

Sent via email

14 April 2021

Dear Anne-Marie Moon,

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

CARDIFF COASTAL DEFENCE

I am writing further to your request for a screening and scoping opinion, dated 19 February 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). The purpose of the scoping procedure is to determine what information should be provided in the ES.

In reaching our Screening Opinion we have considered the proposed works against Schedule A1 and A2 of the above regulations. In reaching our scoping opinion we have had regard to the information provided in the "Cardiff Coastal Defences Environmental Impact Assessment Screening and Scoping Report", dated February 2021, and considered the requirements of Schedule 3 of the Marine Works 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, and had regard to their comments.

Screening Opinion It is our opinion that the works fall within the categories of project listed within Schedule A2, paragraph 69 of the above regulations ("*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*"), 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 carefully 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 has the potential to have a significant effect on the environment and therefore a statutory Environmental Impact Assessment is required.

We have come to this conclusion on the basis of the likely significant impacts of the project, specifically with regard to the large scale of the development which consist of approximately 6.0km of coastal and fluvial defence improvements which are proposed to require a construction site area of approximately 40ha. In addition, the site sits within European designated sites; namely the Severn Estuary SPA and SAC; also the Severn Estuary Ramsar; and Severn Estuary and Rhymney River Section SSSI sites. Due to the location and scale of the works, there is a potential that the project may lead to significant impacts, including on wetland bird species, as well as having the potential to alter the extent of inter-tidal habitats through potential changes in coastal processes.

Scoping Opinion

This letter sets out the additional information that we consider necessary to be included and/or assessed in the ES for this Project.

Please note our scoping opinion is based on the information available to us at this time. The information provided is not a definitive list of the ES / EIA requirements and further information may be required following an application for this project, to ensure a full assessment is carried out.

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

The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)

Scoping Opinion (SC2103)

Summary of the proposal

The proposal by Cardiff Council is to improve and extend coastal and fluvial defences in an area of Cardiff to the east of Cardiff Docks, adjacent to the Severn Estuary and Rhymney River. Tidal and fluvial erosion of the existing defences have led to extensive sections of the defences being completely lost or are in very poor condition. The proposed development aims to increase flood protection for both residents as well as critical infrastructure in the area.

The works consist of approximately 6.0km of coastal defence, different proposals are set out for different areas of work including the construction of rock revetment, raising existing embankments, constructing new earth embankments, sheet piling, both hard engineered and soft engineered scour protection structures and the installation of flood gates. Detailed description of the design proposals for each section have been set out in section 3.4 of the Scoping Report.

Location

The proposal is in an area of Cardiff to the east of Cardiff Docks, adjacent to the Severn Estuary and Rhymney River, as shown in Figure 1-1 of the Scoping Report. The works consist of approximately 6.0km of coastal and fluvial defence improvements which are proposed to require a construction site area of approximately 40ha.

Consultation Responses Received

In considering the scoping report, the NRW PS consulted with various consultation bodies. The consultation bodies that responded are listed below:

- Natural Resources Wales Technical Experts (NRW TE)
- Maritime and Coastguard Agency (MCA)
- Ministry of Defence (MoD)
- Royal Yachting Association (RYA)
- Trinity House Lighthouse Service (THLS)
- The Crown Estate
- Cadw
- NERL safeguarding
- Natural England

0. General comments

- 0.1. Marine and coastal guidance produced by NRW that may provide useful information to help with your project is available here:
<https://naturalresources.wales/guidance-and-advice/business-sectors/marine/?lang=en>
- 0.2. In accordance with Regulation 13(3), the ES submitted should demonstrate consideration of the points raised in this scoping opinion. It is recommended that a table is provided in the ES summarising the scoping opinion comments and how they are addressed in the ES.
- 0.3. The EIA must be undertaken by a competent person and the ES must include a competent expert statement.
- 0.4. Where possible, other environmental assessments should be coordinated with the EIA process. However, it is important to note that the Habitats Regulations Assessment (HRA) and Water Framework Directive assessment (WFD), and any other assessment, are separate processes to the EIA.
- 0.5. Throughout the ES, robust evidence should be presented so that the potential environmental impacts can be properly understood and evaluated; and appropriate measures identified to avoid, reduce or where necessary compensate for those impacts.
- 0.6. The ES must include:
- A Non-Technical Summary (NTS);
 - A chart or map identifying where the activity will be carried out;
 - A description of the likely significant effects of the project, whether direct, indirect, secondary, cumulative, transboundary, short-term, medium-term, long-term, permanent, temporary, positive and negative;
 - A description of the methods used to make the assessment of the significant effects and difficulties encountered in compiling the information and uncertainties involved;
 - A description of measures to avoid, prevent, reduce or offset identified significant adverse effects and proposed monitoring arrangements; &
 - A description of the expected significant adverse effects of the project on the environment resulting from the vulnerability of the project to risks of major accidents or disasters.
- 0.7. The ES must consider any potential transboundary impacts where appropriate.
- 0.8. Early engagement with relevant stakeholders is encouraged. You are able to obtain further advice from NRW TE through the NRW Discretionary Advice Service, please see here: <https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/our-service-to-developers/>

- 0.9. The UK left the EU on 31 January 2020 – all legal obligations relating to compliance with environmental licences/permits and legislation will continue to apply. NRW on behalf of Welsh Ministers will continue to issue licenses in line with our current practice.
- 0.10. You must ensure that reference is made to and consideration of compliance with the UK Marine Policy Statement and the now published Welsh National Marine Plan and its associated policies within the submitted ES, alongside any further regional planning documentation. The published Welsh National Marine Plan can be found here: <https://gov.wales/welsh-national-marine-plan-document>. Implementation guidance for the Welsh National Marine Plan can also be found here: <https://gov.wales/welsh-national-marine-plan-implementation-guidance>.
- 0.11. No detailed response was received from Cardiff County Council as they confirmed they would be providing a formal Scoping Opinion themselves under the Town and Country Planning (EIA)(Wales) Regulations 2017 (as amended) for the proposal. As a single ES is proposed, you should ensure that the ES demonstrates how it has considered all Scoping Opinions received.
- 0.12. We generally agree with the topics that the report has scoped into the EIA. We have provided specific comment below. Where no comment has been provided the assessment should be carried out as detailed within the scoping report.

1. Site Characteristics

- 1.1. In line with the Water Framework Directive we recommend that consideration is given to whether any Heavily Modified Water Body (HWMB) mitigation measures as part of the Severn Lower Transitional surface water waterbody could be implemented into the scheme.
- 1.2. We advise you that, as part of the of the conditions to be maintained for the Estuary feature of the Severn Estuary SAC, the physical form (tidal prism/cross sectional area) and flow (tidal regime) will need detailed consideration.
- 1.3. Section 2.3 of the Scoping report detailed that a study zone up to 5km was used for the purpose of the Screening and Scoping report; however, a justification for the use of a 5km zone was not provided. The marine zone of influence should be informed by a wider hydrodynamic assessment.

2. Proposed Development

- 2.1. The project has the potential to result in the direct loss of habitat of the Severn Estuary SAC. If loss cannot be avoided we would expect that the footprint for the activity to be minimised as much as possible.

2.2. Section 3.4 of the scoping report provided a detailed description of the design proposal for each section of the works.

2.2.1. Section 1: *Severn Estuary coastline east and west of the confluence with the Rhymney River*

- A detailed coastal processes assessment will be required along section 1.
- The design should look to ensure that the smallest footprint in terms of direct loss will be achieved as NRW TE have advised that this will be loss of habitat of the Severn Estuary SAC.
- Sediment management must be considered as a large amount of sediment will need to be disturbed during the works, careful consideration should be given to where any excavated sediment will be placed. NRW TE would not recommend any mobile sediment is locked out of the active marine zone.
- Storage and placement of rock on the foreshore must be considered and assessed.

2.2.2. Section 2: *West bank of the Rhymney River from its confluence with the Severn Estuary northwards to the southern approach to the Rover Way/A4232/Lamby Way roundabout.*

- NRW TE advise that the direct or indirect SAC losses that will occur due to works within this section are unclear. We would advise that engage with NRW TE to consider any potential habitat loss. In addition we would encourage engagement with NRW TE if sediment is planned to be won from the site for use in construction.

2.2.3. Section 3: *West bank of the Rhymney River from the southern approach to the Rover Way/A4232/Lamby Way roundabout, northwards to the Lamby Way road bridge, and the east bank of the river from the Lamby Way road bridge southwards to the large meander opposite the Rhymney River boat club.*

- We welcome the intention to incorporate biological enhancement into the design. However a number of concerns have been raised by NRW TE regarding the scale of the rock armour and defence that is proposed.

Consideration must be given to the point raised below;

- NRW TE raised concern that the lateral extent seems large. Justification should be provided regarding the extent of works and whether as minimal a footprint as possible has been considered. NRW TE have queried whether it would be feasible to take the defence back to the asset line and leave the estuary to function as normally as possible within those hard limits;
- A large amount of sediment will need to be disturbed as part of the proposal. An assessment must be carried out on plume effects and a management plan on subsequent placement;
- NRW TE note that the sediment that will be placed (dug out and put back on a concrete base) on the upper slope will be disconnected from the

basal mudflat and replaced over a short amount of time compared to years of gradual build up. Therefore, NRW TE are concerned on the stability and functionality of the biodiversity enhancement;

- NRW TE advised that the sediment on the upper slope will also only be inundated with the highest tidal states. Therefore, there is little chance for more sediment to settle out under those conditions;
- NRW TE have concerns that the design may lead to the saltmarsh being permanently disconnected with the mudflat; &
- NRW TE are concerned that with the extensive works to the channel, the form and function may be altered permanently.

2.2.4. Section 4: *West bank of the Rhymney River from the Lamby Wat road bridge, northwards to Page drive*

- On the Eastern Bank on the Rhymney River NRW TE have advised that there is considerable area of salt marsh habitat. The ES must consider the potential impact of works on this habitat. NRW TE have recommended that geomorphological modelling is carried out to assess potential impacts on this habitat as notable invertebrate species have been recorded within it and at the adjacent Hendre lake, suggesting that the saltmarsh habitat may form an important corridor for invertebrate species.

2.3. The scoping report in section 3.5 identified that the project may result in direct loss of, or damage or disturbance to intertidal habitats, particularly mudflat habitat, and the separation of saltmarsh from intertidal areas. It is noted in the scoping report that these areas may require mitigation or compensation, we would encourage you to engage with NRW TE as you consider appropriate mitigation or potential compensation requirements.

2.4. Section 3.5.1 of the scoping report highlights the potential for significant impact on the Severn Estuary SAC due to the implementation of a Hold the Line (HTL) policy and future impacts of coastal squeeze as sea level rise. As proposed in section 3.5.1 a detailed coastal squeeze assessment must be carried out. We would encourage you to engage with NRW TE as you carry out this assessment.

2.5. We welcome the intent to produce a Construction Environmental Management Plan (CEMP) and would encourage you to engage with NRW TE as you develop this document. We would refer you NetRegs GGP5 and CIRIA guidelines. In addition NRW TE advise that routes for vehicle movement should be planned to avoid the most sensitive areas of the sites.

2.6. A realistic worst-case scenario for the construction programme should be considered within the ES.

3. **Climate Change**

3.1. No comments were received from consultees in relation to climate change. The ES should include an assessment of the impacts as set out in the scoping report.

4. Coastal processes and geomorphology

- 4.1. We agree with the potential impacts identified within section 7.2.3 specifically;
- Sensitive habitats (saltmarsh, mudflats and rocky shores) may be impacted during construction and then operation via coastal squeeze. Compensatory habitat is likely to be necessary;
 - Biodiversity enhancements should be incorporated into the defence designs; &
 - Assessment is required to determine the potential for chemical release into the watercourse from contaminated land.

These must be considered within the ES.

- 4.2. We agree that potential impacts on coastal processes as a result of construction and operation of the coastal defence proposal are scoped in for further detailed impact assessment. NRW TE advise that given the scale of the works and location in terms of protected sites that an operational model and assessment of the scheme is undertaken to understand likely impacts on the estuary form and function. As no assessment has been carried out we are not able to agree at this stage with the statement in section 7.4.2 of the scoping report that *“existing coastal processes and patterns of sediment deposition are considered unlikely to change significantly as a result of the proposed scheme, as the current coastal alignment will not change. Detailed sediment modelling is therefore unlikely to be required in these areas.”* We would advise further engagement with NRW TE once an initial assessment has been carried out.

- 4.3. We agree that impact on bathing Water Quality can be scoped out due to the nearest bathing water quality area at Barry Island being located approximately 15km from the proposal.

- 4.4. We agree further assessment is required in the ES to determine the potential for chemical release into the watercourse from contaminated land.

- 4.5. NRW TE would encourage the use of softer engineering techniques that would provide a more natural approach than hard engineering and be more sympathetic to natural habitats and ecology as well as the effective management of fine sediment released into the fluvial system. Where soft engineering techniques are proposed the ES must consider any changes in sedimentation which may occur from the implementation of these methods.

- 4.6. We agree with the potential water quality impacts listed within section 7.3.3. these must be assessed and included in the ES.

- 4.7. The ES must show consideration of the potential effects of released fine sediments on WFD biological elements (migratory fish).

- 4.8. We agree with the WFD habitat elements included within section 7.3.4 of the scoping report, however potential impact on additional WFD biological element

(fish, benthic invertebrates, macroalgae, phytoplankton and angiosperms) must also be considered both in terms of temporary and permanent impacts.

- 4.9. We agree that further consideration of potential effects on chemical status associated with the construction of new hard defences is required in the ES as proposed within section 7.3.5 of the scoping report.
- 4.10. We agree impacts on chemical WFD elements/water quality can be scoped out in the operation phase of the project as the Severn Lower waterbody is a heavily modified waterbody because of the flood defence present.
- 4.11. NRW TE have highlighted that Severn Estuary SAC site feature Estuaries, Mudflats & Sandflats not covered by seawater at low tide, Sea lamprey, River lamprey and Twaite shad are unfavourable due to water quality issues [Severn estuary SAC report 2018](#). As detailed in the scoping report marine water quality must be assessed and included within the ES.

5. Biodiversity and nature conservation

5.1. Designated sites

5.1.1. As set out in the scoping report, the ES must assess the potential for the proposal to effect designated sites as well as Habitat and Species of Principal Importance set out under section 7 of the Environment (Wales) Act 2016. The ES must include details of;

- Any historical data for the sites affected by the proposal (e.g. from previous surveys);
- Additional surveys carried out as part of this proposal;
- The habitats and species present;
- The status of these habitats and species;
- The direct and indirect effects of the development upon those habitats and species; &
- Full details of any mitigation or compensation that might be required.

5.2. In general we agree with ecological impacts which have been scoped in for further consideration set out section 8.3 of the report. However, we provide additional comment below.

5.3. Ornithology

5.3.1. We agree that impacts on wintering and migratory bird species arising from loss of habitat and non-physical (air/noise/vibration/lighting) disturbance to wintering and migratory bird species must be scoped into the ES at both the construction and operational phases.

5.3.2. We also agree that during construction, physical disturbance to other habitats and species within and adjacent to the site must be scoped into the ES and must include wintering and migratory bird species using potentially functionally linked habitats.

- 5.3.3. We agree as noted in the scoping report, that the operational phase could have an increased risk of disturbance to wintering and migratory bird species through increased use of the Wales Coast Path following the completion of the flood defence scheme. In addition, NRW TE advise any changes in the location of the Wales Coastal Path, particularly in relation to any re-routing of the path that will lead users to break the skyline (i.e. embankment top). The ES must include an assessment of operational phase disturbance to wintering and migratory bird species, this assessment must consider disturbance through use of the Wales Coast Path.
- 5.3.4. BTO WebBS data is referenced within the scoping report. NRW TE have recommended that data is displayed on a map or maps so the proximity of foraging/roosting areas can be assessed.
- 5.3.5. NRW TE advise impact is considered with regard to the percentage of the populations of important wintering/migrant species which will be impacted, as well as the proximity to the Redshank (*Tringa tetanus*) roost on the Eastern banks of the Rhymney River. NRW TE highlight that there is an important Dunlin (*Calidris alpina alpina*) roost to the east of the development site which may also be impacted by visual and noise disturbance and should be assessed.
- 5.3.6. NRW TE advise that in order to mitigate impacts on the roost that works in these areas should not be conducted during the winter months when the roosts are in use. If this is unavoidable the works should be staged or staggered so the Redshank are able to retreat to one of the roost sites.
- 5.3.7. NRW TE advise that research published on the impacts of the loss of the Cardiff Bay mudflats may support the assessment.
- 5.4. Marine and Diadromous Fish
- 5.4.1. We agree the effect of underwater noise and vibration on fish is assessed as part of the ES.
- 5.4.2. Piling is proposed at section 2 and 3. If any piling is to occur within the water then the impact associated with underwater noise and vibration must be considered on fish species which form features (or sub-features) of the Severn Estuary SAC and Ramsar site or are present in the Rhymney Estuary.
- 5.4.3. NRW TE have advised the effect of noise and vibration may not just be limited to disturbance, depending upon the size of the piles to be installed, the method of installation, and mitigation measures to be applied. The piling could cause injury or mortality of individuals.
- 5.4.4. NRW TE have advised as mitigation, that piling could only occur at tidal states such that there is sufficient distance between the piling and the channel to ensure noise and vibration effects to fish are limited. If the suggested

mitigation cannot be achieved we advise the following further information is provided as part of the ES to understand the risk to fish from the piling activity;

- The number of piles that will need to be installed;
- The working hours proposed for the piling;
- The number of piles installed per day;
- The amount of non-piling time between each pile installation;
- The time of year that piling is scheduled to occur;
- The duration of the full piling programme;
- The number of days piling will occur over the installation period; &
- The amount of non-piling time during the installation period.

5.4.5. NRW TE advise that appropriate working practices and mitigation measures to ensure fish species are not impacted during construction should be included in the CEMP and Method Statement.

5.5. Marine Mammals

5.5.1. Provided that construction works likely to emit noise do not take place below Mean High Water Spring (MHWS), NRW TE consider there is unlikely to be underwater noise impact on marine mammals. However if piling is proposed within the water the effect of underwater noise on marine mammals from piling must be assessed as part of the ES.

5.5.2. NRW TE has confirmed that you have correctly identified the potential for harbour porpoise and grey seal to be found in the Severn Estuary, however, they do not anticipate any impacts from the project to significantly effect these species.

5.6. Benthic Ecology

5.6.1. We agree with that the following potential impacts detailed in section 8.3.1 must be scoped in and assessed within the ES:

- Damage, disturbance, or loss of coastal and aquatic habitats, including intertidal mudflat, saltmarsh, rocky shore, and river habitats – and associated invertebrate species; &
- There is the potential for the scheme to negatively impact upon the features and conservation objectives of the Severn European Marine Site and SSSI.

5.6.2. The following impacts must also be scoped in and assessed for both the construction and operational phases:

- Introduction and spread of invasive non-native species (INNS) - There is the potential for INNS to be introduced and/or spread during construction and operation activities via vehicle movements, preferential settlement of INNS on new infrastructure etc. NRW TE note INNS have been scoped in for both Construction and Operation in Table 16-1 Summary of environmental issues

screened in/out of EIA, but this is not reflected in the text under Biodiversity sections 8.3.1 and 8.3.2; &

- Impacts on coastal processes - Changes to sediment entrainment, suspension or turbidity, changes to patterns of sediment deposition and the potential impacts that these may have on benthic habitats (most notably SAC features of the Severn Estuary SAC and Section 7 habitats) will need to be assessed.

5.6.3. *Sabellaria alveolata* reef has been identified approximately 2km from the proposed scheme. The habitat is an Annex I “Reefs” feature of the Severn Estuary SAC and also a Section 7 habitat under the Environment Wales Act 2016. NRW TE have advised that whilst there is no pathway for direct habitat loss to the reef given the distance from the proposal, there is the potential for changes in the sediment regime and impacts associated with sediment erosion, transport and deposition during the construction and operation of the scheme to have an indirect impact on this habitat. We consider, therefore, that the potential impact on *Sabellaria alveolata* reef must be assessed and included within the ES.

5.6.4. We agree with that the following potential impacts detailed in section 8.3.2 must be scoped in and assessed within the ES:

- Degradation/loss of priority intertidal habitats as a result of future erosion of habitats adjacent to and overlying the proposed new defences, particularly along the Rhymney River;
- There is the potential for the scheme to negatively impact upon the features and conservation objectives of the Severn European Marine Site and SSSI;
- Degradation/loss of Annex I saltmarsh and mudflat habitats;
- Disturbance/degradation of aquatic habitat for invertebrate assemblages; &
- Damage to, and loss of, coastal habitats in the future as a result of coastal squeeze due to sea level rise, which could affect foraging and roosting behaviour of wintering/migratory bird species.

5.6.5. As detailed in the scoping report, the scheme has the potential to result in the permanent loss of intertidal habitat both directly under the footprint of the proposed new defences and as a result of changes in coastal/fluvial erosion and coastal squeeze. Sections of the footprint of the proposed new defence wall fall within the mudflat and sandflats not covered by seawater at low tide and estuaries features of the Severn Estuary SAC. The amount of habitat loss of these features due to the construction and operation of the scheme must be calculated, assessed and included in the ES.

5.6.6. We welcome that measures will be taken to minimise permanent habitat loss. Further detail will be required within the ES in order to demonstrate how permanent habitat loss will be minimised.

5.6.7. NRW TE welcome that the detailed design process will seek to incorporate ecological mitigation measures to benefit intertidal habitats and species. We would advise that you engage with NRW TE to discuss potential opportunities for environment enhancement measures to be incorporated into the scheme.

5.6.8. Biosecurity measures must be implemented to ensure INNS are not spread by works vehicles and site personnel. NRW TE advise that a full Biosecurity Risk Assessment and INNS Management Plan is completed in relation to all marine operation activities associated to the proposal. The risk assessment and management plan should include consideration of all activities, vehicles and equipment used as well as how the risk will be minimised through appropriate mitigation and adherence to best practice guidance and management measures. The risk assessment should include a review of all the available data in relation to the presence of marine INNS where applicable to the current proposal, and the potential risks associated to each species identified.

5.7. SSSI

5.7.1. Section 8.2.6 of the scoping report identifies that saltmarsh within the project area is an important habitat for invertebrates and has been identified as an important corridor for the Shril Carder (*Bombus sylvarum*) and the Large Carder Bee (*Bombus muscorum*). Additionally NRW TE highlight that Nationally important invertebrate assemblages are a feature of both the Gwent levels -Rhymney and Peterstone SSSI and the Severn Estuary SSSI. Loss of saltmarsh habitat may reduce the connectivity of the two SSSIs and lead to a reduction in species numbers and population sizes. NRW TE advise invertebrate surveys are needed to be included properly assess the potential impacts. We consider the potential impacts of the work on invertebrate and on the Gwent levels – Rhymney and Peterstone SSSI must be assessed and included within the ES.

5.7.2. NRW TE have advised that notable plant species are present within the saltmarsh community and are a feature of the Severn Estuary SSSI, therefore surveys recommend that surveys are carried out to identify where these notable species are present within the development area and where they may be lost.

5.7.3. Section 8.2.2 of the scoping report notes that a National Vegetation Classification (NVC) survey was carried but no quadrats were used. However NRW TE have advise that Quadrats should be used to record the finer scale variations within the saltmarsh that will be lost during the construction phase, along with surveys of the notable plant populations, with results presented with maps of the NVC surveys and any target notes.

5.7.4. We agree that there is potential for impact on the Rhymney River Section SSSI and impacts should be scoped into the ES. NRW TE have advised that

the site would be vulnerable to changes in water flow downstream being impeded, or tidal flow being reduced due to the possibility of sediment deposition and erosion.

5.8. Protected Species

- 5.8.1. We agree that the ES scopes in legally protected habitat and species as listed in section 2.2.3 of the scoping report. The ES must include an assessment of the likely impacts and the significance of any predicted effects.
- 5.8.2. Potential impact of works on otters, great crested newts and water voles must be assessed and include within the ES.
- 5.8.3. We note that no built structures will be affected by the proposals. If trees may be felled or pruned to accommodate the development, then their potential to support roosting bats should be considered. If any stands of scrub or trees are to be removed, then the impact of such works on dormice should be considered.
- 5.8.4. NRW TE have advised that any habitat surveys should accord with the NCC Phase 1 survey guidelines (NCC (1990) Handbook for Phase 1 habitat survey. NCC, Peterborough). NRW TE advise that Phase 1 surveys are undertaken and completed during the summer to ensure the best chance of identifying the habitats present.
- 5.8.5. An assessment of the site must take place to determine the likelihood of protected species being present in the area and likely to be affected by the proposals. Targeted species surveys should be undertaken for all species scoped in, these surveys should be undertaken by a qualified, experienced and where necessary, licensed ecologist; and comply with current best practice guidelines. In the event that the surveys deviate from published guidance, or there are good reasons for deviation, full justification for this should be included within the ES.
- 5.8.6. Should protected species be found during the surveys, information must be provided identifying the species specific impacts in the short, medium and long term together with any mitigation and compensation measures proposed to offset the impacts identified. The impact assessment should consider each of the development options under consideration.
- 5.8.7. Where proposals impact protected species, which are also notified features of designated sites, we advise that the ES considers the impacts on those species from both perspectives.
- 5.8.8. The ES should set out how the long term site security of any mitigation or compensation requirements will be assured, including management and monitoring information and long term financial and management responsibility. Where the potential for significant impacts on protected species is identified,

NRW TE advocate that a Conservation Plan is prepared for the relevant species and included as an Annex to the ES.

5.8.9. We advise you that where a European Protected Species is identified and the development proposal will contravene the legal protection they are afforded, a licence should be sought from NRW further details are available on the [species licensing webpage](#). Where this is the case, the ES should include consideration of the requirements for a licence and set out how the works will satisfy the three requirements as set out in the Conservation of Habitats and Species Regulations 2017 (as amended). One of these requires that the development authorised will 'not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status (FCS) in their natural range'. These requirements are also translated into planning policy through Planning Policy Wales (PPW) February 2021, section 6.4.22 and 6.4.23 and Technical Advice Note (TAN) 5, Nature Conservation and Planning (September 2009).

5.8.10. We recommend that you engage with NRW TE and the local authority Ecologist in relation to the scope of the work to ensure that regional and local biodiversity issues are adequately considered, particularly those habitats and species listed in the relevant Local Biodiversity Action Plan and are considered important for the conservation of biological diversity in Wales. NRW TE suggest engagement with relevant local interest groups which may assist informing the assessment of impacts of the proposal.

5.8.11. We encourage the applicant to consider how it can deliver biodiversity enhancements and contribute to deliver ecological resilience.

6. Landscape and visual

6.1. No comments were received from consultees in relation to landscape and visual impacts. However, the ES should include an assessment of the impacts as set out in the Scoping Report.

7. Historic Environment

7.1. Following consultation with Cadw we can confirm that the below designated historic assets are located inside 3km of the proposed development:

7.1.1. Three Scheduled Monuments: GM216 Caer Castell Camp, GM296 Pen y lan Roman Site and GM474 Relict Seawall on Rumney Great Wharf.

7.1.2. Four Registered parks and Gardens PGW (Gm) 19(CDF) Cathays Cemetery (grade II*), PGW (Gm) 24(CDF) Roath Park (grade I), PGW (Gm) 26(CDF) Cathays Park (grade II) and PGW (Gm) 29(CDF) Waterloo Gardens and Roath Mill Gardens (grade II).

7.1.3. A Registered Historic Landscape - HLW (GT) 2 Gwent Levels.

7.1.4. 224 Listed Buildings.

7.2. Chapter 10 of the scoping report outlines which elements of the historic environment will be scoped into the EIA. We agree that the impact of the proposed development on scheduled monuments, listed building and registered historic

parks and gardens can be scoped out of the EIA apart from impact on the registered Gwent Levels landscape of outstanding historic interest which must be assessed. An assessment must also be carried out to consider the potential impact on the undesignated archaeological sites as proposed within the scoping report.

7.3. The impact of the proposed development on the registered Gwent Levels landscape of outstanding historic interest must be considered in the EIA. The screening and scoping report suggest that this will be carried out using the methodology outlined in the 2007 “Guide to Good Practice on Using the Register of Landscapes of Historic Interest in the Planning and Development Process”: However, Cadw have advised given the small area of the registered historic landscape that will be directly affected by the proposed development, it is recommended that instead of using this methodology the impact of the proposed development on the historic landscape should be assessed using the methodology outlined in the Welsh Government document “The Setting of Historic Assets in Wales”.

8. Population and human health

8.1. No comments were received from consultees in relation to population and human health. However, the ES should include an assessment of the impacts as set out in the scoping report.

9. Traffic and Transport

9.1. No comments were received from consultees in relation to traffic and transport. However, the ES should include an assessment of the impacts as set out in the scoping report.

10. Construction-related effects

10.1. We agree that impacts on receptors from land contamination must be scoped into the ES for both the construction and operation phases, we are satisfied with the scope of assessment proposed. The report refers to a Phase 1 Geo-Environmental Desk Study and Geotechnical Ground Investigation, we recommend these reports are included in support of the ES.

11. Other environmental effects

11.1. Flood Risk

11.1.1. NRW TE have confirmed the site to be partially within Zone C1 and C2 of the Development Advice Map (DAM) contained in TAN 15.

11.1.2. We agree that a Flood Consequence Assessment (FCA) should be prepared. As detailed within section 14.2 of the scoping report as it is not anticipated that the proposed scheme will increase flood risk we agree flood risk can be scoped out of the EIA.

11.1.3. NRW TE advise the criteria for the FCA, which should normally be undertaken by a suitably qualified person carrying an appropriate professional

indemnity, are given in Section 7 and Appendix 1 of TAN15. The FCA should be proportionate to the development proposed. To help prepare an FCA, NRW TE have developed [guidance](#), which contains technical advice and recommendations.

12. Cumulative effects

12.1. The ES must include an assessment of cumulative and in-combination effects.

12.2. 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>

Yours sincerely



Peter Morrison
Marine Licensing Team
Natural Resources Wales

Cc: All Consultation Bodies

Approved by:



Wendy Dodds
Marine Licensing Team Leader
Natural Resources Wales
Cc: Consultation Bodies.

Advice Note

The following advice was also provided by consultees.

Asset Management

NRW existing coastal flood defences tie into the high ground and foreshore at the rear of Lamby Way. At National Grid Reference SS 22708 77769, there is an existing informal ramp onto the beach and foreshore. This ramp is used for access to carry out emergency repairs to NRW coastal defences and for access during environmental incidents. It appears that as a result of the proposed development (location 11), access to this ramp will be lost. As such, future maintenance problems may arise. NRW advise it would be beneficial for all parties if this access was maintained or there was a designated access ramp near this location.

Internal Drainage

NRW TE advise the eastern part of the proposed development is within the Caldicot and Wentlooge Levels Internal Drainage District (IDD), with Blanchmoor Reen to the north and Barcroft Reen further east. We advise the applicant we require continued access to undertake our annual works maintenance. The IDD Team request to be kept up to date with the proposal to identify whether any adjustments are required in our annual works programme to assist in the planned works. If requested, the IDD Team can also assist in an advisory capacity with regards to water level management within the locality of the IDD boundary. You can contact IDD Engineer David Penny for further advice:

David.Penny@cyfoethnaturiolcymru.gov.uk.

Furthermore, we advise that no watercourse/drainage alterations or run-off is to enter the IDD system without a Land Drainage Consent from us. Further advice and guidance is available on our [website](#).

Wales Coast Path

With regard to the interests of users of the Wales Coast Path (WCP), NRW TE advise it is important to maintain the current route (and proposed route over Lamby Way landfill site) of the Public Right of Way (PROW) over which the WCP route runs along, in regard to any of the intervening works. It is also important to ensure future path users have a good experience with views that are currently enjoyed.

NRW TE understand the PROW/WCP route on the west side of the Rhymney River will be temporarily diverted inland (using a Temporary Traffic Regulation Order) in order to accommodate the construction of the flood defence works, as advised by Jenn Griffiths (PROW Office) to Lowri Hughson-Smith (Planning) in Cardiff Council.

The PROW/WCP route continues past the DCWW site. NRW TE understand DCWW intend to install their own flood defence scheme at this location. NRW TE consider it is in the interests of path users to ensure there is continuity of the route, so would expect the proposed works to interlink with the DCWW works on the ground. Similarly, the proposed

Biomass site should be considered in connection with any flood defence works as they also include provision for the WCP route within the site boundaries.

Furthermore, it is important to note that there are extremely prolific and persistent areas of Japanese Knotweed (INNS) in this area. For information NRW TE have advised that a WCP grant has previously supported weed treatment along these sections on and adjacent to the WCP route. Also, fly-tipping is prolific in this area, often around or near the Travellers site, on the saltmarsh and foreshore. NRW TE advise the contractor/s must have specific regard to these matters as they will be encountered on site when work is undertaken.

Flood Risk Activity Permit

A Flood Risk Activity Permit may be needed for the proposed works landward of the mean high-water tide (for example, locations 42 and 52). Further information can be found on our website. You can contact Development and Flood Risk Advisor Carl Llewellyn for further advice: Carl.Llewellyn@cyfoethnaturiolcymru.gov.uk.

Waste Produced During Construction

Any waste removed from site will be subject to waste management controls. Waste must be dealt with appropriately and be in line with all relevant waste legislation including Duty of Care Regulations and Hazardous Waste Regulations. Should waste be removed from site it must be taken to an appropriate facility authorised to accept this waste. As part of your waste duty of care you must classify the waste produced:

- before it is collected, disposed of or recovered;
- to identify the controls that apply to the movement of the waste;
- to complete waste documents and records;
- to identify suitably authorised waste management options; &
- to prevent harm to people and the environment.

Further information on Duty of Care Regulations can be found on our [website](#).

Further information on how to classify waste is available on our [website](#).

Further information on how to register as a waste carrier is on our [website](#).

Further information on how to register as a hazardous waste producer is on our [website](#).

Navigation

MCA note that the proposed works location appear to fall outside of the Statutory Harbour Authority area of ABP Cardiff, who have responsibility for maintaining the safety of navigation within their jurisdiction. We strongly recommend that the developer seeks to confirm this with the Harbour Master, and that the Harbour Authority is included as a stakeholder and is actively consulted during the developments progression, as the works may be of interest.

MCA note that the River Rhymney is actively navigated and the presence of the River Rhymney Motor Boat Sail and Angling Club. MCA strongly recommend that the Club and any other regular marine users of the waterway are actively consulted as the plans for the development progress, so that any restrictions to their ability to navigate the river is kept to

a minimum, and that construction and development activities are carried out in a safe manner.