

Sent by e mail

Date 29 March 2021

Dear Gareth McIlquham,

SCREENING OPINION UNDER THE MARINE WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2007 (as amended)

Penrhyn Bay Coastal Scheme (Flood and Coastal Erosion Risk Management Works)

I am writing further to your request for a screening opinion, duly made complete on 7 January 2021, made in accordance with The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("The Regulations").

The purpose of the Environmental Impact Assessment (EIA) screening procedure is to determine whether the proposed works require an Environmental Impact Assessment and submission of an Environmental Statement (ES).

In reaching our Screening Opinion we have considered the proposed works against Schedule A1 and A2 of the above regulations. We have also consulted with the bodies that we consider have an interest in the project by reason of their environmental responsibilities, or local or regional competences, as required by the above regulations.

Screening Opinion

It is our opinion that the proposed works fall within the categories of project listed within Schedule A2, paragraph 69 (*Coastal work to combat erosion and maritime works capable of altering the coast through the construction of, for example, dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works*) of the above regulations, and therefore must be considered in terms of its size, nature and location having regard to the relevant criteria listed in Schedule 1 of the above regulations.

We have considered the views of the consultation bodies alongside the criteria as set out in Schedule 1 of the Regulations, and have determined, based on the information provided; that the project does not require a statutory Environmental Impact Assessment.

We have come to this conclusion on the basis of the likely significant impacts of the project having reviewed the project in terms of the criteria set out in Schedule 1, and consider that the proposed works described in the screening report is unlikely to have significant adverse impacts on the environment.

We have considered that the proposed works may potentially have an adverse effect on *Sabellaria alveolata* reef (a priority habitat under Section 7 of the Environment (Wales) Act 2016) within the intertidal zone from direct impact and also from secondary impacts relating to alteration of coastal processes localised to the proposed development within Penrhyn Bay. However, we are satisfied that these effects can be avoided or mitigated for through the proposed site-specific intertidal surveys to inform development design and placement.

The proposed works are not located within a designated site but are in close proximity to Liverpool Bay SPA. The designated features of this site are predominantly located offshore and with no appropriate nesting habitat identified within the area of works, significant impacts are not predicted as occurring.

The Conservation of Habitats and Species Regulations 2017

As part of the screening exercise, we have also considered whether the proposed project, either alone or in combination with other plans or projects, is likely to have a significant effect on any site designated as a European site of conservation importance under the above Regulations. To assist in making this judgement of likely significant effect, we have sought advice from our statutory nature conversation advisor and it is our initial view that no sites could be impacted by the proposal.

We would encourage you to contact Natural Resources Wales Conservation Advice (Advisory) to receive further pre-application advice to inform your non-statutory environmental report, which will support any future marine licence application. Further information on this service can be found via: <https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/our-service-to-developers/?lang=en>

This Screening Opinion will be provided to all those bodies that were consulted and will be publicised on our website and on our Public Register.

Yours sincerely



Marine Licensing Team
Natural Resources Wales

Cc: All Consultation Bodies

Annex 1 – Comments by Consultation Bodies

To be read in conjunction with Screening Opinion SC2007

1. Summary of Proposal Considered

Penrhyn Bay is a coastal embayment in the county of Conwy, North Wales. The Shoreline Management Plan states that the policy for Penrhyn Bay is to 'Hold the Line'; whilst the Conwy Local Development Plan (LDP) emphasises the importance of preserving the county's unique natural beauty, safeguarding public rights of way and allowing tourism to continue to make a vital contribution to the economy.

The existing defences provide coastal erosion and tidal flooding protection to over 300 residential and commercial properties, utilities infrastructure (including a Dŵr Cymru Welsh Water (DCWW) pumping station, a Wastewater Treatment Works (WwTW) sea outfall and SP Energy Networks assets), the adjacent promenade, A547 highway, Wales Coast Path, National Cycle Route, and the Rhos-on-Sea Golf Club. The present beach and promenade also form a key part of the local community's well-being and recreation space, whilst adding to the area's wider tourist attractions.

In the absence of the continuing beach management works, regularly undertaken by CCBC, the sea wall and revetment are highly likely to fail through the on-going drawdown of the foreshore exposing the corroded and structurally weak sheet piled toe foundations. The present regime of maintenance activities is unsustainable and is likely to increase in frequency over time, as the mobility of the beach increases due to the beach material particle attrition and the increasing severity of storm events and sea level rise associated with climate change.

The Objectives for the project are to:

1. Manage the effects of flood risk and coastal erosion to people and property.
2. Reduce the on-going capital maintenance costs experienced as part of the present beach maintenance regime to safeguard the public backshore assets.
3. Meet the objectives of the Shoreline Management Plan (SMP2) for Penrhyn Bay, which include:
 - Hold the Line
 - Maintaining and widening the beach.
 - Acting in an environmentally acceptable way.
4. Incorporate wider benefits and added amenity value into project design and construction (including consideration of Welsh Government's Community Benefits Policy and the Well-Being of Future Generations (Wales) Act 2015). To maintain and, where possible, enhance the natural environment.

5. Maintain and improve the local area – with an awareness of the amenity value presently provided by Colwyn Bay and Llandudno (neighbouring towns).

To achieve these above objectives, a rock groyne and associated beach nourishment areas are proposed (refer Section 2 below). The total area of the proposed rock groyne is 100m by 65m in width. The beach nourishment is proposed to build out beach profiles around the promontory structure of approximately 68,500m³ and comprising similar material to existing beach deposits.

The rock groyne and beach nourishment are suited to the local area, which already comprises a number of rock promontories whilst the beach nourishment will approximate existing beach deposits. The proposed design would ameliorate coastal processes and reduce ongoing maintenance requirements. Amenity enhancements are proposed and will be developed at detailed design in consultation with the local community and key stakeholders.

2. Location

Penrhyn Bay is a coastal embayment which lends its name to the small town located between the renowned seaside resorts of Llandudno and Colwyn Bay, North Wales. The study frontage is approximately 800m in length contained between the northern breakwater National Grid Reference (NGR): SH8235781963 and south-eastern breakwater NGR: SH8295881523. Of this, approximately 450m is comprised of publicly maintained defences consisting of a 1950s stepped concrete seawall, which has suffered significant levels of deterioration due to the previous on-going erosion of beach levels. The remaining 350m of frontage is in a more self-sustaining natural condition and is in private ownership.

The proposed works are not located within an environmental sensitivity area but are in proximity to the Liverpool Bay SPA (refer Figure A.1).

The precise location of the structure will be determined at the detailed design stage with consideration of local scale effects, such as the existing *Sabellaria alveolata* (honeycomb worm) reef with intent to avoid, reduce and / or offset effects.

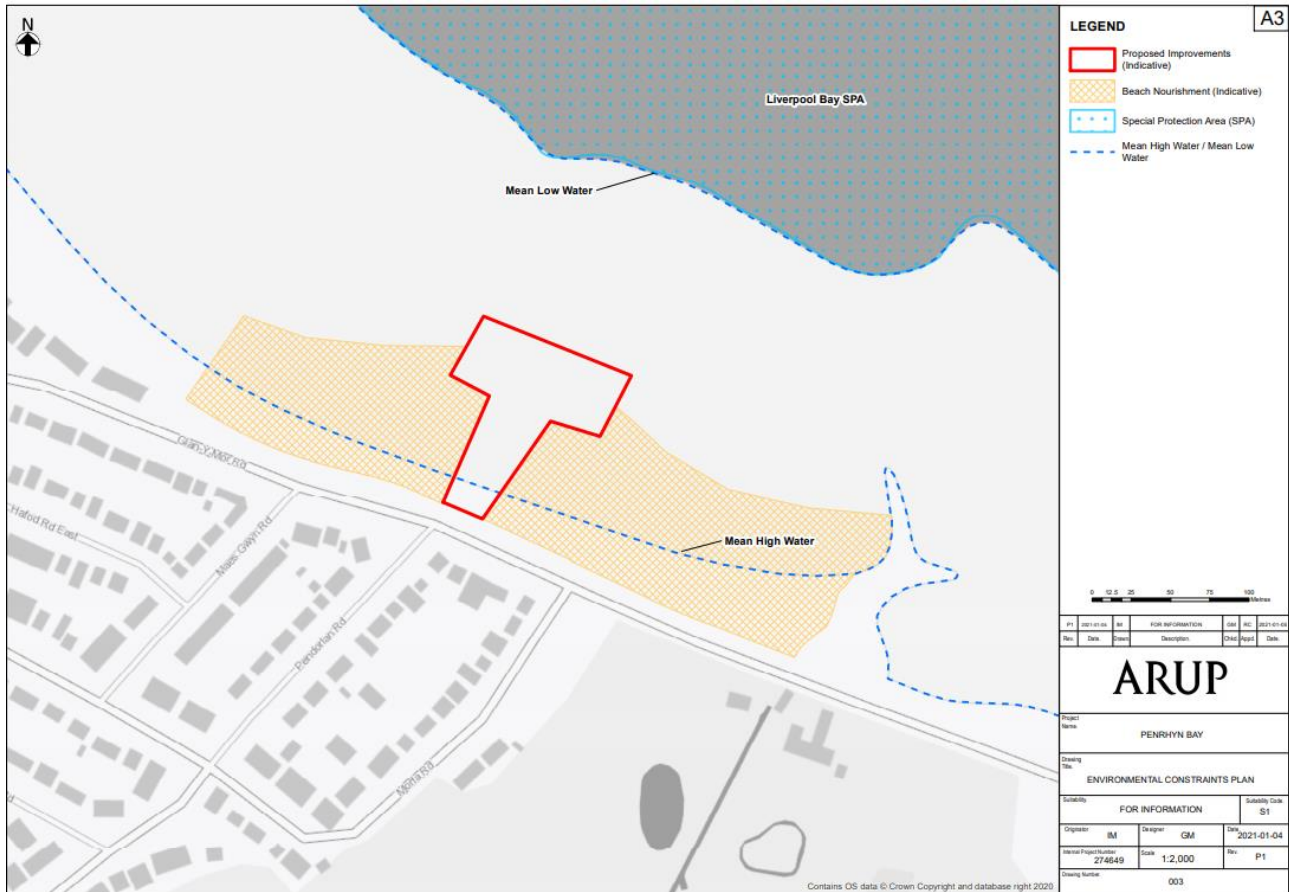


Figure A.1 Indicative proposed coastal defence and beach nourishment area

3. Consultation responses received

In considering our Environmental Screening opinion, Natural Resources Wales Permitting Services (NRW PS) have consulted with various consultation bodies. Those that provided a response are listed below.

- Welsh Government (WG)
- Natural Resources Wales Technical Experts (NRW TE)
- MoD – Safeguarding Defence (MoD)
- Maritime and Coastguard Agency (MCA)
- Trinity House (TH)
- Royal Yachting Association (RYA)
- Conwy County Council Biodiversity Officer (CCC-BD)
- Cadw (Cadw)
- Gwynedd Archaeological Trust (GAT)
- NATS (NERL Safeguarding) (NATS)

4. Key points raised during consultation

Although it was concluded a statutory Environmental Impact assessment was not required, the following advice has been provided regarding the proposal.

4.1 Nature conservation

4.1.1 Marine ornithology

NRW TE agree with the findings of the preliminary ecological appraisal that the features of Liverpool bay are largely offshore and there is no appropriate nesting habitat within the area. NRW TE do not foresee any likely significant effect on any of the marine bird features of Liverpool Bay SPA or Little Ormes Head SSSI.

The Local Authority Biodiversity Officer provided the following comments on marine ornithology;

The site is within the boundary of the North Wales Coast Important Bird Area, but this has not been noted or considered.

The PEA states that *Rock armour (assumed 3-6 ton and 100-300kg gradings) is anticipated to be brought to site by sea and stockpiled on the beach.* However, there is no subsequent consideration of the impacts on the bird species which are a feature of the SPA. The use of the SPA is highly seasonal but there is no consideration of timing in the documents. This should be included and presented within the non-statutory Environmental Report.

No information has been submitted regarding the use of the adjacent SPA by the birds which are a feature of the designation. Surveys of wintering birds have been carried out for the Colwyn Waterfront Phase 2b scheme which may help to inform such an analysis .

4.1.2 Marine & Intertidal Ecology

Sabellaria alveolata (honeycomb worm) reef is listed as a Priority Habitat under Section 7 of the Environment (Wales) Act 2016 within the category of 'Littoral Rock'. This habitat is present within the site and is likely to be affected by the project.

We recognise that measures for this habitat have been proposed to be investigated further as part of the detailed design stage and that these will be informed by a site-specific intertidal biotope survey, which will enable the *S.alveolata* reef location and extent to be mapped. NRW TE confirm an intertidal biotope surveys would be required along with discussion with NRW TE with regard to the approach of the design in avoidance or mitigation of any effects.

4.1.3 Protected sites

NRW TE advise that this proposal will not affect the designated features of the Little Orme SSSI (NRW).

The submitted Preliminary Ecological Appraisal (PEA) lists a number of statutory and non-statutory sites which could have usefully been scoped out as the likelihood that they would be impacted by the scheme is less than negligible. Similarly, a long list of species which have no association with the intertidal area did not need to be presented. Conversely, potential impacts on the Liverpool Bay SPA which is in very close proximity to the site have not been considered in any depth and should be considered in more detail as part of the non-statutory Environmental report (LBO). As detailed in Section 4.1.1 above.

4.1.4 Marine Fish Ecology

No concerns for fish from the development were raised during the consultation.

4.2 Pollution prevention

4.2.1 Water Framework Directive

As the proposed site of the project is within a designated Water Framework Directive (WFD) waterbody (North Wales Coastal waterbody), a WFD Compliance Assessment must be carried out. This would include the polychaete reef mentioned in section 3.2.17 of the Preliminary Ecological Appraisal.

No mention is made of the designated WFD waterbody in the provided documents. We advise that Coastal waterbodies designated under the WFD extend from the Mean High Water to 1 nautical mile offshore. Here, the proposed site of the project lies within the North Wales Coastal waterbody.

NRW TE note that little mention is made of the WFD other than in Section 3.2.17 of the Preliminary Ecological Appraisal. We advise that the WFD should be included in Appendix A – ‘Legislation of the Preliminary Ecological Appraisal’. In addition, it would be useful to include the North Wales Coastal waterbody on a map, such as the map of protected sites.

More information on WFD waterbodies and their current status can be found on the Water Watch Wales website. In addition, we can provide guidance on completing a WFD Compliance Assessment if required, although information can be found on the gov.co.uk website and NRW’s website.

4.2.2 Water Quality

There is no mention of the nearby designated bathing waters. Colwyn Bay (approx. 2km away), Colwyn Bay Porth Eirias (approx. 3km away) and Llandudno North Shore (approx. 4km away).

There is no mention of the Rhos-on-Sea Shellfish Water Protected Area, which is less than 500m away from the project site, in the document or maps. More information is available on NRW's website <https://naturalresources.wales/guidance-and-advice/environmental-topics/water-management-and-quality/water-quality/shellfish-water-protected-areas/?lang=en>

We agree that all works should be undertaken in accordance with Guidance for Pollution Prevention (GPP5), that refuelling of all plant and equipment should not take place on the beach and that a CEMP should be provided.

NRW TE agree that further groundworks investigations should be carried out and that this will aid in determining the likelihood of contaminants being released into the waterbody.

There is no mention of any temporary impacts likely to arise from sediment disturbance. For example, an increase in suspended sediments in the water column.

4.3 Coastal Processes

NRW TE provide the following comments relating to coastal processes:

Comment 1.

There is no discussion on the impacts that the new structure will have on the hydrodynamics at the site. It does though remark that the coastal processes are primarily now controlled by the two groynes at northern and southern end which already affects the natural variability of the coast. I.e. interruption of long shore sediment transport from the north. And an accelerated movement of sediment alongshore towards the south where the sediment tends to pile up and bypass the southern groyne. No interpretation has been given on the offshore flow conditions particularly during storms. There is evidence from the beach profiles of an intertidal berm which moves with the seasons at the southern end. There is a transport potential of sediment towards the west but this is much smaller as the wind fetch from the east is limited and the waves are smaller.

We advise that a Coastal Processes Impact Assessment should be carried out to determine the alteration to the current/wave hydrodynamics and the movement of sediment both alongshore and offshore in the presence of the new groyne which will act to split the frontage up into sub cells and will create more offshore driven flows around the structure on both phases of the tide. There will also potentially be significant draw down of sediment during storm events particularly from the North west and north. A more detailed understanding on the alteration to hydrodynamics in the presence of the central groyne will inform beach management planning and the requirement for future beach nourishment. A more detailed understanding on the impact that alteration to hydrodynamics and sediment transport offshore will also inform the assessment on the Sabellaria reef's recovery/rejuvenation following any habitat destruction caused by the construction of the groyne.

Comment 2

The section of coastline is already modified by the presence of groynes and as a result the addition of another groyne will act to modify the flow and wave patterns further. It is not envisaged that the new structure will have a far-reaching impact on protected sites outside the locality of Penhryn Bay.

Comment 3

There is no detail in the screening opinion on where the 68500m³ of nourished beach material will be sourced from. Any temporary impacts arising from sediment disturbance in the water column arising from these activities should be factored into the coastal processes' assessment.

Comment 4

Alteration of physical processes and sediment transport locally within Penhryn Bay resulting from the proposed works will have a direct impact to the *Sabellaria alveolata* (S7 Habitat of Principle Importance to Wales, Environment Wales Act 2016) and potentially to the WFD coastal water body status and these must be considered.

4.4 Historic Environment

Cadw have provided a list of designated historic sites (presented below), which are located within 2km of the proposed development but intervening topography, buildings and vegetation block all views between them. Consequently, Cadw consider the proposed development will have no impact on the setting of any designated historic assets. There are a number of non-designated historic assets in the vicinity of the proposed development but it is unlikely that the proposed works will have a significant impact on them.

There is some archaeological potential in and around the bay, including but not limited to the fish traps associated with both groynes, tidal gates, and some potential shipwreck locations (all recorded by RCAHMW). As such there is a possibility that this potential could be managed by mitigation at a later stage.

Scheduled Monuments

CN074 Chapel at Penrhyn Old Hall

CN190 Ogof Pant-y-Wennol

DE071 Bryn Euryrn Camp

DE146 Llys Euryrn Medieval House, Llandrillo-yn-Rhos

Registered Parks and Gardens

PGW (Gd) 6(CON) Gloddaeth (St. David's College) (grade I)

Listed Buildings

143	Church of St Trillo	//*
144	Lychgate of Church of St Trillo	//
146	St Trillo's Chapel	//
147	Remains of Llys Euryrn	//
3383	Tan-y-Wal	//
3384	Craig-Llwyd Bach	//
	Outbuilding, comprising Cartshed and Loft and Cowshed at Ty	
3405	Uchaf	//

3465	North Lodge	//
3466	Pen-y-gaer	//
3467	Penrhyn Old Hall, including forecourt wall, steps and mounting block	//*
3468	South Lodge to Penrhyn Old Hall	//
3469	Wing adjoining Penrhyn Old Hall to North East	//
3470	Former Chapel at Penrhyn Old Hall	//
3471	Outbuilding range to NW of Penrhyn Hall Farmhouse	//
3473	Barn to SW of Penrhyn Hall Farmhouse, including attached range to SW	//
3474	Pen-y-Bont Ucha	//
5792	Store Cottage	//
14824	Pumping Station	//
14825	United Reformed Church	//
14826	Church of St George	//
14827	Sundial in St Trillo's Churchyard	//
14828	Ellis Tomb in St Trillo's Churchyard	//
14829	1. Chest Tomb in St Trillo's Churchyard	//
14830	2. Chest Tomb in St Trillo's Churchyard	//
14831	3. Chest Tomb in St Trillo's Churchyard	//
14832	4. Chest Tomb in St Trillo's Churchyard	//
14833	5. Chest Tomb in St Trillo's Churchyard	//
14834	6. Chest Tomb in St Trillo's Churchyard	//
14835	St Trillo's Vicarage	//
14836	,60,RHOS ROAD,Rhos on Sea,,CLWYD,	//
14837	,62,RHOS ROAD,Rhos on Sea,,CLWYD,	//
14838	,64,RHOS ROAD,Rhos on Sea,,CLWYD,	//
14839	,4,TRILLO AVENUE,Rhos on Sea,,CLWYD,	//
14840	White Cottage	//
25410	Pen-y-Bont Isa	//
87734	Former Pier Entrance Building	//

4.5 Flood risk

Flood risk have no concerns on this proposal.

4.6 Navigational Safety

It appears that the works will take place between the mean high water level and above the mean low water line. MCA therefore expect the impact on shipping and navigation to be relatively low).

Trinity House has no objections to the proposed application and confirms any marking requirements are to be considered by Trinity House prior to any changes to any existing aids to navigation.

Following consultation with their local representatives, the RYA has no concerns regarding this proposal.

4.7 Cumulative Impacts

Further assessment of cumulative effects will be completed as part of the detailed design stage and included within the non-statutory Environmental report to support the Marine Licence Application.

The following data sources may provide useful information on other projects for the assessment of cumulative effects:

- The Nationally Significant Infrastructure Projects register:
<https://infrastructure.planninginspectorate.gov.uk/projects/register-of-applications/>
- The Developments of National Significance Register:
<http://gov.wales/docs/desh/publications/180312-dns-register-en.pdf>
- Planning Policy e.g. Local Development Plans, Transport Plans (National and Local) and National Policy Statements.
- An up to date list of marine licensable developments can be found at the following link:
<http://lle.gov.wales/catalogue/item/MarineLicences>

The Local Authority Biodiversity officer also highlights that the site is in close enough proximity to the Colwyn Waterfront Phase 2b scheme (1.5km) for this to warrant consideration particularly as similar broadscale habitats are the same and it is also in proximity to the Liverpool Bay SPA.

End of Screening Opinion.