HERITAGE SURVEY FOR SIX FIELDS ON THE FARM STRYD POORD 798, WINTERTON, KZN

FOR RANGELAND FARMING

DATE: 25 AUGUST 2021

By Gavin Anderson

Umlando: Archaeological Surveys and Heritage

Management

PO Box 10153, Meerensee, 3901

Phone:035-7531785 Cell: 0836585362

umlando@gmail.com



TABLE OF CONTENT

INTRODUCTION	4
KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018	9
METHOD	11
Defining significance	12
RESULTS	15
DESKTOP STUDY	15
PALAEONTOLOGICAL SENSITIVITY	22
FIELD SURVEY	23
Field 1	25
Field 2	
FIELD 3:	
FIELD 4 & 5	27
FIELD 6	29
RECOMMENDATIONS	30
CONCLUSION	
REFERENCES	30
EXPERIENCE OF THE HERITAGE CONSULTANT	31
DECLARATION OF INDEPENDENCE	
APPENDIX A	32
PIA LETTER OF EXEMPTION	32

TABLE OF FIGURES

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT	. 5
FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT	. 6
FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT (2002)	. 7
FIG. 4: SCENIC VIEWS OF THE AREA	. 8
TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES	14
FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA	17
FIG. 6: SURVEYOR GENERAL MAP OF STRYD POORT 1198 (1852)	18
FIG. 7: LOCATION OF THE STUDY AREA IN 1937	
FIG. 8: LOCATION OF THE STUDY AREA IN 1944	
FIG. 9: LOCATION OF THE STUDY AREA IN 2013	21
FIG. 10: PALAEONTOLOGICAL SENSITIVITY MAP	
TABLE 2: LOCATION AND SIGNIFICANCE OF RECORDED SITES	
FIG. 11 LOCATION OF FIELDS & RECORDED FINDS	
FIG.12: FIELD 1	25
FIG. 13: FIELD 2 STONE WALLING AND CEMETERY	26
FIG. 14: FIELD 2 STONE WALLING AND CEMETERY	
FIG. 15: FIELD 5	28
FIG. 16: GRAVES BETWEEN THE FENCE AND ROAD OPPOSITE FIELD 5	28

Abbreviations

HP	Historical Period
IIA	Indeterminate Iron Age
LIA	Late Iron Age
EIA	Early Iron Age
ISA	Indeterminate Stone Age
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
HIA	Heritage Impact Assessment
PIA	Palaeontological Impact Assessment

INTRODUCTION

The Farm Stryd Poort 1136 is located near WInterton, in the Ukuhlamba Local Municiplaity.

The proposed development consists of the cultivation of 19 hectares of land on six separate sites of 10ha, 4ha, 2.2 ha, 1ha, 0.7ha and 0.6ha. This triggered an EIA. Some of the land has been previously used for crops and has gone fallow, while the rest has been used for grazing.

Umlando was requested to undertake a heritage assessment of the proposed development. Figures 1 - 4 show the location of the development.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

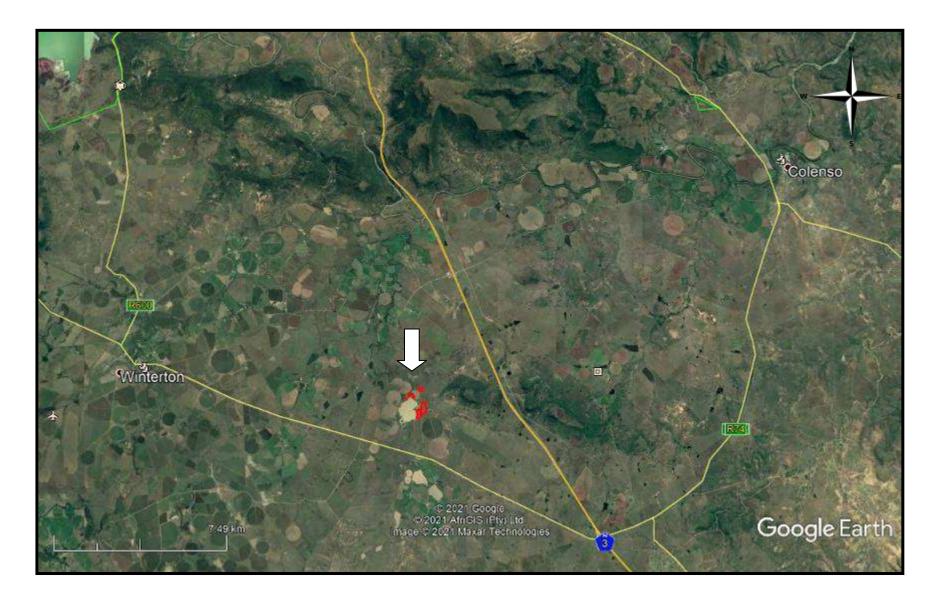




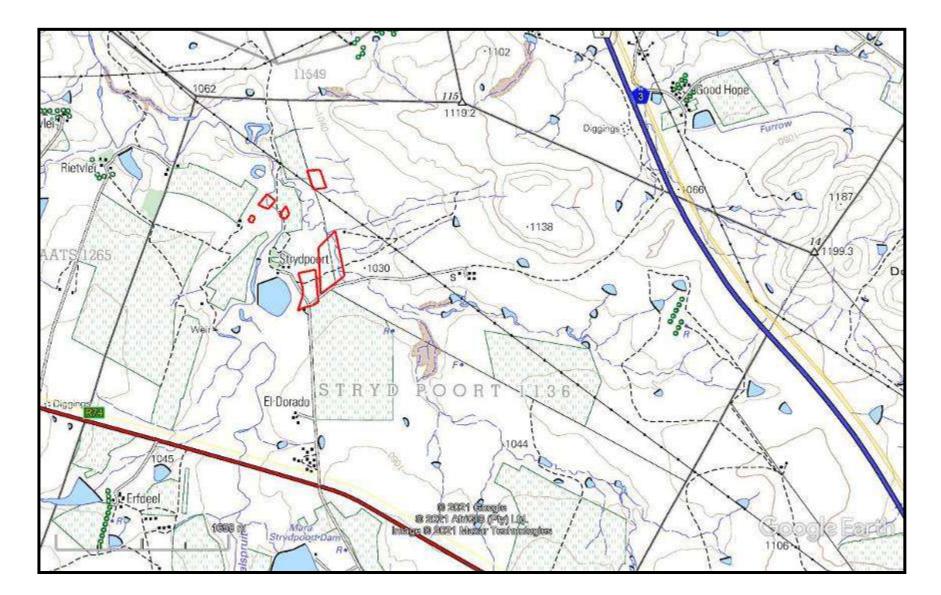
FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT





Page 7 of 38

FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT (2002)



Umlando



<u>Page 8 of 38</u>

FIG. 4: SCENIC VIEWS OF THE AREA









27/08/2021

KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018 "General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the *Gazette*, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original

position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that-

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or

excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

 The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government."

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national monuments and battlefields Southern Africa and provincial in (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

strydpoort HIA

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves

strydpoort HIA

1.5.3. Middens

1.5.4. Cattle byres

1.5.5. Bedding and ash complexes

2. Spatial arrangements:

2.1. Internal housing arrangements

2.2. Intra-site settlement patterns

2.3. Inter-site settlement patterns

3. Features of the site:

3.1. Are there any unusual, unique or rare artefacts or images at the site?

3.2. Is it a type site?

3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

- 8.1. Palaeontological sites
- 8.2. Historical buildings
- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries
- 8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts. Table 1 lists the grading system.

SITE SIGNIFICANCE	FIELD RATING	GRADE	RECOMMENDED MITIGATION
High	National	Grade 1	Site conservation / Site
Significance	Significance		development
High	Provincial	Grade 2	Site conservation / Site
Significance	Significance		development
High	Local	Grade 3A /	
Significance	Significance	3B	
High / Medium	Generally		Site conservation or mitigation
Significance	Protected A		prior to development / destruction
Medium	Generally		Site conservation or mitigation /
Significance	Protected B		test excavation / systematic sampling / monitoring prior to or during development / destruction
Low Significance	Generally Protected C		On-site sampling monitoring or no archaeological mitigation required prior to or during development / destruction

 TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES

RESULTS

DESKTOP STUDY

Voortrekker History

Roussouw (2019a, 2019b) produced two short reports on the farm.

"The farm originally belonged to the settler Jan Hendrik Robbertse who built the first house. In 1938 the farm belonged to a descendant of A.W.J. Pretorius, namely Christiaan Pieter Pretorius, son of Christiaan Marthinus Pretorius, son of A.W.J. Pretorius who was the son of the original Commandant General, A.W.J. Pretorius who led the attack on the Zulus at Blood River (Jansen, E.G. 1938: 154).

The farm was named "Strydpoort" because of the conflict between Andries Hendrik Potgieter's trek-group and the trek-group of Piet Uys, after the death of Piet and Dirkie Uys during the Battle of Italeni on 10 April 1839. Because of this conflict, Potgieter decided to move away from Natal and to settle in the area that would later become known as the Z.A.R. or Zuid-Afrikaansche Republic/Transvaal" (Roussouw 2019a).

"The Strydpoort Laager (later called "Fort Eldorado" from the name of the subdivision of the old Strydpoort farm) was also built before the war, but precisely when is not clear. References to it in 1878 indicate that it was already complete. Throughout the war it was the base of the Upper Tugela Defence Corps of between 40 and 70 men, under command of A.I.E. Pretorius" (Laband, John & Thompson, Paul 2004: 118, in Russouw 2019b).

General heritage

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. Many archaeological sites occur in the general area. The archaeological sites tend to be open Stone Age scatters, overhangs with Rock Paintings, Late Iron Age settlements, LIA engravings and Historical Period structures (fig. 5). The sites vary in significance. No known heritage sites occur within the various fields, except for a historical cemetery of the Pretorius family, their retinue and staff from Cape Town.

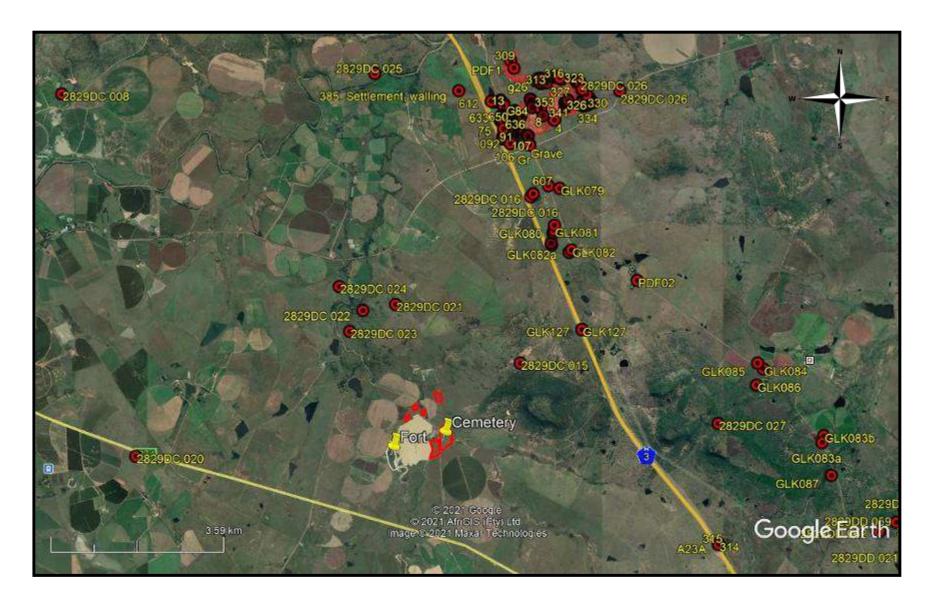
The Farm Stryd Poort 798 was first surveyed in 1853 (fig. 6). However, it had already been established since 1838. This is more of an indication of when British administration took over the area, than actual land ownership. No structures are noted on the SG map. Of importance is that the Fort is not noted on the diagram.

The 1937 aerial photograph indicates that most of the study area was used for agricultural crops. This part of the land was thus ploughed for some time. The two southern fields appear to have been used for grazing (Field 1 and 2: see figure 11 below for field numbering).

The 1944 1:50 000 map reiterates the aerial photo (fig. 8). Moreover, the map indicates two settlements at the western fields (Field 5 and 6) have human settlements, and thus probably graves. The original farmhouses are still visible. By 2009, these settlements are not visible on Google Earth imagery, except for the original farmhouse. The farmhouse and related structures were replaced in 2013 (fig. 9).

The 1972 topographical map indicates that there are no settlements in the general area (fig. 5).

FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA



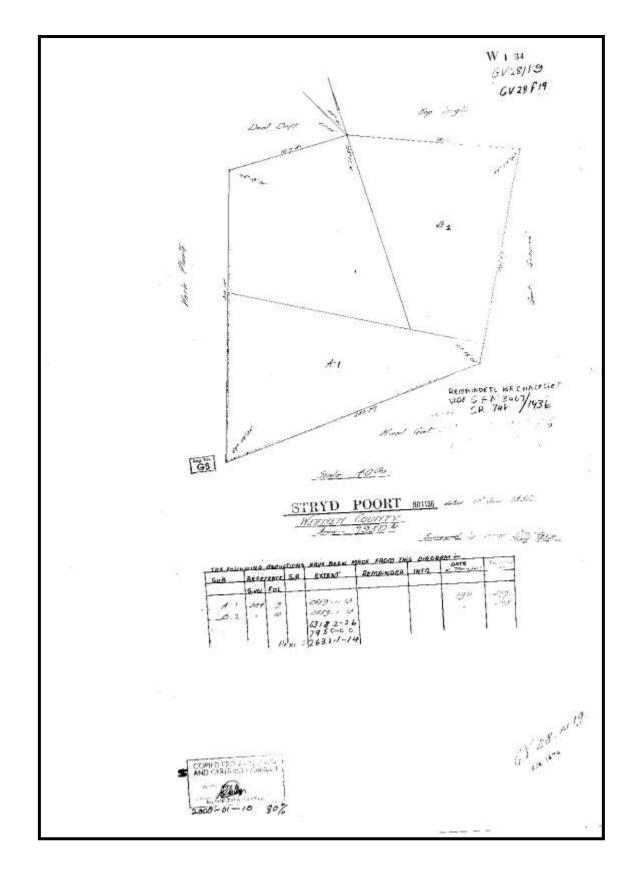


FIG. 6: SURVEYOR GENERAL MAP OF STRYD POORT 1198 (1852)

Page 19 of 38

FIG. 7: LOCATION OF THE STUDY AREA IN 1937

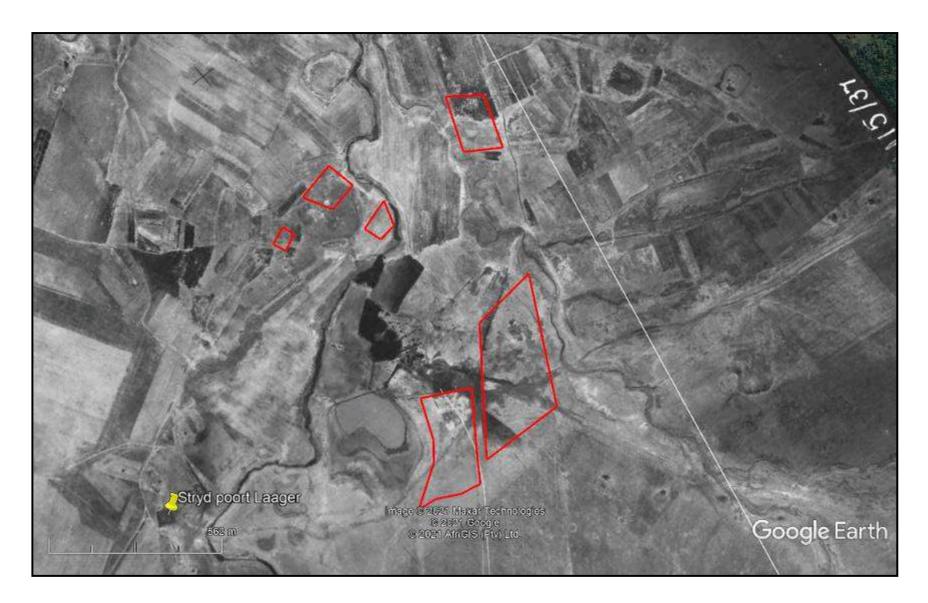
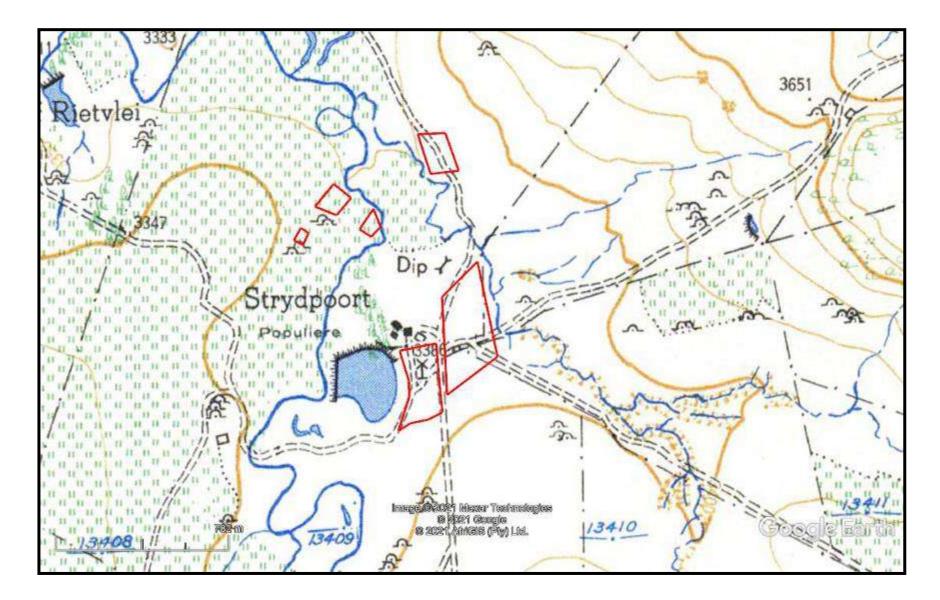


FIG. 8: LOCATION OF THE STUDY AREA IN 1944



Page 21 of 38

FIG. 9: LOCATION OF THE STUDY AREA IN 2013



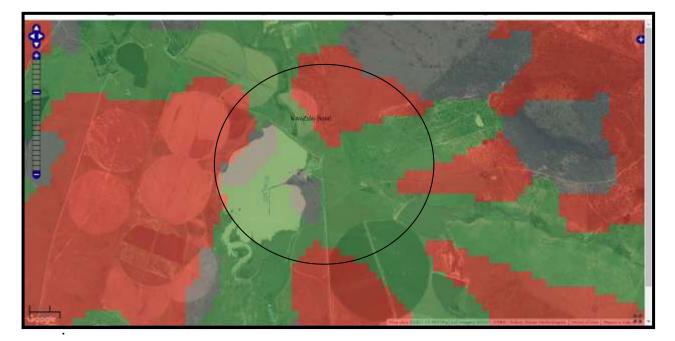
<u>strydpoort HIA</u>



PALAEONTOLOGICAL SENSITIVITY

The area is in an area of medium to very high palaeontological sensitivity (fig. 10). However, since this application is to change the land back to crop farming, it will not affect the palaeontological horizons. This was confirmed by Dr Alan Smith (see Appendix A for a letter of exemption)

FIG. 10: PALAEONTOLOGICAL SENSITIVITY MAP



COLOUR	SENSITIVITY	REQUIRED ACTION
RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	desktop study is required
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

FIELD SURVEY

The field survey was undertaken on 12 August 2021. Ground visibility was very good in most areas, except for parts of Field 2. Each new field was labelled for easier reference in the report. Mr Driemeyer was aware of the various graves, cemeteries and settlements on the land and pointed them out to myself.

The location of these fields and sites are shown in fig. 11. Table 2 summarises the sites.

Name	Latitude	Longitude	Significance	Will Be Affected	Mitigation Required
Graves	-28.827190999	29.656395999	High	No	Will be demarcated
Cemetery	-28.831267434	29.663909974	High	No	Will be demarcated
h1	-28.827006601	29.656537388	Low	No	N/A
h2	-28.825956946	29.657698441	Low	No	N/A
Graves	-28.825986649	29.658141445	High	No	Will be demarcated
Settlement	-28.828837888	29.664568353	High for graves	yes	Will be demarcated if graves occur

FIG. 11 LOCATION OF FIELDS & RECORDED FINDS



Field 1

Field 1 appears to have been used for grazing (Fig. 12). No artefacts were noted in the field.

No further mitigation is required.

FIG.12: FIELD 1



Field 2

Field 2 appears to have been used for grazing (fig. 13). The Pretorius family cemetery and their retinue and staff appear t be buried here. The cemetery has a well-defined outer wall, with an inner wall around the Pretorius family cemetery. The other graves tend to be stone cairns. Some of these graves have headstones and these have faint inscriptions. They should be properly recorded, as they will reflect the names of the people who assisted the Voortrekkers, and they tend to be ignored in past historical work. A polished shale artefact was noted near the entrance within the cemetery.

Mr Driemeyer indicated that there was a settlement with possible graves in this field. We located the main stone walled kraal; however, the grass was too tall to locate possible graves. This settlement post-dates 1940s

Significance: The cemetery is of high significance for the human graves, and historical value. Potential graves related to the settlement are also of high significance.

Mitigation: Mr Driemeyer is currently erecting a fence approximately 10m from the boundary of the outer stone walling. This will suffice as a means of demarcation and as a buffer. The area will be surveyed once the grass has been burnt for the potential graves. Once located they will be mapped, photographed and be fenced off with a 5m buffer between the edge of the grave(s) and the fencing. This is required before the field is initiated up for agricultural activity.

SAHRA Rating: 2 and 3A



FIG. 13: FIELD 2 STONE WALLING AND CEMETERY

strydpoort HIA

Umlando

27/08/2021

FIELD 3:

Field 3 was used for crops since the 1930s (fig. 14). No artefacts or heritage features were noted in the field

No further mitigation is required.

FIG. 14: FIELD 2 STONE WALLING AND CEMETERY



FIELD 4 & 5

Fields 4 & 5 are next to each other and both have been ploughed since the 1930s and at some stage were left to go fallow or for pasturage fig. 15).

No artefacts or heritage features were noted in the field. However, the graves of approx. 5 people occur on the opposite side of the road (fig. 16). These are under dense grass and could not be viewed. The graves probably relate to "H2" from the 1944 topographical map. Mr Driemeyer knows of their location and intends to fence off these graves with appropriate buffering.

strydpoort	HIA		

Significance: The graves are of high significance but will not be affected.

Mitigation: No mitigation is required for the two fields; however, Mr Driemeyer has indicated that he will fence off the graves with the 5m buffer.

SARHA Rating: Graves are 3A

FIG. 15: FIELD 5



FIG. 16: GRAVES BETWEEN THE FENCE AND ROAD OPPOSITE FIELD 5

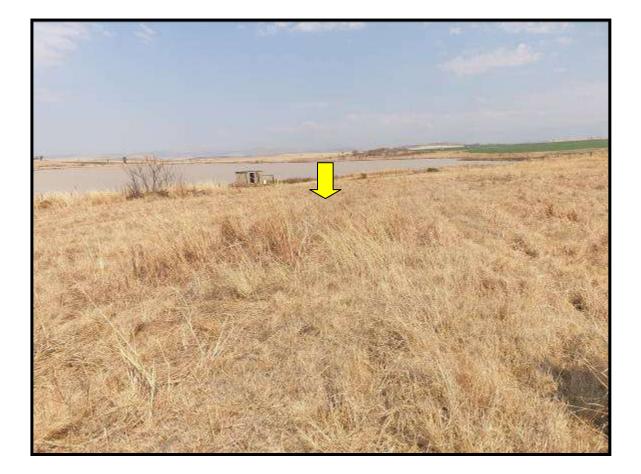


FIELD 6

Field 6 occurs in previously ploughed land (fig. 17). The settlement "h1" from the 1944 topographical map occurs outside to the southwest of this field. There are three known graves 40m to the southwest of Field 6 (fig. 17 yellow arrow). The graves will not be affected by Field 6.

Significance: The graves are of high significance but will not be affected. Mitigation: No mitigation is required; however, Mr Driemeyer has indicated he will fence off the graves with the 5m buffer.

SARHA Rating: Graves are 3A



RECOMMENDATIONS

The proposed new agricultural fields will not affect heritage resources provided adequate management is undertaken. The graves and cemetery will be fenced off with appropriate buffers between the fencing and the structures. This should be documented and submitted to KZNARI as proof before the fields are used.

CONCLUSION

A heritage survey was undertaken for the proposed new land use for agricultural activity on the Farm Stryd Poort 798... Most of the fields have been previously used for crop production, while two appear to have been used only for grazing. A historical cemetery and possible farm labourers' graves occur in Field 2. These will be mitigated, as will the two informal cemeteries, by means of fencing.

No further mitigation is required.

REFERENCES

Roussouw, C 2019a. Survey, Grading Recommendation And Management Plan Of Heritage Sites On The Farm Strydpoort

Roussouw, C 2019b. Survey of purported Anglo-Zulu Fort and surrounding area on the farm Strydpoort

2829DC Winterton 1944, 2000 115_026_17516

SAHRIS Database Umlando Database

EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

Gavin Anderson Archaeologist/Heritage Impact Assessor



APPENDIX A

PIA LETTER OF EXEMPTION

DR ALAN SMITH, ALAN SMITH CONSULTING 29 BROWN'S GROVE SHERWOOD DURBAN Durban, 4091

> UMLANDO: Archaeological Surveys & Heritage Management PO Box 102532, Meerensee, KwaZulu-Natal 3901 phone (035)7531785 cell: 0836585362 / 0723481327 Email:umlando@gmail.com

20/08/2021

Letter of Exemption from Palaeontological Impact Assessment based on Sahris Guidelines for the farm Strydpoort, near Winterton

To whom it may concern

Section 38 of the National Resources Act No 25 of 1999 (Heritage Resources Management), requires a Palaeontological Impact Assessment (PIA) to assess any potential impacts to palaeontological heritage. Dr Alan Smith (Appendix 1) was asked by UMLANDO: Archaeological Surveys & Heritage Management to conduct a palaeontological assessment for a proposed change in crop growth on the farm Strydpoort.

This is simply a change in crop. All else will remain the same, consequently, the anticipated palaeontological impact has not changed.

For this reason a palaeontological exemption is requested for this project. Should the plans/ footprint for this project change then it will need to be reassessed in terms of palaeontological work.

Dr Alan Smith, Alan Smith Consulting

AUS.

strydpoort HIA

APPENDIX 1: DETAILS OF SPECIALIST

Dr Alan Smith

<u>Private Consultant</u>: Alan Smith Consulting, 29 Brown's Grove, Sherwood, Durban, 4091

&

<u>Honorary Research Fellow</u>: Discipline of Geology, School of Agriculture, Earth and Environmental Sciences, University of KwaZulu-Natal, Durban.

Role: Specialist Palaeontological Report production

Expertise of the specialist:

- PhD in Geology (University of KwaZulu-Natal), Pr. Sc. Nat., I.A.H.S.
- Expert in Vryheid Formation (Ecca Group) in northern KZN, this having been the subject of PhD.
- Scientific Research experience includes: Fluvial geomorphology, palaeoflood hydrology, Cretaceous deposits.
- Experience includes understanding Earth Surface Processes in both fluvial and coastal environments (modern & ancient).
- Alan has published in both national and international, peer-reviewed journals. He has published + 50 journal articles with 520 citations (detailed CV available on request).
- Attended and presented scientific papers and posters at numerous international and local conferences (UK, Canada, South Africa) and is actively involved in research.

Selected recent palaeo-related work includes:

- Desktop PIA: Proposed middle income housing units on Portion
 23 of Farm Lot H Weston 13026, Bruntville, Mpofana Local
 Municipality. Client: UMLANDO.
- Desktop PIA: Proposed ByPass Pipeline for Ulundi bulk water pipeline upgrade. Client: UMLANDO.
- Fieldwork PIA: Bhekuzulu Epangweni KZN water reticulation project, Cathkin Park. Client: Mike Webster, HSG Attorneys.
- Fieldwork PIA: Mpungoze water supply scheme, Empangeni.
 Client: Enviropro.
- Fieldwork PIA: Helpmekaar Dam. Client: Afzelia environmental consultants.
- Desktop PIA: Zuka valley, Ballito. Client: Mike Webster, HSG Attorneys.
- Mevamhlope proposed quarry palaeontology report. Client: Enviropro.
- Desktop PIA: Proposed Lovu Desalination site. Client: eThembeni Cultural Heritage.
- Desktop PIA: Tinley Manor phase 2 North & South banks: eThembeni Cultural Heritage
- o Desktop PIA: Tongaat. Client: eThembeni Cultural Heritage.
- Palaeontological Assessment Reports (3) to Scatec Solar SA (Pty) Ltd on an Appraisal of Inferred Palaeontological Sensitivity for a Potential Photo Voltaic Park at (1) Farm Rooilyf near Groblershoop, N Cape; (2) Farm Riet Fountain No. Portions 1 and 6, 18km SE of De Aar, N Cape; and (3) Dreunberg, near Burgersdorp, Eastern Cape. Client: Sustainable Development Projects.

APPENDIX 2: CHANCE FIND PROTOCOL

This Chance Find Protocol must be included in the site EMPr.

If any fossils are found, a Palaeontologist must be notified immediately by the ECO and/or EAP and a site visit must be arranged at the earliest possible time with the Palaeontologist.

In the case of the ECO or the Site Manager becoming aware of suspicious looking palaeo-material:

- The construction must be halted in that specific area and the Palaeontologist must be given enough time to reach the site and remove the material before excavation continues.
- Mitigation will involve the attempt to capture all rare fossils and systematic collection of all fossils discovered. This will take place in conjunction with descriptive, diagrammatic and photographic recording of exposures, also involving sediment samples and samples of both representative and unusual sedimentary or biogenic features. The fossils and contextual samples will be processed (sorted, sub-sampled, labeled, and boxed) and documentation consolidated, to create an archive collection from the excavated sites for future researchers.

Functional responsibilities of the Developer

1. At full cost to the project, and guided by the appointed Palaeontological Specialist, ensure that a representative archive of palaeontological samples and other records is assembled to characterize the palaeontological occurrences affected by the excavation operation.

2. Provide field aid, if necessary, in the supply of materials, labour and machinery to excavate, load and transport sampled material from the excavation

stry	d	oor	t H	A

areas to the sorting areas, removal of overburden if necessary, and the return of discarded material to the disposal areas.

3. Facilitate systematic recording of the stratigraphic and palaeoenvironmental features in exposures in the fossil-bearing excavations, by described and measured geological sections, and by providing aid in the surveying of positions where significant fossils are found.

4. Provide safe storage for fossil material found routinely during excavation operations by construction personnel. In this context, isolated fossil finds in disturbed material qualify as "normal" fossil finds.

5. Provide covered, dry storage for samples and facilities for a work area for sorting, labeling and boxing/bagging samples.

6. Costs of basic curation and storage until collected. Documentary record of palaeontological occurrences must be done.

7. The contractor will, in collaboration with the Palaeontologist, make the excavation plan available to the appointed specialist, in which appropriate information regarding plans for excavations and work schedules must be indicated on the plan of the excavation sites. This must be done in conjunction with the appointed specialist.

8. Initially, all known specific palaeontological information will be indicated on the plan. This will be updated throughout the excavation period.

9. Locations of samples and measured sections are to be pegged, and routinely and accurately surveyed. Sample locations, measured sections, etc., must be recorded three-dimensionally if any "significant fossils" are recorded during the time of excavation.

Page 38 of 38

