ADDENDUM - HERITAGE IMPACT ASSESSMENT
OF THE MASHUNKA AND NGUBO COMMUNITY
ACCESS ROAD AND BRIDGE, TUGELA FERRY,
KWAZULU NATAL.



ACTIVE HERITAGE cc.

FOR: TERRATEST

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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	
IIA	Intermediate Iron Age	
ISA	Intermediate Stone Age	
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	

Details and experience of independent Heritage Impact Assessment Consultant

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Association of Southern African Professional Archaeologists member

Frans received his MA (Archaeology) from the University of Stellenbosch and is presently a PhD candidate on Historical Studies at North West University. His PhD research topic deals with indigenous San perceptions and interactions with the rock art heritage of the Drakensberg.

Frans was employed as a junior research associate at the then University of Transkei, Botany Department in 1988-1990. Although attached to a Botany Department he conducted a palaeoecological study on the Iron Age of northern Transkei - this study formed the basis for his MA thesis in Archaeology. Frans left the University of Transkei to accept a junior lecturing position at the University of Stellenbosch in 1990. He taught mostly undergraduate courses on World Archaeology and research methodology during this period.

From 1991 – 2001 Frans was appointed as the head of the department of Historical Anthropology at the Natal Museum, Pietermaritzburg. His tasks included academic research and publication, display conceptualization, and curating the African ethnology collections of the Museum. He developed various displays at the Natal Museum on topics ranging from Zulu material culture, traditional healing, and indigenous classificatory systems. During this period Frans also developed a close association with the Departments of Fine Art, Psychology, and Cultural and Media Studies at the then University of Natal. He assisted many post-graduate students with projects relating to the cultural heritage of South Africa. He also taught post-graduate courses on qualitative research methodology to honours students at the Psychology

Department, University of Natal. During this period he served on the editorial boards of the *South African Journal of Field Archaeology* and *Natalia*.

Frans left the Natal Museum in 2001 when approached by a Swiss funding agency to assist an international NGO (Working Group for Indigenous Minorities) with the conceptualization of a San or Bushman museum near Cape Town. During this period he consulted extensively with various San groupings in South Africa, Namibia and Botswana. During this period he also made major research and conceptual contributions to the Kamberg and Didima Rock Art Centres in the UKhahlamba Drakensberg World Heritage Site.

Between 2003 and 2007 Frans was employed as the Cultural Resource Specialist for the Maloti Drakensberg Transfrontier Project – a bilateral conservation project funded through the World Bank. This project involved the facilitation with various stakeholders in order to produce a cultural heritage conservation and development strategy for the adjacent parts of Lesotho and South Africa. Frans was the facilitator for numerous heritage surveys and assessments during this project. This vast area included more than 2000 heritage sites. Many of these sites had to be assessed and heritage management plans designed for them. He had a major input in the drafting of the new Cultural Resource Management Plan for the UKhahlamba Drakensberg World Heritage site in 2007/2008. A highpoint of his career was the inclusion of Drakensberg San indigenous knowledge systems, with San collaboration, into the management plans of various rock art sites in this world heritage site. He also liaised with the tourism specialist with the drafting of a tourism business plan for the area.

During April 2008 Frans accepted employment at the environmental agency called Strategic Environmental Focus (SEF). His main task was to set-up and run the cultural heritage unit of this national company. During this period he also became an accredited heritage impact assessor and he is rated by both Amafa and the South African Heritage Resources Agency (SAHRA). He completed almost 50 heritage impact assessment reports nation-wide during an 18th month period.

Frans left SEF and started his own heritage consultancy called "Active Heritage cc" in July 2009. Although mostly active along the eastern seaboard his clients also include international companies such as Royal Dutch Shell through Golder Associates, and UNESCO. He has now completed almost 500 heritage conservation and management reports for various clients since the inception of "Active Heritage cc". Amongst these was a heritage study of the controversial fracking gas exploration of the Karoo Basin and various proposed mining developments in South Africa and proposed developments adjacent to various World Heritage sites. Apart from heritage impact assessments (HIA's) Frans also assist the National Heritage Council (NHC) through Haley Sharpe Southern Africa', with heritage site data capturing and analysis for the proposed National Liberation Route World Heritage Site and the National Intangible Heritage Audit. In addition, he is has done background research and conceptualization of the proposed Dinosaur Interpretative Centre at Golden Gate National Park and the

proposed Khoi and San Interpretive Centre at Camdeboo, Eastern Cape Province. During 2009 he also produced the first draft dossier for the nomination of the Sehlabathebe National Park, Lesotho as a UNESCO inscribed world heritage site. Since 2009 Frans has also expanded the range of services offered by Active Heritage cc to include Social Impact Assessments.

Frans was appointed as temporary lecturer in the department of Heritage and Tourism, UKZN in 2011. He is also a research affiliate at the School of Cultural and Media Studies in the same institution.

Frans's research interests include African Iron Age, paleoecology, rock art research, San ethnography, traditional healers in South Africa, and heritage conservation. Frans has produced more than fourty publications on these topics in both popular and academic publications. He is frequently approached by local and international video and film productions in order to assist with research and conceptualization for programmes on African heritage and culture. He has also acted as presenter and specialist for local and international film productions on the rock art of southern Africa. Frans has a wide experience in the fields of museum and interpretive centre display and made a significant contribution to the conceptual planning of displays at the Natal Museum, Golden Horse Casino, Didima Rock Art Centre and !Khwa tu San Heritage Centre. Frans is also the co-founder and active member of "African Antiqua" a small tour company who conducts archaeological and cultural tours world-wide. He is a Thetha accredited cultural tour guide and he has conducted more than 50 tours to heritage sites since 1992.

Declaration of Consultants independence

Frans Prins is an independent consultant to Terratest and has no business, financial, personal or other interest in the activity, application or appeal in respect of which he was appointed other than fair remuneration for work performed in connection with the activity, application or appeal. There are no circumstances whatsoever that compromise the objectivity of this specialist performing such work.

ADDENDUM

EXECUTIVE SUMMARY

A second heritage survey of the proposed and now adjusted Masunka and Ngubo Community Access Road near Tugela Ferry identified 15 grave sites adjacent to the proposed road upgrade. Although these graves are younger than 60 years they are still protected by provincial heritage legislation. None of these grave sites, with the exception of one, occur within the newly proposed road reserve alignment. The affected grave (T505) will need to be exhumed and reburied as part of a second phase heritage impact assessment under the auspices of Amafa - the local heritage agency. Five grave sites occur within 8m from the edge of the newly aligned and proposed road upgrade (i.e. TF 012B, TF 012A, TF 011, TF 03A, TF 03B). These sites need to be fenced in by the developer under the guidance of local and affected community members before development may occur. 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 as well as graves and burial sites 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 Terratest	
Type of development:	Royal Haskoning DHV Engineers have been appointed by the KwaZulu-Natal Department of Transport to perform feasibility studies and to investigate, design and manage the construction for the proposed bridge crossing with associated Road across the Tugela River, to link the Mashunka and Ngubo communities. The proposed development entails the construction of a bridge over the Tugela River and associated road infrastructure linking the Mashunka and Ngubo local communities, located on the northern and southern side of the river respectively. The development area is located in the Msinga Local Municipality, KwaZulu-Natal Province. Two site / route alternatives have been considered The preferred proposal is to construct a bridge along the Tugela River and Associated link road between the P280 and D12722. The total length of the proposed link road required (i.e. linking the P280 to the D1272) for the preferred alignment is - 2 - 3.3 km. Approximately 1.9 km of the proposed link road consists of an existing dual lane gravel road on the northern bank of the Tugela River that would require minor upgrading. Both the proposed roads and their bridges will include associated storm water infrastructure. Approximately 1.4 km of new road construction would be required to run through existing farmland on the southern bank of the river. The intention is for the link road to be constructed to dual lane gravel Type 4 standard with a road width of 7 m incorporating 2 lanes of 3.5 m wide. This is one lane in either direction. The road reserve will not exceed 30 m. This link road is to be paved at a later stage but will be dependent on the progress of the paving of P280 and D1272.	
Scope of this report	A first phase heritage assessment of the project area has been conducted by Umlando in September 2014 and the recommendations has been approved in November 2014 by Amafa – the local heritage agency. Following on to the recommendations by Umlando it was deemed wise to plot and mark the proposed road alignment in such a manner as to avoid all burials on the footprint. This aspect of the project has been completed by the land surveyor and it was the task of Active Heritage cc to inspect this new alignment and make suitable recommendations regarding potential mitigation – where applicable.	
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 project occurs within the Msinga Local Municipality, which is part of the Umzinyathi District Municipality. Tugela Ferry is the commercial centre of the project area. The other nearby main centres are Greytown, 46 km to the south and Weenen approximately 50 km to the east (Fig 1). The Tugela Ferry irrigation scheme is situated along both sides of the Tugela River in the project area. This scheme was planned and constructed by the Natal Native Trust between 1898 and 1902 and has been in operation since then (Cousins, 2012 *loc. cit.* Sinyolo, *et. al.*, 2014). This scheme is regarded as one of the largest and most successful small-holder irrigation schemes in the Province.

Approximately 1.4 km of new road construction would be required to run through existing farmland on the southern bank of the Tugela River. The intention is for the link road to be constructed to dual lane gravel Type 4 standard with a road width of 7 m incorporating 2 lanes of 3.5 m wide. This is one lane in either direction. The road reserve will not exceed 30 m. This link road is to be paved at a later stage but will be dependent on the progress of the paving of P280 and D1272. Alternative option 1 has been suggested as the preferred road.

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 literature covering

the greater Msinga/Tugela Ferry areas was also consulted. The SAHRIS website was consulted to obtain background information on previous heritage surveys and assessments in the area. The HIA conducted by Umlando in 2014 provided the baseline report for this particular study (Anderson, G 2014).

A ground survey, following standard and accepted archaeological procedures, was conducted on 3 March 2014. The heritage specialist was accompanied by Mr Neil Brandt – the land surveyor responsible for plotting the new road alignment. The footprint and relevant grave sites was surveyed by foot.

Local community members encountered in the study area was interviewed regarding the possible location and age of heritage sites and graves in the area.

2.2 Restrictions encountered during the survey

2.2.1 Visibility

Visibility was good due to overgrazing and the recent burning of the veld in areas adjacent to the proposed road upgrade.

2.2.2 Disturbance

No disturbance of any heritage sites or graves 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

Town: Tugela Ferry

Municipality: Msinga Local Municipality

3.2 Description of the heritage sites in the study area

Fifteen grave sites occur on either side of the proposed road upgrade (Figs 1 -14). These include individual grave sites, graveyards, and a small rural cemetery. Their GPS coordinates are given in Table 2.

Table 2: Locations of grave sites adjacent to the proposed road upgrade (Figs 1-12)

Name	Latitude	Longitude
TF01	-28.744535863	30.395718758
TF01b	-28.744562793	30.395241741
TF02	-28.744613894	30.394302293
TF03a	-28.744623383	30.392833560
TF03B	-28.744759939	30.391793506
TF04	-28.744838974	30.389497038
TF04B	-28.744778959	30.389203001
TF05	-28.744687010	30.387349008
TF05B	-28.744678963	30.387062011
TF06	-28.744691376	30.386041337
TF07	-28.744671184	30.385407538
TF08	-28.744895970	30.381728020
TF08B	-28.745054975	30.380796036
TF09	-28.744304615	30.396129969
TF010	-28.744378861	30.397052310
TF011	-28.744448914	30.397907275
TF012A	-28.744796980	30.399158020
TF012B	-28.744992733	30.399737490
TF013	-28.745057282	30.400505279
TF014	-28.745231856	30.401275986
TF015	-28.724145216	30.355342728
TF016	-28.723762660	30.352875772
TF017	-28.724383577	30.350605463
TF018	-28.726875122	30.350657867
TF019	-28.726917	30.350833
TF020	-28.744733009	30.349897416
TF021	-28.737668622	30.353826090

The site consists of a cemetery, i.e. 15 individual graves, on the southern side of the road. With the new road alignment the graves occur approximately 18m from the edge of the road (with the previous alignment it occur approximately 5m - 15m from the road). The cemetery is ~50m long. All graves are stone cairns and in a north-south orientation (Figs 1 -12). The graves will be directly affected by the new road alignment.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 10m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF02 occurs ~25m from the southern side of the road. The site consists of five graves. All graves are stone cairns and in a north-south orientation. The graves will not be affected by the road upgrade, but would require demarcation.

Significance: The site is of high significance (Table 3)

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 15 m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF03

TF03 is a large cemetery ~100m long. It is located to the south of the road. With the new alignment the graves and occur between 8m and 25m from the road. All graves are stone cairns and in a north-south orientation. Those graves situated within 10m from the edge of the road may be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be an 8 m buffer between the grave(s) and the road upgrade. A fence, with an entrance gate, must be erected around the grave site. This process must take place in consultation with the local community. If a buffer of 8m cannot be met, then grave relocation may be required.

TF04

TF04 is a large cemetery ~35m long and includes both TF 04A and TF 04B. It is located to the north of the road and contains at least 20 graves. With the new alignment these graves are located approximately 15 – 20 m on the side of the road. All graves are stone cairns and in a north-south orientation. Some of the graves could be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 10m buffer between the grave(s) and the road upgrade. The graves need to be fenced in, with an entrance gate, before construction commence. If this buffer cannot be met, then a grave relocation may be required.

TF05 is a large cemetery ~30m long. Most of the graves (approximately 7) are located to the north of the road. All graves are stone cairns and in a north-south orientation With the new road alignment all the graves, with the exception of one, are situated approximately 10m – 15m from the edge of the road. One grave, however, is situated on the south bank of the road approximately 2m from the road edge (TF05B) (Figs 13). This singular grave will most certainly be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be an 8m buffer between the grave(s) on the northern side of the road and the road upgrade. These graves must be fenced in under the auspices of the local community.

However, the singular grave on the south bank of the road will have to be exhumed and reburied. A second phase heritage impact assessment will be necessary in order to facilitate grave exhumation and reburial. This is a time consuming exercise that will also have to include a community consultation process (Appendix 1).

TF06

TF06 is a small graveyard consisting of 3 - 4 graves to the north of the road (Figs 1-12). With the new alignment these grave are located approximately 30m from the edge of the road. All graves are stone cairns and in a north south orientation. The graves will not be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 20m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required. The cemetery will need to be demarcated before construction.

TF07

TF07 occurs ~20m from the northern side of the road. The site consists of three graves. All graves are stone cairns and in a north-south orientation. The graves may be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a

15m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF08

TF08 is a large cemetery ~100m long. It is located to the north and west of the road. With the new alignment the graves occur between 30m and 100m from the road. All graves are stone cairns and in a north-south orientation. The road makes a turn to the south at the eastern end of the cemetery.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 20m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF09

TF09 occurs ~20m north of the road. The site consists of two graves. All graves are stone cairns and in a north-south orientation. The graves will not be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 15m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF010

With the new road alignment TF010 occurs ~18m north of the road. The site consists of three graves. All graves are stone cairns and in a north-south orientation. The graves will not be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 20m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF011

TF011 occurs ~10m north of the road. The site consists of two graves. All graves are stone cairns and in a north-south orientation. The graves will be affected by the road upgrade if the developers maintain a buffer zone.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be an 8m buffer between the grave(s) and the road upgrade. The developers should erect a fence around these graves before construction commence. If the buffer cannot be met, then grave relocation may be required.

TF012

The site consists of seven graves on the side of the road. With the new alignment the graves occur from 8m - 15m from the edge of the road. All graves are stone cairns and in a north-south orientation. The graves may be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 2m buffer between the fence and the grave(s). There needs to be a 7m buffer between the grave(s) and the road upgrade. A fence must be erected around the graves before construction commence. If this buffer cannot be met, then grave relocation may be required.

TF013

TF013 occurs ~10m north of the road. The site consists of several graves. All graves are stone cairns and in a north-south orientation. The graves might be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be an 8m buffer between the grave(s) and the edge of the new road. If this buffer cannot be met, then grave relocation may be required. A fence should be erected around the graves before construction commence.

TF014

TF014 occurs ~15m north of the edge of the road. The site consists of seven graves. However, one potential grave (TF014B) is located adjacent to the road upgrade approximately 2m from the edge of the road. The exact GPS coordinates of this grave is S 30° 02'.714" E 29° 31' 151" (Figs 14). All graves are stone cairns and in a north-south orientation. The graves will be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 8m buffer between the grave(s) and the edge of the road upgrade. If this buffer cannot be met, then grave relocation may be required. A fence, with an

entrance gate, must be erected around the graves before construction commence.

A second phase heritage impact assessment will be necessary in order to exhume and relocate the singular grave adjacent to the road. This process must also include a community consultation process (Appendix 1).

TF015

TF015 occurs ~10m north of the road. The site consists of two graves. All graves are stone cairns and in a west-east orientation. One grave has a *Euphorbia ingens* on top of it. The graves will not be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 8m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF016

TF016 occurs ~10m south of the road. The site consists of a cemetery of ~15 graves. All graves are stone cairns and in a north-south orientation. The graves may be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 8m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF017

TF017 is a stone cairn near the base of a tree 10m to the west of the road. It is not an obvious grave, but appears to demarcate something. It should be treated as a grave.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be an 8m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF018 occurs ~20m west of the road. The site consists of a two graves amongst small bushes. All graves are stone cairns and in a north-south orientation. The graves are unlikely to be affected by the road upgrade.

Significance: The site is of high significance

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be a 10m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required.

TF019

TF019 occurs ~20m west of the road. The site consists of a cemetery. All graves are stone cairns and in a north-south orientation (Figs 1 -12). The graves are unlikely to be affected by the road upgrade.

Significance: The site is of high significance (Table 3).

Mitigation: The site needs to be demarcated before construction begins. There should be a 5m buffer between the fence and the grave(s). There needs to be 10m buffer between the grave(s) and the road upgrade. If this buffer cannot be met, then grave relocation may be required

4 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

4.1 Field Rating

All graves, including those younger than 60 years, are protected by provincial heritage legislation. The graves along the proposed road upgrade are all younger than 60 years (interviews with community members). They are still visited by relatives of the deceased. As such they have been rated as of high significance (Table 3).

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

The proposed upgrade of the Mazurkas and Ngubo Access Road and Bridge may commence but under the following conditions:

- No alternative access roads may be constructed without a new heritage survey
 of the affected area.
- None of the grave sites may be altered or destroyed by the developers (Figs 1 -12).
- The singular graves situated within 2m from the road edge at TF05 and TF014 will need a second phase heritage impact assessment study. This second phase assessment will also entail the application of a permit from Amafa to conduct a grave exhumation and reburial exercise (Appendix 1).
- Grave Sites situated within 8m from the road edge need to be fenced in and provided with a suitable entrance gate (i.e. TF 03, TF 011, TF 012, TF 013, and TF 014). This exercise needs to take place following suitable consultation with the local community.
- It should also be pointed out that the KwaZulu-Natal Heritage Act requires that
 operations exposing archaeological and historical residues, including modern
 graves, should cease immediately pending an evaluation by the heritage
 authorities.

6 MAPS AND PHOTOGRAPHS





Figure 1. Position of graves sites adjacent to the proposed road upgrade (Source: Neil Brand)

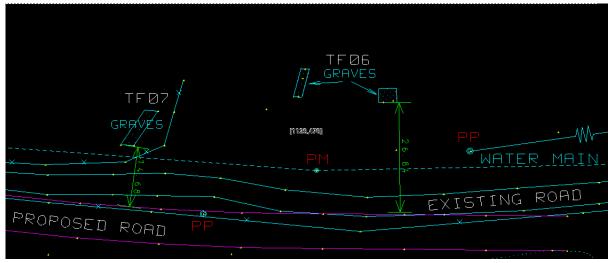


Figure 2. Position of grave sites TF07 and TF06 adjacent to the new road alignment (Source: Neil Brand)

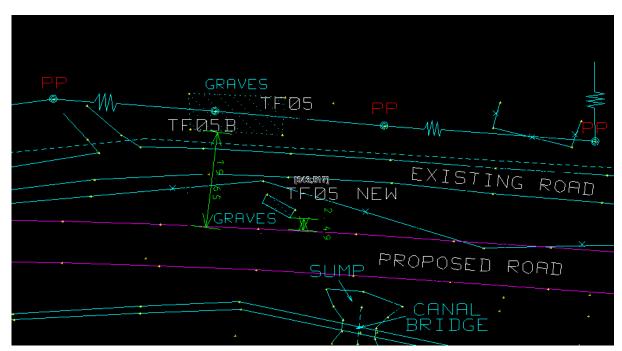


Figure 3. Position of grave sites TF05 adjacent to the new road alignment (Source: Neil Brand)

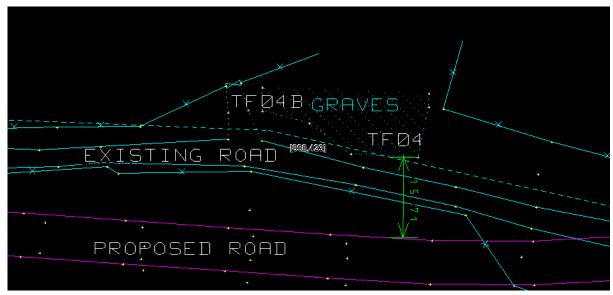


Figure 4. Position of grave site TF04 adjacent to the new road alignment (Source: Neil Brand).



Figure 5. Position of grave site TF03 adjacent to the new road alignment (Source Neil Brand).

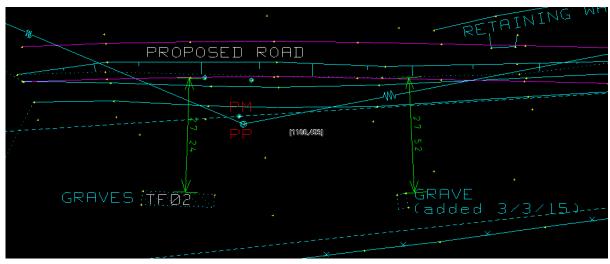


Figure 6. Position of grave site TF02 adjacent to the new road alignment (Source: Neil Brand)

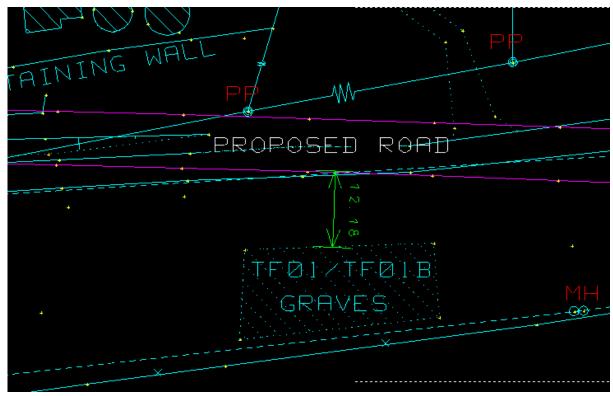


Figure 7. Position of grave site TF01 adjacent to the new road alignment (Source: Neil Brand)

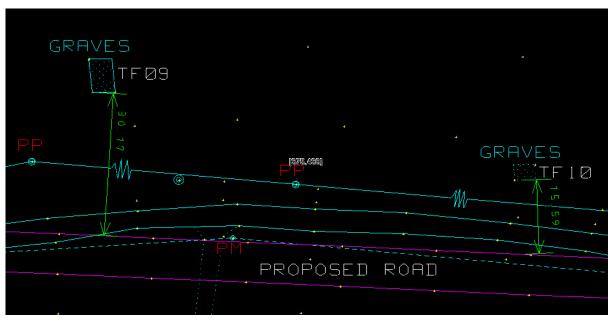


Figure 8. Position of grave sites TF09 and TF10 adjacent to the new road alignment (Source: Neil Brand).

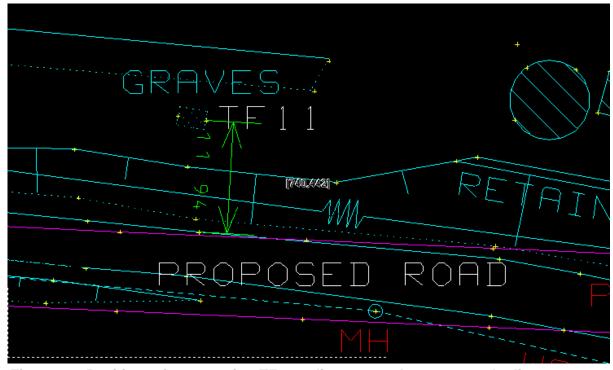


Figure 9. Position of grave site TF11 adjacent to the new road alignment (Source: Neil Brand)

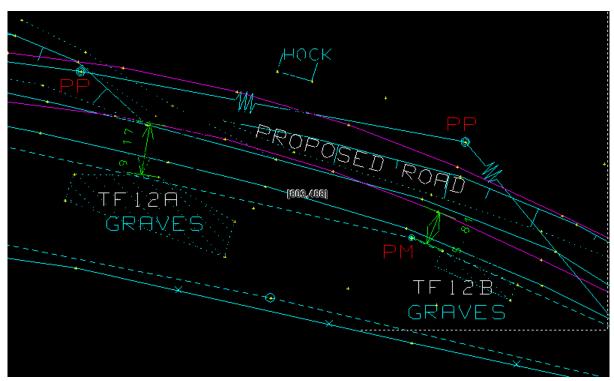


Figure 10. Position of grave site TF12 adjacent to the proposed road upgrade.

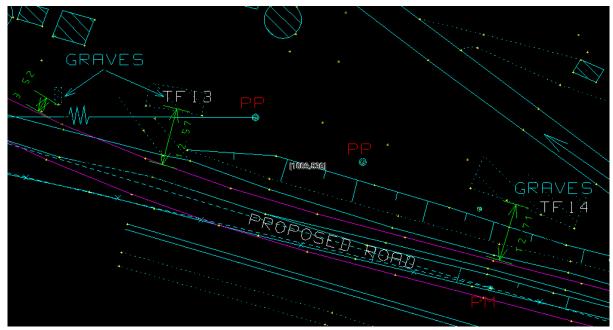


Figure 11. Position of grave site TF13 adjacent to the proposed road upgrade.

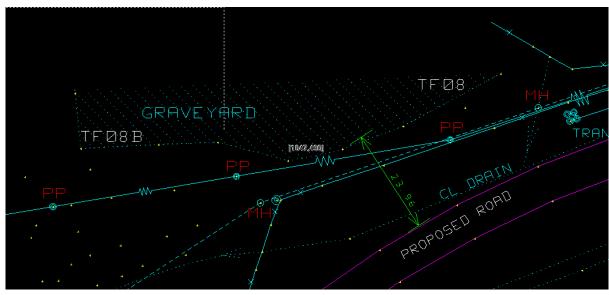


Figure 12. Position of grave site TF08 adjacent to the new road upgrade (Source: Neil Brand).



Figure 13. Singular grave at TF014 situated approximately 2m from the side of the road.



Figure 14. Singular grave at TF05 situated within 2m for the road edge.

9 REFERENCES

Anderson, G. 2014. *Umlando: Cultural Heritage Impact Assessment of the Masunka Ngubo Community Access Road and Bridge, Msinga Local Municipality.* Unpublished Report submitted to Afzelia.

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

APPENDIX 1

Relocation of Graves

Burial grounds and graves are dealt with in Article 36 of the NHR Act, no 25 of 1999. Below follows a broad summary of how to deal with grave in the event of proposed development.

- If the graves are younger than 60 years, an undertaker can be contracted to deal with the exhumation and reburial. This will include public participation, organising cemeteries, coffins, etc. They need permits and have their own requirements that must be adhered to.
- If the graves are older than 60 years old or of undetermined age, an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. This is a requirement by law.

Once it has been decided to relocate particular graves, the following steps should be taken:

- Notices of the intention to relocate the graves need to be put up at the burial site for a period of 60 days. This should contain information where communities and family members can contact the developer/archaeologist/public-relations officer/undertaker. All information pertaining to the identification of the graves needs to be documented for the application of a SAHRA permit. The notices need to be in at least 3 languages, English, and two other languages. This is a requirement by law.
- Notices of the intention needs to be placed in at least two local newspapers and have the same information as the above point. This is a requirement by law.
- Local radio stations can also be used to try contact family members. This is not required by law, but is helpful in trying to contact family members.
- During this time (60 days) a suitable cemetery need to be identified close to the development area or otherwise one specified by the family of the deceased.
- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account. This is a requirement by law.
- Once the 60 days has passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.

- Once the permit has been received, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any items found in the grave