

**ARCHAEOLOGICAL ASSESSMENT FOR THE TWICKENHAM  
HACKNEY PACHASKRAAL PLATINUM MINE,  
NORTHERN PROVINCE**

A Phase-1 report submitted to SRK Consulting

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**INTRODUCTION**

Anglo-Platinum plans to develop the new Twickenham Hackney Pachaskraal (THP) Platinum Mine in the Northern Province. SRK Consulting, the environmental coordinators for the project, commissioned Archaeological Resources Management (ARM), a research programme based in the School of Geography, Archaeology and Environmental Sciences at the University of the Witwatersrand, to survey the area for graves and sites of archaeological interest. The terms of reference were as follows:

| <b>ARCHAEOLOGY AND CULTURAL RESOURCES SPECIALIST STUDY</b>  |   |
|---|---|
| <b>PURPOSE</b>  | <b>ACTIVITIES</b>   |
| <p>To identify and describe (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the mine infrastructure and activities. This study should include the identification of grave sites.</p> <p>Identify and describe impacts to archaeological and cultural resources.</p> <p>Identify and describe management measures.</p> | <ul style="list-style-type: none"> <li>• Identify and describe sites of archaeological, historical or cultural interest and indicate these sites on a map with GPS references.</li> <li>• Estimate and map where possible the grave sites affected by surface infrastructure. This should be done in liaison with the social impact assessment team.</li> <li>• Describe the importance or significance of these sites and whether these sites need to be conserved, protected or relocated.</li> <li>• Describe the procedures for conservation, protection or relocation of sites and provide an indication of time required for these management measures to be implemented.</li> <li>• Document findings and recommendations in a report in EMPR format.</li> <li>• Make provision for inputting into the development of an environmental management system.</li> </ul> |

This is a stand alone report, in terms of the above, and forms part of the specialist studies for the THP Platinum Mine EMPR. This report should be read in conjunction with the EMPR.

## **METHOD**

Two ARM staff, Ms MH Schoeman and Ms B van Doornum, visited the area from 11 to 13 July 2001. On 11 July Ms Briony Liber from SRK, introduced ARM staff, as well as other Project Specialists, to the project area. ARM staff then traversed the area on foot. Sites were recorded with a GPS instrument, located on orthophotos and a map supplied by the mine, and then transferred to the 1:50 000 map 2429BD Ga-Mankopane (Figure 1). The list of graves and possible graves were given to the social impact assessment team, Ms P Spence and Mr R Mathye of SRK.

## **DEFINITIONS**

### Archaeological

Material remains resulting from human activity which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures;

### Contemporary

Material remains resulting from recent human activity, and which is still in use, including artefacts, human remains and artificial features and structures.

### Grave

A place of interment, including the contents, headstone or other marker of such a place, and any other structure on or associated with such place.

### Historic

Material remains resulting from human activity which is younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

### *In Situ* material

Material culture and surrounding deposits in their original location and context, for example a site that has not been disturbed by farming.

### Later Stone Age (LSA)

Material remains resulting from human activity from ca 25 000 years ago onwards. This period is associated with *Homo sapiens sapiens*. The material culture from this period includes: microlithic stone tools; bone and wooden tools; personal ornamentation, such as beads and pendants made of ostrich eggshell, shells, ivory, wood and bone; rock art and formal burials.

### Middle Stone Age (MSA)

Material remains resulting from human activity from ca 250 000 to 25 000 years ago. The MSA is associated first with archaic *Homo sapiens* and later *Homo sapiens sapiens*. Material culture includes stone tools with prepared platforms and stone tools attached to wooden handles. Some of these hafted tools were used as spears for hunting.

## **RESULTS**

The development area is located in the core of the pre-colonial Pedi polity. Sekwati's (the Pedi king until September 1861) grave is located on the farm Hackney (24 28 52S 30 01 46E). No significant remains from this period were found on the THP Platinum mine area. Several other periods, however, were represented.

### **Pachaskraal shaft**

Middle Stone Age (MSA) stone tools lay scattered over most of the area. Two dense clusters, one consisting mostly of cores ( 24 22 36.1S 30 00 33.9E) (Figure 2A) and the other of flakes ( 24 22 35.6S 30 00 34.8E), were located on the surface on a rocky outcrop (Figure 2B). On a nearby higher outcrop (24 22 30.8S 30 00 36.1E) was another MSA cluster (Figure 2C), as well as a few Later Stone Age (LSA ) tools. The team collected representative samples.

A grave marked by a square stone mound (24 22 50.2S 30 00 26.9E) was pointed out to the team by a community representative who accompanied Ms P Spence and Mr R Mathye from SRK. It is associated with the ruins of an historic homestead.

A round stone cairn approximately four metres in diameter, surrounded with smaller satellite stone piles, was found at 24 22 51.5S 30 00 28.9E. The purpose of this mound is not known; it might be a grave or ritual site.

#### **Significance**

- The MSA and LSA stone tool clusters have no archaeological significance.
- The grave has high local significance.
- The significance of the stone cairn needs to be established.

### **Conveyor belt between Pachaskraal and Twickenham Shafts**

Ruins of several historic homesteads are located to the east of the current dirt road. Associated with one of these (24 23 28.8S 30 00 42.7 E) are five round stone cairns and one oval cairn. These appear to be the result of clearing, but they might also be graves.

Two cemeteries stand west of the current road. The first (24 23 50.5S 30 01 02.1E) has twelve graves marked with cement and stone cairns.

The second (24 23 56.1S 30 01 04.9E) contains thirty-one graves marked with cement, stone cairns or metal railing.

**Significance**

- The cemeteries have high local significance.
- The significance of the stone cairns needs to be established.

**Twickenham Plant and Construction Camp**

MSA stone tools are scattered over most of the area. There are a number of round and oval stone cairns in a cleared area (24 24 35.6S 30 01 37.5E), possibly an old field, surrounded by stone walls. These might be graves.

There are stone walls at 24 24 44S 30 01 41.3E. These appear to be historic.

**Significance**

- The MSA stone tool clusters have no archaeological significance.
- The stone walls have no archaeological significance.
- The significance of the stone cairns needs to be established.

**Conveyor belt between Twickenham and Hackney Shafts**

There are number of graves to the west of the current road through Makobakoba, between the Twickenham and Hackney shafts. At 24 24 41.4S 30 01 51.5E there are two graves associated with the ruins of a historic homestead. Similarly there are four to five graves associated with homestead ruins at 24 24 42.1S 30 01 51.6E.

At the base of the hill at 24 24 49.3S 30 01 58.3E there is a graveyard with five to seven graves in front of a contemporary house.

Three formal contemporary cemeteries were noted at 24 26 14S 30 02 35.7E, 24 26 15.3S 30 02 37.2E and 24 26 15.4S 30 02 36.5E.

**Significance**

- The graves and cemeteries have high local significance.

## **Hackney Shaft**

Three different graveyards exist in the Maotsi area adjacent to the Hackney shaft. A formal cemetery with approximately 21 graves stands at 24 27 22.6S 30 03 18.25E. The graves are marked with stone cairns and cement. This area does not seem to be directly affected by the Hackney shaft.

Two other cemeteries, however, are directly affected and both might have already been damaged by the prospecting road. Both are associated with historic ruins. The first (24 27 39.2S 30 03 31E) contains approximately twelve graves marked by stone and soil mounds. The second (24 27 41.1S 30 03 30.7E) contains at least two graves marked by stone cairns.

LSA stone tools have eroded out of the gravel at 24 27 35.9S 30 03 34.5E (Figure 3).

### **Significance**

- The graves and cemeteries have high local significance.
- The LSA stone tools have no archaeological significance.

## **Tailings Dam**

MSA stone tools lie scattered over most of the area. Some scatters are associated with erosion gullies (e.g. 24 22 26S 30 02 46E) (Figure 4), whereas others (e.g. 24 22 35S 30 02 19.7E) are located in old agricultural areas. As a result of these disturbances, the tools are not *in situ* and thus do not form sites.

The ruins of a number of old homesteads (eg. 24 22 44.3S 30 02 29.3E and 24 22 38.4S 30 02 17.6E) and fallow agricultural fields are located in the down slope area between Dithwaing and Botsabelo villages.

No archaeological material was found on the slopes.

There are 25 graves in Botsabelo. Community members felt that it was not appropriate to record them without a community representative. No representative was available, and consequently GPS readings were not taken. Permission to record the graves and a community representative to accompany the team will need to be arranged in advance.



On the northern side of Botsabelo, MSA tools are scattered over the basal slopes.

A bilobial stone-walled enclosure - an old kraal- was found northwest of Botsabelo at 24 22 08.8S 30 01 29E. South of Botsabelo extensive stone terracing stands at 24 22 34S 30 02 08.5E.

**Significance**

- The MSA and LSA stone tool clusters have no archaeological significance.
- The stone-walled kraal and terracing have no archaeological significance.
- The graves have high local significance.

## **DISCUSSION**

Archaeological remains were recorded in the survey and will be affected by the development. The remains, however, have no archaeological significance. The stone tool scatters are not *in situ* and therefore have no significance. No significant material was found in association with the stone walled kraal, or the terracing in the tailings dam area, and consequently neither require mitigation.

A number of graves might be affected by this development. Two sets of legislation protect human burials: the Human Tissues Act (Act No 65 of 1983) and the National Heritage Resources Act (Act No 25 of 1999). The former applies to graves younger than sixty years, whereas the latter protects graves in formal cemeteries older than a hundred years, graves outside formal cemeteries older than sixty years, as well as graves of cultural significance or victims of conflict.

Both Acts establish the steps to follow before remains are removed. These include:

- Notification of the impending removals,
- Consultation with individuals or communities related to the deceased,
- Calling on relatives to claim the remains,
- Notices at the grave sites,
- Satisfactory arrangements for the exhumation and re-interment.

Exhumations conducted under the National Heritage Resources Act (Act No 25 of 1999) must be supervised by an archaeologist. The removal must be conducted with due respect for the customs and beliefs of the affected relatives, and where requested, in the presence of relatives or community representatives (Appendix 1 and 2).

## **RECOMMENDATIONS**

The Twickenham Hackney Pachaskraal Platinum Mine area is devoid of significant archaeological sites, and consequently mitigation is not needed.

The graves, however, may require mitigation. Furthermore, the nature of the stone cairns noted here should be clarified before development. These may be graves. If possible, the development should avoid grave areas. If avoidance is not possible, then the graves must be relocated by specialists, in terms of existing legislation.

With these constraints, there is no archaeological reason why the project should not proceed.