

ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE CONSTRUCTION OF A DAM ON THE VERLORENVLEI FARM (“VERLORENVALLEY” 344) NEAR TOUWSRIVIER

Prepared for

Ninham Shand Consulting Services

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EXECUTIVE SUMMARY

This report details the findings of an Archaeological Impact Assessment carried out in conjunction with an Environmental Impact Assessment for the construction of a dam on the farm Verlorenvlei (Cape Farm “Verlorenvalley” 344) between Ceres and Touwsrivier. The dam wall will be some 300 m long and the flood zone will extend 1 km upstream creating a dam of some 15 Ha in extent. The area to be flooded is partly covered by natural vegetation and part was previously cultivated. The farmer would like to remove topsoil from the flood zone for use elsewhere on the farm.

Two areas indicating historic human activity were located with one being in no way significant. The other comprises of an oak tree and a stone alignment which may be the remains of an old structure. No associated artefacts were found and the site is deemed to be of relatively low significance. However, the possibility of encountering one or more burials in this area during the earthmoving should not be discounted.

Subject to the approval of Heritage Western Cape, we suggest that the construction of the dam be allowed to proceed.

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1. INTRODUCTION

The Archaeology Contracts Office was appointed by Ninham Shand to conduct a Archaeological Impact Assessment for the construction of a farm dam between Touwsrivier and Ceres. The dam will be an in-stream dam on the Smalblaar River and will be located on the farm Verlorenvlei (Cape Farm "Verlorenvalley" 344) which is located on the edge of the Karoo and Warm Bokkeveld areas (Figure 1).

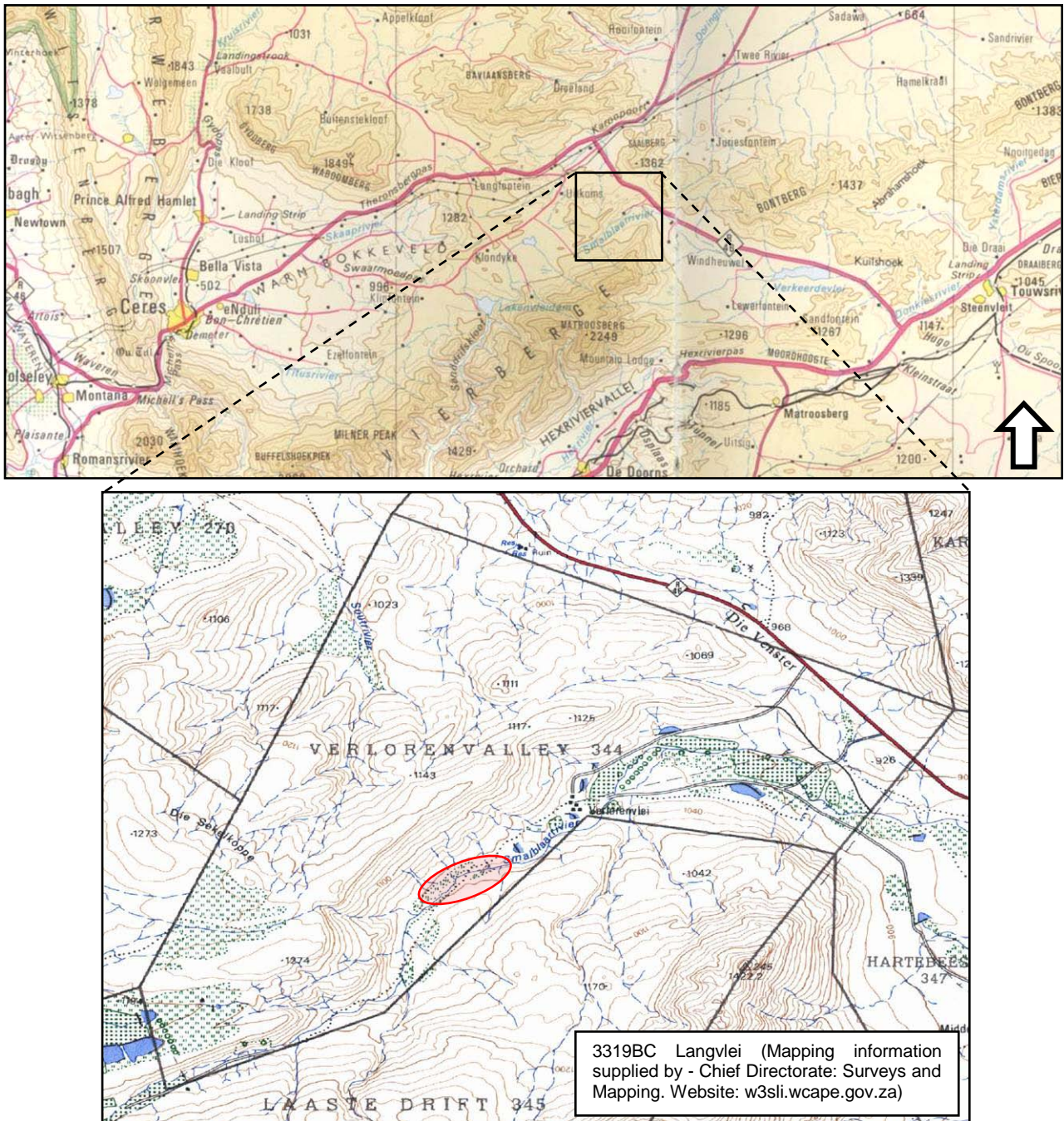


Figure 1: Location of the Verlorenvlei Farm and the Smalblaar River between Ceres and Touwsrivier. The location of the dam is indicated by the red oval.

The farm grows several types of fruit and the dam is intended to provide irrigation capacity for the planting of new orchards. The dam wall will be some 300 m long and the flood zone will reach back about 1 km upstream of the wall creating a total flood area of about 15 Ha. The farm manager would like to excavate and remove the good quality topsoil to use elsewhere.

The Verlorenvlei farm has several historic buildings on it with the main manor house gable being dated 1812. The study area lies well upstream and out of sight of the farmstead.

This Archaeological Impact Assessment is being conducted as part of an Environmental Impact Assessment and the fieldwork for this report was conducted on the 8th February 2006.

2. DESCRIPTION OF THE AFFECTED ENVIRONMENT

The dam will be built in-stream on the Smalblaar River. Some of the area to be flooded was under orchards until fairly recently while most of the remainder is relatively undisturbed natural vegetation (Plate 1). In the vicinity of the dam wall, the river runs through a narrow kloof with low cliffs on one side and it is across this that the wall will be built. The dam wall will extend above the kloof margins (Plate 2) with a spillway being constructed on one side.



Plate 1: Panoramic view of the area to be flooded by the proposed dam. This view is from the south. The wall will be at the far left hand (west) end of the photograph while the end of the flood reach will be just below the white sandy patch on the right.



Plate 2: View of the Smalblaar River valley looking upstream from just below the proposed location of the wall. The yellow dotted line indicates the approximate footprint of the wall.

The river is non-perennial, but water pumped from a borehole further upstream is allowed to flow down the river such that a smaller dam may be filled by a channel probably excavated within the last 15 to 20 years. The river generally runs through the middle of a sandy floodplain. Along the river margins the vegetation is thick and largely impenetrable while the remainder of the floodplain has either been cultivated until recently or is covered by sparser bushes with occasional dense thickets (Plate 3). Above the sandy floodplain the terrain becomes rocky with the south bank being composed of shale and the north bank sandstone. Vegetation in these areas is very sparse thus offering very good visibility. At the entrance to the kloof the underlying sandstone shelves up steeply on the south side thus forming the southern wall of the kloof. The opposite side of this kloof is merely steep, rocky ground with no cliffs being present (Plate 2).

The lowest part of the foot of the wall will be located at about 977 m above sea level and the maximum flood level will be at 1001 m.

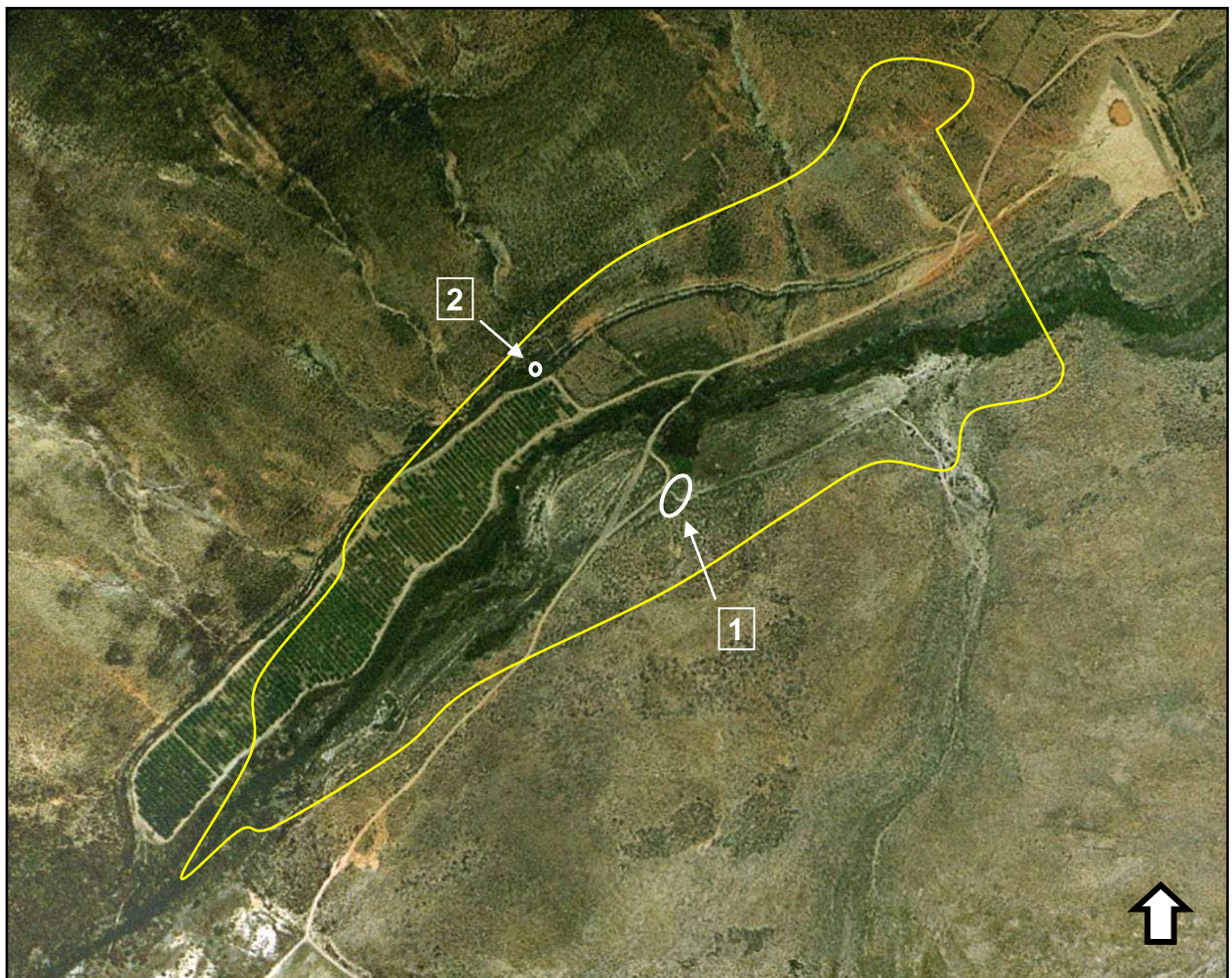


Plate 3: aerial view of the proposed dam area showing the location of the wall and spillway (top right) and the extent of the flood reach. The finds (presented in section 4 below) are indicated by the numbers.

3. METHODS

The area to be impacted was covered on foot with all finds being recorded and photographed. Positions were recorded on a hand-held GPS receiver using the WGS84 datum.

4. FINDINGS

Two sites, both historic, were located within the study area. These, and issues pertaining to cultural landscapes are addressed below.

4.1. Stone alignment and oak tree

GPS position: 33° 17' 40.2" S : 19° 41' 37.6" E

This find is indicated by point number 1 in Plate 3. Midway along the length of the flood area, on the northern side of the floodplain there is an old oak tree (Plate 4). Such trees usually indicate the position of some form of human settlement and this example appears to do just that. Some 20 meters south of the tree we found a stone alignment in sandy soil (Plate 5) that is almost certainly the remains of an old structure that was once located there. The stones are mostly undressed, although one showed evidence of having been shaped artificially (lower right rock in Plate 5b). Similar stones are plentiful on the hillside immediately to the south and the builders undoubtedly collected their materials locally. The total length of wall visible is about 9 meters (running north-south) and its width is 900 mm. There may be a corner at the southern end of the alignment but it is not possible to say this with confidence. Despite much searching, no artefacts could be found in the vicinity of the stone alignment.



Plate 4: The old oak tree found on the southern side of the floodplain.

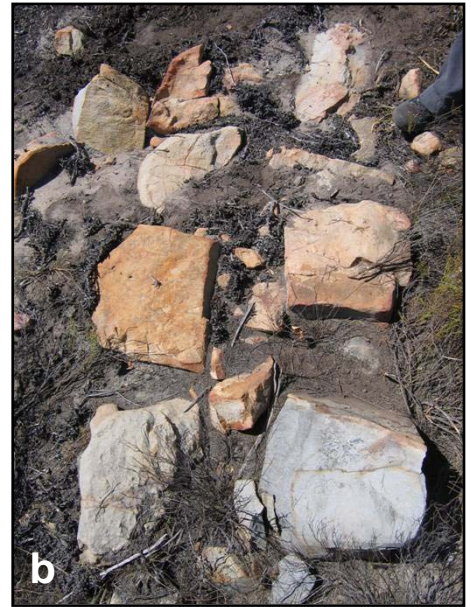


Plate 5: The stone alignment found in the bushes near the oak tree.

4.2. Collected stones and glass artefacts

GPS position: 33° 17' 36.2" S : 19° 41' 32.3" E

This find is indicated by point number 2 in Plate 3. Here, well above the floodplain, we found at least two sets of stones that appear to be artificially collected. It was not possible to say with confidence that there had been any structure built there but examination of the immediate surroundings clearly showed that some activity had occurred there in the past. A search of the surrounding area turned up three fragments of historical glass (Plate 6) as well as a modern broken bottle. The cobalt blue bottle base is likely to have been from a milk of magnesia bottle and a second small, clear base is from a medicine bottle. The third fragment is adiagnostic. The fragments may date to the turn of the 20th century with milk of magnesia having first been produced in the USA in 1880¹.



Plate 6: The three historical glass fragments found in the flood zone.

¹ Source: http://en.wikipedia.org/wiki/Milk_of_Magnesia

4.3. Cultural landscapes

Little remains of earlier cultural landscapes with the oak tree and stone wall alignment being the only tangible features. The modern orchards were probably located on land that had been cultivated by whoever used the structure in the past.

Although the historic farmstead is located nearby, it is downstream and out of line of sight of the proposed dam. The dam wall will be almost entirely obscured by a bend in the kloof immediately downstream.

5. CONCLUSIONS

The oak tree and stone alignment are the only finds worthy of further consideration. Flooding of the proposed area and removal of the topsoil will result in the destruction of these items but given their context they are not seen as being very significant.

6. RECOMMENDATIONS

The recorded finds are not sufficient to prevent construction of the dam and since no significant cultural landscape or visual impacts are foreseen it is recommended that, subject to the approval of Heritage Western Cape, the construction of the dam should be allowed to proceed.

It should be borne in mind, however, that with the existence of some form of settlement near the oak tree, there is a chance that one or more graves might be present nearby. While our search did not reveal any, it is possible that the bushy thickets in the vicinity could have obscured something. This is especially important in the light of the fact that the farmer would like to remove the topsoil from the flood area. During removal of the topsoil in the dam basin, a site supervisor should be instructed to watch for any human bones and should any be encountered, the find should immediately be reported to an archaeologist or to the South African Heritage Resources Agency (SAHRA). Mrs Mary Leslie or Ms Collette Scheermeyer of SAHRA can be contacted on (021) 462 4502 in this regard.

7. INVESTIGATION TEAM

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Report: J. Orton