

## **Blackmill Bay, Isle of Luing**

### **Existing harbour improvements - EIA Screening request**



#### **Introduction**

Blackmill Bay, located on the southwestern coast of the isle of Luing in Argyll, has at its southern end a small promontory that partially shields a cove used as a tiny harbour. This humble setup has been used as the main point of access to the island of Scarba for some years as well as the only area in the village of Blackmill bay that can operate as a safe harbour for local craft, however work to improve it has been long overdue.

Some rock armour sea defence and an access track have been present along the promontory for decades however in its current form the cove provides poor protection at high tide, poor access at low tide, no allowance for those with limited mobility and a number of hazards when leaving or entering the cove. The application is to perform some low impact works to better improve wave protection offered by the cove as well as access for light vessels and better facility for persons using the harbour.

## Location

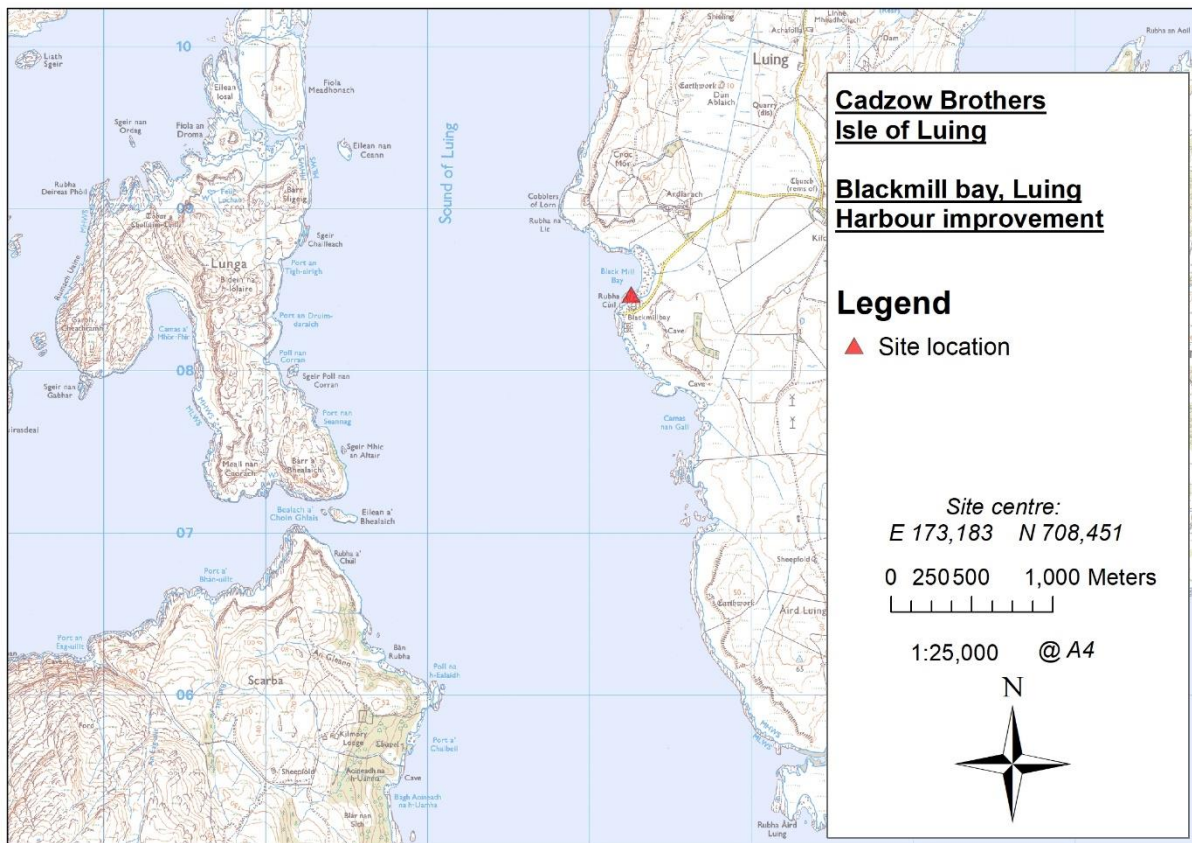


Fig 1. Located on the west of Luing at the site centre given, postcode PA34 4TZ.



## Description of proposed works

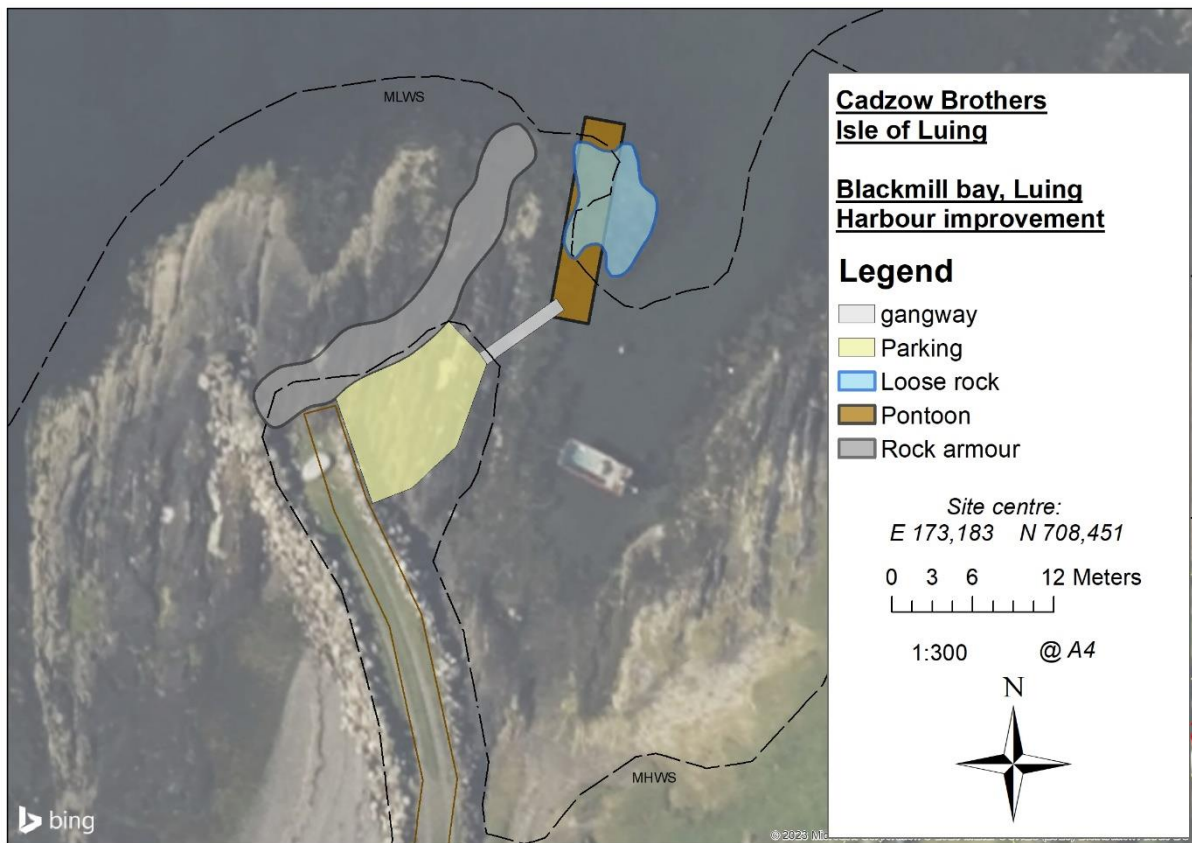


Fig 2. Site plan of proposed works overlaid on satellite imagery with MHWS & MLWS

### Regulated activities

1. Coastal defence works capable of affecting coastal processes.
2. Removal of substances or objects from the seabed.

### Physical characteristics of the proposed works

1. Stage one will be to extend the existing rock armour further along the promontory below the high tide line. Rock will be sourced from the island and an excavator used to position it appropriately. The proposed rock armour will measure approximately 30 meters in length and between 2-6 meters in width. The total **area** of the rock armour will be **120m<sup>2</sup>**.  
The rock used will be large boulders (approx. diameter 80-150cm) sourced from the island of Luing above MHWS, we actually have many of these already sitting in small quarries on the island that are used to source material for agricultural tracks, house sites etc.
2. At the entrance to the cove is a pile of loose rock (this was placed some decades ago by my grandfather to try and protect the cove better, however it doesn't provide any protection and is in fact a hazard to vessels entering the cove) it has an approximate **area of 40m<sup>2</sup>** and is 1m deep, total volume of stone to be removed will therefore be **40m<sup>3</sup>**.

The stone itself is fully exposed at MLWS so not at depth and we plan to use an excavator and trailer to remove the stone above the MHWS line (where it can be used for a carpark if that is deemed appropriate). Every effort will be made to minimise the uplift of sediment and to reduce sediment disturbance.

3. A Car park and turning area above the mean high-tide mark will be created and raised slightly using material to provide easy access to people using the harbour. Its area will be no more than 80m<sup>2</sup>.
4. A pontoon and gangway will be installed to further improve safe access to craft/vessels. The pontoon design will be for a 12m long by 2m wide pontoon and will cater for **boats upto 11 meters in length**. The pontoon will be anchored in place using chain and two mooring blocks, no piling will be required.
5. **The total combined area of Site works below the MHWS line for the proposal is 160m<sup>2</sup>** (120m<sup>2</sup> of rock armour and 40m<sup>2</sup> of stone removal).

### Methodology

1. At the MHWS line the rock armour will match the existing armour in place at 1.5m in height, at the MLWN line this will have to be 4m high, this is an average of 2.75m across the length of the sea defence. With an average base width of 4m and top width of 1m the sea defence will require a total **volume** of approximately **220m<sup>3</sup>** of rock armour.

Installation of rock armour is all above the low tide line and can therefore be undertaken using an excavator, no vessels will be required for this project.

2. Clearing of loose rock will also be undertaken using an excavator as all loose rock is above the low tide line. Based on initial site observations this will total no more than **40m<sup>3</sup>**.
3. The car park will be above the MHWS line and whilst it may not require marine scotland licence I have included it here for thoroughness. The carpark will be constructed using an excavator and will have larger boulders around the periphery with gravel and loose stone infill. There is an option to reuse some of the loose cleared stone here as infill material.
4. The pontoon is likely to be of plastic, steel and timber design with an aluminium gangway.

## Location of proposed works with regards to environmental sensitivity



### **Impacts to environment**

1. There are a number of designations adjacent to the proposed works, they are included below along with the likely impacts the works will have:
  - a. **The Firth of Lorn SAC** was designated to protect the 'extent and distribution of reefs within the site' as well as 'the structure and function of the habitat and the supporting environment on which it relies'. It's main purpose initially was to prohibit dredging for Scallops and other shellfish and enable reefs to regenerate.

Our proposals will have no direct contact with these reefs, additionally, by minimising sediment disturbance and operating entirely above the MLWS we will have a negligible impact on the supporting environment on which the reefs rely.

- b. **Loch Sunart to the Sound of Jura MPA** was established to protect Common Skate as the area is one of very few remaining strongholds in Scotland due to overfishing and Dredging. The Common Skate can grow to a length of 2.5m and weigh 100kg, they typically are found in waters ranging from 10 - 600m deep.

Our proposals will have very limited direct contact with Common Skate given all works are to be undertaken above the MLWS, additionally, by minimising sediment disturbance and operating entirely above the MLWS we will have a negligible impact on the supporting environment on which the Species rely.

- c. **The Inner Hebrides and Minches SAC** is Scotland's first SAC for the Harbour Porpoise, its main purpose is to contribute to the favourable conservation status of the harbour porpoise in the Atlantic Biogeographic Region.

Again, our proposals will have very limited direct contact with Harbour Porpoise given all works are to be undertaken above the MLWS, additionally, by minimising sediment disturbance and operating entirely above the MLWS we will have a negligible impact on the supporting environment on which the Species rely.

2. The works themselves will no doubt cause some disturbance to smaller species, like limpet and crabs. However, the surrounding environmental will not be significantly affected by the works.
3. There are no expected residues, emissions or waste from the proposed works.
4. There are no significant effects expected from the use and installation of rock as we can source this from the nearby agricultural businesses on the island where it is a byproduct. Neither will there be any significant introduction of sediment or soil into the marine environment whilst undertaking the works.