

**FIRST PHASE HERITAGE IMPACT ASSESSMENT  
OF THE PROPOSED UMDLOTI RIVER BRIDGE  
AND REALIGNMENT OF MAIN ROAD P713,  
NDWEDWE LOCAL MUNICIPALITY**



**ACTIVE HERITAGE cc.**

For: Kerry Seppings Environmental Consultants

**Frans Prins  
MA (Archaeology)  
P.O. Box 947  
Howick  
3290**

[feprins@gmail.com](mailto:feprins@gmail.com)  
[activeheritage@gmail.com](mailto:activeheritage@gmail.com)  
Fax: 086 7636380

December 2014

## TABLE OF CONTENTS

<b>1</b>	<b>BACKGROUND INFORMATION ON THE PROJECT</b> .....	<b>1</b>
1.1.	Details of the area surveyed: .....	2
<b>2</b>	<b>BACKGROUND INFORMATION OF THE SURVEY</b> .....	<b>5</b>
2.1	Methodology .....	5
2.2	Restrictions encountered during the survey .....	5
2.2.1	<i>Visibility</i> .....	5
2.2.2	<i>Disturbance</i> .....	5
2.3	Details of equipment used in the survey.....	5
<b>3</b>	<b>DESCRIPTION OF SITES AND MATERIAL OBSERVED</b> .....	<b>5</b>
3.1	Locational data .....	5
3.2	Description of heritage sites identified.....	6
<b>4</b>	<b>STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)</b> .....	<b>6</b>
4.1	Field Rating.....	6
<b>5</b>	<b>RECOMMENDATIONS</b> .....	<b>6</b>
<b>6</b>	<b>MAPS AND FIGURES</b> .....	<b>7</b>
<b>7</b>	<b>REFERENCES</b> .....	<b>10</b>

## LIST OF TABLES

Table 1.	Background information.....	1
Table 2.	Field rating and recommended grading of sites (SAHRA 2005) .....	6

**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 first phase heritage survey of the proposed Umdloti River Bridge and realignment of main Road P713, Ndwedwe Local Municipality identified no heritage sites or features on the footprint. There is no archaeological reason why the development may not proceed on the project area as planned. 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

**Table 1. Background information**

Consultant:	Frans Prins (Active Heritage) for Kerry Seppings Environmental Consultants (KSEMS)
Type of development:	<p>The KwaZulu-Natal Department of Transport (KZNDOT) proposes to construct a new bridge to replace the existing low-level structure along Main Road P713 in the Ndwedwe Local Municipality which forms part of the Ilembe District Municipality. The existing structure is a vented causeway comprising of fifteen (15), 600dia concrete stormwater pipes overlaid by a concrete slab. Due to the low-level structure, any appreciable rainfall event causes water to flow over. As a result this causes inconvenience to the many school children, general pedestrians and vehicles who use the bridge as a link to many services on the other side of the Umdloti River.</p> <p>The new bridge structure will be approximately 100 metres in length and six (6) metres above the Umdloti River. The development also entails the realignment of approximately 500 metres of Main Road P713 and the upgrade of the road surface to Asphalt.</p> <p>The new bridge structure and road upgrade will substantially increase the level of service and benefits to the nearby communities and will provide all year access to the education and health facilities in the area.</p>
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 adjacent to the Umdloti River approximately 4km to the west of Hazelmere Dam and 10km to the north west of Verulam (Fig 1). It is situated in a rural area where most inhabitants practise small scale subsistence farming. The P713, that crosses the Mloti River, is presently untarred.

The co-ordinates for the proposed bridge and road re-alignment are:

Start of road re-alignment - 29° 35'21.6"S; 30°58'47.2"E

Mid-point of bridge - 29°35'29.0"S; 30°58'54.9"E

End of road re-alignment - 29°35'34.5"S; 30°58'48.7"E

## BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater iLembe District Municipality, including the Verulam area, has been relatively well surveyed for archaeological heritage sites by the KwaZulu-Natal Museum, post-graduate students from the Universities of Cape Town and the Witwatersrand, and subsequently by private heritage consultants in the last few years.

The available evidence, as captured in the Amafa and the KwaZulu-Natal Museum heritage site inventories, indicates that this area contains a wide spectrum of archaeological sites covering different time-periods and cultural traditions. Eighty heritage sites occur within this area. These range from Early Stone Age, Middle Stone Age, and Later Stone Age to Early Iron Age, Middle and Later Iron Age sites as well as historical sites relating to the rise of the Zulu Kingdom and the subsequent colonial

period. One notable Middle Stone Age site, i.e. Segubudu near Stanger have been excavated in the last two decades by the University of the Witwatersrand and yielded impressive archaeological stratigraphies relating to the period associated with the origins of anatomically modern people (Mitchell 2002). The available data base also indicates seven archaeological sites in the near vicinity of the project area. These include a midden with Middle Stone Age and later Stone Age material to the immediate south of the study area. Closer to the coast archaeologists have also identified two Early Iron Age sites, and four middens with Later Iron Age material.

Around 1 700 years ago an initial wave of Early Iron Age People settled along the inland foot of the sand dunes on sandy but humus rich soils which would have ensured good crops for the first year or two after they had been cleared. These early agro-pastoralists produced a characteristic pottery style known as Matola. The Matola people also exploited the wild plant and animal resources of the forest and adjacent sea-shore. The communities seems to been small groups of perhaps a few dozen slash-and burn cultivators, moving into a landscape sparsely inhabited by Later Stone Age San hunter-gatherers.

By 1500 years ago another wave of Iron Age migrants entered the area. Their distinct ceramic pottery is classified to styles known as “Msuluzi” (AD 500-700), Ndongondwane (AD 700-800) and Ntshokane (AD 800-900). Three sites belonging to these periods occur along the banks of the Tugela River near the town of Mandeni. Some of these, such as the Ndongondwane and Mamba sites have been excavated by archaeologists (Maggs 1989:31; Huffman 2007:325-462). Some Early Iron Age potsherds have been located by archaeologists from the then Natal Museum closer to Maphumulo but these sites have not been thoroughly investigated.

The greater Verulam area is also intimately associated with the rise of the Zulu Kingdom of Shaka in the early 1820's. King Shaka had his capital Kwa Dukuza to the immediate south of Mandeni at Stanger. The exact spot of Shaka's death is thought to be where an old mahogany tree now grows in the grounds of the Stanger/Kwa Dukuza municipal offices. The grain pit where Dingane is thought to have secretly buried Shaka is marked by a large rock in the King Shaka Memorial Garden in the town. The Zulu people erected this memorial during the reign of King Solomon (1913-1932). An interpretative centre has since been added. Also in Stanger near King Shaka's memorial, is a small river

known as Shaka's spring. From here, unpolluted water was collected for the king's use. Nearby on the Imbozamo River, was Shaka's Bathing Pool and Shaka's Cave where he would rest after swimming. Not much further off is the famous Execution Cliff where executions were carried out on Shaka's orders (Derwent 2006). The battle of Ndongakusuka, which saw the rise of power of king Cetshwayo in 1856, took place near the mouth of the Tugela River to the north of the study area.

The colonial history of the area starts around 1820 when early English ivory traders established themselves at Port Natal (Durban). Dutch descendants (i.e. Voortrekkers) moved into the area soon after 1834 and established a short lived Boer republic called Natalia. The battle site of Ndongakusuka occur on the northern bank of the Tugela River. Here Zulu warriors under Mpande attacked and decimated a force of settlers from Port Natal and several thousand black levies in April 1838. The force had been raised to assist the beleaguered Voortrekker laagers, then under systematic attack by the Zulu. Some years later Ndongakusuka again became the scene of a great battle between Prince Cetshwayo and his brother, Mbuyazi – the bloodiest battle ever fought on South African soil (Derwent 2006). By 1845 Natal became a British colony. The area to the north of the Tugela River remained independent Zulu territory. However, in 1879 Zululand was invaded by British forces and the area annexed soon thereafter. Two well known British forts of this period occur within 20km from the study area, these are the twin forts of Pearson and Tenedos. They were built across from each other on either side of the mouth of the Tugela in 1878 and 1879 respectively. Fort Pearson is named after Colonel Charles Pearson, who led the invasion into Zululand in 1879. It is also the site of the Ultimatum Tree where Chetshwayo was issued the ultimatum intended to spark war. Today, little remains of Fort Pearson apart from the outer trenches. The remains of Fort Tenedos are best viewed from Fort Pearson (ibid). These heritage sites, like the archaeological resources of the province, are also protected by heritage legislation.

## **2 BACKGROUND INFORMATION OF THE SURVEY**

### **2.1 Methodology**

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. In addition, the available archaeological and heritage literature covering the greater iLembe District Municipality area was also consulted. The SAHRIS website was consulted to assess previous heritage surveys in the area.

A ground survey, following standard and accepted archaeological procedures, was conducted on the 27 November 2010.

### **2.2 Restrictions encountered during the survey**

#### **2.2.1 Visibility**

Visibility was good.

#### **2.2.2 Disturbance**

No disturbance of any potential heritage features was noted.

### **2.3 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.

## **3 DESCRIPTION OF SITES AND MATERIAL OBSERVED**

### **3.1 Locational data**

Province: KwaZulu-Natal

Municipality: iLembe District Municipality, Ndwedwe Local Municipality

Town: Verulam



### 3.2 Description of heritage sites identified

No heritage sites were identified during the ground survey. The footprint is also not part of any known cultural landscape. Although the consultant saw modern grave sites none of them occur closer than 100m from the proposed development.

## 4 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

### 4.1 Field Rating

Not applicable as no heritage sites or features occur on the footprint.

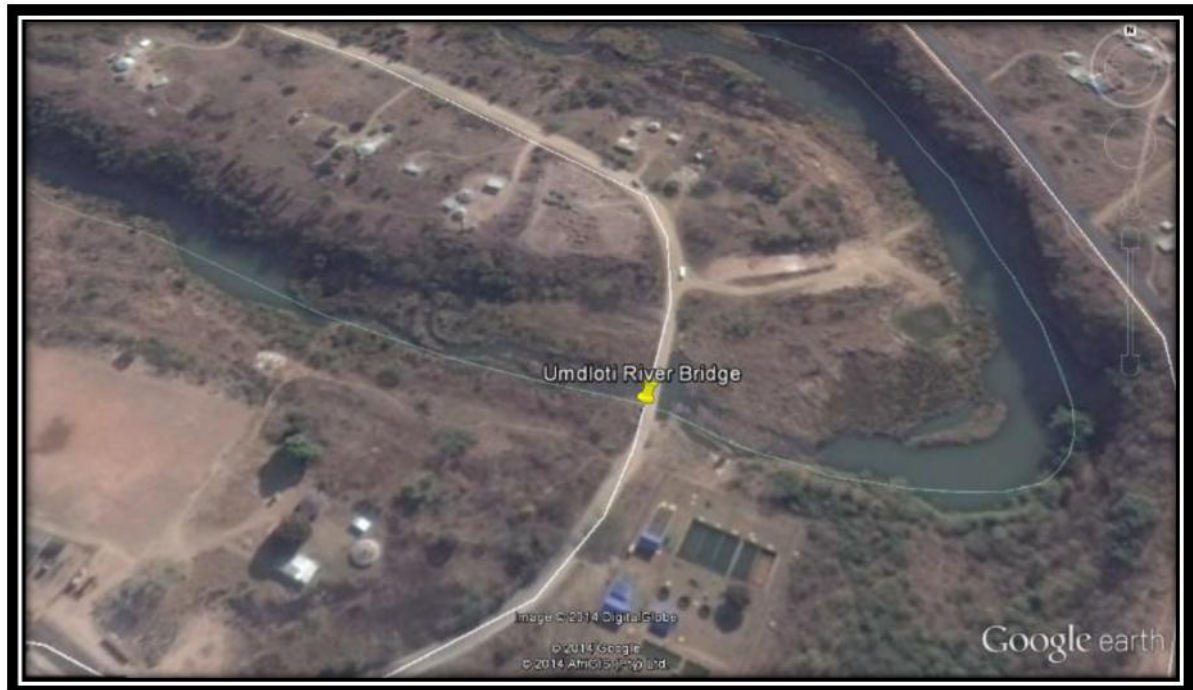
**Table 2. Field rating and recommended grading of sites (SAHRA 2005)**

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	Mitigation necessary before destruction
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

## 5 RECOMMENDATIONS

There is no archaeological reason why the proposed development may not take place as planned. It should, however, be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities

6 MAPS AND FIGURES



**Figure 1. Google aerial photograph showing the location of the proposed Umdloti River Bridge and Main Road P713 in the Ndwedwe Local Municipality (Source KSEMS)**

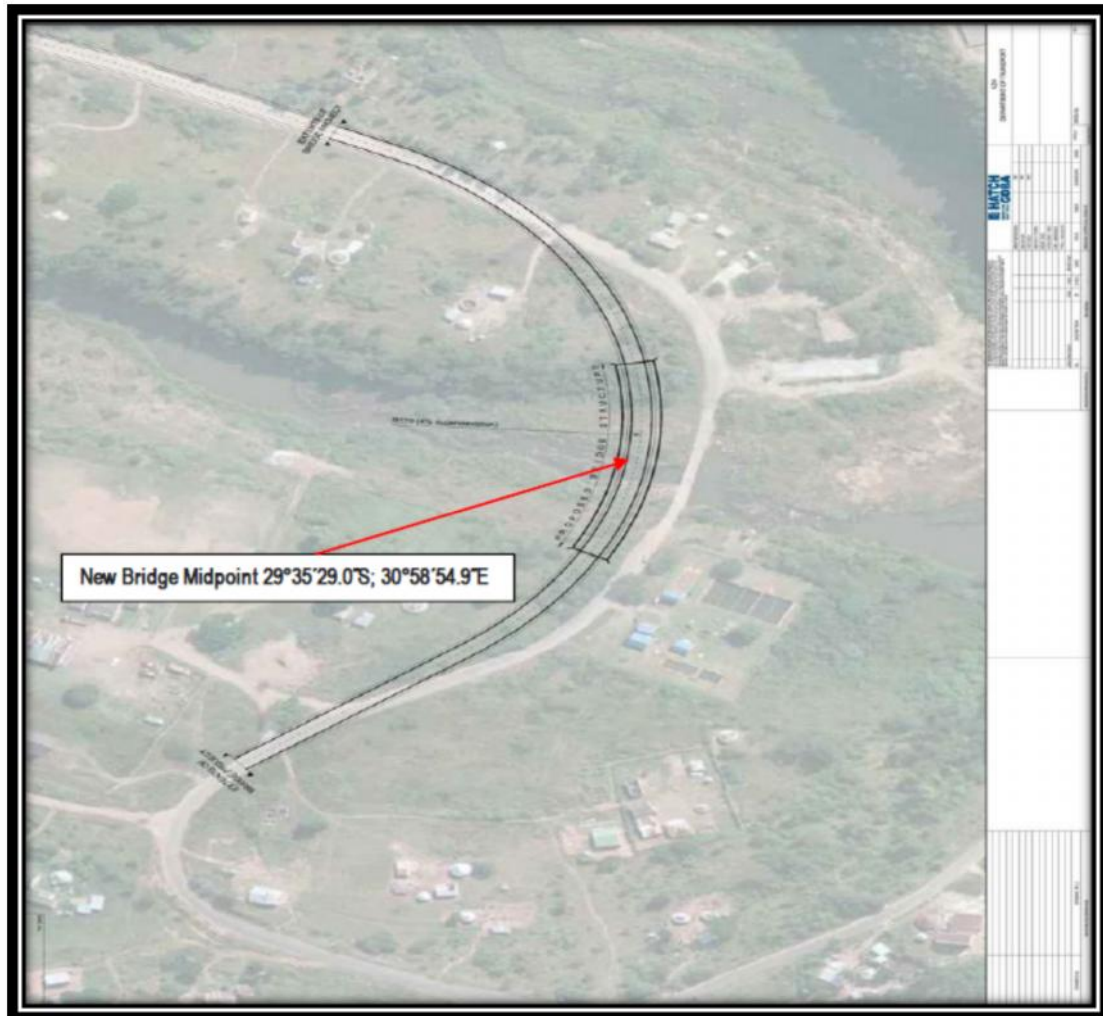


Figure 2. New bridge and proposed road alignment of the P713 relative to the old bridge and road (Source: KSEMS)



**Figure 3. No heritage sites occur adjacent or in close proximity to Main Road R713.**



**Figure 4. No heritage sites occur adjacent to or in the close environs of the Mloti River**

## 7 REFERENCES

Bryant, A. T. 1965. *Olden times in Zululand and Natal*. Cape Town: C. Struik.

Derwent, S. 2006. *KwaZulu-Natal Heritage Sites: A Guide to Some Great Places*. David Phillips: Cape Town

Huffman, T. N. 2007. *Handbook to the Iron Age: The Archaeology of Pre-colonial Farming Societies in Southern Africa*. University of KwaZulu-Natal Press. Pietermaritzburg.

Maggs, T. The Iron Age farming communities. In Duminy, A. and Guest, B. 1989. *Natal and Zululand: from Earliest Times to 1910. A New History*. Pg. 28-46. University of Natal Press. Pietermaritzburg.

Mitchell, P. 2002. *The Archaeology of Southern Africa*. Cambridge University Press: Cambridge

SAHRA, 2005. *Minimum Standards For The Archaeological And The Palaeontological Components Of Impact Assessment Reports, Draft version 1.4*.



