

**ARCHAEOLOGICAL IMPACT ASSESSMENT  
OF A PROPOSED BORROW PIT ON ROODEBERG  
OUTSPAN 194 NEAR LADISMITH,  
EDEN DISTRICT, WESTERN CAPE**

(Assessment conducted under Section 38 (8) of the National Heritage Resources Act as part  
of a Heritage Impact Assessment)

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## EXECUTIVE SUMMARY

Natura Viva cc was appointed by Vidamemoria Heritage Consultants on behalf of Aurecon South Africa (Pty) Ltd to undertake an Archaeological Impact Assessment (AIA) of the proposed development of a new borrow pit, MR00356/5.8/0.3L (Vidamemoria pit no.139), approximately 10 km south of Ladismith, Eden District Municipality, Western Cape. The site of the proposed pit is situated close to picnic areas within an historic outspan place at the western extremity of the Rooiberg.

Material excavated from the pit will be used for the maintenance of gravel roads in the region. Access to the affected area will be by an existing gate and track from the MR00356. It is proposed that the excavated pit will form a stock watering facility and an attractive water feature to enhance the present picnic areas.

This study forms part of the Heritage Impact Assessment triggered by the development. The brief for the study was a field visit and short report identifying and assessing archaeological resources and any impact on them, an assessment of significance and recommendations regarding any mitigation required.

The field assessment was conducted on foot on 11 December 2012. The visibility of archaeological remains on the ground was generally poor due to the dense vegetation covering a large part of the affected polygon. It was better in areas where there were gaps between bushes and shrubs. Visibility was good in the picnic areas. The more densely-vegetated rocky slopes to the south of the proposed pit area were not surveyed.

Given the history of the site as an outspan place, there was a surprising lack of archaeological material on the ground. Some 20 scattered stone artefacts of a variety of raw materials, a few small pieces of ostrich eggshell, two fragments of pre-colonial pottery, a few pieces of glass and a metal horseshoe were noted outside the borrow pit area. Many of the stone artefacts are indeterminate in age but are likely to be either Middle Stone Age (MSA) or Later Stone Age (LSA). A few are clearly diagnostic. One artefact could possibly be the tip of a crude Early Stone Age (ESA) biface. All this material has clearly been washed into position from elsewhere and is thus in a disturbed, secondary context.

The mix of sparse, scattered archaeological and historical material of various ages in a secondary context indicate that the affected area is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed borrow pit is developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pits, work in that area must cease and the South African Heritage Resources Agency (SAHRA) must be notified immediately.

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## 1. INTRODUCTION

Natura Viva cc was appointed by Vidamemoria Heritage Consultants on behalf of Aurecon South Africa (Pty) Ltd to undertake an Archaeological Impact Assessment (AIA) of the proposed development of a new borrow pit, MR00356/5.8/0.3L (Vidamemoria pit no.139), in an historic outspan approximately 10 km south of Ladismith, Eden District Municipality, Western Cape. Van Wyksdorp lies some 25 km to the southeast. Material excavated from the proposed pit will be used for the maintenance of gravel roads in the region. Access to the affected area will be by an existing gate and track from the MR00356. It is proposed that the excavated pit will form a stock watering facility and an attractive water feature to enhance the picnic areas located close to the pit 139.

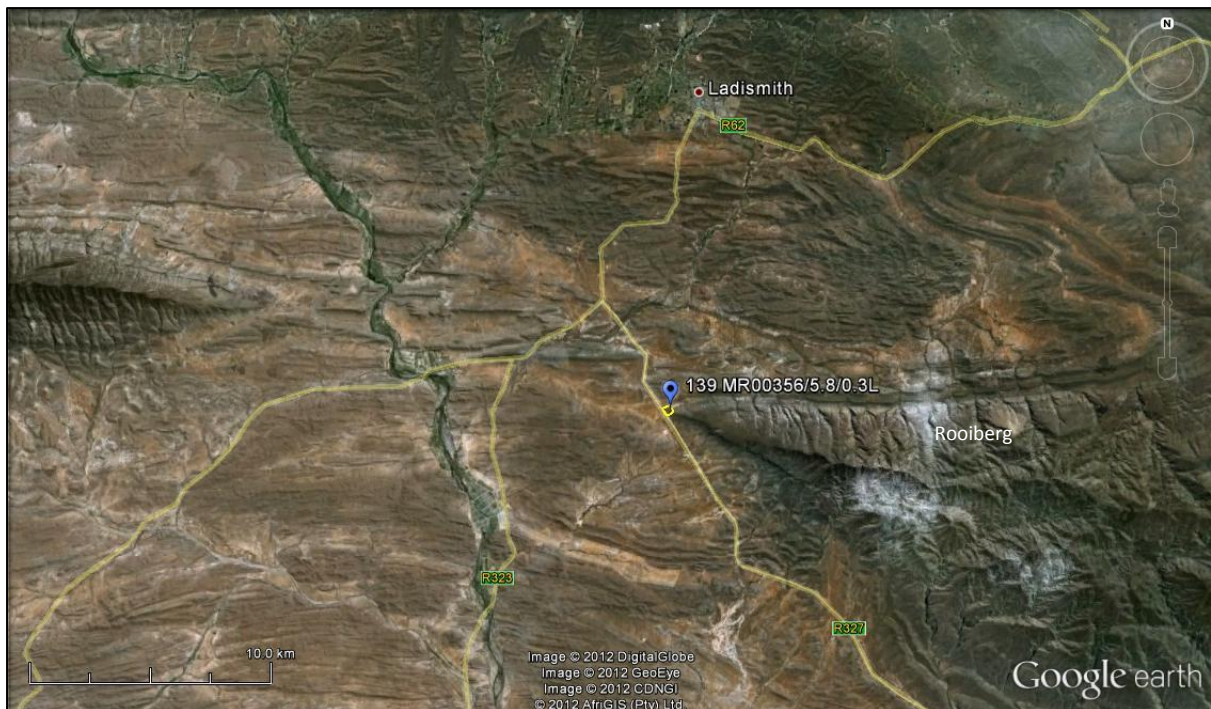


Figure 1: Google earth image showing the location of the proposed borrow pit MR00356/5.8/0.3L (Vidamemoria pit no.139) at the western extremity of the Rooiberg. The relevant 1:50 000 topographical map is 3321CB Van Wyksdorp.

## 2. LEGAL FRAMEWORK

Section 38 of the National Heritage Resources Act (Act 25 of 1999) is triggered by certain types of development, including changes of character to an area exceeding 5 000m<sup>2</sup>, and makes provision for compulsory Heritage Impact Assessments to assess the potential impacts of such proposed developments on heritage resources. In terms of Section 38(1), a Notification of Intent to Develop (NID) form was submitted to Heritage Western Cape (HWC) by Vidamemoria. Following comment from HWC (case 1883-1976 ref.120726TS21) an AIA was included amongst the requirements according to Section 38(8) of the Act.

### **3. TERMS OF REFERENCE**

The terms of reference for the AIA stipulated a field visit to locate and map archaeological resources, a short report dealing with the field observations, an assessment regarding the significance of the resources (in the context of other studies in the area) and any impacts on them, as well as recommendations regarding any mitigation required.

### **4. STUDY APPROACH**

#### **4.1 Methods**

Fieldwork for the proposed pit development was undertaken 11 December 2012. A site plan and polygon indicating the affected area were provided by Aurecon and Vidamemoria respectively for the Phase 1 survey. The area was covered on foot and the tracks were recorded by a Garmin GPSMAP 62s set on the WGS84 datum (Figure 2). The site was extensively photographed.

#### **4.2 Limiting factors**

Visibility of archaeological remains on the ground was generally poor due to the dense vegetation covering a large part of the affected polygon. It was better in areas where there were gaps between bushes and shrubs. Visibility was good in the picnic areas.

### **5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE**

#### **5.1 Archaeological background:**

According to the map of impact studies recorded on the SAHRA Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD (2009), no studies have been done in the area of the proposed borrow pit 139. Studies further afield in the Little Karoo, for example Halkett (2002), Kaplan (2005), Orton (2009) and Tusenius (2012) would suggest that a range of material from the Early Stone Age (ESA), Middle Stone Age (MSA), Later Stone Age (LSA) and colonial period could occur.

The fact that the affected area has historically been regarded as an outspan would indicate that it has been visited over a long period of time. Hunters, cattle traders and travellers had already passed through this area prior to the arrival of white farmers in the mid 18<sup>th</sup> century (Burman 1981). Burman quotes the missionary James Backhouse's observation that the area of the Rooiberg ("Roodeberg") had "many roads which cross this desert country in various directions". Presumably the original inhabitants of this region had previously used many of these tracks.

## 5.2 Borrow pit MR00356/5.8/0.3L (Vidamemoria pit no.139)

**Approximate area:** 175m x 60m in generally affected area of 11 000m<sup>2</sup>

**Location:** S 33° 36' 26.86" E 21° 15' 12.85"

**Farm name and number:** Public Land - Uitspan (Roodeberg Outspan 194)

**Environment:** The proposed borrow pit is situated at the foot of a northwest-facing, moderately steep slope at the western extremity of the prominent Rooiberg (Figures 2 and 5). It is located within public land which is an historic overnight resting place for herded livestock and the attendant drovers (Aurecon 2012). It has subsequently been provided with two picnic areas with concrete braai places, tables and stools which are situated in two clusters of blue gum trees. Toilet facilities built of concrete blocks lie between the picnic areas (Figures 3 and 4).

The actual area of the proposed new pit (Figures 2 and 4) lies to the south of the picnic sites and some 300m to the northeast of an existing pit adjacent to the MR00356 (Figure 5). Besides the existing borrow pit in the south-western corner, another large excavated pit situated between the picnic areas is now overgrown. Fences indicate the boundaries of the polygon (Figure 2). A couple of modern buildings are situated to the south of the polygon and a wind-pump and water tank lie in cultivated land to the northeast of the proposed pit.

Gravelly silty sand overlies angular colluvial gravel, which in turn overlies sandstones of the Rietvlei Formation of the Cape Supergroup. Many angular sandstone blocks occur on the slope in the south-eastern corner of the affected area. With the exception of the picnic areas, fairly dense karoo vegetation covers most of the polygon but there are some patches where gaps between the bushes provide better visibility of the ground. Throughout the affected area there is evidence of sheet-wash and erosion, as well as digging by people and animals. The many tracks and disturbed vegetation evident within and around this area in Figure 2 indicate the broader, disturbed context of the polygon.



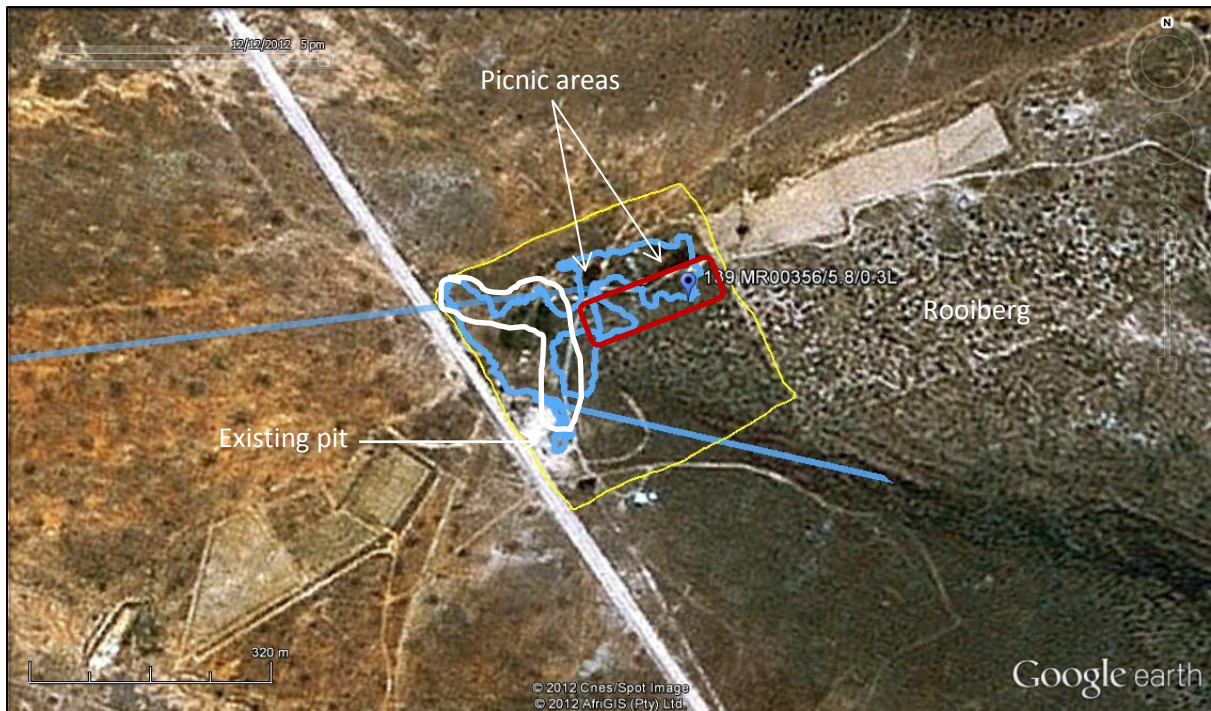


Figure 2: Google earth image showing the area of the proposed borrow pit 139 (red), the polygon of the generally affected area (yellow), the tracks of the field survey (blue) and the area where scattered archaeological remains were found (white). Attention was paid to the actual proposed pit area and the flatter-lying areas. The steeper slopes with denser vegetation in the south-eastern corner were not surveyed. Signs of disturbance in the surrounding area are evident in this image. Please note that the straight blue lines do not indicate survey tracks.

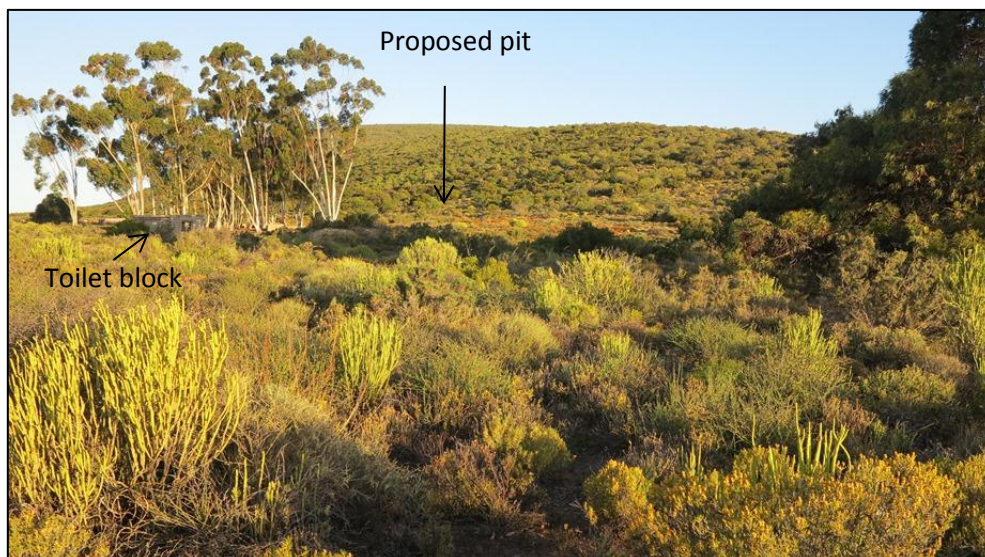


Figure 3: View towards the east showing the proposed new pit, the larger picnic area under the blue gum trees and the toilet block.





Figure 4: View towards the northwest with the proposed borrow pit area in the foreground, the small picnic area near the trees on the left, the large picnic area under the blue gum trees on the right and the toilet block between them.

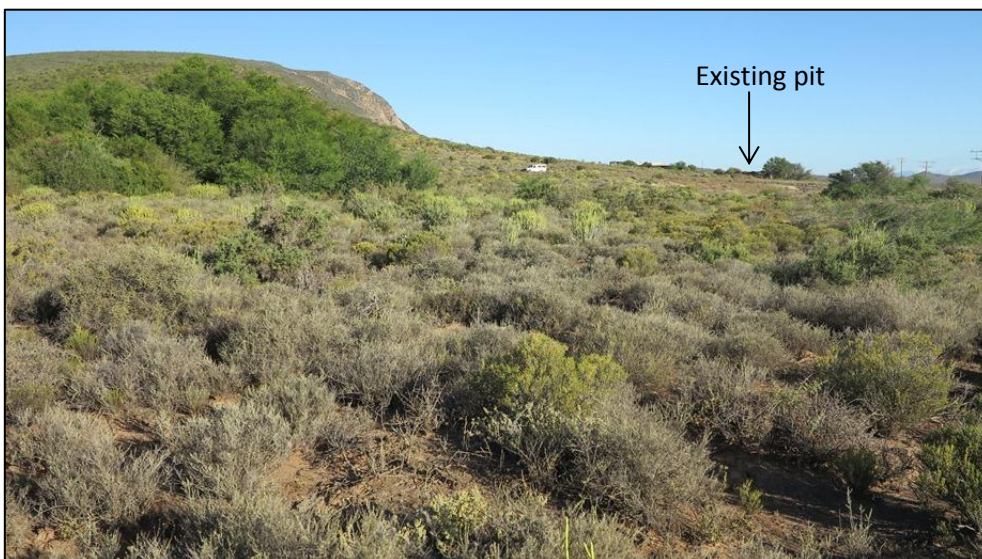


Figure 5: View towards the southeast of the affected area showing the position of the existing pit. The area of the proposed new pit and the picnic areas lie beyond the clump of *Acacia karroo* trees lies on the left. The vehicle indicates the position of the access track. The Rooiberg is visible in the background.





Figure 6: View towards the north of the north-western part of the study area where scattered artefacts were noted.

**Results of the survey:** Within the polygon of the greater affected area attention was paid to the immediate area of the proposed pit, as well as the more flat-lying areas, rather than the steeper slopes with denser vegetation. Given the history of the site as an outspan place, there was a surprising lack of archaeological and historical material on the ground. There was not much modern litter either, although there were occasional plastic bottles, modern glass fragments and rusted metal tins. Several scattered cement slabs and heaps of soil and cement were noted.

Some 20 scattered stone artefacts, a few small pieces of ostrich eggshell, two fragments of pre-colonial pottery (one with red slip), a few pieces of glass and a metal horseshoe were noted outside the borrow pit area (Figures 7 to 15). The stone artefacts are made of a variety of raw materials - quartzite, chert, silcrete and hornfels. Some of the flakes, cores and chunks are indeterminate in age but are likely to be either MSA or LSA, while others are clearly diagnostic. For example, the quartzite artefacts in Figures 11 and 12 are MSA whereas the small silcrete and hornfels flakes in Figure 9 are LSA. One piece could perhaps be the end of a crude ESA biface (Figure 10). The pottery (Figure 13) dates to the last 2000 years and could possibly be linked to Khoekhoen herders. It is not clear whether the horseshoe and thick glass fragment (Figures 14 and 15) are historical or modern. Fragments of tortoise shell were noted in a few spots, but as a complete shell of a recently deceased tortoise was also observed, these are likely to be of modern origin. Similarly, bone fragments, including several isolated vertebrae, are also probably of recent origin. All the above-mentioned material has clearly been washed into position from elsewhere and is thus in a disturbed, secondary context. No graves or potential graves marked by heaps of stone were observed.



Figures 7 to 9: Quartzite core; artefacts made of quartzite, silcrete and hornfels: chert flake. The scale is in cm.



Figures 10 to 12: Possible biface tip to the left of the core; snapped MSA blade; broken MSA flake. The scale is in cm.



Figures 13 to 15: Pre-colonial pottery with red slip and two pieces of ostrich eggshell; fragment of glass bottle; horseshoe. The scale is in cm.



## **6. SIGNIFICANCE AND RECOMMENDATIONS**

The mix of sparse, scattered archaeological and historical material of various ages in a secondary context indicate that the affected area is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed borrow pit is developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pits, work in that area must cease and the South African Heritage Resources Agency (SAHRA) must be notified immediately.

## **7. REFERENCES**

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## **8. ACKNOWLEDGEMENTS**

Ms Quahnita Samie of Vidamemoria Heritage Consultants is thanked for commissioning this study and providing background information.

