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CITY OF TSHWANE
"we are the same"

SCOPING REPORT

BRAAM PRETORIUS STREET EXTENSION

Prepared by:

NEMAI CONSULTING

May 2007

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EXECUTIVE SUMMARY

The City of Tshwane Metropolitan Municipality appointed Nemai Consulting as an independent environmental consultant to ensure that the proposed Extension of Braam Pretorius Street complies with the relevant environmental legislation. A Plan of Study for Scoping was submitted to the Gauteng Department of Agriculture, Conservation and Environment (GDACE), with approval by GDACE that a scoping exercise can be undertaken.

The proposed development is located in Pretoria North, in Annlin West. The extension of Braam Pretorius Street is designed to link Paul Kruger Street and Lavender Road West over the Apies River.

The strategy employed during this study encompassed the following primary tasks:

- Preliminary consultation between GDACE, as the main authorising agent, and Nemai Consulting to determine the necessary authorisation procedure;
- The thorough investigation of the proposed project area and the surrounding environment;
- The submission of an Application Form, Declaration of Independence, and Plan of Study for Scoping to GDACE;
- Investigation of location and technology alternatives;
- The undertaking of a detailed public participation process, whereby Interested and Affected Parties (I&APs) were identified, notified, a public meeting and a Public Open Day were held and all parties were allowed to note their concerns regarding the proposed project;
- The undertaking of specialist studies, namely a Traffic Impact Assessment, Flora and Fauna Study, Heritage Impact Assessment and Floodlines Calculation;
- A modified Delphi technique was used to identify the Impacts of the proposed project on the environment;
- The identification of mitigation measures to limit the negative impacts on the environment and enhance the positive impacts; and
- The compilation of an Environmental Management Plan (EMP) with the necessary environmental protection requirements.

This study found no compelling environmental issues that would hinder the proposed project, assuming compliance with the stipulated mitigation measures contained in this report and in the EMP.

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4 ASSESSMENT OF THE STUDY AREA BEFORE CONSTRUCTION

4.1 General Environmental Description

Refer to the locality map (***Figure 1***) and site photographs (***Appendix E***).

The surrounding area is mainly non-specified land with light industry to the south. Further surrounding this is formal residential land. See **Appendix F** for a Land Use Map with more details. **Appendix G** shows the Red Data species in the area. There is a conservation area 0.2km from the site, which is Wonderboom Nature Reserve. This nature reserve consists of a ridge. The ridge runs to the south of the site and is part of the Magaliesberg Range. Within this nature reserve there are red data plants. **Appendix H** shows the Ecological Processes occurring in the area. There is a perennial river, which occurs within the site, namely the Apies River. A bridge will be constructed over this river. The river runs in a north south direction and flows to the Bon Accord Dam. A historical monument occurs 50m from the site. To the south of the site, 0.2km away is Pretoria blockhouse.

4.2 Biophysical/Physical aspects

4.2.1 Climate

Climatic data, reflected in **Table 2**, was obtained from the South African Weather Bureau (2004), it reflects Pretoria's mean monthly weather for a thirty year period; 1961-1990. No climate monitoring is performed in the region of the project area.

The temperature ranges form –8°C to 40°C with an average annual temperature between 12°C and 25°C. Hot temperatures are experienced during the summer, whilst winters are cold with frost occurring regularly. Throughout the Highveld the northern and western slopes of hills tend to be warmer and drier than the southern and eastern slopes.

Rainfall occurs almost exclusively during summer, with approximately 85% of the total precipitation occurring from the months of November to March. The total annual rainfall equals 674mm.

Wind patterns in Pretoria vary according to topography and urban effects.

4.2.5 Flora and Fauna

The vegetation of the area is predominantly "Marikana Thornveld" which is a savanna type biome. The property along the alignment of the proposed road does not offer any viable natural habitat to support any floral species of conservational importance and the species of medicinal value are all common species with a wide distributional range. The lack of viable natural habitats is largely due to the historical land use that has transformed and changed the landscape of all natural habitats. This has lead to very limited natural vegetation representation. The aquatic habitat offered by the Apies River presently suffers a high degree of degradation both in terms of habitat quality and water quality. The proposed extension of Braam Pretorius Street, if undertaken in a responsible and ecologically sensitive manner, will therefore do little to further degrade the terrestrial and aquatic habitats.

Refer to ***Appendix I*** for the Flora and Fauna Report.

4.2.6 Air Quality

No studies were undertaken to determine the levels of air pollution in the study area.Emissions from the burning of fuel sources and from vehicles are the primary sources of air pollution in the area.

4.2.7 Noise

No studies were undertaken to determine the level of noise pollution in the project area.

4.2.8 Sites of Archaeological and Cultural Interest

A variety of features and sites used to occur in the project area, some of which would not necessarily be impacted on by the extension of Braam Pretorius Street. Due to the recent developments in the area, many of the known sites have been demolished. The result is that very little of cultural significance remains in the area.

Although no historically significant sites or findings were recorded within the study area, provision for such encounters is provided for in the EMP. Mitigation entails the immediate involvement of the South African Heritage and Resource Agency (SAHRA).

Refer to Heritage Impact Assessment in ***Appendix J.***

4.2.9 Sensitive Environments

A specialist study was contracted to determine the present ecological state of the Apies River as well as to delineate the riparian zones. Refer to ***Appendix I*** for the specialist study.

The only relatively sensitive area observed throughout the property is the river and associated riparian zones. Wetlands by definitions are sensitive areas and should be treated as such, meaning that any development should be done in an environmentally responsible manner so as to not further degrade the system. As the riparian zones are

6.1.12 Waste

WASTE: CONSTRUCTION	
Impact	Mitigation
• Inadequate waste management.	• Littering on site and the surrounding areas is prohibited. • Clearly marked litterbins must be provided on site. • All bins must be cleaned of litter regularly. • All domestic waste will be removed from site and disposed of at a registered landfill. • The contractor must install and maintain mobile toilets at work sites. • All vehicles must be services in a designated area within the Contractors camp. • All chemical spills must be contained and cleaned up by the supplier or professional pollution control personnel.

	+/- Impacts	Extent	Magnitude	Duration	Significance
Before Mitigation	-	Local	high	short-term	3
After Mitigation	-	Local	medium	short-term	1

WASTE: OPERATION	
Impact	Mitigation
• Storm water will run off the new road and bridge structures.	• Storm water management measures will be in place during operation.

	+/- Impacts	Extent	Magnitude	Duration	Significance
Before Mitigation	-	Local	high	long-term	3
After Mitigation	-	Local	low	long-term	2

6.1.13 Heritage Resources

HERITAGE RESOURSES: CONSTRUCTION	
Impact	Mitigation
• Damage to heritage resources.	• All finds of human remains must be reported to the nearest police station. • Should any historically significant finds (e.g. artefacts, human remains or sites of cultural or archaeological importance) be located, work must cease and the South African Heritage and Resource Agency (SAHRA) must be contacted immediately. Work in the area can only be resumed once the site has been completely investigated. • Under no circumstances may any worker destroy or interfere with archaeological sites or finds. A fence at least 2m outside the extremities of the site must be erected to protect archaeological sites. • Refer to ***Appendix J*** for the full Heritage Impact Assessment.

	+/- Impacts	Extent	Magnitude	Duration	Significance

Before Mitigation	-	local	medium	short-term	3
After Mitigation	-	local	low	short-term	1

HERITAGE RESOURSES: OPERATION	
Impact	Mitigation
• No impact foreseen.	N/A

6.1.14 Fuel and Chemicals

FUEL AND CHEMICALS: CONSTRUCTION	
Impact	Mitigation
• Environmental pollution can occur from fuel spillages.	• Elevated fuel storage tanks to be provided with impermeable floors and bund walls to prevent pollution during accidental spillages. The outflow of the bunded area to be supplied with an oil trap. The bund wall to be of sufficient height to allow for the containment of 110% of the tank(s) volume. The area must be provided with relevant warning signage (e.g. no smoking and open fires, fire extinguisher). • Prevent spillage from elevated fuel tanks during decanting. • In the event of a fuel spill in excess of 25ℓ, the spill must be confined and mopped up using oil absorbent fibres. Professionals should perform cleaning of large spills. The clean-up operation will initially involve aeration of the soil. This activates bacteria in the soil, which then partially digest the spilt fuel. Contaminated soil should then be removed to a depth of 0.5m below the saturated oil spill level. This soil must be disposed of at a registered landfill site. The efficacy of the clean up should be monitored to ensure that all of the spilt fuel is removed from the soil.

	+/- Impacts	Extent	Magnitude	Duration	Significance
Before Mitigation	-	Local	medium	short-term	3
After Mitigation	-	Local	low	short-term	1

FUELS AND CHEMICALS: OPERATION	
Impact	Mitigation
• No impact foreseen.	N/A

6.1.15 Construction Materials

CONSTRUCTION MATERIALS: CONSTRUCTION	
Impact	Mitigation
• Environmental pollution and untidy site	• Proper storage facilities should be provided for the storage of oils, grease, fuels, chemicals and hazardous materials. • Cement bags must be stored under a roof or inside a suitable container. Cement must be mixed in

A SURVEY OF HERITAGE RESOURCES IN THE PROPOSED BRAAM PRETORIUS ROAD EXTENSION, WONDERBOOM AREA, PRETORIA

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REPORT: 2006KH128

Date of survey: October2006 Date of report: October 2006

SUMMARY

A SURVEY OF HERITAGE RESOURCES IN THE PROPOSED BRAAM PRETORIUS ROAD EXTENSION, WONDERBOOM AREA, PRETORIA

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within a section of the banks of the Apies River, north of Wonderboompoort, Pretoria, in which development is to take place.

A variety of features and sites used to occur here, some of which that would not necessarily be impacted on by the development. Due to recent developments in the area, many of the known sites have already been demolished. The result is that very little of cultural significance remains in the area. Therefore, based on what was found and its evaluation, it is recommended that the proposed development can continue, on condition of acceptance of the following recommendations:

- If archaeological sites are exposed during construction work, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

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A SURVEY OF HERITAGE RESOURCES IN THE PROPOSED BRAAM PRETORIUS ROAD EXTENSION, WONDERBOOM AREA, PRETORIA

1. THE SURVEY

The National Cultural History Museum[1] was contracted by Nemai Consulting to survey a section of the road that is to cross the Apies River north of the Magaliesberg. This is to be an extension of Braam Pretorius Road. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area that is to be impacted by the developed.

2. TERMS OF REFERENCE

The scope of work consisted of conducting a Phase 1 archaeological survey of the site in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

This include;

- Conducting a desk-top investigation of the area
- A visit to the proposed development site

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development areas;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

3. DEFINITIONS AND ASSUMPTIONS

The following aspects have a direct bearing on the survey and the resulting report:

- **Cultural resources** are all non-physical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.

- The **significance** of the sites and artefacts are determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. It must be kept in mind that the

[1] The National Cultural History Museum is affiliated to the Northern Flagship Institution, which acts as parent body for a number of museums, all of which resort under the Department of Arts and Culture.

various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

- Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require further mitigation.

- The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not be disclosed to members of the public.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South Africa Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

4.1 South African Heritage Resources Act

Archaeology, palaeontology and meteorites
In terms of Section 35(4) of this act, no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; bring onto, or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

Structures:
Section 34(1) of this act states that no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

> "Structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;
> "Alter" means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

Human remains:
In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

> (a) destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
> (b) destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
> (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations.

5. METHODOLOGY

5.1 Preliminary investigation

5.1.1 Survey of the literature
A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources (especially photographical and other pictorial sources) were consulted - see the list of references below.

5.1.2 Data bases
The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum, Pretoria, was consulted. The **Environmental Potential Atlas** was also consulted.

5.1.3 Other sources
The topocadastral and other maps were also studied - see the list of references below.

5.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area that had to be investigated was identified by Nemai Consulting by means of maps. The area was investigated by walking across it. Special attention was given to unnatural topographical occurrences such as structures, trenches, holes, outcrops and clusters of trees were investigated.

5.3 Documentation

All sites, objects and structures that are identified are documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities are determined by means of the **Global Positioning System** (GPS)[2] and plotted on a map. This information is added to the description in order to facilitate the identification of each locality.

Map datum used: Hartebeeshoek 94 (WGS84).

6. DESCRIPTION OF THE AREA

[2] According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then to correlate it with reference to the physical environment before plotting it on the map.

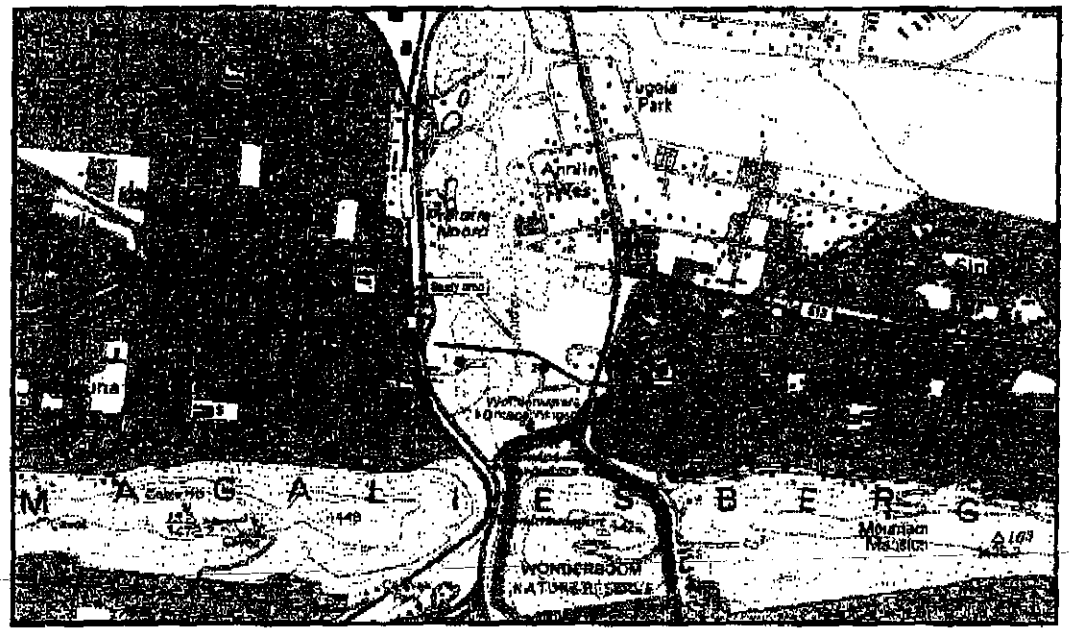

Figure 1. Location of the study area and the identified sites. (Map, courtesy of the Government Printer)

The study area (Fig. 1) covers narrow section of land perpendicular to the Apies River, from Annlin in the east to Pretoria North in the west. These alluvial soils lured early and contemporary farmers to settle in this area where they practiced intensive agriculture by using the water from the river for irrigation. The cultivated fields are all located in the flood plain while the farmsteads and buildings are located along the banks of the Apies River.

According to the 1899 map by Carl Jeppe, the area surveyed is located on the original farm 'Wonderboom' that belonged to Doors Erasmus at the time. The Apies River running from south to north through the original farm, subdivides it into western and eastern portions. The farmsteads and buildings identified are located on the eastern or western side of the Apies River.

7. DISCUSSION

Stone Age

Stone Age people occupied the larger area since earliest times. This, for example, is evidenced by the site they used to occupy in the Wonderboom neck, probably dating back as many as 200 000 years ago. Tools derived from these people's habitation of the area are found all over, as well as in the streambed of the Apies River.

Middle and Late Stone Age people also roamed over the area, sheltering close to the river banks, with the latter group usually settling in caves and rock shelters. Similarly, stone tools dating to this period are found all over.

Iron Age

Iron Age occupation of the area did not start much before the 1500s. By that time, groups of Tswana and Ndebele speaking people were moving into the area, occupying the different hills and outcrops, using the ample resources such as grazing, game and metal ores.

During the early decades of the 19th century, the Tswana- and Ndebele-speakers were dislodged by the Matabele of Mzilikazi. Internal strife caused Mzilikazi, a general of King Shaka, and his followers to move away from the area between the Thukela and Mfolozi river (KwaZulu-Natal). Eventually, after a sojourn in the Sekhukhuneland area, followed by a short stay in the middle reaches of the Vaal River, they settled north of the Magaliesberg. One of three main settlements established by them, eKungwini, was on the banks of the Apies River, just north of Wonderboompoort (Carruthers 1990). However, no remains of this settlement have ever been identified.

It was during the Matabele's stay along the Apies River that the first white people entered the area: travelers and hunters such as Cornwallis Harris and Andrew Smith, traders Robert Schoon and Andrew McLuckie, and missionaries James Archbell and Robert Moffat. It is known from oral history the Robert Schoon sent Mzilikazi huge quantities of glass trade beads, rather than the guns that the latter coveted so much (Becker 1972).

Historic period

White settlers started to occupy huge tracts of land, claiming it as farms since the late 1840s. Of these, some of the earliest were Lucas Bronkhorst (Groenkloof), David Botha (Hartebeestpoort – Silverton) and Doors Erasmus (Wonderboom). With the establishment of Pretoria (1850) services such as roads, started to develop. An increase in population also demanded more food, which stimulated development of farming on the alluvial soils on the banks of the Apies River, close to the water.

The Affected Environment

No sites dating to the Stone Age was found in the study area, although some stone tools were identified in the Apies River streambed (Fig. 2 & 3). These artefacts are probably not in a primary context after a period of 200 000 year in the open, but nevertheless gives an indication of their maker's mobility and activities.

Although some historical evidence indicates that Iron Age people settled in the area (e.g. the Matabele of Mzilikazi), the closest such remains are the stone walling and other material (potsherds, etc.) found in the Wonderboom Nature Reserve. However, due to the attraction of the Tree, this site has been heavily impacted on in the past and little evidence remains of this occupation.

Farmsteads

Several farmsteads occur, or used to occur, in the larger region. They are of varying ages as the original farm was eventually subdivided into smaller farming units. Each contains a dwelling and varying number of outbuildings. The dwellings represent different architectural styles depending on their date of construction.

The most significant and oldest remains of white settlement in the area is the farmstead of Doors Erasmus on the western side of the river (see Fig. 3).

A cemetery used to occur to the south of the study area. It consists of three elements, one defined by a brick wall, a second by a wire fence and a third left open, defined only by the occurrence of graves. The three elements are not separated but clustered and must have been a single feature in the past or meant to become a single feature in future. All of these have already been relocated to other cemeteries.

- Planted vegetation

The entire area is characterized by the occurrence of both exotic and indigenous trees and shrubs. Bluegums have been planted in rows indicating the entrance roads to individual farmsteads while Jacarandas and Syringa trees are common on the existing used and redundant farmsteads. Between 1880 and 1910, palm trees became fashionable garden features and some of these were found on the farmsteads that were investigated. Karee (various Rhus species) and Stinkhout (Celtis Africana) occur on both sides of the Apies River and on individual farmsteads.

8. IDENTIFICATION OF RISK SOURCES

The following project actions may impact negatively on archaeological sites and other sites of cultural importance. The actions are most likely to occur during the construction phase of the proposed project.

- Construction may expose and uncover ESA and MSA tools as well as hidden graves.
- Construction activities might damage existing heritage resources.

9. RECOMMENDATIONS

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance found within a section of the banks of the Apies River, north of Wonderboompoort, Pretoria, in which development is to take place.

A variety of features and sites used to occur here, some of which that would not necessarily be impacted on by the development. Due to recent developments in the area, many of the known sites have already been demolished. The result is that very little of cultural significance remains in the area. Therefore, based on what was found and its evaluation, it is recommended that the proposed development can continue, on condition of acceptance of the following recommendations:

- If archaeological sites are exposed during construction work, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

10. REFERENCES

10.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

10.2 Literature

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10.3 Maps

1: 50 000 Topocadastral maps – 2528CA

10.4 Personal communication

Dr C. J. van Vuuren, Department of Anthropology and Archaeology, University of South Africa, Pretoria.

11. **PROJECT TEAM**

J van Schalkwyk

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

Significance of impact:

- low — where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium — where the impact could have an influence which will require modification of the project design or alternative mitigation
- high — where it would have a "no-go" implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

1 = no further investigation/action necessary
2 = controlled sampling and/or mapping of the site necessary
3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2: SURVEY RESULTS[3]

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

Map datum used: Hartebeeshoek 94 (WGS84).

1. Site number: 2528CA39
Location: Wonderboom 302JR; S -25.68226; E 28.18441
Description: Remains of the old Doors Erasmus farmstead.
Discussion: This site is now abandoned and in ruins.
Recommended management action: 4 = preserve site at all costs
Legal requirements: SAHRA permit

2. Site number: 2528CA73
Location: Wonderboom 302JR; S -25.68251; E 28.19049
Description: Old house, incorporated with other, newer buildings
Discussion: This structure was still in use until quite recently.
Recommended management action: This site has recently been demolished.
Legal requirements: SAHRA permit

3. Site number: 2528CA72
Location: Wonderboom 302JR; S -25.68571; E 28.19070
Description: Three cemeteries adjacent to each other. Some of the graves go back many decades.
Discussion: These are historical significant features as they are old and also relate to other features in the immediate environment.
Recommended management action: These graves have recently been relocated
Legal requirements: SAHRA permit

[3] See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

APPENDIX 3: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are relative and serve only to give a very broad framework for interpretation.

STONE AGE	
Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200
IRON AGE	
Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830
HISTORICAL PERIOD	
Since the arrival of the white settlers - c. AD 1840 in this part of the country	

ADRC - Archaeological Data Recording Centre

core - a piece of stone from which flakes were removed to be used or made into tools

PHRA – Provincial Heritage Resources Agency

SAHRA - South African Heritage Resources Agency

APPENDIX 4: ILLUSTRATIONS

Figure 2. Natural stratigraphy exposed in the stream canal of the Apies River. The lower pebble bed contained a few Early Stone Age tools, probably occurring here in a secondary deposit.

Figure 3. One of the Early Stone Age tools found in the pebble bed shown in the previous photograph.

Figure 4. The remains of the old Doors Erasmus farmstead, with the main house in the background (2004).