

**PROPOSED UPGRADE OF THE MAHADENI
VEHICULAR BRIDGE, NDWEDWE LOCAL
MUNICIPALITY
KWAZULU-NATAL**

Phase 1 Heritage Impact Assessment

March 2017

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EXECUTIVE SUMMARY

The Ndwedwe Local Municipality proposes to upgrade a concrete vehicular bridge located within the municipality. The proposed upgrade of the Mahadeni Bridge aims to improve rural mobility and provide safer and more efficient pedestrian movement in the Ndwedwe Municipality. The project entails the upgrade of an existing bridge to a three span concrete slab bridge (vehicular), measuring 10.5 m x 5 m and contains 2 piers & 2 abutments.

Although the upgrade of the proposed bridge does not trigger Section 38 (1) of the National Heritage Resources Act, 1999 (Act No 25 of 1999) that lists developments and associated criteria that may trigger a heritage impact assessment, the proposed bridge could impact graves, protected 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 National Heritage Resources Act (NHRA).

The existing bridge falls within the deeply rural areas comprising the Ndwedwe Local Municipality. The location of the bridge is at: 29 29'53.15" S 30 50'39.0" E.

A site inspection of the bridge was undertaken on 07 March 2017. The riverine vegetation was densely overgrown and access to some parts were made difficult due to this. Otherwise site conditions were good.

The existing bridge is a low concrete slab situated over the Mahadeni River. There are no residences in close proximity (within 50 m) of the bridge. Recent and past rains have eroded the sides of the bridge and some piping has been exposed in the eroded areas.

No heritage resources were found during an inspection of the immediate bridge area and the larger surrounding area. A resident who was passing the area indicated that to his knowledge there were no heritage sites in the area around the bridge and river.

The South African Heritage Resources Agency's (SAHRA) fossil sensitivity map indicated that the project area is situated in an area of insignificant or zero fossil sensitivity indicating that no further palaeontological studies were required.

No heritage resources were found in and around the project site during the site inspection hence from a heritage perspective, it is recommended that the upgrading of the Mahadeni Bridge proceed with the proviso that the mitigation measures listed in section 9 of the report are adhered to and implemented where necessary.

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AUTHOR DETAILS

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1. INTRODUCTION

The Ndwedwe Local Municipality proposes to upgrade a concrete vehicular bridge located within the municipality. The proposed upgrade of the Mahadeni Bridge aims to improve rural mobility and provide safer and more efficient pedestrian movement in the Ndwedwe Municipality. The project entails the upgrade of an existing bridge to a three span concrete slab bridge (vehicular), measuring 10.5 m x 5 m and contains 2 piers & 2 abutments.

This report serves as the Phase 1 Heritage Impact Assessment (HIA) for the proposed upgrade of the Mahadeni vehicular bridge.

2. LEGISLATIVE BACKGROUND

Although the upgrade of the proposed bridge does not trigger Section 38 (1) of the National Heritage Resources Act, 1999 (Act No 25 of 1999) that lists developments and associated criteria that may trigger a heritage impact assessment, the proposed bridge could impact graves, protected 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 National Heritage Resources Act (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).

This Phase I HIA is undertaken to assess whether any heritage resources will be impacted by the proposed upgrade of the Mahadeni vehicular bridge.

3. LOCATION

The existing bridge falls within the deeply rural areas comprising the Ndwedwe Local Municipality and is situated approximately 3km south east of Wosiyane Village. The location of the bridge is at: 29 29'53.15" S 30 50'39.0" E (see **Figures 1 and 2** below).

4. TERMS OF REFERENCE

Undertake a Phase 1 Heritage Impact Assessment in order to determine the possible existence of archaeological and other historical sites or heritage resources in and close to the proposed upgrading of the bridge that could be impacted by the proposed activity

Provide mitigation measures to limit or avoid any impacts that the upgrading of the bridge may have on heritage resources (if any).

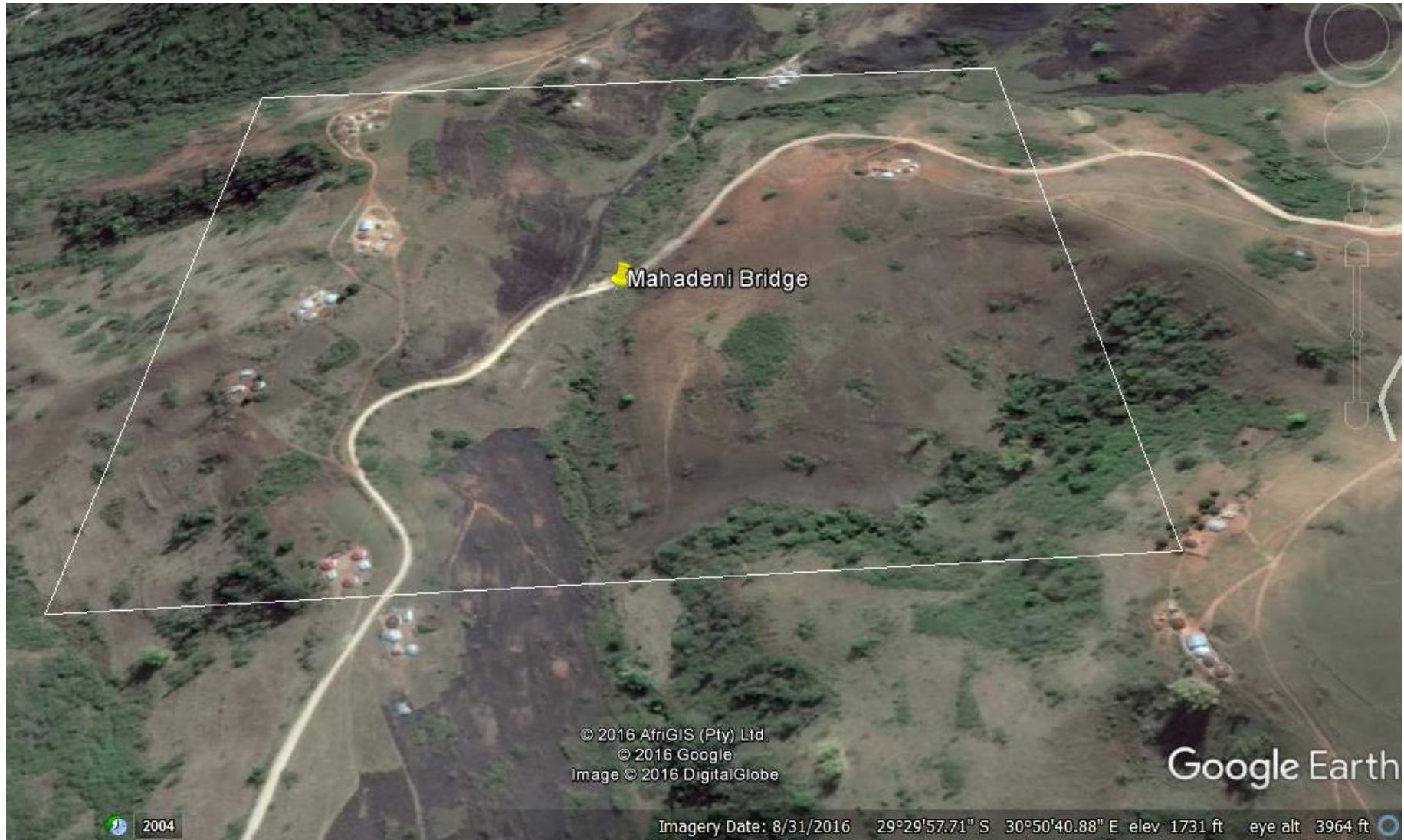


Figure 1: Google Earth image of Mahadeni Bridge



Figure 2: Closer image if existing Mahadeni Bridge

5. METHODOLOGY

A survey of literature was undertaken in order to gain an understanding of potential heritage resources in the area of the proposed bridge upgrade.

A site inspection of the bridge where the upgrade is to take place was undertaken on 07 March 2017. The river vegetation was densely overgrown and access to some parts were difficult due to this. Otherwise site conditions were good.

6. HISTORICAL BACKGROUND OF THE STUDY AREA

During the pre-Shakan period in the 1700s, the vast areas around Ndwedwe and surrounding areas, were under the leadership and governance of many tribal chiefs and izunduna (headmen). It was not until the Shakan period [1815-1828] that these were brought under one kingdom, the Zulu Kingdom of Shaka. Some of the leadings clans and tribal chiefs in the Ndwedwe region, who have deep roots from the pre-Shakan history, include the Chili, Maphephetheni, Ngcolosi, Nyuswa, Nzama, AmaQadi, and Shangase (Ximba 2009:59).

The AmaQadi tribe, who were engrossed in disputes over succession, dispersed northwards over the Tugela River and some southwards around eThekweni area. In the preShakan period the AmaNyuswa tribe lived on the northern bank of the Tugela River until they were integrated into the Zulu Nation by Shaka. The Ngcolosi tribe were once resident on the Tugela River are now found in the Ndwedwe area. The Nzama tribe also resided north of the Mvoti River near Greytown but are now found in the Ndwedwe area. The AmaPhephetheni tribe lived next to the Ngcolosi, but moved to oPhisweni Mountain, until they were integrated into the Zulu Nation by Shaka. The Shangase tribe also called Mkeshane were related to the Ngcobo, and were integrated into the Zulu Nation like the other tribal groups (Ximba: 60).

King Shaka's main royal residences were called Bulawayo which was located in Eshowe, Umbelebele which was located in KwaMashu and Dukuza which was located in Stanger. Geographically, the Stanger royal residence is the nearest to Ndwedwe and it was understood that an area within a radius of 90 kilometres was regarded as been within the domain and influence of King Shaka (Ximba: 59).

The Ndwedwe area is strongly influenced by the Shembe religious beliefs, symbolised by the mythological 'Holy Mountain of Nhlangakazi' situated close to Ndwedwe.

An annual pilgrimage to the Mountain is undertaken by the faithful based on the third book of Moses, the biblical leader. It is said to date back to a revelation iNkosi Shembe of amaNazaretha experienced in 1916, where it was revealed upon him that God would only speak to him at the Holy Mountain Nhlangakazi, just as God had spoken to Moses on Mount Sinai. It is said Isaiah Shembe was alone on a hillside when he was struck down by lightning where the voice of the Lord ordered him to go south. He was carried unconscious to his hut and taken for dead. On waking up he then told his followers that he had been among spirits who had instructed him to go south. It was then that he took his Bible, a blanket, a rod as well as gifts from his followers and engaged on a pilgrimage to the south. That was the birth of the Nhlangakazi pilgrimage (Hlatswayo 2012:2).

7. SITE INSPECTION RESULTS

The existing bridge is a low concrete slab situated over the Mahadeni River. There are no residences in close proximity (within 50 m) of the bridge with the closest residence situated some 170m from the bridge. Recent and past rains have eroded the sides of the bridge and some piping has been exposed in the eroded areas.



Figure 3: View of existing bridge

A resident who was passing by, Mr. Nkululeko Buthulezi, indicated that to his knowledge there were no heritage sites in the area around the bridge and river. No heritage resources were found during an inspection of the immediate bridge area and the surrounding area which also confirmed his statement.



Figure 4: View of bridge and associated erosion



Figure 5: Dense vegetation along river



Figure 6: Valley side



Figure 7: General overview of bridge

Palaeontological

The South African Heritage Resources Agency's (SAHRA) Fossil Sensitivity Map (see **Figure 8** below) indicates that the project area is situated in an area of insignificant or zero fossil sensitivity with the result that no further palaeontological studies are required. However, a protocol for the remote possibility of chance finds of fossils during the upgrading of the bridge is provided in Section 9 of this report.

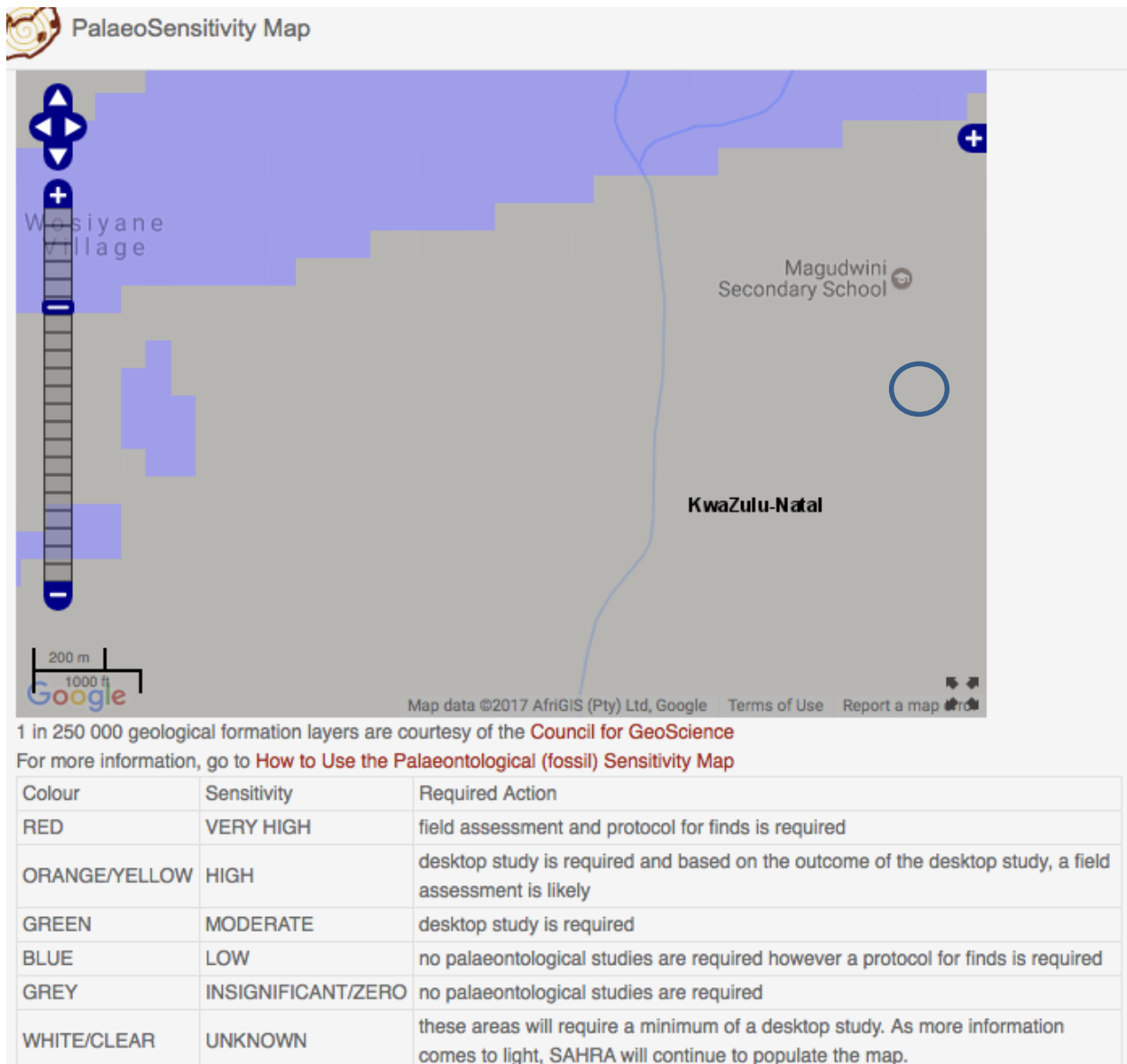


Figure 8: Fossil sensitivity of approximate project area indicated with blue circle

8. RECOMMENDATIONS AND CONCLUSIONS

No heritage resources were found in and around the project site during the site inspection. This was confirmed by a passing resident of the area.

From a heritage perspective, the upgrading of the Mahadeni Bridge can proceed with the proviso that the mitigation measures listed below in section 9 are adhered to and implemented where necessary.

9. MITIGATION MEASURES

- For any chance finds, all work will cease in the area affected and the Contractor will immediately inform the Project Manager. A registered heritage specialist must be called to site for inspection. The relevant heritage resource agency (Amafa) must be informed about the finding.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Permits to 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 are to be protected by a 10m 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 should also be contacted.
- If there are chance finds of fossils during construction, a palaeontologist must be called to the site in order to assess the fossils and rescue them if necessary (with an Amafa permit). The fossils must then be housed in a suitable, recognized institute.

10. REFERENCES

Hlatshwayo, M. 2012. Nhlankasi- the Nazareth Baptist Church's Mecca. (www.archivalplatform.org/blog/entry/nhlankakazi/)

Ximba, E.Z. 2009. *Cultural and Heritage Tourism Development and Promotion in the Ndwedwe Municipal Area. Perceived Policy and Practice*. Unpublished Dissertation submitted to the Faculty of Arts, University of Zululand.