

**HERITAGE IMPACT ASSESSMENT FOR THE  
PROPOSED WASTE BLENDING PLATFORM PROJECT,  
ROODEPOORT DISTRICT, GAUTENG**

For:

**Bohlweki Environmental**  
P O Box 11784  
Vorna Valley  
MIDRAND  
1686

Survey conducted and report prepared by the:

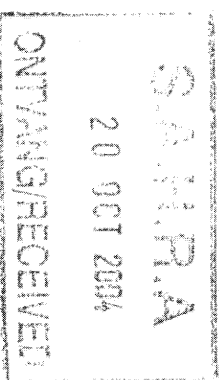
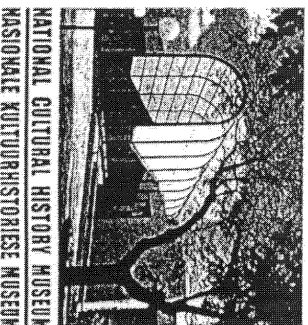
**NATIONAL CULTURAL HISTORY MUSEUM**  
PO Box 28088  
SUNNYSIDE  
0132

Telephone - (012) 324 6082  
Telefax - (012) 328 5173

REPORT: 2004KH45

Date of survey: August 2004

Date of report: August 2004



## **SUMMARY**

### **Heritage impact assessment for the proposed waste blending platform project, Roodepoort district, Gauteng**

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance within the boundaries of the areas proposed for the construction of a waste blending platform in the Roodepoort area of Gauteng.

It is anticipated that at least some of the remains of structures located on the different sites might be older than 60 years, which is the cut-off date for their protection in the current heritage legislation. This presents a problem, as they cannot be destroyed without a valid permit from the Provincial Heritage Resources Agency. However, it is our viewpoint that very little would be gained from any on-site documentation of these remains and we have no preference for the development to take place on any particular one site.

It is recommended that the proposed development can continue, on the following conditions:

- If the site selected for the waste blending platform contains any structures, an archival study must be done to ascertain the significance of the remains. Based on its significance the remains must be documented, i.e. mapped and photographically recorded, before it is destroyed.
- 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.

CONTENTS

SUMMARY . . . . . 1

CONTENTS . . . . . 2

1. THE SURVEY . . . . . 3

2. TERMS OF REFERENCE . . . . . 3

3. DEFINITIONS . . . . . 3

4. LEGISLATIVE REQUIREMENTS . . . . . 4

5. METHODOLOGY . . . . . 5

6. DESCRIPTION OF THE AREA . . . . . 6

7. DISCUSSION . . . . . 7

8. IDENTIFICATION OF RISK SOURCES . . . . . 7

9. RECOMMENDATIONS . . . . . 7

10. REFERENCES . . . . . 8

11. PROJECT TEAM . . . . . 9

APPENDIX 1 . . . . . 10

## **HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED WASTE BLENDING PLATFORM PROJECT, ROODEPOORT DISTRICT, GAUTENG**

### **1. THE SURVEY**

The National Cultural History Museum was contracted by Bohlweki Environmental to survey five small areas, one of which is to be selected for the development of a waste blending platform. 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:

- X **Cultural resources** are all nonphysical 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.
- X 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 various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

- X 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.
- X 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.

#### **4.2 Environmental Conservation Act**

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate this impact are to be formulated.

### **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 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 areas that had to be investigated were identified by Bohlweki Environmental by means of maps. The areas were investigated by walking across it. Special attention was given to unnatural topographical occurrences such as trenches, holes, structures, outcrops and clusters of trees were investigated.

Where possible, local people were interviewed in an effort to obtain information on the existence of known sites.

#### **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)<sup>1</sup> 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).

<sup>1</sup> 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.

## 6. DESCRIPTION OF THE AREA



Fig. 1 Location of the five sites that were investigated.

The five sites, of varying size, are located on both the southern and northern side of the R41, also known as Main Reef Road, in the Roodepoort area of Gauteng (see Fig. 1).

This area was heavily industrialised in the past, having been at the centre of the gold mining industry. As a result, any indication of pre-colonial settlement in the area had been destroyed or covered by later features, such as slimes dams and buildings.

A number of sites declared as heritage sites under the previous Act (No. 29 of 1969), are located to the east of the area under discussion. However, these sites are not threatened by the proposed development.

As most mining activities have ceased in this area, all or most of the structures have been abandoned, vandalised or are reused for a variety of purposes.

## **7. DISCUSSION**

### **7.1 Stone Age**

No stone tools were noticed and no sites likely to be inhabited by Stone Age people occur in the area.

### **7.2 Iron Age**

No sites dating to the Iron Age were identified.

### **7.3 Historical period**

All of the identified sites show remains of previous activities, ranging from earthworks to structures, most of which is probably mining related. At present, it is difficult to assess the significance of the remains on a particular site, as they probably form part of a larger whole, which covers areas larger than the identified sites.

## **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 activities may expose hidden features such as graves or other structures.

## **9. RECOMMENDATIONS**

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural significance within the boundaries of the areas proposed for the construction of a waste blending platform.

It is anticipated that at least some of the remains of structures located on the different sites might be older than 60 years, which is the cut-off date for their protection in the current heritage legislation. This presents a problem, as they cannot be destroyed without a valid permit from the Provincial Heritage Resources Agency. However, it is our viewpoint that very little would be gained from any on-site documentation of these remains and we have no preference for the development to take place on any particular one site.

It is recommended that the proposed development can continue, on the following conditions:

- If the site selected for the waste blending platform contains any structures, an archival study must be done to ascertain the significance of the remains. Based on its significance the remains must be documented, i.e. mapped and photographically recorded, before it is destroyed.



- 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

Bleloch, W. 1901. *The New South Africa*. London: W. Heinemann.

Cartwright, A.P. 1962. *The Gold Miners*. Cape Town: Purnell and Sons.

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

Mason, R.J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Praagh, L.V. (ed.) 1906. *The Transvaal and its mines*. London: Praagh & Lloyd.

Richardson, D. 2001. *Historic sites of South Africa*. Cape Town: Struik Publishers.

Van Riet Lowe, C. n.d. *The distribution of Prehistoric rock engravings and paintings in South Africa*. Archaeological Survey, Archaeological Series No. 7.

Van Warmelo, N.J. 1935. *A Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.

Van Warmelo, N.J. 1977. *Anthropology of Southern Africa in Periodicals to 1950*. Pretoria: Government Printer.

### 10.3 Maps

1: 50 000 Topocadastral maps – 2627BB

## 11. PROJECT TEAM

J van Schalkwyk  
M Naude

## APPENDIX 1: 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 all 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

ADRRC - 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