

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF THE PROPOSED EXTENSION OF A BORROW PIT
ON MONTAGU FARM NO. 213 (HELPMEKAAR),
LANGEBERG 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 Nadeson Consulting Services to undertake an Archaeological Impact Assessment (AIA) for the proposed extension of an existing borrow pit, DR01382/4.5/R/40/A/R19 (Vidamemoria pit no. 91) and road reserve approximately 5 km to the north-east of Montagu in the Langeberg District of the Western Cape. Material excavated from the proposed extension will be used for the re-gravelling of the DR1382. The pit extension will be rehabilitated once mining activities have ceased.

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 19 August 2012.

No archaeological heritage resources were observed during the survey of the proposed pit extension.

The absence of archaeological remains in the affected area indicates that the proposed extension site is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed borrow pit and extension are developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pit, 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 an existing borrow pit, DR01382/4.5/R/40/A/R19 (Vidamemoria pit no. 91) and road reserve approximately 5 km to the north-east of Montagu in the Langeberg District of the Western Cape (Figure 1). Material excavated from the proposed extension will be used for the re-gravelling of the DR1382. The pit extension will be rehabilitated once mining activities have ceased. The slopes will be smoothed out, contoured and re-vegetated.

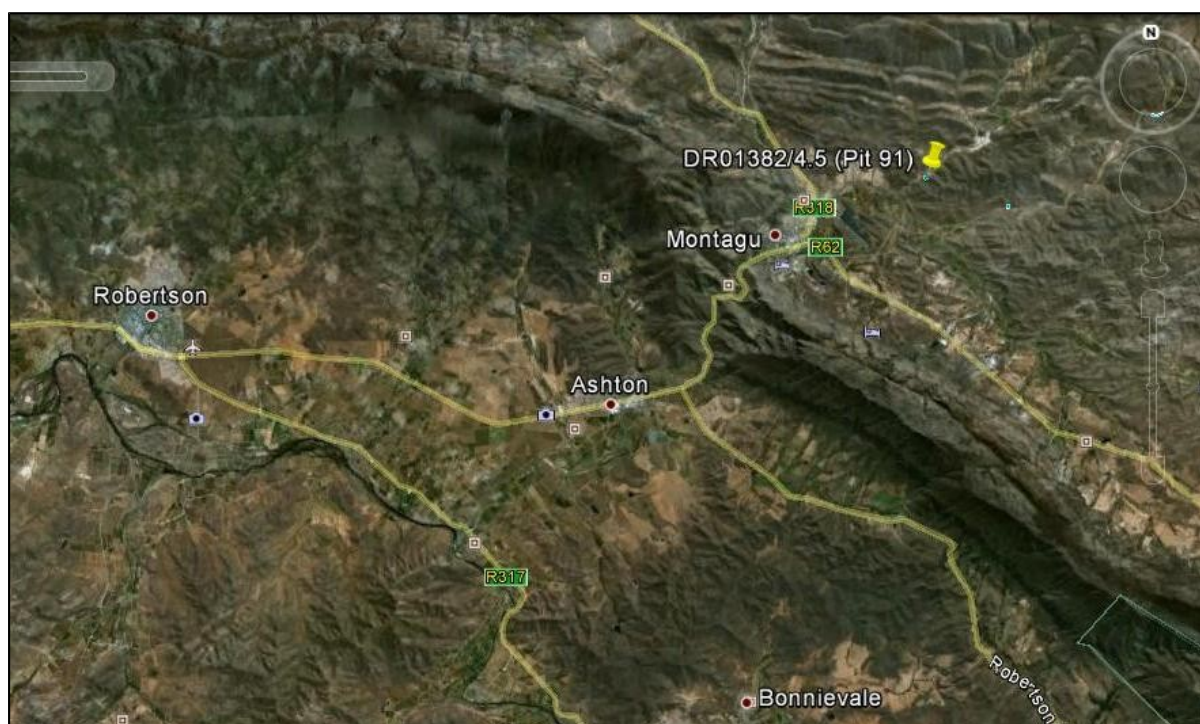


Figure 1: Google earth image showing the location of the proposed extension of an existing borrow pit DR01382/4.5/R/40/A/R19 (Vidamemoria pit no. 91). Montagu lies approximately 5 km away. The relevant 1:50 000 topographical map is 3320CC Montagu.

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 number 111124JL15) 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 pit was undertaken by the author on 19 August 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 varied from good to poor as there were patches of dense vegetation in certain parts of the proposed extension. In addition, the recent rains had resulted in the patchy growth of short grasses, herbs and moss.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITES

5.1 Archaeological background:

Several archaeological impact studies have been undertaken in the general Montagu area, for example those of Kaplan (2005, 2006) and Orton (2009, 2012). Relatively large numbers of Middle Stone Age (MSA) and Later Stone Age (LSA) artefacts, as well as smaller numbers of Early Stone Age (ESA) stone tools, have been observed along the R62 between Montagu and Barrydale (Kaplan 2005). Although most of these artefacts were located in highly disturbed and modified contexts, one large scatter on the farm *Derde Heuvel 210* seemed to consist of tools belonging to a single archaeological occurrence and was assigned medium to high significance (Kaplan 2005). A subsequent study at the *Derde Heuvel* site was in fact done by Orton (2009). Grey quartzite flakes, blades, chunks and cores, probably MSA in character, were distributed throughout the ferruginous gravel of the study area which extended over an area of more than 1 km. All the artefacts were in a secondary context as a result of natural erosion and weathering of the geological strata.

A study in the northern part of Montagu (Kaplan 2006) revealed several very low density scatters of LSA stone tools in disturbed contexts, as well as one large scatter of LSA artefacts (mainly flakes, flake blades and chunks), mostly made of quartzite but some quartz was used too. No cores or formal tools were noted. A few larger, quartzite MSA artefacts were also observed. A recent heritage screening study by Orton (2012) of 9 proposed borrow pit sites in the Ashton area revealed mostly weathered stone artefacts, such as cores

and flakes, at several locations. Although no typical diagnostic artefacts were noted, most undoubtedly belong to the Early or Middle Stone Ages. All were found in secondary contexts. The principal site in the Montagu region where stone artefacts have been recorded in a stratified context is the well-known Montagu Cave, located in the Langeberg south-west of Montagu. Excavations by Keller revealed a long sequence covering the ESA, MSA and LSA (Keller 1970, 1973). The cave also contains some rock art.

5.2 Borrow pit DR01382/4.5/R/40/A/R19 (Vidamemoria pit no. 91)

Approximate area: Approximately 88m x 72m

Location: S 33° 46' 8.36" E 20° 10' 24.56"

Farm name and number: Montagu Farm No. 213 (Helpmekaar)

Environment: The existing quarry lies within the road reserve of the DR1382 and is located at the foot of a fairly steep northwest and west-facing slope (Figures 2, 5 & 6). It is proposed to extend the pit from the existing face in a southerly and south-easterly direction into the slope. Besides the road to the north and the evidence of test pits, there are no boundaries of the proposed polygon visible on the ground. Beyond the affected area, a small side stream runs down the slope to the south and west of the site and joins the main stream situated on the northern side of the DR1382 (Figures 2 & 3). The crest of the slope on which the proposed extension is situated lies to the east (Figures 4, 5 & 6). Ferruginised, down-wasted surface and colluvial gravels overlie partly cleaved and weathered mudrocks of the Waboomberg Formation of the Bokkeveld Group (J. Almond, pers. comm) (Figures 3, 5 & 6). The terrain adjoining the existing quarry has little or no vegetation and is disturbed (Figures 3 & 5) but the rest of the slope is fairly densely vegetated (Figures 3 & 4). There are clumps of taller shrubs such as *Euclea undulata*, *Salsola* sp. and *Lycium* sp. in the rockier southern part of the polygon, and in the lower north-western corner (Figure 4). Visibility of archaeological material on the ground is poor in these areas. Most of the upper slope is covered with more scattered daisy bushes (e.g. *Pentzia*, *Elytropappus*, *Eriocephalus*), 'vygies' and *Tylecodon* spp. and archaeological visibility is good (Figure 3).



Figure 2: Google earth image showing the proposed extension of the existing borrow pit 30 and tracks of the field survey. Please note that the straight blue lines do not indicate survey tracks and that the vegetation on the ground is more dense in winter than it appears in this image.



Figure 3: View towards the northwest over most of the proposed extension. The western-most part of the existing pit, adjacent to the road, is visible to the right and the stream to the north of the DR1382 lies on the other side of the road.



Figure 4: View up the slope towards the southeast showing the crest of the slope on which the proposed extension is situated. More dense, taller vegetation is evident at the foot of the slope.



Figures 5 and 6: View towards the east of the existing quarry; view towards the southeast showing the existing quarry, the eastern part of the proposed extension located above the quarry and the crest of the steeper slope (which lies outside the affected area).

Results of the survey: No archaeological remains were observed.

6. SIGNIFICANCE AND RECOMMENDATIONS

The absence of archaeological remains in the affected area indicates that the proposed extension site is of low archaeological heritage significance. No significant impact on such resources is expected if the proposed borrow pit and extension are developed. No further archaeological studies or mitigation are recommended.

If any human remains are found during the development of the proposed pit, 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

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