# PHASE 1 HERITAGE IMPACT ASSESSMENT REPORT

# STERKRIVIER DEVELOPMENT STERKRIVIERNEDERSETTING: LIMPOPO

For: Envirosolution Systems 122 Schoeman Street Mokopane

Frans Roodt
Assisted by Frans E. Roodt & Liesl Stegmann
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Tel: (015) 2257075 083 770 2131 Fax: 086 670 9130 E-Mail: hr19@mweb.co.za



PO Box 1600 **POLOKWANE** 0 7 0 0

# **CONTENTS**

3	1 Introduction			
	2 Terms of Reference			
4	3 Method 3.1 Sources of information 3.2 Limitations 3.3 Categories of significance			
5	3.4 Terminology			
5	4 Description of the proposed development and terrain			
5 5 6 6 6	<ul><li>5.1 Stone Age remains.</li><li>5.2 Recent Historical Period</li><li>5.3 Graves</li></ul>			
6	6 Background archaeological information			
8	7 Discussion			
8	8 Recommendations for mitigation and management measures			
9	9 References			
10 10	List of figures Fig 1. General view of the environment. Fig 2. View of a lower grindstone.			
11	Locality Map.			

# 1. INTRODUCTION AND LEGAL REQUIREMENTS

The application constitutes an activity, which may potentially be harmful to heritage resources that may occur in the demarcated area. The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that may occur in the demarcated area. This will enable the Applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources.

In terms of the National Heritage Resources Act (1999) the following is of relevance:

# **Historical remains**

**Section 34(1)** 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.

# **Archaeological remains**

Section 35(4) No person may, without a permit issued by the responsible heritage resources authority-

(a) destroy, damage, excavate, alter, deface, or otherwise disturb any archaeological or palaeontological site or any meteorite

# **Burial grounds and graves**

Section 36 (3)(a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-

- **(c)** destroy, damage, alter, exhume, 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
  - **(b)** bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in detection or recovery of metals.

## Culture resource management

Section **38(1)** Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development\* ...

must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature, and extent of the proposed development.

- \*'development' means any physical intervention, excavation, or action, other than those caused by <u>natural forces</u>, which may in the opinion of the heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including-
  - (a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;
  - (b) carry out any works on or over or under a place\*;
  - (e) any change to the natural or existing condition or topography of land, and
  - (f) any removal or destruction of trees, or removal of vegetation or topsoil;

# 2. TERMS OF REFERENCE

The author was contracted to undertake a heritage scoping survey of Portion 191 & 192 of the farm Sterkriviernedersetting 253 KR (Refer to map, South Africa 1:50 000 2428 BA 2428 BB). The aim was to determine the presence or not of heritage resources such as archaeological and historical sites and features, graves and places of religious and cultural significance, and to submit appropriate recommendations with regard to the cultural resources management measures that may be required at affected sites / features.

The report thus provides an overview of the heritage resources, which may occur in the demarcated area where development is intended. The significance of the heritage resources was assessed in terms of criteria defined in the methodology section. The impact of the proposed development on these resources is indicated and the report recommends mitigation measures that should be implemented to minimize the adverse impact of the proposed development on these heritage resources.

#### 3. METHOD

#### 3.1 Sources of information

A pedestrian survey of selected areas and a drive through by vehicle of the demarcated area was undertaken, during which standard methods of observation were applied. As most archaeological material occur in single or multiple stratified layers beneath the soil surface, special attention was given to disturbances, either natural or man-made, as well as changes in vegetation that may have resulted from previous human intervention.

# 3.2 Limitations

Archaeological visibility was limited as vegetation cover is dense. Due to the nature of the archaeological deposit, there is always a small possibility that subterranean material could have been missed.

# 3.3 Categories of significance

The significance of archaeological sites is ranked into the following categories.

No significance: sites that do not require mitigation.	
Low significance: sites that <i>may</i> require mitigation.	
Medium significance: sites that require mitigation.	
High significance: sites that must not be disturbed at all.	

The significance of an archaeological site is based on the amount of deposit, the integrity of the context, the kind of deposit and the potential to help answer present research questions. Historical structures are defined by Section 34 of the National Heritage Resources Act, 1999, while other historical and cultural significant sites, places and features, are generally determined by community preferences.

A crucial aspect in determining the significance and protection status of a heritage resource is often whether or not the sustainable social and economic benefits of a proposed development outweigh the conservation issues at stake. There are many aspects that must be taken into

<sup>\*&</sup>quot;place means a site, area or region, a building or other structure\* ..."

<sup>\*&</sup>quot;structure means any building, works, device or other facility made by people and which is fixed to the ground, ..."

consideration when determining significance, such as rarity, national significance, scientific importance, cultural and religious significance, and not least, community preferences. When, for whatever reason the protection of a heritage site is not deemed necessary or practical, its research potential must be assessed and mitigated in order to gain data / information which would otherwise be lost. Such sites must be adequately recorded and sampled before being destroyed. These are generally sites graded as of low or medium significance.

# 3.4 Terminology

Early Stone Age: Predominantly the Acheulean hand axe industry complex dating to <u>+</u> 1 Myr –

250 000 yrs. before present.

Middle Stone Age: Various lithic industries in SA dating from ± 250 000 yrs. - 30 000 yrs. before

present.

Late Stone Age: The period from ± 30 000 yrs. to contact period with either Iron Age farmers

or European colonists.

Early Iron Age: Most of the first millennium AD.

Middle Iron Age: 10<sup>th</sup> to 13<sup>th</sup> centuries AD.

Late Iron Age: 14<sup>th</sup> century to colonial period. *The entire Iron Age represents the spread of* 

Bantu speaking peoples.

Historical: Mainly cultural remains of western influence and settlement from AD 1652

onwards - mostly structures older than 60 years in terms of Section 34 of the

NHRA.

Phase 1 assessments: Scoping surveys to establish the presence of and to evaluate

heritage resources in a given area.

Phase 2 assessments: In depth culture resources management studies which could include

major archaeological excavations, detailed site surveys and mapping / plans of sites, including historical / architectural structures and features. Alternatively, the sampling of sites by collecting material,

small test pit excavations or auger sampling.

Sensitive: Often refers to graves and burial sites although not necessarily a heritage

place, as well as ideologically significant sites such as ritual / religious places. Sensitive may also refer to an entire landscape / area known for its

significant heritage remains.

#### 4. DESCRIPTION OF THE PROPOSED DEVELOPMENT AND TERRAIN

The proposed development is situated on the farm Sterkriviernedersetting 253 KR. The purpose of development is the erection of a school and clinic as well as 40 dwelling units. The proposed site is to be situated over ploughed fields, thus the area has been disturbed. Vegetation at the time of survey was moderate to dense due to grass cover. Visibility was thus negatively influenced. Generally the vegetation in its natural state would belong to the Mixed Bushveld vegetation type.

# 5. RESULTS OF THE SCOPING SURVEY

# 5.1 STONE AGE REMAINS

No Stone Age remains of significance were noted.

# 5.2 HISTORICAL PERIOD

No historical remains were noted.

# 5.3 GRAVES

No formal graves were noted on the terrain.

# 5.4 IRON AGE REMAINS

A lower grinding stone, probably used for sorghum- based on the size of the grind stone, which is smaller than a maize grinding stone, was noted on the terrain. It was probably used for sorghum grinding. Based on this the archaeological facies present here it could belong to the Madikwe facies (AD 1500-1700). No other associated Iron Age remains were noted. This can be due to the extensive ploughing of the area in the past. Co-ordinates:  $S24^{\circ}$  13' 46.6"  $E28^{\circ}$  45' 03.7"

Significance rating: low.

#### 6. BACKGROUND ARCHAEOLOGICAL INFORMATION

\*In pre-colonial times, various Eastern Bantu-speaking people inhabited South Africa, such as Nguni and Sotho-Tswana. However, they were not the first groups to occupy southern Africa. About 1800 years ago their predecessors brought a new way of life to the region replacing the Stone Age hunter-gatherers. For the first time, people lived in settled communities, cultivating such crops as sorghum, millets, ground beans and cowpeas, and they herded cattle as well as sheep and goats. Because these early farming people also made their own iron tools, many archaeologists call this block of time the Iron Age. For convenience and to mark widespread events, we divide it into three periods: the Early Iron Age (AD 200-900), the Middle Iron Age (AD 900-1300) and the Late Iron Age (AD 1300-1820) to which the ancestors of the present day Nguni and Sotho-Tswana belonged.

The earliest Iron Age tradition in South Africa belonged to the Uruwe Tradition from East Africa and in particular the Kwale Branch that migrated southwards, i.e., the eastern stream of migration and settled in the Tzaneen area in the 3<sup>rd</sup> century AD. These ceramics are known as Silver Leaves/Broederstroom. It spread further south towards KwaZulu-Natal and west towards the Magaliesberg. From the 5<sup>th</sup> century onwards, the westerns stream of migration, namely the Kalundu Tradition from the Congo/Angola regions reached the area. The Happy Rest Branch represents this stream and has been found in the Zoutpansberg and at Mooketsi. The eastern stream disappears by 800 AD, probably merging with the western stream, which dominates further on and developed into Doornkop (eastern parts) and Diamant (Waterberg and Magibeng). A Later facies named Eiland (Type site – Eiland Resort) developed out of Diamant, dating to the 10<sup>th</sup> century AD also occurs widespread in the area.

In the 13<sup>th</sup> century AD a second eastern stream, namely Moloko, migrated into South Africa. Archaeologically, the Sotho-Tswana language is associated with the ceramic cluster known as Moloko. The earliest recorded facies of Moloko is *Icon*.

<sup>\*</sup>From Huffman, T.N. 2007.

*Icon* pottery first appears in the Phalaborwa area in the 12<sup>th</sup> to 13<sup>th</sup> centuries and then slightly later spreading in the Limpopo Province. *Icon* in both areas forms major disjunctions with the local sequences:it cannot be derived from *K2* and *Mapungubwe* in the Limpopo Province, or from *Kgolpolwe* to the southeast.Furthermore, *Icon* cannot be derived from the *Happy Rest – Eiland* sequence elsewhere in Limpopo. Because of the constraints within an historical tradition, *Icon* cannot be derived from other KALUNDU facies in Botswana, Zimbabwe or Zambia. By a process of elimination, then, Sotho-Tswana most likely had Early Iron Age UREWE sources somewhere in East Africa (Huffman 1989, 2007). Sites with this pottery are limited to the Limpopo Province, Mpumalanga and perhaps Botswana, dating to between about AD 1300 and 1500. According to the ceramic evidence, in some places *Icon* incorporated earlier *Eiland* elements. This phase predates the oral record.

The next phase of Moloko includes at least three separate facies derived from *Icon*, each with a similar direction of change in motifs: *Letsibogo* in Botswana and north-western Limpopo, *Madikwe* in the North West Province, south-western Limpopo and Botswana, and *Olifantspoort* in the Magaliesberg. Emphases on different decoration techniques separate these three facies: punctates in Letsibogo, stabs and fingernail impressions in Madikwe, and fine hatching in Olifantspoort. Radiocarbon dates place this second phase between about AD 1500 and 1700. In all three areas, the second phase predates stonewalling ascribed to Sotho-Tswana speakers.

Based on the this recent research by Huffman, stonewalling originated in KwaZulu–Natal from where it spread north via *Ntsuanatsatsi* into the eastern Free State and across the Springbok flats and into the Waterberg where *Ntsuanatsatsi* (BaFokeng) pottery is found intermixed with *Madikwe* pottery called the *Rooiberg or Waterberg facies* in the 17<sup>th</sup> and 18<sup>th</sup> centuries. The early Fokeng introduced walling to both Western and South-western Sotho-Tswana.

Because of adverse climatic conditions, other Nguni-speaking groups left KwaZulu-Natal and moved up onto the plateau where they built walls on top of defensive hilltops. These Trans-vaal Ndebele built stonewalled settlements throughout the Waterberg in the 17<sup>th</sup> to 18<sup>th</sup> centuries. Named after a prominent hill in the Lapalala drainage, **Malora** walling incorporates beehive huts at the back of small terrace platforms. Defensive walling on Malora Hill itself follows the edge of the hilltop, surrounding the entire settlement, while the sparsely decorated pottery includes rim notching and punctates.

# 7. DISCUSSION

Besides the lower grinding stone mentioned above, none of the abovementioned archaeological remains were noted on the demarcated area. It must, however, be noted that earlier Iron Age facies such as *Diamant* and *Madikwe*, may be present in subterranean deposits on the property. The accidental discovery of such archaeological material or sites must be reported to the Limpopo Heritage Resources Authority or an archaeologist.

# 8. RECOMMENDATIONS FOR MANAGEMENT MEASURES

The following culture resources management measures are recommended:

1. It is recommended that monitoring by an archaeologist take place during the development phase, as the possibility of archaeological materials surfacing is high. Should cultural material be uncovered it will be assessed and mitigation measures may be proposed.

It is herewith confirmed that we have no objection with regard to the proposed development on condition that the recommendation above is implemented.

# 9. REFERENCES

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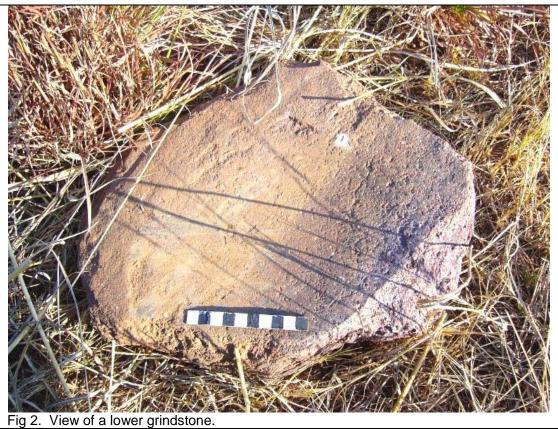
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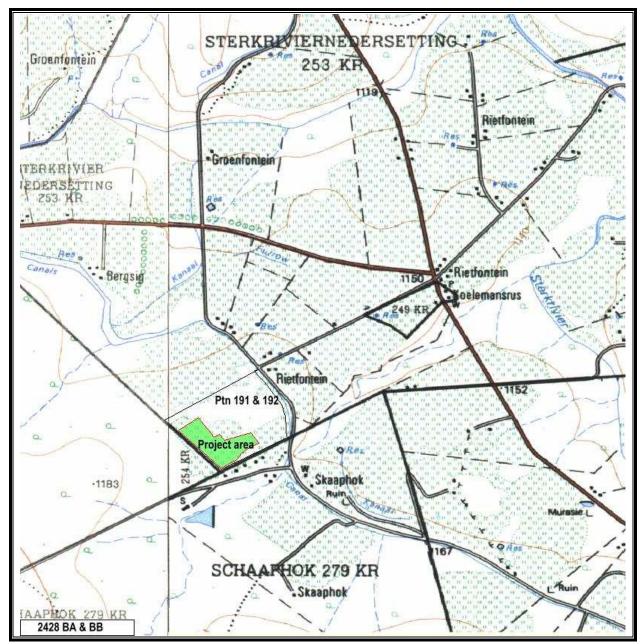
FRANS ROODT (BA Hons, MA Archaeology, Post Grad Dip. in Museology; UP)

Principal Investigator for R & R Cultural Resource Consultants.



Fig 1. General view of the environment.





Locality Map.