AN ARCHAEOLOGICAL ASSESSMENT OF PRECINCT 3, HEARTLAND, HELDERBERG DISTRICT

Prepared for

Chris Snelling On behalf of Heartland Properties Pty Ltd

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Report by

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Summary

ACO Associates cc was appointed by Heartland Pty Ltd to conduct an archaeological impact assessment of Precinct 3 on the Heartland Property at Somerset West. This work will form a section of a broader study currently being conducted by Mr Chris Snelling.

The study area was inspected by the ACO team who are familiar with much of the area, having already completed a survey of the Heartland property in 1996 prior to closure of AECI operations. The study area was at one time the core of the explosives production area of AECI. Massive rehabilitation and landscaping has taken place on much of the site to decontaminate hazardous soils. Disturbance is extensive.

The study has revealed that the potential impacts to heritage that will result from the proposed activity are highly unlikely and fully mitigable, if need be. The few ephemeral middens that on the precint are likely to be protected in ecological corridors where the known cemeteries will be acknowledge and protected in the precinct plan presently under development

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1 Introduction

ACO Associates was appointed by Heartland Properties Pty Ltd to conduct an archaeological impact assessment (as a contribution to a Heritage Impact Assessment) of a portion of land known as Precinct 3 (Figure 1) situated on the Heartland property at Somerset West (previously the African Explosives Factory AECI).

It is intended that the precinct will be subject to development activities. The purpose of the study was to identify any areas of archaeological sensitivity that would present a restriction to development activities.

2 Background

Precinct 3 is well known to ACO Associates in that members of the company (whilst based at UCT) worked on the site during 1996 and 1997 conducting a comprehensive assessment of the general heritage of the overall AECI property. Since then various heritage specialists have conducted focused studies on aspects of the site. The ACO conducted a further study on particularly precinct 3 in 2006 in response to a proposal to construct a sewer main behind the coastal fore dunes (Hart and Halkett 1996, Hart 2006). Hence the history of the site is comprehensively covered in other work and will not be repeated in this report.

2.1 Method

Precinct 3 was subject to a site inspection by Hart and Halkett. Any material found was recorded and co-ordinates logged on Garmin GPS units. Material was evaluated for heritage significance.

There were restrictions in certain area in that Eucalyptus trees had dropped a great deal of leaf litter that obscured the ground surface. Vegetation growth had increased in the riverine area.

3 The receiving environment

It is important to note that precinct 3 includes the raised inner dune cordon adjacent to False Bay. These overlook a coastal plain and wetland system. The site was chosen by the De Beers explosive works in the late 19th century on account of its topography. The active ingredient of dynamite is nitro-glycerine which is a very sensitive product. It cannot be pumped or mechanically handled until such time that it mixed and stabilized. Hence a gravity flow system was very important in the manufacturing process. All the major plants that manufactured the liquid components of explosive were situated on the high dune cordon so that the liquids

could flow down to the mixing areas on the coastal plain. Hence the dune cordon was very heavily developed over the years with facilities manufacturing highly explosive material (see Appendix 1 figures 4-6). In the early days of the factory liquid explosives were dumped contaminating significant tracts of landscape. The materials that the factories were built from over time became impregnated with hazardous substances. When the factory was closed, a massive rehabilitation process commenced. The factories in the explosives area were demolished and the resulting rubble crushed for landfill.



Figure 1 Precinct 3, Heartland, Somerset West.

Facilities were set on fire to burn off any lurking explosive materials while massive volumes of soil in the wetlands and inner dune cordon were excavated out to be decontaminated. Thereafter the area was re-landscaped and allowed to re-vegetate. This rehabilitation process has seen the area returned to a natural, if not attractive appearance. In reality much of the study area has been massively transformed.

Only the dune system outside the perimeter fence (mostly outside Precinct 3), the staff and workers graveyards and the Lourens river estuary remain unaffected. A series of plates is contained in appendix 1.

4 Findings

During the 1996 survey, three Late Stone Age middens were identified in the dunes close to the mouth of the Lourens River. The locations of these are indicated on Figure 2. During a subsequent site visit these were more difficult to identity indicating that some degree of disturbance had taken place since they were first identified. Furthermore, there has been increased vegetation growth in the area which has decreased visibility. In 1996 they were described thus;

Three archaeological sites were located in cleared firebreaks in the coastal zone close to the Lourens River mouth. The survey showed that most of the coastal dune system has been subject to disturbance related to factory activities. Notwithstanding the disturbance, LSA occupation of this area appears to have been marginal. Although fresh water would have been available from the Lourens river, the nearest coastal rock outcrops which would have provided LSA people with staple food in the form of shellfish, are a number of kilometers to the south east at the Strand and Gordon's Bay. The mouth of the Lourens River would have also have been attractive to prehistoric people who would have visited the area to obtain water birds and estuarine fish when the seasons and tides were favourable. A short summary of the sites follows below.

The locations of the sites are shown on Figure 2.

- i) Site 1: (34° 5'55.47"S 18°48'48.43"E.) This is a small scatter of artefacts and shell midden situated on the dune close to a redundant watch tower behind the hostel area. Artefactual material seen includes a silcrete adze and flakes ofsilcrete, quartzite and quartz. Associated shell consists of Patella sp, Argobuccinam postulosum and Choromytilus meridionalis.
- ii) Site 2: (34° 5'57.52"S 18°48'53.46"E. This midden has been exposed in a ploughed firebreak between the factory area and the road to the Strand. Silcrete flakes and Cape Coastal Pottery are present but the shell sample (of which thearchaeological component appears to be Patella sp) has become mixed with much older estuarinespecies that have been brought up by ploughing.
- Site 3: (34° 5'54.35"S 18°48'54.84"E). This is a portion of a very thin lens of midden eroding out of a dune that has been cut through by the firebreak.
 Fragments of pottery and Patella sp are present.

Site 4. During this 2014 survey a single further trace of Late Stone Age material was found just on the inside of the dune cordon at 34° 5'50.64"S 18°48'39.74"E . Noted were several silcrete flakes and an upper grind stone as well as fragments of quartzite. No shellfish were noted. The site appears to have been disturbed and is of low significance.



Figure 2 Location of pre-colonial archaeological sites on or close to precinct 3.

5 Grave yards

Previously red-flagged are the AECI graveyards (figure 3). There are two – the staff cemetery and the "native" cemetery. Both of these sites are of high significance and must be protected in terms of planning the precinct. Heartland is well aware of their presence and significance. There locations are indicated in Figure 3.

There is always a remote possibility that unmarked graves (both colonial and precolonial) may accidentally be disturbed during construction. This event would trigger obtaining an emergency exhumation permit from SAHRA (South African Heritage Resources Agency), temporary cessation of works while the find is respectfully and professionally removed or relocated.

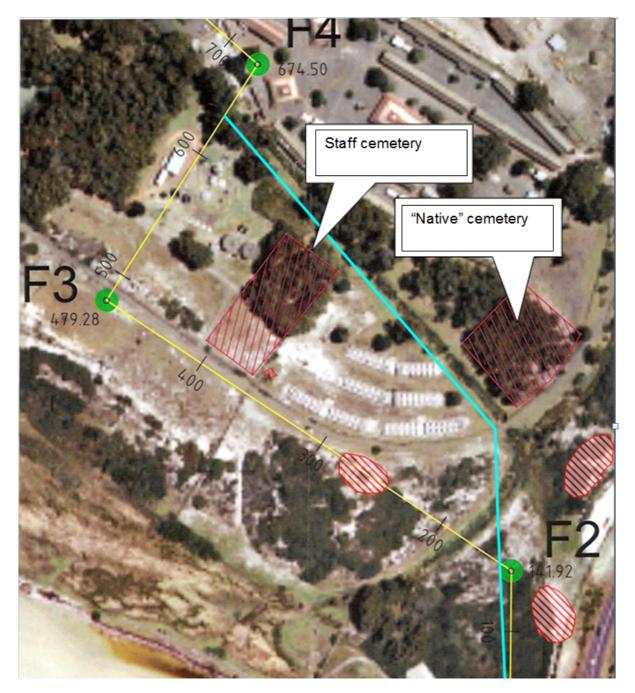


Figure 3 After Hart 2006. Location of the staff and "Native" cemeteries.

6 Mitigation

No specific mitigation is proposed other than to endorse the proposal that the Lourens River mouth and coastal dune be included in an ecological corridor which

should protect the archaeology of the area. If any site lies in or close to a development area, than ACO should be informed so that suitable conservation measures or mitigation can be discussed.

The grave yards are known and planned for within the precinct. There are no plans in place to remove or exhume them. Accidental finds of human remains should be reported to HWC/SAHRA immediately for further action.

7 References

Halkett, D and Hart, T. 1996. An Assessment of Heritage Resources, AECI site, Somerset West. Report prepared by ACO (UCT) for AECI.

Hart., T. 2006. Heritage impact Assessment for the proposed sewer main – Denel and AECI properties. Report prepared by ACO (UCT) for Doug Jeffery Environmental.

8 Appendix 1 (historic photos courtesy of Chris Snelling).



Figure 4 View over the study area in AECI days



Figure 5 Decontamination and rehabilitation in progress.



Figure 6 View of the study area today.