HERITAGE SURVEY OF THE PROPOSED N2 BALLITO INTERCHANGE UPGRADE

FOR AFZELIA ENVIRONMENTAL CONSULTANTS CC

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INTRODUCTION

Umlando cc was contracted by AFZELIA Environmental Consultants to undertake a heritage assessment of the proposed existing n2 flood protection proposed flood protection of the N2 highway at the Riverhorse Valley Industrial Park, Ethekwini Metropolitan Municipality. This is to ensure that if flooding does occur, then the N2 will not be closed to traffic.

"The proposed project involves the upgrade and improvement of the Ballito Interchange on National Route 2, Section 27, KwaDukuza Local Municipality, located within Ilembe District Municipality, KwaZulu- Natal. The proposed interchange upgrade comprises the following principle elements in this EIA application:

1. Widening of southbound exit ramp by approximately 4m
2. Widening of the MR 445 westbound and eastbound approach to the interchange to two lanes
3. Provision of a new, wider six lane interchange bridge with pedestrian walkways over the N2
4. Re-positioning the ramp and MR 445 Intersections
5. A new east to north parclo ramp
6. A new west to south parclo ramp
7. Provision of pedestrian walkways and public transport embayments
8. Signalise the ramp intersections on the east and west sides of the bridge
9. Remarking the painted lines of all approaches to the signalised intersections
10. Relocation of the existing 250mm diameter water main to a new position." (Afzelia N2 BID document March 2010).

The three areas of concern are illustrated in figure 1. Figure 2 illustrates this from an aerial photograph.

FIG. 1 GENERAL LOCATION OF THE PROPOSED ROAD UPGRADE

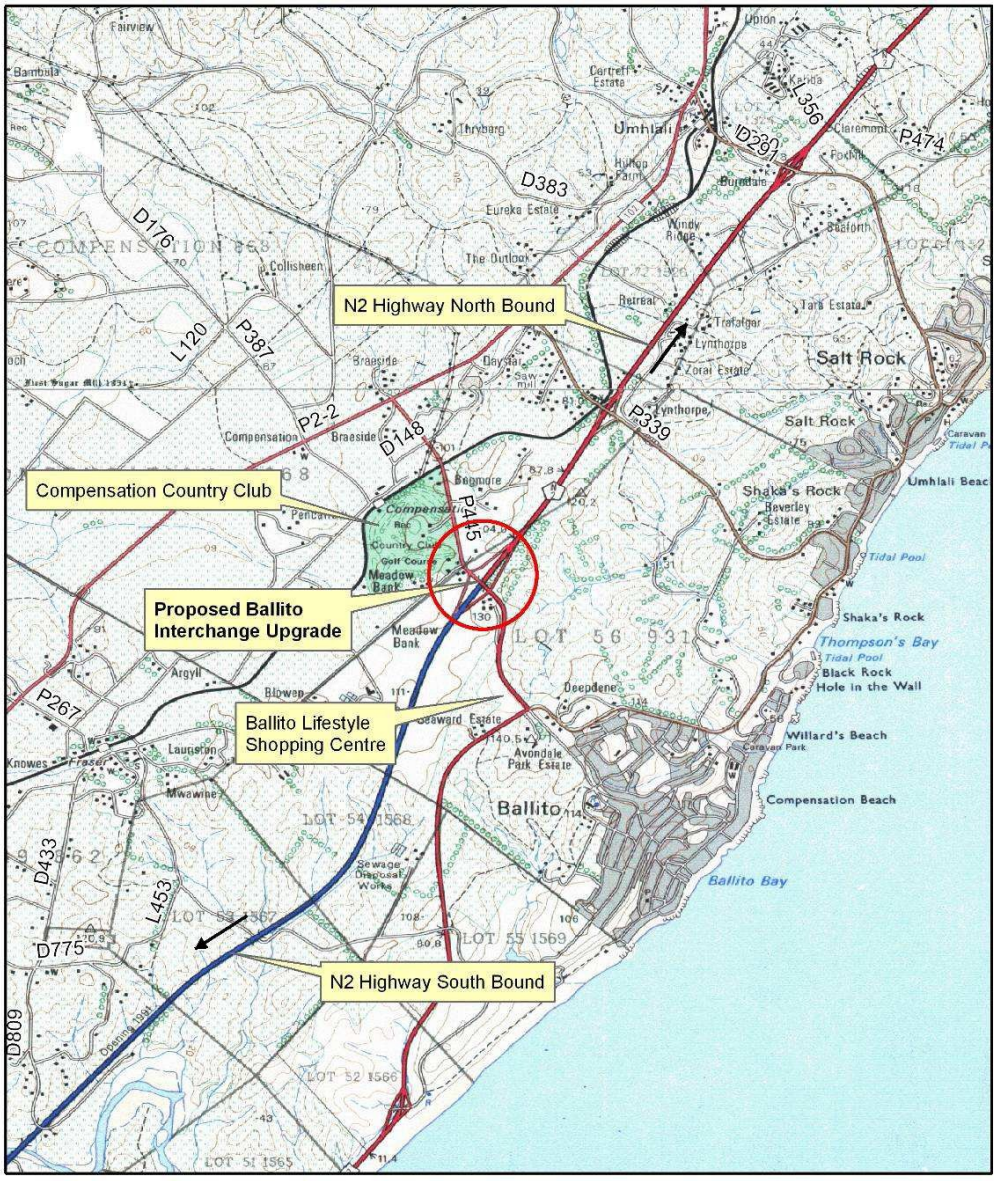
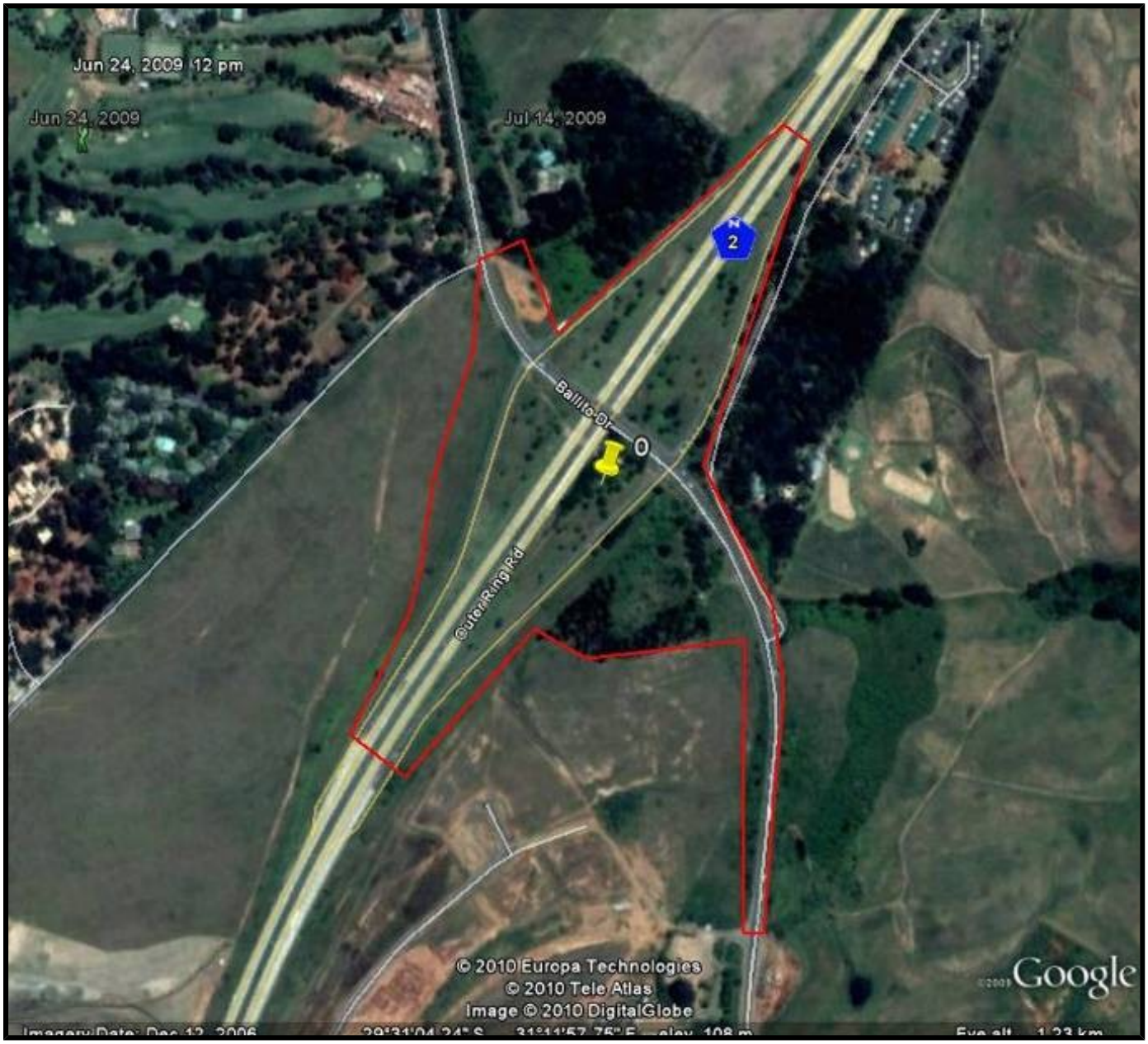


FIG. 2: LAYOUT OF THE PROPOSED ROAD UPGRADE[1]



[1] Yellow triangle indicates the archaeological site

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.

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

The database search indicated that archaeological sites exist in the general area. Tim Maggs, Gavin Whitelaw and I (in chronological order) since the early 1980s, have extensively surveyed this area. The sites that are located in the area date to the Early and Late Iron Age.

One archaeological site was observed in the southeast area of the proposed development. The site consists of a scatter of adiagnostic sherds at the top of the hill. The vegetation was very dense at the time of the survey, and thus visibility was poor (fig. 3). More artefacts would probably occur when the vegetation is removed.

Significance: The site cannot be assessed at the moment.

Mitigation: The site needs to be re-assessed after the vegetation has been cleared and before construction begins.

FIG. 3: STUDY AREA

MANAGEMENT PLAN

The archaeological site needs to be properly assessed. This can only occur after the vegetation has been adequately cleared. This will allow for an estimate of the extent, age and significance of the site to be made. If the material dates to the Late Iron Age, then there is a possibility of human remains occurring on the site. The assessment will need to occur before construction activity begins. On-site supervision during earth moving and/or construction activity may be required.

CONCLUSION

The heritage survey of the proposed N2-Ballito interchange was undertaken in May 2010. One archaeological site was noted; however, it could not be assessed due to the dense vegetation. The site will need to be reassessed after vegetation clearance has occurred.

APPENDIX A

SITE RECORD FORM

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

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SITE CATEGORY: (X where applicable)
Stone Age:
Early Iron Age:?x
Late Iron Age ?
Historical Period:

Recorder's Site No.: BAL01
GPS reading: 29°31'5.19"S 31°12'0.70"E

DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.
From Ballito Lifestyle Centre drive towards the N2 Site occurs on the left hand side on the hill by the Durban turnoff

SITE DESCRIPTION:

Type of Site: Open
Merits conservation: unsure need to re-assess
Threats: Yes
What threats: road construction

RECORDING:
Graphic record: Yes
Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson
Address: PO Box 102532, Meerensee, 3901
Date: May 2010

Description of site and artefactual content.

Site consists of a scatter of pottery observed in various cleared areas