

**ARCHAEOLOGICAL STUDY  
ROAD MR 6, MADLANGEMPISI -  
MSAHWENI, SWAZILAND**

Prepared for

**POLTECH (Pty) Ltd**

By

Agency for Cultural Resource Management  
Specialists in Archaeological Studies and Heritage Management

P.O. Box 159  
Riebeek West,  
South Africa

7306

Ph/Fax: 022 461 2755

E-mail: [gillker@iafrica.com](mailto:gillker@iafrica.com)

Cell: 082 321 0172

**JUNE  
1999**

### Executive summary

Thirty seven sites were located during an archaeological study of the road MR6 between Madlangempisi and Msahweni, Swaziland. Five human burial sites were also identified during the study.

The proposed project involves upgrading the gravel road between Madlangempisi and Msahweni. A number of deviations from the existing alignment have been proposed.

Proposed borrow pit and quarry sites have been identified, and these were also searched for archaeological sites.

All the archaeological sites located during the study are in a severely disturbed context. Sites were located in the road reserve, in road cuttings, on degraded alluvial river terraces, in dongas, stream and river crossing, erosion gullies and exposed gravel slopes and terraces. A few pot sherds and stone flakes were located in ploughed and fallow fields. Pot sherds were also found in unpainted rock shelters and overhangs on a kopje close to the road MR6.

All the archaeological sites located during the study have been given a low significance rating. The probability of locating significant archaeological sites during planned upgrading is also considered to be low.

Five human burial sites were recorded during the study. Four burial sites were located at approximately km 39.7, and one ancient burial site was pointed out to the consultant by Chief Majahane Dlamini, at approximately km 28.0.

The burial sites have been given high significance ratings.

The impact of the planned upgrading of the road MR6 on archaeological sites is considered to be low. More recent and ancient human burial sites may, however, be negatively impacted during implementation of the project.

With regard to the planned upgrading of the road MR6 between Madlangempisi and Msahweni, the following archaeological recommendations have been made.

- No archaeological mitigation is required.
- No further in depth studies are required.
- On-site monitoring during the construction period of the road is not considered necessary.
- Communities affected by the planned upgrading of the road should be consulted as to the whereabouts of more recent burial sites, prior to implementation of the project.

## **1. INTRODUCTION**

### **1.1 Background and brief**

The Agency for Cultural Resource Management has been requested by Poltech (Pty) Ltd to undertake a baseline archaeological study of the road MR6 between Madlangempisi and Msahweni, Swaziland. Proposed quarry and borrow pit sites were also searched for archaeological sites.

The planned project involves upgrading of the gravel road between Madlangempisi and Msahweni. A number of deviations from the current alignment have been proposed.

The aim of the study is to locate, identify and map archaeological sites, burials and religious interest sites that may be impacted by the planning, construction and implementation of the planned project, and to propose measures to mitigate against the impact.

## **2. TERMS OF REFERENCE**

The terms of reference for the archaeological study were:

1. to determine whether there are likely to be any archaeological sites, burials or religious interests sites of significance;
2. to identify and map any sites of archaeological significance, including burial sites and religious interest sites;
3. to assess the status and significance of any impacts resulting from the planned development, and
4. to identify mitigatory measures to protect and maintain any valuable archaeological sites, burial sites and religious interest site that may exist.

## **3. THE STUDY SITE**

The study site for the proposed development is illustrated in Figure 1. The existing Madlangempisi - Msahweni Road consists of 48 kms of gravelled road. The northern section of the road is situated in the Middelveld region of Swaziland, while the rest stretches through the Lowveld region of the country.

## 4. STUDY APPROACH

### 4.1 Method of survey

The approach followed in the road MR6 archaeological study entailed a vehicle and foot survey of the existing and proposed new route, including proposed quarry and borrow pit sites. All the archaeological and burial sites located during the study have been recorded according to accepted archaeological recording techniques. This comprises a written description of the sites, Global Positioning System (GPS) co-ordinates, mapping, and photography where appropriate.

A desk top study was also undertaken.

### 4.2 Documentation of archaeological sites in the study area

No previous detailed archaeological studies have been undertaken in the study area.

A pre-Swazi Late Iron Age<sup>1</sup> fort with pottery remains occurs at Bulandzeni, relatively close to the study area, however (John Masson, pers. comm.). And at Bhalekane, in the study area, excavations for an irrigation canal in 1977 exposed a human skeleton with bangles, and pot sherds (Bobby Forester, pers. comm.).

One rock art site, and one Middle Stone Age site was recorded during a baseline study of the Nyonyane Sisa Government Ranch, one of two proposed resettlement areas for the Maguga Dam Project. The entrance to the farm is immediately off the road MR6 at  $\pm 6.0$  km from Madlangempisi. In addition, numerous marginal scatters of stone tools, and some pottery remains were also located during the study (Kaplan 1998).

Nineteen archaeological sites and six rock painting sites were located and recorded during a baseline study for the Maguga Dam Project (Huffman & Calabrese 1997; Huffman & Steel 1995; Kaplan 1997a,b), in the Piggs Peak area.

A large collection of Early Stone Age<sup>2</sup> (ESA) implements was also made on the south bank of the Komati River, a little upstream from the Kuffka Gorge in 1977 (Price-Williams & Lindsay 1977). In that same year, the Hlalakahle Middle Stone Age<sup>3</sup> (MSA) site, upstream from the Komati River bridge was excavated (Price-Williams & Lindsay 1997).

In addition, Peter Beaumont of the McGregor Museum in Kimberley, South Africa, collected large numbers of Early Stone Age implements from the south bank of the Komati River in the late 1960's (John Masson, pers. comm., & Peter Beaumont, field notes). According to Masson (pers. comm.), a small excavation was also carried out by Beaumont at the well-known Nsangwini rock art site.

<sup>1</sup> a period referring to the last 1000 years of black farming communities in southern Africa.

<sup>2</sup> a term referring to the period between 2 million and 200 000 years ago.

<sup>3</sup> a term referring to the period between 200 000 and 20 000 years ago.

With the exception of Hlakahle 1 & 2 (Price-Williams & Lindsay 1977), the majority of archaeological occurrences in the above studies were all found in severely disturbed contexts, such as ploughed and fallow fields, along gravel roads and tracks, in foot paths, erosion gullies, river terraces, exposed high level gravels, borrow test pits, quarries, and on kopjes. Pottery was also found in unpainted rock overhangs. Stone implements have even been used in the construction of local huts.

## 5. RESULTS OF THE IMPACT ASSESSMENT

The road MR6 archaeological study commenced at Madlangempisi (km 0.0).

Thirty-five sites were recorded during the study of the existing and proposed new route.

**MR6/1** GPS reading S 26°05.43 E 31°32.88 @ km ± 0.0

The site comprises a handful of MSA flakes and chunks in quartzite, shale and chert, on a sheet-washed gravel terrace directly adjacent to the abandoned butchery, overlooking the town of Madlangempisi. Two ESA artefacts were also located. At km ± 0.3, some MSA flakes and chunks were located alongside a footpath below a boulder strewn kopje on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/2** GPS reading S 26°05.83 E 32°32.54 @ km ± 1.0

The site comprises some MSA flakes, chunks and cores in quartzite and shale, on a severely eroded slope with deep dongas, on the left hand side of the road. At km ± 1.3, some MSA flakes and an upper grindstone were located on an extensive, sheet-washed gravel slope on the left hand side of the road. Three ESA flakes were also located.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/3** GPS reading S 26°05.79 E 31°32.52 @ km ± 1.1

Located in the proposed new road alignment, **MR6/3** is located directly opposite **MR6/2** on the right hand side of the road. The site comprises a marginal scatter of MSA flakes, chunks and cores in quartzite, shale and quartz, in a degraded, overgrazed environment characterised by low scrub, bush and dongas.

Significance of finds: **low**

Suggested mitigation: **none required**

**MIR6/4** GPS reading S 26°06.11 E 31°31.95 @ km ± 2.3

The site comprises some Later Stone Age<sup>4</sup> (LSA) flakes in shale, quartz, chert and silerete, on a flattish sandy/gravel sheet eroded slope. Two pieces of pottery were also found.

Significance of finds: **low**

Suggested mitigation: **none required**

**MIR6/5** GPS reading S 26°06.36 E 31°31.65 @ km ± 2.9

The site comprises some MSA and ESA flakes and chunks in a ditch and gravel cutting, on the right hand side of the road

Significance of finds: **low**

Suggested mitigation: **none required**

**MIR6/6** GPS reading S 26°06.31 E 31°31.72 @ km ± 3.0

Located in the proposed new road alignment, **MIR6/6** is located directly adjacent to **MIR6/5**, on the right hand side of the road. The site comprises a few MSA flakes and chunks in a rutted and eroded track close to the village of Muzakeni.

Significance of finds: **low**

Suggested mitigation: **none required**

**MIR6/7** GPS reading S 26°05.29 E 31°31.27 @ km ± 3.7

The site comprises relatively large numbers of LSA flakes, chunks and one hammerstone in the road reserve and in a donga, on the right hand side of the road.

**MIR6/8** GPS reading S 26°09.29 E 31°31.37 @ km ± 4.0

Located in the proposed new road alignment, the site comprises a marginal scatter of LSA and some MSA flakes, including a few cores, in chert, quartzite and shale, located on compacted, eroded red sands, directly opposite the Sisa Nyonyane Government Ranch sign, on the right hand side of the road. One decorated pot sherd was also found, as were a number of smaller pieces of thick-walled pot sherds.

Significance of finds: **low**

Suggested mitigation: **none required**

<sup>4</sup> a term referring to the last 20 000 years of precolonial history in southern Africa.

**MRR6/9** GPS reading S 26°06.03 E 31°30.99 @ km ± 4.5

The site comprises a handful of MSA flakes and chunks, and an ESA flake, on a severely eroded gravel slope and donga on the bend leading down to the Komati River, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/10** GPS reading S 26°05.99 E 31°31.00 @ km ± 4.6

Located in the new road alignment, the site comprises a few MSA flakes and chunks on exposed gravel patches, on grassy terrace overlooking the Komati River.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/11** GPS reading S 26°03.35 E 31°31.12 @ km ± 9.8

The site comprises a few pieces of pottery in the road reserve about 100 m from the Empompini Bus Stop, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/12** GPS reading S 26°02.49 E 31°31.48 @ km ± 11.9

A few MSA flakes were located in the road reserve on the left hand side of the road at the Mzimnene River.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/13** GPS reading S 26°01.96 E 31°32.05 @ km ± 13.5

Some thick-walled pot sherds were located in a number of small overhangs on a granite boulder-strewn kopje, about 120 metres from the road. No paintings were found.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/14** GPS reading S 26°01.21 E 31°32.87 @ km ± 13.9

A few pieces of pottery were located in the road reserve on the left hand side of the road, about 100 m before the Hihlapanoi Grocery Store.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/15** GPS reading S 26°00.28 E 31°32.62 @ km ± 17.0

The site comprises some MSA flakes and chunks on a river terrace above a highly eroded dry river/stream course on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/16** GPS reading S 26°00.08 E 31°32.62 @ km ± 17.5

The site comprises a scatter of MSA and LSA flakes, chunks and chips in quartz, quartzite and shale, on a fairly extensive, flattish, sheet-washed slope, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/17** GPS reading S 26°59.89 E 31°32.60 @ km ± 17.9

A few MSA flakes were located in the road reserve on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MRR6/18** GPS reading S 25°58.36 E 31°32.60 @ km ± 21.0

The site comprises a handful of MSA flakes in shale and quartzite, located in an eroded donga in the road reserve on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**



**MR6/19** GPS reading S 25°58.72 E 31°32.50 @ km ± 21.4

The site comprises a few MSA and LSA flakes and chunks, including one broken unifacial point, in a dry river course against the eroded banks on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/20** GPS reading S 25°56.52 E 31°31.03 @ km ± 26.0

The site comprises a small scatter of MSA flakes and chunks including one possible broken hollow-based point, in shale and quartz, in an exposed gravel deflation, about 20 metres from a fence on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/21** GPS reading S 25°56.03 E 31°30.64 @ km ± 27.1

The site comprises some MSA flakes and a utilised blade in shale, on the eroded banks of the Mpofo River on the left hand side of the road. A few MSA flakes were also located on the flat river terrace at the next river crossing about 200 metres along the road on the left had side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/22** GPS reading S 25°53.72 E 31°30.68 @ km ± 32.8

The site is an ancient burial site located about 60 metres from the road on the right hand side of the road. The site was pointed out to the consultant by Chief Majahane Dlamini. According to the chief the 'ancients' were sometimes buried underneath Umlahabantu and Umsinsi trees. Two pot sherds were found on the ground underneath the trees.

Significance of finds: **high**

Suggested mitigation: **No earthworks, or work camps should be located near the site**

**MR6/23** GPS reading S 25°52.40 E 31°30.38 @ km ± 35.0

The site comprises a few MSA flakes on a soft gravel slope in the road reserve on the right hand side of the road, at the top of a blind rise.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/24** GPS reading S 25°50.56 E 31°29.66 @ km ± 37.0

Two MSA flakes were located at the base of a steep cutting into a cliff, on the left hand side of the road. A sign indicating Mayiwane pinpoints the location.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/25** GPS reading S 25°50.39 E 31°29.62 @ km ± 37.2

The site comprises some MSA flakes in quartzite and shale, and a few undecorated pot sherds, on an exposed gravel bank, directly below a boulder-strewn kopje, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/26** GPS reading S 25°49.56 E 31°28.76 @ km ± 39.3

The site comprises a handful of MSA flakes, one flake-blade, and a core, in quartzite, shale and chert, in the road reserve, on both sides of the road. Four undecorated pot sherds were also found. One potsherd was found embedded in the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/27** GPS reading S 25°49.15 E 31°28.64 @ km ± 39.5

Four recent burial sites were located on a slope about 25 metres from the road on the left hand side of the road<sup>5</sup> (Figure). Two of the grave sites are concrete lined, and two comprise an arrangement of rocks.

Significance of finds: **high**

<sup>5</sup>. this site is indicated in the Poltech feasibility report as being located at ± km 37.5

Suggested mitigation: **family members to be consulted prior to implementation of the project**

**MR6/28** GPS reading S 25°49.15 E 31°28.64 @ km ± 40.0

The site comprises fairly large scatter of modified and unmodified LSA flakes, chunks, and some cores, in quartz, quartzite, shale and chert, on a fairly extensive, flatish, sheet eroded gravel patch, about 100 metres above the bridge on the right hand side of the road. A few MSA flakes and chunks in shale and quartzite were also found.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/29** GPS reading S 25°49.05 E 31°28.27 @ km ± 40.7

A few MSA flakes were located on a soft, moist, gravel patch, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/30** GPS reading S 25°48.80 E 31°27.73 @ km ± 41.7

A few MSA flakes in shale, silcrete and chert were located in a footpath, and on an outcropping of ferrecrete on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/31** GPS reading S 25°48.78 E 31°27.81 @ km ± 42.1

Located in the proposed new road alignment, directly in view of the Mhlonhlweni River, the site comprises a marginal scatter of MSA flakes and chunks in quartzite, shale and chert, on an exposed degraded loose gravel bank, on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/32** GPS reading S 25°48.09 E 31°27.30 @ km ± 43.4

Located in the proposed new road alignment, the site comprises a marginal scatter of MSA flakes and chunks in shale in the road reserve, on a flatish gravel slope, and below a cutting, on the right hand side of the road, about 160 metres before the Ndlalambi River bridge. A few ESA cobble flakes were also found.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/33** GPS reading not taken @ km ± 43.6

Located in the proposed new road alignment, the site comprises a marginal scatter of MSA flakes, chunks and cores, in shale, chert, quartz and quartzite, in a severely degraded gravel bank and steep dongas, overlooking the Ndlalambi River, on the right hand side of the road. Stone tools were also found embedded in the eroded banks, and on the gravel slopes above the river.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/34** GPS reading S 25°47.94 E 31°26.87 @ km ± 44.3

The site comprises a relatively large scatter of modified and unmodified MSA flakes, chunks and cores, in shale, on heavily eroded gravel slopes directly below a steep eroded river bank, about 50 metres upstream of the Ndlalambi River, on the right hand side of the road. A few ESA cobble flakes were also located. Some MSA flakes were also found on the river terrace.

A few MSA flakes were located at km ± 44.5, in the road reserve, on the right hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/35** GPS reading S 25°47.13 E 31°25.75 @ km ± 47.0

Located in the new road alignment, the site comprises a handful of MSA flakes and one core, in shale, quartzite, quartz and chert, on a small outcropping of ferrecrete nodules, on the right hand side of the road, in the village of Timphisini.

Significance of finds: **low**

Suggested mitigation: **none required**

### 5.1 Borrow pits and quarries

The borrow pits and quarry site assessment commenced at Msahweni (km 0.0).

Two archaeological occurrences were recorded.

**MR6/36** GPS reading S 25°52.40 E 31°30.38 @ km ± 12.6

The site is the same location as **MR6/23**, and comprises a few MSA flakes on a soft gravel slope in the road reserve at the top of a blind rise, on the left hand side of the road.

Significance of finds: **low**

Suggested mitigation: **none required**

**MR6/37** GPS reading S 26°00.30 E 31°32.60 @ km ± 32.12

The site is located close to **MR6/15**, and comprises a scatter of MSA and LSA flakes, chunks and cores in shale, silcrete and quartz, on a highly eroded, fairly steeply cut, dry river/stream terrace on the right hand side of the road. Some informal brickwork's are very close to the site.

Significance of finds: **low**

Suggested mitigation: **none required**

## 6. IMPACT STATEMENT

The impact of the planned upgrading of the road MR6 between Madlangempisi and Msahweni on archaeological sites, is considered to be low.

More recent and ancient burial sites, may, however, be impacted by the planned project.

## 7. RECOMMENDATIONS

With regard to the planned upgrading of the road MR6 between Madlangempisi and Mashweni, the following archaeological recommendations are made.

1. No archaeological mitigation is required.
2. No further in depth studies are required.
3. On-site monitoring during the construction period of the road MR6 is not considered necessary.
4. Communities affected by the proposed road upgrading should be consulted as to the whereabouts of recent burial sites, prior to implementation of the project.
5. Any ancient burial remains disturbed or uncovered during upgrading and implementation of the project should immediately be reported to the Swaziland National Trust Commission (Mr S.L. Mamba Chief Executive Officer. Human burial remains should be treated sensitively at all times. Contractors, personnel in control of earthmoving equipment, and the site manager, must be made aware of the possibility of uncovering burial sites, and the procedure to follow.
6. No earthworks or work camps should be located close to Umsinsi or Umlahlabantfu trees (see **MR6/22**), where possible human burials may be uncovered or exposed.

The above recommendations are subject to approval of the Swaziland National Trust Commission.

## 8. REFERENCES

- Huffman, T.N. & Calabrese, J.A.** 1977. Archaeological survey of Maguga Dam: quarries and borrow area. A phase 1 report prepared for Steffen Robertson and Kirsten Consulting Engineers and Scientists. Johannesburg: Archaeological Resources Management.
- Huffman, T.N. & Steel, R.H.** 1975. Archaeological survey of the Maguga Road Development sites. Report prepared for Steffen Robertson and Kirsten Consulting Engineers and Scientists. Johannesburg: Archaeological Resources Management.
- Kaplan, J.** 1997a. Archaeological reconnaissance. Maguga Dam Project - reservoir environmental impact assessment for Task MCD-6. Report prepared for Afridev/Knight Piesold. Agency for Cultural Resource Management: Riebeek West.
- Kaplan, J.** 1997b. Summary report: Archaeological study - Maguga Dam Project - reservoir environmental impact assessment for Task MCD-6. Report prepared for Afridev Consultants (Pty) Ltd. Agency for Cultural Resource Management: Riebeek West.

**Kaplan, J.** 1998. Archaeological study, Nyonyane Sisa Ranch, Maguga Dam Project. Environmental Impact Assessment for Task MCD-6. Report prepared for Afridev Consultants (Pty) Ltd.

**Price-Williams, D.P. & Lindsay, N.E.** 1977. Hlalakahle/Kufika. Stone Age sites in north western Swaziland. Swaziland Archaeological Research Association. City University, London.