

**Phase I Heritage Impact Assessment for the Proposed Mixed Residential
Development on Several Portions of the Farm Rooikoppies 297 JQ in
Marikana, in the Rustenburg Local Municipality, Northwest Province**

(REVISED)

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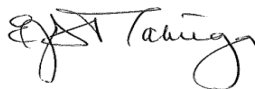
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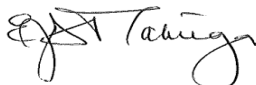
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DECLARATION OF INDEPENDENCE

AHSA is an independent consultancy: We declare that we have no interest, be it business, financial, personal or other vested interest in the undertaking of the proposed activity, other than remuneration for work performed, in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999).

DISCLAIMER

All possible care was taken to identify and document heritage resources during the survey in accordance with best practices in archaeology and heritage management. However, it is always possible that some hidden or subterranean sites are overlooked during a survey. The researcher will not be held liable for such oversights and additional costs thereof.



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ABBREVIATIONS

DEA	Department of Environmental Affairs
EIA	Environmental Impact Assessment
HIA	Heritage Impact Assessment
LSA	Late Stone Age
LIA	Later Iron Age
PHRA	Provincial Heritage Resources Authority
MSA	Middle Stone Age
NHRA	National Heritage Resources Act
NEMA	National Environmental Management Act
PMG	Platinum Group of Minerals
SAHRA	South African Heritage Resources Agency

EXECUTIVE SUMMARY

A Heritage Impact Assessment (HIA) study was requested in terms of Section 38 (8) of the National Heritage Resources Act (No 25 of 1999) for a proposed housing development on the farm Rooikoppies 297 JQ. The site is situated on the outskirts of Marikana in the Rustenburg Local Municipality, Bojanala Platinum District within the North West Province. The heritage impact assessment entailed a site visit and ground survey, which was undertaken on 28 March and 28 May 2022 to assess the heritage sensitivity of the area and to determine potential adverse impacts of the proposed activities on the heritage resources.

The heritage sensitivity of the property is summarised as follows:

1. *The Stone Age*

No Stone Age sites or relics were found.

2. *The Iron Age*

No Iron Age sites or relics were found.

3. *Buildings*

There are no buildings in the farm portions required for the proposed housing development.

4. *Burial Grounds*

One burial ground located on the north-eastern part of the property has at least 18 graves (Lat: 25°42'9.40"S, Long: 27°30'18.60"E). One grave with a polished granite headstone, and base of concrete slab and granite rim, is of Christina Moselane (1914 – 5 February 1978). A buffer of 100 m radius must be reserved around the graves. Two other burial grounds are located outside the footprint of the proposed development.

5. *Other observations*

The derelict building recorded (MRK01) is located outside the footprint of the development. It is considered of little significance. The other two sites dating to the recent past (MRK02, MRK03) MRK04) are associated with farming and rated of low significance. The granite slabs and the dumpsite to which they belong are considered to have no significance.

6. Inventory of heritage sites

SITE NO	LATITUDE	LONGITUDE	PERIOD	DESCRIPTION	RANKING	MITIGATION
MRK01	25°42'46.65"S	27°30'23.13"E	Recent past	An abandoned derelict building used as security check point.	Local 3C	No further action
MRK02	25°42'30.90"S	27°30'12.40"E	20th century	Remains of a rectangular structure built on the edge of flat rock outcrop. It appears to have enclosed a wet or marshy area.	Local 3C	No further action
MRK03	25°42'16.20"S	27°29'50.00"E	19th or 20th century	At the base of a cluster of boulders (concealed by sickle bush). The remains of farm brick pavement or floor built over a flat rock outcrop. Otherwise the remains of a fallen brick wall.	Local 3C	No further action
MRK04	25°42'17.20"S	27°29'47.00"E	Recent past	One of several polished granite slabs. One unpolished slab.	Local 3C	Will not be affected
BG3	25°42'9.40"S,	27°30'18.60"E	20 th Century	Burial ground located on the north-eastern part of the property with at least 18 graves. One grave with a polished granite headstone, and base of concrete slab and granite rim, is of Christina Moselane (1914 – 5 February 1978).	1b	A buffer of 100 m radius to be reserved around the graves
BG1	25°41'33.50"S	27°30'23.40"E	20 th Century	Burial ground located near a railway line, numbering more than 20 of which 9 have polished granite headstones and bases. The rest are settings of stones. Some of the inscriptions are: Molepolle Ramakoti	1b	Located outside the footprint of the proposed development

				Johannes, 1923 -2006; Mororo Nnani, 23 June 1938 – 03 April 1994; Molepolle Isacc 1934 – 1976.		
BG2	25°41'43.40"S	27°30'20.70"E	20 th Century	Burial ground with more than 30 graves consisting of settings of stones	1b	Located outside the footprint of the proposed development

7. Significance ranking of findings

GRADE	RANKING	SIGNIFICANCE	NO OF SITES
1a	National	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 1, 2 or 3A heritage resources	0
1b		Burial Grounds and Graves. Public sensibilities about the sanctity of graves	1
2	Provincial	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 2 heritage resources	0
3A	Local	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 3A heritage resources	0
3B	Local	Of moderate to high intrinsic, associational and contextual value within a local context, i.e. potential Grade 3B heritage resources	0
3C	Local	Of medium to low intrinsic, associational or contextual heritage value within a national, provincial and local context, i.e. potential Grade 3C heritage resources	4
		TOTAL	5

8. Conclusion and Recommendations

A buffer of 100 m radius must be reserved around the Burial Ground in the footprint of the proposed development. Other than the graves the heritage sensitivity of the property is considered to be low, and therefore the project can be given a greenlight to go ahead. The study is mindful that some important discoveries may occur during the preparation of the site (foundation phase). If this happens operations should be halted, and the provincial heritage resources authority or SAHRA notified in order for an investigation and evaluation to be undertaken.

1. INTRODUCTION

A Heritage Impact Assessment (HIA) study was requested in terms of Section 38 (8) of the National Heritage Resources Act (No 25 of 1999) for a proposed housing development on the farm Rooikoppies on the outskirts Marikana in the Rustenburg Local Municipality, Bojanala Platinum District, North West Province. This entailed a site visit and ground survey undertaken on 28 March and 28 May 2022 to assess the heritage sensitivity of the area and to determine potential adverse impacts of the proposed activities on the heritage resources.

1.1. Locational Details of The Receiving Environment

The mining footprint at Rustenburg sits on the western lobe of the Bushveld Igneous Complex (BIC), a vast composite body of plutonic and volcanic rock stretching from Steelpoort in eastern Limpopo Province to Rustenburg in the North West Province. The platinum carrying Merensky Reef is worked at Rustenburg and constitutes the world's greatest reserve of the platinum group of metals. The Bushveld contains the greatest concentration of mineral wealth on the planet and includes, in addition to the platinum group of minerals (PGM), ores, base metals (e.g., chromium, iron, tin, titanium, and vanadium) and industrial minerals (e.g., andalusite, dimension stone, and magnesite).¹

One hundred and sixty hectares (160 ha) of land has been allocated for the housing project on the farm Rooikoppies on the eastern outskirts of Marikana, a project which has been initiated by Tharisa Minerals (Pty) Ltd. The property is bounded by Marikana road about 5 km north of its junction with the N4 highway, and in the east it ends on the common boundary of the Rustenburg and Madibeng Municipalities (Figure 1). Scattered trees, mainly acacias, grow on a southwestern part of the property, along a wetland and stream running through the middle of the property, and there are scattered occurrences in the eastern part of the property. The terrain is flat with a gentle slope on either side of the aforementioned stream. Open areas west of the stream appear to have been under commercial cultivation in the recent past while east of the stream the land was used for grazing. The property is largely covered by black soil, which was sticky after rainfall a few days before our visit, indicating a high clay content (Figure 2-5). Red granite protrudes in a few areas as boulder clusters and flat rock outcropping.

¹ Scoon, R. N. & A. A. Mitchell. 2009. Discovery and Geology of the Platinum Group Element Deposits of the Bushveld Complex, South Africa.



Figure 1: Google Earth map shows the location of the footprint of the proposed residential development on portions of the farm Rooikoppies east of Marikana township



Figure 2: The gravel road on the southern boundary of the property (right). View west taken from near the south-eastern corner of the property



Figure 3: View east towards the eastern boundary of the property. Open grassland; the old tailing in the background is outside the footprint of the proposed development



Figure 4: View south-east from the property, shows open grassland and active mine tailings



Figure 5: Acacia woodland on a south-western portion of the property

1.2. Nature of Development

Tharisa Minerals (Pty) Ltd intends to construct many residential housing units on a portion of the Farm Rooikoppies 297JQ which is 160 ha in extent in order to meet a growing shortage of housing in the mining town. The schedule of physical works includes:

- Development of water and sewer reticulation system.
- Development of roads and streets.
- Construction of residential housing units.
- Electrical supply installations with overhead and/or underground cables.

The nature and scale of the proposed activities require a pre-development impact assessment to be undertaken as heritage resources which may occur in the footprint of the development are at risk of disturbance or destruction.

2. LEGAL FRAMEWORK

2.1. Section 38(3) of NHRA

Under Section 38 of the National Heritage Resources Act (No 25 1999), the terms and conditions of an HIA are stated as follows:

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

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000m² in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m² in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

It is noted that the footprint of the proposed housing development is above the threshold of 5 000 m

2.2. Definition of Heritage (National Estate)

Section 3 lists a wide range of cultural phenomena which could be defined as heritage, or the *National Estate* (3(2)). Section 3(3) outlines criteria upon which heritage value is ascribed. This Section is useful as a field checklist for the identification of heritage resources.

2.3. Protection of Buildings and Structures Older than 60 years

Section 34 provides provisional protection of buildings and structures more than 60 years old:

(1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

2.4. Protection of Archaeological Sites

Section 35 (4) of the NHRA prohibits the destruction of archaeological, palaeontological and meteorite sites:

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

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or

(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

2.5. Protection of graves and burial grounds

Section 36 of the NHRA gives priority for the protection of Graves and Burial Grounds of victims of conflict and graves and burial grounds more than 60 years old. Cautious approaches are considered including managed exhumations and re-interment to pave way for development. International ethical standards as set out in the World Archaeological Congress Vermillion Accord (USA, Dakota, 1989) favor this position and recommend decisions informed by consultation with communities who by association might have strong feelings for protection *in situ* and may argue that a development project is better moved to an alternative site.

2.6. The Burra Charter on Conservation of Places of Cultural Significance

Some generic principles and standards for the protection of heritage resources in South Africa are drawn from international charters and conventions. In particular South Africa has adopted the **Australia Charter for the Conservation of Places of Cultural Significance (the Burra Charter 1999)** as a benchmark best practice in heritage management.

3. APPROACH AND METHODOLOGY

3.1. Literature Review

Previous reports on Heritage Impact Assessment studies that were undertaken in the broader area have been researched to provide light on what can be expected to be found in the area:

Van Vollenhoven, A.C. 2019. *A Report on a Cultural Heritage Impact Assessment for a Proposed Development of a School at Olifantsnek, Rustenburg Local Municipality, North West Province.*

A setting of stones was recorded. Two sets of flimsy stone walling barely rising from the ground were also recorded. All structures are common in the region of Rustenburg, Pilanesberg and Thabazimbi and date to the later Iron Age (LIA) (Pages 21-27).

Coetzee, F. P. 2017. *Cultural Heritage Impact Assessment: Phase 1 Investigation of the Proposed 1 MI Reservoir at Bakubung Lodge, Pilanesberg National Park, Bojanala District Municipality, Moses Kotane Local Municipality, North West Province.* No relics were found during this study (page 2).

Van der Walt, J 2021. *Heritage Impact Assessment (Required under Section 38(8) of the NHRA (No. 25 of 1999) for the West Winds Vodacom Mast in the North West Province.* No heritage resources of significance were noted in the study area (page 30).

Matenga, E. 2017. *Phase I Heritage Impact assessment studying respect of application for mining right (diamonds) on the farm Palmietfontein 208JP, near Pilanesberg, Moses Kotane Local Municipality, Bojanala District, North West Province* (pages 8-9):

- (i) Scatters of stones at two places, some arranged into rectangular settings or lines were the remnants of an old precolonial settlement.
- (ii) two large burial grounds located close to the old settlements described above.
- (iii) Remains of a pioneer Lutheran Church building.

3.2. Fieldwork

A site visit and ground survey were undertaken by an archaeologist accompanied by an assistant on 28 March and 28 May 2022. A ground survey is a systematic procedure for the identification and documentation of archaeological, historical and heritage sites. Systematic foot surveys were undertaken in accordance with standard archaeological practice by which heritage elements can be observed and documented (Figure 5b).



Figure 5b: Map of the survey tracks, 28 March and 28 May 2022

3.3. Limitations

A southern western part of the farm was under a thick cover of grass. On the first visit, the north-western portion of the property close to Marikana Business Centre was considered unsafe for foot surveys as there were a number of people that appeared to be suspiciously hanging around in the veld. On the same occasion a large area west of the stream was waterlogged after weekend rains which constrained the foot surveys. The situation has improved on the second visit on 28 May.

4. ARCHAEOLOGICAL AND HISTORICAL CONTEXT

An outline of the cultural sequence in South Africa is given here to provide context for the identification of heritage resources in the study area.

4.1. Cultural Sequence Summary

Table 1 Cultural Sequence Summary

PERIOD	EPOCH	ASSOCIATED CULTURAL GROUPS	TYPICAL MATERIAL EXPRESSIONS
Early Stone Age 2.5m – 250 000 YCE	Pleistocene	Early Hominids: <i>Australopithecines</i> <i>Homo habilis</i> <i>Homo erectus</i>	Typically large stone tools such as hand axes, choppers and cleavers.
Middle Stone Age 250 000 – 25 000 YCE	Pleistocene	First <i>Homo sapiens</i> species	Typically smaller stone tools such as scrapers, blades and points.
Late Stone Age 20 000 BC – present	Pleistocene / Holocene	<i>Homo sapiens</i> including San people	Typically small to minute stone tools such as arrow heads, points and bladelets.
Early Iron Age / Early Farmer Period c300 – 900 AD (or earlier)	Holocene	Iron Age Farmers	Typically distinct ceramics, bead ware, iron objects, grinding stones.
Later Iron Age 900ADff	Holocene	Iron Age Farmers, emergence of complex state systems	Typically distinct ceramics, evidence of long distance trade and contacts
(ii) Mapungubwe (K2)	1350AD		Metals including gold, long distance exchanges
(ii) Historical period	Tswana / Nguni people	Iron Age Farmers	Mfecance / Difaqane
(iii) Colonial period	19 th Century	European settlers / farmers / missionaries/ industrialisation	Buildings, Missions, Mines, metals, glass, ceramics

4.2. Appearance of Hominids

Important fossil evidence of hominids occurs in South Africa dating back 3million before the present. The hominid site at Sterkfontein lies 40 km southeast of Rustenburg. It is one of the most famous hominids sites in the world featuring the genus *Australopithecus africanus*. The site was inscribed on the UNESCO World Heritage list as a serial nomination together with Taung in the North West Province and Cradle Humankind near Krugersdorp in Gauteng Province.

4.3. The Stone Age

The Stone Age dates back more than 2 million years, and marks a more diagnostic appearance of the cultural sequence divided into three epochs, the Early, Middle and Late Stone Ages. Stone and bone implements manifest the technology of the time and fall into distinct typologies indicating chronological development. Material evidence of human activities has been found in caves, rock-shelters and riverside sites, and very rarely seen in open country.² The Late Stone Age is also associated with the execution of paintings mostly in rock shelters and caves.

4.3.1. *The Early Stone Age [2 million – 250 000 years BP]*

The earliest stone tools appeared in Early Stone Age about 1.4 million years ago. Such tools bore a consistent shape such as the pear-shaped handaxe, cleavers and core tools (Deacon & Deacon, 1999). These tools, which have been called Oldowan and Acheulian were probably used to butcher large animals such as elephants, rhinoceros and hippopotamus. ESA artefacts are usually found near sites where they were manufactured and thus in close proximity to the raw material or at butchering sites. The early hunters are classified as hominids or proto-humans, meaning that they had not evolved to the present human form.

4.3.2. *Middle Stone Age (MSA) [250 000 years – 30 000 years BP]*

The Middle Stone Age (MSA), which appeared ca250 000 years ago, is marked by the introduction of a new tool kit which included prepared cores, scrapers, parallel-sided blades and triangular points hafted to make spears. By then humans had become skilful hunters, especially of large grazers such as wildebeest, hartebeest and eland. It is also believed that by then, humans had evolved significantly to become anatomically modern. Caves were used

² <http://archaeology.about/od/bterms/g/bordercave.htm>

for shelter suggesting permanent or semi-permanent settlement. Furthermore there is archaeological evidence from some of the caves indicating that people had mastered the art of making fire. These were two remarkable steps in human cultural advancement.³

Information on hominids continues to be updated as new research evidence is received. The recent discovery of hominid fossils at the Cradle of Humankind assigned to the genus *Homo Naledi* and dated to between 335 000 and 236 000 MYA add an interesting puzzle to the narrative about the early primates and the development of stone tool technologies (The Star, 10 May 2017, p1 & 12).

4.3.3. *Later Stone Age (LSA)[40 000 years to ca 2000 years BP]*

By the beginning of the LSA, humans are classified as *Homo sapiens* which refers to the modern human physiography and thinking capabilities. Several behavioural traits are exhibited, such as rock art and purposeful burials with ornaments, became a regular practice. The practitioners of rock art are definitely the ancestors of the San and sites abound in the whole of Southern Africa. LSA technology is characterised by microlithic scrapers and segments made from very fine-grained rock. Spear hunting continued, but LSA people also hunted small game with bows and poisoned arrows. Because of poor preservation, open sites become of less value compared to rock shelters.

4.4. The Iron Age Culture [ca. 2500 years BP]

4.4.1. *The Early Iron Age*

The Iron Age culture, which supplanted the Stone Age perhaps 2500 years ago, is associated with the advent of farmers with life stock and using several metals and pottery. Popular scholarly theories have postulated mass migration to account for the perceived sudden synchronized appearance of these technologies in South Africa and indeed in the whole region of Eastern and Southern Africa.⁴ Migration has been critically questioned primarily in view of the fact these people were indigenous to Africa. Furthermore, a gradual “expansion” or “spread” of settlement (rather than a migration in the strict sense of the word) of speakers of Bantu languages over a long period of time sounds more plausible.⁵ In the southern part of the continent these people coexisted and intermingled with Khoisan communities, and hybrid

³ Deacon, J & H. Deacon. 1999. *Human Beginnings in South Africa*. Cape Town: David Philip.

⁴ Phillipson, D. W. 2005. *African Archaeology*. Cambridge: University of Cambridge Press: 249. Huffman 2007. *A Handbook of the Iron Age*. UKZN Press.

⁵ Evers, T. M. 1988. *Recognition of Groups in the Iron Age of Southern Africa*. Unpublished PhD Thesis, University of Witwatersrand. Huffman 2007. *A Handbook on the Iron Age*. Scottsville: UKZN Press

languages spoken in this area is a footprint of such cultural encounters. Metal working represents a new technology not practiced by the Stone Age hunters.

According to Huffman (2007) there were two streams of Early Iron Age (EIA) expansion converging in South Africa, one originating in eastern Africa which has been called the *Urewe-Kwale Tradition* (or the eastern stream) and another from the west, spreading through Zambia and Angola, which he termed the *Kalundu Tradition* (or western stream) (Fig 2) which gradually replaced the Eastern Stream.

Broederstroom near Hartebeesport on the edge of the Magaliesberg is a type site for the earliest appearance of the EIA which has been called Broederstroom and is date between AD 450 and 750.

4.4.2. *The Later Iron Age*

There are a number stone walled sites that date from the Late Iron Age (LIA) in the Bojana Platinum District some of which were in occupation in the immediate precolonial past. These sites are associated with Tswana groups such as the Ba Kgatla Ba Kgafela and the Tlhako. Furthermore, historical and oral records attest to migration streams of Nguni speakers into the south and east of the development area from the 17th century from the south-eastern seaboard. These early Nguni groups spread out and occupied a significantly large area from present day Pretoria to Mokopane and to the Pilanesberg Mountains, might have also been responsible for some of the stone work.

4.5. **Historical Period**

This part of the North West Province was historically home to the Tswana and today that remains to be largely the case. A summary of the differentiation of Tswana groups may be given here as follows.⁶ The Tswana people of the western and north-western parts of the country are classified under several sub-groups. The Ba Kgatla Ba Kgafela were a segment of the Tlokwa, and possibly there was early historical relationship with the Hurutshe (under common chiefs such as Malekele-Masilo-Legabo) which may date back to AD 1450. The earliest Kgatla groups initially lived in the south of what is today Thabazimbi, near the Rooiberg Tin Mines. The founder figure was Phohoti, the son of Mokgatle. His son and successor was Botlholo (Mashiasebara), whose sons Mogale, Pule and Modise split up. Pule left the tribe to

⁶ Pistorius, J. 2013. An updated Phase I Heritage Impact Assessment (HIA) study for Pilanesberg Platinum Mine (PPM) near the Pilanesberg in the North-West Province of South Africa.

form a separate group under his grandson Kgafele. Bothlolo's third son, Modise, and his son Tabane were the forefathers of the sections of the Mmakau, the Motša and the Seabe.

Mogale, the ancestor of the Moseitlha, lived at a place called Dirolong/Direleng in the Bela area and later moved to Hammanskraal. There were further splits in which one segment remained east of the Crocodile River while another segment moved to Molokwane ('Vlieggepoort') near the confluence of the Crocodile and Pienaars Rivers.

4.5.1. *The BaKgatla BaKgafêla*

After the BaKgatla BaKgafêla broke away from the Moseitlha at Momusweng (Hammanskraal), probably during the first half of the 17th century, they settled in various places on their way to the north-west and the Crocodile River. After the Matabele invasion in 1827 one of the founding figures Pilane went to live at Motsitle (Mabeskraal). After 1837 he settled at the Elands River at Mmasebudule (Rhenosterfontein). On the arrival of the Matabele the Kgatla were subjugated and paid a tribute, their villages were destroyed and the young men were incorporated into the Ndebele army. Many of these Tswana clans were uprooted during the *difaqane* when Mzilikazi's and his Matabele *impis* entered the North-West Province in c1832. The area north of the Pilanesberg covers much of the sphere of influence of this section of the Kgatla. This group probably intermarried with Mzilikazi's Ndebele, especially given that some of his sons remained in the area after the Ndebele moved westwards. Descendants of this mixed Ndebele/Tswana population still live in the area today.

4.5.2. *The Tlhako*

The Tlhako is one of the numerous Nguni-related clans who lived in the central part of the former Transvaal province from early on splintering from the Ndzundza-Ndebele who lived in the area around KwaMhlanga but spread westwards under Chief Seutlwane. His son, Mabe (Mahobie), who lived about the middle of the 18th century, moved 6km further to the north to Mothoutlung on the eastern part of Palmietfontein. Mabe (or Mahobie) became chief in 1820 and settled at Motsitle, today known as Mabieskraal (Mahobieskraal). Upon the arrival of Mzilikazi the Tlhako were subjugated by the Ndebele and many of the Tlhako later accompanied the Ndebele and crossed the Marico River to settle with the Ndebele at Silkaatskop. When Mzilikazi was defeated by the Voortrekkers in 1837 and left the former Transvaal, many of the Tlhako returned to their old home. Mabe and the Voortrekkers' relationship deteriorated after a humiliating flogging incident by the Boers in AD1860. He

moved to Molepolole and settled at Magagarape, where Mabe died in 1869. His sons Moetle, Mokgatele, Leotwane and Setadi returned to Mabeskraal (Mahobieskraal).

Moetle Mabe became chief in 1870 and raided white farms for cattle while also supplying farm labour. He died on 15 May 1908. The Tlhako's territory is in the southern and western periphery of the Pilanesberg.

4.5.3. *BaHurutshe*

The BaHurutshe are one of the largest numerically and historically important Tswana chiefdoms in the North-West Province. The "proto-baHurutshe" lived near the headwaters of the Madikwe (Marico) River in about the mid- to late thirteenth century. The founder figure was a woman, Mohurutshe. After her death according to legend there was a rivalry between her two sons, Motebele and Motobejane. The former with his followers fled to Ootse, in present-day eastern Botswana, while the latter remained at the Madikwe River. Motobejane's faction established a capital at Tshwenyane about 15 kilometres north of today's Zeerust. Towards the end of the eighteenth century, the BaHurutshe, like most of their neighbours, became embroiled in a series of conflicts, usually referred to as the Difaqane. These were due to competition over land, cattle and particularly control of new trade items, especially ivory. This in turn was caused by demands from the expanding white trade frontier from the Cape. The BaHurutshe became particularly harassed by the baNgwaketse to the east. The BaHurutshe were forced to form an alliance with the BaTlhaping and BaKwena to keep their opponents at bay, during which time their kgosi, Sebogodi, was killed.

When the missionary, John Campbell, of the London Missionary Society (LMS), visited them in 1820, they were still intact and economically thriving at Kaditshwene. Within a couple of years, however, they were attacked by marauders from the Caledon river area, the PatsabaFokeng of Sebetwane, and the BaPhuting. They then dispersed as refugees in the BaRolong country. Some were incorporated by Mzilikazi and moved with him to south-western Zimbabwe.

In 1836 Mzilikazi was attacked by the white Voortrekkers (with the assistance of the Griqua and Tswana allies, and among them the BaHurutshe). The BaHurutshe slowly returned to their former homeland. They re-established themselves under the leadership of Moiloa. They were supported by the London Mission Society (LMS) and the Lutheran Hermannsburg Missionary Society (HMS). They also reached a rapprochement with the Voortrekkers after the establishment of the South African Republic.

4.6. The Nguni

As has been mentioned earlier, prior to the arrival of Mzilikazi's Ndebele on the highveld around 1827, there were several Nguni groups in the study area as a result of earlier movements in the 17th and 18th century (the Transvaal Ndebele). The Rustenburg area falls within the trail of Mzilikazi in his epic movement from Zululand during the Difaqane and final settlement in the Matobho Hills in present day south-western Zimbabwe. Mzilikazi incorporated elements from several Tswana groups moving with them to south-western Zimbabwe, while some elements of the Ndebele may have also remained in the Bojanala District.

4.7. The European Contact Period

During the first half of the 19th century, the first colonial traders were operating between the far north-west and the central part of the Bankeveld. They chart a passage in the gap between the northern tip of the Magaliesberg and the south-western edges of the Pilanesberg in the study area. Wagons passed through this corridor on their way to Rustenburg and further to the east. Traders such as Schoon and McLuckie (1829), missionaries such as Robert Moffat (1829), the scientific expedition of Andrew Smith (1835) and adventurers such as Cornwallis Harris (1836) moved between the Magaliesberg and the Pilanesberg where they observed numerous precolonial communities living in this part of the north-west. Rustenburg 60km to the south Pilanesberg was the first colonial town to be established by the Voortrekkers during the first half of the 19th century.

The above sets the archaeological and historical context for studying the archaeology and heritage of the project area.

5. FINDINGS OF THE HERITAGE SURVEY

The heritage sensitivity of the property is summarised as follows:

5.1. The Stone Age

No Stone Age sites or relics were found.

5.2. The Iron Age

No Iron Age sites or relics were found.

5.3. Buildings

There are no buildings on the farm portions required for the proposed housing development.

5.4. Burial Grounds

One burial ground (BG3) located on the north-eastern part of the property has at least 18 graves (Lat: 25°42'9.40"S, Long: 27°30'18.60"E). One grave with a polished granite headstone, and base of concrete slab and granite rim, is of Christina Moselane (1914 – 5 February 1978). A buffer of 100 m radius must be reserved around the graves (Figure 6). Two other burial grounds (BG1 and BG2) are located outside the footprint of the proposed development. Their GPS coordinates are Lat: 25°41'33.50"S, Long: 27°30'23.40"E; and Lat: 25°41'43.40"S, Long: 27°30'20.70"E (Figure 7).

5.5. Other Observations

The derelict building recorded (MRK01) is located outside the footprint of the development. It is considered of little significance. The other two sites dating to the recent past (MRK02, MRK03) MRK04) are associated with farming and rated of low significance. The granite slabs and the dumpsite to which they belong are considered to have no significance.



Figure 6: Google Earth Map shows the location of the burial ground (BG3) and a buffer of 100 m radius



Figure 7: Google Earth map shows the location of heritage sites recorded during the surveys

Table 2: Inventory of Heritage Sites

SITE NO	LATITUDE	LONGITUDE	PERIOD	DESCRIPTION	RANKING	MITIGATION
MRK01	25°42'46.65"S	27°30'23.13"E	Recent past	An abandoned derelict building used as security check point.	Local 3C	No further action
MRK02	25°42'30.90"S	27°30'12.40"E	20th century	Remains of a rectangular structure built on the edge of flat rock outcrop. It appears to have enclosed a wet or marshy area.	Local 3C	No further action
MRK03	25°42'16.20"S	27°29'50.00"E	19th or 20th century	At the base of a cluster of boulders (concealed by sickle bush). The remains of farm brick pavement or floor built over a flat rock outcrop. Otherwise the remains of a fallen brick wall.	Local 3C	No further action
MRK04	25°42'17.20"S	27°29'47.00"E	Recent past	One of several polished granite slabs. One unpolished slab.	Local 3C	Will not be affected
BG3	25°42'9.40"S,	27°30'18.60"E	20 th Century	Burial ground located on the north-eastern part of the property with at least 18 graves. One grave with a polished granite headstone, and base of concrete slab and granite rim, is of Christina Moselane (1914 – 5 February 1978).	1b	A buffer of 100 m radius to be reserved around the graves
BG1	25°41'33.50"S	27°30'23.40"E	20 th Century	Burial ground located near a railway line, numbering more than 20 of which 9 have polished granite headstones and bases. The rest are settings of stones. Some of the inscriptions are: Molepolle Ramakoti Johannes, 1923 -2006; Mororo Nnani, 23 June 1938 – 03 April 1994; Molepolle Isacc 1934 – 1976.	1b	Located outside the footprint of the proposed development

BG2	25°41'43.40"S	27°30'20.70"E	20 th Century	Burial ground with more than 30 graves consisting of settings of stones	1b	Located outside the footprint of the proposed development
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5.6. Significance ranking of findings

The ranking system is adapted from Bauman and Winter 2005.⁷

Table 3 Significance Ranking

GRADE	RANKING	SIGNIFICANCE	NO OF SITES
1a	National	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 1, 2 or 3A heritage resources	0
1b		Burial Grounds and Graves. Public sensibilities about the sanctity of graves	1
2	Provincial	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 2 heritage resources	0
3A	Local	Of high intrinsic, associational and contextual heritage value within a national, provincial and local context, i.e. formally declared or potential Grade 3A heritage resources	0
3B	Local	Of moderate to high intrinsic, associational and contextual value within a local context, i.e. potential Grade 3B heritage resources	0
3C	Local	Of medium to low intrinsic, associational or contextual heritage value within a national, provincial and local context, i.e. potential Grade 3C heritage resources	4
		TOTAL	5

5.5. Assessment of Impacts using the Heritage Impact Assessment Statutory Framework

Section 38 of the NHRA

Section 38 (Subsection 3) of the National Heritage Resources Act also provides a schedule of tasks to be undertaken in an HIA process:

⁷ Baumann, N. and S Winter. 2005. Guidelines for involving heritage specialists in Environmental Impact Assessment Processes. Western Cape Government.

Section 38(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

(a) The identification and mapping of all heritage resources in the area affected

Four (7) sites were recorded (see Table 2 above).

(b) An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7

There are no Grade I or Grade II sites. One burial ground is located in the footprint of the development. Two burial grounds are located outside the footprint of the proposed development.

(c) An assessment of the impact of the development on such heritage resources

A buffer of 100 m radius will be reserved for the burial ground in the development area. The other sites are considered of low significance and no further action is warranted.

(i) An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development

The provision of adequate housing is one of the key service delivery goals at the level of the local government, and it is embedded in Tharisa Minerals' corporate social investment programmes. The mixed residential development is part of a long term plan taking into account the expected life of the Rustenburg mines, which is several decades into the future. The provision of housing is therefore a vital necessity.

(e) The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources

Stakeholder consultations were conducted within the scope of the broader environmental impact assessment. No objections were raised concerning the impact of the housing development on heritage resources.

(f) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives

An Environmental Control Officer will be trained to curate chance heritage finds.

(g) Plans for mitigation of any adverse effects during and after the completion of the proposed development.

In the event of discovery of heritage resources deemed of significance during the construction of the housing development, the Provincial Heritage Resources Authority or SAHRA will be informed immediately and an archaeologist or heritage expert called to attend.

5.6. Risk Assessment of The Findings


Table 4: Risk Assessment of Findings

EVALUATION CRITERIA	RISK ASSESSMENT
Description of potential impact	Negative impacts range from partial to total destruction of surface and under-surface movable/immovable relics.
Nature of Impact	Negative impacts can both be direct or indirect.
Legal Requirements	Sections 34, 35, 36, 38 of National Heritage Resources Act No. 25 (1999).
Stage/Phase	Foundation phase: civil works for house foundations, roads, water and waste reticulation and electrical installations
Extent of Impact	Grubbing and excavations can result in damage and destruction of archaeological resources above and below the surface not seen during the survey.
Duration of Impact	Any accidental destruction of surface or subsurface relics is not reversible, but can be mitigated.
Intensity	Uncertain.
Probability of occurrence	Medium.
Confidence of assessment	High.
Level of significance of impacts before mitigation	Medium.
Mitigation measures	If archaeological or other heritage relics deemed of high significance are found during the construction phase, heritage authorities will be advised immediately and a heritage specialist will be called to attend.
Level of significance of impacts after mitigation	Low.
Cumulative Impacts	None.
Comments or Discussion	None.

6. CONCLUSION AND RECOMMENDATIONS

A buffer of 100 m radius must be reserved around the Burial Ground in the footprint of the proposed development. Other than the graves the heritage sensitivity of the property is considered to be low, and therefore the project can be given a greenlight to go ahead. The study is mindful that some important discoveries may occur during the preparation of the site (foundation phase). If this happens operations should be halted, and the provincial heritage resources authority or SAHRA notified in order for an investigation and evaluation to be undertaken.

7. CATALOGUE OF FINDS

SITE NO	COORDINATES		PERIOD
MRK01	25°42'46.65"S	27°30'23.13"E	Recent past
			
<p>DESCRIPTION: An abandoned and derelict building which appears to have been used as a mine security checkpoint.</p>			
HERITAGE SIGNIFICANCE		Mining infrastructure, low significance	
MITIGATION		No further action required.	

SITE NO	COORDINATES		PERIOD
MRK02	25°42'30.90"S	27°30'12.40"E	20 th century



DESCRIPTION: The remains of a rectangular structure which appears to have enclosed a wet (marshy) area on the edge of flat rock outcrop and boulders.

HERITAGE SIGNIFICANCE Modern commercial farming, low significance

MITIGATION No further action required.

SITE NO	COORDINATES		PERIOD
MRK03	25°42'16.20"S	27°29'50.00"E	19 th of 20 th century



DESCRIPTION: At the base of a cluster of boulder. The remains of an earthen brink pavement, otherwise a fallen brick wall on a flat rock outcrop.

HERITAGE SIGNIFICANCE Associated with modern commercial farming.

MITIGATION No further action required.

SITE NO	COORDINATES		PERIOD
MRK04	25°42'17.20"S	27°29'47.00"E	Recent past



DESCRIPTION: A dump site with polished granite slabs which had been prepared using an industrial grinder

HERITAGE SIGNIFICANCE Recent waste disposal site

MITIGATION No further action required.


SITE NO	COORDINATES		PERIOD
BG3	25°42'9.40"S,	27°30'18.60"E	20 th Century




DESCRIPTION: Burial ground located on the north-eastern part of the property with at least 18 graves. One grave with a polished granite headstone, and base of concrete slab and granite rim, is of Christina Moselane (1914 – 5 February 1978).

HERITAGE SIGNIFICANCE Graves are sacred.

MITIGATION A buffer of 100 m radius to be reserved around the graves

SITE NO	COORDINATES		PERIOD
BG1	25°41'33.50"S	27°30'23.40"E	20 th Century
			
<p>DESCRIPTION: Burial ground located near a railway line, numbering more than 20 of which 9 have polished granite headstones and bases. The rest are settings of stones. Some of the inscriptions are: Molepolle Ramakoti Johannes, 1923 - 2006; Mororo Nnani, 23 June 1938 – 03 April 1994; Molepolle Isacc 1934 – 1976.</p>			
HERITAGE SIGNIFICANCE		Graves are sacred.	
MITIGATION	The graves are located outside the footprint of the proposed development. No further action required.		

SITE NO	COORDINATES		PERIOD
BG2	25°41'43.40"S	27°30'20.70"E	20 th Century
			
DESCRIPTION: Burial ground with more than 30 graves consisting of settings of stones			
HERITAGE SIGNIFICANCE		Graves are sacred.	
MITIGATION	The graves are located outside the footprint of the proposed development. No further action required.		

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