



Barmouth Beach Management

Method of Works

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CPF8200



Document Control Sheet

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Reviews

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Rhys Meilyr Thomas	Senior Environment Officer	22/10/2023	0.01

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1.0 Introduction

This document has been prepared by Gwynedd Council as overseeing organisation for proposed Beach Management works at Barmouth, Gwynedd (see figure 1 below for general location plan).

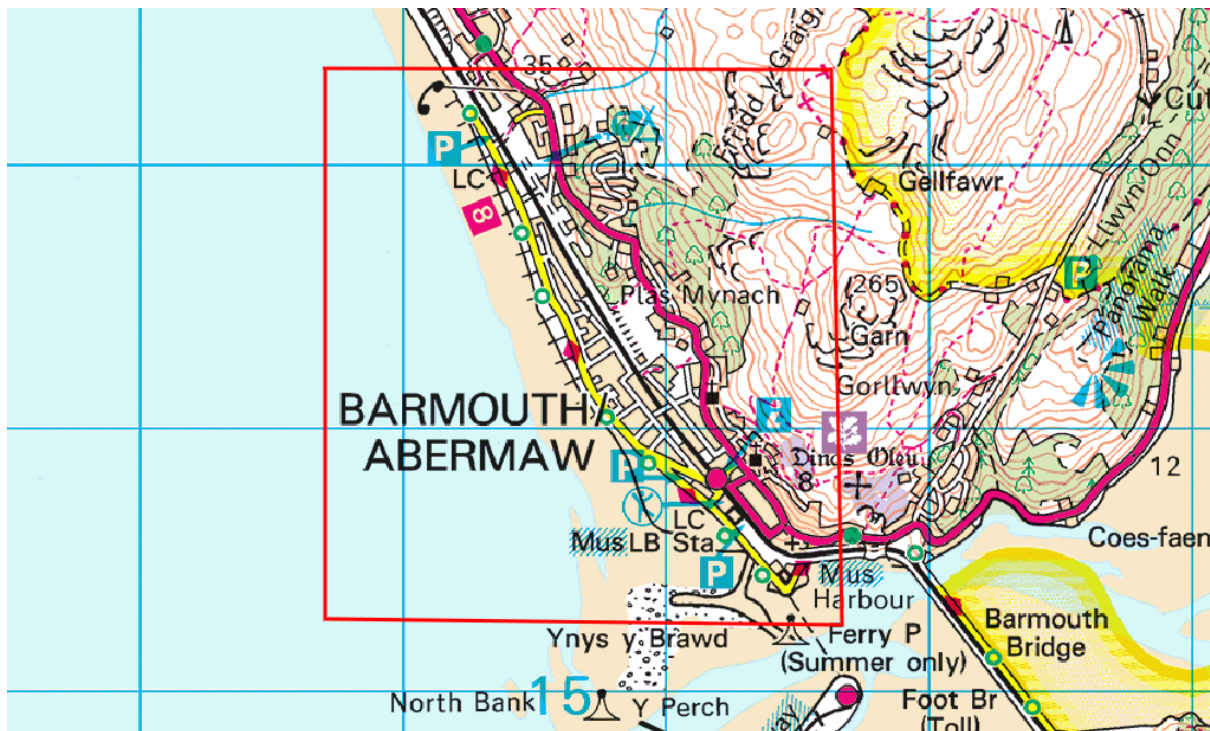


Figure 1: General location plan

The proposed works consist of the following:

- Programme to move accumulated sand from the area directly in front of the southern promenade sea wall (see Figure 2) twice a year, in the autumn/early winter and again at the end of winter.
- The extent of excavation required in front of the sea wall is shown on the cross-section provided in Figure 4 below. The aim is to create a 'sand trap' by removing sand approximately 500mm below the level of the seawall and creating a low gradient batter back up to the level of the existing beach.
- Any additional sand that blows over is to be collected from the promenade, the road and the car park at the rear when the levels are sufficient to create access or safety issues to the users of these areas.
- Sand collected from the sea wall to be moved to either:
 - o Option A: the dune area to the west of Ynys y Brawd causeway (see Figure 2) although only limited storage is available in this area
 - o Option B: a designated deposit area at the northern end of the promenade (see Figure 3)

This method statement has been prepared to accompany an application for a Band 2 Marine Licence for the proposed works.

The purpose of this document is to outline the methods which will be adopted to undertake the works whilst safeguarding the surrounding marine environment, and in particular the features of the Pen Llyn a'r Sarnau SAC. Compliance with these measures will form a condition of the contract on appointment of the successful contractor for the works.

2.0 Method of Works

Sand will be collected from the area shown in Figure 1 below using a tracked 20T (or smaller) excavator.

For deposition in the sand dune area shown in Figure 1 (as per Option A) two 5T – 8T dumpers will collect sand directly from the excavator and track across the beach towards the deposition area. The deposition area will be marked in the dunes beforehand and the dumpers will deposit from the back to the front of this area, working their way out.

For deposition at the northern end of the promenade (as per Option B) 20T dumpers will be used to haul the sand along the highway, prior to deposition on a designated area on the surface of the promenade (see Figure 2). Another excavator will be positioned at the north end to collect sand from the stockpile area and deposit onto the beach over the sea wall. This removes the need for any plant to be positioned on the foreshore and also the need to access the beach via the slipway at the northern end, which has recently been repaired following damage caused due to washout of fines below the surface – a continuous problem as a result of lowering beach levels. Placing the excavator on the promenade also means that sand movement is not limited to low tide conditions. The excavator at the north end will spread the deposited sand to the north and south to prevent the creation of a single large stockpile.

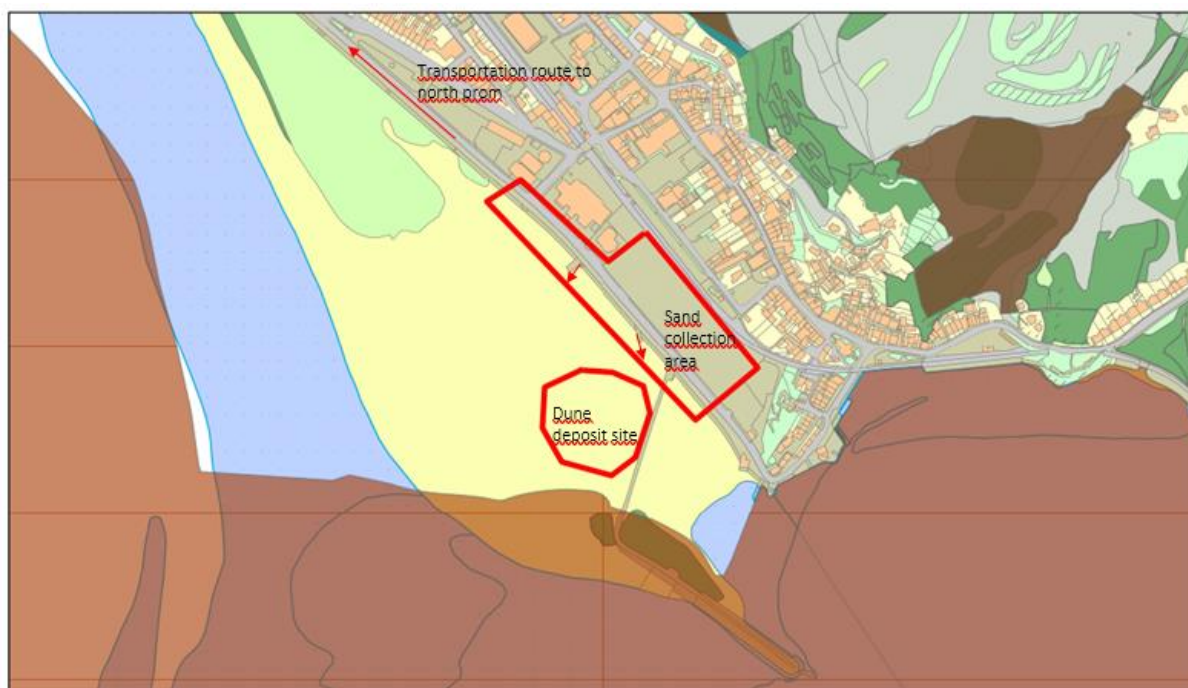


Figure 2: Location of sand collection and Option A deposition area at main beach towards southern end of promenade. Red arrows show slipway access onto foreshore (Internationally protected sites, SAC shaded brown).



Figure 3: Location of Option B sand deposition area at north end of prom (outlined red) and approximate location of temporary stockpile (outlined orange)

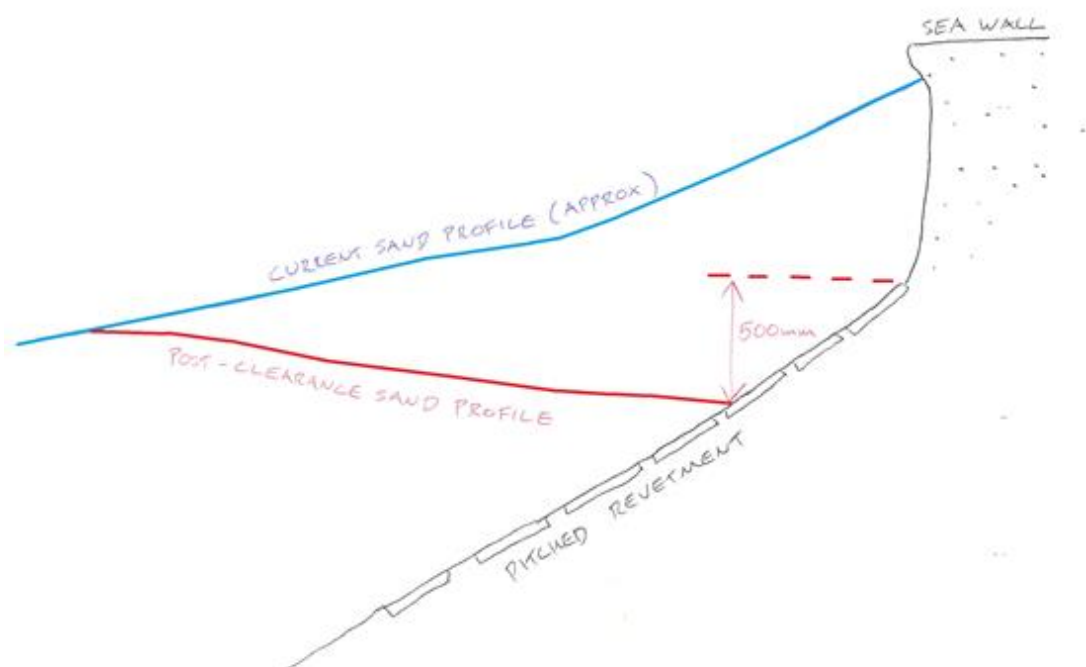


Figure 4: Approximate existing and proposed sand profile in front of sea wall

3.0 Measures to reduce the risk of pollution

The following measures will be implemented to further reduce the risk of environmental damage during the proposed works:

- A Construction Environment Management Plan (CEMP) is to be prepared which will detail what measures will be in place to protect the surrounding environment. Location of adjacent protected sites shall be clearly highlighted.
- Pollution spill kits to be readily available on site within plant/machinery at all times, with staff suitably trained in how to deploy.
- Contractor to have emergency incident response procedure in place in the case of a spillage. Response to include accurate procedure to swiftly remove any contaminated sand/material from site in the case of accidental spillage.
- Contractor to adhere to pollution prevention best practice guidelines, including;
 - GGP5: Works and maintenance in or near water.
- Biodegradable lubricant and hydraulic oil to be used in plant machinery where possible. Biodegradable oils are less toxic than most synthetic oil but should still be stored to the same standards as other oils and prevented from entering the water environment.
- Contractor to monitor and visually assess sand collection activities for any visual signs of contamination within the materials. Where contamination is suspected the material is to be left in situ and arrangements made for appropriate testing and disposal.
- Should sand start collecting in car parking areas/bays along the promenade, car parking is to be restricted in these areas until the sand is removed. This will reduce likelihood of potential pollution contamination.
- Access to and along the beach area to be via the main slipways and along a designated pathway to keep potential habitat disturbance to a minimum.
- There shall be no access to mid – to lower shore where trafficking of vehicles may directly impact sensitive marine habitats.

4.0 Measures to reduce the Health and Safety risks

- Suitable signage to be erected to inform public of ongoing works and warn of risks.
- Suitable signs/barriers to be in place to prevent members of the public from entering near excavation area, deposition area or haulage routes.
- Promenade to be closed off to the public with suitable barriers when excavation occurring directly in front/behind sea wall. Clear and safe pedestrian diversion to be in place during these times.

- Plant and machinery only to be operated by competent persons with relevant training/certification.
- Banksman to perimeter area of works to deter public from entering works area. All operated machinery requires a Banksman at all time