

**Cultural Heritage Impact Assessment of the Proposed Chrome Mine on Portions 4 & 5
of the Farm Spitskop 333KT, Steelpoort, Mpumalanga Province**

For

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Executive Summary

This report focuses on the results from a cultural heritage investigation which yielded Late Iron Age settlements and modern structures.

Iron Age settlements

Several studies in the Steelpoort catchment area have demonstrated beyond doubt that the region was densely populated during that past few hundred years. As a result numerous stone-walled Late Iron Age settlements have been recorded. Research has shown that most of these settlements are probably associated with the royal lineage (and therefore associated capitals) of both the Sotho (BaPedi) and Ndebele speaking communities.

Four Iron Age sites were recorded. One being characterised by a surface scatter (Site 1) and the other two situated on hillocks (Sites 3 & 4) and probably associated with rainmaking. Site 2 is an isolated stone-walled enclosure.

Please note that Sites 2 and 3 fall outside Portion 5 and will therefore not be affected by the present mining development.

Buildings

No buildings older than 60 years were recorded. The homesteads that were noted are modern and will be retained.

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)).

Definitions and abbreviations

Midden: Refuse that accumulates in a concentrated heap.

Stone Age: An archaeological term used to define a period of stone tool use and manufacture (see Table 3)

Iron Age: An archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture (see Table 3)

1. Introduction

The Archaeology Contracts Unit (UNISA) conducted an investigation, focussing on the archaeological and historic remains on portions 4 and 5 of the farm Spitskop 333KT near the town of Steelpoort in Mpumalanga where Samancor Chrome Ltd proposes to establish a new opencast mine. This report forms part of the EIA and EMP process and was requested by M2 Environmental Connections on behalf of the client, Samancor Chrome Ltd.

More specifically, the aim of this investigation is to locate visible archaeological and historical artefacts, structures (including graves), features and settlements of cultural significance within the boundaries of the proposed mining area.

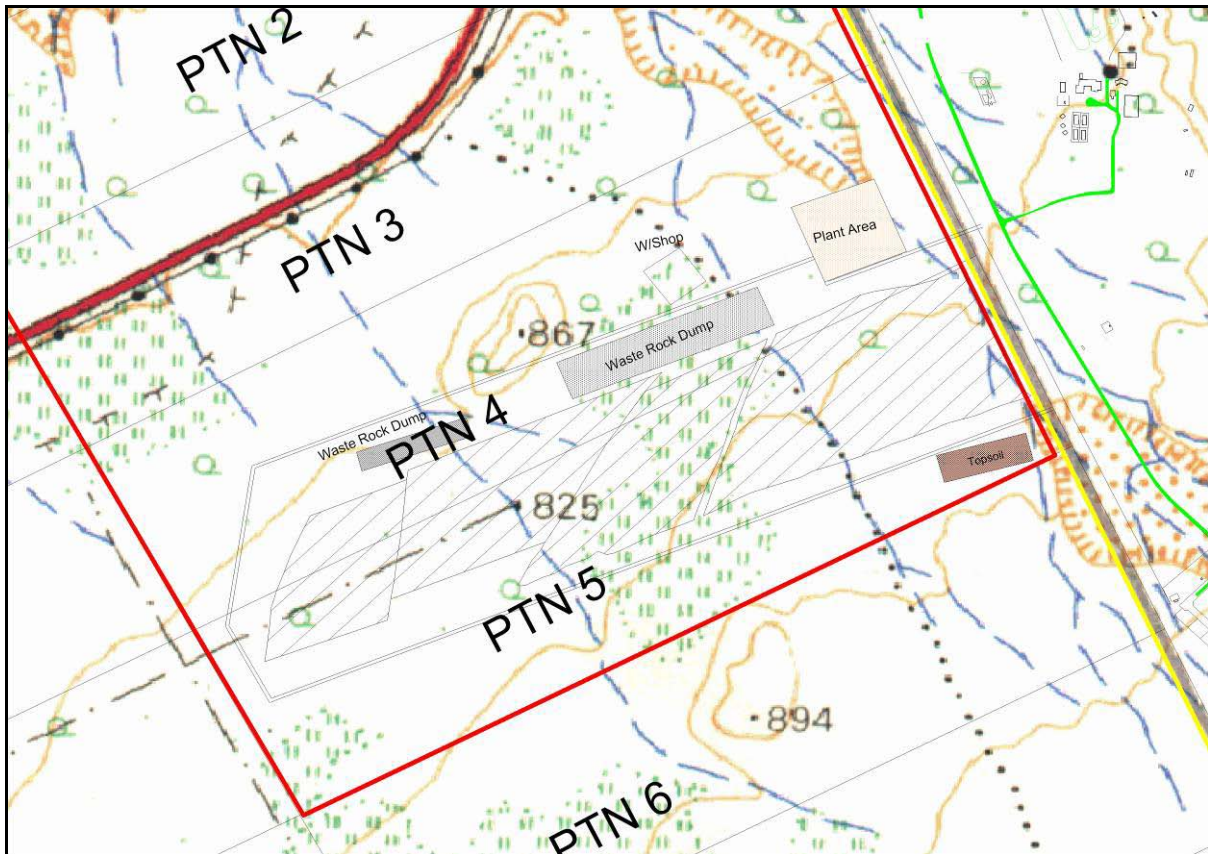
2. Terms of Reference

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;
- Provide contextual information on the archaeological and historical sites in the area;
- Assess any possible impact on the archaeological and historical remains within the area emanating from the proposed mining activities;
- Propose possible mitigation measures provided that such action is necessitated by the development; and

3. Nature of the Proposed Activity or Development

The intension is to establish an open cast chrome mine. Topsoil will be stripped and conserved, after which the overburden will be removed to expose the chrome reserves. The overburden as well as the chrome reserves will be blasted to recover the chromite ore. The topsoil and waste rock will be used for rehabilitation (see Map 1). The total footprint of the mine will be approximately 120 hectares.



Map 1: Outline of proposed mining area.

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. Any impact on archaeological sites is irreversible.
- All archaeological remains, 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 (Act no 25 of 1999)**, 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:**

Significance Rating	Action
Not protected	1. None
Low	2a. Recording and documentation (Phase 1) of site adequate; no further action required
	2b. Controlled sampling (shovel test pits, auguring), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
Medium	3. Excavation of representative sample, C ¹⁴ dating,), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
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

Table 1

- 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 Heritage Resources Agency (SAHRA) (or relevant PHRA).

5. Methodology

5.1 Maps and Other Sources

The proposed area for mining has been demarcated the 1:50 000 topographic map, namely sheet number 2430CC.

A previous archaeological survey was conducted for the proposed new Lannex North Open Cast Mine and Annex Club Open Cast Mine, which is situated to the east of the present study (ECM Report 2006). The survey focussed on portions of the farm Grootboom 366 KT and Annex Grootboom 335KT, which revealed the following heritage resources:

- The remains of two villages dating from the recent past but with possible historical connections (site RP01 and RP02);
- An informal graveyard which can be associated with one of the villages (site GY01);
- Scattered stone tools dating from the Stone Age in a donga crossing the mining area;
- Four potsherds from the Early Iron Age (AD300 to 800).

This data confirms that the area has been settled and utilised from an early period.

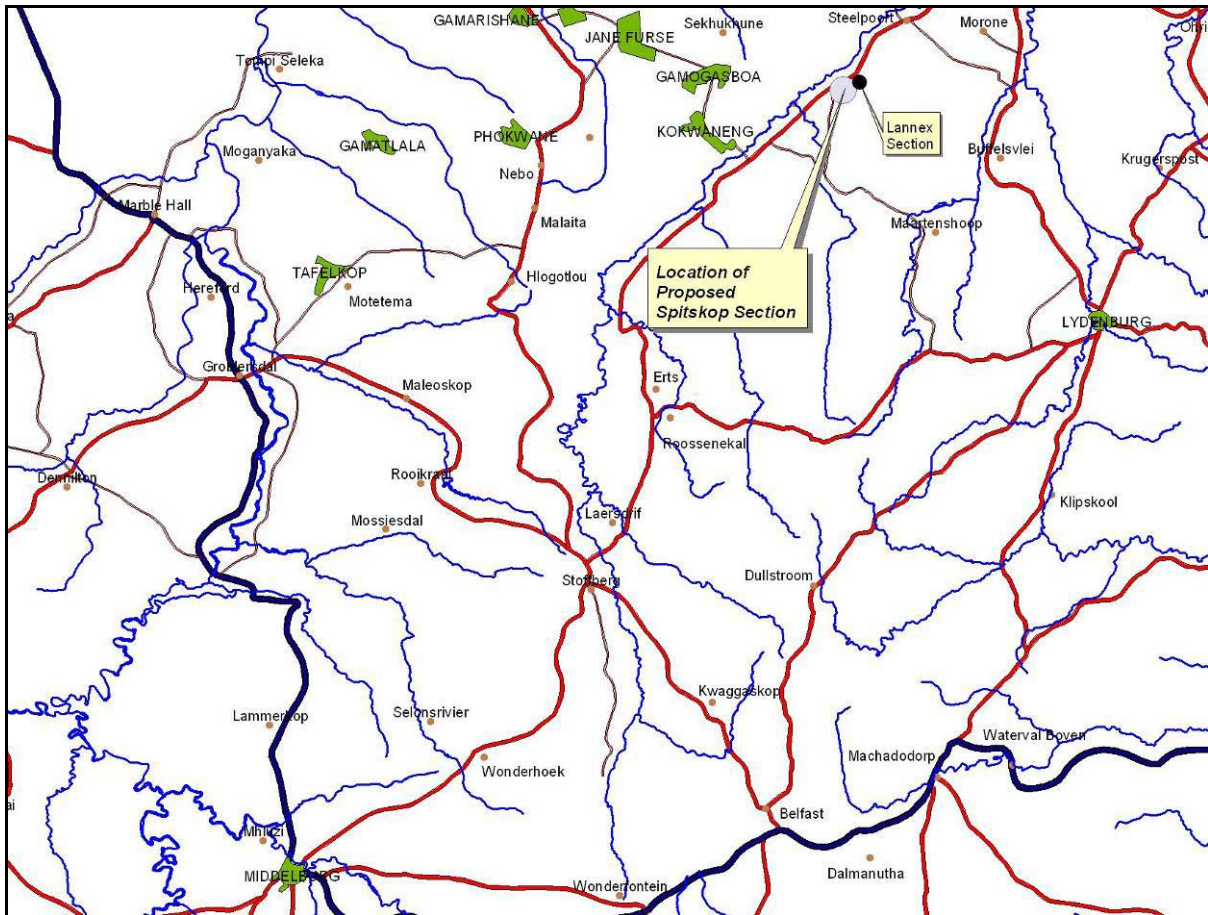
5.2 Fieldwork

An on-site investigation was conducted on 26 June 2007. Access was provided by dirt roads and most of the area was investigated on foot.

5.3 Visibility and Constraints

No constraints were encountered when conducting the field investigation. However, 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.

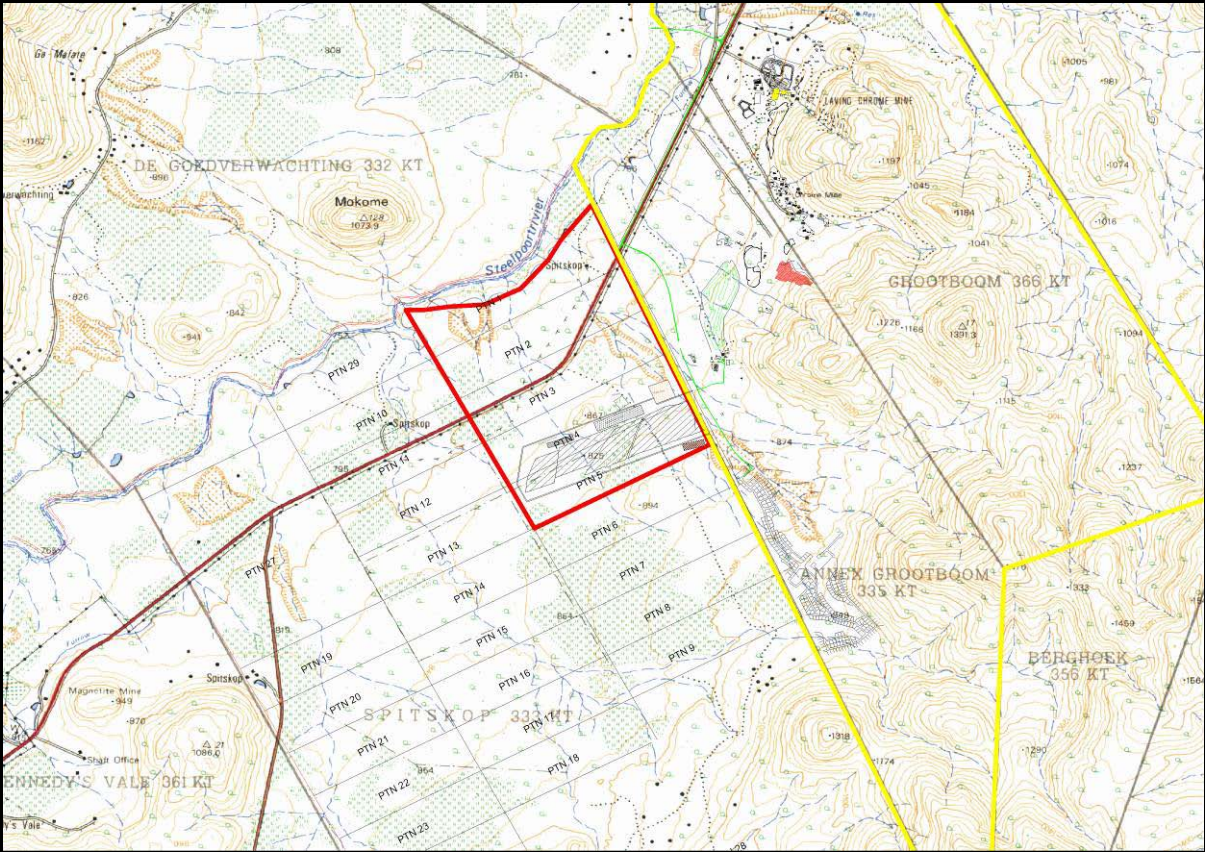
6. Description of Study Area



Map 2: Regional location of the proposed mine.

The relevant area is situated on the farm Spitskop 333KT on Portions 4 and 5.

The farm is characterised by an open flat plain situated to the west of a mountainous region and south of the Steelpoort River. Two hillocks are situated in and adjacent to the surveyed area. In addition, two non-perennial streams run through the area from south to north, ending as part of the Steelpoort River catchment. As a result, extensive erosion dongas were noted (see Figure 1).



Map 3: Location of Portions 4 & 5.



Figure 1: Surface erosion occurring in the area.

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)

Table 3

8. Archaeological Context

8.1 Stone Age

Large concentrations of Early Stone Age (ESA) sites are usually located on the flood plains of perennial rivers and may date to over 2 millions years ago. These ESA open sites may contain, firstly, scatters of stone tools and second, large concentrated deposits which range from pebble tool choppers to core tools such as handaxes and cleavers. The early hominids who made these stone tools, did not actively hunt.

Middle Stone Age (MSA) sites also occur on flood plains but are in many cases associated with rock shelters (overhangs). Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades. They may have been hafted but organic materials do not always preserve. Limited drive hunting activities are associated with this period.

Sites dating to the Late Stone Age (LSA) occur primarily in rock shelters (though open sites have been recorded in the northern Cape). Well protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich egg shell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is sometimes possible. South African rock art is also associated with this period.

8.2 Iron Age Sequence

In the northern regions of South Africa at least three settlement phases, which pertain to prehistoric agropastorists, have been distinguished for the **Early Iron Age** (EIA). The first phase of the Early Iron Age is known as **Happy Rest**, representative of the Western Stream of migrations, and dates to AD 400 - AD 600. The second phase known as **Diamant** is dated to AD 600 - AD 900. 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, Limpopo 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.

The **Late Iron Age** (LIA) settlements are characterised by stone-walled enclosures situated on defensive hilltops (especially c. AD 1640 - AD 1830s). This occupation phase has been linked to the arrival of the Northern Sotho, Tswana and Southern Ndebele (Nguni-speakers) in the region dated from the sixteenth to seventeenth centuries AD. The terminal LIA is represented by late 18th/early 19th century settlements with multichrome Moloko pottery commonly attributed to the Sotho-Tswana. This correlates with oral traditions about various people who sought refuge in the mountains during the processes of disruption in the northern interior of South Africa, caused during the so-called *difaqane* (or *Mfecane*).

9. Ethno-historical Context

The geographic region is defined by the catchment-areas of the Steelpoort River and further accentuated by high-lying areas. It is clear that this region acted as an area of cultural contact for various cultural groups. Ethnographic evidence suggests that the Sotho-speaking Pedi people (of the Pedi Empire) are of Tswana (Kgatla) descent and moved into the Steelpoort River valley under their chief Thobele (Lellelateng) in the 1650s (Mönnig 1967:14).

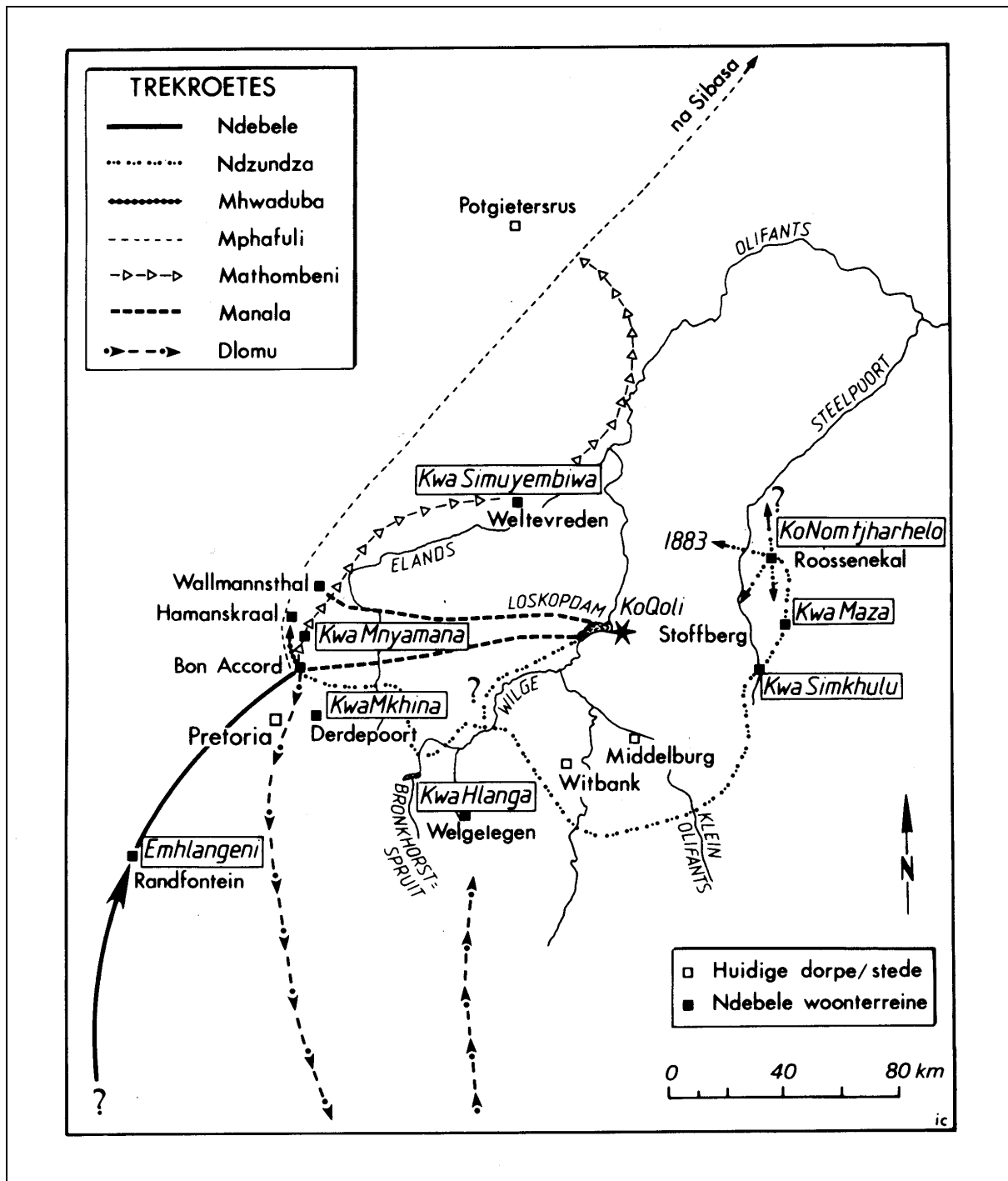
The Ndzundza Ndebele (Southern Ndebele of Nguni origin) also settled in Steelpoort River and oral history suggests an early (*circa* late AD 1500) settlement in the interior, to the immediate north of Pretoria, under their founder-ruler called Musi. The Ndzundza chieftaincy is believed to have eventually extended its boundaries along the catchment area of the Steelpoort River in the 1630s and settled here for the next 250 years (Van Vuuren 1995, Van Warmelo 1935). Several of these settlements (KwaSimkhulu, KwaMaza and Esikhunjini) are known through oral history and have been investigated archaeologically (see Schoeman 1997). We know of their chief Mabhogo who ruled from the 1840s, until his death in 1865 (Schoeman 1997:10). It is also known that both groups extended their political and economic influence to a large geographic area. Other groups who lived in the general geographic area of this survey include the Kopa, the Koni, the Phuting, the Swazi (Ndwandwe), and the Shangaan-Tsonga (we acted as intermediate traders with the east coast). Access to and control over this area might also have changed through time. In the 1820s the area was affected by the disruptive influence of the Zulu warrior Mzilikazi and later, during the middle and late 19th century the area underwent a process of settlement by white farmers which resulted in the establishment of fenced farms and formal towns.

Ndebele towns that have been investigated archaeologically include KwaSimkhulu (occupied circa AD 1600 – AD 1680s), KwaMaza (occupied circa AD 1675 – AD 1820; situated at the eastern foot of Bothasberg), Esikhunjini (occupied circa AD 1820 – AD 1835; on the north-eastern slopes of Bothasberg) and KoNomtjarhelo (capital Erloweni (Mapochstad) and an outlying site: UmKlaarmaak (near Spitskop) (occupied circa AD 1835 – AD 1883) (see Map 4). We also know of several Pedi capitals that were also situated in the Steelpoort River valley.

After a period of conflict the Boer Republic (ZAR) signed a peace-treaty with the Pedi under their chief Sekwati on 17 November 1857. A Lutheran missionary of the Berlin Missionary Society, Alexander Merensky visited Sekwati in 1860 and later built a mission station in

Gerlachshoop near Bopedi (Mönnig 1967:24-25). In the late 1850s negotiations between the Boers and the Pedi resulted in the purchase by the Boers of a large area below the southern escarpment of the Drakensberg.

Several trading routes associated with the gold trade are known. These routes connected the interior with the east coast to facilitate the export of alluvial gold and import of various commodities. Amongst others, one such route ran from Sabie, over the Drakensberg towards Lydenburg. From Lydenburg the route turned north-western towards Sekhukhune Land over the Grootdwars River and through the Steelpoortdrif, up Magneethoogte, past Ramakokskraal, then along the Gompies River towards Platberg (De V. Pienaar 1990:55)



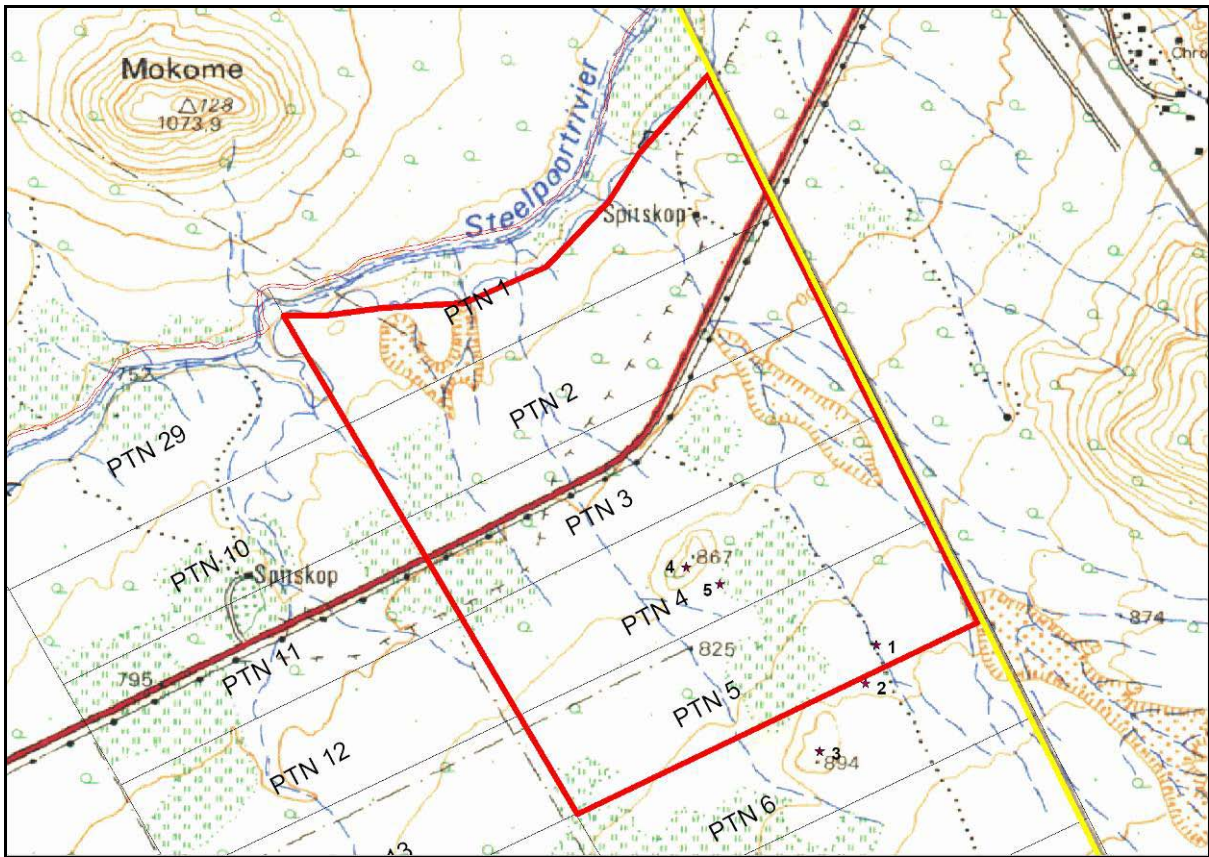
Map 4: Movement and settlement of the Ndzundza-Ndebele.

10. Description of Sites

Although, several Middle Stone Age formal tools and cores were noted in dongas caused by erosion no knapping or settlement sites were recorded. The primary context of these artefacts is not known. The study done on the farm Grootboom 366KT also revealed surface scatters of Stone Age artefacts. Isolated surface scatters of Stone Age tools are not scientifically relevant, in contrast to artefacts in primary context on a knapping site.

All the archaeological sites are situated in close proximity to water (various springs and streamlets flow down the slope towards the Steelpoort River). The average annual rainfall of the region varies between 600 - 750 mm, with a moderate climate during both summer and winter months. Recent climatic research indicates that between AD 900 - AD 1295 southern Africa experienced a 'Warm Epoch' with generally hotter and wetter conditions than today. Between AD 1295 - AD 1780 the region experienced a so-called 'Little Ice Age' with generally colder and drier conditions. Although the period AD 1425 and AD 1675 was generally warm and wet (*cf.* Tyson 1992). As a result, past climatic conditions were at times probably even more favourable for grain cultivation (e.g. sorghum, millet and various types of beans) than today. The floodplains on both sides of the Steelpoort River were probably utilised as agricultural land and grazing.


The location of the sites is indicated on Map 5.



Map 5: Location of the recorded sites.


10.1 Site 1

A. GENERAL SITE DESCRIPTION				
The site consists of a surface scatter of undecorated potsherds and a lower and upper grindstone (see Figure 2). The area has been severely disturbed by surface erosion which makes the primary context of the artefacts unclear. No middens or other structures were recorded.				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
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.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.			√	
Scientific Value				
It has potential to yield information that will contribute to a 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.			√	
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).			√	
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				√
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.				√
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√	
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.			√	
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Damaged		
C. SPHERE OF SIGNIFICANCE	High	Medium	Low	
International			√	
National			√	
Provincial			√	
Local		√		
Specific community	√			
D. FIELD REGISTER RATING				
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]				
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				

Medium	√
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	
Peripheral	
Destruction	√
Uncertain	
G. RECOMMENDED MITIGATION	
<ul style="list-style-type: none"> • Phase 2 investigation • Surveying & recording 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> • National Heritage Resources Act (Act no. 25 of 1999) • Permit from SAHRA for destruction 	
I. PHOTOGRAPHS	
	
<p>Figure 1: Lower and upper grindstone used for grinding grains.</p>	


10.2 Site 2

A. GENERAL SITE DESCRIPTION				
The site consists of an isolated stone-walled enclosure approximately 2.5 metres in diameter. The walling is about 0.5 metres in height (see Figure 2). No other structures are associated with the enclosure and no associated middens were recorded. The enclosure probably functioned as an outpost or as holding pen for small stock.				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
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.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.				√
Scientific Value				
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.			√	
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				√
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				√
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.				√
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√	
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.			√	
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Stable		
C. SPHERE OF SIGNIFICANCE		High	Medium	Low
International				√
National				√
Provincial				√
Local				√
Specific community				√
D. FIELD REGISTER RATING				
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]				√
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				√

Medium	
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	
Destruction	
Uncertain	
<p>G. RECOMMENDED MITIGATION</p> <p>According to the brief received the hillock will not be affected by the mining activities as it is located south of Portion 5 of the farm Spitskop 333KT. However, if subsequent mining activities necessitate impact on the hillock, please note the following: Sufficiently recorded. No further action required.</p>	
<p>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</p> <ul style="list-style-type: none"> • National Heritage Resources Act (Act no. 25 of 1999) • Permit from SAHRA for destruction 	
<p>I. PHOTOGRAPHS</p>  <p>Figure 3: Stone-walled enclosure.</p>	


10.3 Site 3

A. GENERAL SITE DESCRIPTION				
The site is located on a hillock and consists of several terrace walls, several undecorated potsherds, and one large lower grindstone (Figure 4). Several inter-connected secondary walling are evident on the site. No middens were recorded.				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
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.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.			√	
Scientific Value				
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.			√	
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).			√	
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				√
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√	
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.				√
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.				√
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Stable		
C. SPHERE OF SIGNIFICANCE		High	Medium	Low
International				√
National				√
Provincial				√
Local		√		
Specific community		√		
D. FIELD REGISTER RATING				
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]				
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				

Medium	
High	√
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
<p>According to the brief received the hillock will not be affected by the mining activities as it is located south of Portion 5 of the farm Spitskop 333KT. However, if subsequent mining activities necessitate impact on the hillock, please note the following:</p> <ul style="list-style-type: none"> • Phase 2 investigation • Surveying & recording 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> • National Heritage Resources Act (Act no. 25 of 1999) • Permit from SAHRA 	
I. PHOTOGRAPHS	
	
<p>Figure 4: Lower grindstone.</p>	


10.4 Site 4

A. GENERAL SITE DESCRIPTION				
The site is located on a hillock and consists of several terrace walls (Figure 5), some midden deposits and grinding areas on large rocky outcrops. The placement of upper grindstones and potsherds in crevices on the hill might suggest rainmaking practices.				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
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.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.			√	
Scientific Value				
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.			√	
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).			√	
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				√
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa’s natural or cultural heritage.			√	
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa’s natural or cultural places or objects.				√
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.				√
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Stable		
C. SPHERE OF SIGNIFICANCE		High	Medium	Low
International				√
National				√
Provincial				√
Local		√		
Specific community		√		
D. FIELD REGISTER RATING				
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]				
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				

Medium	
High	√
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
<p>According to the brief received the hillock will not be affected by the mining activities on Portion 4 of the farm Spitskop 333KT as the hillock will not be mined. However, if subsequent mining activities necessitate impact on the hillock, please note the following:</p> <ul style="list-style-type: none"> • Phase 2 investigation • Surveying & recording 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> • National Heritage Resources Act (Act no. 25 of 1999) • Permit from SAHRA 	
II. PHOTOGRAPHS	
	
<p>Figure 5: Terrace walling on the hilltop site.</p>	

10.5 Site 5

A. GENERAL SITE DESCRIPTION				
This site consists of two modern houses (with associated structures and gardens) that are currently used by contractors working at the mine (see Figure 6). These structures are not older than 60 years and are therefore not historically significant or protected by the NHRA (Act no. 25 of 1999).				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
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.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.				√
Scientific Value				
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.			√	
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				√
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				√
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa’s natural or cultural heritage.				√
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa’s natural or cultural places or objects.				√
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.			√	
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Well maintained, stable		
C. SPHERE OF SIGNIFICANCE		High	Medium	Low
International				√
National				√
Provincial				√
Local				√
Specific community				√
D. FIELD REGISTER RATING				
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]				√
E. GENERAL STATEMENT OF SITE SIGNIFICANCE				
Low				√

Medium	
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
<ul style="list-style-type: none"> No further action required 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> None 	
I. PHOTOGRAPHS	
	
<p>Figure 6: Modern house on southern slope of hillock.</p>	

11. Summary of Sites

Site	Coordinates	Site Type	Significance	Impact	Mitigation
1	24°48'14.6"S 30°09'40.2"E	Late Iron Age [Early Moloko]	Medium	Destruction	• None
2	24°48'20.4"S 30°09'38.6"E	Livestock Enclosure	Low	None	• None
3	24°48'30.7"S 30°09'31.7"E	Late Iron Age [Hilltop Site]	High	None	• None
4	24°48'02.9"S 30°09'11.5"E	Late Iron Age [Hilltop Site]	High	None	• None

5	24°48'05.4"S 30°09'16.6"E	Historical Houses	Low	None	<ul style="list-style-type: none"> • None

Table 4

12. Conclusions

Iron Age settlements

Several studies in the Steelpoort catchment area have demonstrated beyond doubt that the region was densely populated during that past few hundred years. As a result numerous stone-walled Late Iron Age settlements have been recorded. Research has shown that most of these settlements are probably associated with the royal lineage (and therefore associated capitals) of both the Sotho (BaPedi) and Ndebele speaking communities.

Four Iron Age sites were recorded. One being characterised by a surface scatter (Site 1) and the other two situated on hillocks (Sites 3 & 4) and probably associated with rainmaking. Site 2 is an isolated stone-walled enclosure.

Please note that Sites 2 and 3 fall outside Portion 5 and will therefore not be affected by the present mining development.

Historic Buildings

No buildings older than 60 years were recorded. The homesteads that were noted are modern and will be retained.

Graves and Cemeteries

No graves were recorded in the surveyed area, however if graves are exposed please 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.

Although burial dates could be established for some of the graves (some older than 60 years), most are located outside of a formal cemetery managed by a local authority. In terms of Section 36(3) of the National Heritage Resources Act (Act no. 25 of 1999) it is assumed that these undated burials are older than 60 years and therefore protected.

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)).

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