

Coastal Works Review

**South Sound – Construction of a Private Residential Dock
Block: 23B Parcel: 112**



PREPARED FOR: MINISTRY OF SUSTAINABILITY AND CLIMATE RESILIENCY

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Authored by: Technical Review Committee - Department of Environment, on behalf of the Director,
Department of Environment

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SOUTH SOUND – CONSTRUCTION OF A PRIVATE RESIDENTIAL DOCK BLOCK: 23B PARCEL: 112

Project Proposal

The applicants- James Bussey and Stacey Ottenbreit– are seeking permission for the construction of a private residential dock located on Block 23B Parcel 112 at Red Bay on South Sound Road, as shown in Fig. 1 below. The dock is intended for the use of owners and guests of the property for swim access and for the mooring of small watercraft.

The works will affect approximately 1,148 ft² of Crown property (NB. The application dock area of 1,030 sq. ft. omitted the area of the floating platform measuring 118 sq. ft.). The shore perpendicular walkway shall measure 131ft long by 6ft wide with a rectangular end section measure 12ft long by 14ft wide with a timber-framed cabana with stone shingle roof as shown on figure 1 below. The dock shall also have a section 1ft 10in lower than the rest of the deck around the dock end section measuring 4ft wide and 15ft 6in long and a floating waverunner platform measuring 11ft 10in long by 10ft wide alongside.

The application submission indicates the following: the dock shall be supported by 8inch diameter concrete and steel reinforced PVC piles that will be embedded into the seabed by drilling. The decking will comprise of 6inch Ipe timber decking with ½ inch spacing between boards and shall be 4ft above mean sea level. The pilings will be embedded into the seabed by drilling using a hand operated drilling rig working from scaffolding. A silt screen will be used to contain the entire area of the works whilst they are being carried out to reduce the spread of turbidity and debris.

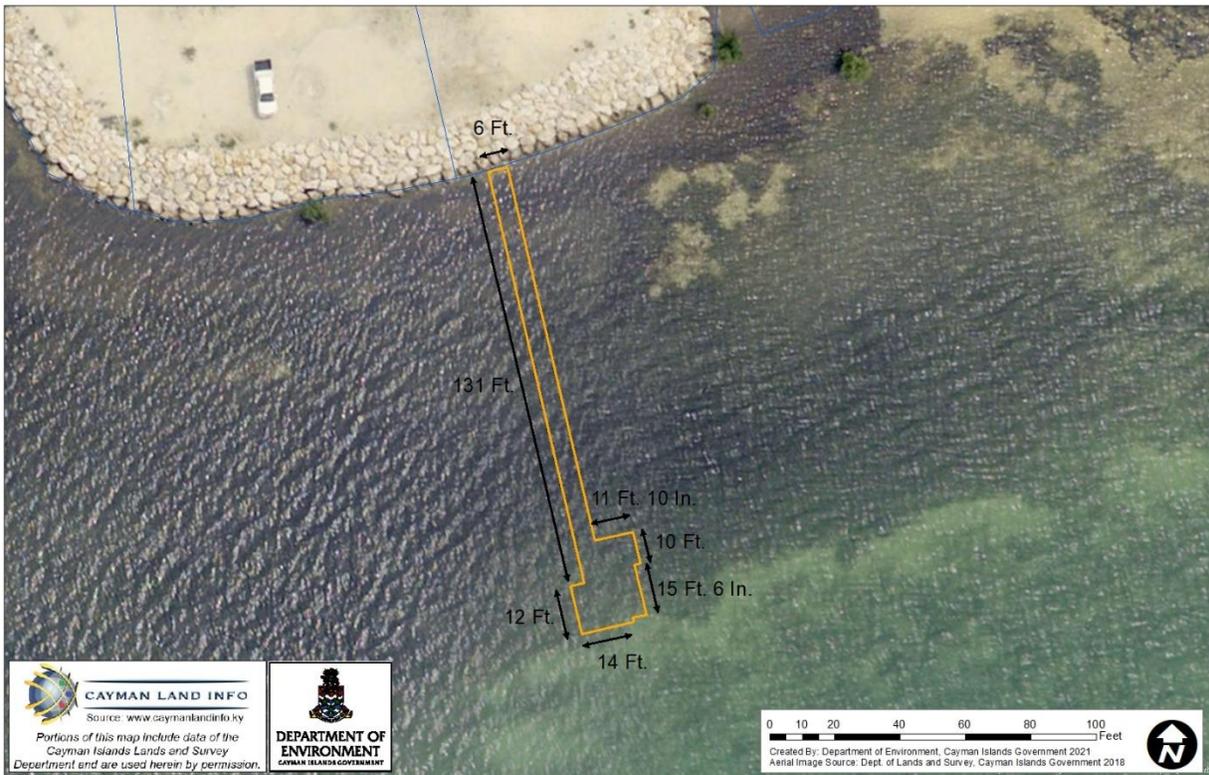


Figure 1: 2018 LIS aerial imagery showing proposed dock outline in orange (LIS 2018)

Environmental Impacts

The Department notes that the precedent has been set for docks to be constructed along this coastline. The proposed dock is located within the South Sound Marine Reserve marine protected area, in the vicinity of dense seagrass beds and coral reef fringing the lagoon. The dock is not located on an active turtle nesting beach and the shoreline in this area is man-modified as the mangroves were removed and the area filled previously with a boulder seawall as shown in figure 2 below.



Figure 2: Site visit photos showing the location of the proposed dock (DOE 2021)

Loss of Benthic Habitats

The characteristics of the seabed in the immediate footprint of the proposed dock are a mix of seagrass and algae. These benthic habitat types represent important marine resources for a variety of species. Impacts to seagrass from dock construction is mainly from the long-term shading caused by the dock structure which reduces vital light penetration required for seagrass growth and productivity. Therefore shading will inhibit further growth and ultimately result in loss of seagrass. The Department supports the applicant's proposal to mitigate shading impacts by installing decking with a minimum of ½ inch spacing, as currently shown on the application plans. Additionally the applicant, in accordance with DOE recommendations, revised their original plans from a cabana with a composite slate roof to a stone shingle roof in order to reduce the risk of introducing plastic debris into the marine environment if it is damaged in a storm.

Construction Impacts

Direct environmental impacts will result from the construction of the dock, mainly through the placement of the piles into the seabed. Construction activities such as jetting and hammering of the piles into the seabed results in the disturbance and suspension of fine silts which form 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 the debris removal and construction of the dock through the use of silt screens throughout all works.

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.

Director, Department of Environment