



Archaetnos Culture & Cultural  
Resource Consultants  
BK 98 09854/23

---

**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE  
PROPOSED RELOCATION OF 3 X 400KV POWER  
LINES AT THE LANDAU 3 COLLIERY, CLOSE TO EMALAHLENI,  
MPUMALANGA PROVINCE**

For:

***SRK Consulting Engineers and Scientists  
PO Box 55291  
Northlands  
2116***

**REPORT NO.: AE01724V**

By:

***Prof. A.C. van Vollenhoven (L.AKAD.SA.)  
Accredited member of ASAPA (Accreditation number: 166)  
Accredited member of SASCH (Accreditation number: CH001)***

***15 May 2017***

Archaetnos  
P.O. Box 55  
GROENKLOOF  
0027  
Tel: 083 291 6104  
Fax: 086 520 4173  
E-mail: antonv@archaetnos.co.za

Member: AC van Vollenhoven BA, BA (Hons), DTO, NDM, MA (Archaeology) [UP], MA (Culture History) [US], DPhil (Archaeology) [UP], Man Dip [TUT], D Phil (History) [US]

## **SUBMISSION OF REPORT**

**Please note that the South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report.**

**It is the client's responsibility to do the submission via the SAHRIS System on the SAHRA website.**

**Clients are advised not to proceed with any action before receiving the necessary comments from SAHRA.**

## **DISCLAIMER**

**Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.**

**Should it be necessary to visit a site again as a result of the above mentioned, an additional appointment is required.**

**Reasonable editing of the report will be done upon request by the client if received within 60 days of the report date. However editing will only be done once and clients are therefore requested to send all possible changes in one request. Any format changes or changes requested due to insufficient or faulty information provided to Archaetnos on appointment, will only be done by additional appointment.**

**Any changes to the scope of a project will require an additional appointment.**

**©Copyright  
Archaetnos**

**The information contained in this report is the sole intellectual property of Archaetnos CC. It may only be used for the purposes it was commissioned for by the client.**

## EXECUTIVE SUMMARY

### Purpose:

Archaetnos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment (HIA) for the proposed Eskom 3x 400kV Relocation of Power lines Project. This is close to the Landau 3 Mine and lies towards the south and south-west of the town of eMalahleni in the Mpumalanga Province.

### Project description:

The project entails the relocation of 3 x 400kV Eskom power lines in the proximity of the Anglo Landau 3 Mine. The power lines route currently traverse AOL's Landau 1 and 2 areas immediately west of the N12 freeway, south of eMalahleni. In addition, the power lines route extends across previously mined underground bord and pillar workings of the numbers 2, 4 and 5 seams. Sinkholes have developed at Landau 1 and 2 due to historical shallow underground mining operations. Due to the formation of sinkholes the re-routing of the three 400 kV power lines is being proposed.

The proposed new power lines route intersects with the Landau 3 MRD and as a result the material needs to be removed to allow for the power lines relocation. Eskom proposes to relocate three 400 kV power lines that traverse AOL's Khwezela Colliery (formerly known as Landau Colliery and Kleinkopje Colliery) and Greenside Colliery mining right areas).

Prior to the development of the proposed projects, AOL and Eskom require environmental authorisation from the Department of Mineral Resources (DMR) and Department of Environmental Affairs (DEA) respectively. AOL appointed SRK as the independent EAP to manage and facilitate the environmental authorisation process.

The project is split into two entities namely:

- MRD reclamation (environmental authorisation application to be submitted to the DMR); and
- Power lines relocation (environmental authorisation application to be submitted to the DEA). This is a separate authorisation process of which Eskom is the applicant.

Only the relocation of the power lines forms part of this application as the MRD reclamation is handled as a separate application.

### Methodology:

The methodology for the study includes a survey of literature and a field survey. The latter was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed. The

survey was undertaken by doing a physical survey via off-road vehicle and on foot, and covered as much as possible of the area to be studied. Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage.

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the GPS. The information was added to the description in order to facilitate the identification of each locality.

#### Public consultation:

Public consultation was done as part of the heritage study. A site notice was placed close the MRD on 12 April 2017. A newspaper notices was placed in the Witbank News on Friday 14 April 2017. The public consultation period of 30 days therefore ends on 14 May. No comments related to heritage were received.

#### Findings:

During the survey no sites of cultural heritage significance were identified within the immediate project area.

#### Recommendations:

- From a heritage perspective, no further work is necessary.
- The proposed development may therefore continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Due to the density of vegetation it also is possible that some sites may only become known later on. Operating controls and monitoring should therefore be aimed at the possible unearthing of such features. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.
- In This regards the following 'Chance find Procedure' should be followed:
  1. Upon finding any archaeological or historical material all work at the affected area must cease.
  2. The area should be demarcated in order to prevent any further work there until an investigation has been completed.
  3. An archaeologist should be contacted immediately to provide advice on the matter.
  4. Should it be a minor issue, the archaeologist will decide on future action, which could include adapting the HIA or not. Depending on the nature of the find, it may include a site visit.
  5. SAHRA's APM Unit may also be notified.
  6. If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
  7. The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
  8. Work on site will only continue after removal of the archaeological/ historical material was done.

# CONTENTS

	Page
EXECUTIVE SUMMARY .....	3
CONTENTS .....	5
CURRICULUM VITAE OF SPECIALIST.....	6
DECLARATION OF INDEPENDENCE .....	7
LIST OF ACRONYMS.....	7
1. INTRODUCTION .....	8
2. PROJECT INFORMATION.....	9
3. TERMS OF REFERENCE .....	12
4. LEGISLATIVE REQUIREMENTS .....	13
5. METHODOLOGY.....	17
6. ASSUMPTIONS, GAPS, RESTRICTIONS, CONDITIONS AND LIMITATIONS.....	23
7. DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT .....	24
8. DESCRIPTION OF THE PHYSICAL ENVIRONMENT .....	24
9. RESULTS OF PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT.....	31
10.HISTORICAL CONTEXT .....	31
11.CONCLUSIONS AND RECOMMENDATIONS.....	33
12.REFERENCES .....	33
APPENDIX A – DEFENITION OF TERMS .....	35
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE .....	36
APPENDIX C – SIGNIFICANCE AND FIELD RATING .....	37
APPENDIX D – PROTECTION OF HERITAGE RESOURCES .....	39
APPENDIX E – HERITAGE MANAGEMENT IMPACT ASSESSMENT PHASES.....	40

## CURRICULUM VITAE OF SPECIALIST: PROF ANTON CARL VAN VOLLENHOVEN

### Tertiary education

- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria
- MA Archaeology 1992, University of Pretoria
- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria
- Diploma Tertiary Education 1993, University of Pretoria
- DPhil Archaeology 2001, University of Pretoria.
- MA Cultural History 1998 (cum laude), University of Stellenbosch
- Management Diploma 2007 (cum laude), Tshwane University of Technology
- DPhil History 2010, University of Stellenbosch

### Employment history

- *1988-1991*: Fort Klapperkop Military Museum - Researcher
- *1991-1999*: National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997)
- *1999-2002*: City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage.
- *2002-2007*: City of Tshwane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage.
- *August 2007* – present – Managing Director for Archaetnos Archaeologists.
- *1988-2003*: Part-time lecturer in Archaeology at the University of Pretoria and a part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.
- *2014*: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- *2015*: Appointed extraordinary professor in history at the Mafikeng Campus of the Northwest University

### Other

- Published 75 articles in scientific and popular journals on archaeology and history.
- Author and co-author of over 580 unpublished reports on cultural resources surveys and archaeological work. A list of reports can be viewed on [www.archaetnos.co.za](http://www.archaetnos.co.za)
- Published a book on the Military Fortifications of Pretoria.
- Contributed to a book on Mapungubwe.
- Delivered more than 50 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 – 2006.
- Member of the South African Academy for Science and Art.
- Accredited professional member of Association for South African Professional Archaeologists.
- Accredited professional member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2019).

ASAPA Accreditation number: 166

SASCH Accreditation number: CH001

## DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.

Signed:



Date: 15 May 2017

### LIST OF ACRONYMS:

AIA – Archaeological Impact Assessment  
CMP – Cultural Management Plan  
EAP – Environmental Assessment Practitioner  
EIA – Environmental Impact Assessment  
HIA – Heritage Impact Assessment  
PIA – Palaeontological Impact Assessment  
SAHRA –South African Heritage Resources Agency

## 1. INTRODUCTION

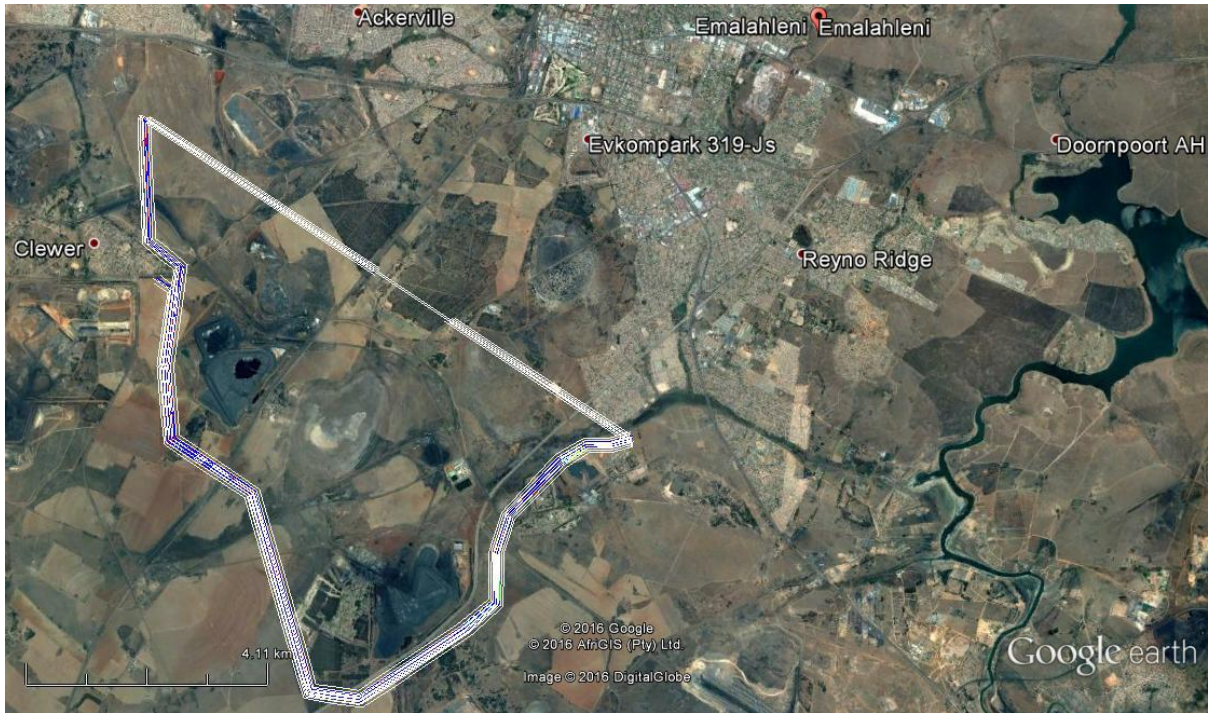
Archaetnos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment (HIA) for the proposed Eskom 3x 400KV Relocation of Power lines Project. This is close to the Landau 3 Mine and lies towards the south and south-west of the town of eMalahleni in the Mpumalanga Province (Figure 1-2).

The study forms part of a Scoping report for public comment. The client indicated the area to be surveyed. It was surveyed via foot and off-road vehicle.



**FIGURE 1: LOCATION OF EMALAHLENI IN THE MPUMALANGA PROVINCE.**





**FIGURE 2: LOCATION OF THE SITE IN RELATION TO EMALAHLENI.**

## **2. PROJECT INFORMATION**

### **2.1 LOCALITY**

The Anglo Landau 3 Mine is situated adjacent to and south of eMalahleni. This is in the Mpumalanga Province.

### **2.2 PROJECT DESCRIPTION**

The project entails the relocation of 3 x 400kV ESKOM power lines in the proximity of the Anglo Landau 3 Mine. Anglo Operations (Pty) Ltd (AOL) intends to reclaim its Landau Mine 3 mineral residue deposit (MRD) in order to provide space for Eskom to relocate three 400kV power lines. The power lines route currently traverse AOL's Landau 1 and 2 areas immediately west of the N12 freeway, south of eMalahleni.

In addition, the power lines route extends across previously mined underground bord and pillar workings of the numbers 2, 4 and 5 seams. Sinkholes have developed at Landau 1 and 2 due to historical shallow underground mining operations. Due to the formation of sinkholes the re-routing of the three 400 kV power lines is being proposed.

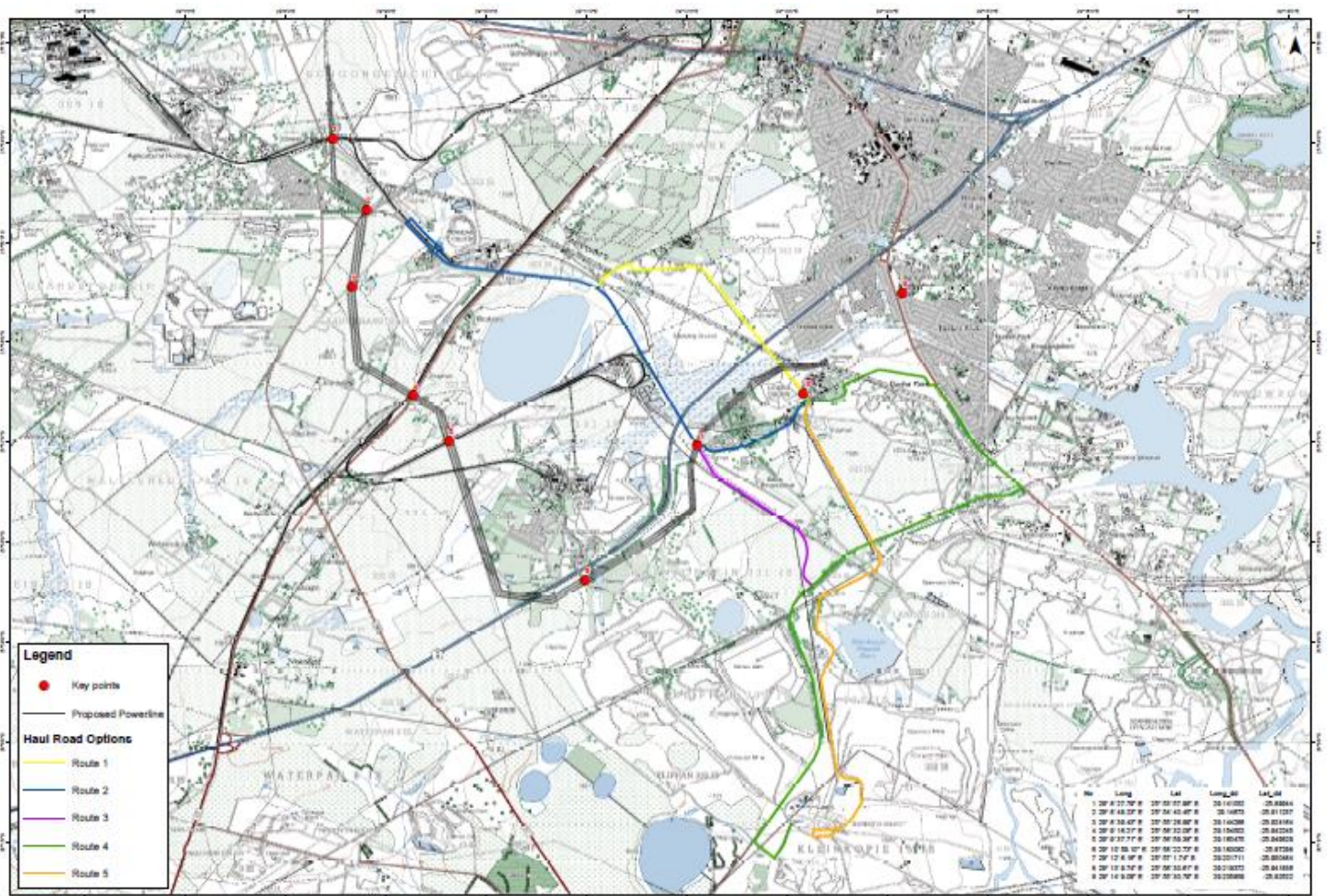
The proposed new power lines route intersects with the Landau 3 MRD and as a result the material needs to be removed to allow for the power lines relocation. Eskom proposes to relocate three 400 kV power lines that traverse AOL's Khwezela Colliery (formerly known as Landau Colliery and Kleinkopje Colliery) and Greenside Colliery mining right areas).

Prior to the development of the proposed projects, AOL and Eskom require environmental authorisation from the Department of Mineral Resources (DMR) and Department of Environmental Affairs (DEA) respectively. AOL appointed SRK as the independent EAP to manage and facilitate the environmental authorisation process.

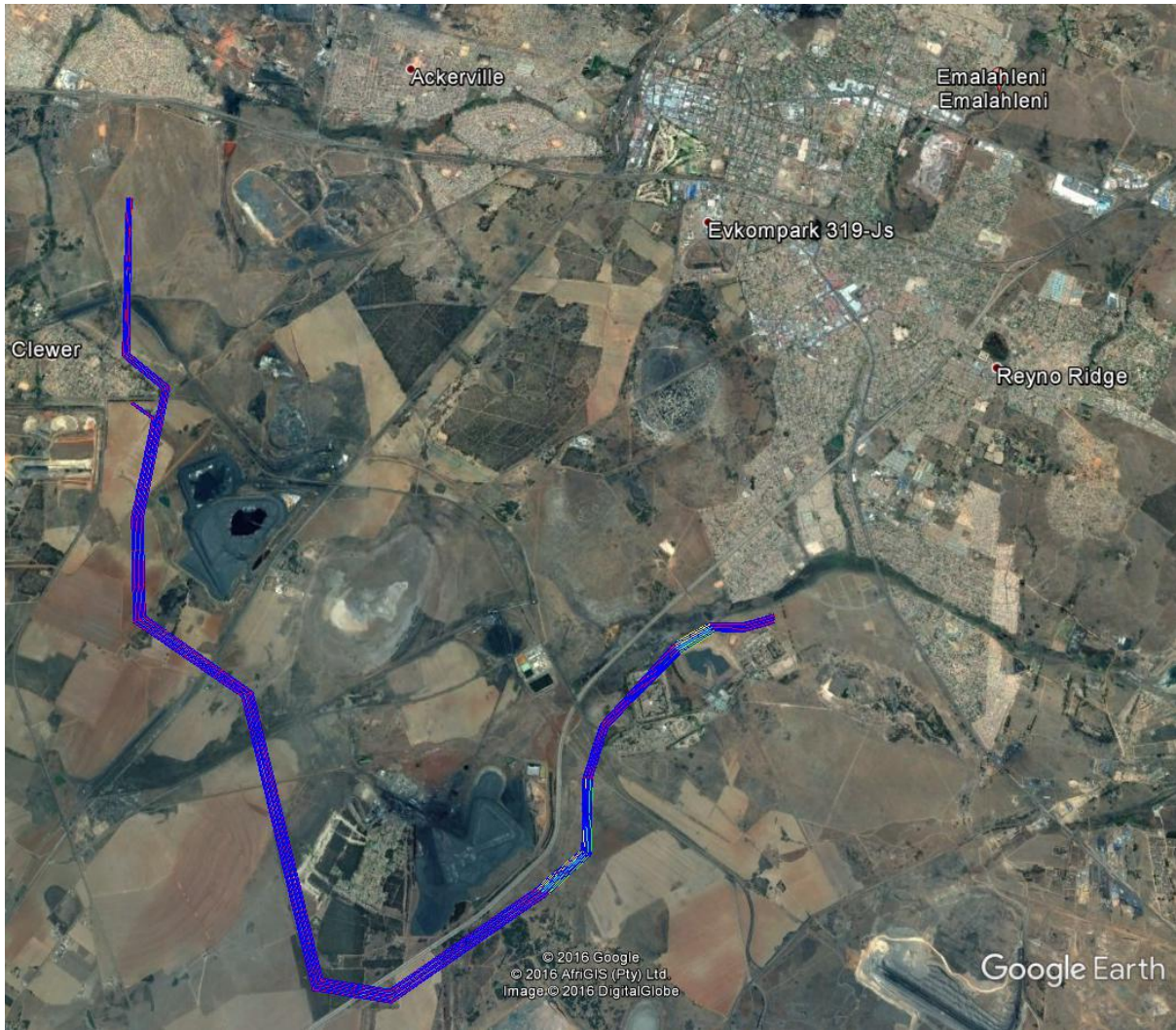
The project is split into two entities namely:

- MRD reclamation (environmental authorisation application to be submitted to the DMR); and
- Power lines relocation (environmental authorisation application to be submitted to the DEA). This is a separate authorisation process of which Eskom is the applicant.

Only the relocation of the power lines forms part of this application as the MRD reclamation is handled as a separate application (Figure 3-4).



**FIGURE 3: MAP INDICATING THE PROJECT AREA INDICATING THE PROPOSED POWER LINES AND HAUL ROAD OPTIONS (SRK).**



**FIGURE 4: LOCATION OF THE PROPOSED POWER LINE.**

**TABLE 1: SUMMARY OF PROJECT SPECIFICS**

Type of development	ESKOM Power lines
Detail of proposed activities (NHRA section 38 triggers)	Linear development longer than 300m in length
Size of project	Approximately 60 km with a servitude of 55 m x 3 lines
Municipality	eMalahleni Local Municipality
1:50 000 topographic map number	?
Farm portions	Klipfontein 322 JS Portion 27 Klipfontein 322 JS Portion 28 Kleinkopje 15 IS Portion 1 Kleinkopje 15 IS Portion 36 Klipfontein 322 JS Portion 0 Klipfontein 322 JS Portion 9 Klipfontein 322 JS Portion 27 Klipfontein 322 JS Portion 28

	Klipfontein 322 JS Portion 208 Klipfontein 322 JS Portion 209 Klipfontein 322 JS Portion 293 Blaauwkrans 323 JS Portion 0 Blaauwkrans 323 JS Portion 14 Blaauwkrans 323 JS Portion 15 Blaauwkrans 323 JS Portion 23 Blaauwkrans 323 JS Portion 33 Groenfontein 331 JS Portion 0 Groenfontein 323 JS Portion 3 Groenfontein 323 JS Portion 10 Klippan 332 JS Portion 2 Klippan 332 JS Portion 14 Klippan 332 JS Portion 18 Klippoort 334 JS Portion 0 Naauwpoort 335 JS Portion 0 Naauwpoort 335 JS Portion 32 Naauwpoort 335 JS Portion 47 Naauwpoort 335 JS Portion 48 Naauwpoort 335 JS Portion 49 Naauwpoort 335 JS Portion 50 Naauwpoort 335 JS Portion 55 Landau 349 IS Portion 0 Klipfontein 1206 JS Portion 0
--	---

### 2.3 APPLICANT AND EAP DETAILS

The applicant is Anglo Operations (Pty) Ltd and the EAP compiling the application is SRK Consulting.

### 3. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
2. Document the found cultural heritage sites according to best practice standards for heritage related studies.
3. Study background information on the area to be developed.
4. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
5. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.

6. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
7. Review applicable legislative requirements.

#### **4. LEGISLATIVE REQUIREMENTS**

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. The first of these are the National Heritage Resources Act (Act 25 of 1999) which deals with the cultural heritage of the Republic of South Africa. The second is the National Environmental Management Act (Act 107 of 1998) which inter alia deals with cultural heritage as part of the Environmental Impact Assessment process.

##### **4.1 The National Heritage Resources Act**

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate (see Appendix D) includes the following:

- 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 features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources.

A Palaeontological Impact Assessment (PIA) is an assessment of palaeontological heritage. Palaeontology is a different field of study, and although also sometimes required by the South African Heritage Resources Agency (SAHRA)<sup>1</sup>, should be done by a professional palaeontologist.

The different phases during the HIA process are described in Appendix E. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

### **Structures**

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

### **Archaeology, palaeontology and meteorites**

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;

---

<sup>1</sup> According to the SAHRIS Paleosensitivity map of SAHRA a desktop PIA study is needed for the area under discussion.

- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

### **Human remains**

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place. Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

#### **4.2 The National Environmental Management Act**

This act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

#### **4.3 The International Finance Corporations' performance standard for cultural heritage**

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect cultural heritage in the course of their project activities.

This is done by clients abiding to the law and having heritage surveys done in order to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians). Any possible chance find, encountered during the project development, also needs to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This includes the possible maintenance of such sites in situ, or when not possible, the restoration of the functionality of the cultural heritage in a different location. When cultural historical and archaeological artifacts and structures need to be removed, this should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may, however, only be considered if there are no technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the affected communities. Again professionals should carry out the work and adhere to the best available techniques.

Consultation with affected communities should be conducted. This entails that such communities should be granted access to their cultural heritage if this is applicable.



Compensation for the loss of cultural heritage should only be given in extra-ordinary circumstances.

Critical cultural heritage may not be impacted on. Professionals should be used to advise on the assessment and protection thereof. Utilization of cultural heritage resources should always be done in consultation with the affected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

## **5. METHODOLOGY**

### **5.1 Survey of literature**

A survey of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the bibliography.

### **5.2 Reference to other specialist desktop studies**

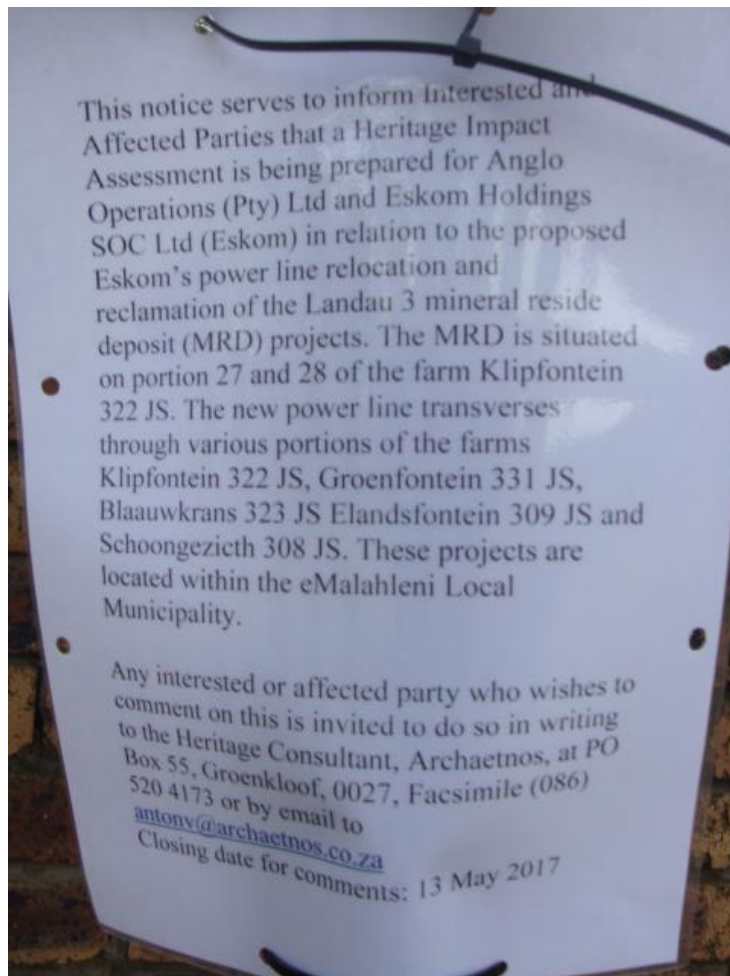
There are a few known archaeological sites that occur in the broader geographical environment of the area where new developments are planned. There is however no known records of archaeological sites that were available at the existing location. A number of heritage reports are known from previous studies in the eMalahleni area (see later).

### **5.3 Public consultation and stakeholder engagement**

Public consultation was done as part of the heritage study. A site notice was placed close the MRD on 12 April 2017 (Figure 5-6). A newspaper notices was placed in the Witbank News on Friday 14 April 2017 (Figure 7-8). The public consultation period of 30 days therefore ends on 14 May.



**FIGURE 5: SITE NOTICE ON SITE.**



**FIGURE 6: WORDING OF THE SITE NOTICE.**

SALES POSITION AT CRUSADERS... 066 689 3829

JDS OVERSEAS... 082 494 3847

TOEGANNDAME BENODIG... 082 494 3847

IMAPHUTHA JSWANA FUNERAL SERVICES... 071 5000 323

CS TECHNOLOGIES AN AUTHORIZED DEALER FOR AD7 SECURITY... 085 219 9335

ICT MARKETERS in Nelspruit, Witbank... 085 219 9335

WCMAS WITBANK COALFIELDS MEDICAL AID SCHEME

NOTICE TO MEMBERS... Annual General Meeting of members of the Witbank Coalfields Medical Aid Scheme...

R. BOOYENS PRINCIPAL OFFICER

OPERATIONS MANAGER FOR FMCG COMPANY... 071 739 9447

OPSOEK NA AFRIKAANS SPREKENDE PERSOON... 081 885 0031

WE ARE IN URGENT NEED OF A RED SEAL QUALIFIED DIESEL MECHANIC... 071 500 323

EMILY SOEK HUISWERK... 071 500 323

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

PRE-PRIMARY SCHOOL TEACHER NEEDED... 085 219 9335

LORINE IS LOOKING FOR DOMESTIC WORK... 074 319 9137

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

SALES REP FOR FMCG COMPANY... 076 536 6331

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

PAULINA IS LOOKING FOR DOMESTIC WORK... 076 536 6331

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

ISAZISO: UKUNCPHISA IZINSALELA ZEMZIMBA... 061 955 1111

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

KENNISGEWING IN TERME VAN... 011 979 7051

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

NOTICE: HERITAGE IMPACT ASSESSMENT FOR ESKOM'S POWER LINE RELOCATION... 011 979 7051

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

NOTICE In terms of Clause 6 of the eMalahleni Land Use Management Scheme... 011 979 7051

PRECIOUS IS LOOKING FOR WORK... 063 207 3419

SARAH IS LOOKING FOR DOMESTIC WORK... 072 428 9323

SYLVIA IS LOOKING FOR DOMESTIC WORK... 072 269 8183

BRENDA is looking for domestic work... 073 530 8144

EMILY SOEK HUISWERK... 071 500 323

GIFT IS LOOKING FOR DOMESTIC OR CLEANER WORK... 073 569 3893

JANE IS LOOKING FOR DOMESTIC WORK... 072 876 6896

JUOTH IS LOOKING FOR ADMIN WORK... 071 739 9447

LETTY is looking for any domestic or cleaning job... 078 784 4385

LINAH IS LOOKING FOR DOMESTIC WORK... 090 691 3401

MARIA SOEK HUISWERK... 079 050 0909

MAVIS IS LOOKING FOR DOMESTIC WORK... 072 899 7884

MELLANIA is looking for domestic work... 064 326 1761

MY HUIS HULP SOEK... 072 540 3721

FIGURE 7: NEWSPAPER NOTICE.

**NOTICE: HERITAGE  
IMPACT ASSESSMENT  
FOR ESKOM'S POWER  
LINE RELOCATION**

This notice serves to inform Interested and Affected Parties that a Heritage Impact Assessment is being prepared for Anglo Operations (Pty) Ltd and Eskom Holdings SOC Ltd (Eskom) in relation to the proposed Eskom's power line relocation and reclamation of the Landau 3 mineral residue deposit (MRD) projects. The MRD is situated on portion 27 and 28 of the farm Klipfontein 322 JS. The new powerline transverses through various portions of the farm Klipfontein 322 JS, Groenfontein 331 JS, Blaauwkrans 323 JS, Elandsfontein 309 JS and Schoongezicht 308 JS. These projects are located within the eMalaheni Local Municipality. Any interested or affected party who wishes to comment on this is invited to do so in writing to the Heritage Consultant, Archaelnos, at P.O. Box 55, Groenkloof, 0027, Facsimile 085 520 4173 or by email to:

antony@archaelnos.co.za  
Closing date for comments:  
13 May 2017

Q5003803

**FIGURE 8: WORDING OF THE NEWSPAPER NOTICE.**

**5.4 Physical field survey**

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS)<sup>2</sup>, while photographs were also taken where needed. The survey was undertaken by doing a physical survey via off-road vehicle and on foot and covered as much as possible of the area to be studied (Figure 9). Unfortunately some

<sup>2</sup> A Garmin Oregon 550 with an accuracy factor of a few meters.

gates were closed restricting actions to sections of some of the routes, but even from a distance these seems to have had the same disturbed character as the rest.

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the under footing was extremely dense and the vegetation cover medium to high. Accordingly both the horizontal and the vertical archaeological visibility was influenced negatively. The survey took 12 hours to complete.



**FIGURE 9: GPS TRACK OF THE SURVEYED AREA. NORTH REFERENCE IS TO THE TOP.**

## **5.5 Documentation**

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the GPS. The information was added to the description in order to facilitate the identification of each locality.

## **5.6 Evaluation of Heritage sites**

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site

- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- Potential to answer present research questions.

## **6. ASSUMPTIONS, GAPS, RESTRICTIONS, CONDITIONS AND LIMITATIONS**

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structures and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).
4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
5. All recommendations are made with full cognizance of the relevant legislation.
6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur.
7. In this particular case the entire surveyed area has been disturbed by recent human activities, mainly mining infrastructure. Accordingly these areas are seen as a low risk areas to reveal heritage sites due to it being almost entirely disturbed.

8. The vegetation cover in certain areas was high and dense, which had a negative effect on both the vertical and the horizontal archaeological visibility.
9. Due To heavy rains the two days before the fieldwork was done, some of the maize fields through which the proposed power lines goes were inaccessible. However due to the disturbance it is seen as low risk areas for finding heritage features.

## **7. DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT**

The population density in eMalahleni consist of 170 000 people in Witbank and 150 000 in Kwa-Guqa. The main employment sector is mining, including various mining companies. The unemployment rate is high, being 51,1%. The formal sector employs 40,5% people and the informal sector 8 %.

Water is provided via the eMalahleni Local Municipality by making use of the Witbank Dam. ESKOM provides power to the area.

## **8. DESCRIPTION OF THE PHYSICAL ENVIRONMENT**

The surveyed area is mainly used for mining and therefore it is an almost entirely disturbed setting. Prior to mining the land use was mainly cattle and maize farming. As a result very little of the original natural vegetation remains in the project area. Pioneer species such as grass and weeds therefore dominate the environment. Exotic invader species such as black wattle are also found in isolated spots within the area.

Clearly the surveyed area had been disturbed by recent human interventions. The proposed power lines starts at the MRD, which is a large mine impact in the area (Figure 10-11). It follows the N12 National road in a westerly direction, through an area consisting of dense disturbed vegetation, mainly consisting of pioneer species (Figure 12-13). It then jumps the N12 in a northern direction (Figure 14).

The vegetation cover varies between areas with short grass and others with very dense and high vegetation (Figure 15-16). The latter has a negative effect on both the horizontal as the vertical archaeological visibility. Apart from the above, other signs of disturbance are maize fields (Figure 17-19), roads (Figure 20) and areas disturbed by mining activities (Figure 21).

The topography is relatively even. It does however fall towards the few perennial and non-perennial streams, which occurs in the surveyed area.





**FIGURE 10: GENERAL VIEW OF AREA WHERE THE PROPOSED POERLINE ROUTE STARTS, CLOSE TO THE MRD.**



**FIGURE 11: VIEW OF VEGETATION ALONG THE PROPOSED POWER LINES ROUTE CLOSE TO THE MRD.**



**FIGURE 12: GENERAL VIEW OF VEGETATION ALONG THE POWER LINES ADJACENT TO THE N12.**



**FIGURE 13: ANOTHER VIEW OF VEGETATION ALONG THE POWER LINES ADJACENT TO THE N12.**



**FIGURE 14: VIEW ALONG POWER LINES ROUTE WHERE IT JUMPS THE N12.**



**FIGURE 15: VIEW ALONG THE PROPOSED POWER LINES ROUTE TOWARDS THE NORTH OF THE N12.**



**FIGURE 16: VIEW OF VEGATAION AT POINT WHERE THE PROPOSED POWER LINES ROUTE ENDS.**



**FIGURE 17: MAIZE CROPS ALONG THE CENTRAL SECTION OF THE PRPOSED POWER LINES ROUTE.**



**FIGURE 18: ANOTHER MAIZE FIELD ALONG THE CENTRAL SECTION OF THE PROPOSED ROUTE.**



**FIGURE 19: LARGE MAIZE FIELD ALONG THE PROPOSED POWER LINES ROUTE.**



**FIGURE 20: POINT WHERE PROPOSED POWER LINES ROUTE CROSSES A PROVINCIAL ROAD.**



**FIGURE 21: REMAINS OF FORMER MINING ACTIVITIES ALONG THE PROPOSED POWER LINES ROUTE.**

## **9. PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT**

No comments related to heritage were received.

## **10. HISTORICAL CONTEXT**

No sites of cultural heritage significance were located during the survey. Some background information is given in order to place the surveyed area in a broad historical and geographical context and to contextualize possible finds that could be unearthed during construction activities.

Quite a large number of heritage reports were written in the eMalahleni area. These however either indicated that nothing of heritage significance was found, or the sites that were found has no contextual link to the current surveyed area (SAHRIS database; Archaetnos' database).

### **10.1 Stone Age**

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is, however, important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago  
Middle Stone Age (MSA) 150 000 – 30 000 years ago  
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

No Stone Age sites are indicated on a map contained in a historical atlas of this area (Bergh 1999: 4). The closest known Stone Age occurrence is that of rock art close to the Olifants River to the south of Witbank (Bergh 1999: 5). This however should rather be seen as a lack of research in the area and not as an indication that such features does not occur. Some Middle Stone Age artifacts were identified out of context during previous surveys in the wider geographical area (Archaetnos' database).

However, no natural shelters were seen during the survey and therefore it is possible that these people did not stay here for long times. The close vicinity of water sources and ample grazing would have made it a prime spot for hunting and obtaining water during the past. Therefore one may assume that Stone Age people probably would have moved through the area.

### **10.2 Iron Age**

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can

be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.  
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however, indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.  
Middle Iron Age (MIA) 900 – 1300 A.D.  
Late Iron Age (LIA) 1300 – 1840 A.D.

No Iron Age sites are indicated in a historical atlas around the town of Witbank, but this may only indicate a lack of research. The closest known Iron Age occurrences to the surveyed area are Late Iron Age sites that have been identified to the west of Bronkhorstspuit and in the vicinity of Bethal (Bergh 1999: 7-8).

The good grazing and access water in the area would have provided a good environment for Iron Age people although building material seem to be reasonably scarce. One would therefore expect that Iron Age people may have utilized the area. This is the same reason why white settlers moved into this environment later on.

### **10.3 Historical Age**

The Historical Age started with the first recorded oral histories in the area. It includes the in-migration of people that were able to read and write.

The first white people to move through this area were the party of the traveler, Robert Scoon who passed through during 1836 (Bergh 1999: 13). Although the Voortrekkers moved across the Vaal River during the 1830's, it seems as if white people only settled here after 1850 (Bergh 1999: 14-15).

At the beginning of the 19<sup>th</sup> century the Phuthing, a South Sotho group, stayed in the vicinity of modern day Kriel and Bethal to the south of the surveyed area. During the Difaquane they fled to the south (Bergh 1999: 10-11; 109). In 1829 the traveler Robert Scoon passed through an area to the south of Witbank (Bergh 1999: 13). The first white farmers only settled here during the late 1850's. By the 1890's this area was inhabited by many white farmers (Bergh 1999: 18-20).

During the Anglo-Boer War the Highveld areas saw much action consisting of various skirmishes between Boer and Brit (Bergh 1999: 51, 54). It includes skirmishes on the farms Oshoek (4 December 1901), Trigaardsfontein (10 December 1901), Witbank (11 January 1902) and Nelspan (26 January 1902).

One may therefore expect to find farm buildings, structures and objects from this time period in the area. Many graveyards from this period in time have also been identified in surrounding areas during past surveys (Archaeos database).



## 11. CONCLUSION AND RECOMMENDATIONS

The survey of the indicated area was completed successfully. As indicated no sites of cultural heritage significance were identified within the proposed project area.

The following is recommended:

- From a heritage perspective, no further work is necessary.
- The proposed development may therefore continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Due to the density of vegetation it also is possible that some sites may only become known later on. Operating controls and monitoring should therefore be aimed at the possible unearthing of such features. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.
- In This regards the following 'Chance find Procedure' should be followed:
  9. Upon finding any archaeological or historical material all work at the affected area must cease.
  10. The area should be demarcated in order to prevent any further work there until an investigation has been completed.
  11. An archaeologist should be contacted immediately to provide advice on the matter.
  12. Should it be a minor issue, the archaeologist will decide on future action, which could include adapting the HIA or not. Depending on the nature of the find, it may include a site visit.
  13. SAHRA's APM Unit may also be notified.
  14. If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
  15. The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
  16. Work on site will only continue after removal of the archaeological/ historical material was done.

## 12. REFERENCES

Archaetnos database.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

- Coertze, P.J. & Coertze, R.D. 1996. **Verklarende vakwoordeboek vir Antropologie en Argeologie.** Pretoria: R.D. Coertze.
- Huffman, T.N. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.** Scottsville: University of KwaZulu-Natal Press.
- International Finance Corporation. 2012. **Overview of performance standards on Environmental and Social Sustainability. Performance Standard 8, Cultural Heritage.** World Bank Group.
- Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Republic of South Africa. 1980. Ordinance on Excavations (**Ordinance no. 12 of 1980**). **The Government Printer: Pretoria.**
- Republic of South Africa. 1983. **Human Tissue Act** (Act 65 of 1983). The Government Printer: Pretoria.
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.
- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- SAHRA's SAHRIS database.
- Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

## **APPENDIX A**

### **DEFINITION OF TERMS:**

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

## **APPENDIX B**

### **DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:**

- Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
- Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
- Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
- Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

## **APPENDIX C**

### **SIGNIFICANCE AND FIELD RATING:**

#### **Cultural significance:**

- Negligible – The site has no heritage significance, although it may be older than 60 years.
- Low - A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings. A site with minimal importance which is decreased by its bad state of decay.
- Low-Medium - A site of lesser importance, which is increased by a good state of preservation and contextual importance (e.g. a specific community).
- Medium - Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- Medium-High - A site that has high importance due to its age or uniqueness, but which decreases due to its bad state of decay.
- High - Any site, structure or feature regarded as important because of its age or uniqueness. Also any important object found within a specific context.
- Very High - A site of exceptional importance due to its age, uniqueness and good state of preservation.

#### **Heritage significance:**

- Grade I     Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II    Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III    Other heritage resources of local importance and therefore worthy of conservation

#### **Field ratings:**

National Grade I significance: The site should be managed as part of the national estate, should be nominated as Grad I site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score above 50.

Provincial Grade II significance: The site should be managed as part of the provincial estate, should be nominated as Grade II site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 40 and 50.

Local Grade IIIA: The site should be included in the heritage register and not be mitigated (high significance), should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 36 and 40.

Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is subject to a permit application lodged with the relevant heritage authority. Score between 6 and 35.

Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. Score below 5.

## **APPENDIX D**

### **PROTECTION OF HERITAGE RESOURCES:**

#### **Formal protection:**

National heritage sites and Provincial heritage sites – grade I and II

Protected areas - an area surrounding a heritage site

Provisional protection – for a maximum period of two years

Heritage registers – listing grades II and III

Heritage areas – areas with more than one heritage site included

Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

#### **General protection:**

Objects protected by the laws of foreign states

Structures – older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

## **APPENDIX E**

### **HERITAGE IMPACT ASSESSMENT PHASES**

1. Pre-assessment or scoping phase – establishment of the scope of the project and terms of reference.
2. Baseline assessment – establishment of a broad framework of the potential heritage of an area.
3. Phase I impact assessment – identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – if there is no likelihood that any sites will be impacted.
5. Phase II mitigation or rescue – planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III management plan – for rare cases where sites are so important that development cannot be allowed.