Archaeological Monitoring of Vegetation Clearing and Earth Moving Activities in Mitigation of Development at Paradise Coast

Remainder of the Farm Droogfontein 245, Mossel Bay, Western Cape Province

Progress Report

Prepared For:

Papilo Investments 33 (Pty) Ltd, PO Box 2500, Northcliff, 2110, Mr Des Yelverton, 044 6982027, 084 2320022, desmondyelverton@live.com



Peter Nilssen

C H A R M cc, PO Box 176, Great Brak River, 6525 Tel: (044) 620 4936 Cell: 082 783 5896 <u>peter@carm.co.za</u>

Company No. CK 2006\133900\23 VAT No. 4240230989

4 March 2010

Executive Summary

This version of the progress report for archaeological monitoring at Paradise Coast is intended for the ECO and developer and may not be submitted to the heritage authorities without written consent from the author.

In accordance with point 11 of the RoD issued by the Ministry for Environment, Planning and Economic Development – for the Paradise Coast development, CHARM deployed an archaeological monitor for vegetation clearing and earthmoving activities associated with the development.

Several localities where archaeological materials – stone artifacts – were exposed were mapped with a hand held GPS unit after which materials were labeled, bagged, collected and photographed. While several Stone Age artefacts were recorded, they occurred in very low densities and the need for further mitigation was deemed unnecessary.

At present, construction activities are on hold and Ms Cathy Avierinos of HilLand Associates, as appointed ECO for the development, will inform CHARM when such activities resume

Table of Contents

Content	Page		
Executive Summary	2		
1. Introduction	4		
1.1 Methodology	4		
1.2 Summary Results of Archaeological Monitoring	4		
2. References			
Figures and Plates			

1. Introduction

This progress report focuses on the fieldwork recently conducted at Paradise Coast (Figure 1 & 2). In accordance with point 11 of a RoD issued - for the Paradise Coast development - by the Ministry for Environment, Planning and Economic Development, Ms Cathy Avierinos of HilLand Associates – on behalf of the developer, represented by Mr Desmond Yelverton – appointed CHARM to conduct the necessary archaeological monitoring. CHARM deployed a full-time archaeological monitor (hereafter "the monitor") to supervise all construction activities associated with vegetation clearing and earth movement.

1.1 Methodology

Based on protocols and procedures developed for archaeological monitoring at Pinnacle Point, the following activities were performed (Nilssen 2005);

- Ms Avierinos informed CHARM of the schedule for relevant construction activities
- The monitor reported to site as advised
- Vegetation clearing and earthmoving activities proceeded only in the presence of the monitor
- When necessary, machine operators or workers cooperated with the monitor when work had to stop for inspection of exposed or suspected archaeological remains (here restricted to stone artifacts)
- For the most part, a GPS was on, laying walk tracks while the monitor followed construction activities the walk track is a record of spatial coverage
- When exposed and identified, the locality of the find(s) was fixed with a hand held Garmin Camo GPS Unit; a label and the find were bagged for the author to identify and photograph
- Collected materials are securely stored till such time as HWC decides on the final place for their curation

1.2 Summary Results of Archaeological Monitoring

During the period from 23 November to 9 December 2009, archaeological monitoring was conducted for 5 days at Paradise Coast. A distance of over 2km was walked, covering an area of around 0.8ha (Figure 3).

26 localities where stone artifacts were identified were mapped, and 102 Stone Age specimens were bagged and returned to the lab (Table 1). Materials span the entire pre-pottery period of human occupation in the area from the Early Stone Age (ESA) through the Middle Stone Age (MSA) to the Later Stone Age (LSA). The dates for these broad Stone Age categories are as follows:

- ESA starts around 2.6 mya (million years ago) and ends between 400-300kya (thousand years ago)
- MSA starts between 400-300kya and ends at around 30kya
- LSA starts around 30kya and ends with the initial occurrence of the pottery or pastoralist period at around 2kya

The bulk of specimens originate in the MSA with only a handful being of LSA age and only a single ESA artifacts was identified and recorded (see Plates 1 & 2). Artefacts include hammer stones, cores, flakes, flaked quartzite cobbles, convergent flakes, blades, a broken hand axe, scrapers, notched piece, manuports and broken flakes (Plates 1 & 2). Quartzite of various

qualities is the dominant raw material and only a few pieces are in silcrete with quartz represented by a single piece.

The most powerful signature of human habitation of the studied area relates to the MSA, the time during which anatomically and behaviourally modern humans developed in southern Africa (Marean *et al* 2007). The nature of the record thus far seen at Paradise Coast, however, is a mixed one – poor context – and materials occur in frequencies too low for scientifically meaningful mitigation in the form of archaeological excavations. As the project progresses, a clearer picture will develop with an increased collection of finds.

Table 1. Coordinate and descriptive data: artefacts recorded during monitoring

		wpnt		Datum: WGS 84	Datum: WGS 84
Date	Monitor	Name	Description	Lat/Lon dec.degrees	Grid: SA National
2009/11/23	Liezel	2	4 artefacts - 20m strip	S34.18737 E22.05858	23 Y0086783 X3784846
2009/11/23	Liezel	3	3 artefacts - 30m strip	S34.18732 E22.05890	23 Y0086754 X3784840
2009/11/23	Liezel	4	5 artefacts - 20m strip	S34.18720 E22.05951	23 Y0086698 X3784827
2009/11/23	Liezel	5	2 artefacts - 20m strip	S34.18713 E22.05995	23 Y0086657 X3784818
2009/11/23	Liezel	6	2 artefacts - 20m strip	S34.18704 E22.06107	23 Y0086554 X3784807
2009/11/23	Liezel	7	1 artefact - 30m strip	S34.18745 E22.06210	23 Y0086458 X3784852
2009/11/24	Liezel	8	11 artefacts - 350m strip	S34.18945 E22.06111	23 Y0086548 X3785075
2009/11/24	Liezel	9	1 artefact - 30m strip	S34.18968 E22.06060	23 Y0086594 X3785101
2009/11/24	Liezel	10	1 artefact - 20m strip	S34.18998 E22.05913	23 Y0086729 X3785135
2009/11/24	Liezel	11	6 artefacts - 20m strip	S34.18987 E22.05878	23 Y0086762 X3785123
2009/11/24	Liezel	12	3 artefacts - 20m strip	S34.18966 E22.05846	23 Y0086792 X3785100
2009/11/24	Liezel	13	2 artefacts - 20m strip	S34.18914 E22.05825	23 Y0086812 X3785043
2009/11/24	Liezel	14	2 artefacts - 20m strip - not retrieved	S34.18863 E22.05810	23 Y0086826 X3784986
2009/11/24	Liezel	15	8 artefacts - 150m strip - not retrieved	S34.19190 E22.06196	23 Y0086466 X3785346
2009/11/25	Liezel	16	1 artefact - 20m strip	S34.18991 E22.06135	23 Y0086525 X3785125
2009/11/25	Liezel	17	2 artefacts - 20m strip	S34.18958 E22.06077	23 Y0086579 X3785089
2009/11/25	Liezel	18	2 artefact - 20m strip	S34.18998 E22.05910	23 Y0086732 X3785135
2009/11/25	Liezel	19	29 artefacts - 20m strip	S34.18972 E22.05859	23 Y0086780 X3785106
2009/12/09	Liezel	21	2 artefacts - 40m strip	S34.18838 E22.06162	23 Y0086502 X3784955
2009/12/09	Liezel	23	3 artefacts 6x6m road	S34.19073 E22.06195	23 Y0086469 X3785215
2009/12/09	Liezel	24	3 artefacts 6x6m road	S34.19114 E22.06205	23 Y0086459 X3785261
2009/12/09	Liezel	25	1 artefacts 6x6m road	S34.19134 E22.06200	23 Y0086464 X3785283
2009/12/09	Liezel	26	1 artefacts 6x6m road	S34.19141 E22.06195	23 Y0086468 X3785291
2009/12/09	Liezel	27	3 artefacts 6x6m road	S34.19172 E22.06193	23 Y0086469 X3785326
2009/12/09	Liezel	28	2 artefacts 6x6m road	S34.19195 E22.06189	23 Y0086473 X3785351
2009/12/09	Liezel	29	2 artefacts 6x6m road	S34.19205 E22.06198	23 Y0086465 X3785362

2. References

Marean, C. W., Thompson, E., Williams, H., Bernatchez J. Nilssen, P. J et al (2007) "Early Human use of Marine resources and pigments in South Africa during the Middle Pleistocene" Nature

Nilssen, P.J. 2005. Archaeological Monitoring of vegetation clearing and all earthmoving activities during development at Pinnacle Point, Mossel Bay. Progress report to HWC. MAPCRM cc, Great Brak River.

Figures and Plates (on following pages)

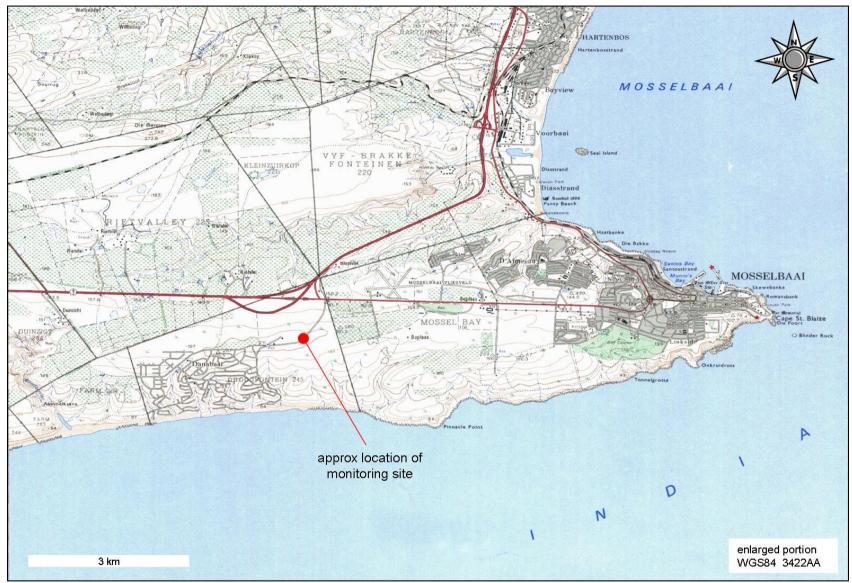


Figure 1. General location of monitoring site at Paradise Coast relative to the south Cape coastal town of Mossel Bay, Western Cape.



Figure 2. Paradise Coast development layout plan, courtesy of the client.



Figure 3. Enlarged area (see Figure 2) showing the studied area – walk tracks in dash dot black line on white – and collection localities.



Plate 1. Collections of Stone Age materials from various collection localities (numbers match with locality numbers in Figure 3). 008 is a scraper and 021 is a broken hand axe.



Plate 1. Collections of Stone Age materials from various collection localities (numbers match with locality numbers in Figure 3). 005 and 007 are scrapers and 10 is a notched piece (likely for the use as an adze).