CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED COAL-LINK PROJECT, UMFOLOZI-EQWASHA TRACTION, KWAZULU-NATAL.



# ACTIVE HERITAGE cc.

# Frans Prins MA (Archaeology)

P.O. Box 947 Howick 3290

Activeheritage@gmail.com Fax: 0867636380 www.activeheritage.webs.com 21 February 2014

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# LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

#### **EXECUTIVE SUMMARY**

A cultural heritage survey of the proposed Coal Link Project, Umfolozi-Eqwasha Traction identified no heritage sites on the footprint. There is no archaeological reason why the proposed development may not proceed on the footprint as planned. However, attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

#### 1 BACKGROUND INFORMATION ON THE PROJECT

The consultant was approached by Sivest to conduct a heritage impact assessment (HIA) of the proposed Coal Link Project.

According to the National Heritage Resources Act, 1999 (NHRA) (Act No. 25 of 1999), the heritage resources of South Africa 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).

The newly promulgated KwaZulu-Natal Heritage Act (Act No. 4 of 2008) also makes specific mention to rock art and archaeological sites.

It is furthermore stated that:

-(1) No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the KwaZulu-Natal Heritage Council.

(2) Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.

(3) The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.

(4) No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.

(5) No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

(6) (*a*) The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.

(*b*) The Council may establish and maintain a provincial repository or repositories for the safekeeping or display of—

(i)

archaeological objects;

(ii)

palaeontological material;

(iii)

ecofacts;

(iv)

objects related to battlefield sites;

(v)

material cultural artefacts; or

(vi)

meteorites.

(7) The Council may, subject to such conditions as the Council may determine, loan any object or material referred to in subsection (6) to a national or provincial museum or institution.

(8) No person may, without the prior written approval of the Council having been obtained on written application to the Council, trade in, export or attempt to export from the Province—

(a)

any category of archaeological object;

(b)

any palaeontological material;

(C)

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any ecofact;

(d)

any object which may reasonably be regarded as having been recovered from a battlefield site;

(e)

any material cultural artefact; or

(f)

any meteorite.

(9) (a) A person or institution in possession of an object or material referred to in paragraphs (a) - (f) of subsection (8), must submit full particulars of such object or material, including such information as may be prescribed, to the Council.

(b) An object or material referred to in paragraph (a) must, subject to paragraph (c) and the directives of the Council, remain under the control of the person or institution submitting the particulars thereof.

(*c*) The ownership of any object or material referred to in paragraph (*a*) vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.

This study aims to identify and assess the significance of any heritage and archaeological resources occurring on the site. Based on the significance, the impact of the development on the heritage resources would be determined. Then appropriate actions to reduce the impact on the heritage resources would be put forward. In terms of the NHRA, 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.

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ype of development:	<ul> <li>REBUILD the powerline from Umfolozi SS to Dabula T. Option 1 - For the REBULD line, the structure will be LATTICE and the Conductor will be KINGBIRD. Option 2 - For the REBULD line, the structure will be existing Tower and the Conductor will be either Aluminium Conductor, Composite Core(ACCC) or Aluminium Conductor, Carbon Re-enforced (ACCR). A corridor width of 100m on either side of the existing line (IE CORRIDOR WIDTH IS 200M) needs to be covered in the assessment. The reason for this approach is to have an approval in place that would support any of the construction strategies that are being explored (Servitude Swap, New Servitude, Break and Build). Some technical and route alternative changes has been proposed as well.</li> <li>The current technical alternatives are as follows:         <ul> <li>Option 1 – Rebuild the power line using lattice towers (20-32 m in height).</li> <li>Option 2 – Rebuild the power line using the existing towers.</li> </ul> </li> </ul>
	<ul> <li>The new technical alternatives are as follows:</li> <li>Option 1 – Temporary bypass line within 25m of the existing centre line, dismantle existing line, build new line, dismantle bypass line</li> <li>Option 2 - Establish new servitude, build new line and hand over old servitude to landowner OR rehabilitate. Please note that the new servitude locations cannot be established at this time Please use the 500m corridor width approach for this option.</li> <li>Option 3 - Dismantle existing line and rebuild new on the same servitude.</li> </ul>

#### Table 1. Background information

Rezoning or subdivision:	rezoning
Terms of reference	To carry out a Heritage Impact Assessment
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)

#### 1.1. Details of the area surveyed:

The study area is situated approximately 45km to the south of Vryheid adjacent to the R34 (Fig 1). The trajectory of the proposed powerline runs roughly parallel to the White Mfolozi (Fig 2). The GPS coordinates is given as 28°24' 13.34" S 31° 23' 59.15" E. The area is dominated by grasslands and some indigenous woody vegetation that occur along the dongas.

#### 2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

Portions of the greater Vryheid and Mfolozi areas have been systematically surveyed for archaeological and heritage sites in the past. These were mostly conducted by archaeologists attached to the then Natal Museum as well as by Amafa staff. The Umfolozi Nature Reserve that is situated to the east of the study area has been more systematically surveyed by researchers such as Jim Feely and Martin Hall in the 1970's. Sixty sites are recorded in the data base of the KwaZulu-Natal Museum. These include fourteen Early Stone Age sites, eight Middle Stone Age sites, ten Later Stone Age sites, three rock painting sites, and forty Later Iron Age sites. The majority of the Early Stone Age sites occur in open air context in large dongas. Middle and Later Stone Age sites occur in context in four rock shelters. Two of these shelters also contain typical San fineline paintings. The majority of the known Later Iron Age sites are situated to the south east of Ngutu and in the near vicinity of Nhlazatshe. They were located during a large scale survey of the area by archaeologists who were interested in the Later Iron Age ecology of Zululand (Hall 1980). They are demarcated by characteristic stone walling. Three stone walling typologies have been identified in the area namely Type A, C, and D (ibid).

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantuspeaking farmers crossed the Limpopo River and arrived in South Africa. Around 800 years ago, if not earlier, Bantu-speaking farmers also settled in the greater Vryheid area. Although some of the sites constructed by these African farmers consisted of stone walling not all of them were made from stone. Sites located elsewhere in the KwaZulu-Natal show that many settlements just consisted of wattle and daub structures. These Later Iron Age sites were most probably inhabited by Ngunispeaking groups who were the direct ancestors of the Zulu (Bryant 1965). However after 1840 some Southern Sotho-speaking Tlokwe people also settled in the area towards Ngutu. With the expansion of the Zulu kingdom of King Shaka in the early 1820's the study area became firmly incorporated into this pre-capitalist kingdom. It is not surprising that this area played such a central part in the colonial period history of KwaZulu-Natal. The Battle of Blood River, between Boer and Zulu, took place to the immediate west of the study area in 1838 (Derwent 2006). In addition, the Anglo-Zulu War of 1879 was also acted out in large areas adjacent to the study area (ibid). The battlefields of Majuba (1887), Hlobane (1879), Holkrantz (1879), Khambula (1879), Bloed Rivier.s Poort (1879), Fort Newdigate and the Prince Imperial.s capture site (1879) lie within the close vicinity of the study area. These battle field sites as well as associated graves and buildings of the era are proclaimed heritage sites and are protected by legislation

## 3 BACKGROUND INFORMATION OF THE SURVEY

#### 3.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. In addition, the available archaeological and historical literature covering the greater Vryheid, Mfolozi, and Nhlazathse areas was also consulted. The SAHRIS data base of heritage sites and reports was studied. Documents reporting on previous cultural resource management studies in the area were also consulted and the relevant heritage sites were documented

A ground survey, following standard and accepted archaeological procedures, was conducted.

# 3.2 Restrictions encountered during the survey

## 3.2.1 Visibility

Visibility was relatively good.

#### 3.2.2 Disturbance

No disturbance of any potential heritage features was noted.

#### 3.3 Details of equipment used in the survey

GPS: Garmin Etrek Digital cameras: Canon Powershot A460 All readings were taken using the GPS. Accuracy was to a level of 5 m.

#### 4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

#### 4.1 Locational data

*Province:* KwaZulu-Natal *Towns:* Vryheid, Nhlazatshe, Ulundi

#### 4.2 Description of the general area surveyed

The footprint consists of overgrazed grassland and some indigenous woody vegetation in the river valleys. The area is surrounded by commercial farms and communal land. Rural Zulu-homesteads occur sporadically within the study area.

No heritage sites occur on the footprint. A Later Stone Age site occurs approximately 850m to the south of the footprint (Figs 3 & 4). This site is listed as site no 2266 in the KwaZulu-Museum data base. Its GPS coordinates is given as S 28° 13' 53" E 31° 11' 10" but this site is not threatened by the proposed development. No graves occur on the footprint and it is not part of any known cultural landscape.

# 4.3 Description and distribution of heritage sites found

Not applicable as no heritage sites occur on the footprint.

#### 4.4 Summary of findings

Although the greater Vryheid, Ulundi and Nhlazatse areas are rich in archaeological and heritage sites none occurs on the footprint.

## 5 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

#### 5.1 Field Rating

Not applicable

Level	Details	Action		
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA		
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority		
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site		
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site		
Generally Protected A	High to medium significance	Mitigationnecessarybeforedestruction		
Generally Protected B	Medium significance	The site needs to be recorded before destruction		
Generally Protected C	Low significance	No further recording is required before destruction		

Table 2. F	ield rating and	I recommended	aradina o	f sites (	(SAHRA 2005)
			9		

# 6 CONCLUSION

The proposed development may proceed from a heritage perspective as no sites or features are threatened on the footprint (Table 3). However, the KwaZulu-Natal Heritage Act requires that any operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.

	HERITAGE		
HERITAGE	No heritage sites occur on or near footprint		
EXTENT (GEOPRAPHICAL)	Localised		
DURATION	Not applicable		
PROBABILITY	Not applicable		
REVERSIBILITY	Not applicable		
IRREPLACEABLE LOSS OF	Not possible as no heritage resources occur on footprint		
RESOURCES			
CUMULATIVE IMPACTS	None		
SIGNIFICANCE RATING -	Low or not applicable		
PRE MITIGATION			
MITIGATION MEASURE	Not applicable, however, the KwaZulu-Natal Heritage Act requires that any operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.		
SIGNIFICANCE – POST MITIGATION	Not applicable		

#### Table 3. Impact of proposed development on heritage resources

# 7 MAPS AND FIGURES



Figure 1. Google aerial photograph showing the location of the study area.



Figure 2. Google aerial photograph indicating the extent of the footprint. The White Mfolozi River runs roughly parallel to the proposed powerline trajectory.



Figure 3. Google aerial photograph showing the location of a Later Stone Age Site approximately 85m to the south of the footprint.



Figure 4. A Later Stone Age surface scatter occurs 85m towards the south of the footprint. This site is not threatened by the proposed development.

#### 8 REFERENCES

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