

**UPGRADE OF DISTRICT ROAD D1252 SITUATED IN
WARDS 3 & 4 OF IMBAMBAZA LOCAL MUNICIPALITY,
KWAZULU-NATAL**

Phase 1 Heritage Impact Assessment

29 July 2019

**FOR: Afzelia Environmental Consultants
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EXECUTIVE SUMMARY

The KwaZulu-Natal (KZN) Department of Transport (DoT) proposes to upgrade district road D1252 from gravel to blacktop. The road runs through Wards 3 and 4 of the Imbambaza Local Municipality that falls under the uThukela District Municipality, KwaZulu-Natal. The D1252 road is the link between Enkomokazini and Loskop station and provides access to the P10/1 road to Estcourt and Maqedandaba. The total length of the road upgrade is 3.899 km (from km 0.0 to km 3.899). The upgrade includes the use of an existing borrow pit.

The length of the upgrade is 3.899 km which triggers sections 41 (1)(a) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. Section 41 (1)(a) refers to: the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length. The possible increase in size of the existing borrow pit for the proposed road upgrade may also trigger section 41 (1)(c) of the above Act which refers to any development or other activity which will change the character of site- (i) exceeding 5000 m².

The start point of the upgrade is at 28° 56' 17.9" S, 29° 34' 58.5" E and the end point is at 28° 56' 06.9" S, 29° 36' 41.2" E. The borrow pit is located at 28° 56' 02.8" S, 29° 35' 57.5" E. A site inspection was undertaken on 23 July 2019.

Several heritage sites were found during the site inspection including:

- Near the school, at least five graves were found situated 20 m south of the D1252. The graves are made from packed rock and two of the graves have inscribed headstones. The graves are fenced and are situated some distance from the D1252 road and should not be impacted by the proposed road upgrade.
- A fenced circular Shembe temple made from white-painted stones is located 14 m north of and above the borrow pit. If the borrow pit is to be mined northwards, then the temple will most likely be impacted. Although of no heritage significance, it may be of importance to those members of the Shembe religion that worship at the temple.
- Three graves were found on the opposite of the road to the borrow pit underneath trees. The graves are made from packed rock and are situated 35 m north of the D1252 and should not be impacted by the proposed upgrade.
- A dwelling that could be older than 60 years was found about 10 m south of the road. As the road is not going to be widened, it should and must not be impacted by the road upgrade.
- Several graves were found within the fenced boundary of a homestead about 8 m south of road. The graves should not be impacted by the road upgrade. However, diagonally opposite this site four graves were found located on the boundary of the road and

homestead. Only a fence separates the road and the graves hence they could be impacted by the upgrade.

- Two graves made from packed rock were found situated 14 m and 30 m south of the D1252 road in an open area. They are situated some distance from the road and should not be impacted by the upgrade.

A desktop palaeontological assessment was undertaken of the proposed road upgrade and it found that there is a chance that palaeontological material may be found during the upgrade of the D1252 road. The impact on fossils was assessed as being potentially high but this can be mitigated by the implementation of a “Chance Find Protocol”.

The assessment of impacts on heritage resources (graves, protected structures, etc) indicated that with the implementation of recommended mitigation measures the impacts can be reduced from a medium impact to a low impact.

The site inspection revealed one structure that could be older than 60 years. Structures older than 60 years are protected by section 37 (1)(a) of the Amafa and Research Institute Act (2018), which states that no structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without prior written approval of the Institute. It is unlikely that the structure will be impacted especially if the mitigation measures recommended are implemented.

Graves and burial sites are protected by section 39 (1) of the KwaZulu-Natal Amafa and Research Institute Act, which refers to the general protection of informal and private burial grounds. The relocation of graves is not recommended as graves are highly significant to people and there are many traditional, cultural and personal sensitivities and norms concerning the removal of graves. The four graves situated right alongside the road should be protected from activities resulting from the upgrade of the D1252 either by sandbagging or by other means that will prevent damage to the graves.

The proposed upgrade of district road D1252 may proceed as long as the recommendations and mitigation measures made in this report and in the desktop palaeontological assessment are implemented.

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I, **Jean Lois Beater**, act as an independent specialist for this project and I do not have any vested interest either business, financial, personal or other, in the proposed activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.

AUTHOR DETAILS

Name	Qualification	Professional Registration
Jean Beater (JLB Consulting)	MA (Heritage Studies)	Member of Association of South African Professional Archaeologists (No. 349)
	MSc (Environmental Management)	Member of IAIAasa (No. 1538)

1. INTRODUCTION

The KwaZulu-Natal (KZN) Department of Transport (DoT) proposes to upgrade district road D1252 from gravel to blacktop. The road runs through Wards 3 and 4 of the Imbambaza Local Municipality that falls under the uThukela District Municipality, KwaZulu-Natal. The D1252 road is the link between Enkomokazini and Loskop station and provides access to the P10/1 road to Estcourt and Maqedandaba. The total length of the road upgrade is 3.899 km (from km 0.0 to km 3899). The upgrade comprises the construction of earthworks, stormwater drainage, layer works, ancillary works and surfacing (Ibhongo Consulting 2019: viii) as well as the use of an existing borrow pit situated alongside the D1252.

It is understood from the Environmental Assessment Practitioner (EAP), Afzelia Environmental Consultants, that the existing gravel road will not be widened.

This report serves as a Phase 1 Heritage Impact Assessment (HIA) for the proposed upgrade of the D1252 road.

2. LEGISLATIVE BACKGROUND

The length of the upgrade is 3.899 km which triggers sections 41 (1)(a) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. Section 41 (1)(a) refers to: *“the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length”*.

The increase in size of the existing borrow pit for the proposed road upgrade may also trigger section 41 (1)(c) of the above Act. This section refers to *“any development or other activity which will change the character of site- (i) exceeding 5000 m²”*.

The project may also impact protected graves, structures, archaeological and palaeontological resources that are protected in terms of sections 37, 38, 39, and 40 of the KwaZulu-Natal Amafa and Research Institute Act, 2018.

In terms of Section 3 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), heritage resources are listed as:

(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; and
- (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).

In addition, the KwaZulu-Natal Amafa and Research Institute Act, 2018, also refers to the intangible aspects of culture that should be kept in mind including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships.

The Phase I HIA was undertaken to assess whether heritage resources will be impacted by the upgrade of district road D1252.

3. LOCATION

The D1252 road provides access to the communities of Mazabaqabeni and Enkomokazini that fall under the Imbambaza Local Municipality, which in turn falls within the uThukela District Municipality. The road is situated approximately 25km north-west of the town of Estcourt along the P10-1 road.

The start point of the upgrade is at 28° 56' 17.9" S, 29° 34' 58.5" E and the end point is at 28° 56' 06.9" S, 29° 36' 41.2" E. The borrow pit is located at 28° 56' 02.8" S, 29° 35' 57.5" E (see **Figure 1** below).

4. TERMS OF REFERENCE

Undertake a Phase 1 Heritage Impact Assessment in order to determine the possible existence of heritage resources, as listed above, that could be impacted by the proposed road upgrade. Provide mitigation measures to limit or avoid the impact of the road upgrade on heritage resources (if any).

The specialist will submit the HIA report to the provincial heritage resources authority, namely the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their consideration and comment.

5. METHODOLOGY

A survey of literature, including other heritage impact assessment (HIA) reports completed for the surrounding area, was undertaken in order to ascertain the history of the area and what type of heritage resources have or may be found in the area.

An inspection of the D1252 road was undertaken on 23 July 2019. Visibility was good.

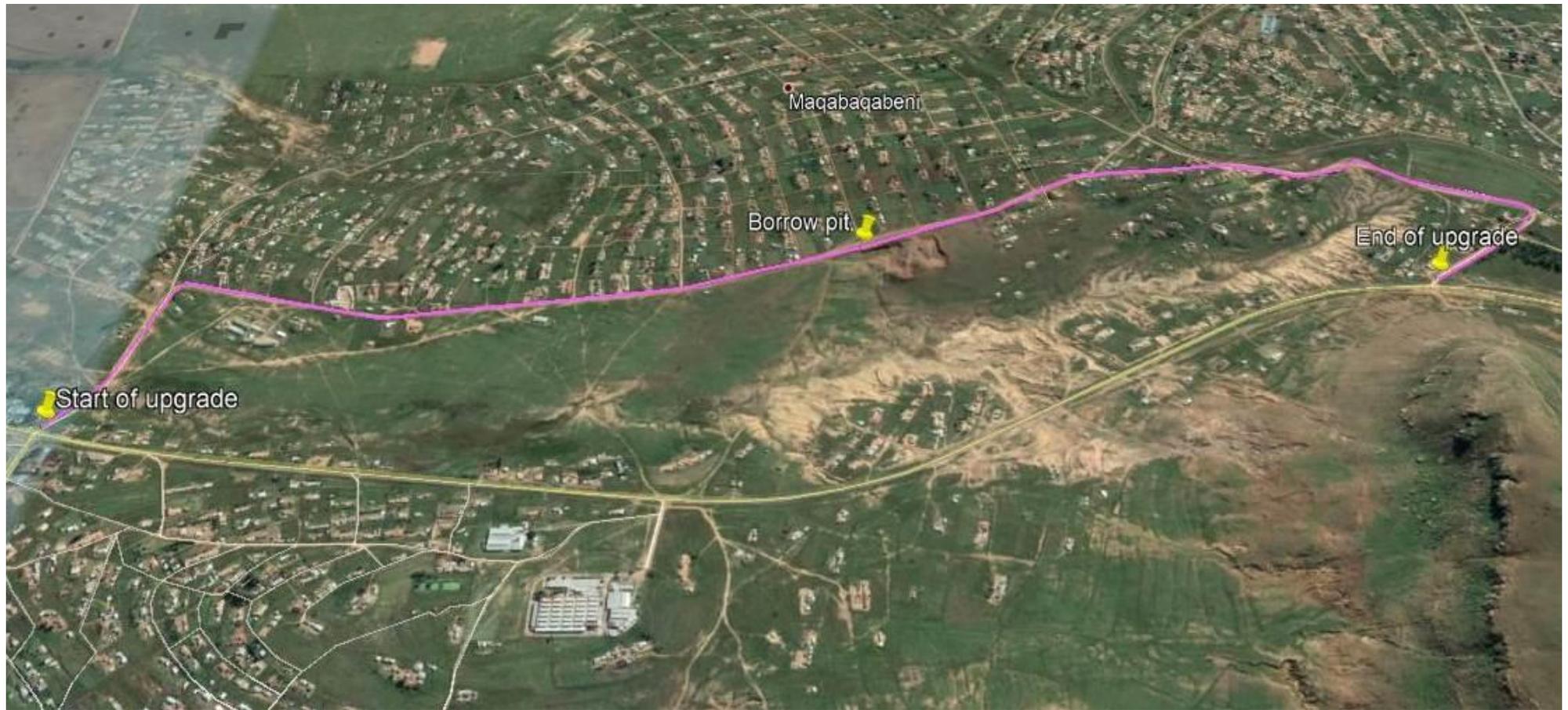


Figure 1: District road D1252 indicated in pink

6. HISTORICAL BACKGROUND OF THE STUDY AREA

Sites belonging to the Early Stone Age period in the Drakensberg are mostly characterised by a few surface scatters and individual stone tools usually in the close vicinity of water. Middle Stone Age sites in the Drakensberg region occur as surface scatters as well as deep cave deposits. The stone tool assemblages belonging to the immediate ancestors of the San or Bushmen have been termed Later Stone Age (LSA). Literally hundreds of LSA sites are located in the Drakensberg region. Evidence from Good Hope shelter 1 near the bottom of Sani Pass suggests that the earliest archaeological evidence for San people in the KwaZulu-Natal portion of the Drakensberg dates back to approximately 8 000 years ago (Active Heritage 2015:6-8).

Archaeological evidence shows that Bantu-speaking agriculturists first settled in southern Africa around AD 300. The earliest agricultural sites in KwaZulu-Natal date to between AD 400 and 550. All are situated close to sources of iron ore, and within 15 km of the coast. From 650 onwards, climatic conditions improved, and agriculturists expanded into the valleys of KwaZulu-Natal, where they settled close to rivers in savanna or bushveld environments. Metal production was a key activity since it provided the tools of cultivation and hunting. In general, sites dating to between 1050 and 1250 were smaller than most earlier agriculturist settlements. This new pattern of settlement was in some way influenced by a changing climate, for there is evidence of increasing aridity from about AD 900. A new pattern of economic inter-dependence evolved that continued into the colonial period nearly 500 years later.

In more 'recent' times, the expansion of the Zulu kingdom under King Shaka around 1818 had a major impact on settlements in the region. Various chieftains were attacked, and people fled across the Maloti-Drakensberg region in search of safer settlements elsewhere. In addition, the Voortrekkers arrived in Natal over the Drakensberg and Nkosi Langalibalele and his followers fled the colonial government after they demanded that his followers register their firearms. He retreated up the Bushman River valley before being captured in Lesotho. He was banished to Robben Island making him the first South African to be imprisoned there. His grave is situated at Giants Castle within the uKhahlamba Drakensberg Park World Heritage Site (WHS) (Derwent 2006:88).

The memorial commemorating the sod laager of Gert Maritz, one of the Voortrekker leaders is situated about 500 m south-west of the start of the road upgrade. He established the laager in

1838 on the banks of the Little Tugela River / Injesutu River after the Voortrekkers descended into the area from the Drakensberg.

In 2000, the World Heritage Committee inscribed the uKhahlamba Drakensberg Park WHS as a haven for many threatened and endemic species and for its wealth of rock paintings made by the San people over a period of 4000 years. Located in the Drakensberg Mountains in an area covering 242,813 hectares, the Park is the largest protected area along the Great Escarpment of Southern Africa (State of Conservation Report 2016:11). District road D1252 is situated a short distance from the designated buffer zone of the WHS (see **Figure 2** below).

The buffer is, according to the Concept Development Plan (Ezemvelo KwaZulu-Natal Wildlife 2011:103), a demarcated area in proximity to a WHS of high biodiversity, cultural heritage, water and landscape importance where ownership is vested with private bodies or indirectly local user communities and where land management rights vest in public rather than exclusively conservation specific agencies and where land management is approached as a partnership between conservation authority and those with user rights. This is outside of a protected area ... and is an area in which the protected area managers work collaboratively with neighbours and municipalities to try to ensure land uses that are compatible with the protected area.

It is assumed by the specialist that, if necessary, the EAP will submit the environmental documentation for the proposed road upgrade, including this report, to the relevant WHS authorities for their comment.

uKhahlamba Drakensberg Park World Heritage Site Zonation

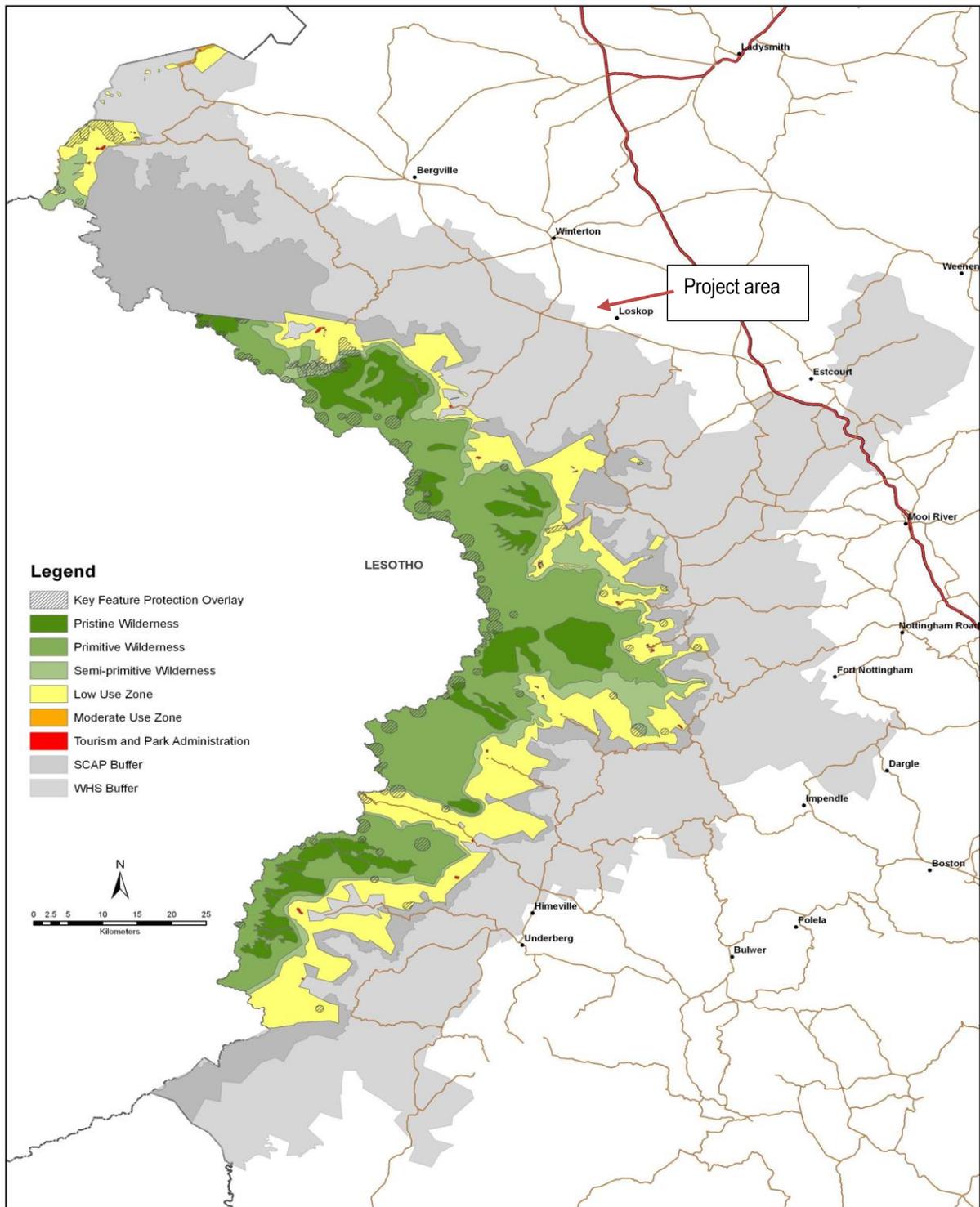


Figure 2: uKhahlamba-Drakensberg Park WHS and WHS buffer

7. RESULT OF SITE INSPECTION

The length of the road upgrade was walked and the specialist spoke to several residents about potential heritage resources along the road. A number of heritage resources were found, some of which are located close to the road and borrow pit. The sites are listed below in **Table 1**.



Figure 3: D1252 looking west



Figure 4: Disturbed condition of road

At least five graves were found situated 20 m south of the D1252 road at 28° 56' 09.1" S, 29° 35' 19.1" E. The graves are made from packed rock and two of the graves have inscribed headstones. The graves are fenced with barb wire and this area is about 35 m in length. The graves are situated some distance from the road and should not be impacted by the upgrade of the road.



Figure 5: Fenced graves

Foundations of structures were found at 28° 56' 06.9" S 29° 35' 45.8" E about 12 m south of the D1252 and close to a recently built structure. No graves were found in the vicinity of the foundations which have no heritage significance.

An existing borrow pit, which is currently being mined, will be used to source material for the upgrade of road. The area is very disturbed as can be seen in **Figure 6** below. The area and surrounds were inspected and a fenced circular Shembe temple made from white-painted stones is located 14 m north of and above the borrow pit (see **Figure 7** below). If the borrow pit is to be mined northwards, then the temple will most likely be impacted. Although of no heritage significance, it may be of importance to those members of the Shembe religion that worship at the temple.



Figure 6: Existing borrow pit



Figure 7: Shembe temple

About 25m south-east of the temple, a mud brick structure was found that could be used by those worshipping at the temple for their ablutions. It is of no heritage significance, It could also be impacted if the borrow pit expands northwards.



Figure 8: Structure near Shembe temple

Three graves were found on the opposite of the road to the borrow pit underneath trees at position 28° 55' 59.6" S, 29° 36' 00.7" E. The graves are made from packed rock and are situated 35 m north of the D1252 and should not be impacted by the proposed upgrade.



Figure 9: Three graves

The remains of a brick building were found close to the road. It is unclear what the building was used for and it could have been a municipal or government office or community hall. The boundary of the structure is about 5 m south of the road. It does not appear to be older than 60 years and is of low heritage significance.



Figure 10: Partially demolished structure

A dwelling that could be older than 60 years was found about 10 m south of the road. As the road is not going to be widened, it should and must not be impacted by the road upgrade.



Figure 11: Potential protected structure

Several graves were found within the fenced boundary of a homestead about 8 m south of road at 28° 55' 55.2" S, 29° 36' 25.0" E. The graves should not be impacted by the road upgrade. However, diagonally opposite this site four graves were found located on the boundary of the road and homestead at 28° 55' 54.5" S, 29° 36' 25.5" E. Only a fence separates the road and the graves. The upgrade of the road could impact on these graves. They are all fairly recent graves with granite headstones and tombstones.



Figure 12: Graves located close to the road

Two graves made from packed rock were found situated respectively 14 m and 30 m south of the D1252 road in an open area. The foundations of a structure were found close to these graves and it is surmised that the graves could be linked to the structure. The graves are situated some distance from the road and should not be impacted by the upgrade.



Figure 13: Single grave



Figure 14: Second grave

The South African fossil sensitivity map indicates that the project area falls into an area of very high fossil sensitivity interspersed with areas of moderate sensitivity and areas of insignificant sensitivity. A desktop palaeontological assessment was undertaken of the proposed road upgrade and it found that there is a chance that palaeontological material may be found during

the upgrade of the D1252 road. The impact on fossils was assessed as being potentially high but this can be mitigated by the implementation of a “Chance Find Protocol”.

A list of heritage resources found during the site inspection are listed below in **Table 1**.

Table 1: List of heritage resources

COORDINATES	HERITAGE RESOURCE	PROXIMITY TO ROAD; MITIGATION MEASURES
Graves located between 28°56'09.1" S 29°35'19.1" E and 28°56'09.3" S 29°35'20.4" E	± 5 graves; high heritage significance	>20m south of road upgrade; no mitigation necessary
28°56'03.2" S 29°36'04.9" E	Shembe temple; potentially significant to Shembe community	Located 14m north of borrow pit; the expansion of borrow pit northwards will result in damage to temple. Discussions should be held with Shembe leaders in the community to have the temple moved to an agreed site
28°55'59.6" S 29°36'00.7" E	3 graves; high heritage significance	Located 35m north of road; no mitigation necessary
28°55'57.5" S 29°36'13.3" E	Partially demolished structure; low heritage significance	5m south of road; no mitigation necessary
28°55'55.9" S 29°36'17.7" E	Structure that could be over >60 years hence protected	9m south of road; no construction activities within 3m of house to protect against damage by road upgrade
28°55'55.2" S 29°36'25.0" E	2 graves; high heritage significance	8m south of road within boundary of homestead; no mitigation necessary
28°55'54.5" S 29°36'25.5" E	4 graves; high heritage significance	Graves are situated alongside road with only a fence between graves and road. Care must be taken not to damage graves during road upgrade; consult with owner of homestead to ensure this
28°55'55.3" S 29°36'37.3" E	2 graves in open area; high heritage significance	Situated 14m and 30m respectively south of road; no mitigation necessary
28°55'55.7" S 29°36'37.5" E		

8. ASSESSMENT OF IMPACTS

The methodology used for the assessment of impacts of the proposed road upgrade was provided by the EAP. The direct, indirect and cumulative impacts of the issues identified through the Phase 1 HIA were assessed in terms of the following criteria:

- The **nature**, which shall include a description of what causes the effect, what will be affected and how it will be affected.
- The **extent**, wherein it will be indicated whether the impact will be local (limited to the immediate area or site of development) or regional, and a value between 1 and 5 will be assigned as appropriate (with 1 being low and 5 being high):
- The **duration**, wherein it will be indicated whether:
 - the lifetime of the impact will be of a very short duration (0–1 years) – assigned a score of 1;
 - the lifetime of the impact will be of a short duration (2-5 years) - assigned a score of 2;
 - medium-term (5–15 years) – assigned a score of 3;
 - long term (> 15 years) - assigned a score of 4; or
 - permanent - assigned a score of 5;
- The **magnitude**, quantified on a scale from 0-10, where 0 is small and will have no effect on the environment, 2 is minor and will not result in an impact on processes, 4 is low and will cause a slight impact on processes, 6 is moderate and will result in processes continuing but in a modified way, 8 is high (processes are altered to the extent that they temporarily cease), and 10 is very high and results in complete destruction of patterns and permanent cessation of processes.
- The **probability** of occurrence, which shall describe the likelihood of the impact actually occurring. Probability will be estimated on a scale of 1–5, where 1 is very improbable (probably will not happen), 2 is improbable (some possibility, but low likelihood), 3 is probable (distinct possibility), 4 is highly probable (most likely) and 5 is definite (impact will occur regardless of any prevention measures).
- The **significance**, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium or high; and
- The status, which will be described as either positive, negative or neutral.
- The degree to which the impact can be reversed.
- The degree to which the impact may cause irreplaceable loss of resources.
- The degree to which the impact can be mitigated.

The significance is calculated by combining the criteria in the following formula:

$$S = (E+D+M) \times P$$

S = Significance weighting

E = Extent

D = Duration

M = Magnitude

P = Probability

The significance weightings for each potential impact are as follows:

- < 30 points: Low (i.e. where this impact would not have a direct influence on the decision to develop in the area),
- 30-60 points: Medium (i.e. where the impact could influence the decision to develop in the area unless it is effectively mitigated),
- >60 points: High (i.e. where the impact must have an influence on the decision process to develop in the area).

The tables below assess the impacts of the road upgrade on protected graves and structures.

Table 2: Significance of impacts on graves

Nature: Graves situated alongside road that could be damaged by road upgrade		
	Without mitigation	With mitigation
Extent	Local (2)	Local (2)
Duration	Permanent (5)	Long-term (4)
Magnitude	High (8)	Moderate (6)
Probability	(3) Probable	Improbable (2)
Significance	45 (Medium)	24 (Low)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources	Yes	Yes
Can impacts be mitigated?	Yes	
<i>Mitigation: Recent graves with granite headstones and tombstones which could be damaged during the upgrade</i>		
<i>Mitigation Measures (a) Consult with homeowner to find a means of protecting the graves from damage during upgrade; (b) If possible a buffer (sandbagging for example) should be placed between the graves and the road to ensure no damage to the graves; (c) If graves are damaged, then work in the immediate area must stop and the graves must be repaired at the cost of the Applicant to the satisfaction of the homeowner; (4) Workers to respect the significance of graves to the family and community</i>		
Cumulative impacts: Low; but possible if any of the graves are damaged		
Residual Impacts: Potentially if graves are damaged		

Table 3: Significance of impacts on protected structures

Nature: Damage or destruction of protected structure		
	Without mitigation	With mitigation
Extent	Local (2)	Local (2)
Duration	Long-term (4)	Long-term (4)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Improbable (2)
Significance	36 (Medium)	20 (Low)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources	No	No
Can impacts be mitigated?	Yes	
<i>Mitigation: The structure is protected by heritage legislation; in addition, it is someone's home and should be respected accordingly.</i>		
<i>Mitigation Measures: (1) A buffer of 3m must be placed between the structure and the road works to avoid damage to it during the upgrade; (2) construction workers to respect the significance of the structure to the homeowner/s</i>		
Cumulative impacts: None		
Residual Impacts: None		

Table 4: Significance of impacts on Shembe structure

Nature: Shembe temple of importance to members of the Shembe community that could be altered, damaged or destroyed by borrow pit		
	Without mitigation	With mitigation
Extent	Local (2)	Local (2)
Duration	Permanent (5)	Medium-term (3)
Magnitude	High (8)	Low (4)
Probability	Probable (3)	Improbable (2)
Significance	45 (Medium)	18 (Low)
Status (positive or negative)	Negative	Negative
Reversibility	High	High
Irreplaceable loss of resources	No	No
Can impacts be mitigated?	Yes	
<i>Mitigation: The structures are not protected by heritage legislation but could be of importance to members of the community; engage with the leaders of the Shembe community if it is impacted to see if the temple can be relocated to another site</i>		
<i>Mitigation Measures: (1) Work force to respect the significance of the temple to members of the Shembe community if new site is close to road upgrade or if it is left in situ.</i>		
Cumulative impacts: <i>The Shembe temple may be moved to another area</i>		
Residual Impacts: <i>None</i>		

9. DISCUSSION, RECOMMENDATIONS AND CONCLUSION

The assessment of impacts on heritage resources found during the site inspection indicated that with the implementation of recommended mitigation measures the impacts can be reduced from a medium impact to a low impact.

The site inspection revealed one structure that could be older than 60 years. Structures older than 60 years are protected by section 37 (1)(a) of the Amafa and Research Institute Act (2018), which states that no structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without prior written approval of the Institute having been obtained on written application to the Institute. It is unlikely that the structure will be impacted especially if the mitigation measures recommended are implemented.

All human remains have high heritage significance at all levels for their spiritual, social and cultural values. Graves and burial sites are protected by section 39 (1) of the KwaZulu-Natal Amafa and Research Institute Act, which refers to the general protection of informal and private

burial grounds. In terms of sub-section (1) that states that no grave or burial ground older than 60 years, or deemed to be of heritage significance by a heritage authority –

(a) not otherwise protected by this Act; and

(b) not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, inundated, removed from its original position, or otherwise disturbed without the prior written approval of the Institute having been obtained on written application to the Institute and in terms of the regulations to this Act.

The relocation of graves is not recommended as graves are highly significant to people and there are many traditional, cultural and personal sensitivities and norms concerning the removal of graves. The four graves situated alongside the road should be protected from activities resulting from the upgrade of the D1252 either by sandbagging or by other means (as agreed with the homeowner) that will prevent damage to the graves.

The proposed upgrade of district road D1252 may proceed as long as the recommendations and mitigation measures made in this report and in the desktop palaeontological assessment are implemented.

10. MITIGATION MEASURES

- For any chance heritage finds (such as graves), 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 to inspect the finding/s. The provincial heritage resource agency, the KwaZulu-Natal Amafa and Research Institute (the Institute), must be informed about the finding/s.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Permits must be obtained from the Institute if heritage resources are to be removed, destroyed or altered.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any recent remains be found on site that could potentially be human remains, the South African Police Service (SAPS) as well as the Institute must be contacted. No SAPS official may remove remains until the correct permit/s have been obtained.
- The mitigation measures recommended in the desktop palaeontological assessment must be implemented.

11. REFERENCES

Active Heritage. 2015. *Cultural heritage impact assessment of the proposed 1.6 million m³ dam, Farm Assegai Hoek, No. 1410 for the authorised Bhekuzulu Empangeni water supply scheme, located near Estcourt, uThukela District Municipality, KwaZulu-Natal*

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