Prepared for:
ESKOM NORTHERN REGION

A PHASE I HERITAGE IMPACT ASSESSMENT STUDY FOR ESKOM'S PROPOSED LETABA PROJECT IN THE LIMPOPO PROVINCE

Prepared by:
Dr Julius CC Pistorius
352 Rosemary Street Lynnwood 0081
PO Box 1522 Bela Bela 0480
Archaeologist & Heritage Consultant
Member ASAPA

Tel and fax 014 7362115
Cell 0825545449
juliuscc@absamail.co.za

May 2012

Executive summary

A Phase I Heritage Impact Assessment (HIA) study as required in terms of Section 38 of the National Heritage Resources Act (Act 25 of 1999) was done for Eskom's proposed Letaba Project in the Limpopo Province. The five components of this project which involves the construction of new power lines, substations, rebuilding of existing power lines and the construction of accompanying infrastructure are referred to as the Eskom Project whilst the footprints of these developmental components are referred to as the Eskom Project Area.

It is possible that the Eskom Project may impact on some of the types and ranges of heritage resources as outlined in Section 3 (see Box 1) of the National Heritage Resources Act (No 25 of 1999). Consequently, a Phase I Heritage Impact Assessment (HIA) was done for the Letaba Project. The aims with the Phase I HIA study were the following:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (Box 1) do occur in the Eskom Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether these remains will be affected by the proposed Eskom Project and, if so, to evaluate what appropriate mitigation and management measures could be taken to reduce the impact of the proposed development on these heritage resources.

The Phase I HIA study revealed the following types and ranges of heritage resources near the Eskom Project Area:

- At least four formal graveyards.

These graveyards were geo-referenced, their coordinates were determined and they were mapped (Figures 1 & 2).

The significance of the heritage resources is indicated as well as the fact that it is highly unlikely that any of these graveyards will be affected by the Eskom Project. Never the less the significance of the graveyards is indicated.

Possible impact on the graveyards

It is highly unlikely that any of the graveyards will be affected, directly or indirectly, by the Eskom Project. This is due to the fact that the graveyards are located at 'safe distances' from the proposed new power line corridors whilst at least two of the graveyards are large and long

established and therefore part of the urban infrastructure. Nevertheless, the significance of the graveyards is indicated.

The significance of the graveyards

All graveyards and graves can be considered to be of high significance and are protected by various laws. The significance of the grave therefore has been indicated as 'High' (Table 1).

Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

General

It is highly likely that this survey may have missed heritage resources in the Eskom Project Area as heritage sites may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance are exposed during the exploration project the South African Heritage Resources Authority (ASAPA) should be notified immediately and all activities must be stopped. 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 and permits from SAHRA to conduct mitigation measures on any uncovered heritage resources or human remains.

Recommendation

There is no reason from a heritage point of view why the Eskom Project should not proceed.

CONTENTS

1 INTRODUCTION

This document contains the report on the results of the Phase I Heritage Impact Assessment (HIA) study that was done for Eskom's proposed Letaba Project in the Limpopo Province.

Parts of the Limpopo Province such as Polokwane (Pietersburg), Phalaborwa, the Blouberg Mountains, Mokopane (Potgietrsrust), Louis Trichardt (Makhado), the Steelpoort Valley (Sekhukuneland) and areas to the north and south of the Soutpansberg have been explored for archaeological remains in the past. These explorations have shown that the Limpopo Province has a rich archaeological heritage comprised of remains dating from the prehistoric and the historical past. Prehistoric and historical remains in the Limpopo Province reflect South Africa's 'national estate' as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (see Box 1).

Box 1: Types and ranges of heritage resources (the national estate) as outlined in Section 3 of the National Heritage Resources Act, 1999 (No 25 of 1999).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) outlines the following types and ranges of heritage resources that qualify as part of the National Estate, namely:

(a) places, buildings structures and equipment of cultural significance;
(b) places to which oral traditions are attached or which are associated with living heritage;
(c) historical settlements and townscapes;
(d) landscapes and natural features of cultural significance;
(e) geological sites of scientific or cultural importance;
(f) archaeological and palaeontological sites;
(g) graves and burial grounds including-
  (i) ancestral graves;
  (ii) royal graves and graves of traditional leaders;
  (iii) graves of victims of conflict;(iv) graves of individuals designated by the Minister by notice in the Gazette;
  (v) historical graves and cemeteries; and
  (vi) other human remains which are not covered by in terms of the Human Tissues Act, 1983 (Act No 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including -
(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  (ii) objects to which oral traditions are attached or which are associated with living heritage;
  (iii) ethnographic art and objects;
  (iv) military objects;
  (v) objects of decorative or fine art;
  (vi) objects of scientific or technological interest; and
  (vii) books, records, documents, photographs, positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

The National Heritage Resources Act (Act No 25 of 1999, Art 3) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value …'. These criteria are the following:

(a) its importance in the community, or pattern of South Africa's history;
(a) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
(b) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(c) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
(g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons; (h)
(h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
(i) sites of significance relating to the history of slavery in South Africa

2 AIMS WITH THIS REPORT

Eskom intends to implement the Letaba Project in the Limpopo Province. This extensive project with its five components which involves the construction of new power lines and substations with accompanying infrastructure are referred to as the Eskom Project whilst the footprints of these developmental components are referred to as the Eskom Project Area. The Eskom Letaba Project may have an influence on any of the types and ranges of heritage resources which are listed in Section 3 of the National Heritage Resources Act (No 25 of 1999).

In order to comply with heritage legislation, Eskom requires knowledge of the presence, relevance and the significance of any heritage resources that may be affected by the Eskom Project. Eskom needs this knowledge in order to take pro-active measures with regard to any heritage resources that may be affected, damaged or destroyed when the Eskom Project is implemented. Urgeneg, the environmental company responsible for compiling the Environmental Impact Assessment (EIA) for the Eskom Project therefore commissioned the author to undertake a Phase I HIA study for the Eskom Project Area.

The aims with the Phase I Heritage Impact Assessment study were the following:

- To establish whether any of the types and ranges of heritage resources as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999) (Box 1) do occur in the Eskom Project Area and, if so, to determine the nature, the extent and the significance of these remains.
- To determine whether these remains will be affected by the proposed Eskom Project and, if so, to evaluate what appropriate mitigation and management measures could be taken to reduce the impact of the proposed development on these heritage resources.

3 METHODOLOGY

This Phase I HIA study was conducted by means of the following:

- Surveying the proposed Eskom Project Area with a vehicle and selected spots on foot.
- Briefly surveying literature relating to the pre-historical and historical context of the Eskom Project Area.
- Consulting maps of the proposed Eskom Project Area.
- Consulting archaeological (heritage) data bases.
- Consulting spokespersons regarding the possible presence of graves and graveyards in the Eskom Project Area.
- Synthesising all information obtained from the data bases, fieldwork, maps and literature survey.

3.1 Fieldwork

The proposed Eskom Project Area was surveyed with a vehicle where accessible roads existed while selected, sensitive spots in the Eskom Project Area were surveyed on foot.

3.2 Databases, literature survey and maps

Databases kept and maintained at institutions such as the Provincial Heritage Resources Agency (PHRA) and the Archaeological Data Recording Centre at the National Flagship Institute (Museum Africa) in Pretoria were consulted to determine whether any heritage resources of significance has been identified during earlier heritage surveys in or near the Eskom Project Area.

The author is not unacquainted with the Eskom Project Area at large as he had done several heritage impact assessment studies near the Eskom Project Area (see Part 8, ‘Select Bibliography’).

Literature relating to the pre-historical and the historical unfolding of the Eskom Project Area was reviewed (see Part 5, ‘Contextualising the Eskom Project Area’).

It is important to contextualise the pre-historical and historical background of the Eskom Project Area in order to comprehend the identity and meaning of heritage sites in and near the Eskom Project Area.

Maps outlining the Eskom Project Area were studied (2330AD Hildreth Ridge, 2330CA Duiwelskloof, 2330CB Ga Modjadji, 2330CC Tzaneen, 2330CD Letsitele, 2430AA Sebalen & 2430AB Ofcalaco: 1:50 000 topographical maps).

3.3 Assumptions and limitations

It is possible that this Phase I HIA study may have missed heritage resources in the Eskom Project Area as heritage sites may occur in thick clumps of vegetation while others may lie below the surface of the earth and may only be exposed once development commences.

If any heritage resources of significance is exposed during the Eskom 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 authorization (permits) from SAHRA to conduct the mitigation measures.

3.4 Some remarks on terminology

Terms that may be used in this report are briefly outlined below:

- Conservation: The act of maintaining all or part of a resource (whether renewable or non-renewable) in its present condition in order to provide for its continued or future use. Conservation includes sustainable use, protection, maintenance, rehabilitation, restoration and enhancement of the natural and cultural environment.

- Cultural resource management: A process that consists of a range of interventions and provides a framework for informed and value-based decision-making. It integrates professional, technical and administrative functions and interventions that impact on cultural resources. Activities include planning, policy development, monitoring and assessment, auditing, implementation, maintenance, communication, and many others. All these activities are (or will be) based on sound research.

- Cultural resources: A broad, generic term covering any physical, natural and spiritual properties and features adapted, used and created by humans in the past and present. Cultural resources are the result of continuing human cultural activity and embody a range of community values and meanings. These resources are non-renewable and finite. Cultural resources include traditional systems of cultural practice, belief or social interaction. They can be, but are not necessarily identified with defined locations.

- Heritage resources: The various natural and cultural assets that collectively form the heritage. These assets are also known as cultural and natural resources. Heritage resources (cultural resources) include all human-made phenomena and intangible products that are the result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyles of the people or groups of people of South Africa.

- In-Situ Conservation: The conservation and maintenance of ecosystems, natural habitats and cultural resources in their natural and original surroundings.

- Iron Age: Refers to the last two millennia and ‘Early Iron Age’ to the first thousand years AD. ‘Late Iron Age' refers to the period between the 16th century and the 19th century and can therefore include the Historical Period.

- Maintenance: Keeping something in good health or repair.

- Pre-historical: Refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the Project Area, to the first appearance or use of 'modern' Western writing brought to the Eastern Highveld by the first Colonists who settled here from the 1840's onwards.

- Preservation: Conservation activities that consolidate and maintain the existing form, material and integrity of a cultural resource.

- Recent past: Refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may, in the near future, qualify as heritage resources.

- Protected area: A geographically defined area designated and managed to achieve specific conservation objectives. Protected areas are dedicated primarily to the protection and enjoyment of natural or cultural heritage, to the maintenance of biodiversity, and to the maintenance of life-support systems. Various types of protected areas occur in South Africa.

- Reconstruction: Re-erecting a structure on its original site using original components.

- Replication: The act or process of reproducing by new construction the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period.

- Restoration: Returning the existing fabric of a place to a known earlier state by removing additions or by reassembling existing components.

- Stone Age: Refers to the prehistoric past, although Late Stone Age peoples lived in South Africa well into the Historical Period. The Stone Age is divided into an Earlier Stone Age (3 million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years to 40 000 years ago) and the Late Stone Age (40 000 years to 200 years ago).

- Sustainability: The ability of an activity to continue indefinitely, at current and projected levels, without depleting social, financial, physical and other resources required to produce the expected benefits.

- Translocation: Dismantling a structure and re-erecting it on a new site using original components.

- Project Area: refers to the area (footprint) where the developer wants to focus its development activities.

- Phase I studies refer to surveys using various sources of data in order to establish the presence of all possible types and ranges of heritage resources in any given Project Area (excluding paleontological remains as these studies are done by registered and accredited palaeontologists).

- Phase II studies include in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include the documenting of rock art, engraving or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavations of archaeological sites; the exhumation of human remains and the relocation of graveyards, etc. Phase II work involve permitting processes, require the input of different specialists and the co-operation and approval of SAHRA.

4 THE ESKOM PROJECT AREA

4.1 Location

The Eskom Project Area partly overlaps with two ecozones, namely the Bushveld in the north and the Great Escarpment in the south. The Eskom Project Area stretches from the Letbaba Substation near Giyane in the north across flat bush veld terrain which is barren and dry towards the east but which becomes more wet and mountainous towards the west. The central part of the Eskom Project Area where the Tarentaal Substation is located incorporates the Tzaneen area and its surroundings which are mountainous and renowned for its high rainfall and tropical climate.

Further to the south the Eskom Project Area overlaps with the fertile and tropical Letaba Valley. It is here where the Letaba Substation will be established. From the main village Nkowankowa a number of villages and towns are spread out southwards towards Ofcaloca and Bokaga in the south. The southern part of the Eskom Project area stretches across flat terrain to Ofcalaco. However, to the west this area incorporates foothills of the Drakensberg where Bokgaga and Thlabine are located.

The central part of the Eskom Project Area in the south, where the Makhutswe Substation is located, is flat and sandy and these characteristics become more pronounced as one travels further to the east (2330 AD Hildreth Ridge, 2330CA Duiwelskloof, 2330CB Ga Modjadji, 2330CC Tzaneen, 2330CD Letsitele, 2430AA Sebalen & 2430AB Ofcalaco: 1:50 000 topographical maps).

4.2 The nature of the Eskom Project

The key development components of the proposed Eskom Project include the following:

<u>Project 01</u>

- Construct a 48km 132kV Kingbird power line between the Spencer Substation and the Tarentaal Substation.
- Construct 2x8.4km loop-in and loop-out power line from the 132kV Spencer/Tarentaal Power line to the Letaba Substation.
- Construct the 2x40MVA/66kV Letaba Substation.

Project 02

- Construct a 4km 66kV Chikadee power line from the Letaba Substation to the Risenga Substation.
- Construct a 20km 66kV Chikadee power line from Letaba Substation to the Lenyenye Substation.

Project 03

- Reconstruct a 5km 66kV Chikadee power line between Nkowankowa and Risenga
- Reconstruct a 2,7km 66kV Chikadee power line between Dan village and Letsitele metering points.
- Reconstruct a 2km 66kV Chikadee power line between Dan village and Nkowankowa

Project 04

- Construct a loop-in and loop-out power line from the existing 8,5km Letsitele-Lenyenye power line by constructing 2x4,5km Chikadee power lines to the new Sesekani Substation.
- Construct the 2x20MVA 66/11kV and 1x20MVA 66/22kV Sesekani Substation.

Project 05

- Construct a 31km 132kV Kingbird power line between Letaba Substation and the Makhutswi Substation.

5 CONTEXTUALISING THE ESKOM PROJECT AREA

The wider study area is well known for the presence of a considerable number of Iron Age sites, some dating from the Early Iron Age and located at the Eiland (Hans Merensky Nature Reserve) and Silver Leaves (Tzaneen). The majority of Iron Age sites recorded, however, dates from the Late Iron Age. These groups included the Bavenda and the Balobedu who lived in the northern and southern parts of the Eskom Project Area which also incorporates some Eastern-Sotho clans. Some of these clans were renowned agriculturists such as the Lobedu, Kgaga, Monareng and the Tlhabine whose villages skirted the foothills of the Drakensberg Mountain range.

The following brief overview of pre-historical, historical, cultural evidence will help to contextualise the Eskom Project Area.

5.1 Stone Age sites

Stone Age sites are marked by stone artefacts that are found scattered on the surface of the earth or as parts of deposits in caves and rock shelters. The Stone Age is divided into the Early Stone Age (covers the period from 2.5 million years ago to 250 000 years ago), the Middle Stone Age (refers to the period from 250 000 years ago to 22 000 years ago) and the Late Stone Age (the period from 22 000 years ago to 200 years ago).

The Later Stone Age is also associated with rock paintings and engravings which were done by the San, Khoi Khoi and in more recent times by Iron Age farmers.

Heritage surveys up to now have recorded Stone Age sites, rock paintings and engravings in the larger Eskom Project Area.

5.2 Pre-historical and historical remains

The Iron Age is associated with the first agro-pastoralists who lived in semi-permanent villages and who practised metal working during the last two millennia.

The Iron Age is usually divided into the Early Iron Age (covers the 1st millennium AD) and the Later Iron Age (covers the first 880 years of the 2nd millennium AD).

The Eskom Project Area has been occupied by Early Iron Age communities as well as by Late Iron Age communities. The Eskom Project Area stretches across the former spheres of influence of the Venda in the north and partly across the sphere of influence of the Lobedu in the south. These communities occupied numerous settlements in the area and a brief historical background to these pre-historical and historical communities is provided in this report.

A brief survey of literature relating to the Venda people who occupied the Thohoyandou area for the past four centuries was undertaken. Particular attention was given to the origins, divisions and settlement history of the Venda. No ethnographic information regarding this group is presented. The Venda is known for cultural traditions such as the *thondo* (an enclosed hut where boys are thought how to protect royals and *domba* (a pre-marital rite held in or near the assembly area of royal villages).

Venda speakers are currently wedged between a predominantly Sotho-speaking region south of the Soutpansberg and the Shona linguistic cluster north of the Limpopo River. Venda, however, is by no means a uniform language. Three regional variants can be distinguished, namely in the north-western Soutpansberg people speak an archaic form of Venda known as Tawamamba a (mixture of Northern-Sotho and Kalanga). Tawamamba has largely been replaced by the Ilafuri dialect (with more recent Sotho elements) in the western and central Soutpansberg. Lastly, the eastern Tshimbedzi variant (with fewer Sotho elements) can be distinguished which is also spoken in southern Zimbabwe.

Two schools of thought dominate an understanding of Venda origins, namely an older version which supports migration and the current view which is based on local development. Only the older migration theory is outlined below.

The migration theory is mainly based on Singo traditions. Singo is the 'totemic name' or *mutupo* for the politically dominant group amongst the Venda. Most ethnographers agree on a homeland for the Singo north of the Limpopo River amongst the Rozwi

(Shona). Various capitals are mentioned. The Singo separated from the Rozwi as a result of dissention and migrated south with some Lemba allies who were Africanized Muslims traders and craftsmen.

Dates for these early origins vary. Most genealogies list at least three rulers living north of the Limpopo River and at least five to six rulers ruling in the Soutpansberg before the installation of chief Makhado in 1864.

The first Singo chief settled in the Soutpansberg six generations before 1864. This would place the earliest Singo settlement in the latter part of the seventeenth century. Once the Singo settled at Dzata in the Nzhelele Valley they extended their power base subjugating sections of the Dau, Kwevhu, Kwinda, Mbedzi, Ndou and Nyai *mitupo* (totemic groups). (Ethnographers used to lump these pre-Singo groups in an amorphous group called the Ngona).

With the expansion of the Singo elite from Dzata the Lemba became scattered amongst various Sotho and Ndebele communities in the Limpopo Province. The united Singo front came to an end with the dispute over the succession of chief Thoyo-ya-Ndou. The Singo polity may have broken up in the Nzhelele Valley between 1750 and 1800.

The three main sections that emerged during the split were the western Ramabulana Singo and their close Ndalamo allies, the eastern Tshivhase and Mphapuli section and a southern section which includes former vassals of the Singo that were gradually incorporated in Sotho chiefdoms. The Eskom Project area collates with the Mphapuli area where it is expected people with this clan name predominantly lives.

The Eskom Project Area also partly collates with people who can claim a Lobedu ancestry. A brief survey of literature relating to the Lobedu (or Balobedu) people who occupied the Tzaneen area for the past four centuries was undertaken. Particular attention was given to the origins and settlement history of the Lobedu. No ethnographic information regarding the Lobedu is presented. It is sufficient to state that the Lobedu is also known as the people of Modjaji, the name given to the queens who ruled this clan and who are renowned for their abilities ‘to make rain’

The Lobedu people collectively are also referred to as the Kolobe tribes. Sotho tribes who have the *kolobe* (bushpig) as totem trace their origin to the Lobedu. These groups include the Kolobe of Mmamaila, Sekgôpô, Mmamabolo and Rakwadu.

The Lobedu in all likely-hood broke away from the Karanga during the time of the legendary kingdom of Monomotapa (in Zimbabwe) and moved southwards, eventually in main becoming Sotho-ized. The group originally settled west of Louis Trichardt from where they moved, under Mohale the founder of the Lobedu, south-westwards. Shortly before AD 1700 they arrived in their present territory. (At this stage, the Kolobe of Mmamobolo had already broken away from the main group).

Among the Lobedu the tribal heads claim to authority is based on his ability to use the rain medicine in his possession. During the rule of the last male tribal leader, Môgôdo, he entrusted the rain medicine to his daughter, Maselegwane, as his sons were conspiring to murder him. When he died Maselegwane succeeded her father as she possessed the rain medicine and became the first women ruler of the Lobedu. She called herself Modjaji and banished her brothers and half brothers from the kingdom.

Since the succession of Maselegwane the position of tribal leader, rain queen and the name ‘Modjaji’ was passed on to the daughter of the reigning queen. Modjaji II was historically the most famous of all the Lobedu queens as she led her people in a revolt against the government of the ZAR at the end of the 19th century. The Lobedu are today the main group in the Bolobedu district.

During and shortly before the stormy reign of Môgôdo (AD 1800) various splinter groups such as the Kolobe of Sekgôpô and Rakwadu broke away from the Lobedu. The descendants of these clans currently live in Sekgosese and Lobedu. The Kolobe of Mamaila had already broken away from the Lobedu around AD 1750 and moved northwards where they found refuge amongst the Venda in the Njelele Valley. After kirmishes with Albasini they moved southwards to Lebowa, shortly after 1855. By 1925 the tribe had undergone a final division. One part now lives in Sekgosese and the other in Bolobedu. Although the connection between the two tribes is recognised, each division is fully independent today.

After the Kolobe of Mmamabolo broke away from the Lobedu around AD 1700, the Mmamabolo settled on the Haenertsburg escarpment and led a nomadic existence. They settled in Sekhukhuneland for a short time and on their way back to Haenertsburg they overcame and assimilated various groups. The tribe divided into two groups after a succession dispute, namely that of Sekwala and the group of Mankweng who both live in the Thabamoopo district.

6 THE PHASE I HERITAGE IMPACT ASSESSMENT

The Phase I HIA study is now briefly discussed and illustrated with some photographs.

6.1 Project 01: Spencer to Letaba power lines and Letaba Substation

This project involves the following developmental components:

- The construction of a ± 48km 132kV Kingbird power line between the Spencer Substation and the Tarentaal Substation.
- The construction of a 2x8.4km loop-in and loop-out power line from the 132kV Spencer/Tarentaal power line to the Letaba Substation.
- The construction of the 2x40MVA/66kV Letaba Substation.

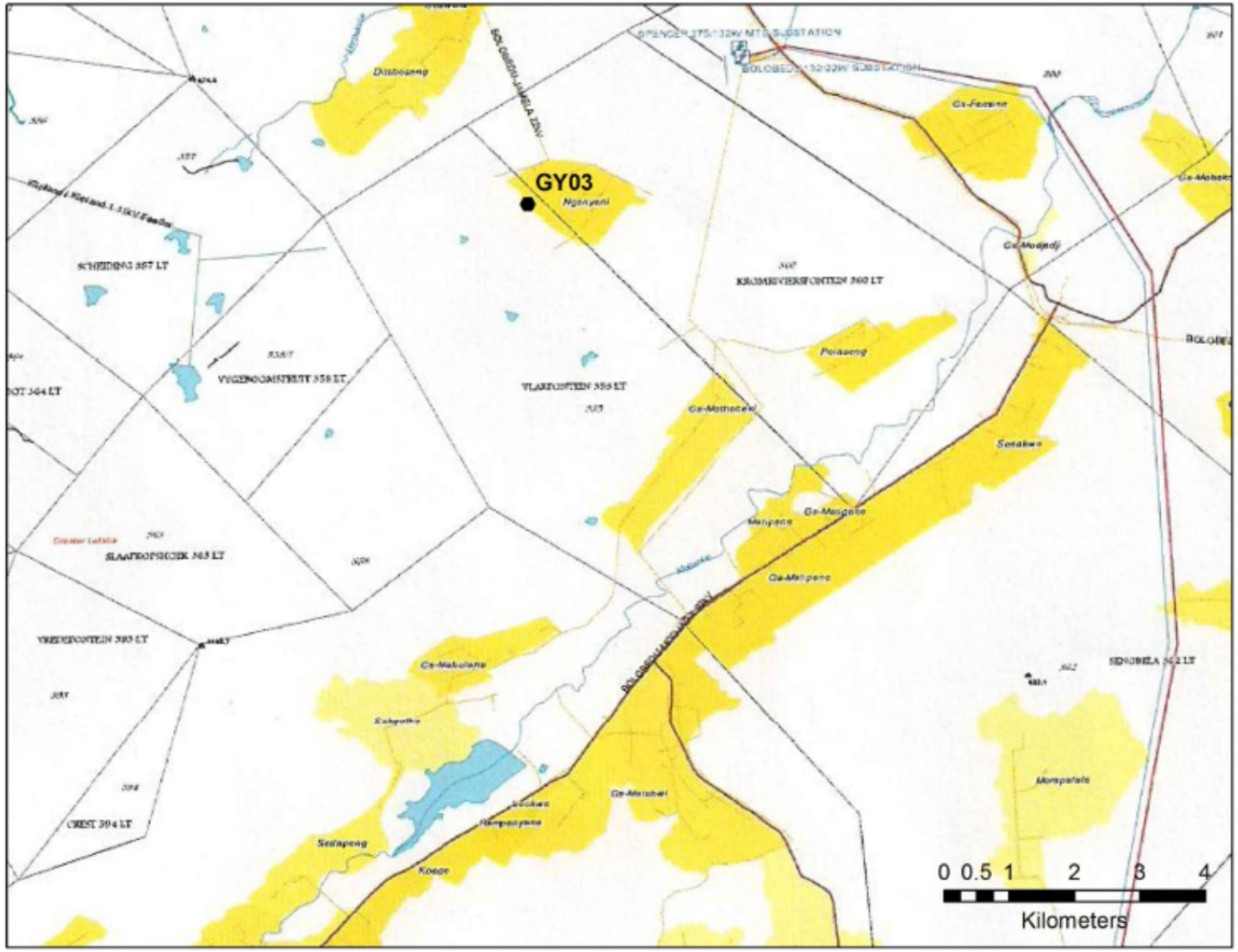
6.1.1 The power lines between the Spencer and Tarentaal Substations

Two options are proposed for the 132kv power line which runs between Spencer and Tarentaal, namely:

6.1.1.1 Alternative 01 (central)

This alternative has the following stretches, namely:

- Stretch AB runs eastwards across Worcestor 205LT and then bends southwards in order to run across Worcestor 200LT as well as Runnymede 426LT. This stretch is approximately nineteen kilometre long and has four kinks and passes villages such as (from north to south) Ga Fanane, Ga Modjadji, Ga Ramphepe, Ga Moloko, Morapala, Ga Mookgo, Runnymede and Kwa Mavele. It joins an existing power line on Runnymede 426LT.
- Stretch BC turns westwards on Meadowbank 429LT and crosses Mamitwas 461LT and runs to the north of the villages of Babanana and Kwa-Mandlhakanzi before joining the national road which runs southwards to the Tarentaalrand Substation (situated between Tzaneen and Gravelotte).



Legend

- Graveyards

Figure 1- The northern part of the Eskom Project Area incorporates the Spencer Substation and the various power line corridors running from this substation to the Tarentaal and Letaba Substations further to the south (above)

- Stretch CD runs southwards following the Tarentaal road's eastern shoulder and crosses the farm Duplex 467LT in order to join one of Eskom's existing power lines on Uitzoek 509LT.
- Stretch DE runs southwards from the farm Uitzoek 504LT following Eskom's existing power line and crosses the Tzaneen/Gravelotte road in order to pass the Tarentaalrand Substation on its eastern side on the farm Tarentaalrand 524LT.
- Stretch EF runs from the Tarentaal Substation southwards and initially follows the eastern and then the western shoulders of this road to Nkowankowa. It crosses the farms Letabasdrift 526LT before bending to the south-east in order to cross the Valencia Estate and the Letaba River before joining the Letaba Substation.

6.1.1.2 Alternative 02 (west)

This power line follows the following route:

- Stretch AB runs from the Spencer Substation westwards across Kromhoutfontein 280LT before bending at the south-western corner of the village Ga Ramaroka on Vlakfontein 359LT to the south-west.
- Stretch BC runs from the bend across the farms Vlakfontein 359LT, Vygeboomspruit 398LT, Slaapkorshoek 383LT and Modjadjes 424LT before bending to the south.
- Stretch CD runs southwards along the border of Modjadjes 424LT/Meidingen 398LT to the northern corner of Strangersrest 431LT. At this point Option 02 joins one of Eskom's existing power lines.
- Stretch DE runs from the northern corner of Strangersrest 431LT south-eastwards along the western borders of the villages of Maleketla and Rabothata before bending to the south and the south-east on Koekwe 468LT.
- Stretch EF runs from Koekwe 468LT southwards across Duplex 467LT, Uitzoek 509LT and Welverwacht 510LT. From this farm (Welverwacht 510LT) it can follow one of two options, namely:

1. Turns to the south-west across farms such as Uitzoek 509LT, Fleeurboom 533LT and Beacon 530LT before bending to the south-east in order to end at the Letaba Substation.
2. Join the last stretch of Option 01 which runs between the Spencer and Letaba Substations.

A graveyard (GY03) next to a large Kremetart (Boabab) tree occurs on the outskirts of the village Ga Ramaroka on Vlakfontein 359LT. This graveyard holds four graves Which are covered with cement slabs. Inscriptions on the cement headstones read as follow:

- 'In living memory of Alfred Moribula Mabulana *1915-01-16 †2004-12-29 Robala ka khutso Kolobe'
- 'Mr Mojipa Mabulana'
- 'Mr Seropole Mabulana'
- 'Mr Malekutu Mabulana

Figure 2- GY03 on the outer edge of the village of Ga Ramaroka on Vlakfontein 359LT is associated with four graves which are covered with cement slabs and a large Boabab tree (above).

Figures 3 & 4- One of the options for the proposed Spencer/Letaba power line corridors where it crosses Stanger 431LT and Koekwe 468LT, respectively a mountainous region (above) and a flat area where cirtrus is planted (below)

6.1.2 The loop-in and loop-out between Spencer/Tarentaal and Letaba Substation

These power lines run from the Letaba Substation northwards to the Tarentaalrand Substation and roughly follows the same route that the Spencer-Letaba power line follows between the Tarentaalrand and the Letaba Substations, namely: these power lines depart from the Tarentaalrand Substation on the farm Tarentaalrand 524LT. From the Tarentaal Substation the power lines run southwards, initially following the eastern and then the western shoulders of this road to Nkowankowa. They cross the farm Letabasdrift 526LT before bending to the south-east in order to cross the Valencia Estate and the Letaba River before joining the Letaba Substation.

Figure 5- The Letaba/Tarentaalrand power line runs across relatively pristine bush north of the Letaba River before entering the Letaba Substation on the farm Letaba 567LT (above).

6.1.3 The Letaba Substation

The proposed Letaba Substation on the farm Letaba 567LT will be established directly to the north of the railway line and the village of Nkowankowa in an area that is predominantly marked by citrus orchards.

The Nkowankowa graveyard (GY01) is located in close proximity of the proposed new Letaba Substation.

Figure 6- The Nkowankowa graveyard (GY01), a large formal graveyard is located in close proximity of the proposed new Letaba Substation (above).

6.2 Project 02: Spencer to Letaba power lines and Letaba Substation

This project involves the following developmental components:

- The construction of a 4km 66kV Chikadee power line from the Letaba Substation to the Risenga Substation.
- The construction of a 20km 66kV Chikadee power line from the Letaba Substation to the Lenyenye Substation.

6.2.1 The power line between the Letaba and Risenga Substations

This short power line runs from the Letaba Substation across the railway line and the road running between Nokowankowa and Letsitele.

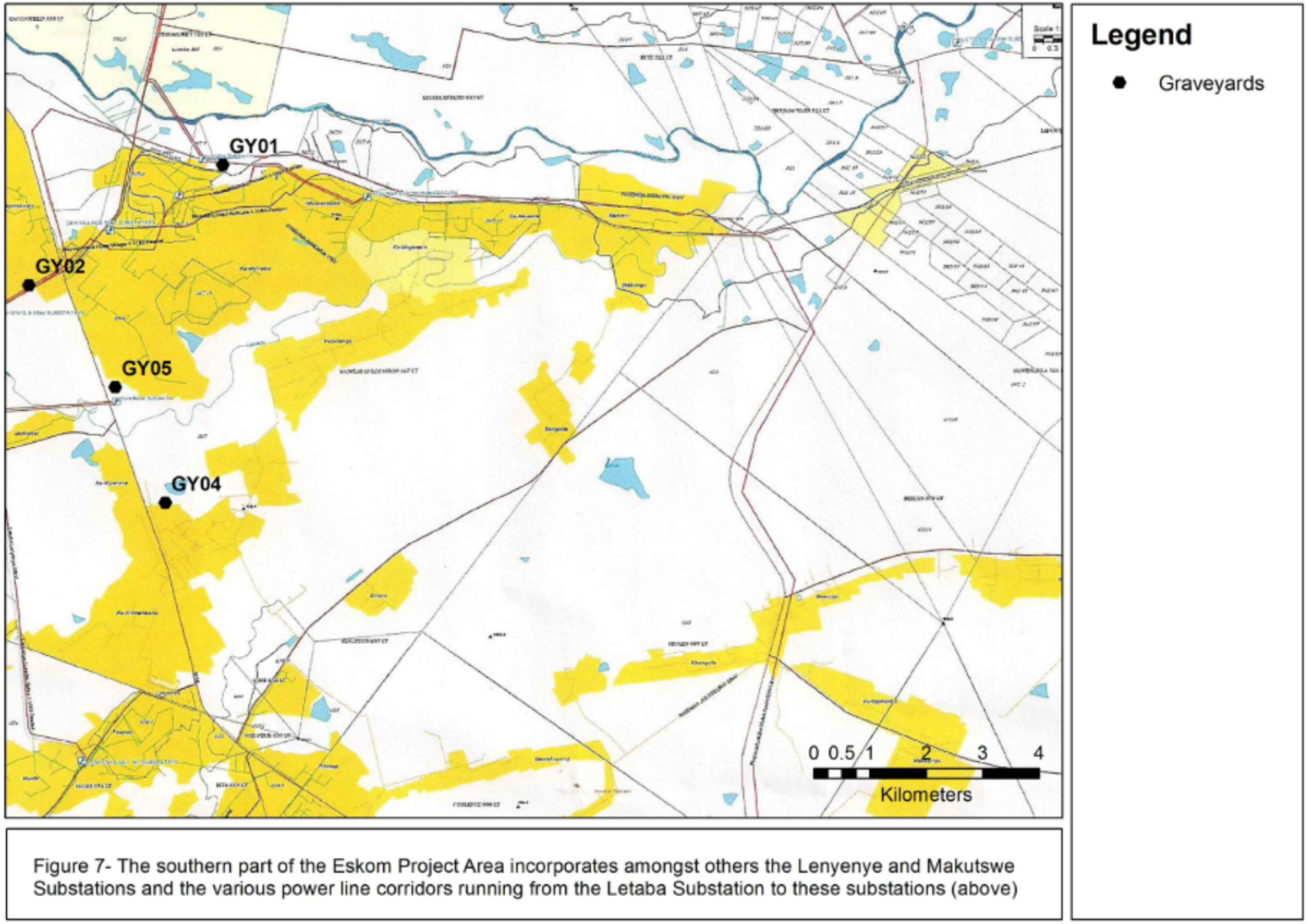


Figure 7- The southern part of the Eskom Project Area incorporates amongst others the Lenyenye and Makutswe Substations and the various power line corridors running from the Letaba Substation to these substations (above)

Figure 8- The 66kV power line running between the Letaba and the Risenga Substations will enter the Risenga Substation from the north after crossing a railway line and the road between Nokowankowa and Letsitele (above).

6.2.2 The power line between the Letaba and Lenyenye Substations

Two options are available for this power line, namely:

6.2.2.1 Option 01 (east)

This power line has two main stretches, namely:

- Stretch AB runs in a straight line from the Letaba Substation south-eastwards through Nkowankowa and across the mountain Mohodwe.
- Stretch BC bends to the south-west on the mountain Mohodwe and run through five bends in a south-westerly direction to the Lenyenye Substation. This stretch then runs along the southern perimeter of the villages of Kwa Muhlaba and Ramokako.

6.2.2.2 Option 02 (west)

This power line has two main stretches, namely:

- Stretch AB runs westwards from the Letaba Substation and crosses a railway line before bending to the south in order to run along the eastern borders of Mokgolobotho (and the eastern shoulder of the R36) to a crossing where it turns to the south-west in order to follow the southern shoulder of this road.
- Stretch BC turns to the south at the south-western corner of Mokgolobotho and runs across the farms Mophlabas 567LT and Moim 654LT before bending three times along a short distance before entering the Lenyenye Substation.

A large formal graveyard (GY02) is located to the north of the road linking Letaba with Letsitele.

Figure 9- A large formal graveyard (GY02) is located near the northern shoulder of the road running between Letaba and Letsitele (above).

6.3 Project 03: Rebuilding power lines

This project involves the following developmental components:

- Rebuilding a 5km 66kV Chikadee power line between Nkowankowa and Risenga.
- Rebuilding a 2,7km 66kV Chikadee power line between Dan village and Letsitele metering points.
- Rebuilding a 2km 66kV Chikadee power line between Dan village and Nkowankowa.

A large formal graveyard (GY05) occurs in close proximity of Dan village.

Figure 10- A large formal graveyard (GY05) is located in close proximity of Dan village from where two 66kV power lines respectively running to the Letsitele metering points and to Nkowankowa will be rebuild (above).

6.4 Project 04: Loop-in and loop-out power line and Sesekani Substation

This project involves the following developmental components:

- Constructing a loop-in and loop-out power line from the existing 8,5km Letsitele-Lenyenye power line by constructing 2x4,5km Chikadee power lines to the new Sesekani Substation.
- Constructing the 2x20MVA 66/11kV and 1x20MVA 66/22kV Sesekani Substation.

No heritage resources of significance were observed in association with this component of the Eskom Project.

6.5 Project 05: Power line between the Letaba and Makhutswi Substations

This project involves the following developmental component:

- The constructing of a ±31km 132kV Kingbird power line between the Letaba Substation and the Makhutswi Substation.

This power line has two options, namely:

6.5.1 Option 01 (central)

Option 01 for the Letaba-Makutswe power line follows the following route, namely:

- Stretch AB runs eastwards from the Letaba Substation along the northern perimeter of Ka Mayomela to the turn-off to the R529.
- Stretch BC runs southwards along the western and then the eastern shoulder of the R529 and crosses the farms Berlyn 670LT, Keulen 669LT, Coblentz 666LT and Bonn 671LT before crossing a dirt road running eastwards into the Harmony Block.
- Stretch CD runs from the dirt road further to the south and follows the eastern shoulder of the R529 whilst crossing the farm Dusseldorf 22KT, passing the village of Ofcalaco and crossing the farm Luxemburg 24KT before ending at the Makutswe Substation.

6.5.2 Option 2 (east)

Option 02 for the Letaba-Makutswe power line follows the following route, namely:

- Stretch AB runs from the Letaba Substation northwards and crosses the Letaba River after which it bends to the east running across the farm Letaba Estates 528LT.
- Stretch BC bends to the south-east on the farm Rust 522LT and runs across the Letaba River as well as across the R529.
- Stretch CD runs in a straight line south-eastwards following the borders of the following farms: Novengill 562LT/Berlyn 670LT, Rooiwal 673LT/Sedan 672LT and Maranda 675LT/Harmony 140KT.
- Stretch DE turns with a ninety degree turn to the south-west and follows Eskom's existing power line across the following farms: Harmony 140KT and across the Nwgabitsi and Ga Selati Rivers to the Makutswe Substation.

6.5.3 Option 3 (west)

Option 03 for the Letaba-Makutswe power line follows the following route, namely:

- Stretch AB runs from the Letaba Substation westwards across the Letaba Estates and turns southwards in order to run along the western border of the village of Mokgolobotho and through the village of Mohlaba (on Mohlabas 567LT) where it turns to the south-west to end on Letsitele 652LT.
- Stretch BC runs from Letsitele 625LT southwards and then eastwards along the borders of Long Valley 644LT/Uplands 653LT and Thabina Valley 13KT.
- Stretch CD runs from the north-western corver of Thabania Valley 13KT south-eastwards and westwards across an extensive mountain range on Mamatzeri 15KT before bending to the south-eastwards along the borders of the farms Tours 17KT/Sedan 18KT; Finale 200LT/Schklum 41KT where it turns eastwards to run across Pretoria 25KT to the Makhutswe Substation.

A graveyard (GY04) with two graves occurs on the western outskirts of Bokaka in the village of Thlabine. Inscriptions on the two tombstones read as follow:

- 'Mariotsana George Siphalane born oct 1918 Died Nov 1979
- Godlaepyo Manene Hunguke Siphalane Birth 1922 Died 1955'

Figure 11- Two graves (GY04) on the outskirts of Bokgaga near the village of Tlhabine (above).

7 THE SIGNIFICACE POSSIBLE IMPACT AND MITIGATION OF THE HERITAGE RESOURCES

7.1 Types and ranges of heritage resources

The Phase I HIA study revealed the following types and ranges of heritage resources near the Eskom Project Area:

- At least four formal graveyards.

These graveyards were geo-referenced, their coordinates were determined and they were mapped (Figures 1 & 2).

The significance of the heritage resources is indicated as well as the fact that it is highly unlikely that any of these graveyards will be affected by the Eskom Project. Never the less the significance of the graveyards is indicated.

GRAVEYARD	COORDINATES	SIGNIFICANCE
GY01 (Letaba/, Nkowankowa)	23º 52.880'S 30º 16.9911'E	**HIGH**
GY02 (Letaba/Letsitele)	23º 54.032'S 30º 15.133'E	**HIGH**
GY03 (Ga Ramaroka)	23º 30 35.14'S 30º 21 06.52E	**HIGH**
GY04 (Bokgaga)	24º 05.302'S 30º 18.280'E	**HIGH**
GY05 Dan cemetery	23º 55.038'S 30º 15.987'E	**HIGH**

Table 1- The coordinates and the significance of graveyards near the Eskom Project Area (above).

7.2 Possible impact on the graveyards

It is highly unlikely that any of the graveyards will be affected, directly or indirectly, by the Eskom Project. This is due to the fact that the graveyards are located at ‘safe distances’ from the proposed new power line corridors whilst at least two of the

graveyards are large and long established and therefore part of the urban infrastructure. Nevertheless the significance of the graveyards is indicated.

7.3 The significance of the graveyards

All graveyards and graves can be considered to be of high significance and are protected by various laws. The significance of the grave therefore has been indicated as ‘High’ (Table 1).

Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

8 CONCLUSION AND RECOMMENDATIONS

The Phase I HIA study revealed the following types and ranges of heritage resources near the Eskom Project Area:

- At least four formal graveyards.

These graveyards were geo-referenced, their coordinates were determined and they were mapped (Figures 1 & 2).

The significance of the heritage resources is indicated as well as the fact that it is highly unlikely that any of these graveyards will be affected by the Eskom Project. Never the less the significance of the graveyards is indicated.

Possible impact on the graveyards

It is highly unlikely that any of the graveyards will be affected, directly or indirectly, by the Eskom Project. This is due to the fact that the graveyards are located at 'safe distances' from the proposed new power line corridors whilst at least two of the graveyards are large and long established and therefore part of the urban infrastructure. Nevertheless the significance of the graveyards is indicated.

The significance of the graveyards

All graveyards and graves can be considered to be of high significance and are protected by various laws. The significance of the grave therefore has been indicated as 'High' (Table 1).

Legislation with regard to graves includes Section 36 of the National Heritage Resources Act (No 25 of 1999) whenever graves are older than sixty years. The act also distinguishes various categories of graves and burial grounds. Other legislation with regard to graves includes those which apply when graves are exhumed and relocated, namely the Ordinance on Exhumations (No 12 of 1980) and the Human Tissues Act (No 65 of 1983 as amended).

There is consequently no reason from a heritage point of view why the Eskom Project should not proceed.

9 SELECT BIBLIOGRAPHY

Berg, J.S. 1989. *Geskiedenisatlas van Suid Afrika. Die vier noordelike provinsies*. Van Schaik: Pretoria.

Botha, S.J. 1983. *'n Voorgestelde nasionale ontwikkelingsplan vir Lebowa*. Universiteit van Pretoria: Pretoria.

De Beer, F.C. 1996. *Berge is nie net berge nie: Swart mense se persepsies oor Modimolle*. South African Journal of Ethnology. 19(1).

Erasmus, B.P.J. 1995. *Oppad in Suid Afrika. 'n Gids tot Suid Afrika, Streek vir Streek*. Jonathan Ball Uitgewers Bpk.

Inskeep, R.R. 1978. *The peopling of Southern Africa*. David Philip: Cape Town.

Loubser, J.H.N. 1991. The ethnoarchaeology of Venda speakers in Southern Africa. *Navorsinge van die Nasionale Museum, Bloemfontein*. Vol 7, No 8.

Mason, R..J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Mason, R.J. 1968. Transvaal and Natal Iron Age settlement revealed by aerial photography and excavation. *African Studies*. 27:167-180.

Pistorius, J.C.C. 2003. *A cultural Heritage Assessment for Eskom's proposed new power line between the Gravelotte Substation and the Ofcolaco Substation in the Limpopo (former Northern) Province of South Africa*. Unpublished report prepared for Eskom and Limpopo Water Initiative.

Pistorius, J.C.C. 2001. *A Phase I Heritage Impact Assessment (HIA) study for Eskom's proposed 132kV loop-in and loop-out power lines running from the Makonde T-off to the proposed new Mutshikili Substation at Thengwe in the Mutala and Thulamela local*

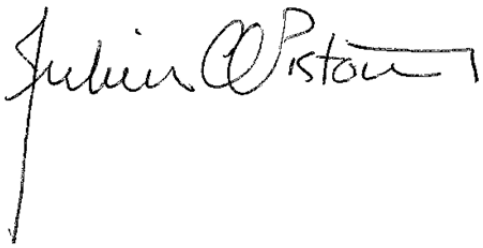
municipalities in the Vhembe District in the Limpopo Province. Unpublished report prepared for Eskom and Limpopo Water Initiative.

Pistorius, J.C.C. 2009. *A Phase I Heritage Impact Assessment (HIA) study for Eskom's proposed 66kV Kingbird power line running between the Letsitele and Lenyenye Substations near Tzaneen in the Limpopo Province of South Africa*. Unpublished report prepared for Eskom and Limpopo Water Initiative.

Pretorius, Fransjohan. 1999. *Life on commando during the Anglo Boer War 1899-1902*. Human & Rousseau: Cape Town.

Van der Merwe, D.S. 1933. A preliminary survey of places and objects of archaeological interest in the Northern Transvaal. *South African Journal of Science*. 30:1-36 (plus illustrations).

Wilson, M. 1969. The Sotho, Venda and Tsonga. In Wilson, M. & Thompson, L. (eds.): *The Oxford History of South Africa. South Africa to 1870*. Oxford: London Press.



DR JULIUS CC PISTORIUS
Archaeologist and Heritage Consultant
Member of ASAPA