

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF THE PROPOSED EXTENSION OF A BORROW PIT
ON KLIP HEUWEL 416, CALEDON AREA, OVERBERG
DISTRICT MUNICIPALITY, 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) for the proposed extension of existing borrow pit MR00276/1.6/L/100 (Vidamemoria pit no. 177) to the north of the N2 between Bot River and Caledon in the Overberg District Municipality. Material excavated from the proposed pit will be used for future resurfacing of gravel roads in the Overberg region. No new roads will have to be constructed as access to the quarry site will be via existing roads and tracks. The proposed pit extension will be rehabilitated and natural vegetation will be reintroduced.

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 17 September 2012. The proposed extension lies in uncultivated, partly disturbed agricultural land. Archaeological visibility was generally good although some patches of denser vegetation occur.

A single quartzite flake of indeterminate age was observed.

The presence of a single, isolated flake in a disturbed context indicates that the proposed extension site is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed extension 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) for the proposed extension of existing borrow pit MR00276/1.6/L/100 (Vidamemoria pit no. 177) to the north of the N2 between Bot River and Caledon in the Overberg District Municipality (Figure 1). Material excavated from the proposed pit will be used for future resurfacing of gravel roads in the Overberg region. No new roads will have to be constructed as access to the quarry site will be via existing roads and tracks. The proposed pit extension will be rehabilitated and natural vegetation will be reintroduced.

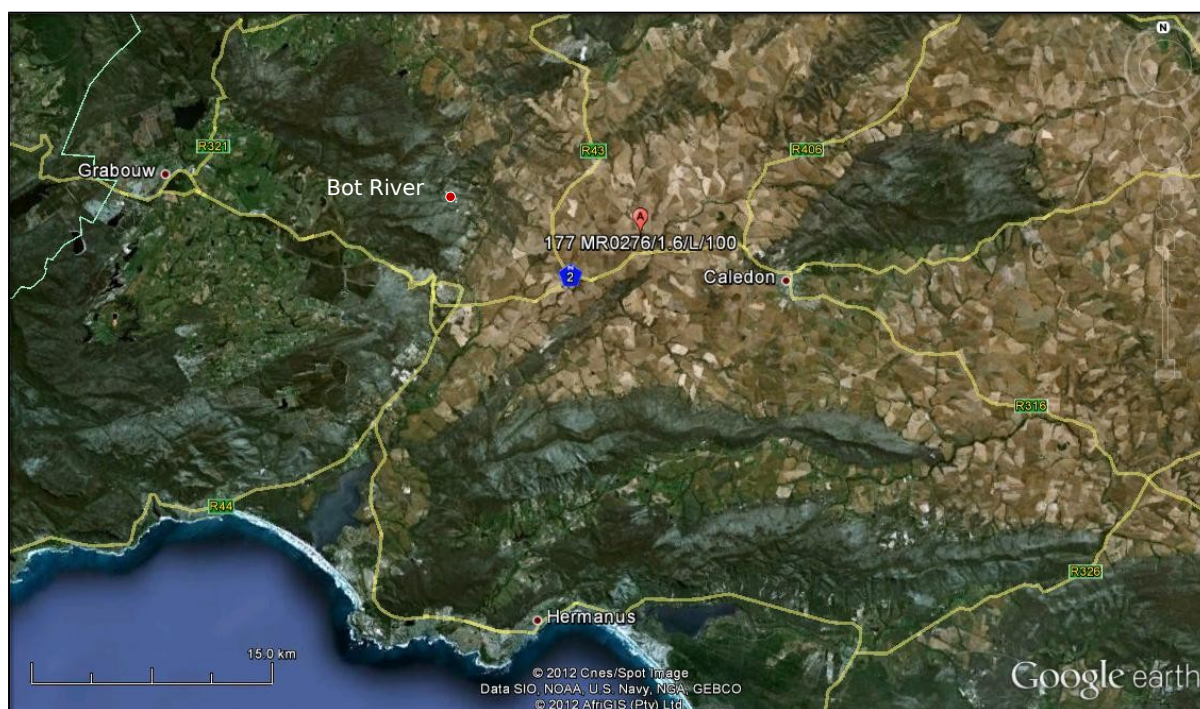


Figure 1: Google earth image showing the location of the proposed extension of existing borrow pit MR00276/1.6/L/100 (Vidamemoria pit no. 177) to the north of the N2 between Bot River and Caledon. The relevant 1:50 000 topographical map is 3419AB Caledon.

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 000m², 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 1879-1971 ref.120726JL13E) 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 was undertaken on 17 September 2012. A site plan indicating the affected area was provided by Nadeson for the Phase 1 survey. The area was covered on foot and 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 good although somewhat limited in parts of the central area of the proposed extension.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE

5.1 Archaeological background:

No studies in the immediate area of proposed pit 177 were noted on the SAHRA Archaeology, Palaeontology and Meteorite Unit Report Mapping Project DVD (2009), but impact studies done in similar, hilly agricultural land in other parts of the Overberg indicate the types of archaeological remains which may occur. During Orton's survey of the site of the proposed Caledon Flight Park, approximately 10 km to the southeast of the present study area, no archaeological material was observed on the site, but one quartzite, one sandstone and three silcrete Early Stone Age (ESA) artefacts were noted in a neighbouring field (2008). Several impact studies have been done in the vicinity of Bot River, some 12 km to the southwest of the proposed pit 177, by Kaplan (2006a, 2006b, 2007). Most of the archaeological remains recorded concern low density scatters of ESA tools, including a handaxe (2006a), but a couple of Middle Stone Age (MSA) flakes and a few Later Stone Age (LSA) silcrete artefacts were also noted.

5.2 Borrow pit MR00276/1.6/L/100 (Vidamemoria pit no. 177)

Approximate area: 4500m²

Location: S 34°12'8.72" E 19°19'44.30"

Farm name and number: Klip Heuwel 416

Environment: The affected area consists of uncultivated farmland. It is bounded by the MR00276 (Boontjieskraal Road) to the northeast, a small dam and blue gum trees to the northwest, wheat fields to the southwest and southeast (Figures 2 and 3). The existing small borrow pit (Figure 5) lies east of the dam. There is evidence of digging and other disturbance throughout most of the site and several heaps of soil have been dumped near the dam and blue gum trees. Further disturbance is caused by a water pipeline which crosses the length of the site. The terrain, which slopes down towards the north and northeast, is covered by gravelly, partly ferruginised colluvium and fine, medium and coarse sandstone and quartz gravel in a silty sand matrix (Figures 8 and 10). The gravelly colluvium overlies Bokkeveld Group sandstones and mudrocks. Some of the sandstone crops out in the higher-lying south-eastern part of the site (Figures 6 and 7). The Shale Renosterveld vegetation (H. Stummer, pers.comm.) varies in density across the site, but archaeological visibility of material on the ground was generally good as the bushes (e.g. *Elytropappus* sp., *Eriocephalus* sp. and other Asteraceae) are mostly scattered. Grass cover and denser bushes occur in the central portion of the affected area and reduced visibility somewhat.



Figure 2: Google earth image showing the proposed extension of the existing borrow pit 177, the tracks of the field survey and the location of the existing borrow pit and dam. Please note that the straight blue lines do not indicate survey tracks.



Figures 3 and 4: View over the affected area towards the north with the dam and blue gum trees indicating the northwestern boundary; view from the northern corner upslope towards the southeast.



Figures 5 and 6: View across the existing small borrow pit towards the southeast; view towards the northwest with an outcrop of sandstone in the foreground. The vegetation is denser in the central part of the affected area. The ruler is about 15cm in length.



Figures 7 and 8: View towards the west of more outcrop of sandstone; detail of ferruginised gravel. The ruler is about 15cm in length.

Results of the survey:

With the exception of a single quartzite flake of indeterminate age (Figure 11), no archaeological material was observed. The flake was found in a disturbed context at the bottom of the slope, close to the southern edge of the dam (Figure10). Outcrops of rock were examined for traces of quarrying but none were noted. A heap of sandstone blocks (Figure 9) was also inspected for flaked material but none was found.



Figures 9 and 10: View towards the north with heap of sandstone blocks in the foreground; view towards the southeast showing the context of the single quartzite flake found which lies next to the ruler (about 15cm in length).



Figure 11: Quartzite flake observed (photo: H Stummer).

6. SIGNIFICANCE AND RECOMMENDATIONS

The presence of an isolated, single flake in a disturbed context indicates that the proposed extension site is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed extension 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

Kaplan, J. M. 2006. Phase 1 Archaeological Impact Assessment: Proposed Development Portion 5 of Farm 436 Caledon. Unpublished report prepared for EnviroAfrica. Agency for Cultural Resource Management.

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8. ACKNOWLEDGEMENTS

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