The following properties will be traversed by the preferred option for the routing of the power line:</p> <ul style="list-style-type: none"> ▪ Vangpan 294LQ ; ▪ Slangkop 295LQ; ▪ Groot-Zwart-Bult 290LQ; ▪ Kruishout 271LQ; ▪ Theunispan 293LQ; ▪ Grootdoorn 292LQ, and; ▪ Wildebeestvlakte 268LQ 	No properties will be affected.
Land ownership	The landownership is mixed with some of the farms been owned by the applicant and others are privately owned (Plan 2: Land Tenure).	The landownership is mixed with some of the farms been owned by the applicant and others are privately owned. (Plan 2: Land Tenure).	The landownership is mixed with some of the farms been owned by the applicant and the majority are privately owned.	No landowners will be affected.

	Preferred Route	Alternative 1	Alternative 2	No Go Option
Benefits of routing	<p>This routing is the preferred option as it follows the proposed railway line to the Boikarabelo Coal mine. The power line will fall within this servitude and therefore have minimal additional impacts on the surrounding environment and land use.</p>	<p>This routing fall within the proposed railway line servitude and does not deviate at of the servitude until such time as it reaches the Boikarabelo Coal mine. Construction of the power line will therefore not lead to additional impacts on the surrounding environmental and land use as the servitude will be disturbed for both the development of the railway line and the MBET pipeline.</p>	<p>This routing can potentially run with in the road reserve. There are already telephone lines running along the road. It would be more of a straight line development.</p>	<p>There will be no additional impact on the receiving environment.</p>
Negative aspects of routing	<p>With this routing the power line cannot follow the railway line entirely due to bends within the rail. This would require an increase in poles along the bends. This would have both financial and technical implications. The power line therefore leaves the servitude to run along the farm boundary of Groot-Zwart-Bult 290LQ and Kamiesbult 291LQ where it joins up again with the railway line servitude. It must be noted 100 m buffers around all pans have been</p>	<p>Due to the nature of the bends of the railway line on the section on Groot-Zwart-Bult 290LQ for the power line to follow these bends it would require an increase in the frequency of poles. This has both a financial and technical implication in the construction of the power line. Additional poles with in a location will also increase the visual impact.</p>	<p>As it crosses more privately owned property it may interfere with potential developments of those properties. It is not clear how the D1675 and D175 will be upgraded in the future, this may restrict available land for a power line servitude and may require it to be re-routed in future which would have cost implications</p>	<p>The Boikarabelo Coal Mine will not receive power and there for could not initiate operation. This would further result in great indirect impacts such as no increase employment opportunities, loss of potential local supplier or contract work; no requirement for further development of the greater area and no foreign income for the country</p>

	Preferred Route	Alternative 1	Alternative 2	No Go Option
	adhered to.			through the export of coal.
Selection reasoning	This routing is the preferable option as for the majority of the route it will be within the railway line servitude and the small deviation out of the servitude has assisted in managing costs in the development and the requirement of excessive poles in a certain area which will have both technical challenges and an increase impact on the surrounding land uses in the area.			This option is not a feasible or reasonable alternative.

Table 2: Comparison of alternative pole design

	Wooden H pole	Steel monopole (Preferred Alternative)
Description	<p>H poles are guyed poles. In addition to horizontal forces and their resulting moments caused by wind and vertical forces from dead load, guyed poles must resist loads in both horizontal and vertical directions due to guywires. Guying forces are the biggest contributors to vertical forces in guyed poles. Guyed poles do not make use of backfill or concrete to transfer forces to the soil.</p> 	<p>Monopoles are self-supporting poles. Self-supporting poles, typically made of concrete or steel, are used where tangent poles and guyed poles will not work. For instance, self-supporting poles may be located at corners of distribution lines where guy wires cannot be used, where sidewalks prevent guying, where a property owner will not allow guying, where an obstruction prevents guying, or many other reasons. Self-supporting poles are not common on distribution lines, but are required where there is no guying option.</p> 

	Wooden H pole	Steel monopole (Preferred Alternative)
Benefits	This type of pole structure is cheaper to erect.	This monopole requires less space and is self-supporting. As they are steel structures they are more durable and have a longer life span. This is due to the fact their longer life actually makes them more cost effective than wood, and they are hollow and much lighter than wooden poles –this makes installation much easier, less time consuming; thus cheaper. Steel poles are generally stronger dependent on the grade and quality of the steel which has been used.
Negatives	This structure has stay wires which are required to support the structure. They require more space.	They are more costly in terms of structure and construction.
Selection reasoning		The monopole is the preferable option as it requires less space for development. This is important as the power line needs to be constructed within the railway line servitude where there is limited space.

3 ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

In the case of linear activities:

Alternative	Latitude (S):			Longitude (E):		
Alternative S1 (preferred route)						
Starting point of the activity	23°	41'	14.410"	27°	19'	19.120"
Middle/Additional point of the activity	23°	40'	55.855"	27°	14	02.938"
End point of the activity	23°	37'	50.142"	27°	09'	56.177"
Alternative S2 (alternative 1)						
Starting point of the activity	23°	41'	14.970"	27°	19'	17.719"
Middle/Additional point of the activity	23°	40'	55.121"	27°	14	09.822"
End point of the activity	23°	37'	50.254"	27°	09'	57.929"
Alternative S3 (alternative 2)						
Starting point of the activity	23°	41'	16.627"	27°	19'	16.627"
Middle/Additional point of the activity	23°	40'	55.775"	27°	14'	02.988"
End point of the activity	23°	37'	50.256"	27°	09'	56.177"

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

Please refer to Plan 7a that indicates the co-ordinates (route) of the preferred route. Plans 7b and c indicates the co-ordinates (route) of the alternative routes. The plans have been appended to Appendix A.

A table containing the route co-ordinates has been attached to Appendix G. Please refer to Plans 7a – c for the co-ordinate points of the respective routes.

4 PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative	Length of the activity
Alternative A1 (preferred activity alternative)	20 540 m
Alternative A2 (if any)	20 006 m
Alternative A3 (if any)	20 945 m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative	Size of the site/servitude
Alternative A1 (preferred activity alternative)	60 000 m ²
Alternative A2 (if any)	60 000 m ²
Alternative A3 (if any)	63 000 m ²

5 SITE ACCESS

Does ready access to the site exist?

Yes	
N/A	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

A service road will be constructed as part of the proposed Boikarabelo Railway Line servitude, which will also be utilised for the power line. This service road was authorized under the authorisation received for the Boikarabelo Coal Mine and Railway Line (Ref. No.: 12/1/9/2-W08, approved on 22 March 2012). For the area of deviation, existing farm boundary fence roads will be utilized.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

Please refer to Appendix C for the layout design of the servitude showing the accesses road. All other roads can be seen on the plans attached in Appendix A.

6 SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the scale of the plan which must be at least a scale of 1:500;
- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- the exact position of each element of the application as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- all trees and shrubs taller than 1.8 metres;
- walls and fencing including details of the height and construction material;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):

- rivers;
- the 1:100 year flood line (where available or where it is required by Department of Water Affairs);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or invested with alien species);
- for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- the positions from where photographs of the site were taken.

All plans have been attached in Appendix A

Plan 1: Regional setting

Plan 2a: Land tenure overview

Plan 2b: Land tenure zoom 1

Plan 2c: Land tenure zoom 2

Plan 3: Topography

Plan 4: Proposed power line practical viewshed

Plan 5: Sensitive Sites

Plan 6: Alternatives

Plan 7a: Proposed Power line 250 m Co-ordinates

Plan 7b: Alternative 1 250 m Co-ordinates

Plan 7c: Alternative 2 250 m Co-ordinates

Plan 8: Site Photos

7 SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

The site photographs are depicted on Plans 8 (Appendix A) detailing the positions of the where the photographs were taken along the route. The photographs have been attached to Appendix B.

8 FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

The designs included in Appendix C include the following:

- The standard Eskom design requirements for a monopole; and
- The servitude design layout.

9 ACTIVITY MOTIVATION

9.1 Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 110 million	
What is the expected yearly income that will be generated by or as a result of the activity?	The income activity is nil, as the result of the activity is the operation of the coal mine	
Will the activity contribute to service infrastructure?	Yes	
Is the activity a public amenity?		No
How many new employment opportunities will be created in the development phase of the activity? The construction of the power line will not create any new permanent employment opportunities but there will be a need for temporary employment. Unskilled temporary employment will be required for the construction of the power line.	25 to 30	
What is the expected value of the employment opportunities during the development phase?	R90 000	
What percentage of this will accrue to previously disadvantaged individuals?	100%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	0	
What is the expected current value of the employment opportunities during the first 10 years?	N/A	

What percentage of this will accrue to previously disadvantaged individuals?	N/A
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9.2 Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

NEED			
i.	Was the relevant municipality involved in the application?	Yes	
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	Yes	
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		
	N/A		

DESIRABILITY:			
i.	Does the proposed land use / development fit the surrounding area?	Yes	
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?	Yes	
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	Yes	
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
	N/A		
v.	Will the proposed land use / development impact on the sense of place?		No
vi.	Will the proposed land use / development set a precedent?		No
vii.	Will any person's rights be affected by the proposed land use / development?		No
viii.	Will the proposed land use / development compromise the "urban edge"?		No
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		

	N/A
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BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	Yes	
ii.	Explain: The development will not have any direct benefits to society apart from employment opportunities during construction. Indirectly, the power line will supply the Boikarabelo Coal Mine with electricity which will allow it to operate. The operation of the Boikarabelo Coal Mine will result in long term employment opportunities. The mine will create about 1200 direct employment opportunities and earn foreign income for South Africa. The indirect employment creation multiplier is 1:6, meaning that Ledjadja will create a total of 6 924 job opportunities over at least 30 years of operation.		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	Yes	
iv.	Explain: The development will not have any direct benefits to society apart from employment opportunities during construction. Indirectly, the power line will supply the Boikarabelo Coal Mine with electricity which will allow it to operate. The operation of the Boikarabelo Coal Mine will result in long term employment opportunities. The mine will create about 1 200 direct employment opportunities and earn foreign income for South Africa. The indirect employment creation multiplier is 1:6, meaning that Ledjadja will create a total of 6 924 job opportunities over at least 30 years of operation.		

10 APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:
Conservation of Agricultural Resources Act 1983 (Act No. 43 of 1983) (CARA)	DEA	1983
National Environmental Management Act (Act No. 107 of 1998) (NEMA)	LDEDET	1998
GNR 544 in terms of section 24(2) and 24(D) of NEMA	LDEDET	2010

Title of legislation, policy or guideline:	Administering authority:	Date:
National Heritages Resources Act, 1999 (Act No. 25 of 1999) (NHRA)	SAHRA	1999
National Environmental Management: Biodiversity Act, 2004 (Act No.10 of 2004) (NEM:BA)	LDEDET	2004
Limpopo Environmental Management Act, 2003 (Act No. 7 of 2003)	LDEDET	2004

11 WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11.1 Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	Yes	
If yes, what estimated quantity will be produced per month?	Quantity unknown	
<p>During construction, the batching of cement for the foundations of the power line structures will occur. General waste (plastic, paper and tins) may be generated during construction, in addition to possible left-over cables. However, the impacts are most likely insignificant and short term. All solid waste will be separated into labelled bins and transported and disposed of at a registered landfill site.</p>		
Where will the construction solid waste be disposed of (describe)?		
<p>The construction waste will be collected weekly and transported to a local registered landfill site or to the Boikarabelo Coal Mine for further separation and management.</p>		
Will the activity produce solid waste during its operational phase?		No
If yes, what estimated quantity will be produced per month?	N/A	
How will the solid waste be disposed of (describe)?		
Not applicable during the operational phase.		
Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?		
Not applicable during the operational phase.		
<p>If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the department to determine whether it is necessary to change to an application for scoping and EIA.</p>		

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?		No
If yes, inform the department and request a change to an application for scoping and EIA.		
Is the activity that is being applied for a solid waste handling or treatment facility?		No
If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.		

11.2 Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?		No
If yes, what estimated quantity will be produced per month?	N/A	
Will the activity produce any effluent that will be treated and/or disposed of onsite?		No
If yes, the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.		
Will the activity produce effluent that will be treated and/or disposed of at another facility?		No
If yes, provide the particulars of the facility:		
Facility name:	N/A	
Contact person:		
Postal address:		
Postal code:		
Telephone:		Cell:
E-mail:		Fax:
Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:		
Not applicable to the proposed project.		

11.3 Emissions into the atmosphere

Will the activity release emissions into the atmosphere?		No
If yes, is it controlled by any legislation of any sphere of government?		No
If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.		
If no, describe the emissions in terms of type and concentration:		
N/A		

11.4 Generation of noise

Will the activity generate noise?	Yes	
If yes, is it controlled by any legislation of any sphere of government?		No
If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.		
If no, describe the noise in terms of type and level:		
<p>The proposed activity will make use of construction vehicles and machinery during the construction phase which may result in an increase in noise levels. The construction and operation of the proposed Boikarabelo Railway Line, construction of the MBET pipeline, the main road as well as other activities in the area in will exceed the noise levels of the pipeline construction. The power line construction phase will occur during daylight hours, short term timeframe and the noise generated will be in a limited extent result in the activities being insignificant. However, mitigation and management measures have been compiled for the limited extent and are available in the Environmental Management Programme (EMPr) (Appendix F).</p>		

12 WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

<input type="checkbox"/> municipal	<input type="checkbox"/> water board	<input type="checkbox"/> groundwater	<input type="checkbox"/> river, stream, dam or lake	<input type="checkbox"/> Other	The activity will not use water
If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate					
the volume that will be extracted per month:				Litres	

Does the activity require a water use permit from the Department of Water Affairs?		No
If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.		

13 ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:
N/A
Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:
N/A

SECTION B: SITE / AREA / PROPERTY DESCRIPTION

Important notes:

For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):	1
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Paragraphs 1 - 6 below must be completed for each alternative.

Has a specialist been consulted to assist with the completion of this section?		Yes	
If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:			
All specialist reports must be contained in Appendix D. The detail of the specialists as well as the declaration of interest form has been included in Appendix D as well.			
Property description/physical address:	A full list of the number of land owners to the power line route as well as the alternative routes has been included in Appendix G.		
(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.			
See above.			
In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.			
Current land-use zoning:	All land is currently zoned as agricultural.		
In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.			
Is a change of land-use or a consent use application required?			No
Must a building plan be submitted to the local authority?			No

Locality map:	<p>An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:</p> <ul style="list-style-type: none"> ▪ an indication of the project site position as well as the positions of the alternative sites, if any; ▪ road access from all major roads in the area; ▪ road names or numbers of all major roads as well as the roads that provide access to the site(s); ▪ all roads within a 1km radius of the site or alternative sites; and ▪ a north arrow; ▪ a legend; and ▪ locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)
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The following plans have been appended to Appendix A:

Plan 1: Regional setting

Plan 2a: Land tenure overview

Plan 2b: Land tenure zoom 1

Plan 2c: Land tenure zoom 2

Plan 3: Topography

Plan 4: Proposed power line practical view shed

Plan 5: Sensitive Sites

Plan 6: Alternatives

Plan 7a: Proposed Power line 250m Co-ordinates

Plan 7b: Alternative 1 250m Co-ordinates

Plan 7c: Alternative 2 250m Co-ordinates

Plan 8: Site Photos

1 GRADIENT OF THE SITE

Indicate the general gradient of the site:

Alternative S1:

Flat X	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

Flat X	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat X	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2 LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline		2.6 Plain	X
2.2 Plateau		2.7 Undulating plain / low hills	
2.3 Side slope of hill/mountain		2.8 Dune	
2.4 Closed valley		2.9 Seafront	
2.5 Open valley			

3 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)		No		No		No

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Dolomite, sinkhole or doline areas		No		No		No
Seasonally wet soils (often close to water bodies)		No		No		No
Unstable rocky slopes or steep slopes with loose soil		No		No		No
Dispersive soils (soils that dissolve in water)		No		No		No
Soils with high clay content (clay fraction more than 40%)		No		No		No
Any other unstable soil or geological feature		No		No		No
An area sensitive to erosion		No		No		No

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4 GROUNDCOVER

Indicate the types of groundcover present on the site:

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition^E	Natural veld with scattered aliens^E	Natural veld with heavy alien infestation^E	Veld dominated by alien species^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an “^E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn’t have the necessary expertise.

5 LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

5.1 Natural area	X	5.22 School	
5.2 Low density residential		5.23 Tertiary education facility	
5.3 Medium density residential	X	5.24 Church	X
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial ^{AN}		5.26 Museum	
5.6 Office/consulting room		5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam ^A		5.29 Sewage treatment plant ^A	
5.9 Light industrial		5.30 Train station or shunting yard ^N	
5.10 Heavy industrial ^{AN}		5.31 Railway line ^N	X
5.11 Power station		5.32 Major road (4 lanes or more)	
5.12 Sport facilities		5.33 Airport ^N	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station ^H		5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	
5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture	X	5.39 Mountain, koppie or ridge	
5.19 Archaeological site	X	5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	
5.21 Dam or Reservoir		5.42 Other land uses (describe)	

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity?

The power line is to run within the proposed railway line (Boikarabelo Railway Line) servitude. No impacts are anticipated.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:	
If NO, specify:	

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:	
If NO, specify:	

6 CULTURAL/HISTORICAL FEATURES

6.1 PROPOSED POWER LINE PREFERRED ROUTE

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including	Yes	
Archaeological or palaeontological sites, on or close (within 20m) to the site?	No	
If YES, explain:		

A Phase 1 Archaeological Impact Assessment (AIA) was undertaken in 2011 for the proposed Boikarabelo Railway line route along which the power line will be constructed. The report was submitted to the South African Heritage Resources Agency (SAHRA) for statutory comment as required in terms of Section 38(8) of the NHRA. It should be noted that the power line will be constructed in conjunction with the construction of the railway line.

The distances of the power line route are (refer to Plan 5 for the site numbers):

- Site 001: Pre-1960's farmstead situated in a farm and is located outside the proposed power line route adjacent to the road servitude and power line route i.e. > 20m;
- Site 002: Find spot - Isolated Middle Stone Age core and flake in a disturbed context within the road servitude i.e. < 20m;
- Site 003: Cement foundation adjacent to the road servitude and power line route i.e. > 20 m; and
- Site 004: Dilapidated mud brick structure adjacent to the road servitude and power line route i.e. > 20 m.

In summary, Sites 001, 003 and 004 are outside 20 m of the power line route, while 002 is within 20 m. Only sites 001 and 002 represented sites that could be considered for inclusion in the national estate. Site 003 and 004 were determined to be insignificant.

The AIA was undertaken as stipulated in the NHRA and SAHRA Minimum Standards (2006). The proposed power line will follow existing road servitudes and it was found that all the historical structures were located outside of the road servitude and therefore outside of the proposed power line route.

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

Four sites were identified during the Phase 1 Archaeological Impact Assessment (appended to Appendix D) conducted. These included one Stone Age find spot and three possible historical structures. The structures include a cement foundation, a mud brick house and pre-1960's farmstead that is currently occupied. However, all of the historical structures identified were located outside of the road servitude and therefore outside of the proposed power line route. The Stone Age find spot was located within the road servitude, on a disturbed surface and therefore within the proposed power line route.

No archaeological mitigation measures were recommended for the identified sites along the power line route, however if additional artefacts are uncovered during the construction phase, an archaeologist must be called to assess the significance of the site. Additionally, site monitoring will be necessary if any earthworks take place in or near the historical sites.

Will any building or structure older than 60 years be affected in any way?		No
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?		No
If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.		

The Archaeological reports completed for both the MBET pipeline and the railway line are attached in Appendix D with correspondence from SAHRA. A request for exemption has been submitted to SAHRA for this project.

SECTION C: PUBLIC PARTICIPATION

Please note that a complete Public Participation Process (PPP) Report is attached as Appendix E-6 to the Final BAR.

1 ADVERTISEMENT

A newspaper advertisement was placed in the Mogol Post local newspaper on 22 November 2012. Please refer to Appendix E-4 for a copy of the advertisement that was placed in the newspaper.

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the department) at a place conspicuous to the public at the boundary or on the fence of—
 - the site where the activity to which the application relates is or is to be undertaken; and
 - any alternative site mentioned in the application;
- giving written notice to—
 - the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - the municipality which has jurisdiction in the area;
 - any organ of state having jurisdiction in respect of any aspect of the activity; and
 - any other party as required by the department;
- placing an advertisement in—

- one local newspaper; or
- any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official Gazette referred to in sub-regulation 54(c)(ii); and
- using reasonable alternative methods, as agreed to by the department, in those instances where a person is desiring of but unable to participate in the process due to—
 - illiteracy;
 - disability; or
 - any other disadvantage.

2 CONTENT OF ADVERTISEMENTS AND NOTICES

Content included in the advertisement placed in the Mogol Post and site notices placed in the project area are in accordance with the stipulated NEMA requirements.

A notice board, advertisement or notices must:

- indicate the details of the application which is subjected to public participation; and
- state—
 - that the application has been submitted to the department in terms of these Regulations, as the case may be;
 - whether basic assessment or scoping procedures are being
 - applied to the application, in the case of an application for environmental authorisation;
 - the nature and location of the activity to which the application relates;
 - where further information on the application or activity can be obtained; and
 - the manner in which and the person to whom representations in respect of the application may be made.

3 PLACEMENT OF ADVERTISEMENTS AND NOTICES

Site notices were placed on 20 November 2012 on site and at specific public places in the surrounds of the study area, inviting stakeholders to become part of the PPP. Please refer to Appendix E-5 for proof of site notices placed in the project area.

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the department in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any Gazette that is published specifically for the purpose of providing notice to the public of applications made in terms of these Regulations.

Advertisements and notices must make provision for all alternatives.

4 DETERMINATION OF APPROPRIATE MEASURES

The PPP for the proposed project has been designed to satisfy the requirements stipulated in the NEMA. Appropriate measures were undertaken to encourage stakeholder participation during the BA process for the proposed project. Please refer to Appendix E-6 for a detailed PPP report which highlights the PPP activities undertaken for the proposed project.

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the department to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5 COMMENTS AND RESPONSE REPORT

During the public review period of the BAR, limited comments were received from registered I&APs and is included in Table 2 of Appendix E-6. The public participation office received correspondence from Mr Nakedi Maake who requested to be registered on the I&AP database during the announcement phase of the project and the competent authority, LEDET.

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in these Regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6 AUTHORITY PARTICIPATION

Comments on the BAR and EMPr were received from the competent authority (LEDET) and these have been recorded in the Comments and Response Table (see Table 2 of Appendix E-6).

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input.

Refer to Table 1 for a list of authorities and parastatals that have been consulted.

Table 3: List of authorities who have been consulted

Group	Authority.
National	Department of Environmental Affairs; and South African Heritage Resources Agency.
Provincial	Department of Mineral Resources, Limpopo; Department of Energy, Limpopo Department of Agriculture, Limpopo; Department Rural Development and Land Reform, Limpopo; Department of Economic Development, Environment and Tourism, Limpopo; and Department of Roads & Transport, Limpopo.
Municipalities	Waterberg District Municipality; and Lephalale Local Municipality.
Parastatals	Eskom Holdings; and Transnet.

7 CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?	YES	
If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):		
<p>PUBLIC PARTICIPATION PROCESS</p> <p><u>Mr Foster Baloyi from LEDET:</u></p> <ul style="list-style-type: none"> All issues raised by I&APs must be adequately addressed. The reference numbers assigned to the proposed project must be included in all future correspondence. <p>FAUNA AND FLORA</p> <p><u>Mr Foster Baloyi from LEDET:</u></p> <ul style="list-style-type: none"> The proposed project must adhere to the requirements of Government Notice 1012 of 27 August 2004 in terms of the National Forest Act, (Act No.84 of 1998). Protected plant species also listed in the Limpopo Environmental Management Act, No.7 of 2003) may not be cut, disturbed or damaged, destroyed and their product may not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the Department of Agriculture, Fisheries and Forestry (DAFF). <p>PROJECT RELATED ISSUES</p> <p><u>Mr Foster Baloyi from LEDET:</u></p> <ul style="list-style-type: none"> The applicant must take into account that no development must be undertaken without an environmental authorisation from LEDET. <p>GENERAL</p> <ul style="list-style-type: none"> <u>Mr Nakedi Maake:</u> <p>Requested to be registered as an I&AP.</p>		

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

The following methodology has been used to determine the positive and negative potential impacts of the proposed activities:

1 IMPACT RATING

The impact rating process is designed to provide a numerical rating of the various environmental impacts identified by use of the Input - Output model. It has to be stressed that the purpose of the EIA process is not to provide an incontrovertible rating of the significance of various aspects, but rather to provide a structured, traceable and defensible methodology of rating the relative significance of impacts in a specific context. This gives the project proponent a greater understanding of the impacts of his project and the issues which need to be addressed by mitigation and also give the regulators information on which to base their decisions. The equations and calculations were derived using Aucamp (2009).

The significance rating process follows the established impact/ risk assessment formula:

$$\text{Significance} = \text{Consequence} \times \text{Probability}$$

Where: $\text{Consequence} = \text{Severity} + \text{Spatial Scale} + \text{Duration}$

And: $\text{Probability} = \text{Likelihood of an impact occurring}$

The matrix calculates the rating out of 147, whereby Severity, Spatial Scale, duration and probability are each rated out of seven as indicated in Table 4. The weight assigned to the various parameters for positive and negative impacts in the formula. Impacts are rated prior to mitigation and again after consideration of the mitigation measure proposed in the EMP. The significance of an impact is then determined and categorised into one of four categories, as indicated in Table 5, which is extracted from Figure 2. In accordance with Regulation 51 of the MPRDA, management actions will be assigned for all identified impacts.

Table 4: Impact assessment parameter ratings

Rating	Severity		Spatial scale	Duration	Probability
	Environmental	Social, cultural and heritage			
7	Very significant impact on the environment.	Irreparable damage to highly valued	<u>International</u> The effect	<u>Permanent: No Mitigation</u>	<u>Certain/ Definite.</u> The impact will

Rating	Severity		Spatial scale	Duration	Probability
	Environmental	Social, cultural and heritage			
	Irreparable damage to highly valued species, habitat or eco system. Persistent severe damage.	items of great cultural significance or complete breakdown of social order.	will occur across international borders.	No mitigation measures of natural process will reduce the impact after implementation.	occur regardless of the implementation of any preventative or corrective actions.
6	Significant impact on highly valued species, habitat or ecosystem.	Irreparable damage to highly valued items of cultural significance or breakdown of social order.	<u>National</u> Will affect the entire country	<u>Permanent:</u> <u>Mitigation</u> Mitigation measures of natural process will reduce the impact.	<u>Almost certain/Highly probable</u> It is most likely that the impact will occur.
5	Very serious, long-term environmental impairment of ecosystem function that may take several years to rehabilitate.	Very serious widespread social impacts. Irreparable damage to highly valued items.	<u>Province/Region</u> Will affect the entire province or region.	<u>Project Life</u> The impact will cease after the operational life span of the project.	<u>Likely</u> The impact may occur.
4	Serious medium term environmental effects. Environmental damage can be reversed in less than a year.	On-going serious social issues. Significant damage to structures / items of cultural significance.	<u>Municipal Area</u> Will affect the whole municipal area.	<u>Long term</u> 6-15 years.	<u>Probable</u> Has occurred here or elsewhere and could therefore occur.
3	Moderate, short-term effects but not affecting ecosystem function. Rehabilitation requires intervention of	On-going social issues. Damage to items of cultural significance.	<u>Local</u> Local extending only as far as the development site area	<u>Medium term</u> 1-5 years.	<u>Unlikely</u> Has not happened yet but could happen once in the lifetime of the project,

Rating	Severity		Spatial scale	Duration	Probability
	Environmental	Social, cultural and heritage			
	external specialists and can be done in less than a month.				therefore there is a possibility that the impact will occur.
2	Minor effects on biological or physical environment. Environmental damage can be rehabilitated internally with/ without help of external consultants.	Minor medium-term social impacts on local population. Mostly repairable. Cultural functions and processes not affected.	<u>Limited</u> Limited to the site and its immediate surroundings.	<u>Short term</u> Less than 1 year.	<u>Rare/ improbable</u> Conceivable, but only in extreme circumstances and/ or has not happened during lifetime of the project but has happened elsewhere. The possibility of the impact materialising is very low as a result of design, historic experience or implementation of adequate mitigation measures.
1	Limited damage to minimal area of low significance, (eg ad hoc spills within plant area). Will have no impact on the environment.	Low-level repairable damage to commonplace structures.	<u>Very limited</u> Limited to specific isolated parts of the site.	<u>Immediate</u> Less than 1 month.	<u>Highly unlikely/None</u> Expected never to happen.

Significance										
		Consequence (severity + scale + duration)								
		1	3	5	7	9	11	15	18	21
Probability / Likelihood	1	1	3	5	7	9	11	15	18	21
	2	2	6	10	14	18	22	30	36	42
	3	3	9	15	21	27	33	45	54	63
	4	4	12	20	28	36	44	60	72	84
	5	5	15	25	35	45	55	75	90	105
	6	6	18	30	42	54	66	90	108	126
	7	7	21	35	49	63	77	105	126	147

Figure 2: Probability Consequence Matrix

Table 5: Significance threshold limits

Significance		
High	108- 147	
Medium-High	73 - 107	
Medium-Low	36 - 72	
Low	0 - 35	

2 ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

PUBLIC PARTICIPATION PROCESS

- All issues raised by I&APs must be adequately addressed.
- The reference numbers assigned to the proposed project must be included in all future correspondence.
- The proposed project must adhere to the requirements of Government Notice 1012 of 27 August 2004 in terms of the National Forest Act, (Act No.84 of 1998). Protected plant species also listed in the Limpopo Environmental Management Act, No.7 of 2003) may not be cut,

disturbed or damaged, destroyed and their product may not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the Department of Agriculture, Fisheries and Forestry (DAFF).

- The applicant must take into account that no development must be undertaken without an environmental authorisation from LEDET.
- Mr Nakedi Maake: Requested to be registered as an I&AP.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report as Annexure E):

Comments received during the public review period of the BAR have been attached to this report as Appendix E-7.

3 IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property / activity / design / technology / operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

3.1 Construction Phase – Direct Impacts

3.1.1 Activity: Temporary Employment

3.1.1.1 Socio – economic

3.1.1.1.1 Description

Positive impact as an increase in employment for the construction of the power line will occur.

Parameter	Description	Rating
Duration	Immediate	1
Extent	Limited	2

Parameter	Description	Rating
Severity	Moderate	3
Probability	Probable	4
Significance	Low	24 (Positive)

3.1.2 Activity: Delivery of towers and transmission lines on site along the transmission line route (determined for all alternatives)

3.1.2.1 Soil

3.1.2.1.1 Description

Compaction of soil in areas where towers and lines will be delivered.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Limited	2	1
Severity	Low	2	1
Probability	Likely	5	4
Significance	Low	25	12

3.1.2.2 Noise

3.1.2.2.1 Description

Movement of machinery on site could contribute to the increase in noise levels.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	2
Extent	Limited	2	1
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	25	20

3.1.2.3 Fauna

3.1.2.3.1 Description

The activity will cause an increase in traffic due to the movement of heavy vehicles. This will result in the disturbance of fauna species. Most fauna species will however, be able to move away and return after construction.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	2
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	24	24

3.1.2.4 Visual

3.1.2.4.1 Description

Visual resource and scenic quality of the area will be altered by an increase in vehicular movement.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Very limited	1	1
Severity	Limited	1	1
Probability	Likely	5	5
Significance	Low	20	20

3.1.3 Activity: Removal of vegetation

3.1.3.1 Soil

3.1.3.1.1 Description

The removal of vegetation will result in soil being exposed to the natural elements, increasing the potential for erosion.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	1
Extent	Limited	2	2
Severity	Low	1	1
Probability	Likely	4	4
Significance	Low	20	16

3.1.3.2 Air quality

3.1.3.2.1 Description

Dust may be generated during the construction phase.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	20	20

3.1.3.3 Noise

3.1.3.3.1 Description

Earth moving activities could increase noise levels.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	1
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	24	20

3.1.3.4 Flora

3.1.3.4.1 Description

Removal of vegetation by site clearance.

Parameter	Description	Rating	Rating after mitigation
Duration	Permanent	5	1
Extent	Limited	2	1
Severity	Low	2	1
Probability	Likely	5	1
Significance	Low	45	3

3.1.3.5 Fauna

3.1.3.5.1 Description

Fauna may be temporarily disturbed during site clearance activities.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	2

Parameter	Description	Rating	Rating after mitigation
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	20	20

3.1.3.6 Visual

3.1.3.6.1 Description

The landscape character will likely be modified slightly by the removal of vegetation in areas that fall outside of the railway servitude. New lines of site might be introduced which will decrease the visual screening capacity of the landscape.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	1
Extent	Very limited	1	1
Severity	Limited	1	1
Probability	Probable	4	3
Significance	Low	16	9

3.1.4 Activity: Removal of soil (Determined for all alternatives)

3.1.4.1 Soil

3.1.4.1.1 Description

Alteration of the soil profile due to digging could lead to the loss of soil structure.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Limited	2	2

Parameter	Description	Rating	Rating after mitigation
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	25	20

3.1.4.2 Noise

3.1.4.2.1 Description

Earth moving activities could increase noise levels.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	1
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	30	20

3.1.5 Activity: Digging of foundation holes (Determined for all alternatives)

3.1.5.1 Soil

3.1.5.1.1 Description

Soil will be exposed to the natural elements resulting in soil erosion.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	16	16

3.1.5.2 Air quality

3.1.5.2.1 Description

Earth moving activities could lead to an increase in dust emissions.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	1
Severity	Very low	1	1
Probability	Likely	5	4
Significance	Low	15	12

3.1.5.3 Noise

3.1.5.3.1 Description

Digging of foundation holes with machinery.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	16	16

3.1.5.4 Heritage resources

3.1.5.4.1 Description

Underground heritage and archaeological resources may be damaged.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	2

Parameter	Description	Rating	Rating after mitigation
Severity	Low	4	4
Probability	Probable	2	2
Significance	Low	16	16

3.1.5.5 Socio – economic

3.1.5.5.1 Description

Local employment opportunities created.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	2
Severity	Moderate	3	3
Probability	Probable	4	4
Significance	Medium - Low	28 (Positive)	28 (Positive)

3.1.5.6 Visual

3.1.5.6.1 Description

The abrasive activities associated with digging of foundation holes will have an impact on the sense of place of some areas.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	1
Severity	Limited	1	1
Probability	Probable	4	4
Significance	Low	12	12

3.1.6 Activity: Movement of machinery around the sites (Determined for all alternatives)

3.1.6.1 Soil

3.1.6.1.1 Description

Compaction of soil due to vehicle movement around / on the sites.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	1
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	4	4
Significance	Low	20	16

3.1.6.2 Air quality

3.1.6.2.1 Description

Machinery and vehicle movement could increase dust emissions around the sites.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Highly probable	5	4
Significance	Low	25	20

3.1.6.3 Noise

3.1.6.3.1 Description

Machinery movement around site could increase noise levels.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Highly probable	5	4
Significance	Low	25	20

3.1.6.4 Flora

3.1.6.4.1 Description

Vehicle and machinery on site could result in the unnecessary destruction of the natural flora on the sites.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Limited	2	1
Severity	Low	2	2
Probability	Highly probable	5	4
Significance	Low	25	16

3.1.6.5 Fauna

3.1.6.5.1 Description

Vehicle and machinery movement could disturb animals living on site.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1

Parameter	Description	Rating	Rating after mitigation
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Probable	4	3
Significance	Low	16	12

3.1.6.6 Visual

3.1.6.6.1 Description

The noisy activities associated with transportation of construction material will have an impact on the sense of place of some areas. The movement of large machinery and vehicles involved in the construction of the power lines will also lead to visual pollution by means of dust plumes which will also have an impact on the current sense of place.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Limited	2	1
Severity	Minor	2	2
Probability	Likely	5	5
Significance	Low	30	25

3.1.7 Activity: Waste generation at construction sites (Determined for all alternatives)

3.1.7.1 Soil

3.1.7.1.1 Description

Soil contamination could occur from ablution facilities placed on site.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	2
Extent	Very limited	1	1

Parameter	Description	Rating	Rating after mitigation
Severity	Very low	1	1
Probability	Likely	3	3
Significance	Low	12	12

3.1.7.2 Flora

3.1.7.2.1 Description

The incorrect handling and disposal of waste could result in littering and negatively impact on the natural flora.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	1
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	25	16

3.1.7.3 Fauna

3.1.7.3.1 Description

The incorrect handling and disposal of domestic waste could have an adverse impact on the health of animals on site.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	1	1
Extent	Very limited	2	1
Severity	Very low	1	2
Probability	Likely	5	4
Significance	Low	20	16

3.1.8 Activity: Hydrocarbon spillages and leakages from machinery

3.1.8.1 Soil

3.1.8.1.1 Description

Contamination of soils.

Parameter	Description	Rating	Rating after mitigation
Duration	Short term	2	1
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	25	16

3.1.9 Activity: Backfilling of foundations (Determined for all alternatives)

3.1.9.1 Air quality

3.1.9.1.1 Description

Earthmoving activities could increase dust emissions.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	1
Extent	Very limited	1	1
Severity	Very low	1	1
Probability	Likely	5	4
Significance	Low	15	12

3.1.9.2 Noise

3.1.9.2.1 Description

Earthmoving activities could increase noise levels.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate	1	2
Extent	Very limited	1	1
Severity	Low	2	2
Probability	Likely	5	4
Significance	Low	20	20

3.2 Construction Phase – Indirect Impacts

The following indirect impacts may be experienced:

- New vehicle tracks and/or clearing of any vegetation may cause additional and unnecessary soil erosion.
- Uncontrolled vehicular access to the site and to the surrounding servitudes could result in destruction of sensitive vegetation and unnecessary soil erosion and/or soil compaction.
- Inadequate attention to fire safety awareness and fire safety equipment could result in unsafe working.
- Environments and risk to surrounding communities.
- Fires created within the construction sites may result in runaway veldfires.
- Failure to provide adequate on-site sanitation and clean drinking water may result in runoff transferring contaminants into the surrounding environment
- Construction rubble left onsite may attract vermin and encourage the growth of opportunistic alien vegetation.
- The impact on habitats or on fauna directly (bird collisions and electrocutions) causing loss of species diversity. Bird collisions likely to have the highest impact.
- Poaching of animals.

3.3 Construction Phase – Cumulative impacts

The construction of the power line is likely to occur in line with that of both the railway line and the MBET pipeline, this will result in the following potential cumulative impacts. The most significant cumulative impacts during the construction phase will be noise generation from all the construction activities and dust generation from vehicle movement on unpaved roads. These impacts will be dominant in the construction phase but during operation they will be negligible.

The Waterberg area has been earmarked for mining and commercial development due to the coal seams in the area. The construction activities associated with the proposed power line will add to an increase in the level of visual pollution in the area. The cumulative visual impacts of development and construction in the area will lead to a change in the landscape character; the aesthetic of the area will be decreased and the sense of place will be altered from one of 'wild Africa' to a development and mining hub.

3.4 Operational Phase

3.4.1 Activity: Vehicle movement during repair and maintenance of transmission lines

3.4.1.1 Noise

3.4.1.2 Description

Maintenance and repair activities could result in an increase in noise levels of the surrounding areas.

Parameter	Description	Rating	Rating after mitigation
Duration	Long term	4	1
Extent	Limited	2	1
Severity	Low	2	3
Probability	Probable	4	4
Significance	Low	32	20

3.4.1.3 Flora

3.4.1.3.1 Description

Natural vegetation and rehabilitated areas could be damaged during maintenance of power line and servitude.

Parameter	Description	Rating	Rating after mitigation
Duration	Long term	4	1
Extent	Limited	1	4

Parameter	Description	Rating	Rating after mitigation
Severity	Low	2	3
Probability	Probable	4	2
Significance	Low	28	16

3.4.1.4 Visual

3.4.1.4.1 Description

Maintenance and repair activities could result in an increase in visual pollution of the surrounding areas periodically as vehicles move around the power lines.

Parameter	Description	Rating	Rating after mitigation
Duration	Immediate (periodically)	1	1
Extent	Very limited	1	1
Severity	Limited	1	1
Probability	Likely	5	4
Significance	Low	15	12

3.5 DECOMMISSIONING PHASE

It is not foreseen that the power line will be decommissioned.

4 ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Preferred alternative

The activity will have a low impact on the receiving environment. The most significant impact with regards to the development of power lines is the potential for bird collisions. All other impacts can be managed and have a low significance. The positive indirect impact of the project is high as it will allow for the operation of the Boikarabelo Coal Mine which will result in employment for the local

community.

This routing is the preferable option as for the majority of the route it will be within the railway line servitude and the small deviation out of the servitude has assisted in managing costs in the development and the requirement of excessive poles in a certain area which will have both technical challenges and an increase impact on the surrounding land uses in the area.

No-go alternative (compulsory)

The no-go option will require the Boikarabelo Coal Mine to seek addition start up supply of electricity. This could be in the form of generators which would have an additional impact on the surrounding environment in terms of air quality and noise. This form of electricity generation is also very costly and seen to be feasible. In the event that the Boikarabelo Coal Mine does not operate there will be no future job opportunities and there will be no opportunity of additional coal supply to both the domestic and international markets.

Alternative 1

This route could be seen as better option as it stays within the servitude of the railway line for the complete length. However, due to the nature of the bends of the railway line on the section on Groot-Zwart-Bult 290LQ for the power line to follow these bends it would require an increase in the frequency of poles. This has both a financial and technical implication in the construction of the power line. Additional poles with in a location will also increase the visual impact, however impacts will be concentrated to the servitude area.

Alternative 2

This alternative route crosses more privately owned property it may interfere with potential developments of those properties. It is not clear how the D1675 and D175 will be upgraded in the future, this may restrict available land for a power line servitude and may require it to be re-routed in future which would have cost implications.

For more alternatives please continue as alternative D, E, etc.

SECTION E: RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the department in respect of the application:

Mitigation measures proposed in the report form part of the EMPr and adherence to the specifications of the EMPr should form part of the conditions of the environmental authorisation, should this be granted:

- An Independent Environmental Control Officer (ECO) must be appointed for the construction of the proposed development to monitor compliance to EMPr;
- The EMPr must be adhered to by the contractor under, the supervision of the engineer and an ECO;
- The ECO audits must include:
 - A monthly compliance audit - with the first audit being conducted no later than one month after construction commences on site; and
 - A post construction (rehabilitation) compliance audit is to be conducted no later than two weeks before the contractor hands over the completed project.
- Soils compacted by construction activities are to be ripped.
- Topsoil is to be stripped from all areas affected by construction and related activities prior to the commencement of major earthworks and conserved for rehabilitation.
- Should any archaeological or palaeontological remains be exposed during operations, work on the area where the artefacts were found must cease immediately and the appropriate specialist will be notified as soon as possible.

In the opinion of the Environmental Practitioner, the proposed activity is not fatally flawed and all potential impacts can be mitigated to an acceptable level. As such, it is recommended that the proposed construction of the power line continue.

Is an EMPR attached?


Yes

The EMPR must be attached as Appendix F.

SECTION F: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, Louise Nicolai declare that I –

- act as the independent environmental practitioner in this application;
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010;
- do not have and will not have a vested interest in the proposed activity proceeding;
- have no, and will not engage in, conflicting interests in the undertaking of the activity;
- undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
- will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the Department may be attached to the report without further amendment to the report;
- will keep a register of all interested and affected parties that participated in a public participation process; and
- will provide the Department with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:	
Name of the Company:	Digby Wells Environmental
Date:	29 November 2012

Appendix A: Site Plan(s)

Appendix B: Photographs

Appendix C: Facility Illustration(s)

Appendix D: Specialist Reports

1. Visual Assessment

2. Archaeology Reports

3. Fauna and Flora Reports

4. Wetland Study

Appendix E: Comments and Responses Report

Appendix F: Environmental Management Programme (EMPR)

Appendix G: Other Information