

**HERITAGE SURVEY OF THE ROAD UPGRADES FOR
NONGOMA WARDS 10, 16 & 17**

FOR INHLOSO PLANNING CC

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INTRODUCTION

Umlando cc was contracted by Inhloso Planning cc to undertake a heritage assessment of the proposed road upgrades for Nongoma Wards 10, 16 and 17 (figures 1 -3). The current roads are either small tracks, or existing roads. The roads are to be extended to an average of 4.2 meters: they are currently about 3.8 meters.

The impacts on the area will be:

- Widening of the roads
- Quarries for the roads

The heritage and paleontology of the study areas were assessed and no sites will be directly affected by the upgrades.

KWAZULU-NATAL HERITAGE ACT NO. 4 OF 2008

“33. General protection: Structures.—

- a) 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.
 - b) 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.
- 2) The Council may, by notice in the *Gazette*, exempt—
- (a) a defined geographical area; or
 - b) 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.

- 3) A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

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

- (a) the grave of a victim of conflict;
- (b) a cemetery made up of such graves; or
- (c) 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.

35. General protection: Traditional burial places.—

- a) No grave—
- b) not otherwise protected by this Act; and
- c) 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.

(1) The Council may only issue written approval once the Council is satisfied that—

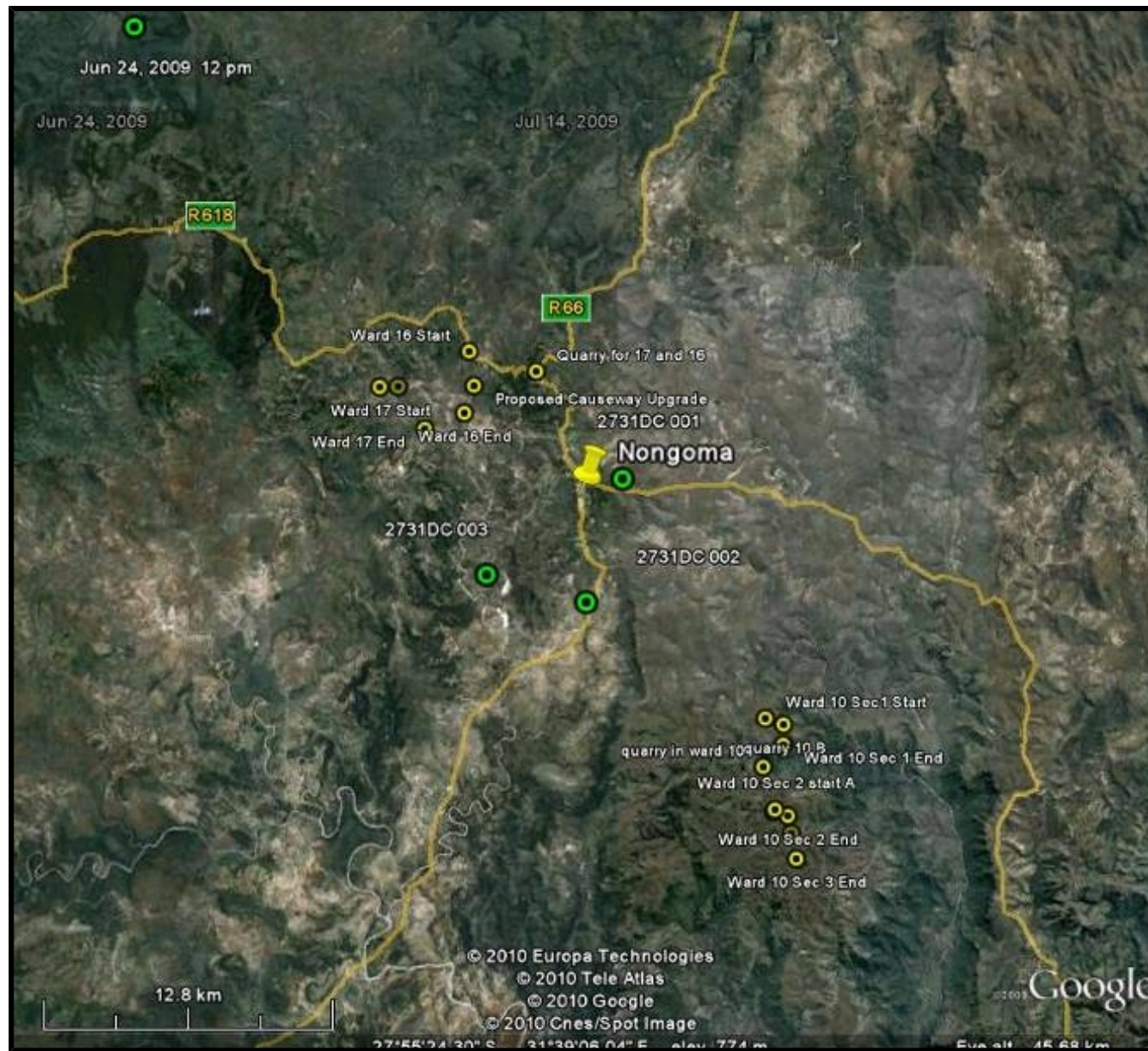
- (a) the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- (b) the applicant and the relevant communities or individuals have reached agreement regarding the grave.

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

- a) 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.

- (1) 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.
- (2) 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.
- (3) 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.
- (4) 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.
- (5) 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.” (KZN Heritage Act of 2008)

FIG. 1 GENERAL LOCATION OF THE PROPOSED NONGOMA ROAD UPGRADES¹



¹ Yellow circles indicate quarries and start/end of the roads

FIG. 2: LOCATION OF THE ROADS FOR WARD 16 AND 17

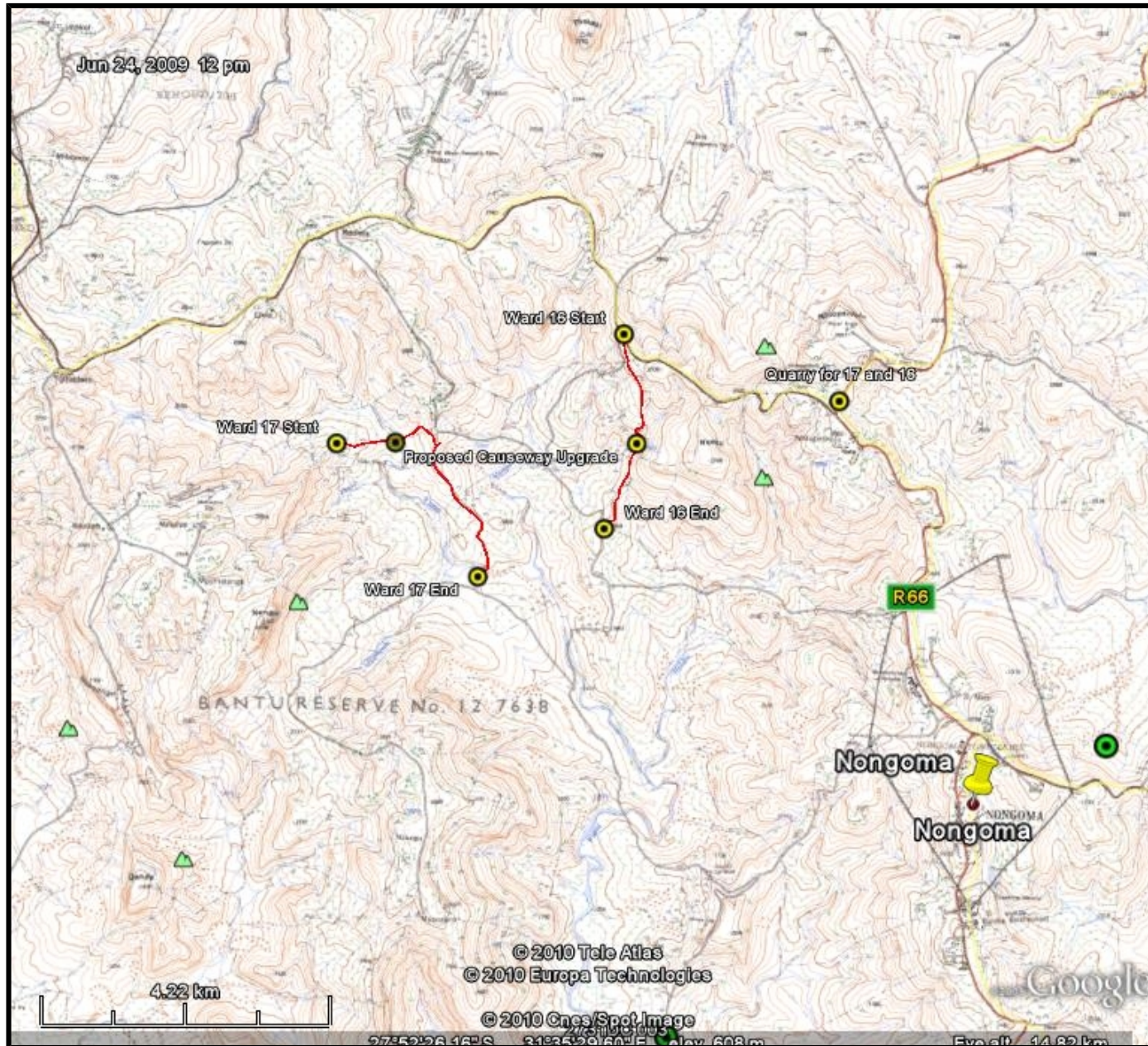
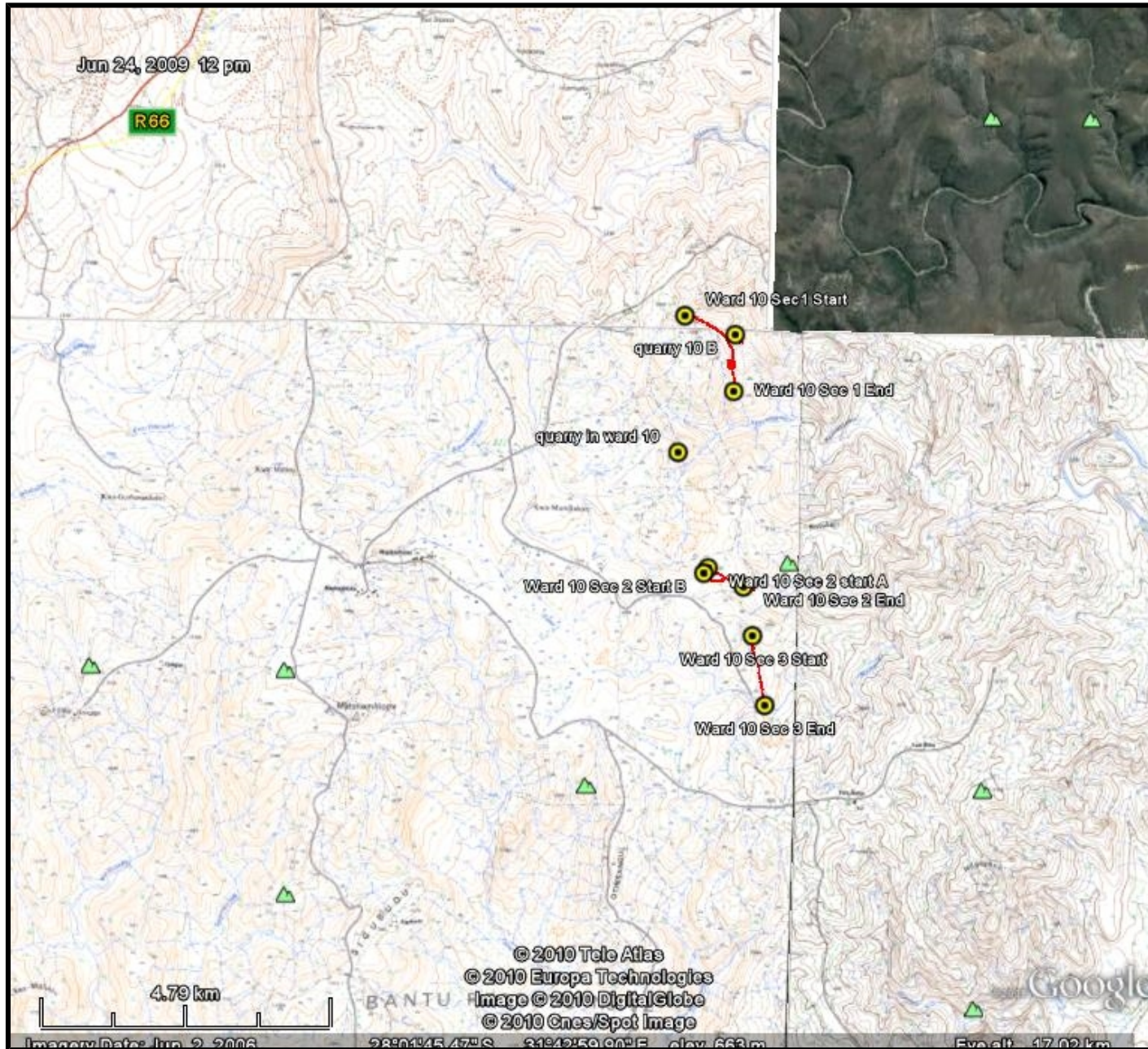


FIG. 3: LOCATION OF THE ROADS FOR WARD 10



METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the databases. These databases contain most of the known heritage sites in KwaZulu-Natal, and known memorials and other protected sites, battlefields and cemeteries in southern Africa. We also consult with an historical architect, palaeontologist, and an historian where necessary. We also consult with the 1st edition 1:50 000 topographical maps (1940s – 1960s) and occasionally the 1937 aerial photographs. These images are used to determine if the landscape was occupied in the recent past. 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

Five heritage sites were observed during the survey. They range from high to low significance.

NON01

NON01 is located along the Ward 16 road. It consists of five human graves that are ~5m from the road (fig. 4). Some of these graves probably predate 1965 as the settlement exists on the 1966 1:50 000 map. Some of the other graves may be more recent.

Significance: Human graves are of high significance.

Mitigation: The graves do not fall under the KZN Heritage Act, and are governed by municipal by-laws. The Act would stipulate at least 15m clearance for human graves. I do suggest that the road is widened on the opposite side of the graves. I also suggest that the graves are properly fenced off and the living descendants are informed of the road upgrade prior to construction activity. The graves should not be affected in any manner.

FIG. 4: GRAVES AT NON01



NON02

NON02 may be a human grave in the corner of the property: I observed a mound within the dense vegetation. As with NON01, this (possible) grave is on the road verge. There is a settlement in this area on the 1966 1:50 000 map.

Significance: If this is a human grave then it is of high significance.

Mitigation: The living descendents should be approached to determine if this is a grave or not. If it is a human grave then it does not fall under the KZN Heritage Act and is governed by municipal by-laws. The Act would stipulate at least 15m clearance for human graves. I do suggest that the road is widened on the opposite side of the graves. The grave is currently fenced off. The graves should not be affected in any manner.

NON03

NON03 is a Shembe circle ~25m from the road. It will not be affected by the road upgrade

Significance: The site is of high significance due to its spiritual nature.

Mitigation: The site will not be affected, and thus no mitigation is required.

FIG. 4: SHEMBE CIRCLE AT NON02



NON04

NON04 is located along the Ward 16 road. It consists of a large Coral tree (*Erythrina spp.*) and a circle of stones at the base (fig. 5). Coral trees are often associated with human graves (see NON01), and this site may be a very old grave. The tree is planted above the grave and is used for the ancestral spirits. The possible grave, and tree, is located ~10m from the road and will thus not be affected.

NON02 should serve as a general rule of thumb for this area: If there is a large/old coral tree, then they should not be affected in any manner as they probably have human remains underneath.

Significance: The site is of high significance if it is a human grave.

Mitigation: The site will not be affected by the road.

FIG. 5: ERYTHRINA SPP. TREE AT NON04



NON05

NON05 is located along the entire hill. It consists of a wide scatter of stone tools. The tools are in a secondary context and typical of the area. That is, they are standard stone tools dating to the middle Stone Age and the Late Stone Age.

Significance: The site is of low significance

Mitigation: No further mitigation is required.

FIG. 6: LOCATION OF NON05 & EXAMPLES OF THE STONE TOOLS



NON06

NON06 is a grave located ~5m from the current track. The grave is unlikely to be affected by the road.

Significance: Human graves are of high significance.

Mitigation: The graves do not fall under the KZN heritage Act due to their recent age, and are thus governed by municipal by-laws. The Act would stipulate at least 15m clearance for human graves. I do suggest that the road is widened on the opposite side of the graves. I also suggest that the graves are properly fenced off and the living descendents are informed of the road upgrade prior to construction activity. The graves should not be affected in any manner.

FIG. 7: LOCATION OF GRAVE AT NON06



MANAGEMENT PLAN

Only one heritage site was observed that would be directly related to the KZN Heritage Act: NON05. This site is a scatter of stone tools occurring over the entire hill. Since these types of tools are very common, and are in a secondary context, they require no further mitigation.

The human graves are unlikely to be directly affected by the road. The living descendents should be informed of the road upgrade, and consulted regarding their ancestral graves. The upgrade must ensure that they do not affect the graves in any manner.

Table 1 gives the locations of the various sites.

Site Name	South	East ²
NON01	27° 52' 12.67"	31° 35' 42.74"
NON02	27° 52' 10.24"	31° 35' 44.56"
NON03	28° 0' 0.76"	31° 44' 16.57"
NON04	27° 51' 21.59"	31° 35' 55.25"
NON05	27° 52' 2.22"	31° 34' 14.04"
NON06	28° 3' 7.87"	31° 44' 44.43"

CONCLUSION

The heritage survey of the Nongoma Wards 10, 16 and 17 road upgrades was undertaken in May 2010. Several sites were observed, however most would not be directly affected by the road upgrade. The upgrade will only be ~0.5m per side of the existing roads/tracks and will thus have a very low impact. The palaeontology of the area will not be affected.

² WGS84

APPENDIX A
PALAEONTOLOGICAL REPORT



Clarens Dinosaur Hunting Expeditions CC

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19 May 2010

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Gavin

PALAEONTOLOGY POTENTIAL – NONGOMA PROJECT

Introduction

Dr Gideon Groenewald was requested to give an indication of possible palaeontological material associated with the Nongoma Road project and the quarries needed to provide gravel material.

Geology

The sites identified for quarry material falls within an area underlain by sedimentary rocks of the Ecca Group, most probably the Vryheid Formation, with prominent outcrops of dolerite.

Palaeontology

The Vryheid Formation is well known for the numerous coal beds that occur in the formation. If excavation is into this formation – the developer must record the presence of any fossilised plant material and inform the Environmental Control Officer (ECO) of the company about the presence of these fossils. Dr Groenewald of Clarens Dinosaur Hunting Expeditions CC will be prepared to discuss the training of an official of the appointed construction company to record these finds professionally.

If the quarries are developed in dolerite outcrop areas there will be no fossils.
Your time is highly appreciated.

GIDEON GROENEWALD (Pr Sci Nat Earth Scientist)

Geologist/Palaeontologist