

g/2/012/23



PHASE ONE ARCHAEOLOGICAL INVESTIGATION
VISSERSHOK, BELLVILLE DISTRICT

Prepared for

SETPLAN

FEBRUARY 1997

Prepared by

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1. EXECUTIVE SUMMARY

An archaeological impact assessment was made of the proposed quarry development on the farm Vissershok, Bellville District. A Later Stone Age artefact occurrence was located in a ploughed field on the north end of the property. The extent of the occurrence, where disturbed by ploughing, was sampled in mitigation of development. It is recommended that planning approval be granted to the proposed quarry development with the proviso that on the northern border of the property, development does not encroach towards the Diep River beyond the limits of the present ploughed field system.

2. INTRODUCTION

At the request of Mr S van der Westhuizen of SETPLAN, the proposed quarry site at Vissershok was visited on 17 February 1997.

The brief was as follows:

- 2.1 survey the proposed quarry area and locate and record the position of archaeological sites
- 2.2 assess the significance of such archaeological sites and the impact of mining operations on them, and
- 2.3 produce a report on the investigation and recommend any mitigatory measures needed.

3. METHOD

The quarry area was traversed with a maximum transect interval of 10 m. Archaeological sites were recorded and their locations noted.

4. ARCHAEOLOGICAL SITES LOCATED

Two large cores were located in ploughed land about 50 metres north east of the water tanks near the southern boundary fence of the property. These may be Acheulian artefacts of considerable age.

A Later Stone Age occurrence was located in ploughed land, on a terrace floodplain on the footslope of a small hill in the north western sector of the property. This area is to be used as the dump for the stone pile from the quarry. The artefacts occur in a moderately sorted loamy A horizon that overlies a B₀.

ferruginous sand horizon. The plough zone did not extend down to the B horizon.

The quartz and silcrete artefacts which are in equal proportions are typical of a Wilton industry. The Wilton industry occurs widely in South Africa, dating to the last 7500 years. Typically it includes a range of microlithic tools (<25 mm) made to a standard design by secondary retouch. The tool type with the highest frequencies is the small convex scraper and assemblages typically include small backed tools like segments as well as borers, adzes, grindstones and ochre. These artefact types are all present in the Vissershok sample.

In the Western Cape the Wilton is best illustrated by the site Byneskranskop, near Gansbaai. In that sequence the levels dating to younger than 5000 years include a number of adzes and crescent adzes (double segments) both of which are present in the Vissershok sample. Single segments are also present. This suggests the Vissershok Later Stone Age site dates to within the last 5000 years. A single undecorated sherd of pottery was recovered from the same location which if associated with the stone artefacts would indicate a date less than 2000 years.

Most of the formal tools are in silcrete and in addition there are small trimming flakes (<10 mm), irregular chunks, cores, flakes up to 40 mm in length. Some flakes show edge damage through use in this material. The convex scrapers (skin working tools) are few and variable; one has an end-scraper rather than the normal short scraper form. Single segments (arrow armatures) are in the 12 mm size range and well made. They are better represented than crescent adzes. There are several flakes showing heavy lateral use damage (wood working) that represent an early stage of discard of standard adze pieces. A single borer (used for drilling ostrich egg shell) with typical rectangular cross-section was included in the sample recovered.

The quartz artefacts are of milky quartz and there are few pieces of crystal quartz. This raw material was obtained in pebble form, shown by pieces retaining the outer surface. The sample includes many irregular chunks from the splitting of quartz pebbles. Flakes in quartz tend to be small (<25 mm) and irregular. There are few flakes of other material are of Malmesbury phillite and they are large and irregular.

5. ASSESSMENT OF SIGNIFICANCE

5.1 Archaeological significance of the possible Acheulian artefacts is rated as low.

5.2 Ploughing of the terrace where the Later Stone Age occurs has had a negative impact. Test pits in the area show that ploughing was not deep enough to reach the ferruginous horizon some half a metre below the surface but it would have been deep enough to turn over the zone in which the artefacts occur. The archaeological context is thus disturbed but the site would have retained some integrity as a localised occurrence. On this count the scientific significance of the occurrence is rated as medium. However, in the context of the peri-urban environment of Greater Cape Town where such sites are few, the occurrence takes on some added significance.

The primary (stone pile) and secondary impacts (vehicles) on the site will be high. The effects will be permanent and negative.

6. COLLECTION OF ARTEFACTS

Development of the site is to commence shortly. In mitigation a collection permit, no 8/97/02/007/51, was obtained from the National Monuments Council to collect

artefacts from the Later Stone Age occurrence. All the artefacts, exposed by ploughing, in two 10 m² areas were collected. Ten testpits of 1 m² were dug to a depth to intersected the B₆ horizon and the ground sieved and the artefacts retrieved (fig. 1). The test pits represent approximately 6 cubic metres of material examined. Site preparation using a bulldozer exposed more artefacts which were collected. The artefacts are housed in the Department of Archaeology, University of Stellenbosch.

7. RECOMMENDATIONS

- 7.1 As measures in mitigation of development have been undertaken it is recommended that quarrying operations at Vissershok be permitted to proceed.
- 7.2 From consideration of the cultural significance of the Later Stone Age site it is recommended that no development should extend on the north side of the property beyond the limits of the present ploughed fields. This would preserve the vegetated area of source bordering dunes between the Diep River and the area designated on the Setiplan map to be used as the stone pile. The justification is that the Later Stone Age occurrence extends to this margin and would extend beyond it to the north. In this way *in situ* sub-surface archaeological materials present will not be disturbed.

Report by:

Prof H J Deacon

Mr R J Goosen

No 42

Figure No 1
 Date: March 1994
 Scale: 1:50 000
 Job: North

LOCALITY, VISUAL IMPACT
 & ZONING (ITO GUIDE PLAN : 1988)

VISSERSHOK QUARRY
 HARD ROCK QUARRY (PTY)LTD

SETTLEMENT PLANNING SERVICES
 CONSULTING TOWN & REGIONAL PLANNERS,
 GEOLOGISTS, ECONOMISTS & ENVIRONMENTALISTS
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- Proposed plant site
- Proposed excavation site
- Other quarries
- Visual impact
- Hill site is visible from Viessershok farmstead and the Platrug sheds but not the farmstead
- Hill site visible from :
- N7 for 2.5km to north bound traffic.
- Viessershok road for ±1km to all east bound traffic.
- Zoning
- Photo position
- Minerals & construction materials
- Buffer area for construction materials
- Source: Cape Metropolitan Guide Plan (1988)

