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**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT  
PROPOSED SAND MINING  
ERF 559 SCHAAPKRAAL  
PHILIPPI  
CAPE TOWN**

Prepared for

**AMATHEMBA ENVIRONMENTAL**

Client: CC Lime

By

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## Executive summary

Amathemba Environmental, on behalf of CC Lime, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of Erf 559 Schaapkraal, in Philippi, in the Western Cape Province.

The subject property has 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.

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.

The subject property lies to the east of Strandfontein Road, in the Philippi Horticultural Area. The proposed site is severely infested with alien vegetation, resulting in low archaeological visibility.

No archaeological heritage remains were located during the 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 the proposed mining activities.

Unmarked pre-colonial 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 559 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 cleaning and mining should not be disturbed until inspected by a professional archaeologist or palaeontologist. Consulting palaeontologist Dr John Pether (083 744 6295) is able to comment on fossiliferous material in the area.
- Should any unmarked 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), or Heritage Western Cape (Dr A. Jerardino (021) 483 9692).

## 1. INTRODUCTION

### 1.1 Background and brief

Amathemba Environmental<sup>1</sup>, Amathemba Environmental, on behalf of CC Lime, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of Erf 559 Schaapkraal, in Philippi, in the Western Cape Province.

The subject property has 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.

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

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<sup>1</sup> Amathemba Environmental is represented by Mr Stephen Davey, 8 Feldhausen Road, Claremont, 7708, Cape Town. Fax 086 671 9841

### 3. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the proposed site is illustrated in Figures 2a and 2b.

The proposed mine is located on Erf 559, Schaapkraal, which is south of Olieboom Road and east of Strandfontein Road in the Phillippi Horticultural Area. The geographical coordinates of the site are approximately 34°03'20" S, 18°32'20" E (WGS 84 datum).

The subject property is located in the south-western side of the Phillippi Horticultural Area. It is approximately 700 m east of Strandfontein Road along 18<sup>th</sup> Avenue. West of Strandfontein Road are the residential suburbs of Pelican Park, Lotus River and Grassy Park. The closest residential area to the south-west of the property is Strandfontein, while the suburb of Mitchell's Plain lies some distance to the east.

The property is infested with alien vegetation, resulting in low archaeological visibility (Figures 3-6). The proposed site is covered in light coloured, calcareous dune sands of the Witsand Formation. It is these deposits that are mined for building sand. Cultivated lands of the Phillippi Horticultural Area intrude into the site on its western flank (refer to Figure 2). The site is vacant and there are no buildings or structures on the property.

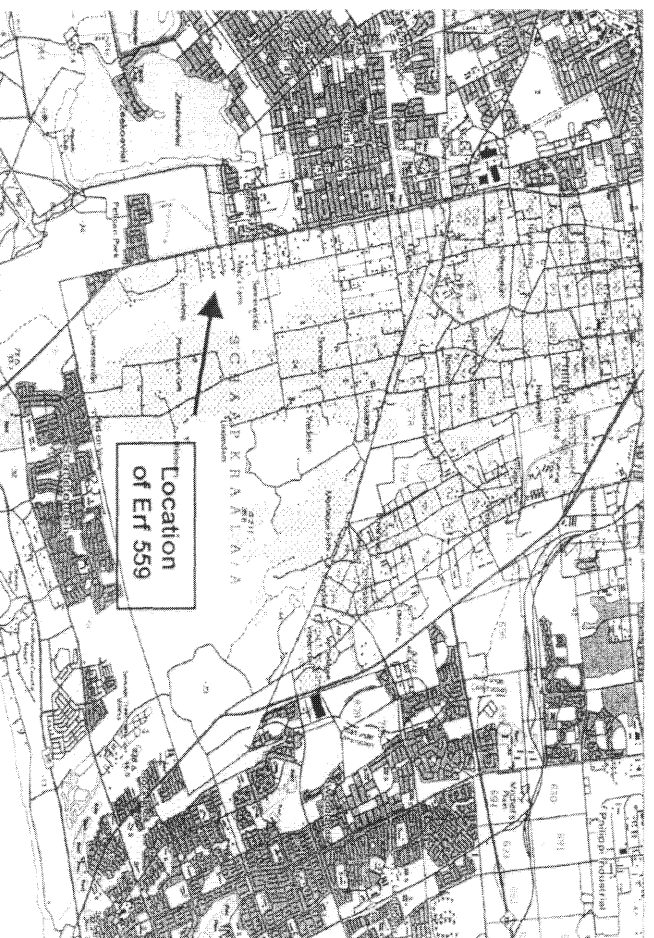


Figure 1 : Locality map (3418 BA Mitchell's Plain)



Figure 2a. Orthophoto of Erf 559 and surrounding land.

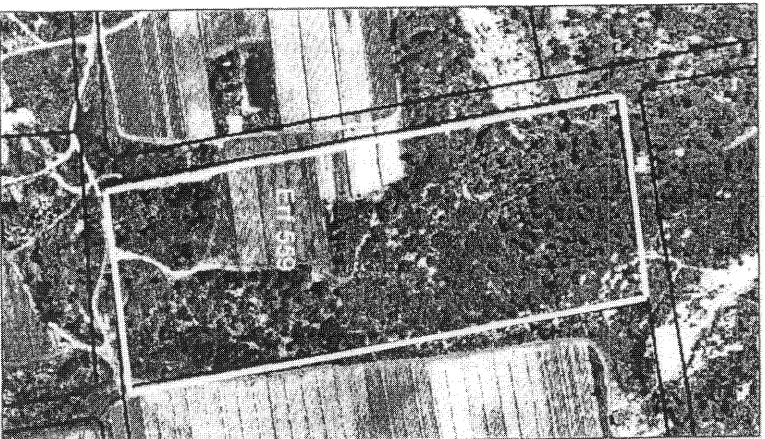


Figure 2b. Aerial photograph of Erf 559

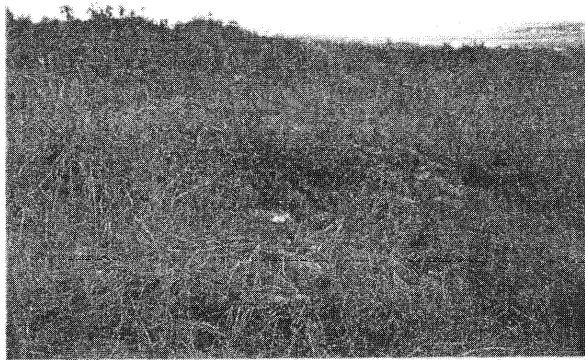


Figure 3. View of the site facing south west.

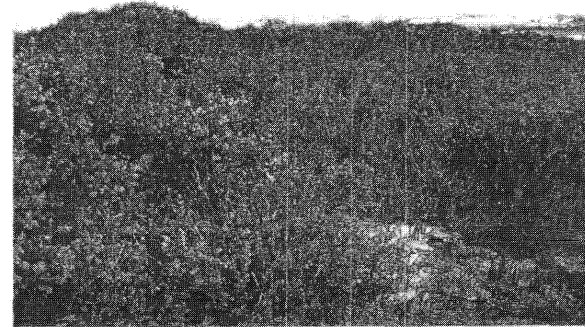


Figure 4. View of the site facing south west.

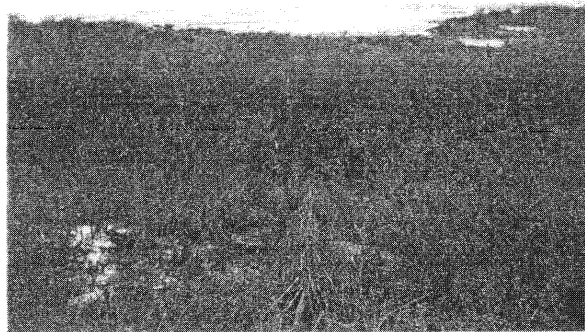


Figure 5. View of the site facing south west.



Figure 6. View of 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 559.

The site visit and assessment took place on the 13<sup>th</sup> of June 2006.

A desk-top study was also undertaken.

### 4.2 Limitations

The subject property is infested with alien vegetation, resulting in low archaeological visibility.

### 4.3 Results of the desk-top study

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).

Pre-colonial archaeological heritage surveys undertaken to date in the Philippi/Strandfontein area have yielded mixed results.

A scatter of marine shellfish and ostrich eggshell was located during a baseline study of Pelican Park Phase 2 and 3, which lies about 1.5 kms south west of the subject property (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 (Kaplan 2002). 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 dunes at Strandfontein and Swartklip. Some fossil material has been found on the Anglo Alpha sand mine near Zandvlei/Macassar (Halkett & Hart 1997). Some studies have yielded nothing (Kaplan 2001, 2005b). Several pre-colonial burials were also uncovered during excavations for the Strandfontein Pavilion (Ken Young pers. comm.).

It is worth noting that a study of proposed sand mining sites on Erven 550, 552, 548 and 560 located directly to the north and south of the subject property failed to locate any archaeological heritage remains (Kaplan 2005c,d, 2006).

## 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. IMPACT ASSESSMENT AND DESCRIPTION

No archaeological heritage remains were located during the assessment of Erf 559.

## 7. IMPACT STATEMENT

The impact of proposed sand mining operations in Erf 559 Philippi on archaeological heritage remains is likely to be low.

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

Unmarked pre-colonial burials may also be uncovered during earthworks and excavations.



## 8. RECOMMENDATIONS

With regard to proposed sand mining operations in Erf 559 Schaapkraal, 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. Consulting palaeontologist Dr John Pether (083 744 6295) is able to comment on fossiliferous material in the area.
- Should any unmarked 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), or Heritage Western Cape (Dr A. Jerardino (021) 483 9692).

## 9. REFERENCES

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