



**A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT OF THE PROPOSED
ROCKY COAST RESIDENTIAL DEVELOPMENT ON PORTION 78 & 79 OF FARM
ONGEGUNDE VRYHEID NO. 746 (ROCKY COAST FARM) AT CAPE ST FRANCIS
IN THE KOUGA LOCAL MUNICIPALITY OF THE EASTERN CAPE PROVINCE**

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Note: This report follows the minimum standard guidelines required by the South African Heritage Resources Agency for compiling Archaeological Heritage Phase 1 Impact Assessment (AHIA) reports and is part of an Environmental Impact Assessment.

This report must be read in conjunction with the original report of 2008;

Binneman, J. 2008. A Phase 1 Archaeological Heritage Impact Assessment of the proposed development on Portion 78 of the Farm Ongegunde Vryheid No. 746 (Rocky Coast Farm), Cape St Francis, Kouga Municipality, Humansdorp District Eastern Cape Province. Prepared for HilLand Associates Environmental Management Consultants. George. Eastern Cape Heritage Consultants. Jeffreys Bay.

EXECUTIVE SUMMARY

Eastern Cape Heritage Consultants cc was appointed by HilLand Associates Environmental Management Consultants during 2008 to conduct a Phase 1 Archaeological Heritage Impact Assessment of the proposed Rocky Coast Farm residential development. Originally a cluster and a rectangular unit type development were proposed in the far western corner of the property. Due to the archaeological sensitivity of the area and a condition of the South African Heritage Resources Agency that no development may take place within 400 metres from the calcrete ridge, the proposed development was moved to the eastern part of the property.

Public Process Consultants on behalf of Rocky Coast Farm (Pty) Ltd appointed Eastern Cape Heritage Consultants to conduct a Phase 1 Archaeological Impact Assessment (AIA) for the final layout of the proposed residential development which will consist of 46 residential erven and associated service infrastructure. The development will take place on Portions 78 and 79 of Farm Ongegunde Vryheid No. 746 (Rocky Coast Farm) at Cape St. Francis in the Kouga Local Municipality of the Eastern Cape Province. The assessment was conducted during August 2019 by two archaeologists. The surveys were conducted to establish the range and importance of possible archaeological sites/remains, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

Access to the area to be developed was easy and after the recent veld fire the archaeological visibility was relatively good, but no concentrations of marine shell or any other archaeological sites/materials were observed during the investigation. However, sites/materials may be covered by dune sand and vegetation and may only be exposed during the development.

The development will take place between approximately 300-600 metres from the coast and therefore falls inside the archaeological coastal sensitivity zone where shell middens and other

archaeological sites/materials are expected to be found. It is recommended that if such features or any other concentrations of archaeological material are exposed, it must be reported to the archaeologist at the Albany Museum in Makhanda (Grahamstown) or to the Eastern Cape Provincial Heritage Resources Authority (ECHRA) so that a systematic and professional investigation can be undertaken. Consultation with the Gamtkwa KhoiSan Council and Albany Museum regarding the conditions for the possible removal, storage and reburial (in the case of human remains) of heritage material must be conducted. All vegetation clearing and construction activities must be monitored by an archaeologist/heritage practitioner before and during the construction phase. Furthermore, managers/foremen should be informed before clearing/construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they encounter sites. Terms and Conditions, in the form of a 'management strategy' should be included in the constitution of the Home Owners Association or into any other relevant legal organisation. The purpose of this 'management strategy' would be to inform the house owners and visitors to the development of possible heritage resources on the property and surrounds, and to prevent, or at best minimize possible damage of sites or prevent the collecting of material by residents and/or visitors. The developers should consider a small display/information centre at a central place in the development where relevant information can be displayed regarding the archaeological heritage resources of the area. Visitors/tourists/hikers must also be informed about the protocol before they visit the sites or participate in an archaeological tour or hike in close proximity to any of the archaeological sites on the property. For a detailed list of recommendations see page 11 below.

PROJECT INFORMATION

Type of development

The proposed residential development will consist of 46 residential erven and associated service infrastructure which will include the clearing of natural vegetation, construction of access and internal roads, a domestic effluent treatment facility and stormwater management. An investigation of a water pipeline was also conducted.

Applicant

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Purpose of the study

The purpose of the study was to conduct a Phase 1 Archaeological Impact Assessment (AIA) for the final layout of the proposed residential development which will consist of 46 residential erven and associated service infrastructure, on a portion of Portions 78 and 79 of Farm Ongegunde Vryheid No. 746 (Rocky Coast Farm) at Cape St. Francis in the Kouga Local Municipality of the Eastern Cape Province. The survey was conducted to establish;

- the range and importance of possible exposed and *in situ* archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to make recommendations to minimize possible damage to these resources.

Site and location

The site for the proposed residential development is located within the 1:50 000 topographic reference map 3424 BB Humansdorp (Map 1). Portion 78 & 79 of Farm Ongegunde Vryheid No. 746 also known as Rocky Coast Farm is situated immediately west of Cape St Francis and approximately 19 kilometres southeast of Humansdorp in the Kouga Local Municipality of the Eastern Cape Province (general GPS reading was taken at 34.12.158S; 24.48.932E). The development will take place between approximately 300 – 600 metres from the coastal high water mark. The layout of the erven follows the crests of former Late Pleistocene/Early Holocene age dune ridges now covered by dense coastal fynbos.

BRIEF ARCHAEOLOGICAL BACKGROUND

Literature review

The oldest evidence of the early inhabitants in the region are large stone tools, called hand axes and cleavers which can be found in the river gravels which capped the hill slopes in the region, and on the calcrete floors exposed in the dune systems along the coast towards Cape St Francis (Laidler 1947; Deacon & Geleijnse 1988; Binneman 2001, 2005). The time period is known as the Earlier Stone Age and the stone tools belong to the Acheulian Industry, dating between approximately 1,5 million and 250 000 years old.

The period between 250 000 and 30 000 years ago is called the Middle Stone Age and thousands of stone points and blades represent this time period in the wider region. This period also witnessed the emergence of the first modern humans (*Homo sapiens sapiens*) and some of the world's oldest remains of anatomically modern humans (some 110 000 years old) come from the Klasies River complex of caves about 35 kilometres west of St Francis Bay. The archaeological deposits at these caves date to 120 000 years old and also represent some of the oldest evidence for the exploitation of marine food resources by people in the region (Singer & Wymer 1982; Rightmire & Deacon 1991; Deacon 1992, 1993, 2001; Deacon, H. J & Shuurman, R. 1992). Although humans were already anatomically modern by 110 000 years ago, they were not yet exhibiting 'modern behaviour' and only developed into culturally modern behaving humans between approximately 80 000 and 70 000 years ago. This occurred during cultural phases known as the Still Bay and Howieson's Poort time periods/stone tool traditions. The Howieson's Poort is well represented at Klasies River Cave 2 and in the dunes near Oyster Bay (Deacon & Wurz 1996; Wurz 1999; Carrion *et al.* 2000).

Unfortunately, no caves and shelters in the region with deposits dating between 25 000 and 5 000 years ago have been researched yet. Nevertheless, from sites farther along the coast and adjacent Cape Mountains, we know that the past 20 000 years, called the Later Stone Age (LSA), introduced several 'new' technological innovations. Others became more common, such as rock art, burials associated with grave goods, painted stones, new microlithic stone tool types, some fixed to handles with mastic, bow and arrow, containers, such as tortoise shell bowls and ostrich eggshell flasks (sometimes decorated), decorative items, bone tools and many more (Deacon & Deacon 1999).

The period between 20 000 and 14 000 years ago experienced extremely cold climatic

conditions world wide and had a great influence on the local environment. During the Last Glacial Maximum (the last ice age) vast areas were exposed along the coast which created favourable conditions for grassland and grazing animals. The remains from archaeological sites indicated that there were several large grazing animal species which are now extinct, for example the giant buffalo, the giant hartebeest and the Cape horse. After 14 000 years ago the climate started to warm up again and the sea level rose rapidly. By 12 000 years ago the sea was close to modern conditions and the previously exposed grassland also disappeared due to the rising sea level, causing the extinction of many grassland species including the giant buffalo, hartebeest and the Cape horse (Deacon & Deacon 1999).

Between 10 000 and 8 000 years ago the environment became bushier and gave rise to territorial smaller type browsing animals that lived in small groups or pairs. Most of the large Last Glacial grazing animals disappeared from the archaeological deposits during this time period. A characteristic of the past 8 000 years, also known as the Wilton time period, was the large number of small (microlithic) stone tools in the shelters and open-air middens of the region. However, by 4 500 years ago these stone tools were replaced at the Klasies River Caves by large quartzite stone tools, labelled the Kabeljous Industry (Binneman, 2007). The first change in the socio-economic landscape came some 2 000 years ago when Khoi pastoralists settled in the region. They were the first food producers and introduced domesticated animals (sheep, goats and cattle) and ceramic vessels to the region (Rudner, 1968; Binneman, 1996).

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- Wurz, S. 1999. The Howiesons Poort backed artefacts from Klasies River: an argument for symbolic behaviour. *South African Archaeological Bulletin* 54: 38–50.

Museum/University databases and collections

The Albany Museum in Grahamstown houses collections and information from the region. Other institutions also housing collections and information from the region include the University of Cape Town and Iziko Museums.

Relevant impact assessments in the immediate vicinity of the proposed development

- Binneman, J. and Reichert, K. 2019. A phase 1 archaeological impact assessments of the proposed residential development and associated infrastructure of 40 units on Erven 922 and 958 at St Francis Bay within the Kouga Local Municipality, Sarah Baartman District Municipality of the Eastern Cape Province. Prepared for Infinity Consulting. St Francis Bay. Eastern Cape Heritage Consultants. Jeffreys Bay.
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ARCHAEOLOGICAL INVESTIGATION

Methodology and results

The developers of the Rocky Coast Farm residential development were contacted prior to the investigation to inform them about the visit and to gain access to the property. All previous layout maps and relevant information were consulted before the investigation started. A Google Earth aerial image study was also conducted of the area prior to the investigation (Maps 1-4). The investigation was conducted on foot by two archaeologists. GPS readings were taken, and the relevant features were digitally recorded.

After the recent veld fire the archaeological visibility was relatively good, but no concentrations of marine shell or any other archaeological sites/materials were observed during the investigation. In general it would appear that the area is of low archaeological sensitivity, but sites/materials may be covered by dune sand and vegetation and may only be exposed during the development. There are no known graves or buildings older than 60 years on the site.

ASSESSMENT OF THE IMPACTS

Direct impacts

Table 1. The potential physical disturbance and destruction of surface and buried pre-colonial archaeology sites/remains during all constructions activities during the construction phase (rating based on the surface visibility of archaeological remains)

Nature of the Impact	Possible loss of non-renewable heritage resources: The adjacent coast is rich in pre-colonial archaeological sites and remains (Maps 5-6), but none were observed on the dune crests a mere 300-600 metres away. It is thus possible that archaeology sites/remains, including human remains, are covered by dune sand and vegetation. These may only be exposed when the sub-surface is disturbed by development activities such as vegetation clearing, levelling, construction of buildings and other infrastructure. The use of earth moving equipment which moves large amounts of soil at a time would make it difficult to observe damage to sites/materials before they are completely destroyed. Archaeological and palaeontological sites and materials of national and international importance may be damaged or destroyed. These heritage resources are protected by the National Heritage Resources Act 25 of 1999.
Extent	Site specific
Duration	Long term – the development of the erven and other infrastructure will be on-going activities.
Consequence /Intensity	Low

Probability	Medium
Degree of Confidence	Medium
Reversibility	Irreversible
Irreplaceable Loss of Resources	Irreplaceable
Status and Significance (without mitigation)	Negative (-)
Mitigation	<p>Shell middens are exposed in an access road currently used by vehicles and if it will be used in the further development of the property, it must be mitigated (see map 4) by following the procedure outlined below.</p> <p>If any human remains (or any other concentrations of archaeological heritage material) are exposed during construction, all work must cease in the immediate area of the finds and must be reported immediately to the archaeologist at the Albany Museum in Makhanda (Tel.: 046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 7450888). Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations will follow from the investigation and may include:</p> <ul style="list-style-type: none"> • Consultation with the Gamtkwa KhoiSan Council regarding the conditions for the possible removal, storage and reburial (in the case of human remains) of heritage material. • If the local Gamtkwa KhoiSan Council agrees to the removal of the material, an archaeologist must apply for permits from the Eastern Cape Province Heritage Resources Authority to collect and/or excavate sites/ materials from archaeological sites impacted by the development. • Consultation with the Albany Museum (repository for archaeological material in the Eastern Cape) regarding permit(s) to remove the heritage material, the storing, curating and costs involved. • A Phase 2 Mitigation process to systematically excavate and to remove the archaeological deposits before construction of the development continues. <p>Note: All costs must be financed by the applicants. This may include:</p> <p>All monitoring and mitigation expenses regarding the excavations/collecting of material, travel, accommodation and subsistence, analysis of the material, radiocarbon date(s) of the site(s) and a once-off curation/storage fee</p>

	payable to the Department of Archaeology at the Albany Museum (Eastern Cape Repository for Archaeological material).
Status and Significance (after mitigation)	High positive (+)

Indirect impacts

Table 2. The potential physical disturbance and destruction of surface pre-colonial archaeology sites/remains on the property

Nature of the Impact	The development will comprise only a small part of the property. The remainder will stay open space and specially the coastal open space is rich in archaeological heritage sites and a management plan must be compiled for these sites as required by the National Heritage Resources Act (Act No. 25 of 1999, section 35). At the moment there is selective control of vehicles entering the property, but no control as far as people and animals are concerned. Archaeological sites are being damaged by the public and animals as well as illegal collecting of material and walking tours. The development of 46 residential erven will bring more residents and visitors to the region who will visit the coast which will put further pressure on already threatened archaeological heritage resources.
Extent	Site specific
Duration	Permanent
Consequence /Intensity	High
Probability	Highly probable
Degree of Confidence	High
Reversibility	Partially reversible
Irreplaceable Loss of Resources	Irreplaceable
Status and Significance (without mitigation)	High negative (-)
Mitigation	A management plan must be compiled to protect and conserve the archaeological resources.
Status and Significance (after mitigation)	High positive (+)

Cumulative impacts

The cumulative impacts on above and below ground heritage will increase when further residential developments are planned for adjoining areas. Future developments are unknown at this point of time.



Figures 1-6. General views of erven 1-21 (see map 3).



Figures 7-12. General views of erven 22-46 and the water pipe route (bottom right insert, see map 3).

DISCUSSION AND MITIGATION

The development will take place between approximately 300-600 metres from the coast and therefore falls inside the archaeological coastal sensitivity zone where shell middens and other archaeological sites/materials are expected to be found. Furthermore, the 2008 survey and research along the adjacent coastal and inland dune areas yielded large numbers of shell middens, other archaeological and palaeontological sites/materials. It is therefore possible that archaeological sites/materials (including human remains) may be found when the property is developed. Such material must be reported to the archaeologist at the Albany Museum or to the Eastern Cape Provincial Heritage Resources Authority, so that a systematic and professional investigation can be undertaken.

RECOMMENDATIONS

Due to the archaeological sensitivity of the property, the following recommendations are made:

1. All construction activities must be monitored by an archaeologist/heritage practitioner. This must include the clearing of vegetation, levelling, excavations for pipelines and other underground/buried infrastructure and all above ground construction activities such as roads and buildings. The method used for clearing the vegetation must be determined after consultation with the appointed archaeologist/heritage practitioner prior to any construction activities.
2. Special care should be taken with regard to the access routes used for the development. The access road to the south of the property located at the public parking next to the boundary of the property has already been closed to vehicles as a result of previous archaeological assessments. The access road should remain closed since it falls within the no-go zone. The remaining access routes are also regarded as sensitive since shell midden material has been identified along the routes (see map 4). Once the access route has been determined for the construction activities it must be submitted to the appointed archaeologist/heritage practitioner for further recommendations to mitigate any impact on these heritage resources.
3. Construction managers/foremen should also 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.
4. If any concentrations of archaeological material (especially human remains) are exposed during construction, all work in that area must cease immediately (depending on the type of find) and it must be reported to the archaeologist at the Albany Museum in Makhanda (Grahamstown) (Tel.: 046 6222 312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 7450 888), so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations will follow from the investigation (See appendix B for a list of possible archaeological sites that may be found in the area). If any archaeological sites/materials are exposed, recommendations will follow after the investigation and may include:
 - Consultation with the Gamtkwa KhoiSan Council regarding the conditions for the possible removal, storage and reburial (in the case of human remains) of heritage material.
 - If the local Gamtkwa KhoiSan Council agrees to the removal of the material, an archaeologist must apply for permits from the Eastern Cape Province Heritage Resources

Authority to collect and/or excavate sites/ materials from archaeological sites impacted by the development.

- Consultation with the Albany Museum (repository for archaeological material in the Eastern Cape) regarding permit(s) to remove the heritage material, the storing, curating and costs involved.
- A Phase 2 Mitigation process to systematically excavate and to remove the archaeological deposits before construction of the development continues.

Note: All costs must be financed by the applicants. This may include:

All monitoring and mitigation expenses regarding the excavations/collecting of material, travel, accommodation and subsistence, analysis of the material, radiocarbon date(s) of the site(s) and a once-off curation/storage fee payable to the Department of Archaeology at the Albany Museum (Eastern Cape Repository for Archaeological material).

5. The total proposed development footprint is anticipated to be ~6.5 hectares (~950m² per unit and associated service infrastructure (~2 ha) which will be rezoned to Resort II. The remainder of the farm (~451.98 ha) which is proposed to be declared a private Nature Reserve will have continued public recreational access to the coastline. The proposed area for the private Nature Reserve is rich in archaeological heritage sites and a Conservation Management Plan (CMP) must be compiled for these sites as required by the National Heritage Resources Act, No. 25 of 1999. At the moment there is limited control of vehicles entering the property and no control as far as people and animals are concerned. This has already resulted in damage to some of the heritage sites on the property and can therefore only be addressed if a CMP is in place that has been approved by ECPHRA.
6. Each landowner and visitor to the proposed development must be made aware of the importance, sensitivity, conservation and protection of the cultural heritage of the region to avoid possible damage to heritage features or removal of material from heritage sites. This should include:
 - 6.1. Terms and Conditions, in the form of a 'management strategy' should be included in the constitution of the Home Owners Association or into any other relevant legal organisation. The purpose of this 'management strategy' would be to inform the house owners and visitors to the development of possible heritage resources on the property and surrounds, and to prevent, or at best minimize possible damage of sites or prevent the collecting of material by residents and/or visitors. This 'management strategy' document (Terms and Conditions) can be compiled by the South Africa Heritage Resources Agency or ECPHRA in cooperation with the Home Owners Association. The information must also be displayed on information boards in public places and along paths to the coast.
 - The developers should consider a small display/information centre at a central place in the development where relevant information can be displayed regarding the archaeological heritage resources of the area. This should include a 'management strategy' which inform the visitors/tourists about the protection, conservation and protocol of visiting these heritage resources. Such a facility will be a constructive contribution towards the potential protection and conservation of the heritage resources of the region and may prove to be a valuable 'investment' to the development.

Motivation for 6.1.

There is no doubt that the development will have an impact and ripple effect on the archaeological heritage resources of the region. The impact will be indirect, but will increase over time. It is therefore the responsibility of the developers to inform potential homeowners and visitors to the development of the importance of the archaeological heritage of the area. In this way, the developers will make a contribution to the potential protection and preservation of these archaeological resources of the region.

The immediate and adjacent areas to the proposed development are rich in archaeological heritage sites, i.e. open-air sites, caves and shelters with extremely valuable and important rock art and unique archaeological deposits. There are sites within walking distance from the development and many others also within a short driving distance, for example the Klasies River Cave Complex. These sites and others will be ‘discovered’ by landowners and visitors during their stay/visit to the estate and region. It is suggested that information boards be placed at strategic public locations in the development area, such as at the entrance to the property and hiking paths to inform landowners and visitors to the estate about the importance and protection of archaeological heritage in the area. The development will also provide private business opportunities such as eco-tourism and other recreational activities which may include visits to archaeological heritage sites. Archaeological heritage resources are non-renewable and also protected by the South African National Heritage Resources (NHRA) Act, No. 25 of 1999, and therefore there are rules and regulations which regulate visits to these sites. The main concern is to protect and conserve the sites and their contents.

7. It is further recommended that information regarding the Minimum Standards and Regulations for opening heritage sites to the public, visits and tours to these sites also be displayed on notice boards (as above). Minimum Standards and Regulations regarding archaeological sites can be obtained from the South African National Heritage Resources Agency (SAHRA) or ECPHRA.
8. Visitors/tourists/hikers must be informed of the following before they visit the sites or participate in an archaeological tour or hike in close proximity to any of the archaeological sites on the property, that:
 - Only archaeological sites registered to SAHRA or ECPHRA, with an approved management plan may be opened to public visiting.
 - Only registered and accredited archaeological and/or rock art tour guides may conduct archaeological tours.
 - Only registered tour guides (registered to the Eastern Cape Parks and Tourism Agency) may conduct tours.
 - Any tour operator/hiking trail company that does not comply with the above requirements will not be allowed access to the property.

GENERAL REMARKS AND CONDITION

Note: This is an Archaeological Impact Assessment (AIA) report compiled for the Eastern Cape Provincial Heritage Resources Authority (ECPHRA) to enable them to make informed decisions regarding the heritage resources assessed in this report and only they have the authority to revise the report. This Report must be reviewed by the ECPHRA where after they will issue their Review Comments to the EAP/developer. The final decision rests with the ECPHRA who must grant permits if there will be any impact on cultural sites/materials as a result of the development

This report is a Phase 1 Archaeological Impact Assessment and does not exempt the developer from any other relevant heritage impact assessments as specified below:

In terms of the National Heritage Resources Act, No. 25 of 1999 (section 38) ECPHRA may require a full Heritage Impact Assessment (HIA) to assess all heritage resources, that includes *inter alia*, all places or objects of aesthetical, architectural, historic, scientific, social, spiritual, linguistic, or technological significance that may be present on a site earmarked for development. A full Heritage Impact Assessment (HIA) should assess all these heritage components, and the assessment may include 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 this Phase 1 AIA is based on the visibility of archaeological sites/material and may not therefore reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the event of such finds being uncovered during construction activities, ECPHRA or an archaeologist must be informed immediately so that they can investigate the importance of the sites and excavate or collect material before it is destroyed (see attached list of possible archaeological sites and material). The developer must finance the costs should additional studies be required as outlined above. The *onus* is on the developer to ensure that the provisions of the National Heritage Resources Act No. 25 of 1999 and any instructions from ECPHRA are followed. The EAP/developer must forward this report to ECPHRA in order to obtain their Review Comments, unless alternative arrangements have been made with the heritage specialist to submit the report.

APPENDIX A: brief legislative requirements

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

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.*

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.*

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, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) the construction of a bridge or similar structure exceeding 50m in length;*
- (c) any development or other activity which will change the character of the site –*
 - (i) exceeding 5000m² 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 10 000m² 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.*

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

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 m² in extent, should be reported to an archaeologist.

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.

Fossil bone

Fossil bones or any other concentrations of bones, whether fossilized or not, should be reported.

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.

Stone features and platforms

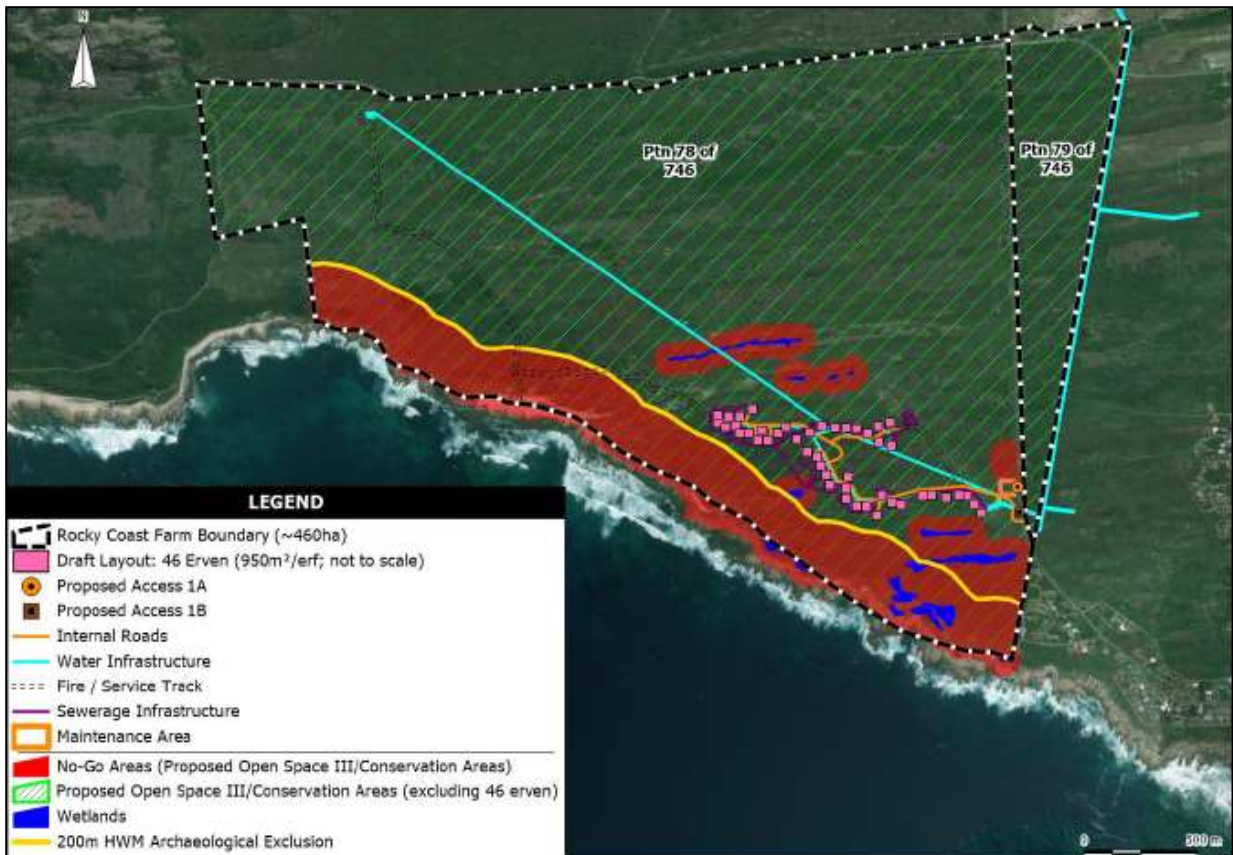
These occur in different forms and sizes, but easily identifiable. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platforms for shell fish. Others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

Historical artefacts or features

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



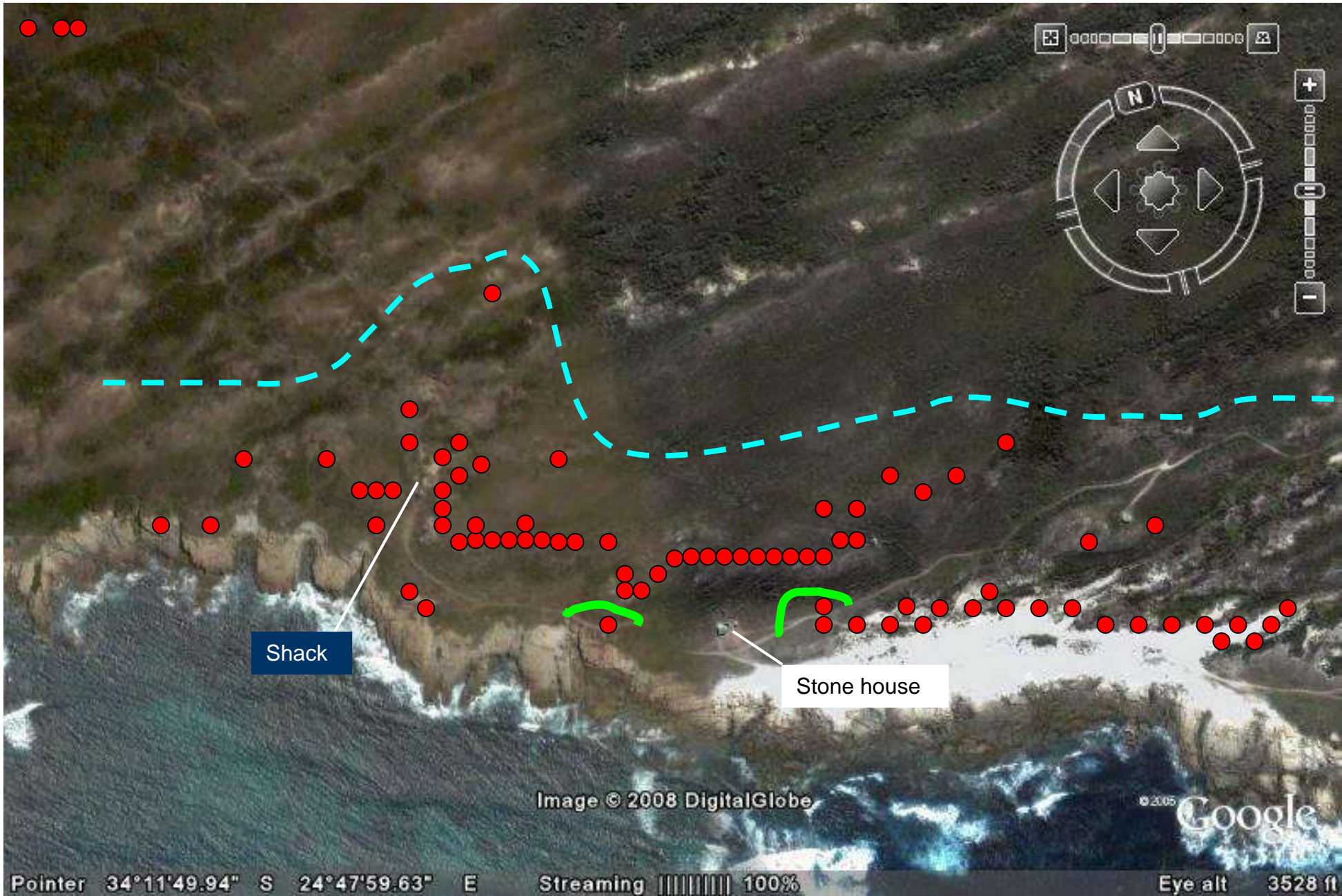
Map 2. Portion 78 & 79 of Farm Ongegunde Vryheid No 746 (Rocky Coast Farm) outlined by the broken red line (map courtesy of Public Process Consultants).



Map 3. The layout of the proposed Rocky Coast Farm residential development (map courtesy of Public Process Consultants).



Map 4. An aerial image of the layout of the 46 erven at the proposed Rocky Coast residential development. The green line represents 300 metres above sea level. The red oval mark the section of vehicle track where shell middens are exposed (map courtesy of Public Process Consultants).



Map 5 (2008). Approximate locations of sites in the Old Tracks, Calcrete Ridge and Coastal Dunes West Areas Note: a red dot may represent more than one site. Green lines indicate where tracks should be closed or diverted to avoid further damage to sites. Light blue dashed line indicates the sensitive zone.



Map 6 (2008). Approximate locations of sites in the old vehicle tracks, calcrete ridge, central and East areas. Note: a red dot may represent more than one site. Green lines indicate where vehicle tracks should be closed or diverted to avoid further damage to site. Yellow arrow indicate which vehicle tracks should be closed and green which to use. Light blue stippled line indicates the sensitive zone.