

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT  
PROPOSED SAND MINING  
ERVEN 550 & 552  
PHILIPPI  
CAPE TOWN**

Prepared for

**AMATHEMBA ENVIRONMENTAL**

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## **Executive summary**

Amathemba Environmental requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of Erven 550 and 552 Philippi, in the Western Cape Province.

The affected properties have been identified for open cast, haul and load sand-mining operations, providing sand to the building and construction industry.

The affected property is currently zoned rural, but to date has not yet been developed.

A large portion of the proposed site is severely infested with alien vegetation, resulting in low archaeological visibility. Some sand mining operations have also taken place in the past.

The extent of the proposed development (about 20 ha combined) 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 Erven 550 and 552 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 TAR Demolition and Excavation CC, requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of Erven 550 and 552 Philippi, in the Western Cape Province

The affected properties, which lie to the west of Strandfontein Road (M17), have been identified for open cast, haul and load sand-mining operations, providing sand to the building and construction industry.

The affected property is currently zoned rural, but to date has not been developed.

The extent of the proposed development (about 20 ha combined) 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 two sites;
- to identify and map any sites of archaeological significance within the proposed sites;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed sites;
- 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 sites

### 3. THE STUDY SITE

A locality map is illustrated in Figure 1.

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

The site lies to the west of Strandfontein Road (M17). The site is accessed from 11<sup>th</sup> Avenue/Olieboom Road. Agricultural lands of the Philippi area directly borders the proposed mine area to the east, south and north west.

The site comprises a series of large, heavily vegetated sand dunes and vegetated dune slacks in between (Figures 3-6). There is no formal infrastructure on the site. Several informal roads and tracks criss-cross the affected properties. Substantial sand mining has taken place on both erven in the past. The properties are infested with alien vegetation, resulting in low archaeological visibility.

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).

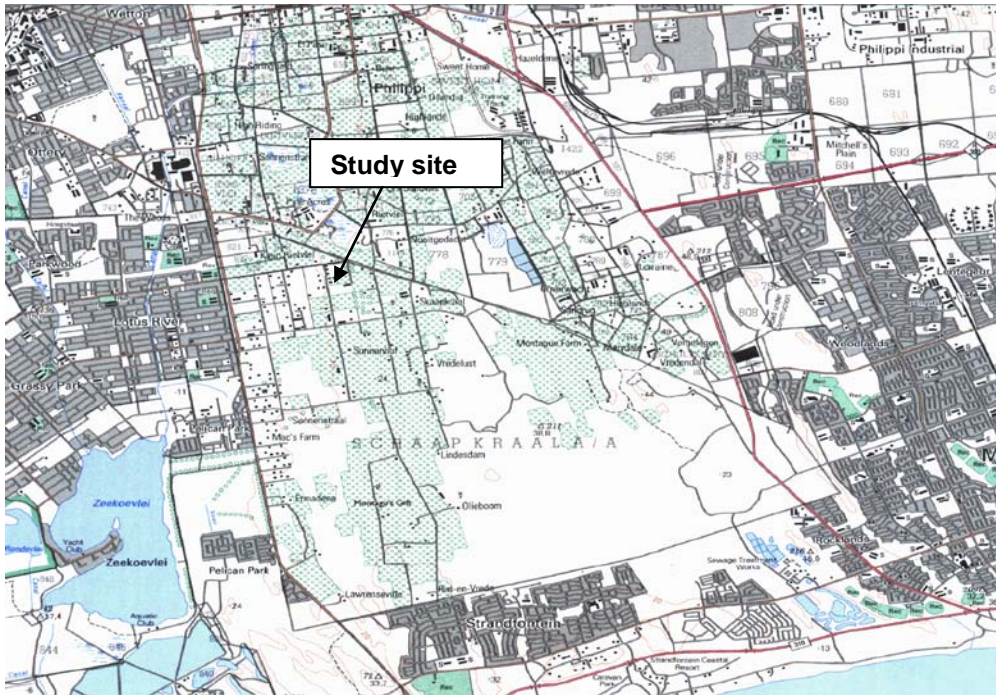


Figure 1. Site locality (3418 BA Mitchells Plain).

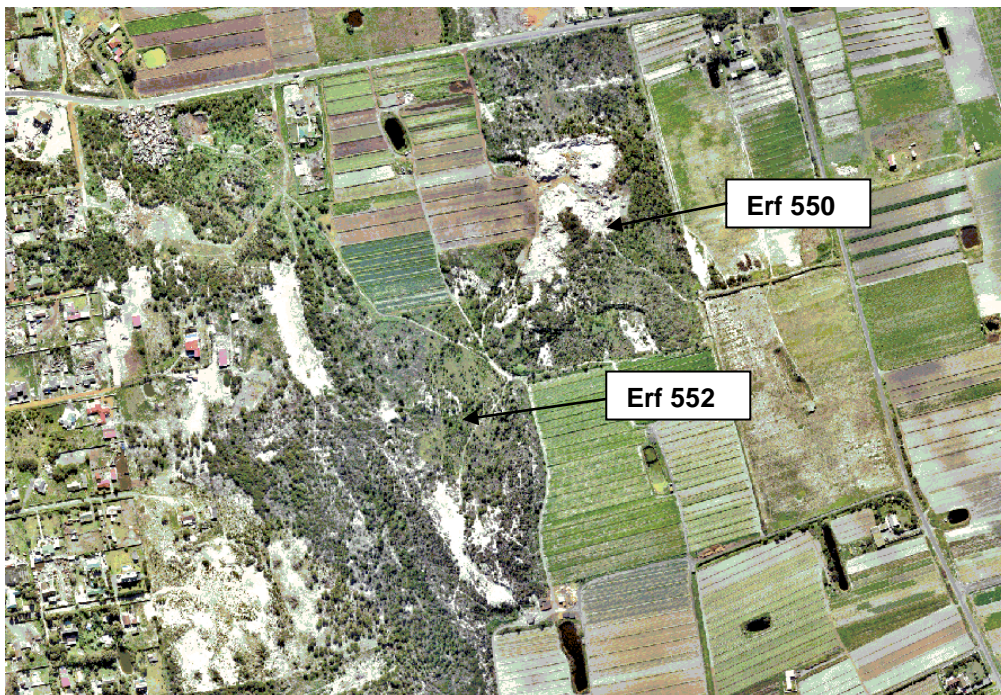


Figure 2. Aerial photograph of the site.



Figure 2. Erven 550 & 552. The site facing west.



Figure 3. Erven 550 & 552. The site facing north.



Figure 4. Erven 550 & 552. The site facing north east.



Figure 5. Erven 550 & 552. the site facing north west.

## **4. APPROACH TO THE STUDY**

### **4.1 Method of survey**

The approach followed in the archaeological study entailed a foot survey of Erven 550 and 552.

The site visit and assessment took place on the 2<sup>nd</sup> 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 000m<sup>2</sup>, or the rezoning or change of land use of a site exceeding 10 000 m<sup>2</sup>, 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**

The affected study area is infested with alien vegetation, resulting in low archaeological visibility.



## **7. IMPACT ASSESSMENT AND DESCRIPTION**

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

### **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 Erven 550 and 552 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 Erven 550 and 552 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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