LETTER OF EXEMPTION AND DESKTOP HERITAGE SURVEY OF THE PROPOSED FOURFEET FARMING EXPANSION

FOR FOURFEET FARMING

DATE: 12 NOVEMBER 2019

By Gavin Anderson

Umlando: Archaeological Surveys and Heritage

Management

PO Box 102532, Meerensee, 3901

Phone/fax: 035-7531785 Fax: 0865445631

Cell: 0836585362



TABLE OF CONTENT

INTRODUCTION	4
KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018	g
METHOD	11
Defining significance	
RESULTS	14
DESKTOP STUDY	
PALAEONTOLOGICAL SENSITIVITY	
DISCUSSION & CONCLUSION	
REFERENCES	20
EXPERIENCE OF THE HERITAGE CONSULTANT	
DECLARATION OF INDEPENDENCE	21
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	7
FIG. 4: SCENIC VIEWS OF THE STUDY AREA	
FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA	
FIG. 6: LOT 54 2049 (1851)	16
FIG. 7: LOCATION OF PROPOSED DEVELOPMENT IN 1937	
FIG. 8: LOCATION OF PROPOSED DEVELOPMENT IN 1972	18
FIG. 9: PALAEONTOLOGICAL SENSITIVITY MAP	19

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

Fourfeet Farming cc, wishes to expand their existing poultry breeder operation on the farm Paderborn, near New Hanover. The development would consist of 18 new houses, which would take place on 3 new sites with 6 houses per site. In total the expansion would allow for an increase of approximately 150 000 birds.

Chicken breeding entails the raising of domesticated birds for the purpose of meat and egg production.

	Each new breeder site would have -
	□ 6 houses
	☐ A shower block with ablutions - connected to septic tank and soakaway
sys	stem
	☐ A small office
	☐ An egg store (excluding rearing site)
	□ Road infrastructure to and around each site

The farm does not fall within 5km of Protected Areas (see Annexure B5) nor 10km of World Heritage Sites. The closest neighbour is over 2km away.

Water would be obtained from 2 existing boreholes on the farm. The proponent is also considering constructing a 3 000 cubic meters reservoir at a central location for water storage. In time, rainwater harvesting from the roofs of the sheds/houses will be implemented.

Umlando was contracted by Nature Stamp and FourFeet Farming to undertake the heritage survey. However, I noted that the area should be exempt from further HIA since it is in already disturbed land.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT



FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT

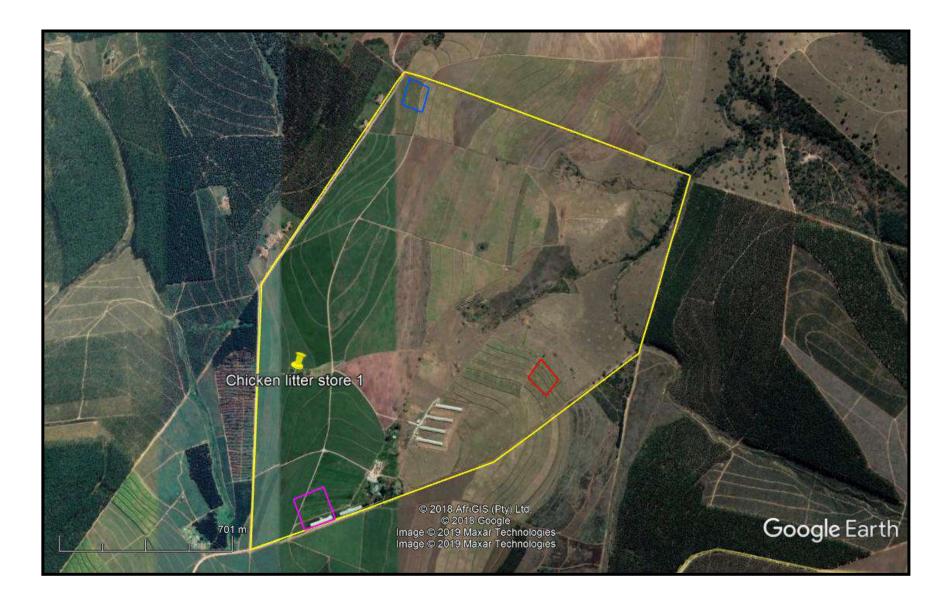


FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT

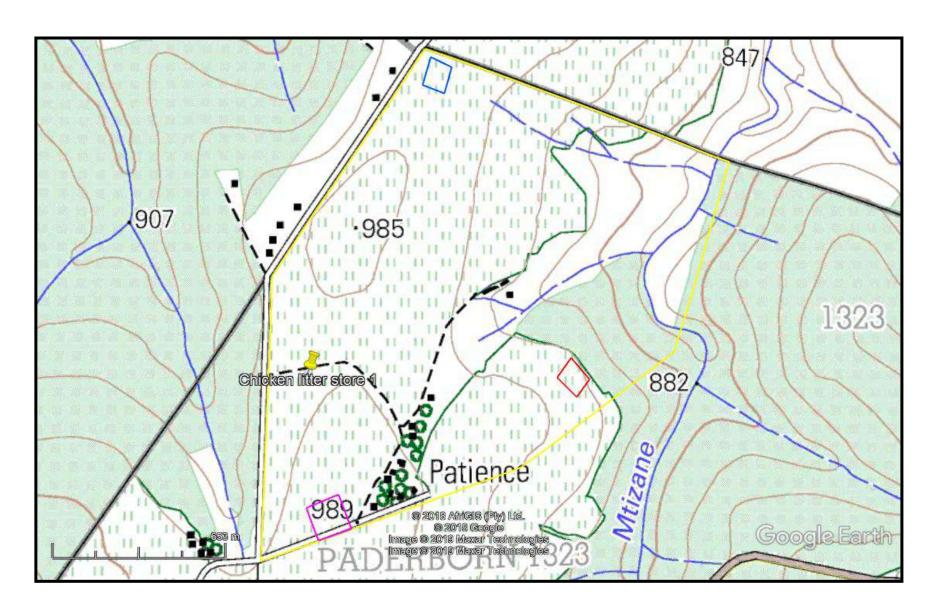


FIG. 4: SCENIC VIEWS OF THE STUDY AREA



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 provincial in (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries 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.

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

- 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.

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. There have been no prior surveys in the study area. The site 2830BC 064 has been incorrectly placed in the database. The archaeological sites tend to be open Stone Age or LIA scatters (fig. 5). These are of low significance.

Fig. 6 indicates the land was surveyed in 1851, and was bought thereafter. By 1937 the land was partially cultivated (fig. 7). By 1972 most of the land was under cultivation (fig. 8).

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

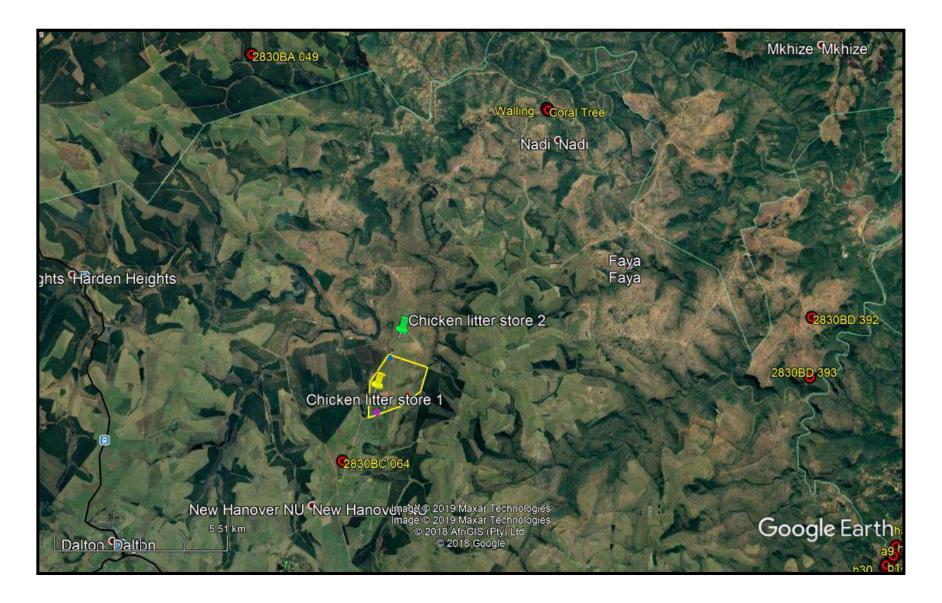


FIG. 6: LOT 54 2049 (1851)

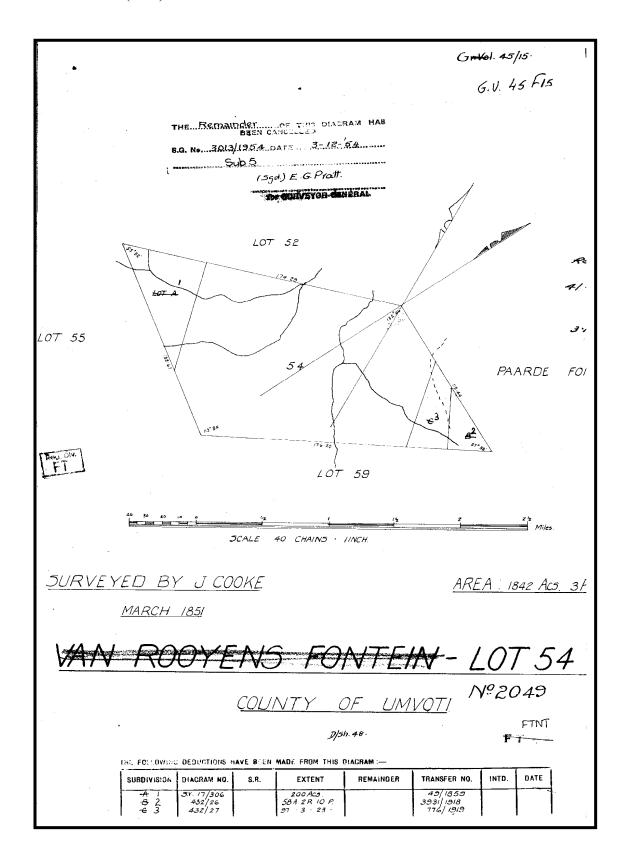
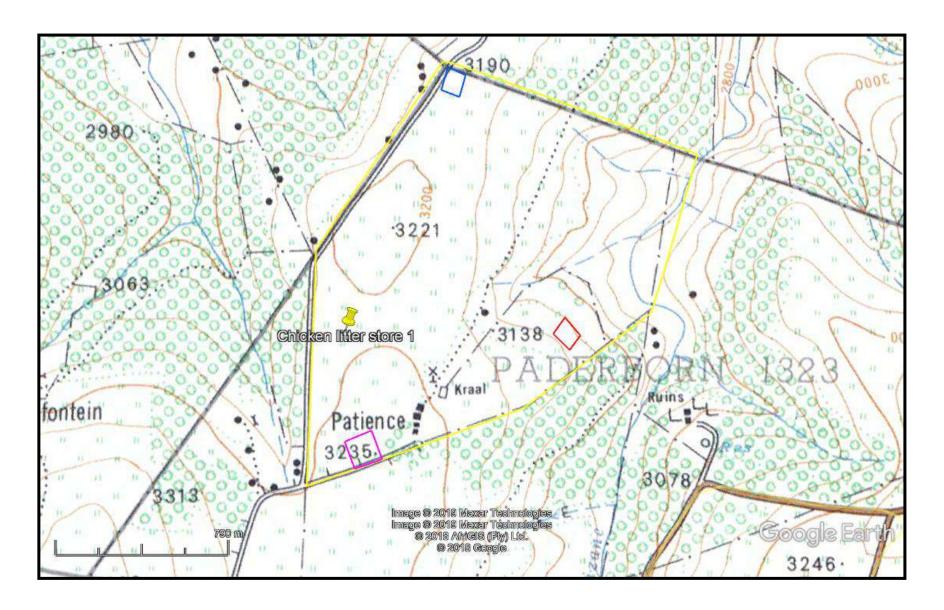


FIG. 7: LOCATION OF PROPOSED DEVELOPMENT IN 1937



FIG. 8: LOCATION OF PROPOSED DEVELOPMENT IN 1972



PALAEONTOLOGICAL SENSITIVITY

The palaeontological sensitivity for this area is mostly of low, or no, palaeontological significance (fig. 9). The southwest corner is of medium significance; however, the area is small. The footprint of each house is minimal and will not extend into any fossil bearing layers. It should be exempt from further PIA study.

Doogle Post(I)

FIG. 9: PALAEONTOLOGICAL SENSITIVITY MAP

DISCUSSION & CONCLUSION

The desktop study indicates that the study area have been cultivated for many years. There will be no *in situ* archaeological sites, rather isolated artefacts, if any. The size of each breeder site is also too small to have any impact.

No further mitigation is required and the project should be exempt from any further HIA requirements.

REFERENCES

117B_184_39140 2930BC New Hanover 1972, 2002

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