

File no. 9/2/018/296
Vol 1 9 April 1998 to 15 Sept 2000

Previous file - (9/2/018/57)
9/2/018/296

**ARCHAEOLOGICAL RESCUE EXCAVATIONS
AT CA 1, CAPE ATLANTIC, MELKBOSSTRAND**

Prepared for

JOHNNIC PROPERTY DEVELOPMENTS (PTY) Ltd

By

AGENCY FOR CULTURAL RESOURCE MANAGEMENT
P. O. Box 159
Riebeeck West
7306
Ph/Fax 022 461 2755
E-mail gillker@iafrica.com

**APRIL
1998**

EXECUTIVE SUMMARY

Archaeological rescue excavations were carried out at Cape Atlantic, a Johnnic Property Development (Pty) Ltd, at Melkbosstrand, in February 1998. Excavations at CA 1 (Cape Atlantic 1), a shell midden, were undertaken in order to minimise the negative impact of the development on archaeological sites in the area.

Altogether, 3 x 1 metre squares were excavated to a depth of approximately 80 cm below the surface, on a west-facing, partially vegetated sand dune overlooking Hole No. 4 in the western portion of the site.

Some natural stratigraphy occurred in the uppermost deposits of the shell midden, but thereafter, the deposit lacked natural stratigraphy and was excavated in approximately 10 cm spits into a white beach/dune sand.

The shellfish remains from the midden are dominated by mussel and limpet species, with some whelk and perlemoen occurring. No visible patterning in the shellfish remains were noted, except that the bulk of the shellfish was confined to the uppermost excavated units. Shellfish densities decrease dramatically in the lowermost excavated units, which are characterised by extensive rootlet activity and some burrowing.

Modified and unmodified stone flakes, cores, chips, chunks, two backed pieces, one scraper, a grooved stone, and grindstone fragments were recovered from the excavation. One possible reamer was also found.

Small finds included six pieces of ostrich eggshell, 21 pieces of ochre, and two ostrich eggshell beads, one incomplete, and one with grooved/flaked edges.

No pottery was recovered from the excavation, suggesting that the site pre-dates 2000 years BP. This, however, may be a function of the small size of the excavated sample. The presence of backed pieces suggests that the site may pre-date 3000 BP.

Faunal remains recovered included mainly tortoise, some crayfish, small bovid, rodent, bird and snake.

1. INTRODUCTION

1.1 Background and brief

In 1997, the Agency for Cultural Resource Management (ACRM) was requested by Crowther Campbell and Associates, on behalf of Johnnic Property Developments (Pty) Ltd, to undertake a baseline archaeological study of erf 1694, the site of the proposed Melkbosstrand Golf Village (Kaplan 1997), now known as Cape Atlantic.

One coherent archaeological site (MGV 1) was recorded during the study (Kaplan 1997). In addition, archaeological residues and occurrences in disturbed contexts were also noted, mainly in the western boundary of the site, adjacent to Otto du Plessis Drive.

The major portion of the study area was, however, severely vegetated, resulting in poor archaeological visibility. It was recommended (Kaplan 1997:7) that an archaeological monitoring programme be implemented by Johnnic Property Developments (Pty) Ltd. It was anticipated that additional archaeological sites such as shell middens, and even human burials, would be exposed during 'search and rescue' (vegetation clearing), and site preparation. This was agreed too by the developers, and archaeological compliance has been accommodated in the Environmental Management Plan (Environmental Management Plan for Cape Atlantic 1997).

The monitoring programme was implemented in October 1998, and since then, numerous archaeological observations have been made during the course of 'search and rescue'. Most of the occurrences noted, however, were thinly dispersed scatters of fragmented shellfish remains, with little, if any artefactual material. These finds were noted in already disturbed contexts in deflated basins. Some scatters, mainly on dunes tops and sides, were better preserved than those in the deflated basins, and contained larger densities of shellfish and artefactual remains, such as pottery, stone tools, ostrich eggshell and beads.

All the sites and occurrences noted have been recorded, with information on extent, preservation, shellfish composition and range of artefactual material present. These criteria have been used as a basis for assessing the significance of the archaeological sites, and proposed mitigation.

A reasonably well preserved scatter of shellfish remains with stone tools and ostrich eggshell, was located among the partially vegetated, west-facing dunes overlooking Hole No. 4 in the western portion of the development (Figure 1). In consultation with the National Monuments Council and Johnnic Property Developments (Pty) Ltd, it was agreed that a rescue excavation be undertaken at this site, known as CA 1.

The aim of the excavation was to generate a representative sample of shell midden material from the site for comparative purposes, and to minimise the negative impact of the development on the site.

A well preserved shell midden (CA 2) with pottery, ostrich eggshell beads, ostrich eggshell, stone tools, and some bone was also located on a large vegetated dune overlooking Holes Nos. 2 and 3 on the site. Rescue excavations are also planned at this site shortly.

2. THE STUDY SITE

The study site for the planned Cape Atlantic development in Melkbosstrand is illustrated in Figure 1.

The site covers a portion of erf 1694, of which 160 ha has been set aside for the development of the golf village. A further 140 ha within the southern portion of the erf has been set aside for inclusion into the adjacent proposed Blouberg Nature Reserve.

3. THE SITE (CA 1)

CA 1 (Cape Atlantic 1) comprises an extensive, but dispersed scatter of fragmented shellfish remains on a west-facing, partially vegetated sand dune in the western portion of the study site (Figure 2). The site overlooks Hole No. 4 in the planned development. Construction of an access road over the top of the dune had already resulted in severe disturbance to part of the midden, where a large amount of crushed shell and a few stone tools lay about. Undisturbed patches and thinly dispersed scatters of shellfish remains, stone tools and some ostrich eggshell, however, lay intact on the west-facing portion of the dune.

3.1 The excavation

CA 1 was excavated over a period of two days, from February 23-24, 1998.

Three square metres were excavated in the midden (Figure 3). All the squares were excavated into an almost sterile white beach/dune deposit. Although some natural stratigraphy occurred in the uppermost shell-rich deposits, the underlying deposits were excavated in approximately 10 cm spits.

All the excavated material was sieved on site through a 3 mm mesh sieve, some of which was sorted on site. To save time and in order to increase the sample size, the bulk of excavated deposit was sieved and bagged on site, and sorted and curated in Riebeeck West.

Bulk samples (i.e. the full contents of a single bucket of sieved deposit) has been kept from each excavated unit for more detailed analysis for research purposes. A full photographic record of the excavation has been kept, as well as drawings of all the excavated sections.

The shellfish and excavated assemblages have been curated according to the requirement of the Department of Archaeology, South African Museum, Cape Town. The curated assemblage will be permanently stored at the South African Museum.

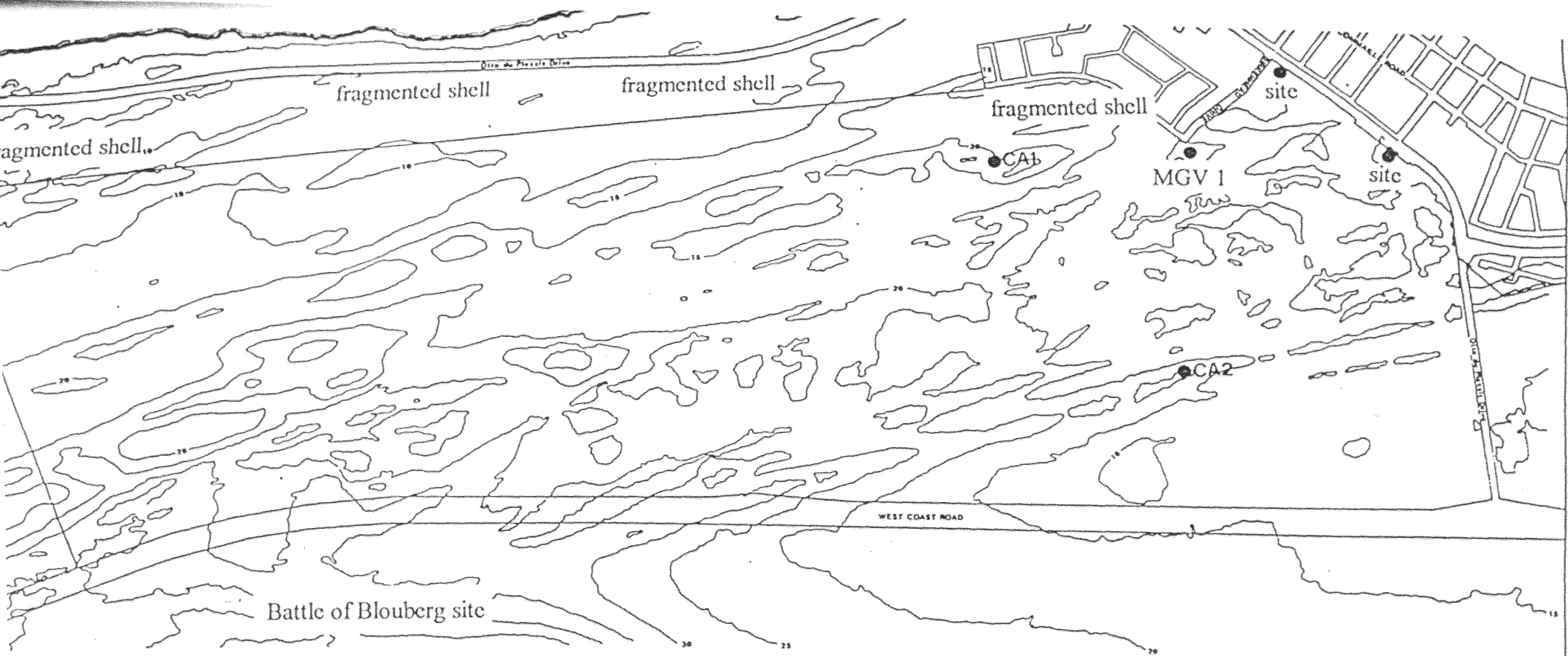


Figure 1. Cape Atlantic: study site and location of archaeological sites.

PORTION OF ERF 1694
MELKBOSSTRAND



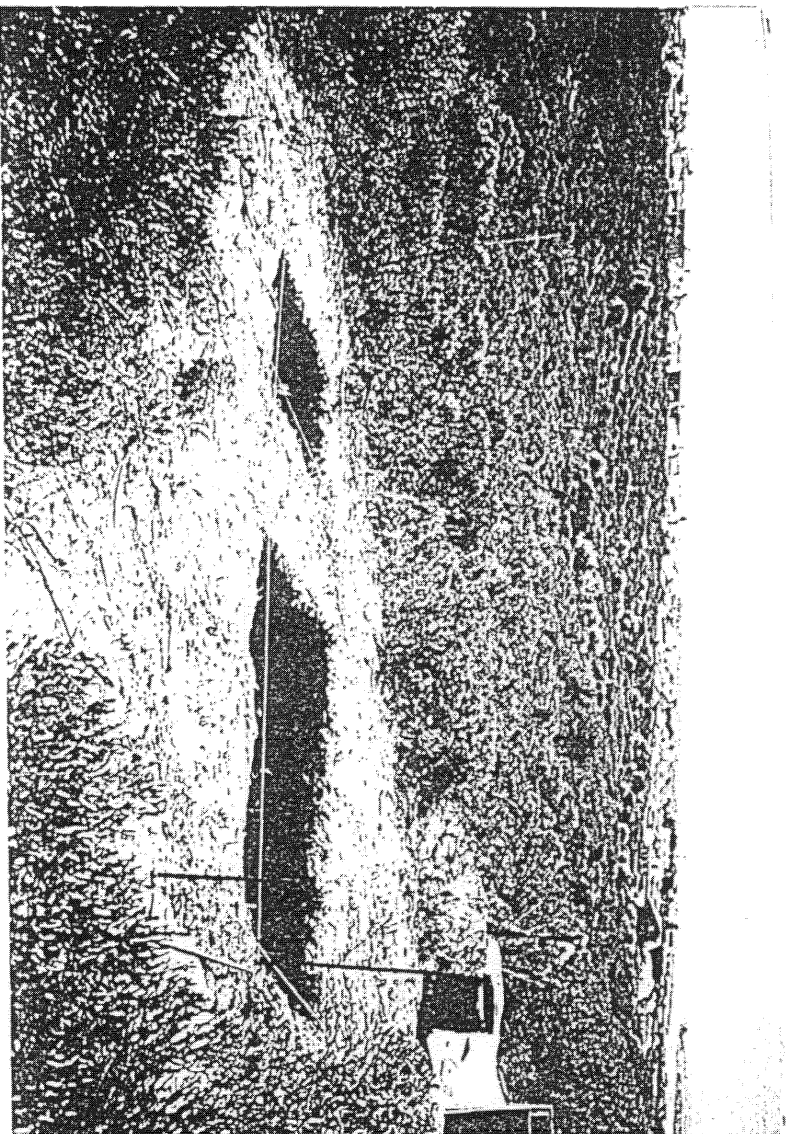


Figure 2. Cape Atlantis 1: The site.

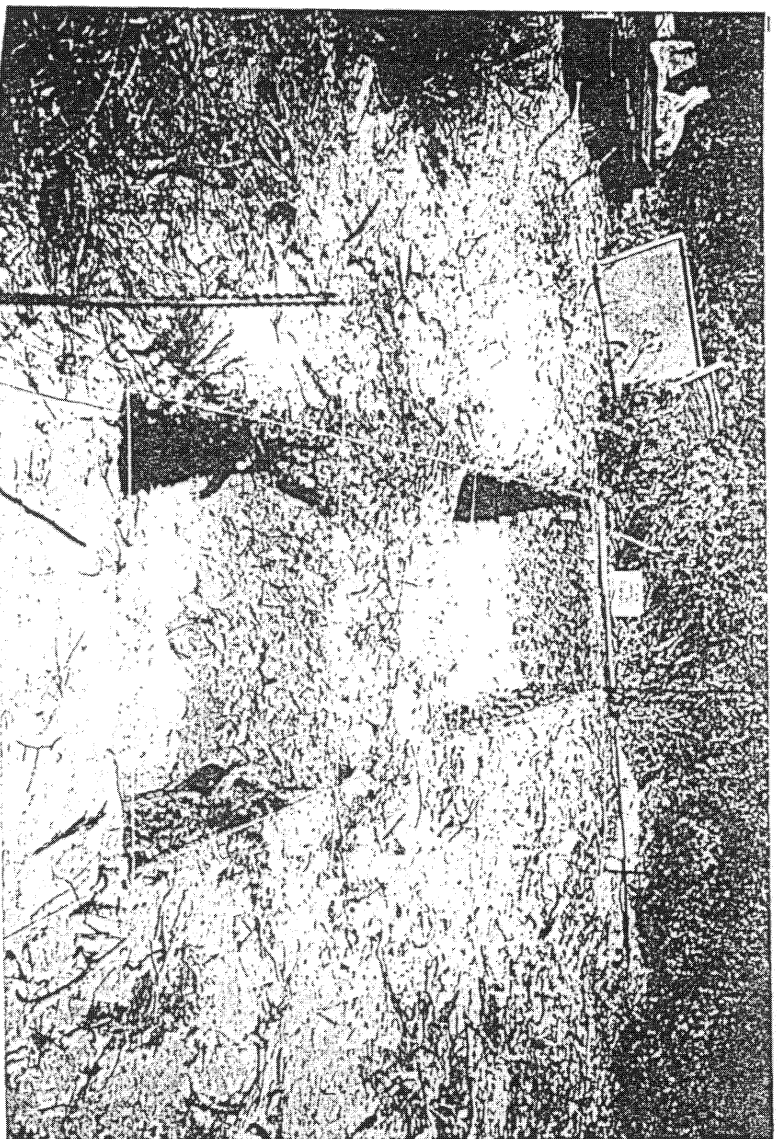


Figure 3. Cape Atlantis 1: The excavation.

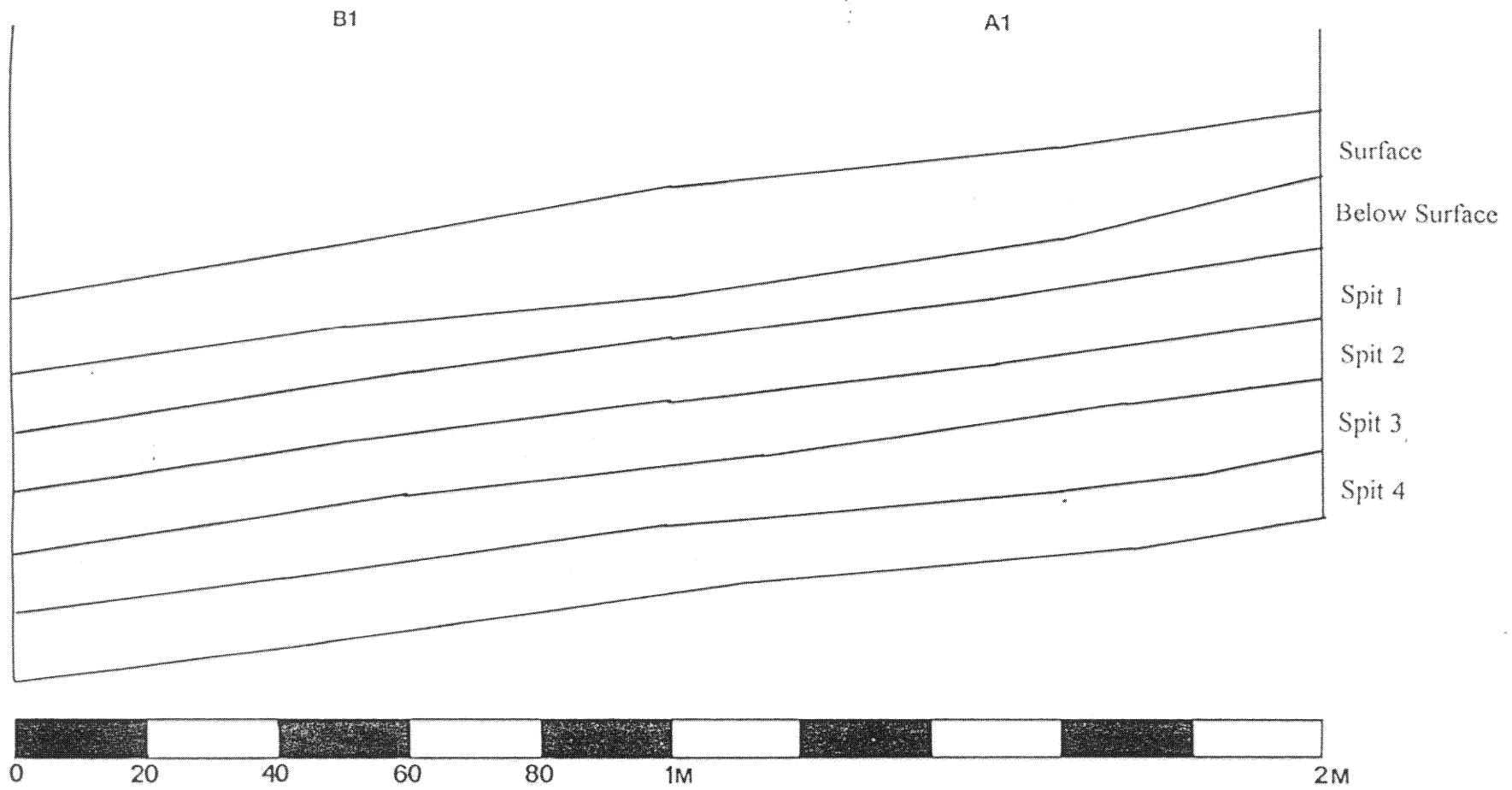


Figure 4. Cape Atlantic I. South-facing section in B1 and A1.

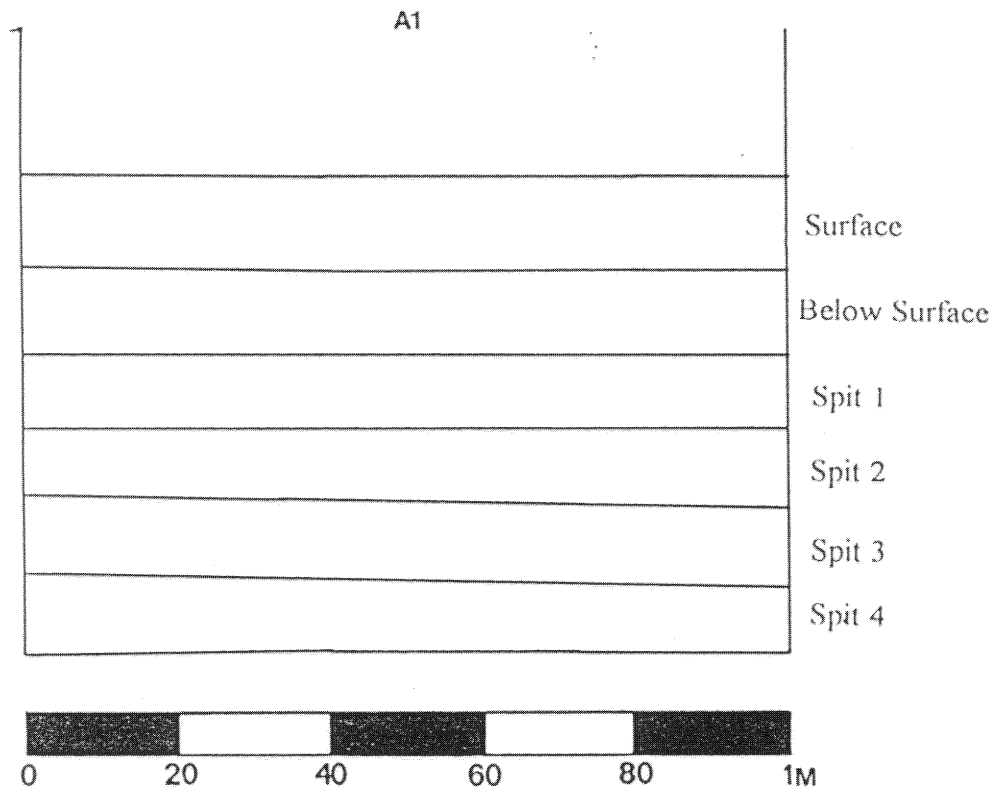


Figure 5. Cape Atlantic I. East-facing section.

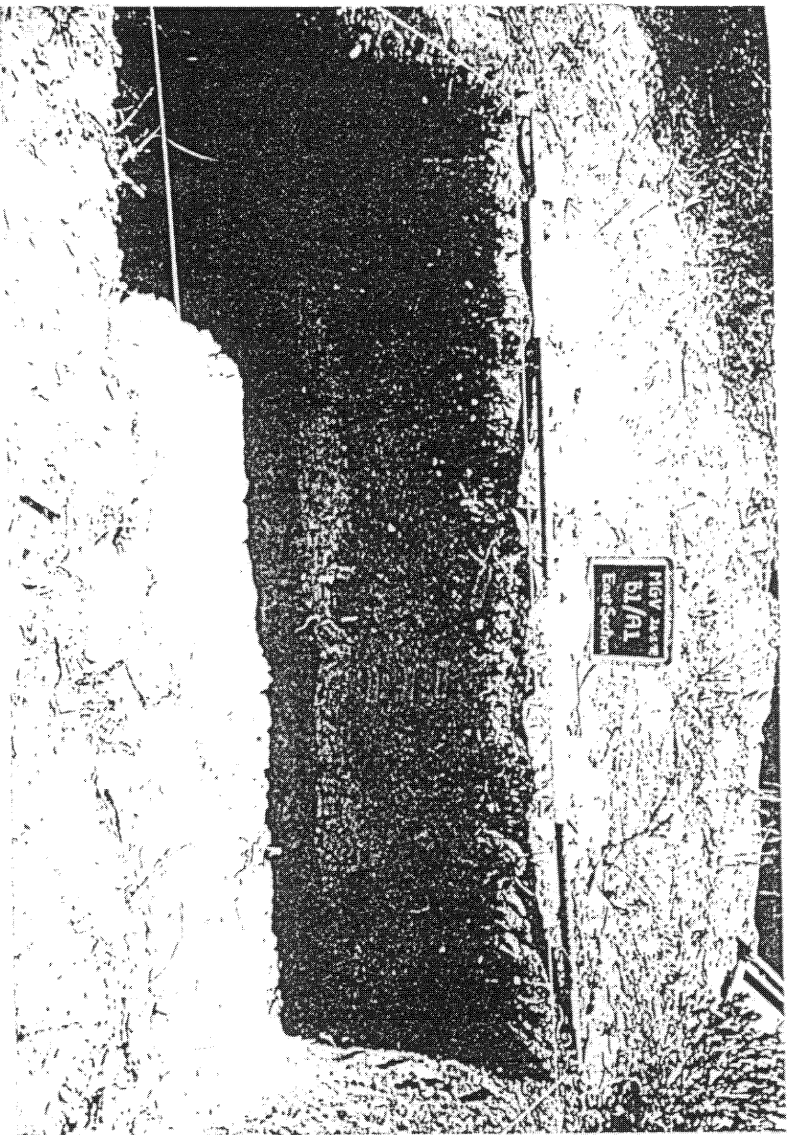


Figure 6. Cape Atlantis 1: B1/A1 section.

3.2 The stratigraphy

Six stratigraphic units were excavated in CA 1. These have been divided into three stratigraphic layers (Figures 4, 5 and 6).

Layer 1 comprised one stratigraphic unit: Surface.

Surface comprised a thin scatter of fragmented shell, with a few pieces of whole shell, many fine rootlets and plant material, on a sandy, homogenous, grey-coloured surface. Root activity is extensive through the deposit.

Layer 2 comprised one stratigraphic unit: Below Surface.

Below Surface is similar to surface, but contains more complete shell, but less fine rootlets and plant material. The matrix of the deposit is darker and more compact than Surface, but still soft and grey-coloured. Root activity through the deposit is extensive.

Layer 3 comprised four stratigraphic units excavated in approximately 10 cm spits: Spit 1, Spit 2, Spit 3 and Spit 4.

Spit 1 comprised a sandy grey-coloured deposit with extensive rootlet activity. Fragmented and some whole shell occurs.

Spit 2 is a paler grey-coloured deposit, with mainly fragmented shell and extensive rootlets.

Spit 3 is a much paler deposit with less shell, and some water worn shell, indicating a beach deposit. Root activity is still evident, but not as extensive as in Spits 2 and 1.

Spit 4 is a white dune/beach deposit. The density of shell has decreased dramatically. Some borrowing is also present in D 1.

4. Artefact assemblages

4.1. Stone artefacts

One hundred and ninety two pieces of artefactual stone were recovered from the excavation (Table 1). The majority (77.6%) of stone artefacts comprise chips, chunks and flakes. Utilised flakes/pieces comprise 16.6% of the assemblage. Grindstone fragments, cores, and formal tools combined, comprise less than 6% of the assemblage.

A selection of stone tools is illustrated in Figure 7.

4.1.1 Raw materials

54.4% of the raw materials in Layers 1-3 are in quartz, while quartzite comprises 34.9%, shale 5.3%, siltcrete 4.7% and CCS 0.7%. There is some difference in the use of quartz between layers 1-3, with quartz comprising 57% of the raw materials in Layer 1, 48.8% in Layer 2 and 56% in Layer 3. Formal tools (backed pieces and

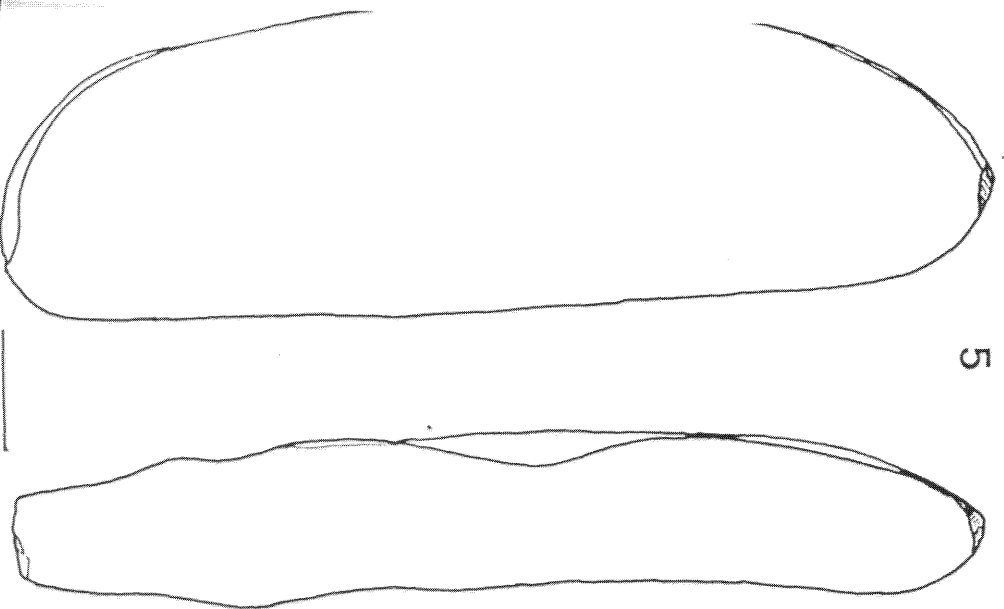
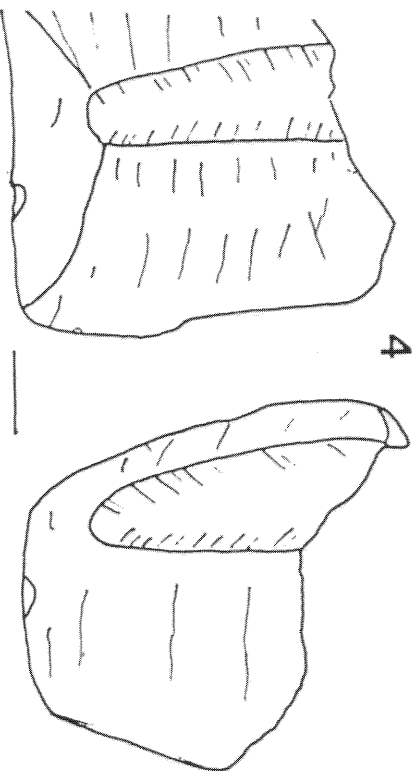
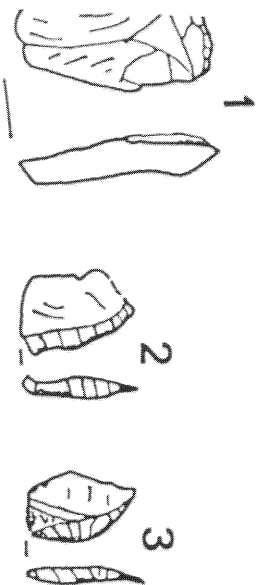


Figure 6. Cape Atlantic 1: Selection of stone tools. 1. Layer 2; scraper (quartz). 2. Layer 1; backed piece (quartz). 3. Layer 3; backed piece (quartz). 4. Layer 2; grooved stone (quartzite) & Layer 3; rammer (quartzite cobble).

	LAYER		
	1	2	3
Beads	-	-	2
Ostrich eggshell	1	3	2
Ochre	8	7	6
TOTAL	9	10	10

Table 2. Cape Atlantic I. Small finds

scrapers) are in quartz, and predictably, grindstone fragments are made on larger quartzite cobbles.

With the exception of CCS, all the raw materials were likely sourced locally. A silcrete quarry has been noted near the farm Groot Oliphantskop, close to the West coast road (Kaplan 1996).

4.2 Ostrich eggshell and ostrich eggshell beads

Two ostrich eggshell beads were recovered from the excavation, both coming from Layer 3 (Table 2). One is incomplete, while the other is complete, but has flaked or grooved edges. Six pieces of ostrich eggshell were also found.

4.3 Ochre

Twenty one pieces of red ochre were found (Table 1). Ochre was probably crushed or rubbed and used in ritual or religious purposes.

5. Faunal remains

5.1 Shellfish

The shellfish remains are dominated by mussel and limpet species, with some whelk, and perlemoen occurring. The occurrence of whelk and other inedible species in the excavated samples suggests that the shellfish was stripped off from the rocks in bulk. There is also little evidence of selection for species or size.

No visible patterning in the shellfish remains were noted, except that the bulk of the shellfish remains were confined to the uppermost excavated units. Shellfish densities decrease dramatically in the lowermost units in the excavated units, which are characterised by extensive root activity and some burrowing.

5.2 Bone

The bulk of the faunal remains are confined to Layer 3, and include mostly tortoise, small antelope, snake and bird. Two crayfish mandibles were also recovered. Tortoise, and small rodent came from Layers 1 and 2. Fish remains are absent.

6. DISCUSSION

Well preserved shell middens are rare along the coast in close proximity to Cape Town, where large scale development has severely impacted on archaeological sites. CA 1, and particularly CA 2, are two of the remaining few.

The absence of pottery at CA 1 suggests that the site pre-dates 2000 BP. This, however, may be a function of the small sample excavated from the midden. Recent excavations at a severely disturbed midden at the Milkwood Place development

adjacent to Cape Atlantic, also suggests that the site predates 2000 BP due the absence of any pottery remains (Deacon and Goosen 1997).

The presence of backed pieces at CA 1 may place the site before 3000 BP, but without radiocarbon dates this is speculative.

Few sites have been excavated on the Cape Peninsula between Milnerton and Melkbosstrand, although a large number have been recorded (Kaplan 1993). A number of Khoisan and non-indigenous human burials, however, have been recovered from the sand dunes in the area, most of them the result of activities related to development (Abrahams 1983; Kaplan 1996; Graham Avery, South African Museum, pers. comm.; Jan Hannekom, pers. comm.).

7. REFERENCES

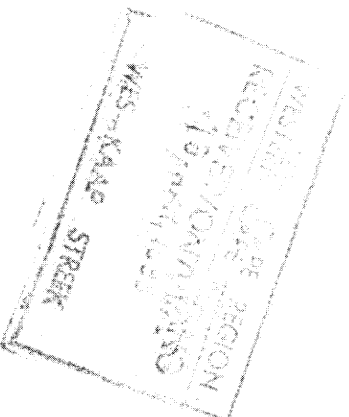
- Abrahams, G. 1983. The report on human skeletal remains and associated artefacts from Milnerton Beach, Cape Province. South African Archaeological Bulletin 38:33-35.
- Deacon, H.J. & Goosen, R.J. 1997. Phase 11 archaeological assessment. Milkwood Place Development, Melkbosstrand. Technical report. Unpublished paper prepared for Investment Facility Company Five Zero Two (Pty) Ltd. Department of Archaeology, University of Stellenbosch.
- Environmental Management Plan for Cape Atlantic. Prepared for Johnnic Property Developments (Pty) Ltd. Cape Town: The Planning Partnership 1997.
- Kaplan, J. 1993. The state of archaeological information in the coastal zone between the Orange River and Ponta do Oura. Prepared for the Department of Environmental Affairs and Tourism. Riebeeck West: Agency for Cultural Resource
- Kaplan, J. 1996. Archaeological and cultural impact assessment: Omega substation. Unpublished report prepared for Ninham Shand Consulting Engineers. Riebeeck West: Agency for Cultural Resource Management.
- Kaplan, J. 1997. Archaeological study: Proposed Melkbosstrand Golf Village. Unpublished report prepared for Crowther Campbell and Associates. Riebeeck West: Agency for Cultural Resource Management.

*3811296

Dr J Deacon

9 April 1998

Jonathan Kaplan
P O Box 159
Klebeek West
7306



Dear Jonathan

ARCHAEOLOGICAL RESCUE EXCAVATIONS, CAPE ATLANTIC, MELKBOSSSTRAND

I acknowledge with thanks receipt of your report on the archaeological rescue excavation at Cape Atlantic prepared for Johnnic Property Developments (Pty) Ltd. Please apply for a permit for this site as soon as possible.

Because of the large-scale development in the area, I think it is important to get a larger sample from this site that can be used for research purposes. As the Stellenbosch students seem committed already to other projects, are there others who may be interested? I suspect that if there was a genuine research interest a proposal could be put forward to Johnnic to fund, or at least contribute to the costs of, a larger excavation programme so that more substantial information can be obtained for a display of the results in the Club House. Let me know if you have any ideas on this.

Your co-operation in keeping the NMC informed of your work is much appreciated.

Yours sincerely

for DIRECTOR
Dvd

Copy: NMC Regional Manager: Western Cape

NATIONAL MONUMENTS COUNCIL

P O Box 4637, CAPE TOWN, 8000
FAX: (021) 462 4509 * TEL: (021) 462 4502

FACSIMILE TRANSMISSION

Gavin Whitelaw, Natal Museum

0331 45 0561

Janette Deacon

24 August 1998

NO. OF PAGES: 1

TO:
FAX NO:
FROM:
DATE:

FACTS COMMITTEE

9/2/018/296

Professor Judith Sealy of the Department of Archeology at the University of Cape Town has applied for a permit to excavate a shell midden on a property at Melkbosstrand currently being developed as a housing estate and golf course by Johnnic. The excavation will be used as a training exercise for UCT students. Jonathan Kaplan has already completed an impact assessment and limited mitigation. The site will be destroyed in the course of construction. Johnnic have agreed to set up a display in the club house. Please let me know if you have any objections to the permit being issued.

9/2/075/2

Mr Philip Kiberd, who will be working with the McGregor Museum, has applied for a permit to excavate an Earlier Stone Age / Middle Stone Age open site on Bundu Farm in the Prieska District. The purpose is to analyse and date the artefacts which are thought to represent a transitional very early MSA phase. Mr Kiberd, who is a human bone and lithics specialist will use the information for an MPhil/PhD project through the University of Southampton supervised by Clive Gamble. Please let me know if you have any objections to the permit being issued.

9/4/6/1/12

Mr Ed Eastwood of Louis Trichardt has applied for a permit to remove a 25 kg rock with two painted images of "skins" from a rock shelter in the Pont Drift area. The rock has fallen from the ceiling of the shelter and the paintings are being damaged by domestic stock. The rock will be placed for safekeeping in the Schoemansdal Museum. Please let me know if you have any objections to the permit being issued.

9/2/240/1

Lance Gewer of Icon Entertainment has applied for permission to film scenes on Mapungubwe Hill and K2 for an educational film. He is being assisted in the project by Professor Tom Huffman and Edwin Harisch. Both will be present during filming. He has assured us that there will be no disturbance of the deposits. If no objections are received, the NMC could either issue a formal permit to "disturb", or simply a letter indicating that we have no objections to the film being made. Please let me know which option you would prefer.

Yours sincerely


for DIRECTOR

Jd/d