

**ARCHAEOLOGICAL IMPACT ASSESSMENT
OF THE PROPOSED EXTENSION OF A BORROW PIT ON
PORTION 1 OF DASSEN KLIP A 169 NEAR PORTERVILLE,
WEST COAST 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) of the proposed extension of borrow pit DR02242/0.3/R/100 (Vidamemoria pit no. 120) which is situated some 12 km to the northeast of Porterville in the Swartland area of the West Coast District Municipality, Western Cape. Material excavated from the proposed extension will be used for the maintenance of gravel roads in the region. No new roads will have to be constructed as access to the quarry site will be via the DR02242. The proposed pit will be rehabilitated once the material has been removed.

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 25 November 2012 by the author and two assistants. The proposed extension is located close to agricultural land on the lower slopes of the Olifantsrivierberge. Visibility of archaeological material on the ground varied from very poor to good depending on the vegetation cover.

A single small silcrete flake was observed throughout the whole of the affected area. No other stone artefacts were seen. No archaeological remains indicating a Khoekhoen presence, for example pre-colonial pottery, were noted either.

The near absence of archaeological remains indicates that the site of the proposed extension is of low archaeological heritage significance. No further archaeological studies or mitigation are therefore recommended.

If any human remains are found during the development of the proposed extension, 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) of the proposed extension of borrow pit DR02242/0.3/R/100 (Vidamemoria pit no. 120) which is situated some 12 km to the northeast of Porterville in the Swartland area of the West Coast District Municipality, Western Cape (Figure 1). It is located close to agricultural land on the lower slopes of the Olifantsrivierberge. Material excavated from the proposed extension will be used for the maintenance of gravel roads in the region. No new roads will have to be constructed as access to the quarry site will be via the DR02242. The proposed pit will be rehabilitated once the material has been removed.

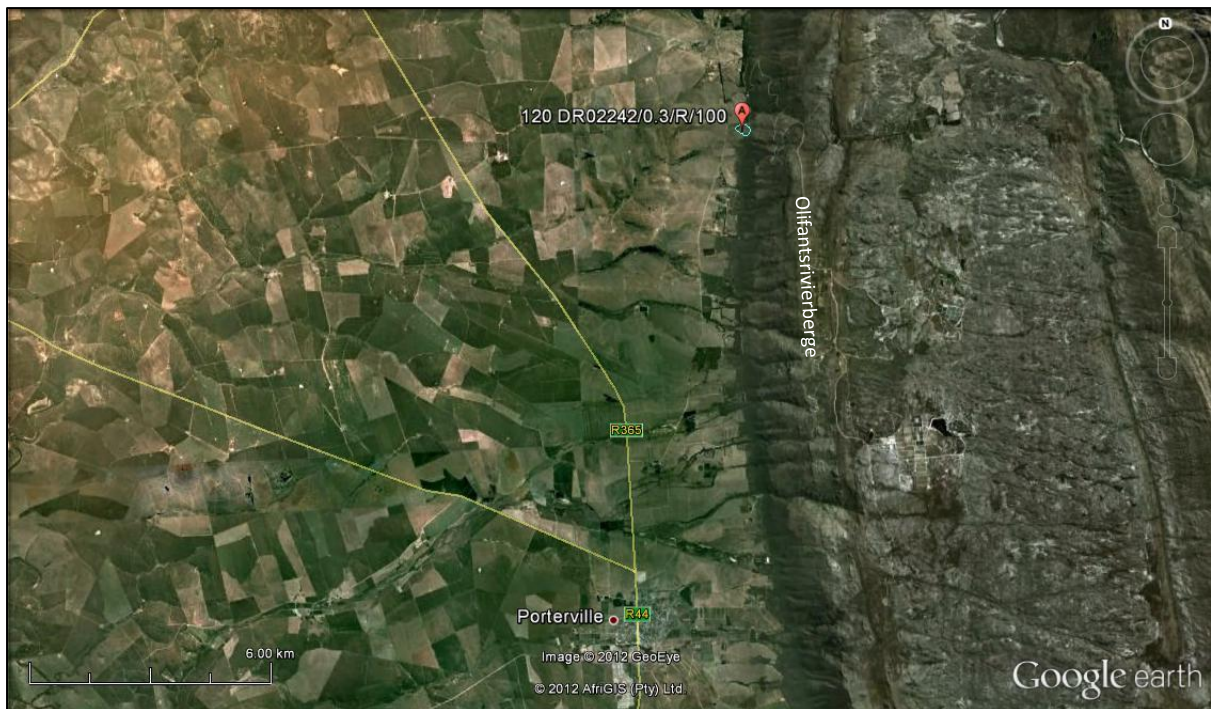


Figure 1: Google earth image showing the location of the proposed borrow pit DR02242/0.3/R/100 (Vidamemoria pit no. 120) at the foot of the Olifantsrivierberge. The relevant 1:50 000 topographical map is 3219CC Keerom.

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 1895-1985 ref 120726TS49) 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 25 November 2012. A site plan indicating the affected area was provided by Nadeson for the Phase 1 survey. The area was covered on foot by the author and two assistants and the author's 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 throughout the affected area and ranged from good to very poor depending on the vegetation cover. More detail is provided below in the description of the site and the results of the survey.

5. DESCRIPTION OF AFFECTED ENVIRONMENT AND SITE

5.1 Archaeological background:

Most of what is known about the archaeology of the Porterville region of the Swartland is derived from a couple of research projects (Hart 1987, Smith et al. 1991) and various Archaeological Impact Assessments (for example, Hart & Finnegan 2008). Hart's survey in the Porterville area revealed that high concentrations of Early Stone Age (ESA) and Middle Stone Age (MSA) material are often associated with the alluvial terraces of the Berg River (Hart 1987) and subsequent impact studies have confirmed that this is the case in almost the entire Berg River Valley of the Swartland. The density of sites decreases with distance from the river and this could partly be due to the fact that the Malmesbury Group bedrocks provide very poor quality material for stone tool manufacture, in contrast to the quartzite cobbles of the Berg River (Hart & Finnegan 2008). These observations are of general relevance to the present study as the Berg River lies about 19 km to the west of Porterville.

Besides ESA and MSA occurrences, historical records and archaeological excavations provide information on the presence of San hunters and Khoekhoen herders in the region of the Berg River and the adjacent mountains. The presence of San people is also attested by the many rock paintings found in the rocky overhangs of the mountains. These include the well-known panels of 'elephants in boxes' at Monte Cristo (Maggs & Sealy 1983) which are situated in the vicinity of Pit 120.

5.2 Borrow pit DR02242/0.3/R/100 (Vidamemoria pit no. 120)

Approximate area: 12 100m²

Location: S 32° 54' 12.28" E 19° 1' 36.68"

Farm name and number: Portion 1 of Dassen Klip A 169

Environment: The proposed extension to an existing pit is located on a northwest-facing slope next to the DR02242 which leads to the Dasklip Pass. Fences provide the north-western and north-eastern boundaries of the affected area. The position of the fields to the southwest and southeast provide some guidelines for the other boundaries. The existing pit is located between the road and the boundary fence (Figures 2 and 3). The proposed extension site is intersected by small streams originating from the kloofs in the Olifantsrivierberge to the east (Figures 4, 5 and 9), as well as by telephone and power lines. Sandy colluvium with angular clasts of sandstone overlies weathered phyllite of the Malmesbury Group (Figures 4 to 8). Besides disturbance caused by the downward flow of water, there are signs of animal burrowing. The density of the vegetation varies across the affected area. On the whole there are gaps between the grass, restios and shrubs such as *Elytropappus rhinocerotis*, *Dodonaea* sp., *Rhus* spp. and *Euclea tomentosa* (Figures 4 to 8). However, some dense patches with poor or zero visibility of the ground do occur, for example along the lower stream beds where taller shrubs occur between scattered large sandstone boulders (Figure 9) and next to the DR02242 (Figure 10) respectively.



Figure 2: Google earth image showing the polygon of proposed borrow pit 120, the position of the existing borrow pit, the area with very dense vegetation and the author's tracks of the field survey. The tracks of the two assistants which covered other areas were not recorded.



Figures 3 and 4: View towards the southwest of the existing pit next to the DR02240; view across the proposed extension towards the northeast.



Figures 5 and 6: View towards the east showing the Olifantsrivierberge kloofs and streams which have an impact on Pit 120; view towards the northwest with one of the geotechnical trial pits in the foreground.



Figures 7 and 8: View towards the west; view towards the south with the edge of the fallow field visible near the power line in the middle distance.



Figures 9 and 10: View towards the southeast showing the denser vegetation along the stream bed; view towards the southwest showing the dense vegetation along the fence line adjacent to the existing pit.

Results of the survey: Except for the very dense patches of vegetation in the above-mentioned areas (Figures 9 and 10), the proposed extension site was extensively surveyed. A single small silcrete flake was observed throughout the whole of the affected area. No other stone artefacts were seen. No archaeological remains indicating a Khoekhoen presence, for example pre-colonial pottery, were noted either.

6. SIGNIFICANCE AND RECOMMENDATIONS

The near absence of archaeological remains indicates that the site of the proposed extension is of low archaeological heritage significance. No further archaeological studies or mitigation are therefore recommended.

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