

# HERITAGE IMPACT ASSESSMENT

## FOR THE PROPOSED FORT RECCE MUSEUM AND RESORT DEVELOPMENT, GAUTENG PROVINCE

**Client:**

LEAP

**Client info:**

Zelda van Wyk

**E – mail:** env3@leapenviro.co.za



**HCAC - Heritage Consultants**

Private Bag X 1049

Suite 34

Modimolle

0510

Tel: 082 373 8491

Fax: 086 691 6461

E-Mail: [jaco.heritage@gmail.com](mailto:jaco.heritage@gmail.com)

Report Author:

Mr. J. van der Walt

Project Reference:

217021

Report date:

February 2017

**DOCUMENT PROGRESS**  
**Heritage Impact Assessment**

**Document status**

<b>Document Version</b>	<b>v1.0</b>
<b>Report Purpose</b>	<b>Draft Report</b>
<b>Report Ref. No.</b>	<b>217017</b>

**Distribution List**

<b>Date</b>	<b>Report Reference number</b>	<b>Document Distribution</b>	<b>Number of Copies</b>
2017/02/17	217017	Leap	Electronic copy
2017/03/24	217017	Leap	Revised Final Copy

## General

The possibility of unmarked or informal graves and subsurface finds cannot be excluded. If any possible finds are made during construction, the operations must be stopped and a qualified archaeologist contacted for an assessment of the find/s.

**Disclaimer:** *Although all possible care is taken to identify sites of cultural importance during the investigation of study areas, it is always possible that hidden or sub-surface sites could be overlooked during the study. Heritage Contracts and Archaeological Consulting CC and its personnel will not be held liable for such oversights or for costs incurred as a result of such oversights.*

**Copyright:** Copyright in all documents, drawings and records whether manually or electronically produced, which form part of the submission and any subsequent report or project document shall vest in Heritage Contracts and Archaeological Consulting CC. None of the documents, drawings or records may be used or applied in any manner, nor may they be reproduced or transmitted in any form or by any means whatsoever for or to any other person, without the prior written consent of Heritage Contracts and Archaeological Consulting CC. The Client, on acceptance of any submission by Heritage Contracts and Archaeological Consulting CC and on condition that the Client pays to Heritage Contracts and Archaeological Consulting CC the full price for the work as agreed, shall be entitled to use for its own benefit and for the specified project only:

- The results of the project;
- The technology described in any report;
- Recommendations delivered to the Client.


**CLIENT:** Leap  
**CONTACT PERSON:** Zelda van Wyk

**LEADING CONSULTANT:** **HCAC** - Heritage Contracts and Archaeological Consulting CC (HCAC)

**CONTACT PERSON:** Jaco van der Walt  
Heritage Contracts and Archaeological Consulting  
Professional Member of the Association of Southern African Professional Archaeologist (#159)

I, Jaco van der Walt as duly authorised representative of Heritage Contracts and Archaeological Consulting CC, hereby confirm my independence as a specialist and declare that neither I nor the Heritage Contracts and Archaeological Consulting CC have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of which the client was appointed as Environmental Assessment practitioner, other than fair remuneration for work performed on this project.

**SIGNATURE:**

 \_\_\_\_\_

## EXECUTIVE SUMMARY

**Site name and location:** The proposed Fort Recce Museum and Resort development, on Portion 280 (Portion of portion 26) of the Farm Tiegerpoort 371 JR, Gauteng Province.

**1: 50 000 Topographic Map:** 2528 CD.

**EIA Consultant:** Leap

**Developer:** South African Special Forces Heritage Foundation

**Heritage Consultant:** Heritage Contracts and Archaeological Consulting CC (HCAC).

**Contact person:** Jaco van der Walt      Tel: +27 82 373 8491    E-mail [jaco.heritage@gmail.com](mailto:jaco.heritage@gmail.com).

**Date of Report:** 17 February 2017

### Findings of the Assessment:

HCAC was appointed to assess the study area in terms of Section 38 (3) of the NHRA as part of the Basic Assessment (BA) for the project. No significant Stone Age sites were recorded in the study area and no ceramics or stone walls attributed to the Iron Age were recorded. No further mitigation prior to construction is recommended in terms of the archaeological component of Section 35 for the proposed development to proceed. An independent Paleontological study was conducted by Fourie (2017) and this study determined that the impact of the development on fossil heritage is **HIGH** and further mitigation measures are required as per the specialist report (Fourie 2017).

In terms of the built environment of the area (Section 34), no standing structures older than 60 years occur within the study area. In terms of Section 36 of the Act no burial sites were recorded in the study area. However if any graves are located in future they should ideally be preserved *in-situ* or alternatively relocated according to existing legislation. No public monuments are located within or close to the study area.

Due to the subsurface nature of archaeological remains and the fact that graves can occur anywhere on the landscape, it is recommended that a chance find procedure is implemented for the project as part of the EMPr.

The study area is surrounded by residential developments (formal and informal) and no significant cultural landscapes or viewsapes were noted during the fieldwork. Based on the results of the field survey of the proposed development there are no significant archaeological risks associated with the development and HCAC is of the opinion that from a heritage point of view there is no reason why the development should not proceed if the recommendations as made in the report area adhered to and based on approval from SAHRA.

CONTENTS

<b>ABBREVIATIONS .....</b>	<b>8</b>
<b>GLOSSARY .....</b>	<b>8</b>
<b>1 BACKGROUND INFORMATION .....</b>	<b>9</b>
1.1. Terms of Reference .....	10
1.2. Archaeological Legislation and Best Practice .....	10
1.3. Description of Study Area .....	12
1.3.1 Location Data .....	12
1.3.2. Location Map .....	13
<b>2. APPROACH AND METHODOLOGY.....</b>	<b>14</b>
2.1 Phase 1 - Desktop Study .....	14
2.1.1 Literature Search .....	14
2.1.2 Information Collection .....	14
2.1.3 Consultation .....	14
2.1.4 Google Earth and Mapping Survey.....	14
2.1.5 Genealogical Society of South Africa .....	14
2.2 Phase 2 - Physical Surveying .....	15
2.3. Restrictions .....	17
<b>3. NATURE OF THE DEVELOPMENT .....</b>	<b>17</b>
<b>4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA .....</b>	<b>18</b>
4.1 Databases Consulted.....	18
4.2. Brief background to the study area .....	18
<b>5. HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES .....</b>	<b>21</b>
5.1. Field Rating of Sites .....	22
<b>6. BASELINE STUDY-DESCRIPTION OF SITES .....</b>	<b>23</b>
<b>7. CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>25</b>
7.1 Reasoned Opinion .....	27
<b>8. PROJECT TEAM .....</b>	<b>27</b>
<b>9. STATEMENT OF COMPETENCY .....</b>	<b>27</b>
<b>10. REFERENCES.....</b>	<b>28</b>

FIGURES

Figure 1. Location map ..... 13

Figure 2. Track logs of the areas surveyed indicated in black with the development footprint indicated in blue. .... 16

Figure 3. 1943 Archival Map indicating historical land use in the study area. .... 20

Figure 4: General site conditions – Bronberg Mountain range ..... 24

Figure 5. Cluster of trees in the study area. .... 24

Figure 6: Disturbed nature of study area. .... 24

Figure 7. Farm worker accommodation in study area. .... 24

## ABBREVIATIONS

AIA: Archaeological Impact Assessment
ASAPA: Association of South African Professional Archaeologists
BIA: Basic Impact Assessment
CRM: Cultural Resource Management
ECO: Environmental Control Officer
EIA: Environmental Impact Assessment*
EIA: Early Iron Age*
EIA Practitioner: Environmental Impact Assessment Practitioner
EMP: Environmental Management Plan
ESA: Early Stone Age
GPS: Global Positioning System
HIA: Heritage Impact Assessment
LIA: Late Iron Age
LSA: Late Stone Age
MEC: Member of the Executive Council
MIA: Middle Iron Age
MPRDA: Mineral and Petroleum Resources Development Act
MSA: Middle Stone Age
NEMA: National Environmental Management Act
PRHA: Provincial Heritage Resource Agency
SADC: Southern African Development Community
SAHRA: South African Heritage Resources Agency

*\*Although EIA refers to both Environmental Impact Assessment and the Early Iron Age both are internationally accepted abbreviations and must be read and interpreted in the context it is used.*

## GLOSSARY

Archaeological site (remains of human activity over 100 years old)

Early Stone Age (~ 2.6 million to 250 000 years ago)

Middle Stone Age (~ 250 000 to 40-25 000 years ago)

Later Stone Age (~ 40-25 000, to recently, 100 years ago)

The Iron Age (~ AD 400 to 1840)

Historic (~ AD 1840 to 1950)

Historic building (over 60 years old)



## 1 BACKGROUND INFORMATION

Heritage Contracts and Archaeological Consulting CC (**HCAC**) was appointed to conduct a Heritage Impact Assessment for the proposed Fort Recce Museum and Resort development as part of the Basic Assessment process.

The aim of the study is to identify cultural heritage sites, document, and assess their importance within local, provincial and national context. It serves to assess the impact of the proposed project on non-renewable heritage resources, and to submit appropriate recommendations with regard to the responsible cultural resources management measures that might be required to assist the developer in managing the discovered heritage resources in a responsible manner. It is also conducted to protect, preserve, and develop such resources within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilized before and during the survey, which includes: Phase 1, a desktop study that includes collection from various sources and consultations; Phase 2, the physical surveying of the study area on foot and by vehicle; Phase 3, reporting the outcome of the study.

General site conditions were recorded by means of photographs, GPS locations, and site descriptions. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to the SAHRA for review.

## 1.1. Terms of Reference

### Desktop study

Conduct a brief desktop study where information on the area is collected to provide a background setting of the archaeology that can be expected in the area.

### Field study

Conduct a field study to: a) systematically survey the proposed project area to locate, identify, record, photograph and describe sites of archaeological, historical or cultural interest; b) record GPS points identified as significant areas; c) determine the levels of significance of the various types of heritage resources recorded in the project area.

### Reporting

Report on the identification of anticipated and cumulative impacts the operational units of the proposed project activity may have on the identified heritage resources for all 3 phases of the project; i.e., construction, operation and decommissioning phases. Consider alternatives, should any significant sites be impacted adversely by the proposed project. Ensure that all studies and results comply with Heritage legislation and the code of ethics and guidelines of ASAPA.

To assist the developer in managing the discovered heritage resources in a responsible manner, and to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

## 1.2. Archaeological Legislation and Best Practice

Phase 1, an AIA or a HIA is a pre-requisite for development in South Africa as prescribed by SAHRA and stipulated by legislation. The overall purpose of a heritage specialist input is to:

- » Identify any heritage resources, which may be affected;
- » Assess the nature and degree of significance of such resources;
- » Establish heritage informants/constraints to guide the development process through establishing thresholds of impact significance;
- » Assess the negative and positive impact of the development on these resources;
- » Make recommendations for the appropriate heritage management of these impacts.

The AIA or HIA, as a specialist sub-section of the EIA, is required under the National Heritage Resources Act NHRA of 1999 (Act 25 of 1999), Section 23(2) (b) of the NEMA and section S. 39 (3) (b) (iii) of the MPRDA.

The AIA should be submitted, as part of the EIA, BIA or EMP, to the PHRA if established in the province or to SAHRA. SAHRA will be ultimately responsible for the professional evaluation of Phase 1 AIA reports upon which review comments will be issued. 'Best practice' requires Phase 1 AIA reports and additional development information, as per the EIA, BIA/EMP, to be submitted in duplicate to SAHRA after completion of the study. SAHRA accepts Phase 1 AIA reports authored by professional archaeologists, accredited with ASAPA or with a proven ability to do archaeological work.

Minimum accreditation requirements include an Honours degree in archaeology or related discipline and 3 years post-university CRM experience (field supervisor level).

Minimum standards for reports, site documentation and descriptions are set by ASAPA in collaboration with SAHRA. ASAPA is based in South Africa, representing professional archaeology in the SADC region. ASAPA is primarily involved in the overseeing of ethical practice and standards regarding the archaeological profession. Membership is based on proposal and secondment by other professional members.

Phase 1 AIA's are primarily concerned with the location and identification of sites situated within a proposed development area. Identified sites should be assessed according to their significance. Relevant conservation or Phase 2 mitigation recommendations should be made. Recommendations are subject to evaluation by SAHRA.

Conservation or Phase 2 mitigation recommendations, as approved by SAHRA, are to be used as guidelines in the developer's decision making process.

Phase 2 archaeological projects are primarily based on salvage/mitigation excavations preceding development destruction or impact on a site. Phase 2 excavations can only be conducted with a permit, issued by SAHRA to the appointed archaeologist. Permit conditions are prescribed by SAHRA and includes (as minimum requirements) reporting back strategies to SAHRA and deposition of excavated material at an accredited repository.

In the event of a site conservation option being preferred by the developer, a site management plan, prepared by a professional archaeologist and approved by SAHRA, will suffice as minimum requirement.

After mitigation of a site, a destruction permit must be applied for from SAHRA by the client before development may proceed.

Human remains older than 60 years are protected by the National Heritage Resources Act, with reference to Section 36. Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of SAHRA. The procedure for Consultation Regarding Burial Grounds and Graves (Section 36[5]) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in this age category, located inside a formal cemetery administrated by a local authority, require the same authorisation as set out for graves younger than 60 years, in addition to SAHRA authorisation. If the grave is not situated inside a formal cemetery, but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws, set by the cemetery authority, must be adhered to.

Human remains that are less than 60 years old are protected under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning; or in some cases, the MEC for Housing and Welfare. Authorisation for exhumation and reinternment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. To handle and transport human remains, the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

### 1.3. Description of Study Area

#### 1.3.1 Location Data

The Applicant intends to develop a Museum and Resort development on Portion 280 (Portion of Portion 26) of the Farm Tiegerpoort 371 JR (Figure 1). The farm Tiegerpoort and surrounding properties were at first commercial farms with their main focus on the production of crops and the raising of live-stock. Most of these farms were later sub-divided into small holdings which supported a wide range of businesses and activities. No specific previous farming activities are evident within the proposed site for the development. The study area is situated along the northern slopes of the Bronberg Mountain Range which is an extension of the Magalies Mountain Range. The Bronberg Mountain Range is known for its quartzite ridges and intermittent grasslands which are both evident within the study area. The vegetation is described by Mucina and Rutherford (2006) as Andesite Mountain Bushveld.



1.3.2. Location Map

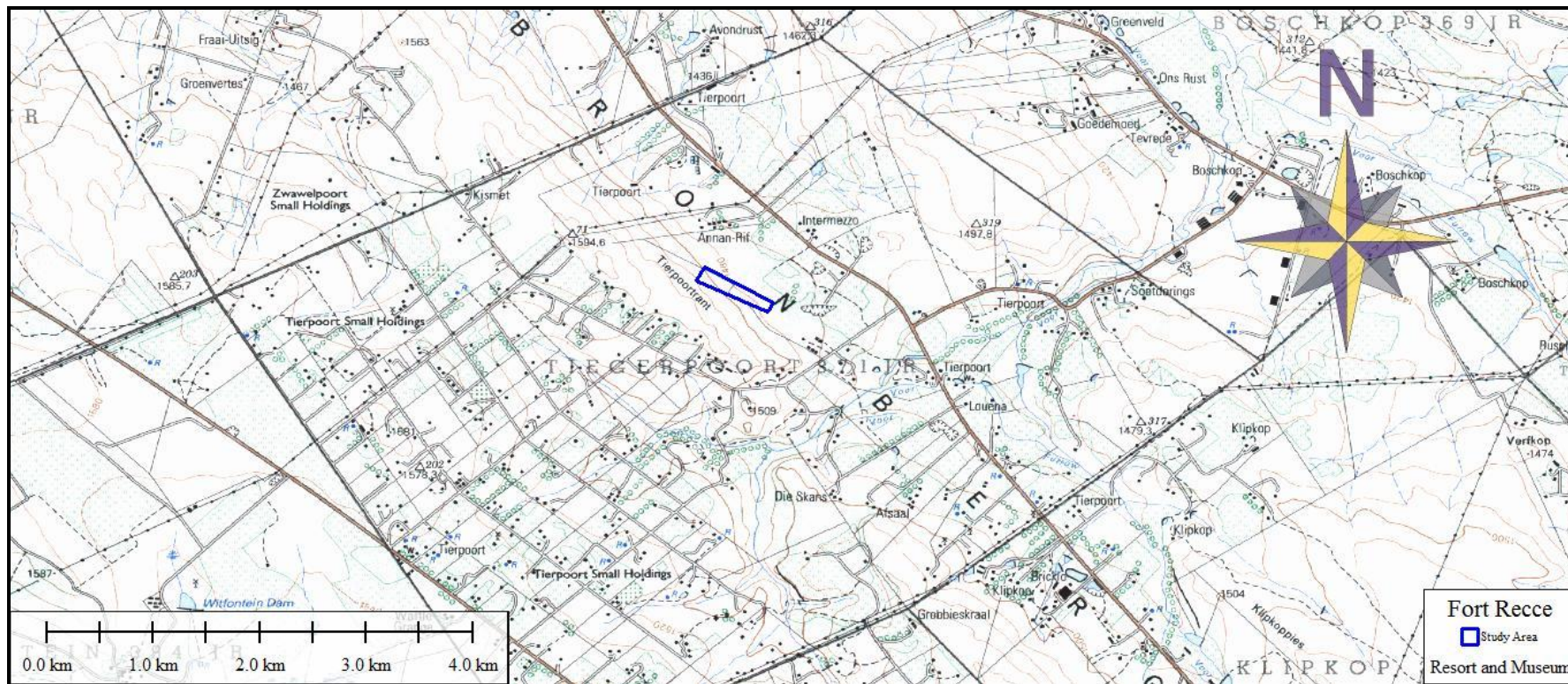


Figure 1. Location map

## 2. APPROACH AND METHODOLOGY

The aim of the study is to cover archaeological databases to compile a background of the archaeology that can be expected in the study area followed by field verification; this was accomplished by means of the following phases.

### 2.1 Phase 1 - Desktop Study

The first phase comprised desktop, scanning existing records for archaeological sites, historical sites, graves, architecture (structures older than 60 years) of the area. The following approach was followed:

#### 2.1.1 Literature Search

This was conducted by utilising data stored in the national archives and published reports relevant to the area. The aim of this is to extract data and information on the area in question.

#### 2.1.2 Information Collection

SAHRIS was consulted to collect data from previously conducted CRM projects in the region to provide a comprehensive account of the history of the study area.

#### 2.1.3 Consultation

Stakeholder engagement is a key component of any BAR process. Public consultation is a legislative requirement of the NHRA. The main purpose of the stakeholder engagement process for the proposed project is to provide an opportunity for stakeholders to raise issues of concern or comments and to express their views on the proposed project. The stakeholder engagement process that was conducted for the proposed Fort Recce development followed a collaborative approach. Through the stakeholder engagement, adequate and timely information is provided to all I&APs to ensure that they are given sufficient opportunity to voice their concerns and issues. No heritage concerns were raised during this process. Mr. Bert Sachse, the site manager, was interviewed during the survey and he said that he was not aware of any heritage sites (such as graves) within the proposed study area.

#### 2.1.4 Google Earth and Mapping Survey

Google Earth and 1:50 000 maps of the area were utilised to identify possible places where sites of heritage significance might be located.

#### 2.1.5 Genealogical Society of South Africa

The database of the Genealogical Society was consulted to collect data on any known graves in the area.

## 2.2 Phase 2 - Physical Surveying

Due to the nature of cultural remains, the majority of which occurs below surface, a field survey of the proposed development was conducted. The study area was surveyed by means of vehicle and extensive pedestrian surveys on the 23<sup>rd</sup> January 2017.

The survey was aimed at covering the proposed development footprint, focussing on specific areas on the landscape that would be more likely to contain archaeological and/or other heritage remains like drainage lines, rocky outcrops as well as slight elevations in the natural topography. These areas were searched more intensively, but many other areas were walked in order to confirm expectations in those areas. Track logs of the areas covered were taken (Figure 2).





Figure 2. Track logs of the areas surveyed indicated in black with the development footprint indicated in blue.



### **2.3. Restrictions**

Due to the subsurface nature of archaeological artefacts, the possibility exists that some features or artefacts may not have been discovered/ recorded during the survey and the possible occurrence of unmarked graves and other cultural material cannot be excluded. This report only deals with the footprint area of the proposed development as indicated in the location map. It should be noted that access in the study area was restricted due to safety concerns. It is possible that new information, which could change the recommendations, could come to light through the following:

- Exposure of archaeological and historical sites and objects that are hidden or are buried during site clearance activities;
- Exposure of hidden archaeological and historical sites and objects (obscured by tall grass etc.).

Although HCAC surveyed the area as thoroughly as possible, it is incumbent upon the developer to stop operations and inform the relevant heritage agency should further cultural remains, such as graves, stone tool scatters, artefacts, bones or fossils, be exposed during the process of development.

### **3. NATURE OF THE DEVELOPMENT**

The Applicant intends to develop a Fort Recce Museum and Resort development on Portion 280 (Portion of Portion 26) of the Farm Tiegerpoort 371 JR including associated infrastructure such as access roads, electrical and sanitation infrastructure and designated parking areas. The development comprises 8,5916 hectares

The proposed development will be used as a heritage site consisting of the falling subordinate uses:

- Museum
- Chapel
- Educational purposes
- Place of refreshment
- Conference facilities
- A curio shop
- A functions hall
- A club house
- A memorial amphitheatre
- Offices
- A restaurant-cum-coffee shop
- Retail
- Accommodation
- Heritage related activities
- Public recreation
- Entertainment

## 4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

### 4.1 Databases Consulted

The following CRM reports were consulted for this study:

Author	Year	Project name	Findings
Van Schalkwyk, J	2003	Heritage Resources In The Western Section Of The Kungwini Local Municipality, Gauteng Province	Stone age occurrences as well as Iron Age sites.
Birkholtz, P.	2009	AIA Ext 9 Kameeldrift, Kameeldrift 298 JR. Gauteng Province.	Iron age Sites and grave sites
Coetzee, F.	2008	Cultural Heritage Survey of the Proposed Residential Development on Portions 281, 282 and 283 of the Farm Zwavelpoort 373JR, Tswane Municipality	Structures older than 60 years.
Roodt, F.	2005	Phase 1 Heritage Impact assessment on Portion 182 and 209 of the farm Zwavelpoort 373 JR.	Historical structures and a grave

Google Earth and 1:50 000 maps of the area were utilised to identify possible places where archaeological and historical sites might be located indicating that along foothills and dolerite dykes LIA sites can be expected

### ***Genealogical Society and Google Earth Monuments***

Neither the Genealogical Society nor the monuments database at Google Earth (Google Earth also include some archaeological sites and historical battlefields) have any recorded sites in the study area.

### 4.2. Brief background to the study area

J. S. Bergh's historical atlas of the four northern provinces of South Africa is a very useful source for the writing of local and regional histories. In the greater Pretoria area an Early Stone Age Terrain, known as Wonderboompoort has been identified. This area was also important to Iron Age communities, as it was located within an area where many Late Iron Age terrains were found. (Bergh 1999: 4, 7). Another well-known Iron Age site is the early Iron Age Site of Derdepoot where a small collection of ceramics was uncovered dating back to the 4<sup>th</sup> to 7<sup>th</sup> century AD (Nienaber et al 1997). Late Iron Age sites are also associated with Southern Ndebele sites and occur in the surrounding areas. These sites are found in the area between Wallmannsthal and Roodeplaat Dam and also along the Pienaars River to the south of the N4 Highway (Birkhotz 2009).

According to Birkholtz (2009) the Manala Ndebele moved from Ezotshaneni to a place known as Embilaneni (place of dassies) in 1717. The new settlement spread over the Bronberg mountains east of Pretoria and included an area that can be defined by a number of present-day farms including Tiegerpoort 371-JR. The Embilaneni settlement was occupied over a period of 30 years between 1717 and 1747.

The Difaqane (Sotho), or Mfekane (“the crushing” in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820’s until the late 1830’s. It came about in response to heightened competition for land and trade, and caused population groups like gun-carrying Griquas and Shaka’s Zulus to attack other tribes. At the beginning of the nineteenth century, the predominant black tribe in the area north of Pretoria was the Manala-Ndebele. The Kgatla were also present to the north of where Pretoria is located today. It seems that, in 1832, Shaka’s Zulu tribe passed by the south of Pretoria from the southeast in a westerly direction. This was in order to attack Mzilikazi’s Ndebele. This group also went on raids in various other areas in order to expand their area of influence. (Bergh 1999: 11, 14, 109-119). During the time of the Difaqane, a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers had gone on expeditions to the northern areas in South Africa, some as early as the 1720’s.

The Scottish travellers Robert Scoon and William McLuckie passed through, or close by the area where the study area was located in 1829. In the same year, Robert Moffat and James Archbell also travelled through this area. In the mid 1830’s, several travellers made their way from the Pretoria area inland. These included the travellers Robert Scoon, Dr Andrew Smith and Captain William Cornwallis Harris. (Bergh 1999: 12-13)

It was however only by the late 1820’s that a mass-movement of Dutch speaking people in the Cape Colony started advancing into the northern areas. This was due to feelings of mounting dissatisfaction caused by economical and other circumstances in the Cape. This movement later became known as the Great Trek. This migration resulted in a massive increase in the extent of that proportion of modern South Africa dominated by people of European descent. (Ross 2002: 39)

Pretoria was founded in 1855 and became the capital of South Africa, then known as the Zuid-Afrikaanse Republiek (ZAR), in 1860. By 1900, Pretoria was a thriving Transvaal town, with shaded streets, well-kept gardens and a lively economy. In mid-1899, the Pretoria district had a white population of 21 000 men and 19 000 women, while the black, coloured and Indian population totalled 38 618. (Theron 1984: 1-3)

### **Battles close to the study area**

The Anglo-Boer War was the greatest conflict that had taken place in South Africa up to date, and also affected the Pretoria district. The white concentration camp closest to the study area was situated a small distance to the northeast of Pretoria. A white and a black concentration camp are located to the southwest of Pretoria, in the Irene area.

The Boer side generally lost ground against the British in this area as the war continued, and in June 1900 the Boer military leaders decided that Pretoria would have to be surrendered to the British forces. This decision was inevitable if the war was to be continued. The town was very susceptible to a siege, and its defence would have gravely endangered the lives of its inhabitants. More importantly, the defence of the town would involve such a great number of Boers that the capture of these men would have surely meant the end of the war. Pretoria was therefore occupied by British forces on Tuesday 5 June 1900. (Bergh 1999: 54, 250; Theron 1984: 273-279).

The battle of Diamond hill took place to the east of the study area a couple of days later. The battle is also referred to as the battle of Donkerhoek. Lord Roberts and his army occupied Pretoria and expected the Boers to surrender, the Boers however moved their capital to Machadodorp and went to great lengths to protect the railway line to prevent the British from moving east toward Machadodorp. General Louis Botha strategically positioned 3500 men in the hills in areas where he expected the British would try and pass. The British advanced toward Botha’s forces with 5000 mounted men and 8000 infantry including about 70 guns. The British stated their aims to be to clear the Boers from the Pretoria area. The British attacked both ends of the Boer line on 11 June 1900. Their infantry and artillery advanced toward the centre of the

position. The next day the British launched a strong attack on the Boers and improved their position which forced the Boers to flee. The Boers lost 30 men (11 were killed) and the British suffered 180 casualties. The Boers left with a sense of victory and the determination to continue to fight. The war lasted 2 more years and guerrilla warfare was characteristic of the war. Another battle took place at Silkaatsnek, to the northwest of Pretoria, some distance from the project area. Here, General De la Rey's Boer troops defeated the British army on 11 July 1900.

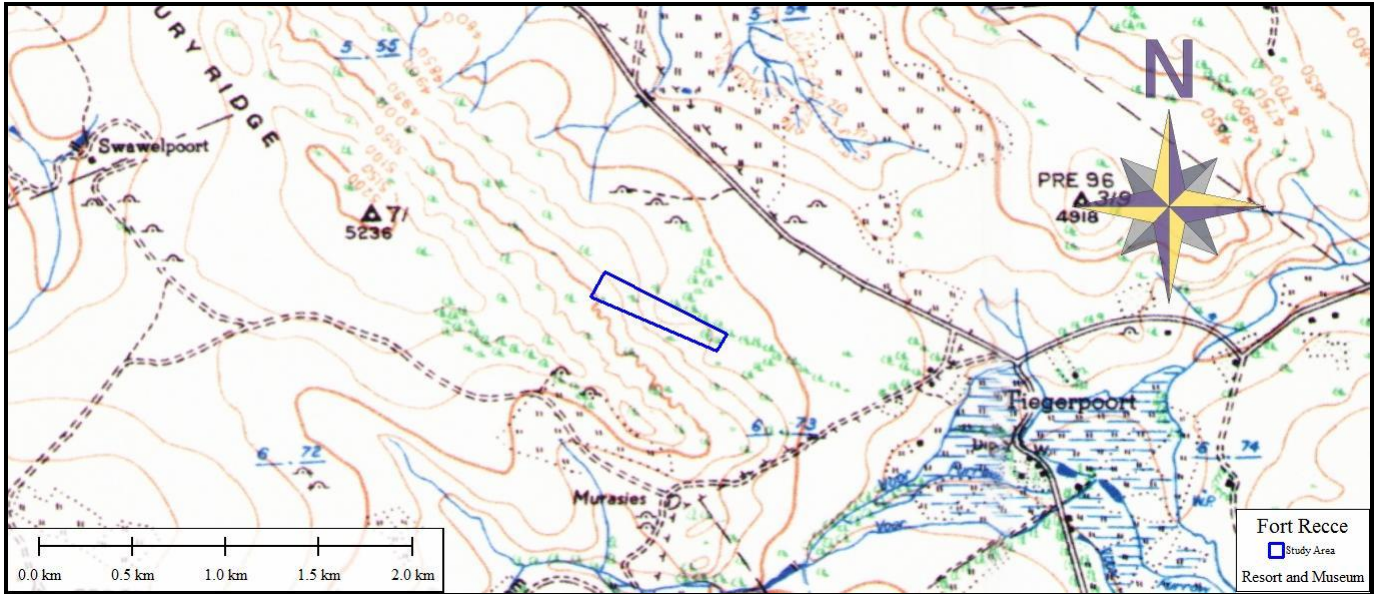


Figure 3. 1943 Archival Map indicating historical land use in the study area.

## 5. HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES

The presence and distribution of heritage resources define a 'heritage landscape'. In this landscape, every site is relevant. In addition, because heritage resources are non-renewable, heritage surveys need to investigate an entire project area, or a representative sample, depending on the nature of the project. In the case of the proposed project the local extent of its impact necessitates a representative sample and only the footprint of the areas demarcated for development were surveyed. In all initial investigations, however, the specialists are responsible only for the identification of resources visible on the surface.

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The following criteria were used to establish site significance:

- » The unique nature of a site;
- » The integrity of the archaeological/cultural heritage deposits;
- » The wider historic, archaeological and geographic context of the site;
- » The location of the site in relation to other similar sites or features;
- » The depth of the archaeological deposit (when it can be determined/is known);
- » The preservation condition of the sites;
- » Potential to answer present research questions.

Furthermore, The National Heritage Resources Act (Act No 25 of 1999, Sec 3) distinguishes nine criteria for places and objects to qualify as 'part of the national estate' if they have cultural significance or other special value. These criteria are:

- » Its importance in/to the community, or pattern of South Africa's history;
- » Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- » Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- » Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- » Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- » Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- » Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- » Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- » Sites of significance relating to the history of slavery in South Africa.

### 5.1. Field Rating of Sites

Site significance classification standards prescribed by SAHRA (2006), and acknowledged by ASAPA for the SADC region, were used for the purpose of this report. The recommendations for each site should be read in conjunction with section 7 of this report.

<b>FIELD RATING</b>	<b>GRADE</b>	<b>SIGNIFICANCE</b>	<b>RECOMMENDED MITIGATION</b>
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP.A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

## 6. BASELINE STUDY-DESCRIPTION OF SITES

It is important to note that the entire farm was not surveyed but only the development footprint. The farm Tiegerpoort and surrounding properties were at first commercial farms with their main focus on the production of crops and the raising of live-stock. Most of these farms were later sub-divided into small holdings which supported a wide range of businesses and activities. No specific previous farming activities are evident within the proposed site for the development (Figure 4 -6).

The study area measures approximately 9ha in size and is situated along the northern slopes of the Bronberg Mountain Range which is an extension of the Magalies Mountain Range. The Bronberg Mountain Range is known for its quartzite ridges and intermittent grasslands which are both evident within the study area. The entire proposed development area is fenced off with a 9 feet high multi-strand fence and an entrance gate is situated on the northern side. Some dumped material, which includes building rubble, gravel and soil, is situated near the entrance gate. A cluster of trees is situated within the north-eastern corner of the property. Farm worker accommodation, ablutions and a large container which serves as a store room is situated within this cluster of trees (Figure 7). A small cemetery occurs **outside** of the development area on the neighbouring property to the south and close to the south-eastern corner of the study area. No graves are situated within the study area and all of the graves are situated on the other side of the fence.

The slopes of the Bronberg Mountain Range are situated to the south and gentle sloping grasslands are situated to the north of the property. The eastern half of the property is mostly flat with soft sandy soils. This part is also overgrown with grass. The western part of the property forms part of the bottom slopes of the Bronberg Mountain Range. This part is rocky and has some interesting quartzite rock formations. A small non-perennial stream crosses the central part of the property from the higher slopes to the south, down to the northern low-laying areas. The previous owner established a small dam within this stream to create a more permanent water feature. This water is pumped up to a water tank situated in the south-western corner of the property which is also the highest point of the property. A track was cleared from rocks and boulders to reach this water tank by vehicle.

An independent Paleontological Assessment was conducted for this project (Fourie 2017). Kindly refer to the full report by Fourie (2017).





Figure 4: General site conditions – Bronberg Mountain range



Figure 5. Cluster of trees in the study area.



Figure 6: Disturbed nature of study area.

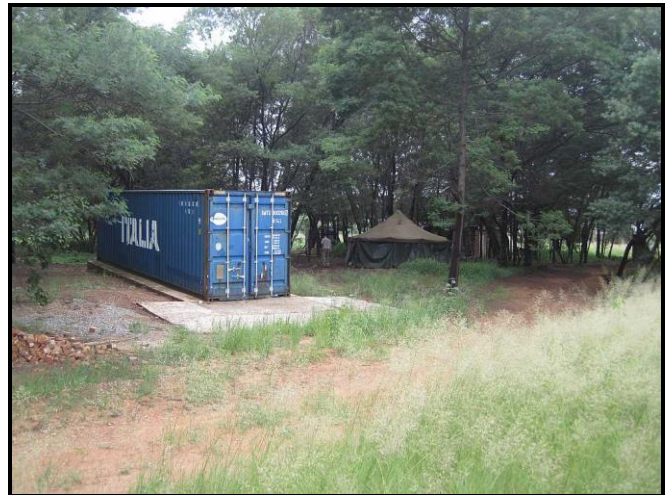


Figure 7. Farm worker accommodation in study area.



## 7. CONCLUSIONS AND RECOMMENDATIONS

HCAC was appointed to assess the study area in terms of Section 38 (3) of the NHRA as part of the Basic Assessment (BA) for the project. No significant Stone Age sites were recorded in the study area and no ceramics or stone walls attributed to the Iron Age were recorded. No further mitigation prior to construction is recommended in terms of the archaeological component of Section 35 for the proposed development to proceed. An independent Paleontological study was conducted by Fourie (2017) and this study determined that the impact of the development on fossil heritage is **HIGH** and further mitigation measures are required as per the specialist report (Fourie 2017).

In terms of the built environment of the area (Section 34), no standing structures older than 60 years occur within the study area. In terms of Section 36 of the Act no burial sites were recorded in the study area. However if any graves are located in future they should ideally be preserved *in-situ* or alternatively relocated according to existing legislation. No public monuments are located within or close to the study area.

Due to the subsurface nature of archaeological remains and the fact that graves can occur anywhere on the landscape, it is recommended that a chance find procedure is implemented for the project as part of the EMPr.

The study area is surrounded by residential developments (formal and informal) and no significant cultural landscapes or viewsapes were noted during the fieldwork. Based on the results of the field survey of the proposed development there are no significant archaeological risks associated with the development and HCAC is of the opinion that from a heritage point of view there is no reason why the development should not proceed if the recommendations as made in the report area adhered to and based on approval from SAHRA.

### Chance find procedure

This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. The aim of this procedure is to establish monitoring and reporting procedures to ensure compliance with this policy and its associated procedures. Construction crews must be properly inducted to ensure they are fully aware of the procedures regarding chance finds as discussed below.

- If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area.
- The senior on-site Manager will inform the ECO of the chance find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the finds who will notify the SAHRA.

In Line with the NHRA Act 25 of 1999 Section 38.3 this report provided the heritage authority with the following:

NHRA Section 38.3 Requirement	Application to this study
Identification and Mapping of heritage resources	No heritage resources occur in the study area
Assessment of significance of identified heritage resources	No heritage resources occur in the study area
Assessment of the impact of the development on heritage resources	The proposed development of the Fort Recce Museum and resort will not have a significant impact on heritage resources.
Evaluation of the impact of the development on heritage resources relative to social and economic benefits of the development	Due to the lack of heritage resources in the development footprint the social and economic benefits of the project outweigh the impact of the project on the heritage resources of the larger area.
Results of consultation with interested and affected parties regarding the impact of the development on heritage resources	No heritage concerns were raised
If heritage resources will be adversely affected by the proposed development, the consideration of alternatives	No heritage resources will be affected and no alternatives were considered.
Plans for mitigation of any adverse effects during and after the completion of the proposed development	Implementation of a chance find procedure.

### 7.1 Reasoned Opinion

From a heritage perspective the proposed project is acceptable from a heritage point of view. If the above recommendations are adhered to and based on approval from SAHRA, HCAC is of the opinion that the development can continue as the development will not impact negatively on the heritage record of the area. If during the pre-construction phase or during construction, any archaeological finds are made (e.g. graves, stone tools, and skeletal material), the operations must be stopped, and the archaeologist must be contacted for an assessment of the finds. Due to the subsurface nature of archaeological material and graves the possibility of the occurrence of unmarked or informal graves and subsurface finds cannot be excluded, but can be easily mitigated by preserving the sites *in-situ* within the development.

### 8. PROJECT TEAM

Jaco van der Walt, Project Manager and archaeologist

Marko Hutten, Archaeologist

### 9. STATEMENT OF COMPETENCY

I (Jaco van der Walt) am a member of ASAPA (no 159), and accredited in the following fields of the CRM Section of the association: Iron Age Archaeology, Colonial Period Archaeology, Stone Age Archaeology and Grave Relocation. This accreditation is also acknowledged by SAHRA and AMAFA.

I have been involved in research and contract work in South Africa, Botswana, Zimbabwe, Mozambique, Tanzania and the DRC; having conducted more than 300 AIA's since 2000.

## 10. REFERENCES

- Archaeological database, University of the Witwatersrand. Referenced 2009
- Bergh, J.S. (ed.) 1998. Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. (J.L. van Schaik, Pretoria).
- Fourie, H. 2017. Proposed development of the Fort Recce Museum and Resort with related infrastructure. City of Tshwane Metropolitan Municipality, Gauteng Province. Farm: Portion 280 (Portion of Portion 26) of the Farm Tiegerpoort 371 JR. Palaeontological Impact Assessment: Desktop study
- Huffman, T.N. 2005. Archaeological Impact assessment for the farm Zwartkoppies. Unpublished report.
- Huffman, T.N. 2007. Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. University of KwaZulu-Natal Press, Scottsville.
- Kusel, U. 2005. A Cultural Heritage Resources Impact assessment of the farm Zwartkoppies, Pretoria East. Unpublished report.
- Mucina, L. & Rutherford, M.C. 2006. The vegetation map of South Africa, Lesotho and Swaziland. SANBI, Pretoria.
- National Heritage Resources Act NHRA of 1999 (Act 25 of 1999)
- Naude, M. 2013. Recording of Stone Walling on the farm Zwartkoppies, Pretoria: Mitigation of proposed Rand Water Pipeline Development.
- Nienaber, W.C., Prinsloo, H.P. & Pistorius, I.C.C. 1997. Derdepoort: 'n Vroeë Ystertydperkterrein noord van die Magaliesberg. Suid-Afrikaanse Tydskrif vir Etnologie 20(1).
- Ross, R. 2002. A concise history of South Africa. Cambridge: Cambridge University Press.
- SAHRA Report Mapping Project Version 1.0, 2009
- Taylor, M.O.V. 1979. Late Iron Age settlements in the Northern Edge of the Vredefort Dome. MA Dissertation. University of the Witwatersrand, Johannesburg.
- Theron, B. M. 1984. The social history of Pretoria during the first phase of the Anglo-Boer War: October 1899 - June 1900. MA Thesis, Pretoria: University of South Africa
- Van der Walt, J. 2007. AIA for Residential development on portions of the farm Derdepoort. Unpublished report
- Van der Walt, J. 2008. Mamelodi Hatherley Power Line On The Farm Hatherley 311 Jr, Mamelodi, Gauteng Province. Unpublished report
- Van der Walt, J. 2015. Archaeological Impact Assessment For the proposed development of Erf 78 in Waltloo. Unpublished Report.
- Van Schalkwyk, J. & De Jong, R. 1998. A Survey Of Cultural Resources In The Nelmapius Extension 4 Urban Development, East Of Pretoria, Gauteng Province. Unpublished report
- Van Schalkwyk, J. 2011. Heritage Impact Assessment For The Proposed Upgrade Of Road R104, Silverton To Bronkhorstspuit, Gauteng Province. Unpublished report.