

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PORTION OF PORTION 7 OF THE FARM WITTEKLIP 123
VREDENBURG**

Prepared for

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By

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**APRIL
2005**

Executive summary

Chand Environmental Consultants requested that the Agency for Cultural Resource Management undertake a specialist Phase 1 Archaeological Impact Assessment of a Portion of Portion 7 of the Farm Witteklip No. 123 in Vredenburg, on the Cape West Coast.

The proposed rezoning of the affected property is for the purpose of a retail shopping centre.

The extent of the proposed development (3 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 planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

Heritage Consultant Mr Graham Jacobs has been appointed to undertake a heritage review of the proposed project.

Later Stone Age tools were located during the baseline study but are very thinly dispersed on a patch of old grazing lands alongside the R399.

Scatters of Later Stone Age tools were also noted outside the affected property on the remaining portion of the farm, alongside a trench in old grazing lands, and on steep slopes associated with large granite outcroppings.

The Phase 1 Archaeological Impact Assessment has, however, identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to development activities.

The specialist Phase 1 Archaeological Impact Assessment of a Portion of Portion 7 of the Farm Witteklip No. 123 Vredenburg has rated the potential impacts to archaeological material as being low.

Archaeological and fossil remains may, however, be uncovered or exposed during earthworks and excavations in underlying calcrete and limestone deposits on the property.

It is well established that vertebrate fossils and archaeological occurrences occur in the Langebaan Limestone (calcrete) formations and associated deposits in the Saldanha Bay/Vredenburg area.

With regard to the proposed development of a Portion of Portion 7 of the Farm Witteklip No. 123 Vredenburg, the following recommendations are made:

- A professional palaeontologist must be appointed to assess the possible palaeontological significance of the fossiliferous material on the property if underlying calcrete deposits are intercepted during earth-moving operations.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

1. INTRODUCTION

1.1 Background and brief

Chand Environmental Consultants requested the Agency for Cultural Resource Management to undertake a specialist Phase 1 Archaeological Impact Assessment (AIA) of a Portion of Portion 7 of the Farm Witteklip No. 123 in Vredenburg on the Cape West Coast.

The proposed rezoning of the property (from Agriculture Zone 1) is for the purpose of a retail shopping centre.

The extent of the proposed development (some 3 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, identify and map archaeological remains that may be negatively impacted by the planning, construction and implementation of the proposed project, and to propose measures to mitigate against the impact.

Mr. Graham Jacobs has been appointed to undertake a specialist heritage review of the proposed project.

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 site locality map is illustrated in Figure 1.

An aerial photograph of the property is illustrated in Figure 2.

The 10 ha property (of which only 3 ha are subject to the rezoning proposal) is located in Vredenburg on the Cape West coast (Figure 3). Access to the site is directly off the R399 between Vredenburg and Saldanha Bay.

The Witteklip farm complex (including farmhouse and outbuildings) occupies the bulk of the affected site, with some old grazing lands located alongside the R399 and the southern boundary of the property. The buildings will be demolished to make way for the shopping centre. Heritage Consultant

The remaining 8 ha of the farm to the north comprises old grazing lands with several prominent granite boulders occurring on the higher slopes (refer to Figures 2 & 4)



Figure 3. View of the Witteklip farm complex.



Figure 4. Granite outcroppings some of which occur on the remainder of the property.

4. APPROACH TO THE STUDY

4.1 Method of survey

The approach followed in the archaeological study entailed a detailed foot survey of 10 ha property.

The site visit and assessment took place on 20 April 2005.

Although located outside the boundary of the affected site, particular attention was paid to searching the granite boulders within the farm boundary, known locations for precolonial herder sites (Sadr *et al* 1992).

More visible archaeological occurrences were recorded and given a co-ordinate using a Gamin Gecko 201 GPS set on map datum WGS 84.

A desktop study was also undertaken.

5. A BRIEF OVERVIEW OF THE ARCHAEOLOGICAL AND FOSSIL SIGNIFICANCE OF THE SALDANHA BAY/VREDENBURG PENINSULA

The Saldanha Bay/Vredenburg Peninsula is exceptionally rich in archaeological sites (Kaplan 1993; Sadr *et al* 1992). Its richness is determined largely by its unique rocky shoreline formation which was favoured by both Later Stone Age¹ (LSA) hunter-gatherers and Khoi herders in the past, as it offered greater opportunities for the exploitation of marine foods, while the local shales and granites provided vital nutrients for domestic stock.

It is also well established that vertebrate fossils and archaeological occurrences in the Langebaan Limestone (calcrete) formations and associated deposits in the Saldanha Bay area, are extremely valuable sources of information on the sedimentary, chronological, palaeoenvironmental and palaeoecological context of the development of modern human behaviour during the Middle Stone Age² (MSA) and perhaps even the Early Stone Age³ (ESA) (Avery 1997).

Middle Pleistocene occurrences and the recovery of human remains in the Langebaan Limestone deposit at Sea Harvest, in Saldanha Bay, has also provided some of the earliest evidence we have in the world for the human exploitation of coastal resources, more than 100 000 years ago (Grine & Klein 1993; Volman 1978).

Beside evidence of well preserved bone, ostrich eggshell, ochre and MSA stone implements, the Hoedjiespunt limestone sediments in Saldanha Bay also contains evidence of early modern human about 125 000 years ago (Berger & Parkington 1995).

With regard to ancient fossil sites earthworks at the Saldanha Steel Project also exposed rare and previously unknown crocodylian and other fossil remains from the Miocene Period, from deposits underlying calcareous formations during excavations for descaling pits (Roberts 1997a).

¹ A term referring to the last 20 000 years of precolonial history in southern Africa.

² A term referring to the period between 200 000 and 20 000 years ago.

³ A term referring to the period between 2 million and 200 000 years ago.

Several fossil hyena lairs have also provided glimpses of past Pleistocene (1.6 million – 200 000 years) faunas, including herbivores and carnivores, at Hoedjiespunt and Sea Harvest in Saldanha Bay (Roberts 1997a). An EIA for the proposed Alpha Saldanha Cement Project in Saldanha Bay also revealed the presence of an unusual Mid-Miocene (~ 11-12 million years) fauna, including the shell of a giant extinct ostrich like bird (Kaplan 1999; Roberts 1997b).

The reasons for the abundance of fossil archaeological and palaeontological remains in the Saldanha - Langebaan area is in part related to the highly calcareous character of the aeolianites (fossil dunes) and shallow marine sediments. Bones and implements are readily preserved by the rapid carbonate cementation of the strata in which they become entombed.

6. LEGISLATIVE REQUIREMENTS

6.1 The National Heritage Resources Act (Act No. 25 of 1999)

6.1.1 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.

6.1.2 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.

6.1.3 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.

7. IMPACT ASSESSMENT AND DESCRIPTION

About 11 LSA tools, including flakes, a core and several chunks, in silcrete, indurated shale and quartz were located in a patch of old agricultural and grazing lands alongside the R399 and the southern boundary of the property (Figure 5).

A GPS reading for the site is (S 32° 55 372 E 17° 59 103)

The above remains have been graded low local significance

7.1 Other finds

S 32° 55 140 E 17° 59 108

A thin scatter of LSA tools were found on the relatively steep slopes in front of several large granite outcroppings that occur on the remainder of the northern portion of the property (refer to Figure 2). Amongst several flakes, cores and chunks in quartz and silcrete, a scraper-adze, and a retouched silcrete flake were also counted.



Figure 5. Grazing lands alongside the R399 where a thin scatter of tools were found.



Figure 6. Large granite boulder just outside the boundary of the affected property.

Several tools, including a MSA flake and a large (ESA-type) silcrete core were also found among small shelters and overhangs around the granite outcroppings. The outcroppings are very visible and accessible, and the surrounding area is littered with broken glass and domestic items. The weathered granite deposits within the shelters and overhangs are also heavily leached and eroded.

According to Dr Karim Sadr (pers. comm.), a researcher in the area, these 'sites' are known but are not considered to be important as they are much disturbed.

Despite the possibility that a spiritual significance could be attached to the large boulder outcroppings that are so prominent in the general study, the above archaeological remains have been graded low local significance.

A few tools were also found over the remainder of the property and near an old excavation trench and some diggings in the northern portion of the property.

Several LSA flakes were also noted on heavily eroded slopes and in grazing fields in front of a large outcropping of granite boulders just beyond the southwestern portion of the study area (Figure 6).

The above remains have also been graded low local significance.

8. IMPACT STATEMENT

The impact of the proposed development of a shopping centre on a Portion of Portion 7 of the Farm Witteklip No. 123 in Vredenburg, on archaeological heritage remains is likely to be low.

The probability of locating significant archaeological remains during implementation of the project is likely to be improbable.

Human burials may, however, be exposed or uncovered during earthworks and excavations.

Fossil archaeological and palaeontological remains may also be exposed in possible underlying calcrete/limestone deposits, during bulk excavations.

9. RECOMMENDATIONS

The archaeological impact assessment of a Portion of Portion 7 of the Farm Witteklip No. 123 in Vredenburg has rated the potential impacts to archaeological material as being low provided that:

- A professional palaeontologist must be appointed to assess the possible palaeontological significance of the fossiliferous material on the property if underlying calcrete deposits are intercepted during earth-moving operations.
- Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

10. REFERENCES

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