EZINGADENI LOW LEVEL BRIDGE, MONDLO, ABAQULUSI LOCAL MUNICIPALITY, KWAZULU-NATAL

Phase 1 Heritage Impact Assessment

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EXECUTIVE SUMMARY

The Abaqulusi Local Municipality proposes the construction of the Ezingadeni low level bridge that will cross the Mvunyane River that runs along the western edge of Mondlo, a township situated approximately 25 km south west of Vryheid in the Zululand District Municipality.

This report serves as the Phase 1 Heritage Impact Assessment (HIA) for the proposed low level bridge.

Although the length of the proposed bridge is unknown and it may be less than 300 m hence not triggering section 38 of the National Heritage Resources Act (NHRA), the bridge will take place in a greenfields (undeveloped) area therefore it could impact on graves, structures, archaeological and palaeontological resources that are protected in terms of sections 33, 34, 35, and 36 of the KwaZulu-Natal Heritage Act (No. 4 of 2008) as well as sections 34, 35, and 36 of the NHRA hence the need for a heritage impact assessment.

The proposed Ezingadeni low level bridge will be situated on western edge of Mondlo which falls within the Abaqulusi Local Municipality in northern KwaZulu-Natal. The proposed bridge is located at 27°58'19.83"S 30°41'4.44"E.

A site inspection of the project area was undertaken on 3 October 2017. The area is undeveloped and cattle were found grazing in and along the banks of the river. The river is eroded and there is erosion in the surrounding area. Visibility was very good.

The area where the bridge is to be constructed was walked. Some recent excavation work was observed on the western side of the river. The area is grazed by cattle and an informal vehicle track can be found on either side of the river leading to the proposed site of the bridge. Large slabs of rock were found along the river. No heritage sites were found during the site inspection including no surface evidence of archaeological sites or artefacts. The area is also not part of any known cultural landscape.

The South African Fossil Sensitivity Map indicates that the project area is situated in an area of very high palaeontological / fossil sensitivity. An area of very high fossil sensitivity requires an onsite field assessment. However, it is recommended that a desktop palaeontological assessment be undertaken to assess the possibility of fossils in the project area and the impact that the Ezingadeni low level bridge could have on such fossils (if any). If field work is required, then this will be recommended by the desktop study. From a heritage perspective, the construction of the Ezingadeni low level bridge can only take place once the desktop palaeontological assessment has been undertaken. Depending on the findings of the assessment, the project may proceed as long as the recommendations provided in this report and those in the desktop assessment are implemented.

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AUTHOR DETAILS

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1. INTRODUCTION

The Abaqulusi Local Municipality proposes the construction of the Ezingadeni low level bridge that will cross the Mvunyane River that runs along the western edge of Mondlo, a township situated approximately 25 km south west of Vryheid in the Zululand District Municipality.

This report serves as the Phase 1 Heritage Impact Assessment (HIA) for the proposed low level bridge.

2. LEGISLATIVE BACKGROUND

The length of the proposed bridge is unknown and it may be less than 300 m hence not triggering section 38 of the National Heritage Resources Act (NHRA), 1999 (Act No 25 of 1999); however, the proposed bridge will take place in a greenfields (undeveloped) area hence it could impact on graves, structures, archaeological and palaeontological resources that are protected in terms of sections 33, 34, 35, and 36 of the KwaZulu-Natal Heritage Act (No. 4 of 2008) as well as sections 34, 35, and 36 of the NHRA.

In terms of Section 3 of the NHRA, heritage resources are described as follows:

- (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 paleontological 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 Phase I HIA was undertaken to assess whether any heritage resources will be impacted by the proposed low level bridge.

3. LOCATION

The proposed Ezingadeni bridge is located on western edge of Mondlo which falls within the Abaqulusi Local Municipality in northern KwaZulu-Natal. The proposed bridge is located at 27°58'19.83"S 30°41'4.44"E. It will cross the Mvunyane River.

4. TERMS OF REFERENCE

Undertake a Phase 1 Heritage Impact Assessment in order to determine the possible existence of archaeological, palaeontological and cultural-historical sites or features in the project area that could be impacted by the proposed low level bridge.

Provide mitigation measures to limit or avoid the impact of the construction of the proposed low level bridge on heritage resources (if any).



Figure 1: Location of bridge

Heritage Impact Assessment



Figure 2: Google Earth image of project area in wider surrounds

Heritage Impact Assessment

5. METHODOLOGY

A survey of literature was undertaken of the project area in order to place the project in a historical context and to establish what heritage resources might have been identified in the immediate and wider project area during previous heritage assessments.

A site inspection of the project area was undertaken on 3 October 2017. The area is undeveloped and cattle were found grazing in and along the banks of the river. The river is eroded and there is erosion in the surrounding area. Some dumping of rubbish is taking place in the river. Visibility was very good.

This Phase 1 HIA report will be submitted to the heritage authority of KwaZulu-Natal, namely Amafa aKwaZulu-Natali (Amafa), for their assessment and comment.

6. HISTORICAL BACKGROUND OF THE STUDY AREA

According to Prins (2012:6), portions of the greater Nqutu and Vryheid areas have been systematically surveyed for archaeological heritage sites in the past. These were mostly conducted by archaeologists attached to the then Natal Museum as well as by Amafa staff. 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 such as large dongas. Middle and Later Stone Age sites occur in context in four rock shelters.

During the Anglo-Boer War (1899-1902), the greater Vryheid and Nqutu areas saw action with clashes taking place between Boer and British forces in the 1900s (Jones & Jones 1999:238).

Mondlo was established to house those who were evicted in the late 1960's from their lands in the neighbourhood of the town of Vryheid and their re-settlement at Trado farm, subsequently known as Mondlo Township. The forced removal was in accordance with the then Government's policy of separate development, but initially no funds were provided for essential infrastructures in the township, such as schools and clinics. Lack of major industries at nearby Nqutu and Vryheid also limited the opportunity of Mondlo inhabitants to find work. During the early 1970's the township was transferred to the KwaZulu Government. Subsequent political resistance in the form of rent and bus boycotts culminated in the murder of Mr Ngobese, the township manager, in 1983 (Zungu n.d. 1).

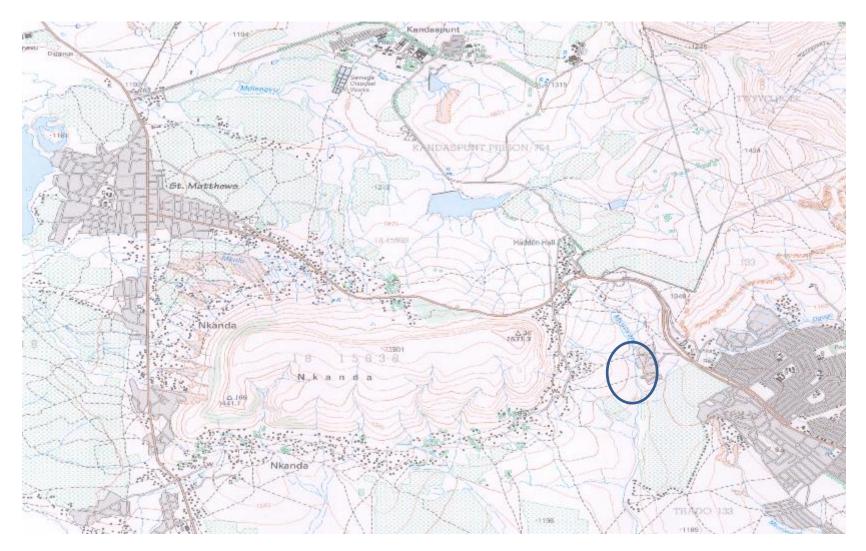


Figure 3: 2730DC map with

The 1:50 000 map (2730DC) (see **Figure 3** above) indicates that agricultural activity previously took place south east of the site of the proposed bridge.

7. RESULTS OF SITE INSPECTION

The area where the bridge is to be constructed was walked. The river had some water in it and erosion has taken place along the river banks. Some recent excavation work was observed on the western side of the river. The area is grazed by cattle and an informal vehicle track can be found on either side of the river leading to the proposed site of the bridge. Large slabs of rock were found along the river.



Figure 4: View of river where bridge is to be crossed



Figure 5: River area with informal track leading to site of bridge



Figure 6: View of river valley showing rocks and erosion



Figure 7: Excavation work on western side of river

No heritage sites were found during the site inspection including no surface evidence of archaeological sites or artefacts. The area is also not part of any known cultural landscape.

The South African Heritage Resources Agency's Fossil Sensitivity Map indicates that the project area is situated in an area coloured in red that indicates an area of very high palaeontological / fossil sensitivity (see **Figure 8** below). As indicated in the Legend in **Figure 8** below, an area of very high fossil sensitivity requires an on-site field assessment. However, it is recommended that a desktop palaeontological assessment be undertaken to assess the possibility of fossils in the project area and the impact that the Ezingadeni low level bridge could have on such fossils (if any). If field work is required, then this will be recommended by the desktop study.

PalaeoSens	itivity Map					
_		Mondlo				
Nkande		KwaZulu-Natal				
1 in 250 000 geological formation layers are courtesy of the Council for GeoScience For more information, go to How to Use the Palaeontological (fossil) Sensitivity Map						
Colour	Sensitivity	Required Action				
RED	VERY HIGH	field assessment and protocol for finds is required				
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely				
GREEN	MODERATE	desktop study is required				
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required				
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required				
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.				

Figure 8: Fossil sensitivity of project area indicated with blue oval

8. RECOMMENDATIONS AND CONCLUSION

No heritage resources were found in the area where the proposed low level bridge is to be constructed. The excavation and construction of the bridge could reveal sub-surface material such as archaeological material hence the mitigation measures provided below must be adhered to regarding change finds of heritage resources. Due to the very high fossil sensitivity of the project area, a desktop palaeontological assessment is recommended.

From a heritage perspective, the construction of the Ezingadeni low level bridge can only take place once the desktop palaeontological assessment has been undertaken. Depending on the

findings of the assessment, the project may proceed as long as the recommendations provided in this report and in the desktop assessment are implemented.

9. MITIGATION MEASURES

- For any chance finds of heritage resources, such as graves or archaeological residues, all work must cease in the area affected and the Contractor must immediately inform the Project Manager. A registered heritage specialist must be called to site for inspection. The relevant heritage resource agency (Amafa) must also be informed about the finding.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Written permission must be obtained from Amafa if heritage resources are to be removed, destroyed or altered.
- All heritage resources found in close proximity to the construction area must be protected by a 5m buffer in which no construction can take place. The buffer material (danger tape, fencing, etc.) must be highly visible to construction crews.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any remains be found on site that is potentially human remains, the South African Police Service (SAPS) should also be contacted. No SAPS official may disturb or exhume such remains, whether of recent origin or not, without the necessary permission.
- In terms of fossil finds, the monitoring programme and mitigation measures provided in the desktop palaeontological assessment must be implemented and adhered to.

10. REFERENCES

Jones, H.M. and Jones, M.G.M. 1999. *A Gazetteer of the Second Anglo-Boer War 1899-1902*. The Military Press, Milton Keynes

Prins, F. 2012. Cultural Heritage Impact Assessment of the proposed extension of the eMondlo St James and Leksand Substation Yards, including the reconstruction of the existing Leksand-St James 88/22kV power line and the construction of the new eMondlo-St James 88/22kV power line. Unpublished report

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