



Archaetnos Culture & Cultural  
Resource Consultants  
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**A REPORT ON AN ARCHAEOLOGICAL AND BUILT ENVIRONMENT IMPACT  
ASSESSMENT FOR THE PROPOSED VERGENOEG MINE 132KV POWER LINE,  
GAUTENG PROVINCE**

For:

**Setala Environmental Services**  
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**REPORT NO.: AE01947V**

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## **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. Arrangements can however be made if necessary.**

**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 is as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Access to certain areas is also sometimes limited. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof. Any additional sites identified can be visited and assessed afterwards and the report amended, but only upon receiving an additional appointment.**

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## EXECUTIVE SUMMARY

Archaetnos cc was requested by Setala Environmental to conduct an Archaeological and Built Environment Impact Assessment related to the proposed Vergenoeg Mine 132kV power line. This includes a substation as well as a loop in and loop out line. Once constructed, the ownership, operation and maintenance of the overhead power line will be transferred to Eskom.

The Vergenoeg Mining Project is located in the Gauteng Province approximately 85 km north of Pretoria and 15 km south of the town of Rust de Winter. Bulk electricity supply infrastructure is needed to augment the existing supply to the above-mentioned mining project on the Farm Kromdraai 209 JR. This is within the Tshwane Metropolitan Municipality in Gauteng Province.

A survey of the available literature was undertaken to obtain background information regarding the area. This was followed by the field survey, which was conducted according to generally accepted HIA practices, aimed at locating all possible objects, sites and features of cultural significance in the area of the proposed development.

Two alternative routes were investigated. During the survey one site of cultural heritage significance was identified close to (100 m) the development area. From a heritage perspective, there is no preference for any of the routes investigated. The proposed development may therefore continue on any of these.

However, as a mitigatory measure, the graves should be fenced in and a management plan be drafted to ensure the sustainable preservation thereof. The proposed development may therefore only continue after receiving comments from the relevant heritage authority and implementation of the mitigation measures indicated..

It should be noted however that the subterranean presence of archaeological and/or historical sites, features or artefacts is always a distinct possibility. Care should therefore be taken when the development commences further that if any of these are discovered, a qualified archaeologist be called in to investigate and that the assessment be amended if necessary.

It is also important to take cognizance that it is the client's responsibility to do the submission of this report via the SAHRIS System on the SAHRA website. No work on site may commence before receiving the necessary comments from SAHRA.

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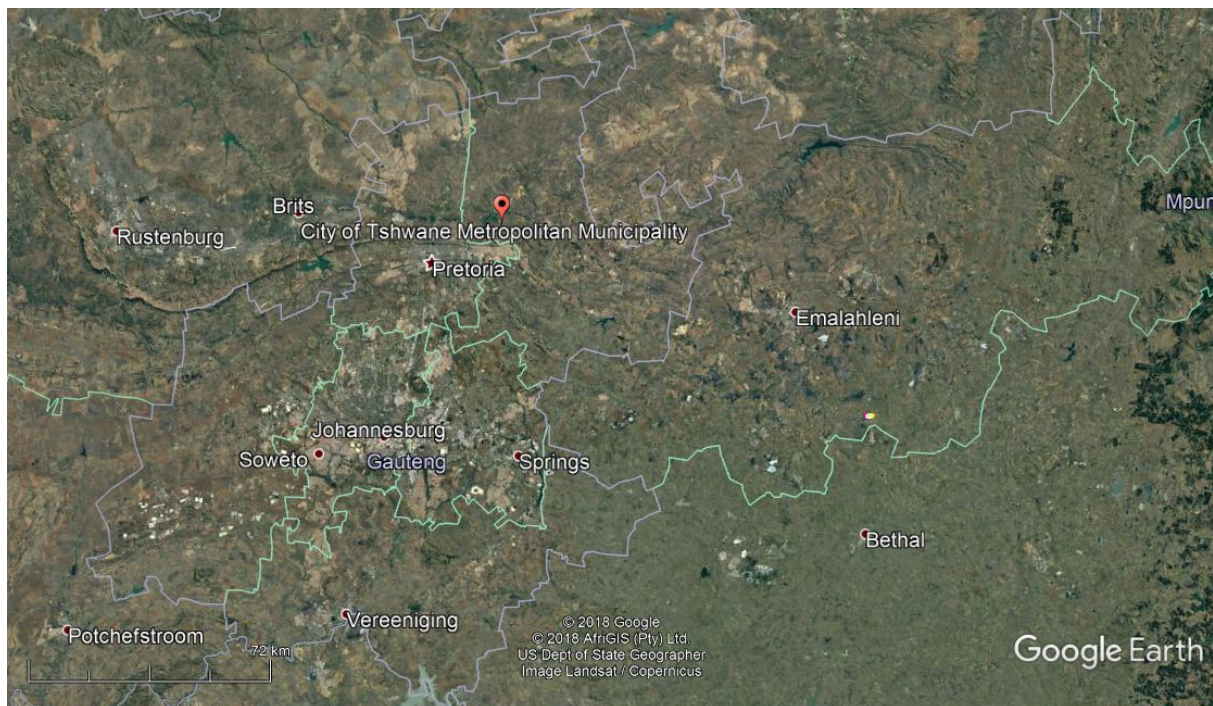
## 1. INTRODUCTION

Setala Environmental has been appointed as the independent environmental assessment practitioner (EAP) to undertake the Environmental Impact Assessment (EIA) for the proposed electricity supply project. The EIA application is for the proposed strengthening of the electricity supply infrastructure for the Vergenoeg Mining project.

Archaeos cc was requested by Setala Environmental to conduct an Archaeological and Built Environment Impact Assessment related to the proposed Vergenoeg Mine 132kV power line. This includes a substation as well as a loop in and loop out line. Once constructed, the ownership, operation and maintenance of the overhead power line will be transferred to Eskom.

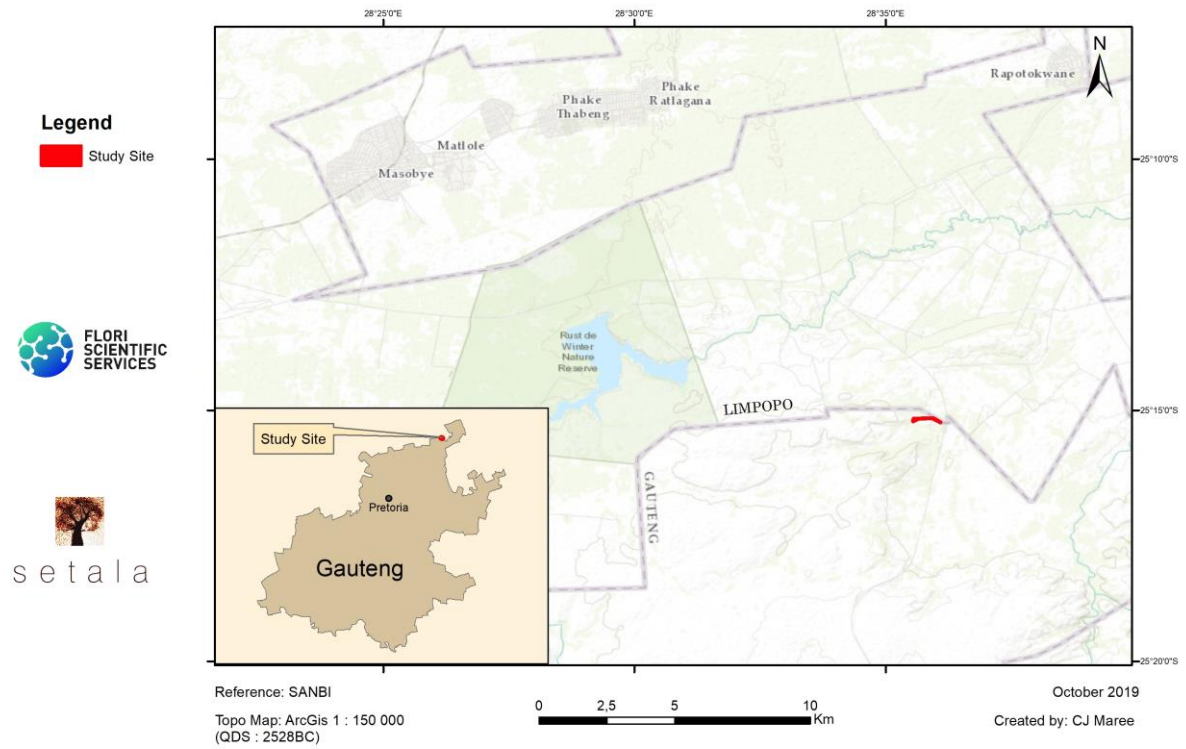
The Vergenoeg Mining Project is located in the Gauteng Province approximately 85 km north of Pretoria and 15 km south of the town of Rust de Winter. Bulk electricity supply infrastructure is needed to augment the existing supply to the above-mentioned mining project on the Farm Kromdraai 209 JR. This is within the Tshwane Metropolitan Municipality in Gauteng Province (Figure 1-3).

This EIA will conform to the National Environmental Management Act 107 of 1998 and to the Environmental Impact Assessment Regulations 2014, as amended. Two alternative routes were investigated. The client indicated the area to be investigated which was surveyed by vehicle and, where possible, by foot.



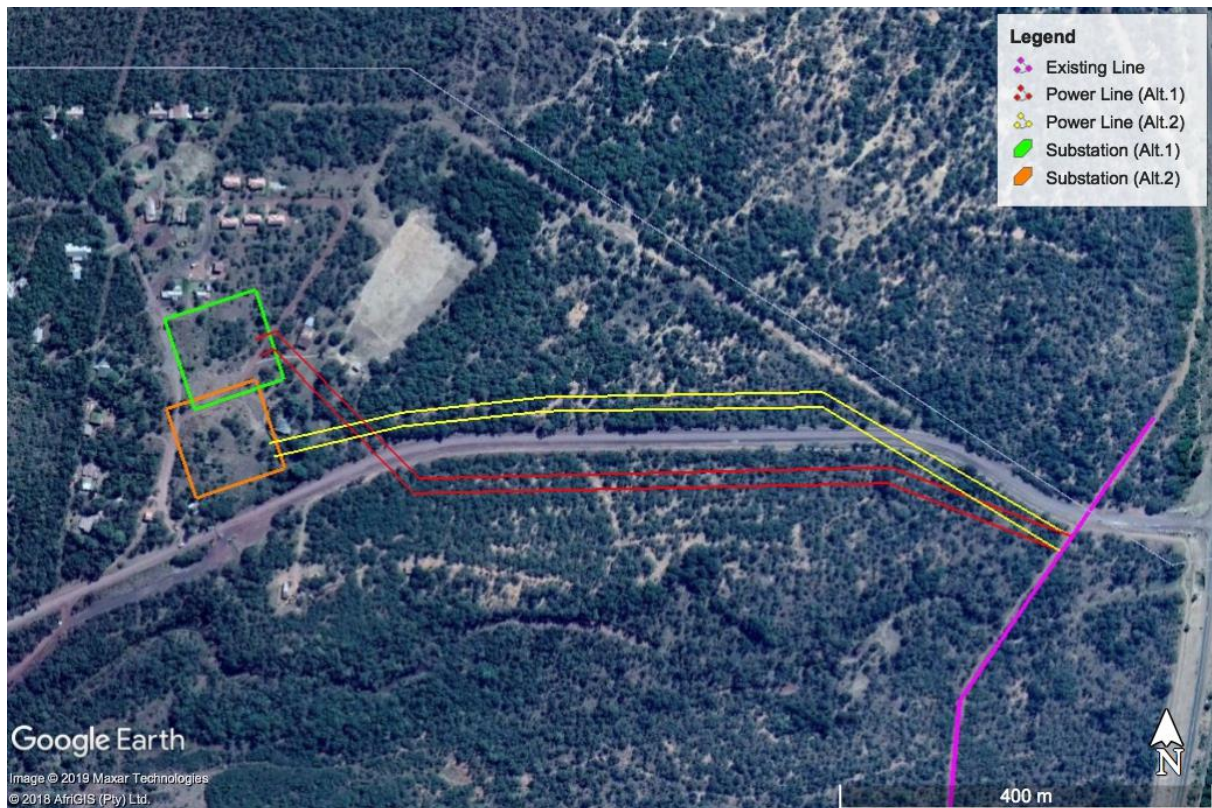
**Figure 1: Location of the City of Tshwane in the Gauteng Province. North reference is to the top.**

# Site Location



**Figure 2: Location of the surveyed site in relation to Tshwane (Setala Environmental).**





**Figure 3: Proposed position of the lines with corresponding substation positions: Red – Preferred route (Alternative 1); Yellow - Alternative 2.**

## 2. 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 in the surveyed area (see Appendix A).
2. Study background information on the area to be developed.
3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, and aesthetic and tourism value (see Appendix B).
4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
5. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
6. Review applicable legislative requirements.

### 3. CONDITIONS & ASSUMPTIONS

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 artefacts 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 artefacts 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 must 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 this report should make it clear how to handle any other finds that might occur.
7. Large sections of the proposed lines follow roads and was therefore surveyed from a vehicle. The roads are a disturbance on the landscape and vegetation here, although natural along the roads, likely regrowth. It therefore is not a high-risk area for heritage.
8. The vegetation along the proposed routes varied between open and dense. It thus influenced archaeological visibility which varied between good and bad.



## 4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

### 4.1 The National Heritage Resources Act

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

- a. Archaeological artefacts, 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. 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;
- 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;
- 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, or
- 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). 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 of 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 **National Health Act (Act 61 of 2003)** 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 **National Health Act (Act 61 of 2003)**.

### **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.

## **5. 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 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). Possible chance finds, 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 include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location. When cultural historical and archaeological artefacts and structures need to be removed is 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 effected communities. Again, professionals should carry out the work and adhere to the best available techniques.

Consultation with affected communities should be engaged in. This entails that access to such communities should be granted 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 effected communities to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

## **6. METHODOLOGY**

### **6.1 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.

### **6.2 Field survey**

The survey was conducted according to generally accepted HIA practices and was aimed at locating possible objects, sites and features of cultural significance in the area of proposed development. A wider corridor of 200 metres was investigated to facilitate any future changes to the alignment of the power line route.

Where required, the location/position of any site was determined by means of a Global Positioning System (GPS)<sup>1</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 4). Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The surveyed route is approximately 1 km long and the size of the areas for the substation about 4 Ha. The survey took about 4 hours to complete.

### **6.3 Oral histories**

People from local communities are interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

### **6.4 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 Global Positioning System (GPS). The information was added to the description to facilitate the identification of each locality.

### **6.5 Evaluation of Heritage sites**

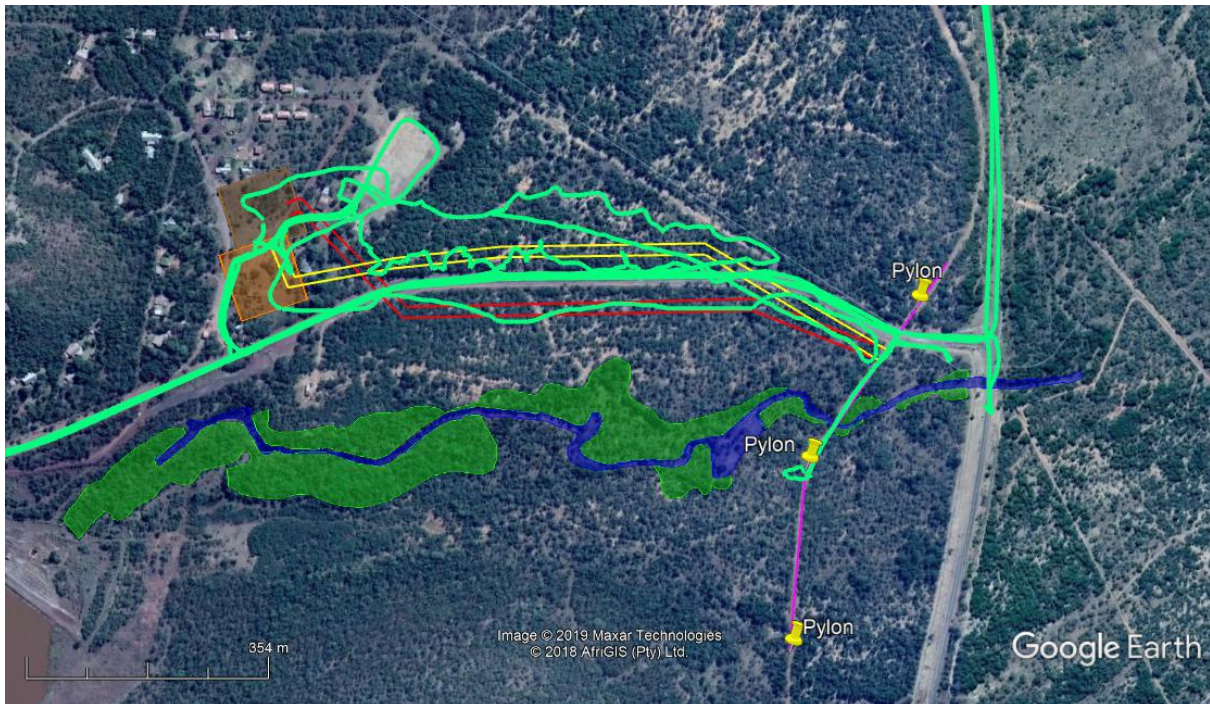
The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- 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

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<sup>1</sup> A Garmin Oregon 550 with an accuracy factor of a few meters.

- 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.



**Figure 4: GPS track of the field survey (green lines). North reference is to the top.**

## 7. DESCRIPTION OF THE ENVIRONMENT

The environment of all two route alternatives, including the substation position, is similar. The area where both proposed positions for the substation is planned, shows major signs of disturbance. Vegetation cover varies between low and medium, with open patches and dense grass in between. A few trees are visible. Gravel roads run through the area and a few buildings, none of which have any heritage significance, are visible (Figure 5-7).

Regarding the alternatives for the power lines, the environment is similar. There are a few open patches as well as areas with reasonably dense vegetation. Gravel roads are found cutting across the proposed positions, but disturbance is generally less than at the substation positions (Figure 8-15)





**Figure 5: View of the area for the proposed substation at Alternative 1, showing long grass. The building falls outside of this area, but has no heritage significance.**



**Figure 6: General view of the area where the substation for Alternative 2 is planned. The corrugated iron building falls outside of this area, but has no heritage significance and is currently used as a workshop.**



**Figure 7: View of the environment where both the proposed substation positions are.**



**Figure 8: General view where Alternatives 1 and 2 for the line starts.**





**Figure 9: View along the Alternative 1.**



**Figure 10: General view along route alternative 1.**



**Figure 11: Area where Alternative 1 ends.**



**Figure 12: View of the environment at Alternative 2.**





**Figure 13: View along the route for Alternative 2.**



**Figure 14: Another view along Alternative 2.**



**Figure 15: Area where the Alternative 2 ends.**

## **8. HISTORICAL CONTEXT**

This geographical area is reasonably well-known as one containing prehistoric sites. One however must realize that certain sections likely were not researched before. On the existing SAHRA database a few sites are indicated here, but there are a few heritage surveys that were done in the area as was research done in the wider geographical region (SAHRIS database; Archaetnos' database). This information is included in the discussion. This includes two previous reports on the adjacent farms for the Nokeng-Fluorspar power lines routes.

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.

### **8.1 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 in the area, with the closest sites located to the north near Settlers and south of the area near Cullinan (Berg 1999: 4). These sites date to between the Middle and Later Stone Age. MSA and LSA tools were however located during surveys on the farms Kromdraai and Naauwpoort (Archaetnos database; SAHRIS 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.

In fact, at least one MSA tool have been found during the current survey. This was however out of context and merely serve as indicating that Stone Age people did move through the area.

## **8.2 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.

Although no EIA or LIA sites are indicated in the area (Bergh 1999:7), some stone walled sites and material were identified during land claims work in the Rust de Winter area (Archaetnos database). LIA sites, features or material could be found in the area, including the Uitkomst facies of the Urewe Tradition dating to between AD1650 and AD1820, the Rooiberg facies of the same tradition dating to between AD1650 and AD1750 (P.175) and also possibly the Buispoort facies of the Urewe Tradition dating to between AD1700 and AD1840 ((Huffman 2007: 171, 175, 203).

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.

### **8.3 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 earliest Europeans to move through or close to the area were the groups of Hume in 1825, followed by David Livingstone in 1847 (Berg 1999: 12 – 13). The farm Kromdraai was granted to one Andries Petrus van der Walt in 1859 (Archaetnos database).

During research regarding a land claim, a fairly large number of sites were identified in the larger geographical area. These included graves, kraals, ruins of homesteads and grazing areas. Oral testimonies, as well ethnographic evidence showed that the Litho Ndzundza settled in the area, and it is indicated that when they moved from Cullinan (near Premier Mine) to the area prior to 1917. They first settled at the site of the present Vergenoeg Mine on Kromdraai (Archaetnos database). Some of the stone walled settlements in the area, claimed by the Litho as ruins of their forefathers, could also have an earlier origin (dating to the LIA and possibly related to other Tswana groups).

Küsel (2011) identified a few sites on neighbouring properties, but these are reasonably far away from the proposed power line. It does however indicate the possibility of finding similar sites.

Based on the above it is therefore very possible that similar sites might be located in the area. One may therefore also 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 (Archaetnos database; SAHRIS database). This is however outside of the current surveyed area. In fact, a small cemetery of approximately 15 unmarked graves was identified, but it lies 100 m outside of any of the alternatives investigated. (Figure 16) . It however lies approximately 100 m from any of the alternatives. It will thus not be impacted on.

## **9. SITES IDENTIFIED IN THE SURVEYED AREA**

One site was identified.

It is a small cemetery of approximately 15 unmarked graves packed with stone (Figure 16). It lies 100 m outside of any of the alternatives investigated and will thus not be impacted on.

GPS: 25°15'14.63"S; 28°36'9.87"E



Figure 16: Cemetery identified 100 m from any of the alternatives investigated.

**Cultural significance Table**

<b>A place is considered to be part of the national estate if it has cultural significance because of -</b>	<b>Applicable or not</b>	<b>Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High</b>
Its importance in the community or pattern of South Africa's history	Y	6
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	6
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	6
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or	N	-

technical achievement at a particular period		
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	6
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
<b>Reasoned assessment of significance using appropriate indicators outlined above:</b>		<b>6 – High</b>

**Integrity scale:**

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

**Field-rating = Cultural significance x Integrity**

$$= 6 \text{ (High)} \times 3$$

$$= 18$$

The site receives a field rating of Local Grade IIIB. It 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.

Two possibilities exist. The first option would be to fence the graves in and have a management plan drafted for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the mine.

The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the mining activities. For this a specific procedure should be followed which includes social consultation. For graves younger than 60 years only an undertaker is needed. For those older than 60 years and unknown graves an undertaker and archaeologist is

needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

As the site falls outside the area of direct impact, option 1 is recommended.

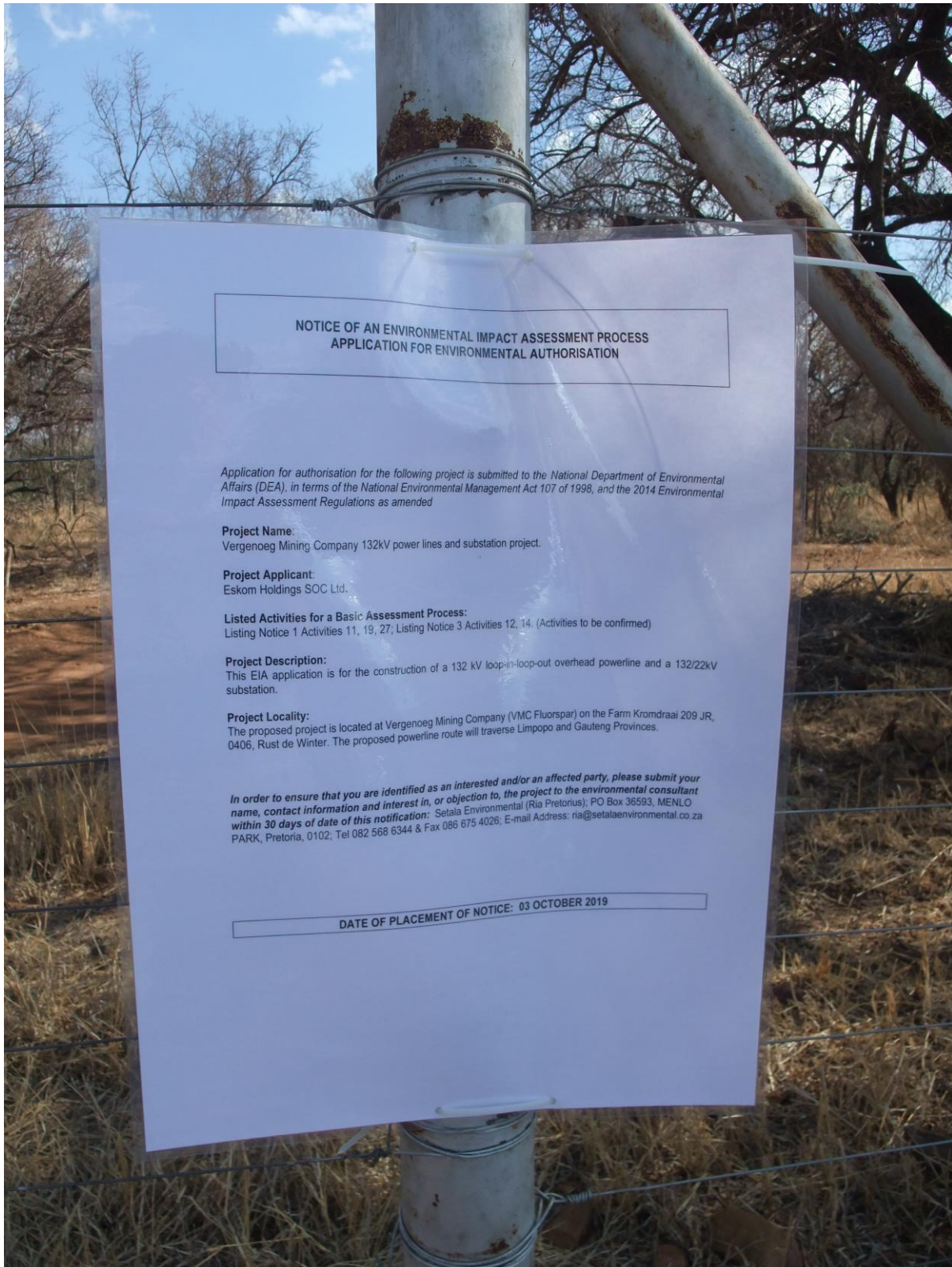
**10. PUBLIC CONSULTATION**

This was done by the EAP in accordance with EIA regulations (Figure 17-18)



**Figure 17: Site notice.**



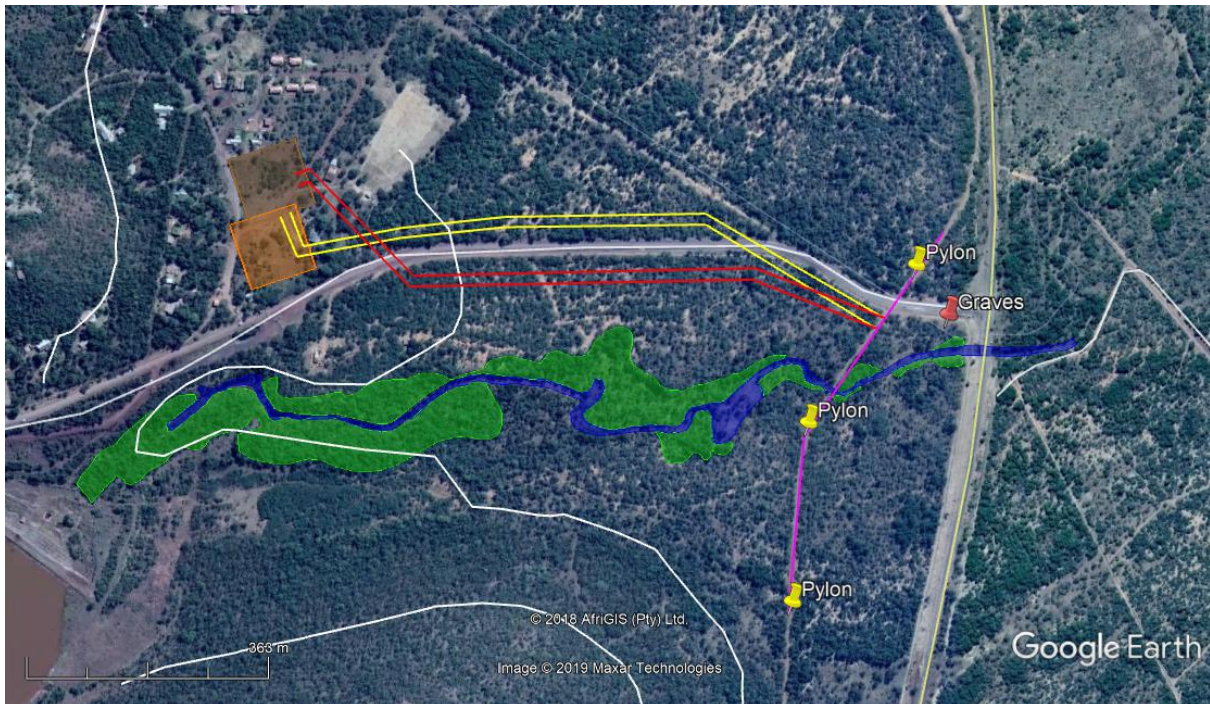


**Figure 18: Wording of the site notice.**



## 11. CONCLUSION AND RECOMMENDATIONS

The heritage survey of the indicated area was completed successfully. One site was identified (Figure 19).



**Figure 19: Indication of the location of the grave site in relation to the development.**

The following is recommended:

1. From a heritage perspective, there is no specific preference for any of the two alternatives.
2. The graves identified are at least 100 m away from any of the alternatives and will therefore not be impacted on. However, as a mitigatory measure, it should be fenced in and a management plan be drafted to ensure the sustainable preservation thereof.
3. The proposed development may continue after receiving comments from the relevant heritage authority and implementation of the mitigation measures indicated..
4. It should be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, work on site immediate cease and a qualified archaeologist be called in to investigate the occurrence.

In this regard the following 'Chance find Procedure' should be followed:

- *Upon finding any archaeological or historical material all work at the affected area must cease.*
- *The area should be demarcated in order to prevent any further work there until an investigation has been completed.*
- *An archaeologist should be contacted immediately to provide advice on the matter.*
- *Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.*
- *SAHRA's APM Unit may also be notified.*
- *If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.*
- *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.*
- *Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.*

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## **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 artefacts, 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: Artefact (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:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- 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.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

#### 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	should be managed as part of the national estate
Provincial Grade II significance	should be managed as part of the provincial estate
Local Grade IIIA	should be included in the heritage register and not be mitigated (high significance)
General protection A (IV A)	site should be mitigated before destruction (high/medium significance)
General protection B (IV B)	site should be recorded before destruction (medium significance)
General protection C (IV C)	phase 1 is seen as sufficient recording and it may be demolished (low significance)



## **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.