

CULTURAL HERITAGE ASSESSMENT OF PROPOSED MSUKENI  
DEVELOPMENT ENTERPRISE, MT AYLIFF,  
EASTERN CAPE PROVINCE, SOUTH AFRICA

Assessment and report by



for

**Environmental and Rural Solutions**

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**4 March 2004**

## Introduction

eThembeni Cultural Heritage was appointed by Environmental and Rural Solutions to undertake a cultural heritage assessment of the area affected by the proposed Msukeni Development Enterprise near Mt Ayloff in the Eastern Cape, in terms of the South African Heritage Resources Management Act No 25 of 1999.

Section 38(1) of the Act requires a cultural heritage assessment in case of:

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length;
- (c) any development or other activity which will change the character of a site –
  - (i) exceeding 5 000 m<sup>2</sup> in extent; or
  - (ii) involving three or more existing even or subdivisions thereof; or
  - (iii) involving three or more even or subdivisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

A cultural heritage assessment is not limited to archaeological artefacts, historical buildings and graves. It is far more encompassing and includes both intangible and invisible resources such as places, oral traditions and rituals. The Act defines a heritage resource as any place or object of cultural significance i.e. of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. This includes the following wide range of places and objects:

- (a) places, buildings, structures and equipment;
- (b) places to which oral traditions are attached or which are associated with living heritage;
- (c) historical settlements and townscapes;
- (d) landscapes and natural features;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including -
  - (i) ancestral graves,
  - (ii) royal graves and graves of traditional leaders,
  - (iii) graves of victims of conflict,
  - (iv) graves of important individuals,
  - (v) historical graves and cemeteries older than 60 years, and
  - (vi) other human remains which are not covered under the Human Tissues Act, 1983 (Act No. 65 of 1983 as amended);
- (h) movable objects, including -
  - (i) objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
  - (ii) ethnographic art and objects;
  - (iii) military objects;
  - (iv) objects of decorative art;
  - (v) objects of fine art;
  - (vi) objects of scientific or technological interest;
  - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings; and
  - (viii) any other prescribed categories, but excluding any object made by a living person;
- (i) battlefields;
- (j) traditional building techniques.

However, this survey was confined to the identification of places, buildings and structures, archaeological sites and graves and burial grounds.

### **Nature and description of proposed activity** (information provided by Environmental and Rural Solutions)

Environmental and Rural Solutions (ERS), an environmental consultancy based in Matatiele, was appointed to conduct an environmental scoping exercise on behalf of the applicant, Alfred Nzo District Municipality, concerning the establishment of the Msukeni Development Enterprise. The site is located some 12km from Mount Ayloff alongside the N2 in the Umzimvubu Local Municipality, Ward 2, of the Alfred Nzo District.

Establishment of the enterprise is part of the Municipality's efforts at local economic development for those rural communities with limited access to employment, resources and services. The Municipality will cover construction costs with funds from the Department of Housing and Local Government's Local Economic Development Fund. The Municipality is facilitating the project and will assist with further training and marketing for the producers and their products.

- The enterprise will consist of craft and fresh produce production facilities, including the following:
- ❖ Four hydroponics tunnels, each 30x10 metres in size, for the production of tomatoes and other fresh produce, which will be sold locally and regionally, as well as exported.
  - ❖ A small restaurant with a conference / meeting centre for an estimated twenty people, with ablutions and catering facilities.
  - ❖ A leather craft production centre, approximately 9m in diameter, to produce crafts and other leather goods from the hides produced at the Mount Ayloff Goat Project and
  - ❖ The sinking of a borehole to supply the enterprise centre with sufficient water.

The target beneficiaries include the rural residents of Ward 2 of the Umzimvubu Local Municipality, including four villages, each of an estimated 300 households. A total of approximately 1200 households will comprise the direct and indirect beneficiaries of the project.

### **Site description and environmental issues**

The site is located approximately 600m from the N2 on the dirt road to Lubaleko, 12km from Mount Ayloff, across the road from Nolutha Special School and approximately 850m from the closest village homestead. Its geographical coordinates are S30°43'18" and E29° 25'39", at approximately 1200 m above sea level. The northeast facing site has an approximately 12 to 15% slope and the existing land use is for communal grazing, managed under the traditional authority. The field has been contoured and ploughed in the past.

### **Methodology**

Two eThembeni staff members undertook a survey of the area on 2 March 2004, accompanied by Sissie Matela and Nicky Mcleod of Environmental and Rural Solutions. Since a permit from SAHRA is required to disturb an archaeological site or structure, we limited our observations to surface cultural remains, without undertaking excavations or sampling of any nature.

## Observations

In accordance with current legislation, no construction activities associated with the proposed activities had started prior to our survey.

The general area is one of variable archaeological significance, with sites recorded from both the Stone and Iron Ages. The following tables provide a brief summary of those time periods:

<b>Early Stone Age</b>	1.5 million to 180 000 years ago	Only stone artefacts remain from this time period, including large choppers, cleavers and hand axes
<b>Middle Stone Age</b>	180 000 to 35 000 years ago	Stone tools smaller than in ESA, include blades and flakes; human and animal remains also found
<b>Late Stone Age</b>	35 000 years ago to the time of European settlement	Variety of artefacts made from organic and inorganic materials; human remains, shell middens etc

<b>Early Iron Age</b>	400 – 500 AD	Mzoniwani phase
<b>Iron Age</b>	500 – 700 AD	Msuluzi phase
	700 – 900 AD	Ndondondwane phase
	900 – 1200 AD	Ntshakane phase
<b>Late Iron Age</b>	1200 – 1500 AD	Settlement by Nguni speakers
<b>Iron Age</b>	1500 – 1700 AD	Introduction of maize
	1700 – 1850 AD	Pre-European settlement
	1850 AD to present	Historical

However, the only cultural resource observed was a scatter of Early Stone Age stone artefacts.

The earliest known stone artefacts are about 2.5 million years old and were found at Kada Gona in Ethiopia (Mazel 1989). Stone artefacts dating to between 2.1 and 1.6 million years old have been found in various places in East Africa, while the earliest dated stone artefacts from South Africa are the pebble tools from Sterkfontein in Gauteng, which are 1.6 million years old.

We know that people learnt to control fire during the Early Stone Age but, besides stone artefacts, little evidence of other aspects of life has survived from these ancient times. People were hunter-gatherers who hunted, trapped and scavenged wild animals and collected wild plant foods, including seeds, fruits, berries and underground tubers. They probably used stone choppers, handaxes and cleavers to butcher animals, crush bones to extract the marrow and pound plant tubers and seeds. Large scrapers were probably used to clean animal skins. Although these stone tools were most likely strictly functional, many are well made, symmetrical and aesthetically pleasing.

The stone scatter at the Msukeni site consists mostly of debris from the stone tool manufacturing process – the flakes, chips and chunks that are left behind when tools are made, in the same way that sawdust and wood chips are the debris from furniture manufacturing. People probably visited the area specifically to exploit the nearby source of dolerite, a hard rock type that fractures cleanly and predictably to produce sharp edges.

We noticed a few handaxes and a fine scraper, along with numerous flakes, chunks and chips. All are weathered with a distinct patina, the outer surface is a light creamy brown where it has been exposed to the elements for millennia, while the original rock is dark grey or black in colour.

No other heritage resources of significance, as defined in the Heritage Resources Management Act 1999 and by the criteria included in the Appendix of this report, were identified as being located on or associated with the proposed development.

## Recommendations

This Early Stone Age artefact scatter is an archaeological site with low cultural heritage significance overall (see Appendix). This is because:

- It has low historical, aesthetic, scientific and social values (the site has been disturbed by agricultural activities; artefacts are limited mostly to debitage rather than formal tools; it is not valued by the local community);
- Such sites are not rare in South Africa (see Mazel 1989);
- It is not especially representative of Early Stone Age sites and
- The site has a low sphere of significance at all levels.

As illustration one may contrast this site with another, better known collection of Early Stone Age artefacts, namely the fossil hominid sites of Sterkfontein, Swartkrans, Kromdraai and environs in Gauteng and the North West Province. These sites, also known collectively as the Cradle of Humankind, were inscribed on the World Heritage List as a Cultural Property in 1999. The many caves in the Sterkfontein Valley have produced abundant scientific information on the evolution and ways of life of modern humans and other animals over the past 3.5 million years. Accordingly, this group of sites throws light on our earliest human ancestors, constituting a vast reserve of scientific information, the potential of which is enormous.

The declaration of the Cradle of Humankind as a World Heritage Site has made many South Africans realise that our rainbow nation has a history that is far older than they realised. Furthermore, researchers worldwide appreciate the scientific value of our early sites. However, although school history textbooks have been revised over the past decade to include this information, many educators find it a difficult subject to teach.

We believe that the value of the Msukeni Early Stone Age site lies in its potential to serve as a valuable teaching aid – tangible evidence of a time when people had no language or way of life as we know it, yet were the ancestors of all of us.

Accordingly, we recommend that we (or another archaeologist approved by SAHRA) apply for a permit from SAHRA to collect a representative sample of artefacts at the time of earthmoving when construction starts on site. Such collection could be part of an inception ceremony that serves to obtain wider recognition for the project. The District Municipality or any other organisation approved by SAHRA could curate the artefacts with the express intention of responsible use for local educational purposes.

Once artefact collection is complete, the project may continue as envisaged.

## **Summary of findings in terms of the Heritage Resources Management Act 1999 Section 38(3)**

### **(a) the identification and mapping of all heritage resources in the area affected**

The requisite documentation has been completed and submitted to SAHRA's Eastern Cape office, as well as to the Archaeology Department of the Albany Museum in Grahamstown as the regional data-recording centre.

### **(b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in regulations**

The archaeological site has low cultural heritage significance.

### **(c) an assessment of the impact of development on such heritage resources**

The site will be damaged or altered significantly by the proposed development.

### **(d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development**

The social and economic benefits outweigh the impacts of the development on the site.

### **(e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources**

The client has undertaken such consultation as part of mandatory scoping requirements and retains the relevant documentation.

### **(f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives**

A representative sample of artefacts should be collected from the site at the time of earthmoving, with the necessary permit from SAHRA.

### **(g) plans for mitigation of any adverse effects during and after completion of the proposed development**

No further mitigation will be necessary once the site has been sampled.

## Conclusion

We have submitted this report to SAHRA's Eastern Cape office in fulfilment of the requirements of the Heritage Resources Management Act 1999. According to Section 38(4) of the Act

The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development, decide—

- (a)* whether or not the development may proceed;
- (b)* any limitations or conditions to be applied to the development;
- (c)* what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
- (d)* whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
- (e)* whether the appointment of specialists is required as a condition of approval of the proposal.

The client may contact Mr Lungile, telephone 046 622 4615 in due course to enquire about SAHRA's decision.

**However, if permission is granted for development to proceed, the client is reminded that the Act requires that a developer cease all work immediately and notify SAHRA should any cultural heritage remains, as defined in the Act, be discovered during the course of development activities.**

## References

Mazel, A. 1989. The Stone Age peoples of Natal. In Duminy, A. and Guest, B. (eds) Natal and Zululand from earliest times to 1910. A new history pp. 1-27. Pietermaritzburg: University of Natal Press and Shuter and Shooter.

## APPENDIX

### SIGNIFICANCE AND VALUE OF HERITAGE RESOURCE SITES

The following guidelines for determining site significance were developed by the South African Heritage Resources Agency in 2003. We use them in conjunction with tables of our own formulation (see that for the Southern African Iron Age, below) when considering intrinsic site significance and significance relative to development activities, as well as when recommending mitigatory action.

#### Type of Resource

Place  
Structure  
Archaeological Site  
Palaeontological Site  
Geological Feature  
Grave

#### Type of Significance

##### 1. Historical Value

#### It is important in the community, or pattern of history

- Importance in the evolution of cultural landscapes and settlement patterns
- Importance in exhibiting density, richness or diversity of cultural features illustrating the human occupation and evolution of the nation, Province, region or locality.
- Importance for association with events, developments or cultural phases that have had a significant role in the human occupation and evolution of the nation, Province, region or community.
- Importance as an example for technical, creative, design or artistic excellence, innovation or achievement in a particular period

#### It has strong or special association with the life or work of a person, group or organisation of importance in history

- Importance for close associations with individuals, groups or organisations whose life, works or activities have been significant within the history of the nation, Province, region or community.

#### It has significance relating to the history of slavery

- Importance for a direct link to the history of slavery in South Africa.

##### 2. Aesthetic Value

#### It is important in exhibiting particular aesthetic characteristics valued by a community or cultural group

- Importance to a community for aesthetic characteristics held in high esteem or otherwise valued by the community.
- Importance for its creative, design or artistic excellence, innovation or achievement.
- Importance for its contribution to the aesthetic values of the setting demonstrated by a landmark quality or having impact on important vistas or otherwise contributing to the identified aesthetic qualities of the cultural environs or the natural landscape within which it is located.
- In the case of an historic precinct, importance for the aesthetic character created by the individual components which collectively form a significant streetscape, townscape or cultural environment.

##### 3. Scientific Value

#### It has potential to yield information that will contribute to an understanding of natural or cultural heritage

- Importance for information contributing to a wider understanding of natural or cultural history by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.
- Importance for information contributing to a wider understanding of the origin of the universe or of the development of the earth.
- Importance for information contributing to a wider understanding of the origin of life; the development of plant or animal species, or the biological or cultural development of hominid or human species.
- Importance for its potential to yield information contributing to a wider understanding of the history of human occupation of the nation, Province, region or locality.



**It is important in demonstrating a high degree of creative or technical achievement at a particular period**

- Importance for its technical innovation or achievement.

**4. Social Value**

**It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons**

- Importance as a place highly valued by a community or cultural group for reasons of social, cultural, religious, spiritual, symbolic, aesthetic or educational associations.
- Importance in contributing to a community's sense of place.

**Degrees of Significance**  
**Rarity**

**It possesses uncommon, rare or endangered aspects of natural or cultural heritage**

- Importance for rare, endangered or uncommon structures, landscapes or phenomena.

**Representivity**

**It is important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects**

Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class.

Importance in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, Province, region or locality.

<b>Sphere of Significance</b>	<b>High</b>	<b>Medium</b>	<b>Low</b>
International	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Provincial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specific Community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**What other similar sites may be compared to this site?**

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**Southern African Iron Age**

	Significance - low	- medium	- high
Unique or type site			Yes
Formal protection			Yes
Spatial patterning	?Yes	?Yes	?Yes
Degree of disturbance	75 – 100%	25 – 74%	0 – 24%
Organic remains (list types)	0 – 5 / m <sup>2</sup>	6 – 10 / m <sup>2</sup>	11 + / m <sup>2</sup>
Inorganic remains (list types)	0 – 5 / m <sup>2</sup>	6 – 10 / m <sup>2</sup>	11 + / m <sup>2</sup>
Ancestral graves			Present
Horizontal extent of site	< 100m <sup>2</sup>	101 – 1000m <sup>2</sup>	1000 + m <sup>2</sup>
Depth of deposit	< 20cm	21 – 50cm	51 + cm
Spiritual association			Yes
Oral history association			Yes
➤ Research potential			High
➤ Educational potential			High

Please note that this table is a tool to be used by qualified cultural heritage managers who are also experienced site assessors.