

Archaeological Impact Assessment at Taaibosch Fontein near Plooyburg, Northern Cape.

DME: prospecting

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Observations made in April 2005 and February 2007

Introduction

The author was contacted originally by Mr Hendrik Snyman to carry out a phase 1 archaeological impact assessment with respect to proposed mining at Taaibosch Fontein, which lies south of the Riet River downstream from Driekopseiland, near Plooyburg. The farm was visited on 16 April 2005. Observations made and recommendations were given in a report of April 2005, incorporated now into this report. Subsequently Mr Mike Parry of Oldseal SA requested a further inspection, which was carried out on 23 February 2007.

Significance criteria, where applicable, are based on tables in Deacon and Whitelaw 1997, as adapted for the Northern Cape (supplied if requested).

Legislation

The National Heritage Resources Act (No 25 of 1999) (NHRA) provides protection for archaeological resources.

It is an offence to destroy, damage, excavate, alter, or remove from its original position, or collect, any archaeological material or object (defined in the Act), without a permit issued by the South African Heritage Resources Agency (SAHRA).

Section 35 of the Act protects all archaeological and palaeontological sites and requires that anyone wishing to disturb a site must have a permit from the relevant heritage resources authority. Section 36 protects human remains older than 60 years. In order for the authority to assess whether approval may be given for any form of disturbance, a specialist report is required. No mining, prospecting or development may take place without heritage assessment and approval.

SAHRA at national level acts on an agency basis for the Provincial Heritage Resources Agency (PHRA) in the Northern Cape, where archaeological sites are concerned. Permit applications should be made to the SAHRA office in Cape Town.

Methods and limitations

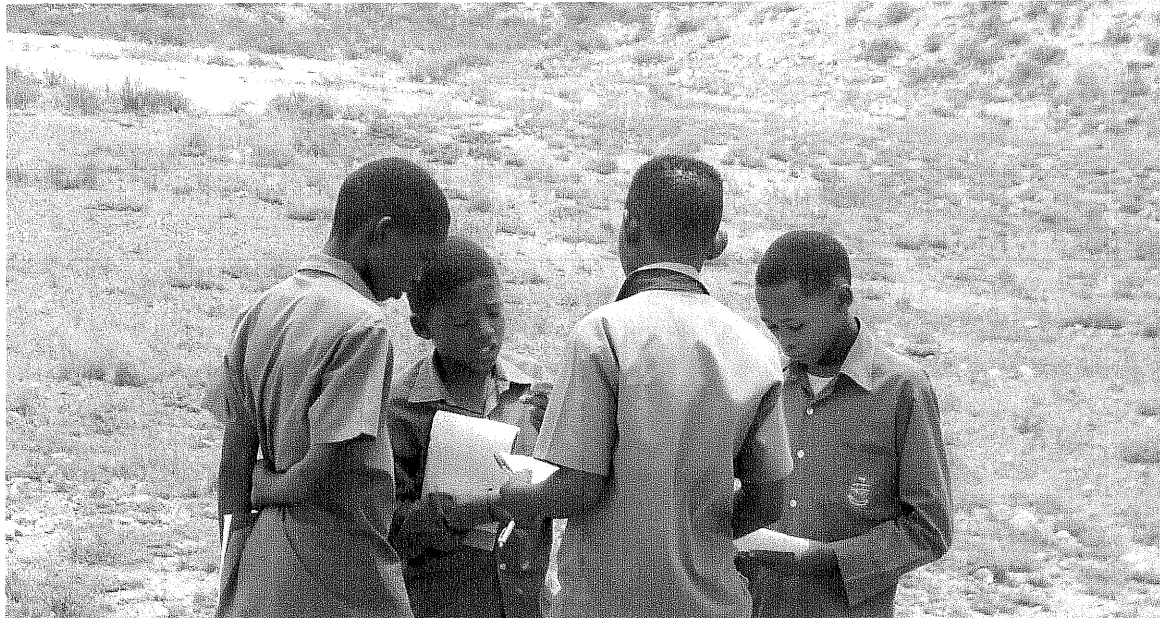
A background literature/museum database search provides indications of what might be expected in the region.

During the site investigation, areas of proposed mining were inspected.

In this environment sediments of archaeological significance are frequently well below the surface. Old diggings or quarries do provide sections that may be

inspected, and dumps of gravel give an opportunity to assess the potential archaeological content of underlying sediment.

On a second visit by D. Morris and M. Seliane in February 2007, a quarry was pointed out which afforded an opportunity to assess the archaeological content of the sediments due to be mined.



A view from the edge of the quarry (students from Plooyburg Junior School learning to recognise stone artefacts in the foreground).

Background: archaeological resources in the region

The Northern Cape has a wealth of archaeological sites (Beaumont & Morris 1990), with locales along and adjacent to the major river systems being of particular note (see also Burkitt 1928; Goodwin & van Riet Lowe 1929).

Stone Age material found in this area spans the Earlier, Middle and Later Stone Ages through Pleistocene and Holocene times. Of particular interest are Pleistocene sites along the Vaal River (e.g. Beaumont & Morris 1990; Beaumont & McNabb 2000), and similar material is known to occur along the Riet River. Late Holocene material with pottery is known to occur on the river banks, while rock engravings are richly distributed in the region, the site of Driekopseiland being of particular renown (Wilman 1933; Morris 1988; Morris 2002).

Terraces along the rivers have long been known for their association with archaeological and Plio-Pleistocene fossil material (e.g. Helgren 1979).

Observations

The area examined was on the plain above the present river channel and separated from it by a ridge of dolerite. Upslope of this ridge the surface sediments consist of calcrete which, drilling has shown, overlies, at several metres depth, a linear deposit

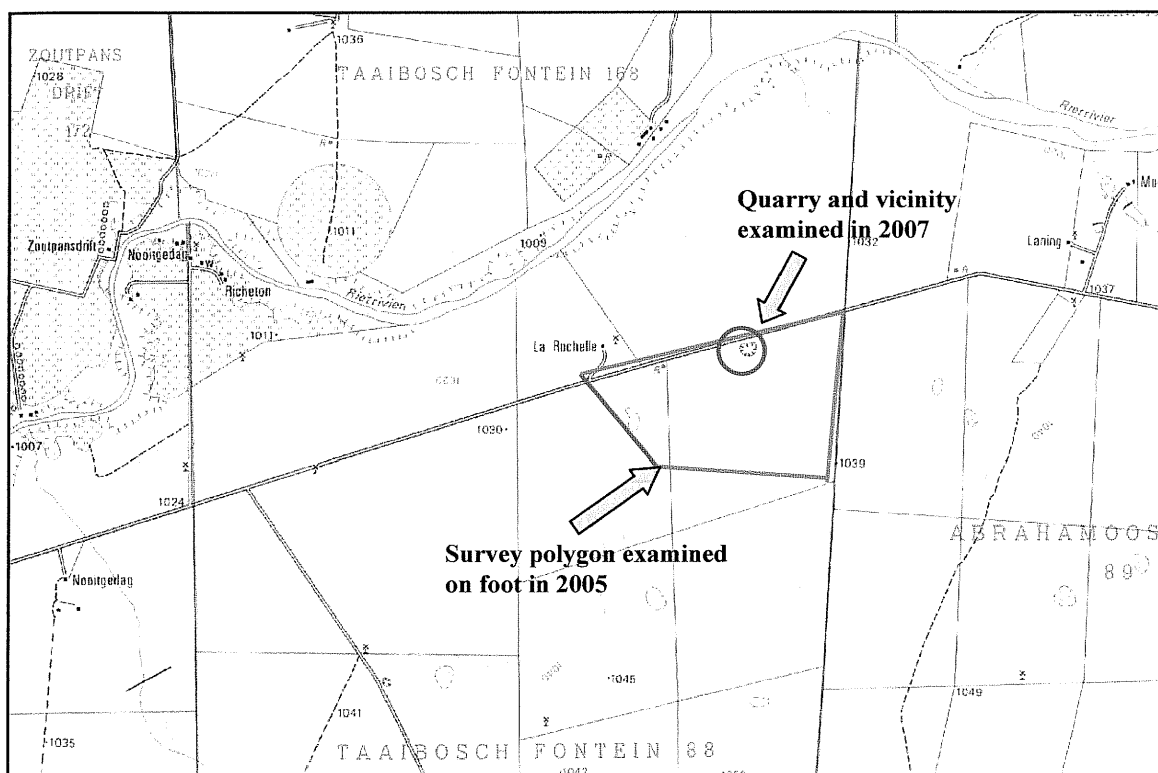
of gravels apparently trending across the farm from a known point on the adjacent farm Abrahamoos Fontein, towards the present Riet River channel.



A featureless calcrete plain overlain by shallow soil, above.
The image below shows the lip of the quarry.



Part of the area was mined sporadically in the past, but the bulk of the area of intended mining is undisturbed, with the gravels lying well below the calcrete.



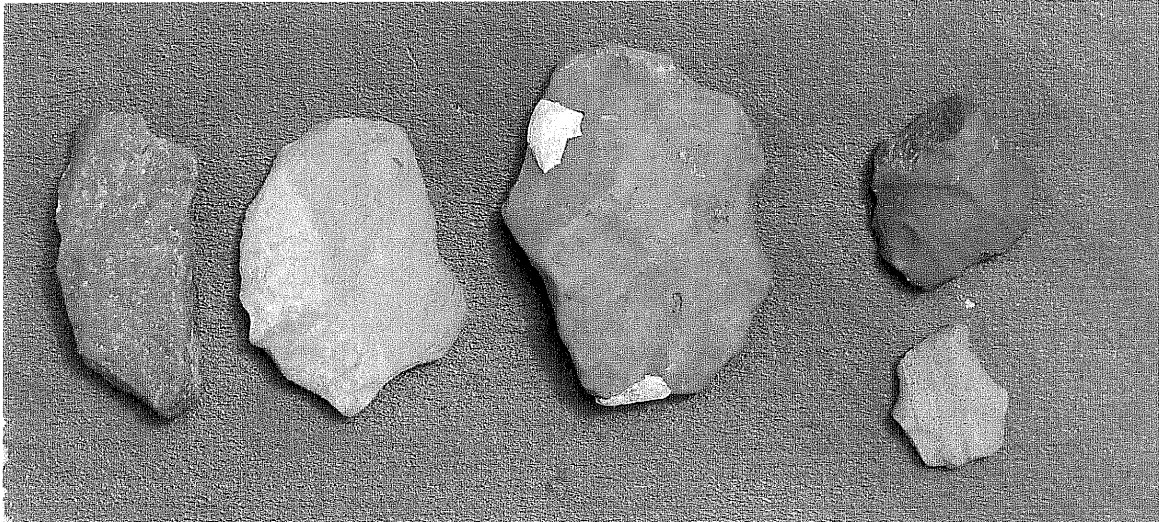
Extracxt from 1:50 000 sheet 2924AA showing areas examined in 2005 and 2007

Archaeological traces:

An area adjacent to the road at 29°02.129' S 24°03.092' E was examined on foot in 2005, while a quarry at 29°02.297' S 24°03.196' E was inspected during a subsequent visit in 2007.

At the first site no archaeological material was found, but it was noted that on present evidence it could not be said that no significant archaeological feature was present below the surface. It was recommended that inspection of material from similar sediments elsewhere on the farm should take place from time to time when gravels are exposed by mining.

The road borrow pit gave such an opportunity during the second visit. A very low density of artefacts was found to occur in and particularly at the base of a surface soil unit overlying the calcrete. No artefacts were found within the calcrete.



A very low density of Middle Stone Age artefacts on hornfels and quartzite (less than $1/m^2$) was found to occur in and mainly at the base of a shallow soil horizon overlying the calcrete. Scale: black background = 21 cm length from left to right.

Recommendations

No significant archaeological traces were noted on intended mining sites and on present evidence there is no reason for mining not to proceed as planned.

It should yet be noted that sub-surface archaeological sites/traces/features may occur. Closer to the river or in softer silts (not occurring within the surveyed area, however), these could include Later Stone Age burials, such as have been found at Weltevrede and Driekopseiland, nearby. The gravels to be mined may contain localised accumulations of Earlier Stone Age artefacts. In the event of such materials/features being found during mining, SAHRA and an archaeologist should be consulted immediately.

Archaeologists of the McGregor Museum should be allowed to carry out visual inspections of sections opened up by mining in order to assess the nature of sedimentation and possible cultural stratigraphies once these become available for study.

No colonial era heritage traces were found during the survey.

Acknowledgements

We thank Mr Hendrik Snyman and Mr Mike Parry who guided us to the sites of proposed mining. We thank learners from the Plooyburg Junior School who visited the sites with us on the second occasion.



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