

Archaeological Impact Assessment

For the proposed Brakpan Memorial Park development, Gauteng Province

Prepared For
W&L Consultants

By



HERITAGE

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



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EXECUTIVE SUMMARY

Site name and location: The Memorial Park Cemetery development is located on a portion of the farm Weltevreden 118 IR in Brakpan Gauteng.

Purpose of the study: Phase 1 Archaeological Impact Assessment to determine the presence of cultural heritage sites and the impact of the proposed power lines on these resources within the areas demarcated for the development.

1:50 000 Topographic Map: 2628 AB

EIA Consultant: W&L Development

Developer: Dalmar Beleggings Edms (BpK)

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

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Date of Report: 27 May 2014

Findings of the Assessment:

The study area is marked by old mining activities with the demolished and looted remains of the Brakpan Mine no 1 shaft found just outside of the north eastern border of the development area. The southern portion is marked as being undermined on archival maps (1944) of the study area. Further impacts to the study area consist of agricultural fields in the northern portion of the study area.

Recently vagrants are illegally occupying the eastern portion of the study area that is next to a landfill site and illegal dumping occurs in this area that is accessible from Mainreef road. In this area two features were recorded consisting of the demolished and looted remains of at least two rectangular structures (**Ruin**) interpreted as dwellings associated with the mine. This area is now being occupied by squatters.

The second feature (**Stamp Mill**) is a memorial for the 3 Policemen and 4 mine officials that were killed on the Brakpan Mines on 9 March 1922.

A third site consisting of a very large **cemetery** is located in the northern section of the study area on the boundary of the golf course. The site is overgrown and the exact amount of graves and the extent of the cemetery are unknown.

Due to the unique nature of the proposed memorial park development the impacts to the recorded heritage resources are considered to be positive. The sites can be protected within the development as the sites fall under the ambient of a memorial park where the memorial and cemetery can be protected *in-situ* and the impact of looting by vagrants who illegally occupy the study area can be nullified.

If the recommendations as made in section 8 of this report are adhered to (subject to approval from SAHRA) there is from an archaeological point of view no reason why the development should not proceed

If any possible finds such as tool scatters, bone or fossil remains are exposed or noticed during construction, the operations must be stopped and a qualified archaeologist must be contacted to assess the find.

General

Due to extensive grass cover, ground visibility was low on portions of the site during survey. Accessibility was also impaired by vagrants in the area and safety concerns. 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 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

<i>Kind of study</i>	Archaeological Impact Assessment
<i>Type of development</i>	Cemetery
<i>Rezoning/subdivision of land</i>	NA
<i>Developer:</i>	Dalmar Beleggings Edms (BpK)
<i>Consultant:</i>	W&L Consultants

Heritage Contracts and Archaeological Consulting CC has been contracted by W&L Consultants to conduct an Archaeological Impact Assessment for the proposed Memorial Park development located close to Brakpan.

The Archaeological Impact Assessment report forms part of the Basic Assessment (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, a background 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 a cemetery, public memorial and ruins were documented in the study area. 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 SAHRA for review.

1.1 Terms of Reference

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 of 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 the relevant 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 of 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 38(1), Section 38(8) of the NEMA and 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.

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 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 proposed Memorial park is located just north of Brakpan next to Brakpan Mines and Leachville. The site is accessible from Mainreef Road (M45) that also borders the site on the north. A secondary road forms the eastern boundary of the site while the Royal Oak Country Club forms the western boundary.

The study area falls within the Mesic Highveld Grassland Bioregion as described by Mucina *et al* (2006) with the vegetation described as Soweto Highveld Grassland. Land use of the study area used to mining. The study area is relatively flat characterised by sand to loam soils A Single drainage system drains the area in east to westerly direction.

2. APPROACH AND METHODOLOGY

The aim of the study is to cover archaeological databases and historical sources to compile a background history of the study area followed by field verification; this was accomplished by means of the following phases (the results are represented in section 4 of this report).

2.1 Phase 1 - Desktop Study

The first phase comprised a desktop study, gathering data to compile a background history of the area in question. It included scanning existing records for archaeological and historical sites in the area.

2.1.1 Literature Search

Utilising data from previous CRM reports done in the area as well as a search in the National archives. 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) and 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

A public participation process is facilitated by the Environmental Consultant for the project and no heritage concerns were raised.

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 was conducted over a period of one day, focusing on drainage lines, hills and outcrops, high lying areas and disturbances in the topography. The study area was surveyed by means of vehicle and extensive surveys on foot by a professional archaeologist on the 17th March 2014

All sites discovered inside the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. Digital photographs were taken at all the sites.

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. Accessibility was impaired by illegal squatters who occupy the area and the possibility exist that not all the features or graves were recorded during the survey. Only the development footprint was surveyed as indicated in the location map, and not the entire farm. 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 stone tool scatters, artefacts, bones or fossils, or graves be exposed or identified during the process of development.

3 NATURE OF THE DEVELOPMENT

The proposed development is a Memorial Park including a cemetery as well as walls of remembrance with landscape gardens gardens. The development covers an area of around 40ha.

4. REGIONAL OVERVIEW

4.1 General Information

Through CRM reports on the area together with secondary source material, primary sources, maps and online sources the study is contextualised. Numerous CRM projects were conducted within the greater study area. Studies by Huffman (1993 and 1998) and Van der Walt (2008, 2009), van Schalkwyk (1997) and Fourie & vd Walt (2002) were consulted for this report. These studies recorded cemeteries and mining related infrastructure and Middle Stone Age artefacts.

Google Earth and 1:50 000 maps of the area were utilised to identify possible places where archaeological and historical sites might be located. The database of the Genealogical Society of South Africa indicated no known grave sites within the study area.

4.2 Archaeological Background

The archaeological background and timeframe of the study area can be divided into the Stone Age and Iron Age.

4.2.1. Stone Age

The Stone Age is divided in Early; Middle and Late Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

Early Stone Age: The period from ± 2.5 million yrs. - $\pm 250\ 000$ yrs. ago. Acheulean stone tools are dominant. No Acheulean sites are on record near the project area, but isolated finds may be possible. However, isolated finds have little value. Therefore, the project is unlikely to disturb a significant site. The lack of any ESA sites was confirmed during the field investigation.

Middle Stone Age: The Middle Stone Age includes various lithic industries in SA dating from $\pm 250\ 000$ yrs. – 25 000 yrs. before present. This period is first associated with archaic Homo sapiens and later Homo sapiens sapiens. Material culture includes stone tools with prepared platforms and stone tools attached to handles. Several MSA occurrences were documented during the survey but does not have conservation value and is discussed further in Section 7 of this report.

Late Stone Age: The period from $\pm 25\ 000$ -yrs before present to the period of contact with either Iron Age farmers or European colonists. This period is associated with Homo sapiens sapiens. Material culture from this period includes: microlithic stone tools; ostrich eggshell beads and rock art. Sites in the open are usually poorly preserved and therefore have less value than sites in caves or rock shelters.

4.2.2. Iron Age (general)

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the pre-Historic and Historic periods. It can be divided into three distinct periods:

The Early Iron Age: Most of the first millennium AD.

The Middle Iron Age: 10th to 13th centuries AD

The Late Iron Age: 14th century to colonial period.

The Iron Age is characterised by the ability of these early people to manipulate and work Iron ore into implements that assisted them in creating a favourable environment to make a better living.

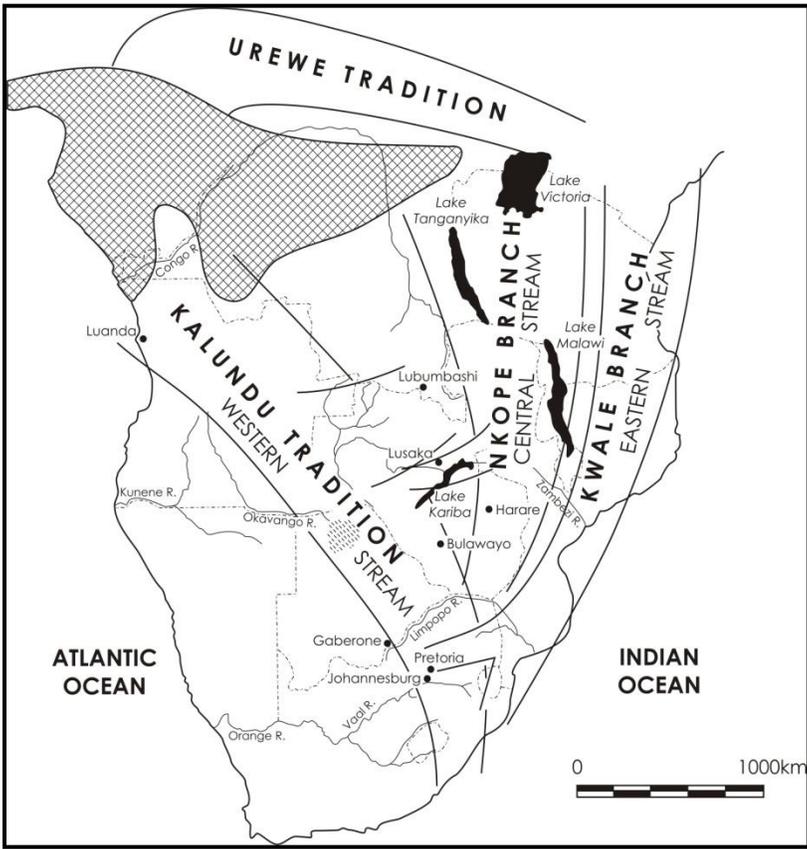


Figure 2: Movement of Bantu speaking farmers (Huffman 2007)

No Sites dating to the Iron Age have been recorded or is expected for the study area.

5. HISTORICAL BACKGROUND

This report is done on the history of Weltevreden 118 IR, the property on which the town of Brakpan was established in Gauteng Province. This report will give an account of the history of this property and also a brief overview of the history of the area and district in which it is located. The report has been divided into several sections that will focus on the following aspects:

- General history of human settlement in the area
- The history of black and white interaction in the area
- A history of specific land ownership of the study area, where this could be traced

5.1. Historiography And Methodology

It was necessary to use a range of sources in order to give an account of the history of the area in which the farm Weltevreden 118 IR is located. Sources include secondary source material, maps, electronic sources and archival documents. Owing to constraints in time and resources, this study should be viewed as an introduction to the history of the Brakpan area and the property under investigation.

Unfortunately not many documents could be found in the National Archives that specifically relates to issues on Weltevreden 118 IR. All available information was however found and analysed. Archival and other maps help to draw a clearer picture of the historical landscape.

5.2. Maps Of The Area Under Investigation

Since the mid 1800's up until the present, South Africa has been divided and re-divided into various districts. Since 1857, the farm Weltevreden 118 IR formed part of the Pretoria district. This remained the case until 1866, when the Heidelberg district was proclaimed and the property would have fallen under its jurisdiction. In 1902 the Witwatersrand district was proclaimed and the area under investigation formed part of the East Rand area within this district. As of 1909, the property fell under the jurisdiction of the Boksburg district. In 1930 the Brakpan district was proclaimed, and the property still forms part of this district. (Geschiedenisatlas van Suid-Afrika 1999: 17, 20-27)

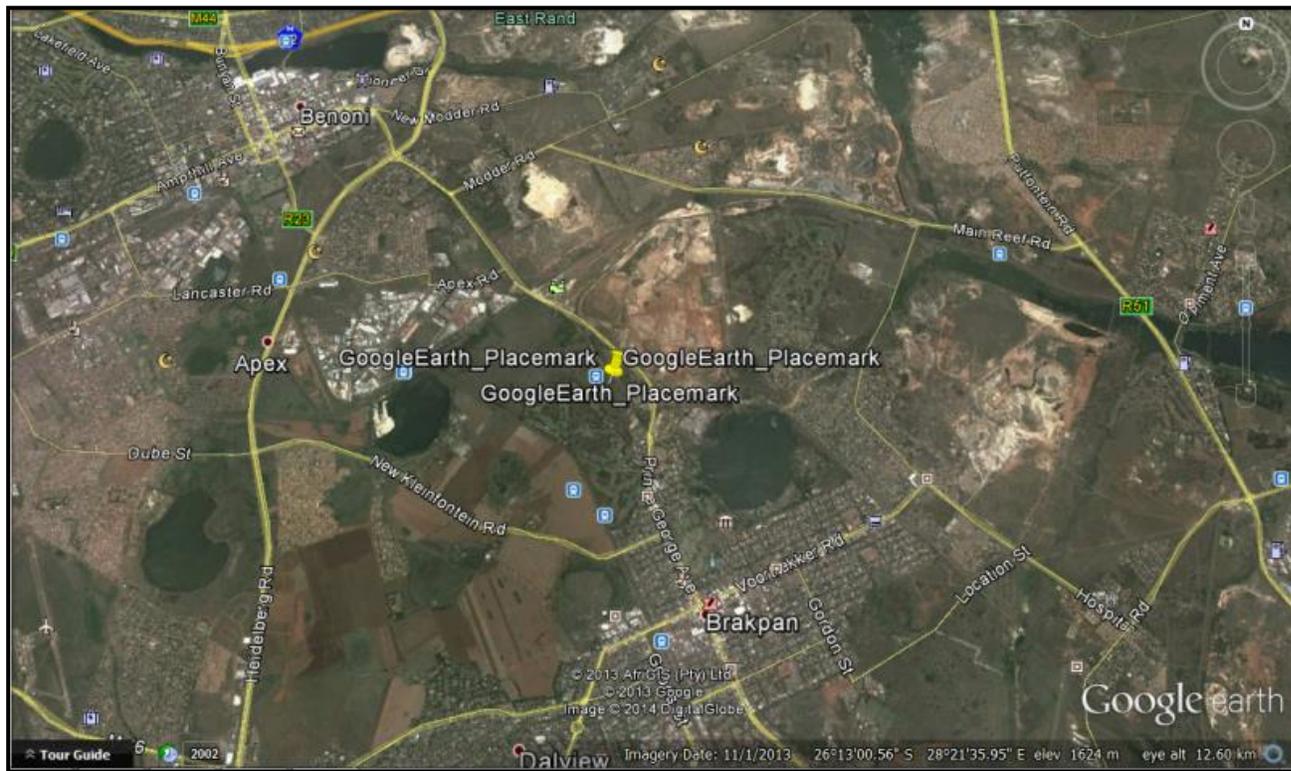


Figure 3: Google Earth Image of the site under investigation ("GoogleEarth_Placemark") in relation to Brakpan and Benoni. (Google Earth 2013)

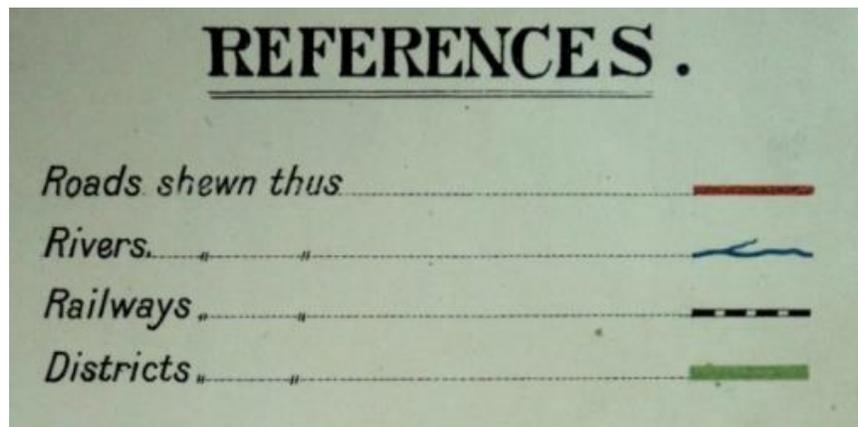
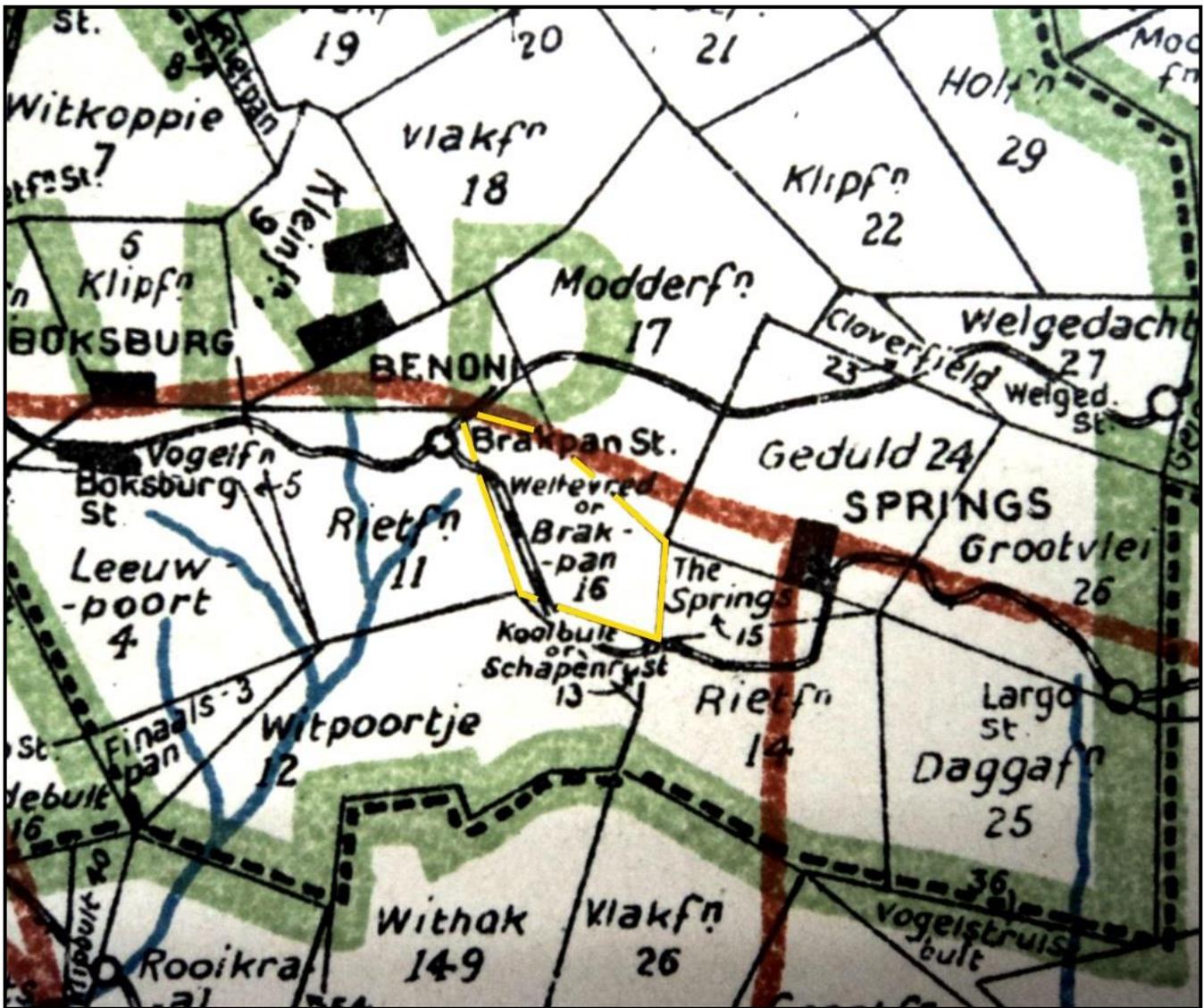


Figure 4 : 1920's Standard Map of the Transvaal, showing the location of Weltevreden or Brakpan 16 in relation to Johannesburg and Pretoria. The property was located in the Pretoria district at the time. (Anon 1920s)

5.3. A Brief History Of Human Settlement And Black And White Interaction In The Brakpan Area

J. S. Bergh's historical atlas of the four northern provinces of South Africa is a very useful source for the writing of local and regional histories. According to this source Weltevreden 118 IR is located in the vicinity of the Linksfield and Primrose Middle Stone Age terrains. (Geschiedenisatlas van Suid-Afrika 1999: 4-8)

The Difaqane (Sotho), or Mfekane ("the crushing" in Nguni) was a time of bloody upheavals in Natal and on the Highveld, which occurred around the early 1820's until the late 1830's. It came about in response to heightened competition for land and trade, and caused population groups like gun-carrying Griquas and Shaka's Zulus to attack other tribes. At the beginning of the nineteenth century, the predominant black tribe in the area south of Johannesburg was the Khudu. In 1832, Shaka's Zulu tribe passed by the south of Pretoria from the southeast in a westerly direction, close by the area where Weltevreden 118 IR is situated today, in order to attack Mzilikazi's Ndebele. This group also went on raids in various other parts of the country to expand their area of influence. The Khudu Tribe also had to move in a western direction to avoid the Ndebele, who were migrating and attacking tribes in the vicinity. (Geschiedenisatlas van Suid-Afrika 1999: 10-11, 109-119)

During the time of the Difaqane, a northwards migration of white settlers from the Cape was also taking place. Some travellers, missionaries and adventurers had gone on expeditions to the northern areas in South Africa, some already as early as the 1720's. In 1825 the Scottish adventurer David Hume made his journey through the area to the north of where Weltevreden 118 IR is located today, travelling first from the trade site at Kuruman in a north eastern direction towards the black village of Shoshong (today this is close to the present-day Mahalapye), then in a south eastern direction towards Pretoria, and finally back to Kuruman. In 1847 another famous traveller, David Livingstone, travelled close by the area under investigation. Livingstone is probably the best-known traveller to have made his journey through the northern provinces of South Africa, but is even better known for his travels into Central Africa. He arrived at Kuruman in 1841 as a missionary of the London Missionary Society. Two years later, he commenced a second journey into the northern provinces of South Africa. He first established a mission station at Mabotsa under the Kgatla (northwest of the present-day Zeerust), then travelled in a south easterly direction past Rustenburg and turned near the north of Johannesburg. Livingstone then travelled past the area where Pretoria would later be established, through the farm area under investigation. Hereafter he made his way back to the mission station. (Geschiedenisatlas van Suid-Afrika 1999: 12-13)

It was 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)

The Anglo-Boer War was the greatest conflict that had taken place in South Africa up to date, and also affected the in which the farm under investigation is situated. Nine black concentration camps were established in the Witwatersrand area, of which Brakpan forms part. These were known as the Bantjes, Bezuidenhoutsvallei, Boksborg, Brakpan, Klipriviersberg, Natalspruit, Nigel, Rietfontein-East and Springs concentration camps. A black concentration camp was therefore established in the area of the present-day Brakpan district. The battle that took place closest to the farm area played out at Donkerhoek, some distance to the southeast of Pretoria. (Geschiedenisatlas van Suid-Afrika 1999: 54)

Between 1939 and 1940, farm boundaries were drawn up in an area that includes the present-day Brakpan magisterial area. The town of Brakpan was established on the property presently known as Weltevreden 118 IR, and the development of this town would therefore have had an important impact in the area of study. Some information regarding the foundation and development of Brakpan will therefore be provided. (Geskiiedenisatlas van Suid-Afrika 1999: 15)

Brakpan is a mining town situated 37 km east of Johannesburg. Brakpan was named after a pan of brackish water on its outskirts - *brak* is Afrikaans for 'brackish', and *pan* is a depression. The town was founded in 1886 on the farm Weltevreden 20 and declared a township in 1912. The development of the town started in 1911 when the Transvaal Coal Trust Company applied for the establishment of a new township in the Brakpan area. This application was violently opposed by a section of the Benoni community that was afraid that their economic interest would be harmed. The Benoni Municipality Council however believed that there existed a definite need for the establishment of a new township, especially for the sake of mineworkers in the Brakpan area. It was believed that this would not affect Benoni's interests. The Council therefore had no objection to the proposed township, which was established later in 1912. (Raper 1983: 93; Humphriss & Thomas 1968: 234)

Brakpan grew rapidly, especially during the First World War. However, its administration represented a problem, since it was a long way from Benoni and most municipal services had to be duplicated. The people in Brakpan became increasingly dissatisfied and by 1918 demanded "self-government". A commission, under the chairmanship of A.E.W. Williamson, was appointed to investigate the matter. He found that the administration of Brakpan gave no grounds for complaint. The only justifiable grievance was that Benoni was embarking on schemes for its own benefit, without regard for the interest of Brakpan. It is for this reason that the Executive Committee of the Provincial Council decided to declare Brakpan a separate municipality. The new municipality started functioning in August 1919. Today the area of Brakpan measures 182.81 km², and the town has a population of 73,080 (399.76 per km²). The majority population group is white (53.31%) and the majority of Brakpan's inhabitants are Afrikaans speaking (47.20%). (Humphriss & Thomas 1968: 234 – 235; Census 2011)

5.4. Historical Overview Of The Ownership And Development Of Weltevreden 118 Ir

Though it was not possible to find a complete title deed record of all the owners of the present-day Portion 37 of Weltevreden 118 IR, it was possible to trace the owners back to 1969. In this year one Ralph Josselowitz became the owner of this property. The land was transferred to Bernard Joss in 2006, and finally to the company Brookway Prop Pty Ltd in 2008.

Some information was found regarding a certain portion of Weltevreden that belonged to Ralph "Joss" by 1968. Though Joss did own Portion 37 of the farm at the time, it is not certain that this information refers to this specific portion. On 23 January 1968, Ralph Joss received permission from the Department of the Prime Minister to establish a black cemetery on a portion of Weltevreden 118 IR for which he held the mining title. He would see to it that this cemetery was fenced. If the cemetery was established on Portion 37, this would be something to take into consideration. (NASA SUB, URU: 5435 46)



Figure 5: This is a mid 1970s map of the Brakpan area, showing the area under investigation within the yellow border. The property was located to the north of a golf course. The township extension of Anzac x3 can be seen to the east of the property. (NASA SAB, CDB: 14872 PB4/19/2/9/118/1)

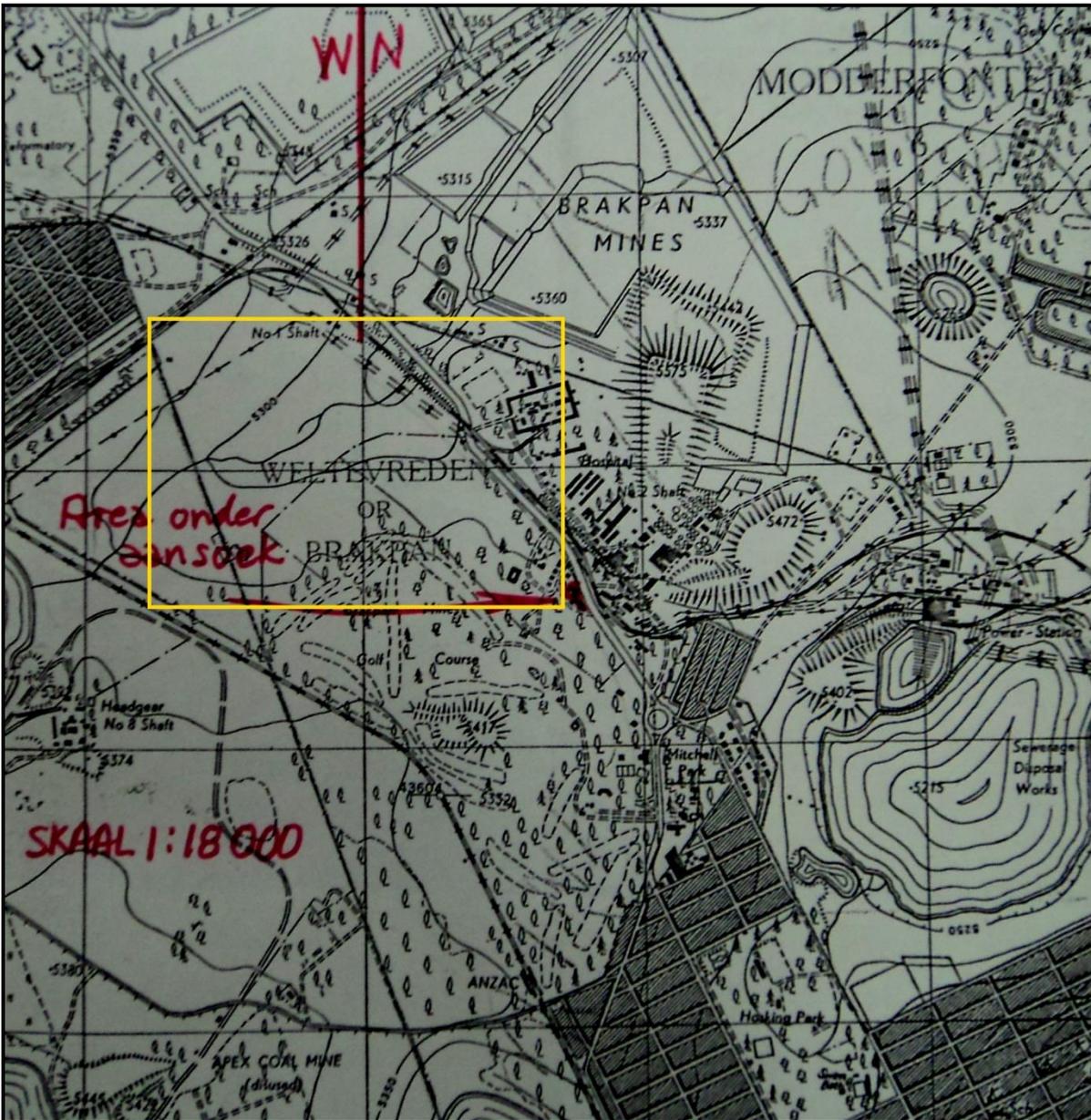


Figure 6: This is a more detailed map of the area under investigation in the mid-1970s. (Area of interest indicated by yellow border) This area does not seem to be developed. A building can however be seen near the southeastern corner of the property. The Brakpan Mines are visible to the northeast of the main road and the area under investigation. To the south, one can see a golf course and further southeast the Brakpan Township and Sewerage Disposal Works. (NASA SAB, CDB: 14872 PB4/19/2/9/118/2)

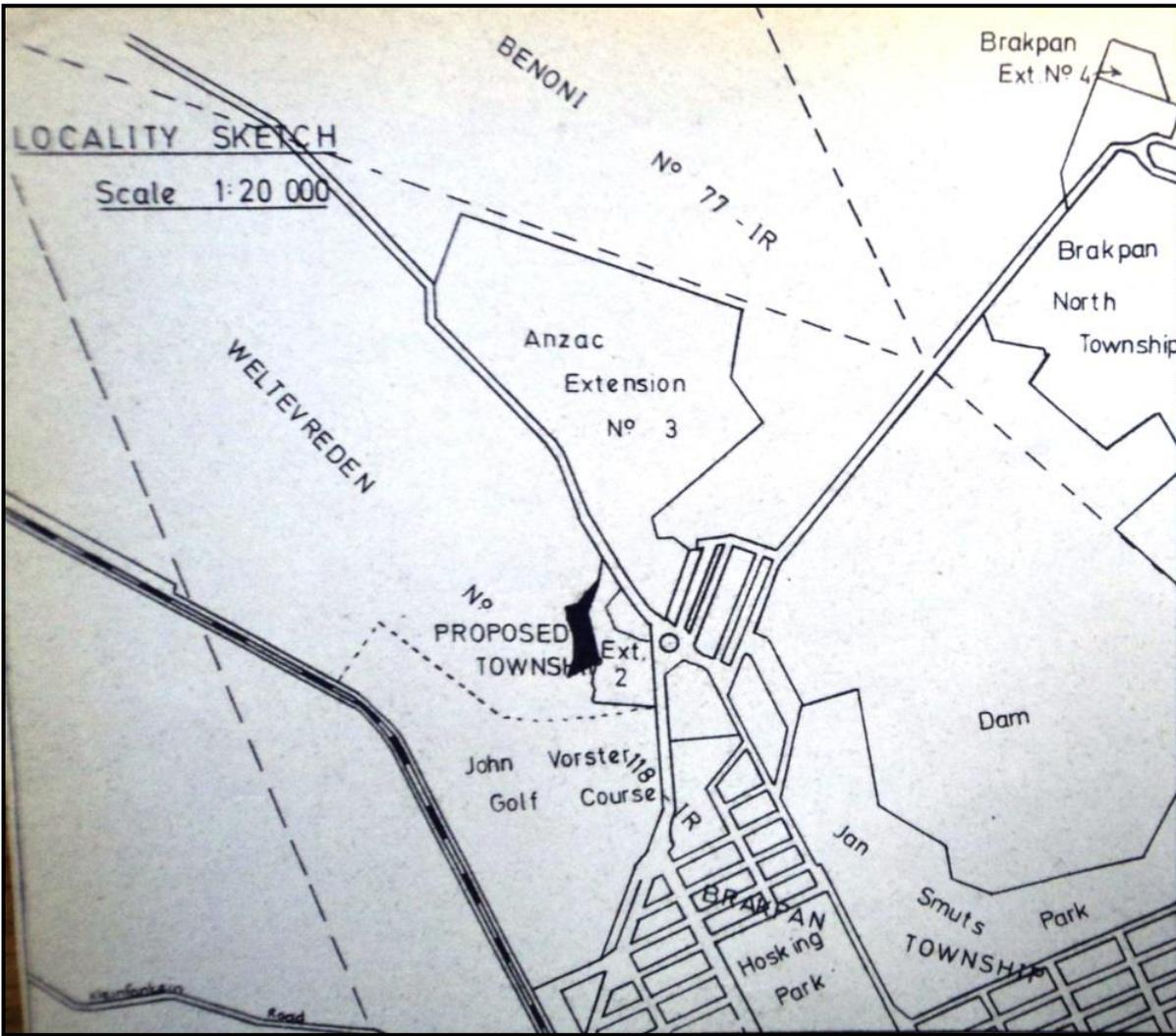
In 1976 negotiations were underway for the establishment of a township as Extension 4 of the Anzac Township in the then northwestern part of the town Brakpan. This township extension would be established on Portion 37 of Weltevreden 118 IR. On 27 September 1976, Brakpan's Town Electrical Engineers certified that a supply of electric current, sufficient for the needs of the inhabitants, would be available. At that time the Clerk of the Town Council of Brakpan had also certified that water and sewerage could be made available to the township within a period of three years. (NASA TAB, MBP: 2/2/1278 20/6/99)

More information was provided in a report, dated November 1976, on the layout of the proposed Anzac Extension No. 4 Township. Herein it was noted that the township was to be developed on an unsurveyed portion of Portion 37 of the farm Weltevreden 118 IR. The layout would make provision for one general residential lot, six special residential lots and a park. No new streets were required, as access to all the lots in the township would be provided from existing streets in the Anzac Extension No. 2 Township. The property fell within the Brakpan Town Planning Scheme and was zoned for agricultural purposes. At the time it was deemed unlikely that a school would be established in the township. (NASA TAB, MBP: 2/2/1278 20/6/99)

The mineral rights on the property were held by African gold and Base Metal Holdings Limited, and this company had given its consent for the establishment of the township. The development would be situated in close proximity to the workings of the Apex Colliery, which was no longer active at the time, and the boundaries of the township were therefore determined in consultation with the Mining Commissioner. A sufficient distance was allowed between the township boundary and the undermining to ensure that there would be no danger to the buildings to be erected on the township. (NASA TAB, MBP: 2/2/1278 20/6/99)

The establishment of a township was deemed necessary and desirable, as there was an acute shortage of large general residential erven in the Brakpan municipal area, and it was felt that the large lot in the Anzac Extension No. 4 Township would provide an opportunity for the erection of flats for sale in terms of the Sectional Titles Act in an area which would remain semi-rural in character and yet be easily accessible to other residential areas and the central area of Brakpan. The general residential lot overlooked an existing golf course which, because it was situated on land that was undermined at shallow depth, would never be developed. It was believed that the special residential lots would find a ready market as the area near the golf course would be a desirable residential neighbourhood. (NASA TAB, MBP: 2/2/1278 20/6/99)

On 30 November 1976 the Brakpan Town Council resolved that the layout of Anzac Extension No. 4 was acceptable, and that the development could continue. (NASA TAB, MBP: 2/2/1278 20/6/99)



TOWNSHIP DATA	
Total area of township	1,6150 Ha.
Total number of erven	8
Minimum size of special residential erven	1000sq.m.
Ruling size of special residential erven	1000sq.m.
Total length of roads	-
Area of roads	-
Area of roads as a % of total area	-
Minimum gradient of roads	-
Maximum gradient of roads	-
Area of park	3300sq.m
Area of park as a % of total area	20%

LAND USE TABLE			
Land Use	No.	Erven Nos.	Colour
Special residential	6	1 - 6	<input type="checkbox"/>
General residential	1	7	<input type="checkbox"/>
Park	1	8	<input type="checkbox"/>
Road	-	-	<input type="checkbox"/>
Total	8	-	-

Scale 1:1000

Plan showing proposed

ANZAC EXTENSION NO 4 TOWNSHIP

situated on an unsurveyed portion

of Portion 37 of the farm

WELTEVREDEN No 118-IR

Figure 7: 1976 Locality sketch of the Brakpan Township area, showing the area where the proposed Anzac Extension No. 4 Township would be established on Portion 37 of Weltevreden 118 IR. The township would therefore be established in the southern corner of the area of interest for this report. (NASA TAB, MBP: 2/2/1278 20/6/99)

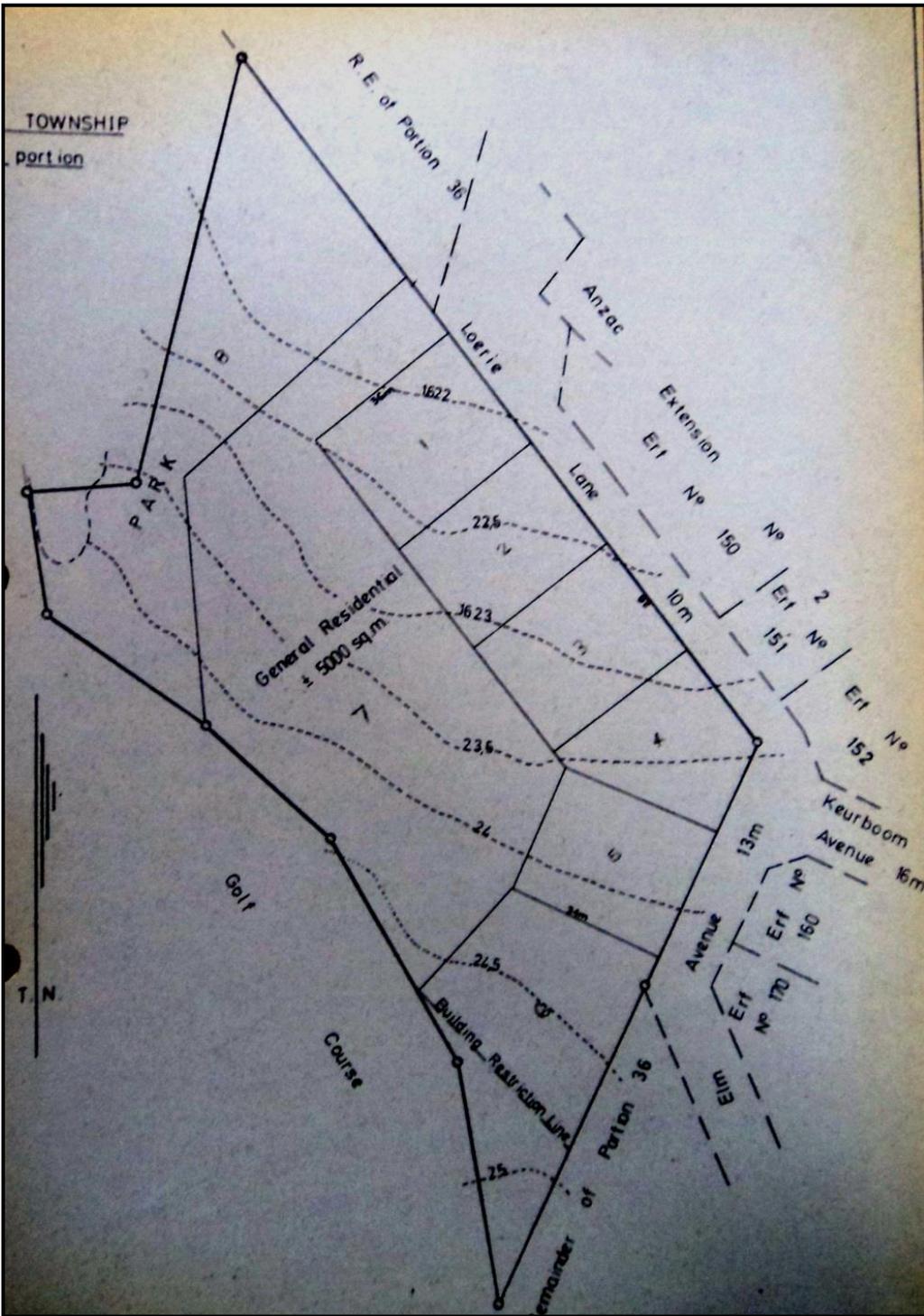


Figure 8: 1976 Sketch plan of the proposed township. One can see six special residential lots along the eastern boundary of the township, and a large general residential lot to the west thereof, bordering on the golf course. A park can be seen in the northernmost part of the township. The streets of the Anzac Extension No 2 Township are visible to the east of the proposed township. (NASA TAB, MBP: 2/2/1278 20/6/99)

6. 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 PV Solar Facility 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.

6.1. 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 9 of this report.

<i>FIELD RATING</i>	<i>GRADE</i>	<i>SIGNIFICANCE</i>	<i>RECOMMENDED MITIGATION</i>
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

7. BASELINE STUDY-DESCRIPTION OF SITES

It is important to note that the entire farm was not surveyed but only the development footprint (Figure 11). The study area is flat with clusters of exotic trees (Figure 14 &15). The larger study area was mined previously (Figure 15) and the north western portion is disturbed due to agricultural fields in the past. A study (van der Walt 2008) adjacent to the current study area revealed several demolished foundations of mining infrastructure, houses and an informal cemetery. For the current study similar sites were recorded as well as a monument, relating to the 1922 Miners strike Victims. The fieldwork was hampered by vagrants who have put up shacks in the eastern portion of the study area. The inhabitants of the area were very aggressive when pictures were taken. In this area illegal dumping occurs (Figure 16).

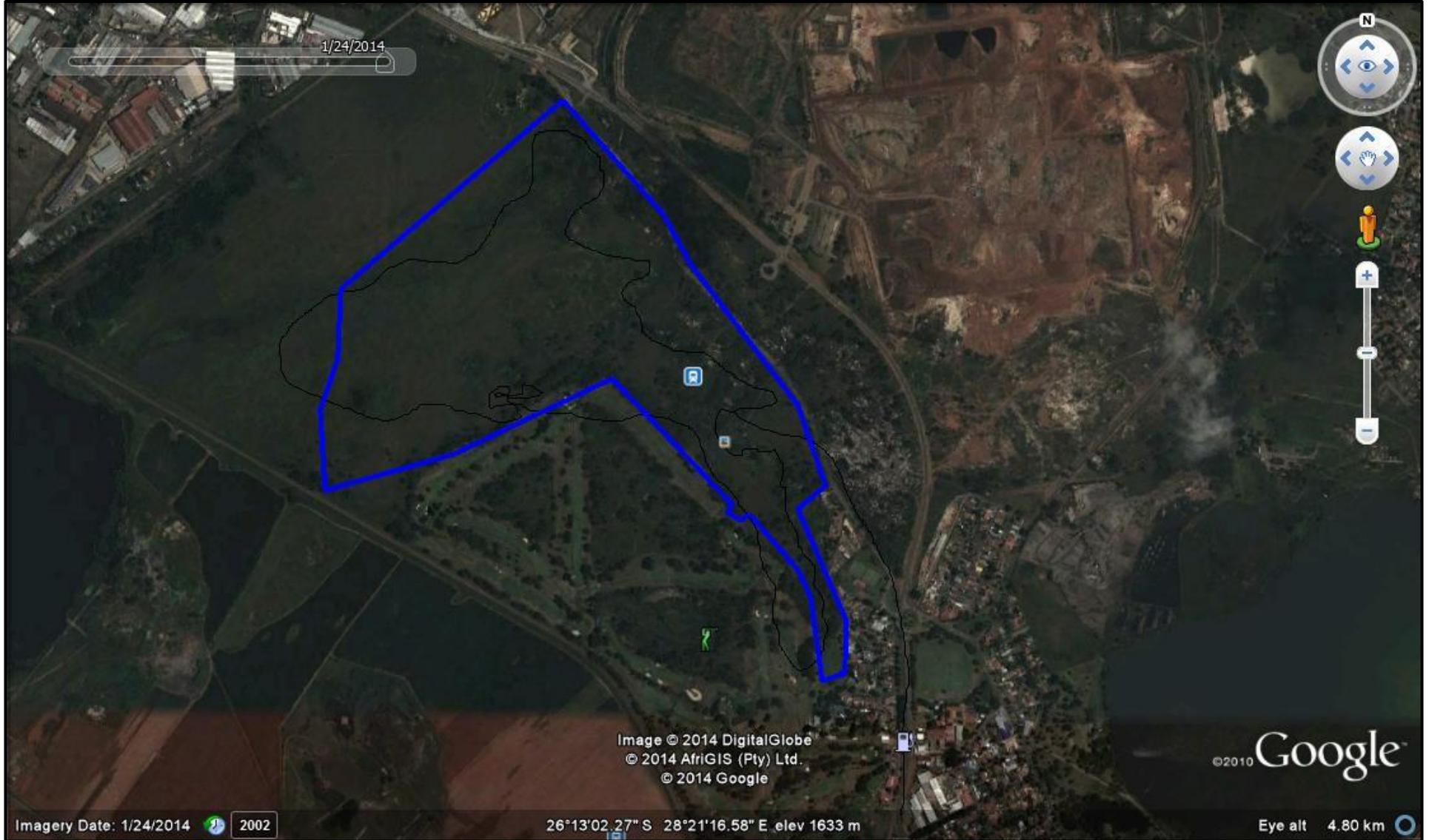


Figure 9: Google Earth image of the study area in blue and track logs of the survey in black.

7.1 Site Distribution Map

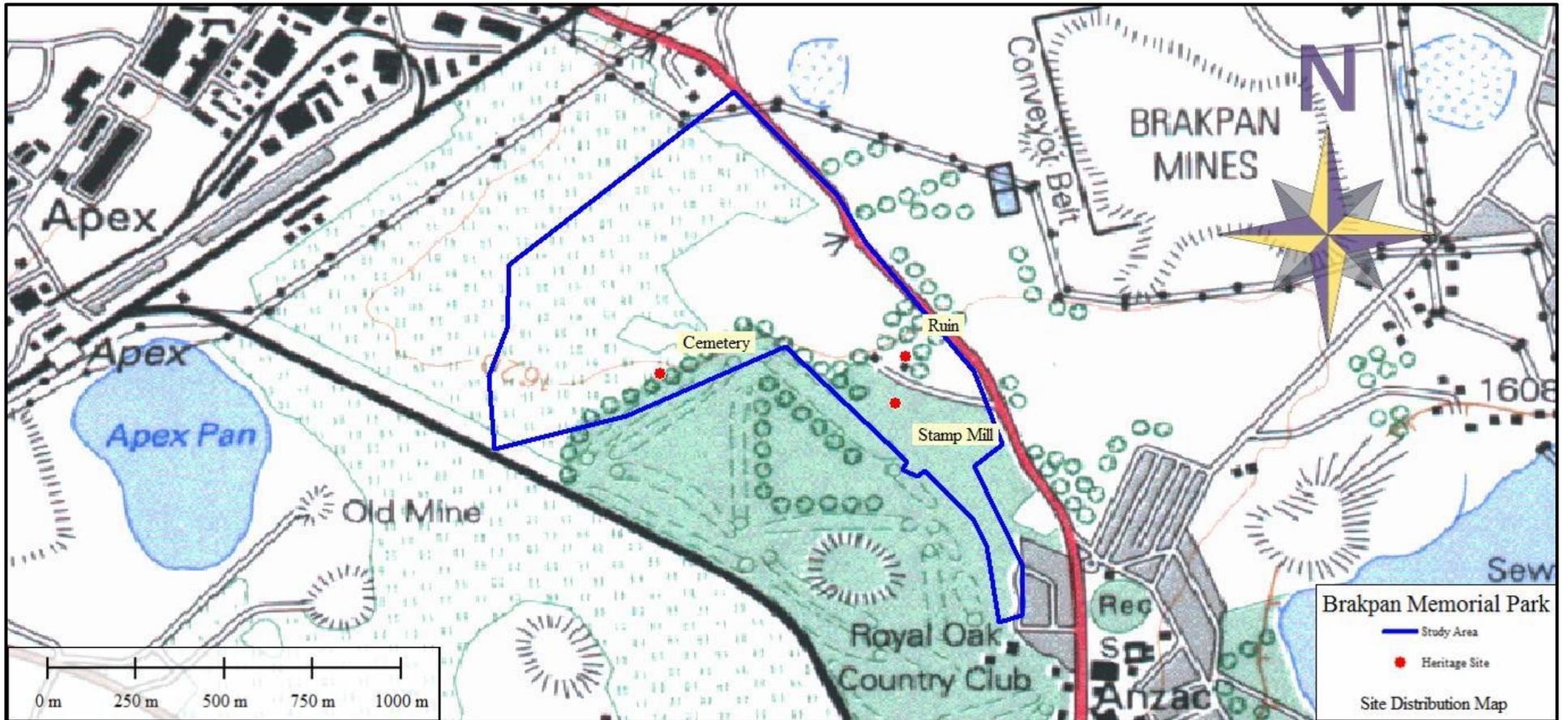


Figure 10: Map showing the location of recorded sites.



Figure 11. Remains of shaft 5 outside the study area.



Figure 12. General Site conditions.



Figure 13. General site conditions.



Figure 14. Illegal dumping.

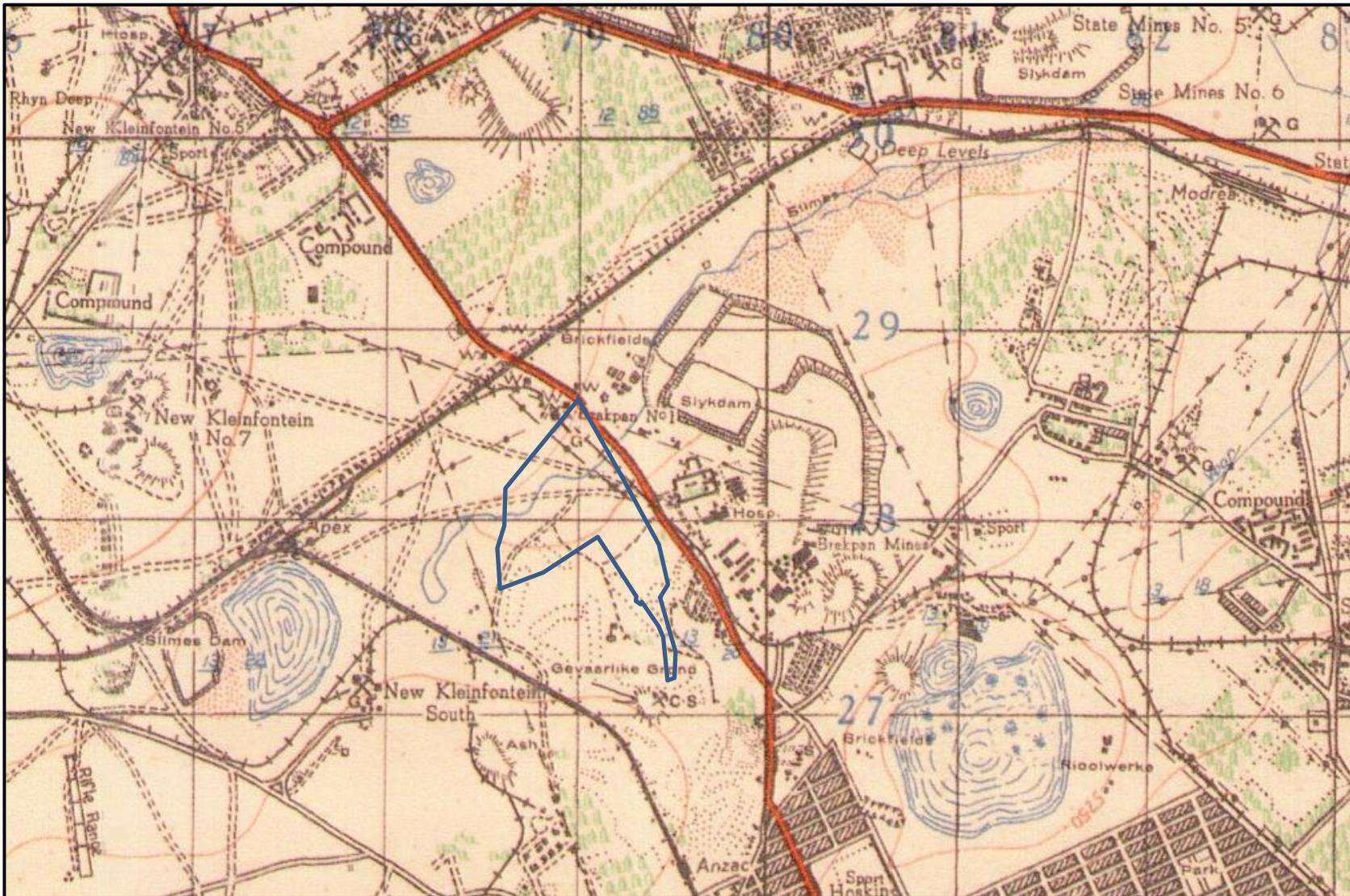


Figure 15: The depicted map represents an enlarged section of the 2628 AB 1:50 000 topographical Map. The map was drawn by the Trigonometrical Survey Office in 1944.

7.2. Sites with Coordinates

Site Number	Landscape	Co ordinate
Ruin	Modern	S26 12 59.5 E28 21 18.0
Cemetery	Modern	S26 13 01.1 E28 20 55.5
Stamp Mill Memorial	Monuments	S26 13 03.8 E28 21 17.0

7.3. Site Descriptions

7.3.1. Cemetery

Field Number	Cemetery	1:50 000 map nr	2628 AB
Site Data	Description:		
Type of site	Open air Site		
Site categories	Cemetery		
Context	This is the location of a very large cemetery. The graves are aligned east to west and most of the grave dressings consist of stone. The site is overgrown and the exact amount of graves and the extent of the cemetery are not known. From the archival study it seems as if this cemetery was formalised on the 23 January 1968, but some graves could well be older.		
Photographs			
			
Figure 16: Dorsal view of artefacts			
Field Rating (Recommended grading or field significance) of the site:	Generally Protected A		
Statement of Significance (Heritage Value)	High social significance.		

7.3.2. Stamp Mill Monument

Site Number	Ruin	1:50 000 map nr	2628 AB
Site Data	Description:		
Type of site	Open site		
Site categories	Modern		
Context	The site consists of a wall and needle commemorating the following persons who passed away during the violent strike. H Martin age 46 – Mine official, L Phillips age 41 – Mine Official, A.B Momsen age 26 – Mine official, G.W Lowdon age 46 – Mine official, S.J Combrink age 23 – special constable, F.H Smit age 28 – special constable, J.H Jordaan age 23 – special constable, V.F Brodigan age 45 – Lieutenant,		
Cultural affinities, approximate age and significant features of the site;	There is illegal squatters who currently occupy this area. They have erected shacks and possible looting of the site may occur. The riots occurred in 1922 and the monument was erected to remember the victims of the violent strike.		
Description of artefacts	Modern industrial artefacts, such as wire, glass and cans, are scattered over the site.		

Photographs



Figure 17: Monument for victims of the violent strike in 1922.

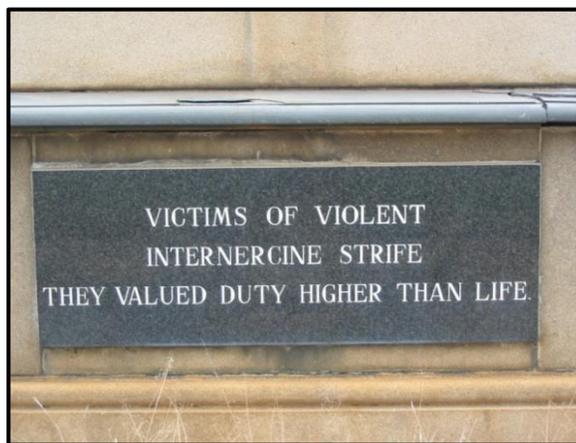


Figure 18: Inscription on the monument.

Field Rating (Recommended grading or field significance) of the site:	Generally Protected A
Statement of Significance (Heritage Value)	High social significance.

7.3.3. Ruin

Site Number	Ruin	1:50 000 map nr	2628 AB
Site Data	Description:		
Type of site	Open site		
Site categories	Modern		
Context	The site consists of the demolished foundations of several rectangular buildings.		
Cultural affinities, approximate age and significant features of the site;	The site is currently occupied by illegal squatters who were very aggressive when the author tried to take pictures of the site. Therefor no pictures were taken. Only the walls remains everything else has been looted. The buildings are not indicated on the archival map (1944) and are only indicated on a map from the mid 1970 (figure 6) and these buildings are therefore assumed not to be older than 60 years.		
Description of artefacts	Modern rubble is scattered over the site.		
Field Rating (Recommended grading or field significance) of the site:	Generally Protected C		
Statement of Significance (Heritage Value)	Low significance based on the extent of destruction and as the buildings are not older than 60 years.		

8. CONCLUSIONS AND RECOMMENDATIONS

The study area is marked by historical mining activities with the demolished and looted remains of the Brakpan Mine no 1 shaft found just outside of the north eastern border of the development area. The southern portion is marked as being undermined on the 1944 maps of the study area. Further impacts to the study area consist of agricultural fields in the northern portion of the study area. Recently vagrants are illegally occupying the eastern portion of the study area that is next to a landfill site and illegal dumping occurs in this area that is accessible from Mainreef road. In this area two features were recorded consisting of the demolished and looted remains of at least two rectangular structures (**Ruin**) interpreted as dwellings associated with the mine. Squatters are now occupying these structures. From the archival study it is concluded that these structures are not older than 60 years or associated with an historic event and therefore not protected under section 34 of the NHRA and no further action or mitigation are necessary for the ruins.

The second feature (**Stamp Mill**) is a memorial for the 3 Policemen and 4 mine officials that were killed on the Brakpan Mines on the 09/03/1922. This site is protected under section 37 of the NHRA and the impact of looting on the site by vagrants in the area is a concern.

A third site consisting of a very large **cemetery** is located in the northern section of the study area on the boundary of the golf course. The site is overgrown and the exact amount of graves and the extent of the cemetery are unknown. From the archival study it seems as if permission from the Department of the Prime Minister to establish a black cemetery on this portion of Weltevreden 118 IR was given on 23 January 1968, it is however possible that by this time a smaller informal cemetery was already established and that some of the graves might be older. The site is protected under Section 36 of the NHRA.

Due to the unique nature of the proposed memorial park development the impacts to the recorded heritage resources are considered to be positive. The sites can be protected within the development as the sites fall under the ambit of a memorial park where the memorial and cemetery can be protected *in-situ* and the impact of looting by vagrants who illegally occupy the study area can be nullified. The following recommendations are applicable:

- Landscaping of the memorial park must be done to incorporate both the cemetery and the Stamp Mill memorial.
- Existing damage from looting and neglect of the site to the memorial must be repaired.
- The cemetery needs to be cleaned so that the extent of the cemetery and the amount of graves can be determined to ensure all the graves are incorporated into the park layout.

If the recommendations as made in section 8 of this report are adhered to (subject to approval from SAHRA) there is from an archaeological point of view no reason why the development should not proceed

If any possible finds such as tool scatters, bone or fossil remains are exposed or noticed during construction, the operations must be stopped and a qualified archaeologist must be contacted to assess the find.

Due to the subsurface nature of archaeological material and unmarked graves the possibility of the occurrence of unmarked or informal graves and subsurface finds cannot 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.

9. PROJECT TEAM

Jaco van der Walt, Project Manager and Archaeologist

Liesl Bester, Archival Specialist

10. 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, DRC and Tanzania; having conducted more than 300 AIAs since 2000.

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