

Archaeological Impact Assessment

H E R I T A G E

Benicon – Bankfontein Coal Mine
Project on a Portion of the
Remaining Extent of Portion 7 of the
farm Bankfontein 215 IS, District
Ermelo, Mpumalanga

Version 1.0

12 March 2009

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EXECUTIVE SUMMARY

Professional Grave Solutions - Heritage Unit was appointed by Digby Wells & Associates to undertake a Phase 1 Archaeological Impact Assessment that forms part of the Environmental Management Programme for the Benicon—Bankfontein Coal Mine Project on a Portion of the Remaining Extent of Portion 7 of the farm Bankfontein 215 IS, District Ermelo, Mpumalanga.

During the survey eight sites of heritage significance were found. The following management and mitigation measures are recommended:

Site 1

The site has been identified as being present on the 1956 map of the area. The building styles and construction of the house and outbuildings indicates the site dating to the early 1900's.

It is recommended that a Conservation Architect evaluates the site and make recommendations on the documentation of the site before destruction is required.

Site 2

The site consists of approximately 14 graves. It is unclear at this stage if the site will be impacted by mining.

It is recommended that the site be fenced and a 20 metre buffer left as protection against inadvertent damaged during mining.

In the event that the cemetery is to be impacted by mining a full grave relocation process must be initiated. This must include;

- A detailed social consultation process, that will trace the next-of-kin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- Site notices indicating the intent of the relocation
- Newspaper Notice indicating the intent of the relocation
- A permit from the local authority;
- A permit from the Mpumalanga Department of health;
- A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- An exhumation process that keeps the dignity of the remains and family intact;

- An exhumation process that will safeguard the legal implications towards the mining company;
- The whole process must be done by a reputable company that are well versed in relocations;
- The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the mining company.

Sites 3, 7 and 8

These sites were identified as historic farm worker settlements. The possibility of infant burials must always be considered with workers housing. Infants and still born babies are customary buried around the house.

It is thus recommended that social consulting be done to identify the previous inhabitants of these sites and then identify possible infant burials at the sites, through this consultation.

Site 4

Site 4 is a possible cemetery consisting of two possible graves. It is unclear at this stage if the site will be impacted by mining. It is recommended that the site be fenced and a 20 metre buffer left as protection against inadvertent damaged during mining.

In the event that the cemetery is to be impacted by mining a full grave relocation process must be initiated.

Sites 5 and 6

The two sites are possibly associated with pre-colonial farming communities. As little research has been conducted on such sites, the documentation of the sites through plan sketches and test excavation is required before an application for the destruction of these sites can be lodged with SAHRA.

If the required mitigation measures are adhered to, there is no reason from a heritage view point why the project cannot be initiated.

General

If during mining any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

COMIEMIS	
1. INTRODUCTION	7
2. APPROACH AND METHODOLOGY	7
2.1 Project Description	7
2.2 PHYSICAL SURVEYING	10
3. LEGISLATIVE REQUIREMENTS AND TERMINOLOGY	10
3.1 Legislation	10
3.2 Abbreviations and Terminology	11
4. ASSESSMENT CRITERIA	12
4.1 IMPACT	13
4.1.1 Nature and existing mitigation	13
4.2 EVALUATION	13
4.2.1 Site Significance	13
4.2.2 Impact Rating	14
5. BACKGROUND OF AREA	15
5.1 ARCHAEOLOGICAL BACKGROUND	15
5.2 HISTORICAL BACKGROUND	16
6. SITES OF SIGNIFICANCE	19
6.1 SITE 1	20
6.2 SITE 2	24
6.3 SITE 3	26
6.4 SITE 4	27
6.5 SITE 5	28
6.6 SITE 6	30
6.7 SITE 7	33
6.8 SITE 8	35
7. ASSUMPTIONS AND LIMITATIONS	36
8. LEGAL AND POLICY REQUIREMENTS	36
8.1 General principles	36
8.1 Graves and cemeteries	37
9. ASSESSMENT AND RECOMMENDATIONS	38
10. LIST OF PREPARES	40
11. REFERENCES	40
ANNEXURE	
Annexure A – Study area and heritage sites	
Figures 1 - Locality Man	0
Figure 1 – Locality Map	9

Figure 2 - Map 2629BD dated 1956. Sites 1 and 7 indicated as being present on	site17
Figure 3 - Nicholas Jacobus Breytenbach, the founder of Breyten (Praagh,	
1906:380)	18
Figure 4 – View front of house	20
Figure 5 - Addition visible on side of main house	21
Figure 6 - Stone built shed on site	21
Figure 7 - Second older dwelling on site	22
Figure 8 - View of site from north	23
Figure 9 - General view of cemetery	24
Figure 10 - View of fenced graves	25
Figure 11 - Visible foundations on site	26
Figure 12 - Possible grave on site	
Figure 13 - General view of site. Red arrows indicating enclosures	28
Figure 14 - Inside first enclosure	29
Figure 15 - Stone walling of enclosure	29
Figure 16 - View of one of the circular enclosures	30
Figure 17 - Stone walling visible on left of photo	31
Figure 18 - Stone walling visible on enclosure	31
Figure 19 – Enclosures indicated by red arrows	32
Figure 20 - remains at site	33
Figure 21 - General view of site	

1. INTRODUCTION

Professional Grave Solutions - Heritage Unit was appointed by Digby Wells & Associates to undertake a Phase 1 Archaeological Impact Assessment that forms part of the Environmental Management Programme for the Benicon- Bankfontein Coal Mine Project on a Portion of the Remaining Extent of Portion 7 of the farm Bankfontein 215 IS, District Ermelo, Mpumalanga.

The aim of the study is to identify all heritage sites, document, and assess their importance within Local, Provincial and National context. From this we aim to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999) (NHRA).

The report outlines the approach and methodology utilised before and during the survey, which includes in Phase 1: Information collection from various sources and public consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

During the survey eight sites of heritage significance were found.

General site conditions and features on site were recorded by means of photos, GPS location, and description. Possible impacts were identified and mitigation measures are proposed in the following report.

2. APPROACH AND METHODOLOGY

2.1 Project Description

The deposit is planned to be mined by opencast methods. Bankfontein Colliery will supply ESKOM and the inland and international coal market. The mining method will be a truck and shovel operation utilising separate fleets for overburden removal and coal and parting removal.

The first step in the operation would be to strip the topsoil which overlies most of the area. The topsoil is assumed to have an average depth of 1m ad this will be stockpiled on a designated area for use in the rehabilitation phase of the project. Once the topsoil has been removed, the truck and shovel fleet will excavate the rest of the soft material

until the hard overburden is reached. The hard overburden will be drilled and blasted to the depth of the upper seam and where it is not present to the top of the middle seam.

This overburden will be removed by means of truck and shovel and tipped into the pit where the coal has already been extracted. The intention is to begin mining in 2010 and to have completed mining by the end of 2013.

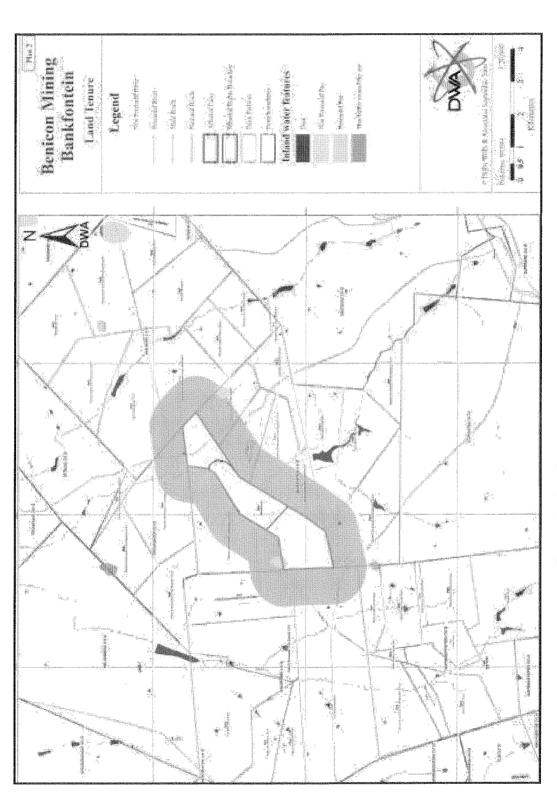


Figure 1 - Locality Map

The aim of the study is to study data available to compile a background history of the study area; this was accomplished by means of the following methodology.

2.2 PHYSICAL SURVEYING

The project area comprises of approximately 512 ha. Due to the nature of cultural remains, the majority that occur below surface, a physical walk through of the study area was conducted. A controlled-exclusive surface survey was conducted over a period of two days, by means of vehicle and extensive surveys on foot by PGS. Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. All sites discovered both inside and bordering the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on digital film were taken at all the sites.

3. LEGISLATIVE REQUIREMENTS AND TERMINOLOGY

3.1 Legislation

The identification, evaluation and assessment of any cultural heritage site, artefact or find in the South African context is required and governed by the following legislation:

- i. National Environmental Management Act (NEMA) Act 107 of 1998
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- iv. Development Facilitation Act (DFA) Act 67 of 1995

The following sections in each Act refer directly to the identification, evaluation and assessment of cultural heritage resources.

- i. National Environmental Management Act (NEMA) Act 107 of 1998
 - a. Basic Environmental Assessment (BEA) Section (23)(2)(d)
 - b. Environmental Scoping Report (ESR) Section (29)(1)(d)
 - c. Environmental Impacts Assessment (EIA) Section (32)(2)(d)
 - d. Environmental Management Plan (EMP) Section (34)(b)
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
 - a. Protection of Heritage resources Sections 34 to 36; and
 - b. Heritage Resources Management Section 38
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
 - a. Section 39(3)

- iv. Development Facilitation Act (DFA) Act 67 of 1995
 - a. The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

3.2 Abbreviations and Terminology

ASAPA:

Association of South African Professional Archaeologists

CRM:

Cultural Resource Management

DEAT:

Department of Environmental Affairs and Tourism

DWAF:

Department of Water Affairs and Forestry

EIA practitioner: Environmental Impact Assessment Practitioner

EIA:

Environmental Impact Assessment

EIA:

Elivinolimonical impace 765655ine

ESA:

Early Iron Age
Early Stone Age

-

Global Positioning System

GPS:

Global i ositioning system

HIA: I&AP: Heritage Impact Assessment Interested & Affected Party

LSA:

Late Stone Age

LIA:

Late Iron Age

MSA:

Middle Stone Age

MIA:

Middle Iron Age

NEMA:

National Environmental Management Act

NHRA:

National Heritage Resources Act

PHRA:

Provincial Heritage Resources Agency

PSSA:

Palaeontological Society of South Africa

ROD:

Record of Decision

SAHRA:

South African Heritage Resources Agency

Archaeological resources

This includes:

- i. material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;
- ii. rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- iii. wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act,

- and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- iv. features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Cultural significance

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

Development

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- i. construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- ii. carrying out any works on or over or under a place;
- iii. subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- iv. constructing or putting up for display signs or boards;any change to the natural or existing condition or topography of land;
- v. any removal or destruction of trees, or removal of vegetation or topsoil

Heritage resources

This means any place or object of cultural significance

4. ASSESSMENT CRITERIA

This chapter describes the evaluation criteria used for the sites listed below.

The significance of archaeological sites was based on four main criteria:

- site integrity (i.e. primary vs. secondary context),
- **amount of deposit, range of features** (e.g., stonewalling, stone tools and enclosures),
- uniqueness and
- potential to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed as follows:

A - No further action necessary;

- B Mapping of the site and controlled sampling required;
- C Preserve site, or extensive data collection and mapping of the site; and
- D Preserve site

Impacts on these sites by the development will be evaluated as follows:

4.1 IMPACT

The potential environmental impacts that may result from the proposed development activities.

4.1.1 Nature and existing mitigation

Natural conditions and conditions inherent in the project design that alleviate (control, moderate, curb) impacts. All management actions, which are presently implemented, are considered part of the project design and therefore mitigate against impacts.

4.2 EVALUATION

4.2.1 Site Significance

Site significance classification standards prescribed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used for the purpose of this report.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance	Grade 1	-	Conservation; National Site
(NS)			nomination
Provincial	Grade 2		Conservation; Provincial Site
Significance (PS)			nomination
Local Significance	Grade 3A	High Significance	Conservation; Mitigation not
(LS)			advised
Local Significance	Grade 3B	High Significance	Mitigation (Part of site should be
(LS)			retained)
Generally Protected		High / Medium	Mitigation before destruction
A (GP.A)		Significance	
Generally Protected	### TO THE RESERVE OF THE PERSON OF THE PERS	Medium	Recording before destruction
B (GP.B)		Significance	
Generally Protected	p	Low Significance	Destruction
C (GP.C)			

4.2.2 Impact Rating

Each impact identified will be assessed in terms of probability (likelihood of occurring), extent (spatial scale), intensity (severity) and duration (temporal scale). To enable a scientific approach to the determination of the impact significance (importance), a numerical value will be linked to each rating scale. The sum of the numerical values will define the significance. The following criteria will be applied to the impact assessment for the project.

Table 1: Probability

Category	Rating	Description
Definite	3	More than 90 percent sure of a particular fact or of the
		likelihood of that impact occurring
Probable	2	70 to 89 percent sure of a particular fact or of the
		likelihood of that impact occurring
Possible	1	40 to 69 percent sure of a particular fact or of the
		likelihood of that impact occurring
Improbable	0	Less than 40 percent sure of a particular fact or of the
		likelihood of that impact occurring

Table 2: Extent

Category	Rating	Description
Site	1	Immediate project site
Local	2	Up to 5 km from the project site
Regional	3	20 km radius from the project site
Provincial	4	Mpumalanga Province
National	5	South African
International	6	Neighbouring countries/overseas

Table 3: Duration

Category	Rating	Description
Very short-term	1	Less than 1 year
Short-term	2	1 to 4 years
Medium-term	3	5 to 10 years
Long-term	4	11 to 15 years
Very long-term	5	Greater than 15 years
Permanent	6	Permanent

Table 4: Intensity

Category	Rating	Description
Very low	0	Where the impact affects the environment in such a way
		that natural, cultural and social functions are not
		affected
Low	1	Where the impact affects the environment in such a way
		that natural, cultural and social functions are only
		marginally affected
Medium	2	Where the affected environment is altered but natural,
		cultural and social function and processes continue
		albeit in a modified way
High	3	Where natural, cultural or social functions or processes
		are altered to the extent that they will temporarily cease
Very high	4	Where natural, cultural or social functions or processes
		are altered to the extent that they will permanently
		cease

Table 5: Significance Rating

Score	Significance Rating
2 - 4	Low
5 - 7	Low to Moderate
8 - 10	Moderate
11 - 13	Moderate to High
14 - 16	High
17 - 19	Very High

5. BACKGROUND OF AREA

5.1 ARCHAEOLOGICAL BACKGROUND

The Stone Age is divided in Earlier; Middle and Later Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

Earlier Stone Age: The period from \pm 2.5 million yrs - \pm 250 000 yrs ago. Acheulean

stone tools are dominant.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yrs - 22 000

yrs before present.

Later Stone Age:

The period from \pm 22 000-yrs before present to the period of contact with either Iron Age farmers or European colonists.

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. Similar to the Stone Age it to can be divided into three periods:

The Early Iron Age: Most of the first millennium AD.

The Middle Iron Age: 10th to 13th centuries AD

The Late Iron Age: 14th century to colonial period.

5.2 HISTORICAL BACKGROUND

The historic timeframe intermingles with the later parts of the Stone and Iron Age, and can loosely be regarded as times when written and oral recounts of incidents became available.

Cartographic Findings

The topographical map 2629BD dated 1956 indicates the existence of Site 1 on site. Also indicated to the south west area of the study site is the existence of huts in the area identified as Site 7.

This indicates the possibility of both sites being older than 60 years and protected under the NHRA.

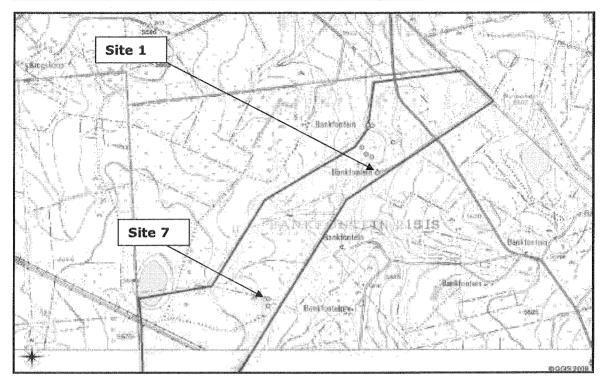


Figure 2 - Map 2629BD dated 1956. Sites 1 and 7 indicated as being present on site

The town of Breyten

The town of Breyten was established on the farm Bothasrust by its owner and well-known farmer and businessman Nicholas Jacobus Breytenbach. It was established during December 1905 at the same time that the railway line between Springs and Breyten was completed. Although the town was only laid out during December 1905, stands were quickly sold and within a month the town had two hotels, several shops, a post and telegraph station as well as a railway station. Churches and schools were later constructed on a commonage granted by N.J. Breytenbach.

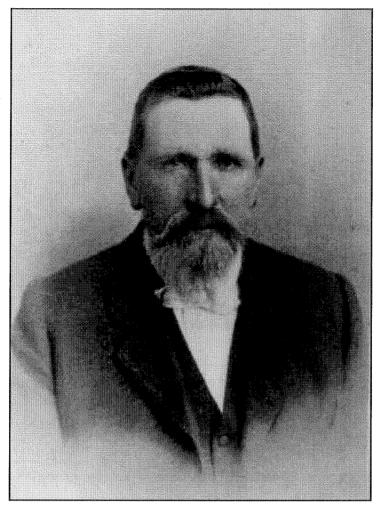


Figure 3 - Nicholas Jacobus Breytenbach, the founder of Breyten

5.2.1. CARTOGRAPHIC MATERIAL

Evaluation of the 1958 Topographical map 2628BB (surveyed in 1965) indicates no structures existing on the study area.

6. SITES OF SIGNIFICANCE

The study area is located on topographical sheet 2628BB.

Description of study area

The study area consists for the most part of open grasslands. Vegetation cover is very dense making observation of the surface very difficult.

Local people consulted

Only one family resides on the study area (the Simelane family). Mss. Martha and Thembeni Simelane were extensively interviewed on their knowledge of the cultural history of the area. They were very helpful and pointed out the cemetery (*Site 2*) to the consultant. According to them there are, except for the house and the cemetery, no other historical sites situated on the study area.

6.1 SITE 1

GPS Coordinates

S26.22898 E29.93093

Site Description

The site consists of the remains of a historic / recent farmstead. It comprises the house (still occupied by the Simelane family) and three dilapidated outbuildings (one of them totally collapsed). The other two outbuildings are still in use. The age of the buildings is unclear as the Simelanes has only occupied them for the last 10 years. According to them they were built by Mr. Stoffel Roets some time ago.

The house was constructed from bricks with a corrugated iron roof. The outbuildings were constructed from locally sourced rock and also have corrugated iron roofs.



Figure 4 - View front of house

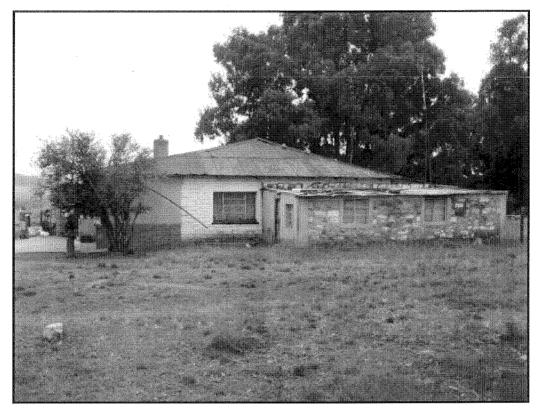


Figure 5 - Addition visible on side of main house



Figure 6 - Stone built shed on site

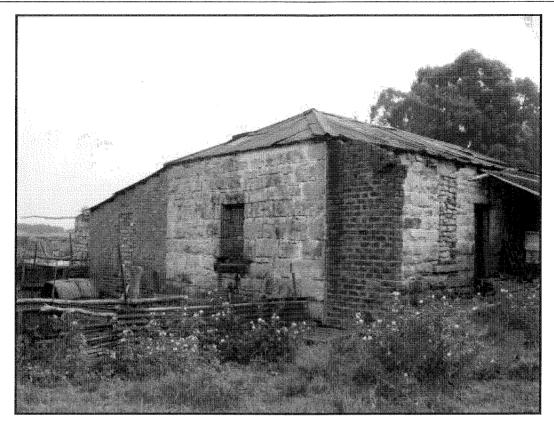


Figure 7 - Second older dwelling on site

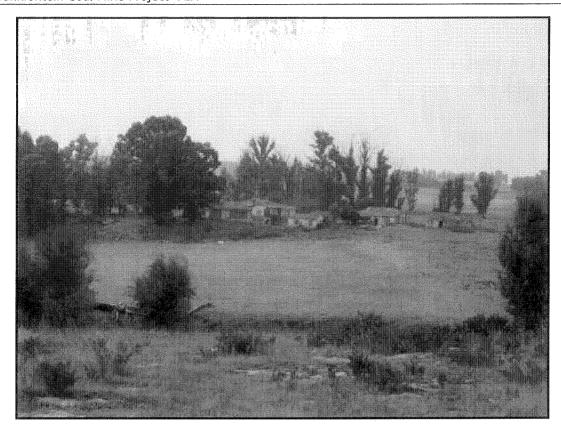


Figure 8 - View of site from north

Impact Rating	Field Rating	Probability	Extent	Duration	Intensity	Mitigation
13	GP.B	2	1	6	4	Evaluation of site will be required by Conservation Architect before a decision on the destruction of the site is made

6.2 SITE 2

GPS Coordinates

S26.22591 E29.92898

Site Description

The site consists of approximately 14 graves aligned along an east/west axis. Five of the graves were fenced with the remainder of the graves being situated on the western side of the fence. All the graves have simple stone grave dressings. No formal headstones were observed. None of the graves bears any identifying features. According to Ms. Martha Simelane some of the graves belong to the Madonsela family who are currently staying in Breyten. Some glass grave goods indicate that at least some of the graves are still being visited.



Figure 9 - General view of cemetery



Figure 10 - View of fenced graves

Impact Rating	Field Rating	Probability	Extent	Duration	Intensity	Mitigation
13	GP.A	2	1	6	4	Fence site with 20 meter buffer. Access control required.

6.3 SITE 3

GPS Coordinates

S26.22675 E29.92947

Site Description

The site consists of the stone/brick foundations of a number of rectangular historic structures, probably the remains of farm workers houses. The remains of these buildings are scattered over an area of about 20m x 30m. It is probable that the cemetery at Site 2 can be associated with this settlement. Due to dense vegetation the exact layout of the settlement could not be determined.



Figure 11 - Visible foundations on site

The possibility of infant burials must always be considered with workers housing. Infants and still born babies are customary buried around the house.

Impact Rating	Field Rating	Probability	Extent	Duration	Intensity	Mitigation
13	GP.A	2	1	6	4	Social consulting to identify family and possible infant burials

6.4 SITE 4

GPS Coordinates

S26.22704 E29.93019

Site Description

The site consists of two stone packed structures that might be graves. One of the potential graves has what appears to be a headstone consisting of an upright stone situated on its western side. This site is situated only approximately 170m from the cemetery at Site 2. The presence of graves in this area is improbable but cannot be excluded.



Figure 12 - Possible grave on site

Impact Rating	Field Rating	Probability	Extent	Duration	Intensity	Mitigation
13	GP.A	2	1	6	4	Fence site with 20 meter buffer. Access control required.

6.5 SITE 5

GPS Coordinates

S26.22535 E29.93278

Site Description

The site consists of two stone packed enclosures situated on the western side of a slope leading down to a small stream. The enclosures make use of the natural geography of the slope and only certain sections are enclosed with packed rocks. They measure approximately 5m in diameter. No cultural material was found on the site.

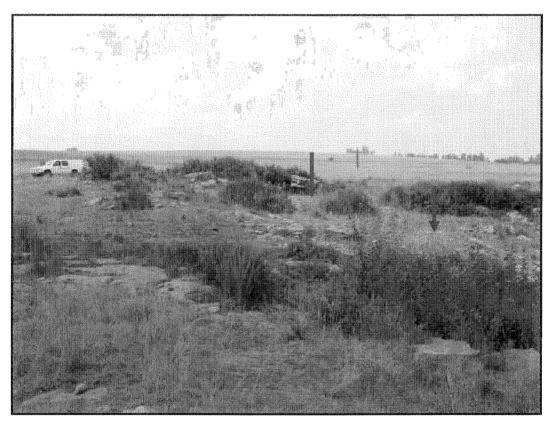


Figure 13 - General view of site. Red arrows indicating enclosures

Impact Field Proba Rating Rating		Probability	Extent	Duration	Intensity	Mitigation
13	GP.B	2	1.	6	4	Test excavation and documentation of layout

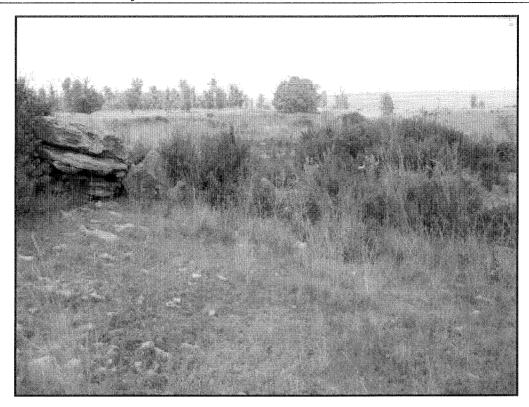


Figure 14 - Inside first enclosure

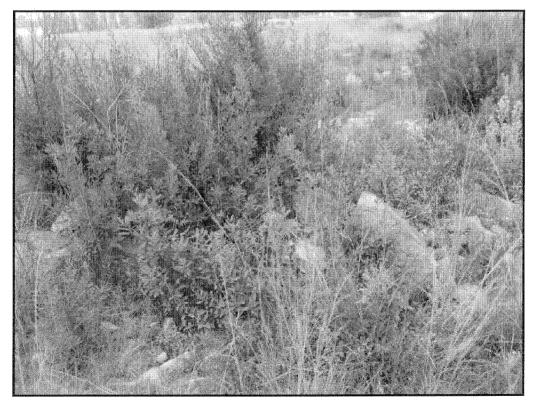


Figure 15 - Stone walling of enclosure

6.6 SITE 6

GPS Coordinates

\$26.22348 E29.92974 \$26.22317 E29.92967 \$26.22325 E29.93025

Site Description

The site consists of a series of approximately five small stone packed enclosures situated on the western side of a slope leading down to a small stream. Two of the enclosures are similar to the ones situated at **Site 5**. Three of the enclosures are situated at the foot of the slope. Two of them have double stone walling and is more extensive than the third which has only one set of walls. All of the enclosures have a diameter of approximately 4m.

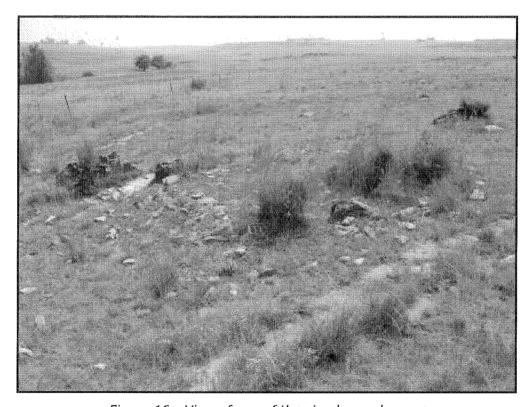


Figure 16 - View of one of the circular enclosures

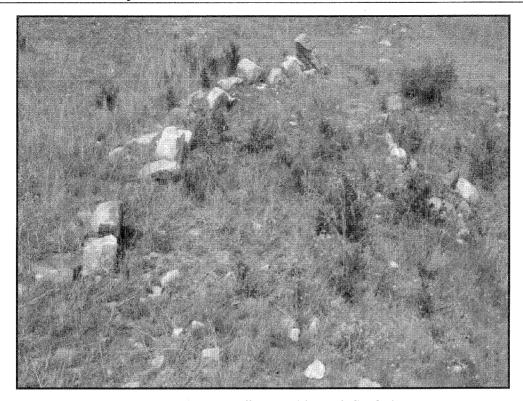


Figure 17 - Stone walling visible on left of photo

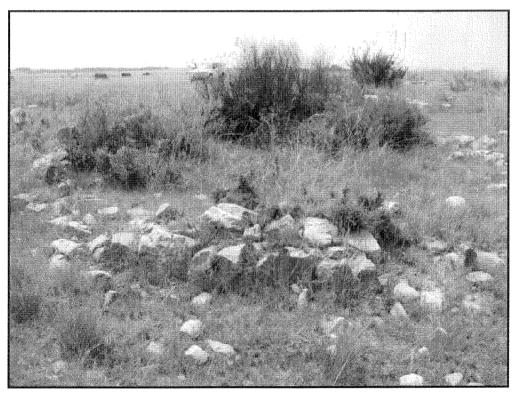


Figure 18 - Stone walling visible on enclosure

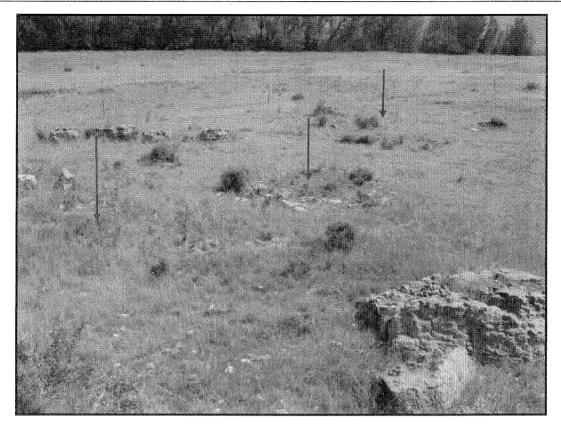


Figure 19 - Enclosures indicated by red arrows

Impact Rating	•		Extent	Duration Intensity Mitigat		Mitigation
13	GP.B	2	1	6	4	Test excavation and documentation of layout

6.7 SITE 7

GPS Coordinates

S26.24523 E29.91753 (WP134) S26.24434 E29.91753 (WP135)

Site Description

The site consists of the foundations of two of rectangular historic structures, probably the remains of farm workers houses. The remains of these buildings are scattered over an area of about 20m x 20m. Due to the dense vegetation the exact extent and layout of the site could not be determined. A single intact glass cold drink bottle was found at the site. The bottle could not be dated but seems to be at least 30 years old.

An unused borehole/fountain is situated approximately 100m east of the site and can probably be associated with **Site 7**.



Figure 20 - remains at site

The possibility of infant burials must always be considered with workers housing. Infants and still born babies are customary buried around the house.

Impact Field Rating Rating		Probability	Extent Duration Intensity		Mitigation		
and at the second second second second	13	GP.B	2	1	6	4	Social consulting to identify family and possible infant burials

6.8 SITE 8

GPS Coordinates

\$26,25407 E29,90744

Site Description

The site consists of the foundations of a number of rectangular historic structures. The remains of these buildings are scattered over an area of about $10m \times 10m$. Due to the dense vegetation the exact extent and layout of the site could not be determined.



Figure 21 - General view of site

The possibility of infant burials must always be considered with workers housing. Infants and still born babies are customary buried around the house.

Impact Rating	Field Rating	Probability	Extent	Duration	Intensity	Mitigation
13	GP.B	2	1	6	4	Social consulting to identify family and possible infant burials

7. ASSUMPTIONS AND LIMITATIONS

Not subtracting in any way from the comprehensiveness of the fieldwork undertaken, it is necessary to realise that the archaeological and heritage resources located during the fieldwork do not necessarily represent all the archaeological and heritage resources located there. This may be due to various reasons, including the subterranean nature of some archaeological sites and dense vegetation cover. As such, should any heritage features and/or objects not included in the present inventory be located or observed, a heritage specialist must immediately be contacted. Such observed or located heritage features and/or objects may not be disturbed or removed in any way until such time that the heritage specialist has been able to make an assessment as to the significance of the site (or material) in question. This is true for graves and cemeteries as well.

8. LEGAL AND POLICY REQUIREMENTS

8.1 General principles

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and paleontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it. The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in the graves: they may be consulted before any disturbance takes place.

The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour. Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer's cost. Thus developers will be able to

proceed without uncertainty about whether work will have to be stopped if a heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that: An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and paleontological 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;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

8.1 Graves and cemeteries

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 (Act 65 of 1983) and are 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. Authorisation for exhumation and reinterment 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. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation. If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and bylaws set by the cemetery authority must be adhered to.

9. ASSESSMENT AND RECOMMENDATIONS

A heritage map is provided in Annexure A

During the survey eight sites of heritage significance were found. The following management and mitigation measures are recommended:

Site 1

The site has been identified as being present on the 1956 map of the area. The building styles and construction of the house and outbuildings indicates the site dating to the early 1900's.

It is recommended that a Conservation Architect evaluates the site and make recommendations on the documentation of the site before destruction is required.

Site 2

The site consists of approximately 14 graves. It is unclear at this stage if the site will be impacted by mining.

It is recommended that the site be fenced and a 20 metre buffer left as protection against inadvertent damaged during mining.

In the event that the cemetery is to be impacted by mining a full grave relocation process must be initiated. This must include;

- A detailed social consultation process, that will trace the next-of-kin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- Site notices indicating the intent of the relocation
- Newspaper Notice indicating the intent of the relocation
- A permit from the local authority;
- A permit from the Mpumalanga Department of health;
- A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- An exhumation process that keeps the dignity of the remains and family intact;
- An exhumation process that will safeguard the legal implications towards the mining company;
- The whole process must be done by a reputable company that are well versed in relocations;
- The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the mining company.

Sites 3, 7 and 8

These sites are identified as historic farm worker settlements. The possibility of infant burials must always be considered with workers housing. Infants and still born babies are customary buried around the house.

It is thus recommended that social consulting be done to identify the previous inhabitants of these sites and then identify possible infant burials at the sites, through this consultation.

Site 4

Site 4 is a possible cemetery consisting of two possible graves. It is unclear at this stage if the site will be impacted by mining.

It is recommended that the site be fenced and a 20 metre buffer left as protection against inadvertent damaged during mining.

In the event that the cemetery is to be impacted by mining a full grave relocation process must be initiated.

Sites 5 and 6

The two sites are seen as associated with pre-colonial farming communities. As little research has been conducted on such sites, the documentation of the sites through plan

sketches and test excavation is required before an application for the destruction of these sites can be lodged with SAHRA.

If the required mitigation measures are adhered there is no reason from a heritage view point why the project cannot be initiated.

General

If during mining any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

10. LIST OF PREPARES

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11. REFERENCES

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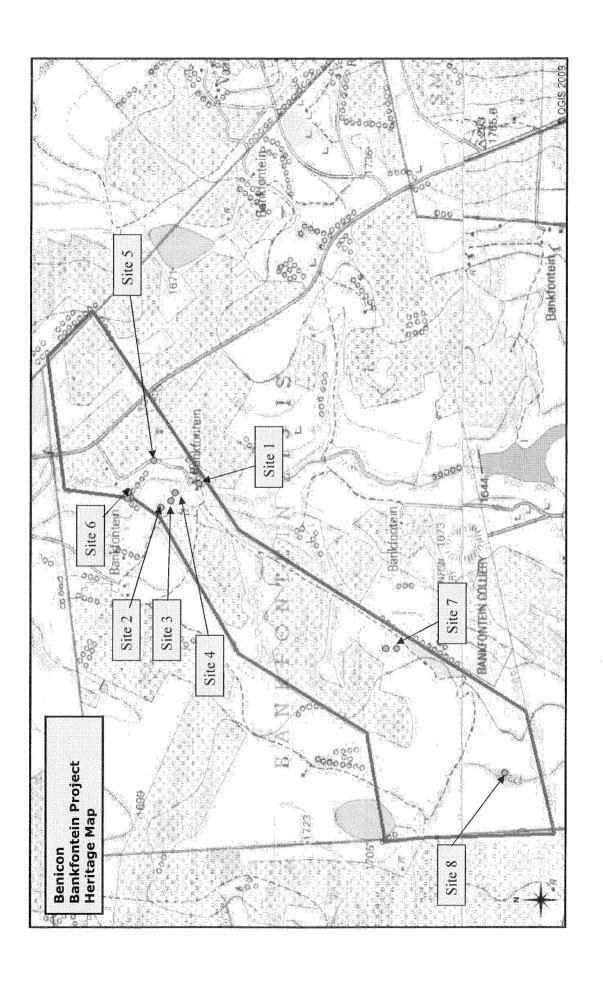
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ANNEXURE A: Heritage sites



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