#### APPENDIX 1: SHORT LIST OF TERMINOLOGY

#### High Energy /Wave coasts

Rough stepped rocky outcrops in sheltered bays usually rise from a few metres of deep water to a few metres above the spring high level. Waves constantly break over the rocks, gullies and pools during high tide. *Perna perna* is often found here in large quantities along the high water level. The *cochlear* zone is exposed during spring tide low, but it is dangerous to collect shellfish from this zone because one can be washed from the rocks.

#### Bench/Boulder coasts

Flat rocky areas (occasionally with round boulders) exposed extensively during low tides. A wide variety of shellfish species are abundant in the numerous rock pools and can easily be collected from the intertidal pools at low tide and include, *Oxystele sinenses*, *Perna perna*, *Turbo sarmaticus*, *Burnupena* spp., and several *Scuterllastra* spp.

#### Classification of shell middens as identified from research along the Cape St Francis coast.

#### Shell middens with pottery and domesticated fauna and those with pottery only.

Both types of sites usually yielded few stone tools and apart from pottery, contained little other cultural material. The Khoi pastoralist middens contained, or were dominated by, shellfish species that yielded relatively high meat mass per individual species, for example, *Solen capensis*, *Perna Perna* and *Donax Serra*. 'Ceramic' middens on the other hand, contained high frequencies, or were dominated by shellfish species from the upper balanoid zone, notably *Oxystele* spp. and *P. perna*. Species from the lower balanoid zone were as a rule not well represented. The oldest radiocarbon date for pottery in the south-eastern Cape was  $1770 \pm 50$  BP (Pta-9311), and the oldest date directly associated with sheep and cattle remains was  $1560 \pm 40$  BP (Pta-5982).

#### Shell middens, without pottery, associated with a quartzite stone industry

This quartzite industry is referred to as the Kabeljous. This industry contains a number of quartzite cobble stone tools, for example, hammer stones, bored stones, grindstones, rubbers, cores, cobble adzes and scrapers, flakes and large segments. Sites with this industry date from 4700 BP. The larger segments seem to be restricted geographically. They have only been found along the coast from Klasies River Mouth in the west to the Fish River Mouth in the east, but they may extend further east. These date between approximately 3000 and 1800 years BP. In general, these sites were also dominated by *P. perna* (it is the most abundant shellfish species in the research area) and *Scuterllastra* spp. Species of the lower balanoid zone were usually also well represented. The people responsible for this industry are referred to as hunter-collector-fishers (HCF) or Kabeljous groups. These were mobile groups, who lived permanently on the coastal foreland.

### Shell middens, without pottery, associated with a silcrete or quartz microlithic Wilton Industry.

The people responsible for this Wilton Industry are referred to as hunter-gatherers (HG) or Wilton groups. These were mobile groups presumably from the adjacent Cape Fold Belt mountains (CFB) who visited the coast occasionally. Wilton deposits in caves and open-air shell middens contained high frequencies of quartz or silcrete microlithic stone tools similar to those found in the adjacent mountains. Segments, however, were absent from the open-air middens that also contained silcrete. The open-air silcrete sites date between 5180 BP and 1900 BP. The shellfish species in these sites are similar to those represented at sites of the Kabeljous Industry.

## APPENDIX 2: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM COASTAL AREAS: guidelines and procedures for developers

#### 1. Shell middens

Shell middens can be defined as an accumulation of marine shell deposited by human agents rather than the result of marine activity. The shells are concentrated in a specific locality above the highwater mark and frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m<sup>2</sup> in extent, should be reported to an archaeologist.

#### 2. Human Skeletal material

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping and developers are requested to be on the alert for this.

#### 3. Fossil bone

Fossil bones may be found embedded in calcrete deposits at the site. Any concentrations of bones, whether fossilized or not, should be reported.

#### 4. Stone artefacts

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

#### 5. Stone features and platforms

These occur in different forms and sizes, but easily identifiable. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platforms for shell fish. Others may resemble circular single row cobble stone markers. These occur in different sizes and may be the remains of wind breaks or cooking shelters.

#### 6. Historical artefacts or features

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.

# APPENDIX 3: PUBLIC HIGHWAY PASS ARCHAEOLOGICAL SITES AT THE DUNES WEST AREA.

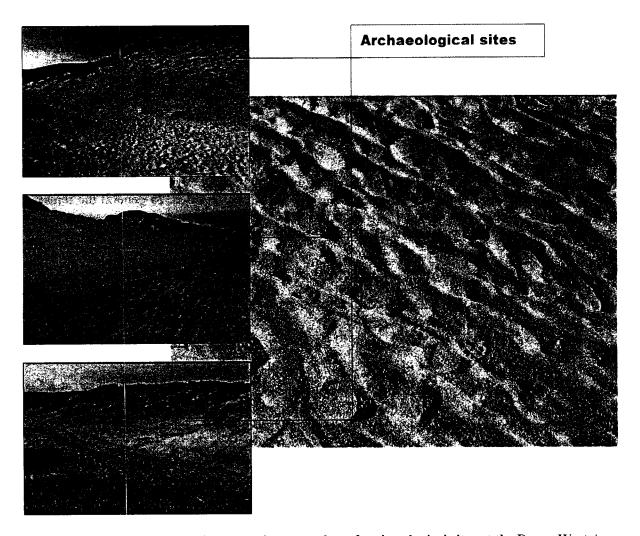
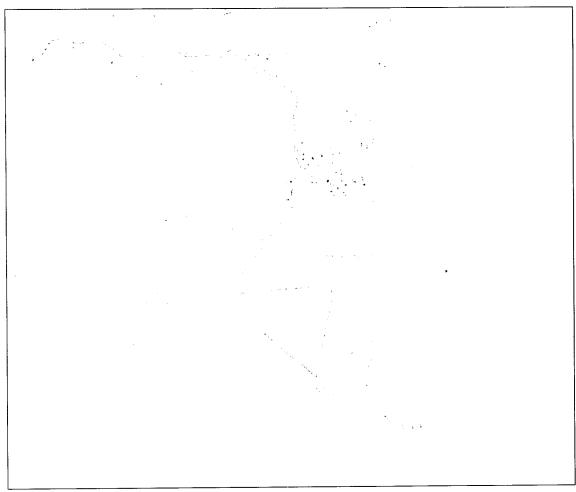


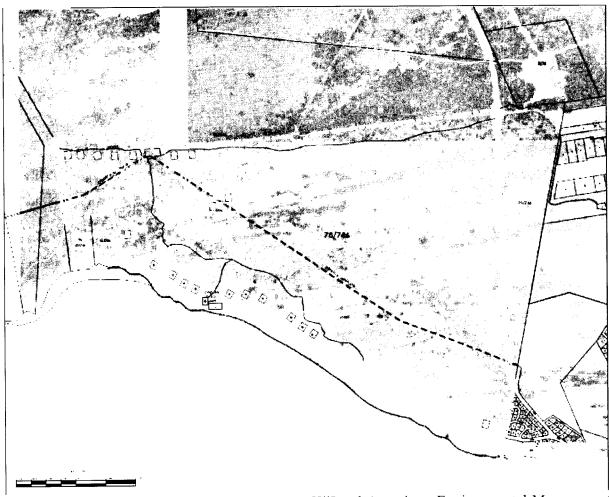
Fig. 41. A view of the feet moving past a large number of archaeological sites at the Dunes West Area.



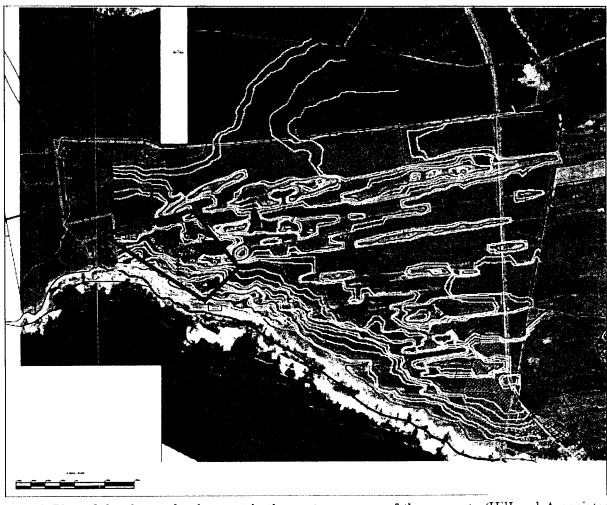
Map. 1. Location of the development. 1:50 000 3424BB Humansdorp (HilLand Associates Environmental Management Consultants).



Map. 2. Aerial photograph of the location of the development (HilLand Associates Environmental Management Consultants).



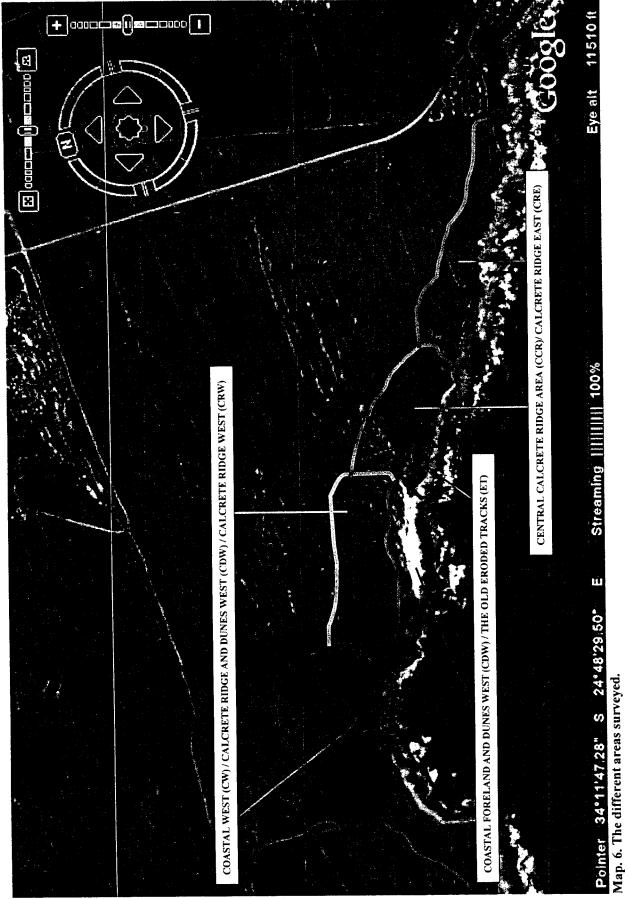
Map. 3. Plan of the rectangular unit development (HilLand Associates Environmental Management Consultants).



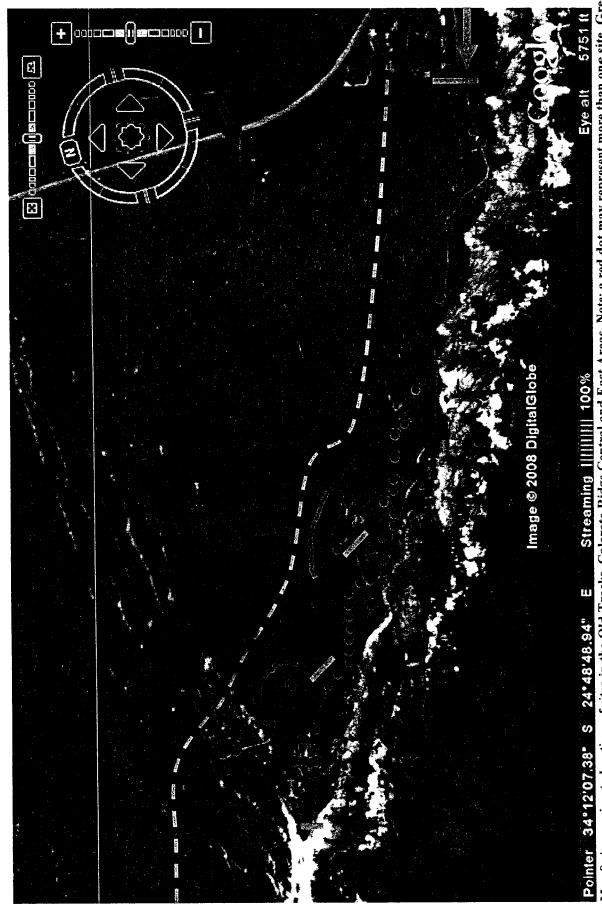
Map. 4. Plan of the cluster development in the western corner of the property (HilLand Associates Environmental Management Consultants).



tracks. Yellow arrow indicates track to be closed. Light blue stippled line indicates the sensitive zone. Solid red line indicate high energy coast; stippled red, wave coast; solid/stippled orange line, bench/boulder coast.



Map 7. Approximate locations of sites in the Old Tracks, Calcrete Ridge and Coastal Dunes West Areas Note: a red dot may represent more than one site. Green lines indicate were tracks should be closed or diverted to avoid further damage to sites. Light blue stippled line indicates the sensitive zone.



Map 8. Approximate locations of sites in the Old Tracks, Calcrete Ridge Central and East Areas. Note: a red dot may represent more than one site. Green lines indicate where tracks should be closed or diverted to avoid further damage to site. Yellow arrow indicate which tracks should be closed and green which to use. Light blue stippled line indicates the sensitive zone.