

**Cultural Heritage Survey of the Brikor Quarry on the Farm  
Donkerhoek 365 JR, Cullinan District**

For

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## Executive Summary

### *Stone Age & Iron Age settlements*

No Stone Age or Iron Age settlements, structures, features or artefacts were recorded during the survey.

### *Historical structures & buildings*

Two stone-walled sangars associated with the Battle of Donkerhoek (Diamond Hill) were recorded (Site 1 & 2). They are older than 60 years and are therefore protected by the NHRA (Act 25 of 1999) and will require mitigation if disturbed.

A modern house was also recorded that is not older than 60 years; no further action required.

### *Graves*

A graveyard (Site 3) was recorded which contains at least 17 graves. The site is protected by the NHRA (Act 25 of 1999) and should be fenced with a minimum 10 metres buffer zone. Most of the graves are stable but will require mitigation if impact cannot be avoided.

If impact will occur in the near future, mitigation measures may entail full grave relocation. Such a relocation process must be undertaken by suitably qualified individuals with a proven track record. Furthermore, a concerted effort must also be made to identify all buried individuals and to contact their relatives and descendants. Other legislative measures which may be of relevance include the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the Human Tissues Act (Act no. 65 of 1983, as amended), the Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

Also note the following:

- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during construction activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).

## 1. Introduction

The aim of this cultural heritage survey is to record and document cultural heritage remains consisting of visible archaeological and historical artefacts, structures (including graves) and settlements of cultural significance within the boundaries of the mining area. This report forms part of a Mining Rights Conversion process and was requested by Brikor Ltd.

## 2. Terms of Reference

The terms of reference of this survey are as follows:

- \* Provide a detailed description of all archaeological artefacts, structures (including graves) and settlements
- \* Estimate the level of significance/importance of the archaeological remains within the area
- \* Assess any possible impact on the archaeological and historical remains within the area emanating from the proposed development activities
- \* Propose possible mitigation measures provided that such action is necessitated by the development

## 3. Nature of the Proposed Activity or Development

The quarry is an existing operation (quartzite mine) which will expand in the near future.

## 4. Definitions and Approach

- Archaeological remains can be defined as human-made objects, which reflect past ways of life, deposited on or in the ground.
- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite non-renewable and irreplaceable.
- All archaeological remains, artificial features and structures older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the **National Heritage Resources Act (NHRA) (Act No. 25 of 1999)**. The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory. No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the **South African Heritage Resources Agency (SAHRA)**. Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the **Mineral and Petroleum Resources Development Act (Act No 28 of 2002)** and the **National Environmental Management Act (Act No 107 of 1998)** when making any recommendations.
- Human remains older than 60 are protected by the **National Heritage Resources Act**, with reference to Section 36. Human remains that are less than 60 years old are protected by the **Human Tissue Act (Act 65 of 1983 as amended)**.

- **Mitigation guidelines:**

<b>Significance Rating</b>	<b>Action</b>
Not protected	1. None
Low	2a. Recording and documentation (Phase 1) of site adequate; no further action required
	2b. Controlled sampling (shovel test pits, augering), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
Medium	3. Excavation of representative sample, C <sup>14</sup> dating, ), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction [including 2a & 2b]
High	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 4b. Graves: Locate demonstrable descendants through social consulting; obtain permits from applicable legislation, ordinances and regional by-laws; exhumation and reinterment [including 2a, 2b & 3]

- Rating the **significance of the impact** on a historical or archaeological site is linked to the significance of the site itself. 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.
- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the **NHRA (Act No. 25 of 1999)** in Section 3, with special reference to subsection 3, and the Australian ICOMOS Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during construction activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).
- A copy of this report will be lodged with the **South African Heritage Resources Agency (SAHRA)** as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the South African

## 5. Methodology

### 5.1 Maps and Other Sources

The proposed area of development is situated approximately  $\pm 25$  km east of Pretoria. The location of the survey area is indicated on Map 1.



Map 1: Aerial view of the mining area.

### 5.2 Fieldwork

Intensive site visits were conducted on 26 August and 10 September 2008. The existing road network was used and selected areas were investigated on foot.

### 5.3 Visibility and Constraints

No severe restrictions were encountered. Also note that due to the subterranean nature of

cultural remains this report should not be construed as a record of all archaeological and historic sites in the area.

## 6. Description of Study Area

The Donkerhoek Quartzite Quarry is situated  $\pm 25$  km east of Pretoria, just north of the N4 highway, between Pretoria and Rayton. The Quarry is located on Portions 87, 114, 115 and 116 of the Farm Donkerhoek 365 JR, District of Cullinan. The size of the property is 87.86 hectares.

The area has been severely disturbed since the quarry was started in 1968. Only selective vegetative areas have remained.

Existing infrastructure includes several dirt roads, a crushing plant, a main pit, a conveyor belt, stock piles, offices, worker accommodation, power lines and fences.



Figure 1: General layout of the mining operation.



Figure 2: General view of the main quarry.

## 7. Archaeological Sequence

PERIOD	APPROXIMATE DATE
Early Stone Age	more than c. 2 million years ago - c. 250 000 years ago
Middle Stone Age	c. 250 000 years ago – c. 25 000 years ago
Later Stone Age (Includes San Rock Art)	c. 25 000 years ago - c. AD 200 (up to historic times in certain areas)
Early Iron Age	c. AD 400 - c. AD 1025
Late Iron Age (Stonewalled sites)	c. AD 1025 - c. AD 1830 (c. AD 1640 - c. AD 1830)

## 8. Archaeological Context

### 8.1 Stone Age

Concentrations of Early Stone Age (ESA) sites are usually present on the flood-plains of perennial rivers and may date to over 2 millions years ago. These ESA open sites may contain scatters of stone tools and manufacturing debris and secondly, large concentrated deposits ranging from pebble tool choppers to core tools such as handaxes and cleavers. The earliest hominins who made these stone tools, probably not always actively hunted, instead relying on the opportunistic scavenging of meat from carnivore kill sites.

Middle Stone Age (MSA) sites also occur on flood plains, but are also associated with caves



and rock shelters (overhangs). Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades and associated manufacturing debris. Tools may have been hafted but organic materials, such as those used in hafting, seldom preserve. Limited drive-hunting activities are also associated with this period.

Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich eggshell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is possible. South African rock art is also associated with the LSA.

## 8.2 Iron Age Sequence

In the northern regions of South Africa at least three settlement phases have been distinguished for early prehistoric agropastoralist settlements during the **Early Iron Age** (EIA). Diagnostic pottery assemblages can be used to infer group identities and to trace movements across the landscape. The first phase of the Early Iron Age, known as **Happy Rest** (named after the site where the ceramics were first identified), is representative of the Western Stream of migrations, and dates to AD 400 - AD 600. The second phase of **Diamant** is dated to AD 600 - AD 900 and was first recognized at the eponymous site of Diamant in the western Waterberg. The third phase, characterised by herringbone-decorated pottery of the **Eiland** tradition, is regarded as the final expression of the Early Iron Age (EIA) and occurs over large parts of the North West Province, Northern Province, Gauteng and Mpumalanga. This phase has been dated to about AD 900 - AD 1200. These sites are usually located on low-lying spurs close to water. However, please note that there are no EIA sites in the Free State.

The **Late Iron Age** (LIA) settlements are characterised by stone-walled enclosures situated on defensive hilltops c. AD 1640 - AD 1830). This occupation phase has been linked to the arrival of ancestral Northern Sotho, Tswana and Southern Ndebele (Nguni-speakers) in the northern and Waterberg regions, and dates from the sixteenth to seventeenth centuries AD. The terminal LIA is represented by late 18th/early 19<sup>th</sup> century settlements with multichrome Moloko pottery commonly attributed to the Sotho-Tswana. These settlements can in many instances be correlated with oral traditions on population movements during which African farming communities sought refuge in mountainous regions during the processes of disruption in the northern interior of South Africa, resulting from the so-called *difaqane* (or *mfecane*).

## 8.3 Historical Background

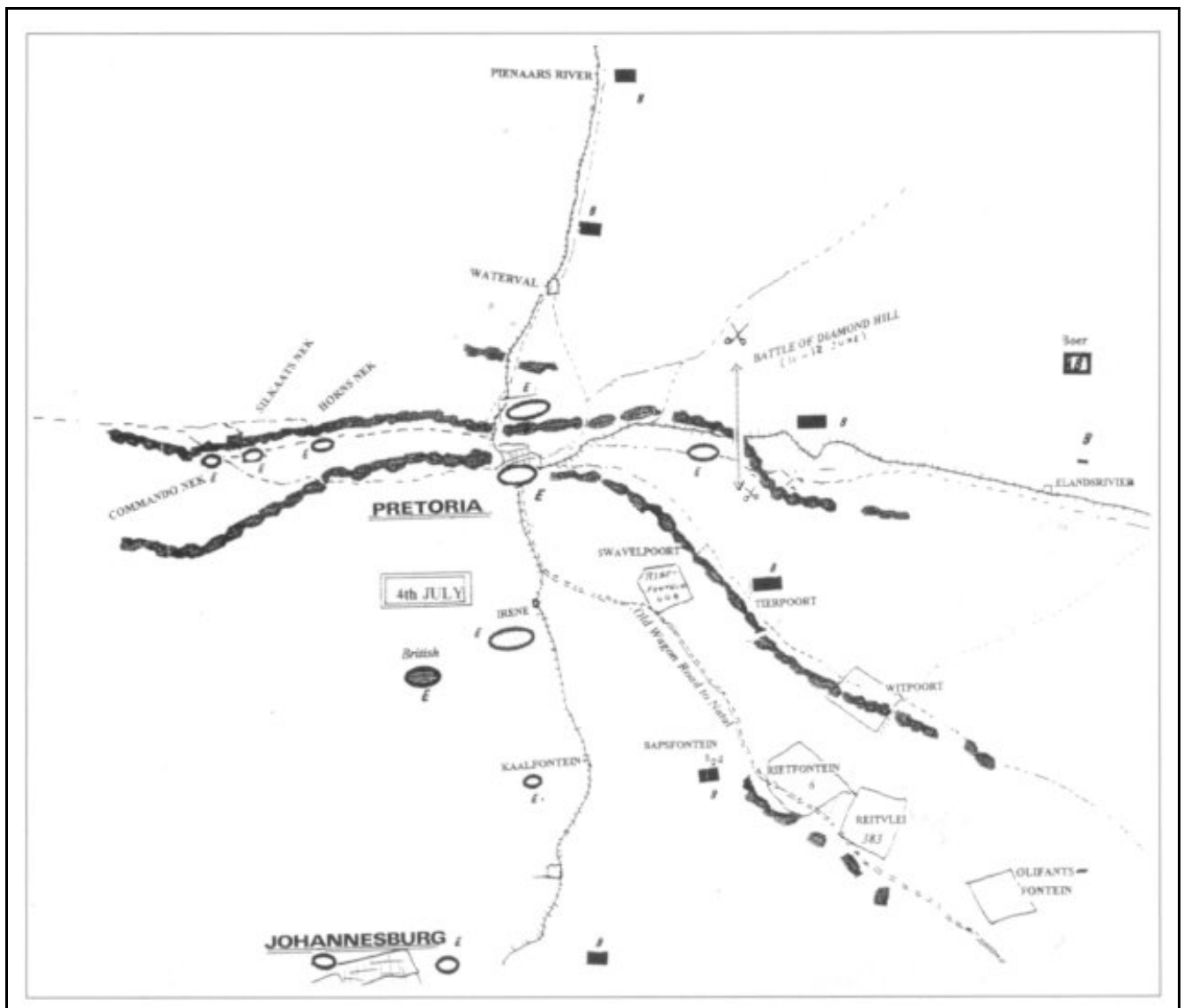
Archival sources indicate that one of the earliest references to the farm Donkerhoek 274 is in 1871 when a transfer dispute was declared between BCE Proes and H Briton and it seems that the case even went to the High Court of Justice.

However, of significance is the Battle of Donkerhoek (also known as the Battle of Diamond Hill) which took place on 11 and 12 June 1900 between the British and Boer forces. This was the last conventional battle that took place during the South African War (1899 – 1902).

A few days before the battle Lord Roberts annexed Pretoria on 5 June 1900. Seeing that President Paul Kruger has relocated himself and his Cabinet (Volksraad) to Waterval-Boven the British planned to launch an offensive towards the east to try and catch Kruger. In reaction the Boer forces positioned themselves with the aim to stop the British offensive. As a result General de la Rey positioned his men near the farm Boekenhoutkloof to the north and General Louis Botha stationed his men on the farms Donkerhoek en Kleinfontein.

On 11 June 1900 the British started marching in an eastern direction and attacked General Botha's position. The Boers had to fall back to the highest hill on the farm Kleinfontein (known as Diamond Hill) where the Battle of Donkerhoek (also near Pienaarspoort where the railway track passes through towards Maputo) took place on 12 June 1900.

There were about 14000 British troops involved in the battle, against the about 4000 men of the Boers. The open grassland in the area was not ideal for the attacking British and they suffered some losses. Despite launching several attacks the Boer did not manage to stop the British advance and had to withdraw in the end.



Map 2: British and Boer positions in July 1900.

Of particular importance are some of the stone-walled structures that were constructed in the area during this battle. Structures such as skanse, redoubts, entrenchments and especially the so-called sangars are of particular importance.

Sangars (a name the British Army brought from India) are small two or four man stone breastworks and were placed at intervals along the front. These stone-walled structures (similar to small cattle kraals) were generally used up to January 1901, after which they were replaced by a more effective Blockhouse Line System (Panagos 1999; Panagos & Faber 1998).



Figure 3: An example of a sangar from the Battle of Witpoort (16 July 1900).

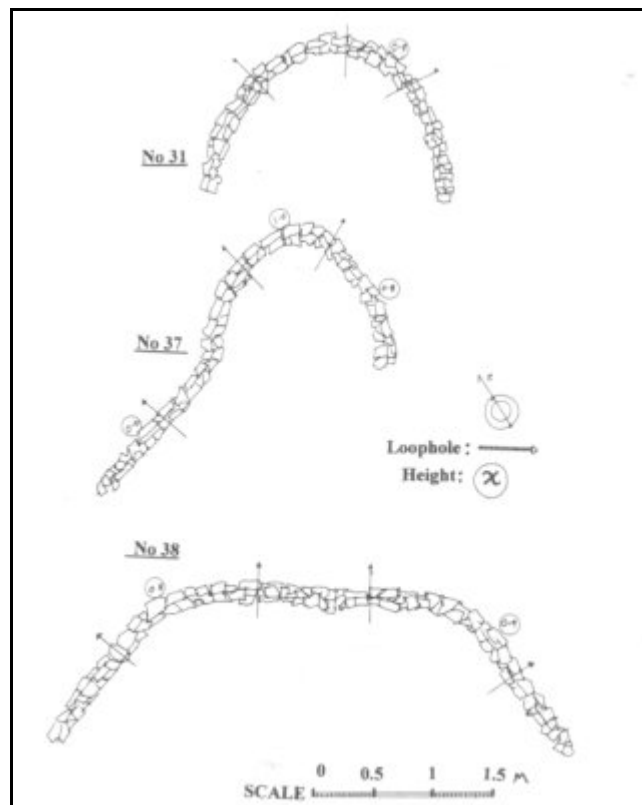


Figure 4: Drawings of sangars from the Battle of Witpoort (16 July 1900).

## 9. Description of Sites



Map 3: Location of recorded sites.

### 9.1 Site 1

#### A. GENERAL SITE DESCRIPTION

The site consists of a dry (no plaster) stone-walled sangar dating from the Second South African War (Anglo-Boer War) (1899 – 1902). The feature is about 8 metres long and constructed in the shape of an arc. The back of the arc is positioned against a rocky outcrop. The walling is about 1.2 metres high, but has started to collapse in one corner. No cultural material remains (i.e. buttons, rifle cartridges and insignia) were recorded in the area near the structure (although they might have been removed through the years).

The structure was probably used as strategic fortification during the Battle of Donkerhoek (Diamond Hill) that took place during the War. However, it is uncertain what specific role the structure played and to what extent it was used. Site 2 is similar to Site 1 and is situated 50 metres towards the northwest (nearer to the cliff).

This structure is older than 60 years and is therefore protected by the NHRA (Act no 25 of

1999).				
<b>B. SITE EVALUATION</b>				
<b>B1. HERITAGE VALUE</b>			<b>Yes</b>	<b>No</b>
<b>Historic Value</b>				
It has importance to the community or pattern of South Africa's history or precolonial history.			√	
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.			√	
It has significance relating to the history of slavery in South Africa.				√
<b>Aesthetic Value</b>				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.				√
<b>Scientific Value</b>				
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.			√	
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.			√	
It has importance to the wider understanding of temporal changes within cultural landscapes, settlement patterns and human occupation.			√	
<b>Social Value</b>				
It has marked or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				√
<b>Tourism Value</b>				
It has significance through contributing towards the promotion of a local sociocultural identity and can be developed as a tourist destination.				√
<b>Rarity Value</b>				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√	
<b>Representative Value</b>				
It is of importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√	
<b>B2. REGIONAL CONTEXT</b>				
Other similar sites in the regional landscape.			√	
<b>B3. CONDITION OF SITE</b>				
Integrity of deposits/structures.		Stable		
<b>C. SPHERE OF SIGNIFICANCE</b>		<b>High</b>	<b>Medium</b>	<b>Low</b>
International				√
National			√	
Provincial		√		
Local		√		
Specific community		√		
<b>D. FIELD REGISTER RATING</b>				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]				
Local/Grade 3B [High significance; mitigation, partly retained]				√
Generally Protected A [High/Medium significance, mitigation]				


Generally protected B [Medium significance, to be recorded]	
Generally Protected C [Low significance, no further action]	
<b>E. GENERAL STATEMENT OF SITE SIGNIFICANCE</b>	
Low	
Medium	
High	√
<b>F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT</b>	
None	√
Peripheral	
Destruction	
Uncertain	
<b>G. RECOMMENDED MITIGATION</b>	
<ul style="list-style-type: none"> <li>• The structure (sangar) must be fenced</li> <li>• A minimum 20 metres buffer zone should be maintained around the structure (due to blasting activities in the area)</li> <li>• If further impact is envisaged, please note the following:                             <ul style="list-style-type: none"> <li>• Phase 2 investigation</li> <li>• Destruction permit from SAHRA</li> </ul> </li> </ul>	
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>	
<ul style="list-style-type: none"> <li>• National Heritage Resources Act (Act no. 25 of 1999)</li> </ul>	
<b>I. PHOTOGRAPHS</b>	
	
<p><b>Figure 5: The outer stone wall of the sangar.</b></p>	



Figure 6: Frontal view of the stone walling.

## 9.2 Site 2

### A. GENERAL SITE DESCRIPTION

The site consists of a dry (no plaster) stone-walled sangar (similar to Site 1) dating to the Second South African War (Anglo Boer War (1899 – 1902). The feature is approximately 6 metres in length and constructed in the shape of an arc. The back of the arc is positioned against a rocky outcrop. Site 2 and Site 1 were probably used during the Second South African War (Anglo-Boer War) to ensure that nobody could ascend the northern slope of the mountain. The area around the feature has been disturbed by mining activities, but the structure itself is stable.

The walling is about 0.9 metres high, but has started to collapse. No cultural material remains (i.e. buttons, rifle cartridges and insignia) were recorded in the area near the structure (although they might have been removed through the years).

The structure was probably used as strategic fortification during the Battle of Donkerhoek (Diamond Hill) that took place during the War. However, it is uncertain what specific role the structure played and to what extent it was used. Site 2 is similar to Site 1 and is situated 50 metres towards the northwest (nearer to the cliff).

This structure is older than 60 years and is therefore protected by the NHRA (Act no 25 of 1999).

### B. SITE EVALUATION

#### B1. HERITAGE VALUE

Yes	No
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#### Historic Value

It has importance to the community or pattern of South Africa's history or precolonial history.	√	
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It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.	√		
It has significance relating to the history of slavery in South Africa.		√	
<b>Aesthetic Value</b>			
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.		√	
<b>Scientific Value</b>			
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.	√		
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.	√		
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.	√		
<b>Social Value</b>			
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).		√	
<b>Tourism Value</b>			
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.		√	
<b>Rarity Value</b>			
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.	√		
<b>Representative Value</b>			
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.	√		
<b>B2. REGIONAL CONTEXT</b>			
Other similar sites in the regional landscape.	√		
<b>B3. CONDITION OF SITE</b>			
Integrity of deposits/structures.	Stable but collapsing		
<b>C. SPHERE OF SIGNIFICANCE</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
International			√
National		√	
Provincial	√		
Local	√		
Specific community	√		
<b>D. FIELD REGISTER RATING</b>			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]	√		
Generally Protected A [High/Medium significance, mitigation]			
Generally protected B [Medium significance, to be recorded]			
Generally Protected C [Low significance, no further action]			
<b>E. GENERAL STATEMENT OF SITE SIGNIFICANCE</b>			
Low			
Medium			
High	√		
<b>F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT</b>			



None	√
Peripheral	
Destruction	
Unknown	

**G. RECOMMENDED MITIGATION**

- The structure (sangar) must be fenced
- A minimum 20 metres buffer zone should be maintained around the structure (due to blasting activities in the area)
- If further impact is envisaged, please note the following:
  - Phase 2 investigation
  - Destruction permit from SAHRA

**H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS**

- National Heritage Resources Act (Act no. 25 of 1999)

**I. PHOTOGRAPHS**



Figure 7: A section of the stone wall of the sangar.

**9.3 Site 3**

**A. GENERAL SITE DESCRIPTION**

The site is a graveyard which consists of approximately 17 graves. The graves have an east-west orientation with the headstones on the western side. Most graves are demarcated by packed rocks and the headstones are upright rocks. One grave was recorded with a headstone, but no inscription could be discerned. No grave offerings were recorded. Oral histories indicate that relatives visited and cleared the graves up to two years ago. It also seems that the graveyard is associated with Ndebele-speaking people who worked and lived in the area before the mine

started.

Because the graves have no inscriptions on the headstones and their age could not be determined, the graveyard is, by default, classified as older than 60 years and is therefore protected under the NHRA (Act no 25 of 1999).

## B. SITE EVALUATION

### B1. HERITAGE VALUE

Yes	No
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#### Historic Value

It has importance to the community or pattern of South Africa's history or precolonial history.		√
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It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.		√
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It has significance relating to the history of slavery in South Africa.		√
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#### Aesthetic Value

It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.		√
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#### Scientific Value

It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.	√	
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It has importance in demonstrating a high degree of creative or technical achievement at a particular period.		√
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It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.		√
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#### Social Value

It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).	√	
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#### Tourism Value

It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.		√
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#### Rarity Value

It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.		√
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#### Representative Value

It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.	√	
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### B2. REGIONAL CONTEXT

Other similar sites in the regional landscape.	√	
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### B3. CONDITION OF SITE

Integrity of deposits/structures.	Stable
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### C. SPHERE OF SIGNIFICANCE

High	Medium	Low
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International			√
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National			√
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Provincial		√	
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Local	√		
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Specific community	√		
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### D. FIELD REGISTER RATING

National/Grade 1 [should be registered, retained]	
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Provincial/Grade 2 [should be registered, retained]	
Local/Grade 3A [should be registered, mitigation not advised]	
Local/Grade 3B [High significance; mitigation, partly retained]	
Generally Protected A [High/Medium significance, mitigation]	√
Generally protected B [Medium significance, to be recorded]	
Generally Protected C [Low significance, no further action]	
<b>E. GENERAL STATEMENT OF SITE SIGNIFICANCE</b>	
Low	
Medium	
High	√
<b>F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT</b>	
None	√
Peripheral	
Destruction	
Unknown	
<b>G. RECOMMENDED MITIGATION</b>	
<ul style="list-style-type: none"> <li>• The graves must be fenced</li> <li>• A minimum 10 metres buffer zone should be maintained around the graves</li> <li>• If further impact is envisaged, please note the following: <ul style="list-style-type: none"> <li>• Phase 2 investigation</li> <li>• Social consultation</li> <li>• Exhumation and reburial</li> </ul> </li> </ul>	
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>	
<ul style="list-style-type: none"> <li>• Human Tissue Act (Act 65 of 1983 as amended).</li> <li>• Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925)</li> <li>• Ordinance on Excavations (Ordinance no. 12 of 1980)</li> <li>• Local and regional provisions, laws and by-laws</li> <li>• National Heritage Resources Act (Act no. 25 of 1999)</li> <li>• Permit from SAHRA for removal</li> </ul>	
<b>II. PHOTOGRAPHS</b>	



Figure 8: Packed stones demarcating one of the graves.



Figure 9: A headstone of one of the graves.


#### 9.4 Site 4

##### A. GENERAL SITE DESCRIPTION

The site consists of the mine manager's house. It is a large double story, multi-room brick house with associated outbuildings and tennis court. The house is currently occupied. The structures are not older than 60 years and therefore not protected under the NHRA (Act no 25 of 1999).

##### B. SITE EVALUATION

<b>B1. HERITAGE VALUE</b>		<b>Yes</b>	<b>No</b>
<b>Historic Value</b>			
It has importance to the community or pattern of South Africa's history or precolonial history.			√
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.			√
It has significance relating to the history of slavery in South Africa.			√
<b>Aesthetic Value</b>			
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.			√
<b>Scientific Value</b>			
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.		√	
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.			√
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.			√
<b>Social Value</b>			
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).			√
<b>Tourism Value</b>			
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.			√
<b>Rarity Value</b>			
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√
<b>Representative Value</b>			
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√
<b>B2. REGIONAL CONTEXT</b>			
Other similar sites in the regional landscape.		√	
<b>B3. CONDITION OF SITE</b>			
Integrity of deposits/structures.		Stable, occupied	
<b>C. SPHERE OF SIGNIFICANCE</b>		<b>High</b>	<b>Medium</b>
International			√
National			√
Provincial			√
Local			√
Specific community			√
<b>D. FIELD REGISTER RATING</b>			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]			
Generally Protected A [High/Medium significance, mitigation]			
Generally protected B [Medium significance, to be recorded]			
Generally Protected C [Low significance, no further action]			
<b>E. GENERAL STATEMENT OF SITE SIGNIFICANCE</b>			

Low	
Medium	
High	
<b>F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT</b>	
None	√
Peripheral	
Destruction	
Unknown	
<b>G. RECOMMENDED MITIGATION</b>	
<ul style="list-style-type: none"> <li>• Feature sufficiently recorded.</li> <li>• No further action required.</li> </ul>	
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>	
<ul style="list-style-type: none"> <li>• None</li> </ul>	
<b>III. PHOTOGRAPHS</b>	
	
<p>Figure 10: The mine manager’s house.</p>	

**10. Summary of Sites**

Site	Coordinates	Site Type	Statement of Significance	Impact	Mitigation
1	25.766870°S 28.465247°E	Historical sangar	High	None	• Fenced
2	25.766237°S 28.464493°E	Historical sangar	High	None	• Fenced

3	25.768243°S 28.459725°E	Graveyard	High	None	• Fenced
4	25.772313°S 28.458083°E	Modern house	-	None	• None

## 11. Conclusions and Recommendations

### *Stone Age & Iron Age settlements*

No Stone Age or Iron Age settlements, structures, features or artefacts were recorded during the survey.

### *Historical structures & buildings*

Two stone-walled sangars associated with the Battle of Donkerhoek (Diamond Hill) were recorded (Site 1 & 2). They are older than 60 years and are therefore protected by the NHRA (Act 25 of 1999) and will require mitigation if disturbed.

A modern house was also recorded that is not older than 60 years; no further action required.

### *Graves*

A graveyard (Site 3) was recorded which contains at least 17 graves. The site is protected by the NHRA (Act 25 of 1999) and should be fenced with a minimum 10 metres buffer zone. Most of the graves are stable but will require mitigation if impact cannot be avoided.

If impact will occur in the near future, mitigation measures may entail full grave relocation. Such a relocation process must be undertaken by suitably qualified individuals with a proven track record. Furthermore, a concerted effort must also be made to identify all buried individuals and to contact their relatives and descendants. Other legislative measures which may be of relevance include the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the Human Tissues Act (Act no. 65 of 1983, as amended), the Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

Note that four categories of graves can be identified. These are:

- Graves younger than 60 years;
- Graves older than 60 years, but younger than 100 years;
- Graves older than 100 years; and
- Graves of victims of conflict or of individuals of royal descent.

Also note the following:

- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during construction activities, such activities should be halted, and a university or

museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).

### **Bibliography**

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