

**ARCHAEOLOGICAL IMPACT ASSESSMENT  
PROPOSED SAND MINING  
ON ERF 493 & 584 SCHAAPKRAAL  
CAPE TOWN**

Prepared for

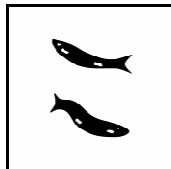
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## EXECUTIVE SUMMARY

An Archaeological Impact Assessment of a proposed sand mining operation on Erven 493 and 585 Schaapkraal near Philippi in the Western Cape has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed, mining activities.

Much of the subject property has already been mined for building sand for more than 50 years and there are large areas that have been mined-out completely. It is estimated that about 50% or more of the property has been transformed by mining operations. The remainder of the site (to be mined) is dominated by well vegetated, stable, sand dunes.

No archaeological heritage remains were located during the baseline study. It should be noted that several proposed sand mining-related studies in the immediate surrounding area have also failed to locate any archaeological remains. The probability of locating any archaeological remains during implementation of the proposed project is therefore likely to be **low**.

Unmarked pre-colonial human burials, buried archaeological and vertebrate fossils (bones) may, however, be exposed or uncovered during proposed sand mining operations.

The following recommendations are made:

- Should any unmarked human remains, buried archaeological sites, or vertebrate fossils (bones) be disturbed, exposed or uncovered during mining operations, these should immediately be reported to Heritage Western Cape (Mr N. Wiltshire 021 483 9692).

## **1. INTRODUCTION**

### **1.1 Background and brief**

Amathemba Environmental, on behalf of Atlantic Sands (Pty) Ltd, requested that the Agency for Cultural Resource Management conduct an Archaeological Impact Assessment for a proposed sand mining operation on Erven 493 and 584 Schaapkraal, in Philippi, in the Western Cape.

Much of the subject property has already been mined for building sand for more than 50 years and it is estimated that at least 50% or more of the property has already been transformed by sand mining operations. The remainder of the site (to be mined) is dominated by well vegetated and relatively stable, sand dunes.

The affected property is already zoned for sand mining.

The extent of the proposed development (about 40 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:

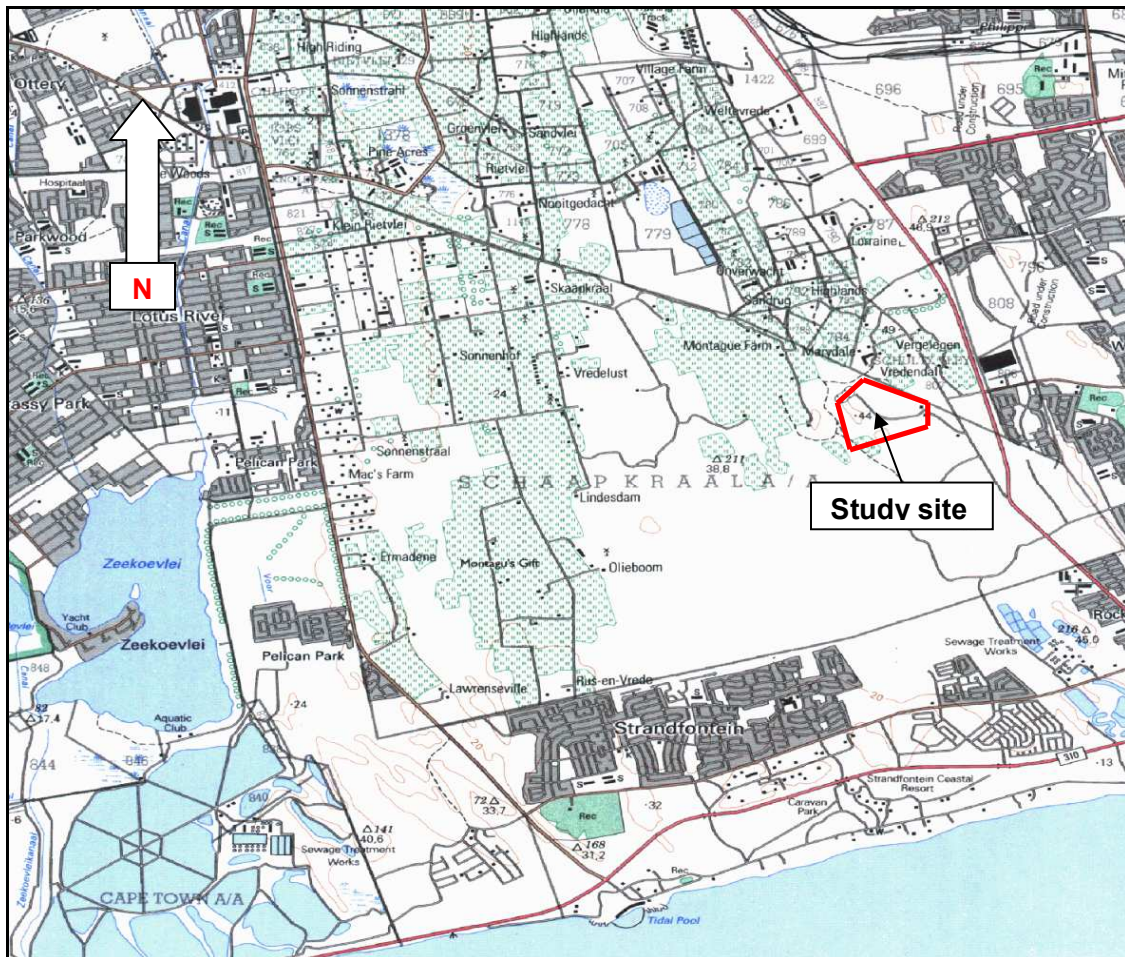
- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed 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 proposed site is illustrated in Figure 2.

The subject property (S 34° 02' 747" E 18° 34' 724" on map datum wgs 84 datum) is located off Vanguard Drive, in the eastern part of the Philippi Horticultural Area, near Weltevreden Road. Much of the proposed site is already subject to large open cast, haul and load sand mining operations, providing sand to the building and construction industry. At least 50% of the property has already been mined out completely, mainly in the central portions. The remainder of the property is dominated by well vegetated, stable sand dunes. An existing sand mining plant is currently operating next to the site. Several wide access roads intersect the property while there are numerous smaller 2-track roads and footpaths that cover the remainder of the site (Figures 3-10). Much of the area is covered in light coloured, calcareous dune sands of the Witsand Formation. It is these deposits that are mined for building sand. Surrounding and competing land-use comprises the Philippi Horticultural area, existing sand mining operations, vacant land, and residential suburbs (such as Strandfontein and Mitchell's Plain) to the south.



**Figure 1: Locality map (3421 BB Mitchells Plain) indicating the approximate boundary of the study site**





**Figure 2. Aerial photograph of the study site**



**Figure 3. View of the site facing south**



**Figure 4. View of the site facing south east**





**Figure 5. View of the site facing south**



**Figure 8. View of the site facing south**



**Figure 6. View of the site facing east**



**Figure 9. View of the site facing south east**



**Figure 7. View of the site facing south east**



**Figure 10. View of the site facing north east**

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

### **4.1 Method of survey**

The approach followed in the archaeological study entailed a foot survey of Erven 493 and 584.

The site visit and assessment took place on the 27<sup>th</sup> of July, 2009.

As requested by Heritage Western Cape, a GPS track path of the archaeological study was created. The track path has been saved to a CD and submitted with a digital copy of the report.

A desk-top study was also undertaken.

### **4.2 Constraints and limitations**

Those areas that have not mined out completely are infested with alien vegetation (mainly Port Jackson and Rooikranz), thick bush and ground cover (such as grasses) resulting in very low archaeological visibility. Access to much of the site is therefore severely restricted. There are some small footpaths beneath the thick tree cover in the eastern portion of the study site, however.

### **4.3 Results of the desk-top study**

Philippi was named after Dr Philip Faure. Before the 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 Flats were not suitable for farming. Despite these hardships, many of the settlers persisted with small scale farming. 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).

Archaeological surveys undertaken to date in the Philippi area have yielded poor results.

A study of proposed sand mining operations on Erven 550, 552, 548 559 and 560 located to the north and west of the subject property failed to locate any archaeological heritage remains (Kaplan 2005a, b, c, 2006a, b). Similarly, a study of Erven 580-582, 587-591, 637-641, 648-654, 657 and 658, located directly adjacent to (i.e. south of) the subject property also, did not locate any archaeological remains (Kaplan 2008).

Closer to the coast, however, some studies have been more fruitful. A scatter of marine shellfish and ostrich eggshell was found during a study of a residential development at Pelican Park, which lies about 2.5 kms to the south west of the subject property (Kaplan 2005d). 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). On the coast scatters of Later Stone Age tools 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. Several pre-colonial burials were also uncovered during excavations for the Strandfontein Pavilion (Ken Young pers. comm.).

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

## **5. IMPACT ASSESSMENT AND DESCRIPTION**

No pre-colonial archaeological heritage remains were located during the assessment of Erf 493 and 584. The proposed mining area is covered in Port Jackson, Rooikranz and other thick bush and grass cover resulting in extremely low archaeological visibility.

Some fragments of blue glass, porcelain and building rubble were noted in the mined out central portion of the study site.

## **6. IMPACT STATEMENT**

The impact of proposed sand mining operations on Erven 493 and 584 on archaeological heritage remains is likely to be **low**. Several studies in the surrounding area have yielded very few, if any, remains. The surrounding areas (including the subject property) have already been subject to large scale sand mining operations for many years, while much of the remaining land is subject to intensive vegetable farming.

Proposed mining of the remaining dunes may, however, expose or uncover buried archaeological sites and vertebrate fossils (bone), beneath the overlying aeolian (wind-blown) sands.

Unmarked pre-colonial burials may also be uncovered during proposed sand mining operations.

## **7. RECOMMENDATIONS**

With regard to proposed sand mining operations in Erven 493 and 584 Schaapkraal, the following recommendations are made:

- Should any buried archaeological sites, fossil bone, or unmarked human remains be disturbed, exposed or uncovered during sand mining operations, these should immediately be reported to Heritage Western Cape (Mr Nic Wiltshire 021 483 9692).



## 8. REFERENCES

- Halkett, D. & Hart, T. 1997. Archaeological assessment of the proposed Cape Flats freeway extension. Report prepared for the Cape Flats Consortium. Archaeology Contracts Office. University of Cape Town.
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