

**HERITAGE SURVEY OF THE PROPOSED P435 ROAD
UPGRADE, NDUMU, NORTHERN KWAZULU-NATAL
FOR AFZELIA ENVIRONMENTAL CONSULTANTS**

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**By Gavin Anderson
Umlando: Archaeological Tourism and Resource
Management
PO Box 102532, Meerensee, 3901
Phone/fax: 035-7531785 Fax: 0865445631
Cell: 0836585362**



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INTRODUCTION

Umlando cc was contracted by AFZALEA Environmental Consultants to undertake a heritage impact assessment of the proposed upgrade of the P435, near Ndumu, northern KwaZulu Natal (fig. 1). The general area is known to have archaeological and palaeontological sites and a heritage impact assessment was required.

The road upgrade is for approximately 17km long and occurs along an existing gravel road. The general area along the route has been severely impacted by previous roadworks, pipelines, anti-erosion gullies, erosion and general development. The direct area is thus already affected by previous development resulting in a poor chance of archaeological site integrity.

The impacts on the area will be:

- A ~3m widening of the total width of the road

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, known memorials and other protected sites, battlefields and cemeteries. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The initial archaeological survey (i.e. fieldwork) consists of a foot survey where the selected area was covered. The survey results will define the significance of each recorded site, as well as a management plan. The main problem with the survey was the poor archaeological visibility.

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 indicated that there were three previously recorded sites within 500m of the current road. The information is supplied by the Natal Museum Archaeology Department. I use this study to indicate the potential for archaeological sites alongside the road.

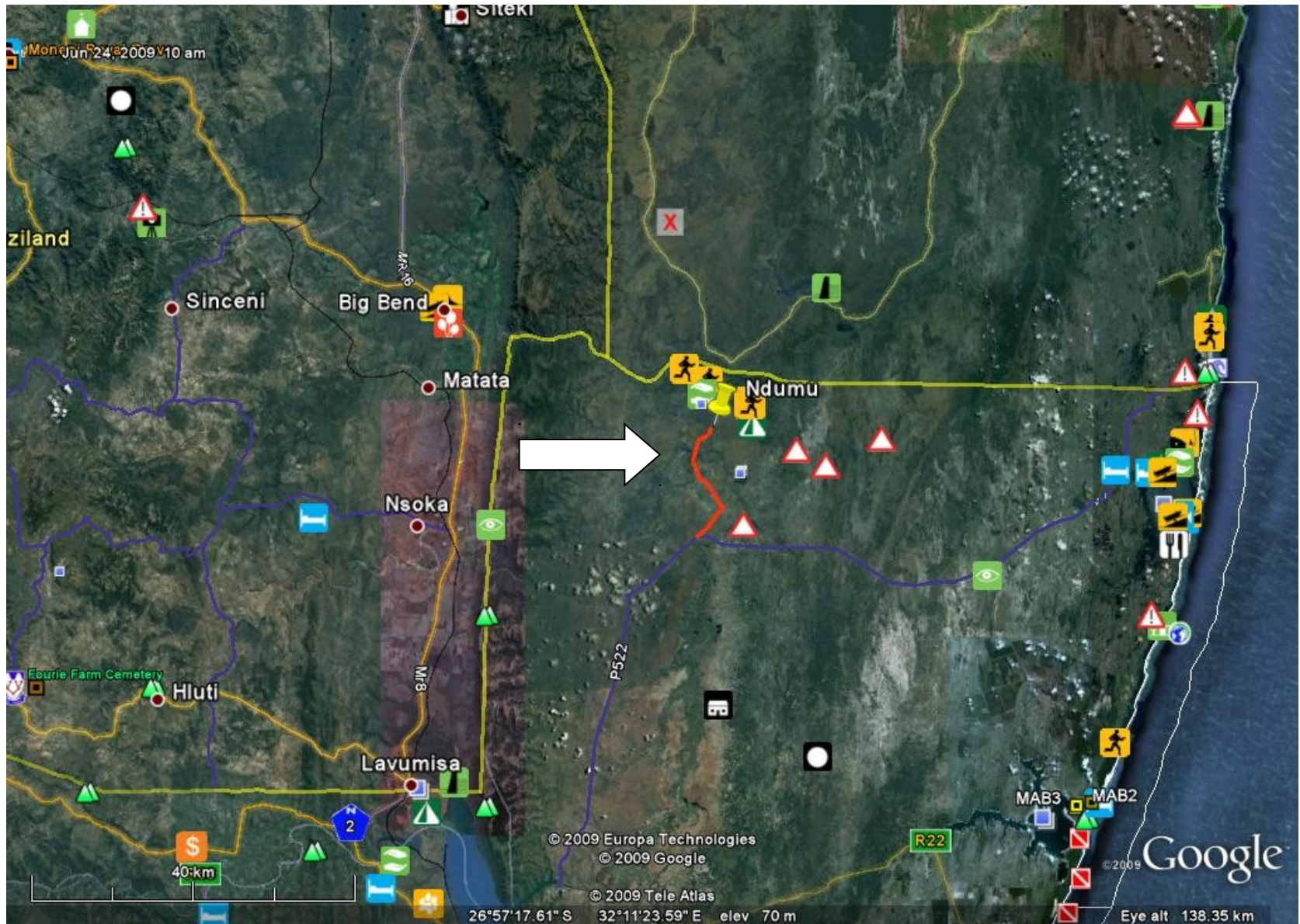
2632CD010

This site is located near the Ndumu police station. The site consists of several Middle Stone Age (MSA) flakes on the surface.

Significance: The site is in a secondary context.

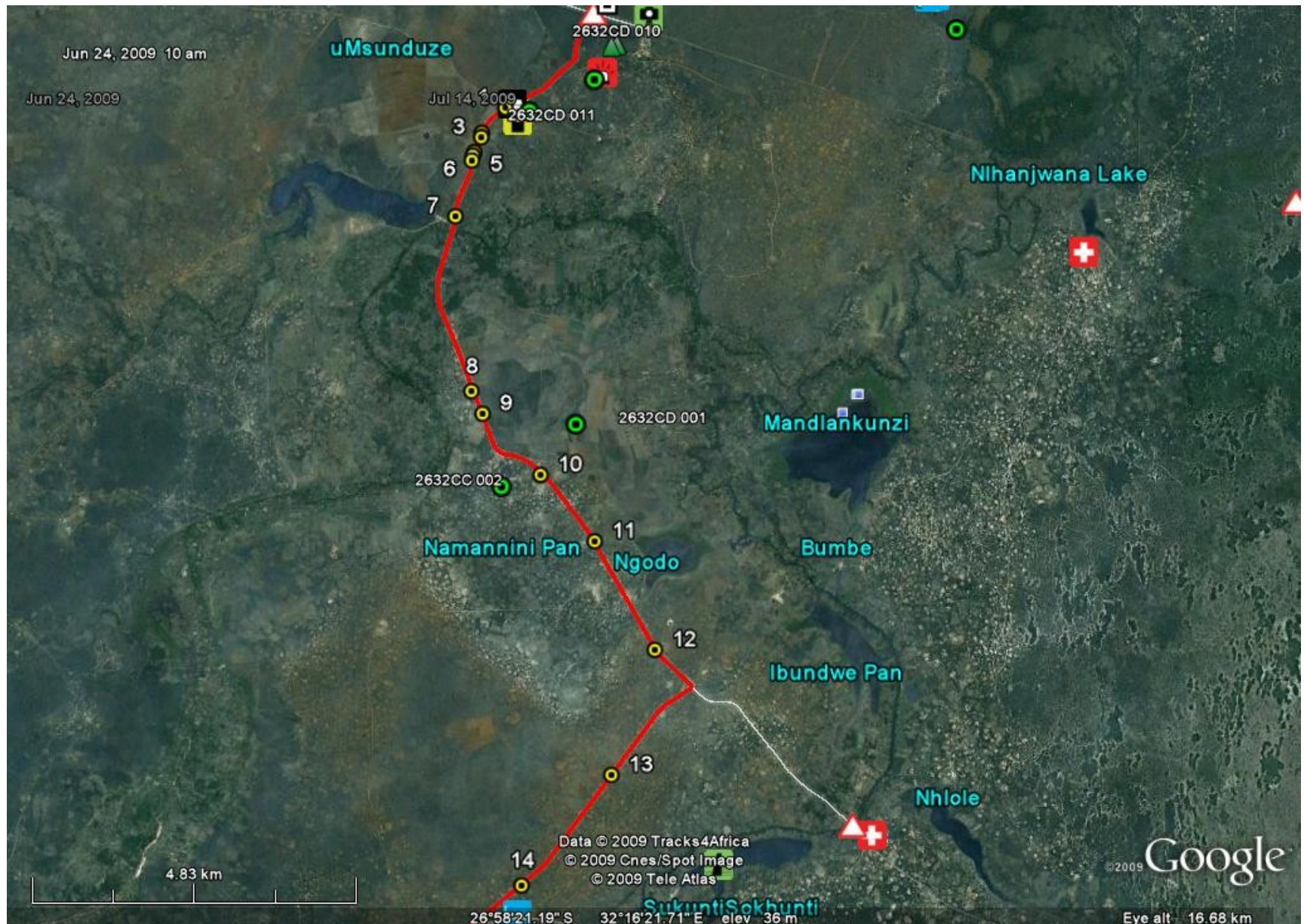
Mitigation: Not affected by the road

FIG. 1: GENERAL LOCATION OF THE PROPOSED BORROW PITS¹



¹ Road upgrade in red line

FIG. 2: LOCATION OF RECORDED SITES AND ISOLATED ARTEFACTS²



² Yellow circles = individual artefacts; green circles are recorded sites

2632CD011

This site is located near the Ndumu police station. The site consists of several Middle Stone Age (MSA) flakes on the surface.

Significance: The site is in a secondary context.

Mitigation: Not affected by the road

2632CC 002

This site contains Late Stone Age (LSA) stone tools located in the riverbed. They are in a secondary context.

Significance: Low

Mitigation: Not affected by the road

SURVEY RESULTS

No archaeological sites were recorded along the road. I did however note 14 areas where there were 1 – 7 individual artefacts. These ranged from Early Stone Age, MSA and LSA stone tools. All of these tools were in a secondary context and have little value.

The number of stone tools in each area is too small to label as a site. I define a Stone Age site (with only stools) as needing 10 or more stone tools. All of these tools are in a secondary context and would probably extend from the road for several kilometres as isolated artefacts. That is, the general area is littered with these artefacts but they are rarely enough in close proximity to call a site. The occurrence of the various servitudes (road clearance, water pipelines, etc) has also damaged any integrity the affected area may have had.

Significance: All of the tools are of low significance.

Mitigation: no mitigation is required.

MANAGEMENT PLAN

All of the artefacts are of low significance and in secondary context. They thus have very little research value, nor any display value – they are average stone tools with no special features. The road upgrade will not be damaging any sites, as the artefacts are too ephemeral to call a site. No permit would thus be required from Amafa KZN.

I did not observe any graves, historical buildings or palaeontological formations along the route.

CONCLUSION

Umlando undertook a heritage survey of the proposed P435 road upgrade. While a few sites have been recorded within 500m of the line, only isolated artefacts were observed along the route. These tools are of low significance and have little research value.

No further mitigation is required relating to the archaeological artefacts.