

**PHASE ONE HERITAGE IMPACT ASSESSMENT
OF THE PROPOSED BHUDLU BRIDGE AND
ACCESS ROAD, UMUZIWABANTU
MUNICIPALITY, KWAZULU-NATAL.**



ACTIVE HERITAGE cc.

For: Royal Haskoning DHV

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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 (2010).
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 Bhudlu Bridge and associated access road, identified no heritage sites on the footprint. There is no known archaeological reason why the proposed development may not proceed 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

Table 1. Background information

Consultant:	Frans Prins (Active Heritage cc) for Centre for Royal Haskoning DHV.
Type of development:	<p>The proposed construction of the Bhudlu Bridge and associated access road.</p> <p>There has been negotiations between uMuziwabantu Municipality (KZN) and Mbizana Municipality (EC) to provide direct link between the municipalities and link up the communities of Nyandeni (KZN) and Nomganya (EC). The position of the proposed bridge is at an existing informal crossing and can only be crossed by tractors when the river is low enough. Access to the site from the KZN side is off the District Road D1100 onto a municipal gravel road then onto an informal 4x4 track leading to the crossing. From the EC side access is similarly off a district road onto a municipal gravel road then onto an informal 4x4 track. Accesses to the bridge from both sides KZN and EC will have to be upgraded to the nearest district roads respectively. uMuziwabantu Municipality will construct the Bridge, KZN portion of the Access Road and a 100m approach road on the EC side of the New bridge. The remainder of the access road on the EC side will be constructed by Mbizana Municipality. The intention of this project is to provide a formal access road to the proposed bridge site on the Kwazulu-Natal side.</p>
Rezoning or subdivision:	na
Terms of reference	To carry out a phase one 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)

1.1. Details of the area surveyed:

The study area is situated in the Umuziwabantu Local Municipality approximately 20 km south west of Harding in southern KwaZulu-Natal (Figs1 & 2). The proposed Bhudlu Bridge will span the Umtavuna River and provide access between communities situated in both the Eastern Cape province and KwaZulu-Natal. The GPS coordinates for the proposed bridge is given as: S 30° 24' 41.13" E 29° 43' 59.02".

Three alternative access roads leading towards the bridge from the KwaZulu-Natal side of the river has been proposed (Fig 2). These include:

Route 1

The portion highlighted in yellow (Fig 2) is a KZN DOT (On Line) OL 03487 road that ties into the D1100 and is meant to be the primary access road into the Nyandeni community. The portion of this road from Kubhudlu Primary school to where it intersects the Route 3 is highly eroded and is significantly steep. To upgrade this portion of road will require substantial storm water control measures and surfacing of the roadway which will increase the construction cost significantly. The remainder of Route 1 from Route 3 intersection is well maintained and may only require some resurfacing if needed.

Route 2

The Green route as shown in Fig 2 will require an intersection with Route 1. This option will be a new road construction of an existing track. The route traverses a stream which will require a culvert and some high fills to meet the required design parameters which will increase the construction costs.

Route 3

The Red Route in Figs 2 & 4 is the preferred route. This route has some advantages to the two previous options. The tie-in to the D1100 is on an existing gravel road which will only need re-graveling. The new section of road runs with the contours and then gradually down a ridge to the Bridge Site. This will eliminate costly storm water control measures and the grades will be gradual enough for a gravel surfacing.

From an economic, social and geometric review Route 3 is the recommended option for the access road to the new Bridge Site

1.2. Cultural Heritage legislation

According to Section 3 (2) of the NHRA, 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
 - 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 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).”

In terms of section 3 (3) 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.”

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The study area has never been systematically surveyed for archaeological sites in the past. However, the greater Port Shepstone area to the east of the study area has been surveyed by archaeologists of the then Natal Museum in the 1970's and 1980's. Further inland the Paddock and greater Oribi Gorge areas, situated to the immediate east of the study area, are well known to archaeological researchers. These surveys were originally conducted by staff associated with the then Natal Parks Board in the 1970's. However, more professional surveys were conducted by archaeologists such as J. H. Cable in the early 1980's (Cable 1984) and later by various archaeologists attached to the Natal Museum (Mazel 1989; Mitchell 2005).

The available evidence, as captured in the KwaZulu-Natal Museum heritage site inventories, indicates that the area to the immediate north east of the study area contains a wide spectrum of archaeological sites covering different time-periods and cultural traditions. These include Early, Middle and later Stone Age sites, Early Iron

Age sites, Later Iron Age sites, and some historical sites. Various buildings and farmsteads belonging to the Victorian and Edwardian periods occur in the area especially in the close environs of Paddock. These are also protected by heritage legislation.

Stone Age sites of all the main periods and cultural traditions occur along the coastal cordon. Most of these occur in open air contexts as exposed by donga and sheet erosion. The occurrence of Early Stone Age tools in the near vicinity of permanent water resources is typical of this tradition. These tools were most probably made by early hominins such as *Homo erectus* or *Homo ergaster*. Based on typological criteria they most probably date back to between 300 000 and 1.7 million years ago. The presence of the first anatomically modern people (i.e. *Homo sapiens sapiens*) in the area is indicated by the presence of a few Middle Stone Age blades and flakes. These most probably dates back to between 40 000 and 200 000 years ago. The later Stone Age flakes and various rock painting sites identified in the area are associated with the San (Bushman) and their direct ancestors. These most probably dates back to between 200 and 20 000 years ago.

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 Bantu-speaking farmers crossed the Limpopo River and arrived in South Africa. By 1500 years ago these early Bantu-speaking farmers also arrived in the project area. Due to the fact that these first farmers introduced metal technology to southern Africa they are designated as the Early Iron Age in archaeological literature. Their distinct ceramic pottery is classified to styles known as “Msuluzi” (AD 500-700), Ndongondwane (AD 700-800) and Ntshekane (AD 800-900). Most of the Early Iron Age sites in the greater Ugu District Municipality belong to these traditions (Maggs 1989:31; Huffman 2007:325-462). These sites characteristically occur on alluvial or colluvial soil adjacent to large rivers below the 1000m contour. The Early Iron Age farmers originally came from western Africa and brought with them an elaborate initiation complex and a value system centred on the central significance of cattle.

Later Iron Age sites also occur to the north east of the study area. These were Bantu-speaking agropastoralists who arrived in southern Africa after 1000 year ago via East Africa. Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the

Zulu-speaking people (Huffman 2007). Many African groups moved through the study area due to the period of tribal turmoil as caused by the expansionistic policies of King Shaka Zulu in the 1820's and subsequent civil wars in Zululand to the north. It is known from oral history that the greater project area was inhabited by Zulu refugees in the 19th century (Bryant 1965) especially by members of the abakwaCele and Lushaba clans. These clans arrived in the project area around 1828 soon after the murder of King Shaka when they were being pursued by supporters of King Dingane (ibid). However, it appears that the lower densely wooded valley areas were only occupied later. According to oral history most of the historical settlement of the area took place on the higher altitude grassland areas.

Archaeological sites in the near vicinity of the project area include 1 Middle Stone Age site and 3 Later Stone Age rock art sites situated adjacent to the Umtavuna River approximately 50km downstream from the project area. The rock art sites form part of the eastern seaboard coastal rock art zone. Most of these occur in sandstone shelters and depict red monochrome paintings although rare polychrome paintings have been recorded at a rock shelter in the Umtavuna Nature Reserve.. None, however, have been recorded in the study area. No Iron Age sites were identified in the project area although one later Iron Age site occur about 7km to the north of the study area.

The Harding area is inhabited by a number of tribes of diverse origin such as the Mawu and the Jali who derive from the Mpondo; the Cele, Nhlanguwini and Nyuswa who are of Zulu origin and one mixed tribe, the Nkumbini founded by the British ivory trader Frank Fynn. The town was established in 1813 as a magisterial and police post on the rather unruly frontier between the colony of Natal and Griqualand East. For a period of time the greater Harding area was a no mans land of gun-runners, smugglers and a retreat for shady characters. In this setting Harding grew into an atmospheric little town and it eventually became a municipality in 1911. The area contains no provincial heritage sites (Derwent 2008).

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum and the SAHRA inventory of heritage sites. The SAHRIS website of heritage resources and previous Cultural Resource Management (CRM) surveys was also consulted. Aerial photographs of the area were surveyed. In addition, the available archaeological and historical literature covering KwaZulu-Natal was also consulted.

A site visit was made to the project area on 5 June 2015. A ground survey, following standard and accepted archaeological procedures, was conducted. The consultant walked the study area on foot and surveyed potential hotspot areas for heritage sites. Particular care was taken to locate graves.

3.2 Restrictions encountered during the survey

3.2.1 Visibility

Visibility was good.

3.2.2 Disturbance

No disturbance of any potential heritage sites 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: Harding

Municipality: Umuziwabantu Local Municipality and the Ugu District Municipality.

4.2 Description of the general area surveyed

The study area is dominated by disturbed grasslands that slopes down towards the Umtavuna River (Fig 3). Rural homesteads are scattered throughout the landscape although many tend to be concentrated adjacent to access roads (Fig 4). The dominant Nguni dispersed settlement pattern still prevails in this area. The Umtavuna River is rather small at this altitude and position inland and would be relatively easy to cross in the dry winter months.

5 HERITAGE SITES AND THEIR SIGNIFICANCE (HERITAGE VALUE)

No heritage sites occur on the footprint. The study area was surveyed by foot yet no archaeological sites or artefacts were observed. Although the consultant observed modern graves in association with some homesteads none occur closer than 30m to the proposed access roads and bridge site. The area is also not part of any known cultural landscape (Table 2).

Table 2. Evaluation and statement of significance.

Significance criteria in terms of Section 3(3) of the NHRA		
	Significance	Rating
1.	Historic and political significance - The importance of the cultural heritage in the community or pattern of South Africa's history.	None.
2.	Scientific significance – Possession of uncommon, rare or endangered aspects of South Africa's cultural heritage.	None.
3.	Research/scientific significance – Potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage.	None.
4.	Scientific significance – Importance in demonstrating the principal characteristics of a particular class of South Africa's cultural places/objects.	None.
5.	Aesthetic significance – Importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.	None.
6.	Scientific significance – Importance in demonstrating a high degree of creative or technical achievement at a particular period.	None.
7.	Social significance – Strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.	None.
8.	Historic significance – Strong or special association with the life and work of a person, group or organization of importance in the history of South Africa.	None.
9.	The significance of the site relating to the history of slavery in South Africa.	None.

5.1 Field Rating

Not applicable, as no heritage sites were discovered during the survey.

Table 3. 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

6 RECOMMENDATIONS

No heritage and/or archaeological sites were located on the survey. The study area also does not form part of any known cultural landscape. It is therefore suggested that the proposed development may proceed as no heritage sites are in any immediate danger of being destroyed or altered. However, it must be pointed out that the South African National Heritage Act requires that operations exposing archaeological and historical residues, including graves, should cease immediately pending an evaluation by the heritage authorities.

7 MAPS AND FIGURES

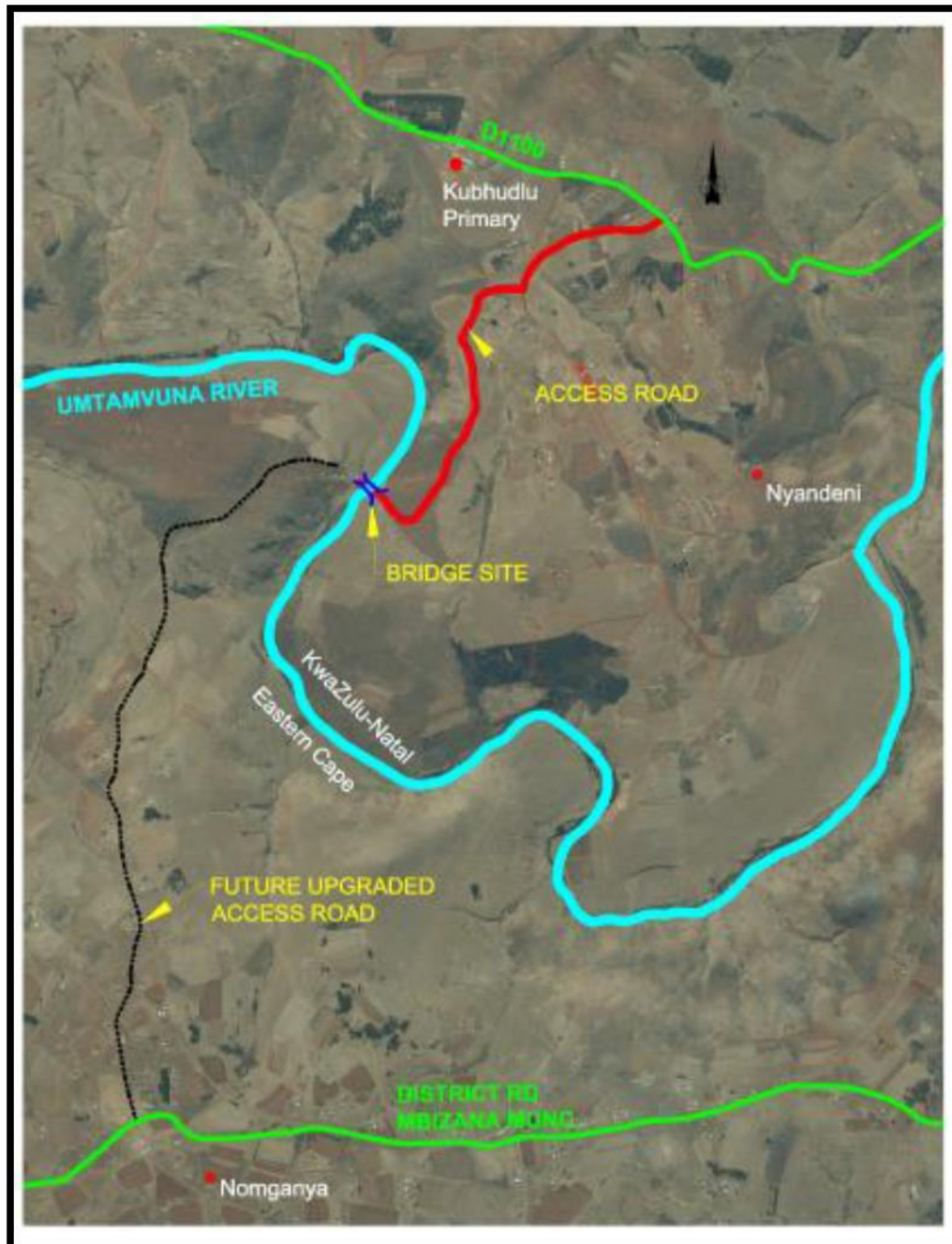


Figure 1. Map showing the locality of the Bhudlu Bridge Site on the border between the Eastern Cape Province and KwaZulu-Natal.

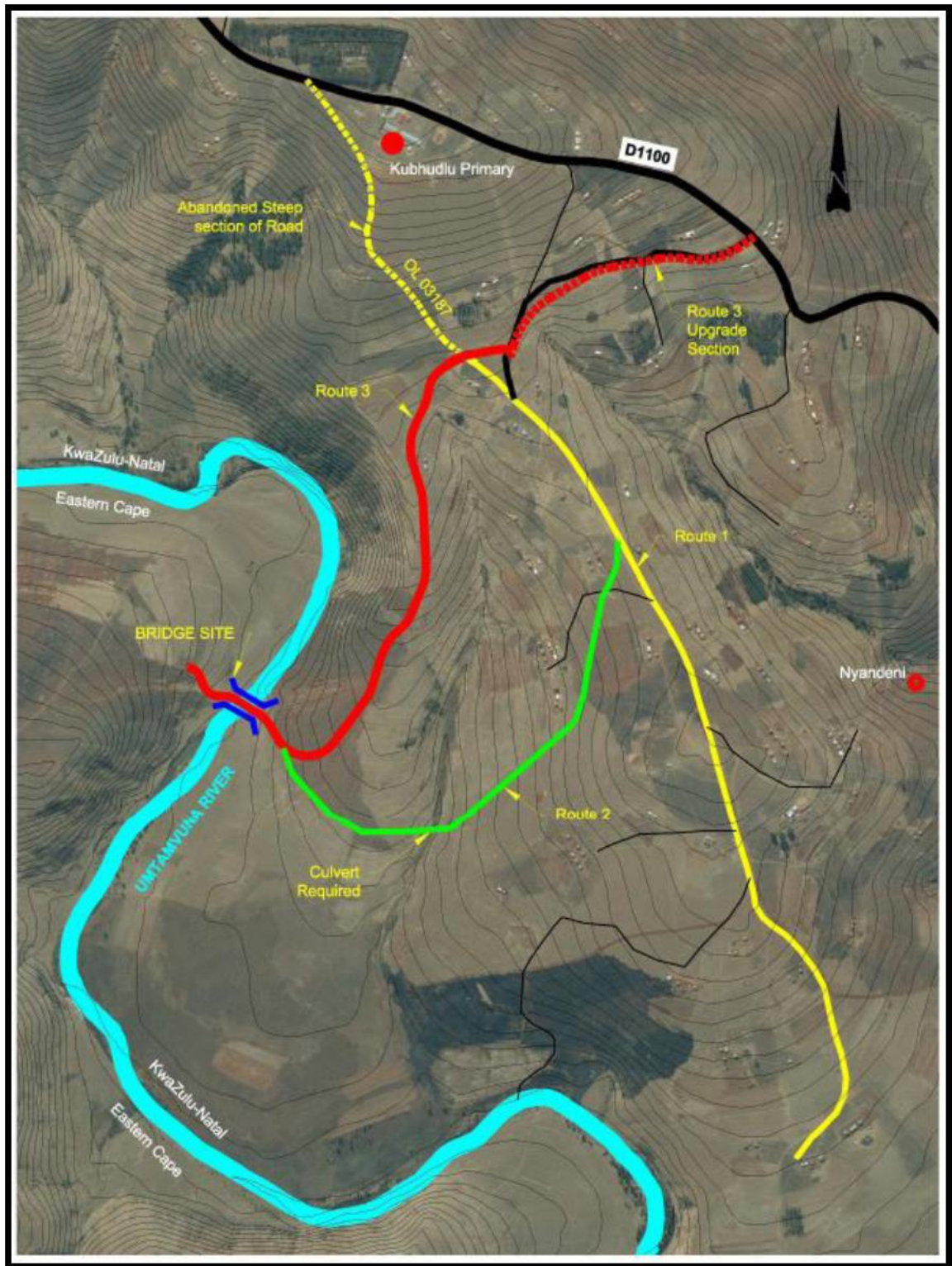


Figure 2. Map showing the three alternative access roads to the Bhudlu Bridge Site. The red line indicates the preferred route



Figure 3.
The proposed Bhudlu Bridge Site on the Umtavuna River.

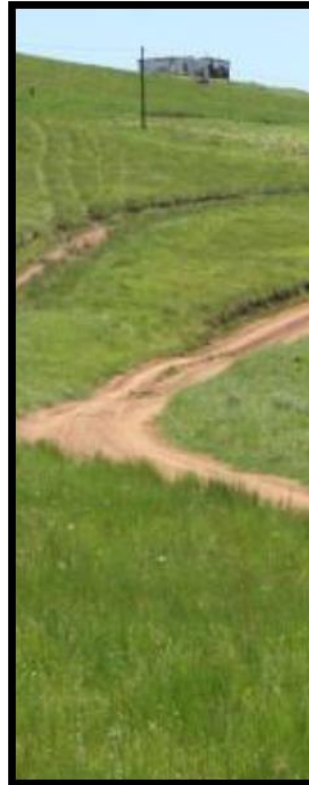


Figure 4. **Present access road to the Bhudlu Bridge. The area is dominated by grasslands with some scattered homesteads.**



Figure 5. One of the present tracks in the area that will be investigated as a potential access road.

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