# PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT PROPOSED DEVELOPMENT PORTION 5 OF FARM 436 CALEDON

Prepared for

#### **EnviroAfrica**

Client: Crimson King Properties 111 (Pty) Ltd

Ву

### **Agency for Cultural Resource Management**

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#### **Executive summary**

EnviroAfrica, on behalf of Crimson King Properties 111 (Pty) Ltd, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for a proposed development on Portion 5 of Farm 436 Caledon.

The proposed rezoning and subdivision of the subject property, from agriculture, to residential, industrial and open space zones, provides for the development of single residential erven, a craft centre and private nature reserve.

The extent of the proposed development (18 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.

Heritage Consultant Mr Henry Aikman has been appointed to undertake a Heritage Impact Assessment (HIA) of the proposed project. The AIA forms part of the HIA.

Located adjacent to the town of Bot River, and to the north of the N2, the proposed site is located on either side of the gravel road to Villiersdorp. The site, comprising mostly old agricultural lands, is also heavily infested with alien vegetation, and is in a severely disturbed and degraded state.

Low density scatters of Early Stone Age tools, including a bifacial handaxe, were located during the archaeological assessment of the proposed development, but the remains occur mostly in a highly disturbed context.

#### The archaeological heritage remains have been graded low local significance.

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

The Phase 1 Archaeological Impact Assessment of a Portion 5 of Farm 436 Caledon, has rated the potential impacts to archaeological heritage material as being low provided that.

 Should any unmarked human remains be disturbed, exposed or uncovered during excavations and earthworks for the proposed project, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502), or Heritage Western Cape (Dr A. Jerardino 021 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.

#### 1. INTRODUCTION

#### 1.1 Background and brief

EnviroAfrica<sup>1</sup>, on behalf of Crimson King Properties 111 (Pty) Ltd, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for a proposed development on Portion 5 of Farm 436 Caledon.

The proposed rezoning and subdivision of the subject property, from agriculture, to residential, industrial and open space zones, provides for the development of single residential erven, a craft centre and private nature reserve.

The extent of the proposed development (18 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.

Heritage Consultant Mr Henry Aikman has been appointed to undertake a Heritage Impact Assessment (HIA) of the proposed project. The AIA forms part of the HIA.

#### 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 site;
- to identify and map any sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites within the proposed site;
- 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 site.

<sup>1</sup> EnviroAfrica is represented by Mr Charel Bruwer. PO Box 4 Onrus River, 7201 Fax: (028) 316 2545

#### 3. THE STUDY SITE

A 1:50 000 locality map is illustrated in Figure 1.

An aerial photograph of the study site is illustrated in Figure 2.

The subject property is located immediately to the north of the N2 and adjacent to the town, of Bot River, on either side of the gravel road to Villiersdorp. The total area of the land portion is about 165 ha and consists of a mix of old agricultural lands and mountain Fynbos on steep, mountain slopes. The proposed 18 ha development footprint is located in the old agricultural lands which are mostly infested with alien vegetation and are in a severely disturbed and degraded state (Figures 3-9). Dense stands of Pine comprise wind breaks between the old lands. An Eskom overhead powerline is aligned across the northern boundary of the property, while a cluster of old Eskom buildings are located alongside the Bot River – Villiersdorp gravel road.

Several gravel roads cut across the proposed site. Some trial diggings also occur, while several large piles of rock have been collected and stacked on the site. The middle slopes comprise deep sandy soils derived from highly weathered quartzite's, while the lower slopes are characterised by extensive and eroded gravel wash deposits. The upper (burnt) slopes are less sandy comprising mainly quartzites. Dumping from a nearby informal settlement is widespread on these upper slopes. No significant landscape features occur on the proposed site, but some rocky outcrops are located about 40-50 m from the north western boundary of the proposed development footprint.

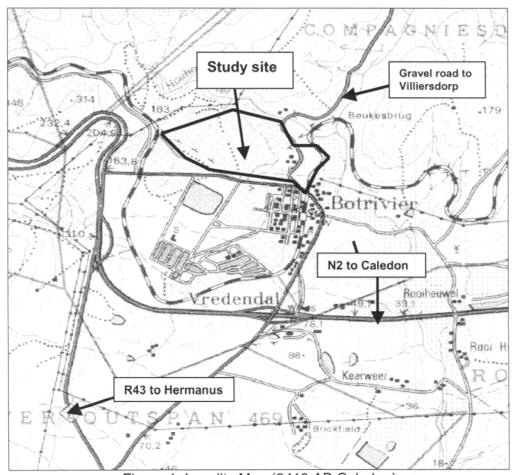


Figure 1. Locality Map (3419 AB Caledon)

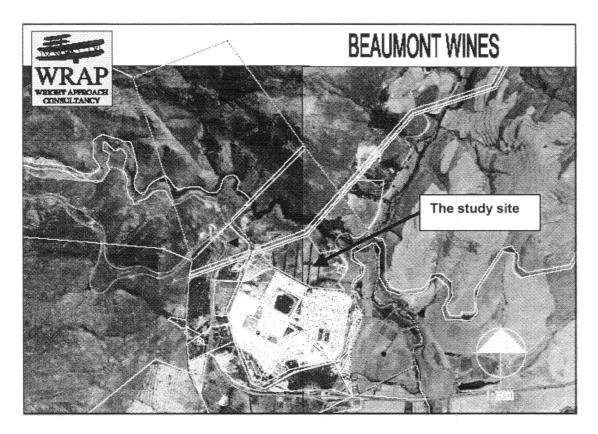


Figure 2. Aerial photograph of the study site

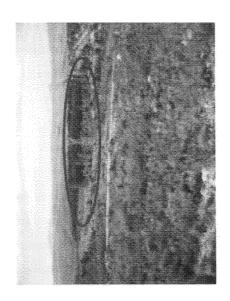


Figure 3. Overview of the site. Circle indicates the subject property. Bot River is located to the right of the plate,

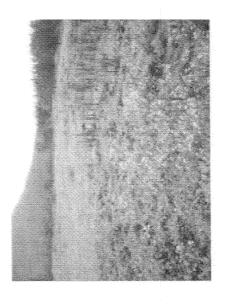


Figure 5. View of the site facing north.

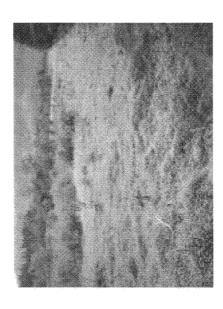


Figure 4. View of the site facing north.

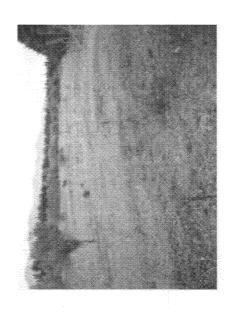


Figure 6. View of the site facing north west.

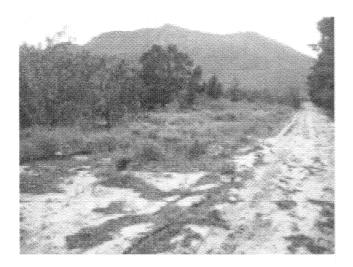


Figure 7. View of the site facing north west.



Figure 8. View of the site facing north west.



Figure 9. View of the site and the lowermost slopes facing north east. The gravel road to Villiersdorp is in the foreground of the plate.

#### 4. APPROACH TO THE STUDY

#### 4.1 Method of survey

The approach followed in the archaeological heritage study entailed a foot survey of the proposed 18 ha footprint. The remainder of the 165 ha property, located on high and very steep mountain slopes, was not searched for archaeological heritage remains. The rocky kopies close to the north western boundary of the proposed development footprint were also inspected for archaeological heritage remains.

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Archaeological heritage remains located during the study have been recorded using a Garmin Geko 201 GPS unit set on map datum WGS 84.

A desktop study was also undertaken.

The site visit and assessment took place on the 29<sup>th</sup> of May 2006.

#### 4.2 Results of the desk-top study

Several archaeological studies in the Bot River area have yielded mixed results.

Low-density scatters of ESA tools were located during an assessment of the Arabella Fynbos Golf Resort (Kaplan 2002). An assessment of an overhead powerline between Bot River and Hermanus yielded a handful of ESA and MSA tools in farmlands east and west of the R43 (Kaplan 2004), while a study of Benguela Cove, a housing development on the east bank of the Bot River recorded high density scatters of ESA tools, including hand axes and other formal tools (Kaplan 2003a). A rare Stone Age silcrete quarry site was also located alongside the R43, on land set aside for a proposed Equestrian and Polo Estate (Kaplan 2003b). Low-density scatters of ESA tools were also located during the same study. A recent study for a proposed water pipeline from the Hermanus River to serve portions of a farm alongside the Bot River-Hermanus Road, failed to locate any archaeological heritage remains (Kaplan 2006)

#### 5. CONSTRAINTS AND LIMITATIONS

A large portion of the proposed site, particularly the middle and lower slopes are infested with alien vegetation, resulting in low archaeological visibility (refer to Figures 7 & 8).

The upper slopes have recently been burnt so archaeological visibility is consequently fairly high.

The property below the Bot River – Villiersdorp Road comprises open but well grassed grazing lands, and archaeological visibility is reasonably high.

## 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

Low density scatters of Early Stone Age (ESA) tools were located during the archaeological assessment of the proposed development.

A few large flakes and chunks were located in the mid-lower portion of the subject property, on heavily eroded sheet washed gravels, in several of the access roads. The tools are in rough-grained quartzite and occur in a severely disturbed context.

A unifacial handaxe in coarse-grained white quartzite was located in a gravel road alongside the southern boundary of the proposed site (Figure 10).

No archaeological remains were located in any of the test excavations, nor among the stack of rocks that have been piled on the property.

A low density scatter of ESA tools, comprising several large flakes and chunks, one partially retouched flake and numbers of unworked quartzite river cobbles, were located in the grass fields on the east facing (gravel) slopes below the Bot River – Villiersdorp gravel road (GPS reading S° 34 13 278 E° 19 12 366). Most of the tools are highly patinated suggesting considerable antiquity, while some retain their cortex (outer layer). The tools appear to occur in a relatively undisturbed context, although the surrounding lands have been subject to at least some agricultural activity in the past. It is important to note that no development will take place in the area below the Bot River – Villiersdorp road, which retains its Agricultural zoning status.

The archaeological heritage remains have been graded low local significance.

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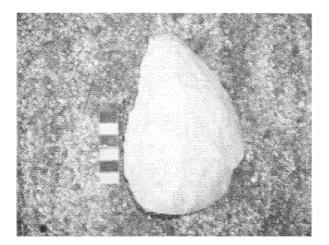


Figure 10. Handaxe. Scale is in cm.

It is worth noting that a low density scatter of tools, comprising a few Later Stone Age (LSA) silcrete flakes, chunks and a core, and two Middle Stone Age (MSA) flakes including one snapped triangular flake, were found alongside a small footpath on south-facing slopes among the small sandstone kopjes, about 40 m beyond the north eastern boundary of the proposed development footprint (GPS reading for the site is S° 34 13 124 E 19° 11 651).

The archaeological heritage remains have been graded low local significance.

#### 8. IMPACT STATEMENT

The impact of the proposed development on important archaeological heritage remains is likely to be low.

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

#### 9. CONCLUDING STATEMENT

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

#### 10. RECOMMENDATIONS

With regard to the proposed development on Portion 5 of Farm 436 Caledon, the following recommendations are made.

 Should any human remains be disturbed, exposed or uncovered during excavations and earthworks for the proposed project, these should immediately be reported to the South African Heritage Resources Agency (Mrs Mary Leslie @ 021 462 4502) or Heritage Western Cape (Dr a. Jerardino 021 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.

#### 11. REFERENCES

Kaplan, J. 2006. Phase 1 Archaeological Impact Assessment proposed water pipeline from the Hermanus River to serve Portions 7 & 8 of the Farm Hermanus River No. 542. Report prepared for Site Plan Consulting. Agency for Cultural Resource Management.

Kaplan, J. 2004. Archaeological scan of the proposed Houhoek to Hermanus double circuit 66Kv overhead powerline and extension to the Afdaks switching station. Report prepared for Eskom Land Development. Agency for Cultural Resource Management.

Kaplan, J. 2003a. Phase 1 Archaeological Impact Assessment proposed rezoning and subdivision Portion 4 of the Farm No. 781 Caledon. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2003b. Phase 1 Archaeological Impact Assessment. Proposed rezoning and subdivision Portion 8-10 of the Farm Afdaksrivier, No. 575 Caledon. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2002. Archaeological study, Arabella Fynbos Golf Resort. Report prepared for Dennis Moss Partnership. Agency for Cultural Resource Management.