#### PHASE 1 ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT REPORT

# a) Title: Yzerfontein retirement village and old age home Proposed development in the Magisterial District of Malmesbury, Western Cape Province,

# b) Author of this report Prof Hilary John Deacon PhD, Consulting Archaeologist 49 Van Riebeeck Street, Stellenbosch 7600. Tel/Fax 021 887 1540, Cell 082 682 7300 Email hjdeacon@iafrica.com

# c) Commissioned (as part of an EIA application for rezoning) by

#### Mr Mark Duckitt

Cape Lowlands Environmental Services PO Box 70, Darling 7345 Email duckswc@wcaccess.co.za

For: Yzerfontein Seaside Estates

# d) Dated

29 November 2006

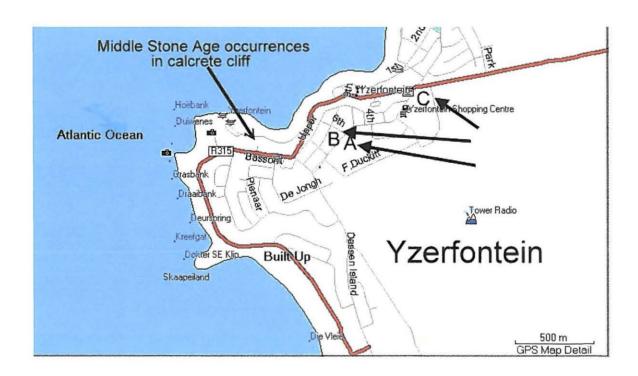


Figure 1 Yzerfontein town showing the position of three options, A-C

# **Executive Summary**

As part an EIA (rezoning) the study was to assess the archaeological and heritage impact of the proposed development of possibly 53 freestanding retirement cottages plus a 4500 m² grant to Afrikaanse Christelike Vroue Vereniging (ACVV) for a frail care centre on two possible properties within the town of Yzerfontein on the West Coast. The third property considered would only accommodate a frail care centre. All three are on a level at some 30 m above sea level inland of the coast. The areas are thickly vegetated with a cover of sands and exposures are minimal. There is some risk that excavations made during development on these properties may uncover archaeological materials. The recommendation is that an archaeologist monitors any earthworks for the development.



Figure 2. Options A-C in relation existing housing at Yzerfontein

#### Background Information on the Project

The Cape Lowlands Environmental Services is undertaking an Environmental Impact Assessment of three possible properties for a development that would include retirement cottages and an ACVV frail care facility in the coastal town of Yzerfontein. The land is vacant with no structures and thus the primary concern is with possible archaeological resources.

#### Background to the archaeological history

In recent years there has been considerable growth of the coastal town of Yzerfontein with loss of archaeological sites. These include Holocene shell middens and older Pleistocene occurrences. A major excavation is currently being undertaken at a partially destroyed but still significant Middle Stone Age site near the harbour (Halkett *et al.* 2003; Klein *et al.* 2004). This site is of interest because it illustrates the gross stratigraphy of the area with a massive calcrete capping the geological solid (diorite), which in turn is overlain by a cover of sands (Figure 3). The site is in an eroded cliff of calcrete at the coast. Although the same calcrete and sands underlie the areas surveyed these areas are on the level 30 m platform without any cliffs. For this reason it is considered unlikely that development there would

encounter similar stratified deposits. The properties are still in proximity to the coast and there remains the possibility of more ephemeral open-air occurrences of Holocene and Pleistocene age being uncovered during development.



Figure 3. Road section at Middle Stone Age site showing the calcrete cliff and vegetated cover sands

# Description of Properties

The properties are labelled A-C on environmental considerations (figure 2). A is a block of vacant land (\$ 33°20.880'; E 18°09.477') surrounded by houses on the landward side of Buitenkant Street and bordered in part by F Duckitt Street. B is a smaller adjoining vacant block (\$ 33°20.845': E 18°09.351') on the seaward side of Buitenkant Street. The size would preclude building any number of retirement cottages on this property. C is a large block (\$ 33°20.708'; E 18°09.771') of vacant land to the north at the entrance to the town. These are prime sites for development as the town expands.

# Methodology

The survey was conducted on 31 October 2006 from 13h00-17h00 by a one-person team in the company of the environmental consultant, Mr Mark Duckitt for part of the time. Each of the properties was traversed on foot. All are vegetated and the substrate is a mantle of sands. Exposures are limited.

#### Description of possible sites A-C for development

The three options have been graded A (most preferred) to C (least preferred) on environmental considerations.

**Option A** (Figure 4) is thickly vegetated and nowhere is the calcrete below the cover sands exposed. A drainage ditch on the northeast corner shows the cover sands to be 0.5 m thick. No cultural materials were recorded.



Figure 4. Option A, undeveloped land surrounded by houses

**Option B** (Figure 5) is a degraded block of land with building rubble in places on the surface. There are no subsurface exposures and no cultural materials visible. This property would only accommodate a frail care facility.



Figure 5. Option B on the seaward side of Buitenkant Street

**Option C** (Figure 6 & 7) is bordered on the east by a water pipeline along the boundary fence. Excavation for burial of the pipe has cut into the calcrete below the sands. Walking the pipeline and examining the backfill showed no indication in the form of shell or other materials that archaeological remains were uncovered. The rest of the property is vegetated and vegetation has stabilised the sand cover resulting in there being no substrate exposures.



Figure 6. Option C, part of the property looking towards Buitenkant Street

Figure 7. Option C, looking north along pipeline dug into calcrete on eastern boundary.



### Sources of Risk

Development on any of the three options A-C poses a similar risk of uncovering buried artefacts. As the properties are on a near level bench or platform inland of the immediate coastal zone the risk of encountering archaeological occurrences is lower than at the immediate coast. The bench or platform, underpinned by an eroded calcrete surface, would have been alternatively swept clean and covered by surficial sands of different ages. For this reason any cultural materials within the cover sands may only be present in deflated concentrates of reduced significance.

#### Statement of Significance and Field Rating

The three options for development have the same rating of medium to low potential significance for archaeological resources. Because of the poor exposures and because it is known that the immediate area was occupied in Pleistocene and Holocene times the possibility that excavations made for development will expose cultural materials cannot be excluded.

# Recommended Mitigations

It is recommended that an archaeologist monitor any excavations made for development. If any development should uncover buried palaeontological or archaeological remains including human remains Heritage Western Cape should be notified (Dr Antonieta Jerardino, Senior Heritage Officer – Archaeologist, Private Bag X9067, Cape Town, 8000, Tel: 021 483 9687, Fax: 021 483 9842, ajerardi@pgwc.gov.za).

#### Conclusions

The survey of the three options for the development of a retirement village and frail care centre at Yzerfontein was undertaken. Cover sands blanket the area and exposures are minimal. No archaeological artefacts and no palaeontological remains were recorded in the survey. It is recommended that an archaeologist monitor the excavations in the construction phase of any development.

### Bibliography

Halkett, D. et al. 2003. First excavation of intact Middle Stone Age layers at Ysterfontein, Western Cape Province, South Africa: implications for Middle Stone Age ecology. Journal of Archaeological Science 30: 955-971.

Klein, R.G. *et al.* 2004. The Ysterfontein 1 Middle Stone Age site, South Africa, and early human exploitation of coastal resources. PNAS 101 (16): 5708-5715.

Co-ordinates of the boundaries of the properties as supplied by M Duckitt

**Option A**: S33°20 540 E18°09 226; S33°20 501 E18°09 261; S33°20 547 E18°09 319; S33°20 569 E18°09 263

**Option B**: S33°20 529 E18°09 224; S33°20 524 E18°09 215; S33°20 494 E18°09 232; S33°20 503 E18°09 253

**Option C:** S33°20 517 E18°09 467; S33°20 463 E18°09 417; S33°20 402 E18°09 447; S33°20 393 E18°09 501; S33°20 503 E18°09 503