



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON AN ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE
NEWCASTLE COAL PROJECT, KWAZULU-NATAL PROVINCE**

For:

CABANGA ENVIRONMENTAL
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REPORT NO.: AE02301V

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16 January 2023
Revised 10 March 2023
Finalised 09 May 2023

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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.

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

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EXECUTIVE SUMMARY

Purpose:

Archaetnos cc was requested by Cabanga Environmental to conduct an archaeological impact assessment (AIA) for Minetek Resources (Pty) Ltd. The project entails opencast mining, potential future underground mining, and mineral processing limited to crushing and screening. This is west of the town of Newcastle in the KwaZulu-Natal Province. This falls within the Newcastle Local Municipality of the Amajuba District Municipality. The proposed project is on portions of the Farms Craig No 2989-HS, Glen Ashton No 8589-HS, Harwarden No 8915-HS, Waterfall No 3335-HS and Dumblane No 3317-HS

Project description:

The project involves the initial opencast mining of coal from the eastern portion of the application area (rollover mining, involving vegetation clearance and topsoil stripping (phased), stockpiling of topsoil and overburden (separate) before reaching the coal, mining of the coal (drill and blast will be required) and then successive backfilling of the previously mined cuts as the pit develops. Future underground mining on the western portions.

Supporting infrastructure will involve crushing and screening plants (no wash plant, no discard dumps). Site offices, small workshop, change house etc. will also be required

Methodology:

The methodology for the study includes a survey of literature followed by a field assessment. 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 will be done by the Environmental Assessment Practitioner (Cabanga Environmental)

Findings:

During the survey Forty-four sites of cultural heritage significance were identified.

The following is recommended:

- Site no. 1 consists of a farmyard and receives a field rating of Local Grade IIIB. It should be included in the heritage register and may be mitigated (medium-high significance if needed). Such mitigation would be subject to a permit application lodged with the relevant heritage authority. Mitigation will consist of documentation of the site, including buildings older than 60 years as well as photographic documentation.

Although the site falls in an underground mining area, it is recommended that the site remain *in situ*. It is however possible that the underground mining may impact on the site in the form of cave-ins. This needs to be prevented. The mine also needs to involve the blasting expert to ensure that no further damage is done to these structures. This would be possible by using different blasting techniques.

Should the above be impossible, the site should rather be mitigated by a Phase II study.

- Site no. 33 (a stone kraal), 35 (historical remains), and 43 (a farmyard) receives a field rating of Local Grade IIIC. It means that 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. Site no. 33 and 35 fall outside of any direct impact, and it is recommended that the sites remain *in situ*. Site no 43 is proposed to be used as offices for the first 8 years of operation, whereafter it will be destroyed by the mining of Pit 6 (if approval is granted).
- Sites no. 2-32, 34, 36-42 and 44 are all graves. Graves are always regarded as having a high cultural significance. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.
 - Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.
 - The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

- Sites no. 9-29, 34, 37-42 and 44 are all outside of the areas of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.¹ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations. However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.
- Sites no. 3-6 fall in an underground mining area which may impact on the site in the form of cave-ins (subsidence). This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.² Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

However, the mine will need to ensure that there is no direct impact to the graves, which includes possible cave-ins. If this is the case, Option 2 will be applicable.

- Site 30-32 is inside of the areas of direct impact. Therefore Option 2 is recommended.
- Site no. 2 consists of graves and historical remains. falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.³ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations. However, the mine will need to ensure that there is no direct impact to the graves, which includes possible cave-ins. If this is the case Option 2 will be applicable.

The historical remains at site 2 receives a field rating of Local Grade IIIC. It means that 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.

- Site no 7 is about 70 m from the proposed pit, site no 8 is 85 m and site no 36 is about 60 m outside. This is reasonably close and thus there likely will be a

¹ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

² It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

³ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

secondary impact due to adjacent mining activities that could cause cave-ins. Blasting may also affect the graves. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan which needs to be discussed with the blasting expert. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations. However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable. Impact can be minimised by moving the pit border to at least 100 m from the graves.

- 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 in certain areas it also is possible that some sites may only become known later. 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 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 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.*

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.

CURRICULUM VITAE

Prof. Anton Carl van Vollenhoven

PERSONAL INFORMATION

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- Address: Archaetnos, PO Box 55, Groenkloof, 0027
- Cell phone: 083 291 6104
- Nationality: RSA
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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

Current:

- *August 2007* – present – Managing Director for Archaetnos Archaeologists.
- *Since 2012*: Archaeologist and heritage official, Department of Environment and Agriculture, City of Tshwane
- *Since 2015*: Extraordinary Professor of History at the North-West University

Previous:

- *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.
- *2014-2015*: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- *2020-2021*: Part-time lecturer in History at the North-West University

OTHER

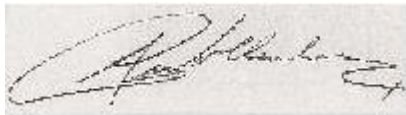
- NRF C2 Research rating.
- Has published 42 peer-reviewed and 56 popular articles.
- Has written 13 books/book contributions/conference proceedings .
- Has been the author and co-author of over 1 118 unpublished reports on cultural resources surveys and archaeological work.
- Has delivered more than 84 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.
- Member of Association for South African Professional Archaeologists. (Council member since 2022).
- Member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014; 2018-2021).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Editorial member of various scientific journals.
- Member of the Provincial Heritage Resources Agency, Gauteng’s Council.
- Member of Provincial Heritage Resources Agency, Gauteng’s HIA adjudication committee (Chairperson 2012-2024).

A list of reports can be viewed on www.archaetnos.co.za.

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: 16 January 2023
(Revised 10 March 2023)

LIST OF ACRONYMS

AIA – Archaeological Impact Assessment
AMP – Archaeology, Meteorites and Palaeontology unit of SAHRA
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

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1. INTRODUCTION

Archaetnos cc was requested by Cabanga Environmental to conduct an archaeological impact assessment (AIA) for Minetek Resources (Pty) Ltd. The project entails opencast mining, potential future underground mining, and mineral processing limited to crushing and screening. This is west of the town of Newcastle in the KwaZulu-Natal Province and falls within the Newcastle Local Municipality of the Amajuba District Municipality. The proposed project is on the portions of the Farms Craig No 2989-HS, Glen Ashton No 8589-HS, Harwarden No 8915-HS, Waterfall No 3335-HS and Dumblane No 3317-HS (Figure 1-3).

The project involves the initial opencast mining of coal from the eastern portion of the application area (rollover mining, involving vegetation clearance and topsoil stripping (phased), stockpiling of topsoil and overburden (separate) before reaching the coal, mining of the coal (drill and blast will be required) and then successive backfilling of the previously mined cuts as the pit develops. Future underground mining is planned on the western portions. Supporting infrastructure will involve crushing and screening plants (no wash plant, no discard dumps). Site offices, small workshop, change house etc. will also be required.

A central co-ordinate of the development is 27°45'11.99"S; 29°51'23.25"E. The topographic 1:50 000 map sheet number is 2729DD and 2729DB

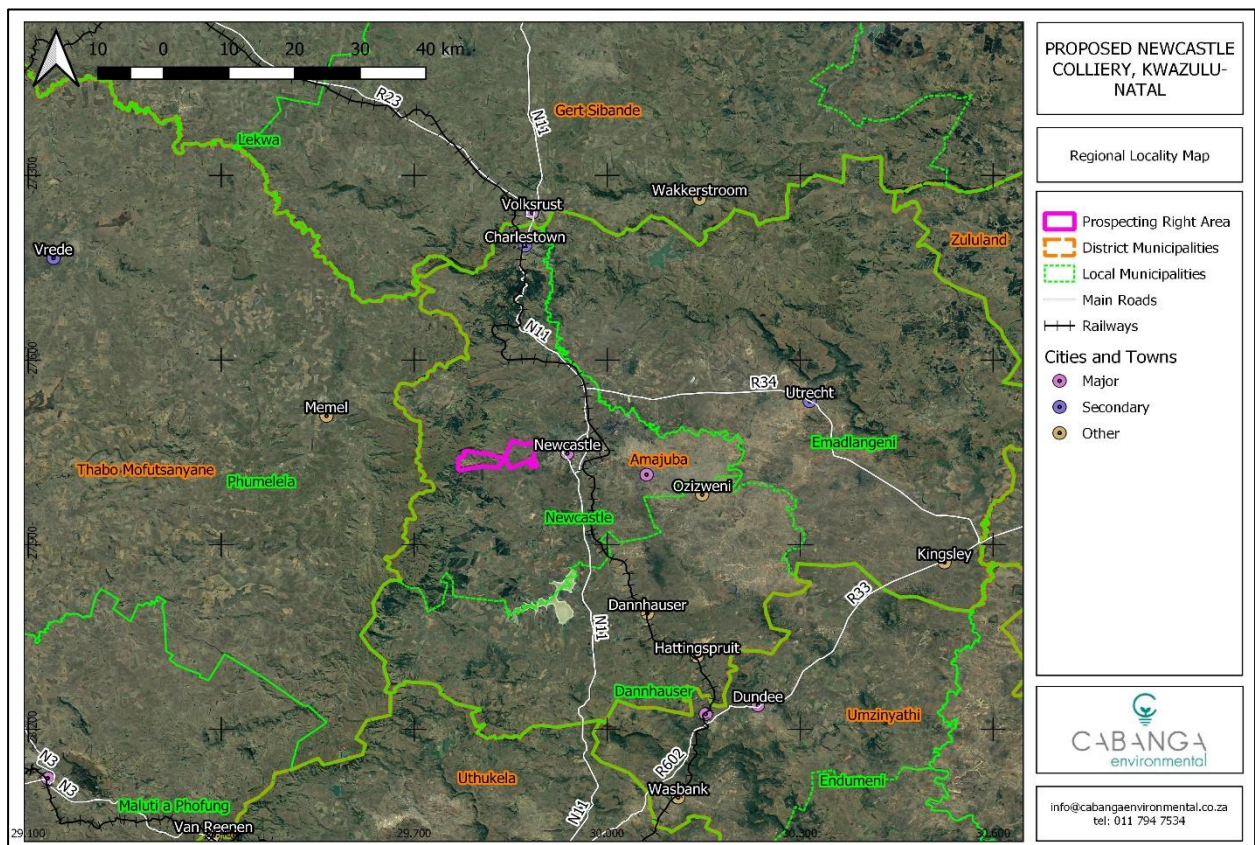


Figure 1: Location of proposed mining area in relation to Newcastle (Cabanga Environmental).

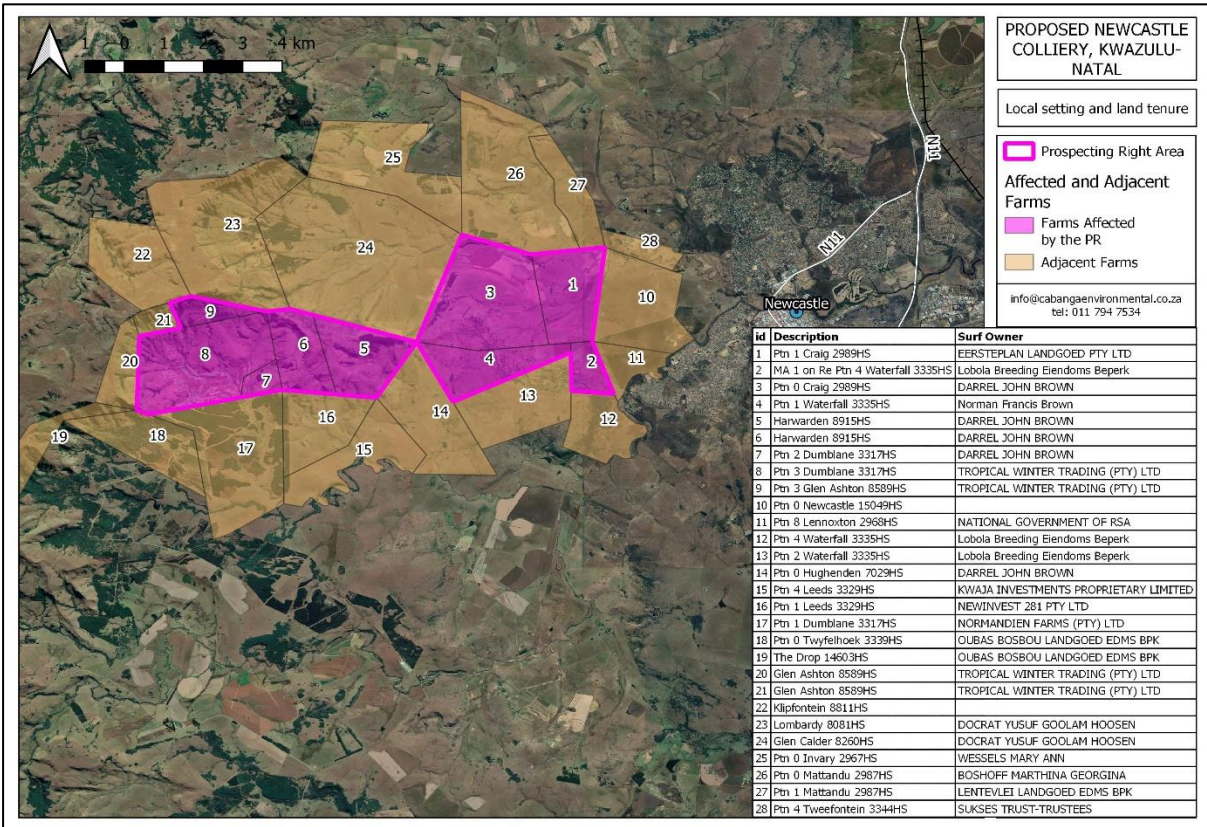


Figure 2: Farms that the Proposed Newcastle Colliery will be located on (Cabanga Environmental).

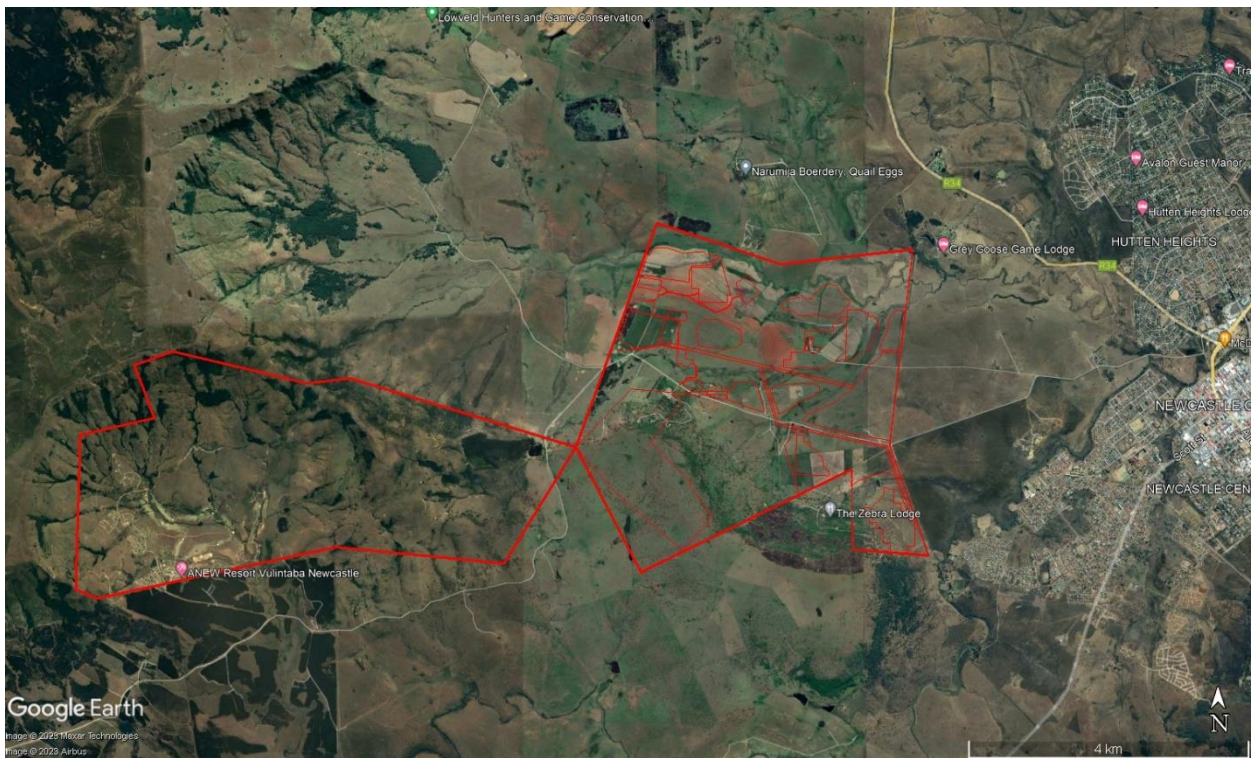


Figure 3: Google earth image indicating the proposed Project area. Note that the surface disturbance is only planned on the eastern section.

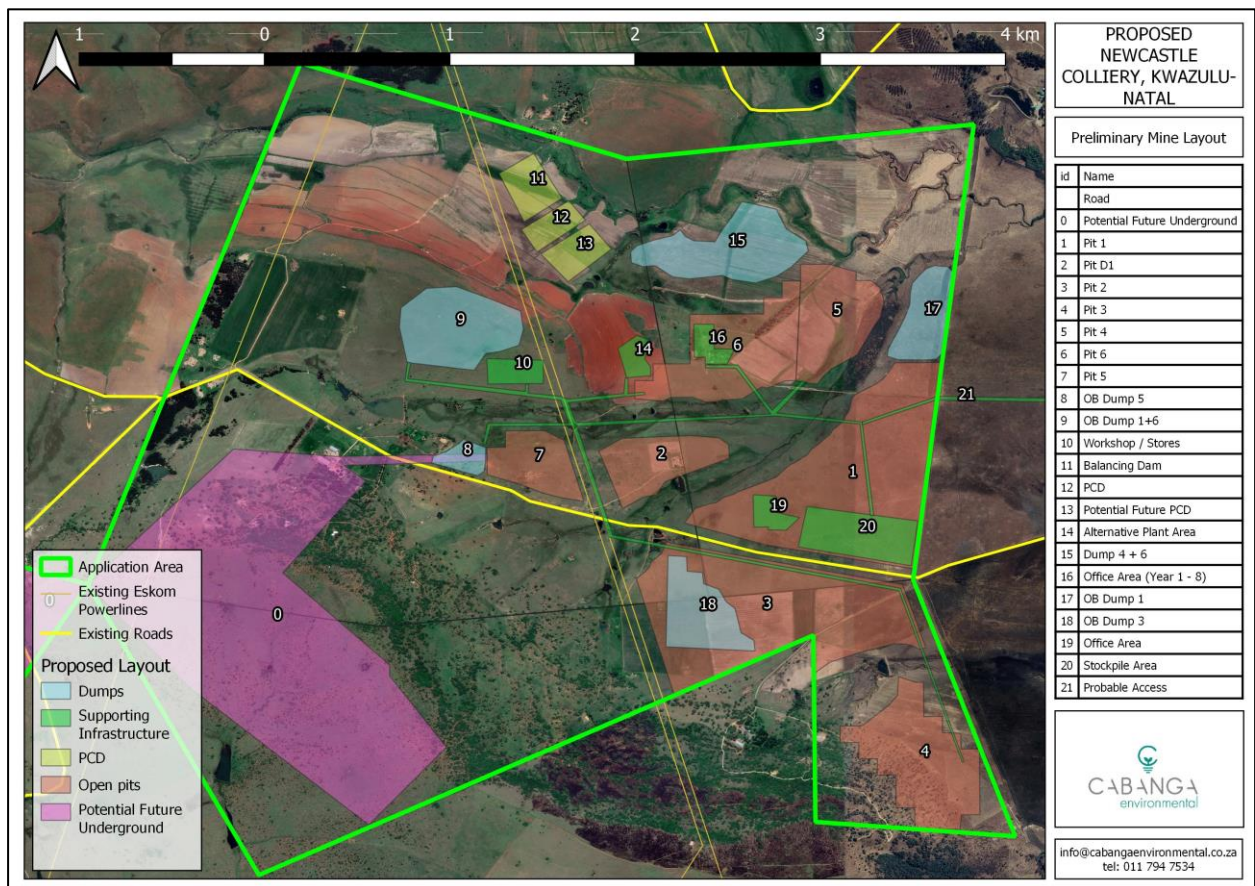


Figure 4: Proposed Project surface layout (Cabanga Environmental).

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 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.

3. 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.

3.1 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)⁴, should be done by a professional palaeontologist. A Palaeontological Impact Assessment has been commissioned on the Project Site and will be completed by Professor Marion Bamford, and will be included as a separate specialist report to the EIA Process.

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 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- 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; 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

⁴ A PIA has been completed

- 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). 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 **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)**.

3.2 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.

3.3 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 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 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.

4. METHODOLOGY

4.1 Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. This includes reports identified on the SAHRIS Database. Sources consulted in this regard are indicated in the bibliography. A few reports are however known from the Newcastle area (SAHRIS database; Archaetnos's database). However, these have no direct bearing on the site in question.

4.2 Public consultation and stakeholder engagement

This aspect will be dealt with by Cabanga Environmental. It will be undertaken in line with NEMA EIA Regulations.

4.3 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. In this case, no interviews with surrounding communities were undertaken as part of the HIA. The surface Rights Owners of the Project Area were interviewed. A local resident, Mr. Hlatswayo also assisted the field work team. He is 70 years of age and lived on the farm for his entire life. He indicated all the sites and confirmed that there are no other ones. It is assumed that community consultation will be covered during the public consultation undertaken by the Environmental Assessment Practitioner (Cabanga).

4.4 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)⁵, 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). During the survey two areas were inaccessible (indicated in blue on Figure 4). The northern part was inaccessible due to both access roads crossing the river was flooded. The south-eastern part was not surveyed due to a locked gate.

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the under footing was reasonably thick, and the vegetation varied between medium and high. Accordingly, both the horizontal and the vertical archaeological visibility was influenced negatively. The size of the surveyed area is limited to the eastern section indicated on the above maps. This includes portions of the

⁵ A Garmin Oregon 550 with an accuracy factor of a few meters.

Farms Craig No 2989-HS and Waterfall No 3335-HS (Figure 2 and 3) Although the entire mining right area is approximately 5 000 Ha in size, the mentioned surveyed area is only 281 Ha. The survey took 12 hours to complete.

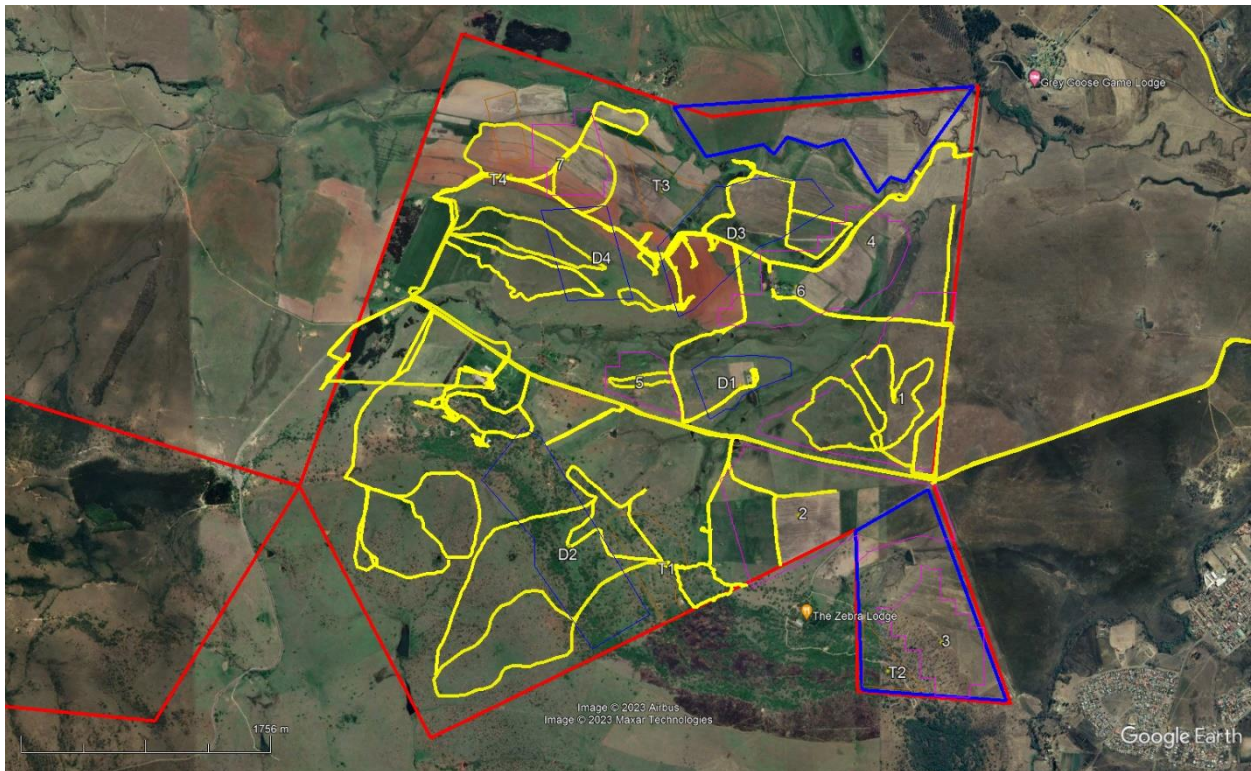


Figure 4: GPS track of the surveyed area (Blue areas were inaccessible).

4.5 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.

4.6 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.

5. 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. Certain areas which are clearly disturbed, due to agricultural activities, and are also seen as very low risk areas and were therefore not surveyed in detail and sometimes just driven through.
8. During the survey a local resident of the farm, Mr. Hlatswayo, who has lived on the farm his entire life (he is now 70 years of age) assisted the team. He indicated all the grave sites in the surveyed area and confirmed that there are no other such sites.
9. The vegetation under footing was reasonably dense and the vegetation varied between medium and high. Accordingly, both the horizontal and the vertical archaeological visibility was influenced negatively.

10. Where the vegetation was low, it was possible to see over a large distance with a diameter of approximately 500 m.
11. During the survey two areas were inaccessible (indicated in blue on Figure 4). The northern area was inaccessible due to both access roads crossing a river which was flooded. The south-eastern part was not surveyed due to a locked gate.

6. DESCRIPTION OF THE PHYSICAL ENVIRONMENT

The surveyed area is almost completely disturbed by agricultural activities. This consist mainly of maize and soya fields (Figure 5-6). Several sections clearly showed signs of being old agricultural fields (Figure 7). Large sections of the land are also used for grazing for farm animals (Figure 8). The surveyed area is also transected by high voltage powerlines (Figure 9).

Natural vegetation was only found in southern sections of the surveyed area as the incline increases, consisting of medium high grass, trees, and shrubs (Figure 10) the presences of pioneer species such as weeds in and around the entire surveyed area, is also an indication of disturbance. The same goes for alien trees which are found here and there in the surveyed area. Archaeological visibility was therefore reasonably good during the survey where the areas are open, but less so to the southern side of the surveyed area.

The topography of the area falls gradually from south to north. This is towards some rivers and water-filled areas (Figure 11).



Figure 5: View of maize field and powerlines within the surveyed area.



Figure 6: View of soya field withing the surveyed area.



Figure 7: View of old agricultural fields in the surveyed area.



Figure 8: View of grazing land within the surveyed area.



Figure 9: View of high voltage powerlines in the surveyed area.



Figure 10: View of dense vegetation growth in the southern part of the surveyed area.



Figure 11: View of river in the northern part of the surveyed area.

7. HISTORICAL CONTEXT

Forty-four sites of cultural heritage significance were located in the surveyed area. In order to place this within context and to understand possible finds that could be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history in the area.

7.1 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.

This geographical area is not well-known as one containing many prehistoric sites. This, however, definitely indicates a lack of research in the area. A few sites including different Stone Age sites are known. During previous surveys in the broader geographical context, Archaetnos has also found such sites. These are to be found in the vicinity of Newcastle and Dannhauser, mostly dating to the Middle Stone Age (Archaetnos Database).

The environment definitely is suitable for Stone Age people. There is ample water and grazing for the wildlife they would have hunted. Although no caves or rock shelters were identified, it is likely that Stone Age people did utilize and settle in the area. No such sites were however identified during the survey.

7.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artefacts (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.

Both Early and Late Iron Age sites are known from the Kwazulu-Natal (Zululand) area. These are associated with the predecessors of the current Zulu people in the area. During the Late Iron Age (LIA), people stayed in extensive stonewalled settlements, but these are more likely to be found at the foot of the mountain and not on the plains where the survey has been conducted. Such sites were identified around Newcastle previously during previous studies in the area (Archaetnos Database) but are too far from the surveyed area to be impacted on by this development.

Iron Age people therefore more than likely settled close to the study area. The good grazing 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.

7.3 Historical Age

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. This era is sometimes called the Colonial era or the recent past.

Due to factors such as population growth and a decrease in mortality rates, more people inhabited the country during the recent historical past. Therefore, and because less time has passed, much more cultural heritage resources from this era have been left on the landscape. It is important to note that all cultural resources older than 60 years are potentially regarded as part of the heritage and that detailed studies are needed in order to determine whether these indeed have cultural significance. Factors to be considered include aesthetic, scientific, cultural and religious value of such resources.

After 1800, the small tribes in Zululand were unified by Chaka (Bergh & Bergh 1984: 14). During the Difaqane (1820's – 1830's), the Ndebele of Mzilikazi migrated from the north-eastern parts of Kwazulu-Natal to the north and most likely passed close to the study area. On this journey they conquered other groups and caused widespread chaos (Bergh 1999:11).

Travelers and missionaries also came to the area. By 1824, people like FG Farewell, JS King, Henry Fynn, John Cane, Henry Ogle, Alexander Biggar, WH Davis, and Thomas Halstead have settled in Port Natal. It was, however, only during the 1830's when the Voortrekkers moved in that white people started colonizing the area to a large extent (Venter 1985: 25-27).

During the Anglo-Zulu War and the Anglo-Boer War (1899-1902) many battles were also fought in the vicinity of the study area (Bergh 1999: 51; Pretorius 1985: 14). One may therefore expect to find farm buildings and related objects in the area. Many graveyards have been identified in surrounding areas during past surveys (Archaetnos database). All of the sites that were found date from the historical period.

8. DISCUSSION OF SITES IDENTIFIED DURING THE SURVEY

As indicated, forty-four sites of cultural importance were identified. Forty-three of these are inside of the Mining Right Application area, and one is located outside thereof. A local resident, Mr. Hlatswayo assisted the field work team. He is 70 years of age and lived on the farm for his entire life. He indicated all the sites and confirmed that there are no other ones. One of those he identified, is a single grave on the northern side of the river but due to the heavy rains of the past season the river was flooded and could not be crossed (Figure 12). No Project infrastructure is proposed in this area.



Figure 12: View of inaccessible area (Blue polygon), the possible location of the grave (anywhere in the Green polygon) and the Mining Right Application Area (Red lines). No infrastructure or activities are proposed by the Project north of the River

8.1 Site no. 1 – Historical Farmyard

This site consists of several structures of which at least four are older than 60 years of age. Several modern structures are also visible. The workshop building has a date of 1922 engraved on the top of the door frame (Figure 13). The other structures that are older than 60 years of age includes an old grain silo, animal shed, and a storage shed (Figure 14).

GPS: 27°45'12.99"S 29°51'14.84"E



Figure 13: Workshop door with date (1922) at site 1.



Figure 14: View of the Farmyard at site 1.

Cultural significance Table: Site 1 Historical Farmyard

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	Medium
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	Medium

Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Medium
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	Low
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	Y	Medium
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Medium
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		3 - Low-Medium

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

$$= 3 \text{ (Low-Medium)} \times 4$$

$$= 12$$

The site therefore receives a field rating of Local Grade IIIB. It should be included in the heritage register and may be mitigated (medium-high significance) if needed. Such mitigation would be subject to a permit application lodged with the relevant heritage

authority. Mitigation will consist of documentation of the site, including buildings older than 60 years as well as photographic documentation.

Although the site falls in an underground mining area, it is recommended that the site remain *in situ*. It is however possible that the underground mining may impact on the site in the form of cave-ins. This needs to be prevented. The mine also needs to involve the blasting expert to ensure that no further damage is done to these structures. This would be possible by using different blasting techniques.

Should the above be impossible, the site should rather be mitigated by a Phase II study.

8.2 Site no. 2 – Graves and Historic remains

This site consists of at least nine unknown graves and some historical building remains. The graves are unknown and are thus considered to be heritage graves. The graves have no clear headstones but are demarcated by packed stone borders (Figure 15). The historical remains are the foundations stones of a rectangular stone structure of about 4 x 4 m in size (Figure 16). This could be from a farm worker dwelling.

GPS: 27°45'19.99"S 29°51'4.68"E



Figure 15: View of some of the graves at site 2.



Figure 16: View of the historical remains at site 2.

Cultural significance Table: Site 2 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.⁶ Access to descendants will

⁶ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case, Option 2 will be applicable.

Cultural significance Table: Site 2 Historical remains

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	Negligible
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	Negligible
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	N	-
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Negligible
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Negligible
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		1 – Negligible

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

= 1 (Negligible) x 1

= 1

The site receives a field rating of Local Grade IIIC. It means that 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.

8.3 Site no. 3 – Grave

This site consists of a single unknown grave and is thus considered a heritage grave. The grave is about 3 m from an existing dirt road. The grave is demarcated with packed stones (Figure 17).



Figure 17: View of the grave at site 3

GPS: 27°45'20.23"S 29°51'5.75"E

Cultural significance Table: Site 3 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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 (High) x 3
= 18

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.⁷ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case, Option 2 will be applicable.

8.4 Site no. 4 – Graves

The site is located under a thicket of trees and consisted of two graves about 27 m from a dirt road. These two graves are unknown and are thus considered heritage graves. The graves are demarcated by packed stones and an earth mound (Figure 18).

GPS: 27°45'25.90"S 29°51'11.32"E

⁷ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.



Figure 18: View of a grave at site 4.

Cultural significance Table: Site 4 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.⁸ Access to descendants will

⁸ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case, Option 2 will be applicable.

8.5 Site no. 5 – Graves

This site consists of at least nineteen graves, with one grave of 60 years old, making it a heritage grave. The remaining eighteen graves are unknown and are thus also considered heritage graves. The marked grave belongs to Mikha Mgabedeli Madlabane who died on 1963-11-10. The headstones are made of granite and stones and the dressings consists of packed stone, cement, and tiles (Figure 19).

GPS: 27°45'16.49"S 29°50'54.91"E



Figure 19: View of a grave at site 5.

Cultural significance Table: Site 5 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium

Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 4$$

$$= 24$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in

no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.⁹ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case, Option 2 will be applicable.

8.6 Site no. 6 – Graves

Site 6 consists of at least five unknown graves and are thus considered heritage graves. They are demarcated by packed stones and stone borders (Figure 20).



Figure 20: View of a grave at site 6.

GPS: 27°45'15.79"S 29°51'1.92"E

⁹ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

Cultural significance Table: Site 6 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$\begin{aligned} &= 6 \text{ (High)} \times 3 \\ &= 18 \end{aligned}$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.¹⁰ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case, Option 2 will be applicable.

8.7 Site no. 7 – Cemetery

This site is a cemetery about 200 m from a tar road, there are at least forty-one graves, and a fence surrounds the cemetery. There are no graves older than 60 years and at least seven graves younger than 60 years of age. The remaining thirty-four graves are unknown and are thus considered heritage graves. The grave dressings are made with packed stone and stone borders and the headstones were made of stone, granite, and tiles (Figure 21). Grave goods that were identified during the survey were snuff containers and beer bottles (Figure 22). The oldest grave belongs to Zenzele Thomasi Thusi who died on 2010-02-13 and the youngest grave belongs to Sithebe Alphinah Ntombizodwa who died on 2022/06/12.

¹⁰ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

GPS: 27°45'6.59"S 29°50'36.82"E



Figure 21: View of a grave at site 7.



Figure 22: View of a grave with grave goods at site 7.

Cultural significance Table: Site 7 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an	Y	Medium

understanding of South Africa's natural or cultural heritage		
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 36$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact, but is only about 70 m from it. However, there always is a secondary impact due to adjacent mining activities that could cause cave-ins and/or damage due to blasting. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

It would be best to move the boundary of the pit to a distance of at least 100 m from the site. However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.8 Site no. 8 – Graves

Site 8 is located outside of the proposed development area. This site consists of at least two graves and is located about 250 m from the tar road and about 85 m from the surveyed area. Both graves are unknown and are thus considered heritage graves. The graves are demarcated with packed stones and stone borders (Figure 23).

GPS: 27°45'13.39"S 29°50'30.49"E



Figure 23: View of a grave at site 8.

Cultural significance Table: Site 8 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is about 85 m outside of the development boundary areas. However, there always is a secondary impact due to adjacent mining activities. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.9 Site no. 9 – Graves

Site 9 consists of at least five graves and is located within an agricultural field. All the graves are unknown and are thus considered heritage graves. The graves are demarcated with stones which seems to have been disturbed by the surrounding agricultural activities (Figure 24).

GPS: 27°44'38.14"S 29°51'54.61"E



Figure 24: View of the graves in maize field at site 9.

Cultural significance Table: Site 9 Graves

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

natural or cultural places or objects		
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations. The site also needs stabilisation as it has already been impacted. This should be done as part of Option 1.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.10 Site no. 10 – Graves

This site consists of at least six unknown graves and are thus considered heritage graves. They are located in the middle of agricultural field and are demarcated with stones which seems to have been disturbed by the surrounding agricultural activities (Figure 25).

GPS: 27°44'37.98"S 29°51'55.40"E



Figure 25: View of a grave in maize field at site 10.

Cultural significance Table: Site 10 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable

8.11 Site no. 11 – Graves

Site 11 consists of at least five unknown graves and are thus considered heritage graves. The graves are located in an agricultural field and demarcated with packed stones (Figure 26). There are signs of burrowing animals at the grave site (Figure 27).

GPS: 27°44'41.51"S 29°51'54.06"E



Figure 26: View of the graves in maize field at site 11.



Figure 27: View of damage to grave caused by burrowing animals at site 11.

Cultural significance Table: Site 11 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium

Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in

no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.12 Site no. 12 – Graves

This site consists of at least two unknown graves and are thus considered heritage graves. The graves are located next to an agricultural field and are demarcated with stones headstones and stone borders (Figure 28).

GPS: 27°44'42.30"S 29°51'53.77"E



Figure 28: View of a grave at site 12.

Cultural significance Table: Site 12 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.13 Site no. 13 – Graves

This site consists of at least two unknown graves and are thus considered heritage graves. The graves are located next to agricultural fields and are demarcated with packed stones (Figure 29).

GPS: 27°44'43.51"S 29°51'52.28"E



Figure 29: View of a grave at site 13.

Cultural significance Table: Site 13 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.14 Site no. 14 – Graves

Site 14 consists of at least two unknown graves and are thus considered heritage graves. The graves are located next to a large tree and is demarcated with a stone headstone and packed stones (Figure 30).

GPS: 27°44'47.35"S 29°51'56.13"E



Figure 30: View of the grave with headstone at site 14.

Cultural significance Table: Site 14 Graves

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

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the

development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.15 Site no. 15 – Grave

This site consists of one unknown grave and is thus considered heritage grave. The grave is demarcated with packed stones (Figure 31).

GPS: 27°44'47.14"S 29°51'56.78"E



Figure 31: View of the grave at site 15.

Cultural significance Table: Site 15 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.16 Site no. 16 – Graves

This site consists of at least four unknown graves and are thus considered heritage graves. They are located about 10 m from a dirt road and close to agricultural fields. The graves are demarcated with packed stones which seems to be disturbed by the surrounding agricultural activities (Figure 32).

GPS: 27°44'42.84"S 29°51'58.98"E



Figure 32: View of the graves at site 16.

Cultural significance Table: Site 16 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.17 Site no. 17 – Grave

This site consists of at least one unknown grave and is thus considered heritage grave. The grave is located in an agricultural field and demarcated with packed stone which seems disturbed by the surrounding agricultural activities (Figure 33).

GPS: 27°44'39.10"S 29°52'10.34"E



Figure 33: View of the grave in soya field at site 17.

Cultural significance Table: Site 17 Grave

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

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the

development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.18 Site no. 18 – Grave

This site consists of at least one grave and is located within an agricultural field. The grave is demarcated by a headstone that reads, Ephram Wradge. As no date of death is visible it is a considered and unknown grave to be dealt with similar to heritage graves (Figure 34). It looks as if the agricultural field goes over the grave itself.

GPS: 27°44'39.70"S 29°52'11.01"E



Figure 34: View of the headstone of grave at site 18.

Cultural significance Table: Site 18 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.19 Site no. 19 – Grave

This site consists of one unknown grave and is thus considered a heritage grave. The grave is located within an agricultural field and is demarcated by a stone headstone (Figure 35).

GPS: 27°44'41.88"S 29°52'10.42"E



Figure 35: View of the headstone of grave at site 19.

Cultural significance Table: Site 19 Grave

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.20 Site no. 20 – Graves

Site 20 consists of two unknown graves and are thus considered heritage graves. They are located near a border fence in an open field. The graves are demarcated with packed stones (Figure 36).

GPS: 27°44'49.75"S 29°52'18.57"E



Figure 36: View of a grave at site 20.

Cultural significance Table: Site 20 Graves

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

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the

development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.21 Site no. 21 – Graves

This site consists of at least six unknown graves and are thus considered heritage graves. They are located next to a border fence and are marked with packed stone. One of the graves had an old bicycle wheel on it (Figure 37).

GPS: 27°44'44.11"S 29°52'17.50"E



Figure 37: View of a grave at site 21.

Cultural significance Table: Site 21 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.22 Site no. 22 – Graves

This site consists of at least four unknown graves and are thus considered heritage graves. They are located next to a border fence and are demarcated with packed stone and headstones (Figure 38).

GPS: 27°44'42.62"S 29°52'17.51"E



Figure 38: View of the graves at site 22.

Cultural significance Table: Site 22 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.23 Site no. 23 – Graves

This site consists of at least three unmarked graves and are thus considered heritage graves. The graves are located within an agricultural field and are demarcated by packed stones, and there is damage from burrowing animals present (Figure 39).

GPS: 27°44'40.50"S 29°52'4.72"E



Figure 39: View of a grave at in soya field with damage caused by burrowing animals at site 23.

Cultural significance Table: Site 23 Graves

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

natural or cultural places or objects		
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	H
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.24 Site no. 24 – Graves

This site consists of at least three unknown graves and are thus considered heritage graves. The graves are located within an agricultural field and are demarcated by packed stones (Figure 40). There is damage from burrowing animals present which exposed grave goods (Figure 41).

GPS: 27°44'45.97"S 29°52'5.81"E



Figure 40: View of a grave and damage caused by burrowing animals at site 24.



Figure 41: Grave goods found at site 24.

Cultural significance Table: Site 24 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 2$$

$$= 12$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.25 Site no. 25 – Graves

This site consists of at least five unknown graves and are thus considered heritage graves. The graves are located within an agricultural field and are demarcated by packed stones (Figure 42). There are signs of damage from burrowing animals around the graves.

GPS: 27°44'44.94"S 29°52'7.10"E



Figure 42: View of a grave with damage caused by burrowing animals at site 25.

Cultural significance Table: Site 25 Graves

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

natural or cultural places or objects		
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.26 Site no. 26 – Graves

This site consists of at least six unknown graves and are thus considered heritage graves. The graves are located within an agricultural field and are demarcated with packed stones which seems to be disturbed by the surrounding agricultural activities (Figure 43).

GPS: 27°44'45.66"S 29°52'1.77"E



Figure 43: View of a grave in a soya field at site 26.

Cultural significance Table: Site 26 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.27 Site no. 27 – Graves

This site consists of at least twenty-three graves, some of which are younger than 60 years of age and some unknown graves. The unknown graves are considered heritage graves. The oldest grave belongs to Mbeki Michael Hlatshwayo who died on 2004/01/06 (Figure 44) and the youngest belongs to Sicolo Beauty Hlatshwayo who died on 2008/03/02. The graves are located on the top of a hill and the remains of an old car is close to the graves (Figure 45).

GPS: 27°44'54.72"S 29°51'59.81"E



Figure 44: View of a grave at site 27.



Figure 45: View of an old car located at site 27.

Cultural significance Table: Site 27 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium

Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 4$$

$$= 24$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in

no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.28 Site no. 28 – Grave

This site consists of at least one unknown grave and is thus considered heritage grave. It is located on the border of an agricultural field and is demarcated by packed stones which seems to be disturbed by the surrounding agricultural activities (Figure 46).

GPS: 27°44'55.40"S 29°52'3.51"E



Figure 46: View of the grave at site 28.

Cultural significance Table: Site 28 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.29 Site no. 29 – Graves

The information told us that this is the site with five unknown graves and are thus considered heritage graves, but the surface remains of the graves have been destroyed by agricultural activities (Figure 47).

GPS: 27°44'52.76"S 29°52'5.94"E



Figure 47: View of agricultural field where graves are located at site 29.

Cultural significance Table: Site 29 Graves

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

As the site is outside of the area of impact, Option 1 is recommended, but the mine needs to ensure the site is preserved.

8.30 Site no. 30 – Grave

This site consists of one unknown grave and is thus considered heritage grave. It is located close to homestead, in an open field and is demarcated by an earth mound (Figure 48).

GPS: 27°45'10.36"S 29°52'22.70"E



Figure 48: View of the grave at site 30.

Cultural significance Table: Site 30 Grave

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

Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 5,6 \text{ (High)} \times 2$$

$$= 11,2$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should

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

The site is inside of the area of direct impact. Therefore Option 2 is recommended.

8.31 Site no. 31 – Grave

This site consists of one unknown grave and is thus considered a heritage grave. The grave is located in an old agricultural field and is demarcated by packed stones (Figure 49).

GPS: 27°45'8.99"S 29°52'21.04"E



Figure 49: View of the grave located at site 31.

Cultural significance Table: Site 31 Grave

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

natural or cultural places or objects		
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is inside of the area of direct impact. Therefore Option 2 is recommended.

8.32 Site no. 32 – Grave

Site 32 consists of one unknown grave and is thus considered a heritage grave. The grave is located in an old agricultural field and demarcated by packed stone and an earth mound (Figure 50).

GPS: 27°45'9.53"S 29°52'21.13"E



Figure 50: View of the grave located at site 32.

Cultural significance Table: Site 32 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an	Y	Medium

understanding of South Africa's natural or cultural heritage		
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is inside of the area of direct impact. Therefore Option 2 is recommended.

8.33 Site no. 33 – Stone kraal

Site 33 is an old stone kraal of 29 x 12 m in size and about 1 m high. The kraal is located next to a dirt road (Figure 51).

GPS: 27°45'52.70"S 29°52'10.34"E



Figure 51: View of stone kraal wall at site 33.

Cultural significance Table: Site 35 Stone kraal

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	Negligible

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	Negligible
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Negligible
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Negligible
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	Negligible
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		1 - Negligible

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

$$= 1 \text{ (Negligible)} \times 3$$

$$= 3$$

The site receives a field rating of Local Grade IIIC. It means that 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.

8.34 Site no. 34 – Graves

This site consists of at least six graves, and all of these are younger than 60 years of age (Figure 52-53). The graves are located about 24 m from a homestead and are surrounded by a fence. They are demarcated by granite headstones and grave dressings made of granite, cement, and gravel. The oldest grave belongs to Mfanafiiti Esrom Hadebe who died on 1991/04/02 and the youngest belongs to Motaung Elizabeth Ngwanaselepe who died on 2007/06/29.

GPS: 27°45'54.57"S 29°52'11.58"E



Figure 52: View of the cemetery at site 34.



Figure 53: View of a grave at site 34.

Cultural significance Table: Site 34 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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 (High) x 4

= 24

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside of the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.35 Site no.35 – Historic remains

This site consists of a single layer of stone in a crescent shaped and is about 4 m in size. The site is located next to the farm border and no contextual evidence was found (Figure 54).

GPS: 27°45'57.87"S 29°52'19.64"E



Figure 54: View of remains of a stone wall at site 35.

Cultural significance Table: Site 35 Historical remains

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		1 – Negligible

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

$$= 1 \text{ (Negligible)} \times 1$$

$$= 1$$

The site receives a field rating of Local Grade IIIC. It means that 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.

8.36 Site no. 36 – Grave

This site consists of one unknown grave and is thus considered a heritage grave. The grave is located close to the farm border fence and is demarcated by packed stones (Figure 55).

GPS: 27°45'58.15"S 29°52'18.56"E



Figure 55: View of the grave at site 36.

Cultural significance Table: Site 36 Grave

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The opencast pit falls within a 100m buffer zone and may be direct impact. The pit boundary should thus be moved to at least 100 m from the graves and Option 1 be implemented.

8.37 Site no. 37 – Graves

This site consists of at least three unknown graves and are thus considered heritage graves. They are located close to the border fence of the farm and demarcated with packed stones (Figure 56).

GPS: 27°46'1.53"S 29°52'11.31"E



Figure 56: View of a grave at site 37.

Cultural significance Table: Site 37 Graves

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

Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should

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

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.38 Site no. 38 – Graves

This site consists of at least three unknown graves and are thus considered heritage graves. The graves are located close to the border fence of the farm and are demarcated with packed stones (Figure 57).

GPS: 27°46'2.94"S 29°52'7.16"E



Figure 57: View of the graves at site 38.

Cultural significance Table: Site 38 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High

Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 - High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.39 Site no. 39 – Graves

This site consists of at least three unknown graves and are thus considered heritage graves. The graves are located in a thicket of trees and are demarcated by stone headstones and packed stone borders (Figure 58).

GPS: 27°46'3.03"S 29°52'6.34"E



Figure 58: View of the graves at site 39.

Cultural significance Table: Site 39 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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 (High) x 1
= 6

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.40 Site no. 40 – Grave

This site consists of at least one unknown grave and is thus considered a heritage grave. The grave is located under a tree and is demarcated by an earth mound (Figure 59).

GPS: 27°45'53.20"S 29°51'58.65"E



Figure 59: View of the grave at site 40.

Cultural significance Table: Site 40 Grave

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

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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.41 Site no. 41 – Grave

This site consists of at least one unknown grave and is thus considered a heritage grave. The grave is located under a tree and is surrounded by a stone wall about 50 cm high. The grave is demarcated with packed stones (Figure 60).

GPS: 27°45'53.83"S 29°52'3.25"E



Figure 60: View of the stone walling with the grave at the centre at site 41.

Cultural significance Table: Site 41 Grave

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

Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the

development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.42 Site no. 42 – Graves

This site consists of at least fourteen unknown graves and are thus considered heritage graves. The graves are located in a fenced off area close to a farm dam. They are overgrown with grass. The graves are demarcated with packed stones (Figure 61).

GPS: 27°45'45.53"S 29°52'8.37"E



Figure 61: View of overgrown graves at site 42.

Cultural significance Table: Site 42 Graves

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

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

$$= 18$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site is outside the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

8.43 Site no. 43 – Farmyard

This site consists of several structures associated with farming activities. The stone kraals and the core of the main are at least 60 years old (Figure 62). The farmhouse has been extensively changed in the recent past (Figure 63).

GPS: 27°44'46.60"S 29°52'25.91"E



Figure 62: View of the stone kraal at site 43.



Figure 63: View of farmhouse at site 43.

Cultural significance Table: Site 43 Farmyard

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	Low

Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	Low
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Low
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	Low
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	N	-
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		2 – Low

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

= 2 (Low) x 2

= 4

The site receives a field rating of Local Grade IIIC. It means that 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.

8.44 Site no. 44 – Grave

This site consists of at least one unknown grave and is thus considered a heritage grave. The grave is located next to a dirt road and agricultural field and is demarcated with packed stones (Figure 64).

GPS: 27°44'24.46"S 29°52'25.28"E



Figure 64: View of the grave at site 44.

Cultural significance Table: Site 44 Grave

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	High
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	Y	High
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	Medium

Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	High
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	High
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	-
Reasoned assessment of significance using appropriate indicators outlined above:		6 – High

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

$$= 6 \text{ (High)} \times 1$$

$$= 6$$

Graves are always regarded as having a high cultural significance. The field rating is Local Grade IIIB. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.

Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.

The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The site outside from the area of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations.

However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.

9. CONCLUSION AND RECOMMENDATIONS

The field work for the project has been completed successfully. As indicated forty-four sites that may be impacted on was identified (Figure 65-67). Forty-three of these are inside of the Mining Right Application area and one of sites is outside.

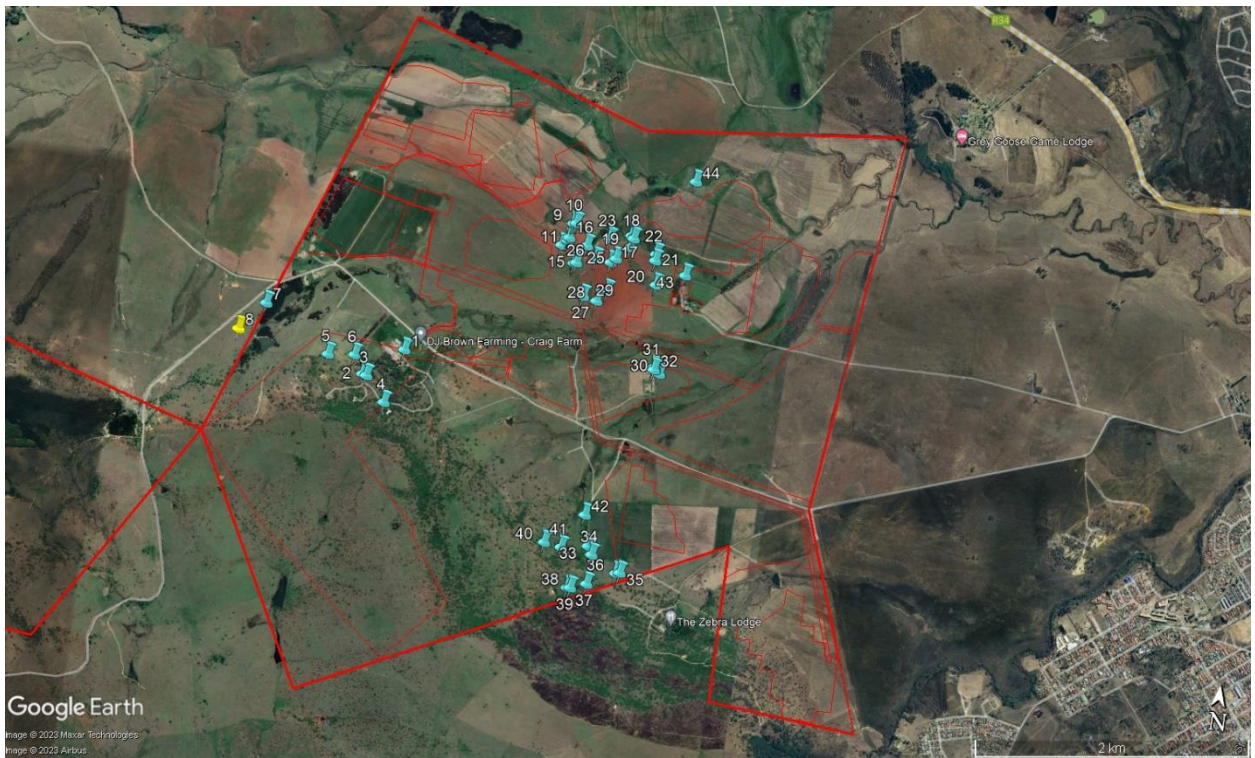


Figure 65: Locations of the heritage sites identified during the survey (Blue markers are sites in the impacted area and Yellow is a site outside the impacted area).



Figure 66: Zoomed in view of heritage sites in the Southern part of the surveyed area (Blue markers are site in the impacted area and the Yellow is the site outside the impacted area).



Figure 67: Zoomed in view of heritage sites in the Northern part of the surveyed area.

The following is recommended:

- Site no. 1 consists of a farmyard and receives a field rating of Local Grade IIIB. It should be included in the heritage register and may be mitigated (medium-high significance if needed). Such mitigation would be subject to a permit application lodged with the relevant heritage authority. Mitigation will consist of documentation of the site, including buildings older than 60 years as well as photographic documentation.

Although the site falls in an underground mining area, it is recommended that the site remain *in situ*. It is however possible that the underground mining may impact on the site in the form of cave-ins. This needs to be prevented. The mine also needs to involve the blasting expert to ensure that no further damage is done to these structures. This would be possible by using different blasting techniques.

Should the above be impossible, the site should rather be mitigated by a Phase II study.

- Site no. 33 (a stone kraal), 35 (historical remains), and 43 (a farmyard) receives a field rating of Local Grade IIIC. It means that 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. Site no. 33 and 35 fall outside of any direct impact, and it is recommended that the sites remain *in situ*. Site no 43 is proposed to be used as offices for the first 8 years

of operation, whereafter it will be destroyed by the mining of Pit 6 (if approval is granted).

- Sites no. 2-32, 34, 36-42 and 44 are all graves. Graves are always regarded as having a high cultural significance. It should be included in the heritage register and mitigation measures must be implemented if any development activities take place in its vicinity.
 - Two possibilities exist. The first option would be to fence the graves in or demarcate the site and have a management plan drafted for the sustainable preservation thereof. This should be compiled by a heritage expert. This option is relevant when the graves are in no danger of being damaged or destroyed by the development (direct impacts). Secondary impact due to the development activities may still exist and must be managed.
 - The second option is to exhume the mortal remains and to have it relocated. This usually is relevant when the graves will be directly affected (damaged or destroyed) by the development. In this case specific procedures should be followed which includes social consultation. Graves younger than 60 years may be exhumed only by an undertaker. For those older than 60 years, and unknown graves, an undertaker and archaeologist should be appointed. Permits must be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.
- Sites no. 9-29, 34, 37-42 and 44 are all outside of the areas of direct impact. However, there always is a secondary impact due to adjacent mining activities (blasting, subsidence etc.). Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.¹¹ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations. However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable.
- Sites no. 3-6 fall in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.¹² Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations.

¹¹ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

¹² It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

However, the mine will need to ensure that there is no direct impact to the graves, which includes possible cave-ins. If this is the case, Option 2 will be applicable.

- Site 30-32 is inside of the areas of direct impact. Therefore Option 2 is recommended.
- Site no. 2 consists of graves and historical remains. falls in an underground mining area which may impact on the site in the form of cave-ins. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan.¹³ Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the underground operations. However, the mine will need to ensure that there is no direct impact to the graves, which includes possible cave-ins. If this is the case Option 2 will be applicable.

The historical remains at site 2 receives a field rating of Local Grade III C. It means that 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.

- Site no 7 is about 70 m from the proposed pit, site no 8 is 85 m and site no 36 is about 60 m outside. This is reasonably close and thus there likely will be a secondary impact due to adjacent underground mining activities that could cause cave-ins. Blasting may also affect the graves. This needs to be prevented. Therefore Option 1 is recommended. Option 1 includes the writing of a site preservation management plan which needs to be discussed with the blasting expert. Access to descendants will not be impacted, as the area falls outside the proposed mine infrastructure area. The current land use will continue concurrent to the operations. However, the mine will need to ensure that there is no direct impact to the graves. If this is the case Option 2 will be applicable. Impact can be minimised by moving the pit border to at least 100 m from the graves.
- 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 in certain areas it also is possible that some sites may only become known later. 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 regard the following 'Chance find Procedure' should be followed:
 - *Upon finding any archaeological or historical material all work at the affected area must cease.*

¹³ It is standard protocol to either recommend option 1 or option 2 for graves. A management plan will address issues, such as accessibility.

- *The area should be demarcated 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.*

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.

10. REFERENCES

Archaetnos database.

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

Bergh, J.S. & Bergh, A.P. 1984. **Stamme en ryke.** Cape Town: Don Nelson.

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.

Mr. Hlatswayo, R.Z. Farmworker of farmer of DJ Brown Farming, and resident of area for 70 years, Personal communication, 2023/02/04.

Pretorius, F. 1985. **1899-1902. Die Anglo-Boere-oorlog.** Cape Town: Don Nelson.

Republic of South Africa. 1980. Ordinance on Excavations (**Ordinance no. 12 of 1980**). The Government Printer: Pretoria.

Republic of South Africa. 2003. **National Health Act (Act 61 of 2003).** 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.
- Venter, C. 1985. **Die Groot Trek**. Cape Town: Don Nelson.

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 Grade 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 37 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 36.

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.