A PHASE 1 ARCHAEOLOGICAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED COB CREEK ESTATE DEVELOPMENT ON PORTION 21 OF THE FARM KABELJAUWS RIVER NO. 321, JEFFREYS BAY, KOUGA MUNICIPALITY, EASTERN CAPE PROVINCE

Prepared for: CEN Integrated Environmental Management Unit

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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.

## **SUMMARY**

#### **Purpose of the study**

To conduct a Phase 1 Archaeological Heritage Impact Assessment of the proposed Cob Creek Estate development on portion 21of the Farm Kabeljauws River No. 321, Jeffreys Bay, Kouga Municipality; to evaluate the importance of the archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

#### The investigation

Occasional quartzite stone tools of the Middle Stone age were found on the flat plateau on the eastern side of the Kabeljous River where the surface gravels have been exposed. There are two shelters with very important archaeological deposits situated on the northern boundary of the proposed development.

### **Cultural sensitivity**

Research and surveys in the wider region indicate that the area along the estuary and the nearby coastline is rich in archaeological sites, despite the fact that a large number has been demolished during residential development in the past. Important shelters with archaeological deposits are situated next to the proposed property for development. These sites are Grade II according to the archaeological site rating system of the South African Heritage Resources Agency sites and should be declared Provincial Sites.

#### Recommendations

1. Before construction starts the developers must meet with the Gamtkwa KhoiSan Council and the landowner on who's land the Kabeljous River Shelters are situated to discuss measures to protect the sites.

- 2. A high fence must be erected along the boundary between the property and the shelters before construction/development start.
- 3. Development should be placed at least 100 metres from the boundary fence to create more space between the KhoiSan archaeological heritage sites and the development.
- 4. If any concentrations of archaeological material are exposed during construction, all work in that area should cease and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources.
- 5. Potential home owners should be made aware of the cultural heritage of the immediate region. For example, this could take the form of a 'management strategy' which could be included in the constitution of the Home Owners Association.

#### **Community consultation**

Consultation with the Gamtkwa KhoiSan Council was conducted as required by the National Heritage Resources Act No. 25 of 1999, Section 38(3e). They will communicate their recommendations to CEN Integrated Environmental Management Unit.

#### PROJECT INFORMATION

#### **Status**

The report is part of an Environmental Impact Assessment.

#### The type of development

A high density residential golf and winery estate development.

#### The Developer

Cob Creek Estate (Pty) Ltd Port Elizabeth

#### The Consultant

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#### Terms of reference

The original proposal was to conduct a Phase 1 Archaeological Heritage Impact Assessment of the proposed Cob Creek Estate development on portion 21of the Farm Kabeljauws River No. 321, Jeffreys Bay, Kouga Municipality; to evaluate the importance of the archaeological heritage sites, the potential impact of the development and to make recommendations to minimize possible damage to these sites.

#### BRIEF ARCHAEOLOGICAL BACKGROUND

#### Literature/research review

The adjacent coastline between Gamtoos River and Jeffreys Bay once housed hundreds of archaeological sites, including the remains of indigenous people (Rudner 1968). Unfortunately, in a few decades virtually all of these important archaeological features have been destroyed by the development of the coastal towns and many were covered with dune sand and vegetation (Binneman 1985, 2001, 2005).

Little is known of the very early prehistory of the region. The oldest evidence of the early inhabitants are large stone tools, called handaxes and cleavers, which can be found in the river gravels which capped the hill slopes in the region (Laidler 1947). These large stone tools are from a time period called the Earlier Stone Age and may date between 1 million and 250 000 years old). These large stone tools are often found associated with the gravels in the area, and were later replaced by smaller stone tools called the Middle Stone Age (MSA) flake and blades industries. Evidence of MSA sites occur throughout the region and date between 120 000 and 30 000 years old. Fossil bone may in rare cases be associated with MSA occurrences along the coast.

The most common archaeological sites found in the area are shell middens (Binneman 1996, 2001, 2005; Rudner 1968). They are relatively large piles of marine shell and are popularly referred to as 'strandloper middens'. In general these shell middens date from the past 6 000 years. They are found mainly opposite rocky coasts, but also occur along sandy beaches if there was a large enough source of white mussel. These concentrations of shell represent the campsites of San hunter-gatherers (dating from as old as 6 000 years ago), Khoi pastoralists and KhoiSan (dating from the past 1 800 in the region) peoples who lived along the immediate coast and collected marine foods on a daily basis. The Khoi people were the first food producers in South Africa and introduced domesticated animals (sheep, goat and cattle) and ceramic vessels to southern Africa as early as 2 000 years ago. The oldest sheep remains recovered from the middens near the Kabeljous River Mouth were radiocarbon dated to 1 560 years old - the oldest date for the presence of sheep in the Eastern Cape (Binneman 1996, 2001).

Shell middens are usually within 300 of the high water mark, but can be found up to 5 km inland. Mixed with the shell and other marine food waste are other terrestrial food remains, cultural material and often human remains are found buried in the middens. Also associated with middens are large stone floors which were probably used as cooking platforms.

Other archaeological sites may consist of concentrations of stone artefact and/or bone remains. Some of the stone tools may date back to 100 000 years old, and the fossil bone occurrences along the coast may also date this old (See appendix for a list of possible archaeological sites that maybe found in the area).

#### Cultural sensitivity of the Kabeljous River estuary and adjacent coastal areas

Archaeological research conducted and observations made in the region indicate that places like the Kabeljous River estuary were popular areas for the hunter-gatherer and pastoralists to live due to the wide variety of food resources within easy walking distance, i.e., shellfish along the beach, fish in the estuary and game in the nearby hills.

Research at Kabeljous River Shelter some four kilometres upstream (next to the proposed development) indicated that this part of the valley was well utilised by prehistoric people from 6 000 years ago (research report available on request) (Binneman 1996, 2007). Two KhoiSan skeletons were also found on the nearby New Papiesfontein farm during the past few years,

indicating that such remains may also be buried on the property in question (Die Burger 27-09-2005). During 1983 several middens were badly damaged and eventually demolished by a bulldozer where houses were being built near the present day caravan park. These were found to be extremely rich in archaeological material (Binneman 1985, 1996, 2001, 2005). The following results were obtained from the limited research project.

- 1. Two of the shell middens were occupied by San hunter-gatherers ('Bushmen') and one was radiocarbon dated to 2 570 years old. Although the middens were situated along a sandy beach, the hunter-gatherers preferred to collect brown mussel from the rocky shore almost a kilometre away, rather than the white mussel which could be collected 50 metres away.
- 2. Two shell middens were of Khoi pastoralist origin. A similar shellfish collecting pattern was followed by the Khoi.
- 3. The Khoi were the first food producers in South Africa and the sheep remains recovered from the middens were radiocarbon dated to 1 560 years old the oldest date for the presence of sheep in the Eastern Cape.
- 4. These middens yielded more fish remains than any other open-air shell midden along the Eastern Cape coast. The remains were mainly from mullet species and taken from the nearby estuary. The method of capture is unknown because it is known from historical records that the indigenous groups did not process nets of any kind.
- 5. The Kabeljous River Shelters provide a history of hunter-gatherer-fishers of the past 6000 years for the area. Several burials were also found in the shelters. The archaeological deposits are extremely important and sensitive to any disturbances.

#### References

- Binneman, J.N.F. 1985. Research along the south eastern Cape coast. In: Hall, S.L. & Binneman, J.N.F. Guide to archaeological sites in the eastern and north eastern Cape. pp. 117-134. Grahamstown: Albany Museum.
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- Binneman, J.N.F. 2001. An introduction to a Later Stone Age coastal research project along the south-eastern Cape coast. Southern African Field Archaeology 10:75-87.
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- Binneman, J.N.F. 2007. Archaeological research along the south-eastern Cape coast part2, caves and shelters: Kabeljous River Shelter 1 and associated stone tool industries Southern African Field Archaeology 15 & 16:57-74.

Die Burger. 27 September 2005.

- Laidler, P.W. 1947. The evolution of Middle Palaeolithic technique at Geelhoutboom, near Kareedouw, in the southern Cape. Transactions of the Royal Society of South Africa
- Rudner, J. 1968. Strandloper pottery from South and South West Africa. Annals of the South African Museum 49:441-663

#### Museum/University databases and collections

The Albany Museum in Grahamstown houses collections and information from the region.

Other institutions which may also have collections and information from the region include the University of Cape Town, Iziko Museums and Bayworld Museum.

## **Relevant impact assessments:**

Binneman, J. 2005. Phase 1 archaeological and living heritage impact assessments on the farm Kabeljaus River 339, Jeffrey's Bay. Prepared for Africa Geo-Environmental Services (Pty) Ltd. Arcadia.

Binneman, J. 2006. Phase 1 archaeological heritage impact assessment for the proposed Kouga development of portions of the farms Kabeljauws River No. 322 and Papiesfontein No. 319 in Jeffreys Bay, Kouga Municipality, District of Humansdorp, Eastern Cape. Prepared for CEN Integrated Environmental Management Unit, Port Elizabeth.

Binneman, J. 2008. Phase 1 archaeological heritage impact assessment for the proposed "St Francis Coastal Reserve" on portions of the remainder of the farm New Papiesfontein No. 320, Kouga Municipality, District of Humansdorp, Eastern Cape. Prepared for: Envirovision Consulting, Pretoria.

#### DESCRIPTION OF THE PROPERTY

#### Area surveyed

#### Location data

The proposed Cob Creek Estate development on portion 21of the Farm Kabeljauws River No. 321, Jeffreys Bay, Kouga Municipality, is situated approximately four kilometres from the Kabeljous River Mouth. It is located between the narrow gauge railway line in the east and the gravel road between Kabeljous Station and Zuurbron (R330 to Hankey) in the west (Maps 1-2). (GPS readings were taken with a Garmin Plus II at 33.58.148S; 24.55.118E and 33.58.622S; 24.55.097E)

#### Map

1:50 000 – 3324DD Hankey

#### ARCHAEOLOGICAL INVESTIGATION

#### Methodology

The investigation was conducted by two people on foot. Most of the property west of the Kabeljous River has been disturbed by farming activities and the floodplain is covered with dense grass and shrubs (Figs 1-6). The steep eastern slope of the river composed of exposed river gravel and is covered by dense thicket and fynbos vegetation (Figs 7-8). The surface of eastern flat plateau comprised exposed gravel covered by grass, fynbos shrubs and bushes. Large areas have also been cleared for vineyards (9 - 11). The boreholes which had to be inspected are in the river floodplain and the surroundings are covered by dense grass. No archaeological material was found. The two new proposed boreholes are on the plateau and no material was found there either. No visible *in* situ archaeological sites were found during the investigation, but occasional Middle and Later Stone Age stone tools were found in the exposed gravel (Fig. 12).

## Conclusions/cultural sensitivity

Apart from the occasional stone tools found on the property, the area is of low cultural sensitivity. It is unlikely that any other archaeological heritage remains of any value will be found *in situ* or of any contextual value, however material may be exposed after the top soil is removed (for example human remains). However, as mentioned above, an important archaeological site is situated close to the property.



Figs 1 & 2. View towards the north and north-east side of the property. The location of the Kabeljous River Shelters is indicted by the red arrow.



Figs 3 - 6. View of the river flood plain and one of the boreholes. Note the dense grass and fynbos vegetation along the steep bank. The location of the Kabeljous River Shelters is indicted by the red arrow.



Figs 7 - 8. View of the dense thicket, fynbos vegetation and the exposed gravel along the eastern steep river bank.



Figs 9 - 12. Views of the dense fynbos vegetation on the eastern slope, part of the vineyards, on flat the plateau, gravel exposed by a vehicle track and an example of stone tools found in the gravel.

## RECOMMENDATIONS AND SUGGESTIONS

#### Introduction

Archaeological heritage resources are non-renewable and also protected by the South African National Heritage Resources (NHRA) Act 25 of 1999. The main concern is to protect and conserve the sites and their contents. 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 home owners and visitors to the development complex of the importance of the archaeological heritage of the area.

The immediate and adjacent areas to the proposed development are rich in archaeological heritage sites with extremely valuable and important and unique archaeological deposits. There are sites within walking distance from the development and many others within a short driving distance. These sites and others will be 'discovered' by home owners and visitors during their stay/visit. The Kabeljous River Shelters which are situated next to the development is an example of such an important archaeological heritage site.

One of the Kabeljous River Shelters was re-excavated by the author in 1984. The sides of the excavations were secured with sandbags against collapse twice since then, but due to regular illegal visits by the public, the walls of bags were damaged and collapsed. This proposed high-density development will place enormous pressure on the shelters. The following recommendations are proposed to protect and conserve the sites:

- 1. Before construction starts the developers must meet with the Gamtkwa KhoiSan Council and the landowner on who's land the Kabeljous River Shelters are situated to discuss the possible effect by proposed development on the sites and possible measures to protect the sites (as required by the National Heritage Resources Act No. 25 of 1999, Section 38(3e).
  - Irrespective of the recommendations which may be proposed at these meeting(s), the following recommendations are proposed to protect and conserve the sites:
- 2. A high fence must be erected along the boundary between the property and the shelters before construction/development start.
- 3. Development should be placed at least 100 metres from the boundary fence to create more space between the KhoiSan archaeological heritage sites and the development.
- 4. Construction managers/foremen must be informed before construction starts of the importance of the shelters and that no workers are allowed to visit the shelters.
- 5. Terms of 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 home 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 of conditions) can be compiled by the South Africa Heritage Resources Agency in cooperation with the Home Owners Association.
- 6. If any concentrations of archaeological material are exposed during construction, all work in that area should cease and it should be reported immediately to the nearest museum/archaeologist or to the South African Heritage Resources Agency, so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See Appendix A for a list of possible archaeological sites that maybe found in the area).

#### **SUGGESTIONS**

- 1. 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. Notice boards should also be placed at central places to inform the public on the laws protecting the sites and site etiquette.
- 2. 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 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.

It is suggested that information regarding the importance and protection of archaeological heritage in the area be displayed at a strategic place within the development. Minimum standards and regulations regarding archaeological sites can be obtained from the South African National Heritage Resources Agency (SAHRA). Visitors/tourists can contribute to the protection and conservation of heritage sites if they first establish the following before they visit or participate in an archaeological tour, for example:

- 1. Only archaeological sites registered to SAHRA, with an approved management plan may be opened to public visiting.
- 2. Only registered and accredited archaeological and/or rock art tour guides may conduct archaeological tours.
- 3. Only registered tour guides (registered to the Eastern Cape Tourism Board) my conduct tours

#### **Conclusions**

The proposed property for development is of low cultural sensitivity. Apart from the occasional stone tools, it is unlikely that any archaeological sites of importance will be found there. In contras, the immediate region is rich in archaeological sites, such as the Kabeljous River Shelters which are situated next to the development. These shelters are the only shelters between the Tsitskamma and Transkei coasts where the San, and KhoiSan peoples lived continuously for the past 6 000 years. This provides archaeologists with an important insight into how these peoples lived and survived in the region over such a long period of time. The caves are very sensitive and should be conserved at all costs. The coast between Kabeljous River and Gamtoos River Mouth is very rich in archaeological sites and material. Development will impact on these resources via recreational and tourism activities. It is the responsibility of the developers to inform landowners and visitors to the estate that these resources are sensitive and non-renewable and that there are regulations protecting and conserving them. A positive contribution the developers can make towards the possible protection and conservation of these resources is to inform landowners and visitors to the estate what the correct legal procedures are regarding visiting and viewing heritage sites in the region. This information must be displayed on sign boards placed at public places in the estate. Hopefully this 'educational approach' will make a positive contribution towards the protection and conservation of important archaeological heritage resources.

#### **GENERAL REMARKS AND CONDITION**

**Note:** This report is a phase 1 archaeological heritage impact assessment/investigation only and does not include or exempt other required heritage impact assessments (see below).

The National Heritage Resources Act (Act No. 25 of 1999, section 35) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, 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 emphasised that the conclusions and recommendations expressed in this archaeological heritage sensitivity investigation are based on the visibility of archaeological sites/features and may not therefore, reflect the true state of affairs. Many sites/features 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, (such as during any phase of construction work), archaeologists 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 Act No. 25 of 1999.

It must also be clear that Archaeological Specialist Reports (AIAs) will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should grant a permit or a formal letter of permission for the destruction of any cultural sites.

# APPENDIX A: 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 m<sup>2</sup> in extent, should be reported to an archaeologist.

#### 2. Human Skeletal material

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

#### 3. Fossil bone

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

#### 4. Stone artefacts

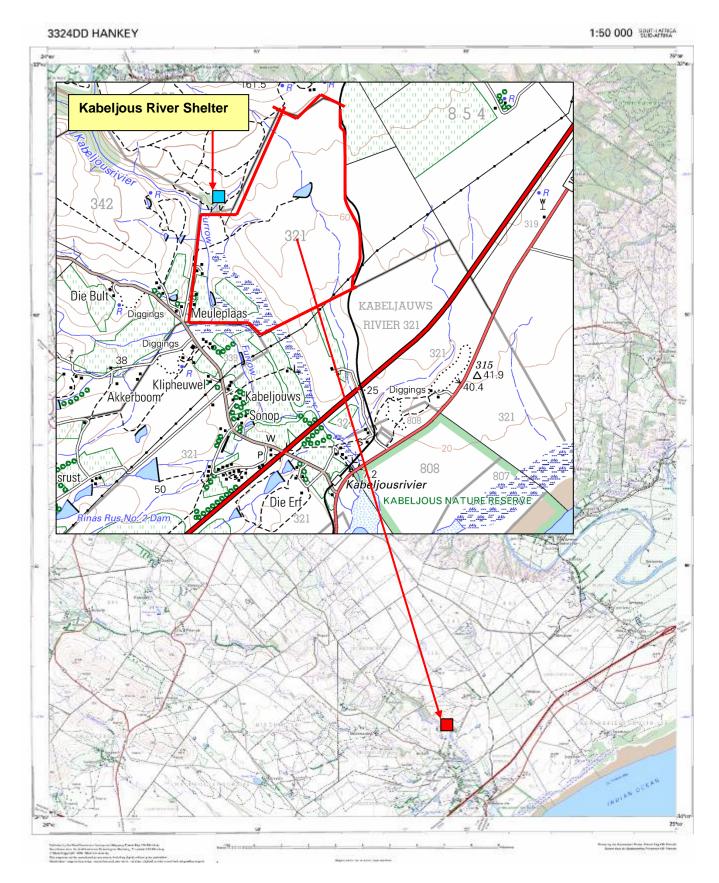
These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

#### 5. Stone features and platforms

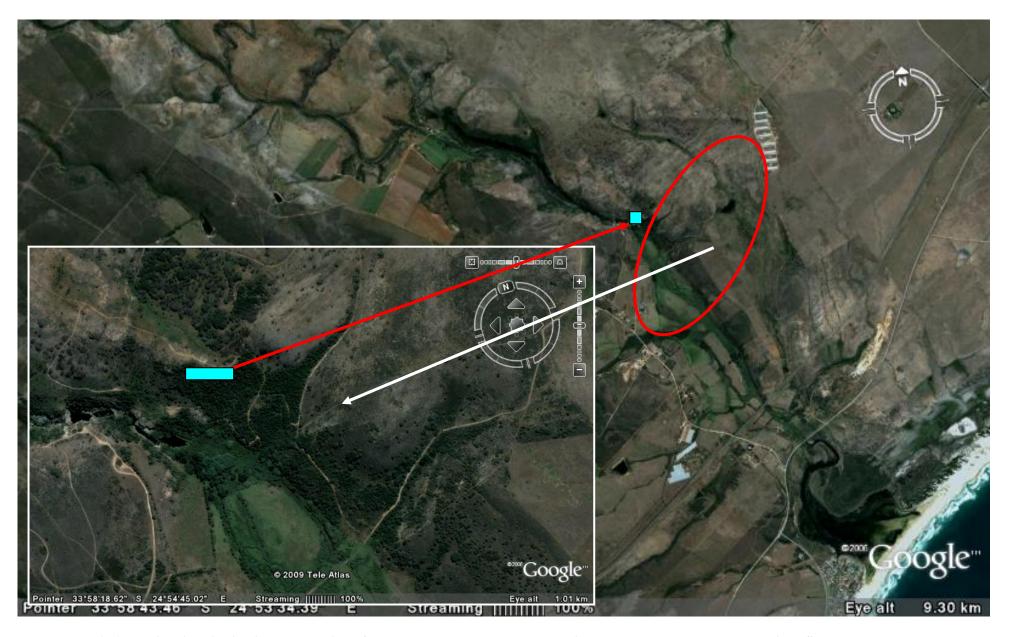
These occur in different forms and sizes, but easily identifiable. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2 metres in diameter and may represent cooking platforms for shell fish. Others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

#### 6. Historical artefacts or features

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



Map 1. 1:50 000 maps with insert (courtesy CEN) indicating the location of the development and the location of Kabeljous River Shelter.



Map 2. An aerial view indicating the location of the proposed development. The light blue block marks the Kabeljous Shelters.