# PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT FARM DRIE HEUVELS NO. 399 MALMESBURY

Prepared for

## **ENVIROAFRICA**

Ву

## **Agency for Cultural Resource Management**

P.O. Box 159 Riebeek West 7306 Ph/Fax: 022 461 2755

Cellular: 082 321 0172 E-mail: acrm@wcaccess.co.za

> JANUARY 2006

## **Executive summary**

EnviroAfrica requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of a proposed housing development on the Farm Drie Heuvels No. 399, Malmesbury, in the Western Cape Province.

The proposed subdivision and rezoning of a small portion of the affected property provides for the development of about 15 chalets, and possibly a conference centre, in four development Nodes, on the southern bank of the Berg River.

The extent of the proposed development (about 5700 m<sup>2</sup> ha) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate and map archaeological heritage sites and remains that may be negatively impacted by the planning, construction and implementation of the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate against the impacts.

A `Notification to Heritage Western Cape of Intent to Develop' checklist has been completed by the archaeologist and submitted to Heritage Western Cape Built Environment and Landscape Committee (BELCOM) for comment. A copy of the Phase 1 Archaeological Impact Assessment report has been included with this submission.

Low-density scatters of Early Stone Age (ESA) and a few Middle Stone Age and Later Stone Age tools were located within three of the proposed four development Nodes, but these are very thinly dispersed over the affected environment, and occur mostly in a severely disturbed and degraded context.

The archaeological heritage remains located during the baseline study have been graded low local significance.

It is interesting to note that large numbers of ESA tools were counted in the surrounding agricultural lands, particularly around Node 4. Studies have shown that ESA tools are not uncommon in the heavily ploughed wheat fields of the Berg River valley.

The Phase 1 Archaeological Impact Assessment has identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to development activities.

The specialist Phase 1 Archaeological Impact Assessment of the Farm Drie Heuvels No. 399, Malmesbury, has rated the potential impacts to archaeological material as being low provided that.

 Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

#### 1. INTRODUCTION

#### 1.1 Background and brief

EnviroAfrica requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of a proposed resort development on the Farm Drie Heuvels No. 399, Malmesbury, in the Western Cape Province.

The proposed subdivision and rezoning of a small portion of the farm Drie Heuwels No. 399, provides for the development of about 15 chalets, and possibly a conference centre, in four development Nodes, on the south bank of the Berg River.

The farm is currently zoned Agriculture I. An application will be made to rezone a small portion of the farm to Resort Zone I and II.

The extent of the proposed development (about 5700 m²) falls within the requirements for an archaeological impact assessment as required by Section 38 of the South African Heritage Resources Act (No. 25 of 1999).

The aim of the study is to locate, identify and map archaeological remains that may be negatively impacted by the planning, construction and implementation of the proposed project, and to propose measures to mitigate against the impact.

A `Notification to Heritage Western Cape of Intent to Develop' checklist has been completed by the archaeologist and submitted to Heritage Western Cape Built Environment and Landscape Committee (BELCOM) for comment.

A copy of the Phase 1 Archaeological Impact Assessment report has been included with the above submission.

#### 2. TERMS OF REFERENCE

The terms of reference for the archaeological study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed development Nodes;
- to identify and map any sites of archaeological significance within the proposed development Nodes;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed development Nodes;
- to assess the status and significance of any impacts resulting from the proposed development, and
- to identify mitigatory measures to protect and maintain any valuable archaeological sites that may exist within the proposed development Nodes.

#### 3. THE STUDY SITE

A locality map is illustrated in Figure 1<sup>1</sup>.

The Farm Drie Heuvels No. 399 is accessed via a gravel road (No. 359) located between Moorreesburg and Gouda. Entrance to the farm is clearly marked alongside the road.

Four development nodes are envisaged (refer to Figure 2), each located on the southern bank of the Berg River.

The surrounding land use comprises wheat fields and some export table grapes.

No new access roads will be constructed. Existing access roads will be upgraded.

## Node 1 (GPS readings S° 33 08 224 E° 18 51 634)

Node 1 comprises an existing (unauthorised) camping site with ablution facilities and entertainment area, on the southern bank of the Berg River. The proposed site is completely obscured by large mature Blue Gum trees (Figure 3). According to the farm owner Mr Koos Bester (pers. comm.), the camping site is flooded during the winter months when the Berg River is in flood.

Three wooden chalets are envisaged on the higher banks of the river within the existing entertainment area (Figure 4).

## Node 2 (GPS readings S° 33 08 000 E° 18 51 570)

A possible conference centre is planned in Node 2, which is located on the high southern bank of the Berg River (Figures 5 & 6). The affected site is degraded, having been levelled for construction and erection of Telkom and Eskom overhead lines. Evidence of earthworks is still visible on the flat site, which is also bisected by a wide gravel road. Some natural vegetation occurs in the immediate surrounding area.

## Node 3 (GPS readings S° 33 07 389 E° 18 51 199)

Access to Node 3 is along an existing gravel farm road (Figure 7). The affected site is located on the fairly steep southern bank of the Berg River and comprises a thin strip of land alongside a gravel road and fence line, covered in natural veld (Figures 8 & 9). Several small outcroppings of quartzite occur in the southern portion of the site. The footprint for the proposed development is on the edge of the surrounding wheat fields. Four units are planned in this area.

## Node 4 (GPS readings S° 33 07 088 E° 18 50 661)

Node 4 is located in a severely degraded slack on the southern bank of the Berg River (Figures 10 & 11). The proposed footprint is heavily eroded as a result of overgrazing, trampling and slope wash. Some vegetation occurs on the steep north and east facing slopes. The surrounding land use comprises heavily ploughed wheat fields (Figure 12). Eight units are planned within Node 4.

No old buildings or other built structures or features occur within or close to the proposed four development Nodes.

.

<sup>&</sup>lt;sup>1</sup> Unfortunately, no aerial photograph of the site is available

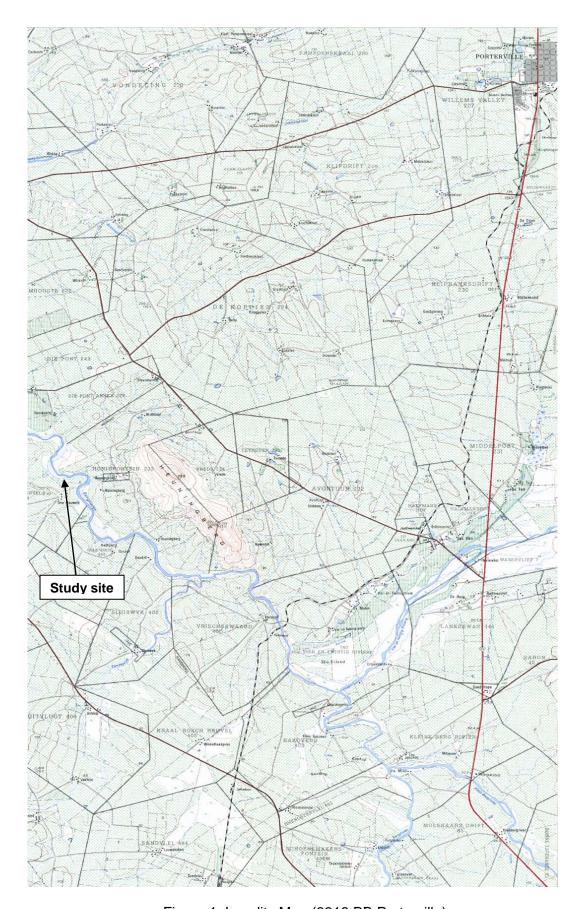


Figure 1. Locality Map (3318 BB Porterville)

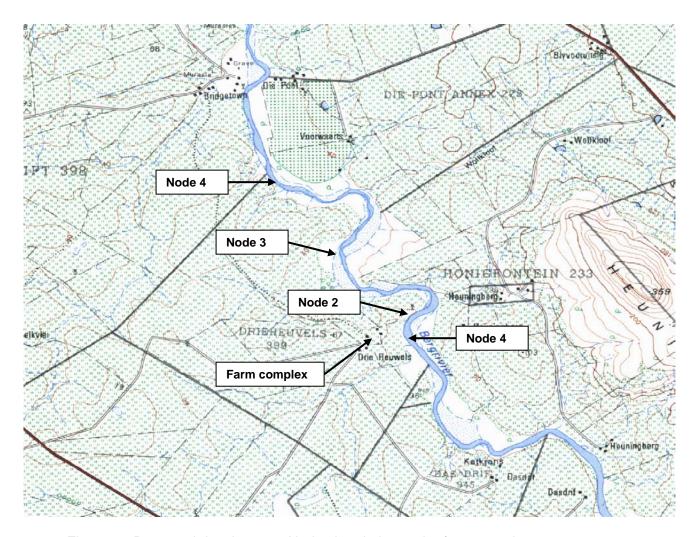


Figure 2. Proposed development Nodes in relation to the farm complex.



Figure 3. Node 1. View of the proposed site and the Berg River facing east. The site is set among the large Blue Gum trees.



Figure 4. Node 1. View of the entertainment area. The proposed chalets will be set among this already highly disturbed area.



Figure 5. Node 2. View of the site facing north west. Note the earthworks and cables in the foreground of the plate.



Figure 6. Node 2. View of the site facing east.



Figure 7. Node 3. Access road to the site. Note the surrounding wheat fields.



Figure 8. Node 3. View of the site facing south east. The Berg River is to the left of the plate.



Figure Node 3. View of the site facing north east. The Berg River is to the right of the plate.



Figure 10. Node 4. View of the site facing north east. The Heuningberg is in the distance. The Berg River can be seen to the left of the plate.



Figure 10. Node 4. View of the south facing north west. The Berg River is to the right of the plate.



Figure 12. Node 4. View of the surrounding land use. Arrow indicates the proposed site.

#### 4. APPROACH TO THE STUDY

#### 4.1 Method of survey

The approach followed in the archaeological heritage study entailed a detailed foot survey of each of the proposed four development Nodes.

Archaeological heritage remains located during the study were recorded using a Garmin Gecko 201 GPS set on map datum WGS 84

The immediate surrounding area was also searched for archaeological heritage remains.

A desktop study was undertaken.

The site visit and assessment took place on the 13 January 2005.

## 5. CONSTRAINTS AND LIMITATIONS

There were no limitations or constraints associated with the proposed development.

#### **6. LEGISLATIVE REQUIREMENTS**

## 6.1 The National Heritage Resources Act (Act No. 25 of 1999)

`...any development or other activity which will change the character of a site exceeding 5 000m², or the rezoning or change of land use of a site exceeding 10 000 m², requires an archaeological impact assessment in terms of the National Heritage Resources Act (No. 25 of 1999).

#### 6.1.1 Structures (Section 34 (1))

No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the South African Heritage Resources Agency (SAHRA), or Heritage Western Cape.

## 6.1.2 Archaeology (Section 35 (4))

No person may, without a permit issued by the SAHRA or Heritage Western Cape, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

#### 6.1.3 Burial grounds and graves (Section 36 (3))

No person may, without a permit issued by SAHRA or Heritage Western Cape, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority.

#### 7. IMPACT ASSESSMENT AND DESCRIPTION

#### 7.1 Node 1

No archaeological heritage remains were located in Node 1.

#### 7.2 Node 2

A small handful of Middle Stone Age (MSA) quartzite flakes were found in Node 2. Two flakes were found embedded in the gravel and clay road, while several flakes were found lying loose in the road and in the surrounding veld.

The low-density scatter of tools has been graded low local significance.

## 7.3 Node 3

A low-density scatter of ESA, MSA and LSA tools were found in the access road leading to Node 3 (refer to Figure 7) and in the surrounding wheat fields. These include several large ESA flakes, cores and chunks, five or six smaller triangular-shaped MSA flakes (some with prepared platforms) and a few LSA tools including a large chunk/core in chalcedony. The ESA and MSA tools are all in locally available quartzites. The source of the chalcedony is unknown, but must have been brought in from elsewhere and from some distance.

The low-density scatter of tools has been graded low local significance.

A collection of tools is illustrated in Figure 13.



Figure 13. Collection of stone tools from Node 3 and surrounding area.

Scale is in cm

## 7.4 Node 4

One ESA quartzite flake was found in Node 4.

Relatively large numbers of ESA tools were, however, found in the surrounding heavily ploughed and terraced wheat fields (refer to Figure 12). These include large flakes, chunks, several hammer stones and large cores, flaked/split cobbles, and a fairly large number of unworked round quartzite river cobbles. Some of the flakes are retouched along one edge, while one incomplete unifacial hand axe was also counted (Figure 14). All the tools are made in locally available quartzite and occur in a severely disturbed context. One fairly large core in silcrete was also counted. The source of the silcrete is unknown.

ESA tools such as those described above are not uncommon in the intensively farmed agricultural lands of the Berg River valley (Hart 1987; Kaplan 2005, 2001).



Figure 14. Collection of stone tools from area surrounding Node 4. Scale is in cm. Arrow indicates the handaxe.

#### 8. IMPACT STATEMENT

The impact of the proposed housing development on the Farm Drie Heuvels No. 399, Malmesbury, on important archaeological heritage remains is likely to be low.

The low density scatter of stone tools found in three of the proposed four Nodes, were all located in a severely disturbed and degraded context. In addition, the surrounding environment has been significantly altered by intensive farming practices.

The probability of locating significant archaeological heritage remains during implementation of the project is likely to be improbable.

It is unlikely, but human burials may be exposed or uncovered during earthworks and excavations.

## 9. RECOMMENDATIONS

The archaeological heritage impact assessment of the Farm Drie Heuvels No. 399, Malmesbury, in the Western Cape Province, has rated the potential impacts to archaeological material as being low provided that:

• Should any human remains be disturbed, exposed or uncovered during earthworks, these should immediately be reported the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502).

## 10. REFERENCES

Hart, T. 1987. Porterville survey. In Parkington, J. & Hall, M. (eds.). Papers in the prehistory of the Western Cape, South Africa. Oxford: BAR International Series 332:404-423.

Kaplan, J. 2005. Phase 1 archaeological impact assessment proposed housing development Portion 11 of the Farm Vrischgewaagd No 401 Malmesbury. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2001. Gamma-Omega 765 Kv Transmission Line. Heritage Management Plan. Report prepared for P.D. Naidoo & Associates and PBA International. Agency for Cultural Resource Management.