

**ARCHAEOLOGICAL IMPACT ASSESSMENT  
PROPOSED HOUSING DEVELOPMENT ON PORTION 30  
OF THE FARM PLATTEBOSCH 485  
STILLBAAI**

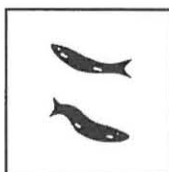
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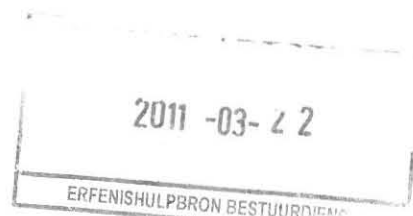
On behalf of:

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**FEBRUARY  
2011**

## **Executive summary**

The Agency for Cultural Resource Management was commissioned to undertake an Archaeological Impact Assessment for a proposed housing development on Farm 485/30 Plattebosch, in Still Bay in the Western Cape.

The total area of the property is about 52 ha in extent and is currently zoned Agriculture. Most of the development will take place in old, disturbed and transformed agricultural lands. About 32 ha of the property will be developed while the remainder of the property, which is very densely covered with Southern Coastal Thicket vegetation, including a large number of protected White Milkwood trees, will be retained and managed as a protected Conservation Area.

The proposed development will comprise of a number of residential opportunities, ranging from free-standing single residential erven to higher density residential options. The development will also include a clubhouse with facilities. A low density 'eco-estate' component is also envisaged which (where possible) will utilize a portion of the natural vegetation. Based on a 'Design for Nature' philosophy, it will have minimal impact on the natural environment. The total number of residential units will be about 470. The development will obtain access from Reservoir Street, with a possible future link road at a later stage.

The aim of the study is to locate and map archaeological sites 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 the impacts.

A 1-day, foot survey of the proposed development footprint was undertaken. Almost the entire proposed development area, comprising the older transformed agricultural lands is heavily overgrown with natural grasses, kweek, bush and scrub, resulting in poor archaeological visibility. There is hardly any surface stone covering the proposed development site. Dune mole rat activity is fairly extensive and the surface and underlying deposits comprise soft, loose, orange-brown coloured sands.

The following findings were made:

Nineteen Stone Age implements were documented during the study and were mapped using a hand held GPS unit. Of the 19 implements, seven were unequivocally Middle Stone Age flakes, five were (possibly MSA) broken/snapped flakes, and the rest were chunks. Two quartz chunks and one quartz chip were also found. Apart from one quartzite chunk found alongside a pile of rubble and the quartz chip, all the implements were found on or next to dune mole rat dumps in the southern portion of the property, indicating that the remains were brought to the surface from below ground. No organic remains such as bone, pottery or ostrich eggshell were found.

Given the very low numbers, and isolated and the widely dispersed nature of the occurrences, the archaeological remains have been rated as having low significance.

The results from the Archaeological Impact Assessment indicate that the proposed development of Plattebosch 485/30 will not impact negatively on important archaeological remains.

Earthmoving operations may expose or uncover more Stone Age tools below the top soils but indications are that the remains are not likely to be of major archaeological value.

A number of AIA's, as well as some archaeological mitigation has been done for several development applications in the surrounding area, and apart from a possible Herder site located close to the Gouriqua River by this archaeologist, the overall results suggest that no important archaeological occurrences occur in the immediate surrounding area.

Indications are that Farm 485/30 does not constitute a sensitive archaeological landscape.

Unmarked pre-colonial human remains may be uncovered during earthmoving operations, and any human remains uncovered during the construction phase must immediately be report to Heritage Western Cape.

With regard to the proposed development of the Farm 485/30 Plattebosch, the following recommendations are made:

- The project is deemed to be viable
- No immediate archaeological mitigation is required.
- Earthmoving operations must be monitored by a professional archaeologist. Monitoring need not be on a full time basis. An archaeological monitoring plan must be presented to Heritage Western Cape for approval. Monitoring may also be done by a trained Environmental Control Officer.
- Should any unmarked human remains be disturbed, exposed or uncovered during excavations and earthworks, these should immediately be reported to Heritage Western Cape (Ms Jenna Lavin or Ms Belinda Mutti 021 483 9685).

**Declaration of Independence:**

Mr Jonathan Kaplan is an independent specialist consultant who is in no way connected with the proponent, other than in the delivery of consulting services. He has an MA in Archaeology from the University of Cape Town and nearly 18 years of working experience in heritage throughout the western parts of South Africa. He is accredited with Principal Investigator status with the Association of Professional Archaeologists of Southern Africa and the Association of Heritage Assessment Practitioners.

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## 1. INTRODUCTION

Pieter Badenhorst Professional Services on behalf of Asla Devco (Pty) Ltd requested that the Agency for Cultural Resource Management conduct an Archaeological Impact Assessment for a proposed housing development on Portion 30 of Farm 485 Plattebosch in Still Bay West in the Western Cape (Figure 1).

The total area of the property is about 52 ha in extent and is currently zoned Agriculture and will have to be rezoned and subdivided in order for the proposed development activities to take place. Most of the development will take place in old, degraded and transformed agricultural lands. About 32 ha of the property will be developed while the remainder (about 20 ha, or 40%), which is very densely covered with Southern Coastal Thicket vegetation, will be retained and managed as a protected Conservation Area.

The proposed development will consist of a mix of residential land uses, ranging from high, medium and low density housing opportunities, a low density 'eco-estate' component and a clubhouse with facilities for residents. The total number of residential units will be about 470. The proposed 'eco-estate' will (where possible) utilize a portion of the natural vegetation in the south eastern portion of the farm. Based on a 'Design for Nature' philosophy, it will have minimal impact on the natural environment.

Associated infrastructure associated with project includes internal streets and engineering services such as water, power and sewerage. A possible future link road is envisaged at a later stage and did not form part of this study.

Although most of the proposed development area falls within the current urban edge, a structure plan amendment will be required in order to accommodate the project. It is important to point out that a number of recently approved and pending development applications within the vicinity of the subject property indicates that the land-use pattern in Still Bay West is undergoing urban transition.

The aim of the study is to locate and map archaeological heritage sites/remains 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.

A Section 38 (8) Notification of Intent to Develop (NID) has been completed by Heritage Consultant Ms Cindy Postlethwayt and will be submitted to Heritage Western Cape Impact Assessment Review Committee (IARCom) for comment.



Figure 1: Locality map

## 2. HERITAGE LEGISLATION

The National Heritage Resources Act (Act No. 25 of 1999) makes provision for a compulsory Heritage Impact Assessment (HIA) when an area exceeding 5000 m<sup>2</sup> is being developed. This is to determine if the area contains heritage sites and to take the necessary steps to ensure that they are not damaged or destroyed during development.

The NHRA provides protection for the following categories of heritage resources:

- Landscapes, cultural or natural (Section 3 (3))
- Buildings or structures older than 60 years (Section 34);
- Archaeological sites, palaeontological material and meteorites (Section 35);
- Burial grounds and graves (Section 36);
- Public monuments and memorials (Section 37);
- Living heritage (defined in the Act as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Section 2 (d) (xxi)).



### **3. TERMS OF REFERENCE**

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed site

### **4. DESCRIPTION OF THE AFFECTED ENVIRONMENT**

An aerial photograph of the proposed development site is illustrated in Figure 2.

A proposed site development plan is illustrated in Figure 3. Alternative 3 is the preferred Alternative, based on specialist studies, and public participation.

Still Bay is a coastal town situated approximately 300 km from Cape Town. The proposed development site is located in Still Bay west, adjacent to Reservoir Street and south of the Fisantekraal smallholding development. The development is set back from the coastline, where a number of known pre-colonial archaeological sites (shell middens) and historical 19<sup>th</sup> Century stone built fishtraps/visvuywers occur.

Most of the proposed 32 ha development footprint comprises old, degraded and transformed agricultural lands which have not been farmed for many years and is covered in vegetation, ranging from thick, knee high indigenous grasses, including Restio, dense Kikuyu grass, bush and thicket, with occasional Milkwood trees occurring in places. Dune mole rat activity is quite extensive. There is very little surface stone over the agricultural lands, restricted to small pieces of calcrete that have been brought to the surface by dune mole rats. There are no outcroppings of surface calcrete on the property. The surface deposits comprise loose, soft, wind blown sands. There are a few small footpaths and animal tracks that intersect the site. For reference and visual purposes, the development footprints have been divided into Portions; namely A-F (refer to Figures 2 & 4-18). Portion E alongside Reservoir Street is extremely well vegetated and impenetrable across most of the development footprint. The remaining (about 20 ha) of the property will be retained as a protected Conservation Area and is made up of extremely dense Coastal Thicket vegetation and large numbers of protected White Milkwood trees. There is one modern house on the property that is completely surrounded by dense vegetation, with access being via a grassed 2-track road leading from Reservoir Street (refer to Figure 2). Surrounding land use comprises vacant land, the Fisantekraal 'eco-estate' development, and residential housing to the east. The municipal reservoir is situated in the north west.





Figure 2. Google aerial photograph of the study site and the proposed development areas (A-H)



Figure 3. Alternative 3 Preferred site layout plan



Figure 4. Portion A view facing south west



Figure 5. Portion A view facing south east



Figure 6. Portion B view facing south east





Figure 7. Portion B view facing south west



Figure 8. Portion C view facing west



Figure 9. Portion C view facing south east



Figure 10. Portion D view facing north west



Figure 11. Portion D view facing west



Figure 12. Portion E view facing south east





Figure 13. Portion E view facing south west



Figure 14. Portion E view facing north



Figure 15. Portion F view facing east



Figure 16. Portion E view facing west



Figure 17. Portion F view facing west



Figure 18. Portion F view facing north east



## **5. STUDY APPROACH**

### **5.1 Method**

The approach followed in the archaeological study entailed a controlled and fairly detailed foot survey of most of the proposed development site which included all of the portions (A-G) of transformed agricultural lands. Parcel H, where it is intended to locate the low-density 'eco-estate' was only partially assessed but due to the thick vegetation cover, this search proved fruitless. The botanical report has indicated that some limited development opportunities may take place among the Milkwood trees that occur across the southern portion of the property (Lowe 2010). Overall, however, the survey was mostly unproductive due to the dense vegetation cover over most of the old agriculture lands. In addition, the Coastal Thicket across the northern portion was virtually impenetrable and was not searched, although some attempt was made to penetrate it at times.

A GPS track path of the archaeological survey was created (refer to Figure A in the Appendix). All archaeological occurrences were plotted in situ, using a Garmin Oregon 300 GPS unit set on map datum wgs 84. A spreadsheet of the waypoints and a description of each of the occurrences are also presented in Table 1 in the Appendix.

The site visit and assessment took place on the 23<sup>rd</sup> February, 2011.

A desktop study was undertaken.

### **5.2 Constraints and limitations**

The subject property, including most of the old agricultural lands (A-G) is covered in a range of vegetation types including bush, scrub and thick natural grasses and Kweek, resulting in very poor archaeological visibility. Portion E particularly is extremely densely vegetated. As indicated above, the Coastal Thicket areas (including Portion H) are virtually impenetrable.

### **5.3 Identification of potential risks**

- Bulk earthworks may uncover some important Stone Age material, but the probability of this occurring is likely to be low.
- Unmarked pre-colonial human burials may be uncovered in the unconsolidated sands in the old agricultural lands.

### **5.4 Results of the desk top study**

Large numbers of shell middens are known to occur on the coast at Still Bay (Hart 1991; Kaplan 1993, 2006; Orton 2005; Rudner 1968). The rocky shoreline around this area is rich in marine resources, particularly shellfish, and acted as foci that attracted Later Stone Age (LSA) hunter gatherer people. Shellfish meat was either cooked in pots or on open fires, but there is also evidence to suggest that meat was dried and smoked. Other marine resources exploited included sea birds, fish, crayfish, seal, dolphin, and even occasionally whales. These coastal shell middens were primarily shellfish processing sites.



Well-preserved *visvywers* (or tidal fishtraps) also occur in Still Bay. *Visvywers* typically consist of stone pile-walled 'dams' built in either gullies or low energy bays with an abundance of loose boulders and shingle. Archaeologists have proposed that the concept originated among LSA people who lived on the coast after 2000 years ago (Avery 1975; Goodwin 1946). 'Ownership' of some south coast *visvywers* has continued through to the historic period with families maintaining the devices and achieving catches through to the present day. However, recent research, that included archival work, and excavations of shell middens deposits close to fishtraps in Still Bay and Jongensfontein, for example, have shown that there is no contextual relationship between the two 'features' and that the origins of most of the fishtraps can be traced to the late 19<sup>th</sup> and early 20<sup>th</sup> Century (Hines 2008).

Further inland, low density scatters of Early and Middle Stone Age tools are also known to occur (De Kock 2007; Kaplan 2009, 2008). Yates (2007) also undertook a survey of Farm 485/51 situated about 1 km to the south of the subject property where low density scatters of Middle and Early Stone Age material was documented. Archaeological mitigation of a possible shell midden and a partly buried feature – possibly a grave covering, on the property failed to expose any *in-situ* buried archaeological deposits or any human remains or heritage related features (Nilssen 2008). The fossil bones of an elephant were also found on Fisantekraal, in Still Bay (De Kock 2007). These remains are currently housed in the Still Bay Museum.

A rare, possible pre-colonial Khoekhoe Herder camp was documented near the Goukou River during an AIA for a proposed housing development on Farm 485/73 (Kaplan 2009). Pottery, including a lug, stone flakes, bone and shellfish were some of the cultural and subsistence remains documented. Rock paintings comprising red and black finger dots has also been seen by this archaeologist in a kloof about 16 kms upstream on the southern bank of the Goukou River. Such forms of painting have long been associated with Herder groups. Historically, Khoekhoen 'tribes' reported to have been present in the Stillbaai region were called the Hessequa and Gouriqua (Deacon and Deacon 1999).

## 6. RESULTS OF THE STUDY

Nineteen, isolated archaeological occurrences were documented during the baseline study. All the occurrences have been mapped with a hand held GPS unit (refer to Figure A and Table 1 in the Appendix). Of the 19 stone tools found, seven are unequivocally Middle Stone Age (MSA) flakes, and five were likely MSA broken/snapped flakes, and the remainder were chunks. All these implements are in quartzite. Two quartz chunks (including one partially flaked) and one quartz chip were also found. Apart from one quartzite chunk (SB1) that was found next to a pile of rubble alongside the fence in the northern portion of the property and the quartz chip (SB2), all the other implements were found on or next to sandy, dune mole rat dumps in the old agricultural lands in the southern portion of the property, indicating that the remains were most likely brought to the surface by animal burrowing.

No evidence of any LSA (hunter-gatherer or Herder) campsites – such as shellfish, pottery, ostrich eggshell and stone flakes were found beneath the canopy of any of the large Milkwood trees targeted during the study. Shelters provided by Milkwood trees provided circumstances suitable for the settlement of prehistoric people. Such sites are rare, but have been documented in Hermanus (Kaplan 2007), Schulphoek (Kaplan

2004) and Sandbaai near Hawston (Kaplan 2011). Perhaps the distance of the site from the coast (about 2 kms) is the reason why no such remains were found.

A collection of some of the tools documented during the study is illustrated in Figures 19-23.

### 6.1 Significance of the archaeological remains

The very small numbers and isolated and widely dispersed nature of the occurrences, and the lack of any contextual information, means that the archaeological remains have been rated as having low significance.



Figure 19. SB3. Scale is in cm



Figure 22. SB11. Scale is in cm



Figure 20. SB5. Scale is in cm



Figure 23. SB18. Scale is in cm



Figure 21. SB8. Scale is in cm

## **7. IMPACT STATEMENT**

The AIA has shown that a proposed housing and 'eco-estate' development on Farm 485/30 Plattebosch in Stillbaai West will not impact negatively on important archaeological remains. Earthmoving operations may expose or uncover some Stone Age tools below the top soils in the agricultural lands, but indications are that the remains are not likely to be of archaeological value. It is maintained that the proposed development will therefore not have an impact of great significance on archaeological occurrences, as the numbers that were documented are small and their distribution very widespread.

It is worth noting that several AIA's, including archaeological mitigation in the surrounding area, has not yielded or uncovered any significant remains, apart from a possible Herder site that is located close to the Gouriqua River.

## **8. RECOMMENDATIONS**

With regard to the proposed development of Plattebosch 485/30 Stillbaai, the following recommendations are made

- The project is deemed to be viable
- No immediate archaeological mitigation is required.
- Earthmoving operations must be monitored by a professional archaeologist. Monitoring need not be on a full time basis. An archaeological monitoring plan must be presented to Heritage Western Cape for approval. Monitoring may also be done by a trained Environmental Control Officer.
- Should any unmarked human remains be disturbed, exposed or uncovered during excavations and earthworks, these should immediately be reported to Heritage Western Cape (Ms Jenna Lavin or Ms Belinda Mutti 021 483 9685).

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## Appendix

Site	Name of property	Lat/Long	Finds
SB (Stillbay)	Plattebosch 485/30 Stillbay		
SB1		S34 22.039 E21 23.815	Quartz chip
SB2		S34 22.015 E21 23.815	Quartzite chunk alongside pile of rubble
SB3		S34 22.318 E21 23.437	MSA quartzite flake
SB4		S34 22.375 E21 23.462	Quartz chunk/flake
SB5		S34 22.346 E21 23.467	MSA quartzite flake
SB6		S34 22.335 E21 23.465	Quartzite flake/chunk
SB7		S34 22.288 E21 23.478	Quartzite chunk
SB8		S34 22.297 E21 23.502	MSA Quartzite flake
SB9		S34 22.219 E21 23.819	Quartz chunk
SB10		S34 22.205 E21 23.814	Quartzite chunk
SB11		S34 22.183 E21 23.776	MSA quartzite flake
SB12		S34 22.226 E21 23.741	MSA quartzite flake/chunk
SB13		S34 22.275 E21 23.765	Broken quartzite flake/chunk
SB14		S34 22.323 E21 23.609	MSA quartzite flake
SB15		S34 22.345 E21 23.569	Quartzite flake/snapped blade
SB16		S34 22.411 E21 23.462	Quartzite chunk
SB17		S34 22.428 E21 23.446	Quartzite chunk
SB18		S34 22.453 E21 23.475	MSA quartzite side struck & utilized/retouched flake
SB19		S34 22.314 E21 23.690	MSA broken quartzite flake

Table 1. Spreadsheet of waypoints and archaeological observations





Figure A. Waypoints of archaeological occurrences and GPS track path