



1 October 2018  
511330

South African Heritage Resources Agency  
Via SAHRIS website

## Attention: Briega Williams

Dear Briega

### Port of Durban: Upgrade of Island View Seawalls: Application for a permit in terms of Section 38 of the National Heritage Resources Act

#### 1. Introduction and background

The Port of Durban, in alignment with the National Ports Plan, has identified Island View for reconstruction and modernisation in order to address safety concerns and to sustain the national fuel import programme. The seawalls along the Island View basin are currently in a poor condition and are in desperate need of repairs and upgrading. The proposed upgrades will improve the structural integrity of the seawalls and reduce the risk of damage to the infrastructure behind the seawalls.

Transnet National Ports Authority (TNPA) has appointed PRDW Consulting Port and Coastal Engineers (PRDW) to undertake the Front End Loading design to upgrade the seawalls along the Island View shoreline, including the installation of scour protection in certain areas. PRDW have appointed SRK Consulting (South Africa) (Pty) Ltd (SRK) to undertake a screening assessment to identify all environmental permits, approvals and regulatory requirements.

On 17 February 2018, SRK submitted a Notification of Intent to Develop (NID) to the South African Heritage Resources Agency (SAHRA), requesting clarification as to whether an application in terms of Section 38 (2) of the National Heritage Resources Act 25 of 1999 (NHRA) would be required for the above-mentioned works. On 22 February 2018, SRK received a letter from SAHRA confirming that a Section 38 (2) application will be required as the proposed dredging and placement of dredge material in scour holes in the harbour basin will affect an area exceeding 5000 m<sup>2</sup> in size.

This submission includes the information required in support of the Section 38 (2) application, which has been submitted online on the South African Heritage Resources Information System platform.

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## 2. Proposed works at the Port of Durban

The proposed works at the Port of Durban consist of upgrades to the shoreline protection along the Island View shoreline, including the installation of scour protection in certain areas. A Pre-Feasibility study undertaken by PRDW considered eleven alternative solutions for repair and upgrade of the Island View seawalls. These options were work-shopped with TNPA, following which it was unanimously agreed that rock revetments are the most effective and the preferred method of protecting the Island View shoreline. This is also the current coastal protection in place around the Island View terminal.

The construction methodology envisaged for the revetments will be a combination of land and marine based techniques. Where there is landside access it is assumed that land based equipment will be able to construct a revetment up to 20 m from the shore edge and to a depth of approximately -2 m Chart Datum Port. Where the revetment slope is beyond the reach of land based equipment, marine based techniques will be adopted.

The base/toe of the new revetments adjacent to berths will need to be aligned with the berth cope alignment. The current slopes cannot be steepened, as there is a danger of slope failure and therefore in certain areas a sheet-pile retaining wall will need to be installed at the toe of the structure to stabilise the slopes. Dredging (excavation) is required in front of the sheet-pile wall to achieve the required/advertised berths depths and in order to be able to place rock scour protection in front of the sheet-pile wall. This additional depth will fall within the general tolerance prescribed for maintenance dredging of 1.5 to 2 m. Scour rock will be placed seawards of the sheet-piles to prevent scouring and potential compromising of the sheet-pile wall.

Additional details regarding the proposed works at the Island View terminal are provided in the Construction Environmental Management Programme (CEMP) attached as **Appendix A**. These works have not yet commenced.

## 3. Application in terms of Section 38 of NHRA

The estimated dredge areas are as summarised in Table 1 below.

**Table 1: Summary of potential surface area to be excavated during construction**

Location	Area (m <sup>2</sup> )
Berth 1 to 2	1 200
Berth 2 to 3	2 300
Berth 4 to 5	2 000
Berth 6 to 7	900
Berth 7 to 8	3 950
Berth 8 to 10	3 200
<b>Total</b>	<b>13 600</b>

It was agreed that the most efficient and beneficial use of this material will be to place it in scour holes within the Island View Basin. This will help reduce the risks of slopes and/or berth structures being undermined due to the excessive scour depths adjacent to the slopes and structures.

The dredging method will only be determined once the contractor has been appointed, however, potential methods of dredging include the following:

- Backhoe dredge from a barge, with dredged material loaded onto separate hopper barges and moved to the scour holes;
- Grab dredge from a barge, with dredged material loaded onto separate hopper barges and moved to the scour holes; and

- Dredge pump off excavator or crane on a barge, with dredged material pumped directly to scour holes.

SRK does not anticipate that any heritage resources would be affected or disturbed by the dredging or filling of the scour holes, irrespective of the dredge methodology employed. The areas in which dredging will take place have previously been disturbed and dredged during the construction of the port. The filling of scour holes will effectively entail the replacement of sediment which has washed out of certain areas of the port.

Please note that all maintenance dredging activities and the associated disposal of dredge spoil will be undertaken in terms of TNPA's Environmental Management Plan for Dredging Operations in the Port of Durban. The Environmental Management Plan for Dredging Operations in the Port of Durban however does not specifically mention mitigation measures associated with heritage artefacts. Therefore, SRK has included the following requirement in the CEMPr:

- *Report all exposed marine/terrestrial heritage resources to SAHRA. Heritage resources uncovered/disturbed must not be disturbed further until advice has been obtained from the relevant heritage authority on how they should be dealt with.*

If SAHRA proposes any additional mitigation measures to be associated with any or all of the potential dredge methodologies, these can be included in the CEMPr.

#### 4. Conclusion

We trust that the information provided above is sufficient for a decision to be made in terms of the issuing of a Section 38 permit.

Should you have any queries or require any further information, please do not hesitate to contact the undersigned. Could you please ensure that all correspondence with regard to this application is addressed or copied to Jessica du Toit at jedutoit@srk.co.za.

Yours faithfully,

**SRK Consulting (South Africa) (Pty) Ltd**

SRK Consulting - Certified Electronic Signature

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