



Archaetnos Culture & Cultural
Resource Consultants
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**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE
PROPOSED UPGRADING AND CONSTRUCTION OF INFRASTRUCTURE AT
THE BAOBAB SHAFT OF LONMIN PLATINUM NEAR LEBOWAKHOMO,
LIMPOPO PROVINCE**

For:

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REPORT: AE957

by:

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EXECUTIVE SUMMARY

Archaeos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment (HIA) for the proposed upgrading and construction of infrastructure at the Baobab Shaft of Western Platinum Limited near Lebowakomo, Limpopo Province. The development constitutes work on the farm Kaffirkraal 167 KS and Turfpan 122 KS.

The current development includes the upgrading of the existing concentrator, construction of a new concentrator including a site for stockpiling of ore, upgrading of the existing tailings dam, construction of a new tailings dam and construction of a road and conveyor for ore transport. The client indicated the areas where the proposed development is to take place (through the provision of drawings), and the survey was confined to this area.

A survey of the available literature was undertaken in order to obtain background information regarding the area. This included looking at previous HIA reports on the wider geographical area. This was followed by the field survey which was conducted according to generally accepted HIA practices, aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development.

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of a Global Positioning System (GPS). The information was added to photographs and the description in order to facilitate the identification of each locality.

During the survey one site of cultural heritage significance was located in the area to be developed and two nearby. All three sites are grave yards. No other cultural resources were identified. It is however known that some Stone and Iron Age occurrences were identified before as well as remains from the recent past.

The three grave yards date to the Historical Age. Consultation with members of the community indicated that these are the only graves in the surveyed area. However it is believed that this may not be true.

All three sites will be left as they are, as they are not in the area to be developed. Grave yard no 1 is close to mine infrastructure and a fence around it will be maintained. The community needs to have access to the graves.

It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when construction commences that if any of these are discovered, a qualified archaeologist be called in to investigate.

1. INTRODUCTION

Archaetnos cc was requested by SRK Consulting to conduct a cultural heritage impact assessment for the proposed upgrading and construction of infrastructure at the Baobab Shaft of Western Platinum Limited near Lebowakhomu in Limpopo Province. The development constitutes work on the farm Kaffirkraal 167 KS and Turfpan 122 KS.

The current development includes the upgrading of the existing concentrator, construction of a new concentrator including a site for stockpiling of ore, upgrading of the existing tailings dam, construction of a new tailings dam and construction of a road and conveyor for ore transport. The client indicated the areas where the proposed development is to take place (by the provision of drawings), and the survey was confined to this area.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Undertake a desk top study of available information on the area.
2. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
3. Documenting such sites in a report including photographs and indicating them on a map with GPS references.
4. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
5. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
6. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources.
7. Recommend and describe suitable mitigation measures should there be any sites of significance that might be impacted upon by the proposed development.
8. Review applicable legislative requirements.

3. THE AUTHOR

Dr Anton Carl van Vollenhoven:

Tertiary education


- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria

4. DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.

Signed:

Date: 7 October 2009



5. SCOPE, PURPOSE AND METHODOLOGY

5.1 Scope and purpose

The scope for the survey was to identify any archaeological and cultural resources on the sites indicated. It was necessary to work in an area of 20 m around the conveyor route, but other areas were assessed as completely as possible.

5.2 Survey of literature

A survey of the available literature was undertaken in order to obtain background information regarding the area. This included looking at other reports from areas close to the Baobab shaft. Sources consulted in this regard are indicated in the bibliography.

5.3 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The survey was undertaken on foot and via an off-road vehicle.

5.4 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of a Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

6. ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE

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

7.1 The National Heritage Resources Act

According to the above-mentioned law the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

Archaeology, palaeontology and meteorites

Section 35(4) of this act states that 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;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. 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.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency.

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 or 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



Figure 1 Location of the Baobab shaft.



Figure 2 Google image of the surveyed area indicating the position of Baobab Shaft and the tailings and storage facilities.

suitable mitigation measures in this regard. In order to enable the reader to better understand this, it is necessary to give a background regarding the different phases of human history.

Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is, however, important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago
Middle Stone Age (MSA) 150 000 – 30 000 years ago
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

Four important Stone Age sites are known in the vicinity of Baobab/ Mokopane. At the Cave of Hearths and at Skoonheid, Early Stone Age sites were identified. Sites dating to the Middle Stone Age were found at the Rufus cave and at the Cave of Hearths. Late Stone Age assemblages are known from the Cave of Hearths and Magazine shelter. Rock paintings, associated with Late Stone Age hunter-gatherers are found in abundance around Mokopane (Bergh 1999: 4-5).

During previous heritage surveys close to Baobab, both Pistorius (2002: 32-33; 2009: 26-27) and Roodt (2003: 5) discovered Middle Stone Age lithic tools, but indicated that these were scattered around the area and therefore did not constitute a site. Pistorius also indicated that not much research has been done in the wider geographical area and therefore little is known about the pre-historical context (Pistorius 2002:19).

During this survey no additional indication of Stone Age activities was found.

Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however, indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

A total number of 42 Late Iron Age sites have been identified to the east of Mokopane (Bergh 1999: 7). Although it is known that Iron Age people probably utilized this environment in the past, no such sites were identified during the survey. Northern Ndebele people moved into the

Site 1

This is a graveyard consisting of at least 25 graves. Most of the graves were packed with stones, but some have bricks, concrete and granite as grave dressing. Only a few have headstones, some of which are made out of granite. A few of the graves are fenced into their own steel fence (Figure 5).

Five of the graves do not indicate a date of death. The oldest date identified was 1935 and the youngest 2006. Two graves are older than 60 years.



Figure 5 Site 1, a grave yard close to the current plant, but probably just outside of the mine property.

GPS: 24°21'18"S
29°26'42"E

The development will not have a direct impact on the site, but there will be a secondary impact. However, due to the sensitivity of this issue, graves are always regarded as having a **high** cultural significance.

As the mining activities will not impact directly on the graves or the descendants of those laid to rest there (such as removal), the graves should remain in-tact. It should then be fenced properly and easy access should be allowed to the families.

Site 2

This is a graveyard consisting of at least 170 graves at the village of Hwelereng. Most of the graves were packed with stones, but the more recent ones have bricks, cement and granite as

GPS: 24°23'20"S
29°28'43"E



Figure 7 Site no 3.

The development will not have any impact on the grave yard. Graves are always regarded as having a **high** cultural significance, but as the mining activities will not impact directly on the grave yard, it will be left as it is.

9. POTENTIAL FATAL FLAWS AND SIGNIFICANT ISSUES OF CONCERN

Although the people spoken to indicate that there are no other graves in the area, this probably is not the case. Past experience has proved that single graves are frequently found close to homesteads and scattered in the veldt. It is possible that the community members spoken to didn't understand or do not want to share this kind of information. However, since there will be no impact on the communities there will also not be an impact on graves situated within the villages.

The grave yards will be left as they are and the communities will be allowed controlled access to grave yard no 1 which lies within the mine property.

The mine could not give a clear indication of exactly where the conveyor route will be. Mr Johan Grobler did however send a member of his staff to accompany the consultant in order to clarify this matter. Nevertheless it was difficult to determine the exact perimeters for the route and therefore the area was criss-crossed a few times in order to counter this problem. Although this methodology is aimed at covering a larger portion than necessary it is still possible that some spots may have been missed in the process. However, the nature of the

12. CONCLUSION

In conclusion it can be stated that the assessment of the area was conducted successfully. Three sites, of which one is outside of the area to be directly impacted upon have been found. The other two may be indirectly impacted upon. The three sites are all grave yards dating to the recent past and are of a high cultural significance. However, fencing them and giving the communities controlled access would suffice.

Care should be taken when development commences that if any uncharted occurrences are discovered, a qualified archaeologist should be called in to investigate the occurrence.

13. REFERENCES

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APPENDIX A

Definition of terms:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).