

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT
OUTENIKUASBOSCH SAFARI PARK
FARMS OUTENIKUASBOSCH 149 AND
HARTENBOS 217
MOSSEL BAY**

Prepared for

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Executive summary

Hilland Associates requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment (AIA) for the proposed development of a portion of the existing Outeniquasbosch Safari Game Farm, on Farms Outeniquasbosch 149 and Hartenbos 217, near Mossel Bay, in the Southern Cape.

The 525 ha farm is currently being operated as a game farm and it is the intention of the owner to develop approximately 90 ha of the farm with residential, commercial and recreational facilities, while keeping the remainder of the property as a game farm. Hiking and mountain biking trails are also envisaged, but these will be restricted to existing roads and tracks and game trails.

The 90 ha of land envisaged for the development has been modified and altered through many years of ploughing and contouring and is therefore in an already transformed state.

The aim of this study is to locate and map archaeological 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 Ron Martin has been appointed to undertake a Heritage Impact Assessment of the proposed project. The archaeological assessment forms part of the wider heritage study.

The following findings were made:

Despite the modified and altered state of the receiving environment, small numbers of Early Stone Age and Middle Stone Age tools were documented during the baseline study. Most of the tools were found in previously disturbed areas on the property, such as open patches of gravel, in grazed and trampled areas, and in existing roads and tracks. Tools were also documented in the contoured fields, and among piles of rock cleared from surrounding fields.

Several scatters of tools, however, appear to occur in, or close to, primary context, but these are very thinly and unevenly dispersed over the surrounding landscape.

The archaeological remains have, overall, been rated as having low local significance.

It is likely (and quite probable) that more Stone Age artefacts will be uncovered during earthmoving operations during the Construction Phase of the proposed project. However, given the already severely modified nature of the receiving environment, the importance of these finds, is also likely to be of **low local significance**.

The Phase 1 Archaeological Impact Assessment of the proposed development of the Outeniquasbosch Safari Game Farm near Mossel Bay has therefore identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed construction activities.

However, given that several thin and dispersed scatters of tools were documented in primary, or close to primary context, it is not inconceivable that earth moving operations might expose in-situ material over the less disturbed portions of the proposed site.

With regard to the proposed development of the Farms Outeniquasbosch 149 and Hartenbos 217, near Mossel Bay, the following recommendations are made:

- Targeted monitoring of earthmoving operations is required during the Construction Phase of the proposed project.
- Full time archaeological monitoring is not required given the already transformed nature of the receiving environment.
- 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 (Mr N. Ndlovu (021) 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.

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1. INTRODUCTION

Hilland Associates, on behalf of Meros (Pty) Ltd requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment for the proposed development of a portion of the existing Outeniquasbosch Safari Game Farm, on the farms Outeniquasbosch 149 and Hartenbos 217, near Mossel Bay, in the Southern Cape, in the Western Cape Province.

The 525 ha farm is currently being operated as a game farm and it is the intention of the owner to develop approximately 90 ha of farm with residential, commercial and recreational facilities, while keeping the remainder of the property as a game farm. The farm is currently stocked with Buffalo, Zebra, Giraffe and various antelope species.

The proposed development will comprise about 624 residential units, a business/commercial centre, a hotel with tourism/conference facilities and an equestrian centre. Hiking and mountain biking trails are also planned on the property.

It is important to note that the 90 ha of land envisaged for development has been heavily modified through many years of ploughing and contouring and is therefore in a severely degraded and altered state. All the agricultural lands are currently utilised as pastures for the various species of game that occur on the farm.

The property is currently zoned Agriculture, and portions will be rezoned and subdivided to accommodate the proposed development activities.

The aim of the study is to locate and map archaeological 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 Ron Martin has been appointed to undertake a Heritage Impact Assessment of the proposed project.

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

3. THE STUDY SITE

A locality map is illustrated in Figure 1.

A site layout plan is illustrated in Figure 2.

Outeniquasbosch Safari Park is located to the north of the existing Hartenbos Sewerage Waste Water Treatment Works, immediately north of the N2. A large portion of the property has been modified as a result of management for grazing lands (Figures 3-20). The farm borders the Hartenbos River on the southern side, with the Brandwag River bordering to the north. The surrounding land use includes the recently approved Monte Christo Eco Estate¹ immediately to the east and several large stone quarrying operations immediately to the west. To the north is agricultural land and to the south lies the eastern part of Hartenbos.

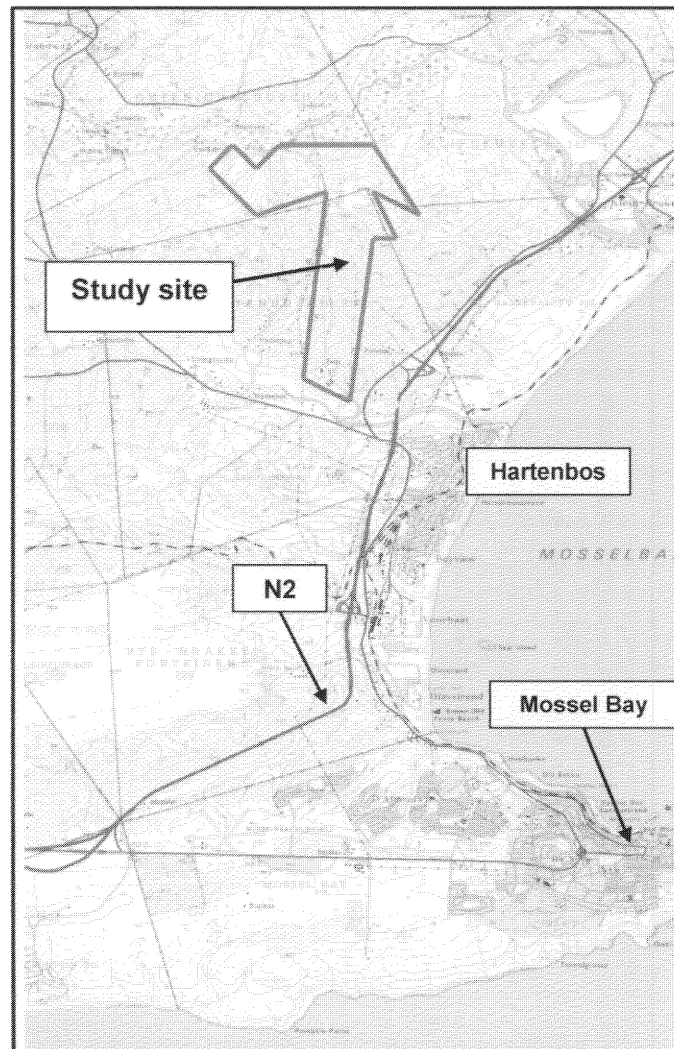


Figure 1. Locality map (3422AA Mossel Bay)

¹ No archaeological impact assessment was undertaken on this property, despite it been approved.

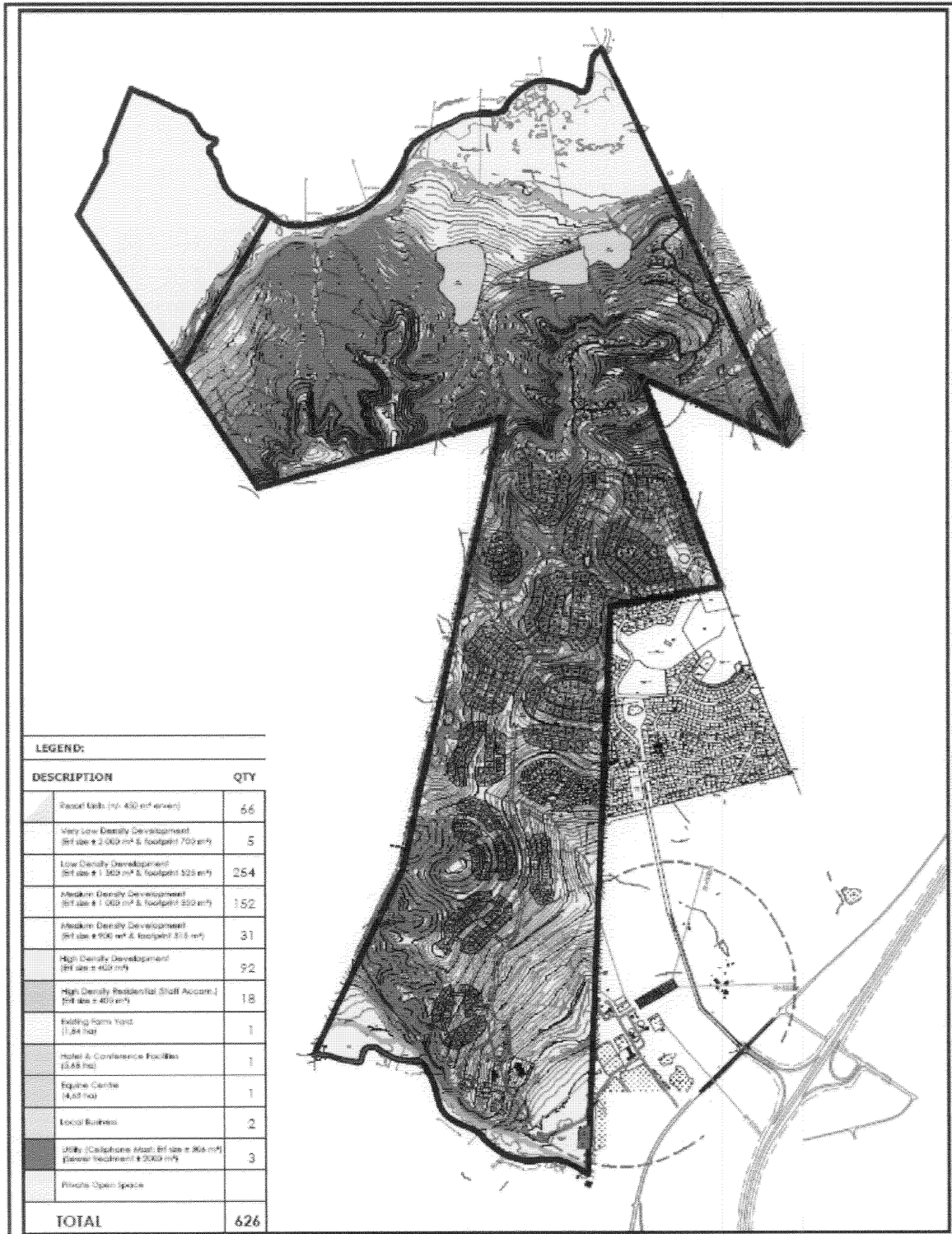


Figure 2. Proposed layout plan



Figure 3. View of the site facing south west



Figure 6. View of the site facing west



Figure 4. View of the site facing south west



Figure 7. View of the site facing south west



Figure 5. View of the site facing south west



Figure 8. View of the site facing south west



Figure 9. View of the site facing north east

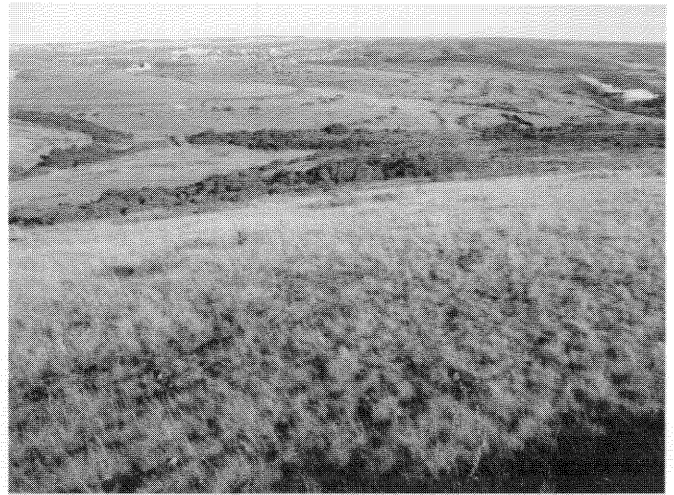


Figure 12. View of the site facing south west



Figure 10. View of the site facing east

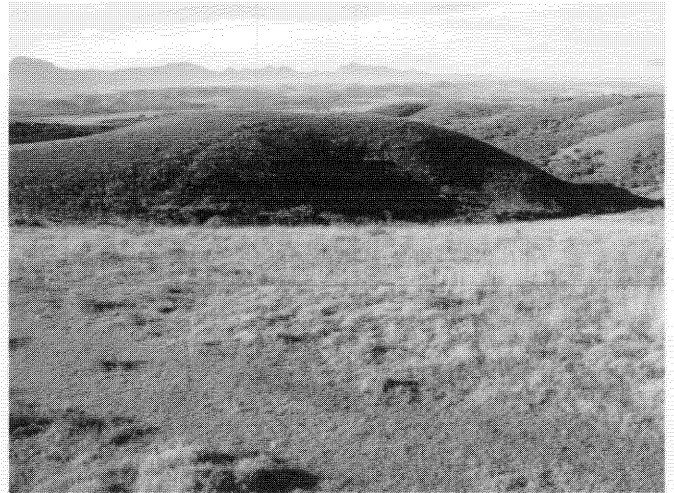


Figure 13. View of the site facing north



Figure 11. View of the site facing north west



Figure 14. View of the site facing north east



Figure 15. View of the site facing north west

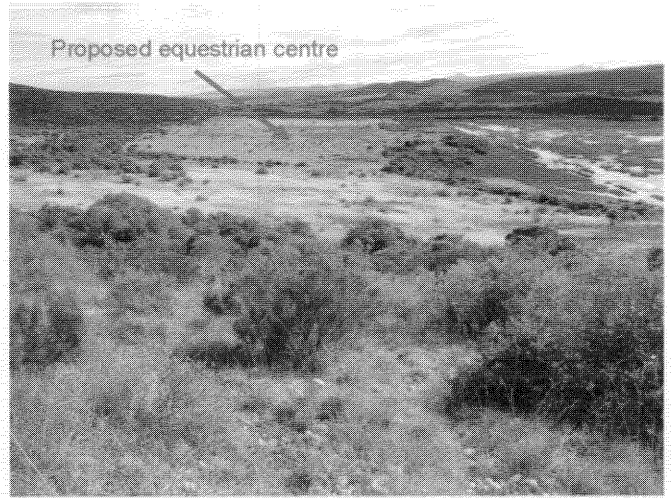


Figure 18. View of the site facing west



Figure 16. View of the hotel site facing north.



Figure 19. View of the equestrian centre facing east



Figure 17. View of the hotel site facing north

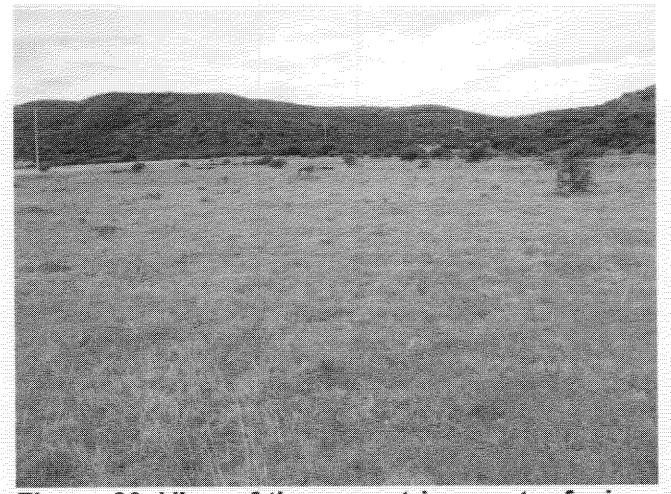


Figure 20. View of the equestrian centre facing south

4. STUDY APPROACH

4.1 Method of survey

The approach followed in the archaeological study entailed a fairly detailed survey of the proposed site. The focus of the study was on the proposed 90 ha development footprint. Proposed hiking and mountain bike trails were also inspected. The remainder of the farm was not searched for archaeological heritage remains, as no development will take place, and the property will be retained as a game farm.

The site visit and assessment took place over two days, on the 5th and 6th of June, 2007.

Archaeological remains were recorded using a Garmin Geko 201 GPS unit set on map datum wgs 84.

A desktop study was also undertaken.

Consultant archaeologist Dr Peter Nilssen was also consulted.

4.2 Constraints and limitations

With regard to access to the various development footprints, there were no major constraints or limitations associated with the study. However, much of the proposed development site is covered in long dry grass, as well as thick kikuyu and Buffalo grass, resulting in low archaeological visibility on the ground.

4.3 Identification of potential risks

The following project actions will likely impact negatively on archaeological heritage remains.

- Earthmoving operations will very likely expose archaeological heritage remains such as Early and Middle Stone Age tools, some of which may occur in primary context.

4.4 Results of the desk top study

Apart from early archaeological investigations of the Cape St. Blaize Cave (Leith 1888; Goodwin & van Riet Lowe 1935) and the mapping of known archaeological sites in the region (Kaplan 1993), very little systematic archaeological work has been carried out in the Mossel Bay area. It has taken several archaeological impact assessments, particularly at Pinnacle Point (Kaplan 1997), to focus attention on the importance of the area in the study of early modern humans in Southern Africa (Marean & Nilssen 2002).

Baseline archaeological studies have documented large numbers of ESA and MSA tools at the Paradise Beach Golf Estate in Dana Bay (Kaplan 2003), Pinnacle Point (Kaplan 1997), as well as on the Farm Droogfontein in Dana Bay (Kaplan 2007). Well preserved shell middens and many open sites have also been recorded and mapped at Nautilus Bay, a large residential development situated to west of Dana Bay (Kaplan 2005).

Up to 70 000, ESA tools have been documented and collected during monitoring of earthmoving operations at Pinnacle Point (Nilssen 2005). Many of the artefacts show little evidence of abrasion and polish, suggesting that they were not rolled or transported by natural agents. It therefore appears likely that most of the artefacts occur in primary or close to primary context. The key point in the monitoring programme is that the archaeology below the surface is undisturbed and it is the context of the finds that is so important for conservation purposes.

5. LEGISLATIVE REQUIREMENTS

The extent of the proposed development (approximately 90 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 following section provides a brief overview of the relevant legislation with regard to the archaeology of the study area.

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

The National Heritage Resources (NHR) Act requires that "...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"

The relevant sections of the Act are briefly outlined below.

5.2 Archaeology (Section 35 (4))

Section 35 (4) of the NHR stipulates that no person may, without a permit issued by HWC, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object.

5.3 Burial grounds and graves (Section 36 (3))

Section 36 (3) of the NHR stipulates that no person may, without a permit issued by the South African Heritage Resources Agency (SAHRA), 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.

6. IMPACT ASSESSMENT AND DESCRIPTION

Archaeological remains described below are indicated in Figure 21.



Figure 21. Aerial photograph of the Outeniquasbosch Safari Park illustrating archaeological occurrences documented during the study

Site A (S° 34 06 056 E° 22 05 784)

A low density scatter of ESA and MSA tools were located on compact brown sands on a gravel patch below a contoured slope alongside the road that runs through the central portion of the farm (Figure 22). Several ESA and MSA tools were also documented on the east facing slopes of the highly terraced and contoured lands west of the gravel road. The surrounding grazing lands are scattered with round quartzite river cobbles, some of which have been flaked and broken. A few tools were also noticed on exposed gravels where the farmlands have been heavily grazed and trampled. One or two tools were also noticed in some of the game trails that intersect the surrounding farmlands. The tools, all in locally available quartzite, include mainly side struck flakes, including a few edge retouched and utilised specimens, chunks, large flaked and split chunks, several pitted hammerstones and prepared cores and at least one blade tool. No handaxes or other formal tools were found. The tools all occur in a highly disturbed context. A collection of tools is illustrated in Figure 23.

The archaeological remains have been rated as having low local significance.

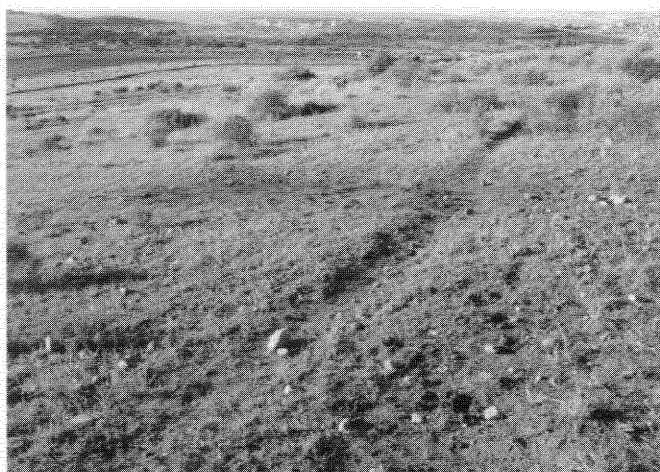


Figure 22. Archaeological context of Site A.
View facing south east

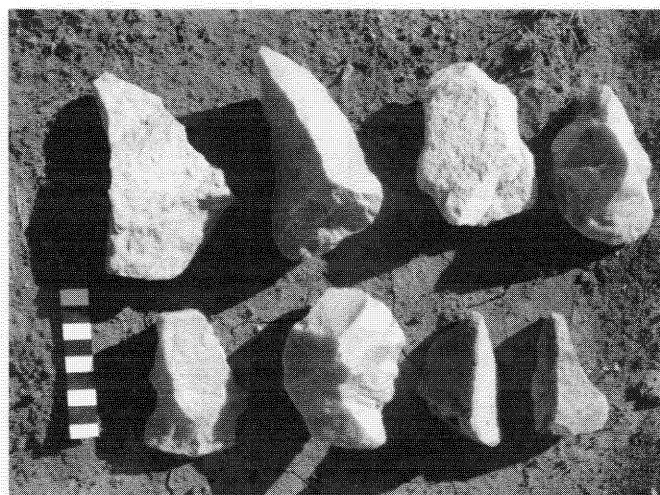


Figure 23. Collection of stone tools from Site A.
Scale is in cm

Site B (S° 34 05 762 E° 22 05 991)

A low density scatter of MSA tools were found on compact brown sands, on an exposed gravel patch below a terraced bank alongside the road that runs along the eastern boundary of the farm (Figures 24 & 25). Several tools were also found on the contoured slopes and surrounding grazing lands, as well as in the gravel road. The tools, all in quartzite, comprise mainly flakes, chunks, and two round flattish, prepared cores. The tools occur in a highly disturbed context. A collection of artefacts is illustrated in Figure 26.

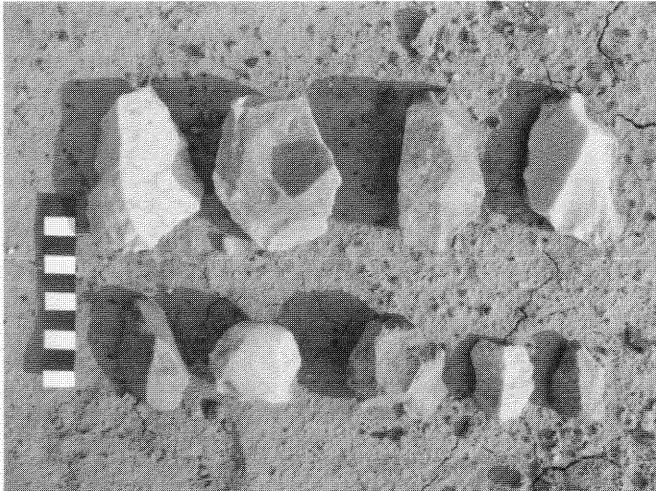
The archaeological remains have been rated as having low local significance.



**Figure 24. Archaeological context of Site B.
View facing east**



**Figure 25. Archaeological context of Site B.
View facing east**



**Figure 26. Collection of stone tools from Site B.
Scale is in cm**

Site C (S° 34 05 679 E° 22 05 786)

A low density scatter of ESA and MSA tools were found on a patch of trampled and exposed gravel about 20 m north of Site B, below a series of steeply terraced banks about 30 m from a new house at the Monte Christo housing development (Figure 27). The tools, all in quartzite, comprise about nine flakes, of which three have faceted platforms, several chunks and broken cobbles. No formal tools were found. The tools occur in a severely disturbed context. A collection of artefacts is illustrated in Figure 28.

The archaeological remains have been rated as having low local significance.



Figure 27. Archaeological context of Site C. View facing north east

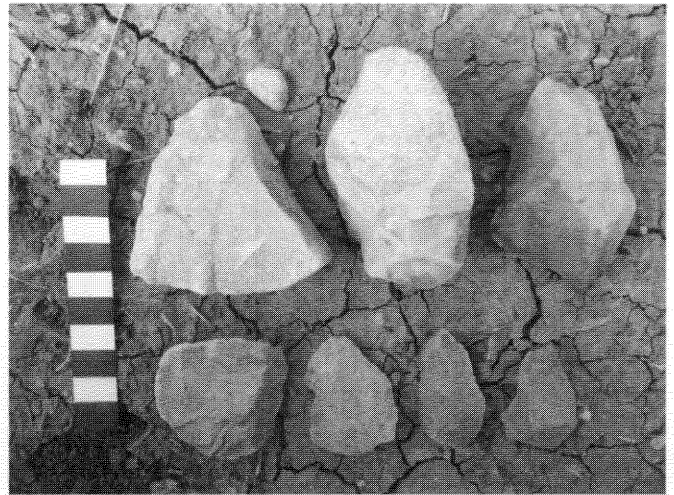


Figure 28. Collection of stone tools from Site C. Scale is in cm.

Site D (S° 34 05 518 E° 22 06 037)

ESA and MSA tools were found on compacted brown sands on heavily grazed and trampled lands near a farm gate/fence, directly alongside the north eastern corner of the Monte Christo development (Figure 29). The tools, mostly in quartzite, but a few also in silcrete, comprise mainly flaked chunks, split/broken cobbles, two cortex flakes, a small round flattish prepared core and a partially retouched (possible) unifacial handaxe. A large block of silcrete was found right next to the farm gate, the source of which is unknown. A collection of tools is illustrated in Figure 30.

The archaeological remains have been rated as having low local significance.

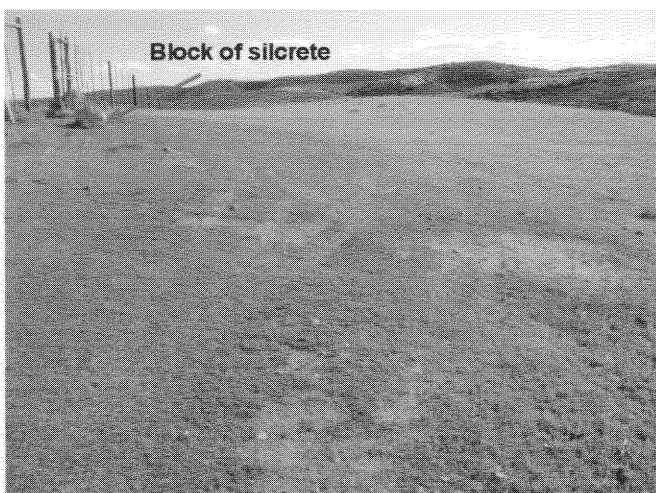


Figure 29. Archaeological context of Site D. View facing west

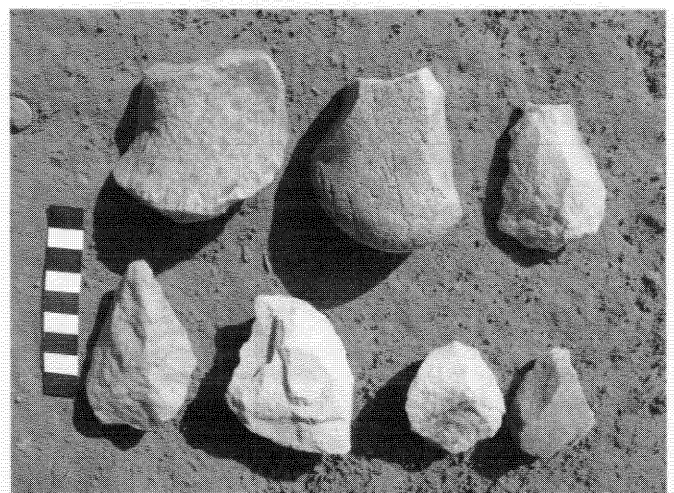


Figure 30. Collection of stone tools from Site D. Scale is in cm

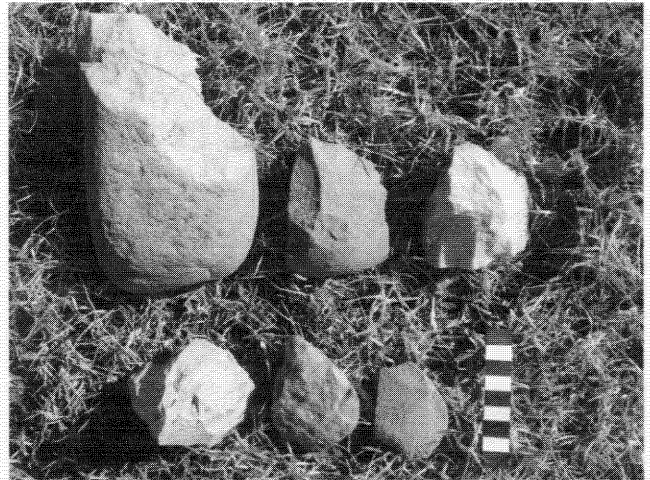
Site E (S° 34 05 469 E° 22 06 303)

A low density scatter of ESA and MSA tools were located on a large patch of heavily grazed lands on a flat-topped hill in the south eastern corner of the proposed site (Figure 31 & refer to Figure 10). Relatively large numbers of rounded quartzite and (occasionally) flaked cobbles occur near the fence line (Figure 32). The tools comprise a selection of flaked and split chunks and cobbles, several modified and unmodified flakes, large and smaller cores, and several blade tools. No formal tools were found. The tools are mostly in quartzite, but several tools in silcrete were also found. The artefacts show little evidence of abrasion and polish, suggesting that they were not rolled or transported by natural agents. It therefore appears likely that most of the artefacts occur in primary or close to primary context. A few stone tools were also documented on the well vegetated, west facing slopes of the property, as well as among a pile of rocks cleared from the surrounding fields. A collection of tools is illustrated in Figures 33 and 34.

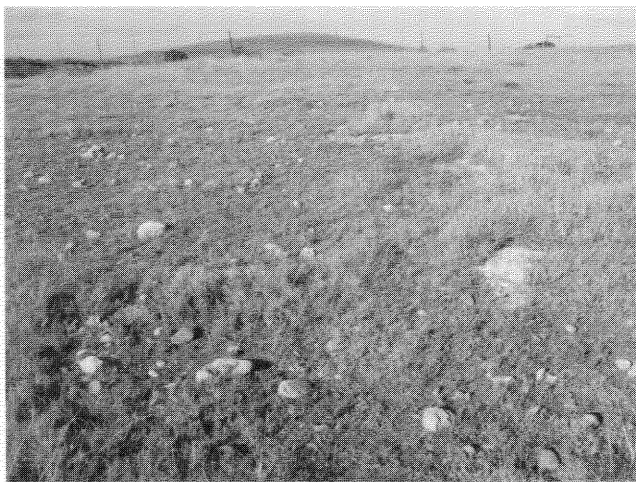
The archaeological remains have been rated as having low local significance.



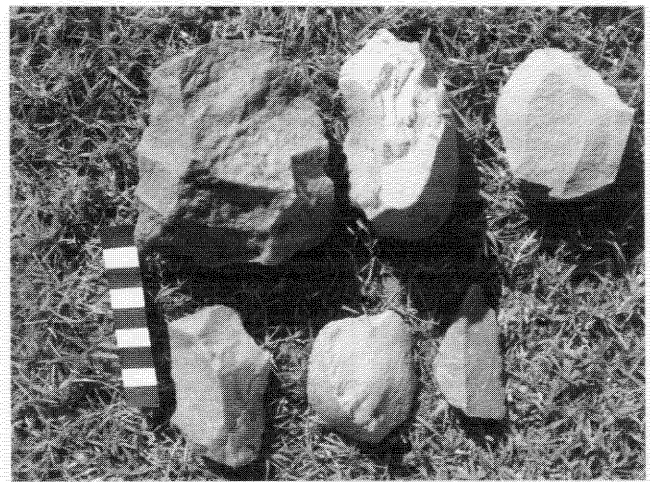
**Figure 31. Archaeological context of Site E.
View facing north**



**Figure 33. Collection of stone tools from Site E.
Scale is in cm**



**Figure 32. Archaeological context of Site E.
View facing east**



**Figure 34. Collection of stone tools from Site E.
Scale is in cm**

Site F (S° 34 05 405 E° 22 05 960)

One ESA flake and several ESA flaked/broken chunks were found among a large pile of gravel and quartzite cobbles that have been excavated for a small drinking dam for animals and deposited alongside the dam (Figure 35).

The archaeological remains have been rated as having low local significance



Figure 35. Archaeological context of Site F.

Site G (S° 34 05 275 E° 22 06 044)

Relatively large numbers of round, unworked quartzite cobbles were documented on the south west facing slopes of grazing lands at the top of the valley (Figure 36). A thin scatter of ESA and a few MSA tools were documented on the slopes. These include mainly flaked and split cobbles and chunks, a few flake tools, one core and one partially retouched unifacial pointed flake. Several weathered and patinated tools were also counted, indicating considerable antiquity. The artefacts appear to occur in primary or close to primary context. A collection of tools is illustrated in Figure 37.

The archaeological remains have been rated as having low local significance.



Figure 36. Archaeological context of Site G. View facing north west

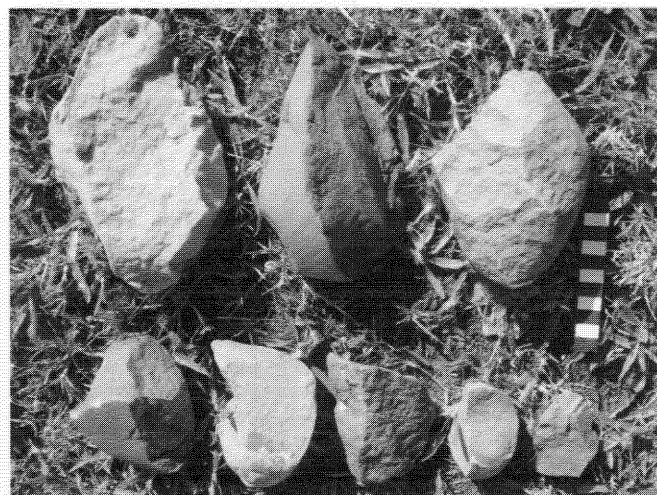


Figure 37. Collection of stone tools from Site G. Scale is in cm

Site H (S° 34 05 069 E° 22 05 975)

Four flaked and broken/split quartzite cobbles, and two MSA quartzite flakes were counted among large numbers of loose quartzite and quartz pebbles that occur on the spur of a large kopje comprising old grazing lands and natural veld, in the northern portion of the farm (refer to Figure 13).

The archaeological remains have been rated as having low local significance.

Site I (S° 34 04 901 E° 22 06 077)

Several broken/split quartzite cobbles were found among large numbers of loose quartzite and quartz pebbles and chunks that occur on the ridge of a kopje overlooking the floodplain of the Klein Brak River in the northern portion of the farm (refer Figure 14). One MSA flake and a few small broken quartzite cobbles were also found in the gravel road leading down the floodplain.

The archaeological remains have been rated as having low local significance.

Site J (S° 34 04 954 E° 22 06 220)

Several large flaked and split/broken quartzite cobbles and one large ESA flake was found among a scatter of round (unworked) quartzite cobbles on a flat spur of grazing lands alongside the winding gravel road that leads down to the floodplain of the Klein Brak River (Figure 38). A few broken and flaked quartzite chunks/cobbles were also found among the thick grasslands overlooking the floodplain (refer to Figure 15).

The archaeological remains have been rated as having low local significance



Figure 38. Archaeological context of Site J. View facing north

Site K (S° 34 04 682 E° 22 06 183)

One ESA quartzite flake and one MSA quartzite faceted flake was found in the gravel access road running alongside the northern boundary of the farm. The north facing slopes of the proposed hotel site are very well vegetated, but a thin scatter of large rounded quartzite cobbles were noted on the old terraced and contoured lands. Three flaked/split cobbles were documented on the

vegetated north facing slopes (refer to Figures 16 and 17).

The archaeological remains have been rated as having low local significance.

Site L (S° 34 04 640 E° 22 05 533)

No stone artefacts were documented in the proposed equestrian centre alongside the floodplain of the Klein Brak River, which comprises heavily grazed grasslands. A few quartzite cobbles were found on the proposed site, none of which have been worked or modified as tools (refer to Figures 18-20).

However, a few flaked and split/broken cobbles were documented among relatively large numbers of rounded quartzite cobbles near the access to the proposed Equestrian Centre (Figure 39).

The archaeological remains have been rated as having low local significance.



**Figure 39. Archaeological context of Site L.
View facing west**

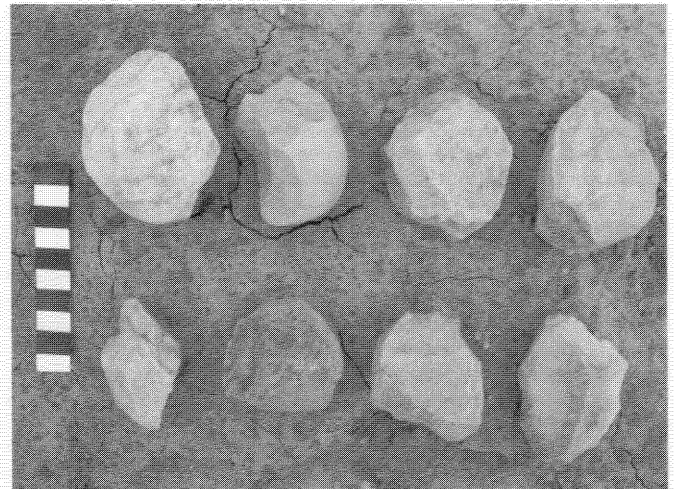
Site M (S° 34 05 657 E° 22 05 829)

Thirteen MSA tools including flakes, chunks and several round cores in quartzite were counted on two patches of gravel alongside the main access that runs road through the farm, below a row of terraced ridges and contoured grazing lands (Figure 39). Several more flake tools were found in the gravel road. A collection of tools is illustrated in Figure 40. The remains occur in a very disturbed context.

The archaeological remains have been rated as having low local significance.



**Figure 39. Archaeological context of Site M.
View facing north east**



**Figure 40. Collection of stone tools from Site M.
Scale is in cm**

Site N (S° 34 05 686 E° 22 05 698)

About 20 ESA and MSA tools were counted on a large patch of eroded gravel beside a small footpath about 150 m from the western boundary of the farm, alongside a long line of terraced and contoured grazing lands (Figure 41). Large numbers of rounded quartzite cobbles and smaller pebbles and stone have eroded from the terraced banks. The tools, all in quartzite, comprise several large pointed bifacial flakes (possibly incomplete handaxes), flaked and broken chunks, several round cores and faceted flakes including some that are retouched and utilised. A number of the flakes are also broken or snapped. A collection of tools is illustrated in Figure 42.

The archaeological remains have been rated as having low local significance.



Figure 41. Archaeological context of Site M. View facing south

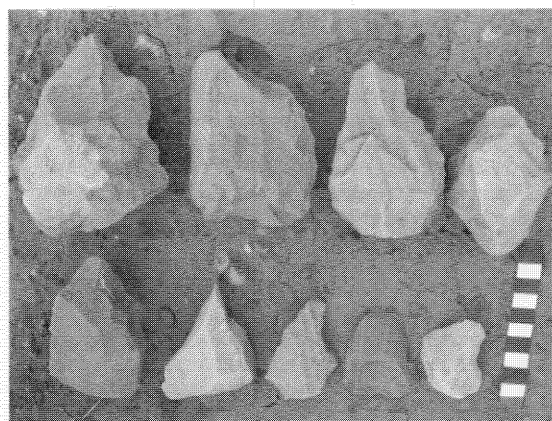


Figure 42. Collection of stone tools from Site N. Scale is in cm

Site O (No GPS reading taken)

Five MSA quartzite flakes and chunks were found on a small patch of land in the southern portion of the property, about 450 m from the farmhouse. The tools occur in a disturbed context.

The archaeological remains have been rated as having low local significance.



Figure 43. Archaeological context of Site O. View facing south

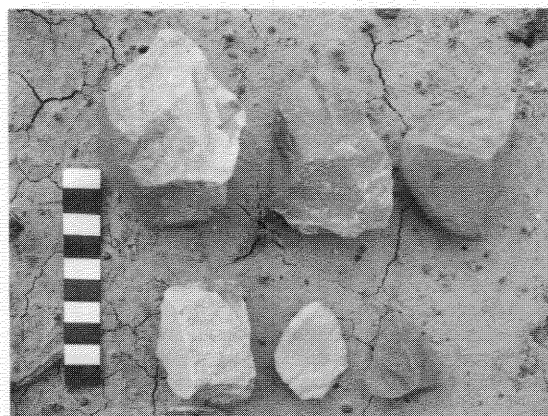


Figure 44. Collection of stone tools from Site O. Scale is in cm.

Site P (No GP reading taken)

A number of ESA broken and split cobble flakes and chunks and at least one core were noted among many exposed quartzite cobbles in some recently ploughed fields close to the main farmhouse. No development will take place within about a 1 km radius of the Waster Water Treatment Works (refer to Figure 2).

6.1 Hiking and mountain bike trails

Several possible hiking and mountain bike (MTB) trails were inspected by the archaeologist. These include several short trails within the 90 ha building footprint, and a more 'extreme' MTB trail in the steep, north western portion of the site (Figures 45-47). It is important to note that only existing roads, tracks and game trails will be used when designing these trails.

Findings: A few ESA tools were noted near a gravel and cobble cutting alongside the proposed MTB trail, while a few more tools were noted in the loose gravel road. The route is mainly very steep and narrow.

ESA and MSA tools were noted in the main gravel access road within the 90 ha footprint and a few tools were also noted in one or two game trails over the remainder of the property.

The archaeological remains have been rated as having low local significance.



Figure 45. Possible MTB trail



Figure 46. Possible MTB trail

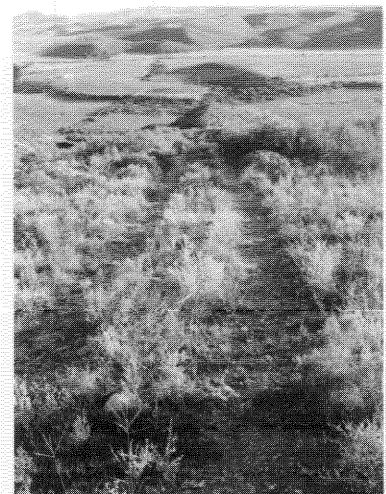


Figure 47. Possible MTB trail

7. IMPACT STATEMENT

Unlike previous AIA's undertaken in the Mossel Bay area (see Kaplan 2007, 2005, 2003), the proposed 90 ha development footprint of the proposed Outeniquasbosch Safari Park has been transformed as a result of many years of agricultural activity, that includes ploughing and contouring, for grain crops such as wheat and Lucerne.

It is likely (and quite probable), though, that more Stone Age artefacts will be uncovered during earthmoving operations during the Construction Phase of the proposed project. However, given the already severely modified nature of the receiving environment, the importance of these finds, is likely to be of **low local significance**.

The Phase 1 Archaeological Impact Assessment of the proposed development of the Farms Outeniquasbosch 149 and Hartenbos 217 near Mossel Bay has therefore identified no significant impacts to pre-colonial archaeological material that will need to be mitigated prior to proposed construction activities. Unlike Pinnacle Point (Kaplan 2003), Paradise Coast (Kaplan 2005) and Droogfontein (Kaplan 2007), for example, the archaeology below the surface at Outeniquasbosch is already highly disturbed.

At the same time, however, several thin and dispersed scatters of tools identified during the baseline study (notably Site E and Site G), appear to occur in primary, or close to primary context, and it is not inconceivable that earth moving operations might expose in-situ material over the less disturbed portions of the proposed site.

8. RECOMMENDATIONS

With regard to the proposed development of the Farms Outeniquasbosch 149 and Hartenbos 217, near Mossel Bay, the following recommendations are therefore made:

- Targeted monitoring of earthmoving operations is required during the Construction Phase of the proposed project. The focus of such monitoring should be in the areas surrounding Sites E and G.
- Full time monitoring during the Construction Phase of the project is not required given the already transformed nature of the receiving environment.
- 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 (Mr N. Ndlovu (021) 483 9692). Burial remains should not be disturbed or removed until inspected by the archaeologist.

9. REFERENCES

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