Marine Institute comments on the Forehsore Lease / Licence application by Shannon Foynes Port Company for modification to existing jetties and quays at Foynes Port, Co. Limerick (FS006837)

Shannon Foynes Port Company has submitted an application for a Foreshore Lease / Licence to facilitate works on the foreshore at Foynes Port as part of a project aimed at extending capacity at Shannon Foynes Port. It is intended that the capacity extension would be achieved by an increased capacity of the quay wall and an increased capacity of supporting landside storage facilities and logistics. Planning Permission for the overall project was granted by An Bord Pleanala in December 2018 (Board Reference: PL91.301561)

The proposed works on the foreshore involves:

(i) construction of an open piled jetty structure with suspended 116.5 metre concrete deck connecting the West Quay to the East Jetty;
(ii) installation of quayside furniture including quay fenders, mooring bollards, safety ladders, toe rail, and lighting columns,
(iii) construction and remedial works to the both existing West Quay and East Jetty ends to facilitate structural 'tie-in' of the proposed new jetty structure,
(iv) removal of the existing small craft landing pontoon and walkway from its current position affixed to the shore between the West Quay and the East Jetty, and provision of a new small craft landing pontoon and walkway affixed to the western side of the West Quay wall, and,
(v) all associated site development works

The proposed extension to the existing Port berths will facilitate opportunity for the docking of larger vessels (with increased loads) in response to the increasing international trend toward larger vessel sizes or alternatively, the docking of increased smaller vessels at the same time.

Connection of the existing West Quay to the existing East Jetty will involve the construction of an open piled jetty structure with suspended reinforced concrete deck tying into the existing jetty and quay wall structures and,the land reclaimed to the rear of the East Jetty (and Berth 5 of same) which already has planning consent. A 25m wide suspended reinforced concrete deck will span between the West Quay and the East Jetty, though will be wider at its eastern end to facilitate transition of the proposed deck into the reclaimed land behind the East Jetty. The proposed deck shall extend a distance of 116.5m between the West Quay and the East Wall with the loads carried by tubular steel piles driven to provide approximately 3m deep penetration into rock.

The proposed suspended deck will include berthing fenders and mooring bollards placed at regular intervals along the outside (northern) quay edge to accommodate mooring vessels for the purpose of loading and unloading of goods. Mooring bollards will also be placed at regular intervals along the inside (southern) quay edge. The suspended deck will facilitate port traffic and infrastructure which would typically expect to include; loading and unloading vehicles, mobile loading hoppers and craneage, and, associate port traffic and personnel. All

existing jetty structures will be retained during the works and will continue to be used for berthing.

No capital dredging is required as part of the proposed works

Prior to commencement of the jetty extension works, the existing small craft landing pontoon located behind the proposed jetty extension will be removed and relocated to an area identified at the west side of West Quay. Two locating piles will be installed at the new location and a landing platform constructed to tie in with the existing quay structure, along with a landing structure and concrete bankseat to accommodate the pontoon walkway.

It is intended that the general sequence of the foreshore works will be as follows

1. Removal and relocation of the existing small craft landing pontoon to an area identified at the west side of West Quay. Two locating piles will be installed at the new location to accommodate the relocated landing pontoon
2. Driving of steel tubular piles to the required depth using a vibrating hammer and hydraulic impact hammer to achieve the required toe level. Piles to support a suspended concrete deck, connecting the existing West Quay to the existing East jetty to create New Berth No. 4.
3. Localised demolition of existing jetty structures and structural connection between new structure and existing jetty structures.
4. Installation of pre-cast concrete deck elements using suitable plant.
5. Pouring of in-situ concrete deck on jetty extension using concrete pump/skip
6. Installation of drainage, services, quay furniture and lighting

The location and details of the proposed works on the foreshore are shown in the following drawings submitted by the applicant:

- Drawing No. M0679-RPS-00-FS-DR-C-001, “Site Location Map”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-003, “Foreshore Lease Map”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-004, “Foreshore Lease Map 1”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-005, “Foreshore Lease Map 2”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-006, “Comparison of existing lease areas to new lease areas”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-007, “Quay General Arrangement”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-008, “Quay Sections”, Rev A, dated April 2018
- Drawing No. M0679-RPS-00-FS-DR-C-009, “Proposed Pontoon Details ”, Rev A, dated April 2018

On the basis of the information provided by the applicant the Marine Institute is of the view that considering the nature, scale, and location of the proposed works, impacts on the marine environment are not likely to be significant.

Given that the proposed works on the foreshore will take entirely with the existing port area significant impacts on aquaculture or seafisheries are not considered likely. There are no licenced aquaculture sites within or adjacent to the area of the proposed works. The nearest licenced aquaculture site is located circa 4.5Km to the east of the port area in question and the Marine Institute is of the view that there would be no impact on aquaculture activities as a result of the proposed works. Similarly there is no significant seafisheries activity within or adjacent area of the proposed works and the Marine Institute is of the view that there would be no impact on seafisheries activities as a result of the proposed works.

The impact of the pier structures on the tidal flows and therefore any potential changes in coastal processes and associated implications on the receiving water was assessed using computational modelling techniques based on the MIKE suite of coastal process modelling software developed by the Danish Hydraulics Institute (DHI). Details of the assessment are set out in Section 12 of the EIAR that accompanied the application. The results of the modelling indicated that the overall impact on coastal processes will be negligible. The proposed jetty extension is to be constructed as an open piled structure to allow tidal circulation to continue therefore the impacts to tidal currents and coastal process have been minimised within the design stage of the project. On this basis significant impacts on coastal processes are not considered likely.

On the basis of the above the The Marine Institute has no objections to the proposed works and recommends that the following Conditions should be attached to any permit that may issue:

- The Lessee / Licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.

- The Lessee / Licensee shall ensure that appropriate methods of operation are adopted in order to ensure that no spillages of fuel, hydrocarbons, cement or other leakages to the foreshore occur during the Construction Phase. Contractor's arrangements for the control of pollutants should be notified to the Department of the Housing, Planning and Local Government for agreement prior to works on the foreshore commencing.

[redacted]

13 February 2019