
Second document for comment
July 2008
Scoping Phase

ENVIRONMENTAL IMPACT
ASSESSMENT

*Bravo Integration Project – Bravo 3:
Construction of a 400 kV power line
from Bravo Power Station to Lulamisa
Substation*

DEAT REF NO: 12/12/20/1097

Proponent: Eskom Transmission

DRAFT SCOPING REPORT

Project 10637

PURPOSE OF THIS DOCUMENT

The growing demand for electricity is placing increasing pressure on Eskom's existing power generation and transmission capacity. Eskom are committed to implementing a Sustainable Energy Strategy that complements the policies and strategies of National Government. Eskom aims to improve the reliability of electricity supply to the country, and in particular to provide for the growth in electricity demand in the Gauteng and Mpumalanga provinces. For this reason, Eskom obtained environmental authorisation to construct the new 400 kV Bravo Power Station between Bronkhorstspuit and Witbank in 2007. Construction of this power station is scheduled to commence in 2008.

Due to this construction the new Bravo power station needs to be integrated with the existing Eskom electricity infrastructure. This proposed project is to construct a 400 kV overhead powerline from the new Bravo Powerstation to the existing Lulamisa Substation. This line will be approximately 90 km in length.

Eskom Transmission has appointed Zitholele Consulting (Pty) Ltd, an independent company, to conduct an EIA to evaluate the potential environmental and social impacts of the proposed project.

The first phase of an EIA is the Scoping Phase. This is the phase during which public issues, concerns and suggestions are identified so that they can be evaluated by the EIA technical specialists during the next phase (the Impact Assessment Phase) of the EIA.

According to the EIA Regulations, interested and affected parties must have the opportunity to comment on the proposed project and verify that all the issues raised during the Scoping Phase have been recorded. This is the main purpose of this Draft Scoping Report. The due date for comment on the draft report is **Thursday, 21 August, 2008**.

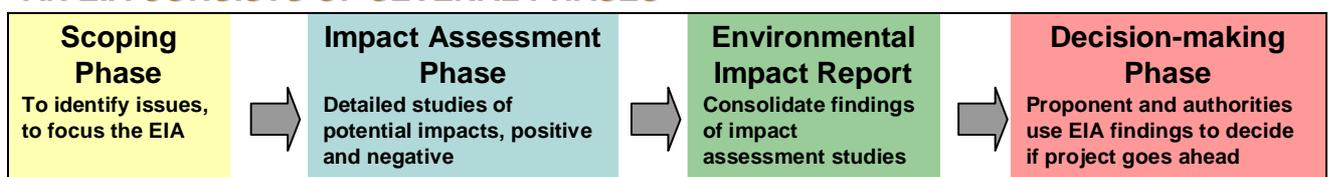
Interested and affected parties will also have an opportunity to comment on the findings of the EIA, which will be presented in a draft Environmental Impact Report (EIR). After public review, the Draft EIR will be updated and submitted to the lead authority, the National Department of Environmental Affairs and Tourism (DEAT) for a decision about the project.

Summary of what the Draft Scoping Report Contains

This report contains the following for comment by stakeholders:

- The background and description to the proposed project
- An overview of the EIA process, including the public participation process
- A description of the existing environment in the project area
- The potential environmental issues and impacts which have already been identified
- The terms of reference for the specialist studies
- A list of comments raised to date.

AN EIA CONSISTS OF SEVERAL PHASES



YOUR COMMENT ON THE DRAFT SCOPING REPORT

The Draft Scoping Report is available for comment from Monday, 21 July 2008 to Thursday, 21 August 2008 (4 weeks). This Draft Scoping Report has been distributed to the authorities, all key stakeholders, all those that have requested a copy and those registered to attend the Key Stakeholder / Authorities Workshop (see below). Copies of the report are available at strategic public places in the project area (see below).

List of public places where the Draft Scoping Report is available:

PLACE	CONTACT PERSON	TELEPHONE
Blue Valley Golf and Country Estate, HALFWAY HOUSE	Bothma, Lise	(011) 512 0538
City of Johannesburg: Human Development, HALFWAY HOUSE	Kubheka, Kaiser	(011) 203 3419
Delmas Public Library, DELMAS	Mehlape, Lydia	(013) 665 2425
Kungwini Public Library, BRONKHORSTSPRUIT	Smith, Brenda	(013) 665 2425
Leandra Public Library, LEANDRA	Potgieter, A M	(017) 683 0055
Lebogang Public Library, LESLIE	Mosako, Rosina	(017) 683 3000
Midfield Homeowners Association, MIDSTREAM ESTATES	Du Preez, Tarynlee	(012) 661 0456
Midlands Homeowners Association, MIDSTREAM ESTATES	De Wet, Lizette	087 805 3610
Midstream Homeowners Association, MIDSTREAM ESTATES	van der Westhuizen, Durette	(012) 661 0915
Olievenhoutbosch Library, OLIVENHOUTBOSCH	Nkonki, Bongsi	(012) 652 1001
Phola Public Library, OGIES	Mabena, Agnes	(013) 645 0094
Secunda Public Library, SECUNDA	Griesel, Tertia	(017) 620 6183

The reports are also available electronically from the Public Participation office.

You may comment on the Draft Scoping Report by:

- completing the comment sheet enclosed with the report
- writing a letter, or producing additional written submissions
- by email or telephone to the public participation office

DUE DATE FOR COMMENT ON THE DRAFT SCOPING REPORT

THURSDAY, 21 AUGUST 2008 TO THE PUBLIC PARTICIPATION OFFICE:

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 Public Participation Office
 Zitholele Consulting (Pty) Ltd
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1 INTRODUCTION

Eskom Holdings is a South African and vertically integrated utility that generates, transports and distributes electricity. It supplies approximately 95% of the country's electricity and 60% of the total electricity consumed on the African continent. An electric power system is a complex assemblage of equipment and circuits for generating, transmitting, transforming and distributing electrical energy. Eskom relies on coal-fired power stations to produce approximately 90% of its electricity. Coal is used to heat water and convert it into steam at high temperatures and pressures. Hot steam at temperatures of between 500°C and 535°C is released and turns a large turbine connected to a rotating magnet to convert energy in the fuel into high voltage electric power. In order for the electricity to be transmitted safely and efficiently, it must be at a high voltage (typically 400 kV) and a low current. The transmission system carries the electric power in large amounts from generating stations to consumption areas.

Electricity delivered by transmission circuits is then stepped down in facilities called substations to voltages more suitable for use in industrial and residential areas. Among other things, substations are used to transform power from one voltage level to another; interconnect alternative sources of power; connect generators, transmission or distribution lines and loads to each other as well as provide switching for alternate connections and isolation of failed or overloaded lines and equipment. This transmission is also used to interconnect adjacent power systems for mutual assistance in case of emergency. The electricity is transformed down to 11 000 volts for local distribution and then further reduced according to the need - for example, 220 volts for domestic use. The electricity entering consumers' premises and homes has had a complex journey - from the initial high voltage transmission grid to a lower voltage distribution network. It has travelled over ground and (probably) underground for many kilometres and been transformed many times on the way.

As part of the increased electricity supply plan, the construction of the new Bravo power station, a coal-fired power station between Bronkhorstspuit and Witbank, will commence later this year at a cost of around R80-billion. Environmental authorisation for this new power station has been granted by DEAT in 2007. Bravo, which forms part of Eskom's R150-billion expansion plan, is expected to begin delivering electricity around 2013.

Since the Bravo power station will aid in the delivery of additional electricity supply, the proposed Bravo Integration Project (Figure 1) is necessary to integrate and connect Bravo into the existing Eskom electricity network. This will ensure that additional electricity supply to areas such as Secunda and Midrand are ensured.

As part of the Bravo Integration project, a new 90 km powerline from the Bravo Powerstation to the existing Lulamisa substation, near Diepsloot is proposed. This will ensure that sufficient electricity supply to the Diepsloot and Northern Johannesburg areas is supplied.

1.1 Environmental Impact Assessment Practitioner (EAP)

Eskom Transmission appointed Zitholele Consulting, an independent consultancy, to undertake the Environmental Impact Assessment for the proposed 400 kV Bravo-Lulamisa power line, in accordance with the new EIA Regulations promulgated in April 2006 in terms of the National Environmental Management Act (Act No 107 of 1998). The Regulations became effective on 1 July 2006.

Zitholele Consulting is an empowerment company formed to provide specialist consulting services primarily to the public sector in the fields of Water Engineering, Integrated Water Resource Management, Environmental and Waste Services, Communication (public participation and awareness creation) and Livelihoods and Economic Development. The company was established to promote new opportunities for and to increase the level of participation by historically disadvantaged individuals (HDIs) in the ownership, management and control of economic activities.

Mr Johan Hayes from Zitholele Consulting was appointed as Environmental Assessment Practitioner (EAP) to undertake the EIA. Mr Hayes is an Environmental Scientist within the Environmental and Social Division of Zitholele Consulting with 5 years experience. He has an honours degree in Zoology and obtained a MSc degree in Ecological Assessment. He is an environmental practitioner registered with SACNASP and an Associate Environmental Auditor (ISO 14001) with the IEMA. He has a broad base of experience in Environmental Impacts Assessments, Basic Assessments, Strategic Environmental Assessments, Water Quality and Project Management of environmental projects gained through five years of work in the South Africa on various EIA, SEAs and water quality related projects. Johan has worked in the private consulting field as well as in the engineering field lending to experience in various infrastructure related projects.

The EAP have no vested interest in the proposed project and hereby declares its independence as required by the EIA Regulations.

1.2 EAP Contact details:

Company: Zitholele Consulting (Pty) LTD
Contact: Mr Johan Hayes (MSc Ecological Assessment)
Address: P O Box 6002, Halfway House, 1685
Cell: 082 859 9132
Landline: 011 254 4932
Fax: 011 805 2100
E-mail: johanh@zitholele.co.za

1.3 Proponent details

Company: Eskom Transmission: Land and Rights
Contact: Project Manager: Mr Vuledzani Thanyani
Address: Eskom Transmission, Mega Watt Park, Maxwell Drive, Sunninghill
Landline: 011 800 5601
Fax: 011 800 3917

1.4 Legal Requirements

The EIA for this proposed project will be conducted in terms of the EIA Regulations that were promulgated in terms of Section 24 (5) of the National Environmental Management Act (Act No. 107 of 1998). The National Department of Environmental Affairs and Tourism (DEAT) is the competent authority as described in NEMA section 24C (d)(iii).

A full EIA is applicable to all projects likely to have significant environmental impacts due to their nature or extent, activities associated with potentially high levels of environmental degradation, or activities for which the impacts cannot be easily predicted.

In terms of Regulation GNR 387, activity 1(l), a full Environmental Impact Assessment comprising both scoping and impact assessment, is necessary for the proposed new 400 kV overhead power lines. This activity is listed as follows:

- *Activity 1(l): The transmission and distribution of above ground electricity with a capacity of 120 kilovolts or more.*

1.4.1 Additional legal requirements and framework

White Paper on the Energy Policy of the Republic of South Africa – 1998

Development within the energy sector in South Africa is guided by the White Paper on the Energy Policy, published by DME in 1998. This White Paper sets out five objectives for the further development of the energy sector. The five objectives are as follows:

- Increased access to affordable energy services;
- Improved energy governance;
- Stimulating economic development;
- Managing energy-related environmental and health impacts; and
- Securing supply through diversity.

Furthermore, the Energy Policy identified the need to undertake an Integrated Energy Planning (IEP) process in order to achieve a balance between energy demand and resource availability, whilst taking into account health, safety and environmental aspects. In addition, the policy identified the need for the adoption of a National Integrated Resource Planning (NIRP) approach to provide a long-term cost-effective resource plan for meeting electricity demand, which is consistent with reliable electricity supply and environmental, social and economic policies.

Integrated Energy Plan (IEP) – 2003

DME commissioned the IEP to provide a framework in which specific energy policies, development decisions and energy supply trade-offs can be made on a project-by-project basis. The framework is intended to create a balance in providing low cost electricity for social and economic development, ensuring security of supply and minimizing the associated environmental impacts. The IEP projected that the additional demand in electricity would necessitate an increase in electricity generation capacity in South Africa by 2007. Furthermore, the IEP concluded that, based on energy resources available in South Africa, coal will be the primary fuel source for the current expansion period.

National Integrated Resource Plan (NIRP) – 2003/2004

In response to the White Paper's objective relating to affordable energy services, the National Electricity Regulator (now NERSA) commissioned a NIRP. The objectives of the NIRP are to determine the least-cost supply option for the country, provide information on the opportunities for investment into new power stations and evaluate the security of supply.

The national electricity demand forecast took a number of factors into account. They are:

- A 2.8% average annual economic growth;
- The development and expansion of a number of large energy-intensive industrial projects;
- Electrification needs;
- A reduction in electricity-intensive industries over the 20 year planning horizon;
- A reduction in electricity consumers – NIRP anticipates people switching to the direct use of natural gas;
- The supply of electricity to large mining and industrial projects in Namibia and Mozambique; and
- Typical demand profiles.

1.4.2 Legal requirements in terms of other Acts

In addition to the ECA and NEMA, the following Acts have some bearing on the proposed activities:

The National Heritage Resources Act (No. 25 of 1999)

The proposed overhead power lines comprise certain activities (e.g. changing the nature of a site exceeding 5 000 m² and linear developments in excess of 300 m) that require authorisation in terms of Section 38 (1) of the Act. Section 38 (8) of the Act states that, if heritage considerations are taken into account as part of an application process undertaken in terms of the ECA, there is no need to undertake a separate application in terms of the National Heritage Resources Act. The requirements of the National Heritage Resources Act have thus been addressed as an element of the EIA process, specifically by the inclusion of a Heritage Assessment.

Expropriation Act (No. 63 of 1975)

Should Eskom decide to construct the proposed power lines and associated infrastructure, they will need to acquire the requisite land. Eskom has a policy of “willing buyer, willing seller”, and therefore endeavors to purchase land where ever possible. However, the State and State-owned-enterprises can acquire the rights to use or possess the requisite land through the Expropriation Act. The Act requires the determination of compensation based on the principle of market value (i.e. what would the value be in the event of both a willing buyer and a willing seller trading the land). There is a suite of additional legislation, which, in conjunction with the Expropriation Act, would be used to determine the compensation value. As this proposed project will take place on existing Eskom property, this Act would not be applicable.

1.5 Objectives of this report

This report addresses the requirements of the scoping and impact assessment processes as outlined in the EIA regulations. The aim of this Draft Scoping Report (DSR) is to:

- Provide information to the authorities and interested and affected parties on the proposed project;
- Provide information regarding alternatives that have been considered;
- Indicate how interested and affected parties were afforded the opportunity to contribute to the project, verify that the issues they raised were considered, and comment on the findings of the impact assessments;
- Describe the baseline receiving environment;
- Present the findings of the Scoping Phase in a manner that facilitates decision-making by the relevant authorities.

2 PROJECT DETAILS

2.1 Project Description

In order for the Bravo power station to be integrated within the existing Eskom infrastructure, Eskom propose to construct a new 400 kV power line from the new Bravo Power Station to the existing Lulamisa substation, near Diepsloot. This line will be approximately 90 km in length. The construction of this proposed 400 kV power line is aimed to ensure sufficient electricity supply to the Diepsloot and Johannesburg North areas, where currently frequent electricity shortages are experienced.

2.2 Project motivation

Eskom applies an Integrated Strategic Electricity Planning (ISEP) process to identify long-term options regarding both the supply and demand sides of electricity provision in South Africa. The ISEP is informed by the White Paper on the Energy Policy of the Republic of South Africa (1998), the Integrated Energy Plan (2003) and the National Integrated Resource Plan (2003/ 2004).

The latest ISEP (October 2005) has identified the need for increased base load electricity supply by the year 2010, while peaking generation is being attended to in the shorter term. The National Energy Regulator of South Africa (NERSA) is the regulatory authority responsible for the electricity supply industry in South Africa. In its National Integrated Resource Plan (NIRP), NERSA has determined that, while various alternative and renewable electricity generation options should be continually investigated, coal should still provide the main fuel source in South Africa. Accordingly, coal-fired power stations will be required for generation capacity expansion during the next 20 years.

As part of the increased electricity supply plan, the construction of the new Bravo power station, a coal-fired power station between Bronkhorstspuit and Witbank, will commence later this year at a cost of around R80-billion. Environmental authorisation for this new power station has been granted by DEAT in 2007. Bravo, which forms part of Eskom's R150-billion expansion plan, is expected to begin delivering electricity around 2013.

Since the Bravo power station will aid in the delivery of additional electricity supply, this proposed 400 kV power line is necessary to integrate and connect Bravo into the existing Eskom electricity network. The proposed construction of the Bravo – Lulamisa line, will ensure that sufficient electricity supply is provided to the Diepsloot and Johannesburg North areas, where frequent electricity shortages are experienced currently.

2.3 Location

The location of the proposed 400 kV line is between the new Bravo Power Station near Bronkhorstspuit and the existing Lulamisa substation near Diepsloot (Figure 2).

The Bravo power line corridors are located on the eastern Highveld of Southern Africa. The corridors cover an area from Witbank in the east, to Diepsloot in the west and Secunda in the south. The terrain is made up of rolling hills and quartzite ridges with flat plains in between. Wetlands and stream criss-cross the area and most feed into the upper-Olifants catchment.

2.4 Project Schedule

Firstly, an EIA needs to be conducted in order to obtain authorisation from DEAT that is required before the proposed project may proceed. As part of the assessment, a Draft Environmental Management Plan (EMP) for the construction of the overhead power lines and associated infrastructure will also be submitted to DEAT for their approval. An EMP provides best-practise guidelines to ensure that construction is done with minimal negative impacts on the environment. Following the EMP during and after construction, will ensure compliance to environmental regulations. Depending on the outcome of the environmental assessment and subsequent decision by DEAT, Eskom anticipates construction to commence in 2009.

2.5 Project Route Alternatives

Three alternative route corridors of approximately 5 km wide will be assessed during this EIA. These three alternative corridors have been selected considering existing environmental information, engineering feasibilities as well as existing Eskom servitudes power lines (Figure 2).

All three alternative corridors will be assessed during this EIA study, to recommend a preferred corridor for the proposed line to be constructed. As illustrated in Figure 2, the three alternative corridors merge into one corridor towards Lulamisa substation, since there is an existing 400 kV Eskom servitude.

During this EIA, the No-Go alternative will also be assessed. This alternative would be recommended if any fatal flaws are found to prevent the construction of the proposed power line in any of the three alternative route corridors.

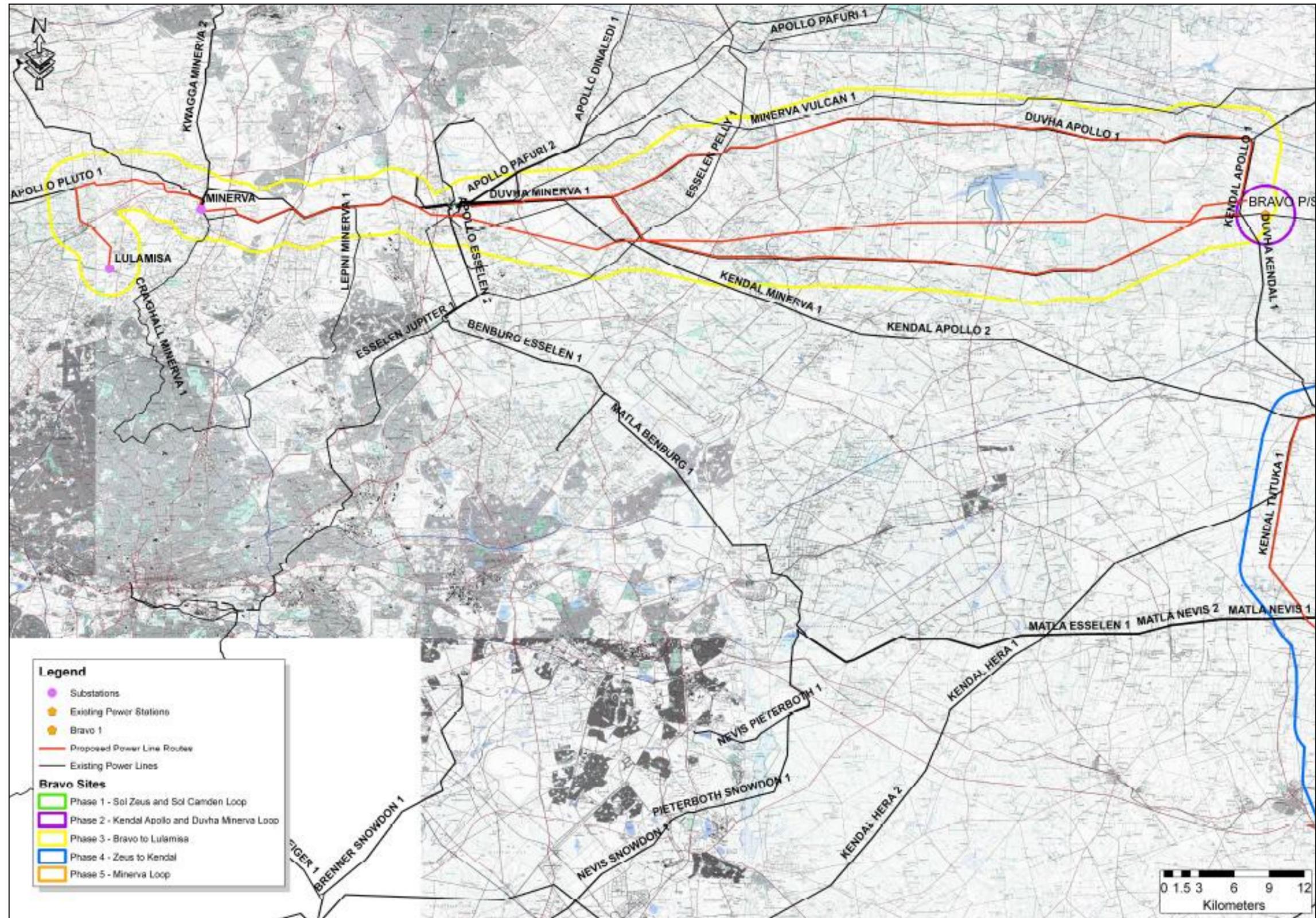


Figure 2. The alternative routes of the proposed Bravo – Lulamisa 400 kV overhead power line. The red lines indicate the three alternative route corridors to be assessed.

3 RECEIVING ENVIRONMENT

3.1 Topography and land-use

3.1.1 Methodology and Data Sources

The topography was taken from the Surveyor General 1:50 000 topocadastral map sheets of the area, namely:

- 2528 CC, CD, DD, DC, and
- 2527 DD

Land Use was determined utilizing a GIS desktop study and confirmed during the site investigations conducted on the 28th to 29th February 2008. Site investigations involved ground truthing the Land Use according to the maps produced using the desktop study. Land Use data was obtained from the Council for Scientific and Industrial Research (CSIR). Their Land Cover database was used to create the desktop maps.

3.1.2 Regional Description

The region forms part of the Highveld plateau and is characterised by a generally flat topography, grassveld, maize and sunflower farming, coal mines and power stations.

The topography of the area exhibits a highly variable landscape with extensive sloping plains and ridges elevated over undulating surrounding plains. The undulating plains include some low hills and pan depressions.

The elevation ranges from 1 180 to 1 660 metres above mean sea level (mamsl) with the western sections of the route located in the lower lying areas that drain towards the Hartbeespoort Dam. The central parts of the corridors traverse several ridges and high-lying areas, while the eastern section traverses relatively flat areas with prominent east-west running ridges (Refer to .

The land use for the region is grouped into urban, cultivation, grassland/plantations, mines/erosion and water bodies/wetlands. From the map it is clear that the Gauteng area is dominated by urban developments, and upon moving to the east the dominance moves towards farming (grazing and cultivation) and open grasslands. Almost 80 % of the power line corridors cover areas used for farming or grasslands while the section of the corridor west of the N1 Highway moves into the urban areas. Figure 4 below provides a graphical representation of the land use associated with the area.

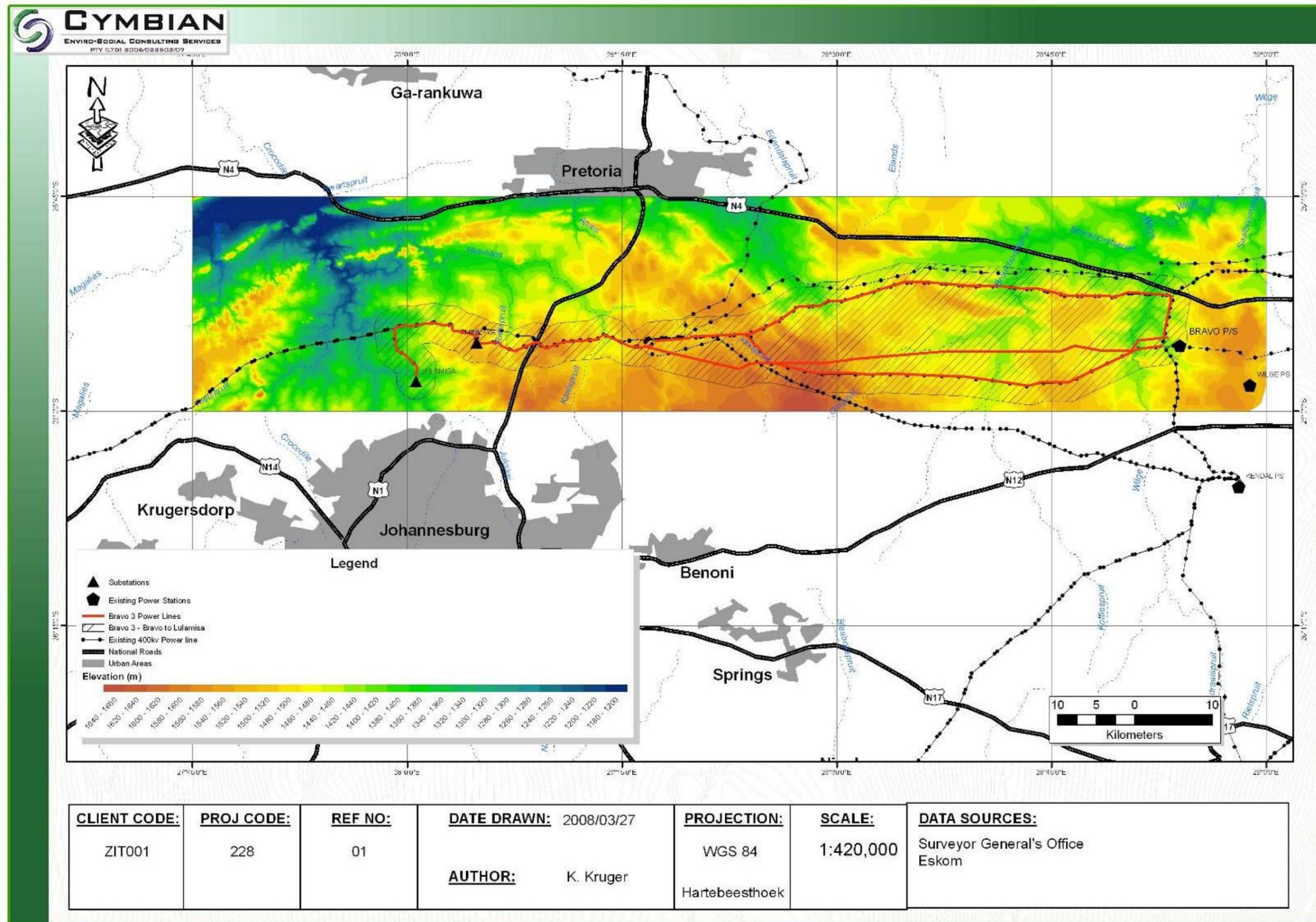


Figure 3. Map illustrating the Topography of the region

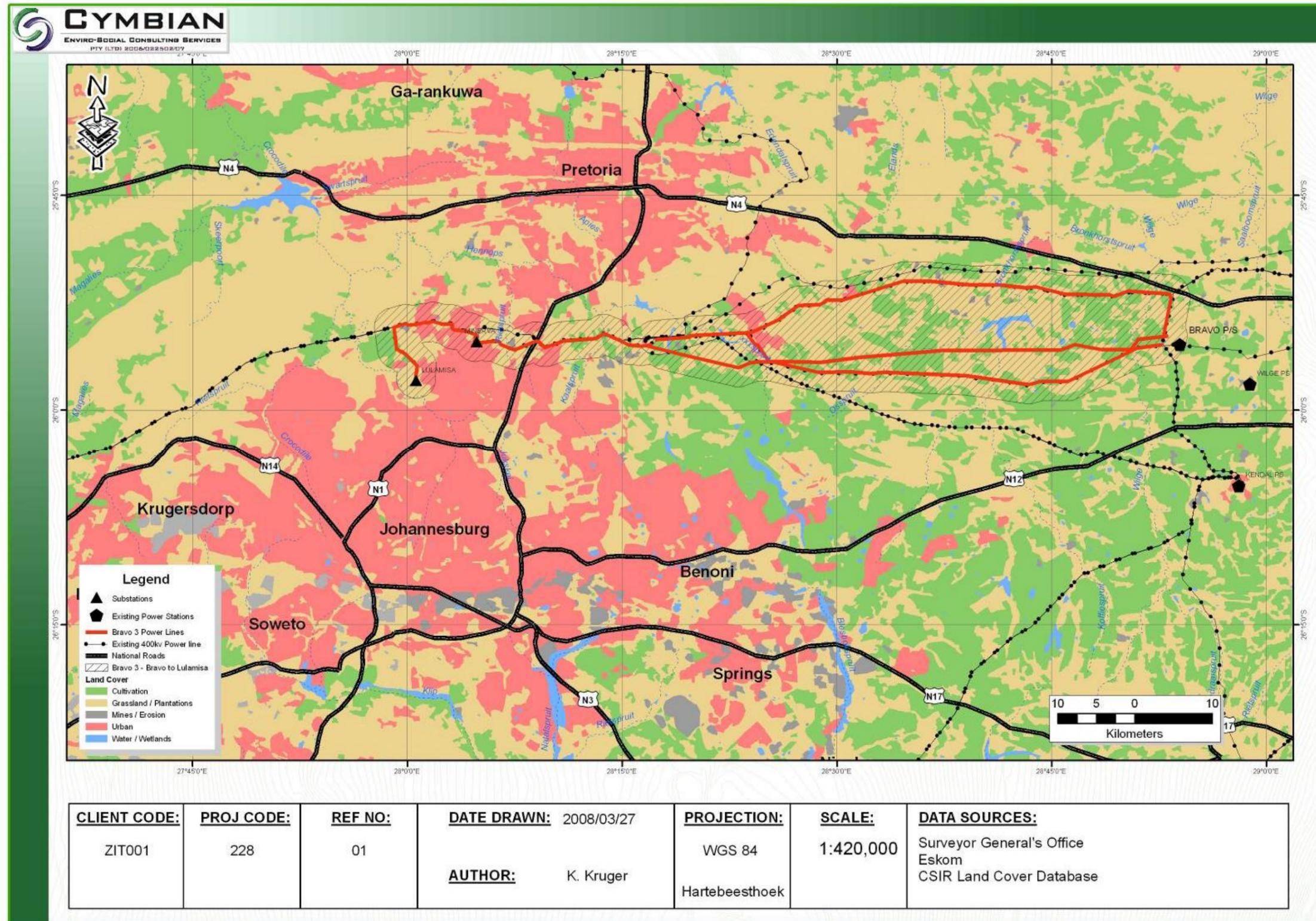


Figure 4. Map illustrating Land Use in and around the proposed power line alternatives

3.1.3 Sensitivities

A number of ridges occur in the area as indicated in Figure 5 below. In several places the proposed corridors traverse along ridges, especially in the Bronkhorstspuit area. The ridges are the only land in the area that is not suitable for agriculture and therefore the power line servitudes have been placed along the ridges. This has had the added bonus that the ridges have remained relatively undisturbed, barring the power line pylon footings. The vegetation along the ridges is in good condition as the servitudes are not open for grazing.

The potential sensitivities due to land use along the power line corridors originate from two areas. Firstly public perception of power lines is often negative, and hence the “sensitivity” to power lines is usually higher in areas of higher population densities. The main sensitivities in this regard are the informal settlements located in Diepsloot and Olivierhoutbosch, the residential estate of Midrand Estates and a couple of planned developments just south-east of Pretoria (Celtic Village and Blue Crane Country Estate).

Secondly sensitivity can arise from current land use, where the land use itself poses a threat to the new power lines. This is the case in areas of mining, quarrying and water bodies. Immediately the middle route option has to be highlighted here, as the proposed alignment traverses over the Bronkhorstspuit Dam. Areas like this have to be avoided during the detailed route planning of the power line alignments in the corridors.

3.2 Geology and Drainage Features

3.2.1 Methodology and Data Sources

The geological analysis was undertaken through the desktop evaluation using a Geographic Information System (GIS) and the relevant data sources. The geological data was taken from the Environmental Potential Atlas Data from the Department of Environmental Affairs and Tourism as well as geological data supplied by the Gauteng Department of Agriculture, Conservation and Environment (GDACE). Surface water data was taken from the WR90 Data supplied by the Department of Water Affairs and Forestry (DWAF) as well as data supplied by GDACE.

3.2.2 Regional Description

The proposed site is generally flat, slightly undulating but without significant hills. The soils belong to the Plinthic Cantena, comprising of Upland duplex and Margalitic soils. The underlying geology is the Mid-Ecca Group, one of the layers of the Karoo Supergroup. It is in this layer that the rich coal deposits that the region is known for were formed. The mining of the Mid-Ecca Group for coal led to the development of Witbank and surrounding settlements.

The geology towards the western section of the proposed power lines, incorporating Minerva and Lulamisa substations, is dominated by Archean granite, Meinhardskraal granite, Sand River gneiss and gneiss of the Halfway House granite.

The central part of the route overlies large sections of dolomite just south of Pretoria. These sections should be seen as sensitive as the dolomite provides a risk of sinkhole formation. The geology of the central section of the proposed power lines includes formations of the Transvaal, Rooiberg and Griqualand-West super groups and groups, while the eastern section of the of the proposed power lines is dominated by formations of the Dwyka group.

There are five major coal seams in the vicinity of the site, in varying degrees of exploitation. Other minerals and metals found in the area are flint, iron, gold, molybdenite, cobalt, and malachite (Emalahleni Local Municipality Spatial Development Framework, 2005).

The regional area covered by the power line corridors, overlies two main drainage networks. The first is found in the central to western parts of the site and all the drainage flows north-west towards the Hartbeespoort Dam and the Crocodile River (Primary Catchment A). The second drainage network drains towards the north-east and culminates in the Olifants River (Primary Catchment B).

The proposed power line routes will cross many drainage features, as illustrated in Figure 6 below.

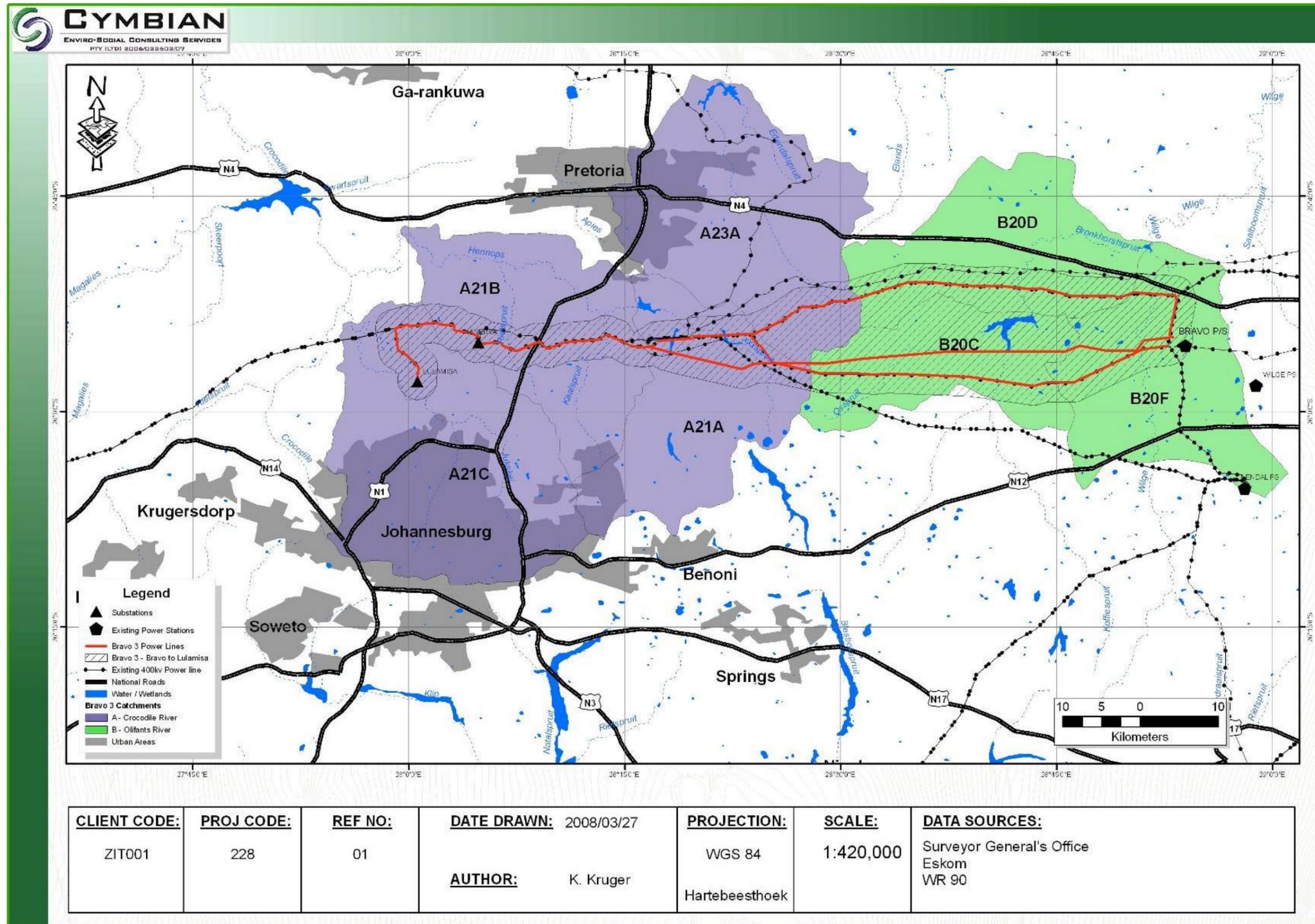


Figure 6. Map illustrating major drainage features and catchments of the proposed route alternatives

3.2.3 Sensitivities

As mentioned above, the route alternatives do intersect sections of dolomite that should be regarded as sensitive.

All surface water bodies are earmarked as sensitive features and should be avoided as far as possible. The wetland demarcation will be undertaken as part of the soil assessment during the final reporting phase, in order to demarcate all wetlands and riparian zones, which will be marked as sensitive.

3.3 Climate

3.3.1 Methodology and Data Sources

Climate information was attained using the climate of South Africa database, Land Types of the Maps 2526 Rustenburg, 2528 Pretoria (Land Type Survey Staff 1987), as well as from The Vegetation of South Africa, Lesotho and Swaziland (Mucina and Rutherford 2006).

3.3.2 Regional Description

The study area displays warm summers and cold winters typical of the Highveld climate. The average summer and winter daytime temperatures (AVD) are 25°C and 20°C, respectively. Rainfall occurs mainly as thunderstorms and drought conditions occur in approximately 12% of all years. The Environmental Atlas for Mpumalanga places rainfall at the proposed route location as ranging between 621 mm and 750 mm per year. Winds are usually light to moderate with the prevailing wind direction is north-westerly during the summer and easterly during winter.

The region experiences strongly seasonal summer-rainfall with very dry winters. The area has a warm temperate climate, with mean monthly minimum temperature of 11.7°C and a mean monthly maximum temperature of 24.0°C. A mean annual temperature (MAT) of 15.8°C is recorded. Incidences of frosts are frequent, however it is higher in the west (30-40 days), than in the east (10-35 days). The mean annual potential evaporation (MAPE) is approximately 2184mm.

The MAP for Funda Muni Training Centre, the nearest official recording station to the study site is approximately 678mm. Maximum and minimum temperatures recorded at the station are 35.0°C and -2.5°C respectively.

3.3.3 Sensitivities

The Highveld is well known for seasonal thunderstorm that can produce incidents of hail and strong winds. The storms in themselves do not pose a potential threat to the proposed power lines, however the lightning associated with these storms does have potential to disrupt power transmission.

3.4 Infrastructure

Access to the proposed project area is via the N4 and N12 national roads from which the R545 lies approximately 2 km to the east of the proposed power line routes. Apart from dirt tracks and farm roads, there are no significant roads on site. Also, as mentioned previously, the new Bravo power station is currently being constructed in the vicinity of the proposed route alignments.

3.5 Ecology

3.5.1 Flora

3.5.1.1 Methodology and Data Sources

The floral study involved extensive fieldwork, a literature review and a desktop study utilizing GIS. The site was investigated during a one week site visit, conducted from the 10th-14th March 2008, in late summer. The area within the servitude was sampled using transects placed at 300m intervals. At random points along the transect an area of 20m x 20m was surveyed. All species within the 20m x 20m quadrant were identified, photographed and their occurrence noted. Sensitive features such as ridges or wetlands were sampled by walking randomly through the area concerned and identifying all species within the area.

The floral data below is taken from The Vegetation of South Africa, Lesotho and Swaziland (Mucina and Rutherford 2006). Also, while on site, the following field guides were used:

- Guide to Grasses of Southern Africa (Frits van Oudtshoorn, 1999);
- Field Guide to Trees of Southern Africa (Braam van Wyk and Piet van Wyk, 1997);
- Field Guide to the Wild Flowers of the Highveld (Braam van Wyk and Sasa Malan, 1998);
- Problem Plants of South Africa (Clive Bromilow, 2001);
- Medicinal Plants of South Africa (Ben-Erik van Wyk, Bosch van Oudtshoorn and Nigel Gericke, 2002)

3.5.1.2 Regional Description

The area under investigation straddles two Biomes, namely the Savanna and the Grassland Biomes. Each biome comprises several bioregions which in turn has various vegetation types within the bioregion. The Grassland Biome is represented by Dry Highveld Grassland bioregion and Mesic Highveld Grassland bioregion, while the Savanna Biome is represented by Central Bushveld bioregion. Figure 7 illustrates graphically the vegetation units represented in the area.

The Grassland biome is represented by:

- Egoli Granite Grassland
- Rand Highveld Grassland
- Eastern Highveld Grassland
- Cartonville Dolomite Grassland

While the Savanna biome is represented by:

- Gold Reef Mountain Bushveld
- Andesite Mountain Bushveld
- Marikana Thornveld

The Delmas Spatial Development Framework (2002) notes that the area has a high agricultural potential. However, the proposed project area is largely transformed by planting of maize fields, and consequently has low habitat diversity. The remaining patches of grassland are relatively degraded due to pressure from grazing. Vegetation in the vicinity of rocky outcrops is, to some extent, still intact, i.e. consisting of indigenous vegetation, but is becoming degraded due to grazing pressures. *Acacia karroo*, *Diospyros lycioides* and *Rhus pyroides* are the dominant indigenous shrubs found in low-lying areas, drainage lines and seasonal streams. In areas of rocky outcrops, shrubs such as *Diospyros lycioides*, *D. austro-africana*, *Ziziphus mucronata*, *Celtis africana* and *Rhus pyroides* are present. Clumps of exotic black wattle (*Acacia mearnsii*) and blue gums are found in the project area.

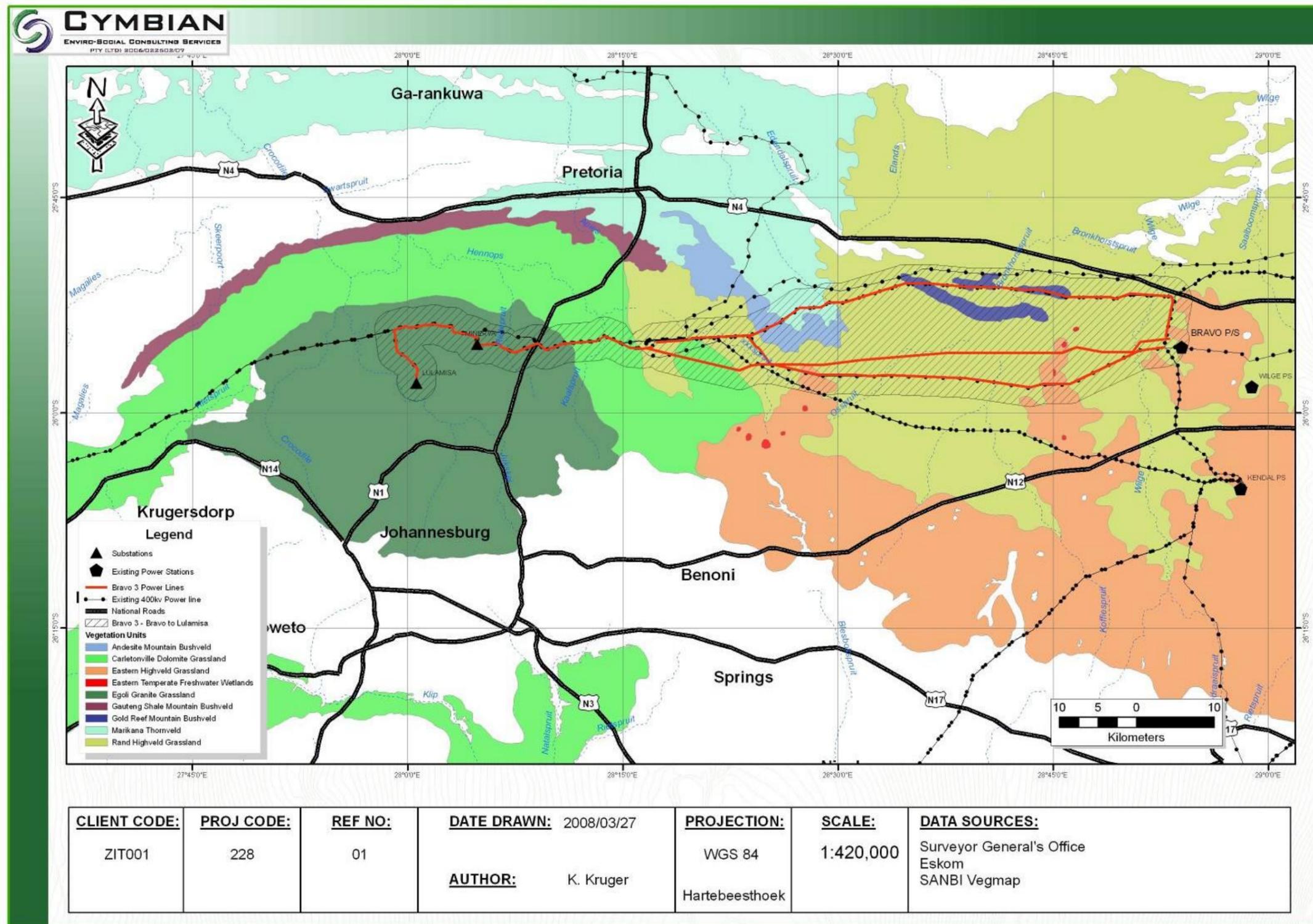


Figure 7. Map of Vegetation units represented in the area

3.5.1.3 Sensitivities

The overall vegetation is not sensitive, however for detailed sensitivities the focus moves to red/orange data species. Due to the endangered status of the plants, their specific occurrence is kept confidential by GDACE. For guidance, the department has issued the Conservation Plan (CPlan) data which provides an indication as to the locality of red/orange data fauna or flora. Figure 8 illustrates the areas identified by CPlan as being sensitive. These areas have been investigated in detail for sensitive flora, and none were found during the site investigations.

3.5.2 Fauna

3.5.2.1 Methodology and Data Sources

During the floral site visit, all faunal species encountered were noted and identified. Additional to this, a literature review of the faunal species that could occur in the area was conducted. A detailed avifauna study will be conducted in the summer months as part of the final report.

3.5.2.2 Regional Description

The grassland and savanna biome that cover the study area provide habitat to a wide variety of fauna, but due to the numerous farming, mining and urbanisation activities very few natural areas remain. Therefore faunal concentrations are limited to nature reserves and game farms.

Small mammals known to occur in the area include hedgehog, rabbits, polecat, meerkat and the ubiquitous rats and mice. Given the habitat, it is likely that korhaans, larks, longclaws, species of *Euplectes* (bishops and widows), weavers, starlings and sparrows occur in the grassveld.

3.5.2.3 Sensitivities

As mentioned above and as is seen in Figure 8 the GDACE CPlan data has been used to identify the potential sites of sensitive faunal occurrence. Due to the current time of year, detailed investigations into the avifauna (which are the main sensitive group) can only be completed during the summer months and have not been included in this interim report. It should be noted that the main sensitive species are White-bellied Korhaan and Grass Owl. During the vegetation assessment White-bellied Korhaan was spotted in close proximity to the Bravo Power Station site.

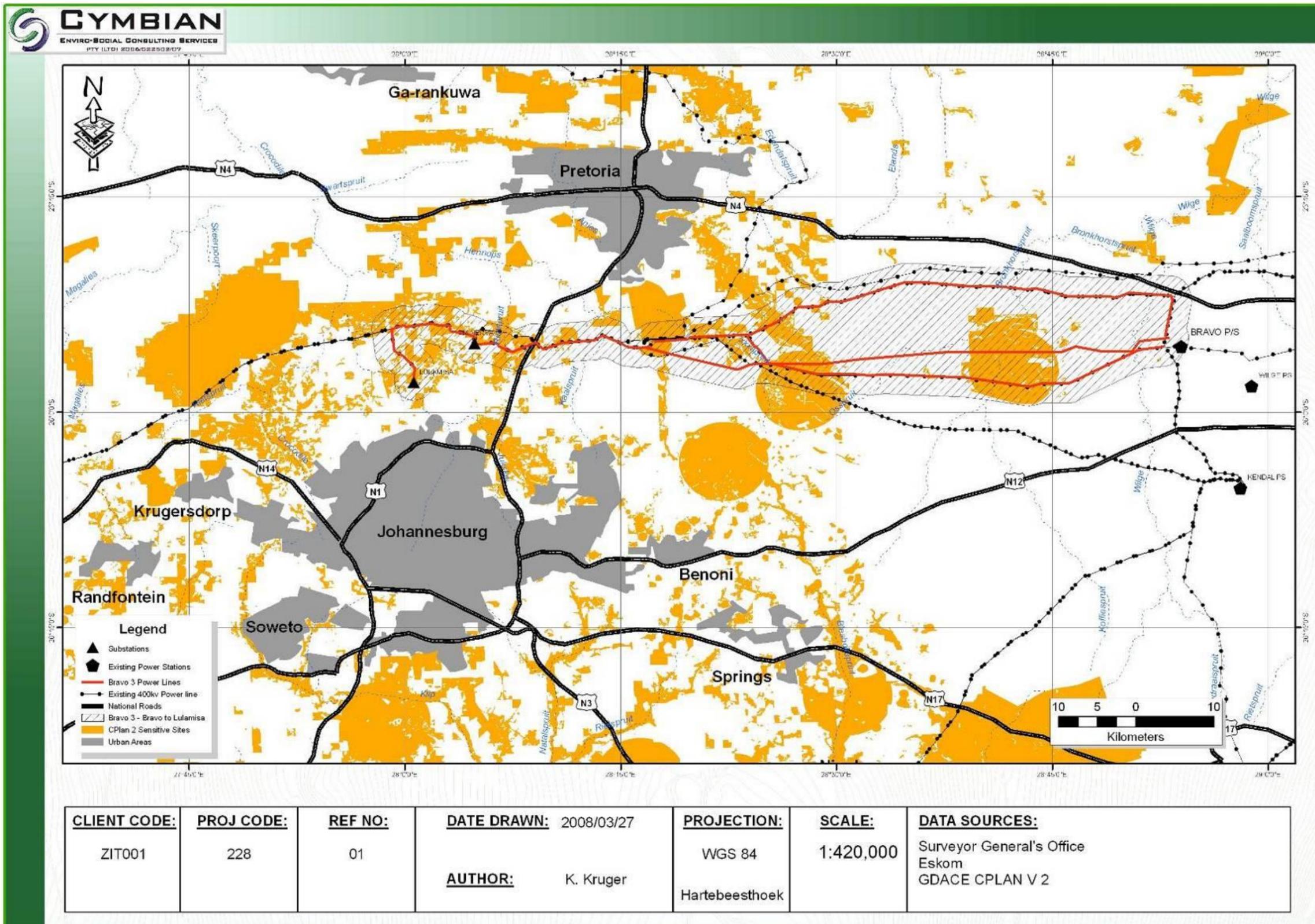


Figure 8. Sensitive Fauna and Flora Map

3.6 Cultural and historical resources

Currently, no database exists for Heritage resources and therefore no desktop study could be undertaken to identify potential areas of cultural and historical resources. As such, there are no known Heritage resources present within the proposed project area. However, during the floral and faunal site investigations a grave site as well as what appears to be stone walls were observed. These sites will be investigated by a Heritage specialist during the EIA to identify and classify the sites.

4 SCOPING PROCESS

4.1 Technical Process

For the Scoping Phase of this EIA, the following technical process as detailed below has been followed:

4.1.1 Pre-consultation meeting with client

On notification and receipt of the appointment letter from Eskom, a project inception meeting held on 13 November 2007 between Eskom and Zitholele Consulting Project Team. During this project kick-off meeting the following was discussed:

- Project Scope and requirements;
- Project Schedule;
- Identification of key stakeholders and role players;
- Analyse the preliminary substation locations and power line route alignments.

4.1.2 Consultation with authorities

A pre-application consultation with Mr. Wayne Hector of DEAT was held on 21 April 2008. During this meeting the proposed project was presented to the authorising authority and the project-specific requirements for environmental authorisation were discussed and finalised.

4.1.3 Application forms and landowner consent

Since the property on which the proposed power lines are to be constructed already belongs to Eskom, no Landowner consent forms are necessary. The EIA application form (Appendix A) for the proposed project was submitted to DEAT on 7 January 2008.

4.1.4 Site Visit

A site visit was conducted by Mr Johan Hayes from Zitholele Consulting and Mr Phuti Makweya from Eskom on 22 February 2008. The objective of this site visit was to familiarise the project team with the area.

4.1.5 Draft Scoping Report and Terms of Reference for Specialist Studies

This Draft Scoping Report (DSR) was prepared on the basis of information and issues identified during the Scoping Phase of this EIA. The Terms of Reference (ToR) for the envisaged specialist studies during the Environmental Impact Assessment Phase and a Plan of Study for EIA are included in Section 6 of this report. The DSR will be updated based on public review and comments obtained from the I&APs. After the public review period, the Final DSR will be submitted to DEAT for approval to commence the Environmental Impact Phase.

4.2 PUBLIC PARTICIPATION PROCESS

Public participation is an essential and legislative requirement for environmental authorisation. The principles that demand communication with society at large are best embodied in the principles of the National Environmental Management Act (Act 107 of 1998, Chapter 1), South Africa's overarching environmental law. In addition, Section 24 (5), Regulation 56 of GN R385 under the National Environmental Management Act, guides the public participation process that is required for an EIA.

The public participation process for the proposed overhead power lines has been designed to satisfy the requirements laid down in the above legislation and guidelines.

Figure 9 provides an overview of the EIA technical and public participation processes, and shows how issues and concerns raised by the public are used to inform the technical investigations of the EIA at various milestones during the process. This section of the report highlights the key elements of the public participation process to date.

4.2.1 Objectives of public participation in an EIA

The objectives of public participation in an EIA are to provide sufficient and accessible information to I&APs in an objective manner to assist them to:

- During Scoping:
 - Identify issues of concern, and provide suggestions for enhanced benefits and alternatives.
 - Contribute local knowledge and experience.
 - Verify that their issues have been considered.

- During Impact Assessment:
 - Verify that their issues have been considered either by the EIA Specialist Studies, or elsewhere.
 - Comment on the findings of the EIA, including the measures that have been proposed to enhance positive impacts and reduce or avoid negative ones.

The key objective of public participation during Scoping is to help define the scope of the technical studies to be undertaken during the Impact Assessment.

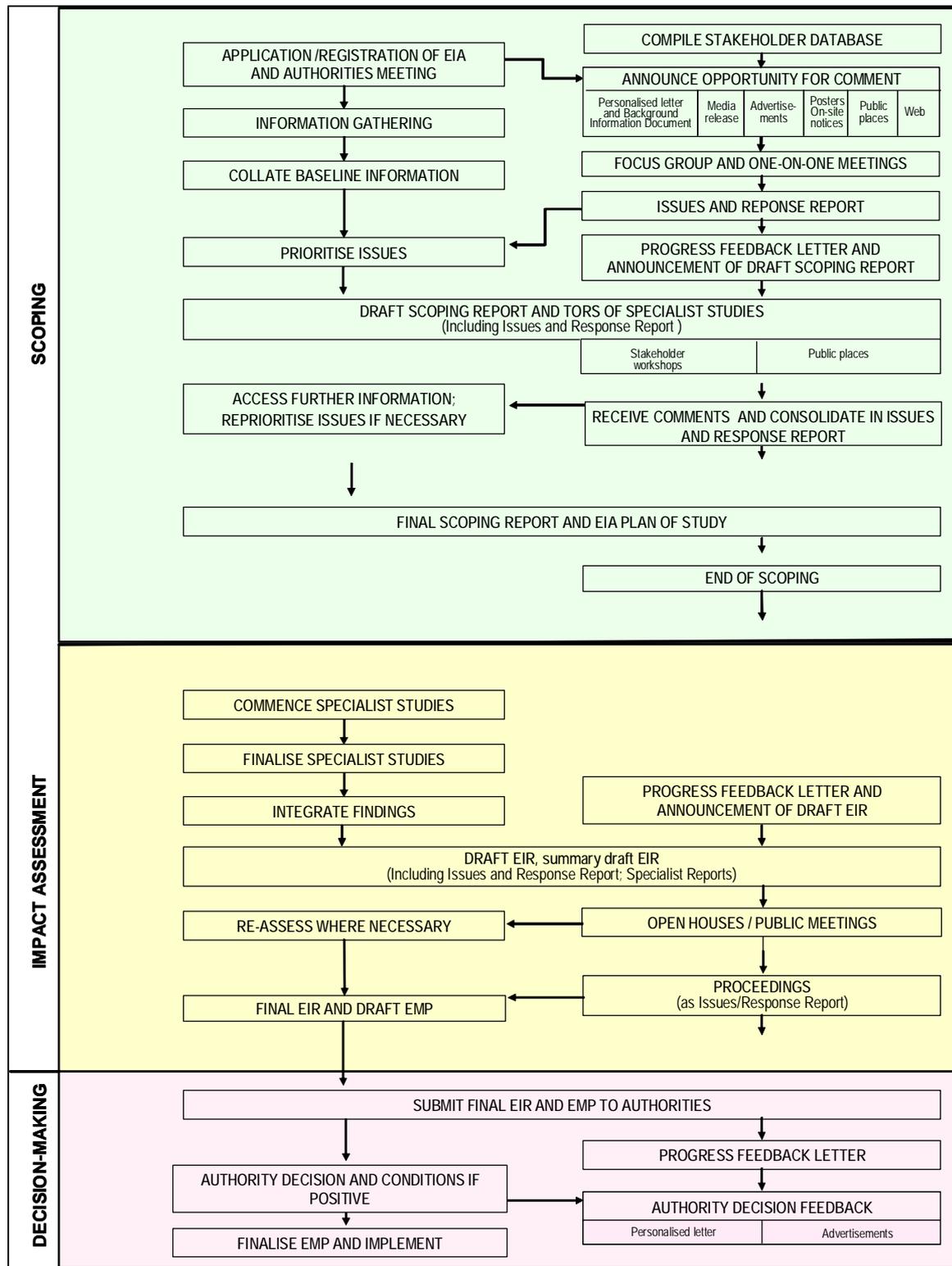


Figure 9. Technical and public participation process and activities that comprise the Environmental Impact Assessment for the proposed new Kappa Substation.

4.2.2 Identification of interested and affected parties

The identification of stakeholders is an ongoing process, refined throughout the process as on-the-ground understanding of affected stakeholders improves through interaction with various stakeholders in the area. The identification of key stakeholders and community representatives (land owners and occupiers) for this project is important and was done in collaboration with the local municipalities and other organisations in the study area.

Stakeholders' details are captured on *Maximiser 9*, an electronic database management software programme that automatically categorises every mailing to stakeholders, thus providing an ongoing record of communications - an important requirement by the authorities for public participation. In addition, comments and contributions received from stakeholders are recorded, linking each comment to the name of the person who made it.

According to the new EIA Regulations under Section 24(5) of NEMA, a register of I&APs must be kept by the public participation practitioner. Such a register has been compiled and is being kept updated with the details of involved I&APs throughout the process (See Appendix D).

4.2.3 Announcement of opportunity to become involved

The opportunity to participate in the EIA was announced in April 2008 as follows:

- Distribution of a letter of invitation to become involved, addressed to individuals and organisations by name, accompanied by a Background Information Document containing details of the proposed project, including maps of the project area and the alternative sites, and a registration sheet (Appendix F);
- Advertisements were placed in the following newspapers (Appendix B):

City Press	27 April
Pretoria News	22 April
Beeld	23 April
The Star	24 April
Citizen	25 April
Pretoria Record Central	25 April
Tshwane Sun West	30 April
Tembisan	25 April
Middelburg Herald	25 April
Witbank News	25 April
Springs Advertiser	23 April
Streeknuus	23 April
Ekasi News	25 April
Ridge Times	25 April
The Echo	25 April

- Notice boards were placed at prominent localities at each alternative site during May and June 2008 at conspicuous places at various public places and on route (Appendix B)). Site notices were placed prominently to invite stakeholder participation.

4.2.4 Obtaining comment and contributions

The following opportunities were (and remain) available during Scoping for I&APs to contribute comment:

- Completing and returning registration/comment sheets on which space was provided for comment.
- Providing comment telephonically or by email to the public participation office.
- Attending stakeholder meetings that were widely advertised (see table below) and raise comments there.

I&APs raised both environmental technical issues and public participation issues during the Scoping period. Issues relevant to the current project configuration will be carried forward into the Impact Assessment phase.

Table 1. List of stakeholder meetings that were advertised as part of the public review period of the Draft Scoping Report.

DATE	VENUE
Monday, 28 July 2008 at 18:00	Midrand
Tuesday, 29 July 2008 at 18:00	Bronkhorstspuit
Wednesday, 30 July 2008 at 18:00	Kendal
Thursday, 31 July 2008 at 18:00	Leandra

Advertisements were placed in the following newspapers to advertise the public review period and stakeholder meetings:

City Press	13 July
Pretoria News	10 July
Beeld	10 July
The Star	10 July
Citizen	10 July
Pretoria Record Central	11 July
Tshwane Sun West	11 July
Tembisan	11 July
Middelburg Herald	11 July
Witbank News	9 July
Springs Advertiser	9 July
Streeknuus	11 July
Ekasi News	11 July
Ridge Times	11 July
The Echo	13 July

4.2.5 Issues and Response Report and acknowledgements

Issues raised thus far, are captured in an Issues and Response Report Version 1, appended to this DSR (Appendix E). This report will be updated to include any additional I&AP contributions that may be received as the EIA process proceeds, and as the findings of the EIA become available. Issues and comments raised during the public review period of the Draft Scoping Report will be considered in the Final Scoping Report and added to the report as Version 2 of the Issues and Response Report.

The contributions made by I&APs are acknowledged in writing.

4.2.6 Draft Scoping Report

The purpose of the DSR was to enable I&APs to verify that their contributions have been captured, understood and correctly interpreted, and to raise further issues. At the end of Scoping, the issues identified by the I&APs and by the environmental technical specialists, were used to define the Terms of Reference for the Specialist Studies that will be conducted during the Impact Assessment Phase of the EIA. A period of four weeks is available for public review of this report (from Monday 21 July to Thursday, 21 August 2008).

In addition to media advertisements and site notices to announce the opportunity to participate in the EIA, the opportunity for public review was announced as follows:

- In the Background Information Document of April 2008 (Appendix F).
- In advertisements published (see table above and Appendix B) to advertise the public review period
- In a letter sent out on 7 July 2008, and addressed personally to all individuals and organisations on the stakeholder database.

The Draft Scoping Report, including the Issues and Response Report Version 1, was distributed for comment as follows:

- Left in public places in the project area. The public places where documents are available is listed in the table below:
- Mailed to key stakeholders (Appendix D).
- Mailed to I&APs who requested the report.

I&APs can comment on the report in various ways, such as completing the comment sheet accompanying the report, and submitting individual comments in writing or by email.

Table 2. List of public places where the Draft Scoping Report is available

PLACE	CONTACT PERSON	TELEPHONE
Blue Valley Golf and Country Estate, HALFWAY HOUSE	Bothma, Lise	(011) 512 0538
City of Johannesburg: Human Development, HALFWAY HOUSE	Kubheka, Kaiser	(011) 203 3419
Delmas Public Library, DELMAS	Mehlape, Lydia	(013) 665 2425
Kungwini Public Library, BRONKHORSTSPRUIT	Smith, Brenda	(013) 665 2425
Leandra Public Library, LEANDRA	Potgieter, A M	(017) 683 0055
Lebogang Public Library, LESLIE	Mosako, Rosina	(017) 683 3000
Midfield Homeowners Association, MIDSTREAM ESTATES	Du Preez, Tarynlee	(012) 661 0456
Midlands Homeowners Association, MIDSTREAM ESTATES	De Wet, Lizette	087 805 3610
Midstream Homeowners Association, MIDSTREAM ESTATES	van der Westhuizen, Durette	(012) 661 0915
Olievenhoutbosch Library, OLIVENHOUTBOSCH	Nkonki, Bongsi	(012) 652 1001
Phola Public Library, OGIES	Mabena, Agnes	(013) 645 0094
Secunda Public Library, SECUNDA	Griesel, Tertia	(017) 620 6183

4.2.7 Final Scoping Report

The Final Scoping will be updated with additional issues raised by I&APs and will contain any new information that may have been generated as a result of this process. It will be distributed to the Authorities (DEAT) and key I&APs, and to those individuals who specifically request a copy. I&APs will be notified of the availability of the report.

Once the lead authority for the EIA has approved the Final Scoping Report, the Impact Assessment Phase of the EIA will commence. This will comprise various Specialist Studies to assess the potential positive and negative impacts of the proposed project, and to recommend appropriate measures to enhance positive impacts and avoid or reduce negative ones. I&APs will be kept informed of progress with these studies.

4.2.8 Public participation during the Impact Assessment

Public participation during the impact assessment phase of the EIA will involve mainly a review of the findings of the EIA, presented in the Draft Environmental Impact Report, a Summary Report of the Draft EIR, and the volume of Specialist Studies.

I&APs will be advised in good time of the availability of these reports, how to obtain them, and the dates and venues of public and other meetings where the contents of the reports will be presented for comment.

5 ENVIRONMENTAL IMPACT ASSESSMENT

5.1 Identified Potential Environmental Impacts

The proposed overhead power lines are anticipated to impact on a range of biophysical and socio-economic aspects of the environment. One of the main purposes of the EIA process is to understand the significance of these potential impacts and to determine if they can be minimized or mitigated. The Scoping Phase describes the full range of potential impacts and then proposes, based on a clear motivation, which impacts should be considered in detail in the EIA Phase.

Based on the duration of construction, negative impacts can be readily predicted and mitigated. It should be noted that a comprehensive construction phase Environmental Management Plan (EMP) would be developed and implemented to regulate and minimize the impacts during the construction phase. The impacts identified during the Scoping Phase of this EIA are included in Table 3.

Table 3. Impacts identified during the Scoping Phase.

Impact	Description
Ecology and Avi-fauna	The proposed power line may impact on the existing fauna and flora within the parameter of the proposed power line routes.
Visual	The proposed new power line may impact visually on the aesthetics of the surrounding areas.
Air quality	Limited impacts from dust generated during construction may occur.
Noise impacts	Noise impacts may occur during the construction of the proposed power line.
Historical	The construction of the proposed 400 kV power line may negatively impact on historical and archaeological resources occurring within the proposed power line routes.
Human and Animal Health	There are perceptions that power lines may negatively affect human and animal health.
Sensitive landscapes and water courses	The proposed power line may impact on wetlands and surface water resources occurring within or in close proximity to the proposed power line routes.

5.1.1 Ecology (Fauna and Flora) and Avi-Fauna

The construction of the proposed power line will have a direct impact on the fauna and flora of the project area, as the clearance of vegetation would occur for and during construction of the proposed power lines. If present, the loss of red data and environmentally significant floral species may thus occur if no mitigation measures are implemented. During this EIA study, a Draft Environmental Management Plan (EMP) will be developed to guide the proposed construction process, and to recommend mitigation measures to minimise and/or prevent negative impacts occurring.

5.1.2 Visual

Although existing power lines may already exist in the area, the proposed additional 400 kV power line may have an additional impact on the visual aesthetics of the project area. The cumulative impacts from a visual perspective need to be assessed.

5.1.3 Historical and Archaeological

The location and construction of the proposed power line may have an impact on the historical and archaeological qualities of the area. If any historical resources are found to occur within the proposed alternative corridors investigated, the Draft Environmental Management Plan (EMP) will guide the proposed construction process, and recommend mitigation measures to minimise and/or prevent negative impacts occurring.

5.1.4 Geology and Land Capability

The location and construction of the proposed power line will lead to a loss of land for agricultural purposes, and a loss of top soil will occur during construction of the proposed power line. Furthermore, the geology of the proposed routes should be investigated since the geology of the area may pose technical infeasibilities during the construction of the proposed power lines.

5.1.5 Impacts on water courses

Impacts on water courses may occur due to the proposed construction. Sensitive areas identified so far include wetland areas, drainage line and rivers and streams. The EMP will be used to guide construction and to prevent any negative and/or permanent damage to water courses.

5.1.6 Noise

Although overhead power lines are not associated with noise, the construction phase of the proposed project may cause short-term noise pollution. The management of noise pollution will be addressed in the EMP.

6 PLAN OF STUDY FOR EIA

6.1 Technical Process

6.1.1 Prepare Specialist Investigations

The specialist investigations to be conducted during the EIA-phase of this project will consist of the following studies:

- Historical and Archaeological Assessment;
- Soils and Geology Assessment;
- Land capability;
- Ecology (Fauna and Flora) and Avi-fauna Assessment;
- GIS and Visual Assessment

The findings of these studies will be reflected in the Environmental Impact Assessment Report. The proposed Terms of Reference (ToR) for each of these specialist investigations is indicated below.

6.1.2 Specialist Studies: Terms of Reference (ToR)

ToR: Soils and Geology

A Geotechnical investigation would be conducted for the proposed overhead power lines. The objectives of this study will be:

- Review existing geological information available;
- An aerial photographic study to assess the accessibility, vegetation cover, drainage lines, slope aspects and percentage outcrop of each of the tree sites.
- A field visit to verify the aerial photographic study observations. Additionally, during the visit, the depth and engineering properties of regolith will be judged from natural exposure (dongas) and hand augering (in case of sandy soils) where applicable. The rock types of outcrop will be identified and the engineering properties thereof assessed.
- A map will be compiled of each of the alternative terrains, indicating the features observed.
- A short report will be compiled, in which the alternatives will be prioritized based on the results of the study.

ToR: Ecology and Avi-fauna

An Ecological and avi-fauna investigation would be conducted on the alternative power lines routes for the proposed project. The objectives of this study will be:

- Review existing ecological information available;
- Conduct a site visit to determine the general ecological state of the proposed site, determine the occurrence of any red data and vulnerable species;
- Provide mitigation measures to prevent and/or mitigate any environmental impacts that may occur due to the proposed project;
- Provide a ranking assessment of the suitability of the three proposed alternative sites;
- Compile an ecological report, indicating findings, recommendations and maps indicating sensitive and/or no-go areas.

ToR: Historical and Archaeological

This Heritage Impact Assessment would be conducted to comply with Section 38 of the National Heritage Resources Act (No 25 of 1999). Specific objectives of this study will be:

- Desktop study (consulting heritage data banks and appropriate literature);
- Site visit of the project area;
- Determine whether any of the types and ranges of heritage resources as outlined in Section 3 of the Act (No 25 of 1999) do occur in the project area;
- Determine what the nature, the extent and the significance of these remains are;
- Determine whether any heritage resources (including graves) will be affected by the development project; and
- If any heritage resources are to be affected by the development project mitigation measures (Phase II studies) has to be undertaken and management proposals have to be set for heritage resources which may continue to exist unaffected in or near the project area.

ToR: GIS and Visual Assessment

This GIS and Visual Assessment would be conducted on the alternative routes for the proposed overhead power lines. Specific objectives of this study will be:

- Desktop study (consulting existing and appropriate literature);
- Site visit of the project area if required;
- Assess the visual impact of the proposed development on each of the three alternative sites;
- Suggest any recommendation / mitigation measures that can be done to decrease the impacts of the proposed development;
- Provide a ranking assessment of the suitability of the three proposed alternative sites;

- Compile a visual assessment report, indicating findings, fatal flaws, recommendations and maps indicating sensitive and/or no-go areas.

6.1.3 Impact Analysis

The significance (quantification) of potential environmental impacts identified during scoping and identified during the specialist investigations will be determined using a ranking scale, based on the following (terminology has been taken from the Guideline Documentation on EIA Regulations, of the Department of Environmental Affairs and Tourism, April 1998):

- **Occurrence**
 - Probability of occurrence (how likely is it that the impact may occur?), and
 - Duration of occurrence (how long may it last?)
- **Severity**
 - Magnitude (severity) of impact (will the impact be of high, moderate or low severity?), and
 - Scale/extent of impact (will the impact affect the national, regional or local environment, or only that of the site?)

Each of these factors has been assessed for each potential impact using the following ranking scales:

<p>Probability: 5 – Definite/don't know 4 – Highly probable 3 – Medium probability 2 – Low probability 1 – Improbable 0 – None</p>	<p>Duration: 5 – Permanent 4 - Long-term (ceases with the operational life) 3 - Medium-term (5-15 years) 2 - Short-term (0-5 years) 1 – Immediate</p>
<p>Scale: 5 – International 4 – National 3 – Regional 2 – Local 1 – Site only 0 – None</p>	<p>Magnitude: 10 - Very high/don't know 8 – High 6 – Moderate 4 – Low 2 – Minor</p>

The environmental significance of each potential impact was assessed using the following formula:

$$\text{Significance Points (SP)} = (\text{Magnitude} + \text{Duration} + \text{Scale}) \times \text{Probability}$$

The maximum value is 100 Significance Points (SP). Potential environmental impacts were rated as high, moderate or low significance on the following basis:

- More than 60 significance points indicates high environmental significance.
- Between 30 and 60 significance points indicates moderate environmental significance.
- Less than 30 significance points indicates low environmental significance.

6.1.4 Draft EIA Report and EMP

Findings and/or recommendations of the specialist studies will be integrated into a report that will be updated as comments are received from I&APs. The Final EIA report, together with a draft construction and operation EMP, will be submitted to DEAT for environmental authorisation.

6.2 Public Participation

The public participation process for the EIA will involve the following proposed steps:

- Announcement of the availability and public review of the draft Environmental Impact Report;
- Announcement of the availability of the final Environmental Impact Report; and
- Notification of the authorities' decision with regard to Environmental Authorisation.

Information about each step is provided below.

6.2.1 Announcing the availability of the Draft EIR and EMP

At this point, specialist assessments would have been conducted and the Draft EIR and EMP would be ready for public review. A letter will be circulated to all registered I&APs, informing them of progress made with the study and that the Draft EIR and EMP are available for comment. The report will be distributed to public places and also presented at a stakeholder workshop / open house.

6.2.2 Public review of Draft EIR and EMP

The EIA Guidelines specify that stakeholders must have the opportunity to verify that their issues have been captured and assessed before the EIA Report will be approved. The findings of the specialist assessments will be integrated into the Draft EIR. The report will be written in a way accessible to stakeholders in terms of language level and general coherence. The Draft EIR will have a comprehensive project description, motivation, and description of alternatives considered and also the findings of the assessment and recommended mitigation measures. It will further include the Issues and Responses Report, which will list every issue raised, with an indication of where the issue was dealt with in the EIR. The findings of the assessment and recommended mitigation measures will also be incorporated into the EIR.

As part of the process to review the Draft EIR and EMP, stakeholder workshops with an open house component will be arranged to afford stakeholders the opportunity to obtain first-hand information from the project team members and also to discuss their issues and concerns.

Contributions at this meeting will be considered in the Final EIR. It is proposed that the same public places be used as in the scoping phase and also that stakeholder meeting be conducted at the same venues as during scoping.

6.2.3 Announcing the availability of the Final EIR and EMP

After comments from I&APs have been incorporated, all stakeholders on the database will receive a personalised letter to report on where we are in the process, to thank those who commented to date and to inform them that the Final EIR and EMP have been submitted to the lead authority for consideration.

6.2.4 Announcing authorities' decision on Environmental Authorisation

Based on the contributions by the stakeholders, the decision of the authorities may be advertised through the following methods:

- Personalised letters to individuals and organisations on the mailing list;
- Advertising in local or regional newspapers

7 CONCLUSION AND RECOMMENDATIONS

Eskom appointed Zitholele Consulting to undertake the Environmental Impact Assessment for the proposed new 400 kV overhead power line from Bravo power station to Lulamisa substation. This scoping study was undertaken with the aim of investigating potential negative impacts on the biophysical environment and identifying issues, concerns and queries from I&APs.

The following key conclusions and recommendations are made from the scoping study:

- Specialist studies, as indicated in Section 6 should be conducted to provide additional information on potential environmental impacts of the proposed landfill upgrade.
- A construction EMP must be developed and effectively implemented by the contractor under the supervision of the engineer and/or Environmental Practitioner.

ZITHOLELE CONSULTING (PTY) LTD

Johan Hayes
DOCUMENT2

Etienne Roux

APPENDIX A

**EIA Application Form, Minutes of Inception Meeting, DEAT
letter requesting exemption from certain activities**

APPENDIX B

Newspaper Advertisements and Site Notices

APPENDIX C
Project Location Map

APPENDIX D
I&AP Database

APPENDIX E

Issues and Response Report

APPENDIX F

Background Information Document