



An EOH Company

**KITSO MINING (PTY) LTD: HERITAGE MEMO AND SITE
MANAGEMENT PROCEDURES FOR AN EXPOSED
BURIAL SITE THE FARM LOHATLHA 673, SIYANDA
DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE**

SAHRA Case Number 11506

A 3D rendering of a globe with water splashing over it, symbolizing sustainability and environmental impact. A large, faint infinity symbol is overlaid on the globe.

**Innovation in
Sustainability**

The logo for EOH, consisting of the letters "EOH" in a bold, white, sans-serif font with a small triangle above the letter 'O'.

Prepared for: Kitso Mining (PTY) LTD

Prepared by: Exigo Sustainability

HERITAGE MEMO AND SITE MANAGEMENT PROCEDURES FOR AN EXPOSED BURIAL SITE AT THE KITSO MINE THE FARM LOHATLHA 673, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

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DECLARATION

I, Nelius Le Roux Kruger, declare that –

- I act as the independent specialist;
- I am conducting any work and activity relating to this assessment in an objective manner, even if this results in views and findings that are not favourable to the client;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have the required expertise in conducting the specialist report and I will comply with legislation, including the relevant Heritage Legislation (National Heritage Resources Act no. 25 of 1999, Human Tissue Act 65 of 1983 as amended, Removal of Graves and Dead Bodies Ordinance no. 7 of 1925, Excavations Ordinance no. 12 of 1980), the Minimum Standards: Archaeological and Palaeontological Components of Impact Assessment (Eastern Cape-PHRA, SAHRA and the CRM section of ASAPA), regulations and any guidelines that have relevance to the proposed activity;
- I have not, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
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Signature of specialist

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1 BACKGROUND

1.1 Scope

Exigo Sustainability was contracted by Kitso Mining (PTY) LTD to undertake an assessment of a human grave and an associated graveyard that had been uncovered during surface clearing and excavation for manganese mining at the Kitso Mine north of Postmasburg in the Northern Cape Province. The Exigo Heritage Specialist was initially asked for advice in terms of legislation and a site inspection was requested to assess the state of the grave, as required by the DMR. The purpose of this document is to describe the current state of the site, the graveyard and the extent of the heritage landscape, to assess the extent of the impact on the graveyard and to submit appropriate recommendations with regard to the cultural resources management measures that is required at affected site. A copy of this report will be supplied to the Burial Grounds and Graves (BGG) and Archaeological, Palaeontological and Meteorite (APM) units of the South African Heritage Resources Agency (SAHRA) and recommendations contained in this document will be reviewed.

1.2 Motivation and Background

On Wednesday 2 August 2017, mining activities on the farm Lohatla at the Kitso Mine near Postmasburg in the Northern Cape Province exposed human remains in an excavation trench, excavated mechanically using a large excavator. All work was immediately ceased, the mine manager was contacted and chance find procedures were implemented that included:

- Ceasing all activities in and around the find;
- Establishing a conservation buffer area surrounding the find;
- Notification of the local South African Police Services in Dingleton;
- Notification of the South African Heritage Resources Agency (SAHRA);

Exposed human remains were collected by the South African Police Services (Dingleton) for safekeeping on the same day. The Heritage Specialist of Exigo Sustainability was notified by mining personnel of the chance find on Thursday 9 August. Kitso Mining (PTY) LTD has received Environmental Authorisation for all activities associated with the operation of the Kitso Mine but the Department of Mineral Resources (DMR) issued a directive to suspend all mining operations until the site has been assessed by a Heritage Specialist. The Heritage Specialist, Neels Kruger conducted a site assessment on Saturday 12 August 2017 where after both the Burial Grounds and Graves (BGG) and Archaeological, Palaeontological and Meteorite (APM) units of SAHRA (**SAHRIS Case Reference 11506**) were informed. The purpose of the site visit was to determine the context of the exposed burial, to assess the state of the site, to demarcate the cemetery and to ascertain whether any other remains may exist in the area. No context could however be determined for the exposed remains as it had been removed by the SAPS. A site walk down identified a large number of graves in the surroundings, known from earlier heritage assessments (see below). The mine immediately indicated that further development in the area of the exposed grave and surrounding graveyard would be suspended permanently and argued for the retaining and conservation of the burial site. The mine also indicated that no material was removed from the site to stockpiles. It should be noted that, according to the mine, the site was fenced as per initial HIA recommendations (Beaumont 2008) but this fence was apparently dismantled and stolen in following years.

1.3 Previous Heritage Impact Assessments

Two Phase 1 Heritage Impact Assessments (HIAs) were completed for the farm Lohatla 673 in 2008 by Beaumont¹ and a study in 2009 by Pelsers & Van Vollenhoven². The purpose these studies were to establish the presence of significant heritage sites on portions of Lohatla demarcated for mining and development. Pelsers (2009) identified a single Historical period structure in his study and in the earlier HIA, Beaumont (2008) refers to the graveyard in question and he established that mining would have no impact on the heritage resource provided that applicable heritage management actions be taken to secure the site. Here, he recommended that an existing fence on the north side of the graveyard be extended to its other sides to enclose the graveyard, and access control be applied.

1.4 Terms of Reference

Heritage specialist input into the Environmental Impact Assessment (EIA) process is essential to ensure that, through the management of change, developments still conserve our heritage resources. It is also a legal requirement for certain development categories which may have an impact on heritage resources. The heritage component of the EIA is provided for in the **National Environmental Management Act, (Act 107 of 1998)** and endorsed by section 38 of the **National Heritage Resources Act (NHRA - Act 25 of 1999)**. In addition, the NHRA protects all structures and features older than 60 years, archaeological sites and material and graves as well as burial sites. The objective of this legislation is to ensure that developers implement measures to limit the potentially negative effects that the development could have on heritage resources. The successful management of sensitive heritage sites is essential and, as such the aims of site management at a national or provincial level which involves involve:

- the identification and definition of the values of the site;
- the implementation of land management practices that maximise the conservation of site, minimise the necessity for site destruction, and maximise the opportunities of lessening the effects of the damage of the site or its components; and
- the setting in place of plans for long term conservation of the site through legal and physical protection and interpretation and visitor management.

As such, a heritage management for the heritage site in question at the Kitso Mine involves:

- the location, identification and documentation of the site attributes and identification of the interests of key players in their ownership and management;
- assessment of the values or significance of the site to the local communities;
- weighing the values of the site with a range of management issues, including
 - its current physical condition,
 - remedial action to ensure conservation of the integrity of the site,
 - implementation of appropriate site management strategies and adjusting and altering them as required.

Site and heritage management addresses management issues at the site, cognisant of current site status,

¹ Beaumont, P. 2008. PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT REPORT ON THREE PORTIONS OF THE FARM LOHATLA 673 NORTH OF POSTMASBURG, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.

² Pelsers & van Vollenhoven. 2009. REPORT ON A HERITAGE IMPACT ASSESSMENT STUDY FOR PROPOSED MINING DEVELOPMENT ON THE REMAINING EXTENT OF THE FARM LOHATLA 673 KURUMAN REGISTRATION DISTRICT, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE

required conservation methods, processes and practices to retain the values of the site in terms of the cultural significance of the site, past and present threats affecting the significance of the site and the management issues at the site, including its condition.

1.5 CRM: Legislation, Conservation and Heritage Management

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

1.5.1 Legislation regarding archaeology and heritage sites

The South African Heritage Resources Agency (SAHRA) and its provincial offices aim to conserve and control the management, research, alteration and destruction of cultural resources of South Africa. It is therefore vitally important to adhere to heritage resource legislation at all times.

a. National Heritage Resources Act No 25 of 1999, section 35

According to the National Heritage Resources Act No 25 of 1999 (section 35) the following features are 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.

In addition, the national estate 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.)

With regards to activities and work on archaeological and heritage sites this Act states that:

“No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit by the relevant provincial heritage resources authority.” (34. [1] 1999:58)

and

“No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological 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 palaeontological material or object, or any meteorite; or*
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites. (35. [4] 1999:58).”*

and

“No person may, without a permit issued by SAHRA or a provincial heritage resources agency-

- (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, 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;*
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals (36. [3] 1999:60).”*

b. Human Tissue Act of 1983 and Ordinance on the Removal of Graves and Dead Bodies of 1925

Graves and burial grounds are commonly divided into the following subsets:

- 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

Graves 60 years or older are heritage resources and fall under the jurisdiction of both the National Heritage Resources Act and the Human Tissues Act of 1983. However, graves younger than 60 years are specifically protected by the Human Tissues Act (Act 65 of 1983) and Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional provisions, laws and by-laws. Such burial places also fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant local authorities.

c. National Heritage Resources Act No 25 of 1999, section 35

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.

A detailed guideline of statutory terms and requirements is supplied in Addendum 1.

2 REGIONAL CONTEXT

2.1 Area Location

The Kitso Mine is situated on portions of the farm Lohatla 673, approximately 35 km north of Postmasburg and 40 km south of Kathu in the Siyanda District Municipality of the Northern Cape Province:

- **Mine Offices** S28.03842° E23.03352°
- **Disturbed Graveyard** S28.03873° E23.03051°

The site is located on 1:50 000 map sheet **2823AACA**.

2.2 Site Description

The Lohatla property comprises flatter plains with rolling hills densely covered with Swarthaäk (*Acacia detinens*). Gentle slopes with more open cover of grass and bush occurs in areas. Signs of historical mining are visible across the property, and especially directly south-east of the graveyard in question.

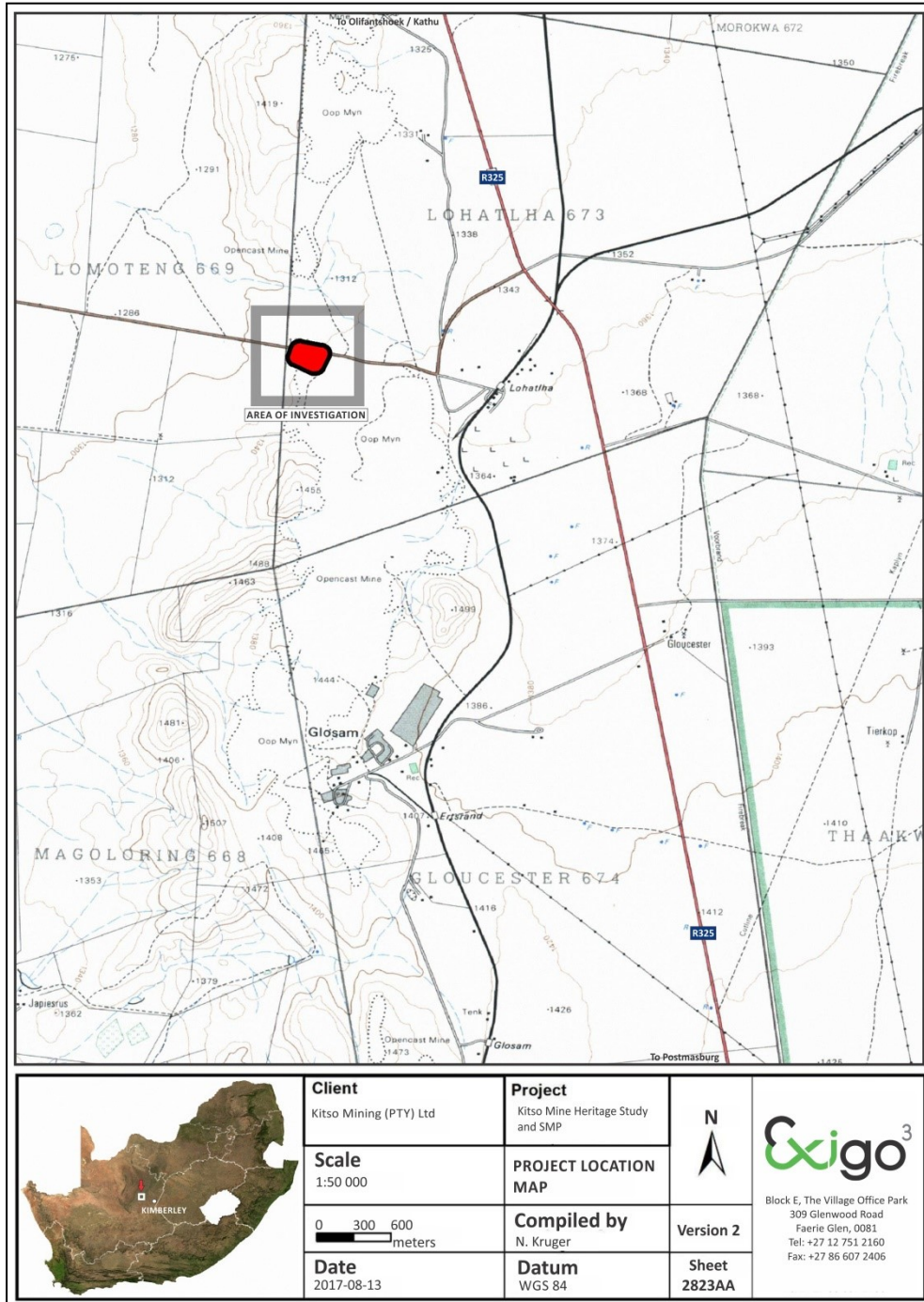


Figure 2-1: 1:50 00 Map representation of the location of the Kitso Mine and the graveyard in question (sheet 3027CA).

3 METHOD OF ENQUIRY

3.1 Sources of Information

3.1.1 Desktop Study

A brief desktop study was prepared in order to contextualize the graveyard in question within a larger historical milieu. The study drew on available unpublished archival databases and unpublished Heritage Assessment reports to give a comprehensive representation of known sites in the study area. Furthermore, numerous academic papers and research articles supplied a historical context for the proposed project and archival sources, aerial photographs, historical maps and local histories were used to create a baseline of the landscape's heritage.

3.1.2 Field Survey

Archaeological survey implies the systematic procedure of the identification of archaeological sites. An assessment of the burial site was conducted on 12 August 2017. The Heritage Specialist was accompanied by the mine manager, mining personnel, a representative of the CPA and members of the nearby Maremane community. During the inspection, the disturbed burial site as well as two other graveyards and areas of heritage potential on the property were inspected. Using a Garmin Montana GPS objects, key coordinates at the sites were taken and photographs were taken with a Samsung Mobile Phone.

3.1.3 Limitations: Visibility and Access

The surrounding vegetation in the study area is mostly comprised out of thick pockets of Swarthaak and mixed grasslands and scattered trees. As such, dense vegetation constrained visibility and access to some areas on the property.



Figure 3-1: View of general surroundings at the area of investigation where the graveyard was disturbed.

4 SITE INVESTIGATION RESULTS


Figure 4-1: Aerial map indicating the locations of heritage sites discussed in the text.

4.1 The General Landscape

During the site inspection, a general survey of the property was conducted whereby mining personnel indicated areas of heritage potential to the Heritage Specialist. Here, a large Historical Period Occupation area and single graves, and a large cemetery were noted.

- Occupation Area and Graves

A large Historical Period occupation area was noted west of the current mine offices along an old haul road. Even though a clear temporal context for site could not be ascertained it might be assumed that it was inhabited in the early 20th century, based on observed surface artefacts. Here, a number of small ash midden deposits containing Historical Period artefacts such as glass, metal, and porcelain were noted. In addition, a few stone cairns resembling graves were also noted in this area.

Key location points for this site are:

- South western corner **S28.03793° E23.04106°**
- South eastern corner **S28.03787° E23.04165°**
- North western corner **S28.03558° E23.04019°**
- North eastern corner **S28.03518° E23.04085°**

- Cemetery

A large cemetery was documented along the norther periphery of the property. The burial site hold various numbers of graves, a number of which might be older than 60 years or unmarked. The graveyard is not fenced off and it is not maintained. A few graves bear marble headstones but the majority of burials are indicated by manganese cairns. Most of the graves are placed in an east-west orientation.

Key location points for this site are:

- South western corner **S28.02207° E23.03032°**
- South eastern corner **S28.02259° E23.03097°**
- North western corner **S28.02109° E23.03074°**
- North eastern corner **S28.02137° E23.03145°**



Figure 4-2: A stone heap and upright stone possibly demarcating a burial at a Historical Period occupation terrain.



Figure 4-3: Glass, porcelain and bone from a possible occupation site on the property.



Figure 4-4: Prickly pear stands in a possible Historical period occupation area.



Figure 4-5: A marble headstone is a large cemetery along the northern periphery of the property.



Figure 4-6: A marble headstone is a large cemetery along the northern periphery of the property.



Figure 4-7: A marble headstone is a large cemetery along the northern periphery of the property.



Figure 4-8: Manganese stone cairns indicating graves in the large cemetery along the northern periphery of the property.

4.2 The Disturbed Burial Site

A large surface area west of the current mining office and south of a connection road had recently been cleared for mining. Here, a number of prospecting trenches were dug and some of these trenches were extended. During excavations on one of these trenches, at least one burial was exposed. Operation in the vicinity of the find was immediately ceased and the area was cordoned off with danger tape. Exposed human bones were collected by the SAPD for safekeeping and the site was left as is. A careful walkthrough of the site was done by the Heritage Specialist in order to examine other burials and to establish a relative perimeter of the site. Key location points for the site perimeter are:

South western corner **S28.03872° E23.02951°**

South eastern corner **S28.03955° E23.03133°**

North western corner **S28.03793° E23.02979°**

North eastern corner **S28.03833° E23.03196°**

When the heritage specialist conducted the site inspection, the following were noted:

- A substantial surface area along the assumed eastern boundary of the graveyard had been cleared and levelled, removing possible surface grave dressing / stones.
- A trench of approximately 3m x 6m was excavated to a depth of approximately 2m where the human remains were exposed.
- Fragments of a wooden coffin were still visible at the site where human remains were excavated.
- Fragments of cloth, originating from the burial was visible on the surface at the site where human remains were excavated.
- It seems as though no other burials were exposed or damaged during excavations.
- A large number of graves, marked by oval piles of manganese clasts occur west of the cleared area. These include a grave covered with a concrete gravestone, dating to 1944 and dating to an individual named Salima.
- The nature of the grave site is such that it is hard to determine its exact perimeters. Those perimeter points indicated above are however reasonably likely to indicate the extent of the site.
- A number of prospecting trenches occur in this area but no exposed human remains, grave pits or cultural material were noted in association with these trenches.
- Generally, the surrounding landscape has been transformed by historical mining.

Mining personnel noted that bone material was uncovered nearby in a trench but that these were the bones of a large animal, possibly a Bovid. Photos were provided to the heritage specialist and an analysis of bone material displayed in these images is ongoing. An investigation into the history of the graveyard, estimated by Beaumont (2008) to hold more than 400 graves, revealed that the graves date to the early 20th century and that they belonged to mine workers in the area. Manganese reserves are known to occur in the Postmasburg area in the Northern Cape Province. The exploration of that deposit, which outcrops on low hills between Postmasburg and Sishen, commenced in 1922 but the location of the major ore bodies in the north only began later, in the late 1930's (Hocking 1983). The Manganese deposits at Lohatla were mined by SA Manganese from the 1930's until closure. Reference to the graves is made in Hocking (1983:72), where it is recorded that in the mid 1930's, a mystery disease, later identified as relapsing fever, had caused local labour to fall sick as many as six or seven men died on a daily basis. It is written that more than 600 men were lost and that they were buried in manganese rubble in an area adjoining Lohatla – most probably the current location of the graveyard in question. Beaumont argues that the single later grave could belong to a family member wishing to be buried near her husband.



Figure 4-9: The excavation trench where human remains were exposed (red arrow).



Figure 4-10: View of the excavation trench where human remains were exposed (red arrow).



Figure 4-11: Remains of a wooden coffin and cloth still present at the site where human remains were exposed.



Figure 4-12: Image of human remains exposed at the site (photo provided).



Figure 4-13: An oval pile of manganese stone, demarcating a burial at the cemetery.



Figure 4-14: A single concrete headstone marked with a name and date at the cemetery.



Figure 4-15: View of a large prospecting trench excavated in the cemetery.



Figure 4-16: View of a large prospecting trench excavated in the cemetery



Figure 4-17: Bone material, assumedly that of a large animal, excavated in closed proximity of the cemetery (photo provided).

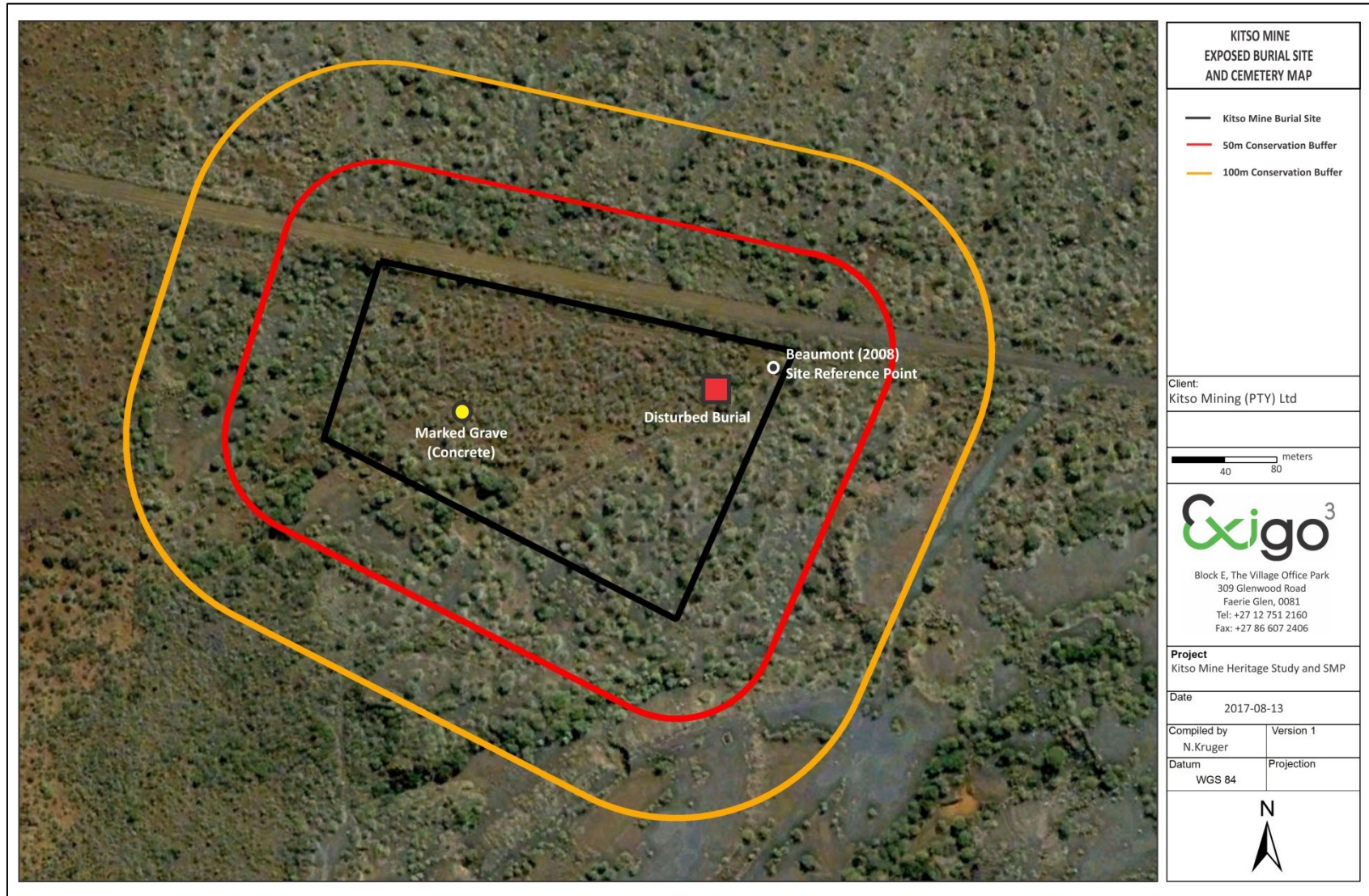


Figure 4-18: Aerial map indicating key points at the cemetery in question, as well as proposed conservation buffer zones.

5 SITE MANAGEMENT PROCEDURES

5.1 Legal Framework

SAHRA's Policy on burial grounds primarily advocates the retaining and conservation of graves and cemeteries, no matter how inaccessible and difficult they are to maintain. Only when essential developments threaten a place of burial, that human remains should be disinterred to another cemetery or burial ground. From a historical point of view and for research purposes, it is vital that burial sites are not disturbed. The location and marking of an individual's grave tells a life story, where he / she died defending (or attacking) a particular place or situation and makes it easier to understand the circumstances of a persons' death. Different legislation applies to the different categories of graves set out above:

- Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act 65 of 1983. These graves fall under the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorization for exhumation and re-interment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains.
- Graves older than 60 years, but younger than 100 years, fall under the jurisdiction of two acts, namely the National Heritage Resources Act 25 of 1999 (Section 36) as well as the Human Tissues Act 65 of 1983. Should graves older than 60 years, or if the age of the grave cannot be ascertained either by a grave marking or through a social consultation process, be located outside a formal cemetery, the Procedure for Consulting Regarding Burial Grounds and Graves (Section 36(5) of the Heritage Resources Act 25 of 1999) is applicable. However, graves older than 60 years but younger than 100 years, which are located within a formal cemetery administered by a local authority will also require the same authorization as set out for graves younger than 60 years over and above SAHRA authorization. If the grave is not located within a formal cemetery, but is to be relocated to one, permission must also be acquired from the local authority and all regulations, laws and by-laws set by the cemetery authority must be adhered to. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains. A qualified archaeologist accredited by SAHRA must personally supervise any alteration to, or relocation of, graves in this category.
- Graves older than 100 years are classified as archaeological, and are protected in terms of Section 35 of the National Heritage Resources Act 25 of 1999. Authorization from SAHRA is required for these graves. A qualified archaeologist accredited by SAHRA must also supervise any alteration or relocation of graves in this category. On the discretion of SAHRA, the Procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) might also be required. If the grave is situated in cemetery administered by a local authority the authorizations as set out for graves younger than 60 years are also applicable over and above SAHRA authorization. The institution undertaking the relocation must be authorized under Section 24 of the Human Tissues Act 65 of 1983 to handle and transport human remains.
- All graves of victims of conflict regardless of how old they are or where they are situated are protected by Act 25 of 1999 (National Heritage Resources Act). SAHRA authorization is required for all graves in this category. Any alteration to a grave in this category or the relocation thereof

must be personally supervised by a qualified archaeologist accredited by SAHRA. If the grave is situated in a cemetery administered by a local authority the authorizations as set out for graves younger than 60 years are also applicable over and above SAHRA authorization. On the discretion of SAHRA the Procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999 (National Heritage Resources Act)) might also be required. In order to handle and transport human remains the institution conducting the relocation should be authorized under Section 24 of Act 65 of 1983 (Human Tissues Act).

5.2 Site Management Actions

The Kitso Mine management has indicated that no further development will take place in the vicinity of any human burials and graves on the property will remain undisturbed. It is essential that sufficient heritage management measures are put into place to rehabilitate the damaged site and to protect and manage the graves at the Lohatla burials sites. Broadly, these management measures should include:

- Fencing of all burial grounds.
- Reinterment of human remains recovered from the graveyard.
- Rehabilitation of transformed areas.
- Erection of a memorial or grave stone.
- Implementing a site management procedures.

5.2.1 Fencing of the burial grounds

The mine management is aware of the fact that the affected graveyard, as well as other burial sites on the mine property should be fenced as a matter of utmost urgency in order to protect the graves and to clearly demarcate the heritage site. As such, they have commenced with fencing of the disturbed graveyard. As a guideline for this process, the standard SAHRA cemetery conservation measures, where the conservation area is fenced allowing for at least one access gate is recommended. Notice boards should be attached to the fence to indicate the nature and sensitivity of the site. It is further recommended that a distance of at least 10m is left undisturbed between the nearest graves and the fence around the graves. Access control should be applied whereby the site is locked off and keys are kept at the mine offices. However, provision for the accessibility to the site for descendants should be made within the health and safety regulations of the mine. A conservation buffer of 100m should be implemented around the cemetery fence but where areas are transformed (e.g. road) a 50m conservation buffer could be considered – subject to careful assessment of these areas.



Figure 5-1: View of a fenced cemetery with a site notice at a mine in Limpopo Province.

5.2.2 Testing and Rehabilitation of the disturbed burial site.

It is essential that disturbed and transformed areas in the graveyard should be rehabilitated in order to restore site integrity and also to ensure that no human remains remain in excavated deposits. Firstly, the disturbed burial site should be excavated by archaeological methods to test whether human remains emanating from the disturbed grave might still be present in subsurface deposits. This measure should be undertaken by a suitably qualified and experienced Heritage Specialist, subject to an excavation permit as required by SAHRA. In addition, excavations and prospecting trenches should be carefully backfilled and this process should entail a continuous watching brief and screening procedure in order to detect the possible presence of human remains. The heritage specialist needs to be present on site during the backfilling in order to handle any human remains that may be encountered during this process. Access and movement of heavy machinery in the graveyard for rehabilitation purposes should be restricted and carefully monitored in order to avoid damage to burials.

5.2.3 Reinternment of human remains recovered from the graveyard

Since no further development will take place in the vicinity of graveyards at the mine, Grave Relocation processes are neither necessary nor recommended. In addition, it is understood that no further palaeoanthropological analysis to determine the age, sex, race and any health status of the remains is required since the general history of the graves are known and no dispute with regards to the remains has been lodged. However, it is of utmost importance that human remains removed from the site by the SAPD, and any other remains possibly present in the disturbed grave, be reinterred at the location where it was exposed. This process should be conducted by a qualified undertaker, and supervised by the archaeologist. It is essential that correct procedures in terms of the reburial of heritage graves be followed which should include:

- The Burial Grounds and Graves (BGG) Unit of SAHRA should be notified of the intention to rebury the remains.
- All cultural and material objects associated with the burial (cloth, nails, coffin remains etc.) should be carefully collected and reinterred with the human remains.
- The remains should be reburied in a small coffin or casket and the necessary respect for the deceased should be observed at all times.
- Local communities and representatives who by tradition might have an interest in the remains should be consulted throughout the process provision should be made for reburial ceremonies if necessary.
- The entire process should be carefully documented by the heritage specialist and reported to the BGG Unit.

5.2.4 Erection of a memorial or grave stone

It is recommended that a memorial stone be erected at the site of the exposed grave in order to convey the history and meaning of the site in a dignified and visual manner. The memorial stone might contain a concise history of the graveyard as well as contact details for visitation and site access arrangements.

5.2.5 Implementing Site Management Procedures

The mine has indicated that all graves on the property should be preserved in situ and future development will be designed around these burial sites. A Site Management Plan needs to be implemented, which should be written in accordance with the SAHRA guidelines in this regard. This plan should indicate:

- The implementation of short and long-term management measures for the burial sites on the property.
- Persons responsible for maintaining the burial sites on the property.

- Action and procedures with regard to possible future chance finds.
- Training programmes for the onsite Environmental Officer (EO) and mining personell to screen sites where earthworks are expected before any activity takes place.
- Agreements with communities and representatives who by tradition might have an interest in the graves regarding the future of such remains, e.g. with regards to visiting rights.

6 RECOMMENDATIONS AND WAY FORWARD

Exigo Sustainability was requested to assist in the assessment of a burial site inadvertently discovered during mining at the Kitso Mine. Human remains are often difficult to detect as burials, in most cases, are not marked at the surface and they may be found in "lost" graveyards, or occur sporadically anywhere as a result of historic activity, victims of conflict or crime. Human remains are often observed when they are exposed through erosion or development. The Kitso Mine decided to preserve all graves and graveyards on the property *in situ*, misnaming the direct impact thereon.

The following recommendations are made based on observations at the burial site and contained in this document:

- The conservation and safeguarding of human burials on the mine property is of primary importance and, cognisant of current operational losses, Kitso has requested a strategy forward that would provide for mining activities to continue concurrently with remedial and heritage site management actions detailed in this document. Mining should be able to continue elsewhere on the property, provided that the proposed conservation buffers of between 50m and 100m around the burial sites are implemented and observed at all times. The burial sites should also be clearly demarcated by means of danger tape until such time that these sites have been secured by means of fencing, where the disturbed graveyard should be fenced as a matter of urgency. Should mining resume, the disturbed graveyard should be monitored on a daily basis by an informed control officer to avoid any further impact on the site. It should be stated that it is imperative that site management protocols as stipulated above be implemented at the soonest opportunity.
- As a permanent measure, a buffer zone of at least 50m needs to be implemented around all burials sites on the property.
- The mine has commenced with fencing the disturbed graveyard, in order to demarcate the sensitive heritage site. Access control should be implemented and a memorial stone be erected at the site of the exposed grave. Other burial sites on the property should also be fenced accordingly.
- It is recommended that the disturbed burial site should be excavated by archaeological methods to test whether human remains emanating from the disturbed grave might still be present in subsurface deposits, subject to an excavation permit as required by SAHRA. In addition, excavations and prospecting trenches should be carefully backfilled and this process should entail and a continuous watching brief and screening procedure by the heritage specialist in order to detect the possible presence of human remains. Human remains removed from the site should be reinterred at its original location as soon as possible. Local communties should be consulted throughout this process.
- A site management plan needs to be drafted for the grave sites. This entails the permanent establishment of a buffer zone, permanent fencing and the implementation of the sustainable preservation measures indicated in the plan. Such a management plan will entail detailed information regarding the preservation of the sites. The management plans should be approved by SAHRA.

- It is recommended that the mine, via the Heritage Specialist, submit a short report including photographic evidence to SAHRA, documenting the successful implementation of remedial and rehabilitation procedures stipulated in this document.
- The burial sites on the mine property should be recorded in the SAHRA database for future reference and heritage site distribution and management purposes.
- In terms of long-term heritage management, it is recommended that the mine provide for the scanning of future development areas by a heritage specialist prior to the commencement of such activities or developments. This will avoid the potential disturbance of localised heritage remains.
- The mine is reminded that should any human bones or unmarked human burials/remains be found during the course of construction, work in the immediate vicinity should cease and the find must immediately be reported to the archaeologist, or the South African Heritage Resources Agency (SAHRA). Under no circumstances may burials be disturbed or removed until such time as necessary statutory procedures required for grave relocation have been met.

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8 ADDENDUM 1: HERITAGE LEGISLATION BACKGROUND

8.1 CRM: Legislation, Conservation and Heritage Management

The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

8.1.1 Legislation regarding archaeology and heritage sites

The South African Heritage Resources Agency (SAHRA) and their provincial offices aim to conserve and control the management, research, alteration and destruction of cultural resources of South Africa. It is therefore vitally important to adhere to heritage resource legislation at all times.

d. National Heritage Resources Act No 25 of 1999, section 35

According to the National Heritage Resources Act of 1999 a historical site is any identifiable building or part thereof, marker, milestone, gravestone, landmark or tell older than 60 years. This clause is commonly known as the “60-years clause”. Buildings are amongst the most enduring features of human occupation, and this definition therefore includes all buildings older than 60 years, modern architecture as well as ruins, fortifications and Iron Age settlements. “Tell” refers to the evidence of human existence which is no longer above ground level, such as building foundations and buried remains of settlements (including artefacts).

The Act identifies heritage objects as:

- objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects, meteorites and rare geological specimens
- visual art objects
- military objects
- numismatic objects
- objects of cultural and historical significance
- objects to which oral traditions are attached and which are associated with living heritage
- objects of scientific or technological interest
- any other prescribed category

With regards to activities and work on archaeological and heritage sites this Act states that:

“No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit by the relevant provincial heritage resources authority.” (34. [1] 1999:58)

and

“No person may, without a permit issued by the responsible heritage resources authority-

- (d) *destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (e) *destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*

- (f) *trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or*
- (g) *bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites. (35. [4] 1999:58)."*

and

"No person may, without a permit issued by SAHRA or a provincial heritage resources agency-

- (h) *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;*
- (i) *destroy, damage, alter, exhume, 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;*
- (j) *bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) and excavation equipment, or any equipment which assists in the detection or recovery of metals (36. [3] 1999:60)."*

e. Human Tissue Act of 1983 and Ordinance on the Removal of Graves and Dead Bodies of 1925

Graves 60 years or older are heritage resources and fall under the jurisdiction of both the National Heritage Resources Act and the Human Tissues Act of 1983. However, graves younger than 60 years are specifically protected by the Human Tissues Act (Act 65 of 1983) and the Ordinance on the Removal of Graves and Dead Bodies (Ordinance 7 of 1925) as well as any local and regional provisions, laws and by-laws. Such burial places also fall under the jurisdiction of the National Department of Health and the Provincial Health Departments. Approval for the exhumation and re-burial must be obtained from the relevant Provincial MEC as well as the relevant Local Authorities.

8.1.2 Background to HIA and AIA Studies

South Africa's unique and non-renewable archaeological and palaeontological heritage sites are 'generally' protected in terms of the National Heritage Resources Act (Act No 25 of 1999, section 35) and may not be disturbed at all without a permit from the relevant heritage resources authority. Heritage sites are frequently threatened by development projects and both the environmental and heritage legislation require impact assessments (HIAs & AIAs) that identify all heritage resources in areas to be developed. Particularly, these assessments are required to make recommendations for protection or mitigation of the impact of the sites. HIAs and AIAs should be done by qualified professionals with adequate knowledge to (a) identify all heritage resources including archaeological and palaeontological sites that might occur in areas of developed and (b) make recommendations for protection or mitigation of the impact on the sites.

The National Heritage Resources Act (Act No. 25 of 1999, section 38) provides guidelines for Cultural Resources Management and prospective developments:

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

development categorised as:

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site:
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m² in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.”

And:

“The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

- (k) The identification and mapping of all heritage resources in the area affected;
- (l) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
- (m) an assessment of the impact of the development on such heritage resources;
- (n) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- (o) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- (p) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- (q) plans for mitigation of any adverse effects during and after the completion of the proposed development (38. [3] 1999:64).”

Consequently, section 35 of the Act requires Heritage Impact Assessments (HIAs) or Archaeological Impact Assessments (AIAs) to be done for such developments in order for all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual, linguistic or technological value or significance to be protected. Thus any assessment should make provision for the

protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects. Heritage resources management and conservation

8.2 Assessing the Significance of Heritage Resources

Archaeological sites, as previously defined in the National Heritage Resources Act (Act 25 of 1999) are places in the landscape where people have lived in the past – generally more than 60 years ago – and have left traces of their presence behind. In South Africa, archaeological sites include hominid fossil sites, places where people of the Earlier, Middle and Later Stone Age lived in open sites, river gravels, rock shelters and caves, Iron Age sites, graves, and a variety of historical sites and structures in rural areas, towns and cities. Palaeontological sites are those with fossil remains of plants and animals where people were not involved in the accumulation of the deposits. The basic principle of cultural heritage conservation is that archaeological and other heritage sites are valuable, scarce and *non-renewable*. Many such sites are unfortunately lost on a daily basis through development for housing, roads and infrastructure and once archaeological sites are damaged, they cannot be re-created as site integrity and authenticity is permanently lost. Archaeological sites have the potential to contribute to our understanding of the history of the region and of our country and continent. By preserving links with our past, we may not be able to revive lost cultural traditions, but it enables us to appreciate the role they have played in the history of our country.

- Categories of significance

Rating the significance of archaeological sites, and consequently grading the potential impact on the resources is linked to the significance of the site itself. The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences. The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3 are used when determining the cultural significance or other special value of archaeological or historical sites. In addition, ICOMOS (the Australian Committee of the International Council on Monuments and Sites) highlights four cultural attributes, which are valuable to any given culture:

- *Aesthetic value:*

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria include consideration of the form, scale, colour, texture and material of the fabric, the general atmosphere associated with the place and its uses and also the aesthetic values commonly assessed in the analysis of landscapes and townscape.

- *Historic value:*

Historic value encompasses the history of aesthetics, science and society and therefore to a large extent underlies all of the attributes discussed here. Usually a place has historical value because of some kind of influence by an event, person, phase or activity.

- *Scientific value:*

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality and on the degree to which the place may contribute further substantial information.

- *Social value:*

Social value includes the qualities for which a place has become a focus of spiritual, political, national or other cultural sentiment to a certain group.

It is important for heritage specialist input in the EIA process to take into account the heritage management structure set up by the NHR Act. It makes provision for a 3-tier system of management including the South Africa Heritage Resources Agency (SAHRA) at a national level, Provincial Heritage Resources Authorities (PHRAs) at a provincial and the local authority. The Act makes provision for two types or forms of protection of heritage resources; i.e. formally protected and generally protected sites:

Formally protected sites:

- Grade 1 or national heritage sites, which are managed by SAHRA
- Grade 2 or provincial heritage sites, which are managed by the provincial HRA (MP-PHRA).
- Grade 3 or local heritage sites.

Generally protected sites:

- Human burials older than 60 years.
- Archaeological and palaeontological sites.
- Shipwrecks and associated remains older than 60 years.
- Structures older than 60 years.

With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise and if the significance of the site is rated high, the significance of the impact will also result in a high rating. The same rule applies if the significance rating of the site is low. The significance of archaeological sites is generally ranked into the following categories.

| Significance | Rating Action |
|--|--|
| No significance: sites that do not require mitigation. | None |
| Low significance: sites, which may require mitigation. | 2a. Recording and documentation (Phase 1) of site; no further action required 2b. Controlled sampling (shovel test pits, augering), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction |
| Medium significance: sites, which require mitigation. | 3. Excavation of representative sample, C14 dating, mapping and documentation (Phase 2 investigation); permit required for sampling and destruction [including 2a & 2b] |
| High significance: sites, where disturbance should be avoided. | 4a. Nomination for listing on Heritage Register (National, Provincial or Local) (Phase 2 & 3 investigation); site management plan; permit required if utilised for education or tourism |
| High significance: Graves and burial places | 4b. Locate demonstrable descendants through social consulting; obtain permits from applicable legislation, ordinances and regional by-laws; exhumation and reinterment [including 2a, 2b & 3] |

Furthermore, the significance of archaeological sites was based on six main criteria:

- Site integrity (i.e. primary vs. secondary context),
- Amount of deposit, range of features (e.g., stonewalling, stone tools and enclosures),
- Density of scatter (dispersed scatter),
- Social value,
- Uniqueness, and
- Potential to answer current and future research questions.

A fundamental aspect in assessing the significance and protection status of a heritage resource is often whether or not the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and mitigated in order to gain data / information, which would otherwise be lost.

