



**AN ARCHAEOLOGICAL ASSESSMENT FOR A NEMA SECTION 24G APPLICATION FOR THE QUANTUM FOODS EGG LAYING FACILITY NEAR THORNHILL IN THE KOUKAMMA LOCAL MUNICIPALITY OF THE EASTERN CAPE PROVINCE**

**Prepared for:** CAPE EAPrac (Pty) Ltd.  
P.O Box 2070  
George  
6530  
Cell: +27 71 603 4132  
Contact person: Ms Louise-Mari Van Zyl  
Email: [louise@cape-eaprac.co.za](mailto:louise@cape-eaprac.co.za)

**Compiled by:** Dr Johan Binneman and Mr Kobus Reichert  
**On behalf of:** Eastern Cape Heritage Consultants  
P.O. Box 689  
Jeffreys Bay  
6330  
Tel: 042 2960399  
Cell: 0728006322  
Email: [kobusreichert@yahoo.com](mailto:kobusreichert@yahoo.com)  
[jnfbinneman@gmail.com](mailto:jnfbinneman@gmail.com)

**Date:** March 2020

## CONTENTS

PROJECT INFORMATION	1
Background and type of development	1
Applicant	1
Consultant	1
Purpose of the study	1
Site and location	1
ARCHAEOLOGICAL ASSESSMENT	2
Methodology and results	2
DISCUSSION AND CONDITIONS	2
GENERAL REMARKS	2
APPENDIX A: brief legislative requirements	5
APPENDIX B: Guidelines and procedures for developers	6
LIST OF FIGURES	
Figure 1. General views of the Quantum Foods egg laying facility near Thornhill	4
LIST OF MAPS	
Map 1. 1:50 000 Maps indicating the location of the Quantum Foods egg laying facility near Thornhill.	7
Map 2. Aerial images indicating the location of the Quantum Foods egg laying facility near Thornhill.	8

## **PROJECT INFORMATION**

### **Background and type of development**

The NEMA Section 24G application has been implemented because the egg laying facility was originally constructed prior to the Environmental Regulations coming into effect. Subsequently other expansions were also done without prior Environmental Authorisation. These expansions included several chicken lying houses as well as an egg packing facility. The developments were conducted without authorization from the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT). The Kouga Local Municipality also refuses to issue the company with as-built approval plans and a zoning certificate until such time as they have obtained their Environmental Authorisation. A heritage impact assessment was also not conducted as required by the National Heritage Resources Act No. 25 of 1999 prior to the activities. This report is part of the rectification application and basic rectification assessment process.

### **Applicant**

Quantum Foods

### **Consultant**

CAPE EAPrac (Pty) Ltd.  
P.O Box 2070  
George  
6530  
Cell: +27 71 603 4132  
Contact person: Ms Louise-Mari Van Zyl

### **Purpose of the study**

The purpose of the study was to conduct an Archaeological Assessment for a NEMA Section 24G application for several chicken lying houses and an egg packing facility near Thornhill in the Koukamma Local Municipality of the Eastern Cape Province. These developments took place without the authorization from the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT). The survey was conducted to describe and evaluate;

- the importance of possible archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to propose recommendations to minimize possible damage to these resources.

### **Site and Location**

The site for the NEMA 24G application is located within the 1:50 000 topographic reference map 3324DD Hankey (Map 1). It is located approximately 2 kilometres northwest of Thornhill and one kilometre north of the N2 National Road to Port Elizabeth. in the Kouga Local Municipality of the Eastern Cape Province (Maps 1-2) (General GPS reading: 33.53.413S; 25.7.006E). The area inspected comprised of a large building, a paved brick parking area and several other structures within a high security fence. The northern side of the building borders closely to the chicken houses and the east, south and western sides are previously ploughed fields covered by dense short grass (Figure 1).

## ARCHAEOLOGICAL ASSESSMENT

### Methodology and results

Most of the area required to be investigated was already severely disturbed in the past by the construction of buildings, parking area, chicken houses, other structures and gravel roads. However, where possible the assessment was conducted on foot by two archaeologists. GPS readings were taken with a Garmin and all important features were digitally recorded. A Google aerial image investigation was conducted of the area prior to the assessment. Due to the disturbance of the area and the dense short grass cover the archaeological visibility was poor and no archaeological sites/materials were observed. The site appears to be of low cultural sensitivity and in general it would appear that the previous developments had no or little impact on *in situ* or significant archaeological site/materials. There are no known graves or buildings older than 60 years on the site

### DISCUSSION AND CONDITIONS

Although it is unlikely that archaeological remains will be found *in situ*, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during further development. Should such archaeological material (especially human remains) be exposed during future construction activities, all work in that area must cease immediately (depending on the type of find) and it must be reported to the archaeologist at the Albany Museum in Makhanda (Grahamstown) (Tel.: 046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 7450888), so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations will follow from the investigation (See appendix B for a list of possible archaeological sites that may be found in the area). If any archaeological sites/materials are exposed, recommendations will follow after the investigation.

In the unlikely event of such finds being uncovered (during any phase of construction work), it must be reported to an archaeologist or to the Eastern Cape Provincial Heritage Resources Authority immediately. The developer must finance the costs should additional investigations and studies be required. The *onus* is on the developer to ensure that the provisions of the National Heritage Resources Act No. 25 of 1999 and any instructions from ECPHRA are followed. The consultant is responsible to forward this report to the relevant Heritage Authority for assessment, unless alternative arrangements have been made with the specialist to submit the report.

### GENERAL REMARKS

This is an Archaeological Assessment report compiled for the Eastern Cape Provincial Heritage Resources Authority (ECPHRA) to enable them to make informed decisions regarding the heritage resources assessed in this report and only they have the authority to revise the report. This Report must be reviewed by the ECPHRA where after they will issue their Review Comments to the EAP/developer. The final decision rests with the ECPHRA who must grant permits if there will be any impact on cultural sites/materials as a result of the development.

It must be emphasized that the archaeological assessment for a NEMA Section 24 G is based on the visibility of archaeological sites/material and may not reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once these have been removed.

Should further development of the site be required, application must be made for a full Heritage Impact Assessment. In such a case the National Heritage Resources Act (Act No. 25 of 1999, section 35) (see Appendix A) may require a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.



Figure 1. general views of the Quantum Foods egg laying facility near Thornhill.

## **APPENDIX A: brief legislative requirements**

Parts of sections 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act 25 of 1999 apply:

### ***Archaeology, palaeontology and meteorites***

35 (4) *No person may, without a permit issued by the responsible heritage resources authority—*

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.*

### ***Burial grounds and graves***

36. (3) (a) *No person may, without a permit issued by SAHRA or a provincial heritage resources authority—*

- (a) destroy, damage, alter, exhume or remove from its original position or 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, 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*
- (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.*

### ***Heritage resources management***

38. (1) *Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –*

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) the construction of a bridge or similar structure exceeding 50m in length;*
- (c) any development or other activity which will change the character of the site –*
  - (i) exceeding 5000m<sup>2</sup> in extent, or*
  - (ii) involving three or more erven or subdivisions thereof; or*
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;*
- (d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or*
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.*

## **APPENDIX B: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM COASTAL AREAS: guidelines and procedures for developers**

### **Shell middens**

Shell middens can be defined as an accumulation of marine shell deposited by human agents rather than the result of marine activity. The shells are concentrated in a specific locality above the high-water mark and frequently contain stone tools, pottery, bone and occasionally also human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 square metre in extent should be reported to a museum/archaeologist.

### **Human skeletal material**

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general the remains are buried in a flexed position on their sides, but are also found buried in a sitting position with a flat stone capping or in ceramic pots. Developers are requested to be on alert for these features and remains.

### **Fossil bone**

Fossil bones may be found embedded in deposits at the sites. Any concentrations of bones, whether fossilized or not, should be reported.

### **Stone artefacts**

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been disturbed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologist notified.

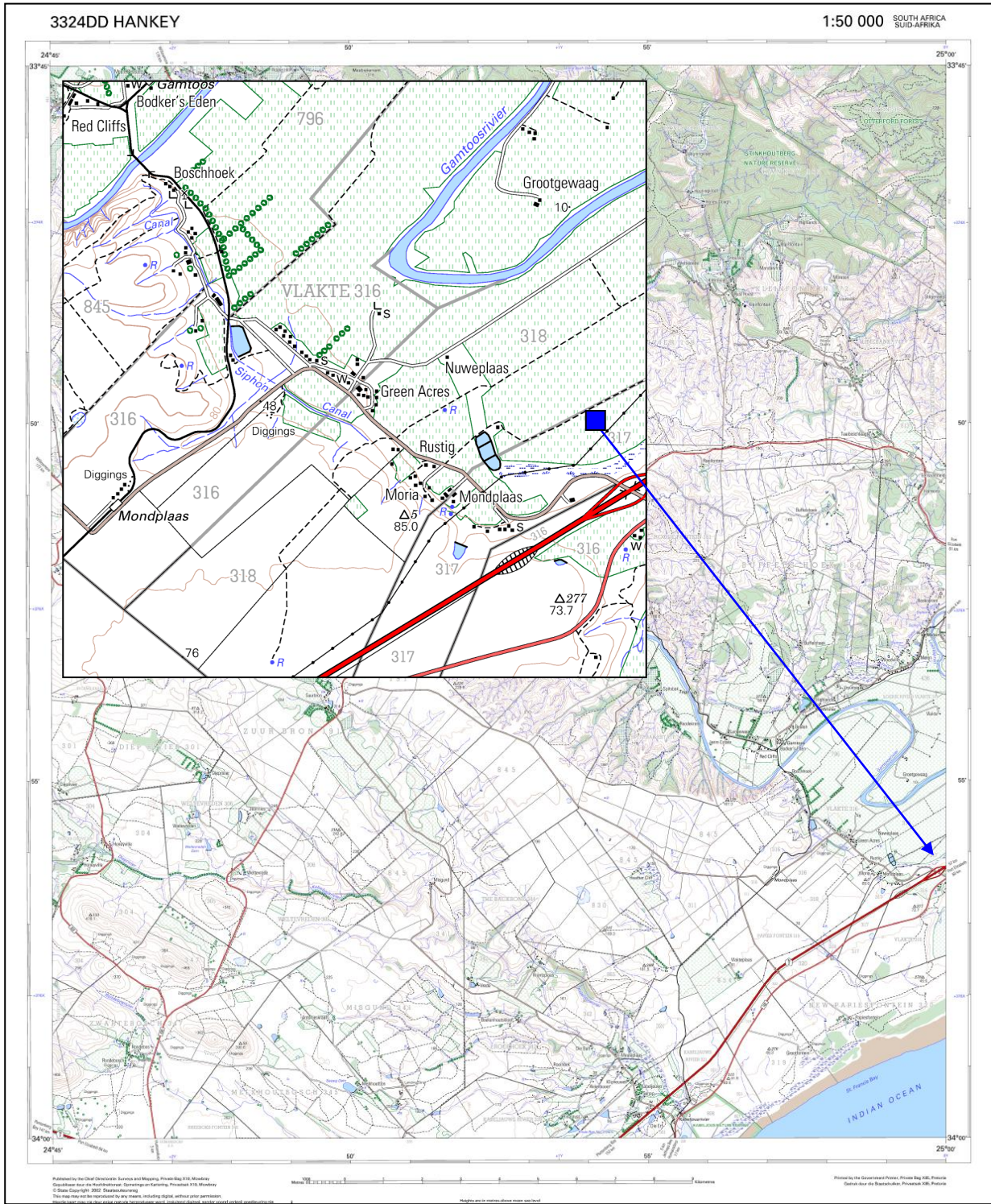
### **Stone features and platforms**

These occur in different forms and sizes, but easily identifiable. The most common are an accumulation of roughly circular fire cracked stones tightly spaced and filled in with charcoal and marine shell. They are usually 1-2metres in diameter and may represent cooking platforms for shell fish. Others may resemble circular single row cobble stone markers. These occur in different sizes and may be the remains of wind breaks or cooking shelters.

### **Historical artefacts and features**

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.





**Map 1. 1:50 000 Topographic maps indicating the approximate location of the Quantum Foods egg laying facility near Thornhill.**



**Map 2. Aerial images of the location of the Quantum Foods egg laying facility near Thornhill.**

**A LETTER OF RECOMMENDATION (WITH CONDITIONS) FOR THE EXEMPTION OF A FULL PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF TWO CHICKEN HOUSES AT THE QUANTUM FOODS EGG LAYING FACILITY NEAR THORNHILL, IN THE KOUGA LOCAL MUNICIPALITY OF THE EASTERN CAPE PROVINCE**

**Prepared for:** CAPE EAPrac (Pty) Ltd.  
P.O Box 2070  
George  
6530  
Cell: +27 71 603 4132  
Contact person: Ms Louise-Mari Van Zyl  
Email: louise@cape-eaprac.co.za

**Compiled by:** Dr Johan Binneman and Mr Kobus Reichert  
**On behalf of:** Eastern Cape Heritage Consultants  
P.O. Box 689  
Jeffreys Bay  
6330  
Tel: 042 2960399  
Cell: 0728006322  
Email: kobusreichert@yahoo.com  
jnfbinnean@gmail.com

**Date:** April 2020

## **PROJECT INFORMATION**

### **Type of development**

The proposed development will include the construction of two chicken houses at the Quantum Foods egg laying facility near Thornhill.

### **Applicant**

Quantum Foods

### **Consultant**

CAPE EAPrac (Pty) Ltd.  
P.O Box 2070  
George  
6530  
Cell: +27 71 603 4132  
Contact person: Ms Louise-Mari Van Zyl  
Email: louise@cape-eaprac.co.za

### **Purpose of the study**

The purpose of the study was to conduct an Archaeological Assessment for the construction of two chicken houses at the Quantum Foods egg laying facility near Thornhill in the Kouga Local Municipality of the Eastern Cape Province. The survey was conducted to describe and evaluate;

- the importance of possible archaeological sites, features and materials,
- the potential impact of the development on these resources and,
- to propose recommendations to minimize possible damage to these resources.

### **Site and location**

The site for the construction of two chicken houses is located within the 1:50 000 topographic reference map 3324DD Hankey (Map 1). It is located approximately 2 kilometres northwest of Thornhill and one kilometre north of the N2 National Road to Port Elizabeth. in the Kouga Local Municipality of the Eastern Cape Province (Maps 1-2) (General GPS reading: 33.53.413S; 25.7.006E). The area inspected is covered by dense short grass (Figure 1).

## **ARCHAEOLOGICAL INVESTIGATION**

### **Methodology and results**

The investigation was conducted on foot by two archaeologists. A Google Earth aerial image investigation and a literary search were also conducted of the area prior to the survey. GPS readings were taken with a Garmin and all important features were digitally recorded. The archaeological visibility was poor due to the dense grass and no sites/materials were observed. Although archaeological sites/materials may be covered by soil and vegetation, it would appear unlikely that remains will be exposed during the development. There are no known graves or buildings older than 60 years on the property.



**Figure 1. General views of the area proposed for the construction of two chicken houses at the Quantum Foods egg laying facility near Thornhill.**

## **DISCUSSION AND CONDITIONS**

Although it is unlikely that archaeological remains will be found *in situ*, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. Should such material be exposed then work must cease in the immediate area of the finds and it must be reported to the Albany Museum (046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 7450888), so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to remove/collect such material (See Appendix B for a list of possible archaeological sites that maybe found in the area).

## **LETTER OF RECOMMENDATION**

It is recommended that the proposed construction of two chicken houses at the Quantum Foods egg laying facility near Thornhill within the Kouga Local Municipality, Sarah Baartman District Municipality of the Eastern Cape Province is exempted from a full Phase 1 Archaeological Heritage Impact Assessment. The proposed area for development appears to be of low cultural sensitivity and it is unlikely that any significant archaeological heritage remains will be found on the property. The proposed development may proceed as planned.

Note: This letter of recommendation only exempts the proposed development from a full Phase 1 Archaeological Heritage Impact Assessment, but not for other heritage impact assessments.

It must also be clear that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment will be assessed by the relevant heritage resources authority. The final decision rests with the heritage resources authority, which should give a permit or a formal letter of permission for the destruction of any cultural sites.

The National Heritage Resources Act (Act No. 25 of 1999, section 35) (see Appendix A) requires a full Heritage Impact Assessment (HIA) in order that all heritage resources, that is, all places or objects of aesthetics, architectural, historic, scientific, social, spiritual linguistic or technological value or significance are protected. Thus any assessment should make provision for the protection of all these heritage components, including archaeology, shipwrecks, battlefields, graves, and structures older than 60 years, living heritage, historical settlements, landscapes, geological sites, palaeontological sites and objects.

## **GENERAL REMARKS AND CONDITIONS**

It must be emphasized that this letter of recommendation for exemption of a full Phase 1 archaeological heritage impact assessment is based on the visibility of archaeological sites/material and may not therefore, reflect the true state of affairs. Sites and material may be covered by soil and vegetation and will only be located once this has been removed. In the unlikely event of such finds being uncovered, (during any phase of construction work), it must be reported to the archaeologist at the Albany Museum (046 6222312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 7450888) immediately. The developer must finance the costs should additional studies be required as outlined above. The *onus* is also on the developer to ensure that this agreement is honoured in accordance with the National Heritage Act No. 25 of 1999. The consultant is responsible to forward this report to the relevant Heritage Authority for assessment, unless alternative arrangements have been made with the specialist to submit the report.

## **APPENDIX A: BRIEF LEGISLATIVE REQUIREMENTS**

Parts of sections 35(4), 36(3) and 38(1) (8) of the National Heritage Resources Act 25 of 1999 apply:

### ***Archaeology, palaeontology and meteorites***

35 (4) *No person may, without a permit issued by the responsible heritage resources authority—*

- (a) *destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;*
- (b) *destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;*
- (d) *bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.*

### ***Burial grounds and graves***

36. (3) (a) *No person may, without a permit issued by SAHRA or a provincial heritage resources authority—*

- (a) *destroy, damage, alter, exhume or remove from its original position or 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, 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*
- (c) *bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.*

***Heritage resources management***

38. (1) *Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorized as –*
- (a) *the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
  - (b) *the construction of a bridge or similar structure exceeding 50m in length;*
  - (c) *any development or other activity which will change the character of the site –*
    - (i) *exceeding 5000m<sup>2</sup> in extent, or*
    - (ii) *involving three or more erven or subdivisions thereof; or*
    - (iii) *involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
    - (iv) *the costs of which will exceed a sum set in terms of regulations by SAHRA, or a provincial resources authority;*
  - (d) *the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or*
  - (e) *any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must as the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.*

## **APPENDIX A: IDENTIFICATION OF ARCHAEOLOGICAL FEATURES AND MATERIAL FROM INLAND AREAS: guidelines and procedures for developers**

### **Human Skeletal material**

Human remains, whether the complete remains of an individual buried during the past, or scattered human remains resulting from disturbance of the grave, should be reported. In general human remains are buried in a flexed position on their side, but are also found buried in a sitting position with a flat stone capping. Developers are requested to be on alert for the possibility of uncovering such remains.

### **Freshwater mussel middens**

Freshwater mussels are found in the muddy banks of rivers and streams and were collected by people in the past as a food resource. Freshwater mussel shell middens are accumulations of mussel shell and are usually found close to rivers and streams. These shell middens frequently contain stone tools, pottery, bone, and occasionally human remains. Shell middens may be of various sizes and depths, but an accumulation which exceeds 1 m<sup>2</sup> in extent, should be reported to an archaeologist.

### **Large stone cairns**

They come in different forms and sizes, but are easy to identify. The most common are roughly circular stone walls (mostly collapsed) and may represent stock enclosures, remains of wind breaks or cooking shelters. Others consist of large piles of stones of different sizes and heights and are known as *isisivane*. They are usually near river and mountain crossings. Their purpose and meaning is not fully understood, however, some are thought to represent burial cairns while others may have symbolic value.

### **Stone artefacts**

These are difficult for the layman to identify. However, large accumulations of flaked stones which do not appear to have been distributed naturally should be reported. If the stone tools are associated with bone remains, development should be halted immediately and archaeologists notified.

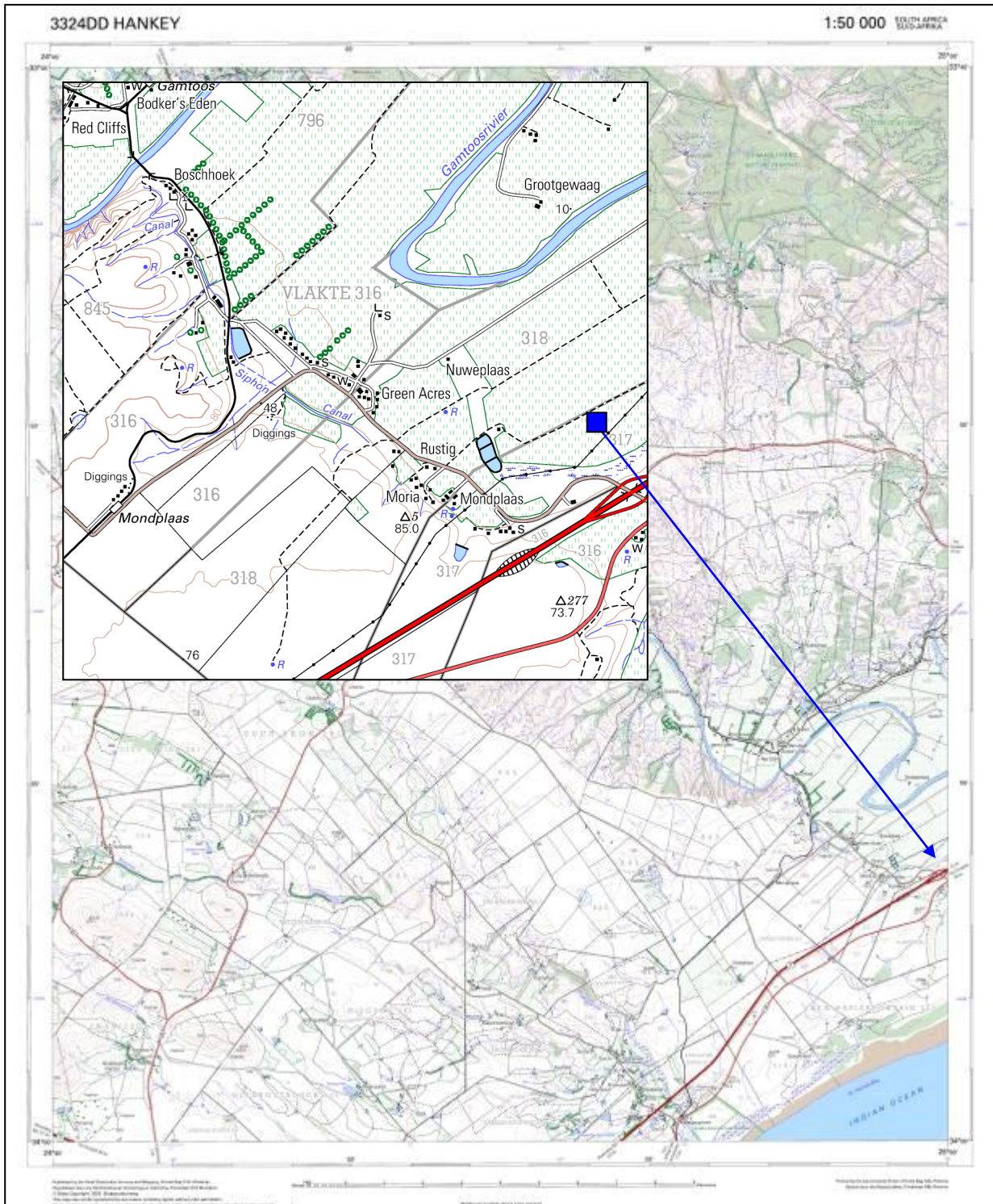
### **Fossil bone**

Fossil bones may be found embedded in geological deposits. Any concentrations of bones, whether fossilized or not, should be reported.

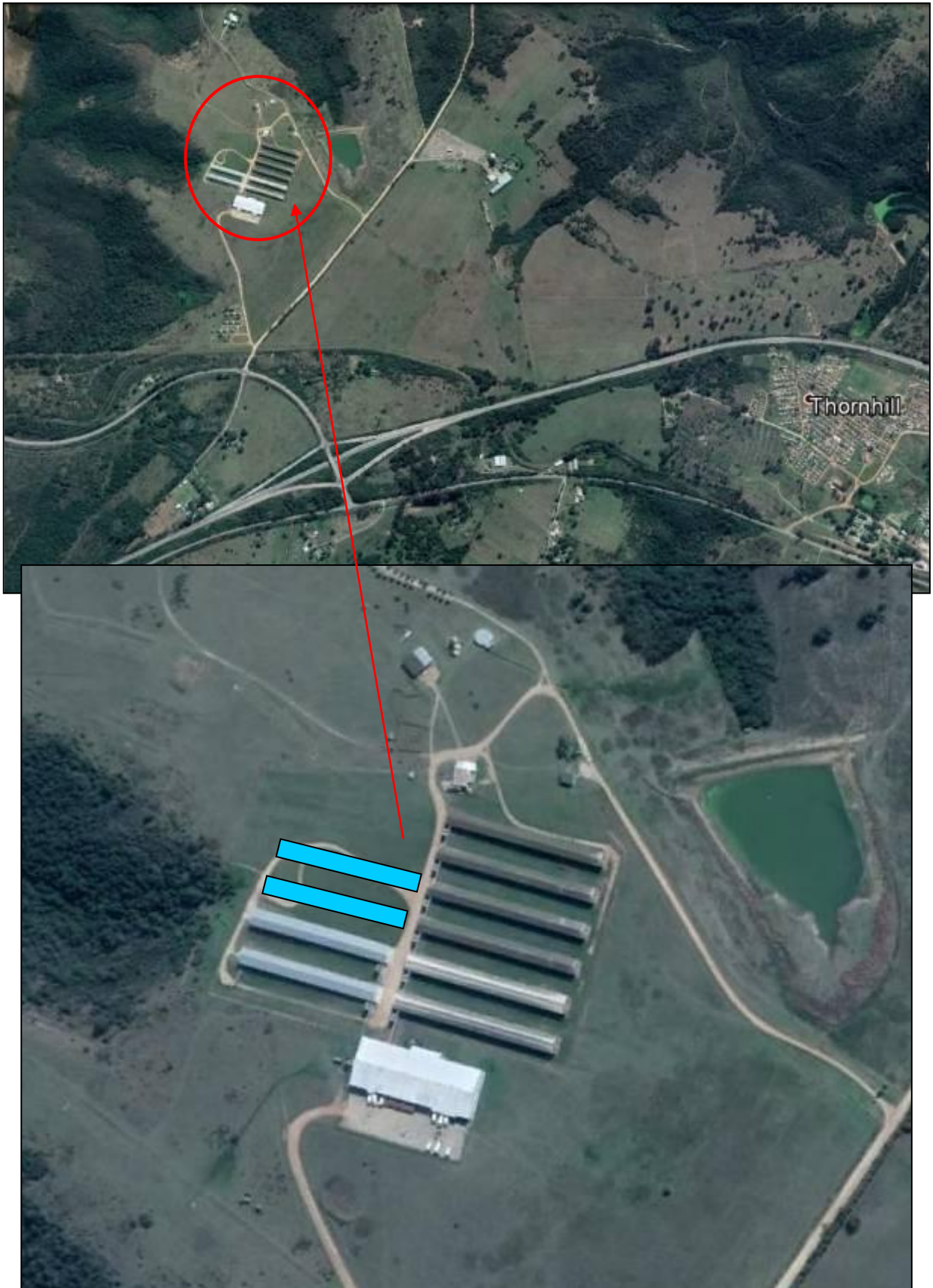
### **Historical artefacts or features**

These are easy to identify and include foundations of buildings or other construction features and items from domestic and military activities.





**Map 1. 1:50 000 Topographic maps indicating the approximate location of the Quantum Foods egg laying facility near Thornhill.**



**Map 2. Aerial images of the location of the Quantum Foods egg laying facility near Thornhill.**