

eThembeni Cultural Heritage

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Attention Mr. Sello Mokhanya

Heritage Scoping Report

GRAVEL ACCESS ROADS AND BRIDGE CULVERTS MOUNT AYLIFF, UMZIMVUBU LOCAL MUNICIPALITY, EASTERN CAPE

Project Description¹

The Umzimvubu Local Municipality has recently appointed ACER (Africa) Environmental Consultants (ACER) as the Environmental Assessment Practitioner (EAP) responsible for obtaining environmental authorisation, and the relevant permits, licenses and approvals required for the proposed construction of several new gravel access roads and bridge culverts in the Mzimvubu Local Municipality, Eastern Cape.

The Umzimvubu Local Municipality has identified a need to construct and upgrade a number of gravel access roads and stream crossings, in order to improve access and safety for communities within the municipality. The proposed new and upgraded gravel access roads and crossings will typically entail the following specifications:

- New 5 m wide gravel access roads consisting of G5 gravel and compacted to a height of approximately 200 mm.
- The construction of concrete causeways approximately 5.5 m in length and 4.5 m wide with a peak flow of 8.96m3 / s, comprising of prefabricated pipes (10 x 600 mm diameter and 4 x 900mm diameter pipes) attached along the length of the bridge.
- Concrete drive strips for the steeper sections.
- The construction of storm water infrastructure such as cut-out drains and dish drains where required along the alignment.
- The placement of road traffic signs.

¹ As provided by the EAP: ACER (Africa) Environmental Consultants (ACER)

To this end eThembeni Cultural Heritage Management was appointed by ACER to undertake a heritage resources assessment of the respective road upgrades and construction.

The proposed gravel access roads and concrete causeways of concern in this report are located along the N2 north of the town of Mount Ayliff.



1. Bridgelink to Bottoman and Phuka Bridge Gravel Access Road and Concrete Causeways

Figure 1 Locality Map: Bridgelink to Bottoman Gravel Access Road and Concrete Causeways

The villages of Dundee, Mnqwane and Mvalweni (Phuka Bridge) are situated north-east of Mount Ayliff to the East of the N2, within the Umzimvubu Local Municipality. Currently no formal access roads exist. As such, the proposed development of a gravel access road and concrete causeways will have significant positive socio-economic impacts such as improved access and safety for all people commuting to and from these communities and accessing the adjacent N2.

The proposed Bridgelink to Bottoman project entails the construction of approximately 837 m of new gravel access road from the southern parts of the Dundee settlement (A) to the northern parts of Mngwane (B). Concrete causeways will be constructed at the watercourse crossings at the following approximate locations:

- Crossing 1: 30°44'59.82" S / 29°25'30.48" E
- Crossing 2: 30°45'7.41" S / 29°25'29.47" E
- Crossing 3: 30°45'14.23" S / 29°25'27.99" E. See Figure 1.

The Phuka Bridge and new and upgraded gravel road sections will serve to improve and provide, where there was not before, access to the adjacent N2; providing significant increased safety and improved accessibility in and between the surrounding community areas. The proposed development entails the following:

- The upgrading and formalisation of two sections of adjoining gravel roads; the first being from the N2 at A for a distance of approximately 761 m to B, and an adjoining section which connects to the first at C and extends south for approximately 318 m to D.
- The construction of a new gravel access road of approximately 398 m in length, from E to F.
- The new Phuka Bridge concrete causeway at the watercourse crossing at (30°41'12.30"S / 29°27'42.28"E). See Figure 2.



Figure 2 Locality of the proposed Phuka bridge access road and culvert bridge crossing, and existing roads.

See also kml. files loaded to SAHRIS.

Site Assessment and Observations

eThembeni staff inspected the proposed road alignment on June 10th 2017.

Dundee, Mnqwane and Mvalweni are located on deeply rilled tallus fans below the line of steep hills (outliers of the Ingeli Mountain range) rising up some 400m to the East of the villages. Deep, headward eroding dongas comprise the drainage lines between the interfluves on which the respective settlements are located. These drainage lines and "badlands" constitute secondary tributaries of the Mvalweni and Mzintlava Rivers, primary tributaries of the Umzimvubu River flowing to the south-west. Basal vegetation cover during the winter inspection was virtually non-existent and consequently surface visibility for the observation of archaeological residues was excellent. We were alerted to the possibility of finding Early and Middle Stone Age (ESA & MSA) tool making residues in the dongas, as in 2002 we had located a very rich Acheulian ESA collection in the palaeo-basin of the Mzintlava River; during site preparation for

construction of the Ntalvini Youth Centre (30° 43.325'S; 29° 25.565'E), some 4 km due SSW of Mvalweni. No archaeological residues were however observed along transects we walked, following the proposed road upgrade alignments and causeways.

At 1200 -1600 m amsl this environment would characteristically comprise mist-belt grasslands along the lee of the Ngeli range, and an area that is subject to extremely harsh winter weather conditions. In precolonial times this environment would have only been exploited seasonally by hunter gatherer bands in search of spring-flowering geophytes and in pursuit of game drawn to the emerging sweet veld *Themeda* grazing. Iron Age pastoralists would have made use of this grazing too during a short transhumance window in spring and early summer from their settled homesteads in the lower and middle reaches of the Umzimvubu and Mtamvuna drainage basins. Consequently, the archaeological footprint on the landscape is expected to be negligible to non-existent².

Increased population and land pressures during the 19th C witnessed increasing use of these higher altitude areas by pastoral and subsistence farmers, especially refugee clans moving south from the internecine conflicts flowing out of the Zulu Kingdom. By the mid-19th C these clans (eg. Bhaca, amaPondo and Mpondomise) were settled in disparate nuclear homesteads across this landscape under established chieftaincies. Late 19th C colonial governance and 20th C social engineering was however to change this ethnographic pattern, culminating in the scattered nuclear homesteads being settled into consolidated villages (*amalali*) during the 1960's, as a consequence of State driven betterment schemes.³

The observably denuded and barren interfluves around Gugwini (Dundee, Mnqwane and Phuka Bridge study area) display evidence of these past homesteads and their attendant ploughed fields. Whilst no remains of structures were observed, grindstones and graves mark the location of these abandoned homesteads. None of the latter were observed within 20m of the proposed upgraded alignments and consequently no impact on these is envisaged (see Protocol below).



Figure 3 Dundee Village Gravel Access Track

² Feely, J.M. 1987. The early farmers of Transkei, southern Africa: before A.D. 1870. Oxford: B.A.R. Feely, J.M. & Bell-Cross, S.M. 2011. The distribution of Early Iron Age settlement in the Eastern Cape:

some historical and ecological implications. South African Archaeological Bulletin 66: 105–12.

³ The Tomlinson Commission. 1956: http://www.sahistory.org.za/article/segregation-apartheid.



Figure 4 Mnqwane Village Access Track and location of Crossing 1



Figure 5 Location of Crossing 2 and Mnqwane village in the far distance to the SE

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Figure 6 Phuka bridge access road due for upgrading in the vicinity of the proposed culvert bridge crossing

2. Brooksnek Gravel Access Roads and Concrete Causeway

Brooksnek Mission is located near the Eastern Cape and KwaZulu-Natal border, approximately 10 km south-west of the town of Kokstad and 22 km north-east of Mount Ayliff. The existing gravel access road to and from Brooksnek Mission is dilapidated and highly eroded and the existing crossing over the Mvalweni River is not accessible or passable with two-wheeled drive vehicles. The proposed gravel access roads upgrade and the construction of the culvert bridge crossing will have significant positive socio-economic impacts such as increased safety and will serve as an alternative access road between Brooksnek and communities adjacent to N2.

In total, approximately 6.28 km of gravel road will be upgraded and formalised and will be comprised of the following sections and crossing points:

- Approximately 4,603 m of gravel road upgrades from A to B.
- Approximately 558 m of gravel road upgrades from C to D.
- Approximately 204 m of gravel road upgrades from E to F.
- Approximately 645 m of gravel road upgrades from G to H.
- Approximately 180 m of gravel road upgrades from I to.
- Approximately 57 m of gravel road upgrades from K to L.
- The construction of a concrete causeway across the Mvalweni River at (30°38'57.64"S / 29°29'9.48"E). See Figure 7, below.



Figure 7 Locality of the proposed Brooksnek gravel access roads and concrete causeway.

See kml. files loaded to SAHRIS.

Site Assessment and Observations

eThembeni staff inspected the proposed road alignment on June 10th 2017.

Road Section A-B from A to the proposed Mzintlava River causeway is a "greenfield" section traversing a rudimentary track across previously ploughed fields that now stand fallow. Road sections C to L are all upgrades of existing tracks and pathways within the *amalali* clustered around the Brookesnek Mission.

The clusters of settlement around the Mission have dual origins. Traditionally Brookesnek is referred to as *Nolangen*i Pass and was the crossing of the hinterland route between the Cape and Natal Colony and the inland route to Pondoland. The Weslyan Mission Society (Methodist Church) established an outpost at this travel nexus in the mid-19th C, from their mission stations at Flagstaff, Ntabankulu and Lusikisiki; established during the reign of King Faku Sigcau (1818-1867). Faku's primary reason for accepting the missionaries was protection against cattle raiding by the Zulus.⁴ Brookesnek subsequently grew to a full-fledged mission station around Nolangeni and people began to settle the fertile basin at the headwaters of the Mzintlava River, as both Christian converts and farmers. It is noticeably today, a faith-based community of *amaKholwa* (Believers).

The proposed infrastructural developments will enhance, rather than have any negative impacts on this historical religious enclave and landscape.

⁴ http://www.sahistory.org.za/article/missionaries-pondoland

Recommendations with regard to the possibility of graves being discovered in the course of development activities

It is recommended that the following protocol be made binding in the Record of Decision (R.o.D.): "During the Public Participation Processes, the project Community Liaison Officer (CLO) and the Environmental Control Officer (ECO) shall engage with stakeholders to ascertain the presence of unmarked or invisible grave sites.

Any identified grave sites should ideally be left with a twenty metre (20m) buffer from construction activities and be fenced pending engagement with the relevant Authorities and any identified family members having an association or interest in the grave. In the event of unintentional exposure of a grave or a request from a family for exhumation and re-interment the CLO/ECO shall immediately contact the Eastern Cape Provincial Heritage Resources Agency to obtain the necessary protocols and procedures for the management of such human remains".

It is our considered opinion that the potential impact to heritage resources through implementation of the proposed Roads Upgrade Projects are very low. No heritage resources were identified within the proposed spheres of activity.

The study area falls within blue and grey sensitivity modelling on the Palaeo-sensitivity map due to intensive dolerite intrusion into, and deep weathering of, the Karoo Supergroup overburden. Thus, no PIA is necessary.

It is highly unlikely that any in situ heritage resources, except nearby grave sites, are present in this densely settled landscape, of which sections have been severely disturbed by recent settlement and agricultural use.

On the basis of this Heritage Scoping Assessment it is our considered opinion that no heritage resources of significance will be wilfully impacted upon. Accordingly, and given the nature of the projects as, largely upgrades within existing servitudes and services infrastructure, it is requested that the proposed project area be exempt from the requirements of a full Phase 1 Heritage Impact Assessment. On this basis we request that ECPHRA authorise the project to proceed with no further heritage resource mitigation requirements.

Please could you convey the Eastern Cape Provincial Heritage Resource's Agency decision on this matter to the appointed Environmental Practitioner, Jacques Blignaut of ACER (Africa).

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Yours sincerely

LOS Schalby?

Len van Schalkwyk. Principal Investigator.

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