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**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
LUTZVILLE WEST
VREDENDAL**

Prepared for

ENVIROAFRICA

By

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2002**

Executive summary

Relatively large numbers of Middle Stone Age and Later Stone Age tools were located during a Phase 1 Archaeological Impact Assessment in Lutzville West in Vredendal. A few Early Stone Age tools were also found.

The proposed project comprises social housing, including the construction of a water pipeline and oxidation dam.

Most of the archaeological remains were located at the site of the proposed oxidation dam. A few tools were found in the pipeline route and in the proposed housing site.

The stone artefacts were all found in an already severely degraded and altered environment. As a result the tools have been given medium to low importance ratings.

Construction of the oxidation dam will impact negatively on archaeological remains, but the significance of the impact is likely to be low.

The impact of the proposed project on archaeological remains in the proposed pipeline route and in the proposed housing site is likely to be low.

With regard to the proposed Lutzville West Housing Project, the following recommendations are made.

- No immediate archaeological mitigation is required.
 - A small collection of tools could be made from the site of the proposed oxidation dam, and kept for possible educational and display purposes at the museum in Vredendal, or other appropriate venue.
- No artefacts may be collected without a permit issued by SAHRA
- The construction camp and plant site should be located only in already disturbed areas.
 - No new access road to the oxidation dam should be constructed without an archaeological study being undertaken

The recommendations are subject to the approval of the South African Heritage Resource Agency (SAHRA).

1. INTRODUCTION

1.1 Background and brief

EnviroAfrica has requested the Agency for Cultural Resource Management to undertake a Phase 1 Archaeological Impact Assessment (AIA) in Lutzville West in Vredendal.

The proposed project comprises social housing for previously disadvantaged communities, including excavation for a water pipeline and construction of an oxidation dam.

The aim of the study is to locate, identify and map archaeological remains that may be negatively impacted by the planning, construction and implementation of the proposed 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 of significance;
2. to identify and map any sites of archaeological significance;
3. to assess the sensitivity and conservation significance of archaeological sites;
4. to assess the status and significance of any impacts resulting from the proposed development, and
5. to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist

3. THE STUDY SITE

The study site for the proposed project is illustrated in Figure 1.

The site is located in Lutzville West, about 25 kms west of Vredendal.

4. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The approach used in the archaeological study entailed a detailed foot survey of the proposed development.

This included a study of the proposed housing project, the water pipeline route and the oxidation dam.

A desk top study was also undertaken.

Middle Stone Age¹ (MSA) and Early Stone Age² (ESA) material are very common in the coastal area north of the Olifants River mouth (Hart 1999; Kaplan 2001). Occurrences have been recorded in virtually every track/road, borrow pit, and quarry along the length of the road servicing Namaqua Sands (Hart and Lanham 1997). In any place where the ground surface has been quarried or deflated, such material is visible.

Closer to Lutzville, large numbers of archaeological sites, mainly Later Stone Age³ (LSA) hunter-gatherer camps and coastal shell middens, have been recorded at Papendorf, Viswater and Strandfontein (Kaplan 2000 and personal observation). Some MSA and ESA tools have also been noted.

The archaeological evidence shows that people have occupied the land around Lutzville for more than one million years.

5. LEGISLATIVE REQUIREMENTS

5.1 The National Heritage Resources Act (Act No. 25 of 1999)

5.1.1 Archaeology (Section 35 (4))

No person may, without a permit issued by the responsible heritage resources authority, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

6. RESULTS OF THE ARCHAEOLOGICAL STUDY

6.1 The housing site (Figures 2 & 3)

LTV 1

Seven Middle Stone Age (MSA) flakes, including two utilised flakes and one miscellaneous retouched tool, in fine-grained quartzite were located in the southern portion of the site, on compacted red sands, in a large, severely degraded area (Figures 1 & 3).

Importance of finds: low

Suggested mitigation: none required.

¹ A term referring to the period between 250 000 and 20 000 years ago.

² A term referring to the period between 2 million and 250 000 years ago.

³ A term referring to the last 20 000 years of precolonial history in southern Africa.

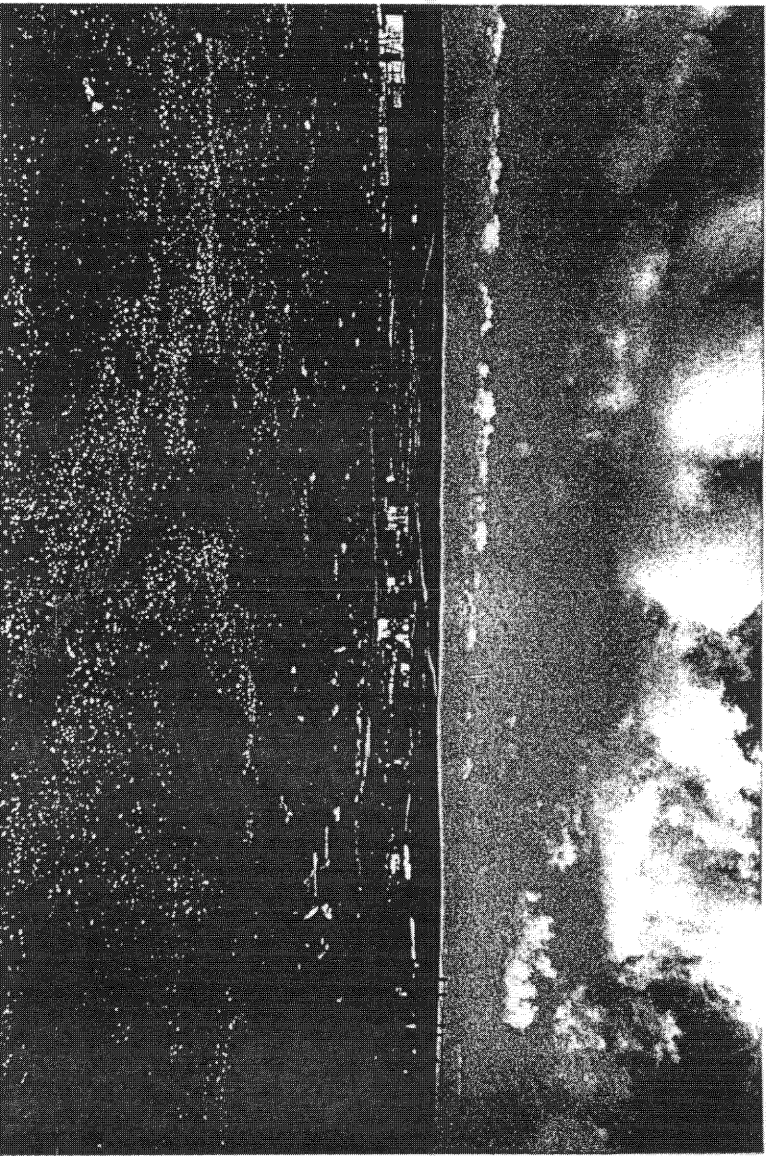


Figure 2. Phase 1 Archaeological Impact Assessment, Social Housing Project, Lutzville West: The housing site.

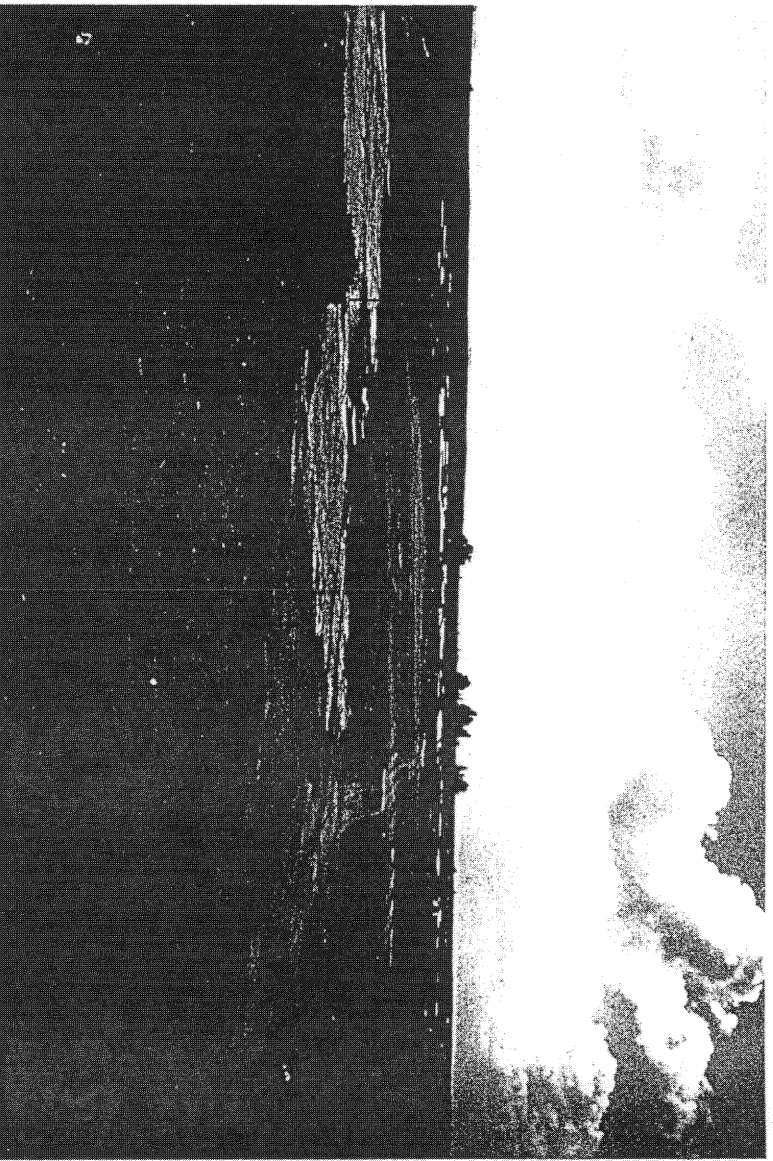


Figure 3. Phase 1 Archaeological Impact Assessment, Social Housing Project, Lutzville West: The housing site.

6.2 The oxidation dam

LTV 2

More than 40 MSA and LSA tools were located in and around the site for the proposed oxidation dam (Figures 1, 4 & 5). Some ESA tools were also found (Figure 6).

The large collection of MSA tools comprise a variety of side-struck flakes, chunks, flaked stone, cores, utilised and unmodified flakes, and retouched tools. No points were found.

The LSA tools comprises a range of mainly utilised and unmodified flakes, a few retouched tools (such as scrapers), chunks, cores and hammetones, silcrete. No pottery was found, suggesting that the LSA tools are older than 2000 years.

ESA tools in fine-grained quartzite included a few large flakes/cleavers, split/flaked cobbles, chunks, and a handaxe (see Figure 6).

The tools were located on hard gravels and compacted red sands, in a severely altered and degraded terrain. Some excavations and earthworks have already taken place in the surrounding area. These excavations may relate to the construction of a nearby shooting range. The remains of gravel road also crosses the site.

Importance of finds: medium to low

Suggested mitigation: none required, but perhaps a collection of stone tools could be made for educational and display purposes at the museum in Vredendal, or other appropriate venue

6.3 The water pipeline

A few MSA flakes were found in the pipeline route leading to the proposed oxidation dam.

Importance of finds: low

Suggested mitigation: none required.

7. IMPACT STATEMENT

The overall impact of the proposed project on archaeological remains is likely to be low.

However, construction of the oxidation dam will impact negatively on archaeological remains, but the significance of the impact is likely to be low.

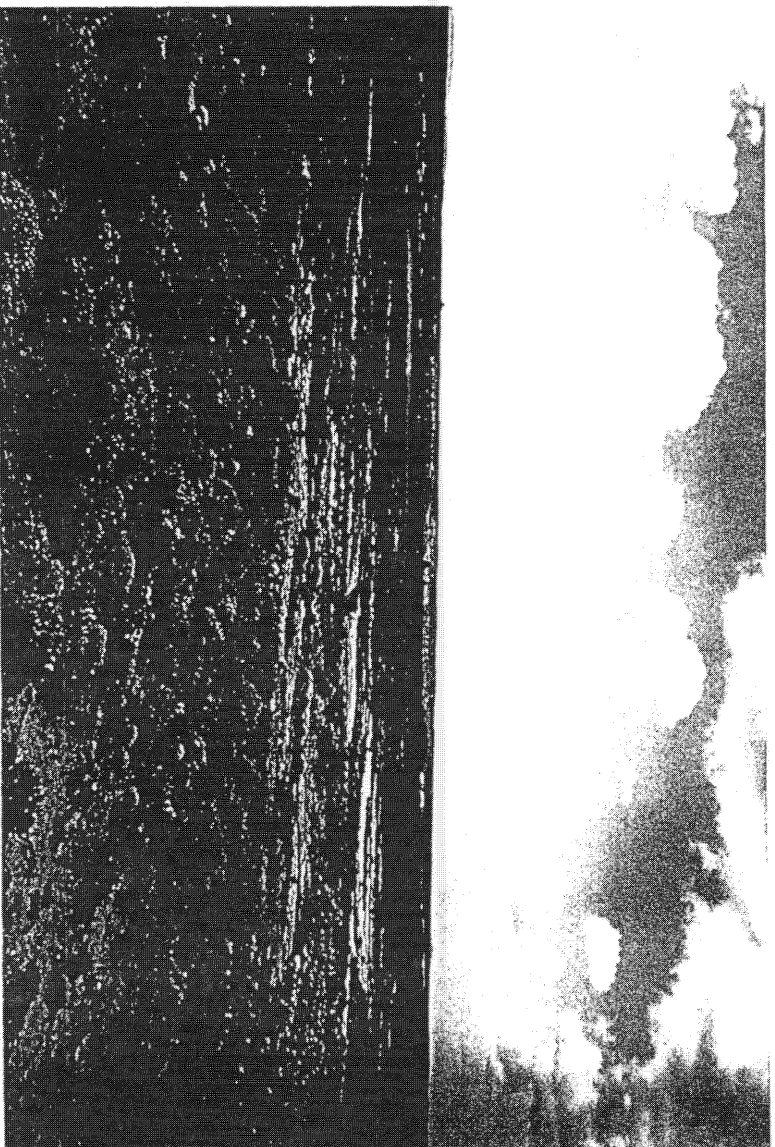


Figure 4. Phase 1 Archaeological Impact Assessment, Social Housing Project, Lutzville West: The oxidation dam site. Arrow indicates the location of the dam.



Figure 5. Phase 1 Archaeological Impact Assessment, Social Housing Project, Lutzville West: A collection of Later Stone Age and Middle Stone Age tools.

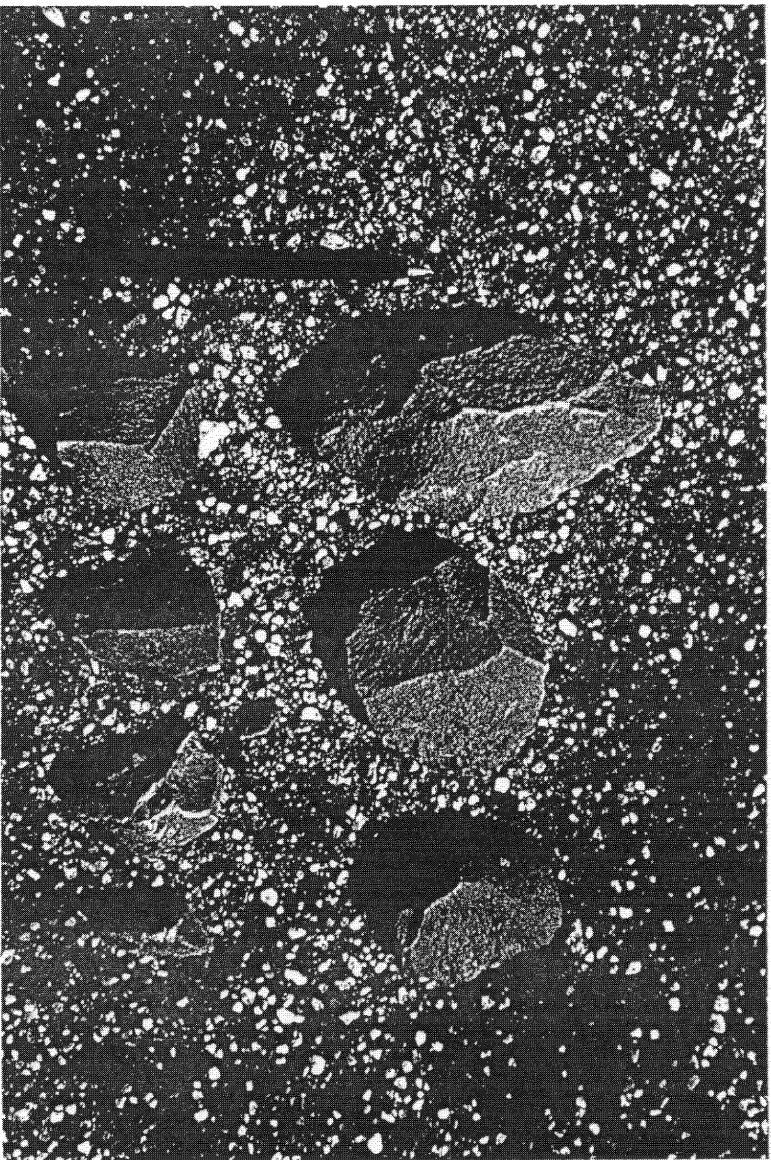


Figure 5. Phase 1 Archaeological Impact Assessment, Social Housing Project, Lutzville West: A collection of Early Stone Age and Middle Stone Age tools.

8. RECOMMENDATIONS

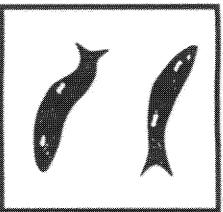
With regard to the proposed Lutzville West Housing Project, the following recommendations are made.

- No immediate archaeological mitigation is required.
 - A small collection of tools could be made from the site of the proposed oxidation dam, and kept for possible educational and display purposes at the museum in Vredendal, or other appropriate venue.
- No artefacts may be collected without a permit issued by SAHRA
- The construction camp and plant site should be located only in already disturbed areas.
 - No new access road to the oxidation dam should be constructed without an archaeological study being undertaken

The recommendations are subject to the approval of SAHRA.

9. REFERENCES

- Hart, T. & Lanham, J. 1997. Phase 2 archaeological excavations at Namakwa Sands Site MS 2. Report prepared for Namankwa Sands Ltd. Archaeology Contracts Office, University of Cape Town.
- Hart, T. 1999. A Phase 1 archaeological assessment of the proposed Liebenberg Bay Mine, Vredendal. Report prepared for Rency (Pty) Ltd. Archaeology Contracts Office, University of Cape Town.
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30 August 2002

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Dear Mary

REPORTS: PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENTS,
PORTION 1 OF THE FARM HERMANUS-ONRUS RIVER NO. 542 CALEDON;
KOEKENAAP; AND LUTZVILLE WEST

Please find copies of the above three reports.

Yours sincerely

Jonathan Kaplan

