



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:

Application Number:

Date Received:

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.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **1 September 2012**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. 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.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. 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 competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

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

√ YES	NO
-------	----

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

The **Eskom Lephalale CNC Project** will consist of:

Eskom plans to construct the Lephalale Customer Network Centre (CNC) in order to facilitate the rendering of services and maintenance by Eskom officials to existing customers and structures, i.e. emergency personnel will be based at the CNC and will be close at hand in case of any electricity problems.

The full scope of work includes the construction of:

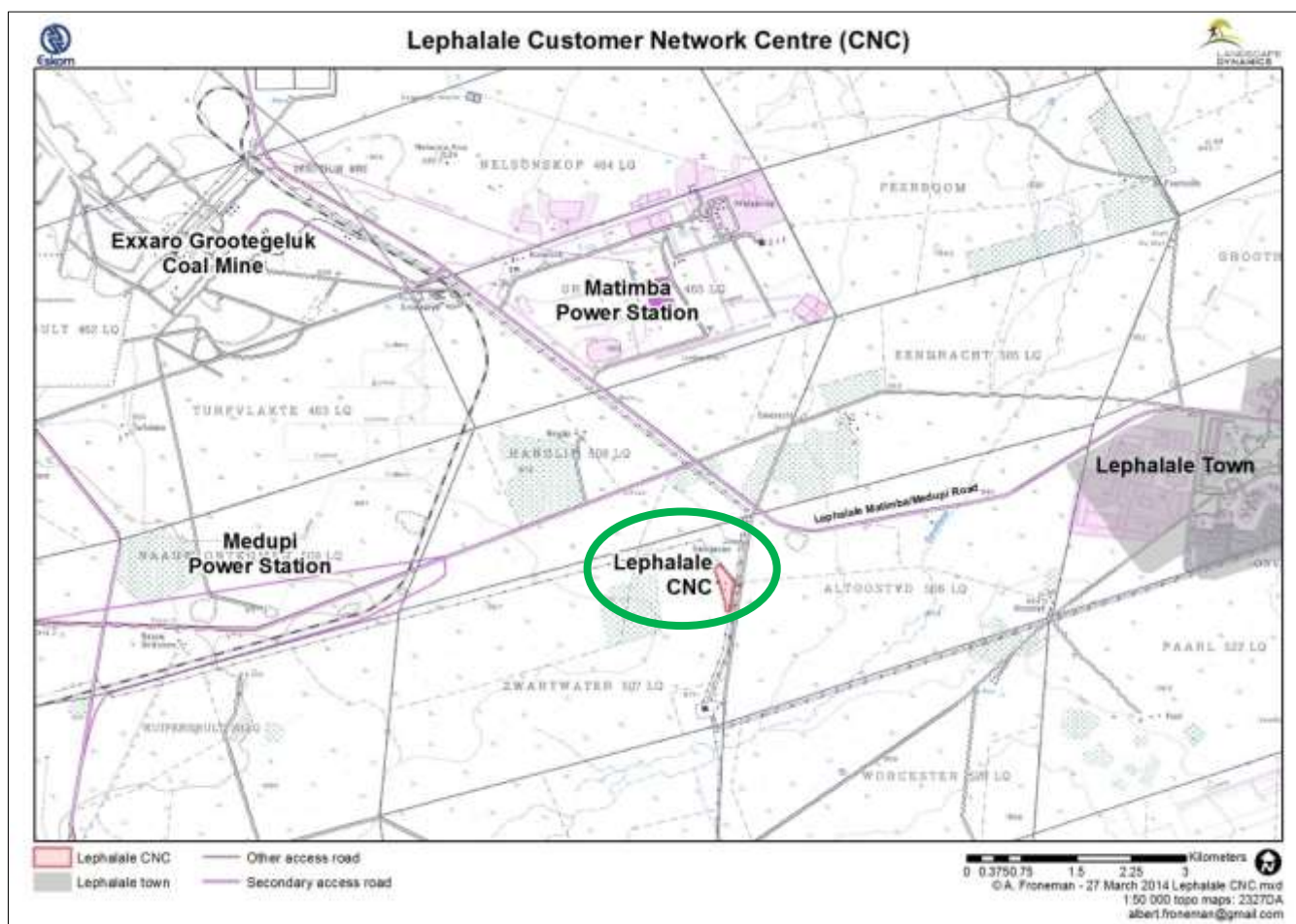
- new office building including electrification and plumbing and interior;
- technical service centre;
- customer service centre;
- parking;
- stand-by accommodation for staff;
- enclosed equipment and general store;
- 2.4m high steel palisade fence;
- parking for bin trucks;
- wash bay;
- facilities for storage of fuel with a capacity of 103,68m³;
- small sewage treatment facility;
- new transformer storage plinth, drainage sump and oil bund
- 21m lighting tower;
- waste/refuse area;
- ladder racks;
- a pole yard that includes a scrap compartment;
- guardhouse.

The above development will have a footprint of 1 830,64m². The total site is approximately 10.1 hectare, which means that less than 2% will be covered by the above proposed Customer Network Centre.

The study area is located on the farm Zwartwater 507-LQ situated west of Lephalale, south of Matimba Power Station and east of the Medupi Power Station in the Limpopo Province.

The property is owned and managed by Eskom Properties, Group Capital as a rehabilitated ash dump. This property is being run as a game farm which is part of Eskom's rehabilitation program for the ash dam, as well as Eskom's bio-diversity trade-off strategy. Furthermore, the intention is also to merge this land with Medupi Power Station's excess ground on the neighbouring farm, to extend the initiative. Several local game species were reintroduced into the area.

SITE LOCALITY MAP



- b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN R.544, 545 and 546	Description of project activity
<p>GN 544, June 2010, Number 13 The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres;</p>	<p>A 103 680 litre (103,68 cubic metres) diesel tank will be erected on the site of the Customer Network Centre (1m³ = 1 000 litres)</p>
<p>GN 544, June 2010, Number 23 The transformation of undeveloped, vacant or derelict land to</p> <p>(i) residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or</p> <p>(ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares; except where such transformation takes place for linear activities.</p>	<p>The proposed Customer Network Centre will be constructed on land of approximately 10,1 hectares.</p>

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—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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, competent authority 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. 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.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

Alternative 1	Latitude	Longitude
NW Corner	23° 34' 21.671"S	28° 7' 47.808"E
NE Corner	23° 34' 19.196"S	28° 8' 7.053"E
SE Corner	23° 34' 30.9"S	28° 8' 8.624"E
SW Corner	23° 34' 32.786"S	28° 7' 49.261"E
Alternative 2	Latitude	Longitude
NW Corner	23° 34' 9.653"S	28° 7' 46.826"E
NE Corner	23° 34' 7.1"S	28° 8' 5.482"E
SE Corner	23° 34' 18.568"S	28° 8' 6.935"E
SW Corner	23° 34' 21.199"S	28° 7' 47.69"E

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (PREFERRED)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

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. In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A.

SITE DESCRIPTION

Eskom is planning the construction of a number of Customer Network Centres around the country and the need for one was identified for the Lephalale district.

The proposed Lephalale CNC will be established within an approximate 10.1 hectares piece of land which is located in the triangular area between the eastern edge of Eskom's ash dump (to the west of the proposed site) and Eskom's existing 400kV powerlines (to the east of the proposed site).

The macro area surrounding the development site lies in the western Limpopo Province 'bushveld' and is characterised by predominantly flat terrain (03° – 14°). The surrounding land uses comprise agriculture (beef production), game farming, and mining and infrastructural zonation link to energy supply.

The approximate 10 hectare development site is currently zoned as *Spatial Development Area 3*, which has assumed a character of mixed non-residential land-use, driven by mining and energy.

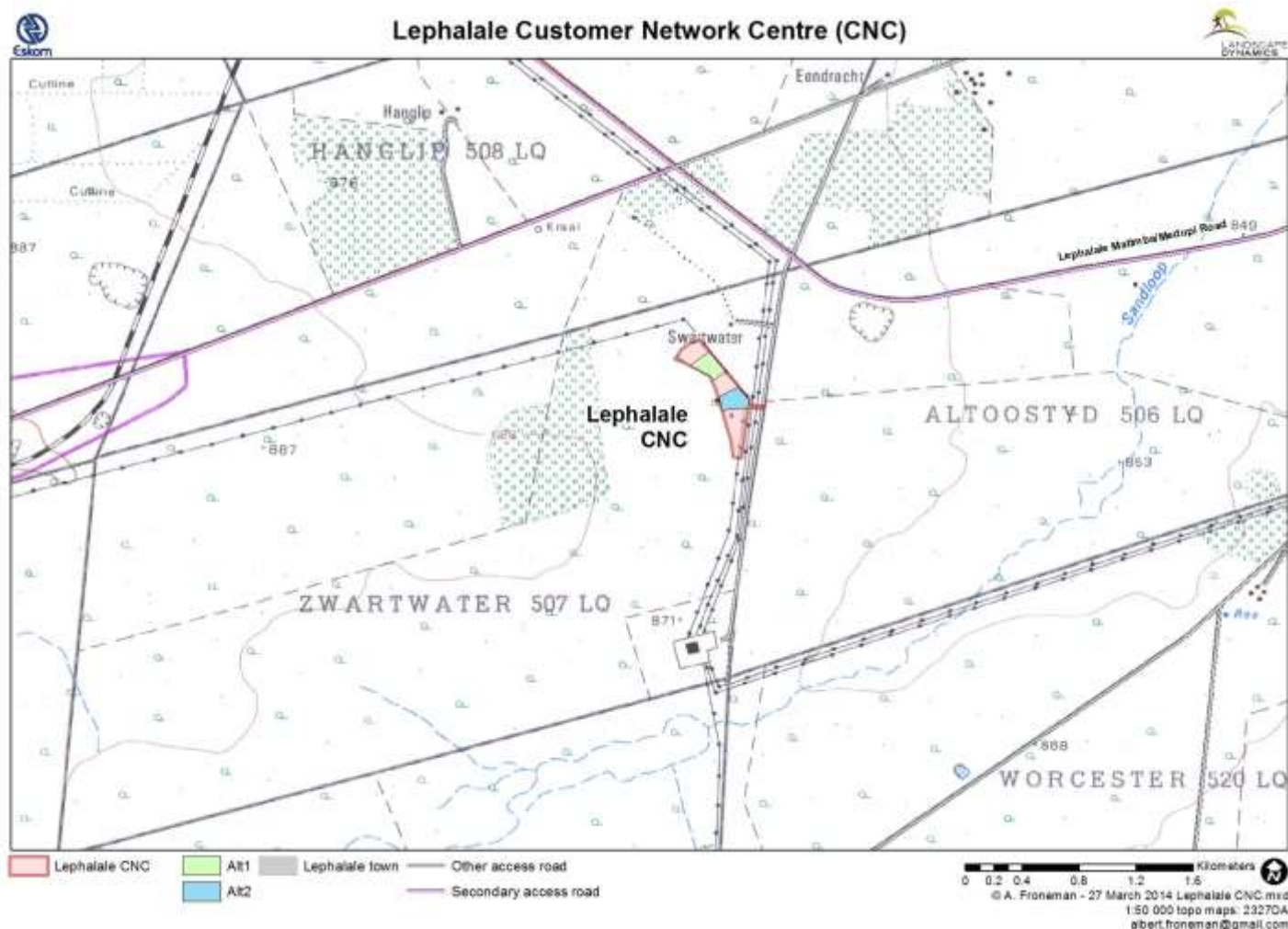
The major plant community within the proposed 10 hectare site is fairly pristine and has retained its natural element. The remaining plant communities have seen an element of disturbance in the past and at least 20% of the site consists of degraded habitat in the form of homogenous *Dichrostachys cinerea* pioneer shrubland.

There are 'undisturbed' portions of the site namely sections of closed woodland and should be left undeveloped as far as possible. Development should preferably take place in the 'disturbed' sections to the north of the site.

SITE ALTERNATIVES

Two site alternatives within the 10.1 hectares were identified and investigated. The two site alternatives are both approximately 2 hectares in size although the CNC will cover an area of approximately 1800m² only. This will allow for ample space in which to manoeuvre when the design and placement of the buildings are being finalised.

Alternative 1 is more to the north of the site and closer to existing infrastructure such as roads and access. The map below is also attached under Appendix A of this report.



Specialist studies were undertaken (attached in Appendix D) and the conclusions thereof are as follows:

- *Vegetation Ecological Investigation*

The final site plan was developed to avoid the densely wooded sections and Alternative 1 as well as Alternative 2 was designed to be in open areas to avoid as much of the natural vegetation as possible, particularly the large trees.

There are no significant differences between Alternative 1 and Alternative 2 in terms of the natural environment. Currently, Alternative 1 is preferred due to its proximity to existing roads and access to the site. In addition, none of the marked protected trees will be affected by the construction of the CNC on the Alternative 1 site.

- *Heritage Impact Assessment*
The HIA shows no specific preference for either of the alternative sites.
- *Paleontological Impact Assessment*
The PIA shows no specific preference for either of the alternative sites.
- *Avifauna Impact Assessment*
The Avifauna Assessment shows no specific preference for either of the alternative sites.

CONCLUSION ON SITE ALTERNATIVES

Both Site Alternative 1 and Site Alternative 2 are acceptable if the proposed mitigations are implemented. Currently, Alternative 1 is the preferred site due to the following reasons:

- There are 'undisturbed' portions of closed woodland on the broader 10 hectares. The biodiversity assessment indicated that these portions should be left undeveloped as far as possible and development should preferably take place in the 'disturbed' sections of the site. The biodiversity study recommended that the site plan should take the densely wooded sections as well as the Tamboti tree stands and the large Marula trees into account (the location of all the protected trees are indicated on a site plan and attached to Appendix A.)
- A final site plan was thus developed to avoid the densely wooded sections and Alternative 1 as well as Alternative 2 was designed to be in open areas to avoid as much of the natural vegetation as possible, particularly the large trees.
- Alternative 1 is the preferred site due to its proximity to existing roads and access to the site. In addition none of the marked protected trees will be affected by the construction of the CNC on the Alternative 1 site.

ACTIVITY ALTERNATIVE

Agriculture

- The surrounding land uses to the site comprise of agriculture (beef production), game farming, and mining and infrastructural zonation link to energy supply.
- The proposed site falls within a property that is currently zoned as *Spatial Development Area 3*, which has assumed a character of mixed non-residential land-use, driven by mining and energy.
- The study site lies in the western Limpopo Province 'bushveld' and is characterised by predominantly flat terrain (03° – 14°) much of which consists of undeveloped agricultural land in the form of cattle and game farms.
- The agricultural potential of the study area can be calculated as low arable to low grazing. In other words, the agricultural potential for the study area (or loss thereof caused by the construction of a Customer Network Centre) is negligible.

Due to the above, it is therefore submitted that agriculture could not be considered as an alternative activity on the site.

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

Alternative 1 (preferred alternative)
Alternative 2
Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)
Alternative 2
Alternative 3

e) No-go alternative

This project is part of Eskom's implementation of a Master Plan for the rendering of services and maintenance by Eskom officials to existing customers and structures. Emergency personnel will also be based at the CNC and will be close at hand in case of any problems in the distribution network.

The site where the CNC is proposed to be constructed falls within Limpopo Sweet Bushveld, which was afforded a conservation status of '*Least Threatened*' by Mucina & Rutherford (2006). The major plant community within the proposed site is fairly pristine and has retained its natural element. The remaining plant communities have seen an element of disturbance in the past and at least 20% of the site consists of degraded habitat.

The areas neighbouring the proposed site have retained their natural element to a certain extent despite being surrounded by development in the form of mining and other heavy industrialisation, agricultural cultivation and urban expansion. Directly adjacent to the proposed site are roads, powerlines, dwellings, open storage facilities and rehabilitated ash dumps.

Taking the above findings into account it can safely be determined that the proposed site has a medium ecological function and its conservation importance status can be considered medium, thus permitting low density development.

Taking all of the above into consideration and all mitigating measures put forward be implemented, there are no identified 'fatal flaws' that could influence the viability of the project.

Should this application not be approved (in other words the applying of the No-Go Option), the support to the broader area will be unreliable and this can result in blackouts and major disturbances in energy provision.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

- Alternative A1¹ (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Size of the activity:

1 830.64 m ²
1 830.64 m ²
m ²

or, for linear activities:

Alternative:

- Alternative A1 (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Length of the activity:

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

Alternative:

- Alternative A1 (preferred activity alternative)
- Alternative A2 (if any)
- Alternative A3 (if any)

Size of the site/servitude:

Approximately 10.1 hectares
Approximately 10.1 hectares

4. SITE ACCESS

Does ready access to the site exist?

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

√ YES	NO

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

Describe the type of access road planned:

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.

5. LOCALITY MAP

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:

- an accurate indication of the project site position as well as positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- 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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/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 property boundaries and numbers of all the properties within 50metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;

- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- Critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

Sensitivity Maps (Appendix A)

- [Ecological Sensitivity Tree Locations Map](#)

8. 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 report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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 Site Layout Plan of a typical Eskom Customer Network Centre is attached in Appendix C.](#)

10. ACTIVITY MOTIVATION

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

<p>1. Is the activity permitted in terms of the property's existing land use rights?</p> <p>The proposed site falls within a property that is currently zoned as <i>Spatial Development Area 3</i>. <i>Spatial Development Area 3</i> has assumed a character of mixed non-residential land-use driven by mining and energy. According to the SDF this form of development should be encouraged in this area.</p>	√YES	NO
<p>(a) <u>Provincial Spatial Development Framework (PSDF)</u></p> <p>Key sectors identified by the Province (Agriculture, Mining, Tourism and Manufacturing) combined with opportunities identified by the Municipality will assist to stimulate economic growth, poverty reduction and overall economic impact. All these activities will need support in supply of energy.</p>	√YES	NO
<p>(b) Urban edge / Edge of Built environment for the area</p> <p>The project will not compromise the integrity of the urban edge.</p>	√YES	NO

<p>(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).</p> <p>The Lephalale Local Municipality is located in the north western part of Waterberg District of Limpopo Province. The Waterberg District Municipality is comprised of six local municipalities, namely Bela Bela, Lephalale, Modimolle, Mogalakwena, Mookgophong and Thabazimbi. Its north-western border is also part of the international border between South Africa and Botswana. The Lephalale municipality is the biggest Municipality in the Limpopo province (covering 14 000km.).</p> <p>Lephalale Local Municipality has been identified as a petrochemical cluster and has attained the status of national development node. The coal fields which boast more than 40% of the total coal reserve of South Africa are located in Lephalale. The Waterberg Coal Field is estimated to contain a resource base of 50 billion tons; of which 12.5 billion tons can be mined by opencast method (coal is sufficiently close to surface that it does not require the sinking of a shaft).</p> <p>Lephalale Municipal areas contribution of mining to GDP is significant at 59.21%. Electricity contributes 11.33% to the GDP and its contribution to the Waterberg electricity sector is at 69.65%. Other sectors that have a significant contribution to the Waterberg GDP per sector include agriculture, mining, and manufacturing.</p> <p>The proposed site falls within a property that is currently zoned as Spatial Development Area 3. Spatial Development Area 3 has assumed a character of mixed non-residential land-use driven by mining and energy. According to the SDF this form of development should be encouraged in this area.</p> <p><i>Relevance</i> The proposed activity/project will provide support to electrical/energy infrastructure that will contribute to sustainable economic growth, provide for sustainable human settlements and support the local industry.</p>	√YES	NO
<p>(d) Approved Structure Plan of the Municipality</p> <p>The development will not conflict / compromise the structure plan of the municipality.</p>	√YES	NO
<p>(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)</p> <p>Specialist studies conducted for this project, namely ecology-, bird- heritage- and paleontological impact assessments all concluded that, with the proposed mitigation measures in place, the Preferred Site for this development will not jeopardize the integrity of the environment.</p> <p>These findings were taken into account when the Preferred Site, as proposed for Environmental Authorisation, was selected.</p> <p>The integrity of existing environmental management priorities will not be compromised by the development as proposed.</p>	√YES	NO

<p>(f) Any other Plans (e.g. Guide Plan)</p> <p>Unknown</p>	YES	√NO
<p>2. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?</p> <p>The proposed site falls within a property that is currently zoned as <i>Spatial Development Area 3</i>. <i>Spatial Development Area 3</i> has assumed a character of mixed non-residential land-use driven by mining and energy. According to the SDF this form of development should be encouraged in this area.</p>	√YES	NO
<p>3. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p> <p>South Africa is coming out of the economic downturn but inadequate power supply could undermine the country's economic recovery and ability to create new jobs. A World Bank loan was granted and offers low-cost capital with long repayment periods. In addition the loan offers a chance to borrow for renewable technologies.</p> <p>In 2003 the Government of South Africa (GoSA) launched the Free Basic Electricity (FBE) policy that provides 50 kilowatt hours (KWh) of free electricity per month to poor families. For a sense of scale, 1 kWh can run a small business kiosk for a day; 50 kWh per month is enough to light 3 lamps and run a small appliance (water heater, TV, or refrigerator). Local governments decide who qualifies for free basic services under criteria set for registering households. Today Eskom provides free basic electricity to 27% of its customer households.</p> <p>The FBE system is supplemented by cross-subsidies from large customers to households using less than 350 KWh/months. The tariffs for this category of customers are usually 25% lower than for customers who consume more than 350 kWh/month.</p> <p>The current Environmental Impact Assessment application is part of a broader scope of work to improve Eskom's network performance.</p>	√YES	NO
<p>4. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p> <p><i>Water supply</i> The Water to the proposed development will be supplied from the water reticulation of the Local Municipality. Note that no construction could commence without sufficient official proof that the water supply for the development is secure.</p>	YES	√NO

<p><i>Sewage</i> A chemical sewer plant will be constructed on site with a daily throughput capacity that is lower than the NEMA listed activities' threshold of 2000 cubic metres and the relevant listed activity is not triggered.</p> <p><i>Waste management</i> An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.</p> <p>Any solid waste that cannot be recycled shall be disposed of at an appropriate landfill site licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No 59 of 2008).</p> <p>The collection of solid waste will be carried out by a private company to be appointed by Eskom for this purpose. The solid waste will be transported to the appropriate solid waste disposal site of Lephalale Local Municipality - to be advised by the Local Municipality. A letter of agreement between the developer and the Permit Holder of the waste disposal site to be kept on site.</p> <p>These above measures are included as requirements in the EMP under the headings "Waste Management". Also refer to the other mitigation measures under the same headings.</p> <p><i>Stormwater drainage</i> A piped stormwater system is proposed. A stormwater management plan that conforms to the requirements of the Department of Water Affairs as well as the Local Municipality has to be compiled by a civil engineer for approval by the above-mentioned authorities.</p> <p><i>Electricity</i> There is an existing Eskom network in the vicinity of the proposed development. The availability of the required supply will have to be confirmed by Eskom.</p>		
<p>5. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p> <p>Refer to above responses</p>	√YES	NO
<p>6. Is this project part of a national programme to address an issue of national concern or importance?</p> <p>Over the past 20 years, South Africa and Eskom have increased access to electricity from 34% to 81%. The Government of South Africa has an annual budget for rural electrification and a program in place to connect the remaining 19% of households by 2014. In addition to household needs, demand is also growing from commercial and small industrial developments as well as schools and health services in rural areas. This project aims to strengthen the Eskom Distribution networks in providing a more efficient support service closer to the customer.</p>	√YES	NO

<p>7. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)</p> <p>The project entails the identification of a potential site for the construction of a Customer Network Centre.</p> <p>The following is relevant:</p> <ul style="list-style-type: none"> • The property in question is owned and managed by Eskom Properties, Group Capital as a rehabilitated ash dump. The site is therefore available to Eskom for the construction of their support infrastructure. • The Customer centre should be in close vicinity to the customers. Eskom identified this area/site as suitable and in line with the technical requirements for the CNC. The CNC has to be close to the customer network it is proposed to support. • The final decision between locations should be made on the accumulative weight of all the above parameters and in addition such as feedback from public participation, land tenure issues, construction costs, etc. 	√YES	NO
<p>8. Is the development the best practicable environmental option for this land/site?</p> <p>Refer to the above. Specialist inputs guided the decision and negative impacts that this development may have on the environment can all be mitigated to acceptable levels. The protection of the bio-physical environment is therefore not jeopardised.</p>	√ YES	NO
<p>9. Will the benefits of the proposed land use/development outweigh the negative impacts of it?</p> <p>Chronic power problems take a heavy toll on society. Without reliable energy, the basic services that people in rich countries take for granted cannot be offered. Since South Africa's electricity crisis began in December 2007, it has been obvious that without an immediate increase in its energy supply South Africa's economy will suffer, public services will become more expensive, and businesses will have to scale back. Failing to address South Africa's energy crisis will have dire consequences for the poor, for industry, and for neighbouring countries.</p>	√YES	NO
<p>10. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?</p> <p>Eskom Distribution has a master plan for electricity strengthening / supply. Similar activities will be conducted in future, as well as possible energy supply projects conducted by the local municipality.</p>	√YES	NO
<p>11. Will any person's rights be negatively affected by the proposed activity/ies?</p> <p>No person's rights would be negatively affected by the proposed activity. A thorough public participation programme was conducted and no comment was received.</p>	YES	√NO

<p>12. Will the proposed activity/ies compromise the “urban edge” as defined by the local municipality?</p> <p>The project will not compromise the integrity of the urban edge.</p>	YES	√NO
<p>13. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?</p> <p>The following SIP is relevant – “SIP 10: Electricity Transmission and Distribution for all - Expand the transmission and distribution network to address historical imbalances, provide access to electricity for all and support economic development. Align the 10-year transmission plan, the services backlog, the national broadband roll-out and the freight rail line development to leverage off regulatory approvals, supply chain and project development capacity.”</p> <p>The current project contributes to the above SIP. The project provides support to the distribution network in the area and thus supports economic development.</p>	√YES	NO
<p>14. What will the benefits be to society in general and to the local communities?</p> <p>The project will assist to stimulate economic growth and poverty reduction.</p>		
<p>15. Any other need and desirability considerations related to the proposed activity?</p> <p>The Eskom Conversion Act, 2001 (Act No. 13 of 2001) establishes Eskom as a State Owned Company (SOC) with the Government of South Africa as the only shareholder, represented by the Minister of Public Enterprises. The main objective of Eskom is to “provide energy and related services including the generation, transmission, distribution and supply of electricity, and to hold interests in other entities”.</p> <p>The proposed Lephalale Customer Network Centre will facilitate the rendering of services and maintenance by Eskom officials to existing customers and structures as, <i>inter alia</i>, emergency personnel will be based at the CNC and will be close at hand in case of any electricity problems.</p> <p>Eskom therefore proposes to construct the Lephalale Customer Network Centre (CNC) to improve the rendering of services and maintenance to the area.</p>		
<p>16. How does the project fit into the National Development Plan for 2030?</p> <p>The National Development Plan aims to eliminate poverty and reduce inequality by 2030. South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society.</p> <p>The Commission’s Diagnostic Report, June 2011 set out South Africa’s achievements and shortcomings since 1994. It identified a failure to implement policies and an absence of broad partnerships as the main reasons for slow progress, and set out nine <i>primary challenges of which the following is relevant to this project</i>: “Infrastructure is poorly located, inadequate and under-maintained”.</p> <p>Given the complexity of national development, the plan sets out six <i>interlinked priorities</i>. <i>Relevant to this project is bringing about faster economic growth</i>.</p>		

The **National Development Plan** makes a firm commitment to achieving a minimum standard of living. *Elements of a decent standard of living include the following relevant to this project :*

- A more efficient and competitive infrastructure.
- Infrastructure to facilitate economic activity that is conducive to growth and job creation.

An approach will be developed to *strengthen key services* such as commercial transport, energy, telecommunications and water, while ensuring their long-term affordability and sustainability.

Economic infrastructure: The proportion of people with access to the electricity grid should rise to at least 90 percent by 2030, with non-grid options available for the rest.

11. 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	Applicability to the project	Administering authority	Date
National Environmental Management Act (Act 107 of 1998)	Authorisation is required	Department of Environmental Affairs	1998
National Water Act (Act 36 of 1998)	Authorisation is not required	Department of Water Affairs	1998
National Heritage Resources Act (25 of 1999)	Authorisation is required	SAHRA	1999
Environment Conservation Act (Act 73 of 1989)	Authorisation is not required	Department of Environmental Affairs	1989
National Environmental Management: Biodiversity Act (Act 10 of 2004)	Authorisation is not required	Department of Environmental Affairs	2004
National Environmental Management: Biodiversity Act (Act 10 of 2004): Threatened & Protected Species Regulations	Authorisation is not required	Department of Environmental Affairs	2004
National Spatial Biodiversity Assessment (2011)	Authorisation is not required	Department of Environmental Affairs	2004
National Biodiversity Strategy Action Plan	Authorisation is not required	Department of Environmental Affairs	2005
Paris Convention for the Protection of the World Cultural and Natural Heritage	Authorisation is not required	Department of Arts and Culture	
White Paper on the Conservation and Sustainable Use of South Africa's Biological Diversity (GN 1095, 28 July 1997)	Authorisation is not required	Responds to the United Nations Convention on Biological Diversity	1997
Conservation of Agricultural Resources Act (43 of 1983)	Authorisation is not required	Department of Agriculture	1983
Endangered and Rare Species of Fauna and Flora (AN 1643 February 1984)	Authorisation is not required	Lists endangered species in terms of the Nature Conservation Ordinance, 1983 (Ordinance 12 of 1983)	1984
RAMSAR Convention on Wetlands of International Importance Especially as Waterfowl Habitat	Authorisation is not required	Department of Water Affairs	

Mineral and Petroleum Resources Development Act (No 28 of 2002)	Authorisation is not required	Department of Mineral Resources	2002
Section 63(1)b & c of the Nature Conservation Ordinance of 1974 (Ordinance 19 of 1974)	Authorisation may be required.	Department of Environmental Affairs	1974
Nature Conservation Regulations 955 of 1975	Authorisation may be required.	Department of Environmental Affairs	1975
Section 7(1) and 15(1) of the National Forests Act of 1998 (Act 84 of 1998)	Authorisation may be required.	Department of Agriculture	1998

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If YES, what estimated quantity will be produced per month?

√YES	NO
Approximately 2.5m ³	

How will the construction solid waste be disposed of (describe)?

- Unusable waste will be disposed of at registered waste disposal sites according to the applicable waste classification.
- Hazardous construction waste will be disposed of at a H:H registered waste disposal facility.
- Refuse bags will be supplied to construction personnel for dumping of household waste. Bins with lids will be provided at construction camps for household waste.

A letter of agreement between Eskom and the Permit Holder of the waste disposal site shall be kept on site.

Where will the construction solid waste be disposed of (describe)?

An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.

Any solid waste that cannot be recycled shall be disposed of at an appropriate landfill site licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No 59 of 2008).

These above measures are included as requirements in the EMPr under the headings "Waste Management". Also refer to the other mitigation measures under the same headings.

Will the activity produce solid waste during its operational phase?

If YES, what estimated quantity will be produced per month?

√YES	NO
Only small volumes of domestic waste will be generated	

How will the solid waste be disposed of (describe)?

An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.

Any solid waste that cannot be recycled shall be disposed of at an appropriate landfill site licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No 59 of 2008).

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Appropriate Landfill site in Lephalale Local Municipality - to be advised by the Local Municipality. A letter of agreement between Eskom and the Permit Holder of the waste disposal site to be kept on site.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

Not applicable

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 competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA? YES NO

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility? YES NO

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	<input checked="" type="checkbox"/> NO
-----	--

If YES, what estimated quantity will be produced per month?

m ³

Will the activity produce any effluent that will be treated and/or disposed of on site?

<input checked="" type="checkbox"/> YES	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.

A chemical sewer plant will be constructed on site with a daily throughput capacity that is lower than the NEMA listed activities' threshold of 2000 cubic metres and the relevant listed activity is not triggered.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES

√NO

If YES, provide the particulars of the facility:

Facility name:		
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

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES

√NO

If YES, is it controlled by any legislation of any sphere of government?

YES

NO

If YES, the applicant must 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:

--

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES

√NO

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES

√NO

If YES, is it controlled by any legislation of any sphere of government?

YES

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:

No permanent noise pollution will occur as a result of the proposed activity.

Limited noise will however occur as a result of construction activities during the construction phase. Eskom shall provide all necessary equipment with standard silencers and maintain silencer units on vehicles where required. Equipment must always be in good working order to minimise unnecessary noise levels.

13. WATER USE

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

<input checked="" type="checkbox"/> Municipal	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water		
<p>The Water to the proposed development will be supplied from the water reticulation of the Local Municipality. Note that no construction could commence without sufficient official proof that the water supply for the development is secure.</p> <p>Measures that could be taken to ensure the optimal reuse or recycling of waste water, are to use grey water to irrigate the landscaping of the proposed development.</p>							
<p>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:</p> <p>Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?</p> <p>If YES, please provide proof that the application has been submitted to the Department of Water Affairs.</p>					<p>litres</p> <table border="1"> <tr> <td>YES</td> <td><input checked="" type="checkbox"/> NO</td> </tr> </table>	YES	<input checked="" type="checkbox"/> NO
YES	<input checked="" type="checkbox"/> NO						

14. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

<p>The following measures are proposed :</p> <ul style="list-style-type: none"> • Low voltage or CFLs (compact fluorescent lights) and LEDs (light emitting diodes) should be incorporated into the architectural designs of the buildings and incandescent light bulbs must be used. • Low-energy lamps must also be used for exterior lighting • Solar panels could be used for supplementary power supply • The following is recommended for the hot water systems at the CNC: <ul style="list-style-type: none"> ○ Geyser blankets could be installed ○ At least the first 1.5m of hot water outlet pipes could be insulated ○ A geyser-timer unit be installed

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

<p>The requirement for energy sufficiency and alternative energy sources will be communicated with the project architects during the design phase of the project.</p>

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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

- Paragraphs 1 - 6 below must be completed for each alternative.

- Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	Limpopo Province
District Municipality	Waterberg District Municipality
Local Municipality	Lephalale Local Municipalities
Ward Number(s)	Ward 4
Farm name and number	Farm Zwartwater 507-LQ
Portion number	
SG Code	TOLQ00000000050700000

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

The proposed site falls within a property that is currently zoned as *Spatial Development Area 3*, which has assumed a character of mixed non-residential land-use driven, by mining and energy.

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? YES NO

1. GRADIENT OF THE SITE

The study site lies in the western Limpopo Province 'bushveld' and is characterised by predominantly flat terrain (03° – 14°) much of which consists of undeveloped agricultural land in the form of cattle and game farms. The altitude of the proposed site ranges between 878 and 884 masl.

Indicate the general gradient of the site.

Alternative S1:

√ Flat	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
--------	-------------	-------------	-------------	--------------	-------------	------------------

Alternative S2 (if any):

√ Flat	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
--------	-------------	-------------	-------------	--------------	-------------	------------------

Alternative S3 (if any):

Flat	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
------	-------------	-------------	-------------	--------------	-------------	------------------

Note

The area where Site Alternative 1 is located does not contain any specific features that will make the site critically more different than Site Alternative 1. Paragraphs 1 - 6 below are therefore the same for both alternatives.

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input checked="" type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		Alternative S2		Alternative S3	
Shallow water table (less than 1.5m deep)	YES	√NO	YES	√NO	YES	NO
Dolomite, sinkhole or doline areas	YES	√NO	YES	√NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	√NO	YES	√NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	√NO	YES	√NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	√NO	YES	√NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	√NO	YES	√NO	YES	NO
Any other unstable soil or geological feature	YES	√NO	YES	√NO	YES	NO
An area sensitive to erosion	YES	√NO	YES	√NO	YES	NO

The Baseline Ecological Assessment describes the geology of the site as follows:

Sandstone, mudstone and siltstone of the Clarens Formation (Karoo Supergroup) as well as from the Matlabas subgroup (Mokolian Waterberg Group) are the dominant underlying geological formations found in the Lephalale region. The area has the following soil types: Kalahari sand, soils with calcrete and surface limestone layers, brownish sandy (Clovelly soil type), clayey-loamy soils (Hutton soil type) on the plains and low-lying areas and shallow gravelly, sandy soils in the slightly undulating areas.

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.

A Baseline Ecological Assessment Report was undertaken by Rory Muldoon Projects and is attached in Appendix D. The report is summarised below.

FLORA

The proposed site lies within the Limpopo Sweet Bushveld vegetation unit as described by Mucina & Rutherford (2006). This unit consists of short open woodland on plains or undulating terrain traversed by several tributaries of the Limpopo River. In disturbed areas, thickets of *Acacia melifera* and *Dichrostachys cinerea* are almost impenetrable. The conservation status of Limpopo Sweet Bushveld is “Least threatened” although less than 1% of this vegetation unit is statutorily conserved. Approximately 5% has been transformed by agricultural cultivation and mining activities.

The vegetation unit can further be broken down into plant communities based on more detailed examination of the dominant plant species growing in certain soil conditions and geological structures. Thus within the proposed 10 hectare site two plant communities were identified:

- Plant Community- 1 = *Grewia flava* / *Commiphora pyracanthoides* closed woodland
- Plant Community-2 – *Dichrostachys cinerea* shrubland.

Plant Community-1 = *Grewia flava* / *Commiphora pyracanthoides* closed woodland.

The ecological function of the *Grewia flava* / *Commiphora pyracanthoides* closed woodland community can be regarded as ‘medium’ with a high score in terms of conservation importance. However it’s ‘degraded’ sub-community can be regarded as having a medium conservation importance status and a medium ecological function.

Plant Community-2 – *Dichrostachys cinerea* shrubland

At least 20% of the proposed site’s natural woodland has been affected by deforestation or bush clearing. It is probable that this community once formed part of the *Grewia flava* / *Commiphora pyracanthoides* closed woodland but has been reduced to its current form through the above mentioned activities. This resulted in the formation of a plant community in a state of recovery with a single pioneer shrub which dominates. The Sickie Bush *Dichrostachys cinerea* is a species which is associated with degraded (deforested and overgrazed) savannah communities often forming dense, impenetrable thickets. In its present state this plant community is of medium conservation importance and has a low ecological function.

Floral Species of Conservation Concern



A number of protected tree species do occur on the study site and marking of the trees was done to minimise damage to the trees (an *Ecological Sensitivity Tree Locations Map* is included in Appendix A).

The 172 trees that were marked / labelled are listed in the Baseline Ecological Assessment Report, as attached in Appendix D.

FAUNA

An area of approximately 500ha, in which the proposed 10 hectare site falls, is managed as a small game reserve and has been enclosed by a 2.1m high game fence which has now been incorporated with the Medupi game reserve. The large game species, which occur naturally in the area, have been fenced in while a number of other game species have been reintroduced. Evidence of the following game species was recorded by spoor and droppings in and around the proposed site during the field survey: Greater Kudu, Impala, Blue Wildebeest, Warthog and Common Duiker.

Signs indicating the presence of several smaller mammals were also noted. These include African Porcupine, Slender Mongoose, Scrub Hare, Aardvark, Smith's Bush (Tree) Squirrel and Chacma Baboon. No caves or rock cavities are present on the site which may harbour large bat populations but the large Marula trees do provide roosting sites for small bats such as Mauritian Tomb Bat and Egyptian Free-tailed Bat.

Fauna Species of Conservation Concern

The only mammal Species of Conservation Concern, which is unquestionably found in the proposed site, is the Aardvark, which is classified under the category 'Least Concern' in the Red Data Book of Mammal of South Africa. Generally this category lists many species which are widespread and is not considered as 'crucial' as the other more significant categories namely Critically Endangered, Endangered and Vulnerable. However it is expected with 'medium probability' that at least two mammals classified as 'Vulnerable' namely Honey Badger *Mellivora capensis* and South African Hedgehog *Atelerix frontalis* may occur in or adjacent to the proposed site.

ECOLOGICAL SENSITIVITY

No ecological communities in the study area were found to have a high ecological sensitivity and deemed as 'No-Go' zones. The biodiversity survey revealed that the proposed site possesses no species of major conservation concern.

SURFACE WATER IN THE STUDY AREA

No surface water, drainage lines or ephemeral pans are present at the site.

GO / NO-GO OPTION

From an ecological viewpoint no 'fatal flaws' (no-go options) were identified. If all recommended mitigating measures are enforced then the project can be supported from an ecological point of view.

IMPACT ASSESSMENT

Certain considerations should be taken into account in order to minimise the negative effects on the ecology of the site and the surrounding habitats.

MITIGATION

The following conditions should be considered when planning and implementing the proposed development:

Vegetation

The 'undisturbed' sections of closed woodland should be left undeveloped as far as possible. Development should preferably take place in the 'disturbed' sections to the north of the site. If this cannot be avoided then the site plan should take the densely wooded sections as well as the Tamboti tree stands and large Marula trees into account - these should be avoided. The plan should also attempt to retain as much of the natural vegetation as possible, particularly the large trees.

Fauna

The preservation of this habitat is important as not only does it support a fairly diverse biological component but would moreover act as important "green" corridor which would be utilised by a wide range of faunal species. Fence or wall designs should facilitate the movement of small mammals in and out of the facility and the use of electrified fence strands near the ground surface should be avoided. Floodlights are discouraged as they have major negative effects on insect and birdlife. If unavoidable these lights should not cast sharp light vertically and 'low' intensity globes should be used.

In the event of unearthing subterranean fauna during the laying of services, the project's environmental officer should be notified and these should be relocated to a suitable conservation area. This should also apply to small mammals being trapped in excavations during construction.

CONCLUSION

Taking the findings mentioned below into account, it can safely be determined that the proposed site has a *medium ecological function* and its conservation importance status can be considered *medium*, thus permitting low density development.

- The biodiversity survey revealed that the proposed site possesses no species of major conservation concern.
- The chief habitat in which the site falls, namely Limpopo Sweet Bushveld has been afforded a conservation status of 'Least threatened' by Mucina & Rutherford (2006).
- The major plant community within the proposed site is fairly pristine and has retained its natural element. The remaining plant communities have seen an element of disturbance in the past and at least 20% of the site consists of degraded habitat.
- The areas neighbouring the proposed site have retained their natural element to a certain extent despite being surrounded by development in the form of mining and other heavy industrialisation, agricultural cultivation and urban expansion. Directly adjacent to the proposed site are roads, power lines, dwellings, open storage facilities and rehabilitated ash dumps.

If all recommended mitigating measures are enforced then the project can be supported from an ecological point of view.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites:

Perennial River	YES	√NO	UNSURE
Non-Perennial River	YES	√NO	UNSURE
Permanent Wetland	YES	√NO	UNSURE
Seasonal Wetland	YES	√NO	UNSURE
Artificial Wetland	YES	√NO	UNSURE
Estuarine / Lagoonal wetland	YES	√NO	UNSURE

The nearest river is the Lephalala River, which is 1,5km to the west of the site

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that 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:

√ Natural area	√ Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	√ Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
√ Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
√ Quarry, sand or borrow pit	Golf course	Other land uses (describe)
<p>The surrounding land uses comprise agriculture (beef production), game farming, mining and infrastructural zonation link to energy supply.</p>		

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

Not applicable

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

Not applicable

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

Not applicable

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	√NO
Core area of a protected area?	YES	√NO
Buffer area of a protected area?	YES	√NO
Planned expansion area of an existing protected area?	YES	√NO
Existing offset area associated with a previous Environmental Authorisation?	YES	√NO
Buffer area of the SKA?	YES	√NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

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 Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES √NO

Uncertain

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

A **Heritage Impact Assessment** was compiled by Dr Julius CC Pistorius, Archaeologist & Heritage Consultant and is attached in Appendix D. The findings of the study are as follows:

The Heritage Impact Assessment (HIA) did not reveal the presence of any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) in the study area. There is consequently no reason from a heritage point of view why the Eskom Project should not continue and the site seems to be suitable from a heritage point of view for the construction of the proposed Lephalale CNC.

If any heritage resources of significance is however exposed during the construction phase of the project, the South African Heritage Resources Authority (SAHRA) should be notified immediately, all development activities must be stopped and an archaeologist accredited with the Association for Southern African Professional Archaeologist (ASAPA) should be notify in order to determine appropriate mitigation measures for the discovered finds. This may include obtaining the necessary authorisation (permits) from SAHRA to conduct the mitigation measures.

A **Palaeontological Impact Assessment** was compiled by Prof Marion Bamford from the Evolutionary Studies Institute: University of the Witwatersrand and is attached in Appendix D. The findings of the study are as follows:

The Karoo Supergroup is very poorly exposed in the Ellisras Basin but from borehole data the underlying sediments comprise a number of Formations with coal seams. The underlying Formations are from top (youngest) down to oldest are the Clarens Formation, Lisbon formation, Greenwich Formation and six others. There are a few outcrops of the Clarens Formation in the general area (but not on the proposed site) which is predominantly aeolian. The next formation, the Lisbon Formation is predominantly of fluvial origin with some aeolian contribution but has no plant material preserved.

The proposed CNC buildings and access road construction are not likely to penetrate below the usual building regulation foundations of 1-2m depth and so will not penetrate any of the other sedimentary layers.

Since the surface rocks in this region are either much too young, Quaternary, or much too old (Archaean in age) to contain fossils and that no fossils have been recorded on the surface (previously agricultural land) it is extremely unlikely that any fossils will be found in the proposed construction area. If, however, any fossils are discovered during the construction then it is strongly recommended that a palaeontologist be called to assess their importance and rescue them if necessary.

As far as the palaeontology is concerned the proposed development can be supported and a Phase 2 study is not necessary.

If any palaeontological material is however exposed during digging, excavating, drilling or blasting then SAHRA must be notified. All development activities must be stopped and a palaeontologist should be called in to determine proper mitigation measures.

Will any building or structure older than 60 years be affected in any way?

YES	√NO
YES	√NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

One of the key social problems facing the Lephalale Municipality is poverty. The unemployment rate in the Municipality is 22,2% of the economically active population (people between the ages of 15 and 64 years = 70% falls in this bracket). The youth unemployment rate is 26,9%.

Economic profile of local municipality:

Lephalale is the fastest growing town in the Waterberg district. There are 115 767 people in the district. 9 out of every 10 residents (90,1%) are black African, followed by whites at 7,9%, with other population groups making up the remaining 2%.

There are 29 880 households in the municipality, with an average household size of 3,4 persons per household. 67,0% of households have access to piped water either in their dwelling or in the yard and 22,0% access piped water on a community stand with a distance less than 200m from dwelling.

Of the 45 527 economically active (employed or unemployed but looking for work) people in the municipality, 22,2% are unemployed. 26,9% of the 26 368 economically active youth (15 – 34 years) in the municipality are unemployed.

The building site of the Medupi Power Station and the operational Matimba Power Station are the largest sources of employment together with agricultural activities such as cattle, poultry, and game farming.

Level of education:

2011 statistics

No schooling aged 20+ - 9,9%

Higher education aged 20+ - 11,6%

Matric aged 20+ - 23,5%

2001 statistics

No schooling aged 20+ - 24,6%

Higher education aged 20+ - 6,2%

Matric aged 20+ - 13,9%

Over the years there has been a steady decline in the number of persons who have not received an education. The percentage of persons with no schooling have decreased from 24,6% in 2001 to 9,9% in 2011, whilst those with education higher than grade 12 has increased from 6,2% in 2001 to 11,6% in 2011.

Amongst those aged 20 years and older, 37% have secondary education, 23,5% have completed matric, 11,6% have some form of higher education, 17,8 completed/have some primary education.

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

R15 million	
R0	
√ YES	NO
√ YES	NO

How many new employment opportunities will be created in the development and construction phase of the activity/ies?	Unknown, depends on contractor. Permanently – none
What is the expected value of the employment opportunities during the development and construction phase?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	Unknown
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?	R0
What percentage of this will accrue to previously disadvantaged individuals?	0%

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix A to this report.

- a) **Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)**

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	

The development site is not identified as a CBA, ESA, ONA or NNR in any of SANBI's biodiversity plans.

- b) **Indicate and describe the habitat condition on site**

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Detail with regards to the vegetation condition within the study area is supplied in the Baseline Ecological Assessment (attached in Appendix D) and summarised in Section B, paragraph 4 'Groundcover' of this report		

Natural	65%	Fairly pristine <i>Grewia flava/ Commiphora pyrocanthoides</i> thicket and shrubland are present on site, which is a vegetation community that is widespread in the Lephalale district.
Near Natural (includes areas with low to moderate level of alien invasive plants)	35%	Areas where there are signs of previous degradation (bush clearing) characterised by more open shrubland and dominated by pioneer shrubs such as <i>Dichrostachys cinerea</i> . Not many alien plants – mainly annuals such as <i>Bidens</i> (Khakibush).
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	0%	

c) **Complete the table to indicate:**

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

<u>Terrestrial Ecosystems</u>		<u>Aquatic Ecosystems</u>						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchanneled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
	Endangered							
	Vulnerable							
	√ Least Threatened	YES	√ NO	UNSURE	YES	√ NO	YES	√ NO

The following map was obtained from the SANBI website and is attached under Appendix A:

- **Terrestrial Ecosystem Threat Status:** Least Threatened

d) **Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)**

Detail with regards to the vegetation within the study area is supplied in the Baseline Ecological Assessment (attached in Appendix D) and summarised in Section B, paragraph 4 'Groundcover' of this report

A **Bird Impact Assessment** (Included in Appendix D) was undertaken by Chris van Rooyen Consulting and is summarised below.

VEGETATION TYPES AND BIRD HABITAT

Woodland

Moist woodland (which forms part of the savanna biome and also encompasses Limpopo Sweet Bushveld) is the dominant vegetation type in the macro study area and consists of a grassy understorey and a distinct woody upper-storey of trees and tall shrubs. In the study area itself, the woodland consists mostly of open to dense woodland. The woodland vegetation is structurally fairly intact but highly fragmented within the macro area by powerline servitudes, old cleared lands and industrial development (Matimba ash dump). Overall, the natural vegetation in the macro study area has been impacted by live-stock grazing, urban development, wood harvesting, agriculture and industrial development.

The natural woodland in the 10ha area where the new CNC is to be constructed comprises natural woodland, with evidence of disturbance (bush densification) in some areas. Due to the existing impacts, few Red Data species are likely to be attracted to the remaining natural woodland on a regular basis, but sporadic occurrence cannot be ruled out.

Grassland

The macro area contains areas where the woody elements were cleared in the past, and which is now covered in grass with scattered trees. These "grasslands" are most evident on old agricultural lands, in servitudes under transmission lines and on the ash dump where the vegetation is in the process of being rehabilitated. Few Red Data species are likely to be attracted to these areas, but Lanner Falcon might occasionally hunt passerines in these clearings, and European Rollers could perch on the remaining trees and shrubs to hawk insects. Abdim's Stork and Kori Bustard might also occasionally be attracted to these open areas.

River, dams and wetlands

There are no natural rivers or wetlands in the study area. There are two industrial waterbodies in the study area, which are unlikely to be attractive to any Red Data species.

Industrial infrastructure

The Matimba and Medupi power stations are located just to the north and west of the study area. The study area itself contains a rehabilitated ash dump and several transmission lines and roads. The fragmented state of the habitat makes the occurrence of sensitive Red Data species likely to be a sporadic rather than regular occurrence due to disturbance and habitat degradation.

IMPACT ASSESSMENT

IMPACTS

Displacement through habitat transformation and disturbance

During the construction phase and maintenance of the proposed CNC, habitat destruction and transformation inevitably takes place. This happens with the construction of access roads, and the actual construction of the CNC infrastructure, which will result in the total transformation of the

building site. These activities will have an impact on birds breeding, foraging and roosting in or in close proximity of the site, through the modification of habitat and disturbance during the construction activities.

The macro area has however been transformed for decades to accommodate a change in land use (i.e. industrial, urban and agriculture) which reduced the number and variety of bird species originally inhabiting the area on account of the loss of habitat and decline in food availability. In the case of the larger Red Data bird species, this has resulted in these species long since disappearing from the study area for all practical reasons. It is therefore not envisaged that any Red Data species will be permanently displaced from the study area by the habitat transformation that will take place at the site of the proposed CNC, irrespective of which alternative is ultimately used.

MITIGATION

- The construction activities must be restricted to the actual footprint of the development.
- Measures must be put in place to ensure that construction personnel are prevented from accessing the property outside the actual construction site.
- Care must be taken to ensure that the habitat destruction is kept to what is absolutely necessary for the construction of the CNC.

The impact of habitat transformation associated with the construction of the CNC should be **low** and should mostly affect non-Red Data species resident or foraging at the site itself, and not local or regional populations.

CONCLUSION

The avifauna that will be directly affected by the loss of habitat are the birds breeding and foraging in the direct area that will be taken up by the CNC. These are almost entirely made up of smaller, non-threatened passerines, with the exception of a few non-threatened raptors and terrestrial species. In this instance, the impact should not materially threaten the local or regional populations of any of these species, due to the small size of the development.

SECTION C: PUBLIC PARTICIPATION

Public participation plays an important role in the compilation of environmental reports as well as the planning, design, and ultimately the implementation of the project. Public participation is a process leading to informed decision-making, through joint effort by the proponent, technical experts, governmental authorities, and systematically identified I&APs.

Landscape Dynamics has taken cognisance of the requirements for public participation in terms of the current 2010 EIA Regulations, and has ensured that the public participation principles are upheld. A successful Public Participation Programme (PPP) is one that is inclusive, actively engages the public and provides ample opportunity for the public to participate in the process.

The purpose of the PPP is to ensure that the issues, inputs and concerns of Interested and Affected Parties (&IAPs) are taken into account during the decision-making process. This requires the identification of I&APs, communication of the process and findings to these I&APs and the facilitation of their input and comment on the process and environmental impacts, including issues and alternatives that are to be investigated. The steps taken during the execution of the PPP undertaken for this project are detailed below.

1. ADVERTISEMENT AND NOTICE

Publication name	Northern News	
Date published	16 May 2014	
Site notice position	Latitude	Longitude
North-eastern corner of the Farm Zwartwater 507-LQ	23° 41' 43.21" S	27° 37' 28.06" E
At the Eskom controlled entrance gate to the property	23° 41' 47.20" S	27° 37' 12.08" E
Date placed	27 March 2014	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

Actions undertaken during the initial Public Participation Process

- Lists of Interested & Affected Parties (IAPs) were compiled and include directly affected and adjacent landowners, government departments, municipalities and other applicable organisations / stakeholders (IAP lists are included as Appendix E5).
- Background Information Documents (BIDs) were emailed / faxed / posted to everyone on these lists in the week of 11 April 2014 (the BID is included as Appendix E2a).
- An onsite notice in English and Northern Sotho was placed in close proximity to the site at the north-eastern corner of the Farm Zwartwater 507-LQ, close to the inter-junction of the dirt road towards the farm and the Medupi/Exxaro/Lephalale road (proof thereof included as Appendix E1b).

- A second onsite notice was left at the entrance to the farm at the security gate – the guard wanted to confirm placement with the relevant Eskom official before placement. He later confirmed telephonically that it had been put up against the gate.
- A newspaper advertisement was placed in the local newspaper, the Northern News on 16 May 2014 (proof thereof included in Appendix E1a).

Public meeting / Public open day

- Due to the fact that no comment from any IAP was received during the initial PPP, it was determined that a public meeting / public open day will not serve any purpose at this stage.
- The reasons for the lack of comment could be due to the fact that the Lephalale CNC development as proposed falls within the site's current zoning rights; it is a low impact development (the coverage is less than 2%); site alternatives were thoroughly assessed; the preferred site would ensure that sensitive flora is protected; all identified impacts could be mitigated to acceptable levels and the land belongs to Eskom SOC Limited.
- However, comment received after the distribution of the Draft BAR will be thoroughly assessed in order to determine the need for a public meeting / public open day.

Distribution of Draft Basic Assessment Report for comment

The Draft BAR, this document, is distributed as follows (a 40-day commenting period applies):

- Hard and electronic copies of the report are being delivered to the
 - National Department of Environmental Affairs
 - Limpopo Provincial Government: The Department of Economic Development, Environment & Tourism, Manager: Environmental Impact Management
 - Lephalale Local Municipality, Municipal Manager: Mr A S Naidoo
 - Limpopo Province Region Department of Water Affairs, The Deputy Director: Water Resources Management
 - South African Heritage Resource Agency (electronically via SAHRIS)
- All Interested & Affected Parties as per the Register of IAPs will receive an electronic copy of the Draft BAR where possible. They will also be notified that a hard copy of the document is available for perusal at the Lephalale Public Library.

Distribution of Final Basic Assessment Report for comment

All comment received as a result of the distribution of the Draft BAR will be addressed accordingly and will be documented in the Final BAR. Should the content of the Final BAR differ significantly from that of the Draft BAR, the Final BAR will be distributed to all IAPs for their final input for a 21 day commenting period.

The Final BAR will be submitted to the Department of Environment Affairs for the issuing of the Environmental Authorisation.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

List of Key Stakeholders (refer to Appendix E.5 for their contact details)

Directly affected landowner

The Landowner of the Farm Zwartwater 507-LQ: Group Capital Department – Eskom Properties, Regional Land Portfolio Managers: Ms Bronwyn Stolp and/or Ms Tinkie Holl
Eskom, Horticulture Officer: Allan Bosman (Matimba Properties)

Adjacent Landowners

Wellington LQ 519 Remainder & Altoostyd LQ 506 Portion 1, Mr Magiel Erasmus
Group Capital Department – Eskom Properties, Regional Land Portfolio Managers: Ms Bronwyn Stolp and/or Ms Tinkie Holl (Kuipersbult LQ 519, Remainder & Hangklip LQ 508, Portion 6)
Enkelbult LQ 462, Remainder, Exxaro Property, For attention: Mr Wolfie Jahn

General Stakeholders

Mdupi Power Station, Environmental Manager: Mr Emile Marell
Matimba Power Station, Environmental Officer: Ms Tshifhiwa Matamele
Exxarro Groote Geluk Power Station, Senior Environmental Specialist: Ms Filomaine Swanepoel

Include proof that the key stakeholders received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

Proof of distribution of the Background Information Document is included in Appendix E2.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

3.1 Comment received during the Initial Advertising Period from 27 March 2014 up to compilation of the Draft BAR

Please note

Although this project was advertised as per the EIA Regulations, no comment was received from either the public, adjacent landowners, municipalities or any government departments.

Summary of main issues raised by I&APs	Summary of response from EAP
No comment was received at the time of submission of this Basic Assessment Report.	

3.3 Comment received on the Draft BAR

The Draft BAR (this document) is now being distributed for comment. All comment received will be addressed accordingly and will be documented in the Final BAR to be submitted to the Department of Environment Affairs for approval.

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

No comment was received at the time of submission of this Basic Assessment Report.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Refer to the list of Interested and Affected Parties in Appendix E.5 for the contact details of the organisations mentioned below

Municipalities

Municipality of the Waterberg District, Municipal Manager: Acting Miss Rataela Feziwe
Lephalale Local Municipality, Municipal Manager: Mr A S Naidoo
Lephalale Local Municipality, Infrastructure & Services: Mr George Rametse
Lephalale Local Municipality, Mayor: Cllr Moloko Jack Maeko

Government Departments

Department of Water Affairs: Water Regulation and Use, For attention: Ms M M Kompane
Limpopo Province Region Department of Water Affairs, The Deputy Director : Water Resources Management, For attention: Mrs Dorothy Maumela
Department of Agriculture, Forestry and Fisheries: For attention Mr. Thapelo Machate
Limpopo Provincial Government Economic Development Environment & Tourism, Manager: Environmental Impact Management: Ms T P Malungane
Limpopo Provincial Government Economic Development Environment & Tourism, EIA Admin Office: Ms Chantall Maseda
Limpopo Province, Department of Finance and Economic Development, Deputy Director: Biodiversity Services: Mr E V Maluleka
Limpopo Heritage Resources Agency, Manager: Heritage: Mr Donald Lithole
SAHRA, The Executive Officer: Heritage Branch: Ms Colette Scheermeyer

South Africa National Roads Agency (SANRAL), Regional Manager: Mr Ismail Essa
Road Agency Limpopo (RAL) Manager: Land Use Management: Mr Phuti Montjane
Limpopo Province, Department of Mineral Resources, Deputy Director: Environment Management (Directorate Mineral Development) Mr A Mulaudzi
Department of Rural Development and Land Reform, Chief Director: Land Restitution Limpopo: Mr Tele Maphotho
Department of Rural Developments and Land Reform, Regional Land Claims: Mr Harry Maphuta
Transnet Freight Rail: The Senior Manager: - Environment Management: Mr Vincent Matabane
Transnet Freight Rail: The Corporate Environment Specialist: Risk Management: Mr Ndivhuwo Netshilaphala
Eskom Transmission, Megawatt Park: The Corporate Specialist Environmental Manager: Mr Dave Lucas

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) 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 competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

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.

1. 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Refer to the summary below as well as Appendix F for a complete impact assessment in terms of Regulation 22(2)(i) of GN R.543.

ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, the following environmental impact statement could sum up the impact that the proposed activity 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.

The nature of the impact on the natural environment is the proposed construction and establishment of a Customer Network Centre (CNC). It is evident that the biggest impact will be during the construction of the buildings and parking lot. Thereafter, the impacts could be significant and lasting and could include the buildings and continual movement of people in the area. However, it is expected that with the proposed mitigation of the impacts as well as the implementation of the Environmental Management Programme, the expected negative impact could be mitigated to acceptable measures.

EVALUATION METHOD FOLLOWED

The nature and extent of expected negative impacts are described directly under the heading for each impact.

A table was designed to facilitate evaluation of the expected negative impact in terms of significance (intensity), duration, probability and significance after mitigation.

The numerical values used for "Impact Severity" (significance / intensity) relates to the potential severity of the proposed project on the specific environmental component without any mitigation and is being evaluated and rated on a scale from 0 to 4 where the following values apply :

- 0 = no impact
 1= low impact
 2 = medium impact
 3 = significant impact
 4 = severe impact

- The **duration** of the expected negative impact is supplied as either “temporary” - 0-3 years (generally during construction) or “permanent”.
- The **probability** that the expected negative impact would occur if not mitigated is rated as “low”, “medium” or “high”.
- The negative impacts are also evaluated in terms of the effectiveness with which it could be mitigated: “**Severity of Impact after Mitigation**” is rated on a scale from 0 to 4, with a severe impact after mitigation receiving a rating of 4 (and can therefore influence the viability of the project) and no impact after mitigation receiving a rating of 0.

IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

IMPACTS OF FUEL TANKS

Disregard of legislative requirement				
Disregard of legislation requirements could result in negative environmental impact and costly non-compliance actions by authorities				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Medium	3	1
Proposed mitigation				
<ul style="list-style-type: none"> • Ensure compliance with relevant legislation and legal standards 				

Poor design- structural failures				
Poor design will result in structural failures and subsequent leaks with resultant negative environmental impact				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Medium	4	1
Proposed mitigation				
<ul style="list-style-type: none"> • Ensure compliance with industry standards 				

OTHER IMPACTS: PLANNING & DESIGN PHASE

Impact on natural habitat				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Low	2	1
<p>Proposed mitigation</p> <p><i>Site Alternatives</i></p> <ul style="list-style-type: none"> The two alternative sites for the CNC were chosen in order to avoid the densely wooded sections as well as the Tamboti tree stands and the large Marula trees on the broader 10 ha site. The site development plan attempted to retain as much of the natural vegetation as possible, particularly the large trees. Currently, Alternative 1 is preferred as the final Site Alternative due to its avoidance of these densely wooded sections. In addition Alternative 1 is preferred due to its proximity to existing roads and access to the site. Both Alternative 1 and Alternative 2 have low-medium ecological sensitivity. <p><i>Other</i></p> <p>The following should be factored into the planning phase of the project, since it could have an influence on construction processes and timing thereof:</p> <ul style="list-style-type: none"> Rehabilitate disturbed areas. Avoid erosion and apply mitigation measures as discussed below and in the EMP. Remove aliens. Avoid removing any trees taller than 2m if not absolutely necessary. Plant indigenous trees in gardens and not using alien plants for landscaping. Protect large remaining trees. No area for a campsite or temporary storage site should be selected where it would be necessary to cut down any trees or clear any shrub land whatsoever, not even alien species. Any selected temporary site (accommodation and storage) preferably must be on the demarcated site itself. 				

IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

IMPACTS OF THE FUEL TANKS

Risk for Leaks of Underground Storage Tanks (USTs)				
Increased risk for leaks of underground storage tanks as a result of poor construction methods can result in significant pollution				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	3	1
<p>Proposed mitigation</p> <ul style="list-style-type: none"> The installation of the UST's must take place in accordance with industry standards. To ensure the system is installed as required by the regulatory authorities, on-site works must be supervised at all times by an experienced person. 				

- It is essential that any protective coating applied to the tanks and pipework is not damaged during installation. The coating must be inspected during and after installation and any damage must be repaired immediately and before the excavation is filled in again.
- Records must be kept of how the UST system was built for future reference during site construction work and the decommissioning or removal of the equipment. These records must include technical drawings of the installation showing the location and orientation of the tanks and pipework, their dimensions and the materials used. It is recommended that
 - all records are dated and maintained during the life of the UST;
 - the records are kept on-site for future reference (for example, in the event of a leak or spillage) in a place from where they can be retrieved quickly.

OTHER IMPACTS: CONSTRUCTION PHASE

Impact on Natural Habitat				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	High	2	1
Proposed mitigation				
<ul style="list-style-type: none"> • Vegetation clearing and construction activities must be limited to the authorised development footprint. • Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species. • Camp site, storage facilities and other necessary temporary structures to preferably be erected within the confines of the CNC site. • No open fires to be allowed outside of designated sites. • Collection of wood for fires and cooking from out of the surrounding veld is prohibited. • A designated area for camp fires and cooking needs to be made. Should open fires be used then an area of at least 2m x 2m needs to be cleared of any flammable materials such as grass. • No material or machinery to be stored or placed in the open veld outside the designated area of the CNC site. 				

Impact on Avifauna				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	High	1	1
Proposed mitigation				
<ul style="list-style-type: none"> • The construction activities must be restricted to the actual footprint of the development. • Measures must be put in place to ensure that construction personnel are prevented from accessing the property outside the actual construction site. • Care must be taken to ensure that the habitat destruction is kept to what is absolutely necessary for the construction of the CNC. 				

Risk of surface and ground water pollution				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
Proposed mitigation Mitigation measures are included in the EMPr to minimise impact of the construction camp, waste and sewage.				

Erosion				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Low	2	1
Proposed mitigation <ul style="list-style-type: none"> Erosion and loss of soil must be prevented by minimising the construction site exposed to surface water run-off. Where necessary erosion stabilising actions such as gabions or re-vegetation must be implemented to prevent further habitat deterioration. Construction must include appropriate design measures that allow surface and subsurface movement of water along drainage lines so as to not impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off. Further detailed erosion control measures are provided in the EMPr. 				

Solid Waste				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
Proposed mitigation <ul style="list-style-type: none"> The construction teams should ensure that all waste is removed from the site and that they recycle the items that can be used again. Any waste that cannot be recycled should be transported to the appropriate landfill site licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No 59 of 2008). A copy of the service agreement, to verify the disposal sites that will be accepting the waste, should be kept on site. 				

Impact of Labourers				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Low	2	1
Proposed mitigation <ul style="list-style-type: none"> Mitigation measures to counter impact on the natural environment and limit potential for crime include <ul style="list-style-type: none"> Specifications in terms of control of construction workers (i.e. provision of toilet and cooking facilities, provision of either accommodation facilities or transport facilities, implementation of Environmental Educational Programmes, etc.). Accommodation for labourers must either be limited to guarding personnel on the construction site (with labourers transported to and from existing neighbouring towns) or a separate fenced and controlled area where proper accommodation and relevant facilities are provided. Eskom and the contractors should maximise the use of local labour where possible by developing a strategy to involve local labour in the contractor teams and construction process. 				

Employment				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
Proposed mitigation <ul style="list-style-type: none"> It should be ensured that contractors use local skills, or train semi-skilled people or re-skill appropriate candidates for employment purposes where possible. The applicant must train safety representatives, managers and workers in workplace safety. All applicable safety standards and regulations, including for subcontractors must be enforced. 				

Local Procurement				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	2
Proposed mitigation <ul style="list-style-type: none"> Local procurement should be aimed at as far as possible. Local sourcing of materials would assist in providing more economic and employment opportunities for the local people. 				

Local Economic Benefits				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Regional	Temporary	Medium	2	2
Proposed mitigation				
<ul style="list-style-type: none"> Maximise the use of local labour even if the number of locals that would be employed would be limited. Accommodate, but regulate the activities of vendors in the vicinity of the construction areas and at the construction camps. 				

Impact on Safety and Security				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
Proposed mitigation				
<ul style="list-style-type: none"> Safety measures are included in the EMPr 				

Impact of dust pollution				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability <i>Probability it would occur if not mitigated : low / medium / high</i>	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
Proposed mitigation				
<ul style="list-style-type: none"> Water trucks must be used on a regular basis on roads and construction sites to dampen dust. Appropriate dust suppression techniques must be implemented on all exposed surfaces to minimise and control airborne dust. Such measures could include, where applicable, wet suppression, chemical stabilisation, the use of a wind fence, covering surfaces with straw chippings and re-vegetation of open areas. 				

Impact on cultural heritage resources				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
<p>Proposed mitigation</p> <ul style="list-style-type: none"> If archaeological/ palaeontological or other types of heritage resources are uncovered during construction/ground clearance activities SAHRA (Mrs Colette Scheermeyer, tel: 021 462 4502) and a professional archaeologists/ palaeontologist dependent on the finds must be alerted immediately to inspect the finds. A rescue excavation may be required if the identified heritage resource/s is deemed to be significant. 				

Visual Impact				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	2	1
<p>Proposed mitigation</p> <p>Landscaping plays a crucial factor in reducing the visual impact of a development and proper planning is therefore required. The following guidelines should apply:</p> <ul style="list-style-type: none"> The general aim with landscaping should be to integrate it with the natural environment of the site and its surrounding area. Therefore, indigenous landscaping, combined with the eradication of alien vegetation, will conserve and enhance the natural character of the site and its surrounds. The establishment of indigenous landscaped gardens and rehabilitation of the natural areas will contribute to the biodiversity of fauna in the area, which would add to the aesthetic experience of the site. More detail with regards to landscaping principles and recommendations are stipulated in the Environmental Management Plan. 				

Loss of agricultural land				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Low	1	1
<p>Proposed mitigation</p> <p>The agricultural potential for the local area (or loss thereof caused by the construction of a customer network centre) is negligible.</p>				

IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

IMPACTS OF THE FUEL TANKS

Leaks could occur				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Medium	3	1
<p>Proposed mitigation</p> <ul style="list-style-type: none"> • Prevent impact rather than manage impact. • Undertake regular engineering inspections • Pressure tests should be conducted regularly on fuel tanks to ensure that there are no leakages. • Provide measures for emergency reporting and remedy • Follow acceptable maintenance and operational practises to ensure consistent, effective and safe performance of the infrastructure 				

Spillages could occur				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Temporary	Medium	3	1
<p>Proposed mitigation</p> <ul style="list-style-type: none"> • Prevent impact rather than manage impact. • Provide measures for emergency reporting and remedy • Provide onsite remediation measures (i.e. spill kits) • Follow acceptable maintenance and operational practises to ensure consistent, effective and safe performance of the infrastructure • Ensure compliance with legal requirement at all times. 				

Risk of fire and explosions				
The storage, handling and transport of fuel are potentially dangerous to humans and properties due to the risk of fire and explosions				
Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Medium	4	1

Proposed mitigation

Strict fire management measures must be implemented:

- A Fire Management Plan must be in place and regularly updated and communicated with all personnel.
- “No smoking” signs must be placed in visible areas on site.
- No fires may be made for the burning of vegetation and waste.
- No open fires are to be made on site – cooking facilities must be provided to personnel and labourers.
- In case of a fire, the local fire department must immediately be contacted.
- The adjacent land users must be informed and/or involved in case of any fire.
- It must be ensured that the basic firefighting equipment is supplied to the site office, kitchen areas, workshop areas and stores.
- Welding gas cutting or cutting of metal will only be allowed inside the working/demarcated areas and with appropriate fire-fighting equipment at hand.

Health and Safety

Health and Safety is an issue that requires serious consideration since negligence can result in serious bodily harm and injury and even death.

Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Permanent	Medium	4	1

Proposed mitigation

- Personnel must at all times wear protective clothing during instances when they can be affected by fuel hazardous materials and odours i.e. when omissions occur during the filling of UST's, during spills, etc.
- Safety signs must be placed in visible areas all over the site.
- A complete First Aid Kit must be readily available on site and regularly serviced.
- Personnel must be trained in health and safety awareness and management of emergency situations.

OTHER IMPACTS: OPERATIONAL PHASE

Impact of alien vegetation

Extent Local / Regional / National	Duration Temporary / Permanent	Probability Probability it would occur if not mitigated : low / medium / high	Significance without mitigation	Significance with mitigation
Local	Long term	High	Medium	Low

Proposed mitigation

- Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
- Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing, but should be temporarily stored in a demarcated area.

IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

It is not envisaged that the CNC will be decommissioned. Eskom is currently experiencing an increased demand for the supply and distribution of additional electricity in the project area.

It is generally assumed that the decommissioning process is the reverse of the construction process and as such the indicated impacts will also be relevant to decommissioning phase.

CUMULATIVE IMPACTS

Cumulative effects are caused by the accumulation and interaction of multiple stresses affecting the parts and the functions of ecosystems. Cumulative effects can be defined as the changes to the environment caused by an activity in combination with other past, present, and reasonably foreseeable human activities.

The magnitude, extent and duration of environmental effects depend on the characteristics of a development activity in a particular location.

The cumulative effect for constructing the CNC will be low. In time, the overall cumulative impact on this area is likely to increase as mining, urbanisation and other Eskom developments are placing pressure on the habitat. It is thus critical that major role players in the region's economy create long term strategic plans that will accommodate and enhance a wide range of economic activities.

Equally important is the need for Eskom to align all the projects that are planned for the area in order to minimise the potential negative impacts and enhance potential positive outcomes. It is therefore crucial for Eskom to liaise very closely with the various municipalities to mainstream Eskom projects into the Integrated Development Plans (IDPs) and Spatial Development Frameworks (SDFs) of the respective municipalities.

Municipal Infrastructure

The extra pressure that this development could place on the existing municipal infrastructure for waste as well as water provisions could have an impact when seen together with other developments within the greater municipal area.

A Services Agreement will however be entered into between the Applicant and the local municipality in which the municipality will confirm that sufficient capacity exist to service the development. Such an agreement will only be possible if the municipality take the existing and future developments within the area into consideration. The cumulative effect of waste and water volumes will therefore be catered for.

CONCLUSION OF IMPACT SIGNIFICANT RATING

All impacts that the proposed Customer Network Centre may have on the environment can be easily and reasonably mitigated to acceptable levels. There are no impacts that could influence the feasibility and viability of this project.

A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F.

2. 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.

Site Alternative 1 & Site Alternative 2

Site selection

Alternative sites have been investigated for the project. Both sites are acceptable if the proposed mitigations are implemented:

- There are 'undisturbed' sections of closed woodland on the broader 10 hectares property. The biodiversity assessment indicated that these portions should be left undeveloped as far as possible. Development should preferably take place in the 'disturbed' sections of the site.
- The biodiversity study recommended that the site plan should take the densely wooded sections as well as the Tamboti tree stands and large Marula trees into account (the biodiversity survey indicated the location of all the protected trees on a site plan which is attached in Appendix A.)
- Alternative 1 as well as Alternative 2 was designed to be in open areas to avoid as much of the natural vegetation as possible, particularly the large trees.

Currently, Alternative 1 is the preferred site due to the following reasons:

- Alternative 1 is the preferred site due to its proximity to existing roads and access to the site. In addition, none of the marked protected trees will be affected by the construction of the CNC on the Alternative 1 site.

Conclusion

This environmental study concluded that the project and all its activities would not have a negative impact on the biophysical and manmade environment that cannot be mitigated to acceptable levels or that could influence the viability and feasibility of the proposed Lephalale Customer Centre.

This application is therefore recommended for Environmental Authorisation.

No-go alternative (compulsory)

This project is part of Eskom's implementation of a Master Plan for the rendering of services and maintenance by Eskom officials to existing customers and structures. Emergency personnel will also be based at the CNC and will be close at hand in case of any problems in the distribution network.

The site where the CNC is proposed to be constructed falls within Limpopo Sweet Bushveld, which was afforded a conservation status of '*Least Threatened*' by Mucina & Rutherford (2006). The major plant community within the proposed site is fairly pristine and has retained its natural element. The remaining plant communities have seen an element of disturbance in the past and at least 20% of the site consists of degraded habitat.

The areas neighbouring the proposed site have retained their natural element to a certain extent despite being surrounded by development in the form of mining and other heavy industrialisation, agricultural cultivation and urban expansion. Directly adjacent to the proposed site are roads, powerlines, dwellings, open storage facilities and rehabilitated ash dumps.

Taking the above findings into account it can safely be determined that the proposed site has a medium ecological function and its conservation importance status can be considered medium, thus permitting low density development.

Taking all of the above into consideration and all mitigating measures put forward be implemented, there are no identified 'fatal flaws' that could influence the viability of the project.

Should this application not be approved (in other words the applying of the No-Go Option), the support to the broader area will be unreliable and this can result in blackouts and major disturbances in energy provision.

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	NO
-------	----

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).

Not applicable

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 competent authority in respect of the application.

The implementation of the Environmental Management Plan must be a condition in the authorisation of the project.

Is an EMPr attached?

✓ YES	NO
-------	----

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

- Locality Map
- Site Alternatives Map
- Sensitivity Map: Ecological Sensitive Tree Locations Map
- SANBI Maps: Terrestrial Ecosystem Threat Status

Appendix B: Photographs

- Photo Report

Appendix C: Facility illustration(s)

- Site Layout Plan of a typical Eskom Customer Network Centre

Appendix D: Specialist reports (including terms of reference)

- Baseline Ecological Assessment – Rory Muldoon Projects
- Bird Impact Assessment – Chris van Rooyen Consulting
- Heritage Impact Assessment – Dr Julius CC Pistorius
- Palaeontological Impact Assessment – Prof Marion Bamford

Appendix E: Public Participation

- E1a – Proof of Placement of Advertisements: Newspaper
- E1b – Proof of Placement of Advertisements: Onsite Notification
- E2a – Background Information Document
- E2b – Proof of initial notification to Interested & Affected Parties
- E3 – Comments and Responses Report (no comment from any IAP was received)
- E4 – Proof of Notification of availability of the Draft BAR to IA&P's *(to be included in the Final BAR)*
- E5 – Complete register of Interested & Affected Parties
- E6 – Copies of Correspondence, notes and minutes of meetings
 - No comment was received during the initial advertising period
 - Written comment received on the Draft BAR with EAP responses *(to be included in the Final BAR)*

Appendix F: Impact Assessment

- Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

- Environmental Management Programme

Appendix H: Details of EAP and expertise

- Landscape Dynamics Company Profile and Condensed CV's

Appendix I: Specialist's declaration of interest

- Specialist's Declaration of Interest

Appendix J: Additional Information

- None