



PACIFIC MARINE GROUP PTY LTD
AUSTRALIA



Port of Townsville Channel Upgrade Project Information Booklet

Project Background

(Information provided by Port of Townsville – Townsville-port.com.au)

The Port of Townsville is northern Australia's largest commercial port and provides a vital link for the mining, agricultural, construction, energy, general cargo, retail, Defence and Cruise industries.

At just 92m wide, the shipping channel is one of the narrowest in the country and can only accommodate ships up to 238m in length.

As ships get larger, the channel must be upgraded to allow vessels safe passage to the port, to ensure Townsville is not bypassed as a trade route.

The \$232m Channel Upgrade project will see the Platypus channel (Port end) widened to 180m, tapering to 120m offshore, to accommodate vessels up to 300m in length when completed in 2023.

Capital Dredging

The channel will be widened from 92m to 180m at the harbour entrance, tapering to 120m at the end of the sea channel.

Capital dredging will be carried out using The Woomera, a mechanical dredge which is the largest of its kind in Australia.

The Woomera uses an excavator to dig compact material from the seabed, which will then be placed on to a waiting barge and transported to the unloading facility for placement in the reclamation area.

A mechanical dredge may be slower than other types of dredgers, however, it provides the best environmental outcomes for Cleveland Bay.

Mechanical dredges do not loosen dredge material with water before removing it, meaning a much higher proportion of solid material is removed in each load and less sediment is left to flow through the marine environment.

Most capital dredging, about 90 per cent, will take place in the Platypus Channel close to the Port where the channel will be extended to 180m wide. About 10 per cent of the dredging will occur in the Sea Channel which runs adjacent to Magnetic Island. This area is naturally deeper and will only need to be widened to 120m.

The Woomera will operate 24/7, weather permitting, until capital dredging is complete. All capital dredge material will be brought back to land and beneficially reused for future Port developments.



Marine Support Operations

Pacific Marine Group will provide a range of services to the principal contractor undertaking dredging operations, including:

- Tug & Barge Operations
- Assist Tug Operations
- Crew Transfer Vessel Operations
- Survey Vessel Operations
- Shore Side / Ancillary Support

Equipment being utilised on the project will include the following (or similar):



Main Tugs –

2609 Damen Shoal busters

The primary responsibility of these tugs will be towing the barges between the Backhoe Dredge in/near the shipping channel & the unloading facility at the reclamation area (as per above map)



Assist Tug -

16m Harbour Tug

This Assist Tug will be utilised to assist Tugs & Barges to berth/depart at the offloading facility.



Barges –

73m x 21m Barges with hoppers & excavator onboard

The barges will be loaded by the Backhoe Dredge, with up to 4000t payloads. They will then be unloaded by Excavators onto trucks at the offloading facility.

Location

The project is based at the Townsville Port, located in South Townsville, Queensland.

Employees will be transported to and from the project site each day, departing from the marine precinct off Sandspit Drive / Windlass Crossing, South Townsville.

Project Duration / Rosters

The project timeline indicates 18 months - 2 years duration – with an anticipated commencement of mid-late February 2022.

Employees will be engaged on a 7 on / 7 off roster, with alternating weeks of day and night shift. Each shift will be approximately 12 hours plus an hour allowed for shift changeover. The changeover period will vary dependent upon vessel location at shift change.

Company provided accommodation and FIFO arrangements will not be available for this project.

Employment Conditions

Based in Townsville, employees will be engaged on fixed term contracts of up to 2 years, with conditions consistent with the modern award, for the roster being undertaken.



The Woomera – Backhoe Dredge (65m length x 19m Breadth)