

# AN ARCHAEOLOGICAL RE-ASSESSMENT OF BOUNDARY CHANGES, NAMAKWA SANDS MINING AREA

Prepared for

**Namakwa Sands Ltd**

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## 1. INTRODUCTION

The Archaeology Contracts Office of the University of Cape Town was requested by Namakwa Sands Ltd. to re-verify the Phase 1 archaeological assessment of proposed mineral sands mining areas on the Namaqualand coast near Brand se Baai. Since Parkington and Poggenpoel (1991) completed their survey of the area, the boundaries of the second phase of mining have undergone adjustment. This survey was undertaken to ensure that this adjustment was not going to impact previously un-recorded archaeological sites. The area in question is that which extends southwards from the Secondary Concentration Plant to the Brand se Baai farmhouse (Figure 1).

## 2. METHOD

Previous studies have shown that most archaeological sites were located in deflated areas, in sheltered dune lee areas close to the shoreline or on the tops of ridges and mounds. All locations fitting this description were checked and trial excavations sunk into some of the more prominent mounds. Transects were walked across open veld and open prospecting trenches were checked for sub-surface material.

### 2.1 Limitations

Recent good rains in Namaqualand have resulted in dense ground cover in places limiting surface visibility. The area can be subject to strong wind and sand movement that may obscure surface visibility of archaeological material.

## 3. FINDINGS

### 3.1 Early Stone Age, Middle Stone Age

Small quantities of Early Stone Age (ESA) and Middle Stone Age (MSA) artefacts were found in spoil heaps associated with most prospecting trenches. It would appear that there is a generalised scatter of ESA and MSA material close to the calcretes that underlie the aeolian sands throughout the mining area. In places where deflation has exposed these calcretes on the surface, this material is also evident.

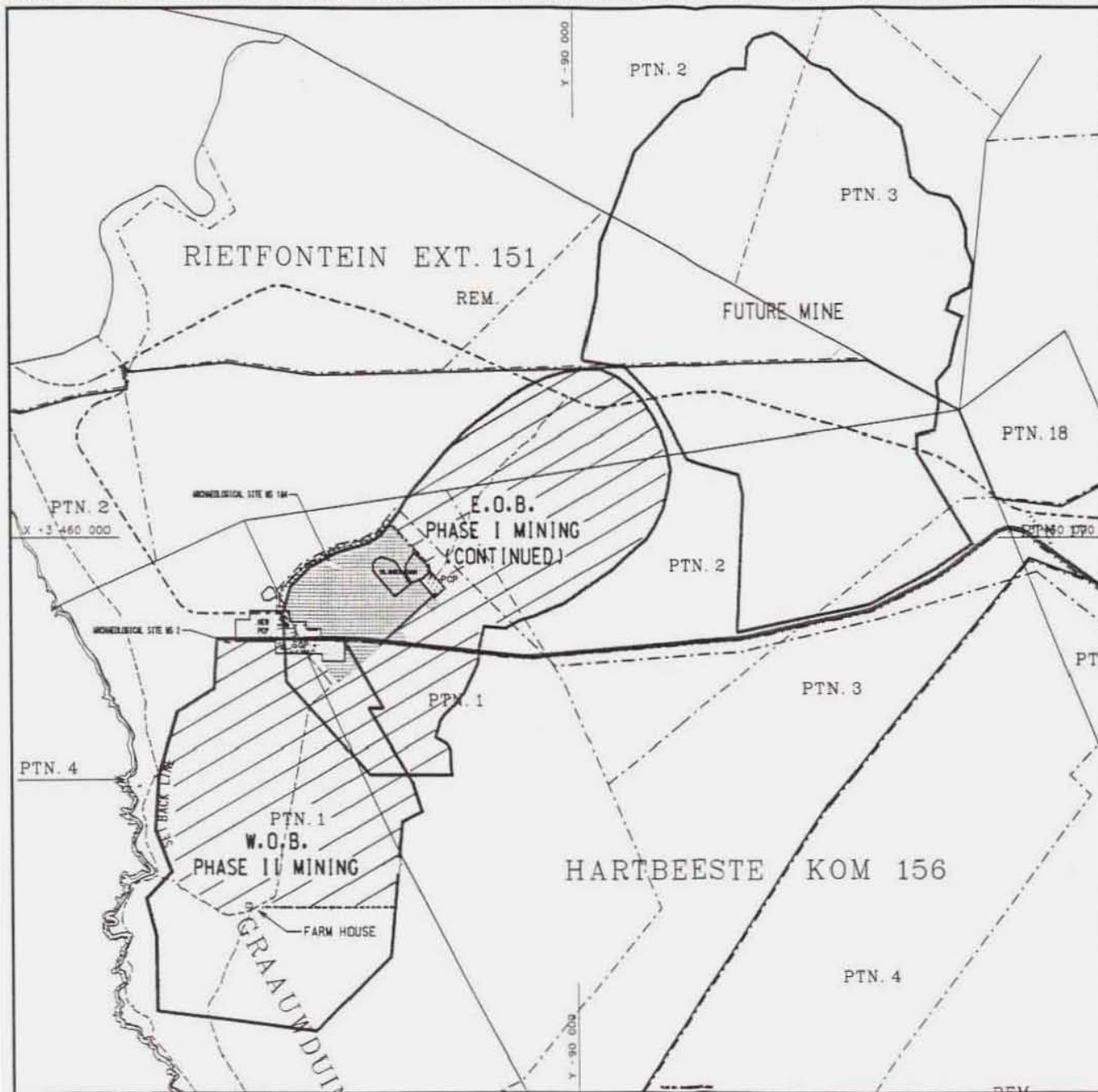
**Importance:** Low. No particular foci of material have been located within the Phase 2 mining area.

**Impact:** High. Mining operations will destroy the vertical provenance of the material. Artefactual material will be redistributed as tailings.

**Mitigation:** Since the material is deeply buried and generally dispersed, suitable mitigation is unfeasible.

### 3.2 Late Stone Age

Very little material was located within the assessed area. Evidence of one sub-surface site was located in the tailings of a prospecting trench. Further trial holes failed to provide any



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PLAN SHOWING  
MINE BOUNDARIES  
INFRASTRUCTURE AND  
OTHER  
RELEVANT INFORMATION

**LEGEND -**

- SURFACE RIGHT BOUNDARY
- FARM BOUNDARY
- POWER LINE
- WATER PIPELINE
- DREBODY BOUNDARY
- MAIN ROAD
- MINOR ROAD
- MINED OUT AREA
- ARCHAEOLOGY COMPLETED



**1**

evidence of definable lenses. Material found on the tailings included quantities of *Patella argenvillei* and *Patella granatina* shell, informal quartz artefacts and a fragment of Cape Coastal pottery. The presence of this material shows that there is a possibility that some LSA sites may be present in the area but buried under aeolian sands.

**Importance:** Unknown

**Impact:** High. Buried material will be destroyed and displaced by mining activities.

**Mitigation:** Mitigation is not possible as there is no way of knowing where these sites are prior to exposure by mining.

## **4. FUTURE ARCHAEOLOGICAL REQUIREMENTS**

### **4.1 Phase 2 Western ore body to Brand se Baai farm**

This report clears the way for mining between the Secondary Concentration Plant and Brand se Baai farmhouse.

### **4.2 South of Brand se Baai**

There are six LSA sites (Parkington and Poggenpoel 1991) south of Brand se Baai which will require mitigation before the mining operation reaches this point.

### **4.3 Brand se Baai farmhouse**

Although heavily modified on a number of occasions, the farmhouse and sheds are probably older than 50 years of age and therefore protected by the 50-year clause of the National Monuments Act of 1969 (as amended).

If demolition of these structures is intended, a permit will have to be obtained from the National Monuments Council or that organisation's future equivalent.

### **4.4 Coastal dunes**

The coastal dunes to the west of the present set back line are very sensitive with the majority of archaeological sites found by Parkington and Poggenpoel (1991) located in this area. If these dunes are to be mined, a comprehensive program of archaeological assessment and rescue work will be necessary.

### **4.5 Future mine (PTN 3)**

Parkington and Poggenpoel (1991) located a number of small, deflated areas with scatters of LSA material on the most easterly portions of the future mining area. If mining takes place here, these will need to be assessed and excavated where necessary.

## **5. CONCLUSION**

Mining of the western ore body as far as the Brand se Baai farmhouse, will for the main part exclude the majority of archaeological sites which are mostly found outside of the mining set

back line. There is a possibility that buried material may be destroyed. This impact unfortunately cannot be mitigated, as the material is not detectable from the surface before mining begins.

## **6. RECOMMENDATION**

1. Mining may proceed in the phase II mining area (WOB) as far as the Brand se Baai farm.
2. Mining (or any other development) of the dune areas outside of the present setback line must be preceded by an archaeological assessment and rescue excavation of archaeological material.
3. Mining of the area to the south of Brand se Baai farmhouse will impact LSA sites. These will have to be sampled before mining begins.
4. Mining in the “future mining area” (Figure 1) will impact LSA sites in deflation bays. These will need to be assessed and sampled before mining begins.

## **7. REFERENCES**

Parkington, J. & Poggenpoel, C. 1991. West Coast Heavy Mineral Sands Project. Archaeological report. Archaeology Contracts Office, University of Cape Town

## **8. PROFESSIONAL TEAM**

Fieldwork and report

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