

Comprehensive and Professional Solutions for all Heritage Related Matters

CK 2006/014630/23 VAT NO.: 4360226270

PHASE 1 HIA REPORT FOR THE DE HEUS MIXED USE DEVELOPMENT LOCATED ON PORTION 15 OF THE FARM BULTFONTYN 128 CLOSE TO MIDDELBURG IN THE EASTERN CAPE PROVINCE

For:

AB ENVIRO CONSULT
7 Louis Leipoldt Street
Potchefstroom
2531

REPORT: APAC021/52

by:

A.J. Pelser
Accredited member of ASAPA

JUNE 2021

P.O.BOX 73703 LYNNWOOD RIDGE 0040

Tel: 083 459 3091 Fax: 086 695 7247

Email: apac.heritage@gmail.com

Member: AJ Pelser BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS]

©Copyright APELSER ARCHAEOLOGICAL CONSULTING

The information contained in this report is the sole intellectual property of APELSER Archaeological Consulting. It may only be used for the purposes it was commissioned for by the client.

DISCLAIMER:

Although all efforts are made to identify all sites of cultural heritage (archaeological and historical) significance during an assessment of study areas, the nature of archaeological and historical sites are as such that it is always possible that hidden or subterranean sites, features or objects could be overlooked during the study. APELSER Archaeological Consulting can't be held liable for such oversights or for costs incurred as a result thereof.

Clients & Developers should not continue with any development actions until SAHRA or one of its subsidiary bodies has provided final comments on this report. Submitting the report to SAHRA is the responsibility of the Client unless required of the Heritage Specialist as part of their appointment and Terms of Reference

SUMMARY

APelser Archaeological Consulting (APAC) was appointed by AB Enviro Consult to conduct a Phase 1 HIA for the De Heus Mixed Use Development. The development and study area is located on Portion 15 of the farm Bultfontyn 128, close to the town of Middelburg in the Eastern Cape Province

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. The assessment of the specific study area identified a number of sites, features or material of cultural heritage (archaeological and/or historical) origin or significance. This report discusses the results of both the background research and physical assessment.

It is recommended that the proposed development be allowed to continue, once the recommended mitigation measures to minimize the impacts of the proposed development on the heritage resources, put forward at the end of this report, have been implemented.

CONTENTS

1.	INTRODUCTION	5
2.	TERMS OF REFERENCE	5
3.	LEGISLATIVE REQUIREMENTS	5
4.	METHODOLOGY	8
5.	DESCRIPTION OF THE AREA	9
6.	DISCUSSION	11
7.	CONCLUSIONS AND RECOMMENDATIONS	26
8.	REFERENCES	27
AP	PENDIX A: DEFINITION OF TERMS:	29
AP	PENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE	30
AP	PENDIX C: SIGNIFICANCE AND FIELD RATING:	31
AP	PENDIX D: PROTECTION OF HERITAGE RESOURCES:	32
ΑP	PENDIX E: HERITAGE IMPACT ASSESSMENT PHASES	33

1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by AB Enviro Consult to conduct a Phase 1 HIA for the De Heus Mixed Use Development. The development and study area is located on Portion 15 of the farm Bultfontyn 128, close to the town of Middelburg in the Eastern Cape Province

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. The assessment of the specific study area identified a number of sites, features or material of cultural heritage (archaeological and/or historical) origin or significance.

The client indicated the location and boundaries of the study area and the assessment concentrated on this portion.

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

- 1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- 3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- 4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
- 5. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1. The National Heritage Resources Act

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography

- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the Act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this Act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b. 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; or
- bring onto or use at a burial ground or grave referred to in paragraph (a) or
 (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**Ordinance no. 12 of 1980**) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2. The National Environmental Management Act

This Act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1. Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2. Field survey

The field assessment section of the study was conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites,

features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

4.3. Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

4.4. Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The study & proposed development area is situated on Portion 15 of the farm Bultfontyn 128, near the town of Middelburg in the Eastern Cape Province. The development will include Tourist Facilities (Golf Club & Agricultural Recreational area), an Agricultural Industry (Feed Mill and Solar Farm) & Intensive-Feed Farming (Sheep Feedlots).

The topography of the study area is mostly flat and open with no rocky outcrops, ridges or hills present. The area has been impacted in the past by agricultural activities, the digging of a water furrow (aqueduct) and associated water provision, an existing Golf Club and course and a cricket field, Although there was some dense vegetation in sections, visibility was for the most part good and access to the study area was not hampered.



Figure 1: General location of the study & development area indicated by the yellow pin (Google Earth 2021).



Figure 2: Closer view of the study area (Google Earth 2021).

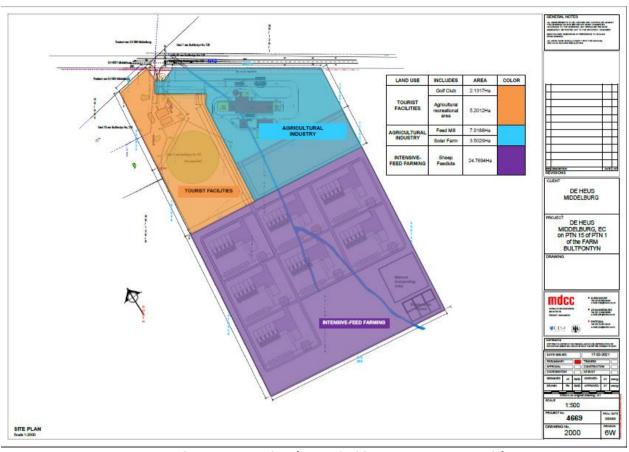


Figure 3: Land Use & Site Plan (provided by AB Enviro Consult).

6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago Middle Stone Age (MSA) less than 300 000 – 20 000 years ago Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

The Stone Age is well represented in the area by the archaeological remains associated with Stone Age hunter gatherers and herders and includes cave shelters and surface sites. These occurrences cover represent the Early, Middle and Later Stone Ages. Erosion gullies and river/streambeds and dolerite outcrops are usually associated with stone tool assemblages (Palaeo Field Services 2014: 6).

For prehistory, Sampson's (1972, 1974) survey of the Seacow drainage near Hanover (part of his Orange River Scheme) is the most important archaeological project in the Karoo environment of the Northern Cape. His team recorded sites and quarries, ranging from the Earlier, Middle and Later Stone Ages, to proto-historic pastoralist camps and Historic farmyards. Among other things, the research noted a correlation between age and the patina on hornfels (also called lydianite and indurated shale): dark brown to yellow = Earlier Stone Age; red = Middle Stone Age; grey to grey brown = Lockshoek; light brown/tan = Interior Wilton; and black = Smithfield (the last three belonging to the Later Stone Age). This culture-history sequence forms a basis for identifying stone tool industries and historic occupations over the entire district. Generally, archaeologists have found scatters of stone tools dating to the Middle and Later Stone Ages.

In the closer geographical area of Middelburg and Noupoort a number of Heritage & Archaeological Impact Assessments for various developments, have recorded a large number of Stone Age sites and finds, including open-air scatters, shelter sites and associated rock art (Rossouw 2010; Booth 2012 & Anderson 2018).

A number of Stone Age open-air sites with dense scatters of material (stone tools) were identified in the study area during the June 2021 assessment.

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

```
Early Iron Age (EIA) 200 – 1000 A.D.
Late Iron Age (LIA) 1000 – 1850 A.D.
```

Huffman (2007: xiii) indicates that a Middle Iron Age should be included. His dates, which are widely accepted in archaeological circles, are:

```
Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.
```

No Iron Age occurrences were identified in the study area during the assessment.

In 1837 the Cape Colony government proclaimed the district of Colesberg, and established the Town of Middelburg in 1852, so named since it is midway between Graaff-Reinet and Colesberg. (It is also approximately halfway between Port Elizabeth and Bloemfontein, as well as between Johannesburg and Cape Town.)

The town and surrounding areas are rich in history from the Anglo Boer War. The adjacent Grootfontein College of Agriculture was established as a military camp and training center for British troops. About 7,000 troops from the Third Manchester Regiment were stationed at Grootfontein - some of them were married, so about 3,000 women and children also

lived at Grootfontein. In 1910 the Union of South Africa took control of the farm after which the Grootfontein School of Agriculture was established in 1911 (www.wikipedia.org).

The oldest map for Portion 1 of the farm Bultfontyn dates to 1844 (www.csg.dla.gov.za) and shows that the farm was then in the Field Cornetcy of Rhenosterberg, Division of Colesberg (CSG Document 10956452). For Portion 15 the map dates to 1957 (CSG Document 10956460). The farm was then located in the Division of Middelburg and the Province of Cape of Good Hope. Portion 15 was surveyed in March 1957 and shows the presence of an Aqueduct Servitude across the center of the study area. This site was recorded during the assessment as well.

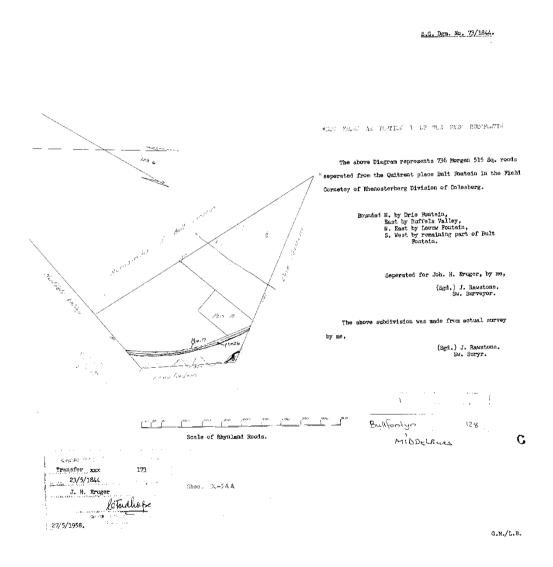


Figure 4: Copy of an 1844 map of Portion 1 of the farm Bultfontyn (www.csg.dla.gov.za).

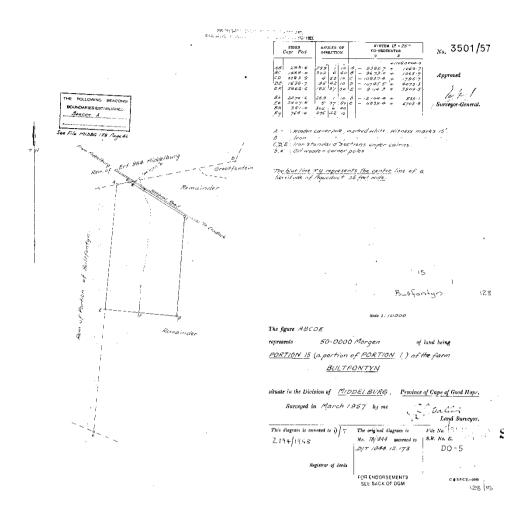


Figure 5: 1957 map of Portion 15 of the farm Bultfontyn 128 (www.csg.dla.gov.za).

Results of the June 2021 Study Area Assessment

A number of archaeological & recent historical sites and features were identified and recorded in the study area during the assessment. The most extensive and significant of these are a number of open-air Stone Age sites with scatters of stone tools and associated material. Some recent historical features recorded include the remnants of an aqueduct (indicated on the 1957 map of Portion 15 of the farm) and possibly associated features and a Cricket field (oval).

The 1st site is the remains of the old Cricket Oval/field close to the Golf Club. The site is demarcated by a soil berm. The Cricket oval is a structure that was constructed between February 2016 and October 2018 and was never used. The site is not deemed as historically significant.

The blue line on the Layout plan is a furrow that was used (Prior to 1990) to divert water that overflowed from a reservoir that was built in the Groot Brak River towards a farm dam that is situated south west of the proposed development. Since the dam wall of the reservoir was broken down in the early 1990's there has been no water in the furrow and this structure has become redundant. The servitude that was registered for this furrow has also since been cancelled. The 2nd site recorded is this water furrow. The Phase 1 assessment is seen as sufficient enough documentation.

The site used to form part of the Golf course as it used to be an 18 hole course and has since been reduced to a 9 hole course. The structures referred to as site 3 are in all probability old structures associated with this activity (Old tee boxes?). They are nearly completely demolished and the Phase 1 assessment is seen as sufficient enough documentation.

GPS Locations of Sites

1. Cricket Oval: **S31 31 40.35 E25 01 52.87**

2. Water Furrow: **S31 31 33.49 E25 01 57.46** (Northern point); **S31 32 00.95 E25 01 56.22** (Southern point)

3. Old Tee Boxes from original golf course: **S31 31 47.60 E25 01 59.90**

Cultural Significance of Sites: Low **Heritage Significance of Sites:** Low

Field Ratings for Sites: General protection C (IV C): Phase 1 is seen as sufficient recording

and it may be demolished (Low Significance)

Mitigation: No further mitigation required



Figure 6: A view of the old Cricket oval and the soil berm demarcating it.



Figure 7: A view down the water furrow at a section in the north.



Figure 8: Another view down the furrow towards the southern section.



Figure 9: One of the old tee boxes in the area.



The most significant sites and finds in the area are the open-air scatters of Stone Age material. These sites are characterized by fairly dense scatters of MSA & LSA flakes, cores, flake tools such as blades, scrapers and more formal tools such as points. A scatter of ostrich egg shell fragments was also recorded in one area. These open-air scatters are located in two large sheet erosion areas. The size and density of these Stone Age scatters make these sites highly significant from an Archaeological perspective. It is therefore recommended that Phase 2 Archaeological Mitigation measures be implemented before the development commences and the sites are destroyed.

The following is recommended:

- 1. Detailed mapping of the Stone Age scatters of material
- 2. Surface sampling of representative material from these scatters in order to determine their age and typology. This material will then have to be curated by a recognized institution such as the McGregor Museum in Kimberley
- 3. A permit from SAHRA will be required from SAHRA to conduct this Phase 2 work

GPS Locations of Sites

S31 31 48.20 E25 01 59.40 (1); S31 31 48.00 E25 02 03.50 (2) & S31 31 48.90 E25 01 53.90 (3)

Cultural Significance of Sites: High

Heritage Significance of Sites: Grade III: Other heritage resources of local importance and

therefore worthy of conservation

Field Ratings for Sites: General protection A (IV A): Site should be mitigated before

destruction (High/Medium Significance)

Mitigation: See Above



Figure 11: The one open sheet erosion area where scatters of Stone Age material were found.



Figure 12: Some of the stone tools at Site 1.



Figure 13: A core and some stone tools from the general area around Site 1 and the Sheet erosion area where dense scatters of material were located.



Figure 14: A scatter of Ostrich egg shell fragments in the area.



Figure 15: More stone tools from the site.



Figure 16: The 2nd sheet erosion area where dense scatters of MSA & LSA stone tools were recorded.



Figure 17: A scatter of stone tools is visible in the area.



Figure 18: Some of the exposed stone tools in the 2nd sheet erosion area.



Figure 19: Some of the stone tools have recently been silted over and is eroding out again.

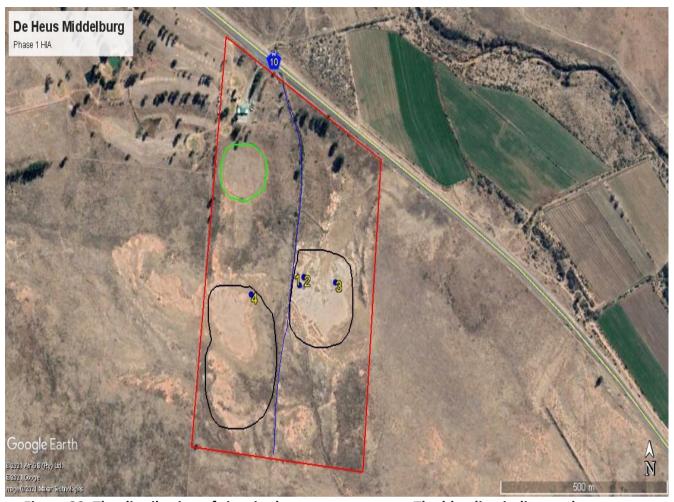


Figure 20: The distribution of sites in the assessment area. The blue line indicates the water furrow; the green polygon is the Cricket Oval; Site 2 is the cement & brick foundation remains associated with the golf course. The sheet erosion areas in the black polygons show the extent of the areas where the Stone Age open-air scatters were found (Google Earth 2021).

From a Cultural Heritage perspective, based on the desktop research and results of the field assessment, it is recommended that the proposed development should be allowed to continue once the mitigation measures provided above have been successfully implemented and completed.

Although all efforts are made to cover a total area during any assessment and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase 1 HIA for the proposed De Heus Mixed Used Development was conducted successfully. The development and study area is located on Portion 15 of the farm Bultfontyn 128, near Middelburg in the Eastern Cape.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. A number of archaeological & recent historical sites and features were identified and recorded in the study area during the assessment. The most extensive and significant of these are a number of open-air Stone Age sites with scatters of stone tools and associated material. Some recent historical features recorded include the remnants of an aqueduct (indicated on the 1957 map of Portion 15 of the farm) and possibly associated features and a Cricket field (oval).

The 1st site is the remains of the old Cricket Oval/field close to the Golf Club. The site is demarcated by a soil berm. The site is not deemed as historically significant.

The 2nd site recorded is this water furrow. The Phase 1 assessment is seen as sufficient enough documentation. The site used to form part of the Golf course as it used to be an 18 hole course and has since been reduced to a 9 hole course. The structures referred to as site 3 are in all probability old structures associated with this activity (Old tee boxes?). They are nearly completely demolished and the Phase 1 assessment is seen as sufficient enough documentation.

The most significant sites and finds in the area are the open-air scatters of Stone Age material. These sites are characterized by fairly dense scatters of MSA & LSA flakes, cores, flake tools such as blades, scrapers and more formal tools such as points. A scatter of ostrich egg shell fragments was also recorded in one area. These open-air scatters are located in two large sheet erosion areas. The size and density of these Stone Age scatters make these sites highly significant from an Archaeological perspective. It is therefore recommended that Phase 2 Archaeological Mitigation measures be implemented before the development commences and the sites are destroyed.

The following is recommended:

- 1. Detailed mapping of the Stone Age scatters of material
- 2. Surface sampling of representative material from these scatters in order to determine their age and typology. This material will then have to be curated by a recognized institution such as the McGregor Museum in Kimberley
- 3. A permit from SAHRA will be required from SAHRA to conduct this Phase 2 work

It should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown

or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

Finally, from a Cultural Heritage perspective, based on the desktop research and results of the field assessment, it is recommended that the proposed development should be allowed to continue once the mitigation measures provided above have been successfully implemented and completed.

8. REFERENCES

General, Closer Views of study area location and footprint & Sites Recorded: Google Earth 2021.

Land Use & Site Layout Plan: Provided by AB Enviro Consult.

Anderson, G. 2018. **HERITAGE SURVEY OF THE UMSOBOMVU 1 WIND ENERGY FACILITY, EASTERN AND NORTHERN CAPE.** Unpublished Report: Umlando Archaeological Surveys and Heritage Management. For: EOH Coastal and Environmental Services. September 2018.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.

Booth, C. 2012. A Phase 1 Archaeological Impact Assessment for the proposed establishment of the ACED Middelburg Solar Park (Park 1 and Park 2) on the farm Tweefontein Remainder of Farm 11 (Solar Park 1) and Tweefontein Portion 4 of Farm 11 (Solar Park 2), Middelburg Eastern Cape Province. Unpublished Report: Department of Archaeology Albany Museum, For: Savannah Environmental (Pty) Ltd. February 2012.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scotsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I).** South African Archaeological Bulletin 67 (195): 120–144, 2012.

Palaeo Field Services cc. 2014. Phase 1 Heritage Impact Assessment of an existing quarry on the farm Plooysfontein 93 near Hanover, NC Province. Unpublished Report for EKO Environmental Consultants. 2014.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

Rossouw, L. 2010. PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT OF PROPOSED GRAVEL QUARRIES ON PORTIONS 1, 25 AND 17 OF HARTEBEES HOEK 187 AND PORTIONS 5 AND 1 OF NAAUWPOORT 1, NOUPOORT DISTRICT, NORTHERN CAPE PROVINCE, AND KOPPIESKRAAL 6 NEAR MIDDELBURG, EASTERN CAPE PROVINCE. Unpublished Report: Department of Archaeology National Museum Bloemfontein. For: Terraworks Environmental Consultants. March 2010.

www.wikipedia.org

Chief Surveyor General Database (<u>www.csg.dla.gov.za</u>): Documents 10956452 & 10956460.

APPENDIX A: DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

Aestetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C: SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D: PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states Structures – Older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES

- 1. Pre-assessment or Scoping Phase Establishment of the scope of the project and terms of reference.
- 2. Baseline Assessment Establishment of a broad framework of the potential heritage of an area.
- 3. Phase I Impact Assessment Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption If there is no likelihood that any sites will be impacted.
- 5. Phase II Mitigation or Rescue Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
- 6. Phase III Management Plan For rare cases where sites are so important that development cannot be allowed.