

**ARCHAEOLOGICAL SURVEY OF THE PROPOSED
UMFOLOZI-NCWANE 88KV LINE & SWITCHING STATION**

For: Earth Consulting cc

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INTRODUCTION

Umlando was contracted by Earth Consulting cc to undertake a heritage survey of the proposed Umfolozi-Ncwane 88kv line and switching station, near Ulundi, KwaZulu-Natal. The survey located six sensitive areas that are within the corridor of the line. Most of these sites can be mitigated in some form and the line may require minor readjustments.

Fig. 1 is the locality map of the line. The line is mostly adjacent to a Vryheid-Mahlabatini road. Most of the area is heavily eroded, or has been ploughed for many years.

METHOD

The method for Heritage assessment consists of several steps.

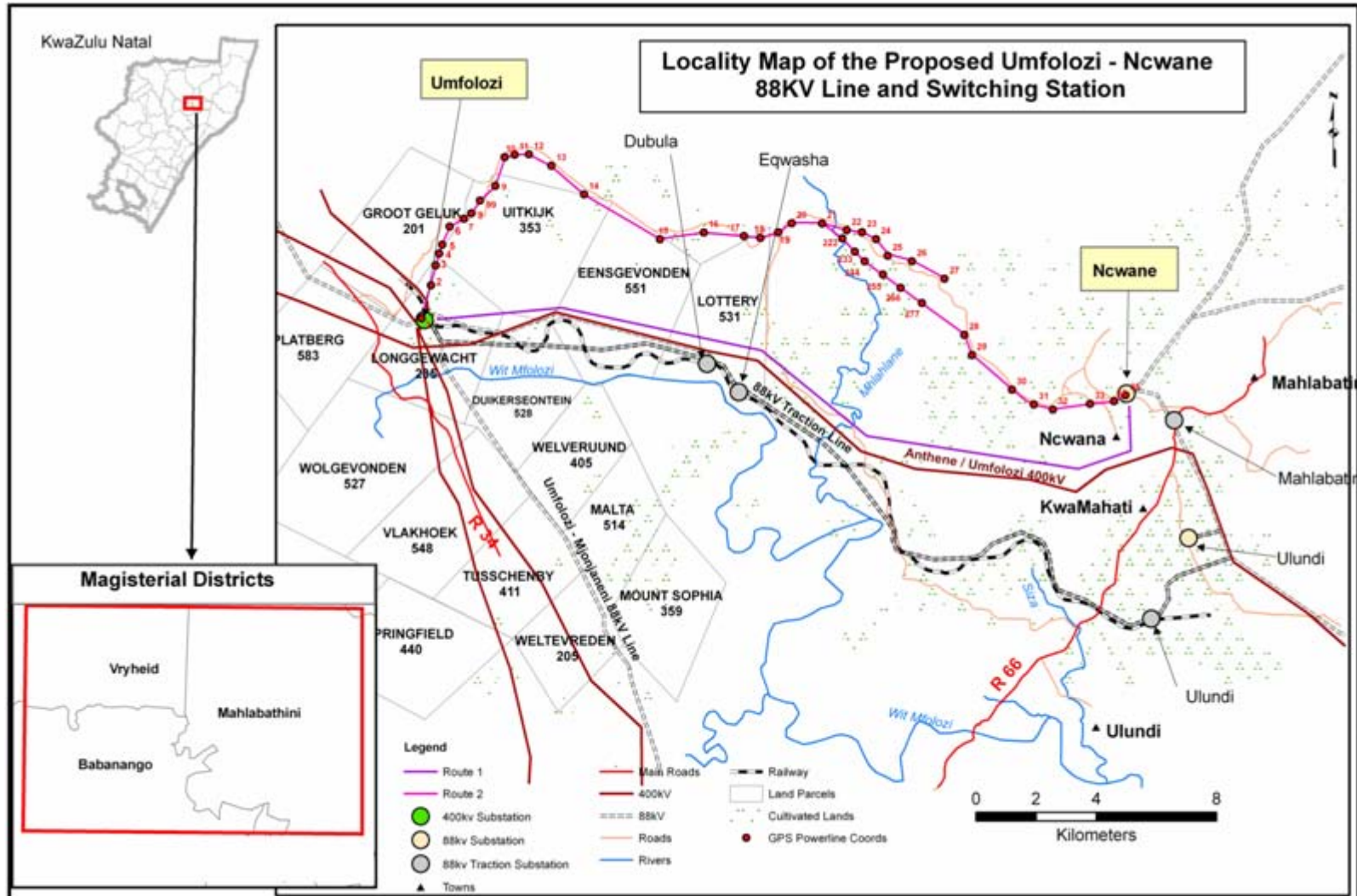
The first step forms part of the desktop assessment. We consulted the database for previously recorded sites in the area.

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 line. We then plotted those co-ordinates on a Google Earth map. The survey consisted of following the co-ordinates from point to point.

The initial archaeological survey consisted of a foot survey along the selected route.

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 these are sampled. Sampling includes the collection of artefacts for future

FIGURE 1: LOCALITY MAP OF THE LINE



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. 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 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.

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

A total of five archaeological sites occur near the line, and one nearby the line. The St. Victor Twasana Mission also occurs near the line. All sites recorded during our survey are prefixed with NCW; other sites are from the Natal Museum database. Table 1 is a summary of the recorded sites.

NCW1

Most of the area along the route consists of scatters of Early (ESA) and/or Middle Stone Age (MSA) material. NCW1 is, however a higher concentration of ESA and MSA stone tools. We observed an ESA quartzite cleaver and MSA flakes on shale and quartzite. These stone tools occur from the top of the hill down to the Mhlahlane River. The site is located between Points 27 and 28 in Figure 1.

Significance: The site is of low significance. Stone tools scatters tend to be in a secondary context when they occur on slopes, or in the open. They have little research value and can only provide an increase of a sample size. We would only sample scatters if they have non-average stone tools.

Mitigation: No further mitigation is required. Eskom will need to apply for a permit from Amafa KZN to partially damage the site, even if the material is in a secondary context.

NCW2

The site is located on top of a hill and next to the line at point 20 of Figure 1. The site consists of at least ten human burials and one Shembe (double) circle. The graves appear to be old (possibly more than 50 years old) and of varying sizes. The Shembe Circle consists of an older outer ring, and a more recent inner ring.

Significance: The site is of high significance and should not be affected by the line. The site will also fall under living heritage site status.

Mitigation: The line should be moved so that it does not impact on the site, even if spanning between towers. The alternative is that each grave will need to be exhumed and a social impact study will need to be undertaken. This is a lengthy and expensive process.

NCW3

NCW3 is a stone walled structure approximately 200m from the road near point 19. The structure is a kraal with secondary walling. These types of structures tend to have human graves inside them, although we did not observe any distinct features. We believe that the stone walling may “belong” to the household

Significance: The site is currently of low significance, although it may increase if there is a human grave attached to it.

Mitigation: The line probably does not affect the site. We suggest that if towers do occur in the areas then they avoid the structure. The site may be spanned provided that the process does not damage the structure. If the structure will be damaged then it will need to be mapped and the nearby household consulted about possible human remains.

NCW4

NCW4 is located between points 18 and 19 of Fig. 1 on the northern side of the road. It consists of a stone walled structure similar to that of NCW3. There are no modern settlements near this structure, however it is probably of similar age and function as NCW3.

Significance: The site is currently of low significance, although it may increase if there is a human grave attached to it.

Mitigation: The line will probably affect the site. We suggest that if towers do occur in the areas then they avoid the structure. The site may be spanned provided that the process does not damage the structure. If the structure will be damaged then it will need to be mapped and possible excavated of human remains do occur inside the structure.

NCW5

NCW5 is located near Point 8 of Fig. 1. NCW5 consists of stone walled structure and secondary walling about 100m southeast of the road, and 390m east of Point 8. It is unlikely that the line will affect this site.

2831AA 30

2831AA 30 is a rock art site in the vicinity of the line. The site was recorded in the 1950s and only the approximate location is given in the database from the

Natal Museum. There were no directions to the site. The site consists of two elephants and a human male.

Given the nature of rock art sites, we believe that the site occurs further south along the base of the cliffs and not at the co-ordinates given

SENSITIVE AREAS

There are two sensitive areas that may be affected by the transmission line.

St Victor Twasana Mission

The first is the St Victor Twasana Mission located near Point 13 of Fig. 1. Some of the buildings and features may predate 1960s. The line appears to occur just south of the mission and will thus probably not affect it.

Significance: The site is of medium-high significance in terms of potential historical buildings and features.

Mitigation: No mitigation is required as the area is not affected.

Points 2 - 5

The second area occurs between Points 2 – 5. The vegetation in this area was dense and accessibility a problem. We did survey along nearby dirt roads for potential sites. As in other places, we noted isolated occurrences of stone tools in secondary context. The area may have stone walling, although we did not observe these. If they do occur then they are low to the ground.

Significance: The area appears to be of low significance.

Mitigation: No mitigation is required.

CONCLUSION

Six heritage sites and two sensitive areas were noted during the course of the survey. These sites range from low to high significance, and each have different management plans. We suggest that the stone walling and burial sites are avoided, even with spanning between points. The ESA and MSA sites will be damaged, and Eskom will need to apply for a permit for the general area.

We also noted two sensitive areas. The one is the St Victor Twasana Mission and the other is a probable area of stone tools. The mission and related features should be avoided. The area of stone tools is a general area with a lower density of stone tools as at NCW1. A permit will not be required as it is not a site per se; however we suggest that Eskom applies for the permit as they may impact on artefacts. A permit to damage, alter or remove archaeological material is required in terms of the KZN Heritage Act of 1997.

TABLE 1: SUMMARY OF SITES

SITE	TYPE	PERIOD ¹	SIGNIFICANCE	MITIGATION ²	CO-ORDINATES
NCW1	Stone tools	ESA, MSA	Low	None	S28°12'51.40", E31°22'17.40"
NCW2	Human graves and Shembe Circle	HP, & recent	High	Exhumation and community consultation	S28°11'3.90", E31°18'51.30"
NCW3	Stone walling and possible grave	HP	Low	Map or excavate.	S28°11'28.09", E31°18'33.49"
NCW4	Stone walling and possible grave	HP	Low	Map or excavate	S28°11'23.92", E31°18'17.34"
NCW5	Stone walling and possible grave	HP	Low	Map or excavate	S31°18'17.34" E31°12'29.80"
2831AA 30	Rock Art	LSA	High	None	S28° 11' 00" E31° 15' 00"
St Victor Twasana Mission	Built structures	Possible HP	High	Should not be affected	Approx: S28°10'5", 31°13'53"
Points 2- 5	Stone tools	Possible ESA,MSA & LSA	Low	None	S28°11'35.66" E31°11'37.02" to S28°12'19.74" E31°11'23.17"

¹ ESA: Early Stone Age MSA: Middle Stone Age LSA: Late Stone Age LIA: Late Iron Age HP: Historical Period

² Mitigation if affected by the transmission line.

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