

**ARCHAEOLOGICAL SURVEY OF THE PROPOSED OKUKU-
HLABISA 88KV EXTENSION AND SUBSTATION**

For: EARTH CONSULTING CC

Date: 22 January 2009

By Gavin Anderson & Louise Anderson

Umlando: Archaeological Tourism and Resource Management

PO Box 102532, Meerensee, 3901



INTRODUCTION 3

METHOD 3

 FIGURE 1: LOCALITY MAP OF THE LINE 5

RESULTS 7

 OKU1 7

 OKU2 8

 TABLE 1: SUMMARY OF HERITAGE SITES 8

 FIGURE 2: LOCATION OF OKU2, OKU3 AND OKU4 9

 FIGURE 3: LOCATION OF OKU5 10

 OKU3 11

 OKU4 11

 OKU5 11

 GENERAL COMMENTS 12

CONCLUSIONS 12

INTRODUCTION

Umlando was contracted by Earth Consulting cc to undertake a heritage survey of the proposed Okuku-Hlabisa 88kv line and switching station, near Hlabisa, KwaZulu-Natal. The survey located five sensitive areas that are within, or near, the corridor of the line. Most of these sites can be mitigated in some form and the line may require minor readjustments. The main types of heritage sites along the corridor are those of recent human graves. These can be mitigated by placing towers in appropriate areas. Modern graves do not fall under the heritage management unless specified. We do, however, note their occurrences.

Fig. 1 is the locality map of the line. The line is mostly just north of the Umfolozi-Hluhluwe Game Reserve. The area ranges from being heavily eroded to dense vegetation.

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. We consulted the database for previously recorded sites in the area. We were not provided with an orthophoto or aerial photograph. We were provided with the map in Figure 1, and the reference co-ordinates of the various poles along the preferred route. We then plotted those co-ordinates on a Google Earth map that was then studied for possible sites, such as stone walling. The survey consisted of following the co-ordinates from point to point.

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, especially pottery. Sites of medium significance have diagnostic artefacts and may 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. 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. We attempt to

recover as many artefacts from these sites by means of systematic sampling, as opposed to sampling diagnostic artefacts only.

Defining significance

Archaeological 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:

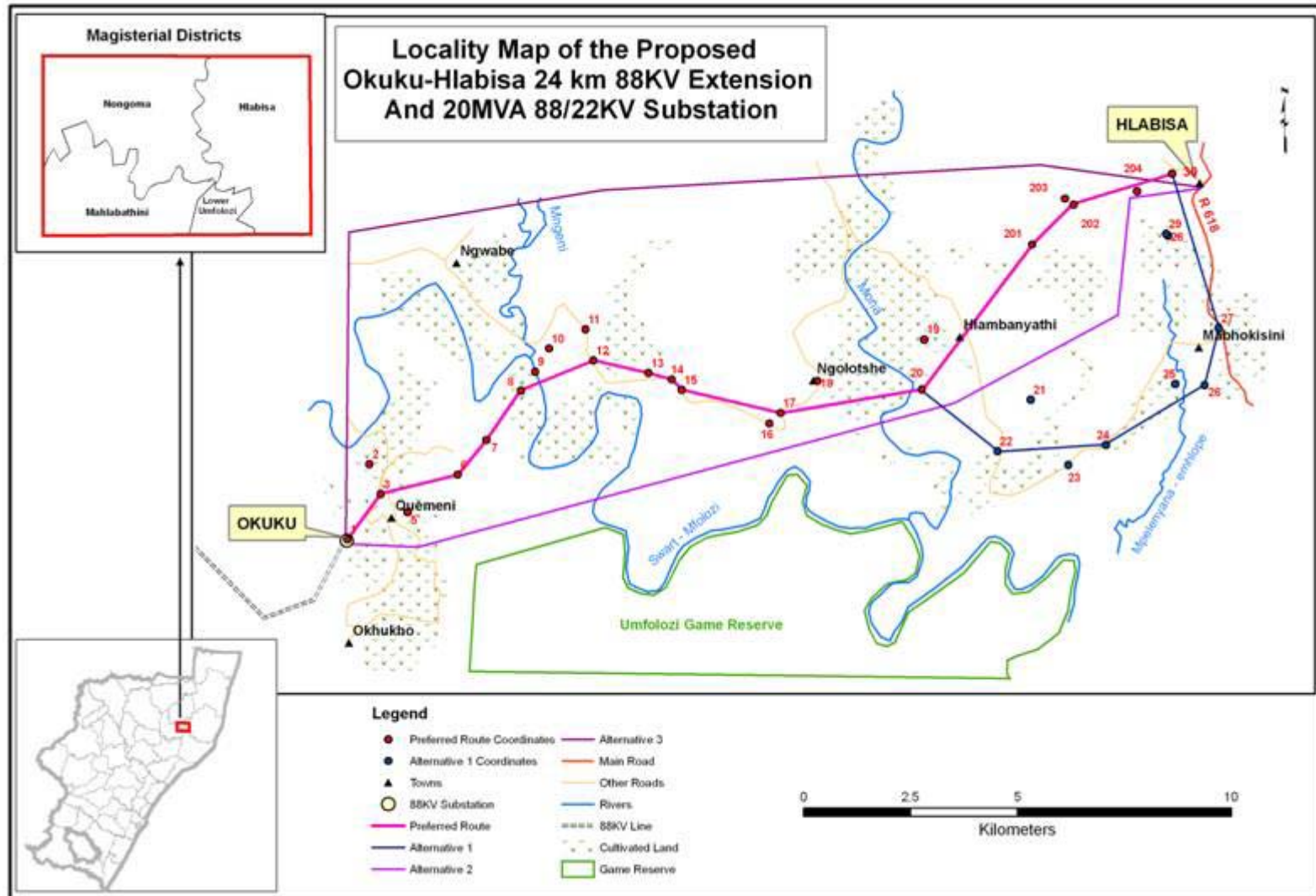
1. State of preservation of:

- 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 and intra-site settlement patterns

FIGURE 1: LOCALITY MAP OF THE LINE



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.

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. A Phase 2 may also include observing construction activity at sensitive sites.

A Phase 2 may yield enough material so that further excavations are not required. However, if significant material occurs in the archaeological deposit then it is likely that a Phase 3 will be required.

RESULTS

The details of each site are given in Appendix A, while Table 1 summarises the results.

The impact of developments on human graves is always a complex issue. We prefer that the graves are not affected; however, at times this cannot be averted. In the case of this transmission line route, the pylons can be moved so as not to affect human graves. We also place a boundary of a 10m radius around any grave. This boundary becomes a “no-go” area for development. This is our standard mitigation for all graves and should be assumed below.

OKU1

OKU1 consists of two old *Euphorbia ingens* trees. These were one of the trees traditionally used to demarcate human graves. This does not mean that all demarcate graves, but in certain contexts they may. We thus make an assumption that if there is an old *Euphorbia ingens* in a clear settlement, then there is a good chance that they may be demarcating a grave. This is the case for OKU1.

Significance: The site is of high significance until proven that there are no human remains.

Mitigation: The line may span over the potential graves, however, the pylons must not affect the graves.

OKU2

OKU2 covers the entire hill (see figure 2). There is some stone walling and at least one human grave. The various walling is that of an older settlement; however we are not sure of the exact age.

Significance: The walling is of medium significance, and the human grave(s) is of high significance.

Mitigation: The type of mitigation required for the walling, depends on where the pylons are placed. If the pylons affect walling then that will need to be mapped. We suggest that the area is revisited once the exact location of the pylon(s) is known.

TABLE 1: SUMMARY OF HERITAGE SITES

Site Name	Estimated Age	Contents	Significance	Requires Mitigation	Type of mitigation
OKU1	Historical	Possible human remains	High	Yes	Re-alignment
OKU2	Historical	Graves and walling	High	Yes	Re-alignment, mapping
OKU3	Historical/Recent	Recent graves	High	No	Not affected
OKU4	Middle & Late Stone Age, Historical Period	Stone tools, pottery and slag	Low	No	None
OKU5	Middle & Late Stone Age, Historical Period	Stone tools and pottery	Low	No	None

FIGURE 2: LOCATION OF OKU2, OKU3 AND OKU4

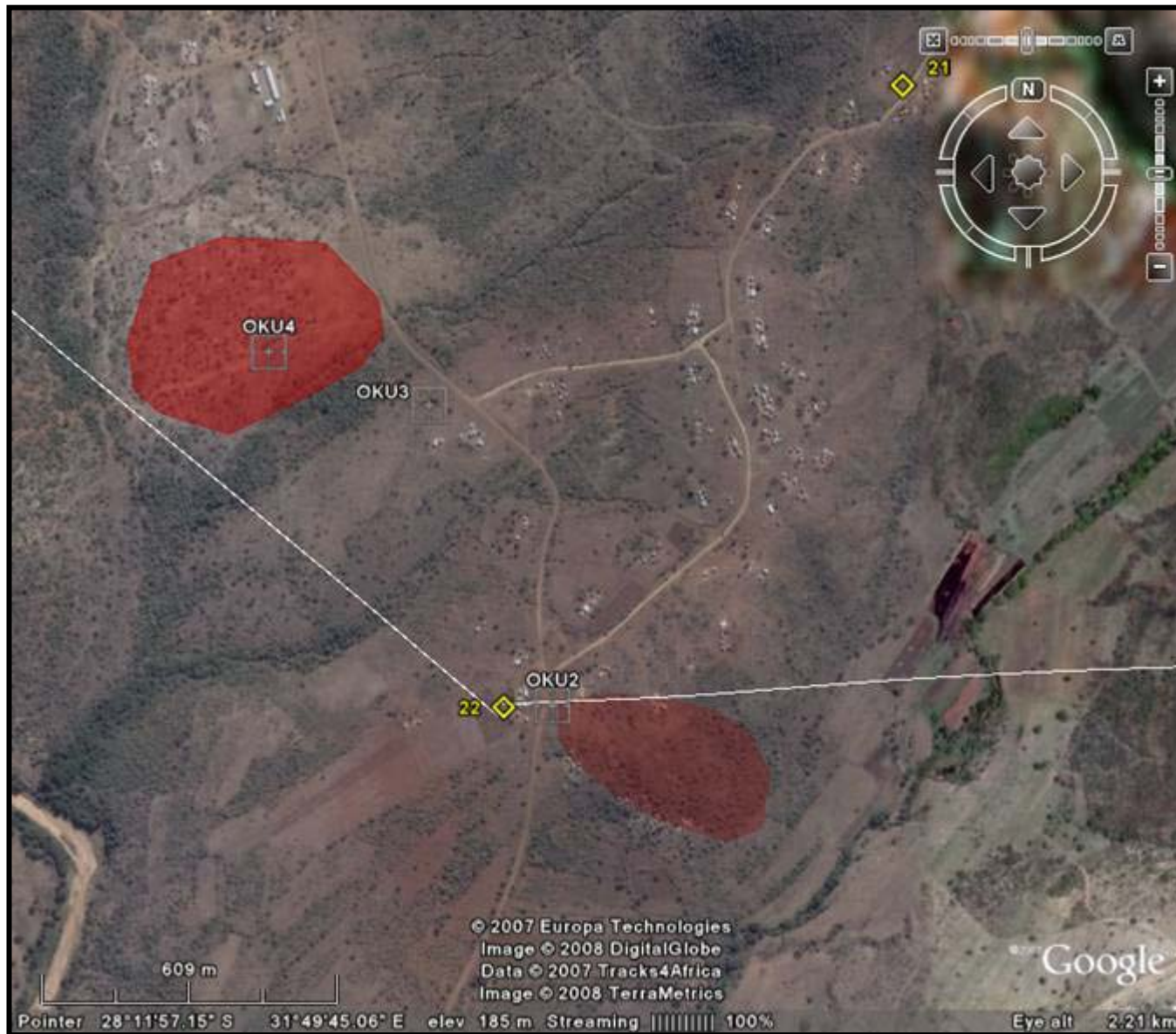


FIGURE 3: LOCATION OF OKU5



OKU3

OKU3 is in the vicinity of the route; however it will not be directly affected. OKU3 consists of a several graves, of which some are recent.

Significance: The site is of high significance.

Mitigation: The site may not be affected.

OKU4

OKU4 occurs along the route (see figure 4). The site is located an area that varies between erosion and dense vegetation. OKU4 consists of a general scatter of Late Stone Age (LSA) stone tools, adiagnostic pottery and one piece of slag. The scatter extends over much of the area.

Significance: The site is of low significance. The artefacts are probably in a secondary context because of the erosion.

Mitigation: We suggest that the area is revisited once the exact location of the pylon(s) is known and that some artefacts are sampled. Sampling occurs in the area of the pylon(s).

OKU5

OKU5 is similar to OKU4, in that it is a general scatter of artefacts in an area that has soil erosion in places (see figure 3). The artefacts may be in a secondary context. The artefacts consist of Middle Stone Age (MSA) and LSA stone tools, as well as pottery and grinding stones.

We were expecting to observe Early Iron Age (EIA) pottery, as this is a good location for EIA sites. We did not locate any EIA sherds.

Significance: The site is of low significance. The artefacts are probably in a secondary context because of the erosion.

Mitigation: We suggest that the area is revisited once the exact location of the pylon(s) is known and that some artefacts sampled. Sampling occurs in the area of the pylon(s).

GENERAL COMMENTS

The preferred route goes over several homesteads, mostly from points 17 to 24. We noticed that many homesteads in this area have ancestral graves in their property. This was very noticeable between points 20 and 22. We suggest that the transmission line and its structures are not located near these houses. Apart from the possible impact of electrical lines on living people, Eskom may be requested to appease ancestral spirits who may be affected by the transmission line. While this is a difficult issue to prove, it would be better to avoid potential areas of discontent.

We suggest that the parts of the line are resurveyed once the exact locations of various pylons have been noted. This should be undertaken in one survey. It is difficult to assess the exact impact of pylons when we are dealing with a general corridor. We have noted certain sensitive areas, and these areas should be revisited and mitigated appropriately as a Phase 2.

CONCLUSIONS

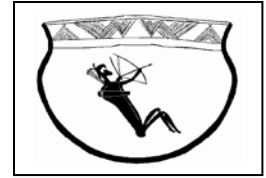
A total of five sites were recorded along the proposed route. These sites consisted of MSA, LSA, and Historical Period artefacts, as well as more recent graves. All of the sites can be mitigated in some manner. We suggested that sites with stone walling are mapped. The route will need to be readjusted where it affects those sites with human graves. We also suggested that the sensitive

areas are revisited once the exact locations of the pylons are known. This will allow us to make site specific management plans as opposed to general comments.

A permit to damage, alter or remove archaeological and historical material is required in terms of the KZN Heritage Act of 1997. Eskom will need to apply for this permit for all areas that will be affected by the transmission line.

APPENDIX A
SITE RECORD FORMS

ARCHAEOLOGICAL SITE RECORD FORM



SITE CATEGORY: (X where applicable)

Stone Age

Early Iron Age:

Late Iron Age

Historical Period: X

Recorder's Site No.: OKU1

Official Name:

Local Name:

Map Sheet:

Map Reference: S28 11' 34.3" E 31 49' 34.3" alt: 320m

GPS reading? yes

DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Take R618 to Hlabisa. About 2-3km south of Hlabisa is Mabhokisini. Take the divisional dirt road west. Site is on top of ridge, just off the road

SITE DESCRIPTION:

Type of Site: Graves

Merits conservation: Yes

Threats: yes

What threats: Possible electricity line

RECORDING:

Details of graphic record:

Recorder/Informant: Name: Umlando, Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State

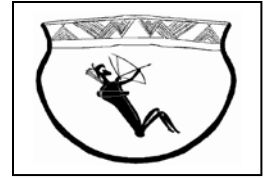
References:

Date: 22 January 2008

DESCRIPTION OF SITE AND ARTEFACTUAL CONTENT.

Many settlements currently used. 2 Old *Euphorbia ingens* amongst them. May be graves.

ARCHAEOLOGICAL SITE RECORD FORM



SITE CATEGORY: (X where applicable)

Stone Age

Early Iron Age:

Late Iron Age

Historical Period: X (recent)

Recorder's Site No.: OKU2

Official Name:

Local Name:

Map Sheet:

Map Reference: S28 12' 09.0" E 31 49' 41.5" (alt: 179m)

GPS reading? yes

DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From OKU1 continue west towards the Black Umfolozi. At T-junction turn right (north).

Site is on RHS at next Y-junction, and covers the hill

SITE DESCRIPTION:

Type of Site: settlement

Merits conservation: Yes

Threats: yes

What threats: Possible electricity Line

RECORDING:

Details of graphic record: None

Recorder/Informant: Name: Umlando, Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State

References:

Date: 22 January 2008

DESCRIPTION OF SITE AND ARTEFACTUAL CONTENT.

Graves and recently abandoned settlement. Stone walling on hill. Other settlements with/out graves on the hill

Entire hill is sensitive

ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age

Early Iron Age:

Late Iron Age

Historical Period: X (or recent)



Recorder's Site No.: OKU3

Official Name:

Local Name:

Map Sheet:

Map Reference: S28 11' 48.2 E" 31 49' 34.3 (alt = 170)

GPS reading? yes

Directions to site: Sketch or description.

From OKU2 take left at Y-junction. At next Y-junction (0.67km) veer left for ~100m.

Site is on left

SITE DESCRIPTION:

Type of Site: open graves/cemetery

Merits conservation: yes

Threats: unlikely

What threats: none

RECORDING:

Details of graphic record: N/A

Recorder/Informant: Name: Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Date: 22 January 2008

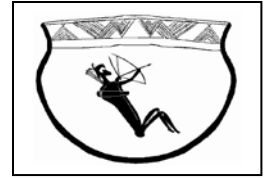
Owner State

References:

Description of site and artefactual content.

“Cemetery” with graves

ARCHAEOLOGICAL SITE RECORD FORM



SITE CATEGORY: (X where applicable)

Stone Age: Middle & Late

Early Iron Age:

Late Iron Age ?

Historical Period: ?

Recorder's Site No.: OKU4

Official Name:

Local Name:

Map Sheet:

Map Reference: S 28 11' 48.2" E31 49' 34.3" (alt:150 – 160m)

GPS reading? yes

DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From OKU3 travel ~200m, where there is a track on left. Follow this track and it runs along middle of site

SITE DESCRIPTION:

Type of Site: Open

Merits conservation: no

Threats: yes

What threats: Possible electricity line

RECORDING:

Details of graphic record:

Recorder/Informant: Name: Umlando, Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State

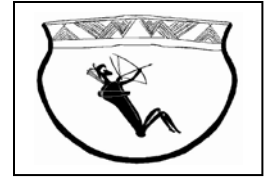
References:

Date:

DESCRIPTION OF SITE AND ARTEFACTUAL CONTENT.

Scatter of MSA, LSA and adiaagnostic pottery, 1x slag. Scatter over the entire hill. Hill is eroded.

ARCHAEOLOGICAL SITE RECORD FORM



SITE CATEGORY: (X where applicable)

Stone Age; Middle and Late

Early Iron Age:

Late Iron Age ?

Historical Period: ?

Recorder's Site No.: OKU5

Official Name:

Local Name:

Map Sheet:

Map Reference: S28 11' 21.7" E31 42' 51.9" (alt: 160 – 200m)

GPS reading? yes

DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From OKU4 travel along the dirt road for ~5km until you reach the bridge. Cross bridge and take left at Y-junction. Take next right at ~4.5km. From here drive ~8km west until the next Y-junction, take the left towards the Black Umfolozi. Note the rather strange (non-applicable) road signs. Cross river and site is on this hill on both sides of road.

SITE DESCRIPTION:

Type of Site: Open

Merits conservation: No

Threats: yes

What threats: Possible electrical line

RECORDING:

Details of graphic record:

Recorder/Informant: Name: Umlando, Gavin and Louise Anderson

Address: PO Box 102532, Meerensee, 3901

Owner State

References:

Date: 22 January 2008

DESCRIPTION OF SITE AND ARTEFACTUAL CONTENT.

Scatter of MSA, LSA and adiaagnostic pottery.

Environmental Consultant: Michelle Simons

Email: dmsimon@mweb.co.za

EIA No.: 12/12/20/1021