## 6. RESULTS OF THE STUDY

#### 6.1 Portion 4 of the Farm Verlorenvlei No. 8

Shell midden deposits cover most of the area below the gravel road south of the Eilandia crayfish factory, where a single residential unit (Unit 5) is proposed (refer to Figure 2). The dune tops and back dune area particularly are covered in substantial volumes of marine shellfish (Figures 9-11). The area immediately behind the back dunes are also covered in thick vegetation, but shellfish is still visible in places. Several crude quartz and quartzite flakes and chunks were found in the back dune area. The shellfish deposits comprise the southern extent of the well-known Cape Deseada Midden (CDM), a large mega midden that extends north (just behind the west facing reefs of Baboon Point) to south over a distance of about 800 m. CDM has been dated to between 3000 and 2000 years ago (Jerardino 1996). A decorated pottery fragment found on the surface of the midden indicates that the site was also used after 2000 years ago (Webley et al 2011). One small fragment of coarse tempered pottery was also found in the back dune area in the proposed development area.

The slopes immediately below the gravel road (where the soils are a darker orange color) also contain shellfish, but these remains are very thinly dispersed and quite ephemeral and sporadic (Figures 12 & 13). A very low density scatter of quartz, quartzite and silcrete stone flakes were also found, as well as a larger fragment of thin-walled, undecorated clay pottery (Figure 14).

There are open areas of loose wind blown sands below the gravel road, where very little/no surface archaeological remains were recorded, and it is here that the archaeologist felt that a very simple, single dwelling, alongside a sandy track could possibly be constructed (refer to Figure 12).



Figure 9. Farm 8/4. View facing south east



Figure 10. Farm 8/4. View facing south



Figure 11. Farm 8/4. View facing south west





Figure 12. Farm 8/4. Possible footprint area for a simple, single dwelling. View facing south



Figure 14. Farm 8/4. Fragment of thin-walled pottery. Scale is in cm

Unit 4 is proposed above the gravel road in Farm 8/4 (refer to Figure 2). The proposed site, on soft loose, orange coloured sands is covered in natural veld (Figure 15), which according to the botanist Nick Helme (2006) has high conservation value. A few fragments of weathered shellfish (mainly limpets) occur on the soft sands alongside the road (Figures 16 & 17), where dune mole rat activity is extensive. It is possible that some of these dispersed scatters may date to a period from about 600 years ago, when according to Webley et al (2011), the site known as EBO (on Erf 65) was more frequently visited. Several isolated quartz chunks and flakes and one or two silcrete flakes were also counted in the wider surrounding area. A compelling scatter of shellfish (mainly limpets but also some Black Mussel), including a dispersed scatter of stone flakes, chunks and several small cores in quartz and silcrete were documented on soft sands among a cluster of large sandstone boulders on the upper slopes of Farm 8, about 50-60 m east of the gravel road (Figure 18).



Figure 15. Farm 8/4 above the gravel road view facing north



Figure 16. Farm 8/4 barely visible shellfish deposits above the road.



Figure 17. Farm 8/4 barely visible shellfish deposits above the road.



Figure 18. Scatter of shellfish and stone flakes occur around a cluster of sandstone boulders on the upper slopes.

#### 6.2 Erf 65

The proposed industrial facility (either a warehouse or factory) will be located within a footprint area that is already severely degraded and transformed (Figure 19). The intention is to build the facility alongside the gravel road (adjacent the existing Eilandia crayfish factory), within an area that is covered in large volumes of building rubble, rocks and debris. Shell midden and fossil shell/raised beach deposits have been identified on the property, alongside the gravel road and in the proposed footprint area (Kaplan 2009; Pether 2009), but these comprise mostly dispersed and patchy scatters (Figures 20 & 21). According to Webley et al (2011) a portion of CDM intrudes into Erf 65 alongside the gravel road, and a lens of shell has been documented by archaeologists in the compound rubbish tip indicating that there is archaeological material in a sub surface context.

The small shelter known as Elands Bay Open (Horwitz 1979) is found on Erf 65, but is located on the mid-upper slopes of the property. The earliest date for this site is around 3000 years ago (Webley et al 2001). A thin scatter of marine shellfish, pottery and stone flakes were also documented on the steep rocky slopes above EBO (Jerardino et al 2006; Kaplan 2009).

The remains of several ruined buildings and foundations that were built before 1948 and later used by migrant labourers between the 1960s and 1980s also occur on Erf 65 (refer to Figure 3) These structures/features are of historical significance (Jacobs 2009; Webley et al 2011). The large pile of rubble on the property almost certainly came from some of the now ruined and demolished buildings that clearly once covered a fairly large portion of the property. Open man holes and septic tanks, old foundations, a service road, and overhead lines are historically associated with these ruined and vandalised buildings.



Figure 19, Erf 65. View facing south



Figure 20. Erf 65. View facing north



Figure 21. Erf 65. View facing north east

# 6.3 Erf 66 (north)

A single dwelling (Unit 1) is proposed in Erf 66 (north). Hailstorm Midden is located on the property, but is a distance from the proposed footprint area. The site has been partially excavated by Horwitz (1979) and Noli (1988) and radiocarbon dated to about 900 years BP. It has been rated as having high local and national significance (Halkett 2005). The extent of the midden has been mapped by the archaeologist (Kaplan 2009) and a proposed buffer zone/ no go' development area recommended.

Shellfish deposits occur on the lower slopes alongside the gravel road, but these are quite dispersed and comprise mainly thin scatters of fragmented (weathered) limpets and black mussel (Figures 22-24) A few stone flakes, and two potsherds were also found on the lower slopes, where the eastern portion is very well vegetated. There are large patches of loose wind blown sands where only a few isolated fragments of shellfish were counted (Figure 25).

Extensive and fairly substantial volumes of shellfish, however, occur on the mid and upper slopes of the property (Figures 26-28). These deposits are very visible below the steep mountain slopes and close to the entrance of the railway tunnel. Relatively large numbers of lithics in quartz, quartzite, indurated shale and silcrete were counted, as well as a few fragments of ostrich eggshell. Fourteen fragments of mostly thick walled undecorated pottery were found, including one decorated body sherd (Figure 29). Several thin walled clay sherds were also found.



Figure 22. Erf 66 (north). View facing north east



Figure 23. Erf 66 (north). View facing north east



Figure 24. Erf 66 (north). View facing north



Figure 26. Erf 66 (north). Shell deposits on the mid slopes



Figure 28, Erf 66 (north). Shell deposits on the upper slopes



Figure 25. Erf 66 (north). View facing north



Figure 27. Erf 66 (north). Shell deposits on the upper slopes



Figure 29. Erf 66 (north). Pottery fragments. Scale is in cm

# 6.3.1 Erf 66 (south)

Two units (Unit 2 and Unit 3) are envisaged in Erf 66 south of the crayfish factory (refer to Figure 2). A few fragments of weathered shellfish (limpets) and a very low density scatter of LSA tools (n = 11), including one retouched silcrete flake and one MSA quartzite flake was encountered on the soft, loose sands between the gravel road and the uppers slopes of the property which is also partially disturbed by the excavations of several large rubbish pits (Figures 30 & 35). Barely visible scatters of shellfish occur alongside the road, but these are very thin and patchy (Figures 31-33). A scatter of weathered shellfish (limpet and some Black Mussel) and a relatively large number of LSA tools in quartz and silcrete were recorded among a cluster of large sandstone boulders on the upper sandy slopes of the property, that also includes Farm 8/4 (refer to Figure 34).



Figure 30. Erf 66 (south). View facing west



Figure 31. Erf 66 (south). View facing south west



Figure 32. Erf 66 (south). View facing south west



Figure 33. Erf 66 (south). View facing west

## 7. PREDICTED IMPACTS

#### 7.1 Portion 4 of the Farm Verlorenvlei No. 8

The probability is high that sensitive, vulnerable and threatened archaeological deposits will be destroyed by construction work and associated activities. Construction of Unit 5 below the gravel road in Portion 4 of Verlorenvlei Farm 8 is not supported (see also Kaplan 2007) as this will likely have a High negative impact on the archaeological site known as CDM that been rated as having high local (Grade 2 – Provincial Heritage Site) significance. Sub-surface archaeological deposits and unmarked human burials may also be intersected or exposed by excavations for foundations and services (access roads, trenches for water and power, and septic tanks, or soak a-ways).

Construction of Unit 4 above the road on Farm 8/4 will not impact much on surface archaeological deposits, but sub-surface material and unmarked burials may be uncovered or exposed during excavations for foundations and services. These deposits will require mitigation (i. e. sampling and dating) prior to implementation of the project.

#### 7.2 Erf 65

Despite the highly degraded nature of the receiving environment, construction of a light industrial facility on Erf 65 will likely impact on surface and sub-surface archaeological material. Surface archaeological deposits will therefore require mitigation (i.e. sampling and dating) prior to implementation of the proposed project. Unmarked human remains may also be intersected or uncovered during proposed construction activities.

# 7.3 Erf 66

If sensitively positioned, and the footprint area reduced, construction of Unit 1 on Erf 66 (north) will not have a significant impact on surface archaeological remains, but construction activities may impact on sub-surface deposits. Unmarked human burials may also be uncovered or exposed during excavation for services and foundations.

Issues of concern, however, are further damage (indirect impacts) to sensitive archaeological deposits on the higher slopes of Erf 66, including the very important Hailstorm Midden (Grade 2 PHS), as a result of more people walking over the property, and collecting tools and artefacts such as pottery, which is illegal in terms of the National Heritage Resources Act (No 25 of 1999).

The assessment has shown that the proposed construction of Units 2 and 3 in Erf 66 south of the crayfish factory will not have much of an impact on surface archaeological remains, but construction activities may impact on potentially important sub surface material. Unmarked human burial may also be uncovered or exposed during proposed construction activities.

## 8. CONCLUSIONS

While care has been taken to identify potential sites for development, the proposed construction of five residential dwellings and a light industrial facility on Erf 65, Erf 66, and Farm 8/4 will have a negative impact on the immediate and surrounding archaeological landscape, both during the construction phase, as well as over the long term operational phase of the development, where cumulative impacts are likely to occur.

Construction of Unit 5 below gravel road in Portion 4 of Verlorenvlei Farm 8 is not supported by the archaeologist as this will likely have a High negative impact on an archaeological site (CDM) that been rated as having high local (Grade 2 – Provincial Heritage Site) significance.

Buried shell middens and unmarked burials may also be intersected or exposed by bulk excavations for foundations and services (trenches and septic tanks, or soak a-ways).

It should also be noted that the Stage I HIA undertaken by Graham Jacobs (on behalf of the applicant) in 2007, recommended that no development should take place south of the Eilandia crayfish factory (in Verlorenvlei Farm 8) as this would impact negatively on the scenic Wilderness qualities and `sense of place' of Baboon Point. Proposed Units 2, 3 and 4 all fall within the 'No-Go Area for Future Development' as indicated on Design Informants Diagram 4 of the Stage 1 HIA report. In addition, the botanical assessment that was done by Nick Helme (in 2006), recommended no development in this area as well, due to its high conservation value. Known as Site C at the time, Verlorenvlei Farm 8 was subsequently screened out of the (original) Baboon Point development proposal.

# 9. RECOMMENDATIONS

Should the proposed development be allowed to proceed, the following recommendations are made:

- 1. Unit 5 (below the road on Farm Verlorenvlei 8/4) must be excluded from the development proposal, a recommendation that was made by the archaeologist in 2007.
- 2. The proposed footprint area for the residential units should be reduced (from  $\pm$  475 m²) to  $\pm$  350 m², including the stoep area. Reducing the size of the footprint area will impact less on potentially sensitive sub-surface archaeological deposits.
- 3. The residential units should be placed as close as possible to existing roads.
- 4. Sampling and dating, by way of test excavations of archaeological deposits in the proposed footprint areas must be undertaken prior to any construction activities commencing. Surface archaeological material must be examined by sub-surface testing to determine the extent of the archaeological occupation. It is recommended that an area of about 3-4 m² from each footprint area will be sufficient to obtain a representative sample of shell for dating and analysis. Should significant sub-surface archaeological deposits and cultural remains be encountered, further sampling may be recommended by the contracted archaeologist.

- 5. Monitoring of bulk earthworks (including excavations for all services) must be carried out by a professional archaeologist. Should any deposits be intersected or exposed during earthmoving operations, these may need to be sampled by the archaeologist. A monitoring programme must be drawn up by the archaeologist and presented to Heritage Western Cape for approval.
- 6. Should any unmarked human remains be disturbed, exposed or uncovered during excavations and earthworks, these should immediately be reported to the archaeologist (Jonathan Kaplan 082 321 0172), or Heritage Western Cape (Att: Ms Jenna Lavin or Mr Justin Bradfield 021 483 9685).

#### 10. REFERENCES

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Archaeological Study, Erf 65, Rem of Erf 66 & Portion 4 of Verlorenvlei Farm No. 8, Elands Bay

Cape. Archaeology Contracts Office, Department of Archaeology, University of Cape Town

# Appendix I

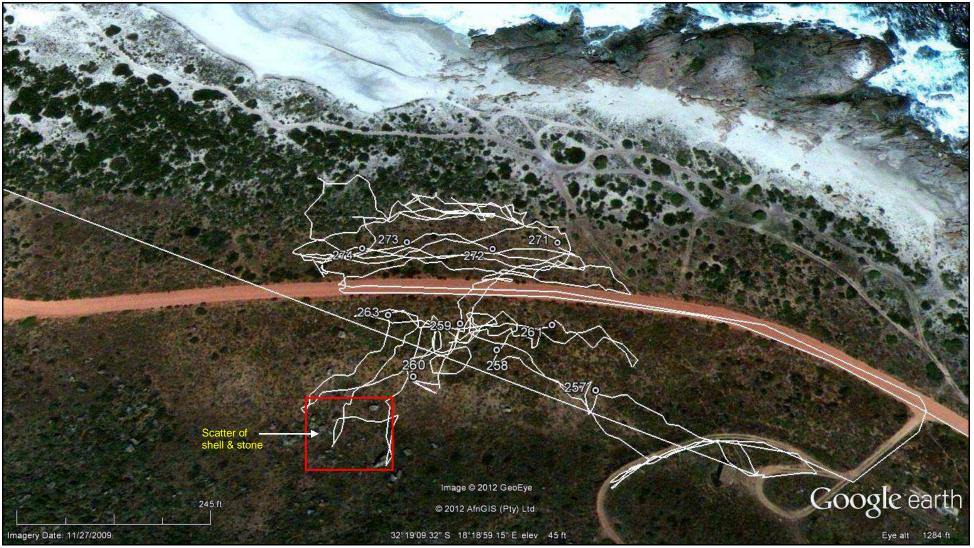


Figure 34. Track paths and potential development sites on Farm 8/4 and Erf 66 (south). One unit (Unit 5) is proposed below the road and three units (Units 2-4) units above the road. The waypoints indicate potential development footprint areas.

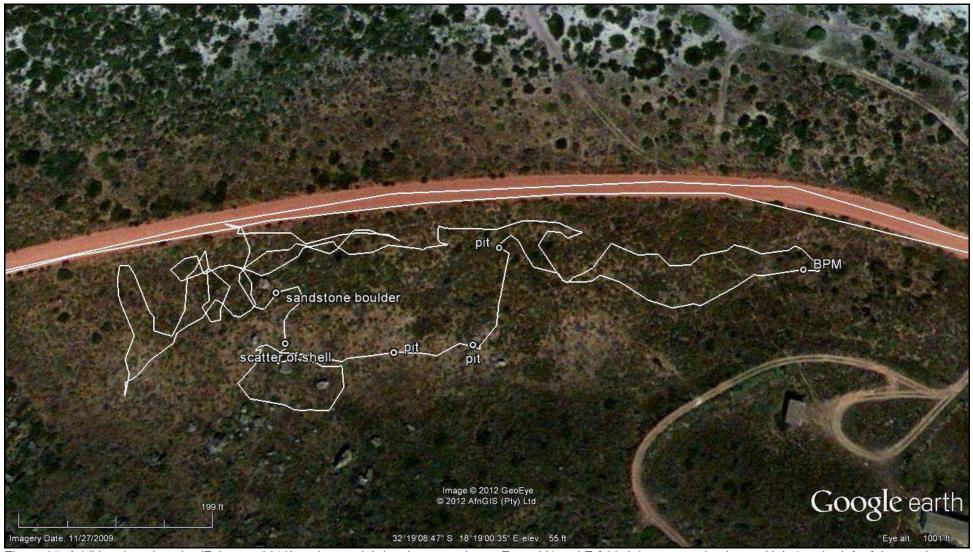


Figure 35. Additional track paths (February 2012) and potential development site on Farm 8/4 and Erf 66. It is proposed to locate Unit 4 to the left of the sandstone boulder, alongside the road.



Figure 36. Track path and illustration of potential development sites in Erf 66 (north). Only one dwelling (Unit 1) is planned in this area. The waypoints indicate potential development areas.



Figure 37. Track path and illustration of proposed site (256) for a light industrial facility in Erf 65.