

ARCHAEOLOGICAL IMPACT ASSESSMENT

FOR THE PROPOSED MOHLAKENG X16 - TOWNSHIP
DEVELOPMENT, GAUTENG PROVINCE

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LEAP

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Project Reference:

216114

Report date:

October 2016

DOCUMENT PROGRESS
Archaeological Impact Assessment

Document status

Document Version	v1.0
Report Purpose	Draft Report for review
Report Ref. No.	216114

Distribution List

Date	Report Reference number	Document Distribution	Number of Copies
2016/10/13	216114	Leap	Electronic 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.

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EXECUTIVE SUMMARY

Site name and location: The proposed Mohlakeng X16 - Township development is located on a Portion of Portion 83 of the Farm Middelvlei 255 IQ, Gauteng Province.

1: 50 000 Topographic Map: 2627 BA.

EIA Consultant: Leap

Developer: Zekwakor Investments (Pty) Ltd

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

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Date of Report: 13 October 2016

Findings of the Assessment:

HCAC was appointed to assess the study area in terms of the archaeological component of Section 35 of the NHRA as part of the basic assessment for the project. No archaeological sites (Iron Age or Stone Age) of significance were recorded. No further mitigation prior to construction is recommended in terms of Section 35 for the proposed development to proceed.

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. 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 EMP.

The study area is surrounded by residential developments (formal and informal) and no significant cultural landscapes or viewsapes were noted during the fieldwork. An African church was recorded and is classified as living heritage and will require some mitigation as outlined under Section 7 of this report. Other studies in the area also did not record archaeological sites (Van der Walt 2011 and 2015 as well as Van Schalkwyk 2008 and 2009) while some did record cemeteries and structures (e.g. Huffman 2007 & Birkholtz 2015).

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 an archaeological 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.

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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

Heritage Contracts and Archaeological Consulting CC (**HCAC**) was appointed to conduct an Archaeological Impact Assessment for the proposed Mohlakeng X16 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 proposed Mohlakeng X16 - Township development is located on a Portion of Portion 83 of the Farm Middelvlei 255 IQ, Gauteng Province (Figure 1). The study area is located at 26° 12' 47.0379" S, 27° 41' 38.8710" E. The proposed development is surrounded by densely populated townships and the general area has been extensively disturbed.

The study area is directly accessible from the R 28. The local geology consists of quartzite and the vegetation and landscape is described by Mucina and Rutherford (2006) as Soweto Highveld Grassland.

1.3.2. Location Map

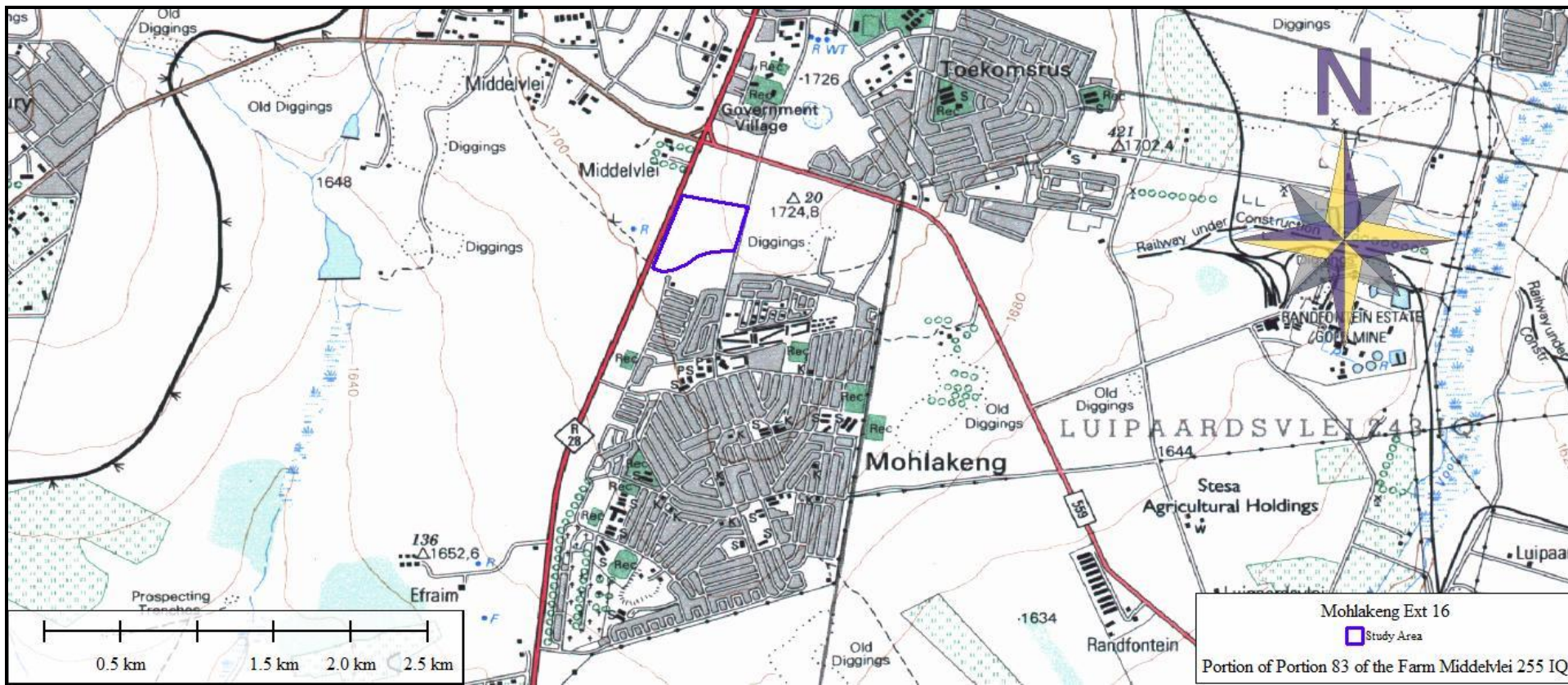


Figure 1. Location map

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

No public consultation was done by the author as this was done independently 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

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 during the week of 12 October 2016.

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.

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 Township development with associated infrastructure including electrical infrastructure and sanitation as well as internal roads. The development comprises approximately 15, 301 hectares.

4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

4.1 Databases Consulted

Wits Database and SAHRA

8 Previously recorded sites are on record for the 2627 BA 1: 50 000 sheet. 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 or close to the project area but provide a background of to the sites that can be expected. The closest site is a historic mining site (Rand Leases) to the north east of the study area.

Numerous previous CRM projects were conducted in the general vicinity of the study area. The studies include a water pipeline project completed by Van Schalkwyk (2008). No sites were recorded, but the report mentions that structures older than 60 years occur in the area, Van Schalkwyk (2009) for a township development survey also recorded no sites. Van der Walt (2011) recorded no sites at the Marula Substation. Huffman (2007) completed a study in Luipaardsvlei and recorded no archaeological sites of significance but did record a cemetery. Towards Soweto Birkholtz (2013) recorded seven sites. These included three sites that can directly or indirectly be associated with the Jameson Raid and its final battle on 2 January 1896, three buildings and a cemetery. Van der Walt (2015) completed another project in the Randfontein area and no significant heritage features were identified in the area.

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. The Jameson Raid Monument is however indicated and is located 11 km east of the study area.

4.2. Brief background to the study area

Sources for the history of the area surrounding the study area include secondary source material, maps, electronic sources and archival documents. The source of J. S. Bergh will be used to write a short history of the area.

4.2.1. Maps Of The Area Under Investigation



Figure 3: 1904 Major Jackson Map of the Potchefstroom district with the approximate location of the study area marked in red.

4.2.3. Historical background of the 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, it seems that the study area is located in 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 present-day Rietvallei 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 Jameson Raid

Cecil John Rhodes had an ideal to unify all South African countries under the British Empire as a federation and in order to do so he planned to overthrow the Kruger government in Johannesburg. Initially a revolt by immigrants in Johannesburg was planned. British troops would then be sent in to protect the lives of British citizens in the area. After this was completed a British High commissioner would be required to ensure the protection of the Transvaal (Birkholtz 2013).

A reform committee was established and included historic figures such as Lionel Phillips, Charles Leonard, John Hayes Hammond, Colonel Frank Rhodes (Cecil John’s brother) as well as Percy Fitzpatrick (later author of *Jock of the Bushveld*). Interestingly the reformers are believed to have had their own agendas in terms of the revolt as gold had recently been discovered in the area and foreigners were not allowed to vote and a desire for equal opportunity would rather have been the driving force than political aspirations. The group was armed and British High Commissioner, Sir Hercules Robinson, was included in the plan. The attack was to come from a strip of land presented to road to build a railway link in what is now Botswana (Birkholtz 2013).

The reform group reconsidered the plan and Rhodes subsequently suggested that the whole plan should be dropped. However, Dr Leander Starr Jameson, responsible for leading the armed force into the Transvaal Republic and Johannesburg, now requested the Reform Committee to write a letter asking his assistance. The letter was drafted by Charles Leonard, and signed by senior members of the Reform Committee. One of the sentences of this letter reads: “*It is under these circumstances that we feel constrained to call upon you to come to our aid should a disturbance arise here*” (Hocking, 1986:51). Jameson indicated that the contents of the letter would not be disclosed, but it was promptly read to the Voluntary Corps at Pitsanaphotlokwe (Pitsani) and the Bechuanaland Border Police troopers stationed at Mafeking (Birkholtz 2013).

On Sunday night, 29 December 1885 all parties who read the letter rode out under Jameson. The telegraph lines were not successfully sabotaged and Kruger knew about the raid within a few hours. The raid was first opposed in the Krugersdorp area by General Cronje’s troops, but managed to continue around Randfontein in an attempt to reach Johannesburg. On the farm Vlakfontein on 2 January 1886 Jameson’s men were surprised by a Boer attack and had to seek shelter amongst cattle kraals and outbuildings on the farm.

Maxim fire and cavalry charges were unsuccessful. On the hills between Vlakfontein and the farm Roodepoort the ZAR Staats Artillerie took up position. Their attack took the Jameson troops by surprise and soon after a white apron (that belonged to a farm worker) was raised in surrender (Birkholtz 2013).

The raid is seen by many historians as one of the key contributing factors which led to the decline of relations between the *Zuid-Afrikaansche Republiek* and Great Britain, and eventually to the outbreak of the Anglo-Boer War of 1899-1902 (Birkholtz 2013).

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) recorded several sangars dating to the Boer war close to the study area on a ridge.

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.

History of Randfontein

Randfontein as a settlement area dates back to the 1550's when the AmaNdebele lived as one nation at Emhlangeni (translated today into the Sesotho language as Mohlakeng, one of the south eastern suburbs of Randfontein) under King Mhlanga around 1550-1580 (cpfrandfontein.co.za). In 1857 the Bootha and Jonker families arrive in the area. (Owners of the farm *Groot Elandsvlei* where the suburbs of Randgate, Loumarina, and Wilbotsdal are today.)

Randfontein has a rich gold mining history. Gold was discovered in Blaauwbank stream near Magaliesburg in 1874 by Henry Lewis, an Australian prospector. Discovery of gold on the Rand by Harrison and Walker started the Reef gold rush in 1886 and in the same year JB Robinson (regarded by some as one of the founders of the modern day town) arrives on the Reef and starts prospecting in the Randfontein area.

In 1889 the Randfontein Estates Gold Mining Company (REGM) is registered. JB Robinson buys properties and farms in the Randfontein district in the following year. Randfontein was established formally in 1890 as well. The first shop in Randfontein, Fedlers, opens in 1894. In 1901 the first car, owned by Hector Mackay, arrives in town.

Chinese miners arrive in Randfontein in 1904. On 1 April 1905, on the North Randfontein gold-mine in the Transvaal, a dispute between the Chinese labourers and the mine management erupted into violence. The entire Chinese work force on the mine premises was involved and mounted European police were used to resolve the outbreak. As a result of this dangerous dispute over wages, fifty-three Chinese were arrested, charged with public violence and assault with intent to do harm. After the arrests the Chinese returned to work. On 4 April, however, they received a wage offer which formed not only the basis of the settlement at the North Randfontein, but was to serve as a model upon which the Transvaal Chamber of Mines based its wage policy towards all Chinese labourers for the rest of their time on the Rand (Richardson 1976). In 1929 the Randfontein Municipality was established; independent from Krugersdorp which managed the town from 1903.

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 by Stone Age communities for example along the Kliprivier where ESA and MSA tools were recorded. LSA material is recorded along ridges to the south of the current study area (Huffman 2008). Petroglyphs occur at Redan as well as along the Vaal River (Berg 1999).

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 date 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.

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.

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 development footprint. It should also be noted that due to safety concerns access in the study area was restricted as the locals were aggressive when photos of the area were taken. Vegetation cover in the study area is low and archaeological visibility is high (Figure 4 & 5). The surrounding area is characterised by informal and formal township developments and the general area has been extensively disturbed due to quarries (Figure 6) and road construction relating to the R28 and R559.

The study area was assessed in terms of the archaeological component of Section 35 of the NHRA and no archaeological (Stone or Iron Age) sites of significance were identified in the study area. In terms of the built environment of the area (Section 34), no standing buildings older than 60 years occur in the areas visited. An informal church (Table 1 & Figure 8) was recorded and is classified as living heritage (Feature 609). The church is located under a cluster of trees in the central portion of the study area. The site is marked by a circle of white rocks (Figure 7).

No burial grounds or graves were recorded and no significant cultural landscapes or viewsapes were noted during the fieldwork due to the extensive residential developments surrounding the study area. As graves can be expected anywhere on the landscape and the fact that the area has been disturbed it is recommended that a chance find procedure is incorporated for this project.

Table 1: Recorded features with Co-ordinates

Feature Number	Type Site	LONGITUDE	LATITUDE	ELEVATION
609	Informal church	26° 12' 45.9685" S	27° 41' 37.9897" E	1768.415527



Figure 4: Study area viewed from the north.



Figure 5. Western portion of the study area.



Figure 6: Earthworks probably related to quarries for road construction.



Figure 7. Church at Feature 609.

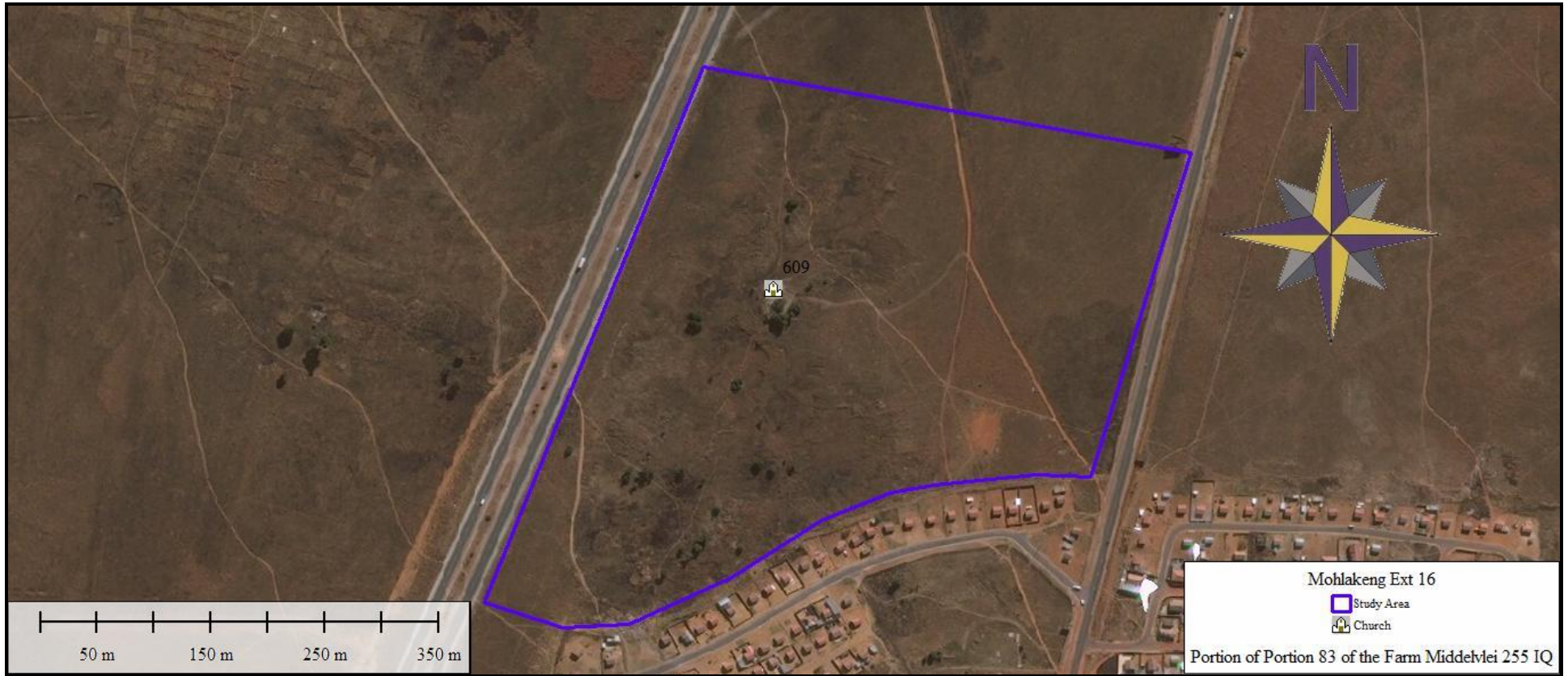


Figure 8. Site distribution map.

7. CONCLUSIONS AND RECOMMENDATIONS

HCAC was appointed to assess the study area in terms of the archaeological component of Section 35 of the NHRA. No archaeological sites (Iron Age or Stone Age) of significance were recorded within the study area. No further mitigation is recommended in terms of Section 35 for the proposed development to proceed. In terms of Section 34 of the Act no standing structures occur in the study area.

An informal church (Feature 609) was recorded and is classified as living heritage. The church is located under a cluster of trees in the central portion of the study area. It is recommended that during the public participation process the congregation must be involved in the process and informed of the proposed development, giving them adequate time to find a suitable replacement site.

In terms of Section 36 of the Act no burial sites were recorded. However if any graves are located in future they should ideally be preserved *in-situ* or alternatively relocated according to existing legislation.

The study area is largely disturbed and 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 EMP:

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.

The study area is surrounded by residential developments and no significant cultural landscapes or viewsapes were noted during the fieldwork.

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 archaeological 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

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.

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MAPS

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