

# Coastal Works Review

**Patrick's Island –Construction of Private Residential Dock and Cabana  
Block: 24C Parcel: 22  
CWL 405**



**PREPARED FOR: MINISTRY OF SUSTAINABILITY AND CLIMATE RESILIENCY**

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Department of Environment

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## Patrick's Island –Construction of a Private Residential Dock and Cabana Block: 24C Parcel: 22

### Project Proposal

The applicants - Thomas and Debbie Guyton - are seeking permission to construct a T-shaped dock, occupying 733 ft<sup>2</sup> of Crown Property in Patricks Island as shown in Figure 1. The proposed dock is intended for personal use for owners of the property, including the mooring of a 37 ft boat.

The works will affect approximately 733 ft<sup>2</sup> of Crown property. The shore perpendicular walkway will measure 40 ft long by 6 ft wide, and the T-ending shall measure 17 ft long by 29 ft wide supported by 10 inch PVC concrete reinforced piles that will be drilled and hammered into the seabed using an air compressor from shore and with the use of barge mounted equipment. The decking will comprise 2x6 inch pressure-treated lumber decking with ½ inch spacing. The dock will be 3 ft 8 inches above Mean High Water level.



FIGURE 1: IMAGERY SHOWING LOCATION OF PROPOSED DOCK WITH FOOTPRINT IN RED (SOURCE: LIS 2018)

## Environmental Impacts

The application site is not located within a Marine Protected Area, nonetheless there are environmental impacts associated with the project. The environmental impacts of this project are identified as follows.

### *Loss of Benthic Habitat*

The seabed in the immediate footprint of the proposal consists of sand/hard bottom closest to the shore along the ledge of the seawall, with algal growth and seagrass within the remaining footprint. Seagrass and algae are important marine habitats for a variety of species. The dock structure will reduce vital light penetration required for seagrass growth and productivity. The plans (S-1.0) and the application form indicates that there will be ½ inch spacing between decking boards as per the DoE's minimum recommendation, which is to ensure that some light penetration can occur to support marine life under the dock. The plans also show the dock built at a height of 3ft 8 inches above sea level. The DoE recommends that this height is increased to its recommended standard of 4 ft above sea level.

### *Cabana Material*

The DoE notes that from the plans that the cabana roof appears to be shingles. Fibreglass shingle roofing is not encouraged given the associated environmental impacts during storm events. In particular, when the shingles and underlying felt paper become detached from the structure by heavy winds and enter the marine environment, they will not readily break down, and therefore pose potential impact to a variety of marine life. The DoE clarified the type of shingles proposed by the applicant, who confirmed a natural hardwood shingle was to be used. This is more acceptable as it is biodegradable and would create less environmental impact under such conditions.

### *Construction Impacts*

Direct environmental impacts will result from the construction of the new dock, mainly through the removal and placement of the PVC pilings into the seabed. The application states that the pilings will be installed by air compressor drilling and hammering into the seabed. The fine silts and sediments of the seabed in this area are easily disturbed and suspended resulting in detrimental sediment plumes which can impact surrounding seagrass communities and marine organisms that depend on good water quality. Therefore it will be important to limit the impacts of sediment plumes generated during construction of the dock through the use of silt screens. The applicant has indicated that silt screens will be used to enclose the works.

### *Launching Ramp*

During a site visit to the site, the DoE found there was already a launching ramp within the seawall at the property. It did not appear usable for a 37 ft boat. The DoE would be unlikely to support dredging here to make it usable for a boat of this size. Any proposed dredging would need to be the subject of a separate coastal works application.

## Comments & Recommendations

Notwithstanding the above mentioned environmental impacts associated with the proposed dock, on balance the Department **recommends this application for approval** subject to the standard Permit conditions and recommended Permit fees (Royalty, Environmental Mitigation and Administration & Monitoring) outlined in Appendix 1. In addition, we recommend that the height of the dock is increased to 4 ft above sea level (rather than 3ft 8 inches as proposed).

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Technical Review Committee – Department of Environment

**On behalf of the Director, Department of Environment**