



eThekweni Cultural Heritage

Amafa aKwazulu-Natali
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25 March 2017

Attention Bernadet Pawandiwa

Dear Ms Pawandiwa

Application for Exemption from a Phase 1 Heritage Impact Assessment

Proposed water reticulation project within the Port of Durban boundary Transnet National Ports Authority (TNPA), eThekweni Metropolitan Municipality

Project Area and Project description¹

The proposed water reticulation project will serve all areas and buildings within the Port's boundary identified as per the Assets Register as well as areas that are currently being supplied by the Transnet National Ports Authority (TNPA). The proposed water reticulation network will be designed with an input pressure of 2.5bar from the eThekwini supply points. The horizontal alignment of the new proposed water network will follow the existing network along the quay walls only. Most of the pipes along the quay walls are within service ducts or tunnels. The network will consist of pipeline to distribute water around the port.

A reservoir with a storage capacity of 15 mega litres (ML) is proposed on the Bluff at the following geographical co-ordinates 29°53' 42.01" S; 31° 02' 25.09" E. (Figure 1). The reservoir will cover a total area of 2500m². The reservoir will connect to the reticulation network via a 600mm diameter, 220m long pipeline which is proposed to be routed down the bluff embankment (Figure 2 - showing 3 x possible routes on Department of Public Works Land - all within close proximity to each other).

The reservoir will require a ring main to be installed from the reservoir around the entire Port.

The pressure at the bottom of the Bluff can be reduced from the 8 bar to 4 bar for the proposed network because of the pressure provided by elevated reservoir. The water reticulation pipe sizes through the Port will be significantly smaller and pressure will no longer be an issue. The 48hour storage will allow Port activities to have an increased reliability and the exclusion of dependency from the eThekwini network will be an advantage.

¹ Information provided EAP – WSP | Parsons Brinckerhoff, Environment & Energy, Africa

Observations

As all works are proposed within existing ducts and tunnels and the reservoir is located in an area of extensive transformation and infrastructure development; no threats to any discrete heritage resources were observed or are anticipated.

The proposed pipeline from the reservoir to the ring main, aligned down the north face of the Bluff, runs through aeolian sands and underlying Berea red sands which are not palaeontologically sensitive to the depths to which the pipeline will be sunk ($\pm 3\text{m}$).²



FIGURE 1

² Pers.comm. Dr. G. Botha – Council for GeoScience (Pmb).

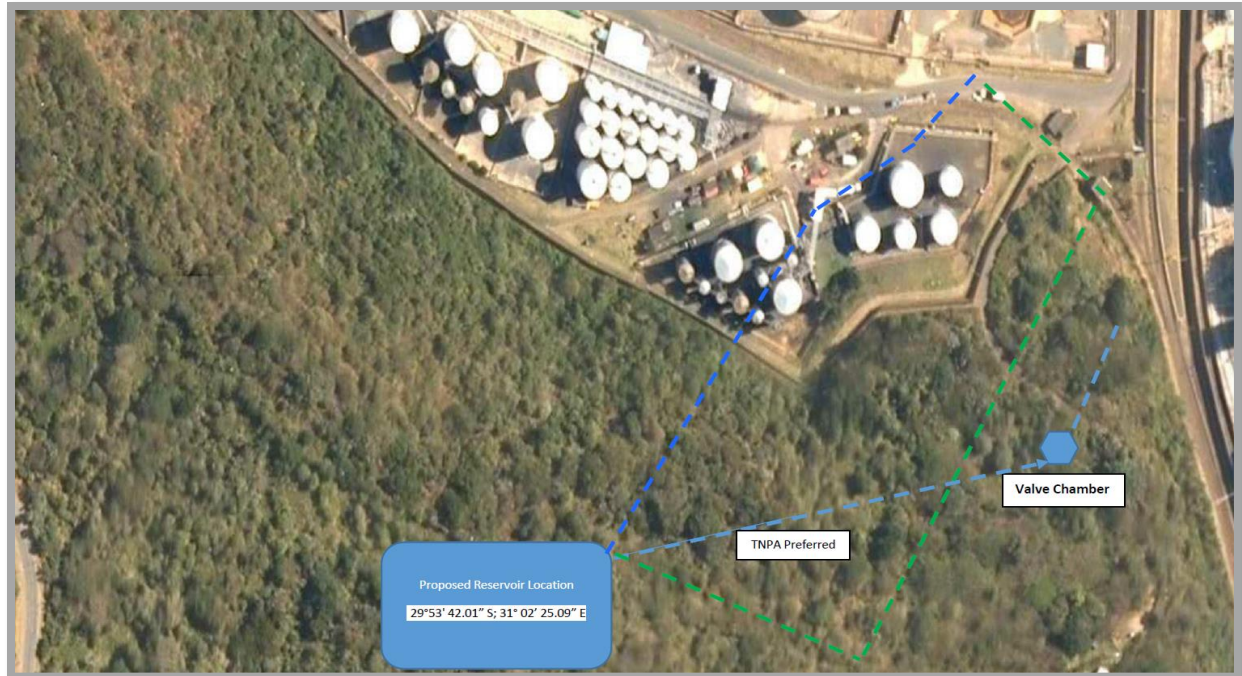


FIGURE 2

Recommendations

Accordingly, we request that Amafa grant an exemption from an HIA for the proposed water reticulation upgrades, allowing the project to proceed with no further heritage resource mitigation.

Standing protocols in terms of the NHRA will prevail in the instance of any archaeological material or human remains being exposed during construction activities. See Appendix 1. In this regard, please can you notify us timeously via the loaded SAHRIS case file as to the decision of Amafa.

Yours sincerely

Len van Schalkwyk
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 will be encountered during the construction phase of this project. The Project Engineer, 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);
- Concentrations of humanly modified stone and stone tools;
- 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); 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 Amafa aKwaZulu-Natali (Heritage KZN must be notified [Tel. 033 3946543; archaeology@amafapmb.co.za]
- The South African Police Services should be notified by a SAHRA staff member or an independent heritage practitioner if human remains are identified. No SAPS official may disturb or exhumate 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 this initial heritage impact assessment.