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# HILLAND ENVIRONMENTAL

Consultant

PHASE I ARCHAEOLOGICAL AND CULTURAL HERITAGE IMPACT REPORT ASSESSMENT SPECIALIST FOR THE PROPOSED DEVELOPMENT OF A MALL ON PORTION OF THE REMAINDER ERF 506 VRYBURG TOWNSHIP WITHIN NALEDI LOCAL MUNICIPALITY OF DR RUTH SEGOMOTSE MOMPATI DISTRICT IN NORTH WEST PROVINCE.

# February, 2022



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## **DECLARATION**

### ABILITY TO CONDUCT THE PROJECT

Munyadziwa Magoma is a professional archaeologist, having obtained his BA degree in Archaeology and Anthropology at University of South Africa (UNISA), an Honours degree at the University of Venda (UNIVEN), and a Master's degree at the University of Pretoria (UP). He is an accredited Cultural Resource Management (CRM) member of the Association for Southern African Professional Archaeologists (ASAPA) and Amafa aKwaZulu-Natali. Munyadziwa is further affiliated to the South African Archaeological Society (SAAS), the Society of Africanist Archaeologists (SAFA), Historical Association of South Africa (HESA); Anthropology Southern Africa (ASnA); International Association for Impact Assessment (IAIAsa); International Council on Monuments and Sites (ICOMOS) and the International Council of Archaeozoology (ICAZ). He has more than fifteen years' experience in heritage management, having worked for different CRM organisations and government heritage authorities. As a CRM specialist, Munyadziwa has completed well over 1000 hundred Archaeological Impact Assessments (AIA) for developmental projects situated in several provinces of the Republic of South Africa. The AIAs projects he has been involved with are diverse, and include the establishment of major substation, upgrade and establishment of roads, establishment and extension of mines. In addition, he has also conducted Heritage Impact Assessments (HIAs) for the alteration to heritage buildings and the relocation of graves. His detailed CV is available on request.

Nokusho Ngobeni is a professional archaeologist, with a BA degree in Arts, an Honours degree in Archaeology obtained at University of Pretoria and Master of Science degree in Heritage Management at Witwatersrand University. She has an experience of working at museum, laboratory and in the field for handling archaeological materials (curation). Nokusho is a member of International Association for Impact Assessment (IAIAsa), the Association for southern African Professional Archaeologists (ASAPA) and the Society of Africanist Archaeologists (SAFA). Nokusho has undertaken several Heritage Impact Assessment and relocation of graves.

We declare that this report has been prepared independently of any influence as may be specified by all relevant departments, institutions and organisations. We act as the independent specialists in this application, and will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant. We declare that there are no circumstances that may compromise our objectivity in performing such work. We vow to comply with all relevant Acts, Regulations and applicable legislation.

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## **Executive Summary**

#### Introduction

At the request of Hilland Environmental, Vhubvo Consultancy Cc conducted a Phase I Archaeological Impact Assessment Study for the proposed development of a mall on a portion of the remainder Erf 506 Vryburg township. The proposed project is located within the jurisdiction of Naledi Local Municipality of Dr Ruth Segomotse Mompati District in the North West Province. This assessment is a specialist component which will form part of the Environmental Management Programme, and is aimed at investigating the general heritage state of the area affected by the proposed development as well as determining if there is a need to conduct any further investigation from an archaeological perspective. The study aims to advise on mitigation measures should any sites be impacted, these mitigations will, in turn, assist the developer in making decisions on the most appropriate option (s) in line with the National Heritage Resources Act, 1999 (Act 25 of 1999). To reach a defensible recommendation, both desktop study and field survey were conducted. The desktop study was undertaken through South African Heritage Resources Information System (SAHRIS) for previous Archaeological Impact Assessments conducted in the region of the proposed development, and also for research that has been carried out in the wider area over recent years. The field survey was conducted to validate any assumptions made during the desktop study.

#### **Receiving Environment**

The proposed development is located on a private land whose topography is characterised by even plain and can be identified as Erf 11883. The area is currently vacant of any activities and was previously used for the purpose of low scale farming, and borrow pits (mining of gravel materials). The landscape of the nearby area proposed for development is semi-urban and is characterised by recreational and industrial landscape, and possesses amongst others infrastructure elements such as major roads, golf playfield and residential complexes. Although transformed, archaeological resources are not unexpected in this area, especially graves. Nevertheless, it must be stated that almost the entire proposed area has been disturbed. If any archaeological sites existed here in the past, it has been completely destroyed during the time when the area was established for farming purposes, or mining of gravel materials. The area is boarded by the N14 national road on the northern section. The east section is a semi park space which is encroached by low grass, while the southern section is a golf playfield, and the western section is used for residential complexes. The area proposed for development is disturbed due to past progresses (see Figures 4 - 7), and no material of archaeological value is expected to be found in the proposed area. The locality map provided in Figure 1 indicates the study area.

#### Impact statement

The desktop study has shown that the proposed site has no potential to yield any archaeological site or isolated tools. The survey conducted confirms that there is no evidence of any archaeological materials on the



proposed site. Therefore, the proposed development will result in diminutive threats to archaeological and grave sites, with impacts ranging from low to very low. Thus, impact of the proposed development of the mall on archaeological and cultural heritage remains is rated as being low (see Table 1). Noteworthy that the nature of the project will cause intense impact to the ground. However, this will be synonymous with other infrastructures in the area.

#### **Restrictions and Assumptions**

Despite that the area had been extensively surveyed (see Figure 11), it is possible that some materials could have been hidden underground and only exposed once construction resume, however, given the historical nature of what the site was used for (farming and extracting of gravel materials), such is very minimal. This report has offered steps that must be taken in such an event when resources of cultural nature are exposed. It is assumed that any sites, features and objects, including sites of intangible heritage potential have been disturbed/ lost value/ and or currently irrelevant as a result of decades of secondary development in the area and nearby. Note that the visibility of the area proposed for development was high (see Figure 4-9), leading to the successful conduction of this report.

#### Survey Findings and Discussion

The main aim of the survey was to evaluate potential heritage resources that may be found within the area of the proposed development, as well as to determine if there is any hamartia that may prevent the proposed Mall development. Phase 1 Archaeological and Cultural Heritage Impact Assessment for the proposed Vryburg Mall development on Portion of the Remainder Erf 506 identified <u>no significant</u> cultural or archaeological impacts envisaged on the footprint of the proposed area. Though there are no significant archaeological materials identified on the footprint of the proposed site, a structure located on the north-east side of the proposed area was noted (see Figure 14). This structure is however of <u>low significance</u> since it is less than 60 years old, and <u>does not</u> possess any social or aesthetic value. However, and more importantly, an area zoned for the Bio Museum (see Figure 15) has been documented directly opposite to the area proposed for the mall. This site is approximately 70m to the proposed area of development and is of significance, as such it must be protected in terms of Section 3 of the National Heritage Resource Act (Act 25 of 1999), and falls under those sites that are protected.

The findings aforementioned must be understood within the context of the proposed development. The Mall development proposal entails construction which involves digging and stamping, which subsequently will cause dust and commotion. The movement of machinery and contractors will be common in the area and it is possible that the Mall development may negatively affect the Bio Museum nearby, i.e., construction machinery may be parked, loaded/off-loaded in the Bio Museum area. This study noted that the proposed site and the Museum area are separated by the N14 national road, and that there is a buffer zone of approximately 70m between the proposed development, and the Museum. It must be further noted that there is no consensus



regarding the meaning, purpose, nature and extent of the buffer zone of Natural/ Cultural Landscape. The buffer zone of the listed property is not clearly defined and various institutions, interested and affected parties and other stakeholders have different conceptualizations of what constitutes development and heritage landscape buffer zone. The recommendations in this report are thus given in consideration of the entire context of the proposed development and are not only limited to the footprint of the proposed development.

#### **Recommendations and Discussions**

Recommendations are given from a heritage point of view with the consideration of the nature of the proposed project and the significance of the heritage resources in the vicinity of the proposed area. The following are the recommendations based on the above findings:

- A Heritage Management Plan (HMP) must be developed to ensure the following:
  - ✓ Guide the developer and relevant stakeholders in addressing concerns related to the identified Bio-Museum; and
  - $\checkmark$  Develop a monitoring programme to facilitate effective implementation of the HMP.

It is recommended that a Heritage Management Plan and Monitoring Plan be compiled before construction resumes. This plan must be compiled by a professional archaeologist and be tailored to ensure protection of the area of the Museum which is nearby the proposed development. The management plan must aim to conserve the site from any form of malfunctionality that may happen during construction, either be by accident or ill-informed. Furthermore, it must be designed to retain the significance of the Museum, and ensure that the enhancement, presentation and maintenance of the surrounding area of the Museum is deliberately and thoughtfully designed to protect the heritage values of the place. Other sensitive issues that must be addressed in the HMP are the following:

- Aspects related to dumping of construction material within the area zoned for a museum must be highlighted;
- Parking of construction machinery/ and or vehicles of construction workforces during the period of construction; and
- 4 Labor-intensive workers should be notified about this museum, and its significance.

#### Conclusions

A thorough background study and survey of the proposed development was conducted and findings were recorded in line with SAHRA guidelines. As per the recommendations above, there are no major heritage reasons why the proposed development could not be allowed to proceed. It is thus recommended that SAHRA approves the proposed development to proceed subject to the recommendations given above.

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## Acronyms and Abbreviations

AIA	Archaeological Impact Assessment
EMP	Environmental Management Plan
HIA	Heritage Impact Assessment
LIA	Late Iron Age
MIA	Middle Iron Age
EIA	Early Iron Age
НМР	Heritage Management Plan
LSA	Late Stone Age
MSA	Middle Stone Age
ESA	Early Stone Age
NASA	National Archives of South Africa
NHRA	National Heritage Resources Act
SAHRA	South African Heritage Resources Agency



## **Glossary of Terms**

The following terms used in this Archaeology are defined in the National Heritage Resources Act [NHRA], Act Nr. 25 of 1999, South African Heritage Resources Agency [SAHRA] Policies as well as the Australia ICOMOS Charter *(Burra Charter)*:

Archaeological Material: remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artifacts, human and hominid remains, and artificial features and structures.

Artefact: Any movable object that has been used modified or manufactured by humans.

**Conservation:** All the processes of looking after a site/heritage place or landscape including maintenance, preservation, restoration, reconstruction and adaptation.

**Cultural Heritage Resources:** refers to physical cultural properties such as archaeological sites, palaeolontological sites, historic and prehistorical places, buildings, structures and material remains, cultural sites such as places of rituals, burial sites or graves and their associated materials, geological or natural features of cultural importance or scientific significance. This include intangible resources such religion practices, ritual ceremonies, oral histories, memories indigenous knowledge.

**Cultural landscape:** "the combined works of nature and man" and demonstrate "the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both internal and external".

**Cultural Resources Management (CRM):** the conservation of cultural heritage resources, management, and sustainable utilization and present for present and for the future generations

**Cultural Significance:** is the aesthetic, historical, scientific and social value for past, present and future generations.



**Chance Finds:** means Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

**Compatible use:** means a use, which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

**Conservation** means all the processes of looking after a place so as to retain its cultural significance.

**Expansion:** means the modification, extension, alteration or upgrading of a facility, structure or infrastructure at which an activity takes place in such a manner that the capacity of the facility or the footprint of the activity is increased.

**Grave:** A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place.

Heritage impact assessment (HIA): Refers to the process of identifying, predicting and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, plan, programme or policy which requires authorisation of permission by law and which may significantly affect the cultural and natural heritage resources. The HIA includes recommendations for appropriate mitigation measures for minimising or avoiding negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

**Historic Material:** remains resulting from human activities, which are younger than 100 years, but no longer in use, including artifacts, human remains and artificial features and structures.

Impact: the positive or negative effects on human well-being and / or on the environment.

*In situ* material: means material culture and surrounding deposits in their original location and context, for instance archaeological remains that have not been disturbed.



Interested and affected parties Individuals: communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by the proposal or activity and/ or who are concerned with a proposal or activity and its consequences.

Interpretation: means all the ways of presenting the cultural significance of a place.

Late Iron Age: this period is associated with the development of complex societies and state systems in southern Africa.

Material culture means buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Mitigate: The implementation of practical measures to reduce adverse impacts or enhance beneficial impacts of an action.

Place: means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

**Protected area:** means those protected areas contemplated in section 9 of the NEMPAA and the core area of a biosphere reserve and shall include their buffers.

**Public participation process:** A process of involving the public in order to identify issues and concerns, and obtain feedback on options and impacts associated with a proposed project, programme or development. Public Participation Process in terms of NEMA refers to: a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to specific matters.

Setting: means the area around a place, which may include the visual catchment.

**Significance:** can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e., intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e., level of significance and acceptability). It is an anthropocentric concept, which makes use of value judgments and science-based criteria (i.e., biophysical, physical cultural, social and economic).



Site: a spatial cluster of artefacts, structures, and organic and environmental remains, as residues of past human activity.



## 1. Introduction

Hilland Environmental requested Vhubvo Consultancy Cc to conduct an Archaeological Impact Assessment (AIA) for the proposed mall on a portion of remainder Erf 506 Vryburg township. This assessment is a specialist component which will provide the necessary input into the Basic Assessment Report, and form part of the Environmental Management Programme. The main objective of the assessment is to investigate the general state of heritage within the affected area. The study aims are to outline the archaeological sites, cultural resources, sites associated with oral histories, graves, cultural landscapes, and any structure of historical significance that may be affected by the proposed development, and to advise on mitigation measures should any be affected and these will in turn assist the developer to make a decision on the most appropriate options in line with the National Heritage Resource Act, 1999 (Act 25 of 1999). The survey was conducted in accordance with the SAHRA Minimum Standards for Archaeology and Palaeontology which clearly specify the required contents of reports of this nature. The town of Vryburg which is approximately 500m east of the proposed area was founded in 1883, and attained municipal status in 1896. The name Vryburg comes from the period in 1882 when Vryburg was established as the capital of the Republic of Stellaland. The Republicans called themselves Vryburgers (free citizens), and since the Afrikaans word for citizen is 'burger' and the word for 'borough' is 'burg' the name of the town followed. During the Anglo Boer War (1899-1902), a concentration camp was founded close to the town, on the farm Waterloo, and served as a center for educating Tswana people (Van Schalkwyk, 2008). In 1910, the Cape Colony became the Cape Province, and automatically became one of the four provinces of the Union of South Africa and later the Republic of South Africa. Today, Vryburg is the industrial and agricultural capital of the region.

## 2. Sites Location and Description

The proposed development is located on a private land whose topography is characterised by even plain and can be identified as Erf 11883. The area is currently vacant of any activities and was previously used for the purpose of low scale farming, and excavation of gravel materials (See Figure 1). The topography of the area is basically fairly steep and open, although grass and shrub cover were fairly in some sections, there are fairly sparse rocky ridges and outcrops present. The study areas are surrounded by existing urban residential developments including housing, roads and other urban infrastructure such as commercial/industrial areas. The north and eastern section is characterised by excavated land which has caused significant damage in the area (see Figure 7-8),



while the south and western section is marred by past construction materials that has been dumped throughout these sections (see Figure 9). It will appear all rubles from the time when residential and other nearby complexes were being built were dumped in the area. The landscape of the nearby area proposed for development is semi-urban and is characterised by recreational and industrial landscape, and possesses amongst others infrastructure elements such as major roads and residential complexes. Although transformed, archaeological resources are not unexpected in this area, especially graves. Nevertheless, almost the entire proposed area has been disturbed. If any archaeological sites existed here in the past, it has been completely destroyed during the time when the area was established for farming purposes, or mining for gravel materials. The area is boarded by the N14 national road on the northern section. The east section is a semi park space which is encroached by low grass, while the southern section is a golf playfield, and the western section is used for residential complexes. The area proposed for development is disturbed due to past progresses (see Figures 4 - 7), and no material of archaeological value is expected to be found in the proposed area. The locality map provided in Figure 2 indicates the study area.

#### Summary of Project Location Details

Province:	North West
Local:	Naledi
District:	Dr Ruth Segomotse Mompati
Farm name:	Erf 506 Vryburg
Proposed development:	Vryburg Mall

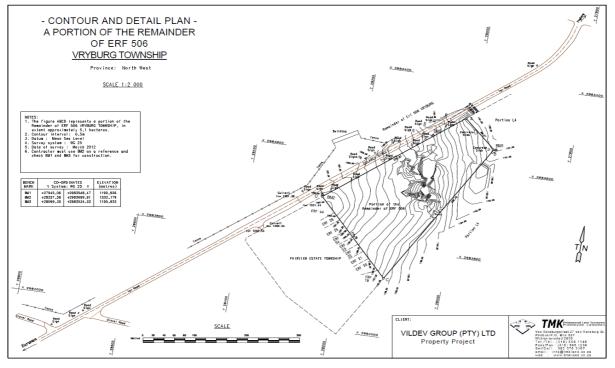


Figure 1: Topographical map depicting past usage of the area as a borrow pit.



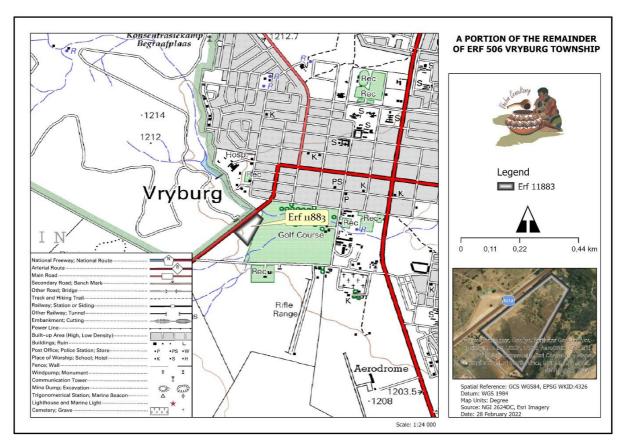


Figure 2: Topographical map indicating the study area.

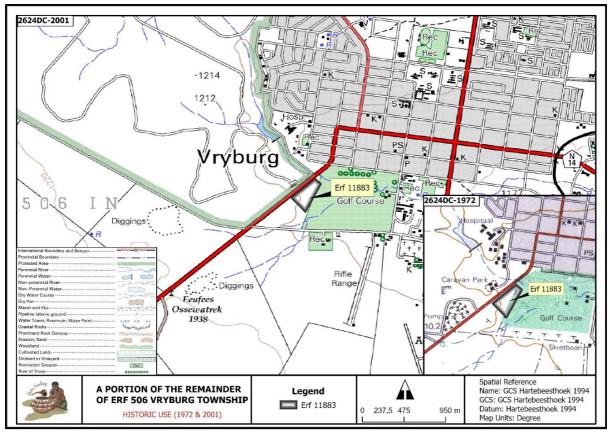


Figure 3: A historical topographical map dating to 1972 indicating the area at its early stage.





Figure 4: An overview of the southern section of the area proposed for the mall.



**Figure 5:** View of western section of the proposed area. Note some of the complexes bordering the proposed area.





**Figure 6:** View of the northern section of the area proposed for the mall with the Bio-Museum further up.



Figure 7: An overview of the eastern section that has been mined for gravel materials over the years.





Figure 8: View of the south eastern section of the proposed area showing excavated area.



Figure 9: Note remnants of bricks that has been dumped on the south and eastern section of the proposed area.



## 3. Nature and Need of the Proposed Project

The proposed development intends to build a new Mall in Vryburg. Malls are needed as they offer convenience, choice and safety for individuals. Furthermore, the construction of the mall will lead to job creation, micro-economic investments and developments. The residents within the municipality will have access to standard of retails that were previously unavailable locally. Building a mall near residential areas is cost effective as to most residents it will cost nothing to cheaper transport fee to access the mall. The malls also serve as social hubs that provides community gathering place.

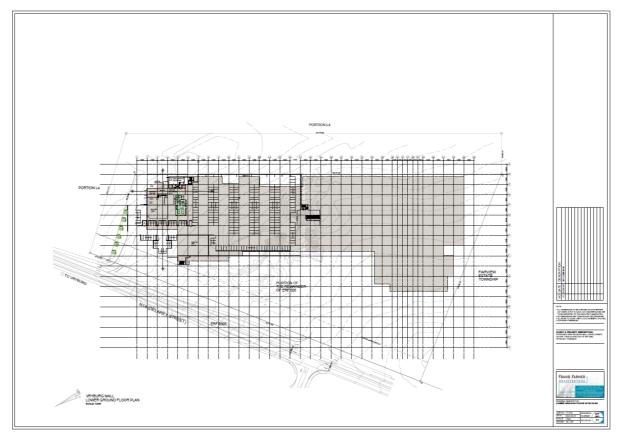


Figure 10: View of the layout plan of the proposed area.

## 4. Purpose of the Cultural Heritage Study

The purpose of this Archaeological Impact Assessment is the following:

• Generally, assess the potential cultural heritage and archaeological impacts associated with the development and operation of the proposed project;



- Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development
- Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- Recommend appropriate and practical mitigation measures to minimise the negative impacts and maximise potential benefits associated with the proposed development;
- Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources; and
- Review applicable legislative requirements.

## 5. Methodology and Approach

## 5.1 Background study introduction

The methodological approach is informed by the 2012 SAHRA Policy Guidelines for impact assessment. As part of this study, the following tasks were conducted:

- 1) Literature review;
- 2) Consultations with the developer and appointed consultants;
- 3) Completion of a field survey; and
- 4) Analysis of the acquired data, leading to the production of this report.

## 5.1.1 Literature Review

The desktop study was undertaken through SAHRIS for previous Cultural Heritage Impact Assessments conducted in the region of the proposed development, and also for research that has been carried out in the area over the recent years, as well as historical aerial maps located in the Deeds Office. These sources were used to screen the proposed area and to understand the baseline of heritage sensitivities.

## 5.1.2 Oral interview

Oral interview was initiated with Bio Museum officials, this aimed to understand the landscapes and/ or intangible heritage of the area.

## 5.1.3 Physical survey

The field survey was undertaken on the 26th of February 2022. Two archaeologists from Vhubvo conducted the survey. See figure 11 for tracklog of the archaeologist.



## 5.1.4 Documentation

The general project area was documented. This documentation included taking photographs using a Sony Cybershort Digital Camera with 10.1 mega-pixel capability. Plotting of finds was done by a Garmin etrex Venture HC.

## 5.1.5 Restrictions and Assumptions

Although no archaeological resources are expected, archaeological materials may be under the surface and therefore unidentifiable to the surveyor until they are exposed once development resume.

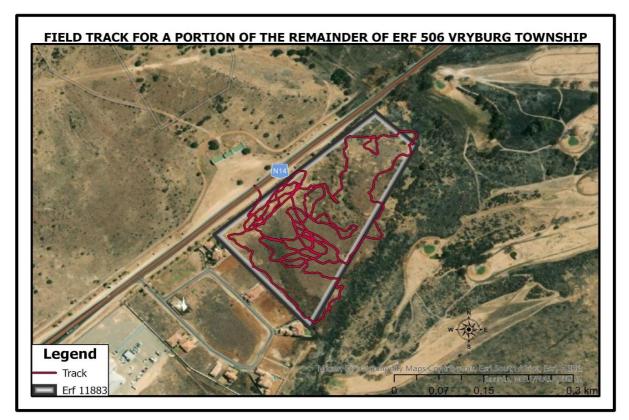


Figure 11: Field track of the surveyed area.

## 6. Applicable Heritage Legislation

Several legislations provide the legal basis for the protection and preservation of both cultural and natural resources. These include the National Environment Management Act (No. 107 of 1998); Mineral Amendment Act (No 103 of 1993); Tourism Act (No. 72 of 1993); Cultural Institution Act (No. 119 of 1998), and the National Heritage Resources Act (Act 25 of 1999). Section 38 (1) of the National Heritage Resources Act requires that where relevant, an Impact Assessment is undertaken in case where a listed activity is triggered. Such activities include:



(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 50 m in length; and

(c) any development or other activity which will change the character of an area of land, or water -

(i) exceeding 5 000 m<sup>2</sup> in extent;

(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, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Section 3 of the National Heritage Resources Act (25 of 1999) lists a wide range of national resources protected under the act as they are deemed to be national estate. When conducting Heritage Impact Assessment (HIA) the following heritage resources have to be identified:

(a) Places, buildings, structures and equipment of cultural significance

(b) Places to which oral traditions are attached or which are associated with living heritage

(c) Historical settlements and townscapes

(d) Landscapes and natural features of formation of cultural significance

(e) Geological sites of scientific or cultural importance

(f) Archaeological and paleontological sites

(g) Graves and burial grounds including-

(i) ancestral graves

*(ii)* royal graves and graves of traditional leaders

(iii) graves of victims of conflict

(iv) graves of individuals designated by the Minister by notice in the Gazette

(v) historical graves and cemeteries; and

(vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983)

(h) Sites of significance relating to the history of slavery in South Africa

(i) moveable objects, including -

(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens

(ii) objects to which oral traditions are attached or which are associated with living heritage

(iii) ethnographic art and objects

(iv) military objects

(v) objects of decorative or fine art

(vi) objects of scientific or technological interest; and

(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

## Other sections of the Act with a direct relevance to the AIA are the following:

**Section 34(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.

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority:



• destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite

Section 36 (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

- destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside formal cemetery administered by a local authority; or
- bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.

## 7. Degree of Significance

This category requires a broad, but detailed knowledge of the various disciplines that might be involved. Large sites, for example, may not be very important, but a small site, on the other hand, may have great significance, as it is unique for the region. The following table is used to grade heritage resources.

**Table 1:** Grading systems for identified heritage resources in terms of National Heritage ResourcesAct (Act 25 of 1999).

Level	Significance	Possible action
National (Grade I)	Site of National Value	Nominated to be declared by SAHRA
Provincial (Grade II)	Site of Provincial Value	Nominated to be declared by PHRA
Local Grade (IIIA)	Site of High Value Locally	Retained as heritage
Local Grade (IIIB)	Site of High Value Locally	Mitigated and part retained as heritage
General Protected Area A	Site of High to Medium	Mitigation necessary before destruction
General Protected Area B	Medium Value	Recording before destruction
General Protected Area C	Low Value	No action required before destruction

## Significance rating of sites

(i) High

(ii) Medium

(iii) Low

This category relates to the actual artefact or site in terms of its actual value as it is found today, and refers more specifically to the condition that the item is in. For example, an archaeological site may be the only one of its kind in the region, thus its regional significance is high, but there is



heavy erosion of the greater part of the site, therefore its significance rating would be medium to low. Generally speaking, the following are guidelines for the nature of the mitigation that must take place as Phase 2 of the project.

## High

- This is a 'do not touch' situation, alternative must be sought for the project, examples would be natural and cultural landscapes like the Mapungubwe Cultural Landscape World Heritage Site, or the house in which John Langalibalele resided.
- Certain sites, or features may be exceptionally important, but do not warrant leaving entirely alone. In such cases, detailed mapping of the site and all its features is imperative, as is the collection of diagnostic artefactual material on the surface of the site. Extensive excavations must be done to retrieve as much information as possible before destruction. Such excavations might cover more than half the site and would be mandatory; it would also be advisable to negotiate with the client to see what mutual agreement in writing could be reached, whereby part of the site is left for future research.

### Medium

• Sites of medium significance require detailed mapping of all the features and the collection of diagnostic artefactual material from the surface of the site. A series of test trenches and test pits should be excavated to retrieve basic information before destruction.

#### Low

 These sites require minimum or no mitigation. Minimum mitigation recommended could be a collection of all surface materials and/ or detailed site mapping and documentation. No excavations would be considered to be necessary.

In all the above scenarios, permits will be required from the South African Heritage Resources Agency (SAHRA) or the appropriate PHRA as per the legislation (the National Heritage Resources Act, no. 25 of 1999). Destruction of any heritage site may only take place when the appropriate heritage authority has issued a permit. The following table is used to determine rating system on the receiving environment.

Table 2: Rating System.

## NATURE

Including a brief description of the impact of the heritage parameter being assessed in the context of the project. This criterion includes a brief written statement of the heritage aspect being impacted upon by a particular action or activity.



## TOPOGRAPHICAL EXTENT

This is defined as the area over which the impact will be expressed. Typically, the severity and significance of an impact have different scales and as such bracketing ranges are often required. This is often useful during the detailed assessment of a project in terms of further defining the determined.

1	Site	The impact will only affect site.
2	Local/district	Will affect the local area or district.
3	Province/region	Will affect the entire province or region.
4	International and National	Will affect the entire country.

## PROBABILITY

This describes the chance of occurrence of an impact

1	Unlikely	The chance of the impact occurring is extremely low (Less than 25% chance of occurrence).
2	Possible	The impact may occur (Between a 25% to 50% chance of occurrence).
3	Probable	The impact will likely occur (Between 50% to 75% chance of occurrence).
4	Definite	Impact will certainly occur (Greater than 75% chance of occurrence).

## REVERSIBILITY

This describes the degree to which an impact on a heritage parameter can be successfully reversed upon completion of the proposed activity.

1	Completely reversible	The	impact	is	reversi	ble	with
		implen	nentation	of	minor	mitiş	gation
		measur	res.				



	Partly reversible	The impact is partly reversible but more
		intense mitigation measures are required.
3	Barely reversible	The impact is unlikely to be reversed even with intense mitigation measures.
4	Irreversible	The impact is irreversible and mitigation measures exist.
	IRREPLACEABLE L	OSS OF RESOURCES
	scribes the degree to which heritage re d activity	esources will be irreplaceably lost as a result of
1	No loss of resource	The impact will not result in the loss of any
		resources.
2	Marginal loss of resource	The impact will result in marginal loss of resources.
2 3	Marginal loss of resource Significant loss of resource	The impact will result in marginal loss of
		The impact will result in marginal loss of resources. The impact will result insignificant loss of



1	Short term	The impact and its effects will either
		disappear with mitigation or will be
		mitigated through natural process in span
		shorter than the construction phase (0-1
		years), or the impact and its effects will last
		for the period of a relatively short
		construction period and a limited recovery
		time after construction, thereafter it will be
		entirely negated (0-2 years).
2	Medium term	The impact and its effects will continue or
		last for some time after the construction
		phase but will be mitigated by direct
		human action or by natural processes
		thereafter (2-10 years).
3	Long term	The impact and its effects will continue or
		last for entire operational life of the
		development, but will be mitigated by
		direct human action or by natural
		processes thereafter (10-50 years).
4	Permanent	The only class of the impact that will non-
		transitory. Mitigation either by man or
		natural process will not occur in such a
		way or such a time span that the impact
		can be considered transient (Indefinite).

## CUMULATIVE EFFECT

This describes the cumulative effect of the impacts on the heritage parameter. A cumulative effect/impact is an effect, which in itself may not be significant but may become significant if added to other existing or potential impacts emanating from similar or diverse activities as a result of the project activity in question.



1	Negligible Cumulative Impact	The impact would result in negligible to no cumulative effects.	
2	Low Cumulative Impact	The impact would result in insignificant cumulative effects	
3	Medium Cumulative Impact	The impact would result in minor cumulative effects	
4	High Cumulative Impact	The impact would result in significan cumulative effects.	
	MAGNI	TUDE	
Describ	es the severity of an impact.		
1	Low	Impact affects the quality, use and integrity of the system/component in a way that is barely perceptible.	
2	Medium	Impact alters the quality, use and integrity of the system/component but system/ component still continues to function in a moderately modified way and maintains general integrity (some impact on integrity).	
3	High	Impact affects the continued viability of the system/component and the quality, use, integrity and functionality of the system or component is severely impaired and may temporarily cease. High costs of rehabilitation and remediation.	



4	Very High	Impact affects the continued viability of
		the system/component and the quality,
		use, integrity and functionality of the
		system or component permanently ceases
		and is irreversibly impaired (system
		collapsed). Rehabilitation and remediation
		often impossible. If possible,
		rehabilitation and remediation often
		unfeasible due to extremely high costs of
		rehabilitation and remediation.

### SIGNIFICANCE

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. This describes the significance of the impact on heritage parameter.

## 7. Discussion of (Pre-) History of South Africa

South Africa possesses a rich archaeological record. It has one of the longest sequences of human development in the world. South African scientists have been actively involved in the search of human origins since 1925 when Raymond Dart identified the *Taung* child as an infant halfway between apes and humans. Dart named the remains Austrolopithecus Africanus, southern apeman, and his work fundamentally changed the focus of human evolution from Europe and Asia to Africa, and it is now widely accepted that humanity originated from Africa, hence reference to Africa as the "cradle of humanity" (Robins et al.1998). In many ways Dart's discovery marked the birth of palaeonthropology as a discipline. The archaeology of South Africa which fits well into the southern African periodisation is broadly divided into Stone Age, Iron Age and the Historical Period.

## Stone Age

The Stone Age is the pre-historic period when humans widely used stone for tool making (Robins et al. 1998). As the early ancestors progressed physically, mentally and socially they developed stone tools. These tools are the earliest evidence for culture in southern Africa (Clark & Kuman



2000). The Stone Age began approximately 2.6 million years ago and ended around 20 000 years ago. It is divided into three phases namely the Early Stone Age, Middle Stone Age and Later Stone Age. It is argued that there are two transitional periods. Noteworthy that the time used for Stone Age is approximate and it differs from one researcher to another (See Robins et al.1998; Korsman & Mayor 1999; Mitchell 2002).

#### Early Stone Age (ESA)

The Early Stone Age is dominated by two industries; the Oldowan and Acheulian. The Oldowan industry which was the earliest was developed by the earliest members of the genus Homo, such as Homo habilis around 2.6 million years ago. The Oldowan tools which are only found in Africa, and not anywhere else are mainly simple flakes which were struck from cobbles. The assemblage comprises tools such as cobble cores and pebble choppers. They were not task-specific tools, and one tool could be used for many functions (Wurz 2000). The Oldowan industry was completely replaced by the Acheulian around 1.7 million years ago. Homo ergaster was probably responsible for the manufacture of Acheulian tools in South Africa. Acheulian tools were longer with sharper edges which suggest they could be used for a variety of activities ranging from butchering of animals, chopping of wood, digging roots and cracking bones for marrow.

#### Middle Stone Age (MSA)

The Middle Stone Age artefacts started appearing about 250 000 years ago and these replaced the larger handaxes and cleavers. In contrast to the ESA technique of removing flakes from a core, MSA tools were flakes to start with. There were of a predetermined size and shape and were made by preparing a core of suitable material and striking off the flake so that it was flaked according to a shape which the toolmaker desired. MSA people made a range of tools from both coarse and fine-grained rock types, sometimes rocks used for tool making were transported considerable distances, probably in bags or containers, as such tool assemblages from some MSA sites tend to lack some of the preliminary cores and contain predominantly finished products like flakes and retouched pieces. The stone toolkit of this period is dominated by elongated, parallel-sided blades as well as triangular flakes. Many MSA sites have evidence of control of fire, prior to this, rock shelters and caves would have been dangerous for human occupation due to predators (Deacon & Deacon 1999). Besides the introduction of fire, the widespread use of red ochre, probably as body paint, also shows that MSA behavior had become more human. The recent finds of decorated ochre at Blombos and decorated ostrich egg shells at Diepkloof also in the Cape further



cements the point. Other sites that have yielded MSA tools in South Africa are Klassies River Mouth, Bloombos and Border Cave (Deacon & Deacon 1999).

### Later Stone Age (LSA)

The Later Stone Age ranges from 20 000 to 2000 years ago. It is important to note that the transition from MSA to LSA did not occur simultaneously in southern Africa. It is described by Deacon (1984) as a period when man refined small blade tools conversely abandoning the MSA prepared-core technique. Anatomically speaking, as the brain gets bigger, tools became smaller and more efficient. Thus, refined artefacts such as thumbnails, convex –edge scrapers, crescents, and bladelets are associated with this period. Other tools of the period are hammers, adzes, bores, grooved stones, hafted tools, points. The period also saw the introduction of poisoned arrows to enhance the effectiveness of bone points and this led to improved hunting (Walker & Thorp 1997). Faunal evidence suggests that LSA hunter-gatherers trapped and hunted zebras, impala, warthog and bovid of various sizes. They also diversified their protein diet by gathering tortoises, marine resources and land snails (Achatina) in large quantities. In addition to bow-hunting and marine sources collection, human behaviour was recognisably modern in many ways; uniquely traits such as rock art and purposefully burial with ornaments was a common practice (Villa *et al.*2012). Rock art in form of paintings and engravings is an important signature of this period. Examples of LSA sites in South Africa are Cottage Cave, Nelson Bay Cave.

#### Iron Age

Iron Age is a period in human history when metal was mainly used to produce tools. The period marks the movement of farming communities into South Africa in the first millennium AD, or 2500 years ago (Mitchell 2002:259). The people were agro-pastoralists that settled in the vicinity of water. In terms of material culture, pottery is a dominant and critical component of an Iron Age assemblage. Iron Age archaeologists use pottery to identify the presence and chronology of different cultural groups on sites. Through the study of stylistic traditions related to vessel shape and decoration, the movement, interaction and lineage of cultural groups can be traced (Huffman 1989). Pottery seriation in conjunction with linguistic data has been used by researchers to trace the origin of these people who brought the Iron Age culture. Researchers have traced the origin of the Bantu people with their agro pastoral to what is now the border of Nigeria and Cameroon. These people migrated eastward and southward breaking into two groups. According to Huffman (2007) there were two streams of Early Iron Age expansion in southern Africa, one referred to as



the Urewe-Kwale tradition (or the eastern stream) and another one called the Kalundu tradition (or the western stream). Refer to figure 12 below:

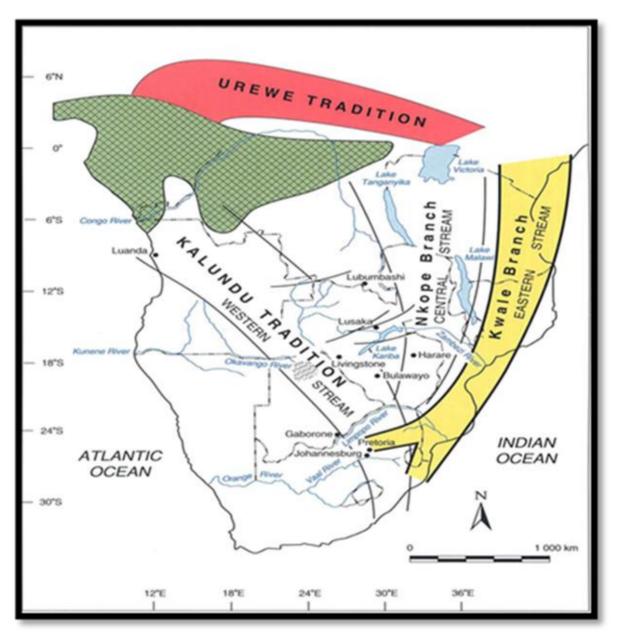


Figure 12: View of the spread of EIA movements, namely Urewe-Kwale and Kalundu traditions in southern Africa (From Huffman 2007:336).

## Early Iron Age (EIA)

Early Iron Age dwelling were built-in low-lying areas, such as river valleys and the coastal plain, where forests and savannas facilitated shifting (slash and burn), they also cultivate grains such as cow peas, ground beans, sorghum and millets (Mitchell 2002). Early Iron Age pottery is characterized by large and prominent inverted rims, large neck areas and fine elaborate decorations. Unlike the broad and flat surface grinding stones of Late Iron Age, the Early Iron Age grinding



stones is deeper and more lenticular grooves. Well known EIA sites in South Africa include Happy Rest in the Limpopo Province, Lydenburg Heads in Mpumalanga, Broederstroom in North West, and Mzonjani in KwaZulu-Natal Province.

## Middle Iron Age (MIA)

The Middle Iron Age stretches from AD900 to 1300 and marks the origins of the Zimbabwe culture. It is marked by a change in emphasis from grain cultivation to cattle herding, however, the importance of cattle cut across all the three ages of the Iron Age period (Huffman 2007). In South Africa a clear shift from the EIA to the MIA is apparent in the Shashe-Limpopo basin where it marks the origins of the Zimbabwe culture where it came with class distinction and sacred leadership (Huffman 2005, 2007). Middle Iron Age sites in the Shashe-Limpopo basin are Schroda, K2 and Mapungubwe.

### Late Iron Age (LIA)

The Late Iron Age dates from AD1300 to 1840.Greater focus on economic growth and the increased importance of trade marks the beginning of the LIA. Specialisation in terms of natural resources exploitation and utilisation is a character feature of this period. Iron slags which tend to occur only in certain localities compared to earlier times. Also, Later Iron Age settlement were no longer located in rivers valleys, but were built on higher ground where homestead which in most instances were made of stone for building purposes would benefit from cooling breezes and good views most probably for strategic purposes. Pottery styles also underwent significant changes; maize was also introduced during this period (Maggs 1980). Well known Late Iron Age sites in North West Province is also Madikwe in the North West (Huffman 2007).

#### Historical Period

The Historical period dates from 1600. It deals with Europe's infiltration, settlement, spread and domineering of European influence in southern Africa. Its segments are; Dutch settlement in the Western Cape, the troubled times of Zululand (Mfeqane/Difaqane), Voortrekkers, early missions and the diamond rush. This period also witnessed or saw the compilation of early maps by missionaries, explorers and military personnel. Bartolomeo Dias was the first European to sail around the southern point of Africa in 1486, he named it "The Cape of Good Hope", nine years later it was Vasco da Gama, however, these Portuguese seafarers were not seriously interested in southern Africa. Nevertheless, the history of southeast part will change forever on the 6th of April 1652. This is when the Dutch seafarer Jan van Riebeeck arrived in Table Bay with his three ships.



His mission was not to establish a full-fledged colony at the Cape but to establish supply station on behalf of the Dutch East India Company (DEIC); however, it committed itself when it granted nine company servants' freedom in 1657 to establish private farms in the Rondebosch area below the eastern slopes of Table Mountain. One of the reasons why the Dutch settled at the Cape was to access the herds of cattle kept by the Khoi-Khoi, this was first achieved by friendly trade, however it was not long before disputes over land erupted after Free Burghers began to encroach on traditional communal grazing lands. By the early 1700's the Dutch colonists have prevailed (Bergh 1999). These new white settlers will influence the context and content of South African's culture forever, starting with development of Cape Town into an urban centre, however it took many years for it to equal the size of Mapungubwe Kingdom which was attained five centuries earlier (it is also argued that Mapungubwe was during its peak more developed than other areas in Europe). These newcomers also introduced new style of houses consisting of flat roofs and ornate pediments, slaves were also imported from other parts of Africa, i.e., Madagascar, India and East Asia, these slaves who were used as labourers were skilled carpenters and bricklayers as such their skills played an invaluable role in speeding up the progress and development of the Cape. It is important to note that the intermingling between the slaves, Africans and the European population marked the beginning of the coloured community.

One of the most significant historical occurrences in the early history of South Africa was the Mfecane/ Difaqane. Shaka was a shrewd king and he stablished a kingdom that became the strongest throughout the region in the 19<sup>th</sup> Century. During the Mfecane/Difaqane at the end of the 19<sup>th</sup> Century, communities who had settled in the KwaZulu-Natal were displaced and forced to move out by wars between the Zulu chiefdoms (Shillington 2013). Many generals were such as Mzilikazi, Soshangane were displaced as Zululand became a desert storm. Shaka's majesty rule came to end in 1828 when he was assassinated by his half-brothers, Dingane and Mhalangana, with Dingane assuming the leadership (Laband 1995). The kingdom became weaker and Cape merchants moved into the region to colonise Natal, and also the Voortrekker who became dissatisfied with British rule, also moved into the area (McKenna 2011).

Over a span of three years starting in 1835, some 12,000 Voortrekkers (pioneers) left the Cape Colony and trekked into the interior by ox wagon. In time, these Voortrekkers who were escaping British policies started to build a unique identity and started calling themselves Afrikaners, they also developed a hybrid language, Afrikaans, which stemmed from high Dutch but incorporated strong French, Malay, German and Black influences. The Afrikaans - speaking descendants of



these people would later simply be called "Boere" (boers or farmers) (Bergh 1999). From the 1820s European missionaries worked tireless to Christianise indigenous communities and to in-culture them in a European way of life, whatever intention these missionaries have undermine African and contributed in displacing African tradition across South Africa. By the 1860s, African states began to weaken as Europeans were eager to exploit Africans as a source of labour and to acquire the fertile area, during this era most African leaders died, e.g.: Makapane (1854); Soshangane (1858); Sekwate (1861); Mswati (1865); Mzilikazi (1868); Moshoeshoe (1870); Mpande (1872); Sekhukhune (1882) and Makhado (1895). With the discovery of diamonds and gold in the 19th century, urbanisation started in South Africa. People came from all over the world to claim their stake in the diamond fields, these discoveries also made the British to realise that there was great wealth for the taking outside the Cape Colony, and with these discoveries South African black's view of life were further changed. Nevertheless, the 1902 Peace treaty in Vereeniging marked the end of Anglo/Boers war, this gave South African black people peace treaty as they hope for better opportunity after all the suppression and domination by the minority, unfortunately it turned out differently as it made no provisions as far as human rights for black people were concerned, actually the process of segregation increased in South Africa.

# 8. Discussion of (Pre-) History of the Study Area

The province of the North West is famous for sites such as the Taung Heritage Site and the Cradle of Humankind World Heritage Site which have basically put the whole of South Africa in the World map in terms of archaeological discoveries. The pre-history of the area is evident through the presence of numerous farms with rock engravings, including Verdwaal Vlakte, Bernauw, Schatkist, Wonderfontein and Kinderdam (Van Schalkwyk, 2012; Morris, 1998).

### Stone Age

Stone Age sites are well preserved in the province of the North West and include numerous sites with rock engravings. The rock art of the province, include the Bosworth Rock Engraving site near Klerksdorp and the Thaba Sione near Mafikeng. Thaba Sione consists of more than 559 rock engravings, with especially predominant depictions of rhinoceros (http://www.tourismnorthwest.co.za/culture/heritage\_resources.html). The known rock engraving sites in the area includes but no limited to Bernauw, Content, Gemsbok Laagte, Klipfontein, Kinderdam, Melalarig, Schatkist, Verdwaal Vlakte and Wonderfontein (Van Schalkwyk 2013). Rock engravings are known from the wider vicinity of the study area (Bergh, 1998). The surrounding area of the proposed site yielded a total of 11 Early Stone Age sites with



Acheulean lithic in the Harts River valley almost immediately east of the town of Taung and approximately 70 km east of the study area (Kuman, 2001).

### Iron Age

Iron Age sites are common in the North West Province, the stone-walled settlement at Kaditshwene in the Madikwe area is a very good example of the remains. Another example of the stone walled sites is the one built by Mzilikazi in the 1830 as an animal trap. The Kaditshwene site was a major city of the Bahurutshe between 1699 and 1823 and it's the largest Iron Age stone-built city in South Africa (Marais-Botes 2012). The Tswana speakers such as the Tlhaping, Hurutshe, Fokeng, Kgatla and the Rolong were the earliest Iron Age settlers in the North West Province (Breutz 1959). A stone walled site has been identified within the vicinity of the proposed study (van Schalkwyk 2013). In addition, Breutz (1959) noted stone walled sites dating to the Late Iron Age and which can be linked to the occupation of the Tswana in the area, these are found on a number of farms in the region, e.g., Waai Hoek and Brul Pan. Another most important site, Dithakong, is located several kilometers from the proposed area of development. This site was first visited by early travelers such as Lichtenstein and John Campbell in the early part of the 19th century.

#### Historical era

The town of Vryburg was founded in 1883 as the capital of the Republic of Stellaland. The name Vryburg means "free fort" in Afrikaans and its citizens viewed themselves as free. In 1884 the town comprised of about 20 houses (www.sa-venues.com). It attained municipal status in 1896. During the Anglo Boer War (1899-1902) a large concentration camp was established on the outskirts of the town (van Schalkwyk 2013). Many early travelers, hunters and missionaries (Burchell 1824, Campbell 1822, Smith 1834, 1836 (Lye 1975), Moffat 1842 and Harris 1852) either passed through the area or close to it. They left behind fascinating description in the form of writings of what life was in these communities before large-scale interaction with white settles took place. Some of the first whites to settle here were the missionaries Samuel Broadbent and Thomas Hodgson, who settled some distance to the east of what later became known as Wolmaransstad (van Schalkwyk 2013). Today a national monument built by the London Missionary Station (stone church built in 1904) still exist and most visited by tourist (www.sa-venues.com).



# 9. Findings and Discussions

The main aim of the survey was to evaluate potential heritage resources that may be found within the area of the proposed development, as well as to determine if there is any hamartia that may prevent the proposed Mall development. Phase 1 Archaeological and Cultural Heritage Impact Assessment for the proposed Vryburg Mall development on Portion of the Remainder Erf 506 identified no significant cultural or archaeological impacts envisaged on the footprint of the proposed area. Though there are no significant archaeological materials identified on the footprint of the proposed site, a structure located on the north-east side of the proposed area was noted (see Figure 14). This structure is however of low significance since it is less than 60 years old, and does not possess any social or aesthetic value. However, and more importantly, an area zoned for the Bio Museum (see Figure 15) has been documented directly opposite to the area proposed for the mall. This site is approximately 70m to the proposed area of development and is of significance, as such it must be protected in terms of Section 3 of the National Heritage Resource Act (Act 25 of 1999), and falls under those sites that are protected.

The findings aforementioned must be understood within the context of the proposed development. The Mall development proposal entails construction which involves digging and stamping, which subsequently will cause dust and commotion. The movement of machinery and contractors will be common in the area and it is possible that the Mall development may negatively affect the Bio Museum nearby, i.e., construction machinery may be parked, loaded/off-loaded in the Bio Museum area. This study noted that the proposed site and the Museum area are separated by the N14 national road, and that there is a buffer zone of approximately 70m between the proposed development, and the Museum. It must be further noted that there is no consensus regarding the meaning, purpose, nature and extent of the buffer zone of Natural/ Cultural Landscape. The buffer zone of the listed property is not clearly defined and various institutions, interested and affected parties and other stakeholders have different conceptualizations of what constitutes development and heritage landscape buffer zone. The recommendations in this report are thus given in consideration of the entire context of the proposed development and are not only limited to the footprint of the proposed development. The results of findings are presented below:

Site Name	Gps	Descriptions	Threats	Action
Vr1	26°57'46.3"S	A structure of a	None	None
	24°43'06.1"E	recent lavatory which has been abandoned.		
		Significance: Low		

 Table 3: Resources found in the area.



Vr2	26°57'47.26"S	A structure that offers	Possibility of threat	Conservation
	24°42'56.38"E	an entrance to the	from construction	
		Bio-Museum.	machinery that may	
		Significance: High	use the area for	
			parking or related.	



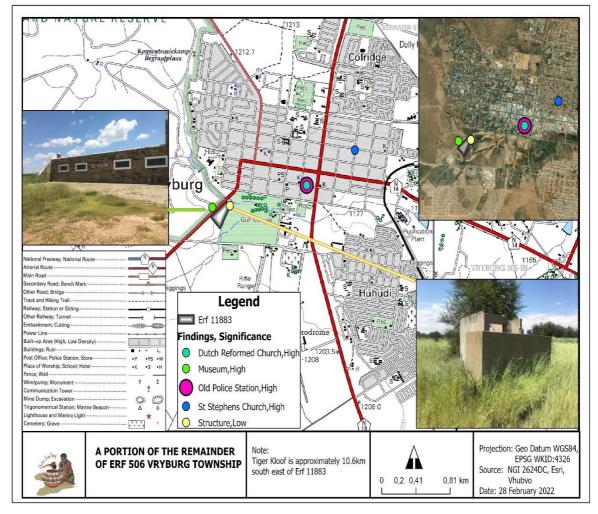


Figure 13: Sensitivity map of the area around the proposed.





Figure 14: Structure noted on the proposed area.



Figure 15: View of the Bio-Museum.



### 9.1 Impact assessment

Below is a description of the proposed development impact ratings. These ratings are for archaeological and cultural heritage sites known to exist in the proposed area, and include Stone and Iron Age, as well as Historical era materials. Note that these impacts are assessed as per Table 2 above:

Description	Ratings
Nature	Negative
Topographical Extent	The impact will only affect site
Duration	Long term
Magnitude	Medium
Probability	Possible
Reversibility	Irreversible
Irreplaceable Loss	The impact will not result in the loss of any
	resources

 Table 4: Anticipated impact rating.

# 10. Recommendations

Recommendations are given from a heritage point of view with the consideration of the nature of the proposed project and the significance of the heritage resources in the vicinity of the proposed area. The following are the recommendations based on the above findings:

♦ A Heritage Management Plan (HMP) must be developed to ensure the following:

- ✓ Guide the developer and relevant stakeholders in addressing concerns related to the identified Bio-Museum; and
- ✓ Develop a monitoring programme to facilitate effective implementation of the HMP.

It is recommended that a Heritage Management Plan and Monitoring Plan be compiled before construction resumes. This plan must be compiled by a professional archaeologist and be tailored to ensure protection of the area of the Museum which is nearby the proposed development. The management plan must aim to conserve the site from any form of malfunctionality that may happen during construction, either be by accident or ill-informed. Furthermore, it must be designed to retain the significance of the Museum, and ensure that the enhancement, presentation and maintenance of the surrounding area of the Museum is deliberately and thoughtfully designed



to protect the heritage values of the place. Other sensitive issues that must be addressed in the HMP are the following:

- Aspects related to dumping of construction material within the area zoned for a museum must be highlighted;
- Parking of construction machinery/ and or vehicles of construction workforces during the period of construction; and
- 4 Labor-intensive workers should be notified about this museum, and its significance.

It must be noted that if any chance archaeological or previously unknown grave (s), be exhumed or discovered during the course of construction work, activities on the proposed development area should be deactivated, and a heritage specialist monitoring the project be notified immediately. In the meantime, construction activities must be stopped within a radius of at least 10m of such an indicator. The area should then be demarcated by a danger tape. In the meantime, it is the responsibility of the environmental officer and the contractor to protect the site from publicity (i.e., media) until a mutual agreement is reached. It is mandatory to report any incident of human remains encountered to the South African Police Services, SAHRA staff member and professional archaeologist. Any measure to cover up the suspected archaeological material or to collect any resources is illegal and punishable by law under Section 35(4) and 36(3) of the National Heritage Resources Act, Act 25 of 1999. The developer should induct field workers about archaeology, and steps that should be taken in the case of exposing archaeological materials.

# 11. Conclusions

A thorough background study and survey of the proposed development was conducted and findings were recorded in line with SAHRA guidelines. As per the recommendations above, there are no major heritage reasons why the proposed development could not be allowed to proceed. It is thus recommended that SAHRA approves the proposed development to proceed subject to the recommendations given above.



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# **APPENDIX 1: SITE SIGNIFICANCE**

The following guidelines for determining site *significance* were developed by SAHRA in 2003. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

## (a) Historic value

- Is it important in the community, or pattern of history?
- Does it have strong or special association with the life or work of a person, group or organization of importance in history?
- Does it have significance relating to the history of slavery?

## (b) Aesthetic value

• Is it important in exhibiting particular aesthetic characteristics valued by a community or cultural group?

## (c) Scientific value

- Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage?
- Is it important in demonstrating a high degree of creative or technical achievement at a particular period?

# (d) Social value

• Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?

## (e) Rarity

• Does it possess uncommon, rare or endangered aspects of natural or cultural heritage?

# (f) Representivity

- Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects?
- What is the importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class?
- Is it important in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province, region or locality?

