

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT
BABOON POINT
ELANDS BAY**

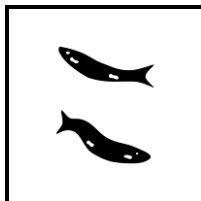
(Erven 65, 66 & Portion 4 of Verlorenvlei Farm No. 8)

Prepared for:

Midnight Storm Investment 170 (Pty) Ltd

Att: Mr Brett Bailey
PO Box 684
Strand
7139

By



Agency for Cultural Resource Management

P.O. Box 159
Riebeeck West
7306

Ph/Fax: 022 461 2755

Cellular: 082 321 0172

E-mail: acrm@waccess.co.za

**APRIL
2008**

Executive summary

Introduction

Midnight Storm Investments 170 (Pty) Ltd requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment for a proposed residential housing development on Erven 65, 66 and Portion 4 of Verlorenvlei Farm No. 8, in Elands Bay on the Cape West coast.

The proposed site is situated at Baboon Point which is located on the western end of Elands Bay, about 2 kms south of Elands Bay Village and about 1.5 km from the mouth of the Verlorenvlei. It contains the landmark Bobbejaansberg, a prominent vertical and flat-topped cliff that overlooks the Indian Ocean.

The proposed development is considered to be extremely sensitive, given that the subject property contains a wealth of pre-colonial archaeological heritage sites of regional, national and international importance.

Three sites (A, B and C) have been identified for proposed development, including a private nature reserve at Baboon Point.

Site A: Is located alongside the gravel road to Baboon Point, close to the entrance to the railway tunnel and very near to an existing residential development

Site B: Is located on Baboon Point directly south west of the Elandia Fish factory and north of the World War 2 radar station barracks building.

Site C: Is located at the southern end of Erf 66 and bisected by the untarred coastal road.

Erf 65 (Site B) currently has industrial development rights, while Erf 66 (Sites A and C) has an Undetermined, zoning. An application will be made by the developers to rezone the affected erven to sub-divisional area for residential purposes.

The extent of the proposed development area (about 21 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 proposed private nature reserve will occupy about 70% of the property, with another 1% being given over to Public Open Space.

The aim of the study is to locate and map pre-colonial archaeological heritage sites that occur in the proposed development area 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.

The AIA forms part of the Environmental Impact Assessment (EIA) process that is being conducted by independent environmental consultants Withers Environmental Consultants.

A Palaeontological Impact Assessment (PIA) of the proposed development has also been undertaken by consulting palaeontologist Dr John Pether.

The AIA and PIA form part of a wider Heritage Impact Assessment (HIA) being undertaken by heritage consultant Graham Jacobs of Arcon Architects & Heritage Consultants.

The results of the HIA (and EIA) will be used to compile an Environmental Constraints Plan to guide the proposed development process.

Findings

Site A: Hail Storm Midden (HSM) is located at the north western end of the proposed site. A relatively large portion of this (substantial) shell midden falls **inside** the proposed development area. Large amounts of shellfish and low density scatters of stone tools, pottery and ostrich eggshell cover the remainder of the proposed development site.

Well preserved shell midden deposits are visible in the road cutting, while highly disturbed shell midden remains also occur below the gravel road, which forms part of the proposed development site.

Shellfish remains, stone flakes, several pot sherds and some ostrich eggshell were also documented in a small overhang in the steep cliffs overlooking Site A, but this site falls **outside** the proposed development area.

Site B: Elands Bay Open (EBO) is located in the proposed site but is situated just **outside** the proposed development area.

Extensive shell midden deposits occur alongside the main gravel road on the coast, in Site B. Low density scatters of shellfish remains were also documented over the remainder of the proposed development site, which is severely degraded and disturbed.

A cluster of small used shelters, comprising thin scatters of shellfish, stone flakes and pottery was documented on the steep rocky slopes above EBO, but these archaeological sites are situated in Erf 64 which is not part of the proposed development area. Erf 64 is owned by the Western Cape Provincial Government, Department of Public Works.

Site C: A very thin scatter of shellfish remains and a few stone flakes were documented in the northern portion of Site C, below the gravel road leading to the radar station.

A thin scatter of shellfish and a few stone flakes were also documented among a cluster of sandstone boulders in the far southern portion of the proposed development area.

The large mega midden known as Cape Deseada Midden (CDM) is situated below the gravel coast road, which falls inside the proposed development area.

Borrow Pit Midden (BPM) is located in Site C alongside the gravel road, but the site is situated **outside** the proposed development area.

Impact

The Phase 1 AIA has shown that development at Baboon Point will impact negatively on fragile and vulnerable pre-colonial archaeological heritage remains, both in the short term during the construction phase, as well as in the long term during the operational phase. The impact of the proposed development is therefore likely to be **high** in Sites A and B and C. Any development at Baboon Point is thus considered to be extremely sensitive. These are critical constraints to the proposed development.

Project-related activities will have to be carefully managed so as not to damage or disturb sensitive archaeological sites that fall outside the proposed development area.

Recommendations

Site A

- A development setback line of between 15 and 20 m must be established between the eastern extent of Hail Storm Midden and the proposed development area. This setback line must be incorporated into Private Open Space. The Private Open Space must be managed by a Home Owners Association in terms of an Environmental Management Plan. The development setback line must be determined by a professional archaeologist, in consultation with Heritage Western Cape.
- Archaeological trial excavations must be undertaken in Site A. If some of the deposits and surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.
- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to archaeologist and the Environmental Control Officer.
- Hail Storm Midden could possibly be developed as a public access and visitor viewing site. A sensitively designed, raised wooden boardwalk and platform with appropriate signage could be developed.

Site B

- A development setback line of about 15 m must be established between Elands Bay Open and the proposed development area. This setback line must be incorporated into Private Open Space. The Private Open Space must be managed by a Home Owners Association in terms of an Environmental Management Plan. The setback line must be determined by a professional archaeologist, in consultation with Heritage Western Cape.
- Archaeological trial excavations of shell midden deposits must be undertaken in Site B, alongside the gravel coastal road, and over the remainder of the proposed development area. If some of the deposits/surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.
- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to the archaeologist and the Environmental Control Officer.

Site C

- Proposed development on Site C must be restricted east of the untarred coastal road. There must be no development west of the road as this will encroach on the important Cape Deseada Midden.
- Archaeological trial excavations must be undertaken in Site C. If some of the deposits/surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.
- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to the archaeologist and the Environmental Control Officer.

Additional recommendations

- Public access to the beach in Sites A, B and C must be controlled. This can be done by constructing raised, wooden boardwalks that avoid sensitive archaeological deposits and dunes. Non essential access roads must be closed and rehabilitated.
- The coastal buffer zone should be conserved and managed as Public Open Space.
- The borrow pit alongside the gravel road in Site C must be rehabilitated. The very important archaeological site known as Borrow Pit Midden must be covered over with soft sand and seeded.
- A Homeowners Association must be constituted and a constitution to be formulated and approved by Heritage Western Cape.
- A Conservation or Heritage Management Plan (HMP) must be developed and implemented for Baboon Point (including Erven 64, 65, 66, and 67) and presented to Heritage Western Cape for approval.
- The Heritage Management Plan must also form part of the Environmental Management Plan for the project and must be administered by a suitably qualified archaeologist.
- An annual audit of pre-colonial archaeological heritage sites in Erven 64, 65, 66, and 67 must be carried out by a professional archaeologist.

Table of Contents

	Page
Executive summary	1
1. INTRODUCTION	6
2. THE STUDY SITE	8
3. TERMS OF REFERENCE	11
4. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES	12
4.1 Assumptions	13
4.2 Constraints and limitation	13
4.3 Identification of risk sources	13
5. AN OVERVIEW OF ARCHAEOLOGICAL INFORMATION IN THE STUDY AREA	13
5.1 Historical settlement at Verlorenvlei	13
5.2 Verlorenvlei/Elands Bay	14
5.3 South of Elands Bay	15
6. LEGISLATIVE REQUIREMENTS	15
6.1 The National Heritage Resources Act	15
6.2 Structures (Section 34 (1))	16
6.3 Archaeology (Section 25 (4))	16
6.4 Burials ground & graves (Section 36 (3))	16
7. FINDINGS	16
7.1 Site A	17
7.2 Site B	20
7.3 Site C	22
8. IMPACT STATEMENT	24
9. OPPORTUNITIES	25
10. RECOMMENDATIONS AND MITIGATION ACTION	25
10.1 Site A	25
10.2 Site B	26
10.3 Site C	27
10.4 Additional recommendations	27
11. REFERENCES	28

1. INTRODUCTION

Midnight Storm Investments 170 (Pty) Ltd requested that the Agency for Cultural Resource Management undertake a Phase 1 Archaeological Impact Assessment (AIA) for a proposed residential housing development at Baboon Point in Elands Bay on the Cape West coast.

The AIA forms part of the Environmental Impact Assessment (EIA) process that is being conducted by independent environmental consultants Withers Environmental Consultants.

A Palaeontological Impact Assessment (PIA) of the proposed development has also been undertaken by consulting palaeontologist Dr John Pether.

The archaeological and palaeontological impact assessments form part of a wider Heritage Impact Assessment (HIA) being undertaken by heritage consultant Graham Jacobs of Arcon Architects & Heritage Consultants.

The results of the HIA (and EIA) will be used to compile an Environmental Constraints Plan in order to guide the proposed development process.

The proposed development is considered to be extremely sensitive, given that the subject property contains a wealth of archaeological sites of regional, national and international importance. The landmark site, Elands Bay Cave, the most visible and prominent of the archaeological sites at Baboon Point, has early modern human deposits dating back more than 150 000 years (Parkington 1976a, b). It is a site of high local significance in terms of its heritage and scientific value. Elands Bay Cave was nominated for National Heritage Status in the early 1990's. The rich overlay of pre-colonial archaeology, later colonial developments and landscape qualities makes Baboon Point unique along the Cape West Coast. Almost, the entire history of human kind within the subcontinent is reflected at Baboon Point (Jerardino et al 2006:7).

Baboon Point at Elands Bay has also been provisionally, proclaimed a Provincial Heritage Site in terms of Section 27 of the National Heritage Resources Act (No. 25 of 1999), a status that it will enjoy until 02 June, 2008.

A Heritage Scoping Study of Baboon Point and the proposed development even was carried out by Dave Halkett of the University of Cape Town, Archaeology Contracts Office in 2005 (Halkett 2005). The heritage resources documented in the report are believed to be a 'fairly comprehensive list' of what occurs in the proposed development area. The more significant sites have been documented with GPS points. Halkett (2005:14) does submit, however, that there may be some 'minor sites' that have not been documented, but maintains that they would not 'seriously effect the placement of development'. The report recommends that if the proposed development continues to a detailed planning phase, Baboon Point would need to be subjected to a full Heritage Impact Assessment (HIA).

A Stage 1 HIA (scoping) report of the proposed development has since been carried by Arcon Architects and Heritage Consultants (Jacobs 2007). The report pays particular attention to potentially highly significant archaeological sites that might be impacted by a proposed residential development. The report concludes that, despite Baboon Point

extremely important status, the no development option 'cannot realistically or fairly be entertained' (Jacobs 2007:3). Limited development is therefore endorsed in principle, subject to a detailed Stage 2 HIA.

Archaeological scoping of the proposed development was also undertaken by Kaplan (2007). This report formed the basis for a detailed Phase 1 AIA.

A Visual Impact Assessment (VIA) has also been carried out on the site (Oberholzer 2007). Oberholzer (2007:8) asserts that the concentration of pre-colonial archaeological remains and more recent historical sites add to the cultural and historical significance of the Baboon Point landscape. The combination of, these elements, he argues, contribute to a strong, almost powerful 'sense of place' (see also Jacobs 2007; Jerardino *et al* 2006; Chittenden Nicks Partnership 1996).

In response to the Stage 1 HIA undertaken by Jacobs (2007), Heritage Western Cape, the delegated Provincial Heritage Authority, issued a Record of Decision (ROD), stating that before any formal development proposal could be considered a full HIA of the proposed development must be undertaken. This included, both a Phase 1 Archaeological Impact Assessment (AIA) and Palaeontological Impact Assessment (PIA)¹.

2. THE STUDY SITE

A locality map is illustrated in Figure 1.

An aerial photograph of the study site is illustrated in Figure 2. The four principal archaeological sites at Baboon Point are Elands Bay Cave (EBC), Elands Bay Open (EBO), Borrow Pit (BP), Cape Deseada Midden (CDM) and Hail Storm Midden (HSM).

Baboon Point is located on the western end of Elands Bay, about 2 kms south of Elands Bay Village and about 1.5 km from the mouth of the Verlorenvlei. It contains the landmark Bobbejaansberg, a prominent vertical and flat-topped cliff that overlooks the Indian Ocean. On a clear day Baboon Point can be seen from St. Helena Bay more than 80 kms to the south.

Existing buildings on Baboon Point comprise the Elandia Crayfish factory and Labour Compound and several Second World War buildings including the radar station, main operations room and ancillary structures. Most of these structures have fallen into disrepair and ruin. Despite its wilderness feel, the receiving environment is already fairly severely degraded. The coastal fore dunes have been heavily impacted as a result of the construction of illegal parking areas, pedestrian traffic, picnic, braai and informal camping sites. A large borrow pit was created during the removal of material for the construction of the radar station road (that was never rehabilitated), while cut and fill excavations for the some of the structures have also been felt. The area around the Labour compound (Site B) is degraded and much building rubble and dumping is evident. Baboon Point is not quite the 'unspoilt landscape' that has been projected (Jerardino *et al* 2006:1).

¹ Heritage Western Cape letter dated 15 June, 2007. (Ref: C13/3/6/1/1/1/C2).

Three proposed development sites (Sites A, B and C) have been identified for residential development at Baboon Point including a private nature reserve.

Erf 65 (Site B) currently has industrial development rights, while Erf 66 (Sites A and C) has an Undetermined, zoning. An application will be made by the developers to rezone the affected erven to sub-divisional area for residential purposes.

Twenty seven residential units are planned for Site A, 26 units are planned for Site B and 39 units are planned for Site C, including associated infrastructure such as internal streets and services.

The property comprises about 21 ha in extent. A proposed private nature reserve will occupy about 70% of the property, with another 1% being given over to Public Open Space.

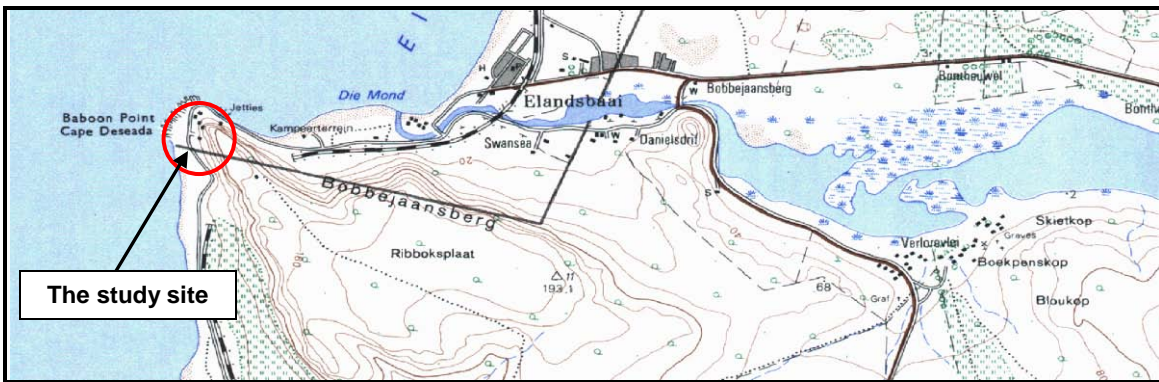


Figure 1. Locality map (3218 AD) Elands Bay

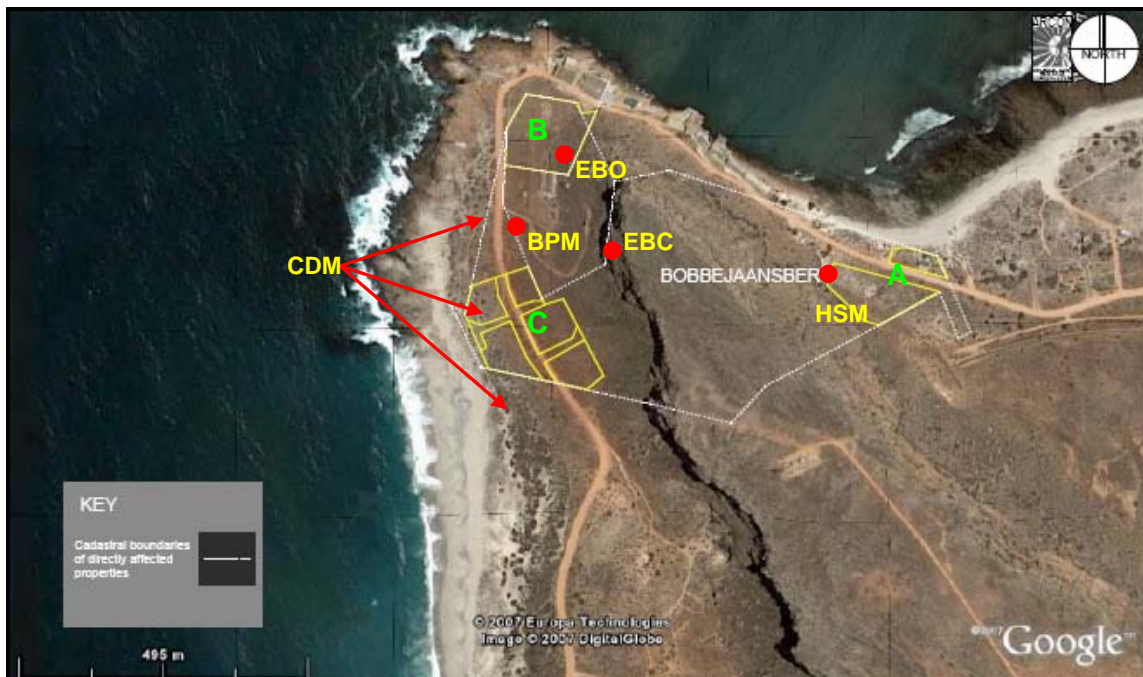


Figure 2. Aerial photograph of the study site and the proposed development. Sites A, B and C. EBO = Elands Bay Open, HSM = Hail Storm Midden, BPM = Borrow Pit Midden, CDM = Cape Deseada Midden, EBC = Elands Bay Cave

Site A: Is located alongside the gravel road to Baboon Point, close to the entrance to the railway tunnel and very near to an existing residential development (Figure 3).



Figure 3. View of Site A

Site B: Is located on Baboon Point directly south west of the Elandia Fish factory and north of the World War 2 radar station barracks building (Figure 4).



Figure 4. View of Site B

Site C: Is located at the southern end of the property, bisected by the untarred coastal road (Figure 5).



Figure 5. View of Site C

3. TERMS OF REFERENCE

The Terms of Reference for the archaeological study are to:

- To determine whether there are likely to be any pre-colonial archaeological sites of significance within the proposed development Sites (A, B & C);
- To identify and map pre-colonial archaeological sites within each of the proposed development Sites;
- To determine the importance and significance of pre-colonial archaeological heritage resources within each of the proposed development Sites;
- To assess the significance of any potential impacts of the proposed development on pre-colonial archaeological sites,
- To identify constraints and opportunities with regard to the proposed development, and
- To recommend measures to protect and maintain valuable pre-colonial archaeological heritage sites that may exist within the proposed development nodes.

Note: The portion of Erf 66 on top of Baboon Point was not surveyed.

4. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The proposed development Sites A, B and C, were carefully and systematically searched for pre-colonial archaeological heritage remains. The field survey covered only pre-colonial archaeological heritage remains.

The archaeological study took place over 3 days, between 18th and 21st March 2008.

Archaeological heritage sites located during the study were identified, mapped, photographed and plotted using a hand held Garmin Geko 201 GPS unit set on map datum WGS 84.

As far as could be established, the (surface) extent of each site, or the estimated boundary of each site has been determined within each of the proposed development sites. It is not possible to accurately plot exact site boundaries as archaeological traces are sometimes spread very thinly and unevenly over the surrounding landscape. Dune mole rats, for example, also, often bring up archaeological remains to the surface, where a few weeks or days before, these were not evident or indeed visible. Archaeologists also acknowledge that the extent of archaeological sites can often only be determined through, shovel testing, sampling and systematic excavation.

The report follows the (required) `Minimum Standards: Archaeological and Palaeontological Components of Impact Assessment Reports², for Phase 1 Archaeological Impact Assessments.

The writer also consulted with Professor John Parkington of the Department of Archaeology, University of Cape Town (UCT), who has been the principal researcher at Elands Bay for more than 30 years and Dr Antoniette Jerardino of the South African Heritage Resources Agency (SAHRA). A field visit to the proposed development site was also undertaken in the company of Heritage Western Cape and SAHRA staff on the 14th April, 2008.

Finally, the archaeologist also spent some time with Mr Tony Manhire, going through the UCT Archaeology Department site records on Elands Bay and discussing aspects of the proposed development. It is acknowledged that the UCT site records are incomplete.

The AIA has also relied on a number of pertinent and relevant reports which complement the current study. The study acknowledges the results of a Heritage Scoping Study of Erven 58, 64, 65, 66, 67 and 596, Elands Bay by Halkett (2005).

The known pre-colonial archaeological heritage sites at Baboon Point are also described in detail, in the proposed Provincial Heritage Site nomination form for Baboon Point, Elands Bay (Jerardino et al 2006). These sites were all revisited by the archaeologist during the current study, photographed and assigned GPS readings.

² SAHRA APM Guidelines: Minimum Standards for the Archaeological & Palaeontological Components of Impact Assessment Reports. August 2006

The AIA study has not reviewed the many archaeological reports, papers, articles, books and monographs that have been produced over more than 30 years of research at Baboon Point that has generated a wealth of social and scientific information on indigenous history and past environments over tens of 1000's of years.

4.1 Assumptions

The study site is located within a known archaeologically sensitive area (see for example Buchanan 1986; Jerardino 1996; Kaplan 1993; Parkington 1981).

The assessment therefore assumes that:

- Damage to heritage resources potentially will occur in the proposed development area.

4.2 Constraints and limitations

There were no constraints or limitations associated with the archaeological study.

4.3. Identification of risk sources

Possible sources of risk in terms of archaeological impacts arising from the proposed development are listed below.

Risk sources apply to the Construction Phase of the proposed project.

- Damage to pre-colonial archaeological heritage remains potentially will occur in the development of the property.
- Unmarked human burials may very likely be exposed or uncovered during earthmoving operations and excavations³.

5. AN OVERVIEW OF ARCHAEOLOGICAL INFORMATION IN THE STUDY AREA

5.1 Historical settlement at Verlorenvlei

By the early seventeenth century, little was known about the Verlorenvlei area as it was slightly to the west of the main routes of exploration along the West Coast. Most of the early traveller's along the Cape west coast, such as Bergh in 1682, Simon van der Stel in 1685, Thurnberg in 1774, Le Vaillant in 1783, Barrow in 1797 and Barnard in 1800, passed through the Verlorenvlei area, crossing the river much further upstream and did not venture along the vlei toward the sea. The names of many of these early traveller's can still be seen on the walls of the cave known as the 'Heerenlogement' which was used as an overnight shelter and is situated further north, between Graafwater and the Olifants River/Vanrhynsdorp.

³ At least 6 human burials have been recorded from in and around Elands Bay Cave (Jerardino et al 2006), one from the borrow pit alongside the gravel road (Manhire pers. comm.) and several from the Elandia Crayfish factory (Jerardino pers. comm.).

By at least the late 1600's, it would appear that no colonists had yet settled in the Verlorenvlei area, although it was being used to graze herds of cattle, supervised by local Khoi inhabitants. It would appear that indigenous San (Bushman) were living in the area under the 'chief' Keyser or Caesar, and that they probably used as their base the land called Caesar's Kraal (behind Muishoekberg), to the east of the original Verlorenvlei Settlement. Starrenburg also visited the kraal of Hannibal in Verlorenvlei in about 1700 (Sinclair 1986).

In the early 1700's, loan places were granted to pioneer settlers by the Dutch East India Company (VOC), for the purpose of grazing. Wheat was also cultivated during this period. During this time some buildings were constructed to house the Khoi overseeing the settler herds and the wheat cultivation (Sinclair 1980).

From the late 1700s grazing of cattle and wheat cultivation continued and occupation of the land became more permanent, with the building of farmhouses and probably also the beginnings of the Verlorenvlei settlement (Sinclair 1980; Gribble 1990).

Previously wheat was grown only for local use because of the difficulties of transport to the Cape Town market, but with the introduction of marine transport, and the removal of a fixed price, incentive was provided for export of surplus wheat to Cape Town. The cutters of the Stephen brothers are reported to have collected the grain from the Verlorenvlei area. The grain was taken by farmers to the Plan House near Baboon Point, and stored there until the arrival of the cutters, which apparently landed for loading at a point between the present crayfishing jetties and the sand bar across the river (Sinclair 1980).

The economic incentive, combined with favourable conditions for wheat cultivation, stimulated the growth of the Verlorenvlei settlement. The presence of the horse-mill and the bakery within the settlement suggests that a small community already existed, their way of life closely associated with the cultivation and processing of wheat (Sinclair 1980; Gribble 1990).

While the mid-nineteenth century saw the boom of the wheat era in the Verlorenvlei area, certain factors contributed to its decline, probably during the early twentieth century. The introduction of machinery, and the growth of co-operative facilities rendered local processing by animal labour unnecessary. Environmental factors, such as a declining soil fertility and water catchment potential due to poor farming methods, overutilisation and overgrazing, and possible climatic change, may also have led to the areas decline (Sinclair 1980).

The Verlorenvlei area still retains some fine examples of the many development phases in the vernacular architecture of the West Coast Sandveld (Gribble 1990). In recent years, many of these have fallen into disrepair and ruin

5.2 Verlorenvlei/Elands Bay

The Verlorenvlei/Elands Bay area is without doubt an extremely important archaeological environment. Archaeological sites occur in abundance. Research has shown that people have occupied the coastal zone for well over 150 000 years (Parkington 1976a). There are approximately 100 archaeological sites near the lower reaches of the Verlorenvlei, situated among the cliffs and rocky kopjes immediately

opposite Baboon Point, and along the shoreline area (Kaplan 1993). The area is rich in prehistoric campsites, caves and rock shelters with paintings, shell middens and geoarchaeological features. Well known sites include Elands Bay Cave and Cape Deseada Midden at Baboon Point, Spring Cave on Bobbejaansberg, Dunefield Midden between Elands Bay and Lamberts Bay, Tortoise Cave above the quarry near Danielsdrif, and Diepkloof Cave west of Grootdrif.

At least 90 rock art sites have also been recorded, most of them in the Sandstone outcroppings along the south bank of the vlei (Manhire *et al* 1993; Van Rijssen 1984; Manhire 1998). Rock paintings record the remarkable artistic achievement of the indigenous San of southern Africa who created them for religious purposes as part of a changing cultural tradition that persisted for over 20 000 years. Well-known painting sites include Elands Bay Cave and on the Bobbejaansberg and among the Diepkloof/Witklip/Grootdrif complex nearer to Redelinghuys, while many other painted sites have been recorded among the Sandveld kopjes between the coast and the interior (Manhire 1997).

5.3 South of Elands Bay

Archaeological sites south of Elands Bay are characterised by fairly extensive, but superficial surface scatters of shellfish remains associated with pottery, stone artefacts and faunal remains. On sites of this kind, the sand mussel, *Donax Serra* occurs in high numbers and may reflect the general location of these scatters along the sandy beaches, where they stretch almost continuously for 50 kilometres (Parkington 1976b).

Extensive surface scatters with a more substantial black mussel and limpet component, also occur behind the parallel dune cordon south of Elands Bay where relatively large numbers of such sites have been recorded at Draaihoek, Soutkloof, Langdam, and Nuwedam (Jerardino 2003). Jerardino (2003) has suggested that most of these sites, in the low, deflated sandy areas adjacent the shoreline, appear to result from brief, episodic occupations.

6. LEGISLATIVE REQUIREMENTS

The following section provides a brief overview of the relevant legislation.

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

The National Heritage Resources (NHR) Act requires that "...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment"

The relevant sections of the Act are briefly outlined below.

6.2 Archaeology (Section 35 (4))

Section 35 (4) of the NHR stipulates that no person may, without a permit issued by HWC, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

6.3 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.

6.4 Burial grounds and graves (Section 36 (3))

Section 36 (3) of the HHR stipulates that no person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), 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. FINDINGS

A map of the positions of archaeological occurrences in the area relative to the three proposed development Sites is produced in Figure 6.

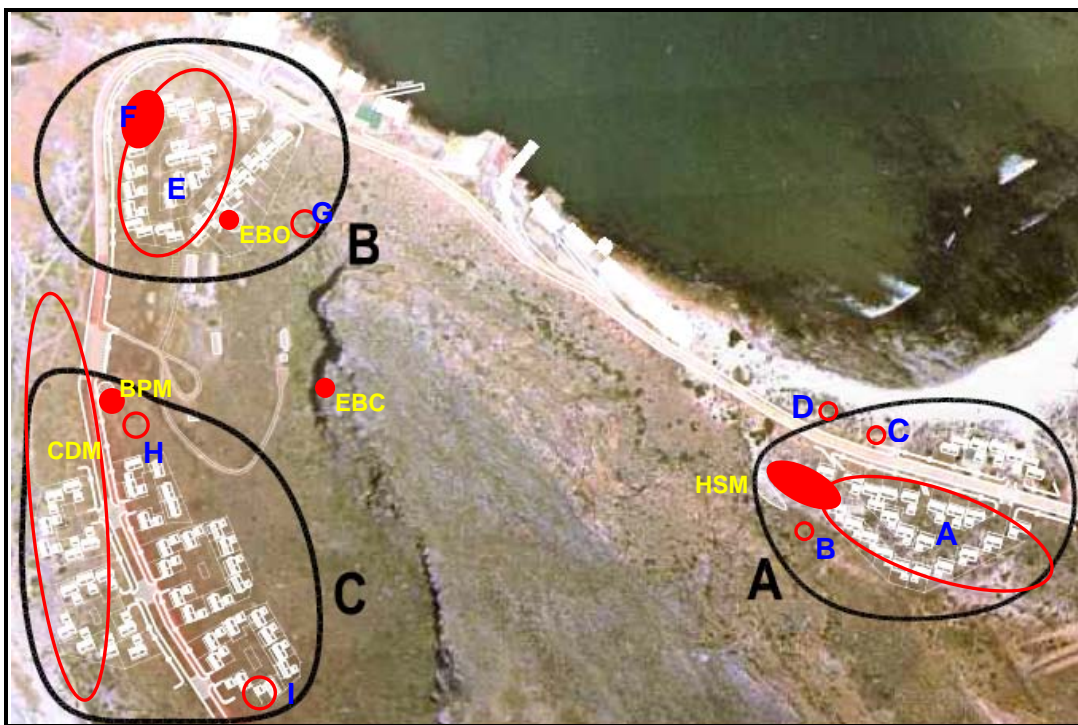


Figure 6. Aerial photograph showing the entire development of Site A, B and C. EBO = Elands Bay Open, HSM = Hail Storm Midden, BPM = Borrow Pit Midden, CDM = Cape Deseada Midden, EBC = Elands Bay Cave

7.1 Site A

Site A extends both below and above the gravel road to Baboon Point, close to the entrance to the railway tunnel and very near to an existing residential development (refer to Figure 3).

The well-known Hail Storm Midden (HSM) (S 32° 19 107 E 18° 19 441) is located at the north western end of the proposed site. A substantial portion of the site falls **inside** the proposed development area. HSM covers part of a wind blown dune situated on the steep slope east of the Elands Bay crayfish factory (Figures 7 and 8). The site has been rated as having high local and national significance (Halkett 2005:12). The highly visible site is characterised by a substantial shell mound overlooking the road, with large numbers of pottery scattered about. Stone flakes in quartz, quartzite and silcrete were also counted. Burnt shell, bone and ash deposits are visible on the surface. The site has been partially excavated (Horwitz 1979; Noli 1988) and radiocarbon dated to about 900 years before present. Radiocarbon dating shows that the shell midden built up fairly quickly and was a site of relatively frequent visits by Later Stone Age people. Black Mussel and limpets were intensively exploited at this location on the coast, but crayfish, fresh water fish (from the nearby Verlorenvlei), marine mammals and sea birds, as well as terrestrial fauna such as tortoise, antelope, dassie and even hippopotamus, were consumed. This important site is not protected, and uncontrolled public access to the site has resulted in considerable damage to the archaeological deposit.



Figure 7. HSM. View of the site facing north east



Figure 8. HSM. View of the site facing west

Extensive scatters of shellfish, also covers almost the entire proposed development site. Shellfish is visible in the large open patches, on fine, wind blown yellow sands (Figures 9 – 11 & refer to **A** in Figure 6). The south eastern portion of the proposed development site is quite degraded and disturbed as a result of construction of the Spoornet railway tunnel, with large boulders (dislodged or moved during construction) occurring on the upper slopes. There is also evidence of some diggings. The shellfish among these large patches is dominated by Black Mussel and limpet, with some whelk also occurring. Low density scatters of stone flakes (in quartz and silcrete), pottery, ostrich eggshell (including an ostrich eggshell bead) was also counted. According to Tony Manhire of the Department of Archaeology, UCT (pers. comm.), a human tooth was found on the site some years ago. The shell scatters are possibly remnants of shellfish associated with

HSM and likely date to the same era. Dune mole rate burrowing is also extensive in this area, and much shellfish is associated with the sandy dumps indicating the presence of below ground archaeological deposits. The remains have provisionally been rated as having medium local significance, subject to trial excavations.

Shell midden material, quartz, quartzite and silcrete stone flakes and a few pot sherds were also documented in a small overhang in the very steep, barely accessible, Sandstone cliffs overlooking Site A, but this archaeological site falls **outside** the proposed development area (Figure 12 & refer to **B** in Figure 6). The shellfish is concentrated immediately in front of the shallow overhang and on the steep south facing slopes. Much shellfish has spilled down the mountain slopes. The shellfish is dominated by mainly weathered and fragmented Black Mussel shell and limpet with some whole limpets (including *S. argenvillei*, *C. granularis* and *C. granatina*) occurring. A GPS reading for the site is S 32° 19 150 E 18° 19 324. This site (EB 20) has been alluded to by Halkett (2005 Figure 3:6) but has not been described. The site has provisionally been rated as having medium – high local significance.



Figure 9. Shellfish scatter in **A**.



Figure 11. Shellfish scatter in **A**.



Figure 10. Shellfish scatter in **A**.



Figure 12. Overhang and shell scatter (**B**).

Well-preserved shell midden deposits also occur in the road cutting (Figure 13). These, substantial shell deposits are probably the edge of HSM, which has been cut through by the gravel road.

Below the gravel road, the receiving environment is very disturbed and degraded. Bush and scrub and soft loose sands characterise the surrounding area. Construction of the Marine Coastal Management (MCM) house, associated road construction activities (including construction of culverts and cut and fill operations) have all added to the highly disturbed nature of the site. Uncontrolled pedestrian and vehicle access to the beach has also resulted in major damage to the fore dunes and beach. Dune mole rat activity is also quite widespread, but very little shellfish is associated with the shell mounds.

A very thin scatter of shellfish and two or three quartz stone flakes, chunks and small round pebbles were documented south of the MCM house in a slightly wind deflated basin. West of the MCM house, scattered bits of shellfish were also documented alongside, a drainage line and a small footpath leading down to the beach. These remains comprise mainly Black Mussel and some limpet. No cultural remains were found. The archaeological remains have been rated as having low local significance

A thin scatter of Black Mussel, limpets (including *S. argenvillei* and *S. granatina*) and some barnacle were located either side of a sandy track leading down to the beach. Most of the remains occur in a severely disturbed context, but some shellfish deposits on the dune slope, still appear to be intact (Figure 14 and refer to **C** in Figure 6). Four small potsherds (one red burnished), a large crayfish mandible, some weathered bone and a few quartz and quartzite flakes were counted. A GPS reading for the site is S 32° 19 090 E 18° 19 366. The site has also been rated as having low local significance.

Small patches of shellfish were also documented on the very steep sandy slopes immediately below the gravel road, at the extreme north western extent of Site A (refer to **D** in Figure 6). Some of this shellfish is still relatively in tact, and probably represents the edge of the HSM which (before the road was built) likely extended down to the beach and the rocky shore. A few pieces of shellfish were found in the wind eroded sandy basin immediately below the steep cliff, including two pieces of weathered and wind blasted pottery and one quartzite miscellaneous grindstone fragment. The site is very disturbed and degraded and has been rated as having low local significance.



Figure 13. Midden deposits in road cutting.



Figure 14. Shell scatter in **C**.

7.2 Site B

Site B is located on Baboon Point directly south west of the Elandia Fish factory and north of the WW 2 radar station barracks building (refer to Figure 4). Much of Site B is severely degraded. Dumping of large piles of building rubble, excavations of numerous septic tanks alongside the gravel road and the remains of several ruined migrant labour buildings cover a large part of the proposed development area.

The well-known EBO or Elands Bay Open site (S 32° 18 59.7 E 18° 19 01.9) is located in Site B, **just outside** the proposed development area (refer to Figure 6). EBO is a small overhang defined by a number of prominent sandstone boulders (Figures 15 and 16). A large concentration of weathered shellfish is very visible in front of the overhang and present in the immediate surrounding area. A stratified shell midden deposit in the overhang was excavated by Horwitz (1979) and radiocarbon dated to about 3000 years ago. Occupation at the site was initially quite brief, during which time Later Stone Age people gathered large quantities of Black Mussels and hunted and captured small game and fished from the nearby Verlorenvlei. Pottery appears in the archaeological deposits after about 1500 years, while large quantities of sheep bone appear in deposits dated between 700 and 600 years. John Parkington undertook further excavations at the site in 1994 (Jerardino *et al* 2006). The site has been rated as having high local and national significance (Halkett 2005:10).

A considerable amount of fragmented and crushed shellfish, very likely originating from EBO, has spilled down the slope, over a small footpath and into the proposed development area, covering a fairly wide area. Stone flakes in quartz and silcrete were counted, as well as seven small pieces of pottery and some ostrich eggshell.

Despite the very disturbed and degraded nature of the receiving environment, shellfish is also dispersed very thinly and unevenly over the remainder of the Site B (refer to **E** in Figure 6). Low density scatters of stone tools (mainly quartz flakes and chunks) were also noted, while several pieces of ostrich eggshell and at least two pieces of pottery were encountered. The archaeological remains in **E** have been provisionally rated as having local significance, subject to trial excavations.



Figure 15. EBO as seen from the gravel road



Figure 16. Close-up view of EBO

A large and very visible shell midden occurs directly alongside the gravel road in Site B, intruding at least 10 -12 metres inside the road (Figures 17 and refer to **F** Figure 6). This site has been documented and described by Jerardino *et al* (2006). Although the immediate surrounding area is quite degraded (a number of septic tanks have been excavated in a line alongside the gravel road), the deposits appear to be quite thick and compacted.

The shellfish is dominated by crushed and weathered Black Mussel and limpets, while only a few quartz flakes, chunks and manuports were counted. Large amounts of shellfish are also associated with several dune mole rat dumps in the immediate area, indicating that significant shellfish deposits occur below the ground. A GPS reading for the site is S 32° 18 951 E 18° 18 989.

It is worth noting that several test pits were sunk on Site B some years ago, where fairly significant (below ground) shell midden deposits were encountered (Tony Manhire, pers. comm.).

The archaeological remains have been provisionally rated as having medium-high local significance, subject to further trial excavations.

Remnants of a mid-Holocene raised beach also occur alongside the above shell midden (**F**), next to some existing cement platforms and the septic tanks. These deposits are characterised by gritty shelly deposits, water worn and rounded shell and small rounded pebbles and some shingle. They are culturally sterile.



Figure 17. Large shell scatter in F.

A cluster of small shelters, with very thin scatters of weathered shellfish were documented on the very steep rocky, rugged and boulder strewn slopes above EBO (refer to **G** in Figure 6). These sites, however, are situated in Erf 64 which is not part of the proposed development area. Erf 64 is owned by the Western Cape Provincial Government, Department of Public Works⁴. The shellfish in these small sites is dominated by Black Mussel and limpets while a few quartz and silcrete stone flakes, chunks and cores, and some small blackened and partially burnished pot sherds were also encountered. These ephemeral, 'late pottery complex' sites have been documented by Jerardino *et al* (2006). The cluster of shelters were located, photographed and assigned GPS co-ordinates by the writer. As the sites are so close to one another, only one co-ordinate (S 32° 19 994 E 18° 19 066) has been given. Given their context (proximity to each other and choice of location), Jerardino *et al* (2006:28) implies that these sites be rated as potentially having high local significance.

⁴ It should be noted that Elands Bay Cave (EBC) is also located in Erf 64

7.3 Site C

Site C is located at the southern end of the property, bisected by the untarred coastal road (refer to Figure 5). The coastal portion of the site is quite severely degraded. Apart from the very visible borrow pit alongside the road, at least five more excavation pits occur on Site C.

The proposed development area extends (over the road) into an archaeologically sensitive area that includes the large megamidden known as Cape Deseada Midden (CDM) (Figures 20 & 21 and refer to Figure 6). This exceptionally large site is about 40 m wide and running in a north to south direction over a distance of more than 800 m. The northern end of this very substantial site extends approximately to a point opposite the entry to the radar station road (Halkett 2005:11).

Mega middens, as the name suggests, contain massive amounts of shellfish that has built up over a relatively short period of time. They are also characterised by modest amounts of charcoal, bone and stone artefacts. A few test pits on the site have been excavated and radiocarbon dated to between 3000 and 2000 years ago (Jerardino 1996).

Research indicates that population densities at Baboon Point were higher during this time with people relying extensively on marine foods (including shellfish, fish, seal and marine birds) and to a lesser extent on terrestrial animals (Jerardino 1996). CDM is one of only a few known mega midden sites that survive on the Cape west coast. The site has been rated as having high local and national significance (Halkett 2005:12; Jerardino et al 2006).

Uncontrolled access, illegal 4 x 4 activity and informal parking and picnicking has resulted in considerable damage to this very important site. Substantial portions still remain in tact, however.



Figure 20. CDM. View facing south



Figure 21. CDM. View facing south

Borrow Pit Midden (BPM) (S 32° 19.04.1 E 18° 18.57.9) is also located in Site C on its northern edge, but falls **outside** the proposed development area (refer to Figure 6). The archaeological site was first exposed as a result of excavations for the building of the radar station road (Halkett 2005).

Two important archaeological occurrences occur in the borrow pit. A Later Stone Age shell midden, rich in bird bone is visible in the cutting along the western edge of the borrow pit, extending below the road (Figure 22), while a rare, Middle Stone Age site (EB17), with stone tools, fossil shell, fossil bone and ostrich eggshell. was exposed on its north eastern edge (Figure 23). Both sites have been sampled by UCT archaeologists, while the MSA results have been published (Parkington et al 2004). It has been suggested that the site extends below the present land surface further to the south and east.

During the field study, the writer also counted several more Middle Stone Age flakes, in silcrete and quartzite, including some fossil bone and some weathered ostrich eggshell. According to Jerardino et al (2006:22) BPM-MSA is the only know Middle Stone Age shell midden occurrence between Saldanha Bay and immediately north of the Olifants River mouth. EB17 has been thus been rated as having high local and national significance (Halkett 2005:11; Jerardino et al 2006:22).

A human skeleton (dubbed `Ursula') was also recovered from the borrow pit when it was first exposed more than 30 years ago, that has been dated to between 8000 and 9000 years old (Manhire pers. comm.).



Figure 22. BPM.



Figure 23. BPM Middle Stone Age site

A very thin and dispersed scatter of shellfish, about 5 – 7 m in extent was documented in soft loose sands about 10 m south east of BPM and about 15 m south west of the curve of the radar station road, in Site C (Figure 24 and refer to H in Figure 6). This ephemeral scatter of shell and stone flakes has been documented by Jerardino et al (2006). The shell is dominated by a few weathered and bleached fragments of Black Mussel and limpet, while a low density scatter of quartz flakes, chips, chunks and one core was counted. Despite the presence of extensive dune mole rat activity in the immediate surrounding area, only a few bits of shellfish were found associated with the sand dumps. Some dumping of farm equipment is also scattered about. A GPS co-ordinate for

the site is S 32° 19 097 E 18° 18 989. The archaeological site has been provisionally rated as having low local significance, subject to trial excavations.

Scattered fragments of bleached and weathered shellfish were also documented on soft, loose, light brown coloured sands, on the lower slopes in the far south western portion of Site C (Figure 25 & refer to **I** in Figure 6). The shellfish appears to be scattered and concentrated around a cluster of large sandstone boulders that extends beyond the southern boundary of the proposed development area. It appears as if some test pits have been conducted in this area, possibly by Bill Buchanan in the early 1980s but this could not be confirmed by the writer. The shellfish is dominated by Black Mussel and limpet, while a low density scatter of stone tools, including quartz flakes, chips and chunks were counted. Two silcrete flakes and two indurated shale flakes were also found, as well as three pieces of bleached bone. A GPS co-ordinate for the site is S 32° 19 097 E 18° 18 989. The archaeological site has been provisionally rated as having low local significance, subject to trial excavations.



Figure 24. Shell and stone scatter in **H**.



Figure 25. Shell and stone scatter in **I**.

8. IMPACT STATEMENT

The Phase 1 Archaeological Impact Assessment has shown that proposed development at Baboon Point, Elands Bay will impact negatively on fragile and vulnerable pre-colonial archaeological heritage remains, both in the short term during the Construction Phase, as well as in the long term during the Operational Phase. The impact of the proposed development is therefore likely to be **high** in Sites A, B and C. Any development at Baboon Point is thus considered to be extremely sensitive. These are undoubtedly critical constraints to any proposed development.

Long term impacts will also have to be carefully managed, especially with regard to those archaeological sites that are situated outside the footprint of the proposed development area.

9. OPPORTUNITIES

Proposed development at Baboon Point does, however, present opportunities which can be explored. These include:

- Development of heritage tourism opportunities that honours the memory and tells the story of the regions indigenous hunter-gatherers. Such stories would also include the more recent Second World War and radar station history at Baboon Point and the relatively unknown African migrant labour system in the fishing industry on the Cape West coast. All these histories are present at Elands Bay. Proposals relating to the development of such products have been made by Jerardino et al (2006) and Kaplan (2007). These proposals should be explored and negotiated in more detail with Heritage Western Cape, the developers and all relevant stakeholders.
- Jacobs (2007:21) also argues that new development can create an opportunity to conserve and control access to archaeologically sensitive sites currently under threat from uncontrolled public use. Such abuse can already been seen at a number of very sensitive sites at Baboon Point, including Cape Deseada Midden, Hail Storm Midden and Elands Bay Cave, for example.

10. RECOMMENDATIONS AND MITIGATION ACTIONS

With regard to the proposed development of Erven 65, 66 and Portion 4 of Verlorenvlei Farm No. 8, Elands Bay, the following recommendations are made:

10.1 Site A

- A development setback line of between 15 and 20 m must be established between the eastern extent of Hail Storm Midden and the proposed development area. This setback line must be incorporated into Private Open Space. The Private Open Space must be managed by a Home Owners Association in terms of an Environmental Management Plan. The development setback line must be determined by a professional archaeologist, in consultation with Heritage Western Cape.
- Archaeological trial excavations must be undertaken in Site A. If some of the deposits and surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.

- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to archaeologist and the Environmental Control Officer.
- Hail Storm Midden could possibly be developed as a public access and visitor viewing site. A sensitively designed, raised wooden boardwalk and platform with appropriate signage could be developed.

10.2 Site B

- A development setback line of about 15 m must be established between Elands Bay Open and the proposed development area. This setback line must be incorporated into Private Open Space. The Private Open Space must be managed by a Home Owners Association in terms of an Environmental Management Plan. The setback line must be determined by a professional archaeologist, in consultation with Heritage Western Cape.
- Archaeological trial excavations of shell midden deposits must be undertaken in Site B, alongside the gravel coastal road, and over the remainder of the proposed development area. If some of the deposits/surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.
- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to the archaeologist and the Environmental Control Officer.

10.3 Site C

- Proposed development on Site C must be restricted east of the untarred coastal road. There should be no development west of this road as this will encroach on the important Cape Deseada Midden.
- Archaeological trial excavations must be undertaken in Site C. If some of the deposits/surface scatters are found to have depth and undisturbed deposits they will have to be sampled by way of controlled archaeological excavations.
- Full-time monitoring of all earthworks must be carried out by a qualified, professional archaeologist. This includes associated infrastructure such as access roads, services for pipelines, electricity and other related infrastructure.
- Archaeological deposits intersected by earthmoving operations must be adequately and professionally sampled.

- If any unmarked burials are uncovered or exposed during earthmoving operations these must be immediately reported to the archaeologist and the Environmental Control Officer.

10.4 Additional recommendations

- Public access to the beach in Sites A, B and C must be controlled. This can be done by constructing raised, wooden boardwalks that avoid sensitive archaeological deposits and dunes. Non essential access roads must be closed and rehabilitated.
- The coastal buffer zone should be conserved and managed as Public Open Space.
- The borrow pit alongside the gravel road in Site C must be rehabilitated. The very important archaeological site known as Borrow Pit Midden must be covered over with soft sand and seeded.
- A Homeowners Association must be constituted and a constitution to be formulated and approved by Heritage Western Cape.
- A Conservation or Heritage Management Plan (HMP) must be developed and implemented for Baboon Point (including Erven 64, 65, 66, and 67) and presented to Heritage Western Cape for approval.
- The Heritage Management Plan must also form part of the Environmental Management Plan for the project and must be administered by a suitably qualified archaeologist.
- An annual audit of pre-colonial archaeological heritage sites in Erven 64, 65, 66, and 67 must be carried out by a professional archaeologist.

11. REFERENCES

Arcon Architects & Heritage Consultants. 2007. Baboon Point Erven 65, 66 & Ptn 4 of Verlorenvlei Farm No. 8 Elands Bay. Heritage Impact Assessment Stage 1. Report prepared for Midnight Storm Investments 170 (Pty) Ltd.

Buchanan, W.F. 1986. Sea shell ashore: a study of the role of shellfish in pre-historic diet and lifestyle and Eland Bay, South Western Cape. University of Cape Town

Chittenden Nicks Partnership 1996. Verlorenvlei Local Structure Plan Volumes I-III. Report prepared for West Coast Regional Services Council and Cape Provincial Administration. Caledon Square.

Gribble, J. 1990. Verlorenvlei vernacular: a structuralist analysis of Sandveld folk architecture. Unpublished Masters Thesis, Department of Archaeology, University of Cape Town

Halkett, D.J. 2005. A Heritage Scoping Study of Erven 58, 64, 65, 66 67 & 596, Elands Bay. Report prepared for BKS (Pty) Ltd. Archaeology Contracts Office University of Cape Town

Heritage Western Cape: 2006. Provincial Site Nomination Form Baboon Point Elands Bay. Provincial Heritage Authority of the Western Cape.

Horwitz. L. 1979. From materialism to middens: a case study at Elands Bay, Western Cape, South Africa. Unpublished BA (Hons) thesis, University of Cape Town.

Jerardino, A. 2003. Precolonial settlement and subsistence along sandy beaches of Elands Bay, West Coast, South Africa. *South African Archaeological Bulletin* 58:53-62.

Jerardino, A. 1996. Changing social landscapes of the Western Cape coast of southern Africa over the last 4500 years. Unpublished PhD thesis, University of Cape Town.

Kaplan, 2007. Archaeological impact assessment proposed residential development Baboon Point Erven 65, 66 and Ptn 4 of Verlorenvlei Farm No. 8 Elands Bay. constraints, opportunities and challenges. Report prepared for BKS (Pty). Agency for Cultural Resource Management.

Manhire, A. 1998. The role of handprints in the rock art of the south-western Cape. *South African Archaeological Bulletin* 53:98-108.

Manhire, A. 1997. Later Stone Age settlement patterns in the Sandveld of the south-western Cape Province, South Africa. Oxford: *British Archaeological Reports International Series* 1:63-71.

Manhire, A.H., Parkington, J. & Van Rijssen, W. 1993. A distributional approach to the interpretation of rock art in the south-western Cape. *South African Archaeological Society Goodwin Series* 4:29-33.

Noli, D. 1988. Results of the 1986 excavation at Hailstorm Midden (HSM), Elands Bay, Western Cape Province. *South African Archaeological Bulletin* 43:43-48.

Oberholzer, B. 2007. Proposed residential development Baboon Point, Elands Bay. Phase 2 Visual Impact Assessment. Report prepared for BKS (Pty) Ltd. Bernard Oberholzer Landscape Architects/Environmental Planners.

Parkington, J.E. 1976a. Follow the San. Follow the San. Unpublished PhD Thesis University of Cape Town.

Parkington, J.E. 1976b. Coastal settlement between the mouths of the Berg and Olifants rivers, Cape Province. *South African Archaeological Bulletin* 31:127-140.

Parkington, J.E. 1981. The effects of environmental change on the scheduling of visits to the Elands Bay Cave, Cape Province. In: Hodder, I., Isaac, G. and Hammond, N. (eds) *Patterns of the Past: Studies in Honour of David Clark*, Cambridge: Cambridge University Press.

Parkington, J.E., Poggenpoel, C., Halkett, D. and Hart, T. 2004. Initial observations on the Middle Stone Age coastal settlement in the western Cape, South Africa. In: Conrad, Nicholas J. (ed) *Settlement Dynamics of the Middle Palaeolithic and Middle Stone Age*. Vol. Kerns Verlag: Tübingen

Sinclair, S. 1980. The rural settlement of Verlorenvlei in historical perspective. Research Report No. 20. School of Environmental Studies, University of Cape Town.

The National Heritage Resources Act (No 25 of 1999): Republic of South Africa Government Gazette No. 19974. Cape Town.

Van Rijssen, W.J.J. 1984. South-western Cape rock art - who painted what? *South African Archaeological Bulletin* 39:125-129.