

ESKOM

ENVIRONMENTAL IMPACT ASSESSMENT

for

The Proposed:

Majuba-Venus 765 kV Transmission Power Lines (EIA:12/12/20/1157)

Turn-in at the Majuba Sub-station (EIA 12/12/20/1161)

Extension of the Majuba Sub-station (EIA 12/12/20/1161)

Turn-in at the Venus Sub-station (EIA 12/12/20/1158)

Extension of the Majuba Sub-station (EIA 12/12/20/1161)

Heritage Resources

Specialist Report

Report prepared for:	Report prepared by:
ACER (Africa) Environmental Management Consultants P O Box 503 MTUNZINI 3867	Elize Becker Knight Piésold Consulting P O Box 383 Westville 3630

DECEMBER 2008

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

PROPONENT

Eskom Transmission, a Division of Eskom Holdings Limited, is the project proponent who has commissioned this EIA. Contact details are as follows:

Proponent: Eskom Holdings Limited (Eskom) Transmission Division
Contact person: Ms Bronwyn Stolp
Physical address: Megawatt Park, Maxwell Drive, Sunninghill, Sandton
Postal address: PO Box 1091, Johannesburg, 2000
Telephone: 011 800 5501
Fax: 086 662 7951
Email: bronwyn.stolp@eskom.co.za

INDEPENDENT ENVIRONMENTAL CONSULTANT

Consultant: ACER (Africa) Environmental Management Consultants
Contact person: Mr Johan van der Walt
Physical address: Suites 5&6, Golden Penny Centre, 26 Hely Hutchinson Road, Mtunzini
Postal address: PO Box 503, Mtunzini, 3867
Telephone: 035-3402715
Fax: 035-3402232
Email: johan@ntshebe.co.za

INDEPENDENT HERITAGE RESOURCES SPECIALIST

Consultant: Elize Becker
Contact person: Elize Becker
Physical address:
Postal address: PO Box383, Westville, 3630
Telephone: 031 266 8072
Fax: 031 266 4668
Email: ebecker@knightpiesold.com

DECLARATION OF INDEPENDENCE

I declare that I am an independent consultant and my views are stipulated according to my Professional standing.

Signed.....

Date.....2008/11/10.....

EXECUTIVE SUMMARY

The project sites surveyed are fairly sensitive due to the Heritage Resources identified in these areas. These Heritage Resources comprise of the Anglo-Boer War battlefield sites, Stone Age sites, Iron Age sites as well as Rock Art areas. Both these sites and areas are highly sensitive in terms of South African history and activities within these areas trigger South African Heritage legislation (SAHRA and AMAFA). During site surveys, it was found that the proposed power lines stretch across important, well known battlefield sites that are declared protected areas in terms of the South African Heritage Resource legislation. Given that some of the project sites are in the vicinity of such heritage landmarks, the enforcement of the National Heritage Act which permits no disturbances without the approval of the Heritage Agencies is possible.

Some of the Eskom power lines proposed are located in close proximity to open air stone walled sites and therefore strict control and measures to prevent damage to such structures are necessary. Certain structures are already in a fairly delicate condition and therefore strict caution must be exercised to prevent further damage to such structures. Should further interference in these sensitive areas be sort, it is proposed that the Heritage Agencies be informed and relevant permission from mentioned Agencies be obtained in writing, prior to the commencement of the activity. If no alternative route is available, the Heritage Agency is to be informed with regard to the situation.

Historical features such as stone walling, frequently occurs in the Ladysmith, Estcourt and Newcastle areas. These areas are of cultural importance and are protected in terms of the national and provincial heritage legislations (SAHRA and AMAFA). Given the valued contribution that these cultural areas add to South African heritage, it is empirical that these stone walled areas, which include Iron Age settlements as well as fortifications (Anglo-Boer War), not be disturbed in any way.

It is recommended that the proposed activity proceeds within the conditions stipulated by the South African Heritage Resource Agency, thus, areas close to homesteads or cultivated fields must be handled with sensitivity and caution as these areas may possess unmarked graves. The local community must also be contacted on a regular basis to determine the existence of any sacred areas that may occur within the project or surrounding areas. Such sacred areas are not to be disturbed. It is also recommended that a monitoring process be put in place to ensure that sensitive Heritage Resources are not disturbed by earthmoving activities and if heritage objects are uncovered by construction that the Heritage Resources can be documented immediately. It is advised that the local museums and Heritage Authorities assist with the formation of monitoring programs.

During site set up, the creation of construction camps and access roads may disturb heritage resources that are located within project areas. It is highly important that the Archaeologist and the

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

Heritage Agencies are notified of the areas proposed to be set aside for construction camp and access road activities prior to establishment and creation.

Graves identified during the reconnaissance phase are not allowed to be disturbed in any way. They are highly significant and should ideally be preserved or fenced off during the construction period. Similarly, Rock Art and Stone Age sites found in the Newcastle, Ncandu Falls, Eikenhof, Normandien and Dassiepoort areas must not be disturbed or tampered with. A Heritage Management Plan is required to protect these areas.

It is recommended that a Heritage Site Officer is appointed to monitor construction activities in order to prevent possible destruction of Heritage Resources during earthmoving construction activities as well as by rehabilitation activities. A Heritage Site Officer will also assist in educating the construction workers about the sensitivity of red flagged areas. The appointed Heritage Site Officer is to ensure that heritage legislation and the relevant management plans are enforced at all times.

The presence of living heritage and cultural landscape areas are of vital importance to a country's history. Heritage and cultural landscapes such as recent settlements that carry contemporary indigenous knowledge with regard to settlement patterns, sacred areas, symbolic events (i.e. the Shembe Church) and traditional grave yards, contribute to the cultural landscape in South Africa. Such areas are highly sensitive in terms of the symbolic events held by the local communities and therefore respect must be paid to such areas. These areas carry important ethnographic information which could possibly be used for future research studies.

TABLE OF CONTENTS

LIST OF FIGURES	6
LIST OF TABLES	6
ACRONYMS	7
DEFINITIONS (as per legislation)	7
1. INTRODUCTION	10
1.1 Project Background	10
1.1.1 <i>What are Cultural Landscapes?</i>	11
1.1.2 <i>How does one identify a Cultural Landscape?</i>	11
1.1.3 <i>How does one protect Cultural Landscapes?</i>	11
1.1.4 <i>How does one protect Cultural Landscapes in the Project Context?</i>	11
1.2 Scope of work	12
1.3 Methodology	12
2. RELEVANT LEGISLATION	15
2.1 National and Provincial Legislation	15
2.2 National Environmental Management Act (107 of 1998)	16
3. HERITAGE RESOURCES IDENTIFIED	17
4. RECOMMENDATIONS AND THE WAY FORWARD	20
4.1 Heritage Resources Identified	20
a) Stone Age Sites	20
i. <i>Sensitivity to Heritage Objects (i.e. river and mountain areas)</i>	20
ii. <i>Heritage Management Plan</i>	20
iii. <i>Monitoring</i>	20
b) Rock Art Sites	20
i. <i>Buffer Zone</i>	20
ii. <i>Heritage Management Plan</i>	21
iii. <i>Monitoring</i>	21
c) Iron Age Sites	21
i. <i>Bufferzone</i>	21
ii. <i>Heritage Management Plan</i>	21
iii. <i>Monitoring</i>	22
d) Historical Archaeological Resources, Battlefield Sites, Memorials	22
i. <i>Buffer Zone</i>	22
ii) <i>Heritage Management Plan</i>	22
iii) <i>Monitoring</i>	22
e) Structures	22
i) <i>Bufferzone</i>	22
ii) <i>Heritage Management Plan</i>	23
iii) <i>Monitoring</i>	23
4.2 Liaison with Local Communities and Historical Societies	23
5. PROCESSES TO BE FOLLOWED IF HERITAGE RESOURCES ARE UNCOVERED DURING EARTHMOVING ACTIVITIES	24
6. GUIDELINES ON THE GENERAL CONDITIONS	24
7. GRAVE PROCEDURES	25
8. CONCLUSION	25

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

9. RESOURCES	26
APPENDIX 1	27

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

LIST OF FIGURES	
Plate 1: Map of Area	Pg 10
Plate 2: Existing Power Line	13
Plate 3: Grave Site	13
Plate 4: Pepworth Station	13
Plate 5: Volksrust Memorial	13
Plate 6: Site orientation by Helicopter	13
Plate 7: Site Assessment by foot	13
Plate 8: Elandslaagte Battlefield Site	14
Plate 9: Amajuba Power Station	14
Plate 10: Schuinshoogte	14

LIST OF TABLES	
Table 1: List of Heritage Resources Identified	Pg 17

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

ACRONYMS	
AMAFA KZN Heritage	AMAFA KwaZulu-Natal Heritage
HIA	Heritage Impact Assessment
SAHRA	South African Heritage Resource Agency

DEFINITIONS (as per legislation)	
<p>Amafa KZN Heritage (No. 10 of 1997)</p>	<p>"archaeological" means -</p> <p>(a) material remains resulting from human activity which are in a state of disuse and are in or on land and are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;</p> <p>(b) rock art, being a form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and is older than 100 years including any area within 10 m of such representation; and</p> <p>(c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land or in the maritime cultural zone referred to in section 5 of the Maritime Zones Act 1994 (Act 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which are older than 60 years or which in terms of national legislation are considered to be worthy of conservation;</p> <p>(d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found;</p> <p>"cultural significance" means of aesthetic, architectural, historical, scientific, social, spiritual or technological value or significance;</p> <p>"conservation", in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance.</p> <p>"council" means the Council of Amafa aKwaZulu-Natali as established in terms of section 5;</p>
<p>National Heritage Resources Act (No. 25 of 1999)</p>	<p>(ii) "archaeological" means—</p> <p>(a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;</p> <p>(b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;</p> <p>(c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and</p> <p>(d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found; (ii)</p> <p>(iii) "conservation", in relation to heritage resources, includes protection,</p>

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

	<p>maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance; (vi)</p> <p>(iv) "Council" means the Council of the South African Heritage Resources Agency established in terms of section 14; (xxxv)</p> <p>(v) "cultural property agreement" in relation to a foreign state, means an agreement between South Africa and a foreign state or an international agreement to which South Africa and a foreign state are both parties, relating to the prevention of illicit international traffic in cultural property; (xx)</p> <p>(vi) "cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance; (xix)</p> <p>(vii) "Department" means the national department responsible for arts and culture and heritage, (viii)</p>
Amafa KZN Heritage	<p>"development" means any physical intervention, excavation or action, other than those caused by natural forces, which may in any way result in a change to the nature, appearance or physical nature of a place or influence its stability and future wellbeing, including -</p> <p>(a) construction, alteration, demolition, removal or change of use of a place or a structure on the place;</p> <p>(b) carrying out any works on or over or under the place;</p> <p>(c) subdivision or consolidation of land comprising a place, including the structures or airspace;</p> <p>(d) construction or putting up for display signs or boardings;</p> <p>(e) any change to the natural or existing condition or topography of land;</p> <p>(f) any removal or destruction of trees or removal of vegetation or topsoil;</p>
South African Heritage Resources Act	<p>"development" means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including—</p> <p>(a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;</p> <p>(b) carrying out any works on or over or under a place;</p> <p>(c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;</p> <p>(d) constructing or putting up for display signs or hoardings;</p> <p>(e) any change to the natural or existing condition or topography of land; and</p> <p>(f) any removal or destruction of trees, or removal of vegetation or topsoil;</p>
Amafa KZN Heritage	<p>"heritage resource" means any place or object of cultural significance including -</p> <p>(a) places, buildings, structures and equipment;</p> <p>(b) places to which oral traditions are attached or which are associated with living heritage;</p> <p>(c) historical settlements and townscapes;</p> <p>(d) landscapes and natural features;</p> <p>(e) geological sites of scientific or cultural importance;</p> <p>(f) archaeological and palaeontological sites;</p> <p>(g) graves and burial grounds, including -</p> <p>(i) ancestral graves,</p> <p>(ii) royal graves and graves of traditional leaders,</p> <p>(iii) graves of victims of conflict,</p> <p>(iv) graves of important individuals,</p> <p>(v) historical graves and cemeteries older than 60 years, and</p> <p>(vi) other human remains which are not covered under the Human Tissues Act, 1983 (Act No.65 of 1983 as amended);</p> <p>(h) movable objects, including -</p> <p>(i) objects recovered from the soil or waters of South Africa including</p>

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

	<p>archaeological and palaeontological objects and material, meteorites and rare geological specimens;</p> <p>(ii) ethnographic art and objects;</p> <p>(iii) military objects;</p> <p>(iv) objects of decorative art;</p> <p>(v) objects of fine art;</p> <p>(vi) objects of scientific or technological interest;</p>
<p>South African Heritage Resources Agency</p>	<p>2 (xvi) "heritage resource" means any place or object of cultural significance;</p>
<p>Amafa KZN Heritage</p>	<p>"object" means any movable property of cultural significance which may be protected in terms of any provisions of this Act, including -</p> <p>(a) any archaeological artefact;</p> <p>(b) palaeontological and rare geological specimens;</p> <p>(c) meteorites;</p> <p>(d) other objects referred to in definition (h) under heritage resources;</p>
<p>South African Heritage Resources Act</p>	<p>2</p> <p>(xxix) "object" means any movable property of cultural significance which may be protected in terms of any provisions of this Act, including—</p> <p>(a) any archaeological artefact;</p> <p>(b) palaeontological and rare geological specimens;</p> <p>(c) meteorites; and</p> <p>(d) other objects referred to in section 3; (xvii)</p> <p>(xxi) "living heritage" means the intangible aspects of inherited culture, and may include—</p> <p>(a) cultural tradition;</p> <p>(b) oral history;</p> <p>(c) performance;</p> <p>(d) ritual;</p> <p>(e) popular memory;</p> <p>(f) skills and techniques;</p> <p>(g) indigenous knowledge systems; and</p> <p>(h) the holistic approach to nature, society and social relationships;</p> <p>(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings; and</p> <p>(viii) any other prescribed categories, but excluding any object made by a living person;</p> <p>i. battlefields;</p> <p>j. traditional building techniques;</p> <p>"heritage site" means any place protected under this Act;</p> <p>"improvement" in relation to heritage resources, includes the repair, restoration and rehabilitation of places protected under this Act;</p> <p>"land" includes land covered by water and the airspace above land;</p>

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

1. INTRODUCTION

1.1 Project Background

The following report is focused on the discussion and provision of guidelines with regard to the protection of Heritage Resources identified during a site orientation and reconnaissance survey along possible routes identified by Eskom for the development power line servitudes. The objective of this report is to display the sensitive areas comparatively to three alternative servitudes. The identified Heritage Resources vary between Stone Age Sites, Iron Age Sites, Rock Art Sites, Graves (Plate 1) and historical areas of significance (Volksrust Memorial Plate 5). These historical sites are referred to as cultural landscapes and are of vital importance in a South African historical context.

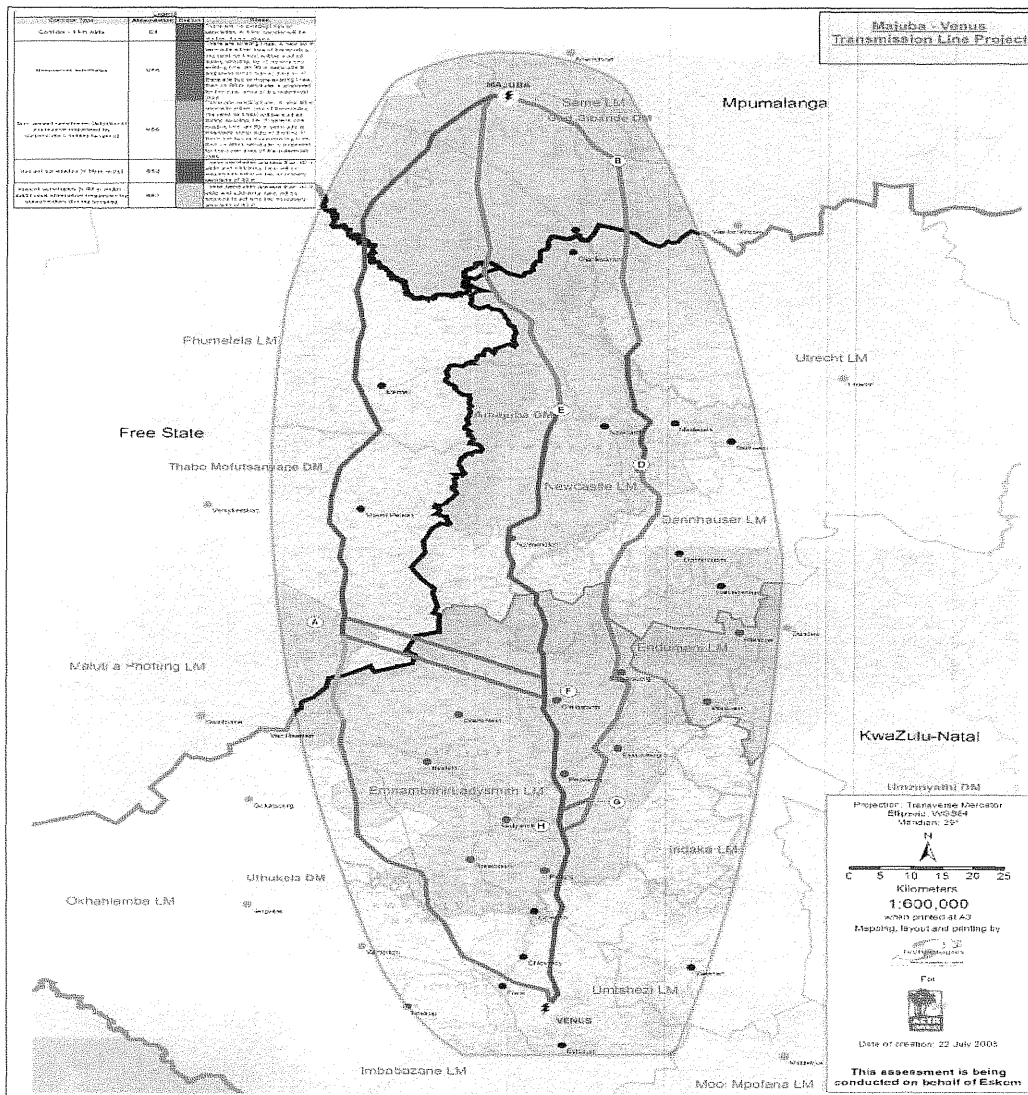


Plate 1: Map of Area

1.1.1 What are Cultural Landscapes?

Cultural landscapes can vary between large environmental areas to a small piece of land or a garden. Cultural landscapes include various features namely the shape of the land, soils and vegetation. The geography, which includes the different soils, the structure of the land and the vegetation of the area, are an approach to provide a structure to explain the meaning of cultural landscapes. The question is where does the human component fit in to the description of Cultural Landscapes. Humans divide the land according their needs and the outcome is the change in patterns of settlement, the type of land use and typical structures used. All these features form a complete circle of human occupation and activities. These activities display the cultural needs and world view in a society. These activities can change over time.

1.1.2 How does one identify a Cultural Landscape?

The identification of cultural landscapes are part of identifying the different types of landscapes that exist. Cultural landscapes can be divided into Historical Designed Landscapes, for instance to display a historic person or time period. Ethnographic landscapes are created by societies and these relate to sacred rivers or caves. Historical vernacular landscape is an illustration of people's worldviews over time, for instance mining districts.

1.1.3 How does one protect Cultural Landscapes?

Cultural landscapes must be protected within the context of the environment. If the landscape is within a protected heritage landmark area, it must be protected as a heritage landmark site. If a cultural landscape is part of visual landscape, it must be protected within the aesthetic value of the landscape and how it is perceived through the cultural world views from the human societies in the areas.

1.1.4 How does one protect Cultural Landscapes in the Project Context?

Buffer Zone areas are required at sensitive areas to prevent the commencement of development activities as these may destroy the Heritage Resources mentioned above. A Management Plan is thus necessary to facilitate and guide those activities allowed at these sites. The appointment of a Heritage Resources Site Officer is also necessary.

The following chapters will provide information with regard to the scope of work, the methodology, legislation, map of the area, GPS co-ordinates identified and recommendations to be followed during the development process.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

An appendix is provided with background information discussing important Anglo-Boer War events.

1.2 Scope of work

Eskom's transmission network supplying electricity to the KwaZulu-Natal Midlands and Southern KwaZulu-Natal requires strengthening to address the needs of the growing population and thus the increase in demand for electricity. As a result, a number of new transmission lines have been proposed and these will be linked to the generating facilities in the Mpumalanga Province. A Phase 1 Heritage Impact Assessment (HIA) associated with the Majuba-Venus 765 KV Transmission line, turn in at the Majuba Sub-Station, extension of the Majuba Sub-Station, turn in at the Venus Sub-Station and extension of the Venus Sub-Station was undertaken. The Phase 1 HIA included a reconnaissance survey of the footprint of the three alternatives that were identified by Eskom (Plate 1).

1.3 Methodology

A site survey was necessary in order to provide insight into the type of environment, location of the site, the surrounding activities and the possible social problems that may occur if the proposed transmission line project is undertaken:

- A project orientation survey was undertaken at a desktop level to better understand the nature of the activity and the extent of the development proposal.
- Consultation provided copies of the technical reports that stipulated the proposed construction activities as well as the co-ordinates of the proposed development line.
- Integration specialists meetings and site orientation were held from the 25th to 28th of August 2008 (Plate 1 & Plate 7).
- A reconnaissance site investigation was undertaken during the months of October and November 2008. The investigation required a detailed reconnaissance foot survey by a qualified heritage practitioner. The Heritage Resources to be impacted upon by the proposed transmission lines and related construction activities were assessed. The foot survey carried out at strategic points also aided in determining if any heritage objects were located at the surface level. The actual GPS co-ordinates for the proposed transmission line locations were determined. Areas that could yield information regarding grave sites were closely inspected. A desktop investigation into the history of the study areas, including an internet search and consultation with relevant authorities, was undertaken (Plate 7).
- The compilation of the report and the determination of a way forward.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

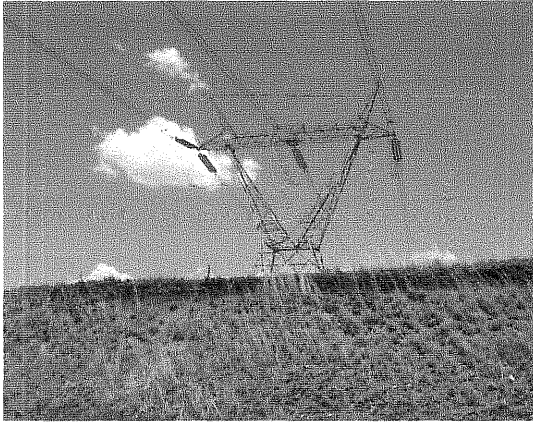


Plate 2: Existing Power Line

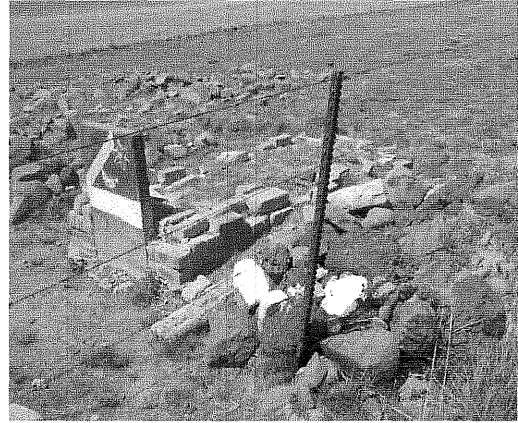


Plate 3: Grave Site



Plate 4: Pepworth Station



Plate 5: Volksrust Memorial

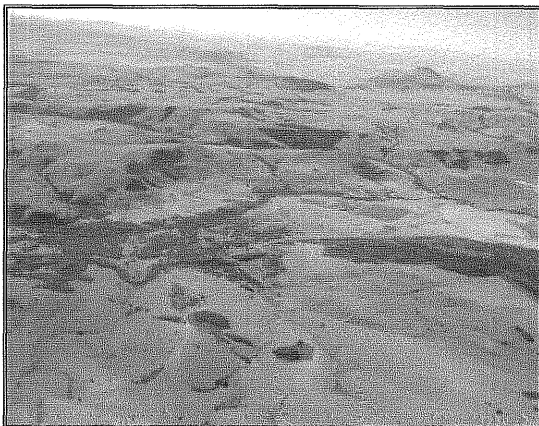


Plate 6: Site orientation by Helicopter

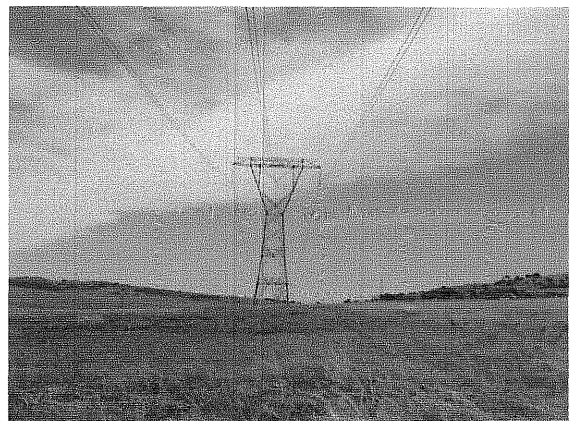


Plate 7: Site Assessment by foot

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION



Plate 8: Elandslaagte Battlefield Site



Plate 9: Amajuba Power Station



Plate 10: Site of the Battle of Schuinshoogte

2. RELEVANT LEGISLATION

2.1 National and Provincial Legislation

According to current national and provincial legislation, Heritage Resources located within the KwaZulu-Natal, Free State and Mpumalanga Provinces are protected in terms of the South African Heritage Resources Act (No. 25 of 1999). According to SAHRA, the following activity triggers the need for an Archaeological Impact Assessment:-

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as:

(a) *"the construction of a road, wall, **powerline**, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length..."* must provide the Heritage Agency with an application document.

Similarly, the KwaZulu-Natal Heritage Act (No. 10 of 1997), also states that:-

27. (1a) *"construction of a road, wall, **powerline**, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length..."* triggers the need for an Archaeological Impact Assessment and therefore the project applicant must provide the Heritage Agency with an application document.

Thus, a Heritage Impact Assessment has to be undertaken and a Report in accordance with Subsection 27 (2) (a) is to be provided. The Report is to include:-

- a) the identification and mapping of all heritage resources in the area affected;
- b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in regulations;
- c) an assessment of the impact development on such heritage resources;
- d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- f) whether heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- g) plans for mitigation of any adverse effects during and after completion of the proposed development.

Following the investigations and the submission of the Heritage Impact Assessment Report, the Council shall, after consultation with the project proponent, decide:-

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

- a) whether or not the development may proceed;
- b) whether any limitations or conditions are to be applied to the development;
- c) which general protective measures in terms of the Act apply, and what formal protective measures may be applied to such heritage resources;
- d) whether compensatory action shall be required in respect of any heritage resources being damaged or destroyed as a result of the development; and
- e) whether the appointment of specialists is necessary as a condition of approval of the proposal.

Note: The Council shall not make any decision under subsection 27 (4) above with respect to any development which impacts on a Heritage Resource protected at a national level unless it has first consulted the national heritage conservation agency.

Any decisions made by the Council may be appealed in accordance with procedures described by the Act.

Subject to the findings of the Heritage Impact Assessment Report, certain activities may require a permit. The permitting procedure will be undertaken if necessary, and the permit will stipulate the terms and conditions associated with the activity.

2.2 National Environmental Management Act (107 of 1998)

In addition to the Heritage Act, Heritage Assessments often request for environmental authorisation procedures associated with listed activities in terms of the National Environmental Management Act (No. 107 of 1998) (NEMA).

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

3. HERITAGE RESOURCES IDENTIFIED

Table 3.1 provides a comprehensive list of the Heritage Resources identified, site descriptions and co-ordinates in which the Heritage Resources were located.

Table 1: Heritage Resources Identified

Ref.	Place Name	South	East	Site Description	Heritage Resource
1	Wakkerstroom Area	27° 21'40.2"	29°57'42.8"	Cultivated Area	Anglo-Boer War events
2	Laingsnek Battlefields Route	27° 21'20.9"	29°55'24.6"	Cultivated Land	Anglo-Boer War events
3	Allemansnek(Versamelberge)	27° 22'21.2"	29°44'06.1"	Cultivated Land	Anglo-Boer War events
5	Witkoppies	27° 13'37.9"	29°43'18.5"	Cultivated Areas	Graves
6	Odendaalsrust, Kleinfonten			Farming Areas	Stone Walling; Structures
7	Majuba (Plate 9)	27° 13'37.9"	29°43'18.5"	Farming Areas	Traditional Graves in the close vicinity of Amajuba Power Station
8	Volksrust, Majuba, Amersfoort	27° 09'12.9"	29°52'42.2"	Cattle Farming Areas; Iron Age settlements	Iron Age settlements
9	Normandien	27° 52'08.8"	29° 49'29.5"	Farm Lands	Iron age and Stone Age Areas
10	Leeukop, Holkrans, Ncande Falls	27° 57'42.4"	29° 47'01.4"	Farm Lands	Stone Walling Rock Art at Ncande Falls Stone Age Sites
11	Normandien Pass	27°59'22.3"	29° 46'34.3"	Farm Areas; In close vicinity of Mountains	Cattle Farming; Cultivated Lands; Typical Stone Age and Rock Art Areas
12	Elandskop	28° 03'54.9"	29° 46'51.0"	Farm Areas; In close vicinity of Mountains	Cattle Farming; Cultivated Lands; Typical Stone Age and Rock Art Areas
13	Dassiepoort	28° 07'20.0"	29° 49'28.6"	Close to Mountains, Close to Rivers	Iron Age; Stone Age, Graves
14	Biggarsberg	28° 15'18.36"	29° 58'08.76"	Farm Lands	Boer Campsites
15	Chelmsford	27° 59'50.7"	29° 58'04"	Next to Chelmsford Dam Farms Lands Cross N11	Stone Walling
16	Ingagané Substation	27° 50'48.3"	29° 59'08.7"	Rural	Graves
17	Pepworth,	28° 28'27.1"	29° 51'30.1"	N11 to R602	Stone Walling; Historical Sites; Fortifications
18	Collings Pass	28° 22'24.3"	29° 56'28.7"	Corridor link between central and	Stone Walling; Living Heritage

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

				western line	
19	Creighforth	28° 17'58.4"	29° 50'25.6"	Farm Areas	Stone Walling
20	Meyersrust	28° 15'52.2"	29° 47'43.1"	Farming Areas	Stone Walling
21	Candeleigh	28° 13'55.7"	29° 43'41.0"	Pivot	Disturbed
23	Wilge River	28° 08'53.8"	29° 35'10.9"	Farming Areas	Stone Age
24	Collings Pass	28° 07'48.2"	29° 32'40.9"	Farming Areas	Stone Walling
25	Collings Pass	28° 07'26.1"	29° 32'18.0"	Farming Areas	Structure (Historical) Grave
26	Collings Pass	28° 06'49.5"	29° 32'29.1"	Farming Areas	Graves
27	Schuinshoogte (Plate 10)	27° 36'57.0"	29° 52'39.9"	Declared Heritage Resources Battlefield Site	Memorial and Graves
28	Collings Pass	28° 06'02.1"	29° 30'19.3"	Farming Areas	Structures (Historical)
29	Collings Pass	28° 05'34.1"	29° 30'05.6"	Farming Areas	Graves
30	Collings Pass	28° 05'20.1"	29° 30'01.7"	Farming Areas	Graves Structures (Historical)
31	Tandjiesberg	28° 08'27.0"	29° 18'53.1"	Farming Areas	Stone Walling
32	De Beers Pass	28° 17'54.5"	29° 28'45.5"	Farming Areas	Stone Walling; Structures (Historical)
33	De Beers Pass	28° 21'26.9"	29° 33'56.8"	Farming Areas	Stone Walling
34	Braamhoek	28° 23'44.3"	29° 37'13.2"	Farming Areas	Stone Walling
35	Pieters Hill, Harts Hill	28° 39'52.84"	29° 50'15.55"	Farming Areas	Battlefield Site
36	Mount Christo,	28° 43'02.36"	29° 51'47.04"	Farming Areas	Battlefield Site
37	Colenso	28° 44'01.58"	29° 51'01.45"	Farming Areas	Battlefield Site
38	Bloukrans	28° 51'05.11"	29° 51'01.45"	Farming Areas	Battlefield Site
39	Wondergeluk	28° 54'11.53"	29° 53'46.47"	Farming Areas	Battlefield Site
40	Kranskloof	28° 36'48.10"	29° 37'03.33"	Farming Areas	Anglo-Boer Historical Events
41	Vaalkrans	28° 39'48.31"	29° 34'30.81"	Farming Areas	Battlefield Site
42	Mount Elizabeth	28° 54'11.53"	29° 53'46.47"	Farming Areas	Winston Churchill 1899 Memorial
43	Doomkop	28° 52'39.19"	29° 44'36.16"	Farming Areas	Anglo-Boer War Battlefield site
44	Frere	28° 52'59.52"	29° 45'59.13"	Farming Areas	Churchill Memorial
45	Rietspruit	28° 29'52.15"	29° 50'02.40"	Farming Areas	Anglo-Boer War Battlefield Site
46	Lombardskop/Gun Hill	28° 33'00.72"	29° 51'00.83"	Farming Areas	Anglo-Boer War Site
47	Bell's Koppie	28° 31'00.67"	29° 47'00.83"	Vacant	Anglo-Boer War
48	Elandslaagte (Plate 8)	28° 33'00.72"	29° 51'00.83"	Farming Areas	Anglo-Boer War Battlefield Site
49	South of uThukela	28° 46'01.3"	29° 42'04.9"	Farming Areas	Fortifications
50	South of uThukela	28° 46'36.6"	29° 40'57.9"	Farming	Fortifications

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

				Areas	
51	South of uThukela	28° 45'41.1"	29° 42'53.4"	Farming Areas	Fortifications
52	South of uThukela	28° 46'13.0"	29° 41'52.3"	Farming Areas	Fortifications
53	Ladysmith Surroundings	28° 37'02.57"	29° 48'54.31"	Development Areas	Anglo-Boer War Sites
54	Ladysmith and Surroundings	28° 35'25.52"	29° 46'36.28"	Development Areas	Anglo-Boer War Sites
55	Rietfontein	28° 29'52.15"	29° 50'02.40"	Farm Area	Anglo-Boer War site
56	Kleinfontein	28° 26'35.83"	29° 56'36.34"	Farm Area	Anglo-Boer War site
57	Gordon Hill	28° 33'01.95"	29° 46'01.70"	Vacant Area	Anglo-Boer War Site
58	Observation Hill	28° 31'59.62"	29° 45'58.60"	Vacant Area	Anglo-Boer War Site
59	Surprise Hill	28° 30'01.38"	29° 46'00.20"	Vacant Area	Anglo-Boer War Site
60	Vaalkop	28° 31'01.09"	29° 50'59.75"	Vacant Area	Anglo-Boer War Site
61	Flag Hill	28° 32'00.90"	29° 49'59.94"	Vacant Area	Anglo-Boer War Site
62	Red Hill	28° 34'00.90"	29° 46'00.75"	Developed partly	Anglo-Boer War Site
63	Mounted Infantry Hill	28° 35'59.78"	29° 45'01.84"	Vacant Area	Anglo-Boer War Site
64	Middle Hill	28° 37'00.34"	29° 45'01.15"	Vacant Area	Anglo-Boer War Site
65	Umbrella Hill	28° 34'01.64"	29° 51'00.63"	Vacant Area	Anglo-Boer War Site
66	Black Hill	28° 33'00.66"	29° 53'00.41"	Vacant Area	Anglo-Boer War Site
67	Thornhill's Kop	28° 31'01.30"	29° 45'02.52"	Vacant Area	Anglo-Boer War Site

Green: Eastern Line	Blue: Central Line	Red: Western Line	Yellow: Corridor combining the central and western line
Total amount of Green Heritage Resources: 8	Total amount of Blue Heritage Resources: 38	Total amount of Red Heritage Resources: 5	Total amount of Yellow Heritage Resources: 14

Note: It must be emphasized that Heritage Resources are not regular and can not be predicted by providing an exact figure of occurrences. It may happen that extended Heritage Resources are identified during development processes.

4. RECOMMENDATIONS AND WAY FORWARD

4.1 Heritage Resources Identified

a) Stone Age Sites

i. Sensitivity to Heritage Objects (i.e. river and mountain areas)

Areas located in close proximity to mountains and rivers, for example the Dassiepoort area, are sensitive to the occurrence of Stone Age sites. These Stone Age sites may include sensitive deposits and stone tools. The sites are not allowed to be disturbed or destroyed in any way.

ii. Heritage Management Plan

The compilation of a Heritage Management Plan is proposed. This management plan will provide guidelines and conditions in terms of what is expected from the Heritage Field Officer and Eskom personnel who are operating in close proximity to the Stone Age Heritage Resources areas. The Heritage Management Plan is proposed to include guidelines in terms of buffer zone areas, determine the activities allowed in the vicinity of sensitive areas and to ensure that the stipulated conditions are adhered to.

iii. Monitoring

The services of a Heritage Resource Site Officer is necessary to monitor the proposed activity. The Heritage Resource Site Officer will be responsible for the monitoring the identified sensitive areas and providing assistance when objects of cultural and archaeological value are discovered. The Heritage Resources Officer must be able to identify areas of sensitivity as per the Heritage Management Plan and understand the methodology in the protection of Heritage Resources.

b) Rock Art Sites

i. Buffer Zone

The occurrence of Rock Art sites located in close proximity to mountainous as well as farm areas identified must not be disturbed or impacted upon in any way. A 50 metre buffer zone and a strict management plan to prevent access to these areas is required.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

ii. Heritage Management Plan

A management plan compiled by a Heritage Specialist needs to be set in place prior to commencement of the proposed activity. The proposed management plan should be approved by the relevant authorities prior to implementation. A Heritage Management Plan will assist in the regulation of activities taking place in close proximity to sensitive areas and will aid in preventing the occurrence of unnecessary destructions.

iii. Monitoring

A Heritage Resources Field Officer is proposed in order to ensure that stipulated conditions as per the Management Plan are adhered to. Conditions stipulated by the Heritage Management Plan and requirements made by the Rock Art Officer must be explained to the Eskom Personnel and a strict monitoring programme is required during the earthmoving activities.

c) Iron Age Sites

i. Bufferzone

Various stone walled areas relating to the Iron Age time period, along with recent living heritage resources were identified. It is critical that sites are managed carefully and access controlled as stipulated by the Heritage Management Plan. The stone walled areas are extremely sensitive and a buffer zone is required in order to prevent unnecessary damage to the structures that exist at the identified areas (Table 1). No stone walled areas are allowed to be interfered with without the approval of the Heritage Resources Agencies. A twenty metre buffer zone is proposed between the development activities and the Heritage Resources identified.

ii. Heritage Management Plan

A Heritage Management Plan is to be compiled by a Heritage Specialist and approved by the relevant Heritage Agencies. The Heritage Management Plan compiled by an archaeologist must stipulate the control that is required at the Heritage Resources sites and activities that may possibly have a negative impact on identified resources.

iii. Monitoring

A Heritage Resource Site Officer is proposed to monitor the development activities and prevent any disturbances from taking place.

d) Historical Archaeological Resources, Battlefield Sites, Memorials

i. Buffer Zone

The identified heritage resource areas are highly sensitive in terms of battlefield sites, memorials and related cultural landscape sites. It is important that these sites are not being impacted upon in any way. If the activity commences in the vicinity of these sensitive areas, a 20 metre buffer zone extending from the Heritage Resource up to the activity area is necessary. The proposed development area is well known for various Battlefield Sites and these areas require strict control in terms of the inclusion of a Buffer Zone area.

ii) Heritage Management Plan

The inclusion and compilation of a Heritage Management Plan at the respective red flag areas are to be taken into account. A Heritage Management Plan is to be completed and approved by the Heritage Resources Agency.

iii) Monitoring

An appointment of a Heritage Control Site Officer to assist construction staff in identifying areas that are regarded as highly significant areas should be considered. This will prevent unnecessary destruction of heritage resources that can not be replaced. It is the responsibility of the Heritage Resource Site Officer to monitor the events of earthmoving activities and the identification of any heritage objects uncovered during development activities.

e) Structures

i) Bufferzone

Structures older than sixty years are protected in terms of the National and Provincial legislation (Amafa and SAHRA). Structures, such as old farm houses, old railway stations and stone walls are considered to be protected heritage resources that are not to be disturbed in any way by

development activities. Buffer Zone areas of approximately 20 metres are implemented to prevent destructive activities from taking place in close vicinity to protected resource areas.

ii) Heritage Management Plan

A Heritage Management Plan is required to monitor stipulated activities allowed in the vicinity of the Heritage Resources areas and provide guidance in terms of activities that are allowed/not allowed in the vicinity of sensitive areas. A Heritage Management Plan should include important information with regard to the negative effects of development activities on the sensitive areas.

iii) Monitoring

An appointment of a Heritage Control Site Officer to assist construction staff in identifying areas that are rated as highly significant areas should be considered. This will aid in preventing the unnecessary destruction of heritage resources and illegal trespassing into sensitive areas. It is the responsibility of the Heritage Resource Site Officer to monitor the events of earthmoving activities and to identify any heritage objects uncovered during earthmoving activities.

4.2 Liaison with Local Communities and Historical Societies

Local communities are an asset that can be utilized when attempting to locate heritage resources and determining the sensitivity of such resources. Local communities carry in depth knowledge relating to the location and value, in terms of sacredness, attached to such resources. Thus, local communities may be able to assist with the monitoring of these sites as well.

5. PROCESSES TO BE FOLLOWED IF HERITAGE RESOURCES ARE UNCOVERED DURING EARTHMOVING ACTIVITIES

In the event of uncovering new heritage resources during the pre-construction and construction phases of the activity, it is advised that activity cease immediately and that Amafa KZN Heritage/SAHRA as well as Knight Piésold are contacted immediately. The specialist (Archaeologist) will investigate the area and determine the sensitivity of the new findings. The specialist, in-conjunction with Amafa KZN Heritage/SAHRA, will make recommendations in terms of the rescue of new heritage resources following the correct permit procedure. A monitoring process, to be undertaken by Amafa KZN Heritage/SAHRA as well as the specialist, is required. This is to ensure that the permit conditions stipulated are correctly followed. The permit conditions are of importance because it prevents any further damage to new heritage resources and guides the developer in avoiding any further disturbances should there be any further heritage resources located in the project area.

6. GUIDELINES ON THE GENERAL CONDITIONS

The following conditions should be included in the approval and in the Record of Decision (ROD) provided by the Department of Agriculture and Environmental Affairs:

- a) In the event of the discovery of graves during construction activities, the South African Heritage Resources Agency/Amafa must be contacted immediately. The activity must cease until further decision making is undertaken and finalised.
- b) In the event of the discovery of heritage objects, Amafa or the South African Heritage Resources Agency must be contacted and construction on the activity must cease until further decision making is undertaken and finalised.
- c) In the event of uncovering Rock Art sites, Amafa or the South African Heritage Resources Agency must be contacted and construction on the activity must cease until further decision making is undertaken and finalised.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

7. GRAVE PROCEDURES

Graves identified during surveys must not be disturbed in any way. If the graves are situated within the planned route, the archaeologist and Heritage Agency must be contacted immediately.

If graves are uncovered during earthmoving activities, development must cease immediately and the Archaeologist/ Heritage Agency must be notified of these findings immediately.

8. CONCLUSION

The proposed Eskom Transmission Power Line Project stretches into sensitive Heritage Resources areas that thus strict control and management from all parties involved, is necessary. Open and continuous communication between Eskom, the Archaeologist and the Heritage Agencies is of vital importance and this will ensure a successful way forward.

9. RESOURCES

- **Literature**

1. Gillings Ken, Battles of KwaZulu-Natal, 2008
2. Kaighin Brian, A Diary of the Siege of Ladysmith, 1999
3. Smit CA, Wakkerstroom (1859-2009)

- **Internet sources**

1. Database University of Pretoria
www.warthog.co.za/dedt/tourism/battlefields/conflict/bloukrans.htm

- **Personal Communications**

1. Amafa KZN Heritage
2. Ladysmith Siege Museum
3. South African Heritage Resources Agency

- **Personal Communications not referenced in the text**

1. Hawkesbury John: Landowner: 073 505 1253
2. Horn Vincent: Historian: 036 631 0740

- **Other**

1. Database Amafa KZN Heritage
2. Database Natal Museum

APPENDIX 1

Important Historical Events related to identified Heritage Resources Areas

1. Helpmekaar, Biggarsberg and Wasbank (Ken Gillings, Battles of KwaZulu-Natal)

After the siege of Ladysmith Gen. Sir Redvers Buller remained in the town of Ladysmith without any sign to attack the Boers located at KwaZulu-Natal. The Boers decided to move to the **Biggars Berg** area and set up camp. In the beginning of March, the British occupied **Elandslaagte** and they reorganised their divisions. On May 1900 the British moved out of Ladysmith and created an impression that he is advancing to **Glencoe** and **Mcupe Pass**.

Buller's force stopped at **Wasbank River** that was in line of **Biggarsberg** via the **Van Tonders Nek Pass**. Gen. Lucas Meyer thought that the pass is the most likely to be occupied by the British and he concentrated his guns and bulk of his Commandos at the pass areas.

Buller decided to move to **Vermaakskraal** that is situated below **Helpmekaar**. Buller decided to send troops away to be located at the Uithoek Valley. The British and Boers decided to move to the southernmost hills. The British reached the area before the Boers could and the Boers decided on having a meeting to make further decisions. The Boers decided to abandon their **Biggarsberg** camp sites.

The British(Dundonald's Mountain Brigade) troops struggled to pass the **Helpmekaar** area as the Boers started veld fires at the area. The Boer rearguard consisting of Col. Lynch's Irish Brigade (Battlefields of KZN) held up the British at Swartwater farm as well as **Blesboklaagte**. They joined the main body and took up positions at **Laingsnek**.

15 May 1900 Buller entered **Dundee**. Hildyard ascended the **Biggarsberg** via **Wesselsnek** and **Wasbank**. On the 16th Bethune had to pursue Boers who were making their way to **Nqutu**. Bethune set off for Vryheid after no threat was identified. On the 20th the Battle of **Scheepersnek** took place and a squadron under Capt. Goff was ambushed.

Lyttelton moved to the Sunday's river on the 23rd of May 1900 and advanced to **Newcastle**. Buller ordered Hilyard to repair the railway at Newcastle. Buller received orders from Marshall Lord Roberts to cross the Drakensberg and move to the Eastern Transvaal.

Hilyard occupied Van Wyk's kop on the 6th of June 1900. 12 Pounder Naval Guns were placed at the area. The mounted troops were tasked to make a flanking movement at **Spitskop**.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

The Boers occupied the top of the escarpment south of **Botha's Pass**. They placed various field guns as well as a Pom-Pom along a front. The guns opened fire on the 8th of June 1900. The fire commenced at 10h00 and at 11h45 Gen. Brigade commenced his advance forming at the lower ground between **Ngogo River** and **Heuningkrans**. Botha's Pass or Ingogo Road on the Northern Side located at **Rietspruit Farm**.

The British advanced (slopes of the Drakensberg) and the Boers made no attempt to stop them. Dundonald's Mounted Brigade moved to the summit named **Quaggaspunt** where the Boer sangers were "at an angle to the rest of their line (Battlefields KZN)" that resulted in the Boers withdrawal. The resistance lasted for thirty minutes. Buller's men entered the Orange Free State.

The Boers withdrew to the **Versamelberg** range and moved to **Volksrust**. Buller advanced to Gansvlei. On the 10th and 11th of June using an infantry attack he broke through the Boers line at **Allemansnek**.

2. The Battle of uThukela Heights (Ken Gillings, Battles of KwaZulu-Natal)

Buller withdrew all his forces along the same route he originally followed earlier and decided to return to **Chieveley**. The relief of Ladysmith became extremely important for Buller. The Boers strengthened their position especially after the Battle of **Colenso** took place. Two important Boer positions were occupied by the British namely **Monte Christo** and **Green Hill**. **Hlangwane** was taken and by the end of February 1900 the British had control of the south bank of the **uThukela River**.

Gen. Louis Botha arrived after the morale of the Boer soldiers dropped immensely. The British crossed the River near Fort Wylie and the Somerset Light Infantry occupied the **Colenso Koppies**. The British were pinned down by the Boers at **Grobbelaarskop**. The Boers were divided in two groups. One group were led by Botha and the other line by Lucas Meyer.

Between the **uThukela river** and the **Colenso Koppies** 15 battalions of the British and 40 guns were placed in the area. The British struggled to move forward as the conditions were muddy and very difficult to operate in.

A battle for the position of **Hart's Hill** took place. The British were subjected by intense fire from the Burghers of Rustenburg and Krugersdorp commandoes. The British decided to cease firing.

Buller decided to launch three brigades against the Boer defenders at **Hart's Hill**, **Railway Hill** and **Pieters Hill**. Barton's Brigade moved to **Pieters Ridge**. Kitchener's brigade attacked Railway hill.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

Pieters ridge and Hart's Hill were taken. The Boers withdrew to **Mbulwana** in the North. Dundonalds mounted brigade moved to the **koppies of Ladysmith**. Two squadrons were formed that included the Imperial Light Horse and the Natal Carbineers. On 28th of February 1900 the British entered Ladysmith via the **Klipriver** area.

3. Vaalkrans (Ken Gillings, Battles of KwaZulu-Natal)

Buller decided to focus on **Vaalkrans** as he believed that if you could place artillery on the hill he would be able to enter the Boer defences. Buller arranged the attack to take place on the 5th of February 1900. At **Swartkop** naval guns, 15 pounder field guns and a mountain battery were placed. A pontoon bridge was constructed. Other guns were placed at **Mount. Alice**.

The Boers realized that they are to be attacked by the British and called for reinforcements. A Long Tom gun was sent from Telegraph Hill to **Doornkop**. Additional guns were placed at **Kranskloof**. On the 5th of January 1900 the battle began and the British moved down to the pontoon bridge and came under fire of the Boers located at the mealie fields. The British crossed the river and mealie fields and commenced to advance up the eastern side of the Hill. The Durham Light Infantry fixed bayonets and occupied the southern slopes of **Vaalkrans**. The British forced the Boers back into the valley. Buller decided to hold on to **Vaalkrans** and transferred No. 2 pontoon to the base of **Vaalkrans**. Gen. Louis Botha arrived and decided on placing the British under fire.

The King's Royal Rifles attacked and managed to regain the wall at **Vaalkrans**. They were replaced by the Devonshire Regiment and they were replaced by the Connaught Rangers from Gen. Hilyards Brigade as well.

Another bombardment commenced at 7 February 1900. Buller received orders from Field Marshall Lord Roberts to concentrate on the siege of Ladysmith and called off the attack at **Vaalkrans**.

4. The Battle of Colenso (Ken Gillings, Battles of KwaZulu-Natal)

The Boers bypassed the Town of Ladysmith and forwarded to Estcourt via the Colenso route. On 15 November 1899 they captured an armoured train that was on its way to Chieveley.

Winston Churchill was captured and sent to Pretoria. The Boers took up positions at the area between Mooi River and Estcourt. They were attacked by the British at Willow Grange. Gen. Piet Joubert decided to occupy the high ground at **uThukela River**.

The command was taken over by Gen. Botha and he decided on preparing trenches and dummy gun positions at the north bank of the river. Buller commenced on shelling the north bank and preparations were made to attack the Boer positions. Hart's 5th Irish Brigade moved towards the uThukela and was led in the loop of the river. Buller intended that the Brigade cross the river upstream of the

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

confluence of the uThukela River and **Doornkopspruit**. The maps the British made were inaccurate and misled the troops in the wrong directions.

The Irish Brigade marched directly into the Boers territory and the Irish Brigade was under fire from three sites.

5. The Winston Churchill Capture (Ken Gillings, Battles of KwaZulu-Natal)

The train comprising of the Royal Navy, Royal Dublin Fusiliers and Durban Light Infantry with Winston Churchill on board steamed out of Estcourt on 15 November 1899. The train reached the town of Frere and no Boer presence was reported. The train travelled to Chieveley and a hundred Boers were noted in the area. Haldane reported this matter to Long and he ordered that the train returns Frere. The Boers opened fire at the areas where the train passed their positions. The Boers placed some rocks on the railway line and the leading trucks derailed. After some action the Locomotive moved forward again and Haldane ordered that the infantry should take shelter alongside the moving locomotive. The Boers increased their firing and the driver of the locomotive increased speed. The Boers captured Haldane and Churchill surrendered to Field Cornet Sarel Oosthuizen of Krugersdorp. Churchill were held at the Staatsmodelskool, but escaped by climbing the surrounding wall. He followed the railway line to Delgoa Bay and jumped upon another train. Churchill was given refuge aboard a steamer and returned to Durban on 23 December 1899.

6. The Siege of Ladysmith (2nd November 1899 – 28th of February 1900) (Ken Gillings, Battles of KwaZulu-Natal)

Gen. George White decided to launch an attack on the Boer Positions on 30 October 1899. The attack was arranged to commence three sessions namely the first group under Col. Carlton was tasked to attack the Free Stater's position at Tchrengula and to occupy Nicholson's Neck. The second under Col. Ian Hamilton had to take up a position at Limit Hill and the third Col. Grimwood was tasked to attack the Boers at Long Hill. After that the British had to cross the Pepworth, Rietfontein and Tinta Nyoni areas.

As per historical records have Carlton's forces mules stampeded that denied him of artillery support. Grimwood's forces were found at Farquhar's Farm and Hamilton's force could not be used. White decided to wait on Buller before the proceed of further attacks.

Defences were split in four namely: A-Section from Devon Post to Cove Redoubt(that included Observation Hill) under Col. Knox, B-Section from Observation Hill to Range Post under Col. Howard, C-Section from Range Post, across Wagon Hill to Caesar's Camp under Hamilton and D-Section from the base of Caesar's Camp across the low plain of the Klip River, commanded by Col. Royston.

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

2nd November 1899 Ladysmith was besieged and the first shell of a Long Tom was fired. On the night of the 7th or 8th of November 1899 a force consisting of Imperial Light Horse and the Natal Volunteers raided the Boer position at Gun Hill close to Lombardskop.

On the 9th of November 1899 the Pretoria Commando attacked Observation Hill from the bed of the Bell Spruit. On the 11th or 12th of November 1899 the Natal Volunteers tried to attack the Boers at Surprise Hill.

Mid December 1899 the siege started to take a large toll and created serious food shortages. On the 6th of January 1900 a combined effort was made by the Transvalers and Free Staters to attack Wagon Hill and Caesar's Camp. Hamilton asked for reinforcements and the Gordon Highlander's moved forward under their commander Dick-Cunyngham.

The Transvalers under Cmdts. Spruyt and Hattingh secured the south-eastern slope of Ceasar's Camp. The remainder fired at the Manchester Regiment. Maj. Goulburn attacked from the summit of Caesar's Camp.

At midday the Free Staters tried to dislodge the Wagon Point defenders and a battle was fought between Lt. Digby Jones (Royal Engineers) and Field Cornets Japie de Villiers and Zach de Jager.

The British cleared the Boers from Ceaser's Camp as well as Wagon Hill. On 28 February 1900 Gen. Buller broke through the Boer's line along the uThukela River and Ladysmith was relieved after a besiege of 118 days.

On the 19th of October 1899 did the Boers advanced to Elandslaagte and captured a train that carried cargo goods. Gen. White was informed with regard to the arrival of the Boers and he requested Gen. John French to confirm the situation. French inspected the area as far as Modderspruit and returned to Ladysmith to report on the Boer situation. White ordered French to clear Elandslaagte of the Boers and protect the railway lines. The Natal Field Artillery opened fire on the Boer camp. The Boers returned fire and French withdrew his troops requesting White for reinforcements. French sent out his cavalry and a fierce battle commenced between the British and Boers. The Boers returned to their original positions and space was open for the British troops to enter the Elandslaagte area. The Battalions moved to the high ground and the artillery provided fire. The Boers used their rifles and kept up the fire but it had minimal effect on the British.

The British right flank came under heavy attack from the Boers. The British were obstructed by a barbed wire fence. Officers tried to cut gaps in the wire to enable them to move forward. The Manchesters fell and they were replaced by the Gordon Highlanders. The two Batteries and the infantry moved forward. The flanks moved forward and crossed the crest entering the Boer positions. Some of the Boers showed the white flag, but withdrew it again that created confusion. The Boers

ESKOM TRANSMISSION

PROPOSED MAJUBA-VENUS 765 KV TRANSMISSION LINE, TURN-IN AT THE MAJUBA SUB-STATION, TURN-IN AT THE VENUS SUB-STATION, EXPANSION OF THE MAJUBA SUB-STATION, AND EXPANSION OF THE VENUS SUB-STATION

commenced with fire again and Hamilton ordered his troops to move forward. The British took control of the area.

The British cavalry observed the Boer retreat and hurried into the fleeing Boers. The Boers reoccupied Elandslaagte two days later.

7. The Battle of Amajuba

The Boers established two different republics namely the South African Republic(Transvaal) and the Orange Free State. During 1877 the British took control of the Republic and send troops to Potchefstroom. On 16 December 1880 the Boers arranged a meeting at Paardekraal (Krugersdorp) and decided on to declare themselves as independent. British Troops were despatched to various Towns at Transvaal and a battle occurred at Bronkhortspruit. In 1880 the High Commissioner of Natal Sir Garnet Wolseley replaced Gen. Sir George Pomeroy Colley in July and established a camp at Mt. Prospect. In 1881 the British troops were defeated at Laingsnek and again at Schuinshoogte (Plate 10). On the 26th of February 1881 Colley decided to move to Majuba Hill that he experienced as of importance to Gen. Piet Joubert and his troops. The men positioned themselves at the summit. The British waited for the morning before they challenged the Boers that camped below.

Joubert told his men to remove the British from the top and Smit gathered his men at the foot of Majuba. The Boers gained possession of the hilltop and the occupants of Gordon's Knoll were removed. The British were forced off the north-west crest and started to retreat to their secondary line of defence. The Boer onslaught was too great for the British and they fled jumping over the sides of the mountain.

8. The Massacre at Bloukrans 1838

After killing Retief's party at Dingane's Settlement, the impi's decided on moving into the valley areas. They Zulu Regiments quietly moved up the Bushman's River toward the camp sites of the Voortrekkers. They commenced with attack and many people lost their lives.