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# FIRST PHASE ARCHAEOLOGICAL AND HERITAGE ASSESSMENT OF THE BORROW PITS FOR THE PROPOSED UPGRADING OF THE ROAD FROM THE MISSION GATE TO RIEMVASMAAK, NORTHERN CAPE

### **EXECUTIVE SUMMARY**

The road from the Mission Gate to Riemvasmaak, Northern Cape, will be upgraded in the near future.

Two existing borrow pits will be exploited for material for the road building.

No archaeological or historical material was found at the proposed sites.

The developments will not require any mitigation measures and I recommend that the planning of the road may proceed.

## INTRODUCTION AND DESCRIPTION

## **Scope and Limitations**

The investigation provided an opportunity to examine the borrow pit sites.

No limitations or obstacles were experienced during site visit.

## Methodology

- 1. The different sites were inspected on foot.
- 2. GPS points were taken and the surrounding area and features were recorded on camera.

#### INVESTIGATION

Two existing borrow pits were selected for the supply of road building material at Riemvasmaak, Northern Cape. The sites were visited on 20 July 2010. Manie van Wyk from Spatial Solutions Incorporated Environmental Consultants, Bloemfontein, accompanied me to the site.

The site was examined for any possible traces of cultural and historical remains to establish the potential impact of the developments on any archaeological and cultural historical material. The Heritage Impact Assessment (HIA) is done in terms of the National Heritage Resources Act (NHRA), (25 of 1999) and under the Environmental Conservation Act, (73 of 1989).

The report aims to locate and evaluate the significance of cultural heritage sites, archaeological material, manmade structures older than 60 years, and sites associated with oral histories and graves that might be affected by the proposed developments.

Geological and palaeontological deposits are not included as a subject of this report.

#### LOCALITY

The two borrow pits are located along the road from the Mission Gate to Riemvasmaak, Northern Cape (Map 2).

Riemvasmaak lies on the Molopo River, about 11km north east of its confluence with the Orange River. The village is situated between the Augrabies National Park and the southern Kalahari and is reached by road over a 56km distance from Kakamas on the N14 between Upington and Pofadder (Map 1).

The soil surface is covered with lumps of quarts and rose quarts in abundance (Figs.4&9). Acacia erioloba (Kameeldoring) trees (Fig.13) are indigenous to this region and a significant number of individual trees grow right in the road reserve.

The following GPS coordinates (Cape scale) were taken (Map 2):

BP1	28°27'56"S 020°19'28"E	Altitude 665m	(Figs.1-4).
BP2	28°27'04"S 019°59'21"E	Altitude 640m	(Figs.5-9).
GATE	28°30'20"S 020°20'19"E	Altitude 641m	(Fig.10).
END	28°26′59″S 020°18′29″E	Altitude 660m	(Figs.11&12).

### **RESULTS**

#### **FINDS**

The sites consist of a deep sandy gritty soil deposit with veins of quarts and rose quarts and boulders in clusters (Figs.2&3).

No archaeological material was found at the sites, nor were there any engravings or other relics or historical material discovered at the different sites.

### ASSESSMENT OF IMPACT

I am convinced that the proposed developments will have no impact on any cultural and historical heritage remains of the area.

### RECOMMENDATIONS

I recommend that the planning and upgrading of the road at Riemvasmaak may proceed.

### **MITIGATION**

Concerning the area for the proposed developments, no mitigation measures will be required.

No obvious reasons could be found to delay the commencement of further planning and development of the site.

## **ACKNOWLEDGEMENTS**

I thank Manie van Wyk from Spatial Solutions International Environmental Consultants, Bloemfontein, for taking me to the site.

#### SELECT BIBLIOGRAPHY:

BEAUMONT, P.B. & VOGEL, J.C. 1989. Patterns in the age and context of rock art in the Northern Cape. South African Archaeological Bulletin 44(150):73-81.

BEAUMONT, P.B., SMITH, A.B. & VOGEL, J.C. 1995. Before the Einiqua: the archaeology of the frontier zone. In Smith, A.B. (Ed.). Einiqualand: Studies of the Orange River Frontier. Cape Town: University of Cape Town Press.

DEACON, J. 1992. Archaeology for Planners, Developers and Local Authorities. Cape Town: National Monuments Council.

DREYER, J. 2003. First phase heritage / archaeological assessment of the NEC Klipkop-Wessels feeder project at Askham, Northern Cape. EIA Report for ESKOM, Kimberley.

DREYER, J. 2005. Archaeological assessment of the proposed upgrading of the gravel road between Alexander Bay and Khubus, Richtersveld, Northern Cape. EIA Report for Cebo Environmental Consultants, Bloemfontein.

DREYER, J. 2007. First phase archaeological and cultural heritage assessment of borrow pit R along the proposed R87 road between Rietfontein & Groot Mier, Gordonia district, Northern Cape

DREYER, J. 2008. First phase archaeological and cultural heritage assessment of the proposed water flow measuring weir site on the Orange River near Sendelingsdrif, Northern Cape. EIA Report for Environmental Consultants, Bloemfontein and the Department of Water Affairs, Kimberley.

DREYER, J. 2010. First phase archaeological and heritage assessment of the proposed water flow measuring weir site in the Orange River at Blouputs, Northern Cape. EIA Report for Enviroworks Environmental Consultants, Bloemfontein and the Department of Water Affairs, Kimberley.

HUMPHREYS, A.J.B. 1986. Searching for the past. Cape Town: David Philip.

MORRIS, D. 1988. Engraved in place and time: a review of variability in the rock art of the Northern Cape and Karoo. South African Archaeological Bulletin 43(148):109-121.

MORRIS, D. 1990a. 'Etchings' and 'Intaglios' in the Upper Karoo: Part 1: The engravings at Springbok Oog. In Beaumont, P.B. & Morris, D. Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

MORRIS, D. 1990b. 'Etchings' and 'Intaglios' in the Upper Karoo: Part 2: Engravings on Jagtpan and adjacent farms. In Beaumont, P.B. & Morris, D.

Guide to archaeological sites in the Northern Cape. Kimberley: McGregor Museum.

PISTORIUS, J.C.C. 1994. Eskom Archaeological Site Identification Guide. Johannesburg: Eskom.

ROSENTHAL, E. (n.d.). The River of Diamonds. Cape Town: Howard Timmins.

SMITH, A.B. (Ed.). 1995. Einiqualand: Studies of the Orange River Frontier. Cape Town: UCT Press.

SOHNGE, P.G. VISSER, D.J.L. AND VAN RIET LOWE, C. 1937. The geology and archaeology of the Vaal River Basin. Pretoria: Government Printer.

# LIST OF ILLUSTRATIONS



Map 1 Riemvasmaak near Augrabies National Park, Northern Cape.

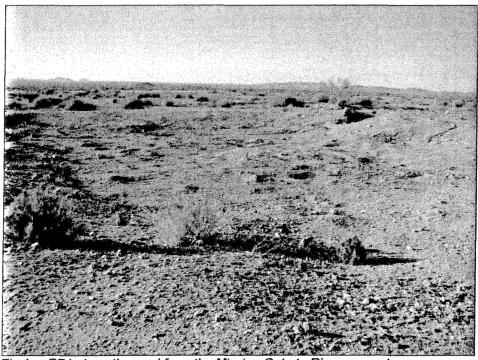
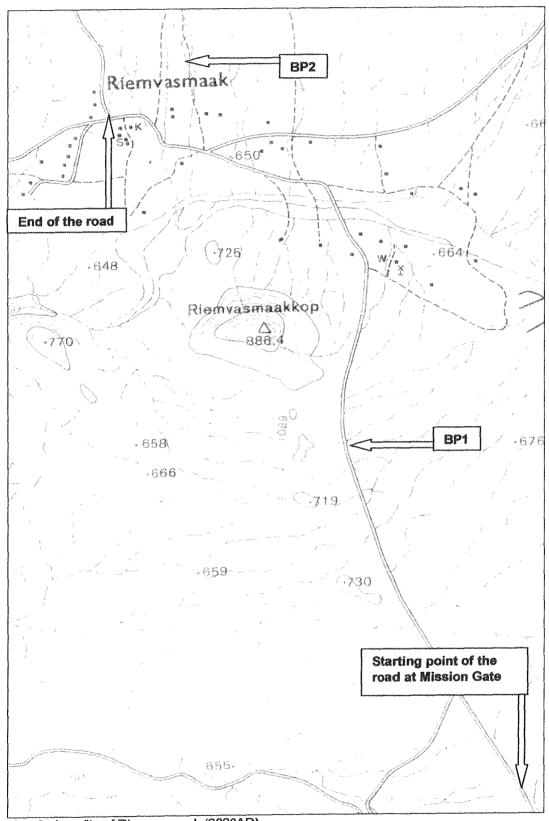


Fig.1 BP1 along the road from the Mission Gate to Riemvasmaak.



Map 2 Locality of Riemvasmaak (2820AD).

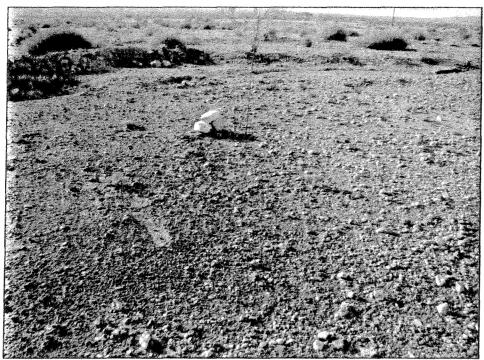


Fig.2 BP1 along the road from the Mission Gate to Riemvasmaak, Northern Cape.

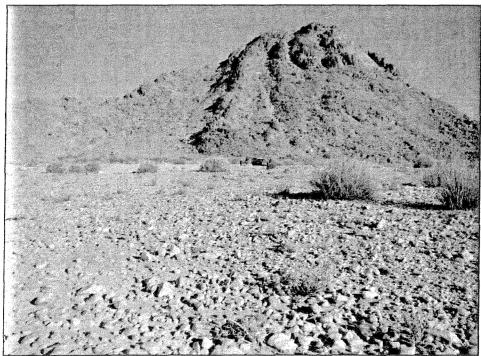


Fig.3 BP1 along the road to Riemvasmaak. Riemvasmaak Kop at the back.



Fig.4 Quarts and rose quarts on the surface at BP1.

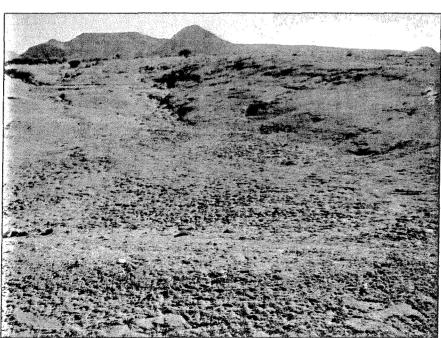


Fig.5 BP2 at Riemvasmaak.

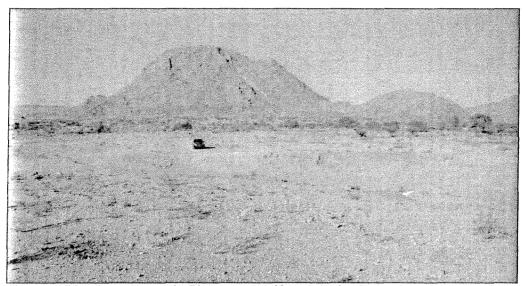


Fig.6 BP2 at Riemvasmaak. Riemvasmaak Kop at the back.

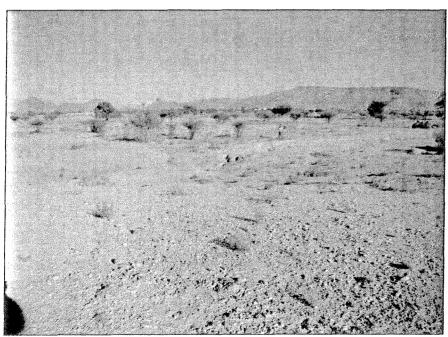


Fig.7 BP2 at Riemvasmaak.

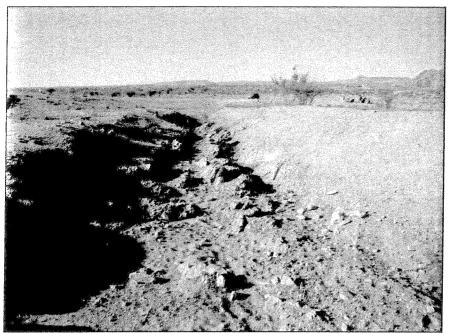
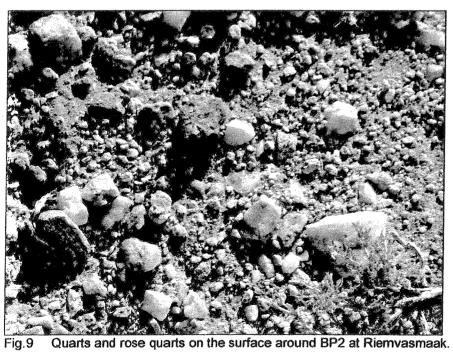


Fig.8 Donga running towards BP2 at Riemvasmaak.



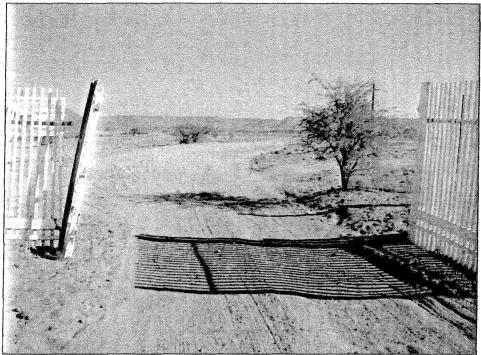


Fig. 10 Starting point of the road to Riemvasmaak.

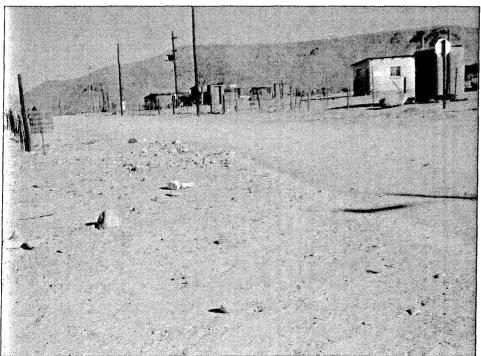


Fig.11 End of the road near the school at Riemvasmaak.

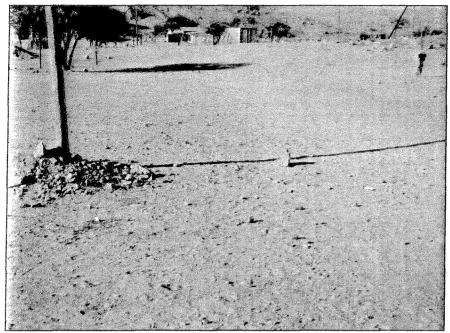


Fig. 12 End of the road near the school at Riemvasmaak.

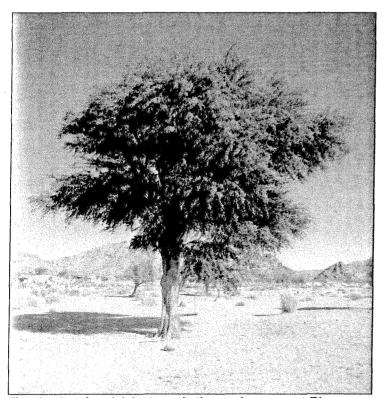


Fig.13 Acacia erioloba trees in the road reserve at Riemvasmaak.