HERITAGE SURVEY OF THE PROPOSED MFINIZO TRANSMISSION LINE

FOR COASTAL ENVIRONMENTAL SERVICES

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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 Coastal & Environmental services (CES) to undertake a heritage assessment of the proposed existing Mfinizo Transmission Line (fig. 1 - 2). The transmission line was commissioned by Eskom Holdings (Pty), and is situated in the general area of Lusikisiki, Eastern Cape. The transmission line will be a 132kV line that will start at the proposed Mfinizo substation, and then link to an existing 132kV line near Buhlanyanga. The proposed line is ~13km long.

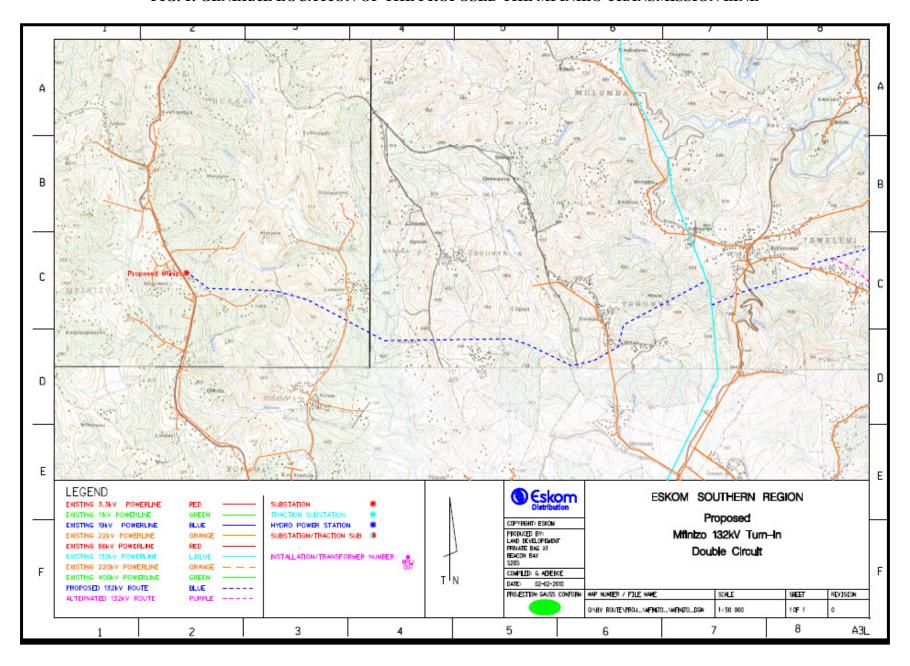
The impacts on the area will be:

- Electricity pylons
- Access roads

The terrain covered by the transmission line is mostly grasslands, flood plains and river valleys. The transmission line passes over several hills, but mostly follows below the skyline. The areas along the transmission are used for pasturage and mealie fields, and have been extensively ploughed.

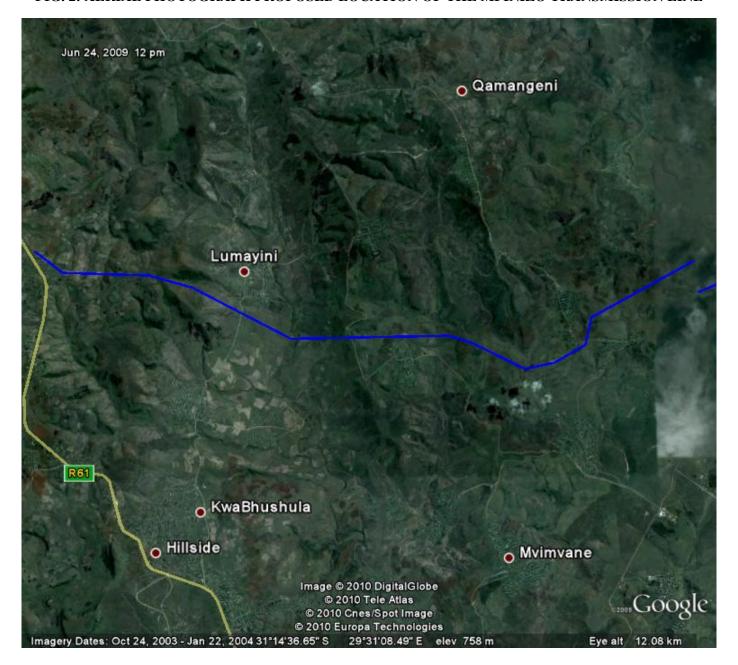
Seven recent heritage sites were observed along the transmission line. The transmission line will possibly directly affect only one heritage area.

FIG. 1: GENERAL LOCATION OF THE PROPOSED THE MFINIZO TRANSMISSION LINE



Mfinizo Transmission Line HIA Undando 14/05/2010

FIG. 2: AERIAL PHOTOGRAPH PROPOSED LOCATION OF THE MFINIZO TRANSMISSION LINE



LEGISLATION PERTAINING TO HERITAGE SITES

The National Heritage Resources Act of 1999 (pp 12-14) protects a variety of heritage resources. This are resources are defined as follows:

- **"3.** (1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- (2) Without limiting the generality of subsection (1), the national estate may include—
 - (a) Places, buildings, structures and equipment of cultural significance;
 - (b) Places to which oral traditions are attached or which are associated with living heritage:
 - (c) Historical settlements and townscapes;
 - (d) Landscapes and natural features of cultural significance;
 - (e) Geological sites of scientific or cultural importance;
 - (f) Archaeological and palaeontological sites;
 - (g) Graves and burial grounds, including—
 - (i) Ancestral graves;
 - (ii) Royal graves and graves of traditional leaders;
 - (iii) Graves of victims of conflict;
 - (iv) Graves of individuals designated by the Minister by notice in the Gazette:
 - (v) Historical graves and cemeteries; and
 - (vi) Other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
 - (h) Sites of significance relating to the history of slavery in South Africa;
 - (i) Movable objects, including—
 - (i) Objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) Objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) Ethnographic art and objects;
 - (iv) Military objects:
 - (v) objects of decorative or fine art:
 - (vi) Objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
- (3)Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—
 - (a) Its importance in the community, or pattern of South Africa's history;
 - (b) Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

- (c) Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa"

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 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

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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

No heritage sites that would have NHRA protection were observed along the transmission line route. Several recent heritage sites were observed and these included graves and buildings (fig. 3).

MFIN01

MFIN01 is located ~100m north of the line. It consists of the foundation remains of several houses, and one whetstone. The people, who lived here, have moved ~50m northwards.

Significance: The site is of low significance

Mitigation: No mitigation is required.

MFIN02

MFIN02 is located halfway down a hill and beside the road. It consists of a terraced area beside a small stream, and a patch of secondary grass normally associated with kraals. There were three stone cairns, of which one was a retaining wall for a small stream. I could not assess the other two cairns as the grass was long and each had a large puff adder amongst the rocks¹! I do not believe these are graves.

Significance: The site is of low significance if the two cairns are not graves.

Mitigation: If the pylons are placed in this area, then the two cairns should be (carefully) reassessed.

¹ It was a health and safety assessment.



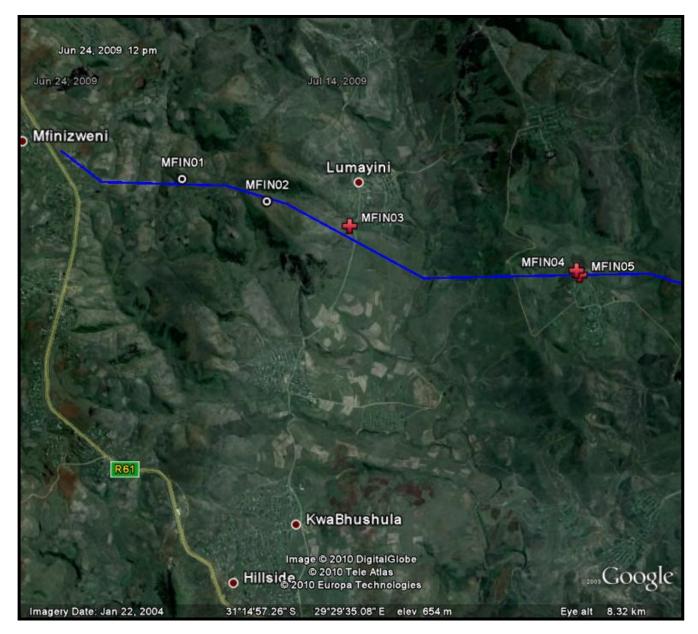


FIG. 4: CEMETERY AT MFIN03²







² Clockwise: Recent graves, 'mud' mound, single small headstone

MFIN03

Near the base of a hill is the Lumayini cemetery (fig. 5). It appears to have been in use for some time, as some graves are weathered. The cemetery is extensive and covers the entire base of the hill (fig. 6). The older graves are difficult to see and are just depressions in the soil (of which some have headstones). The more recent graves have prominent structures.

Significance: Human graves and cemeteries are of high significance.

Mitigation: The line will need to be moved northwards towards the road indicated in figure 6, or southwards of the cemetery. I suggest that the community is actively involved in the section of the line so that older graves are not accidently disturbed.

MFIN04

MFIN04 consists of a single grave in front of an abandoned homestead. The line occurs ~80m to the north of the grave. The access road may pass the grave.

Significance: The human grave is of high significance.

Mitigation: If the access road passes near the grave, it must not affect it in any manner.

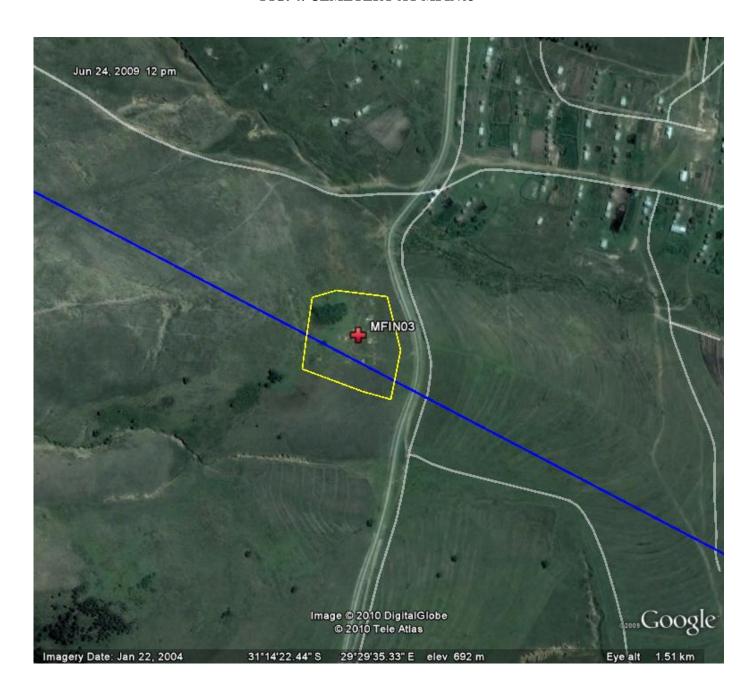
MFIN05

MFIN05 is located near MFIN04 and is a possible recent burial. It occurs in front of an abandoned corrugated house.

Significance: The human grave is of high significance.

Mitigation: If the access road passes near the grave, it must not affect it in any manner. The community has mentioned that there are several graves in the area, and this will be noted in the social impact assessment.

FIG. 4: CEMETERY AT MFIN03³



Mfinizo Transmission Line HIA Umlando 14/05/2010

 $^{^{3}}$ Yellow polygon is approximate extent of the grave; blue line is the transmission line

FIG. 5: HOUSE AND GRAVE AT MFIN04





According to the community, there are several graves in the general area. The line does pass near several homesteads that may have associated human graves, but it will not affect these.

MANAGEMENT PLAN

No management plan is required regarding the heritage sites, as these are not directly covered by the NHRA. The social impact study will ensure that the community identifies recent graves and that they are not disturbed.

CONCLUSION

The Heritage survey of Mfinizo substation and transmission line, near Lusikisiki, was undertaken in April 2010. The line is ~13km long and follows mostly disturbed areas. No heritage sites were observed along the route. Several graves were noted and the transmission line should not affect these. The issue of the community graves will be handled by the social impact study.

APPENDIX A SITE RECORD FORMS

SITE CATEGORY: (X where applicable)

Stone Age: Early Iron Age: Late Iron Age Historical Period: X

Recorder's Site No.: MFIN01

Official Name: N/A Local Name: N/A Map Sheet:

GPS reading: 31°13'58.27"S 29°28'12.04"E



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From Lusikisiki drove north with the R61 towards Mfinizweni. Take 1st right dirt road at Mfinizweni. Follow with GPS

SITE DESCRIPTION:

Type of Site: house remains Merits conservation: no

Threats: no What threats:

RECORDING: Graphic record:

Digital pictures: Tracings: Re-drawings:

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

Date: April 2010

Description of site and artefactual content.

MFIN01 is located ~100m north of the line. It consists of the foundation remains of several houses, and one whetstone. The people, who lived here, have moved ~50m northwards.

SITE CATEGORY: (X where applicable)

Stone Age: Early Iron Age: Late Iron Age Historical Period: X

Recorder's Site No.: MFIN02

Official Name: N/A Local Name: N/A

Map Sheet:

GPS reading: 31°14'7.76"S 29°28'53.81"E



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From Lusikisiki drove north with the R61 towards Mfinizweni. Take 1st right dirt road at Mfinizweni. Follow with GPS

SITE DESCRIPTION:

Type of Site: house and possible grave

Merits conservation:

Threats: Yes

What threats: pylons

RECORDING: Graphic record:

Digital pictures: Tracings: Re-drawings:

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

Date: April 2010

Description of site and artefactual content.

MFIN02 is located halfway down a hill and beside the road. It consists of a terraced area beside a small stream, and a patch of secondary grass normally associated with kraals. There were three stone cairns, of which one was a retaining wall for a small stream. I could not assess the other two cairns as the grass was long and each had a large puff adder amongst the rocks! I do not believe these are graves.

SITE CATEGORY: (X where applicable)

Stone Age: Early Iron Age: Late Iron Age Historical Period: X

Recorder's Site No.: MFIN03

Official Name: N/A Local Name: N/A

Map Sheet:

GPS reading: 31°14'22.26"S 29°29'34.26"E



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From Lusikisiki drove north with the R61 towards Mfinizweni. Take 1st right dirt road at Mfinizweni. Follow with GPS

SITE DESCRIPTION:

Type of Site: cemetery Merits conservation: yes

Threats: Yes

What threats: transmission line and pylons

RECORDING: Graphic record: x

Digital pictures: x Tracings: Re-drawings:

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

Date: April 2010

Description of site and artefactual content.

Near the base of a hill is the Lumayini cemetery. It appears to have been in use for some time, as some graves are weathered. The cemetery is extensive and covers the entire base of the hill. The older graves are difficult to see and are just depressions in the soil (of which some have headstones). The more recent graves have prominent structures.

SITE CATEGORY: (X where applicable)

Stone Age: Early Iron Age: Late Iron Age Historical Period:X

Recorder's Site No.: MFIN04

Official Name: N/A Local Name: N/A

Map Sheet:

GPS reading: 31°14'41.82"S 29°31'26.96"E



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From Lusikisiki drove north with the R61 towards Mfinizweni. Take 1st right dirt road at Mfinizweni. Follow with GPS

SITE DESCRIPTION:

Type of Site: x

Merits conservation: yes

Threats: Yes

What threats: access raods

RECORDING: Graphic record: x

Digital pictures: x Tracings: Re-drawings:

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

Date: April 2010

Description of site and artefactual content.

MFIN04 consists of a single grave in front of an abandoned homestead. The line occurs ~80m to the north of the grave. The access road may pass the grave.

SITE CATEGORY: (X where applicable)

Stone Age: Early Iron Age: Late Iron Age Historical Period:X

Recorder's Site No.: MFIN05

Official Name: N/A Local Name: N/A

Map Sheet:

GPS reading: 31°14'43.64"S 29°31'28.46"E



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

From Lusikisiki drove north with the R61 towards Mfinizweni. Take 1st right dirt road at Mfinizweni. Follow with GPS

SITE DESCRIPTION:

Type of Site: grave? Merits conservation: yes

Threats: Yes

What threats: access road

RECORDING: Graphic record: x

Digital pictures: x Tracings: Re-drawings:

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

Date: April 2010

Description of site and artefactual content.

MFIN05 is located near MFIN04 and is a possible recent burial. It occurs in front of an abandoned corrugated house.