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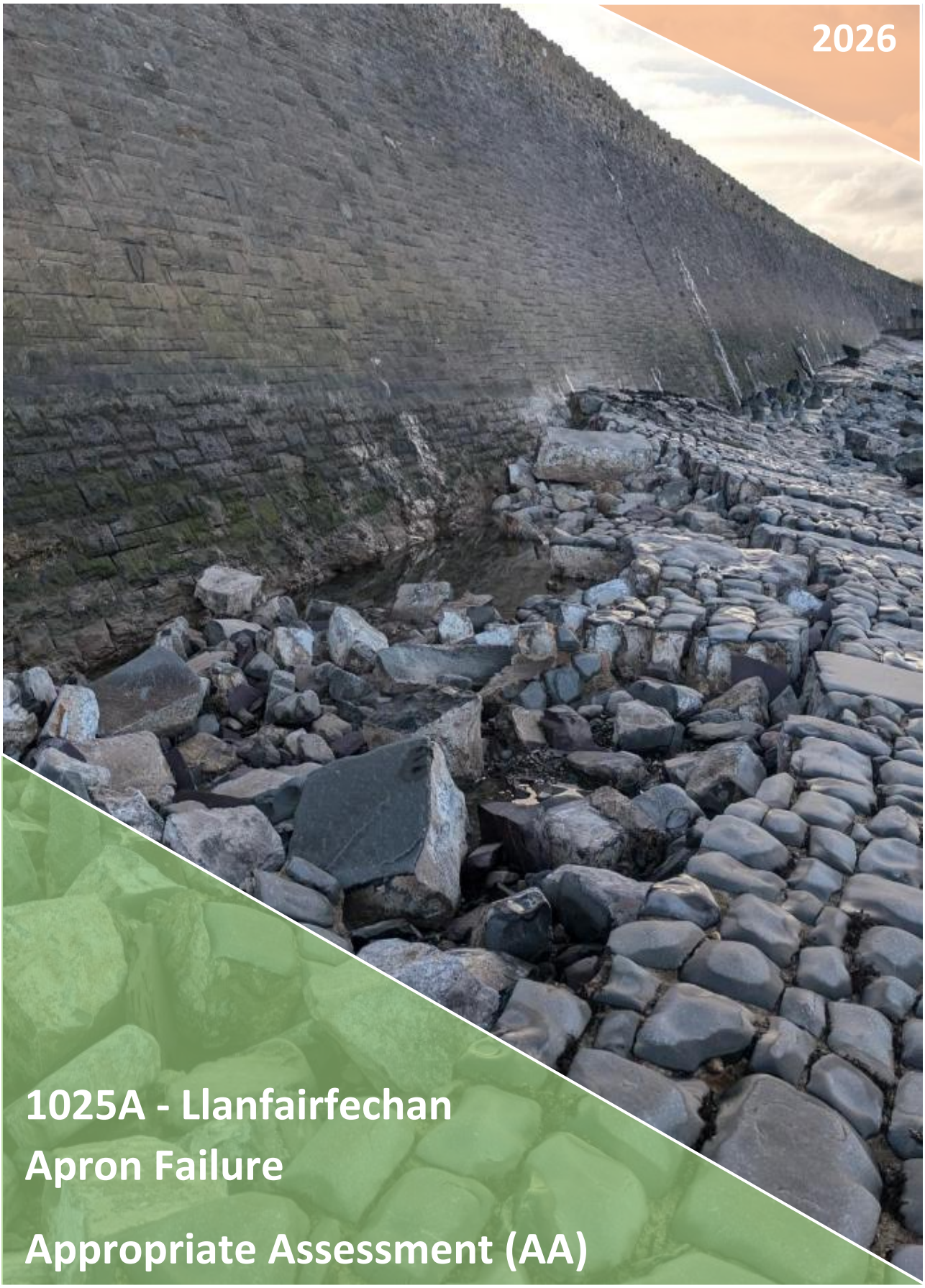

1025A - Llanfairfechan Apron Failure

Appropriate Assessment (AA)

EcoVigour Integrated Environmental Management

NetworkRail

MGroupServices

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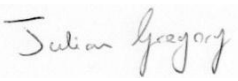
Authorised by	Julian Gregory		03/2026

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1. INTRODUCTION

1.1 ASSESSMENT BACKGROUND

1.1.1 This document provides information to support an Appropriate Assessment under The Conservation of Habitats and Species Regulations 2017 (hereafter referred to as the 'Habitats Regulations') of proposed remedial works to the 1025A - Llanfairfechan Apron Failure, to be undertaken by MGroup, on behalf of Network Rail (NR).

1.1.2 The main statutory designated sites (In order of proximity) which require consideration under the Habitats Regulations has been identified as:

- Menai Strait and Conwy Bay – Special Area of Conservation (SAC) – (onshore/offshore)
- Traeth Lafan – Special Protection Area (SPA) – (onshore/offshore)

1.1.3 There are several other designated sites within proximity to the project which are discussed further in the following sections. Note, the rail defences also abuts the:

- Traeth Lafan – Site of Special Scientific Interest (SSSI) – (onshore/offshore)
- Bae Lerpwl – Special Protection Area (SPA) – (offshore)

1.1.4 This document will be reviewed by the MGroup engineer teams, before being approved and issued along with the final design to be presented to the legislator ahead of construction.

1.1.5 Following review and acceptance, this document will form part of a formal Marine License Application (Band 2).

1.1.6 EcoVigour Ltd have been commissioned to produce these documents for MGroup Ltd, the principal contractor, working on behalf of Network Rail to undertake this Appropriate Assessment.

1.1.7 Under the requirements of the European Council Directive 92/43/EEC 'The Habitats Directive', it is necessary to consider whether projects or plans may have significant effects upon areas of nature conservation importance designated/classified under the Directives. This requirement is translated into UK law through the 'Habitats Regulations'.

2. LEGISLATIVE CONTEXT

2.1 OVERVIEW

2.1.1 This document provides information to support an Appropriate Assessment under the Habitats Regulations of the proposed works by MGroup Ltd on behalf of Network Rail at Llanfairfechan.

2.1.2 The Habitats Directive, transposed into UK legislation through the Conservation of Species and Habitat Regulations (2017) (Article 6 of European Council Directive 92/43/EEC), any plan or project not directly connected with, or necessary to, the management of a European designated site but likely to have a significant effect, either alone or in combination with other plans or projects, shall be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives.

2.1.3 If the Appropriate Assessment concludes that the proposed works may have an adverse effect on the integrity of a European Site, or that such an effect cannot be ruled out (in line with the recognised precautionary principle) avoidance and mitigation measures to avoid such an effect must be considered.

2.1.4 If it cannot be concluded that the proposed works will not have an adverse effect upon the integrity of the site(s), further measures and assessments would be required. Potentially in the form of compensation.

3. METHODOLOGY

3.1 OVERVIEW

3.1.1 This assessment has been produced in-line with Habitats Regulations guidance published by the JNCC (2010), English Nature (now Natural England) (2001) and the Countryside Council for Wales (now Natural Resources Wales) (2008).

3.1.2 Additionally, there are SAC and SSSI's within a wider proximity to the project which will be discussed in further detail within the scoping-out section below.

3.1.3 Non-Statutory sites such as Ancient Semi Natural Woodland (ASNW), Local Nature Reserves (LNR) and National Nature Reserves (NNR) are within proximity to the rail asset. However, do not directly boarder the proposed works excluding the LNR, however, all are unlikely to be impacted by remedial works or supporting temporary works such as compound setups, provided the assessment in relation to Statutory sites is abided by (SSSI, SAC, SPA, RAMSAR, etc). These will not require further direct discussion.

3.1.4 This Appropriate Assessment (AA) will focus on the potential likely significant effects (LSE) of the rail asset refurbishment on the Llanfairfechan Defence, Special Area of Conservation (SAC).

3.1.5 The first stage of an Appropriate Assessment is the Test for Likely Significant Effects (TLSE). As this is the early stage of the project and no formal methodology of construction has been finalised. This assessment will focus on the proposed designs, potential impacts to the designated site, within the context of current coastal policy and annex features.

3.1.6 A further assessment within this document, would be required to assess the project methodology, once known, against the Nature 2000 conditions.

4. Description of The Proposed Design

4.1 Project Context

4.1.1 Recent significant damage has been sustained to the lower concrete apron below the Sea Defence Wall at Llanfairfechen. Resulting in exposed voiding with the outer sea defence alignment. Timely remedial measures have been requested by Network Rail asset teams. MGroup have been commissioned to undertake the repairs at the earliest opportunity.

4.1.2 The coastal defence is situated along the north facing shore of Conwy Bay, to the rear of the defence is the Chester South Junction to Holyhead CNH3 railway line and A55 North Wales Expressway. Along this defence length, the closest designated SAC boundary runs parallel and overlaps the defence alignment. The SSSI boundary also overlaps the defence footprint.

4.1.3 Scheduled masonry arch repairs required by Network Rail (NR). The proposed works will be undertaken during Summer 2026 (exact start date of works dependent on Marine License Assent).

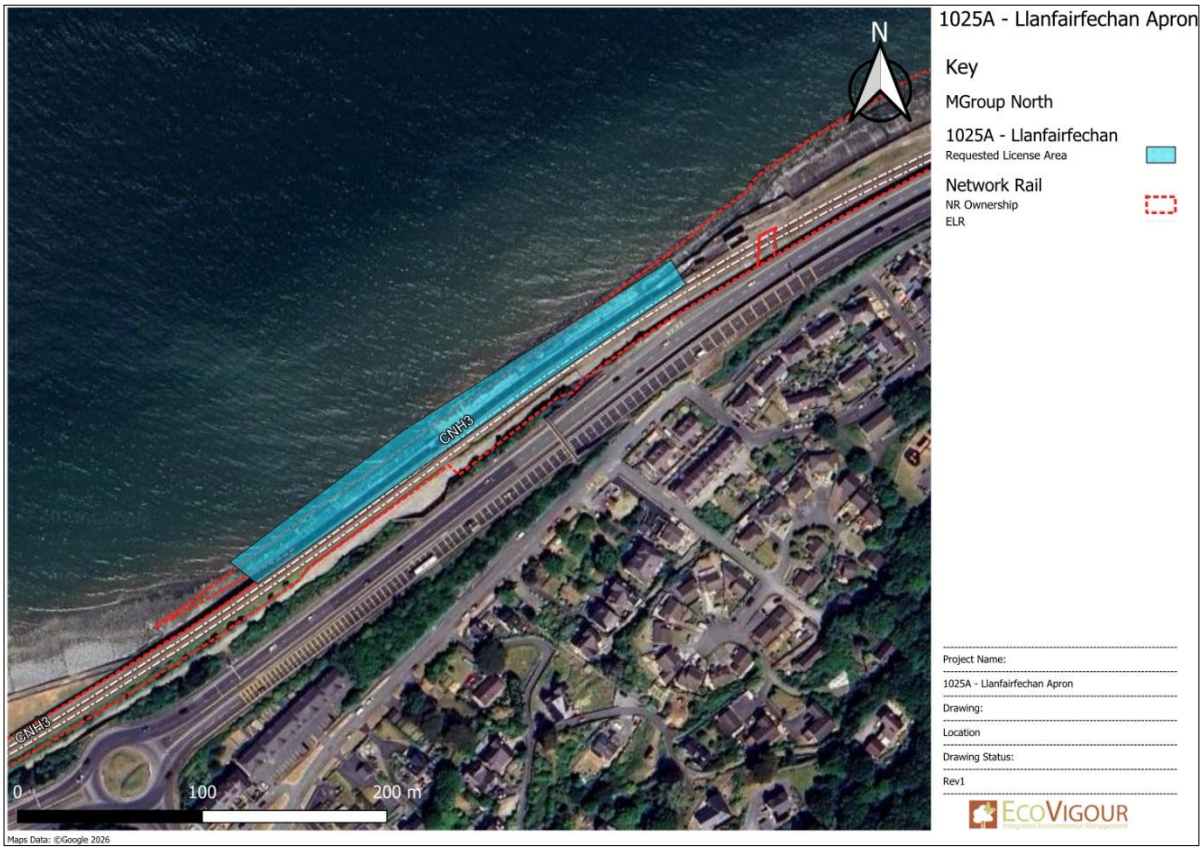

Figure 1: Main works location (OS Map).

4.2 PROJECT DESIGN OVERVIW

4.2.1 The proposed design includes masonry repairs, replacement rock armour components and sheet pile replacement. The figures below illustrate the design footprint and new proposed alignment. Full size design drawings are available in the attached appendices.

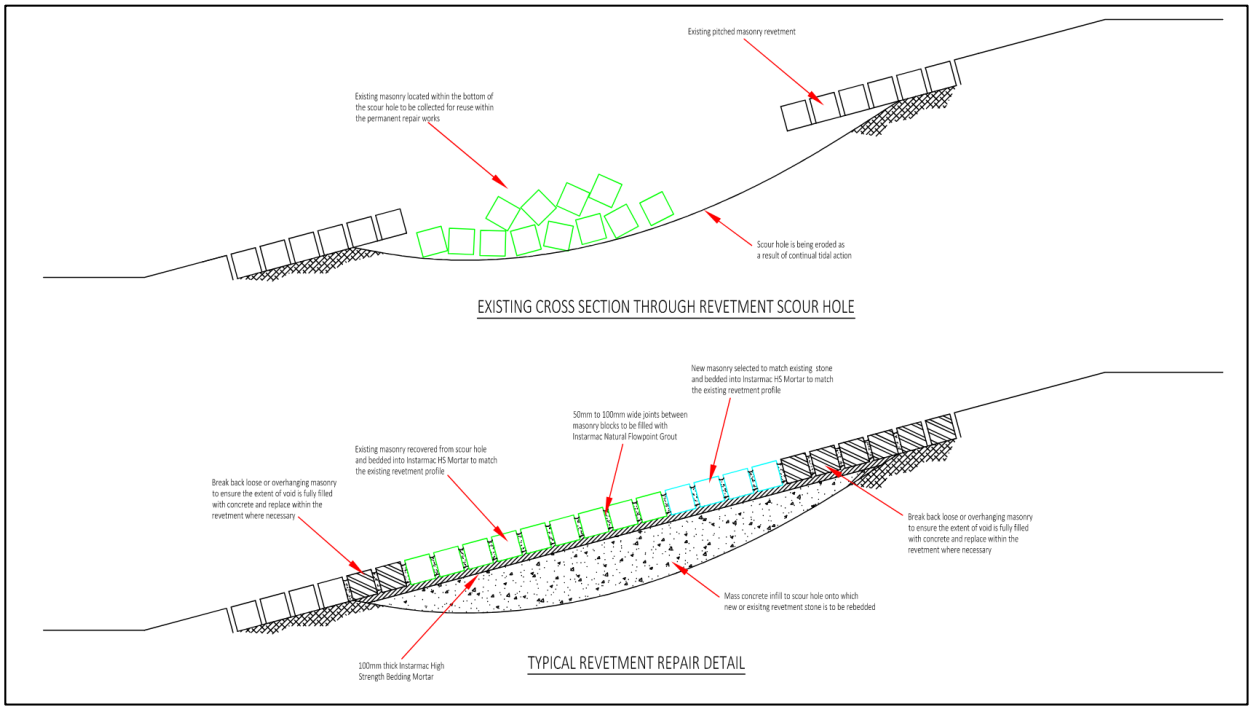

Figure 2: Drawing illustrating new rock armour extent (red) near northern rail crossing (based on previous designs).

4.3 METHODOLOGY

4.3.1 The method of works is set out below. Please note, a formal site task plan will be produced closer to the operational date, to account for changes to personnel allocation and suppliers.

- The majority of the work areas is below Mean High-Water Spring (MHWS) levels so all works will be planned to be carried out during low tide conditions.
-
- Roped access technicians will work from the top of the existing lower defence to gain safe access to the apron. Some locations the angle of slope is relatively flat and in these areas the plant machine will operate and support the works team.

- Materials and equipment will be brought to the work areas using the existing rail line with equipment being lowered to the damaged defence section using Road Rail Vehicles (RRV's) and larger rail mounted cranes (this will be used to deploy low tonnage 360 plant machines).

- Concrete for the works will be delivered in small ready mixed concrete wagons or mixed within the rail corridor using mobile mixture apparatus moved by RRV. A small static concrete pump will be towed by pick up to the works location and all vehicles and pump equipment will remain on the concrete/stone apron during this process. Where concrete pumps are not used, a 'skip' will be used (crane mounted poring equipment).
- Areas of work will be inspected by operatives, and the voids will be prepared as required with the use of handheld breakers where loose material requires cutting out and removing. Where possible, failed areas of apron material will be reused in the repair.

- Small submersible pump will be utilised in the instance where voids do not readily drain between tides, which could affect the concrete mixture. Although the likelihood is low, teams will be briefed on fish rescue techniques during any void draw down, in the event mobile aquatic species are present.

- Concrete will be discharged into the voids via the concrete pump. Operatives will control the pump hose and monitor the discharge of concrete. The concrete will be trowel finished once void has been filled.

- An follow up ecology survey will be undertaken to identify environmental risks associated with the works.

- The works will be subject to tidal movements and majority of repairs will be below water level at high tide.

- Small welfare arrangements will be established to support the workforce during these works. These will utilise existing hard standings and rail access points. Some night working may be required, should rail possessions prove difficult to arrange.

- Teams will abide by all GPP's relevant to the works and conditions outlined within the HRA and Marine License.

5. Designated Sites within Proximity to Site

5.1.1 There are several statutory designated sites within proximity to the defence line.

5.1.2 Site of Special Scientific Interest:

- Traeth Lafan – Site of Special Scientific Interest (SSSI) – (onshore/offshore)

5.1.3 Special Area of Conservation:

- Menai Strait and Conwy Bay – Special Area of Conservation (SAC) – (onshore/offshore)

5.1.4 Special Protection Area (SPA)

- Traeth Lafan – Special Protection Area (SPA) – (onshore/offshore)

5.1.5 There are additional offshore sites, within 200m of the remedial work:

- Bae Lerpwl – Special Protection Area (SPA) – (offshore)

5.1.6 They will not be considered further in this assessment in terms of design, however as indicated within the first section of this document, they must be assessed against a project methodology, to ensure no indirect impacts vectors are likely.

5.1.7 In terms of direct interaction with designated site boundaries, the defence alignment is in direct contact with the defined statutory designated site boundaries.

5.1.8 Consequently, the Menai Strait and Conwy Bay (SAC) and Traeth Lafan (SAC) sites will be discussed further in their own sections below. The Traeth Lafan (SSSI) will also be assessed to satisfy the S28G Notice.

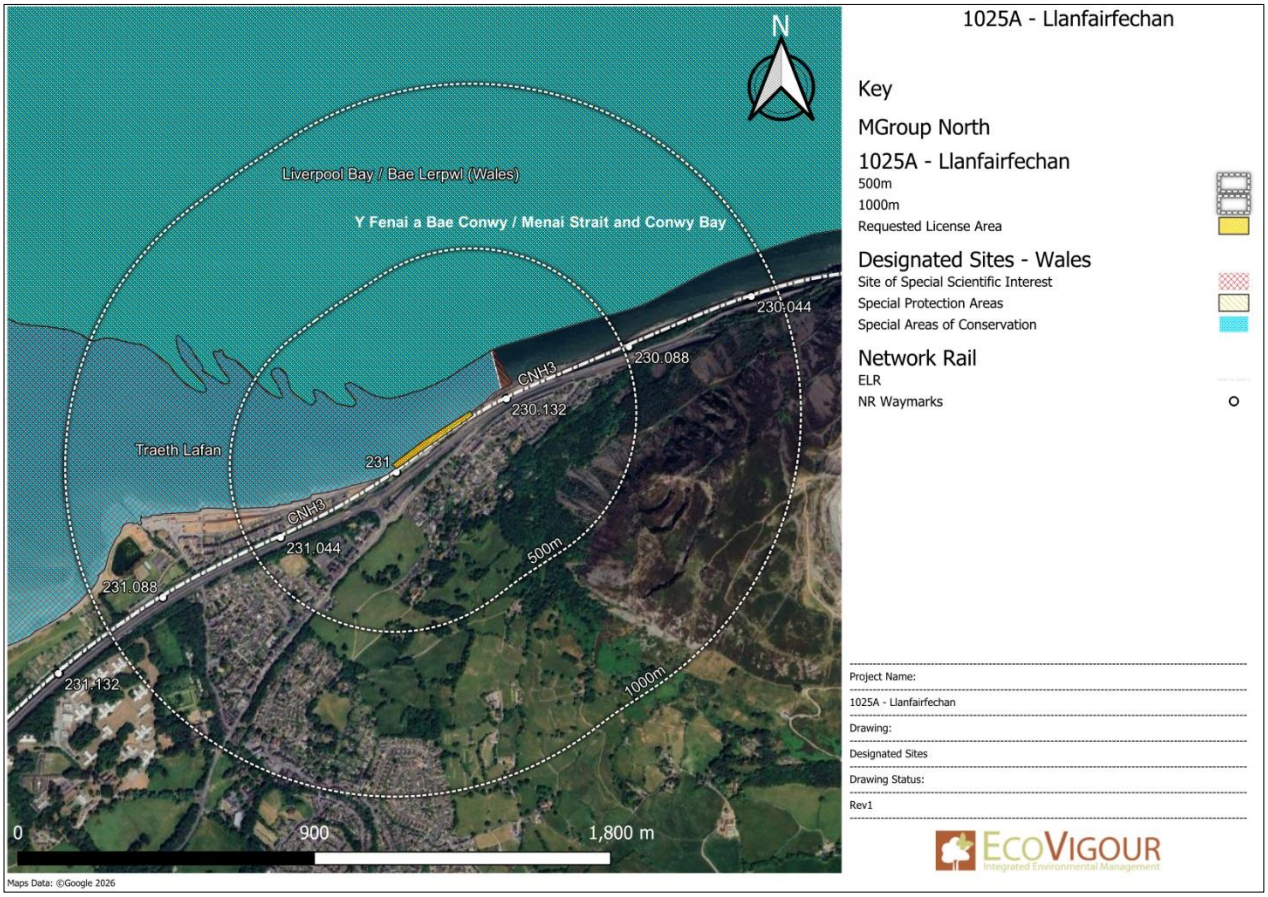

Figure 3: Statutory Sites in relation to remedial works license area.

5.2 Menai Strait and Conwy Bay SAC

5.2.1 The Menai Strait and Conwy Bay special area of conservation (SAC) is in northwest Wales. The site covers the whole of the Menai Strait and extends from Menai Point in the west to the Little Orme/ Rhiwledyn in the east and Traeth Lligwy on Anglesey in the north. The SAC covers approximately 26,483 hectares. It forms part of the UK's National Site Network - See figure below for project location in relation to the SAC boundary.

5.2.2 For the qualifying habitats and species listed in the table below (table 1).

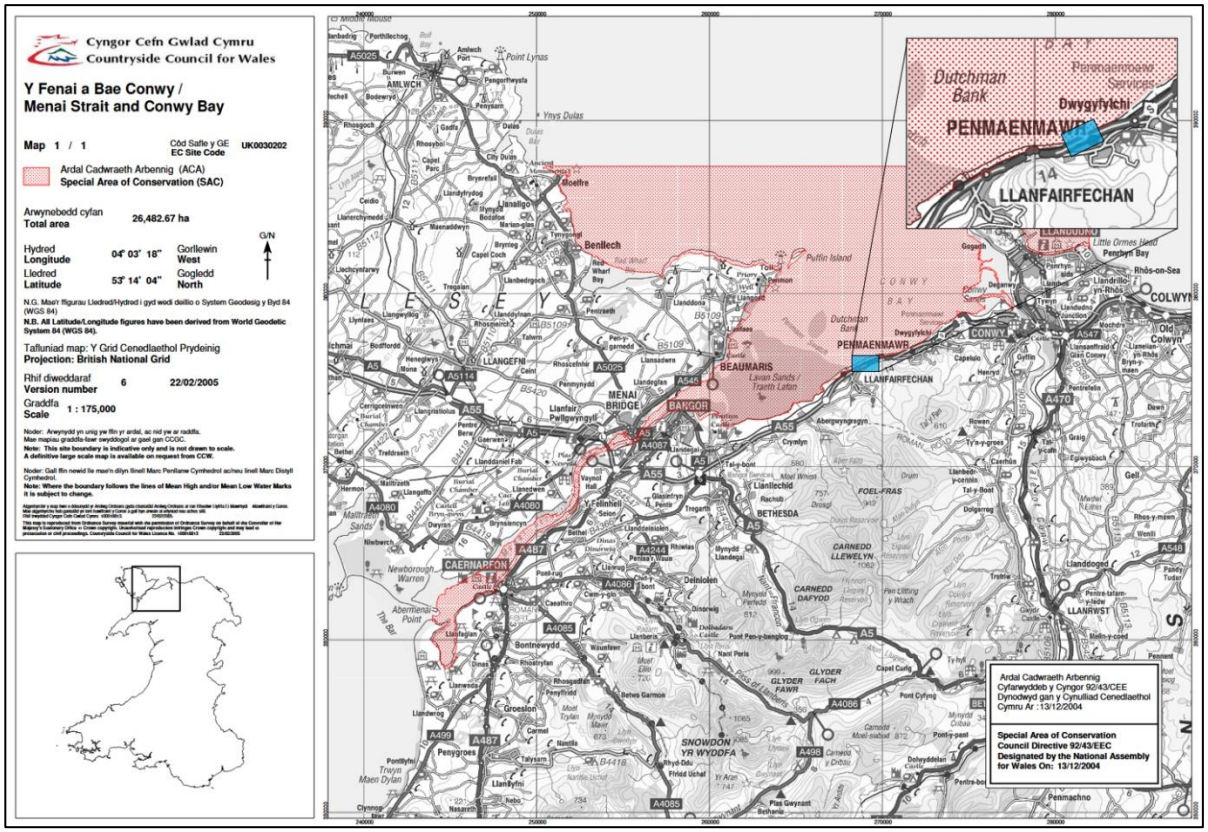

Figure 4: Location of design in relation to wider SAC.

Table 1: Annex I features of the Traeth Lafan.

EU Code	Feature
Annex I habitats that are a primary reason for selection of this site	
1110	Sandbanks which are slightly covered by sea water all the time
1140	Mudflats and sandflats not covered by seawater at low tide
1170	Reefs
Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site	
1160	Large shallow inlets and bays
8330	Submerged or partially submerged sea caves

5.2.3 As the projected remedial works occur directly within the SAC, it is necessary to identify the Annex I features that will be found directly within the project footprint.

5.2.4 Annex II species will be assumed as these species are highly mobile. The Annex I habitat however are discussed in the following subsections.

5.3 Annex I Habitat within Project Area

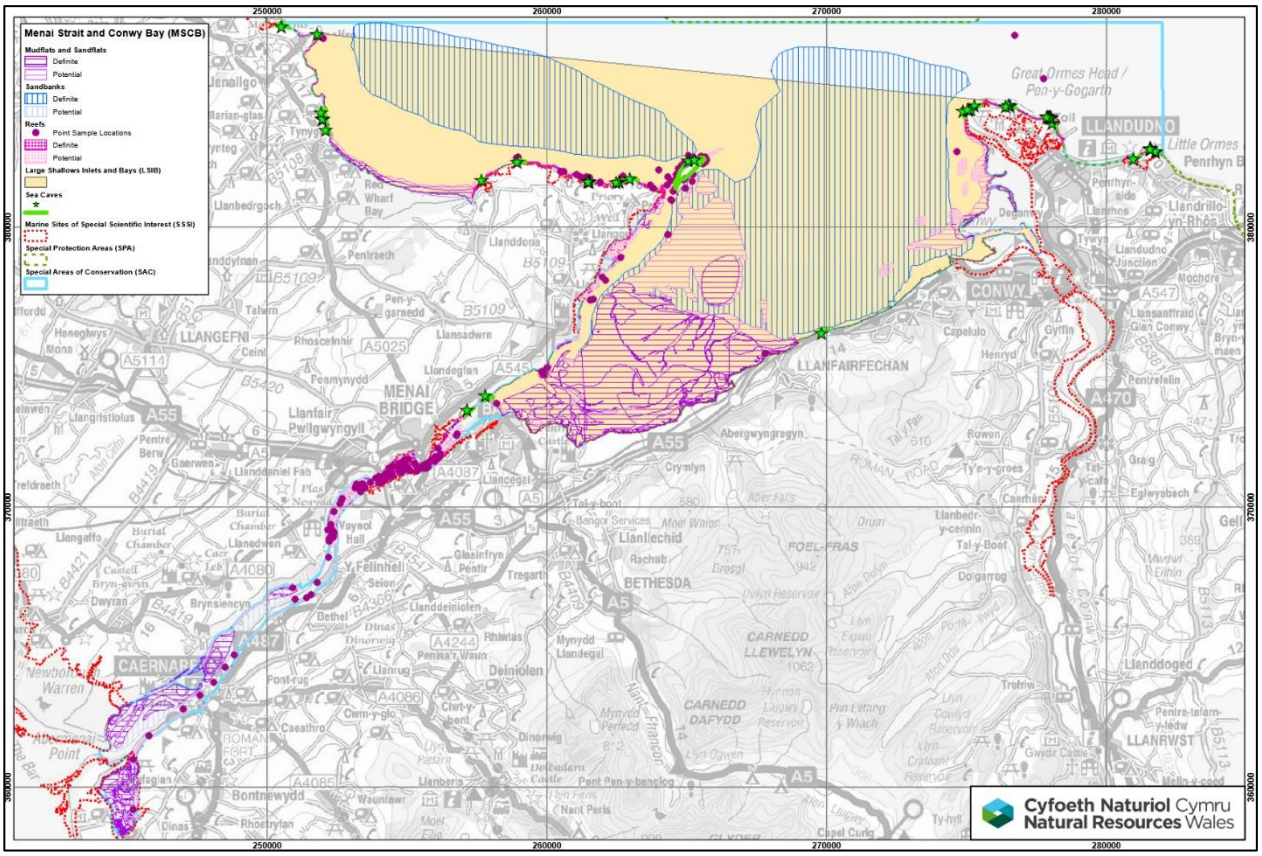

Figure 5: PLAS SAC Habitat Map.

5.3.1 Using the available data from the CCW (now NRW) Designated Habitat Map (Figure above), the relevant Annex I Habitats in relative proximity to the project footprint are:

- 1160 Large shallow inlets and bays.
- 1140 Mudflats and sandflats not covered by seawater at low tide.

5.3.2 Adjacent to, but not within the footprint of the design, habitat 1140 is present along the foreshore of the site, at lower tidal reaches. This band of habitat although not technically within the mapped SAC boundary area, is present, nonetheless.

5.4 TRAETH LAFAN (SPA)

5.4.1 Traeth Lafan should consist of a quiet and relatively undisturbed area of sandflats and mudflats where shellfish and invertebrate populations are self-maintaining and sufficient to support good numbers of a range of over wintering migratory birds, particularly waders with nationally important numbers of oystercatcher. Other species of wader should occur along the shore including curlew, ringed plover, dunlin, knot, bar-tailed godwit, redshank and small numbers of greenshank.

Feature	Feature Type	% of Population
Oyster Catcher *Haematopus ostralegus*	Annex I species	1.4% of the population in Great Britain

5.5 LIVERPOOL BAY (SPA)

5.5.1 The Liverpool Bay (Bae Lerpwl) Special Protection Area (SPA) was originally classified in 2010 for its common scoter (Melanitta nigra), red-throated diver (Gavia stellata) and waterbird assemblage. It was later reclassified by the UK and Welsh Assembly Governments in 2017, by adding three more bird features. These were for non-breeding little gull (Hydrocoloeus minutus), breeding little tern (Sternula albifrons) and breeding common tern (Sterna hirundo). To incorporate this reclassification and addition of species, the boundary of the SPA was extended to the north and West.

5.5.2 The summary of Annex I features of Liverpool Bay SPA are:

- Non-breeding red-throated diver (Gavia stellata);
- Non-breeding common scoter (Melanitta nigra);
- Non-breeding little gull (Hydrocoloeus minutus);
- Breeding common tern (Sterna hirundo);
- Breeding little tern (Sternula albifrons); and
- Non-breeding waterbird assemblage.

5.5.3 The Liverpool Bay SPA supports what is considered significant populations of the above listed species with the following Great British and NW European population percentages displayed below (See Table 2).

Table 2: Population percentages of Liverpool Bay (SPA) Annex II species

Feature	Feature Type	% of Population
Red-throated diver *Gavia stellata* (in non-breeding season)	Annex I species	6.89 (GB)
Little gull *Hydrocoloeus minutus* (in non-breeding season)	Annex I species	Not assessed
Common Scoter *Melanitta nigra* (in non-breeding season)	Regularly occurring migratory species	10.31% of NW European
Waterbird assemblage	Assemblage	N/A
Little tern *Sternula albifrons* (in breeding season)	Annex I species	6.48% GB
Common tern *Sterna hirundo* (in breeding season)	Annex I species	1.80% GB

5.5.4 The majority of the waterbird assemblage is made up of the above Annex I features with the addition of 2 species that occurring in densities exceeding 1% of the GB populations; these are;

- Red-breasted merganser (*Mergus serrator*)

- Great cormorant (*Phalacrocorax carbo*)

5.5.5 Species such as the Red-throated diver (*Gavia stellata*) are considered to be highly sensitive to human interactions and structures with displacement possible from large scale infrastructure projects. Given the limited scope and scale of the undertaking, significant impacts are unlikely, but will be addressed within section 7.

5.6 TRAETH LAFAN - SSSI

5.6.1 This large intertidal area contains a range of habitats from sands exposed to waves and tidal currents at the seaward edge to sheltered sand and mudflats. Freshwater streams flowing across the area add to the diversity. The abundant invertebrate fauna of species such as Cyathura and Scrobicularia attracts large flocks of birds. For wintering waders this is the third most important ground in Wales.

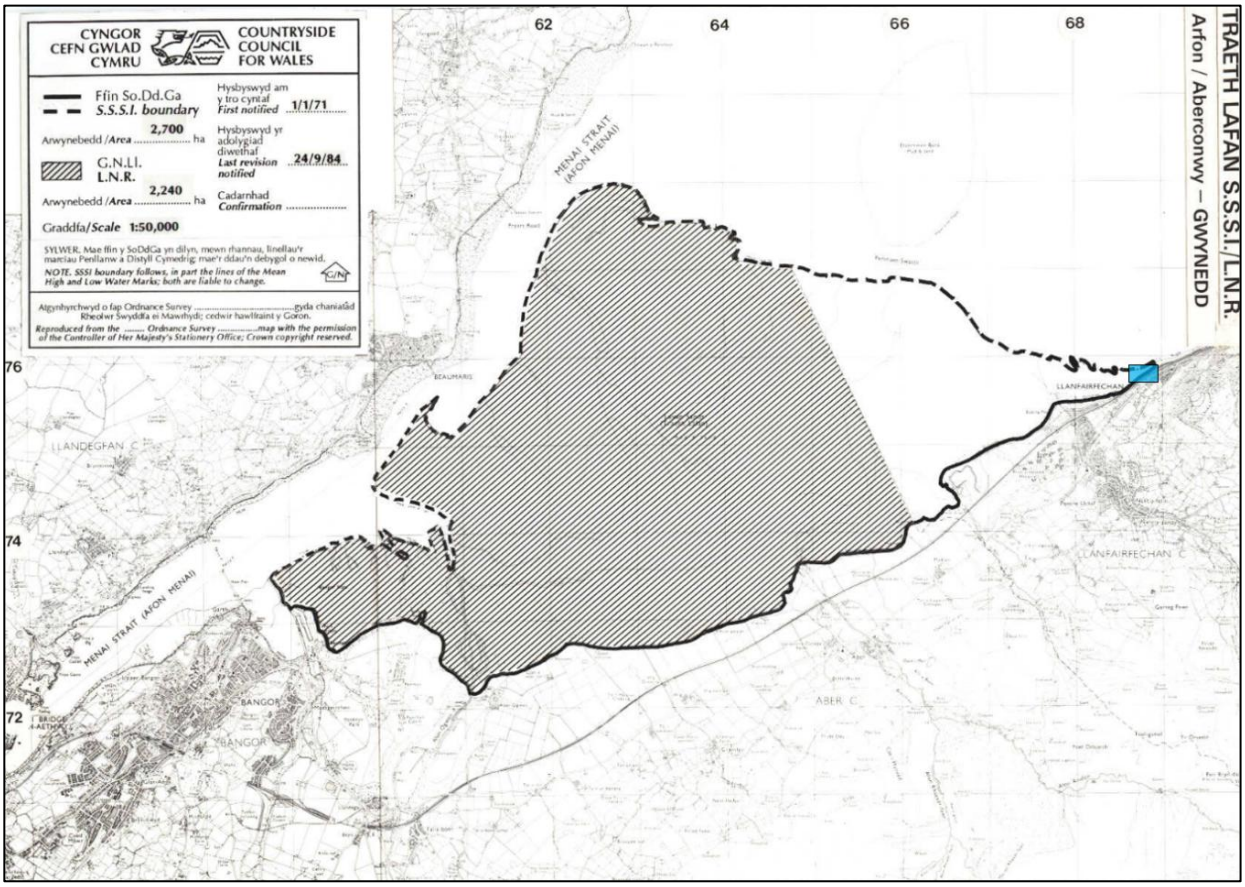

Figure 6: Defence area within context of SSSI.

5.6.2 There is a list of potential damage vectors to the designated site highlighted within the SMS Potentially Damaging Operations (PDO) list. Below are the likely activities considered relevant to the proposed design.

Table 3:PDO list from NRW Designated Site Finder Tool.

SMS Ref No:	Type of operation
11.	Destruction, displacement, removal or cutting of any plant or plant remains, including tree, shrub, herb, hedge, dead or decaying wood, moss, lichen, fungus, leaf-mould, turf or peat.
19.	Erection and repair of sea defences or coast protection works, including cliff or landslip drainage or stabilisation measures.
21.	Destruction, construction, removal, rerouting, or regrading of roads, tracks, walls, fences, hardstands, banks, ditches or other earthworks, including soil and rock exposures.
22.	Storage of materials.
23.	Erection of permanent or temporary structures or the undertaking of engineering works, including drilling or the laying, maintenance or removal of pipelines and cables, above or below ground.
24.	Modification of natural or man-made features (including cave entrances) and clearance of boulders, large stones, loose rock or scree and the battering, buttressing or grading of geological exposures.
26.	Use of vehicles or craft.

5.7 Observed Habitat Present within Design Footprint

5.7.1 The figures below provide a visual summary from previous site walkovers. This is not an extensive collection of the images collected from the survey. Additional images are available upon request.

Figure 7: Image of main failure.

Figure 8: View within failure.

Figure 9: Lower rock armour.

Figure 11: Area of solid lower defence.

Figure 10: View within exposed void.

6. PHYSICAL PROCESSES

6.1 RELEVANT POLICIES WITHIN THE SHORE MANAGEMENT PLAN 2 (SMP2)

6.1.1 As part of the Appropriate Assessment, it is necessary to compare the proposed works against the long-term policies outlined within the Shore Management Plan 2 (SMP2). Within the SMP2 there are several policy units relevant to this section of coastline. The defences are contained within the most north easterly section of Policy Unit PU 20.10 (21 - St Ann's Head to Great Ormes Head)

Figure 12: SMP2 - Policy Units

6.1.2 Management units are defined within epochs, with Epoch 1 referring to periods from present to 2025, Epoch 2 referring to years between 2025-2055 and Epoch 3, 2055-2105. As part of the SMP2, the chosen policies are measured against the potential economic impacts, social and environmental impacts projected over the course of those epochs.

6.1.3 The table below, outlines the long-term preferred policy.

Table 4: Relevant Policy Unit description.

Policy Unit		**Policy Plan**			
		2025	**2055**	**2105**	**Comment**
PU 20.10	Gerizim	HTL	HTL	HTL	This might not preclude local private management of defences subject to normal approvals.
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention, MR – Managed Realignment					

6.1.4 The current repairs proposed within this Epoch do not deviate from the Welsh Governments memorandum on repairs to existing coastal assets. The document does not make any strategic predictions for future maintenance into the next epochs and how those will interact with preferred long-term policies.

7. Assessment of Potential Impacts Resulting from Specific Activities and Proposed Mitigation Measures – Llanfairfechan

This section outlines the receptors of potential damaging vectors as a result of the proposed works and proposes appropriate mitigative measures to ensure that there is not a significant likelihood of impacts.

7.1 Annex I Habitats – Impacts & Mitigation

Receptor	Affected Site	Potential Hazard	Mitigation Measures	Likelihood of Impact
Mudflats and sandflats not covered by seawater at low tide	SAC/SPA/SSSI	Loss of habitat from project activities.	Overall, there will be a short-term impact to the intertidal habitat during the entire project. Vehicle movement will be restricted to the point of defence failure below the structure. Mudflats and saltmarsh will be avoided at all time, unless movement around existing groynes is required. Plant machinery will not deviate from the designated working at any time and will be deployed via track mounted crane only. The machine will not leave the working area via the intertidal habitat. Additional measures will include regular periodic (i.e. daily) visual assessment of the intertidal mudflat, particularly the area of stable mud habitat. This is to ensure that the area does not become visually impacted i.e. rutted or compacted in specific areas as a result of vehicle access across the intertidal area. Mobile habitat is anticipated to regenerated readily, with re-establishment likely to occur over 1-2 years following completion of reactive works.	Negligible likelihood of significant impacts.
Large shallow inlets and bays.	SAC/SPA/SSSI	Loss of habitat from project activities.	As above.	
Reefs	SAC/SPA/SSSI	Loss of habitat from project activities.	Unlikely to occur as reef habitat is located outside of project works locations and access routes to the failed sea defence. Direct impacts unlikely, although pollution events could impact these features indirectly. The latter being addressed with appropriate GPP guidance and best practises.	Negligible likelihood of impacts.

Receptor	Affected Site	Potential Hazard	Mitigation Measures	Likelihood of Impact
All identified within the project area and proximity.	SAC/SPA/SSSI	Contamination of the estuary from spillage of hydrocarbons during refuelling of rail mounted plant and equipment or due to equipment failure.	All plant machinery movement, excluded the use of the small plant machine at the base of the damaged apron, will occur within the confines of the rail corridor. No movement of plant machines along the estuary bed to access the site is required, with all material and machine lowered to the works site via crane. No refuelling of plant machinery or equipment will occur within the estuary habitat. All items of static plant will be placed within a plant nappy when not in use. Fuelled equipment will be checked for defects and leaks prior to the start of each shift. A refuelling procedure will be implemented, whereby plant nappies will be placed beneath fuelling apertures during fuelling and refuelling will only be undertaken by designated, trained individuals using equipment specifically designed for that purpose. Plant Machinery will only operate in low tide conditions and will be removed from the estuary ahead of the rising tide. Provision will be made to remove broken down plant / vehicles or plant and vehicles which become bogged down. Plant will be checked for defects and leaks prior to the start of each shift. Within the compound, a refuelling procedure will be implemented, whereby plant nappies will be placed beneath fuelling apertures during fuelling and refuelling will only be undertaken by designated, trained individuals using equipment specifically designed for that purpose. Network Rail have a spillage plan and specialised contractor in place to respond to and clean up spills. The project EMP will support this document with the relevant copies of GPP's available on site and references to the EMP which supports this document. The Contractor will develop and implement an Emergency Awareness and Response Plan. This will describe how spills will be contained and cleaned up.	Negligible likelihood of impacts with mitigation in place.

Receptor	Affected Site	Potential Hazard	Mitigation Measures	Likelihood of Impact
			The emergency plan will appoint an Incident Coordinator, define roles and responsibilities during an incident, detail response procedures and contain an inventory of response equipment to be maintained on site. Plant will also be available to remove contaminated ballast from site if required. All machinery entering the estuary will undergo regular checks and only use approved biodegradable oils.	
All identified within the project area and proximity.	SAC/SPA/SSSI	Contamination of the estuary from release of concrete.	Works will only occur during low tide conditions. Concrete used will be a rapid drying marine standard which will have cured by the time the tide returns to the working area. Covers around rapid dry concrete are to be in place for several hours at a time and are not long-term features.	Negligible likelihood of impacts with mitigation in place.
All identified within the project area and proximity.	SAC/SPA/SSSI	Release or spread of INNS into the estuary	All machines and equipment will undergo biosecurity control measures before entering the estuarine environment. Please see attached Biosecurity Management Plan in Appendix A.	Negligible likelihood of impacts with mitigation in place.

7.2 ANNEX II SPECIES – IMPACTS & MITIGATION

Receptor	Affected Site	Potential Hazard	Mitigation Measures	Likelihood of Impact
Aggregations of non-breeding birds.	SAC/SPA/SSSI	Noise Disturbance / Visual Disturbance / Habitat Destruction.	Project activities will create a source of light and noise over 6-10 hours during the day. Times will vary due to the variation in the tide and weather. As working hours are not continuous there will be periods where birds are not disturbed by site activities. However, it is likely that local bird populations are habituated to a level of disturbance from human activities, due to large numbers of pedestrians being present throughout the year (peak being summer). Consequently, the project is unlikely to significantly impact these species.	Negligible likelihood of impacts with mitigation in place.
Individual wintering birds.	SAC/SPA/SSSI	Noise Disturbance / Visual Disturbance / Habitat Destruction.	It is unlikely that these works will have a long-term impact on overwintering birds present within the SSSI area. The project is programmed to occur during Summer or early Autumn months. This is to ensure best possible working conditions while also working within a traditionally less impactful period for over wintering species.	Impact Not Likely to be Significant
Fish Assemblage	SAC/SPA/SSSI	Noise Disturbance / Visual Disturbance / Habitat Destruction.	The majority of in/above channel/bay works will be undertaken outside of the fish spawning season for migratory fish such as salmon, trout and eel (mid Oct – Mid April) but will fall within the spawning season for several species of fish which are offered protection under the Natural Environment and Rural Communities Act. Spawning periods for these species are generally between March and July. Works within the bay in relation to the remedial are not programmed until July and August onwards (times depend on granting of Marine License), avoiding peak month. No works within the designated sites will occur until formal assent has been granted by Natural Resources Wales. Works will be undertaken within the bay during the 2026 lull in spawning seasons peak activity period for protected and migratory fish. Mitigation of	Impact Not Likely to be Significant, with appropriate mitigation

Receptor	Affected Site	Potential Hazard	Mitigation Measures	Likelihood of Impact
			impacts from these works will be difficult but the largest mitigating factors are: ♦ The works will not present a barrier to the permanent flowing portion of the estuary below the metallic structure. During high tide, it will be possible for fish to migrate along multiple portions of the structure without coming into proximity to any tasks being undertaken at that particular moment. ♦ Night works are likely during rail blockades. Task lighting will be designed to illuminate the works area but limit light spill into the estuary. This will be achieved through the use of LED flat glass luminaires set at a low level to the defences.	
Fish Assemblage	SAC/SPA/SSSI	Contamination of the estuary from spillage	See comments under estuarine habitat and reference to project EMP.	Impact Not Likely to be Significant
All aquatic species	SAC/SPA/SSSI	Contamination of the estuary from pilling and use of hydraulic actuated equipment.	Any spill or failure in the line will be immediately addressed following best practice pollution controls as those indicated above, in line with GPPS. Arisings will be controlled as described in the method statement and the section above (habitats).	Impact Not Likely to be Significant, with appropriate mitigation

8. Potential In-Combination Effects

8.1 Overview

8.1.1 It is necessary to consider the potential for significant effects from this project in-combination with other plans or projects.

8.1.2 In addition, the plan or project must have been subject to an HRA, which has confirmed that the plan or project is not likely to have a significant effect or demonstrates that the effects have been sufficiently assessed so as to be reasonably understood.

8.1.3 The assessment of in-combination effects must also focus on other projects that have the potential to cause the same types of effects as the proposed maintenance (so that these effects may occur in-combination) and where similar potential impact pathways may exist.

8.1.4 Therefore, this assessment has focused on other projects that could give rise to noise, visual or physical impacts on the SAC species and does not consider projects that could cause different effects.

9. Known Projects Within The Wider Area

9.1.1 There is currently no known large-scale project in a proximity to the proposed maintenance areas which could cause in combination effects.

9.1.2 However, should NRW have other upcoming Marine licenses in place that are soon to be undertaken or currently being undertaken, then the project will be undertake at a period that achieves the least in-combination impacts possible.

10. HRA Conclusion

10.1.1 Encountering Annex II species during the project is a possibility, however it is likely that these occurrences will be highly infrequent. The contractor will abide by the Gwynedd Marine Code in relation to encounters with species such as Otter, Bottlenose Dolphin and Grey Seal, avoiding as much as possible any close contact with these species.

10.1.2 Work schedules will work around the tides and weather conditions predominantly. The working pattern will, generally be organised on a 5–6-day calendar with Saturdays and/or Sundays off. The hours of those days will favour daylight hours, however there will be night working (normally Saturday nights) with the occasional mid-weeknights due to possession access (e.g., periods where rail equipment can be moved from other areas).

10.1.3 The overall footprint of the project is relatively low and is largely limited to the footprint of the structure.

10.1.4 Works are programmed during the summer and autumn, reducing the likelihood of potential indirect impacts to the winter roosting assemblage of birds.

10.1.5 Pollution control measures and emergency response plans will allow for robust controls over hydrocarbon pollution events, which are unlikely. These are further detailed in the attached Environmental Management measures within Task Briefs, which references GPP supporting documentation.

10.1.6 Fish species are also unlikely to be heavily impacted with the limited scale of the works in relation to spawning and nursery habitat, combined with the duration of the works falling outside a significant portion of most sensitive species spawning periods.

10.1.7 At no point will the permanently flowing portion of the bay be impeded. Migrating fish species will have the vast majority of the estuary to navigate freely during the project as whole.

10.1.8 Regarding long term SMP2 policy and Coastal Squeeze. As the project concerns only the correction of failures, in line with resent similar repairs, the works currently coincide with the understanding of defence maintenance, in a Hold the Line policy context.

10.1.9 Mobilisation of sediment is likely to be highly limited as only a very limited amount of machines will come into contact with the estuary/bay bed during low-tide and will essentially beach in-situ, reducing the likelihood of agitating the bed and sediment.

10.1.10 Biosecurity measures in place at the compound will make sure that all equipment and vehicles delivered to site have been cleaned and disinfected prior to deployment into the SAC/SSSI environment. This forms part of the guidance outlined in the Biosecurity Risk Assessment & Management Plan (see appendix A).

10.1.11 From the available information, it is not evident that the Annex I Habitat & Annex II Species that compromise the designate sites overall, will be significantly impacted during the proposed refurbishment.

10.1.12 There will be a temporary reduction in available habitat and quality during the project undertaking and a short period of re-establishment afterwards. Viewing scope of this project, this assessment suggests that Likely Significant Impacts the SAC and SPA is unlikely.

11. Appendix A - Biosecurity Management Plan & Risk Assessment

12. Appendix B – Technical Documents

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