The Proposed Development of Romansbaai on Portions 2, 17, 18 of Farm Klipfonteyn 711, Romansbaai, Gansbaai, Western Cape Province

EXPLORATORY INVESTIGATION OF SHELL MIDDENS TO MAKE RECOMMENDATIONS FOR ARCHAEOLOGICAL MITIGATION

Prepared For:

Danger Point Ecological Development Company (Pty) Ltd
Heritage Western Cape
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(HWC Ref. No. HM/GANSBAAI/ROMANSBAAI/PTNS 2, 17, 18 OF FARM KLIPFONTEIN 711)

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Introduction

This report on the exploratory investigation of the Romansbaai shell middens is a follow up of the initial Phase 1 Archaeological Impact Assessment (AIA) carried out by the Archaeology Contracts Office based at the University of Cape Town (Hart 2006). We thought it unnecessary to repeat all the background information and detail comprehensively presented in the UCT AIA report. Ideally, the present report should be read in conjunction with the aforementioned document. While a few comments are made, we also exclude details concerning recommendations for the conservation, management and mitigation of heritage and archaeological resources as these are comprehensively covered by Hart (2006).

This report focuses on results of the fieldwork and test pit excavations carried out at Romansbaai (Figure 1) during July and August 2008 by a crew of the Centre for Heritage and Archaeological Resources Management (CHARM). The purpose of these operations was twofold. Firstly, to directly confirm and determine which areas of important heritage and archaeological value should be conserved in perpetuity. Secondly, to establish which locations and what volumes should be excavated under controlled, scientific conditions to maximise information retrieval from areas with valuable archaeological material due to be impacted by future construction and development.

Methodology

Based on the accruing experience of shell midden excavation in the Mossel Bay area and on the West Coast (for example see Nilssen et al 2006; Yates 2004), the following procedures and protocols were implemented. The excavation of Test Holes, also known as Shovel Tests, was carried out over a one-week period at Romansbaai. Each hole was approximately one meter square and excavated to a depth of between 1 and 2m according to the deposits

and matrix encountered (Plate 1). Where deemed necessary, and for closer examination, excavated materials were sieved through screens of 10, 3 and 1.5 mm mesh size. No excavated material was retained. The recording method consisted of a written description, digital photographs and a GPS fix of each test hole. Test holes, bar those to undergo further investigation, were backfilled on completion.

Summary of the series of test pits excavated during the exploratory investigation

Based on earlier work by the Archaeology Contracts Office (Hart 2006), a total of six archaeologically sensitive areas - referred to as Areas 1 through 6 - were identified (Figure 2). During the current phase of operations, a total of 49 test holes were excavated within the prescribed areas (Plate 1).

AREA 1

Area 1 is located close to the extreme western end of the property to be developed (Figure 2). The general topography is undulating dunes at the top of the slope leading down towards the sea. The area is covered by fairly dense coastal fynbos with low bushes and isolated patches of milk wood. There is a thin covering of mainly fragmented marine shell on the surface. The perimeter of Area 1 was denoted by four points (116 through 119 – datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2) :

116; S34.61160 E19.32782; 19 Y-030066 X3831554
117; S34.61167 E19.32746; 19 Y-030034 X3831562
118; S34.61115 E19.32707; 19 Y-029998 X3831503
119; S34.61109 E19.32731; 19 Y-030020 X3831497

A total of 10 test holes were excavated in the area (Holes 1 to 10 – Original No's 128 to 137 – coordinate data are available on request from the authors). The holes measured 1 x 1 metres and were excavated to depths

ranging between 1 and 2 metres. Excavation of the test holes revealed a fairly consistent picture (Plate 1). The top 30 to 40cm consisted of dark brown, humic sandy soils with heavy root growth and only occasional shell. At depths ranging between ± 45 and ± 80cm scattered shell was encountered. This was present in all the excavated holes but was never dense enough to form a consolidated shell lens. Three species of marine shellfish dominated the assemblage: Scutellastra argenvillei (limpet), Turbo sarmaticus (alikreukel) and Haliotis midae (perlemoen). Many of the specimens were large in size when not fragmented. There were also occasional whelks including Burnupena sp. The complete absence of mussel shells, specifically Perna perna, brown mussel, was intriguing and a notable departure from south coast shell middens in general.

The only artefacts recovered were quartzite beach cobbles (sometimes roughly flaked) and quartzite flakes. One quartzite upper grindstone and a single ostrich eggshell bead were also found.

AREA 2

Area 2 is situated to the east of Area 1 and is similar in aspect but slightly larger in extent (Figure 2). The vegetation is typical coastal fynbos with no trees except for occasional patches of milk wood thickets, usually in hollows. There is a thin covering of mainly fragmented marine shell on the surface. The perimeter of Area 2 was marked by four points (112 through 115 – datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2):

112; S34.61120 E19.32892; 19 Y-030168 X3831510
113; S34.61171 E19.32929; 19 Y-030201 X3831566
114; S34.61182 E19.32912; 19 Y-030186 X3831579
115; S34.61142 E19.32839; 19 Y-030119 X3831534

A total of 11 test holes were excavated in the area (Holes 11 to 21 – Original No's 138 to 143 & 145 to 149; coordinate data are available on request from the authors). The holes measured 1 x 1 metres and were excavated to

depths ranging between 110 and 180 cm. Dark brown, humic soil with roots persisted to a depth of almost 1 metre in some of the holes below which was sterile light yellow dune sand. The archaeological pattern was consistent in all the excavated holes, varying only in the amount of shell present. Beneath the surface there was occasional scattered marine shell to a depth of around 30cm. Shell lenses were encountered in all the holes at depths ranging from ± 40cm to ± 70 cm. These varied from fairly dense shell concentrations to general shell scatters. As in Area 1, three species dominated the assemblage: Scutellastra argenvillei (limpet), Turbo sarmaticus (alikreukel) and Haliotis midae (perlemoen). Many of the specimens were large in size when not fragmented. There were also occasional whelks (including Burnupena sp.), a single example of Donax serra (white mussel) and two Cymbula oculus shells.

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The only artefacts recovered were quartzite beach cobbles (sometimes roughly flaked) and quartzite flakes. Two pieces of mammal bone were recovered.

AREA 3

Area 3 is situated to the east of Area 2 and is similar in aspect but much smaller in extent (Figure 2). Area 3 is fairly flat apart form a small ridge with melkbos at the southern end. The vegetation is typical low bush coastal fynbos. There is far less marine shell on the surface, mainly restricted to a few isolated patches of fragmented shell. The perimeter of Area 3 was marked by two points (110 and 111 – datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2):

110; S34.61151 E19.32969; 19 Y-030238 X3831545
111; S34.61115 E19.32946; 19 Y-030217 X3831505

A total of 3 test holes were excavated in Area 3 (Holes 22, 23 & 25 – Original No's 150, 151 & 153; coordinate data are available on request from the

authors). The holes measured 1 x 1 metres and were excavated to depths ranging between 120 and 180cm.

A dark brown, organic soil with roots persisted to a depth of about 40cm below the surface. Below this level deposits comprised light brown sandy soil which gave way to light yellow dune sand at depths between 70 and 90cm. The quantity of marine shell varied considerably between the excavated holes. One of the holes was completely sterile with no shell at all, one hole contained minimal, widely separated shell fragments and the remaining holes contained only thin shell concentrations at depths of between 40 and 70cm.

The only artefactual materials included a few small to medium-sized quartzite cobbles associated with the shell deposits.

AREA 4

Area 4 is found to the east of Area 3 and is situated on the slope leading up to a high point overlooking the sea (Figure 2). The vegetation is typical coastal Fynbos with solid bush cover. There is very little marine shell visible on the surface. The perimeter of Area 4 was marked by two points (108 and 109 - datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2):

108; S34.61022 E19.32998; 19 Y-030265 X3831401
109; S34.61113 E19.32988; 19 Y-030256 X3831502

A total of 4 test holes were excavated in Area 4 (Holes 24 & 26, 27 & 28 – Original No's 152, 155, 157 & 158; coordinate data are available on request from the authors). The holes measured 1 x 1 metres in extent and were excavated to depths ranging between 110 and 180 cm.

The deposits consisted of light brown sandy soil. Two of the holes were completely sterile with no shell whatsoever. The remaining two holes had only scattered shell between depths of ± 40 to ± 70cm. Most of the shell was

fragmented with the only whole specimens being S. argenvillei (limpet) and Haliotis midae (perlemoen).

No artefacts were recovered from Area 4.

AREA 5

Area 5 is located next to the rough track leading from the hut next to the road to the point overlooking the sea (Figure 2). Typical coastal Fynbos vegetation with low bush cover dominates. Very little marine shell is to be seen on the surface apart from some fragments. The perimeter of Area 5 was marked by two points (106 and 107 datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2):

106; S34.61052 E19.33073; 19 Y-030334 X3831435
107; S34.61021 E19.32998; 19 Y-030265 X3831401

A total of 5 test holes were excavated in Area 5 (Holes 29 to 33 – Original No's 159 to 163 & 164; coordinate data are available on request from the authors). The holes measured 1 x 1 metres in area and were excavated to depths ranging between 110 and 160 cm.

The natural deposits consisted of light brown, sandy soil to a depth of ± 70cm below which was light yellow sand. One hole was sterile with no shell at all and one hole was virtually sterile. The remaining three holes had scattered shell to a depth of ± 70cm. There was a slight increase in the amount of shell between about 40 & 70cm including a few whole limpets (S. argenvillei).

The only artefacts recovered were a few quartzite beach cobbles (some roughly flaked) and a single, medium-sized, quartzite lower grindstone.

AREA 6

Area 6 is located at the north-western tip of the Romans Bay development and is by far the largest, as well as the richest, of the six designated archaeological areas (Figure 2). The vegetation is the typical low bush coastal Fynbos along with a dense grove of melkbos trees at the western end of the area. There is a diffuse scatter of marine shell over much of the area with a dense focus in the melkbos grove. The perimeter of Area 6 was marked by seven points (121 to 127 – datum WGS 84 - decimal degrees and SA Grid coordinates; see Figure 2):

121; S34.60444 E19.33479; 19 Y-030709 X3830762
122; S34.60430 E19.33497; 19 Y-030725 X3830746
123; S34.60444 E19.33529; 19 Y-030755 X3830761
124; S34.60433 E19.33537; 19 Y-030762 X3830749
125; S34.60346 E19.33418; 19 Y-030653 X3830653
126; S34.60372 E19.33358; 19 Y-030598 X3830681
127; S34.60437 E19.33358; 19 Y-030598 X3830754

A total of 16 test holes were excavated in Area 6 (Holes 34 to 49 – Original No's 166 to 172 & 174 to 182; coordinate data are available on request from the authors). The holes measured 1 x 1 meters in extent and were excavated to depths ranging between 120 and 180 cm.

The upper deposits were light brown organic soils, present to a depth of between about 80 to 100cm and then giving way to light yellow dune sand below.

The marine shell component varied considerably across Area 6. Some holes were completely sterile with no shell at all whilst the single hole excavated within the milk wood grove had continuous shell deposits from the surface to a depth of 140cm. The typical pattern, however, were thin to medium dense shell scatters at depths ranging from ± 40cm to ± 100cm. The dominant marine shellfish species recovered were Scutellastra argenvillei (limpet), Turbo sarmaticus (alikreukel) and Haliotis midae (perlemoen) along with a whelk

component including Burnupena sp. Much less common were Cymbula oculus and Diloma sinensis.

The most commonly encountered artefacts were small to medium-sized quartzite cobbles. Less common were quartzite flakes, quartz flakes and chunks. Also present were a few pieces of plain pottery as well as mammal bone.

Recommended mitigation of AREAS 1 through 6

Rationale

The archaeological deposits at Romansbaai appear to be of considerable importance (see Hart 2006) and it is highly desirable that sampling operations in affected areas be conducted prior to the commencement of any earth moving or construction work. The shell deposits and associated archaeological material were remarkably uniform over the whole area investigated varying only in the quantity of shell present. There was no consolidated shell midden located although scattered sub-surface shell was present over almost the entire area. The archaeological material and the limited range of shell species is intriguing and not typical for other areas investigated on the south coast (personal experience and references to be cited in future reports). It is possible that they may represent pastoral life styles rather than the more commonly encountered hunter-gatherer subsistence strategies.

AREA 1

No further mitigation is required for Area 1 apart from the monitoring programme described below.

AREA 2 (RB10)

The recommended mitigation for Area 2 is that an excavation should be conducted centered on one of the following: Holes 12, 13 or 14 (original No's

139, 140 & 141). The archaeological material is very similar over the whole of Area 2 but there were no dense shell concentrations. The three holes cited offer the best possibilities of shell recovery. Depending on how much shell is encountered the excavation should involve an area of between 6 m² and 9 m². The excavation should be conducted to a depth of 130cm below surface.

AREA 3

No further mitigation is required for Area 3 apart from the monitoring programme described below.

AREA 4

No further mitigation is required for Area 4 apart from the monitoring programme described below.

AREA 5

No further mitigation is required for Area 5 apart from the monitoring programme described below.

AREA 6 (RB15)

The recommended mitigation for Area 6 is that an excavation should be conducted centered on Hole 49 (original No. 182). Apart from the milk wood grove, which is to be conserved in perpetuity, there were no dense shell concentrations in Area 6. Hole 49 offers the best opportunity as it contained a reasonably dense shell scatter as well as evidence of a rudimentary hearth.

Depending on how much shell is encountered the excavation should involve an area of between 6 m² and 9 m². The excavation should be conducted to a depth of 140 cm below surface.

Conservation, Management and Mitigation – further comments

In support of and/or echoing some of Mr. Hart's recommendations for the conservation, management and mitigation of heritage and archaeological resources, please note the following (Hart 2006);

- The building operations should be allowed to commence once the excavations in Area 2 and Area 6 have been completed and a conservation and monitoring programme has been set in place.
- Monitoring operations would need to be carried out, by experienced personnel, during any construction or earth moving activities. If any important archaeological material, and especially any human remains, were to be uncovered the building operations must cease until the relevant remedial action has been completed. The likelihood of human burials being discovered is quite high, noting the fact that a human mandible was discovered on the surface near the milk wood grove in Area 6.
- Areas such as the milk wood grove in Area 6, which are to be preserved in perpetuity, must be cordoned off with hazard tape before and development takes and the developers made aware that this area is not to be impacted in any way. Monitoring of these areas needs to be particularly vigilant.

References (also see those in Hart 2006)

Hart, T. 2006. Phase 1 Archaeological Impact Assessment of a Proposed Development on Portions 2, 7, 18 of Farm Klipfonteyn 711, Romansbaai, Gansbaai, South Western Cape. Report prepared for Heritage Western Cape and Baumann and Winter Heritage Consultants on behalf of Pinnacle Point Developers (Pty) Ltd.

Nilssen, P., Yates, R. & Manhire, A. 2006. Exploratory investigation of shell middens. Erf 15387 and a portion of Erf 2001, Farm Boplaas, Pinnacle Point, Mossel Bay, Western Cape Province. Final report prepared for Heritage Western Cape and Pinnacle Point Resort (Pty) Ltd.

Yates, R. 2004. Archaeological Heritage Resources Assessment: Portion 37 of the Farm Uitkomst 23, Paternoster, Saldanha Bay Municipality, Western Cape Province. Report prepared for Deon Van Zyl Consultants.

Figures & Plates (on following pages)

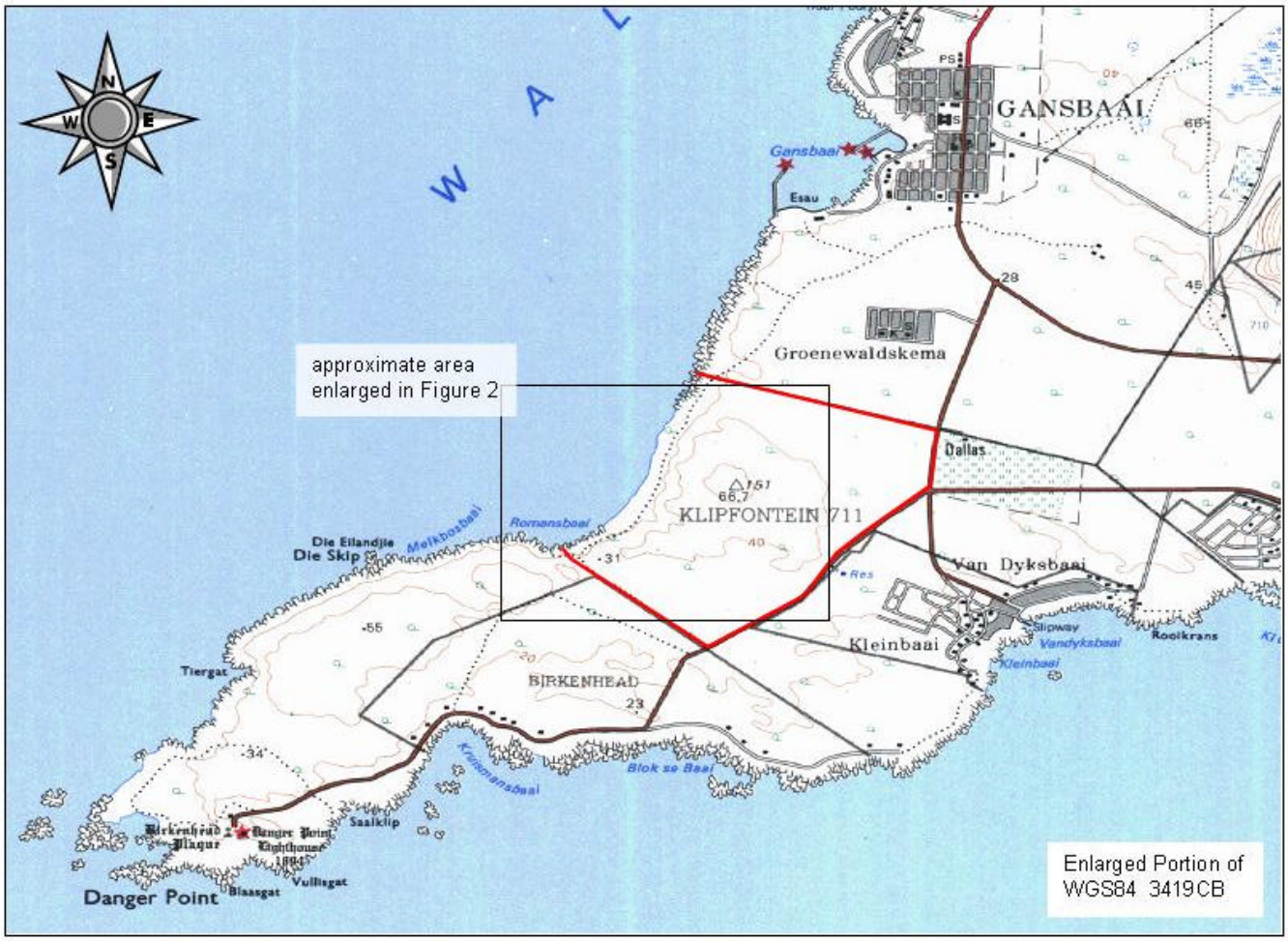

Figure 1. Location of study area – outlined with red - on the peninsula of Gansbaai and Danger Point, in Walker Bay and on the Cape South coast. Mapping information from the Chief Directorate: Surveys and Mapping.

Figure 2. Enlarged area as indicated in Figure 1 showing development layout of Romansbaai Beach & Fynbos Estate with overlay of the placement of exploratory excavation Areas 1 through 6 labeled in black and their extents indicated with red and blue outlines.

Plate 1. An example of a shovel test excavation in Area 1 with lower image as close-up. Handheld GPS included for scale.