ARCHAEOLOGICAL IMPACT ASSESSMENT

PROPOSED HOUSING DEVELOPMENT OF SPLIT PORTION OF FARM PAAPEKUILFONTEIN 281- RE (SEAFRONT) STRUISBAAI CAPE AGULHAS MUNICIPALITY WESTERN CAPE

Assessment conducted under Section 38 (3) of the National Heritage Resource Act (No. 25 of 1999)

HWC CASE 23090406

Prepared for

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On behalf of:

Helemika Number 1 (Pty) Ltd

By:



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Executive summary

1. Introduction

ACRM was appointed by Mr Michael Wurbach to conduct a Phase 1 Archaeological Impact Assessment (or AIA) for a proposed housing development on the Farm Paapekuilfontein 281-Re (seafront) in Struisbaai, Cape Agulhas Municipality in the Overberg Region of the Western Cape.

Farm 281-Re (seafront) is located on the seaward side of Marine Drive, about midway between Struisbaai and L' Agulhas in the southern Cape. The property is small, measuring only 7095m² (or 0.71ha) in extent. The rocky shoreline in the area is a known sensitive archaeological landscape.

The AIA forms part of a Heritage Impact Assessment (HIA) that will be conducted by heritage practitioner Cindy Postlethwayt.

Lornay Consulting is the independent Environmental Assessment Practitioner (EAP) responsible for facilitating environmental authorization for the proposed development.

2. The development proposal

The proposal entails an application to rezone the split portion of Farm 281-Re (seafront), from Agriculture to Subdivisional Area in order to develop five single residential sites, one medium density residential site (for two units), internal streets and open space area. Engineering services (water, sewerage & electricity) will also be provided.

3. Aim of the study

The overall purpose of the study is to assess the sensitivity of archaeological heritage resources in the proposed development site, and to determine potential impacts (of the development) on such resources.

4. Constraints and limitations

There were no constraints or limitations associated with the study. Access to the proposed development alongside Marine Drive was unrestricted.

5. Results

A field assessment was conducted by ACRM on 07 September 2023, in which the observations were made:

• Traces of weathered marine shellfish (mostly *Turbo sarmaticus /* alikreukel) and a few chunks and broken (beach) cobbles were recorded in the coastal footpath that runs alongside the rocky shoreline, and in a few open patches of windblown sand on the vegetated slopes. No organic remains such as pottery, bone or ostrich eggshell were found.

5.1 Grading of the remains

The thin traces of shellfish, very few artefactual remains, and no visible cultural items such as pottery or ostrich eggshell, means that the archaeological remains have been graded as having Low (IIIC) local significance

6. Anticipated impacts

Buried shell middens, and unmarked Khoisan remains may be uncovered or intercepted during excavations for building foundations and services, but the probability of this occurring is rated as being Low.

7. Conclusion

A small housing development on Farm 281-Re (seafront) Struisbaai does not pose a significant threat to local archaeological heritage resources.

Excavations for building foundations and services may uncover buried archaeological deposits.

8. Recommendations

Regarding a proposed housing project on Farm 281-Re (seafront) in Struisbaai, the following recommendations are made

1. No archaeological mitigation is needed prior to construction excavations occurring.

2. Monitoring of excavations for building foundations and services (water, electricity, sewerage, stormwater), must be conducted by a professional archaeologist.

3. If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.

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1. INTRODUCTION

ACRM was appointed by Mr Michale Wurbach on behalf of Helemika Number 1 (Pty) Ltd to conduct a Phase 1 Archaeological Impact Assessment (AIA) for a proposed housing development on the Farm Paapekuilfontein 281- Re (seafront) in Struisbaai, Cape Agulhas Municipality in the Overberg region of the Western Cape (Figures 1 & 2).

Farm 281-Re (seafront) is located on the seaward side of Marine Drive, about midway between Struisbaai and L' Agulhas in the southern Cape. The property is small, measuring only 7095m² (or 0.71ha) in extent. The rocky shoreline in the area is a known sensitive archaeological landscape (Kaplan 1993).

The AIA forms part of a Heritage Impact Assessment (HIA) that will be conducted by heritage practitioner Cindy Postlethwayt.

Lornay Consulting is the independent Environmental Assessment Practitioner (EAP) responsible for facilitating environmental authorization for the proposed development.



Figure 1. Locality Map (3420CA - CC Bredasdorp). Red polygon shows the location of the study site

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Figure 2. Google satellite map indicting the study site (yellow pin) between Struisbaai & Cape Agulhas

2. THE DEVELOPMENT PROPOSAL

The proposal entails an application to rezone the split portion of Farm 281- Re (seafront), from Agriculture to Subdivisional Area in order to develop five single residential sites, one medium density residential site (for two units), internal streets and open space area. Engineering services (water, sewerage & electricity) will also be provided.

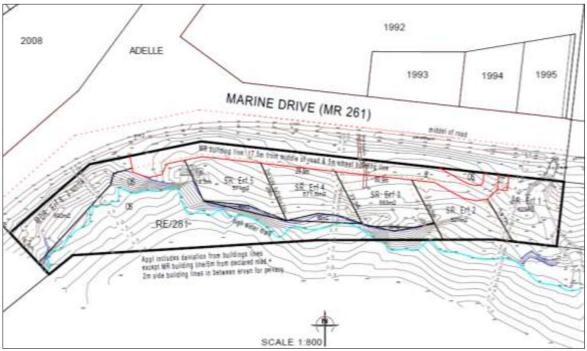


Figure 3. Proposed Site Development Plan

3. 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 m² 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.

4. THE STUDY SITE

Farm 281 - Re (seafront) is located on the seaward side (south) of Marine Drive about midway between Struisbaai and L' Agulhas in the southern Cape (Figure 3). A small sandy beach occupies the western end of the proposed development site. A narrow coastal footpath runs alongside the length of the rocky shoreline, till an informal parking area at the eastern end. Several informal footpaths leading onto the site from Marine Drive have also been created. The rest of the site is quite densely vegetated (Figures 4 & 5), with some disturbance having also taken place. A stormwater outlet is located in the north eastern corner alongside the main road, which has created visible erosion and a deep donga (Figure 6).



Figure 3. Google Earth satellite map of the proposed development site (red polygon) on the seaward side of Marine Drive in Struisbaai.



Figure 4. View of the site facing east. Note the small beach in the foreground of the plate.



Figure 5. View of the site facing west, with the stormwater outlet in the foreground, alongside Marine Drive



Figure 6. Deep donga in the foreground created by the stormwater outlet. View facing southwest.

5. STUDY APPROACH

5.1 Method

A field assessment of the proposed housing development site was conducted by ACRM on 07 September 2023. Identified heritage resources were recorded using a hand-held GPS unit set on the map datum WGS 84. A desk top study was also undertaken to describe the heritage context of the surrounding area.

5.2 Constraints and limitations

There were no constraints associated with the study.

5.3 Identification of potential risks

Buried shell middens, and unmarked Khoisan remains may be uncovered or intercepted during excavations for building foundations and services but the probability of this occurring, is considered to be Low.

6. ARCHAEOLOGICAL CONTEXT

Studies have shown that people have occupied the Agulhas region for well over a million years. Middle Stone Age (MSA) and Early Stone Age (ESA) tools occur locally, while large numbers of Later Stone Age (LSA) shell middens have been recorded in Cape Agulhas, Suiderstrand and Agulhas National Park (Hall 1984; Kaplan 1993, 1997a, b, 1998a, b, 1999a, b, 2001, 2003a, 2006, 2007; Nilssen 2004).

A search of SAHRIS¹ has shown that a handful of commercial CRM surveys have been conducted in Struisbaai. The rocky shoreline between Struisbaai and Cape Agulhas is rich in archaeological resources such as shell middens (Kaplan 2008, 1993), while few remains have been recorded north of the village, where the shoreline forms a long sandy beach. Traces of shellfish have been recorded in the back dune area near Die Plaat, and on some limestone bedrock north of the Langezandt housing development (Hart & Halkett 1995; Kaplan 2003b). A few isolated flakes have also been recorded in Struisbaai North, and near the Caravan Park (Kaplan 2020, 2016a,b), while isolated stone flakes and some pottery was recorded inland of the coast at Andrews Air Field (Kaplan 2021). Colonial period middens associated with the historic settlement at Hotagterklip alongside as one enters Struisbaai have also been recorded (Hart & Halkett 1995).

Cape Agulhas is, probably best known for the large number of well-preserved tidal fish traps/visvywers that occur in the intertidal zone, which are visible at low tide, and on Google Earth satellite imagery. For many years archaeologists have assumed that these stone walled `dams' built in gullies or low energy bays originated among LSA hunter-gatherers who lived on the coast after 3000 years ago (Avery 1975; Goodwin 1946; Gribble 2005). But research conducted by the archaeologist Philip Hine (2008), has shown that most, if not all of these stone built fish traps, were constructed by poor whites (b*ywoners*) in the late 1800s and early 1900s, who rented properties from absent farmers at the time.

7. RESULTS

A few traces of archaeological heritage resources were recorded during the field study (Figure 7 & Table 1).

Fragments of weathered marine shellfish (mostly *Turbo sarmaticus* / alikreukel & some limpet / *Scutellastra longicosta*), a flaked quartz chunk, and a limestone flake (Sites 152-182) were recorded in the coastal footpath that runs alongside the rocky shoreline (Figures 8-10).

Traces of shellfish (*Turbo sarmaticus*) were also recorded in a few open patches of windblown sand on the vegetated slopes above the coastal track (Sites 192, 222 & 212) (Figures 11 & 12).

A few fragments of weathered shellfish and several broken beach cobbles were recorded on the elevated rocky shelf (Site 142) at the end of the small sandy beach (Figure 13).

A few isolated fragments of shellfish were noted in the side wall of the sandy donga (refer to Figure 6), but no anthropogenic remains were noted.

No organic remains such as pottery, bone or ostrich eggshell were found.

7.1 Grading of the archaeological remains

The thin traces of shellfish, very few artefactual remains, and no visible cultural items such as pottery means that the archaeological remains have been graded as having Low (IIIC) local significance

¹ South African Heritage Resource Agency Content Management System



Figure 7. Waypoints of archaeological remains and Track paths in blue

GPS	Name of	Lat/long	Description of finds	Grading	Mitigation
Point	Farm		·	Ū	Ū
	Farm 281 –				
	Re seafront				
142		S34° 48.819' E20° 01.841'	A few weathered fragments of shellfish & several broken cobbles and chunks on rock ledge	IIIC	None required
152		S34° 48.823' E20° 01.869'	Traces of weathered shellfish alongside coastal foot path	IIIC	None required
162		S34° 48.823' E20° 01.875'	Traces of weathered shellfish, + flaked quartz chunk alongside coastal footpath	IIIC	None required
172		S34° 48.824' E20° 01.881'	Traces of weathered shellfish on sandy slope	IIIC	None required
182		S34° 48.826' E20° 01.883'	A few fragments of shellfish + limestone flake alongside coastal footpath	IIIC	None required
192		S34° 48.820' E20° 01.909'	A few fragments of weathered shellfish on sandy slope	IIIC	None required
222		S34° 48.823' E20° 01.938'	A few fragments of weathered shellfish on eroded sandy slope	IIIC	None required
212		S34° 48.830' E20° 01.958'	Fragments of shellfish on patch of sand outside footprint area	IIIC	None required

Table 1. Spreadsheet of waypoints and description of archaeological resources



Figure 8. Site 152. View facing east



Figure 9. Site 162. View facing east.



Figure 10. Site 182. View facing east.



Figure 11. Site 222.



Figure 12. Site 212.



Figure 13. Site 212.

8. IMPACT STATEMENT

The results of the study indicate that, a small housing development on Farm - Re 281 (seafront) in Struisbaai, will likely not impact on important Stone Age archaeological heritage resources.

9. CONCLUSION

Indications are that a proposed housing development on re Farm 218 – Re (seafront) does not pose a significant threat to local Stone Age archaeological resources.

Therefore, there are no objections, on archaeological grounds, to the development proceeding.

10. RECOMMENDATIONS

Regarding a proposed housing project on Farm - Re 281 (seafront) Struisbaai, the following recommendations are made

1. No archaeological mitigation is needed prior to construction excavations commencing.

2. Archaeological monitoring of building foundations and services (e. g. water, electricity, sewerage, stormwater) must be conducted by a professional archaeologist

3. If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.

The above recommendations must be incorporated into the Environmental Management Plan (EMP) for the proposed development.

11. REFERENCES

Avery, G. 1975. Discussion on the age and use of tidal fish traps (visvywers). South African Archaeological Bulletin 30:105-113.

Avery, G. & Avery M. n. d. Survey for Archaeological Occurrences along proposed new Eskom 66kv line Between Bredasdorp and Struisbaai. Report prepared for SHE Cape Environmental cc. Iziko: SA Museum, Cape Town

Goodwin, A.J.H. 1946. Prehistoric fishing methods in South Africa. Antiquity 20:1-8.

Gribble, J. 2005. The ocean basket: precolonial fish traps on Cape south coast. The Digging Stick 22: 1-4

Hall, M. 1984. The Late Stone Age in the Cape Agulhas area: a distributional study. Part One: Final report to the Human Sciences Research Council. Spatial Archaeology Research Unit, Department of Archaeology, University of Cape Town.

Hart, T. & Halkett, D. 1995. Phase 1 archaeological investigation of Erven 940 and 922 Struisbaai. Report prepared for VKE Consulting Engineers. ACO, Department of Archaeology, University of Cape Town.

Hine, P. J. 2008. Stone-walled tidal fish traps: An archaeological and archival investigation. Unpublished MA thesis. Department of Archaeology, University of Cape Town.

Kaplan, 2020. Notice of Intent to Develop, including site visit. Proposed mixed use development on Erf 1811, Struisbaai, Western Cape. HWC Case 20032405. ACRM Cape Town.

2018. Heritage Impact Assessment, proposed new lodges and associated infrastructure at Bloukrans, Hamerkop and Mosselbank, De Hoop Nature Reserve. Report prepared for SLR Consulting. ACRM, Cape Town

Kaplan, 2016a. Notice of Intent to Develop, including site visit. Proposed extension of the Struisbaai Noord Caravan Park, Erf 856 Struisbaai, Western Cape. HWC Case 19120908. ACRM, Cape Town

Kaplan, 2016b. Notice of Intent to Develop, including site visit. Proposed Struisbaai Noord Cemetery, Erf 856 Struisbaai, Western Cape. HWC Case 19120907. ACRM, Cape Town.

Kaplan, J. 2008. Phase 1 Archaeological Impact Assessment proposed sewerage scheme for Struisbaai & Cape Agulhas. Report prepared for Enviroafrica. ACRM, Riebeek West

Kaplan, J. 2007. A Phase 1 Archaeological Impact Assessment of a proposed rest camp facility at Pietie se Punt Agulhas National Park. Report prepared for Triviron. Agency for Cultural Resource Management.

Kaplan, J. 2006. Agulhas Lighthouse Precinct development. Report prepared for Settlement Planning Services. Agency for Cultural Resource Management.

Kaplan, J. 2003a. A Phase 1 Archaeological Impact Assessment of a proposed rest camp facility at Pietie se Punt Agulhas National Park. Report prepared for SRK Consulting Engineers and Scientists. Agency for Cultural Resource Management.

Kaplan, J. 2003b. Phase 1 Archaeological Impact Assessment, Remainder Erf 922 Struisbaai. Report prepared for Withers Environmental Consultants. ACRM, Riebeek West

Kaplan, J. 2001. Archaeological study proposed regional solid waste disposal site for Struisbaai, L'Agulhas and Suiderstrand. Report prepared for Crowther Campbell & Associates. ACRM, Riebeek West

Kaplan, J. 1999a. Archaeological study, Paapekuilsfontein 281. Report prepared for Doug Jefferys Environmental Consultant. Agency for Cultural Resource Management.

Kaplan, J. 1999b. Archaeological study, Erf 193, Suiderstrand. Report prepared for Cape Coastal Development (Pty) Ltd. Agency for Cultural Resource Management.

Kaplan, J. 1998a. Archaeological study, Paapekuilsfontein 281 . Report prepared for Lourens Groep L'Agulhas. Agency for Cultural Resource Management.

Kaplan, J. 1998b. Archaeological study, Portion 10 & 57, Paapekuilsfontein 281, Suiderstrand. Report prepared for Annuke de Kock Environmental Consultant. Agency for Cultural Resource Management.

Kaplan, J. 1997. Archaeological study, Erf 194, 195 & 196, Suiderstrand. Report prepared for Annuke de Kock Environmental Consultant. Agency for Cultural Resource Management.

Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponto do Ouro. Report prepared for the Department of Environmental Affairs and Tourism. Agency for Cultural Resource Management. ACRM, Riebeek West

Nilssen, P. 2004. L'Agulhas Links Golf Resort: Erven 678, 679, 680 and 1251, Agulhas Western Cape Province. Archaeological Heritage Impact Assessment based on foot survey and shovel test excavations. Draft report prepared for Doug Jeffery Environmental Consultants. Mossel Bay Archaeology Project.