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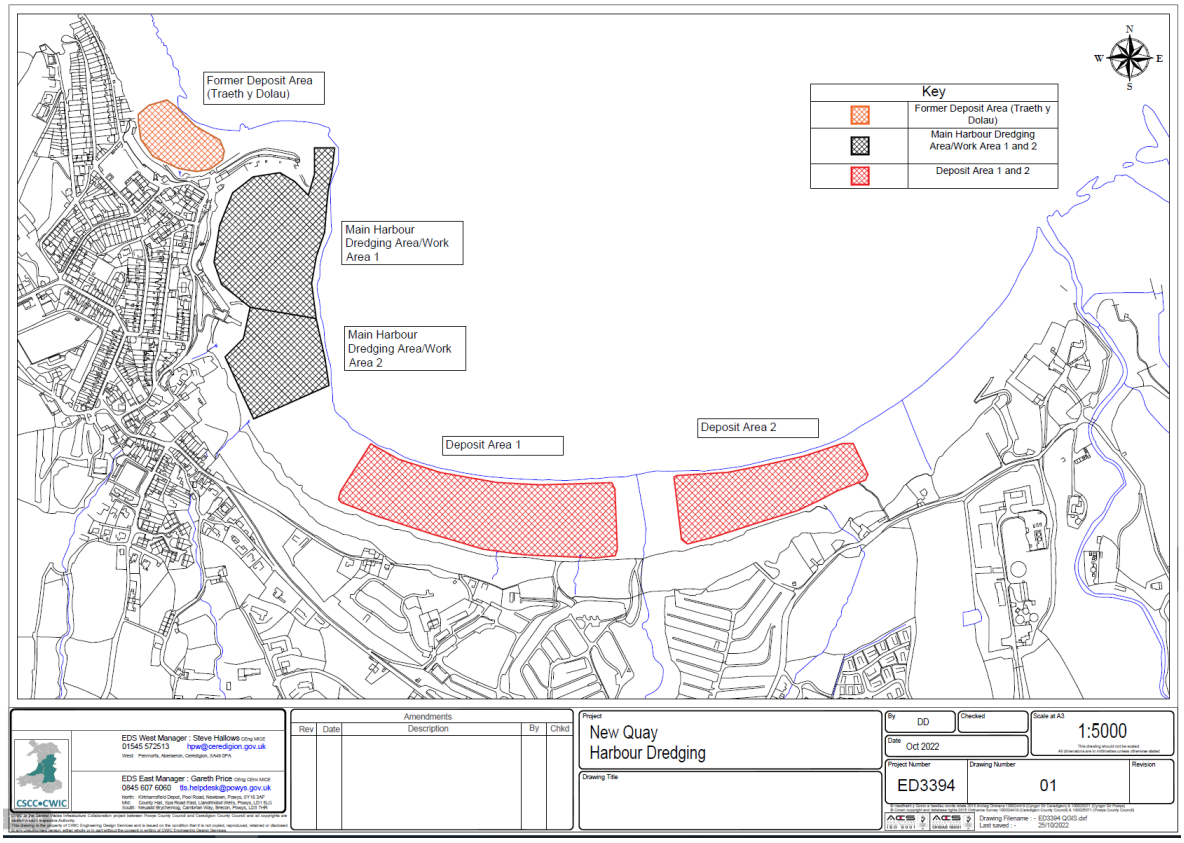

ED3394 New Quay Harbour Dredging

Sediment Disposal Plan for *Sabellaria alveolata* Reefs

14/03/2023

Report Prepared for:-

Report Prepared For: Owen Morgan, Harbour Manager, Highways & Environmental Services, Ceredigion County Council

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Prepared By George HT Ryley, BSc, MSc

	Name	Signature	Position	Date of Issue	Version
Prepared	George HT Ryley		Highways Ecologist	14/03/2023	
Approved					

Record of Previous Issue and Amendments

Version	Revision date	Summary of Changes

Introduction

Ceredigion County Council (CCC) is responsible for the maintenance of New Quay Harbour. As part of this, the harbour basin is dredged annually to maintain access for boats. The dredged material has been used previously to replenish the beach at Traeth Y Dolau, however, this is no longer possible due to overriding access issues. CCC has therefore proposed new deposit areas along neighbouring Cei Bach beach (see figure 1).

Honeycomb worm (*Sabellaria alveolata*) reefs are known to occur along the Ceredigion coastline in the Cardigan Bay marine SAC, with a 2022 Welsh Government publication highlighting six possible locations[1], however, there is no recent mapping. Because of this lack of mapping, Natural Resources Wales (NRW) have requested a disposal plan in support of previous marine licence applications from CCC for dredge disposal activities in New Quay's neighbouring harbour at Aberaeron.

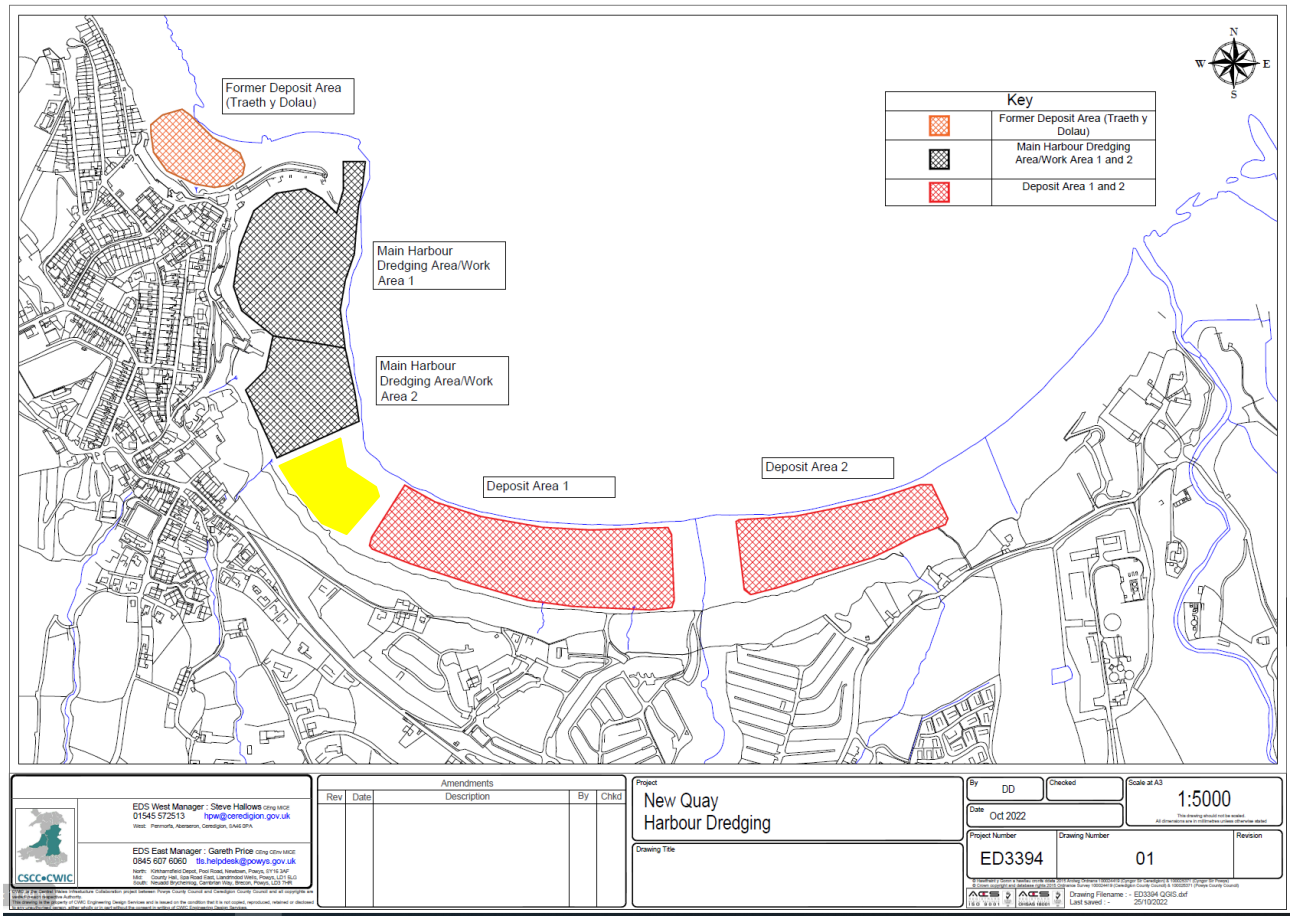

Figure 1: Plan of New Quay harbour dredging areas and proposed deposit areas along Cei Bach. Yellow patch = approximate area of exposed bedrock.

Initial Appraisal of Proposed Deposit Areas

Joint site visits by CCC's Highways Ecologist, Harbour Manager, and Assisitant Site Supervisor took place in October 2022. This identified that the sites and surrounding intertidal area are almost exclusively sand-dominated, with little in the way of exposed bedrock or boulders. *S. alveolata* require a combination of hard rock surfaces and mobile sand in order to develop[2]. The only area where there is exposed rock is in the highlighted spot following the harbour demise and start of Cei Bach Beach (yellow area

in Figure 1). No *S. alveolata* were recorded on these rocks at the time of the survey, however, the area will be by-passed by any dumpers travelling to and from the deposit areas.

Figure 2: Views of the deposit areas showing the absence of exposed bedrock and boulders suitable for *S. alveolata*.

Disposal Plan

The following measures will be taken to minimise the risk of impacting *S. alveolata* in the vicinity of the disposal area:

- A walkover survey of the area will be carried out by a suitably experienced and qualified ecologist prior to any disposal of dredged sediment at this site. This is to be carried out at low tide and will be used to map the current extent of *S. alveolata* in the vicinity.
- A 20-metre buffer zone from any identified *S. alveolata* will be created. No sediment is to be disposed of within this buffer zone.
- To further minimise risk to *S. alveolata* reefs, the contractor will ensure that they evenly distribute any dredged sediment in the permissible areas.

References

1. Assessing Welsh Fisheries Activities Project (Welsh Government). 2022. *Multi-Rig Trawl on Sabellaria spp. Reef.* “6. MPA’s Where Feature Exists”. Available at: https://www.gov.wales/sites/default/files/publications/2022-05/multi-rig-trawl-on-sabellaria-alevolata-spinulosa-reefs.pdf (Accessed 14/03/2023).

2. L.E. Bush, S.J. Balestrini, P.E. Robins, A.J. Davies. 2015. *NRW Evidence Report No 049 - The reproduction and connectivity of Sabellaria alveolata reefs in Wales – MAR4REF Bangor University.* Available at: https://cdn.cyfoethnaturiol.cymru/media/686192/cym-report-049-reproduction-and-connectivity-sabellaria-alveolata-reefs-within-wales.pdf (Accessed 14/03/2023).