## Appendix E: Copies of meeting minutes




## Walmer Airport Valley (Walmer Gqebera) SCM/15-110C, SCM/15-111/C, SCM/15-112/C Relocation of Shack Dwellers in Airport Valley

Walmer Gqeberha Airport Valley

## 18h00

## 03 February 2015

| NAME | ORGANISATION | TEL NO: | CELL NO | E-MAIL | SIGNATURE |
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# Alvodex <br>  

$1^{\text {st }}$ Floor Office, Block A, Metropolitan House, 277-281 Cape Road, Greenacres, Port Elizabeth, 6006
Tel. (041) 3630967
Fax. (086) 5387828

| CLIENT | $:$ | NELSON MANDELA BAY MUNICIPALITY |  |
| :--- | :--- | :--- | :--- |
| PROJECT | $:$ | WALMER GQEBERA TOWNSHIP DEVELOPMENT |  |
| MEETING | $:$ | SITE INSPECTION FOR ACCESS FOR THE TIP TRUCKS |  |
|  |  |  |  |
| Time: 10 h 00 |  | Venue: Walmer Airport Valley Site |  |


| ITEM | DESCRIPTION | ACTION |
| :---: | :---: | :---: |
| 1. | WELCOME <br> $\bullet$ <br> 2. Mr Victor Khame Welcomed all present | ATTENDANCE <br> - As per attached attendance register |
| 3. | APOLOGIES <br> - None |  |
| 4. | PURPOSE OF THE MEETING <br> - Airport Valley Site visit and to check the access road for tipper <br> trucks to Airport Valley with Makhetha, Mr Victor Khame, NMBM <br> Officials, Social Facilitator, Cllr Benya and Community Leaders |  |



Certified to be an accurate and true reflection of meeting held:

|  | Name | Signature | Date |
| :---: | :---: | :---: | :---: |
| NMBM |  |  |  |
| Makhetha |  |  |  |
| Councillor |  |  |  |

# Alvodex 

$1^{\text {st }}$ Floor Office, Block A, Metropolitan House, 277-281 Cape Road, Greenacres, Port Elizabeth, 6006
Tel. (041) 3630967
Fax. (086) 5387828

| CLIENT | $:$ | NELSON MANDELA BAY MUNICIPALITY |
| :--- | :--- | :--- |
| PROJECT | $:$ | WALMER GQEBERA TOWNSHIP DEVELOPMENT |
| MEETING | $:$ | RELOCATION OF 7 SHACK DWELLERS ON THE WAY OF THE TIP TRUCKS' |
|  |  |  |
| Time: 18 h 00 |  |  |


| ITEM | DESCRIPTION | ACTION |
| :---: | :---: | :---: |
| 1. | WELCOME <br> - Mr Tshezi Mzingelwa Welcomed all present |  |
| 2. | ATTENDANCE <br> - As per attached attendance register |  |
| 3. | APOLOGIES <br> - None |  |
| 4. | PURPOSE OF THE MEETING <br> - Informing of Airport Valley Shack dwellers that they are to be requested to relocate. |  |

nelson mandela bay
MUNICIPALITY
PORT ELIZABETH | UITENHAGE | DESPATCH


MUNIC|PALITY
PORT ELIZABETH | UITENHAGE | DESPATCH

|  | - XN informed the people that they will be given till Friday $20^{\text {th }}$ <br> February 2015 for them to relocate as time is short. |
| :--- | :--- | :--- | :--- |
| -XN thanked the people of Airport Valley including the Area <br> Committee for the commitment they have showed in working on <br> sorting out these obstacles. Also thanked the people for allowing <br> the relocation process to run smoothly. <br> $\mathbf{6 .}$ <br> CLOSURE <br> The meeting was formally closed at 18 h 57 |  |

Certified to be an accurate and true reflection of meeting held:

|  | Name | Signature | Date |
| :---: | :---: | :---: | :---: |
| NMBM |  |  |  |
| Makhetha |  |  |  |
| Councillor |  |  |  |

## Appendix F: Site maps \& Design Drawings










## < W Whathay <br> HUS





Figure 8-1: Proposed layout of the housing development


Figure 8-2: Local Spatial Development Framework of the study area (Metroplan, 2014)

## Appendix G: Title Deeds



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& \hline \text { (1) The figure ABCDr represents REMAINDER ERF } 1947 \text { WALMER } \\
& \text { Vide Diagram No. } 6328 / 1949 \text { D/T 1951-281-14001 } \\
& \text { (2) The figure ArEFGHst represents REMAINDER ERF } 1961 \text { WALMER } \\
& \text { Vide Diagram No. } 7194 / 1946 \text { D/T } 1856.27 .234 \\
& \text { (3) The figure tsvu represents ERF } 1960 \text { WALMER } \\
& \text { Vide Diagram No. } 7193 / 1946 \text { D/T } 1947.24002 \\
& \text { (4) The figure uvJKLMNPQ represents ERF } 11303 \text { WALMER } \\
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## Components

## Components

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Administrative District of Port Elizabeth
Province of Eastern Cape
Compiled in AUGUST 2007 , by me

## This diagram is annexed to

No. T27210/2009
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i.f.


## Deeds Office Property

WALMER, 11305, 0 (CAPE TOWN)

## GENERAL INFORMATION

| Deeds Office | CAPE TOWN |
| :--- | :--- |
| Date Requested | 2014/06/30 10:39 |
| Information Source | DEEDS OFFICE |
| Reference | 475764 |


| PROPERTY INFORMATION |  |
| :--- | :--- |
| Property Type | ERF |
| Erf Number | 11305 |
| Portion Number | 0 |
| Township | WALMER |
| Local Authority | NELSON MANDELA BAY METROPOLITAN MUNICIPALITY |
| Registration Division | PORT ELIZABETH RD |
| Province | EASTERN CAPE |
| Diagram Deed | T27210/2009 |
| Extent | $43.7273 H$ |
| Previous Description | - |
| LPI Code | C05900380001130500000 |

## OWNER INFORMATION

## Owner 1 of 1

Person Type
Name
Registration Number Title Deed
Registration Date
Purchase Price (R)
Purchase Date
Share
Microfilm Reference
Multiple Properties
Multiple Owners

GOVERNMENT
PROVINCIAL GOVERNMENT-EASTERN CAPE
T66351/2013
2013/12/05
40,000,000
2013/10/18

NO
NO

ENDORSEMENTS (4)

| $\#$ | Document | Institution | Amount (R) Microfilm |  |
| :--- | :--- | :--- | :--- | :--- |
| 1 | CONSOLIDATE FROM | TOWN WALMER ,ERF 1947, PRTN 0 | UNKNOWN | - |
| 2 | CONSOLIDATE FROM | TOWN WALMER ,ERF 1961,PRTN 0 | UNKNOWN - |  |
| 3 | CONSOLIDATE FROM | TOWN WALMER ,ERF 1960,PRTN 0 | UNKNOWN - |  |
| 4 | CONSOLIDATE FROM | TOWN WALMER ,ERF 11303 ,PRTN 0 | UNKNOWN - |  |

HISTORIC DOCUMENTS (3)

| $\#$ | Document | Owner | Amount (R) Microfilm |  |
| :--- | :--- | :--- | ---: | :--- |
| 1 | T27210/2009 | CAPE ROADS \& EXCAVATIONS PTY LTD | CCT | - |
| 2 | T27210/2009 | PRIVATE ASSET MANAGEMENT PTY LTD | CCT | - |
| 3 | T27210/2009 | WALMER HEIGHTS DEVELOPMENT <br> PARTNERSHIP | CCT | - |

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## Appendix H: Site Photographs



North western entrance to the site off Walmer Heights


Powerline running to the south of the site parallel to Victoria drive


Illegal Dumping


Eastern view of the site towards the airport reservoir


Ruins of a farmstead to the east of the site


Area invaded by Castor oil plant (Ricinus communis)


Forest on site


Protected Milkwood Tree (Sideroxylon inerme)

## Appendix I: Forest Survey Report

# CEN INTEGRATED ENVIRONMENTAL MANAGEMENT UNIT 

## Environmental and Rural Development Specialist

Results of a forest survey on Erf 11305,
Walmer, Port Elizabeth)

## Project Title:

Results of a forest survey on Erf 11305, Walmer, Port Elizabeth)

## Survey and Report by:

Belinda Clark, Stefan Kruger, Merika Louw

## Report Reviewed by:

Dr Mike Cohen

CEN Integrated Environmental Management Unit

36 River Road
Walmer, Port Elizabeth. 6070
South Africa
Phone (041) 581-2983 • Fax 0865042549
E-mail: steenbok@aerosat.co.za

GIS mapping assistance:
Jennifer Verseput - SRK Consulting

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## Introduction

CEN IEM Unit was appointed by SRK Consulting to do a survey of the remaining extent of forest (as defined by the National Forest Act No 84 of 1998 as amended (NFA)) on an area proposed for housing (Erf 11305 in Walmer, Port Elizabeth). The survey was requested by the Department of Agriculture, Forestry and Fisheries (DAFF). DAFF's mandate is to implement the provisions of the NFA and are therefore key role-players in the decision-making process for developments planned in areas where forest occurs.

Section 3(3) of the National Forest Act sets out principles to guide sustainable forest management. Section 3(3)(a) states that 'natural forests' must not be destroyed save in exceptional circumstances where, in the opinion of the Minister, a proposed new land use is preferable in terms of its economic, social or environmental benefits. By inference, areas that are classified as forest on the site during the survey would be protected in terms of the NFA - the current position is that housing projects do not constitute exceptional circumstances.

[^0]The National Forest Act gives the following definition for forest: 'forest' includes-
(a) A natural forest, a woodland and a plantation;
(b) The forest produce in it, and
(c) The ecosystem which makes it up

And 'natural forest' means a group of indigenous trees -
(a) Whose crowns are largely contiguous; or
(b) Which have been declared by the Minister to be a natural forest under section 7(2); (xxviii)

As a general guideline, where 3 or more forest species occur together in a 'clump', this is considered a forest community and is regarded as forest in terms of the above definition.

The terms of reference for the survey were as follows:

* Do an on-site assessment of the remaining extent of forest clumps and species
* Compile a list of dominant forest tree species observed
* Provide a map indicating where forest clumps and species occur on site
* Demarcate the location of protected species listed in terms of the National Forest Act (NFA)

Based on previous studies done on surrounding properties, as well as a review of aerial imagery and observations made during cursory site visits; it is reasonable to expect that forest occurs on the site. It was therefore deemed necessary to do a detailed survey to demonstrate the nature and extent of forest on site to assist the applicant and DAFF in land use decision planning.

## Methodology

Members of CEN IEM Unit visited the site on 16 July 2014. The extent of the study area was defined in an aerial image with the erf boundary provided by SRK Consulting. The site was traversed on foot using a hand-held GPS and an aerial image to demarcate the following (refer to Figure 1):

* Forest clumps - i.e. where 3 or more forest species occurred together.
* Clumps comprised of 2 or fewer forest species and/or individual trees.
* The occurrence of tree species that are protected under the NFA (2012 list of protected species)

$>$ Figure 1: An indication of the area surveyed and waypoints recorded. The site boundary is in black.

A series of maps with a corresponding species list at various waypoints was produced to indicate the extent and nature of forest on the site ${ }^{2}$. It should be noted that the data provided in the series of maps below was compiled based on information collected in the field as well as interpretation from a high resolution aerial image (2011).

## Results of the survey

### 1.1 List of dominant forest/tree species

A list of dominant forest species recorded is shown in Table 1. Species protected under the NFA include Pittosporum viridiflorum and Sideroxylon inerme.
> Table 1: List of dominant forest species recorded (alien species are denoted by a*)

| Anacardiaceae |
| :--- |
| Searsia crenata |
| Searsia glauca |
| Searsia pterota |
| Searsia tomentosa |
| Apocynaceae |
| Carissa bispinosa |
| Asphodelaceae |
| Aloe africana |
| Asteraceae |
| Brachylaena discolor |
| Osteospermum moniliferum |
| Tarchonanthus camphoratus |
| Bigoniaceae |
| Tecoma capensis |
| Celastraceae |
| Lauridia tetragona |
| Mystroxylon aethiopicum |
| Pterocelastrus tricuspidatus |
| Putterlickia pyracantha |
| Ebenaceae |

[^1]| Euclea racemosa |
| :--- |
| Fabaceae |
| Acacia spp. ${ }^{*}$ |
| Acacia karroo |
| Lamiaceae |
| Leonotis leonurus |
| Meliaceae |
| Ekebergia capensis |
| Rhamnaceae |
| Rhamnus prinoides |
| Salicaceae |
| Dovyalis rhamnoides |
| Solanaceae |
| Lycium ferocissimum |
| Myrtaceae |
| Eucalyptus sp. ${ }^{*}$ |
| Pittosporaceae |
| Pittosporum viridiflorum |
| Ranunculaceae |
| Clematis brachiata |
| Rhamnaceae |
| Scutia myrtina |
| Rutaceae |
| Clausena anisata |
| Zanthoxylum capense |
| Salvadoraceae |
| Azima tetracantha |
| Sapotaceae |
| Sideroxylon inerme |
| Tiliaceae |
| Grewia occidentalis |

### 1.2 Maps indicating the extent and nature of forest

Figure 2 indicates the location of forest clumps (i.e. 3 or more species) and clumps consisting of 2 or fewer species (i.e. individuals). Where a protected species was
observed within a forest clump, the clump is designated as 'protected'3. Similarly, individual trees that are protected are reflected accordingly in the map.

All forest clumps observed were fragmented/opened by some form of disturbance (e.g. fire, clearing, tracks). Some of the open areas between clumps were colonized by pioneer forest species, while others had alien vegetation or fynbos species. If the openings were small and believed not to impact on the functioning of the forest 'community', individual clumps were grouped into a single unit and classified as a matrix/interspersed clump versus a solid clump.

Clumps recorded in the survey are numbered as shown in Figure 3. Table 2 gives species information for each clump and an indication is given as to whether the clump is solid or a matrix.

To illustrate the occurrence of individual tree species and/or clumps with 2 or fewer species, the aerial image was divided into two; each indicating waypoints where these were recorded during the survey (refer to Figures 4 to 5 ). A corresponding species list is given in Table 3.

[^2]
> Figure 2: An indication of the location of forest clumps (3 or more species) and individual clumps/species and their protection status (in terms of the list of protected species under the National Forest Act).


Figure 3: Forest clump numbers as referenced in Table 2.
> Table 2: List of floral species recorded at forest clumps

| Clump No. | Waypoint | Species | Solid/Matrix |
| :---: | :---: | :---: | :---: |
| 1-1 | $294-305$, $310-317$, $524-534$, $536-538542-$ 548,549 | Tecoma capensis, Searsia glauca, Zanthoxylum capense, Mystroxylon aethiopicum, Acacia karroo, Euclea racemosa, Dovyalis rhamnoides, Sideroxylon inerme, Scutia myrtina, Clausena anisata, Putterlickia pyracantha, Clematis brachiata, Brachylaena discolour, Azima tetracantha, | Matrix |
| 2 | 344-354 | Rhamnus prinoides, E. racemosa, S. inerme, Searsia glauca, C. anisata, Searsia crenata, A, karroo, Grewia occidentalis, M. aethiopicum | Matrix |
| 3 | 366-374 | G. occidentalis, Z. capense, Acacia cyclops, R. prinoides, Pittosporum viridiflorum, S. myrtina, P. pyracantha, S. inerme | Matrix |
| 4 | 379-380 | Acacia spp., Carissa bispinosa, Searsia sp., S. myrtina, S. inerme, C. anisata | Matrix |
| 5 | $\begin{array}{r} \text { 383-389, } \\ 403-408 \\ \hline \end{array}$ | Z. capense, A. karroo, S. inerme. S. crenata, G. occidentalis, C. bispinosa, S. myrtina, Eucalyptus sp . | Matrix |
| 6 | 410-414 | S. myrtina, S. inerme, A. tetracantha, P. pyracantha, A. karroo | Matrix |
| 7 | $\begin{aligned} & \text { 424-426, } \\ & 437-440 \end{aligned}$ | G. occidentalis, S. inerme, Leonotis leonurus, S. myrtina, C. brachiata, A. karroo, Acacia spp. | Matrix |
| 8 | $\begin{aligned} & 433-437, \\ & 441-454 \end{aligned}$ | S. inerme, G. occidentalis, Ekebergia capensis, A. karroo, S. inerme, P. viridifolium, Aloe Africana. Searsia tomentosa, Searsia pterota, Acacia spp. | Matrix |
| 9 | 461-464,469 | S. inerme, A. karroo, Acacia spp. | Matrix |
| 10 | 474-481 | A. karroo, Z. capense, P. pyracantha, E. racemosa, S. inerme, C. brachiata, S. myrtina, Acacia sp. | Matrix |
| 11 | 482-493 | S. inerme, Z. capense, A. karroo, L. leonorus, G. occidentalis, Hypoestes sp., P. pyracantha, Acacia spp., S. tomentosa, S. glauca, S, crenata | Matrix |
| 12 | 496-510, 512 | S. inerme, L. leonurus, Z. capense, C. brachiata, C. anisata, A. karroo, S. glauca, Acacia spp. | Matrix |
| 13 | 522-523 | S. myrtina, S. crenata, Z. capense | Matrix |
| 14 | 540-542 | S. myrtina, S. inerme |  |


> Figure 4: An aerial image of the northern section of the site with waypoints where individual trees and/or clumps with 2 or fewer trees were recorded during the survey.

$>$ Figure 5: An aerial image of the eastern section of the site with waypoints where individual trees and/or clumps with 2 or fewer trees were recorded during the survey.

Table 3: List of floral species recorded as 'individuals' during the survey

| Waypoint Number | Species |
| :--- | :--- |
| Figure 4 |  |
| 418 | Sideroxylon inerme |
| 419 | S. inerme |
| 420 | S. inerme |
| 422 | S. inerme |
| 430 | Clausena anisata |
| 431 | Pittosporum viridiflorum |
| 432 | P. viridiflorum |
| 457 | Zanthoxylum capense |
| 468 | S. inerme |
| 470 | Acacia karroo, Z. capense, Scutia myrtina |
| 472 | Tarchonanthus camphoratus |
| Figure 5 |  |
| 323 | Lycium ferocissimum |
| 326 | Scutia myrtina |
| 328 | Searsia tomentosa |
| 329 | Searsia glauca |
| 330,331 | S. glauca, A. karroo |
| 332 | Z. capense |
| 333 | S. glauca |
| 335 | S. glauca |
| 338 | S. myrtina |
| 339 | Z. capense |
| 340 | S. myrtina |
| 341 | S. myrtina, Z. capense |
| 342 | S. glauca |
| 343 | S. tomentosa |
| 358 | S. myrtina |
| 359 | S. glauca |
| 360 | S. myrtina |
| 363 | S. inerme |
| 364 | S. inerme |
| 378 | S. inerme |
| 381 | Pterocelastrus tricuspidatus |
| 513 | Rhamnus prinoides, Searsia crenata |
| 517 | T. camphoratus |
| 518 | S. glauca, S. inerme |
|  |  |

## General comments on the status of forest on the site

Forest on Erf 11305 occurs predominantly in two major clumps on the northern and south-eastern borders. These clumps are representative of forest that would have occurred in the area prior to transformation. All forest clumps demarcated in this survey were a matrix of forest species interspersed with alien vegetation and pioneer species, and all have protected species in terms of the NFA (predominantly Sideroxylon inerme). In terms of structure and species composition, forest seems to be more mature than that found on Erf 1948, which is most likely related to soil type and depth.

Forest has been impacted by clearing (historic and current), fires, and alien vegetation encroachment. Large parts of the site are infested with alien vegetation, and remaining forest clumps are largely interspersed with alien tree species. In some areas, Acacia karroo occurred either on the fringes of forest clumps or in disturbed areas close to clumps; indicating potential regeneration of forest. Regeneration is inhibited by fires (as noted by burnt $A$. karroo) and competition with alien species. Current activities that were observed during the survey which impact on remaining forest and forest regeneration include clearing for planting of crops, fires, dumping (especially in the north-western section of the site which is accessible via Walmer Heights) and alien vegetation encroachment. When comparing the high resolution aerial image (2011) with the Google Earth image (2014), no obvious changes in vegetation cover were observed indicating that transformation of the site occurred at an earlier date. In an attempt to determine when impacts on forest vegetation occurred, historical imagery of the site from 2004 to 2011 was reviewed using Google Earth imagery (refer to Figure 6). Based on this, it appears that these impacts have been occurring for some time. The two significant forest clumps demarcated in this survey are visible in 2004 and in general, it does not seem that there were any additional significant forest areas at that time. While
alien vegetation has increased in density since 2004, the change is not as significant as what was observed on Erf 1948.

> Figure 6: A series of Google Earth images of Erf 13305 from 2004 to 2011.

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Integrated Environmental Management Unit CC

## Appendix J: Palaeontological Exemption Letter

# PROPOSED LOW-COST HOUSING DEVELOPMENT ON ERF 11305, 

 WALMER, NELSON MANDELA BAY MUNICIPALITY, EASTERN CAPEJohn E. Almond PhD (Cantab.)<br>Natura Viva cc, PO Box 12410 Mill Street, Cape Town 8010, RSA<br>naturaviva@universe.co.za

## September 2014

## 1. OUTLINE OF PROPOSED DEVELOPMENT

It is proposed to construct low-cost housing on Erf 11305, Walmer, in the Nelson Mandela Bay Municipality, Eastern Cape, as part of the Walmer Gqebera Low-Cost Housing Development, Port Elizabeth. An Environmental Impact Assessment for this housing project is being conducted by SRK Consulting (South Africa) Pty Ltd., Port Elizabeth, who have commissioned this palaeontological heritage comment (Contact details: Mr Luc Strydom. SRK Consulting. Ground Floor, Bay Suites, 1a Humewood Rd, Humerail, Port Elizabeth, 6001. P O Box 21842, Port Elizabeth, 6000. Tel: +27-041-5094800. Fax: +27-041-5094850. Email: Istrydom@srk.co.za).

## 2. GEOLOGICAL BACKGROUND

The Erf 11305 study area ( $33^{\circ} 59^{\prime} 53.5^{\prime \prime} \mathrm{S}, 25^{\circ} 34^{\prime} 14.4^{\prime \prime} \mathrm{E}$ ) is situated on the western outskirts of Walmer, between the M12 to the north and Victoria Drive to the south (Fig. 2). The terrain is fairly flat to undulating, at $c .110 \mathrm{~m}$ amsl., and well-vegetated.

The geology of the study area is shown on the 1:50 000 geology map 3425BA Port Elizabeth (Council for Geoscience, Pretoria) (Fig. 1). As shown on the map, Erf 11305 is underlain by coastal aeolianites (ancient, wind-blown dune sands) of the Nanaga Formation (Algoa Group) of Pliocene to Early Pleistocene age. These ancient dune sands crop out extensively to the west and east of Port Elizabeth (Le Roux 1992). In the present study area they unconformably overlie Palaeozoic sandstones and quartzites of the Peninsula Formation (Table Mountain Group; Op, pale blue in map Fig. 1). The Nanaga beds comprise calcareous sandstones and sandy limestones that often display large scale aeolian cross-bedding - well seen, for example, in deep N 2 roadcuts between Colchester and Grahamstown. They may reach thicknesses of 150 m or more (Maud \& Botha 2000). The Nanaga aeolianites are normally partially to well-consolidated, although unconsolidated sands also occur west of Port Elizabeth (Le Roux 2000). The upper surface of the aeolianites weathers to calcrete and red, clay-rich soil, and the dune sands themselves may be profoundly reddened. The age of the palaeodunes decreases towards the modern coastline, reflecting marine regression (relative sea level fall) during the period of deposition. The oldest outcrops located furthest from the modern coast are the most elevated, having experienced some 30 m of uplift in the Pliocene, and may even be Miocene in age (Roberts et al., 2006). Typically
the ancient dunes are preserved as undulating ridges of rounded hills trending parallel to the modern shoreline (Le Roux 1992).

## 3. PALAEONTOLOGICAL HERITAGE

The sparse palaeontological record of the Pliocene to Early Pleistocene Nanaga Formation is summarised by Le Roux (1992) and Almond (2010). The fossil biota consists of fragmentary marine shells, foraminifera (shelled protozoans), and a small range of terrestrial snails (eg Achatina, Tropidophora, Trigonephrus, Natalina). Dense arrays of calcretised rhizoliths (root casts) commonly occur in these and contemporary Plio-Pleistocene aeolianites along the southern and southwestern coast. A wider range of terrestrial fossils might be found here in future, albeit only rarely due to extensive post-depositional diagenesis (e.g. solution and repreciptation of carbonate by groundwater). They might include mammal remains from hyaena lairs, such as are recorded from contemporary Langebaan Formation aeolianites in the SW Cape (Roberts et al., 2006 and refs therein).

The overall palaeontological sensitivity of the Nanaga Formation is assessed as LOW, although pockets of locally HIGH sensitivity may occur locally.

## 4. CONCLUSIONS \& RECOMMENDATIONS

The proposed low-cost housing development on Erf 11305 Walmer is of LOW significance in terms of local palaeontological heritage since the sedimentary rocks underlying the site are largely unfossiliferous.

It is therefore recommended that exemption from further specialist palaeontological studies and mitigation be granted for this housing development.

Should any substantial fossil remains (e.g. vertebrate bones and teeth, petrified wood, plant fossil assemblages) be encountered during excavation, however, these should be safeguarded, preferably in situ, and reported by the ECO to ECPHRA (i.e. The Eastern Cape Provincial Heritage Resources Authority. Contact details: Mr Sello Mokhanya, 74 Alexander Road, King Williams Town 5600; smokhanya@ecphra.org.za) and a suitably qualified palaeontologist so that specimens can be examined, recorded and, if necessary, professionally excavated at the developer's expense.

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Figure 1: Extract from 1: 50000 geology map 3425BA Port Elizabeth (Council for Geoscience, Pretoria) showing the location of the study area on Erf 11305 Walmer, Port Elizabeth (black rectangle). The scale bar $=1 \mathbf{k m}$. North is towards the top of the map. The study area is underlain by Plio-Pleistocene aeolian sands of the Nanaga Formation (Algoa Group) (T-Qn, orange) that overlie Palaeozoic quartzites and sandstones of the Peninsula Formation (Table Mountain Group) (Op, blue).


Figure 2: Satellite image showing the location of the study area Erf 11305 (red polygon on left) in the Port Elizabeth suburb of Walmer, Nelson Mandela Bay Municipality, Eastern Cape (Image kindly supplied by SRK Consulting, PE).

## 6. QUALIFICATIONS \& EXPERIENCE OF THE AUTHOR

Dr John Almond has an Honours Degree in Natural Sciences (Zoology) as well as a PhD in Palaeontology from the University of Cambridge, UK. He has been awarded post-doctoral research fellowships at Cambridge University and in Germany, and has carried out palaeontological research in Europe, North America, the Middle East as well as North and South Africa. For eight years he was a scientific officer (palaeontologist) for the Geological Survey / Council for Geoscience in the RSA. His current palaeontological research focuses on fossil record of the Precambrian - Cambrian boundary and the Cape Supergroup of South Africa. He has recently written palaeontological reviews for several 1: 250000 geological maps published by the Council for Geoscience and has contributed educational material on fossils and evolution for new school textbooks in the RSA.

Since 2002 Dr Almond has also carried out palaeontological impact assessments for developments and conservation areas in the Western, Eastern and Northern Cape under the aegis of his Cape Town-based company Natura Viva cc. He is a long-standing member of the Archaeology, Palaeontology and Meteorites Committee for Heritage Western Cape (HWC) and an advisor on palaeontological conservation and management issues for the Palaeontological Society of South Africa (PSSA), HWC and SAHRA. He is currently compiling technical reports on the provincial palaeontological heritage of Western, Northern and Eastern Cape for SAHRA and HWC. Dr Almond is an accredited member of PSSA and APHP (Association of Professional Heritage Practitioners - Western Cape).

## Declaration of Independence

I, John E. Almond, declare that I am an independent consultant and have no business, financial, personal or other interest in the proposed development project, application or appeal in respect of which I was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances that compromise the objectivity of my performing such work.

> Th a E Alana

Dr John E. Almond Palaeontologist Datura Viva cc

## Appendix K: Archaeological Impact Assessment

A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED WALMER GQEBERA LOW-COST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

Prepared for: SRK Consulting
PO Box 21842
Port Elizabeth
6000
Tel: 0415094800
Fax: 0415094850
Contact person: Mr Luc Strydom
Email: LStrydom@srk.co.za

Compiled by: Ms Celeste Booth
t/a Booth Heritage Consulting
5 Queens Terrace
12 Chapel Street
Grahamstown
6139
Tel: 0820624655
Email: cbooth670@gmail.com
Contact person: Ms Celeste Booth

Date: September 2014

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## A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT (AIA) FOR THE PROPOSED WALMER GQEBERA LOW-COST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

NOTE: The phase 1 archaeological impact assessment was conducted as a requirement of the National Heritage Resources Act 25 of 1999, Section 38 (1)(c)(i):
38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as -
(c) any development or other activity which will change the character of the site -
(i) exceeding $5000 \mathrm{~m}^{2}$ in extent

This report follows the minimum standard guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) for compiling a Phase 1 Archaeological Impact Assessment (AIA).

## 1. EXECUTIVE SUMMARY

### 1.1. Purpose of the Study

The purpose of the study was to conduct a phase 1 archaeological impact assessment (AIA) for the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape Province. The survey was conducted to establish the range and importance of the exposed and in situ archaeological heritage material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimize possible damage to the archaeological heritage.

### 1.2. Brief Summary of Findings

The proposed area for the low-cost housing development is situated on the boundary of the generally accepted 5 km archaeologically sensitive coastal zone. However, no archaeological heritage remains or expected shell midden sites were observed within the proposed area for development. The ruins of a farmstead, dwelling, and associated infrastructure were documented on the property. The ruins of the buildings may be older than 60 years, however, modifications to the buildings may have been made over time.

### 1.3. Recommendations

The area is of a low pre-colonial archaeological cultural sensitivity, however, the following recommendations must be considered and implemented in accordance with the various phases of the development activities:

1. If it is deemed necessary that the structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structures.
2. If concentrations of historical and pre-colonial archaeological heritage material and/or human remains (including graves and burials) are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/excavation can be undertaken. A professional archaeologist should then be appointed to monitor the remaining vegetation clearing activities/excavation of the surface layer in the case that historical and/or precolonial archaeological material may become exposed. Phase 2 mitigation in the form of test-pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.
3. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

## 2. BACKGROUND INFORMATION

Nelson Mandela Bay Municipality (NMBM) has appointed SRK Consulting to conduct an Environmental Impact Assessment (EIA) process for the proposed development of lowcost housing on Erf 11305, Walmer, as well as a Basic Assessment (BA) for the associated housing development on a 64.2 ha portion of Erf 1948, and connections to services infrastructure to the area. This phase 1 archaeological impact assessment (AIA) focuses on the proposed low-cost housing development to be situated on Erf 11305, Walmer, a separate report (Phase 1 AIA) discusses the assessment conducted for the development of proposed transitional and permanent low-cost housing development to be situated on Erf 1948.

The Phase 1 Archaeological Impact Assessment (AIA) which has been prepared as part of the Environmental Impact Assessment (EIA) process for the proposed project in accordance with the National Heritage Resources Act 25 of 1999, and guidelines by the South African Heritage Resources Agency (SAHRA), and the Eastern Cape Heritage Resources Agency (ECPHRA).

### 2.1. Developer:

Nelson Mandela Bay Municipality (NMBM)

### 2.2. Consultant:

SRK Consulting
PO Box 21842
Port Elizabeth
6000
Tel: 0415094800
Fax: 0415094850
Contact person: Mr Luc Strydom
Email: LStrydom@srk.co.za

### 2.3. Terms of reference

The original proposal was to conduct a phase 1 archaeological impact assessment (AIA) for the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Metropolitan Municipality, Eastern Cape Province. The Terms of Reference (ToR) are as follows:

- Conduct a literature review of known archaeological resources within the area with a view to determining which of these resources are likely to occur within the development footprint;
- Comment on potential impacts on these resources resulting from the development;
- Make recommendations regarding the mitigation of any damage to archaeological resources identified, or that may be identified during the construction phase.


## 3. BRIEF HERITAGE LEGISLATIVE REQUIREMENTS

Parts of sections 3(1)(2)(3), 34(1), 35(4), 36(3) and 38(1)(8) of the National Heritage Resources Act 25 of 1999 apply:

## S3. National estate

3. (1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
4. (2) Without limiting the generality of subsection (1), the national estate may include (a) places, buildings, structures and equipment of cultural significance;
(b) places to which oral traditions are attached or which are associated with living heritage;
(c) historical settlements and townscapes;
(d) landscapes and natural features of cultural significance;
(e) geological sites of scientific or cultural importance;
(f) archaeological and palaeontological sites;
(g) graves and burial grounds, including -
(i) ancestral graves;
(ii) royal graves and graves of traditional leaders;
(iii) graves and victims of conflict;
(iv) graves of individuals designated by the Minister by notice in the Gazette;
(v) historical graves and cemeteries; and
(vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
(h) sites of significance relating to the history of slavery in South Africa;
(i) movable objects, including -
(i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological specimens;
(ii) objects to which oral traditions are attached or which are associated with living heritage;
(iii) ethnographic art and objects;
(iv) military objects;
(v) objects of decorative or fine art;
(vi) objects of scientific or technological interest; and
(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act (Act No. 43 of 1996).
5. (3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of -
(a) its importance in the community, or pattern of South Africa's history;
(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
(c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
(f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
(g) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
(i) sites of significance relating to the history of slavery in South Africa.

## S34. Structures

34. (1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

## S35. Archaeology, palaeontology and meteorites

35 (4) No person may, without a permit issued by the responsible heritage resources authority-
(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

## S36. Burial grounds and graves

36. (3) (a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority-
(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
(b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

## S38. Heritage resources management

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as -
(a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
(b) the construction of a bridge or similar structure exceeding 50 m in length;
(c) any development or other activity which will change the character of the site -
(i) exceeding $5000 \mathrm{~m}^{2}$ in extent, or
(ii) involving three or more erven or subdivisions thereof; or
(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;
(d) the re-zoning of a site exceeding $10000 \mathrm{~m}^{2}$ in extent; or
(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

## 4. BRIEF ARCHAEOLOGICAL BACKGROUND

Little systematic archaeological research has been conducted within the immediate area of the proposed development. However, several relevant archaeological and heritage impact assessments have been conducted within the immediate surrounding vicinity and along the wider coastal region between Kings Beach and Van Stadens River (Binneman 2008, 2009, 2010, 2011, 2012; Binneman \& Booth 2010; Booth, 2013a/b; Van Ryneveld 2010, 2013; Webley 2005, 2007). These impact assessments have identified several Early, Middle, and Later Stone Age stone artefacts and sites distributed along the coastline as well as evidence of Khoekhoen pastoralist occupation and/or interaction by the presence of broken earthenware pot sherds. Archaeological sites in the form of shell middens and scatters have also been reported along this coastline and within the 5 km archaeologically sensitive coastal zone.

Historical research on the early settlement in Walmer shows that the area proposed for the development of low-cost housing development and surrounds was situated on the farm Welbedacht and was later divided into several properties.

### 4.1. Early Stone Age (ESA) - 1.5 million to 250000 years ago

The oldest evidence of the early inhabitants are large stone tools, called hand axes and cleavers, which may be found amongst river gravels such as the Swartkops River and in old spring deposits within the region. These large stone tools are from a time period called the Earlier Stone Age (ESA) and may date between 1.5 million and 250000 years old. Large numbers of Early Stone Age stone tools were found at a research excavation at Amanzi Springs, some 10 kilometres north-east of Uitenhage (Deacon 1970). In a series of spring deposits a large number of stone tools were found in situ to a depth of 3-4 meters. Wood and seed material preserved remarkably very well within the spring deposits, and possibly date to between 800000 to 250000 years old.

Early Stone Age stone artefacts have been documented near Theescombe in the underlying calcrete layers (Binneman 2010).

### 4.2. Middle Stone Age (MSA) - 250000 - 30000 years ago

The large hand axes and cleavers were replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blade industries. Evidence of Middle Stone Age sites occur throughout the region and date between 250000 and 30000 years old. Fossil bone may in rare cases be associated with Middle Stone Age occurrences (Gess 1969). These stone artefacts, like the Earlier Stone Age hand axes are usually observed in secondary context with no other associated archaeological material.

Middle Stone Age stone artefacts have been documented near Theescombe and along the Schoenmakerskop - Sardinia Bay coastline (Binneman 2010, Webley 2005). One occurrence of Middle Stone Age artefacts also occurred north of Buffelsfontein Road near the proposed site of development (Van Ryneveld 2013).

### 4.3. Later Stone Age (LSA) - 30000 years ago - recent (100 years ago)

The majority of archaeological sites found in the area date from the past 10000 years (called the Later Stone Age) and are associated with the campsites of San huntergatherers and Khoi pastoralists. These sites are difficult to find because they are in the open veld and often covered by vegetation and sand. Sometimes these sites are only represented by a few stone tools and fragments of bone. The preservation of these sites is poor and it is not always possible to date them (Deacon and Deacon 1999). There are many San hunter-gatherers sites in the nearby Groendal Wilderness Area and adjacent mountains. Here, caves and rock shelters were occupied by the San during the Later Stone Age and contain numerous paintings along the cave walls. The last San/KhoiSan group was killed by Commando's in the Groendal area in the 1880s.

Several Later Stone Age shell midden sites as well as scatters situated on the surface of the loose dune sand with associated stone and other artefacts have been documented along Marine Drive and the Schoenmakerskop - Sardinia Bay coastline and further west, possibly dating between $6000-8000$ years ago and younger than 4500 years (Binneman 2008, 2010, 2011; Binneman \& Booth 2010; Webley 2005).

### 4.4. Last $\mathbf{2} 000$ years - Khoenkhoen Pastoralism

Some 2000 years ago Khoenkhoen pastoralists occupied the region and lived mainly in small settlements. They introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern Africa. Often archaeological sites are found close to the banks of large streams and rivers. Large piles of freshwater mussel shell (called middens) usually mark these sites. Prehistoric groups collected the freshwater mussel from the muddy banks of the rivers as a source of food. Mixed with the shell and other riverine and terrestrial food waste are also cultural materials. Human remains are often found buried in the middens (Deacon and Deacon 1999).

Several shell midden sites as well as scatters situated on the surface of the loose dune sand are associated with the occupation of Khoekhoen pastoralists within the last 2000 years. These middens and scatters are differentiated from the Later Stone Age sites scatters by the occurrence of earthenware pottery and the faunal remains of domesticated stock such as cattle and sheep. Sites with the occurrence of pottery and other artefacts have been documented along Marine Drive and the Schoenmakerskop Sardinia Bay coastline and further west (Binneman \& Booth 2010).

### 4.5. Last $\mathbf{5 0 0}$ years - Historical

The history of Walmer dates back to the early 1800's before the mass arrival of British Settlers to Port Elizabeth. During 1815 the farm Welbedacht was granted to AM Muller. The farm was located to the south-west of Port Elizabeth and covered an area of just under 14 square miles. The farm was inherited by Muller's eight sons when he died in 1845, however, the sons could not decide on how to subdivide the property and as a result the farm was sold and the money distributed to the heirs. In 1855 the area was transferred to the municipality of Port Elizabeth and renamed Walmer in honour of the Duke of Wellington. By March 1855 the land was laid out and resolved to sell 400 plots by public auction. A number of stands were reserved for the Dutch Reformed Church and the Anglican Church. The plan of the village included wide streets and a plentiful supply of water. In 1899 Walmer was awarded separate municipal status while its residential character, spacious residential plots and attractive dwellings attracted families with young children and the elderly. In 1967 Walmer became part of the Port Elizabeth Municipality.

The history of the Port Elizabeth-Avontuur railway, which is located north of the proposed development area, shows that its passenger service has never been much of a revenue earner. Passengers were initially carried on scheduled trains. However, with their numbers dwindling over the years due to competition from buses operated by the then South African Railway's Road Motor Service, the railway authorities eventually had to terminate the service. A short suburban branch line to serve the town of Walmer (at that stage on the outskirts of Port Elizabeth!) was brought into operation in 1906. This service showed a loss from the start because of lack of community support and was abandoned in 1928.

The sport of horse racing in South Africa enjoys a long and rich history that can be traced back to 1797, with the first recorded race club meeting taking place in 1802. Unfortunately the date for the establishment for the Arlington Race Course, situated immediately east of the proposed development area, could not be found.

The Walmer Golf Club, or more fondly known as Little Walmer, was founded in 1897 which makes it one of the oldest gold clubs in the country. The Walmer Golf Club borders the proposed development area to the west.

The early population of Port Elizabeth consisted mainly of Europeans, as well as persons of mixed race which the Apartheid system subsequently labelled as 'Coloureds' and 'Cape Malays'. Initially few members of the indigenous population were attracted to the town, and almost from the onset economic status was related to skin colour. Thus segregation was an integral part of early Port Elizabeth, with the industrial areas of South End and North End being predominantly Coloured, while the Central and Western suburbs were mainly White.

A large influx of Xhosa refugees into the Colony occurred after the cattle-killing of 1857 and they were rapidly absorbed into the wage-labour market on account of a labour shortage in towns of the eastern frontier districts. Thus, a rising number of Black workers began to enter Port Elizabeth seeking employment, so then a number of socalled 'locations' began to be established on the outskirts of the White suburbs. The growth of Port Elizabeth's African population led to the overcrowding of the Native Strangers' Location. Many of these new arrivals were accommodated in a number of locations on private property. The largest was Gubb's Location which was situated on the 'Mill Property' (now Mill Park), with others in the Baakens River Valley, Walmer and South End

The pattern of 'locations' was first established in 1834 when the Colonial Government made a grant of land to the London Missionary Society (LMS) to provide a burial ground and residential area for Hottentots and other coloured people who were members of the Church (Baines 1989) located at the crest of Hyman's Kloof (Russel Road). Other workers however chose to erect their homes closer to their places of employment, or where a supply of portable water was available. With few exceptions these Black suburbs were informal in nature and residents there were forced to endure living conditions which contemporary observers described as being squalid and open to exploitation by capitalist landlords. Many Whites considered them to be unhealthy and petitions were reportedly organised demanding that they be removed to the outskirts of the town. These requests were in direct opposition to the needs of the growing commercial and industrial sectors which preferred to locate their labour sources close to the harbour and the inner city area. These conflicting vested interests created political tension within the Port Elizabeth Council which were only resolved in 1885 when the Municipality adopted its first set of markedly segregationist regulations. As a result suburbs for the exclusive use of Black residents who were not housed by employers, and who could not afford to purchase property were established on the outskirts of Port Elizabeth. Most prominent amongst them were including Walmer (1896).

In 1898 white business owners and white households wanted their black workers to remain close to their property so work could be more convenient. Although the area of the Gqebera Township was intended to be a white suburb, South African indigenous populations (blacks and coloureds) began to move into the area.

In 1901 an outbreak of Bubonic plague struck the town. This was a direct result of Argentinian fodder and horses being imported into South African by the British military during the Anglo-Boer conflict (now referred to as the South African War). These cargos also carried plague-infected rats and although many members of the White and Coloured communities were also affected, the Black population bore the brunt of the Plague Health Regulations. During this time most of Port Elizabeth's old locations were demolished (with the exception of Walmer), their resident belongings were arbitrarily destroyed and restrictions were imposed upon inter-town travel.

Gqebera, as Walmer Township is called in the Xhosa language that most of its residents speak, was designated to be in the 'whites only' area under the Apartheid Group Area Act 1955, and therefore the regime tried to remove the Township. Due to the strong resistance of the township's residents and support from the citizens in the nearby Walmer suburbs resident area, Gqebera was never destroyed. But the price was high; apartheid authorities would deny Walmer Township the most basic infrastructure.

The Driftsands, situated south-east of the proposed development area towards the coast became a dump site during the late 1800's to stabilise the shifting dune sands. People began settling behind the dune sands from the latter part of the 1800's. Three previous heritage impact assessments have identified the scatter of historical artefacts that is associated with the distribution of the Driftsands Historical Dump Site towards the village of Schoenmakerskop below the World War II fortified observation post, about 5 km south of the proposed site for the low-cost housing development as well as along the Sardinia Bay Road.

Previous surveys in the Driftsands area have revealed extensive historical dump material dating to the Victorian period. After European settlement of the area, the Driftsands threatened the harbour development of Port Elizabeth and it was decided in 1893 to stabilise the dunes by spreading the town garbage in a swathe from Happy Valley to Sardinia Bay. The rubbish was taken to the dunes, and the seeds of Australian acacias (Rooikrantz, Port Jackson, and long leaf wattles) planted in the garbage compost. This job was started in 1893 and completed in 1909.

### 4.6. Human Remains

It difficult to detect the presence of archaeological human remains on the landscape as these burials, in most cases, are not marked at the surface. Human remains are usually observed when they are exposed through erosion or construction activities for development. In some instances packed stones or rocks may indicate the presence of informal pre-colonial burials.

## 5. DESCRIPTION OF THE PROPERTY

### 5.1. Location data

The proposed area for the low-cost housing development is situated about 5 km from the nearest coastline, therefore falling on the boundary of the generally considered 5 km archaeologically sensitive coastal zone. The site is situated between the Arlington Race Track to the west, Beaumont Estates residential area to the north and the Walmer Golf Club to the east. The village of Schoenmakerskop is situated about 5 km south along Victoria Drive. The site can be accessed off Victoria Drive.

### 5.2. Map

1:50 000 Map: 3325DC \& DD 3425BA PORT ELIZABETH (Figure 1).


Figure 1. 1:50 000 topographic map 3325DC \& DD 3425BA PORT ELIZABETH showing the location of the proposed area for the proposed low-cost housing development.


Figure 2. Aerial view of the location of the proposed low-cost housing development on Erf 11305, Gqebera, Walmer, Port Elizabeth (black boundary).


Figure 3: Aerial view of the proposed area for the low-cost housing development showing previous archaeological and heritage impact assessment conducted within the immediate vicinity (1. Webley 2005; 2. Webley 2007; 3. Booth 2013; 4. Binneman \& Booth 2010; 5. Van Ryneveld 2010; Van Ryneveld 2013).


Figure 4. Close-up aerial view of the proposed area for the low-cost housing development showing the location of the related Gqebera housing development on Erf 1948, the Arlington Race Course, and the Walmer Golf Course.


Figure 5. Close-up aerial view of the proposed area for the low-cost housing development showing the development boundary, the survey track, and built environment structures on Erf 11305.

## 6. ARCHAEOLOGICAL INVESTIGATION

### 6.1. Methodology

The survey was conducted on foot by investigating the exposed and less densely vegetated areas. GPS readings and photographs were taken using a Garmin Oregon 550 (Table 1). The GPS readings have been plotted on Figures 3-5.

### 6.2. Results of the Archaeological Investigation

The proposed area for development was mostly covered in dense thicket and grass vegetation that obscured archaeological visibility over most of the area. Very few exposed areas allowed for the possibility of investigating for pre-colonial archaeological material and sites (Figures 6-8). The existing road, footpaths, and surface eroded areas were investigated for possible archaeological and other heritage remains.

The site is currently being used by the local community for various informal recreational, agricultural and other activities. A small group of cattle grazing was encountered in the western half of the site during the survey (Figure 9). The cattle most probably belong to members of the Gqebera Township. A makeshift soccer field is situated near the reservoir just north of the possible farmstead ruins (QBE3) on the south-western boundary of the site (Figure 10). Relatively recent but unused cultivated lands were identified near the northern boundary of the site (Figure 10). Fresh crops of recently planted cabbages and maize occur adjacent to the unused cultivated lands near the ruins of the built environment structure (QBE2).

Several informal dumping areas were encountered during the survey, some of these areas have been completely overgrown with the dense grass vegetation (Figure 12).

During the survey members of the local community (Gqebera Township) were chopping up trees for wood.


Figure 6. View of the general landscape showing the dense thicket vegetation.


Figure 7. View of the general landscape showing the dense grass vegetation.


Figure 8. View of one of the surface exposed areas investigated for archaeological heritage remains.


Figure 9. Cattle grazing on Erf 11305.


Figure 10. View of a makeshift soccer field situated on Erf 11305.


Figure 11. View of previously cultivated lands adjacent to cabbage and maize crops.


Figure 12. View of an area previously used for informal dumping.

No pre-colonial archaeological heritage remains or sites were identified during the survey. However, it is possible that archaeological shell midden sites and artefacts may be uncovered during the development activities.

Two building ruins (QBE2 AND QBE3) and one dipping tank (QBE1) were encountered during the survey. The two building ruins have been recorded on the $1: 50000$ topographic map (Sixth Edition, 2002) (Figure 1). One other building / ruin has also been recorded on the 1:50 000 topographic map (Sixth Edition, 2002) (Figure 1), however, it is not recorded on previous editions of the 1:50 000 topographic maps (Second Edition, 1965 and Forth Edition, 1983), therefore, establishing that the building / ruin is younger than 60 years (co-ordinate has been provided in Table 1). This latter building / ruin was not encountered during the survey.

The dipping tank (QBE1) that would most probably have been used when the area was still used for farming or as a small holding is located in the eastern half of the area and is overgrown with vegetation growth (Figure 13).

The building ruin (QBE2) is located near the northern boundary of the site. The ruin has also been overgrown with dense vegetation growth. The dense vegetation around the ruin made it difficult to investigate whether any historical artefacts or more recent items were associated with the possible dwelling. The artefacts would have assisted in establishing a relative date for the ruin. Only two walls of the ruin remain standing, the rest of the building has collapsed (Figures 14-15). The ruin is older than 60 years as it is visible on the 1939 aerial photograph (aerial photograph provided by Mr Bryan

Wintermeyer). However, the structure may have been modified over time. An unidentified subsurface concrete feature is located within the immediate vicinity of the ruin (Figure 16). At first it resembled a shallow built up grave, however, no human remains were noted.

The building ruin (QBE3) is situated immediately outside the south-eastern corner of the proposed area for development, near the reservoir (Figures 17-18). The ruin is made up of what once was a stone walled dwelling. The only identifiable area of the dwelling is the sunken kitchen indicated by the remaining fireplace feature. Most of the walls have collapsed except for one of the stone walling structures that remains intact. The stone walling structure is attached to what once may have been the kitchen area and may have been the chimney. This stone walling structure remains standing at a height of about four metres. The remains of the side wall attached to this structure indicates that the general height of the dwelling may have been significantly lower than the remaining stone walling structure. Additional buildings, constructed from brick and cement, adjacent to the stone walling dwelling remain relatively intact as well as the possible underground reservoir used to store water. It is likely that the farmstead is associated with the early settlement in the area. However, it is possible that modern additions may have been made to the structure. It is unknown when these dwellings were abandoned. A built-up path leads north down the slight gradient. The dense vegetation around the ruin made it difficult to investigate whether any historical artefacts or more recent items were associated with the possible dwelling. The artefacts would have assisted in establishing a relative date for the ruin.

A substation (QBE4) is located within the south-eastern corner of the proposed development.


Figure 13. An unused dipping tank situated at QBE1.


Figure 14. View of the ruin of a building situated at QBE2.


Figure 15. Alternative view of the building ruin situated at QBE2.


Figure 16. Subsurface feature associated with the ruins situated at QBE2.


Figure 17. View of the ruins of a farmstead situated at the area marked QBE3.


Figure 18. Alterative view of the ruins of a farmstead situated at QBE3.

## 7. DESCRIPTION OF SITES

### 7.1. Built Environment

BE1: An unused dipping tank overgrown with vegetation.

BE2: Ruin of a dwelling and associated infrastructure.

BE3: Ruin of a farmstead.

BE4: Contemporary substation.

The ruins of the built environment are considered as having a low-medium cultural significance and have been allocated a heritage grading of:
'General' Protection B (Field Rating IV B): These sites should be recorded before destruction (usually Medium significance).
(See Table 1. for short descriptions and co-ordinates)
8. COORDINATES AND SITES FOR THE PROPOSED WALMER GQEBERA LOWCOST HOUSING DEVELOPMENT ON ERF 11305, WALMER, PORT ELIZABETH, NELSON MANDELA BAY MUNICIPALITY (NMBM), EASTERN CAPE PROVINCE.

Table 1. Coordinates and sites for the the proposed Walmer Gqebera low-cost housing development on Erf 11305, Walmer, Port Elizabeth, Nelson Mandela Bay Municipality (NMBM), Eastern Cape Province.

| REFERENCE | DESCRIPTION | COORDINATE | HERITAGE GRADING |
| :--- | :--- | :--- | :--- |
| BE1 | Unused dipping tank | $33^{\circ} 59^{\prime} 52.60^{\prime \prime} \mathrm{S} ; 25^{\circ} 34^{\prime} 20.60^{\prime \prime \mathrm{E}}$ | 'General' Protection B <br> (Field Rating IV B) |
| BE2 | Ruin of dwelling | $33^{\circ} 59^{\prime} 48.10^{\prime \prime} \mathrm{S} ; 25^{\circ} 34^{\prime} 11.00^{\prime \prime \mathrm{E}}$ | 'General' Protection B <br> (Field Rating IV B) |
| BE3 | Ruin of farmstead | $33^{\circ} 59^{\prime} 56.70^{\prime \prime} \mathrm{S} ; 25^{\circ} 34^{\prime} 30.30^{\prime \prime \mathrm{E}}$ | 'General' Protection B <br> (Field Rating IV B) |
| BE4 | Substation | $33^{\circ} 59^{\prime} 51.00^{\prime \prime} \mathrm{S} ; 25^{\circ} 34^{\prime} 34.15^{\prime \prime \mathrm{E}}$ | 'General' Protection B <br> (Field Rating IV B) |
| Other building <br> / ruin | Recorded on 1:50 000 <br> topographic map <br> (Sixth Edition, 2002) <br> (Fig. 1) | $33^{\circ} 59^{\prime} 52.93^{\prime \prime} \mathrm{S} ; 25^{\circ} 34^{\prime} 04.85^{\prime \prime} \mathrm{E}$ | N/A |

## 9. CULTURAL LANDSCAPE

Cultural landscapes are increasingly becoming a significant considering factor when conducting various archaeological and heritage impact assessments for proposed developments. The proposed development area, Erf 11305, is considered as having a low-medium cultural heritage significance. This significance attests to the ruins of the built environment related to earlier occupation in the area.

This section gives a brief introduction to the concept of cultural landscape and its relation to various aspects of the dynamic interaction of humans as cultural agents and the landscape as a medium. A description of the interwoven relationships of humans with the landscape over time will be given including the archaeological, historical, and contemporary connections. Lastly, the living heritage makes up a small part of the study undertaken, its significance will be highlighted in relation to the communities who still identify with the area and retain a sense of identity to the landscape.

### 9.1. Concept of Cultural Landscape

Cultural landscapes can be interpreted as complex and rich extended historical records conceptualised as organisations of space, time, meaning, and communication moulded through cultural process. The connections between landscape and identity and, hence, memory are fundamental to the understanding of landscape and human sense of place. Cultural landscapes are the interface of culture and nature, tangible and intangible
heritage, and biological and cultural diversity. They represent a closely woven net of relationships, the essence of culture and people's identity. They are symbolic of the growing recognition of the fundamental links between local communities and their heritage, human kind, and its natural environment. In contemporary society, particular landscapes can be understood by taking into consideration the way in which they have been settled and modified including overall spatial organisation, settlement patterns, land uses, circulation networks, field layout, fencing, buildings, topography, vegetation, and structures. The dynamics and complex nature of cultural landscapes can be regarded as text, written and read by individuals and groups for very different purposes and with very many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives. Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes.

The impact of human action of the landscape occurs over time so that a cultural landscape is the result of a complex history and creates the significance of place in shaping historical identities by examining a community's presence or sense of place. The deeply social nature of relationships to place has always mediated people's understanding of their environment and their movements within it, and is a process which continues to inform the construction of people's social identity today. Social and spatial relationships are dialectically interactive and interdependent. Cultural landscape reflects social relations and institutions and they shape subsequent social relations.

Cultural landscapes tell the story of people, events, and places through time, offering a sense of continuity, a sense of the stream of time. Landscapes reflect human activity and are imbued with cultural values. They combine elements of space and time, and represent political as well as social and cultural constructs. Culture shapes the landscape through day-to-day routine and these practices become traditions incorporated with a collective memory the ultimate embodiments of memorial consciousness', examples such as monuments, annual events and, archives. As they have evolved over time, and as human activity has changed, they have acquired many layers of meaning that can be analysed through archaeological, historical, geographical, and sociological study.

Indigenous people, European explorers, missionaries, pastoralists, international and domestic travellers all looked or look at similar landscapes and experience different versions of reality. Regardless of the power of different cultural groups, however, all groups create cultural landscape and interpret them from their own perspectives. This gives rise to tensions and contradictions between groups, invariably expressed in landscape forms as well.

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many interpretations. The messages embedded in the landscape can be read as signs about values, beliefs, and practices from various perspectives.

Most cultural landscapes are living landscapes where changes over time result in a montage effect or series of layers, each layer able to tell the human story and relationships between people and the natural processes. A common theme underpinning the concept of ideology of landscape itself and the setting for everything we do is that of the landscape as a repository of intangible values and human meaning that nurture our very existence. Intangible elements are the foundation of the existence of cultural landscapes, and that are still occupied by contemporary communities, Landscape, culture and collective memory of a social group are intertwined and that this binds the individuals to their community. Culture shapes their everyday life, the values bind gradually, change slowly, and transfer from generation to generation - culture is a form of memory. We see landscapes as a result of our shared system of beliefs and ideologies. In this way landscape is a cultural construct, a mirror of our memories and myths encoded with meanings which can be read and interpreted. Pivotal to the significance of cultural landscapes and the ideas of the ordinarily sacred is the realisation that it is the places, traditions, and activities of ordinary people that create a rich cultural tapestry of life, particularly through our recognition of the values people attach to their everyday places and concomitant sense of place and identity.

Living heritage means cultural expressions and practices that form a body of knowledge and provide for continuity, dynamism, and meaning of social life to generations of people as individuals, social groups, and communities. It also allows for identity and sense of belonging for people as well as an accumulation of intellectual capital current and future generation in the context of mutual respect for human, social and cultural rights.

Protection of these cultural landscapes involves some management issues such as successful conservation is based on the continuing vital link between people and their landscapes. This link can be disrupted or affected by for instance economical reasons. Other threats can also be attributed to urban expansion and development, tourism, war and looting and something beyond our human intervention: natural disasters and climate change. Cultural landscape management and conservation processes bring people together in caring for their collective identity and heritage, and provide a shared local vision within a global context. Local communities need, therefore, to be involved in every aspect of identification, planning and management of the areas as they are the most effective guardians of landscape heritage.

Most elements of living heritage are under threat of extinction due to neglect, modernisation, urbanisation, globalisation, and environmental degradation. Living heritage is at the centre of people's culture and identity, it is importance to provide space for its continued existence. Living heritage must not be seen as merely safeguarding the past, but it must be seen as safeguarding the logic of continuity of
what all communities or social groups regard as their valuable heritage, shared or exclusive.

In some instances, villages may capitalise on local landscape assets in order to promote tourism. Travel and tourism activities are built around the quest for experience, and the experience of place and landscape is a core element of that quest. It is a constant desire for new experiences that drives tourism, rather than a quest for authenticity. It is, therefore, important to engage actively with the tourism industry so that aspects of life and landscape important to cultural identity, including connection with place are maintained.

### 9.2. Archaeological Landscape

Although no archaeological heritage remains have been documented within the proposed development area, the area was once part of an ancient landscape inhabited by various families of genus Homo. Various studies recording archaeological sites and occurrences within the wider region stretching along Port Elizabeth's western coastline have reported on the evidence of the presence of Homo erectus (Early Stone Age), Homo sapiens (Middle Stone Age), and Homo sapiens sapiens (Later Stone Age). The only remains dating to the Early and Middle Stone Ages are stone artefacts as the organic evidence and sites have not been preserved. The influence of climatic conditions and the rising and falling of the sea levels may also attribute to much archaeological site information being lost.

The preservation of archaeological sites in the form of marine shell middens, marine shell scatters and associated cultural materials remains shows that the natural and edible resources of the area made the area an attraction over the last 10000 years. This region would have been attractive to those hunter-gatherer communities who visited the area to harvest shellfish along the rocky coastline.

The pastoralists were driven by locating enough food to feed their domestic stock herds. The area was also attractive to later Khoekhoen pastoralists who also occupied and moved along this coastline. Their archaeological signature is evident in the remains of pottery sherds that are distributed on the dunes along the coast showing their presence on the landscape. This evidence also unlocks a potentially dynamic social landscape with possible interaction between the hunter-gathers and pastoralists.

Pre-colonial human remains are mostly unmarked and invisible on the landscape, however, in some instances, they may be marked by organised piles of stones.

### 9.3. Historical Landscape

The archaeological interpretation of the cultural landscape relies solely on the presence and surface visibility of artefacts left behind on the landscape by the populations who occupied and migrated through the proposed development area. A more comprehensive historical layer is able to be fitted onto the cultural landscape owing to the availability of written documents and the continuing existence of the traces left behind by European Settlers and the moulding of these traces used to shape the contemporary communities that occupies and regards itself attached to its present cultural landscape.

The proposed development area fits into a greater cultural landscape and the moulding of an historical townscape that developed into contemporary Port Elizabeth. The greater area was made up of four farms, the existing area is situated on the farm Welbedacht, Buffelsfontein (west), Papenbiesiesfontein (east), and Strandfontein (south-east) were granted during the early and mid-1800's. The dune area towards the coast has always been moving Driftsands.

Walmer's historical landscape encompassed much change over the last 200 years, yet also never losing its cultural character. Walmer has always been considered as being a demographically 'grey area' owing to the racial co-existence of the economically more "well-to-do" Whites in the suburbs and economically exploited indigenous and Black populations in the Gqebera Township. The eventual layout of Walmer was based on this continued co-existence despite several attempts to relocate members of the Gqebera Town community to the extreme outskirts of Port Elizabeth which was met with protest from both the White and Black members of the area. Walmer and Gqebera Township is very much the same today as it was historically, albeit different.

### 9.4. Contemporary Landscape

The contemporary cultural landscape is the product of centuries of human interaction, more so when the European Settlers entered the area. The contemporary townscape of Walmer and Gqebera Township has been shaped over the last 200 years. As previously mentioned Walmer and Gqebera Township is very much the same as it was historically, albeit different.

The similarities are vast. The demographic make-up of the Walmer suburbs are still mainly inhabited by the more "well-to-do" White people, although the more "well-to-do" Black and Coloured populations are slowly beginning to settle in the area. Gqebera Township, on the other hand, remains a popular area to migrate to as it still close to the city centre and places of employment. However, the increasing pressure and infiltration of locals from other Port Elizabeth townships and foreigners, such as Zimbabweans, Nigerians, and Somalis has put increased pressure on the townships space for occupation and ailing infrastructure. Gqebera Township is 'landlocked'. The only way to
expand the township is if the municipality decides to purchase private land around the boundaries of the township. The residents of the township continue to protest, however, not against forced removals but because of lack of service delivery and maintenance of existing infrastructure.

Traditions live on by the use of adjacent empty space and resources for the grazing of cattle.

Conditions in Gqebera giving rise to such high alcohol use and high HIV prevalence and thus presenting challenges to prevention, should be seen in the historical and political context. Gqebera is a congested township of about 65000 to 70000 people and is described as one of the most impoverished areas in the EC province. Diverse problems such as deep poverty; lack of education; both gender and crime related violence; unprotected sex; teenage pregnancies; and alcohol and other drug abuse, are among the factors related to and driving the HIV/AIDS epidemic in the township. Impoverished residents rely mainly on government grants and the informal sector to survive.

Despite the problems facing Gqebera Township, several projects have been established in the township that encourages the members of the community to inspire each other.

## 10. CONCLUSION

The phase 1 archaeological impact assessment (AIA) was conducted as requirement of the National Heritage Resources Act (NHRA 25 of 1999) triggered by Section 38(1)(c)(i). A literature review was conducted focusing on the archaeological literature resources available. Historical research was conducted to establish the significance of the historical settlement of the area. The survey was conducted to establish the range and importance of the exposed and in situ archaeological material remains, sites and features; to establish the potential impact of the development; and to make recommendations to minimise the possible damage to the archaeological heritage. The report follows the minimum standards guidelines required by the South African Heritage Resources Agency (SAHRA) and the Eastern Cape Provincial Heritage Resources Agency (ECPHRA).

Very little systematic archaeological research has been conducted within the area proposed for the low-cost housing development. Several relevant archaeological and heritage impact assessments have been conducted within the immediate vicinity and the wider region along the coastline between Kings Beach and Van Stadens River. These reports have identified several Early, Middle, and Late Stone Age stone and other artefacts distributed along the coastline as well as evidence of Khoekhoen pastoralist occupation and / or interaction by the presence of broken earthenware pot sherds. Archaeological sites such as marine shell middens and surface scatters have been reported within this 5 km archaeologically sensitive coastal zone. Historical research on

Walmer and Gqebera Township points the area's unique establishment and the reason for the layout and shaping of Port Elizabeth as a city over the last 200 years.

The proposed development area is situated on the boundary of the 5 km archaeological sensitive coastal zone. No archaeological heritage remains were observed during the survey. However, the survey was limited to surface and exposed area observations and does no eliminate the possibility that archaeological heritage remains may occur below the surface. It is possible that stone artefact may occur below the dense vegetation cover between the surface and $50-80 \mathrm{~cm}$ below the ground. Ruins of buildings were encountered that should be specially assessed to determine the significance. The potential impact of the development activities on the archaeological heritage remains, sites, and features is regarded as low-medium; however, the recommendations and mitigation measures must be taken into consideration and implemented before the commencement of the proposed development activities.

The proposed development area does not evoke the pre-colonial / archaeological cultural landscape as any archaeological heritage materials, sites or features were documented within the area. However the area falls into a greater cultural landscape that shows evidence of occupation and interactive relationships within other communities and the natural resources over a possible 1.5 million years. The colonial / historical cultural landscape describes the process of the development of Port Elizabeth as city and functional harbour port over 200 years.

## 11. RECOMMENDATIONS

The area is of a low pre-colonial archaeological cultural sensitivity, however, the following recommendations must be considered and implemented in accordance with the various phases of the development activities:

1. If it is deemed necessary that these structures be demolished for the proposed development to proceed, it is recommended that a specialist historical archaeologist or historical architect be appointed to assess the significance of the built environment structures.
2. If concentrations of historical and pre-colonial archaeological heritage material and/or human remains are uncovered during construction, all work must cease immediately and be reported to the Albany Museum and/or the Eastern Cape Provincial Heritage Resources Agency (ECPHRA) so that systematic and professional investigation/excavation can be undertaken. A professional archaeologist should then be appointed to monitor the remaining vegetation clearing activities/excavation of the surface layer in the case that pre-colonial shell middens may become exposed. Phase 2 mitigation in the form of test-pitting/sampling or systematic excavations and collections of the pre-colonial shell middens and associated artefacts will then be
conducted to establish the contextual status of the sites and possibly remove the archaeological deposit before development activities continue.
3. Construction managers/foremen and/or the Environmental Control Officer (ECO) should be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.

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Elizabeth, Nelson Mandela Bay Municipality, Eastern Cape province for the development of 2 residential nodes, lodge, and nature reserve.
Binneman, J. 2011. A Phase 1 Archaeological Impact Assessment of the proposed rezoning and possible subdivision of Portion 72 (Portion of Portion 1) of the Farm Stadens River No. 485 in the Division of Uitenhage, Eastern Cape Province, for residential purposes.
Binneman. J. 2012. A letter of recommendation (with conditions) for the exemption of a full phase 1 archaeological impact assessment for the proposed phase 2 redevelopment and landscaping of the southern portion of the King's Beach node of the Nelson Mandela Bat Southern Beachfront (Erf 1031, Erf 576, and the Remainder of Erf 575, Humewood).
Binneman, J. \& Booth, C. 2010. A phase 1 archaeological impact assessment for the proposed 20MW wind farm on three alternative sites: Erf 121, Driftsands (Site Alternative 1), Bushy Park Farm, Remainder of Erf 26, as well as Portions 5, 6, and 7 thereof (Site Alternative 2), and Rietfontein far, (Site Alternative 3), Nelson Mandela Metropolitan Municipality, Eastern Cape Province.
Booth, C. 2013. A phase 1 archaeological impact assessment (AIA) for the Airports Company of South Africa (ACSA) proposed Port Elizabeth airport stormwater upgrade, Walmer, Nelson Mandela Bay Municipality, Eastern Cape Province.
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Van Ryneveld, K. 2010. Phase 1 archaeological impact assessment: Driftsands collector sewer augmentation, Port Elizabeth (Nelson Mandela Bay Municipality), Eastern Cape, South Africa.
Van Ryneveld, K. 2013. Phase 1 archaeological impact assessment: Walmer stormwater detention ponds and associated infrastructure, Erven 1935 and 7006, Walmer, Nelson Mandela Bay Municipality, Eastern Cape Province, South Africa.
Webley, L. 2009. Phase 1 heritage impact assessment: Caravan park development at Van Stadens River Mouth, Cacadu District, Eastern Cape.
Webley, L. 2007. Phase 1 heritage impact assessment for the establishment of the Sardinia Bay Golf Estate (Erf 278 - Theescombe), Port Elizabeth.
Webley, L. 2005. Phase 1 heritage impact assessment of a proposed water reservoir site near Schoenmakerskop, Port Elizabeth.

## 14. GENERAL REMARKS AND CONDITIONS

NOTE: This report is a phase 1 archaeological impact assessment (AIA) only and does not include or exempt other required specialist assessments as part of the heritage impact assessments (HIAs).

The National Heritage Resources Act (Act No. 25 of 1999, Section 35 [Brief Legislative Requirements]) requires a full Heritage Impact Assessment (HIA) in order that all
heritage resources including all places or objects of aesthetics, architectural, historic, scientific, social, spiritual, linguistic, or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

It must be emphasized that the conclusions and recommendations expressed in this phase 1 archaeological impact assessment (AIA) are based on the visibility of archaeological remains, features and, sites and may not reflect the true state of affairs. Many archaeological remains, features and, sites may be covered by soil and vegetation and will only be located once this has been removed. In the event of such archaeological heritage being uncovered (such as during any phase of construction activities), archaeologists or the relevant heritage authority must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed. The onus is on the developer to ensure that this agreement is honoured in accordance with the National Heritage Resources Act No. 25 of 1999 (NHRA 25 of 1999).

Archaeological Specialist Reports (desktops and AIA's) will be assessed by the relevant heritage resources authority. The final comment/decision rests with the heritage resources authority that may confirm the recommendations in the archaeological specialist report and grant a permit or a formal letter of permission for the destruction of any cultural sites.

## APPENDIX A: GRADING SYSTEM

The NHRA stipulates the assessment criteria and grading of archaeological sites. The following categories are distinguished in Section 7 of the Act and the South African Heritage Resources Agency:

- National: This site is suggested to be considered of Grade 1 significance and should be nominated as such. Heritage resources with qualities so exceptional that they are of special national significance.
- Provincial: This site is suggested to be considered of Grade II significance and should be nominated as such. Heritage resources which, although forming part of the national estate, can be considered to have special qualities which make them significant within the context of a province or a region
- Local: This site is suggested to be Grade IIIA significance. This site should be retained as a heritage register site (High significance) and so mitigation as part of the development process is not advised.
- Local: This site is suggested to be Grade IIIB significance. It could be mitigated and (part) retained as a heritage register site (High significance).
- 'General' Protection A (Field Rating IV A): This site should be mitigated before destruction (usually High/Medium significance).
- 'General' Protection B (Field Rating IV B): This site should be recorded before destruction (usually Medium significance).
- 'General Protection C (Field Rating IV C): This site has been sufficiently recorded (in the Phase 1). It requires no further recording before destruction (usually Low significance).


## APPENDIX B: 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 high-water 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 $1 \mathrm{~m}^{2}$ 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 or any other 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

They come in different forms and sizes, but are easy to identify. 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. Others may resemble circular single row cobble stone markers. These are different sizes and may be the remains of wind breaks or cooking shelters.

## 6. Historical artefacts or features

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

## Appendix L: Aquatic Impact Assessment

# ERF 11305 WALMER HOUSING DEVELOPMENT 

## AQUATIC ASSESSMENT

Prepared for:
SRK Consulting
P O Box 21842
PORT ELIZABETH
6000

Prepared by:
Scherman Colloty \& Associates
Postnet Suite 25
Private Bag 1672
GRAHAMSTOWN
6140
scherman colloty and Associates co
Environmental and Aquatic management consulting
(CK 2009/112403/23)

## SPECIALIST REPORT DETAILS

This report has been prepared as per the requirements of the Environmental Impact Assessment Regulations and the National Environmental Management Act (Act 107 of 1998), any subsequent amendments and any relevant National and / or Provincial Policies related to biodiversity assessments.

Report prepared by: Dr. Brian Colloty Pr.Sci.Nat. (Ecology) / Certified EAP / Member SAEIES and SASAqS.

Expertise / Field of Study: BSc (Hons) Zoology, MSc Botany (Rivers), Ph.D Botany Conservation Importance rating (Estuaries) and interior wetland / riverine assessment consultant from 1996 to present.

I, Dr. Brian Michael Colloty declare that this report has been prepared independently of any influence or prejudice as may be specified by the National Department of Environmental Affairs.

Signed:...


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## ACRONYMS

| CARA | Conservation of Agricultural Resources Act |
| :--- | :--- |
| CBA | Critical Biodiversity Area |
| CSIR | Council for Scientific and Industrial Research |
| DWS | Department of Water and Sanitation formerly the Department of Water <br>  <br> ECBCP |
| Effairs |  |
| GIS | Ecological Importance and Sensitivity |
| NCAP | Geographic Information System |
| NFEPA | NMBM Bioregional Conservation Action Plan (SRK, 2011) |
| PES | National Freshwater Ecosystem Priority Atlas (Nel, et al. 2011). |
| SANBI | Present Ecological State |
| WUL | South African National Biodiversity Institute |
| WULA | Water Use License |

## 1 INTRODUCTION

SRK Consulting appointed Scherman Colloty \& Associates (SC\&A) to assess the proposed study area for the potential occurrence of any natural waterbodies, including wetlands (Figure 1). The intent of this study is to assess the present ecological state of any natural water courses should they occur, and provide the client with an indication of any additional requirements needed by the Department of Water and Sanitation (DWS). This would include any potential Water Use Licenses under Section 21 c \& i under the National Water Act, i.e. water course crossings or any construction within 500 m of a wetland boundary.


Figure 1: Google Earth image of Erf 11305 near Walmer Heights
Several terms and definitions are used in this report and the reader is referred to the box below for additional detail.

## Definition Box

Present Ecological State is a term for the current ecological condition of the resource. This is assessed relative to the deviation from the Reference State. Reference State/Condition is the natural or pre-impacted condition of the system. The reference state is not a static condition, but refers to the natural dynamics (range and rates of change or flux) prior to development. The PES is determined per component - for rivers and wetlands this would be for the drivers: flow, water quality and geomorphology; and the biotic response indicators: fish, macroinvertebrates, riparian vegetation and diatoms. PES categories for every component would be integrated into an overall PES for the river reach or wetland being investigated. This integrated PES is called the EcoStatus of the reach or wetland.

Ecological Importance and Sensitivity (EIS) are the terms used to describe the rating of the any given wetland or river reach that provides an indication of the ecological importance of the aquatic system using criteria such as conservation needy habitat or species, protected ecosystems or unique habitat observed. The sensitivity is then derived by assessing the resilience the habitat exhibits under stress as a result of changes in flow or water quality.

### 1.1 Relevant legislation and policy

Locally the South African Constitution, seven (7) Acts and one (1) international treaty allow for the protection of rivers and water courses. These systems are thus protected from destruction or pollution by the following:

- Section 24 of The Constitution of the Republic of South Africa;
- Agenda 21 - Action plan for sustainable development of the Department of Environmental Affairs and Tourism (DEAT) 1998;
- National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998) inclusive of all amendments, as well as the NEM: Biodiversity Act, 2004 (Act 10 of 2004);
- National Water Act, 1998 (Act No. 36 of 1998);
- Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983);
- Minerals and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002);
- Nature and Environmental Conservation Ordinance (No. 19 of 1974);
- National Forest Act (No. 84 of 1998); and
- National Heritage Resources Act (No. 25 of 1999).

This report will be used as part of the relevant submissions to the Department of Water and Sanitation in terms of the registration / licensing (as required) for Section 21 c \& i water uses should they be required.

## Provincial legislation and policy

Various provincial guidelines on buffers have been issued within the province. These are stated below so that the engineers and contractors are aware of these buffers during the planning phase. Associated batch plants, stockpiles, lay down areas and construction camps should avoid these buffer areas. Until national guidelines for riverine and wetland buffers are established, the guidelines set out in the Eastern Cape Biodiversity Conservation Plan documentation should be applied (Berliner \& Desmet, 2007). Table 1 provides recommended buffers for rivers.

Currently there is no accepted priority ranking system for wetlands. Until such a system is developed, it is recommended that a 50 m buffer be set for all wetlands (Berliner \& Desmet, 2007).

Other policies that are relevant include:

- Provincial Nature Conservation Ordinance (PNCO) - Protected Flora. Any plants found within the sites are described in the ecological assessment.
- Eastern Cape Biodiversity Conservation Plan (ECBCP), (Berliner \& Desmet, 2007) - Aquatic Critical Biodiversity Areas (CBAs)
- Nelson Mandela Bay Metropolitan Bioregional Plan (SRK, 2011). Fine scale conservation plan with proposed CBA network also referred to NCAP or Nelson Mandela Bay Conservation Action Plan.
- National Freshwater Ecosystems Priority Areas - (Nel et al., 2011). This mapping product highlights potential rivers and wetlands that should be earmarked for conservation on a national basis.

Table 1: Recommended buffers for rivers (the predominant buffer for the study region is highlighted in blue) (Berliner \& Desmet, 2007)

| River criterion <br> used | Buffer <br> width (m) | Rationale |
| :--- | :---: | :--- |
| Mountain streams <br> and upper foothills <br> of all 1:500 000 <br> rivers | 50 | These longitudinal zones generally have more confined <br> riparian zones than lower foothills and lowland rivers and <br> are generally less threatened by agricultural practices. |
| Lower foothills and <br> lowland rivers of all <br> 1:500 000 rivers | 100 | These longitudinal zones generally have less confined riparian <br> zones than mountain streams and upper foothills and are <br> generally more threatened by development practices. |
| All remaining <br> Generally smaller upland streams corresponding to mountain <br> 1:50 000 streams | 32 | streams and upper foothills, smaller than those designated in <br> the 1:500 000 rivers layer. They are assigned the riparian buffer <br> required under South African legislation. |

## 2 METHODS

### 2.1 Study terms of reference

SC\&A based this study on the following scope of work:

- Identify and delineate any aquatic systems and associated biota that may be impacted upon by the proposed project based on the DWS wetland and riparian delineation methodology (DWAF, 2005);
- Identify and rate potential environmental impacts on these systems and associated biota;
- Provide a significance rating of surface water impacts which includes a rating of the ecological sensitivity of the site, and the effect of the development on the aquatic ecology of the site;
- Identify mitigation measures for negative and enhancement measures for positive impacts.

Based on our understanding of these requirements, SC\&A would produce the following:

- Riparian and /or wetland area delineation supplied together with an analysis of the potential aquatic sensitivity (including any wetlands should they occur).
- Present Ecological State (PES) assessment of any watercourses after a short site visit has been conducted, in line with the Department of Water Affairs requirements should any Section 21 c \& i water use licenses be required.
- Compile the required impact assessment and provide suitable recommendations.


### 2.2 Study methods

This assessment was initiated with a survey of the pertinent literature, including past reports that exist for the study region. Maps and Geographical Information Systems (GIS) were then employed to ascertain, which portions of the proposed development, could have the greatest impact on the water courses and associated habitats.

A site visit was then conducted to ground-truth the above findings, thus allowing critical comment of the possible impacts. Information was also collected to determine the PES and Ecological Importance and Sensitivity (EIS) should any natural systems be found. These analyses were based on the models developed by the Department of Water and Sanitation, with the results producing ratings ( $A-F$ ), descriptions for which are summarised in Table 2.

Table 2: Description of A - F ecological categories based on Kleynhans et al., (1999).

| ECOLOGICAL <br> CATEGORY | ECOLOGICAL DESCRIPTION | MANAGEMENT PERSPECTIVE |
| :---: | :--- | :--- |
| A | Unmodified, natural. | Protected systems; relatively <br> untouched by human hands; no <br> discharges or impoundments <br> allowed |
| B | Largely natural with few modifications. A small change in <br> natural habitats and biota may have taken place but the <br> ecosystem functions are essentially unchanged. | Some human-related disturbance, <br> but mostly of low impact potential |
| C | Moderately modified. Loss and change of natural habitat and <br> biota have occurred, but the basic ecosystem functions are still <br> predominantly unchanged. | Multiple disturbances associated <br> with need for socio-economic <br> development, e.g. impoundment, <br> habitat modification and water <br> quality degradation |
| D | Largely modified. A large loss of natural habitat, biota and <br> basic ecosystem functions has occurred. | mater |
| E | Seriously modified. The loss of natural habitat, biota and basic <br> ecosystem functions is extensive. | Often characterized by high <br> human densities or extensive <br> resploitation. <br> is |
| F | Critically / Extremely modified. Modifications have reached a <br> critical level and the system has been modified completely with <br> an almost complete loss of natural habitat and biota. In the <br> worst instances the basic ecosystem functions have been <br> destroyed and the changes are irreversible. | Management intervention <br> needed to improve health, e.g. to <br> restore flow patterns, river <br> habitats or water quality |

## 3 STUDY AREA DESCRIPTION AND RESULTS

Although the study area is located within the Baakens River catchment, no connections via channels, streams, or rivers occur between the site and the Baakens River (Figure 2). Any potential connectivity has been further been reduced by the roads (present and past).

This is further supported by the National Freshwater Ecosystems Priority Atlas (NFEPA - Nel et al., 2011) (Figure 3) and Eastern Cape Biodiversity Conservation Plan (ECBCP) (Figure 4) spatial databases. The NFEPA project has captured and rated the importance of rivers and wetlands on a national basis and indicates that no such habitats (riverine or wetland) or priority areas are located within or adjacent to the site. This is a similar case for the ECBCP and NMBM Bioregional Plan (NCAP) data.

The study area is therefore characterised by the high degree of modification linked to the development of roads, housing (formal and informal) and alien tree invasion and high levels of illegal solid waste and building rubble disposal. The latter is particularly evident in areas around the former Arlington Race course (Plate 1).

Several areas were shown in the available aerial photographs as likely wetland areas (Plates 2 and 3), but after the site visit these were found to be either bare soils areas or dune hummocks (slack) with alien / secondary vegetation. Therefore no wetland areas were found within or adjacent to the study site.

Consequently no Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) of the areas was determined.


Plate 1: The large areas covered by building rubble adjacent the former Arlington Race track.


Plate 2: The dune hummock areas in the northern portion of the Erf 11305, that could typically be wetland areas, showed no evidence of such habitat, past or present.


Plate 3: A small area of bare soil, adjacent to the Airport reservoir, and was found to be an informal soccer field (soccer posts indicated by red arrow), with no evidence of wetland habitat (Erf 11305)


Figure 2: The project locality (light blue) in relation to the Baakens River (Quaternary Catchment M20A)


Figure 3: The project locality in relation the Freshwater Ecosystems Priority Areas (Nel et al., 2011).


Figure 4: The project locality in relation the ECBCP Aquatic CBA spatial data.

## 4 IMPACT ASSESSMENT

The impact assessment rating methodology was provided by SRK Consulting. However no aquatic environments, natural or man-made were observed within both study areas. Thus the impact assessment was not required.

## 5 CONCLUSION AND RECOMMENDATIONS

Usually these types of reports also assess the impacts on instream biota, the removal of riparian vegetation and the impact on riparian systems, especially during the construction phase. However as none of these systems were evident, it was not necessary to assess these potential impacts.

As no waterbodies, natural or artificial were evident, no Water Use License Applications would be required, under the National Water Act (Act 36 of 1998).

However as the developments will create surface water run-off (hard surface areas) the following recommendations are provided:

- Stormwater from the final outlets should be managed using suitable structures such as swales, gabions and rock rip-wrap so that any run-off from sites is attenuated prior to discharge. Silt and sedimentation should be kept to a minimum, through the use of the above mentioned structures by also ensuring that all structures do not create any form of erosion.
- Vegetation clearing should occur in in a phased manner in accordance with the construction programme to minimise erosion and/or run-off. Large tracts of bare soil will either cause dust pollution or quickly erode and then cause sedimentation in the lower portions of the catchment.
- Only indigenous plant species must be used in the re-vegetation process.
- All construction materials including fuels and oil should be stored in demarcated areas that are contained within berms / bunds to avoid spread of any contamination. Washing and cleaning of equipment should also be done in berms or bunds, in order to trap any cement and prevent excessive soil erosion. Mechanical plant and bowsers must not be refuelled or serviced within or directly adjacent to any channel. It is therefore suggested that all construction camps, lay down areas, batching plants or areas and any stores should be more than 50 m from any demarcated water courses.
- All cleared areas must be re-vegetated after construction has been completed.
- It is also advised that an Environmental Control Officer, with a good understanding of the local flora be appointed during the construction phase. The ECO should be able to make clear recommendations with regards to the re-vegetation of the newly completed / disturbed areas, using selected species detailed in this report.
- All alien plant re-growth must be monitored and should it occur these plants should be eradicated. The scale of the operation does however not warrant the use of a Landscape Architect and / or Landscape Contractor.


## 6 REFERENCES

Berliner D. and Desmet P. 2007. Eastern Cape Biodiversity Conservation Plan: Technical Report. Department of Water Affairs and Forestry Project No 2005-012, Pretoria. 1 August 2007

Department of Water Affairs and Forestry - DWAF (2005). A practical field procedure for identification and delineation of wetland and riparian areas Edition 1. Department of Water Affairs and Forestry , Pretoria.
Kleynhans C.J., Thirion C. and Moolman J. (2005). A Level 1 Ecoregion Classification System for South Africa, Lesotho and Swaziland. Report No. N/0000/00/REQ0104. Resource Quality Services, Department of Water Affairs and Forestry, Pretoria.

Nel, J.L., Murray, K.M., Maherry, A.M., Petersen, C.P., Roux, D.J., Driver, A., Hill, L., Van Deventer, H., Funke, N., Swartz, E.R., Smith-Adao, L.B., Mbona, N., Downsborough, L. and Nienaber, S. (2011). Technical Report for the National Freshwater Ecosystem Priority Areas project. WRC Report No. K5/1801.

## 7 APPENDIX

### 7.1 Indigenous plant species List

List of recorded plant species found within the study area, with family name as per Germishuisen \& Meyer (2003) using PRECIS.

| Family | Scientific Name |
| :--- | :--- |
| ASTERACEAE | Conyza obscura |
| ASTERACEAE | Felicia erigeroides |
| POACEAE | Cynodon dactylon |
| POACEAE | Eragrostis curvula |
| POACEAE | Eragrostis plana |
| POACEAE | Hyparrhenia hirta |

## Appendix M: Previous Record of Decision

ANNEXURE C

# DEPARTMENT OF ECONOMIC AFFAIRS, ENVIRONMENT \& TOURISM CHIEF DIRECTORATE: ENVIRONMENT AFFAIRS 

Collegiate House, onr Belmont Terrace \& Castle Hill, Central, Port Elizabeth Private Bag X 5001, Greenacres 6057

Tel: $\quad 0415085815$<br>Fax: 0415851958<br>Enq: A. Struwig<br>Refi: ECm1/M/107-04<br>Walmer Heights Development Partnership<br>P.O. Box 5003<br>Walmer<br>6065<br>e-mail: Andries.Strwig deaet.ecape.gov za

Attention: Mr. C. Lovemore

## AUTHORISATION IN TERMS OF SECTION 22 OF THE ENVIRONMENT CONSERVATION ACT, ACT 73 OF 1989, TO UNDERTAKE LISTED ACTIVITIES AS SCHEDULED UNDER SECTION 21 OF THE ACT TO ALLOW FOR THE establishment of a residential estate in walmer heights

Refer to your application (reference number $\mathrm{ECmI} / \mathrm{M} / 107-04$ ) for authorisation in terms of the Environment Conservation Act, Act 73 of 1989, to undertake listed activities as scheduled under Section 21 of the Act on Erven 1959 \& 1960 and the Remainder of Erven 1947, 1961 \& 4194, Walmer, within the Nelson Mandela Metropolitan Municipal area in order to facilitate the development of a residential estate thereon.

Authorisation is hereby granted in terms of Section 22 of the Environment Conservation Act, Act 73 of 1989, subject to the conditions contained in the Record of Decision attached as Annexure One.


LEON ELS
DEPUTY DIRECTOR: WESTERN REGION
DATE: $25 / \mathrm{fl} / \mathrm{L} / 20 \%$


# DEPARTMENT OF ECONOMIC AFFAIRS, ENVIRONMENT \& TOURISM CHIEF DIRECTORATE: ENVIRONMENT AFFAIRS 

Collegiate House, cnr Belmont Terrace \& Caste Hill, Central, Port Elizabeth

## RECORD OF DECISION

## ECm1/M/107-04

## 1. Description of Activity

The project entails a change in land use of Erven 1959 \& 1960 and the Remainder of Erven 4194, 1961 \& 1947, Walmer, within the Neison Mandela Metropolitan Municipal area from Agriculture to Special Purposes and the subsequent development of six residential estates thereon.

The following land uses will be provided for within the Special Purposes Zone.

- Residential II for the establishment of 511 units of which 315 will comprise of "Hybrid" units and 196 will comprise of Sectional Title units;
- Transportation Zone for the construction of access and internal roads to service the development; and
- Private Open Space for the establishment of 13 Private Open Space areas to protect sensitive vegetation patches.

Services to the proposed development will be provided by the following means:

- Water will be provided by means of the installation of a 300 mm diameter bulk water supply line that will be connected to the existing water reticulation along Victoria Drive.
- Intemal sewerage reticulation will be linked to the existing sewer main along Victoria Drive by means of a new 160 mm diameter sewer main and a number of sewer pump stations.
- Access will be provided by the extension of Beethoven Drive in Walmer Heights on the north westem side of the proposed development and construction of a section of the planned Driftsands Arterial MR 423 that will link up with Victoria Drive towards the south east of the proposed development.
- Electricity will be provided by the municipality from existing infrastructure in Victoria Drive.
- A piped storm-water system that will discharge into a proposed open storm water channel will be installed that in tum will discharge into an existing municipal open storm-water channe!.


A change of land use from Agriculture to any other land use, as well as the provision of bulk water supply; installation of sewage treatment works and related infrastructure and the upgrading/construction of roads are listed activities in terms of items $2 \mathrm{c}, 11$, 1 n and 1 d respectively of Schedule 1 to Government Notice R1182 of 5 September 1997 for which authorisation needs to be issued in terms of Section 22 of the Environment Conservation Act, Act 73 of 1989.

## 2. Location of Activity

Erven 1959 and 1960 and the Remainder of Erven 4194, 1961 and 1947, are situated in Walmer, within the Nelson Mandela Metropolitan Municipal area adjacent to the Walmer Heights residential area and between the Arlington Race Course and the Walmer Country Club.

## 3. Contact Details of Applicant

| Name: | Walmer Heights Development Partnership |
| :--- | :--- |
| Contact Person: | Mr C Lovemore |
| Address: | P. O. Box 5003 |
|  | Walmer |
|  | Port Elizabeth |
|  | 6065 |
| Telephone: | 0413683466 |
| Fax: | 0413685385 |

## 4. Contact Details of Consultant

| Name: | Public Process Consultants cc |
| :--- | :--- |
| Contact Person: | Ms S Wren |
| Address: | P. O. Box 27688 |
|  | Greenacres |
|  | 6057 |
| Telephone: | 0413748426 |
| Fax: | 0413732002 |

## 5. Details of Site Visit

A site inspection was carried out by Ms M Govender of this office in the company of Ms S Wren, Mr C Lovemore and Mr P illgner on 7 September 2004.

## 6. Decision

Authorisation is granted subject to the conditions contained in Section 8 of this Record of Decision.

## 7. Duration of Authorisation

7.1 The change in land use is to be effected by means of a rezoning in terms of the Land Use Planning Ordinance, Ordinance 15 of 1985, within 12 months of the date of signature of this Record of Decision.
7.2 Installation of service infrastructure is to commence within 12 months of the change in land use being effected and to be completed within 12 months of the date of commencement.
7.3 The construction of housing units is to commence within 6 months of the completion of installation of services and is to be completed within 36 months of the date of commencement.
7.4 Conditions stipulated below are valid in perpetuity.

## 8. Conditions of Authorisation

Please note that the Department of Economic Affairs, Environment and Tourism may review, delete or amend any of the following conditions in the event of new information coming to light.

### 8.1 General Conditions

8.1.1 This authorisation applies only to the activities as described in Sections 1 \& 2 of this Record of Decision. Any other listed activities would be subject to authorisation in terms of Section 22 of the Environment Conservation Act, Act 73 of 1989.
8.1.2 This authorisation is subject to the applicants' compliance with all other relevant legislation, notably the National Forest Act, Act 84 of 1998 and the Land Use Planning Ordinance, Ordinance 15 of 1985.
8.1.3 The conditions of this authorisation shall form part of any contract entered into between the applicant and any contractor and/or sub-contractors.
8.1.4 Should any environmental damage be detected, that in the opinion of DEAE\& $T$ is the result of the development, then the applicant shall be required to make good that damage to the satisfaction of the said authority at hisher own expense.
8.1.5 In the event of any dispute as to what constitutes environmental damage, this Department's opinion will prevail.
8.1.6 DEAE\&T must be notified, within 30 days, of any change of ownership/ developer. Conditions established in the Record of Decision must be made known to and are binding on the new owner/developer.
8.1.7 DEAE\&T must be notified of any change of address of the owner/developer.
8.1.8 Any changes in the project that could have significant environmental impacts and that would differ from that which is authorised by DEAE\&T to be submitted to DEAE\&T for approval prior to such changes being effected.
8.1.9 This Record of Decision must be made available to any interested and affected parties who have registered their interest in the proposed development. The applicant is responsible for ensuring that a copy of this Record of Decision is given to any such interested and affected party within a
week of receiving this Record of Decision.
8.1.10 The listed activity as described in Section 1 of this Record of Decision and hereby authorised may not commence prior to the lapsing of the appeal period as provided for in Section 10 of this Record of Decision.

### 8.2 Project-Specific Conditions

8.2.1 Erven 1959 \& 1960 and the Remainder of Erven 4194, 1961 \& 1947, Waimer, within the Nelson Mandela Metropolitan Municipal area to be rezoned from Agriculture to Special Purposes in terms of the Land Use Planning Ordinance, Ordinance 15 of 1985.
8.2.2 The Special Purposes Zone referred to in Condition 8.2.1 to provide for the different uses as described in Section 1 of this Record of Decision and such uses to conform to the site layout plan being Plan no. 04042A13 dated March 2006 by Johan Meining \& Associates submitted to DEAE\&T in support of the application.
8.2.3 The recommendations made in the Traffic Impact Assessment (as set out in Appendix G of the Final Scoping Report titled "Proposed Hybrid Residential Development (Erf 4194, Erf 1959, Erf 1960, Remainder of Erf 1961, Remainder of Erf 1947) Walmer Heights, Port Elizabeth" compiled by Public Process Consultants dated 24 June 2005 must be implemented and adhered to.
8.2.4 The Walmer Country Club must be consulted and an agreement reached regarding the exact position and the type of boundary fence that will divide the proposed development from the said club prior to such boundary fence being constructed.
8.2.5 A comprehensive Environmental Management Plan (EMP) to be compiled and submitted to DEAE\&T for approval, and implemented for the construction phase of the project. The EMP to include amongst others:

### 8.2.5.1. Applicable conditions as contained in this Record of Decision;

8.2.5.2. General principles of environmental management as applicable to construction activities including environmental best practice, erosion control, minimisation of dust, etc.
8.2.5.3. All recommendations and mitigatory measures contained in the Final Scoping Report titled "Proposed Hybrid Residential Development (Erf 4194, Erf 1959, Erf 1960, Remainder of Erf 1961, Remainder of Erf 1947) Walmer Heights, Port Elizabeth" compiled by Public Process Consultants and dated 24 June 2005;
8.2.5.4. Clear stipulations as to who is responsibie and accountable for what actions;
8.2.5.5. A general code of conduct for any contractor carrying out any work on the development site; and
8.2.5.6. Clear stipulations regarding times that construction activities may take place on site.
8.2.6 Further to the provisions of Condition 8.2.5.2 the general principles of environmental management are to include amongst others:


## DEPARTMENT OF ECONOMIC AFFAIRS, ENVIRONMENT AND TOURISM

CHIEF DIRECTORATE: ENVIRONMENT AFFAIRS

### 8.2.6.1. Measures to minimise dust generation during the construction phase;

8.2.6.2. Any fill material to be used on site (such as for pipeline installation) is to be obtained from a bona fide source. Excess material remaining after construction is to be removed from the site and disposed of at a registered waste disposal facility;
8.2.6.3. Methods of disposal of litter, construction waste and contaminated soil from the construction site;
8.2.6.4. No cementconcrete mixing is to take place on the soil surface. Cement mixers are to be placed on large trays to prevent accidental spills from coming into contact with the soil surface. All concrete spills must be cleaned up and the waste concrete disposed of at a landfill site; and
8.2.6.5. Generators and fuel supply needed during construction must be placed on trays, which contain a suitably absorbent material to soak up any leaks or spills. Once construction is complete all contaminated absorbent material must be removed from site and disposed of at a suitable registered waste disposal site.
8.2.7 An independent Environmental Control Officer (ECO) to be appointed for the duration of the construction phase of the project to ensure that the conditions contained in the EMP and this Record of Decision are complied with.
8.2.8 No blanket clearing of vegetation to take place on the site. Vegetation only to be cleared to facilitate construction/installation of service infrastructure and the building of individual houses. All vegetation on areas that are not developed immediately, to remain intact until such areas are developed.
8.2.9 All areas earmarked for development (inclusive of the installation of service infrastructure and the construction of dwelling units) to be clearly demarcated and all construction activities to be restricted to such demarcated areas.
8.2.10 Further to the requirements of Conditions $8.2 .8 \& 8.2$.9 vegetation clearing to occur in a phased manner to reduce the amount of soil exposed to erosion at any given time.
8.2.11 All areas earmarked as Private Open Space on the site layout plan (Plan no. 04042A13 by Johan Meiring \& Associates, dated March 2006) must be clearly demarcated using chevron tape and markers prior to construction. No disturbance of these areas may occur at any time to facilitate the installation of service infrastructure and/or the construction of any other components of the development.
8.2.12 Prior to project implementation of each phase of the development the following to be carried out:
8.2.12.1. A once-over survey by the Herpetological Society to locate any tortoises that may occur on site and such tortoises to be removed and relocated to a site to be determined in conjunction with the Environmental Services Business Unit of the NMMM; and
8.2.12.2. A once over botanical survey by a botanical specialist to establish whether any species which are of special concem or protected in terms of the Nature and Environmental Conservation Ordinance, Ordinance 19 of 1974, or protected in terms of the National Forests Act, Act 84 of 1998 occur on the areas of the site earmarked for development.
8.2.13 Specimens identified in terms of Condition 8.2.12.2 as well as any other indigenous plant specimens which can be relocated are to be rescued in consultation with the above botanical specialist before vegetation cleaning takes place. Such specimens are to be appropriately transplanted and included in rehabilitation initiatives, where applicable and practicable.
8.2.14 A permit to be obtained from DEAE\&T for the removal and/or transiocation of any species of special concern or species protected in terms of the Nature \& Environmental Conservation Ordinance, Ordinance 19 of 1974 prior to vegetation clearing commencing on site.
8.2.15 A permit to be obtained from the Department of Water Affairs and Forestry for the removal of any trees protected in terms of the National Forest Act, Act 84 of 1998 prior to vegetation clearing commencing on site.
8.2.16 Mature indigenous trees that occur on site (outside of the allocated Private Open Space areas) must be marked out prior to construction and such trees to be retained in situ or transplanted to other areas within the development.
8.2.17 Installation of service infrastructure to conform to the General Layout drawn by Demeyer and Associates cc referenced as SD1295/1002 dated August 2004; provided that the provisions of Condition 8.2.11 are adhered to.
8.2.18 The removal of topsoil is to be limited to the footprint of the structures and services within the development area. All topsoil removed is to be stockpiled for use in re-vegetation or landscaping projects on site.
8.2.19 Where trenches are dug to accommodate service infrastructure, care must be taken to refill the trenches and rehabilitate the disturbed areas immediately after the completion of installation.
8.2.20 A water-bome sewage system is to be utilised for the proposed development. Such system is to be linked to the existing municipal water-bome sewage system.
8.2.21 An adequate storm water drainage system must be installed on the development site. Storm-water may not be directed, channelled or discharged in such a manner that it could cause flooding or nuisance to adjacent land owners located down-gradient of the proposed development.
8.2.22 All construction activities must be limited to normal working hours being from 7:00 to 17:00 on weekdays. No construction is to take place on weekends and public holidays.
8.2.23 Subsequent to the completion of each phase of the proposed development disturbed ground must be re-vegetated using the plants removed prior to construction.
8.2.24 Further to the provisions of Condition 8.2 .23 all common areas on site, including areas within the development footprint, must make use of indigenous vegetation for landscaping purposes. No invasive alien vegetation species are to be allowed on site.
8.2.25 A follow-up programme must be instituted whereby exotic plant material which colonises disturbed ground is systematically removed and destroyed prior to it attaining the seed formation stage.
8.2.26 Home Owners Associations/Bodies Corporate to be established for each individual component of the proposed development to manage all aspects thereof. Such bodies to draw up Codes of Conduct to be approved by DEAE\& $T$ stipulating what is allowed and prohibited on site.

ECm 1/M/107-04

8.2.27 Such Code of Conduct to contain amongst others:
8.2.27.1. Relevant conditions of the EMP;
8.2.27.2. Measures to ensure the continued preservation of the Private Open Spaces as patches of undisturbed indigenous thicket;
8.2.27.3. An alien vegetation control programme for the removal of alien vegetation in a controlled and phased manner, including rehabilitation of areas that have been degraded through such invasion;
8.2.27.4. Natural vegetation management on undeveloped areas inclusive of a fire management plan; and
8.2.27.5. Environmental management rules for the operational phase of the project.
8.2.28 Prospective buyers are to be informed of the fact that the Private Open Spaces within the development have been created to perform an important conservation function and that the indigenous vegetation occurring thereon is therefore protected.
8.2.29 A management plan to be compiled to the satisfaction of DEAE\&T and implemented by the various Homeowners Associations/Bodies Corporate for the management of the Private Open Spaces contained within the development.

## 9. Key Factors That Led to Decision

- A number of alternative land-uses for the site have been considered. The preferred use of the land for residential purposes is acceptable given the close proximity of existing residential developments and service infrastructure in the area.
- In general, the environment at the proposed development site has been transformed and is no longer in a pristine state. There are however, some patches of intact indigenous vegetation that are worth conserving. The development layout has been modified to incorporate these areas as Private Open Space.
- Provided the above conditions are adhered to and the development is carried out with due environmental care as provided for in such conditions, its impact on the environment should be acceptable.

Page 7 of 8

# DEPARTMENT OF ECONOMIC AFFAIRS, ENVIRONMENT AND TOURISM 

CHIEF DIRECTORATE: ENVIRONMENT AFFAIRS
. Appeal
mitten appeal against the decision may be lodged, in terms of Section 35(3) of the vironment Conservation Act, Act 73 of 1989, with the MEC for Economic Affairs, vironment and Tourism within 30 days from date of issue. The address to which th appeals must be submitted is:
ention: The Chief Director: Environmental Affairs
jartment of Economic Affairs, Environment and Tourism
mate Bag X0054
isho
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lIly appeals on environmental grounds can be considered. All appeals should be :ompanied by relevant supporting documentation.

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r'taS STRUWIG
 DATE iSISTANT DIRECTOR (EIM)

M. ELS PITY DIRECTOR: WESTERN REGION

25 Afore 2006
DATE
$r$
$m$

Province of the
EASTERN CAPE
DEPARTMENT OF ECONOMIC DEVELOPMENT
\& ENVIRONMENTAL AFFAIRS
Fax: +27 (41) 5851958
E-mail: Andries.Struwig@deaet.ecape.gov.za

# Ref: ECm1/M/107-04 <br> Enq: A. Struwig 

Walmer Heights Development Partnership
P.O. Box 5003

Walmer
6065
Attention: Mr. C. Lovemore

## AUTHORISATION IN TERMS OF SECTION 22 OF THE ENVIRONMENT CONSERVATION ACT, ACT 73 OF 1989, TO UNDERTAKE LISTED ACTIVITIES AS SCHEDULED UNDER SECTION 21 OF THE ACT TO ALLOW FOR THE ESTABLISHMENT OF A RESIDENTIAL ESTATE IN WALMER HEIGHTS

Refer to the letters from Metroplan dated 8 March 2007 and 19 September 2007 respectively requesting certain amendments to the Record of Decision (reference ECm1/M/107-04) issued on 25 April 2006.

## 1. AMENDMENT OF RECORD OF DECISION

You are hereby informed that the following sections of the Record of Decision issued on 25 April 2006 have been amended as contained in Amendment Notice \#1 attached as Annexure One to this letter:

Section 1: Description of Activity
Section 7: Duration of Authorisation

Section 8: Conditions of Authorisation:

* Amendment of the following conditions:
$;$ Condition 8.2.2.


## 2. NOTIFICATION OF INTERESTED AND AFFECTED PARTIES AND THE PUBLIC

All Interested and Affected Parties that registered during the Environmental Assessment process to be informed that an Amendment Notice to the Record of Decision has been issued.


This letter and attached Amendment Notice \#1 must be attached to the Record of Decision issued on 25 April 2006 and must be read in conjunction therewith.


ALBERT MFENYANA CHIEF DIRECTOR: ENVIRONMENTAL AFFAIRS DATE: $02 / 1107$

## DEPARTMENT OF ECONOMIC DEVELOPMENT AND

# ANNEXURE 1 <br> AMENDMENT NOTICE \# 1 TO RECORD OF DECISION <br> ECm1/M/107-04 

## 1. Description of Activity

The project entails a change in land use of Erven 1959 \& 1960 and the Remainder of Erven 4194, 1961 \& 1947, Walmer, within the Nelson Mandela Bay Municipal area from Agriculture to Special Purposes and the subsequent development of six residential estates thereon.

The following land uses will be provided for within the Special Purposes Zone.

- Four Residential II zones for the establishment of units at the following densities:
- Zone A: 16 units/ha;
- Zone B: 16 units/ha
- Zone C: 16 units/ha; and
- Zone D: 30 units/ha.
- Transportation Zone for the construction of access and internal roads to service the development; and
- Private Open Space for the establishment of 13 Private Open Space areas to, amongst others, protect sensitive vegetation patches.

Services to the proposed development will be provided by the following means:

- Water will be provided by means of the installation of a 300 mm diameter bulk water supply line that will be connected to the existing water reticulation along Victoria Drive.
- Internal sewerage reticutation will be linked to the existing sewer main along Victoria Drive by means of a new 160 mm diameter sewer main and a number of sewer pump stations.
- Access will be provided by the extension of Beethoven Drive in Waimer Heights on the north western side of the proposed development and construction of a section of the planned Driftsands Arterial MR 423 that will link up with Victoria Drive towards the south east of the proposed development.
- Electricity will be provided by the municipality from existing infrastructure in Victoria Drive.
- A piped storm-water system that will discharge into a proposed open storm water channel will be instafled that in turn will discharge into an existing municipal open storm-water channel.

A change of land use from Agriculture to any other land use, as well as the provision of bulk water supply; installation of sewage treatment works and related infrastructure and the upgrading/construction of roads are listed activities in terms of items $2 \mathrm{c}, 11$ in and 1 d respectively of Schedule 1 to Government Notice R1182 of 5 September 1997 for which
authorisation needs to be issued in terms of Section 22 of the Environment Conservation Act, Act 73 of 1989.

## 7. Duration of Authorisation

7.1. Installation of service infrastructure is to commence within 12 months of the date of issue of this Amendment Notice and to be completed within 12 months of the date of commencement.
7.2. The construction of housing units is to commence within 6 months of the completion of installation of services and is to be completed within 36 months of the date of commencement.
7.3. Conditions stipulated below are valid in perpetuity.

## 8. Conditions of Authorisation

Please note that the Department of Economic Development \& Environmental Affairs may review, delete or amend any of the following conditions in the event of new information coming to light.

## Condition 8.2.2

The Special Purposes Zone referred to in Condition 8.2 .1 to provide for the different uses as described in Section 1 of this Record of Decision. In this regard a final site layout plan to be submitted to DEDEA for endorsement prior to any construction commencing on the site.

A. STRUWIG ASSISTANT DIRECTOR: ELM DATE: 1 November 2007

A. MFENYANA CHIEF DIRECTOR: ENVIRONMENTAL AFFAIRS
DATE: $02 \mid 1107$

# APPLICATION FOR CIIANGE IN USE OF LAND 

ANNEXURE A
(PLACE A CROSS IN APPROPRIA'TE BLOCKS)
1.


REZONING TO SUBDIVISIONAL AREA in terms of Section 17 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985), hereinafler referred to as the Ordinance, as required in Section 22(1)(a) of the Ordinance.
2.


REZONING in terms or Scction 17 of the Ordimance WHICII DOES NOT COMPRISE A REZONING TO SUBDIVISIONAL AREA
3.

4.


PERMIT in terms of Regulation 2 of the COASTAL REGULATJONS promulgated in terms of the Environment Conscrvation Act, 1892 (Act 100 of 1982), (Government Notice R. 2587 dated 12 December 1986) WHEN AN APPLICATION IN TERMS OF ORDINANCE 15 OF 1985 IS ALSO REQUIRED.

TO BE ADDRESSED TO: THE DIRECTOR: ADMINISTRATION
P.O.BOX 116 PORT ELIZABETH
6000
ERF NUMBER AND ALLOTMENT AREA: REMAINDER ERF 4194
ERF 1959, ERF 1960, REMAINDER ERF 1961 AND REMAINDER ERF 1947 WALMER

APPLICANT:
POSTAL ADDRESS:

REGISTERED OWNER (S):

POSTAL ADDRESS:
P.O.BOX 28369

SUNRIDGE PARK PORT ELIZABETH 6008

WA LMER HEIGHTS DEVELOPMENT PARTNERSHIP

C/O JOHAN MEIRING
P.O.BOX 28369

SUNRIDGE PARK
6008

## 1. PERSONAL PARTICULARS OF APPLICANT

1.1 Name of person/company to whom/which correspondence should be addressed:

Address: JOHAN MEIRING
P.O.BOX 28369

SUNRIDGE PARK
Ref. No: 32-035(JM42/04)
Tel. No: 3605159
Dialing Code: 041
1.2 Is the applicant the only registered owner of the property concerned?


- If not, attach power of attorney from the registered owner(s) to the apllication. This is also applicable if the person who is applying is still in the process of obtaining the land unit and if the land
1.3 Name(s) of registered owner(s): WALMER HEIGFSTS DEVELOPMENT PARTNERSHIP

2. DETAILS OF LAND UNIT
2.1 Registered description of the property as shown on the title deed:

REMAINDER ERF 4194 Surface Area: $\pm \mathbf{8 , 0 0 0 0}$ HECTARES
ERF 1959 Surface Area: 10,7391 HECTARES
ERF 1960
REMAINDER ERF 1961 Surface Area: $\mathbf{1 0 , 7 3 9 1}$ HECTARES Surface Area: $\mathbf{1 0 , 0 0 8 1}$ HECTARES
REMAINDER ERF 1947
WALMER


Number and date of title deed:
2.2 What is the present zoning of the land unit?

## UNDETERMINED

2.3 Proposed zoning: SPECIAL PURPOSES
2.4 Are any departures applicable to the land unit in terms of Section 15 of the Ordinance?

If so, give full explanation

## WHEREAS

```
the said
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## ARLINGTON SANDPITS CC No CK 86/00841/23

is the registered owner of:-

1. ERF 4193 WALMER, in the Administrative District of PORT ELIZABETH

HELD BY Deed of Transter No T. $7.319 \% / 2 \%^{2}$.
2. REMAINDER OF ERF 1858 WALMERG, in the Administrative District of PORT ELIZABETH

HELD BY Deed of Transfer No T:7,182/19a3
WHICH properties have now beer. consolidated into the land hereinafter described.

NOW THEREFORE in pursuance of the provisions of the said Act, $i$, the Registrar of Deeds at Cape Town, do hereby certify that the said

## ARLINGTON SANDPITS CC <br> No CK 86/00841/23

or its Assigns
is the registered owner of -

```
ERF 4194 WALMER, in the Administrative District of PORT ELIZABETH
```

EXTENT: 10,8398 (Ten Comma Elght Three Nine Eight) hectares

AS WILL APPEAR from Diagram No S G No. 4185-91 annexed.

1. AS REGARDS that portion of land represented by the figure HkG on Dlagram no 4185-91
2. SUBJECT to the conditions referred to in Deed of Transfer No T.15436/1955.
3. ENTITLED to the following conditions contained in Deed of Transfer No T.15436/1955, namely:
"Entitied to the benefit of a road servitude 62,97 metres wide over certain piece of freehold land, situate in the Division of Port Elizabeth, being the remainfing extent of ERF GF part of the farm "Welbedacht" measuring as per such remainder Twenty-four comma six eight three (24,6873) Hectares, held by James Coplen Langford Vignte as to one-hait share by Deed of Transfer in his favour, No 12189 dated 30th August 1944, and by Petrus Johannes Anema as to the remaining one-half share by Certificate of Registered Tite in his favour. No 11431 dated 29th May 1948, which road is indicated on the Diagram No $980 / 53$ annaxed to the sald Deed of Transfer No 15436 dated 20th september, 1955 by the brown line marked $x-y$ as the centre line of the said road."
4. SSEFCT to the conditions referred to in Deed of Transfer No T23310/1965.
5. SUBJECT to the conditions referred to in Deed of Transfel No T. 2331 1/1965.
6. SUBJECT to the following conditions contained in Deed $C$ Transfer No T.23311/1965 imposed by the Divisional Counc of Port Elizabeth as Controlling Authority under th provisions of Section $11(6)$ of Act No 21 of 1940 against E 2678 of which the within property forms part, namely:
(a) The land may not be subdivided without the writtent approval of the Controlling Authority as defineci in Act 21 of 1940.
(b) Not more than one dwelling house togetrer with such outbulldings as are ordinarity required to be used in connection therewith shall be erected on the land except with the written approval of the Controlling Authority as defined in Act 21 of 1940.
(c) The land shall be used for residential and Agricultural purposes onty andino store or plece of business or industry whatsoever may be opened or conducted on the land withotit the written approval of the Controlling Authoffy ass ofefined in Act 21 of 1940.
(d) No building or aryisistricture whatsoever shall be erected within ajdistance of 94,46 metres from the centre line of the Gliendore Divisional Road without the written opproval of the Controlling Authority as celinedim Aet 21 of 1940 .
7. SUBJECFto the following conditions contained in Deed of Transfer No T.5293/1960 imposed by the Administrator of the Province of the Cape of Good Hope against Erf 560 of whichtile within propsrty forms portion, namely:
8. Not more than one dwelling house, together with such outbuildings as are ordinarily requires to be used in connection therewith, shall be erectand on the land except with the approval of the Local Authority.
9. The land shall be used for residential and Agricultural purposes onfy and no new store or plece of business or industry may be opened or conducted on the land without the written approval of the Local Authority.
10. No buliding or any structure whatsoever shall be erected within a distance of 23,61 metres of any boundary line of the property withoust the witten approval of the Local Authority.
11. SUBJECT to the servitude endorsement dated 27th June 1983 on Certificate of Consolidated Titte No T.5062/1972, reading as follows:-
"Remainder
By Deed of Transfer T.23250/83 dated this day in respect of Erf 3988 meas 1,4982 Ha the Remalnder of the within property meas $54,8582 \mathrm{Ha}$ held hereunder is subject to a servitude right of way elght (8) metriss wide as will appear from Servitude Diag No 5960/82 annexed to the abovernentioned Deed of Transter whereon the line A B represents the southem boundary of servitude right of way over the remainder in favour of the abovementioned property.
As will more fulty appear from seid Deed of Transter."
12. SUBJECT to the endorsement dated 27th Jume 1983 on Certificate of Consolidated Title No T.5062/1972, reading as follows:

THEMAINDER
By Deed of Transfer No T.23250/1983 the following conclitions are imposed by the Administrator of the Province of the Cape of Good Hope in terms of Suction 9 of Ordinance No 33 of 1934 against the Remainder of Erf 3635 Walmer when approving the subdivision of the said Ert, namely:
(a) The owner of this erf shall, without compensation, be obliged to allow gas mains, electricity-, telephoneand television cables and/or wires and mainfor other waterpipes and the sewage and drainage, including stormwater of any other ert or erven to be conveyed


#### Abstract

across this erf, and surface installations sucn as mini-substation, meter kjosks and service pillars to be installed thereon if deemed necessary by the local authority and in such manner and positiun as may from time to time be reasonably required. This shall include the right of access to the enf at any reasonable time for the purpose of constructing. altering, removirig or inspecting any works connected with the above.


(b) The owner of this erf shall be obliged, without compensation, to recelve such material or permit such excavation on the erf as may be required to allow use of the full width of the street and provide safe and proper slope to its bank owing to clifference between the levels of the street as finally constructed and the erf, unless he stectis to build retaining walls to the satisfaction of and within a period to be determined by the Local Authority."
B. SUBJECT to the conditions referred to in Deed ci Transfer No T.59/1929.
II. AS REGARDS that portion of land represented by the figure ABCDEFKJ on Dlagram no 4185-91

SUBJEC, to the conditions referred to in Deeds of Transfer Nos T.7634/1915

AND THAT by virtue of these presents the said

## ARLINGTON SANDPITS CC <br> No CK 86/00841/23

or its Assigns now are, and henceforth shall be entitled thereto conformably to local custom, the State, however, reserving its rights.

IN WITNESS whereof, I, the said Registrar, have subscribed to these presents, and have caused the Seal of Office to be afixed thereto.

THUS DONE and EXECUTED at the Office of the Registrar of Deeds at Cape Town on this 17 day of hes, The in the Year One Thousand Nine Hundred and Ninety-Three (1993)

Pagderis Stultings 18 Castle Hill Central PORT ELIZABETH 6001


## DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT
PETRUS JOHANNES GILLIE
appeared before me, REGISTRAR OF DEEDS, at CAPE TOWN, the said ar being duly authorised thereto by a Power of Attorney which said Powertif $A$ was signed at PORT ELIZABETH on 1 June 2006 granted to him b

JOHN CORDINGLEY WHITE Identity Number 2302205024084 Married out of community of property

And the appearer declared that his said principal had, on 7 June 2004, truly an legally sold by Private Treaty, and that he, the said Appearer, in his capacil aforesaid, did, by virtue of these presents, cede and transfer to and on behalf of:

## PRIVATE ASSET MANAGEMENT (PROPRIETARY) LIMITED No. 2002/004257/07

or its Successors in Title or assigns, in full and free property

ERF 1960 WALMER in the Nelson Mandela Metropolitan Municipality, Division of Port Elizabeth. Province of the Eastern Cape;

IN EXTENT 10.7391 (TEN COMMA SEVEN THREE NINE ONE) HECTARES
FIRST TRANSFERRED by Deed of Partition Transter No. T 24002/1947 with Diagram No. 7193/46 relating thereto and held by Deed of Transfer No. T21074/1967.

SUBJECT to such conditions as are referred to in Deed of Transfer No T7634/1915.

WHEREFORE the said Appearer, renouncing all right and title which the said JOHN CORDINGLEY WHITE, Married as aforesald
heretofore had to the premises, did in consequence also acknowledge him to b entirely dispossessed of, and disentitted to the same, and that by virtue of thes presents, the said

## PRIVATE ASSET MANAGEMENT (PROPRIETARY) LIMITED

 No. 2002/004257107or its Successors in Title or assigns, now is and henceforth shall be entitied theret conformably to local custom, the State, however reserving its rights, and final' acknowledging the purchase price to be the sum of R925 161,00 (NINE HUNDRE AND TWENTY FIVE THOUSAND ONE HUNDRED AND SIXTY ONE RAND).

## Page 3

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, havi subscribed to these presents, and have caused the Seal of Office to be affixe thereto.
THUS DONE and EXECUTED at the Office of the Registrar of Deeds at Cape Tow on

- 8 AUG 2096


In my presence


3. ROGER HARTLEY BULLEN

Identity Number 5501075131088 Unmarried
as to a $1 / 12$ share
And duly assisted thereto by a Power of Attorney signed at PORT ELIZABETH on 27 Jarisary 2005 granted to him by

4 RUBY ALICE SHAW (iwinerty Salters, formerly White, formeriy Rider)
Identity Number 1008040001002 Unmarried
as to a 1/2 share
And duly authorised thereto by a Power of Attomey signed at Addo on 31 January 2005 granted to him by
5. THE TRUSTEES of the Trust created in the Estate offtie fate BERTRAM JAMES JOB. NO MT 11691981

Asto aty share

And the appearer decfared that his said principals had, on 3 September 2004. truly and legally sotd by Private Treaty, and that hei the said Appearer, it, his capacity aforesaid, did, by virtue of these presents, cedle and transfer to and on behalf of:

1. CAPE ROADS AND EXCAVATIONS (PROPRIETARY LIMITED
Reglstration Number 1061001276107

And
2. PRIVATE ASSET WANAGEMENT (PROPRIETARY) LIMITED Registration Nüriber: 20021004257/07

Trading as THE UALMERHEIGHTS DEVELOPMENT PARTNERSHIP,

Or their Assigns. in full and free property

REMANDER ERF 1947 WALMER
IN THE NELSON MANDELA METROPOLITAN MUNICIPALITY DIVISION OF PORT ELIZABETH PROVINCE OF THE EASTERN CAPE;

IN EXTENT 3.9749 (THREE COMMA NINE SEVEN FOUR NINE) HECTARES

FIRST TRANSFERRED by Deed of Transfer No. T $14001 / 1951$ with
Diagram SG No. 6328/1949 retating theneto and held by Deeds of Transfer Nos. T15248/1992, T18428/1968, T4292/1963 and T26408/1969.
A. SUBUECT to the conditions referred to in Deed of Transfer No. T14001/1951


WHEREFORE the said Appearer, renouncing all right and tite which the said

1. GAIL QUINTIN PECK, Unmarried
2. BRIAN WILLIAN BULLEN, Married as aforemaid
3. ROGER HARTLEY BULLEN, Unmarried
4. RUBY ALICE SHAW Unmarried
5. THE TRUSTEES OF THE TRUST created in the Estate of the Late EERTRAM JAMES JOB TTust, No. $1169 / 1981$
heretofore had to the premises, did in consequence also acknowledge them to be entirely dispossessed of, and disentited to the same, and that by these presents, the said

## THE WALMER HEIGHTS DEVELOPMENT PARTNERSHIP

Or their Assigns, now are and henceforth shall be entitued thereto, conformabyyt to local custom, the State, however reserving tis rights, and finally acknowledoing the purchase price to be the sum of R100000,00 (ONE HUNDRED THOUSAND RAND).
IN WITNESS WHEREOF, 1 the seid Registrar/ together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixer thereto.
THUS DONE and EXECUTED at the Office of the Registrar of Deeds at Cap Town on

8 Dacmacin


REGISTRAR OF DEEDS:

RUSHMERE NOACH ATTORNEYS 21 Chapel Street Central
Port Elizabeth
6004


Parker :

## DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT
T
$000112142 / 2004$
MARKTREVOR SCHÄFER JUN
appeared before me, REGISTRAR OF DEEDS, at CAPE TOWN, the said appearer being duly authorised thereto by a Power of Attorney which said Power of Attorney was signed at PORT ELIZABETH on 7 September 2004 granted'to him by

The Trustees for the time being of HOLDEN PARKER TRUST No. 2148/1997


And the appaster dectared that his said principal had, on 6 August 2004, truly and legaily sold by Private Treaty, and that he, the said Appearer, in his capacity aforesaid, did, by these presents, cede and trensfer to and on behalf of:

1. CAPE ROADS AND EXGAVATIONS (PROPRIETARY) LIMITED Registration Number 1961/001276/07
and
2. PRIVATE ASSET MANAGEMENT (PROPRTETARY) LIMITED Reghtatration Number 2002/004257/07

Trading in partnership as THE WALAER HEIGHTS DEVELOPMENT PARTNERSHIP

Its Successors in Titte or Assigns, in full and free property

REMAINDER ERF 1981 WALMER
IN THE NELSON MANDELA METROPOIVTTAN MUNICIPALITY DIVISION OF PORT ELIZAEETH PROVINCE OF THE EASTERN CARE:

IN EXTENT 10,0081 (TEN COMMAA ZERO ZERO EIGHT ONE) HECTARES

FIRST TRANSFERRED by Deed of Transfer No. T234 on 22 July 1858 with substituted Diagram No. $194 / 1946$ annexed thereto and held by Deed of Transfer NO. T1377/11968.
A. SUBJECT to such conditions as are referred to in Deed of Transfer No. T7634/1915.

WHEREFORE the said Appearer, renouncing all right and title which the said
, THE TRUSTEES FOR THE TAME BEING OFF HOLDEN PARKER TRUST NO. 2149/1997
heretofore had to the premises, did in consequence also acknowledge her to be entirely dispossessed of, and disentitted to the same, and that by these presents. the said

1. CAPE ROADS AND EXCAVATIONS (PROPRIETARY LIMITED RECESTRATKON NUMEER 1961/001276/07 And
2 PRIVATE ASSET MANAGEMENT (PROPRIETARY) LIMITED PEGISTRATION NUREER 2002004287/07

TRADING IN PARTNERSHIP AS THE WARMER HEIGHTS DEVELOPMENT PARTNERSHIP
their Heirs, Executors, Administrators or Assigns, now ard and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the surf of RB80 000,00 (EIGHT HUNDRED AND EIGHTYHOUSAND RAND).

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixed thereto.

THUS DONE and EXECYTED at The Office of the Registrar of Deeds at Capt Town on 15 Nocheurel



REGISTRAR OFDDEEDS


Property enquiry results for "WALMER" in the Deeds Registry at "CAPE TOWN "

| Property detail: | CAPE TOWN |
| :--- | :--- |
| Deeds registry | ERF |
| Property type | WALMER |
| Township | 1959 |
| Erf number | 0 |
| Portion | EASTERN CAPE |
| Province | PORT ELIZABETH MUN |
| Registration division/Administrative district | PORT ELIZABETH RD |
| Local authority |  |
| Previous description | T24001/1947 |
| Diagram deed number | 10.7391 H |
| Extent | C05900380000195900000 |
| LPI Code |  |

Title Deeds detail:

| Document | Registration <br> date | Purchase <br> date | Amount | Microfilm <br> reference | Document <br> copy? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| T36263/1969 | 19691229 | - | - | - | Not available |

## Owners detail:

| Owners detail: | identity <br> Number | Share | Person <br> Enquiry? |  |
| :--- | :--- | :--- | :--- | :--- |
| Document | Full name | 196100127607 | - | Yes |
| T36263/1969 | CAPE ROADS \& EXCAVATIONS <br>  | PTY LTD |  |  |

## Endorsements / Encumbrances:

No data found for this query!

## History:

No data found for this query!

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Requested by A0009408 with user reference None on: Tuesday, 31 October 2006 08:36 DeedsWeb Version 4.0.0

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### 3.4.4 Additional provisions

(a) In addition to the private outdoor space or the combined open space, as the case may be, a service yard of an adequate area and screened by a wall from the view of anyone else than the occupant(s) of the dwelling unit concerned, shall be provided to the satisfaction of the council.
(b) Despite the zero street building line, a street building line of 2 m may be required to ensure safe traffic circulation or for other reasons such as development in the area, and a driveway shall have an adequate area to allow comfortably for the parking of a large motor car thereon.
(c) Despite the zero side building line, adequate side building lines may be required for fire-fighting purposes, and a 3 m side building line shall apply where a residential zone II abuts on another zone.
(d) Garages and carports shall be excluded in the calculation of floor space for the purpose of determining the area of the private outdoor space.
(e) No group housing site may have an area greater than 2 ha, and no group housing site shall abut on another group housing site.

### 3.6 RESIDENTIAL ZONE IV

### 3.6.1 Colour notation: orange

Primary use: flats
Flats means a building containing three or more owelling units for human habitation, together with such outbuildings as are ordinarily used therewith; provided that in these zones where flats are permissible, fewer than three dwelling units shall also be permissible, whether or not with the special consent of the council, in a building approved for other purposes than for flats.

Consent uses: dwelling-house, group house, town house, public housing, professional usage.
Dwalling-house means a detached building containing only one dwelling unit.
Dwalling unft means a seff-contained interlaading group of rooms with not more than one kitchen, usad only for the living accommodation and housing of a single family, together with such outbuildings as are ordinarily used therewith.

Group house means a dwalling unit which forms part of a group housing scheme.
Group housing means a group of separate and/or linked dwelling units planned, designed and built as a harmonious architectural entity and erranged around or inside a communal opens space in a varied and ordered way, of which every dwelling unit hes a ground floor, such dwelling units may be cadestrally subdivided.

Group housing atte means one or more land units on which a group hosing scheme has been or is to be erecled.
Town house maans a dwelling unit which forms part of a town housing scheme.
Town housing mans a row or group of linked and/or attached dwelling units planned, designed and build as a hamonious architectural entity, of which avery dwelling unit has a ground floor, such dwelling units may be cedastrally subdivided.

Town housing site meens one or more land units on which a town housing scheme has been or is to be erected.
Public housing means dwelling units which are erected with funds voted by a State department or the Provisional Administration or a council.

Professional usage means such type of use as is nomally and reasonably associated with professionel people such as doctors, dentists, architects, engineers and town planners, where the rendering of a service, as against the carrying on of a business, is one of the distinguishing factors.

### 3.6.2 Land use restrictions

Floor factor: at most 1.0
Coverage: at most $40 \%$
Setback: at least 6.5 m
Height: at most four storeys

## Street building line: at least 8 m

Side building line: at least 4 m or half the height of the building, whichever is the greater, subject to regulation 3.6.3(a)

Parking: at least 1.25 parking bays per flat; $25 \%$, or more, if so required by the Council, of the required, number of parking bays shall be provided uncovered on the site and shall be clearly demarcated and properly indicated by means of a notice board to the satisfaction of the Council for the exclusive use of visitors.

### 3.6.3 Notwithstanding regulation 3.6.2 -

(a) the council may approve the erection of an outbuilding which exceeds a side building line, subject to -
(i) compliance with the street building line;
(ii) such outbuilding not exceeding a height of one storey
(iii) no doors or windows being permitted in any wall of such outbuilding which fronts onto the side boundary concerned, and
(iv) the provision of an access way, other than through a buitding and at least 1 m wide, from a street to every vacant portion of the land unit concerned, other than a courtyard, and
(b) the following additional parking requirement shall be applicable with regard to professional usage in this zone: three parking bays per professional person, of which at least two parking bays per professional person shall be reserved for patients or clients. These parking bays shall be clearly indicated and tarred or paved to the satisfaction of the council.

### 3.22 OPEN SPACE ZONE II

### 3.22.1 Colour notation: dark green outline

Primary use: private open space
Private open space means any land which has been set aside in this scheme for utilisation primanily as a private site for sports, play, rest or recreational facilities or as an ornamental garden or a pleasure garden and includes public land which is or will be leased on a long term basis and a cemetery, whether public or private.

Consent uses: none
3.22.3 No structure shall be erected or use practiced except such as is compatible with "private open space", as defined.
3.22.3 The provisions contained in a relevant guide plan that is in force in terms of section 6A of the Physical Planning Act, 1967 (Act 88 of 1967), shall mutatis mutandis apply as additional land use restrictions in this zone.

### 3.25 TRANSPORT ZONE II

### 3.25.1 Colour notation: light brown

Primary use: public road
Public road means any road or street for public use or any land intended fur such purposes.
Consent uses: none
3.25.2 No structure shail be erected or used practiced except such as in compatible with "public road", as defined.

### 3.28 SPECIAL ZONE

### 3.28.1 Colour notation: blue-green

Primary use: special usage
Special usage means a use which is such, or in respect of which the lend use restrictions are such, that it is not catered for in these regulations, and which is set out in detail, and in respect of which the land use parameters are set out in detail, by means of conditions of approval or by means or conditions applicable to the special zone, and includes a conservation usage.

## Consent uses: conservation usage

Conservation usage means any use of a building or site or part thereof which, in the opinion of the council or, on appeal or objection, the Administrator, whose decision shall be final, is worthy of preservation.
3.28.2 If special factors justify the creation of a new zone on the zoning map for a site or sites without justifying the creation of a new zone in the scheme regulations, such site shall be zoned as a special zone on the zoning map. Every such portion of land which has been zoned as such and in respect of which the land use restrictions differ from those of other land which has been zoned as such shall be give a separate number on the zoning map. A special zone may consist of different portions of land, provided the land use restrictions are the same. Each special zone in respect of which the land use restrictions differ form those of other special zones shall be given a separate number (form 1 onwards), and each number with the accompanying land use restrictions shall be describe ed as a separate special zone in an annexure to these scheme regulations.
2.5 Are there any developments (buildings, ext.) on the land unit?
 If so, what are the nature and condition of these improvements?
2.6 Are the present zonings being utilized?


If not, how is the land being utilized? VACANT
2.7 Which uses and/or buildings adjoin the land and what is the condition of such building?
GOLF COURSE NORTHERN PORTION
RESIDENTIAL DEVELOPMENT - NORTH WEST
ARLINGTON RACE COURSE - WESTERN
DRIFTSANDS - SOUTH EASTERN

## 3. DETAILS OF APPLICATION

3.1 Describe the development in detail:

SPECIAL PURPOSES TO ALLOW A SECURE RESIDENTIAL
DEVELOPMENT COMPRISING VARIOUS NODES OF DIFFERENT
DENSITIES. THE DETAIL DESIGN AND LAYOUT OF INTERNAL NODES WILL BE FINALIZED AT A FUTURE STAGE.
3.2 Does the proposal involve the entire land unit?


If not, indicate the size of that portion of the land unit which is not involved and what it is being used for?
3.3 Will the proposed zoning give rise to more families or persons residing on the land unit than is presumably the case; if so how many more? YES
$\pm 650$ DWELLINGS
3.4 If the application will lead to the establishment of a business or Industry on the land unit, indicate - NOT APPLICABLE
3.4.1 the type of business or industry envisaged:
3.4.2 the number of employees to be taken into service on the land unit:
3.4.3 the extent of the service - indicate the furthest places which will normally be traded with:

## 4. RESTRICTING FACTORS

4.1 Are there any restrictions in the title deed in respect of the land unit, which may have effect on this application and which should be lifted
 in terms of the Removal of Restrictions Act, 1967 (Act 84 of 1967)?
4.2 Is any portion of the land unit subject to tidal flow or situated under the high-water mark?


If so, furnish details:
4.3 Is any portion of the land unit in a flood-plain of a river under

1 in 50 years flood-line or subject to any floods?
If so, furnish details (also refer to Section 169A of the Water Act, 1956 (Act 54 of 1956):
4.4 Are there any physical restrictions (such as steep slopes, unstable
 soil formations, swamps, ect) which could affect the development? If so, furnish details and state how the problem can be solved:
4.5 Are there any other restrictions of which your are aware, but which were not mentioned above?
> 4.5 Are there any other restrictions of which your are aware, but which were not mentioned above?

If so, furnish details:

## 5. POSSIBLE REFERRAL TO OTHER BODIES

5.1 Does the application fall within the area described in a guide plan approved in terms of Section 6A of the Physical Planning Act, 1967 (Act 88 of 1967)?

NELSON MANDELA METROPOLITNAN TOWN PLANNING SCHEME

If so, is the application consistent with the guide plan proposals?
Supply reasons for answer: PROPOSED USE IN ACCORDANCE WITH TOWN PLANNING SCHEME.
5.2 Is the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970), applicable to the application?

5.3 Is the land unit situated within the boudaries of a nature area reserved in terms of Section 4 of the Physical Planning Act, 1967
 (Act 88 of 1967), or a mountain catchment area reserved in terms of the Mountain Catchment Areas Act, 1970 (Act 63 of 1970), or a lake area reserved in terms of Lake Areas Development Act, 1975 (Act 39 of 1975), or a nature reserve reserved in terms of the nature reserve reserved in terms of the Nature and Environmental Conservation Ordinance, 1974 (Ordinance 19 of 1974), or a national park reserved in terms of the National Parks Act, 1976 (Act 57 of 1976)?



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[^0]:    ${ }^{1}$ The definition of forest in the NFA was used as a guiding principle in demarcating forest areas on the site:

[^1]:    ${ }^{2}$ While we attempted to indicate the extent of most forest clumps and individuals on the site, it is likely that some may have been missed. However we are confident that majority of the site has been described and the maps can be used by the Department of Forestry and the applicant in land use planning.

[^2]:    ${ }^{3}$ Note that a clump that consists of 3 or more forest species is considered a forest community/ecosystem and is protected in terms of the NFA irrespective of whether it has protected species (listed in terms of the NFA) in it or not.

