

# **Inspection of Destruction of Archaeological Deposits and Archaeological Impact Assessment of Further Construction Related Activities**

**11 Diaz Road, Jeffreys Bay, Jeffreys Bay Magisterial District,  
Eastern Cape Province: Construction of Residential Units**

prepared for

**Lamprecht Properties (Pty) Ltd and the South African Heritage Resources  
Agency**

by

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## **Executive Summary**

*Due to reported damage of construction activities to - and/or destruction of - archaeological deposits at 11 Diaz Road, Jeffreys Bay, the South African Heritage Resources Agency (SAHRA) requested that Lamprecht Properties (Pty) Ltd (LPPL) commission a professional to assess the condition and nature of archaeological materials at the above address.*

*An examination of the said property revealed that archaeological materials do occur on the ground surface along the northern extent and in the eastern portion of the property. Archaeological materials occur in medium to low densities and are comprised mainly of fragmented marine shells. Stone artifacts and the remains of terrestrial fauna are rare. Other cultural remains including modern materials and building rubble are common and mixed up with archaeological remains. This indicates that archaeological material visible on the ground surface is in secondary context. Inspection of exposed profiles reveals that, at this time, no archaeological materials are visible in primary context.*

*Consultation with SAHRA and Dr. Johan Binneman (including photographic records) revealed that in situ archaeological remains did occur in dune sands in the eastern portion of the property. By the time of the inspection reported here, the dune containing shell midden deposits was leveled in breach of the National Heritage Resources Act (No. 25, Section 35[4] of 1999). A trench for a storm water pipe was excavated from west to east near the northern boundary of the property. According to Dr. Binneman some shell lenses were visible in the walls of this trench. These lenses are deep and will not be impacted by further construction activities. Since no further earth moving activities will be conducted, no mitigation measures are recommended as sub surface archaeological remains will not be impacted by continued construction activities.*

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## **1. Introduction**

### **1.1 Background**

Due to reported damage and/or destruction of archaeological deposits at 11 Diaz Road, Jeffreys Bay, Eastern Cape Province (Figures 1 & 2 and Plate 1), and as requested by SAHRA, Mr. A. J. Lamprecht - representing Lamprecht Properties (Pty) Ltd – ceased earthmoving activities and appointed CARM to conduct an inspection at the above address to assess damage to archaeological materials and to undertake an Archaeological Impact Assessment (AIA).

- The development on the above-named property entails the construction of a block of residential units including a basement for parking motor vehicles.
- Under instruction from the local municipality, Lamprecht Properties (Pty) Ltd also installed a storm water pipe along the northern extent of the property.

### **1.2. Purpose and Scope of the Study**

As requested by SAHRA, the objectives of the site inspection and Archaeological Impact Assessment are to:

- Identify, describe and map archaeological heritage resources within the property;
- Provide a provisional field rating of the heritage significance of these sites;
- Evaluate the extent of the damage already done to archaeological sites;
- Determine if any intact archaeological material still exists and whether potential impacts on this material is likely to happen as a result of further construction or earth-moving activities;
- Recommend mitigation measures to reduce the negative impact made on archaeological sites and on sites that could be still intact

### **1.3 Study Area**

The site in question is 11 Diaz Road, Jeffreys Bay, Eastern Cape Province (Figures 1 & 2 and Plate 1). The property is about 3000 m<sup>2</sup> in extent while the footprint of the new structure is approximately 1400 m<sup>2</sup> in extent (see Plate 2). The centre of the property is at about S34.04913 E24.92548 (map datum WGS 84).

The property contained residential structures prior to recent construction activities and the former were restricted to the western portion of the property (Plate 2). The construction of earlier structures almost certainly impacted negatively on archaeological materials at least to the depth of structural foundations. Recent construction activities included excavations through soft deposits and partly into shale bedding. The inspection reported here was conducted after completion of all earth moving activities associated with the current construction.

### **1.4 Approach to the Study**

On 24 March 2007 Mr. A. J. Lamprecht took me to 11 Diaz Road, Jeffreys Bay where I conducted a site inspection while he assimilated relevant paper work at my request. The latter included a letter from SAHRA dated 15 March 2007, which details their requirements from the appointed archaeologist (see 1.2 above). Attached to SAHRA's letter were photographs purported to show damage to archaeological deposits, but since the facsimile copy is very poor I obtained the same photographs from Dr. J. Binneman on 26 March 2007.

The site inspection involved the identification and recording (notes and digital photography) of archaeological remains both on the ground surface and in exposed profiles associated with existing excavations. The photographic record also includes general features and status of the property (a full record is available from the author). The extent of damage to archaeological materials and the rating of their heritage significance could not be determined during the site inspection as no intact archaeological deposits were identified. A detailed inspection and search was not warranted considering the disturbed nature of materials.

Since earthmoving activities associated with construction are complete, no more negative impacts on archaeological deposits will occur and therefore I assumed it unnecessary to attempt locating intact archaeological deposits as this would entail “hit and miss” excavations into previously disturbed sediments.

After consultation with SAHRA and Dr. Binneman, and on receipt of Dr. Binneman’s photographic record, I compared my observations with their information.

## **2. Results**

The western portion of the property consists of a partially constructed basement excavated through mostly soft sediments and partially into a hard shale bedding (Plates 2, 3 & 4). The profile in Plate 4 shows layers of - from the bottom up - shale, ancient beach (probably mid Holocene), calcrete and topsoil. The eastern portion of the property is a leveled area that’s surface consists of a mixture of sands and soil and that lacks vegetation (Plate 5). In an east-west trajectory along the northern extent of the property is where Lamprecht Properties (Pty) Ltd installed storm water piping under instruction from the local municipality (Plate 6). Nearly the entire property shows evidence of recent construction activities including excavation, earth moving and construction.

Archaeological materials were identified on the ground surfaces in the vicinity of the storm water piping and in the eastern portion of the property as indicated with orange shading in Plate 2. Note that the orange shaded area in Plate 2 is a schematic representation of the affected area that was not surveyed accurately. Archaeological materials consist mostly of medium to low density scatters of fragmented marine shell (Plate 7). Species noted include brown mussel, whelk, alikreukel, perlemoen and a variety of limpet species. Several shell fragments are burnt. While a few stone artifacts were recorded, only three fragments of animal bone were identified and are rare (Plate 8). No Cape coastal pottery was seen. Other cultural remains including modern materials such as plastic, glass, ceramic and building rubble are present and mixed up with archaeological remains. The mixture of material remains from temporally separate occupations indicates that prehistoric archaeological material visible on the ground surface is in secondary context. Careful examination of exposed profiles revealed that, at the time of this inspection, no archaeological materials are visible in primary context.

Comparison of my observations with those provided to SAHRA by Dr. Binneman shows that intact archaeological shell midden deposits were present on the property prior to my inspection (Plate 9).

## **3. Sources of Risk, Impact Identification and Assessment**

- Construction activities briefly outlined in 1.1 above have had a permanent and negative impact on archaeological resources. The presence of disturbed archaeological shell midden materials and Dr. Binneman’s photographic evidence of intact shell midden deposits on the property attest to this. Construction activities associated with earlier structures in the western portion of the property almost certainly impacted similar archaeological deposits.

- The exact extent of damage cannot be determined as no intact archaeological deposits were identified during the inspection reported here. It is probably safe to say that destruction is near total as Dr. Binneman only reported a few shell lenses deep in the trench excavated for the storm water piping. All intact archaeological deposits housed in deposits above the current level of excavation, including that of the fore-mentioned trench, are destroyed.
- No further earth moving activities will be carried out and therefore the deeply bedded shell lenses reported by Dr. Binneman are not threatened.

#### **4. Required and Recommended Mitigation Measures**

Since no earth moving is involved during further construction activities, no mitigation measures are recommended as sub surface archaeological remains will not be impacted by continued construction activities.

#### **Acknowledgements**

Eternal thanks to Yuliya and Sasha for understanding my vocation. Thanks to: Braam Lamprecht for hospitality, help in the field and for supplying all relevant paperwork, plans, and aerial photos used below; SAHRA and Dr. Binneman for assistance and documentation; Kate and a great field crew!

**Figures and Plates** (on following pages)

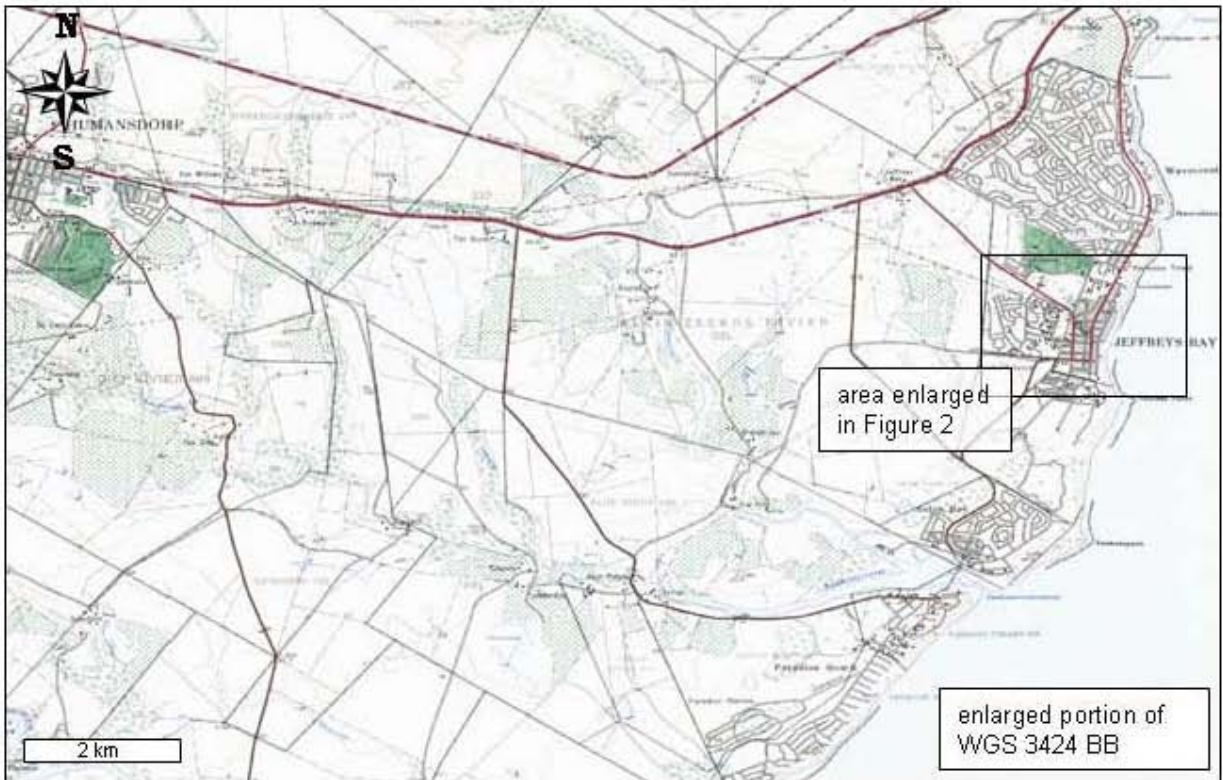


Figure 1. General location of Jeffreys Bay and the study area – framed in black -relative to Humansdorp in the Eastern Cape Province.

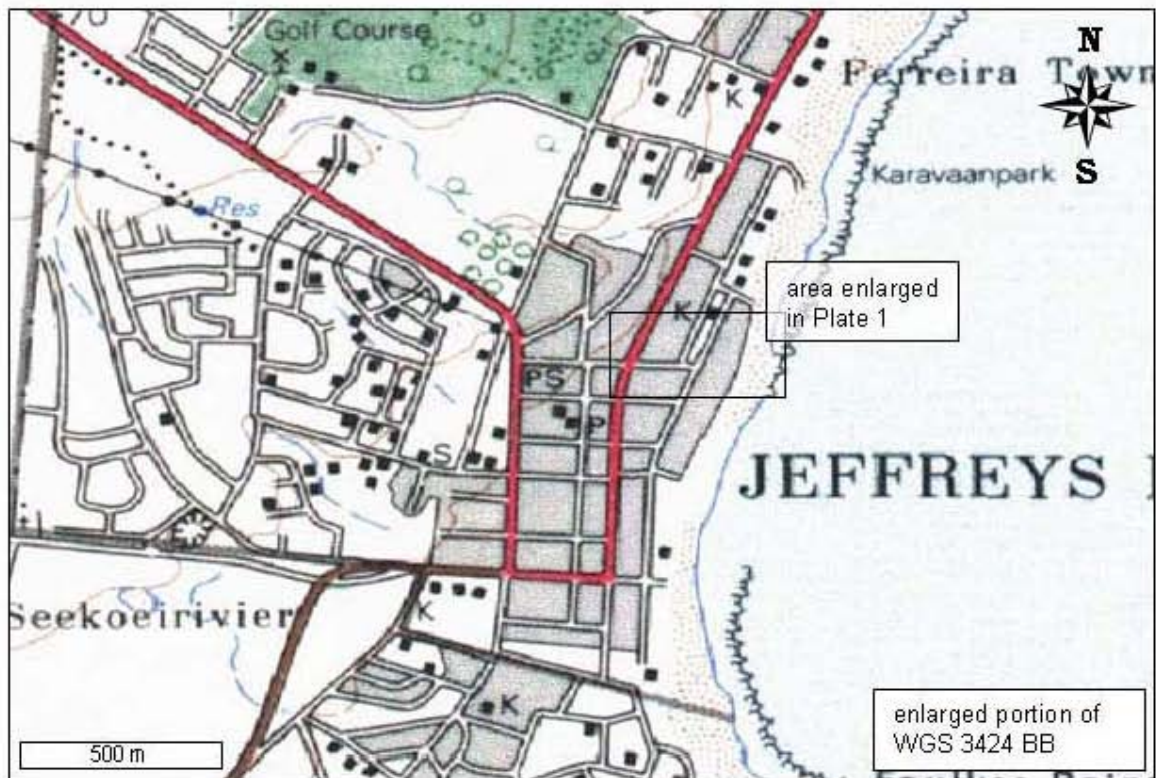


Figure 2. Enlarged area as indicated in Figure 1 showing the general location of 11 Diaz Road in Jeffreys Bay (see Plate 1).



Plate 1. Enlarged area as indicated in Figure 2 showing the location of 11 Diaz Road in Jeffreys Bay (approx. outline in red).



Plate 2. Enlarged area as indicated in Plate 1 showing the approximate outline of 11 Diaz Road in Jeffreys Bay (red). Left and right of blue line are western and eastern portions of the property respectively.





Plate 3. Basement and footprint of new structure in western portion of property (see Plate 2). The profile shown in Plate 4 is framed in green.

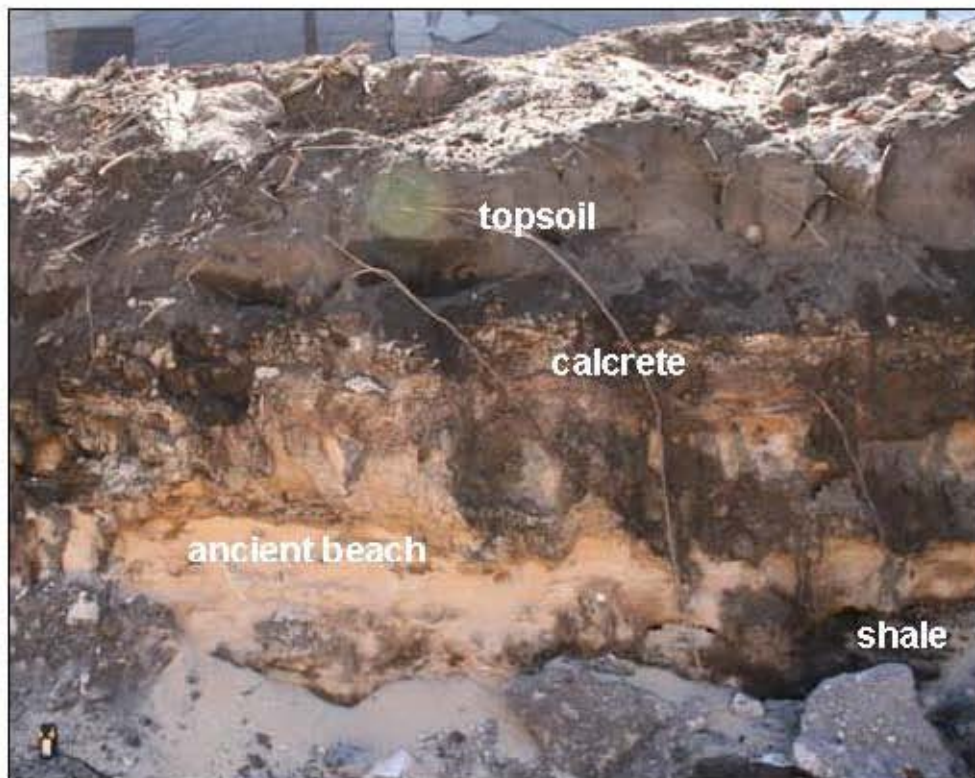


Plate 4. Enlarged profile as indicated by green frame in Plate 3. The shale base is more clearly visible in other photographs. The ancient beach is probably of mid Holocene origin.



Plate 5. Joined images showing eastern portion of property with levelled surface of sands and soil.



Plate 6. Location and trajectory of storm water pipeline along northern extent of property. Left image taken from east (beach) and right image taken from west (road) with schematic placement of pipe in grey.



Plate 7. Examples of surface scatters of mostly fragmented marine shell. Size 9 boot and hand held GPS for scale.



Plate 8. Examples of archaeological remains. Clockwise from top left: combination hammer stone and upper grind stone, flake in quartzite, upper grind stone and proximal tibia fragment of a juvenile medium-small bovid (poss. sheep).



Plate 9. Top three images show dune containing archaeological shell midden materials (from report Dr. Binneman submitted to SAHRA). The middle image shows enlarged details of the area framed with green in top right image. The bottom image is comparable with the top right image, but the former was taken from further to the west.