

**Cultural Heritage Survey of the Proposed Residential Development on the  
Farm Nooitgedacht 333 JR, Mamelodi.**

For

AGES Environmental

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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.

### *Buildings*

The 4 features that were identified (Site 1 - 4) are all modern and are not older than 60 years and therefore not protected under the NHRA (Act no 25 of 1999). No further action is required.

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 proposed area of development on Portion 15(r/e), Portion 16, Portion 17 and Portion 18 of the Farm Nooitgedacht 333 JR, near Mamelodi. This report forms part of the EIA process and was requested by AGES Environmental on behalf of the client Mahube Heights.

## 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 proposed activity consists of the following aspects:

- Approx 1500 Residential units – “Residential 1, 2 and 3”
- Approx 20 000m<sup>2</sup> Retail
- School
- Community Centre

## 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]

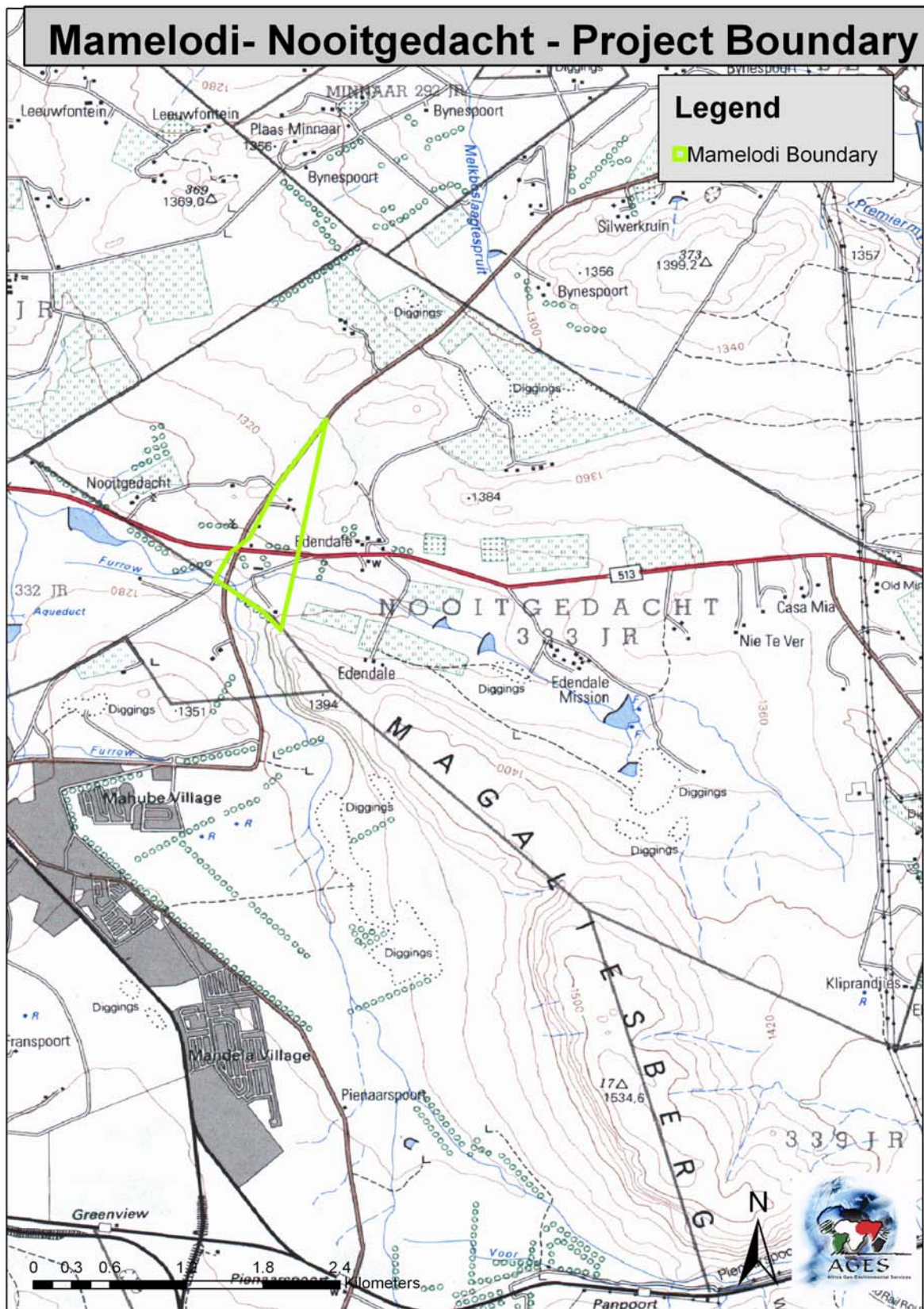
- Rating the **significance of the impact** on a historical or archaeological site is linked to the significance of the site itself. If the significance of the site is rated high, the significance of the impact will also result in a high rating. The same rule applies if the significance rating of the 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 Heritage Resources Agency (SAHRA) (or relevant PHRA).

## **5. Methodology**

### **5.1 Maps and Other Sources**

The proposed area of development is situated east on the Zambezi Road, towards Cullinan. The area is localised on the 1:50 000 topographic map 2528CB. The location of the survey area is indicated on Map 1 & 2.



Map 1: General location of the proposed area of development.





Map 2: Aerial view of the proposed area of development.

## 5.2 Fieldwork

An intensive site visit was conducted on 17 August 2008. The area was investigated on foot.

## 5.3 Visibility and Constraints

No severe restrictions were encountered; however, the study area is severely overgrown by wattle trees. Furthermore, 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 study area is located on Portion 15(r/e), Portion 16, Portion 17 and Portion 18 of the Farm Nooitgedacht 333 JR, Mamelodi. Generally, the survey area is characterised by gentle slopes and vegetation that ranges from trees to grassland. A perennial stream also flows through the southern section of the survey area. The R513 also cuts the area in two on an east-west axis. The area is 40 hectares in extent.





**Figure 1: General view of the northern section of the survey 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)

## 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.

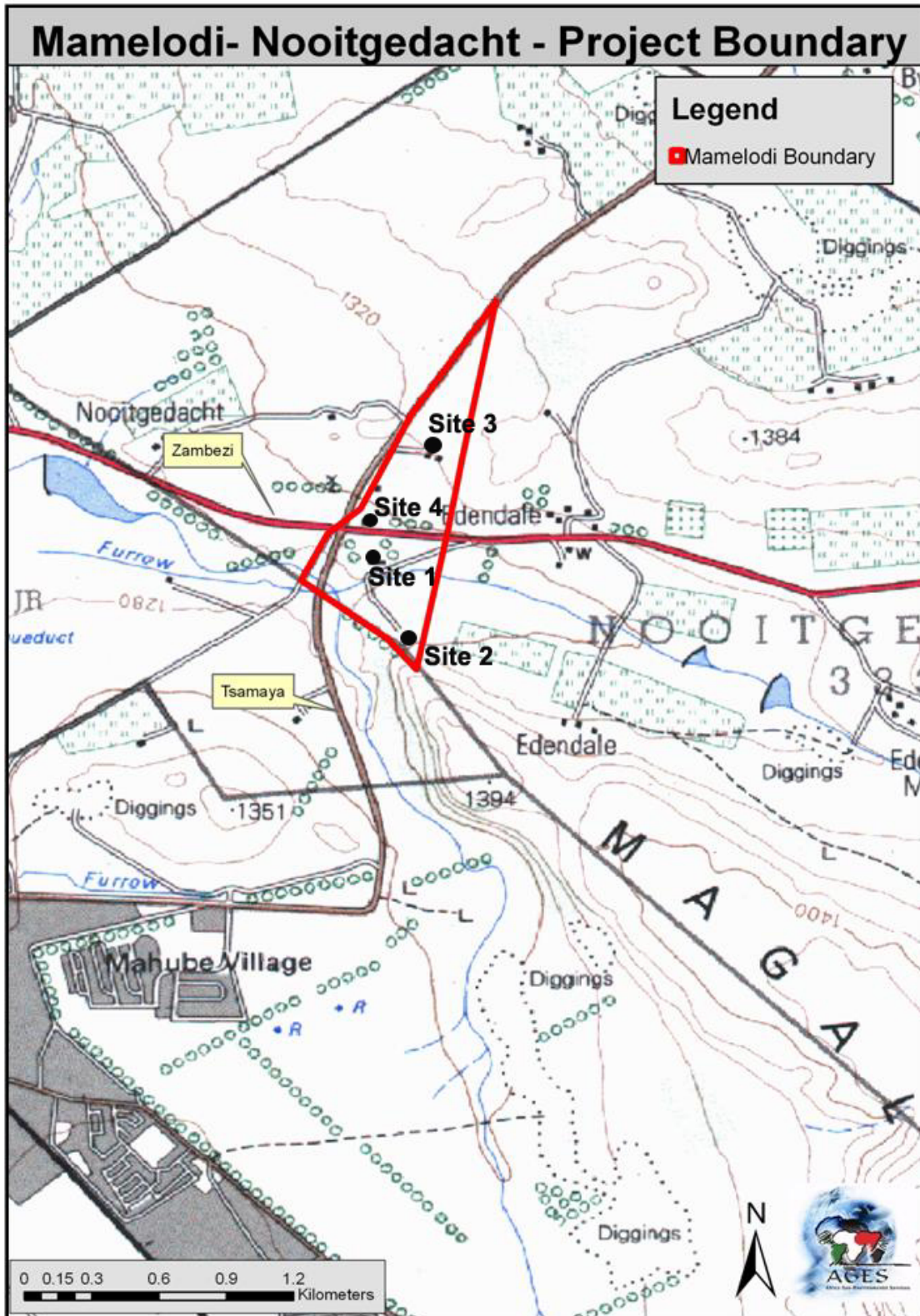
Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich 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.

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*).

9. Description of Sites




Map 3: Location of recorded sites.

**9.1 Site 1**

<b>A. GENERAL SITE DESCRIPTION</b>				
The site consists of a modern corrugated iron structure that is used as a pig sty (piggery). The structure has no historic or heritage value. The structures are not older than 60 years and therefore not protected by the NHRA (Act 25 of 1999). No further action required.				
<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>• Feature sufficiently recorded.</li> <li>• None</li> </ul>	
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>	
<ul style="list-style-type: none"> <li>• None</li> </ul>	
<b>I. PHOTOGRAPHS</b>	
	
<p><b>Figure 2: Corrugated iron structure of the piggery.</b></p>	

**9.2 Site 2**

<b>A. GENERAL SITE DESCRIPTION</b>				
<p>The site consists of a multi-room, multi-structure residential homestead. The structures were built of clay bricks and the walls were smeared with cement plaster. Three structures were recorded which are arranged in an arc with a central open space. No middens or other cultural material was recorded at the site. Ploughed field were noted adjacent to the site.</p> <p>The structure is probably not older than 60 years and therefore not protected under the NHRA (Act no. 25 of 1999).</p> <p>Certainty of prediction: Probable</p>				
<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 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.		Demolished, foundations		
<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			
<b>G. RECOMMENDED MITIGATION</b>			
<ul style="list-style-type: none"> <li>• Feature sufficiently recorded.</li> <li>• None</li> </ul>			
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>			
<ul style="list-style-type: none"> <li>• None</li> </ul>			
<b>I. PHOTOGRAPHS</b>			





Figure 3: Remains of demolished house.

### 9.3 Site 3

#### A. GENERAL SITE DESCRIPTION

The site consists of remaining foundations of a small modern multi-room brick house. No middens or other cultural material was recorded at the site. One remaining outbuilding (garage) is still standing, but all fittings have been removed.

The structure is probably not older than 60 years and therefore not protected under the NHRA (Act no. 25 of 1999).

Certainty of prediction: Probable

#### 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		√
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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.	Demolished, foundations		
<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			
<b>G. RECOMMENDED MITIGATION</b>			
<ul style="list-style-type: none"> <li>• Feature sufficiently recorded</li> <li>• None</li> </ul>			
<b>H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS</b>			
<ul style="list-style-type: none"> <li>• None</li> </ul>			

**II. PHOTOGRAPHS**



Figure 4: Remains of demolished house.

**9.4 Site 4**

**A. GENERAL SITE DESCRIPTION**

The site consists of the two structures. The one is a sandstone and cement structure of which the roof and all fittings have been removed. The second is a brick and cement structure which was probably used for holding livestock. No middens or any other deposits were recorded in association.

The structures are probably not older than 60 years and therefore not protected under the NHRA (25 of 1999).

Certainty of prediction: Probable

**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.		√
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.	Partly demolished, stable	
<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>• None</li> </ul>		



## H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS

- None

## III. PHOTOGRAPHS



Figure 5: Remains of structure for livestock .



Figure 6: Remains of structure for livestock.

## 10. Summary of Sites

Site	Coordinates	Site Type	Statement of Significance	Impact	Mitigation
1	25.684003°S 28.419808°E	Pig sty (Piggery)	Low	High	• None
2	25.686980°S 28.420775°E	House foundations	Low	High	• None
3	25.679657°E 28.421920°S	House foundations	Low	High	• None
4	25.682517°S 28.419750°E	Livestock structures	Low	High	• 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.

### *Buildings*

The 4 features that were identified (Site 1 - 4) are all modern and are not older than 60 years and therefore not protected under the NHRA (Act no 25 of 1999). No further action is required.

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)).