

Archaeological Heritage Scoping Survey

Farm 330/1 Portion 4 & Farm 330/1 Restant (owned by Stanvliet Diskresionere Familie Trust and Pool Landgoed Trust respectively), Herold's Bay, George, Western Cape Province: Proposed Joint Residential Development

prepared for
Stanvliet Diskresionere Familie Trust and Pool Landgoed Trust

by
Peter Nilssen



C A R M
PO Box 176
Great Brak River
6525

Executive Summary

Due to mostly impenetrable vegetation and very low archaeological visibility in the immediate surroundings of the study area an archaeological impact assessment cannot be conducted at this time. Hence this study is presented as an archaeological heritage scoping survey.

Archaeological traces along a hiking trail in the vicinity of the study area, however, indicate that the study area is likely to be archaeologically sensitive.

Residential developments bordering on the study area are already underway. Subsequently, it would be unreasonable to deny the development proposed in the area reported on here. If the development is approved, then it is recommended that vegetation clearing activities associated with development be conducted by hand and not by mechanical means and that these activities be monitored by a professional archaeologist on a full-time basis. If archaeological materials are exposed through vegetation clearing or earthmoving activities, then they must be dealt with in accordance with the National Heritage Resources Act (No. 25 of 1999) and at the expense of the developer(s) and/or property owner(s).

Table of Contents

<u>Content</u>	<u>Page</u>
Executive Summary	2
1. Introduction	4
1.1. Background	4
1.2. Purpose of the Study	4
1.3. Study Area	4
1.4. Approach to the Study	5
2. Results	5
3. Sources of Risk, Impact Identification and Assessment	6
4. Required and Recommended Mitigation Measures.....	7
Figures and Plates	8

1. Introduction

1.1 Background

Due to a proposed joint residential development on Farm 330/1 Portion 4 & Farm 330/1 Restant (owned by Stanvliet Diskresionere Familie Trust and Pool Landgoed Trust respectively;), Herold's Bay, George, Western Cape Province (Figures 1 & 2 and Plate 1), Ms. Ruida Stanvliet - representing Stanvliet Diskresionere Familie Trust - appointed CARM to undertake an Archaeological Impact Assessment (AIA).

The proposal for development is as follows (see layout plan in Figure 3):

- The development comprises 8 single residential Erven, each of approximately 1500 m².
- The footprint of the houses will be 350 m² with an 8 m height restriction - not full double storey.
- Included are access roads and services.

1.2. Purpose and Scope of the Study

Objectives of the Archaeological Impact Assessment are:

- To assess the study area for traces of archaeological materials;
- To identify options for archaeological mitigation in order to minimize potential negative impacts; and
- To make recommendations for archaeological mitigation.

Terms of Reference (ToR):

- a) Locate boundaries of the study area.
- b) Conduct a foot survey of the study area to identify archaeological resources.
- c) Assess the impact of the proposed development on archaeological materials.
- d) Recommend mitigation measures where necessary.
- e) Prepare and submit a report to Ms. Ruida Stanvliet - representing Stanvliet Diskresionere Familie Trust - that meets standards required by Heritage Western Cape in terms of the National Heritage Resources Act, No. 25 of 1999.

1.3 Study Area

The proposed residential development is situated on Farm 330/1 Portion 4 & Farm 330/1 Restant, Herold's Bay, George, Western Cape Province (Figures 1 & 2 and Plate 1). The study area was accessed on foot from the residential area of Herold's Bay Heights, which is directly north of the study area (see origin of walk track in Plate 2). The study area is approximately 5 hectares in extent, and its boundary points - rounded to the nearest meter - are as follows (map datum WGS 84; see Plate 2):

- A, S34.05373 E22.39490 (decimal degrees); 23 Y0055867 X3769786 (SA Grid)
- B, S34.05388 E22.39629 (decimal degrees); 23 Y0055738 X3769802 (SA Grid)
- C, S34.05587 E22.39597 (decimal degrees); 23 Y0055767 X3770023 (SA Grid)
- D, S34.05578 E22.39456 (decimal degrees); 23 Y0055897 X3770014 (SA Grid)

While the study area consists of gentle sloping hills, the topography to the west and south consists of steep slopes and cliffs (Plate 3). The vegetation is mostly dense Fynbos shrub and thicket – though aliens are present - making the study area very difficult to access. Dense vegetation cover renders archaeological visibility very low to zero. Un-vegetated surfaces in and next to a nearby hiking trail were visible and allow at least a tentative statement of the potential archaeological sensitivity of the study area.

Surface sediments in the area consist predominantly of medium to dark brown humic sands underlain by fragmented Table Mountain Sandstone (TMS). No rock shelters or caves were seen.

1.4 Approach to the Study

Archaeological impact assessments in the broader area including - Herold's Bay and George - revealed that the coastal zone is archaeologically sensitive bearing materials of Early, Middle and Later Stone Age origin as well as the pottery/herder period (personal communication with David Halkett, Tim Hart, Royden Yates, Jonathan Kaplan and Belinda Mutti and own experience) No archaeological work was conducted in the immediate vicinity of the study area.

Ms. Ruida Stanvliet - representing Stanvliet Diskresionere Familie Trust - provided aerial photos, a layout plan and surveyor's data indicating the location and extent of the study area, which was accessed on 19 January 2007 by vehicle and then on foot (see Plate 2).

Due to mostly impenetrable vegetation cover, the study area was near impossible to access. Additionally, dense vegetation cover made archaeological visibility inadequate an archaeological impact assessment. This - and a close encounter with an agitated puff adder - persuaded me that further attempts to access the study area were futile. The walk track - as fixed by hand held GPS - shows that the study area was skirted, but not entered (Plate 2). To the south of the study area a hiking trail and other pedestrian tracks were encountered and their un-vegetated surfaces were inspected for archaeological traces. Pedestrian tracks underlie walk tracks shown in green in Plate 2 though some pedestrian paths are visible in the lower right part of the image. GPS fixes were taken of the area covered as well as locations of archaeological occurrences (Plate 2). Dictated notes and a high quality digital photographic record were also made (available from author). Due to severe limitations an AIA could not be conducted and therefore the study is reported here as an Archaeological Heritage Scoping Survey. Inspected ground surfaces provide enough information for at least some comment concerning the potential archaeological sensitivity of the study area.

2. Results

Plate 2 shows the walk trail as fixed with a hand held GPS during the foot survey. Note that small, inconsequential parts of the walk trail in Plate 2 is edited according to aerial photographic information when compared with the trail data as generated by hand held GPS (full data set available from author). This is because GPS reception was lost in a few places. In just over 2 hours of survey a distance of 2.8 km was walked covering an area of around 1 hectare. Due to dense vegetation cover a much smaller area was archaeologically visible.

In the inspected area, no traces of colonial archaeological resources were seen. No rock shelters or caves were seen though these may be obscured by dense vegetation on the steep slopes and cliffs to the south and west of the study area (Plate 3). It is unlikely that rock shelters or caves occur in the gentle slopes of the study area.

Low density scatters of stone artifacts were recorded at archaeological occurrences labeled 1 through 3 in Plate 2. Coordinate data for these occurrences are as follows (map datum WGS 84; see Plate 2):

- 1, S34.05653 E22.39628 (decimal degrees); 23 Y0055738 X3770097 (SA Grid)
- 2, S34.05660 E22.39565 (decimal degrees); 23 Y0055796 X3770105 (SA Grid)
- 3, S34.05633 E22.39445 (decimal degrees); 23 Y0055907 X3770075 (SA Grid)

Though densities of stone artifacts vary a bit across space, there was a nearly continual low to very low density scatter of Stone Age artifacts connecting localities 1 through 3. The archaeological materials consist mostly of stone artifacts of Later Stone Age origin though a few pieces may be of Middle Stone Age origin. Various shaped flakes in quartzite dominate the scatters while those in milky quartz and silcrete are few and rare respectively. No formal stone tools were seen. Materials occur on eroded surfaces associated with pedestrian paths, but small stretches of sedimentary profiles were inspected on the edge of paths. These showed that stone tools are dispersed very sparsely in the humic sands and mixed in among the broken up pieces of TMS (Plate 4). This indicates that the observed scatters are in secondary context and thus lag deposits. If as yet unexposed, subsurface stone artifacts occur in the study area, then they are likely in primary context, which would make the study area archaeologically sensitive.

Although the study area could not be inspected for archaeological traces, the above results indicate that the area does contain traces of Stone Age artifacts. It is likely that vegetation clearing and/or earth moving activities associated with development will reveal the presence of currently invisible and/or subsurface archaeological materials. At this time it is not possible to speculate as to the nature and significance of such materials.

3. Sources of Risk, Impact Identification and Assessment

- The proposed residential development as outlined in 1.1 above will involve vegetation clearing and earthmoving activities that could have a permanent and negative impact on archaeological resources. The presence of archaeological traces of Stone Age origin in the immediate vicinity of the site earmarked for development requires that vegetation clearing and earthmoving activities associated with development be conducted by hand and that these activities be monitored by a professional archaeologist on a full-time basis.

Table 1 summarizes the potential impact of the proposed development on archaeological heritage resources with and without mitigation.

Table 1. Potential Impact on and Loss of Archaeological Heritage Resources

	With Mitigation	Without Mitigation
Extent	Local	Local
Duration	Permanent	Permanent
Intensity	Low	Unknown
Probability	Medium to Low	Medium to High
Significance	Medium to Low	Unknown
Status	Medium to Low	Unknown
Confidence	High	High

4. Required and Recommended Mitigation Measures

The following measures are required:

- In the event that vegetation clearing and earthmoving activities expose archaeological materials, such activities must be halted and Heritage Western Cape must be notified immediately.
- Unmarked human burials may occur anywhere in the landscape and are often exposed during earthmoving activities. Human remains are protected by law and, if older than 60 years, are dealt with by the State Archaeologist at the South African Heritage Resources Agency (Mrs. Mary Leslie who can be reached at 021 462 4502).

It is recommended that:

- A full Archaeological Impact Assessment cannot be performed at present due to limitations described above.
- Because residential developments bordering on the study area are already underway, it would be unreasonable to deny the development proposed in the area reported on here.
- If the proposed residential development is approved, then it is recommended that vegetation clearing activities associated with development be conducted by hand and not by mechanical means. This will minimize and/or avoid permanent negative impact on archaeological resources.
- Vegetation clearing and earthmoving activities be monitored by a professional archaeologist on a full time basis.
- If archaeological materials are exposed through vegetation clearing or earthmoving activities, then they must be dealt with in accordance with the National Heritage Resources Act (No. 25 of 1999) and at the expense of the developer(s) and/or property owner(s).

Figures and Plates (on following pages)

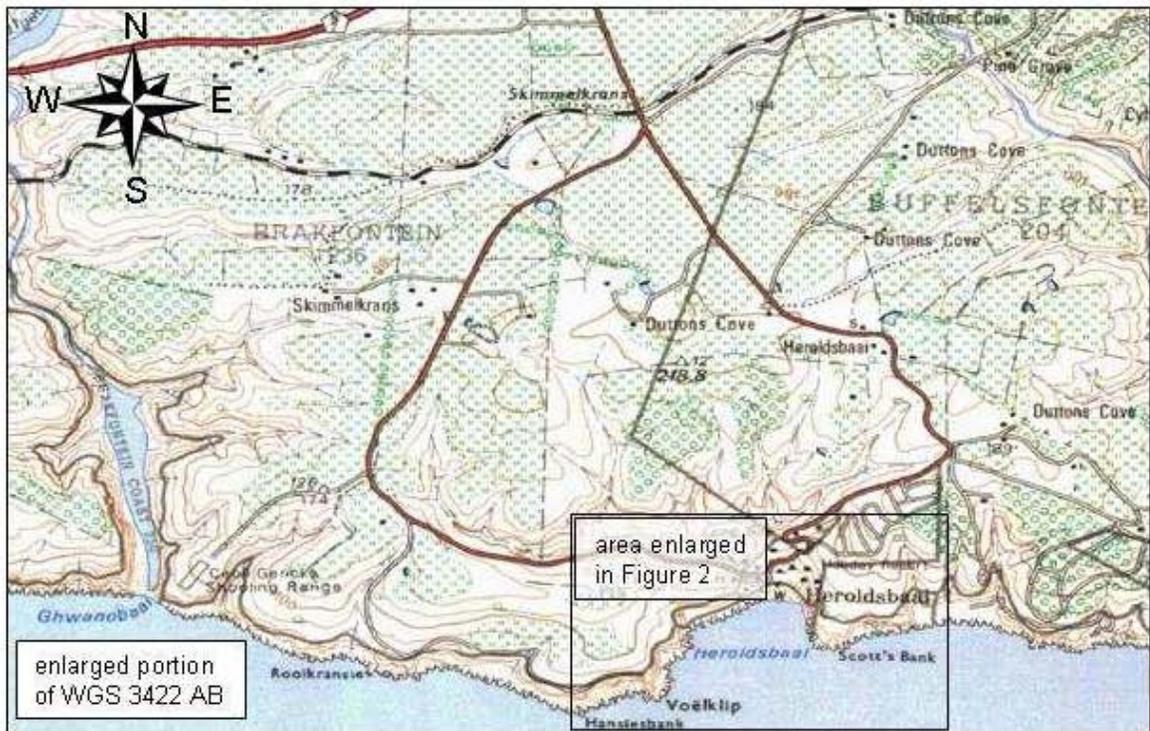


Figure 1. General location of Herold's Bay, roughly south of George on the Cape south coast. The N2 is visible in the top left corner.



Figure 1. Enlarged area as indicated in Figure 1 with the framed area showing the general location of the study area, immediately east to south east of Herold's Bay.



Plate 1. Enlarged area as indicated in Figure 2 with the location and extent of the study area outlined in red. The approximate position and layout of the proposed residential development is shown with a semi-transparent overlay. (Image from Google Earth 2007)

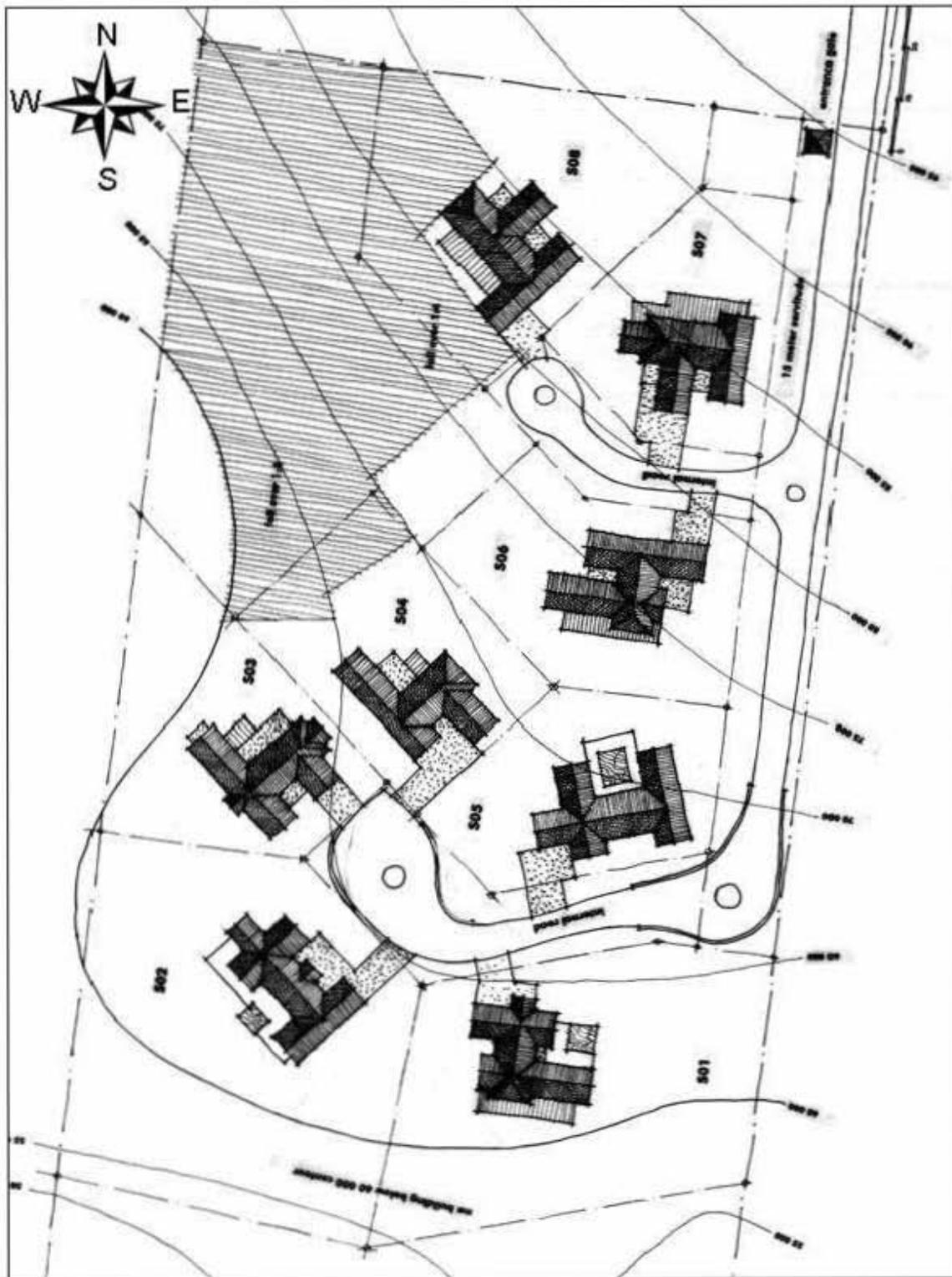


Figure 3. Enlarged version of layout plan for the proposed residential development. The location of the development is shown in Plate 2. The scale is 1:500.



Plate 2. The study area is shown in red as in Plate 1 and boundary corners are labelled A through D. Walk tracks – accurate to within a few meters - as fixed via hand-held GPS are shown with green lines while dots labelled 1 through 3 are archaeological occurrences. Note that this image is outdated since at least three newer dwellings in the immediate vicinity of the study area are evident in Plate 1.

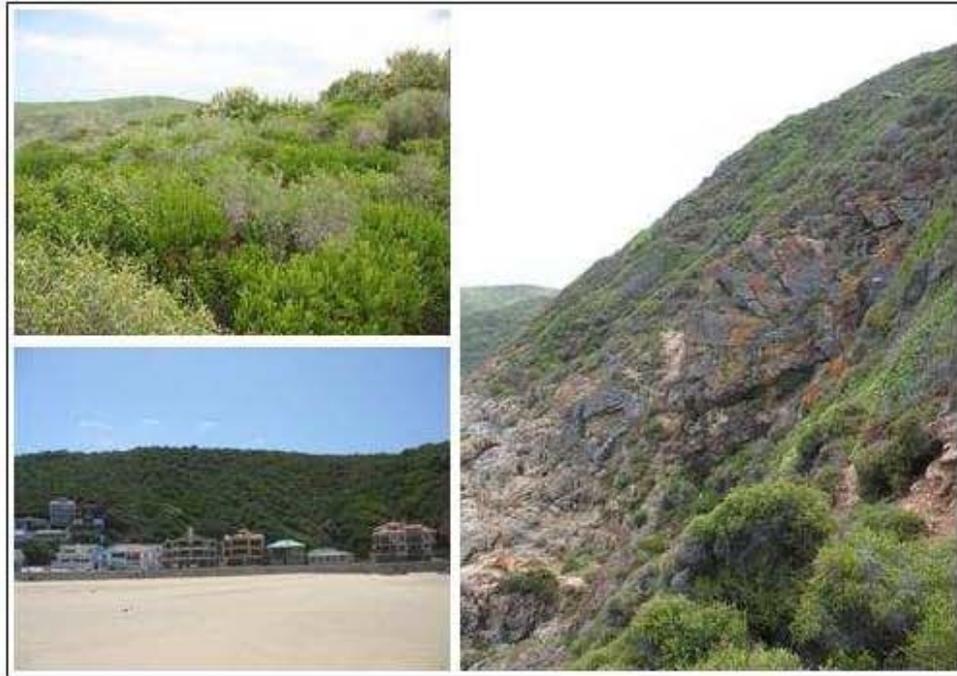


Plate 3. Clockwise from top left image; topography and vegetation cover shown looking across the study area from the south east, along the slopes to the west of the study area and toward the slopes immediately west of the study area.



Plate 4. A small stretch of profile next to the pedestrian trail shows the medium to dark brown humic sands with stone artifacts (circled) and the underlying, fragmented TMS.