PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED SAND MINING ERF 548 PHILIPPI CAPE TOWN

Prepared for

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Ву

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Executive summary

Amathemba Environmental, on behalf of CC Lime, requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of Erf 548 Philippi, in the Western Cape Province.

The affected property has been identified for open cast, haul and load sand-mining operations, providing sand for CC Lime's processing plant.

A large portion of the proposed site has already been levelled, while a modern home, outbuildings and infrastructure related to small scale farming occurs on the site. A portion of the site is also infested with alien vegetation, resulting in low archaeological visibility. Some sand mining operations have also taken place in the past. The site is severely disturbed and modified.

The extent of the proposed development (about 6 ha) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological sites and remains that may be negatively impacted by the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

No archaeological heritage remains were located during a baseline study.

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed mining activities.

Human burials may, however be exposed or uncovered during sand mining operations.

Potentially valuable fossil and geological remains may also be intersected or exposed during mining operations.

With regard to the proposed development of Erf 548 Philippi, the following recommendations are made:

- Contractors, staff and plant operators should be briefed what to look out for, during vegetation clearing and mining operations.
- Heritage remains uncovered or disturbed during vegetation clearing and mining should not be disturbed until inspected by a professional archaeologist or palaeontologist. Dr Dave Roberts of the Council for Geoscience, Bellville (021 948 4754) is able to comment on fossiliferous material in the area.
- Should any human remains be disturbed, exposed or uncovered during mining operations, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

1. INTRODUCTION

1.1 Background and brief

Amathemba Environmental, on behalf of CC Lime, requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of Erf 548 Philippi, in the Western Cape Province

The affected property which lies almost immediately to the west of Strandfontein Road (M17) has been identified for open cast, haul and load sand-mining operations, providing sand for CC Lime's processing plant.

The property is currently zoned rural.

The extent of the proposed development (about 6 ha) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological sites and remains that may be negatively impacted by the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

2. TERMS OF REFERENCE

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed site

3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the affected erf is illustrated in Figure 2.

The site lies immediately to the west of Strandfontein Road (M17) and is accessed from Strandfontein Road.

A large portion of the proposed site has already been levelled about 10-15 years ago, and a large modern home, outbuildings and infrastructure related to small scale animal farming occurs on the site. Several dams also occur on the property. The southern portion, and a portion of the property in the north and south, is infested with alien vegetation, resulting in low archaeological visibility. Some sand mining operations have also taken place in the past, in the south east and north east of the property. The affected site is severely disturbed and modified (Figures 3-6).

Philippi was named after Dr Philip Faure, the first minister of the Wynberg parish of The Dutch Reformed Church. Before the Philippi area was settled by German immigrants after 1877, it was named the Flats. The settlers came from all over Germany and were predominantly poor farmers, day labourers, wood workers and craftsmen (Hart & Halkett 1997).

The immigrants were settled in Mannenberg (Claremont Flats), Wynberg Flats (Ottery and Philippi) and the Dunes. The intention was that they would raise cattle and sell butter and vegetables, but the sandy soils of the Cape Flats was not suitable for farming. Despite these hardships, many of the settlers persisted with small scale farming (Halkett & Hart 1997).

The immigrants planted willows and later Port Jackson to serve as windbreaks between the fields and to bind the sand. By 1883 the farming activities in the area were successful. The settlement eventually grew to become an important market garden providing the inhabitants of Cape Town with a variety of fresh vegetables (Halkett & Hart 1997).

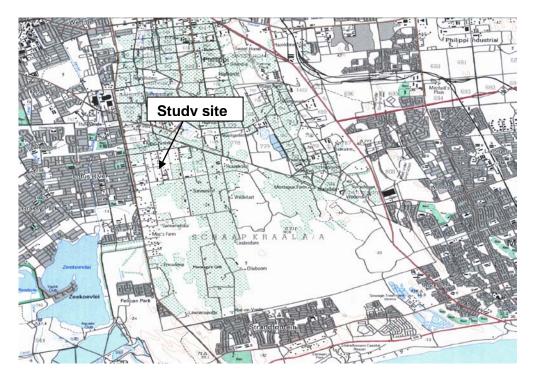


Figure 1. Site locality (3418 BA Mitchells Plain)

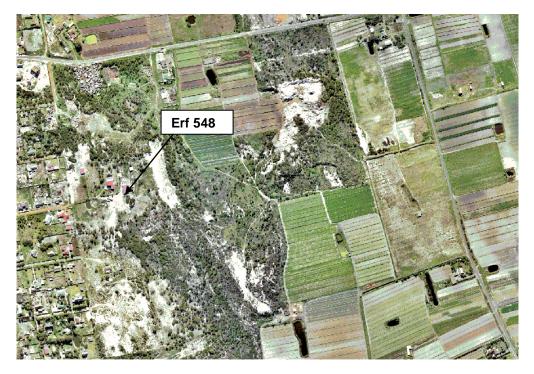


Figure 2. Aerial photograph of the site.



Figure 2. Erf 548. The site facing west.



Figure 3. Erf 548. The site facing north west.



Figure 4. Erf 548. The site facing north.

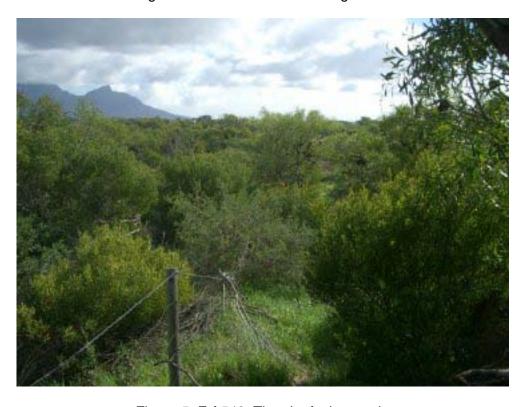


Figure 5. Erf 548. The site facing north.

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a foot survey of Erf 548.

The site visit and assessment took place on the 2nd of August 2005.

5. LEGISLATIVE REQUIREMENTS

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

`...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment in terms of the National Heritage Resources Act (No. 25 of 1999).

5.1.1 Structures (Section 34 (1))

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 South African Heritage Resources Agency (SAHRA), or Heritage Western Cape.

5.1.2 Archaeology (Section 35 (4))

No person may, without a permit issued by the SAHRA or Heritage Western Cape, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.1.3 Burial grounds and graves (Section 36 (3))

No person may, without a permit issued by SAHRA or Heritage Western Cape, 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.

6. LIMITATIONS

A portion of the study area in the affected study area is infested with alien vegetation, resulting in low archaeological visibility. The bulk of the study area is severely disturbed, however.

7. IMPACT ASSESSMENT AND DESCRIPTION

No archaeological heritage remains were located during the assessment of the affected property.

7.1 Other finds in the general study area

Archaeological heritage surveys undertaken to date in the Macassar/Strandfontein/Philippi area appear to indicate a paucity of tangible heritage sites.

Collections of tools were made by amateur archaeologists in the 1950's and 1960's, but their precise locations are unknown and are merely referred to as being in the region of the Cape Flats (Kaplan 1993).

A scatter of marine shellfish and ostrich eggshell was recently located during a baseline study of Pelican Park Phase 2 and 3 (Kaplan 2005a).

A thin scatter of fragmented shellfish and several fragments of ostrich eggshell were also located on a highly degraded sand dune alongside Strandfontein Road (M17) (Kaplan 2002).

According to Mr Dalton Gibbs (pers. comm. 2002) the reserve manager at the Rondevlei Nature Reserve, a Later Stone Age (LSA) shell midden has been located in the northern portion of the reserve, as well as a single Dutch clay pipe.

Isolated scatters of Later Stone Age artefacts have been recorded along the beach between Strandfontein and Macassar (Kaplan 1993), while Rudner (1968) also described several shell middens behind the primary dunes at Strandfontein and Swartklip.

Some fossil material has also been found on the Anglo Alpha sand mine near Zandvliet/Macassar (Halkett & Hart 1997).

Some studies have also identified no archaeological heritage remains (Kaplan 2001, 2005b).

8. IMPACT STATEMENT

The impact of proposed sand mining operations in Erf 548 Philippi on archaeological heritage remains is likely to be low.

The probability of locating significant archaeological heritage remains during implementation of the proposed project is likely to be improbable.

Mining of the dunes may, however, expose or uncover buried archaeological and possibly palaeontological (fossil) remains beneath the overlying aeolian (wind-blown) sands.

It is worth noting that some fossil material has been found on the Anglo Alpha sand mine near Zandvliet/Macassar (Halkett & Hart 1997) to the east of the study area.

9. RECOMMENDATIONS

With regard to the proposed sand mining operations in Erf 548 in Philippi, the following recommendations are made:

- Contractors, staff and plant operators should be briefed what to look out for, during vegetation clearing and mining operations.
- Heritage remains uncovered or disturbed during vegetation clearing and mining should not be disturbed until inspected by a professional archaeologist or palaeontologist. Dr Dave Roberts of the Council of Geoscience, Bellville (021 948 4754) is able to comment on fossiliferous material of the area.
- Should any human remains be disturbed, exposed or uncovered during mining operations, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

10. REFERENCES

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