
**Archaeological Impact Assessment for the Village Ext 10 Residential Development. Roodekrans, Johannesburg,
Gauteng Province**

Prepared For

Prism EMS

By



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EXECUTIVE SUMMARY

Site name and location: Proposed Residential Development on the remaining extent of Portion 30 of the farm Roodekrans 183 I.Q. Roodekrans, Johannesburg, Gauteng Province to be known as The Village Ext. 10. The project is situated directly north of Hendrik Potgieter and east of Cradlestone Mall. It falls within Ward 83 of the City of Joburg on Portion 30 (a portion of portion 6) of the farm Roodekrans 183 I.Q.

1:50 000 Topographic Map: 2627 BB.

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Date of Report: 8 October 2015

Findings of the Assessment:

During a field survey of the study area the development site was assessed in terms of the archaeological component of Section 35 of the NHRA and no archaeological features or material of significance were recorded. Several other studies in the area recorded the remains of historical structures (generally indicated as of low significance). Apart from historical structures other studies in the area recorded no sites of heritage significance (Van Schalkwyk 2007, Van der Walt 2007).

As there are no archaeological sites in the study area no further action is necessary for the archaeological component during the pre-construction phase. If during construction, any archaeological finds are made (e.g. stone tools, skeletal material), the operations must be stopped, and the archaeologist must be contacted for an assessment of the finds. It is therefore recommended that chance find procedures are put in place as described in Section 7.

General

The possible occurrence of unmarked or informal graves and subsurface finds cannot be excluded. If during construction any possible finds such as stone tool scatters, artefacts, graves or bone and fossil remains are made, the operations must be stopped and a qualified archaeologist must be contacted for an assessment of the find.

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

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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

1. INTRODUCTION

Heritage Contracts and Archaeological Consulting CC was contracted by Prims EMS to conduct a Heritage Impact Assessment for the proposed residential development referred to as The Village Ext 10. The study area measures approximately 8.56 ha in extent. The Phase 1 report forms part of the HIA for the proposed project.

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 area on foot and by vehicle; Phase 3, reporting the outcome of the study.

During the survey no sites of archaeological significance were identified. General site conditions and features on sites 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

Conducting 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 a legal body, 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 AIAs 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 reinterment 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 project is situated on the remaining extent of Portion 30 of the farm Roodekrans 183 I.Q. Roodekrans, Johannesburg, Gauteng Province. The project is situated directly north of Hendrik Potgieter and east of Cradlestone Mall. It falls within Ward 83 of the City of Johannesburg on Portion 30 (a portion of portion 6) of the farm Roodekrans 183 IQ at 26° 03' 35.6545" S, 27° 50' 39.5700" E (Figure 1).

1.3.2. Location Map

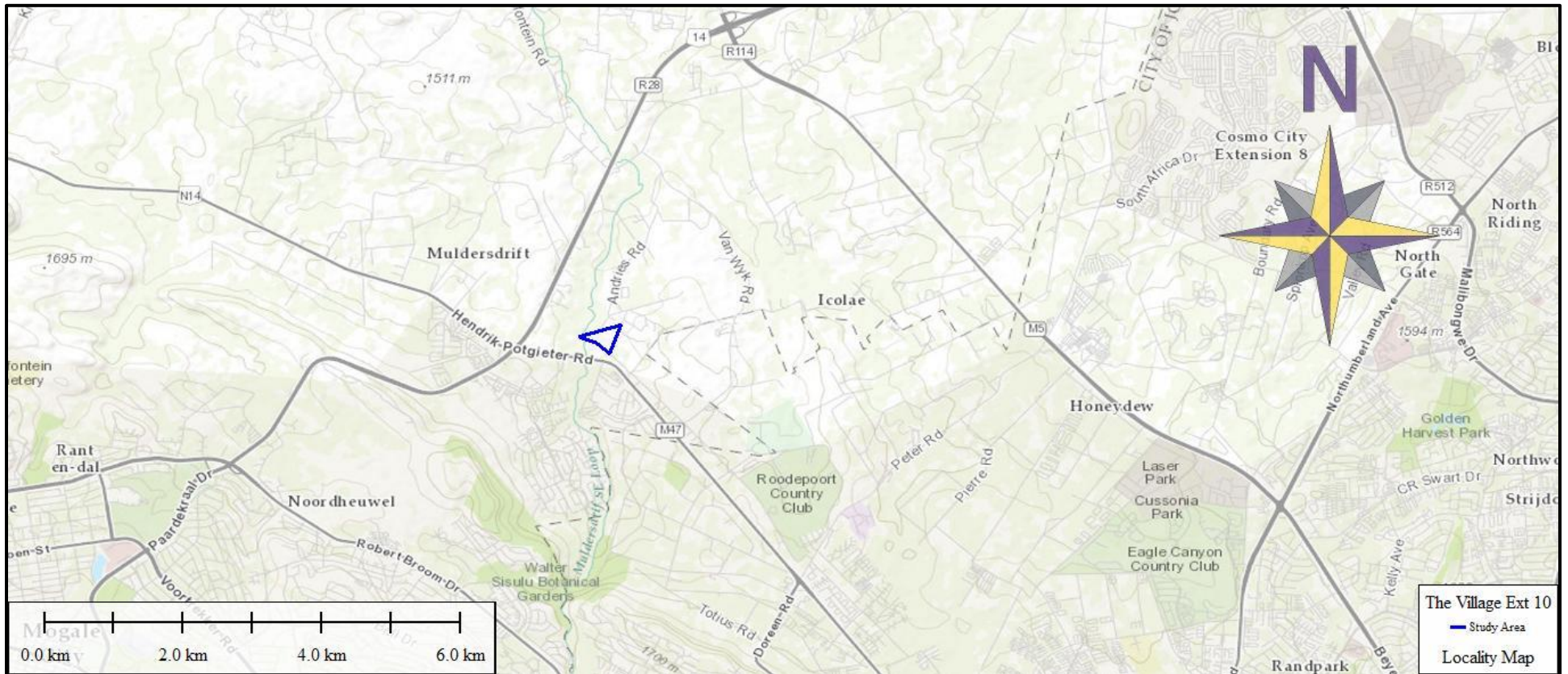


Figure 1: Location map showing the study area in blue.

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 a desktop study scanning existing records for archaeological sites, historical sites, graves, architecture (structures older than 60 years) of the area.

2.1.1 Literature Search

Utilising data for information gathering stored in the archaeological database at Wits and previous CRM reports done in the area. The aim of this is to extract data and information on the area in question.

2.1.2 Information Collection

The South African Heritage Resources Information System (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

An independent public consultation process is facilitated by Prism Environmental Services.

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 study area was conducted. The study area was surveyed on foot by a professional archaeologist on the 8th of September 2015.

2.3. Restrictions

Due to the fact that most cultural remains may occur below surface, the possibility exists that some features or artefacts may not have been discovered/ recorded during the survey. Low ground visibility of parts of the study area is due to development and high grass cover and safety concerns limited the coverage of the survey, and the possible occurrence of unmarked graves and other cultural material cannot be excluded. Only the footprint area of the development was surveyed as indicated in the location map. 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 stone tool scatters, artefacts, bones or fossils, be exposed during the process of development.

3. NATURE OF THE DEVELOPMENT

The proposed development will comprise 2 erven zoned " residential 3" at a density of 62 dwelling units per hectare, 2 Erven zoned "Business 2" including commercial uses and industries (excluding noxious industries), 1 erf zoned "Private Open Land" and a road.

4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

4.1 Databases Consulted

Wits Archaeological Data Bases

32 Previously recorded sites are on record for the 2627 BB 1: 50 000 sheet at the Wits database. These sites consist of Stone Age (ESA & LSA), Late Iron Age, Anglo Boer War remains and Historic mining remains. None of these sites are located within the project area but provide a background of to the sites that can be expected.

SAHRA Report Mapping Project

CRM reports in the area include studies by van der Walt (2007 and 2008) to the west and south west of the study area who recorded no archaeological sites; the 2008 study recorded the remains of a low significance historical structure. Fourie (2008) conducted a study directly north of the current study area and also found no archaeological sites, however a small cemetery was recorded during this study. Huffman (2007) conducted a survey directly west of the current study area and recorded a low significance Middle Stone Age site and some historical structures. A study by Van Schalkwyk (2007) further to the west recorded some historical features.

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 Background Information Available on the Study Area

Since the mid 1800's up until the present, the area where the study area is located had been classified into various different districts. Since 1857, it would have formed part of the Pretoria district (Bergh 1999: 17). By 1894, Roodepoort was located in the Krugersdorp district. (Bergh 1999: 20) This remained the case up until 1977, when the area of study fell into the Witwatersrand District. (Bergh 1999: 25) By 1977 Roodepoort and surrounds also fell under the jurisdiction of the smaller Roodepoort magisterial area. This remained the case up until 1994 (Bergh 1999: 25-27).

A 1943 map of the current study area indicates no features in the study area apart from a dirt road (Figure 2).

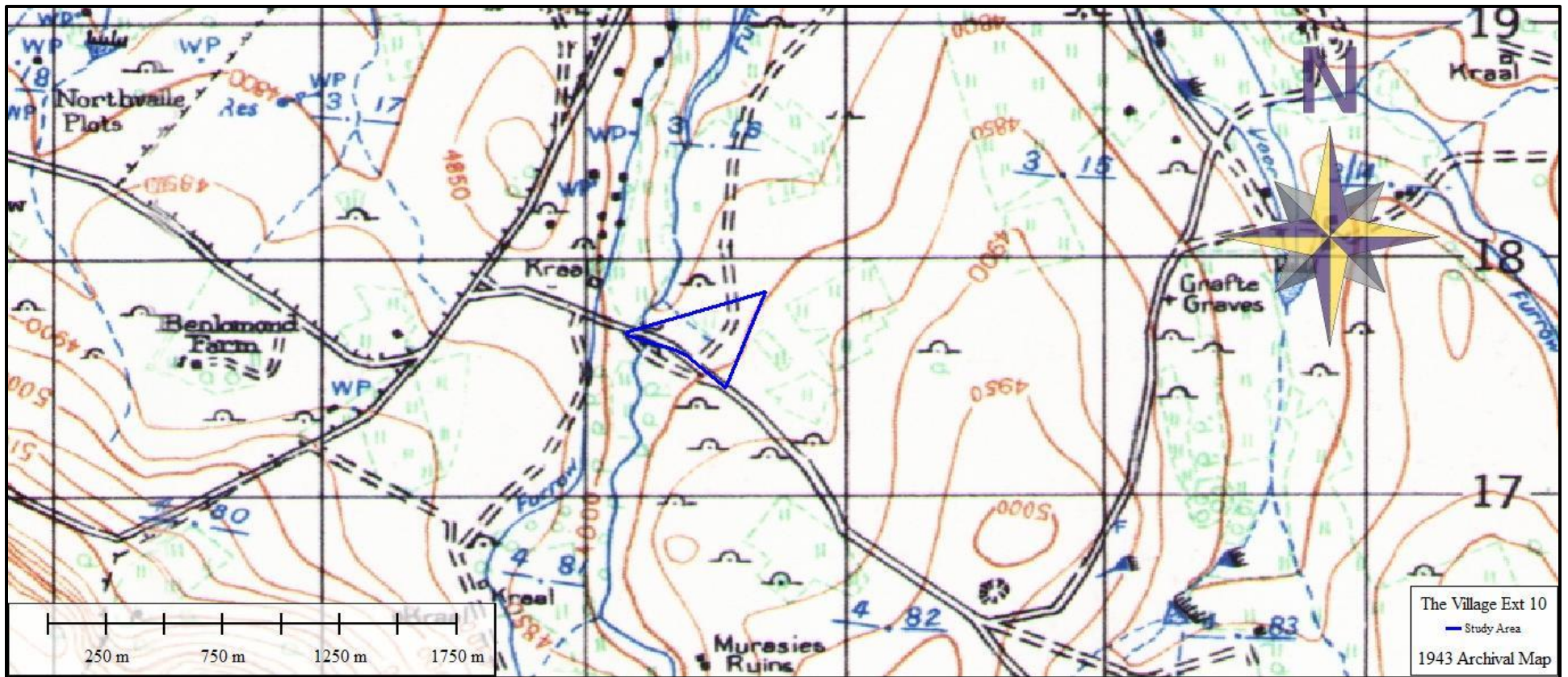


Figure 2: Extract of the 2627 BB sheet that was drawn in 1943. Apart from a dirt road no other features are indicated on the property at the time.

4.3.4. A Brief History of Human Settlement and Black and White Interaction in the Roodepoort 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 history. Interestingly, the study is located not too far from the vicinity of the Melville Koppies, which is a Middle Stone-Age site. (Bergh 1999: 4) This area was also important to Iron Age communities, since these people had smelted and worked iron ore at the Melville Koppies site since the year 1060, by approximation. (Bergh 1999: 7, 87)

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. (Bergh 1999: 10) 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. (Bergh 1999: 14; 116-119) It seems that, in 1827, Mzilikazi's Ndebele started moving through the area where Johannesburg is located today. This group went on raids to various other areas in order to expand their area of influence. (Bergh 1999: 11)

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 already as early as the 1720's. One Bain travelled through, or close by the area where the study area was located in 1831. One Harris also travelled through this area in 1836. (Bergh 1999: 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) By 1939 to 1940, farm boundaries were drawn up in an area that includes the present-day Johannesburg and Krugersdorp (Bergh 1999: 15).

The study area is located in close proximity to the towns of Roodepoort and Krugersdorp and therefore a short discussion on the origins of these towns are applicable.

Roodepoort is a residential area which gets its name from the red soil that characterise the area. Roodepoort was established as a mine camp during the pioneering days of gold mining and dates back to 1884, when Fred Struben discovered the first payable gold in the area at what he called the Confidence Reef, a large rocky outcrop in the centre of Roodepoort. After the Great Trek of 1834-1840, some of the farmers who had left the Cape Colony settled in the interior of the country and the first farms in the vicinity of Roodepoort/Krugersdorp were already measured out in 1839/40. By the 1880's the area was settled by scattered Boer farmers on nine farms. This means that it is one of the first areas where white farmers settled. Four of the farms - Roodepoort, Vogelstruisfontein, Paardekraal and Wilgespruit were soon declared public diggings. The farm Paardekraal is also well known as the place where the Transvaal Boers placed a heap of stones in what is today known as the Paardekraal Monument. This was an act of unity between the Boers to fight for their freedom against Great Britain who annexed the Transvaal in April 1877.

The prospecting rights on the farm Roodepoort were secured by Jan Bantjies and the next year, gold was discovered. The farm was opened for public diggings. The diggers needed a place to pitch their tents and so the farm Roodepoort opened up its land and a shantytown sprang up. In 1857 the area formed part of the district of Pretoria as few other towns were established however four mining towns, Roodepoort, Florida, Hamberg and Maraisburg, were proclaimed between 1886 and 1888. In 1886 the main reef at Langlaagte in Johannesburg was discovered. The gold at Confidence Reef, mostly surface gold in quartz rock, soon ran out, but by then a settled community was established in Roodepoort. In 1963 the Roodepoort-Maraisburg municipality was changed to Roodepoort and city status was granted in 1977 (at which time Maraisburg was dropped from the name).

The area has a rich mining history with several large mining companies like the Klein Paardekraal Estate Gold Mining Co. Ltd, Main Reef Gold Mining Co. Ltd. and Consolidated Main Reef Mines Estate Ltd who obtained property in the area from the late 19th century. The mines used to have their own hospitals and cemeteries, especially relating to the so called native workers.

In 1934 permission was granted to Crown Mines Ltd. to establish a 'native burial ground' on the farm Vierfontein (and in 1942 permission was granted for the establishment of native cemeteries at Paardekraal to name a few examples). An unmarked cemetery associated with mine workers was exposed during development on the farm Paardekraal that stopped development in that area. During the Second World War some of the mine property was converted to be used by the Union Defence Force that included the Crown Mines hospital. It is therefore even possible that some graves in these cemeteries may belong to people who died during the war, although most probably not in active service

The Roodepoort area has several monuments. One of these is monument that commemorates the Jameson Raid of 1895. The old municipal offices in Berlandina Street, a plaster and stone building that is now used as the Roodepoort branch library was declared a national monument in 1985. Another national monument is the old Roodepoort Town School in Rex Street, on the site of the original building erected in 1894 to name but a few.

Krugersdorp was proclaimed a town in 1887 and owes its origin to two important events in the history of South Africa, namely The Transvaal War of independence (1881) and the discovery of the Witwatersrand Goldfields (1886). These two occurrences with their far-reaching political and economic consequences, were mainly instrumental in causing the establishment of two townships, originally apart, but subsequently united under the name of Krugersdorp. The one township became the business centre of the West Rand Goldfields, while the other sprang into existence by reason of the position and significance of the Paardekraal Monument.

Gold, manganese, iron, asbestos and lime are all mined in and around Krugersdorp and the area is characterised by a long mining history, which began when gold was discovered on the farm Paardekraal. Recently Krugersdorp Local Council was re-named after Chief Mogale, the young heir to the Po Chiefdom of the Batswana. The Po tribe, one of the original tribes, occupied the territory now known as Mogale City. They occupied an area that stretched from the Magaliesberg in the west to the present day Northcliff Ridge in the east, to the Vaal River in the southwest and Hartebeespoort Dam in the northwest.

Toward the end of the 1820s, the stability of the area was disrupted by the invasion of Mzilikazi ka Mashobane. Mzilikazi warriors easily overwhelmed the Po, killed their chief and took the young heir, Mogale wa Mogale, captive. Around 1830 the Voortrekkers, dissatisfied with life under British administration in the Cape Colony, began to migrate from the Cape. Mzilikazi was driven out of the area by the Voortrekkers under Paul Kruger, who named the area after himself.

The area has several significant historical sites. One of the most attractive buildings is the civic centre. The Earl of Selbourne, High Commissioner of the Transvaal and Orange Free State, unveiled the foundation stone of the original building in 1907. The JG Strijdom arch bust, designed by JH Labuschagne, was unveiled on 16 December 1966 by Susan Strijdom. It stands on gold-bearing rock. The arch was designed by T Pitout. Another interesting feature is the first stone of the cenotaph that was laid on 20 May 1922. It was unveiled by Sir Abe Bailey on 15 July 1922. The names of those who died in action during the World Wars were added in 1975.

More than 800 women and children were buried in the Concentration Camp Cemetery during the Boer War. The Memorial Avenue, which runs from Paardekraal to the hospital, commemorates those who died during the First World War. Several monuments are found in the area and include amongst others the Old Station Building, Voortrekkerpad Monument, Town Hall, Old Magistrate's Court Building, Paardekraal Monument, JG Strijdom Bust, Paul Kruger Statue, The Blockhouse, and The Concentration Camp.

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 residential development 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.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
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 footprint of the proposed development area as indicated in Figure 1 and 3. The topography of the study area slopes from east to west with no geographical features like drainage systems, shelters or rocky outcrops within the study area. A Small river, the "Muldersdrift se loop", flows in a north to south direction **outside** the western boundary of the study area with three man made dams in the study area. The study area is characterised by sheet erosion and dumping of building rubble, household refuse and the remains of a demolished house(Figure 4,5 and 6) located at (26° 3.614'S, 27° 50.568'E).

During the survey of the study area (Figure 3) no archaeological sites or structures of heritage significance were recorded although isolated MSA flakes (Figure 10) from quartzite were noted in the larger area. These artefacts are scattered too sparsely to be of any significance apart from noting their presence, which has been done so in this report. Huffman (2007) recorded similar finds and also rated these of no significance. Several modern buildings (Figure 8,9 and 11) younger than 60 years and of no heritage significance were recorded on the site consisting of shacks (26° 3.632'S, 27° 50.546'E) labourer dwellings(26° 3.674'S, 27° 50.668'E) and face brick building (26° 3.590'S, 27° 50.557'E).

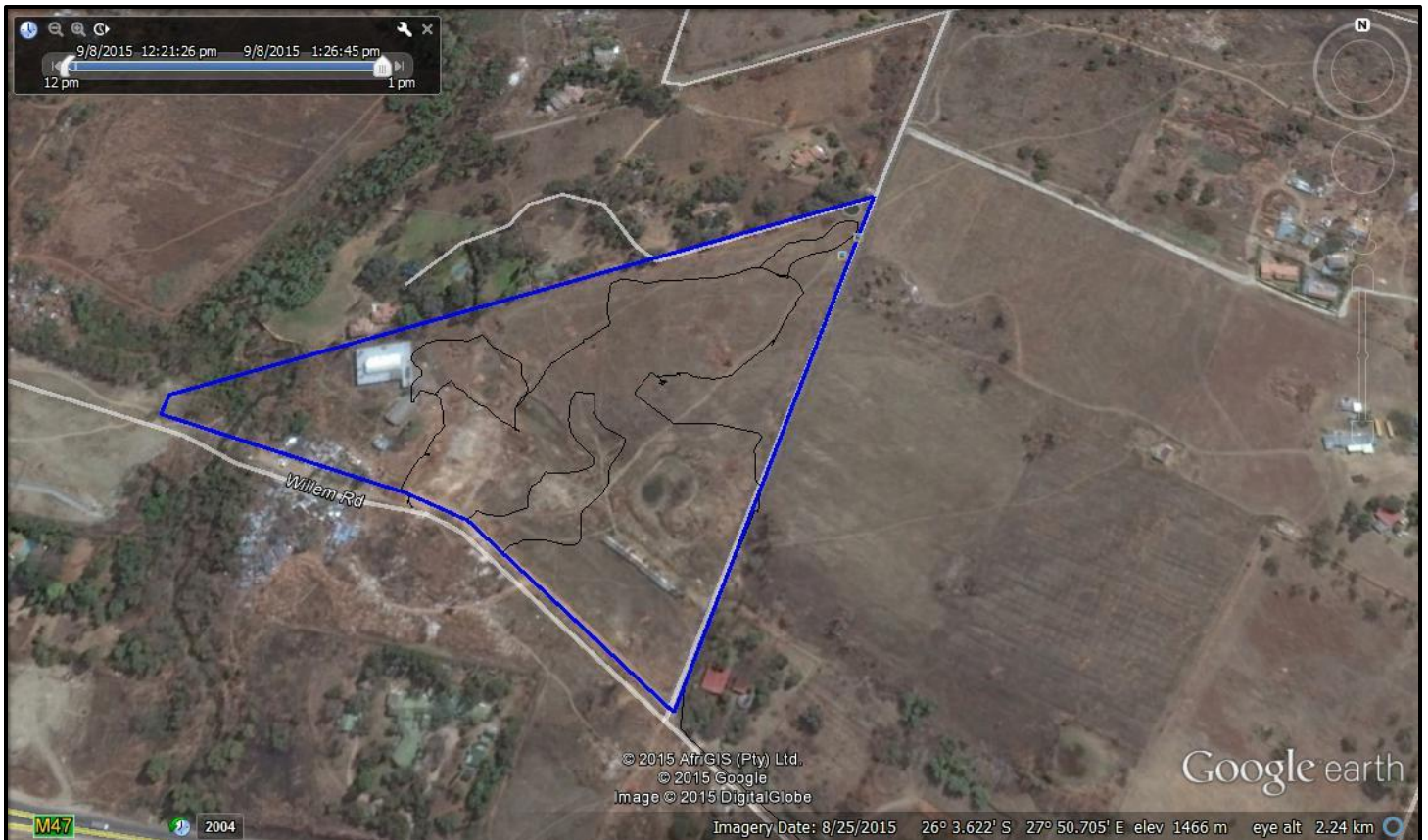


Figure 3: The study area in blue with track logs of the survey in black.



Figure 4. General Site conditions.



Figure 5. Demolished remains of house.



Figure 6. Dumping of building rubble.

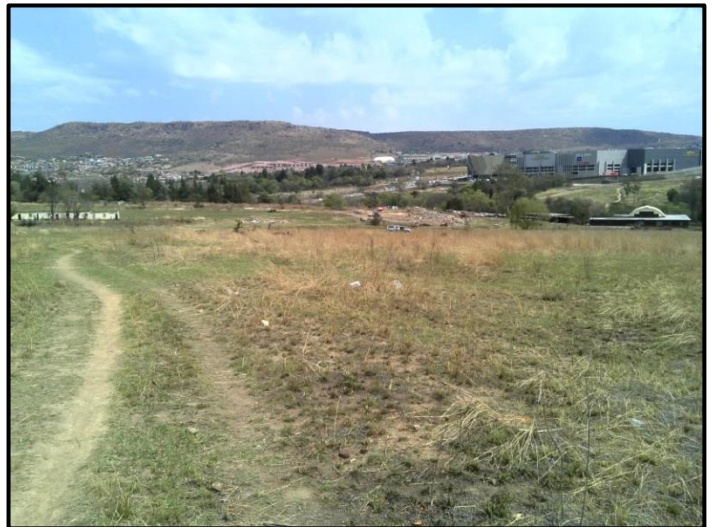


Figure 7. Study area viewed from the north east.



Figure 8. Main structure.



Figure 9. Labourer housing.



Figure 10. Isolated MSA flake.



Figure 11. Informal dwellings.

7. CONCLUSIONS AND RECOMMENDATIONS

HCAC has been contracted by Prism EMS to conduct an Archaeological Impact Assessment for the Roodekrans Ext. 26 Development Located on the Remaining Extent of Portion 139 of the Farm Roodekrans 183 IQ Roodekrans, Johannesburg, Gauteng.

During a field survey of the study area the development site was assessed in terms of the archaeological component of Section 35 of the NHRA and no archaeological features or material of significance were recorded. Several other studies in the area recorded the remains of historical structures (generally indicated as of low significance). Apart from historical structures other studies in the area recorded no sites of heritage significance (Van Schalkwyk 2007, Van der Walt 2007).

As there are no archaeological sites in the study area no further action is necessary for the archaeological component during the pre-construction phase. If during construction, any archaeological finds are made (e.g. stone tools, skeletal material), the operations must be stopped, and the archaeologist must be contacted for an assessment of the finds. It is therefore recommended that chance find procedures are put in place during the construction phase to mitigate any accidental finds as described below.

Chance finds 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 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, 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.

Due to the lack of any significant archaeological sites within the development footprint there is from an archaeological point of view no reason why the development cannot commence work if the recommendations are adhered to and based on approval from SAHRA.

8. PROJECT TEAM

Jaco van der Walt, Project Manager and 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 valid for/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 AIAs since 2000.

10. REFERENCES

- Archaeological database, University of the Witwatersrand references 2009.
- Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Edited by J. S. Bergh. 1999. Pretoria: J. L. van Schaik Uitgewers.
- Fourie, W. 2008. Heritage Scoping Proposed development for Village x9 on Portions 205 and 206 of the farm Roodekrans 183 IQ, Krugersdorp, Gauteng Province. Unpublished report.
- Huffman, T.N. 2007. Archaeological Assessment Van Wyks restant, Krugersdorp. Unpublished report.
- Pelser, A. 2009. A Report On A Heritage Impact Assessment Study For The Proposed New Homes Haven Extension 1 Township On Portion 10 Of The Farm Roodekrans 183 IQ Mogale City Local Municipality Gauteng. Unpublished report.
- Ross, R. 2002. A concise history of South Africa. Cambridge: Cambridge University Press.
- SAHRA Report Mapping Project Version 1.0, 2009
- Van der Walt, J. 2006. Heritage Scoping Assessment Proposed new residential development on Portion 24 of the farm Roodekrans 183 IQ, Johannesburg. Unpublished report.
- Van der Walt, J. 2007. Archaeological Impact Assessment Proposed Township: Chancliff Ridge Ext 34, Mogale City.
- Van der Walt, J. 2008. Cultural Heritage assessment of a portion of portion 20 of Van Wyks Restant 182 IQ, Muldersdrift, Gauteng Province.
- Van Schalkwyk, J. 2007. Heritage Impact Assessment For The Planned Rietvallei 180IQ Development, Krugersdorp Municipal District, Gauteng Province