Environmental Screening Advice Note

Screening completed by	Samuel Price
Date	29th April 2020 (Updated by Josh Gittins, 16/07/2021)

Project Name	Borth – Ynys Las - Due diligence, NHCP, FRM and Coastal Adaptation Plan		
Location	Ynyslas, Ceredigion, Wales	**Grid reference**	SN 61659 92795
Senior User	Keith Ivens	**Senior User Post Title**	Flood Risk & Water Resource Operations
Project Manager	Ben Hext	**Project Manager Post Title**	Project Manager
Community Risk Register Area (for FRM projects)		**Strategic Context e.g. CFMP / SMP Policy, RBMP**	National Habitat Creation Programme and Coastal Adaptation

Set out the background, scope, description, and objectives of the project (information from project mandate)

Background (from Project Mandate)
This project falls under the Coastal Adaptation / National Habitat Creation Programme (NHCP). NRW is undertaking this

programme of work on behalf of the Welsh Government to create intertidal habitat around Wales. This is needed to offset predicted losses due to flood risk management activities near the coast (coastal squeeze). An opportunity has been identified in the study area around Borth and Cors Fochno to create intertidal habitat. The specific interventions required to achieve the habitat creation objective would be identified and assessed as options during production of a business case, supported by an environmental assessment. As such, specific interventions, or options are not described at this screening stage. It is anticipated however, that the works could include building new infrastructure and breeching existing flood defences. The red line boundary shown should be treated as indicative only.

NHCP is referred to as the mechanism for Compensatory habitat creation, under the EC Habitats and Species Directive, in relation to a range of plans (FRMPs, RBMPs, PIPs/FCERM TAPs1). Managed realignment, coastal adaptation and climate change risk have already been discussed by Public Service Boards in the context of the Wellbeing of Future Generations Act, identifying further opportunities for integration across drivers. A contemporary and important link to NHCP is further anticipated with the development of “compensation banking terms” associated with Marine Licencing, including arrangements for partnership funding from both Local Authorities and Network Rail. The successful establishment of compensatory banking terms requires progress on the ‘slow burn’ of large scale coastal adaptation options, to maintain momentum and address developing requirements for offset by NRW in support of all flood risk management authorities; as well as other bodies (e.g. Network Rail) willing to buy into compensation banking in one or more of the NHCP Projects.

Project Description

This project reviews options for coastal adaptation in support of the Tidal Dyfi Flood Risk Management Strategy. It also supports and challenges current Shoreline policy with a range of flood risk management scenarios under consideration, namely: HTL, NAI and HTL. The project develops a 5-case business plan and fully consulted Flood Risk Management review in the context of current statutory drivers for managing climate change and sea level rise and the requirement for Wellbeing and SMNR outcomes. The process involves public and stakeholder consultation and awareness raising and appropriate mitigation in accordance with our defined duties of care. The preferred option for delivering sustainable flood risk management and management of natural resources will be identified and a coastal adaptation plan created to support coastal management decisions such as funding repair of storm-damaged assets, withdrawing asset maintenance or realigning the coastal defences. The project will focus on engagement with key stakeholders and land owners; managing potential negative reputational risks through a carefully

implemented engagement and consultation strategy. This Screening Advice Note will detail the existing environmental baseline for the project study area and identify appropriate actions to follow up. This SAN has been reviewed in light of the SOC being approved for the project.

Environmental Screening

	Environmental Desk Based Assessment	Follow up Action Required	Who will carry out the follow up action?	Action Tracker
Key environmental receptors	**<u>Population & Human Health</u>** The project study area is located to the north and east of Borth, village and seaside resort. The project study area comprises an expanse of flat open grazing marsh with a system of regular pasture fields bounded by wire fences and some hedges. Farm buildings are scattered throughout the study area. A caravan park near Borth is located to the west of the study area. The Afon Leri, Afon Cletwr and Afon Du and Ceredigion Coastal Path bisects the project study area at the southern margin of the flood zone and area of interest. The B4353 and a railway track runs along the north and west of the study area. There are nine Public Rights of Way located within and adjacent to the project study area. These include the following Footpath IDs: 79/2/5, 79/2/4, 79/2/3, 79/2/2, 79/2/1, 448/5/51, 79/2/29, 79/2/28 and 448/5/43. See PRoW Plan in Annex 2. **Note:** Objections have been raised over the potential loss of public right of ways for similar projects in England (e.g. the fact that members of the public would have to	**<u>Population & Human Health (Recreation)</u>** The options appraisal should consider whether the construction phase would impact on nearby receptors (e.g. Borth residents, landowners etc.) e.g. change in flood risk, noise, vibration, light, etc. Agree working hours, noise mitigation traffic management with Ceredigion County Council (CCC). As above, once the proposed works are confirmed, confirm construction compound requirements. Identify and set working hours for contractor. Engage with all landowner(s) regarding proposed works and access considerations to ensure careful planning and most suitable timing to minimise traffic disruptions. There are likely to be permanent impacts related with the project such as the potential loss or flooding of farm land and their associated buildings and loss of business (e.g. Borth Caravan Park). Options for coastal adaptation may also include more radical retreat of infrastructure (rail, road and distribution power network) which will involve engagement with relevant Stakeholders (Local Authority, Scottish Power, Network Rail) and careful negotiation on duties of care via legal services review. If there are impacts on private landowners then the project will need early input from NRW's Land Agent and assessment of duties of care by NRW Legal Services. Implication of coastal adaption and duties under the Electricity Act would need careful review and consideration. Location of the PRoW should be considered during	Project Manager (PM)	*Notes in red are to aid production of consultants brief* *Stakeholder engagement plan* *Engagement activities (public / consultees)*

	detour inland around the realignment site and the new route may have a reduced aesthetic view out to sea). The project study area does not contain any areas of Registered Common Land within the site boundary. However, some Common Land areas are located in close proximity to the south of the B4353 and the East of the site. **Biodiversity, Fisheries & Invasive Non Native Species** International Sites The Cors Fochno Special Area of Conservation (SAC) is located within the south east of the project study area. The Cors Fochno SAC is designated for its Annex I Habitats, these include active raised bogs (priority feature) and degraded raised bogs still capable of regeneration. A qualifying feature of the SAC includes raised bogs and mires and fens. Pen Llyn a'r' Sarnau SAC is located within the project study area, along the Afon Leri and adjacent to the north of the project study area boundary. The Pen Llyn a'r'	development of the proposed works. A temporary diversion order may be required from CCC. If the proposals are developed in such a way that a permanent right of way diversion is needed, then specialist advice should be sought early on from EAT, legal and RoW teams. This has the potential to subject to public scrutiny and could take time to resolve. Other projects in the UK have needed a Public Inquiry to resolve such issues. Opportunities to enhance the recreational benefits of the project study area should be identified (e.g. improving active travel). From a review of aerial photography, it appears there are non-designated footpaths located throughout the Dyfi National Nature Reserve and surrounding project study area. Optimising outcomes for SMNR and Wellbeing should be considered a priority for coastal adaptation options. **Biodiversity, Fisheries & Invasive Non Native Species** A Preliminary Ecological Appraisal (including an extended Phase 1 Habitat Survey) should be undertaken by a qualified ecologist to determine whether there are any protected species (bats, otter, etc) and extent of invasive non-native species (Japanese Knotweed, Himalayan Balsam, etc) within vicinity of the project study area. The PEA survey should also provide recommendations for additional species-specific surveys. It is likely that mitigation measures (sensitive lighting, seasonal restrictions on vegetation removal etc.) will be required. There may be a need for European Protected Species licences. Consult with Carol Fielding, (Ceredigion Environment Team Leader CeredigionEnvironmentTeam@cyfoethnaturiolcymru.gov.uk) who may be able to assist with the scope for the ecological site walkover/surveys (bird, otter, water vole required as a minimum). Based on the scale of the project study area and likely extensive scope of surveys required, surveys are likely to be undertaken externally. The		*PEA (Phase 1)* *Invasive species survey* *River corridor habitat connectivity mapping (opportunity to fill gaps also)*

	Sarnau SAC is designated for its Annex I habitats which include sandbanks which are slightly covered by sea water all the time, estuaries, coastal lagoons, large shallow inlets and bays and reefs. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site include: 1140 Mudflats and sandflats not covered by seawater at low tide; 1310 Salicornia and other annuals colonizing mud and sand; 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae); and 8330 Submerged or partially submerged sea caves. A qualifying feature of the SAC, but not primary reason for its site selection includes its Annex II species; bottlenose dolphin, otter and grey seal. All (but the coastal lagoon) Annex I features are abundant within the Dyfi Estuary and Special Area of Conservation adjacent to the area of interest. These features were identified as being of particular risk from the coastal squeeze implications of holding the line and protecting this area from tidal flood risk over the second epoch of the Shoreline Management Plan (HRA and IROPI Statement of Case). The scale of impact is significant with a total of 152.1 Ha of Intertidal sandflat and 122 Ha of Saltmarsh over the 1st and (especially) second epochs of the SMP2. West Wales Marine SAC is located approximately 250m west of the project study area. West Wales Marine SAC is designated for its Annex II species;	Environment Team should also be consulted with regards to guidance on mitigation measures (seasonal working restrictions, etc.), especially anything that will require forward planning and could impact on the project programme such as INNS control and protected species mitigation (e.g. moving water voles and great crested newts). Consult Environment Team with regards to requirement for HRA for Dyfi Estuary SPA, Cors Fochno and Dyfi Ramsar site and the Cors Fochno SAC and Pen Lyn a'r' Sarnau SAC. An Appropriate Assessment will be needed. Additionally, consult with regards to SSSI Assent requirements for the Dyfi SSSI (if project not subject to planning permission). It is likely that specialist HRA support will be required by the project team, best served through a specialist Consultant. NRW Fisheries team to be consulted regarding specific in-river working requirements (if scheme requires such construction activities). In river construction works will not be permitted during the fish migration period (15th October – 15th April). Liaise with Ceredigion Environment Team to investigate opportunities for habitat connectivity and enhancement. Coastal adaptation of the flood plain should consider the conservation objectives of the Cors Fochno Ramsar site as a priority in the context of preparing the site for tidal exchange with the wider estuary in the face of sea level rise.		

	Harbour porpoise. The Dyfi Estuary Special Protection Area (SPA) is located adjacent to the northern boundary of the project study area. The Dyfi Estuary SPA is designated for the sites importance as a traditional wintering area for Greenland White-fronted Goose. The Northern Cardigan Bay SPA is located approximately 250m west of the project study area. The Northern Cardigan Bay SPA is designated for its Red Throated Diver population. The Cors Fochno and Dyfi Ramsar site is located to the north and south east of the project study area. A summary of the Ramsar site is detailed below: "*A bar-built estuarine complex, comprising the Dyfi estuary, two calcareous dune systems, and a large raised mire. The Dyfi is one of the best examples in north-west Europe of a small, drying, nutrient poor estuary, which has been relatively unaffected by industrial development. A wide range of estuarine habitats are present, including rare transitions to peatland. Cors Fochno is of international importance being the type locality for estuarine raised mire and one of the largest active raised mires in the UK. The geomorphology, flora and invertebrate faunas are of national importance. The site supports the only regular wintering flock of Greenland white-fronted geese in England and Wales, and is a key site in Wales for breeding waders. The site supports significant tourist trade, recreational and educational usage*".			

	National Sites The project study area falls within the Dyfi Site of Special Scientific Interest (SSSI). The Dyfi SSSI is "*designated for its geological and biological features. Situated on the coast of Cardigan Bay, it covers an extensive low-lying area straddling the councils of Ceredigion, Gwynedd and Powys. Included are an outstanding west coast estuary, sand dunes and foreshore at Ynyslas and Aberdyfi, woodland, lowland grassland and mire, and Cors Fochno (Borth Bog) – one of the most extensive tracts of unmodified, actively growing raised bog in Britain. The predominant feature within the coastal and fluvial flood plain is therefore Cors Fochno bog habitat. This comprises an internationally important 530 Ha area of protected Raised Bog (*the distribution of which is shown at the bottom of this doc). The site has important populations of invertebrate species and has a wide range of breeding and wintering birds*". There are no other SSSI sites located within 3km of the project study area. The project study area falls within the Dyfi National Nature Reserve (NNR) which is designated for the following features: Ynyslas Dunes: "*the largest dunes in Ceredigion. The sandy slopes and hollows provide homes for a myriad of small animals including rare spiders, mining bees and butterflies (e.g. dark green fritillaries). They also support a rich population of orchids and other wildflowers, mosses, liverworts, and fungi".* Dyfi Estuary: "*vast areas of internationally important mudflats, sandbanks and*			

	saltmarsh that provide important feeding areas for wetland birds and a nursery area for mullet and bass". Cors Fochno (Borth Bog): "*lies to the south east of the dunes and the River Leri. It is one of the largest remaining examples of a raised peat bog in Britain. The bog surface is dominated by a tapestry of green, gold and red sphagnum mosses. Rare species live within the bog including insectivorous plants like sundews, large heath butterfly, the rosy marsh moth and small red damselfly"*. There are no Local Nature Reserves located within 2km of the project study area. <u>Local Sites</u> There are no areas of Ancient Woodland or Sites of Importance for Nature Conservation located within 1km to the project study area as identified by the Ceredigion Interactive Map. A review of LERC data identified the area surrounding the project study area to support protected birds. Additionally, there is potential for invertebrates (e.g. multiple records of various moth species). Invasive Non-Native Species may be present in the area. There may be opportunities for habitat connectivity and enhancement. Current management practices for the Cors Fochno bog including the following activites: **Ditch blocking:** All of the major internal			

	ditches within the NNR associated with past drainage reclamation and peat cutting have now been blocked, this work being centred on the northern and north-western sections of the site where the problem was greatest. There is an on-going project to block all of the smaller drainage ditches and peat cuttings across the NNR. **Bunding:** A peat bund 1200m long was constructed in 1992/3 along a part of the southern periphery of the site, to reduce water loss into the Pwll Du ditch. This is viewed as a short-term measure and no further bunding is planned pending further assessment of this and other possible re-wetting strategies. **Scrub clearance:** A programme of willow and birch scrub removal and control is in progress and will continue until such a time as further invasion is prevented by the restoration of conditions favouring raised mire vegetation. Attempts to eradicate Rhododendron from degenerate parts of the mire have so far met with limited success and will need to be pursued for a considerable time yet. **Grazing & mowing:** Grazing with native Welsh Mountain ponies and mowing are being employed on some peripheral bog areas modified by past drainage and agricultural use, in order to reduce the dominance of purple moor grass and encourage re-colonisation of characteristic bog species. **Land (eg land take)**			

	Consider Local Development Plan The scheme is likely to result in significant land take (e.g. land is likely to be flooded) and consequently loss of livelihood for those working on the land. An ecosystem services assessment may be required based on the extent of the project study area and identified current land use. An ecosystem services assessment would provide evidence to identify management options that optimise public benefit across the breadth of ecosystem services and avoid potentially significant costs and risks arising from overlooking implications for some services. Main ecosystem types would be identified (e.g. woodland, farmland and freshwater wetlands) and their provisioning services would be captured (e.g. fuel and fibre, maintenance of water table, conservation of protected species etc.). The Dyfi NNR is important for tourism. The Dyfi NNR has a 500m boardwalk from the visitor centre across the dunes to the beach and a shell path from the visitor centre to a boardwalk across the dunes to the beach. There is also a footpath from the caravan park to the shell path where it joins the boardwalk. The visitor centre has been accredited as a Quality Assured Visitor Attraction by Visit Wales The majority of the land within the project study area is designated as grade 4 and 5 under the Agricultural Land Classification. Grade 4 and 5 are described as '*poor quality agricultural land and very poor*			*Desk study / preliminary risk assessment will be required and used to inform the SI scope.*

	quality agricultural land'. **Soils (eg organic matter, erosion, compaction, sealing)** The bedrock geology of the project study area comprises of Borth Mudstones Formation. Peat forms the majority of the superficial deposits within the project study area. Blown sand and tidal deposits comprise the remainder of the superficial deposits. Landmap geological evaluation is of a raised bog (Evaluation: Outstanding). There are no geological SSSIs within the area. Careful attention should be paid to historic land use. There is potential for contaminated land within the project study area. The Cambrian rail track bisects the project study area (circa. 1905). Areas of likely contamination are located to the north of the study area with the harbour, Ynys-Las Sawmill and old quarry. Additionally, the surrounding area is composed of varying sized agricultural land, it is assumed the area will potentially contain associated historical agricultural pollution. The project study area is sited within a Secondary B aquifer, but there are no Groundwater Source Protection Zones. The majority of the project study area falls within the Ynyslas Geological Conservation Review Site.	**Geology & Soils** The project study area has some land uses which could have caused ground contamination. A desk study / preliminary risk assessment will be required and used to inform the SI scope. Consult NRW Geoscience Team regarding identifying an appropriate scope of works. Trystan James Geoscience Team Lead (geoscience@cyfoethynaturiolcymru.gov.uk). The desk top study should be in line with CLR11, Model Procedures for the Management of Land Contamination.		*Geomorphological walkover?* *WFD assessment* *FCA* *Coastal Conceptual Model (further studies and surveys may also be required)*

	There are no Regionally Important Geological Sites located within or within 500m of the project study area. **Water (eg hydromorphological changes, quantity and quality) and coastal processes** The Afon Leri and Afon Pwll Du are designated as 'main rivers'. For WFD the project study area is within the Western Wales River Basin District and the North West Wales Management Catchment. The Dyfi and Leri transitional waterbody is designated under WFD Dyfi and Lerir (GB511006407000). The Dyfi and Leri is currently achieving an overall *Moderate status*. Chemical: Fail. Ecological: Good. The project study area is located within Flood Zone 2 and Flood Zone 3. Flood Defences and Flood Zones are mapped on the NRW Flood Risk Zone map in Annex 2. As detailed in the Mean High Water Springs (MHWS) map in Annex 2. The project study area lies adjacent to MHWS lines as identified by OS maps. However, these lines are not definitive as MHWS moves so dramatically over time, particularly following storm events. Consult with the Marine Licence team	**Water (inc WFD)** If construction works are proposed, the construction works must not increase flood risk and should also be planned to minimise the risk of flooding affecting the construction. If possible, all construction plant and materials should be stored outside the floodplain. Works are likely to require a Flood Risk Activity Permit (FRAP) (Part A: Flood risk activity 3c: Erecting or altering any structure designed to contain or divert flood waters of a main river - Flood risk activity definitions (April 2016) GPG 220). A Flood Consequences Assessment may be required for any structures. Consult with FRM Team – Daniel Jones (Daniel.Jones@cyfoethnaturiolcymru.gov.uk) WFD Preliminary Assessment (Screening) will be required. Liaise with the Ceredigion Environment Team. Consult with Trevor West (WFD Coordinator), Oly Lowe and Ann Lewis (Geomorphology) who can advise on delivery of potential WFD mitigation measures. Once the proposed works are known, the assessment should determine whether the works will have any short term or long-term effects on other WFD elements e.g. hydromorphology. Therefore, WFD Preliminary Assessment (Screening) required. Early consultation with NRW Fisheries Specialist (Richard.Pierce@cyfoethnaturiolcymru.gov.uk) regarding any in-river / riverbank working requirements. It is possible construction works would not be permitted during specific fish (e.g. salmon and trout) breeding and migratory periods. Also, whether any benefits for fisheries can be incorporate into the scheme. Consultation with Marine Licence regarding possible		

	once potential options are identified to ascertain likely potential for marine licence. **Air** There are no Air Quality Management Area's in Ceredigion at present. Any excavation works are likely to result the generation of dust resulting in local air quality effects. **Climate (e.g. greenhouse gas emissions, impacts relevant to adaptation)** The residential and commercial properties within the project study area are susceptible to flooding which may be exacerbated due to climate change	exemptions / guidance on identifying requirements of a marine licence application. (marinelicensing@cyfoethnaturiolcymru.gov.uk). If construction activities are proposed: Working methods must comply with Guidance for Pollution Prevention (GPP 5) (https://cedrec.com/news/index.htm?news_id=26159) . In particular GPP 5 - Works and maintenance in or near water for construction or maintenance works near, in, or over water; GPP 20 - .Dewatering underground ducts and chambers; A coastal conceptual model will be prepared by NRW to help identify what further work is required in this respect. Consult the All Wales Marine Team on the requirements of the conceptual model (Emmer Litt & Nicola Rimington). **Air** N/A **Climatic Factors** Co-ordination of technical specialists internally within NRW and external stakeholders to determine any opportunities to adapt to or mitigate climate change (e.g. sustainably resourced materials from the local area to minimise greenhouse gas emissions, use of low carbon materials, planting of trees and shrubs to offset carbon emissions and provide shade).		

	factors. Increased flooding would be likely under the baseline scenario when the 'hold the line policy' reverts to "Managed Realignment". Carbon usage from the scheme will need to be considered through the options appraisal and design, and lower carbon options investigated where possible. This should include the evaluation of current carbon sequestration vs carbon capture and release following managed realignment. **Landscape and Seascape** **Landscape** The project study area does not fall within a National Park, Historic Landscape or Area of Outstanding Natural Beauty. Landscape design and impacts on trees will be considered as the project progresses. The river corridor is vegetated with sparse shrubbery, hedgerows and grazed embankments. The project study area is located within a Special Landscape Area (SLA) as identified in the Ceredigion Local Development Plan. (LDP does not provide information regarding the identification of the SLA). Agricultural land classification shows the site to predominantly non-agricultural (raised bog). The remainder is either	**Landscape and Seascape** Landscape design to be considered as the project progresses. Environmental Assessment Team (EAT) Landscape Architect to provide advice to design phase.		

	Grade 4 or Grade 5 agricultural land i.e: Grade 4 – poor quality agricultural land with severe limitations which significantly restrict the range and level of yield of crops. Grade 5 - very poor-quality agricultural land with very severe limitations which restrict use to permanent pasture or rough grazing with the exception of occasional pioneer forage crops. As detailed by NRW Landmap: '*the area is a simple expanse of flat open grazing marsh with a system of regular pasture fields bounded by wire fences and some occasional low uniform hedges. Drainage reens add interest alongside roads and dividing fields. A scattering of traditional farm buildings occur and these are usually located on low hummocks rising above adjacent marsh. Tree cover increases landward and on lee slopes of hummocks providing shelter from coastal exposure. Detractors include boatyard buildings, golf courses and caravan parks near Borth and wire fences. Generally, this is a distinctive open expansive landscape enlivened with wide low horizons, open skies and reflections in water. Panoramic views to Cambrian Hills, and across Dyfi Estuary to Snowdonia add further interest*'. Pastoral farming and forestry takes place in the biosphere reserve along with a wide range of tourism and outdoor recreation			

	activities. Beach-related and watercraft-based activities are very active in the summer. The heavy recreational use of the Ynyslas dunes has led to an intensive and long-standing visitor management scheme incorporating interpretive displays and programmes, a visitor centre, wardening, boardwalks and vehicle controls. The area is also active in sustainable living and technology development, natural resource re-habilitation, management and monitoring, environmental education, and interpretation and cultural development. There is a long history of research and monitoring in the area, including vegetation and hydrological analysis, ornithological and tourism impacts research, and invertebrate monitoring. The national nature reserve is visited by about 8,000 students every year. **Seascape** The project study area lies within the Seascape Character Area 27: Dyfi Estuary. Key characteristics of the SCA include diverse coastal and estuarine habitats (including raised peat bog, saltmarsh, mud, sand and reedbeds) and woodland supporting a wide variety of plant, insect and bird species. There are expansive views across the estuary which are enclosed by the surrounding hills, which create an impressive and distinctive backdrop and harmonious compositions of landscape elements.			

	This is generally a calm SCA, despite the dynamic processes within it. Occasional trains are moving elements through the SCA, as well as cars on peripheral roads. Intricate, sinuous patterns of salt marshes, and the delicate textures of reedbeds and oak woodlands form a rich foreground with contrasting colours to the surrounding hills. Sense of wildness and remoteness in parts due to the extensive areas of inaccessible mud and saltmarsh. Sense of tranquillity away from settlements, roads and railway lines which is enhanced by the sounds of birds. The surrounding hills have strong intervisibility with the estuary. They create an impressive backdrop and add to the SCA's sense of place and tranquillity. The SCA is also an important component of views from the surrounding hills, from where it can be appreciated in its coastal context. **Cultural Heritage** There are no Listed Buildings, Historic Landscapes, Registered Parks and Garden, World Heritage Sites, Conservation Areas located within 500m of the project study area. Hulks at Ynyslas, Ceredigion Scheduled Monument is located approximately 420m north of the project study area. There are approximately 20 Historic Environment Record (HER) features within the project study area as identified on the	**Cultural Heritage** Due to the historical nature of the project study area and surrounding area there is likely to be 'known' and 'unknown' historical features present which could be affected by the proposed works. Consult with Dyfed Archaeological Trust early on in the programme and inform them of the proposed scheme. Ideal to do this before proposed works/outline design is known.		

	Historic Wales portal. It is assumed, based on the number of HER features within the project study area that the area will include the potential for further 'unknown' heritage assets. HER features relate to the Afon Leri Bridge, Ynys-Las Sawmill, farm features and Ynys-Las harbour. The scope of work for cultural heritage will need to be agreed with Dyfed Archaeological Trust as the project develops. **Material Assets** The project study area is located north of Borth village with residential and commercial properties located throughout the area. Potential for disruption of utilities. There is key infrastructure in the area including the railway line and roads.	**Material Assets** Progress a utilities search in the project study area. Consult with Environment team (Environment Officer) and waste licensing team.		
Likely consenting route	The finalised Strategic Outline Case has concluded that Coastal Adaption over the next 50 years is required due to climate change pressures, in addition to compliance with SMP2 policy. The extent of the adaption, costs, timescales and beneficiaries will be assessed in more detail during the OBC. Planning Consent is potentially required and a EIA Screening Opinion will be required. If the works do not require the need for planning permission, then they would likely need to be considered under the Land Drainage EIA Regulations and screened for EIA under those regulations. Consideration should also be given to the	Consultation required to establish planning requirements/general permitted development and possible need for statutory EIA. The project would need to consider the potential for a Marine Licence and Marine Licence EIA Regulations (if any of the works fall below MHWS). To be updated once scope of works have been confirmed.	PM / EAT	

Other approvals required	Agriculture EIA Regulations if productive land will be affected.			
	Approvals required, depending upon the nature of the works could include: • Planning Permission (could be a major application if works over 1ha); • SSSI Assent; • HRA • Flood Risk Activity Permit; • Rights of Way Diversion Order; • Sustainable Drainage Approval • WFD Compliance Assessment; and • Marine Licence There could be additional requirements if protected species are present, TPO trees are present, or Common Land is required to be intervened upon in aid of Coastal Adaption. Further, landowner agreements will be required dependent on the option pursued.		EAT	*Screening Opinion / Report / Matrix* *Scoping Report* *Drawings*
Environmental opportunities	The project objectives should include consideration of sustainable management of natural resources & the environment and therefore design options need to consider minimising environmental impact and maximising multiple benefits. Additional Wellbeing outcomes to be considered in context of Wellbeing and Future Generations Act Trevor West (WFD Coordinator) and Oly Lowe (geomorphologist) to advise on delivery of potential WFD mitigation measures and potential benefits e.g. bank naturalisation, treatment of Invasive Non-Native Species and/or hydromorphological improvements. Any WFD outcomes delivered should be reported to Trevor. Implications for WFD Programme and Measures for water levels management to be considered in the context of managing the Cors Fochno Raised Bog and wider flood plain. Make contact with technical specialists internally and external stakeholders to determine whether there are opportunities for delivery of multiple benefits for recreation/access improvement, community engagement and education. Other opportunities which should be explored as part of the scheme include: • Recreational and access improvements • Planting trees or shrubs,		PM / EAT EAT EAT	

	• Promoting simple changes to land management to provide food, shelter and nest sites for pollinators, • Habitat improvement or creation, paying attention to resilience (connectivity, diversity, condition) of habitats within or linked to the study area		

A series of map highlighting some of the scheme constraints has been included within Annex 2.
Record of all consultation responses can be found within Annex 3.

Screening Conclusion

- Following a review, the Environmental Assessment Team (EAT) have determined that this project could lead to significant environmental effects because of the scale of the proposal and/or the complexity or profile of the project.
- The EAT should be included in the project team for the Initial Assessment stage to allow environmental consideration of the options appraisal process and to advise on environmental risk management for the project.

Annex 1: Marine License

Marine Licensing

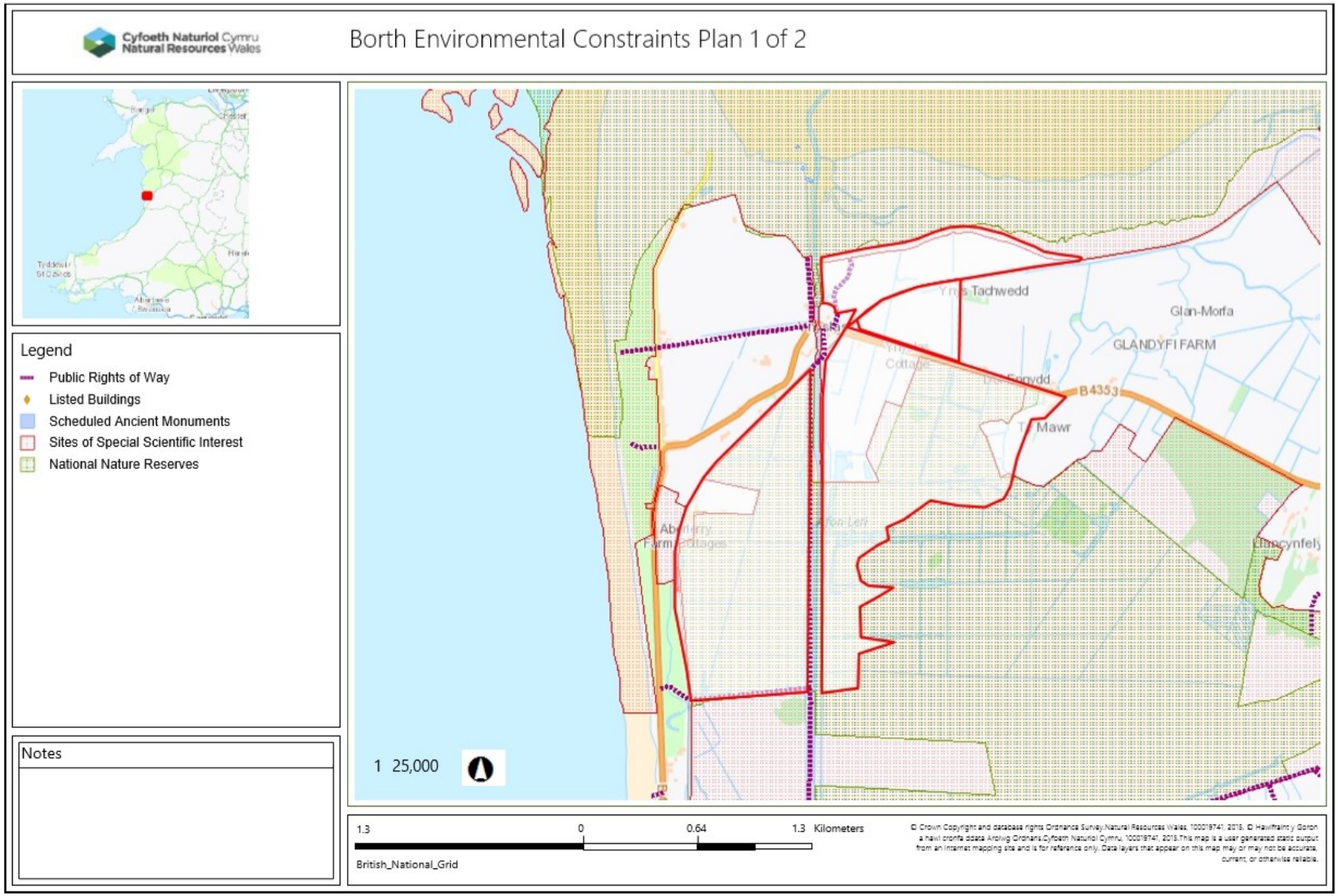
In broad terms a Marine Licence is required for any deposit, removal, construction or dredge operation below Mean High Water Springs out to 12 nautical miles using a vehicle, vessel or marine structure, (Marine and Coastal Act 2009).

Some activities have been exempted from the need to have a marine licence. (The Marine Licensing (Exempted Activities) (Wales) Order 2011). These may include coast protection, drainage and flood defence works. The Marine Licensing Team require notification of these activities, which are then kept on a Register.

To determine whether the works to be undertaken require a marine licence or can be registered as exempt, please contact the Marine Licensing Team at: Marinelicensing@cyfoethnaturiolcymru.gov.uk.

The issue of a marine licence or registration of an exempt activity does not absolve an operator from gaining any other relevant consents or permits.

Annex 2: constraints plans



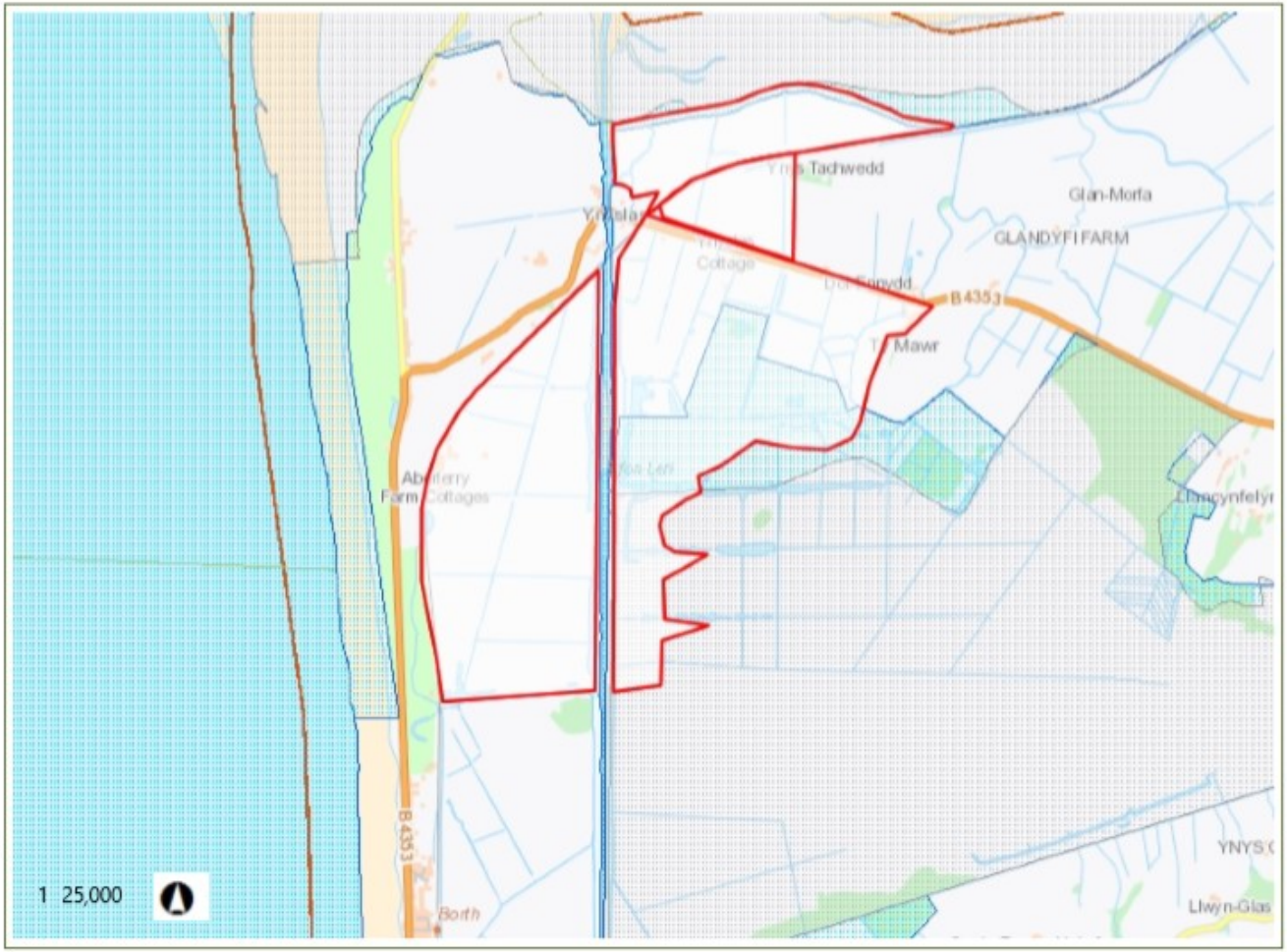
Cyfoeth Naturiol Cymru
Natural Resources Wales

Borth Environmental Constraints Plan 2 of 2

Legend

- Ramsar
- Special Areas of Conservation
- Special Protection Areas
- Coastal Erosion

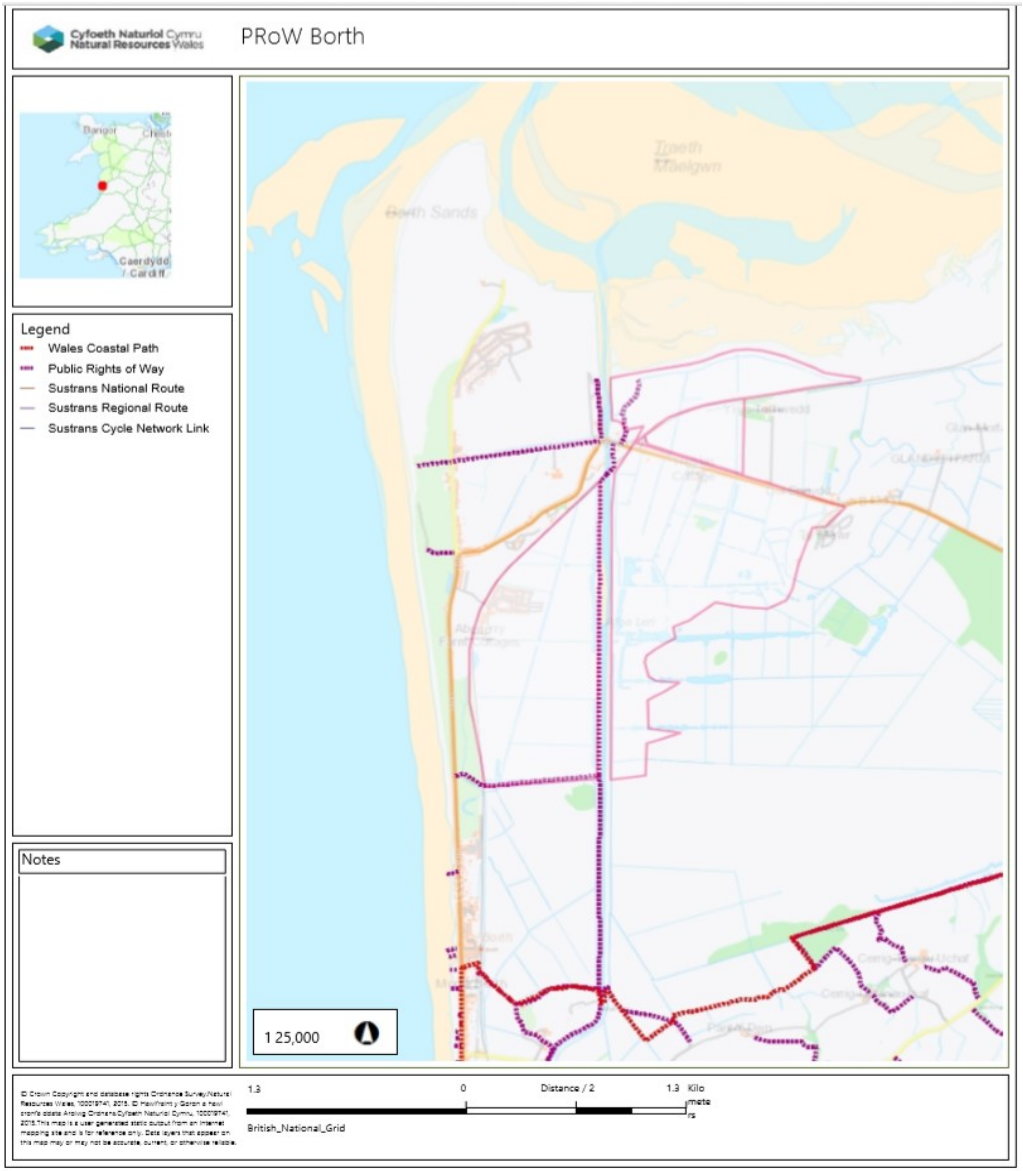
Notes



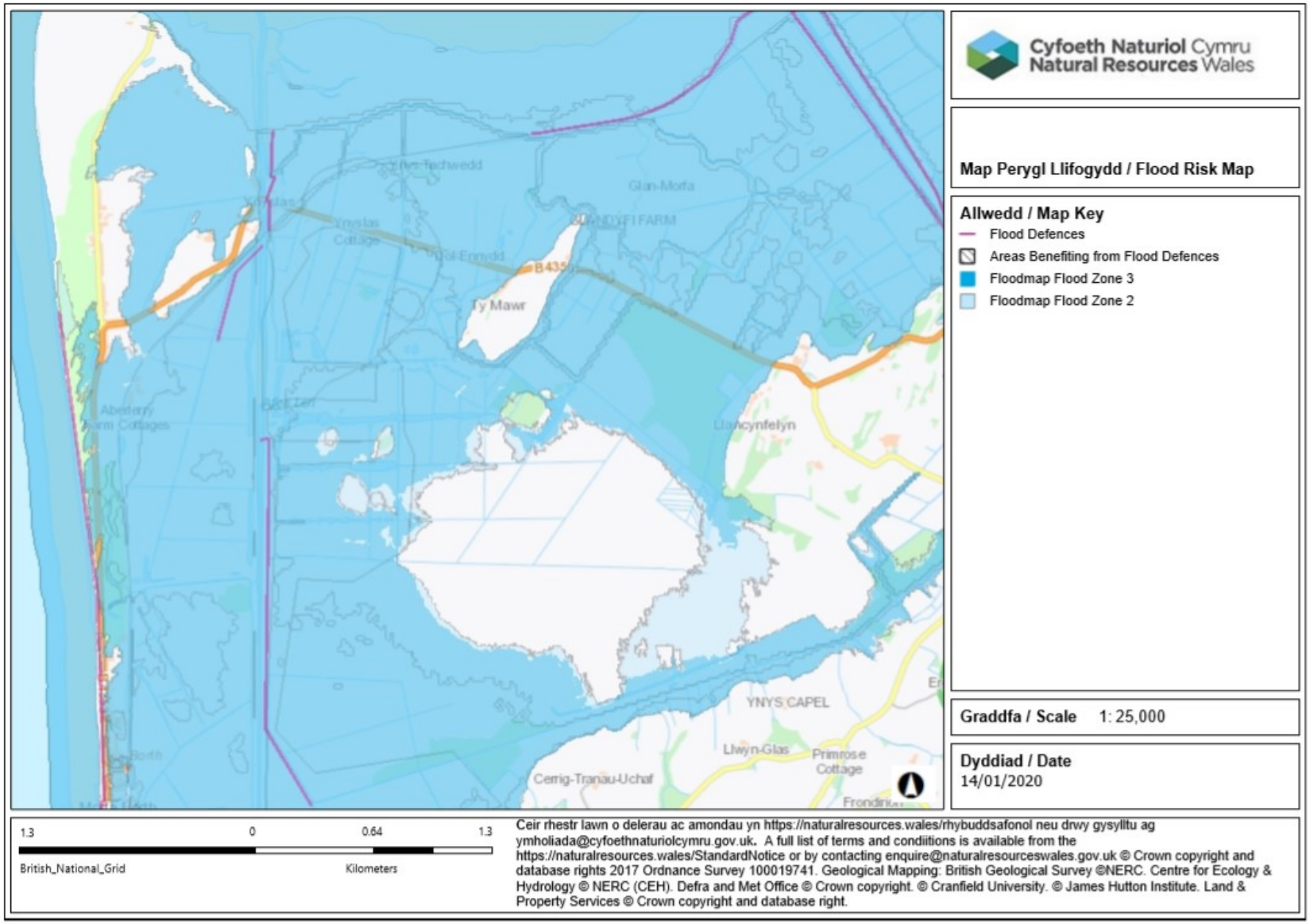
1.3 0 0.64 1.3 Kilometers

British_National_Grid

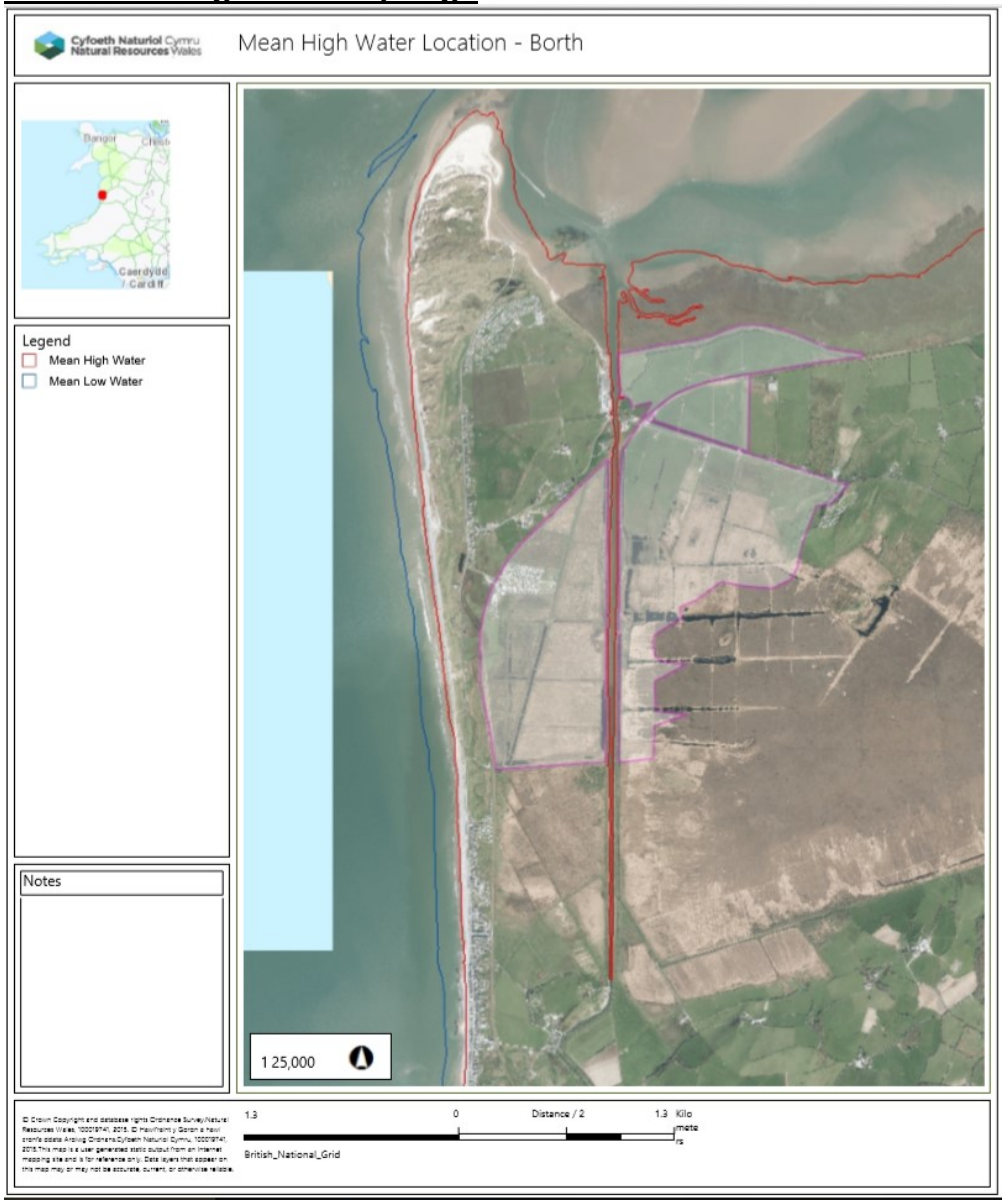
NRW PRoW Map.


Cyfoeth Naturiol Cymru
Natural Resources Wales
PRoW Borth
Legend
Wales Coastal Path
Public Rights of Way
Sustrans National Route
Sustrans Regional Route
Sustrans Cycle Network Link
Notes
1:25,000
1.3
0
Distance / 2
1.3 Kilometers
British_National_Grid

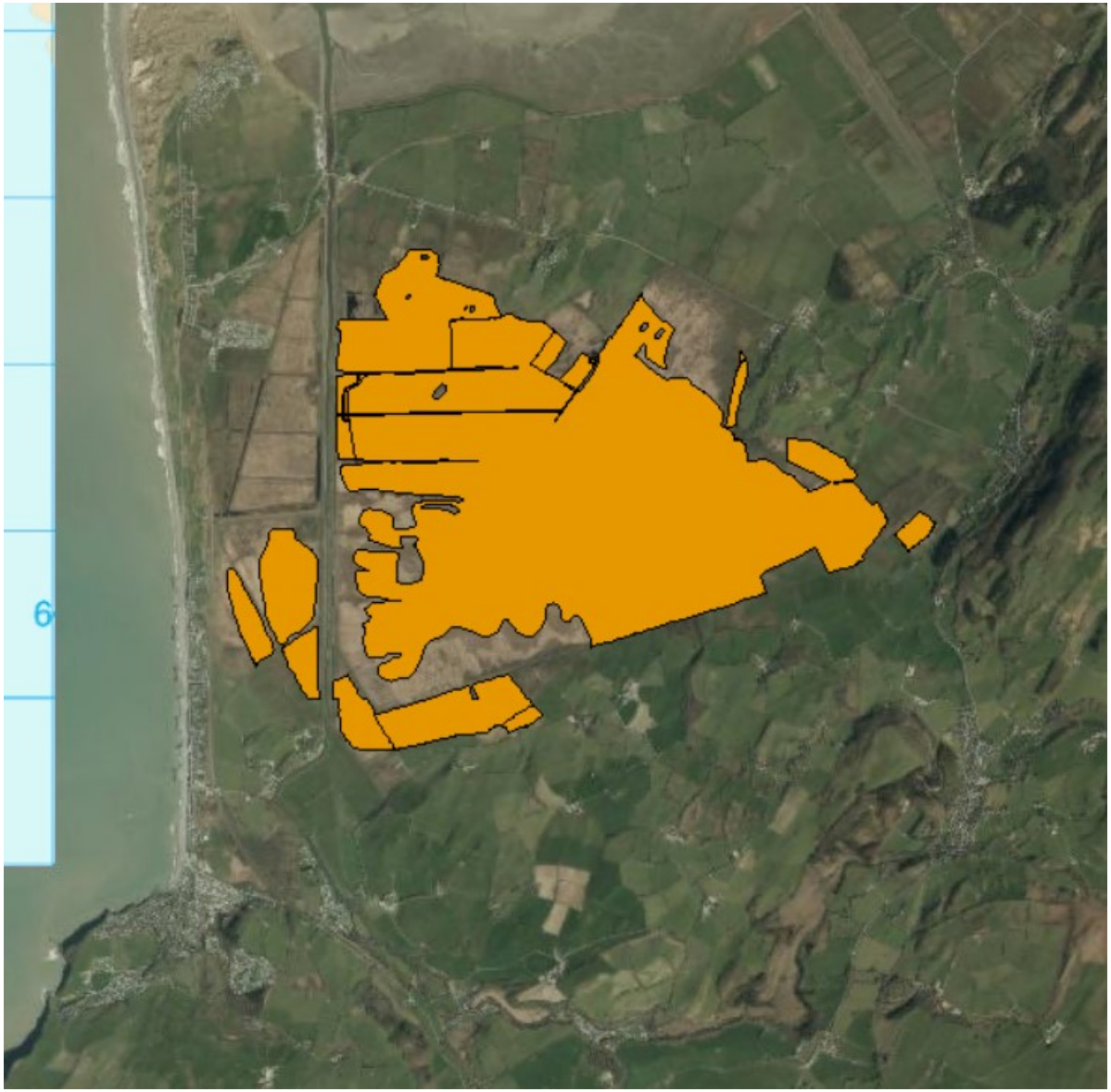
NRW Flood Risk Map and location of existing flood defences.



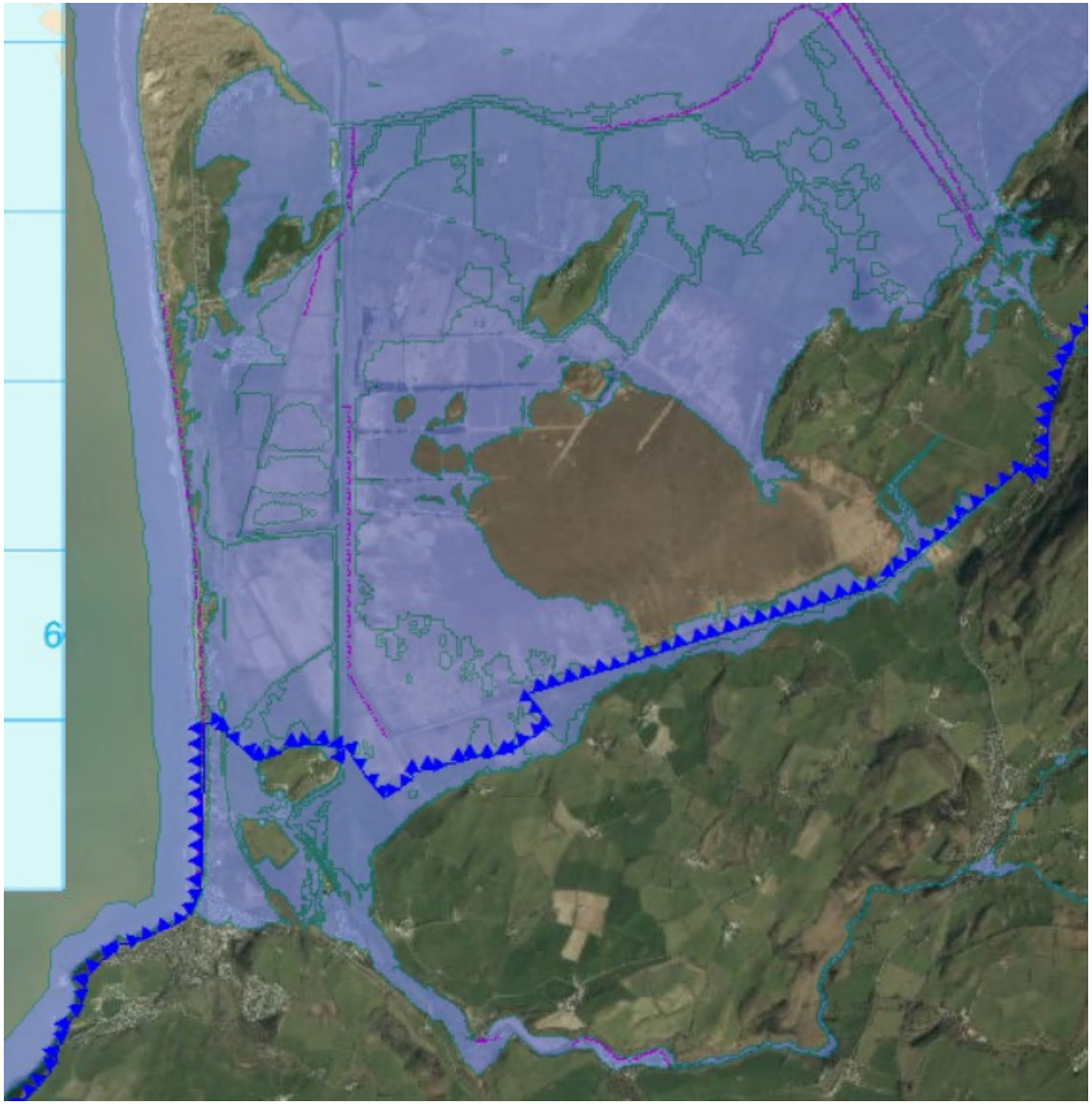
NRW Mean High Water Springs



Broad Bog Habitat Distribution



Wales Coastal Path in context to Flood Plain



Annex 3: parties consulted in the screening

Name	Function	Date issued	Response received	Comments Received	Action taken to address comments
Richard Park	Programme Manager				
Ben Hext	Project Manager				
Mannon Lewis	Planning Team Lead				
Stuart Rees	Conservation and Fisheries				
Daniel Jones	Flood Risk Analysis team				
Marianne Jones	EAT Landscape Architect				
Richard Sumner	Landscape Architect				
Zoe Bevans-Rice[GJ1]	Dyfed Archaeological Trust				
Sam Bosanquet	Senior Habitat Survey & Evaluation and Non-Vascular Plant Ecologist				
Trevor West	Senior WFD Officer				
Trystan James	Geoscience Team Lead				
TBC	Marine Licence				

Name	Function	Date issued	Response received	Comments Received	Action taken to address comments
	Team				
TBC	Area Statement Coordinator				
TBC	NNR site manager				
TBC	Local Land Management Team				
Nikki Rimmington	Marine Policy and Planning EPP				
Ceri Morris, Alex Scorey, Emmer Litt & Nicky Rimington, Kate Borrowdale, Elwyn Sharps, Emily Groves, Ben Wray	All Wales Marine Team				
Kirsten Ramsey	Marine and Coastal Ecosystems advice Team				
Carol Fielding	Environment Team Lead				