

PHASE ONE ARCHAEOLOGICAL INVESTIGATION: VARSWATERBAAI

Prepared for

Planbou (Pty) Ltd

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Prepared by

Archaeology Contracts Office

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1. EXECUTIVE SUMMARY

The Archaeology Contracts Office of the University of Cape Town was commissioned by Planbou (Pty) Ltd to survey a portion of land south of Cape Columbine on the Vredenburg Peninsula. A number of Late Stone Age archaeological sites were located at the location of the proposed development as laid out in the brief. Sites were found at the southern end of the proposed development zone and will require some form of mitigation. No sites were located along the road alignment. Mitigation will have to include both excavation and collection.

2. INTRODUCTION

The Archaeology Contracts Office of the University of Cape Town was commissioned by Planbou (Pty) Ltd. to conduct a Phase 1 archaeological assessment of an area south of Cape Columbine (Figure 1). The proposed development area lies along the coast at Varswaterbaai on Portion 14 of the farm Besterskraal No.38. After discussions with Mr. T.N. Kotz, who represents the developers, the Archaeology Contracts Office undertook to:

2.1. Survey the area set aside for housing development as well as the access road alignment to locate any archaeological sites

2.2. Assess the sites for their significance and the possible impacts resulting from development activities

2.3. Produce a report detailing the findings and indicating the options for mitigating possible destruction of archaeological material should the need arise

3. ARCHAEOLOGICAL BACKGROUND

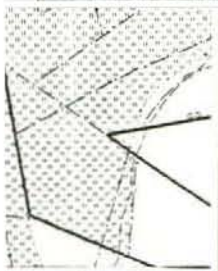
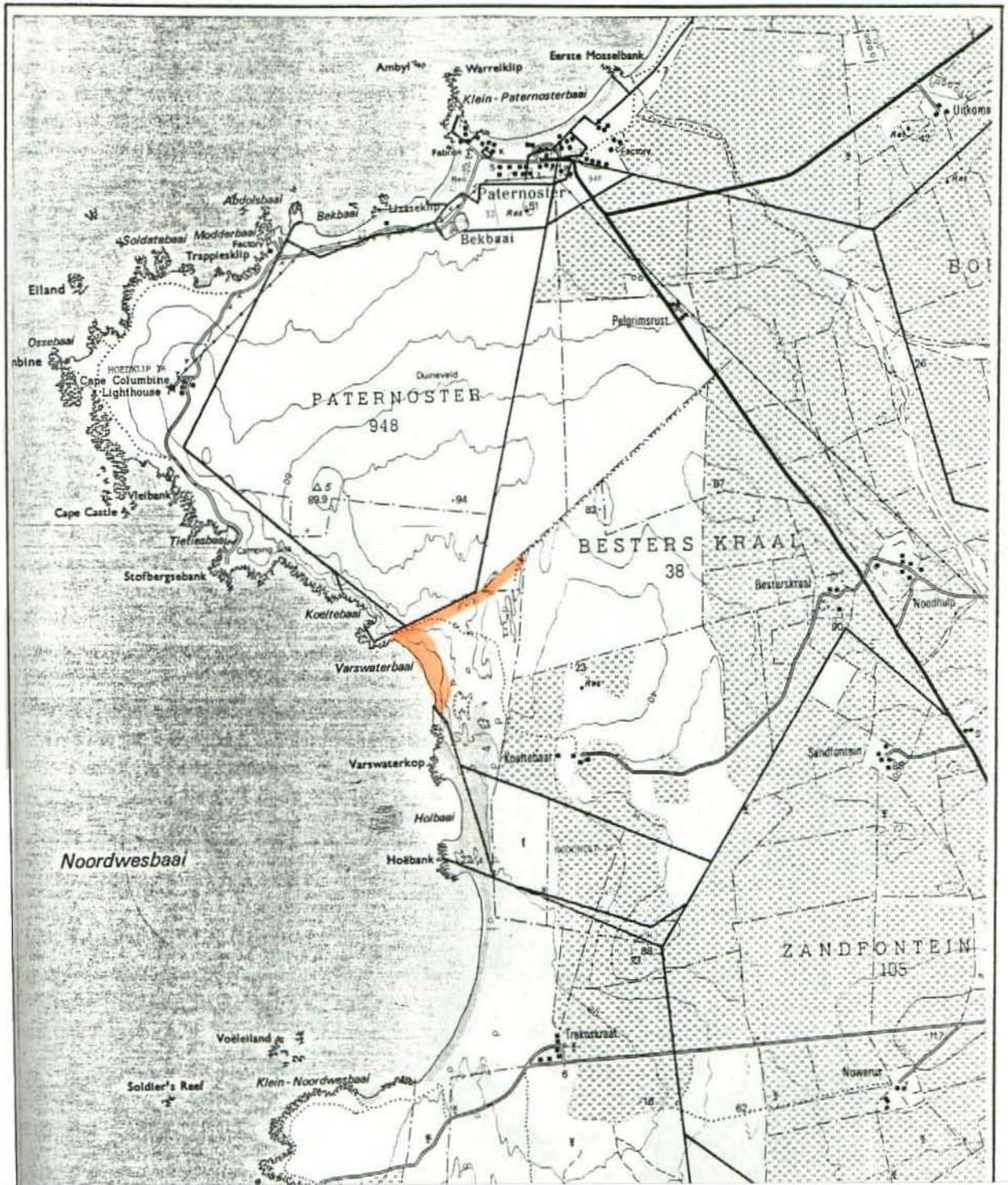
The Vredenburg Peninsula has been the focus of research excavations by archaeologists over recent years. It is now accepted that the area with its unique granite geology and shoreline formations was favoured by prehistoric people, particularly herding groups, as the rich soils provided excellent grazing for both sheep and cattle, and prior to this had provided grazing to herds of wild game.

Prior to 1800 years ago the south western Cape was inhabited by hunter/gatherers (Bushmen) who's economy was based upon the exploitation of wild animals, indigenous plant foods and marine animals. This changed with the arrival of Khoi (Hottentot) herding groups who introduced domestic animals (sheep, goats, cattle) into the Cape resulting in a new economic order. The Vredenburg Peninsula subsequently became a center of the herding economy - the local shales and granites providing some of the vital nutrients for domestic stock that are not available on the Cape Peninsula or the sandstone mountains of the Cape Fold Belt. To this day unresolved questions about the origins, ecology and lifestyle of early pastoralists have attracted the interest of historians, archaeologists and anthropologists alike.

The Vredenburg Peninsula is considered to be particularly rich in cultural resources that need to be conserved or rescued - especially in the light of the increasing development pressure on land that is impacting the west coast at this time. The destruction and/or disturbance of an archaeological site can represent a loss of information about the past, which unlike other environmental resources, can never be renewed.

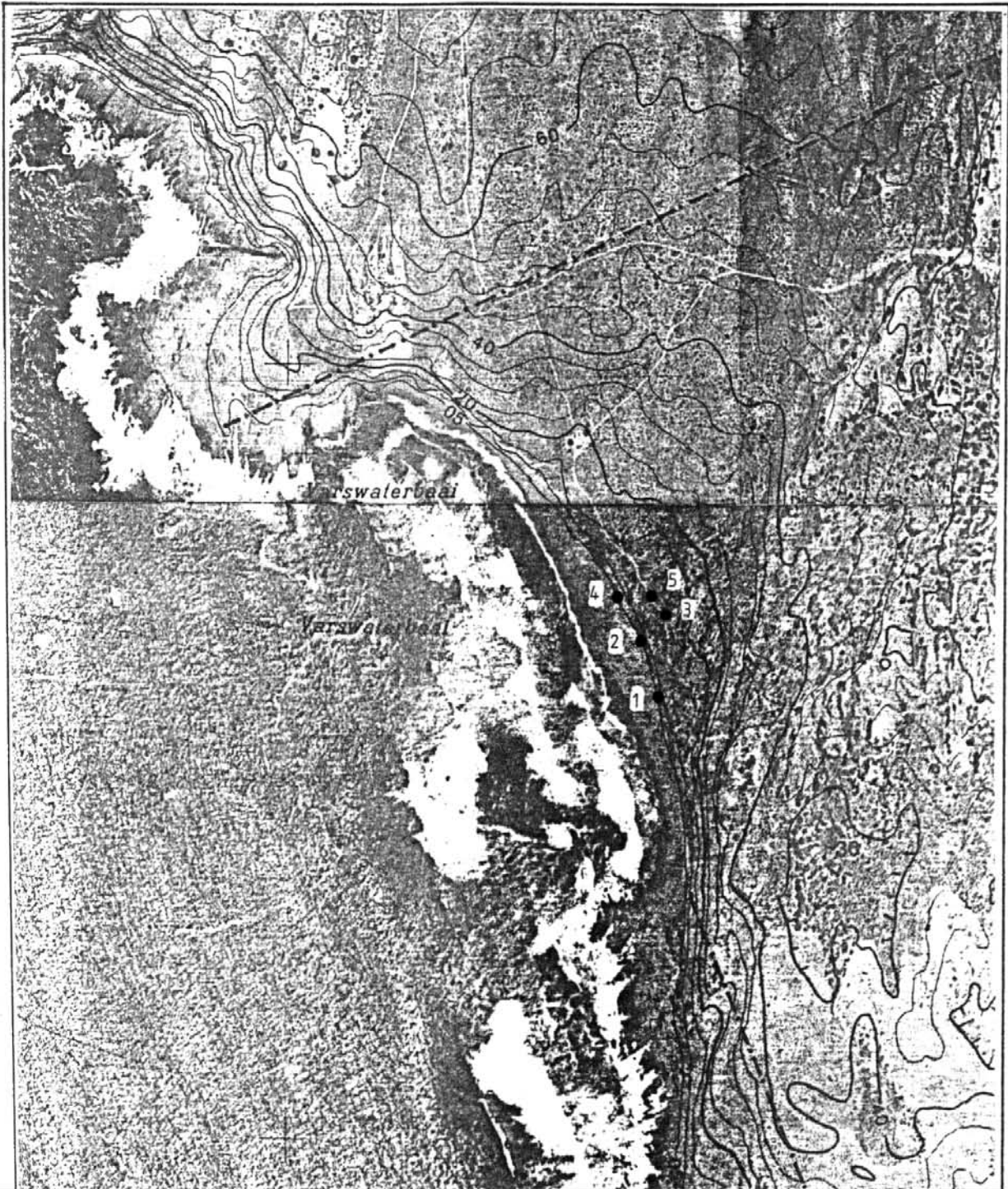
4. METHOD

The prospective development area was searched for archaeological material. The locations of archaeological sites were established using GPS (Global Positioning System) and plotted onto a 1:10 000 orthophoto (Figure 2). The scale has been increased (140%) for presentation purposes. The surface characteristics of the archaeological sites were recorded and included



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3217DB & DD VREDENBURG DERDE UITGAVE
THIRD EDITION 19



3217 DD 7 & 8 CAPE COLUMBINE
 3217 DD 13 TREKOSKRAAL



2

observations of the shell species, fauna, and artefactual material. In instances where surface evidence was not clear, small test holes were excavated to establish if in-situ material existed below the surface.

5. RESULTS

The following section presents summaries of the located archaeological sites in the development area.

VWB 1

GPS Location: 32°51.1390'S 17°52.8539'E

This consists of two exposures of a single lens of shell approximately 20cm thick eroding out of the seaward side of the dune in front of proposed houses #32 and #33. The exposure is approximately 20m in length. At present the lens is covered by a sterile overburden some 1.5-2m thick.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei*, *Patella granatina*, *Patella granularis*, *Patella barbara*, *Patella cochlear* and *Burnupena* sp. The dominant species is not immediately evident but much of the shell is whole and well preserved. Artefactual material consists of a single small upper grindstone/rubber and a few quartzite manuports. 1 crayfish mandible was noted.

Importance: medium-high

Impact: The site will be impacted if the area is landscaped or built on. Secondary damage will most likely occur through increased pedestrian use of the dune to access the beach both during the construction phase and afterwards. At present erosion of the dune is taken place naturally as a result of tidal activity at the base of the dune and this erosional process may require that the dune be artificially stabilised, a process which may impact on the site as well.

Suggested mitigation: A representative sample of the shell midden should be recovered prior to construction.

VWB 2

GPS Location: 32°51.0995'S 17°52.8416'E

This site consists of a lens of shell in the same context as VWB 1 in front of the proposed house #30. The shell lens is approximately 20-25cm thick lying below a sterile overburden. The shell lens appears to have been deposited on a harder soil unit (or a cemented sand body) which is being undercut by erosion and collapsing down slope. Pieces of stratified midden are found intact on these chunks on the lower dune slope.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei*, *Patella granatina*, *Patella granularis*, *Patella barbara*, *Patella cochlear* and *Burnupena* sp. The dominant species is not immediately evident but much of the shell is whole and well preserved. No artefactual material was observed amongst the eroded material.

Importance: medium-high

Impact: The site will be impacted if the area is landscaped or built on. Secondary damage will most likely occur through increased pedestrian use of the dune to access the beach both during the construction phase and afterwards. At present erosion of the dune is taken place naturally as a result of tidal activity at the base of the dune and this erosional process may require that the dune be artificially stabilised, a process which may impact on the site as well.

Suggested mitigation: A representative sample of the shell midden should be recovered prior to construction.

VWB 3

GPS Location: (Plotting indicates error in GPS reading.)

Two small patches of shell on the surface behind the dune cordon. These lie just outside the eastern boundary of the of proposed house #28 close to the point where it adjoins plot #29.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei* and *Patella granatina*. No artefactual material was noted.

Importance: medium-low

Impact: The site will be destroyed if the area is landscaped or built on. Secondary damage could occur through increased pedestrian or vehicular access both during the construction and after.

Suggested mitigation: No mitigation suggested.

VWB 4

GPS Location: 32°51.0621'S 17°52.8261'E

A shell midden lens in the same context as VWB 1 and VWB 2 lying in front of proposed house #27. The exposed lens in section is approximately 20cm thick lying below a thinner sterile overburden some 1m thick.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei*, *Patella granatina* and *Patella granularis*. The dominant species is not immediately evident but much of the shell is whole and well preserved. No artefactual material was observed amongst the eroded material on the dune slope.

Importance: medium-high

Impact: The site will be impacted if the area is landscaped or built on. Secondary damage will most likely occur through increased pedestrian use of the dune to access the beach both during the construction phase and afterwards. At present erosion of the dune is taken place naturally as a result of tidal activity at the base of the dune and this erosional process may require that the dune be artificially stabilised, a process which may impact on the site as well.

Suggested mitigation: A representative sample of the shell midden should be recovered prior to construction.

VWB 5

GPS Location: 32°51.0720'S 17°52.8700'E

The site consists of a surface scatter and single, stratified, below surface lens of shell on proposed plot #27. This lies behind the immediate dune cordon. Neither of these lenses is particularly dense. The lower lies approximately 30cm below the surface. It is not immediately clear whether this exposure is a continuation of VWB 4.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei*, *Patella granatina*, *Patella granularis* and *Patella cochlear*. The dominant species is not immediately evident. Shell is more fragmented partly due to proximity of the jeep track but whole shell has also been preserved. Artefactual material consists of a single quartzite flake.

Importance: medium

Impact: The site will be destroyed if the area is landscaped or built on. Secondary damage could occur through increased pedestrian or vehicular access both during the development and after.

Suggested mitigation: A representative sample of both the surface and particularly the buried shell midden should be recovered prior to construction.

VWB 6

GPS Location: 32°50.5374'S 17°53.4141'E

This site consists of a surface shell scatter immediately adjacent to the new access road to the north-east of the high vegetated dunes. Midden is present on both sides of the boundary fence. The exposure is in the order of 10-15m diameter.

Shellfish species observed include *Choromytilus meridionalis*, *Patella argenvillei*, *Patella granatina* and *Patella granularis*. No artefactual material was noted.

Importance: medium-low

Impact: A small portion of the site has been impacted by the road. Further impact is not foreseen if the road retains its present course.

Suggested mitigation: No mitigation necessary.

6. OTHER ARCHAEOLOGICAL SITES

Besides those in the immediate development area, the rocky points, coastal zone and particularly the dune seas between Holbaai and Varswaterbaai are rich in well preserved archaeological sites that could be negatively impacted as development pressure on the coast increases. We have also noted some sites in the intermediate zone between the high vegetated dunes alongside the existing jeep track.

7. CONCLUSION

The majority of the area that is to be developed will not impact archaeological sites. A small number of sites are present towards the southern end of the development. The new access road follows a route which does not impact on sites until it reaches the area of the proposed housing.

Although we have not observed an abundance of additional archaeological material on the sites in the way of bone and stone artefacts, this material may be present in buried lenses at VWB 1, 2 and 4. No ceramics or backed stone artefacts were observed making it difficult to assess the age of the material.

The depth of the buried lenses at these sites suggests that there has been a local deposition of aeolian sand over the years. The scatters of surface shell behind the immediate dune cordon would seem to confirm this observation of local deposition.

8. RECOMMENDATIONS

The area that has been examined in terms of the brief contains archaeological sites which will require mitigation in the form of a program of excavation and collection before development can take place. In our opinion, sites which require mitigation are VWB 1, VWB 2, VWB 4 and VWB 5. The purpose of such a program is to obtain a representative sample of material to characterise the different kinds of archaeological sites in the area and so establish an archive that can be used by interested persons in the future.

Mitigation of shell midden material requires that the site is subject to controlled excavation by a qualified and an experienced archaeologist and assistants working under a permit issued by the National Monuments Council. All shell middens are explicitly protected by the National Monuments Act of 1969 (as amended).

Human remains may be encountered during the course of developing the site. In the event of this happening, the remains should not be disturbed until an archaeologist is contracted to remove them.

It may be argued that only sites that are directly impacted by construction need to be mitigated. The broader implications of development are that serious indirect damage will

occur through pedestrian and vehicular activities both during and after the construction phase. We are particularly concerned about the use of 4x4 vehicles which do a tremendous amount of damage to both archaeological sites and the environment of the dunes. There should be a commitment on the part of the developers to ensure that vehicular access is limited to specific areas. The existing informal jeep tracks should be closed, particularly those which enter the active dune sea.

Both the authorities and the developers must take cognisance of the fact that there are important archaeological sites on private and state land bordering the property and that these will also be subject to serious impacts as result of the opening of the area to recreation. Use of state land such as the beach, and areas adjoining the beach, need to be taken into account and the authorities responsible for administration of these areas should be drawn into negotiations to determine how this sensitive zone is to be managed given the increased impacts that will occur. The public should be given access to the shore line by way of established paths or walkways which avoid the archaeological sites. In this way the interests of conserving both coastal vegetation and archaeological material can be served.

The measures that need to be taken to mitigate the archaeological sites will require the approval of the Archaeology Plans Committee of the National Monuments Council. It is suggested that a meeting should be arranged with this committee to negotiate a suitable program for the mitigation of archaeological material in the development zone. The developer must apply for a permit to destroy the remaining middens after completion of a mitigation programme. It is suggested that the developer approaches the National Monuments Council (Dr J. Deacon).

These recommendations are subject to the approval of the National Monuments Council (NMC).

9. PROFESSIONAL TEAM

Fieldwork and report preparation

Tim Hart
Dave Halkett