Archaeological Impact Assessment

Archaeological Impact Assessment Report for the proposed Soutpan Low Cost Housing Development close to Pretoria, Gauteng

Prepared For

MDP Consulting

Ву



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VERSION 1.0 11 November 2012

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EXECUTIVE SUMMARY

Site name and location: The proposed Soutpan Low Cost Housing Project, will take place on portion 1 of the farm Tswaing 149 JR in Soutpan north of Pretoria on the border of North West and Gauteng Provinces. The site falls within the jurisdiction of City of Tshwane Metropolitan Municipality of Gauteng Province

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 development area.

1:50 000 Topographic Map: 2528 AC

Environmental Consultant: MDP Consulting

Developer: Department of Housing

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

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Date of Report: 13 November 2012

Findings of the Assessment:

No archaeological, grave sites or structures older than 60 years were identified and there are no fatal flaws in terms of the archaeological component to the project. There is from an archaeological point of view (subjected to approval from SAHRA) there is no reason why the development cannot commence work.

General

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.

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 refere to both Emiliana and I house at Assessment and the				

^{*}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

The Archaeological Impact Assessment report forms part of the EIA for the proposed project.

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

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

During the survey no heritage sites were identified. General site conditions and features on sites were recorded by means of photographs, GPS locations, and site descriptions. Possible impacts were identified and mitigation measures are proposed in the following report.

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

1.1 Terms of Reference

Desktop study

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

Field study

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

Reporting

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

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

1.2. Archaeological Legislation and Best Practice

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

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

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

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

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

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

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

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

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

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

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

Human remains older than 60 years are protected by the National Heritage Resources Act, with reference to Section 36. Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of SAHRA. The procedure for Consultation Regarding Burial Grounds and Graves (Section 36[5]) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in this age category, located inside a formal cemetery administrated by a local

authority, require the same authorisation as set out for graves younger than 60 years, in addition to SAHRA authorisation. If the grave is not situated inside a formal cemetery, but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws, set by the cemetery authority, must be adhered to.

Human remains that are less than 60 years old are protected under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning; or in some cases, the MEC for Housing and Welfare.

Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. To handle and transport human remains, the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

1.3 Description of Study Area

1.3.1 Location Data

The site is located opposite the entrance to the Tswaing Nature reserve on the way to Shosanghuve from Pretoria. The study area consists of an existing township development and is located south of the T junction of the D2757 to Eersterust and the M35 to Shoshanguve. The area is flat and featureless with no rivers or streams. Several quarries exist on the northern portion of the study area and illegal dumping occurs throughout the study area.

1.3.2. Location Map

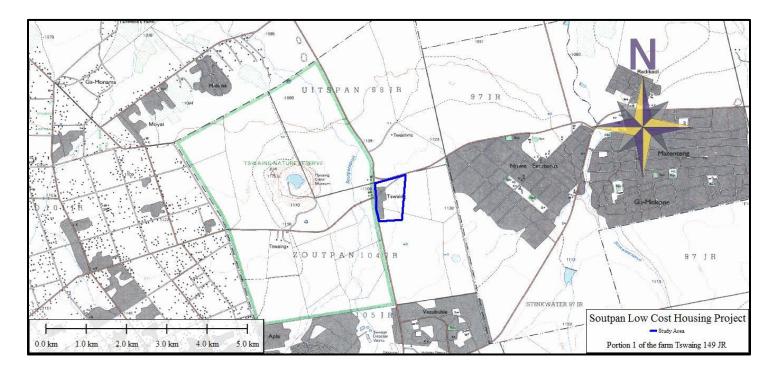


Figure 1: Location map showing the study area in blue.

2. APPROACH AND METHODOLOGY

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

2.1 Phase 1 - Desktop Study

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

2.1.1 Literature Search

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

2.1.2 Information Collection

The 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.

2.1.3 Consultation

No social consultation was conducted but is done as part of the EIA.

2.1.4 Google Earth and Mapping Survey

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

2.1.5 Genealogical Society of South Africa

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

2.2 Phase 2 - Physical Surveying

Due to the nature of cultural remains, the majority of which occurs below surface, a field survey of the study area was conducted. The study area was surveyed by means of vehicle and extensive surveys on foot by a professional archaeologist.

No heritage significant sites were discovered inside the proposed development area.

2.3. Restrictions

Due to the fact that most cultural remains may occur below surface, the possibility exists that some features or artefacts may not have been discovered/ recorded during the survey. Low ground visibility of parts of the study area is due to houses and illegal dumping, and the possible occurrence of unmarked graves and other cultural material cannot be excluded. Only the footprint area of the development was surveyed as indicated in the location map, and not the entire farm. Although HCAC surveyed the area as thoroughly as possible, it is incumbent upon the developer to stop operations and inform the relevant heritage agency should further cultural remains, such as stone tool scatters, artefacts, bones or fossils, be exposed during the process of development.

3. NATURE OF THE DEVELOPMENT

The project entails the formalisation of 3500 stands for construction of low cost hoses, roads and a school in Soutpan. Most of the stands are currently occupied. The application for the project has been lodged with Gauteng Department of Agriculture and Rural Development (GDARD).

4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

4.1 Databases Consulted

Wits Archaeological Data Bases

One previously recorded site (2528 AC1) is on record for the farm Soutpan at the Wits database (referenced 2009). This site is located to the west of the current project area within the Tswaing Nature Reserve.

SAHRA Report Mapping Project

No Previous CRM projects were conducted close to the study 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.

4.2 Archaeological Information Available on the Study Area

4.2.1 Stone Age sites

Stone Age sites are usually associated with stone artefacts found scattered on the surface or as part of deposits in caves and rock shelters. The Stone Age is divided into the Early Stone Age, the Middle Stone Age and the Later Stone Age. No previously recorded Stone Age sites are on record for the study area. No significant Stone Age sites are expected for the study area.

4.2.2. Iron Age remains

Close to the pan potsherds have been found where Sotho and Tswana speaking communities produced salt by filtering, boiling and evaporating lake water during AD 1200 – 1830. For a further discussion on the late Iron Age refer to section 4.3.3 of this report.

4.3. Historical information available on the area

The following section will endeavour to give an account of the history of this farm 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 farm area
- The development of the farm

4.3.1. Historiography And Methodology

It was necessary to use a range of sources in order to give an accurate account of the history of the area in which the farm Tswaing 149 JR is located. Sources include secondary source material, maps and archival documents.

The report was written within a limited time-frame, and should therefore only serve as an introduction to the history of the farm. Also, not all of the sources that were found could be incorporated into the report. The following are relevant sources that can be consulted in the future, if a more thorough investigation is done on the history of the farm area:

• The City Council of Pretoria. 1955. *Pretoria (1855-1955). History of the city of Pretoria published in the centenary year 1955.* Pretoria: Wallachs' P. & P. Co. Ltd.

4.3.2. Maps of the area under investigation

Since the mid 1800's up until the present, South Africa had been classified into various different districts. Since 1857, the farm formed part of the Pretoria District. (Geskiedenisatlas van Suid-Afrika 1999: 17)This remained the case up until 1990, when the farm would have formed part of the Magisterial District of Wonderboom. (Geskiedenisatlas van Suid-Afrika 1999: 20-27)

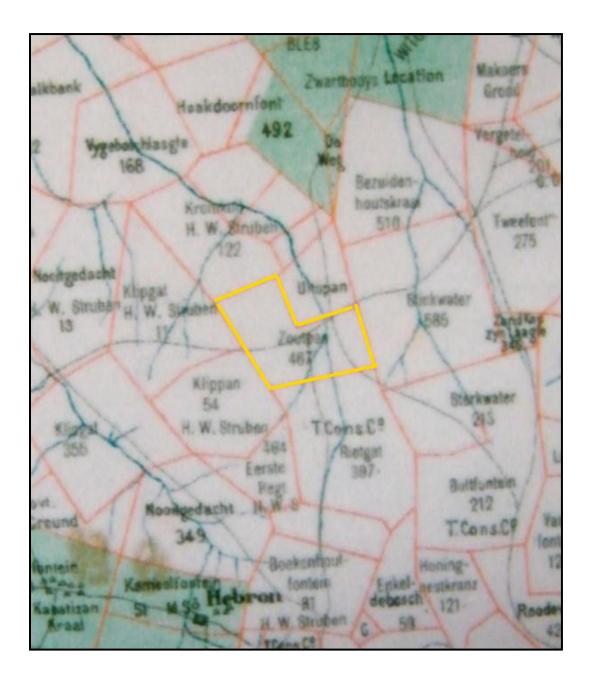


Figure 2 Map 1: Jeppe Map of the Transvaal showing the location of Zoutpan No. 467. (Jeppe 1899)

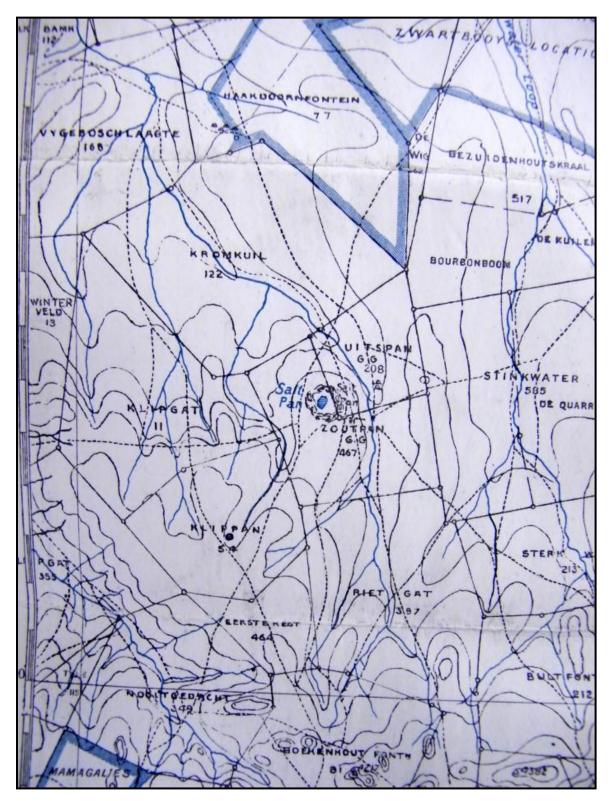


Figure 3 Map 2: 1913 Map of the Pretoria District, drawn up by the Union of South Africa. The location of the farm Zoutpan No. 467, as well as the salt pan thereon, is indicated. (Union of South Africa 1913)

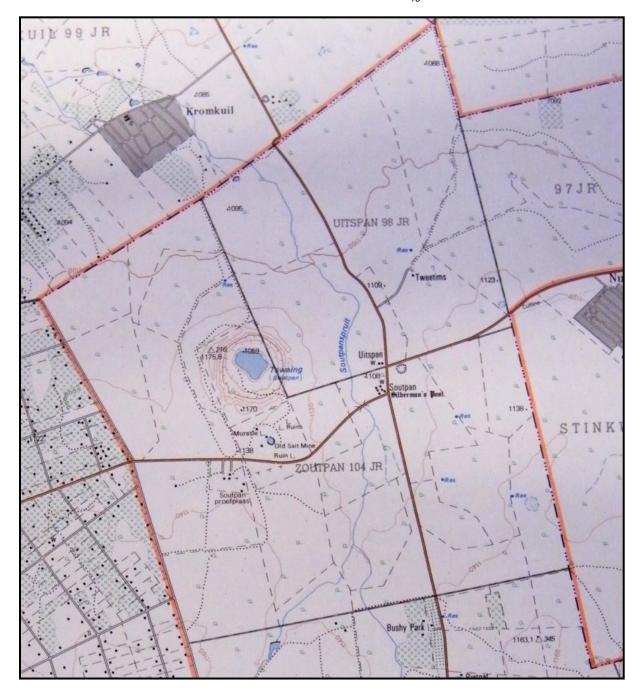


Figure 4 Map 3: 1984 Topographical Map of the farm Zoutpan 104 JR. One can see various ruins and the remains of an old salt mine to the south of the dam. (Topographical Map Mathibestad 1984)

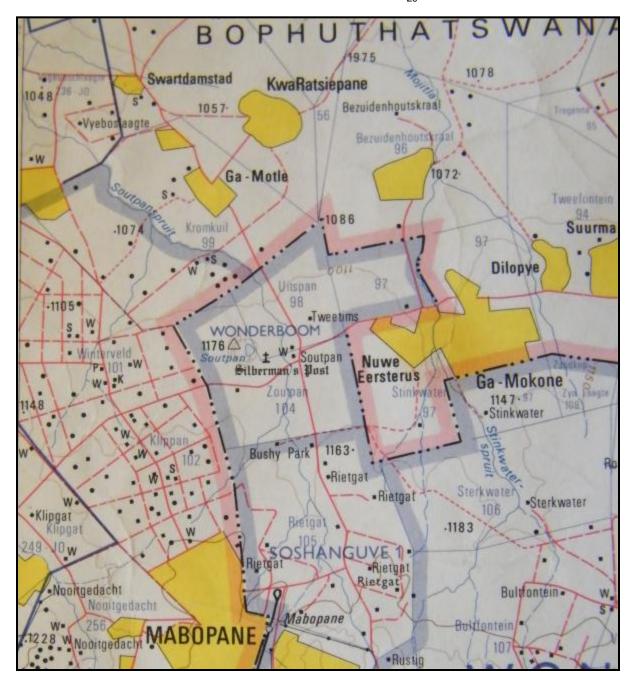


Figure 5 Map 4: 1986 Topographical Map of the Pretoria District. One can see the location of the salt pan (soutpan), as well as a site known as Silberman's Post, on the farm Zoutpan No. 104. (Topographical Map Pretoria 1986)

4.3.3. A Brief History of Human Settlement and Black and White Interaction in The Pretoria 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. Interestingly, it seems that Tswaing 149 JR is located in the vicinity of an Early Stone Age Terrain, known as the Wonderboompoort. (Geskiedenisatlas van Suid-Afrika 1999: 4) This area

was also important to Iron Age communities, as one can see that Tswaing 149 JR was located within an area where many Late Iron Age terrains were found. Geskiedenisatlas van Suid-Afrika 1999: 7)

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. (Geskiedenisatlas van Suid-Afrika 1999: 109-115) 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. (Geskiedenisatlas van Suid-Afrika 1999: 14; 116-119) At the beginning of the nineteenth century, the predominant black tribe in the area north of Pretoria was the Manala-Ndebele. The Kgatla were also present to the north of where Pretoria is located today. It seems that, in 1832, Shaka's Zulu tribe passed by the south of Pretoria from the southeast in a westerly direction. This was in order to attack Mzilikazi's Ndebele. This group also went on raids in various other areas in order to expand their area of influence. (Geskiedenisatlas van Suid-Afrika 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. The Scottish travellers Robert Scoon and William McLuckie passed through, or close by the area where the present-day Tswaing 149 JR was located in 1829. In the same year, Robert Moffat and James Archbell also travelled through this area. (Geskiedenisatlas van Suid-Afrika 1999: 12) In the mid 1830's, several travellers made their way from the Pretoria area into the inland. These included the travellers Robert Scoon, Dr. Andrew Smith and Captain William Cornwallis Harris. (Geskiedenisatlas van Suid-Afrika 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)

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

The Anglo-Boer War was the greatest conflict that had taken place in South Africa up to date, and also affected the Pretoria district, where the farm Tswaing 149 JR is situated. The white concentration camp located closest to this farm, was situated a small distance to the northeast of Pretoria. Another white and a black concentration camp are located to the southwest of Pretoria, in the Irene area. One battle took place at Silkaatsnek, to the

northwest of Pretoria, some distance from the farm. Here, General De la Rey's Boer troops defeated the British army on 11 July 1900. (Geskiedenisatlas van Suid-Afrika 1999: 54, 250) The Boer side however generally lost ground against the British as the war continued, and in June 1900 the Boer military leaders decided that Pretoria would have to be surrendered to the British forces. This decision was inevitable if the war was to be continued. The town was very susceptible to a siege, and its defence would have gravely endangered the lives of its inhabitants. More importantly, the defence of the town would involve such a great number of Boers that the capture of these men would have surely meant the end of the war. Pretoria was therefore occupied by British forces on Tuesday 5 June 1900. (Theron 1984: 273-279)

Between 1939 and 1940, farm boundaries were drawn up in an area that includes the present-day Pretoria. (Geskiedenisatlas van Suid-Afrika 1999: 15)

4.3.4. Historical Overview of the Ownership and Development of the Farm Tswaing 149 Jr

It has been mentioned that this is not an exhaustive study, due to the limited time frame, and it is likely that a further investigation can turn up more documents. Some facets of Tswaing 149 JR's history can however be deducted by studying a list of the important archival documents available on the property. It should be noted that this farm was first known as Zoutpan No. 467 and later Zoutpan No. 104. It is only much more recently that the name of the property was changed to Tswaing 149 JR.

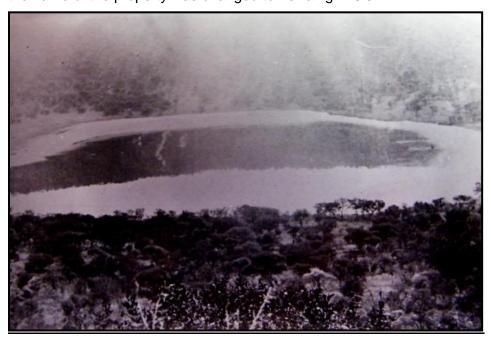


Figure 6 <u>Image 1:</u> Photograph of the salt pan near Pretoria, located on the present-day farm Tswaing 149 JR. This image seems to date back to the early 1900s. (NASA *TAB*, *Photograph: 1027*)

A lease for the farm De Zoutpan No. 467, Pretoria, was granted to the late Alois Hugo Nellmapius for a period of 50 years from 10th September 1891. At that time a rental sum of 125 pound sterling was payable to the government every six months. In the original contract it was specified that Nellmapius would have to allow and provide sufficient camping space for all travellers who came to the farm to gather or buy salt. This was for a period of 48 hours. Nellmapius would also have to take all necessary steps to see that the supply of salt from the pan was not depleted, and that the walls were not broken. The salt pan would also have to be kept unpolluted. He would furthermore be held responsible to record the amounts of salt that was taken from the pan. The lease was consequently ceded to the Pretoria Salt & Soda Company in 1898, but by 1904 the company was behind on its rental payments. An amount of 1250 pounds sterling was due to the government. (NASA *TAB*, *CT*: 47 4047/04; NASA *TAB*, *CT*: 11 9260/02)

On 29 July 1904 it was reported that the Pretoria Salt and Soda Company had started liquidating its assets on 19th June 1899. The Directors, H. F. Strange, J. N. De Jongh and W. A. Martin had apparently been appointed Official Liquidators. On 3 September 1904 a representative of the company wrote a letter to the Chief Inspector of Revenues in Pretoria. According to this correspondent, the dislocation of business caused by the Anglo-Boer war and the non-payment of the claim for compensation by the Imperial authorities for the damage done by the Imperial troops amounting to £528-10-7, had made it impossible for the company to pay for its lease. It had been unfeasible to start work or to meet the liabilities of the company and it is for this reason that it had been decided to proceed with the liquidation and to offer the remaining assets by public auction. The company later received certain remissions regarding the payment, due to the fact that it was a beneficial occupant of the farm Zoutpan during the Anglo-Boer War. The Proclamation of 25th October 1899 apparently exempted lessees of farms from the payment of rent and this exemption held good until the date of Proclamation 27 of 1901, if the lessees had beneficial occupation on that date, or until the date when they acquired beneficial occupation. The company's remaining dept amounted to £714-14-6. (NASA *TAB*, *CT: 47 4047/04;* NASA *TAB*, *CT: 11 9260/02*)

On 30th August 1904 the Stock Inspector in the Pretoria area wrote to the Principal Veterinary Surgeon of the district, reporting that it had come under his notice that a number of people were shooting game on the government farm Zoutpan No. 467, and that others were cutting wood on it. This was cause for concern, as Zoutpan was "a valuable farm; and well watered, and there is also an excellent supply of salt on it." Those who had been shooting game have apparently also burnt of the grass to enable them to more readily shoot game. On 23 September 1904, the Under Secretary for Lands proposed that steps would be taken in regard to the trespassers who were poaching game on the farm. (NASA *TAB, TAD: 433 G1838*)

However, at the beginning of November 1904, the District Commandant in the Pretoria district reported to the Director of Agriculture, noting that no information could be obtained regarding wood that was cut on Zoutpan No. 467.

He did however ascertain that Mr. Struben, of the adjoining farm Kromkuil No. 132, had given permission for wood to be cut and taken away from his farm. It appeared that the wagons carrying wood from Kromkuil were out spanned at Zoutpan as this was the first place where water was obtainable. (NASA *TAB*, *TAD*: 433 G1838)

On 3 April 1905 a request was submitted by the Director of Prisons to the Secretary of the Lands Department in order to ascertain whether Crown farms exist in a healthy part of the Transvaal, which was well watered and suitable for agricultural purposes. He aimed to set up a Penal Agricultural Farm as a Reformatory and Chronic Sick Prison for men.

On 7 April 1905 the Undersecretary for Lands responded that the farm "Zoutpan" No. 467 in Pretoria region was available. The farm at that time belonged to the Crown and was believed to be suitable as per his request, and was under a lease agreement which would be cancelled soon. On 28 April the Undersecretary for Lands sent a request to Captain Doyle of the Agricultural Department to enquire about the suitability of farm "Zoutpan" No.467 as per the request of the Director of Prisons. Also, if the farm "Zoutpan" was not suitable, he requested that Captain Doyle would recommend other suitable farms. On16 May 1905 Captain Doyle responded, stating that he was not familiar with the mentioned farm "Zoutpan" but would try to locate it during his next excursion. (NASA SAB, LDE: 288 3078/2)

On 29 May 1905 the District Medical Officer of Health for the Transvaal, Sgd. Philip C. Walker, wrote to the Public Health Department with regards to the farm Zoutpan 467. He noted that one old Boer had informed him that on all the surrounding farms cases of fever frequently occurred and that he considered Zoutpan the worst of them all. Water was apparently very scarce there, and there was a dam on the farm which at the time of his visit contained a little dirty water. He was also shown what were called two fountains; these were holes cut in the marshlands and appeared to him to be the result of soakage of surface water. At the time of his visit, one of the fountains was dry while the other was flowing slightly - he believed not enough to fill a half-inch pipe. He did not consider that the farm would be a healthy place for a goal, a convict station, or any other kind of institution.

On 5 May 1905, the Director of Prisons sent a letter to the Undersecretary of Lands, stating: "It would appear that "Zoutpan" is quite unsuitable for the purpose, and, therefore, need not be further considered." This is after he received the health report from Sgd. Philip C. Walker. (NASA SAB, LDE: 288 3078/2)

On 10 May 1905 the Acting Native Commissioner in the Pretoria area requested permission from the Secretary of Lands to black individuals to graze and water their goats, 91 cattle and 300 sheep on the farm "Zoutpan" until the next rainy season. This was due to the fact that the adjoining farms Kalkbank 112 and Stinkwater 585, on which there people were resident, had no water or grazing left. On 11 May 1905, the Undersecretary of Lands responded to the Acting Native Commissioner.

He noted the following: "I have the honour to inform you that it is regretted that this land is not at the disposal of the government and the permission sought cannot, therefore, be given. I may point out for your information, that the late government leased the farm "Zoutpan" for a period of 99 years and until such lease has been cancelled, it is impossible for any dealings to take place therewith." It is possible that the Undersecretary of Lands was referring to the lease entered into with the late Nellmapius. (NASA SAB, URU: 222 4040)

45 Head of cattle were quarantined by the police on the farm "Zoutpan" 467 on 26 July 1910, due to the illegal movement of these animals from Rietspruit 1557, Waterberg district to "Zoutpan" by John Adrian Horn and Martha Catherine van der Schiff. On 10 August 1910 the Acting Assistant Principal Veterinary Surgeon wrote to the District Commandant in Pretoria to request that the cattle would be kept in quarantine pending the results of the prosecution of the suspects. (NASA *TAB*, *TAD*: 298 A5893)

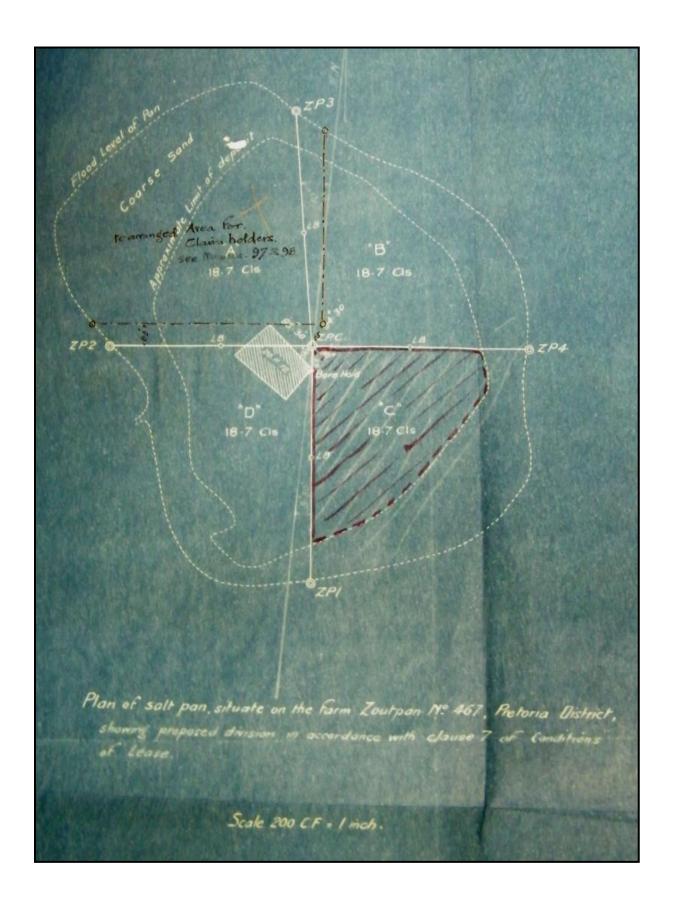
On 30 Nov 1911 the allotment was granted to Patrick Alexander Ogilvie of farm Zoutpan No. 467, for a lease period of 7 years, starting 1 January 1912 and subject to terms as per Government Notice No. 1618 dated 22 September 1911. Hereafter the lessee would have the option to renew for two successive periods of seven years each. Royalty and rent had to be paid half-yearly in advance. (NASA SAB, URU: 71 3133)

The farm Zoutpan No. 467 was again leased to Patrick Alexander Ogilvie, this time for the period of 3rd February 1912 until 7th May 1912. Hereafter it was leased to the company Snodgrass, Redgwell & Craig. (NASA *SAB, MNW: 35 MM3092/10*)

On 16 June 1913 the Beacon Inspector at the salt pan on Zoutpan No. 467 wrote interesting minutes with regards to the development of the farm Zoutpan. Here are some of his notes:

- The necessary beacons were fixed defining the quarter area of the pan, to be set aside for white claim holders. The Manager (Mr. C. W. Gates) was instructed to have iron standards with name plate bearing the official name of the beacon, the standards to be protected by a cairn of stones intermediate line pegs were also placed to enable the sighting of a straight line, along the quadrants boundary.
- The area is undisturbed by any workings that the company have carried out from time to time and has a ready means of access by the old road. This road is in a most deplorable condition and as it is chiefly for the convenience of claim holders, it is questionable whether repairs should be made by the company or the government.
- A two feet tram track is nearly completed which enters the circle of *koppies* (hills) surrounding the Pan, on the north side of the old roadway. The track descends in varying grades to the southern edge of the Pan's deposit, having a fall of about some 200 feet in a horizontal distance of probably 1200 ft. Machinery consisting of boiler, hauling engine and roasting furnaces are expected to arrive next week.

These notes give one an idea of the infrastructure that was present on the farm by 1913. It was also noted that there were 24 black labourers working on the site at the time. (NASA *SAB*, *MNW*: 35 *MM*3092/10)



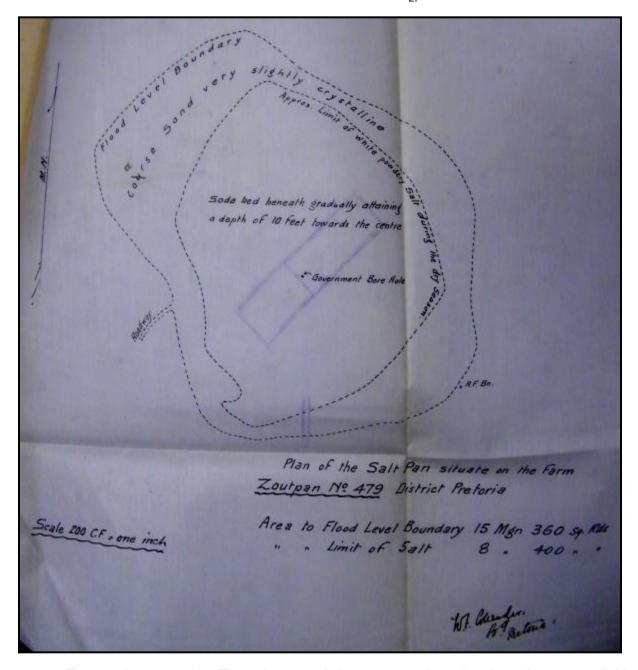


Figure 7 Images 2 & 3: These images, dating to 1913, show that the salt pan was divided into 4 equal portions. On the second image one can see the location of a government borehole, the flood level boundary, a roadway and some other indications as to the layout of the terrain. (NASA SAB, MNW: 35 MM3092/10)

In 1914, the Secretary of Lands entered into an agreement with the Directors of the South African Alkali Limited Company. A lease on the farm Zoutpan No. 467 was first taken out by the company on 1 October 1912. It was agreed that the company would supply brack (saline water) as far as available, or pump the brine from the pan into tanks or dams on the top of the banks of the pan, in order to evaporate it and to supply the brack or salt obtained to the general public for domestic purposes only.

Not more than fifteen bags were to be provided to each person or family in any one year. The price of the salt would also not exceed 1s.6d. per 200 lbs. nett. (NASA *SAB, MNW: 35 MM3092/10*)

On 22 March 1915, the Secretary of South African Alkali Ltd. wrote an interesting letter to the Secretary for Mines and Industries in Pretoria, giving a motivation for the erection of a store on the farm Zoutpan. He noted that during the ensuing dry season, then the company would re-start mining on the property, the number of blacks employed would be from two hundred to two hundred and fifty, and that there would possibly be three of four more white employees. He noted that the company's object in asking for permission to erect a store was to prevent illicit liquor selling. The store would apparently be erected near the cross-roads where it would be of convenience to passing transport wagons. (NASA SAB, MNW: 288 MM2036/15)

In July 1915, the company South African Alkali Ltd. again applied to open a store on Zoutpan No. 467. The Secretary for Mines and Industries replied on 5th July 1915, noting that no objection would be raised by the government to the erection of the store, or to the sub-letting of the trading rights in connection therewith. It was noted by the company that, for some time, its employees have found it difficult to obtain groceries and supplies generally for their use, owing to the isolated position to the company's works, being over thirteen miles from the nearest station or Store. (NASA SAB, MNW: 288 MM2036/15; NASA TAB, LPA: 173 285/1915/3)

On 12 January 1916 the Inspector of Mines set up a report regarding the conditions at a number of mines. Among others he commented on the Pretoria Salt Pan, by that time owned by S. A. Alkali. He had apparently visited the property by the 3rd of that month. It was turning out about 600 tons of alkali per month and appeared to have had a free sale for as much of the mineral as it could produce at a price that was highly profitable. The Mining Inspector however had his doubts as to whether the company would be able to sustain its practices, as the venture was worked in "a very amateurish and hand to mouth manner". He believed that the managers chosen at the pan had no idea of the technical organization necessary to such an industry. The rich layer of soda salts in the dam was covered by an overburden of several feet of mud. This overburden had not been removed systematically but had been "chucked about", and therefore had to be removed several times. The mud and brine was apparently not mined to its full potential, and the Inspector therefore advised that the government, who were the owners of the pan, would appoint a certificated or properly qualified manager and take other steps to force the company to work the deposit on proper economic lines. He besieged the government not to allow the company to "pick the eyes out of the mine", as he believed they were doing. In March 1916, a Government Mining Engineer reported that improvements have taken place at the Pretoria Salt Pan. Better methods appeared to be in use and one Mr. Littlejohn, a well known chemist, had joined the Board and took an active part in the management of the mine. (NASA SAB, MNW: 35 MM3092/10).

On 18 July 1922, the lease of the farm "Zoutpan" No.467 to Patrick Alexander Ogilvie was officially cancelled. This farm had been ceded to Snodgrass, Redgwell and Craig under Deed of Cession No. 168/1912 and again ceded to South African Alkali Limited, under Deed of Cession No. 379/1912 as per terms of Executive Council Minutes No. 3133 dated 30 November 1911. On 19 July 1922 the property was allotted to South African Alkali Limited for a lease period of 28 years, without the option to purchase. (NASA SAB, URU: 581 2454; NASA SAB, URU: 580 2392)

On 27 October 1922 a portion of farm Zoutpan No.467 was proclaimed as a public digging site for base metals as per Act No. 35 of 1908 of the Base Metals Act of 1908. It could not be ascertained exactly what portion was referred to. (NASA *SAB*, *URU*: 393 3164)

On 24 Aug 1932 permission was granted to the Nederduitsche Hervormde or Gereformeerde Gemeente to erect a missionary church for "natives" on a piece of open land on the proclaimed farm Zoutpan No.467. (NASA *SAB*, *URU*: 1360 2318)

On 11th October 1932, one T. B. Young, writing on behalf of Messrs. Herman Bros and Young, wrote to the Native Commissioner at Hamanskraal. He requested that the company would be allowed to let a number of blacks graze cattle on the farm Zoutpan NO. 467, at the rate of 9d. per head per month. These individuals were Ismael Modesia and Klaas Mathebe, both from the farm Haakdoornfontein No. 77. The former had 12 head of the cattle and the latter had 17. This lease was approved by the Assistant Native Commissioner at Hamanskraal, and motivated by the lack of grazing on the farm Haakdoornfontein. On 9 December 1932, Messrs. Herman Brothers and Young received a permit to lease land on Zoutpan No. 367 for grazing to the above mentioned black lessees. This lease was not to exceed a period of one year as from 15th November 1932. Another permit was extended to the company on 6th February 1933, and the following individuals received permission to lease grazing land on the farm Zoutpan:

Fanios Shikoane (18 cattle) Franz Pet (6 cattle) Simon Tsoke (41 cattle) (19 cattle) Daniel Masalesa Johannes Kumala (14 cattle) **Bathwel Make** (8 cattle) Sala Mgugula (9 cattle) Joseph Kapula (17 cattle) Lucas Masope (15 cattle) Stephaans Ratlebani (1 cattle)

Kesekiah Madumo (23 cattle)
Jacob Pete (12 cattle)
August Pete (25 cattle)

Roeboko Mothopi (18 cattle) (NASA SAB, NTS: 7139 736/323)

On 16 July 1958, the Inspector of Native Workers in the Northern Areas wrote a report on black housing and amenities on the farm Zoutpan. At that time the farm was leased by the Palframan en Horner Chemical Engineering Co. (Pty.) Ltd. The products that came from the works were salt and soap soda, and the manager at the farm was one Mr. L. Kretchmer. With regards to medical facilities, one Dr. Ockert of Hamanskraal was the medical officer. The mission station at Hamanskraal apparently also had a hospital. First aid equipment was furthermore available at the works. At this time some 60 workers were employed at the salt mine. Two of these workers were black women who cleaned the houses of the white workers living on the site. 22 of the workers were from Mozambique, and apparently had permits to work there. (NASA SAB, KHK: 2/2/127 N3/12/2 (2))

The Inspector noted that the mine had been shut for three years by 1958. It was only recently that a new firm had taken over the works. It was expected that production would restart in June 1958. With regards, to housing, there was a compound that consisted of 32 two-room houses. Twelve of these houses had fallen into ruin and it was doubted that they would last until after the summer rains. The remaining twenty buildings were still in a relatively good condition. There were apparently also seven *rondawels* (huts), of which six were in a ruinous condition. At that stage married and unmarried workers lived together in the compound. According to one of the workers, the rondawels were originally intended to be single quarters. Of all the workers who were on the site at that time, 12 were single and 23 had families. Nine workers commuted from nearly farms and locations. The inspector described the compound as dirty and untidy. Some self-erected homes had apparently also fallen into ruin, and chickens and pigs were reared on the compound terrain. There was no heating in the accommodation. (NASA SAB, KHK: 2/2/127 N3/12/2 (2))

The Inspector further reported that at that stage only one water point was in working condition and this was at the site of the mining works. No ablution blocks had been erected at the compound at all. Five pit latrines were present at the compound site. The Inspector recommended that the conditions at the mine would be improved. In 1960 it was however reported by the Bantu Commissioner that the Chemical Engineering Co. no longer employed any black workers. Only one black worker was found on the site by the Mining Commissioner, and he was apparently the temporary gardener for the Manager. The compound was found abandoned. (NASA SAB, KHK: 2/2/127 N3/12/2 (2))

In 1962 the Inspector of Bantu Workers in the Northern Areas reported to the Head Bantu Commissioner that the salt mine that was owned by Palframan en Horner Chemical Engineering Co. at Zoutpan had been completely shut down. Everything had apparently been taken apart and sold at a "bankrupt auction". (NASA SAB, KHK: 2/2/127 N3/12/2 (2))

6 June 1960, portion 3 (2000 morgen) of the farm Zoutpan No.104 was granted for use to Johan Leonard Hoffman on condition that he paid for all costs related to the issuing of a grant. Hoffman had noted in his application for the land that he wanted to modernize the buildings on the grounds. Further conditions were that the government would have right of access to all minerals, mineral products and precious stones on the said land and that no blacks apart from the domestic workers would be allowed to work on or occupy the land. (NASA SAB, URU: 4061 1340)

On 1 November 1967 Lan Mon, a Chinese man, was refused a permit which would allow him to continue managing a few businesses on the property Zoutpan No. 104. This included a butchery, a general trading store and three store rooms. He however reapplied and was eventually granted a permit to manage these businesses on the farm on 20 February 1968. About two years later, on 13 March 1970, residential permits were granted to Lan Mon's sons – Kwong Nan Mon and Denis Raymond Mon – allowing them to live on Zoutpan No. 104. (NASA *SAB*, *GMO*: 2/397 12/26)

On 19 January 1971 the State President of South Africa proclaimed a certain portion of the farm Zoutpan No. 104 JR as a public digging for non-precious metals. The farm was at that stage situated in the Pretoria Mining District and measured about 236 morgen and 11 square roods. The farm was registered in the name of the Republic of South Africa. (NASA *SAB*, *URU*: 5946 35)

5. HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES

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

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

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

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

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

5.1. Field Rating of Sites

Site significance classification standards prescribed by SAHRA (2006), and acknowledged by ASAPA for the SADC region, were used for the purpose of this report.

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

6. BASELINE STUDY-DESCRIPTION OF SITES

It is important to note that the entire farm Zoutpan 104 JR was not surveyed but only the footprint of the existing township as indicated in Figure 1. Furthermore most of this area is already developed and no sites of heritage significance were identified. The lack of archaeological sites within the study area can be ascribed to the featureless landscape without any landmarks that would not have attracted human occupation in antiquity. Furthermore archaeological and historical sites are mostly concentrated around the salt pan within the Tswaing crater to the west of the study area.



Figure 8: Google Image of the study area (in red)



Figure 9. Eastern view of the study area with the existing houses in the background.



Figure 10. North Western view of the study area with the existing houses.



Figure 11. Study area viewed from the south east.



Figure 12. Picture taken at the centre of the township.

Impact evaluation of the proposed project on heritage resources

Nature: During the construction phase activities resulting in disturbance of surfaces and/or sub-surfaces may destroy, damage, alter, or remove from its original position archaeological and paleontological material or objects.

Without mitigation	With mitigation
Local (2)	Local (1)
Permanent (5)	Permanent (5)
Low (2)	Low (1)
Probable (1)	Probable (1)
9 (low)	8 (low)
Negative	Negative
Not reversible	Not reversible
Yes	Yes
Yes	
	Local (2) Permanent (5) Low (2) Probable (1) 9 (low) Negative Not reversible Yes

Mitigation:

No sites were identified during the survey. However, if any archaeological or cultural material is uncovered during construction or operation a qualified archaeologist must be contacted to verify and record the find. Mitigation will then include documentation and sampling of the material. This will also be required if any paleontological material is uncovered.

Cumulative impacts:

Archaeological and cultural sites are non-renewable and impact on any archaeological context or material will be permanent and destructive.

Residual Impacts: Depletion of archaeological record of the area.

7. RECOMMENDATIONS

No sites of heritage significance were identified during the survey. However, if during construction, any archaeological finds are made (e.g. stone tools, skeletal material), the operations must be stopped, and the archaeologist must be contacted for an assessment of the finds.

8. CONCLUSIONS

No sites of heritage significance were found during the survey and from a archaeological point of view there is no reason why the development cannot commence (subjected to approval from SAHRA).

9. PROJECT TEAM

Jaco van der Walt, Project Manager Liesl du Preez, Historian

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.

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

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