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NOTIFICATION OF INTENT TO DEVELOP

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Coastal Engineering Infrastructure Activities – Proclaimed Fishing Harbours Work Package 3: West Coast – Maintenance and Repair of Infrastructure Elements at Lambert’s Bay Harbour

INTRODUCTION

Aurecon South Africa (Pty) Ltd (Aurecon) was requested by Coega Development Corporation (CDC), on behalf of the Department of Public Works (DPW), to undertake the coastal engineering infrastructure activities Work Package 3 of the Proclaimed Fishing Harbours Western Cape Development Programme, also known as the small harbours programme. This work package includes the three west coast harbours at St Helena Bay, Laaipelek and Lambert’s Bay.

This document constitutes a Notification of Intent to Develop (NID) in support of the aforementioned works at Lambert’s Bay Harbour.

PROJECT OVERVIEW

Part of the overarching Operation Phakisa initiative is the focus on developing and growing the country’s Ocean Economy. It has been estimated that South Africa’s oceans could contribute between 129 to 177 billion Rand to the GDP by 2033, as well as hundreds of thousands of jobs. An aspect which is critical to realising this potential is the rehabilitation and rejuvenation of the existing small harbours along the coastline.

The small harbours programme aims to drive the rejuvenation and upgrading of the small (fishing) harbours forming part of Operation Phakisa, to promote economic growth within the communities they serve. Currently, there are 13 proclaimed fishing harbours in the Western Cape. Within this programme six main project packages have been identified and DPW has established a Small Harbours Development Unit to implement and facilitate these packages which is already underway.

In order to ensure the efficient rehabilitation of existing infrastructure and reinstatement of the original operational capabilities at each of the proclaimed harbours in the Western Cape, the 13 harbours were split into four packages. Of these four packages, Aurecon was awarded the Proclaimed Fishing Harbours Western Cape Work Package 3, which focuses solely on the three west coast harbours at St Helena Bay, Laaipelek and Lambert’s Bay. All of these harbours play a significant role in the local economy of the west coast, whether that be in the fishing or resource (in particular diamonds) sectors.

Small harbours are often the life source and focal point for the neighbouring communities they serve, and integrated into businesses and communities in and around the towns where they are located. In many cases, these harbours are the main source of employment in sectors including fishing, tourism and manufacturing industries or personnel of the harbour itself. Over time, a number of the existing small harbours along our coastline have been neglected both from an infrastructure and operations perspective as well as from a governance aspect. This in turn has hindered the growth and development of the harbours and subsequently had a negative impact on the surrounding communities. The long term potential of the fishing industry, issuing of quotas managed by government, and the interface of the harbour infrastructure with the surrounding town and environment, are all critical aspects to be understood in order to determine future steps for infrastructure related decisions.

Lamberts Bay Harbour contains a primary and secondary breakwater, as well as a revetment to limit long wave resonance inside the basin. There are three quays in the basin, a finger jetty, a wooden landing berth and a slipway with 300t capacity. The slipway is said to have been refurbished recently. Lamberts Bay harbour breakwaters were first constructed between 1937 and 1940. Bird Island was joined to the mainland by a breakwater in 1959 to protect the fishing fleet in the harbour, and the breakwaters were further extended in 1985, meaning that certain harbour structures are older than 60 years.

In January 1901, the British warship, HMS Sybille wrecked off the coast of Lamberts Bay, opposite Steenbokfontein. The wreck of the war vessel can still be found 8 km south of Lamberts Bay at Steenbokfontein and will not be affected by the predicted interventions.

PROPOSED HARBOUR MAINTENANCE AND REPAIR

The proposed works will entail the repair and / or maintenance of existing harbour structures within the harbour jurisdiction. No expansion to the existing development footprint will occur as a result of the required works. The maintenance and repair activities required at the harbour will include the following aspects:

- Repair concrete structures including crack sealing and concrete patch repairs:

This will include sealing of cracks and patch repairs to the concrete on the western and southern breakwaters as well as the main quay and finger jetty, as required. On the western breakwater, corroded and degraded concrete sections along the crest wall will be repaired with new reinforcement installed and new concrete cast as required. The repaired sections of the crest wall will be reinstated back to its original state in order to ensure the safety of the users accessing the western breakwater.

From the edge of Bird Island to half way along the southern breakwater, crack repairs (maximum 20mm wide x 4m per crack) will be made. These crack repairs will consist of reaming (removal of the affected concrete and filling with joint (flexible) sealant to prevent further ingress and corrosion of the concrete).

Concrete repairs will also be implemented on the main quay where a portion (approximately 1 m²) of the quay coping has been damaged. The damaged concrete will be removed and replaced with new concrete.

The inner harbour navigation aid support structure shall be repaired or replaced as it has been damaged. The support shall be reinstated to its original state.

- Repacking of the revetment:

The rubble revetment (185 m²) will be repaired through repacking of the rock armour units and by importing additional rock units, to be placed by mobile crane or suitable alternative from the landside. Unsuitable material currently dumped on the existing slope will be removed prior to the repacking of suitable rock units.

- Repair and replacement of marine furniture:

Bollards and fenders along the main quay and finger jetty will be repaired or replaced as required.

- Replacement of shore crane:

The existing derrick crane on the main quay will be replaced with a new derrick crane of similar capacity.

- Main slipway maintenance:

Repairs and maintenance of the main slipway shall be undertaken. The mechanical components to be inspected and repaired (where required) on the main slipway include the winch, power pack, cable/rope and cradle. Due to the specialist nature of the mechanical components the planned approach is to provide the specialist contractors the opportunity to inspect the equipment, assess the condition and maintenance requirements of the equipment and then provide detailed method statements for the required works during Tender Stage. Concrete repairs to the slipway support beams and ramp will also

be undertaken where necessary. This will include resealing and grouting of concrete on these structures. An inspection of the main slipway rails will be conducted to assess the current condition of the rails and the extent of the repairs required, if at all necessary.

- Routine dredging of the harbour basin:

Dredging of the harbour basin is a standard maintenance requirement for harbour operations, and should occur regularly to ensure the proper functioning of the harbour activities. This maintenance activity has been neglected in Lambert's Bay Harbour in recent years. It has been determined that up to 50 000 m³ of sediment will need to be dredged within the harbour basin to previously chartered depths, and future routine dredging activities will be necessary as a standard maintenance practice for the harbour. Previously, a deposition site was identified and approved in the sea to the west of the western breakwater however, this deposition site has never been used and the approval has since expired. The most suitable location for the dredged sediment is therefore yet to be determined, but it is proposed that the dredged sediment be removed and deposited offshore in accordance with requirements of a Dumping at Sea Permit and specific Dredging and Dumping at Sea Maintenance Management Plan.

- Removal of two sunken vessels:

Two sunken vessels will be removed from the harbour. The South African Heritage Resources Agency (SAHRA) was contacted to provide assistance in determining if the removal of sunken vessels will require permitting in terms of the National Heritage Resources Act (Act no. 25 of 1999) (NHRA). Ms Lesa le Grange of SAHRA confirmed that the sunken vessels are modern therefore would not require a permit in terms of the NHRA for the removal thereof.

An Environmental Management Specification (EM Specification) for the removal of sunken vessels was prepared by Aurecon's Environmental Team, for the Specialist Service Provider that will be removing them. The EM Specification covers the standard requirements for controlling the impact of sunken vessel removal activities on the environment including the coastal environment. Due to the specialist nature of sunken vessel removal works, the planned approach is to request detailed Method Statements from the Specialist Service Providers during the tender process. These Method Statements will be evaluated with particular emphasis placed on compliance to the Environmental Management Specification and Safety Management Plans, which will include a plan for reuse, scraping and/or disposal.

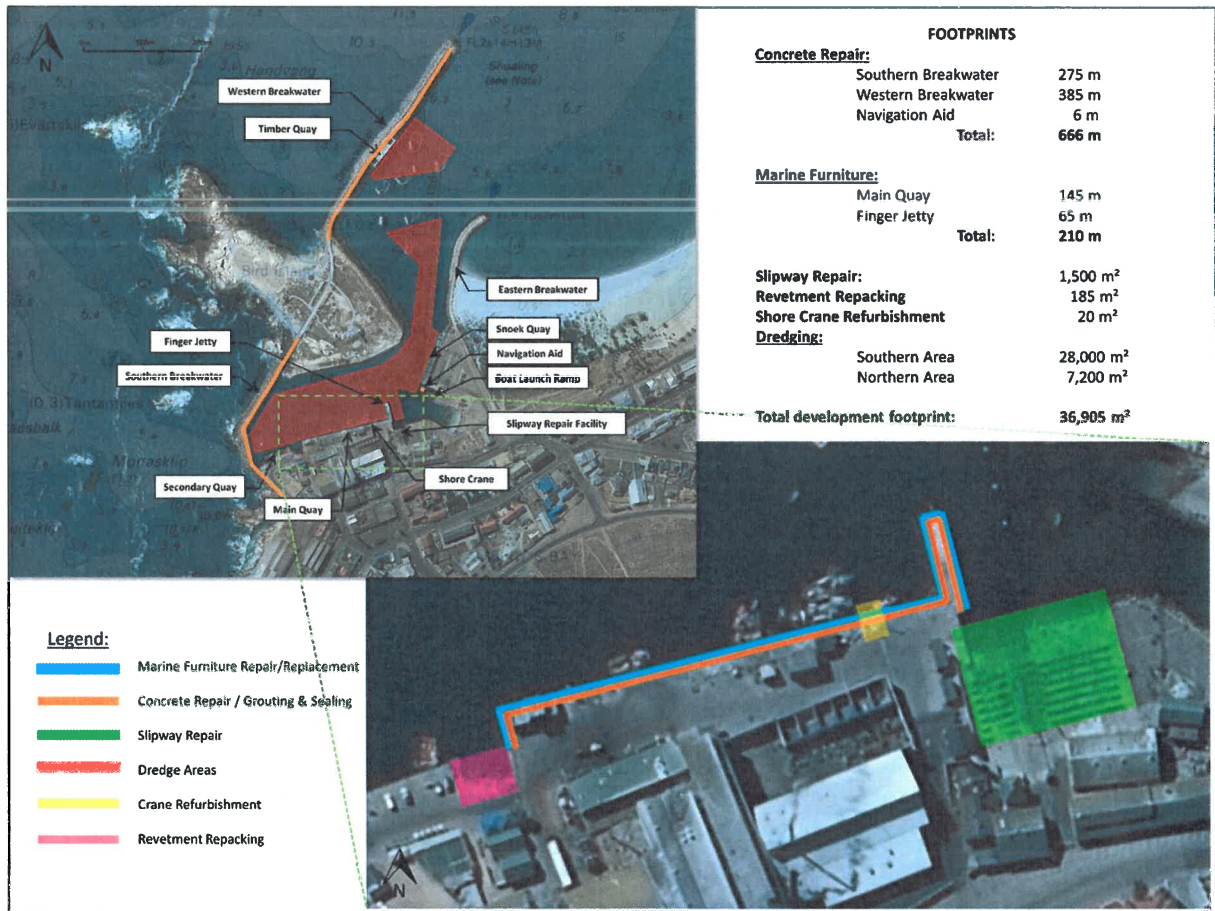


Figure 1: Site map indicating the location of the proposed works

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) (NEMA)

The Applicability Checklist of the EIA Regulations, 2014 in terms of Listing Notices as defined in GN No. R.983, R.984 and R.985 of 4 December 2014 based on the project activities was submitted to the Department of Environmental Affairs (DEA).

DEA examined the information provided on the checklist and concluded that the proposed development does not constitute any listed activities defined in terms of the NEMA Environmental Impact Assessment Regulations, 2014. However, the dredging and disposal of dredged material triggers the exclusion clause as per Activity 19 of GN R. 983, which states that a Maintenance Management Plan (MMP) must be submitted to DEA for approval before commencement of the proposed maintenance and repair works for Lambert's Bay Harbour. Additionally, no listed activities were triggered for the removal of sunken vessels.

THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT NO. 25 OF 1999) (NHRA)

Section 34 of the National Heritage Resources Act has triggered the need for Notification of Intent to Develop (NID), since certain structures of Lambert's Bay harbour are older than 60 years. Additionally in terms of Section 38(1e) the dredging operations trigger the need for NID as during these operations material of archaeological value might be encountered and this material obliges correct handling and management.

The table below summarises the project activities that may trigger the need for a NID as per the NHRA:

| National Heritage Resources Act 25 of 1999 | Description of project activity/aspect that may trigger the need for NID |
|--|---|
| <p><i>Part 2: General protections</i></p> <p>34. Structures</p> <p><i>(1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.</i></p> | <p>Lambert's Bay harbour breakwaters are older than 60 years and maintenance and repair work will be undertaken on them. The age of other structures such as the quays and slipways are unknown. Due to the current state of these structures, there are some portions along the structures which require repairs to ensure the safety of users and public. Without the repair and maintenance work being undertaken on these structures, the fishing harbour cannot operate safely and to its full capacity.</p> <p>Clarification is therefore required from SAHRA on whether an application for a permit is required in terms of Section 34 of the Act.</p> |
| <p><i>Part 2: General protections</i></p> <p>35. Archaeology, palaeontology and meteorites</p> <p>...</p> <p><i>(4) No person may, without a permit issued by the responsible heritage resources authority -</i></p> <p><i>(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;</i></p> <p><i>(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;</i></p> | <p>Approximately 50 000 m³ of sediment will be dredged from Lambert's Bay Harbour basin down to previously chartered depths, forming part of a standard maintenance requirement for harbour operations. It is assumed that the harbour basin was last dredged in 2004. The dredged material will most likely be disposed of in the sea (either within the harbour limits or offshore) however disposal sites have not been identified or evaluated as yet.</p> <p>No known archaeological or palaeontological site or material is present within the harbour basin.</p> |
| <p><i>Part 2: General protections</i></p> <p>38. Heritage resources management</p> <p><i>(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as –</i></p> | <p>The dredging operations will cause disturbance in the identified marine section. During these operations material of archaeological value might be encountered. Thus it will require an application as per Section 38(1e) of the Act.</p> |
| <p><i>(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;</i></p> | <p>Repair and/or maintenance work on existing harbour structures will take place however these repair works will be reinstating the original state of the structures due to the safety and operational risk they currently impose.</p> |
| <p><i>(b) the construction of a bridge or similar structure exceeding 50 m in length;</i></p> | <p>Repair and/or maintenance work on existing harbour structures will take place however these repair works will be reinstating the original state of</p> |

| | |
|--|---|
| | the structures due to the safety and operational risk they currently impose. |
| <p>(c) any development or other activity which will change the character of a site -</p> <p>(i) exceeding 5 000 m² in extent; or</p> | Individual sections of the harbour requiring maintenance and repair work will not exceed 5,000 m ² in extent although, collectively it may but these areas are spread across the harbour. The structures in its current state is a safety and operational risk and would need to be repaired in order to ensure the safety of the users and the functionality of the harbour. The repairs will be done in such a way as to reinstate the original state of the structures. |
| (ii) involving three or more existing erven or subdivisions thereof; or | Not applicable |
| (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or | Not applicable |
| (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority; | Clarification from SAHRA required in terms of the applicability hereof. |
| (d) the re-zoning of a site exceeding 10 000m ² in extent; or | Not applicable |
| <p>(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,</p> <p>must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.</p> | Clarification from SAHRA required in terms of the applicability hereof. |

CONCLUSION

The town of Lambert's Bay is largely established around the fishing harbour and many tourists also visit the harbour due to Bird Island which is attached to the breakwaters. In its current state, the harbour is considered a safety risk and without the repair and/or maintenance work being undertaken on existing structures, its functionality is limited and constrained.

Routine maintenance dredging is also required because currently, sediment build-up in the harbour basin is hindering access of larger fishing vessels to dock in the harbour. The harbour was previously dredged in 2004.

According with the information provided in this letter, Aurecon issues this Notification of Intent to Develop to SAHRA in terms of the requirements set out in the National Heritage Resources Act, 1999 Regulations.

Should you have any queries please do not hesitate to contact the undersigned.

Yours sincerely
AURECON

A handwritten signature in black ink that reads 'Tamryn Johnson'.

Tamryn Johnson

Senior Environmental Scientist: Environment and Advisory Services

Copies: Mieke Barry (Aurecon), Werner Gous (Aurecon), Ulrich Pearce (CDC), Maxwell Denga (CDC)

