

9/2/018/57

**ARCHAEOLOGICAL STUDY:  
PROPOSED MELKBOSSTRAND GOLF VILLAGE**

Prepared for  
**CROWTHER CAMPBELL & ASSOCIATES**

By

Agency for Cultural Resource Management  
P.O. Box 159  
Riebeeck West  
7306  
Ph/Fax 02246 855  
e-mail gillker@iafrica.com

**May 1997**

## Executive summary

One Later Stone Age shell midden was located during an archaeological study of a portion of Erf 1694, the site for the proposed Melkbosstrand Golf Village. The shell midden was located atop the disturbed remains of a large sand dune at the end of Birkenhead Drive.

Construction of the planned Birkenhead Drive Extension to the proposed golf village will pass close by the shell midden, but will not impact directly on it. No immediate archaeological mitigation is therefore considered necessary. However, should the shell midden be disturbed in any way by construction of the access road, or associated road building or landscaping activities, some archaeological sampling may be required prior to any construction or landscaping activities commencing.

Ephemeral scatters of fragmented marine shell remains and occasional stone flakes were located in the disturbed area adjacent to Waratah Avenue, as well as in the disturbed areas adjacent to Otto Du Plessis Drive.

Ephemeral patches of fragmented marine shell were also located in some open clearings among the frontal dunes between the western boundary of Erf 1694 and Otto Du Plessis Drive. These scatters are, however, outside of the proposed development zone, but fall within the demarcated area of the proposed nature reserve area.

Construction of a planned access road to the golf village from Otto Du Plessis Drive through the proposed nature reserve on the western boundary of the site may impact on archaeological sites such as shell middens or burials.

The study site is heavily vegetated, resulting in extremely low archaeological visibility. However, the location of a large shell midden, the presence of ephemeral scatters of marine shell fragments in some open spaces among the frontal dunes, and patches of fragmented marine shell exposed by burrowing and vegetation clearing bordering parts of the study area, suggests that the vegetated frontal dunes and perhaps even the inland dissected dunes may yield additional sites when earthmoving commences.

The probability of human burial remains being uncovered during earthmoving activities is also high.

Vertebrate fossil and archaeological occurrences in the Langebaan Limestone Formation may also be uncovered should excavations penetrate the calcrete deposits and associated sediments in the flat dune area in the western portion of the site. It is well established that such fossil and archaeological occurrences are valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological contexts of human behavior development during the Middle Stone Age.

An archaeological management plan, covering a monitoring programme should be implemented. The proposed siting of the residential properties on the frontal dune ridges, as well as the layout of the golf course and associated infrastructure such as access roads and work ramps, may potentially impact on shell middens. Human burials are relatively common along the south-western Cape coast, and the probability of graves being encountered during the construction phase of the project is also considered to be high.

Should planned excavations intend to penetrate the calcrete deposits and associated sediments in the flat dune area in the western portion of the site, appropriate strategies need at sampling the fossils that might be encountered, will need to be developed and applied.

An archaeological component should also be included in the Management Plan for the proposed Blouberg Nature Reserve. The establishment of access roads, walking trails and associated recreational facilities may impact on archaeological sites, including shell middens, fossils and graves.

## **1. Introduction**

### **1.1 Background and brief**

The Agency for Cultural Resource Management (ACRM) has been requested by Crowther Campbell and Associates to undertake a baseline archaeological survey of a portion of Erf 1694, the site of the proposed Melkbosstrand Golf Village.

The proposed development consists of an 18 hole golf course, including club house, hotel, practice green and recreational facilities. In addition, 1595 residential units are also planned. A portion of the erf will also be set aside for inclusion into the adjacent proposed Blouberg Nature Reserve.

The aim of the archaeological study is to locate, identify and map archaeological or historical sites that may be impacted by the planning, construction and implementation of the proposed project and to propose measures to mitigate against the impact.

## **2. Terms of reference**

The terms of reference for the archaeological and historical study were:

1. to provide a brief description of the archaeology and cultural history of the site and surrounding area;
2. to determine whether there are likely to be any archaeological or historical sites of significance on the site;
3. to identify and map any sites of archaeological and/or cultural significance;
4. to assess the status and significance of any impacts resulting from the proposed development; and
5. to identify mitigatory measures to protect and maintain any valuable archaeological and historical sites that may exist.

## **3. The study site**

The study site for the proposed Melkbosstrand Golf Village is illustrated in Figure 1.

The site covers a portion of Erf 1694, of which 160 ha has been set aside for the development of the golf village. A further 140 ha within the southern portion of the erf has been set aside for inclusion into the adjacent proposed Blouberg Nature Reserve. The boundary between the proposed golf village and the nature area is not indicated in Figure 1.

The study site is well vegetated resulting in extremely low archaeological visibility. The western portion of the site is heavily vegetated by coastal Strandveld, while the dissected dunes between the eastern portion of the site and the West Coast road (R27) is infested with mainly alien acacia vegetation, with interspersed patches of Strandveld. Numerous sand tracks bisect the eastern portion of the site. Some open spaces occur in places among

frontal dunes between the western boundary of the study area and Otto Du Plessis Drive.

## 4.1 Method of survey

The approach followed in the baseline archaeological study entailed a detailed foot survey of the portion of Erf 1694 to be developed as a golf village. The survey also covered the northern portion of the site to be set aside as a nature reserve.

In addition to the field study a literature review of the archaeology and cultural history of the surrounding area was also undertaken.

An examination of the existing records in the South African Museum (SAM) was also undertaken. According to the records of the SAM Archaeological Data Recording Centre, archaeological sites have been recorded in the proposed Melkbosstrand Golf Village study area. One shell midden has been recorded south of the western boundary of the affected site at Kreeftebaai (Dr Graham Avery, South African Museum, pers. comm.) (Figure 1).

According to Dr Graham Avery (pers. comm.) of the SAM Department of Archaeology, a shell midden occurs above a large sand dune marked by a trig beacon at the end of 11th Avenue in Otto Du Plessis Drive. A shell midden was also located by ACRM on a large sand dune in front of the Caltex garage about 30 metres from the corner of Birkenhead Drive (Figure 1). A concrete structure built on top of the shell midden and currently used by the local municipality as a storage facility is, according to Mr Gary Thompson (pers. comm.), the remains of a British fort dating from the time of the Battle of Blouberg.

These sites are all located outside of the affected area.

## 4.2 Documentation of sites

The archaeological site and scatters located in the affected area are described according to accepted archaeological recording techniques. These include a written scientific description of the mapped shell midden, and a more generalised description of the ephemeral scatters. A photographic record of the shell midden in Birkenhead Drive was also recorded. All sites and scatters were plotted on the 1: 10 000 orthophotos (3318 CB 24 & 25 Melkbosstrand and 3318 CD 4 & 5 Bloubergstrand). A Global Positioning System (GPS) reading was taken only for the shell midden in Birkenhead Drive.

## 5. A regional archaeological and historical overview

### 5.1 Archaeology

Numerous shell middens and open sites once occurred among large frontal dunes stretching all the way from Paarden Eiland to Melkbosstrand (Rudner 1968). Most of these sites have all since been destroyed as a result of land reclamation and development.

Although no precise precolonial history of Melkbosstrand has been written, several dozen archaeological sites in the region, including Milnerton, Rietvlei and Koeberg, have been identified (Rudner 1968; Kaplan 1993, 1994, 1995a, b).

A number of Khoisan and non-indigenous burials have also been recovered from the sand dunes north of the Milnerton Lagoon Mouth (Graham Avery, South African Museum, pers. comm.; Abrahams 1983)

There is also strong evidence for the correlation between the distribution of coastal archaeological sites and physical features in the coastal zone. For example, land forms and features such as exposed rocky headlands, wavecut rocky platforms and dunes acted as magnets in the placement and distribution of sites (Kaplan 1993). Rocky headlands acted as foci that attracted Stone Age people as they offered greater opportunities for the exploitation of marine foods, particularly shellfish. The Melkbosstrand coastal zone is characterised by such features.

According to Avery (1997), it is well established that vertebrate fossil and archaeological occurrences in the Langebaan Limestone (calcretes) Formation are extremely valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological contexts of the development of modern human behavior during the Middle Stone Age<sup>1</sup> (MSA).

Middle Pleistocene archaeological occurrences at Saldanha Bay, for example, have provided some of the earliest evidence we have for human exploitation of coastal resources and will contribute significantly to evidence concerning the development of modern human behavior (Volman 1978; Klein 1983; Grine & Klein 1993; Berger & Parkinson 1995).

Closer to the study area, excavations at Duinefontein 2, a fossil site of both national and international significance north of Melkbosstrand, established the association of MSA artefacts and bones of large extinct animals representing buried land surfaces older than the later Middle Pleistocene (120 000 years) ago for the first time in the southwestern Cape (Klein 1976).

## 5.2 Battle of Blouberg

Grootberg and Kleinberg (otherwise known as Blouberg Hill), overlooking Erf 1694, was the site of the Battle of Blouberg.

The Battle of Blouberg took place on 6 January 1806. In this battle, the Dutch East India Company forces of General Janssens were defeated by a British expeditionary force, heralding the start of the second British occupation of the Cape.

The battle was fought mainly on the slopes of the Kleinberg.

1. A term referring to the period between 20 000 and 200 000 years ago.

## 6. Results of the impact assessment

One Later Stone Age<sup>2</sup> (LSA) shell midden was located during the archaeological survey of Erf 1694. Patches of fragmented marine shell were also located in some open spaces among the vegetated frontal dunes between the western border of the study area and Otto Du Plessis Drive (Figure 1).

Patches of fragmented marine shell have also been exposed by burrowing and disturbance along the length of Otto Du Plessis Drive and ephemeral scatters of fragmented marine shell remains and occasional stone flakes were located in the disturbed area adjacent to Waratah Avenue (Figure 1).

The study site is otherwise heavily vegetated, resulting in low archaeological visibility. However, the location of a large shell midden at the end of Birkenhead Drive, the presence of ephemeral scatters of marine shell fragments in some open spaces among the frontal dunes, and patches of fragmented marine shell bordering parts of the study area, suggests that the vegetated frontal dunes and perhaps even the inland dunes may yield additional sites when earthmoving commences. The fact that numerous shell middens sites once occurred among sand dunes west of the study area, does also suggest that additional sites may be located in Erf 1694 when earthmoving commences.

MGV refers to Melkbosstrand Golf Village

### 1. MGV 1. GPS reading S 33°43.96 E 18°26.70

The site is located atop a large prominent sand dune at the end of Birkenhead Drive (Figure 2). The site comprises an extensive scatter of fragmented marine shell remains (mainly mussel and limpet, with some perlemoen and whelk). Some whole shell also occurs. Two pieces of ostrich eggshell, one piece of pottery and stone flakes, including a broken lower grindstone, were also found. The sand dune and shell midden have been disturbed as a result of the dirt track which bisects the large sand dune.

A ± 40 cm thick layer of in-situ shell is visible in the cutting on either side of a 4x4 track which bisects the dune (Figure 3). Relatively undisturbed remains of the midden are also visible behind the dune on its northern ridge.

Significance of finds: **high**

Suggested mitigation: **none required. However, should construction of the Birkenhead Drive Extension, or landscaping, impact on the midden, some controlled sampling of the site will be required**

## 7. Impact statement and description

Impact assessment and description is illustrated in Tables 1 and 2.

---

2. A term referring to the last 20 000 years of precolonial history in southern Africa.



### Impact statement

The study site is well vegetated resulting in extremely low archaeological visibility. Some open spaces occur in places among the vegetated frontal dunes between the western boundary of the study area and Otto Du Plessis Drive. Numerous sand tracks bisect the eastern portion of the site.

According to the Melkbosstrand Golf Village Conceptual Layout plan, construction of the planned Birkenhead Drive Extension to the proposed golf village will pass close by to **MGV 1**, but will not impact directly on the midden. No immediate archaeological mitigation is therefore considered necessary.

The proposed siting of the residential properties on the frontal dune ridges as well as the layout of the golf course and associated infrastructure, may impact on shell middens or burials.

Construction of a planned access road to the golf village from Otto Du Plessis Drive through the proposed nature reserve on the western boundary of the site may impact on archaeological sites such as shell middens or burials.

Human burials are relatively common along the south-western Cape coast, and the probability of graves being encountered during the construction phase of the project is also considered to be high.

Excavation of any kind in establishing infrastructure in the calcretes and associated sediments in the flat dune area in the western portion of the site will potentially impact on Pleistocene archaeological remains.

### 9. Legislation

All archaeological and historical sites, including human burial remains, are protected by the National Monuments Act (Act No. 28 of 1969 as amended). It is an offence to disturb, remove or destroy from its original site, or excavate any such site without a permit from the National Monuments Council.

Regardless of whether any immediate archaeological mitigation is undertaken in Erf 1694, a permit to destroy the remaining sites on the property must be applied for by the developer from the National Monuments Council.

### 10. Recommendations for management and mitigation

With regard to the proposed Melkbosstrand Golf Village development, the following recommendations are made.

1. Should **MGV 1** be impacted in any way by construction of the access road, or associated road building or landscaping activities, some sampling of the shell midden will be required prior to any activities commencing.
2. An archaeological monitoring programme should be implemented in consultation with Johnnie Property Developments, and Crowther Campbell and Associates and the Agency for Cultural Resource Management.



the proposed siting of the residential properties on the frontal dune ridges, as well as the impact of the golf course and associated infrastructure such as access roads and work areas, may potentially impact on shell middens, fossils, and human burial remains.

Appropriate strategies aimed at sampling shell middens, fossils and the recovery of human remains should they be encountered, will need to be developed and applied.

Should planned excavations intend to penetrate the calcretes and associated sediments in the flat dune area in the western portion of the site, appropriate strategies, aimed at sampling the fossils that might be encountered, will need to be developed and applied.

With regard to the planned development of the Blouberg Nature Reserve, the following recommendations are made.

1. An archaeological component should be included in the development and implementation of the Management Plan for the nature reserve. The establishment of access roads, walking trails and associated recreational and educational facilities may impact on archaeological sites, including shell middens, fossil sites and graves. Appropriate strategies aimed at sampling shell middens, fossil sites, and the recovery of human burials should they be encountered, will need to be developed and applied.

The above recommendations are subject to the approval of the National Monuments Council Archaeological Plans Committee.

## 11. References

- Abrahams, G. 1983. The report on human skeletal remains and associated artefacts from Milnerton Beach, Cape Province. *South African Archaeological Bulletin* 38:33-35.
- Berger, L.R. & Parkington, J. 1995. A new Pleistocene hominid-bearing locality at Hoedjiespunt, South Africa. *American Journal of Physical Anthropology* 98:6-1-609.
- Deacon, J. 1976. Report on stone artefacts from Duinefontein 2, Melkbosstrand. *South African Archaeological Bulletin*. 31:21-25.
- Grine, F.E. & Klein, R.G. 1993. Late Pleistocene human remains from the Sea Harvest site, Saldanha Bay, South Africa. *South African Journal of Science* 89:145-152.
- Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponta do Oura. Report prepared for the Department of Environmental Affairs and Tourism. Agency for Cultural Resource Management: Riebeeck West.
- Kaplan, J. 1994. A first phase archaeological survey of Klein Springfontein. Cape west coast. Report prepared for the West Coast Regional Services Council. Agency for Cultural Resource Management: Riebeeck West.
- Kaplan, J. 1995a. Archaeological survey: Milnerton Lagoon Mouth development. Report prepared for the Milnerton Lagoon Mouth Development Company. Agency for Cultural Resource Management: Riebeeck West.

1995b. Archaeological survey: proposed Eskom wellfield and connecting  
Report prepared for Eskom. Agency for Cultural Resource Management:  
Went.

K.G. 1976. A preliminary report on the Middle Stone Age open-air site of  
Melkbosstrand 2, Melkbosstrand, south-western Cape Province, South Africa. South  
Archaeological Bulletin 31:12-20.

K.G. 1983. Palaeoenvironmental implications of Quaternary large mammals in the  
region. In: Deacon, H.J., Hendey, Q.B. and Lamprechts, J.J.N. (eds). Fynbos  
palaeoecology: a preliminary synthesis. South African National Scientific Programmes  
No. 75 116-138.

J. 1968. Strandloper pottery from South and South West Africa. Annals of the  
South African Museum 49:441-663.