

# Archaeological Impact Assessment

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FOR THE PROPOSED ANCHORVILLE EXTENSION 12 TOWNSHIP DEVELOPMENT IN LENASIA,  
GAUTENG PROVINCE

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Prepared For

**Prism EMS**

By



# HERITAGE

Contracts and Archaeological Consulting

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**VERSION 1.0**  
**27 January 2015**

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**SIGNATURE:**

\_\_\_\_\_

## EXECUTIVE SUMMARY

**Site name and location:** The proposed Lenasia Township development referred to Anchorville Extension 12 is situated on Portion 185 (a Portion of Portion 182) of the farm Roodepoort 302 I.Q. The farm portion is situated east and adjacent to the R558 (Lenasia Drive), in the Lenasia area and falls within the jurisdiction of the City of Johannesburg Metropolitan Municipality (Region G, Ward 8). GPS co-ordinates to locate the site: 26°20'48.86"S, 27°49'45.99"E.

**Purpose of the study:** Phase 1 Archaeological Impact Assessment to determine the presence of cultural heritage sites and the impact of the proposed project on these resources within the study area.

**1:50 000 Topographic Map:** 2627 BD

**Environmental Consultant:** Prism EMS

**Developer:**

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

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**Date of Report:** 27 January 2015

### Findings of the Assessment:

During the survey no sites of archaeological significance were identified within the study area. One white washed upright stone was recorded in the study area that is attributed to land surveying activities but this should be confirmed during the social consultation process that this is not a grave marker.

As the study area is disturbed to a certain degree surface indicators of heritage sites might not be visible anymore and the possibility of exposing archaeological/historical or skeletal remains during the development exists. It is therefore recommended that chance find procedures are put in place during the construction period to mitigate any accidental finds as described in section 7 of this report.

If these recommendations are adhered to and subject to the approval of SAHRA, we are of the opinion from an archaeological point of view that the development can go ahead.

### General

Due to extensive sand cover, ground visibility was low on portions of the site during survey. The possible occurrence of unmarked or informal graves and subsurface finds can thus not be excluded. If during construction any possible finds such as stone tool scatters, artefacts 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.

**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.*

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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

<b><i>Kind of study</i></b>	Archaeological Impact Assessment
<b><i>Type of development</i></b>	Residential Township
<b><i>Rezoning/subdivision of land</i></b>	Rezoning
<b><i>Consultant:</i></b>	Prism EMS

The Archaeological Impact Assessment (AIA) report forms part of the BA 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, collection of background information 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 heritage significant sites were identified in the development footprint. 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 peer 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 represents 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 subject site is situated on Portion 185 (a Portion of Portion 182) of the farm Roodepoort 302 I.Q. The farm portion is situated east and adjacent to the R558 (Lenasia Drive), in the Lenasia area and falls within the jurisdiction of the City of Johannesburg Metropolitan Municipality (Region G, Ward 8). GPS co-ordinates to locate the site: 26°20'48.86"S, 27°49'45.99"E. Access to the site will be gained from the R558. The site measures approximately 8 hectares in extent.

### 1.3.2. Location Map

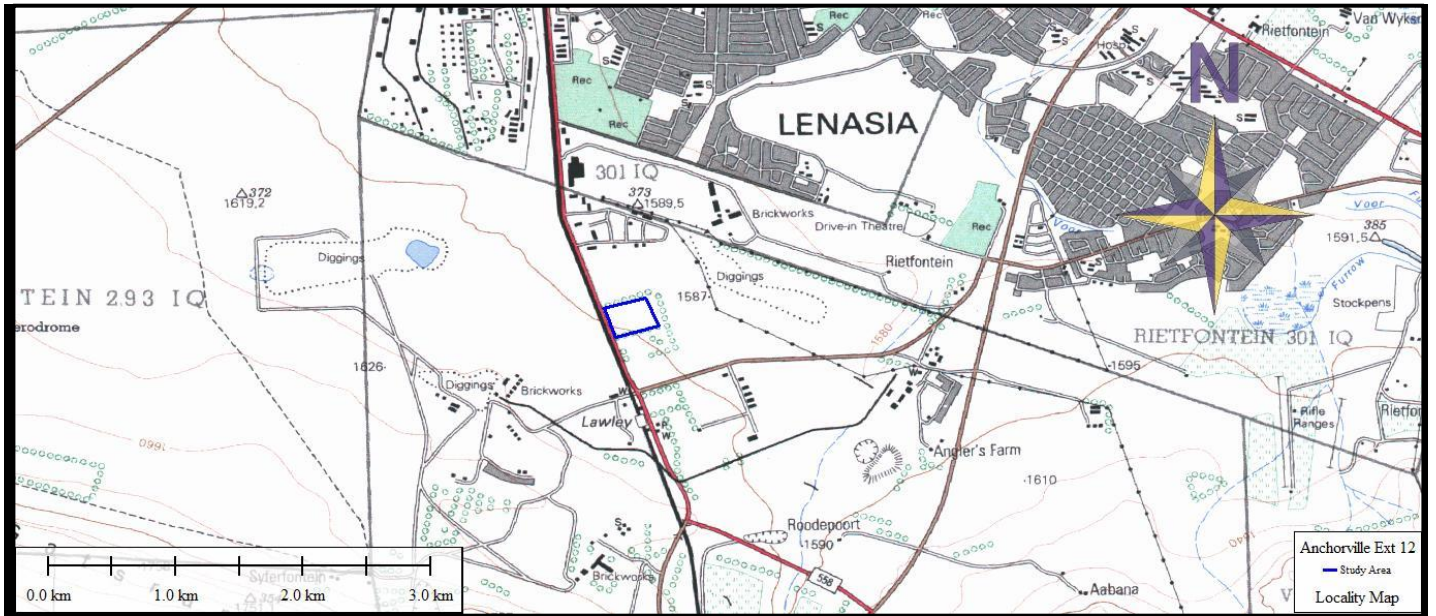


Figure 1: Study area.

## **2. APPROACH AND METHODOLOGY**

The aim of the study is to cover archaeological databases to compile a background history of the study area followed by field verification; this was accomplished by means of the following phases.

### **2.1 Phase 1 – Data base Research**

The first phase comprised a data base search, gathering data to understand the history of the area in question. It included scanning existing records for archaeological sites, historical sites and graves of the area.

#### **2.1.1 Literature Search**

A Literature search utilising data stored in the archaeological database at Wits and previous CRM reports done in the area was conducted. The aim of this is to extract data and information on the area in question, looking at archaeological sites, historical sites and graves of the area.

#### **2.1.2 Information Collection**

The SAHRA report mapping project (Version 1.0) 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. The South African Heritage Information System was also used to collect information.

#### **2.1.3 Consultation**

No consultation was conducted by the heritage team as this was conducted as a separate process as part of the BA.

#### **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**

A field survey of the study area of approximately 8 ha was conducted. The study area was surveyed on foot by a professional archaeologist on the 15<sup>th</sup> January 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 archaeological visibility is due to extensive ground disturbance, illegal dumping and vegetation, and the possible occurrence of unmarked graves and other cultural material cannot be excluded. Although Heritage Contracts and Archaeological Consulting CC 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 unmarked graves, stone tool scatters, artefacts, bones or fossils, be exposed during the process of development.

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

It is the intention of the application to establish a township with erven zoned to facilitate commercial and retail development. An internal street will also be included in the layout. Access will be gained from the R558. The site measures approximately 8 hectares in extent

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

#### **4.1 Databases Consulted**

##### ***Wits Archaeological Data Bases***

Forty two sites are on record for the 2627 BD topographic map at the Wits database. These sites consist of Early, Middle and Late Stone Age, Late Iron Age and several historical structures including blockhouses. None of these sites are in close proximity of the study area and will not be affected by the proposed development.

##### ***SAHRA and SAHRIS***

Very few other studies are on record close to the study area. To the north west of the study area (further than 5km) a single study was conducted who did not record any archaeological sites (De Jong 2004).

However 3km to the south east on the same farm but a different portion (Ptn 58, 59 and 113 of the farm Roodepoort 302 LQ) an extensive complex of Anglo Boer War fortifications was recorded on a ridge together with various Late Stone Age sites (Huffman 2008 a & b)

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

The monuments database at Google Earth has no sites close to the study area. The genealogical society also does not have any grave sites on record for the study area.

## 4.2 Archaeological and Historical Information Available on the Study Area

Johannesburg has a rich and varied heritage and it is important to take the history of the greater area around the study area into account to contextualize the study area.

### 4.2.1. A Brief History Of Human Settlement In The Johannesburg 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 closer to Johannesburg, the Melville Koppies 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 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 farm Roodepoort 302 IQ was surveyed in 1930 (Figure 2).

An Anglo Boer War battle known as the Battle of Doornkop took place in the area on 29 May 1900. The British were advancing toward Johannesburg led by General John French. De La Rey and his men held the Klipriviersberg Ridge for the first two days but on the third day the Boers were outflanked by French's cavalry to the West, where General Sarel Oosthuizen's commando was forced to withdraw. This opened the road to Johannesburg and the British took the city peacefully on 30 May 1900. Huffman (2008 a) recorded several sangers dating to the Boer war close to the study area on a ridge.

### 4.2.2. Johannesburg

The city of Johannesburg was formally established in 1886 with the discovery of gold and the Witwatersrand reef on the farm Langlaagte. This gold discovery set off an influx of people from all over the world into the settlement to find gold. The new settlement was named after two officials of the Zuid-Afrikaansche Republiek (ZAR), Christiaan Johannes Joubert and Johannes Rissik, who both worked in land surveying and mapping.

### 4.2.3. Lenasia

Lenasia and settlement there was a contentious issue. After the National Party won the 1948 elections and implemented the Apartheid system various areas were considered for Indian housing. The Group Areas Act was passed in 1950. Indians had been living in various suburbs in and around Johannesburg for decades. In towns such as Turffontein small communities had taken root, while in others there were larger communities, for example in Fordsburg, Doornfontein, Vrededorp, Sophiatown, Newclare ([www.sahistory.co.za](http://www.sahistory.co.za)).

The area where Lenasia is located today provided opportunity for a housing area 35 km from Johannesburg. The surrounding property was owned by a German national by the name of Lenz. He had acquired the property and settled

there much earlier but he eventually sold the property to the government for housing developments. Mahommed Jajbhay, Rev Sigamoney, Mahommed Abed, Ebrahim Dadabhai and Advocate Minty formed the Transvaal Indian Organisation, which was tasked to persuade Indians to move to Lenz ([www.sahistory.co.za](http://www.sahistory.co.za)).

Initially Lenasia consisted of the people living at the barracks. Later the government sold plots for around R 60 each, in the first extension to be established. The plots were purchased by families eligible for government loans to build private homes, according to strict specifications. Infrastructure in Lenasia, in 1955, was non-existent. Until the later 1950s, houses in Extension 1 had no piped water, electricity or sewage. There was only a bucket system. Later a single U-shaped street became the first residential area. It was called 12th Street, and today it makes up Nightingale, into Sunbird, into Smew ([www.sahistory.co.za](http://www.sahistory.co.za)). The first families with permanent houses all lived along this horseshoe arrangement. Breadwinners travelled to the city centre via a road that crossed the railway line and connected with the R29 road that linked Johannesburg to Potchefstroom – mainly by a municipal bus service that offered two trips in the morning and two in the evening ([www.sahistory.co.za](http://www.sahistory.co.za)).

By 1955 the Lenasia High School was established, it also accommodated Indian pupils living in Fordsburg and other areas of Johannesburg. These students would travel by train or bus to the school, the government having closed off access to high schools in Johannesburg. The first school principal, Mr Francis, was an enlightened educator, who served in this capacity from 1955 to 1967 ([www.sahistory.co.za](http://www.sahistory.co.za)).

Like the other schools that followed, Lenz High School was a structure made up of asbestos, in an age when the dangers of the material had not been publicised. This structure was used for 40 years before a permanent brick construction was erected, on another site, after the coming of democracy ([www.sahistory.co.za](http://www.sahistory.co.za)).

In 1958 Lenasia was proclaimed an Indian township under the Group Areas Act ([www.sahistory.co.za](http://www.sahistory.co.za)). The minutes of a meeting of the Non-European Affairs Committee of the Johannesburg City Council, dated 31 October 1961, reflect that the item under consideration was “Indian Housing: Lenz Camp”. The minutes record that on 27 June 1961, the Council resolved that:“(a) That the lease of part of the military camp at Lenz by the Council from the Group Areas Development Board be renewed for a period of six months as from 1st July 1961, on the same terms and conditions. (b) That the arrangement be subject to review after December 1961.”

The minutes included that the Secretary for Community Development had informed the Town Clerk in September that the Group Area Development Board was planning to take over the camp “as from 1st January 1962 on expiry of the present lease”. The meeting ended with the recommendation:

“That the Group Area Development Board be asked to continue housing the existing tenants at the Lenz Camp until other accommodation becomes available for them.” ([www.sahistory.co.za](http://www.sahistory.co.za)).

#### **4.2.4. Archaeology of the area**

Although there are no well-known Stone Age sites located on or around the study area there is evidence of the use of the larger area (with special reference to the farm Roodepoort 302 IQ) by Stone Age communities, especially along ridges to the south of the current study area (Huffman 2008a & b).

Regarding the Iron Age, the well-known Smelting Site at Melville Koppies requires further mention. The site was excavated by Professor Mason from the Department of Archaeology of WITS in the 1980's. Extensive Stone walled sites are also recorded at Klipriviers Berg Nature reserve belonging to the Late Iron Age period. A large body of research is available on this area. These sites (Taylor's Type N, Mason's Class 2 & 5) are now collectively referred to as Klipriviersberg (Huffman 2007). These settlements are complex in that aggregated settlements are common, the outer wall sometimes includes scallops to mark back courtyards, there are more small stock kraals, and straight walls separate households in the residential zone. These sites dates to the 18th and 19th centuries and was built by people in the Fokeng cluster.

In this area the Klipriviersberg walling would have ended at about AD 1823, when Mzilikazi entered the area (Rasmussen 1978). This settlement type may have lasted longer in other areas because of the positive interaction between Fokeng and Mzilikazi.

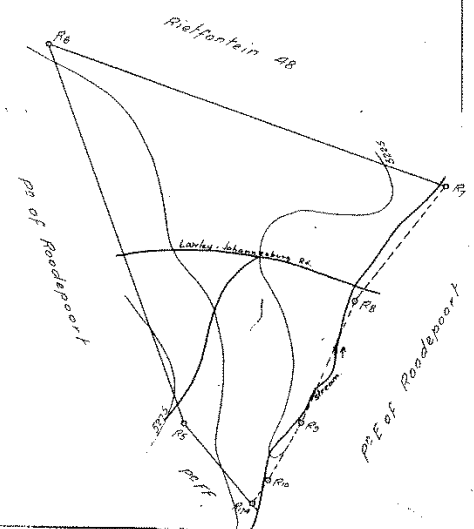
Form B2.—Diagram Form for a Sub-Division of a Farm or portion of a Farm.

S.G. No. A. 3977/21

SIDES.		ANGLES.		(Y) CO-ORDINATES (X)	
R6-5	462.38	R6	50 26 50	R6	- 3505.00 + 5864.57
R3-174	120.000	R3	159 30 0	R3	- 3940.61 + 5709.60
R74-10	33.379	R74	73 12 20	R74	- 4032.223 + 5632.332
R10-9	74.88	R10	17.5 29 20	R10	- 4004.47 + 5614.09
R9-8	151.55	R9	174 48 50	R9	- 3938.74 + 5578.23
R8-7	166.19	R8	193 55 20	R8	- 3789.69 + 5517.97
R7-6	476.05	R7	72 37 0	R7	- 3667.58 + 5417.14

Rect Area = 176 Mgn 86.5 mls  
 Lt R6-Stream-R7 = 180 0 0  
 Lt R5-R74-Stream = 180 0 0

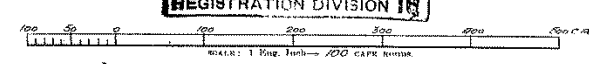
*With draw see also  
 2000 1/2 1/2 1/2 1/2 1/2  
 H. J. ...  
 7/13/30*



Vertical Datum = V.L. Datum Sea Level

Tans geregistreer onder :  
 Now registered under :  
**No. 302**  
**REGISTRASIE AFDELING**  
**REGISTRATION DIVISION 10**

THIS FARM TRANSFERRED ON  
 17/10/1921 TO THE REGISTRAR  
 AND TRANSFERRED TO THE REGISTRAR  
 REGISTERED UNDER NO. 18.



The above Figure lettered R6 R5 R74 mid stream post R10 R9 R8 to R7  
 17 1/2 Morgen 34 1/2 Square Roods of land, being portion RR of Portion  
 ROODEPOORT No. 49, 18.

as appears on Diagram S.G. No. A. 2978/21, framed by Surveyor C. D. LUCAS, in February, 1921,  
 relating to Deed of Transfer No. ROODEPOORT dated 14th October, 1858, made in favour of J. P. MARE,  
 situate in the District of KRUGERSDORP, Ward WEST RAND, Province of Transvaal. Bounded as indicated above,  
 The Beacons were pointed out by J. H. JONKER and Surveyor C. D. LUCAS, and have been properly erected according to law.  
 Surveyed in June, July and August, 1921. by me *C. Lucas* Land Surveyor.

Examined. The numerical data of this diagram are sufficiently consistent.  
*H. Maxwell & Edwards*  
 Examiner of Diagrams.

Approved  
*H. J. ...*  
 Surveyor-General.

This diagram belongs to Crown Grant No. made this day in favour of  
*G. ...*  
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Surveyor-General's Office, Pretoria. 2222

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T.P.S. (S. JO'BURG.)

Figure 2: Chief Surveyor General Map drawn up in 1930.



## 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 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 approved 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><i>FIELD RATING</i></b>	<b><i>GRADE</i></b>	<b><i>SIGNIFICANCE</i></b>	<b><i>RECOMMENDED MITIGATION</i></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 STUDY AREA

The study area is situated on Portion 185 (a Portion of Portion 182) of the farm Roodepoort 302 I.Q. The farm portion is situated east and adjacent to the R558 (Lenasia Drive) with in Lenasia. The site is located at GPS co-ordinates 26°20'48.86"S, 27°49'45.99"E. The site is characterised by a relatively flat features landscape (Figure 3) with knee high grass cover (Figure 4 and 5). Portions of the site are disturbed by construction activities for the R558 and illegal dumping of building rubble occur throughout the site (Figure 6) potentially obliterating surface indicators of heritage sites. No buildings, structures or archaeological sites were recorded within the development footprint. A large informal cemetery occurs approximately 70 meters to the east of the study area on a different portion of the farm Roodepoort 302 (Figure 8).

Due to high vegetation cover in this area it was not possible to conduct an accurate count of the graves but it is estimated that more than 60 graves occur here. The graves area aligned east to west with various materials used as grave dressings (Figure 10, 11 & 12). The site is located at 26°20'48.16"S, 27°49'55.75"E. At co-ordinate 26°20'50.03"S, 27°49'42.06"E an upright standing stone was recorded marked with white lime, this is presumably a marker for the land surveyor (Figure 13). Although unlikely this stone could also possibly indicate a grave and this should be confirmed through the social consultation process.

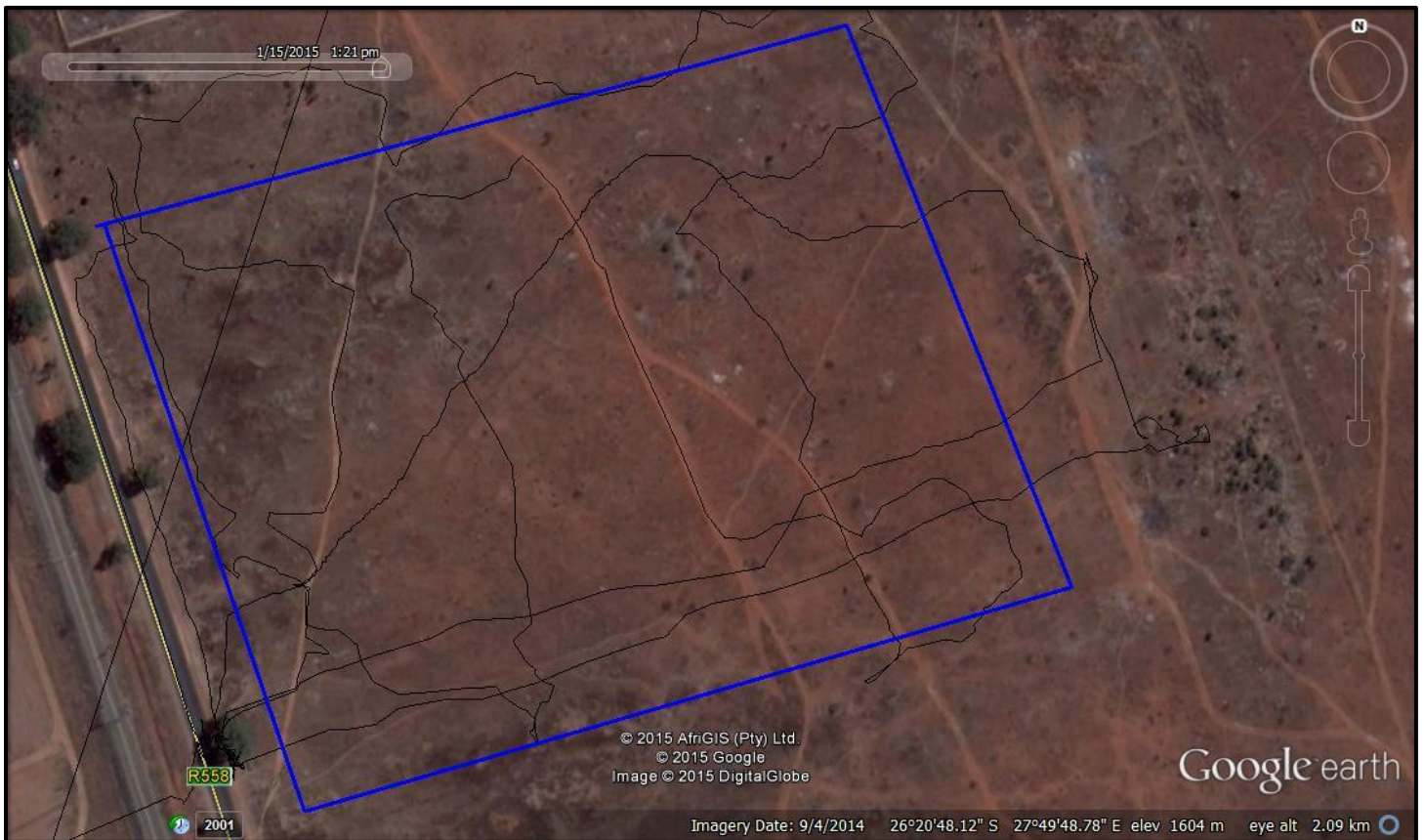


Figure 3: Google image of the study area in Blue with the Track logs of the survey in Black.



Figure 4: Study area viewed from the south east.



Figure 5: Site conditions in the eastern portion of the study area.



Figure 6: Illegal dumping.



Figure 7: Illegal dumping.

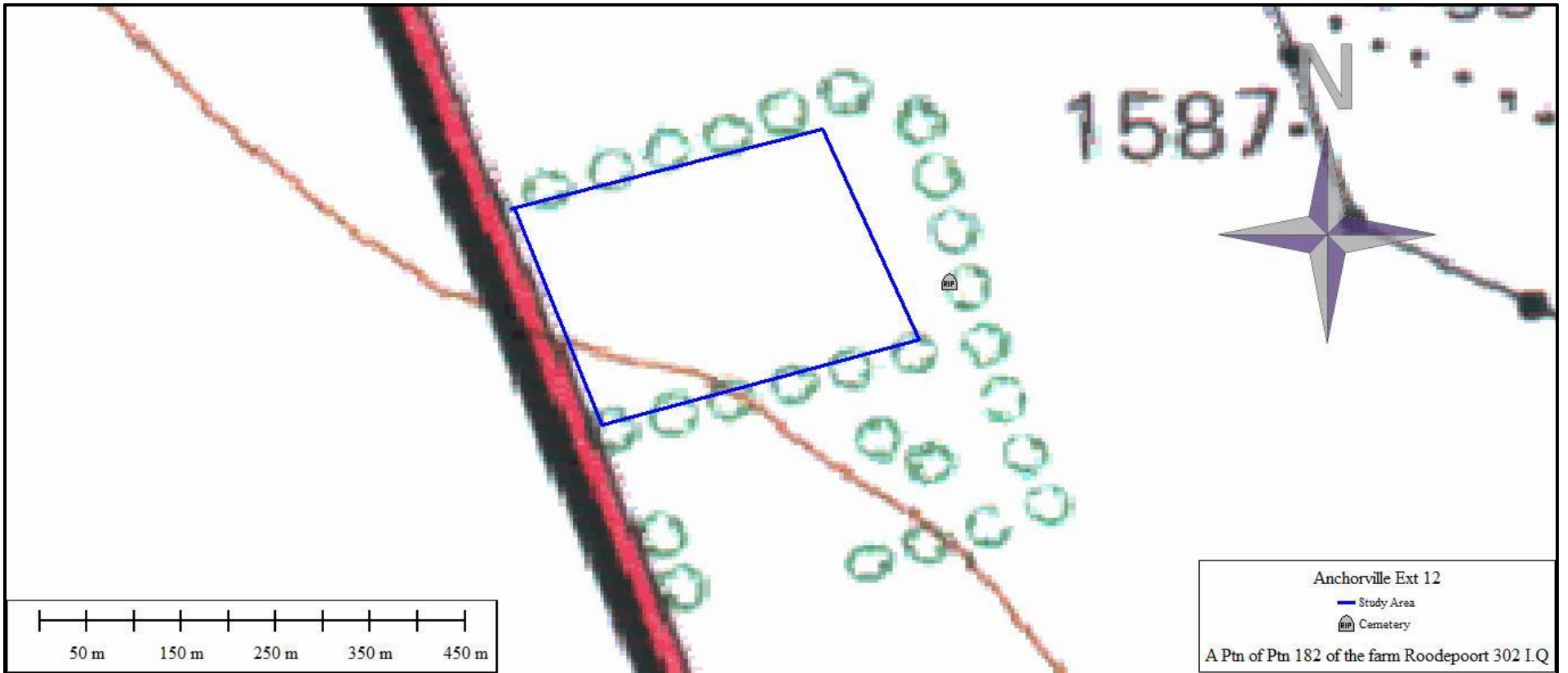


Figure 8: Map indicating recorded cemetery outside of the study area.



Figure 9. Grave in the cemetery outside the study area.



Figure 10. Grave dressings.



Figure 11. Headstones and graves in the cemetery



Figure 12. Upright whitewashed stone in study area.

## 7. DISCUSSION

During the survey no sites of archaeological significance were identified. One white washed upright stone was recorded in the study area that is attributed to land surveying activities but this should be confirmed during the social consultation / public participation process as this might also mark a grave. If this is confirmed as a grave, the site should be fenced off with an access gate for family members and a 15 meter buffer zone. If not, the development can go ahead as planned with chance finds procedures in place.

A large cemetery was recorded outside of the study area on a different portion of the farm Roodepoort and the current project will not impact on this cemetery, but all staff should be made aware of this site to prevent accidental damage to the cemetery during the construction period.

Portions of the site are disturbed by earthworks and construction activities for the R558 and illegal dumping of building rubble occur throughout the site potentially obliterating surface indicators of heritage sites. It is therefore recommended that chance find procedures are put in place during the construction period 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.

If these recommendations are adhered to and subject to the approval of SAHRA, we are of the opinion from an archaeological point of view that the development can go ahead.

## 8. PROJECT TEAM

Jaco van der Walt BA (Pret) BA (Hons) (Archaeology) (Wits), MA (Archaeology) (Wits)

## 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.

Currently, I serve as Council Member for the CRM Section of ASAPA, and have been involved in research and contract work in South Africa, Botswana, Zimbabwe, Mozambique and Tanzania as well as the DRC; having conducted more than 300 AIAs since 2000.

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