

**PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
PORTION OF PORTION 3 OF THE FARM BESTERS
KRAAL NO. 38
VREDENBURG**

Prepared for

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Client: Mr Pierre Heydenrych

By

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Executive summary

CK Rumboll & Partners, on behalf of Mr P. Heydenrych, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of Portion of Portion 3 of the Farm Besters Kraal No. 38 Vredenburg on the Cape West Coast.

The proposed rezoning and subdivision of the subject property entails the establishment of about 200 smallholdings with a minimum plot size of 1.0 ha each and private roads giving access to the serviced units. The affected property is currently zoned Agriculture.

The extent of the proposed development (about 200 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/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 Graham Jacobs has been appointed to undertake a Heritage Impact Assessment of the proposed project. The archaeological study forms part of the wider heritage study.

The subject property is located in Paternoster, on the left hand side, on the crest of the hill as one enters the township from Vredenburg. The large, vacant site, sloping to the west, is covered with a mix of bush and scrub, with a swathe of indigenous grass (*Restio*) covering a large part of the southern portion. The property is 'rough' and littered with loose nodules and chunks of calcrete, and bands of exposed calcrete on the slightly elevated slopes and on the lower western slopes. A series of high, vegetated dunes is located in the extreme south eastern corner of the subject property, extending partially alongside the south eastern boundary, onto an elevated calcrete ridge.

The archaeological study has shown that heritage remains are visible on the site, comprising mostly thin and ephemeral scatters of Later Stone Age (LSA) shell midden material, with low density scatters of stone tools and a few small pieces of pottery.

The most important archaeological occurrence on the subject property comprises a small, discreet, and well preserved LSA site in a wind deflated hollow among the low barrier dunes in the southern portion of the property. The site contains relatively large numbers of stone tools, pottery, burnt limestone and marine shell.

Well-preserved, compacted shell midden deposits and stone flakes were also located on the elevated calcrete ridge alongside the southern boundary of the subject property, not more than 50 m south east of the above site.

Middle Stone Age tools were also located during the baseline study, but these are spread very thinly and unevenly over the remainder of the property, usually comprising only one or two or three tools. Up to nine MSA artefacts were, however, found in the eastern portion of the proposed site, but in a radius of about 50 m in extent.

With regard to the proposed rezoning and subdivision of Portion of Portion 3 of the Farm Besters Kraal No. 38 Vredenburg, the following recommendations are made.

- A Conservation Corridor must be established in the southern portion of the proposed site, where no development should be allowed to take place. This would ensure protection of the better preserved archaeological heritage remains in this portion of the subject property.
- Development in the remainder of the property should be allowed to proceed as planned, subject to the following conditions.
- A specialist palaeontologist must be appointed by the developer to inspect excavations for possible fossil archaeological and palaeontological remains during the Construction Phase of the project, if bulk earthworks and excavations penetrate the underlying calcrete/limestone deposits on the site. Consulting palaeontologist Mr John Pether (78 33 023 or 083 744 6296) can be contacted in this regard.
- 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). Burial remains should not be disturbed or removed until inspected by the archaeologist.

1. INTRODUCTION

1.1 Background and brief

CK Rumboll & Partners¹, on behalf of Mr P. Heydenrych, requested that the Agency for Cultural Resource Management conduct a Phase 1 Archaeological Impact Assessment of Portion of Portion 3 of the Farm Besters Kraal No. 38 Vredenburg on the Cape West Coast.

The proposed rezoning and subdivision of the affected property entails the establishment of about 200 smallholdings with a minimum plot size of 1.0 ha each and private roads giving access to the serviced units. The subject property is currently zoned Agriculture.

The extent of the proposed development (about 200 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/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 Graham Jacobs has been appointed to undertake a Heritage Impact Assessment of the proposed project.

The archaeological study forms part of the wider heritage study.

2. TERMS OF REFERENCE

The terms of reference for the study were:

- to determine whether there are likely to be any archaeological sites of significance within the proposed site;
- to identify sites of archaeological significance within the proposed site;
- to assess the sensitivity and conservation significance of archaeological sites potentially affected by the proposed subdivision and development;
- to assess the 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.

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3. THE STUDY SITE

A locality map is illustrated in Figure 1.

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

The subject property is located in Paternoster, on the left hand side, on the crest of the hill as one enters the township from Vredenburg. Entrance to the property is directly alongside the turnoff to 'Uitkoms Farm'. The large, vacant site, sloping to the west, is covered in a mix of bush and scrub, with a swathe of indigenous grass (*Restio*) across a large part of its southern portion. The property is rough and littered with large numbers of loose nodules and chunks of calcrete and bands of exposed calcrete on the slightly elevated ridges, and across its western slopes. An ancient, calcrete-lined river bed occurs in the southern portion of the property. Numerous two track roads cut across the subject property, and around its perimeter. A series of high, well-vegetated dunes are located in the extreme south eastern corner of the proposed site, overlooking Vaarswaterbaai. The dunes flatten out alongside the southern boundary of the property onto a long, flat elevated calcrete ridge (Figures 3-9). The northern portion of the proposed site alongside the tar road is heavily degraded, as a result of overgrazing.

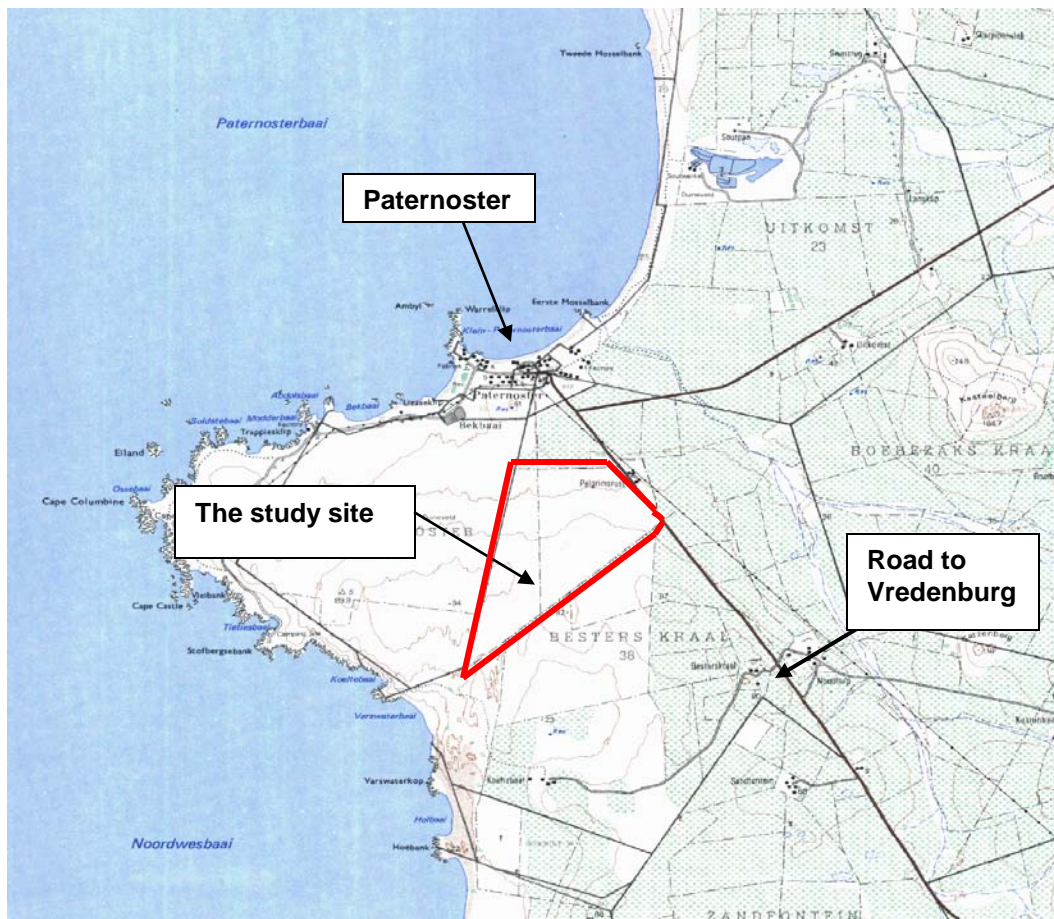


Figure 1. Site locality (3217 DB & DD Vredenburg).

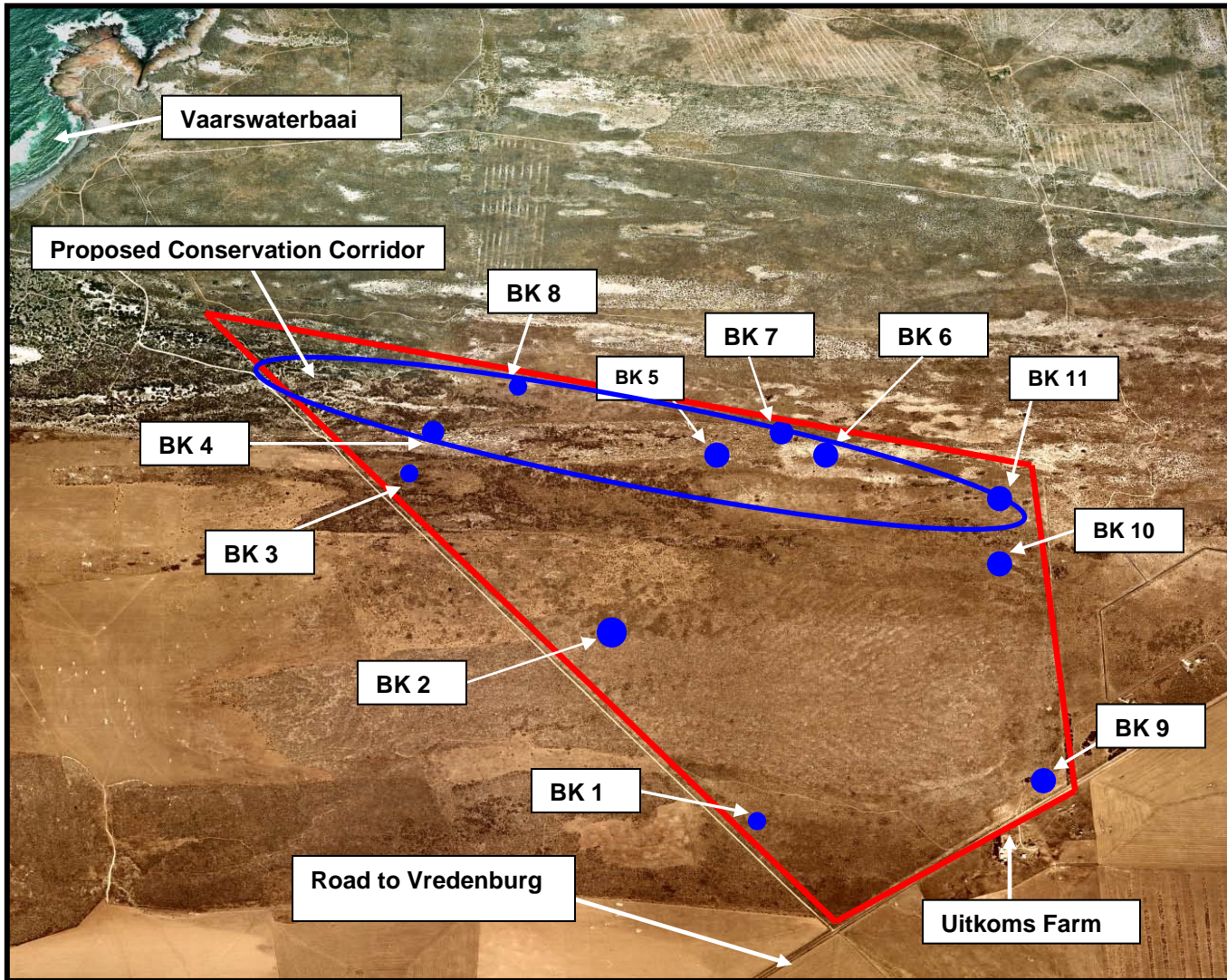


Figure 2. Aerial photograph of the study site indicating the location of archaeological heritage remains.



Figure 3. View of the site facing south from the main road entrance



Figure 4. View of the site facing south from the main road.



Figure 5. View of the site facing north. Kasteelberg is in the distance. Note the large swathe of indigenous Restio in the background of the plate.



Figure 6. View of the site facing north west.



Figure 7. View of the site facing north. The eastern boundary of the site (i.e. the gravel road) is to the right of the plate.



Figure 8. View of the site facing north west. Note the high dunes.

4. STUDY APPROACH AND DOCUMENTATION OF ARCHAEOLOGICAL SITES

The approach used in the specialist study entailed a foot survey of the subject property.

Significant landscape features such as the high dunes in the south eastern portion, and the elevated calcrete ridge alongside the southern boundary, were especially targeted and systematically searched.

Archaeological occurrences were recorded and given a co-ordinate using a Gamin Gecko 201 GPS set on map datum WGS 84.

The site visit and assessment took place over two days, on the 29th March and 4th April 2006.

A desktop study was also undertaken.

4.1 Assumptions

Since the receiving environment is located within a known archaeologically sensitive area (Kaplan 1993), the assessment assumes that:

- Damage to archaeological heritage resources potentially will occur in the proposed development.

4.2 Limitations

A large swathe of land across the southern portion of the property is covered in indigenous Restio, and the high dunes in the south eastern portion are well vegetated, resulting in low archaeological visibility.

5. RESULTS OF THE DESKTOP STUDY

A number of Archaeological Impact Assessments have been undertaken in Paternoster in recent years, in direct response to an increase in the pace of residential development in the area (Halkett & Hart 1992a,b; Halkett & Mutti 1998; Hart & Halkett 1995, 1998a,b; Kaplan 2002, 2003, 2004, 2005a).

Many sites have been identified and recorded during the course of these surveys, a number of which have also been excavated and sampled (Hart & Halkett 1996; Halkett 1996; Kaplan 2005b, c, d; Yates 1998, 2003, 2004a,b).

Analysis of archaeological deposits in Paternoster appear to indicate that the majority of the sites date within the last 3000-4000 years and overlap the period both before and after the arrival of Khoekhoe pastoralists with domestic stock and pottery.

Shovel testing on Portion 37 of the Farm Uitkoms 23 also revealed the presence of an indigenous Khoisan burial (Yates 2004a).

6. LEGISLATIVE REQUIREMENTS

`...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 The National Heritage Resources Act (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 that 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. IDENTIFICATION OF POTENTIAL RISKS

The following project actions may impact negatively on archaeological sites during the course of the proposed development.

The actions are most likely to occur during the Construction Phase of the proposed development.

- Earthworks for services will potentially impact negatively on important archaeological heritage remains in the southern portion of the affected property.
- Fossil archaeological and palaeontological remains may be intersected or exposed should excavations for roads and services penetrate surface and underlying calcrete/limestone deposits.
- Excavations for services may uncover or expose human burials.

8. IMPACT ASSESSMENT AND DESCRIPTION

Archaeological heritage sites located during the baseline study are indicated in Figure 2.

BK 1 (GPS reading S° 32 49 899 E° 17 54 126)

A very thin scatter of a few small fragments of weathered shellfish and some bleached whole shell was located in an area measuring about 25 x 25 m in extent, about 50 m west of the fence line alongside the eastern boundary of the site. The site is barely visible among the low bush and scrub and only visible in a few open spaces on loose red sands. The shellfish is dominated by Scutellastra and Cymbula sp. and some Black Mussel (Choromytilus meridionalis). Three quartzite flakes, one quartzite chunk, one small silcrete chunk, one MSA quartzite flake, and one small piece of pottery were counted. A large silcrete core was found in a well-defined two track road about 15 m west of the fence line.

The archaeological remains have been graded low local significance.

BK 2 (GPS reading S° 32 50 119 E° 17 53 726)

About 9 weathered Middle Stone Age (MSA) tools, including six flakes (two with prepared platforms), two retouched flakes, and one flaked chunk were located in a radius of about 50 m on red sands surrounded by rocks and exposed calcrete about 60 m west of the fence alongside the eastern boundary of the property. All the tools are in fine-grained quartzite.

The archaeological remains have been graded low local significance.

BK 3 (GPS reading S° 32 50 338 E° 17 53 574)

A very thin scatter of shell fragments was found among loose red sands in a small catchment surrounded by thick Restio, directly alongside the boundary fence in the south eastern portion of the property. The shellfish comprises Scutellastra argenvillei, Cymbula granatina, Cymbula miniata and some Black Mussel. A few large whole bleached shells (Scutellastra argenvillei) were also noted. Except for one snapped silcrete utilized blade found next to an animal burrow, no other cultural items were found.

The archaeological remains have been graded low local significance.

BK 4 (GPS reading S° 32 50 389 E° 17 53 359)

A small patch of well-preserved, compacted shell midden deposit was found alongside a barely visible track, below the low vegetated back dunes in the south eastern portion of the property. The shellfish appears to spread outward, but is not very visible because of the thick vegetation cover. The bleached and grey-coloured shell, including relatively large numbers of whole shell, comprises mainly Scutellastra argenvillei. The surrounding vegetation comprises thick Restio grass, resulting in low archaeological visibility. No cultural items were located.

The archaeological remains have been graded medium-high local significance.

BK 5 (between GPS reading S° 32 50 389 E° 17 53 359 & S° 32 50 099 E° 17 53 373)

A thin scatter of shellfish remains was located in a few open sandy spaces along a section of thickly vegetated frontal dunes. The surrounding veld is covered in thick Restio grass and dune vegetation, resulting in low archaeological visibility. The shellfish comprises mainly fragments of Scutellastra and Cymbula sp, with a few whole pieces of S. argenvillei also occurring. One quartz flake and one quartz chunk was also counted.

The archaeological remains have been graded low local significance.

BK 6 (GPS reading S° 32 50 043 E° 17 54 369)

Probably the most important site locating during the study, BK 6 comprises a discreet scatter of shell in a small (4-5 m in extent) wind deflated hollow among the moderately less vegetated frontal dunes in the southern portion of the property (Figure 9). The shellfish is dominated by Scutellastra and Cymbula sp, with some larger whole shell (mainly S. argenvillei) present. Some Black Mussel occurs, and a few pieces of White Sand Mussel were also counted. Nodules and small chunks of calcrete litter the site, some of which has been burnt and blackened, perhaps suggesting the remains of a possible hearth. Relatively large numbers of stone tools were found in the hollow, including at least 17 quartz flakes, chunks, a few small chips and one small irregular core. One quartz segment was found. Two silcrete flakes, six quartzite cobble flakes and several quartzite chunks were also counted. About 20 pieces of pottery (all body sherds) were found, while a small pile of potsherds may represent the remains of a single vessel.

Several small patches of shellfish including some whole shell, was found on hardened calcrete surfaces about 20 m to the south west of the deflated hollow, among the Restio covered dunes. Some bone and burnt shell was also noted, including one small piece of ostrich eggshell, a quartzite hammerstone, and a pecked anvil.

BK 6 and the above patches of shell may relate to a larger, more visible scatter of compacted shellfish deposits on the elevated calcrete ridge about 30-40 m to the south west (i.e. BK 7).

The archaeological remains have been graded medium to high local significance.



Figure 9. BK 6. The site, in a deflated sand hollow, cannot be seen in the immediate foreground of the plate.

BK 7 (GPS reading S° 32 50 087 E° 17 53 279)

Well preserved shell midden deposits and a handful of stone flakes were found on a level calcrete ridge about 20 north of the southern boundary of the proposed site (Figure 10). The shellfish deposits measures about 15 x 7 m in extent and comprise a fairly compacted, fragmented and crushed surface layer of shellfish, dominated by Scutellastra and Cymbula sp. with some Black Mussel also occurring. A few whelks were also noted. Stone artefacts, including one quartz core, two quartz flakes, one quartz chunk, one quartzite flake, three limestone flakes, one small silcrete core and one MSA quartzite flake were counted. Dwarf succulent vegetation covers a large portion of the archaeological deposit.

The archaeological remains have been graded medium to high local significance.



Figure 10. BK 7

BK 8 (GPS reading S° 32 50 338 E° 17 53 159)

A thin dispersed strip of crushed and fragmented shellfish and some weathered and bleached bone (including seal and tortoise) were found in the soft sandy track immediately alongside the fence line in the south eastern portion of the property. One piece of ostrich eggshell was also found. No other cultural items were located.

Crushed and fragmented bits of shell were noted in several of the loose and soft sandy tracks which cut through the high, well-vegetated dunes in the north eastern portion of the study area. It is likely that other remains occur among the dunes and beneath the wind-blown sands in this area, but none were located.

The archaeological remains have been graded low local significance.

BK 9 (GPS reading S° 32 49 270 E° 17 54 145)

A thin dispersed scatter of a few fragments of shellfish (Black Mussel and Scutellastra sp.) was found in the extreme north western corner of the proposed site. The surrounding area is much degraded as a result of overgrazing. One quartzite flake, one limestone flake and one fragment of oyster shell were also counted.

The archaeological remains have been graded low local significance.

BK 10 (GPS reading S° 32 49 311 E° 17 53 741)

A very thin scatter of bits of fragmented shell (Scutellastra sp and Cymbula sp) was found on soft, loose red sands, about 25 m east of the fence line in the south western portion of the property. The surrounding veld is covered in bush and littered with nodules and chunks of calcrete. One quartz flake and one quartzite chunk was also counted.

The archaeological remains have been graded low local significance.

BK 11 (GPS reading S° 32 49 311 E° 17 53 464)

A thin scatter of bits of fragmented shellfish (Scutellastra sp and Cymbula sp) was found in open spaces among scrub and bush on soft loose sands on an elevated sandy ridge about 20m east of the fence line in the south western corner of the subject property, and directly behind an existing small holding property on the adjacent property. A few whole shells (S. argenvillei) and some whelks were also noted. One quartzite flake and one small piece of ostrich eggshell were also found.

The archaeological remains have been graded low local significance.

8.1 Other finds

Middle Stone Age tools and the occasional LSA tool were also located during the study, but these are spread very thinly and unevenly over the remainder of the property. The MSA tools comprise flakes with prepared platforms, several retouched flakes, large cores, chunks, and one re-used LSA scraper.

The archaeological remains have been graded low local significance.

9. RECOMMENDATIONS

With regard to the proposed rezoning and subdivision of Portion of Portion 3 of the Farm Besters Kraal No. 38 Vredenburg, the following recommendations are made.

- A Conservation Corridor must be established in the southern portion of the proposed site, where no development should be allowed to take place (refer to Figure 2). This would ensure protection of the better preserved archaeological heritage remains in this portion of the subject property.
- Development in the remainder of the property should be allowed to proceed as planned, subject to the following conditions.
- A specialist palaeontologist must be appointed by the developer to inspect excavations for possible fossil archaeological and palaeontological remains during the Construction Phase of the project, if bulk earthworks and excavations penetrate the underlying calcrete/limestone deposits on the site. Consulting palaeontologist Mr John Pether (78 33 023 or 083 744 6296) can be contacted in this regard.

- 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).

Burial remains should not be disturbed or removed until inspected by the archaeologist.

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