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Attention Bernadet Pawandiwa

#### **Heritage Scoping Report**

Upgrade of the Waste-Water Treatment Works and Sewage Reticulation
Mtunzini Village
Mlalazi Local Municipality, King Cetshwayo DM, KwaZulu-Natal

### Project Area and Project description<sup>1</sup>

The proposed Waste-Water Treatment Works and sewage reticulation upgrades are located within the townlands of Mtunzuni village. The sewage reticulation upgrades are phased but will all occur within existing servitudes, within the village precinct (See Figure 1.). Acer (Africa) are the Environmental Assessment Practitioner appointed to assist with the environmental authorization process. A Basic Assessment Report is required in terms of NEMA.<sup>2</sup>

The proposed development involves the construction and upgrading of existing sewage infrastructure and reticulation, extension thereof; and the establishment of a new WWTW. In February 2020 eThembeni were further requested to assess an effluent outfall line option to be incorporated into the original scheme design. The proposed development will be implemented by the Mlalalzi LM.

## **Observations**

eThembeni staff inspected the site on 27 May 2019. All but one portion of the reticulation system lie within existing servitudes. An alternative line proposed in the SE of the village (see Google Earth imagery; kml. loaded to SAHRIS Case File) crosses an area of previous sugar cane cultivation. No archaeological remains were observed on the surface during inspection of this line. The proposed Effluent Outfall Line from the WWTW to both the north and south of the Mllazi River, traverses areas currently under intensive sugar cane cultivation. Historically, prior to the clearing of indigenous vegetation for the aforementioned agriculture, this alignment would have traversed riparian zones of Swamp Forest and Phragmites reedbeds; areas eshewed for Iron Age settlement.

Inspection of the Effluent Outfall line on 25 August 2020 revealed no evidence of Iron Age cultural debris.

<sup>&</sup>lt;sup>1</sup> Information provided by the appointed EAP, ACER (Africa)

<sup>&</sup>lt;sup>2</sup> The National Environmental Management Act, Act 107 of 1998, as amended.

Both Early and Late Iron Age pottery remains are recorded from the village precinct (Albert van Jaarsveld: pers.comm); and the author observed Late Iron Age ceramics on the dune crest to the west of the village during the survey for the Fairbreeze water pipeline (2009). The latter were out of context as a result of earlier construction of a bulk water reservoir.

The proposed WWTW is located in a palaeodune slack located westward of the town, below the N2 (N) Freeway.

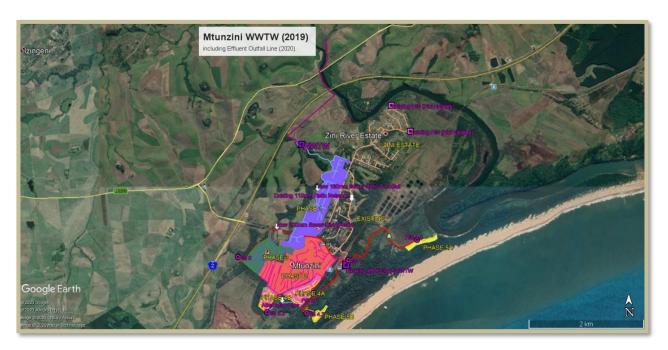


Figure 1 Layout of Sewer Reticulation and location of new WWTW and Effluent Outfall Line

No historical structures that could potentially be impacted by the proposed WW reticulation were observed during the survey.

The underlying lithology comprises Cretaceous Maputaland Group calcarenites, clayey sand, red and grey dune sand, limestone and conglomerate.

These are overlain by Berea Red Dune sands and will not be affected by the proposed development activities.3

See further images loaded to the SAHRIS Case File.

<sup>&</sup>lt;sup>3</sup> Ovenchika, M. 2027. Lithostratigraphy of the Zulti South MLA. Report prepared for the CHRMP, Zulti South MLA. eThembeni CHM for Amafa aKwaZulu-Natali.2012.

# Recommendations

In the absence of any heritage resources of significance, and that no further palaeontological mitigation is required, we accordingly request that Amafa allow the revised WWTW development to proceed with no further heritage resource mitigation; suffice that the protocols in Appendix 1 are made binding to any Environmental Authorisations issued.

Please can you notify us timeously, via the loaded SAHRIS Case File, as to the decision of Amafa in this regard.

Yours sincerely

Len van Schalkwyk

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Principle Investigator.

## Appendix 1

# Protocol for the Identification, Protection and Recovery of Heritage Resources During Construction and Operation

It is possible that sub-surface heritage resources could be encountered during the construction phase of this project. The Environmental Control Officer and all other persons responsible for site management and excavation should be aware that indicators of sub-surface sites could include:

- Ash deposits (unnaturally grey appearance of soil compared to the surrounding substrate);
- Bone concentrations, either animal or human;
- Ceramic fragments, including potsherds;
- Stone concentrations that appear to be formally arranged (may indicate the presence of an underlying burial, or represent building/structural remains); and
- Fossilised remains of fauna and flora, including trees.

In the event that such indicator(s) of heritage resources are identified, the following actions should be taken immediately:

- All construction within a radius of at least 20m of the indicator should cease. This distance should be increased at the discretion of supervisory staff if heavy machinery or explosives could cause further disturbance to the suspected heritage resource.
- This area must be marked using clearly visible means, such as barrier tape, and all personnel should be informed that it is a no-go area.
- A guard should be appointed to enforce this no-go area if there is any possibility that it could be violated, whether intentionally or inadvertently, by construction staff or members of the public.
- No measures should be taken to cover up the suspected heritage resource with soil, or to collect any remains such as bone or stone
- If a heritage practitioner has been appointed to monitor the project, s/he should be contacted and a site inspection arranged as soon as possible.
- If no heritage practitioner has been appointed to monitor the project, the head of archaeology at Amafa's Pietermaritzburg office should be contacted; telephone 033 3946 543.
- The South African Police Services should be notified by an Amafa staff member or an independent heritage practitioner if human remains are identified. No SAPS official may disturb or exhume such remains, whether of recent origin or not.
- All parties concerned should respect the potentially sensitive and confidential nature of the heritage resources, particularly human remains, and refrain from making public statements until a mutually agreed time.
- Any extension of the project beyond its current footprint involving vegetation and/or earth clearance should be subject to prior assessment by a qualified heritage practitioner taking into account all information gathered during the initial assessment.